City of Hutto

Agenda

City Council Meeting

Thursday, May 20, 2021 at 7:00 PM

City Council Chambers

In accordance with the Texas Open Meetings Act this meeting agenda is posted for public information, continuously, for at least 72 hours prior to the scheduled time of the meeting on the bulletin board located on the exterior wall of the City Hall building at 500 West Live Oak, Hutto, Texas. This meeting agenda is also accessible via the Internet at huttotx.gov

1. **CALL SESSION TO ORDER**
2. **ROLL CALL**
3. **INVOCATION-Pastor Bobby Pruitt, Hutto Bible Church**
4. **PLEDGE OF ALLEGIANCE**
5. **CITY COUNCIL COMMENTS**

   Pursuant to Texas Government Code Sec. 551.0415, a member of the governing body may make an announcement about items of community interest during a meeting of the governing body without given notice of the subject of the announcement. Items of Community Interests include: (1) expressions of thanks, congratulations, or condolence; (2) information regarding holiday schedule; (3) an honorary or salutary recognition of public official, public employee, or other citizen, except that a discussion regarding a change in the status of a person's public office or public employment is not an honorary or salutary recognition of the subdivision; (4) a reminder regarding social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the political subdivision; and (5) announcements involving imminent threat to the public health and safety of people in the political subdivision that has arisen after the posting of the agenda.

   5.1. General Comments from City Council

   5.2. City Council Liaison Reports

6. **PUBLIC COMMENT**

   Any citizen wishing to speak during public comment may do so after completing the required registration form. The purpose of this item is to allow the residents of Hutto and other interested persons an opportunity to address the City Council on agenda issues and on non-agenda issues that are a matter of the jurisdiction of the City Council (i.e., City policy or legislative issues). Non-agenda issues regarding daily operational or administrative matters should be first dealt with at the administrative level by calling City Hall at (512) 759-4839during business hours. Each person providing public comment will be limited to 3 minutes.

   Any citizen wishing to speak during public comment may do so after completing the required registration form. Comments for this meeting may also be sent to comments@huttotx.gov PRIOR to 4:00 pm on May 20, 2021. The email must include name, address, phone # and email to be recognized properly. Citizens wishing to comment by phone may call:

   Toll Free Call In: 1-800-717-4201, Conference ID: 242-3288

   Once you are in the conference call press *5 to signal that you are requesting to speak during public comment.

(Note: The Texas Open Meetings Act, Texas Government Code, Chapter 551, prohibits the City Council from fully discussing, debating, or considering subjects for which public notice has not been given on the agenda. Issues that cannot be referred to the City Staff for action may be placed on the agenda of a future City Council Session.)

7. CITY MANAGER COMMENTS

7.1. Presentation by the Hutto Police Department

8. CONSENT AGENDA ITEMS

8.1. Consideration and possible action on approving the May 6, 2021 Work Session minutes.

8.2. Consideration and possible action on approving the May 6, 2021 City Council meeting minutes.

8.3. Consideration and possible action approving Resolution No. R-2021-077 authorizing the City Manager to execute an Addendum with P3 Works, LLC for administrative services for Cottonwood Creek Public Improvement District. (City Attorney-D.Palumbo)

8.4. Consider and possible action on Resolution No. R-2021-080 Accepting the infrastructure improvements for the subdivision Cottonwood Creek Phase 1. (Anthony Host)

8.5. Consideration and possible action on Resolution No. R-2021-081 authorizing the City Manager to execute an Interlocal Agreement with Williamson County approving the County to perform construction within City Limits for Segment 1 of the Southeast Loop project. (Samuel Ray)

8.6. Consideration and possible action approving Resolution No. R-2021-089 the "RSI Offsite" infrastructure improvements for the Emory Crossing subdivision. (Anthony Host)

8.7. Consideration of a request to cancel the public hearing on the proposed zoning change request for Aspen Heights Planned Unit Development (PUD), 36.624 acres, more or less, of land, a single-family residential use PUD, located on FM 1660 South. **POSTPONED AT THE APPLICANT'S REQUEST**

8.8. Consideration and possible action on Ordinance No. 2021-030 amending Chapter 2, Article 2.02, Sections 2.02.032, 2.02.121, And 2.02.182, altering the terms of members of the Planning and Zoning Commission, the Zoning Board of Adjustment, and The Building and Standards Commission. (City Attorney - C. Rosas-Grillet)

8.9. Consideration and possible action on Resolution No. R-2021-082 approving Change Order No. 1 for the Lakeside Estates Lift Station Abandonment Project increasing the total project cost by $29,543.22. (Samuel Ray)

8.10. Consideration and possible action on Resolution No. R- 2021-075 establishing an Emergency Preparedness Task Force; providing eligibility criteria; and adopting the procedural rules for the Emergency Preparedness Task Force to follow in carrying out its duties. (Councilmember Gordon)

8.11. Consideration and possible action on Resolution No. R-2021-087 appointing a Deputy City Attorney for the City of Hutto in accordance with Section 4.04 of the Hutto City Charter as approved by the voters on May 1, 2021. (City Attorney - C. Rosas-Grillet)

8.12. Consideration and possible action on Resolution No. R-2021-090 approving the first amendment to groundwater lease with Rodney L. Hortenstine and Kay L. Hortenstine dated November 10, 2004.

9. ORDINANCES

9.1. Consideration and possible action On Ordinance No. 2021-031 amending Chapter 2 “Administration and Personnel,” to amend Article 2.03 “Personnel,” section 2.03.041 “Residency Requirement” to modify the residency requirement for the City Manager. (City Attorney - C. Rosas-Grillet)

10. RESOLUTIONS

10.1. Consideration and possible action on Resolution No. R-2021-088, approving the First Amendment to the City Manager Employment Agreement dated September 17, 2021.

10.2. Consideration and possible action on Resolution No. R-2021-071, authorizing the City Manager to execute a contract with Freese and Nichols in regards to the Hutto 2040 Comprehensive Plan. (Ashley Lumpkin)

10.3. Discussion and possible action on the selection of a list of consultants in response to the City of Hutto’s Request for Qualifications for On-Demand engineering and planning consultant services. (RFQ 21-01). (Ashley Lumpkin)

10.4. Consideration and possible action on Resolution No. R-2021-084 determining costs of authorized improvements for the Cottonwood Creek Public Improvement District and ordering the filing of an assessment roll with the City Secretary to make available to the public in compliance with Texas Local Government Code Chapter 372; calling a public hearing on the levy of assessments on property located within the Cottonwood Creek Public Improvement District to pay such costs and directing the City Secretary to publish and mail notice of the public hearing in accordance with Texas Local Government code Chapter 372; and related matters; and providing an effective date. (City Attorney-D.Palumbo)

10.5. Consideration and possible action on Resolution No. R-2021-085 of the City of Hutto, Texas providing the public with information regarding certain litigation involving the city, including Preston Hollow Capital, LLC v. Cottonwood Development Corporation and the City of Hutto, in which all claims against the Corporation and the City have been dismissed in the corporation’s and city’s favor; Legacy Hutto, LLC v. City of Hutto, in which all claims against the city have been dismissed in the city’s favor, and council direction to litigation counsel to continue to evaluate legally questionable transactions performed by and during the former City Manager’s tenure and take appropriate legal action to protect and defend the City of Hutto and its residents; providing for severability; providing for repeal and providing an effective date. (Mayor Snyder)

10.6. Consideration and possible action on Resolution No. R-2021-086 appointing a Mayor Pro Tem for the City of Hutto in accordance with Section 3.05 of the Hutto City Charter as approved by the voters on May 1, 2021.

11. OTHER BUSINESS

11.1. Consideration and possible action on establishing agenda packet review meetings.(Councilmember Gordon)

11.2. Consideration and possible action to waive the City Manager residency requirement for a definite period of time in accordance with Section 2.03.041 of the Hutto Code of Ordinances.

11.3. Consideration and possible action on reviewing Cottonwood Creek Public Improvement District financing documents and direction to city staff and consultants regarding key terms relating thereto. (City Attorney-D.Palumbo)

11.4. Discussion and Possible Action regarding Possible Appointments, Re-appointments and/or Removals to City Boards, Commissions, Task Forces, Economic Development Corporations, Local Government Corporations and Tax Increment Reinvestment Zone Boards.

12. EXECUTIVE SESSION

The City Council for the City of Hutto reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above as authorized by the Texas Government Code Sections 551.071 (Litigation/Consultation with Attorney), 551.072 (Deliberations regarding real property), 551.073 (Deliberations regarding gifts and donations), 551.074 (Deliberations regarding personnel matters) or 551.076 (Deliberations regarding deployment/implementation of security personnel or devices) and 551.087 (Deliberations regarding Economic Development negotiations).

12.1. Receive legal advice pursuant to Texas Government Code Sec. 551.071 related to Pending Legal Requests, Potential Claims and City Council Legal Requests.

12.2. Receive legal advice pursuant to Texas Local Government Code Section 551.071 relating to the CO-OP Master Development Agreement executed August 17, 2017, as amended and ancillary agreements entered into pursuant to the CO-OP Master Development Agreement executed August 17, 2017, as amended. (City Attorney-D.Palumbo)

12.3. Deliberate the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of the City Manager pursuant to Texas Government Code Section 551.074, Personnel Matters.

12.4. Receive legal advice pursuant to Texas Local Government Code Section 551.071 relating to waiving the attorney-client privilege for Bojorquez Law Firm Memo regarding alleged charter & ethics code violation dated May 12, 2021.

12.5. Receive legal advice pursuant to Texas Government Code Sec. 551.071 related to the Annual Comprehensive Financial Report for the year ended September 30, 2020 and potential claims against former employees. (City Attorney - C. Rosas-Grillet)

12.6. Receive legal advice pursuant to Texas Government Code 551, Section 551.071 to deliberate, seek legal advice and direct Litigation Counsel regarding Jones v. City of Hutto et. al, pending in the U.S. District Court, Western District, Austin Division. (George Hyde)

13. ACTION RELATIVE TO EXECUTIVE SESSION

13.1. Consideration and possible action related to legal advice received pursuant to Texas Government Code Sec. 551.071 related to Pending Legal Requests, Potential Claims and City Council Legal Requests.

13.2. Consideration and possible action on legal advice received pursuant to Texas Local Government Code Section 551.071 relating to the CO-OP Master Development Agreement executed August 17, 2017, as amended and ancillary agreements entered into pursuant to the CO-OP Master Development Agreement executed August 17, 2017, as amended. (City Attorney-D.Palumbo)

13.3. Consideration and possible action on the appointment, employment, evaluation, reassignment, duties, discipline or dismissal of the City Manager pursuant to Texas Government Code Section 551.074, Personnel Matters.

13.4. Consideration and possible action on legal advice received pursuant to Texas Local Government Code Section 551.071 relating to waiving the attorney-client privilege for

Bojorquez Law Firm Memo regarding alleged charter & ethics code violation dated May 12, 2021.

13.5. Consideration and possible action on legal advice received pursuant to Texas Local Government Code Section 551.071 related to the Annual Comprehensive Financial Report for the year ended September 30, 2020 and potential claims against former employees.

13.6. Consideration and possible action on legal advice received pursuant to Texas Government Code Sec. 551.071 related to Jones v. City of Hutto et. al, pending in the U.S. District Court, Western District, Austin Division. (George Hyde)

14. ADJOURNMENT

15. CERTIFICATION

I certify that this notice of the Hutto City Council meeting was posted on the City of Hutto website and the City Hall bulletin board of the City of Hutto on May 17, 2021 at 5:00 P.M.

Holly Nagy

The City of Hutto is committed to comply with the Americans Disability Act. The Hutto City Council Chamber is wheelchair accessible. Request for reasonable special accommodations must be made 48 hours prior to the meeting. Please email the City Secretary's office at City.Secretary@huttox.gov or call (512) 759-4033 for assistance.

City Council
AGENDA ITEM REPORT

To: City Council
Subject: Consideration and possible action on approving the May 6, 2021 Work Session minutes.
Meeting: Thursday, May 20, 2021
Department: City Secretary
Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. May 6, 2021-Work Session Minutes

City of Hutto

MINUTES

City Council Work Session
Thursday, May 6, 2021 at 5:30 PM
City Council Chambers

In accordance with the Texas Open Meetings Act this meeting agenda is posted for public information, continuously, for at least 72 hours prior to the scheduled time of the meeting on the bulletin board located on the exterior wall of the City Hall building at 500 West Live Oak, Hutto, Texas. This meeting agenda is also accessible via the Internet at huttotx.gov

1. CALL SESSION TO ORDER *5:30 PM*

2. ROLL CALL

Members of City Council present: Mayor Mike Snyder, Councilmember Robin Sutton, Councilmember Mandi Villarreal Salvo, Councilmember Dan Thornton, Councilmember Peter Gordon, and Councilmember Mike Arismendez.

Councilmember Tanner Rose arrived at 6:15 PM

City Staff present: Warren A. Hutmacher, City Manager, Stacy Schmitt, Assistant to the City Manager, Holly Nagy, City Secretary, Cristian Rosas Grillet, City Attorney, Ashley Lumpkin, Executive Director of Business and Development Services, Samuel Ray, City Engineer

3. PLEDGE OF ALLEGIANCE

4. OTHER BUSINESS

4.1. Presentations from and discussions with the City's Financial Advisor, Hilltop Securities, Inc., developers, project managers, bond counsel, and underwriters regarding the City Council's calendar of action items, financing methods, and development and construction progress and timeline for both the Cottonwood Creek Public Improvement District and the Durango Farms Public Improvement District. (Finance)

Presentation ensued.

5. ADJOURNMENT *6:51 PM*

_____
Mike Snyder, Mayor

Attest:

_____
Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To: City Council
Subject: Consideration and possible action on approving the May 6, 2021 City Council meeting minutes.
Meeting: Thursday, May 20, 2021
Department: City Secretary
Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Amended Draft Minutes 5-6-21

City of Hutto

MINUTES

City Council Meeting
Thursday, May 6, 2021 at 7:00 PM
City Council Chambers

In accordance with the Texas Open Meetings Act this meeting agenda is posted for public information, continuously, for at least 72 hours prior to the scheduled time of the meeting on the bulletin board located on the exterior wall of the City Hall building at 500 West Live Oak, Hutto, Texas. This meeting agenda is also accessible via the Internet at huttotx.gov

1. CALL SESSION TO ORDER *7:00 PM*

2. ROLL CALL

Members of City Council present: Mayor Mike Snyder, Councilmember Robin Sutton, Councilmember Mandi Villarreal Salvo, Councilmember Dan Thornton, Councilmember Tanner Rose, Councilmember Peter Gordon, and Councilmember Mike Arismendez.

City Staff present: Warren A. Hutmacher, City Manager, Stacy Schmitt, Assistant to the City Manager, Holly Nagy, City Secretary, Cristian Rosas Grillet, City Attorney, Ashley Lumpkin, Executive Director of Business and Development Services, Samuel Ray, City Engineer.

3. INVOCATION-Led by Fr. Piega of St. Patrick Catholic Church

4. PLEDGE OF ALLEGIANCE

5. CITY COUNCIL COMMENTS

5.1. General Comments from City Council

Councilmember Gordon: I just want to thank the residents who brought to my attention just a couple of issues that we had with developers that had been instructed to do certain things and to follow certain procedures that weren't being followed as far as construction entrances being constructed where they we said they weren't supposed to be and driving trucks where they weren't supposed to go and so I don't ever have the opportunity to drive down a lot of these streets so I don't see it, so I really appreciate the citizens bringing that to our attention that's important for us to know so that we can get it in the right hands, so I've already gotten some of these in the hands of the City Manager and we are looking into those. I just wanted to reassure the citizens that we are addressing things and if things aren't going right and you see something, let us know and we will do everything we can. I appreciate it.

Councilmember Villarreal Salvo: Thank you to the Wilco Elections for a really nicely well-done election this past week there not always very clean, but this one was great and well executed by all parties. A huge thank you to our City Staff, you all have been working diligently and around the clock to get us reopened and I know a lot of people in our community were excited to be able to come into City Hall this week and see you face to face and pay bills. I know a lot of people are excited about our Library opening back up in a few more weeks and I'm looking forward to hosting my next office hours tomorrow so, hope to see you all there if you have any questions and you want to sit down and talk to an elected official.

Councilmember Sutton: I would like to agree with Councilmember Gordon with the construction traffic and the things going on. I think that maybe it's an opportunity for the City to maybe get some guidelines in because it's not just going to affect the areas that we see now, as much as we're growing it's going to start affecting everyone else. I think we might need, I don't know how we would do it, but fines that they would go through a road block or get caught there or something. I know that Mayor Snyder was going to look into more fees if the trucks are seen coming through 1660 and Old Town roads so I think it's an opportunity for us to pursue as we are growing and to help alleviate any safety issues in the future.

Councilmember Mike Arismendez: I just wanted to say thank you for the trust that you've placed in me to fill the short void in being City Council Place 5 I know it's very short and we have an election that's coming up but I want you to know that I sincerely appreciate it. I've done work on the CDC/EDC board and it has been a joy for me. I think one thing we never need to forget, what we do needs to be in an attitude of service. Leadership is not about position, it's about service so as long as we take that mentality in everything we do and everyone we appoint in those positions then this city will begin to start moving in a direction that will benefit everybody. Thank you for the trust that you've placed in me.

5.2. City Council Liaison Reports

6. PUBLIC COMMENT

-Rick Hudson
-Victor Henry
-Christina Bastos
-Mike Heath

7. CITY MANAGER COMMENTS

7.1. Introduction of the new Economic Development Director.

7.2. Introduction of the new Communications Manager.

8. PROCLAMATIONS

8.1. Proclamation No. 2021-003: Proclaiming May 2-8th, 2021 as "Children's Mental Health Awareness Week." -*Trish Van Till was present for this Proclamation.*

8.2. Proclamation No. 2021-004: Proclaiming the Month of May "Motorcycle Safety Awareness Month." - *Karibeños MC was present for this Proclamation*.

9. CONSENT AGENDA ITEMS

9.1. Consideration and possible action on approving the April 15, 2021 City Council meeting minutes.

9.2. Consideration and possible action regarding Ordinance No. O-2021-020 Amending the Code of Ordinances Section 20.02.002 Partial exemption for ad valorem taxes imposed on the elderly to reduce the residence homestead exemption for persons age 65 or older, or surviving spouse, to $30,000 beginning tax year 2021 and repealing the tax exemption beginning in tax year 2022. (Second Reading)(City Attorney - C. Rosas-Grillet)

9.3. Consideration and possible action regarding Ordinance No. O-2021-021 Amending the Code of Ordinances Section 20.02.003 Partial exemption for ad valorem taxes imposed on the disabled to reduce the residence homestead exemption for disabled persons or surviving spouses to $30,000 beginning tax year 2021 and repealing the tax exemption beginning in tax year 2022. (Second Reading)(City Attorney - C. Rosas-Grillet)

9.4. Consideration and possible action regarding Ordinance No. O-2021-022 Amending the Code of Ordinances Chapter 2, Article 2.02 Boards, Commissions and Authorities altering the appointment process of certain members of boards, commissions, and authorities appointed by the city council; and expanding the eligibility criteria for members of the parks advisory board and the historic preservation commission. (Second Reading)(City Attorney-C. Rosas-Grillet)

9.5. Consideration and possible action on Resolution No. R-2021-065 Accepting the infrastructure improvements for the subdivision known as Mustang Creek Phase 2. (Anthony Host)

9.6. Consideration and possible action on Resolution No. R-2021-066 accepting the infrastructure improvements for the subdivision known as Mustang Creek Phase 3. (Anthony Host)

9.7. Consideration and possible action on Resolution No. R-2021-067 accepting the infrastructure improvements for the subdivision known as Mustang Creek CR 118 minor arterial phase 1. (Anthony Host)

9.8. Consideration and possible action on Resolution No. R-2021-073 approving an Interlocal Agreement for Conducting a Satellite Basic Peace Officer Course between the City of Hutto and the Capital Area Council of Governments. (Chief Hall)

9.9. Consideration and possible action regarding Ordinance No. O-2021-029 Amending the Code of Ordinances, Chapter 22 Traffic and Vehicles, Article 22.03 Operation of Vehicles, Section 22.03.034 School Zones to modify the eligibility criteria for school zones. (Samuel Ray)

Councilmember Sutton pulled item 9.8 and 9.9. Councilmember Gordon pulled Item 9.4 for discussion.

Councilmember Villarreal Salvo made a motion to approve Consent Agenda Items 9.1, 9.2, 9.3, 9.5, 9.6, and 9.7. as presented. Councilmember Sutton seconded the motion. The motion passed unanimously. (7:0)

Discussion ensued.

Councilmember Gordon made a motion to approve Item 9.4, Councilmember Thornton seconded the motion the motion passed unanimously. (7:0)

Councilmember Villarreal Salvo made a motion to approve Item 9.8 as presented, Councilmember Gordon seconded the motion. The motion passed unanimously. (7:0)

Councilmember Sutton made a motion to approve Item 9.9 as presented. Councilmember Villarreal Salvo seconded the motion. The motion passed unanimously. (7:0)

10. ORDINANCES

10.1. Consideration of a public hearing and possible action on Ordinance No. O- 2021-025 regarding a zoning change request for Chandler Corner Lots 2 and 4 from Single Family Rural (SF-R) to Industrial (I). (First Reading)(Ashley Lumpkin)

Public Hearing opened: 8:14 PM
Public Hearing closed: 8:14 PM

Councilmember Villarreal Salvo made a motion to approve Item 10.1 as presented. Councilmember Arismendez seconded the motion. The motion passed unanimously. (7:0)

Councilmember Gordon made a motion to dispense of the second reading. Councilmember Sutton seconded the motion. The motion passed unanimously (7:0)

10.2. Consideration of a public hearing and possible action on the first and final reading of Ordinance No. O-2021-027 approving the proposed annexation of the Gola Tracts, 197.82 acres, more or less, of land, and to establish the base zoning for the property as SF-1 (Single-Family Residential). (First Reading)(Ashley Lumpkin).

Public Hearing opened: 8:20 PM
Public Hearing closed: 8:20 PM

Councilmember Villarreal Salvo made a motion to approve Item 10.2 as presented. Councilmember Gordon seconded the motion. The motion passed unanimously. (7:0)

Councilmember Gordon made a motion to dispense of the second reading. Councilmember Arismendez seconded the motion. The motion passed unanimously (7:0)

Item 11.4 was moved up at this time.

11.4. Consideration of a public hearing and possible action on Resolution No. R-2021-070, approving the Gola Preliminary Plat, 197.83 acres, more or less, of land, 576 residential lots, located on FM 1660 South. (Ashley Lumpkin)

Public Hearing opened: 8:26 PM
Public Hearing closed: 8:26 PM

Councilmember Villarreal Salvo requested to see the application process for plat approvals at one of the next meetings.

Councilmember Villarreal Salvo made a motion to approve Item 11.4 as presented. Councilmember Gordon seconded the motion. The motion passed unanimously. (7:0)

10.3. Consideration of a public hearing and possible action on the first and final reading of Ordinance No. O-2021-028 approving the proposed annexation of the Titan Innovation Business Park Phase II, 106.66 acres, more or less, of land, and to establish the base zoning for the property as LI (Light Industrial). (First Reading) (Ashley Lumpkin).

Public Hearing opened: 8:29 PM

Fr. Piega, St. Patrick Catholic Church spoke on this item.

Discussion ensued regarding historic farm house.

Public Hearing closed: 8:31 PM

Councilmember Villarreal Salvo made a motion to approve item 11.4 as presented. Councilmember Gordon seconded the motion. The motion passed unanimously. (7:0)

Councilmember Gordon made a motion to dispense of the second reading Councilmember Arismendez seconded the motion. The motion passed unanimously. (7:0)

11. RESOLUTIONS

11.1. Consideration and possible action on Resolution No. R-2021-068 Authorizing the City Manager to complete the purchase of five (5) replacement vehicles for the Police Department in the amount of $305,787.00 from Holiday Auto Group/Defender Supply through Tarrant County Cooperative Contract No. 2020-174. (Chief Hall)

Councilmember Rose made a motion to approve Item 11.1 as presented. Councilmember Gordon seconded the motion. The motion passed unanimously. (7:0)

11.2. Consideration and possible action on Resolution No. R-2021-069 consenting to the creation of a Municipal Utility District to be known as Lakeside Municipal Utility District No. 9 and the inclusion or annexation of approximately 456.753 acres of land. (City Attorney- C. Rosas-Grillet)

Councilmember Villarreal Salvo made a motion to approve Item 11.2 as presented. Councilmember Gordon seconded the motion. The motion passed unanimously. (7:0)

11.3. Consideration and possible action on Resolution No. R-2021-076 approving the Comprehensive Development and Consent Agreement between the City of Hutto, Robert M. Tiemann and Rowe Lane Development LTD and authorizing the City Manager to execute the agreement. (City Attorney- C. Rosas-Grillet)

Councilmember Arismendez made a motion to approve Item 11.3 as presented. Councilmember Sutton seconded the motion. The motion passed unanimously. (7:0)

12. OTHER BUSINESS

Councilmember Gordon requested to move Item 12.3 up.

12.3. Consideration and possible action regarding possible appointments, re-appointments and/or removals to City Boards, Commissions, Task Forces, Economic Development Corporations, Local Government Corporations and Tax Increment Reinvestment Zone Boards.

Randal Clark spoke on this item.

Councilmember Rose made a motion to appoint Victor Henry to the EDC. Councilmember Villarreal Salvo seconded the motion. The motion passed unanimously. (7:0)

Councilmember Rose made a motion to remove Steven Harris from the EDC Board. Councilmember Sutton seconded the motion. The motion passed (5:1) with Councilmember Gordon against and Councilmember Arismendez abstaining.

12.1. Presentation of the Comprehensive Annual Finance Report for the year ended September 30, 2020. (Lee Ann Huddleston)

Presentation ensued. No action taken.

12.2. Consideration and possible action regarding establishing Council protocols. (Mayor Snyder)

A subcommittee of Council members Rose, Sutton and Gordon will work together on bringing recommendations to Council for review at the first meeting in July.

13. EXECUTIVE SESSION *Entered 10:27 PM*

The City Council for the City of Hutto reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed above as authorized by the Texas Government Code Sections 551.071 (Litigation/Consultation with Attorney), 551.072 (Deliberations regarding real property), 551.073 (Deliberations regarding gifts and donations), 551.074 (Deliberations regarding personnel matters) or 551.076 (Deliberations regarding deployment/implementation of security personnel or devices) and 551.087 (Deliberations regarding Economic Development negotiations).

13.1. Receive legal advice pursuant to Texas Government Code Sec. 551.071 related to Pending Legal Requests, Potential Claims and City Council Legal Requests.

13.2. Receive legal advice pursuant to Texas Government Code Sec. 551.071 and deliberate regarding 10 legal action necessary in connection with Texas Attorney General Opinion No. LP-0366 and River Creek Development Corporation; 2) Jones v. City of Hutto, et al, pending in the U.S. District Court, Western District of Texas, Austin Division; 3) City of Hutto, Texas v. Wolverine Interests, LLC, pending in Williamson County District Court and, 4) the engagement of Russell Rodriguez Hyde Bullock, LLP for legal services in connection therewith. (George Hyde)

13.3. Receive legal advice pursuant to Texas Local Government Code Section 551.071 relating to the CO-OP Master Development Agreement executed August 17, 2017, as amended and ancillary agreements entered into pursuant to the CO-OP Master Development Agreement executed August 17, 2017, as amended. (Mayor Snyder)

14. ACTION RELATIVE TO EXECUTIVE SESSION *Reconvened 11:45 PM*

14.1. Consideration and possible action related to legal advice received pursuant to Texas Government Code Sec. 551.071 related to Pending Legal Requests, Potential Claims and City Council Legal Requests.

No action.

14.2. Consideration and possible action on legal advice received in executive session regarding: 1) legal action necessary in connection with Texas Attorney General Opinion

No. LP-0366 and River Creek Development Corporation; 2) Jones v. City of Hutto, et al, pending in the U.S. District Court, Western District of Texas, Austin Division; 3) City of Hutto, Texas v. Wolverine Interests, LLC and 4) engagement of Russell Rodriguez Hyde Bullock, LLP for legal services in connection therewith. (George Hyde)

Councilmember Rose made a motion that the city subject to appropriations engage Mr. Hyde of Russell Rodriguez Hyde Bullock, LLP to represent its interests in joint representation with the River Creek Development Corporation related to matters involving the corporations Co-Op Mustang Creek and Cross Creek projects and to represent the City's interest in regarding matters related to the Wolverine Interests LLC litigation and authorizing the City Manager to execute the agreements. Councilmember Thornton seconded the motion. The motion passed unanimously. (7:0)

14.3 Consider and possible action on legal advice pursuant to Texas Local Government Code Section 551.071 relating to the CO-OP Master Development Agreement executed August 17, 2017, as amended and ancillary agreements entered into pursuant to the CO-OP Master Development Agreement executed August 17, 2017, as amended. (Mayor Snyder)

Item being moved to May 20, 2021.

15. ADJOURNMENT *11:50 PM*

Passed and Approved this 20th day of May, 2021

_____
Mike Snyder, Mayor

Attest:

_____
Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To: City Council
Subject: Consideration and possible action approving Resolution No. R-2021-077 authorizing the City Manager to execute an Addendum with P3 Works, LLC for administrative services for Cottonwood Creek Public Improvement District. (City Attorney-D.Palumbo)
Meeting: Thursday, May 20, 2021
Department: Legal
Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Resolution R-2021-077 P3 Works Addendum Cottonwood Creek PID
2. Hutto_PSA Addendum_Cottonwood Creek

CITY OF HUTTO, TEXAS

RESOLUTION NO. R-2021-077

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE ADDENDUM "A" FOR ADMINISTRATIVE SERVICES FOR THE COTTONWOOD CREEK PUBLIC IMPROVEMENT DISTRICT

WHEREAS, the City of Hutto, Texas has contracted with P3 Works, LLC to provide administrative services for its public improvement districts and tax increment reinvestment zones; and

WHEREAS, the contract between the City of Hutto, Texas and P3 Works, LLC, provides for administrative services for public improvement districts created by the City of Hutto, Texas by separate addendum.

NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF HUTTO, TEXAS,

That the City Council hereby authorizes the City Manager to execute attached Addendum "A" for administrative services for the Cottonwood Creek Public Improvement District on behalf of the City, Council, and;

CONSIDERED and RESOLVED by the City Council of the City of Hutto on this the **20th day of May 2021**.

CITY OF HUTTO, TEXAS

_____
Mike Snyder, Mayor

ATTEST:

_____
Holly Nagy, City Secretary

EXHIBIT A

PUBLIC IMPROVEMENT DISTRICT SERVICES ADDENDUM

SCOPE OF SERVICES TO BE PROVIDED

PID Name: Cottonwood Creek PID__

Authorized Start Date by City Manager: _____

City Manager Signature: _____

Receipt by PID Administrator Signature and Date: _____

SERVICE AND ASSESSMENT PLAN PREPARATION AND BOND ISSUANCE SUPPORT SERVICES

Billed at P3Works' prevailing hourly rates, which are currently as follows:

Title	***Hourly Rate***
Managing Partner	*$250*
Vice President	*$185*
Senior Associate	*$160*
Associate	*$135*
Administrative	*$75*

**P3Works' hourly rates may be adjusted from time to time to reflect increased costs of labor and/or adding/reclassifying titles. Travel times will be billed at hourly rates.*

Preparation of Service and Assessment Plan

1. P3Works will prepare a complete and final Service and Assessment Plan to be adopted by City Council.
2. P3Works will present the Service and Assessment Plan to City Council and request approval of Assessment Roll.

Bond Issuance Support

1. P3Works will ensure bond documents, including the PID financing agreement, bond indenture, and official statement are all consistent with the Service and Assessment Plan.
2. P3Works will provide ad-hoc analysis as requested by the underwriter in preparation of the preliminary official statement.

Participation in Presentations to City Council or other Public Forums

1. P3Works will prepare and present information as requested to the City Council or any other public forum.

BASIC DISTRICT ADMINISTRATION SERVICES

$2,500 per month for the first improvement area and $1,250 per month for each improvement area thereafter.

Prepare Annual Service and Assessment Plan Update

1. If possible, obtain updated construction cost estimates (or actual costs for completed facilities) for District improvements, and update service and assessment plan text and tables.
2. Update service and assessment plan text and tables as necessary to account for any changes in development plan or land uses.
3. Update annual District assessment roll.
4. Identify parcel subdivisions, conveyance to owner's associations, changes in land use, and any other information relevant to the levy of special assessments.
5. Review maps of tax parcels to compile/audit list of parcels that are within the District for the upcoming bond year. Classify each parcel pursuant to the approved service and assessment plan.
6. Identify and parcels dedicated to any property types classified as exempt by the service and assessment plan.
7. Update District database with newly subdivided parcels and property type classifications.
8. Calculate annual special assessment for each parcel. Verify the sum of annual installments for all parcels in the District is sufficient to meet the annual debt service requirement, administration expenses, and any provisions for delinquency or prepayment reserves.
9. Calculate other funds available, such as reserve fund income, capitalized interest, and interest income. Reduce annual assessment based on findings according to approved service and assessment plan.
10. Present preliminary annual assessment roll to City. Upon approval by City, submit final annual assessment roll to Williamson County Tax Collector.

Administration of Bond Funds (if bonds are sold)

1. Review and reconcile the account statements for the funds maintained by the trustee. Ensure annual special assessment calculation is compliant with Indenture as it relates to each fund.
2. Provide annual summary of all District accounts maintained by Trustee at the time the annual service and assessment plan update is performed.

Provide Public Information Request Support

1. If requested, P3Works will respond to any calls and or emails relating to the District. P3Works will only provide technical answers relating to the annual assessments or the District generally. P3Works will not provide any commentary on City policy relating to PIDs.
2. If the City receives a notice from a property owner alleging an error in the calculation of any matters related to the annual assessment roll for the District, P3Works will review and provide a written response to the City. If a calculation error occurred, P3Works will take

corrective action as required to correct the error.

Delinquency Management

1. After the end of the annual assessment installment collection period, P3Works will prepare a Collection Report, which details which parcels are collected, delinquent and the amount of delinquency.
2. P3Works will notify the City and coordinate with the City's Bond Counsel as to what action must be taken relating to delinquent parcels, if any, to remain in compliance with the District bond documents.

DISTRICT ADMINISTRATION SETUP SERVICES (Required for any existing PID not created by P3Works.)

$10,000 One Time Lump Sum Fee

1. Prepare website database searchable by property tax ID # for property owners, title companies, mortgage companies, or other interested parties. The search results will provide assessment information, including outstanding principal, annual installment amount, payment information, and a breakdown of the assessment installment by use (principal, interest, reserve fund accounts, administrations, etc.)
2. Prepare "District Information" page for website. P3Works will provide a link to District documents.
3. P3Works will review the full bond transcript and identify all requirements of the City relating to District administration and/or disclosure requirements.
4. Audit District administration prior to P3Works hire date and determine any items that need to be discussed with City, bond counsel, financial advisor.

ADDITIONAL DISTRICT ADMINISTRATION SERVICES

Billed at P3Works' prevailing hourly rates, which are currently as follows:

Title	***Hourly Rate***
Managing Partner	*$250*
Vice President	*$185*
Senior Associate	*$160*
Associate	*$135*
Administrative	*$75*

**P3Works' hourly rates may be adjusted from time to time to reflect increased costs of labor and/or adding/reclassifying titles. Travel will be billed at the hourly rates.*

Continuing Disclosure Services

1. P3Works will prepare the form of the annual report as required by the continuing disclosure agreements and work with the City and the Developer to complete.
2. P3Works will request from developer the reports due pursuant to the developer disclosure agreement and disseminate these reports pursuant to the disclosure agreement.
3. Upon notification by any responsible party or if P3Works independently becomes aware of such knowledge, P3Works will prepare notices of material events covering the events enumerated in the disclosure agreements.
4. P3Works will coordinate with the Trustee to disseminate the annual reports, quarterly reports from the developer, and notice of significant events to the Municipal Securities Rulemaking Board (MSRB) and any other parties required in the continuing disclosure agreement.

Developer Payment Request Administration

1. P3Works will review all developer payment requests to ensure the request complies with the PID Financing Agreement, the District service and assessment plan, and any other relevant provisions contained in the District documents.
2. P3Works will audit the developer payment request to ensure there is proper backup documentation and that the accounting is accurate.
3. P3Works will coordinate with the City's designated representative to ensure the improvements were built to the standards of the accepting governing body.
4. P3Works will ensure improvements to be dedicated are free and clear of all liens and encumbrances.

Consulting Services Relating to Future Improvement Areas and related Bond Issuance (to be paid from Developer funds advanced to City)

1. P3Works will update the Service and Assessment Plan to comply with Bond documents.
2. P3Works will prepare an updated Assessment Roll including the future Improvement Area
3. P3Works will coordinate with City's bond counsel, financial advisor, and the bond underwriter to ensure the Bonds and all related documents are in compliance with State Law.
4. P3Works will prepare any additional reports or analyses as needed to successfully issue the Bonds.

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Consider and possible action on Resolution No. R-2021-080 Accepting the infrastructure improvements for the subdivision Cottonwood Creek Phase 1. (Anthony Host)
Meeting:	Thursday, May 20, 2021
Department:	Public Works
Staff Contact:	Anthony Host

BACKGROUND INFORMATION:

Subdivision south of CR 199

SUMMARY OF REQUEST:

Acceptance of infrastructure Cottonwood Creek Phase I

STAFF REVIEW:

Staff has inspected and all testing has been passed.

FINANCIAL IMPACT:

$6,842,611.20 of assets and maintenance to the city.

POLICY IMPLICATIONS:

N/A

ATTACHMENTS:

1. COTTONWOOD CREEK PHASE I Engineer's Concurrence Letter
2. COTTONWOOD CREEK PHASE I Final subdivision check list
3. COTTONWOOD CREEK PHASE I Maintenance Bond Skonica dow21041609090
4. COTTOWOOD CREEK PHASE I TAS Re-Inspection 21-071
5. COTTONWOOD CREEK PHASE 1 - COST & QUANTITIES
6. COTTONWOOD CREEK PHASE 1 - Record Drawings
7. COTTONWOOD CREEK PHASE I Construction Summary Final
8. Cottonwood Creek Phase I acceptance resolution

12/02/2020

RE: Cottonwood Creek Phase 1 Paving, Drainage, Water & Wastewater Improvements
City of Hutto
Williamson County
Contractor: CC Carlton

Engineer's Concurrence Letter

To Whom It May Concern:

Please find this letter as our formal engineering concurrence for the above-referenced project. On December 2, 2020, I the undersigned professional engineer, made a final visual inspection of the above referenced project. This inspection represented the culmination of multiple site visits conducted by BGE, Inc. under the supervision of Josh Janysek, singly and several joint site visits conducted with City of Hutto Site Inspectors accompanied by Contractor personnel. The conclusion drawn from this final inspection and those site visits conducted during construction is that the Cottonwood Creek Phase 1 Paving, Drainage, Water & Wastewater Improvements project has been constructed in general compliance with the approved plans, specifications and requirements of the associated regulatory permits with insignificant deviation.

Revegetation of areas disturbed in this construction project remain in progress with appropriate erosion controls in place to minimize erosive potential during the grow-in period.

Sincerely,
BGE, Inc.

Josh Janysek, P.E.
Project Manager – Construction



cc: Todd Meaker, City of Hutto
Chase Kohlhoff, Lennar
Jared Davis, CC Carlton

FINAL SUBDIVISION / SITE PROJECT CHECKLIST

Date: 5/5/2021

Name of Project: Cotton Wood Creek Phase 1

Conditional / Final Acceptance Date: _____

Inspector's Name: Todd Meuker Job Number(s): _____

Note: All spaces need to be initialed by Inspector including N/A.

TM 1. Project Construction Summary Date Received: 4/9/21

TM 2. Engineer's Concurrence Letter Date Received: 4/9/21

TM 3. Maintenance Bond(s) Date Received: 4/16/21

TM 4. Final Cost & Quantities Date Received: 4/9/21

TM 5. As-built Reproducible Plans Date Received: 4/9/21
(1-24"X36", pdf scan, ACAD Base Map files)

TM 6. TDLR Inspection Report

TM 7. Test Reports
- TM Manhole Test
- TM TV Test
- TM Bacteriological Test
- TM WW Low Air Pressure Test / Mandrel Test
- TM Valve & Hydrant Test
- TM Water Pressure Test

TM 8. Punch List Date Completed: 4/1/21

TM 9. No. of Lots for Subdivisions 168 Total Acres in Subdivision. 45.6

Comments: _____

Please initial: _____ Inspector, _____ Supervisor, _____ Administrative Assistant
Received by: _____

THE GUARANTEE™
an [intact] company

MAINTENANCE BOND

BOND NO. 800103487

KNOW ALL MEN BY THESE PRESENTS:

That we CC Carlton Industries, Ltd. as Principal, and Atlantic Specialty Insurance Company as Surety, are held and firmly bound unto City of Hutto as Obligee in the sum of Seven Million One Hundred Eleven Thousand Nine Hundred Fifty-four & 45/00 Dollars ($ $7,111,954.45) for which sum, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally by these presents.

WHEREAS, on the 28th day of February, 2020, Principal entered into a contract with the Obligee for: Cottonwood Phase 1

Which contract is by reference made a part hereof and is hereafter referred to as the Contract.

NOW THEREFORE, the condition of this obligation is such, that if the Contractor shall make good any defect in material or construction that shall appear within 2 (two) year(s) from the date of the substantial completion, (April 12, 2022) this shall be null and void and otherwise remain in full force and effect.

Signed, sealed and dated this 12th day of April, 2021.

CC Carlton Industries, Ltd.

Witness

BY: _____
Principal

ITS: PRESIDENT

Atlantic Specialty Insurance Company

Andriana M. Gonzalez
Witness

BY: _____
Attorney-In-Fact John W. Schuler

Rev. 7/27/2020

605 Highway 169 North, Suite 800, Plymouth, Minnesota, USA 55441 | Tel: 1-800-662-0156 | www.onebeaconsurety.com

intact INSURANCE

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Walter E. Benson Jr, Steve Dobson, John W. Schuler,** each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2025

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 12th day of April, 2021.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

Please direct bond verifications to surety@intactinsurance.com

IMPORTANT NOTICE

To obtain information or make a complaint:

You may contact your agent.

You may call your Insurance Carrier's toll-free telephone number for information or to make a complaint at:

1-800-321-2721

You may also write to your Insurance Carrier at

Atlantic Specialty Insurance Company
Paralegal

605 Highway 169 North, Suite 800
Plymouth, MN 55441

1-781-332-7671

You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at

1-800-252-3439

You may write the Texas Department of Insurance:

P.O. Box 149104, Austin, TX 78714-9104

Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

PREMIUM OR CLAIM DISPUTES: Should you have a dispute concerning your premium or about a claim you should contact the agent first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR POLICY: This notice is for information only and does not become a part or condition of the attached document.

AVISO IMPORTANTE

Para obtener informacion o para someter una queja:

Puede communicarse con su agente.

Usted puede llamar al numero de telefono gratis de su compañía de seguros para informacion o para someter una queja al:

1-800-321-2721

Usted tambien puede escribir a su compañía de seguros en:

Atlantic Specialty Insurance Company
Paralegal

605 Highway 169 North, Suite 800
Plymouth, MN 55441

1-781-332-7671

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de companias, coberturas, derechos o quejas al:

1-800-252-3439

Puede escribir al Departamento de Seguros de Texas:

P.O. Box 149104, Austin, TX 78714

Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

DISPUTAS SOBRE PRIMAS □ RECLAMOS: Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el agente primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

UNA ESTE AVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte condicion del documento adjunto.

April 29, 2021

Josh Janysek, P.E.
BGE, Inc.
1701 Directors Blvd., Ste. 1000
Austin, TX 78744

Re: Cottonwood Creek Phase 1 TAS Re-Inspection

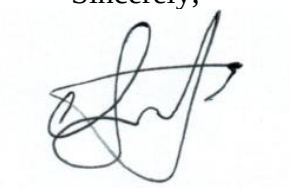
Dear Josh:

This report presents the findings of the on-site inspection for the Cottonwood Creek Phase 1 Project for compliance with the Texas Accessibility Standards. This report is limited to inspecting the elements for compliance with the applicable technical standards and not scoping. A Re-inspection of the site was conducted on April 29, 2021 which included the review of the pedestrian elements within the subdivision, including but not limited to sidewalks, curb ramps and associated crosswalks.

All of the pedestrian elements were found to be in compliance with the Texas Accessibility Standards. The scope of work is limited to the inspection of the elements and excludes project registration with TDLR and a formal plan review of the design documents.

Feel free to contact me at (512) 410-7059 or at arturo@alturalp.com with any questions.

Sincerely,



Arturo Pinero, RAS #1551

Altura Solutions, LLC
3616 Far West Blvd., Ste. 117-288, Austin, TX 78731

(512) 410-7059
arturo@alturalp.com

COTTONWOOD CREEK PHASE 1 FINAL COST AND QUANTITIES

DRAINAGE IMPROVEMENTS					COST
ITEM	DESCRIPTION	QTY.	UNIT	UNIT PRICE	AMOUNT
1	18-INCH RCP, CLASS III	1,314	LF	$ 60.00	$78,840.00
2	24-INCH RCP, CLASS III	1,718	LF	$ 70.00	$120,260.00
3	30-INCH RCP, CLASS III	1,145	LF	$ 80.00	$91,600.00
4	36-INCH RCP, CLASS III	1,433	LF	$ 125.00	$179,125.00
5	42-INCH RCP, CLASS III	1,593	LF	$ 160.00	$254,880.00
6	42-INCH RCP, CLASS III (ADDED SSL-L)	70	LF	$ 195.00	$13,650.00
7	48-INCH RCP, CLASS III	158.00	LF	$ 190.00	$30,020.00
8	54-INCH RCP, CLASS III	309.00	LF	$ 265.00	$81,885.00
9	MULTI BOX CULVERT HEADWALL	1	EA	$ 35,000.00	$35,000.00
10	MULTI BOX CULVERT HEADWALL W/ DISSIPATORS	1	EA	$ 39,000.00	$39,000.00
11	MULTI BOX CULVERT HEADWALL 6-5'X4' RCB	1	EA	$ 44,900.00	$44,900.00
12	MULTI BOX CULVERT HEADWALL W/ DISSIPATORS 6-5'X4' RCB	1	EA	$ 51,000.00	$51,000.00
13	6 - 5' x 5' RCB, CLASS III	55	LF	$ 1,600.00	$88,000.00
14	TYPE F HAND RAIL FOR 6- 5' X 5' RCB	1	LS	$ 15,000.00	$15,000.00
15	7 - 5' x 4' RCB, CLASS III	52.00	LF	$ 2,200.00	$114,400.00
16	TYPE F HAND RAIL FOR 6 - 5' X 4' RCB	600.00	LF	$ 30.00	$18,000.00
17	5'X3' RCB, CLASS III	64	LF	$ 298.00	$19,072.00
18	6'X3' RCB, CLASS III	125	LF	$ 300.00	$37,500.00
19	8'X3' RCB, CLASS III	196	LF	$ 400.00	$78,400.00
20	8'X3' HEADWALL W/ ENERGY DISSIPATERS	1	LF	$ 15,000.00	$15,000.00
21	6'X3' HEADWALL W/ ENERGY DISSIPATERS	1	EA	$ 13,000.00	$13,000.00
22	4'X4' AREA INLET	2	LF	$ 4,500.00	$9,000.00
23	10-FOOT CURB INLET	41.00	EA	$ 4,900.00	$200,900.00
24	15-FOOT CURB INLET	1.00	EA	$ 7,000.00	$7,000.00
25	STANDARD MANHOLE FOR STORM, 4-FOOT DIA.	5	EA	$ 4,300.00	$21,500.00
26	STANDARD MANHOLE FOR STORM, 5-FOOT DIA.	4	EA	$ 5,300.00	$21,200.00
27	STANDARD MANHOLE FOR STORM, 6-FOOT DIA.	1	EA	$ 6,000.00	$6,000.00
28	6'X6' JUNCTION BOX	2	EA	$ 4,900.00	$9,800.00
29	7'X7' JUNCTION BOX	1	EA	$ 9,200.00	$9,200.00
30	8'X8' JUNCTION BOX	1	EA	$ 9,400.00	$9,400.00
31	9'X9' JUNCTION BOX	1.00	EA	$ 12,800.00	$12,800.00
32	CLASS II RIPRAP 1.5-FEET DEEP	3,501	SF	$ 5.00	$17,505.00
33	CLASS II RIPRAP 2-FEET DEEP	1,200	SF	$ 7.50	$9,000.00
34	TEMPORARY SEDIMENTATION BASIN	1.00	LS	$ 10,000.00	$10,000.00
35	TRENCH SAFETY SYSTEMS	7,625.00	LF	$ 1.00	$7,625.00
36	TRASH RACK W/ CONCRETE PAD	1.00	LS	$ 3,225.00	$3,225.00
				Total	$1,772,687.00

WATER IMPROVEMENTS					COST
ITEM	DESCRIPTION	QTY.	UNIT	UNIT PRICE	AMOUNT
1	8-INCH C-900, DR-14 POTABLE WATERLINE	6,877	LF	$ 37.00	$254,449.00
2	12-INCH C-900, DR-14 POTABLE WATERLINE	7,288	LF	$ 53.00	$386,264.00
3	12-INCH C-900, DR-14 LOWERING	1	LS	$ 7,500.00	$7,500.00
4	SINGLE WATER SERVICE	29	EA	$ 1,700.00	$49,300.00
5	DOUBLE WATER SERVICE	74	EA	$ 1,900.00	$140,600.00
6	SINGLE IRRIGATION WATER SERVICE	1	EA	$ 1,700.00	$1,700.00
7	FIRE HYDRANT ASSEMBLY	25	EA	$ 5,300.00	$132,500.00
8	8-INCH GATE VALVE	28	EA	$ 2,100.00	$58,800.00
9	12-INCH GATE VALVE	17	EA	$ 3,100.00	$52,700.00
10	12-INCH CONNECT TO EXISTING	1	EA	$ 2,500.00	$2,500.00
11	8-INCH CONNECT TO EXISTING	1	EA	$ 2,400.00	$2,400.00
12	AUTOMATIC FLUSH VALVE	5	EA	$ 4,400.00	$22,000.00
13	TRENCH SAFETY SYSTEMS	14,165	LF	$ 0.60	$8,499.00

14	ADDED 18" STEEL ENCASEMENT	120	LF	$ 195.00	$23,400.00
				Total	$1,142,612.00

WASTEWATER IMPROVEMENTS					**COST**
ITEM	**DESCRIPTION**	**QTY.**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	8-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 0' TO 8'	930	LF	$ 40.00	$37,200.00
2	8-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 8' TO 10' DEEP	4,883	LF	$ 37.00	$180,671.00
3	8-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 10' TO 12' DEEP	742	LF	$ 42.00	$31,164.00
4	8-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 12' TO 14' DEEP	306	LF	$ 55.00	$16,830.00
5	8-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 14' TO 16' DEEP	170	LF	$ 65.00	$11,050.00
6	10-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 8' TO 10' DEEP	628	LF	$ 45.00	$28,260.00
7	10-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 10' TO 12' DEEP	296.00	LF	$ 47.00	$13,912.00
8	10-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 12' TO 14' DEEP	552	LF	$ 49.00	$27,048.00
9	10-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 14' TO 16' DEEP	379	LF	$ 60.00	$22,740.00
10	12-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 0' TO 8'	34	LF	$ 44.00	$1,496.00
11	12-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 8' TO 10' DEEP	-40	LF	$ 49.00	($1,960.00)
12	12-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 10' TO 12' DEEP	237	LF	$ 53.00	$12,561.00
13	12-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 12' TO 14' DEEP	2,958	LF	$ 63.00	$186,354.00
14	12-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 14' TO 16' DEEP	250.00	LF	$ 75.00	$18,750.00
15	15-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 0' TO 8' DEEP	210	LF	$ 64.00	$13,440.00
16	15-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 8' TO 10' DEEP	450	LF	$ 71.00	$31,950.00
17	15-INCH ASTM D3034 SDR-26 WASTEWATER PIPE, 10' TO 12' DEEP	608	LF	$ 77.00	$46,816.00
18	20-INCH STEEL CASING WITH SPACERS	60	LF	$ 205.00	$12,300.00
19	STANDARD BOLTED MANHOLE, 4-FOOT DIA.	18	EA	$ 5,000.00	$90,000.00
20	VENTED, BOLTED AND GASKETED MANHOLE, 4-FOOT DIA.	3	EA	$ 5,350.00	$16,050.00
21	VENTED MANHOLE, 4-FOOT DIA.	3.00	EA	$ 6,700.00	$20,100.00
22	STANDARD MANHOLE, 4-FOOT DIA.	39	EA	$ 4,600.00	$179,400.00
23	EXTRA DEPTH, 4-FOOT DIA.	175	VF	$ 450.00	$78,750.00
24	15-INCH BOOTS ON MANHOLES	1	LS	$ 2,500.00	$2,500.00
25	SINGLE WASTEWATER SERVICE	38	EA	$ 1,900.00	$72,200.00
26	DOUBLE WASTEWATER SERVICE	69	EA	$ 2,100.00	$144,900.00
27	CONNECT TO EXISTING MANHOLE	1	EA	$ 12,250.00	$12,250.00
28	TRENCH SAFETY SYSTEMS	13,593.00	LF	$ 1.00	$13,593.00
29	CONCRETE COFFER DAM	1	EA	$ 9,750.00	$9,750.00
30	ADDITIONAL GRAVEL (GROUNDWATER)	551	CY	$ 45.00	$24,795.00
31	FILTER FABRIC (GROUNDWATER)	6,890	SY	$ 3.50	$24,115.00
32	DAILY PUMPING (GROUNDWATER)	22.00	DAY	$ 250.00	$5,500.00
				Total	$1,384,485.00

STREET IMPROVEMENTS					**COST**
ITEM	**DESCRIPTION**	**QTY.**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	SUBGRADE PREPARATION	45,284	SY	$ 2.00	$90,568.00
2	8-INCH LIME TREATED SUBGRADE	45,284	SY	$ 8.00	$362,272.00
3	HMAC, 2-INCH THICKNESS	17,274	SY	$ 10.50	$181,377.00
4	CRUSHED LIMESTONE BASE, 9-INCH THICKNESS	22,492	SY	$ 9.50	$213,674.00
5	HMAC, 2-INCH THICKNESS	18,219	SY	$ 10.50	$191,299.50
6	CRUSHED LIMESTONE BASE, 14-INCH THICKNESS	22,792	SY	$ 15.00	$341,880.00
7	STREET END BARRICADE	10	LS	$ 1,200.00	$12,000.00
8	MACHINE LAID P.C. CONCRETE CURB AND GUTTER	14,925	LF	$ 16.00	$238,800.00
9	P.C. CONCRETE RIBBON CURB	174	LF	$ 15.00	$2,610.00
10	P.C. CONCRETE SIDEWALK, 5-FEET WIDE, 4-INCH THICKNESS	26,674	SF	$ 4.00	$106,696.00
11	P.C. CONCRETE SIDEWALK, 8-FEET WIDE, 4-INCH THICKNESS	17,465	SF	$ 4.00	$69,860.00
12	P.C. CONCRETE SIDEWALK CURB RAMP WITH PAVERS	70	EA	$ 1,350.00	$94,500.00
13	SIGNING AND STRIPING	1	LS	$ 5,000.00	$5,000.00
14	CONCRETE VALLEY GUTTERS	15	EA	$ 5,200.00	$78,000.00
				Total	$1,988,536.50

CLEARING & EXCAVATION IMPROVEMENTS					**COST**
ITEM	**DESCRIPTION**	**QTY.**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	CLEARING AND GRUBBING	48	AC	$ 1,200.00	$57,624.00
2	EXCAVATION	51,513	CY	$ 3.20	$164,841.60
3	CHANNEL EXCAVATION	26,737	CY	$ 3.75	$100,263.75
4	EMBANKMENT	56,777	CY	$ 3.20	$181,686.40
5	ADDED EMBANKMENT	189	CY	$ 3.75	$708.75

6	ADDED STOCKPILE EXCESS	22,868	CY	$ 2.15	$49,166.20
				Total	$554,290.70

EROSION IMPROVEMENTS					**COST**
ITEM	**DESCRIPTION**	**QTY.**	**UNIT**	**UNIT PRICE**	**AMOUNT**
1	SILT FENCE FOR EROSION CONTROL	25,910	LF	$ 2.75	$71,252.50
2	ADDED SILT FENCE AT STOCKPILE	500	LF	$ 4.75	$2,375.00
3	INLET PROTECTION	44	EA	$ 100.00	$4,400.00
4	STABILIZED CONSTRUCTION ENTRANCE	2	EA	$ 2,100.00	$4,200.00
5	ROCK BERM	52	LF	$ 30.00	$1,560.00
6	REVEGETATION	233,603	SY	$ 0.25	$58,400.75
7	LANDLOCK EROSION CONTROL MAT	9,525	SY	$ 4.00	$38,100.00
8	TRICKLE CHANNEL	1,979	LF	$ 45.00	$89,055.00
				Total	$269,343.25

TOTAL CONSTRUCTION COSTS		
ITEM	**DESCRIPTION**	**COST AMOUNT**
1	DRAINAGE IMPROVEMENTS	1,772,687.00
2	WATER IMPROVEMENTS	1,142,612.00
3	WASTEWATER IMPROVEMENTS	1,384,485.00
4	STREET IMPROVEMENTS	1,988,536.50
5	CLEARING & GRADING IMPROVEMENTS	554,290.70
6	EROSION IMPROVENTS	269,343.25
	Grand Total	7,111,954.45

CONSTRUCTION PLANS FOR COTTONWOOD CREEK PHASE I WILLIAMSON COUNTY, TEXAS "PAVING, DRAINAGE, WATER & WASTEWATER IMPROVEMENTS"

JANUARY 2020

SUMMARY NOTES

ENGINEER: BGE, INC., TBPE F-1046
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TEXAS 78744
(512) 879-0400

SURVEYOR: BGE, INC., TBPE F-1046
101 WEST LOUIS HENNA BLVD, SUITE 400
AUSTIN, TX 78728
(512) 879-0400

PROPERTY OWNER: LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION
13620 NORTH F.M. 620
BUILDING 1, STE. 150
AUSTIN, TX 78717

UTILITY PROVIDERS: ONCOR ENERGY
ATMOS GAS

LEGAL DESCRIPTION:

THAT LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., BEING THE OWNER OF 45.597 ACRES OF LAND OUT OF THE WILLIAM GATLIN SURVEY A-271, WILLIAMSON COUNTY, TEXAS AS CONVEYED TO IT BY INSTRUMENTS RECORDED IN DOC. NO'S. _____ & _____ OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, OF WHICH A PORTION BEING OUT OF MEADOWS AT COTTONWOOD CREEK, PHASE ONE, A SUBDIVISION AS RECORDED IN DOC. NO. 2009067576 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID MEADOWS AT COTTONWOOD CREEK, PHASE ONE HAVING BEEN VACATED BY DOCUMENT NO. _____ OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID SUBDIVISION HAVING BEEN APPROVED FOR RESUBDIVISION PURSUANT TO PUBLIC NOTIFICATION & HEARING PROVISIONS OF CHAP. 212 AND 232 OF THE TEXAS LOCAL GOVERNMENT CODE, DOES HEREBY SUBDIVIDE 45.597 ACRES OF LAND IN ACCORDANCE WITH THE ATTACHED MAP OR PLAT SHOWN HEREON, TO BE KNOWN AS:

COTTONWOOD PHASE 1

AND DOES HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

APPROVED BY

WILLIAMSON COUNTY ESD #3 — DATE 2-27-20

CITY OF HUTTO ENGINEERING — DATE 2-19-20

BENCHMARK

BENCHMARK #12 MAG NAIL W/ SHINER STAMPED "BGE INC" IN ASPHALT IN THE CENTER OF COUNTY ROAD 199, BEING APPROXIMATELY 1,420 FEET WEST-NORTHWEST OF THE INTERSECTION OF COUNTY ROAD 199 AND COUNTY ROAD 132.

ELEVATION: 648.75 FEET NAVD-88
GRID N: 10171601.73
GRID E: 3178479.93

BENCHMARK #13 MAG NAIL W/ SHINER STAMPED "BGE INC" IN ASPHALT IN THE NORTHBOUND LANE OF COUNTY ROAD 132, BEING APPROXIMATELY 15 FEET SOUTHEAST OF THE INTERSECTION OF COUNTY ROAD 199 AND COUNTY ROAD 132.

ELEVATION: 653.29 FEET NAVD-88
GRID N: 10171379.44
GRID E: 3179884.00

BENCHMARK #20 MAG NAIL W/ SHINER STAMPED "BGE INC" SET IN ASPHALT IN THE WESTBOUND LANE OF LUNA VISTA DRIVE BEING APPROXIMATELY 500 FEET EAST-SOUTHEAST OF THE INTERSECTION OF LUNA VISTA AND TEA ROSE TRAIL IN FRONT OF THE SOUTHEAST CORNER OF 517 LUNA VISTA DRIVE.

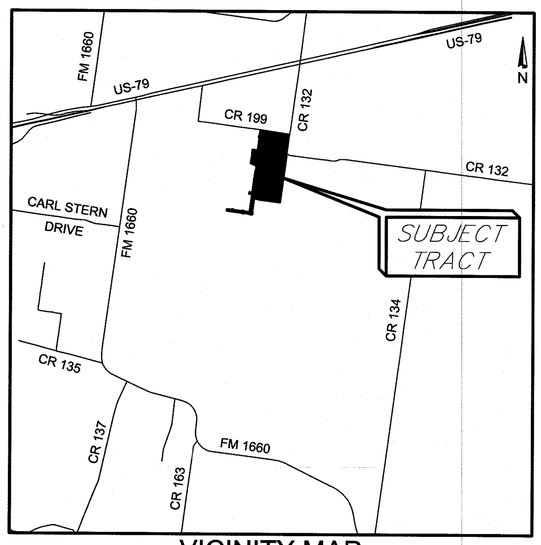
ELEVATION: 619.40 FEET NAVD-88
GRID N: 10166495.17
GRID E: 3177612.50

SUBMITTED BY

TIMOTHY M. HOLLAND, P.E. — DATE 2-11-2020
BGE, INC. TBPE NO. F-1046
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TEXAS 78744
(512) 879-0400 (MAIN)

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF HUTTO MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

VICINITY MAP



VICINITY MAP
NOT TO SCALE

NOTES:
1. THIS PROJECT IS LOCATED WITHIN THE COTTONWOOD CREEK WATERSHED.
2. THIS PROJECT IS NOT LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.
3. GRADING SHOWN FOR DRAINAGE WILL BE COMPLETED WITH THIS PROJECT.
4. NO PORTION OF THIS TRACT IS ENCROACHED BY ANY SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 1% ANNUAL CHANCE FLOODPLAIN AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP (FLOOD INSURANCE RATE MAP) COMMUNITY PANEL NUMBER 48491C0520E, EFFECTIVE DATE SEPTEMBER 26, 2008, FOR WILLIAMSON COUNTY, TEXAS."

REVISIONS/CORRECTIONS

SHEET LIST	DESCRIPTION	DATE	REVISE (R) ADD (A) VOID (V) SHEET NO.'S	ACCEPTED BY	APPROVAL DATE

Sheet List Table

Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES (1 OF 2)
3	GENERAL NOTES (2 OF 2)
4	PLAT (1 OF 3)
5	PLAT (2 OF 3)
6	PLAT (3 OF 3)
7	EROSION CONTROL PLAN (1 OF 2)
8	EROSION CONTROL PLAN (2 OF 2)
9	BRANSON BLVD PLAN AND PROFILE (1+00 TO 9+50)
10	BRANSON BLVD PLAN AND PROFILE (10+00 TO 20+00)
11	BRANSON BLVD PLAN AND PROFILE (20+00 TO END)
12	GOLDEN PLAINS PKWY PLAN AND PROFILE (1+00 TO END)
13	CANLEY LOOP PLAN AND PROFILE (1+00 TO END)
14	CANLEY LOOP & ARNAGE DR KNUCKLE PROFILE
15	LONGBRIDGE DR PLAN AND PROFILE (1+00 TO END)
16	ARNAGE DR PLAN AND PROFILE (1+00 TO 10+00)
17	ARNAGE DR PLAN AND PROFILE (10+00 TO 20+00)
18	ARNAGE DR PLAN AND PROFILE (20+00 TO END)
19	ASCARI ST & CUL DE SAC PLAN AND PROFILE (1+00 TO END)
20	COVENTRY DR PLAN AND PROFILE (1+00 TO END)
21	WOLSELEY DR PLAN AND PROFILE (1+00 TO END)
22	SEBRING CIRCLE PLAN AND PROFILE (1+00 TO END)
23	WOLSELEY COVE CUL DE SAC PLAN AND PROFILE (1+00 TO END)
24	OVERALL GRADING PLAN
25	OVERALL DRAINAGE AREA MAP
26	DRAINAGE AREA CALCS
27	OVERALL STORM PLAN
28	SSL-A PLAN AND PROFILE (1+00 TO 9+50)
29	SSL-A PLAN AND PROFILE (9+50 TO END)
30	SSL-B & SSL-C PLAN AND PROFILE (1+00 TO 8+00)
31	SSL-C 8+00 TO END & SSL-D PLAN AND PROFILE
32	SSL-E PLAN AND PROFILE (1+00 TO 9+50)
33	SSL-E PLAN AND PROFILE (9+50 TO END)
34	SSL-F PLAN AND PROFILE & SSL-H PLAN AND PROFILE (1+00 TO END)
35	SSL-G PLAN AND PROFILE (1+00 TO END)
36	SSL-I & SSL-J PLAN AND PROFILE (1+00 TO END)
37	SSL-A & SSL-C LATS
38	SSL-E LATS
39	LAT E.11 & SSL-D, SSL-F & SSL-G LATS
40	SSL-K & SSL-L PLAN & PROFILE & SSL-G, SSL-H & SSL-I LATS
41	CHANNEL 1 PLAN AND PROFILE (4+50 TO 10+00)
42	CHANNEL 1 PLAN AND PROFILE (10+00 TO END)
43	CHANNEL 2 PLAN AND PROFILE (1+00 TO END)
44	OVERALL WASTEWATER PLAN (1 OF 2)
45	OVERALL WASTEWATER PLAN (2 OF 2)
46	WW-A PLAN AND PROFILE (1+00 TO 10+00)
47	WW-A PLAN AND PROFILE (10+00 TO 20+00)
48	WW-A PLAN AND PROFILE (20+00 TO 29+50)
49	WW-A PLAN AND PROFILE (29+50 TO 40+00)
50	WW-A PLAN AND PROFILE (40+00 TO 50+00)
51	WW-A PLAN AND PROFILE (50+00 TO 60+00)
52	WW-A PLAN AND PROFILE (60+00 TO 70+00)
53	WW-A PLAN AND PROFILE (70+00 TO END)
54	WW-B PLAN AND PROFILE (1+00 TO 10+00)
55	WW-B PLAN AND PROFILE (10+00 TO END)
56	WW-C PLAN AND PROFILE (1+00 TO END)
57	WW-D PLAN AND PROFILE (1+00 TO END)
58	WW-E PLAN AND PROFILE (1+00 TO END)
59	WW-F PLAN AND PROFILE (1+00 TO END)
60	WW-G & WW-H PLAN AND PROFILE (1+00 TO END)
61	WW-J & WW-K PLAN AND PROFILE (1+00 TO END)
62	WW-L & WW-M & WW-N PLAN AND PROFILE (1+00 TO END)
63	WW-O & WW-P & WW-Q PLAN AND PROFILE (1+00 TO END)
64	OVERALL WATER PLAN (1 OF 2)
65	OVERALL WATER PLAN (2 OF 2)
66	WL-A PLAN AND PROFILE (1+00 TO 10+00)
67	WL-A PLAN AND PROFILE (10+00 TO END)
68	WL-B PLAN AND PROFILE (1+00 TO 10+00)
69	WL-B PLAN AND PROFILE (10+00 TO 19+50)
70	WL-B PLAN AND PROFILE (19+50 TO 30+00)
71	WL-B PLAN AND PROFILE (30+00 TO 40+00)
72	WL-B PLAN AND PROFILE (40+00 TO END)
73	WL-C PLAN AND PROFILE (1+00 TO END)
74	OVERALL SIGNAGE PLAN
75	EROSION DETAILS (1 OF 2)
76	EROSION DETAILS (2 OF 2)
77	STREET DETAILS (1 OF 2)
78	STREET DETAILS (2 OF 2)
79	STORM DETAILS
80	WASTEWATER DETAILS (1 OF 3)
81	WASTEWATER DETAILS (2 OF 3)
82	WASTEWATER DETAILS (3 OF 3)
83	WATER DETAILS (1 OF 4)
84	WATER DETAILS (2 OF 4)
85	WATER DETAILS (3 OF 4)
86	WATER DETAILS (4 OF 4)
87	TxDOT DETAILS (1 OF 5)
88	TxDOT DETAILS (2 OF 5)
89	TxDOT DETAILS (3 OF 5)
90	TxDOT DETAILS (4 OF 5)
91	TxDOT DETAILS (5 OF 5)

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED USING INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND/OR OWNER. THE SIGNATURE BELOW SIGNIFIES THAT THESE PLANS HAVE BEEN REVISED IN ACCORDANCE WITH THE INFORMATION PROVIDED. THIS DOCUMENT IS FOR INFORMATION AND REFERENCE IN CONNECTION WITH THE OWNER'S USE AND OCCUPANCY OF THE PROJECT AND IS NOT INTENDED FOR BID, PERMIT OR CONSTRUCTION.

By: Josh Janysek Date: 11/18/2020

BROWN & GAY ENGINEERS
TBPE REGISTRATION No. F-1046

STATE OF TEXAS — TIMOTHY M. HOLLAND — 94845 — LICENSED PROFESSIONAL ENGINEER — 2/11/2020

BGE, Inc.
1701 Directors Boulevard, Suite 1000
Austin, TX 78744
Tel: 512-879-0400 • www.browngay.com
TBPE Registration No. F-1046

Update #1 (2-18-20)
Update #2 (2-25-20)

CITY OF HUTTO - GENERAL CONSTRUCTION NOTES
UPDATED MARCH 2019

1. THE CONTRACTOR IS TO CONTACT ONE OF THE FOLLOWING: TEXAS811 811 LONE STAR 1-800-669-8344 FOR LOCATION OF EXISTING FACILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
2. PRIOR TO ANY CONSTRUCTION, THE DESIGN ENGINEER SHALL CONVENE A PRECONSTRUCTION CONFERENCE BETWEEN THE CITY OF HUTTO, HIMSELF, THE CONTRACTOR, OTHER UTILITY COMPANIES, ANY AFFECTED PARTIES AND ANY OTHER ENTITY THE CITY OR ENGINEER MAY REQUIRE. IF CONSTRUCTION IS NOT STARTED ON THE SITE WITHIN 30 CALENDAR DAYS AFTER THE PRE-CONSTRUCTION CONFERENCE, THE ENGINEER SHALL CONVENE A NEW PRECONSTRUCTION CONFERENCE BETWEEN THE CITY OF HUTTO, HIMSELF, AND ALL THE ABOVE MENTIONED ENTITIES.
3. PRIOR TO ANY CHANGES TO THE CONSTRUCTION SITE, VIDEO OF THE SITE MUST BE TAKEN AND PROVIDED TO THE CITY BEFORE CONSTRUCTION COMMENCES.
4. ALL CONSTRUCTION OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF HUTTO ENGINEERING MANUAL AND STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS. IF CITY OF HUTTO ENGINEERING MANUAL UNAVAILABLE, OR NOT APPLICABLE, REFER TO TXDOT AND/OR CITY OF GEORGETOWN MANUAL, STANDARDS AND/OR SPECIFICATIONS.
5. ALL STORM SEWER BENDS AND WYES SHALL BE PREFABRICATED.
6. ALL STORM SEWER MAINS TO BE FIELD-TESTED FOR WATER TIGHTNESS NO SOONER THAN 30 DAYS AFTER TOTAL COMPLETION OF THE STORM SEWER LINES.
7. ALL STORM SEWER MAINS TO BE VIDEO TAPED BY CAMERA NO SOONER THAN 30 DAYS AFTER TOTAL COMPLETION OF THE STORM SEWER LINES. TWO DIGITAL COPIES SHALL BE SUPPLIED TO THE CITY BEFORE CLOSEOUT. ALL STORM SEWER CONDUITS WILL BE INSPECTED BY THE CITY BEFORE CITY ACCEPTANCE, VIDEO MUST SHOW DETAILS OF ALL IRREGULARITIES OR OFFSETS (MINIMUM 10 SECONDS OF VIDEO TIME).
8. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 E. 6TH STREET, AUSTIN, TEXAS.
9. CONTRACTOR SHALL TAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES FROM DAMAGE. ANY DAMAGE INCURRED TO EXISTING FACILITIES AS A RESULT OF CONSTRUCTION OPERATIONS TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR, AT NO ADDITIONAL COST TO OWNER.
10. CONTRACTOR TO GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS OR PERSONS IN CHARGE OF PUBLIC AND PRIVATE UTILITIES AFFECTED BY HIS OPERATIONS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
11. CONTRACTOR TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIAL, INCLUDING METHODS OF HANDLING AND DISPOSAL.
12. CONTRACTOR TO COORDINATE INTERRUPTIONS OF ALL UTILITIES AND SERVICES. ALL WORK TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED.
13. WHEN UN-LOCATED OR INCORRECTLY LOCATED, A BREAK IN UTILITY LINES, OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED DURING SITE WORK OPERATIONS, CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. CONTRACTOR SHALL COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
14. CONTRACTOR TO LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, CONTROL POINTS AND PROJECT ENGINEERING REFERENCE POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, AT NO ADDITIONAL COST TO OWNER.
15. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. CLEAN-UP SHALL BE TO THE SATISFACTION OF THE ENGINEER.
16. THE CONTRACTOR AND THE ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. ACCURATE "RECORD" DRAWINGS WILL BE PROVIDED TO THE CITY OF HUTTO, ALONG WITH A LETTER CERTIFICATION FROM A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS, STATING THAT SAID PROJECT HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THESE PLANS, PRIOR TO THE OWNER BEING ISSUED A CERTIFICATION OF COMPLETION AND FINAL ACCEPTANCE. THESE "RECORD" DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE ENGINEERING AND DEVELOPMENT SERVICES DEPARTMENTS PRIOR TO FINAL ACCEPTANCE.
17. CONTRACTOR SHALL STRIP SIX (6) INCHES OF TOPSOIL FROM ALL AREAS SUBJECT TO GRADE MODIFICATION. REMOVE ALL AREAS OF WEAK SOIL.
18. THE CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. IN THE EVENT THAT A FENCE MUST BE REMOVED, THE CONTRACTOR SHALL REPLACE SAID FENCE OR PORTION THEREOF WITH THE SAME TYPE OF FENCING TO A QUALITY OF EQUAL OR BETTER THAN THE ORIGINAL FENCE.
19. UPON COMPLETION OF THE PROJECT, THE SITE(S) AS DEFINED HEREIN SHALL BE CLEANED OF ALL DEBRIS AND LEFT IN A NEAT AND PRESENTABLE CONDITION.
20. ALL ADJOINING PAVEMENT SECTIONS SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION AND ANY DAMAGES INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE.
21. CONTRACTOR TO CONTROL DUST CAUSED BY THE WORK AND COMPLY WITH POLLUTION CONTROL REGULATIONS OF GOVERNING AUTHORITIES (NO SEPARATE PAY).
22. TRAFFIC CONTROLS TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT TXDOT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND TXDOT BARRICADE AND CONSTRUCTION STANDARDS.
23. REVEGETATE ALL DISTURBED AREAS UPON COMPLETION OF THE WORK PER CITY OF GEORGETOWN CONSTRUCTION STANDARDS.
24. CONTRACTOR TO EXERCISE CAUTION DURING CONSTRUCTION NEAR AND AROUND GAS LINES AND POWER LINES.
25. NO WORK IS TO BE PERFORMED BETWEEN THE HOURS OF 6:00 P.M. AND 7:00 A.M. ALL WORK REQUIRING CITY INSPECTION SHALL BE PERFORMED MONDAY THRU FRIDAY. THE CITY RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER ALL WORK PERFORMED WITHOUT INSPECTION.
26. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION VERTICALLY AND HORIZONTALLY OF ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK, AND SHALL NOTIFY THE ENGINEER AND THE CITY IF THE EXISTING UTILITY LOCATION AND DEPTHS ARE DIFFERENT FROM WHAT IS SHOWN ON THE PLANS. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
27. ALL FIRE LINES SHALL BE DUCTILE IRON.
28. DETECTABLE TAPE SHALL BE USED FOR ALL UNDERGROUND UTILITIES. TAPE MUST BE 12" WIDE 5 MIL WITH APPLICABLE COLOR AND LABEL.
29. CONTRACTOR WILL BE RESPONSIBLE FOR KEEPING ROADS AND DRIVES ADJACENT TO AND NEAR THE SITE FREE FROM SOIL, SEDIMENT AND DEBRIS. CONTRACTOR WILL NOT REMOVE SOIL, SEDIMENT OR DEBRIS FROM ANY AREA OR VEHICLE BY MEANS OF WATER, ONLY SHOVELING AND SWEEPING WILL BE ALLOWED. CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL FROM THE SITE.
30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO PRIVATE PROPERTY WHICH OCCURS AS A RESULT OF ANY PORTION OF THIS PROJECT. ANY DAMAGE TO PRIVATE PROPERTY SHALL BE REPAIRED TO EQUAL OR BETTER CONDITION. THE CONTRACTOR SHALL PAY AND/OR SETTLE WITH PRIVATE PROPERTY OWNER(S) FOR ALL COST RELATED TO DAMAGE. THE CITY WILL NOT PROVIDE SEPARATE PAY FOR REPAIR OF DAMAGES, REIMBURSEMENTS OR SETTLEMENTS.

CITY OF HUTTO - EROSION, SEDIMENTATION AND TREE PROTECTION NOTES
UPDATED AUGUST 2018

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF THE PROJECT AND GRASS RESTORATION.
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
3. ALL PLANTING SHALL BE DONE BETWEEN MAY 1ST AND SEPTEMBER 15TH EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATE SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100 LBS/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 82% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, CLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
4. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
5. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR INCHES (4"). THE IRRIGATION TO OCCUR AT 10-DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS. RAINFALL OCCURRENCES OF ONE HALF AND INCH (1/2") OR GREATER TO POSTPONE THE WATER SCHEDULE ONE WEEK.
6. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST ONE AND ONE HALF INCHES (1.5") HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN TWENTY-FIVE SQUARE FEET EXIST.
7. A MINIMUM OF FOUR INCHES (4") OF TOPSOIL TO BE PLACE IN ALL AREA DISTURBED BY CONSTRUCTION.
8. THE CONTRACTOR TO HYDRO MULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
9. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIP LINE.
10. TO AVOID SOIL COMPACTION. CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIP LINE AREA.
11. WHERE A FENCE IS CLOSER THAN FOUR FEET (4') TO A TREE TRUCK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT FEET (8'), OR THE LIMITS OF LOWER BRANCHING, IN ADDITION TO THE FENCING.
12. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
13. ANY ROOT EXPOSED BY THE CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREA WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATTER IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
14. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURE, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
15. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING ONE-QUARTER INCH (1/4") TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
16. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'-4') BEHIND THE AREA IN QUESTION.
17. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
18. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNER'S EXPENSE.
19. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

CITY OF HUTTO - WASTEWATER NOTES
UPDATED AUGUST 2018

1. WASTEWATER SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF HUTTO ENGINEERING DESIGN MANUAL, STANDARD SPECIFICATIONS AND STANDARD DETAILS.
2. NO CURVILINEAR WASTEWATER DESIGN/LAYOUT IS PERMITTED.
3. ALL WASTEWATER SERVICE, AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:
   A. WASTEWATER SERVICE "S" ON TOP OF CURB
   B. VALVE "V" ON TOP OF CURB
4. TOOLS FOR MARKING CURBS SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF MARKING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF MARKING SHALL BE SPECIFIED BY THE DESIGN ENGINEER AND APPROVED BY THE CITY OF HUTTO.
5. THRUST BLOCKING AND RESTRAINTS SHALL BE IN ACCORDANCE WITH CITY OF HUTTO STANDARD SPECIFICATIONS.
6. MANDREL TESTING WILL BE REQUIRED ON ALL WASTEWATER PIPE AS PER CITY OF HUTTO CONSTRUCTION SPECIFICATIONS.
7. ALL GRAVITY WASTEWATER MAINS TO BE FIELD-TESTED FOR WATER TIGHTNESS AND VIDEO TAPED BY CAMERA SO SOONER THAN 30-DAYS AFTER TOTAL COMPLETION OF WASTEWATER LINES. TWO DIGITAL COPIES SHALL BE PROVIDED TO THE CITY BEFORE CLOSEOUT.
8. HYDROSTATIC PRESSURE AND LEAKAGE TESTS SHALL BE PERFORMED ON ALL PRESSURE PIPELINES CARRYING WASTEWATER.
9. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE SEPARATELY AND INDEPENDENTLY OF WASTEWATER LINES BY HYDROSTATIC EXFILTRATION TESTING OR OTHER CITY APPROVED METHOD PER CITY OF HUTTO CONSTRUCTION SPECIFICATIONS.
10. EXISTING MANHOLES SHALL BE TESTED FOR LEAKAGE PRIOR TO CORING OR ADJUSTMENT.
11. EXISTING MANHOLES SHALL HAVE ALL CONCRETE SURFACES CLEANED AND COATED PER CITY OF HUTTO WASTEWATER DETAILS AFTER CORING OR ADJUSTMENT.
12. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE / NATIONAL SANITATION FOUNDATION STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
13. PIPE MATERIAL FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AWWA C900, MIN. DR 14), OR DUCTILE IRON (AWWA C151, MIN. CLASS 350). DUCTILE IRON FOR PRESSURE WASTEWATER MAINS SHALL HAVE A CORROSION RESISTANT INTERIOR LINING ACCEPTABLE TO OWNER. PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS SHALL BE PVC SDR-26, ASTM D-3034.
14. ALL PVC PIPE (ALL TYPES AND SDR/DR WALL THICKNESS TO BE USED) SHALL HAVE RUBBER GASKET EQUIPPED BELL AND SPIGOT JOINTS CONFORMING TO ASTM D-3212. THE GASKET MATERIAL SHALL CONFORM TO ASTM F-477. SOLVENT WELDED JOINTS WILL NOT BE APPROVED FOR THIS PROJECT.
15. ALL SANITARY SEWER FACILITIES AND POTABLE WATERLINES MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET OF CLEARANCE IN ANY DIRECTION BETWEEN THEM. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, FOLLOW THESE SPECIAL PROCEDURES.
   A. IF A COLLECTION SYSTEM PIPE PARALLELS A PUBLIC WATER SUPPLY PIPE THE FOLLOWINGREQUIREMENTS APPLY:
      I. A COLLECTION SYSTEM PIPE MUST BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC MEETING ASTM SPECIFICATIONS WITH AT LEAST 150 POUNDS PER SQUARE INCH (PSI) PRESSURE RATING FOR BOTH THE PIPE AND JOINTS.
      II. VERTICAL SEPARATION MUST BE AT LEAST TWO FEET BETWEEN THE OUTSIDE DIAMETERS OF THE PIPES.
      III. HORIZONTAL SEPARATION MUST BE AT LEAST FOUR FEET BETWEEN OUTSIDE DIAMETERS OF THE PIPES.
      IV. COLLECTION SYSTEM PIPE MUST BE BELOW WATER SUPPLY PIPE.
   B. IF A COLLECTION SYSTEM PIPE CROSSES A PUBLIC WATER SUPPLY PIPE, THE FOLLOWING REQUIREMENTS APPLY:
      I. IF A COLLECTION SYSTEM IS CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, THE FOLLOWING REQUIREMENTS APPLY:
         a. A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN OUTSIDE DIAMETERS OF THE PIPES.
         b. A COLLECTION SYSTEM PIPE MUST BE BELOW A PUBLIC WATER SUPPLY PIPE.
         c. COLLECTION SYSTEM PIPE JOINTS MUST BE LOCATED AS FAR AS POSSIBLE FROM AN INTERSECTION WITH A PUBLIC WATER SUPPLY LINE.
      II. IF A COLLECTION SYSTEM CROSSES OVER A PUBLIC WATER SUPPLY PIPE, EACH PORTION OF A COLLECTION SYSTEM PIPE WITHIN NINE FEET OF A PUBLIC WATER SUPPLY PIPE MUST BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS.
16. AN INDEPENDENT QUALIFIED LAB, AT THE CONTRACTOR'S EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAGES), SUPPLIES, AND LABOR NECESSARY TO PERFORM THE TESTS. A CITY OF HUTTO CONSTRUCTION INSPECTOR MUST BE PRESENT FOR ALL TESTING.
17. THE CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER AND THE CITY NOT LESS THAN 24 HOURS NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING, OR PRESSURE TESTING.
18. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS AUTHORIZED BY THE CITY OF HUTTO.
19. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON PER CITY OF HUTTO STANDARD DETAILS.
20. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF PAVEMENT SHALL HAVE BOLTED AND GASKETED COVERS. CONCRETE MANHOLES TO BE COATED PER STANDARD DETAIL AND CONSTRUCTION SPECIFICATIONS. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE PERMITTED.
21. ALL WASTEWATER PIPING AND FITTINGS SHALL BE VIRGIN STOCK.
22. ALL MECHANICAL RESTRAINTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

CITY OF HUTTO - WATER NOTES
UPDA
TED MARCH 2019

1. WATER SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF HUTTO ENGINEERING MANUAL, STANDARD SPECIFICATIONS AND STANDARD DETAILS.
2. FIRE HYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLY WRAP BAG AND TAPED INTO PLACE. THE POLY WRAP SHALL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND BROUGHT INTO SERVICE. ALL FIRE LINES SHALL BE DUCTILE. IRON
3. ALL WATER SERVICE, WASTEWATER SERVICE, AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:
   A. WATER SERVICE "W" ON TOP OF CURB
   B. VALVE "V" ON TOP OF CURB OR VALVE SIGN AS INSTRUCTED BY CITY ENGINEER
4. TOOLS FOR MARKING CURBS SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF MARKING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF MARKING SHALL BE SPECIFIED BY THE ENGINEER AND APPROVED BY THE CITY OF HUTTO.
5. THRUST BLOCKING AND RESTRAINTS SHALL BE IN ACCORDANCE WITH CITY OF HUTTO STANDARD SPECIFICATIONS.
6. HYDROSTATIC PRESSURE AND LEAKAGE TESTS SHALL BE PERFORMED ON ALL PRESSURE PIPELINES CARRYING WATER.
7. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
8. PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AWWA C900/C905, MIN. DR 14), OR DUCTILE IRON (AWWA C151, MIN. CLASS 350). WATER SERVICES (2" OR SMALLER) SHALL BE POLYETHYLENE TUBING (BLACK, 200 PSI, DR 9).
9. ALL DUCTILE IRON PIPE (D.I.P) SHALL BE WRAPPED WITH EIGHT (8) MIL, BLACK VIRGIN POLYETHYLENE WRAP AS SPECIFIED IN ANSI/AWWA C105/A21.5.
10. ALL D.I.P. SHALL BE LINED WITH VIRGIN POLYETHYLENE CONFORMING TO ASTM D-1248; 40 MIL THICKNESS (NOMINAL), 35 MILS (MINIMUM). LINER TO BE POLYBOND OR EQUAL, AT ANY POINT WHERE DIP CANNOT BE WRAPPED IN POLYETHYLENE, COAT THE EXTERIOR WITH POLYBOND OR APPROVED EQUAL.
11. ALL PVC PIPE (ALL TYPES AND SDR/DR WALL THICKNESS TO BE USED) SHALL HAVE RUBBER GASKET EQUIPPED BELL AND SPIGOT JOINTS CONFORMING TO ASTM D-3212. THE GASKET MATERIAL SHALL CONFORM TO ASTM F-477. SOLVENT WELDED JOINTS WILL NOT BE APPROVED FOR THIS PROJECT.
12. ALL POTABLE WATERLINES AND SANITARY SEWER FACILITIES MUST BE INSTALLED SO AS TO PROVIDE A MINIMUM OF NINE FEET OF CLEARANCE IN ANY DIRECTION BETWEEN THEM. WHERE THE NINE FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, FOLLOW THESE SPECIAL PROCEDURES.
   A. IF A COLLECTION SYSTEM PIPE PARALLELS A PUBLIC WATER SUPPLY PIPE THE FOLLOWING REQUIREMENTS APPLY:
      I. A COLLECTION SYSTEM PIPE MUST BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC MEETING ASTM SPECIFICATIONS WITH AT LEAST 150 POUNDS PER SQUARE INCH (PSI) PRESSURE RATING FOR BOTH THE PIPE AND JOINTS.
      II. VERTICAL SEPARATION MUST BE AT LEAST TWO FEET BETWEEN THE OUTSIDE DIAMETERS OF THE PIPES.
      III. HORIZONTAL SEPARATION MUST BE AT LEAST FOUR FEET BETWEEN OUTSIDE DIAMETERS OF THE PIPES.
      IV. COLLECTION SYSTEM PIPE MUST BE BELOW WATER SUPPLY PIPE.
   B. IF A COLLECTION SYSTEM PIPE CROSSES A PUBLIC WATER SUPPLY PIPE, THE FOLLOWING REQUIREMENTS APPLY:
      I. IF A COLLECTION SYSTEM IS CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI, THE FOLLOWING REQUIREMENTS APPLY:
         a. A MINIMUM DISTANCE OF SIX (6) INCHES BETWEEN OUTSIDE DIAMETERS OF THE PIPES.
         b. A COLLECTION SYSTEM PIPE MUST BE BELOW A PUBLIC WATER SUPPLY PIPE.
         c. COLLECTION SYSTEM PIPE JOINTS MUST BE LOCATED AS FAR AS POSSIBLE FROM AN INTERSECTION WITH A PUBLIC WATER SUPPLY LINE.
      II. IF A COLLECTION SYSTEM CROSSES OVER A PUBLIC WATER SUPPLY PIPE, EACH PORTION OF A COLLECTION SYSTEM PIPE WITHIN NINE FEET OF A PUBLIC WATER SUPPLY PIPE MUST BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC PIPE WITH A PRESSURE RATING OF AT LEAST 150 PSI USING APPROPRIATE ADAPTERS.
13. THE CONTRACTOR MUST OBTAIN A TEMPORARY WATER METER FROM THE CITY OF HUTTO UTILITY BILLING DEPARTMENT FOR ALL WATER USED DURING CONSTRUCTION.
14. CONTRACTOR TO SCHEDULE WATER VALVE CLOSURE THROUGH CITY OF HUTTO: DEPARTMENT OF PUBLIC WORKS UTILITY DIVISION WITH ADVANCE NOTICE OF 7 DAYS. CONTRACTOR TO CONTACT PUBLIC WORKS AT PHONE 512-759-4016 AND NOTIFY CONSTRUCTION INSPECTOR. WATER VALVE CLOSURE WILL ONLY BE SCHEDULED FOR TUESDAY THROUGH THURSDAY. CONTRACTOR TO NOTIFY ALL BUSINESSES AND RESIDENTS AFFECTED BY VALVE CLOSURES. CLOSURES MUST BE COORDINATED TO MINIMIZE EFFECTS ON EXISTING CUSTOMERS WITH CONSIDERATIONS GIVEN TO BUSINESSES THAT REQUIRE WATER TO MAINTAIN OPERATIONS.
15. LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE SCHEDULED WITH THE CITY OF HUTTO. CONTRACTOR WILL BE RESPONSIBLE FOR TRACKING THE AMOUNT OF WATER USED DURING FLUSHING AND BE REQUIRED TO REIMBURSE THE CITY FOR WATER USE, IF NOT ALREADY METERED.
16. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINES AND SHALL PROVIDE ALL EQUIPMENT NECESSARY (INCLUDING TEST GAGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTION MATERIAL) AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY THE ENGINEER AND A CITY OF HUTTO CONSTRUCTION INSPECTOR. WATER SAMPLES WILL BE COLLECTED TO VERIFY EACH TREATED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PPM.
17. AN INDEPENDENT QUALIFIED LAB, AT THE CONTRACTOR'S EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAGES), SUPPLIES, AND LABOR NECESSARY TO PERFORM THE TESTS. A CITY OF HUTTO CONSTRUCTION INSPECTOR MUST BE PRESENT FOR ALL TESTING.
18. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND THE CITY NOT LESS THAN 24 HOURS NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING, OR PRESSURE TESTING.
19. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS AUTHORIZED BY THE CITY OF HUTTO.
20. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON PER CITY OF HUTTO STANDARD DETAILS.
21. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF PAVEMENT SHALL HAVE BOLTED AND GASKETED COVERS. CONCRETE MANHOLES TO BE COATED PER STANDARD DETAIL AND CONSTRUCTION SPECIFICATIONS. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE PERMITTED.
22. ALL FIRE LINES SHALL BE DUCTILE IRON PIPE (AWWA C-100, CLASS 200).
23. ALL FIRE HYDRANTS SHALL BE SILVER IN COLOR INCLUDING BONNET AND INSTALLED PER CITY OF HUTTO STANDARD DETAIL.
24. ALL WATER PIPING AND FITTINGS SHALL BE VIRGIN STOCK.
25. ALL MECHANICAL RESTRAINTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
26. ALONG STATE HIGHWAYS, WATER LINES ARE REQUIRED ON BOTH SIDES OF THE ROADWA

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."

2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].

3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [§290.44(A)(2)].

4. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY [§290.44(A)(3)].

5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].

6. WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [§290.44(A)(4)].

7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [§290.44(B)].

8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].

9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].

10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [§290.44(F)(2)].

11. PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS. O THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT

    THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

    $Q = \frac{LD\sqrt{P}}{148{,}000}$

    WHERE:
    Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
    L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
    D= THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
    P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

    THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-600 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

    $L = \frac{SD\sqrt{P}}{148{,}000}$

    WHERE:
    L = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
    S = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
    D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
    P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED MUST MEET §290.44(E)(1)-(4).

13. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE, THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND, THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT [§290.44(E)(5)].

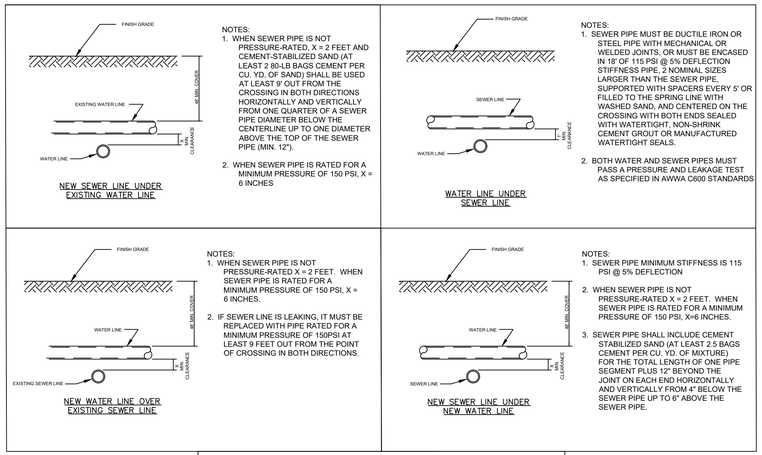
14. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION [§290.44(E)(6)].

15. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE [§290.44(E)(7)].

16. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAINFIELDS [§290.44(E)(8)].

17. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14OR MOST RECENT, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].

18. DECHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.



TRENCH SAFETY NOTES:

1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT WILL BE PROVIDED BY THE CONTRACTOR.
2. IN ACCORDANCE WITH THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4-FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
3. IF TRENCH SAFETY SYSTEM DETAILS WERE NOT PROVIDED IN THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN 5 FEET IN DEPTH AND DURING CONSTRUCTION IT IS FOUND THAT TRENCHES ARE IN FACT 5 FEET OR MORE IN DEPTH OR TRENCHES LESS THAN 5 FEET IN DEPTH ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE ENGINEER NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE RETAINED AND COPIES SUBMITTED TO THE CITY OF HUTTO.

FIRE DEPARTMENT:

1. AN ALL WEATHER DRIVING SURFACE MUST BE INSTALLED IN LOCATIONS SHOWN ON THE SITE PLAN TO BE FIRE LANES, PRIOR TO ANY BUILDING CONSTRUCTION BEYOND THE FOUNDATION PHASE.
2. THE FOUR AND ONE HALF-INCH STEAMER OPENING MUST FACE THE DRIVEWAY OR STREET WITH THREE TO SIX FEET SET BACKS FROM THE CURB LINE(S). NO OBSTRUCTION IS ALLOWED WITHIN THREE (3) FEET OF ANY FIRE HYDRANT, AND THE FOUR AND ONE HALF OPENING MUST BE TOTALLY UNOBSTRUCTED FROM THE STREET/DRIVEWAY.
3. ALL PERVIOUS/DECORATIVE PAVEMENTS SHALL BE ENGINEERED AND INSTALLED FOR 75,000 LB. LIVE-VEHICLE LOADS. THE DISTRICT MUST APPROVE ANY PERVIOUS/DECORATIVE PAVING WITHIN 100 FT. OF ANY BUILDING.
4. COMMERCIAL DUMPSTERS AND CONTAINERS WITH AN INDIVIDUAL CAPACITY OF 1.5 CUBIC YARDS OR GREATER SHALL NOT BE STORED OR PLACED WITHIN TEN- (10) FT. OF OPENINGS, COMBUSTIBLE WALLS, OR COMBUSTIBLE EAVE LINES.
5. VERTICAL CLEARANCE REQUIRED FOR FIRE APPARATUS IS 13 FEET, 6 INCHES, FOR THE FULL 25 FEET WIDTH OF ALL ACCESS DRIVES AND ROUTES FOR INTERNAL CIRCULATION. DEAD-END FIRE APPARATUS ACCESS ROADS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH APPROVED PROVISIONS FOR THE TURNING AROUND OF FIRE APPARATUS.
6. FIRE LANES SHALL BE STENCILED "FIRE LANE-TOW AWAY ZONE" IN WHITE LETTERS THREE INCHES TALL, AT INTERVALS NOT TO EXCEEDING 35 FEET. CURBS ALONG THE FIRE LANES SHALL BE PAINTED RED IN AREAS AS INDICATED ON THE SITE PLAN. WHERE NO CURB AND GUTTER EXISTS, FIRE APPARATUS ACCESS ROADS SHALL BE MARKED WITH PERMANENT FIRE LANE- TOW AWAY ZONE SIGNS AT INTERVALS NOT EXCEEDING 50 FEET. SIGNS SHALL HAVE A MINIMUM DIMENSION OF 12 INCHES WIDE AND 18 INCHES HIGH AND HAVE RED LETTERS ON A WHITE REFLECTIVE BACKGROUND. SIGNS SHALL BE POSTED ON ONE SIDE OR BOTH SIDES OF THE FIRE APPARATUS ROAD AS REQUIRED BY LOCAL AMENDMENTS.

GENERAL NOTES:

1. UNLESS OTHERWISE LISTED HEREIN, ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF GEORGETOWN STANDARD SPECIFICATIONS, WHICH ARE HEREBY REFERENCED FOR THIS CONSTRUCTION PLAN SET.
2. WHERE A STATE OR LOCAL MUNICIPAL STANDARD DETAIL DUPLICATES A DETAIL SHOWN IN THE PLANS, THE MORE STRINGENT DETAIL, AS DETERMINED BY THE REVIEWING AGENCY, SHALL APPLY.
3. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED TO EXISTING OR BETTER CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.

HIGH PRESSURE PIPELINE CROSSING NOTES:

1. CONSTRUCTION PARAMETERS: CONSTRUCTION ACTIVITY OF ANY KIND THAT TAKE PLACE WITHIN THE EASEMENT WILL REQUIRE 48 HOURS (TWO WORKING DAYS) PRIOR NOTICE TO TEXAS ONE-CALL AT 811. A COMPANY REPRESENTATIVE MUST BE PRESENT DURING ANY OF THE AFOREMENTIONED CONSTRUCTION ACTIVITIES AND LANDOWNER ACKNOWLEDGES THAT COMPANY'S REPRESENTATIVE SHALL HAVE FULL AUTHORITY TO STOP ANY OF LANDOWNER'S EXCAVATION OR CONSTRUCTION RELATED ACTIVITIES WITHIN THE EASEMENT IF COMPANY'S REPRESENTATIVE, IN HIS/HER SOLE DISCRETION, BELIEVES LANDOWNER'S ACTIVITIES COULD RESULT IN DAMAGE TO THE FACILITIES OR POSE A THREAT TO THE ENVIRONMENT OR PUBLIC SAFETY. THE PRESENCE OF COMPANY'S REPRESENTATIVE WILL NOT RELIEVE LANDOWNER OF ANY LIABILITY UNDER THIS AGREEMENT.
2. CONSTRUCTION PARAMETERS (CONTINUED): NO EQUIPMENT WILL BE ALLOWED TO WORK OVER THE PIPELINE, UNLESS APPROVED BY COMPANY'S REPRESENTATIVE. NO EXCAVATION OR REMOVAL OF COVER WILL BE PERMITTED WITHIN THE EASEMENT, UNLESS APPROVED BY COMPANY'S REPRESENTATIVE. ANY EXCAVATION WITHIN EIGHTEEN (18) INCHES PLUS HALF THE DIAMETER OF THE PIPELINE WILL BE DONE BY HAND; HOWEVER, NO MECHANICAL EXCAVATION SHOULD EVER BE PERFORMED LESS THAN TWO (2) FEET FROM THE PIPELINE. ALL MECHANICAL DIGGING EQUIPMENT APPROVED TO WORK WITHIN THE EASEMENT SHALL HAVE THE TEETH REMOVED OR BARRED WITH A PLATE WELDED ACROSS THE TEETH, NO DETACHABLE IMPLEMENTS WILL BE ALLOWED. NO MEDIUM OR LARGE VIBRATORY COMPACTION EQUIPMENT IS PERMITTED TO OPERATE WITHIN TEN FEET (10') OF THE PIPELINE. ONLY WALK-BEHIND VIBRATORY ROLLERS/COMPACTORS ARE PERMITTED TO OPERATE WITHIN TEN FEET (10') OF THE PIPELINE. COMPANY WILL REQUIRE PHYSICAL VERIFICATION OF THE PIPELINE'S DEPTH OF COVER AND ALIGNMENT, AT LANDOWNER'S EXPENSE, PRIOR TO WORK BEING PERFORMED NEAR THE PIPELINE. THE METHOD OF PHYSICAL VERIFICATION, WHETHER HYDRO-EXCAVATION OR OTHER MEANS, SHALL BE COORDINATED AND APPROVED BY COMPANY'S REPRESENTATIVE. IF THE PIPELINE IS NOT AT THE ANTICIPATED ALIGNMENT OR DEPTH, LANDOWNER SHALL ADJUST THE ENCROACHMENT ACCORDINGLY AT NO EXPENSE TO COMPANY.
3. BRIDGE CROSSING: THE AFOREMENTIONED BRIDGE CROSSING SHALL BE AS CLOSE TO A 90-DEGREE ANGLE AS POSSIBLE, BUT NOT LESS THAN 45-DEGREE ANGLE, IN RELATION TO THE PIPELINE. LANDOWNER SHALL BE RESPONSIBLE FOR ALL FUTURE DAMAGE TO THE ROADWAY, BRIDGE, AND APPURTENANCES INCLUDING THEIR REPLACEMENT OR RESTORATION IN THE EVENT THAT COMPANY, OR ITS DESIGNEE, MUST ACCESS THE PIPELINE AND/OR EASEMENT TO PERFORM ROUTINE OR EMERGENCY MAINTENANCE.
4. UNDERGROUND PIPELINES AND UTILITIES: ALL CROSSINGS SHOULD BE AS CLOSE TO A 90-DEGREE ANGLE AS POSSIBLE, BUT NOT LESS THAN 35-DEGREE ANGLE, IN RELATION TO THE PIPELINE. THE AFOREMENTIONED TWELVE INCH (12") SANITARY SEWER LINE SHALL BE CONSTRUCTED VIA THE TRENCHLESS CONSTRUCTION METHOD AND SHALL MAINTAIN A MINIMUM OF THIRTY SIX INCHES (36") OF VERTICAL CLEARANCE, MEASURED FROM THE PIPELINE. LANDOWNER SHALL INCLUDE ADEQUATE INSPECTION POTHOLES EXTENDING A MINIMUM OF THIRTY SIX INCHES (36") BELOW THE PIPELINE TO ENSURE PILOT DRILL IS BELOW THE PIPELINE. THE LOCATION OF THE INSPECTION POTHOLES SHALL BE AT THE DISCRETION OF THE COMPANY REPRESENTATIVE, ALL BORE PITS SHALL BE LOCATED OUTSIDE OF THE EASEMENT. LANDOWNER SHALL EVALUATE THE STIPULATIONS PROVIDED AND ADJUST ACCORDINGLY AT NO EXPENSE TO COMPANY OR ITS AFFILIATES IF THE STIPULATIONS PROVIDED PRESENT SAFETY AND/OR ENVIRONMENTAL CONCERNS. FOREIGN UTILITIES CROSSING COMPANY'S PIPELINE SHALL INCLUDE WARNING TAPE IN ACCORDANCE WITH THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) UNIFORM COLOR CODE, ABOVE THE FOREIGN UTILITY, TWELVE INCHES (12") BELOW GROUND AND SHALL EXTEND A MINIMUM OF TWENTY FEET (20") IN EACH DIRECTION AS MEASURED FROM THE CROSSING POINT.
5. HEAVY EQUIPMENT: COMPANY WILL REQUIRE A MINIMUM OF 72 HOURS WRITTEN NOTICE PRIOR TO CROSSING THE PIPELINE WITH HEAVY EQUIPMENT. WHEREVER LANDOWNER WILL CROSS THE PIPELINE AND/OR EASEMENT WITH HEAVY EQUIPMENT, LANDOWNER WILL PLACE TIMBER MATTING, WITH A MINIMUM THICKNESS OF EIGHT INCHES (8") OR OTHER SUITABLE MATERIAL OVER THE PIPELINE AND/OR EASEMENT AS DETERMINED BY COMPANY'S FIELD REPRESENTATIVE. COMPANY WILL REQUIRE A MINIMUM OF THREE AND FIVE TENTHS FEET (3.5') OF STABLE SOIL COVER ABOVE THE PIPELINE AT LOCATIONS WHERE CONSTRUCTION ACTIVITIES REQUIRE CROSSING OVER THE PIPELINE WITH HEAVY CONSTRUCTION EQUIPMENT.
6. EXCAVATED MATERIAL: EXCAVATED MATERIAL WILL NOT BE PLACED OVER THE PIPELINE. LANDOWNER AGREES TO CLEAN UP AND REPAIR ALL DAMAGES TO THE EASEMENT RESULTING FROM THE WORK ON OR ACROSS THE EASEMENT, ANY AND ALL DAMAGE REPAIRS AND CLEANUP OF THE EASEMENT WILL BE SUBJECT TO COMPANY'S ACCEPTANCE.
7. NO INTERFERENCE: LANDOWNER SHALL AT ALL TIMES CONDUCT ALL OF ITS ACTIVITIES WITHIN THE EASEMENT IN SUCH A MANNER AS NOT TO INTERFERE WITH OR IMPEDE IN ANY MANNER WHATSOEVER THE OPERATION OF THE FACILITIES AND ANY RELATED ACTIVITIES OF COMPANY, IF AT ANY TIME COMPANY, IN ITS SOLE DISCRETION, DETERMINES THAT THE SAFETY, OPERATION, OR MAINTENANCE OF THE FACILITIES IS ADVERSELY AFFECTED BY THE ENCROACHMENT, COMPANY MAY TAKE ANY AND ALL NECESSARY ACTION TO PROTECT THE EASEMENT AND FACILITIES FROM SUCH ADVERSE CONDITION, IN ACCORDANCE WITH SECTION 12, LANDOWNER SHALL PROMPTLY REIMBURSE COMPANY FOR ITS REASONABLE COSTS INCURRED IN PROTECTING OR MODIFYING THE FACILITIES FROM, OR TO ELIMINATE, SUCH ADVERSE CONDITION.

							APR
							DATE
						DESCRIPTION	
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

GENERAL NOTES (2 OF 2)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. ROLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
3 OF 91

STREET NAMES		
STREET	R.O.W. WIDTH	CENTERLINE LENGTH
GOLDEN PLAINS PARKWAY	50 FT.	795 FT.
BRANSON BOULEVARD	80 FT.	2,480 FT.
MONTEGO STREET	50 FT.	40 FT.
MILLINER LOOP	50 FT.	80 FT.
ARNAGE DRIVE	50 FT.	2,125 FT.
SEBRING CIRCLE	50 FT.	150 FT.
COVENTRY DRIVE	60 FT.	838 FT.
WOLSELEY DRIVE	50 FT.	812 FT.
WOLSELEY COVE	50 FT.	148 FT.
LONGRIDGE DRIVE	60 FT.	963 FT.
CANLEY LOOP	50 FT.	938 FT.
ASCARI COURT	50 FT.	106 FT.
TOTAL LINEAR FEET		9,475 FT.

BENCHMARKS:

MERITAGE HOMES OF TEXAS, LLC
A 17.08 ACRE TRACT
DOC. NO. 2018105406 O.P.R.W.C.

BENCHMARK #12
MAG NAIL W/ SHINER STAMPED "BGE, INC" IN ASPHALT IN THE WESTBOUND LANE OF GOLDEN PLAINS PARKWAY BEING APPROXIMATELY 15 FEET WEST-NORTHWEST OF THE INTERSECTION OF COUNTY ROAD 199 AND COUNTY ROAD 132.
ELEVATION: 848.75 FEET NAVD-88
GRID N: 10171601.73
GRID E: 3179749.53

BENCHMARK #13
MAG NAIL W/ SHINER STAMPED "BGE, INC" IN ASPHALT IN THE WESTBOUND LANE OF GOLDEN PLAINS PARKWAY BEING APPROXIMATELY 15 FEET SOUTHEAST OF THE INTERSECTION OF COUNTY ROAD 199 AND COUNTY ROAD 132.
ELEVATION: 853.29 FEET NAVD-88
GRID N: 10171230.24
GRID E: 3179884.00

BENCHMARK #20
MAG NAIL W/ SHINER STAMPED "BGE, INC" SET IN ASPHALT IN THE WESTBOUND LANE OF LUNA VISTA DRIVE BEING APPROXIMATELY 500 FEET EAST-SOUTHEAST OF THE INTERSECTION OF LUNA VISTA DRIVE AND LUNA VISTA CIRCLE, SAID NAIL IN FRONT OF THE SOUTHEAST CORNER OF 311 LUNA VISTA DRIVE.
ELEVATION: 819.46 FEET NAVD-88
GRID N: 10168494.17
GRID E: 3177912.50

LAND USE SCHEDULE		
DESCRIPTION	NO.	ACREAGE
RESIDENTIAL	160	25.479 AC.
AMENITY LOT	1	2.225 AC.
OPEN SPACE	6	3.315 AC.
RIGHT-OF-WAY	1	14.578 AC.
TOTAL	168	45.597 AC.

LOT PERCENTAGE TABLE				
LOT SIZE	PREVIOUS	PROPOSED PHASE 1	TOTAL	ALLOWABLE
40	0	47	47	286 MAX. (37%)
50/60	0	111	111	N/A
70	0	2	2	99 MIN. (13%)

BEARING BASIS NOTE:
BEARING ORIENTATION IS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD 83 DATUM. ALL DISTANCES SHOWN HEREON ARE SURFACE AND CAN BE CONVERTED TO GRID BY DIVIDING BY THE COMBINED SCALE FACTOR = 1.00010971059

BGE, Inc.
101 West Louis Henna Blvd, Suite 400
Austin, TX 78728
Tel: 512-879-0400 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10106502

SHEET 1 OF 5

LEGEND

DOC.	DOCUMENT
D.R.W.C.	DEED RECORDS OF WILLIAMSON COUNTY
ELEC.	ELECTRIC
ESMT.	EASEMENT
NO.	NUMBER
NOS.	NUMBERS
O.S.	OPEN SPACE
O.P.R.W.C.	OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY
O.R.W.C.	OFFICIAL RECORDS OF WILLIAMSON COUNTY
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT-OF-WAY
VOL.	VOLUME
( )	RECORD INFORMATION FOR DOC. NOS. 2003097296, 2003097297 & 2003097298 O.P.R.W.C.
[ ]	RECORD INFORMATION FOR DOC. NO. 2010007503 O.P.R.W.C.
~ ~	RECORD INFORMATION FOR DOC. NO. 2009067576 O.P.R.W.C.
	RECORD INFORMATION FOR DOC. NO. 2018105406 O.P.R.W.C.
●	FOUND 1/2" IRON ROD
○	SET 1/2" IRON ROD W/CAP STAMPED "BGE INC"
+	BENCHMARK

FINAL PLAT
COTTONWOOD PHASE 1
A SUBDIVISION OF 45.597 ACRES OF LAND
LOCATED IN THE
WILLIAM GATLIN SURVEY, ABSTRACT NO. 271
WILLIAMSON COUNTY, TEXAS

BGE, Inc.
101 West Louis Henna Blvd, Suite 400
Austin, TX 78728
Tel: 512-879-0400 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10106502

SHEET 2 OF 5

REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

PLAT (1 OF 3)

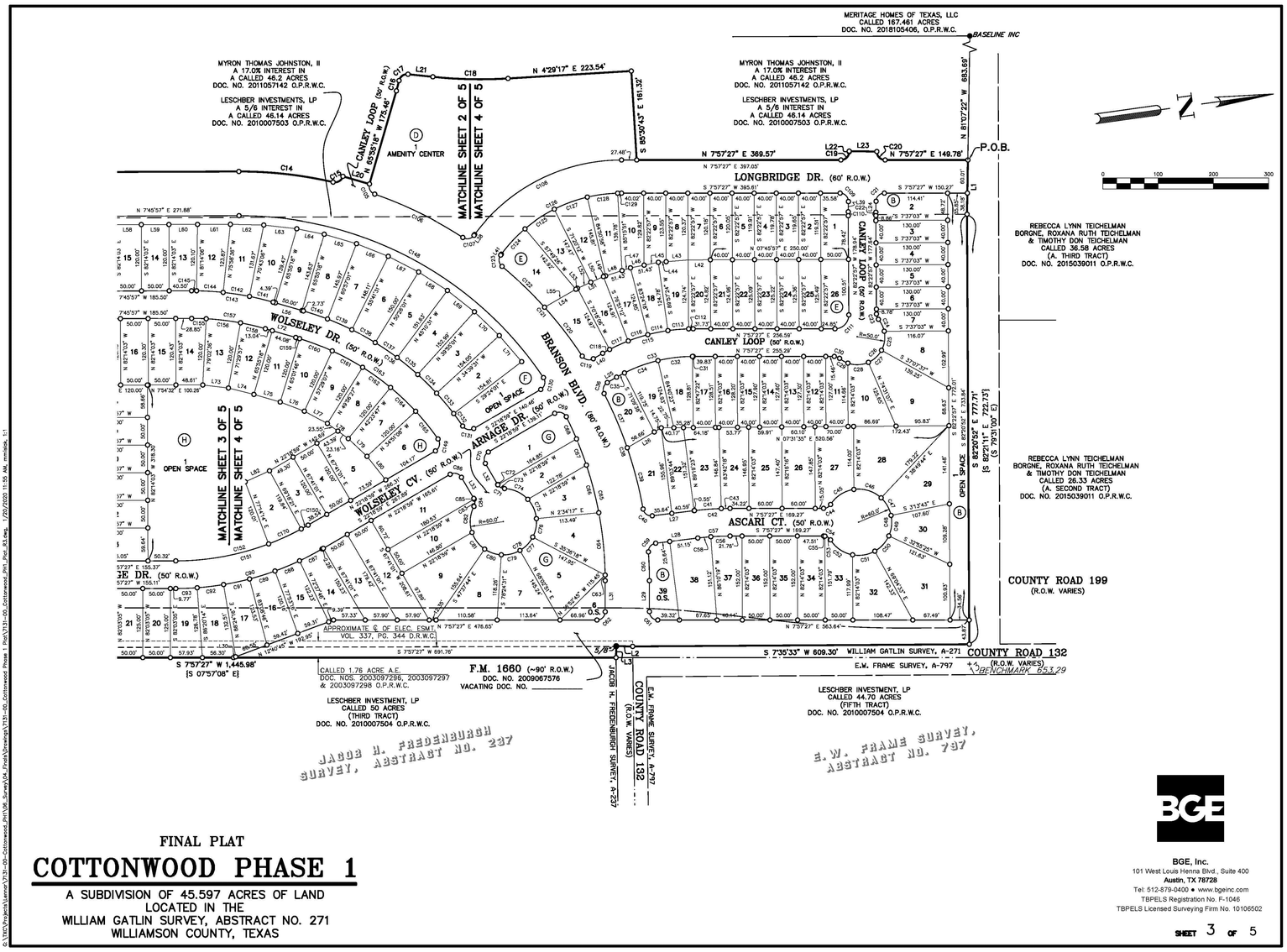
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
4 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-PLAT-PH1.dwg Layout: PLAT (1 OF 3) Plotted: 2/11/2020 2:11:41 PM

G:\TXC\Projects\Lennar\7131-00-Cottonwood Phase 1 Plat\7131-00-Cottonwood_PH1\06_Survey\04_Finals\Drawings\7131-00-Cottonwood_PH1_Plat_R3.dwg, 1/20/2020 11:54 AM, mmilam, 1:1


MERITAGE HOMES OF TEXAS, LLC
CALLED 167.461 ACRES
DOC. NO. 2018105406, O.P.R.W.C.
BASELINE INC
MYRON THOMAS JOHNSTON, II
A 17.0% INTEREST IN
A CALLED 46.2 ACRES
DOC. NO. 2011057142 O.P.R.W.C.
LESCHER INVESTMENTS, LP
A 5/6 INTEREST IN
A CALLED 46.14 ACRES
DOC. NO. 2010007503 O.P.R.W.C.
CANLEY LOOP (50' R.O.W.)
AMENITY CENTER
MATCHLINE SHEET 2 OF 5
MATCHLINE SHEET 4 OF 5
MATCHLINE SHEET 3 OF 5
MATCHLINE SHEET 4 OF 5
LONGBRIDGE DR. (60' R.O.W.)
P.O.B.
WOLSELEY DR. (60' R.O.W.)
BRANSON BLVD. (60' R.O.W.)
ARNAGE DR. (50' R.O.W.)
WOLSELEY CV. (50' R.O.W.)
ASCARI CT. (50' R.O.W.)
CANLEY LOOP (50' R.O.W.)
OPEN SPACE
REBECCA LYNN TEICHELMAN
BORGNE, ROXANA RUTH TEICHELMAN
& TIMOTHY DON TEICHELMAN
CALLED 36.58 ACRES
(A. THIRD TRACT)
DOC. NO. 2015039011 O.P.R.W.C.
REBECCA LYNN TEICHELMAN
BORGNE, ROXANA RUTH TEICHELMAN
& TIMOTHY DON TEICHELMAN
CALLED 26.33 ACRES
(A. SECOND TRACT)
DOC. NO. 2015039011 O.P.R.W.C.
COUNTY ROAD 199
(R.O.W. VARIES)
COUNTY ROAD 132
(R.O.W. VARIES)
BENCHMARK 853.29
F.M. 1660 (~90' R.O.W.)
DOC. NO. 2009067576
VACATING DOC. NO. _____
CALLED 1.76 ACRE A.E.
DOC. NOS. 2003097295, 2003097297
& 2003097298 O.P.R.W.C.
LESCHER INVESTMENT, LP
CALLED 50 ACRES
(THIRD TRACT)
DOC. NO. 2010007504 O.P.R.W.C.
LESCHER INVESTMENT, LP
CALLED 44.70 ACRES
(FIFTH TRACT)
DOC. NO. 2010007504 O.P.R.W.C.
JACOB H. FREDENBURGH SURVEY, A-237
E.W. FRAME SURVEY, A-797
WILLIAM GATLIN SURVEY, A-271
APPROXIMATE ℄ OF ELEC. ESMT N 75°27'27" E 478.65'
VOL. 337, PG. 344 (D.R.W.C.)
S 75°27'27" W 1,445.98'
[S 075°08" E]
N 75°27'27" E 369.57'
N 75°27'27" E 397.03'
N 75°27'27" E 149.78'
S 75°27'27" W 609.30'
S 75°27'27" W 891.76'
N 75°27'27" E 563.64'
S 82°20'52" E 777.71'
[S 082°00' E]
N 81°07'22" W 683.69'
S 69°20'43" E 191.22'
N 4°29'17" E 223.54'
N 75°37'27" E 150.20'
N 74°53'37" E 271.88'
N 75°37'27" W 185.50'
N 75°37'27" W 185.50'
N 75°37'27" W 1,322.33'
N 75°37'27" W 1,322.33'
N 75°37'27" W 1,322.33

STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS:

THAT LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., BEING THE OWNER OF 45.597 ACRES OF LAND OUT OF THE WILLIAM GATLIN SURVEY A-271, WILLIAMSON COUNTY, TEXAS AS CONVEYED TO IT BY INSTRUMENTS RECORDED IN DOC. NO'S. _____ & _____ OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, OF WHICH A PORTION BEING OUT OF MEADOWS AT COTTONWOOD CREEK, PHASE ONE, A SUBDIVISION AS RECORDED IN DOC. NO. 2009067576 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID MEADOWS AT COTTONWOOD CREEK, PHASE ONE HAVING BEEN VACATED BY DOCUMENT NO. _____ OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID SUBDIVISION HAVING BEEN APPROVED FOR RESUBDIVISION PURSUANT TO PUBLIC NOTIFICATION & HEARING PROVISIONS OF CHAP. 212 AND 232 OF THE TEXAS LOCAL GOVERNMENT CODE, DOES HEREBY SUBDIVIDE 45.597 ACRES OF LAND IN ACCORDANCE WITH THE ATTACHED MAP OR PLAT SHOWN HEREON, TO BE KNOWN AS:

COTTONWOOD PHASE 1

AND DOES HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND, THIS THE _____ DAY OF _____, 20___, A.D.

_____
KEVIN PAPE, VICE PRESIDENT
LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.
13620 NORTH F.M. 620
BUILDING 1, SUITE 150
AUSTIN, TEXAS 78717

STATE OF TEXAS §
COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY, PERSONALLY APPEARED KEVIN PAPE, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

_____
NOTARY PUBLIC, STATE OF TEXAS

_____
PRINT NOTARY'S NAME
MY COMMISSION EXPIRES _____

I, TIMOTHY M. HOLLAND, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS, TO PRACTICE THE PROFESSION OF ENGINEERING, AND DO HEREBY CERTIFY THAT THIS PLAT IS FEASIBLE FROM AN ENGINEERING STANDPOINT, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

PRELIMINARY: THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT

_____ _____
TIMOTHY M. HOLLAND, P.E. DATE
LICENSED PROFESSIONAL ENGINEER NO. 94848
BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744

STATE OF TEXAS — TIMOTHY M. HOLLAND — 94848 — LICENSED PROFESSIONAL ENGINEER

I, JONATHAN O. NOBLES, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS, TO PRACTICE THE PROFESSION OF SURVEYING, AND DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT, THAT IT WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND, AND THAT ALL NECESSARY SURVEY MONUMENTS ARE CORRECTLY SET OR FOUND AS SHOWN THEREON.

PRELIMINARY: THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT

_____ _____
JONATHAN O. NOBLES, R.P.L.S. DATE
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5777
BGE, INC.
101 WEST LOUIS HENNA BLVD., SUITE 400
AUSTIN, TEXAS

STATE OF TEXAS — JONATHAN O. NOBLES — 5777 — REGISTERED PROFESSIONAL LAND SURVEYOR

CITY DEVELOPMENT SERVICES SIGNATURES:

THIS SUBDIVISION IS LOCATED WITHIN THE CITY LIMITS OF HUTTO, THIS THE _____ DAY OF _____, 20___.

_____ _____
ASHBY GRUNDMAN, DEVELOPMENT SERVICES DIRECTOR DATE

THIS PLAT WAS APPROVED FOR RECORDING BY THE HUTTO CITY COUNCIL ON THE ON THE _____ DAY OF _____, 20___.

_____ _____ _____ _____
DOUG GAUL, MAYOR DATE LACIE HALE, CITY SECRETARY DATE

STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF WILLIAMSON §

THAT I, NANCY RISTER, CLERK OF THE COUNTY COURT OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT IN WRITING, WITH ITS CERTIFICATION OF AUTHENTICATION, WAS FILED FOR RECORD IN MY OFFICE ON THE ___DAY OF _____, 20___ A.D., AT _____ O'CLOCK ___M. AND DULY RECORDED ON THE ___DAY OF _____, 20___ A.D., AT _____ O'CLOCK ___M. IN THE PLAT RECORDS OF SAID COUNTY, IN DOCUMENT NO. _____,

WITNESS MY HAND AND SEAL OF THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS, THE DATE LAST ABOVE WRITTEN.

NANCY RISTER, CLERK, COUNTY COURT
WILLIAMSON COUNTY, TEXAS

BY: _____
DEPUTY

GENERAL NOTES:

1. BEARING ORIENTATION IS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE 4203, NAD83. COMBINED SCALE FACTOR = 1.0001097659
2. NO BUILDING, FENCING, LANDSCAPING OR STRUCTURES ARE ALLOWED WITHIN ANY DRAINAGE OR WASTEWATER EASEMENT UNLESS EXPRESSLY PERMITTED BY THE CITY OF HUTTO.
3. BUILDING SETBACKS SHALL CONFORM TO UDC REQUIREMENTS, AS AMENDED.
4. A FIVE (5) FOOT PUBLIC UTILITY EASEMENT (PUE) IS HEREBY DEDICATED ALONG AND ADJACENT TO ALL STREET SIDE PROPERTY LINES.
5. A FIVE (5) FOOT PUBLIC UTILITY EASEMENT (PUE) IS HEREBY DEDICATED ON EACH SIDE OF ALL REAR LOT LINES.
6. IF PARKING IS DESIRED ON BOTH SIDES OF THE STREET THEN THE STREETS MUST BE A MINIMUM OF 33 FEET WIDE. IF THE STREETS ARE LESS THAN 33 FEET IN WIDTH FIRE LANE SIGNAGE IS REQUIRED. (2018 IFC APPENDIX D SEC. 103.6 – D103.6.2)
7. NO LOT IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTION IS MADE TO PUBLIC WATER AND WASTEWATER UTILITIES.
8. SIDEWALKS AND TREES SHALL BE PROVIDED ON BOTH SIDES OF ALL STREETS WITHIN THIS SUBDIVISION.
9. SIDEWALKS AND TREES SHALL BE PROVIDED ALONG ALL STREETS BOUNDING THIS SUBDIVISION.
10. AN ARTERIAL FENCE SHALL BE CONSTRUCTED ALONG F.M. 1660 PER UDC REQUIREMENTS, AS AMENDED.
11. ALL FENCING THAT IS NOT ON A PRIVATE LOT TO BE MAINTAINED BY THE HOA.
12. STREET LIGHTING SHALL BE PROVIDED BY THE DEVELOPER IN CONFORMANCE WITH THE UDC REQUIREMENTS, AS AMENDED.
13. THIS TRACT IS WITHIN WATER CCN SERVICE AREA 10321. WATER AND WASTEWATER WILL BE AVAILABLE THROUGH THE CITY OF HUTTO AFTER THE APPROPRIATE WATER AND WASTEWATER SYSTEMS ARE INSTALLED TO THIS SITE. THE CITY OF HUTTO ASSUMES NO OBLIGATIONS FOR INSTALLING ANY WATER AND WASTEWATER IMPROVEMENTS REQUIRED TO SERVE THIS SITE.
14. NO PORTION OF THIS TRACT IS ENCROACHED BY THE ULTIMATE 1% ANNUAL CHANCE FLOODPLAIN.
15. NO PORTION OF THIS TRACT IS ENCROACHED BY ANY SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 1% ANNUAL CHANCE FLOODPLAIN AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP (FLOOD INSURANCE RATE MAP) COMMUNITY PANEL NUMBER 48491C0520E, EFFECTIVE DATE SEPTEMBER 26, 2008, FOR WILLIAMSON COUNTY, TEXAS.
16. IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATIONS SHALL BE BUILT AT LEAST ONE (1) FOOT ABOVE THE SURROUNDING GROUND AND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF ½" PER FOOT FOR A DISTANCE OF AT LEAST TEN (10) FEET.
17. ALL SUBDIVISION CONSTRUCTION SHALL CONFORM TO THE CITY OF HUTTO UNIFIED DEVELOPMENT CODE AS AMENDED, CONSTRUCTION STANDARDS, AND GENERALLY ACCEPTED ENGINEERING PRACTICES.
18. ON-SITE STORMWATER DETENTION FACILITIES WILL BE PROVIDED TO REDUCE POST-DEVELOPMENT PEAK RATES OF DISCHARGE OF THE 2, 10, 25 AND 100-YEAR STORM EVENTS.
19. ALL EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS OR HER ASSIGNS.
20. ALL DRAINAGE LOTS SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

FINAL PLAT

COTTONWOOD PHASE 1

A SUBDIVISION OF 45.597 ACRES OF LAND
LOCATED IN THE
WILLIAM GATLIN SURVEY, ABSTRACT NO. 271
WILLIAMSON COUNTY, TEXAS

BGE, Inc.
101 West Louis Henna Blvd., Suite 400
Austin, TX 78728
Tel: 512-879-0400 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10106502

SHEET 5 OF 5

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-PLAT-PH1.dwg, 1/30/2020 11:55 AM, mwhite, 1:1

SHEET 6 OF 91

SUBMITTAL DATE: 01-16-2020

COTTONWOOD CREEK
HUTTO, TEXAS

PLAT (3 OF 3)

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

DRAWN BY: DAZ | REVIEWED BY: TMH | DESIGNED BY: DAZ

REV	DESCRIPTION	DATE	APR
△			
△			
△			
△			
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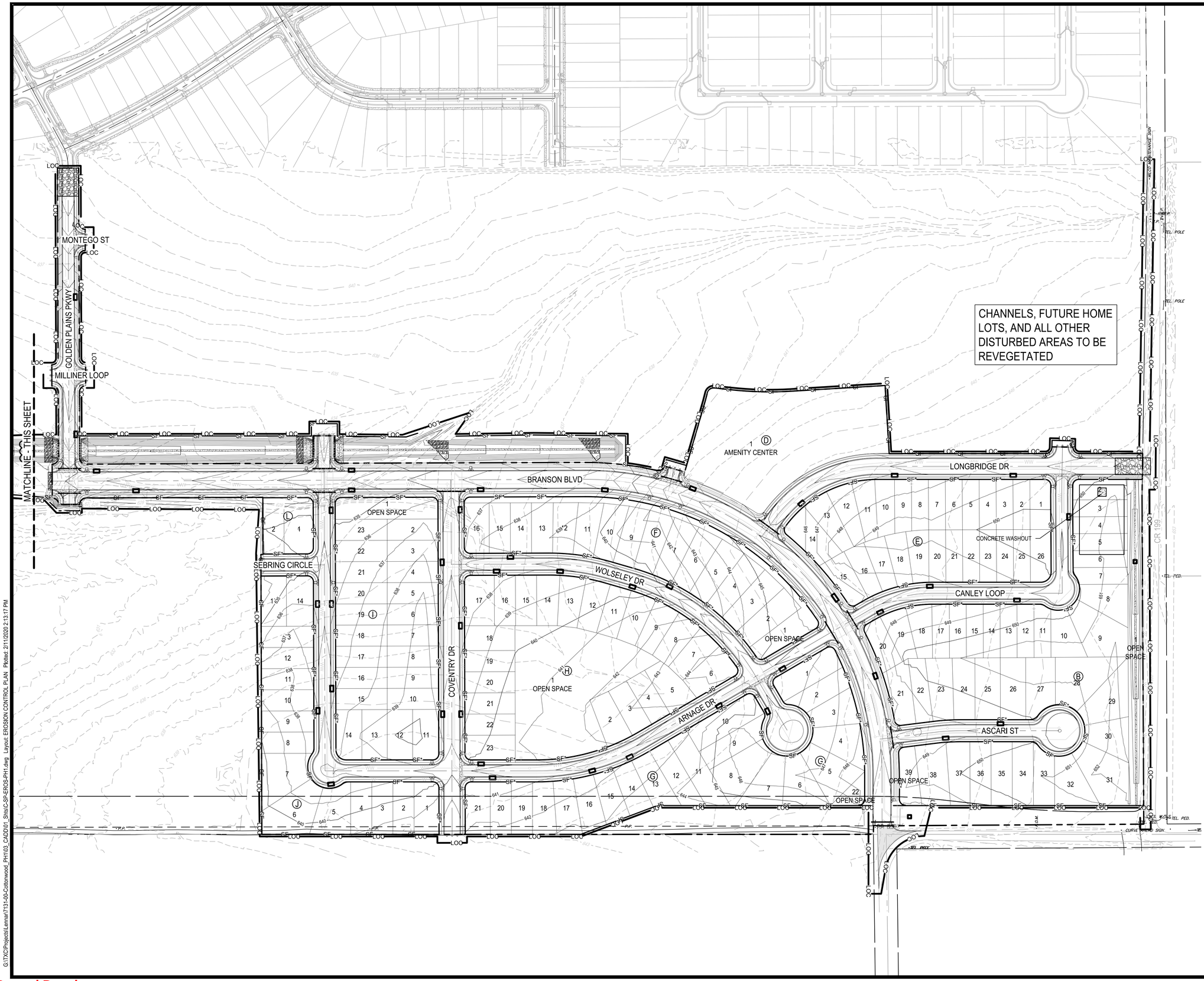

0 50' 100' 200'
SCALE: 1" = 100'

LEGEND

- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- SF* — PHASE II SILT FENCE (SEE NOTE 21 THIS SHEET)
- 100 — ENGINEERED 100YR FLOODPLAIN
- FEMA — FEMA 100YR FLOODPLAIN
- WATERWAY SETBACK
- XXX — EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- XXX — PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- INLET PROTECTION
- ROCK BERM
- CONSTRUCTION ENTRANCE

1. IF A CONCRETE WASHOUT IS TO BE UTILIZED DURING CONSTRUCTION THE LOCATION WILL BE DETERMINED ONCE CONSTRUCTION HAS BEGUN AND WILL BE PROPERLY NOTATED ON THE SITE MAP AT THAT TIME.
2. ALL REQUIRED NOTICES AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE BEFORE THE COMMENCEMENT OF CONSTRUCTION.
3. ALL EROSION AND SEDIMENTATION CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO THE PROJECT SITE.
4. INSTALL SILT FENCE ACCORDINGLY FOR RUN-ON DIVERSION OR OFFSITE SEDIMENT CONTROL DEPENDING ON UP OR DOWN SLOPE, FACING POST SIDE ON THE DOWN GRADIENT SIDE.
5. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
6. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
7. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY COUNTY INSPECTOR.
8. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
9. CONTRACTOR SHALL MAINTAIN AND UTILIZE DUST CONTROL FOR THE DURATION OF THE PROJECT.
10. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING ONTO THE PUBLIC ROADWAY ON AN ONGOING/REGULAR BASIS.
11. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
12. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
13. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
14. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
15. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL STORM SEWER INLET BOXES, LINES, PIPES AND CULVERTS BEFORE CONDITIONAL/FINAL ACCEPTANCE CAN OBTAINED.
16. TRAVIS COUNTY REQUIRES CERTIFIED SWP3 INSPECTORS TO CONDUCT SWP3 INSPECTIONS AND REPORTING ON ALL PROJECTS WITH ONE ACRE OF DISTURBANCE AND LARGER.
17. PERMITTEE SHALL INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY SWP3 REPORT, UPON RECEIVING A FORECAST CALLING FOR A RAIN EVENT FOR AN EXTENDED PERIOD, MODIFICATION OF INLET PROTECTION SHOULD BE MADE TO PREVENT FLOODING OR PONDING OF WATER IF TRAFFIC OR PROPERTY CONCERNS ARISE.
18. A DE-WATERING PLAN FOR THE POND(S) MUST BE APPROVED BY THE COUNTY ENVIRONMENTAL INSPECTOR IF THE TEMPORARY SEDIMENTATION POND IS DE-WATERED AFTER RAINFALL EVENTS. THE DE-WATERING METHOD MUST MINIMIZE THE DISCHARGE OF SUSPENDED SEDIMENTS TO THE GREATEST EXTENT FEASIBLE BY DRAWING WATER FROM THE SURFACE OF THE IMPOUNDMENT.
19. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY FOLLOWING COMPLETION OF EACH INLET.
20. THE TOP OF ROCK BERMS NEAR THE END OF A HEADWALL SHALL BE FAR ENOUGH AWAY AND LOWER THEN THE FLOWLINE OF THE INFLOW PIPE TO PREVENT SEDIMENT BACK-UP WITHIN THE PIPE.
21. PHASE II SILT FENCE TO BE PLACED AFTER THE ROAD AND UTILITY CONSTRUCTION ARE COMPLETE.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE
BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownge.com

COTTONWOOD CREEK
HUTTO, TEXAS

EROSION CONTROL PLAN (1 OF 2)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
7 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-EROS-PH1.dwg Layout: EROSION CONTROL PLAN Plotted: 2/11/2020 2:13:17 PM

Record Drawing



0 50' 100' 200'

SCALE: 1" = 100'

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SEDIMENT BASIN DATA TABLE		
DRAINAGE AREA	=	41.4 ac
REQUIRED STORAGE	=	512,035 cf
PROVIDED STORAGE	=	584,031 cf
PROVIDED SURFACE AREA	=	68,271 sf
OUTLET ELEVATION	=	612.70 ft
STORAGE ELEVATION	=	619.89 ft
TOP OF EMBANKMENT ELEVATION	=	620.50 ft
DEWATERING TIME	=	48 hrs

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
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TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

EROSION CONTROL PLAN (2 OF 2)

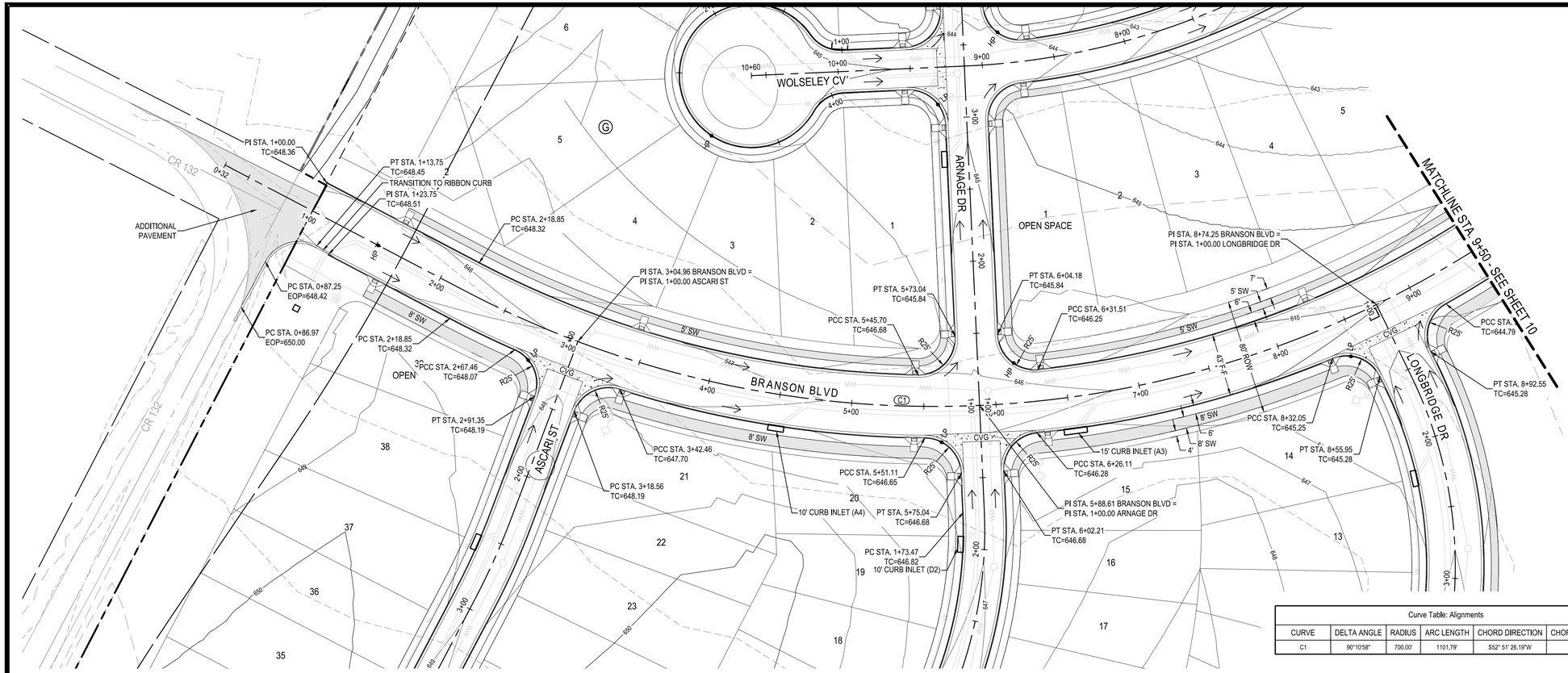
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. ROLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
8 OF 91

G:\TX\CP\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-EROS-PH1.dwg Layout: EROSION CONTROL PLAN (2) Plotted: 2/11/2020 2:13:43 PM

Record Drawing



0 20' 40' 80'
SCALE: 1" = 40'

Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C1	90°10'58"	700.00'	1101.79'	S52° 51' 26.19"W	991.53'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- 5' SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- 5' SIDEWALK TO BE CONSTRUCTED BY BUILDER
- CURB RAMP
- CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25.5' AT FACE OF CURB UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
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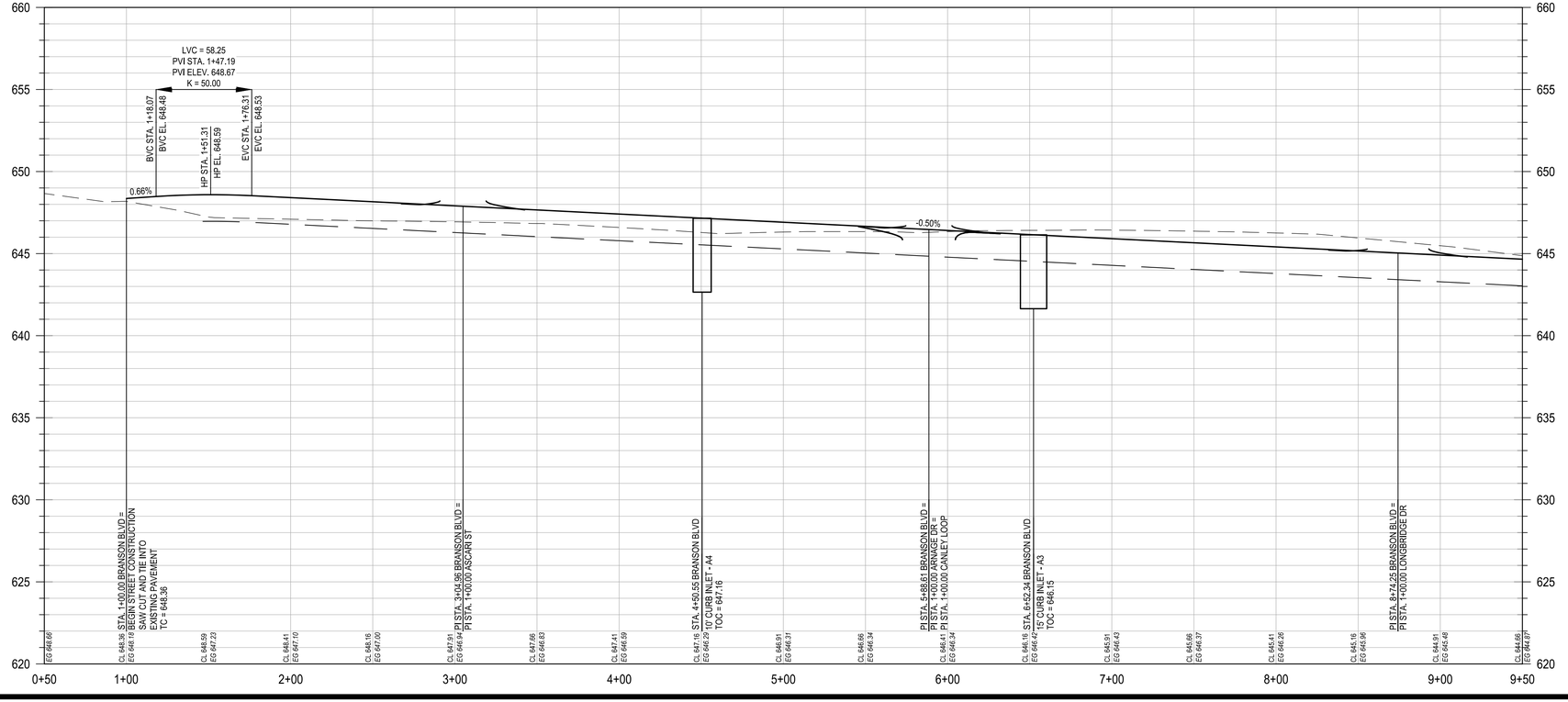
5. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
6. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.); PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

BRANSON BLVD
35 MPH DESIGN SPEED



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁	◁	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
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TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

BRANSON BLVD PLAN AND PROFILE
(1+00 TO 9+50)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
9 OF 91

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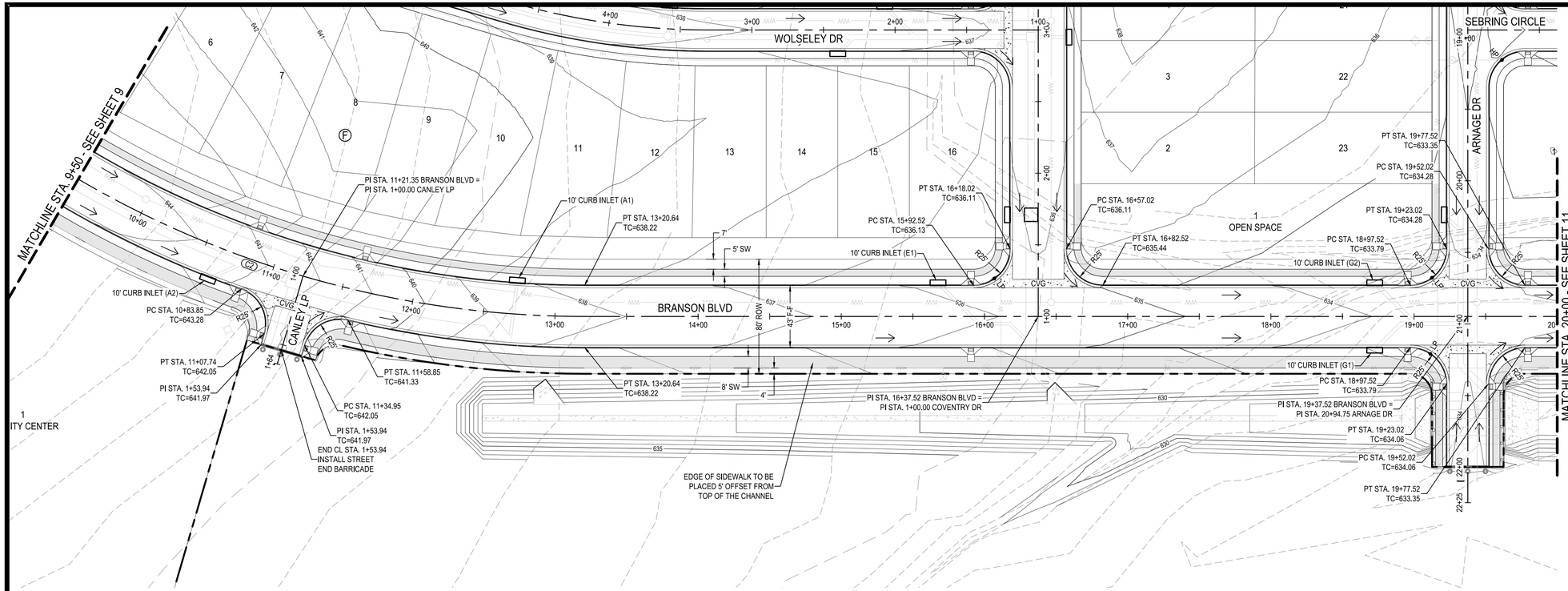
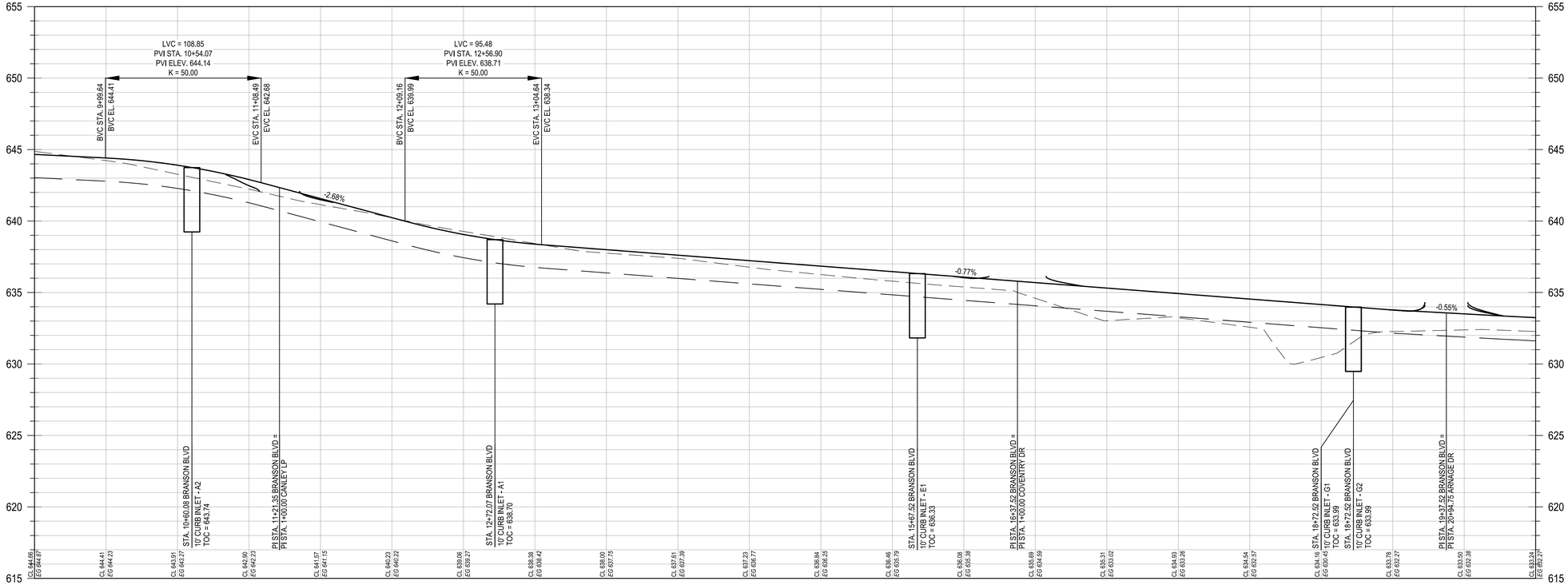
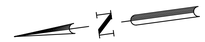


Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C2	90°10'58"	700.00'	1101.79'	S52° 51' 26.19"W	991.53'

BRANSON BLVD
35 MPH DESIGN SPEED





0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
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- PROPOSED MAJOR CONTOUR
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NOTES:
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PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

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1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
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TEL: 512-879-0400 www.brownge.com

COTTONWOOD CREEK
HUTTO, TEXAS

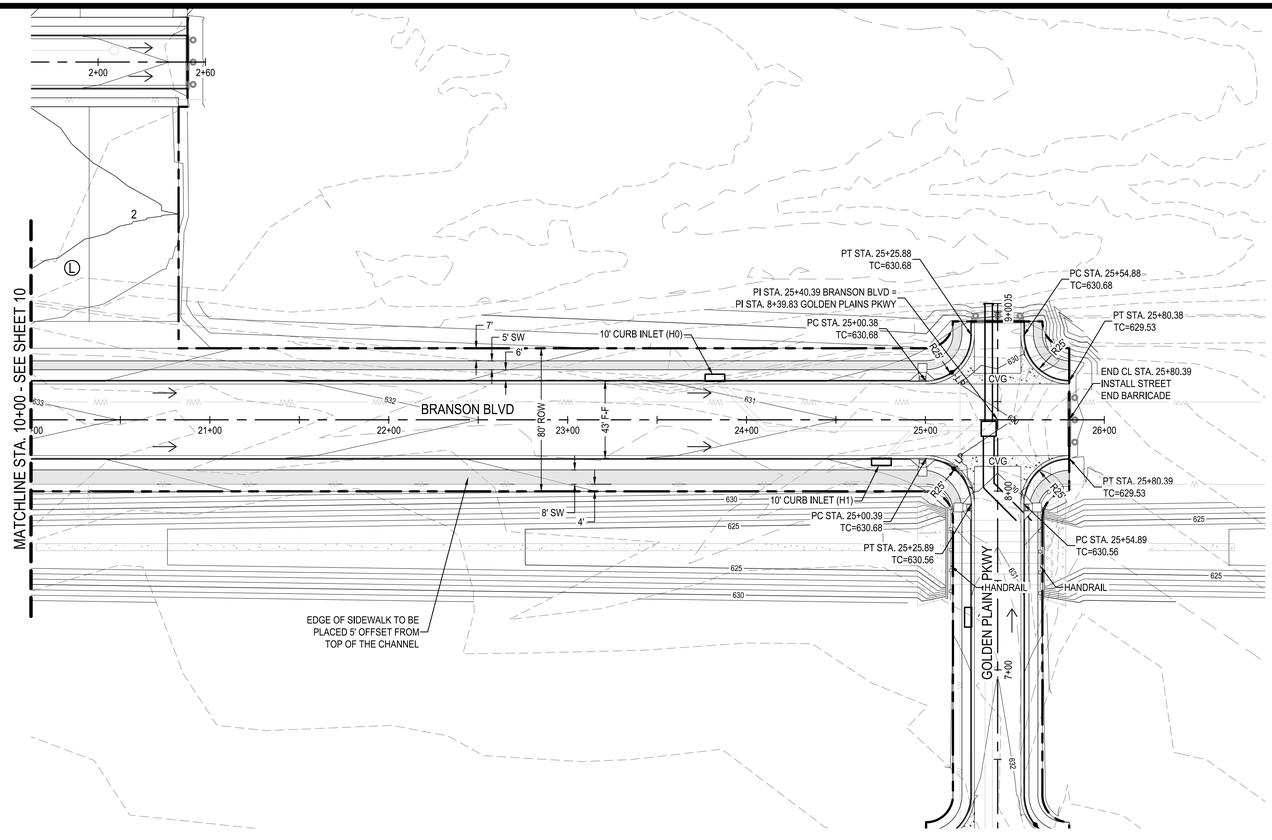
BRANSON BLVD PLAN AND PROFILE
(10+00 TO 20+00)

SUBMITTAL DATE: 01-16-2020

SHEET
10 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: BRANSON BLVD (10+00 TO 20+00) Plotted: 2/11/2020 2:17:51 PM

Record Drawing



BRANSON BLVD

0 20' 40' 80'

SCALE: 1" = 40'

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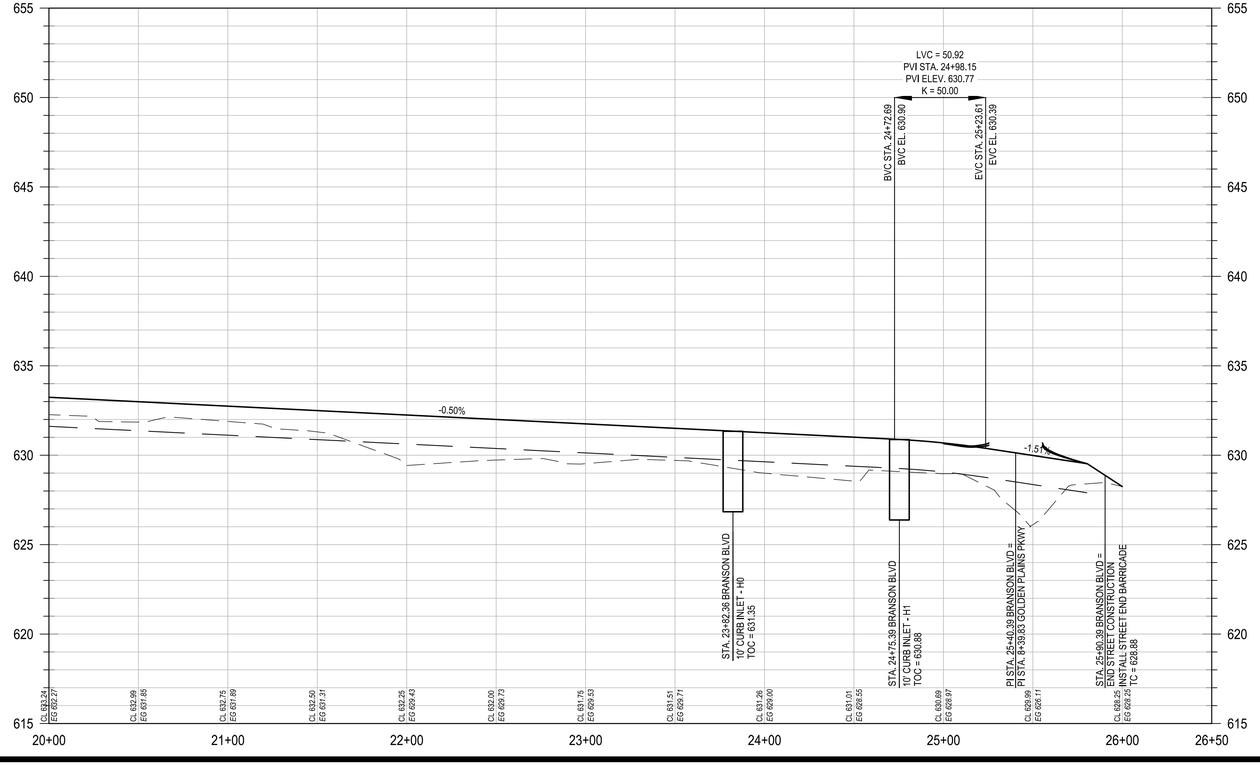
5. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
6. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

BRANSON BLVD
35 MPH DESIGN SPEED



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

BRANSON BLVD PLAN AND PROFILE (20+00 TO END)

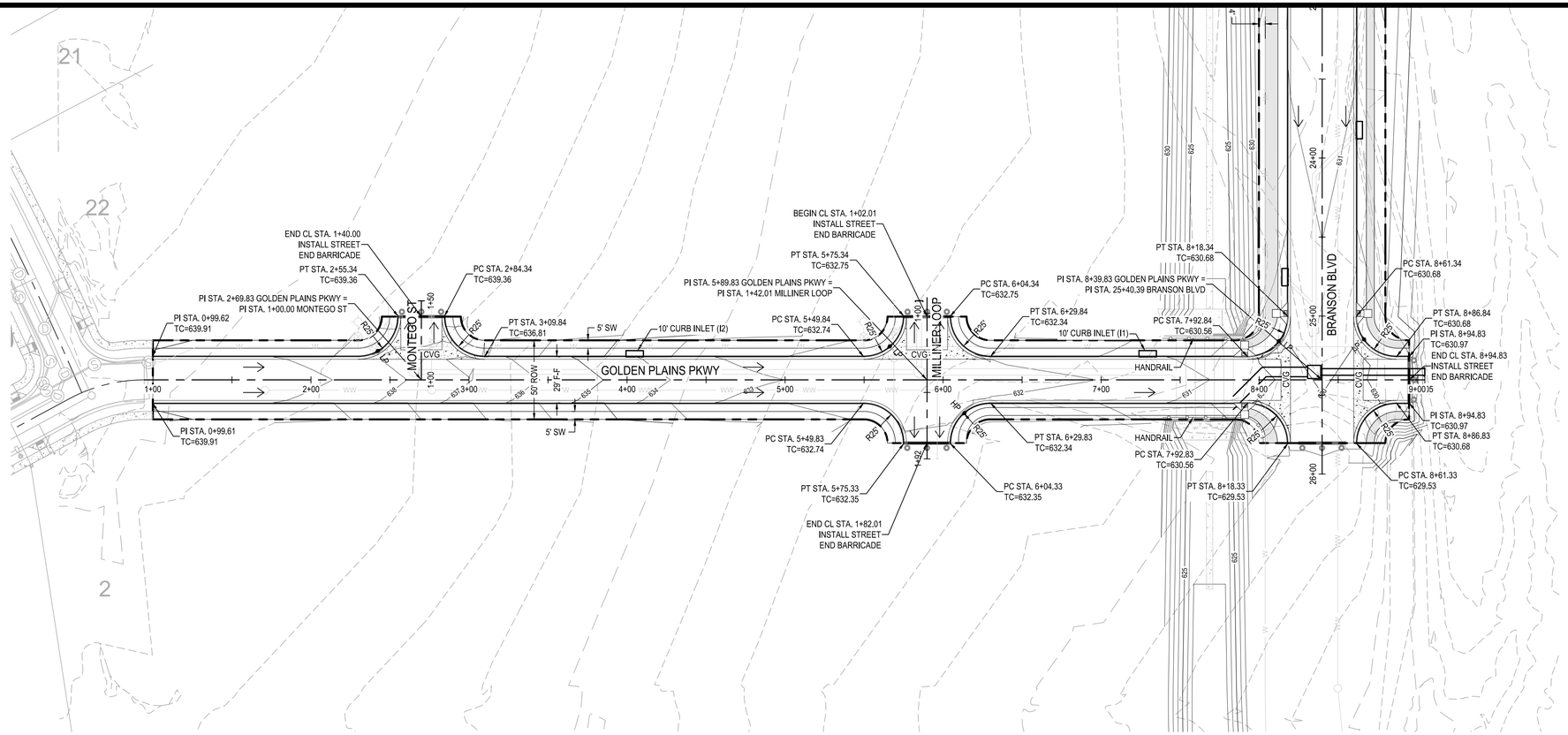
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
11 OF 91

G:\TX\CP\projects\Lennar\7131-09-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: BRANSON BLVD (20+00 TO END) Plotted: 2/11/2020 2:18:23 PM

Record Drawing



LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- 5' SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- 5' SIDEWALK TO BE CONSTRUCTED BY BUILDER
- CURB RAMP
- CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:

1. ALL CURB RETURN RADII TO BE 25.5' AT FACE OF CURB UNLESS OTHERWISE NOTED.
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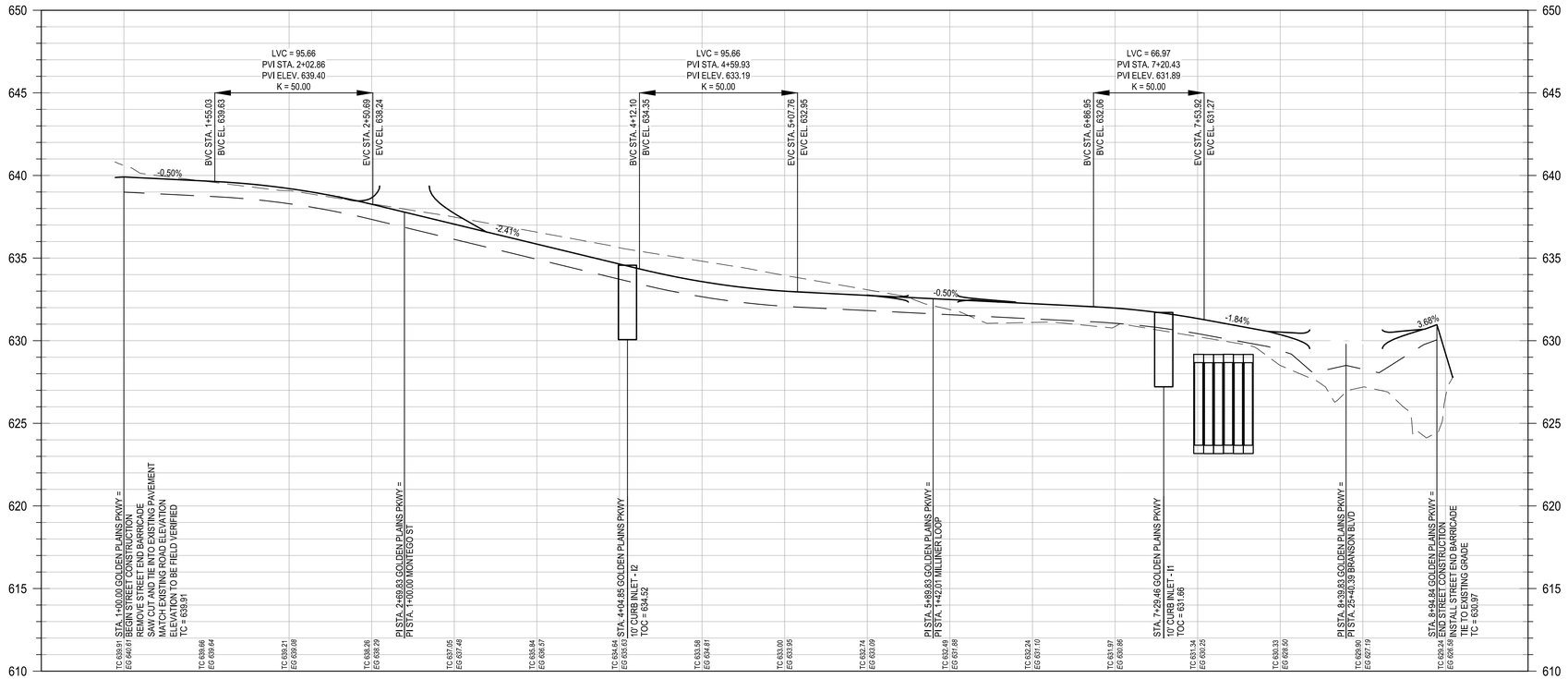
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

GOLDEN PLAINS PKWY
30 MPH DESIGN SPEED



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

							APR
							DATE
							DESCRIPTION
							REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownandgay.com

COTTONWOOD CREEK
HUTTO, TEXAS

GOLDEN PLAINS PKWY PLAN AND PROFILE
(1+00 TO END)

SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
12 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SR-ROAD-P&P-PH1.dwg Layout: GOLDEN PLAINS PKWY (1+00 TO END) Plotted: 2/11/2020 2:18:55 PM

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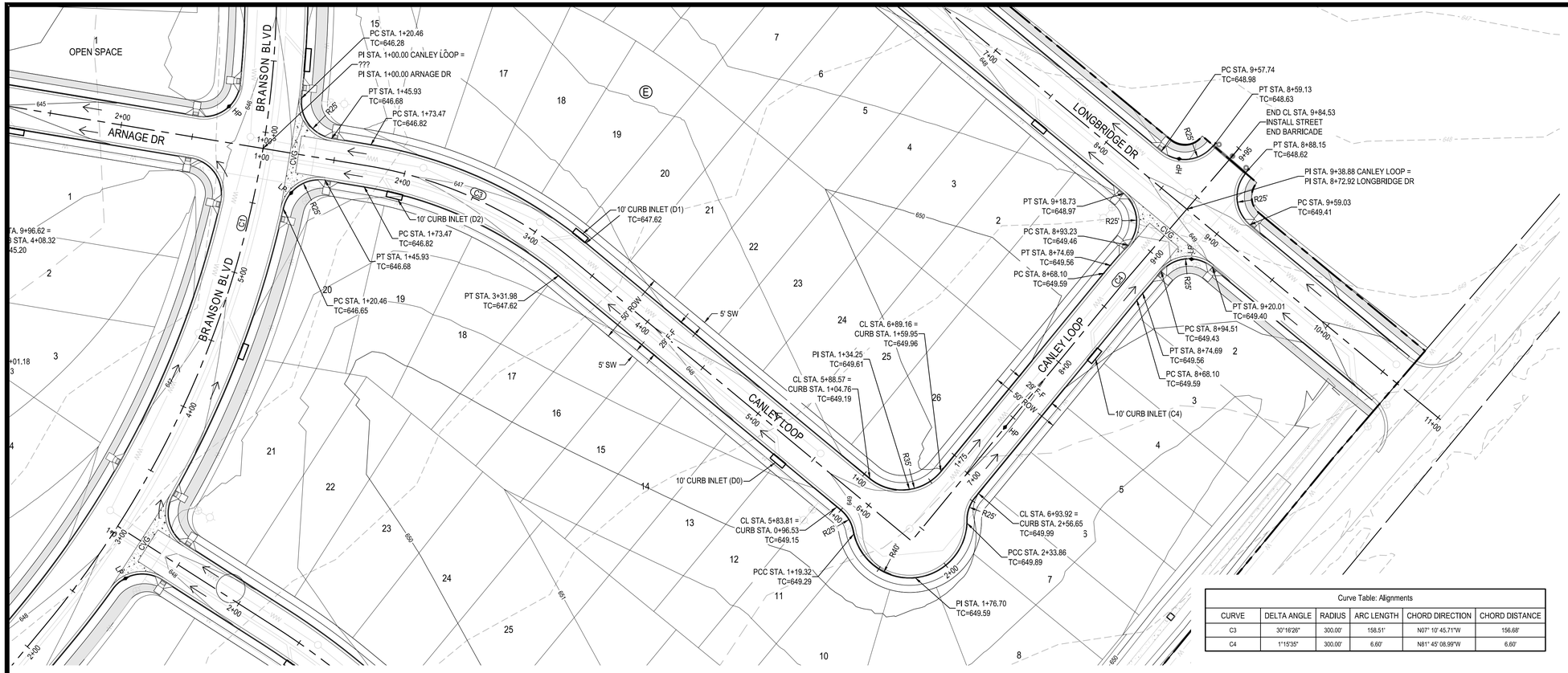

Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C3	30°16'26"	300.00'	158.51'	N07° 10' 45.71"W	156.68'
C4	1°15'35"	300.00'	6.60'	N81° 45' 08.99"W	6.60'

0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- 5' SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- 5' SIDEWALK TO BE CONSTRUCTED BY BUILDER
- CURB RAMP
- CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

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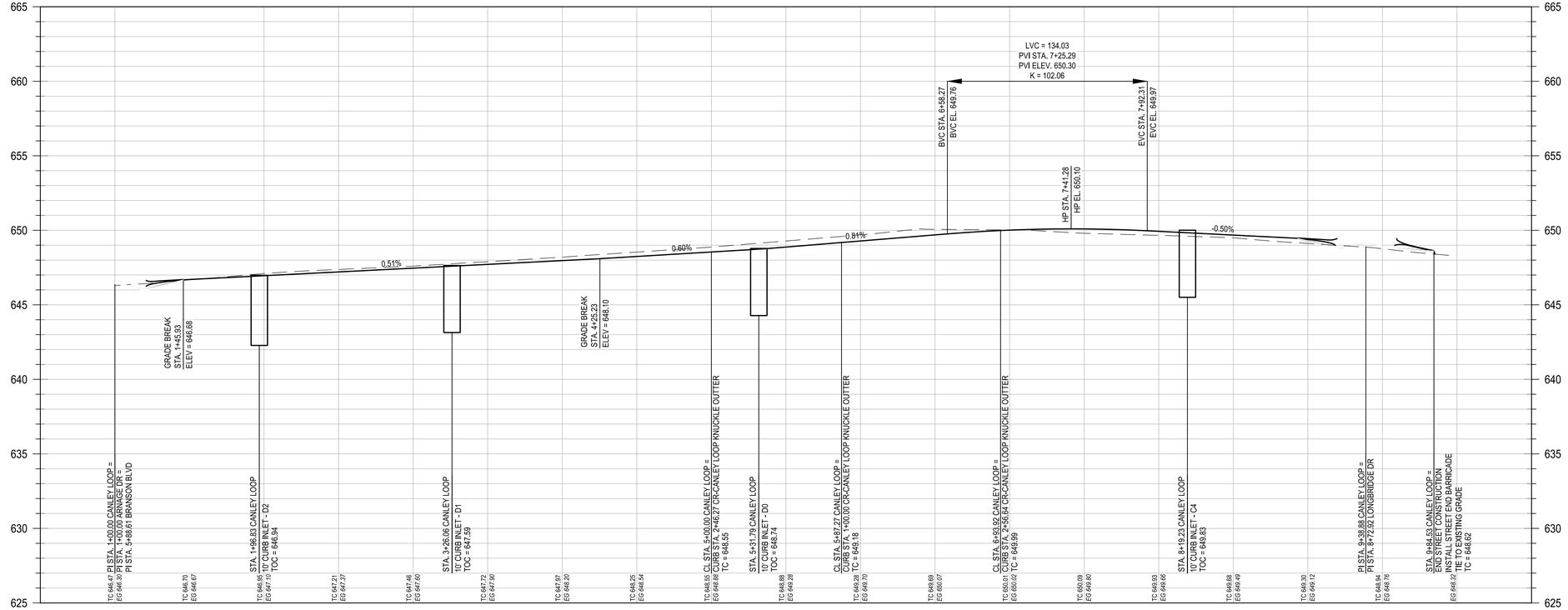
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

CANLEY LOOP
30 MPH DESIGN SPEED



BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

COTTONWOOD CREEK
HUTTO, TEXAS

CANLEY LOOP PLAN AND PROFILE
(1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
13 OF 91

G:\TX\CP\projects\Lennar\7131-06-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: CANLEY LOOP (1+00 TO END) Plotted: 2/11/2020 2:19:41 PM

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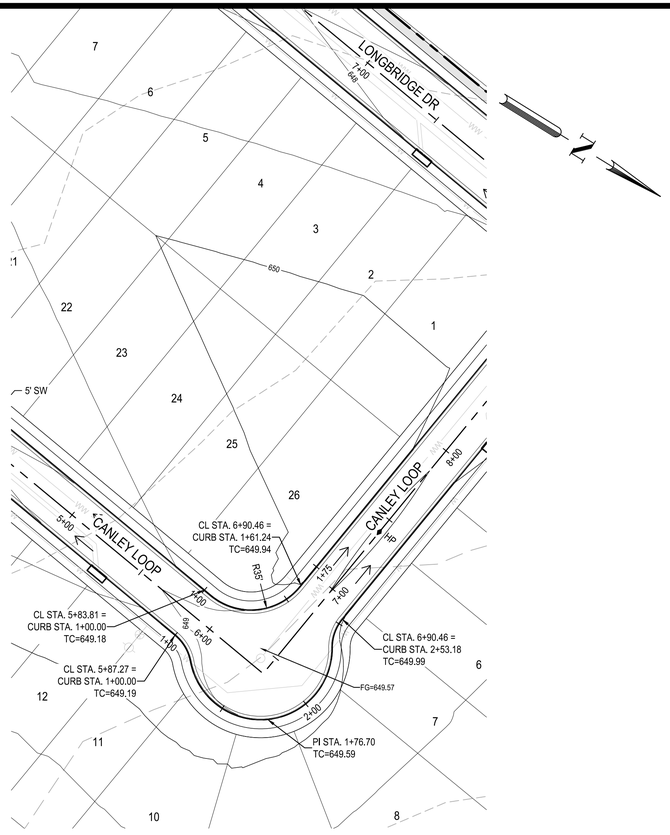

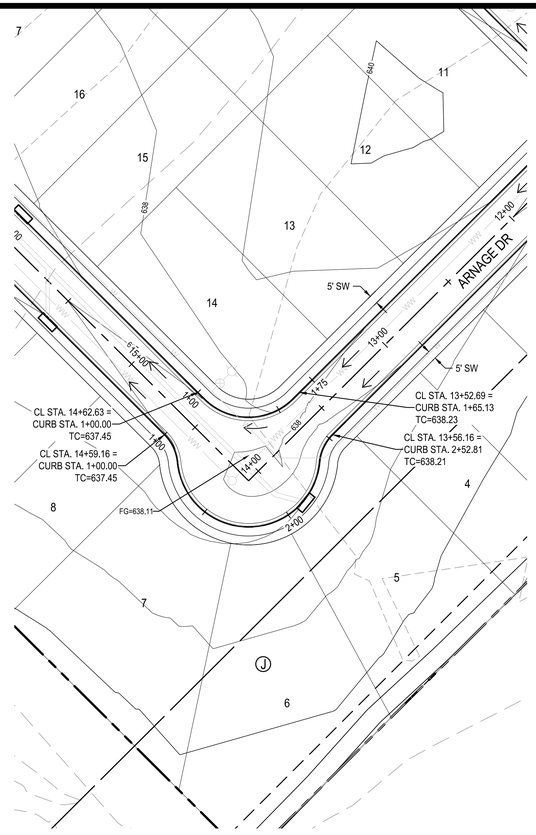

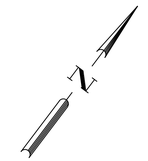

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- 5' SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
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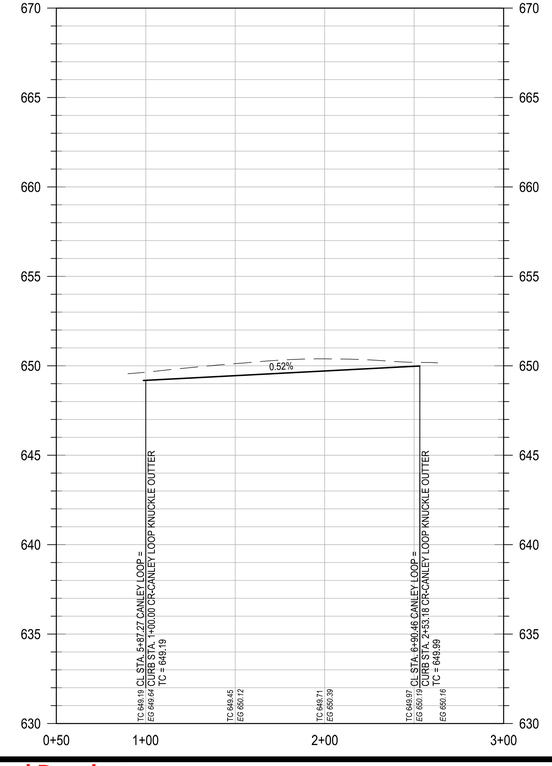
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

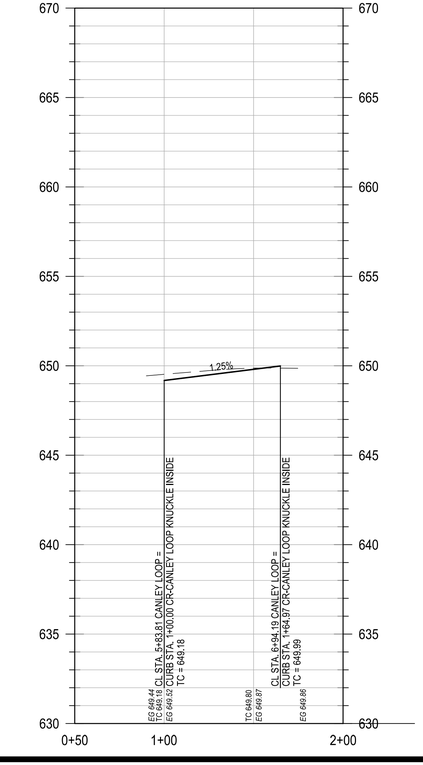
PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

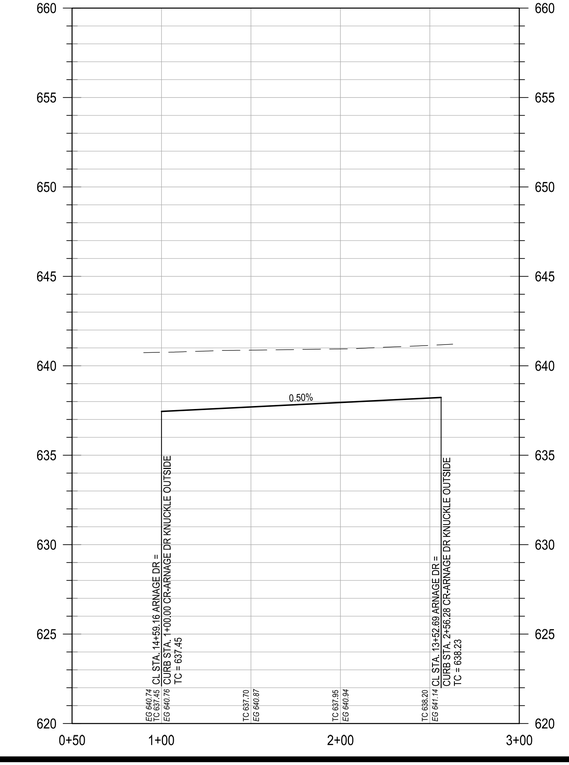
CR-CANLEY LOOP KNUCKLE OUTTER



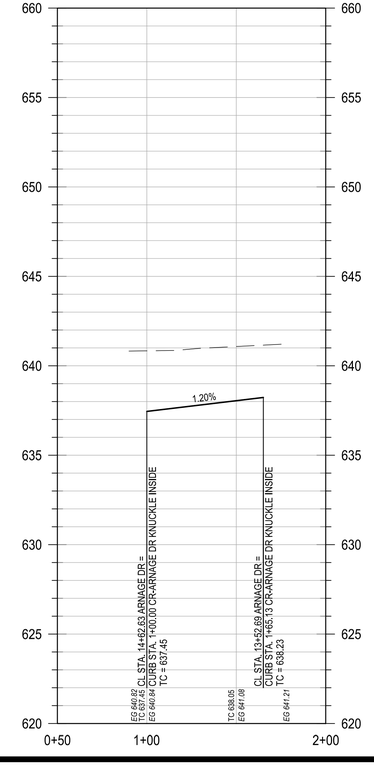
CR-CANLEY LOOP KNUCKLE INSIDE



CR-ARNAGE DR KNUCKLE OUTSIDE



CR-ARNAGE DR KNUCKLE INSIDE



	APR	DATE	DESCRIPTION
REV			

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

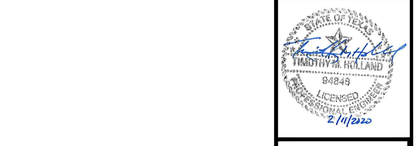
BGE

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownge.com

COTTONWOOD CREEK
HUTTO, TEXAS

CANLEY LOOP & ARNAGE DR KNUCKLE PROFILE

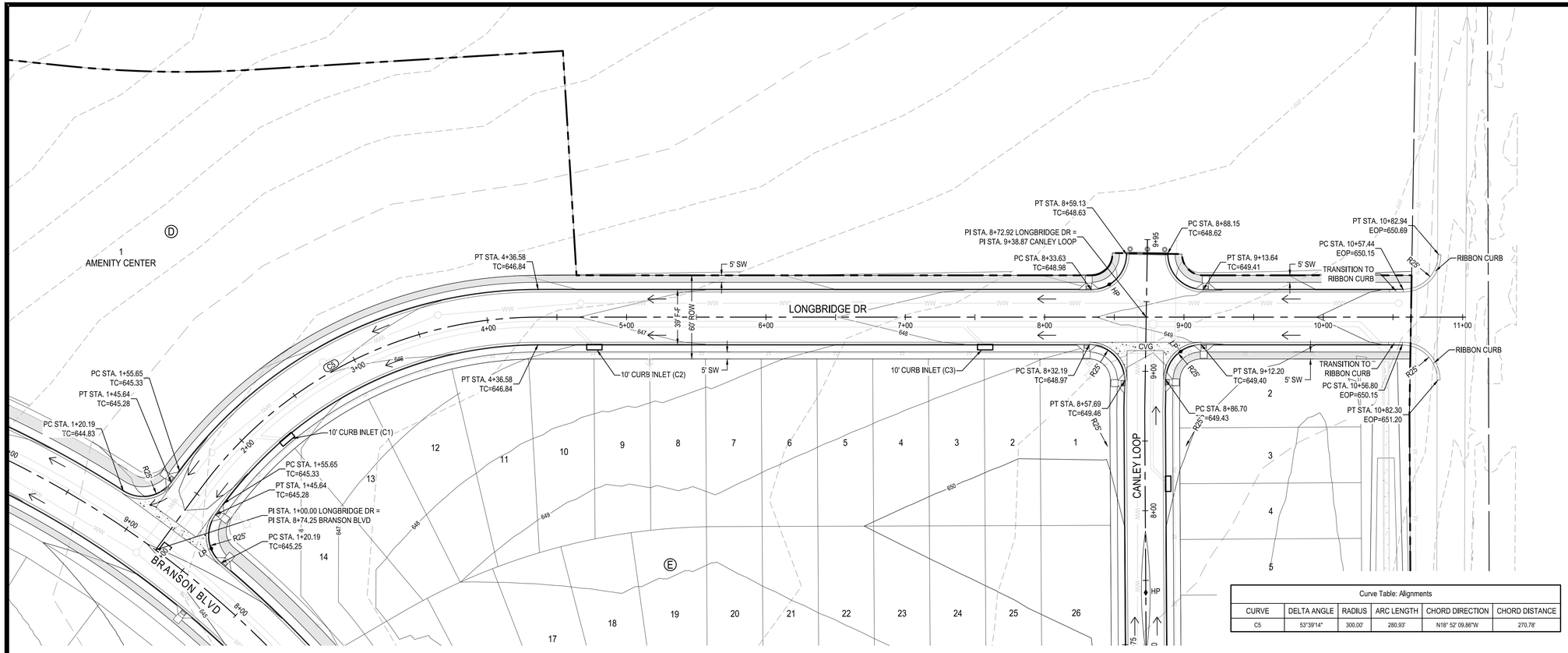
SUBMITTAL DATE: 01-16-2020



SHEET
14 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SR-ROAD-P&P-PH1.dwg Layout: CANLEY LOOP & ARNAGE DR KNUCKLE PROFILE Plotted: 2/11/2020 2:20:33 PM

Record Drawing



Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C5	53°39'14"	300.00'	280.93'	N18° 52' 09.86"W	270.78'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
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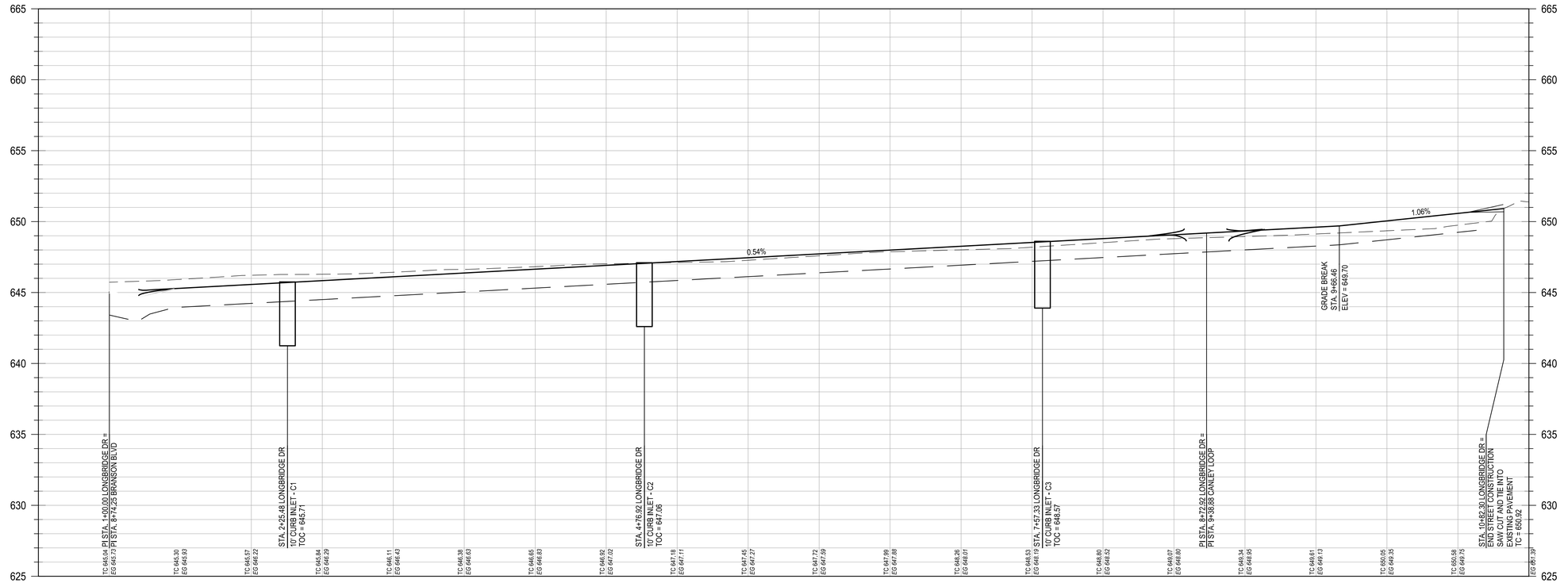
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

LONGBRIDGE DR
30 MPH DESIGN SPEED



BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

COTTONWOOD CREEK
HUTTO, TEXAS

LONGBRIDGE DR PLAN AND PROFILE (1+00 TO END)

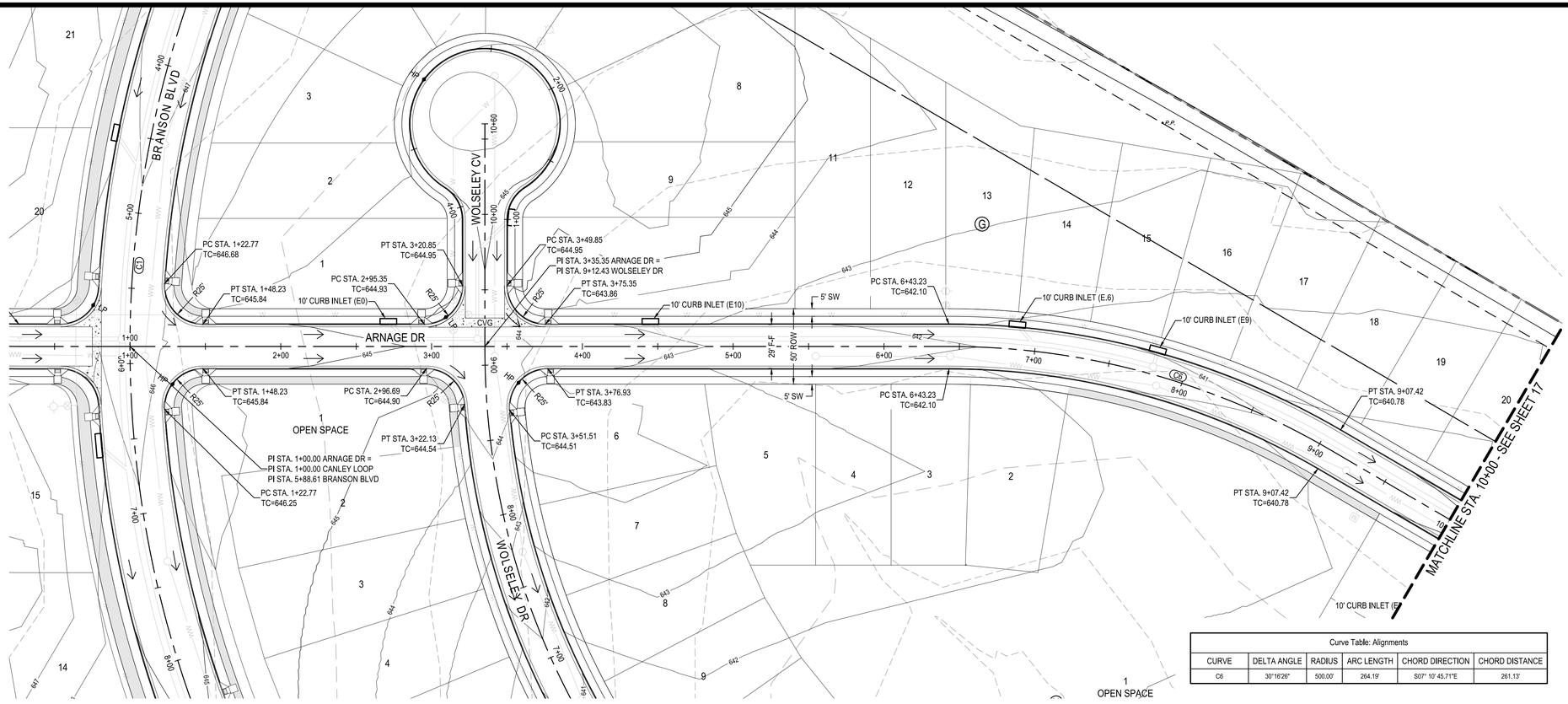
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
15 OF 91

G:\TX\CP\projects\Lennar\7131-09-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: LONGBRIDGE (1+00 TO END) Plotted: 2/11/2020 2:21:09 PM

Record Drawing



0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
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- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
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Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C6	30°16'26"	500.00'	264.19'	S07° 10' 45.71"E	261.13'

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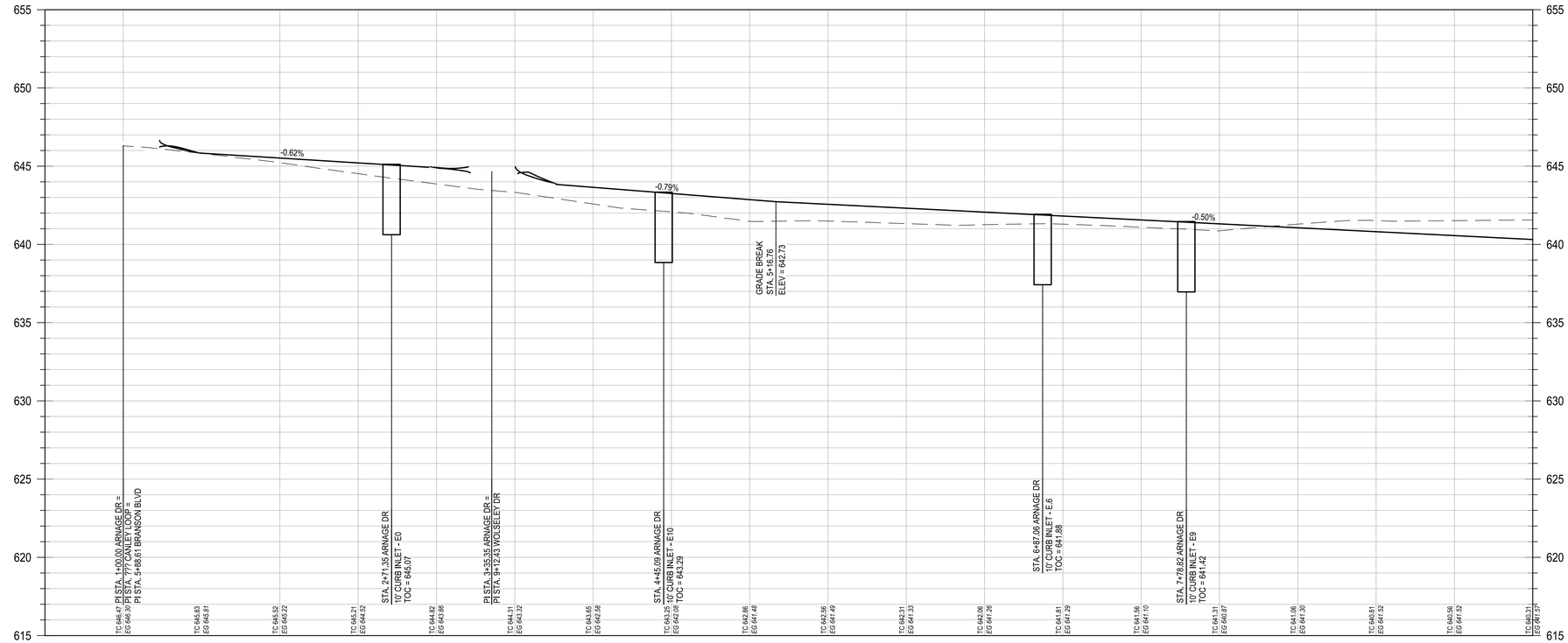
PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

ARNAGE DR
30 MPH DESIGN SPEED



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							DATE
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DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownge.com

COTTONWOOD CREEK
HUTTO, TEXAS

ARNAGE DR PLAN AND PROFILE
(1+00 TO 10+00)

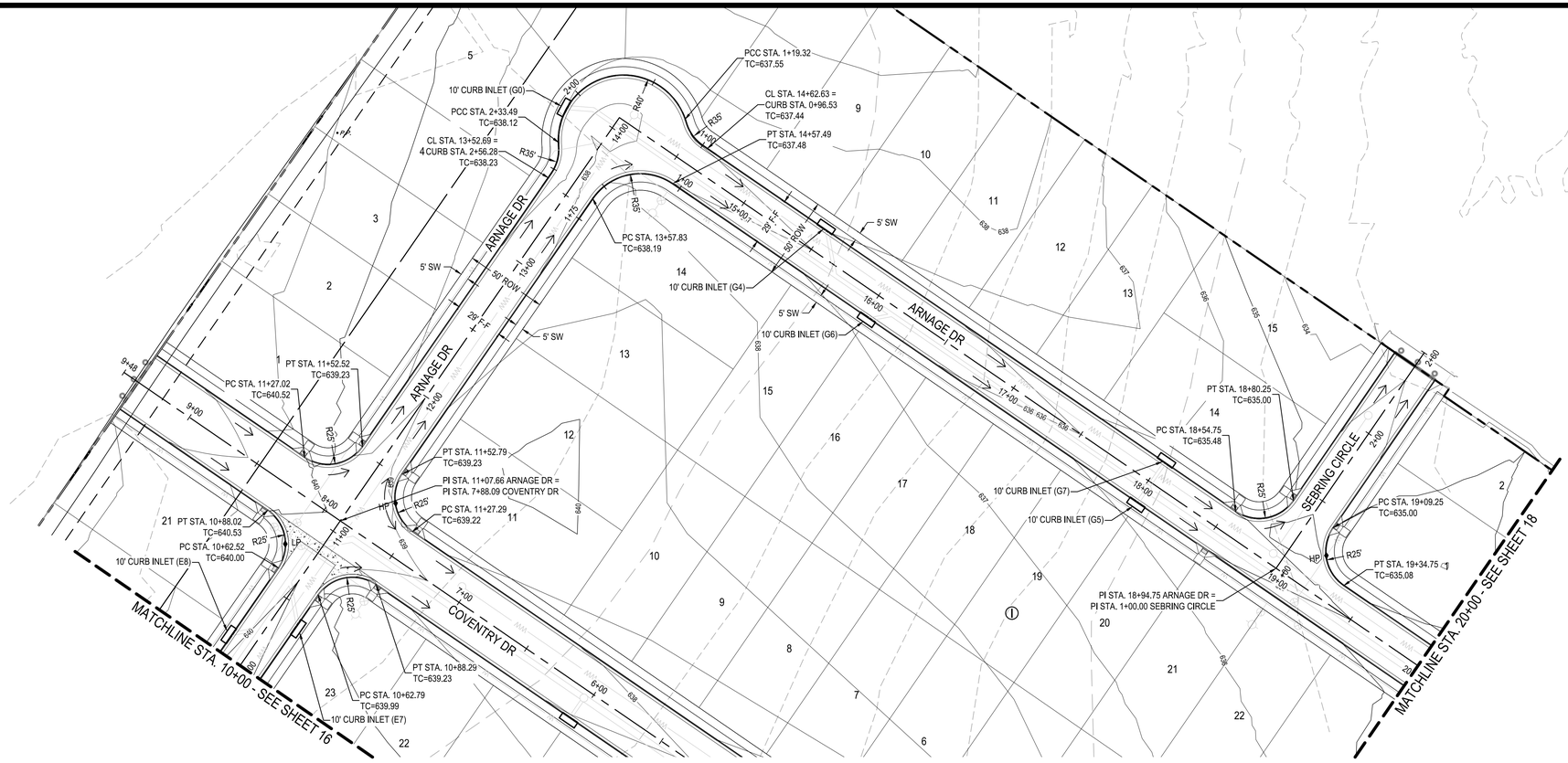
SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
16 OF 91

G:\TX\CP\projects\Lennar\7131-09-Cottonwood_PH1\03_CADD\01_Shts\C-SR-ROAD-P&P-PH1.dwg Layout: ARNAGE DR (1+00 TO 10+00) Plotted: 2/11/2020 2:21:53 PM

Record Drawing



0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
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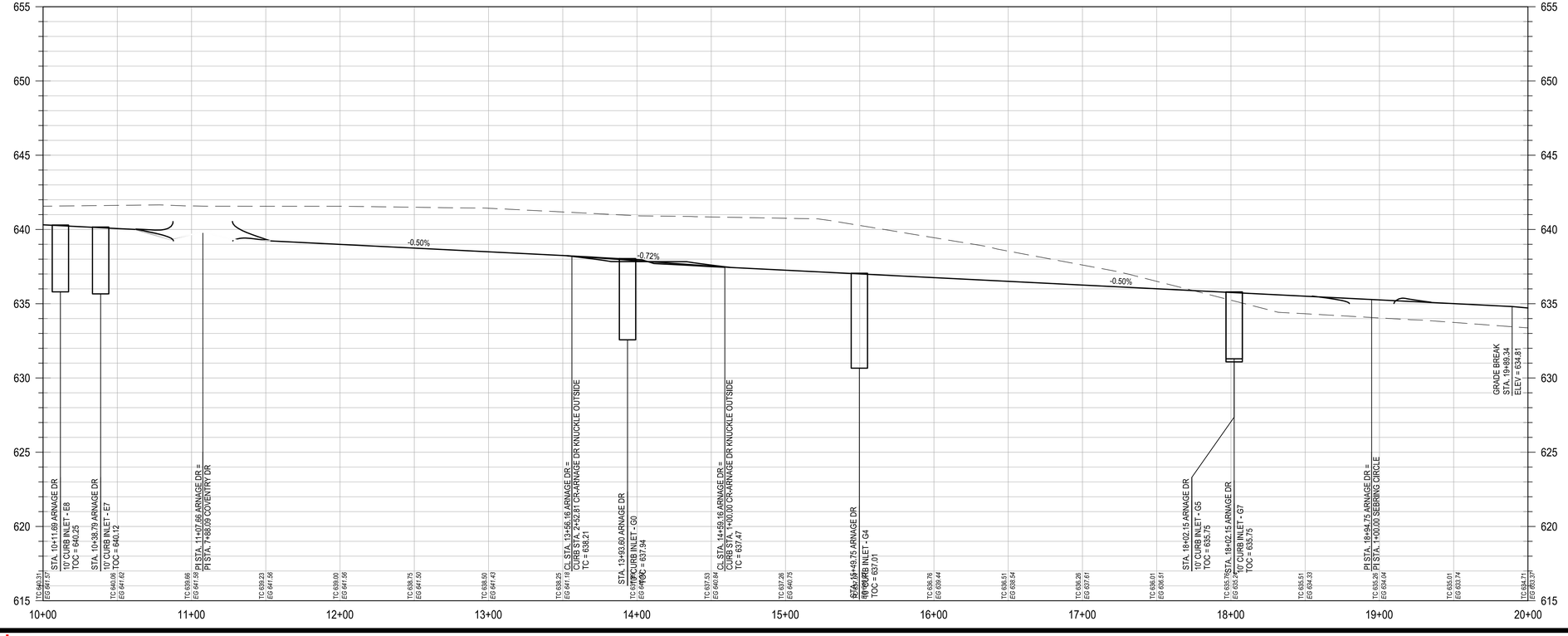
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

ARNAGE DR
30 MPH DESIGN SPEED



	DESCRIPTION	DATE	APR
REV			

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

ARNAGE DR PLAN AND PROFILE
(10+00 TO 20+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
17 OF 91

G:\TX\CP\projects\Lennar\7131-06-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-PAP-PH1.dwg Layout: ARNAGE DR (10+00 TO 20+00) Plotted: 2/11/2020 2:22:22 PM

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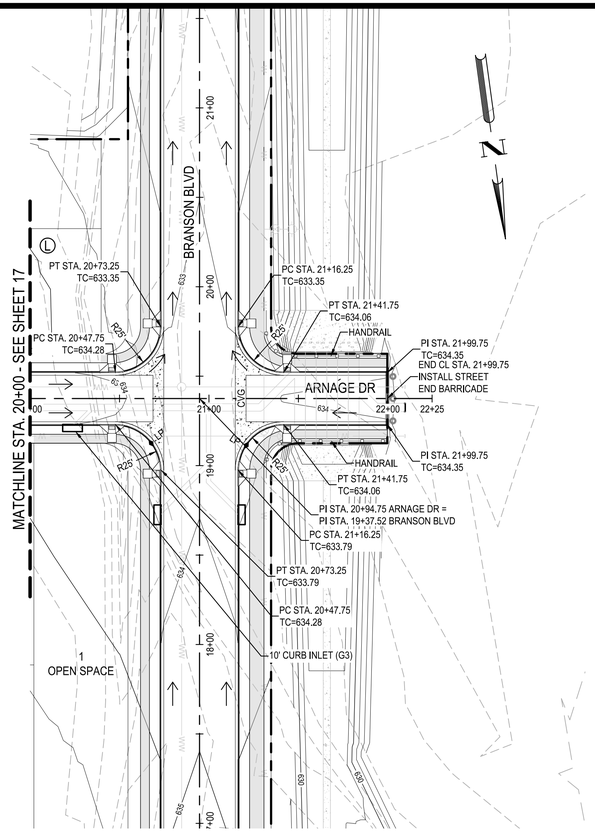

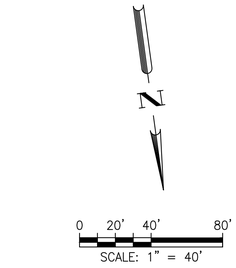

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- 5' SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- 5' SIDEWALK TO BE CONSTRUCTED BY BUILDER
- CURB RAMP
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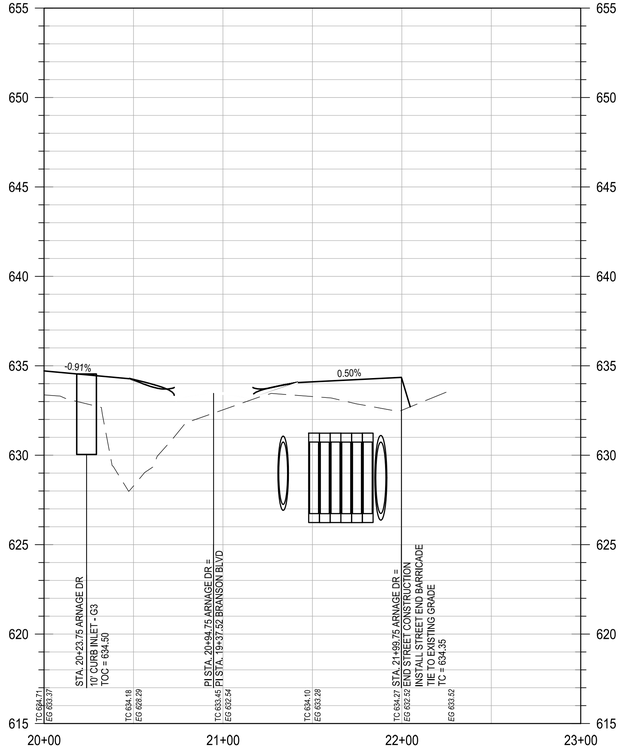
7. FOR STANDARD STREET END BARRICADE SEE DETAIL ON SHEET 78.

