16

Date Submitted: _____

P.O Box 369 (Mail)
303 E Pecan Dr (Physical)
Johnson City, TX 78636
830.868.7111 (Phone)
830.868.7118 (Fax)

PLAT APPLICATION
CHAPTER 10

Section I. *Plat and Applicant Information*

PLAT NAME: Homestead at Deer Creek, Phase One

Owner/Agent: Legacy Capital Funding, LLC Phone: _____ Fax: _____

Owner/Agent Address: 10008 Loxely Lane, Austin, TX Zip Code: 78717

Engineer/Surveyor: Belton Engineering, Inc. Phone: 254.731.5600 Fax: _____

Address: 106 N. East St., Belton, TX Zip Code: _____

Elevation Survey: ☒ Major Plat ☐ Amending Plat ☐ Replat ☐ Minor Plat

Water Service: ☒ City ☐ Well

Sewer Service: ☒ City ☐ Septic System

Plat is over, within, or includes the following:	Land Area Being Platted:	Lots	Acres
Yes ☒ No ☐ Johnson City City Limits Yes ☐ No ☒ Johnson City Extraterritorial Jurisdiction Yes ☒ No ☐ Flood Plain	Single-Family (SF) Non-Single Family (NSF)	73 lots & 5	tracts 21.281

Base preliminary platting fee	$ 654.00	Base final platting fee	$ 402.00
Single family residential development 78 lots / tracts x $67.00 / lot	$ 5226.00	Non-single family residential development	$
Variance	$	Plat deferral	$
Performance agreement time extension	$	Vacating declaration	$
Re-plat involving notification	$	Amending plat	$
Plat withdrawal	$	Emergency add-on	$
Plat recording fee *	$ Actual cost per County	Processing fee	$ 123.00
Plan review fee	$ 442.00	Floodplain Development / Driveway Permits: $ 419.00	

* Recording of plat, dedication instrument, development agreement, and HOA Declaration of Covenants, Conditions and Restrictions (CC&Rs), Articles of Incorporation, and Bylaws

Total Fee: $ 7,266.00, not including actual recording fees.
All fees shall be paid at the time of plat filing.

Required Letters of Certification, if a
Environmental Quality (TCEQ); Bla

I hereby certify that the above infon

Print Name: Lina Chtay

Date: _____

Updated 11/27/20

RECEIPT № 4495

DATE 5/25/22

RECEIVED FROM Dunbar

Address: Plat Fees

DOLLARS $ 7266.00

FOR _____ OTHER _____ ✓ 1101

Account No. _____

Water _____
Sewer _____
Garbage _____
Tax _____
Late Charge _____

HOW PAID		
CASH		
CHECK	7266	00
MONEY ORDER		

City Of Johnson City

BY _____

Ref. No G 100105030

APPLICATION DATE: _____

P.O. Box 369 (Mail)
303 E. Pecan Dr. (Physical)
Johnson City, TX 78636
830.868.7111 (Phone)
830.868.7718 (Fax)

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

Project Address: 217 281 Loop, Johnson City, Texas

Company Name Completing Floodplain Development Work: Belton Engineering, Inc

Company Phone No.: 254-731-5600 Company Email: lchtay@beltonengineers.com

Property Owner's Name: Legacy Capital Funding, LLC

Property Owner's Phone No.: _____ Property Owner's Email: mehul@dabarhomes.com

Subdivision: _____ Lot Number: _____
Block: ___ _____ N.C.B.: _____
Tract: _____

Location Description (if not in a subdivision):
At the intersection of US Highway 281 and 281 Loop within the city of Johnson City

Type of Proposed Construction:

Residential X Mobile Home ☐ Non-Residential ☐ Other ☐

Type of Proposed Development:

Subdivision X Mobile Home Park ☐ Fill-Permanent ☐ Fill-Temporary ☐ Other ☐

If other is checked, please describe:

Attach a scaled set of plans of the proposed construction and/or development to this application.

I acknowledge that this application may take up to 10 business days to process, and that the City of Johnson City Development Service Dept. will contact me regarding any permit, permit number, required fees, or permissions granted for this application.

Permit is valid for six (6) months from the date of approval. If not completed within 6 months, the applicant must reapply for an additional permit.

Date: 05-19-22

Signature: _____

Print Name: Lina Chtay

OFFICE USE ONLY:

Updated 11/27/20

May 25, 2022

Darbar Homes
10008 Loxley Lane
Austin, TX 78717

RE: Letter of Certification

Plat: Homesteads at Deer Creek, Phase I

Plat Date: May 19, 2022

To Whom it May Concern:

Please accept this Letter of Certification for approval of the above-mentioned plat. Pedernales Electric Cooperative has no objections to the filing of this plat for consideration by the appropriate governmental entity.

We will offer service to this location in accordance with our Line Extension Tariff, which requires a completed application and pre-payment of all fees before construction can begin. A deposit may also be required

Should changes be made to the approved plat noted and dated above, this letter will be deemed invalid, and the updated plat will have to follow the plat review and approval process.