ARNAGE DR
30 MPH DESIGN SPEED



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
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TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

ARNAGE DR PLAN AND PROFILE (20+00 TO END)

SUBMITTAL DATE: 01-16-2020



SHEET
18 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: ARNAGE DR (20+00 TO END) Plotted: 2/11/2020 2:22:49 PM

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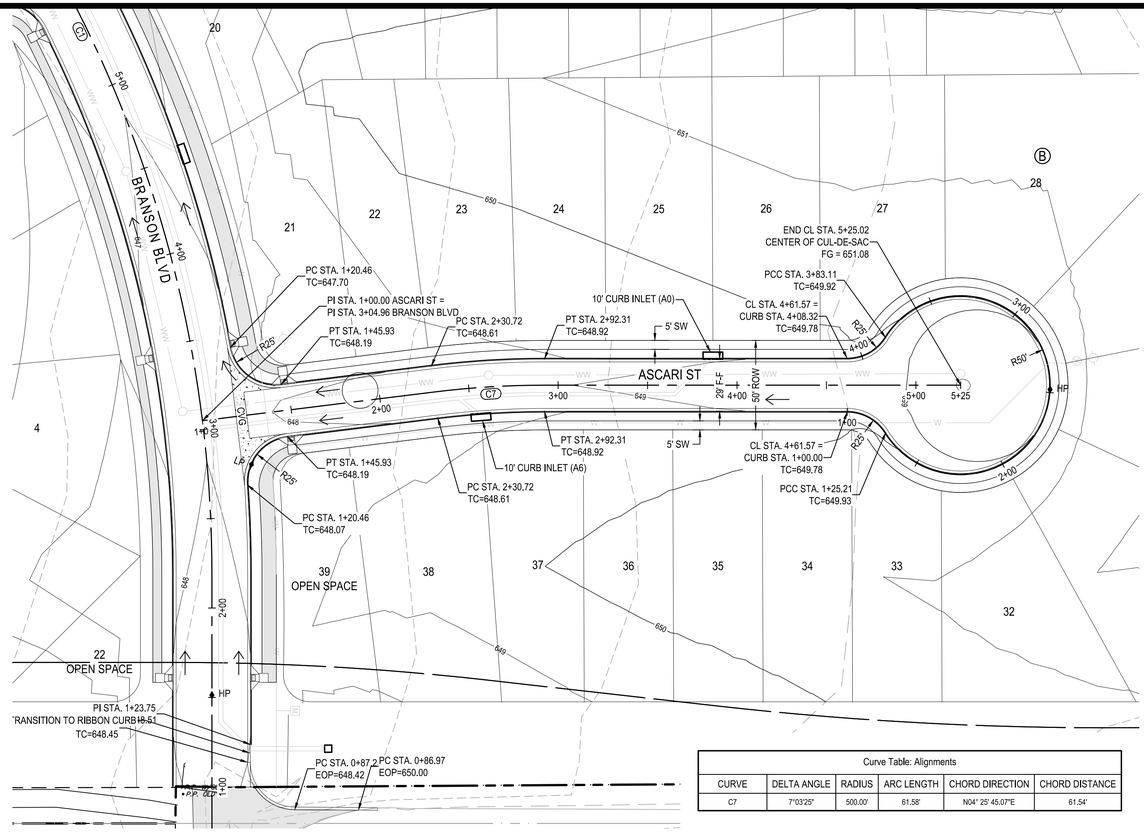

Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C7	7°03'25"	500.00'	61.58'	N04° 25' 45.07"E	61.54'

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
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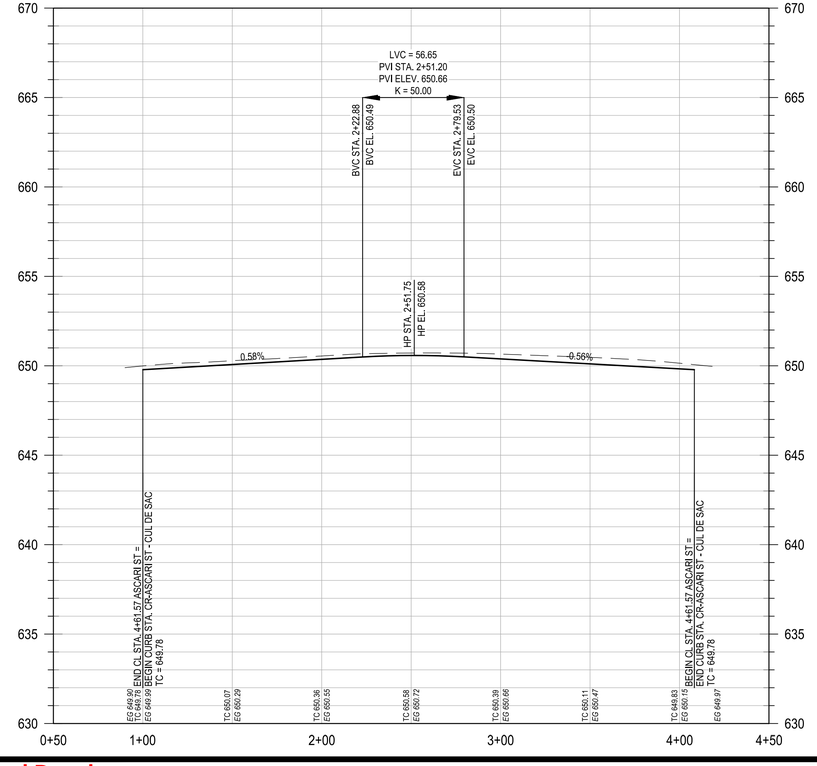
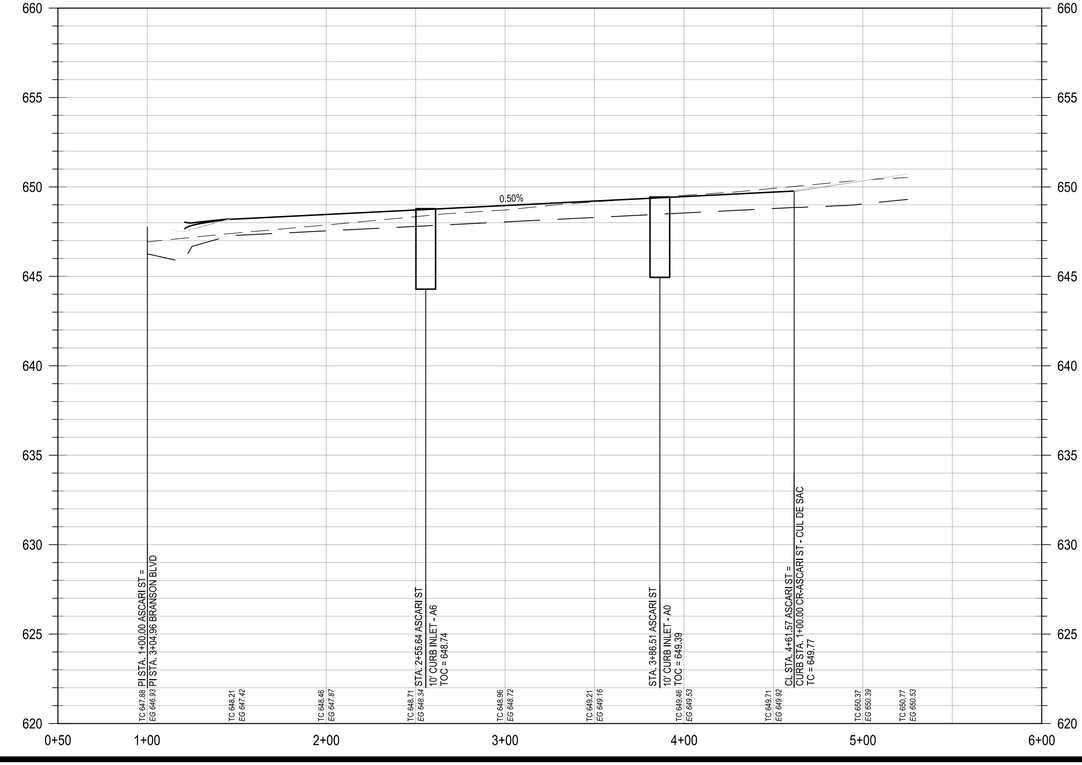
PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

CR-ASCARI ST - CUL DE SAC



ASCARI ST
30 MPH DESIGN SPEED



							REV
							DESCRIPTION
							DATE
							APR

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

ASCARI ST & CUL DE SAC PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020



SHEET
19 OF 91

G:\TX\CP\projects\Lennar\7131-06-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: MILLINER LOOP & ASCARI ST (1+00 TO END) Plotted: 2/11/2020 2:23:36 PM

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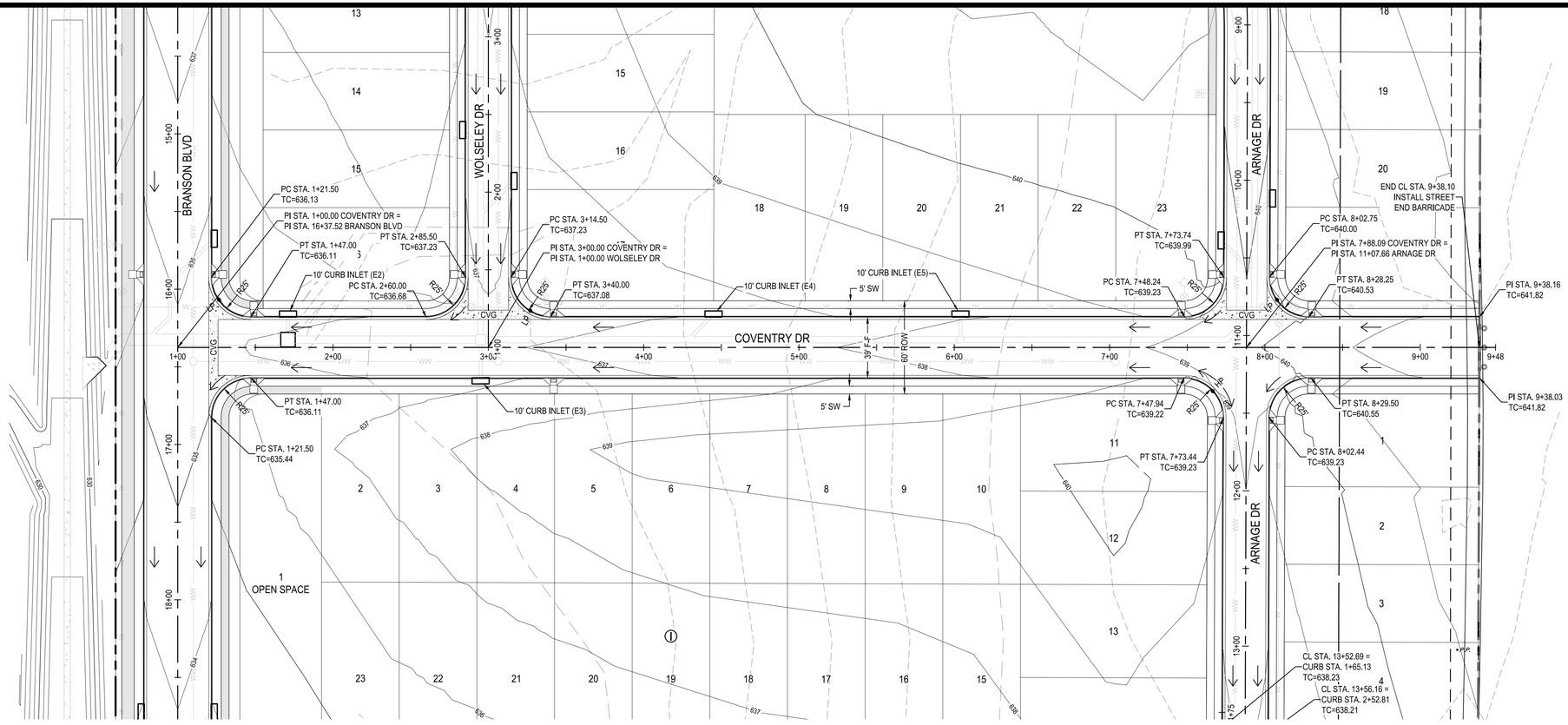
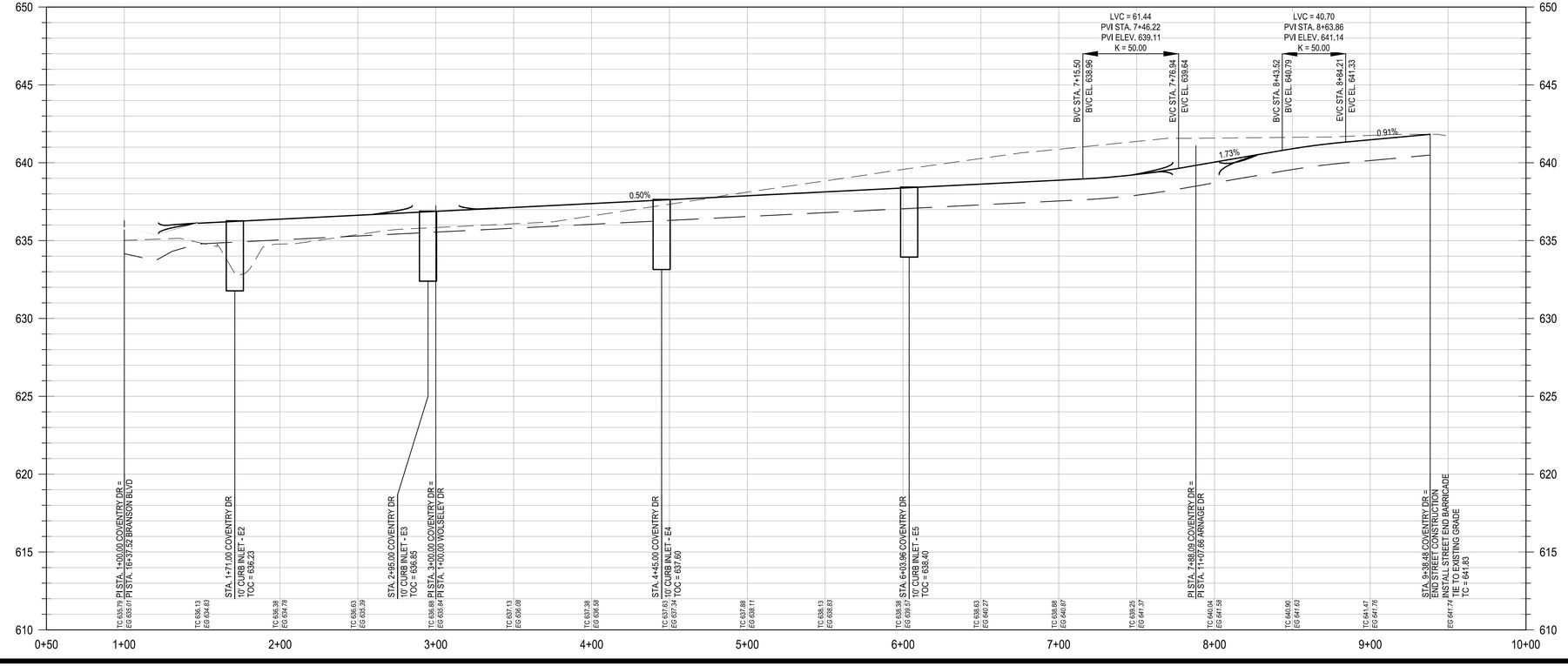


COVENTRY DR
30 MPH DESIGN SPEED



LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- OE — OVERHEAD ELECTRIC
- 28 — LOT NUMBER
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PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

							APR
							DATE
							DESCRIPTION
							REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownbgey.com

COTTONWOOD CREEK
HUTTO, TEXAS

COVENTRY DR PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
20 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SR-ROAD-P&P-PH1.dwg Layout: COVENTRY DR (1+00 TO END) Plotted: 2/11/2020 2:24:13 PM

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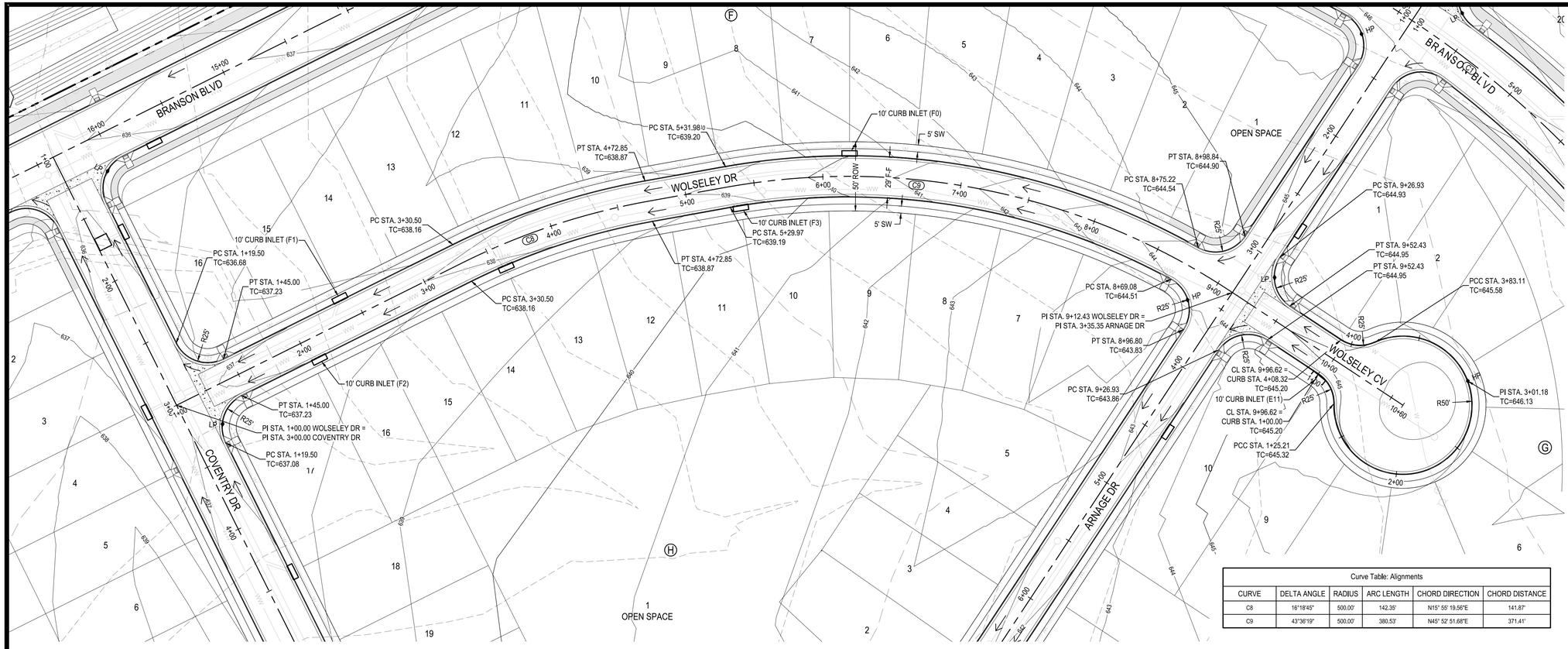

Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C8	16°18'45"	500.00'	142.35'	N15° 55' 19.56"E	141.87'
C9	43°36'19"	500.00'	380.53'	N45° 52' 51.68"E	371.41'

0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
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PROFILE LEGEND

- PROPOSED GRADE
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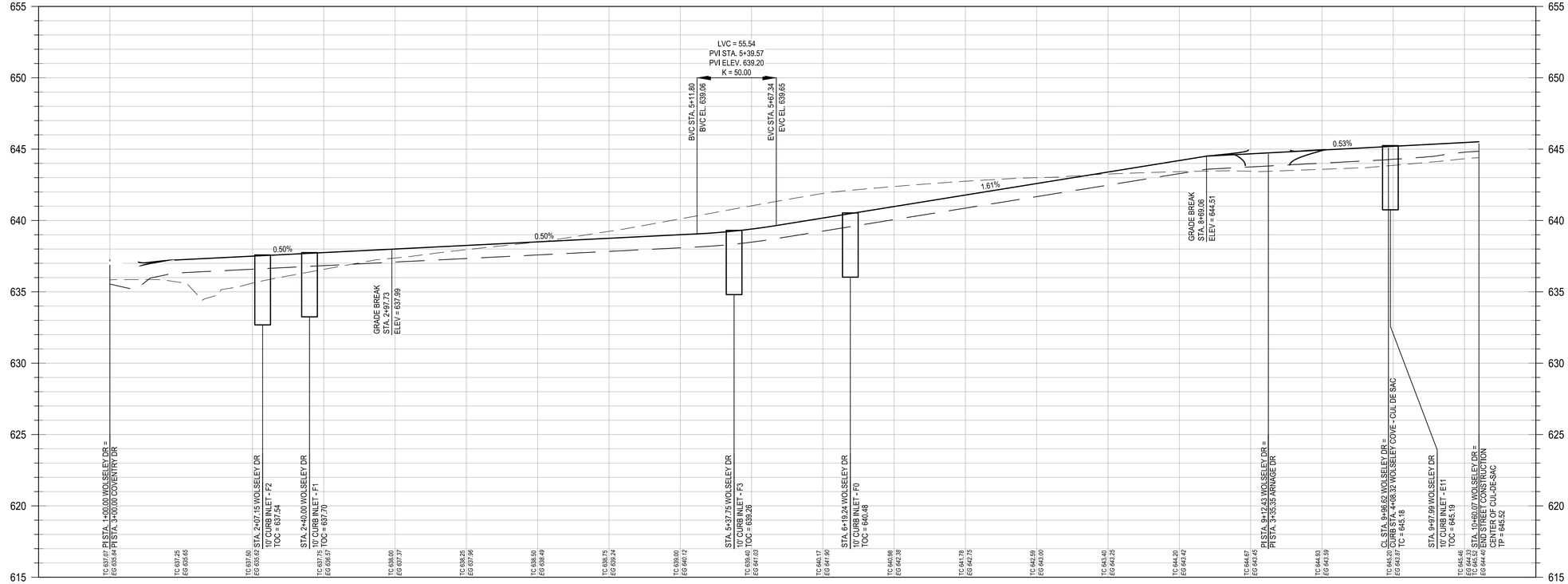
- EXISTING GRADE
- PROPOSED CURB INLET

WOLSELEY DR
30 MPH DESIGN SPEED



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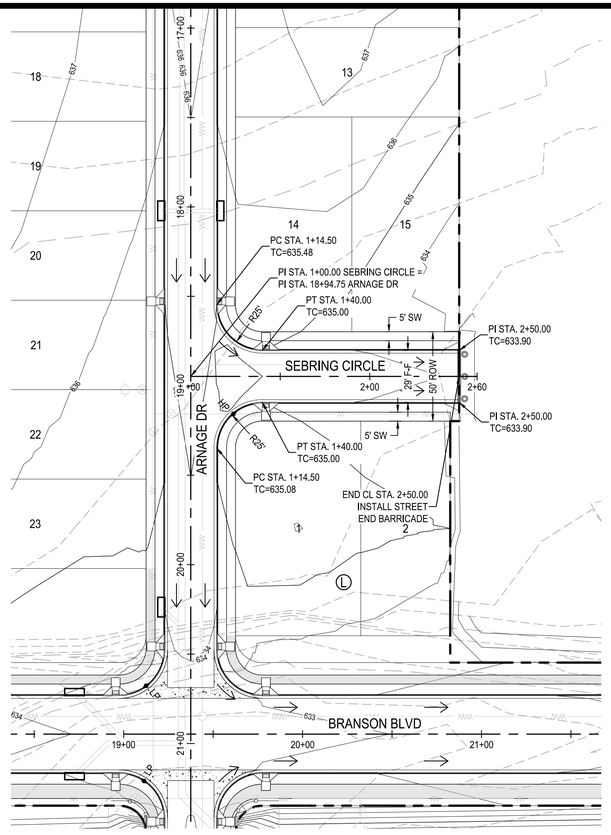
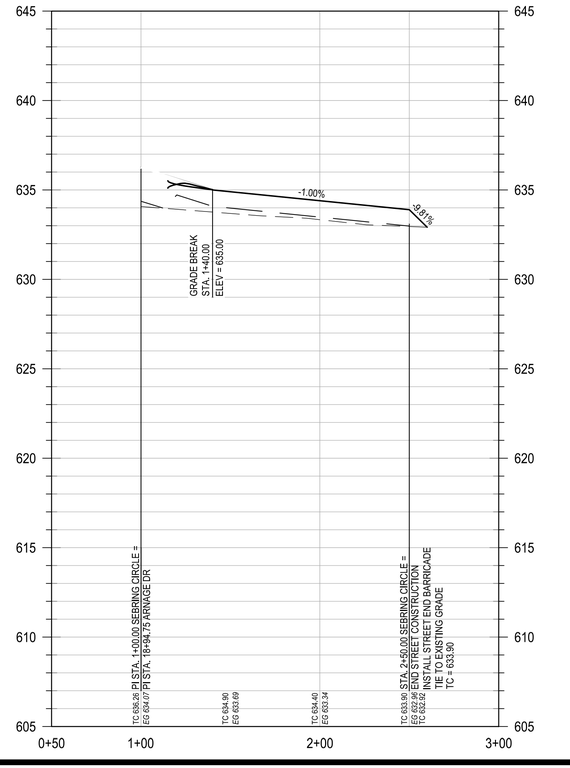


SEBRING CIRCLE



0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
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PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

SEBRING CIRCLE PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
22 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: SEBRING CR (1+00 TO END) Plotted: 2/11/2020 2:25:31 PM

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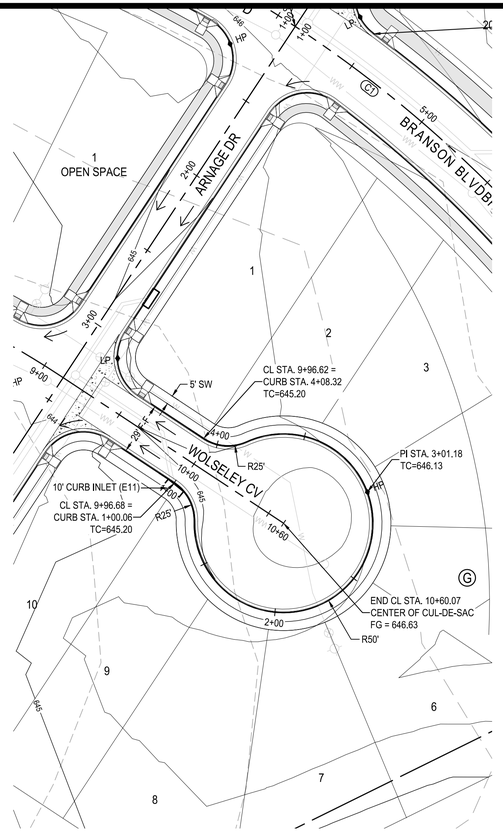
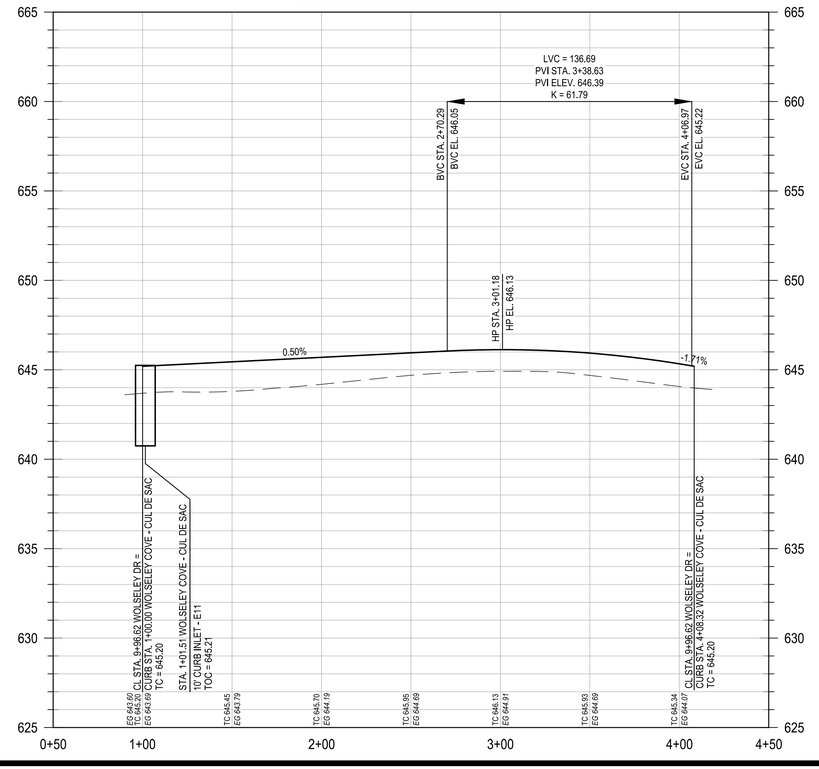
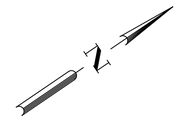


WOLSELEY COVE - CUL DE SAC





0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
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PROFILE LEGEND

- PROPOSED GRADE
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- EXISTING GRADE
- PROPOSED CURB INLET

	APR	DATE	DESCRIPTION	REV

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DRAWN BY: DAZ

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COTTONWOOD CREEK
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WOLSELEY COVE CUL DE SAC PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
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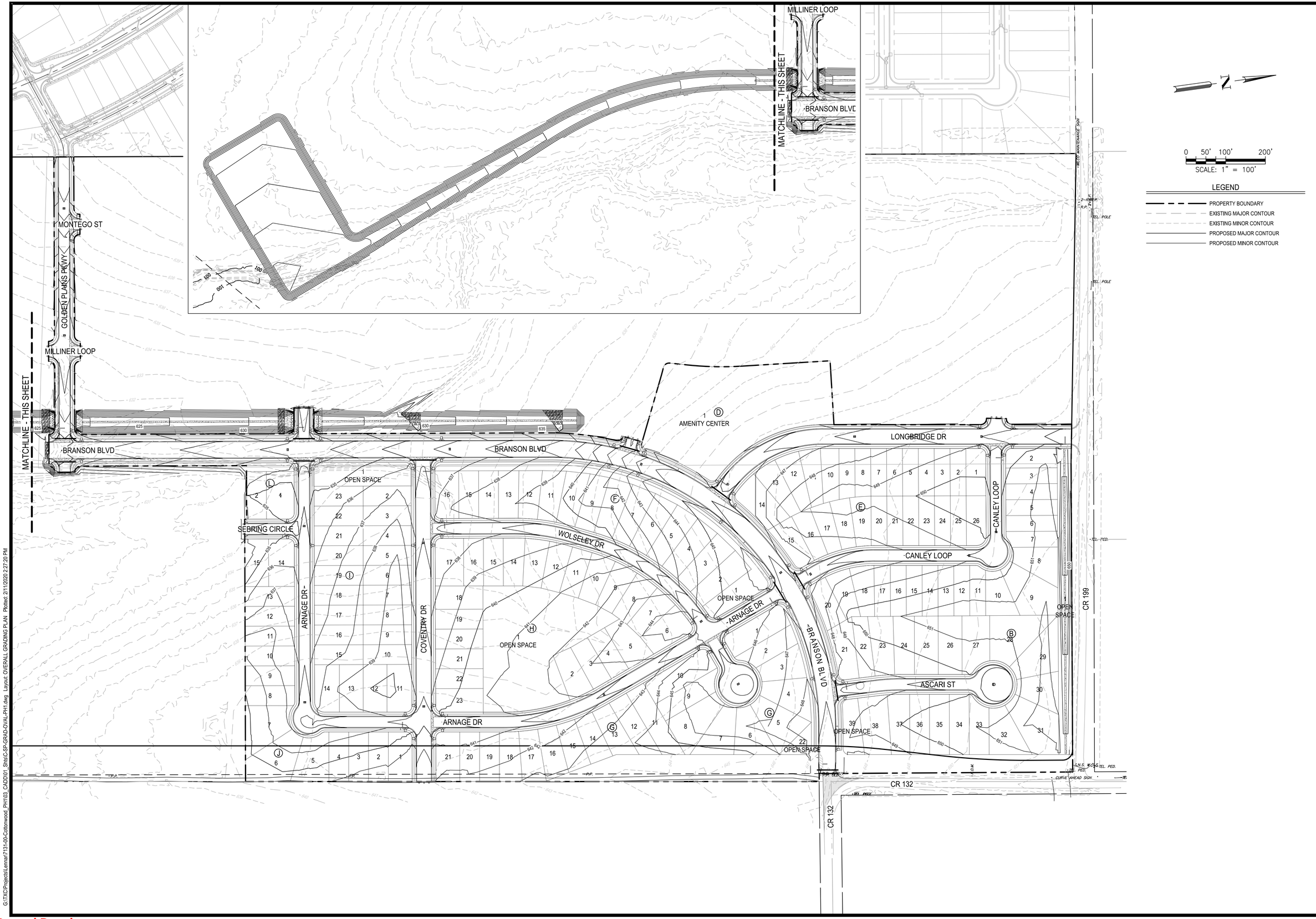
2/11/2020

SHEET
23 OF 91

G:\TXCP\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-ROAD-P&P-PH1.dwg Layout: WOLSELEY COVE CUL DE SAC PLAN AND PROFILE (1+00 TO END) Plotted: 2/11/2020 2:26:08 PM

Record Drawing



REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL GRADING PLAN

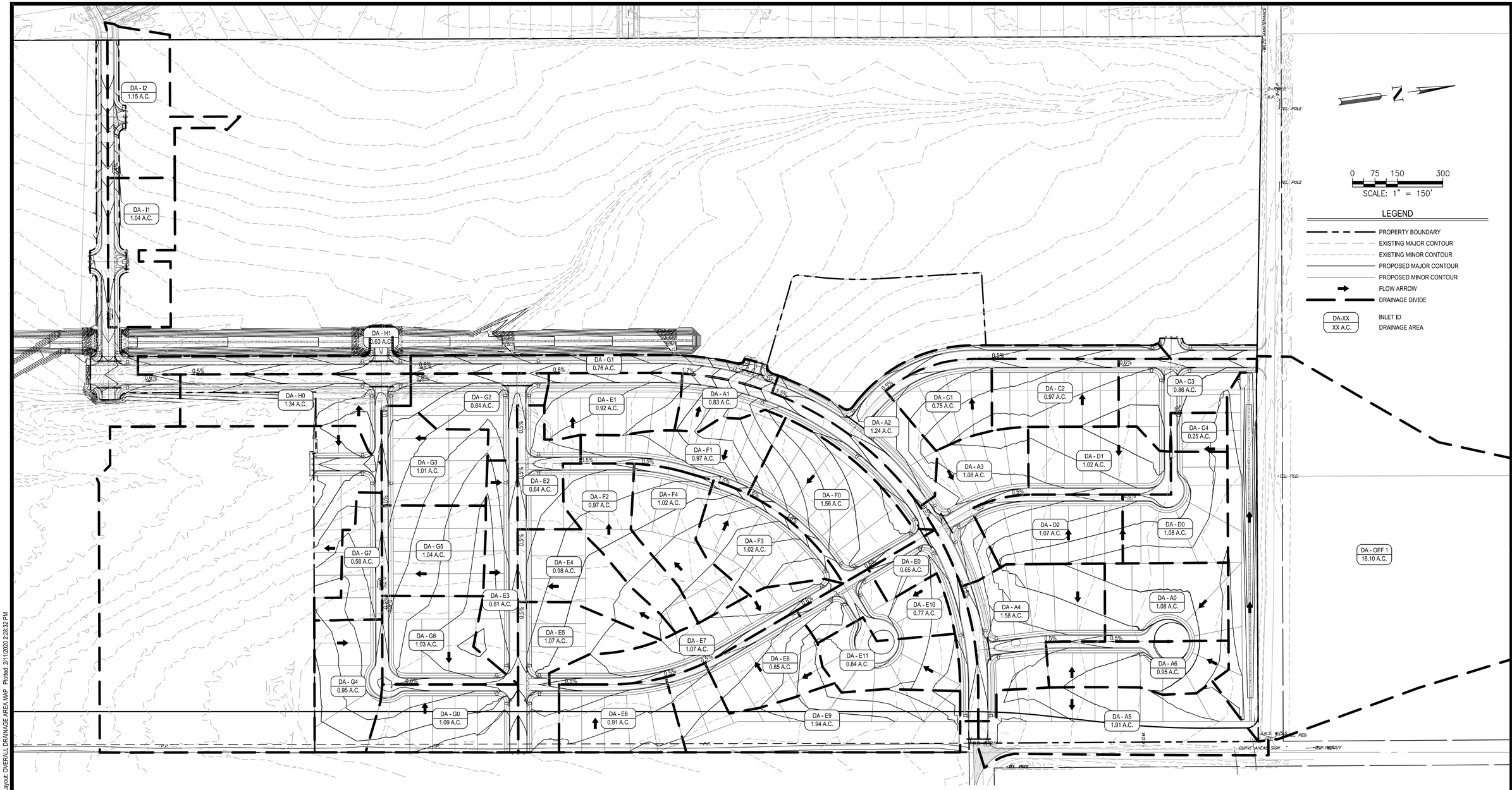
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
24 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-GRAD-OVAL-PH1.dwg Layout: OVERALL GRADING PLAN Plotted: 2/11/2020 2:27:20 PM

Record Drawing



0 75 150 300
SCALE: 1" = 150'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FLOW ARROW
- DRAINAGE DIVIDE
- DA-XX / XX A.C. — INLET ID / DRAINAGE AREA

REV	DESCRIPTION	DATE	APR

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COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL DRAINAGE AREA MAP

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
25 OF 91

G:\TX\CIP\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-DAM-OVAL-PH1.dwg Layout: OVERALL DRAINAGE AREA MAP Plotted: 2/11/2020 2:28:32 PM

Record Drawing

CALCULATION OF IMPERVIOUS COVER AND "C" VALUES

ASSUMPTIONS		
40 ft Lot	2601	sf
60-70 ft Lot	3550	sf
50 ft Lot	3400	sf
One half Street (residential) (50' ROW)	20	lf
One half Street (residential) (60' ROW)	25	lf
One half Street (collector) (80' ROW)	27	lf
Knuckle (50' radius)	9160	sf
Impervious C2	0.74	
Pervious C2	0.25	
Impervious C25	0.87	
Pervious C25	0.34	
Impervious C100	0.96	
Pervious C100	0.41	

Note: Street and knuckle impervious cover includes sidewalk

		# OF LOTS			ST LENGTH	ST LENGTH	ST LENGTH			IMPERV.			
AREA	ACRES	40 FT	60-70 FT	50 FT	(RES)	(RES)	(COL)	KNUCKLE	IC (SF)	COVER	C2	C25	C100
DA - A0	1.08	0	3	1	69	0	0	0.5	20010	43%	0.458	0.565	0.644
DA - A6	0.95	0	0	4	201.2	0	0	0.5	22204	54%	0.513	0.624	0.705
DA - A5	1.91	0	0	4.25	700	0	0	0	28450	34%	0.418	0.521	0.598
DA - A4	1.58	2	1	3	371	0	301.5	0	34512.5	50%	0.496	0.606	0.686
DA - A3	1.08	4.5	0	0	200	0	65	0	17459.5	37%	0.432	0.537	0.614
DA - A2	1.24	1.35	0	0	0	830	419	0	35574.35	66%	0.573	0.689	0.772
DA - A1	0.83	0	0	1	0	0	683.47	0	21853.69	60%	0.546	0.660	0.742
DA - D0	1.08	6.5	0	0	202	0	0	0.25	23236.5	49%	0.492	0.602	0.682
DA - D1	1.02	6.47	0	0	400	0	0	0	24828.47	56%	0.524	0.636	0.717
DA - D2	1.06	7	0	0	339	0	0	0	24987	54%	0.515	0.627	0.708
DA - C4	0.25	2	0	0	85	0	0	0	6902	63%	0.561	0.676	0.759
DA - C3	0.86	2	0	0	330.4	305.6	0	0.17	21007.2	56%	0.525	0.637	0.718
DA - C2	0.97	7	0	0	0	280.4	0	0	25217	60%	0.542	0.656	0.738
DA - C1	0.75	4	0	0	0	245	0	0	16529	51%	0.498	0.608	0.688
DA - E0	0.65	0	0	0.75	123.1	0	440	0	16892	60%	0.542	0.656	0.738
DA - E11	0.84	0	0	3.25	0	0	0	0.75	17920	49%	0.490	0.600	0.679
DA - E10	0.77	0	0	2.75	300	0	0	0.28	17914.8	53%	0.512	0.623	0.704
DA - E9	1.94	0	0	4.5	92	0	0	0	17140	20%	0.349	0.447	0.522
DA - E8	0.91	0	0	5	237	0	0	0	21740	55%	0.519	0.631	0.712
DA - E7	1.07	0	0	1.75	703.6	0	0	0	20022	43%	0.460	0.568	0.646
DA - E6	0.85	0	0	3.25	235	0	0	0	15750	43%	0.458	0.565	0.644
DA - E5	1.07	0	0	2.75	93	333	0	0	19535	42%	0.455	0.562	0.641
DA - E4	0.98	0	0	3	0	161	0	0	14225	33%	0.413	0.517	0.593
DA - E3	0.81	0	0	3	0	490	0	0	22450	64%	0.562	0.677	0.760
DA - E2	0.64	0	0	1.75	190	274	0	0	16600	60%	0.542	0.656	0.737
DA - E1	0.92	0	0	4	0	0	294	0	21538	54%	0.513	0.625	0.706
DA - F0	1.56	0	0	5	471	0	0	0	26420	39%	0.441	0.546	0.624
DA - F4	1.02	0	0	4	179	0	0	0	17180	39%	0.439	0.545	0.623
DA - F3	1.02	0	0	4.75	372.7	0	0	0	23604	53%	0.510	0.622	0.702
DA - F2	0.97	0	0	2.75	158	0	0	0	12510	30%	0.395	0.497	0.573
DA - F1	0.97	0	0	4.5	385	0	0	0	23000	54%	0.517	0.628	0.709
DA - G0	1.09	0	0	5	211	150	0	0.1	25886	55%	0.517	0.629	0.710
DA - G7	0.58	0	0	2.75	280	0	0	0	14950	59%	0.540	0.654	0.735
DA - G6	1.03	0	0	4.5	438	0	0	0	24060	54%	0.513	0.624	0.705
DA - G5	1.04	0	0	7	200	0	0	0	27800	61%	0.551	0.665	0.748
DA - G4	0.95	0	0	4	172	0	0	0	17040	41%	0.452	0.558	0.636
DA - G3	1.01	0	0	6	220	0	0	0	24800	56%	0.526	0.639	0.720
DA - G2	0.84	0	0	1	0	151	300	0	15275	42%	0.455	0.561	0.640
DA - G1	0.76	0	0	0	0	0	805	0	21735	66%	0.572	0.688	0.771
DA - H0	1.35	0	0	4.5	185	0	509	0	32743	56%	0.523	0.635	0.716
DA - H1	0.63	0	0	0	167	0	602.9	0	19618.3	71%	0.600	0.719	0.803
DA - I2	1.15	0	0	4	740.6	0	0	0	28412	57%	0.528	0.641	0.722
DA - I1	1.04	0	0	5	509.9	0	0	0	27198	60%	0.544	0.658	0.740
DA - OFF 1	16.10	0	0	0	0	0	0	0	17637.2	3%	0.262	0.353	0.424

Post-Development TOC

Drainage Area	Total Area, acres	Time of Conc'n, Tc (min)
DA - A0	1.08	9.01
DA - A6	0.95	9.81
DA - A5	1.91	8.31
DA - A4	1.58	11.55
DA - A3	1.08	8.75
DA - A2	1.24	9.28
DA - A1	0.83	6.47
DA - D0	1.08	10.16
DA - D1	1.02	9.97
DA - D2	1.06	10.12
DA - C4	0.25	8.38
DA - C3	0.86	9.57
DA - C2	0.97	9.84
DA - C1	0.75	8.84
DA - E0	0.65	8.06
DA - E11	0.84	9.46
DA - E10	0.77	8.16
DA - E9	1.94	18.33
DA - E8	0.91	12.25
DA - E7	1.07	12.74
DA - E6	0.85	8.36
DA - E5	1.07	22.68
DA - E4	0.98	22.90
DA - E3	0.81	10.53
DA - E2	0.64	9.00
DA - E1	0.92	11.97
DA - F0	1.56	11.92
DA - F4	1.02	10.05
DA - F3	1.02	8.31
DA - F2	0.97	23.65
DA - F1	0.97	11.31
DA - G0	1.09	10.66
DA - G7	0.58	9.55
DA - G6	1.03	7.90
DA - G5	1.04	9.45
DA - G4	0.95	14.91
DA - G3	1.01	9.74
DA - G2	0.84	8.10
DA - G1	0.76	8.55
DA - H0	1.35	9.78
DA - H1	0.63	8.42
DA - I2	1.15	7.41
DA - I1	1.04	10.36
DA - OFF 1	16.10	37.66

Drainage Area	Total Area, acres	25 YR EVENT			100 YR EVENT		
		C	I, in/hr	Q, cfs	C	I, in/hr	Q, cfs
DA - A0	1.08	0.565	8.50	**5.2**	0.644	10.75	**7.5**
DA - A6	0.95	0.624	8.25	**4.9**	0.705	10.46	**7.0**
DA - A5	1.91	0.521	8.74	**8.7**	0.598	11.02	**12.6**
DA - A4	1.58	0.606	7.75	**7.4**	0.686	9.89	**10.7**
DA - A3	1.08	0.537	8.59	**5.0**	0.614	10.85	**7.2**
DA - A2	1.24	0.689	8.42	**7.2**	0.772	10.65	**10.2**
DA - A1	0.83	0.660	9.44	**5.2**	0.742	11.81	**7.3**
DA - D0	1.08	0.602	8.15	**5.3**	0.682	10.34	**7.6**
DA - D1	1.02	0.636	8.20	**5.3**	0.717	10.40	**7.6**
DA - D2	1.06	0.627	8.16	**5.4**	0.708	10.35	**7.8**
DA - C4	0.25	0.676	8.72	**1.5**	0.759	10.99	**2.1**
DA - C3	0.86	0.637	8.32	**4.6**	0.718	10.55	**6.5**
DA - C2	0.97	0.656	8.24	**5.2**	0.738	10.45	**7.5**
DA - C1	0.75	0.608	8.56	**3.9**	0.688	10.82	**5.6**
DA - E0	0.65	0.656	8.83	**3.8**	0.738	11.12	**5.3**
DA - E11	0.84	0.600	8.36	**4.2**	0.679	10.59	**6.0**
DA - E10	0.77	0.623	8.79	**4.2**	0.704	11.08	**6.0**
DA - E9	1.94	0.447	6.33	**5.5**	0.522	8.20	**8.3**
DA - E8	0.91	0.631	7.57	**4.3**	0.712	9.68	**6.3**
DA - E7	1.07	0.568	7.45	**4.5**	0.646	9.54	**6.6**
DA - E6	0.85	0.565	8.72	**4.2**	0.644	11.00	**6.0**
DA - E5	1.07	0.562	5.69	**3.4**	0.641	7.42	**5.1**
DA - E4	0.98	0.517	5.66	**2.9**	0.593	7.38	**4.3**
DA - E3	0.81	0.677	8.04	**4.4**	0.760	10.22	**6.3**
DA - E2	0.64	0.656	8.51	**3.6**	0.737	10.76	**5.1**
DA - E1	0.92	0.625	7.64	**4.4**	0.706	9.76	**6.3**
DA - F0	1.56	0.546	7.66	**6.5**	0.624	9.77	**9.5**
DA - F4	1.02	0.545	8.18	**4.5**	0.623	10.38	**6.6**
DA - F3	1.02	0.622	8.74	**5.5**	0.702	11.02	**7.9**
DA - F2	0.97	0.497	5.57	**2.7**	0.573	7.27	**4.0**
DA - F1	0.97	0.628	7.82	**4.8**	0.709	9.96	**6.9**
DA - G0	1.09	0.629	8.00	**5.5**	0.710	10.17	**7.9**
DA - G7	0.58	0.654	8.33	**3.2**	0.735	10.56	**4.5**
DA - G6	1.03	0.624	8.89	**5.7**	0.705	11.19	**8.1**
DA - G5	1.04	0.665	8.36	**5.8**	0.748	10.59	**8.2**
DA - G4	0.95	0.558	6.97	**3.7**	0.636	8.96	**5.4**
DA - G3	1.01	0.639	8.27	**5.3**	0.720	10.49	**7.6**
DA - G2	0.84	0.561	8.81	**4.2**	0.640	11.11	**6.0**
DA - G1	0.76	0.688	8.66	**4.5**	0.771	10.93	**6.4**
DA - H0	1.35	0.635	8.26	**7.1**	0.716	10.47	**10.1**
DA - H1	0.63	0.719	8.70	**3.9**	0.803	10.98	**5.6**
DA - I2	1.15	0.641	9.07	**6.7**	0.722	11.39	**9.5**
DA - I1	1.04	0.658	8.08	**5.5**	0.740	10.27	**7.9**
DA - OFF 1	16.10	0.353	4.29	**24.4**	0.424	5.66	**38.6**

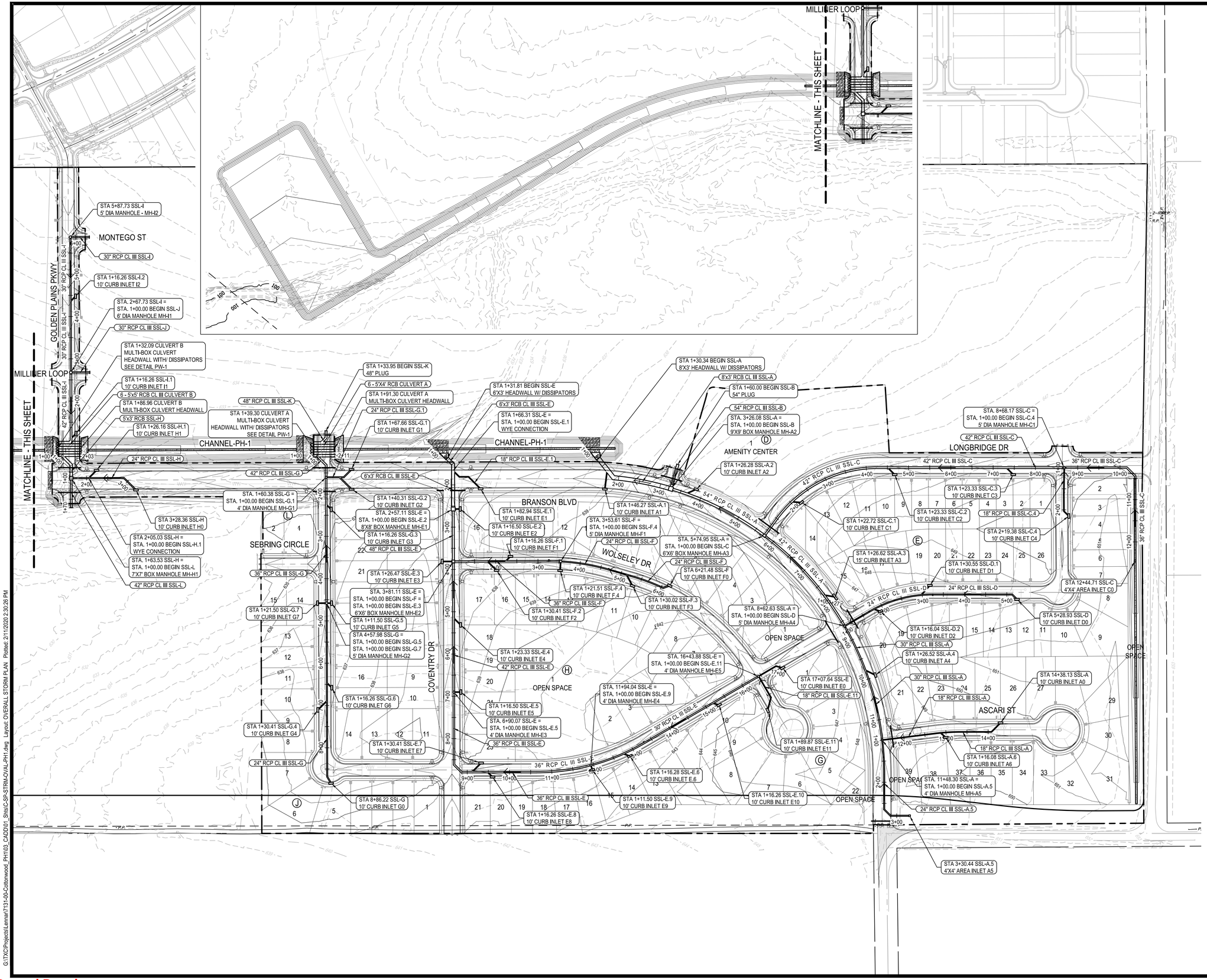
STREET / INLET CAPACITIES
100-YEAR

						STREET CAPACITY					INLET ON GRADE						SUMP INLET				
Drainage Area	Inlet Type	Upstream	$Q_{(100)}$ (cfs)	$Q_{(add)}$ (cfs)	$Q_{(pass)}$ (cfs)	$Q_{(int)}$ (cfs)	Street Width (ft)	Slope (ft/ft)	a (ft)	Y_o (ft)	Ponded Width (ft)	Q_o/L_a (ft)	Length Needed (ft)	Length (ft)	L/L_{need} *=>Qpass	a/Y_o	Possible Q (cfs)	$Q_{(bypass)}$ (cfs)	Clogging Factor	$Q_{(int)}$ (cfs)	Allowable head (ft)	Inlet Length (ft)	Calculated head (ft)
DA - A0	Grade Inlet	0 0 0	7.50	0.00	1.38	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	7.74	10	1.0	0.83	9.69	0.00					
DA - A6	Grade Inlet	DA - A0 0 0	7.00	1.38	2.26	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	8.65	10	1.0	0.83	9.69	0.00					
DA - A5	Area Inlet	0 0	12.60	0.00	0.00	**12.60**	-	-	-	-	-	-	-	-	-	-	-	-	10%	12.6	1	16	0.38
DA - A4	Grade Inlet	DA - A6 0 0	10.70	2.26	2.34	**10.62**	44	0.0050	0.42	0.58	21.72	1.07	12.17	10	0.8	0.71	10.65	2.31					
DA - A3	Grade Inlet	DA - D2 DA - A4 0 0	7.20	4.66	1.24	**10.62**	44	0.0050	0.42	0.58	21.72	1.07	11.14	15	1.0	0.71	15.98	0.00					
DA - A2	Grade Inlet	DA - C2 0 0	10.20	0.42	0.00	**10.62**	44	0.0150	0.42	0.48	12.76	0.95	11.22	10	0.9	0.87	9.47	1.15					
DA - A1	Grade Inlet	DA - A3 0 0	7.30	1.24	0.00	**8.54**	44	0.0166	0.42	0.44	10.98	0.90	9.50	10	1.0	0.95	8.99	0.00					
DA - D0	Grade Inlet	0 0 0	7.60	0.00	0.00	**7.60**	30	0.0080	0.42	0.50	13.79	0.97	7.87	10	1.0	0.84	9.66	0.00					
DA - D1	Grade Inlet	0 0 0	7.60	0.00	1.48	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	7.84	10	1.0	0.83	9.69	0.00					
DA - D2	Grade Inlet	DA - D1 0 0	7.80	1.48	2.35	**6.93**	30	0.0064	0.42	0.50	14.80	0.97	9.57	10	1.0	0.83	9.69	0.00					
DA - C4	Grade Inlet	0 0 0	2.10	0.00	0.00	**2.10**	30	0.0050	0.42	0.35	6.81	0.81	2.60	10	1.0	1.19	8.06	0.00					
DA - C3	Grade Inlet	0 0 0	6.50	0.00	0.00	**6.50**	40	0.0060	0.42	0.48	15.82	0.94	6.88	10	1.0	0.87	9.45	0.00					
DA - C2	Grade Inlet	0 0 0	7.50	0.00	0.42	**7.08**	40	0.0055	0.42	0.50	19.77	0.97	7.74	10	1.0	0.83	9.69	0.00					
DA - C1	Grade Inlet	0 0 0	5.60	0.00	0.00	**5.60**	40	0.0055	0.42	0.46	14.41	0.93	6.05	10	1.0	0.90	9.26	0.00					
DA - E0	Grade Inlet	DA - A4 0 0	5.30	2.34	0.82	**6.82**	30	0.0062	0.42	0.50	14.78	0.97	7.88	10	1.0	0.83	9.69	0.00					
DA - E11	Grade Inlet	0 0 0	6.00	0.00	0.00	**6.00**	30	0.0050	0.42	0.50	13.75	0.97	6.21	10	1.0	0.84	9.65	0.00					
DA - E10	Grade Inlet	0 0 0	6.00	0.00	0.00	**6.00**	30	0.0079	0.42	0.46	10.79	0.93	6.48	10	1.0	0.90	9.25	0.00					
DA - E9	Grade Inlet	0 0 0	8.30	0.00	2.18	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	8.56	10	1.0	0.83	9.69	0.00					
DA - E8	Grade Inlet	0 0 0	6.30	0.00	0.18	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	6.50	10	1.0	0.83	9.69	0.00					
DA - E7	Grade Inlet	DA - E9 DA - E8 0 0	6.60	2.36	2.84	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	9.25	10	1.0	0.83	9.69	0.00					
DA - E6	Grade Inlet	0 0 0	6.00	0.00	0.00	**6.00**	30	0.0050	0.42	0.50	13.75	0.97	6.21	10	1.0	0.84	9.65	0.00					
DA - E5	Grade Inlet	DA - E7 0 0	5.10	2.84	1.19	**6.75**	40	0.0050	0.42	0.50	19.74	0.97	8.19	10	1.0	0.83	9.69	0.00					
DA - E4	Grade Inlet	0 0 0	4.30	0.00	0.00	**4.30**	40	0.0050	0.42	0.43	12.39	0.89	4.84	10	1.0	0.97	8.89	0.00					
DA - E3	Grade Inlet	DA - E5 0 0	6.30	1.19	0.74	**6.75**	40	0.0050	0.42	0.50	19.74	0.97	7.73	10	1.0	0.83	9.69	0.00					
DA - E2	Grade Inlet	DA - E3 0 0	5.10	0.74	0.00	**5.84**	40	0.0050	0.42	0.48	15.57	0.94	6.20	10	1.0	0.88	9.42	0.00					
DA - E1	Grade Inlet	0 0 0	6.30	0.00	0.00	**6.30**	44	0.0077	0.42	0.45	11.46	0.91	6.91	10	1.0	0.93	9.12	0.00					
DA - F0	Grade Inlet	DA - E0 0 0	9.50	0.82	0.00	**10.32**	30	0.0161	0.42	0.49	12.84	0.96	10.78	10	0.9	0.85	9.58	0.74					
DA - F4	Grade Inlet	0 0 0	6.60	0.00	0.48	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	6.81	10	1.0	0.83	9.69	0.00					
DA - F3	Grade Inlet	0 0 0	7.90	0.00	0.00	**7.90**	30	0.0147	0.42	0.46	10.50	0.92	8.60	10	1.0	0.92	9.19	0.00					
DA - F2	Grade Inlet	DA - F1 0 0	4.00	2.00	0.00	**6.00**	30	0.0050	0.42	0.50	13.75	0.97	6.22	10	1.0	0.84	9.65	0.00					
DA - F1	Grade Inlet	DA - F0 DA - F4 0 0	6.90	1.22	2.00	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	8.38	10	1.0	0.83	9.69	0.00					
DA - G0	Grade Inlet	0 0 0	7.90	0.00	1.19	**6.71**	30	0.0060	0.42	0.50	14.80	0.97	8.15	10	1.0	0.83	9.69	0.00					
DA - G7	Grade Inlet	DA - G6 DA - G5 0 0	4.50	5.25	3.63	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	10.06	11	1.0	0.83	10.66	0.00					
DA - G6	Grade Inlet	DA - G0 0 0	8.10	1.19	3.17	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	9.59	10	1.0	0.83	9.69	0.00					
DA - G5	Grade Inlet	0 0 0	8.20	0.00	2.08	**6.12**	30	0.0050	0.42	0.50	14.68	0.97	8.46	10	1.0	0.83	9.69	0.00					
DA - G4	Grade Inlet	0 0 0	5.40	0.00	0.00	**5.40**	30	0.0050	0.42	0.48	11.97	0.95	5.71	10	1.0	0.87	9.46	0.00					
DA - G3	Grade Inlet	0 0 0	7.60	0.00	0.00	**7.60**	30	0.0091	0.42	0.49	12.51	0.95	7.97	10	1.0	0.86	9.54	0.00					
DA - G2	Grade Inlet	0 0 0	6.00	0.00	0.00	**6.00**	44	0.0077	0.42	0.44	11.16	0.90	6.64	10	1.0	0.94	9.04	0.00					
DA - G1	Grade Inlet	DA - A2 0 0	6.40	1.15	0.00	**7.55**	44	0.0077	0.42	0.48	12.70	0.95	7.99	10	1.0	0.87	9.45	0.00					
DA - H0	Grade Inlet	0 0 0	10.10	0.00	0.00	**10.10**	44	0.0050	0.42	0.57	19.07	1.05	9.59	10	1.0	0.73	10.53	0.00					
DA - H1	Grade Inlet	0 0 0	5.60	0.00	0.00	**5.60**	44	0.0050	0.42	0.46	12.10	0.93	6.02	10	1.0	0.90	9.30	0.00					
DA - I2	Grade Inlet	0 0 0	9.50	0.00	0.00	**9.50**	30	0.0241	0.42	0.45	10.06	0.91	10.45	10	1.0	0.93	9.09	0.41					
DA - I1	Grade Inlet	DA - I2 0 0	7.90	0.41	0.56	**7.75**	30	0.0080	0.42	0.50	14.86	0.97	8.58	10	1.0	0.83	9.69	0.00					
DA - OFF 1	Area Inlet	0 0 0	38.60		0.00	**38.60**	-	-	-	-	-	-	-	-	-	-	-	-	10%	38.6	3	16	0.81

STREET / INLET CAPACITIES
25-YEAR

Crown Height Collect. 0.58
Crown Height Local 0.50

					STREET CAPACITY					INLET ON GRADE						SUMP INLET				
Drainage Area	Inlet Type	Upstream	Q(pass) (cfs)	$Q_{(25)}$ (cfs)	Street Width (ft)	Slope (ft/ft)	a (ft)	Y_o (ft)	Ponded Width (ft)	Q_o/L_a (ft)	Length Needed (ft)	Length (ft)	L/L_{need} *=>Qpass	a/Y_o	Possible Q (cfs)	$Q_{(bypass)}$ (cfs)	Clogging Factor	$Q_{(25)}$ (cfs)	Allowable head (ft)	Inlet Length (ft)	Calculated head (ft)
DA - A0	Grade Inlet	0	5.2	30	0.0050	0.42	0.47	11.55	0.94	5.53	10	1.0	0.88	9.40	0						
DA - A6	Grade Inlet	0	4.9	30	0.0050	0.42	0.46	11.00	0.93	5.27	10	1.0	0.90	9.29	0						
DA - A5	Area Inlet	0	8.7	-	-	-	-	-	-	-	-	-	-	-	-	-	10%	8.7	1	16	0.30
DA - A4	Grade Inlet	0	7.4	44	0.0050	0.42	0.51	14.38	0.98	7.52	10	1.0	0.81	9.84	0						
DA - A3	Grade Inlet	0	5.0	44	0.0050	0.42	0.45	11.36	0.91	5.50	10	1.0	0.93	9.10	0						
DA - A2	Grade Inlet	0	7.2	44	0.0150	0.42	0.42	10.31	0.88	8.19	10	1.0	1.00	8.79	0						
DA - A1	Grade Inlet	0	5.2	44	0.0166	0.42	0.37	8.59	0.82	6.32	10	1.0	1.14	8.23	0						
DA - D0	Grade Inlet	0	5.3	30	0.0080	0.42	0.44	9.85	0.90	5.87	10	1.0	0.94	9.03	0						
DA - D1	Grade Inlet	0	5.3	30	0.0050	0.42	0.48	11.75	0.94	5.62	10	1.0	0.87	9.43	0						
DA - D2	Grade Inlet	0	5.4	30	0.0064	0.42	0.46	10.78	0.92	5.84	10	1.0	0.91	9.25	0						
DA - C4	Grade Inlet	0	1.5	30	0.0050	0.42	0.31	5.86	0.77	1.95	10	1.0	1.33	7.68	0						
DA - C3	Grade Inlet	0	4.6	40	0.006	0.42	0.42	12.21	0.88	5.20	10	1.0	0.98	8.85	0						
DA - C2	Grade Inlet	0	5.2	40	0.0055	0.42	0.45	13.63	0.91	5.70	10	1.0	0.93	9.13	0						
DA - C1	Grade Inlet	0	3.9	40	0.0055	0.42	0.41	11.36	0.87	4.50	10	1.0	1.02	8.66	0						
DA - E0	Grade Inlet	0	3.8	30	0.0062	0.42	0.41	8.71	0.87	4.36	10	1.0	1.01	8.72	0						
DA - E11	Grade Inlet	0	4.2	30	0.0050	0.42	0.44	9.86	0.90	4.65	10	1.0	0.94	9.04	0						
DA - E10	Grade Inlet	0	4.2	30	0.0079	0.42	0.41	8.62	0.87	4.83	10	1.0	1.02	8.69	0						
DA - E9	Grade Inlet	0	5.5	30	0.0050	0.42	0.48	12.19	0.95	5.79	10	1.0	0.86	9.50	0						
DA - E8	Grade Inlet	0	4.3	30	0.0050	0.42	0.44	10.02	0.91	4.74	10	1.0	0.94	9.08	0						
DA - E7	Grade Inlet	0	4.5	30	0.0050	0.42	0.45	10.33	0.92	4.92	10	1.0	0.92	9.15	0						
DA - E6	Grade Inlet	0	4.2	30	0.0050	0.42	0.42	9.16	0.89	4.75	10	1.0	0.98	8.85	0						
DA - E5	Grade Inlet	0	3.4	40	0.0050	0.42	0.39	10.81	0.85	3.99	10	1.0	1.06	8.52	0						
DA - E4	Grade Inlet	0	2.9	40	0.0050	0.42	0.37	9.93	0.83	3.49	10	1.0	1.12	8.30	0						
DA - E3	Grade Inlet	0	4.4	40	0.005	0.42	0.43	12.58	0.89	4.93	10	1.0	0.97	8.93	0						
DA - E2	Grade Inlet	0	3.6	40	0.005	0.42	0.40	11.15	0.86	4.18	10	1.0	1.04	8.61	0						
DA - E1	Grade Inlet	0	4.4	44	0.0077	0.42	0.40	9.53	0.85	5.15	10	1.0	1.05	8.54	0						
DA - F0	Grade Inlet	0	6.5	30	0.0161	0.42	0.42	9.01	0.88	7.38	10	1.0	0.99	8.81	0						
DA - F4	Grade Inlet	0	4.5	30	0.0050	0.42	0.45	10.33	0.92	4.92	10	1.0	0.92	9.15	0						
DA - F3



0 50' 100' 200'
SCALE: 1" = 100'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- 10' CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO BE AWARE OF OVERHEAD ELECTRIC LINES AT ALL TIMES.
3. ALL MANHOLE COVERS SHALL BE STAMPED "STORM DRAIN" ONLY WITHOUT ANY CITY REFERENCES.

REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL STORM PLAN

SUBMITTAL DATE: 01-16-2020

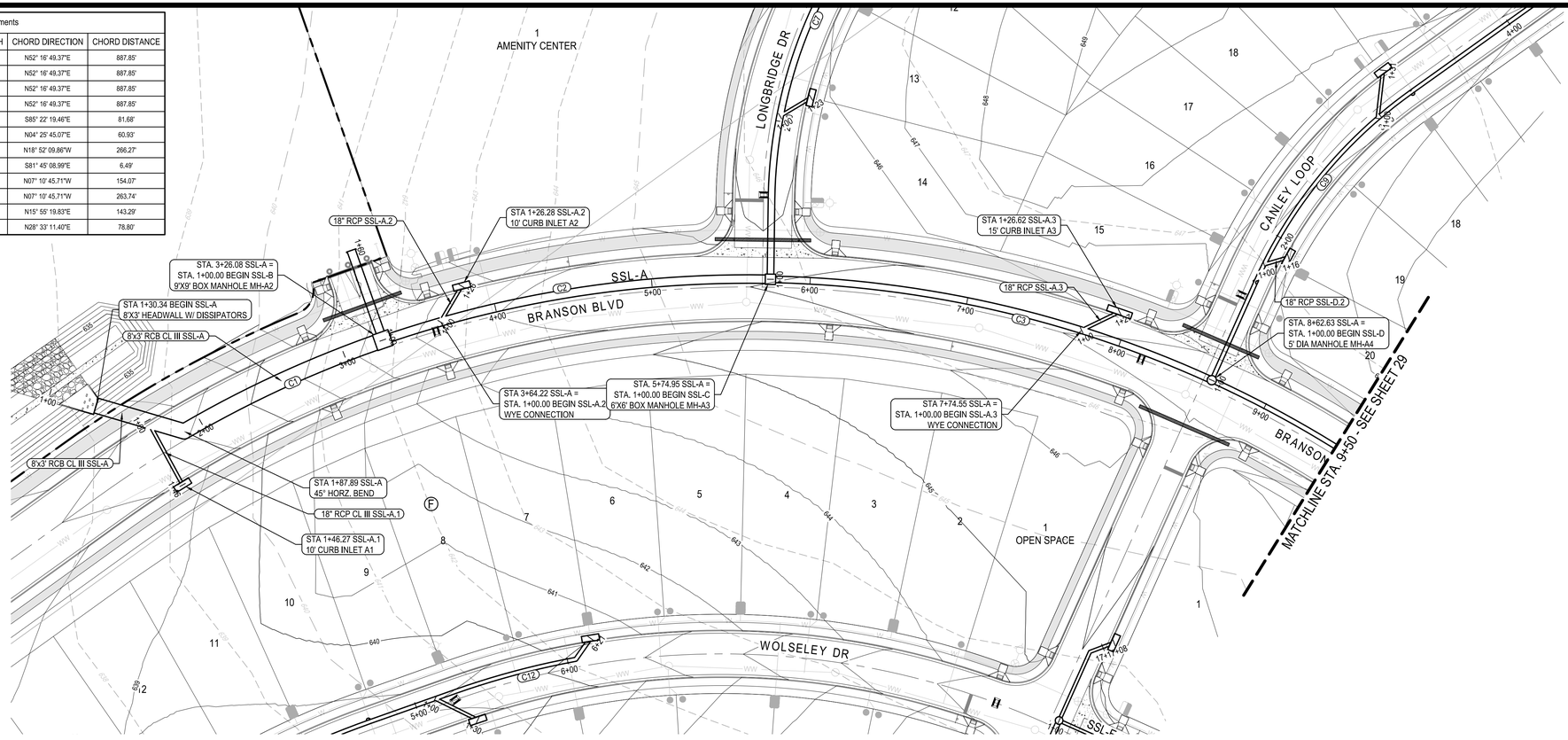
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
27 OF 91

G:\TX\C\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01 Shts\C-SP-STRM-OVAL-PH1.dwg Layout: OVERALL STORM PLAN Plotted: 2/11/2020 2:30:26 PM

Record Drawing

Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C1	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C2	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C3	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C4	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C5	6°38'30"	705.00'	81.72'	S85° 22' 19.46"E	81.68'
C6	7°03'25"	495.00'	60.97'	N04° 25' 45.07"E	60.93'
C7	53°39'14"	295.00'	276.25'	N18° 52' 09.86"W	266.27'
C8	1°15'35"	295.00'	6.49'	S81° 45' 08.99"E	6.49'
C9	30°16'26"	295.00'	155.87'	N07° 10' 45.71"W	154.07'
C10	30°16'26"	505.00'	266.83'	N07° 10' 45.71"W	263.74'
C11	16°20'34"	504.07'	143.78'	N15° 55' 19.83"E	143.29'
C12	8°56'59"	505.00'	78.88'	N28° 33' 11.40"E	78.80'



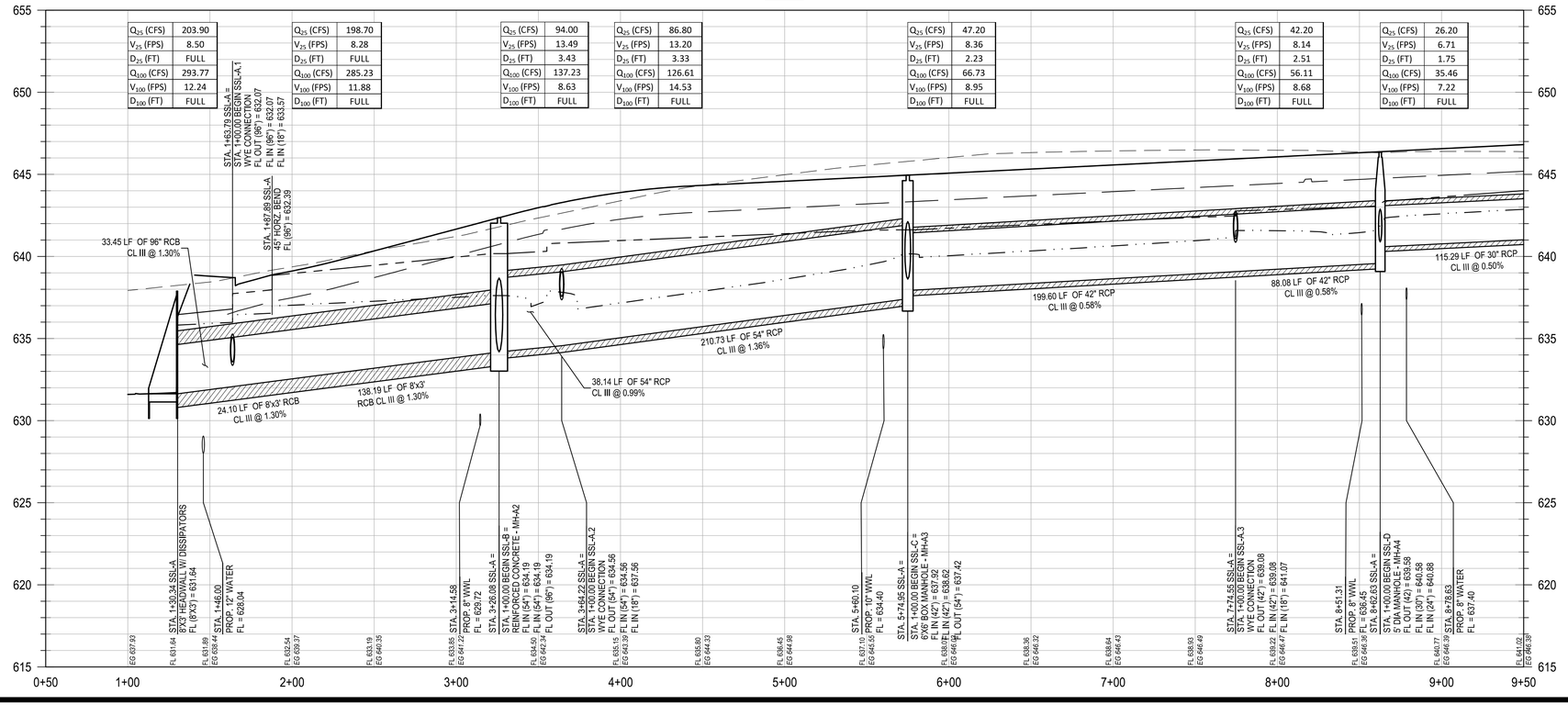
0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-A



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwengtgy.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-A PLAN AND PROFILE (1+00 TO 9+50)

SUBMITTAL DATE: 01-16-2020



SHEET
28 OF 91

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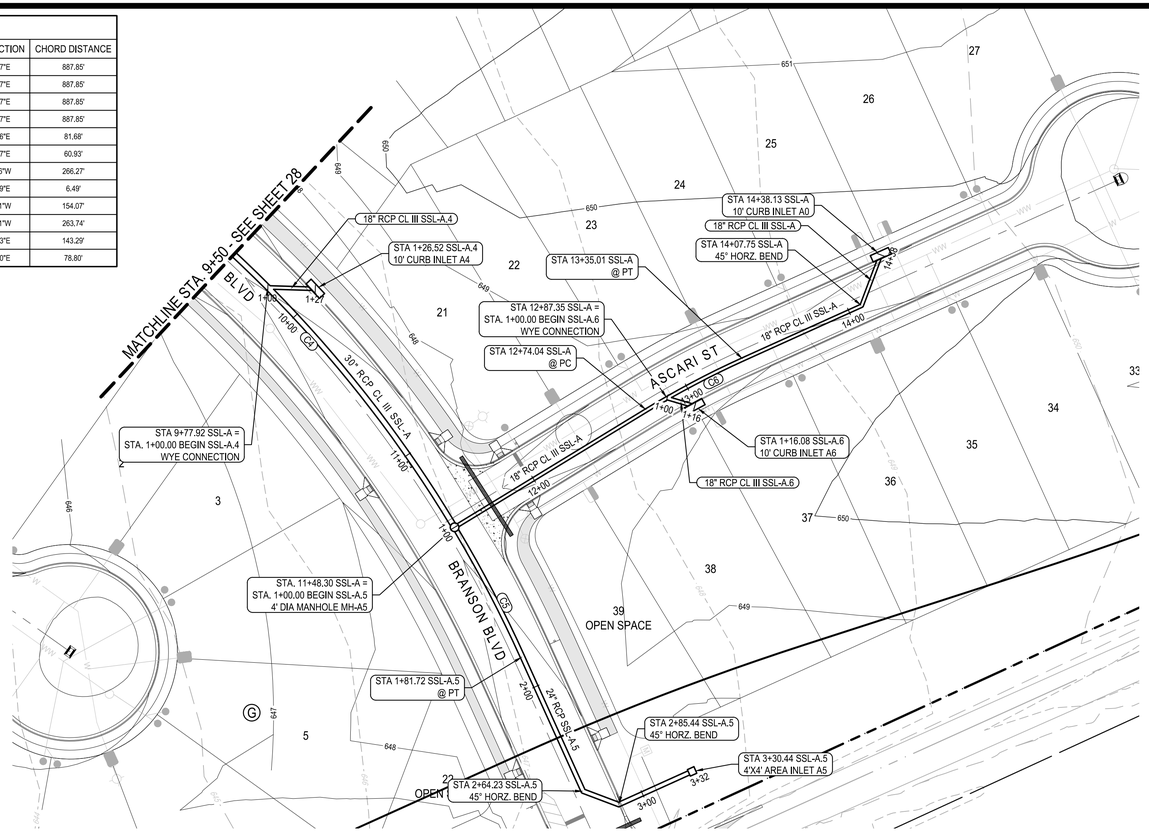
Record Drawing

Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C1	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C2	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C3	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C4	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C5	6°38'30"	705.00'	81.72'	S85° 22' 19.46"E	81.68'
C6	7°03'25"	495.00'	60.97'	N04° 25' 45.07"E	60.93'
C7	53°39'14"	295.00'	276.25'	N18° 52' 09.86"W	266.27'
C8	1°15'35"	295.00'	6.49'	S81° 45' 08.99"E	6.49'
C9	30°16'26"	295.00'	155.87'	N07° 10' 45.71"W	154.07'
C10	30°16'26"	505.00'	266.83'	N07° 10' 45.71"W	263.74'
C11	16°20'34"	504.07'	143.78'	N15° 55' 19.83"E	143.29'
C12	8°56'59"	505.00'	78.88'	N28° 33' 11.40"E	78.80'



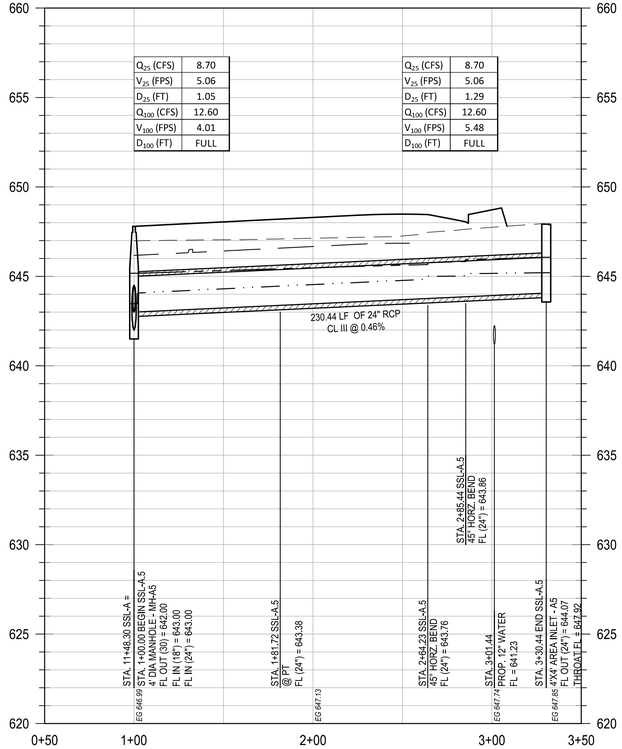
0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-A.5



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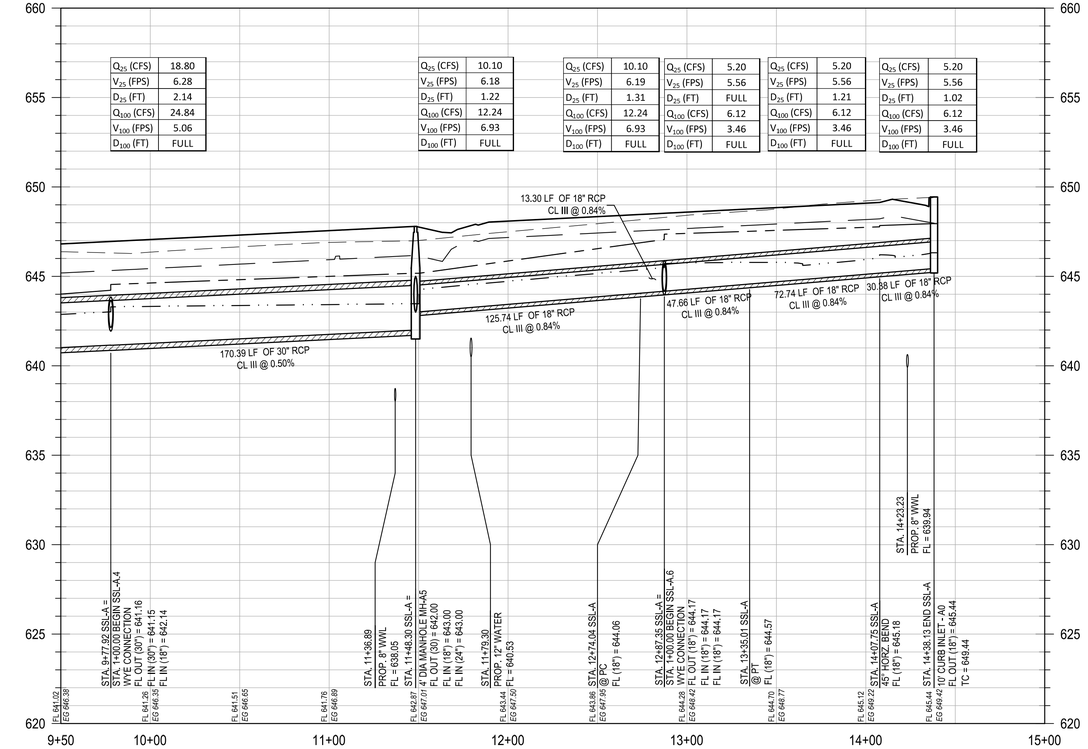


PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

	APR
	DATE
	DESCRIPTION
	REV
DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownge.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-A PLAN AND PROFILE (9+50 TO END)

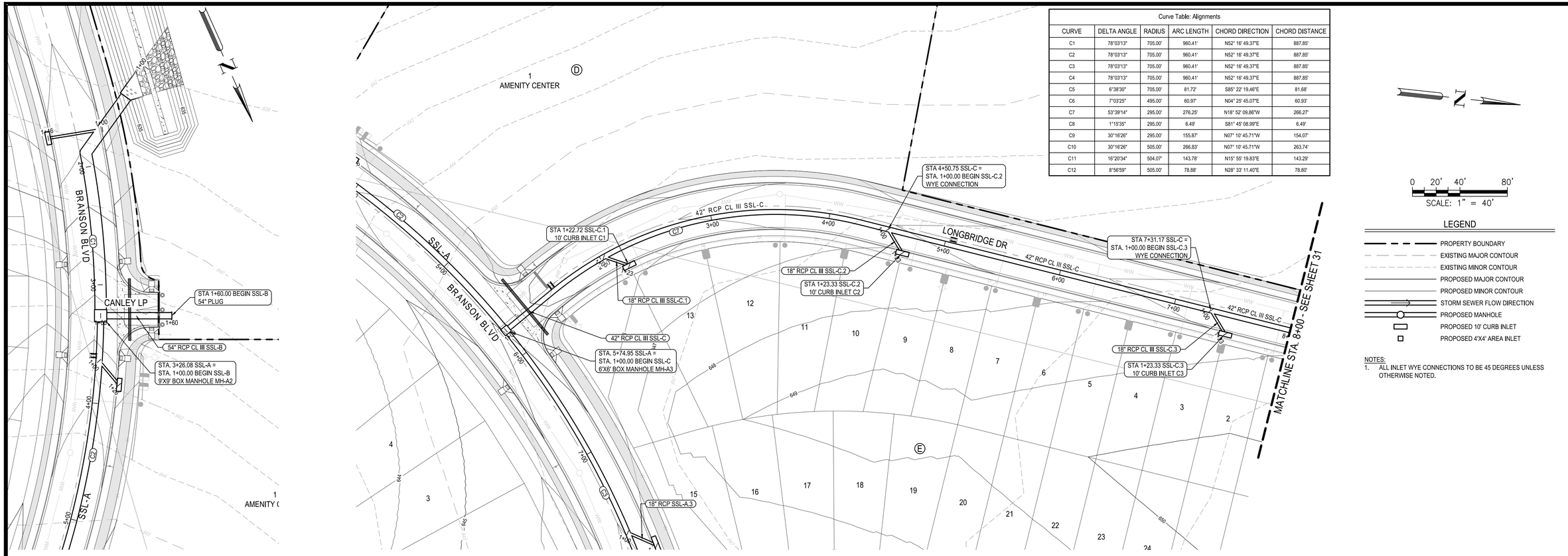
SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
29 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-A 9+50 TO END Plotted: 2/11/2020 2:33:58 PM

Record Drawing



Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
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C3	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C4	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C5	6°38'30"	705.00'	81.72'	S85° 22' 19.46"E	81.68'
C6	7°03'25"	495.00'	60.97'	N04° 25' 45.07"E	60.93'
C7	53°39'14"	295.00'	276.25'	N18° 52' 09.86"W	266.27'
C8	1°15'35"	295.00'	6.49'	S81° 45' 08.99"E	6.49'
C9	30°16'26"	295.00'	155.87'	N07° 10' 45.71"W	154.07'
C10	30°16'26"	505.00'	266.83'	N07° 10' 45.71"W	263.74'
C11	16°20'34"	504.07'	143.78'	N15° 55' 19.83"E	143.29'
C12	8°56'59"	505.00'	78.88'	N28° 33' 11.40"E	78.80'

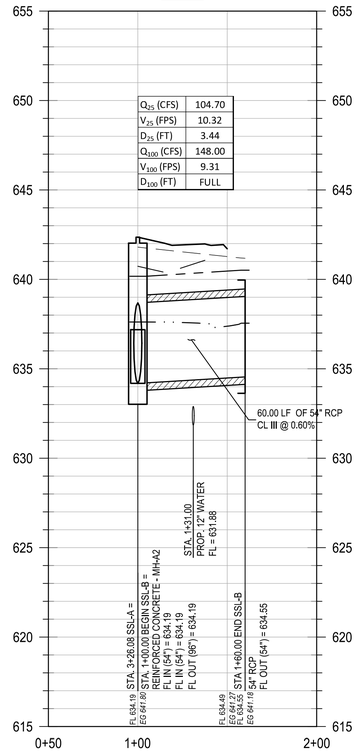
0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-B



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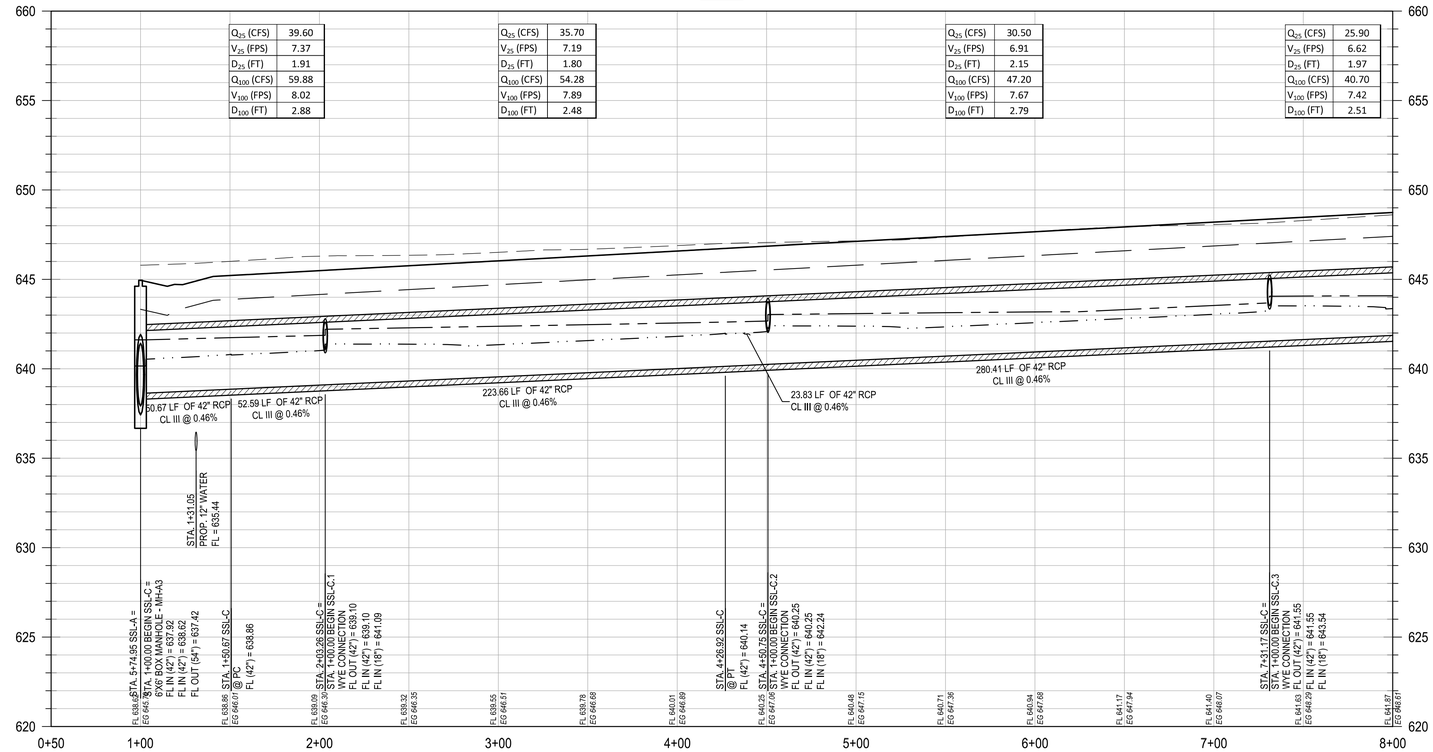


PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-B & SSL-C PLAN AND PROFILE
(1+00 TO 8+00)

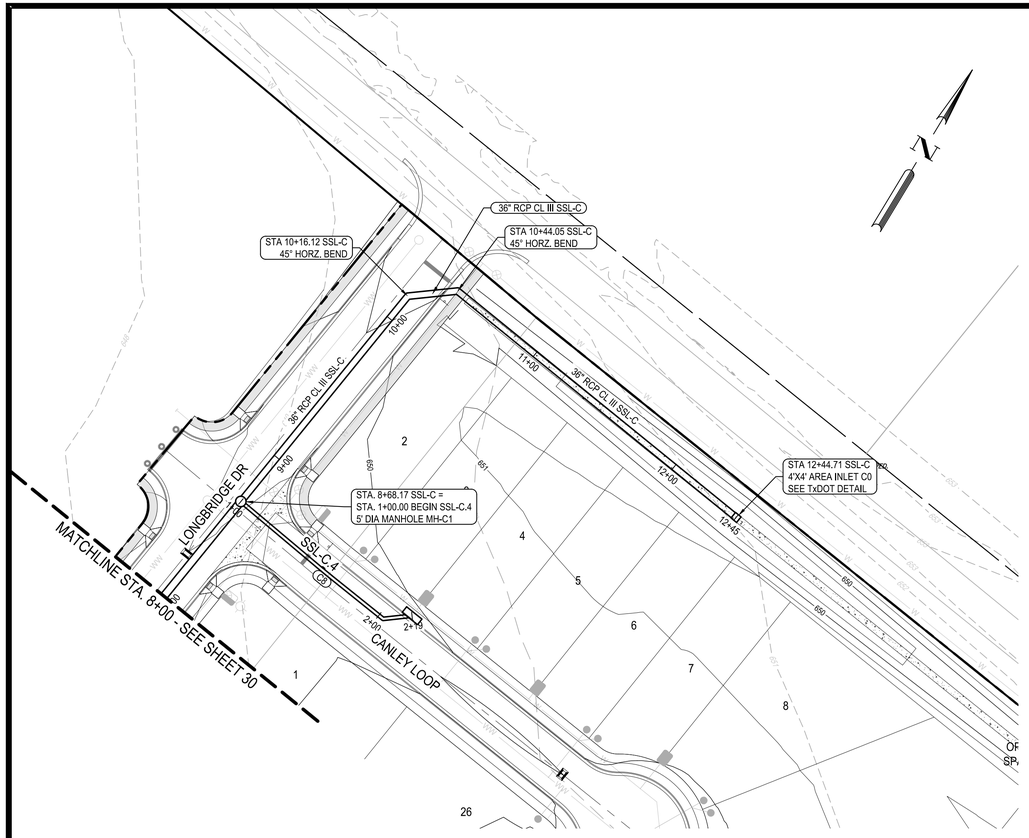
SUBMITTAL DATE: 01-16-2020

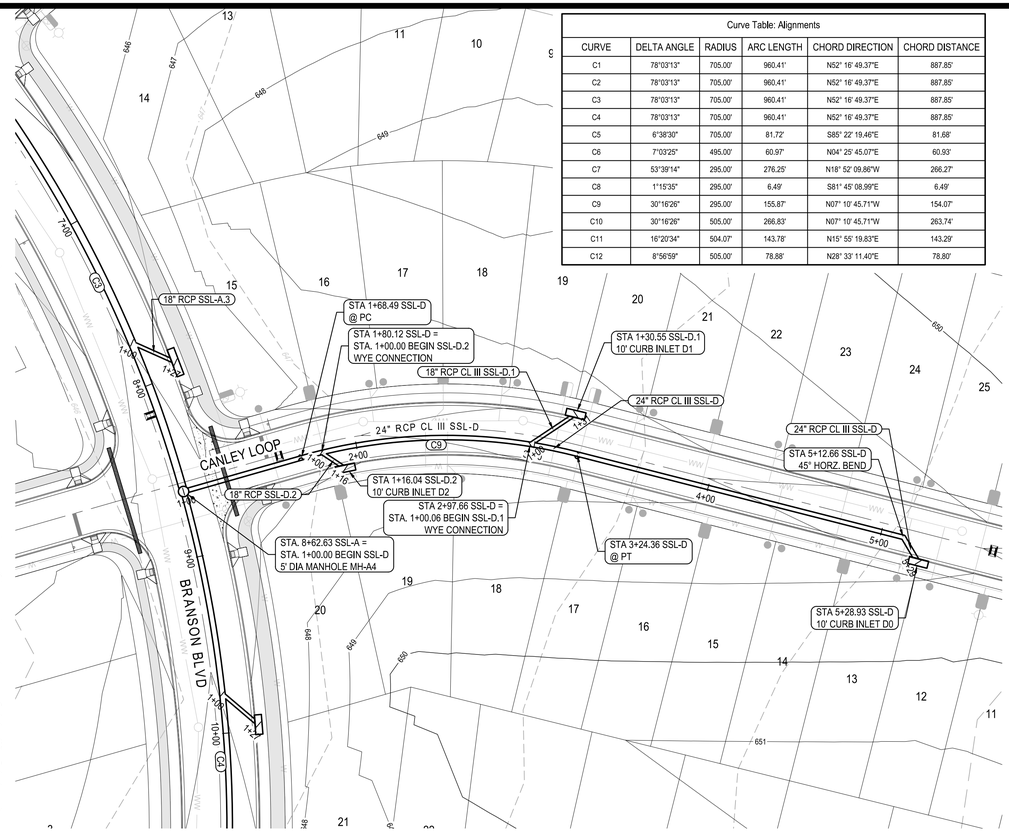
STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
30 OF 91

G:\TX\CP\projects\Lennar\7131-09-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-B & SSL-C 1+00 TO 8+00 Plotted: 2/11/2020 2:34:55 PM

Record Drawing





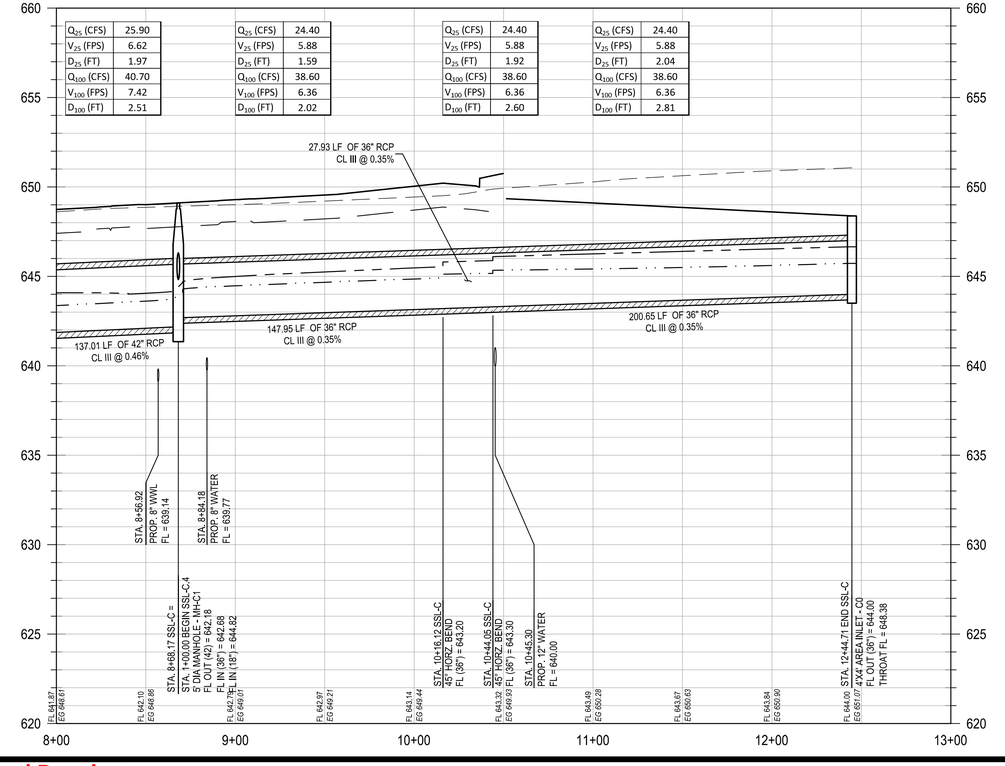
Curve Table: Alignments					
CURVE	DELTA ANGLE	RADIUS	ARC LENGTH	CHORD DIRECTION	CHORD DISTANCE
C1	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C2	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C3	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C4	78°03'13"	705.00'	960.41'	N52° 16' 49.37"E	887.85'
C5	6°38'30"	705.00'	81.72'	S85° 22' 19.46"E	81.68'
C6	7°03'25"	495.00'	60.97'	N04° 25' 45.07"E	60.93'
C7	53°39'14"	295.00'	276.25'	N18° 52' 09.86"W	266.27'
C8	1°15'35"	295.00'	6.49'	S81° 45' 08.99"E	6.49'
C9	30°16'26"	295.00'	155.87'	N07° 10' 45.71"W	154.07'
C10	30°16'26"	505.00'	266.83'	N07° 10' 45.71"W	263.74'
C11	16°20'34"	504.07'	143.78'	N15° 55' 19.83"E	143.29'
C12	8°56'59"	505.00'	78.88'	N28° 33' 11.40"E	78.80'

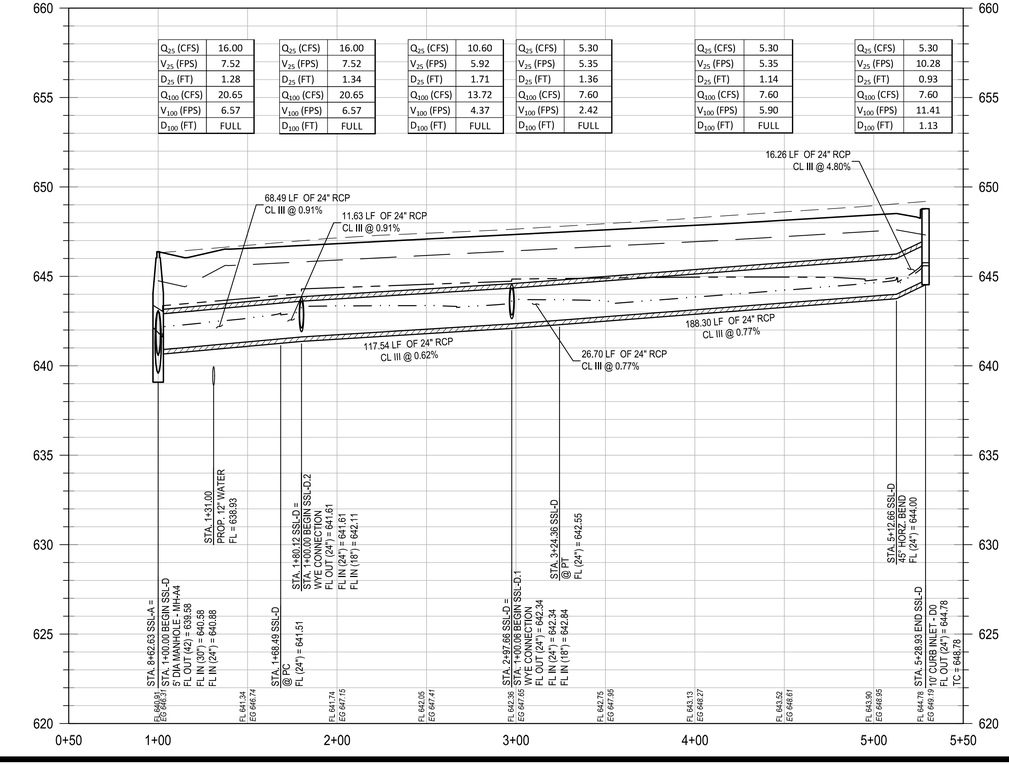
0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.





PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-C 8+00 TO END & SSL-D PLAN AND PROFILE

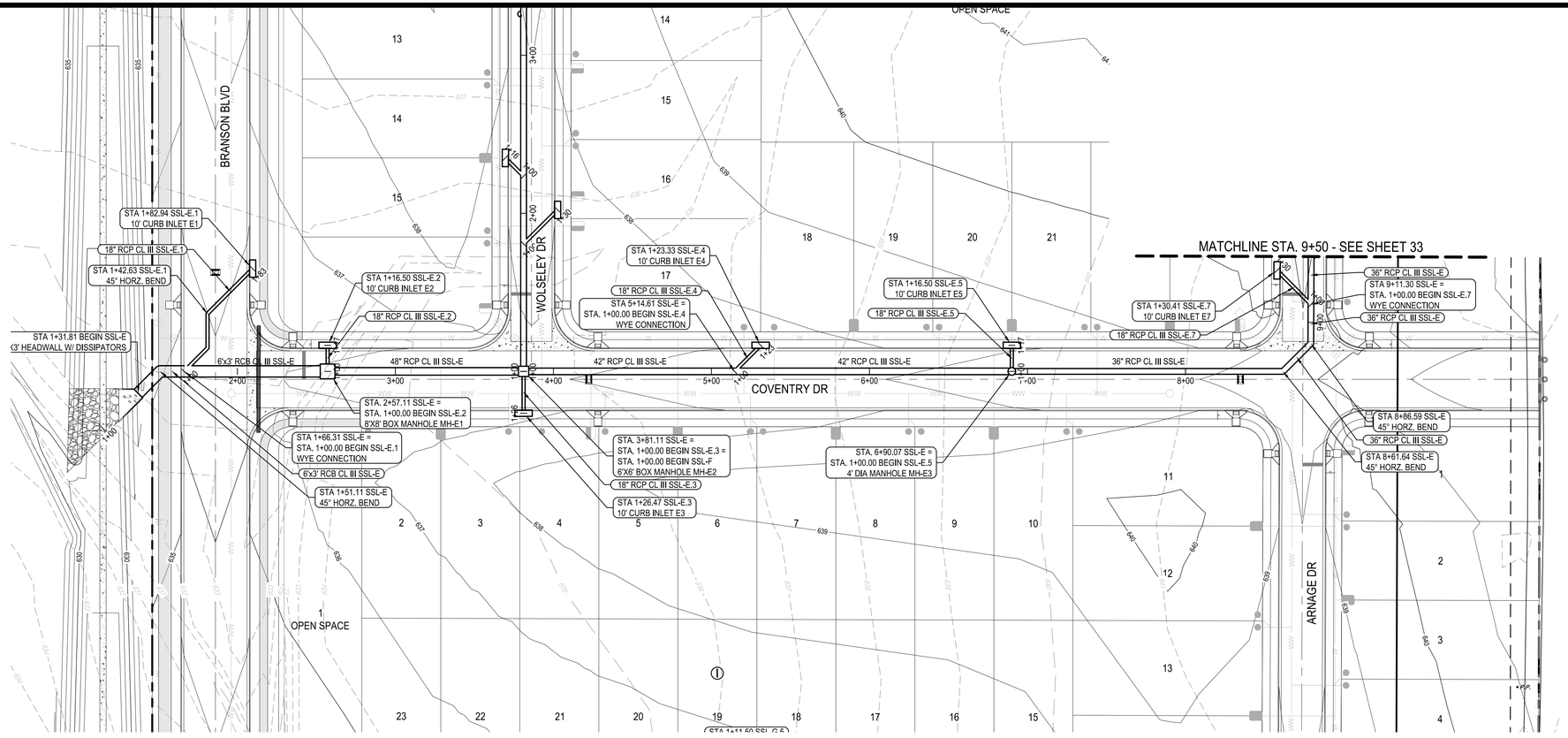
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
31 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-C 8+00 TO END & SSL-D Plotted: 2/11/2020 2:35:51 PM

Record Drawing

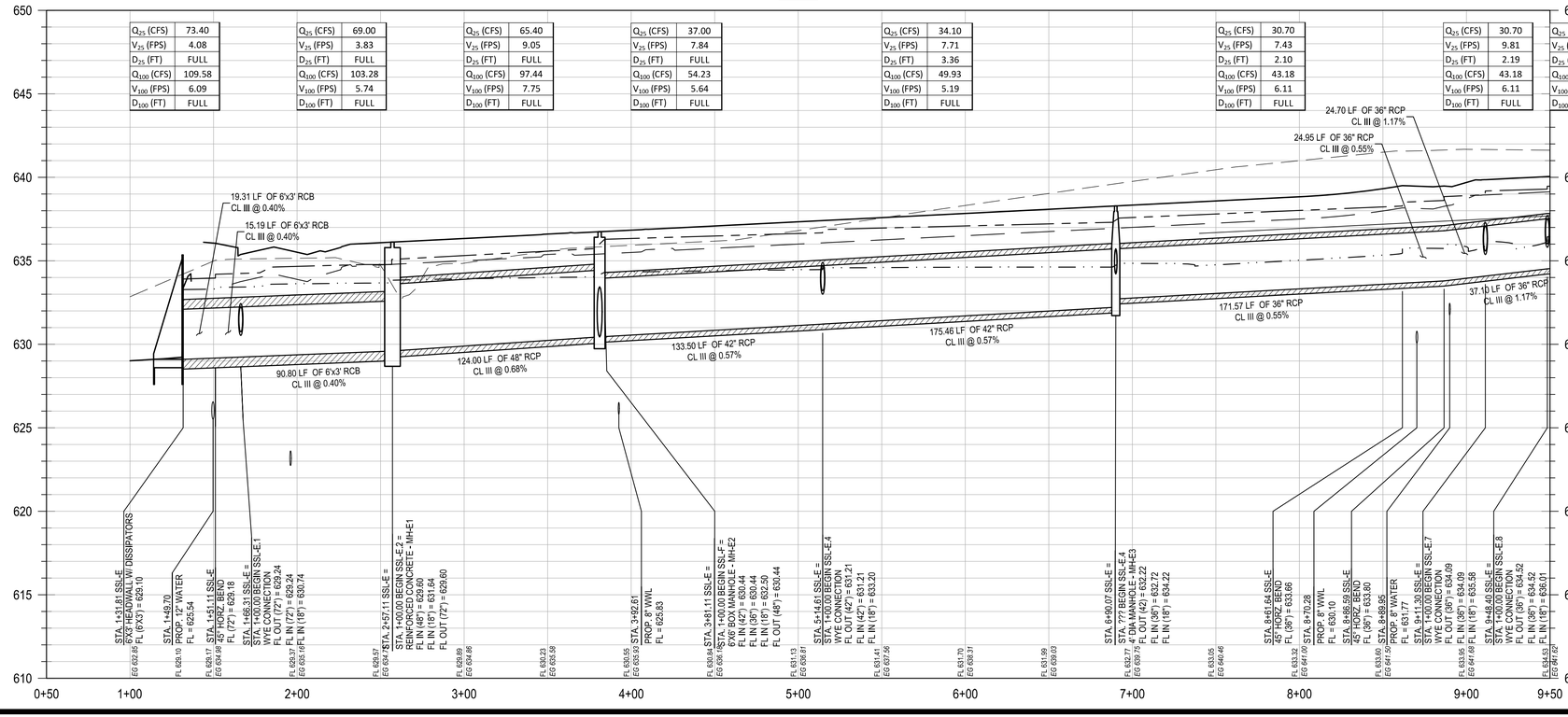


LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-E



Q_{25} (CFS)	73.40	Q_{25} (CFS)	69.00	Q_{25} (CFS)	65.40	Q_{25} (CFS)	37.00	Q_{25} (CFS)	34.10	Q_{25} (CFS)	30.70	Q_{25} (CFS)	30.70	Q_{25} (CFS)	26.20
V_{25} (FPS)	4.08	V_{25} (FPS)	3.83	V_{25} (FPS)	9.05	V_{25} (FPS)	7.84	V_{25} (FPS)	7.71	V_{25} (FPS)	7.43	V_{25} (FPS)	9.81	V_{25} (FPS)	9.36
D_{25} (FT)	FULL	D_{25} (FT)	FULL	D_{25} (FT)	FULL	D_{25} (FT)	FULL	D_{25} (FT)	3.36	D_{25} (FT)	2.10	D_{25} (FT)	2.19	D_{25} (FT)	2.10
Q_{100} (CFS)	109.58	Q_{100} (CFS)	103.28	Q_{100} (CFS)	97.44	Q_{100} (CFS)	54.23	Q_{100} (CFS)	49.93	Q_{100} (CFS)	43.18	Q_{100} (CFS)	43.18	Q_{100} (CFS)	37.06
V_{100} (FPS)	6.09	V_{100} (FPS)	5.74	V_{100} (FPS)	7.75	V_{100} (FPS)	5.64	V_{100} (FPS)	5.19	V_{100} (FPS)	6.11	V_{100} (FPS)	6.11	V_{100} (FPS)	5.24
D_{100} (FT)	FULL	D_{100} (FT)	FULL	D_{100} (FT)	FULL	D_{100} (FT)	FULL	D_{100} (FT)	FULL	D_{100} (FT)	FULL	D_{100} (FT)	FULL	D_{100} (FT)	FULL

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

	APR
	DATE
	DESCRIPTION
	REV
DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownbgy.com

COTTONWOOD CREEK
HUTTO, TEXAS

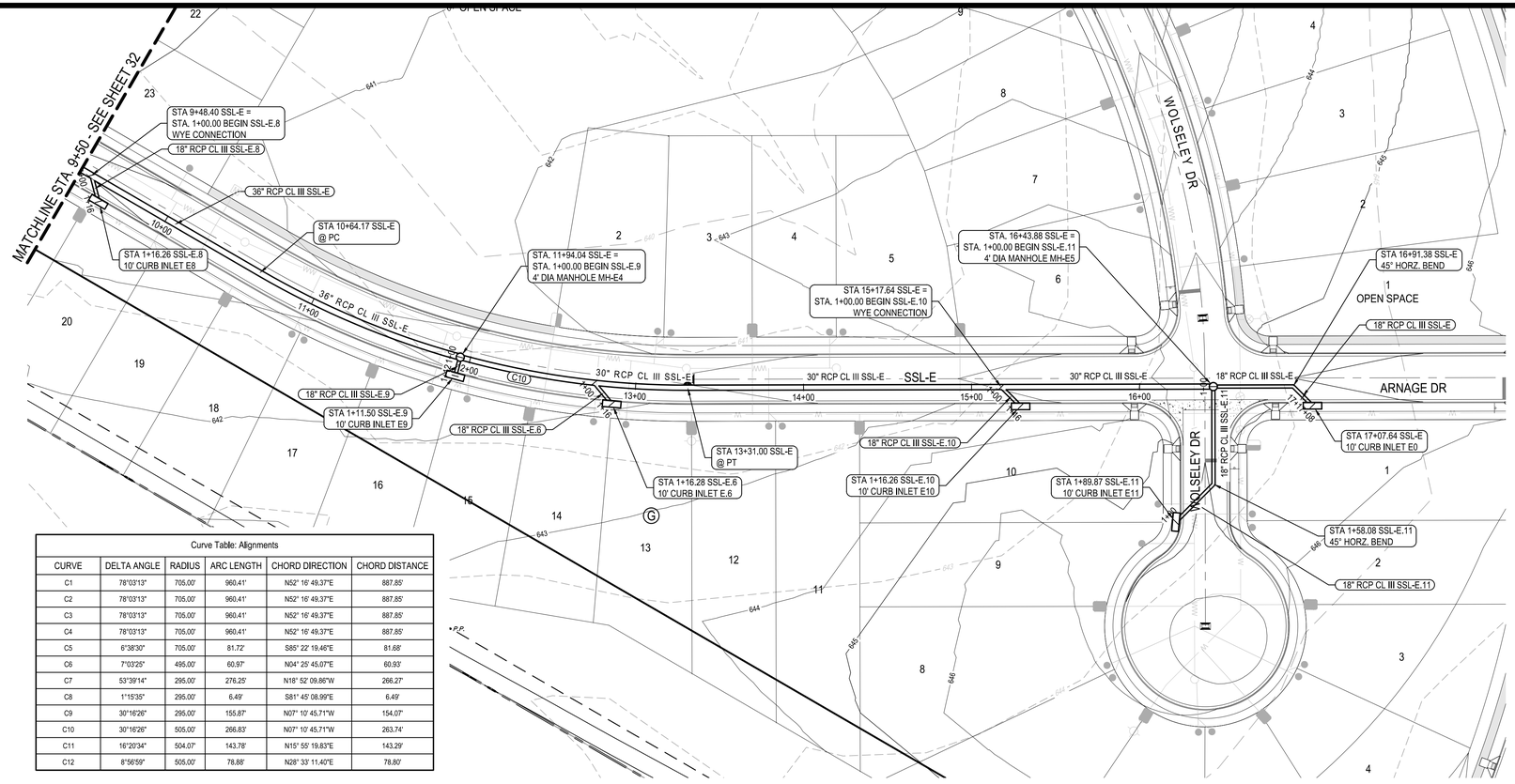
SSL-E PLAN AND PROFILE (1+00 TO 9+50)

SUBMITTAL DATE: 01-16-2020

SHEET
32 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-E 1+00 TO 9+50 Plotted: 2/11/2020 2:36:26 PM

Record Drawing



Curve Table: Alignments					
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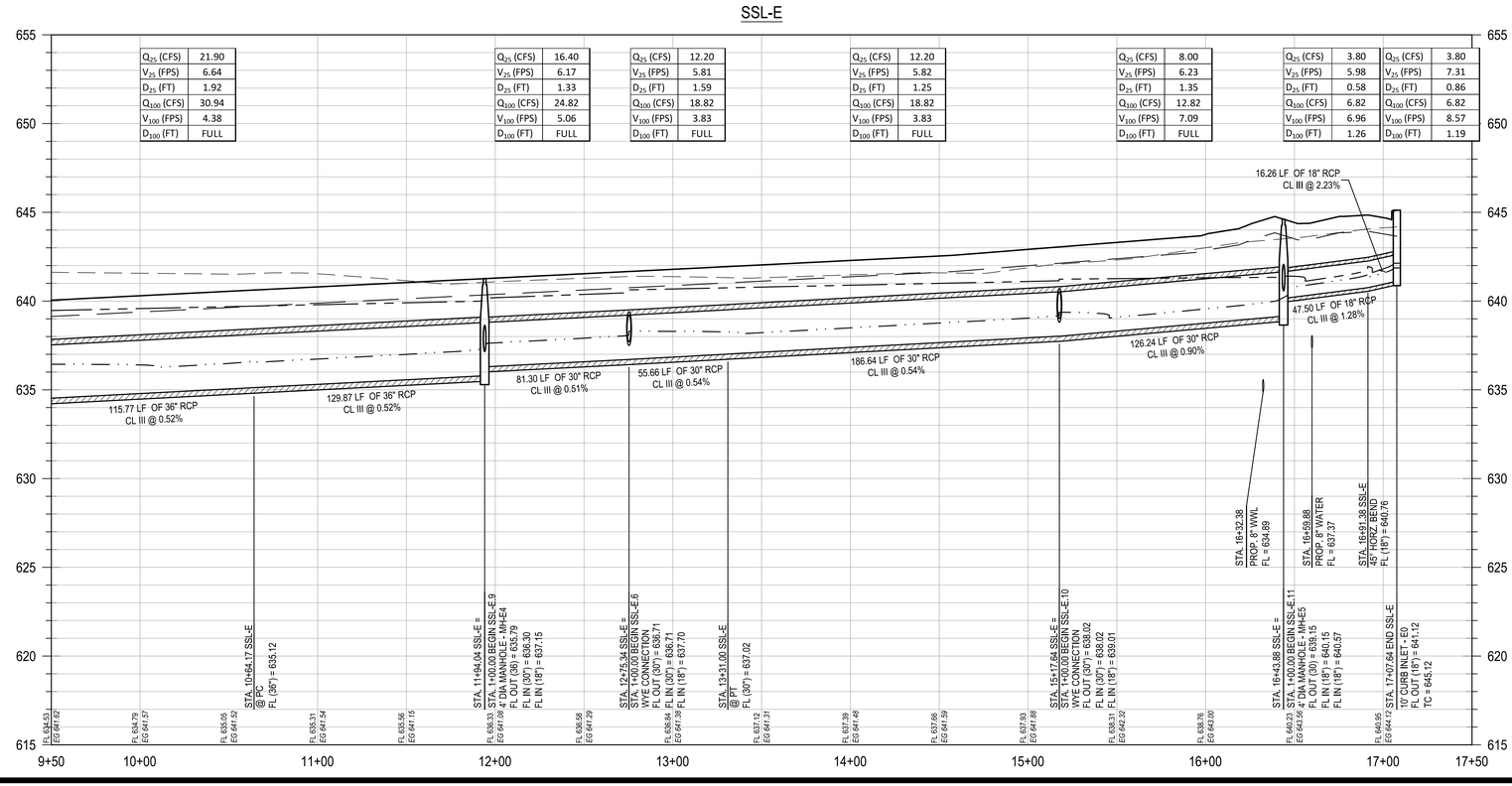
C12	8°56'59"	505.00'	78.88'	N28° 33' 11.40"E	78.80'

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

LEGEND
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

PROFILE LEGEND
- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE



							APR
							DATE
							DESCRIPTION
							REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-E PLAN AND PROFILE (9+50 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
33 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-E 9+50 TO END Plotted: 2/11/2020 2:37:00 PM

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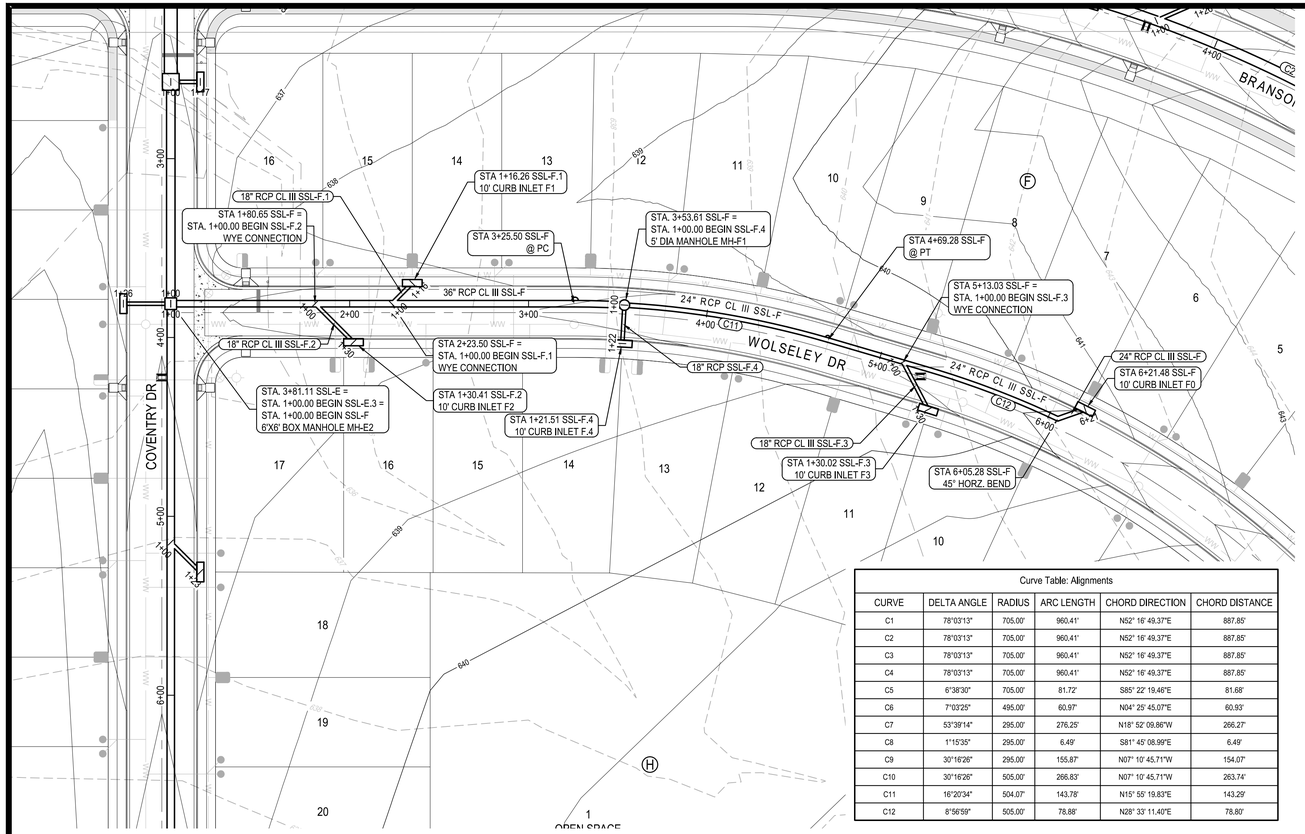

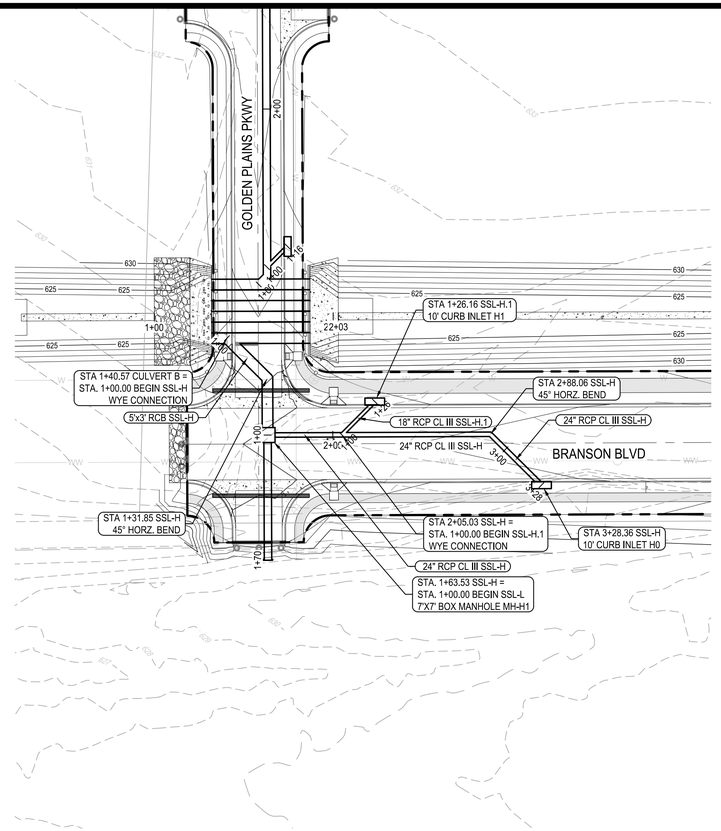

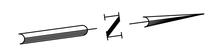

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

Curve Table: Alignments

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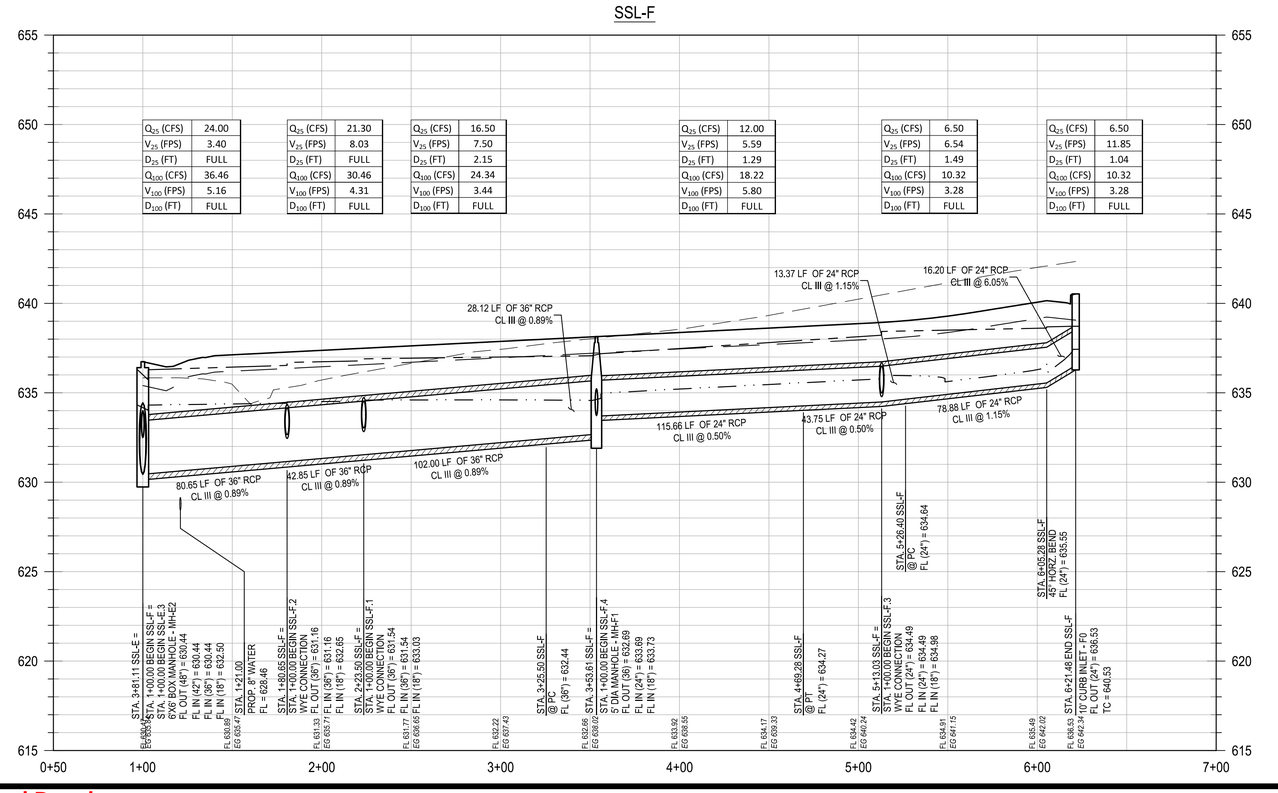

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwengtgy.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-F PLAN AND PROFILE & SSL-H PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
34 OF 91

Record Drawing

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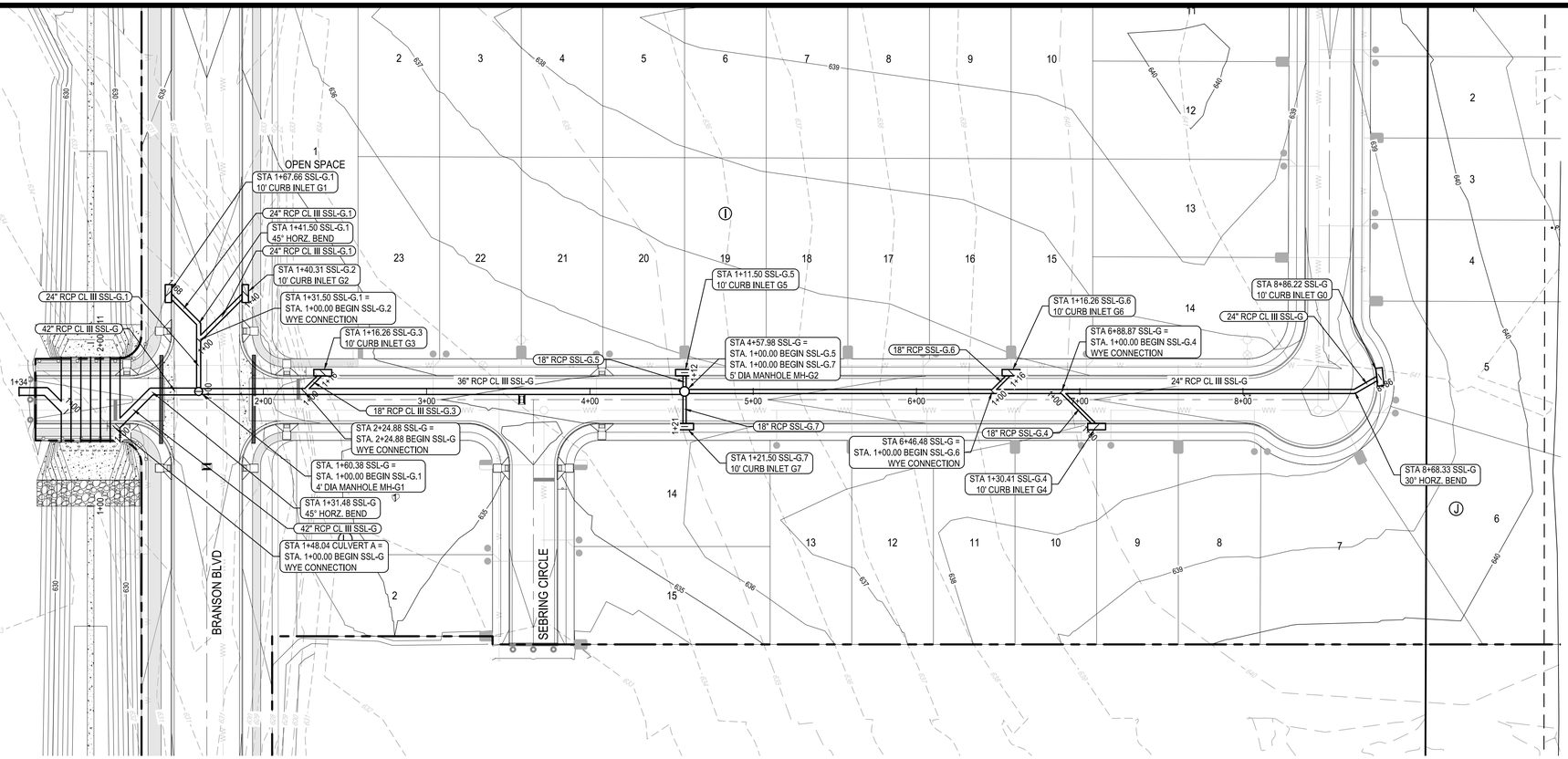

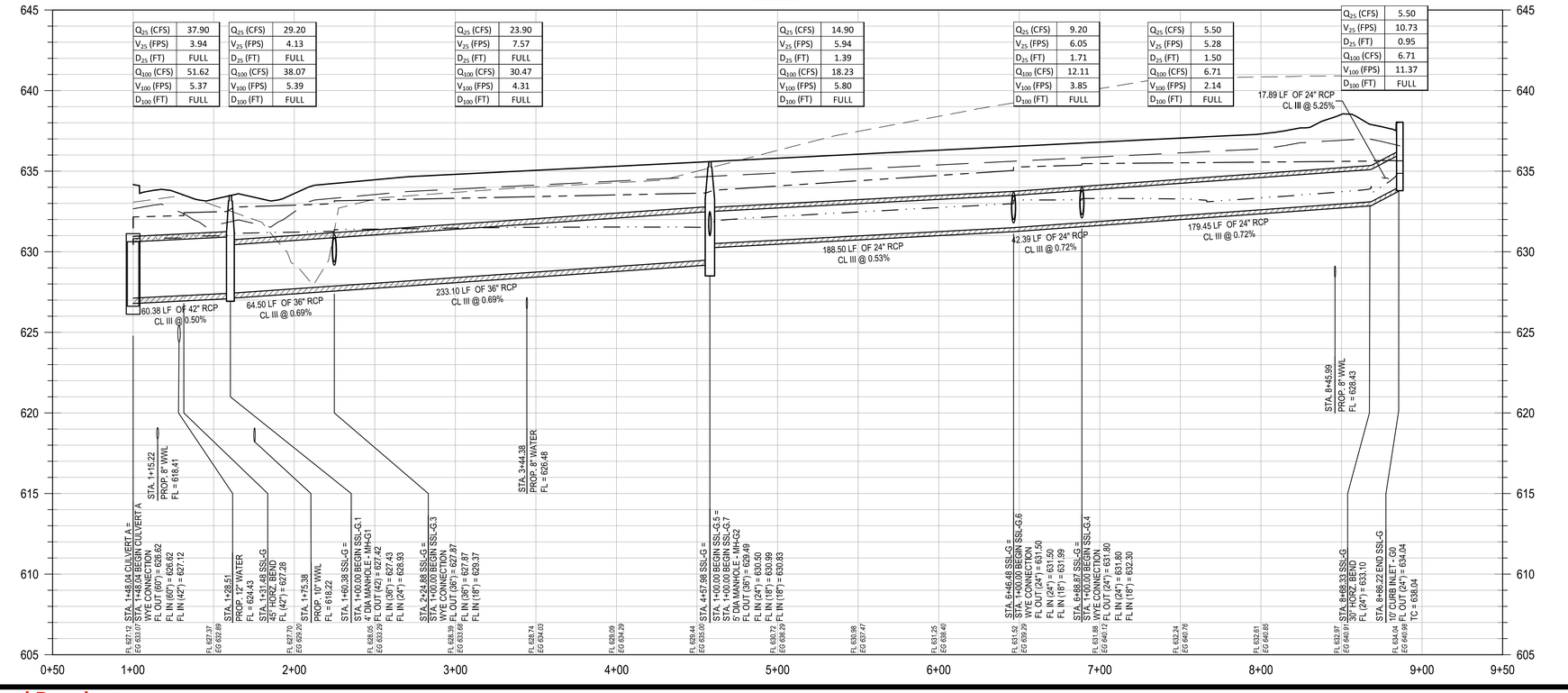

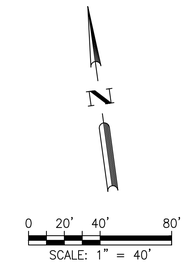

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

							APR
							DATE
							DESCRIPTION
△	△	△	△	△	△		REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-G PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
35 OF 91

G:\TX\CP\projects\Lennar\7131-06-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-G Plotted: 2/11/2020 2:38:23 PM

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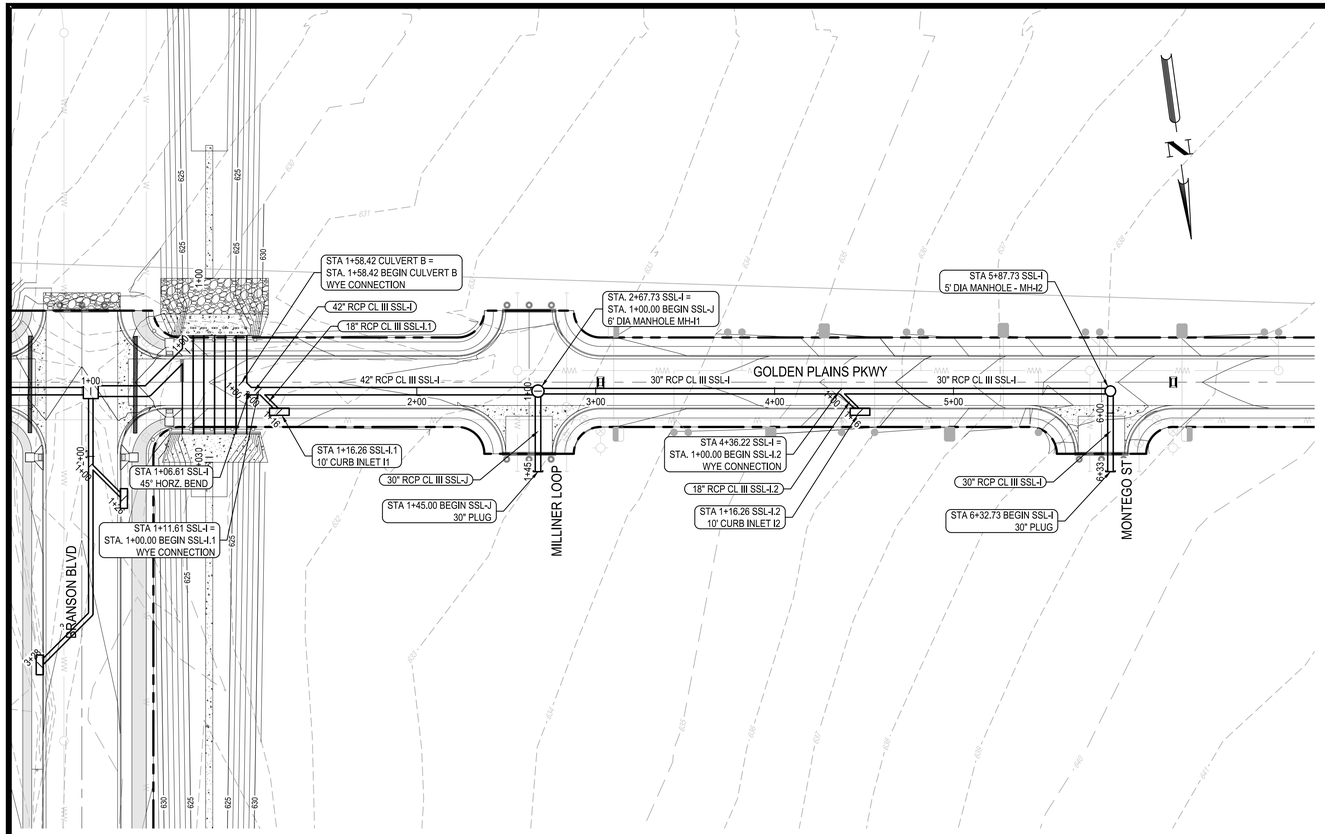
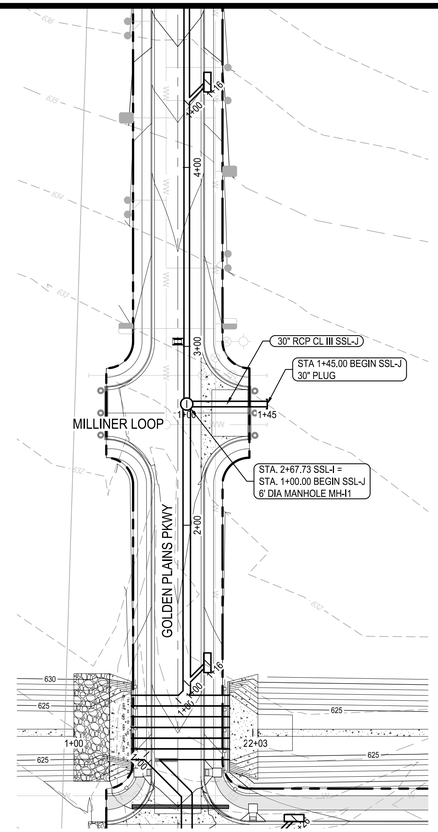




0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-I

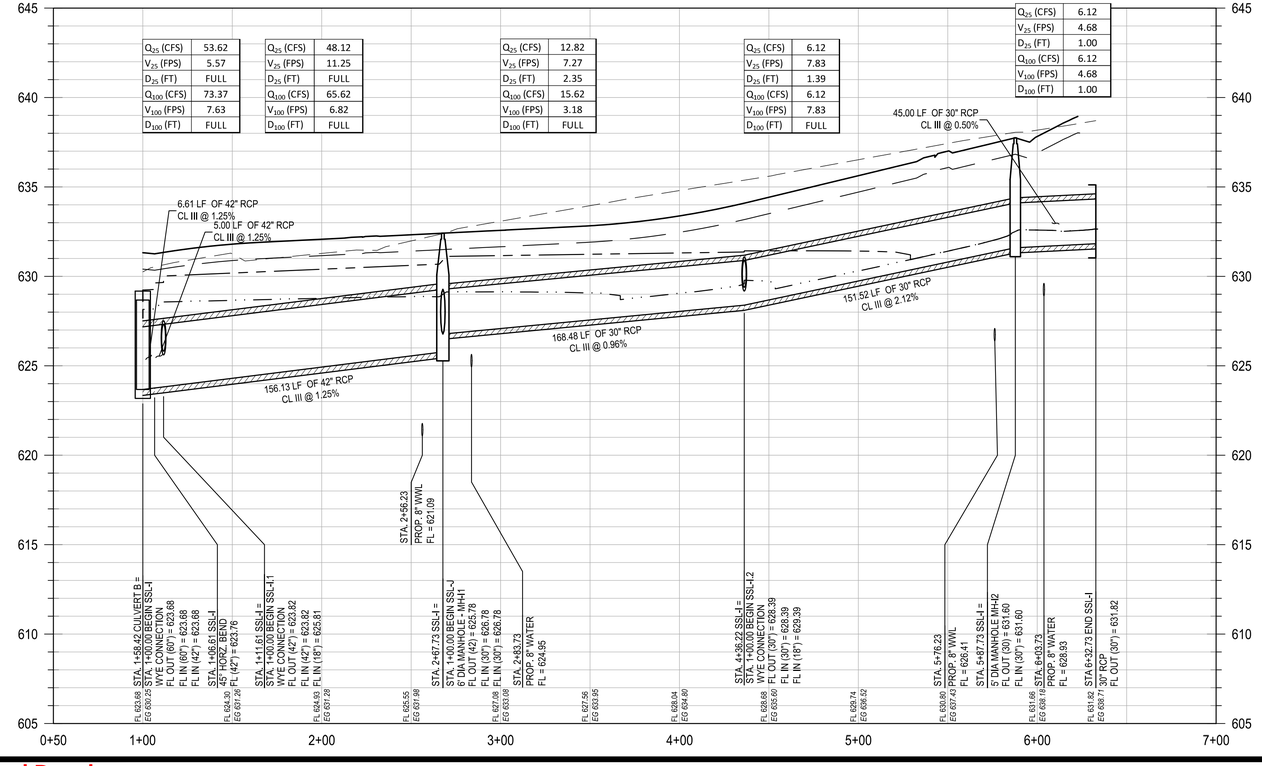
Q_{25} (CFS)	53.62
V_{25} (FPS)	5.57
D_{25} (FT)	FULL
Q_{100} (CFS)	73.37
V_{100} (FPS)	7.63
D_{100} (FT)	FULL

Q_{25} (CFS)	48.12
V_{25} (FPS)	11.25
D_{25} (FT)	FULL
Q_{100} (CFS)	65.62
V_{100} (FPS)	6.82
D_{100} (FT)	FULL

Q_{25} (CFS)	12.82
V_{25} (FPS)	7.27
D_{25} (FT)	2.35
Q_{100} (CFS)	15.62
V_{100} (FPS)	3.18
D_{100} (FT)	FULL

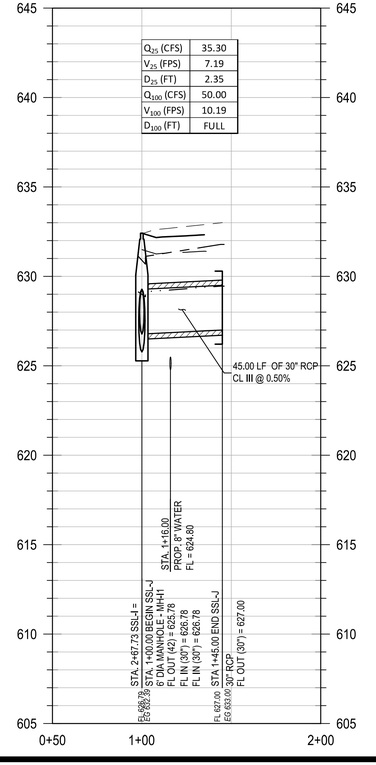
Q_{25} (CFS)	6.12
V_{25} (FPS)	7.83
D_{25} (FT)	1.39
Q_{100} (CFS)	6.12
V_{100} (FPS)	7.83
D_{100} (FT)	FULL

Q_{25} (CFS)	6.12
V_{25} (FPS)	4.68
D_{25} (FT)	1.00
Q_{100} (CFS)	6.12
V_{100} (FPS)	4.68
D_{100} (FT)	1.00



SSL-J

Q_{25} (CFS)	35.30
V_{25} (FPS)	7.19
D_{25} (FT)	2.35
Q_{100} (CFS)	50.00
V_{100} (FPS)	10.19
D_{100} (FT)	FULL



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

	DESCRIPTION	DATE	APR

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwengtg.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-I & SSL-J PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

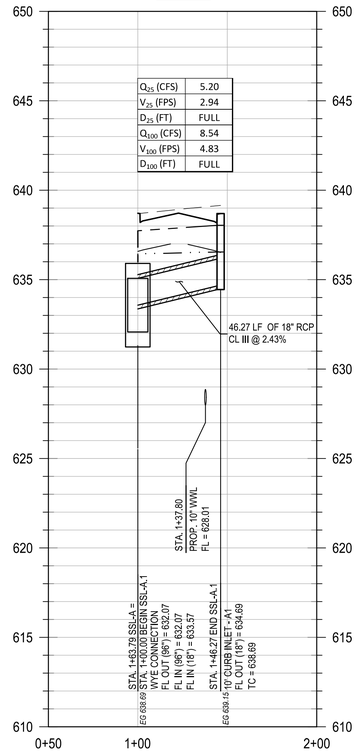
SHEET
36 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-I & SSL-J Plotted: 2/11/2020 2:39:07 PM

Record Drawing

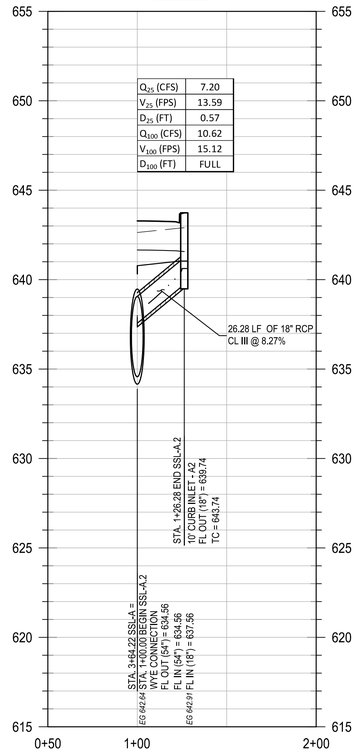
SSL-A.1

Q_{25} (CFS)	5.20
V_{25} (FPS)	2.94
D_{25} (FT)	FULL
Q_{100} (CFS)	8.54
V_{100} (FPS)	4.83
D_{100} (FT)	FULL



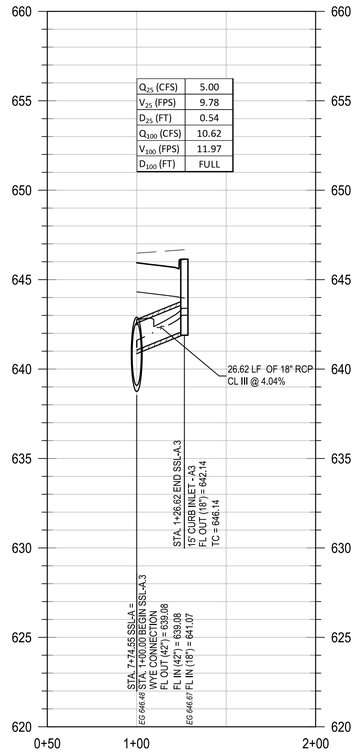
SSL-A.2

Q_{25} (CFS)	7.20
V_{25} (FPS)	13.59
D_{25} (FT)	0.57
Q_{100} (CFS)	10.62
V_{100} (FPS)	15.12
D_{100} (FT)	FULL



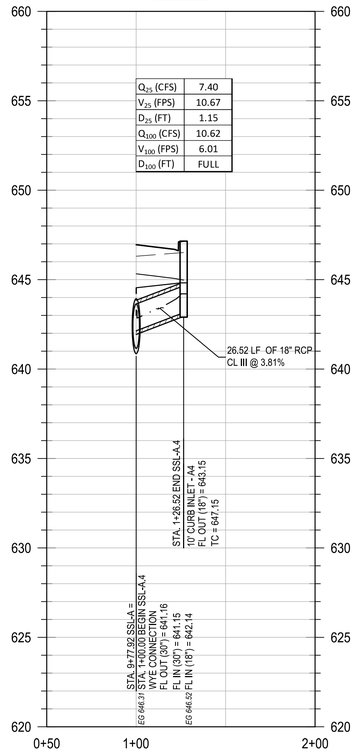
SSL-A.3

Q_{25} (CFS)	5.00
V_{25} (FPS)	9.78
D_{25} (FT)	0.54
Q_{100} (CFS)	10.62
V_{100} (FPS)	11.97
D_{100} (FT)	FULL



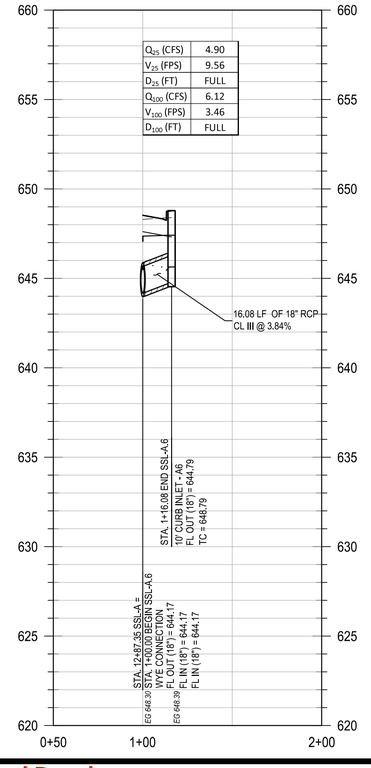
SSL-A.4

Q_{25} (CFS)	7.40
V_{25} (FPS)	10.67
D_{25} (FT)	1.15
Q_{100} (CFS)	10.62
V_{100} (FPS)	6.01
D_{100} (FT)	FULL



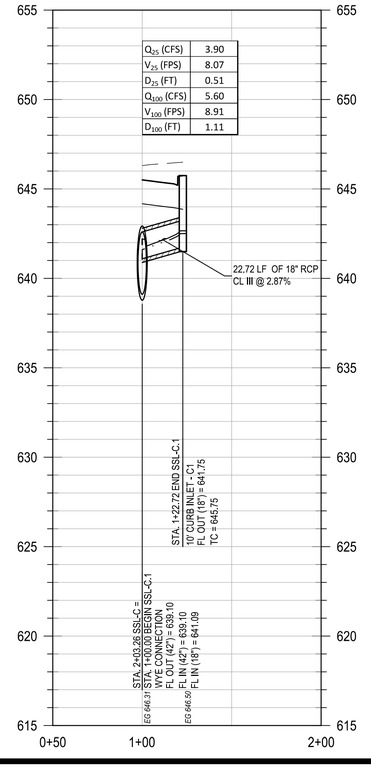
SSL-A.6

Q_{25} (CFS)	4.90
V_{25} (FPS)	9.56
D_{25} (FT)	FULL
Q_{100} (CFS)	6.12
V_{100} (FPS)	3.46
D_{100} (FT)	FULL



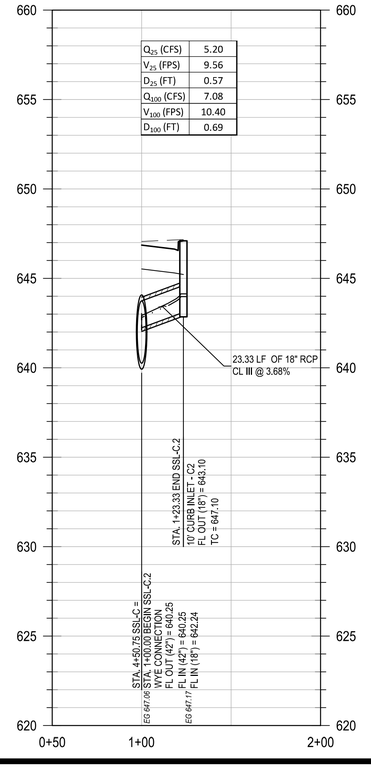
SSL-C.1

Q_{25} (CFS)	3.90
V_{25} (FPS)	8.07
D_{25} (FT)	0.51
Q_{100} (CFS)	5.60
V_{100} (FPS)	8.91
D_{100} (FT)	1.11



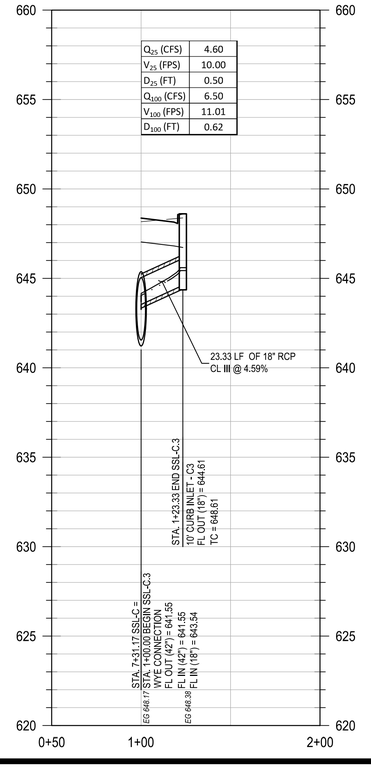
SSL-C.2

Q_{25} (CFS)	5.20
V_{25} (FPS)	9.56
D_{25} (FT)	0.57
Q_{100} (CFS)	7.08
V_{100} (FPS)	10.40
D_{100} (FT)	0.69



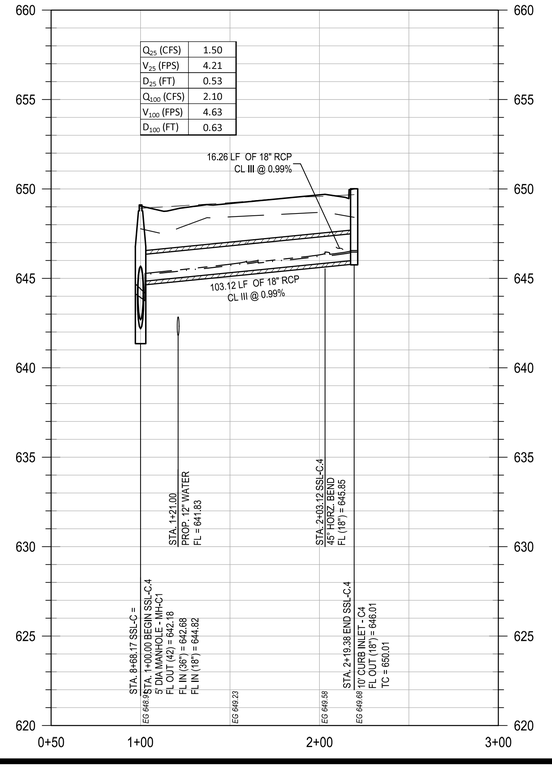
SSL-C.3

Q_{25} (CFS)	4.60
V_{25} (FPS)	10.00
D_{25} (FT)	0.50
Q_{100} (CFS)	6.50
V_{100} (FPS)	11.01
D_{100} (FT)	0.62



SSL-C.4

Q_{25} (CFS)	1.50
V_{25} (FPS)	4.21
D_{25} (FT)	0.53
Q_{100} (CFS)	2.10
V_{100} (FPS)	4.63
D_{100} (FT)	0.63



REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-A & SSL-C LATS

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

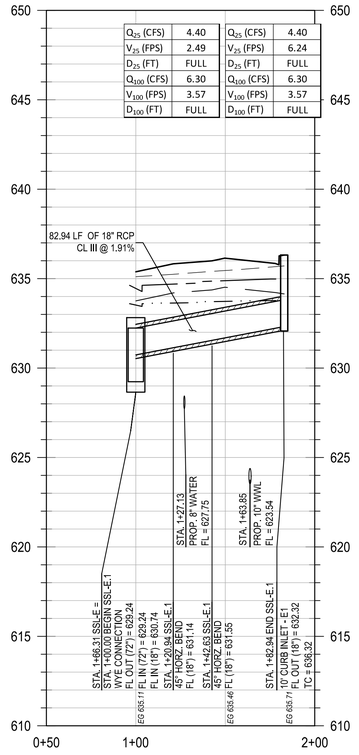
SHEET
37 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SIhtsC-SP-STRM-P&P-PH1.dwg Layout SSL-A & SSL-C LATS Plotted: 2/11/2020 2:39:37 PM

Record Drawing

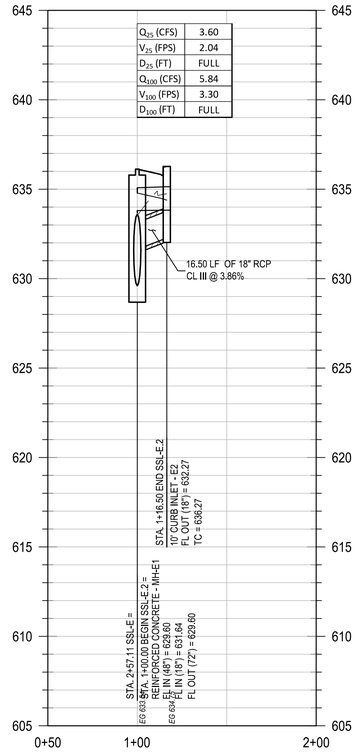
SSL-E.1

Q_{25} (CFS)	4.40
V_{25} (FPS)	2.49
D_{25} (FT)	FULL
Q_{100} (CFS)	6.30
V_{100} (FPS)	3.57
D_{100} (FT)	FULL



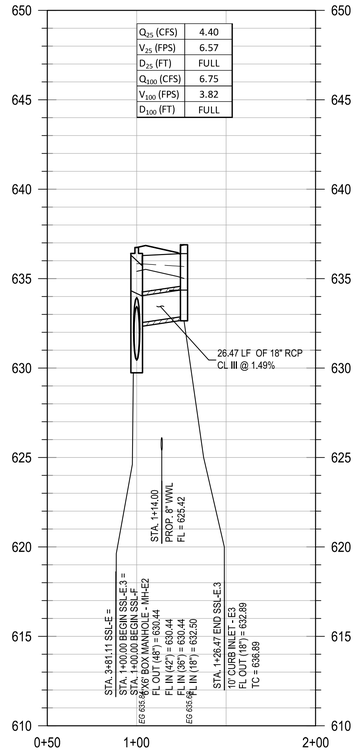
SSL-E.2

Q_{25} (CFS)	3.60
V_{25} (FPS)	2.04
D_{25} (FT)	FULL
Q_{100} (CFS)	5.84
V_{100} (FPS)	3.30
D_{100} (FT)	FULL



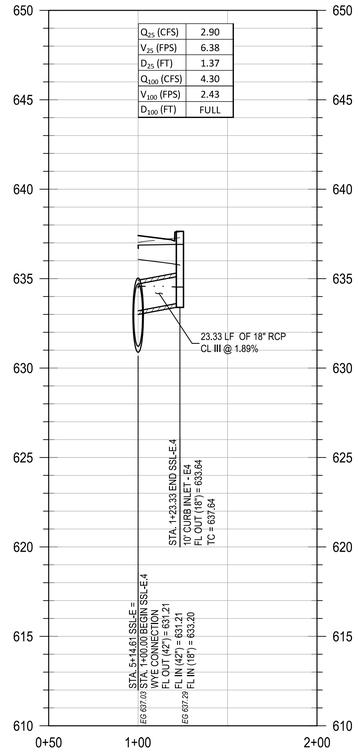
SSL-E.3

Q_{25} (CFS)	4.40
V_{25} (FPS)	6.57
D_{25} (FT)	FULL
Q_{100} (CFS)	6.75
V_{100} (FPS)	3.82
D_{100} (FT)	FULL



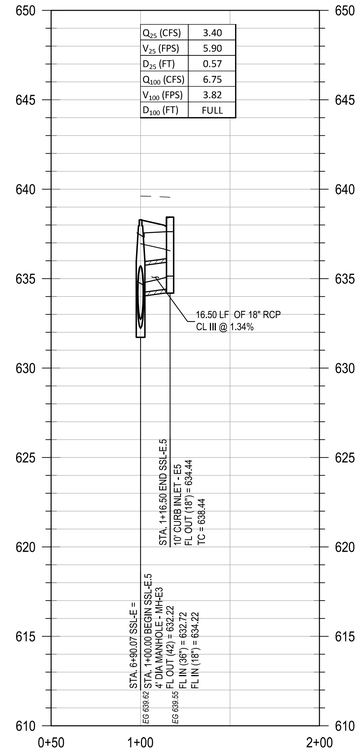
SSL-E.4

Q_{25} (CFS)	2.90
V_{25} (FPS)	6.38
D_{25} (FT)	1.37
Q_{100} (CFS)	4.30
V_{100} (FPS)	2.43
D_{100} (FT)	FULL



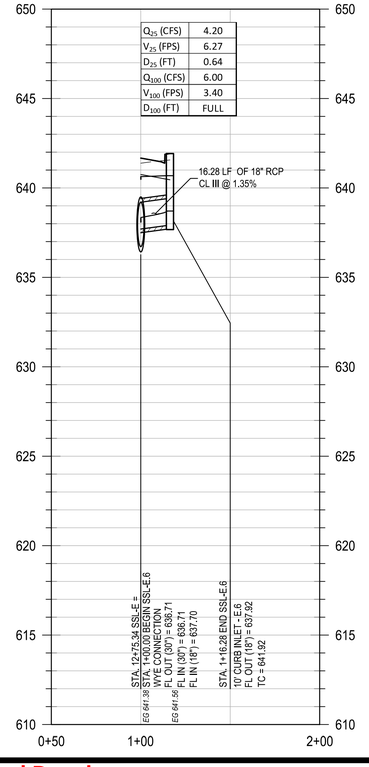
SSL-E.5

Q_{25} (CFS)	3.40
V_{25} (FPS)	5.90
D_{25} (FT)	0.57
Q_{100} (CFS)	6.75
V_{100} (FPS)	3.82
D_{100} (FT)	FULL



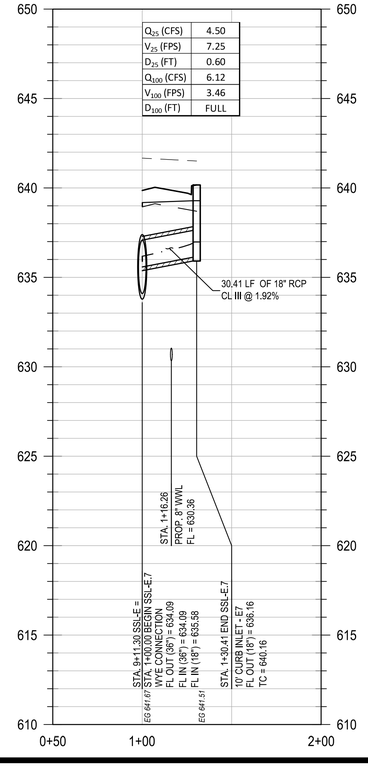
SSL-E.6

Q_{25} (CFS)	4.20
V_{25} (FPS)	6.27
D_{25} (FT)	0.64
Q_{100} (CFS)	6.00
V_{100} (FPS)	3.40
D_{100} (FT)	FULL



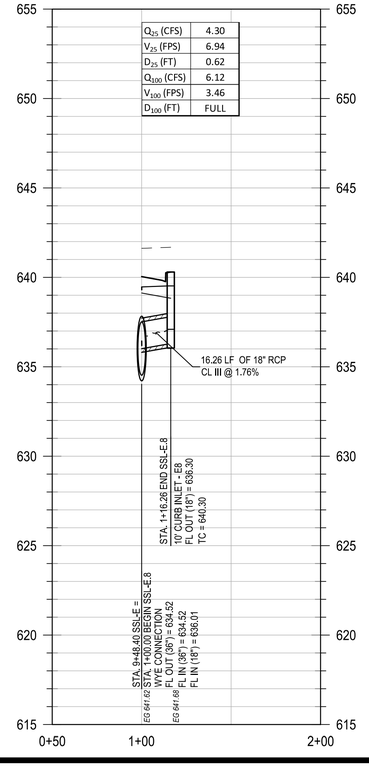
SSL-E.7

Q_{25} (CFS)	4.50
V_{25} (FPS)	7.25
D_{25} (FT)	0.60
Q_{100} (CFS)	6.12
V_{100} (FPS)	3.46
D_{100} (FT)	FULL



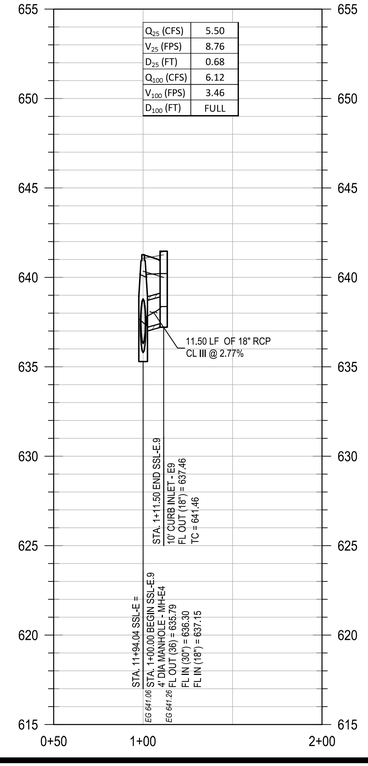
SSL-E.8

Q_{25} (CFS)	4.30
V_{25} (FPS)	6.94
D_{25} (FT)	0.62
Q_{100} (CFS)	6.12
V_{100} (FPS)	3.46
D_{100} (FT)	FULL



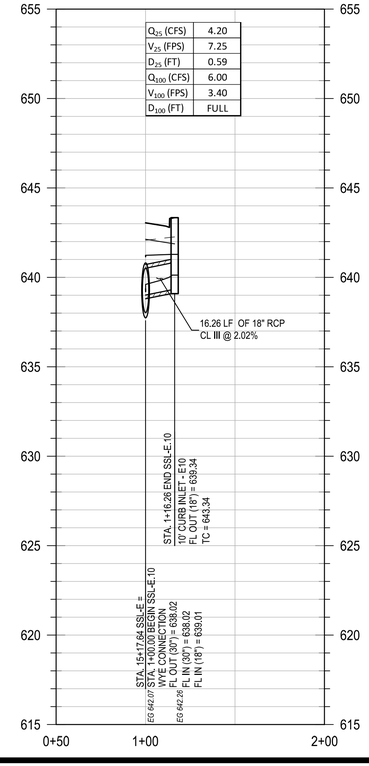
SSL-E.9

Q_{25} (CFS)	5.50
V_{25} (FPS)	8.76
D_{25} (FT)	0.68
Q_{100} (CFS)	6.12
V_{100} (FPS)	3.46
D_{100} (FT)	FULL



SSL-E.10

Q_{25} (CFS)	4.20
V_{25} (FPS)	7.25
D_{25} (FT)	0.59
Q_{100} (CFS)	6.00
V_{100} (FPS)	3.40
D_{100} (FT)	FULL



							APR
							DATE
							DESCRIPTION
△	△	△	△	△	△		REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

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COTTONWOOD CREEK
HUTTO, TEXAS

SSL-E LATS

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

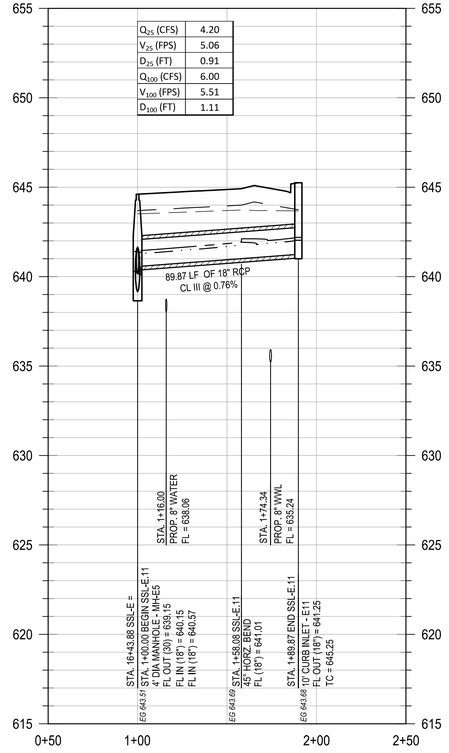
SHEET
38 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SitInsC-SP-STRM-P&P-PH1.dwg Layout: SSL-E LATS Plotted: 2/11/2020 2:39:57 PM

Record Drawing

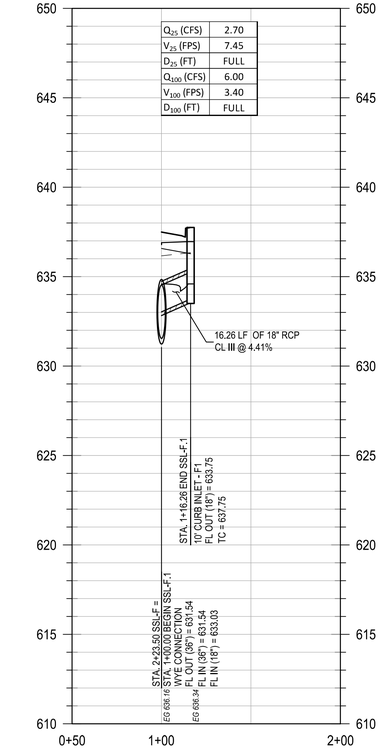
SSL-E.11

Q_{25} (CFS)	4.20
V_{25} (FPS)	5.06
D_{25} (FT)	0.91
Q_{100} (CFS)	6.00
V_{100} (FPS)	5.51
D_{100} (FT)	1.11



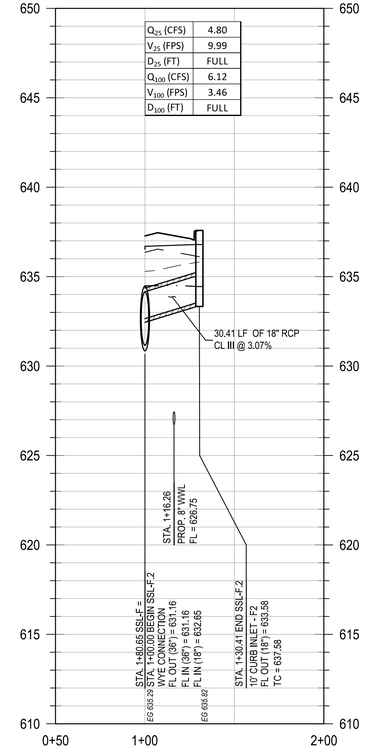
SSL-F.1

Q_{25} (CFS)	2.70
V_{25} (FPS)	7.45
D_{25} (FT)	FULL
Q_{100} (CFS)	6.00
V_{100} (FPS)	3.40
D_{100} (FT)	FULL



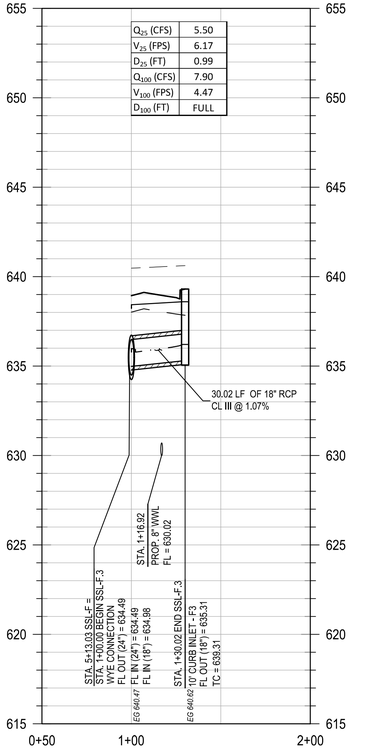
SSL-F.2

Q_{25} (CFS)	4.80
V_{25} (FPS)	9.99
D_{25} (FT)	FULL
Q_{100} (CFS)	6.12
V_{100} (FPS)	3.46
D_{100} (FT)	FULL



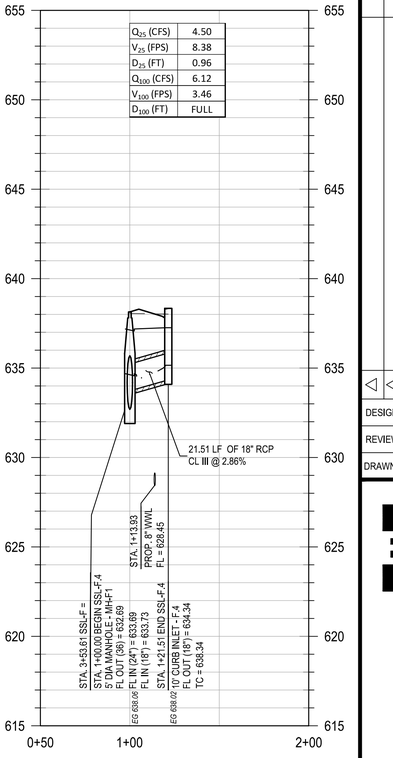
SSL-F.3

Q_{25} (CFS)	5.50
V_{25} (FPS)	6.17
D_{25} (FT)	0.99
Q_{100} (CFS)	7.90
V_{100} (FPS)	4.47
D_{100} (FT)	FULL



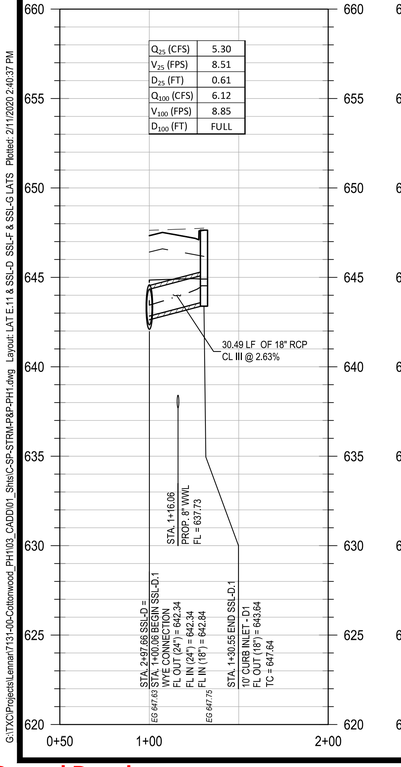
SSL-F.4

Q_{25} (CFS)	4.50
V_{25} (FPS)	8.38
D_{25} (FT)	0.96
Q_{100} (CFS)	6.12
V_{100} (FPS)	3.46
D_{100} (FT)	FULL



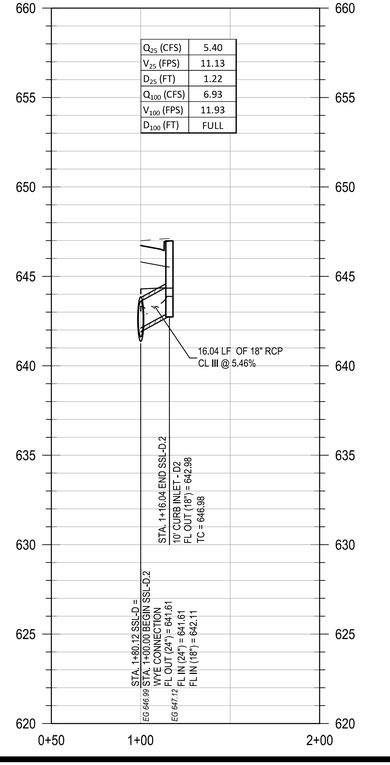
SSL-D.1

Q_{25} (CFS)	5.30
V_{25} (FPS)	8.51
D_{25} (FT)	0.61
Q_{100} (CFS)	6.12
V_{100} (FPS)	8.85
D_{100} (FT)	FULL



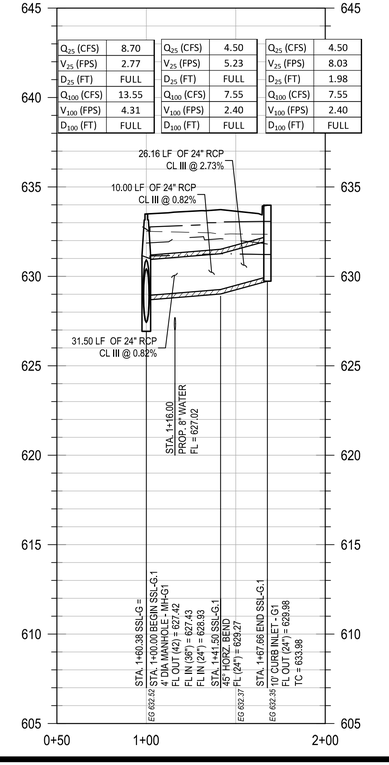
SSL-D.2

Q_{25} (CFS)	5.40
V_{25} (FPS)	11.13
D_{25} (FT)	1.22
Q_{100} (CFS)	6.93
V_{100} (FPS)	11.93
D_{100} (FT)	FULL



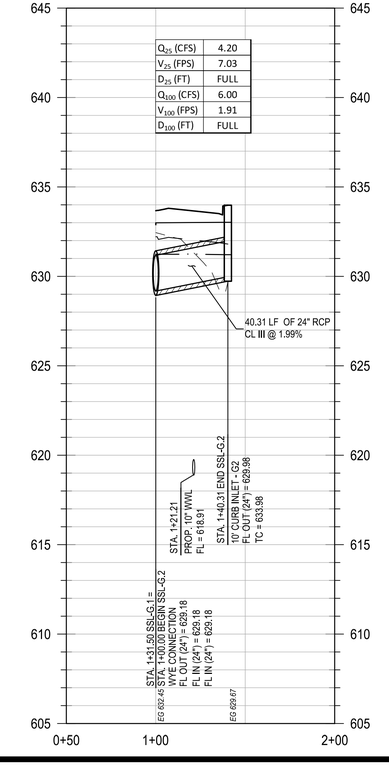
SSL-G.1

Q_{25} (CFS)	8.70	Q_{25} (CFS)	4.50	Q_{25} (CFS)	4.50
V_{25} (FPS)	2.77	V_{25} (FPS)	5.23	V_{25} (FPS)	8.03
D_{25} (FT)	FULL	D_{25} (FT)	FULL	D_{25} (FT)	1.98
Q_{100} (CFS)	13.55	Q_{100} (CFS)	7.55	Q_{100} (CFS)	7.55
V_{100} (FPS)	4.31	V_{100} (FPS)	2.40	V_{100} (FPS)	2.40
D_{100} (FT)	FULL	D_{100} (FT)	FULL	D_{100} (FT)	FULL



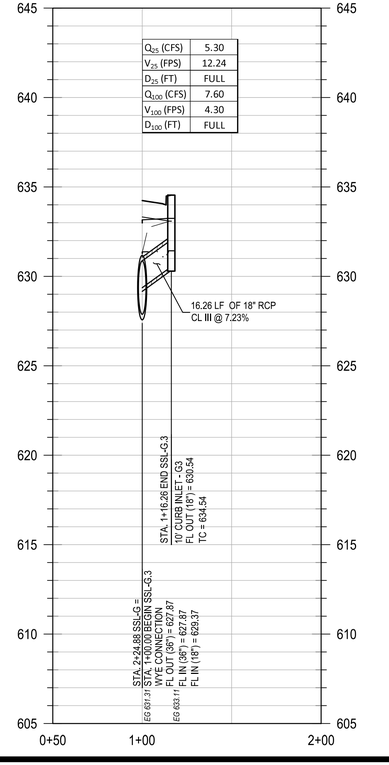
SSL-G.2

Q_{25} (CFS)	4.20
V_{25} (FPS)	7.03
D_{25} (FT)	FULL
Q_{100} (CFS)	6.00
V_{100} (FPS)	1.91
D_{100} (FT)	FULL



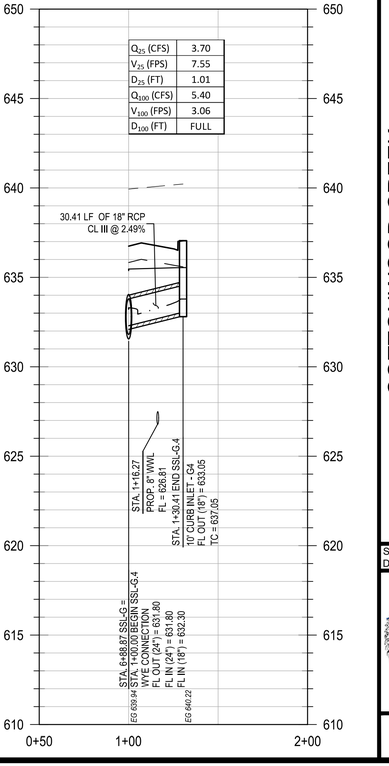
SSL-G.3

Q_{25} (CFS)	5.30
V_{25} (FPS)	12.24
D_{25} (FT)	FULL
Q_{100} (CFS)	7.60
V_{100} (FPS)	4.30
D_{100} (FT)	FULL



SSL-G.4

Q_{25} (CFS)	3.70
V_{25} (FPS)	7.55
D_{25} (FT)	1.01
Q_{100} (CFS)	5.40
V_{100} (FPS)	3.06
D_{100} (FT)	FULL



DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

APR	DATE	DESCRIPTION	REV

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COTTONWOOD CREEK
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LAT E.11 & SSL-D, SSL-F & SSL-G LATS

SUBMITTAL DATE: 01-16-2020

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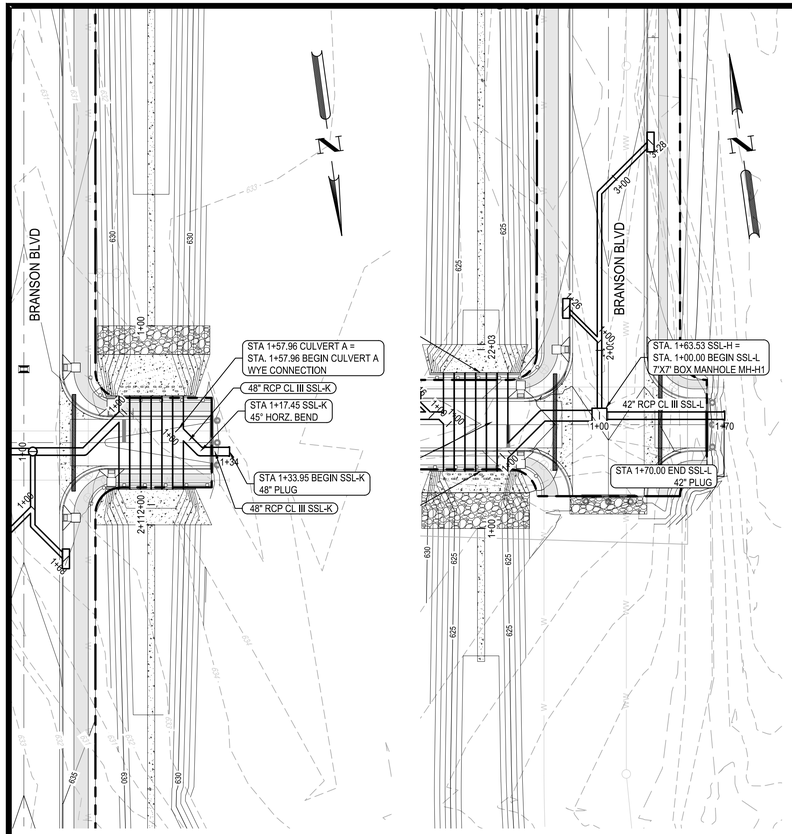
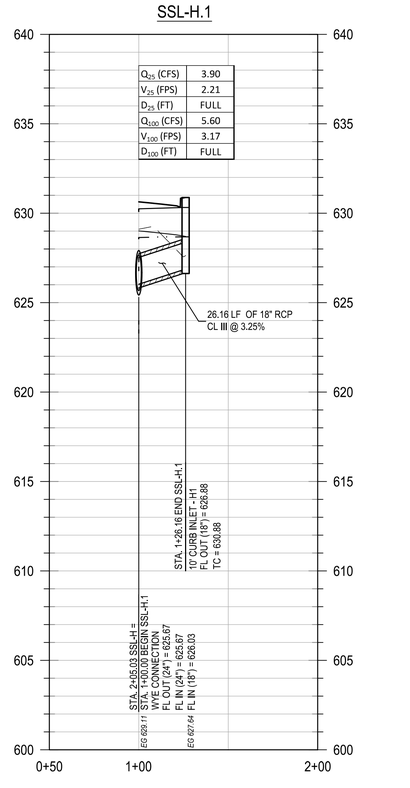
2/11/2020

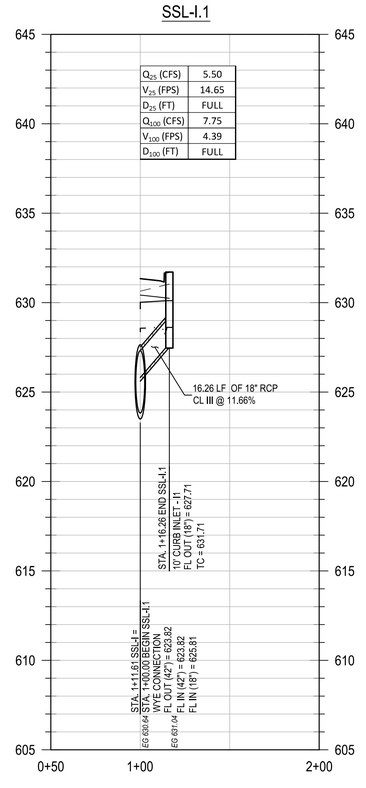
SHEET
39 OF 91

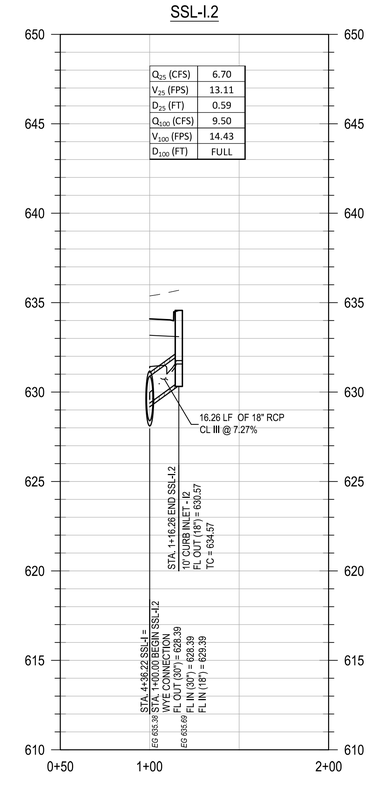
G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SitInsC-SP-STRM-P&P-PH1.dwg Layout: LAT E.11 & SSL-D SSL-F & SSL-G LATS Plotted: 2/11/2020 2:40:37 PM

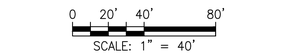
Record Drawing







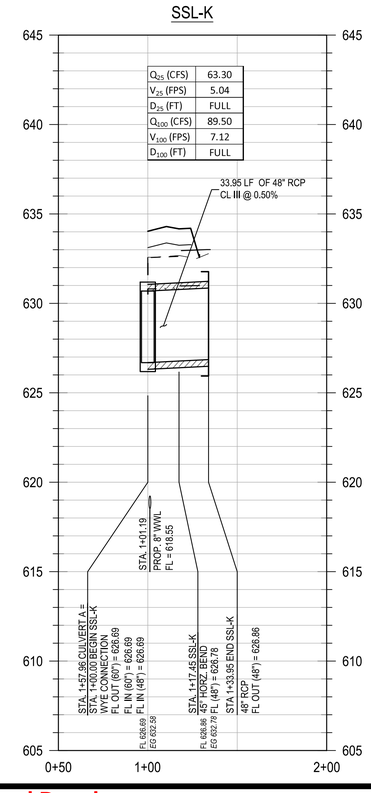


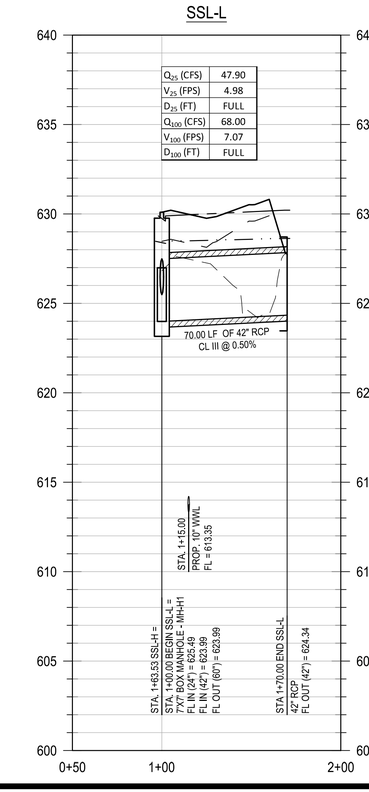


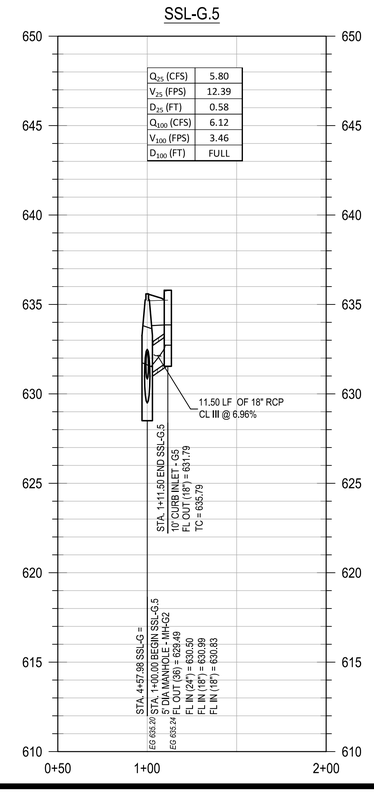
LEGEND

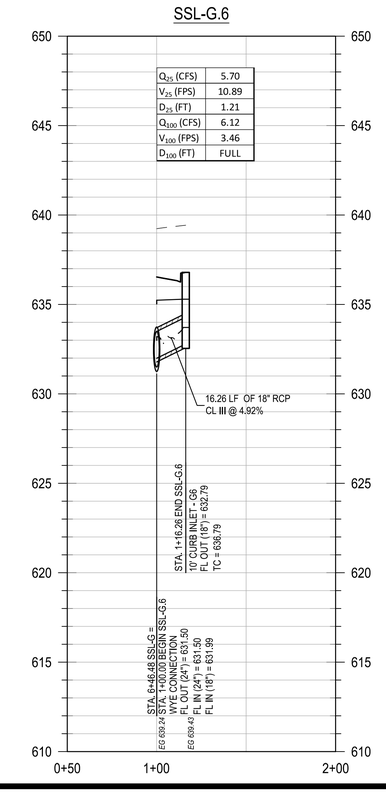
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

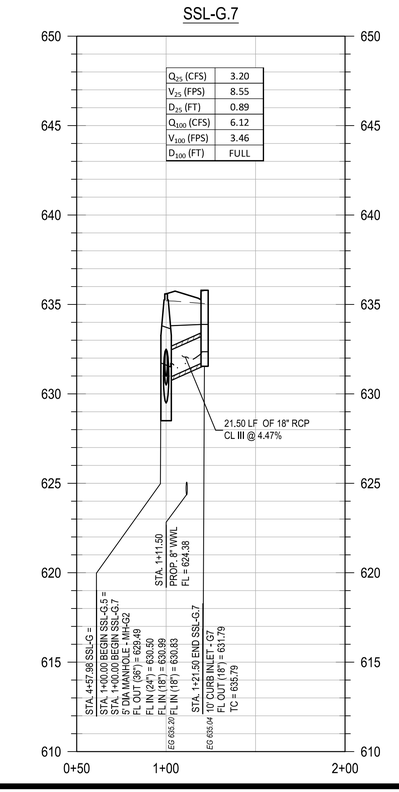
NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.











PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

SSL-K & SSL-L PLAN & PROFILE &
SSL-G, SSL-H & SSL-I LATS

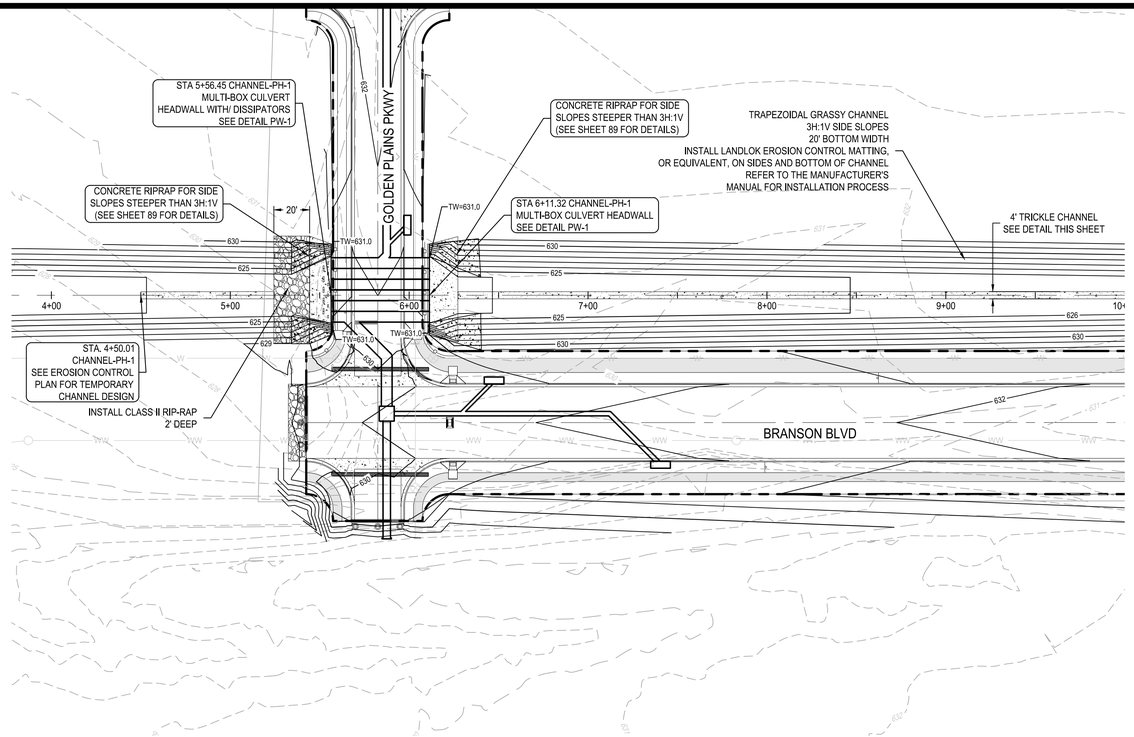
SUBMITTAL DATE: 01-16-2020

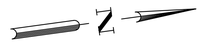
STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
40 OF 91

G:\TX\CP\projects\Lennar\7131-06-Cottonwood_PH1\03_CADD\01_Shts\C-SP-STRM-P&P-PH1.dwg Layout: SSL-K & SSL-L PLAN & PROFILE & SSL-G, SSL-H & SSL-I LATS Plotted: 2/11/2020 2:41:39 PM

Record Drawing





0 20' 40' 80'

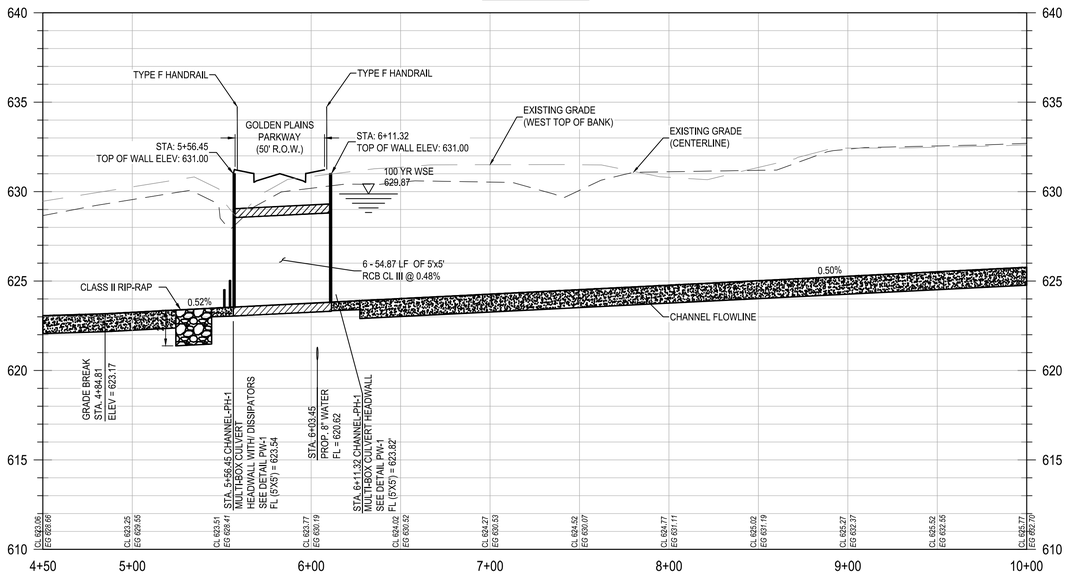
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

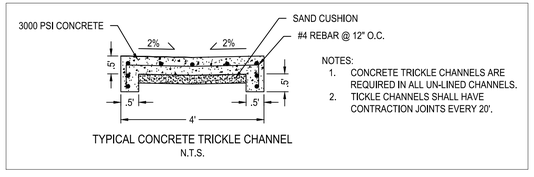
NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

CHANNEL-PH-1



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE



TYPICAL CONCRETE TRICKLE CHANNEL
N.T.S.

NOTES:
1. CONCRETE TRICKLE CHANNELS ARE REQUIRED IN ALL UN-LINED CHANNELS.
2. TICKLE CHANNELS SHALL HAVE CONTRACTION JOINTS EVERY 20'.

Rock Riprap Gradation Table

Rock Riprap Class by Median Particle Diameter (D50)		D15 (in)		D50 (in)		D85 (in)		D100 (in)
Class	Diameter (in)	Min	Max	Min	Max	Min	Max	Max
I	6	3.7	5.2	5.7	6.9	7.8	9.2	12.0
II	9	5.5	7.8	8.5	10.5	11.5	14.0	18.0
III	12	7.3	10.5	11.5	14.0	15.5	18.5	24.0
IV	15	9.2	13.0	14.5	17.5	19.5	23.0	30.0
V	18	11.0	15.5	17.0	20.5	23.5	27.5	36.0
VI	21	13.0	18.5	20.0	24.0	27.5	32.5	42.0
VII	24	14.5	21.0	23.0	27.5	31.0	37.0	48.0
VIII	30	18.5	26.0	28.5	34.5	39.0	46.0	60.0
IX	36	22.0	31.5	34.0	41.5	47.0	55.5	72.0
X	42	25.5	36.5	40.0	48.5	54.5	64.5	84.0

								APR
								DATE
								DESCRIPTION
								REV
DESIGNED BY:	DAZ							
REVIEWED BY:	TMH							
DRAWN BY:	DAZ							

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
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TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

CHANNEL 1 PLAN AND PROFILE (4+50 TO 10+00)

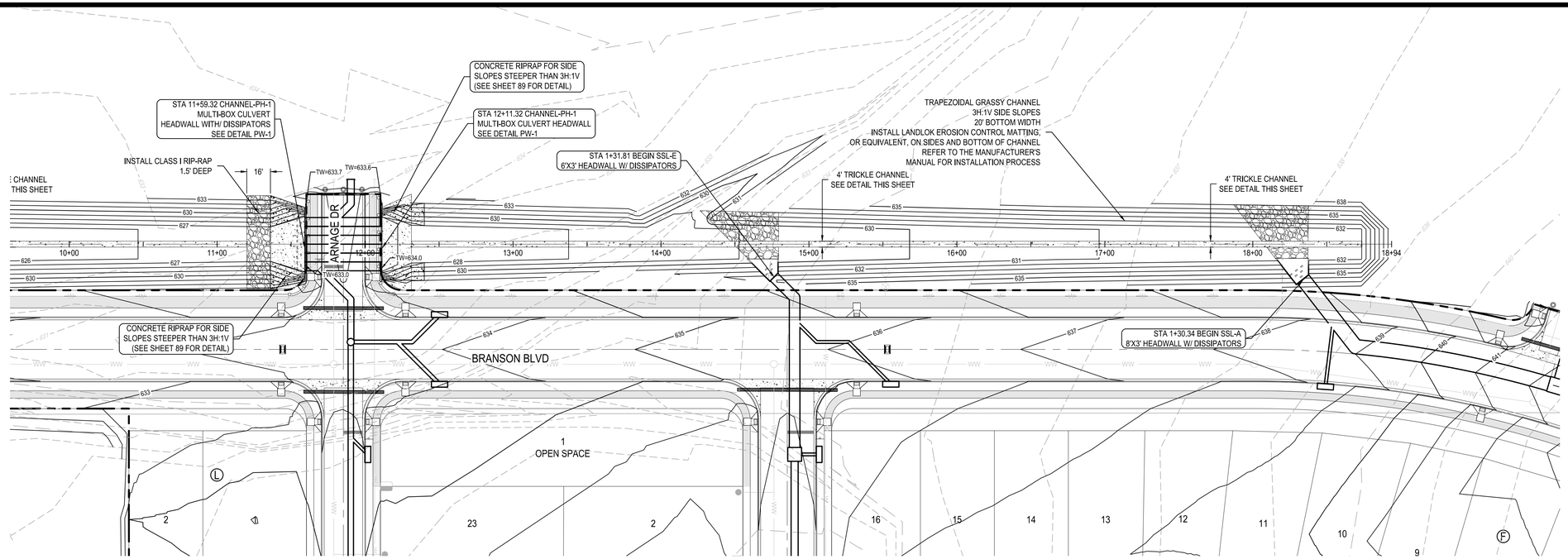
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY H. HOLLAND
94048
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
41 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SitnsC-SR-CHANNEL-PAP-PH1.dwg Layout: CHANNEL 1 PLAN AND PROFILE (4+50 TO 10+00) Plotted: 2/11/2020 2:43:40 PM

Record Drawing



0 20' 40' 80'

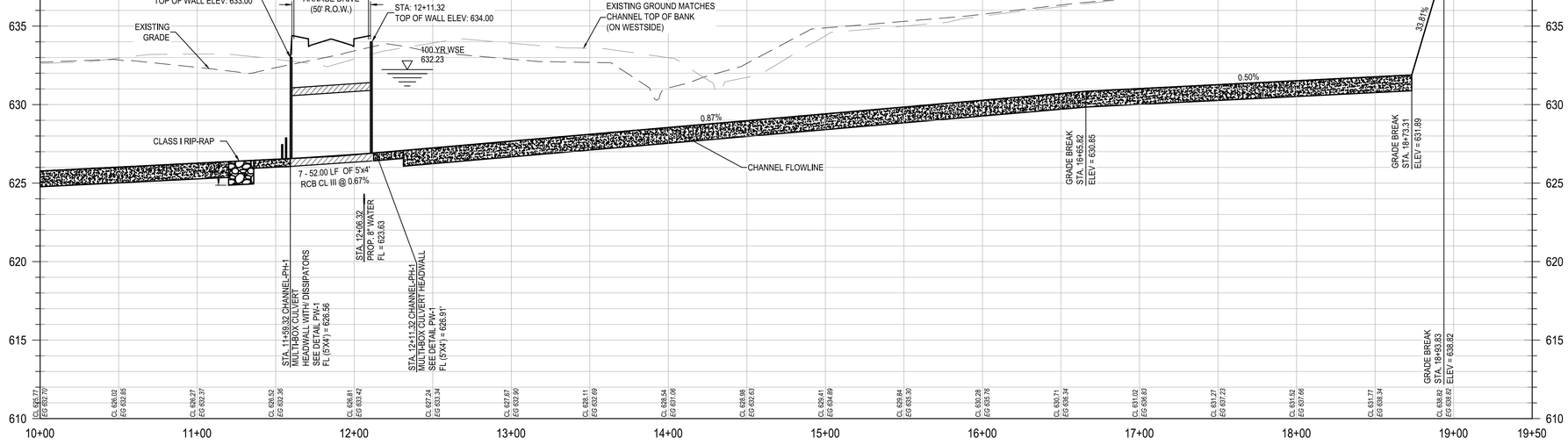
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

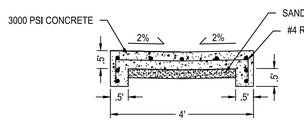
NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

CHANNEL-PH-1



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE



TYPICAL CONCRETE TRICKLE CHANNEL
N.T.S.

NOTES:
1. CONCRETE TRICKLE CHANNELS ARE REQUIRED IN ALL UN-LINED CHANNELS.
2. TICKLE CHANNELS SHALL HAVE CONTRACTION JOINTS EVERY 20'.

Rock Riprap Gradation Table

Rock Riprap Class by Median Particle Diameter (D50)		D15 (in)		D50 (in)		D85 (in)		D100 (in)
Class	Diameter (in)	Min	Max	Min	Max	Min	Max	Max
I	6	3.7	5.2	5.7	6.9	7.8	9.2	12.0
II	9	5.5	7.8	8.5	10.5	11.5	14.0	18.0
III	12	7.3	10.5	11.5	14.0	15.5	18.5	24.0
IV	15	9.2	13.0	14.5	17.5	19.5	23.0	30.0
V	18	11.0	15.5	17.0	20.5	23.5	27.5	36.0
VI	21	13.0	18.5	20.0	24.0	27.5	32.5	42.0
VII	24	14.5	21.0	23.0	27.5	31.0	37.0	48.0
VIII	30	18.5	26.0	28.5	34.5	39.0	46.0	60.0
IX	36	22.0	31.5	34.0	41.5	47.0	55.5	72.0
X	42	25.5	36.5	40.0	48.5	54.5	64.5	84.0

								APR
								DATE
								DESCRIPTION
◁	◁	◁	◁	◁	◁			REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

CHANNEL 1 PLAN AND PROFILE (10+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. ROLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
42 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SR-CHANNEL-PAR-PH1.dwg Layout: CHANNEL 1 PLAN AND PROFILE (10+00 TO END) Plotted: 2/11/2020 2:44:09 PM

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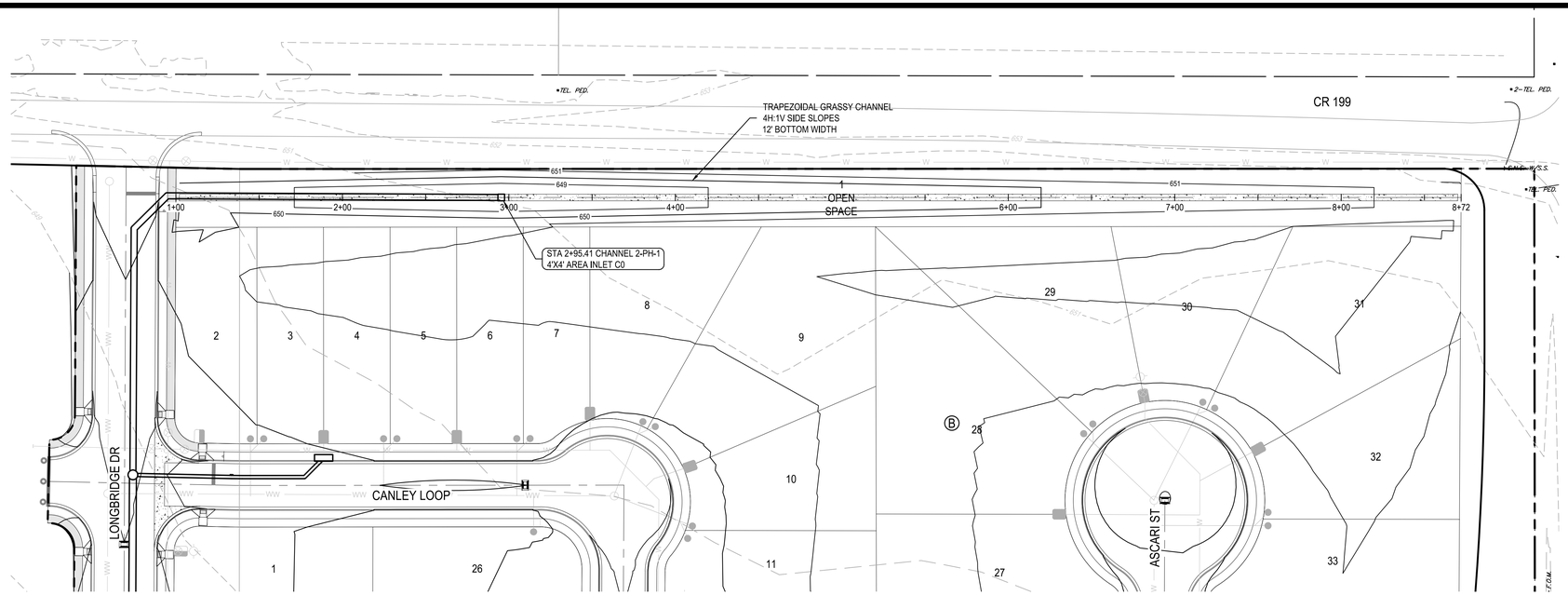
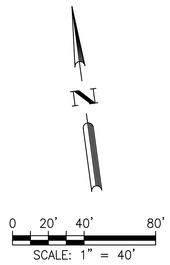


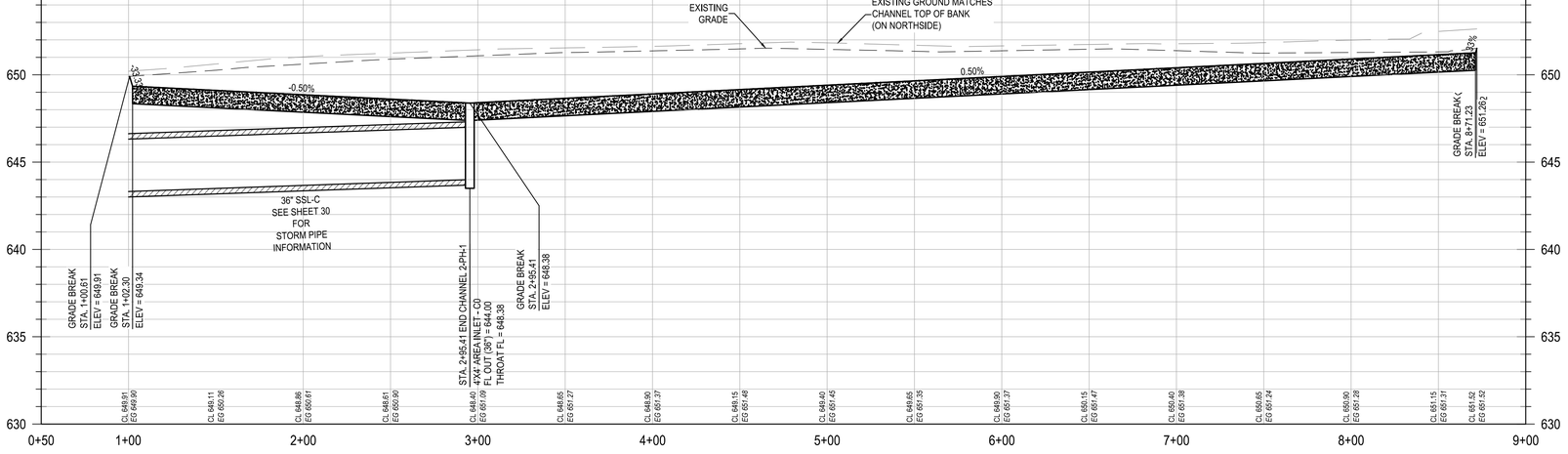


LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED MANHOLE
- PROPOSED 10' CURB INLET
- PROPOSED 4'X4' AREA INLET

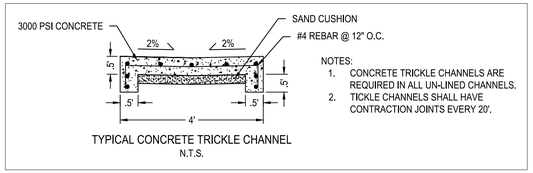
NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

CHANNEL 2-PH-1



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE



TYPICAL CONCRETE TRICKLE CHANNEL
N.T.S.