If you should have any questions regarding this Letter of Certification, please contact me at (830) 454-3520 or bradley.noack@peci.com.

Sincerely,

Bradley Noack

Bradley Noack
Electrical Distribution Design & Planning Manager
PEC Marble Falls District

Through Tax Year 2021	# TAX CERTIFICATE	Certificate # 40848

Issued By:
BLANCO COUNTY APPRAISAL DISTRICT
P O BOX 338
615 N NUGENT (PHYSICAL ONLY)
JOHNSON CITY, TX 78636

Property Information

Property ID: 8609 Geo ID: 26870000001408001
Legal Acres: 91.5500
Legal Desc: ABS A0147 SURVEY 172 J. DUEL,ACRES 91.55
Situs: 217 281 LOOP TX
DBA:
Exemptions:

Owner ID: 131525 100.00%
LEGACY CAPITAL FUNDING LLC
% MEHUL & JAY & ANKIT PATEL
10008 LOXLEY LN
AUSTIN, TX 78717

For Entities	Value Information	
BL-PED GROUNDWATER CONS DIS	Improvement HS:	0
BLANCO COUNTY	Improvement NHS:	268,150
CITY OF JC	Land HS:	0
ESD #1	Land NHS:	50,230
JOHNSON CITY ISD	Productivity Market:	2,024,290
	Productivity Use:	8,470
	Assessed Value	326,850

Property is receiving Ag Use

Current/Delinquent Taxes

This is to certify that, after a careful check of the tax records of this office, the following delinquent taxes, penalties, interest and any known costs and expenses as provided by Tax Code §33.48, are due on the described property for the following taxing unit(s):

Year Entity	Taxable	Tax Due	Disc./P&I	Attorney Fee	Total Due
Totals:		**0.00**	**0.00**	**0.00**	**0.00**

Outstanding Litigation Fees

Fee Date	Fee Description	Amount Due
06/01/2022	TC	10.00
	Total Fees Due:	**10.00**

Effective Date: 06/01/2022 **Total Due if paid by: 06/30/2022** **10.00**

Tax Certificate Issued for:	Taxes Paid in 2021
CITY OF JC	1,304.13
BLANCO COUNTY	1,274.71
BL-PED GROUNDWATER CONS DIS	72.23
ESD #1	326.85
JOHNSON CITY ISD	3,483.89

If applicable, the above-described property has/is receiving special appraisal based on its use, and additional rollback taxes may become due based on the provisions of the special appraisal (Comptroller Rule 9.3040) or property omitted from the appraisal roll as described under Tax Code Section 25.21 is not included in this certificate [Tax Code Section 31.08(b)].

Pursuant to Tax Code Section 31.08, if a person transfers property accompanied by a tax certificate that erroneously indicates that no delinquent taxes, penalties or interest are due a taxing unit on the property or that fails to include property because of its omission from an appraisal roll, the unit's tax lien on the property is extinguished and the purchaser of the property is absolved of liability to the unit for delinquent taxes, penalties or interest on the property or for taxes based on omitted property. The person who was liable for the tax for the year the tax was imposed or the property was omitted remains personally liable for the tax and for any penalties or interest.

A tax certificate issued through fraud or collusion is void.

This certificate does not clear abuse of granted exemptions as defined in Section 11.43 Paragraph(1) of the Texas Property Tax Code.

May Be Subject to Court Costs if Suit is Pending

Signature of Authorized Officer of Collecting Office

Date of Issue: 06/01/2022
Requested By: TIM MITCHELL
Fee Amount: 10.00
Reference #:

QUIDDITY

3100 Alvin Devane Boulevard
Suite 150
Austin, TX 78741
Tel: 512.441.9493
www.jonescarter.com

March 9, 2022

Rick A. Schroder
Chief Administrative Officer, City Secretary
303 E. Pecan Dr., Johnson City, TX 78636

Re: The Homestead at Deer Creek Subdivision
Wastewater Treatment Plant Capacity

Mr. Schroder,

Quiddity performed an evaluation of the existing wastewater treatment plant (WWTP) as requested by the City to determine available capacity for the proposed 91.57-acre Homestead at Deer Creek single family Subdivision. The evaluation was made based on the following WWTP flow and capacity information provided by the City:

- WWTP Current Average Daily Flow: 160K-170K gallons per day (average per month)
- WWTP Maximum Average Daily Flow: 303K gallons per day.
    - Permitted flow developed based on Chapter 317 (Design Criteria Prior to 2008) of the Texas Administrative Code (TAC)
- Calculated Existing Used Capacity: 53-56%

To determine the subdivision's expected demand, calculations were performed applying criteria outlined in the City of Johnson City Design Standards (CoJCDS) and TAC's Chapter 317 to the following conditions:

1. The subdivision's ultimate 91.57 acre build out including 201 lots
2. Approximately 21.3 acres in Phase 1 including 73 lots

Below is a summary of the criteria implemented and results:

- Average Daily Flow (ADF) per lot: 350 gallons per day (CoJCDS Table 6.2 and TAC Chapter 317.4)
- Infiltration (wet weather flow): 1,500 gallons per day per acre (Common in the area)
- Ultimate 201 lot area: 91.57 acres

QUIDDITY

Summary of Results		
	Ultimate	Phase 1
Maximum Dry Weather Flow (gal/day)	70,350	25,550
Maximum Wet Weather Flow (gal/day)*	207,705	162,905
WWTP Capacity Dry Weather Flow	76%	61%
	79%	64%
WWTP Capacity Wet Weather Flow	122%	107%
	125%	110%

**Includes entire subdivision area for Ultimate and Phase 1*

Under TAC rule 305.126, whenever a domestic wastewater treatment plant reaches 75% of the permitted ADF for three consecutive months, the permittee is required to initiate engineering and financial planning for expansion and/or upgrading of the treatment plant and/or collection facilities. Whenever flows at a domestic wastewater treatment plant reach 90% of the permitted ADF for three consecutive months, the permittee is required to obtain authorization from TCEQ to commence construction of the necessary additional treatment.

For City planning purposes and based on design criteria outlined in chapter 6 of CoJCDS and Chapter 317 of TAC, it is our understanding that wet weather conditions should be accounted for when estimating design flow. Section 6 of the CoJCDS also indicates that "All facilities shall be of sufficient size to provide adequate capacity for the ultimate development. The wastewater lines shall be sized to meet the peak-day dry weather flow plus an appropriate allowance for infiltration of storm water". Therefore, the results summarized above indicate that the WWTP's capacity would be exceeded once Phase 1 is built.

Phase 1 demand calculations were also provided by the developer's engineer, Belton Engineering (Attachment 1). Their calculations are for dry weather flow conditions only and don't include infiltration or an adjustment factor. Therefore, their calculations indicate that the WWTP would be at less than 64% capacity after Phase 1 is built.

If the City desires to approve platting of Phase 1 based on Belton's calculations, we recommend the following:

1. Determine and document actual wet weather flow based on historical data and investigate if other adjustments to the design parameters summarized above are possible based on current TAC Rules (E.g. ADF).
2. Begin plans to expand the WWTP immediately.
3. Ensure that future phases of the subdivision are not built until the WWTP is expanded unless other measures are implemented.

QUIDDITY

4. Carefully evaluate demand requirements of any other potential development in the WWTP's service area.

Please note that the existing organic load capacity of the WWTP was not evaluated in this analysis.

Feel free to contact me with any questions you may have.

Sincerely,

Odalys C. Johnson, P.E.

From: Odalys Johnson <ojohnson@quiddity.com>
Sent: Friday, June 3, 2022 12:51 PM
To: Rick Schroder <rschroder@johnsoncitytx.org>
Cc: Kent O'Brien <kobrien@quiddity.com>
Subject: RE: CoJC 92 Acre Development - Various Items

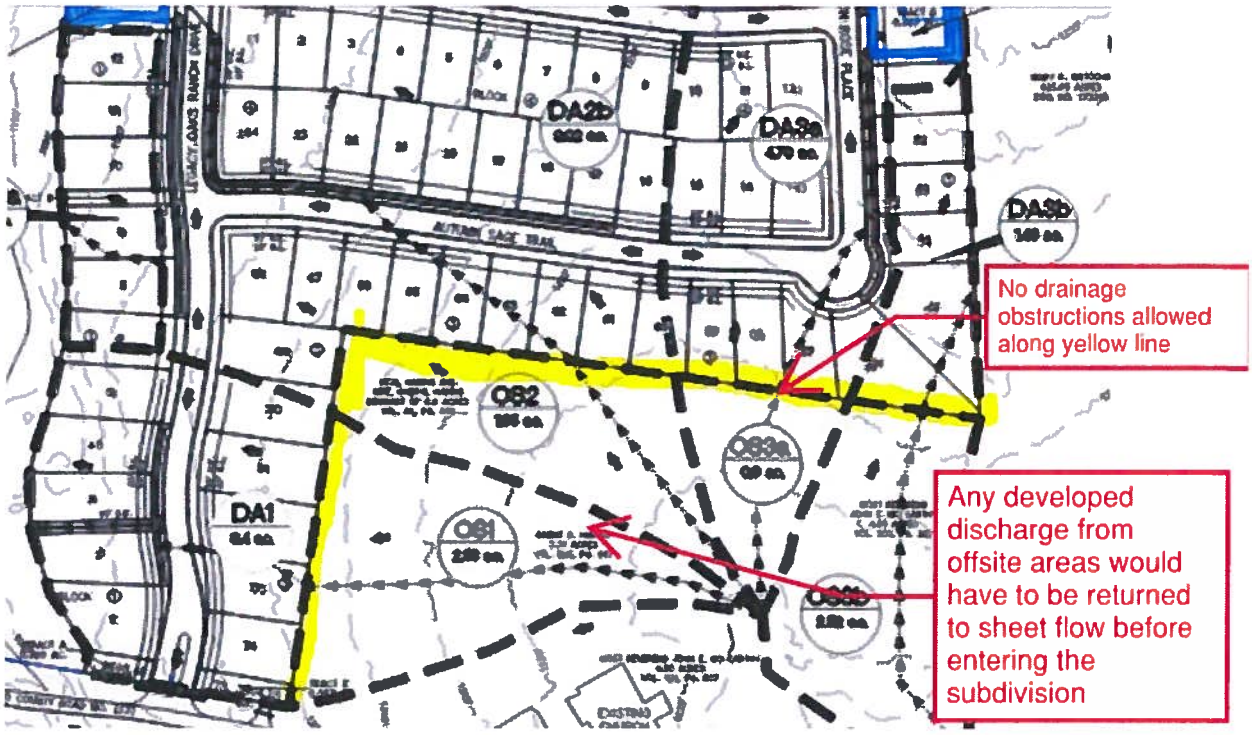
Hi Rick,
I checked the effective FIRM map and it looks to me like most of the development is in Zone AE and not A (see attached FIRM). I think Belton needs to corroborate that.

Odalys Johnson
Senior Project Manager
Email: ojohnson@quiddity.com
T: (512) 441-9493

From: Odalys Johnson <ojohnson@quiddity.com>
Sent: Friday, June 3, 2022 9:57 AM
To: Rick Schroder <rschroder@johnsoncitytx.org>
Cc: Kent O'Brien <kobrien@quiddity.com>
Subject: RE: CoJC 92 Acre Development - Various Items

Hi Rick,
I agree with your assessment of the code and applicable regulations. Here are a few additional thoughts/considerations:

- Recommend utilizing best available data for the floodplain study including Atlas 14 rainfall intensities. I understand that the Code does not have provisions requiring the use of Atlas 14 intensities, but it will not require a significant amount of additional effort from the engineer to use the updated data which would provide the most accurate BFEs.
- The developer may not be required per the City's code to process a LOMR, but based on my interpretation of the NFIP regulations, the community is responsible for processing one within 6 months of a study. We can certainly assist in that process once EDGE approves Belton's study, and I recommend we do so to ensure the community maintains a good NFIP rating.
- In regards to the off-site drainage issue, I think easements are a better solution, but I agree that a note restricting drainage obstructions along the back of the lots should be included in the plat if easements are not an option. We would also need to make sure that when the offsite area gets developed, any discharge from those sites and/or ponds is returned to sheet flow, which may be a challenge for those developments.



Feel free to call to discuss if you would like.
Thank you,

Odalys Johnson
Senior Project Manager

Email: ojohnson@quiddity.com
T: (512) 441-9493

From: Rick Schroder <rschroder@johnsoncitytx.org>
Sent: Thursday, June 2, 2022 8:09 PM
To: Odalys Johnson <ojohnson@quiddity.com>
Cc: Kent O'Brien <kobrien@quiddity.com>
Subject: Re: CoJC 92 Acre Development - Various Items

forgot to include addition:

a. Add Note:

    a. Prior to the sale of the last lot in Phase One of this Subdivision, the developer shall pay for the equipment cost and installation of a third (3rd) submersible lift station pump, control panel, variable frequency drive, and ancillary equipment at

Gonzales lift station of equal to or better quality than existing equipment from a distributor within sixty (60) miles of Johnson City, TX.

Best,

Rick A. Schroder

On Jun 2, 2022, at 2:39 PM, Rick Schroder <rschroder@johnsoncitytx.org> wrote:

Odalys –

I have researched the floodplain issue for the 92-acre development going before the City Council next Tuesday, and I offer the following. Please review and advise. I apologize in advance for the length of this email.

1. Floodplain (and its relation to subdivision platting):

As you are aware, Chapter 3 *Building Regulations*, Article 3.04 *Flood Damage Prevention* regulates developments within and abutting floodplains. Applicable (in my opinion) Sections and commentary follow:

Sec. 3.04.002 Definitions
Area of special flood hazard. The land in the floodplain within a community subject to a 1-percent or greater chance of flooding in any given year. The area may be designated as zone A on the flood hazard boundary map (FHBM). After detailed rate making has been completed in preparation for publication of the FIRM, zone A usually is refined into zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE or V.

Commentary *– The subject parcel abuts Zone A. In this instance, Zone A is not further refined.*

Base flood elevation (BFE). The elevation shown on the flood insurance rate map (FIRM) and found in the accompanying flood insurance study (FIS) for zones A, AE, AH, A1-A30, AR, V1-V30, or VE that indicates the water surface elevation resulting from the flood that has a 1% chance of equaling or exceeding that level in any given year - also called the base flood.

Commentary *– The BFE was not established in 1991 for the perimeter of the Flood Zone A abutting the development.*

Flood insurance rate map (FIRM). An official map of a community, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

Commentary *– The FIRM map is dated 1991 and established a Flood Zone A abutting the development. As stated above, Flood Zone A did not include BFEs.*

Zones. Zones on the flood insurance rate map have the following meanings:

(1) Zone A. Areas of the base (1% or 100-year) flood where base flood elevations have not been determined.