NOTES:
1. CONCRETE TRICKLE CHANNELS ARE REQUIRED IN ALL UN-LINED CHANNELS.
2. TICKLE CHANNELS SHALL HAVE CONTRACTION JOINTS EVERY 20'.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

CHANNEL 2 PLAN AND PROFILE (1+00 TO END)

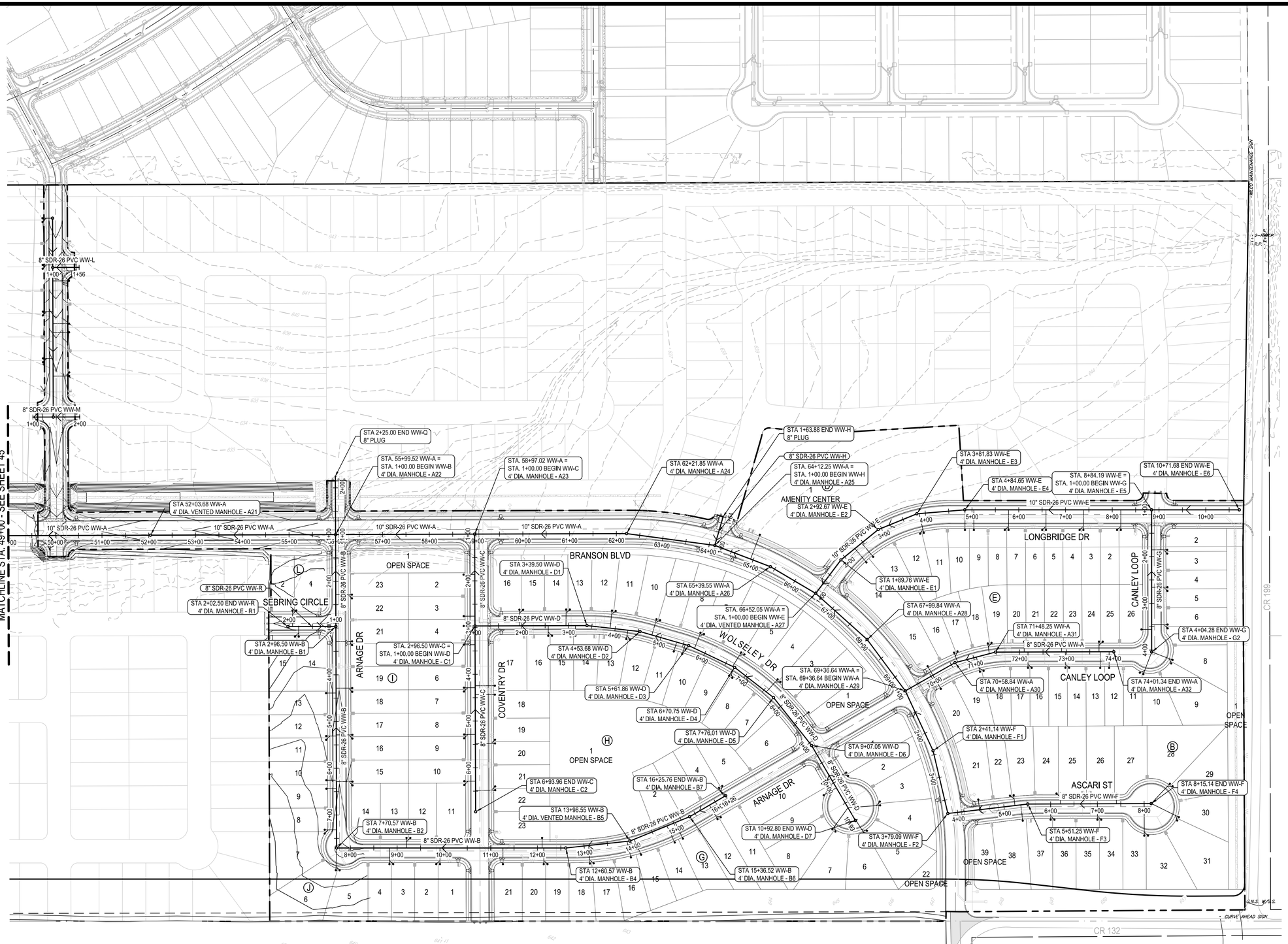
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
43 OF 91

G:\TX\CIP\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-CHANNEL-P&P-PH1.dwg Layout: CHANNEL 2 PLAN AND PROFILE (1+00 TO END) Plotted: 2/11/2020 2:44:36 PM

Record Drawing



0 50' 100' 200'

SCALE: 1" = 100'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.

NOTE:

1. ALL ITEMS ARE TO BE FURNISHED AND INSTALLED BY CONTRACTOR. REFERENCE CONSTRUCTION DETAILS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL GRAVITY LINES ARE TO BE INSTALLED FROM DOWNSTREAM TO UPSTREAM.
3. ALL WASTEWATER LINES SHALL BE PVC SDR-26 CONFORMING TO ASTM D30304 WITH MINIMUM PIPE STIFFNESS OF 115 PSI AS DETERMINED BY ASTM D2412.
4. AT ALL WATER LINE CROSSINGS, WASTEWATER MAIN SHALL BE ASTM 2241, SDR-26 CLASS 160 OR BETTER PVC FOR MINIMUM 20 FEET CENTERED ON WATER LINE.
5. CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, CONTRACTOR MUST IMMEDIATELY NOTIFY PROJECT ENGINEER FOR FURTHER DIRECTION.
6. TRACER TAPE SHALL BE PLACED ABOVE ALL PLASTIC PIPES.
7. CAUTION: CONTRACTOR TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. FOR ALL EXISTING MANHOLES MODIFIED BY CONSTRUCTION TO BE TESTED, REPAIRED AND RECOATED PER DETAIL WW-03.

	APR
	DATE
	DESCRIPTION
◁ ◁ ◁ ◁ ◁ ◁	REV
DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL WASTEWATER PLAN (1 OF 2)

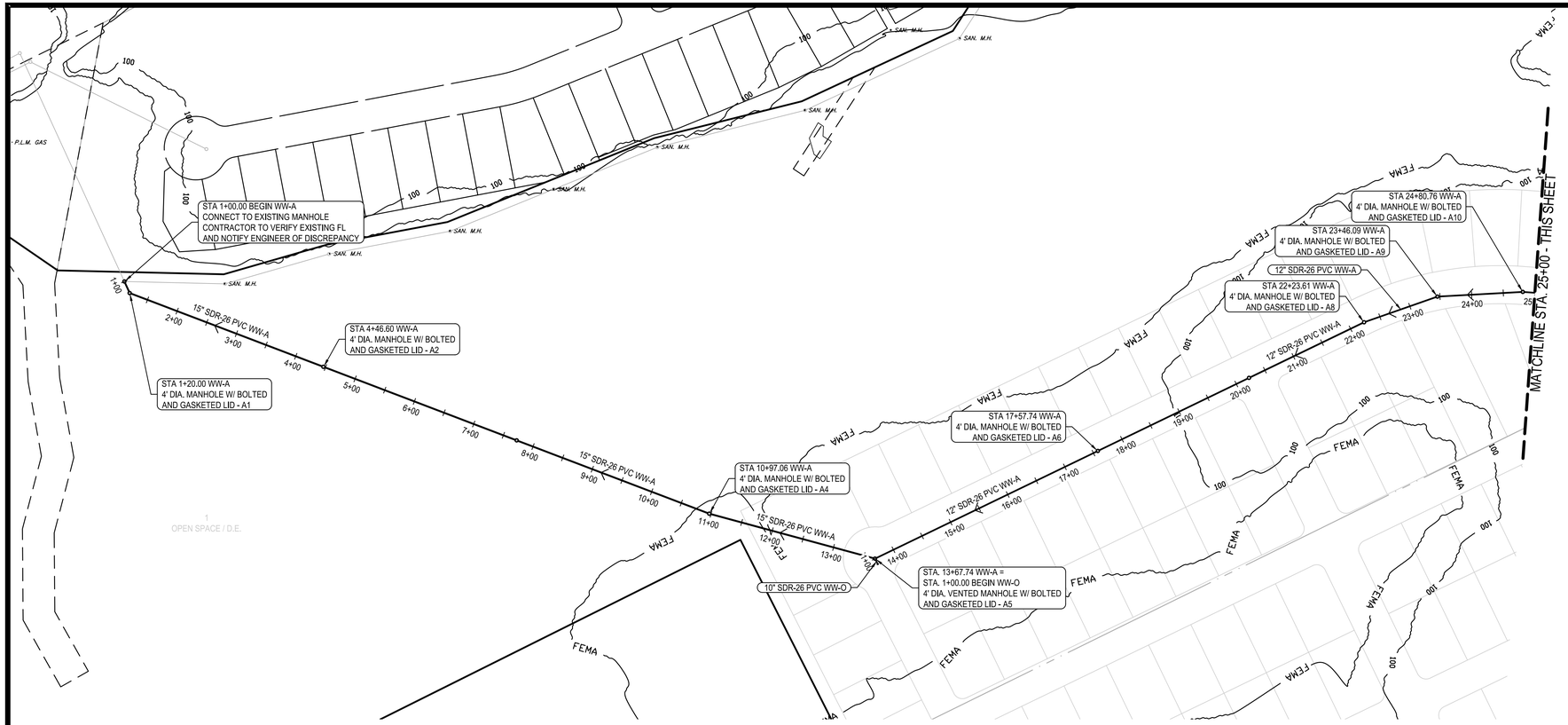
SUBMITTAL DATE: 01-16-2020

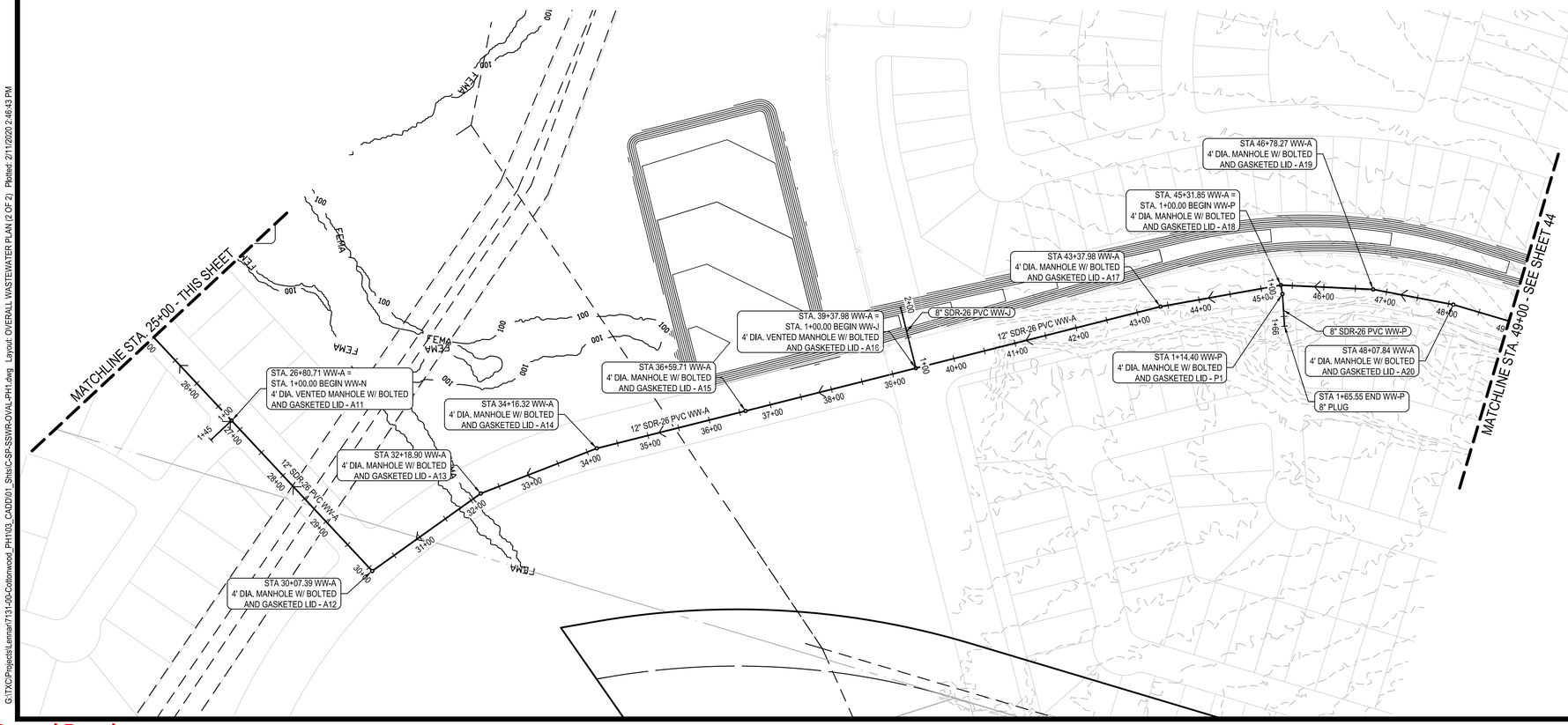
STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

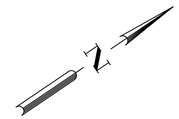
SHEET
44 OF 91

G:\TX\CIP\Projects\Lennar\17310-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-OVAL-PH1.dwg Layout: OVERALL WASTEWATER PLAN (1 OF 2) Plotted: 2/11/2020 2:46:16 PM

Record Drawing







0 50' 100' 200'

SCALE: 1" = 100'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.

NOTE:

1. ALL ITEMS ARE TO BE FURNISHED AND INSTALLED BY CONTRACTOR. REFERENCE CONSTRUCTION DETAILS SHEETS FOR ADDITIONAL INFORMATION.
2. ALL GRAVITY LINES ARE TO BE INSTALLED FROM DOWNSTREAM TO UPSTREAM.
3. ALL WASTEWATER LINES SHALL BE PVC SDR-26 CONFORMING TO ASTM D30304 WITH MINIMUM PIPE STIFFNESS OF 115 PSI AS DETERMINED BY ASTM D2412.
4. AT ALL WATER LINE CROSSINGS, WASTEWATER MAIN SHALL BE ASTM 2241, SDR-26 CLASS 160 OR BETTER PVC FOR MINIMUM 20 FEET CENTERED ON WATER LINE.
5. CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, CONTRACTOR MUST IMMEDIATELY NOTIFY PROJECT ENGINEER FOR FURTHER DIRECTION.
6. TRACER TAPE SHALL BE PLACED ABOVE ALL PLASTIC PIPES.
7. CAUTION: CONTRACTOR TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. FOR ALL EXISTING MANHOLES MODIFIED BY CONSTRUCTION TO BE TESTED, REPAIRED AND RECOATED PER DETAIL WW-03.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngby.com

COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL WASTEWATER PLAN (2 OF 2)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
45 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-OVAL-PH1.dwg Layout: OVERALL WASTEWATER PLAN (2 OF 2) Plotted: 2/11/2020 2:46:43 PM

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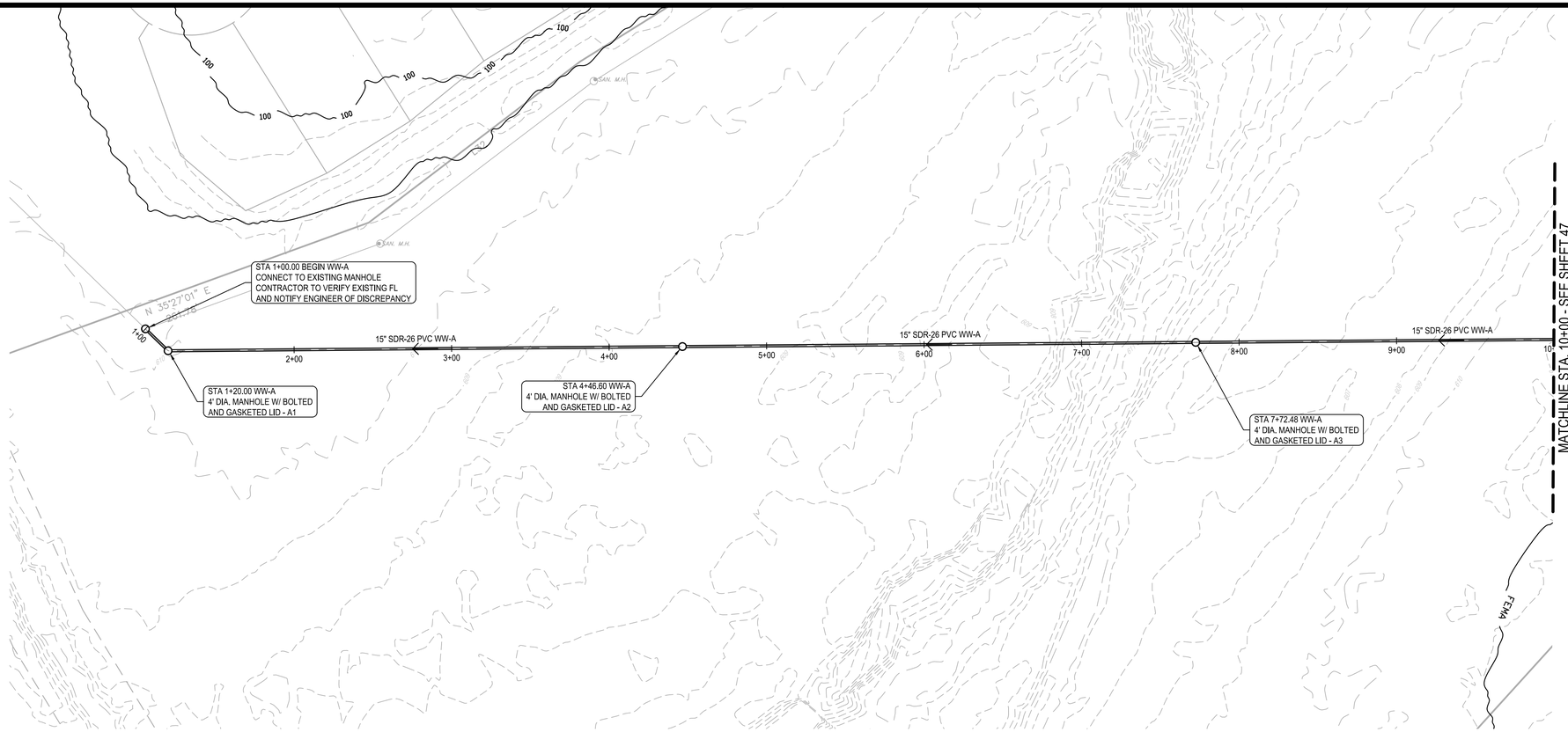

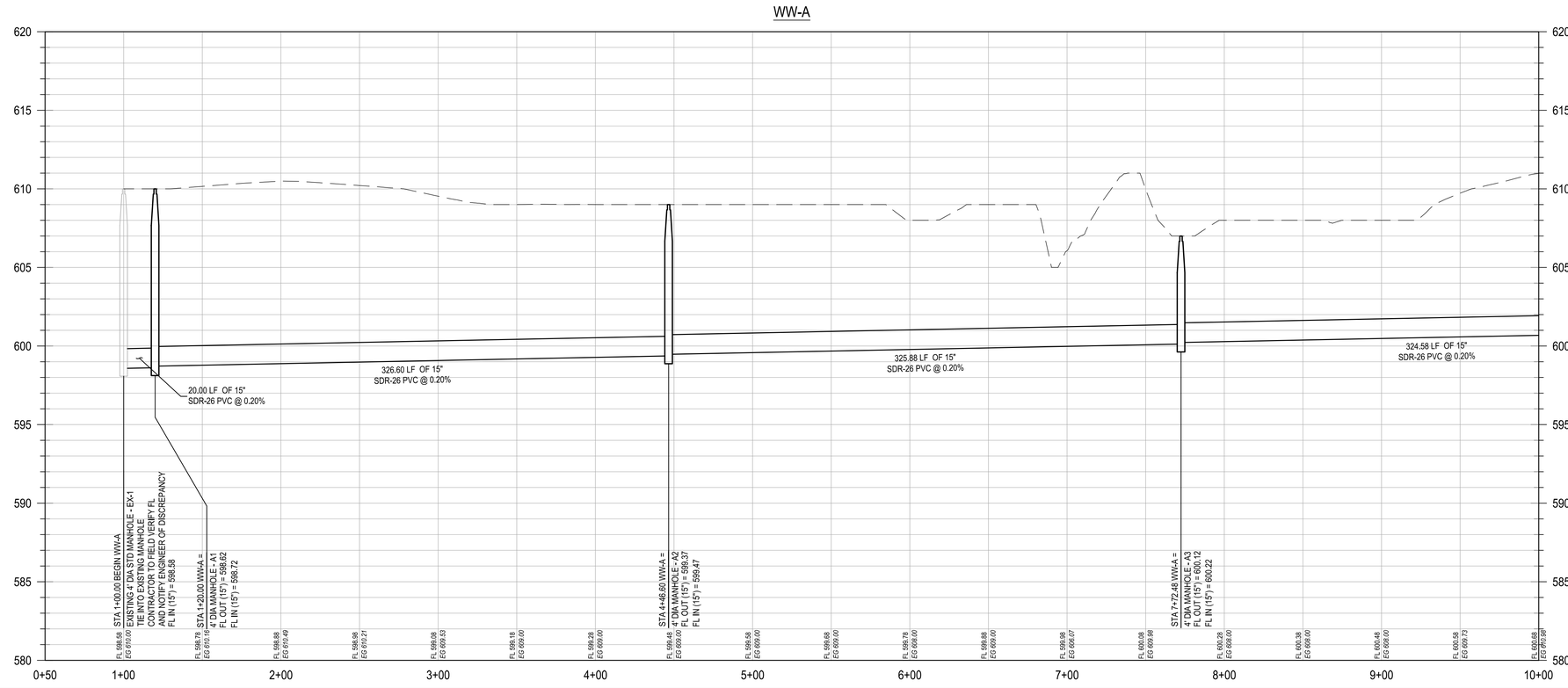

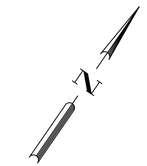

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.

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PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
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TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS
WW-A PLAN AND PROFILE
(1+00 TO 10+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
46 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-WW-A-P&P-PH1.dwg Layout: WW-A (1+00 TO 10+00) Plotted: 2/11/2020 2:48:49 PM

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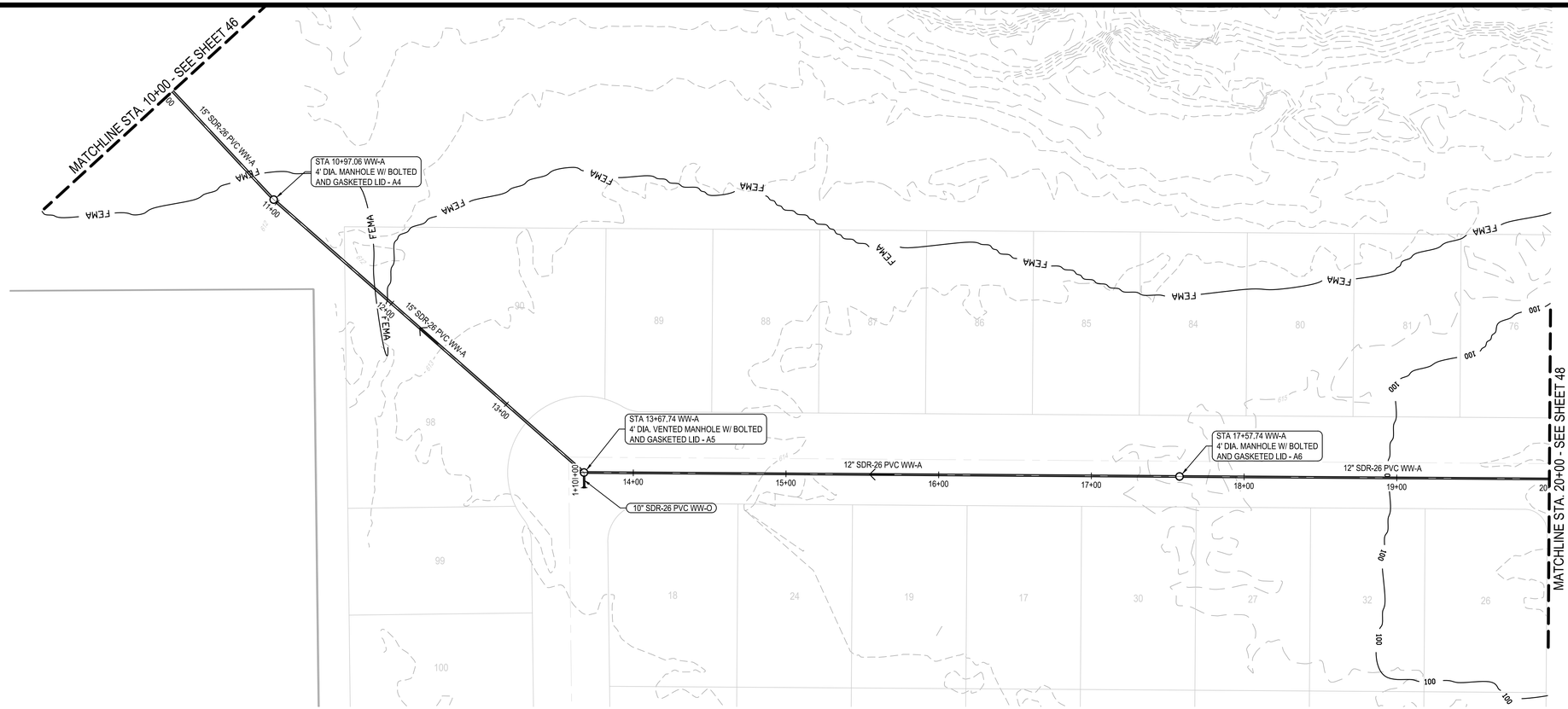

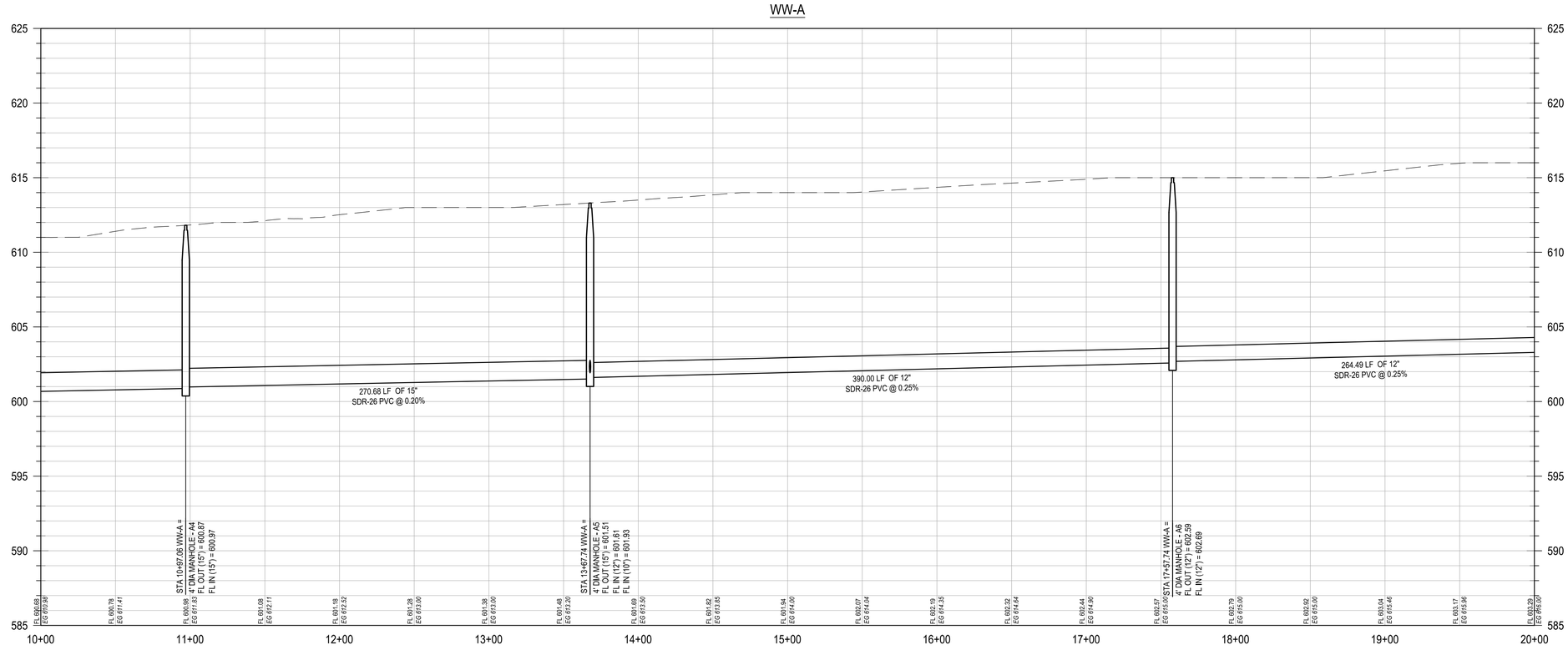

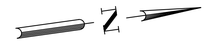

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

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PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngey.com

COTTONWOOD CREEK
HUTTO, TEXAS
WW-A PLAN AND PROFILE
(10+00 TO 20+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
47 OF 91

G:\TXCI\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-WW-A-P&P-PH1.dwg Layout: WW-A (10+00 TO 20+00) Plotted: 2/11/2020 2:49:13 PM

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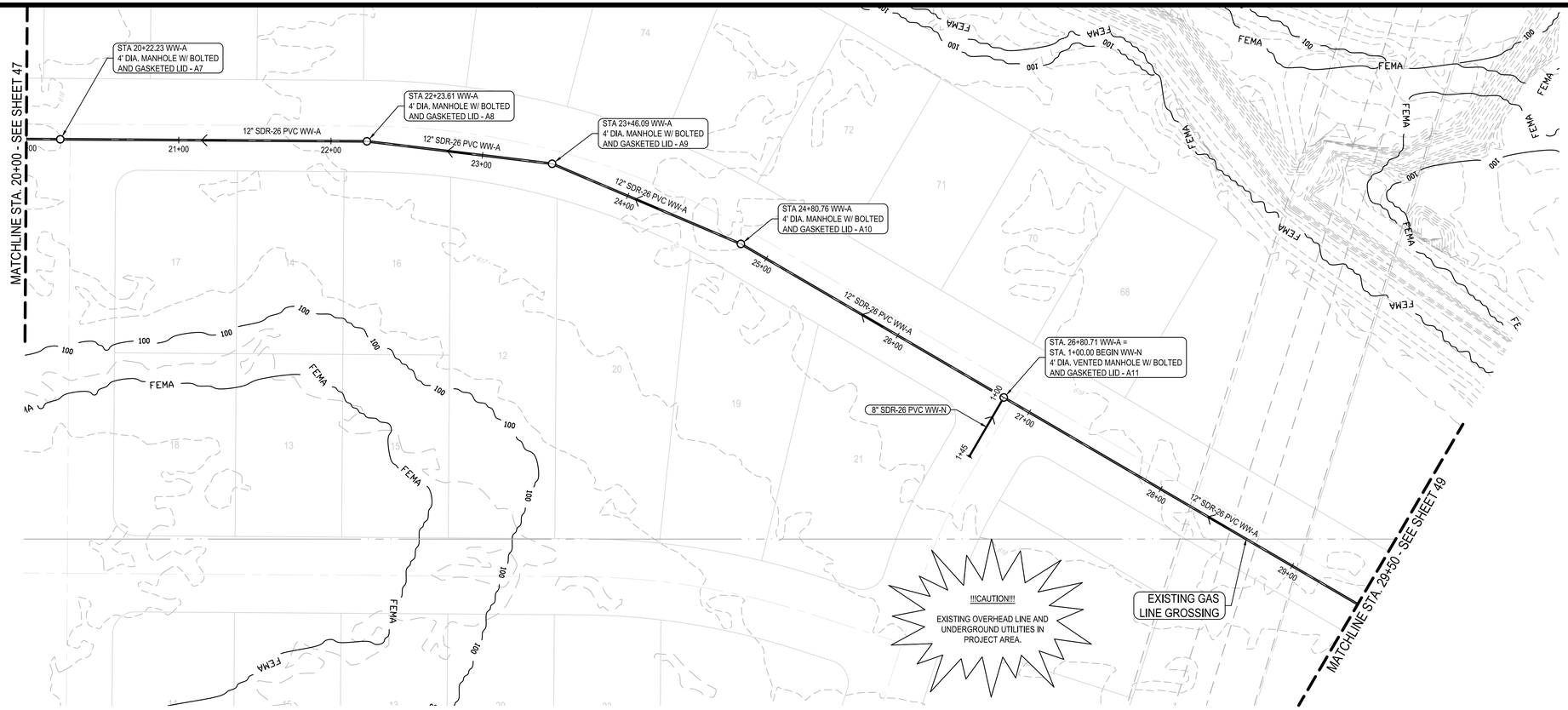

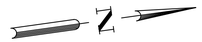

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
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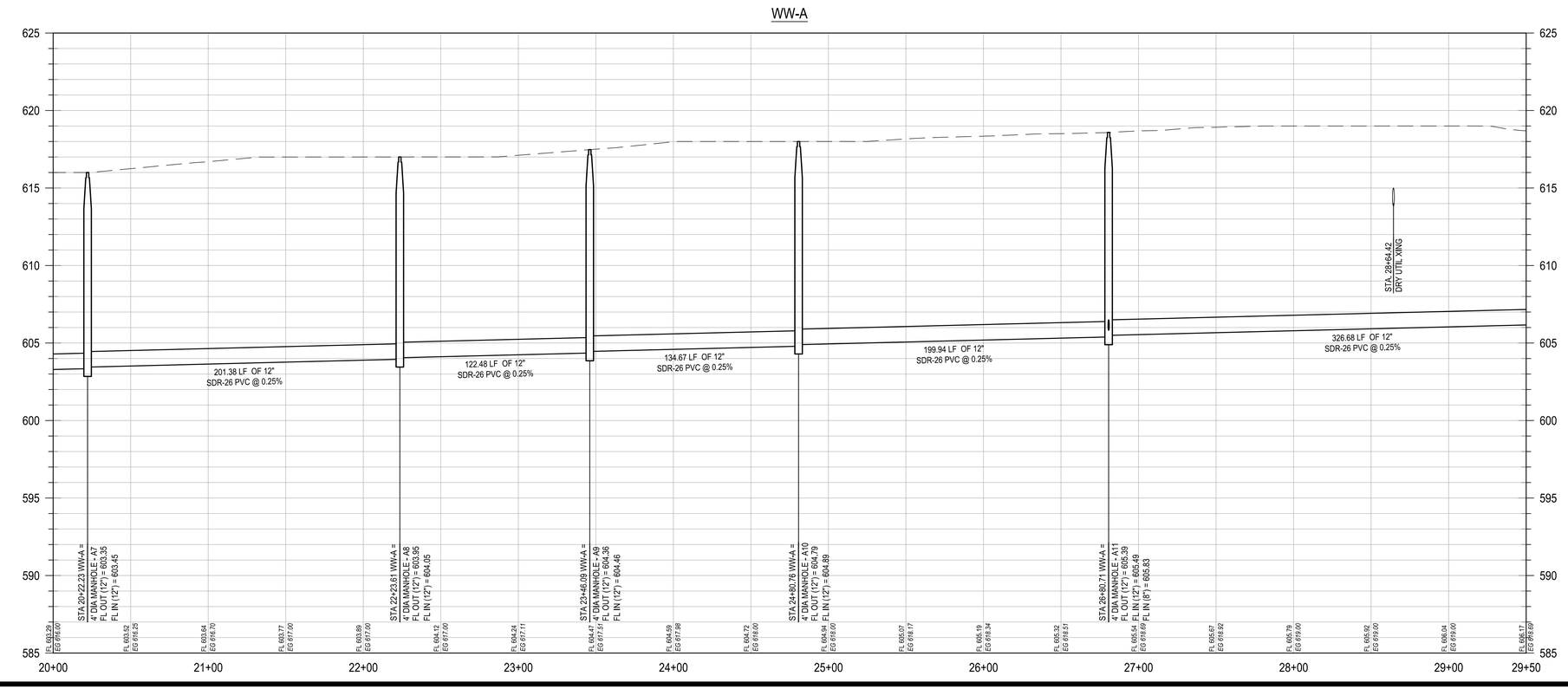

PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY:	DAZ
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BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
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TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-A PLAN AND PROFILE (20+00 TO 29+50)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
48 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Sht s\C-SP-SSWR-WW-A-P&P-PH1.dwg Layout: WW-A (20+00 TO 30+00) Plotted: 2/11/2020 2:48:36 PM

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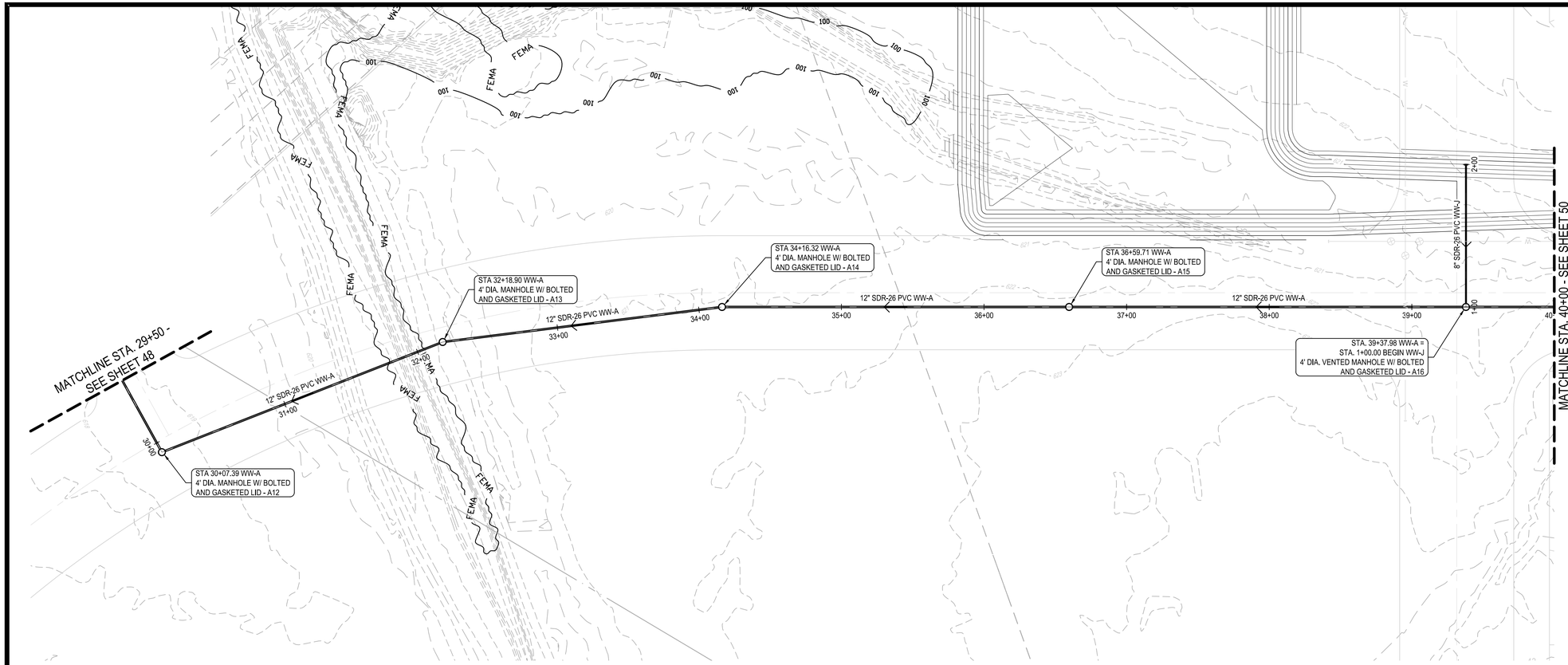

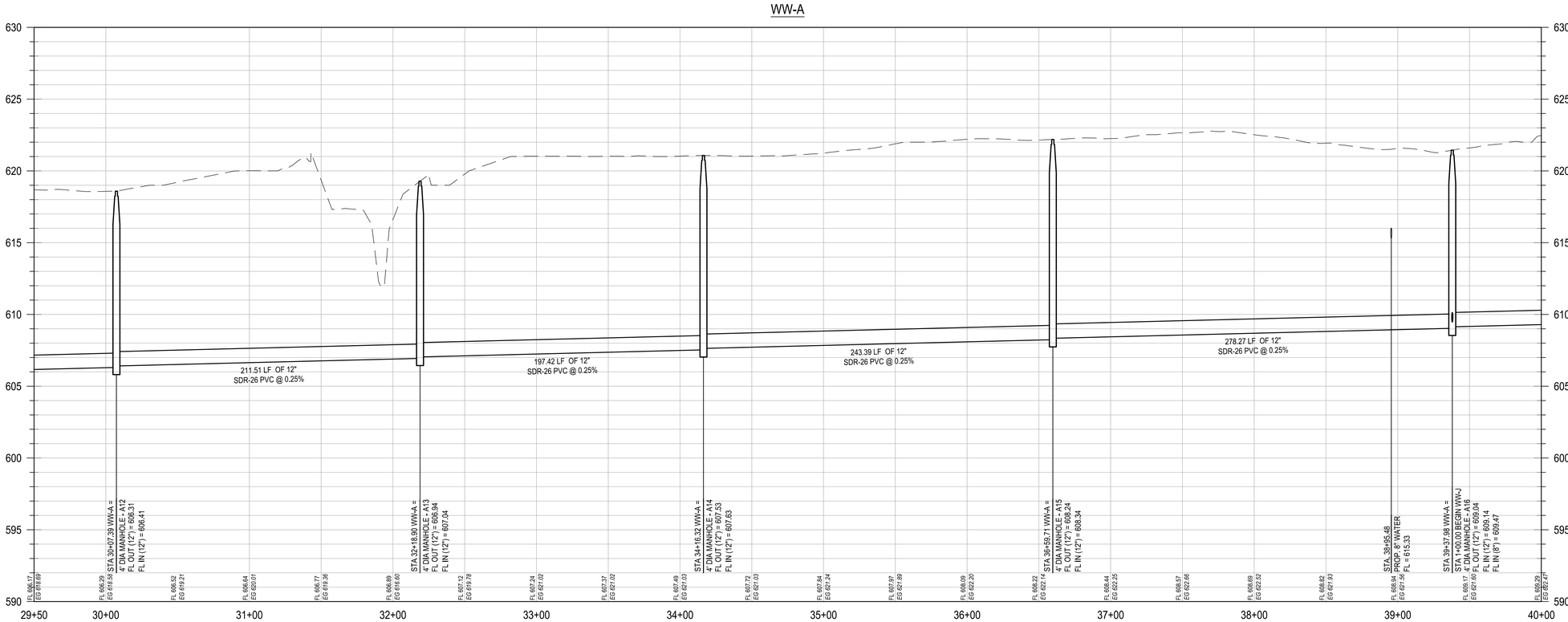

0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
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PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
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◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ
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COTTONWOOD CREEK
HUTTO, TEXAS

WW-A PLAN AND PROFILE (29+50 TO 40+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
49 OF 91

G:\TXCD\Projects\Lennar7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-WW-A-P&P-PH1.dwg Layout: WW-A (30+00 TO 40+00) Plotted: 2/11/2020 2:50:01 PM

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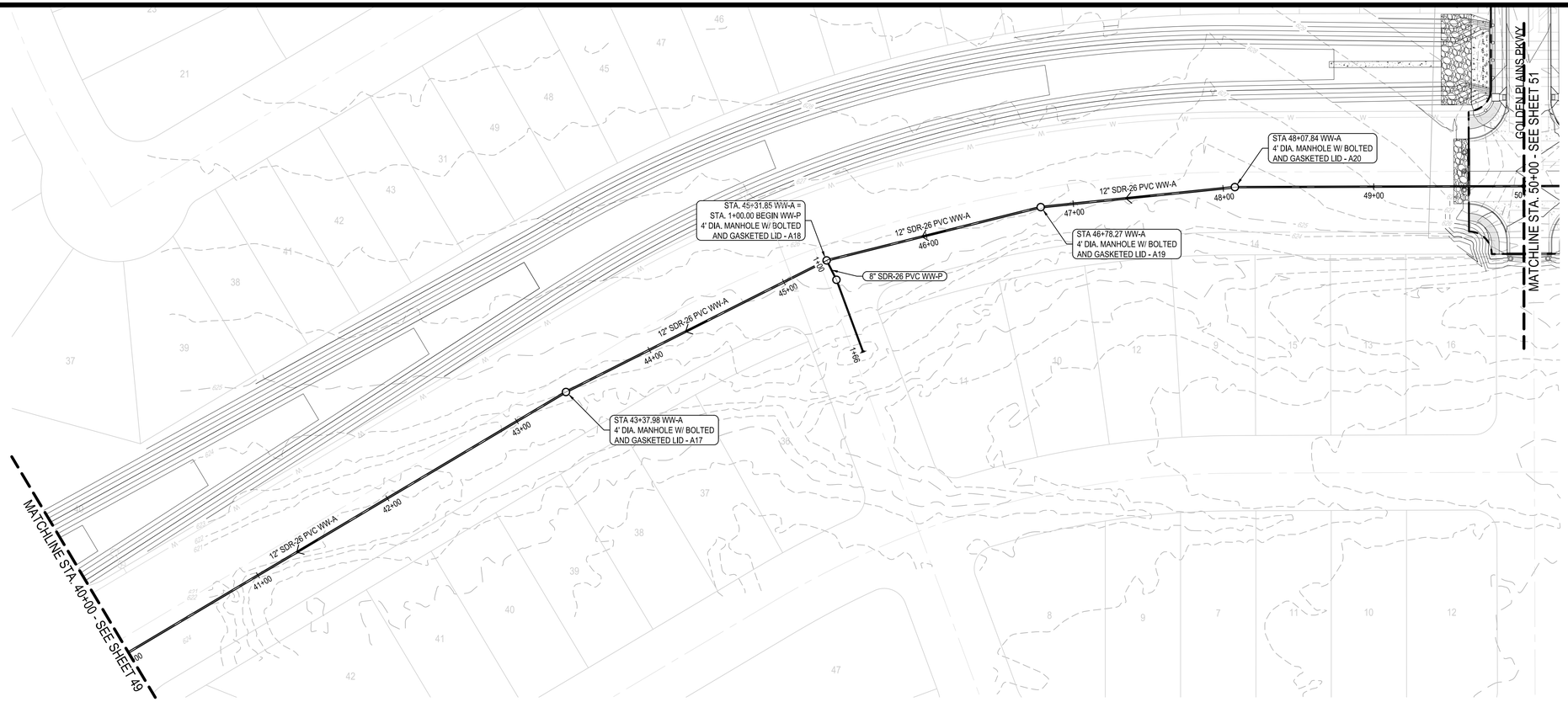

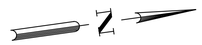

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
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- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
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- WASTEWATER LINE
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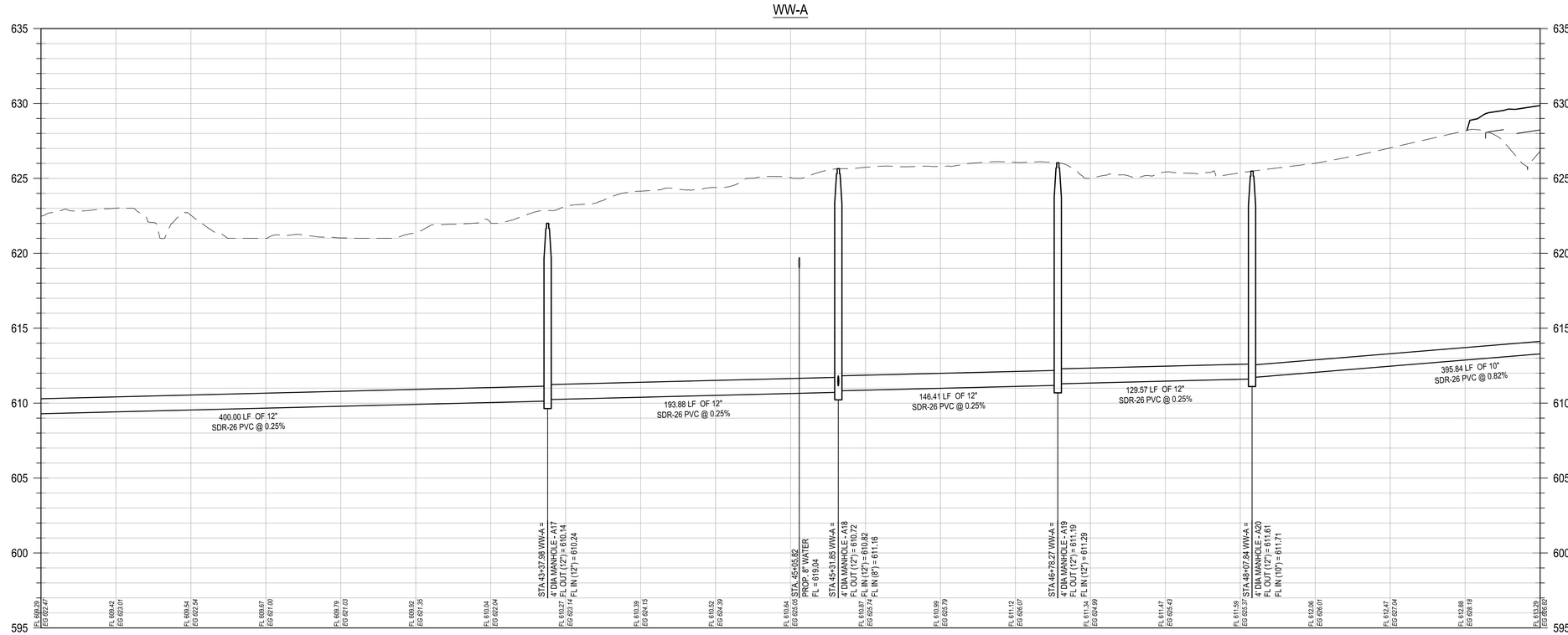

PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

	APR
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COTTONWOOD CREEK HUTTO, TEXAS

WW-A PLAN AND PROFILE (40+00 TO 50+00)

SUBMITTAL DATE: 01-16-2020



SHEET 50 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-WW-A-P&P-PH1.dwg Layout: WW-A (40+00 TO 50+00) Plotted: 2/11/2020 2:50:24 PM

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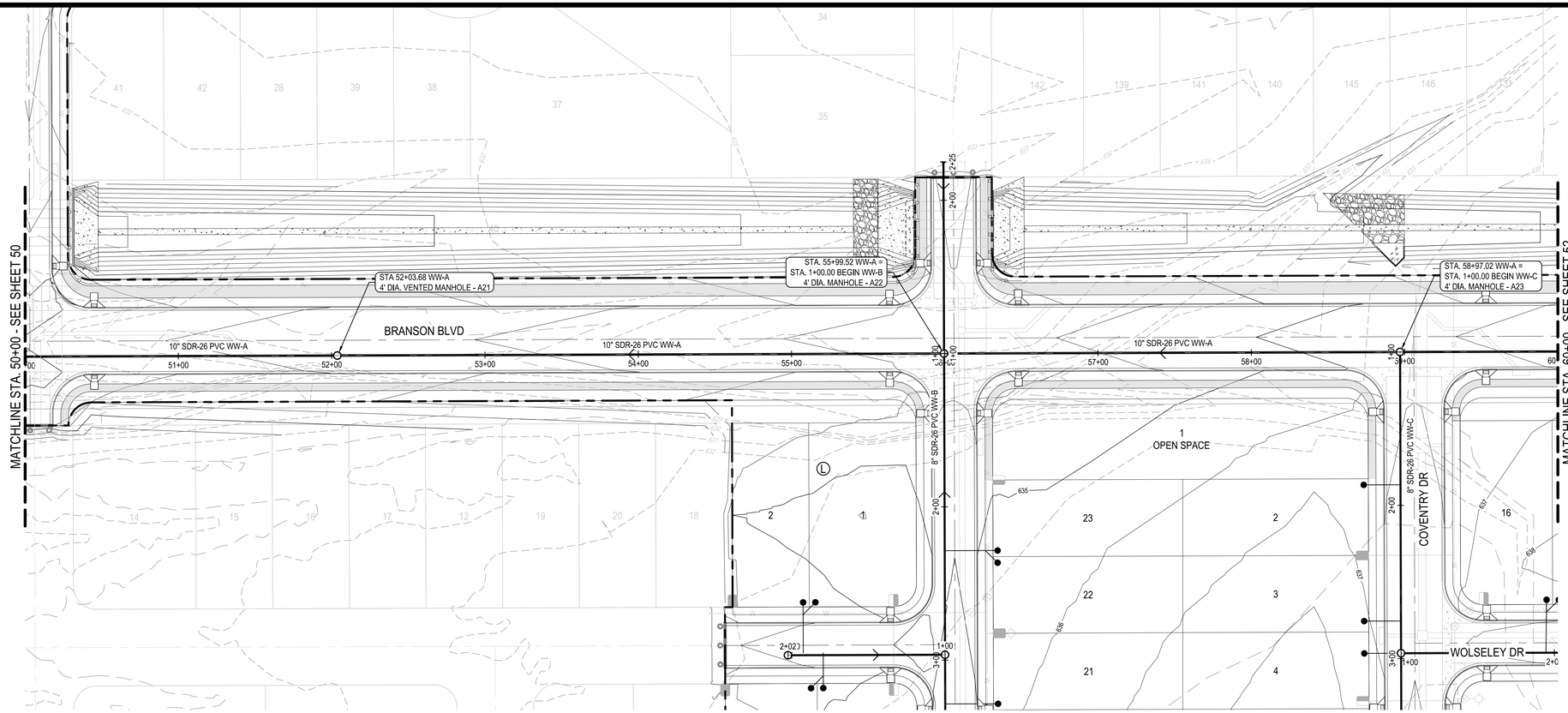

LEGEND

- PROPERTY BOUNDARY
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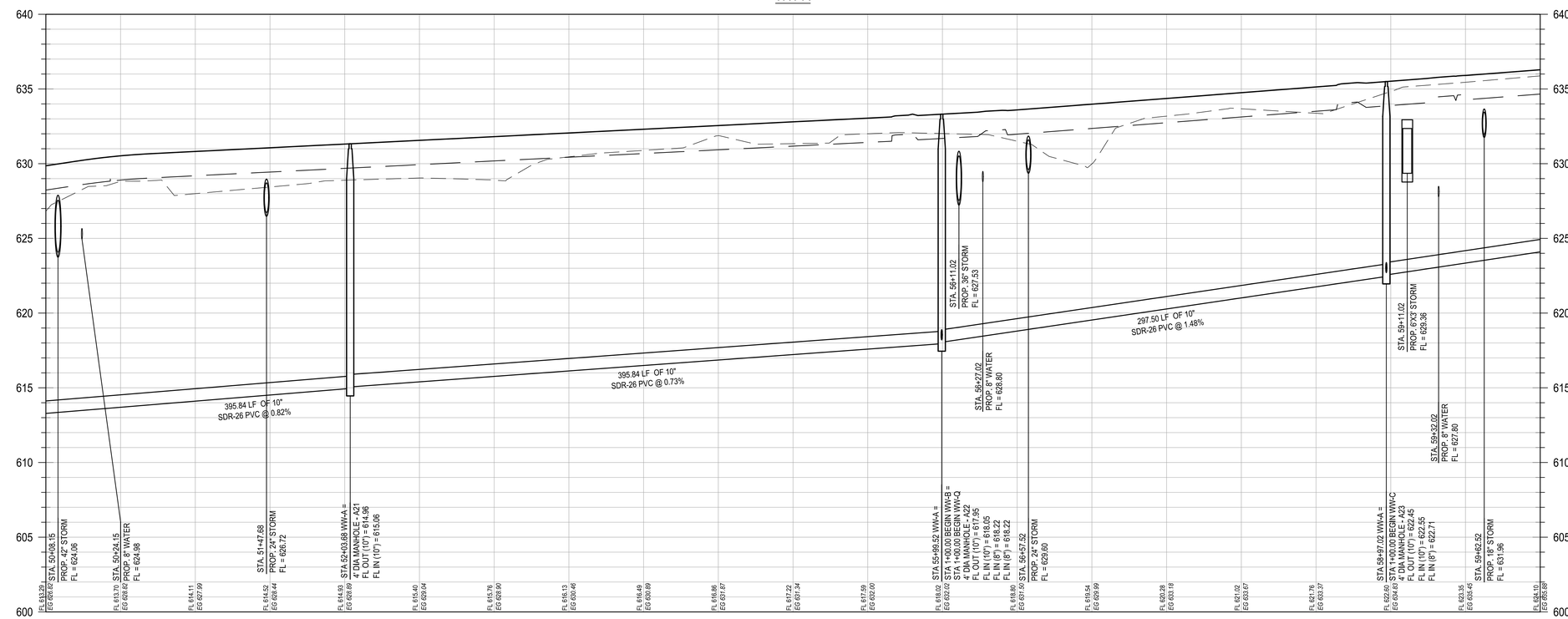
WW-A



PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
							REV
DESIGNED BY:	DAZ						
REVIEWED BY:	TMH						
DRAWN BY:	DAZ						

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-A PLAN AND PROFILE (50+00 TO 60+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
51 OF 91

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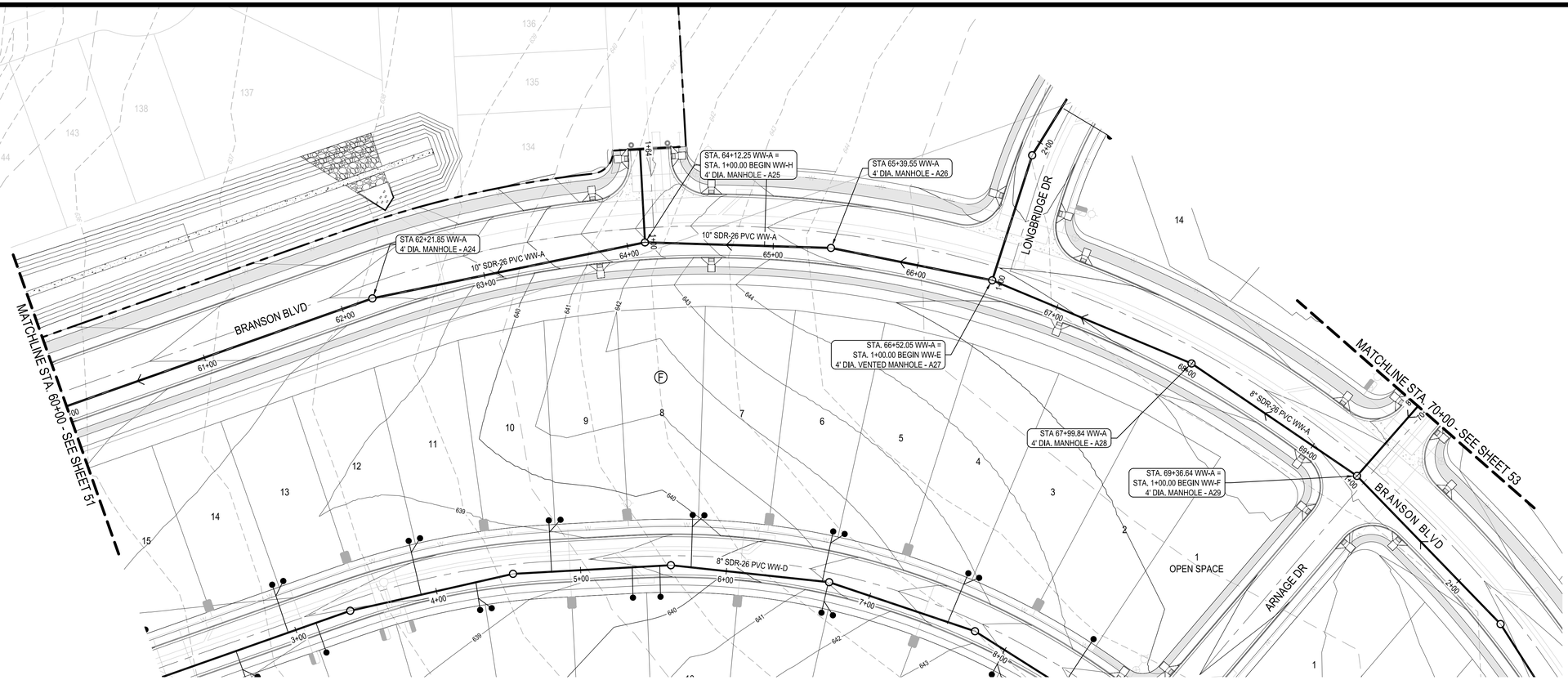

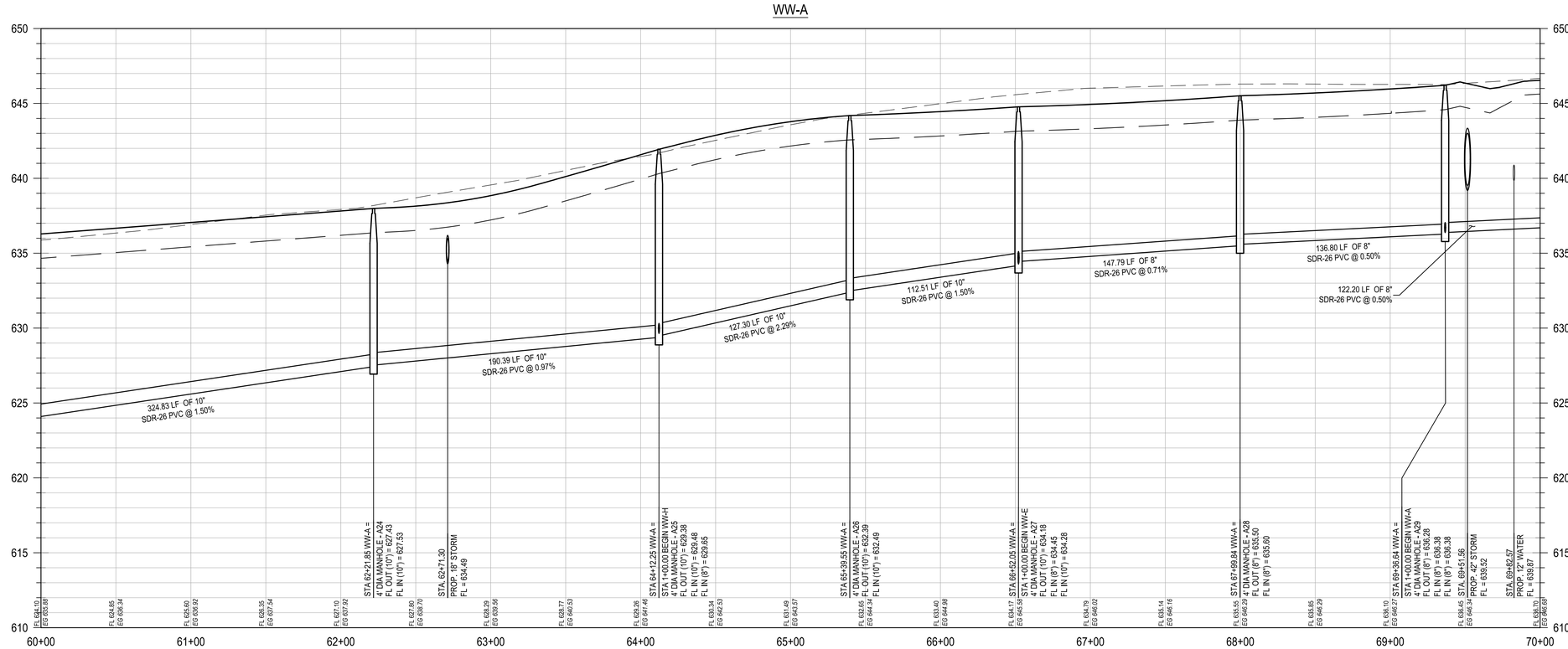

0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

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PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

	APR
	DATE
	DESCRIPTION
	REV
DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngby.com

COTTONWOOD CREEK
HUTTO, TEXAS
WW-A PLAN AND PROFILE
(60+00 TO 70+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
52 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-WW-A-P&P-PH1.dwg Layout: WW-A (60+00 TO 70+00) Plotted: 2/11/2020 2:51:27 PM

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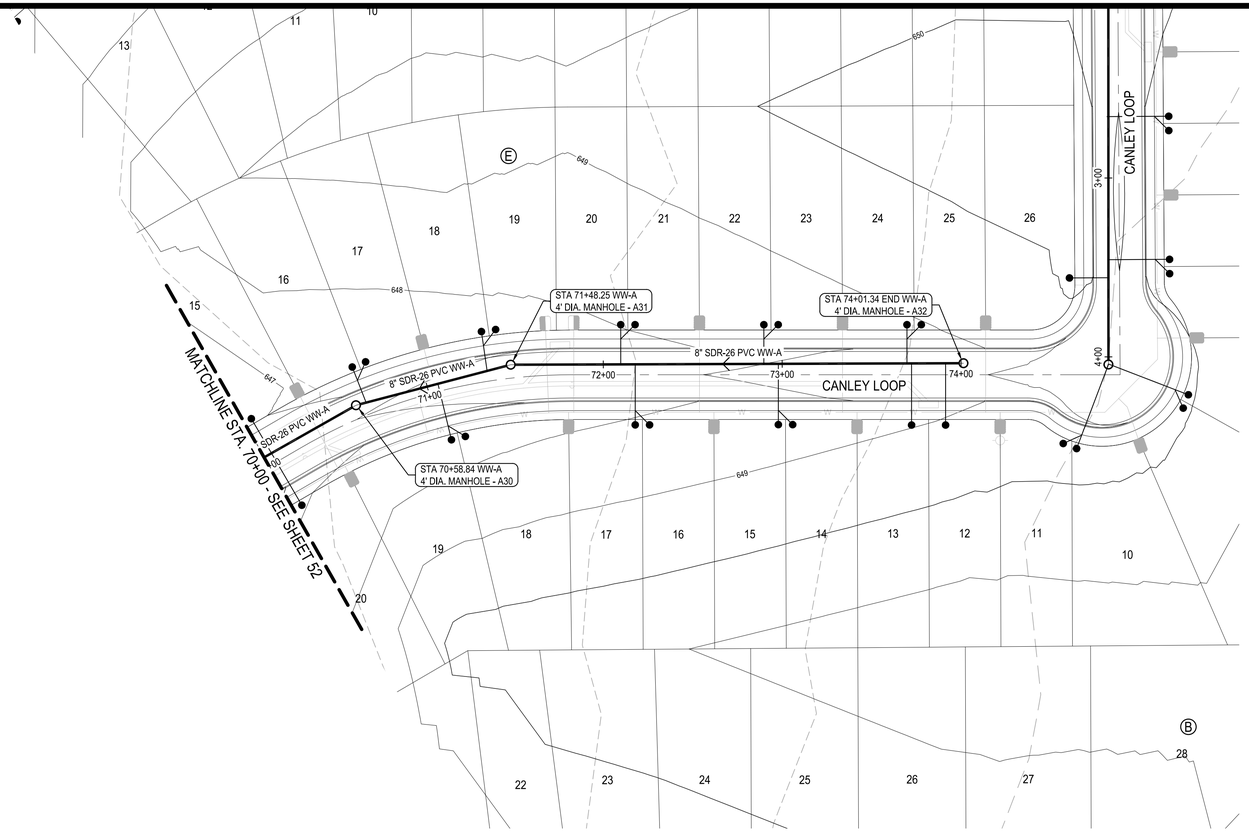

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
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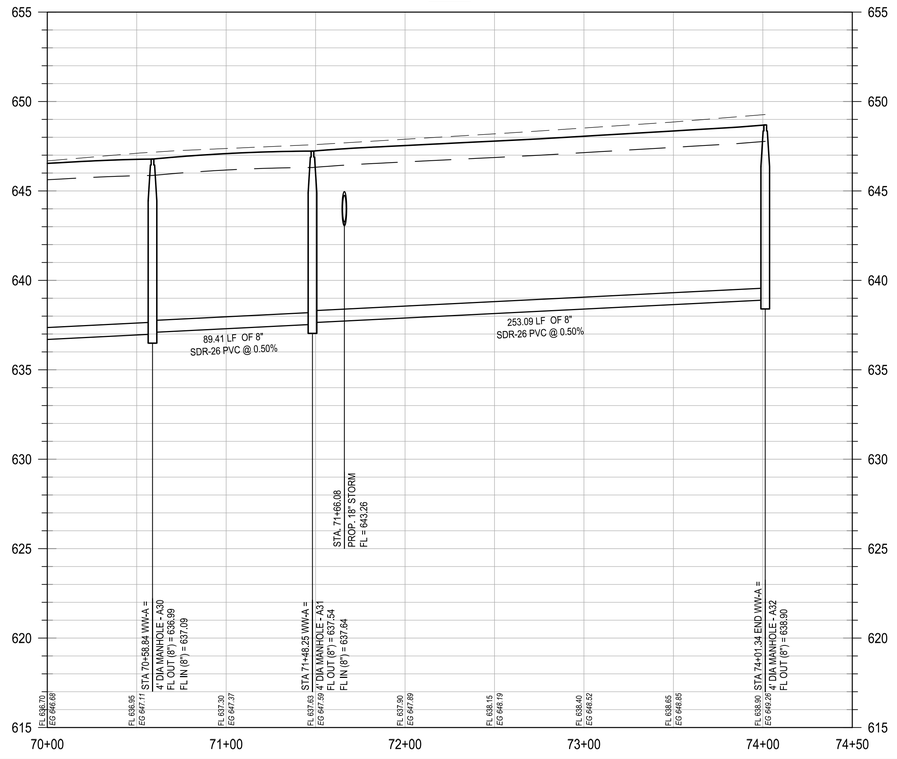
WW-A



PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-A PLAN AND PROFILE
(70+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
53 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-WW-A-P&P-PH1.dwg Layout: WW-A (70+00 TO END) Plotted: 2/11/2020 2:51:59 PM

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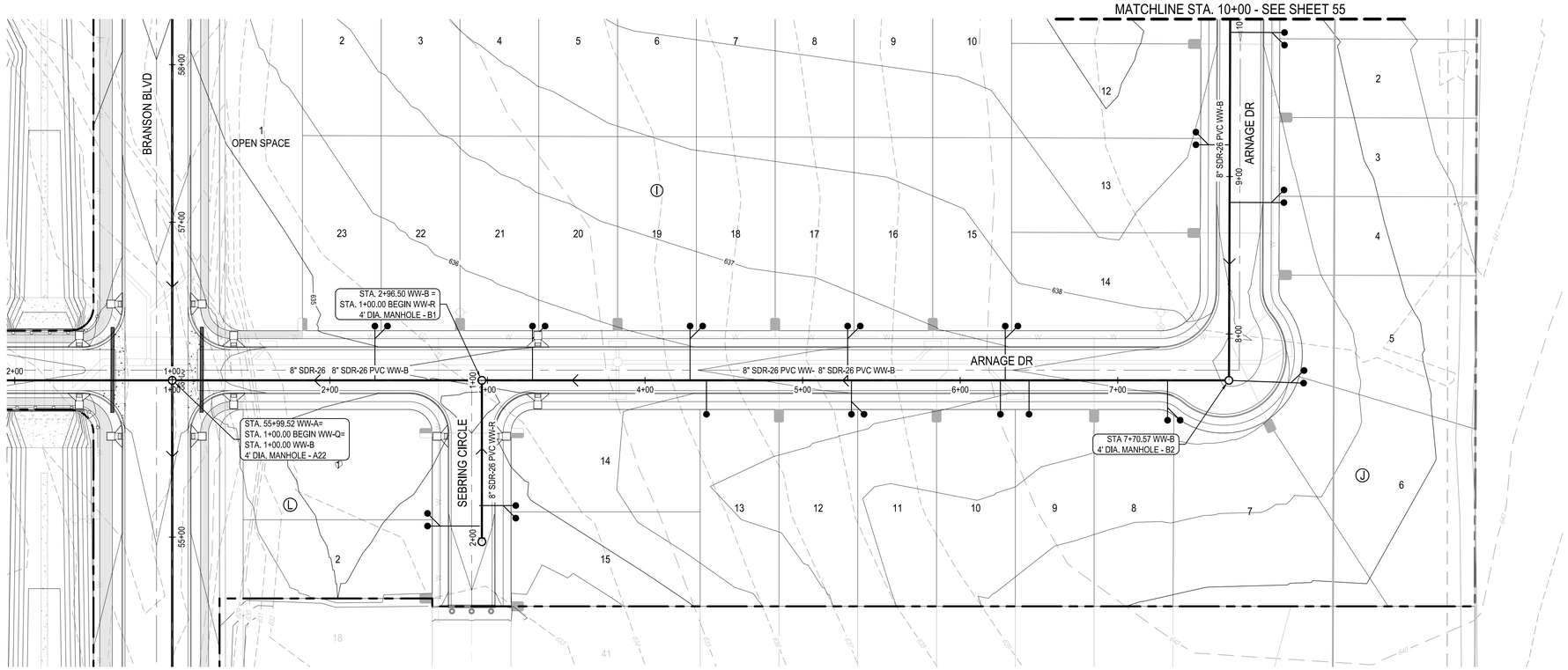

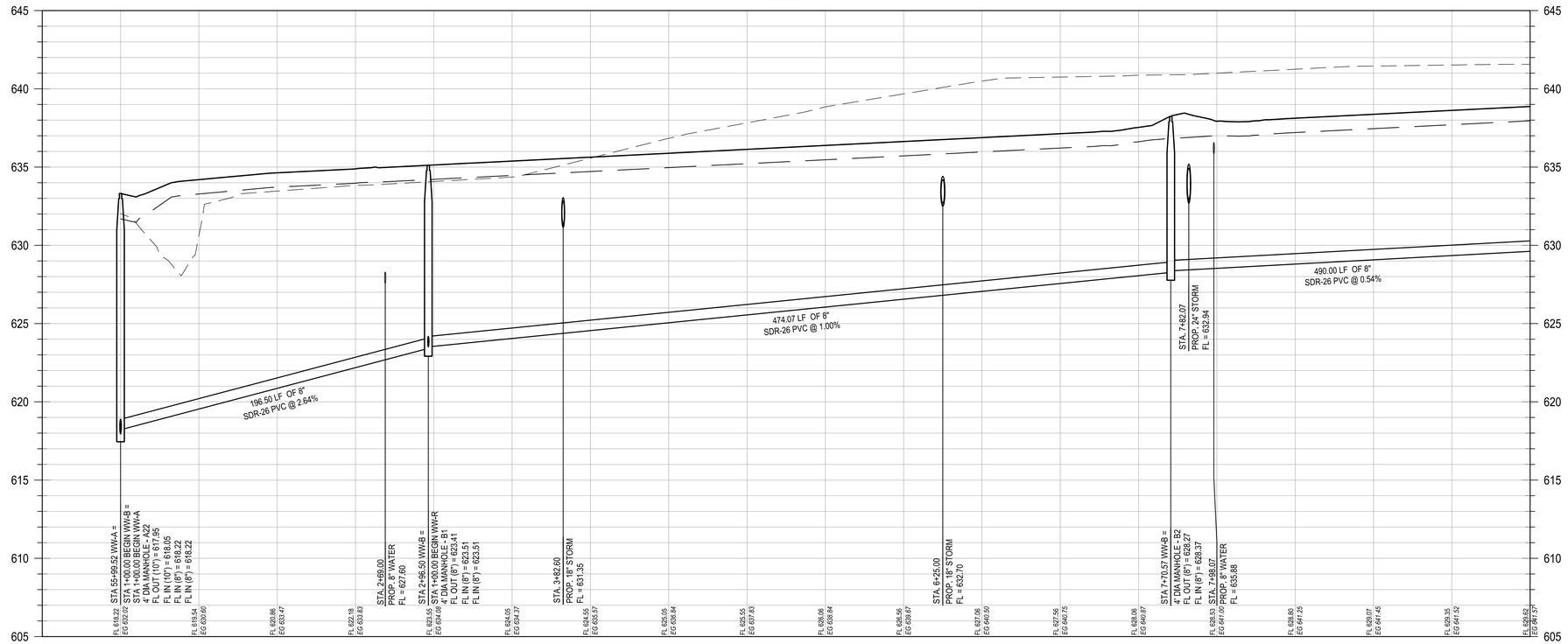

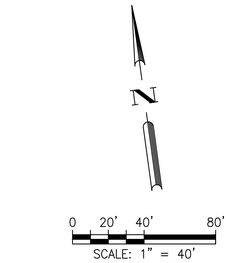

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
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- DOUBLE WASTEWATER SERVICE
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PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngey.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-B PLAN AND PROFILE (1+00 TO 10+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
54 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-P&P-PH1.dwg Layout: WW-B (1+00 TO 10+00) Plotted: 2/11/2020 2:54:21 PM

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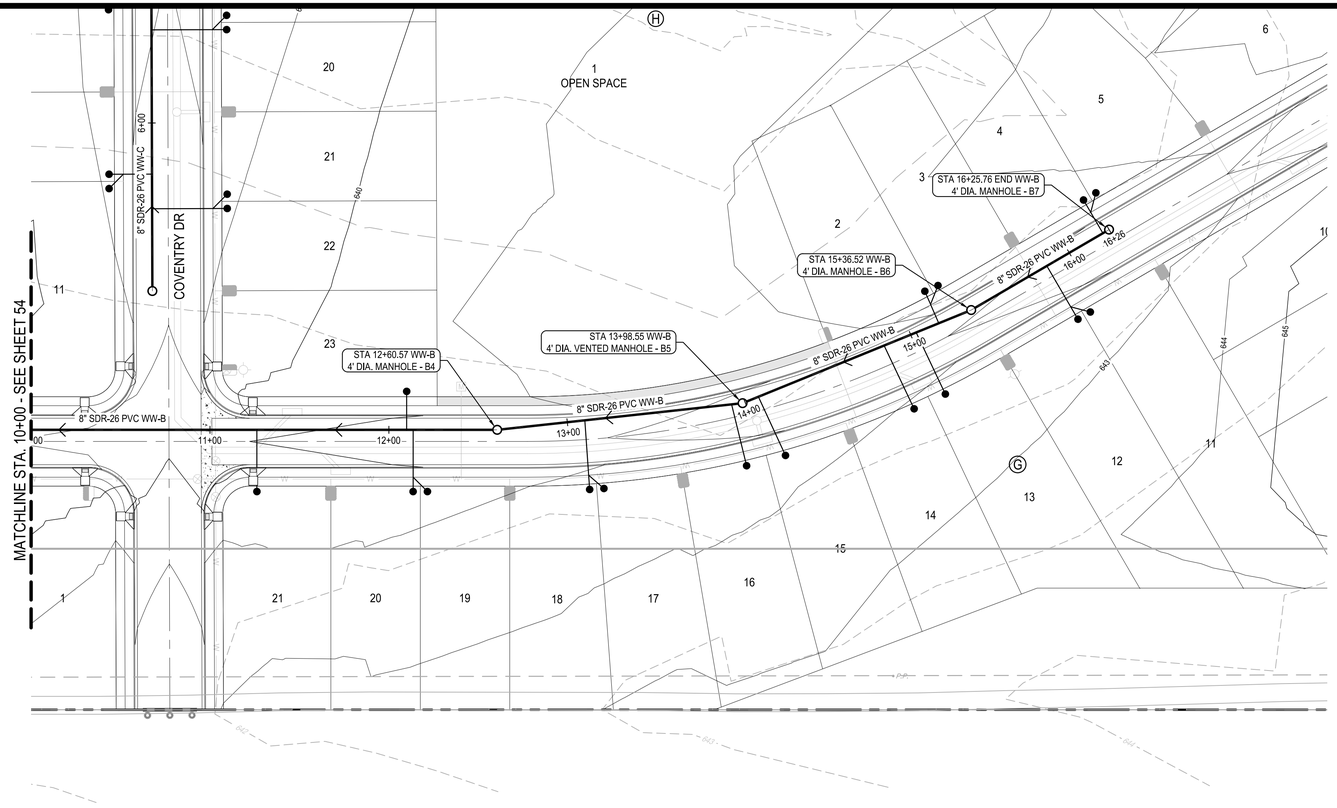

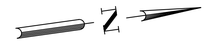

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
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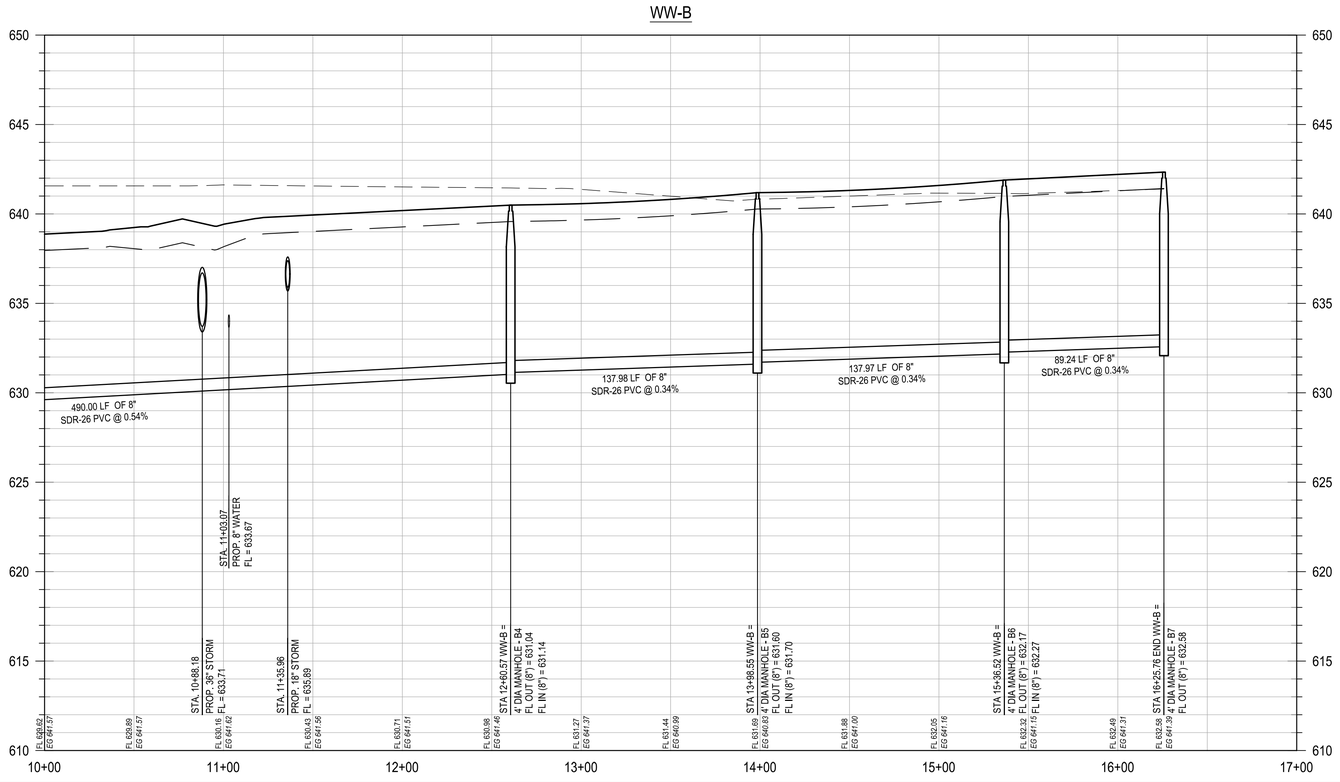

PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-B PLAN AND PROFILE (10+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
55 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-PAP-PH1.dwg Layout: WW-B (10+00 TO END) Plotted: 2/11/2020 2:54:48 PM

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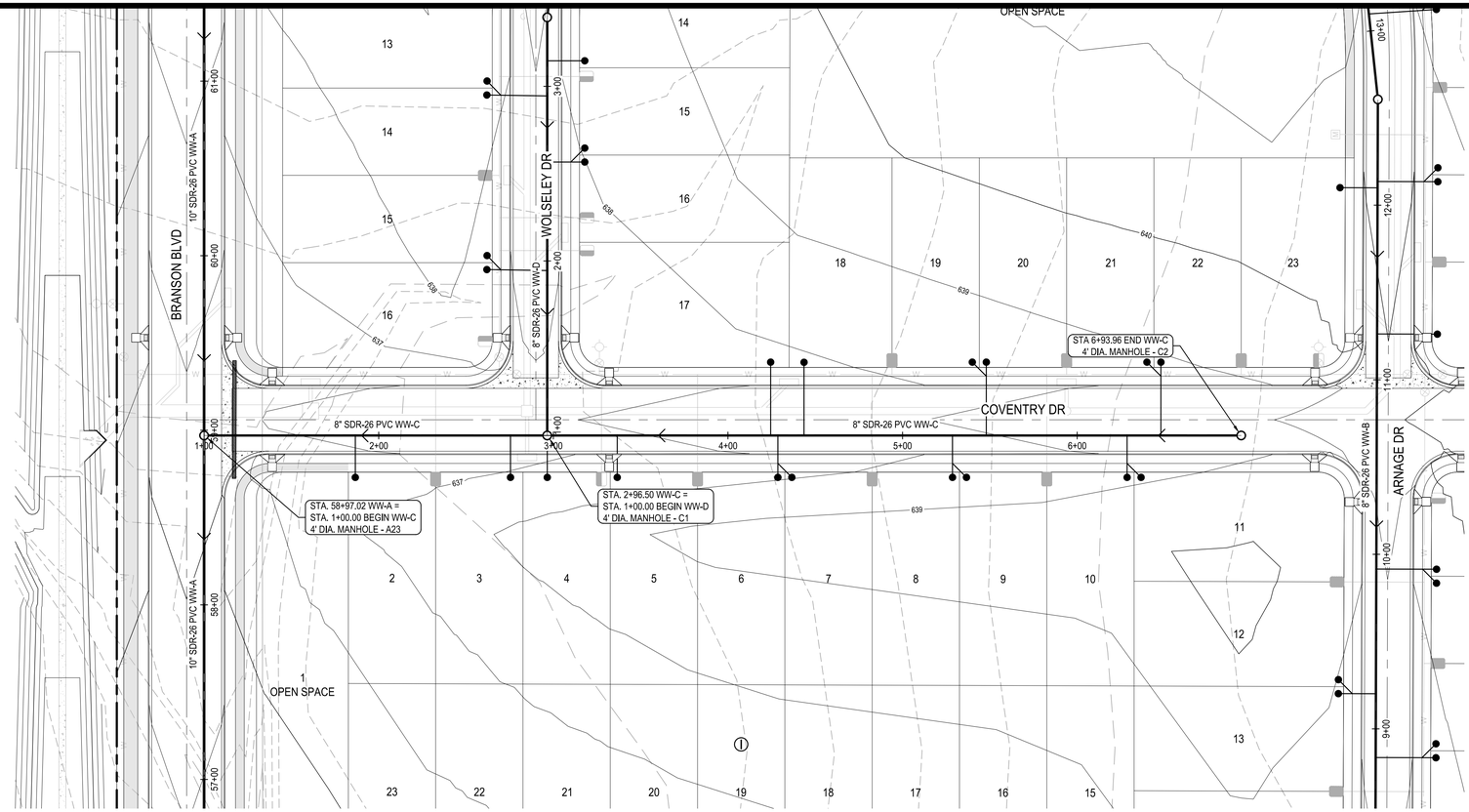

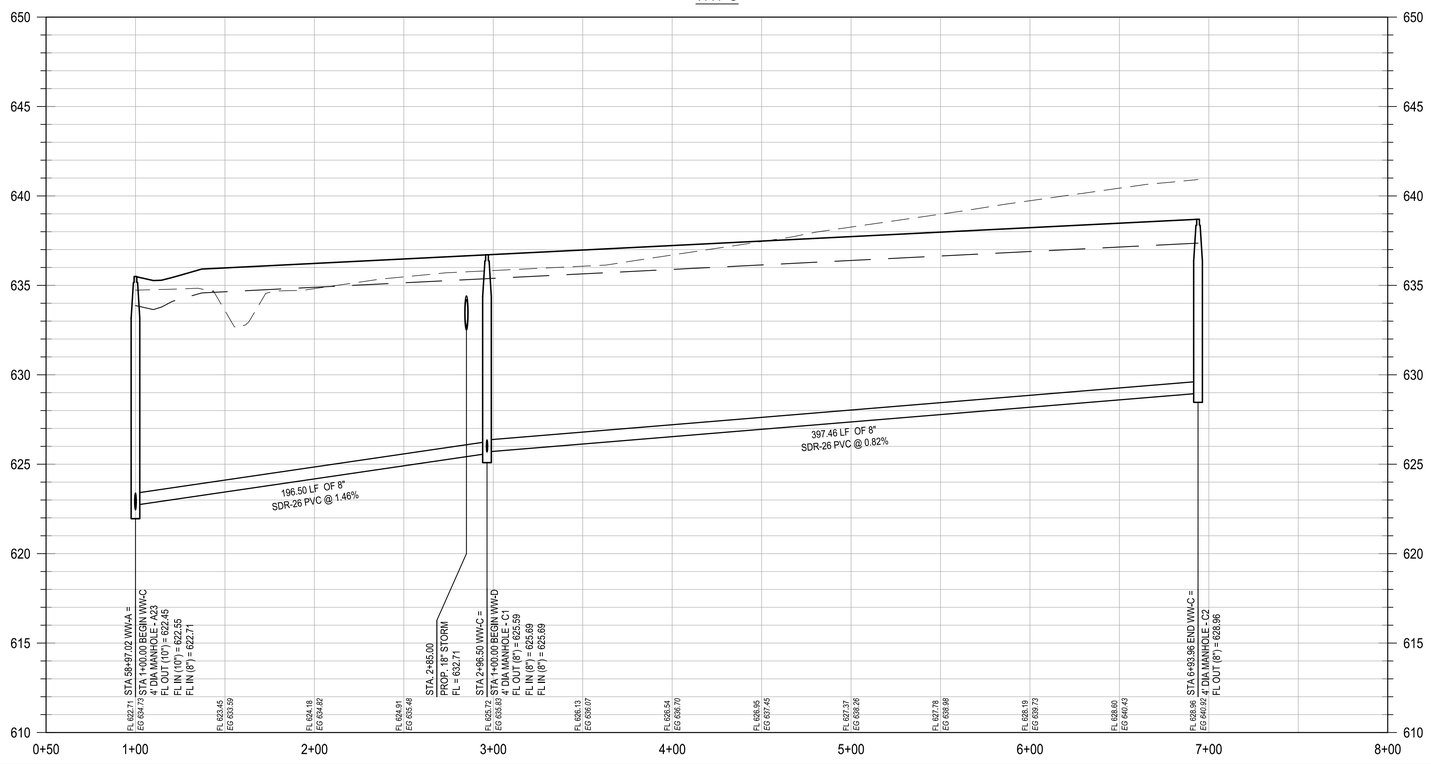

N

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
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- WASTEWATER LINE
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PROFILE LEGEND

- FINISHED GRADE
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							APR
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DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngey.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-C PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
56 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-P&P-PH1.dwg Layout: WW-C Plotted: 2/11/2020 2:55:23 PM

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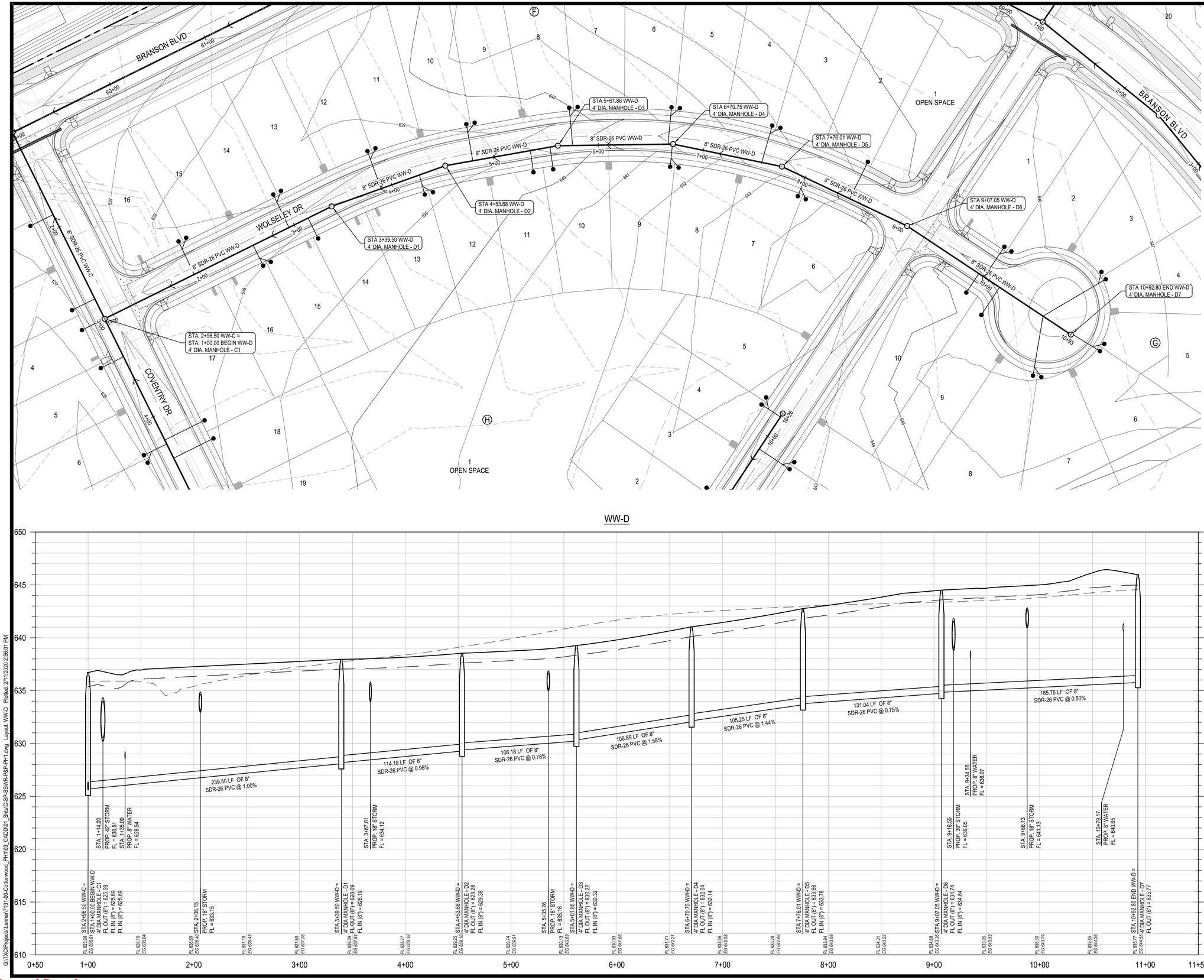

0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

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- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

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WW-D

PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
							REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-D PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
57 OF 91

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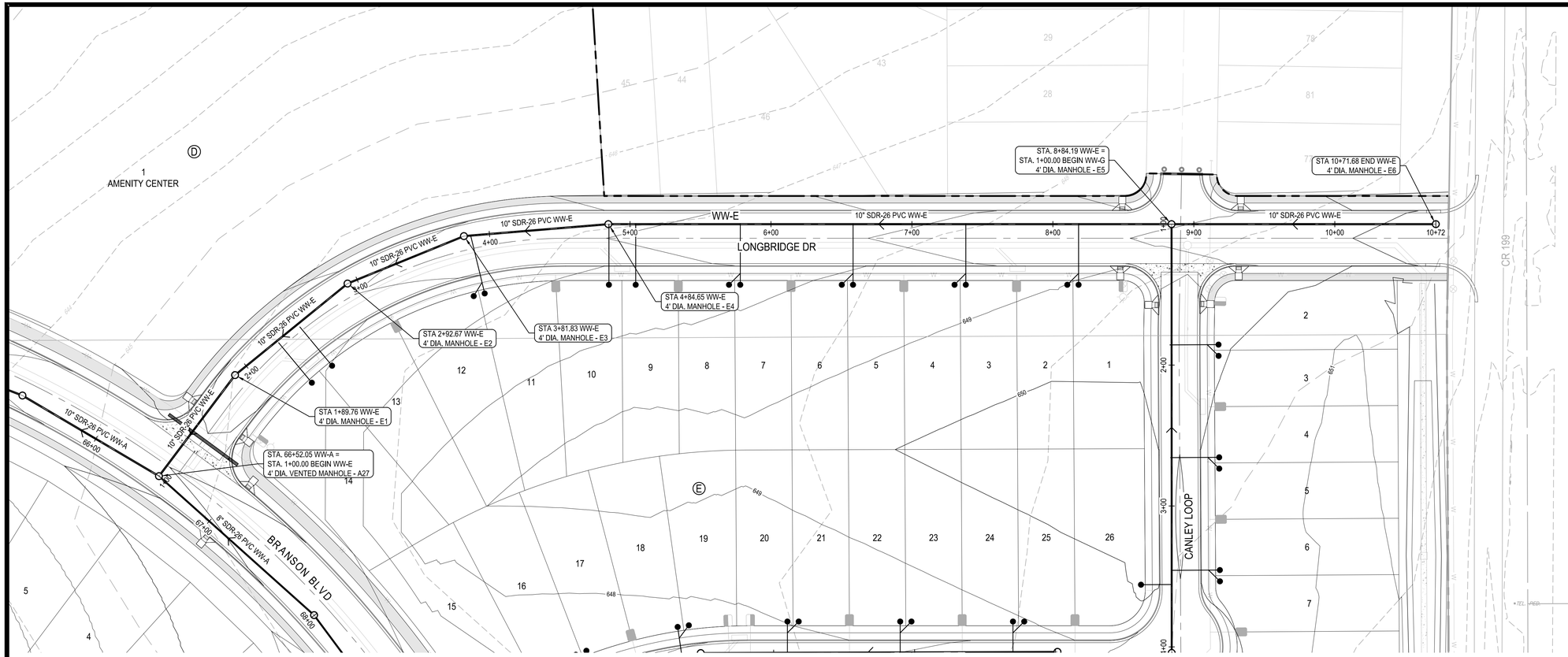

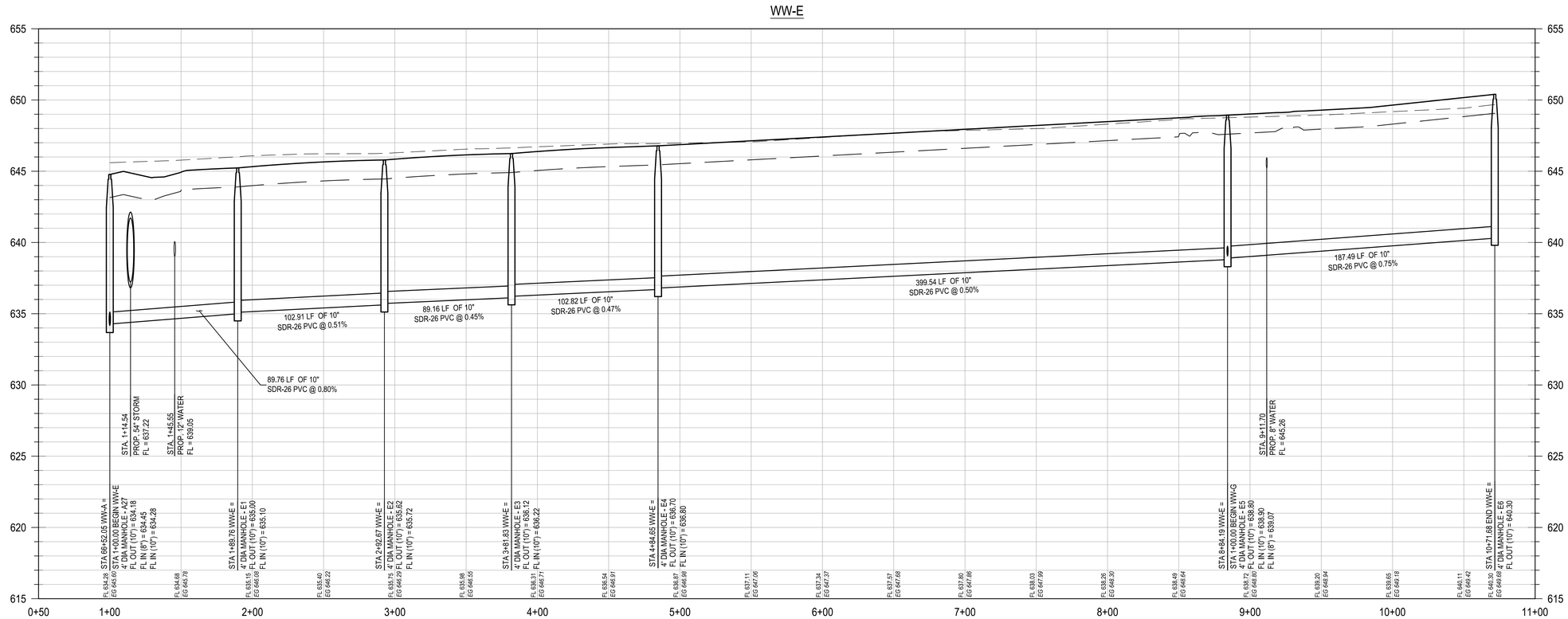

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

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PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownandgay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-E PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
58 OF 91

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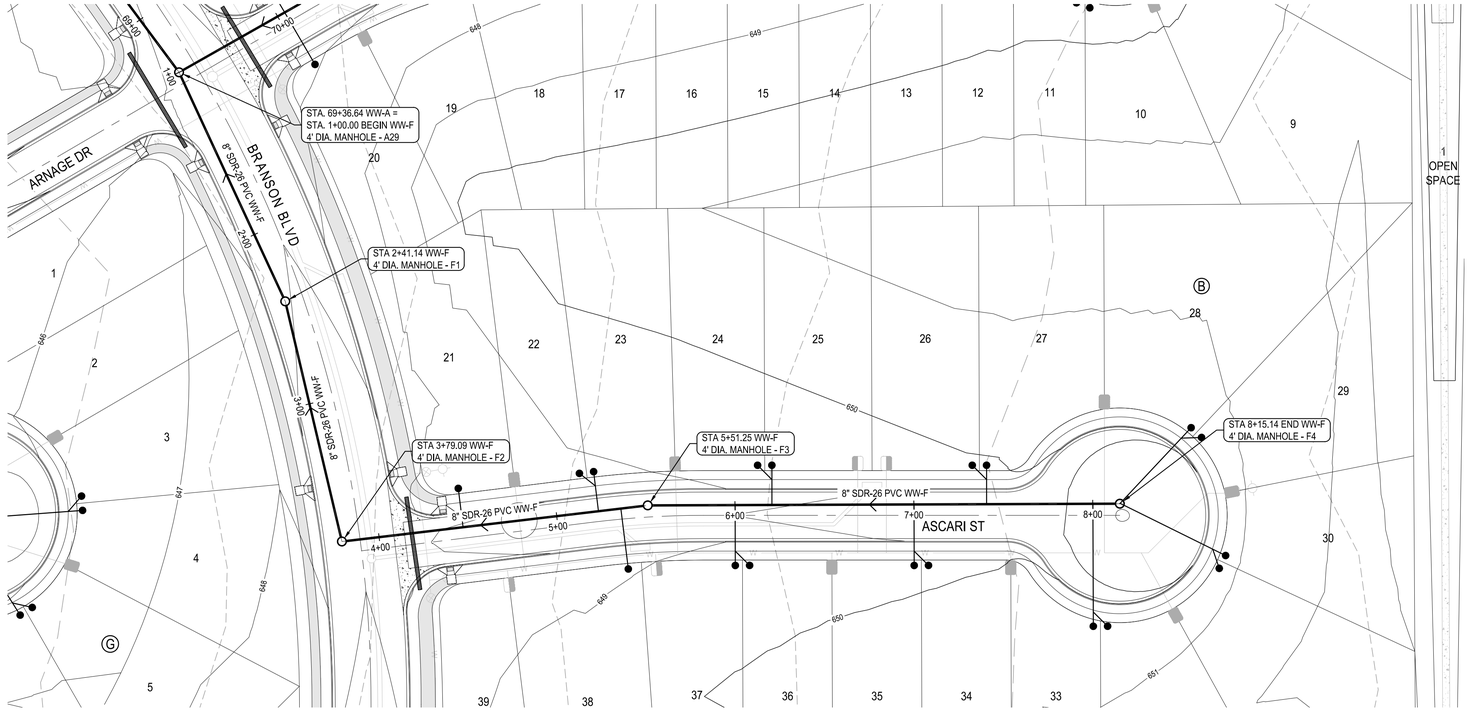



0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
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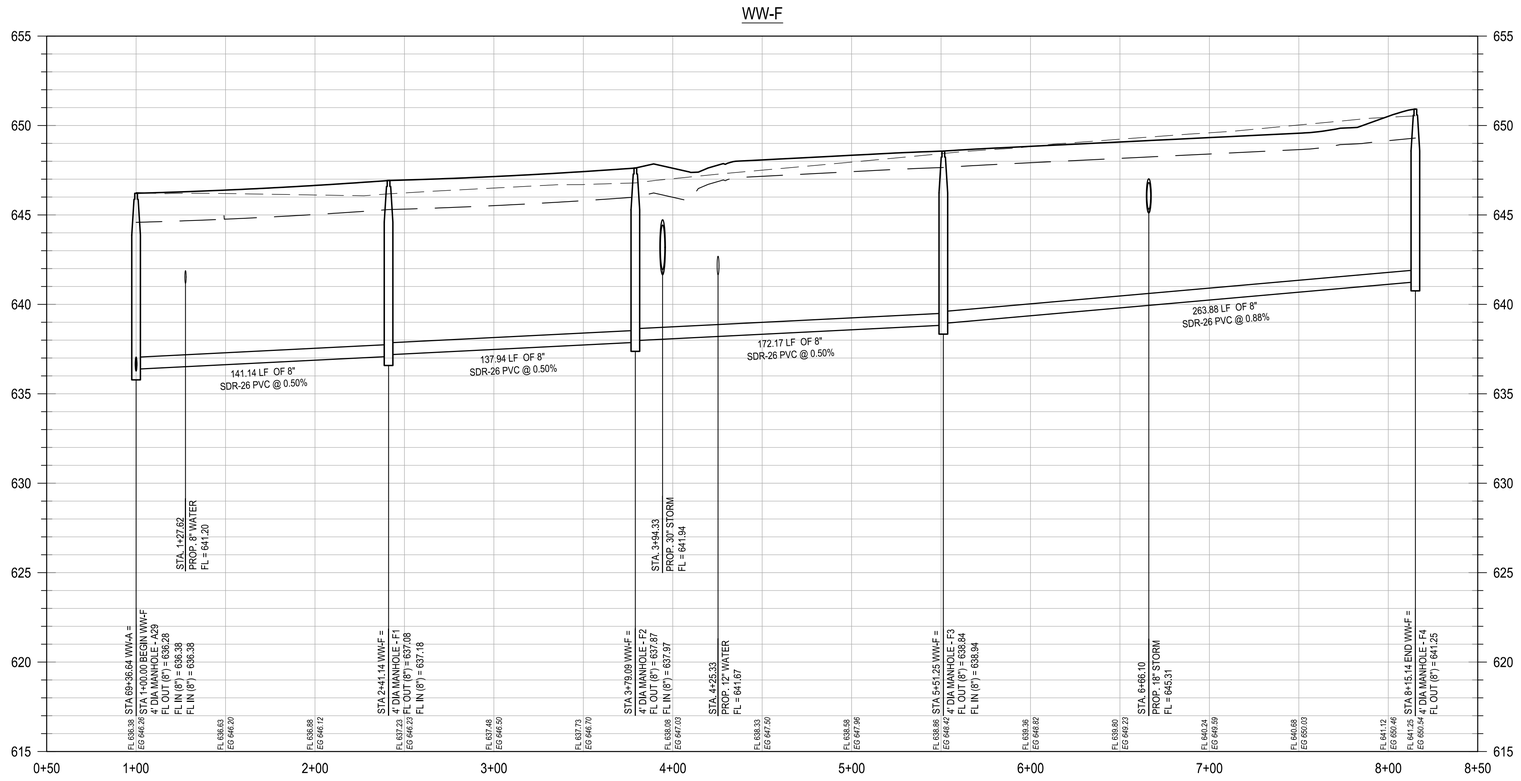

PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							DESCRIPTION	REV
								APR
								DATE

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownge.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-F PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020



SHEET 59 OF 91

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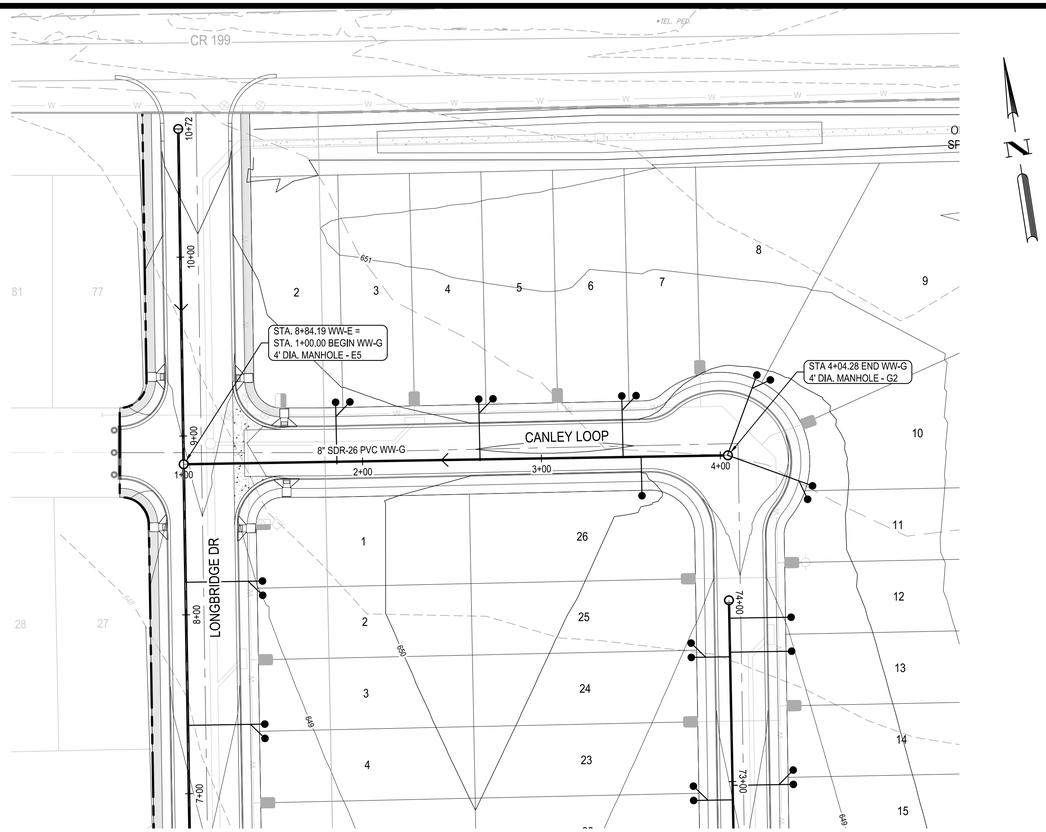

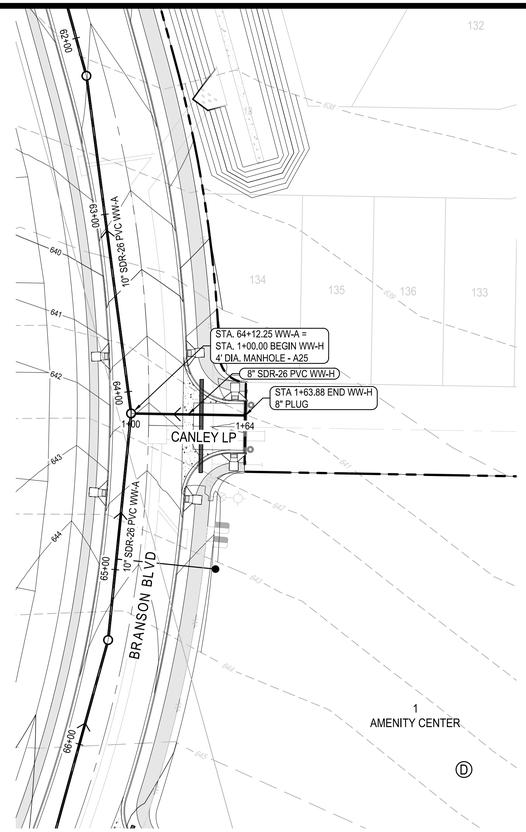

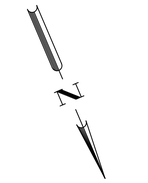

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
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- DOUBLE WASTEWATER SERVICE
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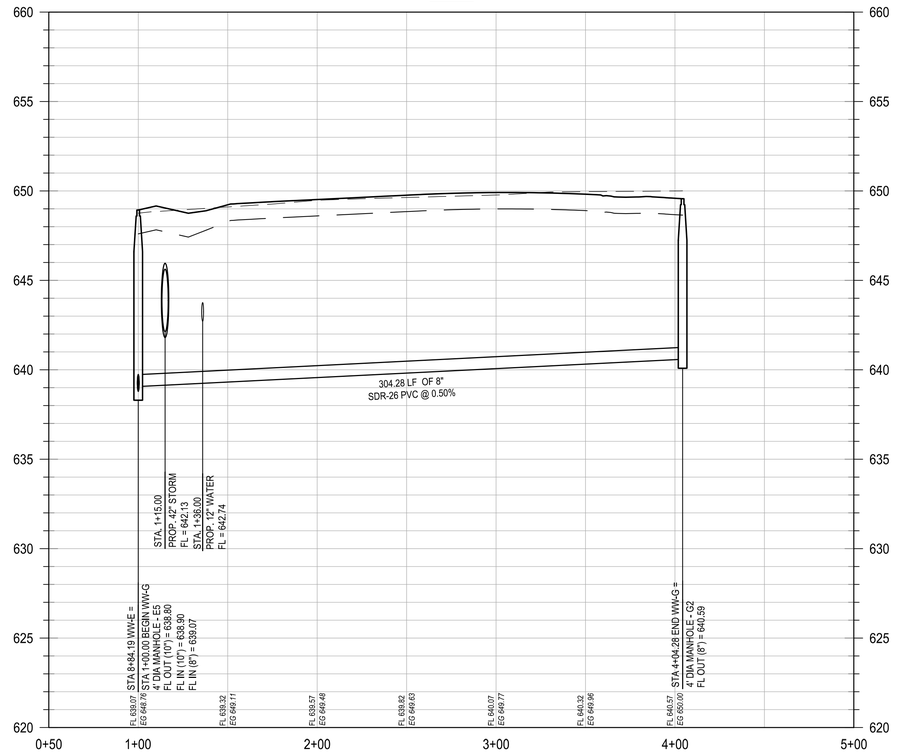
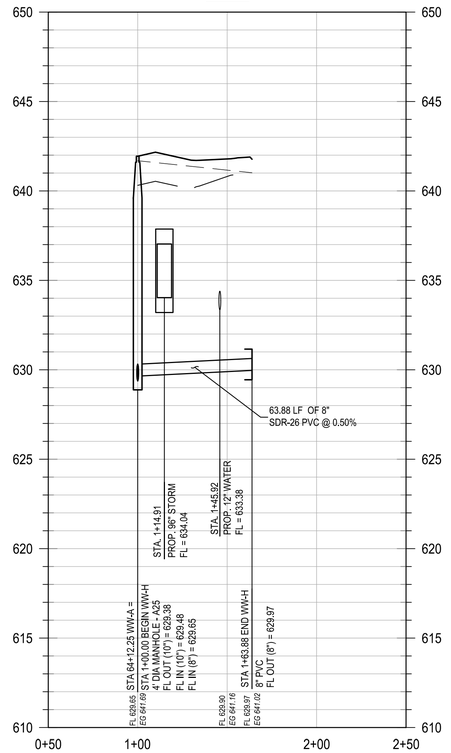
PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

WW-G



WW-H



							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownbgy.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-G & WW-H PLAN AND PROFILE
(1+00 TO END)

SUBMITTAL DATE: 01-16-2020



SHEET
60 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_Sht s\C-SP-SSWR-P&P-PH1.dwg Layout: WW-G & WW-H Plotted: 2/11/2020 2:58:01 PM

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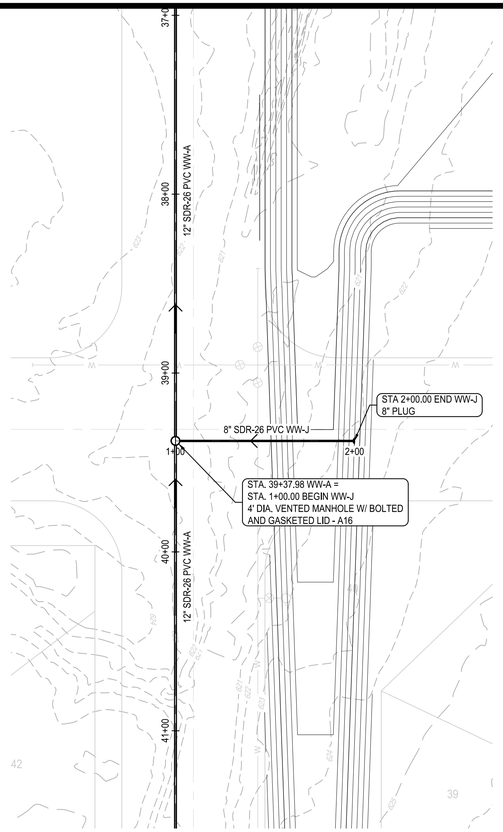

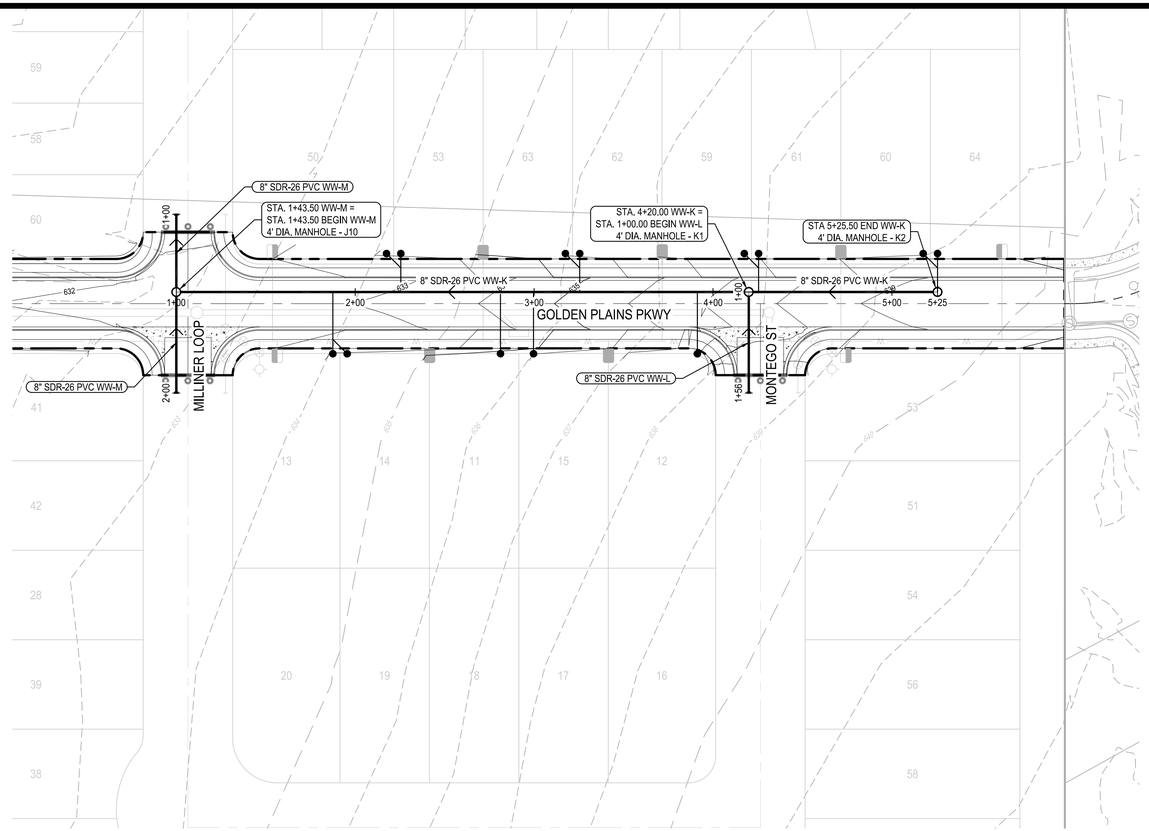

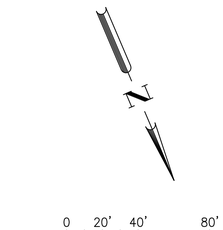

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
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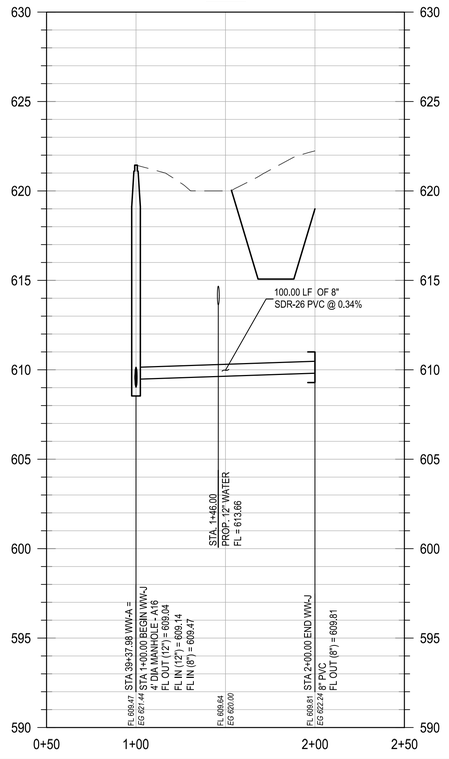
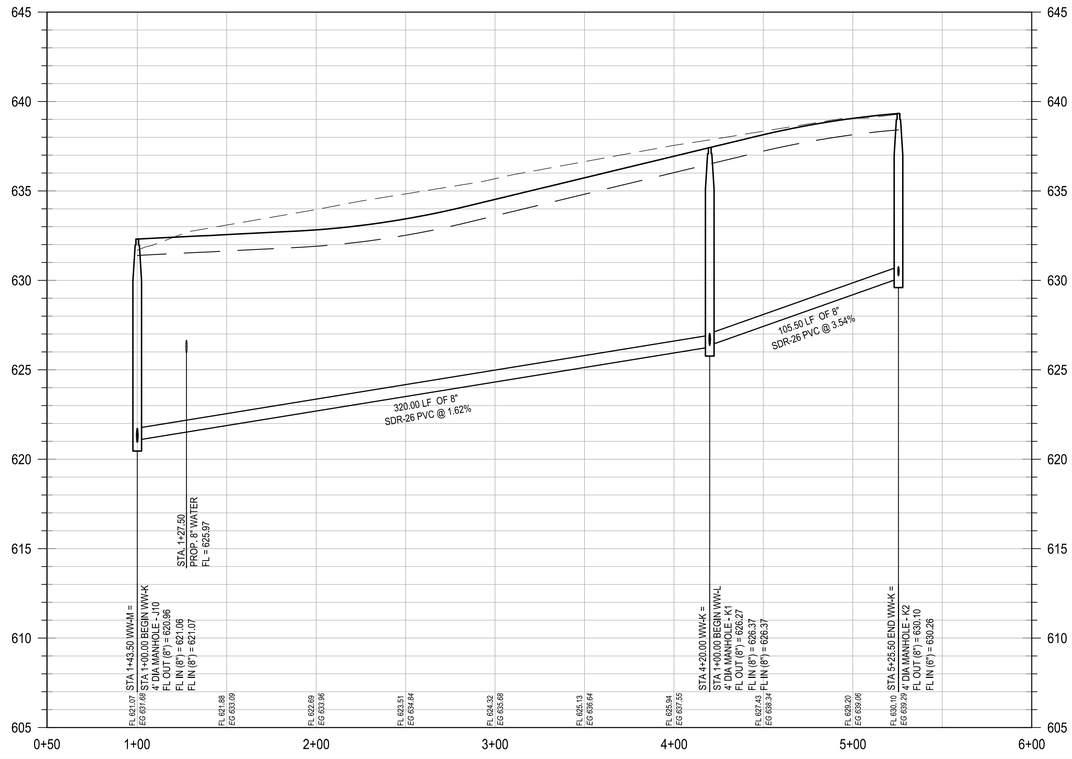
WW-J



WW-K



PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

	APR	DATE	DESCRIPTION	REV

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK HUTTO, TEXAS

WW-J & WW-K PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020



SHEET
61 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Sht s\C-SP-SSWR-P&P-PH1.dwg Layout: WW-J & WW-K Plotted: 2/11/2020 2:58:45 PM

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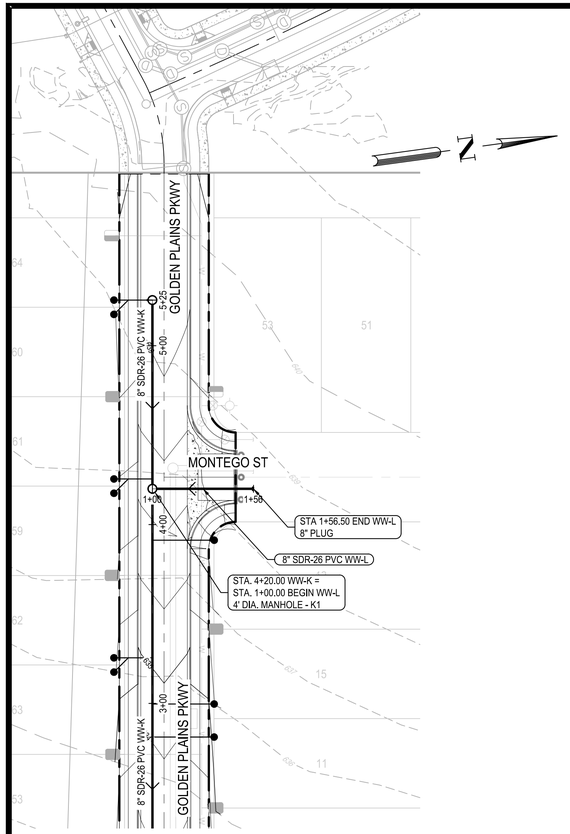

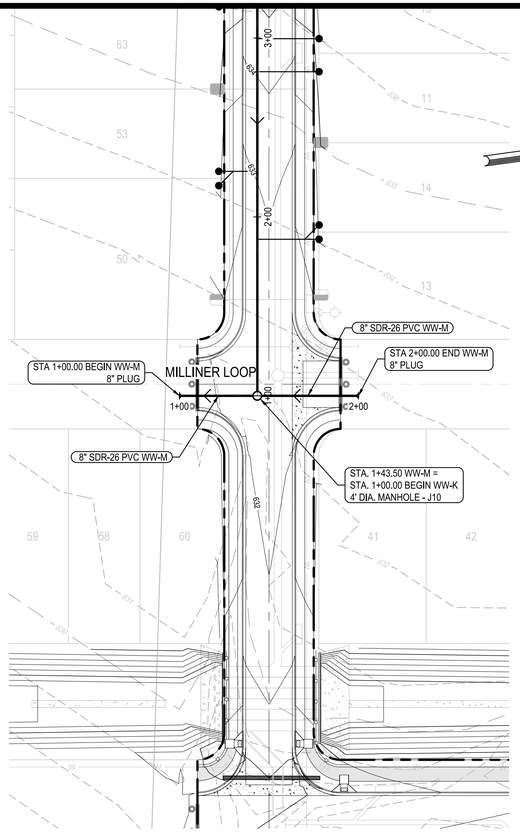

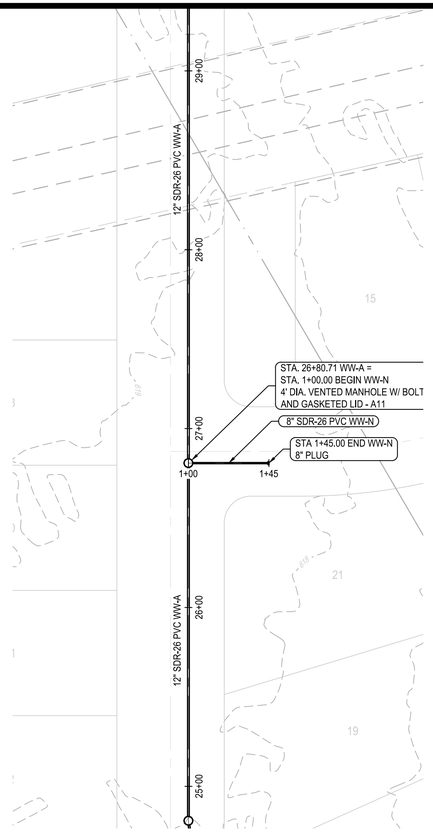

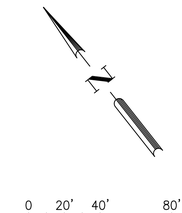

LEGEND

- PROPERTY BOUNDARY
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- EXISTING MAJOR CONTOUR
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- PROPOSED MAJOR CONTOUR
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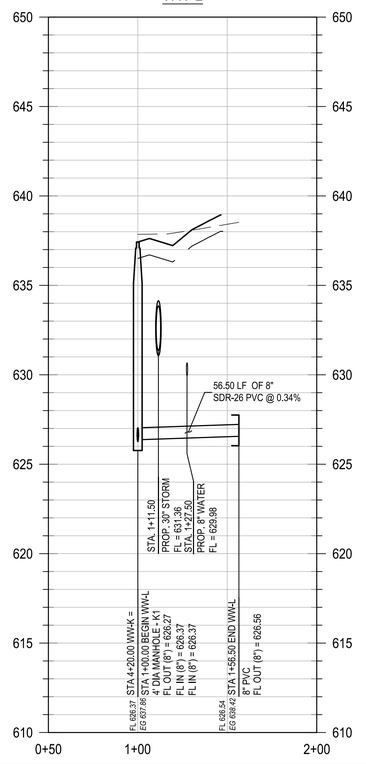
WW-L



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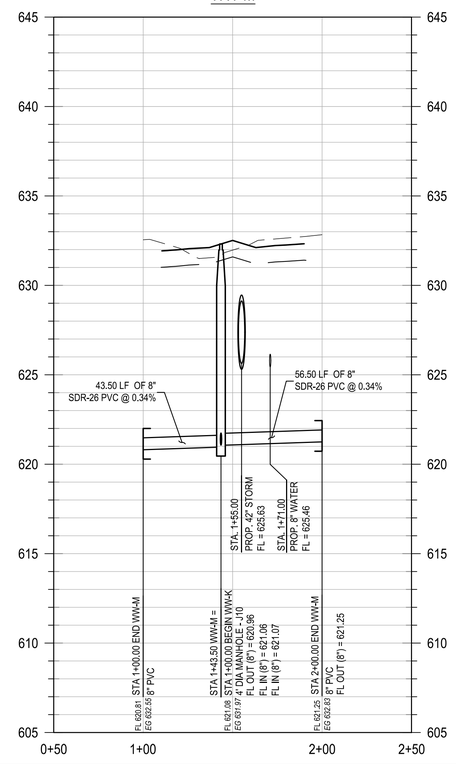
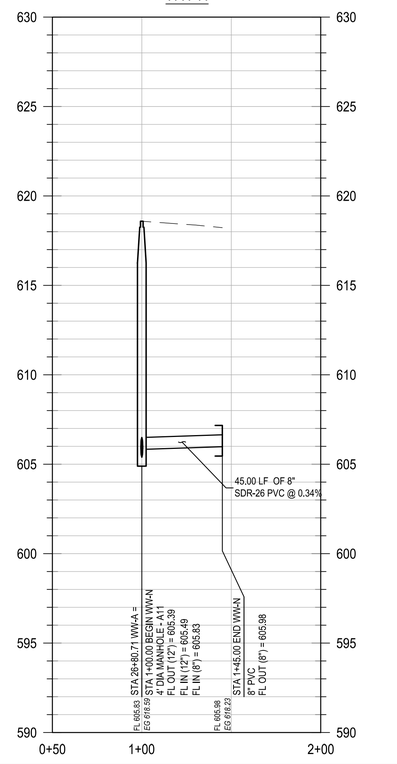


WW-N



PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

							APR
							DATE
							DESCRIPTION
							REV
DESIGNED BY:	DAZ						
REVIEWED BY:	TMH						
DRAWN BY:	DAZ						

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-L & WW-M & WW-N PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
62 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-P&P-PH1.dwg Layout: WW-L & WW-M & WW-N Plotted: 2/11/2020 2:59:46 PM

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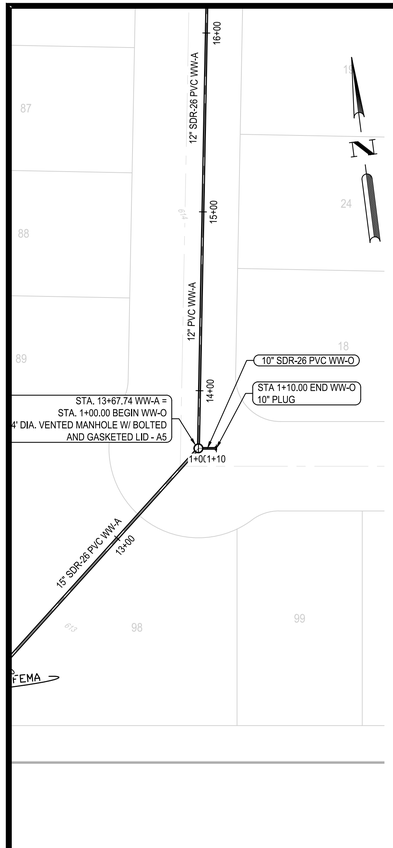
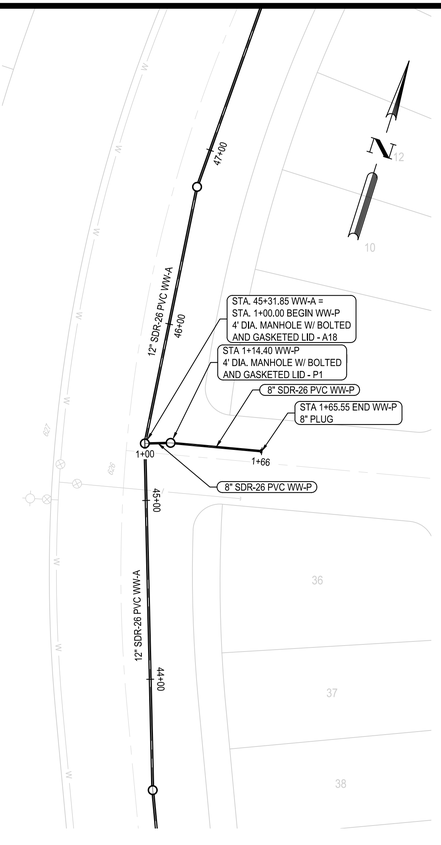
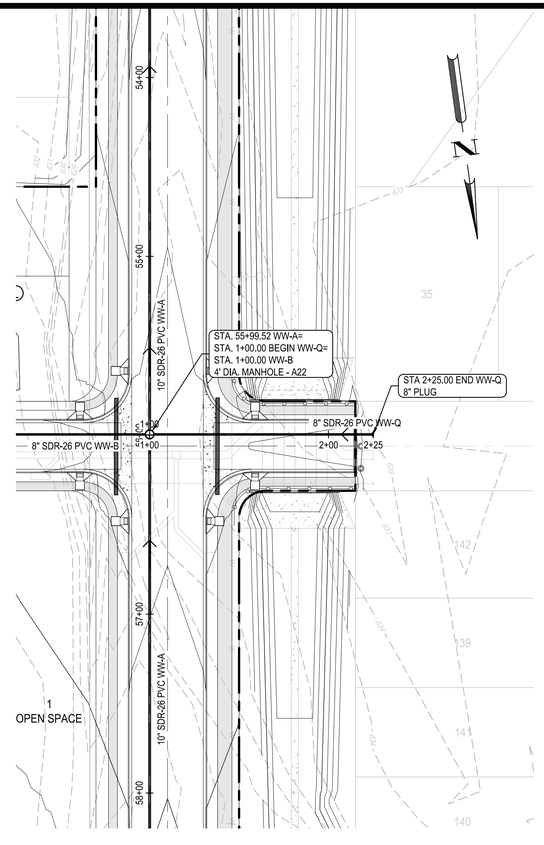
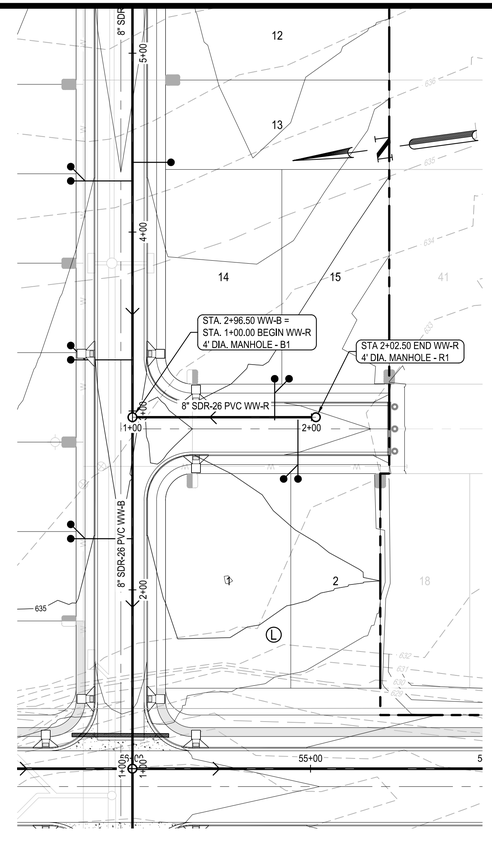








0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.

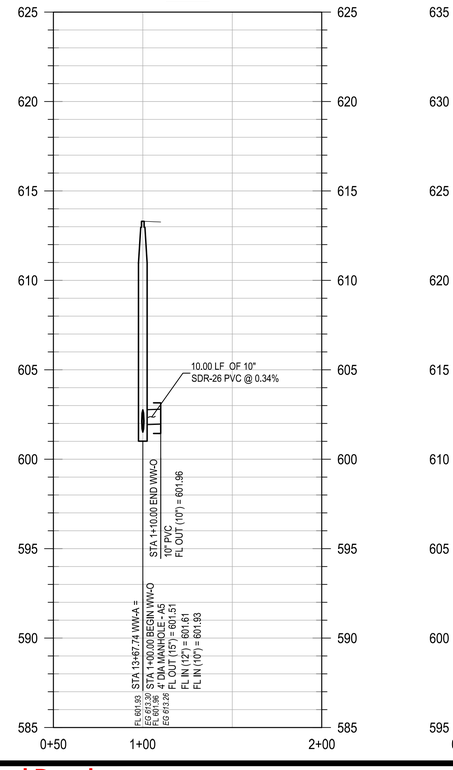
NOTE:

1. ALL MANHOLES SHALL BE COATED WITH RAVEN 405, OR APPROVED EQUAL, WITH A UNIFORM THICKNESS OF 124 MILS AND A MINIMUM THICKNESS OF 100 MILS, APPLIED AFTER MANHOLES HAVE PASSED THE VACUUM TEST (CITY STANDARD WW-03).
2. TOPS OF MANHOLES UNDER PAVEMENT SHALL BE ADJUSTED TO MATCH FINISH GRADES PRIOR TO ACCEPTANCE OF WORK.
3. CORE EXISTING MANHOLE, INSERT GASKET AND PROVIDE PRECO GROUT SEAL INSIDE AND OUR, OR APPROVED EQUAL.
4. ALL WASTEWATER LINES SHALL BE PVC SDR-26 CONFORMING TO ASTM D3034 WITH MINIMUM PIPE STIFFNESS OF 115 PSI AS DETERMINED BY ASTM D2412.
5. AT ALL WATERLINE CROSSINGS, WASTEWATER MAIN SHALL BE ASTM 2241, SDR-26CLASS 160 OR BETTER PVC FOR MINIMUM 20 FEET CENTERED ON THE WATERLINE.
6. CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, CONTRACTOR MUST IMMEDIATELY NOTIFY PROJECT ENGINEER FOR FURTHER DIRECTION.
7. ALL GRAVITY LINES ARE TO BE INSTALLED FROM DOWNSTREAM TO UPSTREAM.
8. TRACER TAPE SHALL BE PLACED ABOVE ALL PLASTIC PIPES.
9. WHERE WATER LINE CROSSES UNDER WASTEWATER LINES, THE WATER LINE SHALL BE ENCASED IN AN 18 FOOT MINIMUM LENGTH STEEL ENCASEMENT PIPE CENTERED ON THE WATER LINE AND SHALL BE AT LEAST TWO NOMINAL PIPE DIAMETERS LARGER THAN THE WATER LINE PER TAC PART 1, CHAPTER 290, SUBCHAPTER D, RULE 290.44 AND THE CITY OF HUTTO DETAIL W-14.

PROFILE LEGEND

- FINISHED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

WW-O



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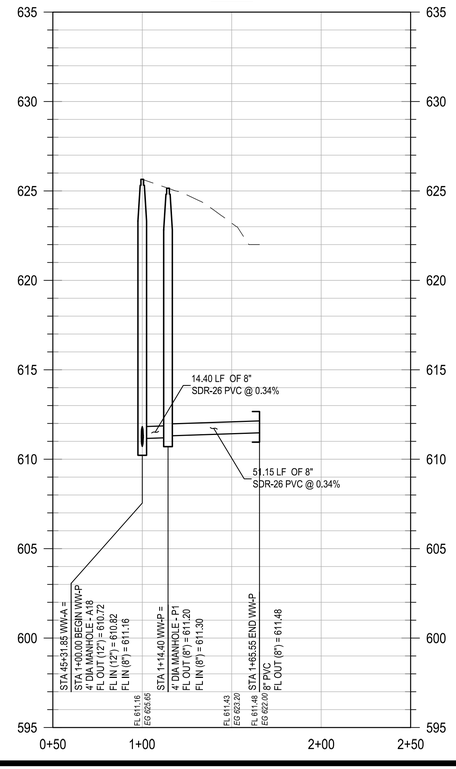

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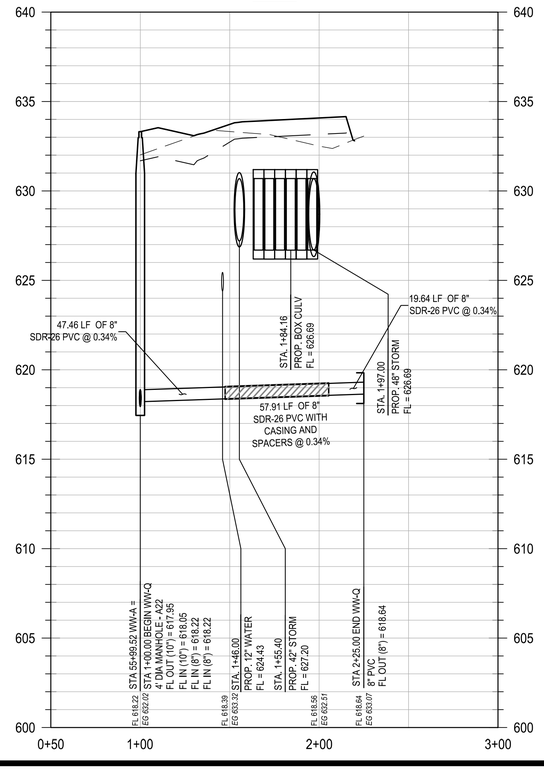
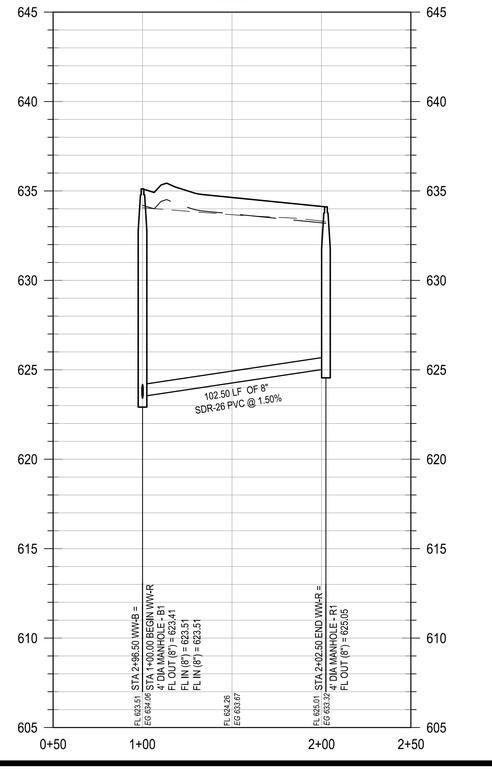


WW-R



	DESCRIPTION	DATE	APR
REV			

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngby.com

COTTONWOOD CREEK
HUTTO, TEXAS

WW-O & WW-P & WW-Q PLAN AND PROFILE (1+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
63 OF 91

G:\TXCD\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SSWR-P&P-PH1.dwg Layout: WW-O & WW-P & WW-O Plotted: 2/11/2020 3:00:50 PM

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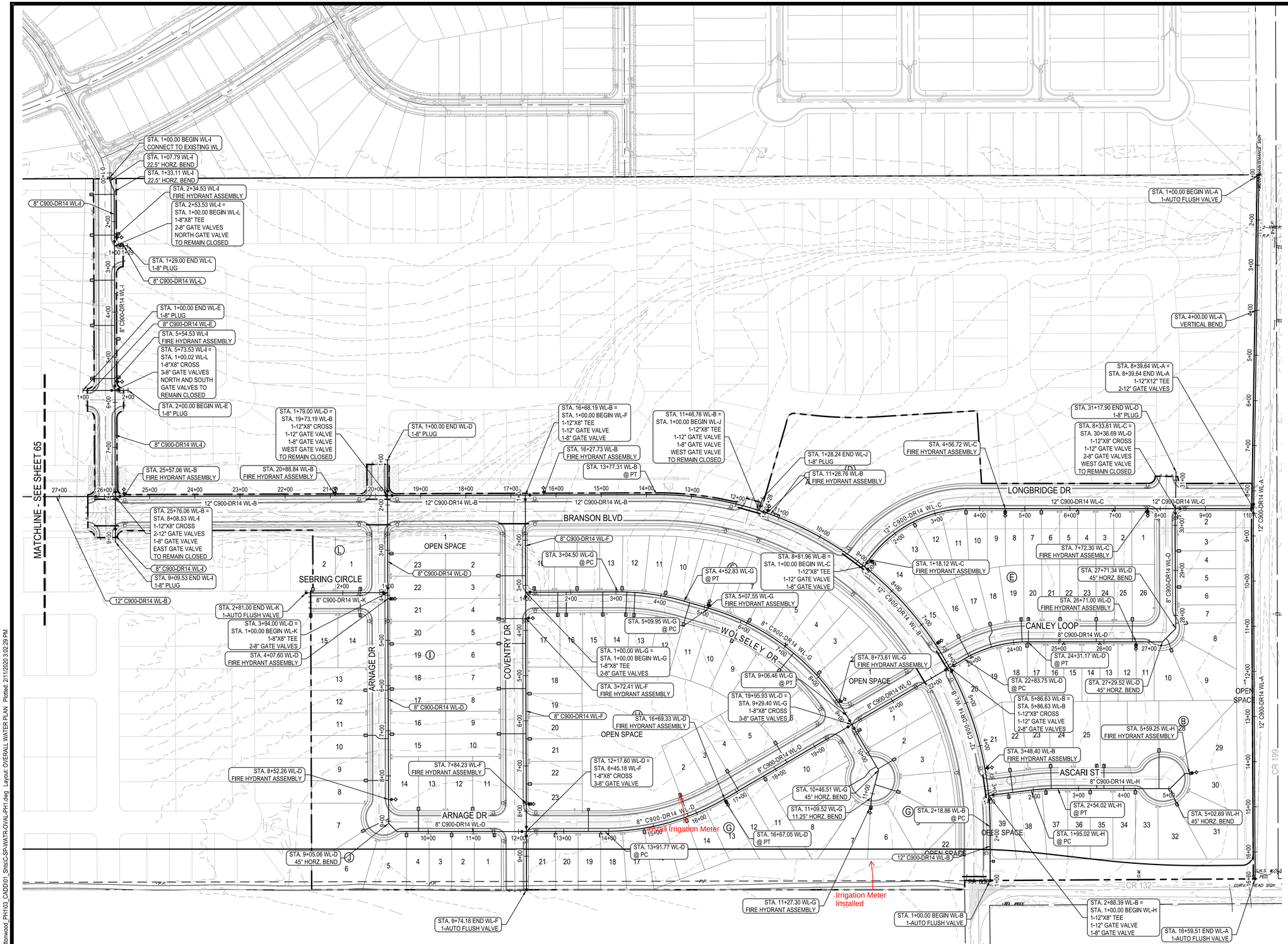

0 50' 100' 200'
SCALE: 1" = 100'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- 2" IRRIGATION SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- 1 - 4" SLEEVE, 1 - 6" SLEEVE
- ARV — AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.
* DEMOLITION OF EXISTING WATERLINE TO FOLLOW.

REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngey.com

COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL WATER PLAN (1 OF 2)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94845
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
64 OF 91

G:\TX\CP\Projects\Lennar\73131-00-Cottonwood_RH\103_CADD\01_Shts\C-SP-WATR-OVAL-PH1.dwg Layout: OVERALL WATER PLAN Plotted: 2/11/2020 3:02:29 PM

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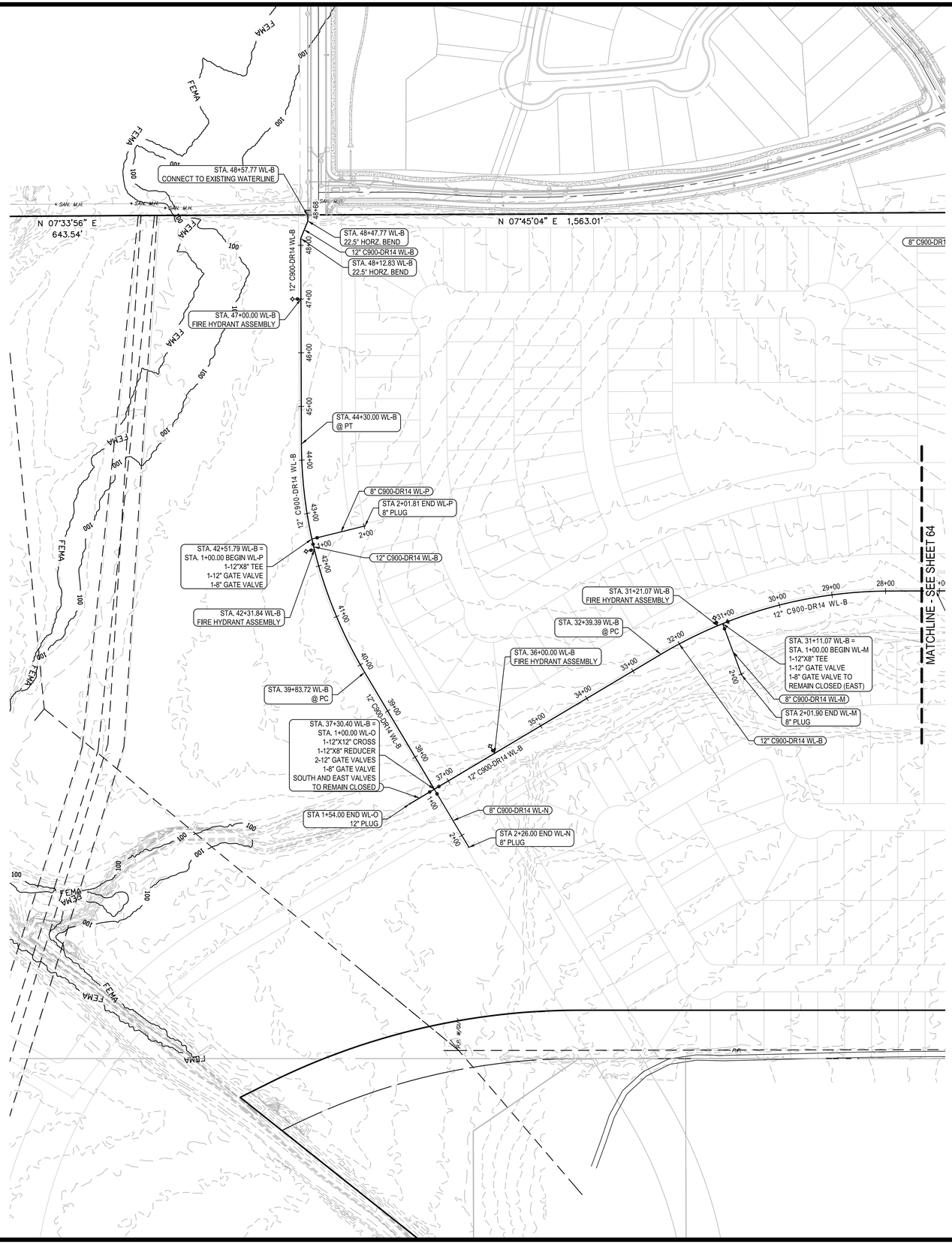

0 50' 100' 200'

SCALE: 1" = 100'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- 2" IRRIGATION SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- 1 - 4" SLEEVE, 1 - 6" SLEEVE
- ARV — AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.
* DEMOLITION OF EXISTING WATERLINE TO FOLLOW.

REV	DATE	APR	DESCRIPTION

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngby.com

COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL WATER PLAN (2 OF 2)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
65 OF 91

G:\TX\C\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-WATR-OVAL-PH1.dwg Layout: OVERALL WATER PLAN (2 OF 2) Plotted: 2/11/2020 3:02:53 PM

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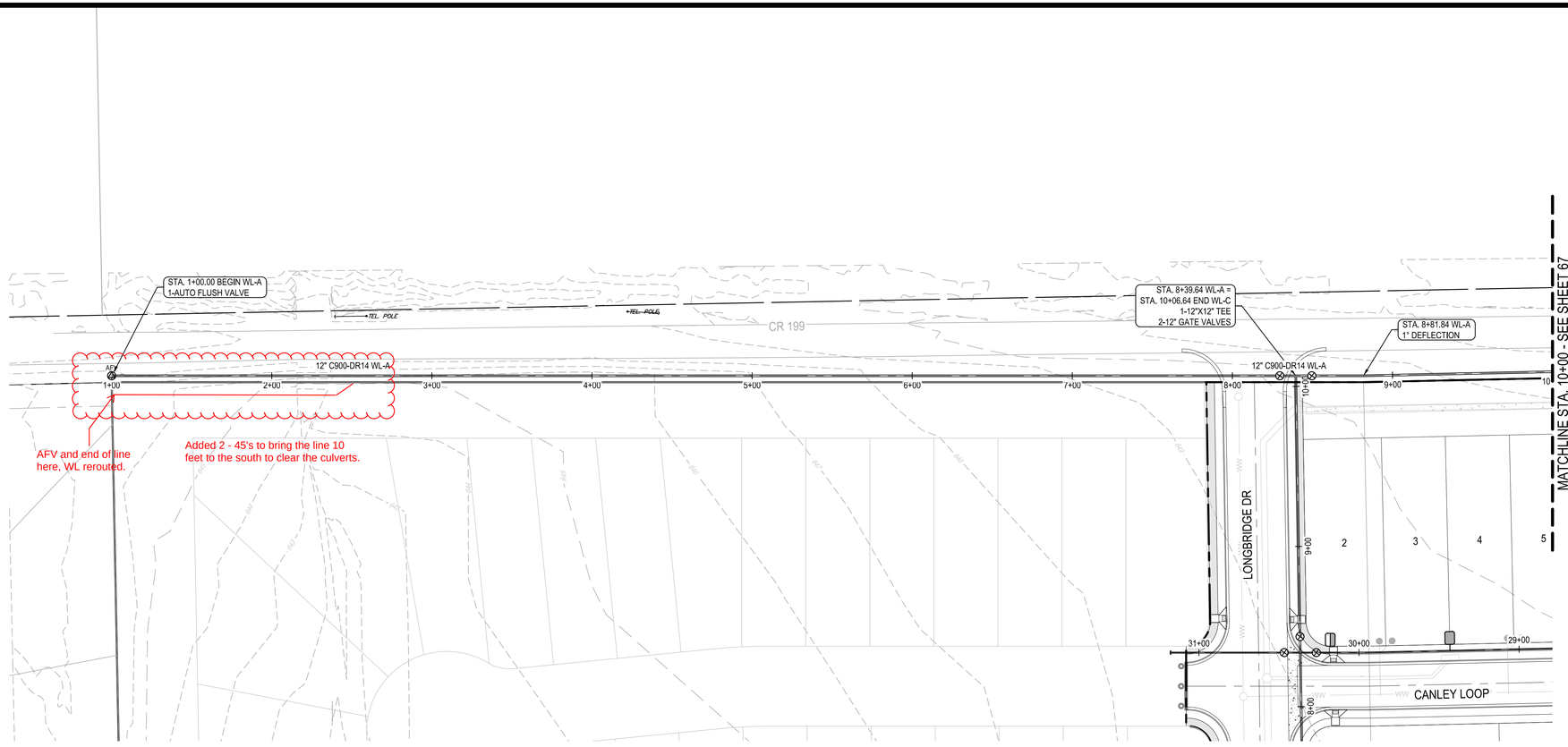

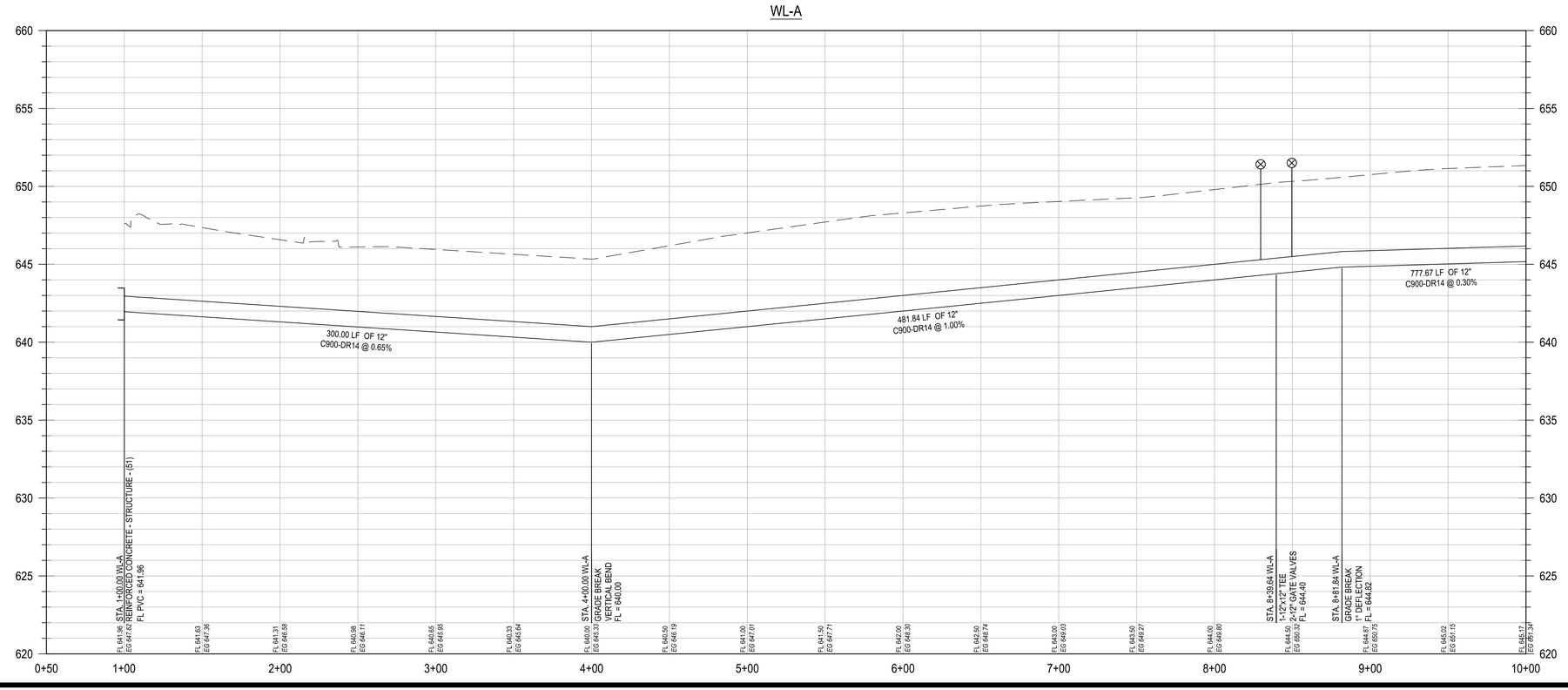

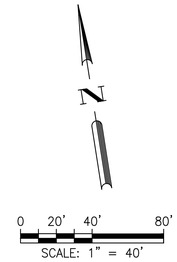

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- WATER METER
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- AIR RELEASE VALVE
- WATER CAP

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brownge.com

COTTONWOOD CREEK
HUTTO, TEXAS
WL-A PLAN AND PROFILE (1+00 TO 10+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
66 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-WATR-P&P-PH1.dwg Layout: WL-A PLAN AND PROFILE (1+00 TO 10+00) Plotted: 2/11/2020 3:04:56 PM

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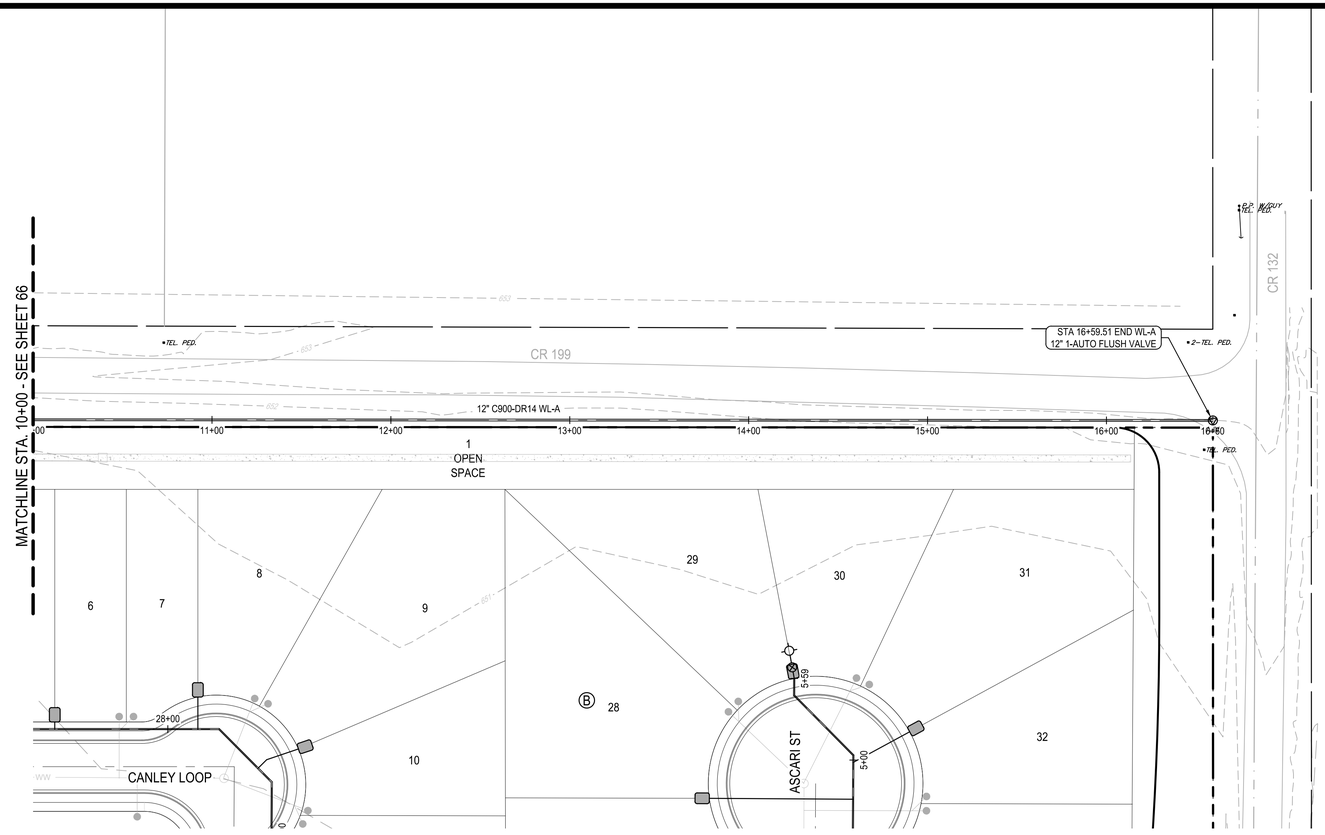

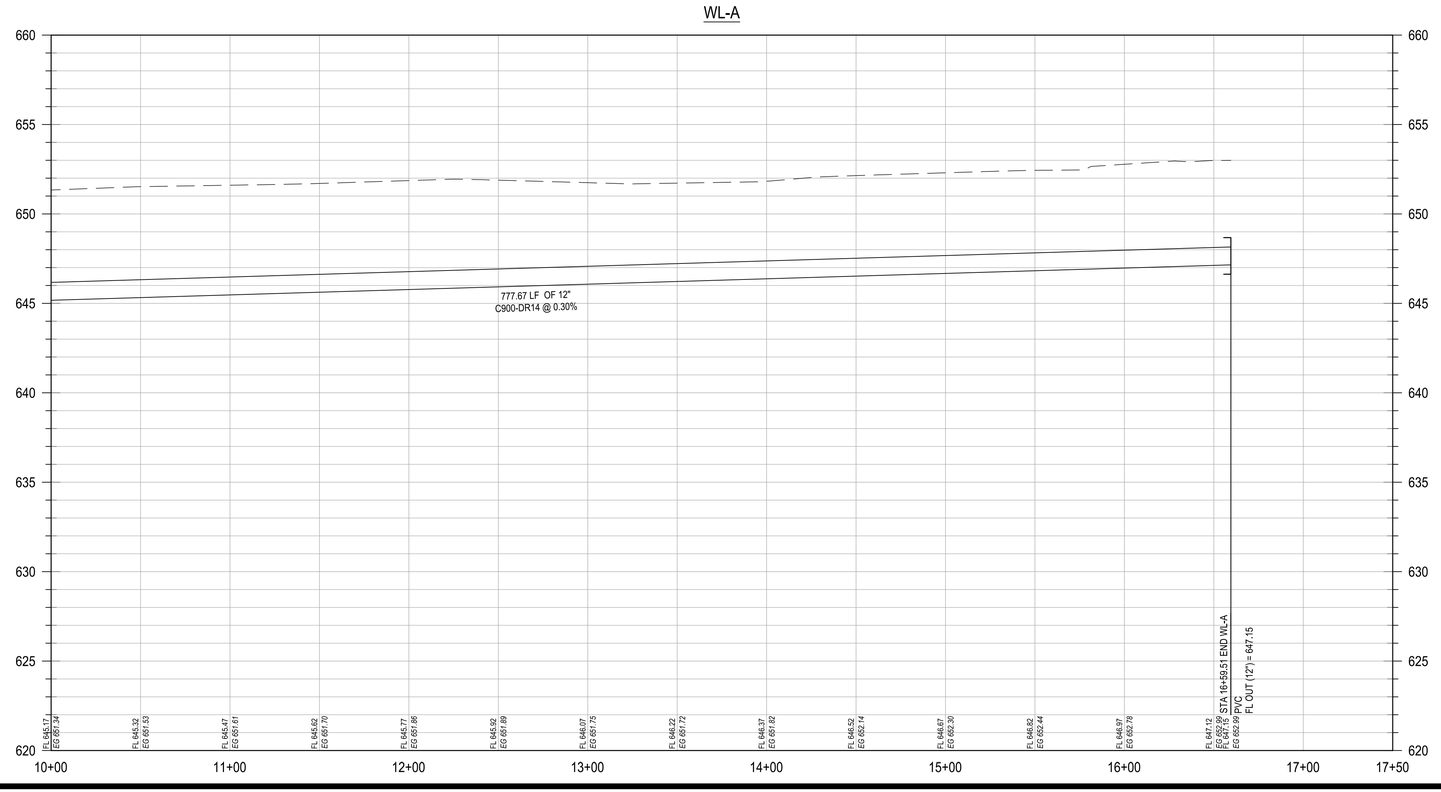

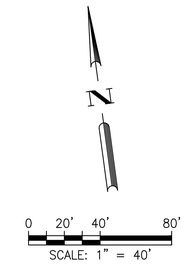

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- WATER METER
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- AIR RELEASE VALVE
- WATER CAP

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS
WL-A PLAN AND PROFILE (10+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
67 OF 91

G:\TX\CP\Projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-WATR-P&P-PH1.dwg Layout: WL-A PLAN AND PROFILE (10+00 TO END) Plotted: 2/11/2020 3:05:24 PM

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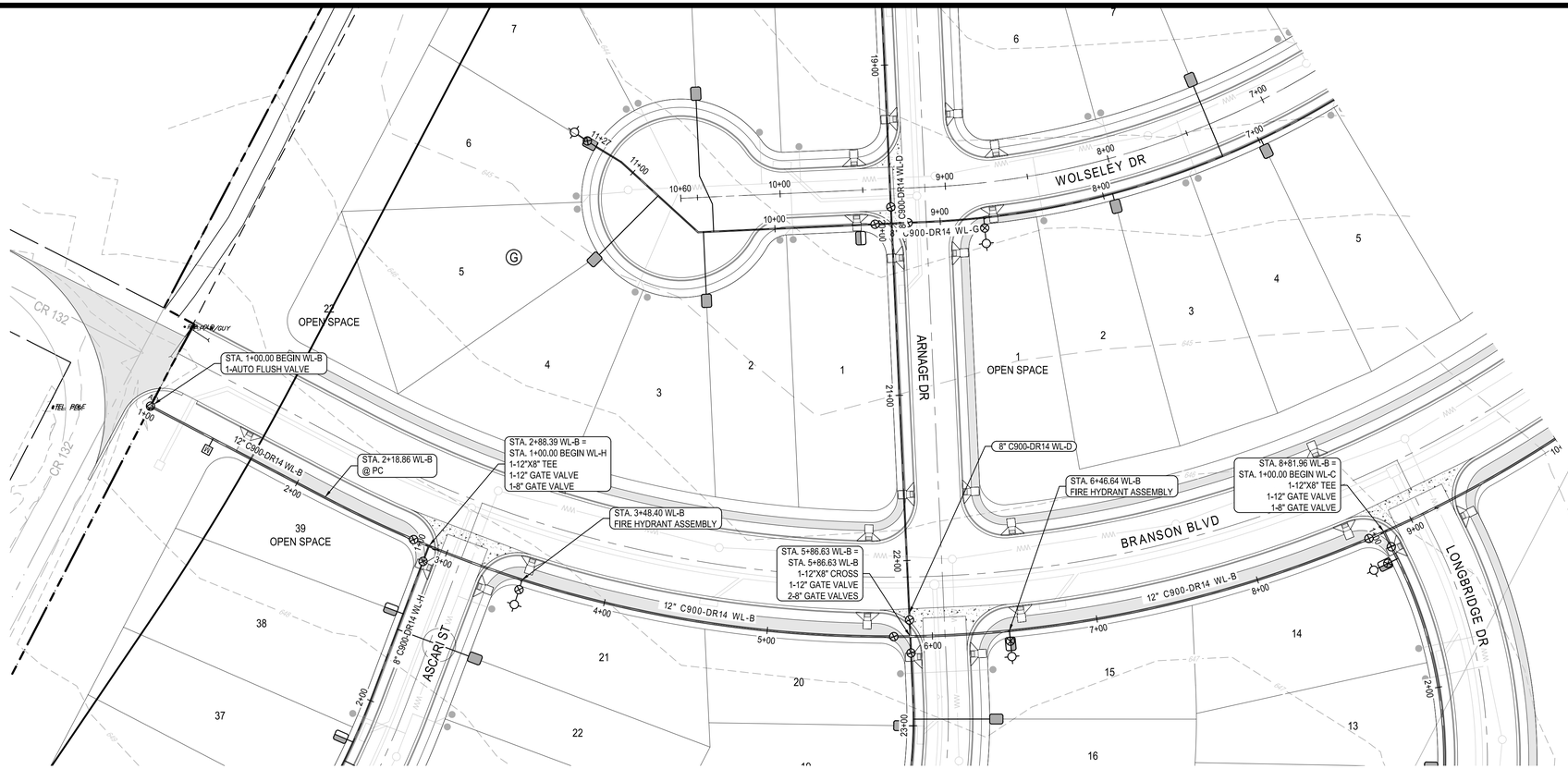
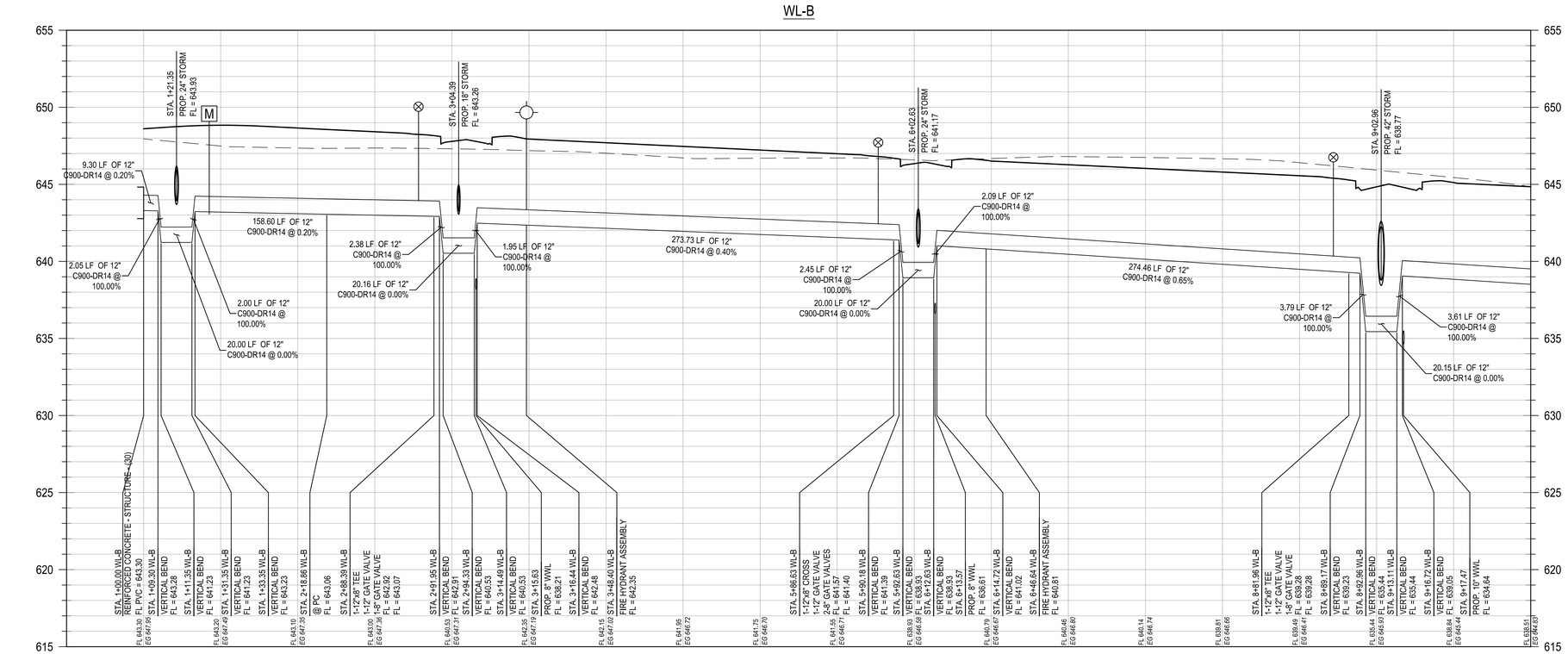
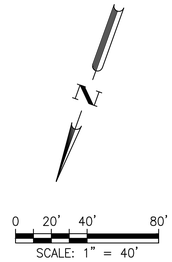






LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- WATER METER
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- AIR RELEASE VALVE
- WATER CAP

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS
WL-B PLAN AND PROFILE (1+00 TO 10+00)

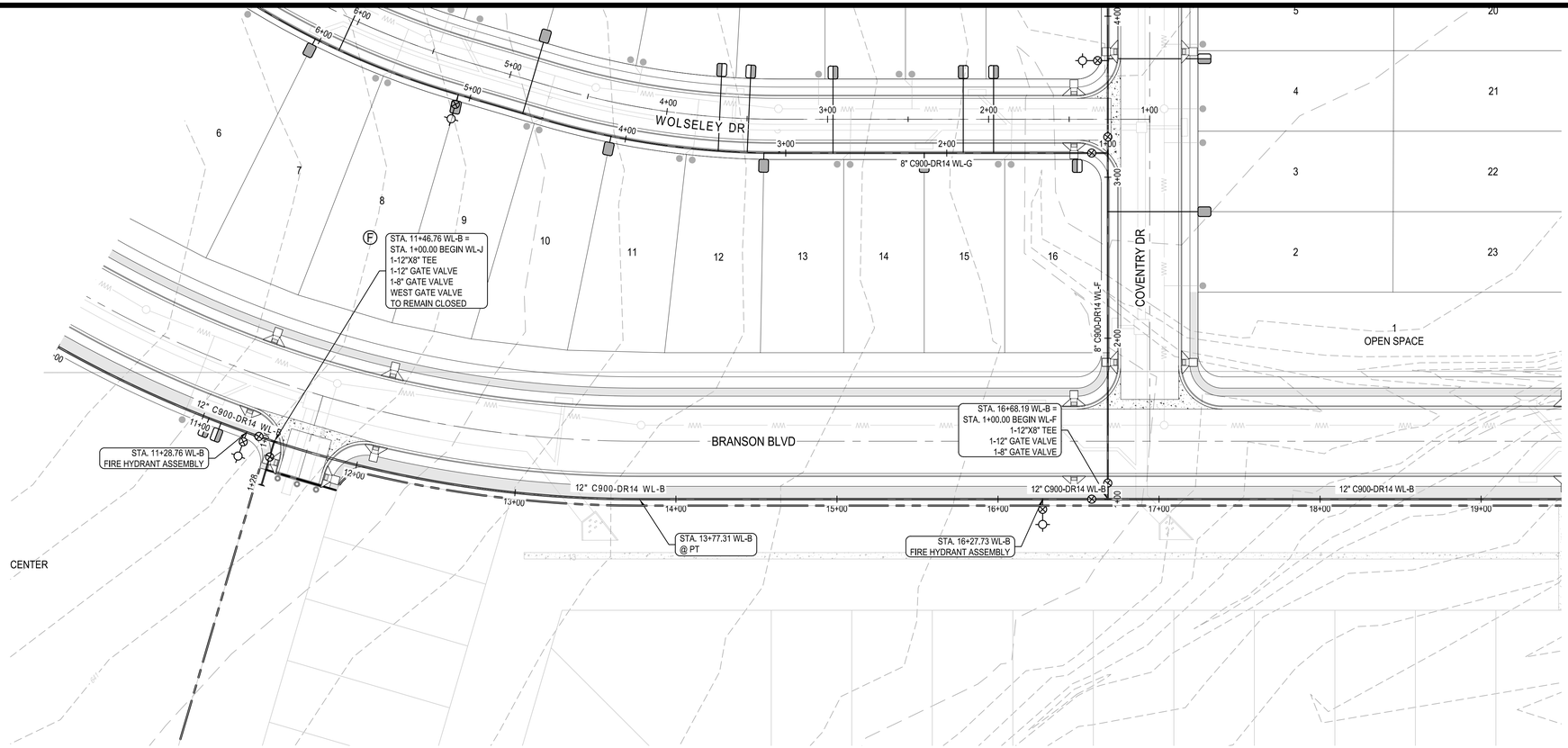
SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND
94848
LICENSED PROFESSIONAL ENGINEER
2/11/2020

SHEET
68 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-WATR-P&P-PH1.dwg Layout: WL-B PLAN AND PROFILE (1+00 TO 10+00) Plotted: 2/11/2020 3:06:03 PM

Record Drawing



0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

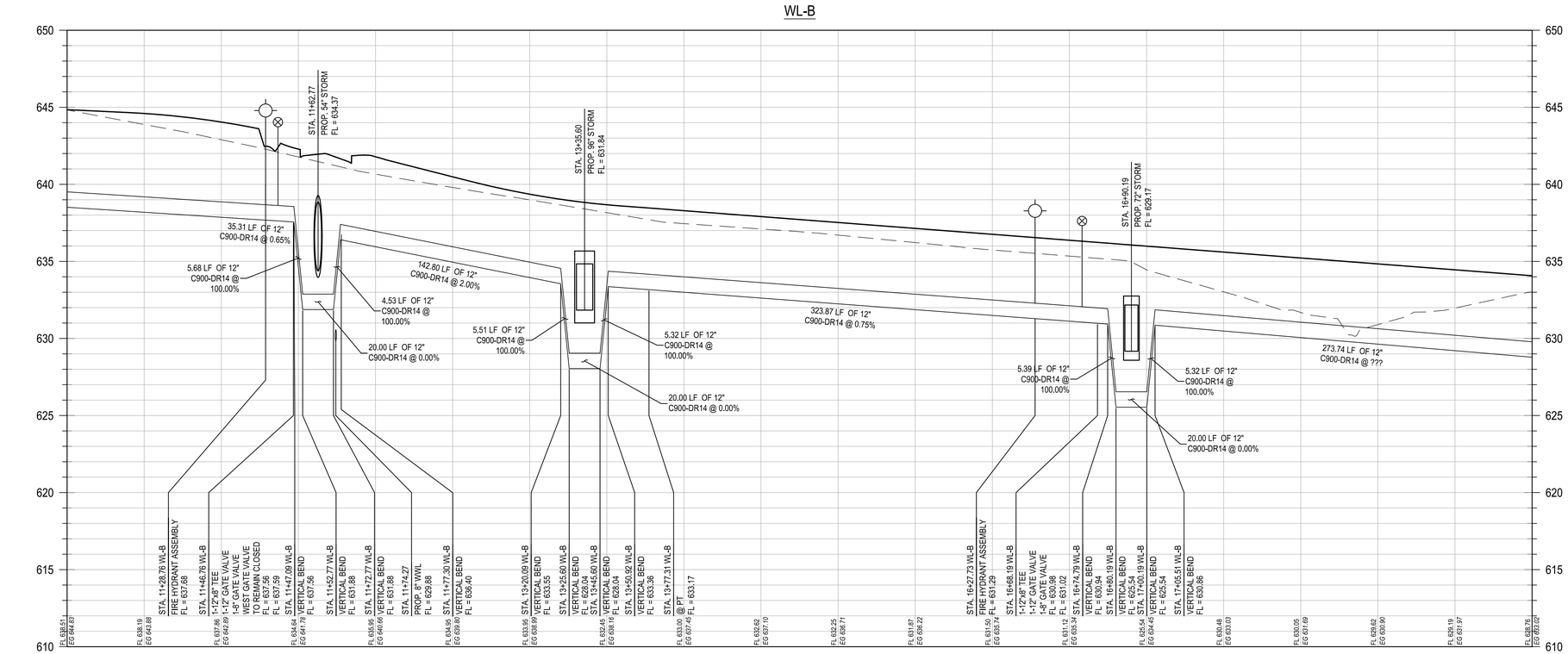
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- WATER METER
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- AIR RELEASE VALVE
- WATER CAP

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.



DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WL-B PLAN AND PROFILE
(10+00 TO 19+50)

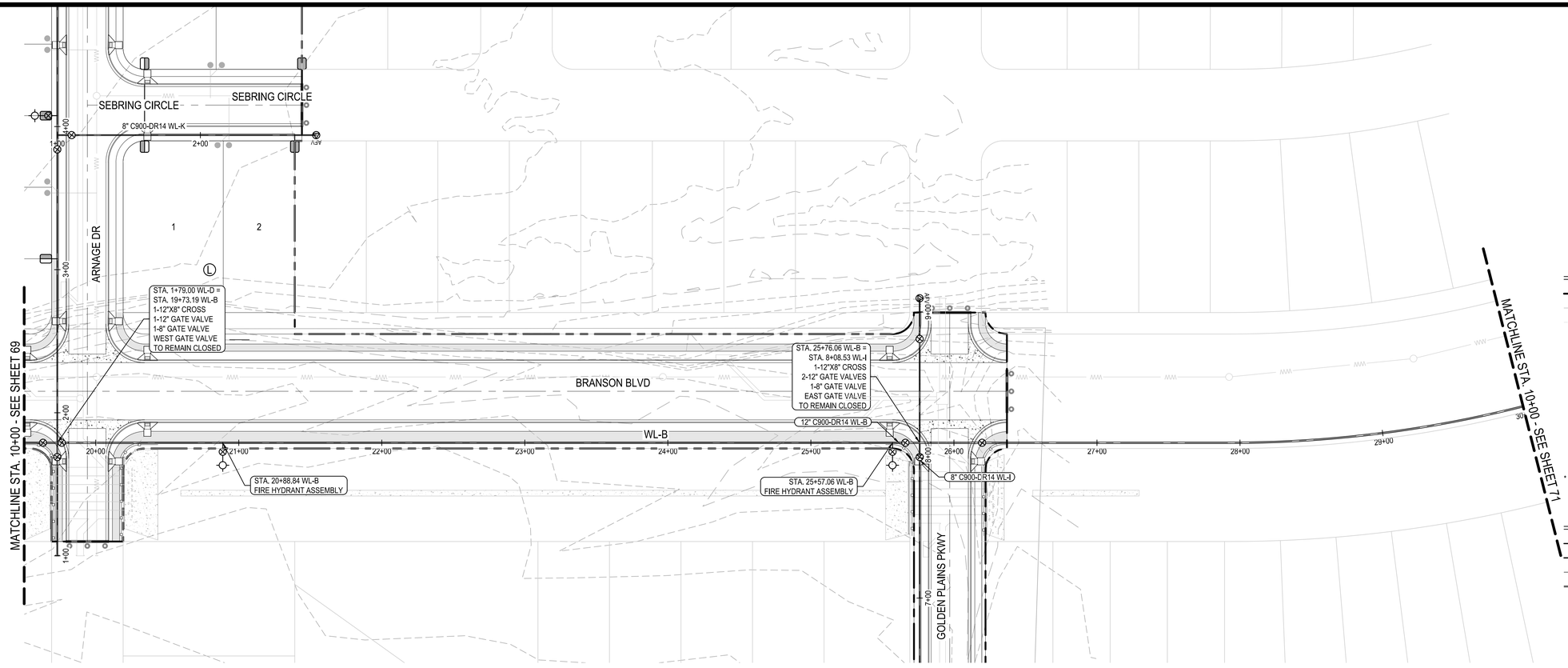
SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND
94848
LICENSED PROFESSIONAL ENGINEER
2/11/2020

SHEET
69 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-WATR-P&P-PH1.dwg Layout: WL-B (10+00 TO 19+50) Plotted: 2/11/2020 3:06:38 PM

Record Drawing



0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- WATER METER
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- AIR RELEASE VALVE
- WATER CAP

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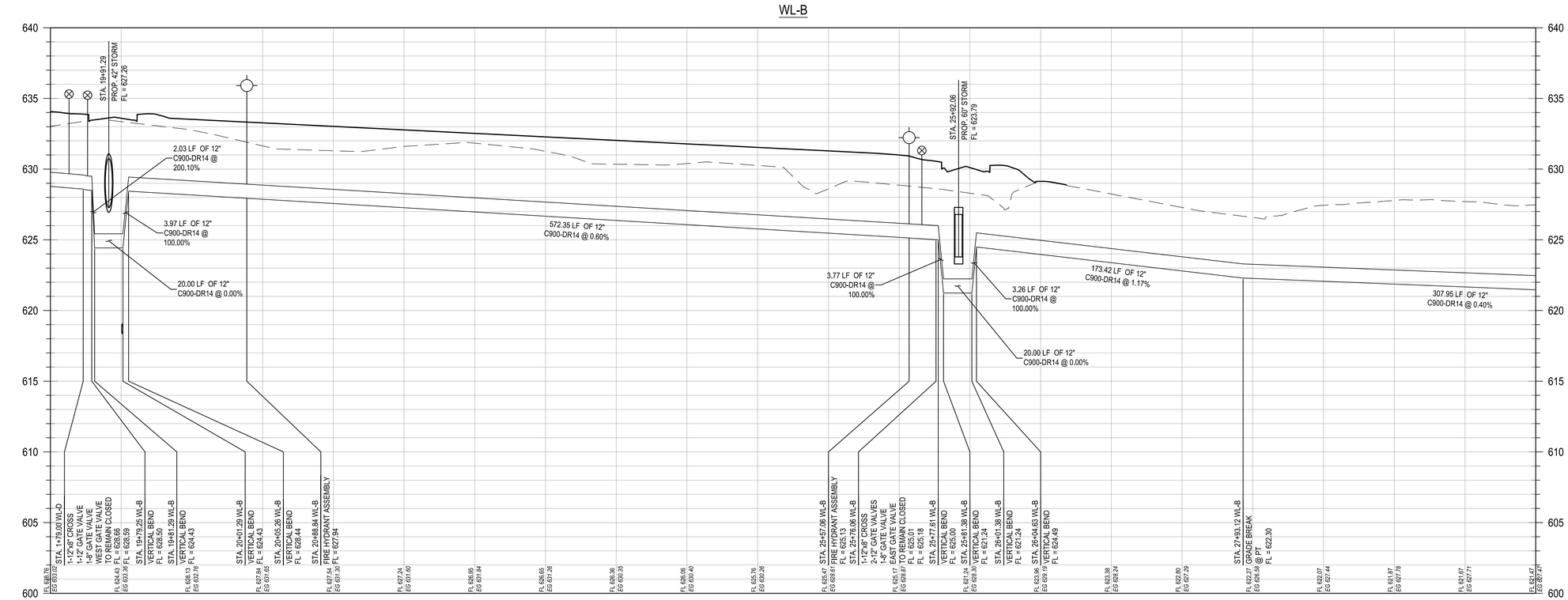

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS
WL-B PLAN AND PROFILE
(19+50 TO 30+00)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
70 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-WATR-P&P-PH1.dwg Layout: WL-B PLAN AND PROFILE (20+00 TO 30+00) Plotted: 2/11/2020 3:07:04 PM

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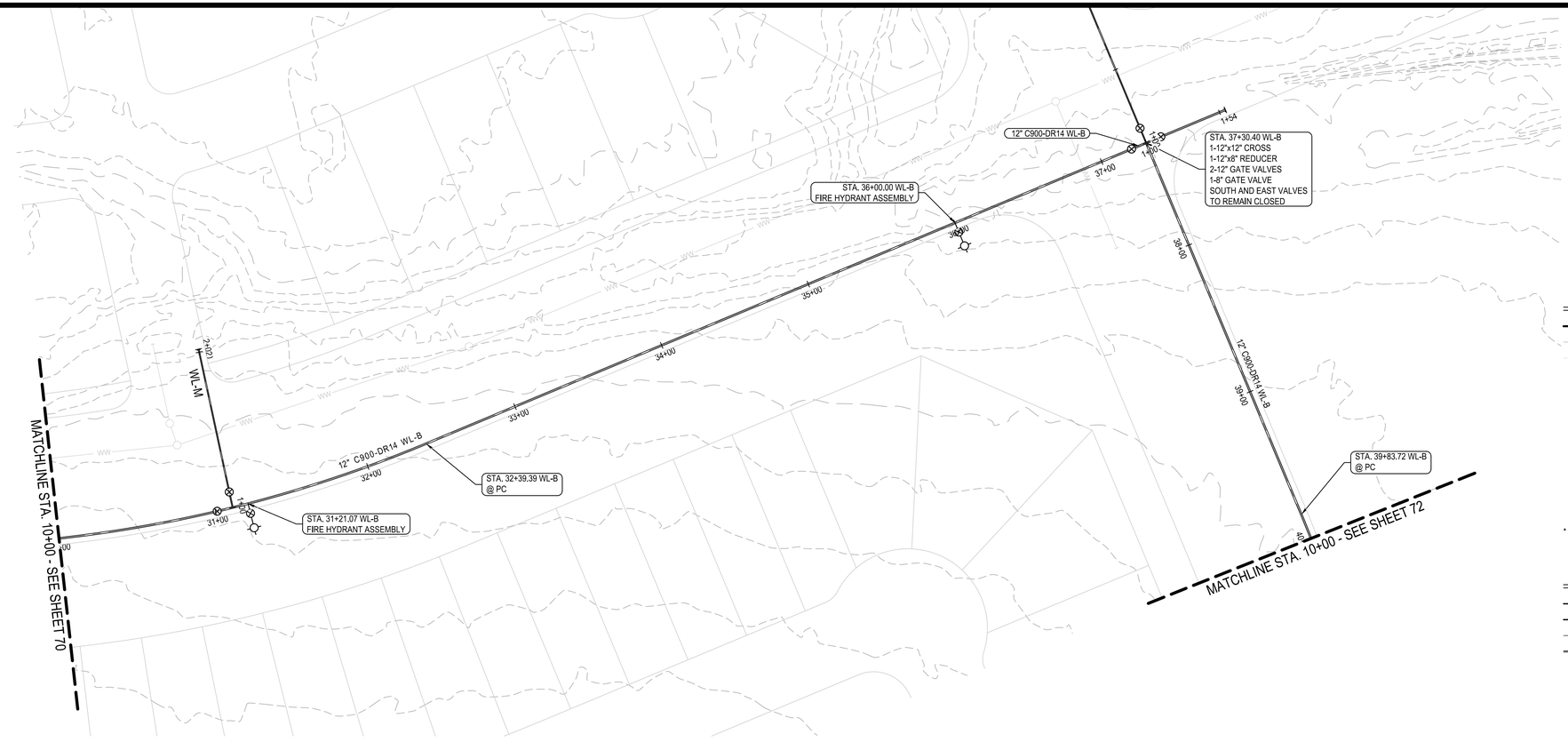

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SCALE: 1" = 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
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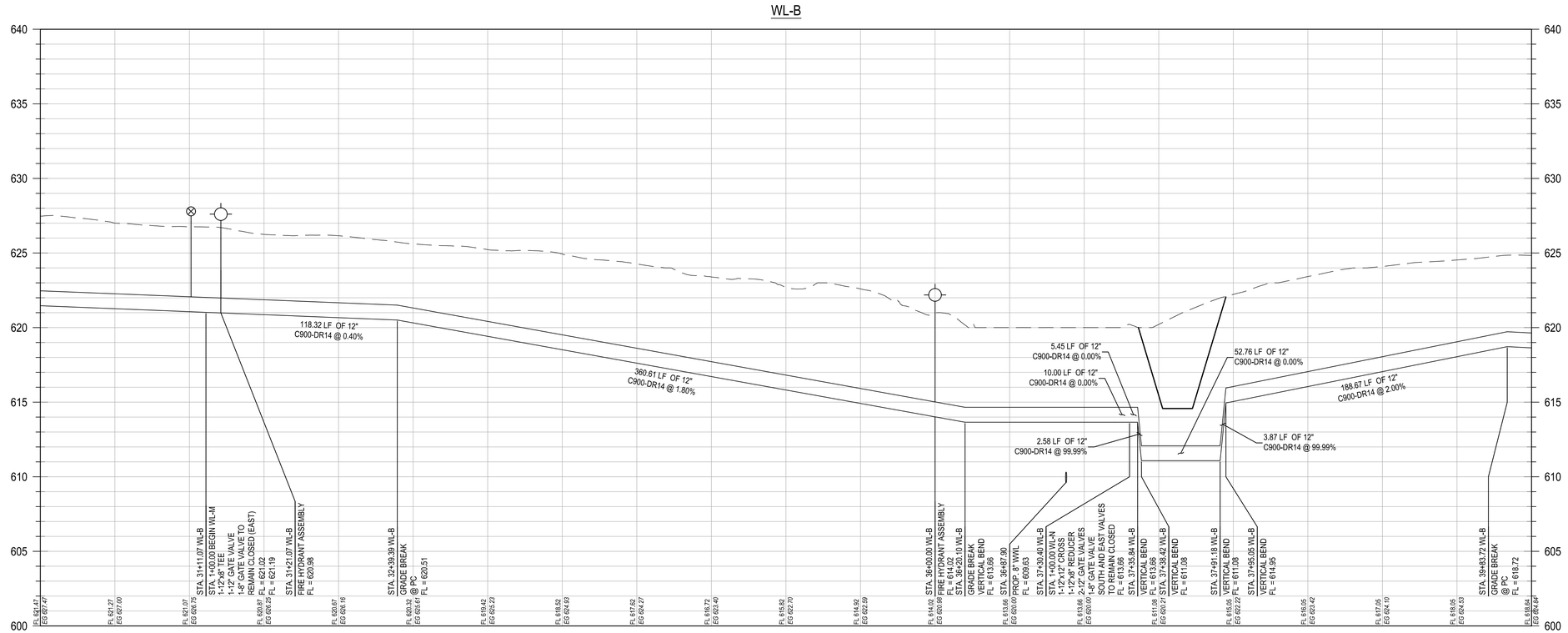

							APR
							DATE
							DESCRIPTION
							REV
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DRAWN BY:	DAZ						

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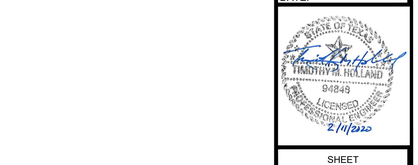
COTTONWOOD CREEK
HUTTO, TEXAS
WL-B PLAN AND PROFILE
(30+00 TO 40+00)

SUBMITTAL DATE: 01-16-2020



SHEET
71 OF 91

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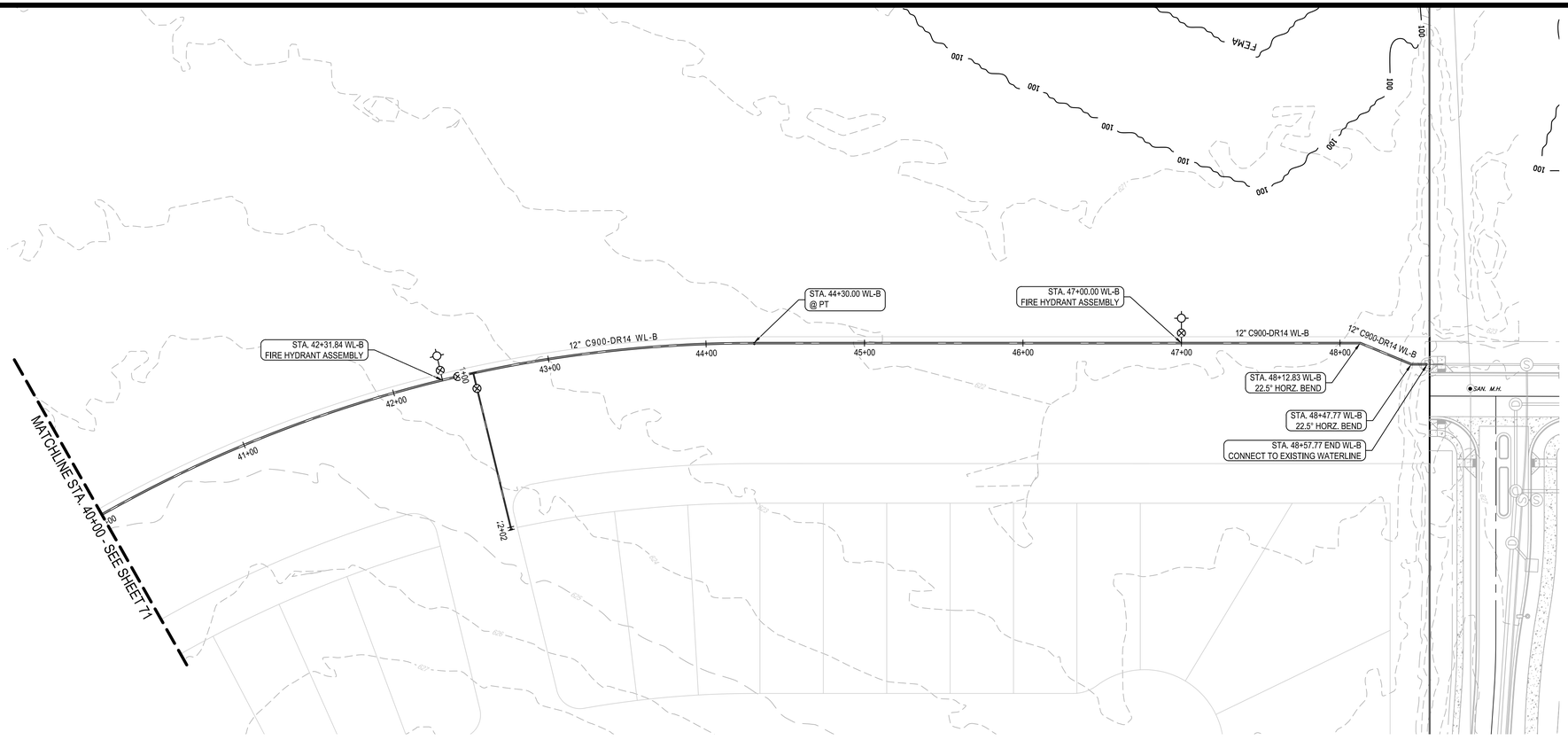

0 20' 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- CAP
- WATER METER
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

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PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT
- GATE VALVE
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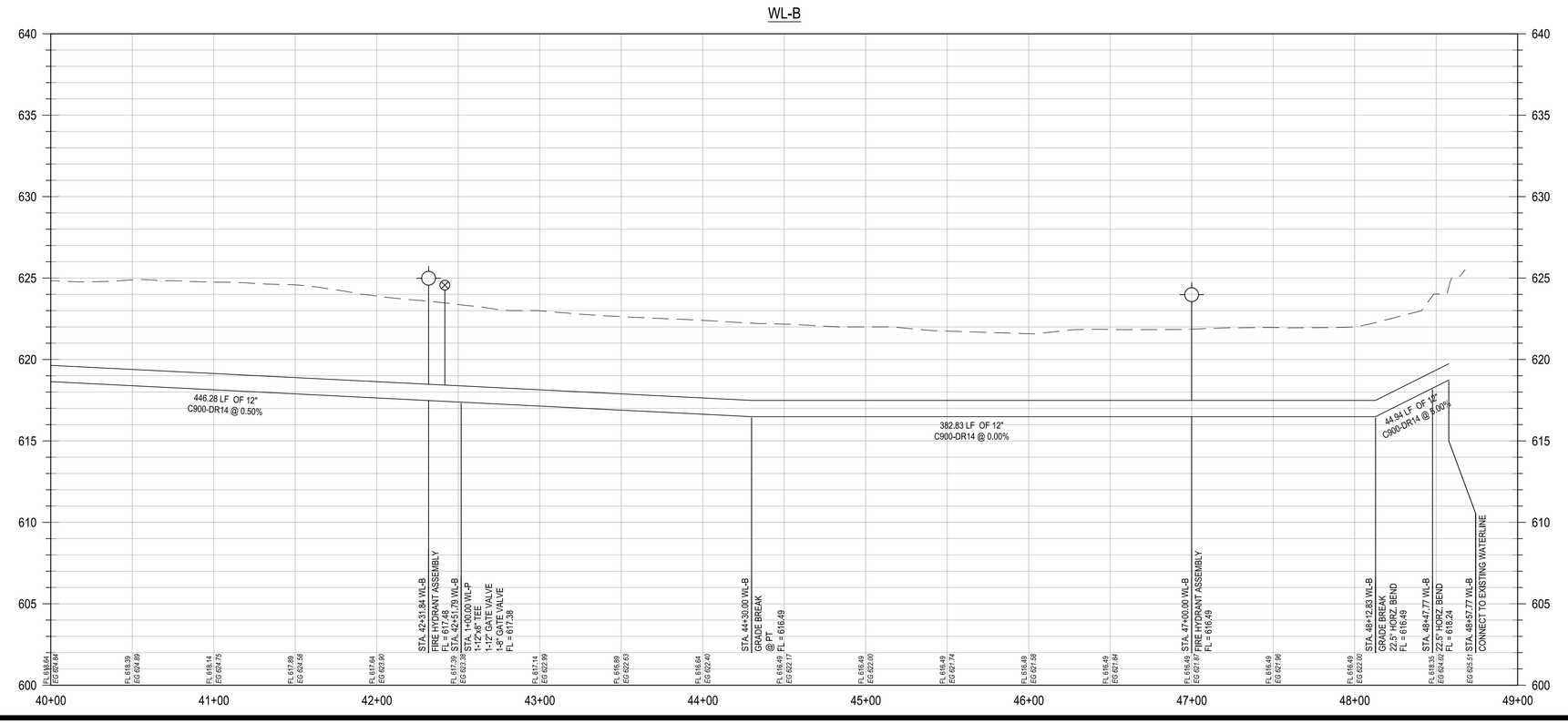

	APR
	DATE
	DESCRIPTION
	REV
DESIGNED BY:	DAZ
REVIEWED BY:	TMH
DRAWN BY:	DAZ

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1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WL-B PLAN AND PROFILE
(40+00 TO END)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
72 OF 91

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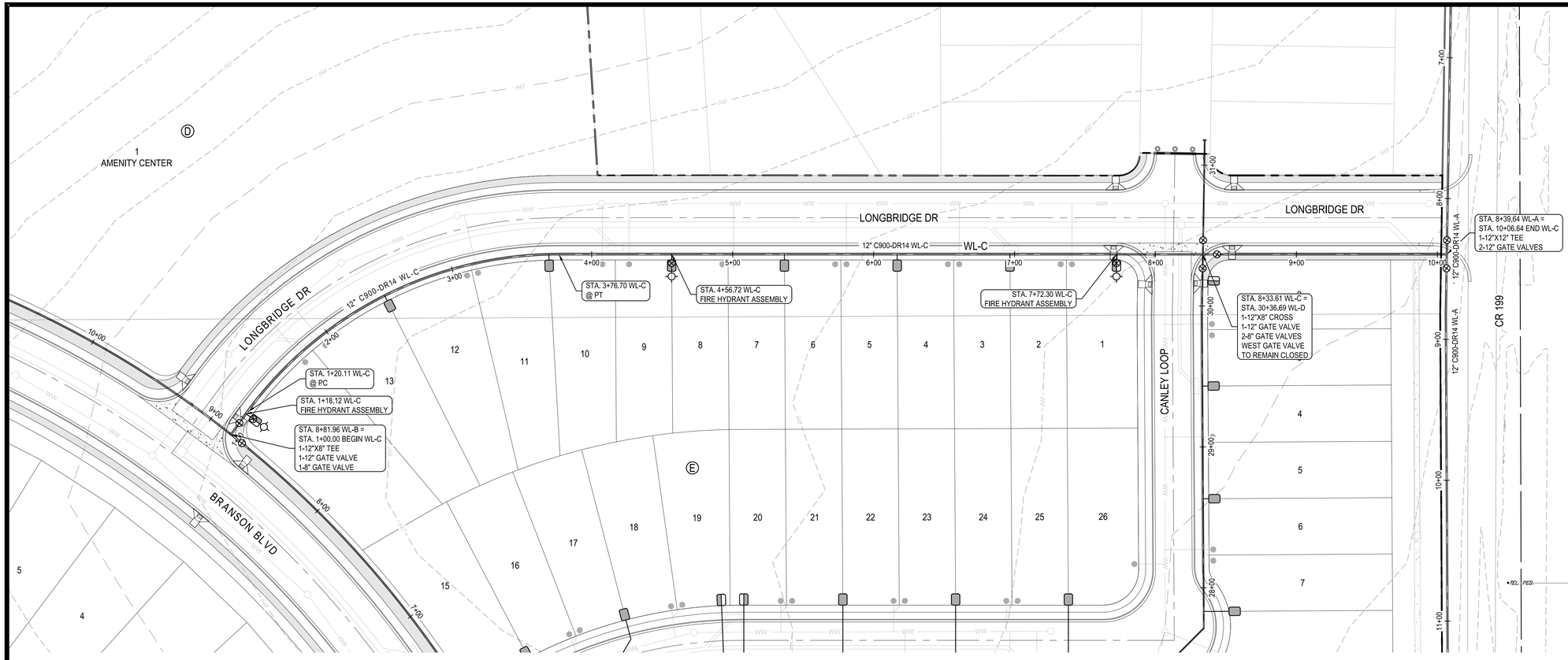

0 20' 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
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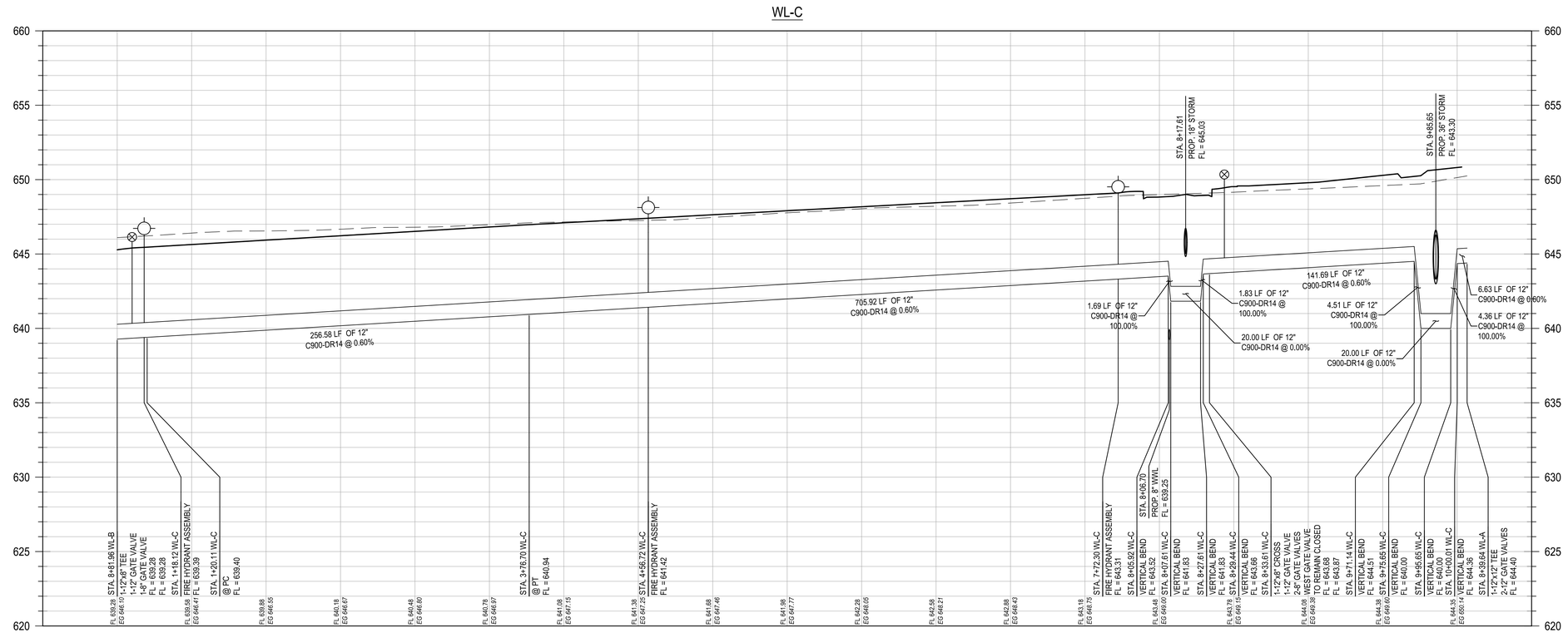

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
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AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.brwengey.com

COTTONWOOD CREEK
HUTTO, TEXAS
WL-C PLAN AND PROFILE
(1+00 TO END)

SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
73 OF 91

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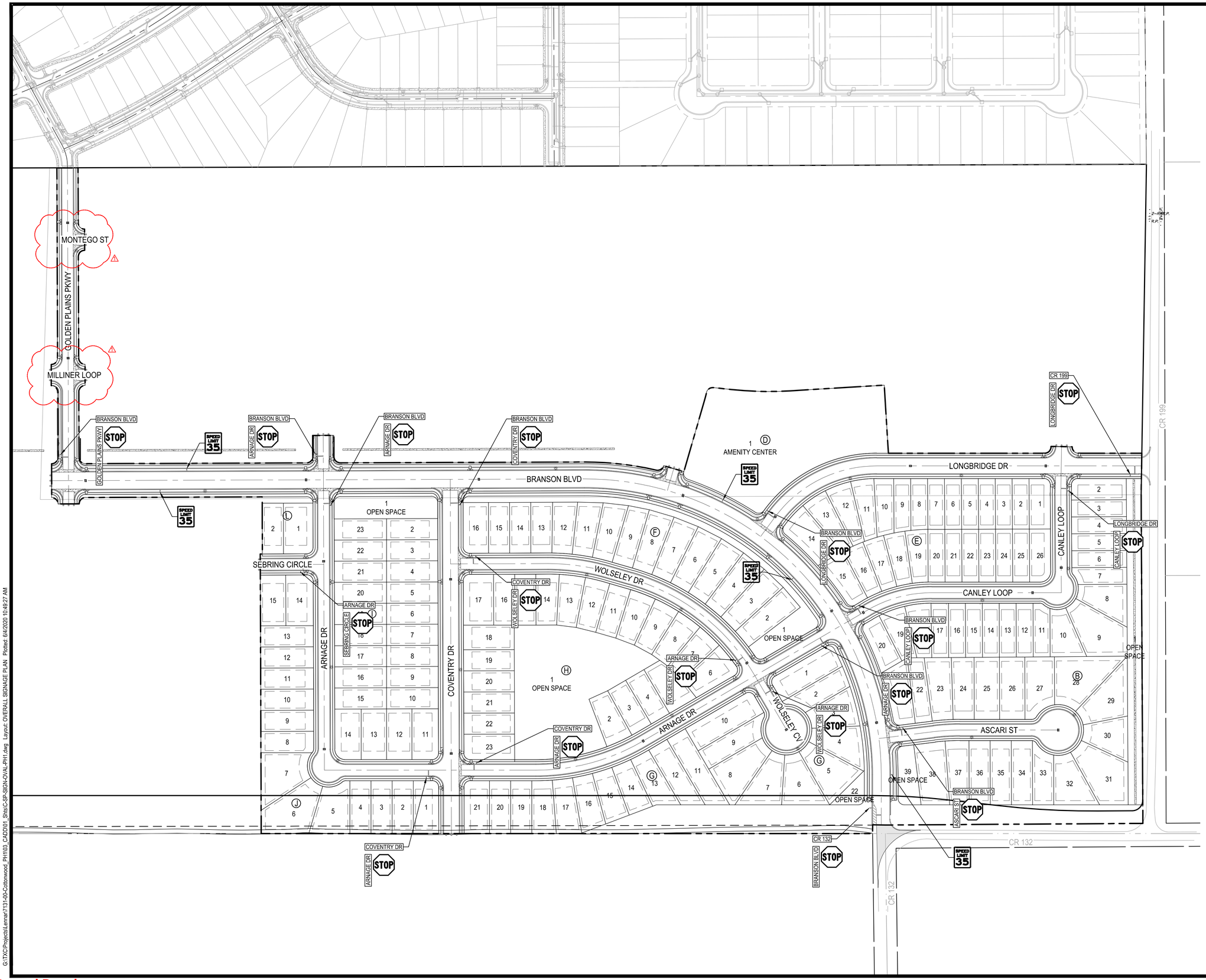


0 50' 100' 200'

SCALE: 1" = 100'

LEGEND

- PROPERTY BOUNDARY
- STREET NAME / STREET NAME — R1-1 30"x30" — PROPOSED STOP SIGN W/ STREET NAME SIGNS
- R2-1 — PROPOSED SPEED LIMIT SIGN
- PROPOSED STREET END BARRICADE
- PROPOSED SIGN
- PROPOSED STOP BAR
- PROPOSED BLUE FIRE HYDRANT DELINEATOR
- STREET LIGHT (BY OTHERS)
- IRRIGATION SLEEVE

NOTES:

1. STREET NAMES SHALL BE DISPLAYED ON STANDARD D3-1 GUIDE SIGNS ERECTED AT EACH STREET INTERSECTION AND HAVE WHITE LETTERS ON A GREEN BACKGROUND IN ACCORDANCE WITH CITY OF HUTTO STANDARDS.
2. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE TEXAS MANUAL OF UNIFORM TRAFFIC DEVICES (TxMUTCD).
3. PER TxMUTCD REQUIREMENTS, THERE MUST BE A 2' MINIMUM OFFSET BETWEEN THE FACE OF CURB AND THE OUTSIDE EDGE OF SIGNS.
4. BLUE FIRE HYDRANT DELINEATORS TO BE PLACED IN OUTSIDE TRAVEL LANE, 3' FROM LIP OF GUTTER.
5. ALL CHANGES TO THE TRAFFIC CONTROL PLAN MUSH BE APPROVED AND DOCUMENTED BY THE SEALING ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY PROPOSED CHANGES TO THE TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL.
6. THE LETTERING FOR NAMES OF STREETS ON STREET NAME SIGNS SHALL BE COMPOSED OF A COMBINATION OF LOWER-CASE LETTERS WITH INITIAL UPPER-CASE LETTERS.
7. STOP SIGNS TO BE INSTALLED PER CITY OF HUTTO DETAIL SD-03
8. TYPE III BARRICADES TO THE INSTALLED PER CITY OF GEORGETOWN DETAIL SD22.
9. ALL STOP SIGNS TO BE ACCOMPANIED WITH ADJACENT 24 INCH WHITE STOP BAR.
10. ALL SIGNS AND STRIPING TO BE INSTALLED PER TxMUTCD.