Commentary *– See above.*

Sec. 3.04.003 General provisions

(b) Basis for establishing the areas of special flood hazard. The areas of special flood hazard identified by the Federal Emergency Management Agency in the current scientific and engineering report entitled, "The Flood Insurance Study (FIS) for Johnson City, Texas and Incorporated Areas," dated February 18, 2009 with accompanying flood insurance rate maps and/or flood boundary-floodway maps (FIRM and/or FBFM) dated February 6, 1991, and any revisions thereto are hereby adopted by reference and declared to be a part of this article.

Commentary *– I searched FEMAs website specifically for the Study dated February 18, 2009. Other than the 1991 FIRM maps, I could not find it. I did, however, find a LOMA for the property closest to 281 Loop and abutting the development: 601 S. U.S. Hwy. 281 - https://map1.msc.fema.gov/data/48/L/13-06-0465A-480712.pdf?LOC=4a806be40d94cfab63e200232a2499d8. Other documents applicable to Johnson City are located here: https://msc.fema.gov/portal/availabilitySearch?addcommunity=480712.*

Sec. 3.04.004 Administration

(b) Duties and responsibilities of the floodplain administrator. Duties and responsibilities of the floodplain administrator shall include, but not be limited to, the following:

(8) When base flood elevation data has not been provided in accordance with section 3.04.003(b), the floodplain administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer the provisions of section 3.04.005.

(c) Permit procedures.

(1) Application for a floodplain development permit shall be presented to the floodplain administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

(A) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;

Commentary *– The Code recognizes that there are instances where BFEs are not established for Flood Zone A. It also recognizes that there may be development in or near Flood Zone A. For such development, a Floodplain Development Permit is required. The Permit should include BFE data determined under Sec. 3.04.005 below and the elevation of foundation slabs for homes proposed within this development.*

Sec. 3.04.005 Flood hazard reduction standards

(b) Specific standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in section 3.04.003(b), section 3.04.004(b)(8), or subsection (c)(3) below, the following provisions are required:

(1) Residential construction. New construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to eighteen (18) or more inches above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection as proposed in section 3.04.004(c)(1)(A), is satisfied.

(c) Standards for subdivision proposals.

(1) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with section 3.04.001(b), (c), and (d) of this article.

(2) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet floodplain development permit requirements of section 3.04.003(c); section 3.04.004(c); and the provisions of this section.

(3) Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to section 3.04.003(b) or section 3.04.004(b)(8) of this article.

(4) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

(5) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

(e) Floodways. Floodways located within areas of special flood hazard established in section 3.04.003(b), are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

(1) Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

(2) If subsection (e)(1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this section.
(3) Under the provisions of 44 CFR chapter 1, section 65.12, of the National Flood Insurance Program regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first completes all of the provisions required by section 65.12.

Commentary *– The Code allows residential new construction where the lowest floor (ie top of foundation slab) is 18 or more inches above the BFE so long as an engineer, architect, or land surveyor certifies that fact. Moreover, the BFE must be provided by the developer's engineer for Flood Zone A abutting the development because Phase One of development exceeds 50 lots.*

With regard to the proposed exposed ductile iron sewer line crossing Deer Creek, the developer's engineer must demonstrate through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

Summary *–*

1. *The subject parcel abuts Zone A.*
2. *The BFE was not established in 1991 for the perimeter of the Flood Zone A abutting the development.*
3. *The Code recognizes that there are instances where BFEs are not established for Flood Zone A. It also recognizes that there may be development in or near Flood Zone A. For such development, a Floodplain Development Permit is required. The Permit should include BFE data determined under Sec. 3.04.005 and the elevation of foundation slabs for homes proposed within this development.*
4. *The Code allows residential new construction where the lowest floor (ie top of foundation slab) is 18 or more inches above the BFE so long as an engineer, architect, or land surveyor certifies that fact. Moreover, the BFE must be provided by the developer's engineer for Flood Zone A abutting the development because Phase One of development exceeds 50 lots.*
5. *With regard to the proposed exposed ductile iron sewer line crossing Deer Creek, the developer's engineer must demonstrate through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.*

In my opinion, with regard to the floodplain issue, the developer's engineer must 1) determine BFE for Flood Zone A abutting the development; 2) identify BFE on the plat for Flood Zone A; and 3) place a note on the plat that a registered professional engineer, architect, or land surveyor will inspect and certify in writing to the City that the lowest floor elevation (ie top of foundation slab) is 18 or more inches above the determined BFE. I do not interpret our Code as requiring a LOMR/LOMA/Etc.

2. Exposed Ductile Iron Sewer Line Crossing Deer Creek:

I have searched our current Code of Ordinances relating to exposed utilities. I see no prohibition on exposed utility lines. Our Subdivision Design Standards require utilities to be buried; however, those Design Standards were adopted after the initial preliminary plat in November 2020 and, therefore, would not apply to this vested development.