REV	DESCRIPTION	DATE	APR
4	ADDED CURB RAMPS	5/27/2020	
3			
2			
1			

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

OVERALL SIGNAGE PLAN

SUBMITTAL DATE: 01-16-2020

TIMOTHY M. HOLLAND 94848 LICENSED PROFESSIONAL ENGINEER 2/11/2020

SHEET 74 OF 91

G:\TX\CP\projects\Lennar\7131-00-Cottonwood_PH1\03_CADD\01_Shts\C-SP-SIGN-OVAL-PH1.dwg Layout: OVERALL SIGNAGE PLAN Plotted: 6/4/2020 10:49:27 AM

Record Drawing

GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 – 10%
	200 FEET	2 ACRES	10 – 20%
	100 FEET	1 ACRE	20 – 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 – 10%

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS

TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES

DRAWING NAME: EC01 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB

NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100lb/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 82% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP. RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10–DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1–1/2 INCHES HIGH WITH 95**% COVERAGE**, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION.
9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED–ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING.
13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'–4') BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNERS EXPENSE.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

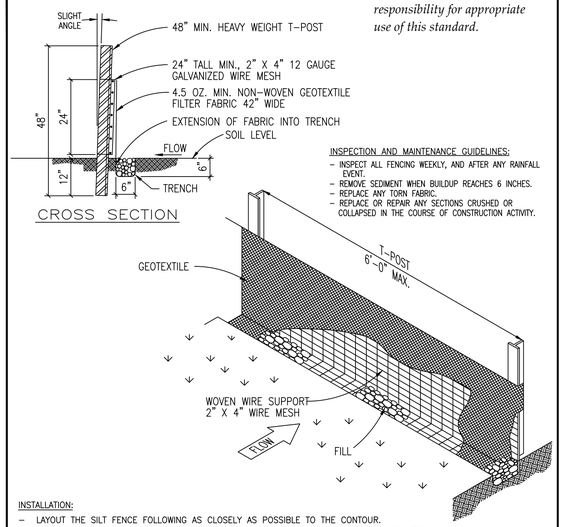
REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS

EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES

DRAWING NAME: EC01A | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB

The Architect/Engineer assumes responsibility for appropriate use of this standard.



CROSS SECTION

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

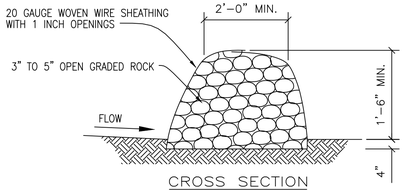
INSTALLATION:
- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T–POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T–POST WITH 11 1/2 GAUGE GALVANIZED T–POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

REVISION NOTE: ADOPTED 6/21/2006

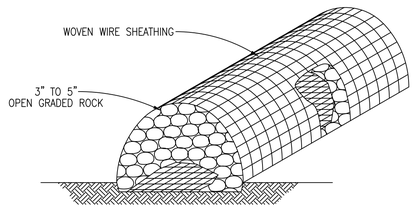
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS

SILT FENCE DETAIL

DRAWING NAME: EC02 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB



CROSS SECTION



INSTALLATION:
- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE THE FINISHED SIZE OF THE BERM.
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX. 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

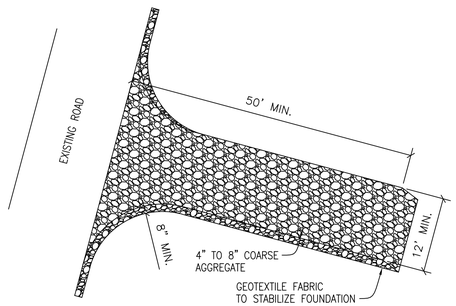
The Architect/Engineer assumes responsibility for appropriate use of this standard.

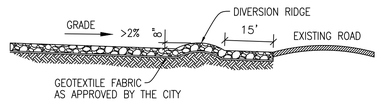
REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS

ROCK BERM DETAIL

DRAWING NAME: EC03 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB





INSTALLATION:
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

INSPECTIONS AND MAINTENANCE GUIDELINES:
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS–OF–WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

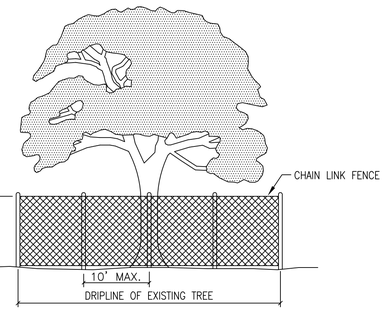
The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS

STABILIZED CONSTRUCTION ENTRANCE

DRAWING NAME: EC06 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB



NOTES:

1. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING).
2. FENCES SHALL COMPLETELY SURROUND THE TREE, OR CLUSTERS OF TREES; WILL BE LOCATED AT THE OUTERMOST LIMIT OF THE TREE BRANCHES (DRIPLINE), AND WILL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MATERIALS.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN SIX INCHES (6") CUT OR FILL, OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY.
   C. WOUNDS TO EXPOSED ROOTS, TRUNKS OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES, SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING AND FIRE.
3. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
   B. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN SIX FEET (6'–0") TO BUILDING.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS

TREE PROTECTION – CHAIN LINK FENCE

DRAWING NAME: EC09 | SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

EROSION DETAILS (1 OF 2)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
75 OF 91

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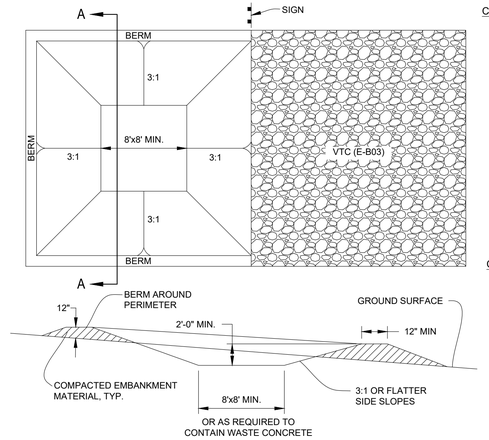

CROSS-SECTION A-A

CONCRETE WASHOUT AREA

CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SELECT A SUITABLE LOCATION FOR CONCRETE WASHOUT AREA(S). (TO BE PLACED A MINIMUM OF 100' FROM DRAINAGE WAYS, BODIES OF WATER, AND INLETS.)
2. LOCATION FOR CONCRETE WASHOUT SHALL BE ADDED TO APPROVED SWP3 KEPT ON SITE.
3. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
4. VEHICLE TRACKING CONTROL (VTC E-B03) IS REQUIRED AT THE ACCESS POINT.
5. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
6. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION.

CONCRETE WASHOUT AREA MAINTENANCE NOTES

1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.
4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

EROSION DETAILS (2 OF 2)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94048
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
76 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SshtsC-SR-DET_-PH1.dwg Layout: EROSION DETAILS (2 OF 2) Plotted: 2/11/2020 3:09:57 PM

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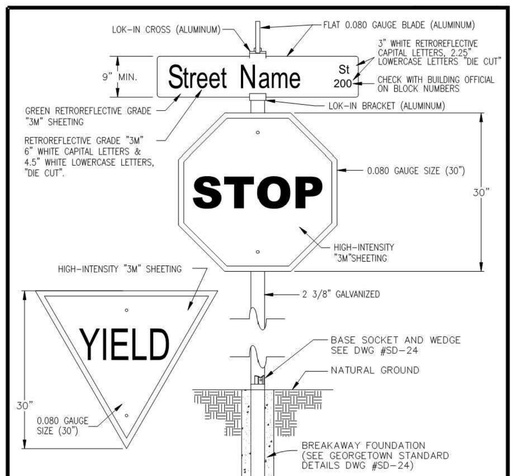
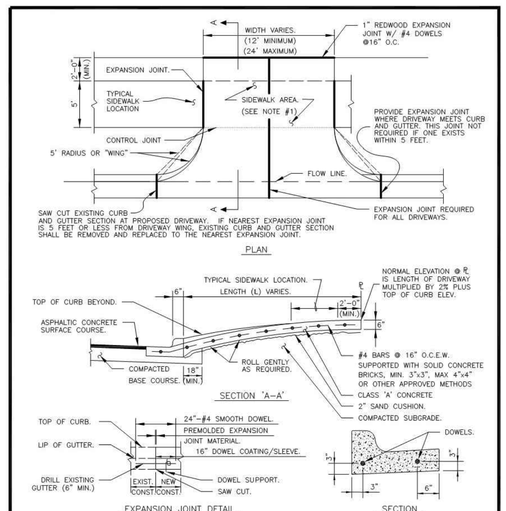


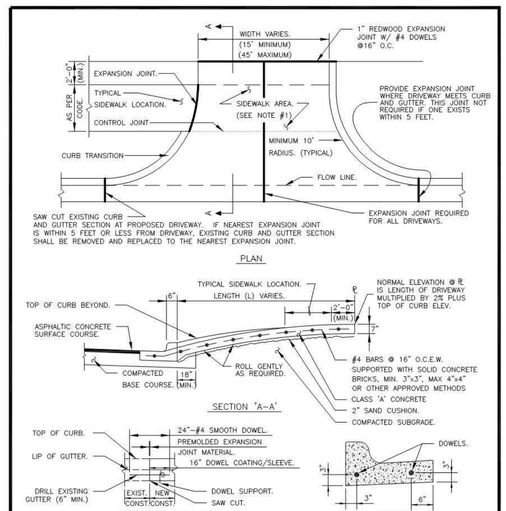
NOTES:
1. 7-FOOT MIN. HEIGHT FROM GROUND TO BOTTOM OF SIGN.
2. ALL SIGNS TO BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).
3. ALL SIGNAGE SHEETINGS SHALL BE HIGH-INTENSITY "3M" SHEETING.

CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. SD-03
	UPDATED: 11/30/17
STANDARD STREET SIGN DETAIL HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
	SCALE: N.T.S.
	FILE NAME: SD03.DWG



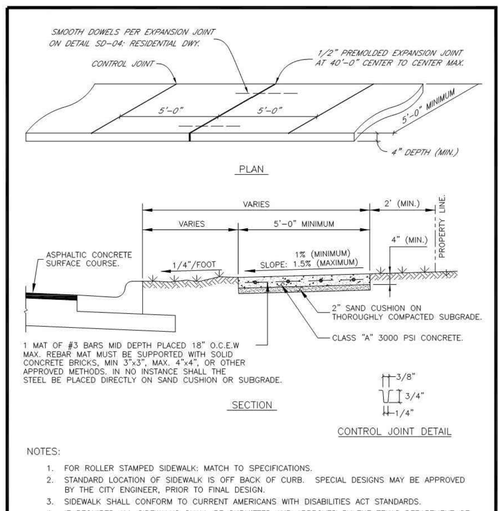
NOTES:
1. THE SIDEWALK AREA OF THE DRIVEWAY SHALL SLOPE TOWARD THE STREET PAVING AT NO MORE THAN 1.5%.
2. CONTROL JOINT DIMENSIONS PER DETAIL SD-06.

CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. SD-04
	UPDATED: 4/1/2014
RESIDENTIAL DRIVEWAY HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
	SCALE: N.T.S.
	FILE NAME: SD04.DWG



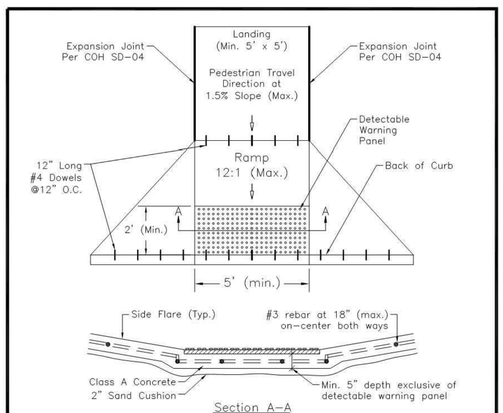
NOTE:
1. THE SIDEWALK AREA OF THE DRIVEWAY SHALL SLOPE TOWARD THE STREET PAVING AT NO MORE THAN 1.5%.
2. CONTROL JOINT DIMENSIONS PER DETAIL SD-06.

CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. SD-05
	UPDATED: 4/1/2014
COMMERCIAL DRIVEWAY HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
	SCALE: N.T.S.
	FILE NAME: SD05.DWG



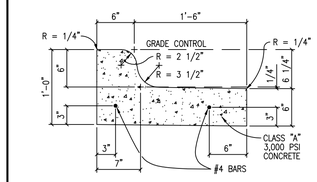
NOTES:
1. FOR ROLLER STAMPED SIDEWALK: MATCH TO SPECIFICATIONS.
2. STANDARD LOCATION OF SIDEWALK IS OFF BACK OF CURB. SPECIAL DESIGNS MAY BE APPROVED BY THE CITY ENGINEER, PRIOR TO FINAL DESIGN.
3. SIDEWALK SHALL CONFORM TO CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS.
4. IF REQUIRED ALL SIDEWALKS SHALL BE SUBMITTED AND APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION BY THE ENGINEER OF RECORD.
5. ANY VARIANCE IN TEXTURE, GRADE OR ALIGNMENT MUST BE APPROVED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION.

CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. SD-06
	UPDATED: 4/1/2014
SIDEWALK DETAIL HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
	SCALE: N.T.S.
	FILE NAME: SD06.DWG

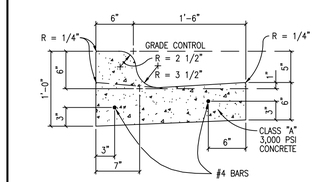


NOTES:
1. Curb ramps and detectable warning materials must be compliant with 2010 ADA Standards for Accessible Design and the 2012 TAS.
2. Detectable warning panels to be cast-in-place cast iron detectable warning plates manufactured by East Jordan Iron Works or Neenah Foundry.
3. Detectable warning panels to be installed per manufacturer's recommendations.
4. Detectable warning panels shall be located such that the edge nearest the curb line is at the back of curb. Align the rows of domes perpendicular to the grade break between the ramp run and the roadway.
5. Detectable warning panel to be contrasting color to the adjacent surfaces, including side flares.
6. Rebar to be installed per detail SD-06.

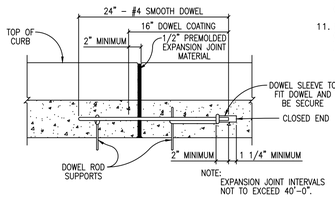
CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. SD-09
	UPDATED: 2015-04-01
STANDARD CURB RAMP HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
	SCALE: N.T.S.
	FILE NAME: SD09.DWG



SPILL CURB



CATCH AND LAYDOWN CURB

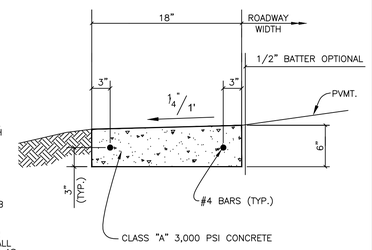


CURB DOWEL DETAIL

NOTES:
1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR THE CITY OF GEORGETOWN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. THE FOLLOWING SCHEME OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF GEORGETOWN.
   A. ALL CURB AND CURB AND GUTTER (REINFORCED) SHALL HAVE TWO #4 LONGITUDINAL REINFORCING BARS.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. REINFORCING BARS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
11. REBAR SUPPORTS ARE NOT REQUIRED ON MACHINE PLACED CURB PROVIDED THAT REBAR IS PROPERLY GUIDED INTO THE CURB SECTION.

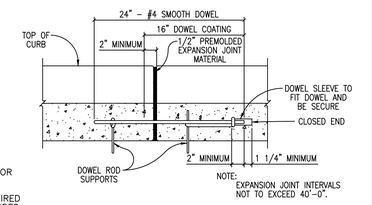
The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: ADOPTED 6/21/2006
CURB AND GUTTER DETAILS	DRAWING NAME: SD06
	SCALE: NTS; DATE:
	DRAWN BY: MRS; APPROVED BY: TRB



RIBBON CURB

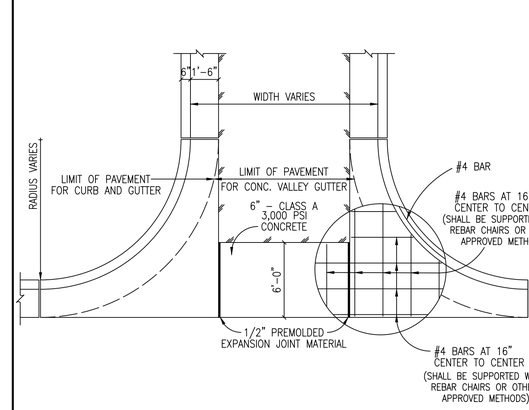
NOTES:
1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR TH CITY OF GEORGETOWN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. ONE OF THE FOLLOWING SCHEMES OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF GEORGETOWN.
   A. CURB AND GUTTER (REINFORCED) SHALL HAVE LONGITUDINAL REINFORCING BARS AS FOLLOWS: THREE #4,
   B. ALL TYPES OF CURB (REINFORCED) SHALL HAVE #4 BAR FOR LONGITUDINAL REINFORCEMENT.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. REINFORCING BARS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
11. REBAR SUPPORTS ARE NOT REQUIRED ON MACHINE PLACED CURB PROVIDED THAT REBAR IS PROPERLY GUIDED INTO THE CURB SECTION.



CURB DOWEL DETAIL

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: ADOPTED 6/21/2006
RIBBON CURB DETAILS	DRAWING NAME: SD08
	SCALE: NTS; DATE: 1/2003
	DRAWN BY: MRS; APPROVED BY: TRB



The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: ADOPTED 6/21/2006
CONCRETE VALLEY GUTTER DETAIL	DRAWING NAME: SD03
	SCALE: NTS; DATE: 1/2003
	DRAWN BY: MRS; APPROVED BY: TRB

APR	DATE	DESCRIPTION	REV

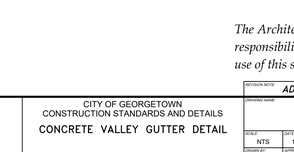
DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

STREET DETAILS (1 OF 2)

SUBMITTAL DATE: 01-16-2020



SHEET
77 OF 91

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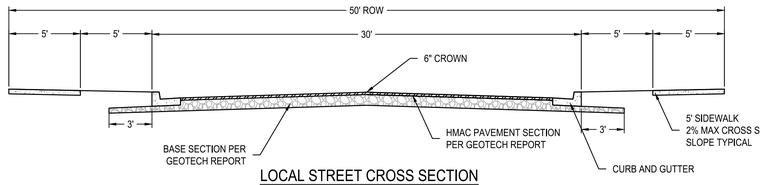
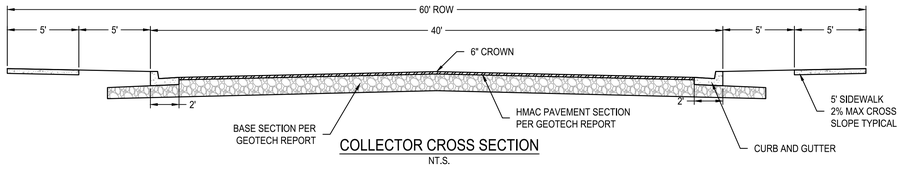
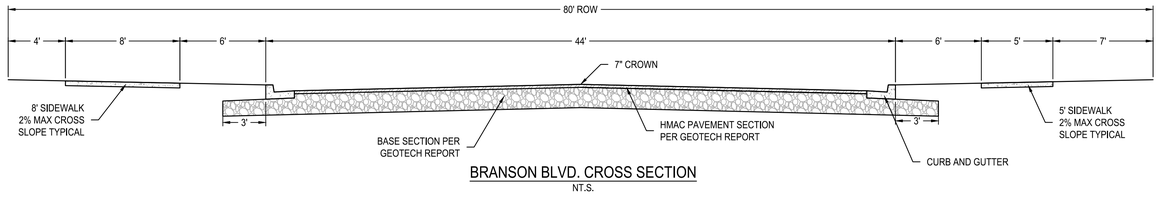


LOCAL STREET CROSS SECTION
NT.S.

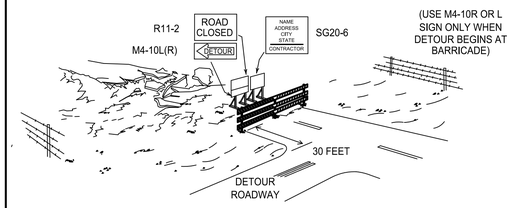


COLLECTOR CROSS SECTION
NT.S.

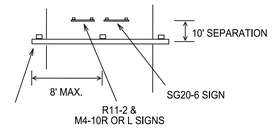


BRANSON BLVD. CROSS SECTION
NT.S.

EACH ROADWAY OF DIVIDED HIGHWAY
SHALL BE BARRICADED, IN THE SAME MANNER.



PERSPECTIVE VIEW



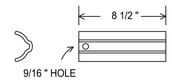
PLAN VIEW

1). R11-2 AND M4-10 SIGNS SHOULD BE MOUNTED ON INDEPENDENT SUPPORTS AT 7' MOUNTING HEIGHT IN CENTER OF ROADWAY.
2). ADVANCE SIGNING, INCLYDE CONSTRUCTION WARNING, SIGNS AND DETOUR SIGNING SHALL BE AS SPECIFIED ELSEWHERE IN THE PLANS.
3). THE THREE RAILS ON TYPE III BARRICADES SHALL BE REFLECTIVE ORANGE AND REFLECTIVE WHITE STRIPES ON ONE SIDE FACING ONE-WAY TRAFFIC AND BOTH SIDES FOR TWO-WAY TRAFFIC.
4). BARRICADE STRIPING SHOULD SLANT DOWNWARD IN THE DIRECTON OF DETOUR.
5). ALL SIGNS TO BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TYPE III CONSTRUCTION BARRICADE

REVISION NOTE: ADOPTED 6/21/2006
DRAWING NAME: SD22
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



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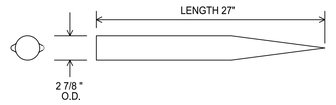
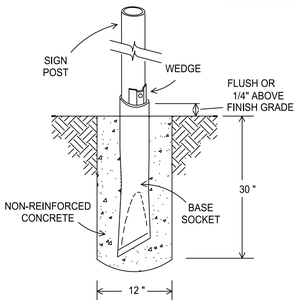
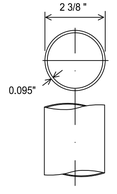


BASE SOCKET



TYPICAL ASSEMBLY



SIGN POST

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
POZ-LOC (BREAKAWAY FOUNDATION)

REVISION NOTE: ADOPTED 6/21/2006
DRAWING NAME: SD24
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

STREET DETAILS (2 OF 2)

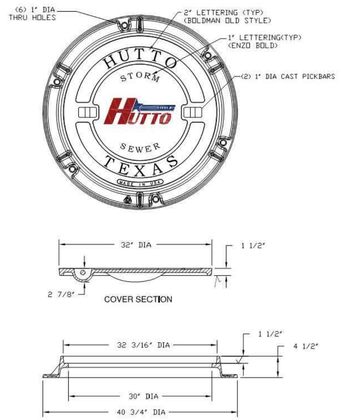
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
78 OF 91

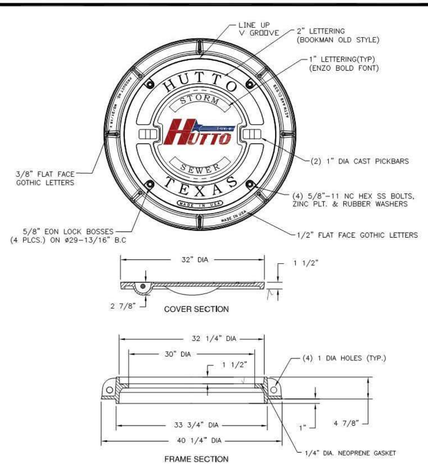
G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SIhts\C-SR-DETL_PH1.dwg Layout: STREET DETAILS (2 OF 2) Plotted: 2/11/2020 3:10:06 PM

Record Drawing



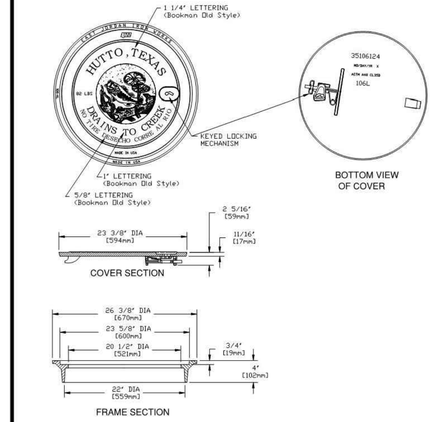
NOTES:
1. STANDARD STORMSEWER MANHOLE SET TO BE EAST JORDAN IRON WORKS, INC. CATALOG NO. V1420RG/ V1432-3DI, OR APPROVED EQUAL. COVER TO BE STAMPED "STORM SEWER."
2. STANDARD STORMSEWER MANHOLE SET TO BE HEAVY DUTY LOAD RATED.
3. FOR MORE DETAILED SPECIFICATIONS, REFER TO EAST JORDAN IRON WORKS, INC. REFERENCE PRODUCT DRAWINGS 41432105A01 AND 41432105.
4. MANHOLE COVER TO BE DUCTILE IRON PER ASTM A536 (70-50-05). SEE EAST JORDAN IRON WORKS, INC. CATALOG NO. V1432-3.
5. MANHOLE FRAME TO BE GRAY IRON PER ASTM A48 CL35B.

CITY OF HUTTO	DRAWING NO. SD01
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 02/01/2019
STANDARD STORMSEWER MANHOLE SET	DRAWN BY: BB
ENGINEERING & PUBLIC WORKS	SCALE: N.T.S.
	FILE NAME: SD01.DWG



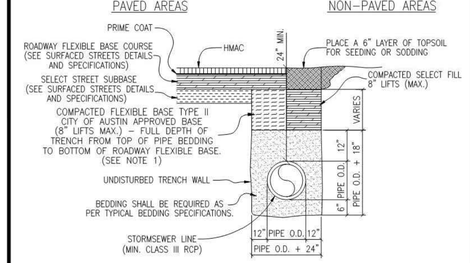
NOTES:
1. BOLTED STORM WATER MANHOLE SET TO BE EAST JORDAN IRON WORKS, INC. CATALOG NO. V2432. OR APPROVED EQUAL, COVER TO BE STAMPED "STORM SEWER."
2. STANDARD STORMWATER MANHOLE SET TO BE HEAVY DUTY LOAD RATED.
3. FOR MORE DETAILED SPECIFICATIONS, REFER TO EAST JORDAN IRON WORKS, INC. REFERENCE PRODUCT DRAWING 42432114W01
4. FOR STANDARD STORMWATER MANHOLE SET REFER TO DETAIL SD01.
5. MANHOLE COVER TO BE DUCTILE IRON PER ASTM A536 (70-50-05). SEE EAST JORDAN IRON WORKS, INC CATALOG NO. V2432-3, PRODUCT DRAWING 42432114.
6. MANHOLE FRAME TO BE GRAY IRON PER ASTM A48 CL35B.

CITY OF HUTTO	DRAWING NO. SD1A
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 02/01/2019
BOLTED STORMSEWER MANHOLE SET	DRAWN BY: BB
ENGINEERING & PUBLIC WORKS	SCALE: N.T.S.
	FILE NAME: SD1A.DWG



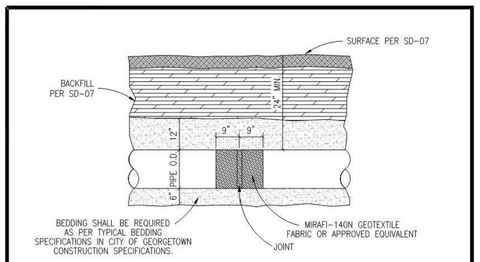
NOTES:
1. STANDARD CURB INLET LID SET TO BE EAST JORDAN IRON WORKS, INC. CATALOG NO. 106-4L, OR APPROVED EQUAL.
2. FOR MORE DETAILED SPECIFICATIONS, REFER TO EAST JORDAN IRON WORKS, INC. REFERENCE PRODUCT DRAWING 35506124.
3. CURB INLET LID AND FRAME TO BE GRAY IRON PER ASTM A48 CL35B.

CITY OF HUTTO	DRAWING NO. SD-02
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 10/05/10
STANDARD CURB INLET LID	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: SD02.DWG



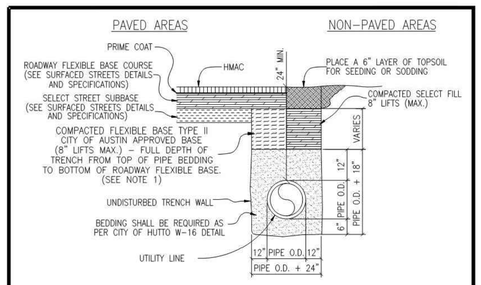
NOTES:
1. A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN EVERY TWO HUNDRED (200) FEET FOR EACH EIGHT (8) INCH LIFT OF BASE. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY OF HUTTO. BACKFILL COMPACTION SHALL BE A MINIMUM OF 95% MAXIMUM DENSITY PER TxDOT 113E SPECIFICATIONS.
2. THICKNESS FOR HMAC, ROADWAY FLEXIBLE BASE COURSE, AND SELECT STREET SUBBASE PER GEOTECHNICAL ENGINEER RECOMMENDATIONS.
3. CONTRACTOR OR ENGINEER MAY USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL.
4. STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III UNLESS DEPTH OF PIPE REQUIRES A STRONGER CLASS.
5. ALL JOINTS SHALL BE WRAPPED WITH GEOTEXTILE FABRIC PER DETAIL SD-08.

CITY OF HUTTO	DRAWING NO. SD-07
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 12/13/17
STORM SEWER TRENCH AND EMBEDMENT	DRAWN BY: BB
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: SD07.DWG



NOTES
1. PIPE SHALL BE REINFORCED CONCRETE PIPE CLASS III UNLESS THE DEPTH OF PIPE REQUIRES A STRONGER CLASS.
2. ALL FITTINGS AND WYES SHALL BE MANUFACTURED AND NOT CONSTRUCTED ON THE PROJECT WITHOUT PRIOR APPROVAL FROM THE CITY.
3. ALL JOINTS SHALL BE WRAPPED WITH MIRAFI-140N GEOTEXTILE FABRIC OR APPROVED EQUIVALENT. EACH JOINT SHALL BE WRAPPED WITH 18" WIDE FABRIC CENTERED ON THE JOINT.

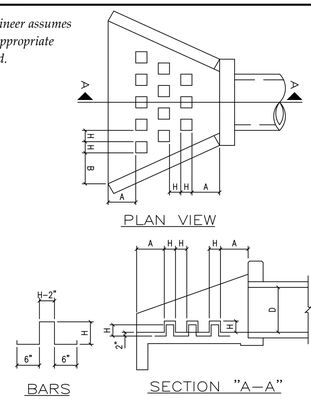
CITY OF HUTTO	DRAWING NO. SD-08
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 10/27/14
STORM SEWER TRENCH AND EMBEDMENT (PROFILE)	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: SD08.DWG



NOTES:
1. A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN EVERY TWO HUNDRED (200) FEET FOR EACH EIGHT (8) INCH LIFT OF BASE. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY OF HUTTO. BACKFILL COMPACTION SHALL BE A MINIMUM OF 95% MAXIMUM DENSITY PER TxDOT 113E SPECIFICATIONS.
2. THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE GOVERNING AGENCY.
3. CITY ENGINEER MAY GIVE PERMISSION TO USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL.
4. STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III UNLESS DEPTH OF PIPE REQUIRES A STRONGER CLASS.
5. ALL JOINTS SHALL BE WRAPPED WITH GEOTEXTILE FABRIC PER DETAIL SD-08.

CITY OF HUTTO	DRAWING NO. SD-10
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 12/13/17
UTILITY TRENCH AND EMBEDMENT	DRAWN BY: BB
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: SD10.DWG

The Architect/Engineer assumes responsibility for appropriate use of this standard.

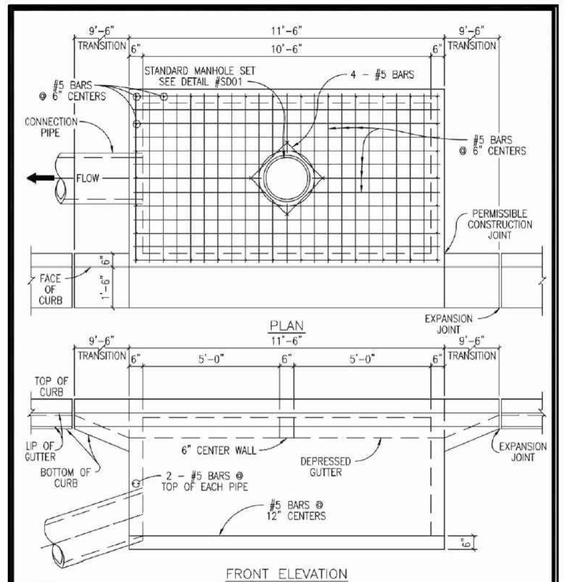


NOTES:
1. USE CLASS "A" CONCRETE, 3,000 PSI AT 28 DAYS, UNLESS NOTED.
2. REINFORCING STEEL - ASTM A615, GRADE 40, UNLESS NOTED.
3. LAP REINFORCING 30 BAR DIAMETERS MIN. AT SPLICES, UNLESS NOTED.
4. CHAMFER EXPOSED EDGES OF CONCRETE 3/4", UNLESS NOTED.
5. PLACE REINFORCING WITH THE CENTER OF THE OUTSIDE BARS 2 INCHES FROM THE SURFACE OF THE CONCRETE.

TABLE OF DIMENSIONS FOR ENERGY DISSIPATOR DETAIL

D PIPE DIAMETER (INCHES)	NUMBER OF ROWS OF DISSIPATORS	NUMBER OF DISSIPATORS IN FRONT ROW	H (INCHES)	A (INCHES)	B (INCHES)
12	1	3	4	4	9.1875
18	2	4	4 1/2	9 1/2	15.5625
24	2	5	6	14 3/4	16 1/2
30	3	6	7 1/2	12 1/2	14 3/8
36	3	6	9	16 1/4	18 5/16
42	3	6	10 1/2	20	22 1/4
48	3	6	12	23 3/4	26 1/4
54	3	6	13 1/2	27 1/2	27 3/4
60	3	6	15	31 1/4	31 5/8

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: ADOPTED 6/21/2006
ENERGY DISSIPATER DETAIL	DRAWING NAME: SD20
	SCALE: NTS; DATE: 1/2003
	DESIGNED BY: MRS; APPROVED BY: TRB



NOTES:
1. ALL CONCRETE SHALL BE CLASS "A" 3,000 PSI CONCRETE.
2. STORM SEWER PIPE MATERIAL TO BE R.C.P. (CLASS III) UNLESS OTHERWISE APPROVED BY THE CITY OF HUTTO.

CITY OF HUTTO	DRAWING NO. SD10
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 08/15/18
CURB INLET	DRAWN BY: BB
ENGINEERING & PUBLIC WORKS	SCALE: N.T.S.
	FILE NAME: SD10.DWG

							APR
							DATE
							DESCRIPTION
							REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

STORM DETAILS

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
79 OF 91

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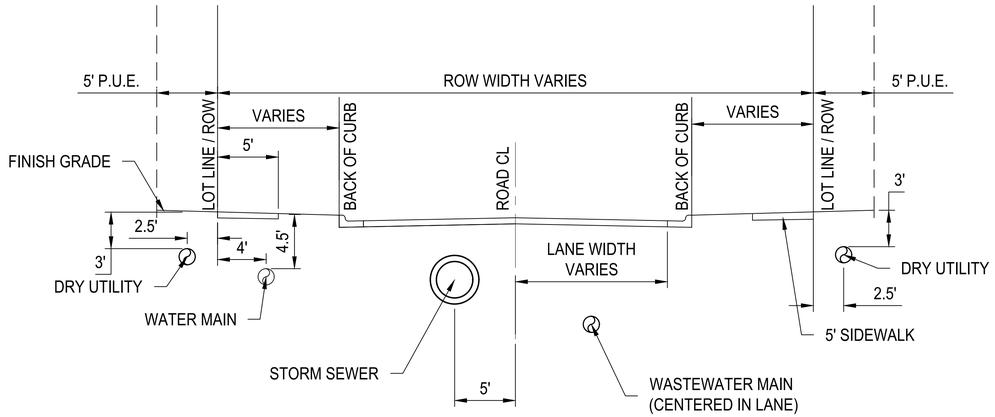
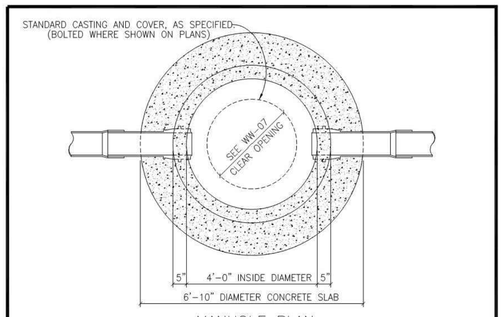
Record Drawing



TYPICAL UTILITY CROSS SECTION



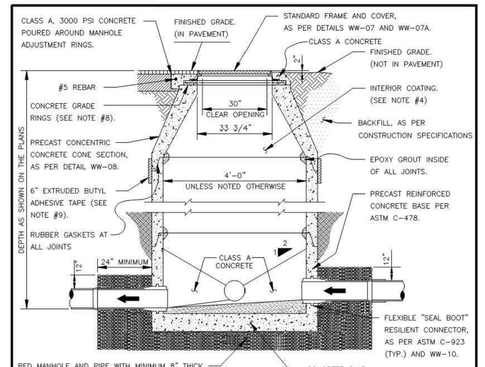
MANHOLE PLAN

CITY OF HUTTO NOTES:

MANHOLE DETAILS SHALL REFLECT THE CITY'S MINIMUM SPECIFICATIONS, AS STATED BELOW:

A. ALL MANHOLES SHALL BE 48" I.D., R.C.P., CLASS III, WITH RUBBER O-RING GASKET JOINTS CONFORMING TO ASTM C478, C433 AND C76.
B. ALL MANHOLES SHALL HAVE WATER-TIGHT FRAME AND COVER, WITH A MINIMUM 30" CLEAR OPENING, AS MANUFACTURED BY EAST JORDAN IRON WORKS (AS PER DETAIL # WW-07 & # WW-07A) OR APPROVED EQUAL.
C. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON FRAME AND COVER.
D. ALL MANHOLES SHALL HAVE A CONCENTRIC CONE.
E. MANHOLES MAY HAVE A FLAT LID, IF APPROVED BY CITY OF HUTTO, BEING 12" THICK WITH A MINIMUM 30" OPENING, AS MANUFACTURED BY CALVERT CONCRETE OR APPROVED EQUAL M.F.G. CONFORMING TO ASTM C478, 5000 P.S.I. CONCRETE, TRAFFIC BEARING, AND O-RING JOINT CONFORMING TO ASTM C443.
F. INVERTS AND FLEXIBLE SEAL BOOTS, PER ASTM C-923, SHALL BE CAST INTO BASE SECTION.
G. MINIMUM DROP BETWEEN INVERTS SHALL BE ONE-TENTH OF A FOOT (0.1').
H. TWO (2") INCH GRADE RINGS WITH AN I.D. TO MATCH FRAMES CLEAR OPENING, MINIMUM OF TWO (2), MAXIMUM OF FIVE (5) GRADE RINGS REQUIRED.

	CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. WW-02
		UPDATED: 09/20/10
	STANDARD MANHOLE - PLAN HUTTO UTILITY SYSTEMS	DRAWN BY: XXX
		SCALE: N.T.S.
		FILE NAME: WW02.DWG

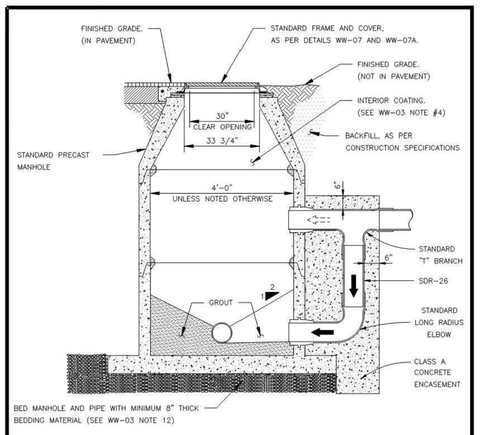


1. MANHOLES SHALL BE PRECAST ASTM C478 BELL AND SPIGOT WITH "O" RING JOINTS.
2. SEE CONSTRUCTION PLANS FOR MANHOLE SIZE, LOCATION, CONFIGURATION, TYPE OF TOP SECTION, VENTING REQUIREMENTS, PIPE SIZES AND TYPES.
3. SEE SPECIFICATIONS ON MATERIALS AND CONSTRUCTION.
4. ENTIRE INTERIOR OF WASTEWATER MANHOLES TO BE COATED WITH RAVEN 405, OR APPROVED EQUAL, WITH A UNIFORM THICKNESS OF 124 MILS AND A MINIMUM THICKNESS OF 100 MILS, APPLIED AFTER MANHOLE HAS PASSED THE VACUUM TEST.
5. ALL MANHOLE COVERS SHALL BE BOLTED AND GASKETED, WHEN MANHOLES ARE LOCATED OUTSIDE OF PAVEMENT.
6. MANHOLES TO BE VENTED ARE IDENTIFIED ON MANHOLE SCHEDULE, REFERENCE MANHOLE VENT DETAIL.
7. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO THE FLOW STREAM. ALL P.V.C. PIPE SHALL BE REMOVED FROM INVERT.
8. FRAME ADJUSTMENT HEIGHT SHALL BE FIVE INCHES (5") MINIMUM AND EIGHTEEN INCHES (18") MAXIMUM.
9. EXTERIOR OF EACH JOINT TO BE WRAPPED IN 6" EXTRUDED BUTYL ADHESIVE TAPE WHEN MANHOLE IS LOCATED IN THE 100-YR FLOODPLAIN.
10. MANHOLES TO BE DESIGNED TO RESIST LATERAL AND VERTICAL SOIL FORCES RESULTING FROM MANHOLE DEPTH. ADDITIONALLY, MANHOLES LOCATED IN PAVEMENT TO BE DESIGNED FOR H20 TRAFFIC LOADING.
11. BASE SECTION SHALL BE DESIGNED FOR H-20 LOADING, PLUS EARTH LOAD AT 130 PCF.

12. MANHOLE BASE BEDDING MATERIAL SPECS FOR 3/4" WASHED GRAVEL:

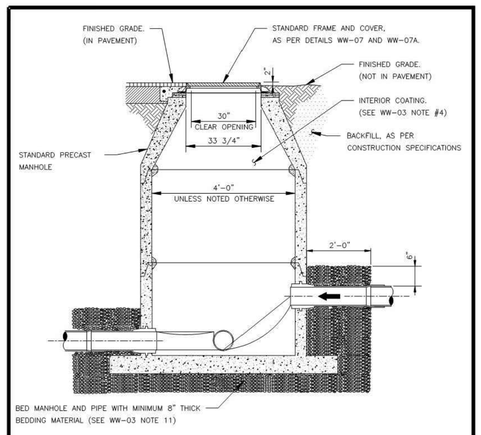
SIEVE SIZE	% RETAINED
1"	0
1 1/2"	0-10
3/4"	45-80
3/4"	85-100
3/8"	95-100

	CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. WW-03
		UPDATED: 09/30/10
	STANDARD MANHOLE - SECTION HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
		SCALE: N.T.S.
		FILE NAME: WW03.DWG



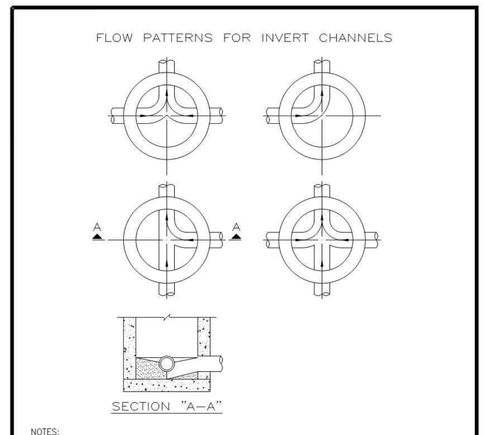
1. CONCRETE ENCASEMENT FOR DROP CONNECTION TO BE POURED INTEGRALLY WITH BOTH MANHOLE SLAB AND WALL.
2. DROP CONNECTIONS SHALL BE REQUIRED WHENEVER AN INFLUENT SEWER IS LOCATED TWO FEET (2') OR MORE ABOVE THE MAIN INVERT CHANNEL.
3. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
4. MINIMUM PIPE SIZE FOR DROP IS EIGHT INCHES (8").
5. SEE STANDARD MANHOLE DETAIL (DWG. # WW-03) FOR ADDITIONAL REQUIREMENTS.

	CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. WW-04
		UPDATED: 09/23/10
	DROP CONNECTION-PRECAST MANHOLE TYPE "A" HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
		SCALE: N.T.S.
		FILE NAME: WW04.DWG



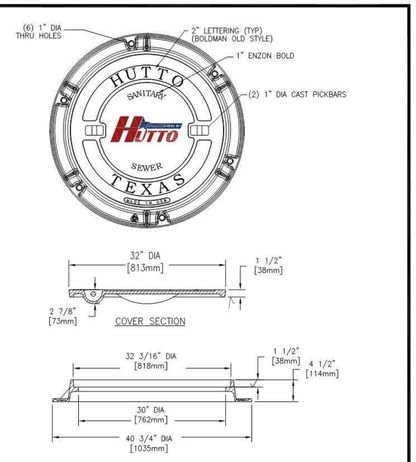
NOTES:
1. TO BE USED WHERE DROP IS SIX INCHES (6") TO TWO FEET (2'-0").
2. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
3. CONSTRUCTION OF DROP SHALL PROVIDE A OVERSIZED SLAB TO EXTEND UNDER THE DROP CONNECTION.
4. MINIMUM PIPE SIZE FOR DROP IS EIGHT INCHES (8").
5. SEE STANDARD MANHOLE DETAIL (DWG. # WW-03) FOR ADDITIONAL REQUIREMENTS.

	CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. WW-05
		UPDATED: 09/23/10
	DROP CONNECTION-PRECAST MANHOLE TYPE "B" HUTTO UTILITY SYSTEMS	DRAWN BY: MSL
		SCALE: N.T.S.
		FILE NAME: WW05.DWG



NOTES:
1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOW.
3. CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
4. SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
5. INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP.

	CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. WW-06
		UPDATED: 06/01/09
	FLOW PATTERNS FOR INVERT CHANNELS HUTTO UTILITY SYSTEMS	DRAWN BY: xxx
		SCALE: N.T.S.
		FILE NAME: WW06.DWG



NOTES:
1. STANDARD WASTEWATER MANHOLE SET TO BE EAST JORDAN IRON WORKS, INC. CATALOG NO V1420RG/V1432DI OR CITY ENGINEER APPROVED EQUAL. COVER TO BE STAMPED "SANITARY SEWER."
2. STANDARD WASTEWATER MANHOLE SET TO BE HEAVY DUTY LOAD RATED.
3. FOR MORE DETAILED SPECIFICATIONS, REFER TO EAST JORDAN IRON WORKS, INC. REFERENCE PRODUCT DRAWING NO. 41432106401.
4. FOR BOLTED WASTEWATER MANHOLE SET REFER TO CITY OF HUTTO DETAIL WW09.
5. MANHOLE COVER TO BE DUCTILE IRON PER ASTM A536 (70-50-05).
6. MANHOLE FRAME TO BE GRAY IRON PER ASTM A48 CL35B.

	CITY OF HUTTO CONSTRUCTION STANDARDS AND DETAILS	DRAWING NO. WW07
		UPDATED: 04/01/2019
	STANDARD WASTEWATER MANHOLE SET ENGINEERING & PUBLIC WORKS	DRAWN BY: BB
		SCALE: N.T.S.
		FILE NAMEWW07.DWG

	APR
	DATE
	DESCRIPTION
	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WASTEWATER DETAILS (1 OF 3)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
80 OF 91

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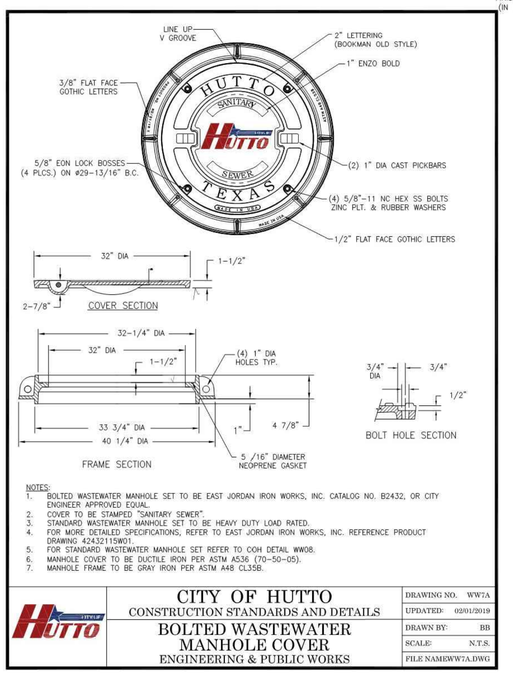

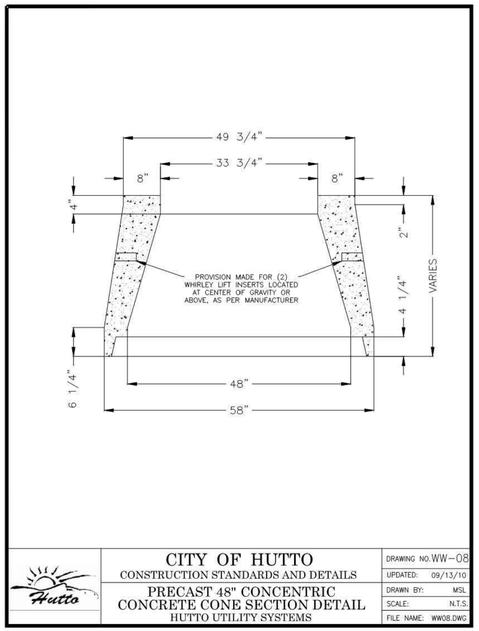

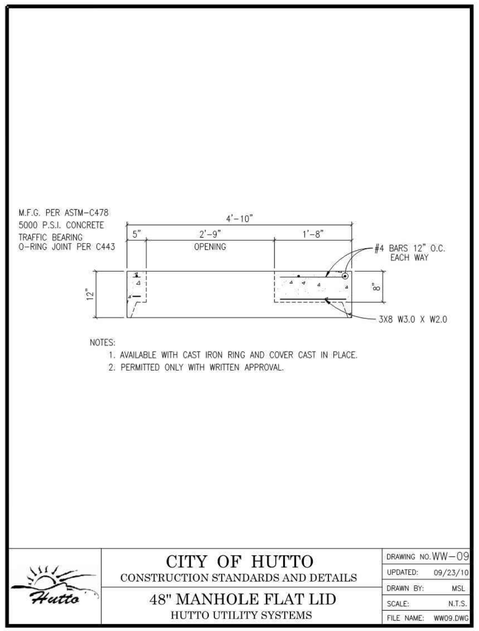

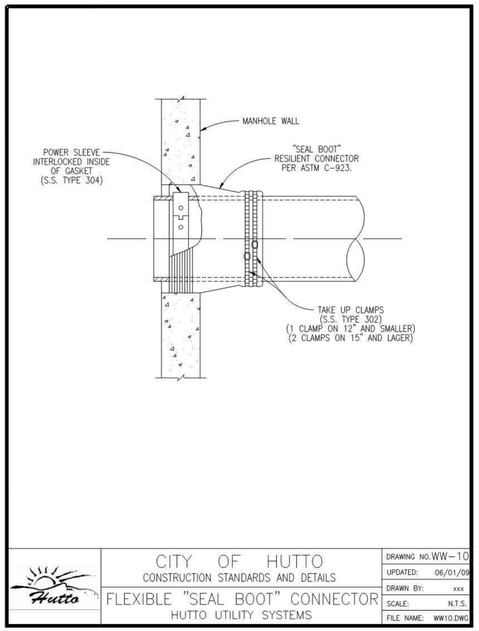

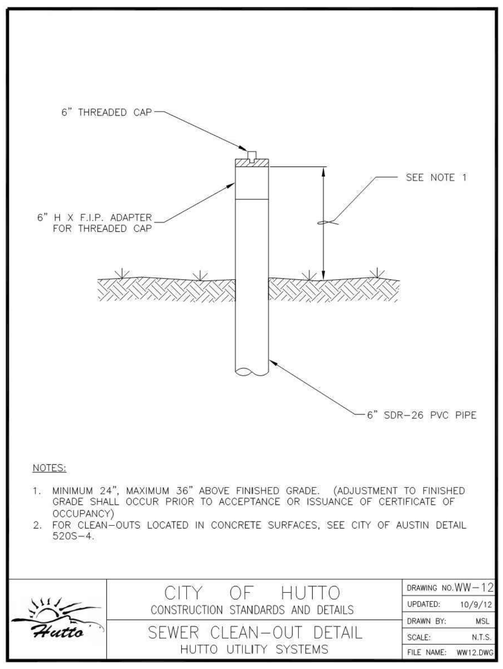

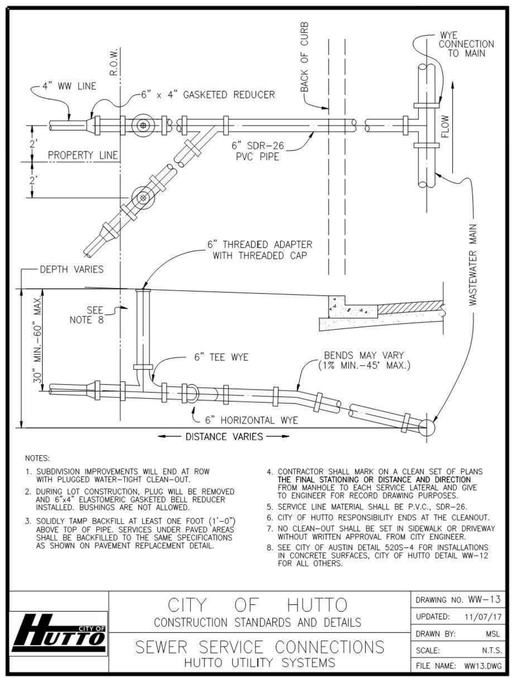

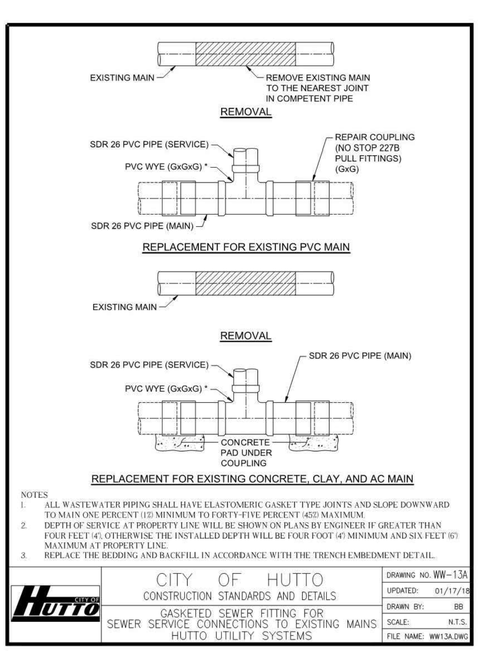

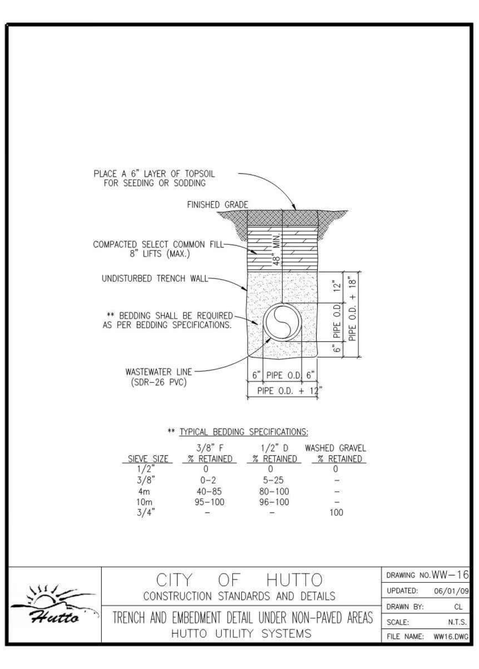

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						DATE
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DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE
BGE, INC.
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COTTONWOOD CREEK
HUTTO, TEXAS

WASTEWATER DETAILS (2 OF 3)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
81 OF 91

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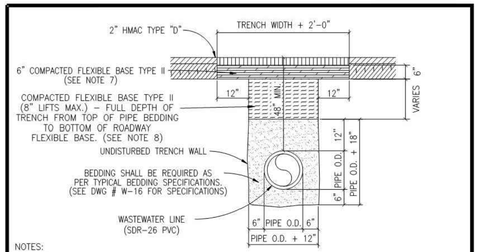
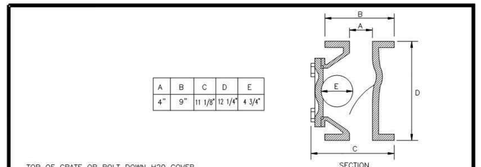


NOTES:

1. REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE.
2. BASE MATERIAL SHALL BE PLACED IN TWO OR THREE LAYERS AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO SPECIFIED MAXIMUM DENSITY.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE.
5. A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN EVERY TWO HUNDRED (200) FEET FOR EACH SIX (6) INCH LIFT OF SUBGRADE AND EACH OPEN CUT CROSSING. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY OF HUTTO.
6. THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE GOVERNING AGENCY.
7. FLEXIBLE BASE TYPE II: (ROADWAY BASE)
   TxDOT TYPE A – GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO 98% OF TxDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
8. FLEXIBLE BASE TYPE II: (TRENCH BACKFILL)
   TxDOT TYPE A – GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO 95% OF TxDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
9. CONTRACTOR OR ENGINEER MAY REQUEST FOR USE OF ALTERNATE BACKFILL MATERIAL. ALTERNATE MATERIALS AND TESTING PROTOCOL MUST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER PRIOR TO USE.

CITY OF HUTTO	CITY OF HUTTO	DRAWING NO. WW-17
	CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 06/01/09
	TRENCH AND EMBEDMENT AND PAVEMENT REPLACEMENT DETAIL UNDER EXISTING ROADWAY	DRAWN BY: xxx
	HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
		FILE NAME: WW17.DWG



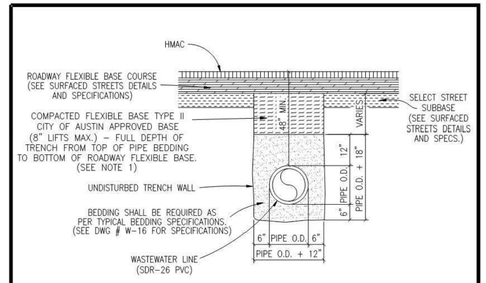
A	B	C	D	E
4"	9"	11 1/8"	12 1/4"	4 3/4"

FLOMATIC MODEL 408F BALL CHECK VALVE
SCALE: N.T.S.
(SEE NOTE 4 BELOW)

NOTES:

1. AIR INTAKE PIPE TO BE D.I.P., CLASS 53 WITH FLANGED CONNECTIONS.
2. ALL FITTINGS TO BE 150 PSIG RATED & ANSI/AWWA C110/A21.10.
3. SURFACE PREP ABOVE GROUND PIPING TO SSPC10-63, N.A.C.E. NO.2 STANDARD. APPLY EPOXY PRIMER 2-4 MIL. DFT FOLLOWED BY 2 COATS OF AMINE ADDUCT CURED, HIGH-BUILD EPOXY (TWO COMPONENT EPOXY POLYAMIDE) 8-10 MIL DFT, NON-LEAD CEDAR GREEN COLOR.
4. IF ELEVATION OF VENT OPENING IS LESS THAN 1-FT. ABOVE 100 YR. FLOODPLAIN, FLOMATIC MODEL 408F BALL CHECK VALVE OR EQUAL WITH FLOATING TYPE BALL TO BE INSTALLED AT DOWNTURNED OPENING OF VENT. (SEE DIMENSIONAL DETAIL ABOVE RIGHT). 16 MESH 304 S.S. INSECT SCREEN TO BE PLACED IN THE OPENING.

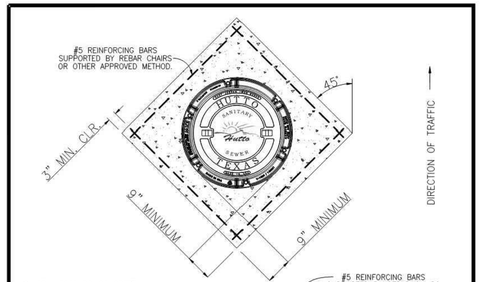
Hutto	CITY OF HUTTO	DRAWING NO. WW-18
	CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/28/10
	MANHOLE VENT FOR BELOW GROUND INSTALLATION	DRAWN BY: XXX
	HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
		FILE NAME: WW18.DWG



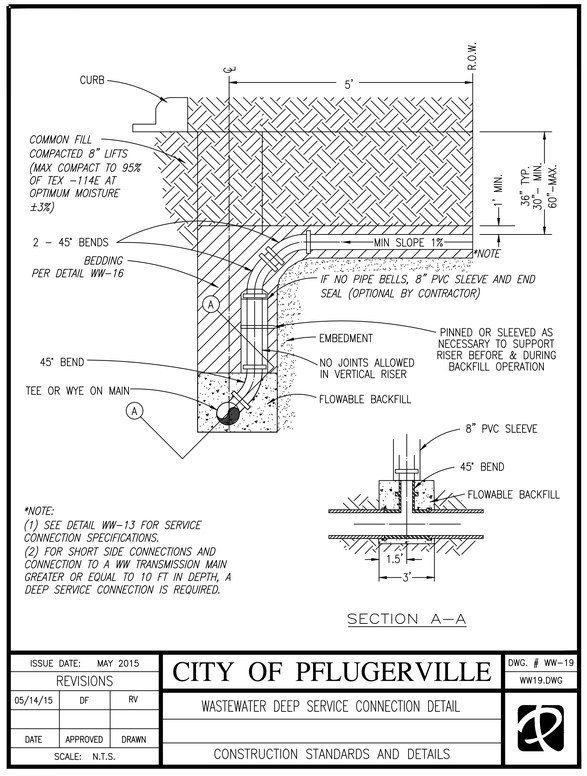
NOTES:

1. A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN EVERY TWO HUNDRED (200) FEET FOR EACH EIGHT (8) INCH LIFT OF BASE. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY OF HUTTO. BACKFILL COMPACTION SHALL BE A MINIMUM OF 95% MAXIMUM DENSITY PER TxDOT 113E SPECIFICATIONS.
2. THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE GOVERNING AGENCY.
3. CONTRACTOR OR ENGINEER MAY REQUEST FOR USE OF ALTERNATE BACKFILL MATERIAL. ALTERNATE MATERIALS AND TESTING PROTOCOL MUST BE SUBMITTED TO AND APPROVED BY THE CITY PRIOR TO USE.

HUTTO	CITY OF HUTTO	DRAWING NO. WW-19
	CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 06/01/18
	TRENCH AND EMBEDMENT DETAIL UNDER PROPOSED ROADWAY	DRAWN BY: BB
	ENGINEERING & PUBLIC WORKS	SCALE: N.T.S.
		FILE NAME: WW19.DWG



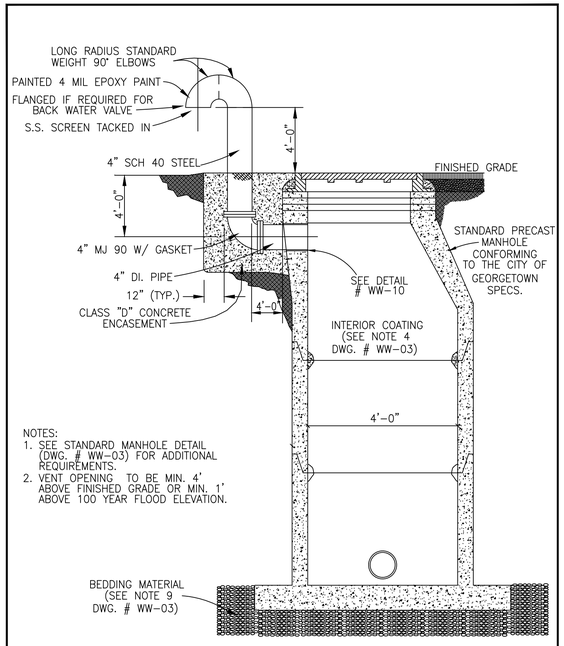
Hutto	CITY OF HUTTO	DRAWING NO. WW-20
	CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 10/10/10
	CONCRETE APRON AROUND MANHOLE RING AND COVER	DRAWN BY: MSL
	HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
		FILE NAME: WW20.DWG



*NOTE:
(1) SEE DETAIL WW-13 FOR SERVICE CONNECTION SPECIFICATIONS.
(2) FOR SHORT SIDE CONNECTIONS AND CONNECTION TO A WW TRANSMISSION MAIN GREATER OR EQUAL TO 10 FT IN DEPTH, A DEEP SERVICE CONNECTION IS REQUIRED.

ISSUE DATE: MAY 2015		
REVISIONS		
05/14/15	DF	RV
DATE	APPROVED	DRAWN
SCALE: N.T.S.		

	CITY OF PFLUGERVILLE	DWG. # WW-19
	WASTEWATER DEEP SERVICE CONNECTION DETAIL	WW19.DWG
	CONSTRUCTION STANDARDS AND DETAILS	



NOTES:
1. SEE STANDARD MANHOLE DETAIL (DWG. # WW-03) FOR ADDITIONAL REQUIREMENTS.
2. VENT OPENING TO BE MIN. 4' ABOVE FINISHED GRADE OR MIN. 1' ABOVE 100 YEAR FLOOD ELEVATION.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

GEORGETOWN TEXAS	CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	REVISION NOTE: ADOPTED 6/21/2006
	TYPICAL MANHOLE WITH VENT	DRAWING NAME: WW19
		SCALE: NTS; DATE: 11/2003
		DRAWN BY: MRS; APPROVED BY: TRB

							APR
							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
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COTTONWOOD CREEK
HUTTO, TEXAS

WASTEWATER DETAILS (3 OF 3)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
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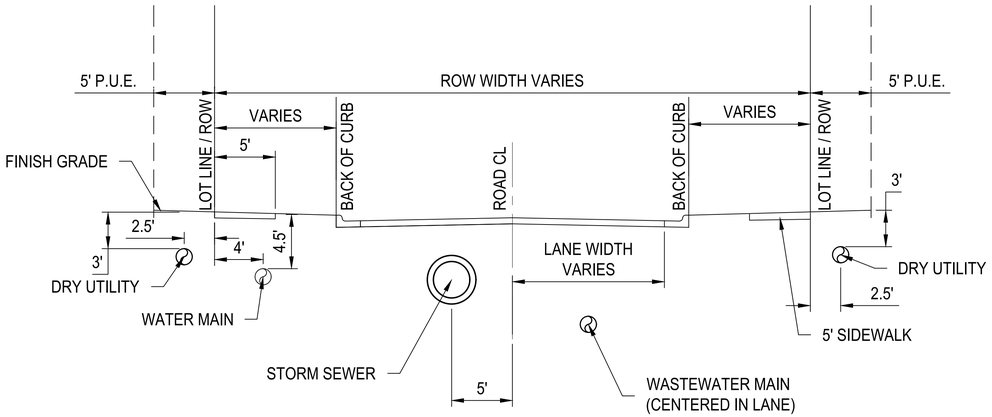
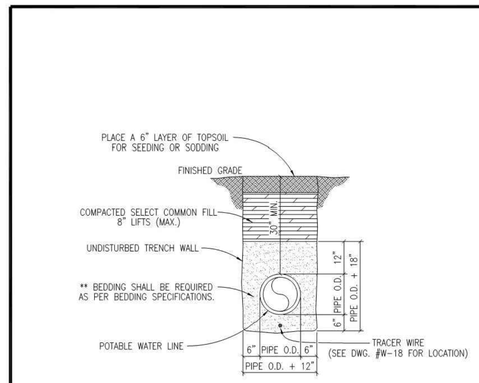


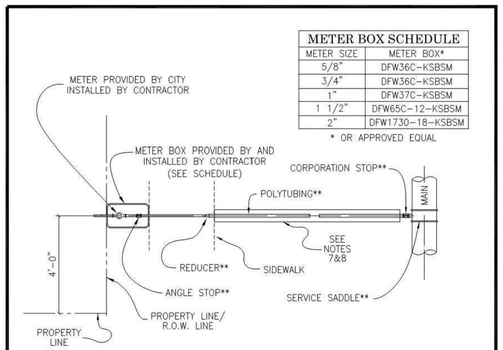
TYPICAL UTILITY CROSS SECTION



** TYPICAL BEDDING SPECIFICATIONS:

SIEVE SIZE	3/8" F % RETAINED	1/2" D % RETAINED	WASHED GRAVEL % RETAINED
1/2"	0	0	0
3/8"	0–2	5–25	–
4m	40–85	80–100	–
10m	95–100	96–100	–
3/4"	–	–	100

CITY OF HUTTO	DRAWING NO. W–02
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 06/01/09
TRENCH AND EMBEDMENT DETAIL UNDER NON–PAVED AREAS	DRAWN BY: CL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W02.DWG



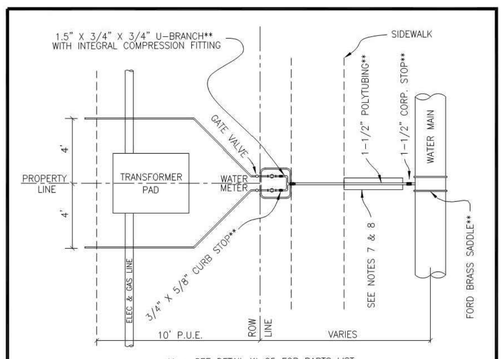
METER BOX SCHEDULE	
METER SIZE	METER BOX*
5/8"	DFW36C–KSBSM
3/4"	DFW36C–KSBSM
1"	DFW37C–KSBSM
1 1/2"	DFW65C–12–KSBSM
2"	DFW1730–18–KSBSM

* OR APPROVED EQUAL

** = SEE DETAIL W–24 FOR PARTS LISTINGS

NOTES:
1. STANDARD PARTS LIST FOUND ON DETAIL W–24.
2. SERVICE LINE TO REDUCE UNDER SIDEWALK (SEE W–24 & W–26).
3. ANGLE STOPS SHALL BE SIZED TO MATCH SERVICE & METER SIZE.
4. 1" ANGLE STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
5. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" IN DIAMETER SHALL BE HANDLED ON AN INDIVIDUAL BASIS.
6. ANGLE STOPS 1 1/2" AND 2" IN SIZE SHALL BE PROVIDED WITH BOTH A LOCKING CAP AND METER FLANGE.
7. BEDDING MATERIAL PER CONSTRUCTION SPECIFICATIONS.
8. CASING REQUIREMENTS FOR SERVICE LINES CROSSING ROADWAYS SEE DETAIL W–26.
9. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY ENGINEER.
10. ALL SERVICE LINES SHALL BE PLACED PERPENDICULAR TO ROADWAY.

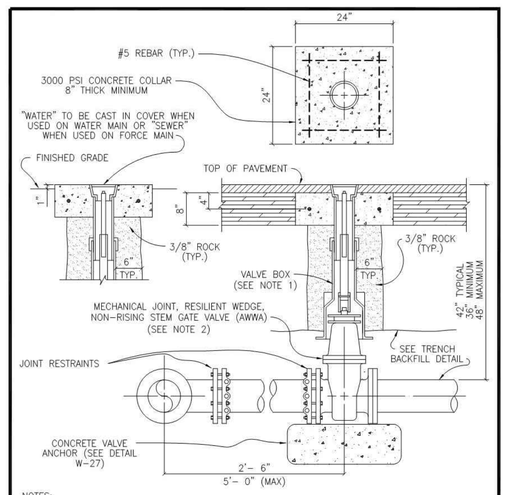
CITY OF HUTTO	DRAWING NO. W–04
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 11/11/11
SINGLE WATER SERVICE - PLAN	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W04.DWG



** = SEE DETAIL W–25 FOR PARTS LIST

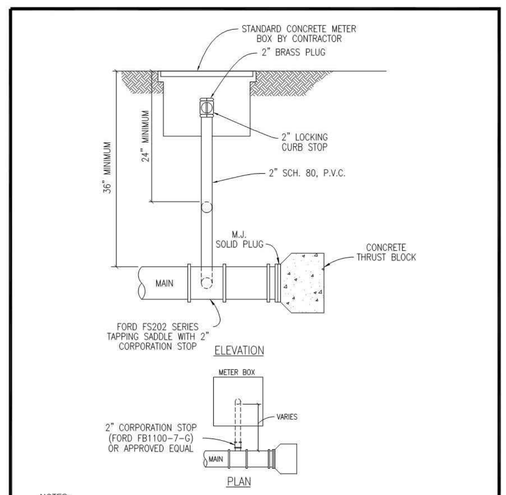
NOTES:
1. AUTHORIZED SERVICE LINE MATERIAL: 1.5" POLYETHYLENE TUBING SDR 9, CLASS 200
2. ANGLE STOP SIZE SHALL MATCH U–BRANCH AND METER.
3. 1" ANGLE STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
4. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" IN DIAMETER SHALL BE HANDLED ON AN INDIVIDUAL BASIS.
5. ANGLE STOPS 1 1/2" AND 2" IN SIZE SHALL BE PROVIDED WITH BOTH A LOCKING CAP AND METER FLANGE.
6. BEDDING ENVELOPE AND MATERIAL PER CONSTRUCTION SPECIFICATIONS.
7. CASING REQUIREMENTS FOR SERVICE LINES CROSSING ROADWAYS SEE DETAIL W–26.
8. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY.

CITY OF HUTTO	DRAWING NO. W–05
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 11/11/11
DOUBLE WATER SERVICE - PLAN	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W05.DWG



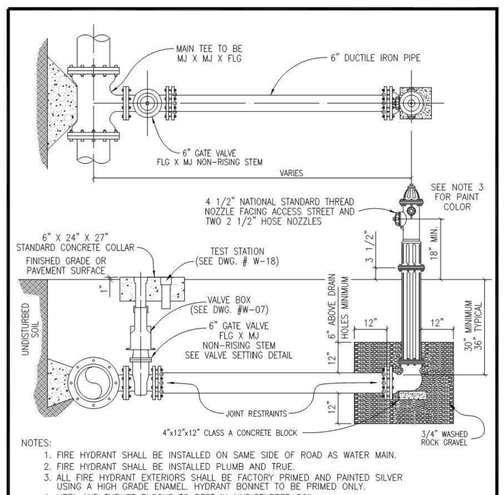
NOTES:
1. VALVE BOX SHALL BE AMERICAN FLOW CONTROL TRENCH ADAPTER OR APPROVED EQUAL HAVING AN ADJUSTABLE RANGE OF + OR – 6 INCHES FROM INSTALLED FINISH GRADE.
2. ACCEPTABLE GATE VALVES ARE:
   A. AMERICAN FLOW CONTROL – SERIES 2500
   B. MUELLER – 2360 SERIES
   C. CLOW

CITY OF HUTTO	DRAWING NO. W–07
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 11/11/11
TYPICAL VALVE SETTING	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W07.DWG



NOTES:
1. TRAFFIC BEARING METER BOXES WILL BE REQUIRED IN ALL PAVED AREAS AND AREAS WHICH MAY BE PAVED IN THE FUTURE.
2. TUBING SHALL BE CONTINUOUS FROM CORPORATION STOP TO CURB STOP, NO FITTINGS SHALL BE PERMITTED.

CITY OF HUTTO	DRAWING NO. W–09
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 11/11/11
STANDARD BLOW–OFF	DRAWN BY: xxx
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W09.DWG



NOTES:
1. FIRE HYDRANT SHALL BE INSTALLED ON SAME SIDE OF ROAD AS WATER MAIN.
2. FIRE HYDRANT SHALL BE INSTALLED PLUMB AND TRUE.
3. ALL FIRE HYDRANT EXTERIORS SHALL BE FACTORY PRIMED AND PAINTED SILVER USING A HIGH GRADE ENAMEL. HYDRANT BONNET TO BE PRIMED ONLY.
4. HEEL AND THRUST BLOCKS TO REST IN UNDISTURBED SOIL.
5. THE ONLY FIRE HYDRANTS ACCEPTABLE ARE:
   A. KENNEDY – K81D
   B. AMERICAN DARLING – B84B
   C. CLOW – MEDALLION
6. DOUBLE BLUE REFLECTOR "HYE–LITES" BRAND, MANUFACTURED BY PAVEMENT MARKERS INC. TO BE INSTALLED AT CENTERLINE OF STREET PERPENDICULAR TO HYDRANT.

CITY OF HUTTO	DRAWING NO. W–10
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 11/11/11
TYP. FIRE HYDRANT INSTALLATION	UPDATED BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W10.DWG

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							DATE
							DESCRIPTION
◁	◁	◁	◁	◁	◁		REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE
BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F–1046
TEL: 512-879-0400 www.brwngey.com

COTTONWOOD CREEK
HUTTO, TEXAS

WATER DETAILS (1 OF 4)

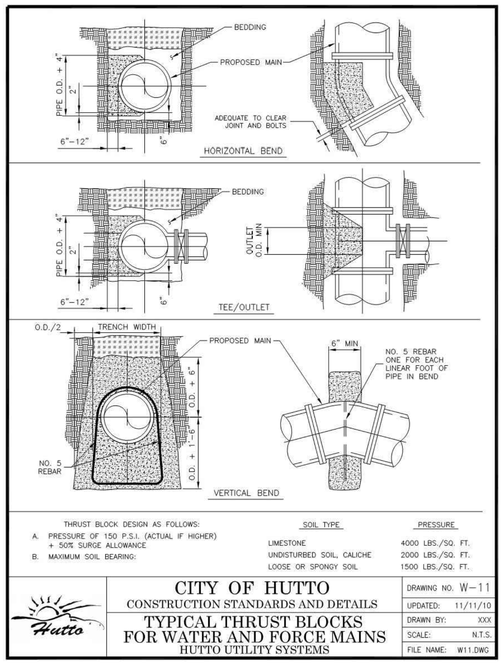
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
83 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_Shts\C-SR-DET1_PH1.dwg, Layout: WATER DETAILS (1 OF 4), Plotted: 2/11/2020 3:10:16 PM

Record Drawing



THRUST BLOCK DESIGN AS FOLLOWS:

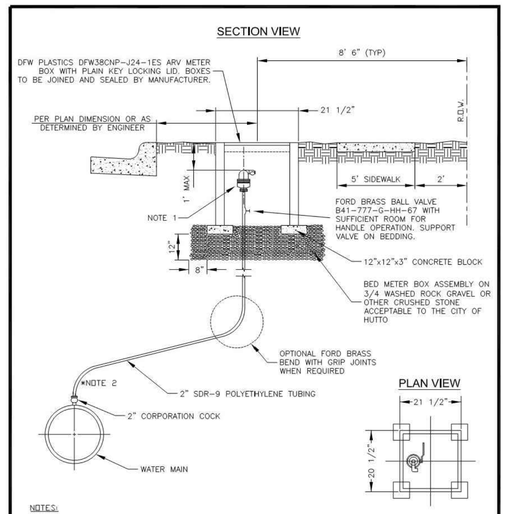
A. PRESSURE OF 150 P.S.I. (ACTUAL IF HIGHER) + 50% SURGE ALLOWANCE

B. MAXIMUM SOIL BEARING:

SOIL TYPE	PRESSURE
LIMESTONE	4000 LBS./SQ. FT.
UNDISTURBED SOIL, CALICHE	2000 LBS./SQ. FT.
LOOSE OR SPONGY SOIL	1500 LBS./SQ. FT.

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
TYPICAL THRUST BLOCKS FOR WATER AND FORCE MAINS
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–11
UPDATED:	11/11/10
DRAWN BY:	XXX
SCALE:	N.T.S.
FILE NAME:	W11.DWG



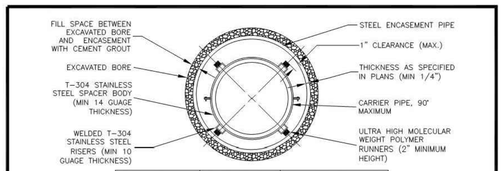
NOTES:

1) ARI D–040 P 2" AIR RELEASE VALVE. HIGHER CAPACITY VALVES TO BE DESIGNATED BY DESIGN ENGINEER AND APPROVED BY CITY ENGINEER.

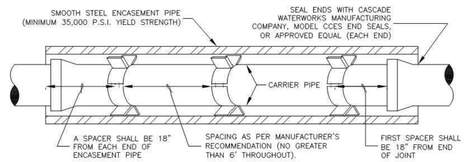
2) THREAD TO COMPRESSION BRASS ELBOW ALLOWED IF NECESSARY DUE TO DEPTH LIMITATIONS.

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
STANDARD AIR RELEASE VALVE FOR WATER MAINS
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–12
UPDATED:	3/01/12
DRAWN BY:	MSL
SCALE:	N.T.S.
FILE NAME:	W12.DWG



PIPE SIZE–CARRIER (DIAMETER)	PIPE SIZE–CASING (DIAMETER) (MIN.)	MINIMUM PIPE THICKNESS (INCHES)	
6"	16"	1/4	0.2500
8"	18"	1/4	0.2500
10"	20"	5/16	0.3125
12" ~ 14"	24"	3/8	0.3750
16" ~ 18"	30"	7/16	0.4375
20"	36"	1/2	0.5000
24"	42"	1/2	0.5000
30"	48"	1/2	0.5000

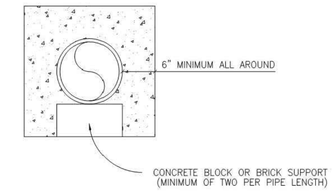


NOTES:

1. CASING SPACER CONFIGURATION AND SPACING SHALL BE AS SHOWN ON MANUFACTURER'S DRAWINGS FOR SPECIFIC WORK. THESE MUST BE ACCEPTABLE TO THE CITY OF HUTTO.
2. CASING SPACER SHALL BE AS MANUFACTURED BY CASCADE WATERWORKS MANUFACTURING COMPANY, MODEL CCS, OR APPROVED EQUAL.
3. CASING SPACERS SHALL NOT BE PAID DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE APPROPRIATE BID ITEM.
4. DO NOT USE WEDGES BETWEEN CARRIER PIPE AND CASING.
5. PRIOR TO INSERTING CARRIER PIPE, ANY WATER SHOULD BE PUMPED OUT OF CASING SO THAT NO MORE THAN A FEW INCHES OF WATER REMAINS.
6. ALL JOINTS IN ENCASEMENT SHALL BE RESTRAINED FOR WATER LINES ONLY UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
PIPE ENCASEMENT
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–14
UPDATED:	2015–04–01
DRAWN BY:	MSL
SCALE:	N.T.S.
FILE NAME:	W14.DWG

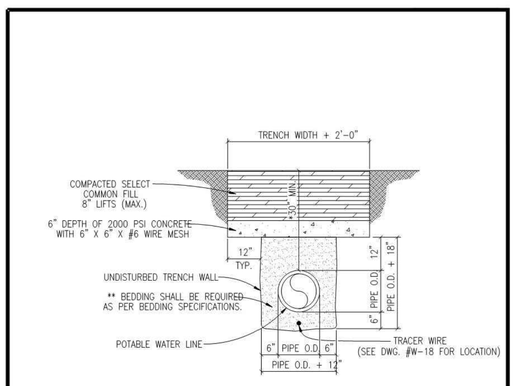


NOTES:

1. ENCASEMENT TO BE CONSTRUCTED WHERE SEWER LINES PASS OVER OR UNDER A WATER MAIN WITH LESS THAN EIGHTEEN INCHES (18") CLEAR DISTANCE.
2. AT CROSSINGS, ENCASEMENT SHALL EXTEND TEN FEET (10'–0") ON EITHER SIDE OF CROSSING.
3. BEGINNING AND ENDING OF ENCASEMENTS SHALL NOT BE MORE THAN SIX INCHES (6") FROM A PIPE JOINT.
4. WHERE WATER AND SEWER LINES PARALLEL WITH LESS THAN TEN FEET (10'–0") HORIZONTAL CLEAR DISTANCE, NO ENCASEMENT IS REQUIRED IF BOTH LINES ARE 150 PRESSURE PIPE.
5. RAW WATER MAINS SHALL BE 150 PSI PRESSURE RATED WHEN PARALLELING POTABLE WATER MAINS WITH LESS THAN TEN FEET (10'–0") HORIZONTAL CLEARANCE.
6. WHERE MINIMUM COVER, THIRTY INCHES (30") IS NOT AVAILABLE, ENCASEMENT WILL BE REQUIRED.
7. ALL CONCRETE ENCASEMENTS MUST BE FORMED AND INSPECTED BY THE CITY OF HUTTO INSPECTOR PRIOR TO PLACING CONCRETE AND BACKFILLING.

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
CONCRETE ENCASEMENT DETAIL
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–15
UPDATED:	06/01/09
DRAWN BY:	XXX
SCALE:	N.T.S.
FILE NAME:	W15.DWG



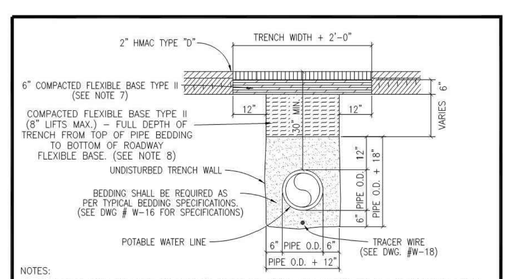
* WHERE 30" MINIMUM COVER CAN NOT BE OBTAINED OR DUE TO POTENTICAL SURFACE LOADING THE CITY MAY REQUIRE A CAP TO BE INSTALLED.

** TYPICAL BEDDING SPECIFICATIONS:

SIEVE SIZE	3/8" F % RETAINED	1/2" D % RETAINED
1/2"	0	0
3/8"	0–2	5–25
4m	40–85	80–100
10m	95–100	96–100
3/4"	–	–

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
CONCRETE TRENCH CAP DETAIL
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–16
UPDATED:	09/28/2017
DRAWN BY:	XXX
SCALE:	N.T.S.
FILE NAME:	W16.DWG

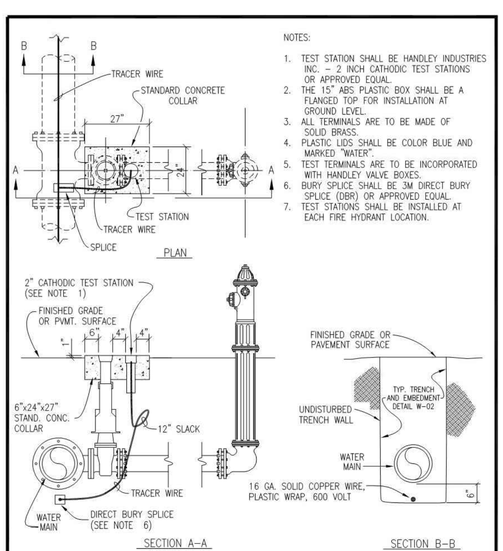


NOTES:

1. REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE.
2. BASE MATERIAL SHALL BE PLACED IN TWO OR THREE LAYERS AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO SPECIFIED MAXIMUM DENSITY.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE.
5. A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN EVERY TWO HUNDRED (200) FEET FOR EACH SIX (6) INCH LIFT OF SUBGRADE AND EACH OPEN CUT CROSSING. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY OF HUTTO.
6. THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE GOVERNING AGENCY.
7. FLEXIBLE BASE TYPE II: (ROADWAY BASE)
   TxDOT TYPE A – GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO 98% OF TxDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
8. FLEXIBLE BASE TYPE II: (TRENCH BACKFILL)
   TxDOT TYPE A – GRADE 2 OR BETTER CRUSHED LIMESTONE BASE COMPACTED TO 95% OF TxDOT 113E AT OPTIMUM MOISTURE. PROCTOR TO BE PROVIDED BY THE CONTRACTOR TO THE CITY INSPECTOR.
9. CONTRACTOR OR ENGINEER MAY REQUEST FOR USE OF ALTERNATE BACKFILL MATERIAL. ALTERNATE MATERIALS AND TESTING PROTOCOL MUST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER PRIOR TO USE.

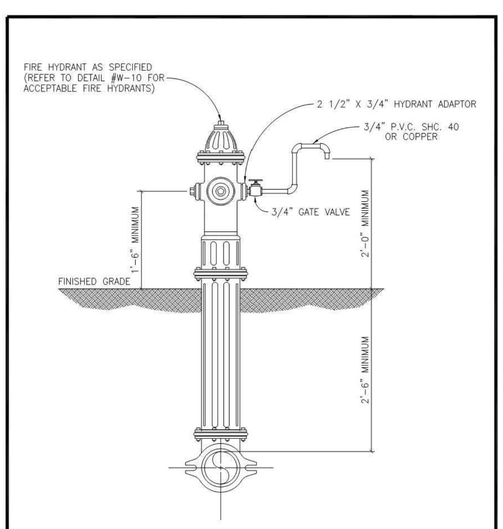
CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
TRENCH AND EMBEDMENT AND PAVEMENT REPLACEMENT DETAIL UNDER EXISTING ROADWAY
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–17
UPDATED:	06/01/09
DRAWN BY:	XXX
SCALE:	N.T.S.
FILE NAME:	W17.DWG



CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
TRACER WIRE INSTALLATION AND TEST STATION LOCATION
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–18
UPDATED:	9/1/2011
DRAWN BY:	XXX
SCALE:	N.T.S.
FILE NAME:	W18.DWG



CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
FIRE HYDRANT SAMPLING POINT
HUTTO UTILITY SYSTEMS

DRAWING NO.	W–19
UPDATED:	11/11/10
DRAWN BY:	XXX
SCALE:	N.T.S.
FILE NAME:	W19.DWG

REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WATER DETAILS (2 OF 4)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/1/2020

SHEET
84 OF 91

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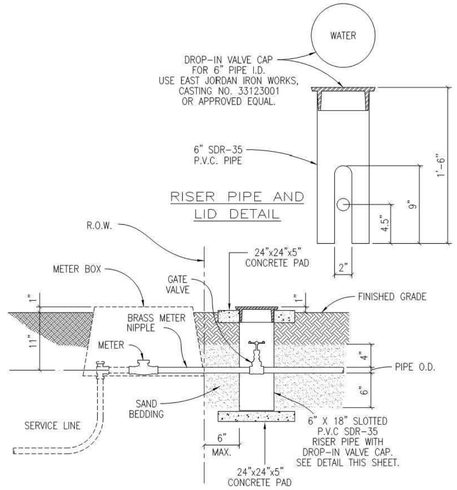
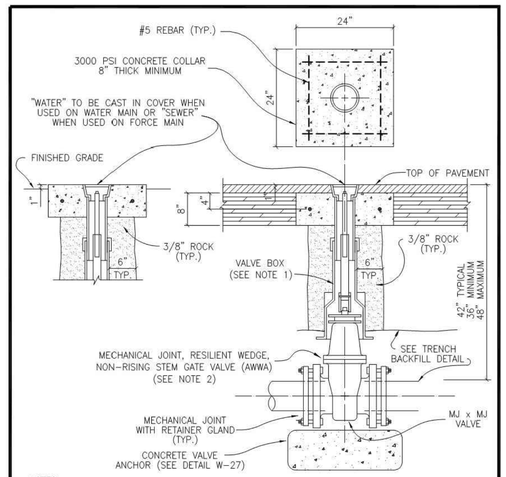
Record Drawing



NOTES:

1. GATE VALVE SHALL BE A HAMMOND IB645, CLASS 125, BRONZE GATE, SCREWED BONNET, NON-RISING STEM, SOLID WEDGE DISC WITH THREADED ENDS OR APPROVED EQUAL.
2. DROP-IN VALVE CAP SHALL BE CAST WITH THE WORD "WATER" ON TOP.
3. USE SCHEDULE 80, M.I.P. ADAPTER AS REQUIRED.

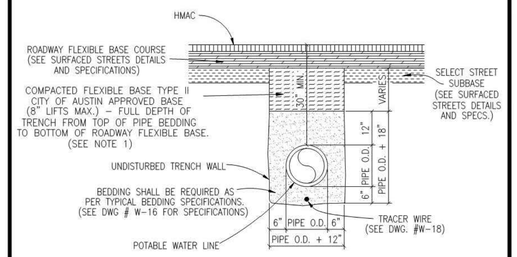
CITY OF HUTTO	DRAWING NO. W-20
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 11/11/11
CUSTOMER'S CUT-OFF	DRAWN BY: VMB
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W20.DWG



NOTES:

1. VALVE BOX SHALL BE AMERICAN FLOW CONTROL TRENCH ADAPTER OR APPROVED EQUAL HAVING AN ADJUSTABLE RANGE OF + OR - 6 INCHES FROM INSTALLED FINISH GRADE. (SEE VALVE SETTING DETAIL, DWG. #W-07.)
2. ACCEPTABLE GATE VALVES ARE:
   A. AMERICAN FLOW CONTROL - SERIES 2500
   B. MUELLER - 2360 SERIES
   C. CLOW

CITY OF HUTTO	DRAWING NO. W-21
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 11/11/11
INLINE VALVE INSTALLATION	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W21.DWG

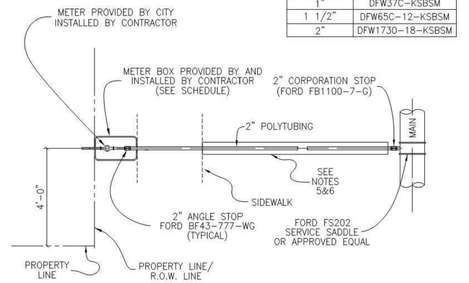


NOTES:

1. A MINIMUM OF ONE DENSITY TEST SHALL BE TAKEN EVERY TWO HUNDRED (200) FEET FOR EACH EIGHT (8) INCH LIFT OF BASE. PROCTORS FOR MATERIALS USED IN BACKFILLING SHALL BE OBTAINED BY A CERTIFIED LABORATORY. DENSITY TESTS SHALL BE CONDUCTED BY A CERTIFIED LABORATORY OR THE PERMITTEE'S CONSULTANTS. THE PERCENTAGE OF MAXIMUM DENSITY REQUIRED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "THE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AT THE TIME THE PERMIT WAS ISSUED. ALL DENSITY TESTS SHALL BE COMPLETED AND ACCEPTED ON EACH LAYER PRIOR TO ADDITIONAL BACKFILLING. A COPY OF ALL COMPLETED AND ACCEPTED DENSITY TESTS SHALL BE FURNISHED TO CITY OF HUTTO. BACKFILL COMPACTION SHALL BE A MINIMUM OF 95% MAXIMUM DENSITY PER TxDOT 113E SPECIFICATIONS.
2. THESE SPECIFICATIONS MAY BE SUPERSEDED BY THE GOVERNING AGENCY.
3. CONTRACTOR OR ENGINEER MAY REQUEST FOR USE OF ALTERNATE BACKFILL MATERIAL. ALTERNATE MATERIALS AND TESTING PROTOCOL MUST BE SUBMITTED TO AND APPROVED BY THE CITY PRIOR TO USE.

CITY OF HUTTO	DRAWING NO. W-22
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 12/13/17
TRENCH AND EMBEDMENT DETAIL UNDER PROPOSED ROADWAY	DRAWN BY: BB
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W22.DWG

METER BOX SCHEDULE	
METER SIZE	METER BOX*
5/8"	DFW36C-KSBSM
3/4"	DFW36C-KSBSM
1"	DFW37C-KSBSM
1 1/2"	DFW65C-12-KSBSM
2"	DFW1730-18-KSBSM

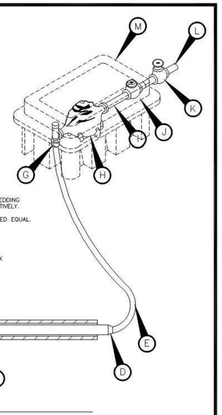


NOTES:

1. ANGLE STOPS SHALL BE SIZED TO MATCH SERVICE & METER SIZE.
2. 1" ANGLE STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
3. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" IN DIAMETER SHALL BE HANDLED ON AN INDIVIDUAL BASIS.
4. 2" ANGLE STOPS SHALL BE PROVIDED WITH BOTH A LOCKING CAP AND METER FLANGE.
5. BEDDING MATERIAL PER CONSTRUCTION SPECIFICATIONS.
6. CASING REQUIREMENTS FOR SERVICE LINES CROSSING ROADWAYS SEE DETAIL W-26.
7. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY ENGINEER.
8. ALL SERVICE LINES SHALL BE PLACED PERPENDICULAR TO ROADWAY.

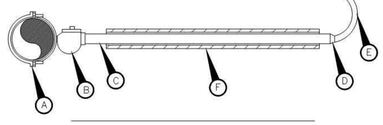
CITY OF HUTTO	DRAWING NO. W-23
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 08/19/13
COMMERCIAL WATER SERVICE	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W04.DWG

METER SIZE	LENGTH
5/8"	7 3/4"
3/4"	9"
1"	11"



NOTE:

1. SERVICE PIPE SHALL BE 200 psi BLACK COLORED POLYETHYLENE HAVING A DIMENSION RATIO OF 9 (DR9).
2. SERVICE SADDLES SHALL BE WRAPPED COMPLETELY WITH 8 mil. POLYETHYLENE FILM.
3. TOP OF BOXES SHALL BE 1" ABOVE FINISHED GRADE.
4. PIPING AND TUBING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 510.3 OF THE STANDARD SPECIFICATIONS. SPECIAL ATTENTION IS CALLED TO "PIPE BEDDING ENVELOPE" AND "BACKFILLING", SECTIONS 510.3 (14) AND 510.3 (25), RESPECTIVELY.
5. METER BOX TO BE MODEL DFW36C-KSBSM BY DFW PLASTICS, INC. OR APPROVED EQUAL. PROVIDE BLACK-PAINTED METAL LID WITH METER READER.
6. AXIS OF METER ASSEMBLY (METER STOP, METER, PIPING AND OWNERS CUTOFF) SHALL BE 10" BELOW TOP OF BOX.
7. SLOTS PROVIDED IN METER BOX TO ACCOMODATE PIPING INTO AND OUT OF BOX SHALL NOT BE MODIFIED.
8. ALL PARTS SHALL BE AS NOTED OR APPROVED EQUAL.



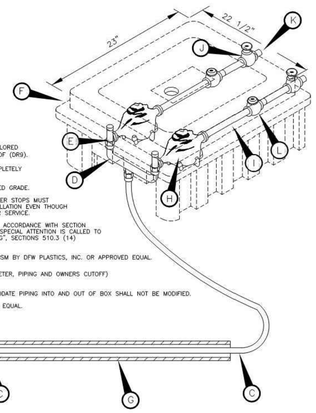
MATERIAL LIST

A. FORD BRASS FS202 SERIES TAPPING SADDLE.
B. 1 1/2" CORPORATION STOP: FORD BRASS FB1100-6-G.
C. 1 1/2" POLYETHYLENE TUBING SDR 9, CLASS 200.
D. FORD BRASS C84-34G COMPRESSION BY MALE REDUCING ADAPTER.
E. 1" POLYETHYLENE TUBING SDR 9, CLASS 200.
F. PIPE CASING WHERE APPLICABLE (SEE SEPARATE DETAIL).
G. FORD BRASS BA13-332W ANGLE STOP.
H. WATER METER; SUPPLIED BY CITY.
I. WATER METER COUPLING; MALE I.P.T. X SWIVEL COUPLING NUT:
   - FOR 5/8" AND 3/4" METERS: 3/4" x 8 1/2" LONG.
   - FOR 1" METERS: 1" x 8 1/2" LONG.
J. BRONZE GATE VALVE: NON-RISING STEM (3/4" OR 1") FEMALE I.P.T. (PROPERTY OWNERS CUT-OFF OUTSIDE METER BOX IN SEPARATE VALVE CAN WITH LID AS PER CITY STANDARDS).
K. 3/4" PRESSURE REDUCING VALVE.
L. 3/4" OR 1" PIPE MEETING CITY OF HUTTO PLUMBING CODE REQUIREMENTS.
M. PLASTIC RECTANGULAR METER BOX AS NOTED ON DETAIL W-04.

NOTE: H THRU L TO BE INSTALLED UNDER SEPARATE BUILDING PERMIT.

CITY OF HUTTO	DRAWING NO. W-24
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 12/1/11
1", 3/4" OR 5/8" SINGLE METER	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W24.DWG

METER SIZE	LENGTH
5/8"	7 3/4"
3/4"	9"



NOTE:

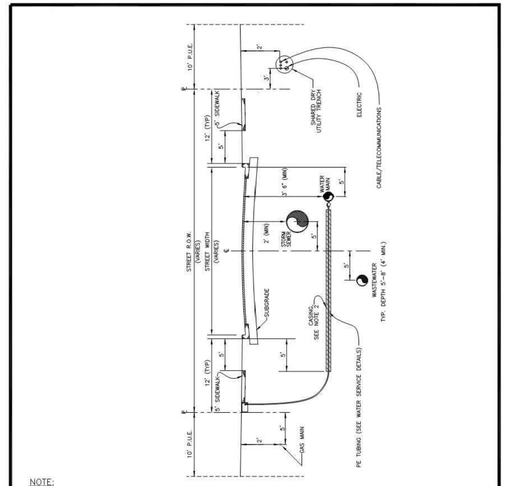
1. SERVICE PIPE SHALL BE 200 psi BLACK COLORED POLYETHYLENE HAVING A DIMENSION RATIO OF (DR9).
2. SERVICE SADDLES SHALL BE WRAPPED COMPLETELY WITH 8 mil. POLYETHYLENE FILM.
3. TOP OF BOXES SHALL BE 1" ABOVE FINISHED GRADE.
4. BRANCH CONNECTION AND BOTH ANGLE METER STOPS MUST BE INSTALLED PRIOR TO FIRST METER INSTALLATION EVEN THOUGH SECOND PROPERTY MAY NOT BE READY FOR SERVICE.
5. PIPING AND TUBING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 510.3 OF THE STANDARD SPECIFICATIONS. SPECIAL ATTENTION IS CALLED TO "PIPE BEDDING ENVELOPE" AND "BACKFILLING", SECTIONS 510.3 (14) AND 510.3 (25), RESPECTIVELY.
6. METER BOX TO BE MODEL DFW38C-14-KSBSM BY DFW PLASTICS, INC. OR APPROVED EQUAL.
7. AXIS OF METER ASSEMBLY (METER STOP, METER, PIPING AND OWNERS CUTOFF) SHALL BE 10" BELOW TOP OF BOX.
8. SLOTS PROVIDED IN METER BOX TO ACCOMODATE PIPING INTO AND OUT OF BOX SHALL NOT BE MODIFIED.
9. ALL PARTS TO BE AS NOTED OR APPROVED EQUAL.

MATERIAL LIST

A. FORD BRASS FS202 SERIES TAPPING SADDLE
B. 1 1/2" FORD BRASS FB1100-6-G CORPORATION STOP.
C. 1 1/2" POLYETHYLENE SDR 9, CLASS 200 TUBING.
D. FORD BRASS U48-63-7 1/2 G U-BRANCH.
E. FORD BRASS BA13-332W ANGLE STOP.
F. PLASTIC RECTANGULAR METER BOX (SEE NOTE 6).
G. PIPE CASING (SEE DETAIL W-26).
H. WATER METER, PROVIDED BY CITY.
I. WATER METER COUPLING: 3/4" x 8 1/2" MALE I.P.T. X SWIVEL COUPLING NUT.
J. 3/4" OR 1" BRONZE GATE VALVE: NON-RISING STEM, FEMALE I.P.T. (PROPERTY OWNERS CUT-OFF OUTSIDE METER BOX IN SEPARATE VALVE CAN WITH LID AS PER CITY STANDARDS).
K. 3/4" OR 1" PIPE MEETING CITY OF HUTTO PLUMBING CODE REQUIREMENTS.
L. 3/4" P.R.V.

NOTE: H THRU L TO BE INSTALLED UNDER SEPARATE BUILDING PERMIT

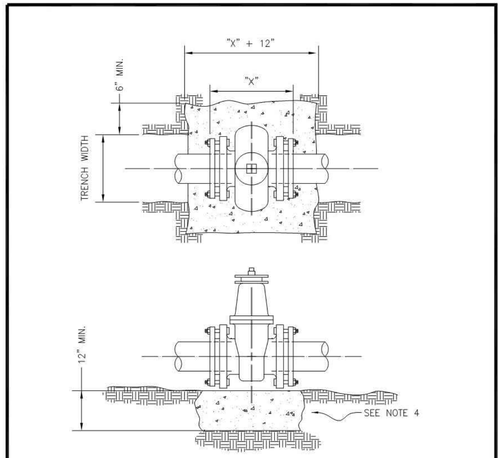
CITY OF HUTTO	DRAWING NO. W-25
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 12/1/11
3/4" OR 5/8" DOUBLE METER	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W25.DWG



NOTE:

1. REFER TO "STANDARD INSTALLATION DETAIL FOR ONE OR TWO METERS" FOR SERVICE SPECIFICS.
2. FOR SERVICE LINES GREATER THAN 1.5" DIAMETER, USE 4" SDR-35 FOR CASING. FOR LINES 1.5" IN DIAMETER AND BELOW, USE 2" SCHEDULE 40 PVC, GALVANIZED CASING PIPE REQUIRED FOR JACK AND BORE. ALL SERVICE LINES TO BE ENCASED PER THIS DETAIL.
3. STORMSEWER SHALL BE A MINIMUM OF ONE FOOT(1') ABOVE WASTEWATER MAINS AND LATERALS.
4. MINIMUM VERTICAL SEPARATION DISTANCE BETWEEN WATER AND WW AT CROSSINGS IS 2'.

CITY OF HUTTO	DRAWING NO. W-26
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 3/1/2015
WATER SERVICE CASING DETAIL	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W26.DWG



NOTES:

1. THE ENGINEER SHALL PROVIDE DESIGN ON ALL VALVES 12" AND LARGER.
2. COMPLY WITH REQUIREMENTS OF AWWA C-550, PROTECTIVE EPOXY INTERIOR COATINGS FOR VALVES.
3. PAINT UNEMBEDDED PORTION OF REBAR WITH TWO COATS OF COAL TAR EXPOXY.
4. CONCRETE VALVE SUPPORT, 2500 PSI CONCRETE.

CITY OF HUTTO	DRAWING NO. W-27
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 10/13/10
CONCRETE VALVE ANCHOR	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: W27.DWG

REV	DESCRIPTION	DATE	APR

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WATER DETAILS (3 OF 4)

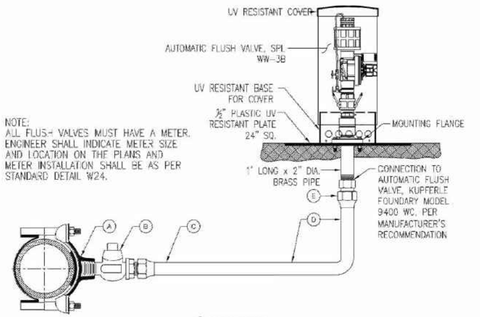
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY H. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
85 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SIhts\C-SR-DET1_PH1.dwg, Layout: WATER DETAILS (3 OF 4), Plotted: 2/11/2020 3:10:19 PM

Record Drawing



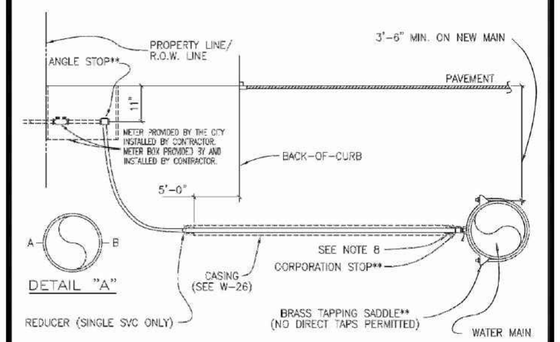
NOTE:
ALL FLUSH VALVES MUST HAVE A METER. ENGINEER SHALL INDICATE METER SIZE AND LOCATION ON THE PLANS AND METER INSTALLATION SHALL BE AS PER STANDARD DETAIL W24.

A. 2" SERVICE CLAMP
B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET
C. 2" POLY TUBING WATER SERVICE EXTENDED BEYOND PAVEMENT
D. 2" POLY TUBING
E. 2" BRASS COUPLING, COMPRESSION x FIP

NOTES:
1. AUTOMATIC FLUSH VALVE MAY ALSO BE USED ON TAPPED PLUGS AND CAPS.
2. THE CONTRACTOR SHALL PROVIDE THE FLUSH VALVE ACCESS KEY TO CITY OF HUTTO WATER UPON FLUSH VALVE ACCEPTANCE.
3. METER BOX AND FLUSH VALVE SHALL NOT BE LOCATED IN A SIDEWALK, DRIVEWAY, PEDESTRIAN WAY OR TRAFFIC WAY.
4. A DRAINAGE WAY, CONTAINED WITHIN THE R.O.W. OR AN EASEMENT, SHALL BE PROVIDED FROM FLUSH VALVE TO STORM SEWER SYSTEM OR PUBLIC DRAINAGE WAY. THIS DRAINAGE WAY SHALL BE CONSTRUCTED OF CONCRETE OR OTHER CITY ENGINEER APPROVED MATERIAL TO PREVENT EROSION.
5. DESIGN ENGINEER SHALL PROVIDE CALCULATIONS WITH PLANS AT THE TIME OF REVIEW INCLUDING FREQUENCY AND FLUSH RATE REQUIRED TO CIRCULATE WATER IN DEAD END MAIN EVERY 72 HOURS.

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
AUTOMATIC FLUSH VALVES
ENGINEERING & PUBLIC WORKS

DRAWING NO.	W.15
UPDATED:	09/01/18
DRAWN BY:	BB
SCALE:	N.T.S.
FILE NAME:	W15.DWG

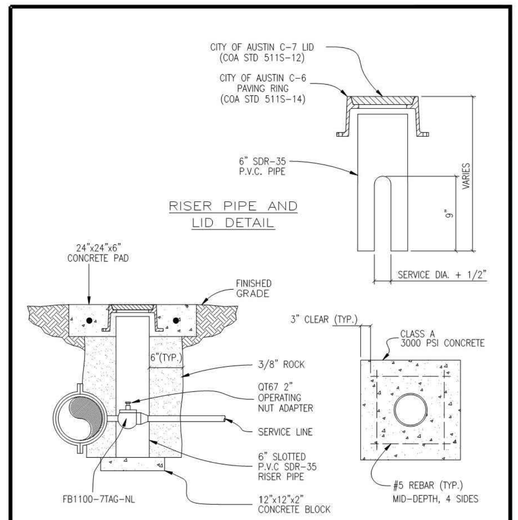


** = SEE DETAIL W-24 FOR SINGLE SERVICE PARTS
DETAIL W-25 FOR DOUBLE SERVICE PARTS

NOTES:
1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET AND AT THE CENTERLINE AS SHOWN ON DETAIL "A".
2. WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISHED GRADE.
3. AUTHORIZED SERVICE LINE MATERIAL:
   A. POLYETHYLENE TUBING SHALL BE SDR-9. (MAX. DIA. 2") CLASS 200
4. ROTATE THE CORPORATION STOP SO T-AT THE OPERATING NUT IS ACTUATED FROM THE VERTICAL POSITION RATHER THAN THE HORIZONTAL. SEE STD. RISER FOR CORP. STOP DETAIL (DWG # W08).
5. SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO ANGLE STOP WITH NO FITTINGS IN BETWEEN.
6. SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
7. CASING REQUIRED FOR ALL PAVEMENT CROSSINGS. SEE W-26 FOR CASING DETAIL.
8. BEDDING PER CONSTRUCTION SPECIFICATIONS.
9. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY ENGINEER.

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
TYP. WATER SERVICE – ELEVATION
HUTTO UTILITY SYSTEMS

DRAWING NO.	W-03
UPDATED:	11/11/11
DRAWN BY:	MSL
SCALE:	N.T.S.
FILE NAME:	W03.DWG



NOTES:
1. 1 1/2" & 2" CORPORATION STOP STOP
2. PAVING RING AND LID MATERIALS SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
3. FINISH PAVING RING AND LID BY REMOVING FINS AND FLASHING; PAINT WITH BLACK ASPHALT COATING.

CITY OF HUTTO
CONSTRUCTION STANDARDS AND DETAILS
1 1/2" & 2" CORPORATION STOP RISER
HUTTO UTILITY SYSTEMS

DRAWING NO.	W-28
UPDATED:	11/27/17
DRAWN BY:	MSL
SCALE:	N.T.S.
FILE NAME:	W28.DWG

	APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

WATER DETAILS (4 OF 4)

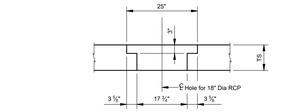
SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

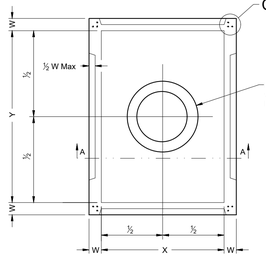
SHEET
86 OF 91

G:\TXC\Projects\Lennar\7131-00-Cottonwood_PH1\03_CAD\01_SIhts\C-SR-DET_-PH1.dwg Layout: WATER DETAILS (4 OF 4) Plotted: 2/11/2020 3:10:20 PM

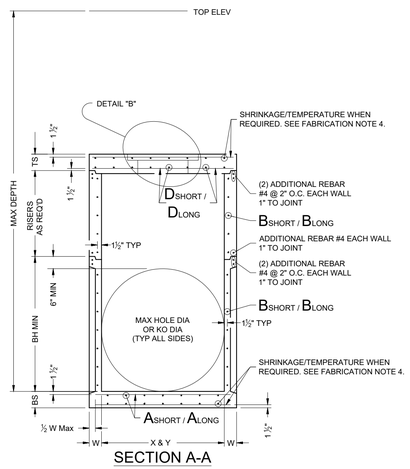
Record Drawing



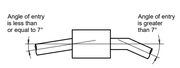
DETAIL "B"



PLAN VIEW



SECTION A-S



PIPE CONNECTION DETAIL

Connect pipes within 7° of normal to PJB wall. If necessary, use pipe elbow or curved approach alignment to stay within this limit.

FABRICATION NOTES:
1. Provide Class "H" concrete in accordance with Item 421 and having a minimum compressive strength of 5,000 psi.
2. Provide Grade 60 reinforcing steel or equivalent area of WWR.
3. Provide typical clear cover of 1 ½" to reinforcing steel at interior or exterior walls.
4. Walls or slabs with a thickness of 8" or greater require shrinkage and temperature reinforcing steel. Provide steel area = 0.11 in²/ft each way.
5. No substitution is allowed for vertical and horizontal #4 bars in corners.
6. Manufacture base and risers to nearest 3" increment.
7. Design tongue and groove joints for full closure on both shoulders. Minimum spigot depth is ½".
8. Provide lifting devices in conformance with Manufacturer's recommendations.
9. See sheet PDD for sizes, dimensions, and reinforcing steel not shown.
10. Provide hole in below grade slab only when PJB is installed with inlet type POD.

INSTALLATION NOTES:
1. Inverts (benching) to be provided by Contractor. Concrete or mortar used for invert is subsidiary to junction box.
2. Seal tongue and groove joints with preformed or bulk mastic in conformance with Manufacturer's recommendations. Tongue and groove joints may be grouted no more than 1" between each section, or ½ the joint depth, whichever is greater.
3. Do not grout rubber gasket joints without Manufacturer's recommendation.
4. For rigid pipe, cut hole in thin wall panel (KO) 4" Max, 2" Min larger than pipe OD.
5. For flexible pipe, consult bootseal Manufacturer's specification for placement tolerance and hole size. Center pipe in hole and install bootseal per Manufacturer's specification.

GENERAL NOTES:
1. Precast Junction Box consists of base slab, base unit, risers (as required), and below grade slab. See sheet PDD for sizes.
2. Designed according to ASTM C913.
3. Payment for junction box is per Item 465 "Junction Boxes, Manholes, and Inlets" by type and size.

Cover dimensions are clear dimensions, unless noted otherwise.

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

PRECAST JUNCTION BOX

PJB

FILE:	pres60.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	January 2015	CONT	SECT	JOB	HIGHWAY
	REVISIONS	DIST	COUNTY		SHEET NO.

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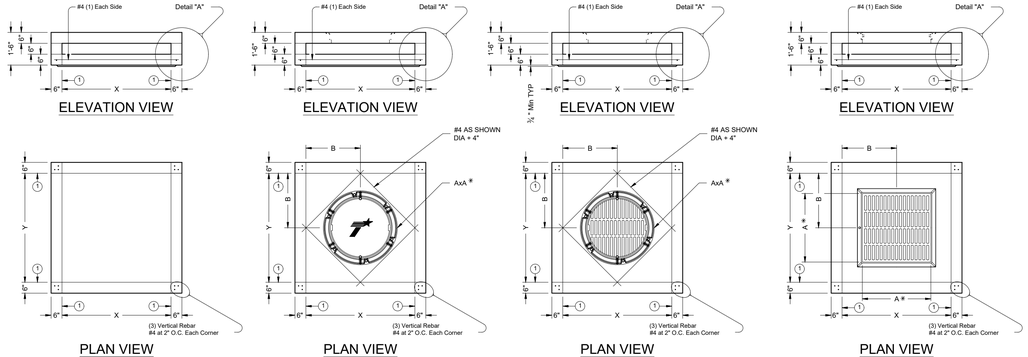
DATE:
FILE:



① Matches inside face of wall of precast base or riser below inlet.

FABRICATION NOTES:
1. Provide Class "H" concrete in accordance with Item 421 and having a minimum compressive strength of 5,000 psi.
2. Provide Grade 60 reinforcing steel or equivalent area of WWR.
3. Provide clear cover of ½" to reinforcing from bottom of slab for structural reinforcement. Place short span reinforcing closest to surface.
4. No substitution is allowed for diagonal #4 bars around openings.
5. Design tongue and groove joints for full closure on both shoulders. Minimum spigot depth is ½".
6. Provide lifting devices in conformance with Manufacturer's recommendations.

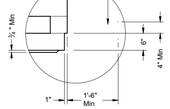
INSTALLATION NOTES:
1. PAZD is for use in ditches and medians outside of the horizontal clearance (clear zone). Precast Area Zone Drain is not intended for direct traffic and may not be placed in roadway.
2. Seal tongue and groove joints with preformed or bulk mastic in conformance with Manufacturer's recommendations. Tongue and groove joints may be grouted no more than 1" between each section, or ½ the joint depth, whichever is greater.
3. Do not grout rubber gasket joints without Manufacturer's recommendation.

GENERAL NOTES:
1. Designed according to ASTM C913.
2. Payment for inlet is per Item 465, "Junction Boxes, Manholes, and Inlets" by type, style, size, and opening size (when applicable).

Short Span Reinf Steel Style	Long Span Reinf Steel Size (X x Y)	A x A	B x B	② A/B	Area	Area
SL	3'x3'	n/a	n/a		0.37 in²/ft	0.37 in²/ft
RC,RG	3'x3'	32" Dia	1.5'x1.5'		0.37 in²/ft	0.37 in²/ft
FG	3'x3'	3'x3'	1.5'x1.5'		0.37 in²/ft	0.37 in²/ft
SL	4'x4'	n/a	n/a		0.34 in²/ft	0.34 in²/ft
RC,RG	4'x4'	32" Dia	2'x2'		0.34 in²/ft	0.34 in²/ft
FG	4'x4'	3'x3'	2'x2'		0.34 in²/ft	0.34 in²/ft
FG	4'x4'	4'x4'	2'x2'		0.34 in²/ft	0.34 in²/ft
SL	5'x5'	n/a	n/a		0.43 in²/ft	0.43 in²/ft
RC,RG	5'x5'	32" Dia	2.5'x2.5'		0.68 in²/ft	0.68 in²/ft
FG	5'x5'	3'x3'	2.5'x2.5'		0.43 in²/ft	0.43 in²/ft
FG	5'x5'	4'x4'	2.5'x2.5'		0.43 in²/ft	0.43 in²/ft

* Nominal frame/grate or ring/cover size.

Construct cast-in-place reinforced concrete apron when shown elsewhere in plans. Use Class "A" concrete. Apron is subsidiary to PAZD. Apron is 1'-6" Min width around precast zone drain.



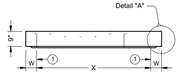
DETAIL "A"
(Reinforcing not shown for clarity)
When an apron is to be cast around PAZD, use detail above to create an apron ledge on all 4 sides.

Texas Department of Transportation | Bridge Division Standard

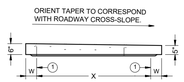
PRECAST AREA ZONE DRAIN

PAZD

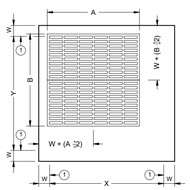
FILE:	pres60.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	January 2015	CONT	SECT	JOB	HIGHWAY
	REVISIONS	DIST	COUNTY		SHEET NO.



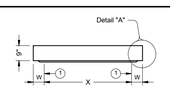
STYLE 'FG'



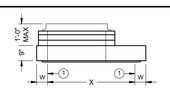
STYLE 'SFG'
ELEVATION VIEW



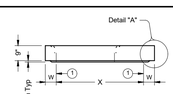
PLAN VIEW
CAST-IN FRAME & GRATE
STYLES 'FG' & 'SFG'



ELEVATION VIEW



ELEVATION VIEW



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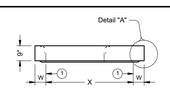
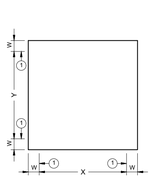
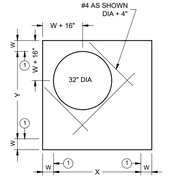


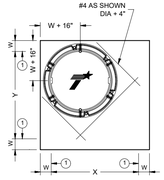
ELEVATION VIEW



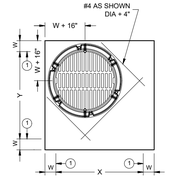
PLAN VIEW
NO OPENINGS
STYLE 'SL'



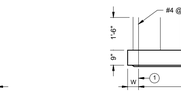
PLAN VIEW
SHIP LOOSE RING & COVER
STYLE 'RH'



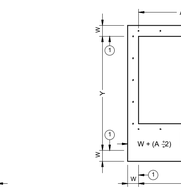
PLAN VIEW
32" DIA CAST-IN RING & COVER
STYLE 'RC'



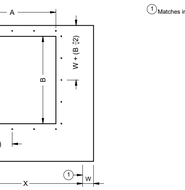
PLAN VIEW
32" DIA CAST-IN RING & GRATE
STYLE 'RG'



ELEVATION VIEW



PLAN VIEW
SHIP LOOSE FRAME & GRATE
STYLE 'SH'



PLAN VIEW
EXPOSED REBAR
STYLE 'S1'

① Matches inside face of wall of precast base or riser below inlet.

HL93 LOADING SHEET 1 OF 2

Texas Department of Transportation | Bridge Division Standard

PRECAST SLAB LID

PSL

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	REVISIONS	DIST	COUNTY		SHEET NO.

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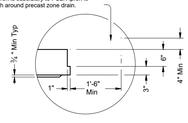
DATE:
FILE:

Short Span Reinf Steel Style	Long Span Reinf Steel Size (X x Y)	W	② A x B (nominal)	Area	Area
SL	3'x3'	6"	n/a	0.37 in²/ft	0.37 in²/ft
RH,RC,RG,SH,S1,FG	3'x3'	6"	3'x3' or 32" Dia	0.37 in²/ft	0.37 in²/ft
SFG	3'x3'	6"	3'x3'	0.32 in²/ft	0.32 in²/ft
SL	4'x4'	6"	n/a	0.34 in²/ft	0.34 in²/ft
RH,RC,RG,SH,S1,FG	4'x4'	6"	3'x3' or 32" Dia	0.41 in²/ft	0.41 in²/ft
SH,S1,FG	4'x4'	6"	4'x4'	0.41 in²/ft	0.41 in²/ft
SFG	4'x4'	6"	4'x4'	0.32 in²/ft	0.32 in²/ft
SL	3'x5'	6"	n/a	0.39 in²/ft	0.39 in²/ft
RH,RC,RG,SH,S1,FG	3'x5'	6"	3'x5' or 32" Dia	0.48 in²/ft	0.48 in²/ft
SH,S1,FG	3'x5'	6"	3'x5'	0.48 in²/ft	0.48 in²/ft
SFG	3'x5'	6"	3'x5'	0.32 in²/ft	0.32 in²/ft
SL	4'x5'	6"	n/a	0.42 in²/ft	0.42 in²/ft
RH,RC,RG,SH,S1,FG	4'x5'	6"	3'x3' or 32" Dia	0.42 in²/ft	0.42 in²/ft
SH,S1,FG	4'x5'	6"	4'x4'	0.63 in²/ft	0.63 in²/ft
SH,S1,FG	4'x5'	6"	3'x5'	0.66 in²/ft	0.66 in²/ft
SL	5'x5'	6"	n/a	0.36 in²/ft	0.36 in²/ft
RH,RC,RG,SH,S1,FG	5'x5'	6"	3'x3' or 32" Dia	0.43 in²/ft	0.43 in²/ft
SH,S1,FG	5'x5'	6"	4'x4'	0.63 in²/ft	0.63 in²/ft
SH,S1,FG	5'x5'	6"	3'x5'	0.63 in²/ft	0.63 in²/ft
SL	5'x6'	6"/8"	n/a	0.48 in²/ft	0.48 in²/ft
RH,RC,RG,SH,S1,FG	5'x6'	6"/8"	3'x3' or 32" Dia	0.48 in²/ft	0.48 in²/ft
SH,S1,FG	5'x6'	6"/8"	4'x4'	0.60 in²/ft	0.60 in²/ft
SH,S1,FG	5'x6'	6"/8"	3'x5'	0.60 in²/ft	0.60 in²/ft
SL	6'x6'	6"/8"	n/a	0.43 in²/ft	0.43 in²/ft
RH,RC,RG,SH,S1,FG	6'x6'	6"/8"	3'x3' or 32" Dia	0.56 in²/ft	0.56 in²/ft
SH,S1,FG	6'x6'	6"/8"	4'x4'	0.56 in²/ft	0.56 in²/ft
SH,S1,FG	6'x6'	6"/8"	3'x5'	0.59 in²/ft	0.59 in²/ft
SL	8'x8'	8"/10"	n/a	0.45 in²/ft	0.45 in²/ft
RH,RC,RG,SH,S1,FG	8'x8'	8"/10"	3'x3' or 32" Dia	0.45 in²/ft	0.45 in²/ft
SH,S1,FG	8'x8'	8"/10"	4'x4'	0.45 in²/ft	0.45 in²/ft
SH,S1,FG	8'x8'	8"/10"	3'x5'	0.45 in²/ft	0.45 in²/ft

② See sheet PDD for corresponding wall thickness (W) of base unit or riser.

Construct cast-in-place reinforced concrete apron, when shown elsewhere in plans. Use Class "A" concrete. Apron is subsidiary to PSL. Apron is 1'-6" Min width around precast zone drain.



DETAIL "A"
(Reinforcing not shown for clarity)
When an apron is to be cast around PSL, use detail above to create an apron ledge on all 4 sides.

FABRICATION NOTES:
1. Locate penetration (Style 'RH'), ring and cover (Style 'RC'), ring and grate (Style 'RG'), and frame and grate (Style 'FG') in a corner. Only one penetration is allowed per slab lid.
2. Provide Class "H" concrete in accordance with Item 421 and having a minimum compressive strength of 5,000 psi.
3. Provide Grade 60 reinforcing steel or equivalent area of WWR.
4. Provide clear cover of ½" to reinforcing from lower outside shoulder of slab for structural reinforcement, and 2" from top of slab for shrinkage and temperature reinforcing. Place short span reinforcing closest to surface.
5. Slabs with a thickness of 8" or greater require shrinkage and temperature reinforcing. Provide steel area = 0.11 in²/ft each way.
6. No substitution is allowed for diagonal #4 bars around openings.
7. Design tongue and groove joints for full closure on both shoulders. Minimum spigot depth is ½".
8. Provide lifting devices in conformance with Manufacturer's recommendations.

INSTALLATION NOTES:
1. Precast slab lids are intended for direct traffic and may be placed in roadway.
2. Seal tongue and groove joints with preformed or bulk mastic in conformance with Manufacturer's recommendations. Tongue and groove joints may be grouted no more than 1" between each section, or ½ the joint depth, whichever is greater.
3. Do not grout rubber gasket joints without Manufacturer's recommendation.
4. Initial installation of grade adjustment rings for Styles 'RH' and 'SH' is limited to 1'-0" Max as shown.
5. Grade adjustment rings for Styles 'RH' and 'SH' may be increased to 2'-0" Max when future construction affects final grade of structure. Make adjustments greater than 2'-0" with additional risers. Adjustments can be made up to Max depth shown on sheet PDD. Structure must be evaluated if Max depth will be exceeded.
6. Orient long dimension of grate slots perpendicular to traffic, unless noted otherwise on plans.

GENERAL NOTES:
1. Designed according to ASTM C913.
2. Payment for lid is per Item 465, "Junction Boxes, Manholes, and Inlets" by type, style, size, and opening size (when applicable).

Cover dimensions are clear dimensions, unless noted otherwise.

HL93 LOADING SHEET 2 OF 2

Texas Department of Transportation | Bridge Division Standard

PRECAST SLAB LID

PSL

FILE:	pres60.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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	REVISIONS	DIST	COUNTY		SHEET NO.

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							DATE
							DESCRIPTION
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DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

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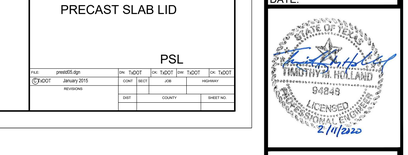
COTTONWOOD CREEK
HUTTO, TEXAS

TXDOT DETAILS (1 OF 5)

SUBMITTAL DATE: 01-16-2020



SHEET
87 OF 91

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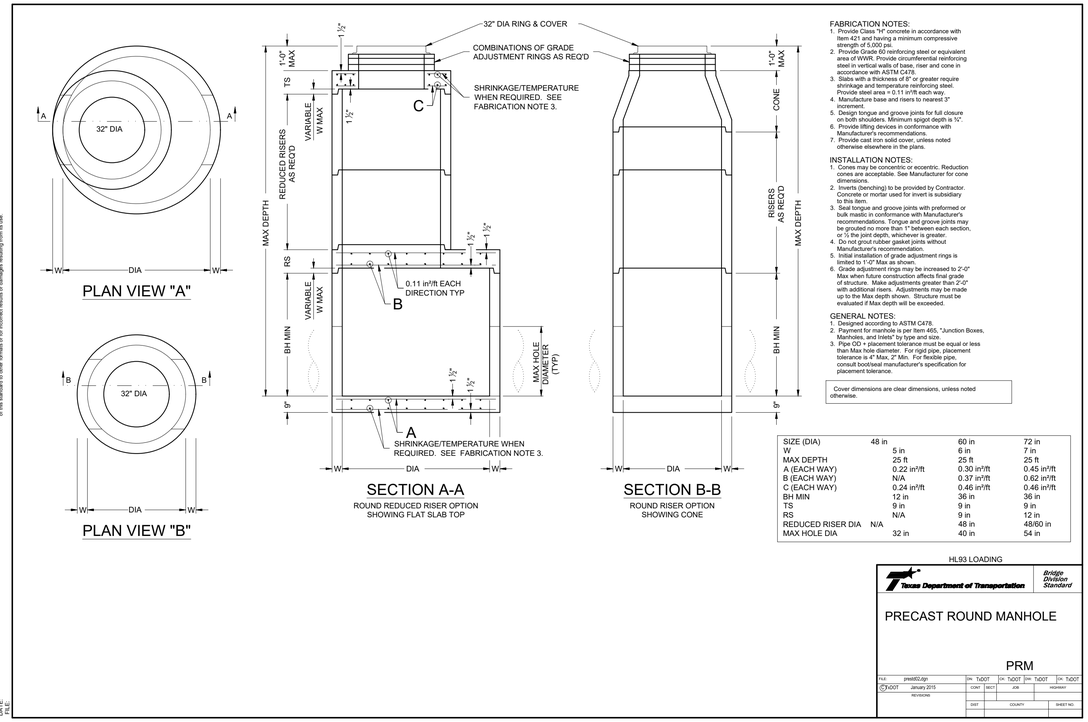

FABRICATION NOTES:
1. Provide Class "H" concrete in accordance with Item 421 and having a minimum compressive strength of 5,000 psi.
2. Provide Grade 60 reinforcing steel or equivalent area of WWR. Provide circumferential reinforcing steel in vertical walls of base, riser and cone in accordance with ASTM C478.
3. Slabs with a thickness of 8" or greater require shrinkage and temperature reinforcing steel. Provide steel area = 0.11 in²/ft each way.
4. Manufacture base and risers to nearest 3" increment.
5. Design tongue and groove joints for full closure on both shoulders. Minimum spigot depth is ¾".
6. Provide lifting devices in conformance with Manufacturer's recommendations.
7. Provide cast iron solid cover, unless noted otherwise elsewhere in the plans.

INSTALLATION NOTES:
1. Cones may be concentric or eccentric. Reduction cones are acceptable. See Manufacturer for cone dimensions.
2. Inverts (benching) to be provided by Contractor. Concrete or mortar used for invert is subsidiary to this Item.
3. Seal tongue and groove joints with preformed or bulk mastic in conformance with Manufacturer's recommendations. Tongue and groove joints may be grouted no more than 1" between each section, or ½ the joint depth, whichever is greater.
4. Do not grout rubber gasket joints without Manufacturer's recommendation.
5. Initial installation of grade adjustment rings is limited to 1'-0" Max as shown.
6. Grade adjustment rings may be increased to 2'-0" Max when future construction affects final grade of structure. Make adjustments greater than 2'-0" with additional risers. Adjustments may be made up to the Max depth shown. Structure must be evaluated if Max depth will be exceeded.

GENERAL NOTES:
1. Designed according to ASTM C478.
2. Payment for manhole is per Item 465, "Junction Boxes, Manholes, and Inlets" by type and size.
3. Pipe OD + placement tolerance must be equal or less than Max hole diameter. For rigid pipe, placement tolerance is 4" Max, 2" Min. For flexible pipe, consult bootseal manufacturer's specification for placement tolerance.

Cover dimensions are clear dimensions, unless noted otherwise.

SIZE (DIA)	48 in	60 in	72 in
W	5 in	6 in	7 in
MAX DEPTH	25 ft	25 ft	25 ft
A (EACH WAY)	0.22 in²/ft	0.30 in²/ft	0.45 in²/ft
B (EACH WAY)	N/A	0.37 in²/ft	0.62 in²/ft
C (EACH WAY)	0.24 in²/ft	0.46 in²/ft	0.46 in²/ft
BH MIN	12 in	36 in	36 in
TS	9 in	9 in	9 in
RS	N/A	9 in	12 in
REDUCED RISER DIA	N/A	48 in	48/60 in
MAX HOLE DIA	32 in	40 in	54 in

HL93 LOADING

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PRECAST ROUND MANHOLE

PRM

FILE:	prm601.dgn	CK: TxDOT	CK: TxDOT	CK: TxDOT	CK: TxDOT
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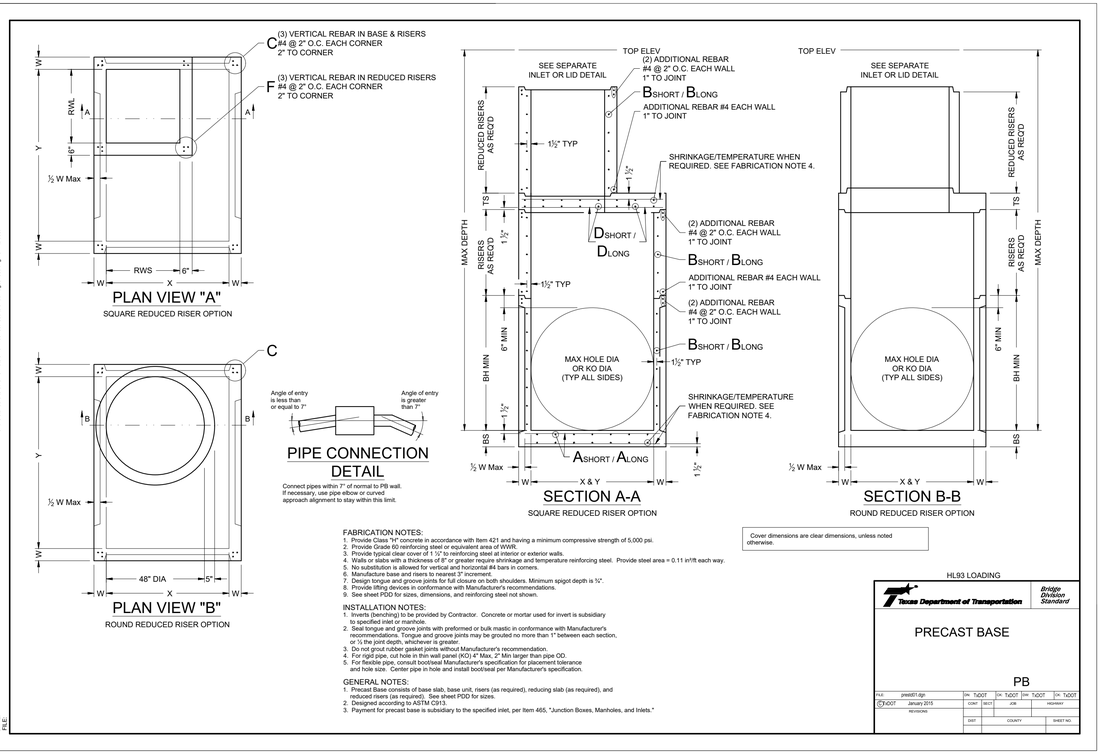

FABRICATION NOTES:
1. Provide Class "H" concrete in accordance with Item 421 and having a minimum compressive strength of 5,000 psi.
2. Provide Grade 60 reinforcing steel or equivalent area of WWR.
3. Provide typical clear cover of 1 ½" to reinforcing steel at interior or exterior walls.
4. Walls or slabs with a thickness of 8" or greater require shrinkage and temperature reinforcing steel. Provide steel area = 0.11 in²/ft each way.
5. No substitution is allowed for vertical and horizontal #4 bars in corners.
6. Manufacture base and risers to nearest 3" increment.
7. Design tongue and groove joints for full closure on both shoulders. Minimum spigot depth is ¾".
8. Provide lifting devices in conformance with Manufacturer's recommendations.
9. See sheet PDD for sizes, dimensions, and reinforcing steel not shown.

INSTALLATION NOTES:
1. Inverts (benching) to be provided by Contractor. Concrete or mortar used for invert is subsidiary to specified inlet or manhole.
2. Seal tongue and groove joints with preformed or bulk mastic in conformance with Manufacturer's recommendations. Tongue and groove joints may be grouted no more than 1" between each section, or ½ the joint depth, whichever is greater.
3. Do not grout rubber gasket joints without Manufacturer's recommendation.
4. For rigid pipe, cut hole in thin wall panel (KO) 4" Max, 2" Min larger than pipe OD.
5. For flexible pipe, consult bootseal Manufacturer's specification for placement tolerance and hole size. Center pipe in hole and install bootseal per Manufacturer's specification.

GENERAL NOTES:
1. Precast Base consists of base slab, base unit, risers (as required), reducing slab (as required), and reduced risers (as required). See sheet PDD for sizes.
2. Designed according to ASTM C913.
3. Payment for precast base is subsidiary to the specified inlet, per Item 465, "Junction Boxes, Manholes, and Inlets."

Cover dimensions are clear dimensions, unless noted otherwise.

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PRECAST BASE

PB

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	Size	MAX DEPTH = 15 ft. to top of BASE SLAB										MAX DEPTH = 25 ft. to top of BASE SLAB										Min Height (See Gen'l Note 3)	Max HOLE DIA (See Fab Note 2)	Max KO DIA (See Fab Note 2)
		Base Slab			Base Unit orRiser Walls			Below Grade Slab (w/PJB)Reducing Slab (w/PB)				Base Slab			Base Unit orRiser Walls			Below Grade Slab (w/PJB)Reducing Slab (w/PB)						
		Short Span/Bend Steel/Area	Long Span/Bend Steel/Area	Thickness	Short Span/Bend Steel/Area	Long Span/Bend Steel/Area	Thickness	Reduced Riser Size	Short Span/Bend Steel/Area	Long Span/Bend Steel/Area	Thickness	Short Span/Bend Steel/Area	Long Span/Bend Steel/Area	Thickness	Short Span/Bend Steel/Area	Long Span/Bend Steel/Area	Thickness	Reduced Riser Size	Short Span/Bend Steel/Area	Long Span/Bend Steel/Area	Thickness			
	X x Y	Ashort	Along	BS	Bshort	Blong	W	RWSxRWLor ID	Dshort	Dlong	TS	Ashort	Along	BS	Bshort	Blong	W	RWSxRWLor ID	Dshort	Dlong	TS	BH MIN	HOLE DIA	KO DIA
	ft.	in²/ft	in²/ft	in.	in²/ft	in²/ft	in.	in. **	in²/ft	in²/ft	in.	in²/ft	in²/ft	in.	in²/ft	in²/ft	in.	in. **	in²/ft	in²/ft	in.	ft.	in.	in.
Precast Junction Box (PJB)	3x3	0.23	0.23	6	0.19	0.19	6	N/A	0.37	0.37	9	0.29	0.29	6	0.24	0.24	6	N/A	0.37	0.37	9	3.5	36	36
	4x4	0.29	0.29	6	0.24	0.24	6	N/A	0.41	0.41	9	0.47	0.47	6	0.38	0.38	6	N/A	0.41	0.41	9	4.5	48	48
	3x5	0.29	0.18	6	0.19	0.35	6	N/A	0.48	0.48	9	0.39	0.18	6	0.23	0.59	6	N/A	0.48	0.48	9	3.5	36/60	36/60
	4x5	0.36	0.18	6	0.22	0.34	6	N/A	0.42	0.42	9	0.53	0.26	6	0.39	0.59	6	N/A	0.42	0.42	9	4.5	48/60	48/60
	5x5	0.36	0.36	6	0.34	0.34	6	N/A	0.43	0.43	9	0.62	0.62	6	0.59	0.59	6	N/A	0.43	0.43	9	5.5	60	60
	5x6	0.27	0.27	9	0.34	0.45	6	N/A	0.48	0.48	9	0.47	0.45	9	0.38	0.54	8	N/A	0.48	0.48	9	5.5	60/72	60/72
	6x6	0.27	0.27	9	0.45	0.45	6	N/A	0.56	0.56	9	0.52	0.52	9	0.54	0.54	8	N/A	0.56	0.56	9	6.5	72	72
	8x8	0.46	0.46	9	0.51	0.51	8	N/A	0.45	0.45	12	0.87	0.87	9	0.59	0.59	10	N/A	0.45	0.45	12	8.5	96	72
Precast Base (PB)	3x3	0.23	0.23	6	0.19	0.19	6	N/A	N/A	N/A	N/A	0.29	0.29	6	0.24	0.24	6	N/A	N/A	N/A	N/A	3.5	36	36
	4x4	0.29	0.29	6	0.24	0.24	6	N/A	N/A	N/A	N/A	0.47	0.47	6	0.38	0.38	6	N/A	N/A	N/A	N/A	4.5	48	48
	3x5	0.29	0.18	6	0.19	0.35	6	3x3	0.30	0.34	9	0.39	0.18	6	0.23	0.59	6	3x3	0.40	0.40	9	3.5	36/60	36/60
	4x5	0.36	0.18	6	0.22	0.34	6	3x3	0.30	0.30	9	0.53	0.26	6	0.39	0.59	6	3x3	0.46	0.37	9	4.5	48/60	48/60
	4x5	0.36	0.18	6	0.22	0.34	6	4x4	0.30	0.30	9	0.53	0.26	6	0.39	0.59	6	4x4	0.39	0.39	9	4.5	48/60	48/60
	4x5	0.36	0.18	6	0.22	0.34	6	48"	0.39	0.39	9	0.53	0.26	6	0.39	0.59	6	48"	0.47	0.47	9	4.5	48/60	48/60
	4x5	0.36	0.18	6	0.22	0.34	6	3x5	0.33	0.40	9	0.53	0.26	6	0.39	0.59	6	3x5	0.48	0.48	9	4.5	48/60	48/60
	5x5	0.36	0.36	6	0.34	0.34	6	3x3	0.34	0.34	9	0.62	0.62	6	0.59	0.59	6	3x3	0.53	0.53	9	5.5	60	60
	5x5	0.36	0.36	6	0.34	0.34	6	4x4	0.36	0.36	9	0.62	0.62	6	0.59	0.59	6	4x4	0.64	0.64	9	5.5	60	60
	5x5	0.38	0.38	6	0.34	0.34	6	48"	0.36	0.36	9	0.62	0.62	6	0.59	0.59	6	48"	0.64	0.64	9	5.5	60	60
	5x5	0.36	0.36	6	0.34	0.34	6	3x5	0.34	0.40	9	0.62	0.62	6	0.59	0.59	6	3x5	0.53	0.53	9	5.5	60	60
	5x6	0.31	0.31	9	0.34	0.45	6	3x3	0.34	0.34	9	0.47	0.45	9	0.38	0.54	8	3x3	0.61	0.50	9	5.5	60/72	60/72
	5x6	0.27	0.27	9	0.34	0.45	6	4x4	0.36	0.45	9	0.47	0.45	9	0.38	0.54	8	4x4	0.74	0.57	9	5.5	60/72	60/72
	5x6	0.29	0.29	9	0.34	0.45	6	48"	0.36	0.45	9	0.47	0.45	9	0.38	0.54	8	48"	0.74	0.57	9	5.5	60/72	60/72
	5x6	0.29	0.29	9	0.34	0.45	6	3x5	0.45	0.45	9	0.47	0.45	9	0.38	0.54	8	3x5	0.61	0.61	9	5.5	60/72	60/72
	6x6	0.29	0.29	9	0.45	0.45	6	3x3	0.41	0.41	9	0.52	0.52	9	0.54	0.54	8	3x3	0.74	0.74	9	6.5	72	72
	6x6	0.27	0.27	9	0.45	0.45	6	4x4	0.45	0.45	9	0.52	0.52	9	0.54	0.54	8	4x4	0.87	0.87	9	6.5	72	72
	6x6	0.29	0.29	9	0.45	0.45	6	48"	0.45	0.45	9	0.52	0.52	9	0.54	0.54	8	48"	0.87	0.87	9	6.5	72	72
	6x6	0.29	0.29	9	0.45	0.45	6	3x5	0.45	0.45	9	0.52	0.52	9	0.54	0.54	8	3x5	0.87	0.87	9	6.5	72	72
	8x8	0.52	0.52	9	0.51	0.51	8	3x3	0.61	0.61	12	0.91	0.91	9	0.70	0.70	10	3x3	0.85	0.85	12	8.5	96	72
	8x8	0.52	0.52	9	0.51	0.51	8	4x4	0.70	0.70	12	0.87	0.87	9	0.70	0.70	10	4x4	1.01	1.01	12	8.5	96	72
	8x8	0.52	0.52	9	0.51	0.51	8	48"	0.70	0.70	12	0.87	0.87	9	0.70	0.70	10	48"	1.01	1.01	12	8.5	96	72
	8x8	0.52	0.52	9	0.51	0.51	8	3x5	0.70	0.85	12	0.87	0.87	9	0.70	0.70	10	3x5	1.01	1.01	12	8.5	96	72

** Unless otherwise indicated.

FABRICATION NOTES:
1. Maximum spacing of reinforcement is 8".
2. At manufacturer's option, provide cast or cored holes or thin wall panels (KO) to the maximum diameter shown for each. When no penetration is required, it is acceptable to provide a wall with no sectional reduction.

GENERAL NOTES:
1. Precast Junction Box consists of base slab, base unit, risers (as required), and below grade slab. See sheet PJB for details.
2. Precast Base consists of base slab, base unit, risers (as required), reducing slab (as required), and reduced risers (as required). See sheet PB for details.
3. Min Height shown is for stock base units. Use stock base units whenever practical. Smaller height base units can be used in special installation circumstances, when noted elsewhere in the plans. Absolute minimum height of base units is 2'-6".

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Texas Department of Transportation — Bridge Division Standard

DESIGN DATA FOR PRECAST BASE AND JUNCTION BOX

PDD

FILE:	prm607.dgn	CK: TxDOT	CK: TxDOT	CK: TxDOT	CK: TxDOT
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	REVISIONS	DIST	COUNTY		SHEET NO.

																								APR
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																								DESCRIPTION
																								REV

DESIGNED BY: DAZ

REVIEWED BY: TMH

DRAWN BY: DAZ

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COTTONWOOD CREEK
HUTTO, TEXAS

TXDOT DETAILS (2 OF 5)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS — TIMOTHY R. HOLLAND — 94548 — LICENSED — PROFESSIONAL ENGINEER — 2/11/2020

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88 OF 91

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Record Drawing

TABLE OF DIMENSIONS & REINFORCING STEEL (Wings for One Structure End)

Dimensions					Variable Reinforcing				Estimated Quantities per ft of wing length (2-Wings)		Estimated Quantities per ft of Toewall (1-Toewall)	
					Bars J1		Bars J2					
Maximum Wingwall Height Hw	W	X	Y	Z	Size	Spa	Size	Spa	Reinf (LB/FT)	Conc (CY/FT)	Reinf (LB/FT)	Conc (CY/FT)
2'-6"	2'-10"	10"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	33.73	0.248		
2'-9"	2'-10"	10"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	37.07	0.261		
3'-0"	2'-10"	10"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	49.98	0.444	6.85	0.071
3'-3"	2'-10"	10"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	53.32	0.462	6.85	0.071
3'-6"	2'-10"	10"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	53.98	0.480	6.85	0.071
4'-0"	3'-2"	1'-2"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	55.77	0.532	6.85	0.071
4'-6"	3'-2"	1'-2"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	59.77	0.568	6.85	0.071
5'-0"	3'-9"	1'-5"	1'-0"	9"	7	#4	1'-0"	#4	1'-0"	63.45	0.632	6.85	0.071
5'-6"	3'-9"	1'-7"	1'-2"	2"	7	#4	1'-0"	#4	1'-0"	67.46	0.668	6.96	0.075
6'-0"	4'-4"	2'-0"	1'-4"	4"	7	#4	1'-0"	#4	1'-0"	80.67	0.730	7.07	0.078
6'-6"	4'-4"	2'-0"	1'-4"	4"	7	#4	1'-0"	#4	1'-0"	85.05	0.768	7.07	0.078
7'-0"	5'-0"	2'-3"	1'-9"	9"	8	#5	1'-0"	#5	1'-0"	92.15	0.864	8.07	0.093
7'-6"	5'-0"	2'-3"	1'-9"	9"	8	#5	1'-0"	#4	1'-0"	96.54	0.902	8.07	0.093
8'-0"	5'-6"	2'-8"	1'-10"	8"	8	#5	6"	#5	6"	81.49	0.535	8.13	0.095
8'-6"	5'-6"	2'-8"	1'-10"	8"	8	#5	6"	#5	6"	144.47	1.000	8.13	0.095
9'-0"	6'-0"	2'-10"	2'-2"	8"	8	#6	6"	#5	6"	130.53	1.136	8.41	0.110
10'-6"	6'-5"	3'-0"	2'-5"	9"	9	#6	6"	#5	6"	196.27	1.234	8.57	0.117
11'-6"	7'-2"	3'-6"	2'-8"	11"	9	#6	6"	#5	6"	178.80	0.856	9.52	0.140
12'-6"	7'-8"	3'-9"	2'-11"	1'-0"	#7	6"	#6	6"	6"	283.41	1.592	9.74	0.157
13'-6"	8'-2"	4'-0"	3'-2"	1'-2"	#8	6"	#6	6"	6"	348.72	1.804	10.02	0.186
14'-6"	8'-10"	4'-5"	3'-5"	1'-5"	#9	6"	#6	6"	6"	432.94	2.048	10.30	0.218
15'-6"	9'-6"	4'-10"	3'-8"	1'-6"	#9	6"	#7	6"	6"	489.52	2.302	11.24	0.253
16'-0"	9'-11"	5'-0"	3'-11"	1'-7"	#9	6"	#7	6"	6"	505.72	2.448	11.47	0.279

TABLE OF WINGWALL REINFORCING (2-Wings)

Bar	Size	No.	Spa
DL	#5	~	1'-0"
DS	#5	~	1'-0"
E	#4	~	1'-0"
F	#4	~	1'-0"
G	#6	4	~
M	#4	4	~
P	#4	~	1'-0"
RS	#5	3	~
RL	#5	3	~
V	#4	~	1'-0"

TABLE OF ESTIMATED CULVERT TOEWALL QUANTITIES

Bar	Size	No.	Spa
L	#4	~	1'-6"
Q	#4	1	~
Reinf (LB/FT)			2.45
Conc (CY/FT)			0.037

WING DIMENSION CALCULATIONS:

Formulas: (All values are in Feet)

Hw = H + T + C - 0.250'

A = (Hw - 0.333') ÷ (SL)

B = (A) (Tangent (Θ + 15°))

Lw = (A) ÷ (Cosine (Θ + 15°))

For Cast-In-place culvertst

Ltw = ((N) (S) + (N + 1) (U)) ÷ (Cosine Θ)

For Precast culvertst

Ltw = ((N) (2 U + S) + (N - 1) (0.5')) ÷ Cosine Θ

Total Wingwall Area (Two Wings - S.F.) =

- (2) (Hw) (Lw) for Ty PW-1
- + (2) (Hw) (Lw) - 6 SF for Ty PW-2 and Hw ≥ 4'
- + (2) (Hw) (Lw) - 1.5 SF for Ty PW-2 and Hw < 4'

Hw = Height of Wingwall

Lw = Length of Wingwall

Ltw = Culvert Toewall Length

N = Number of Culvert Spans

SL1 = Channel Slope ratio, (horizontal: 1 Vertical, Usual value is 2:1)

Θ = Culvert Skew

See applicable box culvert standard for H, S, T, and U values.

BARS DS (Short Wing) · BARS DL (Long Wing) · BARS RS (Short Wing) · BARS RL (Long Wing)

BARS J1 · BARS V · BARS L · BARS J2

1. Extend Bars P 3'-0" minimum into bottom slab of Box Culvert.
2. Adjust to fit as necessary to maintain 1 ¼" clear cover and 4" minimum between bars.
3. Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings multiply the tabulated values by 0.5 x (A+Lw).
4. Recommended values of Slope are: 2:1, 3:1, 4:1, & 6:1.
5. When shown elsewhere on the plans, a 5" deep concrete riprap shall be constructed. Payment for riprap shall be as required by Item 432, "Riprap". Unless otherwise shown on the plans or directed by the Engineer, the riprap shall have a 6" wide by 5" deep reinforced concrete toewall constructed adjacent to natural ground. The toewall shall be reinforced by extending riprap reinforcing into the toewall. Construction joints or grouted joints, oriented in the direction of flow, shall extend across the full distance of the riprap, at intervals of approximately 20'. When such riprap is provided, the culvert toewall shown in SECTION B-B will not be required.
6. At Contractor's option, Culvert Toewall may be ended flush with Wingwall Toewall. Adjust reinforcing from that shown as necessary.
7. Applicable values of of Skew are: 15°, 30°, and 45°.
8. Typical wingwall angle for all skews.
9. 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail or curbs taller than 1'-0", refer to ECD standard. For structures with T6 bridge rail, refer to T6-CM standard. For structures with traffic rail, other than T6, refer to RAC standard.
10. For vehicle safety, curb heights and wall heights shall be reduced, if necessary, to provide a maximum 3" projection above finished grade. No changes will be made in quantities and no additional compensation will be allowed for this work.

GENERAL NOTES:

Designed according to AASHTO LRFD Specifications.

All reinforcing steel shall be Grade 60.

Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.

All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.

All reinforcing bars shall be adjusted to provide a minimum of 1 ¼" clear cover.

When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced as directed by the Engineer.

See BCS sheet for additional dimensions and information.

The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for the Contractor's information only.

DESIGNER NOTES:

Type PW-1 can be used for all applications and must be used if railing is to be mounted to the wingwall.

Type PW-2 can only be used for applications without a railing mounted to the wingwall.

INSIDE ELEVATION (Showing reinforcing. Culvert and Culvert Toewall reinforcing not shown for clarity.)

PLAN (Showing dimensions and 30° Skew.)

SECTION A-A (Wingwall Toewall)

CORNER DETAILS (Culvert and Culvert Toewall reinforcing not shown for clarity.)

SECTION B-B (No Skew)

Texas Department of Transportation	Bridge Division Standard
CONCRETE WINGWALLS WITH FLARED WINGS FOR SKEWED BOX CULVERTS	FW-S

File: fw-sstde.dgn | DN: GAF | CK: CAT | DW: TxDOT | CK: GAF
©TxDOT February 2010 | CONT | SECT | JOB | HIGHWAY
REVISIONS 10-00 Add wing for synthetic fibers. | DIST | COUNTY | SHEET NO.

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TABLE OF DIMENSIONS & REINFORCING STEEL (Wings for One Structure End)

Dimensions					Variable Reinforcing				Estimated Quantities per ft of wing length (2-Wings)		Estimated Quantities per ft of Toewall (1-Toewall)	
					Bars J1		Bars J2					
Maximum Wingwall Height Hw	W	X	Y	Z	Size	Spa	Size	Spa	Reinf (LB/FT)	Conc (CY/FT)	Reinf (LB/FT)	Conc (CY/FT)
2'-6"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	48.64	0.406	6.85	0.071
2'-9"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	49.31	0.424	6.85	0.071
3'-0"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	49.98	0.444	6.85	0.071
3'-3"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	53.32	0.462	6.85	0.071
3'-6"	2'-10"	10"	1'-0"	7"	#4	1'-0"	#4	1'-0"	53.98	0.480	6.85	0.071
4'-0"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	55.77	0.532	6.85	0.071
4'-6"	3'-2"	1'-2"	1'-0"	7"	#4	1'-0"	#4	1'-0"	59.77	0.568	6.85	0.071
5'-0"	3'-9"	1'-5"	1'-0"	7"	#4	1'-0"	#4	1'-0"	63.45	0.632	6.85	0.071
5'-6"	3'-9"	1'-7"	1'-2"	2"	7	#4	1'-0"	#4	1'-0"	67.46	0.668	6.96	0.075
6'-0"	4'-4"	2'-0"	1'-4"	4"	7	#4	1'-0"	#4	1'-0"	80.67	0.730	7.07	0.078
6'-6"	4'-4"	2'-0"	1'-4"	4"	7	#4	1'-0"	#4	1'-0"	85.05	0.768	7.07	0.078
7'-0"	5'-0"	2'-3"	1'-9"	9"	8	#5	1'-0"	#5	1'-0"	92.15	0.864	8.07	0.093
7'-6"	5'-0"	2'-3"	1'-9"	9"	8	#5	1'-0"	#4	1'-0"	96.54	0.902	8.07	0.093
8'-0"	5'-6"	2'-8"	1'-10"	8"	8	#5	6"	#5	6"	139.04	0.962	8.13	0.095
8'-6"	5'-6"	2'-8"	1'-10"	8"	8	#5	6"	#5	6"	144.47	1.000	8.13	0.095
9'-0"	6'-0"	2'-10"	2'-2"	8"	8	#6	6"	#5	6"	130.53	1.136	8.41	0.110
10'-6"	6'-5"	3'-0"	2'-5"	9"	9	#6	6"	#5	6"	196.27	1.234	8.57	0.117
11'-6"	7'-2"	3'-6"	2'-8"	11"	9	#6	6"	#5	6"	178.80	0.856	9.52	0.140
12'-6"	7'-8"	3'-9"	2'-11"	1'-0"	#7	6"	#6	6"	6"	283.41	1.592	9.74	0.157
13'-6"	8'-2"	4'-0"	3'-2"	1'-2"	#8	6"	#6	6"	6"	348.72	1.804	10.02	0.186
14'-6"	8'-10"	4'-5"	3'-5"	1'-5"	#9	6"	#6	6"	6"	432.94	2.048	10.30	0.218
15'-6"	9'-6"	4'-10"	3'-8"	1'-6"	#9	6"	#7	6"	6"	489.52	2.302	11.24	0.253
16'-0"	9'-11"	5'-0"	3'-11"	1'-7"	#9	6"	#7	6"	6"	505.72	2.448	11.47	0.279

TABLE OF WINGWALL REINFORCING (2-Wings)

Bar	Size	No.	Spa
D1	#6	~	1'-0"
D2	#6	~	1'-0"
E1	#4	~	1'-0"
F	#4	~	1'-0"
G	#6	~	8"
M1	#4	4	~
P	#4	~	1'-0"
V	#4	~	1'-0"

TABLE OF TOEWALL REINFORCING

Bar	Size	No	Spa
J3	#4	~	1'-0"
M2	#4	2	~
E2	#4	~	1'-0"

WING DIMENSION CALCULATIONS:

Formulas: (All values are in Feet)

Hw = H + T + C

Lw = (Hw) (SL) ÷ Cosine Θ for Ty PW-1

+ (Hw + 1') (SL) ÷ Cosine Θ for Ty PW-2 and Hw ≥ 4'

+ (Hw - 0.5') (SL) ÷ Cosine Θ for Ty PW-2 and Hw < 4'

For Cast-In-place culvertst

Ltw = ((N) (S) + (N + 1) (U)) ÷ Cosine Θ

For Precast culvertst

Ltw = ((N) (2 U + S) + (N - 1) (0.5')) ÷ Cosine Θ

Total Wingwall Area (Two Wings - S.F.) =

- (2) (Hw) (Lw) for Ty PW-1
- + (2) (Hw) (Lw) - 6 SF for Ty PW-2 and Hw ≥ 4'
- + (2) (Hw) (Lw) - 1.5 SF for Ty PW-2 and Hw < 4'

Hw = Height of Wingwall

Lw = Length of Wingwall

Ltw = Culvert Toewall Length

N = Number of Culvert Spans

SL1 = Channel Slope ratio, (horizontal: 1 Vertical, Usual value is 2:1)

Θ = Culvert Skew

See applicable box culvert standard for S, H, T and U values.

BARS D1 · BARS D2 · BARS J1 · BARS J2 · BARS J3 · BARS V

1. Skew Angle = 0°
2. At discharge end, chamfer may be ¾".
3. For 15° Skew ~ 1"
   For 30° Skew ~ 2"
   For 45° Skew ~ 3"
4. Quantities shown are for two Type PW-1 wings. Adjust concrete volume for Type PW-2 wings. To determine estimated quantities for two wings, multiply the tabulated values by Lw. Quantities shown do not include weight of Bars D.
5. Provide weepholes for Hw = 5'-0" and greater. Fill around weepholes with coarse gravel.
6. Lap Bars M1 1'-6" minimum with Bars M2.
7. Bars G equally spaced at 8" maximum, place as shown. Provide at least two pair Bars G per wing.
8. 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail or curbs taller than 1'-0", refer to ECD standard. For structures with T6 bridge rail, refer to T6-CM standard. For structures with traffic rail, other than T6, refer to RAC standard.
9. For vehicle safety, the following requirements must be met:
   - For structures without bridge rail, curbs cannot project more than 3" above finished grade.
   - For structures with bridge rail, build curbs flush with finished grade.

   Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
10. 1'-0" typical. 2'-0" typical when RAC standard is referenced elsewhere in the plans.
11. 3'-0" for Hw < 4'.
12. 6" for Hw < 4'.

GENERAL NOTES:

Designed in accordance with AASHTO LRFD Bridge Design Specifications.

Provide Class "C" Concrete (f'c = 3,600 psi Min) and Grade 60 reinforcing steel.

Provide 1 ½" Min clear cover to reinforcing steel, depth of toewalls for wingwalls and culverts may be reduced as directed when founded on solid rock, when directed by the Engineer.

See BCS sheet for wingwall type and additional dimensions and information.

The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for the Contractor's information only.

DESIGNER NOTES:

Type PW-1 can be used for all applications and must be used if railing is to be mounted to the wingwall.

Type PW-2 can only be used for applications without a railing mounted to the wingwall.

PARTIAL ELEVATION - PW-1 · PARTIAL ELEVATION - PW-2 · SECTION C-C · SECTION C-C

SECTION A-A (Showing Wing Reinf) · SECTION B-B (Showing Wing Reinf)

DETAILS FOR NON-SKEWED BOX CULVERTS · DETAILS FOR SKEWED BOX CULVERTS (Showing 30° Skew)

Texas Department of Transportation	Bridge Division Standard
CONCRETE WINGWALLS WITH FLARED WINGS FOR BOX CULVERTS TYPES PW-1 AND PW-2	PW

File: pwsta01.dgn | DN: GAF | CK: CAT | DW: TxDOT | CK: GAF
©TxDOT February 2010 | CONT | SECT | JOB | HIGHWAY
REVISIONS 11-20 Reinforcing Quantities. 02-10 PW-1 & PW-2. | DIST | COUNTY | SHEET NO.

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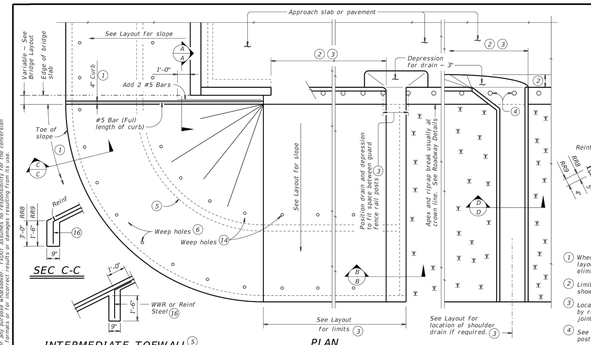
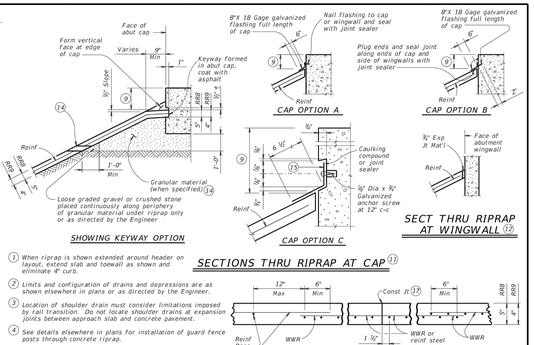
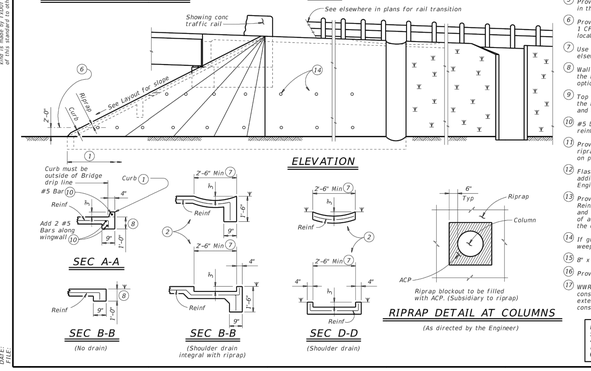
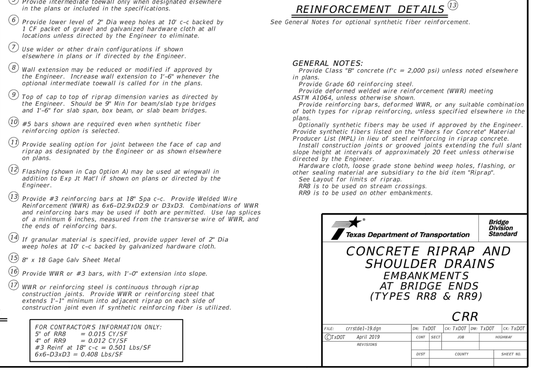




1. When riprap is shown extended around header on layout, extend slab and toewall as shown and eliminate 4" curb.
2. Limits and configuration of drains and depressions are as shown elsewhere in plans or as directed by the Engineer.
3. Location of shoulder drain must consider limitations imposed by rail transition. Do not locate shoulder drains at expansion joints between approach slab and concrete pavement.
4. See details elsewhere in plans for installation of guard fence posts through concrete riprap.
5. Provide intermediate toewall only when designated elsewhere in the plans or included in the specifications.
6. Provide lower level of 2" Dia weep holes at 10' c-c backed by 1 CF packet of gravel and galvanized hardware cloth at all locations unless directed by the Engineer to eliminate.
7. Use wider or other drain configurations if shown elsewhere in plans or if directed by the Engineer.
8. Wall extension may be reduced or modified if approved by the Engineer. Increase wall extension to 1'-6" whenever the optional intermediate toewall is called for in the plans.
9. Top of cap to top of riprap dimension varies as directed by the Engineer. Should be 9" Min for beam/slab type bridges and 3'-6" for slab span, box beam, or slab beam bridges.
10. #5 bars shown are required even when synthetic fiber reinforcing option is selected.
11. Provide sealing option for joint between the face of cap and riprap as designated by the Engineer or as shown elsewhere on plans.
12. Flashing (shown in Cap Option A) may be used at wingwall in addition to Exp Jt Mat'l if shown on plans or directed by the Engineer.
13. Provide #3 reinforcing bars at 18" Spa c-c. Provide Welded Wire Reinforcement (WWR) as 6x6-D29xD2.9 or D3xD3. Combinations of WWR and reinforcing bars may be used if both are permitted. Use lap splices of a minimum 6 inches, measured from the transverse wire of WWR, and the ends of reinforcing bars.
14. If granular material is specified, provide upper level of 2" Dia weep holes at 10' c-c backed by galvanized hardware cloth.
15. 8" x 18 Gage Galv Sheet Metal
16. Provide WWR or #3 bars, with 1'-0" extension into slope.
17. WWR or reinforcing steel is continuous through riprap construction joints. Provide WWR or reinforcing steel that extends 1'-3" minimum into adjacent riprap on each side of construction joint even if synthetic reinforcing fiber is utilized.





GENERAL NOTES:

Provide Class "B" concrete (fc = 2,000 psi) unless noted elsewhere in plans.

Provide Grade 60 reinforcing steel.

Provide deformed welded wire reinforcement (WWR) meeting ASTM A1064, unless otherwise shown.

Provide reinforcing bars, deformed WWR, or any suitable combination of both types for riprap reinforcing, unless specified elsewhere in the plans.

Optionally synthetic fibers may be used if approved by the Engineer. Provide synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) in lieu of steel reinforcing in riprap concrete.

Install construction joints or grooved joints extending the full slope height at intervals of approximately 20 feet unless otherwise directed by the Engineer.

Hardware cloth, loose grade stone behind weep holes, flashing, or other sealing material are substitute to the bid item "Riprap".

See Layout for limits of riprap.

RR8 is to be used on stream crossings.

RR9 is to be used on other embankments.

Texas Department of Transportation	Bridge Division Standard
CONCRETE RIPRAP AND SHOULDER DRAINS EMBANKMENTS AT BRIDGE ENDS (TYPES RR8 & RR9)	CRR

File: crrstde1-19.dgn | DN: TxDOT | CK: TxDOT | DW: TxDOT | CK: TxDOT
©TxDOT April 2019 | CONT | SECT | JOB | HIGHWAY
REVISIONS | DIST | COUNTY | SHEET NO.

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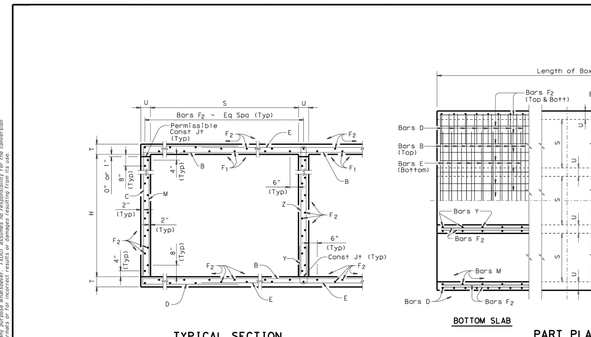


1. 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail or curbs taller than 1'-0", refer to ECD standard. For structures with T6 bridge rail, refer to T6-CM standard. For structures with traffic rail, other than T6, refer to RAC standard.
2. For vehicle safety, the following requirements must be met:
   - For structures without bridge rail, curbs shall project no more than 3" above finished grade.
   - For structures with bridge rail, curbs shall be flush with finished grade.

   Curb heights shall be reduced, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
3. For curbs less than 1'-0" high, tilt bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, bars K may be omitted.
4. 1'-0" typical. 2'-0" when RAC standard is referred to elsewhere in the plans.

Deformed welded wire reinforcement (WWR) meeting the requirements of ASTM A1064 may be used to replace conventional reinforcement shown at the Contractor's option. The area of required reinforcement may be reduced by the ratio of 60 ksi / 70 ksi. Spacing of WWR is limited to 4" Min and 18" Max. When required, provide lap splices in the WWR of the same length required for the equivalent bar size, rounded up for wire sizes between conventional bar sizes.

Example Conversion: Replacement of No. 6 Gr 60 at 6" Spacing with WWR.
WWR required = (0.44 sq in/ 0.5') x (60 ksi/70 ksi) = 0.754 sq in/ft.
If D30.6 wire is used to meet the 0.754 sq in/ft requirement in this example, the required spacing = (0.306 sq in/ 0.754 sq in/ft) x 12 in/ft = 4.87" Max spacing.
Required lap length for the provided D30.6 wire is 2'-2" (Lap required for uncoated No. 5 bars, as shown in Item 440).

GENERAL NOTES:

Designed according to AASHTO LRFD Specifications.

Designed to the maximum fill height shown.

All reinforcing steel shall be Grade 60.

All concrete shall be Class "C" with the exception that Class "S" concrete shall be used in the extended legs of the U-shaped structures at entrance, and when top slab is the final riding surface.

Class "C" concrete shall have a minimum compressive strength of 3,600 psi. Class "S" concrete shall have a minimum compressive strength of 4,000 psi.

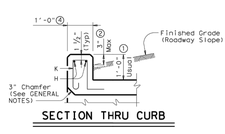
The use of permanent forms is not allowed.

The bottom edge of the top slab shall be chamfered 3" at the entrance.

Reinforcing bars shall be adjusted to provide a minimum of 1 ¼" clear cover.

Construction joints shown at the flow line may be raised a maximum of 6" at the Contractor's option. If this option is used, Bars M may be cut off or raised, Bars C and D may be reversed, and Bars Y and Z may be reversed.

See standard MC-MD for skewed ends, angle sections and lengthening detailsls.

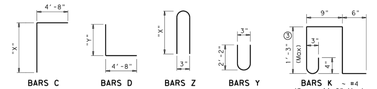


H	Bar Dimensions	
	"X"	"Y"
2'-0"	2'-5"	2'-2"
3'-0"	3'-5"	2'-2"
4'-0"	4'-5"	2'-2"
5'-0"	5'-5"	2'-2"

HL93 LOADING SHEET 1 OF 2

Texas Department of Transportation	Bridge Division Standard
MULTIPLE BOX CULVERTS CAST-IN-PLACE 5'-0" SPAN 0' TO 20' FILL	MC-5-20

File: mc520sta.dgn | DN: GAF | CK: LRM | DW: BRHTLTxDOT | CK: GAF
©TxDOT April 2019 | CONT | SECT | JOB | HIGHWAY
REVISIONS 10-13 Added WWR | DIST | COUNTY | SHEET NO.



STATE OF TEXAS TIMOTHY H. HOLLAND 94849 LICENSED PROFESSIONAL ENGINEER 2/11/2020

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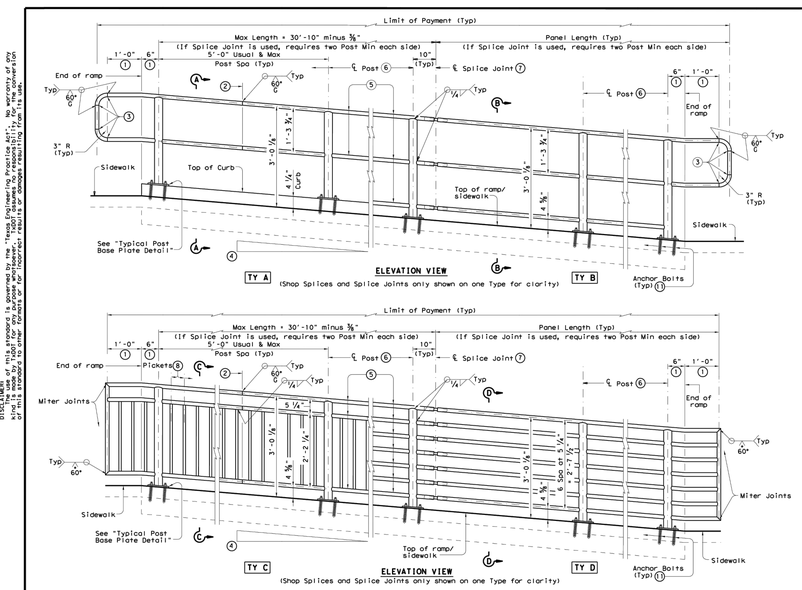
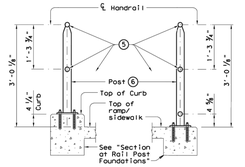




RECOMMENDED USAGE 9 10
Dropoff Height/ Condition	Recommended Rail Options
< 30" dropoff	TY A, TY B, TY C, or TY D
≥ 30" dropoff, or along Bike Path	TY E or TY F

1. Parallel to ground.
2. One shop splice per panel is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.
3. Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.
4. See Ramp Details located elsewhere in plans for ramp slope and dimensions. Maximum ramp slope will not exceed 8.3 percent. Level landing required for each 30" rise if grade exceeds 5 percent.
5. 1 ½" Dia. Standard Pipe (1.900" O.D., 0.145" wall thickness). Parallel to ramp / sidewalk. Provide holes as needed in 1 ½" Dia. pipe for galvanizing drainage and venting.
6. 2 ½" Dia. Standard Pipe (2.875" O.D., 0.203" wall thickness). See "Post Mount Detail" for crimping and trimming post to fit Dia. of top rail. Provide holes as needed in post for galvanizing drainage and venting. Plumb all posts.
7. See "Handrail Fabrication Details" for Splice Joints.
8. ℄ ⅜" Dia. Round Bar equal spacing at 4 ½" Max. Plumb all pickets.
9. When needed for accessibility (grade > 5 percent) or as needed for pedestrian safety.
10. Not to be used on bridges.
11. See "General Notes" for anchor bolt information.

SHEET 1 OF 3

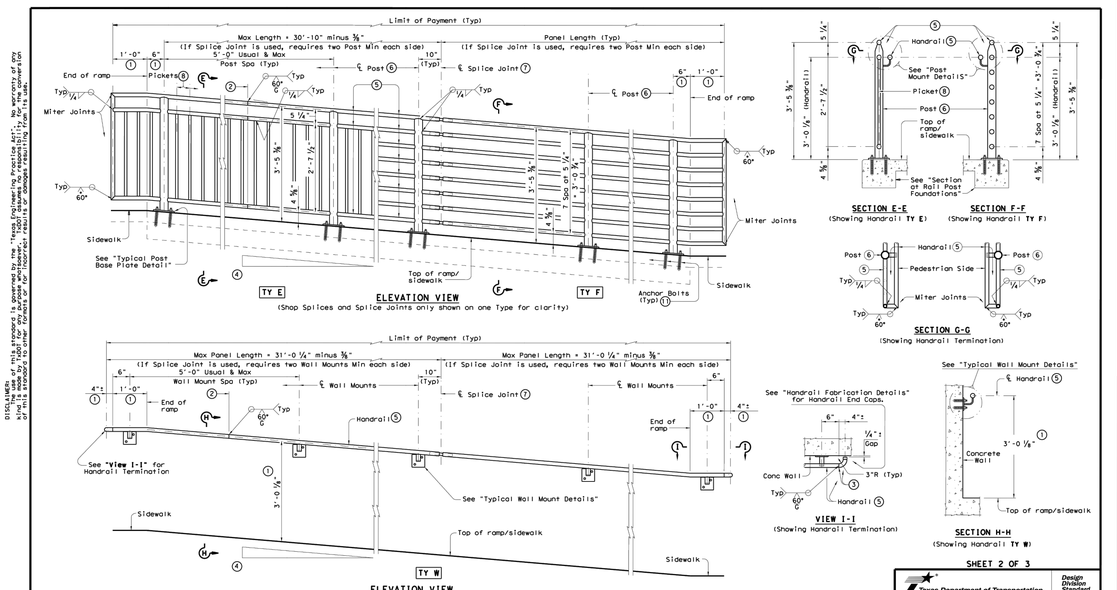
Texas Department of Transportation — Design Division Standard

PEDESTRIAN HANDRAIL DETAILS

PRD-13

FILE: prd13.dgn	DN: TxDOT	CK: AM	DW: JTR	CK: CGL
©TxDOT December 2006	CONT	SECT	JOB	HIGHWAY
REVISIONS				
REVISED MAY, 2015 (VP)	DIST	COUNTY		SHEET NO.

DATE:
FILE:



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4. See Ramp Details located elsewhere in plans for ramp slope and dimensions. Maximum ramp slope will not exceed 8.3 percent. Level landing required for each 30" rise if grade exceeds 5 percent.
5. 1 ½" Dia. Standard Pipe (1.900" O.D., 0.145" wall thickness). Parallel to ramp / sidewalk. Provide holes as needed in 1 ½" Dia. pipe for galvanizing drainage and venting.
6. 2 ½" Dia. Standard Pipe (2.875" O.D., 0.203" wall thickness). See "Post Mount Detail" for crimping and trimming post to fit Dia. of top rail. Provide holes as needed in post for galvanizing drainage and venting. Plumb all posts.
7. See "Handrail Fabrication Details" for Splice Joints.
8. ℄ ⅜" Dia. Round Bar equal spacing at 4 ½" Max. Plumb all pickets.
11. See "General Notes" for anchor bolt information.

SHEET 2 OF 3

Texas Department of Transportation — Design Division Standard

PEDESTRIAN HANDRAIL DETAILS

PRD-13

FILE: prd13.dgn	DN: TxDOT	CK: JM	DW: JTR	CK: CGL
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REVISIONS				
REVISED MAY, 2015 (VP)	DIST	COUNTY		SHEET NO.

DATE:
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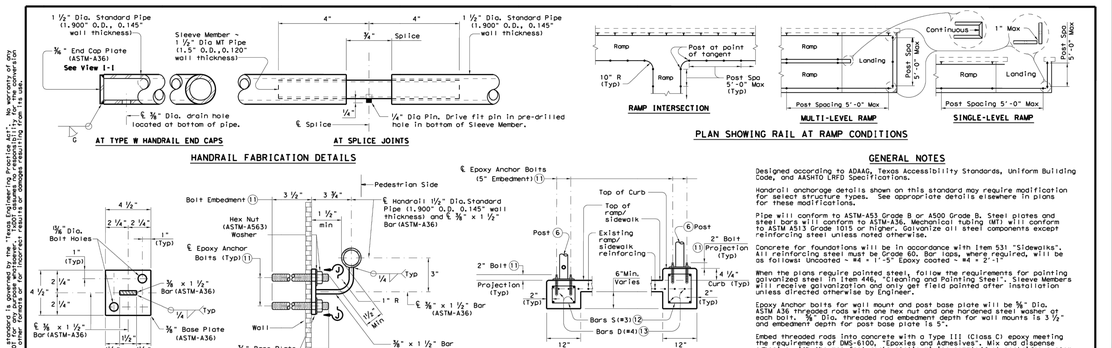

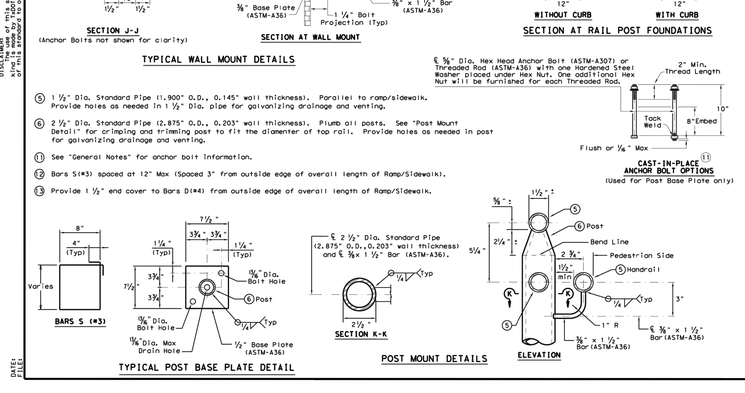

5. 1 ½" Dia. Standard Pipe (1.900" O.D., 0.145" wall thickness). Parallel to ramp/sidewalk. Provide holes as needed in 1 ½" Dia. pipe for galvanizing drainage and venting.
6. 2 ½" Dia. Standard Pipe (2.875" O.D., 0.203" wall thickness). Plumb all posts. See "Post Mount Detail" for crimping and trimming post to fit the diameter of top rail. Provide holes as needed in post for galvanizing drainage and venting.
11. See "General Notes" for anchor bolt information.
12. Bars S(#3) spaced at 12" Max (Spaced 3" from outside edge of overall length of Ramp/Sidewalk).
13. Provide 1 ½" end cover to Bars D(#4) from outside edge of overall length of Ramp/Sidewalk.

GENERAL NOTES

Designed according to ADAAG, Texas Accessibility Standards, Uniform Building Code, and AASHTO LRFD Specifications.

Handrail anchorage details shown on this standard may require modification for select structure types. See appropriate details elsewhere in plans for these modifications.

Pipe will conform to ASTM-A53 Grade B or A500 Grade B. Steel plates and steel bars will conform to ASTM-A36. Mechanical tubing (MT) will conform to ASTM A513 Grade 1015 or higher. Galvanize all steel components except reinforcing steel unless noted otherwise.

Concrete for foundations will be in accordance with Item 531 "Sidewalks". All reinforcing steel must be Grade 60. Bar tops, where required, will be as follows: Uncoated - #4 - 1'-5" Epoxy coated - #4 - 2'-1"

When the plans require painted steel, follow the requirements for painting galvanized steel in Item 446, "Cleaning and Painting Steel". Sleeve Members will receive galvanization and only get field painted after installation unless directed otherwise by Engineer.

Epoxy Anchor bolts for wall mount and post base plate will be ⅝" Dia. ASTM A36 threaded rods with one hex nut and one hardened steel washer at each bolt. ⅝" Dia. threaded rod embedment depth for wall mounts is 3 ½" and embedment depth for post base plate is 5".

Embed threaded rods into concrete with a Type III (Class C) epoxy meeting the requirements of DMS-6100, "Epoxies and Adhesives". Mix and dispense adhesive with the manufacturer's static mixing nozzle/dual cartridge system. Core drill holes (percussion drilling not permitted).

At the contractor's option the post base plate anchor bolts may be cast with the Ramp/Sidewalk (See Cast-In-Place Anchor Bolt Options).

Optional cast-in-place anchor bolts will be ⅝" Dia ASTM A307 Grade A bolts (or A36 threaded rods with one rack welded hex nut each) with one hex nut and one hardened steel washer at each bolt. Embedment depth of cast-in-place bolt will be 8" for post base plate.

Handrails and any wall or other surface adjacent to them will be free of any sharp or abrasive elements.

Submit shop drawings to the Engineer unless otherwise noted. For curved handrail applications, fabricate the handrail to the curve if radius is less than 600 ft. Shop drawings are required when rail is fabricated to the curve.

For all handrails, erection drawings will be submitted to the Engineer for approval to ensure proper installation.

Drawings will show handrail mount locations with bolts setting, spacing, ramp slope, and/or splice joint locations, and handrail lengths with identification showing where each handrail goes on the layout.

Payment for concrete sidewalks or curb ramps will be paid for in accordance with Item 531 "Sidewalks".

Payment for all items shown is to be included in unit price bid in accordance with Item 450 "Railing" of the type specified.

All exposed edges will be rounded or chamfered to approximately ⅛" by grinding.

SHEET 3 OF 3

Texas Department of Transportation — Design Division Standard

PEDESTRIAN HANDRAIL DETAILS

PRD-13

FILE: prd13.dgn	DN: TxDOT	CK: JM	DW: JTR	CK: CGL
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REVISIONS				
REVISED MAY, 2015 (VP)	DIST	COUNTY		SHEET NO.

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APR	DATE	DESCRIPTION	REV

DESIGNED BY: DAZ
REVIEWED BY: TMH
DRAWN BY: DAZ

BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744
TBPE Registration No. F-1046
TEL: 512-879-0400 www.browngay.com

COTTONWOOD CREEK
HUTTO, TEXAS

TXDOT DETAILS (4 OF 5)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
90 OF 91

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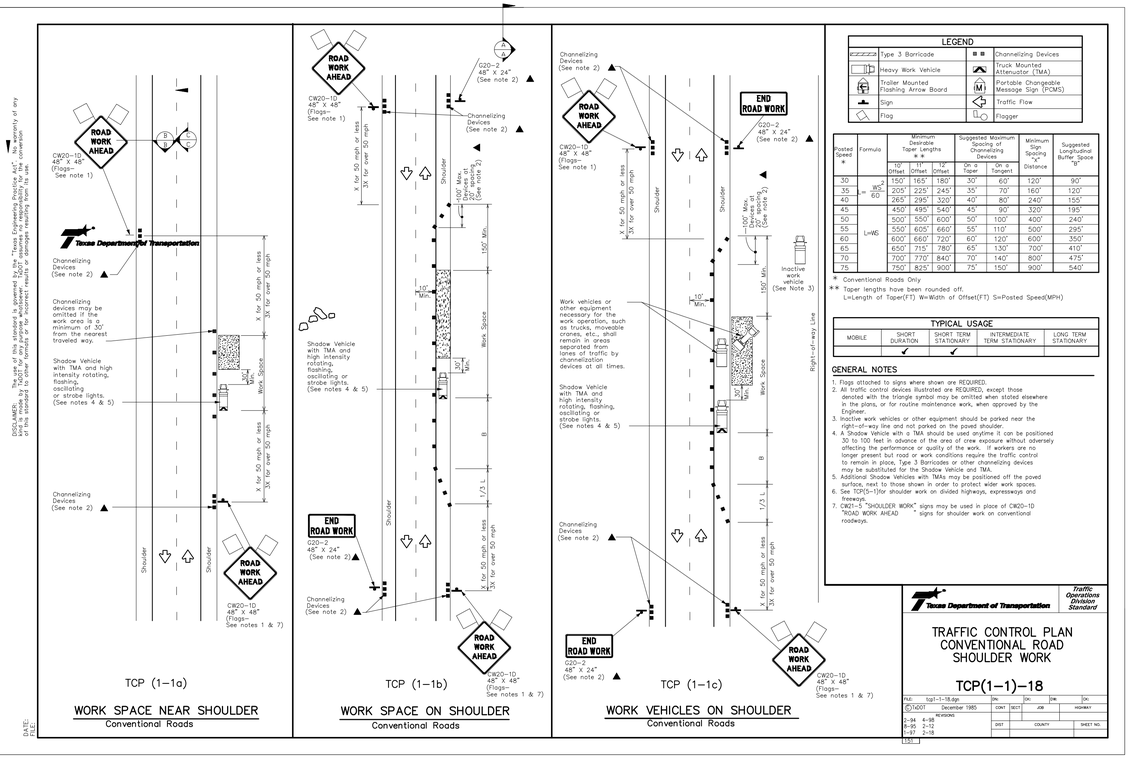
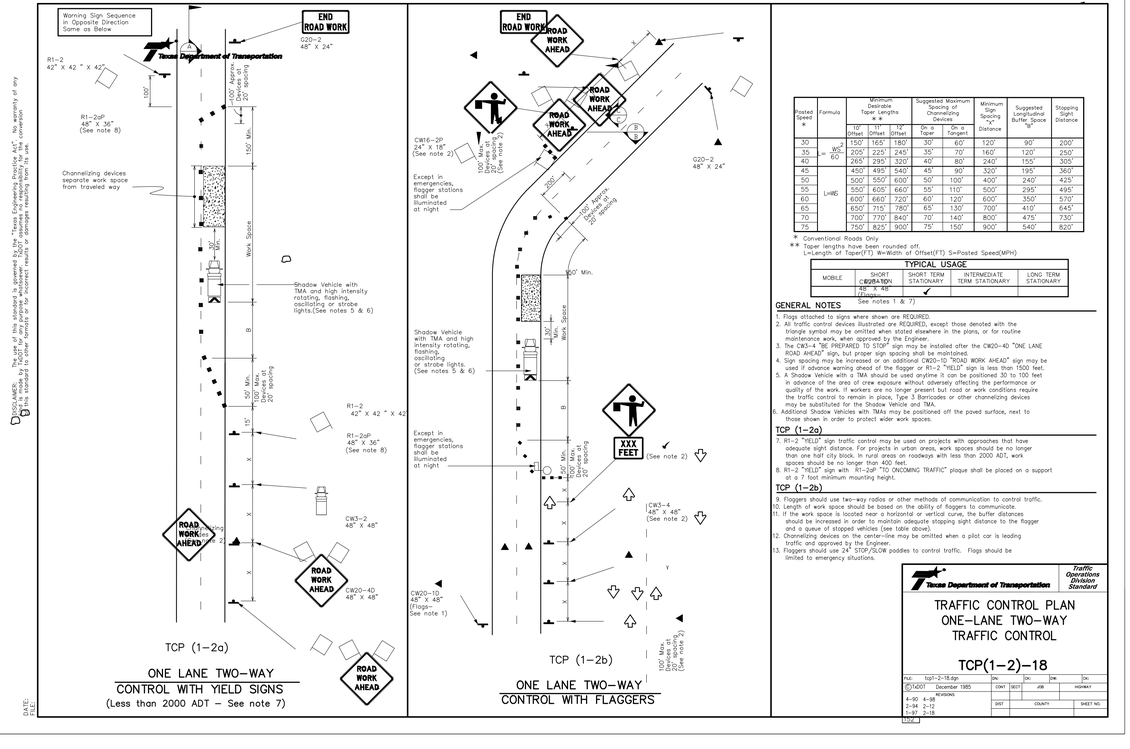
Record Drawing





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COTTONWOOD CREEK
HUTTO, TEXAS

TXDOT DETAILS (5 OF 5)

SUBMITTAL DATE: 01-16-2020

STATE OF TEXAS
TIMOTHY R. HOLLAND
94849
LICENSED
PROFESSIONAL ENGINEER
2/11/2020

SHEET
91 OF 91

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Record Drawing

PROJECT CONSTRUCTION SUMMARY

PROJECT NAME: Cottonwood Phase 1

FINAL ACCEPTANCE DATE: _____

INSPECTOR: Todd Meaker

CONTRACTOR: CC Carlton

Maintained By:	
COH	Other
Boxes checked by COH	

CONSTRUCTION COSTS

STREET IMPROVEMENT COST: $2,261,771.20

SIDEWALK IMPROVEMENT COST: $176,556.00

SIDEWALK RAMP IMPROVEMENT COST: $94,500.00

BRIDGE IMPROVEMENT COST: N/A

POND(S) COST: $10,000

DRAINAGE IMPROVEMENT COST: $1,772,687.00

WATER IMPROVEMENT COST: $1,142,612.00

WASTEWATER IMPROVEMENT COST: $1,384,485.00

RESTORATION .COST: $269,343.25

TOTAL IMPROVEMENT COST: $7,111,954.45

PREPARED BY (DESIGN ENGINEER): Josh Janysek

CHECKED BY (CITY INSPECTOR):_____

CONSTRUCTION SUMMARY FOR STREETS & SIDEWALKS

STREET PAVING							
STREET NAME	Address from	Address to	Pavement Design (Thickness) Asphalt / Base	Pavement Width (FT) (foc-foc)	L (FT)	PRIVATE	ETJ
BRANSON BLVD	226	1001	2” / 18”	44’	2,480’	NO	NO
GOLDEN PLAINS PKWY	0	0	2” / 14”	30’	794’	NO	NO
CANLEY LOOP	101	200	2” / 14”	30’	884’	NO	NO
LONGBRIDGE DR	142	226	2” / 14”	40’	982’	NO	NO
ARNAGE DR	403	1001	2” / 14”	30’	2,099’	NO	NO
ASCARI CT	1001	1018	2” / 14”	30’	425’	NO	NO
COVENTRY DR	100	300	2” / 14”	40’	848’	NO	NO
WOLSELEY DR	101	129	2” / 14”	30’	812’	NO	NO
WOLSELEY CV	1000	1003	2” / 14”	30’	148’	NO	NO
SEBRING CIRCLE	100	103	2” / 14”	30’	160’	NO	NO
MONTEGO ST	0	0	2” / 14”	30’	60’	NO	NO
MILLINER LOOP	0	0	2” / 14”	30’	88’	NO	NO

SIDEWALKS / SIDEWALK RAMPS						
STREET NAME	Address from	Address to	W (FT)	L (FT)	SIDES [1]	CURB RAMP [2]
BRANSON BLVD	102	1001	8’	4,422	S&N	24
GOLDEN PLAINS PKWY	0	0	5’	0	N/A	6
CANLEY LOOP	0	0	5’	0	N/A	4
LONGBRIDGE DR	142	226	5’	1,484	S,W,N	6
ARNAGE DR	220	1001	5’	395	N&W	16
ASCARI ST	0	0	5’	0	N/A	2
COVENTRY DR	100	100	5’	58	W	8
WOLSELEY DR	101	101	5’	56	N&W	6
SEBRING CIRCLE	0	0	5’	0	N/A	2
MONTEGO ST	0	0	5’	0	E&W	0
MILLINER LOOP	0	0	5’	0	E&W	0

1 – Designates location of existing sidewalk (E, W, S, N, SE, SW, NE, NW of designated street)
2 – Number of Ramps

CONSTRUCTION SUMMARY FOR BRIDGES

BRIDGES / BRIDGE CLASS CULVERTS / DRAINAGE CULVERTS ACROSS ROW								
STREET NAME AND ADDRESS OR LOCATION	FEATURE CROSSED [1]	TYPE [2]	DESCRIPTION [3]	DECK		COST	PRIVATE	ETJ
				W (FT) [4]	L (FT) [5]			
GOLDEN PLAINS PKWY	CHANNEL	B	MULTI BOX CULVERT HEADWALL 5'X4' RCB WITH DISSIPATORS	54'	30'	$35,000	NO	NO
GOLDEN PLAINS PKWY	CHANNEL	B	MULTI BOX CULVERT 5'X4' RCB WITH DISSIPATORS	54'	30'	$39,000	NO	NO
ARNAGE DR	CHANNEL	B	MULTI BOX CULVERT HEADWALL 5'X4' RCB WITH DISSIPATORS	52'	30'	$44,900	NO	NO
ARNAGE DR	CHANNEL	B	MULTI BOX CULVERT HEADWALL 5'X4' RCB WITH DISSIPATORS	55'	30'	$51,000	NO	NO

1 – Feature Crossed: Creek name if major creek or branch, or roadway name if overpass.

2 – Type: B – Bridge, C - Culvert, P – Pipe. All crossings 20' and wider including multiple box culverts totaling 20' or wider shall be classified as a B – Bridge. Culverts are precast of cast-in-place box culverts. Pipes are smaller drainage pipe crossings with or without headwalls.

3 – Description: i.e. 2 spans (Bridge), 2 – 5 X 7' (Culverts), 2 – 24" RCP (Pipes).

4 – Deck Width: Use "footprint" of culvert/pipes for width on buried culvert/pipes; include full "out to out" dimension, including sidewalks and railings, for width of standard bridges.

5 – Deck Length: Measured along the centerline of the roadway

CONSTRUCTION SUMMARY FOR PONDS

POND TYPE [1]	LOCATION (ADDRESS OR LOT / BLOCK #)	SIZE (SY) [2]	DRAINAGE AREA (ACRES)	PRIVATE [3]	ETJ	COST
S / Temp	South East corner of Project	7585	41.4	N/A	NO	$10,000.00

1 – BD = Bio–Detention
D = Detention Only
DSF = Detention / Sedimentation / Filtration
F = Filtration Only
S = Sedimentation Only
SF = Sedimentation / Filtration
SFI = Sedimentation / Filtration / Infiltration
SI = Sedimentation / Irrigation
WP = Wet Pond

2 – Approximate boundary area

3 – Provide copy of recorded agreement for privately maintained ponds

CONSTRUCTION SUMMARY FOR DRAINAGE

STORM DRAIN			MANHOLES			INLETS		
SIZE (inches) (H' x W')	MATERIAL TYPE [2]	L (FT)	QTY	SIZE (Dia – FT)	MATERIAL TYPE [2]	QTY	SIZE Length (feet)	TYPE [1]
18"	RCP	1,314	5	4'	PRECAST	41	10	CURB
24"	RCP	1,718	4	5'	PRECAST	1	15	CURB
30"	RCP	1,145	1	6'	PRECAST	2	4X4	AREA
36"	RCP	1,433						
42"	RCP	1,593						
48"	RCP	158						
54"	RCP	309						

JUNCTION BOXES			OUTFALL STRUCTURES		
QTY	SIZE (FT x FT x FT)	MATERIAL TYPE [2]	QTY	SIZE [3]	DESCRIPTION [4]
2	6X6	PRECAST	1	8X3	HEADWALL
1	7X7	PRECAST	1	6X3	HEADWALL
1	8X8	PRECAST			
1	9X9	PRECAST			

CHANNEL			
LENGTH (FT)	BOTTOM WIDTH (FT)	SIDE SLOPE (FT/FT)	LINING MATERIAL TYPE
1,444'	4'	3 :1	CONCRETE & GRASS

1) Grate, Area, Curb, Recessed Curb, Combination, Slotted Drain
2) Cast-in-Place, Precast
3) Pipe size / Culvert Size
4) Headwall, Wing Walls, Gabions

CONSTRUCTION SUMMARY FOR WATER

VALVES INSTALLED			PIPE			FIRE HYDRANTS		
SIZE	DESCRIPTION	NO.	SIZE	TYPE	LENGTH	SIZE	TYPE	NO.
8”	CLOW	28	8”	C-900 PVC	6877’	5 ¼”	CLOW	25
12”	CLOW	17	12”	C-900 PVC	7288’			
			18”	CASING	120’			

AIR RELEASE		
SIZE	TYPE	NO.
2”	AFV	5

SERVICES INSTALLED	
NO.	TYPE
29	SINGLE
74	DOUBLE
1	IRRIGATION

CONSTRUCTION SUMMARY FOR WASTEWATER

PIPE			MANHOLES					
SIZE	TYPE	LENGTH	DEPTH	MAKE	STA. NO.	B.C.	EYE	STREET
8”	SDR-26	7004’	11’4”	PRECAST	1+20	YES	2	N/A
10”	SDR-26	1855’	9’6”	PRECAST	4+46	YES	2	N/A
12”	SDR-26	3479’	8’	PRECAST	7+72	YES	2	N/A
15”	SDR-26	1268’	11’5”	PRECAST	10+97	YES	2	N/A
20”	STEEL CASING	60’	12’	PRECAST	13+67	YES	2	N/A
			13’	PRECAST	17+57	YES	2	N/A
			14’	PRECAST	20+23	YES	2	N/A
			14’	PRECAST	22+23	YES	2	N/A
			13’	PRECAST	23+46	YES	2	N/A
			14’	PRECAST	24+80	YES	2	N/A
			14’	PRECAST	26+80	YES	2	N/A
			13’	PRECAST	30+07	YES	2	N/A
			12’	PRECAST	32+18	YES	2	N/A
			14’	PRECAST	34+16	YES	2	N/A
			14’	PRECAST	36+59	YES	2	N/A
			13’	PRECAST	39+37	YES	2	N/A
			13’	PRECAST	43+37	YES	2	N/A
			14’10”	PRECAST	45+31	YES	2	N/A
			15’	PRECAST	46+78	YES	2	N/A
			14’	PRECAST	48+07	YES	2	N/A
			16’	PRECAST	52+03	NO	2	BRANSON BLVD
			16’	PRECAST	55+99	NO	4	BRANSON BLVD
			13’5”	PRECAST	58+97	NO	3	BRANSON BLVD
			11’	PRECAST	62+21	NO	2	BRANSON BLVD
			14’	PRECAST	64+12	NO	3	BRANSON BLVD
			13’	PRECAST	65+39	NO	2	BRANSON BLVD
			10’	PRECAST	66+52	NO	3	BRANSON BLVD
			11’	PRECAST	67+99	NO	2	BRANSON BLVD
			10’	PRECAST	69+36	NO	4	BRANSON BLVD
			11’	PRECAST	70+58	NO	2	CANLEY LOOP
			11’	PRECAST	71+48	NO	2	CANLEY LOOP
			11’	PRECAST	74+01	NO	2	CANLEY LOOP
			11’	PRECAST	2+69	NO	3	ARNAGE DRIVE
			10’	PRECAST	7+70	NO	2	ARNAGE DRIVE
			9’	PRECAST	12+06	NO	3	ARNAGE DRIVE
			9’	PRECAST	13+98	NO	2	ARNAGE DRIVE
			10’	PRECAST	15+36	NO	2	ARNAGE DRIVE
			8’7”	PRECAST	16+25	NO	2	ARNAGE DRIVE
			10’11”	PRECAST	2+96	NO	3	COVENTRY DRIVE
			11’11”	PRECAST	6+93	NO	2	COVENTRY DRIVE

			9’6”	PRECAST	3+39	NO	2	WOLSELEY DRIVE
			9’10”	PRECAST	4+53	NO	2	WOLSELEY DRIVE
			10’7”	PRECAST	5+61	NO	2	WOLSELEY DRIVE
			10’2”	PRECAST	6+70	NO	2	WOLSELEY DRIVE
			9’3”	PRECAST	7+76	NO	2	WOLSELEY DRIVE
			8’6”	PRECAST	9+07	NO	2	WOLSELEY DRIVE
			8’8”	PRECAST	10+92	NO	2	WOLSELEY DRIVE
			10’11”	PRECAST	1+89	NO	2	LONGBRIDGE DRIVE
			10’6”	PRECAST	2+92	NO	2	LONGBRIDGE DRIVE
			10’2”	PRECAST	3+81	NO	2	LONGBRIDGE DRIVE
			10’4”	PRECAST	4+84	NO	2	LONGBRIDGE DRIVE
SERVICES INSTALLED			10’3”	PRECAST	8+84	NO	3	LONGBRIDGE DRIVE
			9’2”	PRECAST	10+7	NO	2	LONGBRIDGE DRIVE
NO.	TYPE		9’	PRECAST	2+41	NO	2	BRANSON BLVD
38	Single		8’11”	PRECAST	3+79	NO	2	BRANSON BLVD
			9’6”	PRECAST	5+51	NO	2	ACARI ST
69	Double		9’5”	PRECAST	8+15	NO	2	ACARI ST
			9’4”	PRECAST	4+04	NO	2	CANLEY LOOP
TYPE OF MANHOLE COATING: **SPRAYWALL**			10’6”	PRECAST	1+43	NO	3	GOLDEN PLAINS PKWY
			10’11”	PRECAST	4+20	NO	3	GOLDEN PLAINS PKWY
			9’1”	PRECAST	5+25	NO	2	GOLDEN PLAINS PKWY
			14’6”	PRECAST	45+31	YES	3	N/A
			14’	PRECAST	1+14	YES	2	N/A
			9’6”	PRECAST	2+02	NO	2	SEBRING CIRCLE

LIMITS OF CONSTRUCTION FOR WATER/WASTEWATER PROJECTS ONLY

PROJECT NAME _____ WORK ORDER #_____

W/WW JOB I.D. _____ SUBDIVISION FILE # _____

LIMITS OF PROJECT WILL BE GIVEN BY ADDRESS OF STREETS LISTED BELOW

STREET NAME	FROM	TO

THIS SHEET MUST BE USED WHEN THERE IS NOT A STREET AND DRAINAGE SUMMARY INCLUDED.

RESOLUTION NO. R-

A RESOLUTION ACCEPTING THE INFRASTRUCTURE IMPROVEMENTS FOR THE SUBDIVISION KNOWN AS COTTONWOOD CREEK PHASE I; IN THE CITY OF HUTTO, WILLIAMSON COUNTY, TEXAS.

WHEREAS, the infrastructure improvements for the Cottonwood Creek Phase I Residential subdivision have been constructed and are ready for acceptance, and;

WHEREAS, a final inspection was conducted by the City's Construction and Public Works staff of all roads, drainage, sidewalks, ADA ramps, water and wastewater improvements, and;

WHEREAS, all items have been constructed according to engineering plans and City codes and standards, and;

WHEREAS, CC Carlton Construction LLC, submitted a warranty bond to cover the material and workmanship for two years,

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, hereby accepts the infrastructure improvements for Cottowood Creek Phase I

The City Council hereby finds and declares that written notice of the date, hour, place and subject of the meeting at which this resolution was adopted was posted and that such meeting was open to the public as required by law at all times during which this Resolution and the subject matter hereof were discussed, considered and formally acted upon, all as required by the Open Meetings Act, Chapter 551, Texas Government Code, as amended.

CONSIDERED and RESOLVED by the City Council of the City of Hutto on this the **20th** day of **May, 2021.**

THE CITY OF HUTTO, TEXAS

_____
Mike Snyder, Mayor Pro Tem

ATTESTED:

_____
Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration and possible action on Resolution No. R-2021-081 authorizing the City Manager to execute an Interlocal Agreement with Williamson County approving the County to perform construction within City Limits for Segment 1 of the Southeast Loop project. (Samuel Ray)
Meeting:	Thursday, May 20, 2021
Department:	Engineering
Staff Contact:	Samuel Ray

BACKGROUND INFORMATION:

Williamson County has been developing plans for the Southeast Loop project for several years now. This project will ultimately be a highway with access roads around the southeast of the current City of Hutto starting at CR 138 and SH 130 and ending at FM 3349 and US 79. On June 4th of 2020, City Council approved a resolution consenting to the use of eminent domain by Williamson County within the City limits of Hutto for the Southeast Loop project. Williamson County is nearing start of construction of Segment 1 of the Southeast Loop project.

SUMMARY OF REQUEST:

Request approval of resolution for City Manager to execute Interlocal Agreement with Williamson County.

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Resolution - ILA with Williamson County Regarding Segment 1 of the Southeast Loop Project
2. 20210510-SELoop-ILASegment1
3. Hutto ILA ExhibitA

RESOLUTION NO. R-2021-081

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN INTERLOCAL AGREEMENT WITH WILLIAMSON COUNTY REGARDING THE CITY/COUNTY PARTICIPATION IN THE DESIGN AND CONSTRCUTION COSTS RELATED TO SEGEMENT 1 OF THE SOUTHEAST LOOP CONSTRUCTION PROJECT.

WHEREAS, V.T.C.A., Government Code, Chapter 791, the Texas Interlocal Cooperation Act, provides that any one or more public agencies may contract with each other for the performance of governmental functions or services for the promotion and protection of the health and welfare of the inhabitants of this State and the mutual benefits of the parties, and;

WHEREAS, the County is and has been in the process of designing Segment 1 of the Southeast Loop from the current terminus of CR 138 at SH 130 to the intersection of the proposed SE Loop and CR 137, the approximate location being shown on Exhibit "A, attached hereto, (the "County Project"), and;

WHEREAS, the City desires to cooperate with the County to facilitate the construction of the County Project;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS:

The Hutto City Council herby authorizes the City Manager to execute an interlocal agreement with Williamson County regarding the participation in the design and construction costs related to Segment 1 of the Southeast Loop construction project.

CONSIDERED and RESOLVED on this the 20th day of **May, 2021.**

THE CITY OF HUTTO, TEXAS

_____
Mike Snyder, Mayor

ATTEST:

_____
Holly Nagy, City Secretary

INTERLOCAL AGREEMENT
REGARDING THE CITY/COUNTY PARTICIPATION IN THE DESIGN AND CONSTRUCTION COSTS RELATED TO SEGEMENT 1 OF THE SOUTHEAST LOOP CONSTRUCTION PROJECT

THE STATE OF TEXAS §
§ KNOW ALL BY THESE PRESENTS:
COUNTY OF WILLIAMSON §

THIS INTERLOCAL AGREEMENT ("**Agreement"**) is entered into between the City of Hutto, Texas, a Texas municipal corporation (the "**City**") and Williamson County, a political subdivision of the State of Texas (the "**County**"). In this Agreement, the City and the County are sometimes individually referred to as "**a Party**" and collectively referred to as "**the Parties**".

WHEREAS, V.T.C.A., Government Code, Chapter 791, the Texas Interlocal Cooperation Act, provides that any one or more public agencies may contract with each other for the performance of governmental functions or services for the promotion and protection of the health and welfare of the inhabitants of this State and the mutual benefit of the parties;

WHEREAS, the County is and has been in the process of designing Segment 1 of the Southeast Loop from the current terminus of CR 138 at SH 130 to the intersection of the proposed SE Loop and CR 137, the approximate location being shown on Exhibit "A", attached hereto, (the "County Project"); and

WHEREAS, the City desires to cooperate with the County to facilitate the construction of the County Project; and

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises and agreements of the Parties contained in this Agreement, the Parties agree as follows:

I.
PURPOSE

1.01 General. The purpose of this Agreement is to provide consent for the County's design and construction of the County Project. The County Project includes the planning of a future controlled-access facility from SH 130 to CR 137 and the design and construction of the first phase, a three-lane roadway from the current terminus of CR 138 at SH 130 to CR 137 and the proposed roadway.

II.
CONSTRUCTION OF COUNTY PROJECT

2.01 County Obligations. The County shall be responsible for all costs associated with the preliminary and final design, construction bidding and management, right-of-way acquisitions, utility relocations, and all other costs related to the construction of the County Project.

2.02 Construction Plans. The County will submit the plans and specifications related to the County Project to the City.

2.03 Inspection. The City may inspect all aspects of the County Project that are within the City Limits during construction. Upon receipt of notification from the City that the City's inspectors determine the construction by the County is not in accordance with the approved project plans, the County shall cease construction until the deficiency can be identified and a corrective plan of construction implemented with the agreement of the City.

2.04 Permits. The County shall be responsible for obtaining permits, if any, required for the construction of the Project.

2.05 Insurance, Bonds and Warranties. The County shall require the contractor for the Project to name the City as an additional insured on any policies related to the County Project for those sections of the County Project that lie within the City Limits. The County shall require the contractor to provide performance bonds, and maintenance bonds in favor of the City for the County Project in amounts satisfactory to the City. The County shall transfer any warranties for the County Project within the city limits to the City upon final completion and acceptance of the Project.

III.

CITY OBLIGATIONS

3.01 Permission to Construct. The City agrees to allow the County to construct the County Project within the City's boundaries, including the acquisition of right-of-way, through condemnation or otherwise. The City further agrees to accept maintenance of the County Project within the City limits.

3.02 Utility Conflicts. City and County agree to cooperate regarding the location of water and/or wastewater utilities that conflict with the new right-of-way. The City acknowledges that it shall be responsible for all design and construction costs to relocate utility lines if said lines are within existing right-of-way. Conversely, it shall be the County's obligation to pay all design and construction costs for utility relocations if said lines lie within easements held by the City.

3.03 CITY RIGHT-OF-WAY. NOT APPLICABLE FOR SEGMENT 1. **IV.**

GENERAL PROVISIONS

5.01 Authority. This Agreement is made in part under the authority conferred in Chapter 791, *Texas Government Code*

5.02 Term. This Agreement shall commence upon execution of this Agreement and shall end upon the completion of the County Project.

5.03 Severability. The provisions of this Agreement are severable and, if any provision of this Agreement is held to be invalid for any reason by a court or agency of competent jurisdiction, the remainder of this Agreement will not be affected and this Agreement will be construed as if the invalid portion had never been contained herein.

5.04 Default and Remedies. If City fails to pay for Services under this Agreement, and continues such failure for thirty (30) days after the County provides written notice to cure, City shall be deemed to be in default under this Agreement. In the event that the County defaults under this Agreement, and such default is not cured, City may, in addition to any other remedy at law or in equity, immediately terminate this Agreement or seek specific performance of this Agreement.

5.05 Cooperation. The Parties agree to cooperate at all times in good faith to effectuate the purposes and intent of this Agreement.

5.06 Entire Agreement. This Agreement contains the entire agreement of the Parties regarding the subject matter hereof and supersedes all prior or contemporaneous understandings or representations, whether oral or written, regarding the subject matter and only relates to the Segment 1 of the County Project shown in the plans attached hereto as Exhibit "A."

5.07 Amendments. Any amendment of this Agreement must be in writing and will be effective if signed by the authorized representatives of the Parties.

5.08 Applicable Law; Venue. This Agreement will be construed in accordance with Texas law. Venue for any action arising hereunder will be in Williamson County, Texas.

5.09 Notices. Any notices given under this Agreement will be effective if (i) forwarded to a Party by hand-delivery; (ii) transmitted to a Party by confirmed telecopy; or (iii) deposited with the U.S. Postal Service, postage prepaid, certified, to the address of the Party indicated below:

CITY: _____
_____
_____

Attn: City Manager

COUNTY: 710 S. Main Street, Georgetown, Texas 78626
Attn: William Gravell, Jr.
Telephone: (512) 943-1550
Facsimile: (512) 943-1662

5.10 Counterparts; Effect of Partial Execution. This Agreement may be executed simultaneously in multiple counterparts, each of which will be deemed an original, but all of which will constitute the same instrument.

5.11 Authority. Each Party represents and warrants that it has the full right, power and authority to execute this Agreement.

5.12 Effective Date. This Agreement is executed to be effective on the date the last Party signs this Agreement.

5.13 No Joint Venture. The County Project is a sole project of the County and is not a joint venture or other partnership with the City.

(SIGNATURES ON FOLLOWING PAGE)

CITY OF HUTTO, TEXAS

By:_____

Name:_____

Its:_____

ATTEST:

By: _____

_____, _____ City Secretary

APPROVED AS TO FORM:

By: _____

Name: _____

Title: _____

THE STATE OF TEXAS §
§
COUNTY OF WILLIAMSON §

THIS INSTRUMENT was acknowledged before me on this ____ day of _____, 2020, by _____ as Mayor of the City of Hutto, a Texas home-rule city, on behalf of said city.

_____
Notary Public, State of Texas

WILLIAMSON COUNTY, TEXAS

By:_____
Bill Gravell, Jr., County Judge

ATTEST:

By: _____
Nancy Rister, County Clerk

THE STATE OF TEXAS §
§
COUNTY OF WILLIAMSON §

THIS INSTRUMENT was acknowledged before me on this ____ day of _____, 2020, by Bill Gravell, Jr., County Judge of Williamson County, Texas, on behalf of said County.

_____
Notary Public, State of Texas

Limmer Loop

Precinct 4

Carpenter Dr

BRUSHY CREEK

BOGGY CREEK

Williamson County

Travis County

Text

130 TOLL

79

101

395

401

404

973

132

134

137

3349

1660

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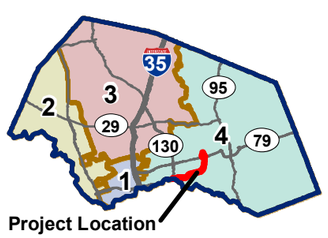


Southeast Loop
SH 130 to US 79

WILLIAMSON COUNTY 1848

- Segment 1
- Segment 2
- Segment 3
- Williamson County Boundary
- Parks and Open Spaces
- Flood Hazard Area (FEMA)
- Rivers/Streams
- Roadways

N W E S

0 0.5 1
Miles

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration and possible action approving Resolution No. R-2021-089 the "RSI Offsite" infrastructure improvements for the Emory Crossing subdivision. (Anthony Host)
Meeting:	Thursday, May 20, 2021
Department:	Public Works
Staff Contact:	Anthony Host

BACKGROUND INFORMATION:

The RSI Offsite is the wastewater lift station that provides service to Mustang Creek Subdivision and the new high school. It pumps towards the SWWTP

SUMMARY OF REQUEST:

Staff recommends acceptance

STAFF REVIEW:

Staff had inspected and project has passed all testing.

FINANCIAL IMPACT:

$4,007,000.45 of infrastructure asset and maintenance

POLICY IMPLICATIONS:

N/A

ATTACHMENTS:

1. RSI OFFSITE Final Cost and Quantities
2. RSI OFFSITE Green Civil Design Engineer's Concurrence Letter Lift Station
3. RSI OFFSITE Maintenance Bond
4. RSI OFFSITE Project Construction Summary
5. RSI Hutto Offsite WW Line, Record Drawings
6. RSI OFFSITE Engineer's Certificate of Completion
7. RSI OFFSITE ABPA WW
8. RSI OFFSITE Resolution

K

CONTRACT: RSI Hutto Ph 1

PROGRESS PAYMENT NO: 11
PROGRESS PAYMENT PERIOD: 11/30/2020

CONTRACTOR: JL GRAY CONSTRUCTION, INC
PO BOX 508
GEORGETOWN, TX 78627

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE	CONTRACT AMOUNT	PREVIOUS QTY.	QTY THIS EST	QTY TO DATE	COST TO DATE	PREVIOUS COST	COST THIS ESTIMATE	%
STREET IMPROVEMENTS												
1	PAYMENT & PERFORMANCE BONDS	1	LS	45200.00	45,200.00	0	1	1	45,200.00	0.00	45,200.00	100
2	8" CRUSHED LIMESTONE BASE	289	SY	31.00	8,959.00	289	0	289	8,959.00	8,959.00	0.00	100
3	SUBGRADE PREPARATION	289	SY	19.00	5,491.00	289	0	289	5,491.00	5,491.00	0.00	100
4	8" LIME STABELIZED SUBGRADE	289	SY	42.00	12,138.00	289	0	289	12,138.00	12,138.00	0.00	100
5	2" HOT MIX ASPHALT	289	SY	37.00	10,693.00	289	0	289	10,693.00	10,693.00	0.00	100
6	SAWCUT PAVEMENT	276	LF	5.50	1,518.00	276	0	276	1,518.00	1,518.00	0.00	100
7	LIFTSTATION DRIVEWAY CONCRETE PAVEMENT 6-IN REINFORCED	90	SY	87.00	7,830.00	0	0	0	0.00	0.00	0.00	0
8	LIFT STATION ACCESS ROAD 6" LIMESTONE BASE	1,158	SY	12.00	13,896.00	1,158	0	1,158	13,896.00	13,896.00	0.00	100
9	CURB RIBBON 18-INCH	20	LF	23.00	460.00	20	0	20	460.00	460.00	0.00	100
10	REMOVE AND REPLACE 18" CMP	158	LF	82.00	12,956.00	158	0	158	12,956.00	12,956.00	0.00	100
11	REMOVE AND REPLACE 18" RCP	90	LF	85.00	7,650.00	90	0	90	7,650.00	7,650.00	0.00	100
12	REMOVE AND REPLACE SLOPING HEADWALL FOR 18-INCH CMP	6	EA	3200.00	19,200.00	6	0	6	19,200.00	19,200.00	0.00	100
13	REMOVE AND REPLACE SLOPING HEADWALL FOR 18-INCH RCP	2	EA	3200.00	6,400.00	2	0	2	6,400.00	6,400.00	0.00	100
14	REMOVE AND REPLACE CONCRETE RIP-RAP AND DISSIPATORS	18	SY	625.00	11,250.00	18	0	18	11,250.00	11,250.00	0.00	100
15	REPAIRS AS REQUIRED TO EXISTING AREA INLETS AND CONCRETE RIP	1	LS	26000.00	26,000.00	1	0	1	26,000.00	26,000.00	0.00	100
16	TRAFFIC SIGNS	2	EA	400.00	800.00	2	0	2	800.00	800.00	0.00	100
17	STAKING CULVERTS AND DRIVEWAYS	425	LF	1.25	531.25	425	0	425	531.25	531.25	0.00	100
18	TRAFFIC CONTROLS	1	EA	20340.00	20,340.00	1	0	1	20,340.00	20,340.00	0.00	100
					211,312.25				203,482.25	158,282.25	45,200.00	96
FORCE MAIN IMPROVEMENTS												
19	12" D.I.P. AWWA C151 MIN. CLASS 350	15,102	LF	76.50	1,155,303.00	15,102	0	15,102	1,155,303.00	1,155,303.00	0.00	100
20	AIR RELEASE VALVE	6	EA	4600.00	27,600.00	6	0	6	27,600.00	27,600.00	0.00	100
21	GATE VALVES 12-INCH	6	EA	3200.00	19,200.00	6	0	6	19,200.00	19,200.00	0.00	100
22	ADJUST VALVE STEMS TO FINISHED GRADE	6	EA	230.00	1,380.00	6	0	6	1,380.00	1,380.00	0.00	100

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE	CONTRACT AMOUNT	PREVIOUS QTY	QTY THIS EST	QTY TO DATE	COST TO DATE	PREVIOUS COST	COST THIS ESTIMATE	%
23	BORE AND JACK 24" STEEL ENCASEMENT	610	LF	513.00	312,930.00	610	0	610	312,930.00	312,930.00	0.00	100
24	BORE PIT	5	EA	5400.00	27,000.00	5	0	5	27,000.00	27,000.00	0.00	100
25	RECEIVING PIT	5	EA	4700.00	23,500.00	5	0	5	23,500.00	23,500.00	0.00	100
26	TRENCH SAFETY	15,102	LF	2.00	30,204.00	15,102	0	15,102	30,204.00	30,204.00	0.00	100
27	STAKING	15,102	LF	1.50	22,653.00	15,102	0	15,102	22,653.00	22,653.00	0.00	100
28	LIFT STATION	1	LS	1437000.00	1,437,000.00	0.9	0.08	0.98	1,408,260.00	1,293,300.00	114,960.00	98
					3,058,770.00				3,026,030.00	2,913,070.00	114,960.00	99
WASTEWATER IMPROVEMENTS												
29	12" PVC SDR26 0-8	65	LF	37.00	2,405.00	65	0	65	2,405.00	2,405.00	0.00	100
30	12" PVC SDR26 8-10	712	LF	40.00	28,480.00	712	0	712	28,480.00	28,480.00	0.00	100
31	12" PVC SDR26 10-12	632	LF	43.00	27,176.00	632	0	632	27,176.00	27,176.00	0.00	100
32	12" PVC SDR26 12-14	439	LF	46.00	20,194.00	439	0	439	20,194.00	20,194.00	0.00	100
33	12" PVC SDR26 14-16	99	LF	49.00	4,851.00	99	0	99	4,851.00	4,851.00	0.00	100
34	12" PVC SDR26 16-18	17	LF	52.00	884.00	17	0	17	884.00	884.00	0.00	100
35	12" PVC SDR26 18-20	36	LF	55.00	1,980.00	36	0	36	1,980.00	1,980.00	0.00	100
36	12" PVC SDR26 20-22	96	LF	59.00	5,664.00	96	0	96	5,664.00	5,664.00	0.00	100
37	12" PVC SDR26 22-24	45	LF	96.00	4,320.00	45	0	45	4,320.00	4,320.00	0.00	100
38	21" PVC ASTM F679 PS 115 0-8	189	LF	70.00	13,230.00	189	0	189	13,230.00	13,230.00	0.00	100
39	21" PVC ASTM F679 PS 115 8-10	387	LF	73.00	28,251.00	387	0	387	28,251.00	28,251.00	0.00	100
40	21" PVC ASTM F679 PS 115 10-12	1,108	LF	77.00	85,316.00	1,108	0	1,108	85,316.00	85,316.00	0.00	100
41	21" PVC ASTM F679 PS 115 12-14	592	LF	81.00	47,952.00	592	0	592	47,952.00	47,952.00	0.00	100
42	21" PVC ASTM F679 PS 115 14-16	749	LF	84.00	62,916.00	749	0	749	62,916.00	62,916.00	0.00	100
43	21" PVC ASTM F679 PS 115 16-18	229	LF	89.00	20,381.00	229	0	229	20,381.00	20,381.00	0.00	100
44	21" PVC ASTM F679 PS 115 18-20	7	LF	93.00	651.00	7	0	7	651.00	651.00	0.00	100
45	21" PVC ASTM F679 PS 115 24-26	149	LF	143.00	21,307.00	149	0	149	21,307.00	21,307.00	0.00	100
46	DOUBLE SERVICE	4	EA	2200.00	8,800.00	4	0	4	8,800.00	8,800.00	0.00	100
47	SINGLE SERVICE	5	EA	1850.00	9,250.00	5	0	5	9,250.00	9,250.00	0.00	100
48	CLEAN-OUT 8-INCH	1	EA	775.00	775.00	1	0	1	775.00	775.00	0.00	100
49	8" EYE-OUT AND PLUG	2	EA	100.00	200.00	2	0	2	200.00	200.00	0.00	100
50	MANHOLE 4-FT DIAMETER	3	EA	3800.00	11,400.00	3	0	3	11,400.00	11,400.00	0.00	100
51	EXTRA DEPTH 4-FT MANHOLE	5	VF	325.00	1,625.00	5	0	5	1,625.00	1,625.00	0.00	100
52	DROP MANHOLE 5-FT DIAMETER	3	EA	8800.00	26,400.00	3	0	3	26,400.00	26,400.00	0.00	100
53	EXTRA DEPTH 5-FT DROP MANHOLE	44	VF	325.00	14,300.00	44	0	44	14,300.00	14,300.00	0.00	100
54	MANHOLE 5-FT DIAMETER	16	EA	5500.00	88,000.00	16	0	16	88,000.00	88,000.00	0.00	100
55	EXTRA DEPTH 5-FT MANHOLE	86	VF	325.00	27,950.00	86	0	86	27,950.00	27,950.00	0.00	100
56	MANHOLE 7-FT DIAMETER	1	EA	12000.00	12,000.00	1	0	1	12,000.00	12,000.00	0.00	100

ITEM NO.	DESCRIPTION	QTY.	UNIT	UNIT PRICE	CONTRACT AMOUNT	PREVIOUS QTY.	QTY THIS EST	QTY TO DATE	COST TO DATE	PREVIOUS COST	COST THIS ESTIMATE	%
57	EXTRA DEPTH 7-FT MANHOLE	16	VF	325.00	5,200.00	16	0	16	5,200.00	5,200.00	0.00	100
58	VENT STRUCTURE	3	EA	3800.00	11,400.00	3	0	3	11,400.00	11,400.00	0.00	100
59	BOLTED COVER	10	EA	500.00	5,000.00	10	0	10	5,000.00	5,000.00	0.00	100
60	ADJUST MANHOLE CASTINGS	21	EA	300.00	6,300.00	21	0	21	6,300.00	6,300.00	0.00	100
61	BORE FOR 2" WW AND 36" STEEL ENCASEMENT PIPE AND SPACERS	125	LF	772.00	96,500.00	125	0	125	96,500.00	96,500.00	0.00	100
62	BORE PIT	1	EA	5200.00	5,200.00	1	0	1	5,200.00	5,200.00	0.00	100
63	RECEIVING PIT	1	EA	4600.00	4,600.00	1	0	1	4,600.00	4,600.00	0.00	100
64	CONNECT TO EXISTING MANHOLE CORE AND RE-COAT	1	LS	7300.00	7,300.00	1	0	1	7,300.00	7,300.00	0.00	100
65	CONCRETE TRENCH CAP	50	LF	60.00	3,000.00	50	0	50	3,000.00	3,000.00	0.00	100
66	TRENCH SAFETY	5,551	LF	2.00	11,102.00	5,551	0	5,551	11,102.00	11,102.00	0.00	100
67	STAKING	5,551	LF	1.20	6,661.20	5,551	0	5,551	6,661.20	6,661.20	0.00	100
					738,921.20				738,921.20	738,921.20	0.00	100
EROSION CONTROL IMPROVEMENTS												
68	REVEG	54,685	SY	1.40	76,559.00	54,685	0	54,685	76,559.00	76,559.00	0.00	100
69	STABELIZED CONSTRUCTION ENTRANCE W/TEMP CULVERT	3	EA	2300.00	6,900.00	3	0	3	6,900.00	6,900.00	0.00	100
70	SILT FENCE-ON/OFF SITE CONST	12,200	LF	2.75	33,550.00	12,200	0	12,200	33,550.00	33,550.00	0.00	100
71	ROCK BERM	230	LF	23.00	5,290.00	230	0	230	5,290.00	5,290.00	0.00	100
72	CONCRETE WASH OUT	1	EA	650.00	650.00	1	0	1	650.00	650.00	0.00	100
					122,949.00				122,949.00	122,949.00	0.00	100
TOTAL CONTRACT					4,129,952.45				4,093,382.45	3,933,222.45	160,160.00	99

TOTAL COMPLETED TO DATE	4,093,382.45
TOTAL COMPLETED / STORED TO DATE	4,093,382.45
RETAINAGE HELD	409,338.25
TOTAL COMPLETED LESS RETAINAGE	3,684,044.20
LESS PREVIOUS BILLINGS	3,539,900.20
CURRENT PAYMENT DUE	144,144.00

ORIGINAL CONTRACT	4,129,952.45
CONTRACT CHANGES	0.00
TOTAL CONTRACT WITH CHANGES	4,129,952.45
WORK COMPLETED TO DATE	4,093,382.45

Green Civil Design
GCD
Engineering & Consulting

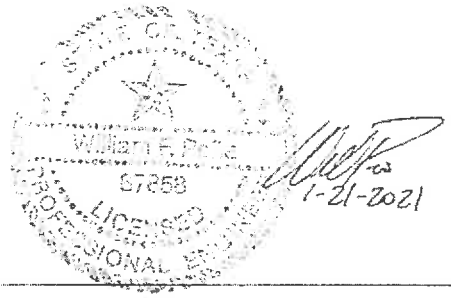
301 Denali Pass, Suite 3
Cedar Park, Texas 78613
(512) 640-6590
Texas Registered Engineering Firm F-17563

ENGINEER'S CONCURRENCE LETTER

Date: 12/22/2020

Project Name: Emory Crossing Lift Station

I, and Green Civil Design staff working under my supervision, have visited the site during construction and have completed general visual observations of the Emory Crossing Lift Station. Based on these observations, and to the best of my knowledge, the Emory Crossing Lift Station has been built in accordance with the approved plans and specifications with insignificant deviation. I certify that this project has reached final completion as of December 22, 2020.



William Peña, P.E.

MAINTENANCE BOND

Bond No.: **118577F**

KNOW ALL PERSONS BY THESE PRESENTS, that we, JL Gray Construction, Inc., as Principal and Westfield Insurance Company, a corporation organized and doing business under and by virtue of the laws of the State of Ohio and duly licensed to conduct surety business in the State of Texas, as Surety, are held and firmly bound unto City of Hutto as Obligee, in the sum of Four Million One Hundred Twenty-nine Thousand Nine Hundred Fifty-two And 45/100 ($4,129,952.45) Dollars, for which payment, will and truly to be made, we bind ourselves, our heirs, executors and successors, jointly and severally firmly by these presents.

THE CONDITIONS OF THE OBLIGATION IS SUCH THAT:

WHEREAS, the above named Principal entered into an agreement or agreements with said Obligee(s) to: RSI Hutto Offsite WW Line

WHEREAS, said agreement provided that Principal shall guarantee replacement and repair of improvements as described therein for a period of 2 year(s) following final acceptance of said improvements: RSI Hutto Offsite WW Line Wastewater and Lift Station Improvements

NOW THEREFORE, if the above Principal shall indemnify the Obligee for all loss that Obligee may sustain by reason of any defective materials or workmanship which become apparent during the period of 2 year (s) from and after acceptance of said improvements by Obligee, then this obligation shall be void; otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the seal and signature of said Principal is hereto affixed and the corporate seal and the name of the said Surety is hereto affixed and attested by its duly authorized Attorney-in-Fact.

This 27th day of January, 2021.

JL Gray Construction, Inc.
Principal

By: _____

Westfield Insurance Company
Surety

Seal

By: _____
Jack Nottingham, Attorney-in-fact

Local Recording Agency:
K & S Insurance
P O Box 277
Rockwall, TX 75087

General
Power
of Attorney

CERTIFIED COPY

POWER NO. **4220012 14**

Westfield Insurance Co.
Westfield National Insurance Co.
Ohio Farmers Insurance Co.

Westfield Center, Ohio

Know All Men by These Presents, That WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, corporations, hereinafter referred to individually as a "Company" and collectively as "Companies," duly organized and existing under the laws of the State of Ohio, and having its principal office in Westfield Center, Medina County, Ohio, do by these presents make, constitute and appoint

TONY FIERRO, JOHNNY MOSS, JAY JORDAN, MISTIE BECK, JEREMY BARNETT, JADE PORTER, ROBERT G. KANUTH, JARRETT WILLSON, JACK NOTTINGHAM, JOINTLY OR SEVERALLY

of **ROCKWALL** and State of **TX** its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver **any and all bonds, recognizances, undertakings, or other instruments or contracts of suretyship.**

LIMITATION: THIS POWER OF ATTORNEY CANNOT BE USED TO EXECUTE NOTE GUARANTEE, MORTGAGE DEFICIENCY, MORTGAGE GUARANTEE, OR BANK DEPOSITORY BONDS.

and to bind any of the Companies thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the applicable Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolution adopted by the Board of Directors of each of the WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY:

"Be It Resolved, that the President, any Senior Executive, any Secretary or any Fidelity & Surety Operations Executive or other Executive shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

The Attorney-in-Fact. may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Corporate Secretary."

"Be it Further Resolved, that the signature of any such designated person and the seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signatures or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached." (Each adopted at a meeting held on February 8, 2000).

In Witness Whereof, WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY have caused these presents to be signed by their **National Surety Leader** and **Senior Executive** and their corporate seals to be hereto affixed this **02nd** day of **JANUARY** A.D., **2020** .

Corporate Seals Affixed

WESTFIELD INSURANCE COMPANY
WESTFIELD NATIONAL INSURANCE COMPANY
OHIO FARMERS INSURANCE COMPANY

By: **Gary W. Stumper,** *National Surety Leader* and *Senior Executive*

State of Ohio
County of Medina ss.:

On this **02nd** day of **JANUARY** A.D., **2020** , before me personally came **Gary W. Stumper** to me known, who, being by me duly sworn, did depose and say, that he resides in **Hartford, CT;** that he is **National Surety Leader** and **Senior Executive** of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, the companies described in and which executed the above instrument; that he knows the seals of said Companies; that the seals affixed to said instrument are such corporate seals; that they were so affixed by order of the Boards of Directors of said Companies; and that he signed his name thereto by like order.

Notarial Seal Affixed

State of Ohio
County of Medina ss.:

David A. Kotnik, Attorney at Law, *Notary Public*
My Commission Does Not Expire (Sec. 147.03 Ohio Revised Code)

I, **Frank A. Carrino,** Secretary of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; and furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Westfield Center, Ohio, this 27th day of January A.D., 2021

Frank A. Carrino, *Secretary*

BPOAC2 (combined) (06-02)

IMPORTANT NOTICE
STATE OF TEXAS
COMPLAINT PROCEDURES

1. IMPORTANT NOTICE

To obtain information or make a complaint:

2. You may contact your agent.

3. You may call **Westfield Insurance Company, Westfield National Insurance Company, and/or Ohio Farmers Insurance Company's** toll-free telephone number for information or to make a complaint at:

1-800-243-0210

4. You may also write to **Westfield Insurance Company, Westfield National Insurance Company, and/or Ohio Farmers Insurance Company** at:

Attn: Bond Claims
One Park Circle
P O Box 5001
Westfield Center, OH 44251-5001
Fax #330-887-0840

5. You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at:

1-800-252-3439

6. You may write to the Texas Department of Insurance, Consumer Protection Section (MC 111-1A):

P.O. Box 149091
Austin, TX 78714-9091
Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

7. **PREMIUM OR CLAIM DISPUTES:**
Should you have a dispute concerning your premium or about a claim, you should contact the agent, Westfield Insurance Company, Westfield National Insurance Company, or Ohio Farmers Insurance Company first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

8. **ATTACH THIS NOTICE TO YOUR POLICY:**
This notice is for information only and does not become a part or condition of the attached document.

AVISO IMPORTANTE

Para obtener informacion o para someter una queja:

Puede comunicarse con su (title) al (telephone number).

Usted puede llamar al numero de telefono gratis de **Westfield Insurance Company, Westfield National Insurance Company, and/or Ohio Farmers Insurance Company's** para informacion o para someter una queja al:

1-800-243-0210

Usted tambien puede escribir a **Westfield Insurance Company, Westfield National Insurance Company, and/or Ohio Farmers Insurance Company:**

Attn: Bond Claims
One Park Circle
P O Box 5001
Westfield Center, OH 44251-5001
Fax #330-887-0840

Puede comunicarse con el Departamento de Sequros de Texas para obtener informacion acerca de companies, coberturas, derechos o quejas al:

1-800-252-3439

Puede escribir al Departamento de Seguros de Texas, Consumer Protection Section (MC 111-1A):

P.O. Box 149091
Austin, TX 78714-9091
Fax: (512) 490-1007
Web: www.tdi.texas.gov
E-mail: ConsumerProtection@tdi.texas.gov

DISPUTAS SOBRE PRIMAS O RECLAMOS:
Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con el agente, Westfield Insurance Company, Westfield National Insurance Company, o Ohio Farmers Insurance Company primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

UNA ESTE AVISO A SU POLIZA: Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del documento adjunto.

BD5430 (06-15)

PROJECT CONSTRUCTION SUMMARY

PROJECT NAME: ____RSI Hutto Offsite WW Line

FINAL ACCEPTANCE DATE:

INSPECTOR: Richard Rodriguez

CONTRACTOR: JL Gray Constuction

Maintained By:	
COH	Other
Boxes checked by HOA	

CONSTRUCTION COSTS

STREET IMPROVEMENT COST: $211,312.25

SIDEWALK IMPROVEMENT COST: $0

SIDEWALK RAMP IMPROVEMENT COST: $0

BRIDGE IMPROVEMENT COST: $0

POND(S) COST: $0.00

DRAINAGE IMPROVEMENT COST: $0

WATER IMPROVEMENT COST: $0.00

WASTEWATER IMPROVEMENT COST: $3,795,691.00

EROSION CONTROLS / RESTORATION COST: $122,949.00

TOTAL IMPROVEMENT COST: $4,129,952.45

PREPARED BY (DESIGN ENGINEER): Randall Jones & Associate Engineering

CHECKED BY (CID SUPERVISOR):



1/2

CONSTRUCTION SUMMARY FOR WASTEWATER

PIPE			MANHOLES					
SIZE	TYPE	LENGTH	SIZE	No.	STA. NO.	B.C.	EYE	STREET
12"	DIP FM	15102	4'	3				
12"	SDR26	2141	5'	16				
21	F679	3410	7'	1				
SERVICES INSTALLED								

NO.	TYPE – S / D
	SINGLE
	DOUBLE

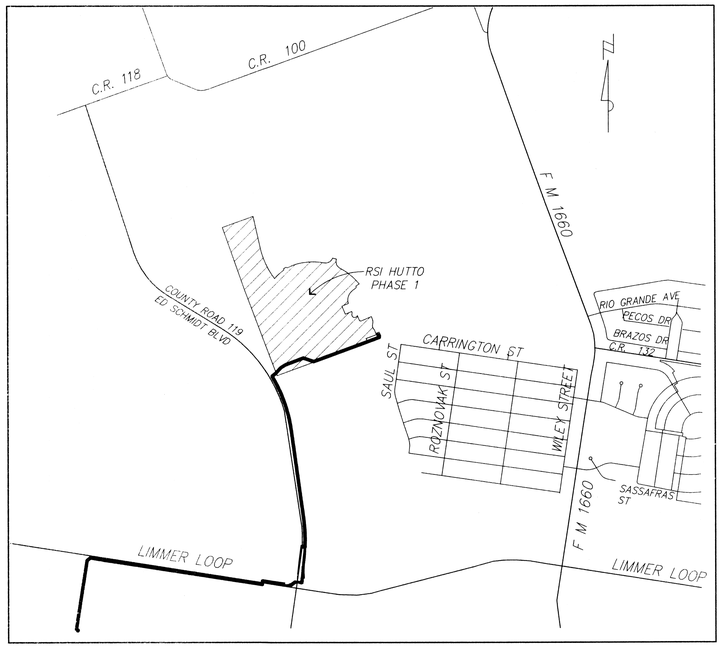
TYPE OF MANHOLE COATING:

Raven 405

LIMITS OF CONSTRUCTION FOR WATER/WASTEWATER PROJECTS ONLY

2/2

RSI HUTTO
OFFSITE WW LINE
UTILITY IMPROVEMENTS



LOCATION MAP
N.T.S.

SHEET INDEX

1. COVER SHEET
2. GENERAL NOTES 1 OF 2
2A. GENERAL NOTES 2 OF 2
3. EROSION & SEDIMENTATION CONTROL PLAN 1 of 4
4. EROSION & SEDIMENTATION CONTROL PLAN 2 of 4
5. EROSION & SEDIMENTATION CONTROL PLAN 3 of 4
6. EROSION & SEDIMENTATION CONTROL PLAN 4 of 4
7. SITE PLAN
8. WASTEWATER LINE "A" PLAN & PROFILE STA: 1+00 TO STA: 14+00
9. WASTEWATER LINE "A" PLAN & PROFILE STA: 14+00 TO STA: 27+00
10. WASTEWATER LINE "A" PLAN & PROFILE STA: 27+00 TO END
11. FORCE MAIN PLAN & PROFILE STA: 0+00 TO STA: 10+00
12. FORCE MAIN PLAN & PROFILE STA: 10+00 TO STA: 20+00
13. FORCE MAIN PLAN & PROFILE STA: 20+00 TO STA: 32+00
14. FORCE MAIN PLAN & PROFILE STA: 32+00 TO STA: 44+00
15. FORCE MAIN PLAN & PROFILE STA: 44+00 TO STA: 56+00
16. FORCE MAIN PLAN & PROFILE STA: 56+00 TO STA: 68+00
17. FORCE MAIN PLAN & PROFILE STA: 68+00 TO END
18. WASTEWATER LINE "I" & "A2" PLAN & PROFILE
19. WASTEWATER LINE "I" (cont'd) PLAN & PROFILE
20. STANDARD DETAILS 1 OF 3
21. STANDARD DETAILS 2 OF 3
22. STANDARD DETAILS 3 OF 3
23. TCEQ GENERAL NOTES
24. TEMPORARY LIFT STATION ACCESS DRIVE
25. TXDOT DETAILS TCP (1-1)-18

L1. LIFT STATION SITE PLAN
L2. ENLARGED LIFT STATION PLAN
L3. LIFT STATION CROSS SECTIONS (SHEET 1 OF 2)
L4. LIFT STATION CROSS SECTIONS (SHEET 2 OF 2)
L5. LIFT STATION DETAILS
L6. ODOR CONTROL DETAILS

E1. ELECTRICAL LEGEND
E2. ELECTRICAL SITE PLAN
E3. ONE LINE DIAGRAM
E4. MOTOR CONTROL CENTER ELEVATION
E5. SHELTER ELEVATIONS
E6. PUMP CONTROL PANEL DETAILS
E7. WETWELL ELECTRICAL DETAILS
E8. ELECTRICAL DETAILS
E9. ONCOR ELECTRICAL DETAILS
E10. SCHEMATIC DIAGRAMS-1
E11. SCHEMATIC DIAGRAMS-2
E12. SCHEMATIC DIAGRAMS-3
E13. SCHEMATIC DIAGRAMS-4
E14. SCHEMATIC DIAGRAMS-5
E15. MOTOR SCHEMATIC DIAGRAMS

RECORD DRAWINGS

I CERTIFY THAT **THESE DRAWINGS** REFLECT THE IMPROVEMENTS **CONSTRUCTED AS** TO SIZE, **LOCATION, AND GRADE AND** THAT THE **CONSTRUCTION WAS IN** GENERAL COMPLIANCE **WITH THE CONTRACT** DOCUMENTS **AND SPECIFICATIONS.**

BY: _____ DATE: 1/8/21

TITLE: Project Manager

OWNER:
WILLIAM LYON HOMES
810 HESTER'S CROSSING ROAD SUITE 235
ROUND ROCK, TX 78681

SUBMITTED BY:

ISRAEL RAMIREZ, P.E. — DATE: 8.28.2019

APPROVED BY:

CITY OF HUTTO — DATE: 9-17-19

REVIEWED FOR COMPLIANCE WITH COUNTY REQUIREMENTS:

See Note Below

WILLIAMSON COUNTY
ENGINEERING & DEVELOPMENT
SERVICES — DATE

For Constuction within Williamson County Right of Way "CR 119"
The Owner and Contractor shall complete the "Notice of Proposed Installation Utility Line on Williamson County Right-of-Way" and obtain the Right of Way Utility Permit before they can begin work.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

			CITY OF HUTTO		WILLIAMSON COUNTY	
REV. NO.	SHT. NO.	DESCRIPTION OF REVISION	ACCEPTED	DATE	ACCEPTED	DATE
1	8,9,11	LOWERD 21" WASTEWATER & DUAL FORCE MAIN TRENCH DETAILS	Rev #1 ADDED PAVING RESTORING		N/A	N/A

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: COVER SHEET

STATE OF TEXAS — ISRAEL RAMIREZ — 114495 — LICENSED PROFESSIONAL ENGINEER — 8.28.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	N/A

SHEET 01

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-01 COVER.dwg Aug 27, 2019

City Of Hutto - General Construction Notes

Updated March 2019

1. The contractor is to contact one of the following:
   Texas811 811
   Lone star 1-800-669-8344
   For location of existing facilities at least 48 hours prior to commencement of any construction activities.
2. Prior to any construction, the design engineer shall convene a preconstruction conference between the City of Hutto, himself, the contractor, other utility companies, any affected parties and any other entity the City or engineer may require. If construction is not started on the site within 30 calendar days after the pre-construction conference, the engineer shall convene a new preconstruction conference between the City of Hutto, himself, and all the above mentioned entities.
3. Prior to any changes to the construction site, video of the site must be taken and provided to the City before construction commences.
4. All construction operations shall be performed in accordance with City of Hutto Engineering Manual and standard construction specifications and details. If City of Hutto Engineering Manual unavailable, or not applicable, refer to TxDOT and/or City of Georgetown Manual, standards and/or specifications.
5. All storm sewer bends and wyes shall be prefabricated.
6. All storm sewer mains to be field-tested for water tightness no sooner than 30 days after total completion of the storm sewer lines.
7. All storm sewer mains to be video taped by camera no sooner than 30 days after total completion of the storm sewer lines. Two digital copies shall be supplied to the City before closeout. All storm sewer conduits will be inspected by the city before city acceptance, video must show details of all irregularities or offsets (minimum 10 seconds of video time).
8. All construction operations shall be accomplished in accordance with applicable regulations of the U.S. Occupational Safety and Health Administration. OSHA standards may be purchased from the government printing office; information and related reference materials may be purchased from OSHA, 611 e. 6th Street, Austin, Texas.
9. Contractor shall take all due precautions to protect existing facilities from damage. Any damage incurred to existing facilities as a result of construction operations to be repaired immediately by the contractor, at no additional cost to owner.
10. Contractor to give notice to all authorized inspectors, superintendents or persons in charge of public and private utilities affected by his operations at least 48 hours prior to commencement of work.
11. Contractor to comply with all applicable local, state, and federal requirements regarding excess and waste material, including methods of handling and disposal.
12. Contractor to coordinate interruptions of all utilities and services. All work to be in accordance with the requirements of the applicable utility company or agency involved.
13. When un-located or incorrectly located, a break in utility lines, or other utilities and services are encountered during site work operations, contractor shall notify the applicable utility company immediately to obtain procedure directions. Contractor shall cooperate with the applicable utility company in maintaining active services in operation.
14. Contractor to locate, protect, and maintain benchmarks, monuments, control points and project engineering reference points. Re-establish disturbed or destroyed items by registered professional land surveyor in the State of Texas, at no additional cost to owner.
15. When construction is being carried out within easements, the contractor shall confine his work to within the permanent and temporary easements. Prior to final acceptance, the contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the engineer.
16. The contractor and the engineer shall keep accurate records of all construction that deviates from the plans. Accurate "record" drawings will be provided to the City of Hutto, along with a letter certification from a registered professional engineer licensed in the State of Texas, stating that said project has been constructed in accordance with these plans, prior to the owner being issued a certification of completion and final acceptance. These "record" drawings shall meet with the satisfaction of the Engineering and Development Services Departments prior to final acceptance.
17. Contractor shall strip six (6) inches of topsoil from all areas subject to grade modification. Remove all areas of weak soil.
18. The contractor shall protect all existing fences. In the event that a fence must be removed, the contractor shall replace said fence or portion thereof with the same type of fencing to a quality of equal or better than the original fence.
19. Upon completion of the project, the site(s) as defined herein shall be cleaned of all debris and left in a neat and presentable condition.
20. All adjoining pavement sections shall be protected during all phases of construction and any damages incurred due to contractor's operation shall be repaired and/or replaced at the contractor's expense.
21. Contractor to control dust caused by the work and comply with pollution control regulations of governing authorities (no separate pay).
22. Traffic controls to be installed in accordance with the current TxDOT manual on uniform traffic control devices and TxDOT barricade and construction standards.
23. Revegetate all disturbed areas upon completion of the work per City of Georgetown construction standards.
24. Contractor to exercise caution during construction near and around gas lines and power lines.
25. No work is to be performed between the hours of 6:00 p.m. and 7:00 a.m. all work requiring City inspection shall be performed Monday thru Friday. The City reserves the right to require the contractor to uncover all work performed without inspection.
26. The Contractor shall determine the exact location vertically and horizontally of all existing utilities prior to commencing work, and shall notify the engineer and the City if the existing utility location and depths are different from what is shown on the plans. The contractor agrees to be fully responsible for any and all damages which might be associated by the contractor's failure to exactly locate and preserve any and all underground utilities.
27. All Fire Lines shall be ductile iron.
28. Detectable tape shall be used for all underground utilities. Tape must be 12" wide 5 mil with applicable color and label.
29. Contractor will be responsible for keeping roads and drives adjacent to and near the site free from soil, sediment and debris. Contractor will not remove soil, sediment or debris from any area or vehicle by means of water, only shoveling and sweeping will be allowed. Contractor will be responsible for dust control from the site.
30. The Contractor shall be responsible for all damage to private property which occurs as a result of any portion of this project. Any damage to private property shall be repaired to equal or better condition. The Contractor shall pay and/or settle with private property owner(s) for all cost related to damage. The City will not provide separate pay for repair of damages, reimbursements or settlements.

Available benchmarks (datum: NAVD 88) that may be utilized for the construction of this project are described as follows:

BENCH MARKS:
1. LCRA CS03 – 3" Brass disk Along FM 1660, Lat. 30–33–37.07767"N Long. 97–32–39.15515"W elev=670.21

2. LCRA CS02 – 3" Brass Disk Along CR 108, Lat. 30–33–19.287"N Long. 97–33–33.130"W elev=706.89

City of Hutto - Water Notes

Updated March 2019

1. Water systems shall be constructed in accordance with City of Hutto Engineering Manual, standard specifications and standard details.
2. Fire hydrants on mains under construction shall be securely wrapped with a poly wrap bag and taped into place. The poly wrap shall be removed when the mains are accepted and brought into service. All fire lines shall be ductile. iron
3. All water service, wastewater service, and valve locations shall be appropriately marked as follows:
   A. Water Service "W" on top of curb
   B. Valve "V" on top of curb or valve sign as instructed by City Engineer
4. Tools for marking curbs shall be provided by the Contractor. Other appropriate means of marking service and valve locations shall be provided in areas without curbs. Such means of marking shall be specified by the engineer and approved by the City of Hutto.
5. Thrust blocking and restraints shall be in accordance with City of Hutto standard specifications.
6. Hydrostatic pressure and leakage tests shall be performed on all pressure pipelines carrying water.
7. All newly installed pipes and related products must conform to American National Standards Institute must be certified by an organization accredited by ANSI.
8. Pipe material for water mains shall be PVC (AWWA C900/C905, MIN. DR 14), or Ductile Iron (AWWA C151, MIN. CLASS 350). Water services (2" OR SMALLER) shall be polyethylene tubing (BLACK, 200 PSI, DR 9).
9. All ductile iron pipe (D.I.P) shall be wrapped with eight (8) MIL, black virgin polyethylene wrap as specified in ANSI/AWWA C105/A21.5.
10. All D.I.P. shall be lined with virgin polyethylene conforming to ASTM D-1248; 40 MIL thickness (nominal), 35 MILS (minimum). Liner to be Polybond or equal. At any point where D.I.P. cannot be wrapped in polyethylene, coat the exterior with Polybond or approved equal.
11. All PVC pipe (all types and SDR/DR wall thickness to be used) shall have rubber gasket equipped bell and spigot joints conforming to ASTM D-3212. The gasket material shall conform to ASTM F-477. Solvent welded joints will not be approved for this project.
12. All potable waterlines and sanitary sewer facilities must be installed so as to provide a minimum of nine feet of clearance in any direction between them. Where the nine foot separation distance cannot be achieved, follow these special procedures.
    A. If a collection system pipe parallels a public water supply pipe the following requirements apply:
       I. A collection system pipe must be constructed of cast iron, ductile iron, or PVC meeting ASTM specifications with at least 150 pounds per square inch (PSI) pressure rating for both the pipe and joints.
       II. Vertical separation must be at least two feet between the outside diameters of the pipes.
       III. Horizontal separation must be at least four feet between outside diameters of the pipes.
       IV. Collection system pipe must be below water supply pipe.
    B. If a collection system pipe crosses a public water supply pipe, the following requirements apply:
       I. If a collection system is constructed of cast iron, ductile iron, or PVC with a minimum pressure rating of 150 PSI, the following requirements apply:
          a. A minimum distance of six (6) inches between outside diameters of the pipes.
          b. A collection system pipe must be below a public water supply pipe.
          c. Collection system pipe joints must be located as far as possible from an intersection with a public water supply line.
       II. If a collection system crosses over a public water supply pipe, each portion of a collection system pipe within nine feet of a public water supply pipe must be constructed of cast iron, ductile iron, or PVC pipe with a pressure rating of at least 150 PSI using appropriate adapters.
13. The Contractor must obtain a temporary water meter from the City of Hutto Utility Billing Department for all water used during construction.
14. Contractor to schedule water valve closure through City of Hutto: Department of Public Works - Utility Division with advance notice of 7 days. Contractor to contact public works at phone # 512-759-4016 and notify construction inspector. Water valve closure will only be scheduled for Tuesday through Thursday. Contractor to notify all businesses and residents affected by valve closures. Closures must be coordinated to minimize effects on existing customers with considerations given to businesses that require water to maintain operations.
15. Line flushing or any activity using a large quantity of water must be scheduled with the City of Hutto. Contractor will be responsible for tracking the amount of water used during flushing and be required to reimburse the city for water use, if not already metered.
16. The Contractor, at his expense, shall perform sterilization of all potable water lines and shall provide all equipment necessary (including test gages), supplies (including concentrated chlorine disinfection material) and necessary labor required for the sterilization procedure. The sterilization procedure shall be monitored by the Engineer and a City of Hutto Construction Inspector. Water samples will be collected to verify each treated line has attained an initial chlorine concentration of 50 ppm.
17. An independent qualified lab, at the Contractor's expense, shall perform quality testing for all wastewater pipe installed and pressure hydrostatic testing of all water lines constructed. The contractor shall provide all equipment (including pumps and gages), supplies, and labor necessary to perform the tests. A City of Hutto Construction Inspector must be present for all testing.
18. The Contractor shall provide the engineer and the city not less than 24 hours notice prior to performing sterilization, quality testing, or pressure testing.
19. The Contractor shall not open or close any valves unless authorized by the City of Hutto.
20. All valve boxes and covers shall be cast iron per City of Hutto standard details.
21. All manholes shall be concrete with cast iron ring and cover. All manholes located outside of pavement shall have bolted and gasketed covers. Concrete manholes to be coated per standard detail and construction specifications. Tapping of fiberglass manholes shall not be permitted.
22. All fire lines shall be ductile iron pipe (AWWA C-100, Class 200).
23. All fire hydrants shall be silver in color including bonnet and installed per City of Hutto Standard detail.
24. All water piping and fittings shall be virgin stock.
25. All mechanical restraints shall be installed per manufacturer's specifications.
26. Along State Highways, water lines are required on both sides of the roadway. New water lines crossing existing streets shall be placed by boring. A steel casing shall be required under major and minor collector roadways, arterial roadways and State Highway. Open cut excavation will not be allowed to cross existing streets, unless approved by the City Engineer.
27. All new water pipes must have detectable tape per City of Hutto Standard Detail.
28. All automatic flush valves must use a meter to measure water loss.
29. Tracer wire will be tested and must work correctly before City acceptance of infrastructure. Tracer wirer must be encased in pipe.
30. All reduced size taps shall be made using an epoxy coated fabricated steel tapping sleeve with stainless steel bolts, or a stainless steel full circle tapping sleeve with ductile iron flange.

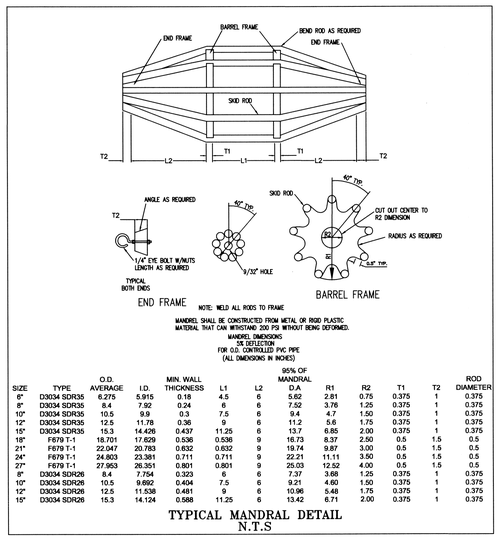
SEQUENCE OF CONSTRUCTION

1. Hold pre-construction conference to include Owner, Contractor, City of Hutto, Williamson County & Engineer. Provide attendants 72 hour notification prior to pre-construction conference.
2. Install temporary erosion controls and tree protection per approved plans.
3. Deliver approved rough-cut sheets to the City of Hutto Engineering Department.
4. Install all utilities to be located under the proposed pavement.
5. Deliver wastewater cut sheets to the City of Hutto Engineering Department.
6. Begin installation of wastewater lines. Upon completion, restore as much disturbed areas as possible, particularly channels and large open areas.
7. Deliver final grade cut sheets to the City of Hutto Engineering Department.
8. Insure that all underground utility crossings are completed.
9. Complete all underground installations within the R.O.W.
10. Complete final grading and restoration of detention, sedimentation/filtration ponds.
11. Complete permanent erosion control and restoration of site vegetation.
12. Project Engineer writing concurrence letter, and scheduling final inspection City of Hutto Engineering Department, prior to the removal of erosion controls.
13. Remove and dispose of temporary erosion controls & tree protection.
14. Restore any areas disturbed during removal of erosion/sedimentation controls.

City of Hutto - Wastewater Notes

Updated August 2018

1. Wastewater systems shall be constructed in accordance with the City of Hutto Engineering Design Manual, standard specifications and standard details.
2. No curvilinear wastewater design/layout is permitted.
3. All wastewater service, and valve locations shall be appropriately marked as follows:
   A. Wastewater Service "S" on top of curb
   B. Valve "V" on top of curb
4. Tools for marking curbs shall be provided by the Contractor. Other appropriate means of marking service and valve locations shall be provided in areas without curbs. Such means of marking shall be specified by the Design Engineer and approved by the City of Hutto.
5. Thrust blocking and restraints shall be in accordance with City of Hutto standard specifications.
6. Mandrel testing will be required on all wastewater pipe as per City of Hutto construction specifications.
7. All gravity wastewater mains to be field-tested for water tightness and video taped by camera so sooner than 30-days after total completion of wastewater lines. Two digital copies shall be provided to the City before closeout.
8. Hydrostatic pressure and leakage tests shall be performed on all pressure pipelines carrying wastewater.
9. All manholes shall be tested for leakage separately and independently of wastewater lines by hydrostatic exfiltration testing or other City approved method per City of Hutto construction specifications.
10. Existing manholes shall be tested for leakage prior to coring or adjustment.
11. Existing manholes shall have all concrete surfaces cleaned and coated per City of Hutto wastewater details after coring or adjustment.
12. All newly installed pipes and related products must conform to American National Standards Institute / National Sanitation Foundation Standard 61 and must be certified by an organization accredited by ANSI.
13. Pipe material for pressure wastewater mains shall be PVC (AWWA C900, MIN. DR 14), or Ductile Iron (AWWA C151, MIN. CLASS 350). Ductile iron for pressure wastewater mains shall have a corrosion resistant interior lining acceptable to owner. Pipe material for gravity wastewater mains shall be PVC SDR-26, ASTM D-3034.
14. All PVC pipe (all types and SDR/DR wall thickness to be used) shall have rubber gasket equipped bell and spigot joints conforming to ASTM D-3212. The gasket material shall conform to ASTM F-477. Solvent welded joints will not be approved for this project.
15. All sanitary sewer facilities and potable waterlines must be installed so as to provide a minimum of nine feet of clearance in any direction between them. Where the nine foot separation distance cannot be achieved, follow these special procedures.
    A. If a collection system pipe parallels a public water supply pipe the following requirements apply:
       I. A collection system pipe must be constructed of cast iron, ductile iron, or PVC meeting ASTM specifications with at least 150 pounds per square inch (PSI) pressure rating for both the pipe and joints.
       II. Vertical separation must be at least two feet between the outside diameters of the pipes.
       III. Horizontal separation must be at least four feet between outside diameters of the pipes.
       IV. Collection system pipe must be below water supply pipe.
    B. If a collection system pipe crosses a public water supply pipe, the following requirements apply:
       I. If a collection system is constructed of cast iron, ductile iron, or PVC with a minimum pressure rating of 150 PSI, the following requirements apply:
          a. A minimum distance of six (6) inches between outside diameters of the pipes.
          b. A collection system pipe must be below a public water supply pipe.
          c. Collection system pipe joints must be located as far as possible from an intersection with a public water supply line.
       II. If a collection system crosses over a public water supply pipe, each portion of a collection system pipe within nine feet of a public water supply pipe must be constructed of cast iron, ductile iron, or PVC pipe with a pressure rating of at least 150 PSI using appropriate adapters.
16. An independent qualified lab, at the Contractor's expense, shall perform quality testing for all wastewater pipe installed and pressure hydrostatic testing of all water lines constructed. The contractor shall provide all equipment (including pumps and gages), supplies, and labor necessary to perform the tests. A City of Hutto Construction Inspector must be present for all testing.
17. The Contractor shall provide the design engineer and the City not less than 24 hours notice prior to performing sterilization, quality testing, or pressure testing.
18. The Contractor shall not open or close any valves unless authorized by the City of Hutto.
19. All valve boxes and covers shall be cast iron per City of Hutto standard details.
20. All manholes shall be concrete with cast iron ring and cover. All manholes located outside of pavement shall have bolted and gasketed covers. Concrete manholes to be coated per standard detail and construction specifications. Tapping of fiberglass manholes shall not be permitted.
21. All wastewater piping and fittings shall be virgin stock.
22. All mechanical restraints shall be installed per manufacturer's specifications.



NOTE: WELD ALL RODS TO FRAME

MANDREL SHALL BE CONSTRUCTED FROM METAL OR RIGID PLASTIC MATERIAL THAT CAN WITHSTAND 200 PSI WITHOUT BEING DEFORMED.
MANDREL DIMENSIONS
5% DEFLECTION
FOR O.D. CONTROLLED PVC PIPE
(ALL DIMENSIONS IN INCHES)

SIZE	TYPE	O.D. AVERAGE	I.D.	MIN. WALL THICKNESS	L1	L2	95% OF MANDREL D.A	R1	R2	T1	T2	ROD DIAMETER
6"	D3034 SDR35	6.275	5.915	0.16	4.5	6	5.62	2.81	0.75	0.375	1	0.375
8"	D3034 SDR35	8.4	7.92	0.24	6	6	7.52	3.76	1.25	0.375	1	0.375
10"	D3034 SDR35	10.5	9.9	0.3	7.5	6	9.4	4.7	1.50	0.375	1	0.375
12"	D3034 SDR35	12.5	11.78	0.36	9	6	11.2	5.6	1.75	0.375	1	0.375
15"	D3034 SDR35	15.3	14.426	0.437	11.25	6	13.7	6.85	2.00	0.375	1	0.375
18"	F679 T-1	18.701	17.629	0.536	0.536	9	16.73	8.37	2.50	0.5	1.5	0.5
21"	F679 T-1	22.047	20.783	0.632	0.632	9	19.74	9.87	3.00	0.5	1.5	0.5
24"	F679 T-1	24.803	23.381	0.711	0.711	9	22.21	11.11	3.50	0.5	1.5	0.5
27"	F679 T-1	27.953	26.351	0.801	0.801	9	25.03	12.52	4.00	0.5	1.5	0.5
6"	D3034 SDR26	8.4	7.754	0.323	6	6	7.37	3.68	1.25	0.375	1	0.375
10"	D3034 SDR26	10.5	9.692	0.404	7.5	6	9.21	4.60	1.50	0.375	1	0.375
12"	D3034 SDR26	12.5	11.538	0.481	9	6	10.96	5.48	1.75	0.375	1	0.375
15"	D3034 SDR26	15.3	14.124	0.588	11.25	6	13.42	6.71	2.00	0.375	1	0.375

TYPICAL MANDRAL DETAIL
N.T.S

City of Hutto - Erosion, Sedimentation and Tree Protection Notes

Updated August 2018

1. The Contractor to install and maintain erosion/sedimentation controls and tree/natural area protective fencing prior to any site preparation work (clearing, grubbing, grading, or excavation). Contractor to remove erosion/sedimentation controls at the completion of the project and grass restoration.
2. The placement of erosion/sedimentation controls to be in accordance with the approved erosion and sedimentation control plan and water pollution abatement plan. Deviations from the approved plan must be submitted to and approved by the owner's representative.
3. All planting shall be done between May 1st and September 15th except as specifically authorized in writing. If planting is authorized to be done outside the date specified, the seed shall be planted with the addition of winter fescue (Kentucky 31) at a rate of 100 lbs/acre. Grass shall be common Bermuda Grass, hulled, minimum 82% pure live seed. All grass seed shall be free from noxious weed, grade "A" recent crop, cleaned and treated with appropriate fungicide at time of mixing. Seed shall be furnished in sealed, standard containers with dealer's guaranteed analysis.
4. All disturbed areas to be restored as noted in the water pollution abatement plan.
5. The planted area to be irrigated or sprinkled in a manner that will not erode the topsoil, but will sufficiently soak the soil to a depth of four inches (4"). The irrigation to occur at 10-day intervals during the first two months to insure germination and establishment of the grass. Rainfall occurrences of one half and inch (1/2") or greater to postpone the water schedule one week.
6. Restoration to be acceptable when the grass has grown at least one and one half inches (1.5") high with 95% coverage, provided no bare spots larger than twenty-five square feet exist.
7. A minimum of four inches (4") of topsoil to be place in all area disturbed by construction.
8. The contractor to hydro mulch or sod (as shown on plans) all exposed cuts and fills upon completion of construction.
9. Erosion and sedimentation controls to be installed or maintained in a manner which does not result in soil buildup within tree drip line.
10. To avoid soil compaction, contractor shall not allow vehicular traffic, parking, or storage of equipment or materials in the tree drip line area.
11. Where a fence is closer than four feet (4') to a tree truck, protect the trunk with strapped-on planking to a height of eight feet (8'), or the limits of lower branching, in addition to the fencing.
12. Trees to be removed in a manner which does not impact trees to be preserved.
13. Any root exposed by the construction activity to be pruned flush with the soil. Backfill root area with good quality topsoil as soon as possible. If exposed root areas are not backfilled within two days, cover them with organic matter in a manner which reduces soil temperature and minimizes water loss due to evaporation.
14. Contractor to prune vegetation to provide clearance for structure, vehicular traffic, and equipment before damage occurs (ripping of branches, etc.). All finished pruning to be done according to recognized, approved standards of the industry (reference the "National Arborist Association Pruning Standards for Shade Trees").
15. The contractor is to inspect the controls at weekly intervals and after every rainfall exceeding one-quarter inch (1/4") to verify that they have not been significantly disturbed. Any accumulated sediment after a significant rainfall to be removed and placed in the owner designated spoil disposal site. The contractor to conduct periodic inspections of all erosion/sedimentation controls and to make any repairs or modifications necessary to assure continued effective operation of each device.
16. Where there is to be an approved grade change, impermeable paving surface, tree well, or other such site development immediately adjacent to a protected tree, erect the fence approximately two to four feet (2'-4') behind the area in question.
17. No above and/or below ground temporary fuel storage facilities to be stored on the project site.
18. If erosion and sedimentation control systems are existing from prior contracts, owner's representative and the contractor to examine the existing erosion and sedimentation control systems for damage prior to construction. Any damage to preexisting erosion and sedimentation controls noted to be repaired at owner's expense.
19. Intentional release of vehicle or equipment fluids onto the ground is not allowed. Contaminated soil resulting from accidental spill to be removed and disposed of properly.

NOTE:
1. FOR EMBANKMENT ROADWAY FILL: SEE CITY OF GEORGETOWN SPECIFICATIONS SD3.03 (CONSTRUCTION METHODS)& SD3.04 (EARTH EMBANKMENTS).

2. FOR SITE PREPARATION: SEE CITY OF GEORGETOWN SPECIFICATIONS G3.06 (SITE CLEARING) & G3.09 (REGRADING).

3. FOR MANDRAL DETAIL SEE SHEET #29

Trench Safety Notes:

1. In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems plans and implementation to be utilized for this project will be provided by the Contractor as part of the contract task.

2. In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4 feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.

3. If trench safety system details were not provided in the plans because trenches were anticipated to be less than 5 feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted to the City of HUTTO.

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: GENERAL NOTES
SHEET 1 OF 2

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
9-27-19

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE N/A

SHEET 02

RECORD DRAWING

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WILLIAMSON COUNTY STANDARD NOTES

CONSTRUCTION - GENERAL

1. A preconstruction meeting shall be scheduled prior to the start of construction. The Design Engineer, Owner, Contractor, Subcontractors, and County Engineer shall attend this meeting. All roads are to be constructed in accordance with the construction documents as approved by the County Engineer and in accordance with the specifications found in the current version of the "Texas Department of Transportation Manual Standard Specifications for Construction of Highways, Streets, and Bridges" unless otherwise stated on the construction documents approved by the County Engineer.

2. All materials shall be sampled and tested by an Independent Testing Laboratory in accordance with the construction documents approved by the County Engineer. The Owner shall pay for all testing services and shall furnish the County Engineer with certified copies of these test results. The County Engineer must approve the test results prior to constructing the next course of the roadway structure. Any material which does not meet the minimum required test specifications shall be removed and recompacted or replaced unless alternative remedial action is approved in writing from the County Engineer.

3. Except for electrical lines, all underground nonferrous utilities within a right-of-way or easement must be accompanied by ferrous metal lines to aid in tracing the location of said utilities through the use of a metal detector.

4. All pavements are to be designed by a Registered Professional Engineer. The design shall be based on a 20-year design life and in conjunction with recommendations based upon a soils report of samples taken along the proposed roadways. Test borings shall be placed at a maximum spacing of 500 feet or other sampling frequency approved by the County Engineer based on recommendations provided by the geotechnical engineer. The soils report and pavement design shall be submitted to the County Engineer for review. The pavement design must be approved by the County Engineer prior to or concurrently with the review and approval of the construction plans. In addition to the basis of the pavement design, the soils report shall contain the results of sampled and tested subgrade for plasticity index, pH, sulfate content, and maximum density.

SUBGRADE:

1. The preparation of the subgrade shall follow good engineering practices as directed by the County Engineer in conjunction with recommendations outlined in the geotechnical report. When the Plasticity Index (PI) is greater than 20, a sufficient amount of lime shall be added as described in Item 260 of the current edition of the TxDOT Standard Specifications for Construction until the PI is less than 20. If the addition of lime as described in Item 260 is not feasible, an alternate stabilizing design shall be proposed and submitted to the County Engineer for approval. The subgrade shall be prepared and compacted to achieve a dry density per TxDOT Item 132. In addition, proof rolling may be required by the County Engineer
.
2. The subgrade shall be inspected and approved by an Independent Testing Laboratory and a certified copy of all inspection reports furnished to the County Engineer, who must approve the report prior to application of the base material. All density test reports shall include a copy of the work sheet showing the percentage of the maximum dry (Proctor) density. The number and location of all subgrade tests shall be determined by the County Engineer.

BASE MATERIAL:

1. Base material shall conform to Item 247 of the current edition of the TxDOT Standard Specifications for Construction, "Flexible Base". The base material shall be Type A Grade 1, Type A Grade 2, or as approved by the County Engineer.

2. Each layer of base course shall be tested for in-place dry density and measured for compacted thickness. The number and location of all base test samples shall be determined by the County Engineer.

3. The base shall be prepared and compacted to achieve a minimum of 98% of the maximum (Proctor) dry density or as approved by the County Engineer upon recommendation by the testing laboratory. The maximum lift shall not exceed six inches. The base must be inspected and approved by an Independent Testing Laboratory and a certified copy of the test results furnished to the County Engineer for approval. Prior to the placement of the first lift of base, the stockpile shall be tested for the specifications found in Item 247 Table 1 and the result furnished to the County Engineer for approval.

BITUMINOUS PAVEMENT:

1. Urban roads require a minimum 2 inch wearing surface of HMAC TxDOT Type D. The mix shall be from a TxDOT certified plant. The mix design shall be submitted to the County Engineer for approval prior to placement of the material. Contractor's Quality Control (CQC) test reports shall be submitted to the County Engineer on a daily basis. As a minimum, daily CQC testing on the produced mix shall include: Sieve Analysis TEX-200-F, Asphalt Content TEX-210-F, Hweem Stability TEX-208-F, Laboratory Compacted Density TEX-207-F, and Maximum Specific Gravity TEX-227-F. The number and location of all HMAC tests shall be determined by the County Engineer with a minimum of three, 6-inch diameter field cores secured and tested by the contractor from each day's paving. Each HMAC course shall be tested for in-place density, bituminous content and aggregate gradation, and shall be measured for compacted thickness. The number and location of all HMAC test samples shall be determined by the County Engineer.

2. Rural roads may use either the specifications found in Section B7.1 or a two-course surface in accordance with Item 316, treatment wearing surface, of the current edition of the TxDOT Standard Specifications for Construction. The type and rate of asphalt and aggregate shall be indicated on the plans as a basis of estimate and shall be determined at the preconstruction conference. Aggregate used in the mix shall be on the TxDOT Quality Monitoring Schedule. Aggregate shall be Type B Grade 4. Gradation tests shall be required for each 300 cubic yards of material placed with a minimum of two tests per each grade per each project. Test results shall be reviewed by the County Engineer prior to application of the material.

CONCRETE PAVEMENT:

In lieu of bituminous pavement, portland cement concrete pavement may be used. In such cases, the pavement thickness shall be a minimum of 9 inches of concrete, and shall be jointed and reinforced in accordance with the detail included in Appendix J. The mix shall be from a TxDOT certified plant. The mix design shall be submitted to the County Engineer for approval prior to placement of the material.

CONCRETE GENERAL:

1. Unless otherwise specified, concrete shall be in accordance with Item 421 of the current edition of the TxDOT Standard Specifications for Construction and be placed in accordance with the applicable item.

2. All concrete shall be tested for compressive strength. One set of three concrete test cylinders shall be molded for every 50 cubic yards of concrete placed for each class of concrete per day, or at any other interval as determined by the County Engineer. A slump test shall be required with each set of test cylinders. One cylinder shall be tested for compressive strength at an age of seven days and the remaining two cylinders shall be tested at 28 days of age.

ROAD NAMES, SIGNS AND MARKERS:

1. All roads shall be named, with prior approval for said name from the Williamson County 911 Addressing Coordinator. Roads must be named in a manner to avoid confusion in identification. Roads that are extensions of existing roads must carry the names of those in existence. Roads that are not continuous, or which have 90 degree turns, shall have different names. The Owner shall provide the Coordinator with two digital files of the plat. One file shall be in an Adobe .pdf format, and the other file shall be in an AutoCAD .dwg format georeferenced to NAD 1983 State Plane Grid Coordinate System, Texas Central Zone (4203), with drawing units of US feet. The road names shall be displayed on standard intersection road marker signs erected by the Owner in compliance with the TxMUTCD "Street Name Signs" and at the locations as indicated on the construction plans.

2. Traffic control signs (such as stop, yield, and speed limit signs) shall be installed by the Owner of said subdivision in compliance with the TxMUTCD and at the locations as indicated on the approved construction plans. Other traffic control signs, as shown on the construction plans, shall be installed to indicate any unusual traffic or road hazard or conditions that may exist. All traffic control devices shall be placed in compliance with the TxMUTCD and the construction cost shall be borne by the Owner.

3. A speed limit of 25 mph for local roads, 30 mph for collector roads and 40 mph for arterial roads within all platted subdivisions is hereby adopted. This limit may be changed only by Commissioner's Court upon the basis of an engineering and traffic investigation showing that the prima facie maximum reasonable and prudent speed for a particular road (or part of a road) should be different. The placement of a stop sign or a yield sign on the minor road at intersections shall be evaluated on a case-by-case basis in accordance with the TxMUTCD.

4. For any road that is proposed to be extended at some time in the future, a minimum of five metal channel posts, equally spaced, shall be placed at the end of the road. Each post shall have an 18"x18" red diamond object marker sign (type OM-4 per TxMUTCD) placed four feet above the existing ground.

5. A future road extension sign shall be placed at the end of all roads and temporary cul-de-sacs that are proposed to be extended at some time in the future. The sign shall state the following: Future Extension of <name of road>.

6. Signage that differs from the standard signage that is maintained by the County shall be maintained by the Owner. The signage shall be maintained in such a fashion to comply with the TxMUTCD requirements.

DRAINAGE AND FLOOD CONTROL:

1. Storm water management controls, when needed, shall be designed, constructed and maintained to restrict the rate of drainage from the platted area to the rate of drainage of the land in its natural state. When a development shall have several sections, storm water management controls for the ultimate developed area shall be constructed if not located in the first platted section. Storm water management controls are to be designed by a Registered Professional Engineer using a basis of a 2, 10, and 100-year storm. Exceptions may be allowed when the Owner can demonstrate that downstream property shall not be adversely affected.

2. Drainage calculations shall be made using the edition of the City of Austin's Drainage Criteria Manual in effect as of the date of these Regulations or other methods satisfactory to the County Engineer. All data and calculations must be presented to the County Engineer as part of the construction plans. The following requirements shall be incorporated into the design:
(a) Bridges and cross drainage structures for arterial and collector roads shall be designed to convey the 25-year storm without overtopping the facility.
(b) Bridges and cross drainage structures for local roads shall be designed to convey the 10-year storm without overtopping the facility.
(c) All longitudinal drainage structures shall be designed to convey the 10-year storm.
(d) On curb and gutter roadways, the roadway shall be designed so that no more than one half of one travel lane shall be inundated by the 10 year storm.

3. All drainage structures and appurtenances shall be designed by a Registered Professional Engineer. A profile shall be shown in the construction plans for all drainage structures. Each profile shall show the design flow, velocity, invert elevations, and the hydraulic grade line.

4. Driveway culverts shall have a minimum interior diameter of 18" or equal and a minimum length of 22 feet, and shall include a concrete apron safety treatment in accordance with City of Austin Standard Detail 508S-20, "Stormdrain Outfall Protection Culvert Under Roadway/Inline". Larger or longer culverts shall be installed if necessary to accommodate drainage based upon a 10-year flow frequency. All driveway culverts shall have safety end treatments with concrete aprons.

5. At some point within the first ten feet from the edge of the roadway gutter, the entire width of a driveway shall have the same or greater elevation as the top of the curb at the edge of the roadway.

6. Maintenance responsibility for drainage will not to be accepted by the County other than that accepted in connection with draining or protecting the road system. Maintenance responsibility for storm water management controls will remain with the Owner.

7. Easements shall be provided, where necessary, for all drainage courses in and across property to be platted. The location and width shall be shown on the plat and marked "Drainage Easement" or "Drainage and Underground Utilities Easement". In general, a "Drainage Easement" shall be a minimum of 20 feet in width and a "Drainage and Underground Utilities Easement" shall be a minimum of 30 feet in width.

8. All roadside ditches shall have a minimum depth, as measured from the edge of the road pavement, equal to the diameter of the driveway culvert pipe(s) plus nine inches, and a bottom width equal to the diameter of the driveway culvert pipe(s). The side slopes of the ditches are to be 3:1 or flatter.

9. Roadside ditches may be eliminated within a rural subdivision provided that the road has 18-inch ribbon curbs, the roadway surface has an adequate cross slope, and the overall drainage patterns throughout the subdivision remain as in an undeveloped state.

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: GENERAL NOTES SHEET 2 OF 2

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
9.27.19

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE N/A

SHEET 02A

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LEGEND

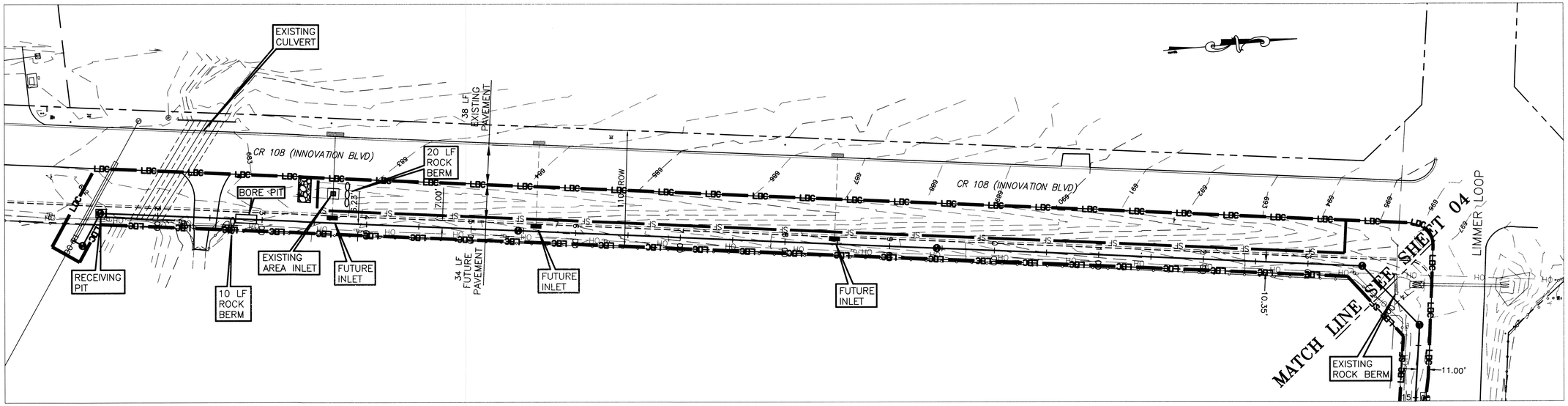
- = 10' INLET
- WV = WATER VALVE
- Ⓓ = STORM SEWER MH
- Ⓢ = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC
- = STABILIZED CONSTRUCTION ENTRANCE
- SF = SILT FENCE
- LOC = LIMITS OF CONSTRUCTION
- = ROCK BERM

NOTES:

1. INSPECT TEMPORARY EROSION CONTROLS ON A DAILY BASIS. ADJUST THE CONTROLS AND/OR REMOVE ANY SEDIMENT BUILDUP AS NECESSARY. THE CITY OF HUTTO RESERVES THE RIGHT TO REQUEST ADDITIONAL EROSION CONTROLS BEYOND WHAT IS BEING SHOWN ON THE CONSTRUCTION PLANS IF POTENTIAL EROSION PROBLEMS ARE IDENTIFIED.

2. THIS SUBDIVISION IS NOT LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.

3. NO ONSITE UNDERGROUND STORAGE TANKS OR CRITICAL FEATURES EXIST.



RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784

2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

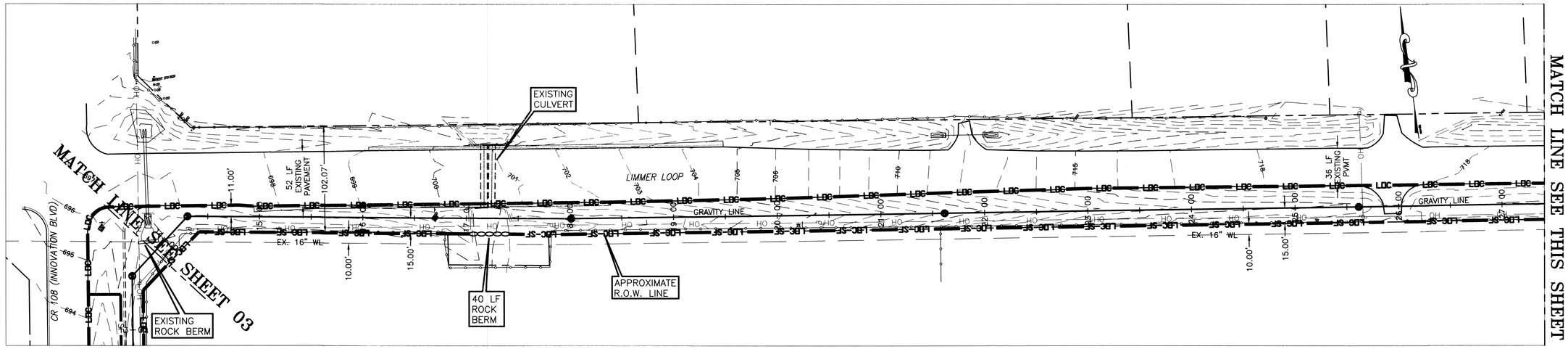
SHEET: EROSION & SEDIMENTATION CONTROL PLAN 1 OF 4

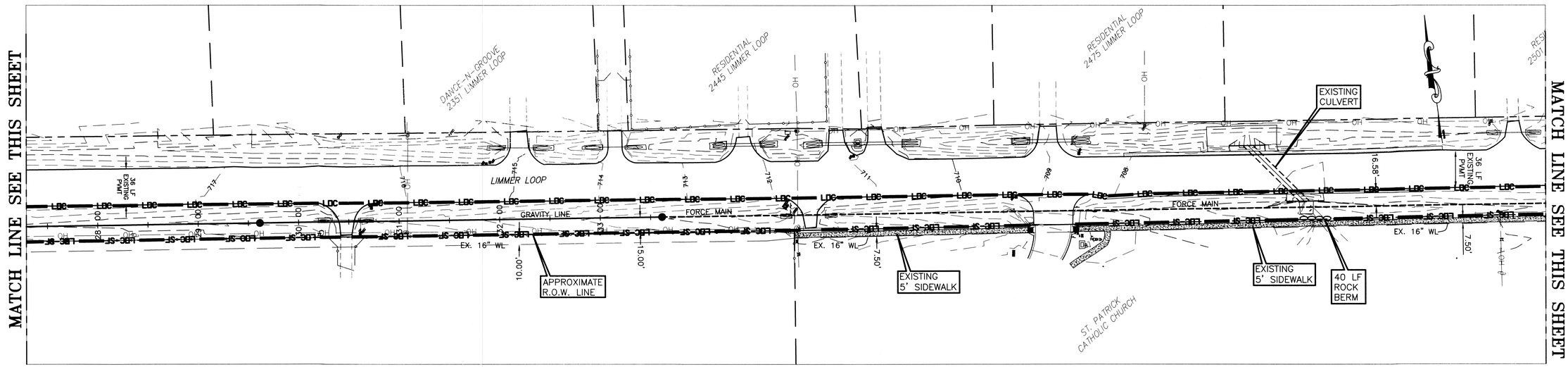
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
7.12.19

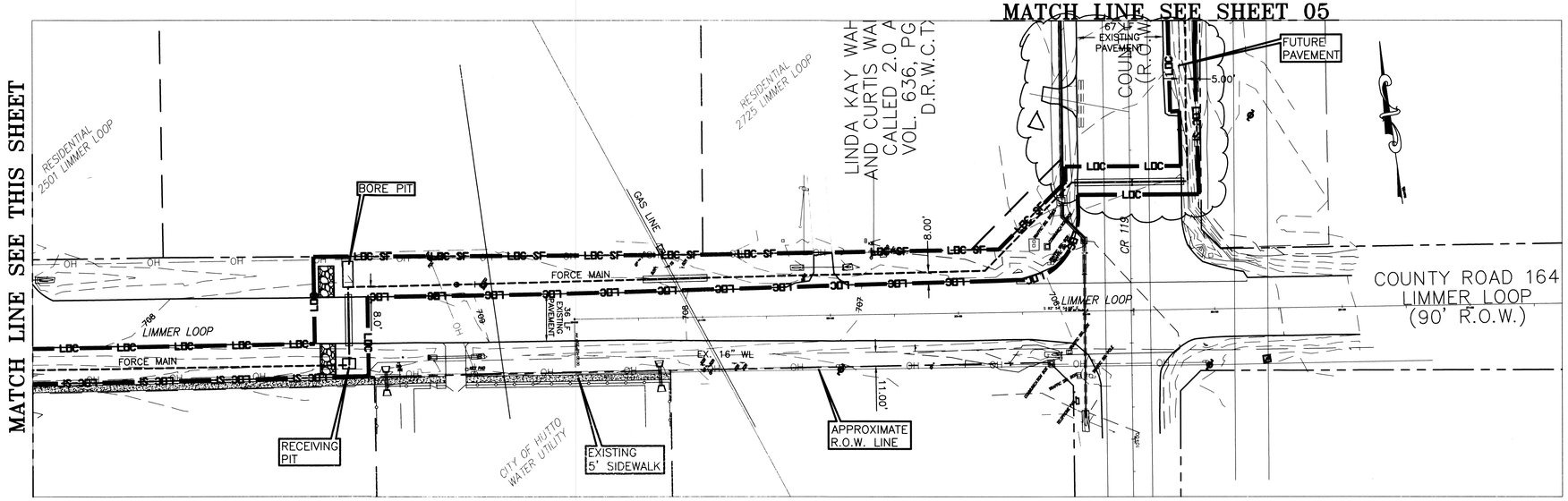
DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=50'

SHEET 03

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-03-06_ES PLAN.dwg Jul 09, 2019







LEGEND

- = 10' INLET
- = WATER VALVE
- = STORM SEWER MH
- = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC
- = STABILIZED CONSTRUCTION ENTRANCE
- SF = SILT FENCE
- LOC LOC = LIMITS OF CONSTRUCTION
- LOC-SF LOC-SF = LIMITS OF CONSTRUCTION/SILT FENCE
- = ROCK BERM

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY
1	1.15.20	updated E&S to reflect alignment	JR

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: EROSION & SEDIMENTATION CONTROL PLAN 2 OF 4

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
1.9.2020

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=50'

SHEET 04

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-03-06_ES PLAN.dwg Jan 15, 2020

MATCH LINE SEE SHEET 04

MATCH LINE SEE THIS SHEET

Y ROAD 119
W. VARIES)

HARRY RONALD HANSON
AND SUSAN DIANE TASTO
CALLED 16.516 ACRES
TRACT 1
DOC. NO.

NO. 2008080963
O.P.R.W.C.TX.

EXISTING CULVERT

VARIES EXISTING PAVEMENT

80.00'

VARIES FUTURE PAVEMENT

40 LF EXISTING PAVEMENT

40 LF FUTURE PAVEMENT

OVERHEAD ELECTRIC

5.00' (TYP)

FORCE MAIN

4.85'

5.70'

1.82'

FUTURE PAVEMENT

EXISTING ROCK BRIDGE

40 LF ROCK BERM

FUTURE PAVEMENT

MATCH LINE SEE THIS SHEET

MATCH LINE SEE THIS SHEET

NO. 2008080963
O.P.R.W.C.TX.

EXISTING PAVEMENT

EXISTING PAVEMENT

40 LF EXISTING PAVEMENT

40 LF FUTURE PAVEMENT

80.00'

5.00'

FORCE MAIN

FORCE MAIN

5.00'

40 LF EXISTING PAVEMENT

80.00'

5.00' (TYP)

40 LF FUTURE PAVEMENT

FORCE MAIN

FUTURE PAVEMENT

FUTURE PAVEMENT

MATCH LINE SEE THIS SHEET

EXISTING CULVERT

4.20'

80.00'

5.00' (TYP)

40 LF EXISTING PAVEMENT

40 LF FUTURE PAVEMENT

FORCE MAIN

40 LF ROCK BERM

FUTURE PAVEMENT

FORCE MAIN WW-1

MATCH LINE SEE THIS SHEET

(PROPOSED)
THURMAN HOLT ROAD

(PROPOSED)
STINCHCOMB ROAD

ONCOR ELECTRIC DELIVERY EASEMENT - DOC. NO.

HOA DETENTION POND

MOOSE ROAD

FORCE MAIN

TEMPORARY SECONDARY ACCESS ROAD

CONSTRUCTION STAGING & SPOILS AREA

CONCRETE WASHOUT

20' TEMPORARY EMERGENCY ACCESS EASEMENT
DOC. NO.
OPRWC

N: 10180933.01
E: 3169264.31

MATCH LINE SEE SHEET 06

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY
1	11/20	As-Built ES	JK

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784

2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

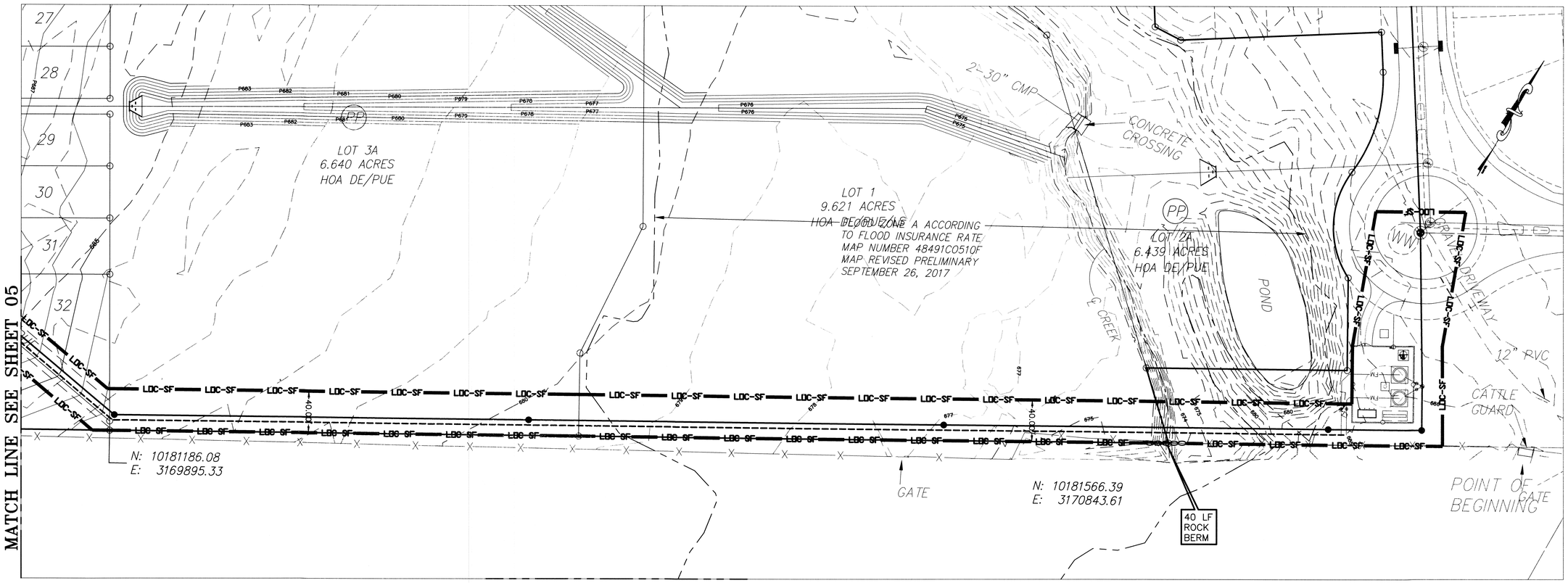
SHEET: EROSION & SEDIMENTATION CONTROL PLAN 3 OF 4

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
1.15.2020

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=50'

SHEET
05

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-03-06_ES PLAN.dwg Jan 15, 2020



R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-03-06_ES PLAN.dwg Jul 09, 2019

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

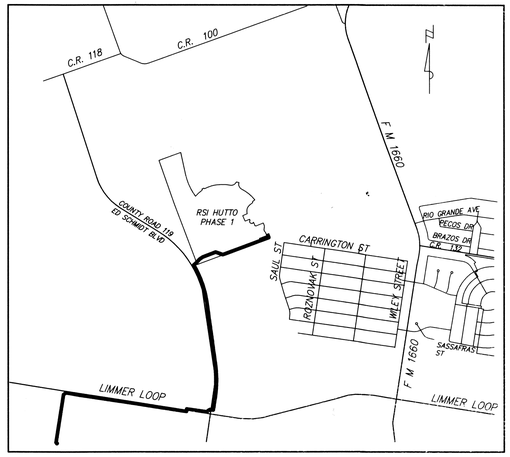
PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: EROSION & SEDIMENTATION CONTROL PLAN 4 OF 4

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
3.12.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=50'

SHEET 06



LOCATION MAP
N.T.S.

SCALE: 1"=300'

NOTES:

1. SEE SHEET #23 FOR WATER AND WASTEWATER CROSSING DETAIL.

NO.	DATE	DESCRIPTION	BY
1	1.15.20	ETJ update	JR

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: SITE PLAN

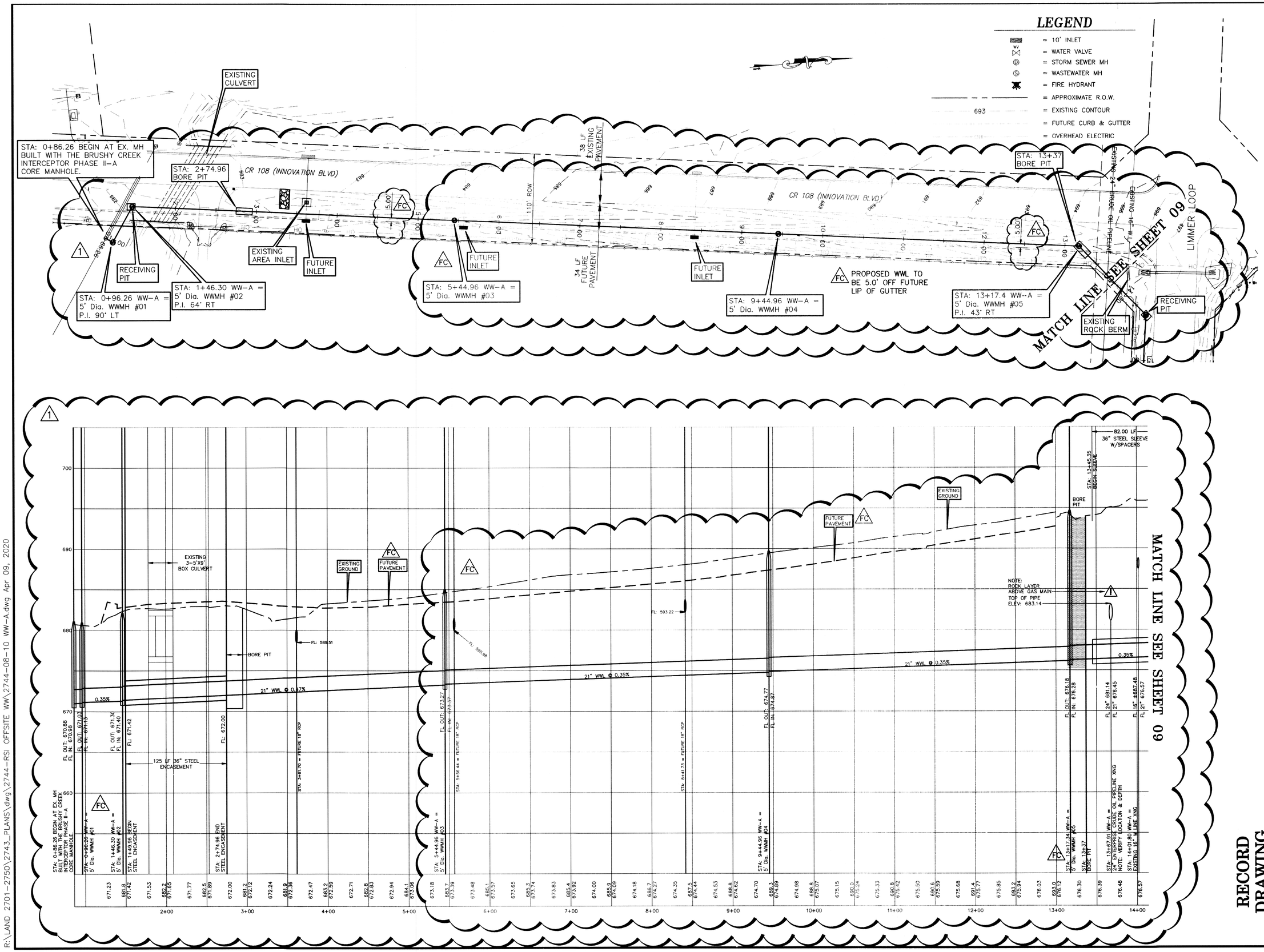
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
1.15.2020

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE 1"=300'

SHEET
07

RECORD DRAWING

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-07 SITE PLAN.dwg Jan 15, 2020



NO.	DATE	DESCRIPTION	BY
FC	4.18.20	MOVE 21" LINE IN FUTURE CR 108	IR
FC	3/6/20	REVISED ALIGNMENT 0+86.26 TO 13+37	EPAN
FC	3/6/20	REVISED PROFILE FROM MH#3 TO MH#6	IR
FC	2/5/20	MOVE 21" WW LINE 3' WEST	IR
1	10/21/19	REVISED PROFILE FROM STA: 1+00 TO MH#6	IR

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: WASTEWATER LINE "A" PLAN & PROFILE
STA: 1+00 TO STA: 14+00

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
4.18.2020

DATE: SEPT 2018
DRAWN: EPAN
CHECKED: IR
FILE: 2744
SCALE 1"=5'/1"=50'

SHEET 08

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-08-10 WW-A.dwg Apr 09, 2020

LEGEND

- = 10' INLET
- = WATER VALVE
- = STORM SEWER MH
- = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

STATION EQUATION
STA: 14+35.68 BACK=
STA: 14+44.24 FORWARD
5' Dia. DROP WWMH #06
P.I. 48° RT

EXISTING CULVERT

STA: 18+01.20 WW-A =
5' Dia. WWMH #07

STA: 21+61.48 WW-A =
5' Dia. WWMH #08

STA: 25+61.48 WW-A =
5' Dia. WWMH #09

LIMMER LOOP

EXISTING PAVEMENT 52 LF

EXISTING PAVEMENT 36 LF

GRAVITY LINE

EX. 16" WL

APPROXIMATE R.O.W. LINE

EXISTING ROCK BERM

MATCH LINE SEE SHEET 08

MATCH LINE SEE SHEET 10

82.00 LF
36" STEEL SLEEVE
W/SPACERS

STA: 13+45.35
BEGIN SLEEVE

STA: 14+27.35
END SLEEVE

BORE PIT

RECEIVING PIT

EXISTING GROUND

50 LF CONCRETE TRENCH CAP

21" WW @ 1.31%

21" WW @ 2.22%

21" WW @ 0.60%

NOTE:
ROCK LAYER ABOVE GAS MAIN
TOP OF PIPE ELEV: 683.14

0.35%

FL IN 684.11

FL OUT: 676.25
FL IN: 676.35
STA: 13+37.20 WW-A =
5' Dia. WWMH #05

FL OUT: 676.45
FL IN: 676.55
STA: 13+67.91 WW-A =
5' Dia. WWMH #06
NOTE: VERIFY LOCATION & DEPTH
STA: 14+01.80 WW-A =
EXISTING 16" W LINE XNG

FL 24" 681.14
FL 21" 676.45
EXISTING GAS PIPELINE XNG

FL 16" ±687.48
FL 21" 676.57

STATION EQUATION
STA: 14+35.68 BACK=
STA: 14+44.24 FORWARD
5' Dia. DROP WWMH #06

FL OUT: 676.89
FL IN: 676.79

FL OUT: 688.60
FL IN: 688.90
STA: 18+01.20 WW-A =
5' Dia. WWMH #07

FL OUT: 697.07
FL IN: 697.17
STA: 21+61.48 WW-A =
5' Dia. WWMH #08

FL OUT: 699.57
FL IN: 699.67
STA: 25+61.48 WW-A =
5' Dia. WWMH #09

MATCH LINE SEE SHEET 08

MATCH LINE SEE SHEET 10

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY
FC	3/6/20	REVISED PROFILE FROM MH#3 TO MH#6	IR
1	10/21/19	REVISED PROFILE FROM STA: 1+00 TO MH#6	IR

RANDALL JONES & ASSOCIATES ENGINEERING, INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

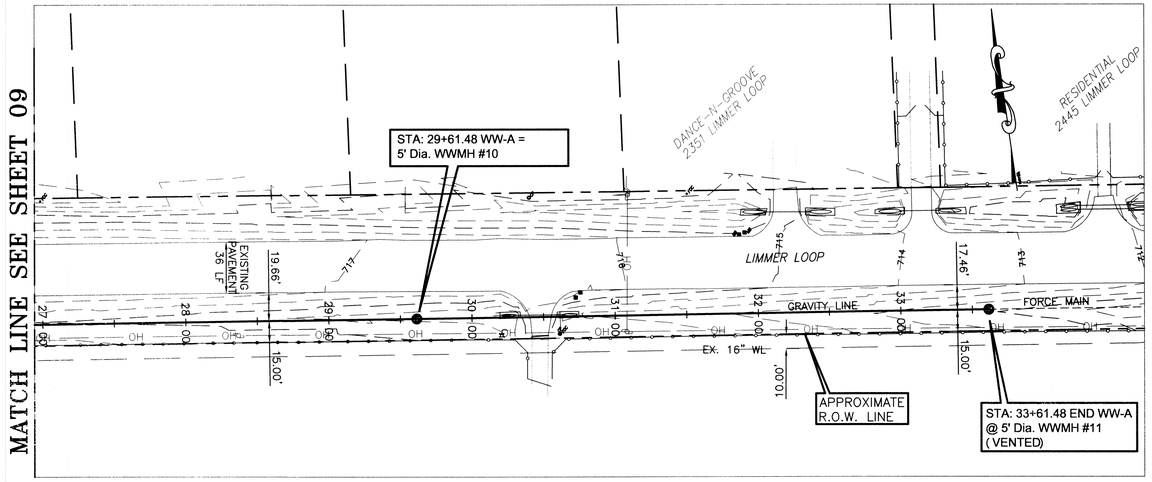
SHEET: WASTEWATER LINE "A" PLAN & PROFILE
STA: 14+00 TO STA: 27+00

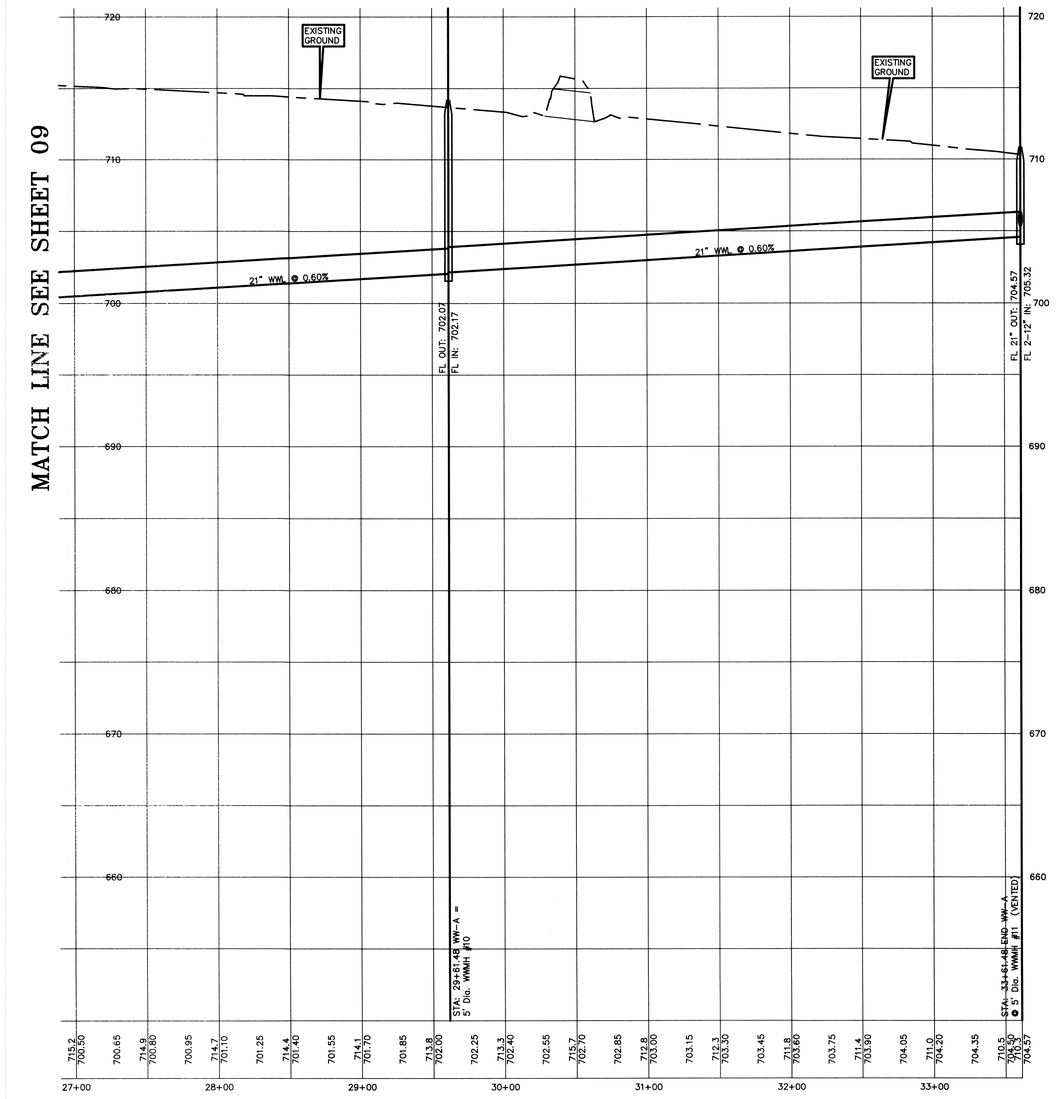
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
3-6-2020

DATE:	SEPT 2018
DRAWN:	JBH
CHECKED:	IR
FILE:	2744
SCALE	1"=5'/1"=50'

SHEET 09

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-08-10 WW-A.dwg Mar 10, 2020





LEGEND

- = 10' INLET
- WV = WATER VALVE
- D = STORM SEWER MH
- S = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: WASTEWATER LINE "A" PLAN & PROFILE STA: 27+00 TO END

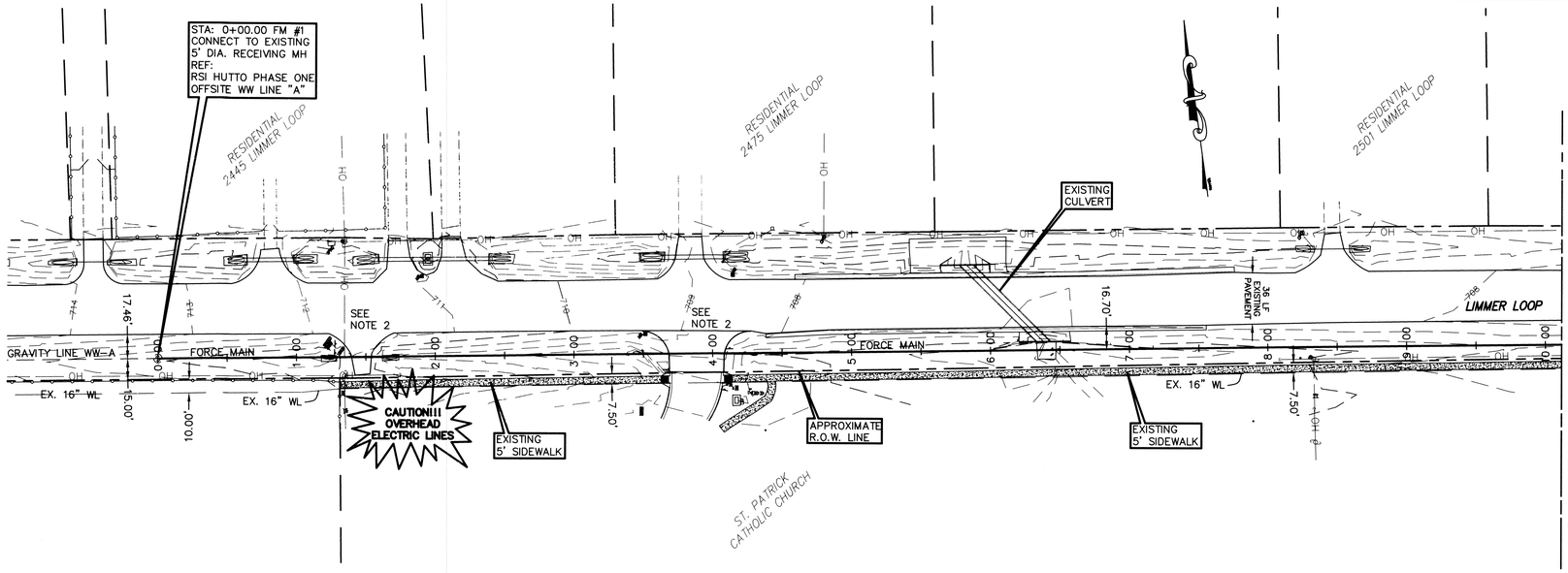
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
8.19.19

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE 1"=5'/1"=50'

SHEET 10

RECORD DRAWING

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-08-10 WW-A.dwg Aug 09, 2019



MATCH LINE SEE SHEET 12

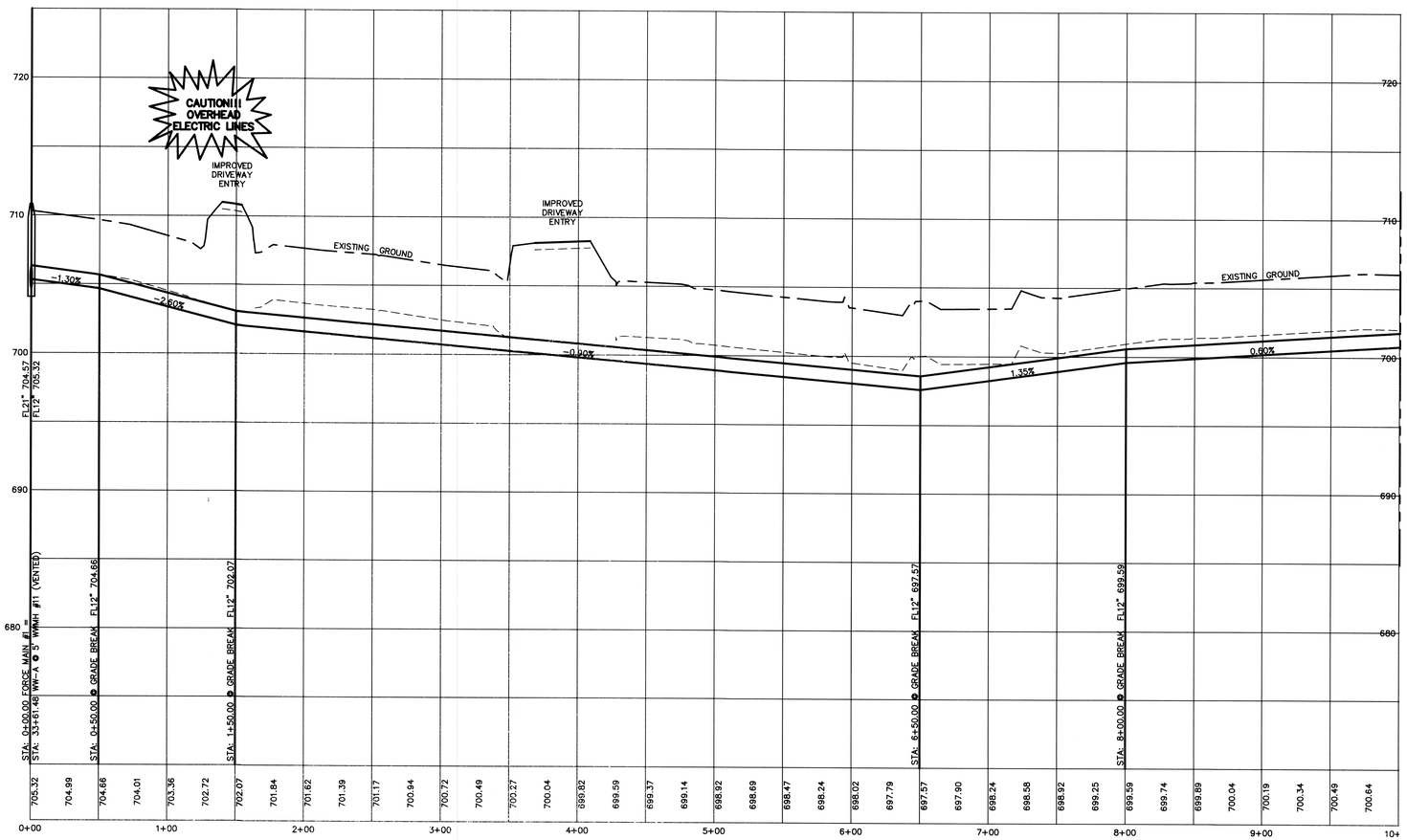
LEGEND

- = 10' INLET
- WV = WATER VALVE
- (D) = STORM SEWER MH
- (S) = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

NOTE:

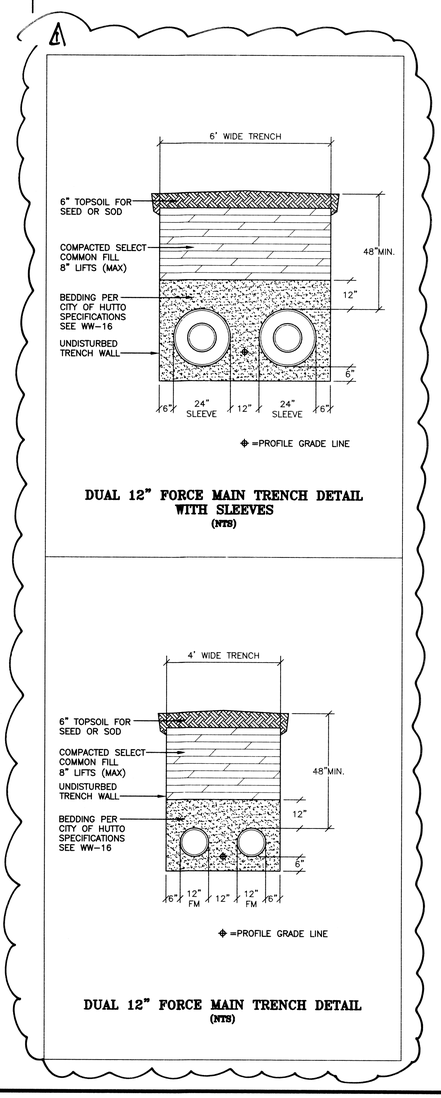
1. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH ALL PROPERTY OWNERS REGARDING SEQUENCE OF CONSTRUCTION FOR DRIVEWAY ACCESS. ALL DRIVEWAYS, CULVERTS & RIPRAP SHALL BE REPAIRED TO EXISTING CONDITION OR BETTER. NO OPEN CUTS TO BE LEFT OVERNIGHT.
3. CONTRACTOR TO REGRADE AND REVEGETATE DITCH CHANNEL TO MATCH EXISTING CONDITIONS AND TO ENSURE POSITIVE WATER FLOW.
4. SEE TRENCH SAFETY NOTES ON SHEET 2.
5. INSTALL WATER BARRIERS ALONG THE LENGTH OF THE PITS/"WORK ZONE" PER DETAILS ON SHEET #25.

FM #1: DUAL 12" DI PIPE (AWWA C151 MIN. CLASS 350)



MATCH LINE SEE SHEET 12

RECORD DRAWING



DUAL 12" FORCE MAIN TRENCH DETAIL WITH SLEEVES
(NTS)

DUAL 12" FORCE MAIN TRENCH DETAIL
(NTS)

NO.	DATE	DESCRIPTION	BY
1	11.6.19	Dual Force Main Trench Details Added	JR

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: FORCE MAIN PLAN & PROFILE
STA: 0+00 TO STA: 10+00

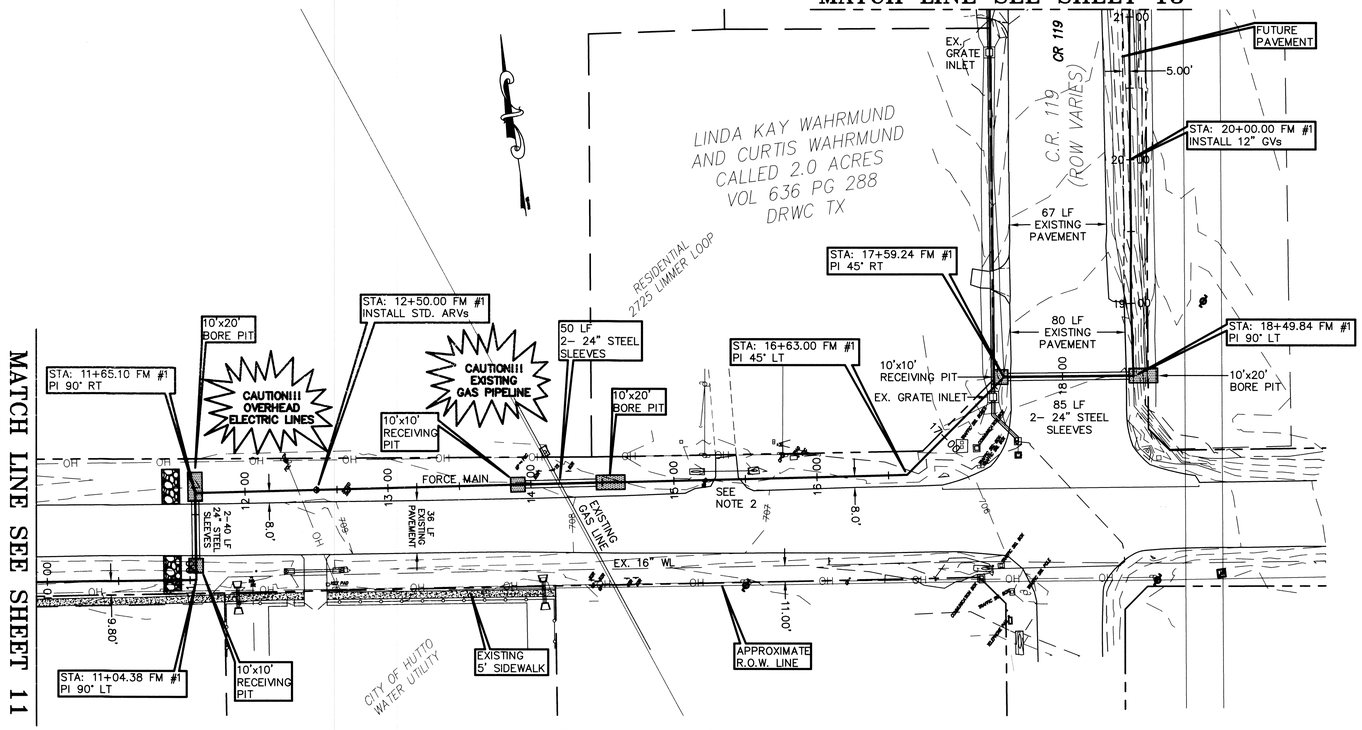
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
11.6.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=5'/1"=50'

SHEET 11

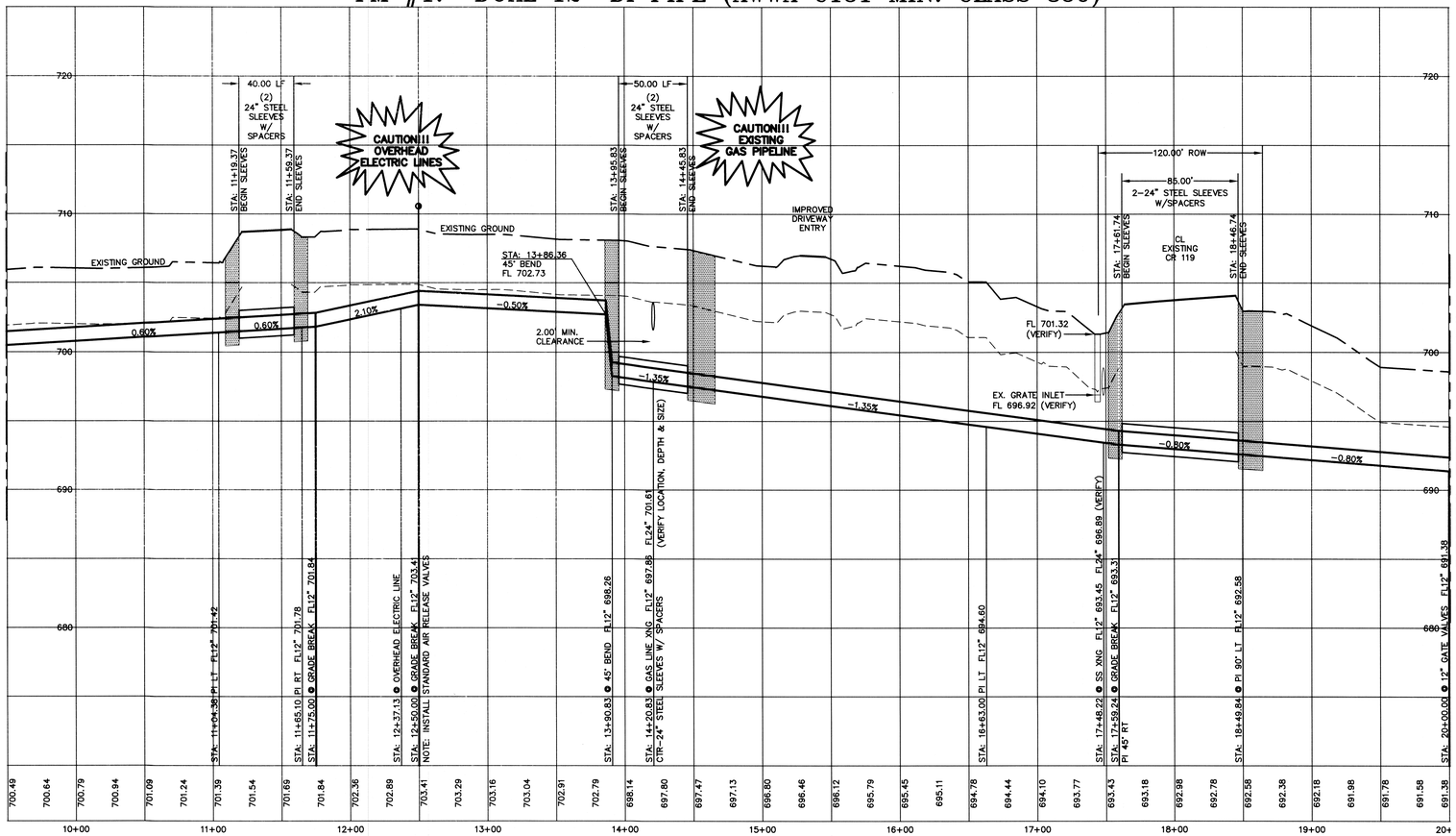
R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-11-17 FORCE MAIN.dwg Nov 06, 2019

MATCH LINE SEE SHEET 13



MATCH LINE SEE SHEET 11

FM #1: DUAL 12" DI PIPE (AWWA C151 MIN. CLASS 350)



MATCH LINE SEE SHEET 13

MATCH LINE SEE SHEET 11

LEGEND

- = 10' INLET
- = WATER VALVE
- = STORM SEWER MH
- = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

NOTE:

1. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH ALL PROPERTY OWNERS REGARDING SEQUENCE OF CONSTRUCTION FOR DRIVEWAY ACCESS. ALL DRIVEWAYS, CULVERTS & RIPRAP SHALL BE REPAIRED TO EXISTING CONDITION OR BETTER. NO OPEN CUTS TO BE LEFT OVERNIGHT.
3. CONTRACTOR TO REGRADE AND REVEGETATE DITCH CHANNEL TO MATCH EXISTING CONDITIONS AND TO ENSURE POSITIVE WATER FLOW.
4. SEE TRENCH SAFETY NOTES ON SHEET 2.
5. INSTALL WATER BARRIERS ALONG THE LENGTH OF THE PITS/"WORK ZONE" PER DETAILS ON SHEET #25.

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: FORCE MAIN PLAN & PROFILE STA: 10+00 TO STA: 20+00

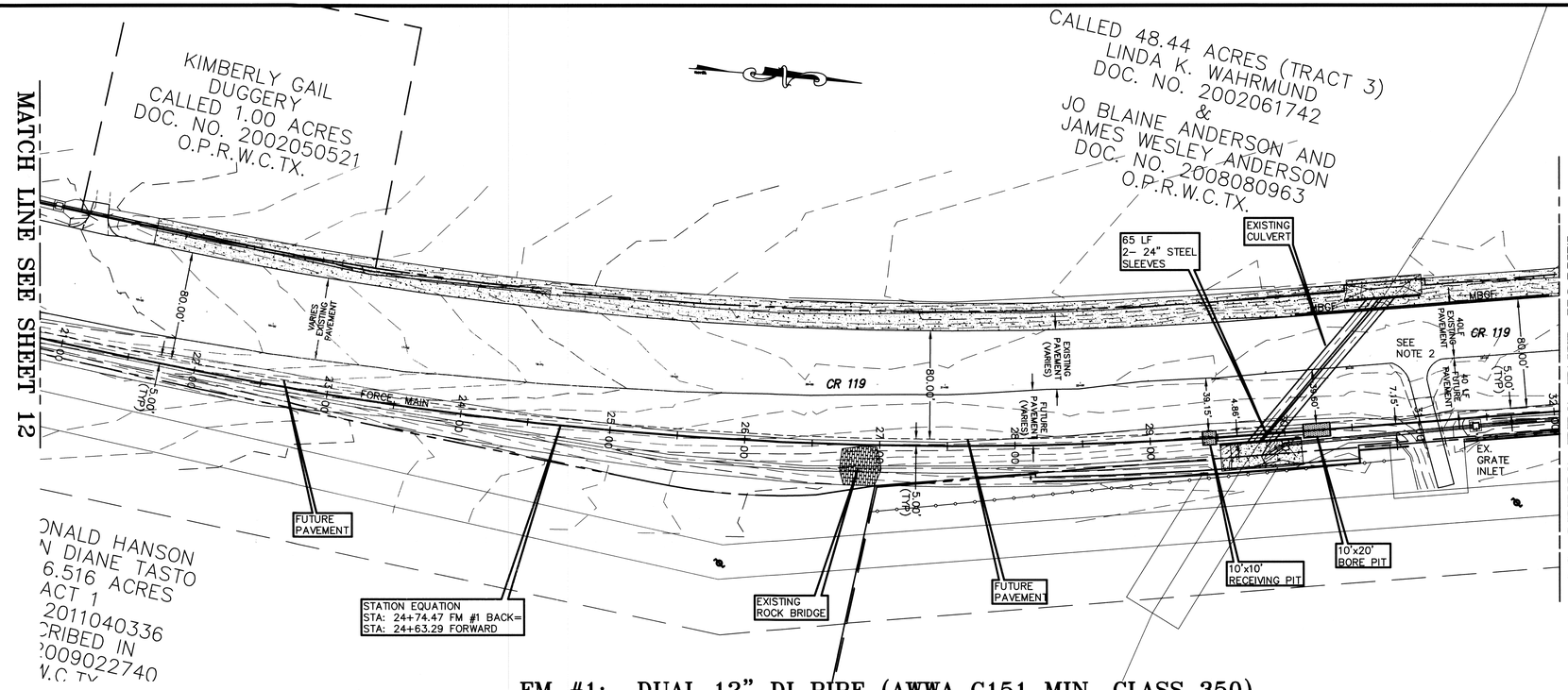
STATE OF TEXAS — ISRAEL RAMIREZ — 114495 — LICENSED PROFESSIONAL ENGINEER

DATE:	SEPT 2018
DRAWN:	EPM
CHECKED:	IR
FILE:	2744
SCALE	1"=5'/1"=50'

SHEET 12

RECORD DRAWING

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-11-17 FORCE MAIN.dwg Oct 15, 2019



LEGEND

- = 10' INLET
- WV = WATER VALVE
- D = STORM SEWER MH
- S = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

NOTE:

1. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH ALL PROPERTY OWNERS REGARDING SEQUENCE OF CONSTRUCTION FOR DRIVEWAY ACCESS. ALL DRIVEWAYS, CULVERTS & RIPRAP SHALL BE REPAIRED TO EXISTING CONDITION OR BETTER. NO OPEN CUTS TO BE LEFT OVERNIGHT.
3. CONTRACTOR TO REGRADE AND REVEGETATE DITCH CHANNEL TO MATCH EXISTING CONDITIONS AND TO ENSURE POSITIVE WATER FLOW.
4. SEE TRENCH SAFETY NOTES ON SHEET 2.

FM #1: DUAL 12" DI PIPE (AWWA C151 MIN. CLASS 350)

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

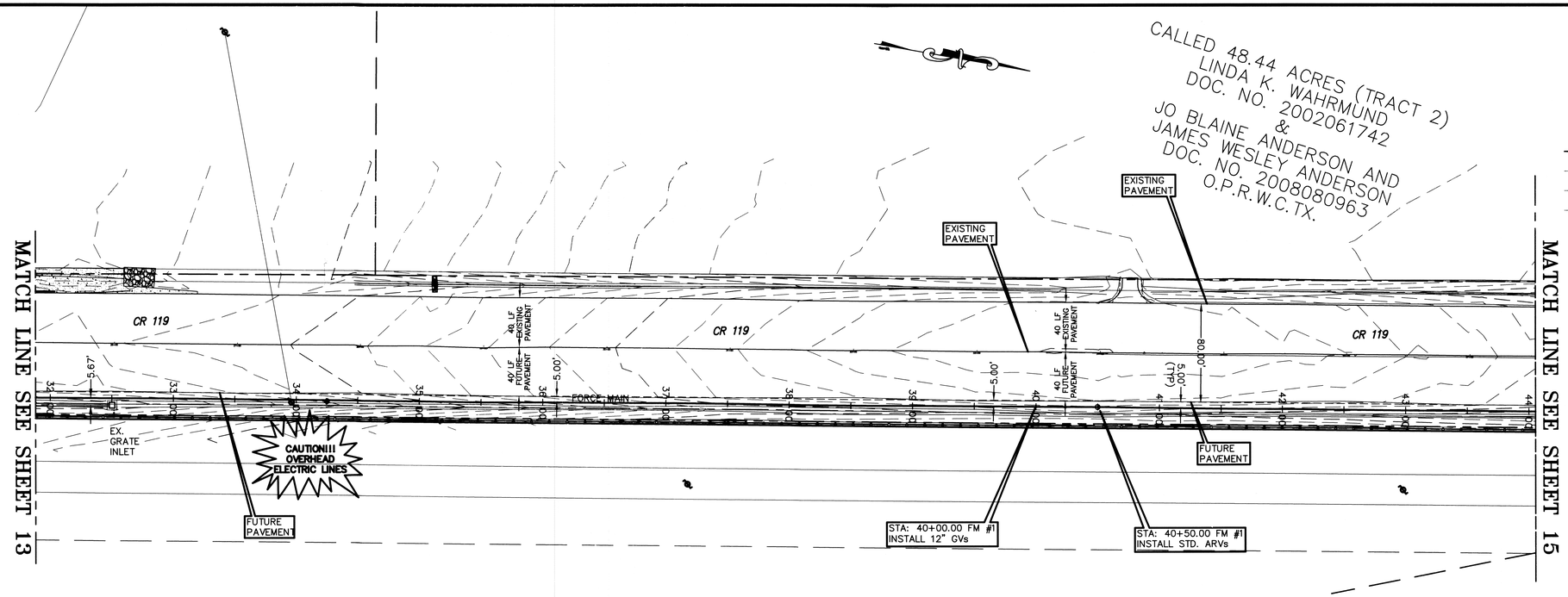
SHEET: FORCE MAIN PLAN & PROFILE
STA: 20+00 TO STA: 32+00

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
9.27.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=5'/1"=50'

SHEET 13

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-11-17 FORCE MAIN.dwg Sep 27, 2019



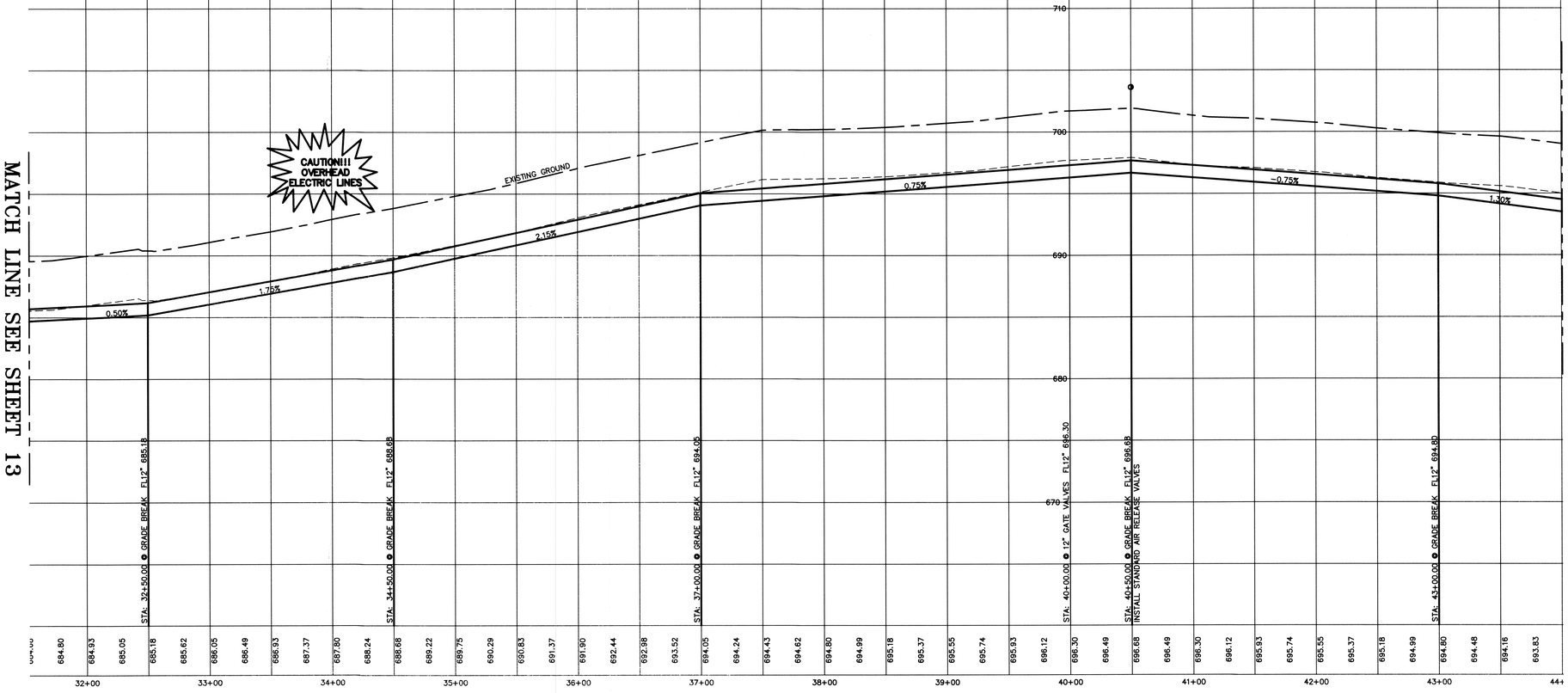
LEGEND

- = 10' INLET
- = WATER VALVE
- = STORM SEWER MH
- = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

NOTE:

1. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH ALL PROPERTY OWNERS REGARDING SEQUENCE OF CONSTRUCTION FOR DRIVEWAY ACCESS. ALL DRIVEWAYS, CULVERTS & RIPRAP SHALL BE REPAIRED TO EXISTING CONDITION OR BETTER. NO OPEN CUTS TO BE LEFT OVERNIGHT.
3. CONTRACTOR TO REGRADE AND REVEGETATE DITCH CHANNEL TO MATCH EXISTING CONDITIONS AND TO ENSURE POSITIVE WATER FLOW.
4. SEE TRENCH SAFETY NOTES ON SHEET 2.

FM #1: DUAL 12" DI PIPE (AWWA C151 MIN. CLASS 350)



RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

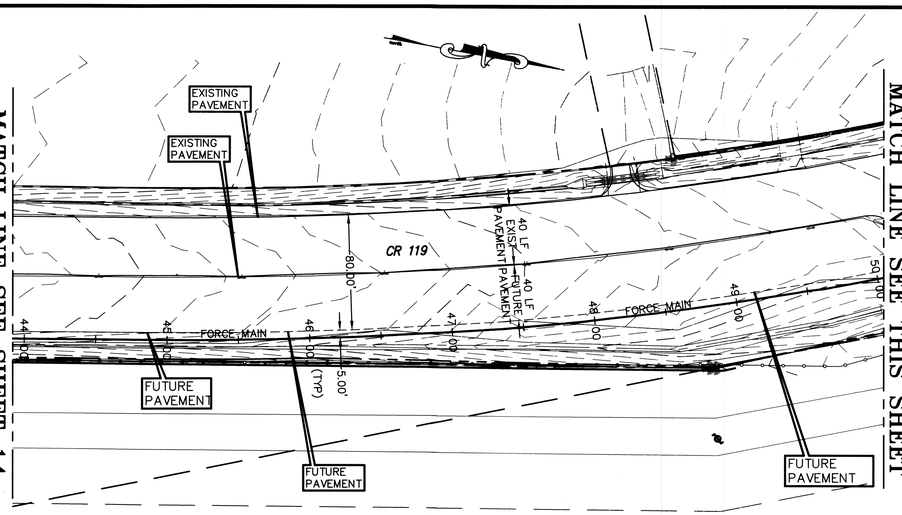
SHEET: FORCE MAIN PLAN & PROFILE STA: 32+00 TO STA: 44+00

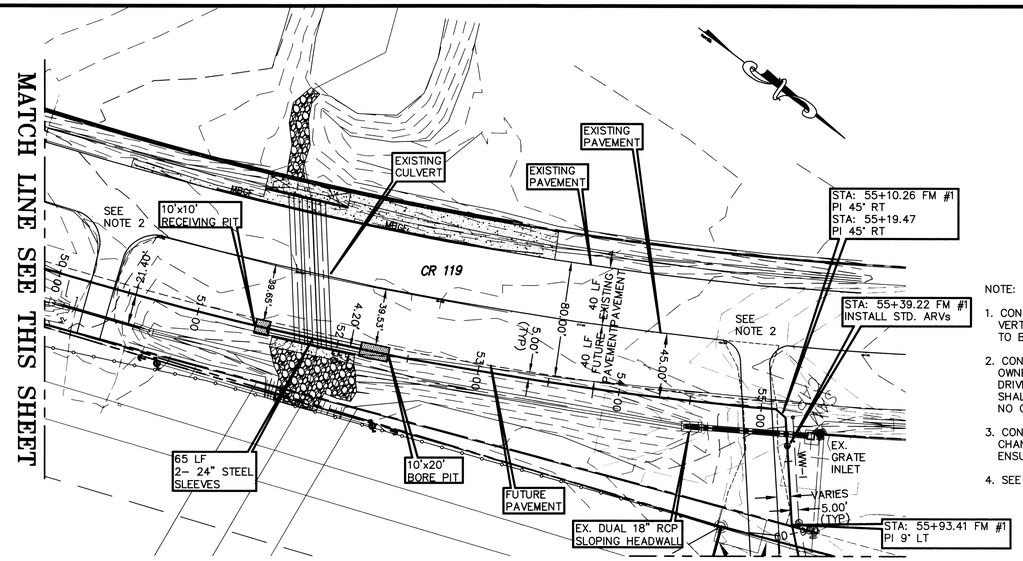
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
7.22.19

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE 1"=5'/1"=50'

SHEET 14

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-11-17 FORCE MAIN.dwg Sep 27, 2019





LEGEND

- = 10' INLET
- = WATER VALVE
- = STORM SEWER MH
- = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

NOTE:

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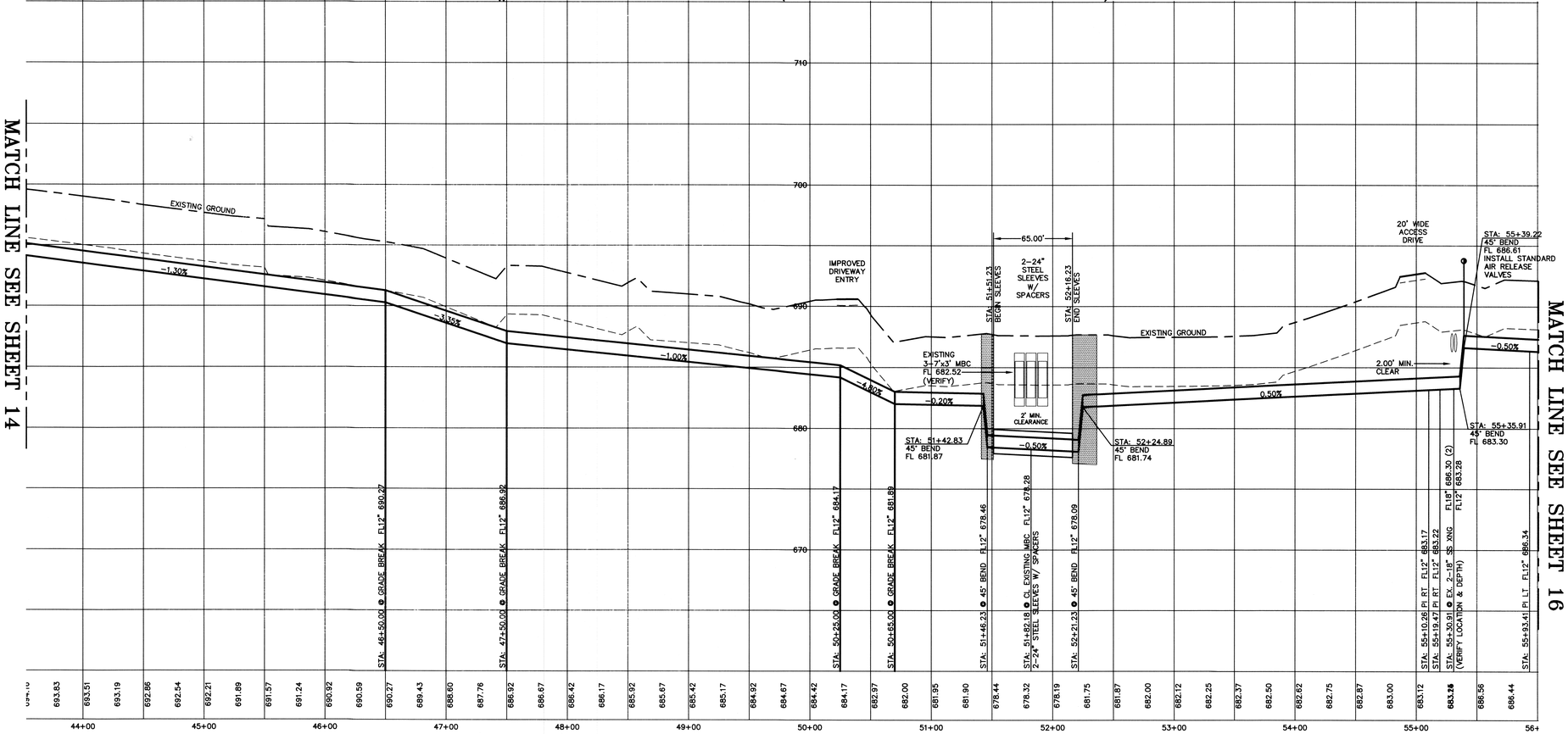
3. CONTRACTOR TO REGRADE AND REVEGETATE DITCH CHANNEL TO MATCH EXISTING CONDITIONS AND TO ENSURE POSITIVE WATER FLOW.
4. SEE TRENCH SAFETY NOTES ON SHEET 2.

FM #1: DUAL 12" DI PIPE (AWWA C151 MIN. CLASS 350)



RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

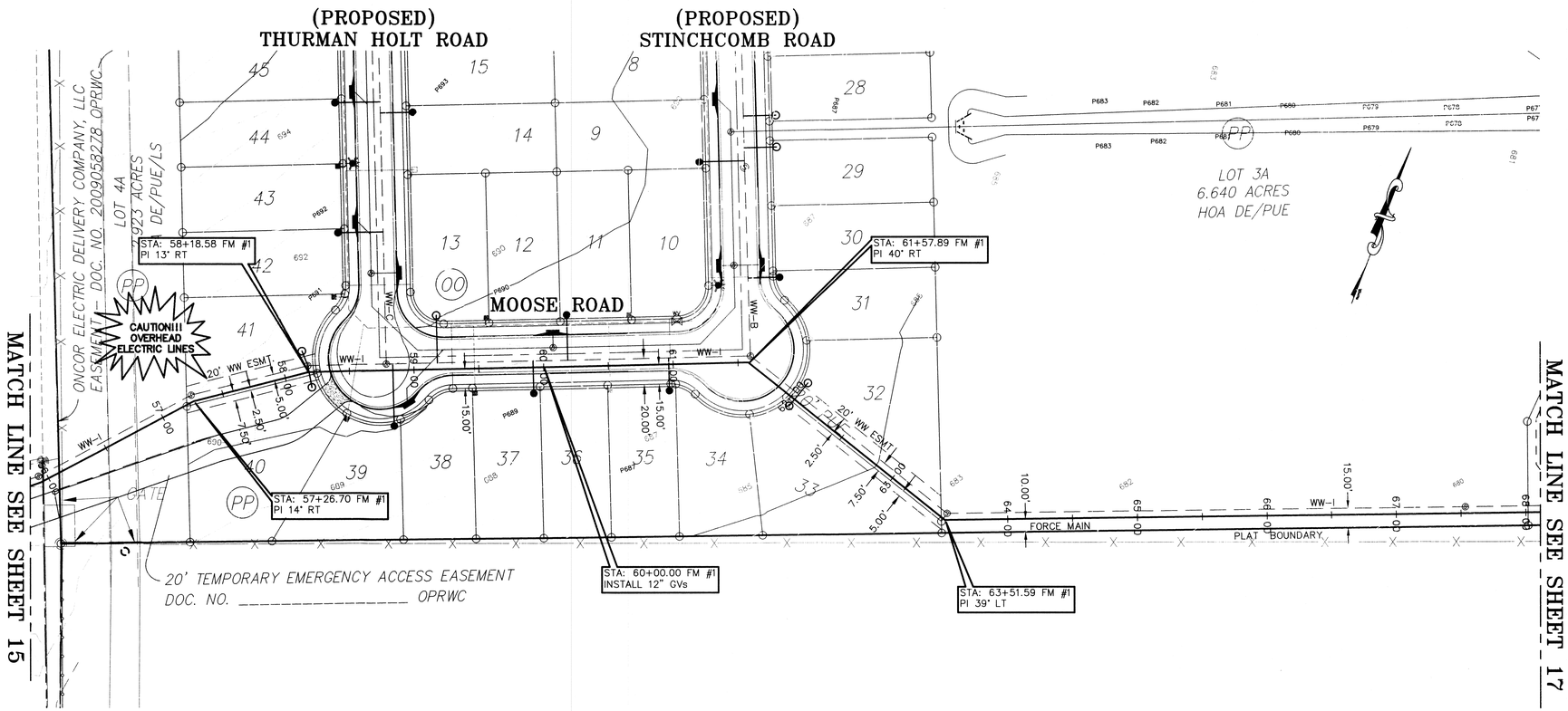
SHEET: FORCE MAIN PLAN & PROFILE STA: 44+00 TO STA: 56+00

STATE OF TEXAS — ISRAEL RAMIREZ — 114495 — LICENSED PROFESSIONAL ENGINEER — 9.24.19

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE 1"=5'/1"=50'

SHEET 15

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-11-17 FORCE MAIN.dwg Sep 27, 2019



LEGEND

- = 10' INLET
- WV = WATER VALVE
- Ⓓ = STORM SEWER MH
- Ⓢ = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
- 693 = EXISTING CONTOUR
- = FUTURE CURB & GUTTER
- OH = OVERHEAD ELECTRIC

NOTE:

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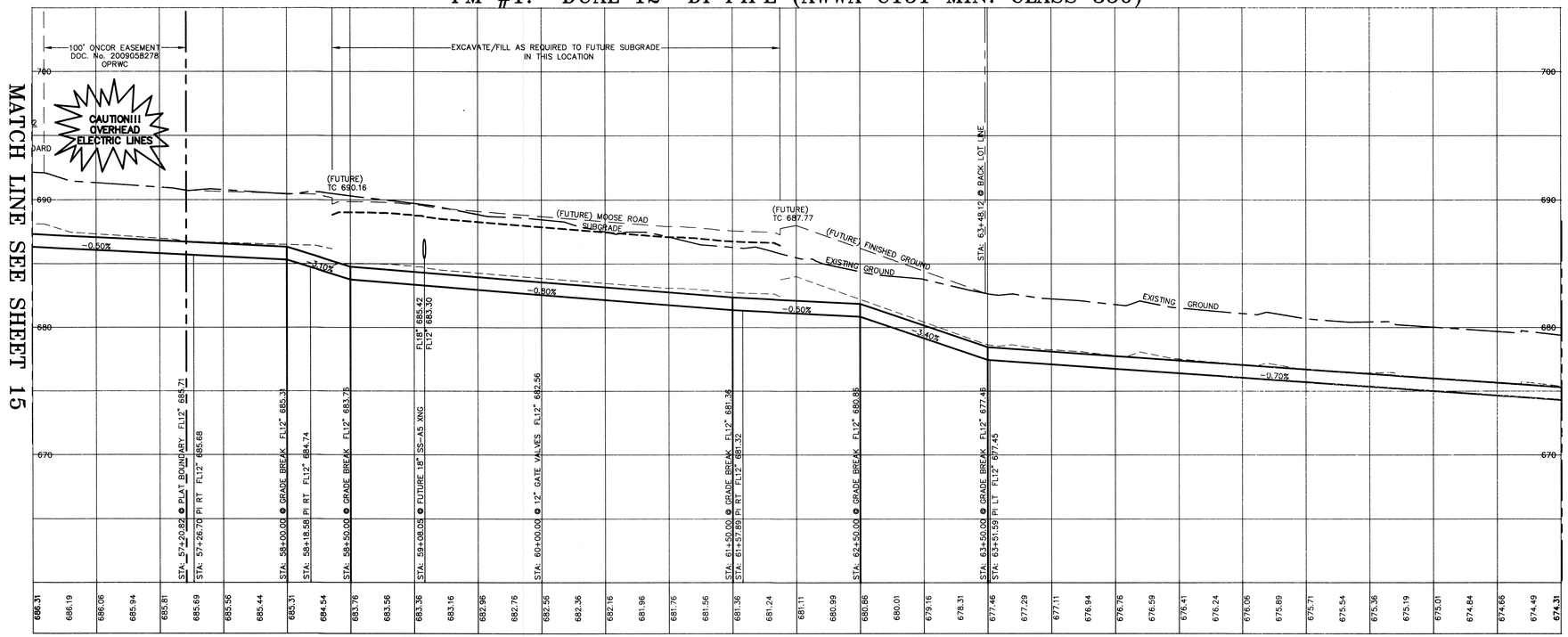
FM #1: DUAL 12" DI PIPE (AWWA C151 MIN. CLASS 350)



RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

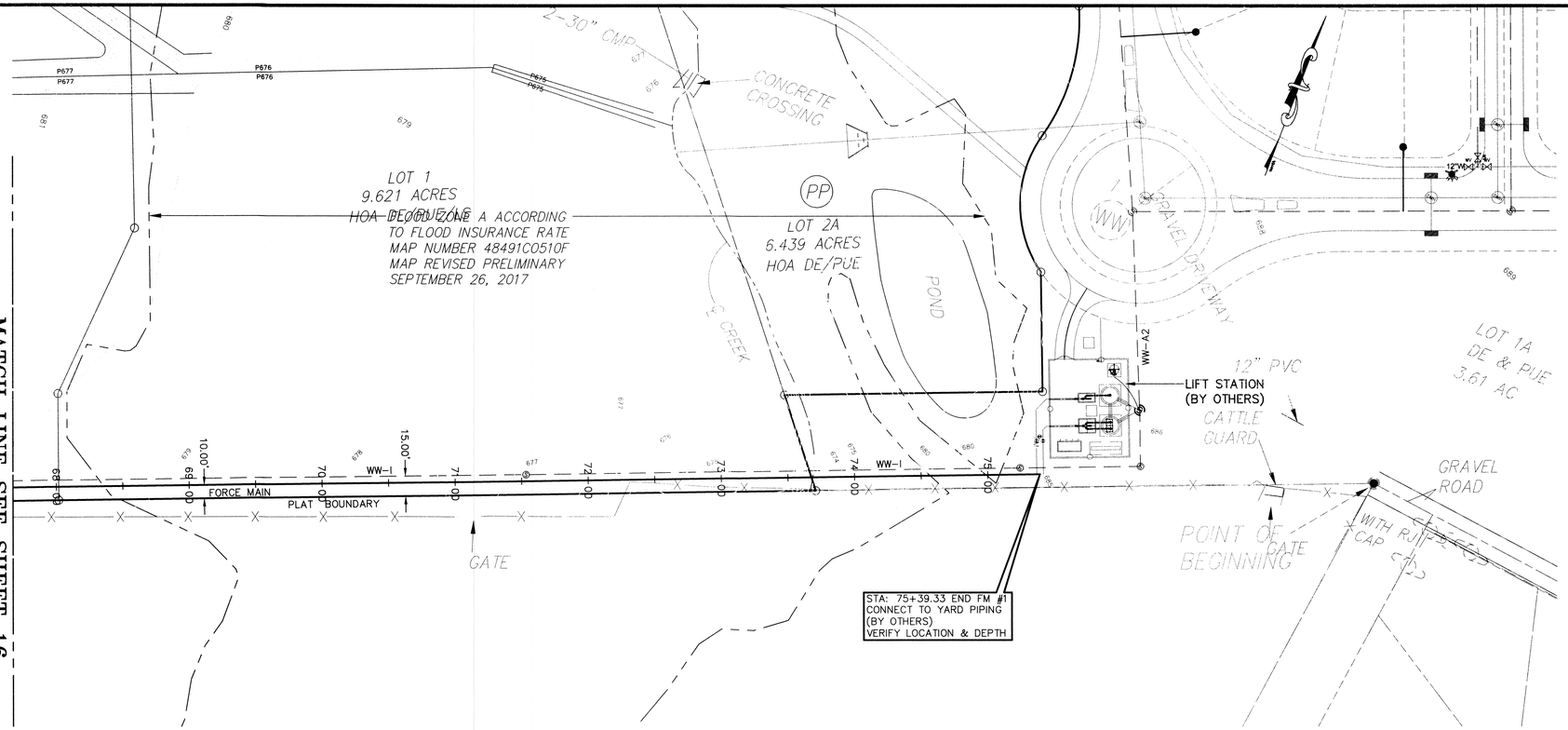
SHEET: FORCE MAIN PLAN & PROFILE STA: 56+00 TO STA: 68+00

STATE OF TEXAS — ISRAEL RAMIREZ — 114495 — LICENSED PROFESSIONAL ENGINEER

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=5'/1"=50'

SHEET 16

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-11-17 FORCE MAIN.dwg Aug 19, 2019



LEGEND

- = 10' INLET
- WV = WATER VALVE
- (D) = STORM SEWER MH
- (S) = WASTEWATER MH
- = FIRE HYDRANT
- = APPROXIMATE R.O.W.
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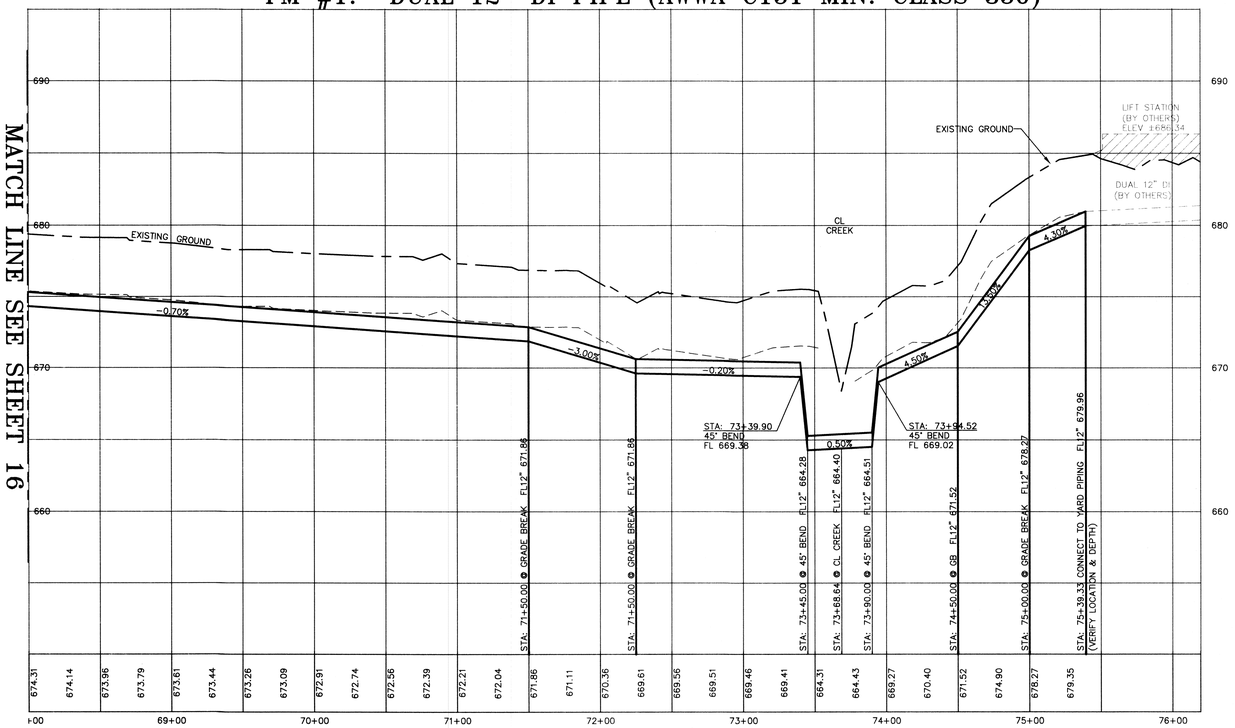


MATCH LINE SEE SHEET 16

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

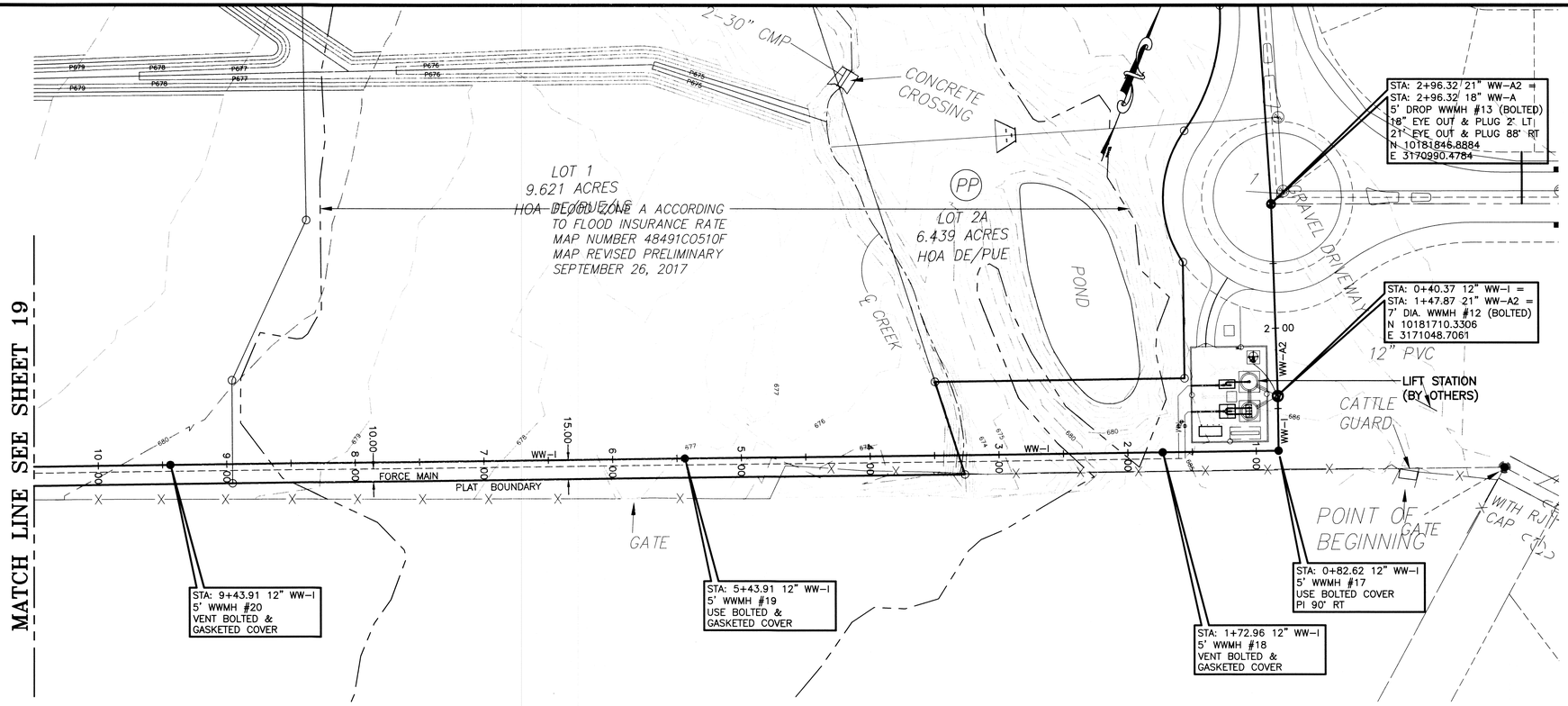
SHEET: FORCE MAIN PLAN & PROFILE STA: 68+00 TO END

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
7.2.19

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE 1"=5'/1"=50'

SHEET 17

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-11-17 FORCE MAIN.dwg Aug 19, 2019



LEGEND

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- = FIRE HYDRANT
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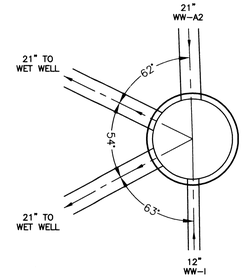
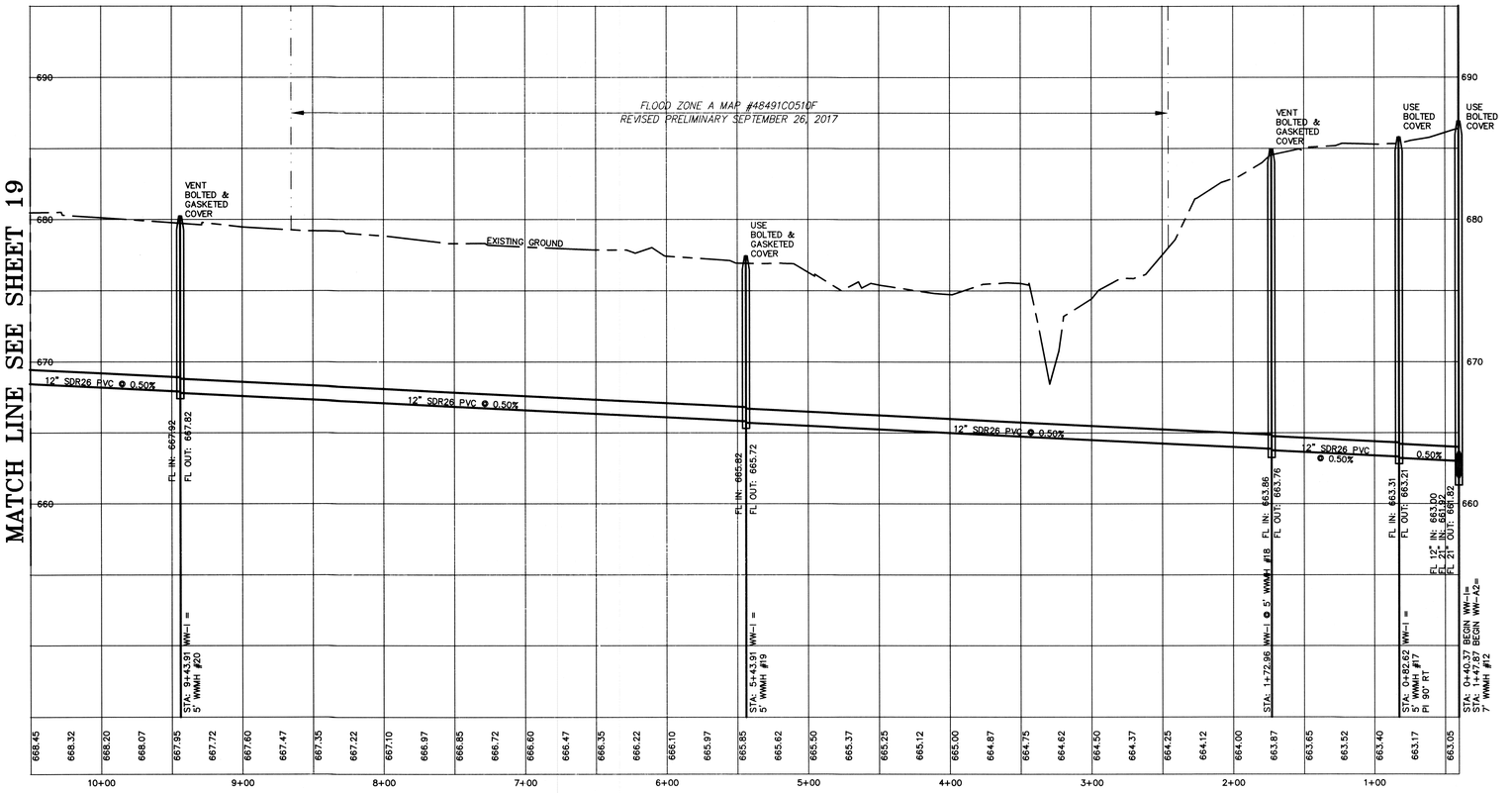
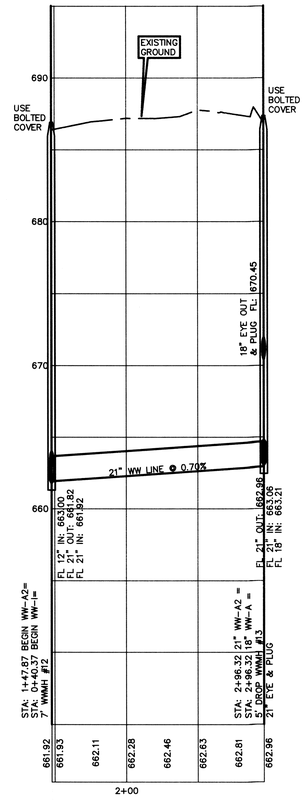


7' DIA. MH #12
NTS





RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

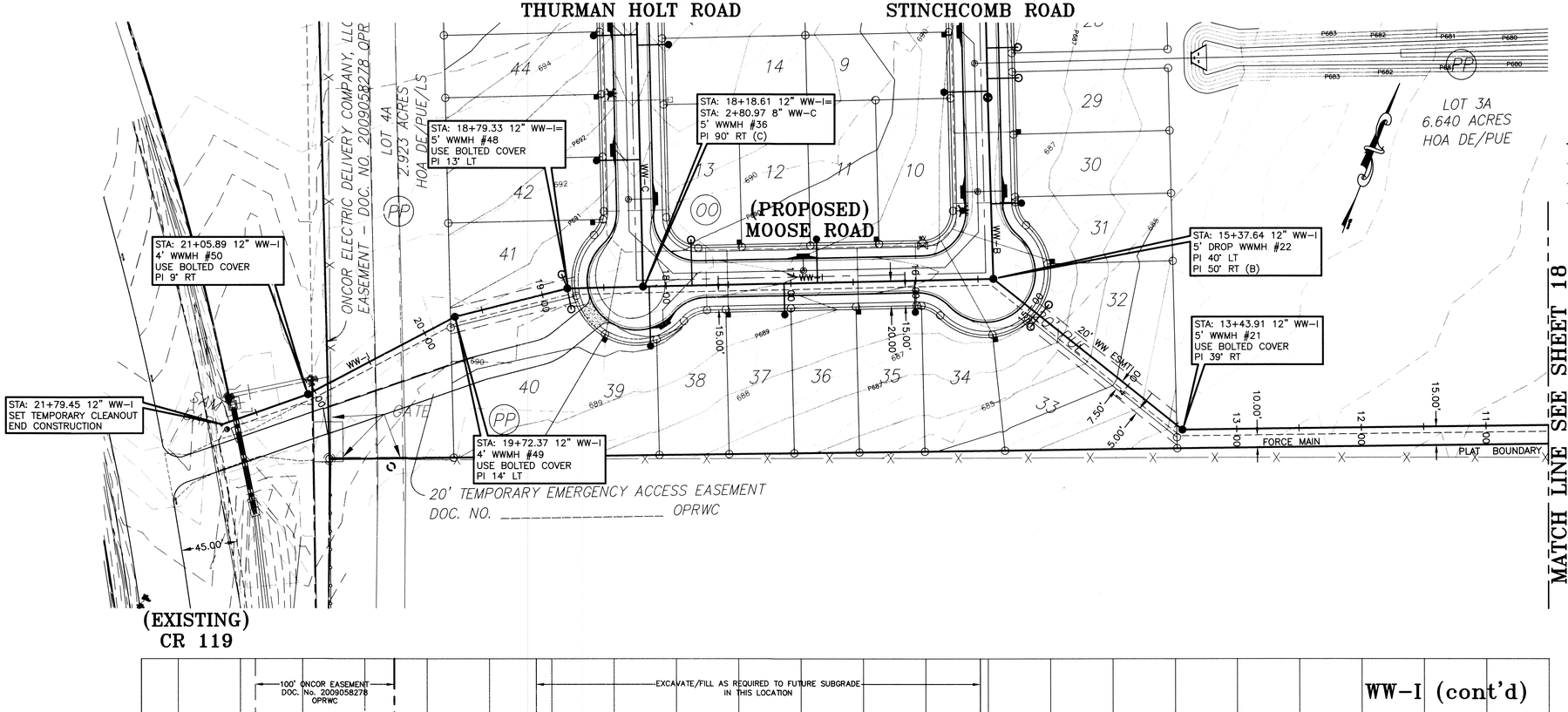
SHEET: WASTEWATER LINE "I" & "A2"

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
7.12.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	1"=5'/1"=50'

SHEET 18

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-18-19 WW-I.dwg Jul 10, 2019



LEGEND

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- = WASTEWATER MH
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- OH = OVERHEAD ELECTRIC

NOTE:

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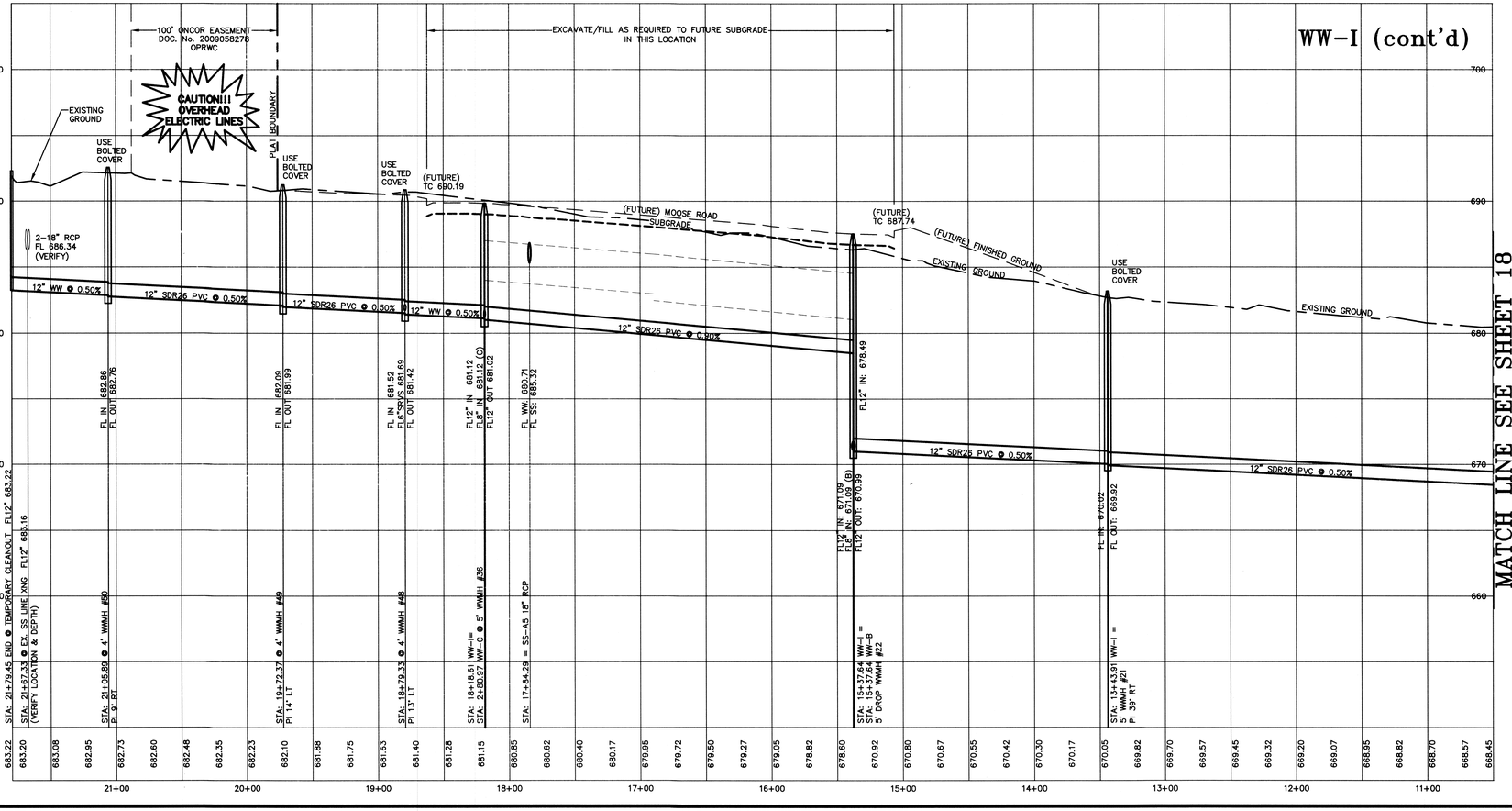


DESCRIPTION	BY	NO.	DATE

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: WASTEWATER LINE "I" (cont'd)

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
7.18.19

DATE: SEPT 2018
DRAWN:
CHECKED:
FILE: 2744
SCALE 1"=5'/1"=50'

SHEET 19

RECORD DRAWING

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-18-19 WW-I.dwg Jul 10, 2019

GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 – 10%
	200 FEET	2 ACRES	10 – 20%
	100 FEET	1 ACRE	20 – 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 – 10%

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

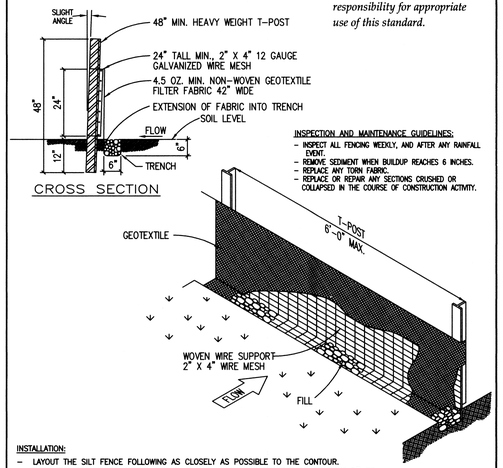
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES	ADOPTED 6/21/2006 EC01
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; CHECKED BY: TRB

NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SWQP) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100lb/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 80% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10-DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION.
9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING.
13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.), ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'-4') BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNERS EXPENSE.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES	ADOPTED 6/21/2006 EC01A
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; CHECKED BY: TRB

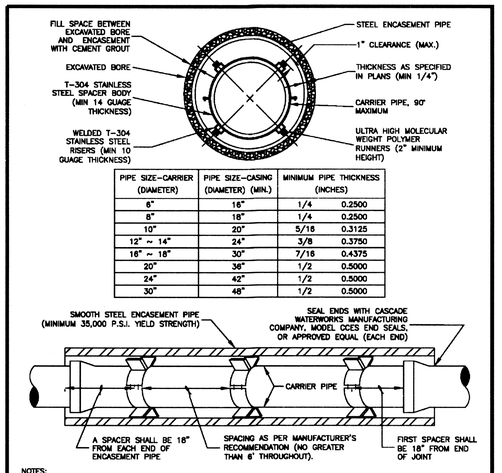


INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

INSTALLATION:
- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T-POST WITH 11 1/2 GAUGE GALVANIZED T-POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

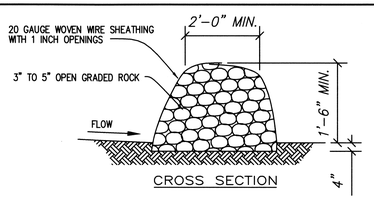
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SILT FENCE DETAIL	ADOPTED 6/21/2006 EC02
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; CHECKED BY: TRB

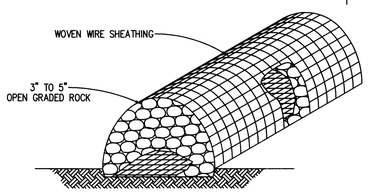


PIPE SIZE–CARRIER (DIAMETER)	PIPE SIZE–CASING (DIAMETER) (MIN.)	MINIMUM PIPE THICKNESS (INCHES)	
6"	16"	1/4	0.2500
8"	18"	1/4	0.2500
10"	20"	5/16	0.3125
12" ~ 14"	24"	3/8	0.3750
16" ~ 18"	30"	7/16	0.4375
20"	36"	1/2	0.5000
24"	42"	1/2	0.5000
30"	48"	1/2	0.5000

NOTES:
1. CASING SPACER CONFIGURATION AND SPACING SHALL BE AS SHOWN ON MANUFACTURER'S DRAWINGS FOR SPECIFIC WORK. THESE MUST BE ACCEPTABLE TO THE CITY OF HUTTO.
2. CASING SPACER SHALL BE AS MANUFACTURED BY CASCADE WATERWORKS MANUFACTURING COMPANY, MODEL CCS, OR APPROVED EQUAL.
3. CASING SPACERS SHALL NOT BE PAID DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE APPROPRIATE BID ITEM.
4. DO NOT USE WEDGES BETWEEN CARRIER PIPE AND CASING.
5. PRIOR TO INSERTING CARRIER PIPE, ANY WATER SHOULD BE PUMPED OUT OF CASING SO THAT NO MORE THAN A FEW INCHES OF WATER REMAINS.
6. ALL JOINTS IN ENCASEMENT SHALL BE RESTRAINED FOR WATER LINES ONLY UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

CITY OF HUTTO	PIPE ENCASEMENT HUTTO UTILITY SYSTEMS	DRAWING NO. W-14; UPDATED: 2015-04-01; DRAWN BY: MSL; SCALE: N.T.S.; FILE NAME: W14.DWG



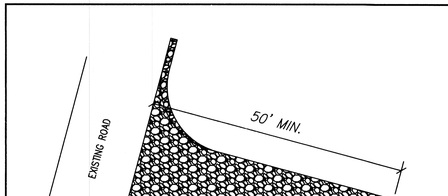


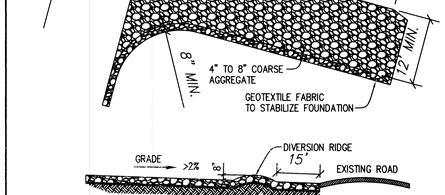
INSTALLATION:
- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE THE FINISHED SIZE OF THE BERM.
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX. 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	ROCK BERM DETAIL	ADOPTED 6/21/2006 EC03
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; CHECKED BY: TRB



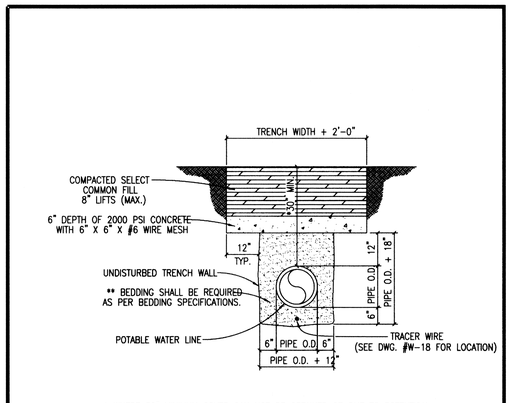


INSTALLATION:
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

INSPECTIONS AND MAINTENANCE GUIDELINES:
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	STABILIZED CONSTRUCTION ENTRANCE	ADOPTED 6/21/2006 EC06
		SCALE: NTS; DATE: 1/2003; DRAWN BY: MRS; CHECKED BY: TRB



* WHERE 30" MINIMUM COVER CAN NOT BE OBTAINED OR DUE TO POTENTICAL SURFACE LOADING THE CITY MAY REQUIRE A CAP TO BE INSTALLED.

** TYPICAL BEDDING SPECIFICATIONS:

SIEVE SIZE	3/8" F % RETAINED	1/2" D % RETAINED
1/2"	0	0
3/8"	0–2	5–25
4m	40–85	80–100
10m	95–100	96–100
3/4"	–	–

CITY OF HUTTO	CONCRETE TRENCH CAP DETAIL HUTTO UTILITY SYSTEMS	DRAWING NO. W-16; UPDATED: 09/28/2017; DRAWN BY: xxx; SCALE: N.T.S.; FILE NAME: W16.DWG

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784
2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

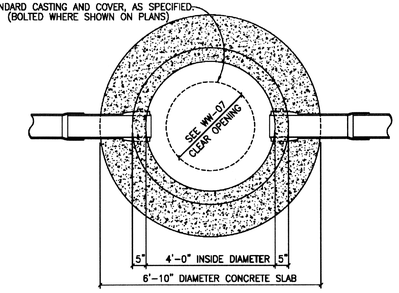
SHEET: STANDARD DETAILS 1 OF 3

STATE OF TEXAS — ISRAEL RAMIREZ — 114495 — LICENSED PROFESSIONAL ENGINEER — 7.12.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	N/A

SHEET 20

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-20-23 STANDARD DETAILS.dwg Jul 10, 2019



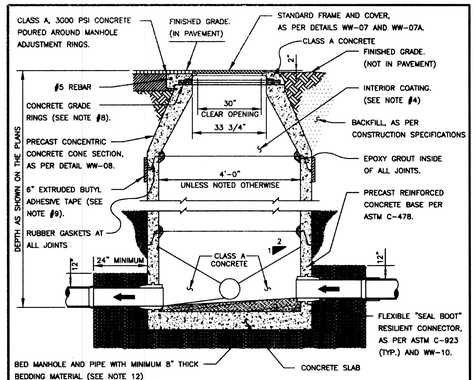
MANHOLE PLAN

CITY OF HUTTO NOTES:

MANHOLE DETAILS SHALL REFLECT THE CITY'S MINIMUM SPECIFICATIONS, AS STATED BELOW:

A. ALL MANHOLES SHALL BE 48" I.D., R.C.P., CLASS III, WITH RUBBER O-RING GASKET JOINTS CONFORMING TO ASTM C478, C433 AND C76.
B. ALL MANHOLES SHALL HAVE WATER-TIGHT FRAME AND COVER, WITH A MINIMUM 30" CLEAR OPENING, AS MANUFACTURED BY EAST JORDAN IRON WORKS (AS PER DETAIL # WW-07 & # WW-07A) OR APPROVED EQUAL.
C. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON FRAME AND COVER.
D. ALL MANHOLES SHALL HAVE A CONCENTRIC CONE.
E. MANHOLES MAY HAVE A FLAT LID, IF APPROVED BY CITY OF HUTTO, BEING 12" THICK WITH A MINIMUM 30" OPENING, AS MANUFACTURED BY CALVERT CONCRETE OR APPROVED EQUAL. M.F.G. CONFORMING TO ASTM C478, 5000 P.S.I. CONCRETE, TRAFFIC BEARING, AND O-RING JOINT CONFORMING TO ASTM C443.
F. INVERTS AND FLEXIBLE SEAL BOOTS, PER ASTM C-923, SHALL BE CAST INTO BASE SECTION.
G. MINIMUM DROP BETWEEN INVERTS SHALL BE ONE-TENTH OF A FOOT (0.1').
H. TWO (2") INCH GRADE RINGS WITH AN I.D. TO MATCH FRAMES CLEAR OPENING, MINIMUM OF TWO (2), MAXIMUM OF FIVE (5) GRADE RINGS REQUIRED.

CITY OF HUTTO	DRAWING NO. WW-02
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/20/10
STANDARD MANHOLE - PLAN	DRAWN BY: XXX
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW02.DWG

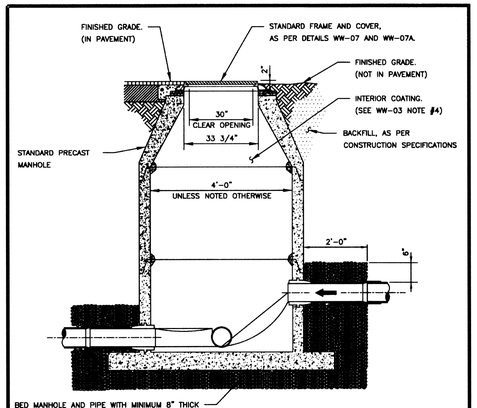


1. MANHOLES SHALL BE PRECAST ASTM C478 BELL AND SPIGOT WITH "O" RING JOINTS.
2. SEE CONSTRUCTION PLANS FOR MANHOLE SIZE, LOCATION, CONFIGURATION, TYPE OF TOP SECTION, VENTING REQUIREMENTS, PIPE SIZES AND TYPES.
3. SEE SPECIFICATIONS ON MATERIALS AND CONSTRUCTION.
4. ENTIRE INTERIOR OF WASTEWATER MANHOLES TO BE COATED WITH RAVEN 405, OR APPROVED EQUAL, WITH A UNIFORM THICKNESS OF 124 MILS AND A MINIMUM THICKNESS OF 100 MILS, APPLIED AFTER MANHOLE HAS PASSED THE VACUUM TEST.
5. ALL MANHOLE COVERS SHALL BE BOLTED AND GASKETED, WHEN MANHOLES ARE LOCATED OUTSIDE OF PAVEMENT.
6. MANHOLES TO BE VENTED ARE IDENTIFIED ON MANHOLE SCHEDULE. REFERENCE MANHOLE VENT DETAIL.
7. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO THE FLOW STREAM. ALL P.V.C. PIPE SHALL BE REMOVED FROM INVERT.
8. FRAME ADJUSTMENT HEIGHT SHALL BE FIVE INCHES (5") MINIMUM AND EIGHTEEN INCHES (18") MAXIMUM.
9. EXTERIOR OF EACH JOINT TO BE WRAPPED IN 6" EXTRUDED BUTYL ADHESIVE TAPE WHEN MANHOLE IS LOCATED IN THE 100-YR FLOODPLAIN.
10. MANHOLES TO BE DESIGNED TO RESIST LATERAL AND VERTICAL SOIL FORCES RESULTING FROM MANHOLE DEPTH. ADDITIONALLY, MANHOLES LOCATED IN PAVEMENT TO BE DESIGNED FOR H20 TRAFFIC LOADING.
11. BASE SECTION SHALL BE DESIGNED FOR H-20 LOADING, PLUS EARTH LOAD AT 130 PCF.

12. MANHOLE BASE BEDDING MATERIAL SPECS. FOR 3/4" WASHED GRAVEL:

SIEVE SIZE	% RETAINED
1"	0
3/4"	0-10
1/2"	40-70
3/8"	85-100

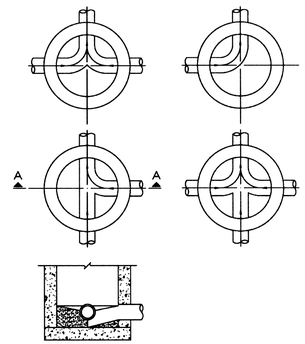
CITY OF HUTTO	DRAWING NO. WW-03
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/30/10
STANDARD MANHOLE - SECTION	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW03.DWG



NOTES:
1. TO BE USED WHERE DROP IS SIX INCHES (6") TO TWO FEET (2'-0").
2. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
3. CONSTRUCTION OF DROP SHALL PROVIDE A OVERSIZED SLAB TO EXTEND UNDER THE DROP CONNECTION.
4. MINIMUM PIPE SIZE FOR DROP IS EIGHT INCHES (8").
5. SEE STANDARD MANHOLE DETAIL (DWG. # WW-03) FOR ADDITIONAL REQUIREMENTS.

CITY OF HUTTO	DRAWING NO. WW-05
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/23/10
DROP CONNECTION-PRECAST MANHOLE TYPE "B"	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW05.DWG

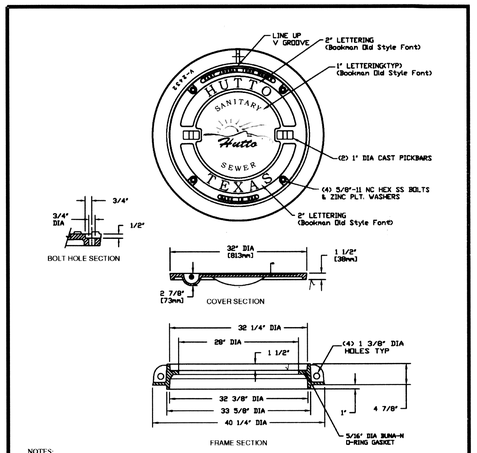
FLOW PATTERNS FOR INVERT CHANNELS



SECTION "A-A"

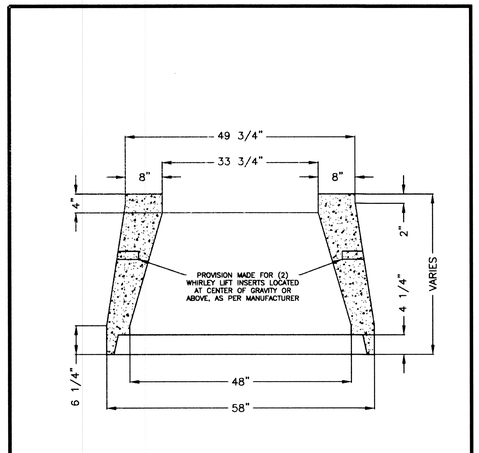
NOTES:
1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOW.
3. CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
4. SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
5. INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP.

CITY OF HUTTO	DRAWING NO. WW-06
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 06/01/09
FLOW PATTERNS FOR INVERT CHANNELS	DRAWN BY: XXX
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW06.DWG



NOTES:
1. BOLTED WASTEWATER MANHOLE SET TO BE EAST JORDAN IRON WORKS, INC. CATALOG NO. V2452, OR APPROVED EQUAL. COVER TO BE STAMPED "SANITARY SEWER."
2. STANDARD WASTEWATER MANHOLE SET TO BE HEAVY DUTY LOAD RATED.
3. FOR MORE DETAILED SPECIFICATIONS, REFER TO EAST JORDAN IRON WORKS, INC. REFERENCE PRODUCT DRAWING 14243206/1.
4. FOR STANDARD WASTEWATER MANHOLE SET REFER TO DETAIL WW07.
5. MANHOLE COVER TO BE DUCTILE IRON PER ASTM A536.
6. MANHOLE FRAME TO BE GRAY IRON PER ASTM A48 CL35B.

CITY OF HUTTO	DRAWING NO. WW-07A
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/21/10
BOLTED WASTEWATER MANHOLE SET	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW07A.DWG



CITY OF HUTTO	DRAWING NO. WW-08
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/13/10
PRECAST 48" CONCENTRIC CONCRETE CONE SECTION DETAIL	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
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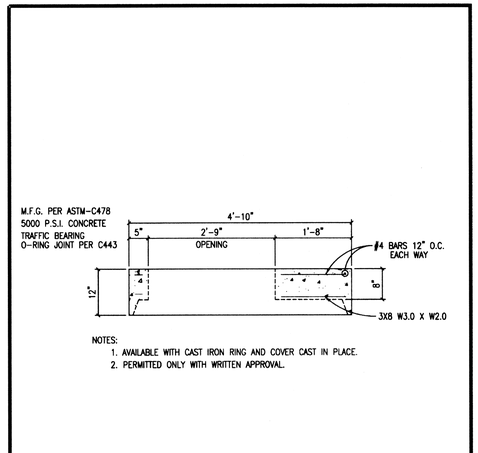
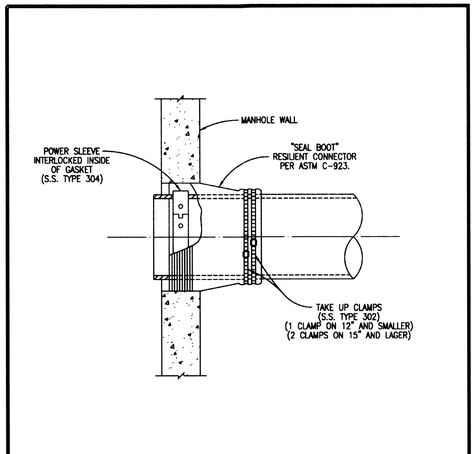


NOTES:
1. AVAILABLE WITH CAST IRON RING AND COVER CAST IN PLACE.
2. PERMITTED ONLY WITH WRITTEN APPROVAL.

CITY OF HUTTO	DRAWING NO. WW-09
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/23/10
48" MANHOLE FLAT LID	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW09.DWG



CITY OF HUTTO	DRAWING NO. WW-10
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 06/01/09
FLEXIBLE "SEAL BOOT" CONNECTOR	DRAWN BY: XXX
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW10.DWG

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: STANDARD DETAILS 2 OF 3

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
7.12.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	N/A

RECORD DRAWING

SHEET 21

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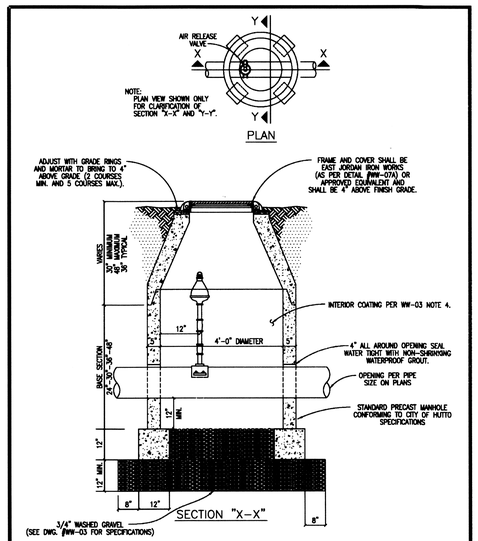
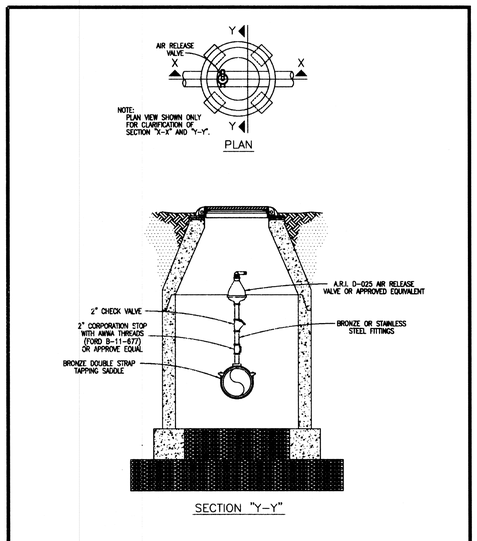
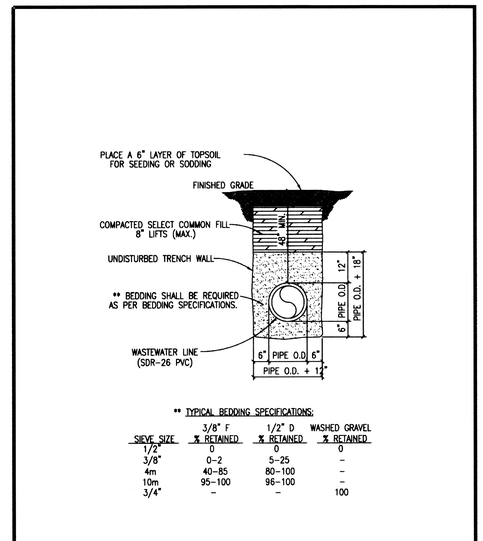


CITY OF HUTTO	DRAWING NO. WW-14
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 10/10/10
STANDARD AIR RELEASE VALVE FOR FORCE MAINS	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW14.DWG



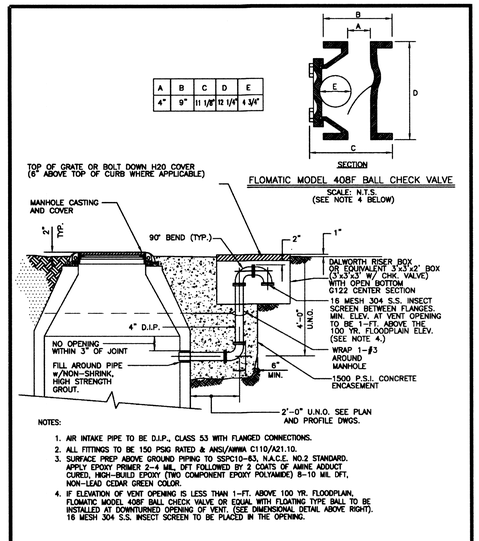
CITY OF HUTTO	DRAWING NO. WW-15
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 10/10/10
STANDARD AIR RELEASE VALVE FOR FORCE MAINS	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW15.DWG



** TYPICAL BEDDING SPECIFICATIONS:

SIEVE SIZE	3/8" F % RETAINED	1/2" D % RETAINED	WASHED GRAVEL % RETAINED
1/2"	0	0	0
3/8"	0-2	5-25	-
4m	40-85	80-100	-
10m	95-100	96-100	-
3/4"	-	-	100

CITY OF HUTTO	DRAWING NO. WW-16
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 06/01/09
TRENCH AND EMBEDMENT DETAIL UNDER NON-PAVED AREAS	DRAWN BY: CL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW16.DWG



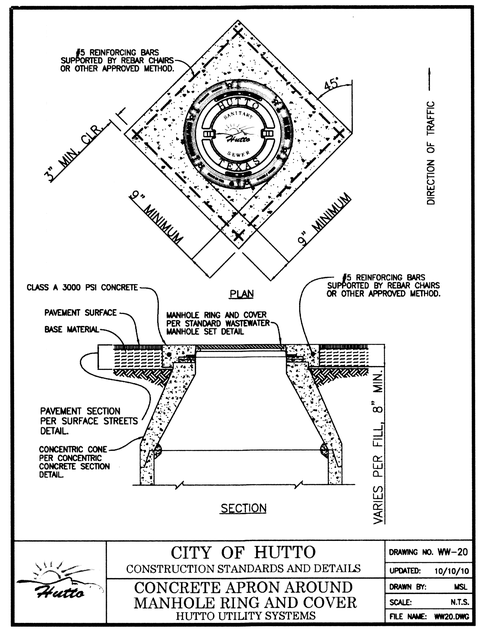
FLOMATIC MODEL 408F BALL CHECK VALVE
SCALE: N.T.S.
(SEE NOTE 4 BELOW)

A	B	C	D	E
4"	9"	11 1/8"	12 1/4"	4 3/4"

NOTES:

1. AIR INTAKE PIPE TO BE D.I.P., CLASS 53 WITH FLANGED CONNECTIONS.
2. ALL FITTINGS TO BE 150 PSIG RATED & ANSI/AWWA C110/A21.10.
3. SURFACE PREP ABOVE GROUND PIPING TO SSPC10-63, N.A.C.E. NO.2 STANDARD. APPLY EPOXY PRIMER 2-4 MIL. DFT FOLLOWED BY 2 COATS OF AMINE ADDUCT CURED, HIGH-BUILD EPOXY (TWO COMPONENT EPOXY POLYAMIDE) 8-10 MIL DFT, NON-LEAD CEDAR GREEN COLOR.
4. IF ELEVATION OF VENT OPENING IS LESS THAN 1-FT. ABOVE 100 YR. FLOODPLAIN, FLOMATIC MODEL 408F BALL CHECK VALVE OR EQUAL WITH FLOATING TYPE BALL TO BE INSTALLED AT DOWNTURNED OPENING OF VENT. (SEE DIMENSIONAL DETAIL ABOVE RIGHT). 16 MESH 304 S.S. INSECT SCREEN TO BE PLACED IN THE OPENING.

CITY OF HUTTO	DRAWING NO. WW-18
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 09/28/10
MANHOLE VENT FOR BELOW GROUND INSTALLATION	DRAWN BY: XXX
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW18.DWG



CITY OF HUTTO	DRAWING NO. WW-20
CONSTRUCTION STANDARDS AND DETAILS	UPDATED: 10/10/10
CONCRETE APRON AROUND MANHOLE RING AND COVER	DRAWN BY: MSL
HUTTO UTILITY SYSTEMS	SCALE: N.T.S.
	FILE NAME: WW20.DWG

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
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2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

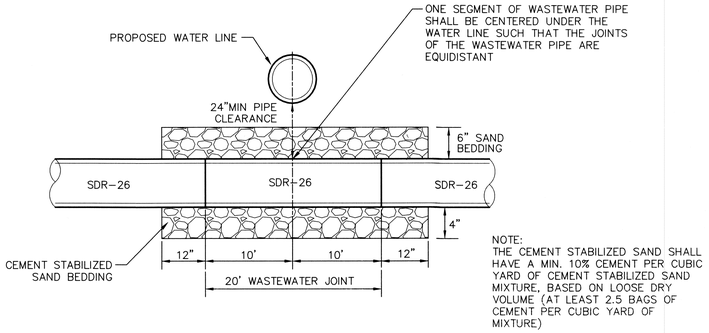
SHEET: STANDARD DETAILS 3 OF 3

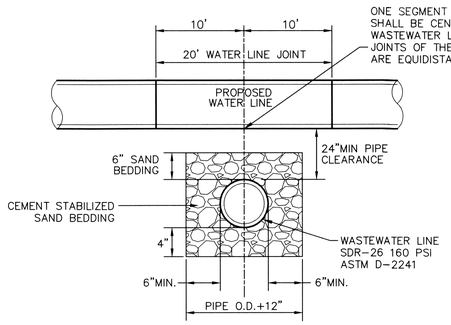
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER
7.12.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	N/A

SHEET
22

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-20-23 STANDARD DETAILS.dwg Jul 10, 2019





WATER LINE/WASTEWATER LINE CROSSING DETAIL

STANDARD PIPE SIZE DIMENSIONS:
PVC-SDR 26 - 8" O.D. 8.40 in.; t=0.24 in.; I.D.=7.92 in.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

1. This water distribution system must be constructed in accordance with the current Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D. When conflicts are noted with local standards, the more stringent requirement shall be applied. Construction for public water systems must always, at a minimum, meet TCEQ's "Rules and Regulations for Public Water Systems.

2. An appointed engineer shall notify in writing the local TCEQ's Regional Office when construction will start. Please keep in mind that upon completion of the water works project, the engineer or owner shall notify the commission's Water Supply Division, in writing, as to its completion and attest to the fact that the work has been completed essentially according to the plans and change orders on file with the commission as required in 30 TAC §290.39(h)(3).

3. All newly installed pipes and related products must conform to American National Standards Institute (ANSI)/NSF International Standard 61 and must be certified by an organization accredited by ANSI, as required by 30 TAC §290.44(a)(1).

4. Plastic pipe for use in public water systems must bear the NSF International Seal of Approval (NSF-pw) and have an ASTM design pressure rating of at least 150 psi or a standard dimension ratio of 26 or less, as required by 30 TAC §290.44(a)(2).

5. No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply, as required by 30 TAC §290.44(a)(3).

6. Water transmission and distribution lines shall be installed in accordance with the manufacturer's instructions. However, the top of the water line must be located below the frost line and in no case shall the top of the water line be less than 24 inches below ground surface, as required by 30 TAC §290.44(a)(4).

7. Pursuant to 30 TAC §290.44(a)(5), the hydrostatic leakage rate shall not exceed the amount allowed or recommended by the most current AWWA formulas for PVC pipe, cast iron and ductile iron pipe. Include the formulas in the notes on the plans.
The hydrostatic leakage rate for polyvinyl chloride (PVC) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-605 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

$$Q=(LD\sqrt{P})/148{,}000$$

Where:
Q = the quantity of makeup water in gallons per hour,
L = the length of the pipe section being tested, in feet,
D = the nominal diameter of the pipe in inches, and
P = the average test pressure during the hydrostatic test in pounds per square inch (psi).