Summary –

So long as:

1. The developer's engineer demonstrates through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge; and
2. The proposed ductile iron is suitable for open exposure (not buried) and carrying wastewater.

We have no objection to this proposal.

3. Offsite Drainage Entering Property:

The Code of Ordinances in effect at the time of initial submittal referenced drainage infrequently. The only reference I can find follows:

Applicable sentences:

The first sentence, "The subdivider shall…construct such storm sewers, drainage ditches…of such size as to adequately serve (as recommended by the City Engineer and approved by the City Council) the area being subdivided."
The last sentence, "All such facilities shall be constructed in accordance with subdivision design standards and specifications approved and adopted by the City Council".

I have never found referenced design standards and specifications, so I do not know if they ever existed.

Summary –

You previously mentioned that we could require open fencing (ie chain link, ornamental iron, etc.) in lieu of channeling the sheet flow. If that still is the case, we do not have an objection to this, but it would need to be noted on the plat for each applicable lot. Moreover, this drainage issue must be in accordance with Texas professional engineering standards / ethics.

4. Curbing:

The developer indicated that no curbing for the street would be provided. As in Item No. 3 above, the prior Code of Ordinances did not require curbing, and I cannot find the referenced design standards and specifications. Nonetheless, I have attached the street design standards in effect at the time of initial plat application.

5. Construction Document Comments:

Below, please find the construction document comments that you provided to the developer's engineer. I have added my comments, where necessary:

2	Extend ROW or easement to encompass the full length of the WW line to the existing system connection.
2	Adjust alignment of WW line to be within the proposed ROW or easements. Adjust slopes accordingly ensuring minimum velocities are met.
2	The City does not allow exposed utility lines. Please revise accordingly. See above Item No. 2.
3	Use NOAA data for Johnson City. The developer indicated they were using Atlas 14 values for Blanco Co. The developer also stated that they would be providing a formal drainage report.
3-4	Provide drainage easements / ROW for offsite drainage, ditches, ponds and any other major drainage ways per paragraph B
3	Adjust DA2 boundary based on topography.
4	Clarify source of QPOST data on tables. Per Belton Engineers, the applicant will submit a full drainage report to accompany the construction documents.
4	Limit sheet flow to 100'.
4	Include analysis of the 2 yr storm event.
4	Provide 1' of freeboard at detention ponds. Per Belton Engineers, they will add to detail sheet.
4	Provide Atlas 14 100-yr floodplain delineation and supporting data in a drainage report. Can only be a suggestion.
4	Clarify how Das OS1, DA1b, DA1a, DA2a and DA2c drain to the pond. Per Belton Engineers, they will provide a combined hydrograph in drainage report.
5	Include analysis of the 2 yr storm event.
7	Provide all hydrographs in a drainage report explaining methodology, etc.
9	Do ditch calculations account for the downstream culvert's headwater elevations?
10	Driveway culverts should not be less than 18".
	Provide roadway typical cross sections and grading plan. Include the proposed water and wastewater lines and storm sewers or ditches.
	Show existing water line along 281 Loop.

6. EDGE Agreement for Floodplain Management:

The proposed agreement for floodplain management is being placed on the City Council agenda on June 7th, 2022.

7. Development Agreement:

The developers are waiting on me for a proposed development agreement addressing the following matters. After consultation with the City Attorney, we request the following be placed as notes on the plat in lieu of a development agreement:

a. Amend Note No. 6 to read as follows:

    a. Water and wastewater impact fees were not paid at the time of platting for this plat. All impact fees must be paid in full, at the rate in effect at the time of service applications, prior to water meter set and/or wastewater service connection. Further, the developer shall install individual water and wastewater taps to each lot within the Subdivision and, therefore, no tap fees are required to be paid prior to water meter set and/or wastewater service connection.

b. Add Note:

    a. The developer shall pay for the equipment cost and installation of a third (3rd) submersible lift station pump, control panel, variable frequency drive, and ancillary equipment at Gonzales lift station of equal to or better quality than existing equipment from a distributor within sixty (60) miles of Johnson City, TX.

8. Planning and Zoning Commission Approved Motion:

FYI...the P&Z approved the following motion on May 24th:

Motion to recommend approval of the proposed final plat, excluding the submitted construction documents, for the Homesteads at Deer Creek, Phase One, Subdivision, subject to the the following items being completed, reviewed and approved by the City Engineer and/or City Staff, and attached to the final plat prior to City Council review of this item on or after June 7, 2022:

1) Plat

a. Add 10' utility easement identifier across the front boundary lines of all lots on plat map.
b. Amend Block 3, Lots 34, 41, & 68 20' building setback lines on sides of property to 15'.
c. Amend Block 4, Lots 1, 12, 13 & 24 20' building setback lines on sides of property to 15'.
d. Add drainage area / easement identifier to Tract B on plat map.
e. Add common area identifiers to Tracts A & E on plat map.
f. Submit required plat fees.
g. Submit required letter of certification from PEC.
h. Submit current property tax certificate.
i. Submit survey / metes and bounds description per Note No. 5.
j. Remove last sentence from Note No. 9: "In subdivision entirely containing "Acreage Tracts" of five (5) acres or more in size, an easement will be accepted."