The hydrostatic leakage rate for ductile iron (DI) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-600 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

$$L=(SD\sqrt{P})/148{,}000$$

Where:
L = the quantity of makeup water in gallons per hour,
S = the length of the pipe section being tested, in feet,
D = the nominal diameter of the pipe in inches, and
P = the average test pressure during the hydrostatic test in pounds per square inch (psi).

8. The maximum allowable lead content of pipes, pipe fittings, plumbing fittings and fixtures is 0.25 percent.

9. The system must be designed to maintain a minimum pressure of 35 psi at all points within the distribution network at flow rates of at least 1.5 gallons per minute per connection. When the system is intended to provide firefighting capability, it must also be designed to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions as required by 30 TAC §290.44(d).

10. The contractor shall install appropriate air release devices in the distribution system at all points where topography or other factors may create air locks in the lines. All vent openings to the atmosphere shall be covered with 16-mesh or finer, corrosion resistant screening material or an acceptable equivalent as required by 30 TAC §290.44(d)(1).

11. Pursuant to 30 TAC §290.44(d)(4), accurate water meters shall be provided. Service connections and meter locations should be shown on the plans.

12. Pursuant to 30 TAC §290.44(d)(5), sufficient valves and blowoffs to make repairs. The engineering report shall establish criteria for this design.

13. Pursuant to 30 TAC §290.44(d)(6), the system shall be designed to afford effective circulation of water with a minimum of dead ends. All dead-end mains shall be provided with acceptable flush valves and discharge piping. All dead-end lines less than two inches in diameter will not require flush valves if they end at a customer service. Where dead ends are necessary as a stage in the growth of the system, they shall be located and arranged to ultimately connect the ends to provide circulation.

14. The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes and septic tank drainfields. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet 30 TAC §290.44(e)(1-4) of the current rules.

15. Pursuant to 30 TAC §290.44(e)(5), the separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant.

16. Pursuant to 30 TAC §290.44(e)(6), fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater line, wastewater lateral, or wastewater service line regardless of construction.

17. Pursuant to 30 TAC §290.44(e)(7), suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line.

18. Pursuant to 30 TAC §290.44(e)(8), waterlines shall not be installed closer than ten feet to septic tank drainfields.

19. Pursuant to 30 TAC §290.44(f)(1), the contractor shall not place the pipe in water or where it can be flooded with water or sewage during its storage or installation.

20. Pursuant to 30 TAC §290.44(f)(2), when waterlines are laid under any flowing or intermittent stream or semi-permanent body of water the water main shall be installed in a separate watertight pipe encasement. Valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested.

21. The contractor shall disinfect the new water mains in accordance with AWWA Standard C-651 and then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed water line will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer, in accordance with 30 TAC §290.44(f)(3).

Revised March 4, 2015

SEPARATION OF WATER AND WASTEWATER PIPELINE REQUIREMENTS:

§290.44(e) Location of waterlines. The following rules apply to installations of waterlines, wastewater mains or laterals, and other conveyances/appurtenances identified as potential sources of contamination. Furthermore, all ratings specified shall be defined by ASTM or AWWA standards unless stated otherwise. New mains, service lines, or laterals are those that are installed where no main, service line, or lateral previously existed, or where existing mains, service lines, or laterals are replaced with pipes of different size or material.

§290.44(e)(1) When new potable water distribution lines are constructed, they shall be installed no closer than nine feet in all directions to wastewater collection facilities. All separation distances shall be measured from the outside surface of each of the respective pieces.

§290.44(e)(2) Potable water distribution lines and wastewater mains or laterals that form parallel utility lines shall be installed in separate trenches.

§290.44(e)(3) No physical connection shall be made between a drinking water supply and a sewer line. Any appurtenance shall be designed and constructed so as to prevent any possibility of sewage entering the drinking water system.

§290.44(e)(4) Where the nine-foot separation distance cannot be achieved, the following criteria shall apply.

§290.44(e)(4)(A) New waterline installation--parallel lines.

§290.44(e)(4)(A)(i) Where a new potable waterline parallels an existing, non-pressure or pressure rated wastewater main or lateral and the licensed professional engineer licensed in the State of Texas is able to determine that the existing wastewater main or lateral is not leaking, the new potable waterline shall be located at least two feet above the existing wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the existing wastewater main or lateral. Every effort shall be exerted not to disturb the bedding and backfill of the existing wastewater main or lateral.

§290.44(e)(4)(A)(ii) Where a new potable waterline parallels an existing pressure rated wastewater main or lateral and it cannot be determined by the licensed professional engineer if the existing line is leaking, the existing wastewater main or lateral shall be replaced with at least 150 psi pressure rated pipe. The new potable waterline shall be located at least two feet above the new wastewater line, measured vertically, and at least four feet away, measured horizontally, from the replaced wastewater main or lateral.

§290.44(e)(4)(A)(iii) Where a new potable waterline parallels a new wastewater main, the wastewater main or lateral shall be constructed of at least 150 psi pressure rated pipe. The new potable waterline shall be located at least two feet above the wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the wastewater main or lateral.

§290.44(e)(4)(B) New waterline installation--crossing lines.

§290.44(e)(4)(B)(i) Where a new potable waterline crosses an existing, non-pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. The potable waterline shall be at least two feet above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. If the existing wastewater main or lateral is disturbed or shows signs of leaking, it shall be replaced for at least nine feet in both directions (18 feet total) with at least 150 psi pressure rated pipe.

§290.44(e)(4)(B)(ii) Where a new potable waterline crosses an existing, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. If the existing wastewater main or lateral shows signs of leaking, it shall be replaced for at least nine feet in both directions (18 feet total) with at least 150 psi pressure rated pipe.

§290.44(e)(4)(B)(iii) Where a new potable waterline crosses a new, non-pressure rated wastewater main or lateral and the standard pipe segment length of the wastewater main or lateral is at least 18 feet, one segment of the waterline pipe shall be centered over the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. The potable waterline shall be at least two feet above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (vi) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.

§290.44(e)(4)(B)(iv) Where a new potable waterline crosses a new, non-pressure rated wastewater main or lateral and a standard length of the wastewater pipe is less than 18 feet in length, the potable water pipe segment shall be centered over the wastewater line. The materials and method of installation shall conform with one of the following options.

§290.44(e)(4)(B)(iv)(I) Within nine feet horizontally of either side of the waterline, the wastewater pipe and joints shall be constructed with pipe material having a minimum pressure rating of at least 150 psi. An absolute minimum vertical separation distance of two feet shall be provided. The wastewater main or lateral shall be located below the waterline.

§290.44(e)(4)(B)(iv)(II) All sections of wastewater main or lateral within nine feet horizontally of the waterline shall be encased in an 18-foot (or longer) section of pipe. Flexible encasing pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The encasing pipe shall be centered on the waterline and shall be at least two nominal pipe diameters larger than the wastewater main or lateral. The space around the carrier pipe shall be supported at five-foot (or less) intervals with spacers or be filled to the springline with washed sand. Each end of the casing shall be sealed with watertight non-shrink cement grout or a manufactured watertight seal. An absolute minimum separation distance of six inches between the encasement pipe and the waterline shall be provided. The wastewater line shall be located below the waterline.

§290.44(e)(4)(B)(iv)(III) When a new waterline crosses under a wastewater main or lateral, the waterline shall be encased as described for wastewater mains or laterals in subclause (II) of this clause or constructed of ductile iron or steel pipe with mechanical or welded joints as appropriate. An absolute minimum separation distance of one foot between the waterline and the wastewater main or lateral shall be provided. Both the waterline and wastewater main or lateral must pass a pressure and leakage test as specified in AWWA C600 standards.

§290.44(e)(4)(B)(v) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (vi) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.

§290.44(e)(4)(B)(vi) Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.

§290.44(e)(5) Waterline and wastewater main or lateral manhole or cleanout separation. The separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant.

§290.44(e)(6) Location of fire hydrants. Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater main, wastewater lateral, or wastewater service line regardless of construction.

§290.44(e)(7) Location of potable or raw water supply or suction lines. Suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line.

§290.44(e)(8) Proximity of septic tank drainfields. Waterlines shall not be installed closer than ten feet to septic tank drainfields.

§290.44(f) Sanitary precautions and disinfection. Sanitary precautions, flushing, disinfection procedures, and microbiological sampling as prescribed in AWWA standards for disinfecting water mains shall be followed in laying waterlines.

§290.44(f)(1) Pipe shall not be laid in water or placed where it can be flooded with water or sewage during its storage or installation.

§290.44(f)(2) Special precautions must be taken when waterlines are laid under any flowing or intermittent stream or semipermanent body of water such as marsh, bay, or estuary. In these cases, the water main shall be installed in a separate watertight pipe encasement and valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested to determine that there are no leaks in the underwater line. Alternately, and with the permission of the executive director, the watertight pipe encasement may be omitted.

§290.44(f)(3) New mains shall be thoroughly disinfected in accordance with AWWA Standard C651 and then flushed and sampled before being placed in service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure. Sampling shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer.

PER TCEQ: Where a new potable waterline crosses a new, non-pressure rated wastewater main or lateral and the standard pipe segment length of the wastewater main or lateral is at least 18 feet, one segment of the waterline pipe shall be centered over the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. The potable waterline shall be at least two feet above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The wastewater main or lateral shall be embedded in cement stabilized sand for the total length of one pipe segment plus 12 inches beyond the joint on each end.

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: TCEQ GENERAL NOTES

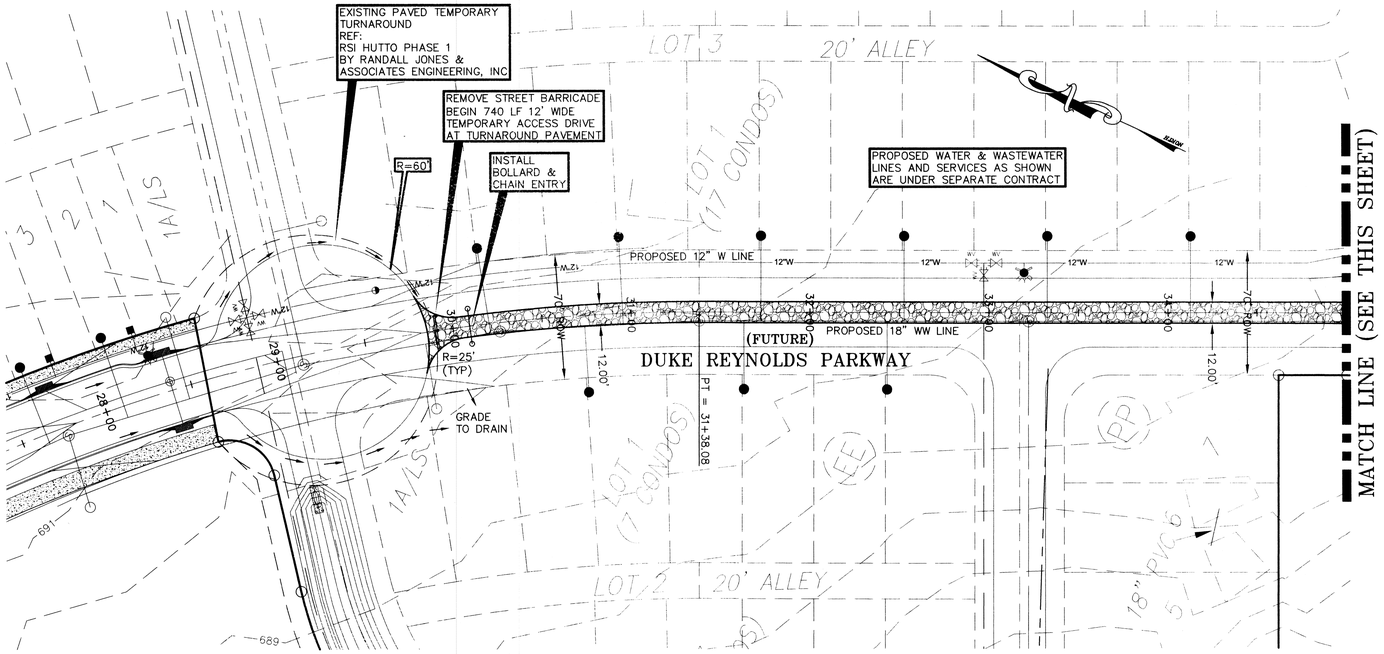
STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
7.12.19

DATE:	SEPT 2018
DRAWN:	
CHECKED:	
FILE:	2744
SCALE	N/A

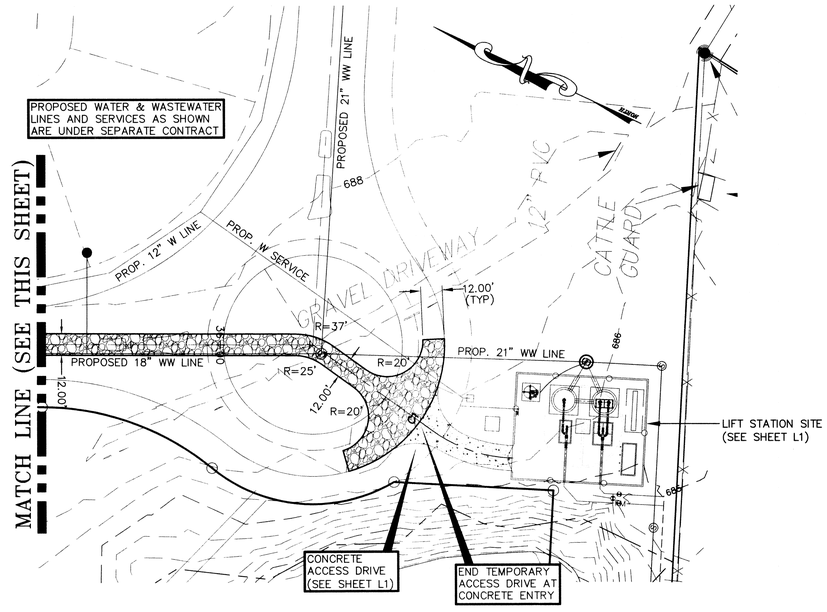
SHEET
23

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-20-23 STANDARD DETAILS.dwg Jul 10, 2019

REF:
RSI HUTTO
PHASE 1
DUKE REYNOLDS
PARKWAY



CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD	TANGENT	BEARING	DELTA
C1	73.50'	98.48'	91.28'	58.23'	S79°05'24"E	76°46'17"



SCALE
0 20 40 60 80

LEGEND

- = 10' INLET
- = WATER VALVE
- = STORM SEWER MH
- = WASTEWATER MH
- = FIRE HYDRANT
- = IPF
- = FLOW ARROW

R.O.W. = RIGHT OF WAY

F.O.C. = FACE OF CURB

NOTE:

1. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
2. 12' WIDE TEMPORARY ACCESS DRIVE SHALL BE CLEARED, GRADED AND STABILIZED WITH 6" OF BASE. MAINTAIN 2.00% CROSS SLOPE IN THE DIRECTION OF NATURAL DRAINAGE SO AS NOT TO IMPEDE OVERLAND FLOWS.

RECORD DRAWING

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX. 78664
(512) 836-4793

PROJECT: RSI HUTTO OFFSITE WW LINE

SHEET: TEMPORARY LIFT STATION ACCESS DRIVE

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED PROFESSIONAL ENGINEER
8.28.19

DATE:	AUG 2019
DRAWN:	JBH
CHECKED:	
FILE:	2744
SCALE	1"=4'/1"=40'

SHEET 24

R:\LAND 2701-2750\2743_PLANS\DWG\2744-RSI OFFSITE WW\2744-24 TEMPORARY ACCESS DRIVE.dwg Aug 28, 2019

R:\LAND 2701-2750\2743_PLANS\dwg\2744-RSI OFFSITE WW\2744-25 TxDOT DETAILS.dwg Oct 15, 2019

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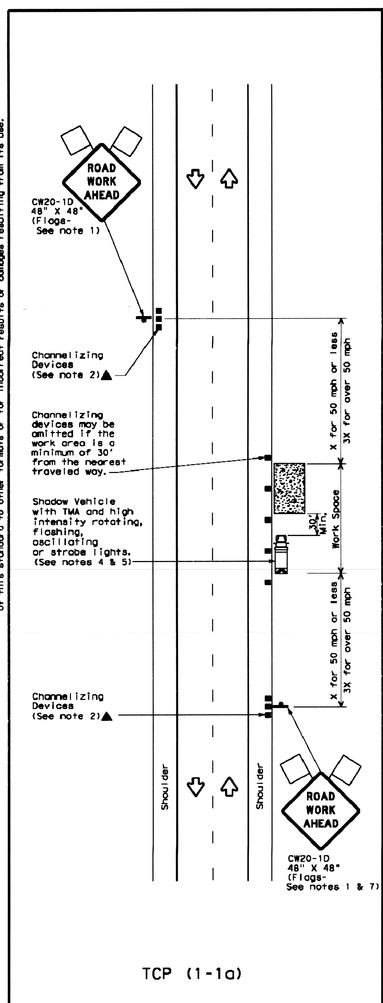
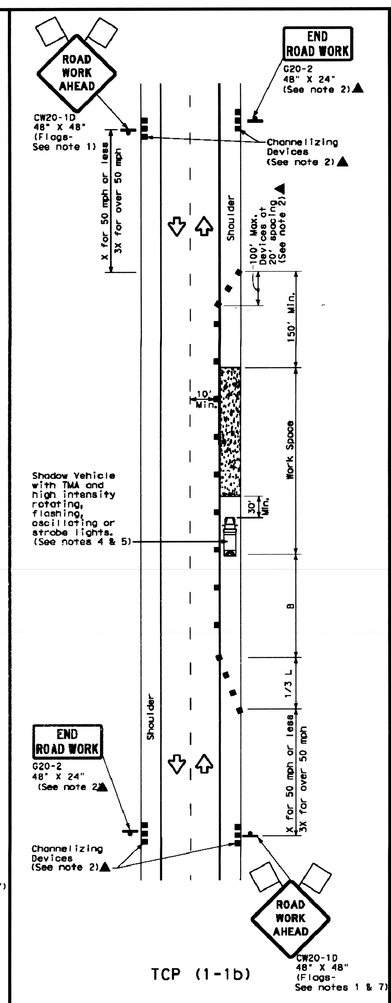
DATE:
FILE:



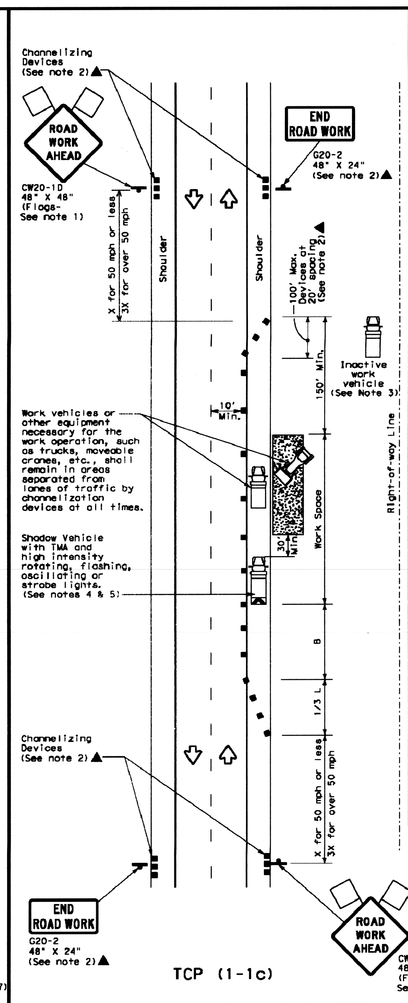
TCP (1-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads



TCP (1-1b)

WORK SPACE ON SHOULDER
Conventional Roads



TCP (1-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	L=WS²/60	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45		450'	495'	540'	45'	90'	320'	195'
50	L=WS	500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES
1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
6. See TCP(5-1)for shoulder work on divided highways, expressways and freeways.
7. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP(1-1)-18

FILE: tcp1-1-18.dgn	DW:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	DIST	COUNTY		SHEET NO.

193

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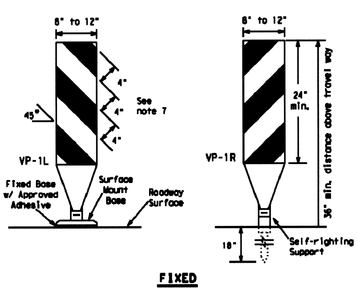
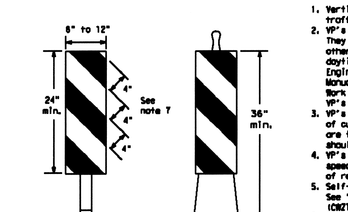
DATE:
FILE:



FIXED
(Rigid or self-righting)

DRIVEABLE

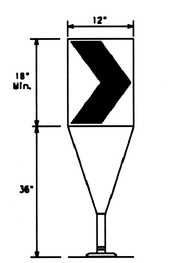


(Rigid or self-righting)

PORTABLE

1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual Appendix B "Treatment of Pavement Drop-offs in Work Zones" for additional guidelines on the use of VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type A conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.

VERTICAL PANELS (VPs)

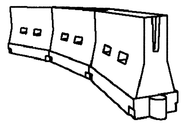


Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective type B_N or Type C_N conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS

GENERAL NOTES
1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.

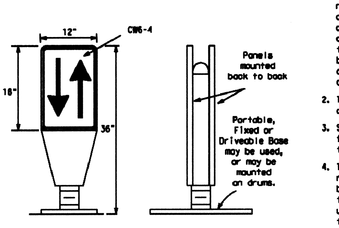


LONGITUDINAL CHANNELIZING DEVICES (LCD)
1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. LCDs may be used instead of a line of cones or drums.
3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10) placed near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS
1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate NCHRP 350 crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS



1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with 42" cones or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B_N or Type C_N conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent
30	L=WS²/60	150'	165'	180'	30'	60'
35		205'	225'	245'	35'	70'
40		265'	295'	320'	40'	80'
45		450'	495'	540'	45'	90'
50	L=WS	500'	550'	600'	50'	100'
55		550'	605'	660'	55'	110'
60		600'	660'	720'	60'	120'
65		650'	715'	780'	65'	130'
70		700'	770'	840'	70'	140'
75		750'	825'	900'	75'	150'
80		800'	880'	960'	80'	160'

** Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

SHEET 9 OF 12

Texas Department of Transportation — Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(9)-13

FILE: bc-13.dgn	DW: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS 9-07 7-13	DIST	COUNTY		SHEET NO.

193

SHT. #25

RECORD DRAWING

Israel Rambam, P.E. # 91849 — State of Texas — Professional Engineer

GENERAL:
1. STANDARD PROCTOR DENSITIES SHALL BE TAKEN ON ALL FILL, AND RESULTS SUBMITTED TO INSPECTOR PRIOR TO POURING CONCRETE OR PLACING GRAVEL.

2. REFER TO LIFT STATION PLAN AND CROSS-SECTIONS SHEET FOR MORE INFORMATION.

3. FORCE MAIN AND WATER LINES TO BE INSTALLED WITH 48" COVER UNLESS NOTED OTHERWISE.

4. ALL EXPOSED FORCE MAIN PIPING AND PIPING IN WET WELL AND VALVE VAULT TO HAVE FLANGED FITTINGS, UNLESS NOTED OTHERWISE. ALL BURIED PIPING TO HAVE MECHANICAL JOINT FITTINGS WITH RESTRAINTS, UNLESS NOTED OTHERWISE.

5. ALL HORIZONTAL AND VERTICAL FORCE MAIN BENDS SHALL BE MECHANICALLY RESTRAINED TO THE PIPE IN ACCORDANCE WITH CITY OF AUSTIN SPL WW-27A..

6. HOSE BIB TO BE AN ANTIFREEZE AND BFD HOSE BIB WITH HOSE REEL ATTACHED TO FENCE.

CONCRETE:
1. REINFORCED CONCRETE:
   A. ALL CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3,500 PSI AT 28 DAYS, UNLESS SPECIFIED OTHERWISE.
   B. CONCRETE SHALL HAVE A MAXIMUM WATER TO CEMENT RATIO OF 0.45.
   C. CONCRETE SHALL HAVE A SLUMP BETWEEN 6" TO 8".
   D. AIR ENTRAINMENT SHALL NOT BE USED.
   E. MID RANGE WATER REDUCING ADMIXTURE IS RECOMMENDED TO IMPROVE WORKABILITY.
   F. CONCRETE PLACED WITH A FALL EXCEEDED 5 FEET SHALL BE PLACED USING A TREMIE.
   G. CONCRETE SHALL BE PROPERLY VIBRATED AND FINISHED TO MAXIMIZE DENSITY AND MINIMIZE SURFACE DEFECTS.
   H. REINFORCING STEEL SHALL BE DEFORMED NEW BILLET STEEL BARS IN ACCORDANCE WITH ASTM/ANSI A615, GRADE 60. DETAILING, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES."
   I. CONTINUOUS REINFORCING STEEL TO BE LAPPED 36 BAR DIAMETERS.
   J. WHERE AN OPENING INTERRUPTS SLAB REINFORCING, PROVIDE AN EQUAL AMOUNT OF REINFORCING ON EACH SIDE OF THE OPENING EXTENDING A MINIMUM OF 36 BAR DIAMETERS PAST THE EDGES AT EACH END. PROVIDE 3-NO. 4 X 48 IN. LONG AT EACH REENTRANT CORNER.
   K. ALL HOOKS AND BENDS IN REINFORCING BARS SHALL CONFORM TO ACI STANDARDS UNLESS SPECIFIED OTHERWISE.
   L. TACK WELDING ON REINFORCING STEEL IS NOT PERMITTED.
   M. HALF SIZE (MINIMUM) CONCRETE BRICKS MAY BE USED TO CHAIR UP THE SLAB AND BEAM REINFORCING. ROCKS OR LARGE STONES ARE NOT ACCEPTABLE.
   N. REINFORCING STEEL COVERAGE SHALL BE AS FOLLOWS:
      i. SLAB MATS: 3" BOTTOM, 2" TOP, 3" SIDES
      ii. GRADE BEAMS: 3" BOTTOM, 2" TOP, 2" SIDE FORMED, 3" SIDE AGAINST EARTH.

2. WHERE LEAN CONCRETE IS SPECIFIED OR NEEDED, IT SHALL HAVE A MINIMUM STRENGTH OF 2,000 PSI AT 28 DAYS.

3. NON-SHRINK GROUT: SHALL BE A HIGH STRENGTH GROUT WITH A MINIMUM STRENGTH OF 5,000 PSI AT 28 DAYS.

SELECT FILL:
1. BUILDING PADS AND SLABS MAY BE BROUGHT TO GRADE WITH EITHER SELECT FILL DESCRIBED BELOW OR WITH A CRUSHED LIMESTONE BASE MATERIAL MEETING THE REQUIREMENTS OF TXDOT STANDARD SPECIFICATION ITEM 247, TYPE A, GRADE 3.

2. SELECT FILL TO CONSIST OF NATIVE OR IMPORTED SELECT MATERIAL MEETING THE FOLLOWING REQUIREMENTS:
   A. SHALL BE GRANULAR, NON-EXPANSIVE, EARTHEN MATERIALS FREE OF DEBRIS. IT SHALL HAVE LESS THAN 3% ORGANICS BY WEIGHT WHEN TESTED IN ACCORDANCE WITH ASTM D2974.
   B. SHALL HAVE A LIQUID LIMIT LESS THAN 30 AND A PLASTICITY INDEX LESS THAN 12 WHEN TESTED IN ACCORDANCE WITH ASTM D4318.
   C. SHALL CONFORM TO THE FOLLOWING GRADING LIMITS:

SIEVE SIZE	PERCENT BY WEIGHT PASSING SIEVE
3"	100%
2 1/2"	95-100%
3/4"	80-100%
NO. 4	50-90%
NO. 200	0-15%

3. SELECT FILL TO BE COMPACTED TO A MINIMUM OF 95% OF ASTM D698 STANDARD PROCTOR MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM, WITH COMPACTED LIFT THICKNESS OF 6" OR LESS, UNLESS NOTED OTHERWISE.

KEYNOTES:

1. PROPOSED 1 1/2" XLPE HOSE IN 1 1/2" SCHEDULE 40 PVC ENCASEMENT. ROUTE FROM ODOR CONTROL SYSTEM TO MANHOLE WITH XLPE EXTENDED 24" INTO MANHOLE.
2. PROPOSED 1" RPZ WITH INSULATED ENCLOSURE, HOSE BIB, AND HOSE REEL. SEE NOTE 6 AND DETAIL SHEET L5. ALL EXPOSED WATER PIPE SHALL BE INSULATED.
3. PROPOSED JIB CRANE WITH ELECTRIC CHAIN HOIST INSTALLED ON MANUFACTURE RECOMMENDED CONCRETE FOUNDATION.
   JIB CRANE:
   FREE STANDING BASE PLATE MOUNTED. CAPACITY: 1.5 TONS MIN.
   HEIGHT UNDER BOOM = ADEQUATE TO PROVIDE A MIN. LIFTING HEIGHT WITH ELECTRIC CHAIN HOIST INSTALLED OF 14' (16' TYP., BUT MANUFACTURER VERIFY)
   SPAN = 23'
   MANUFACTURER = GORBEL, SPANCO, OR APPROVED EQUAL.
   ELECTRIC CHAIN HOIST WITH PUSH TROLLEY: 1.5 TON MIN. CAPACITY WITH 30 FPM MIN. LIFT SPEED.

3a. SPAN = 23'

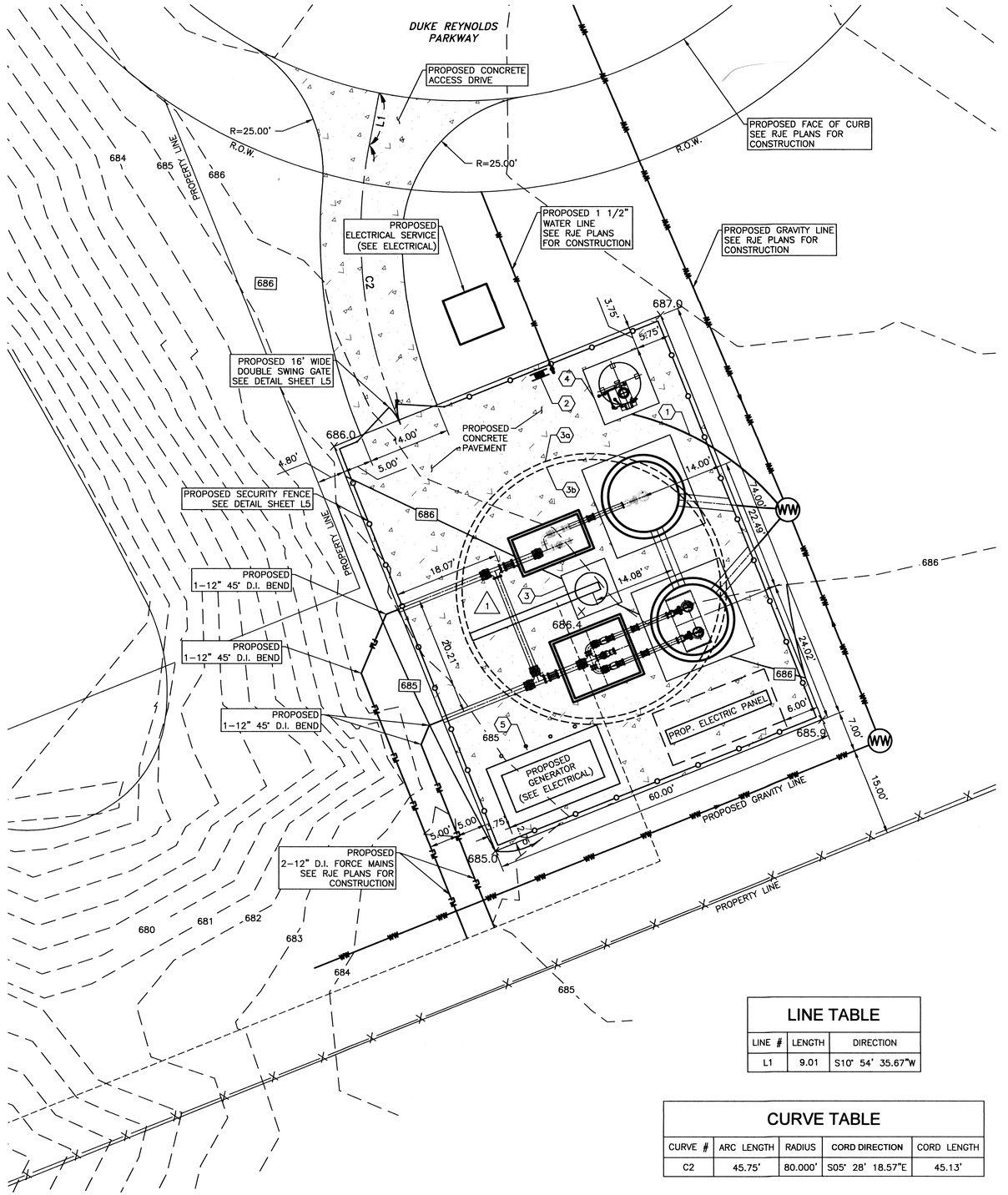
3b. HOIST TRAVEL = 22'

4. PROPOSED ODOR CONTROL SYSTEM ON 10'X10' CONCRETE PAD. SEE DETAIL SHEET L6.
5. PROPOSED PIPE BOLLARDS, 4 EACH. SEE DETAIL SHEET L5

N

0' 10' 20'

SCALE: 1"=10'



LINE TABLE

LINE #	LENGTH	DIRECTION
L1	9.01	S10° 54' 35.67"W

CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	CORD DIRECTION	CORD LENGTH
C2	45.75'	80.000'	S05° 28' 18.57"E	45.13'

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
1	REVISED LOCATION OF 2-12" TEES, 3-12" GATE VALVES, AND CONNECTING PIPE		2020/01/28

REVISIONS

STATE OF TEXAS
William F. Peña
87859
LICENSED PROFESSIONAL ENGINEER
1-28-2020

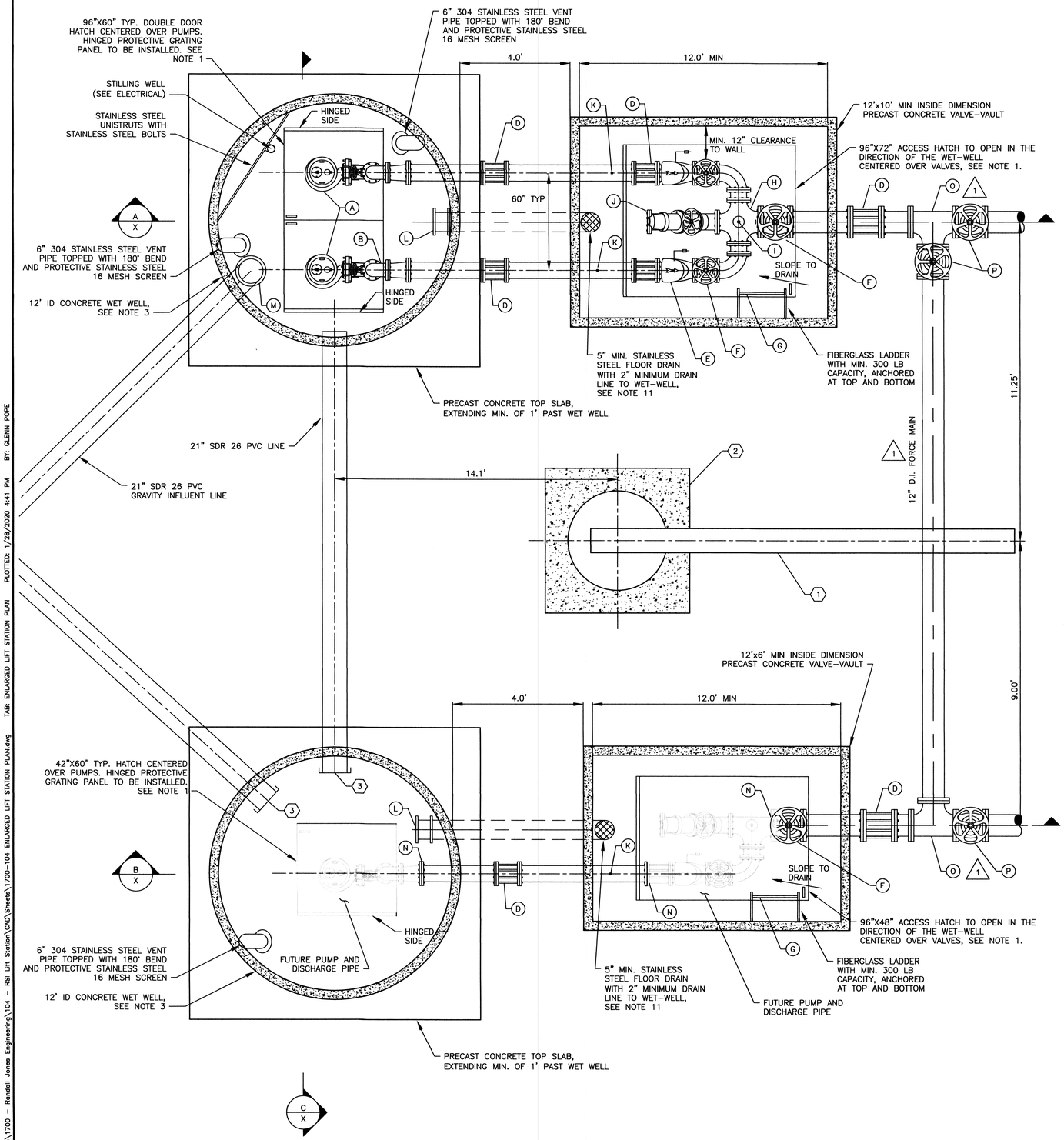
Green Civil Design GCD
Engineering & Consulting
11130 Jollyville Rd., Ste. 101
Austin, Texas 78759
(512) 640-6590
Texas Registered Engineering Firm F-17563

RSI HUTTO LIFT STATION

LIFT STATION SITE PLAN

SHEET
L1
OF 6

FILE: p:\Projects\1700 - Rondell Jones Engineering\104 - RSI Lift Station\CAD\Sheets\1700-104 LIFT STATION SITE PLAN.dwg TAB: LIFT STATION SITE PLAN PLOTTED: 1/28/2020 4:41 PM BY: GLENN POPE



NOTES:

1. VERIFY SIZE OF WET WELL ACCESS HATCH WITH PUMP MANUFACTURER. THE ACCESS FRAMES AND COVERS SHALL BE CONSTRUCTED OF ALUMINUM THREAD PLATE AND SHALL BE WATERTIGHT (GASKET), AND SHALL BE RATED FOR 300 PSF. THE DOORS SHALL OPEN TO 90° AND AUTOMATICALLY LOCK. THE LIFTING HANDLES, HINGES AND ALL FASTENING HARDWARE SHALL BE ALUMINUM OR STAINLESS STEEL, TYPE 316. ACCESS COVER ON VALVE VAULT SHALL BE CENTERED ON THE VALVES AND CLEANOUT FOR ACCESS. ACCESS COVERS SHALL INCLUDE HINGED ALUMINUM GRATES FOR SAFETY. ACCESS COVERS SHALL BE ABLE TO BE SECURED WITH A PADLOCK.
2. THE WET WELL FLOOR SHALL BE GROUTED TO FORM A HOPPER STYLE SUMP AT THE PUMPS. THE SLOPE FOR THE GROUT SURFACE SHOULD BE APPROXIMATELY 1H:1V AND SHOULD EXTEND 18 INCHES TOWARD THE CENTER OF THE WELL FROM ALL SIDES OF THE WELL. GROUT SHALL BE SHAPED TO ENSURE THAT SOLIDS WILL NOT ACCUMULATE. GROUT SHALL NOT INTERFERE WITH EQUIPMENT REMOVAL.
3. WET WELLS AND MANHOLES SHALL BE EITHER PRE-CAST REINFORCED POLYMER CONCRETE (COA SPL NO. WW-146F) OR PRE-CAST REINFORCED STANDARD CONCRETE (COA SPL NO. WW-146):
   A. STANDARD CONCRETE: SHALL BE LINED IN ACCORDANCE WITH COA SPL NO. WW-511 OR NO. WW-511B
   B. POLYMER CONCRETE: NO LINING
4. GUIDE RAILS, BASE ELBOW, FLANGE GRONNET, AND DISCHARGE FLANGE MUST BE SUPPLIED BY PUMP MANUFACTURER. THE PUMP SHALL BE EASILY REMOVED FOR INSPECTION OR SERVICE. PERSONNEL SHALL HAVE NO REASON TO ENTER THE WET WELL. GUIDE RAILS SHALL BE SUPPORTED AT A MAXIMUM INTERVAL OF EVERY 10 FEET WITH STAINLESS STEEL SUPPORTS. SUPPLIER SHALL PROVIDE DIMENSIONS OF THE STAINLESS STEEL GUIDE RAILS TO ENSURE COMPATIBILITY.
5. ALL HARDWARE AND FASTENERS USED SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL. GUIDE BRACKETS FOR EACH PUMP MUST BE SUPPLIED BY THE PUMP MANUFACTURER TO ENSURE COMPATIBILITY WITH SUPPLIED EQUIPMENT.
6. EACH PUMPING UNIT SHALL BE PROVIDED WITH A STAINLESS STEEL LIFTING CHAIN. LIFTING CHAIN SHALL EXTEND AT LEAST 4 FEET ABOVE WET WELL.
7. A 316 STAINLESS STEEL FLOAT MOUNTING ASSEMBLY SHALL BE PROVIDED. THE FLOATS SHALL BE MOUNTED AWAY FROM THE WET WELL INLET, ANY CONTROL WIRING, AND THE PUMPS TO MINIMIZE DISTURBANCE. FLOATS SHALL BE LOCATED OUTSIDE OF THE STILLING WELL.
8. ALL STATIONARY PIPING AND VALVES USED IN THE LIFT STATION WET WELL AND VALVE VAULT SHALL BE DUCTILE IRON OR 316 STAINLESS STEEL WITH A MINIMUM WORKING PRESSURE OF 350 PSI. DUCTILE IRON PIPE AND FITTINGS SHALL BE EPOXY COATED WITH A 100% SOLIDS EPOXY SUITABLE FOR THE WET WELL ENVIRONMENT, PROTECTO 401 (P401) OR APPROVED EQUAL. ALL HARDWARE MUST BE 300 SERIES STAINLESS STEEL. FLANGES SHALL HAVE FULL FACE GASKETS WITH 350 PSI RATING.
9. PUMP DISCHARGE LINES SHALL HAVE 1/4 INCH TAPS WITH STAINLESS STEEL OR BRONZE BALL VALVES. THE TAPS SHALL BE ACCESSIBLE AND LOCATED UPSTREAM OF THE VALVES (ON THE PUMP SIDE) IN THE EXTERNAL VAULT VALVE.
10. IN THE VALVE VAULT, ALL DISCHARGE LINES SHALL HAVE ADEQUATE THRUST SUPPORT MEMBERS AT EACH FITTING. WHERE POSSIBLE, LONG RADIUS 90 DEGREE BENDS SHALL BE USED.
11. THE VALVE VAULT SHALL HAVE A DRAIN TO THE WET WELL. THE DRAIN SHALL HAVE A MINIMUM 5 INCH DIAMETER STAINLESS STEEL SCREEN. THE DRAIN LINE SHALL BE A MINIMUM 2 INCH DIAMETER AND BE FITTED WITH STAINLESS STEEL FLAP VALVE AND A TRAP TO PREVENT GASES FROM ENTERING THE VALVE VAULT.
12. ALL VENTS SHALL BE STAINLESS STEEL. VENTS SHALL BE COATED INSIDE AND OUT PER CITY OF AUSTIN STANDARD SPECIFICATIONS.
13. ALL CONCRETE WET WELL AND VALVE VAULT SECTION JOINTS SHALL BE SEALED WITH "O" RINGS. CANUSA WRAPPED SEAL SHALL BE INSTALLED ON THE OUTSIDE OF EACH JOINT ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
14. WET WELL BOTTOM SLAB TO BE PLACED ON A LEVELING PAD CONSISTING OF 1" DIAMETER WASHED GRAVEL OR CRUSHED ROCK, IN ACCORDANCE WITH THE GEOTECHNICAL REPORT DATED 4/26/2019. THE VALVE VAULT BOTTOM SLAB SHALL BE PLACED ON SELECT FILL, SEE NOTE 15.
15. SELECT FILL: SEE NOTES ON SITE PLAN SHEET.
16. THE EXTERIOR OF THE WET-WELL SHALL BE BACKFILLED WITH CLEAN ON-SITE LOW AND/OR HIGH P.I. SOIL, COMPACTED IN 8-INCH LIFTS TO A MINIMUM OF 95% OF THE OPTIMUM DRY WEIGHT IN ACCORDANCE WITH TXDOT TEST METHOD TEX-113-3. SEE GEOTECHNICAL REPORT DATED 4/26/2019.
17. EXCAVATION: EXCAVATION FOR THE WET-WELL AND VALVE-VAULT SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT DATED 4/26/2019. SURFACE WATER SHALL NOT BE ALLOWED TO ENTER ANY OF THE TRENCHES AND/OR EXCAVATIONS.
18. DEWATERING: GROUNDWATER SHALL BE EXPECTED DURING EXCAVATION. TRENCHES AND/OR EXCAVATIONS SHALL BE KEPT DRY AND FREE OF WATER AT ALL TIMES. SEE GEOTECHNICAL REPORT DATED 4/26/2019 FOR MORE INFORMATION.
19. PIPING, FITTINGS AND VALVES SHALL BE IN ACCORDANCE WITH APPLICABLE CITY OF AUSTIN SPL.
20. ALL PENETRATIONS INTO WET WELL SHALL MEET ASTM C923, BE SEALED WATER AND GAS TIGHT.
21. PUMP/MOTOR DATA:
    KSB K 200-403/1104 XNG-S, 14.11" IMPELLER, OR APPROVED EQUAL
    Q= 2100 GPM RPM= 1800 RPM (MAXIMUM)
    H= 159.5 FT TDH V= 460v, 3 PHASE
    HP= 148 HP

KEYNOTES:

1. PROPOSED JIB CRANE WITH ELECTRIC CHAIN HOIST INSTALLED ON MANUFACTURE RECOMMENDED CONCRETE FOUNDATION.
   JIB CRANE:
   FREE STANDING BASE PLATE MOUNTED. CAPACITY: 1.5 TONS MIN. HEIGHT UNDER BOOM = ADEQUATE TO PROVIDE A MIN. LIFTING HEIGHT WITH ELECTRIC CHAIN HOIST INSTALLED OF 14' (16' TYP., BUT MANUFACTURER VERIFY)
   SPAN = 23'
   MANUFACTURER = GORBEL, SPANCO, OR APPROVED EQUAL.
   ELECTRIC CHAIN HOIST WITH PUSH TROLLEY: 1.5 TON MIN. CAPACITY WITH 30 FPM MIN. LIFT SPEED.
2. CONCRETE JIB CRANE FOUNDATION PER MANUFACTURE'S RECOMMENDATIONS, 8'X8'X4' DEEP TYPICAL. JIB CRANE FOUNDATION TO BE PLACED ON A LEVELING PAD IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
3. INSTALL RESTRAINED PLUG ON 21" LINES INSIDE WET WELL.

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	QTY.
A	SUBMERSIBLE PUMP (SEE PUMP & MOTOR DATA)	2
B	12" ø DUCTILE IRON 90° BEND, FLG	2
C	10"X12" ECCENTRIC REDUCER, FLG, WITH FLAT SIDE TOWARDS PUMP	2
D	12" DRESSER STYLE COUPLING JOINT	5
E	12" SWING CHECK VALVE W/EXTERNAL ARM, FLG. EXTERNAL ARM SHALL BE ON SIDE OF CHECK VALVE CLOSEST TO VAULT WALL	2
F	12" RESILIENT WEDGE GATE VALVE WITH HANDWHEEL, FLG	3
G	FIBERGLASS LADDER WITH MIN. 300 LB CAPACITY, ANCHORED AT TOP AND BOTTOM	2
H	12" ø DUCTILE IRON CROSS, FLG	1
I	2" AUTOMATIC AIR RELEASE VALVE WITH BALL VALVE	1
J	2" PIG PORT AND GATE VALVE WITH FLANGE MOUNTED PIPE SUPPORT ON FLANGE OF GATE VALVE, WITH 2" QUICK CONNECT	1
K	1/4" TAP & BALL VALVE, SEE NOTE 9	2
L	STAINLESS STEEL FLAP VALVE	1
M	21"X21" TEE, PVC	1
N	12" BLIND FLANGE	
O	12"X12" DUCTILE IRON TEE, MJ	
P	12" RESILIENT WEDGE GATE VALVE WITH VALVE BOX	

PUMP LEVEL & ALARM SETTINGS

	PROPOSED PHASE 1		FUTURE ULTIMATE	
CONTROL POINT	ELEVATION (FEET)	DISTANCE FROM WET WELL FLOOR (FEET)	ELEVATION (FEET)	DISTANCE FROM WET WELL FLOOR (FEET)
HIGH LEVEL ALARM	660.20	12.20	660.70	12.70
LAG LAG PUMP ON	659.20	11.20	660.20	12.20
LAG PUMP ON	658.70	10.70	659.70	11.70
LEAD PUMP ON	658.20	10.20	659.20	11.20
LAG LAG PUMP OFF	652.50	4.50	652.50	4.50
LAG PUMP OFF	652.00	4.00	652.00	4.00
LEAD PUMP OFF	651.50	3.50	651.50	3.50
LOW LEVEL ALARM	651.00	3.00	651.00	3.00

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
1	REVISED LOCATION OF 2-12" TEES, 3-12" GATE VALVES, AND CONNECTING PIPE		2020/01/28

REVISIONS

STATE OF TEXAS
William F. Peña
87859
LICENSED PROFESSIONAL ENGINEER
1-28-2020

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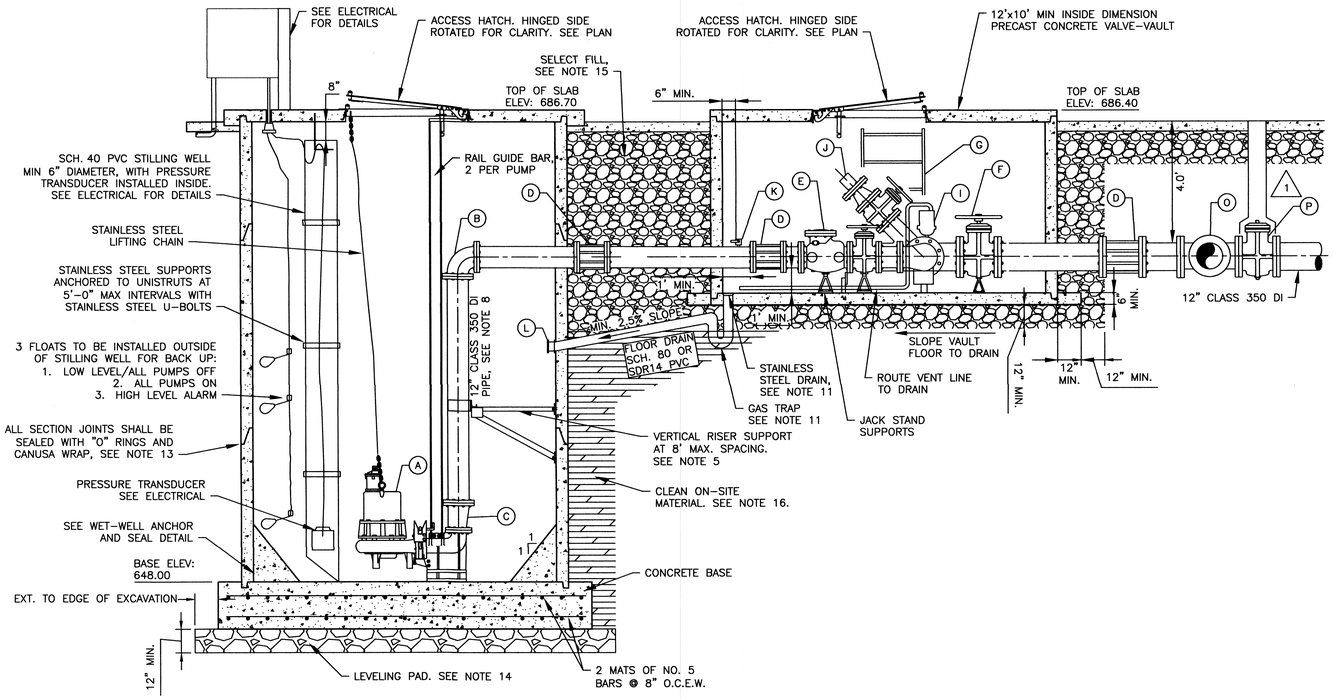
Texas Registered Engineering Firm F-17563

RSI HUTTO LIFT STATION

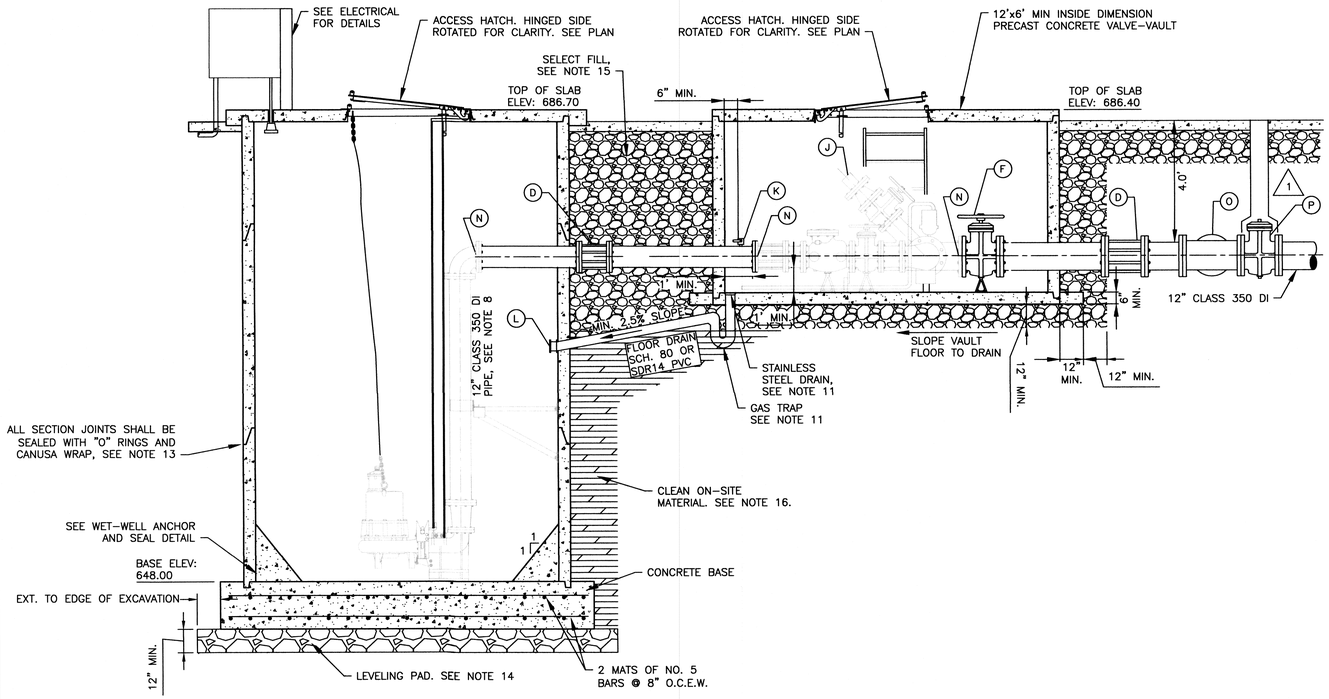
ENLARGED LIFT STATION PLAN

SHEET L2 OF 6

FILE: p:\Projects\1700 - Randall Jones Engineering\104 - RSI Lift Station\CAD\Sheets\1700-104 ENLARGED LIFT STATION PLAN.dwg TAB: ENLARGED LIFT STATION PLAN PLOTTED: 1/28/2020 4:41 PM BY: GLENN POPE



SECTION A-A



SECTION B-B

NOTES:

1. VERIFY SIZE OF WET WELL ACCESS HATCH WITH PUMP MANUFACTURER. THE ACCESS FRAMES AND COVERS SHALL BE CONSTRUCTED OF ALUMINUM THREAD PLATE AND SHALL BE WATERTIGHT (GASKET), AND SHALL BE RATED FOR 300 PSF. THE DOORS SHALL OPEN TO 90° AND AUTOMATICALLY LOCK. THE LIFTING HANDLES, HINGES AND ALL FASTENING HARDWARE SHALL BE ALUMINUM OR STAINLESS STEEL, TYPE 316. ACCESS COVER ON VALVE VAULT SHALL BE CENTERED ON THE VALVES AND CLEANOUT FOR ACCESS. ACCESS COVERS SHALL INCLUDE HINGED ALUMINUM GRATES FOR SAFETY. ACCESS COVERS SHALL BE ABLE TO BE SECURED WITH A PADLOCK.
2. THE WET WELL FLOOR SHALL BE GROUTED TO FORM A HOPPER STYLE SUMP AT THE PUMPS. THE SLOPE FOR THE GROUT SURFACE SHOULD BE APPROXIMATELY 1H:1V AND SHOULD EXTEND 18 INCHES TOWARD THE CENTER OF THE WELL FROM ALL SIDES OF THE WELL. GROUT SHALL BE SHAPED TO ENSURE THAT SOLIDS WILL NOT ACCUMULATE. GROUT SHALL NOT INTERFERE WITH EQUIPMENT REMOVAL.
3. WET WELLS AND MANHOLES SHALL BE EITHER PRE-CAST REINFORCED POLYMER CONCRETE (COA SPL NO. WW-146F) OR PRE-CAST REINFORCED STANDARD CONCRETE (COA SPL NO. WW-146):
   A. STANDARD CONCRETE: SHALL BE LINED IN ACCORDANCE WITH COA SPL NO. WW-511 OR NO. WW-511B
   B. POLYMER CONCRETE: NO LINING
4. GUIDE RAILS, BASE ELBOW, FLANGE GRONNET, AND DISCHARGE FLANGE MUST BE SUPPLIED BY PUMP MANUFACTURER. THE PUMP SHALL BE EASILY REMOVED FOR INSPECTION OR SERVICE. PERSONNEL SHALL HAVE NO REASON TO ENTER THE WET WELL. GUIDE RAILS SHALL BE SUPPORTED AT A MAXIMUM INTERVAL OF EVERY 10 FEET WITH STAINLESS STEEL SUPPORTS. SUPPLIER SHALL PROVIDE DIMENSIONS OF THE STAINLESS STEEL GUIDE RAILS TO ENSURE COMPATIBILITY.
5. ALL HARDWARE AND FASTENERS USED SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL. GUIDE BRACKETS FOR EACH PUMP MUST BE SUPPLIED BY THE PUMP MANUFACTURER TO ENSURE COMPATIBILITY WITH SUPPLIED EQUIPMENT.
6. EACH PUMPING UNIT SHALL BE PROVIDED WITH A STAINLESS STEEL LIFTING CHAIN. LIFTING CHAIN SHALL EXTEND AT LEAST 4 FEET ABOVE WET WELL.
7. A 316 STAINLESS STEEL FLOAT MOUNTING ASSEMBLY SHALL BE PROVIDED. THE FLOATS SHALL BE MOUNTED AWAY FROM THE WET WELL INLET, ANY CONTROL WIRING, AND THE PUMPS TO MINIMIZE DISTURBANCE. FLOATS SHALL BE LOCATED OUTSIDE OF THE STILLING WELL.
8. ALL STATIONARY PIPING AND VALVES USED IN THE LIFT STATION WET WELL AND VALVE VAULT SHALL BE DUCTILE IRON OR 316 STAINLESS STEEL WITH A MINIMUM WORKING PRESSURE OF 350 PSI. DUCTILE IRON PIPE AND FITTINGS SHALL BE EPOXY COATED WITH A 100% SOLIDS EPOXY SUITABLE FOR THE WET WELL ENVIRONMENT, PROTECTO 401 (P401) OR APPROVED EQUAL. ALL HARDWARE MUST BE 300 SERIES STAINLESS STEEL. FLANGES SHALL HAVE FULL FACE GASKETS WITH 350 PSI RATING.
9. PUMP DISCHARGE LINES SHALL HAVE 1/4 INCH TAPS WITH STAINLESS STEEL OR BRONZE BALL VALVES. THE TAPS SHALL BE ACCESSIBLE AND LOCATED UPSTREAM OF THE VALVES (ON THE PUMP SIDE) IN THE EXTERNAL VAULT VALVE.
10. IN THE VALVE VAULT, ALL DISCHARGE LINES SHALL HAVE ADEQUATE THRUST SUPPORT MEMBERS AT EACH FITTING. WHERE POSSIBLE, LONG RADIUS 90 DEGREE BENDS SHALL BE USED.
11. THE VALVE VAULT SHALL HAVE A DRAIN TO THE WET WELL. THE DRAIN SHALL HAVE A MINIMUM 5 INCH DIAMETER STAINLESS STEEL SCREEN. THE DRAIN LINE SHALL BE A MINIMUM 2 INCH DIAMETER AND BE FITTED WITH STAINLESS STEEL FLAP VALVE AND A TRAP TO PREVENT GASES FROM ENTERING THE VALVE VAULT.
12. ALL VENTS SHALL BE STAINLESS STEEL. VENTS SHALL BE COATED INSIDE AND OUT PER CITY OF AUSTIN STANDARD SPECIFICATIONS.
13. ALL CONCRETE WET WELL AND VALVE VAULT SECTION JOINTS SHALL BE SEALED WITH "O" RINGS. CANUSA WRAPPED SEAL SHALL BE INSTALLED ON THE OUTSIDE OF EACH JOINT ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
14. WET WELL BOTTOM SLAB TO BE PLACED ON A LEVELING PAD CONSISTING OF 1" DIAMETER WASHED GRAVEL OR CRUSHED ROCK, IN ACCORDANCE WITH THE GEOTECHNICAL REPORT DATED 4/26/2019. THE VALVE VAULT BOTTOM SLAB SHALL BE PLACED ON SELECT FILL, SEE NOTE 15.
15. SELECT FILL: SEE NOTES ON SITE PLAN SHEET.
16. THE EXTERIOR OF THE WET-WELL SHALL BE BACKFILLED WITH CLEAN ON-SITE LOW AND/OR HIGH P.I. SOIL, COMPACTED IN 8-INCH LIFTS TO A MINIMUM OF 95% OF THE OPTIMUM DRY WEIGHT IN ACCORDANCE WITH TXDOT TEST METHOD TEX-113-3. SEE GEOTECHNICAL REPORT DATED 4/26/2019.
17. EXCAVATION: EXCAVATION FOR THE WET-WELL AND VALVE-VAULT SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT DATED 4/26/2019. SURFACE WATER SHALL NOT BE ALLOWED TO ENTER ANY OF THE TRENCHES AND/OR EXCAVATIONS.
18. DEWATERING: GROUNDWATER SHALL BE EXPECTED DURING EXCAVATION. TRENCHES AND/OR EXCAVATIONS SHALL BE KEPT DRY AND FREE OF WATER AT ALL TIMES. SEE GEOTECHNICAL REPORT DATED 4/26/2019 FOR MORE INFORMATION.
19. PIPING, FITTINGS AND VALVES SHALL BE IN ACCORDANCE WITH APPLICABLE CITY OF AUSTIN SPL.
20. ALL PENETRATIONS INTO WET WELL SHALL MEET ASTM C923, BE SEALED WATER AND GAS TIGHT.
21. PUMP/MOTOR DATA:
    KSB K 200-403/1104 XNG-S, 14.11" IMPELLER, OR APPROVED EQUAL
    Q= 2100 GPM RPM= 1800 RPM (MAXIMUM)
    H= 159.5 FT TDH V= 460v, 3 PHASE
    HP= 148 HP

KEYNOTES:

1. PROPOSED JIB CRANE WITH ELECTRIC CHAIN HOIST INSTALLED ON MANUFACTURE RECOMMENDED CONCRETE FOUNDATION.
   JIB CRANE:
   FREE STANDING BASE PLATE MOUNTED. CAPACITY: 1.5 TONS
   MIN. HEIGHT UNDER BOOM = ADEQUATE TO PROVIDE A MIN. LIFTING HEIGHT WITH ELECTRIC CHAIN HOIST INSTALLED OF 14' (16' TYP., BUT MANUFACTURER VERIFY)
   SPAN = 23'
   MANUFACTURER = GORBEL, SPANCO, OR APPROVED EQUAL.
   ELECTRIC CHAIN HOIST WITH PUSH TROLLEY: 1.5 TON MIN. CAPACITY WITH 30 FPM MIN. LIFT SPEED.
2. CONCRETE JIB CRANE FOUNDATION PER MANUFACTURE'S RECOMMENDATIONS, 8'X8'X4' DEEP TYPICAL. JIB CRANE FOUNDATION TO BE PLACED ON A LEVELING PAD IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
3. INSTALL RESTRAINED PLUG ON 21" LINES INSIDE WET WELL.

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	QTY.
A	SUBMERSIBLE PUMP (SEE PUMP & MOTOR DATA)	2
B	12" ø DUCTILE IRON 90° BEND, FLG	2
C	10"X12" ECCENTRIC REDUCER, FLG, WITH FLAT SIDE TOWARDS PUMP	2
D	12" DRESSER STYLE COUPLING JOINT	5
E	12" SWING CHECK VALVE W/EXTERNAL ARM, FLG. EXTERNAL ARM SHALL BE ON SIDE OF CHECK VALVE CLOSEST TO VAULT WALL	2
F	12" RESILIENT WEDGE GATE VALVE WITH HANDWHEEL, FLG	3
G	FIBERGLASS LADDER WITH MIN. 300 LB CAPACITY, ANCHORED AT TOP AND BOTTOM	2
H	12" ø DUCTILE IRON CROSS, FLG	1
I	2" AUTOMATIC AIR RELEASE VALVE WITH BALL VALVE	1
J	2" PIG PORT AND GATE VALVE WITH FLANGE MOUNTED PIPE SUPPORT ON FLANGE OF GATE VALVE, WITH 2" QUICK CONNECT	1
K	1/4" TAP & BALL VALVE, SEE NOTE 9	2
L	STAINLESS STEEL FLAP VALVE	1
M	21"X21" TEE, PVC	1
N	12" BLIND FLANGE	
O	12"X12" DUCTILE IRON TEE, MJ	
P	12" RESILIENT WEDGE GATE VALVE WITH VALVE BOX	

PUMP LEVEL & ALARM SETTINGS

CONTROL POINT	PROPOSED PHASE 1		FUTURE ULTIMATE	
	ELEVATION (FEET)	DISTANCE FROM WET WELL FLOOR (FEET)	ELEVATION (FEET)	DISTANCE FROM WET WELL FLOOR (FEET)
HIGH LEVEL ALARM	660.20	12.20	660.70	12.70
LAG LAG PUMP ON	659.20	11.20	660.20	12.20
LAG PUMP ON	658.70	10.70	659.70	11.70
LEAD PUMP ON	658.20	10.20	659.20	11.20
LAG LAG PUMP OFF	652.50	4.50	652.50	4.50
LAG PUMP OFF	652.00	4.00	652.00	4.00
LEAD PUMP OFF	651.50	3.50	651.50	3.50
LOW LEVEL ALARM	651.00	3.00	651.00	3.00

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
1	REVISED LOCATION OF 2-12" TEES, 3-12" GATE VALVES, AND CONNECTING PIPE		2020/01/28

REVISIONS

STATE OF TEXAS
William F. Peña
87853
LICENSED
PROFESSIONAL ENGINEER
1-28-2020

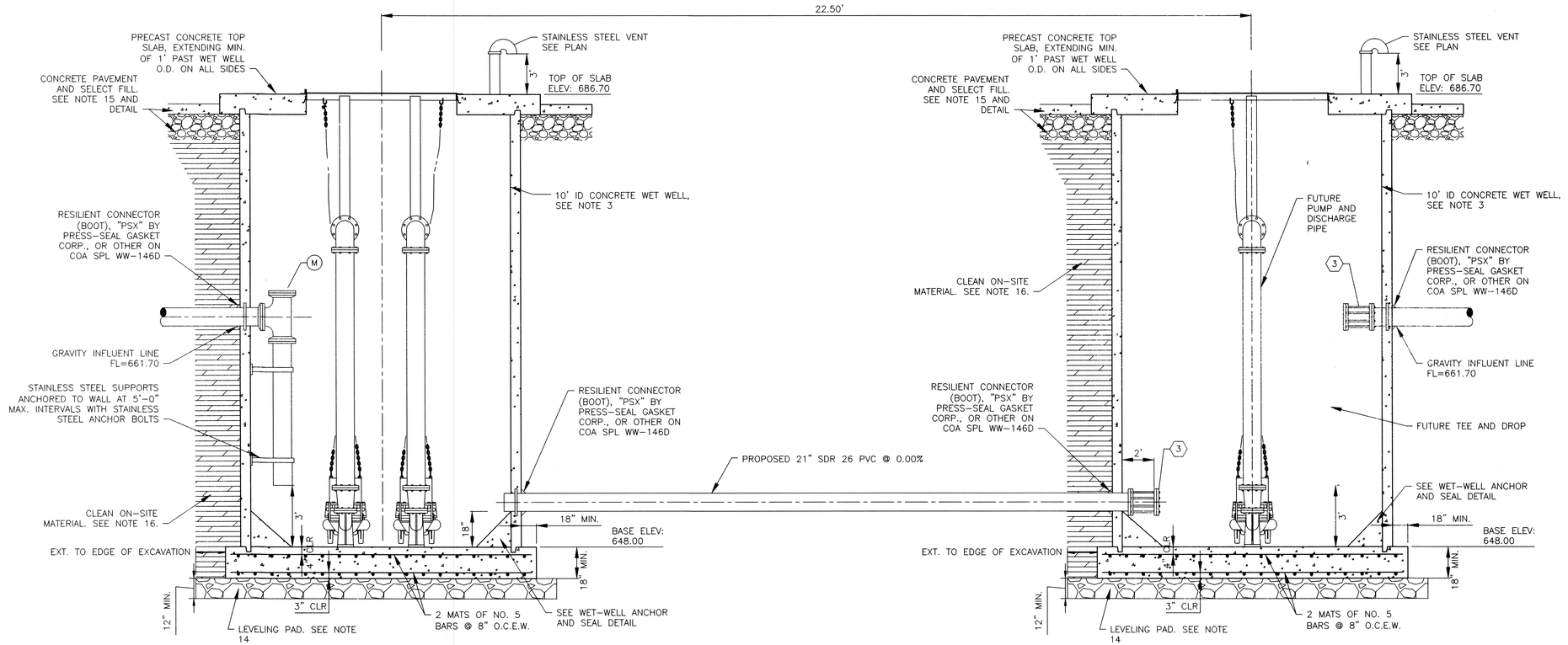
Green GCD Civil Design
Engineering & Consulting
11130 Jollyville Rd. Ste. 101
Austin, Texas 78759
(512) 640-6590
Texas Registered Engineering Firm F-17563

RSI HUTTO LIFT STATION

LIFT STATION CROSS SECTIONS (SHEET 1 OF 2)

SHEET L3 OF 6

FILE: p:\Projects\1700 - Rondell Jones Engineering\104 - RSI Lift Station\CAD\Sheets\1700-104 LIFT STATION CROSS SECTIONS.dwg TAB: LIFT STATION CROSS SECTIONS (SHEET 1 OF 2) PLOTTED: 1/28/2020 4:41 PM BY: GLENN POPE



SECTION C-C

NOTES:

1. VERIFY SIZE OF WET WELL ACCESS HATCH WITH PUMP MANUFACTURER. THE ACCESS FRAMES AND COVERS SHALL BE CONSTRUCTED OF ALUMINUM THREAD PLATE AND SHALL BE WATERTIGHT (GASKET), AND SHALL BE RATED FOR 300 PSF. THE DOORS SHALL OPEN TO 90° AND AUTOMATICALLY LOCK. THE LIFTING HANDLES, HINGES AND ALL FASTENING HARDWARE SHALL BE ALUMINUM OR STAINLESS STEEL, TYPE 316. ACCESS COVER ON VALVE VAULT SHALL BE CENTERED ON THE VALVES AND CLEANOUT FOR ACCESS. ACCESS COVERS SHALL INCLUDE HINGED ALUMINUM GRATES FOR SAFETY. ACCESS COVERS SHALL BE ABLE TO BE SECURED WITH A PADLOCK.
2. THE WET WELL FLOOR SHALL BE GROUTED TO FORM A HOPPER STYLE SUMP AT THE PUMPS. THE SLOPE FOR THE GROUT SURFACE SHOULD BE APPROXIMATELY 1H:1V AND SHOULD EXTEND 18 INCHES TOWARD THE CENTER OF THE WELL FROM ALL SIDES OF THE WELL. GROUT SHALL BE SHAPED TO ENSURE THAT SOLIDS WILL NOT ACCUMULATE. GROUT SHALL NOT INTERFERE WITH EQUIPMENT REMOVAL.
3. WET WELLS AND MANHOLES SHALL BE EITHER PRE-CAST REINFORCED POLYMER CONCRETE (COA SPL NO. WW-146F) OR PRE-CAST REINFORCED STANDARD CONCRETE (COA SPL NO. WW-146):
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KEYNOTES:

1. PROPOSED JIB CRANE WITH ELECTRIC CHAIN HOIST INSTALLED ON MANUFACTURE RECOMMENDED CONCRETE FOUNDATION.
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   ELECTRIC CHAIN HOIST WITH PUSH TROLLEY: 1.5 TON MIN. CAPACITY WITH 30 FPM MIN. LIFT SPEED.
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3. INSTALL RESTRAINED PLUG ON 21" LINES INSIDE WET WELL.

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	QTY.
A	SUBMERSIBLE PUMP (SEE PUMP & MOTOR DATA)	2
B	12" ø DUCTILE IRON 90° BEND, FLG	2
C	10"X12" ECCENTRIC REDUCER, FLG, WITH FLAT SIDE TOWARDS PUMP	2
D	12" DRESSER STYLE COUPLING JOINT	5
E	12" SWING CHECK VALVE W/EXTERNAL ARM, FLG. EXTERNAL ARM SHALL BE ON SIDE OF CHECK VALVE CLOSEST TO VAULT WALL	2
F	12" RESILIENT WEDGE GATE VALVE WITH HANDWHEEL, FLG	3
G	FIBERGLASS LADDER WITH MIN. 300 LB CAPACITY, ANCHORED AT TOP AND BOTTOM	2
H	12" ø DUCTILE IRON CROSS, FLG	1
I	2" AUTOMATIC AIR RELEASE VALVE WITH BALL VALVE	1
J	2" PIG PORT AND GATE VALVE WITH FLANGE MOUNTED PIPE SUPPORT ON FLANGE OF GATE VALVE, WITH 2" QUICK CONNECT	1
K	1/4" TAP & BALL VALVE, SEE NOTE 9	2
L	STAINLESS STEEL FLAP VALVE	1
M	21"X21" TEE, PVC	1
N	12" BLIND FLANGE	

PUMP LEVEL & ALARM SETTINGS

	PROPOSED PHASE 1		FUTURE ULTIMATE	
CONTROL POINT	ELEVATION (FEET)	DISTANCE FROM WET WELL FLOOR (FEET)	ELEVATION (FEET)	DISTANCE FROM WET WELL FLOOR (FEET)
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LAG PUMP ON	658.70	10.70	659.70	11.70
LEAD PUMP ON	658.20	10.20	659.20	11.20
LAG LAG PUMP OFF	652.50	4.50	652.50	4.50
LAG PUMP OFF	652.00	4.00	652.00	4.00
LEAD PUMP OFF	651.50	3.50	651.50	3.50
LOW LEVEL ALARM	651.00	3.00	651.00	3.00

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

STATE OF TEXAS
William F. Peña
87858
LICENSED
PROFESSIONAL ENGINEER
10-16-2019

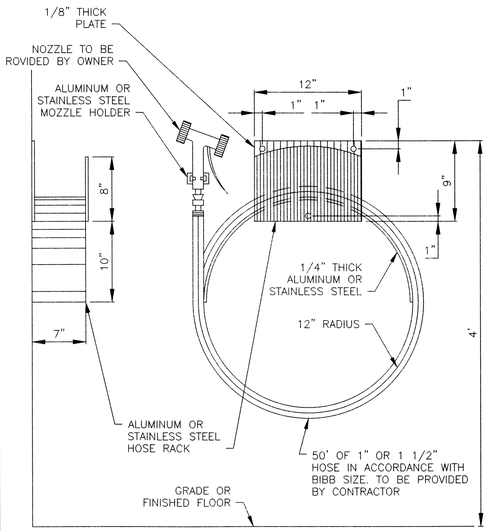
Green Civil Design GCD
Engineering & Consulting
Texas Registered Engineering Firm F-17563
11130 Jollyville Rd. Ste. 101
Austin, Texas 78759
(512) 640-6590

RSI HUTTO LIFT STATION

LIFT STATION CROSS SECTIONS (SHEET 2 OF 2)

SHEET L4 OF 6

FILE: p:\Projects\1700 - Rondall Jones Engineering\104 - RSI Lift Station\CAD\Sheets\1700-104 LIFT STATION CROSS SECTIONS.dwg TAB: LIFT STATION CROSS SECTIONS (SHEET 2 OF 2) PLOTTED: 10/16/2019 4:26 PM BY: SVETLANA DOYBAN



WASH HOSE STATION DETAIL
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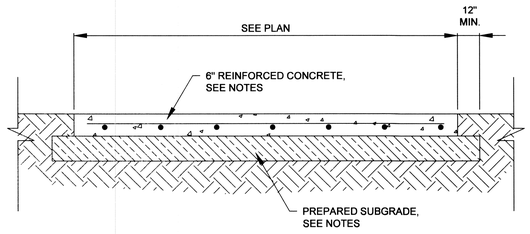


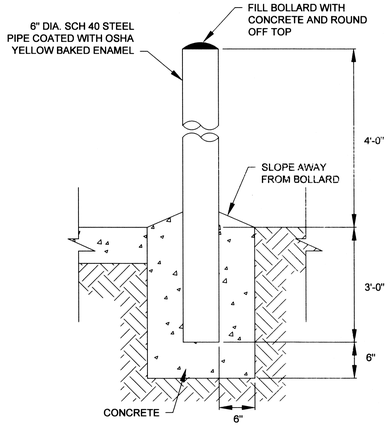
NOTES:

1. CONCRETE TO HAVE A MINIMUM STRENGTH OF 3,500 PSI AT 28 DAYS, AND SHALL BE REINFORCED WITH NO. 3 BARS AT 12" O.C.E.W.

2. EXPANSION JOINTS TO BE SPACED TRANSVERSELY AT 25' O.C. CONSTRUCTION JOINTS TO BE PLACED AT THE END OF EACH DAY'S POUR.

3. SUBGRADE TO BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, "XXXX".

CONCRETE ACCESS DRIVE DETAIL
SCALE: NTS



PIPE BOLLARD DETAIL
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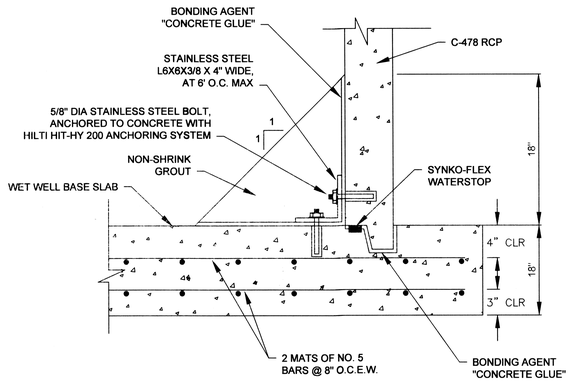


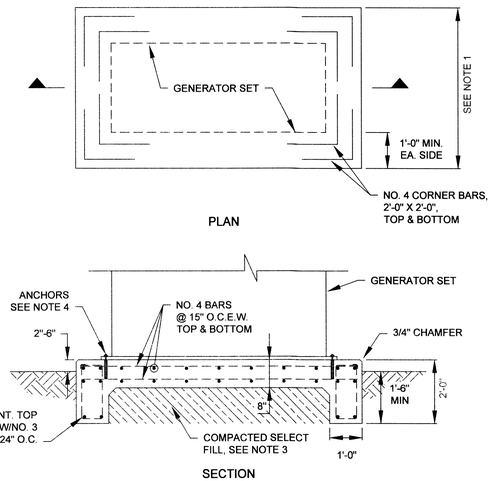
NOTES:

1. CONCRETE TO HAVE A MINIMUM STRENGTH OF 3,500 PSI AT 28 DAYS.

2. SEE NOTES ON CROSS-SECTION SHEET REGARDING SUBGRAGE.

3. ANCHOR BOLTS IN EXISTING CONCRETE: DRILLED HOLES SHALL BE COMPLETELY CLEANED USING A BRUSH AND COMPRESSED AIR PRIOR TO INSTALLING BOLT AND ADHESIVE. MANUFACTURER'S RECOMMENDATIONS SHALL BE FOLLOWED FOR INSTALLATION.

WET-WELL ANCHOR AND SEAL DETAIL
SCALE: NTS



PLAN

SECTION

NOTES:

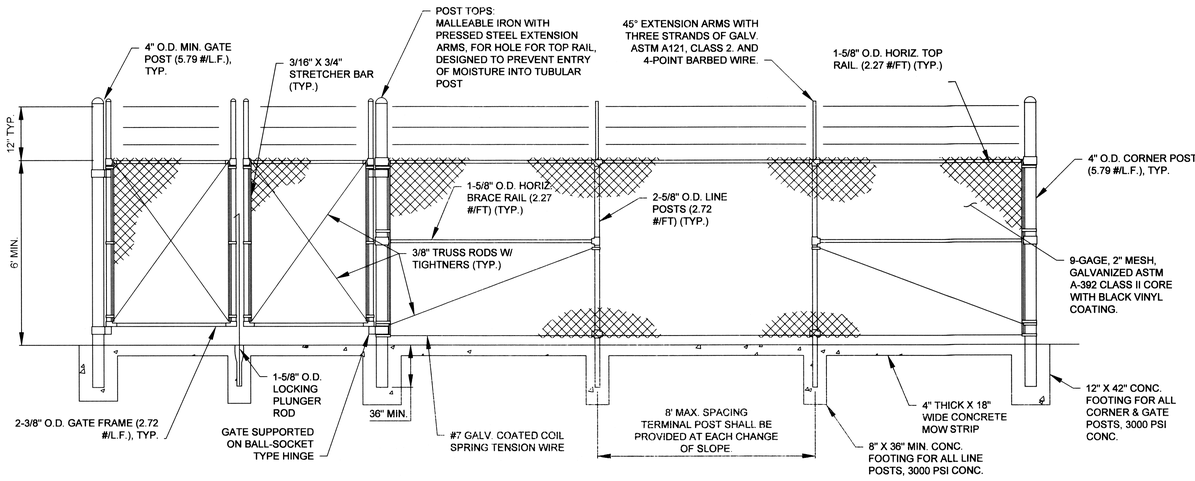
1. FINAL SIZE OF PAD TO BE BASED ON GENERATOR SET DIMENSIONS. PAD TO EXTEND BEYOND GENERATOR SET A MINIMUM OF 12" ON ALL SIDES.

2. SLAB TO BE POURED MONOLITHICALLY WITH BEAMS.

3. SELECT FILL TO BE COMPACTED TO 95% MINIMUM OF ASTM D698 STANDARD PROCTOR MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM, WITH LIFT THICKNESSES OF 6" OR LESS.

4. PROVIDE STAINLESS STEEL THREADED ANCHORS AT EACH ANCHOR LOCATION. INSTALL NUMBER AND SIZE OF THREADED ANCHOR RODS PER GENERATOR MANUFACTURER'S RECOMMENDATIONS, AND AT ALL ANCHOR LOCATIONS. DRILLED HOLES SHALL BE COMPLETELY CLEANED USING A BRUSH AND COMPRESSED AIR PRIOR TO INSTALLING ANCHOR AND ADHESIVE. HILTI HIT-HY 200 ADHESIVE SYSTEM TO BE USED, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

GENERATOR PAD DETAIL
SCALE: NTS



NOTES:

1. THE GATE SHALL COME COMPLETE WITH TAMPER PROOF FRAMES, HINGES, BRACED AND PAD LOCKABLE. THE HINGES SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE. THE GATE SHALL BE INSTALLED SO THAT IT MAY NOT BE REMOVED WITHOUT DISASSEMBLING THE HARDWARE. THE HARDWARE ATTACHMENT BOLTS SHALL BE PEENED SO THAT REMOVAL WILL BE DIFFICULT.
2. ALL POST SHALL BE SET PLUM AND SPACED AT MAXIMUM OF EIGHT (8) FEET APART. THE FENCE SHALL BE INSTALLED TO MAINTAIN NOT MORE THAN TWO (2) INCHES OF CLEARANCE FROM FINISHED GRADE.
3. FENCE HARDWARE TO BE RUST PROOF AND TAMPER PROOF.
4. GATES TO BE DESIGNED BY MANUFACTURER TO WITHSTAND OPENING WIDTH DESIGNED ON PLANS. GATE FRAME AND POST DIMENSIONS SHOWN ARE MINIMUMS. CLEARANCE BETWEEN GATES WHEN CLOSED SHALL BE 3" MAXIMUM.
5. MOW STRIP SHALL BE FORMED FROM CONCRETE, 3,000 PSI MINIMUM. IT SHALL BE EIGHTEEN (18) INCHES WIDE AND A MINIMUM OF FOUR (4) INCHES THICK WITH TWO (2) INCHES ABOVE GROUND LEVEL. TWO (2) ROWS OF NUMBER THREE (3) BARS OF STEEL SHALL BE EVENLY SPACED ALONG THE FULL LENGTH OF THE MOW STRIP, AND A NUMBER THREE (3) BAR OF STEEL SHALL BE CROSS-TIED EVERY TWENTY (20) FEET. FENCE POST SHALL BE INSTALLED IN CENTER OF MOW STRIP.

SECURITY FENCE (CHAIN LINK) DETAIL
SCALE: NTS

RECORD DRAWING

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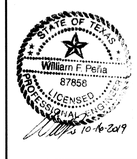

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RSI HUTTO LIFT STATION

LIFT STATION DETAILS

SHEET
L5
OF 6

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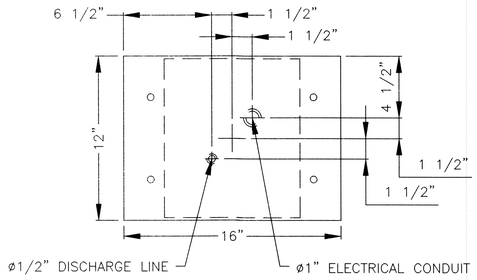
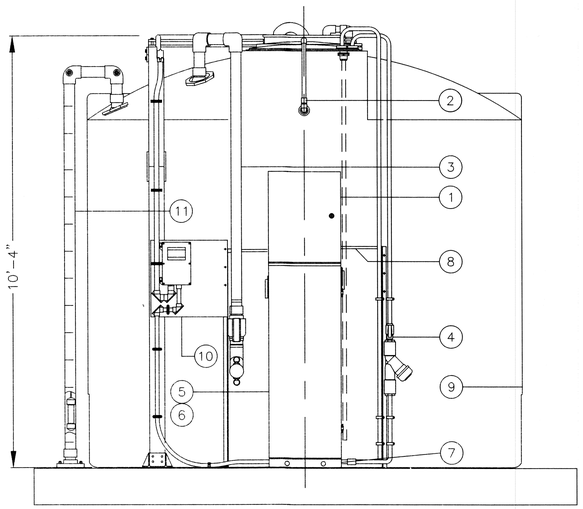
FIGURE 3-1



RISER/SLAB PENETRATION DETAIL

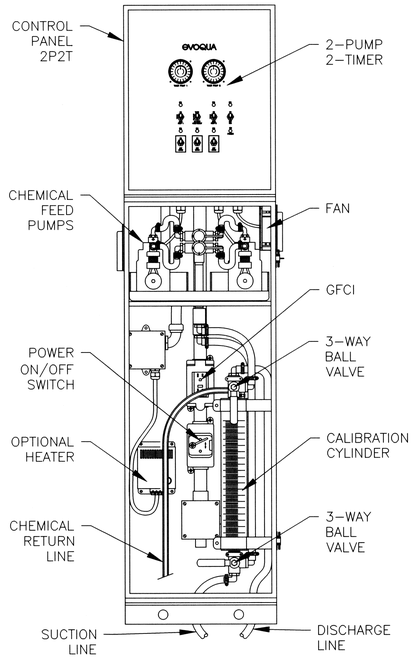
NOMENCLATURE

1. 2P2T CONTROL BOX ASSEMBLY
2. OVERFILL LEVEL ASSEMBLY
3. ø2" FILL PIPING ASSEMBLY
4. ø1/2" SUCTION PIPING ASSEMBLY
5. 2P2T CALIBRATION STAND ASSEMBLY W/PUMPS
6. CHEMICAL FEED PUMPS
7. 12" X 16" PIPE STAND RISER
8. 36" X 24" X 48" SS PIPE/UTILITY TANK STAND
9. 2,550 GALLON TANK: 7'-1" DIAMETER, 10'-4" HIGH
10. ULTRASONIC LEVEL INDICATOR ASSEMBLY
11. MECHANICAL LEVEL INDICATOR ASSEMBLY

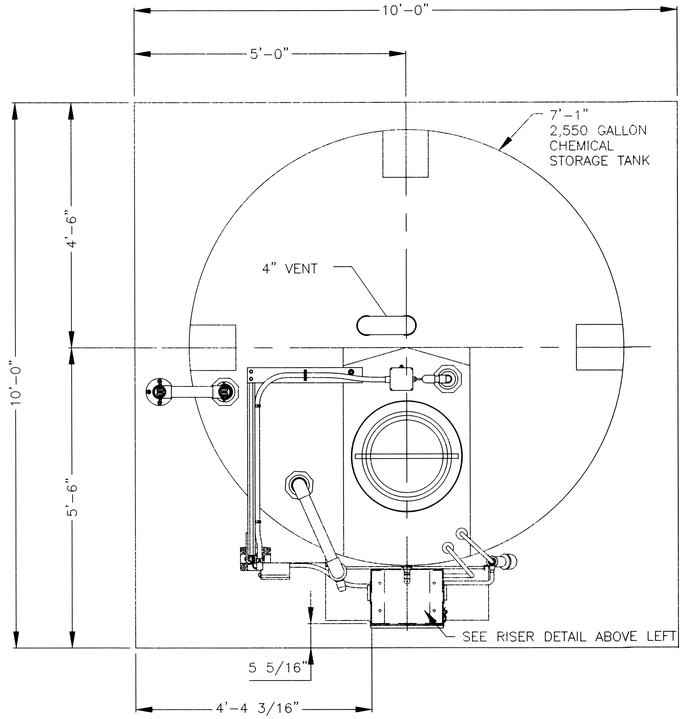


ELEVATION VIEW

PAD & EQUIPMENT LAYOUT IS ONLY SUGGESTED
PAD DOES NOT INCLUDE ANY CONTAINMENT CURBING
CAUTION: CALIBRATION STAND DOOR EXTENDS PAST PAD DIMENSIONS



DETAIL VIEW
NOT TO SCALE



PLAN VIEW

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CHECKER	DATE
ENGINEER FRYL	07/12/16
MANAGER	DATE
FILE:	
SCALE: 29	

TITLE: ASSM MASTER CHEMFEED 2550 GALLON BLACK 2P2T SYSTEM

CLIENT

EVOQUA WATER TECHNOLOGIES
WATER TECHNOLOGIES
Sarasota, FL
1-941-355-2971

PROJECT	DRAWING	SHEET	REV
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RSI HUTTO LIFT STATION

ODOR CONTROL DETAILS

SHEET
L6
OF 6

FILE: p:\Projects\1700 - Rondoll Jones Engineering\104 - RSI Lift Station\CAD\Sheets\1700-104 ODOR CONTROL DETAILS.dwg TAB: ODOR CONTROL DETAILS PLOTTED: 10/16/2019 4:26 PM BY: SVETLANA DOYBAN

PLAN SYMBOLS

LE LT	LEVEL TRANSDUCER; LEVEL TRANSMITTER	CONDUIT ROUTED UNDERGROUND OR IN FLOOR SLAB.
FE FT	FLOW TRANSDUCER; FLOW TRANSMITTER	EXPOSED OR CONCEALED CONDUIT CONDUIT ABOVE FLOOR
PE PT	PRESSURE TRANSDUCER; PRESSURE TRANSMITTER	3#10(P), 1#10(G), 3/4"C. — CONDUIT & WIRE DESIGNATION, E.G., 3 #10 POWER, 1 #10 (G) IN ¾" CONDUIT; (P)=POWER; (C) = CONTROL; (G) = GROUND; (A) = ALARM; (SH) = SPACE HEATER; (I) = INSTRUMENTATION; (SP) = SPARE WIRES (EC) = EMPTY CONDUIT
FIRQ	FLOW INDICATING RECORDER WITH TOTALIZER	
ZS	LIMIT SWITCH	CONDUIT TURNING DOWN
SV	SOLENOID VALVE	CONDUIT TURNING UP
FS	FLOW SWITCH	CONDUIT WITH TWISTED PR SHIELDED CABLE. SHOWN ABOVE FINISH FLOOR OR GRADE AND SHOWN BELOW.
CL	CHLORINATOR	WIRING IN CONDUIT. SHORT LINES INDICATE HOT WIRES; LONG LINE INDICATES NEUTRAL; SEE SYMBOL BELOW FOR GROUND WIRE, #12 AWG TYPE THWN UON
CLD	CHLORINE LEAK DETECTOR	GROUND WIRE. IN CONDUIT.
DS	DOOR OPERATED LIMIT SWITCH	SWITCH WIRE. IN CONDUIT.
TB1	TERMINAL BOX WITH DESIGNATION, NEMA 3R	HOT, NEUTRAL & GROUND, DENOTES THE LIMITS OF SWITCHING WHEN SHOWN BETWEEN ROOMS ON LIGHTING PLANS
RWT	VFD "REFLECTIVE WAVE TRAP"	GROUND WIRE. BARE COPPER. UNDERGROUND.
PB	PB = ELECTRICAL POWER PULL BOX OR MANHOLE	RTU — RTU — HOMERUN TO RTU, BELOW FLOOR/GRADE AND ABOVE.
PH	PH = ELECTRICAL POWER HAND HOLE	MCC — MCC — HOMERUN TO MCC, BELOW FLOOR/GRADE AND ABOVE.
HH	HH = ELECTRICAL POWER HAND HOLE	B1–P — CONDUIT AND WIRE DESIGNATION.
D	WALL MOUNTED EXTERIOR LIGHTING FIXTURE WITH DESIGNATION IN CENTER	2 — KEYNOTE REFERENCE
		75 — MOTOR CONNECTION. HP INDICATED. AS SHOWN ON PLAN DWG.
		FLEXIBLE CONDUIT OR PORTABLE CABLE
A A	SQUARE OR ROUND CEILING MOUNTED INTERIOR OR SOFFIT MOUNTED EXTERIOR INCANDESCENT, HID OR FLUORESCENT LIGHTING FIXTURE WITH DESIGNATION	ENCLOSURE
		MOTOR CONTROL CENTER. NO. OF SECTIONS INDICATED.
		DISCONNECT SWITCH.
A	FLUORESCENT LIGHTING FIXTURE WITH DESIGNATION	J JB — JUNCTION BOX
C	HID, FLUORESCENT OR INCANDESCENT STANCHION FIXTURE WITH DESIGNATION	GROUND ROD. 3/4" X 10'–0"
B	POLE MOUNTED HID OR FLUORESCENT CUTOFF EXTERIOR LIGHTING FIXTURE	250 VOLT, 50A, 2 POLE, GROUNDING RECEPTACLE. COORDINATE AMPERAGE WITH CIRCUIT BREAKER SHOWN TO SERVE RECEPTACLE. PROVIDE SS WEATHERPROOF BACKBOX & COVER WHEN SHOWN AT EXTERIOR LOCATIONS.
	2' x 4' FLUORESCENT LAYIN TROFFER LIGHTING FIXTURE	120 VOLT, 20A, 2 POLE, GROUND FAULT INTERRUPTER TYPE DUPLEX RECEPTACLE. PROVIDE WITH SS WEATHERPROOF COVER AND SS BACKBOX WHEN SHOWN AT EXTERIOR LOCATIONS.
TC PC	TIME CLOCK AND ROOF MOUNTED PHOTOCELL	120 VOLT, 20A, 2 POLE, GROUNDING DUPLEX CONVENIENCE OUTLET OR RECEPTACLE. (ABBREVIATION=DCO)
SF-1	MECHANICAL, PLUMBING OR EQUIPMENT BY OTHERS. DESIGNATION UNDERLINED AND EQUIPMENT CROSSHATCHED	HEAT TRACE NON–GFIC (UON) 120 VOLT, 20A, 2 POLE, GROUNDING WEATHERPROOF SIMPLEX DEDICATED OUTLET OR RECEPTACLE. (ABBREVIATION=SDO)
RTU	REMOTE TERMINAL UNIT	MANUAL MOTOR SWITCH WITH THERMAL OVERLOADS AND PILOT LT.; (PROVIDE SS BACKBOX & SS WP COVER WHEN SHOWN ON EXTERIOR)
	ANTENNA	SPST SWITCH WHEN SHOWN ON LIGHTING PLANS DENOTES SWITCHING FOR THAT SAME ROOM, WHICH IT IS SHOWN; OR SS WEATHERPROOF SWITCH WITH PILOT LT PROVIDE WITH SS (STAINLESS STEEL) BACKBOX AND SS WP COVER.
GEN	REMOTE GENERATOR ANNUNCIATOR	
CCPI	CLARIFIER CONTROL PANEL	LOW VOLTAGE (120/208V)
		HIGH VOLTAGE (277/480V)
ALCP	AIR LIFT CONTROL PANEL	TRANSFORMER – SEE ONE LINE FOR SIZE
LD TS CAS	PUMP TEMPERATURE SWITCH; HOUSING LEAK DETECTOR; MOISTURE AND TEMPERATURE MONITOR.	SS — EMERGENCY PUSHBUTTON – SQUARE 'D' #9001KR2B–KA1 RED MOMENTARY PUSHBUTTON WITH EXTENDED GUARD AND PUSH–TO–TEST PILOT LIGHT.
IMR	MOTOR WINDING INSULATION MONITOR RELAY	SELECTOR SWITCH: HOA = HAND–OFF AUTO; OOT = ON–OFF–TEST; LOR = LOCAL–OFF–REMOTE; SS = START–STOP; K = KEY OPERATED; MOR = MANUAL–OFF–REMOTE
R	PILOT LIGHT. COLOR INDICATED.	

ONE LINE DIAGRAM SYMBOLS

3P–20A	CIRCUIT BREAKER, THERMAL MAGNETIC, RATING AND NUMBER OF POLES AS SHOWN.
SSM	SOLID STATE METERING UNIT.
SP TVSS	SURGE PROTECTION/TRANSIENT VOLTAGE SURGE SUPPRESSOR
480 V / 15 KVA / 120/240V	POWER TRANSFORMER. RATING AND PRIMARY AND SECONDARY VOLTAGES AND WINDING CONNECTIONS INDICATED.
1200:5	CURRENT TRANSFORMER. TURNS RATIO AND NUMBER REQ'D. AS INDICATED.
75	MOTOR. HP INDICATED. AS SHOWN ON ONE–LINE DIAGRAM.
TDR	TIME DELAY RELAY
R	PHASE MONITOR
3 HMCP	FULL VOLTAGE , NON REVERSING (FVNR) COMBINATION MAGNETIC MOTOR STARTER WITH MOTOR CIRCUIT PROTECTOR (HMCP) DISCONNECT, AND THERMAL OVERLOADS. NEMA SIZE SHOWN. (WHEN SHOWN GRAY SCALED WITH DASHED LINES, PROVIDE SPARE SPACE IN MCC FOR FUTURE DEVICE, SIZE AS SHOWN))
IC HMCP OC	SOFT START – SOLID STATE NON–REVERSING STARTER WITH MOTOR CIRCUIT PROTECTOR DISCONNECT, MAIN FUSE AND ISOLATING CONTACTOR. (WHEN SHOWN GRAY SCALED WITH DASHED LINES, PROVIDE SPARE SPACE IN MCC FOR FUTURE DEVICE, SIZE AS SHOWN))
HMCP VFD OC	VARIABLE FREQUENCY DRIVE WITH INPUT FUSE HMCP DISCONNECT AND OUTPUT CONTACTOR. (WHEN SHOWN GRAY SCALED WITH DASHED LINES, PROVIDE SPARE SPACE IN MCC FOR FUTURE DEVICE, SIZE AS SHOWN))
TSH MSH	MOTOR TEMPERATURE SWITCH; MOTOR SPACE HEATER
	PUSHBUTTON – START/STOP UNLESS OTHERWISE NOTED
	SELECTOR SWITCH
R	PILOT LIGHT. COLOR INDICATED.
ETM	ELAPSED TIME METER
HOA	HAND–OFF–AUTO SELECTOR SWITCH
PC	PHOTOCELL
KWH	POWER COMPANY KILOWATT HOUR METER
	FUSED SWITCH. FOR MOTOR SPACE HEATER PROTECTION
J	COMBINATION FUSIBLE DISCONNECT/STARTER. PROVIDE MINIMUM NEMA SIZE 1 STARTER & FUSE PER MOTOR MFPR'S RECOMMENDATIONS
LSLL	FLOAT LEVEL SWITCH. LSHH=HIGH LEVEL;LSLL=LOW LEVEL; LSP=ALARM RESET LEVEL SWITCH.
	AUTOMATIC TRANSFER SWITCH.
GEN	GENERATOR
1200AF/3P/1000AT SST LSIG K	SOLID STATE CIRCUIT BREAKER WITH L=LONG TIME, S=SHORT TIME, I=INSTANTANEOUS AND G=GROUND FAULT PROTECTION SETTINGS. K=KIRK KEY INTERLOCK. PROVIDE FACTORY ENGINEERED STUDY AND SETTINGS BY AN APPROVED CIRCUIT BREAKER TESTING COMPANY.

SCHEMATIC DIAGRAM SYMBOLS

	MOTOR SPACE HEATER
CRX	NORMALLY OPEN RELAY CONTACT. RELAY NUMBER INDICATED
CRX	NORMALLY CLOSED RELAY CONTACT. RELAY NUMBER INDICATED
OL	MOTOR STARTER OVERLOAD. OPENS ON OVERCURRENT
	TEMPERATURE SWITCH. CLOSES ON FALLING TEMPERATURE.
H O A X00 X00	3 POSITION SELECTOR SWITCH. MAINTAINED CONTACT TYPE. H–O–A = HAND–OFF–AUTO; M–O–R = MANUAL–OFF REMOTE; L–O–R = LOCAL–OFF–REMOTE. XOO = CONTACT STATE AT EACH POSITION. MOMENTARY CONTACT TYPE PUSHBUTTONS. NORMALLY OPEN; AND NORMALLY CLOSED.
	SPST TOGGLE SWITCH
	DPST TOGGLE SWITCH
	TERMINAL FOR CONTROL WIRING IN RTU PANEL
	TERMINAL FOR I/O WIRING IN CONTROL PANEL
	TERMINAL IN MOTOR CONTROL CENTER OR INDIVIDUAL STARTER
	TERMINAL FOR WIRING AT GENERATOR CONTROL PANEL
PMR	PHASE MONITOR AUXILIARY RELAY CONTACT. OPENS ON PHASE FAILURE.
	WIRING REMOTE FROM CONTROL PANELS
	WIRING INSIDE OF CONTROL PANELS
	CONNECTION.
	NO CONNECTION.
ON R	PILOT LIGHT. PUSH–TO–TEST. COLOR INDICATED.
CRX CR	RELAY COIL.
MS M	MOTOR STARTER COIL.
TDR TR TDR	TIME DELAY RELAY. ON OR OFF DELAY AS NOTED.
ETM	ELAPSED TIME METER
	CONTROL POWER TRANSFORMER – 480 VOLT PRIMARY, 120 VOLT SECONDARY.
	FUSE
	SHIELDED TWISTED PR. #18 INSTRUMENTATION WIRE WITH SHIELD COILED AND TAPED
	SHIELDED TWISTED PR. #18 INSTRUMENTATION WIRE WITH SHIELD CONNECTED TO GROUNDED TERMINAL
	GROUND CONNECTION
	FLOAT LEVEL SWITCH. CLOSES ON RISING LEVEL.
	FLOAT LEVEL SWITCH. OPENS ON RISING LEVEL.

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
2. COMPLY FULLY WITH ALL LAWS AND CODES COVERING THE WORK AND PROVIDE COMPLETE INSTALLATIONS AS REQUIRED BY SAID LAWS AND CODES. ALL MATERIALS FURNISHED, LABOR PERFORMED, ARRANGEMENTS OF SYSTEM, SIZES OF COMPONENTS, AND ALL OTHER FEATURES OF ALL ELECTRICAL WORK SHALL BE IN STRICT ACCORDANCE WITH MUNICIPAL AND STATE CODES, LAWS AND REGULATIONS, RULES OF NEC, OSHA AND/OR OTHER AUTHORITIES THAT MAY HAVE JURISDICTION PERTAINING TO THE WORK.
3. ALL NECESSARY PERMITS, LICENSES, CERTIFICATES, TESTS, ETC. SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR.
4. IN ALL CASES OF DIFFERENCE BETWEEN MINIMUM REQUIREMENTS OF THE VARIOUS LAWS, CODES, AND AUTHORITIES, IT IS THE INTENT THAT THE WORK SHALL EXCEED THE LESSER REQUIREMENTS WHILE MEETING THE GREATER OR MORE STRINGENT REQUIREMENTS.
5. INSPECT PROJECT SITE IN ORDER TO DETERMINE THE SCOPE AND CHARACTER OF THE ELECTRICAL WORK REQUIRED UNDER THE CONTRACT INCLUDING THE EXTENT AND EFFECT OF EXISTING SYSTEMS.
6. ALL WIRING SHALL BE COPPER CONDUCTOR, MINIMUM #12 AWG, FOR POWER AND LIGHTING WITH TYPE THW, XHHW, THWN OR THHN INSULATION. ALL WIRING SHALL BE COLOR CODED PER THE SPECIFICATION REQUIREMENTS. THE WIRING FOR EQUIPMENT GROUND WIRES SHALL HAVE GREEN COLOR INSULATION.
7. CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY AND TO CONFIRM THAT THE WORK IS BUILDABLE AS SHOWN AND MEETS ALL APPLICABLE CODES BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION ISSUES, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER BEFORE PROCEEDING WITH THE WORK IN QUESTION OR WITH RELATED WORK.
8. ALL MATERIALS FURNISHED UNDER THIS CONTRACT SHALL BE NEW UNLESS OTHERWISE NOTED. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION OR ACCEPTANCE OF THE WORK. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT HIS OWN EXPENSE, WHEN ORDERED TO DO SO, ALL WORK THAT MAY DEVELOP DEFECTS IN MATERIAL OR WORKMANSHIP WITHIN SAID PERIOD OF TIME.
9. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS FOR SERVICE INTENDED, AS INTERPRETED BY THE ENGINEER. THE INSTALLATION OF ALL EQUIPMENT SHALL BE MADE BY EXPERIENCED CRAFTSMAN IN A NEAT, WORKMANLIKE MANNER. ALL MATERIALS, TOOLS, COSTS AND SERVICES NECESSARY TO COMPLETELY INSTALL ALL ELECTRICAL WORK SHALL BE PROVIDED BY THE CONTRACTOR.
10. IT IS THE INTENT AND MEANING OF THE CONTRACT DOCUMENTS THAT THE CONTRACTOR SHALL PROVIDE ELECTRICAL INSTALLATION THAT IS COMPLETE. ALL ITEMS AND APPURTENANCES NECESSARY, REASONABLY INCIDENTAL, OR CUSTOMARILY INCLUDED, EVEN THOUGH EACH AND EVERY ITEM IS NOT SPECIFICALLY CALLED OUT OR SHOWN IN THE CONSTRUCTION DOCUMENTS SHALL BE PROVIDED.
11. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE AND MISALIGNMENT ACCORDING TO APPLICABLE CODES, STANDARDS, AND GOOD CONSTRUCTION PRACTICES. CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO PROTECT ALL EXISTING OPERATIONS AND PROPERTY ADJACENT, WITH WHICH WORK COMES IN CONTACT, OR OVER OR UNDER WHICH HE MAY TRANSPORT, HOIST, OR MOVE MATERIALS, EQUIPMENT, DEBRIS, ETC., AND SHALL REPAIR SATISFACTORILY ALL DAMAGED CAUSED BY HIM DURING CONSTRUCTION.
13. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH OWNER–PROVIDED EQUIPMENT FOR ELECTRICAL POWER REQUIREMENTS AND COMMUNICATIONS REQUIREMENTS FOR ALL EQUIPMENT INSTALLED IN THIS PROJECT.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STUDY ALL DOCUMENTS AND PROVIDE ALL LABOR AND MATERIALS FOR COMPLETE AND OPERABLE SYSTEMS AS DESIGNED, DESCRIBED, IMPLIED AND SHOWN ON THESE DOCUMENTS. HE SHALL NOT BASE HIS BID SOLELY ON EQUIPMENT COUNTS SHOWN ON DRAWINGS, BUT THE DRAWINGS, SPECIFICATIONS AND THE INTENDED OR SPECIFIED PERFORMANCE AS A WHOLE PACKAGE. HE IS RESPONSIBLE FOR PROVIDING HIS EQUIPMENT SUPPLIERS WITH HIS OWN TAKE–OFF OF REQUIRED EQUIPMENT FOR THE PROJECT.

ABBREVIATIONS

A	AMPERES	BKR	BREAKER	EF	EXHAUST FAN	HPS	HIGH PRESSURE SODIUM LAMP	LP	LIGHTING PANEL	OL	OVERLOAD	RGS	RIGID GALVANIZED STEEL	UG	UNDERGROUND
AC	ALTERNATING CURRENT	C	CONDUIT	ETM	ELAPSED TIME METER	HT	HEIGHT – ABOVE FINISH FLOOR OR GRADE	LV	LOW VOLTAGE	PB	PULLBOX OR PUSHBUTTON	SDO	SIMPLEX DEDICATED OUTLET	UON	UNLESS OTHERWISE NOTED
AF	AMPS FRAME – CIRCUIT BREAKER FRAME SIZE	COA	CITY OF AUSTIN	EXIST	EXISTING	HMCP	MOTOR CIRCUIT PROTECTOR	MC	MAIN CONTACTOR	PEC	PEDERNALES ELECTRIC COMPANY	SP	SPARE	VM	VOLTMETER
AF	AMPS FUSE – FUSEED SWITCH	CB	CIRCUIT BREAKER	F	FUSE	HZ	FREQUENCY IN HERTZ – CYCLES PER SEC.	MCC	MOTOR CONTROL CENTER	PR	PAIR	SS	STAINLESS STEEL	VFC	VARIABLE FREQUENCY CONTROLLER
AFF	MOUNTING HEIGHT ABOVE FINISHED FLOOR	CKT	CIRCUIT	FDR	FEEDER	INC	INCANDESCENT	MCP	MOTOR CIRCUIT PROTECTOR	PL	PILOT LIGHT	SSMU	SOLID STATE METERING UNIT	VFD	VARIABLE FREQUENCY DRIVE
AFG	MOUNTING HEIGHT ABOVE FINISHED GRADE	CP	CONTROL PANEL	FIXT	FIXTURE	INST	INSTRUMENT	MCB	MAIN CIRCUIT BREAKER	PNL	PANEL	SST	SOLID STATE TRIP UNIT	WP	WEATHERPROOF
AG	ABOVE GRADE	CPT	CONTROL POWER TRANSFORMER	GEN	GENERATOR	JB	JUNCTION BOX	MSB	MAIN SWITCHBOARD	PP	POWER POLE	ST	SINGLE THROW	WW	WATER AND WASTEWATER UTILITY
AIC	FAULT CURRENT INTERRUPTING CAPACITY	CR	CONTROL RELAY	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	KWH	KILOWATT HOURS	NATS	NON–AUTOMATIC TRANSFER SWITCH	PS	PRESSURE SWITCH	TDR	TIME DELAY RELAY	XFER	TRANSFER
AT	AMPS TRIP – CIRCUIT BREAKER TRIP SETTING/RATING	CT	CURRENT TRANSFORMER	GND	GROUND	LC	LIGHTING CONTACTOR	NC	NORMALLY CLOSED CONTACT	PT	POTENTIAL TRANSFORMER	TR	TIMING RELAY	XFMR	TRANSFORMER
ATS	AUTOMATIC TRANSFER SWITCH	DCO	DUPLEX CONVENIENCE OUTLET	GWP	WEATHERPROOF GFCI			NF	NON–FUSED	PVC	POLYVINYL CHLORIDE CONDUIT OR COATING	T/S	TWISTED/SHIELDED	XMTR	TRANSMITTER
AWG	AMERICAN WIRE GAUGE	EC	ELECTRICAL CONTRACTOR	HP	HORSEPOWER			NO	NORMALLY OPEN CONTACT	PW	PULLWIRE	TU	TEXAS ELECTRIC UTILITIES	3PDT	THREE POLE DOUBLE–THROW

RECORD DRAWING

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08/23/19

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RSI HUTTO LS CONTROLS

ELECTRICAL LEGEND

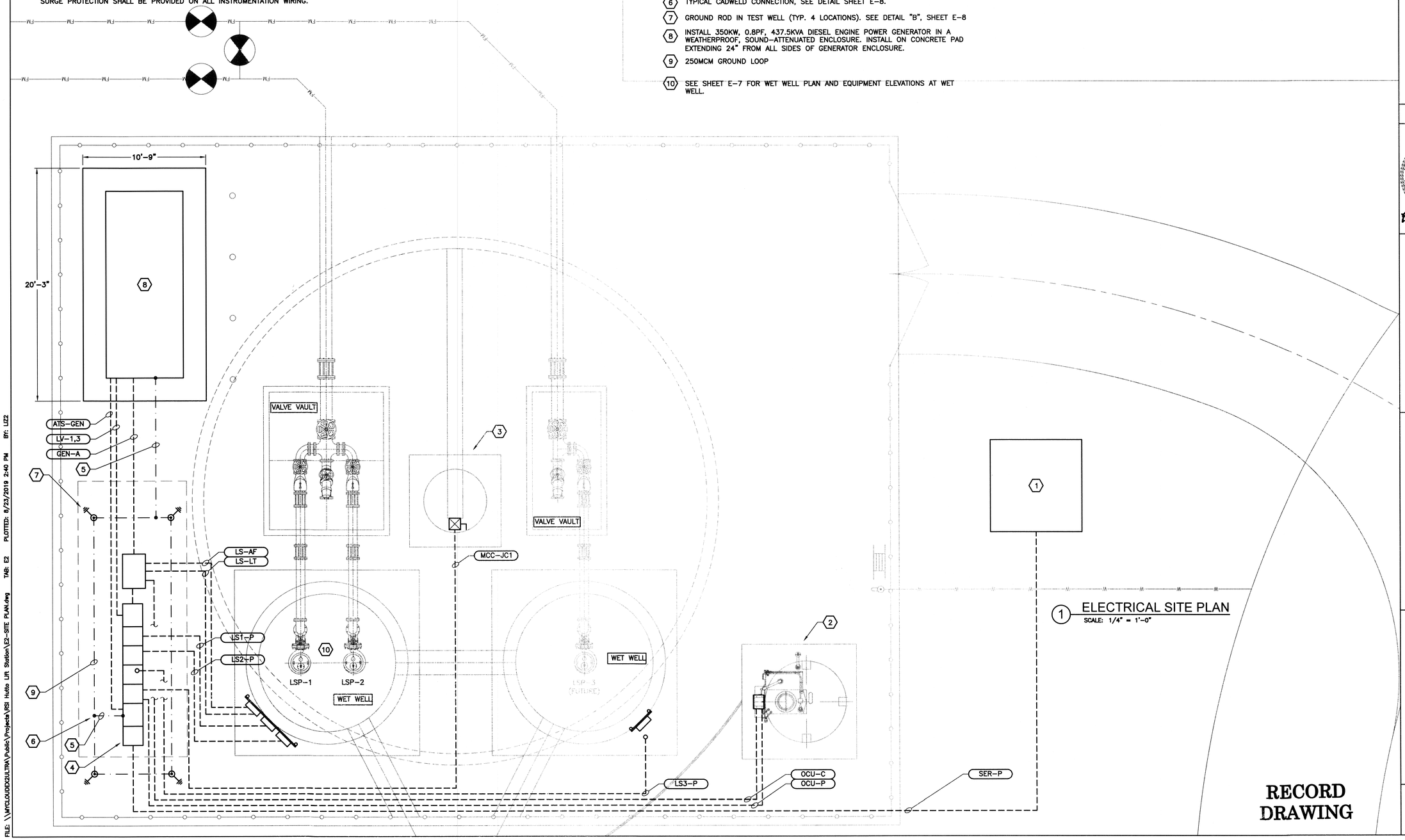
SHEET
E-1
OF 15

GENERAL NOTES:

1. THE ELECTRICAL, INSTRUMENTATION AND CONTROLS SYSTEMS SHALL COMPLY WITH THE CITY OF HUTTO LIFT STATION STANDARDS AND ELECTRICAL CODES; NATIONAL ELECTRICAL CODE AND ALL CITY, STATE AND FEDERAL STANDARDS, RULES AND REGULATIONS.
2. ALL WORK SHALL BE PERFORMED BY A CONTRACTOR HAVING A MINIMUM OF 5 CONSECUTIVE YEARS OF SUCCESSFUL EXPERIENCE IN THE CONSTRUCTION OF PROJECTS OF THE SAME TYPE AND SIZE OR LARGER.
3. ALL CONDUITS SHALL BE INSTALLED UNDERGROUND IN STEEL REINFORCED CONCRETE DUCTBANKS. CONDUITS SHALL BE SCHEDULE 40 PVC. TRANSITIONS TO ABOVE GRADE SHALL BE MADE WITH PVC COATED RIGID GALVANIZED STEEL OR PVC COATED RIGID ALUMINUM CONDUIT ELBOWS.
4. WIRING SHALL BE STRANDED COPPER CONDUCTOR, XHHW2 INSULATED. MINIMUM WIRE SIZE SHALL BE #12 AWG FOR ALL WIRING FOR CIRCUITS RATED 120 V OR HIGHER EXCEPT THAT #14 AWG MAY BE USED FOR CONTROL CIRCUITS.
5. WIRING FOR INSTRUMENTATION CIRCUITS SHALL BE #18 TWISTED PAIR WITH SHIELD. SHIELD SHALL BE GROUNDED AT THE CONTROL PANEL END ONLY. SURGE PROTECTION SHALL BE PROVIDED ON ALL INSTRUMENTATION WIRING.

KEYNOTES:

1. CONSTRUCT TRANSFORMER PAD PER ONCOR STANDARDS, SEE SHEET E-8.
2. ODOR CONTROL UNIT "OCU"
3. JIB CRANE "JC-1", RESTRICT MOVEMENT AS REQUIRED TO SAFEGUARD OTHER ELECTRICAL EQUIPMENT.
4. 800A MOTOR CONTROL CENTER "MCC" WITH AUTOMATIC TRANSFER SWITCH AND SERVICE-ENTRANCE MAIN BREAKER DISCONNECT.
5. #2/0 BARE CU. GROUND.
6. TYPICAL CADWELD CONNECTION, SEE DETAIL SHEET E-8.
7. GROUND ROD IN TEST WELL (TYP. 4 LOCATIONS). SEE DETAIL "B", SHEET E-8
8. INSTALL 350KW, 0.8PF, 437.5KVA DIESEL ENGINE POWER GENERATOR IN A WEATHERPROOF, SOUND-ATTENUATED ENCLOSURE. INSTALL ON CONCRETE PAD EXTENDING 24" FROM ALL SIDES OF GENERATOR ENCLOSURE.
9. 250MCM GROUND LOOP
10. SEE SHEET E-7 FOR WET WELL PLAN AND EQUIPMENT ELEVATIONS AT WET WELL.



1 ELECTRICAL SITE PLAN
SCALE: 1/4" = 1'-0"

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

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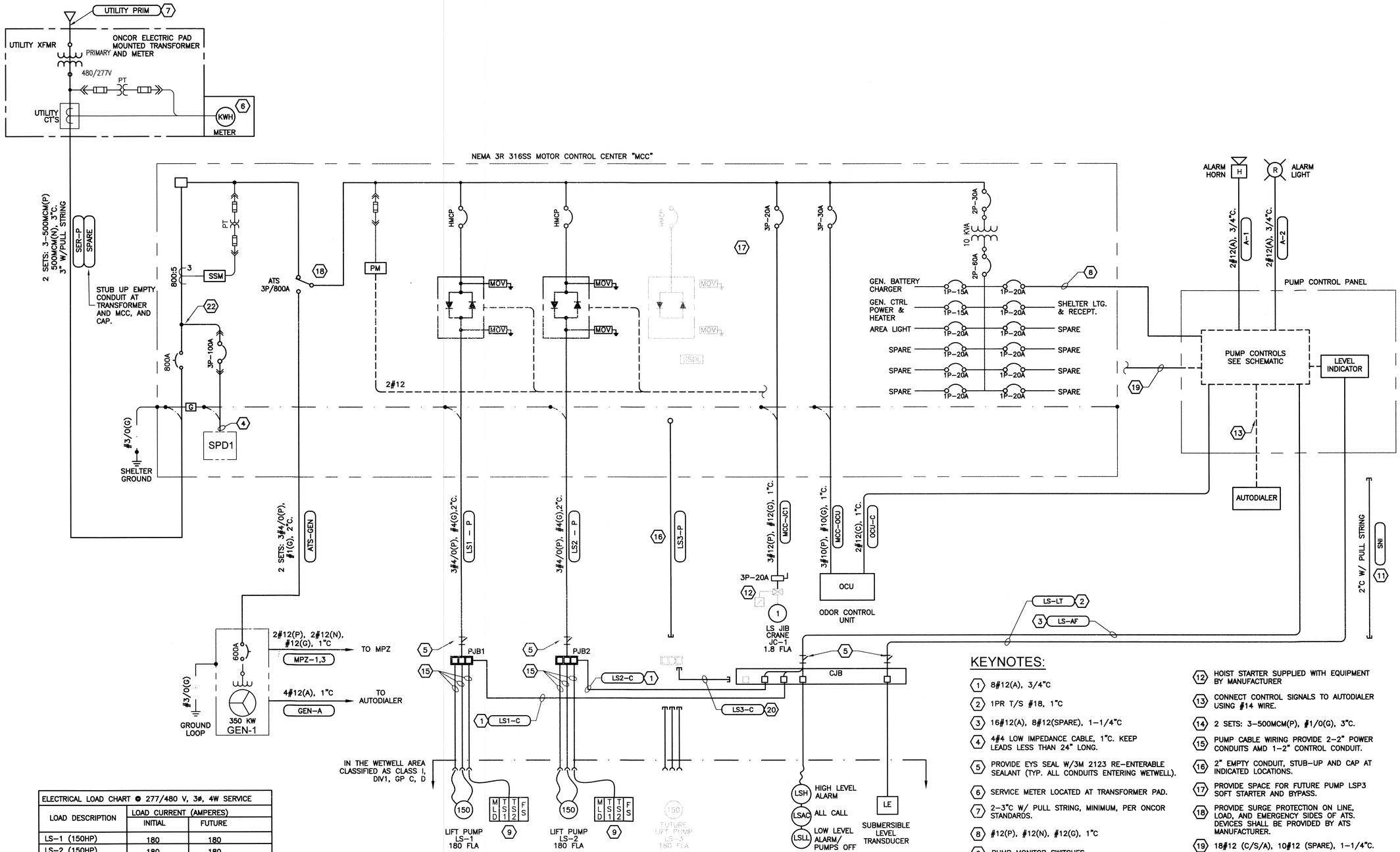
RSI HUTTO LS CONTROLS

ELECTRICAL SITE PLAN

SHEET
E-2
OF 15

FILE: \\WYCLOUDE2ULTRA\Public\Projects\RSI Hutto Lift Station\E2-SITE PLAN.dwg TAB: E2 PLOTTED: 8/23/2019 2:40 PM BY: LIZ2



ELECTRICAL LOAD CHART @ 277/480 V, 3ø, 4W SERVICE			
LOAD DESCRIPTION		LOAD CURRENT (AMPERES) INITIAL	FUTURE
LS-1 (150HP)		180	180
LS-2 (150HP)		180	180
LS-3 (150HP)		--	180
OCU		18	18
HOIST		2.1	2.1
25% LARGEST MOTOR		45	45
OTHERS		20.8	20.8
TOTAL:	AMPS	445.8	625.8
	KVA	370.7	520.3
SERVICE CONDUCTORS: (MINIMUM SIZE) 2 SETS: 3-500MCM(P), 500MCM(N), 3"C.			

1 ONE-LINE DIAGRAM
SCALE: N.T.S.

KEYNOTES:

1. 8#12(A), 3/4"C
2. 1PR T/S #18, 1"C
3. 16#12(A), 8#12(SPARE), 1-1/4"C
4. 4#4 LOW IMPEDANCE CABLE, 1"C. KEEP LEADS LESS THAN 24" LONG.
5. PROVIDE EYS SEAL W/3M 2123 RE-ENTERABLE SEALANT (TYP. ALL CONDUITS ENTERING WETWELL).
6. SERVICE METER LOCATED AT TRANSFORMER PAD.
7. 2-3"C W/ PULL STRING, MINIMUM, PER ONCOR STANDARDS.
8. #12(P), #12(N), #12(G), 1"C
9. PUMP MONITOR SWITCHES

M L D – MOISTURE LEAK DETECTOR
T S 1 – MOTOR TEMPERATURE SWITCH
T S 2 – BEARING TEMP. SWITCH
F S – MOTOR FLOAT SWITCH

10. STUB UP SPARE CONDUIT AT CONTROL PANEL AND TRANSFORMER PAD FOR FUTURE PHONE LINE.
11. COORDINATE CONNECTION WITH PHONE SERVICE PROVIDER.
12. HOIST STARTER SUPPLIED WITH EQUIPMENT BY MANUFACTURER
13. CONNECT CONTROL SIGNALS TO AUTODIALER USING #14 WIRE.
14. 2 SETS: 3-500MCM(P), #1/0(G), 3"C.
15. PUMP CABLE WIRING PROVIDE 2-2" POWER CONDUITS AMD 1-2" CONTROL CONDUIT.
16. 2" EMPTY CONDUIT, STUB-UP AND CAP AT INDICATED LOCATIONS.
17. PROVIDE SPACE FOR FUTURE PUMP LSP3 SOFT STARTER AND BYPASS.
18. PROVIDE SURGE PROTECTION ON LINE, LOAD, AND EMERGENCY SIDES OF ATS. DEVICES SHALL BE PROVIDED BY ATS MANUFACTURER.
19. 18#12 (C/S/A), 10#12 (SPARE), 1-1/4"C.
20. 1" EMPTY CONDUIT.
21. BREAKER FOR SPD DEVICE SHALL BE SIZED PER MCC MANUFACTURER RECOMMENDATIONS.
22. SEAL OFF CONDUIT TO SPD DEVICE TO MINIMIZE DAMAGE IN THE EVENT OF A SURGE EVENT.

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RSI HUTTO LS CONTROLS

ONE LINE DIAGRAM

SHEET
E-3
OF 15

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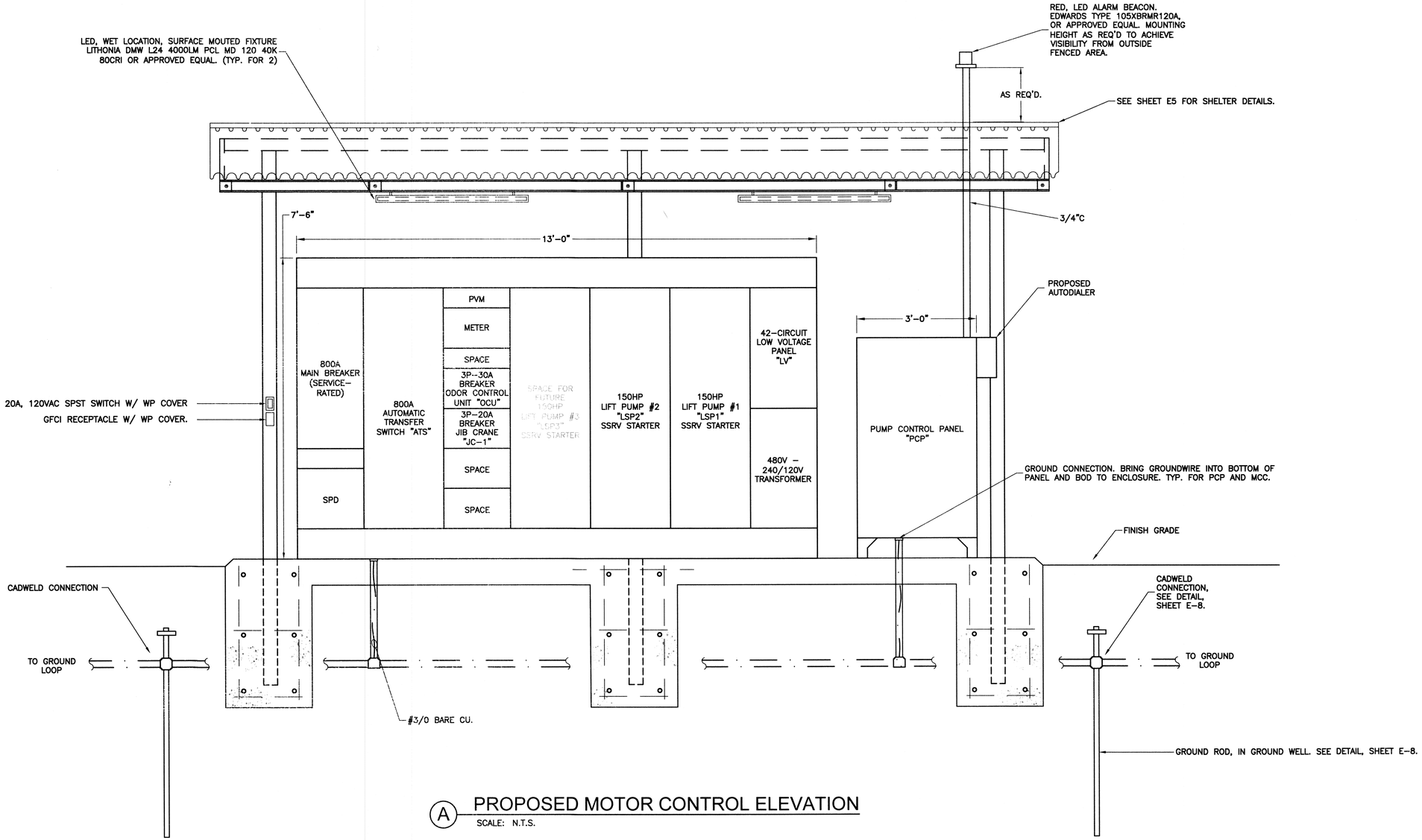

(A) PROPOSED MOTOR CONTROL ELEVATION

SCALE: N.T.S.

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RSI HUTTO LS CONTROLS

MOTOR CONTROL CENTER ELEVATION

SHEET E-4 OF 15

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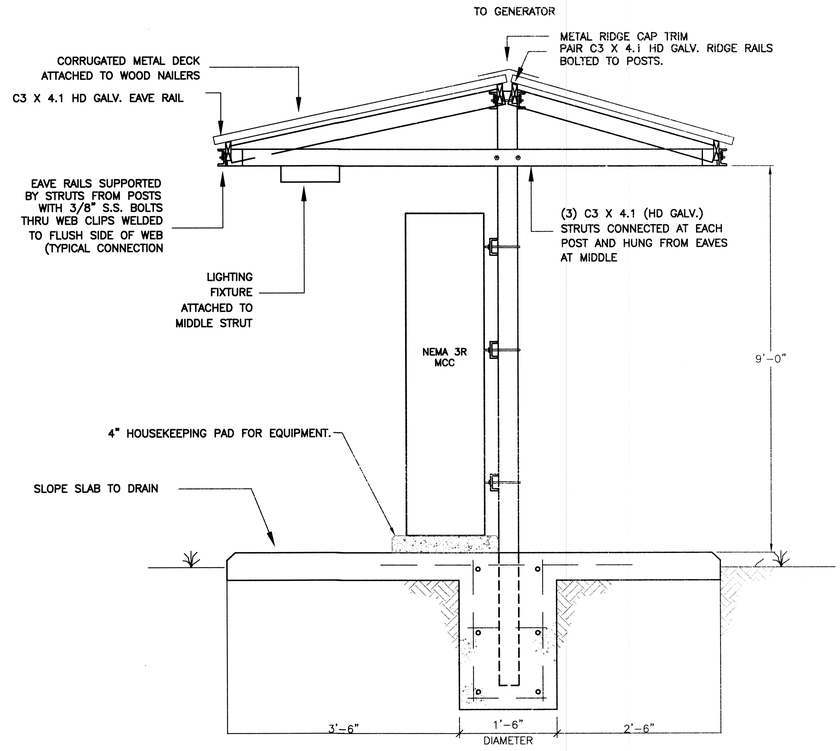
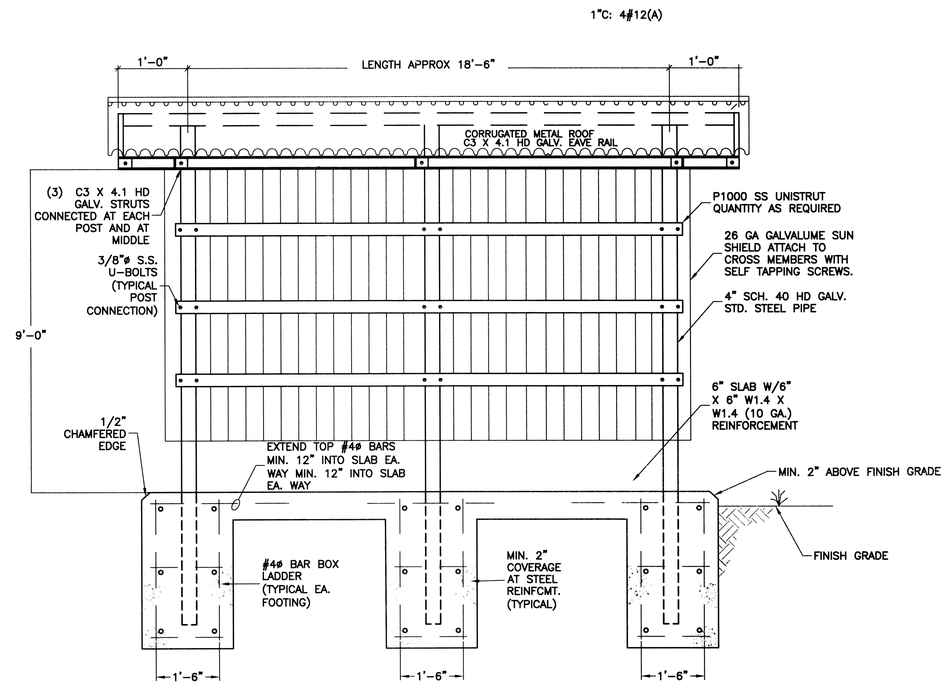


A SHELTER - END VIEW

SCALE: N.T.S.



B SHELTER - BACK VIEW

SCALE: N.T.S.

NOTE: SEE PREVIOUS SHEET FOR LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS.

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RSI HUTTO LS CONTROLS

SHELTER ELEVATIONS

SHEET
E-5
OF 15

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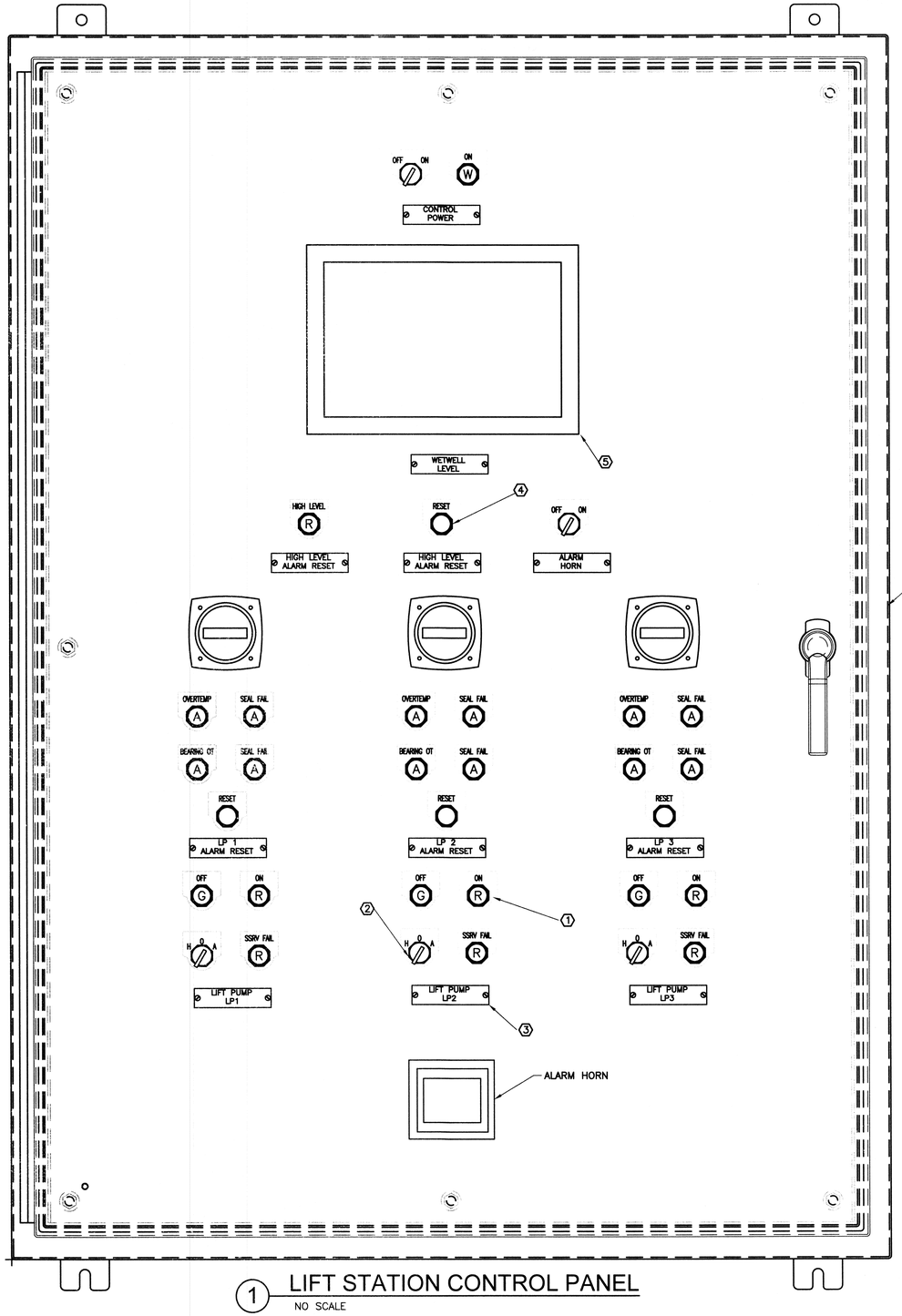

1 LIFT STATION CONTROL PANEL
NO SCALE

KEYNOTES

1. INDICATING LIGHT, LED TYPE, PUSH-TO-TEST, COLOR INDICATED, 22MM.
2. SELECTOR SWITCH, 22MM, TWO OR THREE POSITION AS SHOWN.
3. 3-PLY PHENOLIC NAMEPLATE. BLACK WITH 3/8" WHITE LETTERING.
4. MOMENTARY CONTACT PUSHBUTTON, 22 MM
5. PSI QC2I LCD DISPLAY SCREEN WITH TWO EXPANSION, 1500CT I/O MODULES. PROVIDE RS232 MODBUS CONNECTION BETWEEN EXPANSION I/O MODULE.

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RSI HUTTO LS CONTROLS

PUMP CONTROL PANEL DETAILS

SHEET
E-6
OF 15

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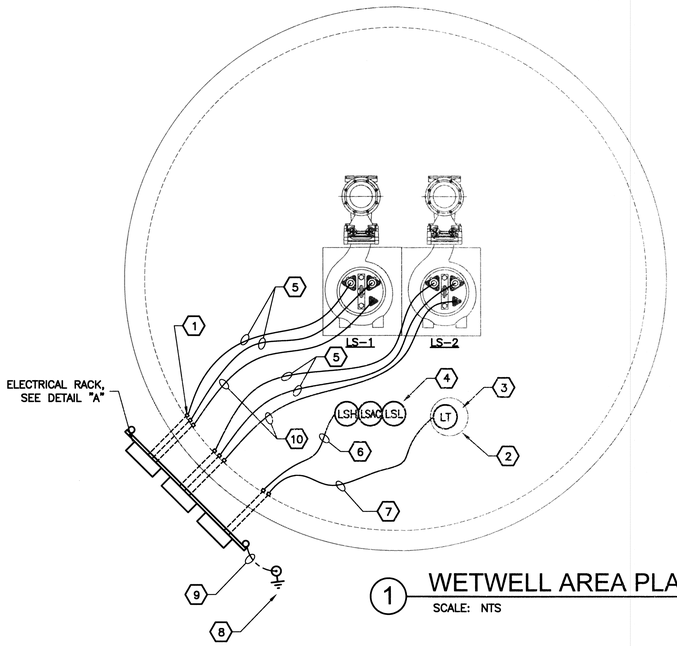
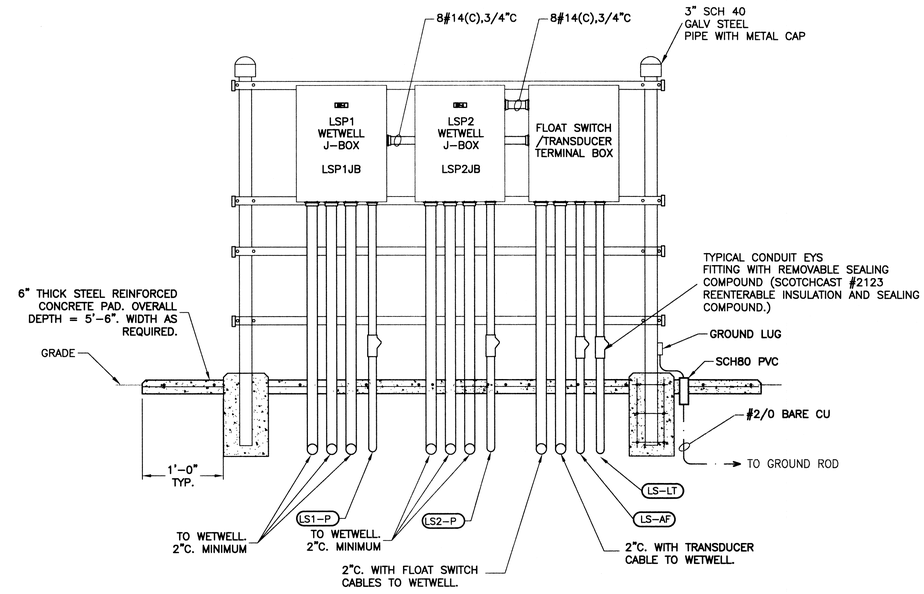


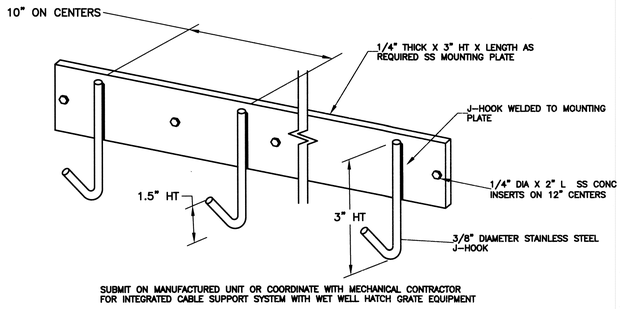
1 WETWELL AREA PLAN
SCALE: NTS

KEYNOTES:

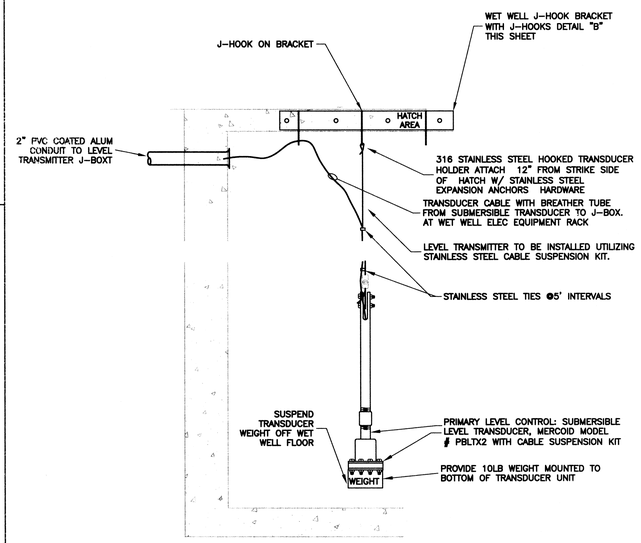
1. CROUSE HINDS CGB FITTING. TYPICAL FOR ALL CONDUITS ENTERING WETWELL.
2. STILLING WELL. SCH. 80 PVC WITH SLOTS EVERY 6". TOP OF STILLING WELL TO EXTEND A MINIMUM OF 12" ABOVE THE HIGH WATER ALARM LEVEL AND EXTEND TO WITHIN 2" OF THE WET WELL FLOOR. LOCATE ADJACENT TO FLOATS AND ACCESSIBLE FROM THE HATCH.
3. SUBMERSIBLE PRESSURE TRANSDUCER CALIBRATED FOR WETWELL WATER RANGE LEVEL. LOCATE 12" OFF THE BOTTOM OF THE WET WELL. PROVIDE A J-HOOK AND KELLEMS GRIPS FOR SUPPORT.
4. FLOAT SWITCHES WITH STAINLESS STEEL CORD SUPPORT. LOCATE WITHIN 6" OF THE WET WELL HATCH OPENING.
5. PUMP POWER WIRING, PROVIDE TWO SEPARATE 2" CONDUITS FOR CABLES.
6. FLOAT SWITCH CABLES.
7. SUBMERSIBLE PRESSURE TRANSDUCER CABLE.
8. 3/4" X 10'-0" COPPERWELD GROUND ROD.
9. #8 BARE COPPER GROUND WIRE.
10. PUMP CONTROL WIRING, PROVIDE ONE 2" CONDUIT FOR CONTROL CABLE.



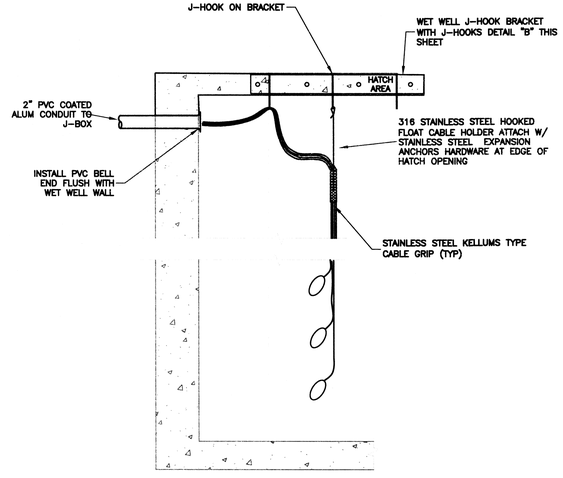
A ELECTRICAL RACK
SCALE: NTS



B WET WELL J-HOOK BRACKET CABLE SUPPORTS
SCALE: N.T.S



C LEVEL TRANSDUCER INSTALLATION
SCALE: NTS



D FLOAT SWITCH INSTALLATION
SCALE: NTS

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RSI HUTTO LS CONTROLS

WETWELL ELECTRICAL DETAILS

SHEET
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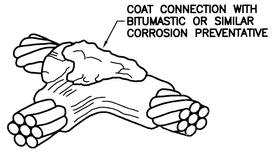
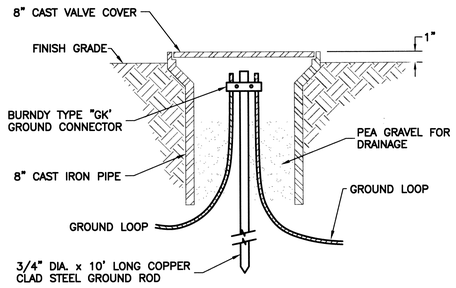
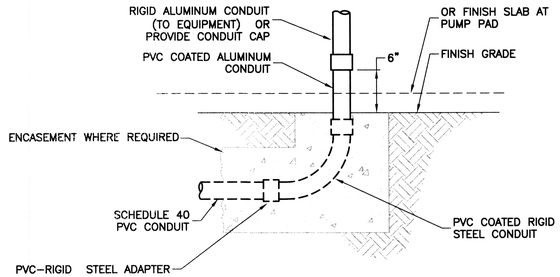


A CADWELD CONNECTION "TA"
SCALE: N.T.S.



B GROUNDWELL
SCALE: N.T.S.



D TYPICAL OUTDOOR CONDUIT STUB-UP
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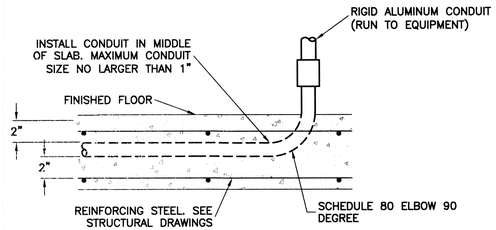

E CONDUIT IN SLAB
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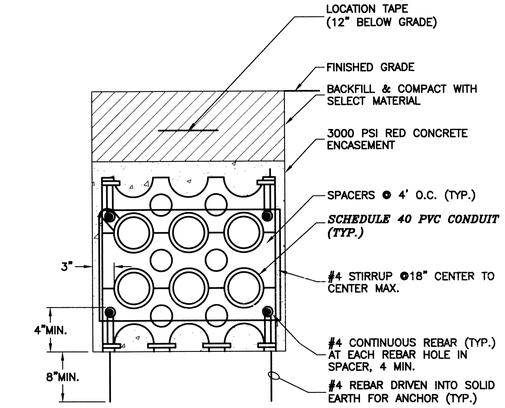

C DUCTBANK SPACER DETAIL
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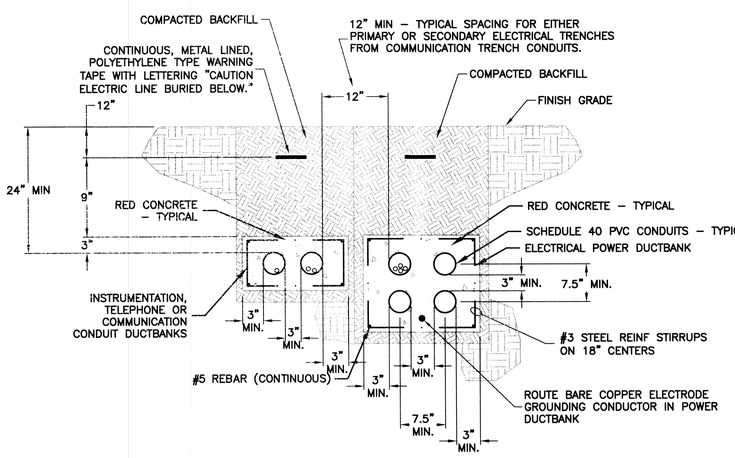

NOTE:

THIS DETAIL IS FOR GENERAL DUCTBANK INFORMATION AND MINIMUM REQUIREMENTS. IT DOES NOT NECESSARILY DEPICT ANY SPECIFIC SITUATION FOR THIS PROJECT.

F TYPICAL DUCTBANK DETAIL
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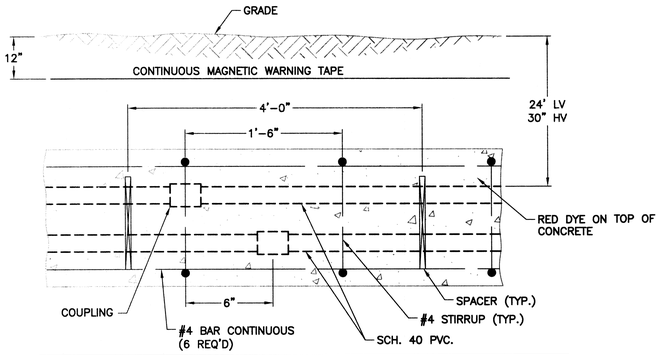
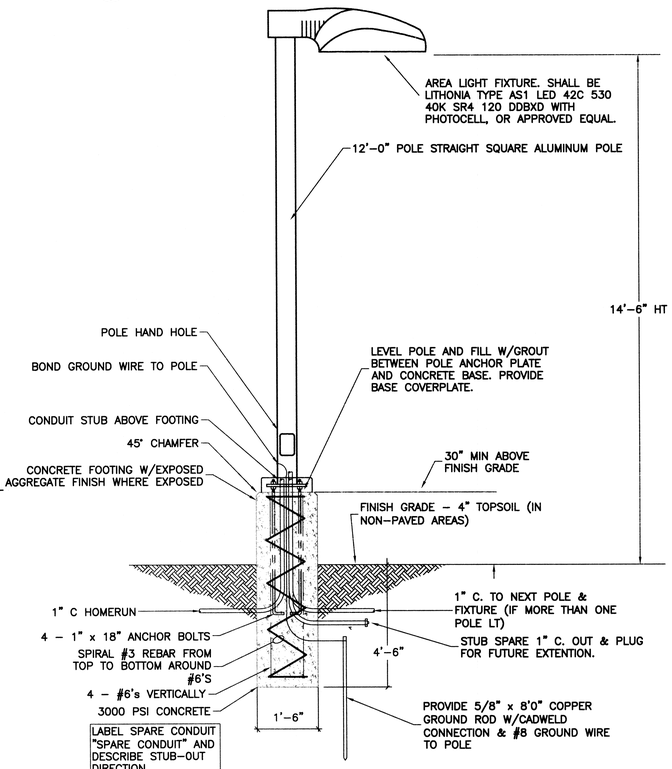


NOTE:
1. THIS DETAIL IS ONLY FOR DUCTBANK GENERAL OR MINIMUM REQUIREMENTS.

G DUCTBANK LONGITUDINAL SECTION
NTS



H AREA LIGHT INSTALLATION DETAIL
SCALE: N.T.S.

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RSI HUTTO LS CONTROLS

ELECTRICAL DETIALS

SHEET
E-8
OF 15

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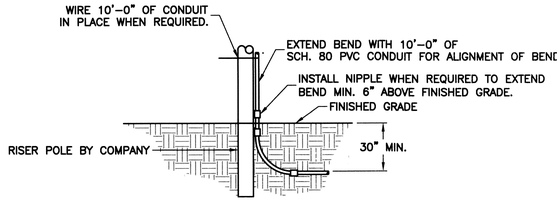
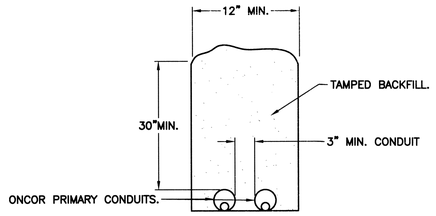
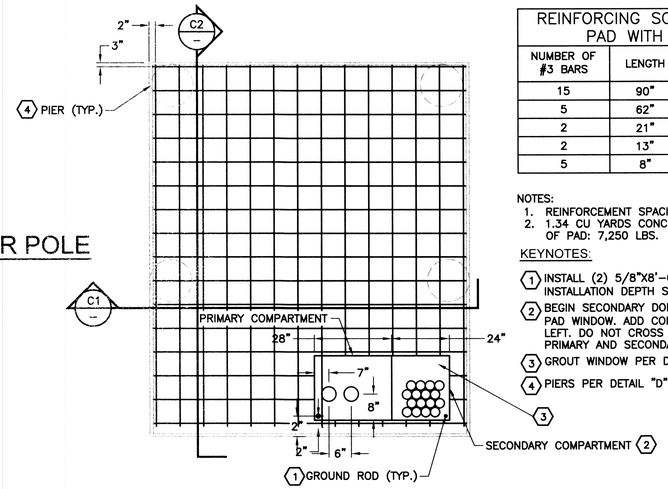


A TERMINATION OF PRIMARY CONDUIT AT RISER POLE
NO SCALE



B TRENCH REQUIREMENTS
NO SCALE

NOTES:
1. TRENCH SHALL BE IN ACCORDANCE WITH ONCOR STANDARDS. REFER TO SPECIFICATION 16402 "ELECTRICAL SERVICE".
2. CONTACT ONCOR REPRESENTATIVE FOR CONDUIT SIZE.



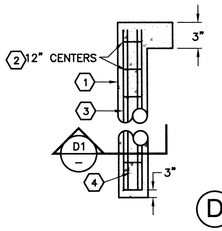
C CONCRETE PAD DETAILS
NO SCALE

REINFORCING SCHEDULE FOR PAD WITH BEAMS		
NUMBER OF #3 BARS	LENGTH	WEIGHT (LBS)
15	90"	42.3
5	62"	9.7
2	21"	1.3
2	13"	0.8
5	8"	1.2

NOTES:
1. REINFORCEMENT SPACING: 11" CENTERS.
2. 1.34 CU YARDS CONCRETE; TOTAL WEIGHT OF PAD: 7,250 LBS.

KEYNOTES:
1. INSTALL (2) 5/8"X8'-0" GROUND RODS AS SHOWN. INSTALLATION DEPTH SHALL BE 7'-6".
2. BEGIN SECONDARY DONDUITS AT RIGHT EDGE OF PAD WINDOW. ADD CONDUITS AS REQ'D RIGHT TO LEFT. DO NOT CROSS DIVIDING LINE BETWEEN PRIMARY AND SECONDARY CONDUITS.
3. GROUT WINDOW PER DETAIL "G", THIS SHEET.
4. PIERS PER DETAIL "D", THIS SHEET.

GENERAL NOTES FOR POURED IN PLACE CONCRETE PAD:
1. TRANSFORMER CONCRETE PAD SHALL BE DESIGNED AND INSTALLED PER ONCOR STANDARDS. REFER TO SPECIFICATION 16402 "ELECTRICAL".
2. ALL REINFORCING STEEL SHALL HAVE A THREE INCH CLEARANCE FROM THE BOTTOM. THERE SHALL BE A THREE INCH CLEARANCE FROM SIDES TO STEEL RUNNING PARALLEL THEREOF. THERE SHALL BE A TWO INCH CLEARANCE FROM END OF STEEL TO SIDES AND WINDOW.

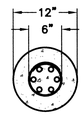


REINFORCING SCHEDULE (PIERS)			
NUMBER OF #3 BARS	SHAPE	LENGTH	SHAPE
6	#5	5"	STRAIGHT
6	#3	2'-1"	HOOP (DETAIL "D2"

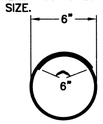
NOTES:
1. .145 CU YARDS CONCRETE/PIER;
2. TOTAL WEIGHT OF (1) PIER: 565 LBS.

D PIER DETAILS
NO SCALE

KEYNOTES:
1. PIER DEPTH SHALL BE 5'-0" BELOW BOTTOM OF PAD UNLESS ROCK OR OTHER HARD SURFACES ARE ENCOUNTERED. IF ROCK OR OTHER HARD SURFACES ARE ENCOUNTERED PRIOR TO A 5'-0" DEPTH, PIER DEPTH SHALL EXTEND 6" INTO THE HARD SURFACE.
2. PIER REINFORCING TO EXTEND 3" INTO PAD. SEE DETAIL "D2", THIS SHEET.
3. FOUR PIERS POSITIONED AS SHOWN ARE RECOMMENDED FOR ALL PAD SIZES EXCEPT THE 114"X132" PAD. SIX PIERS POSITIONED AS SHOWN ARE RECOMMENDED FOR THIS PAD SIZE.

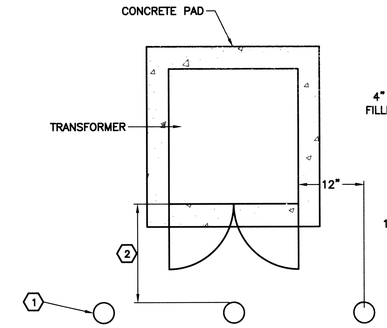


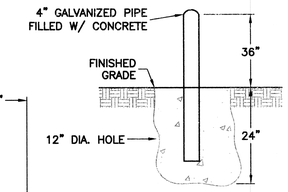
D1 PIER SECTION
NO SCALE



D2 PIER DETAIL
NO SCALE

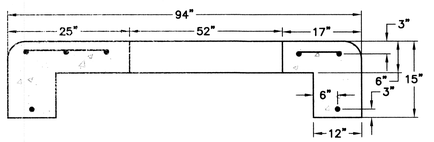
NOTE: REFER TO ONCOR UTILITY STANDARDS FOR LOCATING AND INSTALLING TRANSFORMER PAD



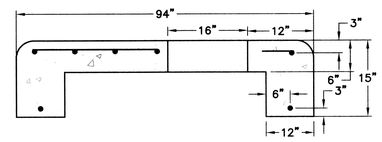


E GUARD POST INSTALLATION
NO SCALE

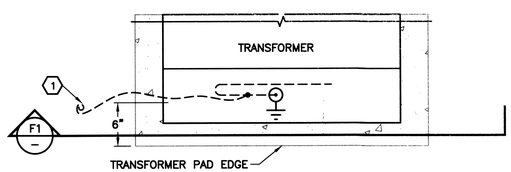
KEYNOTES:
1. DISTANCE BETWEEN POSTS SHOULD NOT EXCEED 4'-0".
2. VERIFY POST LOCATIONS ALLOW FOR TRANSFORMER DOOR OPENING.



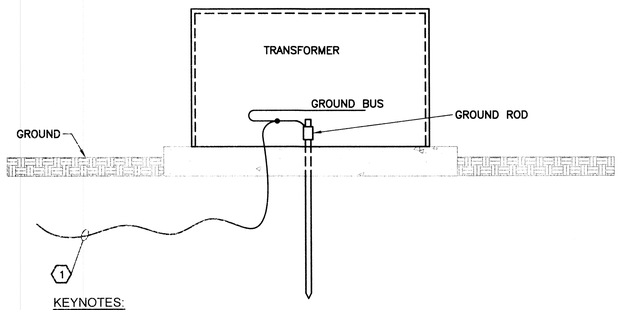
C1 PAD SECTION
NO SCALE



C2 PAD SECTION
NO SCALE

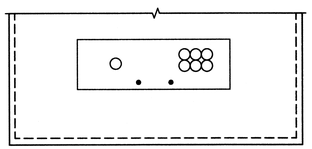


F EQUIPMENT GROUND PLAN
NO SCALE

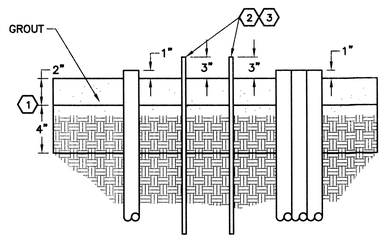


KEYNOTES:
1. INSTALL NO. 6 S.D. BARE COPPER AS SHOWN FOR FOREIGN UTILITY COMPANY BONDING. INSTALL ON PROPERTY LINE SIDE OF PAD.

F1 EQUIPMENT GROUND ELEVATION
NO SCALE



G GROUTING DETAIL
NO SCALE



G1 PAD WINDOW DETAIL
NO SCALE

NOTES:
1. GROUT SHALL BE PORTLAND BASED AND SANDED. DO NOT USE CONCRETE.
2. GRAVEL FILL IS NOT ACCEPTABLE.

KEYNOTES:
1. FILL IN PAD WITH 4" OF EARTH BACKFILL AND 2" OF GROUT.
2. GROUND RODS SHALL EXTEND A MAXIMUM OF 3" ABOVE GROUTING TO ASSURE ADEQUATE DRIVEN DEPTH AND ALLOW FOR ADEQUATE CONNECTING SPACE.
3. GROUND RODS SHALL EXTEND A MINIMUM OF 7'-6" INTO EARTH.

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

08/23/19
STATE OF TEXAS
ELIZABETH SEGNER-ZWAIT
108870
LICENSED
PROFESSIONAL ENGINEER
Elizabeth Segner-Zwait

JRSA ENGINEERING, INC.
Consulting Electrical Engineers, TBPE #F-3907
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Austin, Texas 78759
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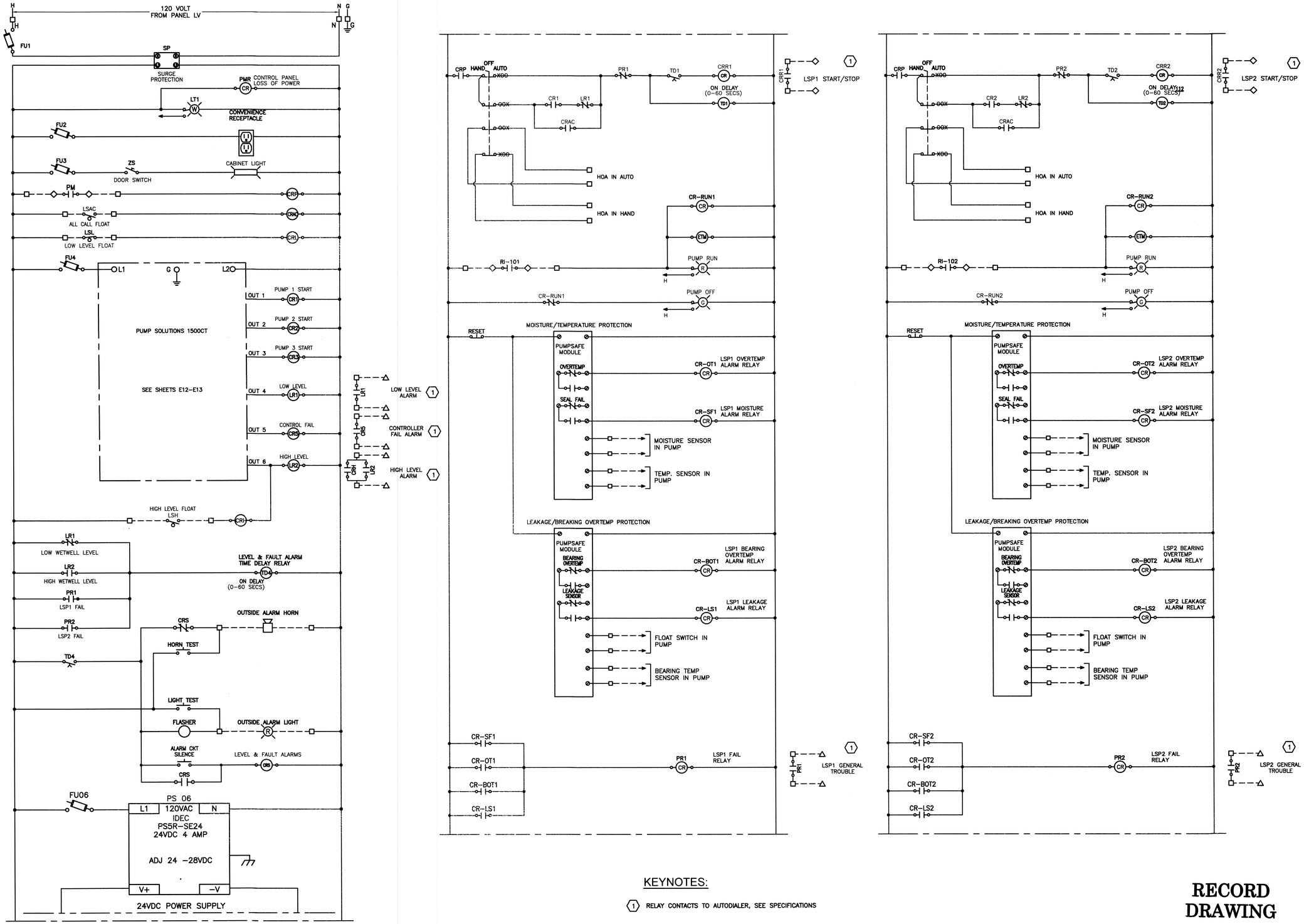
Texas Registered Engineering Firm F-17563

RSI HUTTO LS CONTROLS

ONCOR ELECTRICAL DETAILS

SHEET
E-9
OF 15

FILE: \\AYCLOUDC2GULTRA\Public\Projects\RSI Hutto LPL Station\EB-ONCOR DETS.dwg TAB: E9 PLOTTED: 8/23/2019 2:41 PM BY: LIZ2



KEYNOTES:

(1) RELAY CONTACTS TO AUTODIALER, SEE SPECIFICATIONS

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

08/23/19

STATE OF TEXAS
ELIZABETH SEGNER-ZARATE
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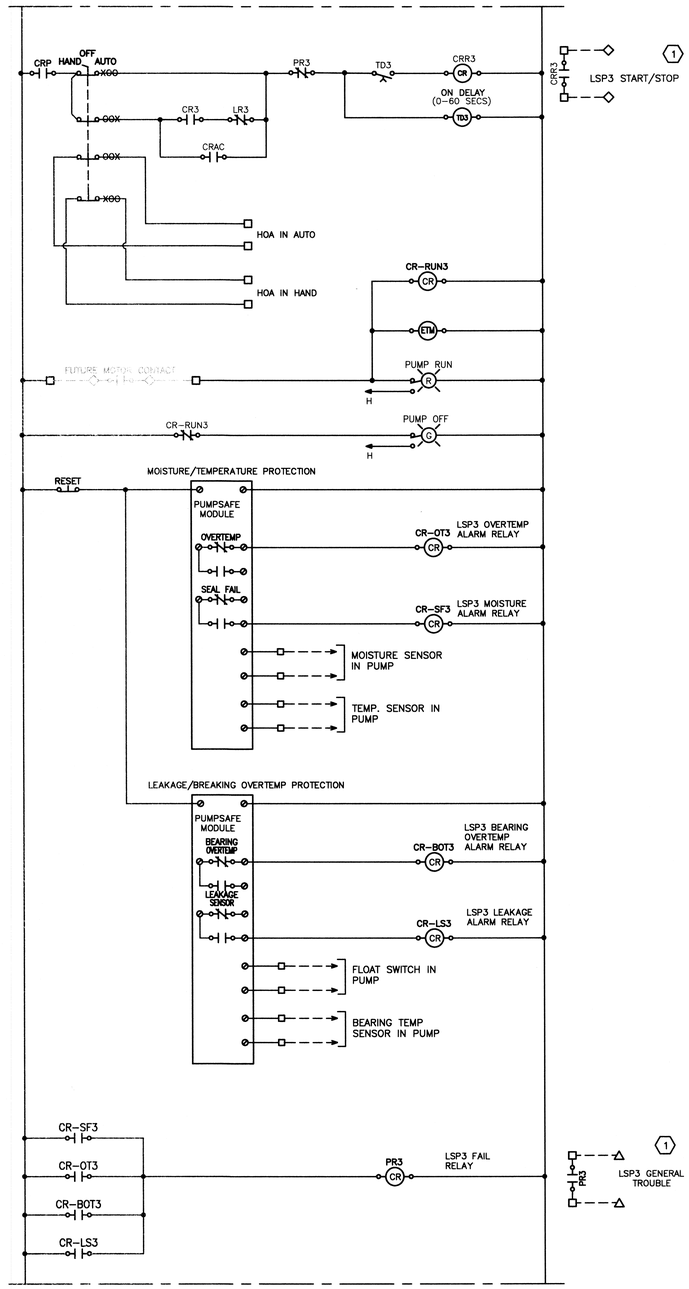
RSI HUTTO LS CONTROLS

SCHEMATIC DIAGRAMS-1

SHEET
E-10
OF 15

FILE: \\MYCLOUDEX2ULTRA\Public\Projects\RSI Hutto Lift Station\E10-E15 - SCHEMATICS.dwg TAB: E10 PLOTTED: 8/23/2019 2:41 PM BY: LIZ2



RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

08/23/19

STATE OF TEXAS
ELIZABETH SEGNER-ZARATE
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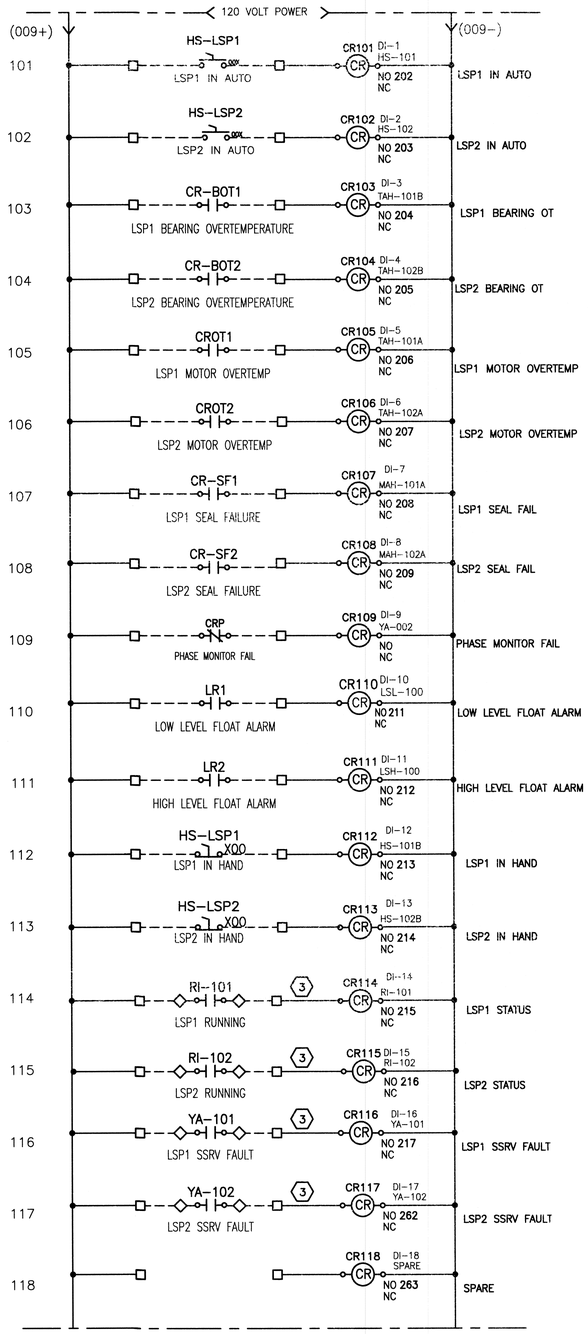
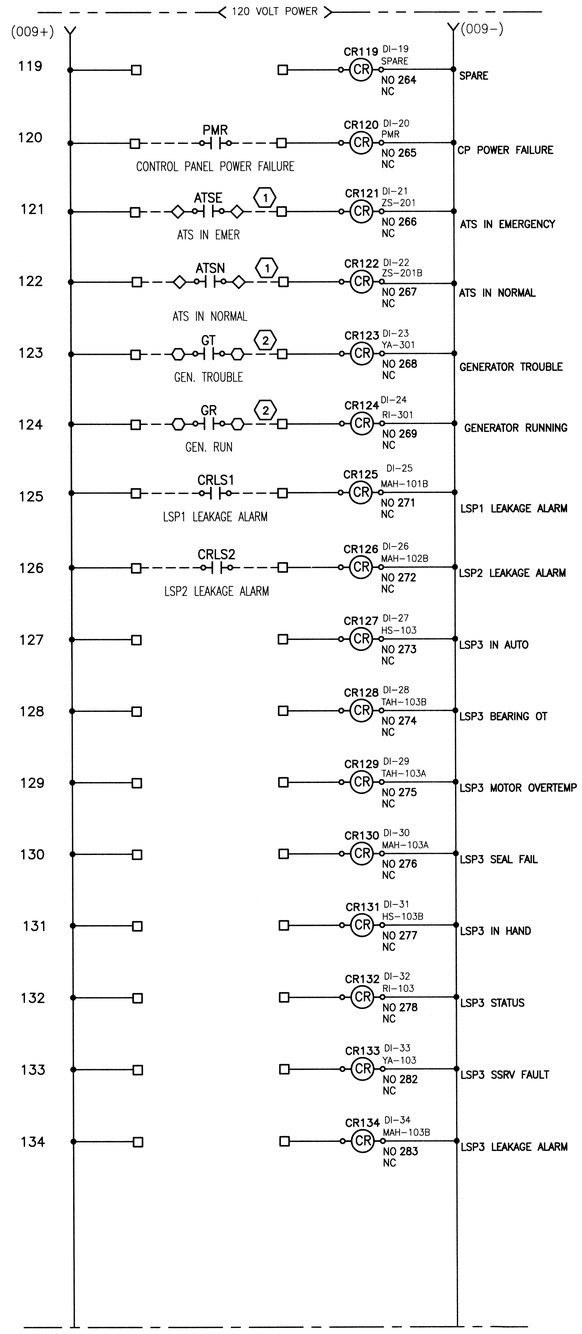
RSI HUTTO LS CONTROLS

SCHEMATIC DIAGRAMS-2

SHEET
E-11
OF 15

FILE: \\MYCLOUDEX2ULTRA\Public\Projects\RSI Hutto Lift Station\E10-E15 - SCHEMATICS.dwg TAB: E11 PLOTTED: 8/23/2019 2:41 PM BY: LIZ2





KEYNOTES:

1. AUTOMATIC TRANSFER SWITCH AUXILIARY CONTACT
2. GENERATOR ANNUNCIATOR AUXILIARY CONTACT
3. CONTACTS IN LSP MOTOR BUCKET (IN MOTOR CONTROL CENTER)

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

08/23/19

STATE OF TEXAS
ELIZABETH SEGNER-ZARATE
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Austin, Texas 78759
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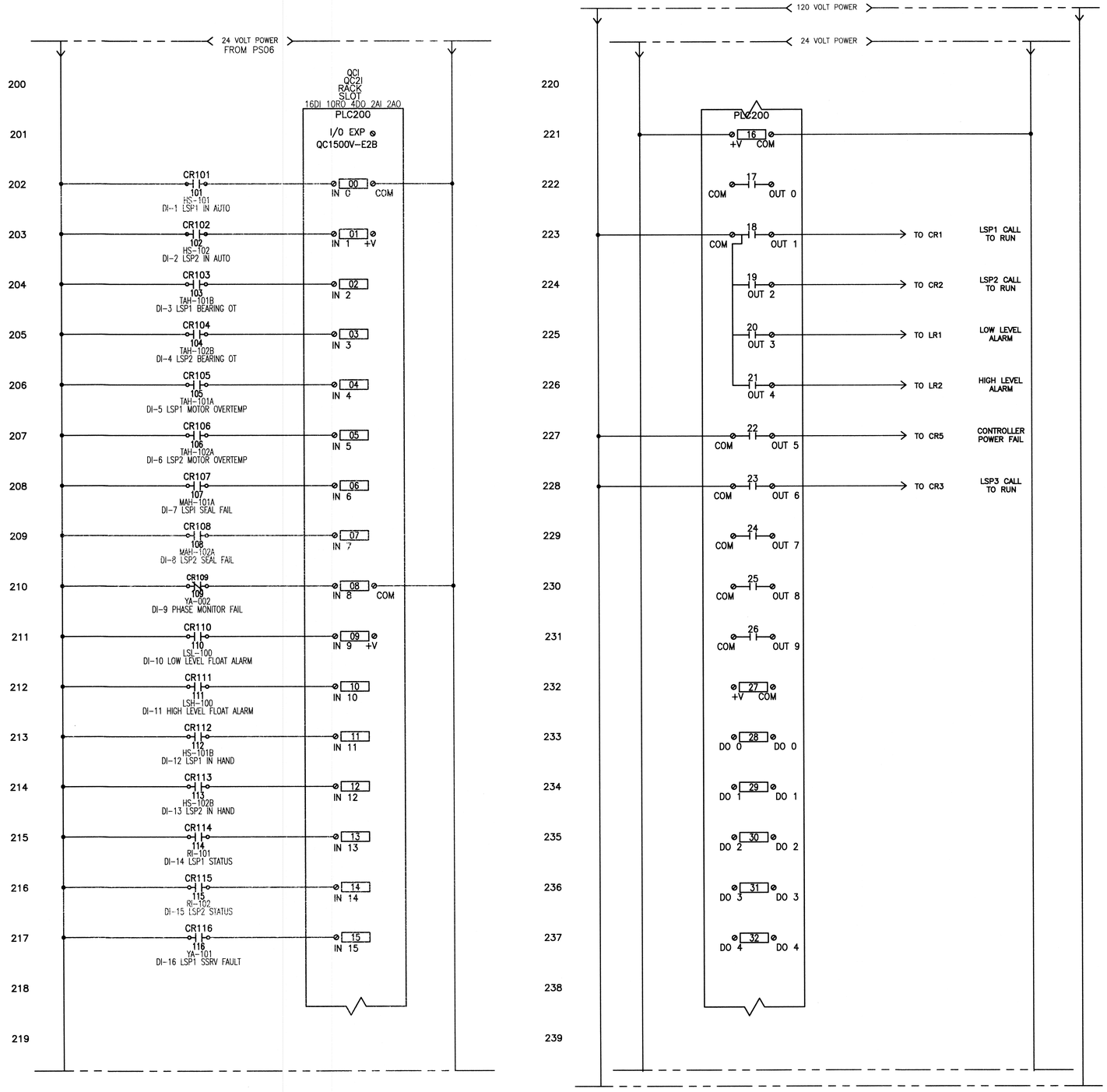
Texas Registered Engineering Firm F-17563

RSI HUTTO LS CONTROLS

SCHEMATIC DIAGRAMS-3

SHEET E-12 OF 15

FILE: \\WFCLOUDECULTRA\Public\Projects\RSI Hutto Lift Station\E10-E15 - SCHEMATICS.dwg TAB: E12 PLOTTED: 8/23/2019 2:41 PM BY: LIZ2



RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

08/23/19

STATE OF TEXAS
ELIZABETH SEGNER-ZARATE
108870
LICENSED
PROFESSIONAL ENGINEER

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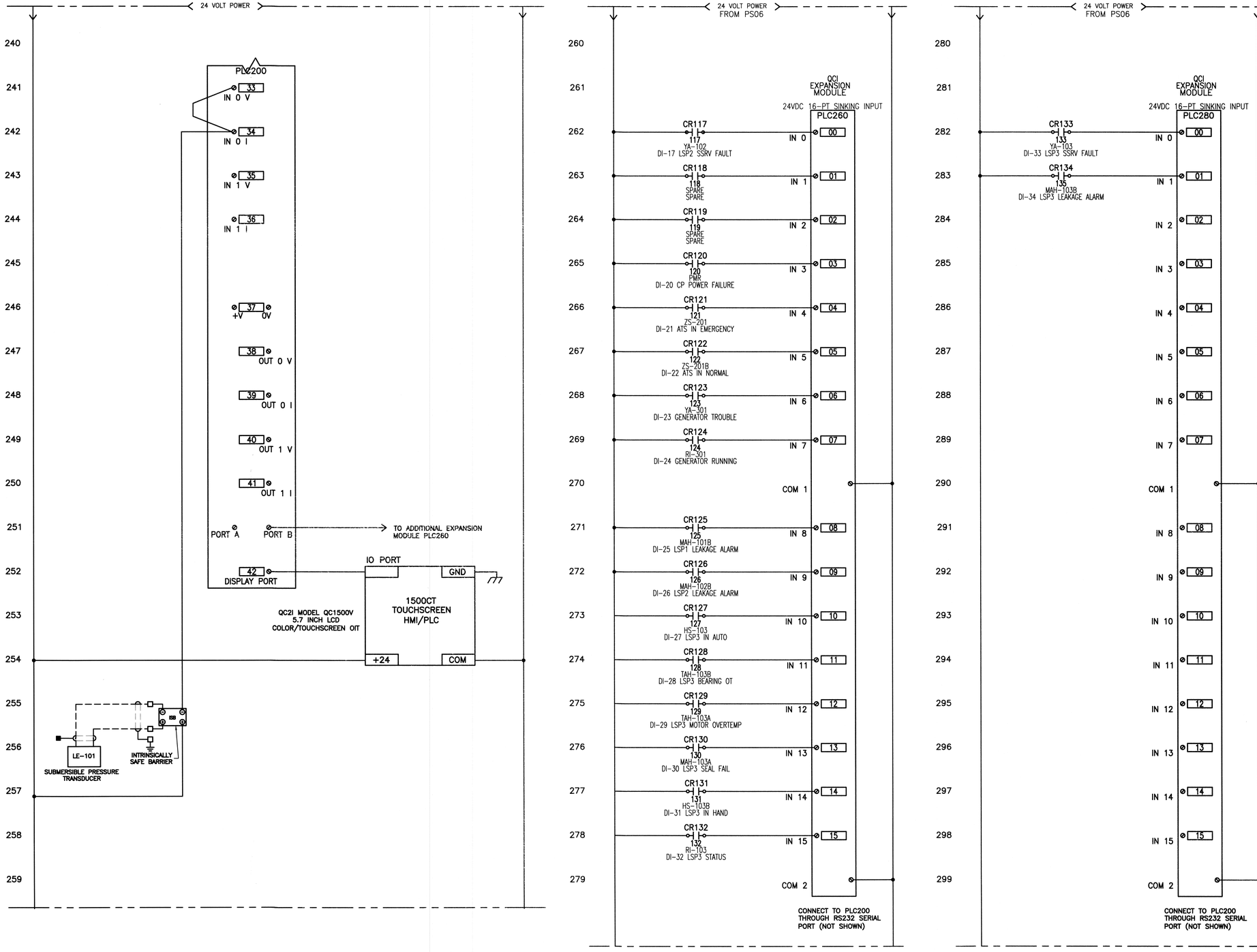
(512) 640-6590
Texas Registered Engineering Firm F-17563

RSI HUTTO LS CONTROLS

SCHEMATIC DIAGRAMS-4

SHEET E-13 OF 15

FILE: \\MYCLOUDEX2ULTRA\Public\Projects\RSI Hutto Lift Station\E10-E15 - SCHEMATICS.dwg TAB: E13 PLOTTED: 8/23/2019 2:41 PM BY: LIZ2



RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

08/23/19

STATE OF TEXAS
ELIZABETH SEGNER-ZARATE
108870
LICENSED
PROFESSIONAL ENGINEER

JRSA ENGINEERING, INC.
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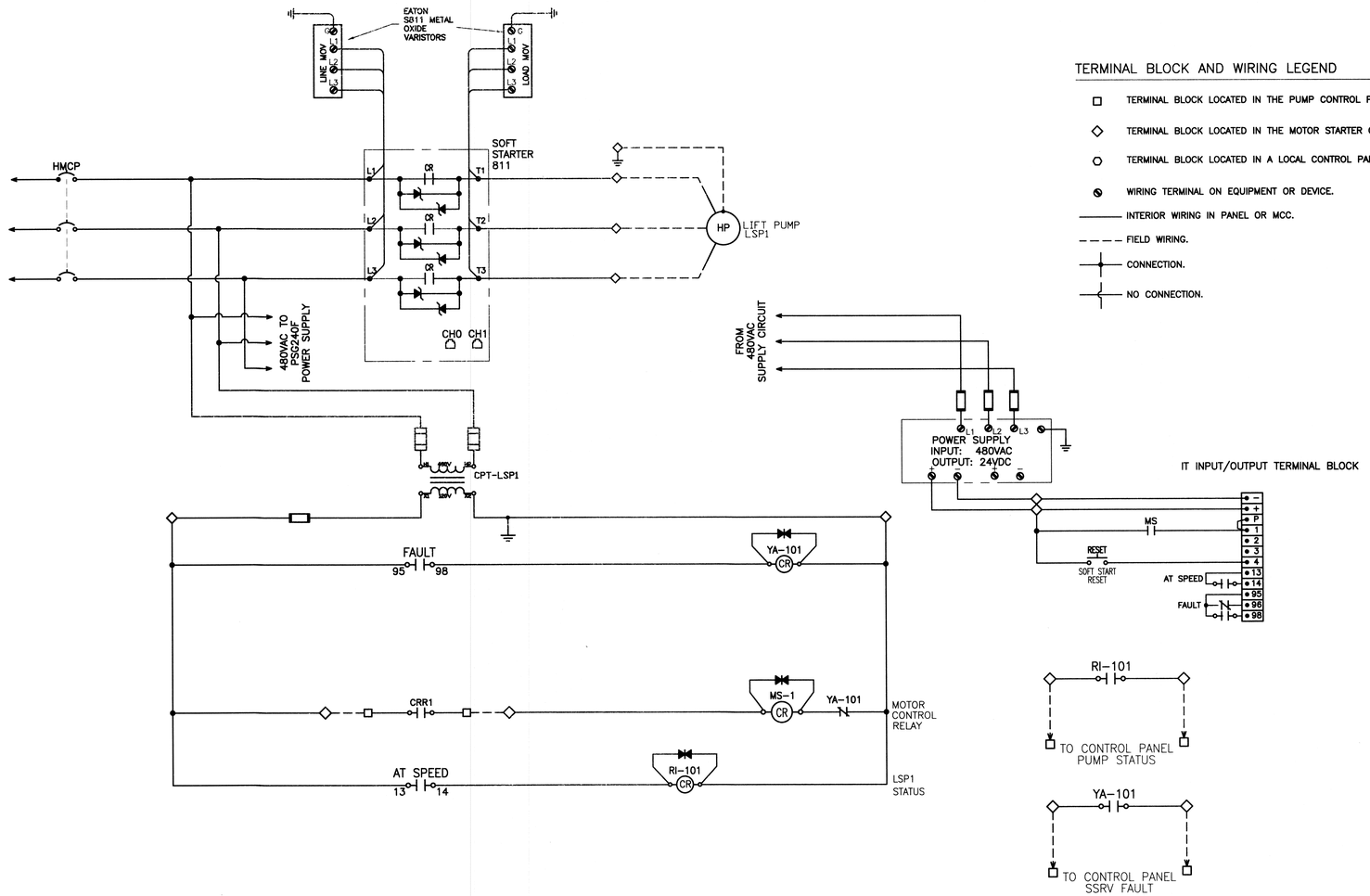
Engineering & Consulting
11130 Jollyville Rd., Ste. 101
Austin, Texas 78759
(512) 640-6590
Texas Registered Engineering Firm F-17563

RSI HUTTO LS CONTROLS

SCHEMATIC DIAGRAMS-5

SHEET
E-14
OF 15

FILE: \\MYCLOUDEX2ULTRA\Public\Projects\RSI Hutto Lift Station\E10-E15 - SCHEMATICS.dwg TAB: E14 PLOTTED: 8/23/2019 2:41 PM BY: LIZ2



TERMINAL BLOCK AND WIRING LEGEND

- □ TERMINAL BLOCK LOCATED IN THE PUMP CONTROL PANEL.
- ◇ TERMINAL BLOCK LOCATED IN THE MOTOR STARTER CUBICLE (MCC)
- ○ TERMINAL BLOCK LOCATED IN A LOCAL CONTROL PANEL.
- WIRING TERMINAL ON EQUIPMENT OR DEVICE.
- INTERIOR WIRING IN PANEL OR MCC.
- FIELD WIRING.
- CONNECTION.
- NO CONNECTION.

1 TYPICAL LIFT STATION MOTOR SCHEMATIC

TYP. FOR 3 PUMPS (LSP1, LSP2 AND FUTURE LSP3)

NOTES

1. THE SOFT START WIRING SHOWN ON THESE SCHEMATIC DIAGRAMS IS BASED ON EATON CUTLER HAMMER, TYPE S811 IN ORDER TO ESTABLISH A STANDARD. PRODUCTS MANUFACTURED BY ALLEN BRADLEY, GENERAL ELECTRIC OR SQUARE D THAT COMPLY WITH THE SPECIFICATIONS WILL BE ACCEPTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL DESIGN AND/OR CONSTRUCTION COSTS THAT MAY RESULT FROM THE USE OF ONE OF THESE ALTERNATE MANUFACTURERS.

RECORD DRAWING

NO.	DESCRIPTION	APP	DATE
	REVISIONS		

08/23/19

STATE OF TEXAS
ELIZABETH SEGNER-ZARATE
108870
LICENSED
PROFESSIONAL ENGINEER

Elizabeth Segner-Zarate

JRSA ENGINEERING, INC.
Consulting Electrical Engineers, TBPE #F-3997
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Austin, Texas 78730
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Austin, Texas 78759
(512) 640-6590
Texas Registered Engineering Firm F-17563

RSI HUTTO LS CONTROLS

MOTOR SCHEMATIC DIAGRAMS

SHEET E-15 OF 15

FILE: \\MYCLOUDEX2ULTRA\Public\Projects\RSI Hutto Lift Station\E10-E15 - SCHEMATICS.dwg TAB: E15 PLOTTED: 8/23/2019 2:41 PM BY: LIZ2

RANDALL JONES & ASSOCIATES
ENGINEERING INC.

ENGINEER'S CERTIFICATE OF COMPLETION

Owner of Property:
William Lyon Homes

Kind of Project, Contract Identification:
RSI Hutto Offsite WW Line – Utility Improvements

Name of Contractor: JL Gray Construction Inc.

Name of Consulting Engineer: Randall Jones & Associates Engineering, Inc. / TBPE Reg. No. F-9784

Address of Consulting Engineer: 2900 Jazz St, Round Rock, TX 78664

I certify that this Project is 100% complete on 01-22-2021; that the project was under periodic observation by either myself or someone under my supervision; that to the best of my knowledge the Project was in accordance with and includes all items in the plans and specifications approved by all authorities having jurisdiction; and "Record Drawings" have been furnished to the City.

This concurrence letter does not include the inspection or approval of any ADA related improvements. The opinion expressed in this letter is based on a general visual inspection of the project. As engineer, I was not engaged to perform inspection services during construction.

STATE OF TEXAS
ISRAEL RAMIREZ
114495
LICENSED
PROFESSIONAL ENGINEER

Signature

Texas Registration Number
114495

T: engconc

AFFIDAVIT OF BILLS PAID

STATE OF TEXAS }

COUNTY OF WILLIAMSON }

BEFORE ME, the undersigned authority, on this day personally appeared Seth Jewell - V.P. party to that certain Contract entered into between **JLGRAY Construction** and **Taylor Morrison** for the erection, construction, and completion of certain improvements and or additions upon the following described premises, to wit:

RSI Hutto Offsite WW Line

Said party being by me duly sworn states upon oath that the said improvements have been erected and completed in full compliance with the above referred to Contract and the agreed plans and specifications therefore.

Deponent further states that he has paid all bills and claims for materials furnished and labor performed on said Contract and that there are no outstanding unpaid bills or legal claims for labor performed or materials furnished upon said job.

THIS AFFIDAVIT IS BEING MADE BY THE UNDERSIGNED REALIZING THAT IT IS IN RELIANCE UPON THE TRUTHFULNESS OF THE STATEMENTS CONTAINED HEREIN THAT FINAL AND FULL SETTLEMENT OF THE BALANCE DUE ON SAID CONTRACT IS BEING MADE, AND IN CONSIDERATION OF THE DISBURSEMENT OF FUNDS BY **JL GRAY CONSTRUCTION, INC.** DEPONENT EXPRESSLY WAIVES AND RELEASES LIEN; CLAIMS, AND RIGHTS TO ASSERT A LIEN ON SAID PREMISES AND AGREES TO INDEMNIFY AND HOLD OWNER SAFE AND HARMLESS FROM AND AGAINST ALL LOSSES, DAMAGES, COSTS, AND EXPENSES OF ANY CHARACTER WHATSOEVER SPECIFICALLY INCLUDING COURT COSTS, BONDING FEES, AND ATTORNEY FEES, ARISING OUT OF OR IN ANY WAY RELATING TO CLAIMS FOR UNPAID LABOR OR MATERIAL USED OR ASSOCIATED WITH CONSTRUCTION OF IMPROVEMENTS ON THE ABOVE-DESCRIBED PREMISES.

By: _____

Subscribed and sworn to before me, the undersigned authority, on this, the 25th of February, 2021.

_____
Notary Public in and for the State of Texas

TERESA BORTLE
NOTARY PUBLIC - STATE OF TEXAS
ID# 132406920
COMM. EXP. 03-17-2024

RESOLUTION NO. R-

A RESOLUTION ACCEPTING THE INFRASTRUCTURE IMPROVEMENTS FOR THE SUBDIVISION KNOWN AS EMORY CROSSING "RSI OFFSITE"; IN THE CITY OF HUTTO, WILLIAMSON COUNTY, TEXAS.

WHEREAS, the infrastructure improvements for the "RSI Offsite" in the Emory Crossing Residential subdivision have been constructed and are ready for acceptance, and;

WHEREAS, a final inspection was conducted by the City's Construction and Public Works staff of all roads and wastewater improvements, and;

WHEREAS, all items have been constructed according to engineering plans and City codes and standards, and;

WHEREAS, JL Gray Construction, Inc. submitted a warranty bond to cover the material and workmanship for two years,

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF

HUTTO, TEXAS, hereby accepts the infrastructure improvements for Emory Crossing known as "RSI Offsite".

The City Council hereby finds and declares that written notice of the date, hour, place and subject of the meeting at which this resolution was adopted was posted and that such meeting was open to the public as required by law at all times during which this Resolution and the subject matter hereof were discussed, considered and formally acted upon, all as required by the Open Meetings Act, Chapter 551, Texas Government Code, as amended.

CONSIDERED and RESOLVED by the City Council of the City of Hutto on this the **20th** day of **May, 2021.**

THE CITY OF HUTTO, TEXAS

_____
Mike Snyder, Mayor

ATTESTED:

_____
Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration of a request to cancel the public hearing on the proposed zoning change request for Aspen Heights Planned Unit Development (PUD), 36.624 acres, more or less, of land, a single-family residential use PUD, located on FM 1660 South. **POSTPONED AT THE APPLICANT'S REQUEST**
Meeting:	Thursday, May 20, 2021
Department:	Development Services
Staff Contact:	Ashby Grundman

BACKGROUND INFORMATION:

Aspen Heights is a proposed Planned Unit Development (PUD) on the north side of FM 1660 S and CR 137. It is 36.624 acres of undeveloped land.

Owner: Stuart G. Farley and Hal P. Farley
Applicant: T.C. Selman – Breckenridge Multifamily Hutto Texas LLC
Current Zoning: Single-Family Residential (SF-1)
Proposed Zoning: Planned Unit Development (Single-Family 2 Base Zoning)
Surrounding Land Uses:

- **North –** SF-1 (Glenwood Subdivision)
- **East -** ETJ (Mid-Density Residential)
- **South –** B-2 Commercial (Vacant)
- **West –** SF-1 (Brushy Creek Meadows)

SUMMARY OF REQUEST:

The proposed Planned Unit Development (PUD) would provide 231 residential units on 36.624 acres of vacant land. Those units include a mixture of two, three, and four-bedroom units on a common lot. The proposed PUD provides for pedestrian connectivity, but there is no proposed street connectivity between the existing residential development to the north and the proposed PUD.

The Unified Development Code (UDC) defines the PUD zoning designation as a district allowing for creativity, innovation and flexibility in land use, density, site planning and design for a parcel that would result in a project with a more appropriate and desirable land use than what would result from strict application of the code. Development standards are required for a parcel that would be developed as PUD. Staff has reviewed the proposed PUD against the required criteria.

Code Deviations

Developer Proposed	UDC

6.3 Dwelling Units Per Acre	10.303.4	8-14 Dwelling Units Per Acre.
No Street Connectivity	10.613.3.9	Required connection in adjacent or adjoining developments.
Street Width 30 Back of Curb to Back of Curb	10.611.12	Face of Curb to Face of Curb 30 feet.
Sidewalks on one side	10.611.12	5 feet sidewalks required on both sides.
1,155 proposed parking (462 are within the garage attached to the home)	10.405.9	2 spaces per dwelling
Subdivision Platting Process		
Garage extended beyond house façade	10.406.3.3	Garage may protrude no more than 6 feet in front of façade.
Garage Widths 58% on 90% of houses, 75% on 10% of houses	10.406.3.3	Max 50% width of house linear frontage
Elevation Repeatability – proposing 7 elevations.	10.406.3.4	Number of elevations must equal 10% of number of lots - 23 minimum by code.
Building Setbacks Front: 10’ Garage: 10’ Rear: 10’	10.403.4	Front: 20’ Garage: 25’ Rear: 20’
Driveway Parking – for guest spaces	10.405.8	Parking space minimum size is 9’x18’ proposing front setback of 10 feet does not allow for driveway parking.
Landscape Buffer	10.403.6	10’ wide planting area or 5’ wide planting area with a 6’ tall masonry fence

The City’s adopted Future Land Use Map designates this area as being intended for commercial, however the property is currently zoned Single-Family Residential.

Engineering Review:
The Aspen Heights PUD is proposing public streets that do not meet the current requirements as specified in the UDC section 10.611.12 Street Classification Standards. The proposed local street ROW is 50’ rather than the standard 55’. Sidewalks are proposed only on one side of the local streets rather than the standard to have sidewalk on both sides of the street, sidewalk widths are not specified within the PUD, however, the city will require a minimum of 5’ for sidewalk. The proposed location of the sidewalk directly adjacent to the street with the tree lawn on the outside of the sidewalk does not match the city standard of sidewalk outside of tree lawn, however, the City Engineering department is in support of this change as installing sidewalk directly adjacent to the

street with trees further away from the street will improve the long-term structural integrity of the road construction reducing the need for future maintenance activities.

The developer has provided a TIA determination worksheet and it has been determined that the proposed development does not meet the trip generation threshold of 2,000 daily trips to require a Traffic Impact Analysis as stated in the UDC Section 10.615.4.1. The development does however meet the UDC requirements in section 10.312.11 which allows the city to request a traffic study for projects that generate more than 100 peak hour trips. This traffic study was scoped with the City Engineering department and is provided. The traffic study evaluates the sites access driveways, identifies required improvements to these access locations. In addition to the required improvements to the site access locations the project will be required to pay the Transportation Impact Fee which is calculated in the traffic study and comes to a total of $572,514.93 for the proposed development.

As of the writing of this staff report, there have been 9 responses to the public notices. Of those responses, two are in favor and seven are opposed. Those responses are included in the packet. If there are any more staff will present those at the meeting. There was a public hearing held on November 3, 2020. This is the second public hearing.

STAFF REVIEW:

Staff finds that the proposed PUD for Aspen Heights does not meet the intent of the provisions for PUD Review Criteria as listed in Section 10.203.13 of the UDC.

FINANCIAL IMPACT:

Not applicable.

POLICY IMPLICATIONS:

Not applicable.

ATTACHMENTS:

1. 210219-AspenHeightsHutto-PUD w page numbers
2. 20210407_Aspen Heights TIA Determination Form
3. 20210427_Aspen Heights_Traffic Analysis
4. PUD Review Criteria

ASPEN HEIGHTS
PLANNED UNIT DEVELOPMENT
Hutto, Texas

ASPEN HEIGHTS

NORRIS DESIGN
Planning | Landscape Architecture | Branding

ASPEN HEIGHTS

PLANNED UNIT DEVELOPMENT

The proposed development of the Farley tract on FM 1660 know as Aspen Heights Hutto is intended to be a new neighborhood of single-family rental homes that promotes a lifestyle of a community where individuals and families can live, work and play. Our guiding principles of our Planned Unit Development reflect a strong connectivity to the adjacent single-family neighborhood to the north and Farley Middle School to the south. The Aspen Heights community will include high quality housing, appealing landscaping, open areas, walking paths and family-oriented amenities.

Aspen Heights Partners is proposing a new, market rate single family rental project in Hutto, Texas. The project will consist of 231 two, three, and four bedroom homes on 36.6 acres located at 9261-9213 FM 1660, Hutto, Texas.

The investment thesis is centered on providing potential residents unable or unwilling to continue residing in traditional apartment complexes with a reasonably prices alternative that offers best-in-class amenities and the space and privacy typically associates with purchasing a home.

The Project will be a community of luxury single-family detached rental homes with resort style amenities nestled in Hutto, a northeastern suburb of the rapidly-expanding Austin MSA. The project's two, three- and four-bedroom homes with attached garages will have modern interiors with designer finishes. Granite counters, stainless steel appliances, washer/dryers, custom tile and flooring of luxury vinyl tile and low pile carpet are included in all homes. Touch screen thermostats, energy efficient lighting and high bandwidth cabling are carefully planned in each home. Fully fenced backyards and beautifully landscaped yards enhance the homes.

The Aspen Heights neighborhood will be close to schools, shopping and restaurants. The project neighbors Round Rock, Georgetown, Pflugerville and is less than thirty minutes from Austin and ABIA International airport.



1. General Provisions

1.1 Definitions

Words and terms used herein shall have their usual force and meaning, or as defined in the City of Hutto Code of Ordinances, as amended, hereinafter referred to as "the Unified Development Code" or "UDC".

1.2 Property

This Plan covers approximately 36.624 acres of land, located within the City of Hutto, Texas, and more particularly described in Exhibit "A".

1.3 Purpose

The purpose of this Plan is to ensure a PUD that: 1) is equal to, superior than and/or more consistent than that which would occur under the standard ordinance requirements, 2) is in harmony with the Hutto 2040 Comprehensive Plan, as amended, 3) does not have an undue adverse effect upon adjacent property, the character of the neighborhood, traffic conditions, parking, utilities or any other matters affecting the public health, safety and welfare, 4) provides benefits of open space, aesthetic features, harmonious design, and a strong commitment of connectivity to the public sidewalks and adjacent property, 5) is adequately provisioned by essential public facilities and services, and 6) will be developed and maintained so as not to dominate, by scale or massing of structures, the immediate neighboring properties or interfere with their development or use.

1.4 Applicability of City Ordinances

1.4.1 Zoning Ordinance

All aspects not specifically covered by this Plan shall be regulated by the SF-2 zoning district, as amended. If there is a conflict between this Plan and Code, this Plan shall supersede the specifics conflicting provisions of the Code.

1.4.2. Other Ordinances

All other Ordinances within the Code, as applicable and amended, shall apply to the Property, except as clearly modified by this Plan. In the event of a conflict, the terms of this Plan shall control.

EXHIBIT A: PRELIMINARY SITE PLAN



VICINITY MAP

PARKING CALCULATIONS

Garage Spaces (2 per unit)	462
Driveway Spaces (2 per unit)	462
Street Parking	231
Total Provided Spaces	**1,155**

NORTH

0 50 100 200

SCALE: 1" = 100'

4

NORRIS DESIGN
Planning | Landscape Architecture | Branding

1.5 Project Overview

1.5.1. Purpose of Plan

The purpose of the Plan is to provide a new development of affordable single family rental homes that promote of a lifestyle of community where families can live, work and play.

1.5.2. Concept Plan

This Plan, as depicted in Exhibit "A", shall serve as the Concept Plan for the Project.

1.5.3. Platting and Site Plan

The Property shall be permitted to be platted with multiple single family detached homes located on one common lot.

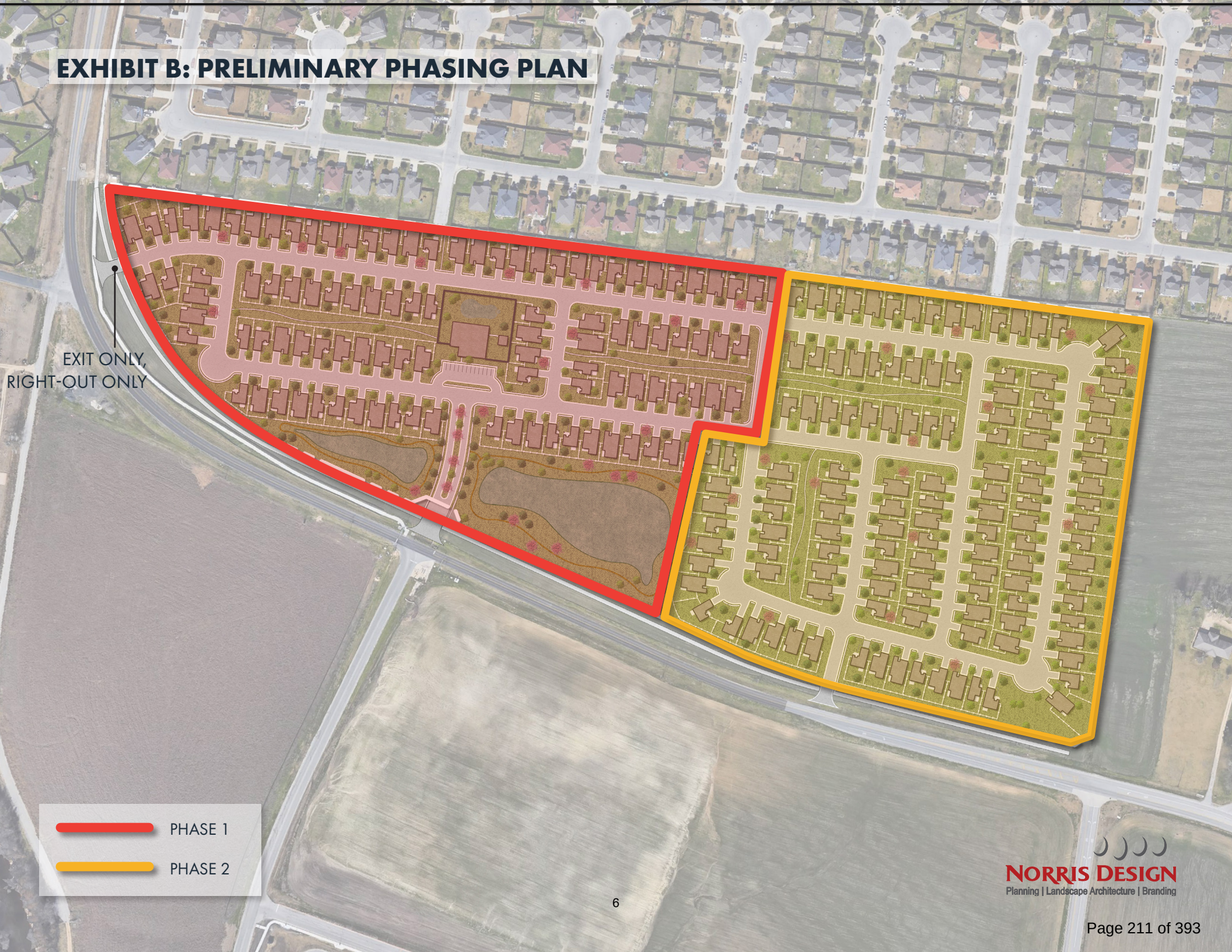
1.5.4. Land Use

(1) The residential housing type shall be single family detached units on a common lot, with each dwelling unit having a private external entrance, private attached garage and parking and a private yard area.