k. Add verbiage to Mehul Patel signatory block (last sentence) - ...shown hereon, subject to a Dedication Instrument executed on _____ and recorded as Document No. _____ with this Plat at the Blanco County Deed Records."
l. Remove dates from the County Clerk signatory block.
m. Add missing property line length to Block 4, Lot 24.
n. Add identifier to Block 1, Lots 2 & 3 indicating 7.5' drainage easements on either side of common lot line.
o. Address whether additional drainage easements / channels / interceptors are required for offsite drainage entering property from the South.

2) Documents Accompanying Plat

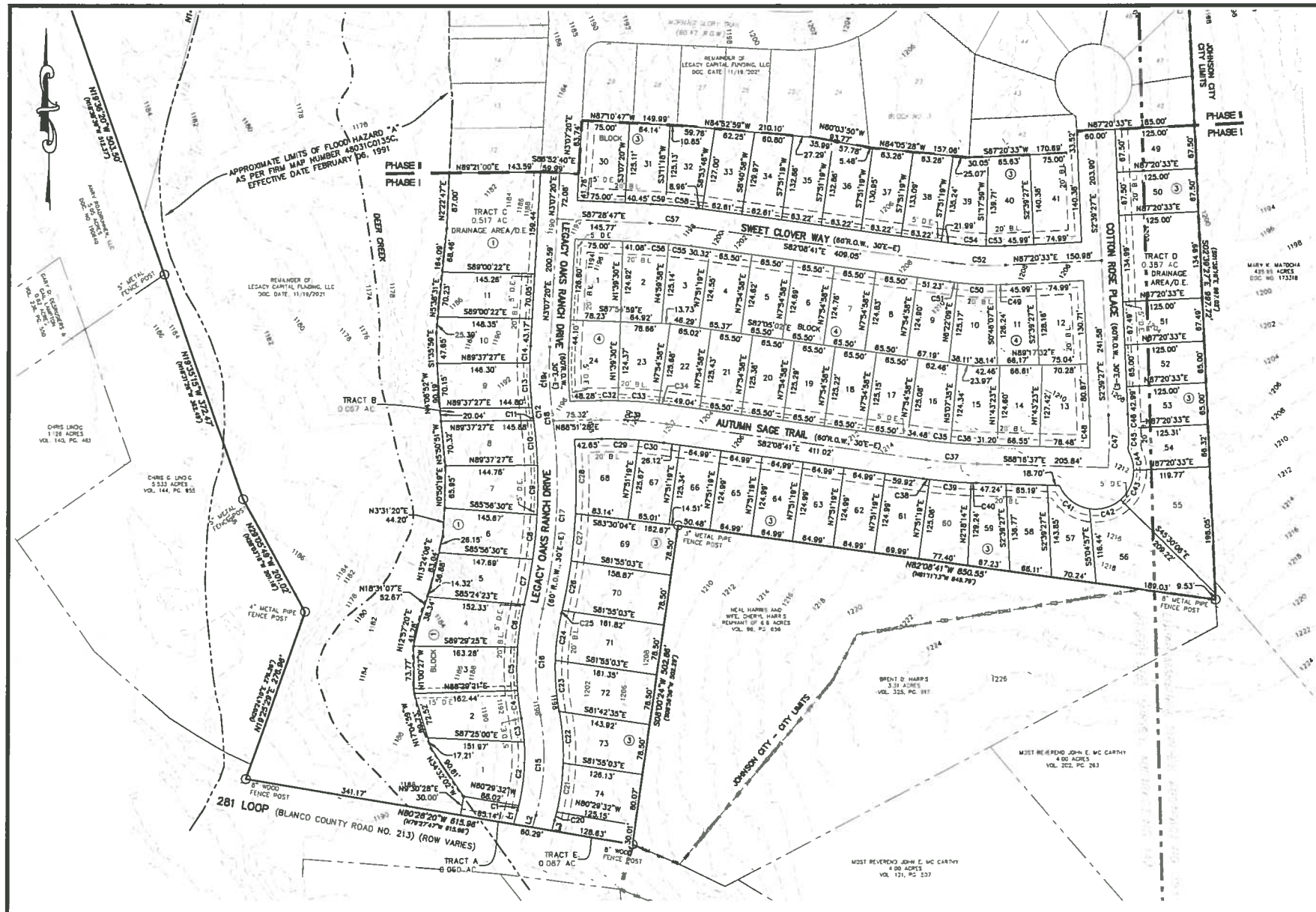
a. Dedication Instrument

i. Submit survey / metes and bounds description to dedication instrument.
ii. Reword last sentence of paragraph two to read as follows: "The subdivision's Homeowner's Association (HOA) shall maintain dedicated drainage areas, easements, and detention ponds; however, the City shall be granted authority to maintain said areas should the HOA fail to do so."

b. Provide a separate easement for the portion of the sewerline crossing future phases of development to the manhole in Deer Creek and determine whether the ductile iron crossing proposed in Deer Creek may be exposed.
c. Provide a development agreement establishing the timing of impact / tap fee payments, the installation of a third pump at the Gonzalez lift station, the maintenance of drainage easements / ponds, and the requirement for documents establishing the HOA and its authority over common areas and drainage areas, easements, and detention ponds.
d. Address, as a part of the required floodplain development permit, whether the developer shall be required to further evaluate FEMA flood hazard "A" limits adjacent to the phased development.