(2) A maximum of 231 units shall be allowed.

(3) A clubhouse/pavilion, swimming pool and children's playscape shall be included in the Project.

EXHIBIT B: PRELIMINARY PHASING PLAN



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1.6 Development Standards

1.6.1. Exterior Finish

(1) The modern farmhouse style shall be 100% horizontally installed or board and batten cement-based siding on all units.

(2) Cedar shall be limited to accent features.

1.6.2. Garage Door Treatment

(1) An upgraded garage door defined as a faux wood or wood clad shall be required.

(2) Garages shall be front load and placed forward of the front façade.

(3) Garages shall not be more than 58% of the house lineal footage width on 90% of the homes (2-3 bdr) and 75% of the house lineal footage width on 10% of the homes (4 bdr).

1.6.3. Repetitive Design and Required Elements

(1) The Project shall have a minimum of seven different elevations which will be placed so that identical elevations are not on adjacent lots or directly across the street.

(2) Each home will have a functional porch on the front, side or back. Front or side covered porches will be approximately 30-100 square feet and rear or back covered porches will be approximately 80-130 square feet.

1.6.4. Yard and Perimeter Fencing

(1) Each home shall have a back yard privacy fence constructed of cedar boards, treated wood or metal posts and treated rails.

(2) Perimeter fencing types are:

(a) Wrought iron, steel or aluminum.

(b) Cedar boards, treated wood or metal posts, treated rails with dry stacked stone columns.

1.6.5. Building Setbacks

(1) Setbacks for the common platted lot containing the detached single-family units shall be according to those established for the SF-2 zoning district except as follows;

(a) Front yard setback (min) = 10'

(b) Garage door setback (min) = 10'

(c) Rear yard setback (min) = 10'

(2) All units shall have a minimum of 10' of separation from their foundations.

1.6.6. Parking

(1) A total of 2 parking spaces shall be provided at each unit.

(2) Street quest parking will be provided on one side of the street only.

(3) A total of 1,155 will be included on the site (462 spaces at the living unit 2 car garage, 462 guest spaces at the driveways of the living spaces and 231 additional guest spaces on the project). A parking table has been included on the site plan.

(4) Parking for the clubhouse/pavilion will be provided as required by the Code of Ordinances and the UDC.

EXHIBIT C: PRELIMINARY FENCING PLAN



5' WROUGHT IRON POOL FENCING

6' WROUGHT IRON PERIMETER FENCING

6' HORIZONTAL WOOD FENCE WITH DRY STACK COLUMNS

7' HORIZONTAL WOOD PRIVACY FENCE

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1.6 Development Standards (Cont.)

1.6.7. Public Streets

(1) A minimum width of 30' from 'back of curb to back of curb' shall be used for all public streets other than the entry collector.

(2) Public streets will not connect to the existing single-family neighborhood to the north but will connect with a landscaped sidewalk area. The existing dead-end streets will be removed (if approval is granted by the neighborhood association). A landscape area will be created in the area of the dead-end streets.

1.6.8. Landscape and Bufferyards

(1) Along the northern and eastern boundaries a low-level bufferyard shall be installed, consisting of;

(a) A 10' wide planting area or a 5' planting area plus a 7' horizontal wooden perimeter fence, either replacing the existing neighborhood fence or allowing the existing neighborhood to tie into it.

(b) Two native tall trees and one native short tree per every fifty linear feet of bufferyard (which shall allow trees to be clustered along lengthy stretches of boundary).

(2) All homes shall have one native tall tree or two native short trees

(3) Tree lawn area shall have one native tall tree per 30'-40' of linear public street frontage, including a root barrier detail which will be used in conditions where required trees are located near utility lines.

(4) Native tall and short trees shall have a trunk a minimum of 2" caliper.

(5) Planted shrubs shall be a one-gallon container and grow to 2' at maturity.

1.7 Parkland Dedication

1.7.1 Parkland shall be provided by Fee-In-Lieu per the Code of Ordinances and UDC.

1.8 Changes to the Development Plan

1.8.1. Minor Changes

Minor changes (10%) to the Plan which do not substantially and adversely change this Plan may be approved administratively, if approved in writing by Development Services and the City Attorney.

1.8.2. Major Changes

All changes not permitted above shall be resubmitted following the same procedure required by the original PUD application.

EXHIBIT D: METES AND BOUNDS

A METES AND BOUNDS
DESCRIPTION OF A
36.624 ACRE TRACT OF LAND

BEING a 36.624 acre (1,595,340 square feet) tract of land situated in the William Gatlin Survey No. 23, Abstract No. 271, City of Hutto, Williamson County, Texas; and being a portion of a tract called 40.846 acres in instrument to Stuart Gregory Farley recorded in Document No. 2006032605 of the Official Public Records of Williamson County; said 40.846 acres being the same tract described by metes and bounds in Document No. 2003028462 of the Official Public Records of Williamson County; and being more particularly described as follows:

BEGINNING at a Type II TxDOT right-of-way monument found on the easterly boundary F.M. 1660 (variable width public right-of-way) and the southerly boundary of Lot 7, Block H of Glenwood Subdivision Phase One, plat of which is recorded in Document No.2003022092 of the Official Public Records of Williamson County, marking the northeast corner of that certain 4.2031 acre Parcel 01 described in Lis Pendens as The State of Texas vs. Stuart Gregory Farley, recorded in Document No. 201602005 of the Official Public Records of Travis County, and marking the northwest corner of the herein described tract;

THENCE, South 82°37'17" East, 2312.18 feet along the southerly boundary of said Glenwood Subdivision Phase One to a 1/2-inch iron rod (w/cap stamped "AMERI SURVEYORS") found on the southerly boundary of Lot 26, Block F of Glenwood Subdivision Phase 2A, plat of which is recorded in Document No. 200500945 of the Official Public Records of Williamson County, marking the northwest corner of that certain 16.813 acre tract described in instrument to Francisco J. and Martha G. Perez, recorded in Document No. 2015079930 of the Official Public Records of Williamson County, and marking the northeast corner of the herein described tract;

THENCE, South 07°57'03" West; at 628.68 feet passing the northwest corner of that certain 0.623 acre tract described in instrument to Williamson County Emergency Services #3, recorded in Document No. 2005001732 of the Official Public Records of Williamson County; continuing for a total distance of 929.99 feet to a 1/2-inch iron rod (w/cap stamped "KHA") set on the northeasterly right-of-way line of aforesaid F.M. 1660 marking the southern-most northeast corner of aforesaid 4.2031 acre Parcel 01, and marking the southeast corner of the herein described tract;

THENCE, over and across the aforesaid 40.846 acre tract, and along the northeasterly right-of-way line of said F.M. 1660, same being the northeasterly boundary of the said 4.2031 acre tract, the following ten (10) courses and distances:

1. North 75°35'21" West 5.67 feet to a Type II TxDOT right-of-way monument found for corner;
2. South 56°06'46" West 33.26 feet to a Type II TxDOT right-of-way monument found for corner;
3. North 75°35'21" West 569.11 feet to a Type II TxDOT right-of-way monument found at a point of curvature;
4. in a northwesterly direction along a tangent curve to the right having a central angel of 10°18'00", a radius of 1415.00 feet, a long chord bearing and distance of North 70°26'21" West, 254.03 feet, and a total arc length of 254.37 feet to a Type II TxDOT right-of-way monument found at a point of tangency;
5. North 65°17'21"West; at 3.59 feet passing a found 1/2-inch iron rod (w/green plastic cap); continuing for a total distance of 614.73 feet to a Type II TxDOT right-of-way monument found for corner;
6. North 20°17'21" West 35.36 feet to a Type II TxDOT right-of-way monument found for corner;
7. North 65°17'21" West 70.00 feet to a Type II TxDOT right-of-way monument found for corner;
8. South 69°42'39" West 35.36 feet to a Type II TxDOT right-of-way monument found for corner;
9. North 65°17'21" West 304.17 feet to a 1/2-inch iron rod (w/cap stamped "KHA") set at a point of curvature;
10. in a northwesterly direction along a tangent curve to the right having a central angel of 61°15'35", a radius of 685.00 feet, a long chord bearing and distance of North 34°39'33" West 698.00 feet, and a total arc length of 732.39 feet to the **POINT OF BEGINNING** and containing 36.624 acres of land in Williamson County, Texas. The basis of bearing for this description is the Texas State Plane Coordinate System Grid, Central Zone (FIPS 4203) (NAD'83). All distances are on the Grid and shown in U.S. Survey Feet. This document was prepared in the office of Kimley-Horn and Associates, Inc. in San Antonio, Texas.



JOHN G. MOSIER
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 6330
601 NW LOOP 410, SUITE 350
SAN ANTONIO, TEXAS 78216
PH. 210-541-9166
greg.mosier@kimley-horn.com

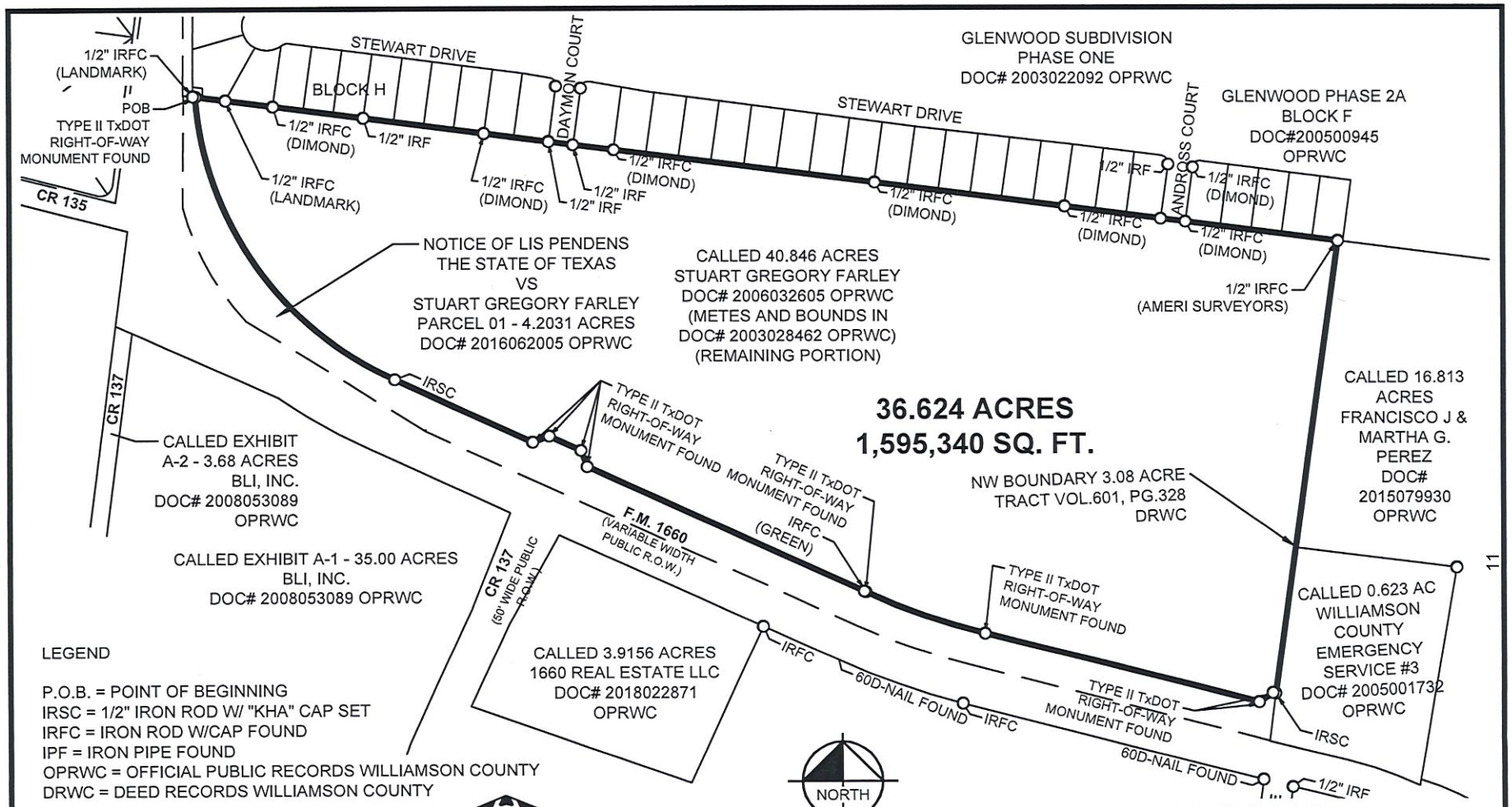
EXHIBIT OF
36.624 ACRES OF LAND
WILLIAM GATLIN SURVEY No. 23,
ABSTRACT No. 271, CITY OF HUTTO,
WILLIAMSON COUNTY, TEXAS.

Kimley»Horn
601 NW Loop 410, Suite 350
San Antonio, Texas 78216 FIRM # 10193973
Tel. No. (210) 541-9166
www.kimley-horn.com

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
N/A	MAV	JGM	10/19/2020	069241808	1 OF 2

VILLARREAL, MIGUEL 10/19/2020 2:47 PM K:\SNA_SURVEY\069241808-ASPEN-HTS-HUTTO\DWG\EXHIBITS\36.624AC EXHIBIT.DWG

EXHIBIT E: SURVEY



LEGEND

P.O.B. = POINT OF BEGINNING
IRSC = 1/2" IRON ROD W/ "KHA" CAP SET
IRFC = IRON ROD W/CAP FOUND
IPF = IRON PIPE FOUND
OPRWC = OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY
DRWC = DEED RECORDS WILLIAMSON COUNTY

EXHIBIT OF
36.624 ACRES OF LAND
WILLIAM GATLIN SURVEY No. 23,
ABSTRACT No. 271, CITY OF HUTTO,
WILLIAMSON COUNTY, TEXAS.

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greg.mosier@kimley-horn.com

STATE OF TEXAS
REGISTERED
JOHN G. MOSIER
6330
PROFESSIONAL
LAND SURVEYOR

10-19-2020

GEODETIC BASIS STATEMENT: The bearings shown hereon are based on the Texas State Plane Coordinate System, Central Zone (FIPS 4203) (NAD'83), as determined by the Global Positioning System (GPS). All distances shown hereon are on the GRID. The unit of linear measurement is U.S. Survey Feet.

Kimley»Horn
13455 Noel Road, Two Galleria Office Tower, Suite 700, Dallas, Texas 75240 FIRM # 10115500
Tel. No. (972) 770-1300
Fax No. (972) 239-3820

Scale	Drawn by	Checked by	Date	Project No.	Sheet No.
1" = 300'	MAV	JGM	10/19/ 2020	069241808	2 OF 2

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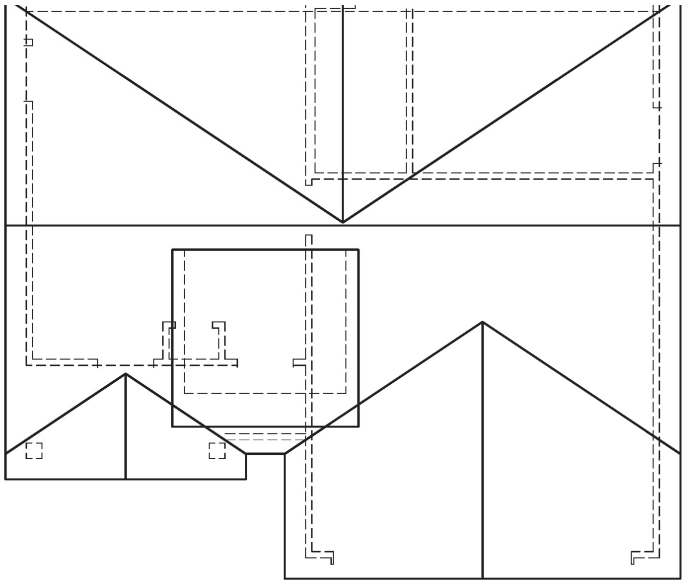
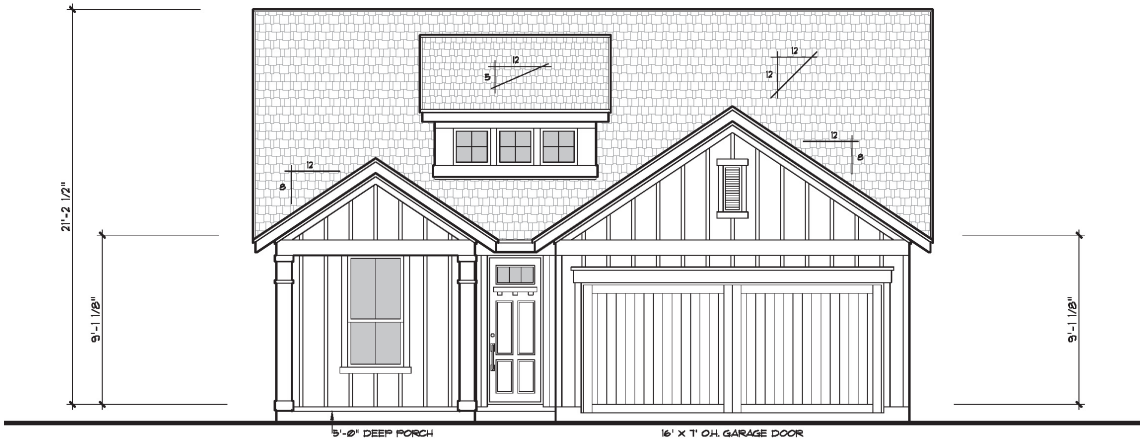
EXHIBIT F: ARCHITECTURAL EXAMPLES







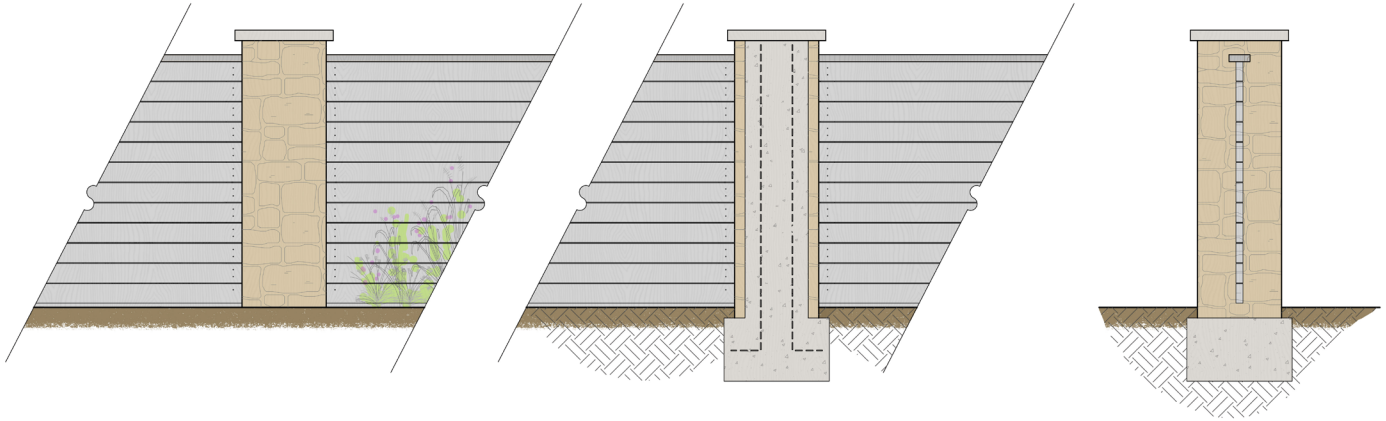


'A' Elevation
Plan 1

Sketch 1206

NOTE: These images are representative of the exterior architectural materials only.

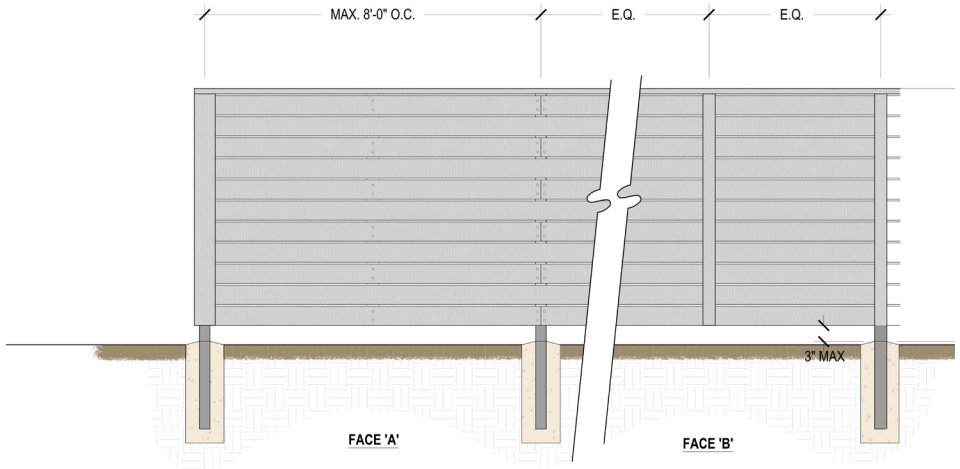
EXHIBIT G: CONCEPTUAL PERIMETER FENCING



NOTE: Dry stack stone columns to be spaced every ±80'. All wood to be stained grey.

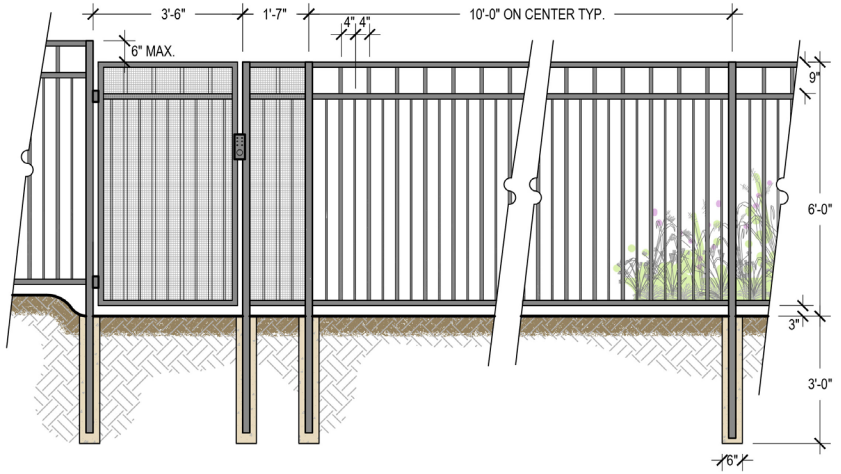
HORIZONTAL WOOD FENCE W/ STONE COLUMN

SCALE: 1/2" = 1'-0"



NOTES:
1. All wood to be stained grey.
2. Fence posts to be placed between existing wood fence posts - field verify each location.

WOOD SCREENING FENCE

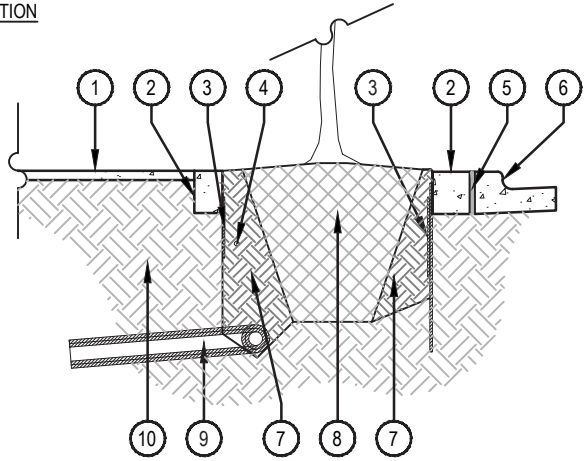


NOTES:
1. Metal pool fence to be 5' HT.
2. Metal perimeter fence to be 6' HT.

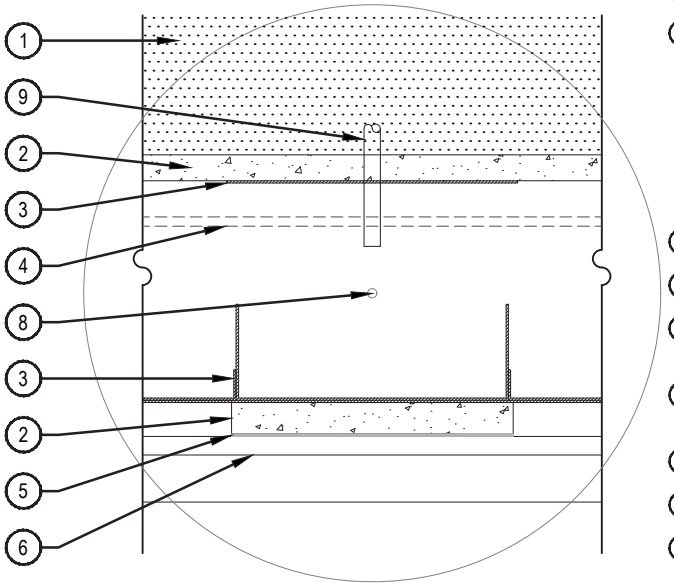
METAL FENCE

EXHIBIT H: CONCEPTUAL TREE ROOT BARRIER DETAIL

SECTION



PLAN



1. ADJACENT CONCRETE WALK
2. PC CONCRETE BEAM
3. GEOTEXTILE / BENTONITE CLAY WATERPROOFING MEMBRANE. UB 48-2 TYPE ROOT BARRIER LOCATED ALONG RIVERSIDE FOR ENTIRE PLANTING ZONE. REF. CIVIL FOR SPECS. AND LOCATION OF 1/4" STEEL PLATE ROOT BARRIER TO PROTECT STORM INLET.
4. IRRIGATION
5. ISOLATION JOINT
6. CURB AND GUTTER, REF. CIVIL PLANS
7. AMENDED PLANTING SOIL PER CITY OF AUSTIN SPECIFICATIONS
8. ROOTBALL AND VEGETATION
9. DRAINAGE LINE
10. COMPACTED SUBGRADE, PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS

NOTES:

1. TREE WELLS SHALL NOT CONFLICT WITH EXISTING OR PROPOSED WATER OR WASTEWATER LINES AND SHALL NOT BE INSTALLED WITHIN A MINIMUM HORIZONTAL DISTANCE OF 900mm (36") FROM THE OUTSIDE OF ANY PUBLIC OR PRIVATE UTILITY LINE OR APPURTENANCE.

ROOT BARRIER PLAN AND SECTION

SCALE: 1/2" = 1'-0"

EXHIBIT I: CONCEPTUAL POND TRAIL PLAN



NORRIS DESIGN
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EXHIBIT J: STREET SECTION | PUBLIC ENTRY DRIVE

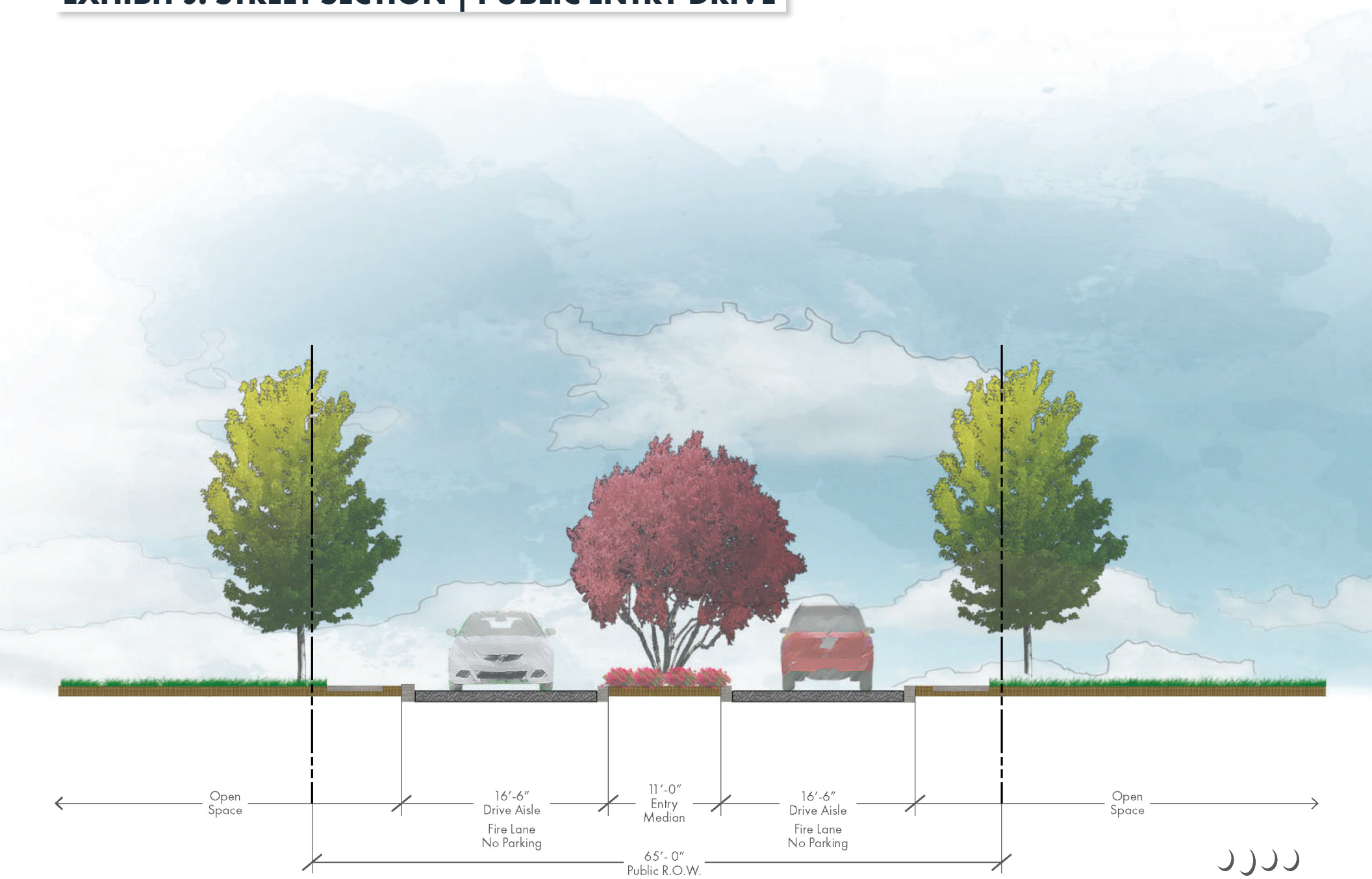

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EXHIBIT K: STREET SECTION | PUBLIC STREET

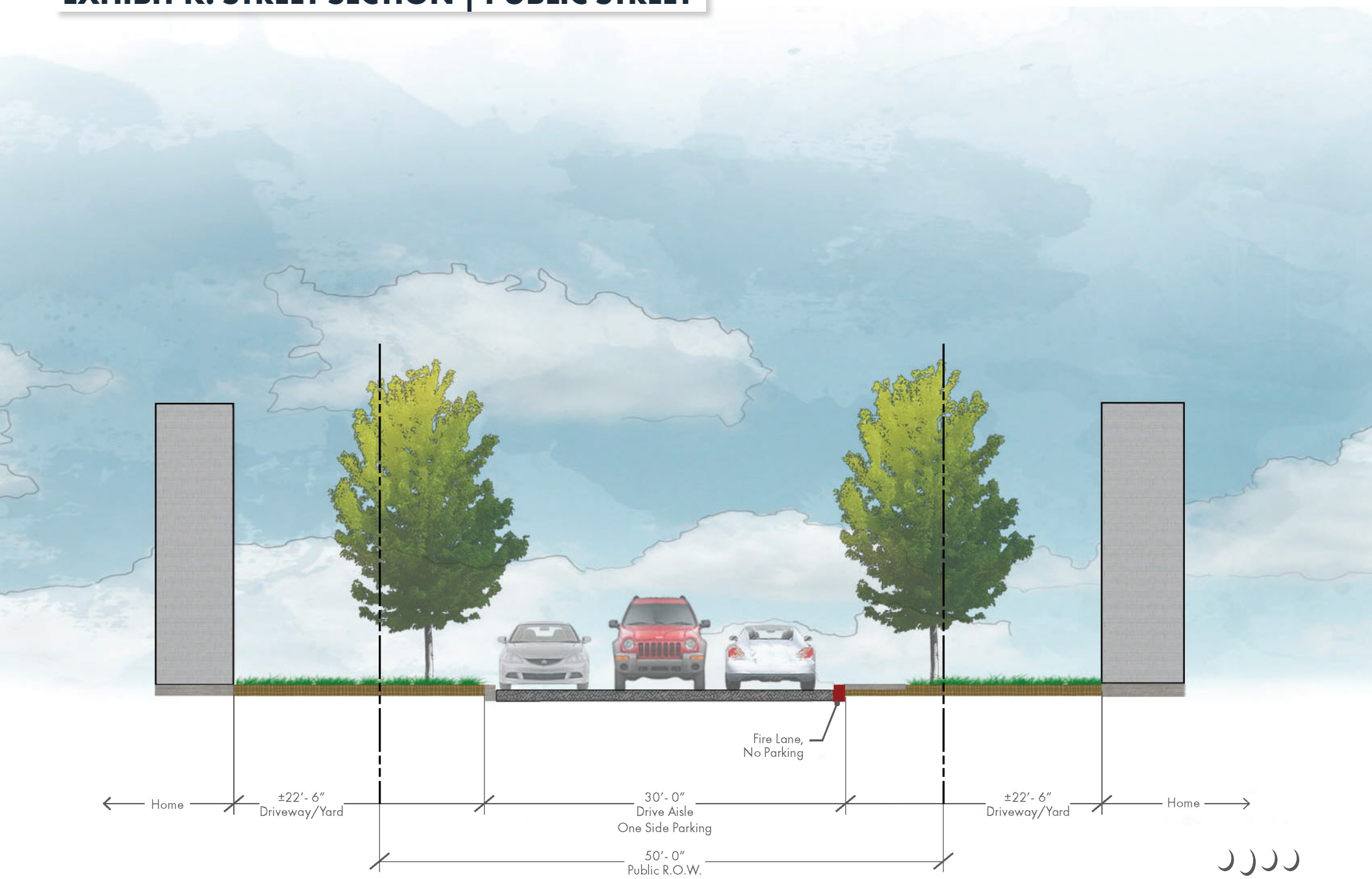

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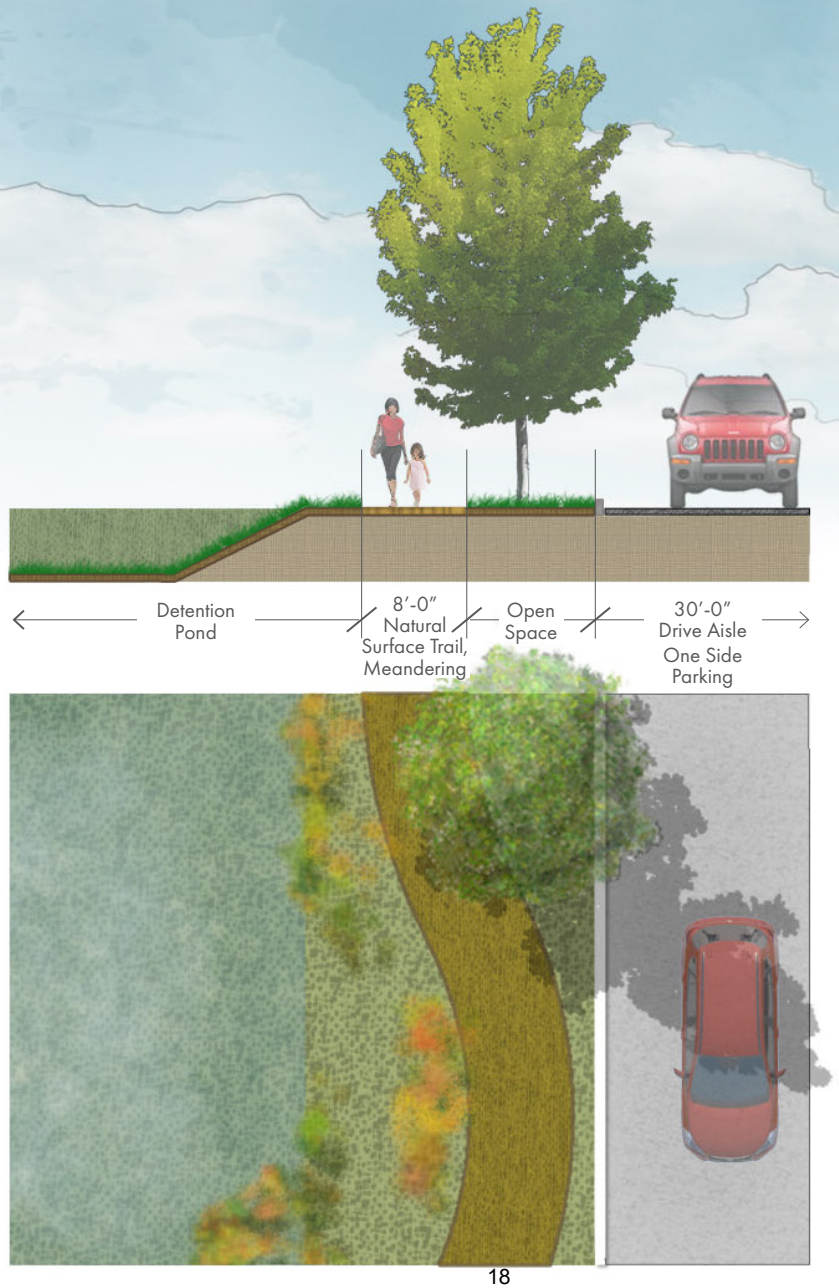
EXHIBIT L: STREET SECTION | POND TRAIL



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TYPICAL UTILITY LOCATION

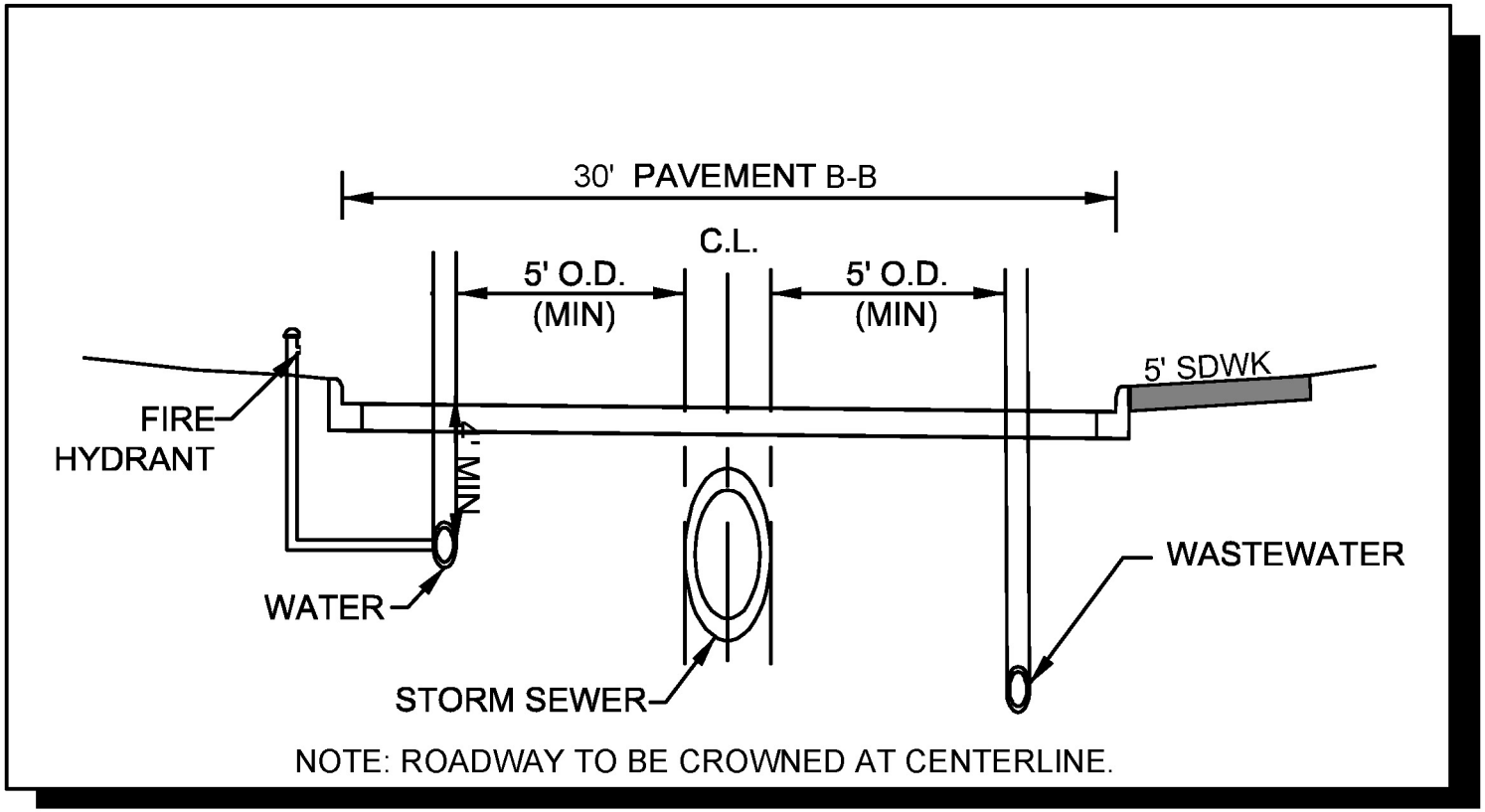

EXHIBIT N: CONCEPTUAL ENTRY ELEMENTS



PRIMARY ENTRY SIGN



ENTRY POLE LIGHT

EXHIBIT O: CONCEPTUAL AMENITIES







CITY OF HUTTO
TRAFFIC IMPACT ANALYSIS (TIA) DETERMINATION WORKSHEET
APPLICANT MUST FILL IN WORKSHEET PRIOR TO SUBMITTING FOR TIA DETERMINATION

PROJECT NAME: Aspen Heights Residential Development
LOCATION: W of FM 1660 and Mager Ln
APPLICANT'S AGENT: Dawniele Metsker-Galarza, P.E. TELEPHONE NO.: 210-321-3431

APPLICATION STATUS: DEVELOPMENT ASSESSMENT:____ZONING:_____ SITE PLAN:__X__

EXISTING:

PHASE NUMBER	BLDG SQ.FT.	LAND USE	ITE CODE	DAILY TRIP RATE/EQ	DAILY TRIPS

PROPOSED

PHASE NUMBER	BLDG SQ.FT.	LAND USE	ITE CODE	DAILY TRIP RATE/EQ	DAILY TRIPS	AM / PM RATE/EQ	AM TRIPS	PM TRIPS
1	231 DU	Residential Planned Unit Development	270	Ln(T)=0.94Ln(x)+2.43	1,893	AM: Ln(T) = 0.88Ln(x)+0.26 PM: Ln(T)=0.96Ln(X)+0.20	156	227
				Totals	**1,893**		**156**	**227**

ABUTTING ROADWAYS

STREET NAME	PROPOSED ACCESS?	PAVEMENT WIDTH	CLASSIFICATION
FM 1660	Yes	Existing - 50 ft of pavement	Minor Arterial

NOTE: A TIA determination must be made prior to submittal of any zoning or site plan application. Therefore, this completed and reviewed form MUST ACCOMPANY any subsequent application for the IDENTICAL project. CHANGES to the proposed project will REQUIRE a new TIA determination to be made.

Kimley»Horn

State of Texas Registered Firm No. 928

TRAFFIC STUDY

DATE: APRIL 27, 2021

TO: SAMUEL RAY, P.E.
CITY OF HUTTO

FROM: AMY AVERY, P.E., PTOE
KIMLEY-HORN

RE: ASPEN HEIGHTS DRIVEWAY AND TRAFFIC ANALYSIS



The purpose of this memorandum is to document the traffic analysis prepared for a proposed 231 dwelling unit residential planned unit development located on FM 1660 between CR 135 and Swindoll Lane in Hutto, Texas. Based on the trip generation and criteria in section 10.615.4 of the City of Hutto Unified Development Code, a TIA is not required for the subject site as the proposed development generates less than 2,000 daily trips. However, the City has requested this limited analysis traffic study based on section 10.312.11 as the development does generate at least 100 peak hour trips.

PROPOSED LAND USES

The site is currently undeveloped. The proposed development will consist of a 231 dwelling unit residential planned unit development. **Figure 1** shows the proposed site plan. Traffic projections were prepared for the proposed development based on the trip generation rates found in the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation Manual, 10th Edition*. **Table 1** summarizes the land use and total number of trips that are expected to be generated by the proposed development during the AM and PM peak periods and on a daily basis. The number of trips generated represents the number of vehicles entering and exiting the proposed development to and from the adjacent street system.

Table 1: Proposed Land Use and Site Generated Trips

Land Use	ITE Code	Amount	Units	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Phase 1 -2024										
Residential Planned Unit Development	270	231	Dwelling Unit(s)	1,894	34	122	156	111	60	171
Total Net New External Trips				***1,894***	***34***	***122***	***156***	***111***	***60***	***171***

Trip generation based on ITE's Trip Generation Manual, 10th Edition.
Pass-by trips based on ITE's Trip Generation Handbook, 3rd Edition.

PROPOSED SITE ACCESS POINTS

This site is anticipated to have three access points. Access A is a proposed at the existing intersection of FM 1660 & CR 135 and shall be restricted to emergency access only. Access B is a proposed full access driveway at the existing intersection of FM 1660 & CR 137, and Access C is another proposed full access driveway on FM 1660, approximately 1,050 feet east of Access B.

The proposed driveway spacing is consistent with TxDOT driveway spacing criteria, given the posted speed of 55 miles per hour on FM 1660. Preliminary coordination has occurred with TxDOT and the City of Hutto and approval of proposed access points is expected when driveway permit applications are submitted.

TRAFFIC DISTRIBUTION AND ASSIGNMENT

The distribution and assignment of the build out site-generated traffic to the study area roadway network was performed to reflect the anticipated local traffic patterns. **Figure 2** shows the proposed distribution for the development.

The anticipated turning movement volumes were computed based on trip generation information and directional distribution assumptions. **Figure 3** shows the projected AM and PM peak hour site related trips.

The trip generation, directional distribution, and trip assignment are attached to this memorandum. No reduction will be taken for internal capture, transit, or pass-by.

TURN LANE EVALUATION

Based on TxDOT deceleration auxiliary lane thresholds, a deceleration lane is required when anticipated turning movements are 50 vehicles per hour or more and the posted speed limit is greater than 45 mph. At speeds less than or equal to 45 miles per hour a deceleration lane is required when anticipated turning movements are 60 vehicles per hour. The speed limit on FM 1660 is 55 miles per hour. **Table 2** summarizes the turn lane requirements for the proposed development access points.

Table 2: Anticipated Turn Lane Requirements

Turn Lane Location	Right-Turn Volume (vph)	Left-Turn Volume (vph)	Right-Turn Threshold Met?	Left-Turn Threshold Met?
Access A/CR 135 & FM 1660	-	-	-	-
Access B/CR 137 & FM 1660	3 (PM)	83 (PM)	No	Yes
Access C & FM 1660	2 (PM)	11 (PM)	No	No

Installation of a southbound left-turn deceleration lane is triggered at the intersection of Access B/CR 137 & FM 1660. Based on the speed limit of 50 miles per hour, a total deceleration length of 525 feet is required, of which 100 feet is taper, and 100 feet is storage. No additional pavement is required due to an existing two-way center left-turn lane on FM 1660. Whether or not the striping will require modification will be coordinated with TxDOT during the driveway permitting process.

IMPACT FEE CALCULATIONS

The City of Hutto recently passed an ordinance that grants the city the power to assess and collect Transportation Impact Fees from developments to fund capital projects that improve the transportation system. Table 3 summarizes the impact fee calculations associated with the proposed development.

When the impact fee study was completed in 2018 the land uses the study was based on were from the 9th edition of the ITE Trip Generation Manual. The land use most applicable to the proposed development that was included in the impact fee study is land use code 220 – Apartment/Multi-Family/Condominium.

The development is not adjacent to any of the projects identified in the impact fee CIP so the responsibility of the development is limited to the calculated transportation impact fee.

Table 3: Impact Fee Summary

Impact Fee Study Land Use (Based on 9th Edition ITE)	Number of Dwelling Units (DU)	Vehicle-Miles per DU	Adopted Transportation Impact Fee rate (per veh-mi)	Calculated Transportation Impact Fee
Apartment/Multi-family/Condominium	231	3.16	$784.31	$572,514.93

SUMMARY AND RECOMMENDATIONS

Based on the analysis performed in this technical memorandum, we offer the following conclusions and recommendations to support the development:

- Access A/CR 135 & FM 1660
  - Access A shall be restricted to emergency access only.
- Access B/CR 137 & FM 1660
  - Signalization of the westbound approach (Access B).
  - Installation of a southbound left-turn lane is recommended. Based on the speed limit of 50 miles per hour, a total deceleration length of 525 feet is required, of which 100 feet is taper, and 100 feet is storage. No additional pavement is required due to an existing two-way center left-turn lane on FM 1660. Whether or not the striping will require modification will be coordinated with TxDOT during the driveway permitting process.
- Access C & FM 1660
  - Access C requires no improvements to operate as full access.
- FM 1660 has been widened adjacent to the site previously. Therefore, the development is not subject to the border street requirements and is subject only to the adopted impact fee assessment of $572,514.93.

Attachments:

1. Figure 1: Site Location
2. Figure 2: Site Plan
3. Figure 3: Trip Distribution
4. Figure 4: Trip Assignment
5. City of Hutto Study Scope Documentation

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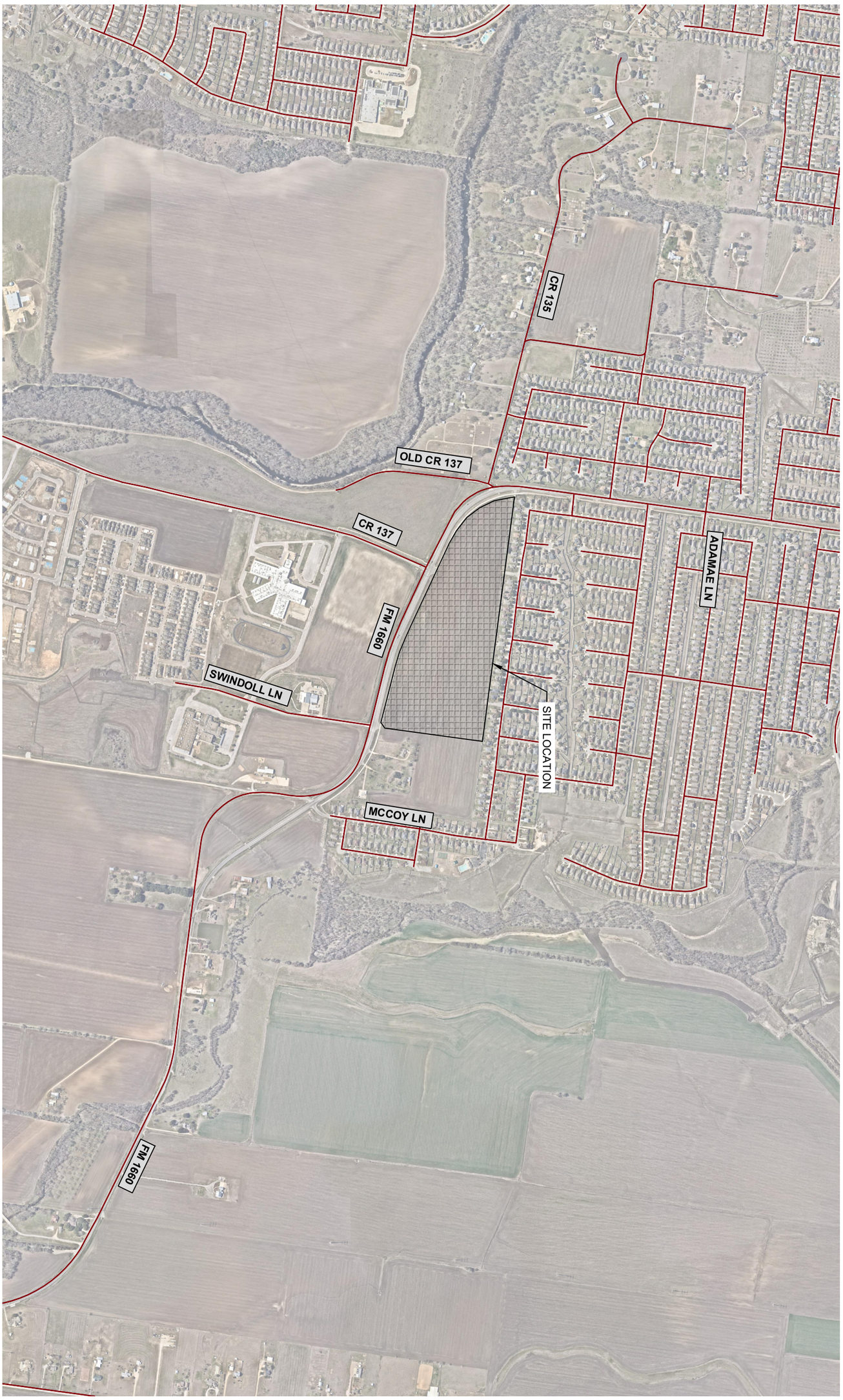

ASPEN HEIGHTS RESIDENTIAL DEVELOPMENT

SHEET NUMBER 1

SITE LOCATION

KHA PROJECT	069241808
DATE	APRIL 2021
SCALE	AS SHOWN
DESIGNED BY	___
DRAWN BY	___
CHECKED BY	___

FOR REVIEW ONLY

Kimley»Horn

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601 NW LOOP 410, SUITE 350, SAN ANTONIO, TX 78216
PHONE : 210-541-9166 FAX: 210-541-8699
WWW.KIMLEY-HORN.COM TBPE FIRM NO. 928

No.	REVISIONS	DATE	BY

EXHIBIT A: PRELIMINARY SITE PLAN



VICINITY MAP

PARKING CALCULATIONS

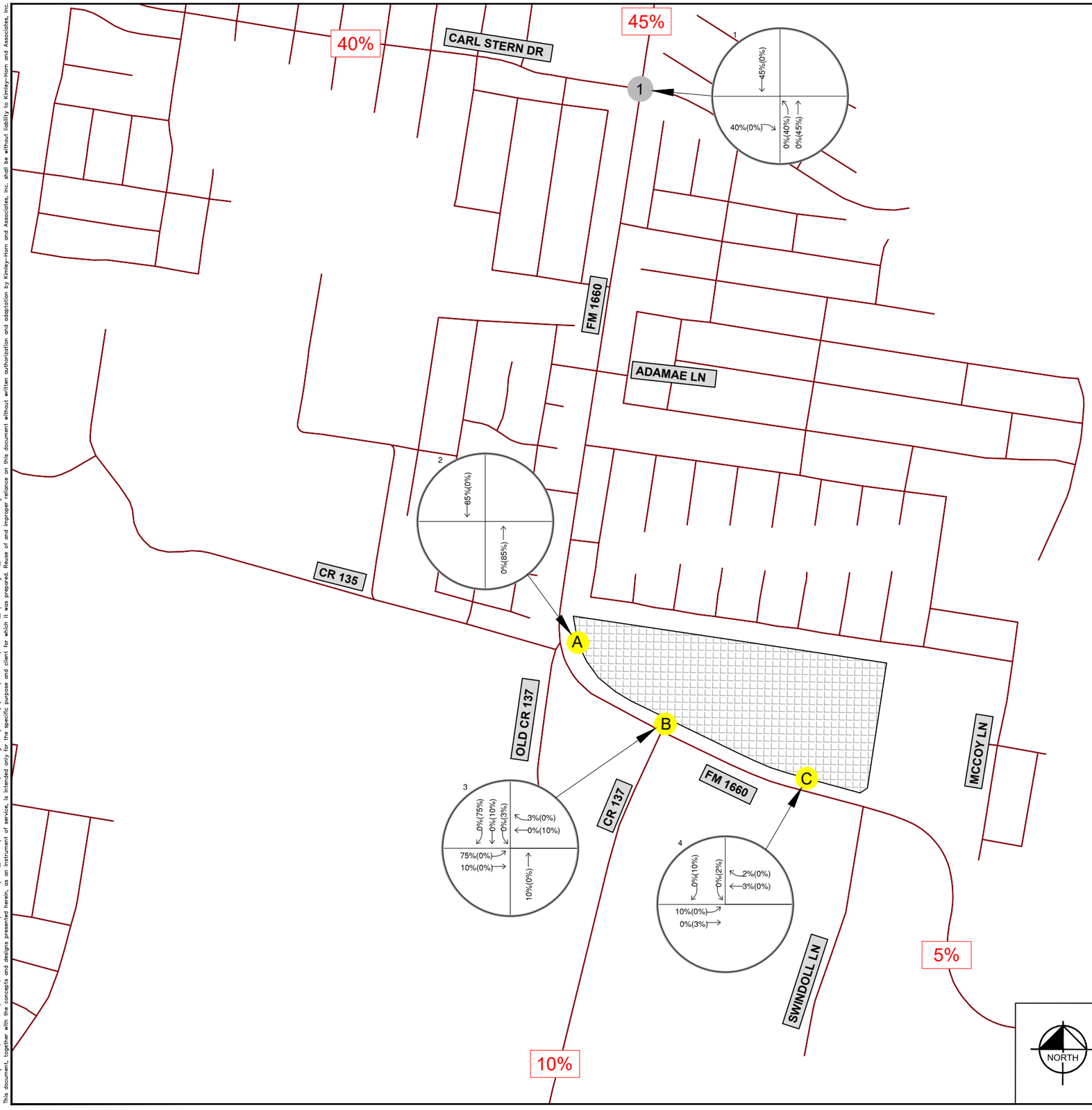
Garage Spaces (2 per unit)	462
Driveway Spaces (2 per unit)	462
Street Parking	231
Total Provided Spaces	**1,155**

NORTH

0 50 100 200

SCALE: 1" = 100'

NORRIS DESIGN
Planning | Landscape Architecture | Branding



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No.	REVISIONS	DATE	BY

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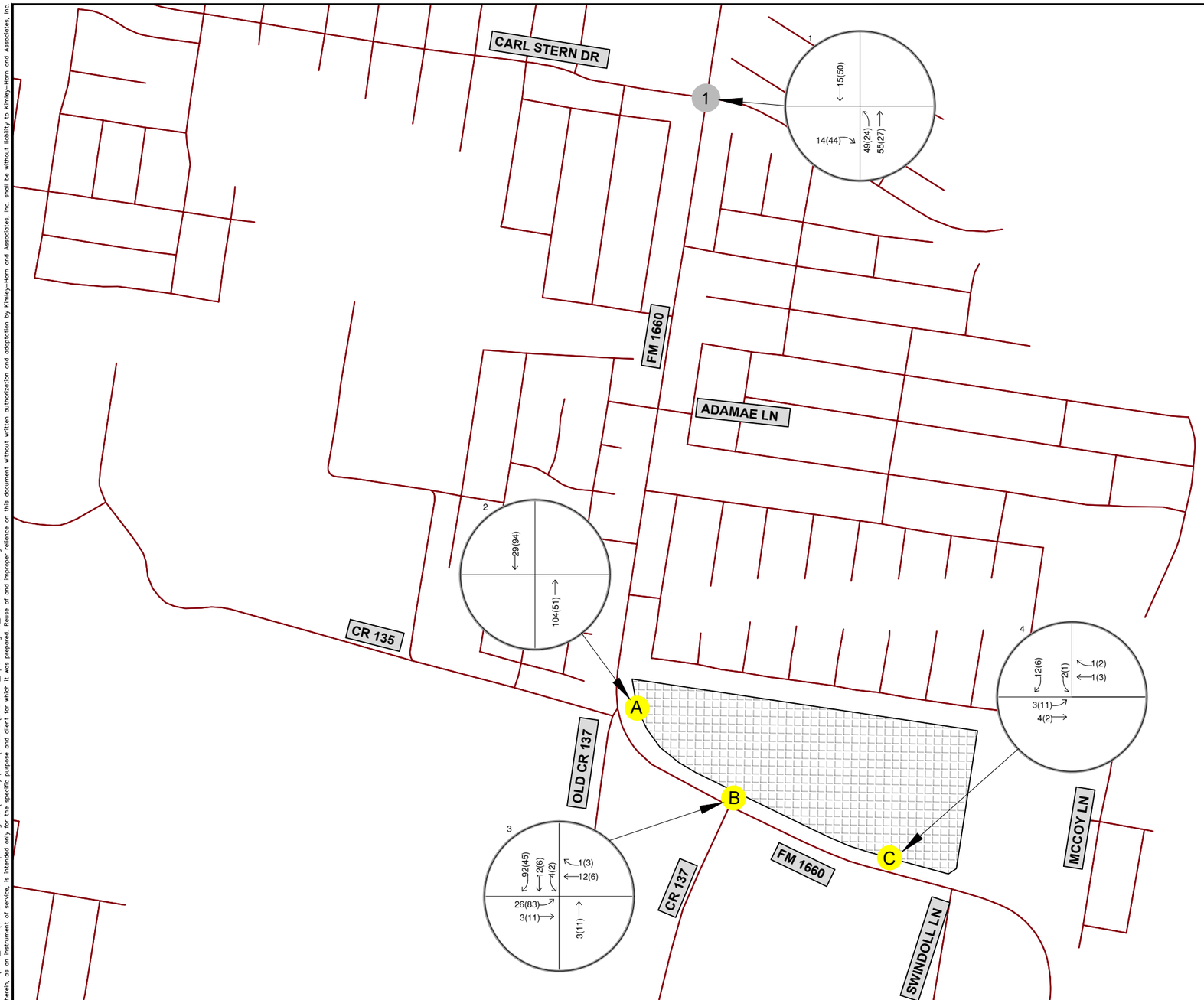
KHA PROJECT 069241808
DATE APRIL 2021
SCALE AS SHOWN
DESIGNED BY ----
DRAWN BY ----
CHECKED BY ----

TRIP DISTRIBUTION

ASPEN HEIGHTS RESIDENTIAL DEVELOPMENT

SHEET NUMBER 3



Land Use	ITE Code	Amount	Units	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips		
					IN	OUT	TOTAL	IN	OUT	TOTAL
Phase 1 -2024										
Residential Planned Unit Development	270	231	Dwelling Unit(s)	1,894	34	122	156	111	60	171
Total Net New External Trips				*1,894*	*34*	*122*	*156*	*111*	*60*	*171*

Trip generation based on ITE's Trip Generation Manual, 10th Edition.
Pass-by trips based on ITE's Trip Generation Handbook, 3rd Edition.

NORTH

TURNING MOVEMENT

XX(XX) AM (PM) TURNING MOVEMENT VOLUME

No.	REVISIONS	DATE	BY

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FOR REVIEW ONLY

KHA PROJECT 069241808
DATE APRIL 2021
SCALE AS SHOWN
DESIGNED BY ---
DRAWN BY ---
CHECKED BY ---

SITE GENERATED TRIPS

ASPEN HEIGHTS RESIDENTIAL DEVELOPMENT

SHEET NUMBER 4

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TRAFFIC IMPACT ANALYSIS SCOPE AND STUDY AREA

Project Name:	Aspen Heights Residential Development	Date: April 27, 2021
Location:	FM 1660 between CR 135 & Swindoll Ln	
Owner's Agent:	Kimley-Horn & Associates, Inc. Amy Avery, P.E., PTOE	Phone: 210-321-3442

Scope must be approved and signed by staff prior to submittal of a Traffic Impact Analysis (TIA).

I. Data Collection

1. Background Information:

a. A Study Area Map that specifies study intersections and points of access to the site for the TIA is shown as Attachment A.

2. Intersections Capacity Analysis:

Existing Intersections

A. N/A

Future Intersections:

1. Access A/CR 135 & FM 1660 (turn lane evaluation only)
2. Access B/CR 137 & FM 1660 (turn lane evaluation only)
3. Access C & FM 1660 (turn lane evaluation only)

Segment Capacity Analysis:

- All internal site roadways shall be sized appropriately based on ADT range of different street classifications as shown in the UDC for Alley, Residential Local, or Residential Collector

Note: the TIA may be required to review and discuss the consequences of the following future build conditions:

- N/A

Site Boundary and Internal Roadways:

- For adjacent roadways not yet built to the cross section in UDC 10.511.12 for the functional classification defined in the 2018 Mobility Plan, roadway capacities for the 2018 Mobility Plan ultimate section will be compared with site traffic volumes on the same roadway segment to determine a pro-rata share of improving the roadway to the 2018 Mobility Plan ultimate section. Pro-rata will be capped

at 50% for roadway segments where the site borders the roadway on one side, and at 100% when the site borders both sides of a roadway alignment. Internal roadways shall be sized to accommodate site build out traffic based on ADT thresholds defined in the UDC 10.511.

- The following shall be used as the planning level cost of different street classifications on a per-mile basis to build the ultimate section from the 2018 Mobility Plan and UDC:
    - Residential Collector or Major Collector - $5 million per mile
    - Minor Arterial - $8 million per mile
    - Major Arterial - $12 million per mile

II. Study Assumptions

1. Data Assumptions: The following assumptions must be included in the analysis. Any change in these assumptions must be approved prior to submittal of the TIA. The assumptions are based on data provided by ITE.

    a. Trip Generation – ITE 10th Edition, attach trip generation to this scope with use of either average trip rate or equation for each land use and associated period (peak hour of generator, weekday AM, e.g.)

2. The following reduction factors are approved for the proposed land uses:

    a. Internal trip capture rates: Consistent with guidance in the ITE Trip Generation Handbook, internal capture is not applicable for the proposed development.

    b. Pass-by Trips: Consistent with guidance in the ITE Trip Generation Handbook, pass-by is not applicable for the proposed development.

    c. Traffic Distribution Trip distribution for trips generated by the site should follow Section 3 of this scope.

    d. Transit Trips: None.

3. Trip Distribution: The distribution of trips to/from the proposed development will be based upon the existing roadway network and traffic patterns. Where new roadways (and connections) are integral to the site, present these elements as part of the "build out" condition. Trip Distribution to be submitted for interim review and approval before capacity analysis is performed after collection of existing counts and comparison with existing distribution trends.

Direction	Roadway	Phase 1: 2024 Site Traffic To/From
West	Carl Stern Dr	40%
North	FM 1660	45%
South	FM 1660	5%
South	CR 137	10%

4. Other Considerations:
   Build-Out year for Phase 1 of Development: 2024

   Demonstration of adequate sight distance, turn lane warrants, appropriate spacing, and queueing analysis shall be provided for all proposed site access points as applicable.

5. Mitigations: Proposed mitigations shall show a pro-rata percentage for the share of the improvement attributable to the site development.
   a. For signal timing adjustments and deceleration left- or right-turn lanes into the site, pro-rata shall be 100%.
   b. For new signals or full intersection control changes, pro-rata percentage shall be calculated as the site traffic entering the intersection divided by the total traffic entering the intersection for a given phase build-out.
   c. For new turn lanes, pro-rata percentage shall be calculated for the approach for which the improvement is being made as the site traffic for the approach divided by the total traffic using the approach. Turn lanes cannot be achieved by restriping unless 12' lanes are maintained with a 4' shoulder on both sides of the roadway, when curb and gutter is not present. Mitigations shall be tied to each phase of development and pro-rata calculated for the phase in which the mitigation is required. Mitigations may be carried into subsequent phases of development as background improvements.
   d. Pro-rata for site boundary and internal roadways shall follow method outlined in Section 2 with segment capacity analysis.

   Costs for mitigations shall be $350 per linear foot for each lane of roadway or turn lane, $350,000 for new signals, and $5,000 for signal timing adjustments at each intersection. If a new turn lane or roadway requires relocation of sidewalks, overhead utilities, bridge expansions, retaining walls, or other street elements, additional cost shall be estimated for relocation or construction of these facilities based on the latest TxDOT 3 month Statewide average low bid unit prices with supporting documentation of calculations. Costs for other mitigations shall be coordinated with and approved by City of Hutto.

6. Submittal Requirements

   a. Submit electronic copies to City of Hutto, and coordinate with TxDOT regarding their requirements. Submit CD's or .zip files containing the following: PDF of the TIA, Excel spreadsheets for all calculations, and a CAD file for the site plan, if available.

Submittal Distribution is to be as follows:

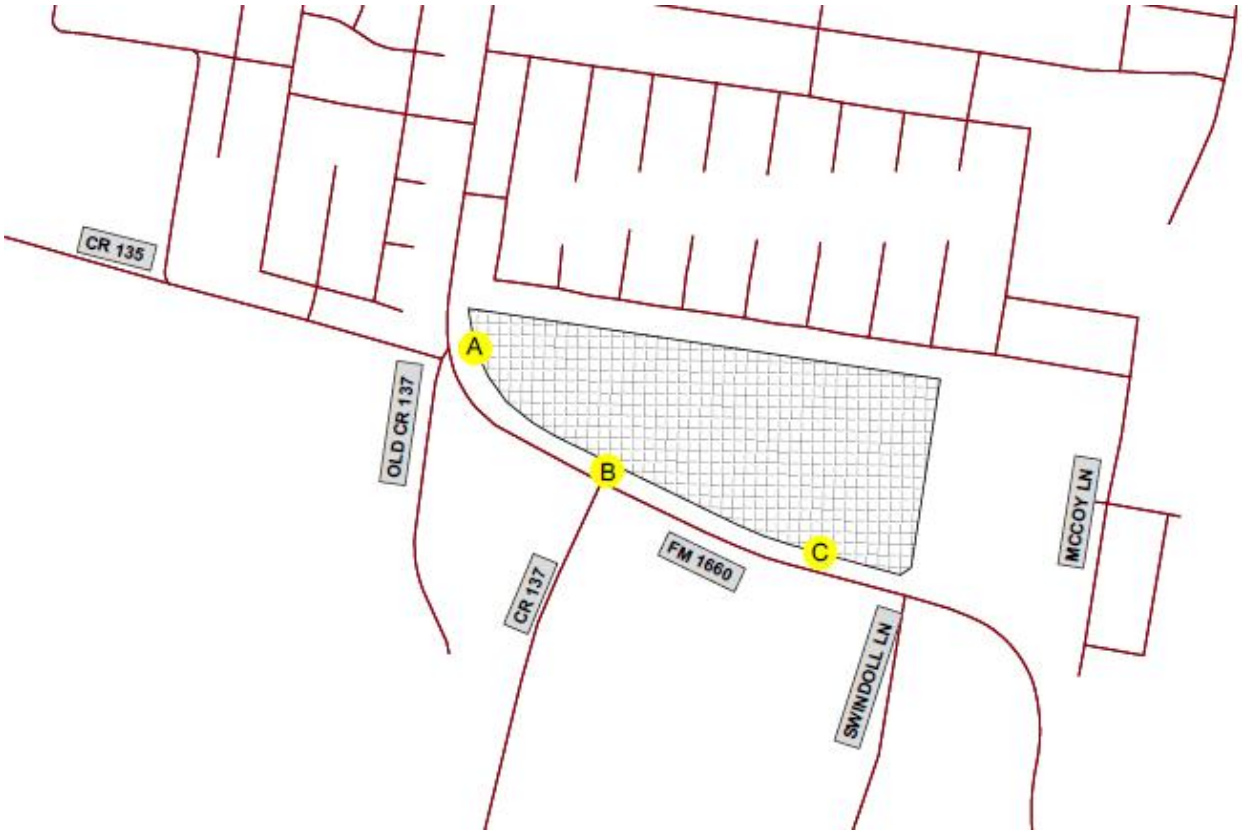
City of Hutto: Electronic, Attention Sam Ray (Samuel.Ray@HuttoTX.gov)
TxDOT: Electronic, Attention Scott Cunningham (Scott.Cunningham@txdot.gov)

This scope and study is based upon the assumed development uses and intensities in the TIA Determination sheet in Attachment B. Any change in these assumptions may require a change in the scope. Preparation of the TIA shall follow City of Hutto Unified Development Code Chapter 10.515.4 requirements unless otherwise specified in this document.

Approved by (City of Hutto):_____ Phone:_____

Approved by (TxDOT):_____ Phone:_____

Attachment A



Existing Intersections

B. N/A

Future Intersections:

1. Access A/CR 135 & FM 1660 (turn lane evaluation only)
2. Access B/CR 137 & FM 1660 (turn lane evaluation only)
3. Access C & FM 1660 (turn lane evaluation only)

Attachment B

CITY OF HUTTO
TRAFFIC IMPACT ANALYSIS (TIA) DETERMINATION WORKSHEET
APPLICANT MUST FILL IN WORKSHEET PRIOR TO SUBMITTING FOR TIA DETERMINATION

PROJECT NAME: Aspen Heights Residential Development
LOCATION: FM 1660 between CR 135 & Swindoll Ln
APPLICANT'S AGENT: Kimley-Horn & Associates, Inc. (Amy Avery, P.E., PTOE) PHONE #.: 210-321-3441
APPLICATION STATUS: DEVELOPMENT ASSESSMENT:___ZONING__SITE PLAN: ____

EXISTING:

PARCEL NUMBER	BLDG SQ.FT.	LAND USE	ITE CODE	DAILY TRIP RATE/EQ	DAILY TRIPS

PROPOSED

TRACT NUMBER	BLDG SQ.FT.	LAND USE	ITE CODE	DAILY TRIP RATE/EQ	DAILY TRIPS	AM / PM TRIP RATE/EQ	AM TRIPS	PM TRIPS
1 (Phase)	231 DU	Residential Planned Unit Development	210	Ln(T)=0.94Ln(x)+2.43	1894	AM: Ln(T) = 0.88Ln(x)+0.26 PM: Ln(T)=0.97Ln(X)-0.14	156	171
2 (Phase)								
				Total	**1894**		**156**	**171**

ABUTTING ROADWAYS

STREET NAME	PROPOSED ACCESS?	PAVEMENT WIDTH	CLASSIFICATION*
FM 1660	Yes	48'	Major Collector

*Classification reflects Mobility Master Plan, 2018

NOTE: A TIA determination must be made prior to submittal of any zoning or site plan application. Therefore, this completed and reviewed form MUST ACCOMPANY any subsequent application for the IDENTICAL project. CHANGES to the proposed project will REQUIRE a new TIA determination to be made.

10.203.13.3 – Planned Unit Development Review Criteria:

1. **The PUD is consistent with the spirit of the community, neighborhood and other applicable land use and development plans, compatible with the character of adjacent development or recommended land uses, it would not adversely affect property near the site, and it achieves the benefits of improved design.**
    - The proposed PUD is not consistent with the spirit of the community, neighborhood and is not compatible with the character of adjacent developments in the area.
2. **The PUD will not adversely affect land with significant historical, cultural, recreational or aesthetic value.**
    - The proposed uses within the PUD are compatible with the surrounding land uses.
3. **The PUD will give benefits through providing open space, parks, conservation of environmental features, aesthetic features and harmonious design, and/or energy efficient site design.**
    - The proposed PUD provides a private amenity center for residents and trails around the detention ponds that front along FM 1660 South. There are two additional small trails provided within the development, but the open space is minimal. They are also proposing pedestrian connectivity throughout the development and surrounding the development, but there is no proposed vehicular connectivity.
4. **The benefits of preserving land for open space, parks or other public amenities outweigh the potential impact from more intense or dense development on the site.**
    - The proposed PUD provides standards for the single-family development with some trails.
5. **The PUD controls external effects on nearby land uses such as movement and congestion of traffic; lighting; trash accumulation and litter; noise, air and water pollution; and other factors affecting public health, welfare, safety and convenience.**
    - The proposed PUD provides for pedestrian connectivity to adjacent developments. The proposed PUD standards will not negatively affect the health, safety and general welfare of the community.
6. **The PUD will be served by adequate facilities including streets, fire protection, water and sanitation.**
    - The proposed PUD will be served adequately by all utilities.
7. **The PUD does not have a significantly greater burden on the city's existing infrastructure, public improvements and services than development at a density permitted under the current zoning or suggested under community, neighborhood and other applicable land use and development plans, or that arrangements are made to mitigate impacts.**
    - The proposed PUD does not affect the existing infrastructure plans for the area. They are proposed to donate right-of-way and will meet the UDC requirements.
8. **PUD architectural design, landscaping, hardscaping and signage parameters must give evidence of compatibility with adjacent development, internal consistency of design, and conformance to city design standards.**
    - The proposed PUD does not allow for non-compatible development within the community. New construction must conform to the design guidelines within the PUD and UDC.

City Council

AGENDA ITEM REPORT

To: City Council

Subject: Consideration and possible action on Ordinance No. 2021-030 amending Chapter 2, Article 2.02, Sections 2.02.032, 2.02.121, And 2.02.182, altering the terms of members of the Planning and Zoning Commission, the Zoning Board of Adjustment, and The Building and Standards Commission. (City Attorney - C. Rosas-Grillet)

Meeting: Thursday, May 20, 2021

Department: Legal

Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Ordinance 2021-030 Amending 2.02.032 2.02.121 2.02.182

ORDINANCE NO. O-2021-030

AN ORDINANCE AMENDING CHAPTER 2, ARTICLE 2.02, SECTIONS 2.02.032, 2.02.121, AND 2.02.182 OF THE CITY OF HUTTO'S CODE OF ORDINANCES ALTERING THE TERMS OF MEMBERS OF THE PLANNING AND ZONING COMMISSION, THE ZONING BOARD OF ADJUSTMENT, AND THE BUILDING AND STANDARDS COMMISSION; AND PROVIDING FOR EFFECTIVE DATE, PUBLICATION, SEVERABILITY, REPEAL, OPEN MEETINGS CLAUSE, AND ENACTMENT.

WHEREAS, on May 1, 2021, the voters approved an amendment to the Hutto City Charter providing that Section 12.04 of the Hutto City Charter be amended to increase the terms of office of the Planning and Zoning Commission from two (2) to three (3) years; and

WHEREAS, pursuant to Section 9.005 of the Texas Local Government Code, a charter amendment does not take effect until the governing body of the municipality enters an order in the records of the municipality declaring that the charter or amendment is adopted; and

WHEREAS, on May 12, 2021, the City Council adopted Resolution 2021-078 canvassing the returns and declaring the results of the May 1, 2021 General and Special Elections; and

WHEREAS, Section 211.008(b) of the Texas Local Government Code provides that a board of adjustment must consist of at least five members to be appointed for two year terms; and

WHEREAS, Section 54.033(b) of the Texas Local Government Code provides that a building and standards commission shall consist of one or more panels, each composed of at least five members, to be appointed for terms of two years; and

WHEREAS, the City Council desires to amend its Code of Ordinances to alter the terms of certain boards and commissions in accordance with the Charter amendments and state law.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, THAT:

1. FINDINGS OF FACT

The foregoing recitals are incorporated into this Ordinance by reference as findings of fact as if expressly set forth herein.

2. ENACTMENT

Chapter 2, Article 2.02, Sections 2.02.032, 2.02.121, and Section 2.02.182, of the Code of Ordinances of the City of Hutto, is hereby amended to read in accordance with *Attachment "A"*, which is attached hereto and incorporated into this Ordinance for all intents and purposes. Underlined and italicized text shall be added, and struck-through and bracketed text shall be deleted as indicated in *Attachment "A".*

3. REPEALER

All ordinances, or parts thereof, that are in conflict or inconsistent with any provision of this Ordinance are hereby repealed to the extent of such conflict, and the provisions of this Ordinance shall be and remain controlling as to the matters regulated, herein.

4. SEVERABILITY

Should any of the clauses, sentences, paragraphs, sections or parts of this Ordinance be deemed invalid, unconstitutional, or unenforceable by a court of law or administrative agency with jurisdiction over the matter, such action shall not be construed to affect any other valid portion of this Ordinance.

5. CODIFICATION

The City Secretary is hereby directed to record and publish the attached rules, regulations and policies in the City's Code of Ordinances as authorized by Section 52.001 of the Texas Local Government Code.

6. EFFECTIVE DATE

This Ordinance shall be effective immediately upon passage.

7. PROPER NOTICE & MEETING

It is hereby officially found and determined that the meeting at which this Ordinance was passed was open to the public, and that public notice of the time, place and purpose of said meeting was given as required by the Open Meetings Act, Texas Government Code, Chapter 551.

READ and **APPROVED** on the first reading this the **20th** day of **May 2021.**

By motion duly made, seconded and passed with an affirmative vote of all the Councilmembers present, the requirement for reading this ordinance on two separate dates was dispensed with.

THE CITY OF HUTTO, TEXAS

By:_____
Mike Snyder, Mayor

By:_____
Holly Nagy, City Secretary

(SEAL)

Attachment "A"

ARTICLE 2.02 BOARDS, COMMISSIONS AND AUTHORITIES

Division 2. Planning and Zoning Commission

Sec. 2.02.032 Composition; terms of members

There shall be a city planning and zoning commission, which shall consist of seven members that serve a *three* [~~two~~]-year term.

Division 5. Zoning Board of Adjustment

Sec. 2.02.121 Composition, terms of members

The zoning board of adjustment members shall consist of seven members that serve *two* [~~three~~]-year terms.

Division 7. Buildings and Standards Commission

Sec. 2.02.182 Composition; terms of members

The commission shall consist of seven members that serve *two* [~~three~~]-year terms. To the extent possible, the city council shall appoint members to the commission who have experience or expertise in the building trades.

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration and possible action on Resolution No. R-2021-082 approving Change Order No. 1 for the Lakeside Estates Lift Station Abandonment Project increasing the total project cost by $29,543.22. (Samuel Ray)
Meeting:	Thursday, May 20, 2021
Department:	Engineering
Staff Contact:	Samuel Ray

BACKGROUND INFORMATION:

The Lakeside Estates Lift Station Abandonment Project was approved for construction on November 19th of 2020. The contractor for the project is Bell Contractors and the project has been under construction since December of 2020. The Contractor has encountered unforseen site conditions such as unmarked water utilities or water utilities that were located in locations opposed to where record drawings showed the utility. These conflicts required additional time, material and effort from the contractor to address outside of the executed construction contract. Change Order No. 1 also addresses time delays related to the February winter storm in accordance with Article 12.3 A of the projects Contract Documents. The total of the impacts of Change Order No. 1 include an increase of $29,543.22 in the total project cost and an additional 25 days added to the contract.

SUMMARY OF REQUEST:

Staff requests approval of the Resolution.

STAFF REVIEW:

FINANCIAL IMPACT:

Approval of the resolution will result in an increase to the total cost of the Lakeside Estates Project Cost of $29,543.22 which will be appropriated from available Utility Bond Funds.

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Resolution - Lakeside Estates Lift Station Abandonment Project Change Order 1
2. 2021.05.03_Change Order No. 1

RESOLUTION NO. R-2021-082

A RESOLUTION APPROVING CHANGE ORDER NUMBER 1 FOR THE LAKESIDE ESTATES LIFTSTATION ABANDONMENT PROJECT INCREASING THE TOTAL PROJECT COST BY $29,543.22.

WHEREAS, the Lakeside Estates Lift Station abandonment project is a capital improvement project approved by City Council on November 19th of 2020 by Resolution No. R-2020-106, and;

WHEREAS, the project is under construction and contractor has encountered unforeseen site conditions requiring additional time, materials and effort to address in order to complete the project, and;

WHEREAS, Change Order No. 1 has been requested by the project Contractor in accordance with the applicable construction contract, and;

WHEREAS, Change Order No. 1 has been reviewed and approved by the design engineer and City staff and is recommended for approval in accordance with the project construction contract, and;

WHEREAS, Section 6-106 of the Cities procurement policy states that the total contract price of may not be increased because of change orders unless additional money for increased costs is appropriated for that purpose from available funds, and;

WHEREAS, the City desires to appropriate an additional $29,543.22 from available Utility Bond funds for the Lakeside Estates Lift Station Project;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS:

The Hutto City Council herby approves Change Order #1 for the Lakeside Estates Lift Station Abandonment project increasing the total project cost by $290,543.22.

CONSIDERED and RESOLVED on this the 20th day of **May, 2021.**

THE CITY OF HUTTO, TEXAS

_____
Mike Snyder, Mayor

ATTEST:

_____
Holly Nagy, City Secretary

Change Order No. 01

Project Name: Lakeside Estates Lift Station Abandonment	**DCS Project No.:** 20101400
Project Owner and Address: City of Hutto 500 W Live Oak Street Hutto, TX 78634	**Owner's Project No.:** NA
	Date of Issuance:
Project Contractor and Address: Bell Contractors, Inc. 3082 W. Hwy 190 Belton, Texas 76513	**Date of Contract:** 12/01/2020
	Contract Period: 245 days

It is agreed to modify the Contract referred to above as follows:

Item #	Description Of Changes	Change in Contract Price	Change in Contract Time
1	Deletion of Bid Schedule Item 30 per Submittal No. 2	($2,616.32)	0
2	Relocate existing waterline and make modifications to	$23,927.56	13
	proposed wastewater line and manhole, per RFI No. 4		
3	Additional days for February Ice Storm per Contact Article		7
	Article 12.3 A.		
4	Removal and reinstallation of waterline per RFI No. 7	$8,231.98	5
	Difference Net =	$29,543.22	25

Summary: It is agreed to modify the Contract referred to above as follows:

Contract Price prior to this Change Order: $1,372,489.13	**Contract Time prior to this Change Order** Substantial (days and date): 215 days; July 10, 2021 Final (days and date): 245 days; August 9 2021
Net Increase (decrease) of this Change Order: $29,543.22	**Net Increase (decrease) of this Change Order** 25 days
Revised Contract Price with all approved Change Orders: $1,402,032.35	**Revised Contract Time with all approved Change Orders** Substantial (days and date): 240 days; August 4, 2021 Final (days and date): 270 days; September 3, 2021

The changes included in this Change Order are to be accomplished in accordance with the terms, stipulations and conditions of the original Contract as though included therein.

Accepted for Contractor by: _____ **Date:** 5-10-21

Recommended for Approval by (DCS Engineering, LLC): _____ **Date:** 5/10/21

Approved for Owner by: _____ **Attest:** _____ **Date:** _____

Approved: (Other - when required) _____ **Date:** _____

Distribution: Contractor _____ File _____ Field _____ Owner _____ Other _____

Shop Drawing Transmittal No. 2

Project Name: Lakeside Estates Lift Station Abandonment		**Date Received:** 12/21/2020
Project Owner: City of Hutto		**Checked By:** WW
Contractor: Bell Contractors Inc.	**Engineer:** DCS Engineering, LLC	**Log Page:2**
Address: 3082 W. Hwy 190 Belton, Texas 76513	**Address:** 1101 S. Capital of Texas Highway Building G-100 Austin, TX 78746	**DCS Project No.** 20101400 **Spec Section:**
		Drawing/Detail No.
Attn:	**Attn:** Alison Zamsky	**1st Sub.** ☐ **ReSub.** ☐
Date Transmitted:	**Previous Transmittal Date:**	

Item No.	No. Copies	Description	Manufacturer	Mft/Vendor Dwg or Data No.	Action Taken*
1		Manholes	Capital Precast		C.
2		Manhole Ring & Covers	Plastic Trends		C.
3		Manhole Vent Assembly	Flomatic, SIP Industries		C.

Remarks:

*The Action Designated Above is in Accordance with the Following Legend:

A – Furnish as Submitted

B – Furnish as Noted

C – Revise and Submit
1. Not enough information for review.
2. No reproducible submitted.
3. Copies illegible.
4. Not enough copies submitted.
5. Wrong sequence number.
6. Wrong resubmittal number.
7. Wrong spec section.
8. Wrong form used.
9. See Comments.

D – Rejected

E – Engineer's review not required.
1. Submittal not required.
2. Supplemental information. Submittal retained for informational purposes only.
3. Information reviewed and approved on prior submittal.
4. See Comments.

Comments:

See Attached.

By _____ Date 12/29/2020

Distribution: Contractor ✓ File ✓ Field ✓ Owner ✓ Other _____

T.B.P.E. Firm No. F-13162, 03/13/2013

DCS ENGINEERING, LLC

PROJECT: Lakeside LS Aband. COMPUTED BY: WW DATE: 12/29/2020

SUBJECT: Submittal No 2. Comments CHECKED BY: DATE:

JOB #: 2010 1400 PAGE: 1 OF: 1

Item No 1. Manholes

(1) All pipe inverts shall be marked 1/2.

(2) MH No. 2 - No drop on 6" pipe. Remove Pipe No 2 from Submittal. Pipe No 3 660.33 Elevation is correct.

(3) MH No. 11 - Install Pipe No 3 w/out Drop Remove Pipe No 2. From Submittal. Correct direction of Pipe No. 1 to show flow exiting Manhole

(4) MH No. 30 - Shall be a "Doghouse" Manhole, built around existing line. Correct direction of Pipe No 2 to show flow exiting manhole

(5) MH No 28 - Correct Direction of Pipe No 1 to show flow exiting manhole.

(6) MH No 21 - Correct Direction of Pipe No 1 to show flow exiting manhole.

(7) MH No 18 - Correct Direction of Pipe No 1. to show flow exiting manhole.

(8) MH No 14 - Correct Direction of Pipe No. 1 to show flow exiting manhole.

(9) MH No. 8-9 - Per Bid Schedule Item No. 21 and 22, Contractor shall provide calculations signed and sealed by a State of Texas licensed engineer for Manholes No. 8 and No. 9.

(10) MH No 7. - Vent not shown on Submittal. Per Sheet 02C-14 this is a vented manhole. Add vent pipe to Manhole No 7.

(11) MH No 6 - Remove "48"x2' Riser Sanitary" from 1/3 t. Correct quantity of 48" Profile gasket to 3.

(12) - MH No 5 - Contractor shall submitt cutsheet for Manhole No. 5

(13) MH No 4 - Correct direction of Pipe No 1. to show flow exiting manhole.

(14) Ensure all information is shown on cutsheets. Manhole 21, 28, 30, and 31 cutsheet have line direction information cutoff of PDF.

Item No 2. Manhole Ring and Covers

(1) Per Sheet 03C-03 Drawing No. WW7A Note 1, Bolted wastewater Manhole set to be East Jordan Iron Works, Inc Catalog No. B2432 or City Engineer approved equal. Dimentions of submittal do not match detail.

Item No 3. Manhole Vent Assembly

(1) Contractor shall indicate size of Ball Check Valve on Submittal.

(2) Per Sheet 03C-05A, Detail No. 2, Note No. 3, All vent pipe shall be lined with 40 M.I.S (min) Protecto 401 Ceramic Epoxy Lining (Inside) and 12 M.I.S Epoxy Paint on Exterior (Forest Green Color)

(3) Per Sheet 03C-05A, Detail No. 2 Contractor shall submitt all vent pipe elevations with corresponding manhole name to engineer for approval prior to Fabrication.

Additional.

(1) Per Item No 1. Comment No. 3 a Change order deduct of $2,616.32 will be provided for deletion of Bid Schedule Item No. 30 from the project.

Request for Information No. 04

Project Name:	Lakeside Estates Lift Station Abandonment	**Date:**	2-25-21
Project Engineer:	DCS Engineering, LLC	**Contractor:**	Bell Contractors Inc.
Address:	1101 S. Capital of Texas Hwy Building G-100 Austin, Texas 78746	**Address:**	3082 W Hwy. 190 Belton, Texas 76513

Interpretation and/or direction concerning the issue(s) described below is hereby requested:

Description (attach sketches or other documentation as required):
Bell Contractors has located an unmarked 12" Line @ Sta 6+80 the flowline of the proposed sewer at this location is 598.16 & the existing 12" Line is at 599.44. These are flowline elevation. Let us know how to proceed with this.

By _____ **Date** 2-23-21

Response (attach sketches or other documentation as required):
Contractor shall provide a change proposal to relocate existing waterline and make modifications to installed and proposed wastewaterlines and manhole per attached DWG 02C-02 markups.

By _____ **Date** 03/03/21

MATCHLINE – STA: 03+00
SEE DRAWING 02C–01

MATCHLINE – STA: 08+00
SEE DRAWING 02C–03

4' VENTED "WW MH–28"
WITH BOLTED AND GASKETED LID
STA:4+32.49
N:10166027.87
E:3169489.61
WW–18
03C–04

BEGIN 30"
STEEL CASING

END 30"
STEEL
CASING
W–14
03–04

R464833
RIVERWALK MASTER COMMUNITY INC
108 ALTAMONT ST,
HUTTO, TX 78634

EXIST ROCK
GABION

20' PROP WW
EASEMENT

20' PROP WW
EASEMENT

EXIST
STORM
INLET
10

EXIST
STORM
OUTFALL
7

EXIST STM CROSSING

EXIST
ELECTRIC
BOX
4

EXIST WL
CROSSING
5 8

SALVAGE AND
REINSTALL EXIST
GUARD RAIL

EXIST FIRE
HYDRANT

ALTAMONT STREET
(EXIST ASPHALT ROAD)

SIDEWALK

RIVERWALK DRIVE
(EXIST ASPHALT ROAD)

EXIST 8–6"
CULVERTS

EXIST 5–36"
FL: ±601.00

4' "WW MH–29"
WITH BOLTED AND GASKETED LID
STA:3+34.78
N:10166085.30
E:3169567.93

4' "WW MH–30"
WITH BOLTED AND GASKETED LID
STA:3+09.20
N:10166067.23
E:3169584.99
9

EXIST 12" WL

EXIST WL
CROSSING
5 8

SALVAGE AND
REINSTALL EXIST
GUARD RAIL

PROP 18" WW

EXIST 36" STM

4' "WW MH–27"
WITH BOLTED AND GASKETED LID
STA:6+29.00
N:10166218.53
E:3169442.00

SAW CUT 4.5' WIDE
REMOVE AND

R.O.W.
VARIES

PROPERTY
LINE

EXIST STORM INLET 10

4' "WW MH–26"
WITH BOLTED AND GASKETED LID
STA:7+52.96
N:10166293.40
E:3169343.21

Exist 12"
Waterline per
Field Found
Conditions

2' OD to OD
(min)

Install 4 90° bends
with field fit spool
pieces (approx 2.3'
long) to raise exist
12" waterline to CL
= 602.23' (FL =
601.73'). WL shall
be min 2' clear (OD
to OD) from
proposed
wastewater in all
directions.

Assumed WL
Location

2' OD to OD
(min)

Assumed WL
Location

Proposed wastewater
pipe shall be encased in
300 psi flowable fill as
shown in the Encasement
Detail on this sheet from
STA 3+39.11 to STA
7+52.96

Proposed wastewater
manhole shall be
encased in 1' thick, 300
psi flowable fill.

WASTEWATER

Encasement Detail

SCALE : 1" = 20'

300 psi Flowable Fill

18"

24"

CL

4.5"

18" pvc WW
(PS 115)

LEGEND

- SF — SILT FENCE
- SFJ — SILT FENCE WITH J–HOOKS (2 / 03C–02)
- LOC — LIMIT OF CONSTRUCTION
- CHAIN LINK FENCE
- –100–YR FW– 100 YEAR FLOODWAY
- –100–YR FP– 100 YEAR FLOODPLAIN
- –500–YR FP– 500 YEAR FLOODPLAIN
- OHP — OVERHEAD POWER LINE
- UE — UNDERGROUND ELECTRIC LINE
- FO — FIBER OPTIC LINE

EXIST TREE TO REMAIN

EXIST TREE TO REMAIN WITH WOOD SLATS

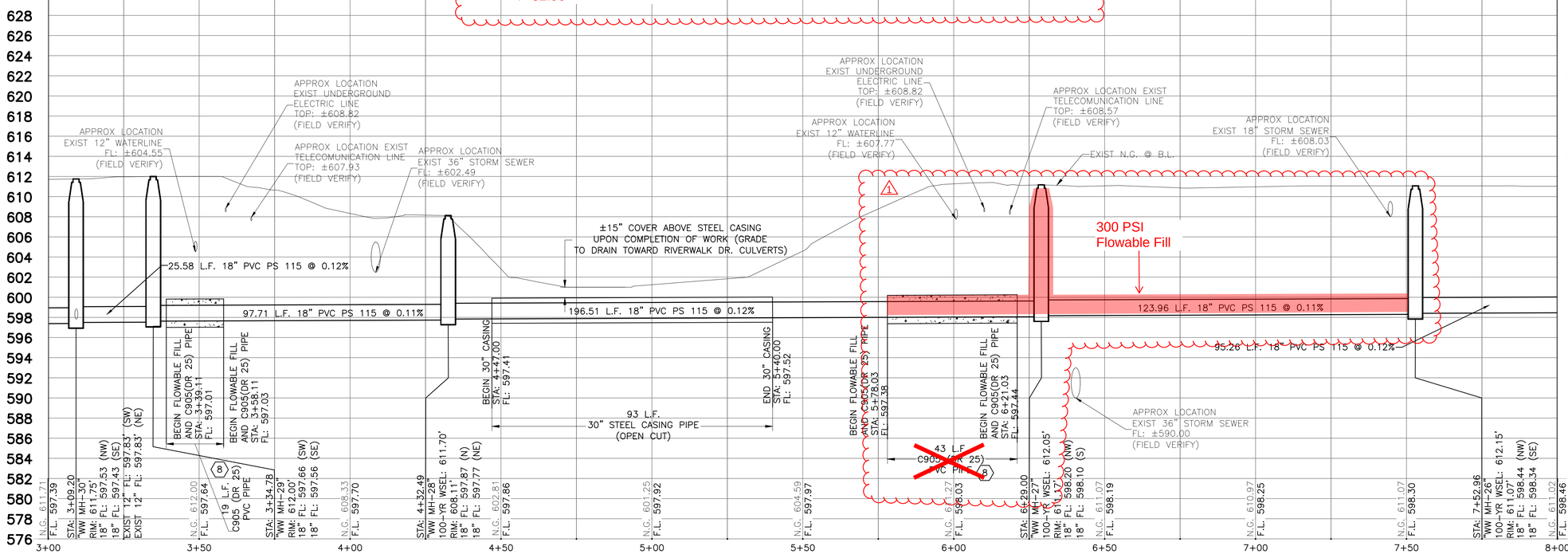
EXIST TREE TO REMAIN WITH CHAIN LINK FENCE

EXIST TREE TO BE DEMOLISHED

BORE LOG LEGEND:

- LIMESTONE
- SHALE
- USCS CLAYEY SAND
- USCS CLAYEY GRAVEL
- USCS HIGH PLASTICITY CLAY
- USCS LOW PLASTICITY CLAY
- WEATHERED SHALE
- WEATHERED LIMESTONE

NOTES:
1. NOTES ARE SHOWN ON 00G–05 FOR THIS DRAWING.
2. CONTRACTOR SHALL MINIMIZE DISTURBANCE OF LAND WITHIN THE FLOODPLAIN. MATERIAL STORAGE AND CONSTRUCTION VEHICLE PARKING SHALL BE OUTSIDE THE LIMITS OF THE FLOODPLAIN. DISTURBED LAND WITHIN FLOODPLAIN SHALL BE REVEGETATED IMMEDIATELY AFTER THE AREA IS VACATED.
3. ALL MANHOLES TO BE COATED AND VACUUM TESTED.



KEY NOTES:

1. INSTALL PIPELINE TRENCH COLLAR AT 400' SPACING PER DETAIL 2, DWG 03C–04.
2. INSTALL HYDROMULCH SEEDING ON ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES UNDER THIS PROJECT. PAYMENT SHALL BE FOR FIELD INSTALLED QUANTITIES PER BID ITEMS.
3. UPON COMPLETION OF WASTEWATER PIPE INSTALLATION, REPAIR SUBGRADE OVER WASTEWATER TRENCH PER CITY OF HUTTO DETAIL WW–17 ON SHEET 03C–04 TO MATCH EXIST SURFACE.
4. CONTRACTOR SHALL VERFIY LOCATION OF ELECTRIC UTILITIES PRIOR TO STARTING CONSTRUCTION.
5. CONTRACTOR SHALL POTHOLE EXISTING WATERLINE TO CONFIRM ELEVATIONS OF WATERLINE PRIOR TO CONSTRUCTION.
6. CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE SIDEWALK AS REQUIRED. RESTORE TO EQUAL OR BETTER CONDITION UPON COMPLETION OF WORK IN THIS AREA. DOWEL INTO EXIST SIDEWALK WITH #4'S @ 9" O.C.
7. CONTRACTOR SHALL ENSURE THAT STORM WATER DOES NOT DRAIN INTO OPEN TRENCH DURING RAIN EVENTS.
8. CENTER PIPE BELOW PROP WL SUCH THAT THE JOINTS OF THE WASTEWATER PIPE ARE AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE FIELD FOUND WATER PIPE. EMBED WASTEWATER PIPE IN 300 PSI FLOWABLE FILL FOR THE TOTAL LENGTH OF THE C905 PIPE PLUS 12" BEYOND THE JOINT IN BOTH DIRECTIONS. FLOWABLE FILL BEDDING SHALL BE A MINIMUM OF 6" ABOVE AND 4" BELOW THE WASTEWATER MAIN.
9. MANHOLE SHALL BE CONSTRUCTED AROUND EXISTING 12" WW LINE AND NOT DISRUPT FLOW. CONTRACTOR MAY ELECT TO INSTALL MANHOLE WITH DOGHOUSE BLOCKOUTS AROUND EXISTING 12" WW. ALL ANNULAR SPACE FROM BLOCKOUTS SHALL BE GROUTED AFTER INSTALLATION OF MANHOLE AND 18" WW LINE. EXISTING 12" WW SHALL REMAIN IN SERVICE DURING CONSTRUCTION. AFTER PROPOSED INTERCEPTOR IS TESTED AND TIED INTO EXISTING MANHOLE, CONTRACTOR SHALL CUT EXIST 12" WW SUCH THAT THE MANHOLE HAS TWO INLET AND TWO OUTLET PIPES. PROVIDE TEMPORARY INFLATABLE PLUGS AS REQUIRED TO COMPLETE WORK. NO SEPARATE PAY.
10. CONTRACTOR SHALL PROVIDE CURB INLET PROTECTION.

REV. NO.	DATE	DESCRIPTION
1	4/15/2021	Reroute waterline and provide concrete encasement on wastewater line

PROJECT MANAGER:	WWW
DESIGNED BY:	ANB
CHECKED BY:	JTH
DRAWN BY:	SMB
DCS PROJECT NO:	20101400

DCS ENGINEERING, LLC
1101 S. CAPITAL OF TEXAS HIGHWAY, BUILDING G–100
AUSTIN, TX 78746
TEL: (512) 614–6171
T.B.P.E. FIRM NO. F–13162

CITY OF HUTTO

LAKESIDE ESTATES LIFT STATION ABANDONMENT

STATE OF TEXAS
DARREN C STROZEWSKI
87908
LICENSED PROFESSIONAL ENGINEER
9/9/2020

LAKESIDE WASTEWATER INTERCEPTOR

WASTEWATER LINE PLAN & PROFILE – STA. 03+00 TO STA. 08+00

DATE: SEPTEMBER 2020

SCALE: HORIZ: 1"=20' VERT: 1"=6'

DRAWING: 02C–02

FILENAME: Z:\Projects 1400–1499\20101400 – COH Lakeside LS Abandonment 2019\500 – Final_Design\5.1 – Drawings\Sheet Files\02C–01 – 18.dwg, LAST SAVED ON: Sep 15 2020 2:22pm, PLOTTED BY: SBARRY, ON: Sep 15 2020 2:27pm, CFG:

BELL CONTRACTORS, INC.
Since 1977

April 30, 2021

Name
Company
Address
City

Phone:
FAX:
Mobile:
e-mail:

Change Of proposal for Sewer at "Lakeside Estates Lift Station Abandonment" in Hutto, TX.

Unit #	Description	Quantity	Unit	Unit Price		Amount
I	**Water**					
1	12" C-900	40	LF	$180.70	$	7,228.00
2	Connections To Existing 12"	2	EA	$3,528.41	$	7,056.82
3	12" 90 Bends	4	EA	$2,205.91	$	8,823.64
4	Traffic Control	1	LS	$5,047.50	$	5,047.50
5	Trench Safety	40	LF	$1.96	$	78.40
	Total-Water				**$**	**28,234.36**
II	**Sewer**					
1	18” AWWA C-905 PVC Pipe (DR25 165 psi)10-15 ft.	-43	LF	$349.00	$	(15,007.00)
2	18” PS 115 (ASTM F679) PVC Pipe under existing roadway10-15 ft.	43	LF	$169.12	$	7,272.16
3	Flowable Fill	77	CY	$44.52	$	3,428.04
	Total-Sewer				**$**	**(4,306.80)**
	Total				**$**	**23,927.56**

Days Requested 13

Request for Information No. 07

Project Name:	Lakeside Estates Lift Station Abandonment	**Date:**	5-6-21
Project Engineer:	DCS Engineering, LLC	**Contractor:**	Bell Contractors Inc.
Address:	1101 S. Capital of Texas Hwy Building G-100 Austin, Texas 78746	**Address:**	3082 W Hwy. 190 Belton, Texas 76513

Interpretation and/or direction concerning the issue(s) described below is hereby requested:

Description (attach sketches or other documentation as required):

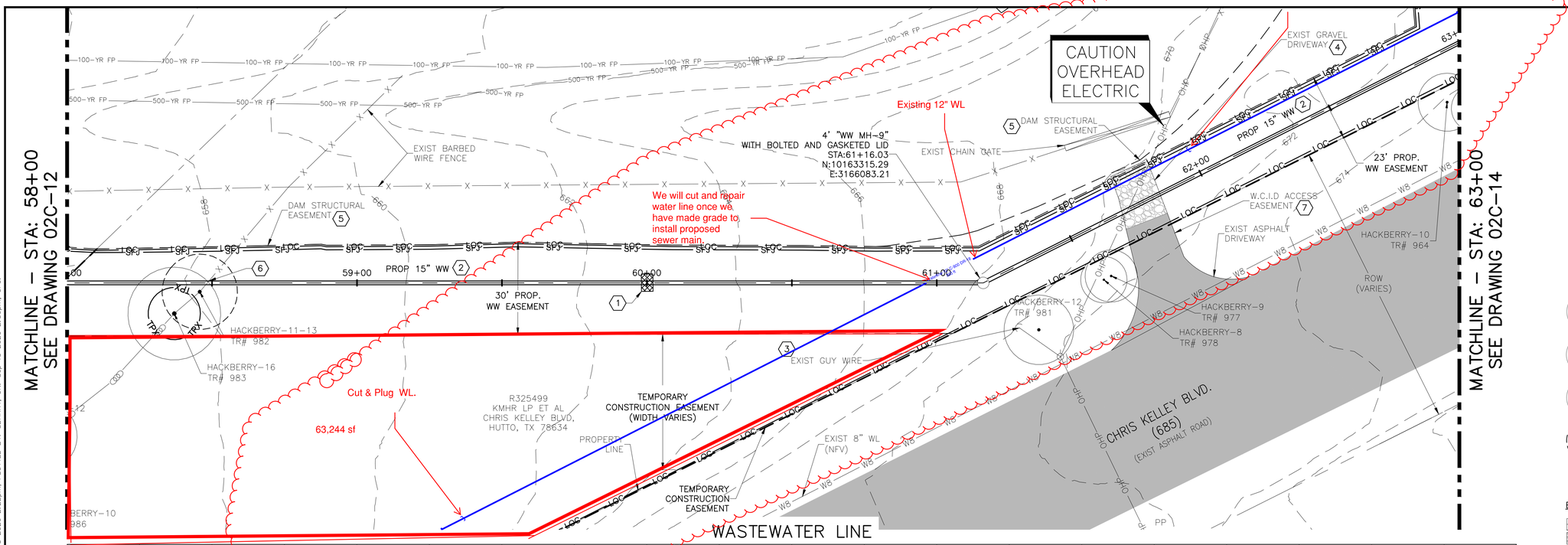
Bell Contractors has found a conflict with an existing waterline at Sta 60+79.03. The existing line is a 12" with about 2' of cover with no bedding sitting on the rock. We have tried to dig on either side of this line to avoid disruption, but we cannot reach the depth required to make grade without having the excavator sitting directly over this location plus benching to achieve the depth needed. We have spoken to Manville Water on 5-4-21 we asked if this line could be shut down for a few days to dig past this area but that was not an option. We would like to have a shutdown to install 2 restrained plugs in order to keep the line in service after we have installed the sewer the water main will be reconnected, and the plugs removed. I have attached a sketch of the conflict location and the areas we plan to cap the line.

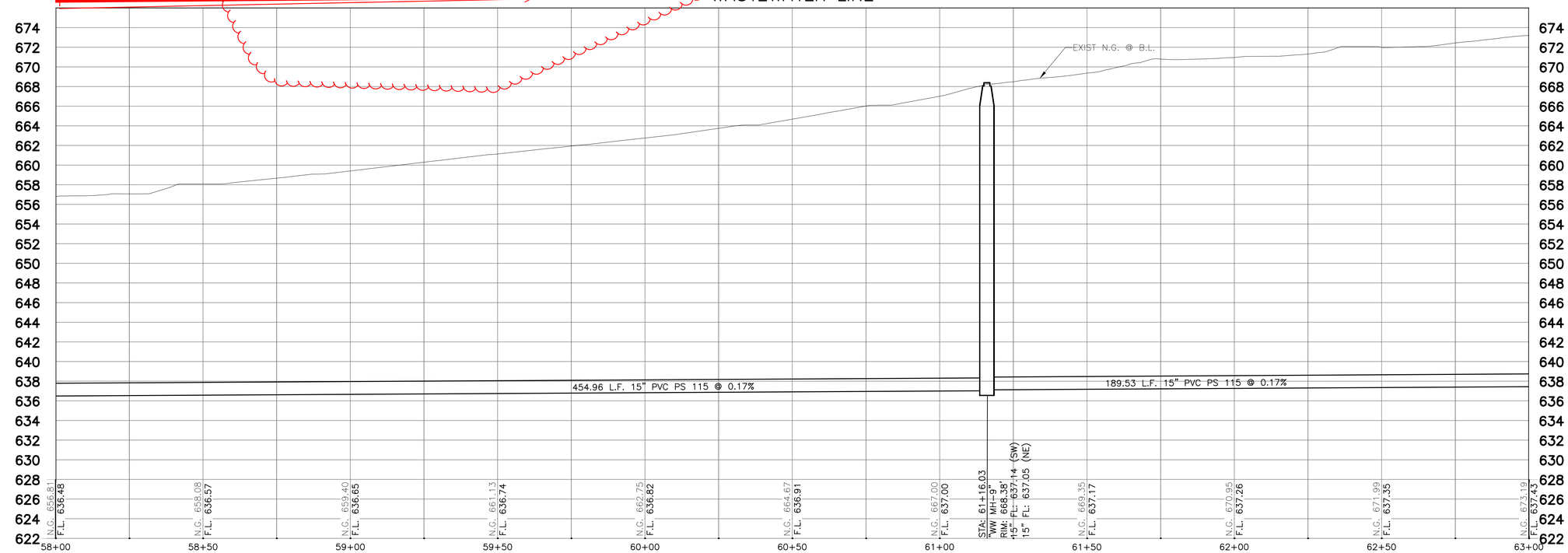
By _____ Date 5-6-21

Response (attach sketches or other documentation as required):

Contractors proposed resolution of the waterline conflict at Sta 60+79.03 as shown in attached markup of 02C-13 is appsoved. Attached Change Proposal of $8,231.98 and 5 day will be included in Change Order No. 1.

By _____ Date 5/10/21





SCALE : 1" = 20'

LEGEND

- SF — SILT FENCE
- SFJ — SILT FENCE WITH J–HOOKS (2 / 03C–02)
- LOC — LIMIT OF CONSTRUCTION
- CHAIN LINK FENCE
- EXIST TREE TO REMAIN
- EXIST TREE TO REMAIN WITH WOOD SLATS
- EXIST TREE TO REMAIN WITH CHAIN LINK FENCE
- EXIST TREE TO BE DEMOLISHED
- –100–YR FW– 100 YEAR FLOODWAY
- –100–YR FP– 100 YEAR FLOODPLAIN
- –500–YR FP– 500 YEAR FLOODPLAIN
- OHP — OVERHEAD POWER LINE
- UE — UNDERGROUND ELECTRIC LINE
- FO — FIBER OPTIC LINE

BORE LOG LEGEND:

- LIMESTONE
- SHALE
- USCS CLAYEY SAND
- USCS CLAYEY GRAVEL
- USCS HIGH PLASTICITY CLAY
- USCS LOW PLASTICITY CLAY
- WEATHERED SHALE
- WEATHERED LIMESTONE

NOTES:

1. NOTES ARE SHOWN ON 00G–05 FOR THIS DRAWING.
2. CONTRACTOR SHALL MINIMIZE DISTURBANCE OF LAND WITHIN THE FLOODPLAIN. MATERIAL STORAGE AND CONSTRUCTION VEHICLE PARKING SHALL BE OUTSIDE THE LIMITS OF THE FLOODPLAIN. DISTURBED LAND WITHIN FLOODPLAIN SHALL BE REVEGETATED IMMEDIATELY AFTER THE AREA IS VACATED.
3. ALL MANHOLES TO BE COATED AND VACUUM TESTED.

KEY NOTES:

1. INSTALL PIPELINE TRENCH COLLAR AT 400' SPACING PER DETAIL 2, DWG 03C–04.
2. INSTALL HYDROMULCH SEEDING ON ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES UNDER THIS PROJECT. PAYMENT SHALL BE FOR FIELD INSTALLED QUANTITIES PER BID ITEMS.
3. CONTRACTOR SHALL COORDINATE WORK NEAR OVERHEAD POWER WITH ONCOR. ANY REQUIRED MOVEMENT OF GUY WIRES MUST BE APPROVED BY ONCOR PRIOR TO CONSTRUCTION IN THIS AREA.
4. REMOVE AND REPLACE SIDEWALK AND/OR GRAVEL AS REQUIRED. RESTORE TO EQUAL OR BETTER CONDITION UPON COMPLETION OF PIPE INSTALLATION.
5. CONTRACTOR SHALL NOT ENTER THE STRUCTURAL EASEMENT FOR THE UPPER BRUSHY CREEK W.C.I.D. DAM #20.
6. SALVAGE AND REINSTALL EXISTING FENCE AS NEEDED. CONTRACTOR IS RESPONSIBLE TO RESTORE TO EQUAL OR BETTER CONDITION IF DAMAGED.
7. CONTRACTOR TO COORDINATE WITH W.C.I.D. UPPER BRUSHY CREEK AT 512–284–7685 WHEN CONSTRUCTING IN ACCESS EASEMENT AND BACKFILL TRENCH EACH NIGHT.

REV. NO.	DATE	DESCRIPTION

PROJECT MANAGER:	WWW
DESIGNED BY:	ANB
CHECKED BY:	JTH
DRAWN BY:	SMB
DCS PROJECT NO:	20101400

DCS ENGINEERING, LLC
1101 S. CAPITAL OF TEXAS HIGHWAY, BUILDING G–100
AUSTIN, TX 78746
TEL: (512) 614–6171
T.B.P.E. FIRM NO. F–13162

CITY OF HUTTO

LAKESIDE ESTATES LIFT STATION ABANDONMENT

STATE OF TEXAS — DARREN C STROZEWSKI — 87908 — LICENSED PROFESSIONAL ENGINEER — 9/9/2020

LAKESIDE WASTEWATER INTERCEPTOR

WASTEWATER LINE PLAN & PROFILE - STA. 58+00 TO STA. 63+00

DATE: SEPTEMBER 2020

SCALE: HORIZ: 1"=20' VERT: 1"=6'

DRAWING: 02C-13

FILENAME: Z:\Projects 1400-1499\20101400 - COH Lakeside LS Abandonment 2019\500 - Final_Design\5.1 - Drawings\Sheet Files\02C-01 - 18.dwg, LAST SAVED ON: Sep 15 2020 2:22pm, PLOTTED BY: SBARRY, ON: Sep 15 2020 2:30pm, CFG:


KOMATSU
DANGER
PC
490
LC

BELL CONTRACTORS, INC.
Since 1977

May 7, 2021

Name
Company
Address
City

Phone:
FAX:
Mobile:
e-mail:

Change Of proposal for Sewer at "Lakeside Estates Lift Station Abandonment" in Hutto, TX.

Unit #	Description	Quantity	Unit	Unit Price		Amount
I	**Water**					
1	12" C-900	40	LF	$106.78	$	4,271.20
2	12" Sleeves	3	EA	$715.00	$	2,145.00
3	12" Plugs	2	EA	$907.89	$	1,815.78
	Total-Water				**$**	**8,231.98**
	Total				**$**	**8,231.98**

Days Requested 5

RESOLUTION NO. 2021-075

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, ESTABLISHING AN EMERGENCY PREPAREDNESS TASK FORCE; PROVIDING ELIGIBILITY CRITERIA; ADOPTING THE PROCEDURAL RULES FOR THE EMERGENCY PREPAREDNESS TASK FORCE TO FOLLOW IN CARRYING OUT ITS DUTIES; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council for the City of Hutto desires to establish an Emergency Preparedness Task Force; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS:

Section 1. That the facts and recitations set forth in the preamble of this resolution are hereby adopted, ratified, and confirmed.

Section 2. That the City Council of the City of Hutto hereby establishes an Emergency Preparedness Task Force.

Section 3. That the City Council hereby adopts the procedural rules and eligibility criteria for the Emergency Preparedness Task Force to follow in carrying out its duties, attached as Exhibit "A" and incorporated herein.

Section 4. That this resolution shall take effect immediately from and after its passage, in accordance with the provisions of the State Statutes of the State of Texas.

Section 5. Open Meetings Act. It is hereby officially found and determined that the meeting at which this resolution was passed was open to the public and public notice of the time, place and purpose of said meeting was given, all as required by the Open Meetings Act, *Chapter 551, Texas Government Code.*

PASSED AND APPROVED on this 6th day of May by a vote of _____ (*ayes*) to _____ (*nays*) to _____ (*abstentions*) of the City Council of Hutto, Texas.

CITY OF HUTTO

_____
Mike Snyder, Mayor

ATTEST:

_____
Holly Nagy, City Secretary

EXHIBIT “A”

City of Hutto Emergency Preparedness Task Force (EPTF)

Procedural Rules

Membership Requirements

(1) All EPTF members shall be appointed by the city council and shall serve without compensation.

(2) The EPTF shall be composed of seven members to serve three-year terms.

(3) Each candidate for appointment as a member of the EPTF shall be at least eighteen (18) years old, be a registered voter of the city, and shall have resided within the corporate city limits, or within territory annexed prior to the appointment, for at least twelve months preceding the appointment. The EPTF shall, to the extent possible, be comprised of, but not limited to, representatives from hospitals, emergency medical services (EMS) agencies, first responder agencies, fire departments, law enforcement agencies, healthcare agencies, government agencies, and other emergency preparedness and/or response organizations.

(4) EPTF members shall serve without compensation and shall not be employed by or hold any other position in city government. In addition to any other requirements prescribed by the city council, members shall maintain the qualifications established by this section while in office.

(5) The term of office of EPTF members is three years and shall commence on the first day of July. Initial appointments for establishment of the EPTF shall be staggered and with partial terms, with three (3) members appointed with terms ending June 30, 2023 and four (4) members appointed with terms ending June 30, 2024.

Duties and Responsibilities

The Emergency Preparedness Task Force (EPTF) serves in an advisory capacity and render recommendations upon request of the City Council to include, without limitation, as follows:

(1) Advise and assist the City of Hutto on topics related to preparedness, response, recovery and mitigation activities as they pertain to emergency preparedness, including proposing improvements for future emergency preparedness;

(2) Advise and assist the City of Hutto in creating and developing effective communication strategies to advise residents in the event of an emergency;

(3) Compile information on emergency preparedness resources available to Hutto residents and recommended emergency preparedness measures for each type of emergency event;

(4) Monitor and evaluate implementation of the emergency preparedness communication strategy and recommend additional forms of communication and technology to deliver critical information to residents before, during, and after an emergency;

(5) Advise and assist the City of Hutto in implementing an Emergency Preparedness Week;

(6) File annual reports to the City Council and may be required to provide additional reports upon request of

the City Council; and

(7) Advise the City of Hutto of equipment, procedures, and policies needed to implement the emergency preparedness communication strategy.

Meeting Rules and Procedures Generally.

The EPTF shall follow the adopted policy regarding City of Hutto Boards, Commissions and Authorities. Robert's Rules of Order, current edition, shall be the parliamentary rules for the EPTF.

That the meetings of the EPTF shall be advisory in nature, a quorum of the EPTF shall be four (4) members, and a majority vote of the quorum shall be required for any action to be taken by the EPTF. All meetings and procedures of the EPTF shall be consistent with the policies of the City of Hutto concerning advisory boards, commissions, and authorities.

Legal Conformance

All meetings, actions, and other responsibilities and duties carried out by the EPTF shall be done in conformance with all applicable federal, state, and local laws.

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration and possible action on Resolution No. R-2021-087 appointing a Deputy City Attorney for the City of Hutto in accordance with Section 4.04 of the Hutto City Charter as approved by the voters on May 1, 2021. (City Attorney - C. Rosas-Grillet)
Meeting:	Thursday, May 20, 2021
Department:	City Secretary
Staff Contact:	

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Resolution Deputy City Attorney 5.13.21

RESOLUTION NO. 2021-087

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, APPOINTING A DEPUTY CITY ATTORNEY FOR THE CITY OF HUTTO IN ACCORDANCE WITH SECTION 4.04 OF THE HUTTO CITY CHARTER AS APPROVED BY THE VOTERS ON MAY 1, 2021; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, on May 1, 2021, the voters approved an amendment to the Hutto City Charter providing that Section 4.04 of the Hutto City Charter be amended to authorize the City Council to appoint a Deputy City Attorney who shall conduct the prosecutions in the Hutto municipal court; and

WHEREAS, pursuant to Section 9.005 of the Texas Local Government Code, a charter amendment does not take effect until the governing body of the municipality enters an order in the records of the municipality declaring that the charter or amendment is adopted; and

WHEREAS, on May 12, 2021, the City Council adopted Resolution 2021-078 canvassing the returns and declaring the results of the May 1, 2021 General and Special Elections; and

WHEREAS, the City Council desires to appoint a Deputy City Attorney for the City of Hutto in accordance with Section 4.04 of the Hutto City Charter.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS:

Section 1. That the facts and recitations set forth in the preamble of this resolution are hereby adopted, ratified, and confirmed.

Section 2. That the City Council of the City of Hutto hereby appoints Sara Naylor as the Deputy City Attorney.

Section 3. That this resolution shall take effect immediately from and after its passage, in accordance with the provisions of the State Statutes of the State of Texas.

Section 4. Open Meetings Act. It is hereby officially found and determined that the meeting at which this resolution was passed was open to the public and public notice of the time, place and purpose of said meeting was given, all as required by the Open Meetings Act, *Chapter 551, Texas Government Code.*

PASSED AND APPROVED on this 20th day of May by a vote of _____ (*ayes*) to _____ (*nays*) to _____ (*abstentions*) of the City Council of Hutto, Texas.

CITY OF HUTTO

_____
Mike Snyder, Mayor

ATTEST:

_____
Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To: City Council
Subject: Consideration and possible action on Resolution No. R-2021-090 approving the first amendment to groundwater lease with Rodney L. Hortenstine and Kay L. Hortenstine dated November 10, 2004.
Meeting: Thursday, May 20, 2021
Department: Legal
Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

None

City Council

AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration and possible action On Ordinance No. 2021-031 amending Chapter 2 “Administration and Personnel,” to amend Article 2.03 “Personnel,” section 2.03.041 “Residency Requirement” to modify the residency requirement for the City Manager. (City Attorney - C. Rosas-Grillet)
Meeting:	Thursday, May 20, 2021
Department:	Legal
Staff Contact:	

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Ordinance Amending Section 2.03.041 Residency Requirements 5.13.21

ORDINANCE NO. O-2021-031

AN ORDINANCE AMENDING CHAPTER 2 "ADMINISTRATION AND PERSONNEL," OF THE HUTTO CODE OF ORDINANCES, TO AMEND ARTICLE 2.03 "PERSONNEL," SECTION 2.03.041 "RESIDENCY REQUIREMENT" TO MODIFY THE RESIDENCY REQUIREMENT FOR THE CITY MANAGER; AND PROVIDING FOR EFFECTIVE DATE, PUBLICATION, SEVERABILITY, REPEAL, OPEN MEETINGS CLAUSE AND ENACTMENT.

WHEREAS, Section 150.021 of the Texas Local Government Code provides that a municipality may establish residency requirements for municipal department heads appointed by the mayor or the governing body of the municipality; and

WHEREAS, Ordinance O-2020-032 requires the City Manager to reside within city limits, while serving as city manager; and

WHEREAS, Ordinance O-2020-032 further requires a prospective city manager that resides outside city limits to establish a residence within the city limits within six (6) months after accepting the city manager position; and

WHEREAS, the City Council desires to modify the residency requirements for the position of the City Manager; and

WHEREAS, the City Council of the City of Hutto, Texas, finds it to be in the best interest of the public safety, health and general welfare of the City to amend Section 2.03.041.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, THAT:

SECTION I.

The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION II.

That Section 2.03.041 of the Hutto Code of Ordinances, is hereby amended as follows:

Sec. 2.03.041 Residency requirement

The city manager shall reside within the city limits while serving as city manager. If a prospective city manager resides outside the city limits he or she shall establish a residence within the city limits within six (6) months after accepting the city manager position. *The city council may waive the residency requirement for just cause for a definite period of time after discussion in open*

session.

SECTION III. Publication Clause

The City Secretary of the City of Hutto is hereby authorized and directed to publish the caption of this ordinance in the manner and for the length of time prescribed by law.

SECTION IV. Severability Clause

The provisions of this ordinance are severable, and if any sentence, section, or other parts of this ordinance should be found to be invalid, such invalidity shall not affect the remaining provisions, and the remaining provisions shall continue in full force and effect.

SECTION V. Repealing Clause

All ordinances and resolutions and parts thereof in conflict herewith are hereby expressly repealed insofar as they conflict.

SECTION VI. Open Meetings Clause

The City Council hereby finds and declares that written notice of the date, hour, place, and subject of the meeting at which this ordinance was adopted was posted and that such meeting was open to the public as required by law at all times during which this ordinance and the subject hereof were discussed, considered, and formally acted upon, all as required by the Open Meetings Act, Chapter 551, Texas Government Code, as amended.

SECTION VII. Effective Date

This ordinance shall take effect immediately upon passage.

READ and **APPROVED** on first reading on the **20th** day of **May**, **2021**, at a meeting of the City Council of the City of Hutto, Texas at which a quorum was present and for which due notice was given pursuant to Section 551.001, *et. seq.*, of the Texas Government Code.

By motion duly made, seconded and passed with an affirmative vote of all the Councilmembers present, the requirement for reading this ordinance on two separate dates was dispensed with.

THE CITY OF HUTTO, TEXAS

By:_____
Mike Snyder, Mayor

By: _____
Holly Nagy, City Secretary
(SEAL)

City Council

AGENDA ITEM REPORT

To: City Council

Subject: Consideration and possible action on Resolution No. R-2021-088, approving the First Amendment to the City Manager Employment Agreement dated September 17, 2021.

Meeting: Thursday, May 20, 2021

Department: Legal

Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

None

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration and possible action on Resolution No. R-2021-071, authorizing the City Manager to execute a contract with Freese and Nichols in regards to the Hutto 2040 Comprehensive Plan. (Ashley Lumpkin)
Meeting:	Thursday, May 20, 2021
Department:	Development Services
Staff Contact:	Ashley Lumpkin

BACKGROUND INFORMATION:

City Council provided staff the direction to negotiate a contract with Freese and Nichols in March 2021, after a full RFQ process to create a new Comprehensive Plan document for the City of Hutto. The Texas Local Government Code speaks to adopting a Comprehensive Plan “for the long-range development of the municipality”. This project, and the result plan, will be the guiding document for development patterns within the city moving forward. The contract, attached, includes a multitude of deliverables, and includes the following key pieces discussed previously with City Council:

- Numerous public meetings, both in-person and virtual to identify issues and opportunities and gather feedback on citizens’ visions for the City,
- Interactive website to the project to further solicit citizen participation and provide materials for the public meetings, further enhancing the transparency of the entire comprehensive planning process; and
- Fiscal analysis for Hutto’s market and data to understanding the tradeoffs and fiscal impact of different development patterns including fiscal resiliency
- A review of the Master Mobility Plan; and
- Integration of the parks, water, and wastewater master plans; and
- Implementation plan including a diagnostic analysis of the existing development ordinance.

Recently, staff asked the CDC/EDC for additional funding to expand the scope of the downtown plan element within the Comprehensive Plan. Just as the Comprehensive Plan will view the city on a macro scale, the expanded scope for the downtown area will reevaluate the Old Town District. The plan seeks to state needs and define goals within the smaller district in alignment with the strategic objectives of the city. The enhanced scope includes additional opportunities to engage the community and recognizes the importance of the Old Town District within Hutto but also distinguishes the District as its own destination. Infill and development opportunities need to be balanced with the needs of the existing neighborhoods and community. As Hutto continues to grow, the expanded scope will be a critical tool with which to guide future development and provide a transparent, public framework for the approval process within the historic area. Should the CDC/EDC approve this funding, the contract will expand to include the expanded Downtown Plan element.

SUMMARY OF REQUEST:

STAFF REVIEW:

City staff and legal have reviewed the proposed contract from Freese and Nichols and recommend the City Council authorize the City Manager to execute the contract.

FINANCIAL IMPACT:

The comprehensive plan will be split funded through Development Services and Engineering, and should the CDC/EDC fund the expanded Downtown Plan, they will also participate in in the overall project. The total cost shall not exceed five hundred one thousand five hundred twenty seven Dollars $501,527.If the EDC/CDC does not fund the expanded scope for the downtown plan, Task 8 will be struck from the contract with a resulting not to exceed of $322,001.

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Attachment A Hutto comp plan scope 2021.05.12
2. City PSA Hutto Comp Plan
3. RESOLUTION NO 2021-071

SCOPE OF SERVICES AND RESPONSIBILITIES OF OWNER

ARTICLE I

BASIC SERVICES: FNI shall render the following professional services in connection with the development of the Project:

PROJECT UNDERSTANDING:

The City of Hutto (Client, City) is engaging a FNI to prepare a local comprehensive plan consistent with standards, procedures and best management practices in Texas. The project planning area will encompass the existing Hutto city limits and extraterritorial jurisdiction (ETJ) as identified by the City.

SCOPE OF SERVICES:

Tasks prepared as part of this planning effort may occur concurrently or sequentially where appropriate, or in some cases may deviate from the sequence shown in this Scope of Services document.

Task 1: Project Management and Quality Control

Perform general project management and control project quality, progress and budget for the scoped period of completion, including the FNI's monthly reporting and invoicing requirements, monthly status meetings with the City, and similar efforts.

Deliverables:

- Monthly one-page reports
- Monthly project management meetings

Task 2: Engagement and Meetings

For all engagement efforts described below, the City and FNI may mutually agree to reassign meetings and engagement methods for other forms of outreach with similar effort to leverage other opportunities in the community or allow for other creative approaches as established in the Public Engagement Plan mutually agreed to by the City and FNI. This includes digital and socially-distant alternatives should the City and FNI deem such approaches necessary or preferred due to external factors such as public health emergencies. Efforts will be made to coordinate outreach to align with other community events to reach broader audiences, with attention toward tailoring the outreach to align with the atmosphere of the event. A Public Engagement Plan will be prepared, agreed to, and finalized.

1. Staff Initiation Conference Call (1 meeting, totaling 1 hour)

   A conference call or virtual meeting with City staff will take place at the beginning of the project to familiarize all parties with the scope, project schedule, project kick-off, data request needs and timing, invoicing, communication and key staff, and other significant considerations.

2. Kick-off Meeting and Study Area Tour (1 meeting and study area tour, totaling 8 hours)

   Attend one (1) kick-off meeting with the City. The purpose of the meeting will be to build upon

discussions of the staff initiation conference call.

Immediately following the Kick-off Meeting, participate in one (1) site tour of the study area to provide spatial context to conversations about the City's challenges and opportunities. If unable to conduct this as an in-person tour, the City will provide a recommended tour route and key information elements. FNI and the City may also mutually agree to other approaches, such as a virtual study area tour.

3. CPAC Meetings (6 meetings, 2 hours each)

   CPAC Meetings will allow for the review of key components of the plan in detail, to explore possible scenarios, to debrief public participation efforts, and to receive direction on plan issues and topics. Such sessions will include an agenda, any necessary maps and handouts for review, and drafts of key tasks for review and comment. A total of six (6) meetings are included in this scope of work, with all planned as virtual meetings unless consolidated with a planned in-person trip associated with another engagement activity of this task.

4. Virtual Stakeholder Meetings (2 days, 8 hours per day)

   A total of two (2) days of stakeholder meetings are proposed during the project, with all planned as virtual meetings unless consolidated with a planned in-person trip associated with another engagement activity of this task. These meetings shall be scheduled as back-to-back meetings, if possible, to ensure continuity in the discussion, with logical breaks as necessary.

5. Community Workshops, Open Houses or Other Engagement Effort (4 efforts at 2 hours each)

   Four (4) community workshops, open houses or other engagements with similar level of effort, as established in the Public Engagement Plan, will be held during the process to identify issues and opportunities and gather feedback on citizens' visions for the City. At a minimum, two (2) of these engagements will be virtual (see section 7, below).

6. City Council Check-In and Adoption Meetings (4 meetings at 2 hours each)

   Receive input from and give updates to the City Council at two (2) City Council check-ins during the process. Attend two (2) adoption meetings; one at the Planning and Zoning Commission and one at the City Council. The City and FNI may mutually agree to reassign these meetings as needed.

7. Interactive Project Website, Virtual Engagement and Project Brand (1 website, 1 project brand, 2 surveys)

   a. Establish an interactive project website that supports integrated community engagement tools, such as virtual idea walls for brainstorming, interactive mapping for geographic feedback, virtual town halls and open houses, feature-rich online surveys, participatory budgeting in a seamless platform supportive of desktop and mobile access.

   b. Develop at least two (2) non-scientific online community surveys with the assistance of the City during the course of the project.

   c. Establish branding for use throughout the planning process and on all documents.

Deliverables:

a. Project website with described capabilities

b. Meetings, events and engagements, and their associated support materials, as described

c. Summaries of each engagement activity, consolidated as an appendix to the plan

Summary of Meetings and Trips:

a. Based on the Scope of Services, the FNI will attend the following meetings:

Fifteen (15) Monthly Status Meetings with the City
One (1) Staff Initiation Conference Call
One (1) Kick-off Meeting and Study Area Tour
Six (6) CPAC Meetings
Up to Ten (10) Stakeholder Meetings (2 days, assuming 5 per day)
Four (4) Community Workshops, Open Houses, or Similar Engagements
Two (2) City Council Check-Ins
Two (2) Adoption Meetings (Planning and Zoning Commission and City Council)

Task 3: Draft Introduction and Community Snapshot

1. Baseline Analysis

    a. Study a historic timeline of the City, including major events impacting physical development of the community.

    b. Analyze historic population and related growth trends and patterns.

    c. Explain patterns and impacts of demographic information collected. Demographic data will be based upon the most recent U.S. Census American Community Survey data available at the time Notice to Proceed is given by the City.

2. Planning Context

    The following are elements to be documented in order to establish the planning context:

    a. Review past and ongoing planning efforts conducted by the City.

    b. Evaluate regional initiatives, including activities of adjacent cities.

    c. Conduct a physical features assessment, including topography, floodplains, developed/undeveloped land, natural features, sensitive environmental areas and other physical implications that impact growth and development.

    d. Evaluate implications of public health emergencies and specifically the COVID-19 pandemic

on the City's planning context.

Deliverables:

- Draft introduction plan element
- Draft community snapshot plan element

Task 4: Draft Vision, Guiding Principles and Goals

1. Community Vision

   Develop a vision statement based on an assessment of City feedback regarding goals and vision, an understanding of existing community constraints, and a summary of public input and feedback.

2. Guiding Principles and Goals

   Develop guiding principles and goals based on analysis, community input and feedback received at the beginning of the process.

Deliverables:

- Draft vision plan element

Task 5: Draft Land Use and Development

1. Existing Land Use Analysis

   Assess the land use characteristics of the City, including:

   a. Analysis of types of land use (color-coded by category) and quantified by acres.

   b. Discussion of existing development patterns and land use relationships, both opportunities and constraints.

2. Future Land Use Plan and Urban Form

   Develop a future land use plan that will take into account existing land use information, neighborhood compatibility, current zoning regulations, economic development strategies, past development patterns, infill and redevelopment opportunities, and integrate them into a graphic depiction of the community's future. The plan will consider the following:

   a. Location of future residential, non-residential, mixed uses, open space and institutional land uses along with associated intensities.

   b. Location of natural and building environment characteristics of the City to promote conservation, appropriate use and protection of both natural and cultural resources that should be considered when making future development decisions.

   c. Location of future land uses along major transportation and transit corridors along with associated intensities, with consideration towards transit-oriented development.

d. Equity and geographic disparities, and approaches to resolving those disparities.

e. Economic productivity through development and redevelopment strategies.

f. Compatibility of adjacent uses and contexts to provide transitions.

3. Metrics, Consequences and Tradeoffs

   a. Develop future scenario data and metrics to understand consequences and tradeoffs to different future development patterns, which may include land consumption, energy use, water use, walk accessibility, transit accessibility, transportation, emissions, household costs, fiscal performance, and risk and resilience.

   b. Fiscal analysis will be grounded in the local market potential, the real cost of services for the City and the primary revenue sources for cities: property tax, sales tax, and fee revenue.

4. Urban Form

   See Task 10.

5. Aligning Vision with Market

   Identify strategies to balance and bridge the gap between current market demand, long-term desired state or aspiration goals of the community, and financial resources required to accelerate preferred development if the market is not yet aligned. Analysis and recommendations regarding alignment of market to vision may alternatively be addressed in Task 9 economic development.

6. Population Patterns

   a. Develop a new projected growth rate and population projections for the City based upon historical growth patterns and future growth considerations, derived from FNI expertise and other professional sources, such as the Texas Water Development Board and Metropolitan Planning Organization.

   b. Evaluate shifting population patterns and trends to increase understanding of the City's stage of growth and development relative to likely build-out.

Deliverables:

- Draft land use and development plan element as described, including goals, objectives and actions

Task 6: Transportation and Mobility

1. The Mobility Strategy component of the Comprehensive Plan update will review the existing Mobility Master Plan (MMP) to identify changes to the thoroughfare classification system, cross sections, functional classification map in the MMP. FNI will determine new guiding principles for mobility through public involvement to help guide the MMP future updates through the

Comprehensive Plan update process. Recommendations will focus on street functional classification and cross section standards updates needed in the MMP to properly address vehicular capacity, and integration of pedestrian and bicycle facilities within right-of-way or easements.

2. FNI will update the Functional Classification map in the MMP with desired changes including:

    a. Evaluate Williamson County's mobility plan projects within, adjacent to, and connecting to Hutto for potential updates to the classification map

    b. Conduct a planning level feasibility evaluation of the City's MMP, including recommended alignment changes, functional classification changes, and connectivity to serve future growth

    c. Identify potential changes to street cross-sections associated with functional classifications

    d. Review the cross sections developed as part of the existing MMP and update cross sections with recommended revisions in Streetmix online software for incorporation into an MMP update. In addition, review the current Street Classification Standards in Section 10.611.12 of the Unified Development Code (UDC) to identify changes to the Standards table based on updates to the street cross sections.

Deliverables:

- Draft transportation and mobility plan element as described, including goals, objectives and actions

Task 7: Public Facilities, Parks and Infrastructure

1. Integration of Water and Wastewater Utility Master Plans

    Identify and discuss implications for the City's infrastructure resulting from plan direction for land use and development intensity, integrating existing Water and Wastewater Master Plans as applicable.

2. Stormwater Infrastructure

    Prepare goal, policy and action items for a stormwater/drainage component, focusing on the municipal separate stormwater system and conveyance of water efficiently from storm events, treatment of runoff to preserve natural assets and the environment, regional approaches, and positioning the City for efficient operations and maintenance into the future.

3. Facilities and Parks

    Develop goal, policy and action items related to necessary community facilities and services, such as police, fire and parks, correlated to future land use projections.

Deliverables:

- Draft public facilities, parks and infrastructure plan element as described, including goals, objectives and actions

Task 8: Downtown Master Plan

1. DNA Assessment

    a. Inventory and analyze existing land use, transportation and urban design conditions within the downtown study area, documenting building and design conditions.

    b. Review the study area's physical framework, such as:

        i. Land use patterns and current functions
        ii. Street networks and transportation framework
        iii. Pedestrian facilities and civic spaces
        iv. Historic and downtown structures
        v. Vacant and underutilized parcels

    c. Review the study area's regulatory and policy framework, such as:

        i. Existing regulations and effects on development
        ii. Current financial and regulatory boundaries, including tax investment zones and other special districts

    d. Review the study area's ownership and land assembly framework.

    e. Create a DNA Report using the Downtown analysis (8.1.a – 8.1.d) detailing Downtown Hutto's existing built and natural environments.

    f. Identify key projects of significant parcels for new development or redevelopment for building and site level illustrative plans.

2. Program and Design Downtown Plan

    a. Conduct a 2-Day Design Workshop with the community and City using the DNA Report, the economic analysis, and other findings from the Team as a foundation for community conversations regarding the future design of Downtown Hutto.

    b. Conduct a collaborative Team meeting following the community Design Workshop to dissect what we learned and how to use it going forward.

3. Post- Workshop Downtown Plan Refinement

    a. Identify potential projects and opportunities for improving and enhancing public and private efforts to promote recreation, accessibility, tourism and a sense of community, character and identity through urban design, open space and public art.

    b. Prepare a character plan depicting categories of development intensities, buildings, general parking and building characteristics in an urban condition.

    c. Prepare one (1) illustrative master plan to depict base information with catalyst infill graphics for proposed infill buildings by land use/form type, district elements, key open and

civic space locations and key planning strategies.

d. Prepare up to two (2) building/site scale illustrative plans of the key catalyst opportunity areas for enhanced development and/or redevelopment.

4. Downtown Implementation Policies and Tools

a. Develop an action plan to address policies and related recommendations, such as regulatory actions, programs, capital projects, and intergovernmental partnerships.

b. Identify responsible parties, prioritization and best-fit approaches to financing, including incentive policy recommendations best-suited to various plan implementation elements. This excludes drafting legal preliminary and project plans for financing districts as those efforts can vary and should be tailored to the specific approach.

c. Provide a strategy overview and key Steps Report for Implementation of Key Area Building-Scale Plans.

d. Draft a Final Master Plan Document including Downtown Plan Deliverables, Implementation Recommendations and Appendices of DNA Report, Stakeholder Input (including one comprehensive revision).

Deliverables:

- Draft Downtown Plan as described, including illustrative plans, goals, objectives and an action plan.

Task 9: Economic Resiliency

1. Evaluate economic approaches and challenges in the City and Region, including those brought about by the coronavirus, to develop strategies to build economically resilient and diverse communities.

2. Analyze the broad factors influencing new development, redevelopment and tourism activity in the City, focusing on complete neighborhoods and equitable access to economic opportunity while addressing density needs and variables that influence the vibrancy of commercial corridors and nodes.

3. Examine the high level economic and tax impacts of the major components of the Plan, providing the City with a sense of how much new job activity and incremental revenue will be captured over the next 10 to 20 years.

4. Recommendations and findings will take into consideration the City's position within the Region's competitive economic development environment, seeking to identify those attributes that can distinguish the City and bring about the desired quality of life.

Deliverables:

- Draft economic resiliency plan element as described, including goals, objectives and actions

Task 10: Neighborhoods, Housing and Preservation

1. This task may take the form of a districts-based approach due to the variability of issues and opportunities within this task geographically.

2. Neighborhood and Housing Assessment

    a. Evaluate neighborhoods at a high-level in terms of completeness: where residents have easy, convenient access to many of the places and services they use daily including grocery stores, restaurants, schools and parks, without relying heavily on a car.

    b. Identify a variety of existing and recommended neighborhood and housing programs to address any emerging issues, including a map of neighborhood associations.

    c. Explore housing typologies to address compatibility with character while allowing for incremental change, such as the use of accessory dwellings, townhomes and a variety of building type formats and other forms of housing responsive to market interest and need.

3. Urban Form and Neighborhood/Small Area Planning Framework Guidance

    Evaluate approaches to create a policy foundation for neighborhood and small area planning supportive of compatible redevelopment and revitalization. Assess and provide recommendations on the urban form of the City, including compact development, gateways and corridors, activity centers, community image and open space networks. Assess methods and approaches to support authentic and fiscally sustainable development for the City and districts where small area plans may be developed. Create up to two (2) illustrative plans of the selected areas that will be determined by the outcomes of the assessment.

4. Preservation and Design

    a. Assess the City's ongoing efforts in historic preservation, identifying any needs for new or updated historic resources surveys.

    b. Develop policies that address community gateways, community image, and the preservation of character-giving community elements.

Deliverables:

Draft neighborhoods, housing and preservation plan element as described, including goals, objectives and actions

Task 11: Draft Implementation

Provide an implementation plan structured into a coordinated action program The implementation plan will outline priorities in a matrix format, primarily by:

1. Reviewing the various policies and related recommendations from each plan element.

2. Dividing the policies and related recommendations into applicable implementation techniques/actions, such as regulatory actions, programs, and intergovernmental partnerships, to

create an overall Action Plan.

3. Prioritizing the implementation techniques/actions into appropriate time periods.

4. Establishing appropriate metrics from which to gauge the effectiveness of the strategies implemented and progress toward full plan implementation.

5. Preparing a diagnostic analysis and report on the City's current development ordinances to identify alterations and amendments necessary to align the regulatory documents to the recommendations of the plan(s) produced under this project.

Deliverables:

Draft implementation plan element as described

Task 12: Preparation of Final Documents

1. Draft Report

    a. Individual draft plan elements will be sent throughout the planning process. The City will consolidate comments from staff, CPAC and others and provide one set of consolidated comments per plan element to the FNI within two (2) weeks of submission.

    b. Prepare a draft Comprehensive Plan Report (Draft 1) that will document the planning process and aforementioned tasks. The draft will be provided to the City, CPAC and other parties the City wishes to include for review and comments. The City will consolidate comments from staff, CPAC and others on Draft 1, and provide one set of consolidated comments within two (2) weeks of submission. The FNI will provide a comment review meeting to clarify any comments.

    c. Prepare a revised draft Comprehensive Plan Report (Draft 2) to address the comments and revisions from Draft 1. This draft will serve as the draft for approval consideration by the Planning and Zoning Commission and City Council.

2. Final Report and Deliverables

    a. Produce an "as adopted" final report to incorporate any changes made during the adoption process by City Council.

    b. Provide deliverable in digital format (PDF), including both text and mapping, such that it will be easily reproducible. Electronic files of the final Comprehensive Plan will be provided to the City. The plan will be prepared in Adobe InDesign.

3. Plan Mapping

    All mapping created will use ESRI's ArcGIS software and other necessary rendering software. It is assumed that the City will provide all necessary base mapping data in compatible electronic format in order to generate necessary mapping.

ARTICLE II

ADDITIONAL SERVICES: Additional Services to be performed by FNI, if authorized by City, which are not included in the above described basic services, are described as follows:

A. Printing and binding of documents in addition to those identified in ARTICLE II will be billed in accordance with the rates outlined in Attachment CO. FNI, following a request for assistance from the City, will prepare an estimate for approval by the City prior to initiating work.

B. Modification to Task 6 Transportation and Mobility to conduce a full update of the Mobility Master Plan (MMP). It is assumed that public involvement feedback from the Comprehensive Plan Update will be used in development of the MMP. Transportation Modeling is not included.

a. Data Collection

FNI will coordinate with the City or outside agencies to obtain available GIS data for base mapping and maps within the existing MMP. The GIS files will be in ESRI ArcGIS10.x format and projected in NAD 83 State Plane, Central Texas Zone coordinates. In addition, K-H will coordinate with the City on any available traffic count information from the past three (3) calendar years and substitute with information from TxDOT's statewide planning map, where available.

b. Existing Conditions Review

FNI will coordinate with the City to create an inventory of existing roadways (arterials and collectors only) based on the latest adopted Functional Classification map in the MMP. The inventory will be completed using aerial photography. This existing inventory database is anticipated to show the number of lanes, condition (ultimate or not) and if it matches the MMP map ultimate condition. FNI anticipates spending two days (two employees) in the City verifying the existing network. As part of this field work an existing needs assessment will be developed.

c. Intersection Improvements

FNI will identify intersection improvements to support the overall mobility of the City. These may include traffic signals, turn lanes, roundabouts, and innovative intersections. FNI will identify intersection control during Task 2.2 and collect crash data for the past three (3) calendar years from the TxDOT Crash Reporting Information System (CRIS) to evaluate crash hot spots and potential safety improvements.

Intersection capacity improvements or control changes will be identified based on a simplified flow chart evaluation based on functional classifications of existing streets and field observations in b., above. Recommendations will be limited to twenty (20) intersections in the City.

d. Policy Review

FNI will review transportation policies and codes that apply to the development of transportation systems. The current Traffic Impact Analysis (TIA) policy will be included in

this review. The team will compile a list and reference each policy or ordinance that is applicable to the project. Inconsistencies and gaps in the list will be identified. Based on the results of the evaluation, FNI will meet with City staff to compare evaluations and recommendations. These policies will be identified in the Comprehensive Plan update, but not resolved or developed.

e. Pedestrian and Bicycle Considerations

FNI will use the inventory of existing sidewalks and bike facilities from the 2020 Parks Master Plan (PMP) and update the inventory based on aerial and field evaluations in Task b., above. Results of the evaluation will be used, along with trail recommendations in the Parks Master Plan, to create an updated Pedestrian and Bicycle facility map in the MMP. The updated map will reflect planned multi-modal enhancements based on updated classifications and cross sections in Basic Services Task 6, and identify the top 10 bike and sidewalk projects to complement the roadway projects identified in Task f., below.

f. CIP Project List Development

FNI will review current MMP project lists to determine if any projects are completed or under development and update the status of projects. FNI will consolidate the existing project lists for roadways, intersections, pedestrians, bikes, transit, and system management into one Transportation Capital Improvement Plan (CIP), removing overlaps between projects, and updating planning level cost estimates based on revisions to cross sections and project scopes. Up to five (5) newly identified roadway projects may be incorporated into the CIP based on results of Basic Services Task 6.

g. CIP Project Prioritization

Using goals and objectives identified in Basic Services Task 6, FNI will work with City staff to develop priorities for transportation project evaluation and prioritization for roadway projects. The following will be led by FNI to develop a prioritization tool to rank projects based on up to 6 mobility priorities and weighting each priority with measures of effectiveness. The results of the exercises in this subtask will be used to develop a prioritization tool for ranking projects in a Microsoft Excel spreadsheet. Standalone sidewalk, bike, trail, intersection and other projects will be shown and dollars allocated on an annual basis in the CIP, but not prioritized as part of this effort.

h. Documentation

FNI will incorporate the findings, recommendations, and public involvement into a report to replace the current MMP and submit a draft final document for review by the Client. A copy of the report will be provided in electronic format, including all maps and data tables, in the format specified.

FNI will address one set of review comments and prepare a final document and submit in electronic format for support in an adoption process.

C. Making revisions to drawings or other report documents when such revisions are 1) not consistent with approvals or instructions previously given by City or 2) due to other causes not solely within the

control of FNI.

D. Meeting or trips in excess of the number of meetings included in Article I for coordination meetings, public meetings or other activities. Additional meetings requested by the City in excess of those included in Article I will be billed hourly in accordance with the rates outlined in Attachment CO.

E. Preparation of new impact fees or impact fee updates for water, wastewater, roadway or drainage under Chapter 395.

F. Preparation of a full downtown master plan.

G. Preparation of water, wastewater or drainage master plans.

H. Preparation of new or updated zoning ordinance, subdivision ordinance and other development regulations, including unified development codes.

I. Preparing applications and supporting documents for government grants, loans, or planning advances and providing data for detailed applications, including MPO applications.

J. Preparing data and reports for assistance to City in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.

K. Revisions, contract modifications, studies or analysis required to comply with local, State, Federal or other regulatory agencies that become effective after the date of this agreement.

L. Providing basic or additional services on an accelerated time schedule. This includes cost for overtime wages of employees and FNIs, inefficiencies in work sequence and plotting or reproduction costs directly attributable to an accelerated time schedule directed by the City.

M. Preparing statements for invoicing or other documentation for billing other than for the standard invoice for services attached to this professional services agreement.

N. Providing document revisions in excess of those outlined in Article I.

ARTICLE III

TIME OF COMPLETION: FNI is authorized to commence work on the Project upon execution of this Agreement and agrees to complete the services within **fifteen (15) months of the notice to proceed.**

If FNI's services are delayed through no fault of FNI, FNI shall be entitled to adjust contract schedule consistent with the number of days of delay. These delays may include but are not limited to delays in City or regulatory reviews, delays on the flow of information to be provided to FNI, governmental approvals, etc. These delays may result in an adjustment to compensation as outlined on the face of this Agreement and will be based upon rates outlined in Attachment CO.

ARTICLE IV

RESPONSIBILITIES OF OWNER: City shall perform the following in a timely manner so as not to delay the services of FNI:

A. Provide meeting space and coordinate equipment needs, room set up, and logistics for meetings outlined in Article I.

B. Provide information from all previous and current studies and projects (as available) that may affect the outcome of the Plan. This information will be provided in digital format when possible and available.

C. Provide the most recently updated digital base map and aerial imagery of the planning area for use during the comprehensive plan preparation process. These files will be in the form of GIS file types native to ESRI ArcGIS.

D. Contact meeting invitees for stakeholder and public meeting(s). This includes email, mail, newsletter or other forms of notification.

E. Examine and provide prompt feedback on all submittals, draft reports, sketches, drawings, and other documents presented by FNI within a reasonable time so as not to delay the services of FNI. City comments should be consolidated with clear and concise edits, preferably typed for legibility.

F. Designate in writing a person to act as City's representative with respect to the services to be rendered under this Agreement. Such person shall have contract authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to FNI's services for the Project.

G. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this Agreement.

H. Bear all costs incident to compliance with the requirements of this Article IV.

ARTICLE V

DESIGNATED REPRESENTATIVES: FNI designates the following representatives:

FNI's Project Representative	Name:	Chance Sparks, AICP, CNU-A
	E-mail:	Chance.sparks@freese.com
	Phone:	512-617-3156
FNI's Accounting Representative	Name:	Stephanie Kirchstein
	E-mail:	Stephanie.kirchstein@freese.com
	Phone:	214-217-2212

ATTACH CO

CITY OF HUTTO
AGREEMENT WITH
FREESE AND NICHOLS
FOR PROFESSIONAL SERVICES

THIS AGREEMENT (hereinafter referred to as the "Agreement) is made by and between the City of Hutto, a Texas home-rule municipal corporation, whose offices are located at 500 W. Live Oak Street, Hutto, Texas, 78634, (hereinafter referred to as the "City") and Freese and Nichols (hereinafter referred to as the "Consultant"), a Texas corporation, whose offices are located at 10431 Morado Circle Building 5,Suite 300, Austin, Texas 78759.

This Agreement is for professional engineering, consulting and related services (hereinafter referred to as "Services") relating to the City of Hutto's requirement for Hutto Comprehensive Plan (hereinafter referred to as the "Project").

RECITALS:

WHEREAS, City has determined that there is a need for the delineated services; and

WHEREAS, City desires to contract for such services; and

WHEREAS, the parties desire to enter into this Agreement to set forth in writing their respective rights, duties and obligations hereunder;

NOW, THEREFORE, WITNESSETH:

That for and in consideration of the mutual promises contained herein and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, it is mutually agreed between the parties as follows:

1.01 EFFECTIVE DATE, DURATION, AND TERM

This Agreement shall be effective on the date this Agreement has been signed by each party hereto, and shall remain in full force and effect unless and until it expires by operation of the term indicated herein, or is terminated or extended as provided herein.

The initial term of this Agreement shall be until full and satisfactory completion of the work specified herein is achieved, but in no event later than September 30, 2022.

City reserves the right to review the project at any time, including at the end of any deliverable or phase, and may elect to terminate the project with or without cause or may elect to continue with the next deliverable or phase.

1.02 CONTRACT AMOUNT

In consideration for the professional consulting services to be performed by Consultant, City agrees to pay Consultant a total sum not to exceed five hundred one thousand five hundred twenty seven Dollars $501,527. This sum shall be made in payment for services and the Scope of Work deliverables as delineated in Section 1.03. This amount is a fixed not-to-exceed amount which includes all expenses which are defined as reimbursable under this Agreement as delineated in Section 1.04.

1.03 SCOPE OF WORK

For purposes of this Agreement, such Scope of Work is entitled "Attachment A ~ Proposed Scope of Services ~ "Hutto Comprehensive Plan" and same is attached hereto as Exhibit "A" and is incorporated herein for all purposes as if recited herein verbatim. This Agreement and exhibits shall evidence the entire understanding and agreement between the parties and shall supersede any prior proposals, correspondence or discussions.

Consultant shall satisfactorily provide all services and deliverables described under the referenced Scope of Work within the contract term specified in Section 1.01. Consultant's undertakings shall be limited to performing services for the City and/or advising the City concerning those matters on which Consultant has been specifically engaged. Consultant shall perform its services in accordance with this Agreement and in accordance with the referenced Scope of Work. Consultant shall perform its services in a professional and workmanlike manner.

Consultant shall not undertake work that is beyond the Scope of Work set forth in Section 1.03. However, either party may make written requests for changes to the Scope of Work. To be effective, a change to the Scope of Work must be negotiated and agreed to in all relevant details, and must be embodied in a valid Supplemental Agreement as described in Section 1.05 hereof.

1.04 PAYMENT FOR SERVICES; REIMBURSABLE EXPENSES

Payment for Services: In consideration for the services to be performed by Consultant, the City agrees to pay Consultant the following "Payment for Services:"

Fees for the listed deliverables in the total amount of the project, not to exceed Three Hundred Twenty-Two Thousand and One Dollars $501,527 paid by the City in the following manner:

(1) Compensation for services under this Agreement for preparation of a Comprehensive Plan and Downtown Plan by percentage complete

Not-to-Exceed Total Payment for Services: Unless subsequently changed by Supplemental Agreement to this Agreement, Consultant's total compensation for consulting and valuation services hereunder shall not exceed five hundred one thousand five hundred twenty seven Dollars $501,527. This amount represents the absolute limit of the City's liability to Consultant hereunder unless same shall be changed by additional Supplemental Agreement, and the City shall pay, strictly within the confines of the not-to-exceed sum recited herein, Consultant's professional fees for work done on behalf of the City.

Deductions: No deductions shall be made for Consultant's compensation on account of penalty, liquidated damages or other sums withheld from payments to Consultant.

Additions: No additions shall be made to Consultant's compensation based upon project claims, whether paid by the City or denied.

1.05 SUPPLEMENTAL AGREEMENT

The terms of this Agreement may be modified by written Supplemental Agreement hereto, duly authorized by the City Council or City Manager, if the City determines that there has been a significant change in (1) the scope, complexity, or character of the services to be performed; or (2) the duration of the work. Any such Supplemental Agreement must be executed by both parties within the period specified as the term of this Agreement. Consultant shall not perform any work or incur any additional costs prior to the execution, by both parties, of such Supplemental Agreement. Consultant shall make no claim for extra work done or materials furnished unless and until there is full execution of any Supplemental Agreement, and the City shall not be responsible for actions by Consultant nor for any costs incurred by Consultant relating to additional work not directly authorized by Supplemental Agreement.

1.06 INVOICE REQUIREMENTS; TERMS OF PAYMENT

Invoices: To receive payment following delivery of all deliverables, Consultant shall prepare and submit detailed progress invoices to the City, in accordance with the delineation contained herein in Section 1.04, for services rendered. Such invoices for services shall track the referenced Scope of Work, and shall detail the services performed, along with documentation for each service performed. Payment to Consultant shall be made on the basis of the invoices submitted by Consultant and approved by the City. Such invoices shall conform to the schedule of services and costs in connection therewith.

Should additional backup material be requested by the City relative to service deliverables, Consultant shall comply promptly. In this regard, should the City determine it necessary, Consultant shall make all records and books relating to this Agreement available to the City for inspection and auditing purposes.

Payment of Invoices: The City reserves the right to correct any error that may be discovered in any invoice that may have been paid to Consultant and to adjust same to meet the requirements of this Agreement. Following approval of an invoice, the City shall endeavor to pay Consultant promptly, but no later than the time period required under the Texas Prompt Payment Act described in Section 1.10 herein. Under no circumstances shall Consultant be entitled to receive interest on payments which are late because of a good faith dispute between Consultant and the City or because of amounts which the City has a right to withhold under this Agreement or state law. The City shall be responsible for any sales, gross receipts or similar taxes applicable to the services, but not for taxes based upon Consultant's net income.

1.07 REQUIRED DRAFT REPORT AND FINAL REPORT

Consultant agrees to provide the City with all required draft reports and a detailed final written

report, together with all information gathered and materials developed during the course of the project as described in Attachment A.

1.08 LIMITATION TO SCOPE OF WORK

Consultant and the City agree that the scope of services to be performed is enumerated in Section 1.03 herein, and may not be changed without the express written agreement of the parties. Notwithstanding anything herein to the contrary, the parties agree that the City retains absolute discretion and authority for all funding decisions, such to be based solely on criteria accepted by the City which may be influenced by but not be dependent on Consultant's work.

1.09 NON-APPROPRIATION AND FISCAL FUNDING

This Agreement is a commitment of the City's current revenues only. It is understood and agreed that the City shall have the right to terminate this Agreement at the end of any City fiscal year if the governing body of the City does not appropriate funds sufficient to purchase the services as determined by the City's budget for the fiscal year in question. The City may effect such termination by giving Consultant a written notice of termination at the end of its then current fiscal year.

1.10 PROMPT PAYMENT POLICY

In accordance with Chapter 2251, V.T.C.A., Texas Government Code, payment to Consultant will be made within thirty (30) days of the day on which the City receives the performance, supplies, materials, equipment, and/or deliverables, or within thirty (30) days of the day on which the performance of services was complete, or within thirty (30) days of the day on which the City receives a correct invoice for the performance and/or deliverables or services, whichever is later. Consultant may charge a late fee of one percent (1%) for payments not made in accordance with this prompt payment policy; however, this policy does not apply to payments made by the City in the event:

(1) There is a bona fide dispute between the City and Consultant concerning the supplies, materials, or equipment delivered or the services performed which causes the payment to be late; or

(2) The terms of a federal contract, grant, regulation, or statute prevent the City from making a timely payment with federal funds; or

(3) There is a bona fide dispute between the parties and subcontractors or between a subcontractor and its suppliers concerning supplies, materials, or equipment delivered or the services performed which causes the payment to be late; or

(4) Invoices are not mailed to the City in strict accordance with instructions, if any, on the purchase order or the Agreement or other such contractual agreement.

1.11 TERMINATION; DEFAULT

Termination: It is agreed and understood by Consultant that the City may terminate this Agreement for the convenience of the City, upon thirty (30) days' written notice to Consultant, with the understanding that immediately upon receipt of said notice all work being performed under this Agreement shall cease. Consultant shall invoice the City for work satisfactorily completed and shall be compensated in accordance with the terms hereof for work accomplished prior to the receipt of said notice of termination. Consultant shall not be entitled to any lost or anticipated profits for work terminated under this Agreement. Unless otherwise specified in this Agreement, all data, information, and work product related to this project shall become the property of the City upon termination of this Agreement, and shall be promptly delivered to the City in a reasonably organized form without restriction on future use. Should the City subsequently contract with a new consultant for continuation of service on the project, Consultant shall cooperate in providing information.

Termination of this Agreement shall extinguish all rights, duties, and obligations of the City and the terminated party to fulfill contractual obligations. Termination under this section shall not relieve the terminated party of any obligations or liabilities which occurred prior to termination.

Nothing contained in this section shall require the City to pay for any work which is unsatisfactory as determined by the City or which is not submitted in compliance with the terms of this Agreement.

Default: The City may terminate this Agreement, in whole or in part, for default if the City provides Consultant with written notice of such default and Consultant fails to cure such default to the satisfaction of the City within ten (10) business days of receipt of such notice (or a greater time if permitted by the City).

If Consultant defaults in performance of this Agreement and if the City terminates this Agreement for such default, then the City shall give consideration to the actual costs incurred by Consultant in performing the work to the date of default. The cost of the work that is useable to the City, the cost to the City of employing another firm to complete the useable work, and other relevant factors will affect the value to the City of the work performed at the time of default. Consultant shall not be entitled to any lost or anticipated profits for work terminated for default hereunder.

1.12 INDEPENDENT CONTRACTOR STATUS

Consultant is an independent contractor, and is not the City's employee. Consultant's employees or subcontractors are not the City's employees. This Agreement does not create a partnership, employer-employee, or joint venture relationship. No party has authority to enter into contracts as agent for the other party. Consultant and the City agree to the following rights consistent with an independent contractor relationship:

(1) Consultant has the right to perform services for others during the term hereof.

(2) Consultant has the sole right to control and direct the means, manner and method by which services required by this Agreement will be performed.

(3) Consultant has the right to hire assistants as subcontractors, or to use employees to provide the services required by this Agreement.

(4) Consultant or its employees or subcontractors shall perform services required hereunder, and the City shall not hire, supervise, or pay assistants to help Consultant.

(5) Neither Consultant nor its employees or subcontractors shall receive training from the City in skills necessary to perform services required by this Agreement.

(6) City shall not require Consultant or its employees or subcontractors to devote full time to performing the services required by this Agreement.

(7) Neither Consultant nor its employees or subcontractors are eligible to participate in any employee pension, health, vacation pay, sick pay, or other fringe benefit plan of the City.

1.13 NON-SOLICITATION

Except as may be otherwise agreed in writing, during the term of this Agreement and for twelve (12) months thereafter, neither the City nor Consultant shall offer employment to or shall employ any person employed then or within the preceding twelve (12) months by the other or any affiliate of the other if such person was involved, directly or indirectly, in the performance of this Agreement.

1.14 CITY'S RESPONSIBILITIES

Full information: The City shall provide full information regarding project requirements. The City shall have the responsibility of providing Consultant with such documentation and information as is reasonably required to enable Consultant to provide the services called for. The City shall cause its employees and any third parties who are otherwise assisting, advising or representing the City to cooperate on a timely basis with Consultant in the provision of its services. Consultant may rely upon written information provided by the City and its employees and agents as accurate and complete. Consultant may rely upon any written directives provided by the City or its designated representative concerning provision of services.

Required materials: Consultant's performance requires receipt of all requested information reasonably necessary to provision of services. The City shall furnish information which includes but is not limited to access to City property, preliminary information and/or data regarding the City, pertinent correspondence with other local municipal and planning officials, previous analyses or studies, and other pertinent information. Consultant agrees, within ten (10) days of the effective date of this Agreement, to provide the City with a comprehensive and detailed information request list.

1.15 CONFIDENTIALITY; AND MATERIALS OWNERSHIP

Any and all programs, data, or other materials furnished by the City for use by Consultant in connection with services to be performed under this Agreement, and any and all data and information gathered by Consultant, shall be held in confidence by Consultant as set forth hereunder. Each party

agrees to take reasonable measures to preserve the confidentiality of any proprietary or confidential information relative to this Agreement, and to not make any use thereof other than for the performance of this Agreement, provided that no claim may be made for any failure to protect information that occurs more than three (3) years after the end of this Agreement.

The parties recognize and understand that the City is subject to the Texas Public Information Act and its duties run in accordance therewith.

All data relating specifically to the City's business and any other information which reasonably should be understood to be confidential to City is confidential information of City. Consultant's proprietary software, tools, methodologies, techniques, ideas, discoveries, inventions, know-how, and any other information which reasonably should be understood to be confidential to Consultant is confidential information of Consultant. The City's confidential information and Consultant's confidential information is collectively referred to as "Confidential Information." Each party shall use Confidential Information of the other party only in furtherance of the purposes of this Agreement and shall not disclose such Confidential Information to any third party without the other party's prior written consent, which consent shall not be unreasonably withheld. Each party agrees to take reasonable measures to protect the confidentiality of the other party's Confidential Information and to advise their employees of the confidential nature of the Confidential Information and of the prohibitions herein.

Notwithstanding anything to the contrary contained herein, neither party shall be obligated to treat as confidential any information disclosed by the other party (the "Disclosing Party") which: (1) is rightfully known to the recipient prior to its disclosure by the Disclosing Party; (2) is released by the Disclosing Party to any other person or entity (including governmental agencies) without restriction; (3) is independently developed by the recipient without any reliance on Confidential Information; or (4) is or later becomes publicly available without violation of this Agreement or may be lawfully obtained by a party from any non-party. Notwithstanding the foregoing, either party will be entitled to disclose Confidential Information of the other to a third party as may be required by law, statute, rule or regulation, including subpoena or other similar form of process, provided that (without breaching any legal or regulatory requirement) the party to whom the request is made provides the other with prompt written notice and allows the other party to seek a restraining order or other appropriate relief.

Subject to Consultant's confidentiality obligations under this Agreement, nothing herein shall preclude or limit Consultant from providing similar services for other clients.

Neither the City nor Consultant will be liable to the other for inadvertent or accidental disclosure of Confidential Information if the disclosure occurs notwithstanding the party's exercise of the same level of protection and care that such party customarily uses in safeguarding its own proprietary and confidential information.

Notwithstanding anything to the contrary in this Agreement, the City will own as its sole property all written materials created, developed, gathered, or originally prepared expressly for the City and delivered to the City under the terms of this Agreement (the "Deliverables"); and Consultant shall own any general skills, know-how, expertise, ideas, concepts, methods, techniques, processes, software, or other similar information which may have been discovered, created, developed or derived by Consultant

either prior to or as a result of its provision of services under this Agreement (other than the Deliverables). Consultant's working papers and Consultant's Confidential Information (as described herein) shall belong exclusively to Consultant. The City shall have a non-exclusive, non-transferable license to use Consultant's Confidential Information for the City's own internal use and only for the purposes for which they are delivered to the extent that they form part of the Deliverables.

1.16 WARRANTIES

Consultant warrants that all services performed hereunder shall be performed consistent with generally prevailing professional or industry standards, and shall be performed in a professional and workmanlike manner. Consultant shall re-perform any work not in compliance with this warranty. CONSULTANT DISCLAIMS ALL OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

1.17 LIMITATION OF LIABILITY

Should any of Consultant's services not conform to the requirements of this Agreement, then and in that event the City shall give written notification to Consultant; thereafter, (a) Consultant shall either promptly re-perform such services to the City's satisfaction at no additional charge, or (b) if such deficient services cannot be cured within the cure period set forth herein in Section 1.11, then this Agreement may be terminated for default.

In no event will Consultant be liable for any loss, damage, cost or expense attributable to negligence, willful misconduct or misrepresentations by the City, its directors, employees or agents.

In no event shall Consultant be liable to the City, by reason of any act or omission relating to the services provided under this Agreement (including the negligence of Consultant), whether a claim be in tort, contract or otherwise, (a) for any consequential, indirect, lost profit, punitive, special or similar damages relating to or arising from the services, or (b) in any event, in the aggregate, for any amount in excess of the total professional fees paid by the City to Consultant under this Agreement, except to the extent determined to have resulted from Consultant's gross negligence, willful misconduct or fraudulent acts relating to the service provided hereunder.

1.18 INDEMNIFICATION

Consultant and the City each agree to indemnify, defend and hold harmless the other from and against any and all amounts payable under any judgment, verdict, court order or settlement for death or bodily injury or the damage to or loss or destruction of any real or tangible personal property to the extent arising out of the indemnitor's negligence in the performance of this Agreement. For professional liability claims, Consultant shall reimburse the City for all reasonable costs of their defense in the same proportion Consultant is found liable, rather than "defend" as above.

Consultant agrees to indemnify, defend and hold harmless the City from and against any and all amounts payable under any judgment, verdict, court order or settlement for Third Party claims of

infringement of any trade secrets, copyrights, trademarks or trade names alleged to have occurred and arising from the deliverables provided by Consultant to the City in connection with the performance of this Agreement. Should the City's use of such deliverables be determined to have infringed, Consultant may, at its option: (i) procure for the City the right to continue using such deliverables provided or (ii) replace or modify them to make their use non-infringing while yielding substantially equivalent results. If neither of the above options is or would be available on a basis that is commercially reasonable, then Consultant may terminate this Agreement, the City shall return such deliverables provided, and Consultant will refund to the City the fees paid for the deliverables provided. This infringement indemnity does not cover claims arising from the combination of such deliverables with products or services not provided by Consultant; the modification of such deliverables by any person other than Consultant; deliverables complying with or based upon (1) designs provided by or at the direction of the City or (2) specifications or other information provided by or at the direction of the City; or use of systems, materials or work performed in a manner not permitted hereunder or by another obligation of the City to Consultant.

The indemnities in this section are contingent upon: (1) the indemnified party promptly notifying the indemnifying party in writing of any claim which gives rise to a claim for indemnification hereunder; (2) the indemnifying party being allowed to participate in the defense and settlement of such claim; and (3) the indemnified party cooperating with all reasonable requests of the indemnifying party (at the indemnifying party's expense) in defending or settling a claim. The indemnified party shall have the right, at its option and expense, to participate in the defense of any suit or proceeding through counsel of its own choosing.

1.19 ASSIGNMENT AND DELEGATION

The parties each hereby bind themselves, their successors, assigns and legal representatives to each other with respect to the terms of this Agreement. Neither party may assign any rights or delegate any duties under this Agreement without the other party's prior written approval, which approval shall not be unreasonably withheld.

1.20 LOCAL, STATE AND FEDERAL TAXES

Consultant shall pay all income taxes, and FICA (Social Security and Medicare taxes) incurred while performing services under this Agreement. The City will not do the following:

(1) Withhold FICA from Consultant's payments or make FICA payments on its behalf;

(2) Make state and/or federal unemployment compensation contributions on Consultant's behalf; or

(3) Withhold state or federal income tax from any of Consultant's payments.

If requested, the City shall provide Consultant with a certificate from the Texas State Comptroller indicating that the City is a non-profit corporation and not subject to State of Texas Sales and Use Tax.

1.21 INSURANCE

Insurance. Consultant, at Consultant's sole cost, shall have and maintain during the term of this Agreement professional liability insurance coverage in the minimum amount of One Million Dollars from a company authorized to do insurance business in Texas and otherwise acceptable to the City.

Sub-consultant Insurance. Without limiting any of the other obligations or liabilities of Consultant, Consultant shall require each sub-consultant performing work under this Agreement to maintain during the term of the Agreement, at the sub-consultant's own expense, the same stipulated minimum insurance required in the immediately preceding paragraph, including the required provisions and additional policy conditions as shown below. As an alternative, Consultant may include its sub-consultants as additional insureds on its own coverages as prescribed under these requirements. Consultant's certificate of insurance shall note in such event that the sub-consultants are included as additional insureds.

Consultant shall obtain and monitor the certificates of insurance from each sub-consultant in order to assure compliance with the insurance requirements. Consultant must retain the certificates of insurance for the duration of this Agreement, and shall have the responsibility of enforcing these insurance requirements among its sub-consultants. The City shall be entitled, upon request and without expense, to receive copies of these certificates of insurance.

Insurance Policy Endorsements. Each insurance policy hereunder shall include the following conditions by endorsement to the policy:

(1) Each policy shall require that thirty (30) days prior to the expiration, cancellation, non-renewal or any material change in coverage, a notice thereof shall be given to the City by certified mail to:

City Manager,
City of Hutto
500 W. Live Oak Street
Hutto, TX 78634

Consultant shall also notify the City, within twenty-four (24) hours of receipt, of any notices of expiration, cancellation, non-renewal, or material change in coverage it receives from its insurer.

(2) Companies issuing the insurance policies shall have no recourse against the City for payment of any premiums or assessments for any deductibles which all are at the sole responsibility and risk of Consultant.

(3) Terms "the City" or "the City of Hutto" shall include all authorities, boards, commissions, departments, and officers of the City and individual members, employees and agents in their official capacities, or while acting on behalf of the City of Hutto.

(4) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by the City, to any future coverage, or to the City's Self-Insured Retentions of whatever nature.

(5) Consultant and the City mutually waive subrogation rights each may have against the other for loss or damage, to the extent same is covered by the proceeds of insurance.

Cost of Insurance. The cost of all insurance required herein to be secured and maintained by Consultant shall be borne solely by Consultant, with certificates of insurance evidencing such minimum coverage in force to be filed with the City.

1.22 COMPLIANCE WITH LAWS, CHARTER AND ORDINANCES

Consultant, its consultants, agents, employees and subcontractors shall use best efforts to comply with all applicable federal and state laws, the Charter and Ordinances of the City of Hutto, as amended, and with all applicable rules and regulations promulgated by local, state and national boards, bureaus and agencies. Consultant shall further obtain all permits, licenses, trademarks, or copyrights required in the performance of the services contracted for herein, and same shall belong solely to the City at the expiration of the term of this Agreement.

1.23 FINANCIAL INTEREST PROHIBITED

Consultant covenants and represents that Consultant, its officers, employees, agents, consultants and subcontractors will have no financial interest, direct or indirect, in the purchase or sale of any product, materials or equipment that will be recommended or required under this Agreement.

1.24 DESIGNATION OF REPRESENTATIVES

The City hereby designates the following representative authorized to act in its behalf with regard to this Agreement:

Warren A. Hutmacher
500 W. Live Oak Street
Hutto, TX 78634
Email: Warren.Hutmacher@HuttoTX.gov

Consultant hereby designates the following representative authorized to act in its behalf with regard to this Agreement:

Wendy Shabay, Vice President
Freese and Nichols, Inc.
801 Cherry St, Suite 2800
Fort Worth, TX 76102
Telephone: 817-735-7259

Facsimile:
Email: wds@freese.com

1.25 NOTICES

All notices and other communications in connection with this Agreement shall be in writing and shall be considered given as follows:

(1) When delivered personally to recipient's address as stated herein; or

(2) Three (3) days after being deposited in the United States mail, with postage prepaid to the recipient's address as stated in this Agreement.

Notice to Consultant:

Wendy Shabay, Vice President
Freese and Nichols, Inc.
801 Cherry St, Suite 2800
Fort Worth, TX 76102

Notice to City:

Warren A Hutmacher,
City Manager
City of Hutto
500 W. Live Oak
Hutto, TX 78634

AND TO

Bojorquez Law Firm
City of Hutto City Attorney
12325 Hymeadow Dr.
Austin, TX 78750

Nothing contained in this section shall be construed to restrict the transmission of routine communications between representatives of the City and Consultant.

1.26 APPLICABLE LAW; ENFORCEMENT AND VENUE

This Agreement shall be enforceable in Hutto, Texas, and if legal action is necessary by either party with respect to the enforcement of any or all of the terms or conditions herein, exclusive venue for same shall lie in Williamson County, Texas. This Agreement shall be governed by and construed in accordance with the laws and court decisions of the State of Texas.

1.27 EXCLUSIVE AGREEMENT

The terms and conditions of this Agreement, including exhibits, constitute the entire agreement between the parties and supersede all previous communications, representations, and agreements, either

written or oral, with respect to the subject matter hereof. The parties understand and expressly agree that, in the event of any conflict between the terms of this Agreement and any other writing, this Agreement shall prevail. No modifications of this Agreement will be binding on any of the parties unless acknowledged in writing by the duly authorized governing body or representative for each party.

1.28 DISPUTE RESOLUTION

If a dispute arises under this Agreement, the parties agree to first try to resolve the dispute with the help of a mutually selected mediator. If the parties cannot agree on a mediator, the City shall select one mediator and Consultant shall select one mediator and those two mediators shall agree upon a third mediator. Any costs and fees, other than attorney fees, associated with the mediation shall be shared equally by the parties.

The City and Consultant hereby expressly agree that no claims or disputes between the parties arising out of or relating to this Agreement or a breach thereof shall be decided by any arbitration proceeding, including without limitation, any proceeding under the Federal Arbitration Act (9 USC Section 1-14) or any applicable state arbitration statute.

1.29 FORCE MAJEURE

Notwithstanding any other provisions of this Agreement to the contrary, no failure, delay or default in performance of any obligation hereunder shall constitute an event of default or a breach of this Agreement, only to the extent that such failure to perform, delay or default arises out of causes beyond control and without the fault or negligence of the party otherwise chargeable with failure, delay or default; including but not limited to acts of God, acts of public enemy, civil war, insurrection, riots, fires, floods, explosion, theft, earthquakes, natural disasters or other casualties, strikes or other labor troubles, which in any way restrict the performance under this Agreement by the parties.

Consultant shall not be deemed to be in default of its obligations to the City if its failure to perform or its substantial delay in performance is due to the City's failure to timely provide requested information, data, documentation, or other material necessary for Consultant to perform its obligations hereunder.

1.30 SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this Agreement or the occurrence of any event rendering any portion of provision of this Agreement void shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement, and the balance of this Agreement shall be construed and enforced as if this Agreement did not contain the particular portion of provision held to be void. The parties further agree to amend this Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this Article shall not prevent this entire Agreement from being void should a provision which is of the essence of this Agreement be determined void.

1.31 STANDARD OF CARE

Consultant represents that it is specially trained, experienced and competent to perform all of the services, responsibilities and duties specified herein and that such services, responsibilities and duties shall be performed, whether by Consultant or designated sub-consultants, in a manner according to generally accepted business attraction practices.

1.32 GENERAL AND MISCELLANEOUS

The section numbers and headings contained herein are provided for convenience only and shall have no substantive effect on construction of this Agreement.

No delay or omission by either party in exercising any right or power shall impair such right or power or be construed to be a waiver. A waiver by either party of any of the covenants to be performed by the other or any breach thereof shall not be construed to be a waiver of any succeeding breach or of any other covenant. No waiver of discharge shall be valid unless in writing and signed by an authorized representative of the party against whom such waiver or discharge is sought to be enforced.

This Agreement may be executed in multiple counterparts, which taken together shall be considered one original. The City agrees to provide Consultant with one fully executed original.

IN WITNESS WHEREOF, the parties have executed this Agreement on the dates hereafter indicated.

City of Hutto, Texas

By: _____
Warren A. Hutmacher, City Manager
Date Signed: _____

Attest:

_____
Holy Nagy, City Secretary
Date Signed: _____

Approved as to Form:

By: _____
_____, City Attorney
Date Signed: _____

Freese and Nichols

By: _____
Title: Wendy Shabay, Vice President
Date Signed: _____

Attachment A

RESOLUTION NO 2021-071

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT WITH FREESE AND NICHOLS, INC FOR A COMPREHENSIVE PLAN

WHEREAS, this resolution is to authorize a contract with Freese and Nichols, Inc for professional services to prepare a comprehensive plan; and

WHEREAS, the Texas Local Government Code § 213.001 authorizes a city to adopt a comprehensive plan for the long-range development of the municipality.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS:

The Hutto City Council hereby approves and authorizes the City Manager or his designee to execute a contract with Freese and Nichols, Inc in an amount not to exceed $501,527.

CONSIDERED and RESOLVED by the City Council of the City of Hutto on this the **20th** day of **May, 2021.**

THE CITY OF HUTTO, TEXAS

_____

Mike Snyder, Mayor

ATTEST:

_____

Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To:	City Council
Subject:	Discussion and possible action on the selection of a list of consultants in response to the City of Hutto's Request for Qualifications for On-Demand engineering and planning consultant services. (RFQ 21-01). (Ashley Lumpkin)
Meeting:	Thursday, May 20, 2021
Department:	Development Services
Staff Contact:	Ashley Lumpkin

BACKGROUND INFORMATION:

RELEASE DATE: January 17, 2021
DUE DATE: February 04, 2021 at 3:00 P.M.
PROPOSAL OPENING: February 04, 2021 at 3:10 P.M.
PROPOSAL TITLE: Hutto On Demand Professional Engineering and Planning Consultant Services

In January, the City of Hutto released a Request for Quantifications (RFQ) to select firms and those who responded to the published notice. Evaluation Personnel reviewed each respondent's submission to ascertain their capability to perform all the requirements contemplated by the solicitation.

The following RFQ timeline was followed:

Date	Event
January 17, 2021	Advertise intent to solicit qualifications.
January 24, 2021	Second notification date.
January 17, 2021 - January 26, 2021	Preparation and submission of written proposals by interested firms, and resolution of any questions not otherwise addressed in this Request for Qualifications.
February 4, 2021 at 3:00 P.M.	Deadline for submission of proposals and scheduled public opening of timely received proposals.
February 12, 2021 - February 27, 2021	The City of Hutto Selection Committee reviews all proposals received and evaluates submissions.
May 20, 2021	City Council is presented with Selection Committee's recommendations.

Evaluation Committee:

La'Mar Kemp – Financial Services

Ashley Lumpkin– Executive Director

Development Services Ashby Grundman – Development Services Director
Samuel Ray – Director of Engineering
Ning Zhang – City Engineer

Best Value Evaluation:
All proposals received were evaluated based on the best value for the City using a criterion weight rating scale. Evaluation personnel carefully reviewed and rated each proposal by considering all or part of the criteria listed below.

Statement of Qualifications completed in format	Experience in providing proposed services	Design and Technology relating to municipal projects	Perform all tasks outlined either directly or through sub-consultants	Key personnel professional background and experience	Quality and competency of projects previously undertaken	Familiarity with, and proximity to the geographic location to the City of Hutto
10 pts	30 pts	10 pts	20 pts	10 pts	10 pts	10 pts

SUMMARY OF REQUEST:

There were 27 responses to the RFQ. The Selection Committee is asking for City Council approval to negotiate contracts with the following seven firms:

- Freese and Nichols
- Halff and Associates, Inc
- Kimley Horn
- Garver, LLC
- K Friese and Associates
- DCS Engineering, LLC
- CP&Y, Inc.

The contracts will be brought back to City Council for approval.

STAFF REVIEW:

FINANCIAL IMPACT:

Not applicable at this time.

POLICY IMPLICATIONS:

Not applicable at this time.

ATTACHMENTS:

1. ITEM 10. 3 BACKGROUND INFORMATION

BACKGROUND INFORMATION

RELEASE DATE: January 17, 2021
DUE DATE: February 04, 2021 at 3:00 P.M.
PROPOSAL OPENING: February 04, 2021 at 3:10 P.M.
PROPOSAL TITLE: Hutto On Demand Professional Engineering and Planning Consultant Services

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May 20, 2021	City Council is presented with Selection Committee's recommendations.

Evaluation Committee:

La'Mar Kemp – Financial Services
Ashley Lumpkin– Executive Director Development Services Ashby Grundman – Development Services Director
Samuel Ray – Director of Engineering
Ning Zhang – City Engineer

Best Value Evaluation:

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Statement of Qualifications completed in format	Experience in providing proposed services	Design and Technology relating to municipal projects	Perform all tasks outlined either directly or through sub-consultants	Key personnel professional background and experience	Quality and competency of projects previously undertaken	Familiarity with, and proximity to the geographic location to the City of Hutto	
10 pts	30 pts	10 pts	20 pts	10 pts	10 pts	10 pts	

SUMMARY OF REQUEST

There were 27 responses to the RFQ. The Selection Committee is asking for City Council approval to negotiate contracts with the following seven firms:

Freese and Nichols

Halff and Associates, Inc

Kimley Horn

Garver, LLC

K Friese and Associates

DCS Engineering, LLC

CP&Y, Inc.

The contracts will be brought back to City Council for approval.

FINANCIAL IMPACT

Not applicable at this time.

City Council
AGENDA ITEM REPORT

To: City Council
Subject: Consideration and possible action on Resolution No. R-2021-084 determining costs of authorized improvements for the Cottonwood Creek Public Improvement District and ordering the filing of an assessment roll with the City Secretary to make available to the public in compliance with Texas Local Government Code Chapter 372; calling a public hearing on the levy of assessments on property located within the Cottonwood Creek Public Improvement District to pay such costs and directing the City Secretary to publish and mail notice of the public hearing in accordance with Texas Local Government code Chapter 372; and related matters; and providing an effective date. (City Attorney-D.Palumbo)
Meeting: Thursday, May 20, 2021
Department: City Secretary
Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Hutto Cost Determination Resolution Cottonwood Creek PID 5-13-21 Final
2. Notice of Assessment Hearing (Cottonwood Creek PID) 5-13-21 Final

RESOLUTION NO._____

A RESOLUTION OF THE CITY OF HUTTO, TEXAS, DETERMINING COSTS OF THE PROPOSED PUBLIC IMPROVEMENTS IN THE COTTONWOOD CREEK PUBLIC IMPROVEMENT DISTRICT, APPROVING A PROPOSED ASSESSMENT ROLL, AND MAKING RELATED FINDINGS AND DETERMINATIONS, IN ACCORDANCE WITH CHAPTER 372 OF THE TEXAS LOCAL GOVERNMENT CODE

WHEREAS, the City of Hutto, Texas (the "City"), is authorized under Chapter 372 of the Texas Local Government Code, as amended (the "Act"), to create a public improvement district;

WHEREAS, Hutto 372, Ltd., a Texas limited partnership and Lennar Texas Holding Company, a Texas corporation, previously submitted and filed with the City Secretary of the City an amended and restated petition (the "Petition") requesting the establishment of a public improvement district;

WHEREAS, after providing all notices required by the Act and the Texas Government Code Chapter 551, the City Council on March 18, 2021 conducted a public hearing to consider comments for and against the creation of the District and the advisability of the proposed public improvements and, after closing the public hearing, passed and approved Resolution No. R-2021-029 (the "PID Creation Resolution") authorizing creation of the Cottonwood Creek Public Improvement District on April 1, 2021 ("District");

WHEREAS, in accordance with Section 372.010 of the Act, notice of the resolution creating the District was published in the *Taylor Press* on April 18, 2021;

WHEREAS, the City has reviewed the Preliminary Service and Assessment Plan attached to this Resolution as **"Exhibit A"** and the Proposed Assessment Roll attached as **"Exhibit F"** to such Preliminary Service and Assessment Plan;

WHEREAS, in accordance with Section 372.016 of the Act, the City Council desires to make certain determinations and findings with regard to the total cost of the "Authorized Improvements" set forth in the Preliminary Service and Assessment Plan attached to this Resolution as "**Exhibit A**";

WHEREAS, in accordance with Section 372.016 of the Act, the City Council also desires to approve the Proposed Assessment Roll, which is included as **"Exhibit F"** to the Preliminary Service and Assessment Plan attached to this Resolution as "**Exhibit A,**" cause the Proposed Assessment Roll to be filed with the City Secretary, and to direct the City Secretary to make the Proposed Assessment Roll available for public inspection and publish notice of the City Council's intention to consider the proposed assessments on Improvement Area #1 (as defined in the Preliminary Service and Assessment Plan) at a public hearing, all in accordance with the requirements of the Act.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, THAT:

Section 1. The findings set forth in the recitals of this Resolution are found to be true and correct and are incorporated into this Resolution for all purposes by this reference.

Section 2. The City Council hereby finds, declares, and directs:

(a) Determination of Cost. The cost determinations for the proposed Authorized Improvements in Improvement Area #1 set forth in the Preliminary Service and Assessment Plan attached to this Resolution as "**Exhibit A**" are hereby approved.

(b) Proposed Assessment Roll. The Proposed Assessment Roll included in the Preliminary Service and Assessment Plan attached to this Resolution as "**Exhibit A,**" stating the assessment against each parcel of assessable land in Improvement Area #1 in the District as determined by the method of assessment set forth in said Preliminary Service and Assessment Plan is hereby approved, and the City Council declares that the Proposed Assessment Roll is hereby filed with the City Secretary. The City Council hereby directs the City Secretary to make the Proposed Assessment Roll available for public inspection and publish notice of the City Council's intention to consider the proposed assessments on Improvement Area #1 at a public hearing, all in accordance with the requirements of the Act.

Section 3. City Council hereby authorizes and directs City Secretary to take the actions described in Section 2 of this Resolution and authorizes and directs staff to prepare the required resolutions, ordinances, agreements, service and assessment plan, assessment roll and other documents necessary for the City Council to effectuate the PID Creation Resolution and this Resolution.

Section 4. The City Council hereby declares that written notice of the date, hour and place of the meeting at which this Resolution was adopted, was posted and that such meeting was open to the public as required by law at all times when this Resolution and the subject matter hereof were discussed, considered, and formally acted upon, all as required by the Open Meetings Act, Chapter 551, Texas Government Code, as amended.

Section 5. This Resolution shall take effect immediately from and after its passage.

EXHIBIT LIST:

Exhibit A – Preliminary Service and Assessment Plan (including the Proposed Assessment Roll)

PASSED & APPROVED by the CITY COUNCIL of the CITY OF HUTTO on the 20th day of May, 2021 on vote of ____ AYES; ____ NAYS; ____ ABSTENTIONS.

THE CITY OF HUTTO, TEXAS

By:_____
Mike Snyder, Mayor

ATTEST:

By:_____
Holly Nagy, City Secretary

EXHIBIT A

(Preliminary Service and Assessment Plan – including the Proposed Assessment Roll)

Cottonwood Creek Public Improvement District

PRELIMINARY SERVICE AND ASSESSMENT PLAN
MAY 13, 2021

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INTRODUCTION

Capitalized terms used in this Service and Assessment Plan shall have the meanings given to them in **Section I** unless otherwise defined in this Service and Assessment Plan or unless the context in which a term is used clearly requires a different meaning. Unless otherwise defined, a reference to a "Section" or an "Exhibit" shall be a reference to a Section of this Service and Assessment Plan or an Exhibit attached to and made a part of this Service and Assessment Plan for all purposes.

On April 1, 2021 the City Council passed and approved Resolution No. R-2021-029 authorizing the creation of the Cottonwood Creek Public Improvement District in accordance with the PID Act, which authorization was effective upon publication as required by the PID Act.

The purpose of the District is to finance the Actual Costs of the Authorized Improvements for the benefit of property within the District. The District contains approximately 370.312 acres located within the City, as described legally by metes and bounds on **Exhibit A-1** and as depicted on the map in **Exhibit B-1**.

The PID Act requires a service plan covering a period of at least five years and defining the annual indebtedness and projected cost of the Authorized Improvements. The Service Plan is contained in **Section IV**.

The PID Act requires that the Service Plan include an assessment plan that assesses the Actual Costs of the Authorized Improvements against Assessed Property within the District based on the special benefits conferred on such property by the Authorized Improvements. The Assessment Plan is contained in **Section V**.

The PID Act requires an Assessment Roll that states the Assessment against each Parcel determined by the method chosen by the City. The Assessment against each Assessed Property must be sufficient to pay the share of the Actual Costs apportioned to the Assessed Property and cannot exceed the special benefit conferred on the Assessed Property by the Authorized Improvements. The Assessment Roll for Improvement Area #1 is contained in **Exhibit F**.

SECTION I: DEFINITIONS

"Actual Costs" mean, with respect to Public Improvements, the actual costs paid or incurred by or on behalf of the Owner: (1) to plan, design, acquire, construct, install, and dedicate such improvements to the City, including the acquisition of necessary easements and other right-of-way; (2) to prepare plans, specifications (including bid packages), contracts, and as-built drawings; (3) to obtain zoning, licenses, plan approvals, permits, inspections, and other governmental approvals; (4) for third-party professional consulting services including but not limited to, engineering, surveying, geotechnical, land planning, architectural, landscaping, legal, accounting, and appraisals; (5) of labor, materials, equipment, fixtures, payment and performance bonds and other construction security, and insurance premiums; and (6) to implement, administer, and manage the above-described activities, including a 4% construction management fee. Actual Costs shall not include general contractor's fees in an amount that exceeds a percentage equal to the percentage of work completed or construction management fees in an amount that exceeds an amount equal to the construction management fee amortized in approximately equal monthly installments over the term of the applicable construction management contract. Amounts expended for costs described in subsection (3), (4), and (6) above shall be excluded from the amount upon which the general contractor and construction management fees are calculated.

"Additional Interest" means the amount collected by application of the Additional Interest Rate if PID Bonds are issued. Additional Interest is not charged on the Improvement Area #1 Reimbursement Obligation.

"Additional Interest Rate" means the 0.50% additional interest rate charged on Assessments pursuant to Section 372.018 of the PID Act.

"Administrator" means the City or the person or independent firm designated by the City who shall have the responsibility provided in this Service and Assessment Plan, the Indenture, or any other agreement or document approved by the City related to the duties and responsibility of the administration of the District.

"Annual Collection Costs" mean the actual or budgeted costs and expenses relating to collecting the Annual Installments, including, but not limited to, costs and expenses for: (1) the Administrator; (2) legal counsel, engineers, accountants, financial advisors, and other consultants engaged by the City; (3) calculating, collecting, and maintaining records with respect to Assessments and Annual Installments; (4) preparing and maintaining records with respect to Assessment Rolls and Annual Service Plan Updates; (5) issuing, paying, and redeeming PID Bonds if issued; (6) investing or depositing Assessments and Annual Installments; (7) complying with this Service and Assessment Plan and the PID Act with respect to the issuance and sale of PID Bonds, including continuing disclosure requirements; and (8) the paying agent/registrar and Trustee in connection with PID Bonds, if issued, including their respective legal counsel. Annual Collection Costs collected but not expended in any year shall be carried forward and applied to reduce Annual Collection Costs for subsequent years.

"Annual Installment" means the annual installment payment of an Assessment as calculated by the Administrator and approved by the City Council, that includes: (1) principal; (2) interest; (3) Annual Collection Costs; and (4) Additional Interest, if applicable.

"Annual Service Plan Update" means an update to this Service and Assessment Plan prepared no less frequently than annually by the Administrator and approved by the City Council.

"Appraisal District" means Williamson Central Appraisal District.

"Assessed Property" means any Parcel within the District against which an Assessment is levied.

"Assessment" means an assessment levied against a Parcel imposed pursuant to an Assessment Ordinance and the provisions herein, as shown on any Assessment Roll, subject to reallocation upon the subdivision of such Parcel or reduction according to the provisions herein and in the PID Act.

"Assessment Ordinance" means any ordinance adopted by the City Council in accordance with the PID Act that levies an Assessment on Assessed Property within the District, as shown on any Assessment Roll.

"Assessment Plan" means the methodology employed to assess the Actual Costs of the Authorized Improvements against Assessed Property within the District based on the special benefits conferred on such property by the Authorized Improvements, more specifically described in **Section V.**

"Assessment Roll" means any assessment roll for the Assessed Property within the District, including the Improvement Area #1 Assessment Roll included in this Service and Assessment Plan as **Exhibit F**, as updated, modified, or amended from time to time in accordance with the procedures set forth herein and in the PID Act, including updates prepared in connection with the levy of an Assessment, the issuance of PID Bonds, if issued, or in connection with any Annual Service Plan Update.

"Authorized Improvements" mean all costs to be paid with Assessments, including Public Improvements, Bond Issuance Costs, and District Formation Expenses.

"Bond Issuance Costs" means the costs associated with issuing PID Bonds, if issued, including but not limited to attorney fees, financial advisory fees, consultant fees, appraisal fees, printing costs, publication costs, City costs, capitalized interest, reserve fund requirements, underwriter's discount, fees charged by the Texas Attorney General, and any other cost or expense directly associated with the issuance of PID Bonds, if such bonds are issued.

"City" means the City of Hutto, Texas.

"City Council" means the governing body of the City.

"County" means Williamson County, Texas.

"Delinquent Collection Costs" means costs related to the foreclosure on Assessed Property and the costs of collection of delinquent Assessments, delinquent Annual Installments, or any other delinquent amounts due under this Service and Assessment Plan including penalties and reasonable attorney's fees actually paid, but excluding amounts representing interest and penalty interest.

"District" means the Cottonwood Creek Public Improvement District, consisting of the approximately 370.312 acres within the City, as described by metes and bounds on **Exhibit A-1** and by the map on **Exhibit B-1**.

"District Formation Expenses" means the costs associated with forming the District, including but not limited to 1st year Annual Collection Costs, and any other cost or expense directly associated with the establishment of the District.

"Estimated Buildout Value" means the estimated value of an Assessed Property after completion of the vertical improvements (e.g. house, office building, etc.), and shall be determined by the Administrator and confirmed by the City Council by considering such factors as density, lot size, proximity to amenities, view premiums, location, market conditions, historical sales, builder contracts, discussions with homebuilders, reports from third party consultants, or any other information that may impact value.

"Improvement Area" means specifically defined and designated portions of the District that are developed in phases, including Improvement Area #1 and each area within the District that is specifically defined and designated as a phase of development.

"Improvement Area #1" means approximately 186.341 acres located within the District, as shown on **Exhibit B-2** and more specifically described in **Exhibit A-2**.

"Improvement Area #1 Annual Installment" means the annual installment payment on the Improvement Area #1 Assessment as calculated by the Administrator and approved by the City Council that includes: (1) principal, (2) interest, (3) Annual Collection Costs, and (4) Additional Interest, if applicable.

"Improvement Area #1 Assessed Property" means any Parcel within Improvement Area #1 against which an Assessment is levied.

"Improvement Area #1 Assessment" means an Assessment levied against a Parcel within Improvement Area #1 and imposed pursuant to an Assessment Ordinance and the provisions herein, as shown on the Improvement Area #1 Assessment Roll, subject to reallocation upon the subdivision of such Parcel or reduction according to the provisions herein and in the PID Act.

"Improvement Area #1 Assessment Roll" means the Assessment Roll for Improvement Area #1 attached as **Exhibit F**, as updated, modified, or amended from time to time in accordance with the procedures set forth herein and in the PID Act, including updates prepared in connection with the issuance of PID Bonds, if issued, or in connection with any Annual Service Plan Update.

"Improvement Area #1 Bonds" mean those certain "City of Hutto, Texas, Special Assessment Revenue

Bonds, Series 2021 (Cottonwood Creek Public Improvement District Improvement Area #1 Project)", that are anticipated to be issued in calendar year 2021 and secured by Improvement Area #1 Assessments.

"Improvement Area #1 Improvements" mean those Public Improvements that only benefit Improvement Area #1.

"Improvement Area #1 Projects" mean Improvement Area #1 Improvements, Improvement Area #1's allocable share of District Formation Expenses, and Bond Issuance Costs for the Improvement Area #1 Bonds, if issued.

"Improvement Area #1 Unplatted Parcel" means all property within Improvement Area #1 save and except property within the Phase 1 Plat against which the Improvement Area #1 Assessment is initially levied. Until a plat has been recorded and a Property ID has been assigned by the Appraisal District to each Lot within the Improvement Area #1 Unplatted Parcel, the Annual Installment for the Improvement Area #1 Unplatted Parcel will be allocated to each property ID within the Improvement Area #1 Unplatted Parcel based on the Williamson Central Appraisal District acreage for billing purposes only.

"Improvement Area #1 Reimbursement Agreement" means that certain "Cottonwood Creek Public Improvement District Reimbursement Agreement" effective ____, 20__ entered into by and between the City and Owner, whereby all or a portion of the Actual Costs not paid to Owner from PID Bonds, if issued, will be paid to the Owner from Improvement Area #1 Assessments to reimburse the Owner for Actual Costs paid by the Owner, plus interest, that are eligible to be paid with Improvement Area #1 Assessments.

"Improvement Area #1 Reimbursement Obligation" means an amount not to exceed $10,215,000 payable from Improvement Area #1 Assessments to be paid to Owner pursuant to the Reimbursement Agreement, but excluding any payments from the net proceeds of PID Bonds.

"Indenture" means an Indenture of Trust entered into in connection with the issuance of PID Bonds, as amended or supplemented from time to time, between the City and the Trustee setting forth terms and conditions related to the PID Bonds, if issued.

"Landowner Agreement" means that certain Landowner Agreement between the City and Owner dated ____, 20__, as may be further amended.

"Lot" means, for any portion of the District for which a subdivision plat has been recorded in the official public records of the County, a tract of land described as a "lot" in such subdivision plat.

"Lot Type" means a classification of final building Lots with similar characteristics (e.g. lot size, home product, buildout value, etc.), as determined by the Administrator and confirmed by the City Council. In the case of single-family residential Lots, the Lot Type shall be further defined by classifying the residential Lots by the estimated buildout value of the Lot as determined by the Administrator and confirmed by the City Council.

"Lot Type 1" means a Lot in Improvement Area #1 designated as such on the Improvement Area #1 Assessment Roll, marketed or sold to homebuilders as a 40' lot. The projected Annual Installments for Lot Type 1 are attached as **Exhibit G-3**. The location of each Lot designated as a Lot Type 1 is shown on **Exhibit L**.

"Lot Type 2" means a Lot in Improvement Area #1 designated as such on the Improvement Area #1 Assessment Roll, marketed or sold to homebuilders as a 50' Lot. The projected Annual Installments for Lot Type 2 are attached as **Exhibit G-4**. The location of each Lot designated as a Lot Type 2 is shown on **Exhibit L**.

"Lot Type 3" means a Lot in Improvement Area #1 designated as such on the Improvement Area #1 Assessment Roll, marketed or sold to homebuilders as a 70' Lot. The projected Annual Installments for Lot Type 3 are attached as **Exhibit G-5**. The location of each Lot designated as a Lot Type 3 is shown on **Exhibit L**.

"Lot Type Duplex" means a Lot in Improvement Area #1 designated as such on the Improvement Area #1 Assessment Roll, marketed or sold to homebuilders as a 60' Lot anticipated to contain a duplex unit. The projected Annual Installments for Lot Type Duplex are attached as **Exhibit G-2**. The location of each Lot designated as a Lot Type Duplex is shown on **Exhibit L**.

"Maximum Assessment" means for each Lot Type within Improvement Area #1, at the time a new Lot is created by plat an Assessment equal to the lesser of (1) the amount calculated pursuant to **Section VI.A**, or (2) the amount shown on **Exhibit H**.

"Non-Benefitted Property" means Parcels within the boundaries of the District that accrue no special benefit from the Authorized Improvements.

"Notice of Assessment Termination" means a recorded document evidencing the termination of an Assessment, a form of which is attached as **Exhibit J**.

"Owner" means collectively Hutto 315 Ltd., a Texas Limited Partnership and Lennar Homes of Texas Land and Construction, Ltd., a Texas Limited Partnership and their successors and assigns.

"Owner Funded Improvements" mean the improvements that are funded entirely by the Owner and are not eligible for repayment by Assessments; provided that, for the avoidance of doubt, such term does not include the improvements to be funded entirely by the Owner without reimbursement to the extent the amount of Authorized Improvements exceeds the amount of the Reimbursement Obligation.

"Parcel(s)" means a property identified by either a tax map identification number assigned by the Williamson Central Appraisal District for real property tax purposes, by metes and bounds description, by lot and block number in a final subdivision plat recorded in the official public records of the County, or by any other means as determined by the City.

"Phase 1 Plat" means the plat for phase 1 of Improvement Area #1 that was recorded with the County on October 19, 2020 and shown on **Exhibit K**.

"PID Act" means Chapter 372, Texas Local Government Code, as amended.

"PID Bonds" mean any bonds issued by the City, if applicable, that are secured by Assessments levied on Assessed Property within the District, including, but not limited to the Improvement Area #1 Bonds.

"Prepayment" means the payment of all or a portion of an Assessment before the due date of the final installment thereof. Amounts received at the time of a Prepayment which represent a payment of principal, interest, or penalties on a delinquent installment of an Assessment are not to be considered a Prepayment, but rather are to be treated as the payment of the regularly scheduled Annual Installment.

"Prepayment Costs" mean interest, including Additional Interest (if applicable), and Annual Collection Costs to the date of Prepayment.

"Property ID" mean a unique number assigned to each Parcel by the Appraisal District.

"Public Improvements" mean improvements authorized by Section 372.003 of the PID Act as more specifically described in **Section III** and depicted on **Exhibit I**.

"Service and Assessment Plan" means this Service and Assessment Plan as it may be modified, amended, supplemented, and updated from time to time.

"Service Plan" covers a period of at least five years and defines the annual indebtedness and projected costs of the Authorized Improvements, more specifically described in **Section IV**.

"Tax Parcel" means a Parcel that has been assigned a tax map identification number by the Williamson Central Appraisal District.

"Trustee" means the trustee (or successor trustee) under an Indenture.

SECTION II: THE DISTRICT

The District includes approximately 370.312 acres located within the City, as described legally by metes and bounds on **Exhibit A-1** and as depicted on the map on **Exhibit B-1**. Development of the District is anticipated to include approximately 73 duplex Lots and 910 single-family home Lots.

Improvement Area #1 includes approximately 186.341 acres as more particularly described by metes and bounds on **Exhibit A-2** and depicted on **Exhibit B-2.** Development of Improvement Area #1 is anticipated to contain 4 duplex Lots and 542 single-family home Lots.

SECTION III: AUTHORIZED IMPROVEMENTS

The City, based on information provided by the Owner and its engineer and on review by the City staff and by third-party consultants retained by the City, determined that the Authorized Improvements confer a special benefit on the Assessed Property. Public Improvements will be designed and constructed in accordance with City standards and specifications and will be owned and operated by the City unless otherwise indicated. The budget for the Authorized Improvements, as well as the allocation of the Authorized Improvements, is shown on **Exhibit C**.

A. Improvement Area #1 Improvements

- *Water*

  Improvements include trench excavation and embedment, trench safety, PVC piping, manholes, service connections, and testing. These lines will include the necessary appurtenances to be fully operational transmission lines extending water service to the limits of the improvements. The water improvements will be designed and constructed in accordance with City standards and specifications and will be owned and operated by the City.

- *Drainage*

  Improvements include trench excavation and embedment, trench safety, reinforced concrete piping, manholes, inlets, channels/swales and ponds. These will include the necessary appurtenances to be fully operational to convey stormwater to the limits of the Improvement Area. The drainage improvements will be designed and constructed in accordance with City standards and specifications and will be owned and operated by the City.

- *Streets*

  Improvements include subgrade stabilization (including excavation and drainage), concrete and reinforcing steel for roadways, handicapped ramps, and street lights. Intersections, signage, lighting, and re-vegetation of all disturbed areas within the right of way are included. These roadway improvements include streets that will provide street access to each Lot. These projects will provide access to community roadways and state highways. The street improvements will be

designed and constructed in accordance with City standards and specifications and will be owned and operated by the City.

B. Bond Issuance Costs and District Formation Expenses

- *Debt Service Reserve Fund*

  Equals the amount required under an applicable Indenture in connection with the issuance of PID Bonds, if issued. This amount may be updated or revised at the time of issuance if PID Bonds are issued.

- *Capitalized Interest*

  Equals the capitalized interest payments on PID Bonds, if issued, as reflected in an applicable Indenture. This amount may be updated or revised at the time of issuance if PID Bonds are issued.

- *Underwriter's Discount*

  Equals a percentage of the par amount of a particular series of PID Bonds, if issued, plus a fee for underwriter's counsel. This amount may be updated or revised at the time of issuance if PID Bonds are issued.

- *Cost of Issuance*

  Includes costs associated with issuing PID Bonds, if issued, including but not limited to attorney fees, financial advisory fees, consultant fees, appraisal fees, printing costs, publication costs, County costs, fees charged by the Texas Attorney General, and any other cost or expense directly associated with the issuance of PID Bonds. This amount may be updated or revised at the time of issuance if PID Bonds are issued.

- *District Formation Expenses*
  First year Annual Collection Costs and other costs and expenses directly associated with forming the District.

SECTION III-A: OWNER FUNDED IMPROVEMENTS

The following improvements are Owner Funded Improvements that are funded entirely by the Owner and are not eligible for repayment by Assessments.

- *Wastewater*

  Improvements include trench excavation and embedment, trench safety, PVC piping, manholes, service connections, and testing. These lines will include the necessary appurtenances to be fully operational extending wastewater service to the limits of the District. The wastewater improvements will be designed and constructed in accordance with City standards and specifications and will be owned and operated by the City.

SECTION IV: SERVICE PLAN

The PID Act requires the Service Plan to cover a period of at least five years. The Service Plan is required to define the annual projected costs and indebtedness for the Authorized Improvements undertaken within the District during the five-year period. The Service Plan shall be updated in each Annual Service Plan Update. **Exhibit D** summarizes the Service Plan for the District. PID Bonds may be issued by the City during the five-year period to pay all or a portion of the Reimbursement Obligation owed under the Reimbursement Agreement. If PID Bonds are issued, the PID Bonds will fund costs of issuance of the PID Bonds and other costs set forth in **Section III** above.

Exhibit E summarizes the sources and uses of funds required to construct the Authorized Improvements. If PID Bonds are issued, **Exhibit E** will be updated to show the amount required to fund the required reserves and issue the PID Bonds at the time the PID Bonds are issued. The sources and uses of funds shown on **Exhibit E** shall be updated in each Annual Service Plan Update.

SECTION V: ASSESSMENT PLAN

The PID Act allows the City to apportion the costs of the Authorized Improvements to the Assessed Property based on the special benefit received from the Authorized Improvements. The PID Act provides that such costs may be apportioned: (1) equally per front foot or square foot; (2) according to the value of property as determined by the City, with or without regard to improvements constructed on the property; or (3) in any other manner approved by the City that results in imposing equal shares of such costs on property similarly benefited. The PID Act further provides that the governing body may establish by ordinance or order reasonable classifications and formulas for the apportionment of the cost between the municipality and the area to be assessed and the methods of assessing the special benefits for various classes of improvements.

This section of this Service and Assessment Plan describes the special benefit received by each Assessed Property within the District as a result of the Authorized Improvements and provides the basis and justification for the determination that this special benefit exceeds the amount of the Assessments to be levied on the Assessed Property for such Authorized Improvements.

The determination by the City of the assessment methodologies set forth below is the result of the discretionary exercise by the City Council of its legislative authority and governmental powers and is conclusive and binding on the Owner and all future owners and developers of the Assessed Property.

A. Assessment Methodology

The City Council, acting in its legislative capacity based on information provided by the Owner and its engineer and on review by the City staff and by third-party consultants retained by the City, has determined that Improvement Area #1 Projects shall be allocated to Improvement Area #1 Assessed Property pro rata based on Estimated Buildout Value.

B. Assessments

Improvement Area #1 Assessments were levied on the Improvement Area #1 Assessed Property according to the Improvement Area #1 Assessment Roll, attached hereto as **Exhibit F**. The projected Improvement Area #1 Annual Installments are shown on **Exhibit G-1**, subject to revisions made during any Annual Service Plan Update.

C. Findings of Special Benefit

The City Council, acting in its legislative capacity based on information provided by the Owner and its engineer and reviewed by the City staff and by third-party consultants retained by the City, has found and determined:

- *Improvement Area #1*

  1. The costs of Improvement Area #1 Projects equal $17,542,359, as shown on **Exhibit C**; and
  2. The Improvement Area #1 Assessed Property receives special benefit from the Improvement Area #1 Projects equal to or greater than the Actual Costs of the Improvement Area #1 Projects allocated to Improvement Area #1 Assessed Property; and
  3. The Improvement Area #1 Assessed Property was allocated 100% of the Improvement Area #1 Assessments levied for the Improvement Area #1 Projects, which equal $10,215,000 as shown on the Improvement Area #1 Assessment Roll, attached as **Exhibit F;** and
  4. The special benefit (≥ $17,542,359) received by the Improvement Area #1 Assessed Property from the Improvement Area #1 Projects allocated to Improvement Area #1 Assessed Property is greater than the amount of Improvement Area #1 Assessments ($10,215,000) levied on the Improvement Area #1 Assessed Property.
  5. At the time the City Council approved the Assessment Ordinance levying Assessments on Improvement Area #1, the Owner owned 100% of the Improvement Area #1 Assessed Property. In a Landowner Agreement with the City, the Owner acknowledged that the Improvement Area #1 Projects confer a special benefit on the Improvement Area #1 Assessed Property and consented to the imposition of the Improvement Area #1 Assessments to pay for the Actual Costs associated therewith. The Owner ratified, confirmed, accepted, agreed to, and approved: (1) the determinations and findings by the City Council as to the special benefits described herein and in the Assessment Ordinance, and (2) the levying of the Improvement Area #1 Assessments on the Improvement Area #1 Assessed Property.

D. Annual Collection Costs

The Annual Collection Costs shall be paid for on a pro rata basis by each Assessed Property based on the amount of outstanding Assessment remaining on the Assessed Property. The Annual Collection Costs shall be collected as part of and in the same manner as Annual Installments in the amounts shown on the Assessment Roll, which may be revised in Annual Service Plan Updates based on Actual Costs incurred.

E. Interest

Additional Interest will not be collected as part of the Reimbursement Obligation. If PID Bonds are issued, the interest rate on Improvement Area #1 Assessments levied on the Improvement Area #1 Assessed Property may exceed the interest rate on the PID Bonds, if issued, by the Additional Interest Rate.

SECTION VI: TERMS OF THE ASSESSMENTS

A. Reallocation of Assessments

1. Upon Division Prior to Recording of Subdivision Plat

Upon the division of any Assessed Property (without the recording of subdivision plat), the Administrator shall reallocate the Assessment for the Assessed Property prior to the division among the newly divided Assessed Properties according to the following formula:

$A = B \times (C \div D)$

Where the terms have the following meanings:

A = the Assessment for the newly divided Assessed Property
B = the Assessment for the Assessed Property prior to division
C = the Estimated Buildout Value of the newly divided Assessed Property
D = the sum of the Estimated Buildout Value for all the newly divided Assessed Properties

The calculation of the Estimated Buildout Value of an Assessed Property shall be performed by the Administrator based on information from the Owner, homebuilders, market studies, appraisals, official public records of the County, and any other relevant information regarding the Assessed Property. The calculation as confirmed by the City Council shall be conclusive.

The sum of the Assessments for all newly divided Assessed Properties shall equal the Assessment for the Assessed Property prior to subdivision. The calculation shall be made separately for each newly divided Assessed Property. The reallocation of an Assessment for an Assessed Property that is a homestead under Texas law may not exceed the Assessment prior to the reallocation. Any reallocation pursuant to this section shall be reflected in an update to this Service and Assessment Plan approved by the City Council.

2. Upon Subdivision by a Recorded Subdivision Plat

Upon the subdivision of any Assessed Property based on a recorded subdivision plat, the Administrator shall reallocate the Assessment for the Assessed Property prior to the subdivision among the new subdivided Lots based on Estimated Buildout Value according to the following formula:

$A = [B \times (C \div D)]/E$

Where the terms have the following meanings:

A = the Assessment for the newly subdivided Lot

B = the Assessment for the Parcel prior to subdivision

C = the sum of the Estimated Buildout Value of all newly subdivided Lots with same Lot Type

D = the sum of the Estimated Buildout Value for all the newly subdivided Lots excluding Non-Benefitted Property

E= the number of Lots with same Lot Type

Prior to the recording of a subdivision plat, the Owner shall provide the City an Estimated Buildout Value as of the date of the recorded subdivision plat for each Lot created by the recorded subdivision plat considering factors such as density, lot size, proximity to amenities, view premiums, location, market conditions, historical sales, discussions with homebuilders, and any other factors that may impact value. The calculation of the Estimated Buildout Value for a Lot shall be performed by the Administrator and confirmed by the City Council based on information provided by the Owner, homebuilders, third party consultants, and/or the official public records of the County regarding the Lot.

The sum of the Assessments for all newly subdivided Lots shall not exceed the Assessment for the portion of the Assessed Property subdivided prior to subdivision. The calculation shall be made separately for each newly subdivided Assessed Property. The reallocation of an Assessment for an Assessed Property that is a homestead under Texas law may not exceed the Assessment prior to the reallocation. Any reallocation pursuant to this section shall be reflected in an update to this Service and Assessment Plan approved by the City Council.

3. Upon Consolidation

If two or more Lots or Parcels are consolidated, the Administrator shall allocate the Assessments against the Lots or Parcels before the consolidation to the consolidated Lot or Parcel, which allocation shall be approved by the City Council in the next Annual Service Plan Update.

4. Determination of Maximum Assessment for new Lot Types

If a Lot is created by plat that cannot be classified as one of the Lot Types shown on **Exhibit H**, a new Lot Type shall be created. The Maximum Assessment for the new Lot Type shall be calculated so that the average Annual Installment results in an equivalent tax rate of $3.08, inclusive of all overlapping taxes for local taxing entities.

B. True-up of Assessments if Maximum Assessment Exceeded

Prior to the approval of a final subdivision plat, the Administrator shall certify that the final plat will not cause the Assessment for any Lot Type to exceed the Maximum Assessment. If the subdivision of any Assessed Property by a final subdivision plat causes the Assessment per Lot for any Lot Type to exceed the applicable Maximum Assessment for such Lot Type, the landowner shall partially prepay the Assessment for each Assessed Property that exceeds the applicable Maximum Assessment for such Lot Type in an amount sufficient to reduce the Assessment to the applicable Maximum Assessment for such Lot Type. The City's approval of a final subdivision plat without payment of such amounts does not eliminate the obligation of the person or entity filing the plat to pay such Assessments.

C. Mandatory Prepayment of Assessments

If Assessed Property is transferred to a person or entity that is exempt from payment of the Assessments, the owner transferring the Assessed Property shall pay to the City the full amount of the Assessment, plus Prepayment Costs and Delinquent Collection Costs for such Assessed Property, prior to the transfer. If the owner of the Assessed Property causes the Assessed Property to become Non-Benefitted Property, the owner causing the change in status shall pay the full amount of the Assessment, plus Prepayment Costs and Delinquent Collection Costs, prior to the change in status.

D. Reduction of Assessments

If as a result of cost savings or Authorized Improvements not being constructed, the Actual Costs of completed Authorized Improvements are less than the Assessments, (i) in the event PID Bonds are not issued, the City Council shall reduce each Assessment on a pro-rata basis such that the sum of the resulting reduced Assessments for all Assessed Property equals the reduced Actual Costs, or (ii) in the event PID Bonds are issued, the Trustee shall apply amounts on deposit in the applicable account of the project fund, relating to the PID Bonds, that are not expected to be used for purposes of the project fund to redeem outstanding PID Bonds, in accordance with the applicable Indenture. The Assessments shall not, however, be reduced to an amount less than the outstanding PID Bonds.

The Administrator shall update (and submit to the City Council for review and approval as part of the next Annual Service Plan Update) the Assessment Roll and corresponding Annual Installments to reflect the reduced Assessments.

E. Prepayment of Assessments

The owner of the Assessed Property may pay, at any time, all or any part of an Assessment in accordance with the PID Act. If PID Bonds are issued, interest costs from the date of prepayment to the date of redemption of the applicable PID Bonds, if any, may be paid from a reserve established under the applicable Indenture. If an Annual Installment has been billed prior to the Prepayment, the Annual Installment shall be due and payable and shall be credited against the Prepayment.

If an Assessment is paid in full, with interest to the date of Prepayment: (1) the Administrator shall cause the Assessment to be reduced to zero and the Assessment Roll to be revised accordingly; (2) the Administrator shall prepare the revised Assessment Roll and submit to the City Council for review and approval as part of the next Annual Service Plan Update; (3) the obligation to pay the Assessment and corresponding Annual Installments shall terminate; and (4) the City shall provide the owner with a recordable Notice of Assessment Termination, a form of which is attached as **Exhibit J**.

If an Assessment is paid in part, with Prepayment Costs: (1) the Administrator shall cause the Assessment to be reduced and the Assessment Roll revised accordingly; (2) the Administrator shall prepare the revised Assessment Roll and submit to the City Council for review and approval as part of the next Annual Service Plan Update; and (3) the obligation to pay the Assessment and corresponding Annual Installments shall be reduced to the extent of the Prepayment made.

F. Prepayment as a Result of Eminent Domain Proceeding or Taking

To the extent permitted by law, the following process shall apply in the event of a Taking (as defined below). If any portion of any Parcel of Assessed Property is taken from an owner as a result of eminent domain proceedings or if a transfer of any portion of any Parcel of Assessed Property is made to an entity with the authority to condemn all or a portion of the Assessed Property in lieu of or as a part of an eminent domain proceeding (a "**Taking**"), the portion of the Assessed Property that was taken or transferred (the "**Taken Property**") shall be reclassified as Non-Benefitted Property.

For the Assessed Property that is subject to the Taking as described in the preceding paragraph, the Assessment that was levied against the Assessed Property (when it was included in the Taken Property) prior to the Taking shall remain in force against the remaining Assessed Property (the Assessed Property less the Taken Property), (the "**Remaining Property**") following the reclassification of the Taken Property as Non-Benefitted Property, subject to an adjustment of the Assessment applicable to the Remaining Property after any required Prepayment as set forth below. The owner will remain liable to pay in Annual Installments, or payable as otherwise provided by this Service and Assessment Plan, as updated, or the PID Act, the Assessment that remains due on the Remaining Property, subject to an adjustment in the Assessment applicable to the Remaining Property after any required Prepayment as set forth below. Notwithstanding the foregoing, if the Assessment that remains due on the Remaining Property exceeds the Maximum Assessment, the owner will be required to make a Prepayment in an amount necessary to ensure that the Assessment against the Remaining Property does not exceed the Maximum Assessment, in which case the Assessment applicable to the Remaining Property will be reduced by the amount of the partial Prepayment. If the City receives all or a portion of the eminent domain proceeds (or payment made in an agreed sale in lieu of condemnation), such amount shall be credited against the amount of prepayment, with any remainder credited against the assessment on the Remainder Property.

In all instances the Assessment remaining on the Remaining Property shall not exceed the Maximum Assessment.

By way of illustration, if an owner owns 100 acres of Assessed Property subject to a $100 Assessment and 10 acres is taken through a Taking, the 10 acres of Taken Property shall be reclassified as Non-Benefitted Property and the remaining 90 acres of Remaining Property shall be subject to the $100 Assessment, (provided that this $100 Assessment does not exceed the Maximum Assessment on the Remaining Property). If the Administrator determines that the $100 Assessment reallocated to the Remaining Property would exceed the Maximum Assessment on the Remaining Property by $10, then the owner shall be required to pay $10 as a Prepayment of the Assessment against the Remaining Property and the Assessment on the Remaining Property shall be adjusted to be $90.

Notwithstanding the previous paragraphs in this subsection, if the owner notifies the City and the Administrator that the Taking prevents the Remaining Property from being developed for any use which could support the Estimated Buildout Value requirement, the owner shall, upon receipt of the compensation for the Taken Property, be required to prepay the amount of the Assessment required to buy down the outstanding Assessment to the Maximum Assessment on the Remaining Property to support the Estimated Buildout Value requirement. The owner will remain liable to pay the Annual

Installments on both the Taken Property and the Remaining Property until such time that such Assessment has been prepaid in full.

Notwithstanding the previous paragraphs in this subsection, the Assessments shall not, however, be reduced to an amount less than the outstanding PID Bonds.

G. Payment of Assessment in Annual Installments

Assessments that are not paid in full shall be due and payable in Annual Installments. **Exhibit G-1** shows the projected Annual Installments for Improvement Area #1. Annual Installments are subject to adjustment in each Annual Service Plan Update.

The Administrator shall prepare and submit to the City Council for its review and approval an Annual Service Plan Update to allow for the billing and collection of Annual Installments. Each Annual Service Plan Update shall include updated Assessment Rolls and updated calculations of Annual Installments. Annual Collection Costs shall be allocated equally among Parcels for which the Assessments remain unpaid. Annual Installments shall be collected by the City in the same manner and at the same time as ad valorem taxes. Annual Installments shall be subject to the penalties, procedures, and foreclosure sale in case of delinquencies as set forth in the PID Act and in the same manner as ad valorem taxes for the City. The City Council may provide for other means of collecting Annual Installments. Assessments shall have the lien priority specified in the PID Act.

Sales of the Assessed Property for nonpayment of Annual Installments shall be subject to the lien for the remaining unpaid Annual Installments against the Assessed Property, and the Assessed Property may again be sold at a judicial foreclosure sale if the purchaser fails to timely pay the Annual Installments as they become due and payable.

The City reserves the right to refund PID Bonds in accordance with the PID Act, if such bonds are issued. In the event of a refunding, the Administrator shall recalculate the Annual Installments so that total Annual Installments will be sufficient to pay the refunding bonds, and the refunding bonds shall constitute "PID Bonds."

Each Annual Installment of an Assessment, including interest on the unpaid principal of the Assessment, shall be updated annually. Each Annual Installment shall be due when billed and shall be delinquent if not paid prior to February 1 of the following year. The first Annual Installment for Improvement Area #1 will be delinquent if not paid by February 1, 2022.

SECTION VII: ASSESSMENT ROLLS

The Improvement Area #1 Assessment Roll is attached as **Exhibit F**. The Administrator shall prepare and submit to the City Council, for review and approval, proposed revisions to the Assessment Rolls and Annual Installments for each Parcel within the District as part of each Annual Service Plan Update.

SECTION VIII: ADDITIONAL PROVISIONS

A. Calculation Errors

If the owner of a Parcel claims that an error has been made in any calculation required by this Service and Assessment Plan, including, but not limited to, any calculation made as part of any Annual Service Plan Update, the owner's sole and exclusive remedy shall be to submit a written notice of error to the Administrator by December 1st of each year following City Council approval of the calculation; otherwise, the owner shall be deemed to have unconditionally approved and accepted the calculation. Upon receipt of a written notice of error from an owner the Administrator shall provide a written response to the City Council and the owner within 30 days of such referral. The City Council shall consider the owner's notice of error and the Administrator's response at a public hearing, and within 30 days after closing such hearing, the City Council shall make a final determination as to whether an error has been made. If the City Council determines that an error has been made, the City Council may take such corrective action as is authorized by the PID Act, this Service and Assessment Plan, the Assessment Ordinance, or the Indenture, or is otherwise authorized by the discretionary power of the City Council. The determination by the City Council as to whether an error has been made, and any corrective action taken by the City Council, shall be final and binding on the owner and the Administrator.

B. Amendments

Amendments to this Service and Assessment Plan must be made by the City Council in accordance with the PID Act. To the extent permitted by the PID Act, this Service and Assessment Plan may be amended without notice to owners of the Assessed Property: (1) to correct mistakes and clerical errors; (2) to clarify ambiguities; and (3) to provide procedures to collect Assessments, Annual Installments, and other charges imposed by this Service and Assessment Plan.

C. Administration and Interpretation

The Administrator shall: (1) perform the obligations of the Administrator as set forth in this Service and Assessment Plan; (2) administer the District for and on behalf of and at the direction of the City Council; and (3) interpret the provisions of this Service and Assessment Plan. Interpretations of this Service and Assessment Plan by the Administrator shall be in writing and shall be appealable to the City Council by owners or developers adversely affected by the interpretation. Appeals shall be decided by the City Council after holding a public hearing at which all interested parties have an opportunity to be heard. Decisions by the City Council shall be final and binding on the owners and developers and their successors and assigns.

D. Severability

If any provision of this Service and Assessment Plan is determined by a governmental agency or court to be unenforceable, the unenforceable provision shall be deleted and, to the maximum extent possible, shall be rewritten to be enforceable. Every effort shall be made to enforce the remaining provisions.

LIST OF EXHIBITS

Exhibit A-1	District Legal Description
Exhibit A-2	Improvement Area #1 Legal Description
Exhibit B-1	District Boundary Map
Exhibit B-2	Improvement Area #1 Boundary Map
Exhibit C	Authorized Improvements
Exhibit D	Service Plan
Exhibit E	Sources and Uses
Exhibit F	Improvement Area #1 Assessment Roll
Exhibit G-1	Improvement Area #1 Annual Installments
Exhibit G-2	Lot Type Duplex Annual Installments
Exhibit G-3	Lot Type 1 Annual Installments
Exhibit G-4	Lot Type 2 Annual Installments
Exhibit G-5	Lot Type 3 Annual Installments
Exhibit H	Maximum Assessment
Exhibit I	Map of Improvement Area #1 Improvements
Exhibit J	Notice of Assessment Termination
Exhibit K	Phase 1 Plat
Exhibit L	Lot Type Classification Map

EXHIBIT A-1 – DISTRICT LEGAL DESCRIPTION

EXHIBIT ____

Takedown 1- 9.487 Acre Tract
Meadows at Cottonwood Creek, Phase One

LEGAL DESCRIPTION

FIELD NOTES FOR A 9.487 ACRE TRACT OF LAND OUT OF THE WILLIAM GATLIN SURVEY, ABSTRACT NO. 271, AND THE JAMES HICKMAN SURVEY, ABSTRACT NO. 291, WILLIAMSON COUNTY, TEXAS; CONSISTING OF THE EXISTING RIGHT-OF-WAY OF BRANSON BOULEVARD (ROW ~ 90') AND LOT 1, BLOCK "A" AS SHOWN ON THE PLAT OF MEADOWS AT COTTONWOOD CREEK, PHASE ONE, AS RECORDED IN DOCUMENT NUMBER 2009067576 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 9.487 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2-inch iron rod with cap stamped "BASELINE INC" found on the south right-of-way line of County Road 199 (R.O.W.~ varies) no reference found, at the most northerly northeast corner of the remainder of 367.15 acre tract of land (Exhibit "A") as conveyed unto Hutto 372, LTD in Document Numbers 2003097296, 2003097297, and 2003097298, all recorded in the Official Public Records of Williamson County, Texas, at the northwest corner of said Branson Boulevard, the northwest corner and POINT OF BEGINNING of the herein described tract;

THENCE, S 82°20'52" E, coincident with the south right-of-way line of said County Road 199 and the north right-of-way line of said Branson Boulevard, a distance of 54.98 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set on the west right-of-way line of County Road 132 (ROW ~ Varies), no reference found, at the northeast corner of the right-of-way of said Branson Boulevard, the northeast corner of the herein described tract;

THENCE, departing said south right-of-way line of County Road 199, coincident with said west right-of-way line of County Road 132, same being the east right-of-way line of said Branson Boulevard, the following three (3) courses:

1) S 07°35'33" W, a distance of 609.30 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, an angle point of the herein described tract;

2) S 08°57'58" W, a distance of 29.75 feet to a 5/8-inch iron rod found, a re-entrant corner of the herein described tract;

3) S 81°13'49" E, a distance of 20.77 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the northwest corner of a called 50 acre tract of land conveyed to Leschber Investment, LP in the Special Warranty Deed recorded in Document Number 2010007504 of the Official Public Records of Williamson County, Texas, an easterly corner of the herein described tract;

THENCE, S 07°57'27" W, coincident with the east right-of-way line of Branson Boulevard and the west line of said 50 acre tract, passing at a distance of 2,477.07 feet the southwest corner of said 50 acre tract, same being the northwest corner of a called 4.855 acre tract of land conveyed to Audrey Evans in Document Number 2010004677 of the Official Public Records of Williamson County, Texas, and continuing coincident with the east right-of-way line of Branson Boulevard and the west line of said 4.855 acre tract, a total distance of 2,675.76 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the common westerly corner of the 4.855 acre tract and Lot 1, Block "A" as shown on the aforementioned subdivision plat of Meadows at Cottonwood Creek, Phase One, being a point of curvature of said right-of-way line and an angle point of the herein described tract;

THENCE, in an easterly direction coincident with the common line of said Lot 1 and the 4.855 acre tract, the following three (3) courses;

1) S 26°27'39" E, a distance of 238.46 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

2) S 82°12'22" W, a distance of 270.89 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

3) N 52°49'21" E, a distance of 84.62 feet to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found on the easterly line of the remainder of a called 5.57 acre tract of land (Exhibit "B") as described in Document Numbers 2003097296, 2003097297, and 2003097298 of the Official Public Records of Williamson County, Texas, at the most easterly corner of Lot 1, the most easterly corner of the herein described tract

THENCE, S 46°27'34" W, coincident with the common line of the remainder of said 5.57 acre tract and said Lot 1, passing at a distance of 76.59 feet the common corner of the remainder of the 5.57 acre tract and the remainder of the 367.15 acre tract and continuing coincident with the common line of the remainder of the 367.15 acre tract and said Lot 1, passing at a distance of 532.25 feet the common corner of Lot 1 and the most easterly corner of the right-of-way line of said Branson Boulevard and continuing coincident with the common line of the remainder of the 367.15 acre tract and the terminal end of the right-of-way line of Branson Boulevard, a total distance of 631.51 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the south corner of said right-of-way line, the south corner of the herein described tract;

THENCE, in a northerly direction, coincident with the common line of the remainder of the 367.15 acre tract and the west right-of-way line of Branson Boulevard the following eight (8) courses;

1) N 18°35'56" W, a distance of 57.25 feet to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

2) Curving to the right, having a radius of 1,295.00 feet, an arc distance of 600.23 feet, a central angle of 26°33'23", a chord bearing of N 05°19'14" W, and a chord distance of 594.87 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

3) N 07°57'27" E, a distance of 2,675.72 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, a point of curvature of the herein described tract;

4) Curving to the right, having a radius of 1,545.00 feet, an arc distance of 173.21 feet, a central angle of 06°25'24", a chord bearing of N 11°10'09" E, and a chord distance of 173.12 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

5) N 14°22'51" E, a distance of 130.41 feet to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

6) Curving to the left, having a radius of 1,955.00 feet, an arc distance of 231.22 feet, a central angle of 06°46'35", a chord bearing of N 10°59'34" E, and a chord distance of 231.08 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

7) N 07°36'16" E, a distance of 81.03 feet to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found, a point of curvature of the herein described tract;

8) Curving to the left, having a radius of 25.00 feet, an arc distance of 39.25 feet, a central angle of 89°57'08", a chord bearing of N 37°22'18" W, and a chord distance of 35.34 feet to the POINT OF BEGINNING and containing 9.487 acres of land, more or less.

I hereby certify that these notes were prepared from a survey made on the ground by employees of BGE, Inc and are true and correct to the best of my knowledge. The Basis of Bearing recited herein is the Texas State Plane Coordinate System, Central Zone, NAD 83. A sketch accompanies this description.

Dion P. Albertson RPLS No. 4963
BGE, Inc.
7330 San Pedro Ave, Suite 202
San Antonio TX 78216
Telephone: 210-581-3600
TBPLS Licensed Surveying Firm No. 10194490

10/16/19
Date

STATE OF TEXAS REGISTERED DION P. ALBERTSON 4963 PROFESSIONAL LAND SURVEYOR

Client: Lennar
Date: October 16, 2019
Job No: 6104-00

EXHIBIT ____

Lennar-46.713 Acre Tract
ALTA/NSPS Land Title Survey

LEGAL DESCRIPTION

FIELD NOTES FOR A 46.713 ACRE TRACT OF LAND OUT OF THE WILLIAM GATLIN SURVEY ABSTRACT NO. 271, WILLIAMSON COUNTY, TEXAS; BEING A CALLED 46.2 ACRE TRACT OF LAND WITH 17% INTEREST CONVEYED UNTO MYRON THOMAS JOHNSTON, II IN DOCUMENT NUMBER 2011057142 AND A CALLED 46.14 ACRE TRACT OF LAND WITH A 5/6 INTEREST CONVEYED UNTO LESCHBER INVESTMENTS, LP IN DOCUMENT NUMBER 2010007503, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 46.713 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS AND SHOWN ON THE ATTACHED SKETCH:

BEGINNING at a 1/2-inch iron rod with cap stamped "Baseline Inc." found on the south right-of-way line of County Road 199 (R.O.W. Varies) no reference found, at the common corner of said 46.2 acre tract and a called 167.461 acre tract of land conveyed unto Meritage Homes of Texas, LLC in Document Number 2018105406, Official Public Records of Williamson County Texas and the northwest corner and **POINT OF BEGINNING** of the herein described tract;

THENCE, S 81°07'22" E, coincident with the common line of the 46.2 acre tract and said south right-of-way line, a distance of 781.88 feet (Record S 79°03'00" E, 764.04 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the common corner of the 46.2 acre tract and the remainder of a 367.15 acre tract of land (Exhibit "A") conveyed unto Hutto 372, LTD in Document Numbers 2003097296, 2003097297 and 2003097298, all recorded in Official Public Records of Williamson County, Texas, the northeast corner of the 46.2 acre tract and the herein described tract, from which a 1/2-inch iron rod with cap stamped "Baseline Inc." found on the south right-of-way line of said County Road 199, at the northwest end of the curve return from the west right-of-way line of Branson Boulevard as shown in Document Number 2009067576, Official Public Records of Williamson County, Texas bears S 82°20'52" E, a distance of 722.73 feet;

THENCE, S 07°42'37" W, departing said common line coincident with the common line of the 46.2 acre tract and the remainder of said 367.15 acre tract, a distance of 2603.60 feet (Record S 10°00'00" W, 2,598.44 feet) to a 1/2-inch iron rod (bent) found at the common corner of the 46.2 acre tract and the remainder of the 367.15 acre tract, the southeast corner of the herein described tract;

THENCE, N 80°26'51" W, continuing coincident with said common line, a distance of 784.53 feet (Record N 79°30'00" W, 781.39 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set on the east line of the aforementioned 167.461 acre tract at the common corner of the 46.2 acre tract and the remainder of the 367.15 acre, the southwest corner of the herein described tract, from which a 5/8"-inch iron rod found at an angle point in the east line of the 167.461 acre tract bears S 07°45'48" W, a distance of 1,563.00 feet;

THENCE, N 07°45'48" E, coincident with the common line of the 46.2 acre tract and said 167.461 acre tract, a distance of 2594.31 feet (Record N 10°23'00" E, 2,604.35 feet) to the POINT OF BEGINNING and containing 46.713 acres of land more or less.

I hereby certify that these notes were prepared from a survey made on the ground by employees of BGE, Inc and are true and correct to the best of my knowledge. The Basis of Bearing recited herein is the Texas State Plane Coordinate System, Central Zone, NAD 83. A sketch accompanies this description.

Dion P. Albertson

8/29/19

Date



Dion P. Albertson RPLS No. 4963
BGE, Inc.
7330 San Pedro Ave, Suite 202
San Antonio TX 78216
Telephone: 210-581-3600
TBPLS Licensed Surveying Firm No. 10194490

Client: Lennar
Date: August 29, 2019
Job No: 6104-00

EXHIBIT ____

Lennar-314.112 Acre Tract
ALTA/NSPS Land Title Survey

LEGAL DESCRIPTION

FIELD NOTES FOR A 314.112 ACRE TRACT OF LAND OUT OF THE WILLIAM GATLIN SURVEY ABSTRACT NO. 271 AND THE JAMES HICKMAN SURVEY, ABSTRACT NO. 291, WILLIAMSON COUNTY, TEXAS; BEING THE REMAINING PORTION OF A CALLED 367.15 ACRE TRACT OF LAND (EXHIBIT "A") AND THE REMAINING PORTION OF A 5.57 ACRE TRACT OF LAND (EXHIBIT "B") AS CONVEYED UNTO HUTTO 372, LTD IN DOCUMENT NUMBERS 2003097296, 2003097297 AND 2003097298 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 314.112 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS AND SHOWN ON THE ATTACHED SKETCH:

BEGINNING at a 1/2-inch iron rod with cap stamped "Baseline Inc." found on the south line of a called 87.81 acre tract of land conveyed unto Larry W. Leschber in Volume 2430, Page 332, Official Public Records of Williamson County Texas at the northwest corner of a called 143.5 acre tract of land conveyed unto LPL Investments, LP in Document Number 2010007498, Official Public Records of Williamson County Texas, an easterly corner of the remainder of said 367.15 acre tract and the **POINT OF BEGINNING** of the herein described tract;

THENCE, S 07°51'01" W, coincident with the common line of said 143.5 acre tract and the remainder of the 367.15 acre tract, a distance of 3370.40 feet (Record S 10°48'00" W, 3,369.65 feet) to a 1/2-inch iron rod with cap stamped "BASELINE INC." found at the common corner of the remainder of the 367.15 acre tract and a called 45.77 acre tract of land (Tract 2) conveyed unto Swindoll Investments, LP in Document Number 2008093458, Official Public Records of Williamson County Texas, an easterly corner of the herein described tract;

THENCE, N 82°47'03" W, coincident with the common line of the remainder of the 367.15 acre tract, said 45.77 acre tract and a 34.17 acre tract of land (Tract 3) conveyed unto Swindoll Investments, LP in said Document Number 2008093458, a distance of 848.98 feet (Record N 79°53' W, 848.80 feet) to a 5/8-inch iron rod found, a corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 07°41'41" E, coincident with the common line of the 367.15 acre tract and said 34.17 acre tract, a distance of 516.58 feet (Record N 10°38' E, 516.45 feet) to a 5/8-inch iron rod found (disturbed) at the most northeasterly corner of the 34.17 acre tract, a re-entrant corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 82°32'58" W, continuing coincident with said common line a distance of 185.35 feet (Record N 79°37'30" W, 185.35 feet) to a 1/2-inch iron rod with cap stamped "BASELINE INC." found at the common corner of the 34.17 acre tract and a called 28.435 acre tract of land (Tract B) conveyed unto Claudia Ann Crislip in Document Number 2018083501, Official Public Records of Williamson County Texas, and angle point of the reminder of the 367.15 acre tract and the herein described tract ;

THENCE, N 82°47'28" W, coincident with the common line of the remainder of the 367.15 acre tract and said 28.435 acre tract, a distance of 385.56 feet (Record N 79°52' W, 385.56 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the common corner of the 28.435 acre tract and the remainder of a called 50.00 acre tract of land (Tract A) as conveyed unto Claudia Ann Crislip in said Document Number 2018083501, an angle point of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 82°44'28" W, coincident with the common line of the remainder of the 367.15 acre tract and the remainder of the 50.00 acre tract, a distance of 717.71 feet (Record N 79°49' W, 717.56 feet) to a 5/8-inch iron rod found (disturbed) at the northwest corner of the remainder of the said 50.00 acre tract, a re-entrant corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, S 07°38'02" W, coincident with the common line of the remainder of the 367.15 acre tract and the remainder of the 50.00 acre tract, a distance of 2,275.38 feet (Record S 10°33'30" W, 2,275.32 feet) to a 5/8-inch iron rod found at the southwest corner of the remainder of the 50.00 acre tract, a re-entrant corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, S 82°52'10" E, continuing coincident with said common line, a distance of 89.67 feet (Record S 79°20'30" E, 88.93 feet) to a 5/8-inch iron rod found at the northwest corner of a 1.54 acre tract of land (Tract C) conveyed unto Claudia Ann Crislip in said Document Number 2018083501, an angle point of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, in a southeasterly direction, coincident with the common line of the remainder of the 367.15 acre tract and said 1.54 acre tract the following four (4) courses;

1) S 30°02'22" E, a distance of 303.35 feet (Record S 27°20' E, 303.05 feet) to a 5/8-inch iron rod found, an angle point of the herein described tract;

2) S 08°06'32" W, a distance of 47.67 feet (Record S 11°02' W, 47.67 feet) to a 5/8-inch iron rod found, an angle point of the herein described tract;

3) S 24°41'28" E, a distance of 97.74 feet (Record S 21°46' E, 97.74 feet) to a 5/8-inch iron rod found, an angle point of the herein described tract;

4) S 05°33'25" W, a distance of 132.75 feet (Record N 08°23' 30" W, 132.90 feet) to a 1/2-inch iron rod found on the north line of the remainder of a called 41 acre tract of land (Tract 3) as conveyed unto Wallin Farm and Ranch Partnership, LTD. in Document Number 2004043044, Official Public Records of Williamson County, Texas, the southwest corner of the 1.54 acre tract and the southeast corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 82°40'21" W, coincident with the common line of the remainder of the 367.15 acre tract and said remainder of the 41 acre tract, a distance of 882.65 feet (Record N 79°45'00" W, 882.21 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 82°25'26" W, continuing coincident with said line, a distance of 222.64 feet (Record N 79°14'30' W, 222.64 feet) to a 1/2-inch iron rod with a cap stamped "MCANGUS SURVEYING" at the southeast corner of Glenwood, Phase 4B Final Plat as shown in Document Number 2007051616, Official Public Records of Williamson County Texas, the southwest corner of the 367.15 acre tract and the herein described tract;

THENCE, departing said common line, in a northerly direction, coincident with the common line of the remainder of the 367.15 acre tract and said Glenwood, Phase 4B Final Plat the following eight (8) courses;

1) N 47°40'09" E, passing at a distance of 215.64 feet a 1/2-inch iron rod found at the common corner of Lot 5 and Lot 6, said Glenwood, Phase 4B and continuing a total distance of 393.88 feet (Record N 50°08'25" E, 393.88 feet) to a 1/2-iron rod with a cap stamped "VARA LAND SURVEY", an angle point of the herein describe tract;

2) N 09°52'12" W, a distance of 402.95 feet (Record N 07°23'56" W, 402.86 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

3) N 08°21'28" E, passing a distance of 184.17 feet to a 1/2-inch iron rod found at the common corner of the right-of-way of Fishbaugh Lane (R.O.W. ~ 60') as shown on said plat of Glenwood, Phase 4B and Lot 1A, Amending Plat of Lot 14, Block C, Glenwood, Phase 4A And Lot 1, Block C, Glenwood, Phase 4B as recorded in Document Number 2008041948, Official Public Records of Williamson County Texas, and continuing coincident with the common line of the 367.15 acre tract and said Amending Plat a total distance of 618.28 feet (Record N 10°49'44" E, 618.14 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

4) N 23°37'35" W, a distance of 253.00 feet (Record N 21°09'19" W, 252.94 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

5) N 37°47'11" W, passing at a distance of 130.91 feet a 1/2-inch iron rod with a cap (not readable) found at the common corner of said Amending Plat and said Glenwood, Phase 4B Final Plat and continuing coincident with the common of the remainder of the 367.15 acre tract and said Glenwood Phase 4 Final Plat, a total distance of 300.83 feet (Record N 35°18'55" W, 300.76 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

6) N 36°44'56" E, a distance of 33.82 feet (Record N 39°13'12" E, 33.81 feet) to a 1/2-inch iron rod with a cap stamped "VARA LAND SURVEYING" found (disturbed), an angle point of the herein described tract;

7) N 09°45'43" E, a distance of 105.17 feet (Record N 12°13'59" E, 105.15 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

8) N 03°49'57" W, a distance of 80.55 feet (Record N 01°21'41" W, 80.12 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, at the common corner of said Glenwood, Phase 4B Final Plat and Glenwood Subdivision Phase 2A recorded in Document Number 2005009450, Official Public Records of Williamson County, Texas, an angle point of the herein described tract;

THENCE, N 68°36'49" E, coincident with the common line of the remainder of the 367.15 acre tract and said Glenwood Subdivision Phase 2A, passing at a distance of 130.56 feet a 1/2-inch iron rod with a cap stamped "DIAMOND SURVEYING" found at the common corner of said Glenwood Subdivision Phase 2A and Final Subdivision Plat of Glenwood, Phase 5 recorded in Document Number 2015064417, Official Public Records of Williamson County, Texas and continuing coincident with the common line of the remainder of the 367.15 acre tract and said Final Subdivision Plat of Glenwood, Phase 5, a total distance of 131.68 feet (Record N 71°05'48" E, 131.68 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

THENCE, in a northerly direction, coincident with the common line of the remainder of the 367.15 acre tract and said Final Subdivision Plat of Glenwood, Phase 5 the following nine (9) courses;

1) N 35°27'01" E, a distance of 261.78 feet (Record N 37°56'07" E, 261.78 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

2) N 18°05'26" E, a distance of 168.87 feet (Record N 20°34'32" E, 168.87 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

3) N 23°30'07" E, a distance of 193.50 feet (Record N 25°59'13" E, 193.50 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

4) N 12°03'26" E, a distance of 351.52 feet (Record N 14°32'32" E, 351.52 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

5) N 20°06'10" E, a distance of 239.67 feet (Record N 22°35'16" E, 239.67 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

6) N 09°10'51" E, a distance of 262.53 feet (Record N 11°39'57" E, 262.53 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

7) N 23°02'13" W, passing at a distance of 131.52 feet a 1/2-inch iron rod with a cap (unreadable) found and continuing a total distance of 501.47 feet (Record N 20°33'07" W, 501.47 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

8) N 63°11'02" W, a distance of 263.49 feet (Record N 60°41'56" W, 263.49 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

9) N 65°23'04" W, a distance of 103.10 feet (Record N 62°53'58" W, 103.10 feet) to a 1/2-inch iron rod with a cap stamped "DIAMOND SURVEYING" found on the east line of a called 167.461 acre tract of land conveyed unto Meritage Homes of Texas, LLC in Document Number 2018105406, Official Public Records of Williamson County Texas, the most northerly corner of said Final Subdivision Plat of Glenwood, Phase 5, a westerly corner of the herein described tract;

THENCE, N 07°33'56" E, coincident with the common line of the 367.15 acre tract and said 167.461 acre tract a distance of 643.54 feet (Record N 07°33'56" E, 643.67 feet) to a 5/8-inch iron rod found, an angle point of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 07°45'48" E, continuing coincident with said common line a distance of 1563.00 feet (Record N 10°38'30" E, 1,565.39 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the southwest corner of a called 46.2 acre tract of land with 17% interest conveyed unto Myron Thomas Johnston, II in Document Number 2011057142 and a called 46.14 acre tract of land with a 5/6 interest conveyed unto Leschber Investments, LP in Document Number 2010007503, Official Public Records of Williamson County, Texas, a corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, S 80°26'51" E, coincident with the common line of the remainder of the 367.15 acre tract and said 46.2 acre tract a distance of 784.53 feet (Record S 77°21'00" E, 785.62 feet) to a 1/2-inch iron rod found (bent) for the southeast corner of said 46.2 acre tract, a re-entrant corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 07°42'37" E, continuing coincident with said common line, a distance of 2603.60 feet (Record N 10°37'00" E, 2,602.65 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set on the south right-of-way line of County Road 199 (R.O.W. Varies) no reference found, at the common corner of the remainder of the 367.15 acre tract and the 46.2 acre tract, the most northwesterly corner of the herein described tract, from which a 1/2-inch iron rod with a cap stamped "BASELINE INC" found at the northwest corner of the 46.2 acre tract bears N 81°07'22" W, a distance of 781.88 feet;

THENCE, S 82°20'52" E, coincident with the common line of the remainder of the 367.15 acre tract and said south right-of-way line a distance of 722.73 feet (Record S 79°31'00" E, 722.73 feet) to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found at the northwest end of the curve return from the west right-of-way line of Branson Boulevard as shown in Document Number 2009067576, Official Public Records of Williamson County, Texas, a point of curvature of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, curving to the right, coincident with said curve return, an arc distance of 39.25 feet, a radius of 25.00 feet, a central angle of 89°57'08" and a chord bearing of S 37°22'18" E, (Record S 37°22'37" E) and a chord distance of 35.34 feet to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found at a point of tangency of the remainder of the 367.15 acre tract and the herein described tract;

THENCE in a southerly direction, coincident with the common line of the remainder of the 367.15 acre tract and the west right-of-way line of said Branson Boulevard the following seven (7) courses;

1) S 07°36'16" W, a distance of 81.03 feet (Record S 07°35'57" W, 81.02 feet) to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

2) Curving to the right, an arc distance of 231.22 feet, a radius of 1955.00 feet, a central angle of 06°46'35", a chord bearing of S 10°59'34" W, (Record S 10°59'15" W) and a chord distance of 231.08 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

3) S 14°22'51" W, a distance of 130.41 feet (Record S 14°22'32" W, 130.41 feet) to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

4) Curving to the left, an arc distance of 173.21 feet, a radius of 1545.00 feet, a central angle of 06°25'24", a chord bearing of S 11°10'09" W, (Record S 11°09'50" W) and a chord distance of 173.12 feet to a ½-inch iron rod with a cap stamped "BGE INC" set, a point of tangency of the herein described tract;

5) S 07°57'27" W, a distance of 2,675.72 feet (Record S 07°57'08" E, 2,675.72 feet) to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

6) Curving to the left, an arc distance of 600.23 feet, a radius of 1295.00 feet, a central angle of 26°33'23", a chord bearing of S 05°19'14" E, (Record S 05°19'44" E) a chord distance of 594.87 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

7) S 18°35'56" E, a distance of 57.25 feet (Record S 18°36'15" E, 57.25 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the south corner of said right-of-way, a re-entrant corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 46°27'34" E, coincident with the common line of the remainder of the 367.15 acre tract, the southeast end of said right-of-way and Lot 1, Block A, Meadows At Cottonwood Creek Phase One as shown on Document Number 2009067576, Official Public Records of Williamson County, Texas, a distance of 631.51 feet (Record N 46°27'15" E, 631.51 feet) to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found at angle point of a 4.855 acre tract of land conveyed unto Audrey Evans in Document Number 2010004677 and described in Document Number 2003097300 both recorded in the Official Public Records of Williamson County Texas, an angle point of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, in a northeasterly direction, coincident with the common line of the remainder of the 367.15 acre tract and said 4.855 acre tract the following five (5) courses;

1) N 52°49'21" E, a distance of 19.89 feet (Record N 52°57'35" E, 20.26 feet) to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found, an angle point of the herein described tract;

2) N 49°15'10" E, a distance of 102.08 feet (Record N 48°41'59" E, 101.22 feet) to a 1/2-inch iron rod with a cap stamped "MCANGUS SURVEYING" found, an angle point of the herein described tract;

3) N 38°02'42" E, a distance of 96.62 feet (Record N 38°03'07" E, 96.62 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

4) N 37°41'23" E, a distance of 125.99 feet (Record N 37°41'48" E, 125.99 feet) to a 1/2-inch iron rod with a cap stamped "MCANGUS SURVEYING" found, an angle point of the herein described tract;

5) N 66°38'01" E, a distance of 102.61 feet (Record N 66°38'26" E, 102.61 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set, on the south line of a called 50 acre tract (Third Tract) as conveyed unto Leschber Investments, LP in Document Number 2010007504, Official Public Records of Williamson County, Texas, an angle point of the herein described tract corner;

THENCE, S 82°13'58" E, coincident with the common line of the remainder of the 367.15 acre tract, said 50 acre tract, a called 43.34 acre tract of land conveyed unto Leschber Investments, LP in said Document Number 2010007504 and the aforementioned called 87.71 acre tract a distance of 1001.06 feet (Record S 79°15'00" E, 1,002.16 feet) to the **POINT OF BEGINNING** and containing 314.112 acres of land, more or less.

I hereby certify that these notes were prepared from a survey made on the ground by employees of BGE, Inc and are true and correct to the best of my knowledge. The Basis of Bearing recited herein is the Texas State Plane Coordinate System, Central Zone, NAD 83. A sketch accompanies this description.

Dion P. Albertson

Dion P. Albertson RPLS No. 4963
BGE, Inc.
7330 San Pedro Ave, Suite 202
San Antonio TX 78216
Telephone: 210-581-3600
TBPLS Licensed Surveying Firm No. 10194490

8/29/19
Date



Client: Lennar
Date: August 29, 2019
Job No: 6104-00

EXHIBIT A-2 – IMPROVEMENT AREA #1 LEGAL DESCRIPTION

EXHIBIT ____

Lennar-46.713 Acre Tract
ALTA/NSPS Land Title Survey

LEGAL DESCRIPTION

FIELD NOTES FOR A 46.713 ACRE TRACT OF LAND OUT OF THE WILLIAM GATLIN SURVEY ABSTRACT NO. 271, WILLIAMSON COUNTY, TEXAS; BEING A CALLED 46.2 ACRE TRACT OF LAND WITH 17% INTEREST CONVEYED UNTO MYRON THOMAS JOHNSTON, II IN DOCUMENT NUMBER 2011057142 AND A CALLED 46.14 ACRE TRACT OF LAND WITH A 5/6 INTEREST CONVEYED UNTO LESCHBER INVESTMENTS, LP IN DOCUMENT NUMBER 2010007503, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 46.713 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS AND SHOWN ON THE ATTACHED SKETCH:

BEGINNING at a 1/2-inch iron rod with cap stamped "Baseline Inc." found on the south right-of-way line of County Road 199 (R.O.W. Varies) no reference found, at the common corner of said 46.2 acre tract and a called 167.461 acre tract of land conveyed unto Meritage Homes of Texas, LLC in Document Number 2018105406, Official Public Records of Williamson County Texas and the northwest corner and **POINT OF BEGINNING** of the herein described tract;

THENCE, S 81°07'22" E, coincident with the common line of the 46.2 acre tract and said south right-of-way line, a distance of 781.88 feet (Record S 79°03'00" E, 764.04 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the common corner of the 46.2 acre tract and the remainder of a 367.15 acre tract of land (Exhibit "A") conveyed unto Hutto 372, LTD in Document Numbers 2003097296, 2003097297 and 2003097298, all recorded in Official Public Records of Williamson County, Texas, the northeast corner of the 46.2 acre tract and the herein described tract, from which a 1/2-inch iron rod with cap stamped "Baseline Inc." found on the south right-of-way line of said County Road 199, at the northwest end of the curve return from the west right-of-way line of Branson Boulevard as shown in Document Number 2009067576, Official Public Records of Williamson County, Texas bears S 82°20'52" E, a distance of 722.73 feet;

THENCE, S 07°42'37" W, departing said common line coincident with the common line of the 46.2 acre tract and the remainder of said 367.15 acre tract, a distance of 2603.60 feet (Record S 10°00'00" W, 2,598.44 feet) to a 1/2-inch iron rod (bent) found at the common corner of the 46.2 acre tract and the remainder of the 367.15 acre tract, the southeast corner of the herein described tract;

THENCE, N 80°26'51" W, continuing coincident with said common line, a distance of 784.53 feet (Record N 79°30'00" W, 781.39 feet) to a 1/2-inch iron rod with a cap stamped "BGE INC" set on the east line of the aforementioned 167.461 acre tract at the common corner of the 46.2 acre tract and the remainder of the 367.15 acre, the southwest corner of the herein described tract, from which a 5/8"-inch iron rod found at an angle point in the east line of the 167.461 acre tract bears S 07°45'48" W, a distance of 1,563.00 feet;

THENCE, N 07°45'48" E, coincident with the common line of the 46.2 acre tract and said 167.461 acre tract, a distance of 2594.31 feet (Record N 10°23'00" E, 2,604.35 feet) to the POINT OF BEGINNING and containing 46.713 acres of land more or less.

I hereby certify that these notes were prepared from a survey made on the ground by employees of BGE, Inc and are true and correct to the best of my knowledge. The Basis of Bearing recited herein is the Texas State Plane Coordinate System, Central Zone, NAD 83. A sketch accompanies this description.

Dion P. Albertson

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8/29/19
Date



Client: Lennar
Date: August 29, 2019
Job No: 6104-00

EXHIBIT ____

Takedown 1- 9.487 Acre Tract
Meadows at Cottonwood Creek, Phase One

LEGAL DESCRIPTION

FIELD NOTES FOR A 9.487 ACRE TRACT OF LAND OUT OF THE WILLIAM GATLIN SURVEY, ABSTRACT NO. 271, AND THE JAMES HICKMAN SURVEY, ABSTRACT NO. 291, WILLIAMSON COUNTY, TEXAS; CONSISTING OF THE EXISTING RIGHT-OF-WAY OF BRANSON BOULEVARD (ROW ~ 90') AND LOT 1, BLOCK "A" AS SHOWN ON THE PLAT OF MEADOWS AT COTTONWOOD CREEK, PHASE ONE, AS RECORDED IN DOCUMENT NUMBER 2009067576 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 9.487 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING at a 1/2-inch iron rod with cap stamped "BASELINE INC" found on the south right-of-way line of County Road 199 (R.O.W.~ varies) no reference found, at the most northerly northeast corner of the remainder of 367.15 acre tract of land (Exhibit "A") as conveyed unto Hutto 372, LTD in Document Numbers 2003097296, 2003097297, and 2003097298, all recorded in the Official Public Records of Williamson County, Texas, at the northwest corner of said Branson Boulevard, the northwest corner and POINT OF BEGINNING of the herein described tract;

THENCE, S 82°20'52" E, coincident with the south right-of-way line of said County Road 199 and the north right-of-way line of said Branson Boulevard, a distance of 54.98 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set on the west right-of-way line of County Road 132 (ROW ~ Varies), no reference found, at the northeast corner of the right-of-way of said Branson Boulevard, the northeast corner of the herein described tract;

THENCE, departing said south right-of-way line of County Road 199, coincident with said west right-of-way line of County Road 132, same being the east right-of-way line of said Branson Boulevard, the following three (3) courses:

1) S 07°35'33" W, a distance of 609.30 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, an angle point of the herein described tract;

2) S 08°57'58" W, a distance of 29.75 feet to a 5/8-inch iron rod found, a re-entrant corner of the herein described tract;

3) S 81°13'49" E, a distance of 20.77 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the northwest corner of a called 50 acre tract of land conveyed to Leschber Investment, LP in the Special Warranty Deed recorded in Document Number 2010007504 of the Official Public Records of Williamson County, Texas, an easterly corner of the herein described tract;

THENCE, S 07°57'27" W, coincident with the east right-of-way line of Branson Boulevard and the west line of said 50 acre tract, passing at a distance of 2,477.07 feet the southwest corner of said 50 acre tract, same being the northwest corner of a called 4.855 acre tract of land conveyed to Audrey Evans in Document Number 2010004677 of the Official Public Records of Williamson County, Texas, and continuing coincident with the east right-of-way line of Branson Boulevard and the west line of said 4.855 acre tract, a total distance of 2,675.76 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the common westerly corner of the 4.855 acre tract and Lot 1, Block "A" as shown on the aforementioned subdivision plat of Meadows at Cottonwood Creek, Phase One, being a point of curvature of said right-of-way line and an angle point of the herein described tract;

THENCE, in an easterly direction coincident with the common line of said Lot 1 and the 4.855 acre tract, the following three (3) courses;

1) S 26°27'39" E, a distance of 238.46 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

2) S 82°12'22" E, a distance of 270.89 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

3) N 52°49'21" E, a distance of 84.62 feet to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found on the easterly line of the remainder of a called 5.57 acre tract of land (Exhibit "B") as described in Document Numbers 2003097296, 2003097297, and 2003097298 of the Official Public Records of Williamson County, Texas, at the most easterly corner of Lot 1, the most easterly corner of the herein described tract

THENCE, S 46°27'34" W, coincident with the common line of the remainder of said 5.57 acre tract and said Lot 1, passing at a distance of 76.59 feet the common corner of the remainder of the 5.57 acre tract and the remainder of the 367.15 acre tract and continuing coincident with the common line of the remainder of the 367.15 acre tract and said Lot 1, passing at a distance of 532.25 feet the common corner of Lot 1 and the most easterly corner of the right-of-way line of said Branson Boulevard and continuing coincident with the common line of the remainder of the 367.15 acre tract and the terminal end of the right-of-way line of Branson Boulevard, a total distance of 631.51 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the south corner of said right-of-way line, the south corner of the herein described tract;

THENCE, in a northerly direction, coincident with the common line of the remainder of the 367.15 acre tract and the west right-of-way line of Branson Boulevard the following eight (8) courses;

1) N 18°35'56" W, a distance of 57.25 feet to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

2) Curving to the right, having a radius of 1,295.00 feet, an arc distance of 600.23 feet, a central angle of 26°33'23", a chord bearing of N 05°19'14" W, and a chord distance of 594.87 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

3) N 07°57'27" E, a distance of 2,675.72 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, a point of curvature of the herein described tract;

4) Curving to the right, having a radius of 1,545.00 feet, an arc distance of 173.21 feet, a central angle of 06°25'24", a chord bearing of N 11°10'09" E, and a chord distance of 173.12 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

5) N 14°22'51" E, a distance of 130.41 feet to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

6) Curving to the left, having a radius of 1,955.00 feet, an arc distance of 231.22 feet, a central angle of 06°46'35", a chord bearing of N 10°59'34" E, and a chord distance of 231.08 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

7) N 07°36'16" E, a distance of 81.03 feet to a 1/2-inch iron rod with a cap stamped "BASELINE INC" found, a point of curvature of the herein described tract;

8) Curving to the left, having a radius of 25.00 feet, an arc distance of 39.25 feet, a central angle of 89°57'08", a chord bearing of N 37°22'18" W, and a chord distance of 35.34 feet to the POINT OF BEGINNING and containing 9.487 acres of land, more or less.

I hereby certify that these notes were prepared from a survey made on the ground by employees of BGE, Inc and are true and correct to the best of my knowledge. The Basis of Bearing recited herein is the Texas State Plane Coordinate System, Central Zone, NAD 83. A sketch accompanies this description.

Dion P. Albertson RPLS No. 4963
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TBPLS Licensed Surveying Firm No. 10194490

11/14/19
Date

STATE OF TEXAS REGISTERED DION P. ALBERTSON 4963 PROFESSIONAL LAND SURVEYOR

Client: Lennar
Date: November 14, 2019
Job No: 6104-00

EXHIBIT ____ Takedown 1-130.141 Acre Tract

LEGAL DESCRIPTION

FIELD NOTES FOR A 130.141 ACRE TRACT OF LAND OUT OF THE WILLIAM GATLIN SURVEY, ABSTRACT NO. 271, AND THE JAMES HICKMAN SURVEY, ABSTRACT NO. 291, WILLIAMSON COUNTY, TEXAS; BEING A PORTION OF THE REMAINING PORTION OF A CALLED 367.15 ACRE TRACT OF LAND (EXHIBIT "A") AS CONVEYED UNTO HUTTO 372, LTD. IN DOCUMENT NUMBERS 2003097296, 2003097297 AND 2003097298, RECORDED IN THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 130.141 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING at a 1/2-inch iron rod with cap stamped "Baseline Inc." found on the south right-of-way line of County Road 199 (R.O.W.~ varies) no reference found, at the northwest corner of the called 46.2 acre tract of land with 17% interest conveyed to Myron Thomas Johnston II in the Special Warranty Deed recorded in Document Number 2011057142 of the Official Public Records of Williamson County, Texas, same being the called 46.14 acre tract of land with a 5/6 interest conveyed to Leschber Investments, LP in the Special Warranty Deed recorded in Document Number 2010007503 of the Official Public Records of Williamson County, Texas, and the northeast corner of a called 167.461 acre tract of land conveyed unto Meritage Homes of Texas, LLC in the Special Warranty Deed recorded in Document Number 2018105406 of the Official Public Records of Williamson County, Texas;

THENCE, S 81°07'22" E, coincident with the common line of said 46.2 acre tract and said south right-of-way line of County Road 199, a distance of 781.88 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the common northeast corner of said 46.2 acre tract and northwest corner of said remainder of the 367.15 acre tract, the northwest corner and **POINT OF BEGINNING** of the herein described tract;

THENC, S 82°20'52" E, coincident with the common line of the remainder of the 367.15 acre tract and said south right-of-way line, a distance of 722.73 feet a 1/2-inch iron rod with cap stamped "BASELINE INC." found at the most northerly northeast corner of said remainder of 367.15 acre tract and the northwest end of the curve return from the west right-of-way line of Branson Boulevard, as shown in Document Number 2009067576 of the Official Public Records of Williamson County, Texas, the northeast corner of the herein described tract;

THENCE, curving to the right, coincident with said curve return, having a radius of 25.00 feet, an arc distance of 39.25 feet, a central angle of 89°57'08", a chord bearing of S 37°22'18" E, and a chord distance of 35.34 feet to a 1/2-inch iron rod with cap stamped "BASELINE INC." found at the southeast end of said curve return, a point of tangency of the herein described tract;

THENCE, in a southerly direction, coincident with the common line of the remainder of the 367.15 acre tract and the west right-of-way line of said Branson Boulevard the following six (6) courses;

1) S 07°36'16" W, a distance of 81.03 feet to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

2) Curving to the right, having a radius of 1,955.00 feet, an arc distance of 231.22 feet, a central angle of 06°46'35", a chord bearing of S 10°59'34" W, and a chord distance of 231.08 feet to a 1/2-inch iron rod found (disturbed), a point of tangency of the herein described tract;

3) S 14°22'51" W, a distance of 130.41 feet to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

4) Curving to the left, having a radius of 1,545.00 feet, an arc distance of 173.21 feet, a central angle of 06°25'24", a chord bearing of S 11°10'09" W, and a chord distance of 173.12 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, a point of tangency of the herein described tract;

5) S 07°57'27" W, a distance of 2,675.72 feet to a 1/2-inch iron rod found (disturbed), a point of curvature of the herein described tract;

6) Curving to the left, having a radius of 1,295.00 feet, an arc distance of 29.35 feet, a central angle of 01°17'55", a chord bearing of S 07°18'30" W, and a chord distance of 29.35 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the end of this curve, an easterly corner of the herein described tract;

THENCE, departing the west right-of-way line of Branson Boulevard, over and across the remainder of said 367.15 acre tract the following twelve (12) courses;

1) S 67°10'48" W, a distance of 520.71 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, the beginning of a non-tangent curve to the right;

2) Curving to the right with a radius of 40.00 feet, an arc distance of 62.83 feet, a central angle of 90°00'00", a chord bearing of S 67°49'12" E, and a chord distance of 56.57 feet to a 1/2-inh iron rod with cap stamped "BGE INC" set, a point of tangency of the herein described tract;

3) S 22°49'12" E, a distance of 436.09 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, a point of curvature of the herein described tract;

4) Curving to the left with a radius of 840.00 feet, an arc distance of 379.96 feet, a central angle of 25°55'00", a chord bearing of S 35°46'42" E, and a chord distance a of 376.73 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, a point of reverse curvature of the herein described tract;

5) Curving to the right with a radius of 15.00 feet, an arc distance of 22.77 feet, a central angle of 86°58'59", a chord bearing of S 05°14'43" E, and a chord distance of 20.65 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, a point of tangency of the herein described tract;

6) S 38°14'46" W, a distance of 195.88 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, a corner of the herein described tract;

7) N 51°45'14" W, a distance of 120.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, a re-entrant corner of the herein described tract;

8) S 38°13'23" W, a distance of 281.87 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, a point of curvature of the herein described tract;

9) Curving to the left with a radius of 650.00 feet, an arc distance of 282.90 feet, a central angle of 24°56'12", a chord bearing S 24°42'23" W, and a chord distance of 280.67 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the end of this curve, a corner of the herein described tract;

10) N 82°24'38" W, a distance of 41.42 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, a re-entrant corner of the herein described tract;

11) S 08°21'05" W, a distance of 1,268.34 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set, the southeast corner of the herein described tract;

12) N 82°22'00" W, a distance of 570.54 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set on the common westerly line of the remainder of the 367.15 acre tract and easterly line of Final Subdivision Plat of Glenwood, Phase 5, a subdivision as recorded in Document Number 2015064417 of the Official Public Records of Williamson County, Texas, the southwest corner of the herein described tract;

THENCE, in a northerly direction, coincident with the common line of the remainder of the 367.15 acre tract and said Final Subdivision Plat of Glenwood, Phase 5 the following six (6) courses;

1) N 12°03'26" E, a distance of 351.52 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

2) N 20°06'10" E, a distance of 239.67 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

3) N 09°10'51" E, a distance of 262.53 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

4) N 23°02'13" W, passing at a distance of 131.52 feet a 1/2-inch iron rod with a cap (unreadable) found and continuing a total distance of 501.47 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

5) N 63°11'02" W, a distance of 263.49 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set, an angle point of the herein described tract;

6) N 65°23'04" W, a distance of 103.10 feet to a 1/2-inch iron rod with a cap stamped "DIAMOND SURVEYING" found on the east line of a called 167.461 acre tract of land conveyed unto Meritage Homes of Texas, LLC in Document Number 2018105406, Official Public Records of Williamson County Texas, the most northerly corner of said Final Subdivision Plat of Glenwood, Phase 5, a westerly corner of the herein described tract;

THENCE, N 07°33'56" E, coincident with the common line of the remainder of the 367.15 acre tract and said 167.461 acre tract a distance of 643.54 feet to a 5/8-inch iron rod found, an angle point of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 07°45'48" E, continuing coincident with said common line a distance of 1,563.00 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the southwest corner of the aforementioned called 46.2 acre tract of land, a corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, S 80°26'51" E, coincident with the common line of the remainder of the 367.15 acre tract and said 46.2 acre tract a distance of 784.53 feet to a 1/2-inch iron rod found (bent) for the southeast corner of said 46.2 acre tract, a re-entrant corner of the remainder of the 367.15 acre tract and the herein described tract;

THENCE, N 07°42'37" E, continuing coincident with said common line, a distance of 2,603.60 feet to the POINT OF BEGINNING and containing 130.141 acres of land more or less;

I hereby certify that these notes were prepared from a survey made on the ground by employees of BGE, Inc and are true and correct to the best of my knowledge. The Basis of Bearing recited herein is the Texas State Plane Coordinate System, Central Zone, NAD 83. A sketch accompanies this description.

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TBPLS Licensed Surveying Firm No. 10194490

10/15/19
Date

STATE OF TEXAS
REGISTERED
DION P. ALBERTSON
4963
PROFESSIONAL
LAND SURVEYOR

Client: Lennar
Date: October 15, 2019
Job No: 6104-00

EXHIBIT B-1 – DISTRICT BOUNDARY MAP

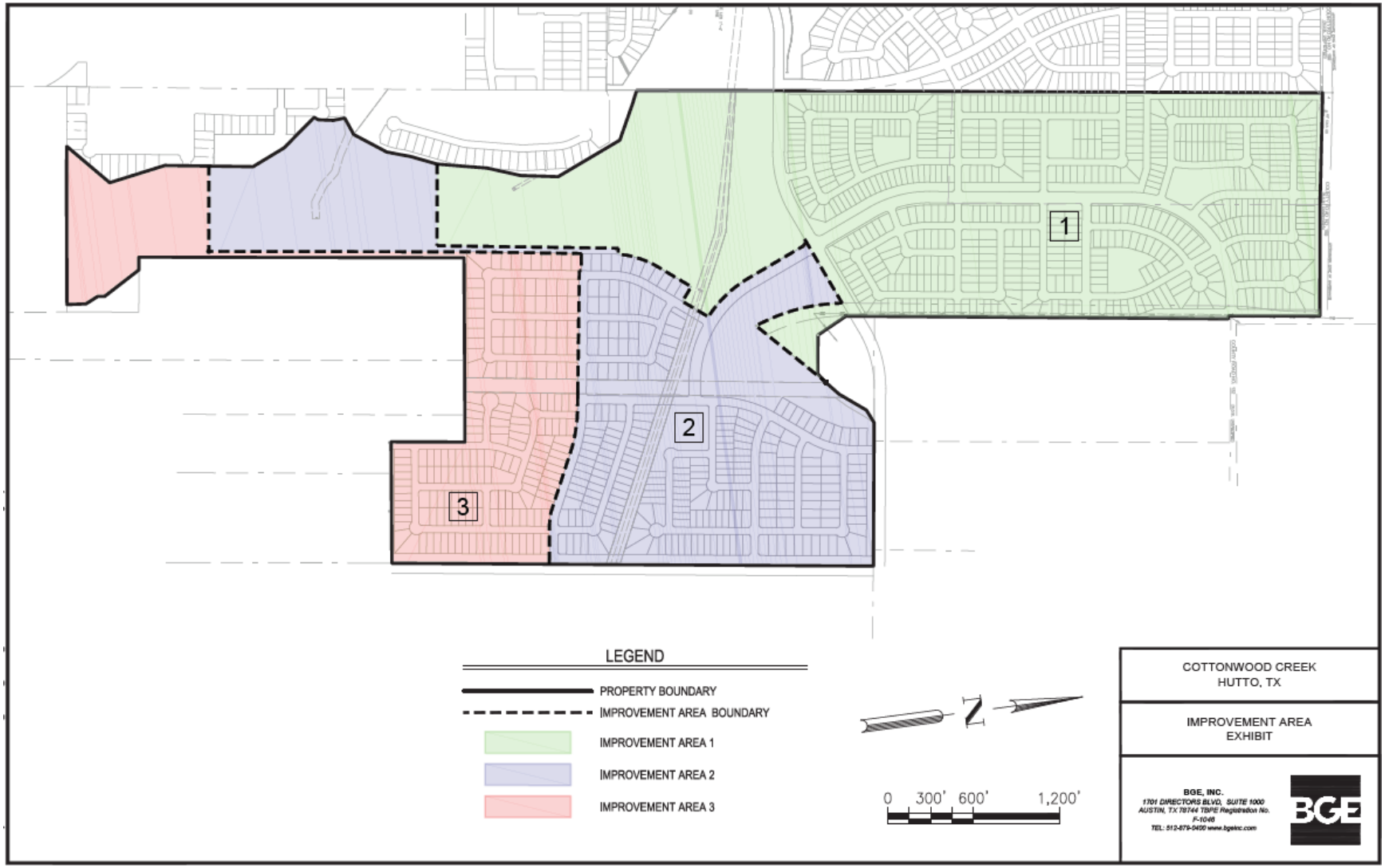


EXHIBIT B-2 – IMPROVEMENT AREA #1 BOUNDARY MAP

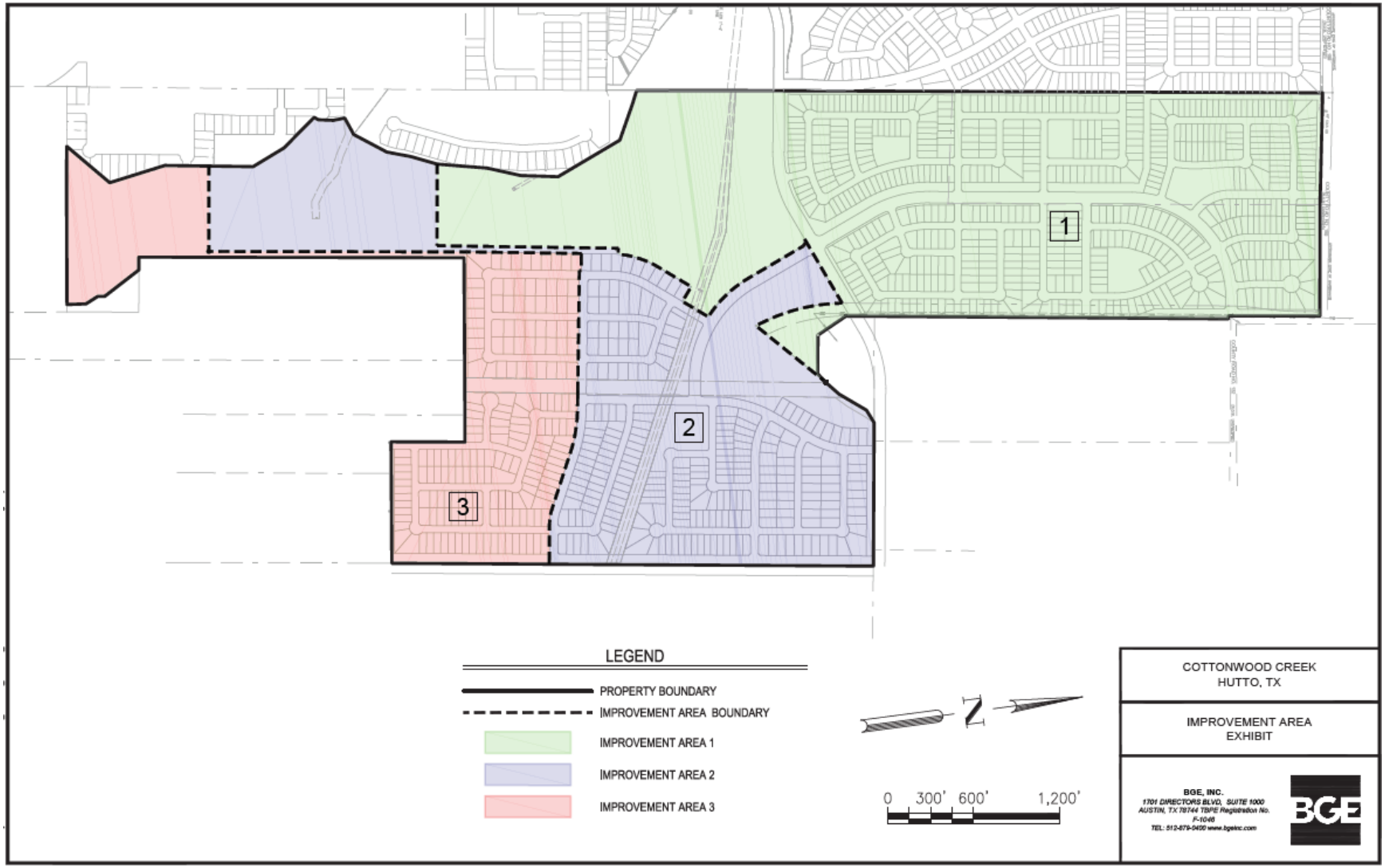


EXHIBIT C – AUTHORIZED IMPROVEMENTS

	Total Costs [a]	Owner Funded Improvements	Improvement Area #1
Improvement Area #1 Improvements			
Water	$ 2,201,224	$ -	$ 2,201,224
Drainage	4,098,093	-	4,098,093
Streets	7,211,005	-	7,211,005
	$ 13,510,321	**$ -**	**$ 13,510,321**
Owner Funded Improvements			
Wastewater	$ 2,466,675	$ 2,466,675	$ -
	$ 2,466,675	**$ 2,466,675**	**$ -**
Bond Issuance Costs and District Formation Expenses			
Debt Service Reserve Fund [b]	$ 611,013	$ -	$ 611,013
Capitalized Interest [b]	-	-	-
Underwriter Discount [b]	306,450	-	306,450
Cost of Issuance [b]	612,900	-	612,900
First Year Annual Collection Costs	35,000	-	35,000
	$ 1,565,363	**$ -**	**$ 1,565,363**
Total	**$ 17,542,359**	**$ 2,466,675**	**$ 15,075,684**

[a] Per the Engineer's Report prepared by BGE, Inc. dated May 2021.
[b] The amounts shown for Bond Issuance Costs are estimates and are subject to change if PID Bonds are issued.

EXHIBIT D – SERVICE PLAN

Improvement Area #1						
Installments Due		**1/31/2022**	**1/31/2023**	**1/31/2024**	**1/31/2025**	**1/31/2026**
Principal		$ 175,000.00	$ 180,000.00	$ 190,000.00	$ 200,000.00	$ 205,000.00
Interest		434,137.50	426,700.00	419,050.00	410,975.00	402,475.00
Capitalized Interest		-	-	-	-	-
	(1)	$ 609,137.50	$ 606,700.00	$ 609,050.00	$ 610,975.00	$ 607,475.00
Annual Collection Costs	(2)	$ 35,000.00	$ 35,700.00	$ 36,414.00	$ 37,142.28	$ 37,885.13
Additional Interest [a]	(3)	$ -	$ -	$ -	$ -	$ -
Total Annual Installment	**(4) = (1) + (2) + (3)**	**$ 644,137.50**	**$ 642,400.00**	**$ 645,464.00**	**$ 648,117.28**	**$ 645,360.13**

[a] Additional Interest will be collected if PID Bonds are issued.

EXHIBIT E – SOURCES AND USES

		Improvement Area #1
Sources of Funds		
Owner Advance [a]	$	10,215,000
Owner Contribution [b]		7,327,359
Total Sources	**$**	**17,542,359**
Uses of Funds		
Improvement Area #1 Improvements	$	13,510,321
Owner Funded Improvements		2,466,675
	$	**15,976,996**
Bond Issuance Costs and District Formation Expenses		
Debt Service Reserve Fund [c]	$	611,013
Capitalized Interest [c]		-
Underwriter's Discount [c]		306,450
Cost of Issuance [c]		612,900
First Year's Annual Collection Costs		35,000
	$	1,565,363
Total Uses	**$**	**17,542,359**

[a] Reimbursable to Owner pursuant to Reimbursement Agreement.

[b] Not subject to reimbursement to Owner.

[c] The amounts shown for Bond Issuance Costs are estimates and are subject to change if PID Bonds are issued.

EXHIBIT F – IMPROVEMENT AREA #1 ASSESSMENT ROLL

Property ID	Legal Description	Lot Type	Improvement Area #1 Outstanding Assessment	Improvement Area #1 Installment Due 1/31/2022
R602994	COTTONWOOD PH 1, BLOCK B, Lot 1	Non-Benefitted Property	$ -	$ -
R602995	COTTONWOOD PH 1, BLOCK B, Lot 2	1	$ 16,058.45	$ 1,012.61
R602996	COTTONWOOD PH 1, BLOCK B, Lot 3	1	$ 16,058.45	$ 1,012.61
R602997	COTTONWOOD PH 1, BLOCK B, Lot 4	1	$ 16,058.45	$ 1,012.61
R602998	COTTONWOOD PH 1, BLOCK B, Lot 5	1	$ 16,058.45	$ 1,012.61
R602999	COTTONWOOD PH 1, BLOCK B, Lot 6	1	$ 16,058.45	$ 1,012.61
R603000	COTTONWOOD PH 1, BLOCK B, Lot 7	1	$ 16,058.45	$ 1,012.61
R603001	COTTONWOOD PH 1, BLOCK B, Lot 8	1	$ 16,058.45	$ 1,012.61
R603002	COTTONWOOD PH 1, BLOCK B, Lot 9	1	$ 16,058.45	$ 1,012.61
R603003	COTTONWOOD PH 1, BLOCK B, Lot 10	1	$ 16,058.45	$ 1,012.61
R603004	COTTONWOOD PH 1, BLOCK B, Lot 11	1	$ 16,058.45	$ 1,012.61
R603005	COTTONWOOD PH 1, BLOCK B, Lot 12	1	$ 16,058.45	$ 1,012.61
R603006	COTTONWOOD PH 1, BLOCK B, Lot 13	1	$ 16,058.45	$ 1,012.61
R603007	COTTONWOOD PH 1, BLOCK B, Lot 14	1	$ 16,058.45	$ 1,012.61
R603008	COTTONWOOD PH 1, BLOCK B, Lot 15	1	$ 16,058.45	$ 1,012.61
R603009	COTTONWOOD PH 1, BLOCK B, Lot 16	1	$ 16,058.45	$ 1,012.61
R603010	COTTONWOOD PH 1, BLOCK B, Lot 17	1	$ 16,058.45	$ 1,012.61
R603011	COTTONWOOD PH 1, BLOCK B, Lot 18	1	$ 16,058.45	$ 1,012.61
R603012	COTTONWOOD PH 1, BLOCK B, Lot 19	1	$ 16,058.45	$ 1,012.61
R603013	COTTONWOOD PH 1, BLOCK B, Lot 20	1	$ 16,058.45	$ 1,012.61
R603014	COTTONWOOD PH 1, BLOCK B, Lot 21	1	$ 16,058.45	$ 1,012.61
R603015	COTTONWOOD PH 1, BLOCK B, Lot 22	1	$ 16,058.45	$ 1,012.61
R603016	COTTONWOOD PH 1, BLOCK B, Lot 23	2	$ 20,515.95	$ 1,293.69
R603017	COTTONWOOD PH 1, BLOCK B, Lot 24	2	$ 20,515.95	$ 1,293.69
R603018	COTTONWOOD PH 1, BLOCK B, Lot 25	Duplex	$ 28,573.75	$ 1,801.80
R603019	COTTONWOOD PH 1, BLOCK B, Lot 26	Duplex	$ 28,573.75	$ 1,801.80
R603020	COTTONWOOD PH 1, BLOCK B, Lot 27	3	$ 25,430.63	$ 1,603.61
R603021	COTTONWOOD PH 1, BLOCK B, Lot 28	3	$ 25,430.63	$ 1,603.61
R603022	COTTONWOOD PH 1, BLOCK B, Lot 29	2	$ 20,515.95	$ 1,293.69
R603023	COTTONWOOD PH 1, BLOCK B, Lot 30	2	$ 20,515.95	$ 1,293.69
R603024	COTTONWOOD PH 1, BLOCK B, Lot 31	2	$ 20,515.95	$ 1,293.69
R603025	COTTONWOOD PH 1, BLOCK B, Lot 32	2	$ 20,515.95	$ 1,293.69
R603026	COTTONWOOD PH 1, BLOCK B, Lot 33	2	$ 20,515.95	$ 1,293.69
R603027	COTTONWOOD PH 1, BLOCK B, Lot 34	2	$ 20,515.95	$ 1,293.69
R603028	COTTONWOOD PH 1, BLOCK B, Lot 35	2	$ 20,515.95	$ 1,293.69
R603029	COTTONWOOD PH 1, BLOCK B, Lot 36	2	$ 20,515.95	$ 1,293.69
R603030	COTTONWOOD PH 1, BLOCK B, Lot 37	2	$ 20,515.95	$ 1,293.69
R603031	COTTONWOOD PH 1, BLOCK B, Lot 38	2	$ 20,515.95	$ 1,293.69
R603032	COTTONWOOD PH 1, BLOCK B, Lot 39	Non-Benefitted Property	$ -	$ -
R603033	COTTONWOOD PH 1, BLOCK D, Lot 1	Non-Benefitted Property	$ -	$ -

.

Property ID	Legal Description	Lot Type	Improvement Area #1 Outstanding Assessment	Improvement Area #1 Installment Due 1/31/2022
R603034	COTTONWOOD PH 1, BLOCK E, Lot 1	1	$ 16,058.45	$ 1,012.61
R603035	COTTONWOOD PH 1, BLOCK E, Lot 2	1	$ 16,058.45	$ 1,012.61
R603036	COTTONWOOD PH 1, BLOCK E, Lot 3	1	$ 16,058.45	$ 1,012.61
R603037	COTTONWOOD PH 1, BLOCK E, Lot 4	1	$ 16,058.45	$ 1,012.61
R603038	COTTONWOOD PH 1, BLOCK E, Lot 5	1	$ 16,058.45	$ 1,012.61
R603039	COTTONWOOD PH 1, BLOCK E, Lot 6	1	$ 16,058.45	$ 1,012.61
R603040	COTTONWOOD PH 1, BLOCK E, Lot 7	1	$ 16,058.45	$ 1,012.61
R603041	COTTONWOOD PH 1, BLOCK E, Lot 8	1	$ 16,058.45	$ 1,012.61
R603042	COTTONWOOD PH 1, BLOCK E, Lot 9	1	$ 16,058.45	$ 1,012.61
R603043	COTTONWOOD PH 1, BLOCK E, Lot 10	1	$ 16,058.45	$ 1,012.61
R603044	COTTONWOOD PH 1, BLOCK E, Lot 11	1	$ 16,058.45	$ 1,012.61
R603045	COTTONWOOD PH 1, BLOCK E, Lot 12	1	$ 16,058.45	$ 1,012.61
R603046	COTTONWOOD PH 1, BLOCK E, Lot 13	1	$ 16,058.45	$ 1,012.61
R603047	COTTONWOOD PH 1, BLOCK E, Lot 14	1	$ 16,058.45	$ 1,012.61
R603048	COTTONWOOD PH 1, BLOCK E, Lot 15	1	$ 16,058.45	$ 1,012.61
R603049	COTTONWOOD PH 1, BLOCK E, Lot 16	1	$ 16,058.45	$ 1,012.61
R603050	COTTONWOOD PH 1, BLOCK E, Lot 17	1	$ 16,058.45	$ 1,012.61
R603051	COTTONWOOD PH 1, BLOCK E, Lot 18	1	$ 16,058.45	$ 1,012.61
R603052	COTTONWOOD PH 1, BLOCK E, Lot 19	1	$ 16,058.45	$ 1,012.61
R603053	COTTONWOOD PH 1, BLOCK E, Lot 20	1	$ 16,058.45	$ 1,012.61
R603054	COTTONWOOD PH 1, BLOCK E, Lot 21	1	$ 16,058.45	$ 1,012.61
R603055	COTTONWOOD PH 1, BLOCK E, Lot 22	1	$ 16,058.45	$ 1,012.61
R603056	COTTONWOOD PH 1, BLOCK E, Lot 23	1	$ 16,058.45	$ 1,012.61
R603057	COTTONWOOD PH 1, BLOCK E, Lot 24	1	$ 16,058.45	$ 1,012.61
R603058	COTTONWOOD PH 1, BLOCK E, Lot 25	1	$ 16,058.45	$ 1,012.61
R603059	COTTONWOOD PH 1, BLOCK E, Lot 26	1	$ 16,058.45	$ 1,012.61
R603060	COTTONWOOD PH 1, BLOCK F, Lot 1	Non-Benefitted Property	$ -	$ -
R603061	COTTONWOOD PH 1, BLOCK F, Lot 2	2	$ 20,515.95	$ 1,293.69
R603062	COTTONWOOD PH 1, BLOCK F, Lot 3	2	$ 20,515.95	$ 1,293.69
R603063	COTTONWOOD PH 1, BLOCK F, Lot 4	2	$ 20,515.95	$ 1,293.69
R603064	COTTONWOOD PH 1, BLOCK F, Lot 5	2	$ 20,515.95	$ 1,293.69
R603065	COTTONWOOD PH 1, BLOCK F, Lot 6	2	$ 20,515.95	$ 1,293.69
R603066	COTTONWOOD PH 1, BLOCK F, Lot 7	2	$ 20,515.95	$ 1,293.69
R603067	COTTONWOOD PH 1, BLOCK F, Lot 8	2	$ 20,515.95	$ 1,293.69
R603068	COTTONWOOD PH 1, BLOCK F, Lot 9	2	$ 20,515.95	$ 1,293.69
R603069	COTTONWOOD PH 1, BLOCK F, Lot 10	2	$ 20,515.95	$ 1,293.69
R603070	COTTONWOOD PH 1, BLOCK F, Lot 11	2	$ 20,515.95	$ 1,293.69
R603071	COTTONWOOD PH 1, BLOCK F, Lot 12	2	$ 20,515.95	$ 1,293.69
R603072	COTTONWOOD PH 1, BLOCK F, Lot 13	2	$ 20,515.95	$ 1,293.69
R603073	COTTONWOOD PH 1, BLOCK F, Lot 14	2	$ 20,515.95	$ 1,293.69

Property ID	Legal Description	Lot Type	Improvement Area #1	
			Outstanding Assessment	Installment Due 1/31/2022
R603074	COTTONWOOD PH 1, BLOCK F, Lot 15	2	$ 20,515.95	$ 1,293.69
R603075	COTTONWOOD PH 1, BLOCK F, Lot 16	2	$ 20,515.95	$ 1,293.69
R603076	COTTONWOOD PH 1, BLOCK G, Lot 1	2	$ 20,515.95	$ 1,293.69
R603077	COTTONWOOD PH 1, BLOCK G, Lot 2	2	$ 20,515.95	$ 1,293.69
R603078	COTTONWOOD PH 1, BLOCK G, Lot 3	2	$ 20,515.95	$ 1,293.69
R603079	COTTONWOOD PH 1, BLOCK G, Lot 4	2	$ 20,515.95	$ 1,293.69
R603080	COTTONWOOD PH 1, BLOCK G, Lot 5	2	$ 20,515.95	$ 1,293.69
R603081	COTTONWOOD PH 1, BLOCK G, Lot 6	Non-Benefitted Property	$ -	$ -
R603082	COTTONWOOD PH 1, BLOCK G, Lot 7	2	$ 20,515.95	$ 1,293.69
R603083	COTTONWOOD PH 1, BLOCK G, Lot 8	2	$ 20,515.95	$ 1,293.69
R603084	COTTONWOOD PH 1, BLOCK G, Lot 9	2	$ 20,515.95	$ 1,293.69
R603085	COTTONWOOD PH 1, BLOCK G, Lot 10	2	$ 20,515.95	$ 1,293.69
R603086	COTTONWOOD PH 1, BLOCK G, Lot 11	2	$ 20,515.95	$ 1,293.69
R603087	COTTONWOOD PH 1, BLOCK G, Lot 12	2	$ 20,515.95	$ 1,293.69
R603088	COTTONWOOD PH 1, BLOCK G, Lot 13	2	$ 20,515.95	$ 1,293.69
R603089	COTTONWOOD PH 1, BLOCK G, Lot 14	2	$ 20,515.95	$ 1,293.69
R603090	COTTONWOOD PH 1, BLOCK G, Lot 15	2	$ 20,515.95	$ 1,293.69
R603091	COTTONWOOD PH 1, BLOCK G, Lot 16	2	$ 20,515.95	$ 1,293.69
R603092	COTTONWOOD PH 1, BLOCK G, Lot 17	2	$ 20,515.95	$ 1,293.69
R603093	COTTONWOOD PH 1, BLOCK G, Lot 18	2	$ 20,515.95	$ 1,293.69
R603094	COTTONWOOD PH 1, BLOCK G, Lot 19	2	$ 20,515.95	$ 1,293.69
R603095	COTTONWOOD PH 1, BLOCK G, Lot 20	2	$ 20,515.95	$ 1,293.69
R603096	COTTONWOOD PH 1, BLOCK G, Lot 21	2	$ 20,515.95	$ 1,293.69
R603097	COTTONWOOD PH 1, BLOCK G, Lot 22	2	$ 20,515.95	$ 1,293.69
R603098	COTTONWOOD PH 1, BLOCK H, Lot 1	Non-Benefitted Property	$ -	$ -
R603099	COTTONWOOD PH 1, BLOCK H, Lot 2	2	$ 20,515.95	$ 1,293.69
R603100	COTTONWOOD PH 1, BLOCK H, Lot 3	2	$ 20,515.95	$ 1,293.69
R603101	COTTONWOOD PH 1, BLOCK H, Lot 4	2	$ 20,515.95	$ 1,293.69
R603102	COTTONWOOD PH 1, BLOCK H, Lot 5	2	$ 20,515.95	$ 1,293.69
R603103	COTTONWOOD PH 1, BLOCK H, Lot 6	2	$ 20,515.95	$ 1,293.69
R603104	COTTONWOOD PH 1, BLOCK H, Lot 7	2	$ 20,515.95	$ 1,293.69
R603105	COTTONWOOD PH 1, BLOCK H, Lot 8	2	$ 20,515.95	$ 1,293.69
R603106	COTTONWOOD PH 1, BLOCK H, Lot 9	2	$ 20,515.95	$ 1,293.69
R603107	COTTONWOOD PH 1, BLOCK H, Lot 10	2	$ 20,515.95	$ 1,293.69
R603108	COTTONWOOD PH 1, BLOCK H, Lot 11	2	$ 20,515.95	$ 1,293.69
R603109	COTTONWOOD PH 1, BLOCK H, Lot 12	2	$ 20,515.95	$ 1,293.69
R603110	COTTONWOOD PH 1, BLOCK H, Lot 13	2	$ 20,515.95	$ 1,293.69
R603111	COTTONWOOD PH 1, BLOCK H, Lot 14	2	$ 20,515.95	$ 1,293.69
R603112	COTTONWOOD PH 1, BLOCK H, Lot 15	2	$ 20,515.95	$ 1,293.69
R603113	COTTONWOOD PH 1, BLOCK H, Lot 16	2	$ 20,515.95	$ 1,293.69

Property ID	Legal Description	Lot Type	Improvement Area #1	
			Outstanding Assessment	Installment Due 1/31/2022
R603114	COTTONWOOD PH 1, BLOCK H, Lot 17	2	$ 20,515.95	$ 1,293.69
R603115	COTTONWOOD PH 1, BLOCK H, Lot 18	2	$ 20,515.95	$ 1,293.69
R603116	COTTONWOOD PH 1, BLOCK H, Lot 19	2	$ 20,515.95	$ 1,293.69
R603117	COTTONWOOD PH 1, BLOCK H, Lot 20	2	$ 20,515.95	$ 1,293.69
R603118	COTTONWOOD PH 1, BLOCK H, Lot 21	2	$ 20,515.95	$ 1,293.69
R603119	COTTONWOOD PH 1, BLOCK H, Lot 22	2	$ 20,515.95	$ 1,293.69
R603120	COTTONWOOD PH 1, BLOCK H, Lot 23	2	$ 20,515.95	$ 1,293.69
R603121	COTTONWOOD PH 1, BLOCK I, Lot 1	Non-Benefitted Property	$ -	$ -
R603122	COTTONWOOD PH 1, BLOCK I, Lot 2	2	$ 20,515.95	$ 1,293.69
R603123	COTTONWOOD PH 1, BLOCK I, Lot 3	2	$ 20,515.95	$ 1,293.69
R603124	COTTONWOOD PH 1, BLOCK I, Lot 4	2	$ 20,515.95	$ 1,293.69
R603125	COTTONWOOD PH 1, BLOCK I, Lot 5	2	$ 20,515.95	$ 1,293.69
R603126	COTTONWOOD PH 1, BLOCK I, Lot 6	2	$ 20,515.95	$ 1,293.69
R603127	COTTONWOOD PH 1, BLOCK I, Lot 7	2	$ 20,515.95	$ 1,293.69
R603128	COTTONWOOD PH 1, BLOCK I, Lot 8	2	$ 20,515.95	$ 1,293.69
R603129	COTTONWOOD PH 1, BLOCK I, Lot 9	2	$ 20,515.95	$ 1,293.69
R603130	COTTONWOOD PH 1, BLOCK I, Lot 10	2	$ 20,515.95	$ 1,293.69
R603131	COTTONWOOD PH 1, BLOCK I, Lot 11	2	$ 20,515.95	$ 1,293.69
R603132	COTTONWOOD PH 1, BLOCK I, Lot 12	2	$ 20,515.95	$ 1,293.69
R603133	COTTONWOOD PH 1, BLOCK I, Lot 13	2	$ 20,515.95	$ 1,293.69
R603134	COTTONWOOD PH 1, BLOCK I, Lot 14	2	$ 20,515.95	$ 1,293.69
R603135	COTTONWOOD PH 1, BLOCK I, Lot 15	2	$ 20,515.95	$ 1,293.69
R603136	COTTONWOOD PH 1, BLOCK I, Lot 16	2	$ 20,515.95	$ 1,293.69
R603137	COTTONWOOD PH 1, BLOCK I, Lot 17	2	$ 20,515.95	$ 1,293.69
R603138	COTTONWOOD PH 1, BLOCK I, Lot 18	2	$ 20,515.95	$ 1,293.69
R603139	COTTONWOOD PH 1, BLOCK I, Lot 19	2	$ 20,515.95	$ 1,293.69
R603140	COTTONWOOD PH 1, BLOCK I, Lot 20	2	$ 20,515.95	$ 1,293.69
R603141	COTTONWOOD PH 1, BLOCK I, Lot 21	2	$ 20,515.95	$ 1,293.69
R603142	COTTONWOOD PH 1, BLOCK I, Lot 22	2	$ 20,515.95	$ 1,293.69
R603143	COTTONWOOD PH 1, BLOCK I, Lot 23	2	$ 20,515.95	$ 1,293.69
R603144	COTTONWOOD PH 1, BLOCK J, Lot 1	2	$ 20,515.95	$ 1,293.69
R603145	COTTONWOOD PH 1, BLOCK J, Lot 2	2	$ 20,515.95	$ 1,293.69
R603146	COTTONWOOD PH 1, BLOCK J, Lot 3	2	$ 20,515.95	$ 1,293.69
R603147	COTTONWOOD PH 1, BLOCK J, Lot 4	2	$ 20,515.95	$ 1,293.69
R603148	COTTONWOOD PH 1, BLOCK J, Lot 5	2	$ 20,515.95	$ 1,293.69
R603149	COTTONWOOD PH 1, BLOCK J, Lot 6	2	$ 20,515.95	$ 1,293.69
R603150	COTTONWOOD PH 1, BLOCK J, Lot 7	2	$ 20,515.95	$ 1,293.69
R603151	COTTONWOOD PH 1, BLOCK J, Lot 8	2	$ 20,515.95	$ 1,293.69
R603152	COTTONWOOD PH 1, BLOCK J, Lot 9	2	$ 20,515.95	$ 1,293.69
R603153	COTTONWOOD PH 1, BLOCK J, Lot 10	2	$ 20,515.95	$ 1,293.69

Property ID	Legal Description	Lot Type	Improvement Area #1	
			Outstanding Assessment	Installment Due 1/31/2022
R603154	COTTONWOOD PH 1, BLOCK J, Lot 11	2	$ 20,515.95	$ 1,293.69
R603155	COTTONWOOD PH 1, BLOCK J, Lot 12	2	$ 20,515.95	$ 1,293.69
R603156	COTTONWOOD PH 1, BLOCK J, Lot 13	2	$ 20,515.95	$ 1,293.69
R603157	COTTONWOOD PH 1, BLOCK J, Lot 14	2	$ 20,515.95	$ 1,293.69
R603158	COTTONWOOD PH 1, BLOCK J, Lot 15	2	$ 20,515.95	$ 1,293.69
R603159	COTTONWOOD PH 1, BLOCK L, Lot 1	2	$ 20,515.95	$ 1,293.69
R603160	COTTONWOOD PH 1, BLOCK L, Lot 2	2	$ 20,515.95	$ 1,293.69
R020578	Improvement Area #1 Unplatted Parcel	[a]	$ 2,000,080.36	$ 126,121.07
R602991	Improvement Area #1 Unplatted Parcel	[a]	$ 26,303.00	$ 1,658.61
R587039	Improvement Area #1 Unplatted Parcel	[a]	$ 5,118,196.16	$ 322,743.23
Total			**$ 10,215,000.00**	**$ 644,137.50**

[a] For billing purposes only, until a plat has been recorded within the Improvement Area #1 Unplatted Parcel, the Annual Installment will be billed to each Tax Parcel within the Improvement Area #1 Unplatted Parcel based on the acreage of the Tax Parcel as calculated by the Williamson Central Appraisal District.

EXHIBIT G-1 – IMPROVEMENT AREA #1 ANNUAL INSTALLMENTS

Installments Due	Principal	Interest [a]	Capitalized Interest	Additional Interest [b]	Annual Collection Costs	Annual Installment
1/31/2022	$ 175,000.00	$ 434,137.50	$ -	$ -	$ 35,000.00	$ 644,137.50
1/31/2023	$ 180,000.00	$ 426,700.00	$ -	$ -	$ 35,700.00	$ 642,400.00
1/31/2024	$ 190,000.00	$ 419,050.00	$ -	$ -	$ 36,414.00	$ 645,464.00
1/31/2025	$ 200,000.00	$ 410,975.00	$ -	$ -	$ 37,142.28	$ 648,117.28
1/31/2026	$ 205,000.00	$ 402,475.00	$ -	$ -	$ 37,885.13	$ 645,360.13
1/31/2027	$ 215,000.00	$ 393,762.50	$ -	$ -	$ 38,642.83	$ 647,405.33
1/31/2028	$ 225,000.00	$ 384,625.00	$ -	$ -	$ 39,415.68	$ 649,040.68
1/31/2029	$ 235,000.00	$ 375,062.50	$ -	$ -	$ 40,204.00	$ 650,266.50
1/31/2030	$ 245,000.00	$ 365,075.00	$ -	$ -	$ 41,008.08	$ 651,083.08
1/31/2031	$ 255,000.00	$ 354,662.50	$ -	$ -	$ 41,828.24	$ 651,490.74
1/31/2032	$ 265,000.00	$ 343,825.00	$ -	$ -	$ 42,664.80	$ 651,489.80
1/31/2033	$ 275,000.00	$ 332,562.50	$ -	$ -	$ 43,518.10	$ 651,080.60
1/31/2034	$ 285,000.00	$ 320,875.00	$ -	$ -	$ 44,388.46	$ 650,263.46
1/31/2035	$ 300,000.00	$ 308,762.50	$ -	$ -	$ 45,276.23	$ 654,038.73
1/31/2036	$ 315,000.00	$ 296,012.50	$ -	$ -	$ 46,181.76	$ 657,194.26
1/31/2037	$ 325,000.00	$ 282,625.00	$ -	$ -	$ 47,105.39	$ 654,730.39
1/31/2038	$ 340,000.00	$ 268,812.50	$ -	$ -	$ 48,047.50	$ 656,860.00
1/31/2039	$ 355,000.00	$ 254,362.50	$ -	$ -	$ 49,008.45	$ 658,370.95
1/31/2040	$ 370,000.00	$ 239,275.00	$ -	$ -	$ 49,988.62	$ 659,263.62
1/31/2041	$ 385,000.00	$ 223,550.00	$ -	$ -	$ 50,988.39	$ 659,538.39
1/31/2042	$ 400,000.00	$ 207,187.50	$ -	$ -	$ 52,008.16	$ 659,195.66
1/31/2043	$ 420,000.00	$ 190,187.50	$ -	$ -	$ 53,048.32	$ 663,235.82
1/31/2044	$ 435,000.00	$ 172,337.50	$ -	$ -	$ 54,109.29	$ 661,446.79
1/31/2045	$ 455,000.00	$ 153,850.00	$ -	$ -	$ 55,191.47	$ 664,041.47
1/31/2046	$ 475,000.00	$ 134,512.50	$ -	$ -	$ 56,295.30	$ 665,807.80
1/31/2047	$ 495,000.00	$ 114,325.00	$ -	$ -	$ 57,421.21	$ 666,746.21
1/31/2048	$ 515,000.00	$ 93,287.50	$ -	$ -	$ 58,569.63	$ 666,857.13
1/31/2049	$ 535,000.00	$ 71,400.00	$ -	$ -	$ 59,741.03	$ 666,141.03
1/31/2050	$ 560,000.00	$ 48,662.50	$ -	$ -	$ 60,935.85	$ 669,598.35
1/31/2051	$ 585,000.00	$ 24,862.50	$ -	$ -	$ 62,154.56	$ 672,017.06
Total	**$ 10,215,000.00**	**$ 8,047,800.00**	**$ -**	**$ -**	**$ 1,419,882.77**	**$19,682,682.77**

[a] Interest is calculated at a 4.25% rate, which is 2% above the Bond Buyer's 20 Bond Index as of 5/11/2021.

[b] Additional Interest will be collected if PID Bonds are issued.

Note: The figures shown above are estimates only and subject to change in annual service plan updates. Changes in administrative expenses, reserve fund requirements, interest earnings, or other available offsets could increase or decrease the amounts shown.

EXHIBIT G-2 – LOT TYPE DUPLEX ANNUAL INSTALLMENTS

Installments Due	Principal	Interest [a]	Capitalized Interest	Additional Interest	Annual Collection Costs	Annual Installment
1/31/2022	$ 489.52	$ 1,214.38	$ -	$ -	$ 97.90	$ 1,801.80
1/31/2023	$ 503.50	$ 1,193.58	$ -	$ -	$ 99.86	$ 1,796.94
1/31/2024	$ 531.47	$ 1,172.18	$ -	$ -	$ 101.86	$ 1,805.51
1/31/2025	$ 559.45	$ 1,149.59	$ -	$ -	$ 103.90	$ 1,812.94
1/31/2026	$ 573.43	$ 1,125.82	$ -	$ -	$ 105.97	$ 1,805.22
1/31/2027	$ 601.41	$ 1,101.45	$ -	$ -	$ 108.09	$ 1,810.94
1/31/2028	$ 629.38	$ 1,075.89	$ -	$ -	$ 110.25	$ 1,815.52
1/31/2029	$ 657.35	$ 1,049.14	$ -	$ -	$ 112.46	$ 1,818.95
1/31/2030	$ 685.32	$ 1,021.20	$ -	$ -	$ 114.71	$ 1,821.23
1/31/2031	$ 713.29	$ 992.07	$ -	$ -	$ 117.00	$ 1,822.37
1/31/2032	$ 741.27	$ 961.76	$ -	$ -	$ 119.34	$ 1,822.37
1/31/2033	$ 769.24	$ 930.26	$ -	$ -	$ 121.73	$ 1,821.22
1/31/2034	$ 797.21	$ 897.56	$ -	$ -	$ 124.16	$ 1,818.94
1/31/2035	$ 839.17	$ 863.68	$ -	$ -	$ 126.65	$ 1,829.50
1/31/2036	$ 881.13	$ 828.02	$ -	$ -	$ 129.18	$ 1,838.33
1/31/2037	$ 909.10	$ 790.57	$ -	$ -	$ 131.76	$ 1,831.43
1/31/2038	$ 951.06	$ 751.93	$ -	$ -	$ 134.40	$ 1,837.39
1/31/2039	$ 993.02	$ 711.51	$ -	$ -	$ 137.09	$ 1,841.62
1/31/2040	$ 1,034.98	$ 669.31	$ -	$ -	$ 139.83	$ 1,844.11
1/31/2041	$ 1,076.94	$ 625.32	$ -	$ -	$ 142.63	$ 1,844.88
1/31/2042	$ 1,118.89	$ 579.55	$ -	$ -	$ 145.48	$ 1,843.92
1/31/2043	$ 1,174.84	$ 532.00	$ -	$ -	$ 148.39	$ 1,855.23
1/31/2044	$ 1,216.80	$ 482.07	$ -	$ -	$ 151.36	$ 1,850.22
1/31/2045	$ 1,272.74	$ 430.35	$ -	$ -	$ 154.38	$ 1,857.48
1/31/2046	$ 1,328.69	$ 376.26	$ -	$ -	$ 157.47	$ 1,862.42
1/31/2047	$ 1,384.63	$ 319.79	$ -	$ -	$ 160.62	$ 1,865.05
1/31/2048	$ 1,440.58	$ 260.95	$ -	$ -	$ 163.83	$ 1,865.36
1/31/2049	$ 1,496.52	$ 199.72	$ -	$ -	$ 167.11	$ 1,863.35
1/31/2050	$ 1,566.45	$ 136.12	$ -	$ -	$ 170.45	$ 1,873.02
1/31/2051	$ 1,636.38	$ 69.55	$ -	$ -	$ 173.86	$ 1,879.79
Total	**$ 28,573.75**	**$ 22,511.58**	**$ -**	**$ -**	**$ 3,971.74**	**$ 55,057.07**

[a] Interest is calculated at a 4.25% rate, which is 2% above the Bond Buyer's 20 Bond Index as of 5/11/2021.

[b] Additional Interest will be collected if PID Bonds are issued.

Note: The figures shown above are estimates only and subject to change in annual service plan updates. Changes in administrative expenses, reserve fund requirements, interest earnings, or other available offsets could increase or decrease the amounts shown.

EXHIBIT G-3 – LOT TYPE 1 ANNUAL INSTALLMENTS

Installments Due	Principal	Interest [a]	Capitalized Interest	Additional Interest	Annual Collection Costs	Annual Installment
1/31/2022	$ 275.11	$ 682.48	$ -	$ -	$ 55.02	$ 1,012.61
1/31/2023	$ 282.97	$ 670.79	$ -	$ -	$ 56.12	$ 1,009.88
1/31/2024	$ 298.69	$ 658.77	$ -	$ -	$ 57.24	$ 1,014.70
1/31/2025	$ 314.41	$ 646.07	$ -	$ -	$ 58.39	$ 1,018.87
1/31/2026	$ 322.27	$ 632.71	$ -	$ -	$ 59.56	$ 1,014.54
1/31/2027	$ 337.99	$ 619.01	$ -	$ -	$ 60.75	$ 1,017.75
1/31/2028	$ 353.71	$ 604.65	$ -	$ -	$ 61.96	$ 1,020.32
1/31/2029	$ 369.43	$ 589.62	$ -	$ -	$ 63.20	$ 1,022.25
1/31/2030	$ 385.15	$ 573.91	$ -	$ -	$ 64.47	$ 1,023.53
1/31/2031	$ 400.87	$ 557.55	$ -	$ -	$ 65.76	$ 1,024.17
1/31/2032	$ 416.59	$ 540.51	$ -	$ -	$ 67.07	$ 1,024.17
1/31/2033	$ 432.31	$ 522.80	$ -	$ -	$ 68.41	$ 1,023.53
1/31/2034	$ 448.03	$ 504.43	$ -	$ -	$ 69.78	$ 1,022.24
1/31/2035	$ 471.61	$ 485.39	$ -	$ -	$ 71.18	$ 1,028.18
1/31/2036	$ 495.19	$ 465.35	$ -	$ -	$ 72.60	$ 1,033.14
1/31/2037	$ 510.91	$ 444.30	$ -	$ -	$ 74.05	$ 1,029.27
1/31/2038	$ 534.50	$ 422.59	$ -	$ -	$ 75.53	$ 1,032.61
1/31/2039	$ 558.08	$ 399.87	$ -	$ -	$ 77.04	$ 1,034.99
1/31/2040	$ 581.66	$ 376.15	$ -	$ -	$ 78.58	$ 1,036.39
1/31/2041	$ 605.24	$ 351.43	$ -	$ -	$ 80.16	$ 1,036.82
1/31/2042	$ 628.82	$ 325.71	$ -	$ -	$ 81.76	$ 1,036.29
1/31/2043	$ 660.26	$ 298.98	$ -	$ -	$ 83.39	$ 1,042.64
1/31/2044	$ 683.84	$ 270.92	$ -	$ -	$ 85.06	$ 1,039.82
1/31/2045	$ 715.28	$ 241.86	$ -	$ -	$ 86.76	$ 1,043.90
1/31/2046	$ 746.72	$ 211.46	$ -	$ -	$ 88.50	$ 1,046.68
1/31/2047	$ 778.16	$ 179.72	$ -	$ -	$ 90.27	$ 1,048.16
1/31/2048	$ 809.60	$ 146.65	$ -	$ -	$ 92.07	$ 1,048.33
1/31/2049	$ 841.04	$ 112.24	$ -	$ -	$ 93.92	$ 1,047.20
1/31/2050	$ 880.35	$ 76.50	$ -	$ -	$ 95.79	$ 1,052.64
1/31/2051	$ 919.65	$ 39.08	$ -	$ -	$ 97.71	$ 1,056.44
Total	**$ 16,058.45**	**$ 12,651.51**	**$ -**	**$ -**	**$ 2,232.12**	**$ 30,942.07**

[a] Interest is calculated at a 4.25% rate, which is 2% above the Bond Buyer's 20 Bond Index as of 5/11/2021.

[b] Additional Interest will be collected if PID Bonds are issued.

Note: The figures shown above are estimates only and subject to change in annual service plan updates. Changes in administrative expenses, reserve fund requirements, interest earnings, or other available offsets could increase or decrease the amounts shown.

EXHIBIT G-4 – LOT TYPE 2 ANNUAL INSTALLMENTS

Installments Due	Principal	Interest [a]	Capitalized Interest	Additional Interest	Annual Collection Costs	Annual Installment
1/31/2022	$ 351.47	$ 871.93	$ -	$ -	$ 70.29	$ 1,293.69
1/31/2023	$ 361.51	$ 856.99	$ -	$ -	$ 71.70	$ 1,290.21
1/31/2024	$ 381.60	$ 841.63	$ -	$ -	$ 73.13	$ 1,296.36
1/31/2025	$ 401.68	$ 825.41	$ -	$ -	$ 74.60	$ 1,301.69
1/31/2026	$ 411.72	$ 808.34	$ -	$ -	$ 76.09	$ 1,296.15
1/31/2027	$ 431.81	$ 790.84	$ -	$ -	$ 77.61	$ 1,300.26
1/31/2028	$ 451.89	$ 772.49	$ -	$ -	$ 79.16	$ 1,303.54
1/31/2029	$ 471.98	$ 753.28	$ -	$ -	$ 80.75	$ 1,306.00
1/31/2030	$ 492.06	$ 733.22	$ -	$ -	$ 82.36	$ 1,307.64
1/31/2031	$ 512.15	$ 712.31	$ -	$ -	$ 84.01	$ 1,308.46
1/31/2032	$ 532.23	$ 690.54	$ -	$ -	$ 85.69	$ 1,308.46
1/31/2033	$ 552.31	$ 667.92	$ -	$ -	$ 87.40	$ 1,307.64
1/31/2034	$ 572.40	$ 644.45	$ -	$ -	$ 89.15	$ 1,306.00
1/31/2035	$ 602.52	$ 620.12	$ -	$ -	$ 90.93	$ 1,313.58
1/31/2036	$ 632.65	$ 594.52	$ -	$ -	$ 92.75	$ 1,319.92
1/31/2037	$ 652.73	$ 567.63	$ -	$ -	$ 94.61	$ 1,314.97
1/31/2038	$ 682.86	$ 539.89	$ -	$ -	$ 96.50	$ 1,319.25
1/31/2039	$ 712.99	$ 510.87	$ -	$ -	$ 98.43	$ 1,322.28
1/31/2040	$ 743.11	$ 480.56	$ -	$ -	$ 100.40	$ 1,324.07
1/31/2041	$ 773.24	$ 448.98	$ -	$ -	$ 102.41	$ 1,324.63
1/31/2042	$ 803.37	$ 416.12	$ -	$ -	$ 104.45	$ 1,323.94
1/31/2043	$ 843.53	$ 381.98	$ -	$ -	$ 106.54	$ 1,332.05
1/31/2044	$ 873.66	$ 346.13	$ -	$ -	$ 108.67	$ 1,328.46
1/31/2045	$ 913.83	$ 308.99	$ -	$ -	$ 110.85	$ 1,333.67
1/31/2046	$ 954.00	$ 270.16	$ -	$ -	$ 113.06	$ 1,337.22
1/31/2047	$ 994.16	$ 229.61	$ -	$ -	$ 115.33	$ 1,339.10
1/31/2048	$ 1,034.33	$ 187.36	$ -	$ -	$ 117.63	$ 1,339.33
1/31/2049	$ 1,074.50	$ 143.40	$ -	$ -	$ 119.98	$ 1,337.89
1/31/2050	$ 1,124.71	$ 97.73	$ -	$ -	$ 122.38	$ 1,344.83
1/31/2051	$ 1,174.92	$ 49.93	$ -	$ -	$ 124.83	$ 1,349.69
Total	**$ 20,515.95**	**$ 16,163.31**	**$ -**	**$ -**	**$ 2,851.71**	**$ 39,530.98**

[a] Interest is calculated at a 4.25% rate, which is 2% above the Bond Buyer's 20 Bond Index as of 5/11/2021.

[b] Additional Interest will be collected if PID Bonds are issued.

Note: The figures shown above are estimates only and subject to change in annual service plan updates. Changes in administrative expenses, reserve fund requirements, interest earnings, or other available offsets could increase or decrease the amounts shown.

EXHIBIT G-5 – LOT TYPE 3 ANNUAL INSTALLMENTS

Installments Due	Principal	Interest [a]	Capitalized Interest	Additional Interest	Annual Collection Costs	Annual Installment
1/31/2022	$ 435.67	$ 1,080.80	$ -	$ -	$ 87.13	$ 1,603.61
1/31/2023	$ 448.12	$ 1,062.29	$ -	$ -	$ 88.88	$ 1,599.28
1/31/2024	$ 473.01	$ 1,043.24	$ -	$ -	$ 90.65	$ 1,606.91
1/31/2025	$ 497.91	$ 1,023.14	$ -	$ -	$ 92.47	$ 1,613.51
1/31/2026	$ 510.36	$ 1,001.98	$ -	$ -	$ 94.32	$ 1,606.65
1/31/2027	$ 535.25	$ 980.29	$ -	$ -	$ 96.20	$ 1,611.74
1/31/2028	$ 560.15	$ 957.54	$ -	$ -	$ 98.13	$ 1,615.81
1/31/2029	$ 585.04	$ 933.73	$ -	$ -	$ 100.09	$ 1,618.86
1/31/2030	$ 609.94	$ 908.87	$ -	$ -	$ 102.09	$ 1,620.90
1/31/2031	$ 634.83	$ 882.95	$ -	$ -	$ 104.13	$ 1,621.91
1/31/2032	$ 659.73	$ 855.97	$ -	$ -	$ 106.22	$ 1,621.91
1/31/2033	$ 684.62	$ 827.93	$ -	$ -	$ 108.34	$ 1,620.89
1/31/2034	$ 709.52	$ 798.83	$ -	$ -	$ 110.51	$ 1,618.86
1/31/2035	$ 746.86	$ 768.68	$ -	$ -	$ 112.72	$ 1,628.25
1/31/2036	$ 784.20	$ 736.93	$ -	$ -	$ 114.97	$ 1,636.11
1/31/2037	$ 809.10	$ 703.61	$ -	$ -	$ 117.27	$ 1,629.98
1/31/2038	$ 846.44	$ 669.22	$ -	$ -	$ 119.62	$ 1,635.28
1/31/2039	$ 883.79	$ 633.25	$ -	$ -	$ 122.01	$ 1,639.04
1/31/2040	$ 921.13	$ 595.68	$ -	$ -	$ 124.45	$ 1,641.26
1/31/2041	$ 958.47	$ 556.54	$ -	$ -	$ 126.94	$ 1,641.95
1/31/2042	$ 995.82	$ 515.80	$ -	$ -	$ 129.48	$ 1,641.09
1/31/2043	$ 1,045.61	$ 473.48	$ -	$ -	$ 132.07	$ 1,651.15
1/31/2044	$ 1,082.95	$ 429.04	$ -	$ -	$ 134.71	$ 1,646.70
1/31/2045	$ 1,132.74	$ 383.02	$ -	$ -	$ 137.40	$ 1,653.16
1/31/2046	$ 1,182.53	$ 334.87	$ -	$ -	$ 140.15	$ 1,657.55
1/31/2047	$ 1,232.32	$ 284.62	$ -	$ -	$ 142.95	$ 1,659.89
1/31/2048	$ 1,282.11	$ 232.24	$ -	$ -	$ 145.81	$ 1,660.17
1/31/2049	$ 1,331.90	$ 177.75	$ -	$ -	$ 148.73	$ 1,658.38
1/31/2050	$ 1,394.14	$ 121.15	$ -	$ -	$ 151.70	$ 1,666.99
1/31/2051	$ 1,456.38	$ 61.90	$ -	$ -	$ 154.74	$ 1,673.01
Total	**$ 25,430.63**	**$ 20,035.31**	**$ -**	**$ -**	**$ 3,534.85**	**$ 49,000.79**

[a] Interest is calculated at a 4.25% rate, which is 2% above the Bond Buyer's 20 Bond Index as of 5/11/2021.

[b] Additional Interest will be collected if PID Bonds are issued.

Note: The figures shown above are estimates only and subject to change in annual service plan updates. Changes in administrative expenses, reserve fund requirements, interest earnings, or other available offsets could increase or decrease the amounts shown.

EXHIBIT H – MAXIMUM ASSESSMENT

Lot Size	Lot Type	Units	Total Assessment	Maximum Assessment per Lot Type [a]
Improvement Area #1				
60'	Duplex	4	$ 114,295	$28,573.75 Per Unit
40'	1	233	$ 3,741,618	$16,058.45 Per Unit
50'	2	305	$ 6,257,365	$20,515.95 Per Unit
70'	3	4	$ 101,723	$25,430.63 Per Unit

[a] The Maximum Assessment per Lot Type will be reduced annually by the principal payments made as part of the Annual Installment.

EXHIBIT I – MAP OF IMPROVEMENT AREA #1 IMPROVEMENTS

[Maps provided show total district improvements. Developer, please provide map of just Improvement Area #1 Improvements.]

EXHIBIT J – NOTICE OF ASSESSMENT TERMINATION

P3Works, LLC
9284 Huntington Square, Suite 100
North Richland Hills, TX 76182

[Date]
Williamson County Clerk's Office
Honorable [County Clerk Name]
Williamson County Clerk
405 Martin Luther King Jr St
Georgetown, TX 78626

Re: **City of Hutto Lien Release documents for filing**

Dear Ms./Mr. [County Clerk Name],

Enclosed is a lien release that the City of Hutto is requesting to be filed in your office. Lien release for [insert legal description]. Recording Numbers: [Plat]. Please forward copies of the filed documents below:

City of Hutto
Attn: Holly Nagy
500 W Live Oak St
Hutto, TX 78634

Please contact me if you have any questions or need additional information.

Sincerely,
[Signature]

Jon Snyder
P: (888) 417-7074
admin@p3-works.com

AFTER RECORDING RETURN TO:

[City Secretary Name]
500 W Live Oak St
Hutto, TX 78634

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

FULL RELEASE OF PUBLIC IMPROVEMENT DISTRICT LIEN

STATE OF TEXAS	**§**	
	§	**KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF WILLIAMSON	**§**	

THIS FULL RELEASE OF PUBLIC IMPROVEMENT DISTRICT LIEN (this "Full Release") is executed and delivered as of the Effective Date by the City of Hutto, Texas, a Texas home rule municipality.

RECITALS

WHEREAS, the governing body (hereinafter referred to as the "City Council") of the City of Hutto, Texas (hereinafter referred to as the "City "), is authorized by Chapter 372, Texas Local Government Code, as amended (hereinafter referred to as the "Act"), to create public improvement districts within the corporate limits and extraterritorial jurisdiction of the City; and

WHEREAS, on or about April 1, 2021, the City Council for the City, approved Resolution No. R-2021-029, creating the Cottonwood Creek Public Improvement District; and

WHEREAS, the Cottonwood Creek Public Improvement District consists of approximately 370.312 contiguous acres located within the extraterritorial jurisdiction of the City; and

WHEREAS, on or about _____, the City Council, approved Ordinance No. ____, (hereinafter referred to as the "Assessment Ordinance") approving a service and assessment plan and assessment roll for the Property within Improvement Area #1 of the Cottonwood Creek Public Improvement District; and

WHEREAS, the Assessment Ordinance imposed an assessment in the amount of $_____ (hereinafter referred to as the "Lien Amount") for the following property:

[legal description], a subdivision in Williamson County, Texas, according to the map or plat of record in Document/Instrument No. _____ of the Plat Records of Williamson County, Texas (hereinafter referred to as the "Property"); and

WHEREAS, the property owners of the Property have paid unto the City the Lien Amount.

RELEASE

NOW THEREFORE, the City, the owner and holder of the Lien, Instrument No. _____, in the Real Property Records of Williamson County, Texas, in the amount of the Lien Amount against the Property releases and discharges, and by these presents does hereby release and discharge, the above-described Property from said lien held by the undersigned securing said indebtedness.

EXECUTED to be **EFFECTIVE** this the _____ day of _____, 20__.

CITY OF Hutto, TEXAS,
A Texas home rule municipality,

By: _____
Warren Hutmacher, City Manager

ATTEST:

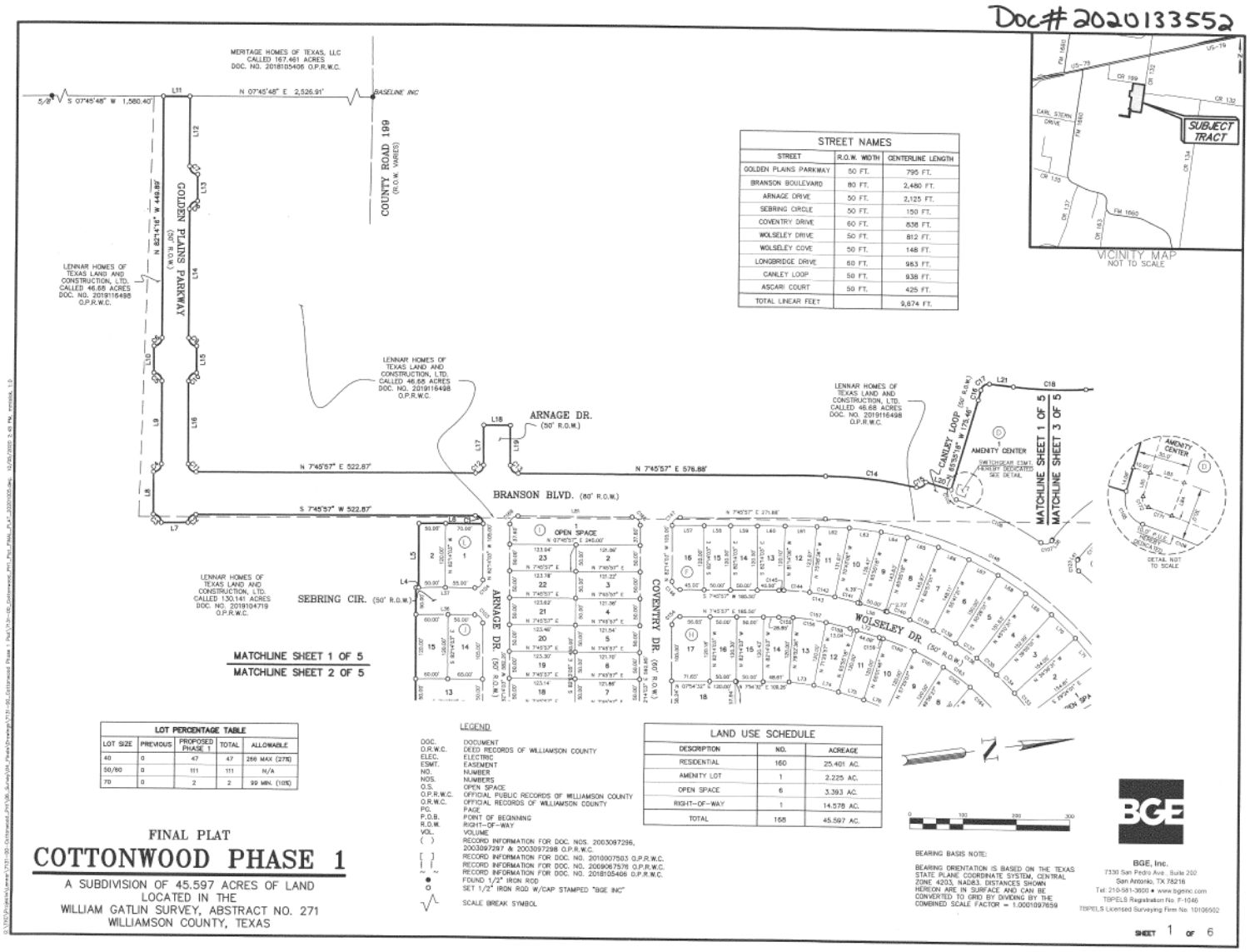
_____
Holly Nagy, City Secretary

STATE OF TEXAS **§**
§
COUNTY OF WILLIAMSON **§**

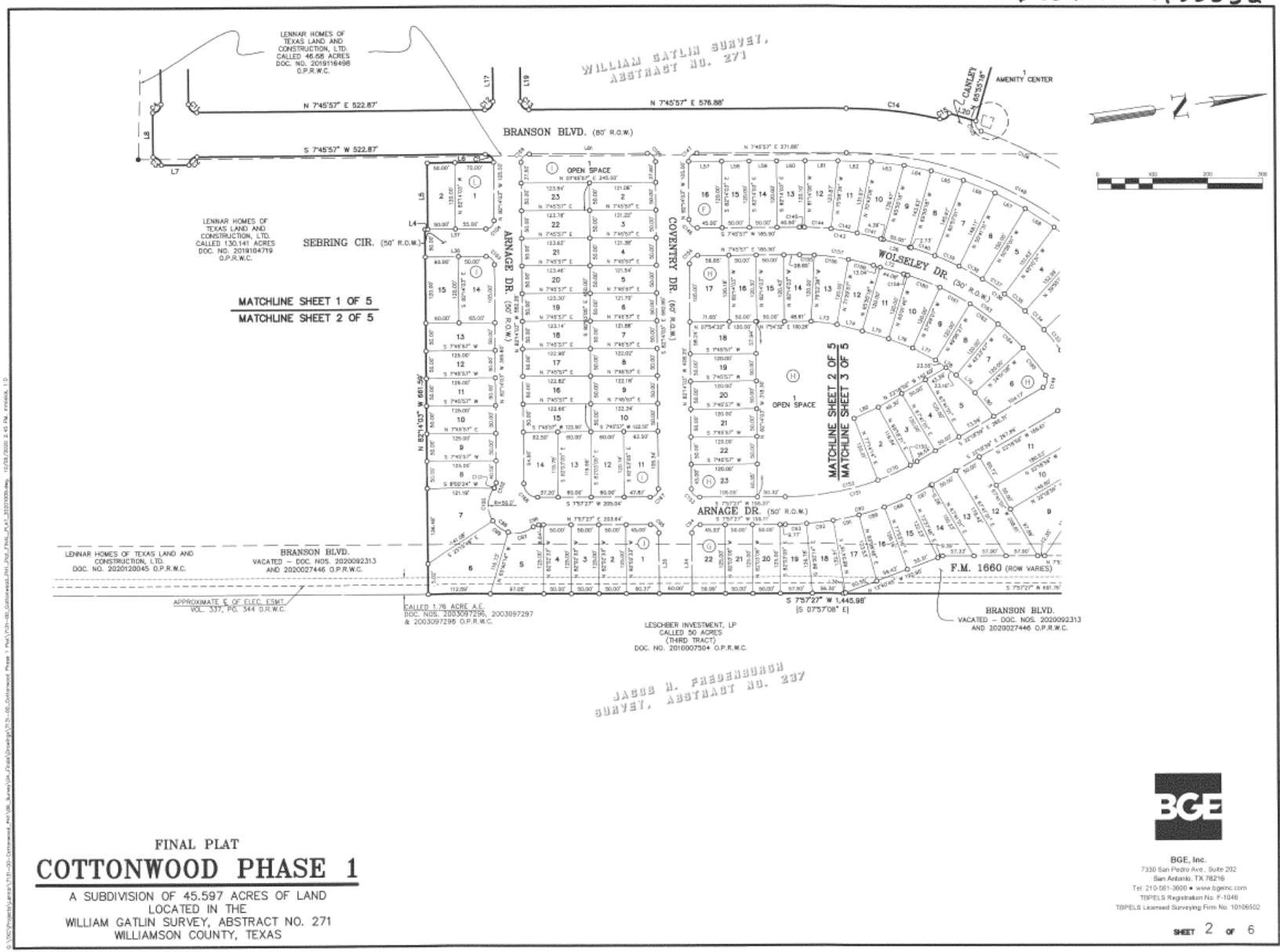
This instrument was acknowledged before me on the ____ day of _____, 20__, by Warren Hutmacher, City Manager for the City of Hutto, Texas, a Texas home rule municipality, on behalf of said municipality.

_____
Notary Public, State of Texas

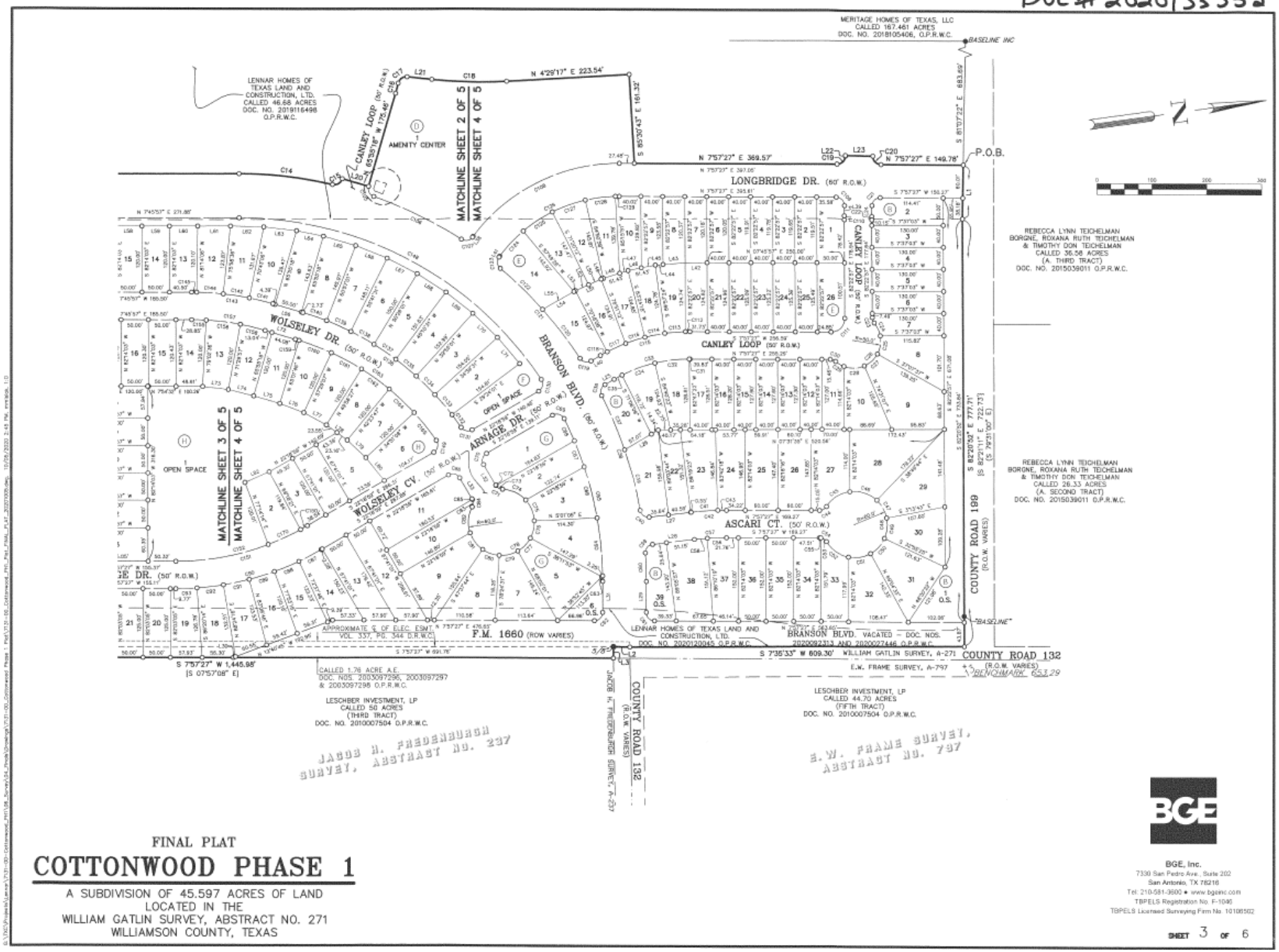
EXHIBIT K – PHASE 1 PLAT



Doc#2020133552



Doc #2020133552



FINAL PLAT

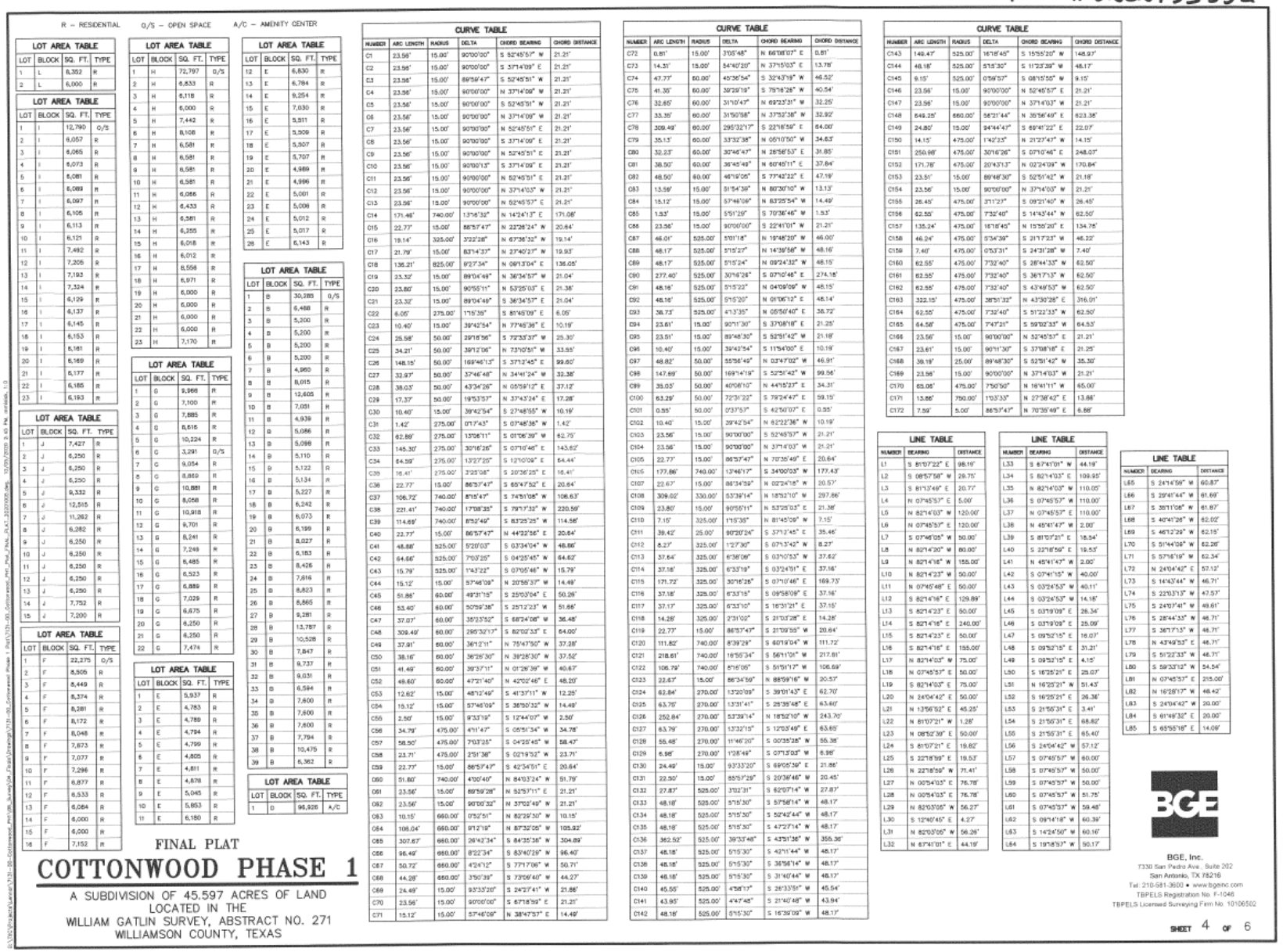
COTTONWOOD PHASE 1

A SUBDIVISION OF 45.597 ACRES OF LAND
LOCATED IN THE
WILLIAM GATLIN SURVEY, ABSTRACT NO. 271
WILLIAMSON COUNTY, TEXAS

BGE, Inc.
7330 San Pedro Ave., Suite 202
San Antonio, TX 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10106502

SHEET 3 OF 6

Doc #2020133552



R – RESIDENTIAL O/S – OPEN SPACE A/C – AMENITY CENTER

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	L	6,352	R
2	L	6,000	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	I	12,790	O/S
2	I	6,057	R
3	I	6,065	R
4	I	6,073	R
5	I	6,081	R
6	I	6,089	R
7	I	6,097	R
8	I	6,105	R
9	I	6,113	R
10	I	6,121	R
11	I	7,492	R
12	I	7,205	R
13	I	7,193	R
14	I	7,324	R
15	I	6,129	R
16	I	6,137	R
17	I	6,145	R
18	I	6,153	R
19	I	6,161	R
20	I	6,169	R
21	I	6,177	R
22	I	6,185	R
23	I	6,193	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	J	7,427	R
2	J	6,250	R
3	J	6,250	R
4	J	6,250	R
5	J	9,332	R
6	J	12,515	R
7	J	11,262	R
8	J	6,282	R
9	J	6,250	R
10	J	6,250	R
11	J	6,250	R
12	J	6,250	R
13	J	6,250	R
14	J	7,752	R
15	J	7,200	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	F	22,275	O/S
2	F	8,505	R
3	F	8,449	R
4	F	8,374	R
5	F	8,281	R
6	F	8,172	R
7	F	8,048	R
8	F	7,873	R
9	F	7,077	R
10	F	7,296	R
11	F	6,877	R
12	F	6,533	R
13	F	6,084	R
14	F	6,000	R
15	F	6,000	R
16	F	7,152	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	H	72,797	O/S
2	H	6,533	R
3	H	6,118	R
4	H	6,000	R
5	H	7,442	R
6	H	8,108	R
7	H	6,581	R
8	H	6,581	R
9	H	6,581	R
10	H	6,581	R
11	H	6,066	R
12	H	6,433	R
13	H	6,581	R
14	H	6,355	R
15	H	6,018	R
16	H	6,012	R
17	H	8,556	R
18	H	6,971	R
19	H	6,000	R
20	H	6,000	R
21	H	6,000	R
22	H	6,000	R
23	H	7,170	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	G	9,968	R
2	G	7,100	R
3	G	7,885	R
4	G	8,616	R
5	G	10,224	R
6	G	3,291	O/S
7	G	9,054	R
8	G	8,869	R
9	G	10,881	R
10	G	8,058	R
11	G	10,918	R
12	G	9,701	R
13	G	8,241	R
14	G	7,249	R
15	G	6,485	R
16	G	6,523	R
17	G	6,889	R
18	G	7,029	R
19	G	6,675	R
20	G	6,250	R
21	G	6,250	R
22	G	7,474	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	E	5,937	R
2	E	4,783	R
3	E	4,789	R
4	E	4,794	R
5	E	4,799	R
6	E	4,805	R
7	E	4,811	R
8	E	4,878	R
9	E	5,045	R
10	E	5,853	R
11	E	6,180	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
12	E	6,830	R
13	E	6,784	R
14	E	6,254	R
15	E	7,030	R
16	E	5,511	R
17	E	5,909	R
18	E	5,507	R
19	E	5,707	R
20	E	4,969	R
21	E	4,996	R
22	E	5,001	R
23	E	5,008	R
24	E	5,012	R
25	E	5,017	R
26	E	6,143	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	B	30,285	O/S
2	B	6,488	R
3	B	5,200	R
4	B	5,200	R
5	B	5,200	R
6	B	5,200	R
7	B	4,960	R
8	B	8,015	R
9	B	12,605	R
10	B	7,051	R
11	B	4,939	R
12	B	5,086	R
13	B	5,088	R
14	B	5,110	R
15	B	5,122	R
16	B	5,134	R
17	B	5,227	R
18	B	6,242	R
19	B	6,073	R
20	B	6,199	R
21	B	8,027	R
22	B	6,183	R
23	B	8,426	R
24	B	7,616	R
25	B	8,823	R
26	B	8,865	R
27	B	9,281	R
28	B	13,787	R
29	B	10,528	R
30	B	7,847	R
31	B	9,737	R
32	B	9,031	R
33	B	6,594	R
34	B	7,800	R
35	B	7,800	R
36	B	7,800	R
37	B	7,794	R
38	B	10,475	R
39	B	6,362	R

LOT AREA TABLE			
LOT	BLOCK	SQ. FT.	TYPE
1	D	96,926	A/C

CURVE TABLE					
NUMBER	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD DISTANCE
C1	23.56'	15.00'	90°00'00"	S 52°45'51" W	21.21'
C2	23.56'	15.00'	90°00'00"	S 37°14'09" E	21.21'
C3	23.56'	15.00'	89°59'47"	S 52°45'51" W	21.21'
C4	23.56'	15.00'	90°00'00"	N 37°14'09" W	21.21'
C5	23.56'	15.00'	90°00'00"	S 52°45'51" W	21.21'
C6	23.56'	15.00'	90°00'00"	N 37°14'09" W	21.21'
C7	23.56'	15.00'	90°00'00"	N 52°45'51" E	21.21'
C8	23.56'	15.00'	90°00'00"	S 37°14'09" E	21.21'
C9	23.56'	15.00'	90°00'00"	N 52°45'51" E	21.21'
C10	23.56'	15.00'	90°00'13"	S 37°14'09" E	21.21'
C11	23.56'	15.00'	90°00'00"	N 52°45'51" E	21.21'
C12	23.56'	15.00'	90°00'00"	N 37°14'03" W	21.21'
C13	23.56'	15.00'	90°00'00"	N 52°45'57" E	21.21'
C14	171.46'	740.00'	13°16'32"	N 14°24'13" E	171.08'
C15	22.77'	15.00'	86°57'47"	N 22°26'24" W	20.64'
C16	19.14'	325.00'	3°22'28"	N 67°36'32" W	19.14'
C17	21.79'	15.00'	83°14'37"	N 27°40'27" W	19.93'
C18	136.21'	825.00'	9°27'34"	N 09°13'04" E	136.05'
C19	23.32'	15.00'	89°04'49"	N 36°34'57" W	21.04'
C20	23.80'	15.00'	90°55'11"	N 53°25'03" E	21.38'
C21	23.32'	15.00'	89°04'49"	S 36°34'57" E	21.04'
C22	6.05'	275.00'	1°15'35"	S 81°45'09" E	6.05'
C23	10.40'	15.00'	39°42'54"	N 77°45'36" E	10.19'
C24	25.58'	50.00'	29°18'56"	S 72°33'37" W	25.30'
C25	34.21'	50.00'	39°12'06"	N 73°10'51" W	33.55'
C26	148.15'	50.00'	169°46'13"	S 37°13'45" E	99.60'
C27	32.97'	50.00'	37°46'48"	N 34°41'24" W	32.38'
C28	38.03'	50.00'	43°34'26"	N 05°59'12" E	37.12'
C29	17.37'	50.00'	19°53'57"	N 37°43'24" E	17.28'
C30	10.40'	15.00'	39°42'54"	S 27°48'55" W	10.19'
C31	1.42'	275.00'	0°17'43"	S 07°48'36" W	1.42'
C32	62.89'	275.00'	13°06'11"	S 01°06'39" W	62.75'
C33	145.30'	275.00'	30°16'26"	S 07°10'46" E	143.62'
C34	54.59'	275.00'	11°22'25"	S 12°10'09" E	54.44'
C35	16.41'	275.00'	3°25'08"	S 20°36'25" E	16.41'
C36	22.77'	15.00'	86°57'47"	S 65°47'52" E	20.64'
C37	106.72'	740.00'	8°15'47"	S 74°51'06" W	106.63'
C38	221.41'	740.00'	17°08'35"	S 79°17'32" W	220.59'
C39	114.69'	740.00'	8°52'49"	S 83°25'25" W	114.58'
C40	22.77'	15.00'	86°57'47"	N 44°22'56" E	20.64'
C41	48.88'	525.00'	5°20'03"	S 03°34'04" W	48.86'
C42	64.66'	525.00'	7°03'25"	S 04°25'45" W	64.62'
C43	15.79'	525.00'	1°43'22"	S 07°05'46" W	15.79'
C44	15.12'	15.00'	57°46'09"	N 20°56'37" W	14.49'
C45	51.86'	60.00'	49°31'15"	S 25°03'04" E	50.26'
C46	53.40'	60.00'	50°59'38"	S 25°12'23" W	51.66'
C47	37.07'	60.00'	35°23'52"	S 68°24'08" W	36.48'
C48	309.49'	60.00'	295°32'17"	S 82°02'33" E	64.00'
C49	37.91'	60.00'	36°12'11"	N 75°47'50" W	37.28'
C50	38.16'	60.00'	36°26'30"	N 39°26'30" W	37.52'
C51	41.49'	60.00'	39°37'11"	N 01°26'39" W	40.67'
C52	49.60'	60.00'	47°21'40"	N 42°02'46" E	48.20'
C53	12.62'	15.00'	48°12'49"	S 41°37'11" W	12.25'
C54	15.12'	15.00'	57°46'09"	S 36°50'32" W	14.49'
C55	2.50'	15.00'	9°33'19"	S 12°44'07" W	2.50'
C56	34.79'	475.00'	4°11'47"	S 05°51'34" W	34.78'
C57	58.90'	475.00'	7°06'25"	S 04°25'45" W	58.47'
C58	23.71'	475.00'	2°51'36"	S 02°19'52" W	23.71'
C59	22.77'	15.00'	86°57'47"	S 42°34'51" E	20.64'
C60	51.80'	740.00'	4°00'40"	N 84°03'24" W	51.79'
C61	23.56'	15.00'	89°59'28"	N 52°51'11" E	21.21'
C62	23.56'	15.00'	90°00'32"	N 37°02'49" W	21.21'
C63	10.15'	660.00'	0°52'51"	N 82°29'30" W	10.15'
C64	108.04'	660.00'	9°12'19"	N 87°32'05" W	105.92'
C65	307.67'	660.00'	26°42'34"	S 84°35'38" W	304.89'
C66	96.49'	660.00'	8°22'34"	S 83°40'28" W	96.40'
C67	50.72'	660.00'	4°24'12"	S 77°17'06" W	50.71'
C68	44.28'	660.00'	3°50'39"	S 73°06'40" W	44.27'
C69	24.49'	15.00'	93°33'20"	S 24°27'41" W	21.86'
C70	23.56'	15.00'	90°00'00"	S 67°18'59" E	21.21'
C71	15.12'	15.00'	57°46'09"	N 38°47'57" E	14.49'

CURVE TABLE					
NUMBER	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD DISTANCE
C72	0.81'	15.00'	3°05'48"	N 66°08'07" E	0.81'
C73	14.31'	15.00'	54°40'20"	N 37°15'03" E	13.78'
C74	47.77'	60.00'	45°36'54"	S 32°43'19" W	46.52'
C75	41.35'	60.00'	39°29'19"	S 75°16'26" W	40.54'
C76	32.65'	60.00'	31°10'47"	N 69°23'31" W	32.25'
C77	33.35'	60.00'	31°50'58"	N 37°52'38" W	32.92'
C78	309.49'	60.00'	295°32'17"	S 22°18'56" E	64.00'
C79	35.13'	60.00'	33°32'38"	N 05°10'50" W	34.63'
C80	32.23'	60.00'	30°46'47"	N 26°56'53" E	31.85'
C81	38.50'	60.00'	36°45'49"	N 60°46'11" E	37.84'
C82	48.50'	60.00'	46°19'05"	S 77°42'22" E	47.19'
C83	13.58'	15.00'	51°54'39"	N 80°30'10" W	13.13'
C84	15.12'	15.00'	57°46'09"	N 83°25'54" W	14.49'
C85	1.53'	15.00'	5°51'29"	S 70°36'46" W	1.53'
C86	23.56'	15.00'	90°00'00"	S 22°41'01" W	21.21'
C87	46.01'	525.00'	5°01'18"	N 19°48'20" W	46.00'
C88	48.17'	525.00'	5°15'27"	N 14°39'56" W	48.16'
C89	48.17'	525.00'	5°15'24"	N 09°24'32" W	48.15'
C90	277.40'	525.00'	30°16'26"	S 07°10'46" E	274.18'
C91	48.16'	525.00'	5°15'22"	N 04°09'09" W	48.15'
C92	48.16'	525.00'	5°15'20"	N 01°06'12" E	48.14'
C93	38.73'	525.00'	4°13'35"	N 05°50'40" E	38.72'
C94	23.61'	15.00'	90°11'30"	S 37°08'18" E	21.25'
C95	23.51'	15.00'	89°48'30"	S 52°51'42" W	21.18'
C96	10.40'	15.00'	39°42'54"	S 11°54'00" E	10.19'
C97	48.82'	50.00'	55°56'49"	N 03°47'02" W	46.91'
C98	147.69'	50.00'	169°14'19"	S 52°56'42" W	99.56'
C99	35.03'	50.00'	40°08'10"	N 44°15'23" E	34.31'
C100	63.29'	50.00'	72°31'22"	S 79°24'47" E	59.15'
C101	0.55'	50.00'	0°37'57"	S 42°50'07" E	0.55'
C102	10.40'	15.00'	39°42'54"	N 82°22'36" W	10.19'
C103	23.56'	15.00'	90°00'00"	S 52°45'57" W	21.21'
C104	23.56'	15.00'	90°00'00"	N 37°14'03" W	21.21'
C105	22.77'	15.00'	86°57'47"	N 70°35'49" E	20.64'
C106	177.86'	740.00'	13°46'17"	S 34°00'03" W	177.43'
C107	22.67'	15.00'	86°34'59"	N 02°24'18" W	20.57'
C108	309.02'	330.00'	53°39'14"	N 18°52'10" W	297.86'
C109	23.80'	15.00'	90°55'11"	N 53°25'03" E	21.38'
C110	7.15'	325.00'	1°15'35"	N 81°45'09" W	7.15'
C111	39.42'	25.00'	90°20'24"	S 37°12'45" E	35.46'
C112	8.27'	325.00'	1°27'30"	S 07°13'42" W	8.27'
C113	37.64'	325.00'	6°38'09"	S 03°10'53" W	37.62'
C114	37.18'	325.00'	6°33'19"	S 03°24'31" E	37.16'
C115	171.72'	325.00'	30°16'26"	S 07°10'46" E	169.73'
C116	37.18'	325.00'	6°33'19"	S 09°58'09" E	37.16'
C117	37.17'	325.00'	6°33'10"	S 16°31'21" E	37.15'
C118	14.28'	325.00'	2°31'02"	S 21°03'28" E	14.28'
C119	22.77'	15.00'	86°57'47"	S 21°09'55" W	20.64'
C120	111.82'	740.00'	8°39'28"	S 60°19'04" W	111.72'
C121	218.61'	740.00'	16°55'34"	S 56°11'06" W	217.81'
C122	106.79'	740.00'	8°16'05"	S 51°51'17" W	106.69'
C123	22.67'	15.00'	86°34'59"	N 88°59'16" W	20.57'
C124	62.84'	270.00'	13°20'09"	S 39°01'43" E	62.70'
C125	63.75'	270.00'	13°31'41"	S 25°35'48" E	63.60'
C126	252.84'	270.00'	53°39'14"	N 18°52'10" W	243.70'
C127	63.79'	270.00'	13°32'15"	S 12°03'49" E	63.65'
C128	55.48'	270.00'	11°46'20"	S 00°35'28" W	55.38'
C129	6.98'	270.00'	1°28'49"	S 07°13'03" W	6.98'
C130	24.49'	15.00'	93°33'20"	S 69°06'39" E	21.86'
C131	22.50'	15.00'	85°57'29"	S 20°36'46" W	20.45'
C132	27.87'	525.00'	3°02'31"	S 62°07'14" W	27.87'
C133	48.18'	525.00'	5°15'30"	S 57°58'14" W	48.17'
C134	48.18'	525.00'	5°15'30"	S 52°42'44" W	48.17'
C135	48.18'	525.00'	5°15'30"	S 47°27'14" W	48.17'
C136	362.52'	525.00'	39°33'48"	S 43°51'36" W	355.36'
C137	48.18'	525.00'	5°15'30"	S 43°11'44" W	48.17'
C138	48.18'	525.00'	5°15'30"	S 38°56'14" W	48.17'
C139	48.18'	525.00'	5°15'30"	S 31°40'44" W	48.17'
C140	45.55'	525.00'	4°58'17"	S 26°33'51" W	45.54'
C141	43.95'	525.00'	4°47'48"	S 21°40'48" W	43.94'
C142	48.18'	525.00'	5°15'30"	S 16°39'09" W	48.17'

CURVE TABLE					
NUMBER	ARC LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD DISTANCE
C143	149.47'	525.00'	16°18'45"	S 15°55'20" W	148.97'
C144	48.18'	525.00'	5°15'30"	S 11°23'39" W	48.17'
C145	9.15'	525.00'	0°59'57"	S 08°15'56" W	9.15'
C146	23.56'	15.00'	90°00'00"	N 52°45'57" E	21.21'
C147	23.56'	15.00'	90°00'00"	N 37°14'03" W	21.21'
C148	649.25'	660.00'	56°21'44"	N 35°56'49" E	623.38'
C149	24.80'	15.00'	94°44'47"	S 69°41'22" E	22.07'
C150	14.15'	475.00'	1°42'23"	N 21°27'47" W	14.15'
C151	250.88'	475.00'	30°16'26"	S 07°10'46" E	248.03'
C152	171.78'	475.00'	20°43'13"	N 02°24'09" W	170.84'
C153	23.51'	15.00'	89°48'30"	S 52°51'42" W	21.18'
C154	23.56'	15.00'	90°00'00"	N 37°14'03" W	21.21'
C155	26.45'	475.00'	3°11'23"	S 09°21'40" W	26.45'
C156	62.55'	475.00'	7°32'40"	S 14°43'44" W	62.50'
C157	135.24'	475.00'	16°18'45"	N 15°55'20" E	134.78'
C158	46.24'	475.00'	5°34'39"	S 21°17'23" W	46.22'
C159	7.40'	475.00'	0°53'31"	S 24°31'28" W	7.40'
C160	62.55'	475.00'	7°32'40"	S 28°44'33" W	62.50'
C161	62.55'	475.00'	7°32'40"	S 36°17'13" W	62.50'
C162	62.55'	475.00'	7°32'40"	S 43°49'53" W	62.50'
C163	322.15'	475.00'	38°51'32"	N 43°30'28" E	316.01'
C164	62.55'	475.00'	7°32'40"	S 51°22'33" W	62.50'
C165	64.58'	475.00'	7°47'21"	S 59°02'33" W	64.53'
C166	23.56'	15.00'	90°00'00"	N 52°45'57" E	21.21'
C167	23.61'	15.00'	90°11'30"	S 37°08'18" E	21.25'
C168	39.18'	25.00'	89°48'30"	S 52°51'42" W	35.30'
C169	23.56'	15.00'	90°00'00"	N 37°14'03" W	21.21'
C170	65.08'	475.00'	7°50'50"	N 16°41'11" W	65.00'
C171	13.86'	750.00'	1°03'33"	N 27°38'42" E	13.86'
C172	7.59'	5.00'	86°53'47"	N 70°35'49" E	6.88'

LINE TABLE		
NUMBER	BEARING	DISTANCE
L1	S 81°07'22" E	98.19'
L2	S 08°57'56" W	29.75'
L3	S 81°13'49" E	20.77'
L4	N 07°45'57" E	5.00'
L5	N 82°14'03" W	120.00'
L6	N 07°45'57" E	120.00'
L7	S 07°46'05" W	50.00'
L8	N 82°14'20" W	80.00'
L9	N 82°14'16" W	155.00'
L10	N 82°14'23" W	50.00'
L11	N 07°45'48" E	50.00'
L12	S 82°14'16" E	129.89'
L13	S 82°14'23" E	50.00'
L14	S 82°14'16" E	240.00'
L15	S 82°14'23" E	50.00'
L16	S 82°14'16" E	155.00'
L17	N 82°14'03" W	75.00'
L18	N 07°45'57" E	50.00'
L19	S 82°14'03" E	75.00'
L20	N 24°04'42" E	50.00'
L21	N 13°56'52" E	45.25'
L22	N 81°07'21" W	1.28'
L23	N 08°52'39" E	50.00'
L24	S 81°07'21" E	19.82'
L25	S 22°18'59" E	19.53'
L26	N 22°18'59" W	71.41'
L27	N 00°54'03" E	76.78'
L28	N 00°54'03" E	76.78'
L29	N 82°03'06" W	56.27'
L30	S 12°40'45" E	4.27'
L31	N 82°03'06" W	56.26'
L32	N 67°45'01" E	44.19'

LINE TABLE		
NUMBER	BEARING	DISTANCE
L33	S 67°41'01" W	44.19'
L34	S 82°14'03" E	109.95'
L35	N 82°14'03" W	110.05'
L36	S 07°45'57" W	110.00'
L37	N 07°45'57" E	110.00'
L38	N 45°41'47" W	2.00'
L39	S 81°07'21" E	18.54'
L40	S 22°18'59" E	19.53'
L41	N 45°41'47" W	2.00'
L42	S 07°41'15" W	40.00'
L43	S 03°24'53" W	40.11'
L44	S 03°24'53" W	14.18'
L45	S 03°19'09" E	26.34'
L46	S 03°19'09" E	25.09'
L47	S 09°52'15" E	16.03'
L48	S 09°52'15" E	31.21'
L49	S 09°52'15" E	4.15'
L50	S 16°25'21" E	25.07'
L51	N 16°25'21" W	51.43'
L52	S 16°25'21" E	26.36'
L53	S 21°55'31" E	3.41'
L54	S 21°55'31" E	68.82'
L55	S 21°55'31" E	65.40'
L56	S 24°04'42" W	57.12'
L57	S 07°45'57" W	60.00'
L58	S 07°45'57" W	50.00'
L59	S 07°45'57" W	50.00'
L60	S 07°45'57" W	51.75'
L61	S 07°45'57" W	59.48'
L62	S 09°41'18" W	60.39'
L63	S 14°24'50" W	60.16'
L64	S 19°58'57" W	59.17'

LINE TABLE		
NUMBER	BEARING	DISTANCE
L65	S 24°14'59" W	60.87'
L66	S 29°41'44" W	61.69'
L67	S 35°11'06" W	61.87'
L68	S 40°41'26" W	62.02'
L69	S 46°12'29" W	62.15'
L70	S 51°44'09" W	62.26'
L71	S 57°15'19" W	62.34'
L72	N 24°04'42" E	57.12'
L73	S 14°43'44" W	46.71'
L74	S 22°03'13" W	47.57'
L75	S 24°07'41" W	49.61'
L76	S 28°44'33" W	46.71'
L77	S 36°17'13" W	46.71'
L78	N 43°49'53" E	46.71'
L79	S 51°22'33" W	46.71'
L80	S 59°33'12" W	54.54'
L81	N 07°45'57" E	215.00'
L82	N 16°28'17" W	48.42'
L83	S 24°04'42" W	20.00'
L84	S 61°48'32" E	20.00'
L85	S 65°55'18" E	14.09'

FINAL PLAT

COTTONWOOD PHASE 1

A SUBDIVISION OF 45.597 ACRES OF LAND
LOCATED IN THE
WILLIAM GATLIN SURVEY, ABSTRACT NO. 271
WILLIAMSON COUNTY, TEXAS

BGE, Inc.
7330 San Pedro Ave., Suite 202
San Antonio, TX 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10106502

SHEET 4 OF 6

Doc#2020133552

LEGAL DESCRIPTION

FIELD NOTES FOR A 45.597 ACRE TRACT OF LAND SITUATED IN THE WILLIAM GATLIN SURVEY, ABSTRACT NO. 271, WILLIAMSON COUNTY, TEXAS; BEING A PORTION OF A CALLED 46.68 ACRE TRACT OF LAND AS CONVEYED TO LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., AS RECORDED IN DOCUMENT NO. 2019116498 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, A PORTION OF A CALLED 130.141 ACRE TRACT OF LAND AS CONVEYED TO LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., AS RECORDED IN DOCUMENT NO. 2019104719, OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, ALSO BEING A PORTION OF THE BRANSON BOULEVARD RIGHT-OF-WAY (R.O.W.=90') AS DEDICATED BY THE PLAT OF MEADOWS AT COTTONWOOD CREEK PHASE ONE, AS RECORDED IN DOCUMENT NUMBER 2009067576 AND BEING VACATED BY DOCUMENT NOS. 2020092313 & 2020027446 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, AS CONVEYED TO LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD. AS RECORDED IN DOCUMENT NO. 2020120045 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 45.597 ACRE TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING for POINT OF REFERENCE at the south right-of-way line of County Road 199 (variable width R.O.W.) no reference found, at the northwest corner of the called 46.68 acre Lennar tract and the northeast corner of a called 167.461 acre tract of land conveyed unto Heritage Homes of Texas, LLC by Special Warranty Deed recorded in Document Number 2018105406 of the Official Public Records of Williamson County, Texas; THENCE, S 81°07'22" E, with the common line of said 46.68 acre tract and said south right-of-way line of County Road 199, a distance of 683.69 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set on the north line of said 46.68 acre tract and the south right-of-way line of County Road 199 for the northwest corner and POINT OF BEGINNING of the herein described tract of land;

THENCE, S 81°07'22" E, coincident with the common line of said 46.68 acre tract and said south right-of-way line of County Road 199, a distance of 98.19 feet to a 1/2-inch iron rod with a cap stamped "BGE INC" set at the common northeast corner of said 46.68 acre tract and northwest corner of said 130.141 acre Lennar tract for an angle point;

THENCE, S 82°20'52" E, continuing coincident with said common line, passing at a distance of 722.73 feet a 1/2-inch iron rod with cap stamped "BASELINE INC." found at the most northerly northeast corner of said 130.141 acre tract and the northwest end of the curve return from the west right-of-way line of Branson Boulevard (90' right-of-way) as dedicated by plat of MEADOWS AT COTTONWOOD CREEK PHASE ONE, a subdivision as recorded in Document Number 2009067576 of the Official Public Records of Williamson County, Texas, (now vacated) and continuing for a total distance of 777.71 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the intersection of said south right-of-way line of County Road 199 and the west right-of-way line of County Road 132 (variable width right-of-way), for the northeast corner of the herein described tract;

THENCE, departing said south right-of-way line of County Road 199, coincident with said west right-of-way line of County Road 132, same being the now vacated east right-of-way line of the Branson Boulevard, the following three (3) courses and distances:

1) S 07°35'33" W, a distance of 609.30 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for an angle point;

2) S 08°57'58" W, a distance of 29.75 feet to a 5/8-inch iron rod found; and

3) S 81°13'49" E, a distance of 20.77 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for the northwest corner of the called 50 acre tract conveyed to Lasalle Investment, LP in the Special Warranty Deed recorded in Document Number 2010007504 of the Official Public Records of Williamson County, Texas;

THENCE, coincident with the west line of said 50 acre tract and said vacated east right-of-way line of Branson Boulevard, S 07°57'27" W, a distance of 1,445.98 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for the easterly south corner of the herein described tract;

THENCE, leaving the west line of said 50 acre tract, over and across said vacated right-of-way of Branson Boulevard and said 130.141 acre tract, N 82°14'03" W, a distance of 661.59 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract;

THENCE, continuing over and across said 130.141 acre tract, N 07°45'57" E, a distance of 5.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly interior corner of the herein described tract;

THENCE, continuing over and across said 130.141 acre tract, N 82°14'03" W, a distance of 120.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract;

THENCE, continuing over and across said 130.141 acre tract N 07°45'57" E, a distance of 120.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly interior corner of the herein described tract and the point of curvature of a curve to the left;

THENCE, partly over and across said 130.141 acre tract and said 46.68 acre tract, along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears S 52°45'57" W, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set;

THENCE, continuing over and across said 46.68 acre tract, S 07°45'57" W, a distance of 522.87 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the point of curvature of a curve to the left;

THENCE, partly over and across said 46.68 acre tract and said 130.141 acre tract along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears S 37°14'09" E, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract;

THENCE, continuing over and across said 130.141 acre tract, S 07°46'05" W, a distance of 50.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the point of curvature of a curve to the left;

THENCE, partly over and across said 130.141 acre tract and said 46.68 acre tract along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 89°59'47" and a chord which bears S 52°45'51" W, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract, N 82°14'20" W, a distance of 80.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract and the point of curvature of a curve to the left;

THENCE, continuing over across said 46.68 acre tract along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears N 37°14'09" W, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 82°14'16" W, a distance of 155.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract and the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears S 52°45'51" W, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract; N 82°14'23" W, a distance of 50.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a southerly exterior corner of the herein described tract and the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears N 37°14'09" W, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 82°14'16" W, a distance of 449.89 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set on the west line of said 46.68 acre tract and the east line of said 167.461 acre tract for the southwest corner of the herein described tract;

THENCE, coincident with the east line of said 167.461 acre tract and the west line of said 46.68 acre tract, N 07°45'48" E, a distance of 50.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly exterior corner of the herein described tract;

THENCE, leaving the west line of said 167.461 acre tract, over and across said 46.68 acre tract, S 82°14'16" E, a distance of 129.89 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears N 52°45'51" E, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for an exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract S 82°14'23" E, a distance of 50.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for an exterior corner of the herein described tract and a point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears S 37°14'09" E, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract S 82°14'16" E, a distance of 240.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears N 52°45'51" E, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for an exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract S 82°14'23" E, a distance of 50.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for an exterior corner of the herein described tract and the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears S 37°14'09" E, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract S 82°14'16" E, a distance of 155.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set at the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears N 52°45'51" E, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 07°45'57" E, a distance of 522.87 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears N 37°14'03" W, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 82°14'03" W, a distance of 75.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract N 07°45'57" E, a distance of 50.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract S 82°14'03" E, a distance of 75.00 feet a 1/2-inch iron rod with cap stamped "BGE INC" set for the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.56 feet, having a radius of 15.00 feet, a central angle of 90°00'00" and a chord which bears N 52°45'57" E, a distance of 21.21 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 07°45'57" E, a distance of 576.88 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for the point of curvature of a curve to the right;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the right, an arc distance of 171.46 feet, having a radius of 740.00 feet, a central angle of 13°16'32" and a chord which bears N 14°24'13" E, a distance of 171.08 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of reverse curvature;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 22.77 feet, having a radius of 15.00 feet, a central angle of 85°57'47" and a chord which bears N 22°26'24" W, a distance of 20.64 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract N 24°04'42" E, a distance of 50.00 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly interior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract N 65°55'18" W, a distance of 175.46 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 19.14 feet, having a radius of 325.00 feet, a central angle of 03°22'28" and a chord which bears N 67°36'32" W, a distance of 19.14 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of reverse curvature;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the right, an arc distance of 21.79 feet, having a radius of 15.00 feet, a central angle of 83°14'37" and a chord which bears N 27°40'27" W, a distance of 19.93 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 13°56'52" E, a distance of 45.25 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 136.21 feet, having a radius of 825.00 feet, a central angle of 09°27'34" and a chord which bears N 09°13'04" E, a distance of 136.05 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 04°29'17" E, a distance of 223.54 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract S 85°30'43" E, a distance of 181.32 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly interior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract N 07°57'27" E, a distance of 369.57 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.32 feet, having a radius of 15.00 feet, a central angle of 89°04'49" and a chord which bears N 36°34'57" W, a distance of 21.04 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set;

THENCE, continuing over and across said 46.68 acre tract N 81°07'21" W, a distance of 1.28 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly exterior corner of the herein described tract;

THENCE, continuing over and across said 46.68 acre tract N 08°52'39" E, a distance of 50.00 feet a 1/2-inch iron rod with cap stamped "BGE INC" set for a westerly exterior corner of the herein described tract and the point of curvature of a curve to the left;

THENCE, continuing over and across said 46.68 acre tract, along said curve to the left, an arc distance of 23.80 feet, having a radius of 15.00 feet, a central angle of 90°55'11" and a chord which bears N 53°25'03" E, a distance of 21.38 feet to a 1/2-inch iron rod with cap stamped "BGE INC" set for a point of tangency;

THENCE, continuing over and across said 46.68 acre tract N 07°57'27" E, a distance of 149.78 feet to the POINT OF BEGINNING; and containing 45.597 acres (1,986,168 sq. ft.) of land.

FINAL PLAT

COTTONWOOD PHASE 1

A SUBDIVISION OF 45.597 ACRES OF LAND
LOCATED IN THE
WILLIAM GATLIN SURVEY, ABSTRACT NO. 271
WILLIAMSON COUNTY, TEXAS

BGE, Inc.
7330 San Pedro Ave., Suite 202
San Antonio, TX 78216
Tel: 210-581-3600 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10106502

SHEET 5 OF 6

Doc #2020133552

STATE OF TEXAS §
COUNTY OF TRAVIS §

KNOW ALL MEN BY THESE PRESENTS:

THAT LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD., A TEXAS LIMITED PARTNERSHIP, ACTING HEREIN BY AND THROUGH KEVIN PAPE, VICE PRESIDENT, BEING THE OWNER OF 45.597 ACRES OF LAND OUT OF THE WILLIAM GATLIN SURVEY A-271, WILLIAMSON COUNTY, TEXAS AS CONVEYED TO IT BY INSTRUMENTS RECORDED IN DOC. NO'S. 2019116488, 2019104719, AND 2020120045 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, OF WHICH A PORTION BEING OUT OF MEADOWS AT COTTONWOOD CREEK, PHASE ONE, A SUBDIVISION AS RECORDED IN DOC. NO. 2009067576 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID MEADOWS AT COTTONWOOD CREEK, PHASE ONE HAVING BEEN VACATED BY DOCUMENT NOS. 2020027446 AND 2020092313 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID SUBDIVISION HAVING BEEN APPROVED FOR RESUBDIVISION PURSUANT TO PUBLIC NOTIFICATION & HEARING PROVISIONS OF CHAP. 212 OF THE TEXAS LOCAL GOVERNMENT CODE, DOES HEREBY SUBDIVIDE SAID 45.597 ACRES OF LAND IN ACCORDANCE WITH THE PLAT SHOWN HEREON, TO BE KNOWN AS:

COTTONWOOD PHASE 1

AND DOES HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND, THIS THE 1st DAY OF October, 2020 A.D.

KEVIN PAPE, VICE PRESIDENT
LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD.
13620 NORTH RAN. 620
BUILDING 1, SUITE 150
AUSTIN, TEXAS 78717

STATE OF TEXAS §
COUNTY OF TRAVIS §

BEFORE ME, THE UNDERSIGNED AUTHORITY, PERSONALLY APPEARED KEVIN PAPE, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

NOTARY PUBLIC, STATE OF TEXAS

LINDSAY LONG
Notary Public
State of Texas
ID # 131111412-7
Comm. Expires 05/08/2021

Lindsay Long
PRINT NOTARY'S NAME
MY COMMISSION EXPIRES 05-08-2021

I, TIMOTHY M. HOLLAND, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS, TO PRACTICE THE PROFESSION OF ENGINEERING, AND DO HEREBY CERTIFY THAT THIS PLAT IS FEASIBLE FROM AN ENGINEERING STANDPOINT, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

TIMOTHY M. HOLLAND, P.E.
LICENSED PROFESSIONAL ENGINEER NO. 94848
BGE, INC.
1701 DIRECTORS BOULEVARD, SUITE 1000
AUSTIN, TX 78744

10/5/2020
DATE

STATE OF TEXAS
TIMOTHY M. HOLLAND
94848
LICENSED
PROFESSIONAL ENGINEER

I, DION P. ALBERTSON, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS, TO PRACTICE THE PROFESSION OF SURVEYING, AND DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND WAS PREPARED FROM AN ACTUAL ON THE GROUND SURVEY OF THE PROPERTY UNDER MY SUPERVISION.

DION P. ALBERTSON, R.P.L.S.
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 4963
BGE, INC.
7330 SAN PEDRO AVE, SUITE 202
SAN ANTONIO, TEXAS 78216

10/5/2020
DATE

STATE OF TEXAS
DION P. ALBERTSON
4963
REGISTERED
PROFESSIONAL LAND SURVEYOR

GENERAL NOTES:

1. BEARING ORIENTATION IS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE 4203, NAD83. COMBINED SCALE FACTOR = 1.0001097659
2. NO BUILDING, FENCING, LANDSCAPING OR STRUCTURES ARE ALLOWED WITHIN ANY DRAINAGE OR WASTEWATER EASEMENT UNLESS EXPRESSLY PERMITTED BY THE CITY OF HUTTO.
3. BUILDING SETBACKS SHALL CONFORM TO UDC REQUIREMENTS, AS AMENDED.
4. A TEN (10) FOOT PUBLIC UTILITY EASEMENT (PUE) IS HEREBY DEDICATED ALONG AND ADJACENT TO ALL STREET SIDE PROPERTY LINES.
5. A FIVE (5) FOOT PUBLIC UTILITY EASEMENT (PUE) IS HEREBY DEDICATED ON EACH SIDE OF ALL REAR LOT LINES.
6. IF PARKING IS DESIRED ON BOTH SIDES OF THE STREET THEN THE STREETS MUST BE A MINIMUM OF 33 FEET WIDE. IF THE STREETS ARE LESS THAN 33 FEET IN WIDTH FIRE LANE SIGNAGE IS REQUIRED. (2018 IFC APPENDIX D SEC. 103.6 – D103.6.2)
7. NO LOT IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTION IS MADE TO PUBLIC WATER AND WASTEWATER UTILITIES.
8. SIDEWALKS AND TREES SHALL BE PROVIDED ON BOTH SIDES OF ALL STREETS WITHIN THIS SUBDIVISION.
9. SIDEWALKS AND TREES SHALL BE PROVIDED ALONG ALL STREETS BOUNDING THIS SUBDIVISION.
10. AN ARTERIAL FENCE SHALL BE CONSTRUCTED ALONG F.M. 1660 PER UDC REQUIREMENTS, AS AMENDED.
11. ALL FENCING THAT IS NOT ON A PRIVATE LOT TO BE MAINTAINED BY THE HOA.
12. STREET LIGHTING SHALL BE PROVIDED BY THE DEVELOPER IN CONFORMANCE WITH THE UDC REQUIREMENTS, AS AMENDED.
13. THIS TRACT IS WITHIN WATER CCN SERVICE AREA 10321. WATER AND WASTEWATER WILL BE AVAILABLE THROUGH THE CITY OF HUTTO AFTER THE APPROPRIATE WATER AND WASTEWATER SYSTEMS ARE INSTALLED TO THIS SITE. THE CITY OF HUTTO ASSUMES NO OBLIGATIONS FOR INSTALLING ANY WATER AND WASTEWATER IMPROVEMENTS REQUIRED TO SERVE THIS SITE.
14. NO PORTION OF THIS TRACT IS ENCROACHED BY THE ULTIMATE 1% ANNUAL CHANCE FLOODPLAIN.
15. NO PORTION OF THIS TRACT IS ENCROACHED BY ANY SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 1% ANNUAL CHANCE FLOODPLAIN AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP (FLOOD INSURANCE RATE MAP) COMMUNITY PANEL NUMBER 48491C0520E, EFFECTIVE DATE SEPTEMBER 26, 2008, FOR WILLIAMSON COUNTY, TEXAS.
16. IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATIONS SHALL BE BUILT AT LEAST ONE (1) FOOT ABOVE THE SURROUNDING GROUND AND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF ⅛" PER FOOT FOR A DISTANCE OF AT LEAST TEN (10) FEET.
17. ALL SUBDIVISION CONSTRUCTION SHALL CONFORM TO THE CITY OF HUTTO UNIFIED DEVELOPMENT CODE AS AMENDED, CONSTRUCTION STANDARDS, AND GENERALLY ACCEPTED ENGINEERING PRACTICES.
18. ON-SITE STORMWATER DETENTION FACILITIES WILL BE PROVIDED TO REDUCE POST-DEVELOPMENT PEAK RATES OF DISCHARGE OF THE 2, 10, 25 AND 100-YEAR STORM EVENTS.
19. ALL EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS OR HER ASSIGNS.
20. ALL DRAINAGE LOTS SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

CITY DEVELOPMENT SERVICES SIGNATURES:

THIS SUBDIVISION IS LOCATED WITHIN THE CITY LIMITS OF HUTTO, THIS THE 19th DAY OF October, 20 20

ASHBY GRUNDMAN, DEVELOPMENT SERVICES DIRECTOR

10-19-2020
DATE

THIS PLAT WAS APPROVED FOR RECORDING BY THE HUTTO CITY COUNCIL ON THE ON THE 6th DAY OF February, 2020

DOUG GAUL, MAYOR

10/19/20
DATE

ANDREA PRICE, CITY SECRETARY

10/19/20
DATE

STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF WILLIAMSON §

THAT I, NANCY RISTER, CLERK OF THE COUNTY COURT OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT IN WRITING, WITH ITS CERTIFICATION OF AUTHENTICATION, WAS FILED FOR RECORD IN MY OFFICE ON THE 28th DAY OF October, 2020 A.D., AT 3:40 O'CLOCK P.M. AND DULY RECORDED ON THE 29th DAY OF October, 2020 A.D., AT 4:01 O'CLOCK P.M. IN THE PLAT RECORDS OF SAID COUNTY, IN DOCUMENT NO. 2020133552

WITNESS MY HAND AND SEAL OF THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS, THE DATE LAST ABOVE WRITTEN.

NANCY RISTER, CLERK, COUNTY COURT
WILLIAMSON COUNTY, TEXAS

BY: Brenda McKenzie
DEPUTY Brenda McKenzie

FINAL PLAT

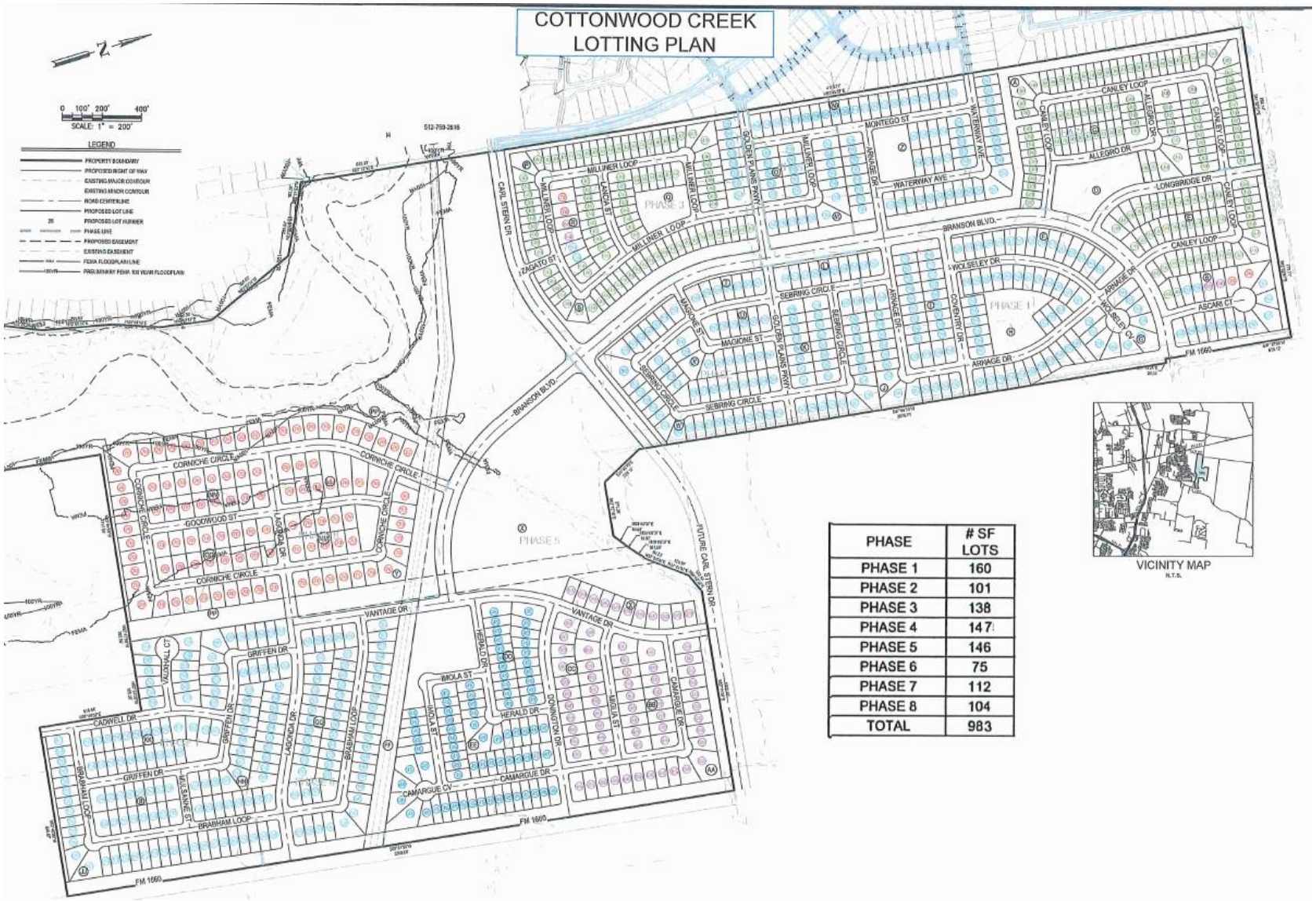
COTTONWOOD PHASE 1

A SUBDIVISION OF 45.597 ACRES OF LAND
LOCATED IN THE
WILLIAM GATLIN SURVEY, ABSTRACT NO. 271
WILLIAMSON COUNTY, TEXAS

BGE, Inc.
7330 San Pedro Ave., Suite 202
San Antonio, TX 78216
Tel: 210-561-3600 • www.bgeinc.com
TBPELS Registration No. F-1046
TBPELS Licensed Surveying Firm No. 10106502

SHEET 6 OF 6

EXHIBIT L – LOT TYPE CLASSIFICATION MAP



PHASE	# SF LOTS
PHASE 1	160
PHASE 2	101
PHASE 3	138
PHASE 4	147
PHASE 5	146
PHASE 6	75
PHASE 7	112
PHASE 8	104
TOTAL	983

NOTICE OF PUBLIC HEARING
TO CONSIDER PROPOSED ASSESSMENTS
TO BE LEVIED AGAINST PROPERTY LOCATED IN IMPROVEMENT AREA #1 OF
THE COTTONWOOD CREEK PUBLIC IMPROVEMENT DISTRICT

Notice is hereby given that the City Council of the City of Hutto, Texas, will hold a public hearing in the Council Chambers at Hutto City Council Chambers, 500 West Live Oak., Hutto, Texas on June 3, 2021, at 7:00 p.m. to consider proposed assessments to be levied against the assessable property located within Improvement Area #1 ("Improvement Area #1) of the Cottonwood Creek Public Improvement District (the "District") pursuant to the provisions of Chapter 372, Texas Local Government Code. Written and oral objections will be considered at the hearing.

General Nature of Public Improvements: The general nature of the proposed public improvements are: (i) the establishment of parks and open space, together with the design, construction and maintenance of any ancillary structures, features or amenities such as trails, pavilions, community facilities, parking facilities, sidewalks, irrigation, walkways, lighting, benches, trash receptacles and any similar items located therein; (ii) landscaping; (iii) acquisition, construction, and improvement of water, wastewater and drainage facilities; (iv) acquisition construction and improvement of streets, roadways, rights-of-way and related facilities; (v) entry monumentation and features; (vi) signage; (vii) projects similar to those listed in subsections (i)-(vi) above; and (viii) payment of costs associated with constructing and financing the public improvements listed in subparagraphs (i)-(vii) above, including costs of establishing, administering and operating the District.

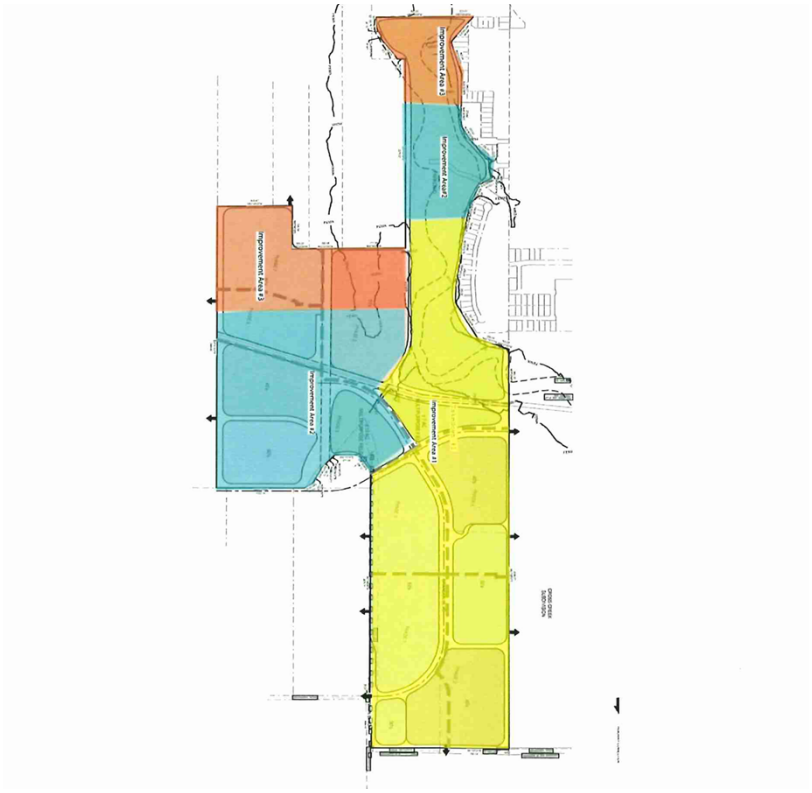
The property within the District is expected to be developed in multiple phases, with certain improvements that will benefit and serve all of the property within the District, and certain improvements that will benefit and serve only the property within each phase (an "Improvement Area"). Improvement Area #1 is anticipated to include acquisition, construction, and/or improvement of streets, roadways, rights-of-way and related facilities, and acquisition, construction, and/or improvement of water, wastewater, and drainage facilities, as well as the payment of costs associated with the public improvements described herein. Assessments are only presently proposed for Improvement Area #1, and no assessments will be considered at the public hearing for Improvement Area #2 or Improvement Area #3.

Estimated Total Cost of Public Improvements: The total cost of the public improvements to be funded by the District is approximately $20,000,000.00 (including issuance and other financing costs). The exact amount will be provided in the approved service and assessment plan.

District Boundaries: The District includes approximately 370 acres located south of CR 199 and west of CR 134 (the "Property"). Improvement Area #1, comprised of 186.341 acres, is located within the Property as generally depicted on Exhibit A attached hereto.

Materials: The field notes, a copy of the proposed service and assessment plan, and assessment roll are available for inspection at Hutto City Hall at 500 West Live Oak, Hutto, Texas.

Exhibit A



City Council
AGENDA ITEM REPORT

To: City Council

Subject: Consideration and possible action on Resolution No. R-2021-085 of the City of Hutto, Texas providing the public with information regarding certain litigation involving the city, including Preston Hollow Capital, LLC v. Cottonwood Development Corporation and the City of Hutto, in which all claims against the Corporation and the City have been dismissed in the corporation's and city's favor; Legacy Hutto, LLC v. City of Hutto, in which all claims against the city have been dismissed in the city's favor, and council direction to litigation counsel to continue to evaluate legally questionable transactions performed by and during the former City Manager's tenure and take appropriate legal action to protect and defend the City of Hutto and its residents; providing for severability; providing for repeal and providing an effective date. (Mayor Snyder)

Meeting: Thursday, May 20, 2021

Department: City Secretary

Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Resolution No. 2021-085- Preston Hollow Litigation

RESOLUTION NO. 2021-085

A RESOLUTION OF THE CITY OF HUTTO, TEXAS PROVIDING THE PUBLIC WITH INFORMATION REGARDING CERTAIN LITIGATION INVOLVING REGARDING CERTAIN LITIGATION INVOLVING THE CITY, INCLUDING PRESTON HOLLOW CAPITAL, LLC v. COTTONWOOD DEVELOPMENT CORPORATION AND THE CITY OF HUTTO, IN WHICH ALL CLAIMS AGAINST THE CORPORATION AND THE CITY HAVE BEEN DISMISSED IN THE CORPORATION'S AND CITY'S FAVOR; LEGACY HUTTO, LLC V. CITY OF HUTTO, IN WHICH ALL CLAIMS AGAINST THE CITY HAVE BEEN DISMISSED IN THE CITY'S FAVOR; AND COUNCIL DIRECTION TO LITIGATION COUNSEL TO CONTINUE TO EVALUATE LEGALLY QUESTIONABLE TRANSACTIONS PERFORMED BY AND DURING THE FORMER CITY MANAGER'S TENURE AND TAKE APPROPRIATE LEGAL ACTION TO PROTECT AND DEFEND THE CITY OF HUTTO AND ITS RESIDENTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR REPEAL AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Hutto finds that the citizens of Hutto regularly express interest in the business and operations of the City; and

WHEREAS, the City Council finds, in particular, the residents of Hutto have recently expressed interest in the various lawsuits in which the City, a City board, or a City Official may be a party; and

WHEREAS, the City Council finds that the City, a City board or a City official is a party in several currently pending lawsuits; and

WHEREAS, the City Council finds an update to the public regarding the status of such lawsuits would serve a public purpose of affirmatively and efficiently apprising the residents of the functions and activities of the City, in a manner that does not disclose confidential information; and

WHEREAS, the City Council now desires to issue a status update of the various lawsuits in which the City, a City board or City Official is a party.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS:

Section 1. All of the above premises are hereby found to be true and correct legislative and factual findings of the City of Hutto, Texas and are hereby approved and incorporated into the body of this Resolution as if copied in their entirety.

Section 2. The status of the various legal matters are as follows:

Preston Hollow Capital, LLC v. Cottonwood Development Corporation and the City of Hutto, Texas

On September 22, 2020, Preston Hollow Capital, LLC filed its original complaint in the U.S. District Court of the Western District, Austin Division, alleging that both the Cottonwood Development Corporation and the City of Hutto (a non-party to the illegal loan contract) unconstitutionally took from Preston Hollow Capital, LLC approximately $15,000,000. Preston Hollow Capital, LLC sought an award of $15,000,000 with interest, costs of suit and attorneys' fees.

On October 14, 2020, represented by Russell Rodriguez Hyde Bullock, LLC with attorney George Hyde as Lead Counsel, Cottonwood Development Corporation and the City of Hutto, Texas filed their answer to the original complaint, responding by denying such claims and raising the legal issue that the loan contract and related agreements were invalid and failed to include terms and conditions required by state law resulting in the contracts being illegal.

Cottonwood Development Corporation and the City raised defenses to the allegations made. They asserted that they are entities with recognized immunity from the claims made, that it is legally improper to mischaracterize a contract dispute as a claim of unconstitutional conduct, that their suit failed to state a claim of which relief could be granted by the court and failed to state a claim that invoked the Court's subject matter jurisdiction to rule over the proceeding.

Cottonwood Development Corporation and the City also filed state law counterclaims seeking a declaratory judgment that the loan agreement and related documents constitute illegal contracts and are otherwise void ab initio (as if never existed) and that the land owned by Cottonwood Development Corporation is immune from foreclosure. In the alternative (if the court were to determine the agreements are somehow enforceable), they claimed that Preston Hollow Capital, LLC's failure to fully fund the initial loan amount of $15,000,000 at closing was a breach of the agreement; therefore, Preston Hollow Capital, LLC was first to breach the agreement.

The City and Cottonwood, still pleading in the alternative, contend that Preston Hollow Capital, LLC failed to follow the contractual procedures required in making its assertion of breach against Cottonwood Development Corporation, that Preston Hollow Capital, LLC was not entitled to do so at the time it declared breach, and that the legal defense of "mutual mistake" (when both parties equally mistake the contract terms or status as legal) occurred. The City and Cottonwood Development Corporation contend that Preston Hollow Capital, LLC representatives violated the Texas Open Meetings Act by meeting in closed executive session to discuss the terms of the contract between the two parties; thus, making the contract voidable. A temporary injunction to prevent Preston Hollow Capital, LLC from attempting to take real property that was involved in the loan transaction, improperly accelerating the note if determined valid, and from interfering with any other contractual obligations involving the properties was sought.

On December 15, 2020, after a number of other motions were filed with the court, Cottonwood Development Corporation and the City of Hutto filed a Motion to Dismiss all of Preston Hollow Capital, LLC's allegations against both defendants.

On March 31, 2021, again after a number of other motions were filed with the Court, U.S. District Judge Lee Yeakel issued a Final Judgment in this case, dismissing all of Preston Hollow Capital, LLC's allegations with prejudice. The court also dismissed the City's state law counterclaims without prejudice, so that they may be refiled in Williamson County District Court. Those filing of those claims is in process.

Interestingly, on March 16, 2021, Preston Hollow Capital, LLC filed a recommendation that the U.S. Judge dismiss all of its claims. In the response, legal counsel for Preston Hollow Capital, LLC admitted that "it did not dispute the voidness of the loan documents, which form the basis of Preston Hollow LLC's Fifth Amendment takings claims against both defendants.

Preston Hollow Capital, LLC, despite its judicial admission that the Loan Documents are all void, have refused to remove the deeds of trust encumbering over $22,000,000 of real property owned by Cottonwood Development, without any legal basis. Preston Hollow Capital, LLC has also filed an appeal to the U.S. Fifth Circuit Court of Appeals (New Orleans). Our legal counsel anxiously awaits Preston Hollow LLC's briefing to continue the defense.

Legal action will be filed in Williamson County District Court to obtain a court order directing Preston Hollow Capital, LLC to remove or release all filed title documents and formally declare the loan documents void, since Preston Hollow Capital, LLC has judicially admitted they are void.

Legacy Hutto, LLC v. City of Hutto, Texas

On June 12, 2020, Legacy Hutto, LLC filed its Original Petition in the District Court of Williamson County alleging that the City of Hutto, Texas was responsible for breach of contract and sought over $3,300,000, plus pre- and post-judgment interest and attorneys' fees.

Upon being served with the Original Petition, the City initially conferred with representatives of Legacy Hutto, LLC in an attempt to dispose of the lawsuit, but it was unsuccessful. On August 12, 2020, represented by Russell Rodriguez Hyde Bullock, LLC with attorney George Hyde as Lead Counsel the City filed its general denial of all claims and raised the defense of immunity and demonstrated to the Court that former City Manager Mr. Odis Jones did not possess City Council authority to execute the contract and Legacy Hutto, Texas, LLC did not file the proper ethics disclosure with the Texas Ethics Commission, rendering the contract illegal and executed without authority.

Legacy Hutto, LLC made four more attempts to rewrite the Petition to overcome the City's defenses before the Court considered the City's Motion to Dismiss with prejudice based on the fact the contract is void and illegal. On April 16, 2021, the Honorable Williamson County District Judge Ryan D. Larson issued a court order dismissing all claims against the City of Hutto, Texas. The matter is now on appeal filed with the Texas Third Court of Appeals located in Austin; however, the case, due to workload on the Third Court of Appeals, has been transferred to the State's Seventh District Court of Appeals located in Amarillo, where it will be heard and decided by the judges of that court, applying Third Court of Appeals legal precedent.

The city has currently identified at least four more development related transactions which, are not yet able to be publicly disclosed due to anticipated litigation, the City Council has found reasonable cause to engage Russell Rodriguez Hyde Bullock, LLC with attorney George Hyde as Lead Counsel, to evaluate the legally questionable transactions performed by and during the former City Manager's tenure and take appropriate legal action to protect and defend the City of Hutto and its residents.

Section 3. The City Council of the City of Hutto hereby finds and declares that written notice of the date, hour, place and subject of the meeting at which this Resolution was adopted was posted and that such meeting was open to the public as required by law at all times during which this Resolution and the subject matter hereof were discussed, considered and formally acted upon, all as required by the Open Meetings Act, Chapter 551, Texas Government Code, as amended.

CONSIDERED and RESOLVED by the City Council of the City of Hutto on this the **20th day of May 2021**.

CITY OF HUTTO, TEXAS

_____
Mike Snyder, Mayor

ATTEST:

_____
Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To: City Council
Subject: Consideration and possible action on Resolution No. R-2021-086 appointing a Mayor Pro Tem for the City of Hutto in accordance with Section 3.05 of the Hutto City Charter as approved by the voters on May 1, 2021.
Meeting: Thursday, May 20, 2021
Department: City Secretary
Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

1. Resolution 2021-086 Mayor Pro Tem

RESOLUTION NO. 2021-086

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS, APPOINTING A MAYOR PRO TEM FOR THE CITY OF HUTTO IN ACCORDANCE WITH SECTION 3.05 OF THE HUTTO CITY CHARTER AS APPROVED BY THE VOTERS ON MAY 1, 2021; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, on May 1, 2021, the voters approved an amendment to the Hutto City Charter providing that Section 3.05 of the Hutto City Charter be amended to authorize the City Council to appoint a Mayor Pro Tem at the next regular City Council meeting after the date the office is declared vacant; and

WHEREAS, pursuant to Section 9.005 of the Texas Local Government Code, a charter amendment does not take effect until the governing body of the municipality enters an order in the records of the municipality declaring that the charter or amendment is adopted; and

WHEREAS, on May 12, 2021, the City Council adopted Resolution 2021-078 canvassing the returns and declaring the results of the May 1, 2021 General and Special Elections; and

WHEREAS, the City Council desires to appoint a Mayor Pro Tem for the City of Hutto in accordance with Section 3.05 of the Hutto City Charter.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HUTTO, TEXAS:

Section 1. That the facts and recitations set forth in the preamble of this resolution are hereby adopted, ratified, and confirmed.

Section 2. That the City Council of the City of Hutto hereby appoints _____ as the Mayor Pro Tem.

Section 3. That this resolution shall take effect immediately from and after its passage, in accordance with the provisions of the State Statutes of the State of Texas.

Section 4. Open Meetings Act. It is hereby officially found and determined that the meeting at which this resolution was passed was open to the public and public notice of the time, place and purpose of said meeting was given, all as required by the Open Meetings Act, *Chapter 551, Texas Government Code.*

PASSED AND APPROVED on this 20th day of May by a vote of _____ (*ayes*) to _____ (*nays*) to _____ (*abstentions*) of the City Council of Hutto, Texas.

CITY OF HUTTO

_____
Mike Snyder, Mayor

ATTEST:

_____
Holly Nagy, City Secretary

City Council
AGENDA ITEM REPORT

To: City Council
Subject: Consideration and possible action to waive the City Manager residency requirement for a definite period of time in accordance with Section 2.03.041 of the Hutto Code of Ordinances.
Meeting: Thursday, May 20, 2021
Department: Legal
Staff Contact:

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

None

City Council

AGENDA ITEM REPORT

To:	City Council
Subject:	Consideration and possible action on reviewing Cottonwood Creek Public Improvement District financing documents and direction to city staff and consultants regarding key terms relating thereto. (City Attorney-D.Palumbo)
Meeting:	Thursday, May 20, 2021
Department:	Legal
Staff Contact:	

BACKGROUND INFORMATION:

SUMMARY OF REQUEST:

STAFF REVIEW:

FINANCIAL IMPACT:

POLICY IMPLICATIONS:

ATTACHMENTS:

None

BOARDS AND COMMISSIONS MASTER LIST as of 5/13/21					
			Term Ends		
Council Member Place 1		Robin Sutton	May-23		
Council Member Place 2		Dan Thornton	May-23		
Council Member Place 3		Mandi Villarreal Salvo	May-22		
Council Member Place 4		Peter Gordon	May-23		
Council Member Place 5		Mike Arismendez	May-21		
Council Member Place 6		Tanner Rose	May-22		
Mayor		Mike Snyder	May-22		
Planning & Zoning Commission					
Meets: 1st Tuesday @ 7:00 p.m. of each month in City Council Chambers					
2 year terms per Charter					
Staff Liasion: Ashley Lumpkin					
Council Liasion: Peter Gordon					
				Appointed	**Term Ends**
Place 1	Jericka	Lawyer	Commissioner	7/2/20	6/30/22
Place 2	Randal	Clark	Commissioner	6/18/20	6/30/22
Place 3	John	Klein	Commissioner	2/4/20	6/30/22
Place 4	Tony	Wertz	Chair	7/3/19	6/30/21
Place 5	Richard	Hudson	Vice Chair	6/18/20	6/30/22
Place 6	James	Weaver	Commissioner	8/20/20	6/30/21
Place 7	Susanna	Boyer	Commissioner	8/1/19	6/30/21
After June 30, 2021, the Commissioners for Place 6 and Place 7 (Mayor) shall be appointed to a one-year term, and the Commissioner for Place 4 shall be appointed to a two-year term. After June 30, 2022, the Commissioner for Place 1 shall be appointed to a one-year term, the Commissioners for Place 2 and Place 5 shall be appointed to two-year terms, and the Commissioners for Place 3, Place 6, and Place 7 (Mayor) shall be appointed to three-year terms.					
Parks Advisory Board					
Meets: 2nd Wednesday @ 7:00 p.m. of each month in City Council Chambers					
3 year terms					
Staff Liasion: Tony Host					
Council Liasion:					
				Appointed	**Term Ends**
Place 1	Katie	Weiss	Vice Chair	9/30/18	6/20/21
*Place 2	Wendel	Teltow	Member	1/23/20	6/30/21
*Place 3	David	Meyer	Member	9/17/20	6/30/22
*Place 4	Kevin	Grimm	Member	7/2/20	6/30/22
*Place 5	Christina	Bastos	Member	11/15/20	6/30/21
Place 6	Rose	McMillin	Member	6/20/19	6/30/22
Place 7	Perry	Savard	Chair	6/20/19	6/30/22
* Filled unexpired term					

Library Advisory Board					
Meets: Quarterly @ 6:00 p.m. in City Council Chambers					
3 year terms					
Staff Liasion: Kristi Robich					
Council Liasion: Tanner Rose					
				Appointed	**Term Ends**
Place 1	Christina	Garza	Member	5/16/19	6/30/22
Place 2	Dwight	Baker	Chair	9/20/18	6/30/21
Place 3	Tara	Chappell	Vice Chair	7/3/19	6/30/22
Place 4	Scott	Rose	Member	9/17/20	6/30/22
**Place 5	Havala	Merit	Member	5/16/19	6/30/21
Place 6	David	Westbrook	Member	11/7/19	6/30/22
*Place 7	Brian	Thompson	Member	2/27/20	6/30/22
*Filled unexpired term	** Reappt Application in folder.				
Zoning Board of Adjustment					
Meets: 4th Weds @ 7:00 p.m. of each month in City Council Chambers					
2 year terms per LGC Sect. 211.008(b)					
Staff Liasion: Ashby Grundman					
Council Liasion:					
				Appointed	**Term Ends**
Place 1	Vacant		Member		6/30/22
Place 2	Vacant		Member		6/30/21
Place 3	David	Meyer	Member	7/3/19	6/30/21
* Place 4	Wendell	Teltow	Member	6/20/19	6/30/20
Place 5	Vacant		Member		6/30/21
Place 6	Maureen	Rooker	Member	6/20/19	6/30/21
Place 7	Randal	Clark	Member	9/19/19	6/30/21
*Filled unexpired term					
Historic Preservation Commission					
Meets: 4th Tuesday @ 6:30 p.m. of each month in City Council Chambers					
3 year terms					
Staff Liasion:					
Council Liasion: Tanner Rose					
				Appointed	**Term Ends**
Place 1	DeAnne	Worley	Commissioner	7/3/19	6/30/20
** Place 2	Jon	Stephenson	Commissioner	3/4/21	6/30/21
Place 3	Curtis	Orton	Commissioner	9/20/18	6/30/22
Place 4	Robert	Lykins	Commissioner	9/20/18	6/30/20
Place 5	Vacant		Commissioner		6/30/21
Place 6	Travis	Allen	Commissioner	6/20/19	6/30/22
Place 7	Vacant		Commissioner		
* Filled unexpired term	** Reappt Application in folder.				

Building and Standards Commission					
Meets: As Needed in City Council Chambers (at least once a year)					
2 year terms per LGC Sect. 54.033					
Staff Liasion: Ashley Lumpkin					
Council Liasion: None					
				Appointed	**Term Ends**
*Place 1	Troy	Manella	Commissioner	1/3/19	6/30/20
Place 2	Vacant		Commissioner	9/20/18	6/30/21
Place 3	Kendrick	Whittington	Commissioner	8/2/18	6/30/22
Place 4	Vacant		Commissioner	6/20/19	6/30/22
Place 5	Tom	Brown	Commissioner	9/20/18	6/30/21
Place 6	Maureen	Rooker	Commissioner	6/20/19	6/30/22
Place 7	Richard	Hudson	Commissioner	6/20/19	6/30/22
* Filled unexpired term					
Ethics Review Commission					
Meets: As needed in City Council Chambers (at least once a year)					
3 year terms					
Staff Liasion: City Secretary					
Council Liasion: None					
				Appointed	**Term Ends**
* Place 1	Jane	Wrinkle	Member	2/4/21	6/30/21
** Place 2	Lori	Brown-Duncan	Vice Chair	9/20/18	6/30/21
Place 3	Bill	Kohl	Member	7/11/19	6/30/22
** Place 4	Christina	Garza	Member	12/17/20	6/30/20
*Place 5	Abel	Landin	Member	9/19/19	6/30/21
Place 6	April	Willis	Member	8/15/19	6/30/22
Place 7	Krystal	Kinsey	Member	11/21/19	6/30/22
* Filled unexpired term	** Reappt Application in folder.				
Economic Development Corporation					
Meets: 1st Monday at 6:30 p.m. of each month in City Council Chambers					
Staff Liasion: Stacy Schmitt					
Council Liasion: Mike Snyder					
				Appointed	**Term Ends**
Place 1	Marqueta	Grant	Member	2/25/21	6/30/21
Place 2	Mike	Arismendez	Member	9/17/20	6/30/21
Place 3	Shawn	Lucas	Member	9/17/20	6/30/21
Place 4	Don	Carlson	Vice Chair	7/3/19	6/30/21
Place 5	Vacant		Treasurer	2/4/21	6/30/21
Place 6	Victor	Henry	Member	5/6/21	6/30/21
Removed 5-6-21 Place 7	Steven	Harris	Chair	6/20/19	6/30/21

Communications/Technology Task Force					
Meets once a month.					
1 year term- appts in Feb.					
Council Liasion: Peter Gordon					
Place 1	Vacant		Member		2/3/22
Place 2	Jane	Wrinkle	Member	2/4/21	2/4/22
Place 3	Vacant		Member		2/3/22
Place 4	Andrew	Ingrassia	Member	8/27/20	2/1/21
Place 5	Ross	Barber	Member	8/27/20	2/1/21
Place 6	Jerica	Lawyer	Member	2/6/20	2/6/21
Place 7	Dana	Wilcott	Member	8/27/20	2/1/21
ADA/Electronic and Information Resource Task Force					
Meets once a month					
1 year term-Appts in Feb					
Council Liasion: Dan Thornton					
Place 1	Vacant		Member		
Place 2	Jane	Wrinkle	Member	2/4/21	2/4/22
Place 3	Vacant		Member		
Place 4	Laurie	Stockman	Member	2/25/21	2/6/22
Place 5	Vacant		Member		
Place 6	Vacant		Member		
Place 7	Vacant		Member		
Diversity and Inclusion Commission					
Meets monthly					
3 yr terms					
Council Liasion:					
Place 1	Ana	Gonzales	Member	11/19/21	6/30/24
Place 2	Tara	Spoons	Member	9/17/20	6/30/23
Place 3	Vanessa	Henry	Member	11/5/20	6/30/24
Place 4	Brian	Thompson	Member	8/27/20	6/30/23
Place 5	Onnesha	Williams	Member	8/20/20	6/30/23
Place 6	Beatriz	Rodriguez	Member	11/5/20	6/30/24
Place 7	Nakeenya	Wilson	Member	11/19/20	6/30/24
Tax Increment Reinvestment Zone (TIRZ) #1					
3 appts from City					
2 appts from County *+					
2 yr terms					
	Russ	Boles	Member	2/14/20	2/14/22
*+	Scott	Heselmeyer	Member	3/2/21	3/2/23
	VACANT		Chair		2/1/22
	Rick Hudson		Member	2/10/20	2/10/22
	Mandi Villarreal Salvo		Member	4/1/21	2/1/22