As a part of this motion, the developer shall respond to the City Engineer's comments, questions, and directives and correct, if necessary, all related construction documents and permit applications, as all such documents shall be be reviewed and approved by the City Engineer.

This motion is based on the Municipal Code of Ordinances Chapter 3 Building Regulations, Division 9 Fire Code and Article 3.04 Flood Damage Prevention; Chapter 5 Fire Prevention and Protection; Chapter 10 Subdivision Regulation; Chapter 13 Utilities; and Chapter 14 Zoning.



Curve Table			
Curve #	Length	Radius	Chord
C1	7.41'	320.00'	N14°29'09"E 7.41'
C2	99.71'	320.00'	N4°53'45"E 99.31'
C3	37.38'	320.00'	N7°22'31"W 37.34'
C4	43.85'	430.00'	S7°47'58"E 43.83'
C5	68.09'	430.00'	S0°20'28"E 68.02'
C6	67.16'	430.00'	S8°40'11"W 67.10'
C7	71.91'	806.00'	N10°35'18"E 71.89'
C8	70.05'	806.00'	N5°32'34"E 70.02'
C9	77.24'	806.00'	N0°18'28"E 77.21'
C10	70.24'	806.00'	N4°56'03"W 70.22'
C11	5.09'	806.00'	N7°36'42"W 5.09'
C12	15.06'	585.00'	S7°03'18"E 15.06'
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C14	28.27'	585.00'	S1°50'08"W 28.27'
C15	158.03'	350.00'	N21°2'53"E 156.89'
C16	168.81'	400.00'	S1°12'44"W 165.40'
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C18	9.58'	836.00'	N7°27'51"W 9.58'
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B	0.057	DRAINAGE	HOA
C	0.517	DRAINAGE	HOA
D	0.387	DRAINAGE	HOA
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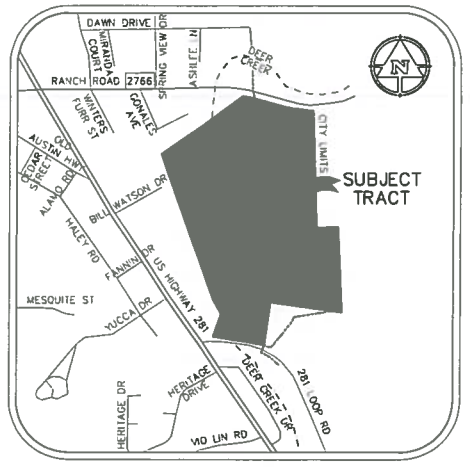


VICINITY MAP

LEGEND

IRS	IRON ROD SET STAMPED "BRYAN TECHNICAL SERVICES"
IRF	IRON ROD FOUND
IRFC	IRON ROD FOUND WITH CAP
D.E.	DRAINAGE EASEMENT
U.E.	UTILITY EASEMENT
N.A.E.	NON-ACCESS EASEMENT
B.L.	BUILDING LINE
P.O.B.	POINT OF BEGINNING
E-E	BACK TO BACK OF CURB
R.O.W.	RIGHT-OF-WAY
( )	DEED CALLS

FINAL PLAT OF:

HOMESTEADS AT DEER CREEK, PHASE I

PHASE I–21.281 ACRES
73 LOTS, 3 BLOCKS AND 5 TRACTS INCLUDING:
3,289.93 L.F. OF NEW STREETS AND 4.48 A.C. OF R.O.W.
JOSEPH DUEL SURVEY, ABSTRACT #147 &
ELIJAH MARSHALL SURVEY ABSTRACT #393, BLANCO COUNTY, TEXAS
A SUBDIVISION IN THE CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS

100 200 300

STATE OF TEXAS
COUNTY OF BLANCO

KNOW ALL MEN BY THESE PRESENTS, THAT LEGACY CAPITAL FUNDING, LLC, A TEXAS LIMITED LIABILITY COMPANY, WHOSE ADDRESS IS 10008 LOXELY LANE, AUSTIN, TEXAS 78717, BEING THE SOLE OWNER OF THAT 91.567 ACRE TRACT OF LAND SITUATED IN THE JOSEPH DUEL SURVEY, ABSTRACT NO. 147, AND THE ELIJAH MARSHALL, ABSTRACT NO. 393, BLANCO COUNTY, TEXAS, AS CONVEYED TO IT BY DEED DATED NOVEMBER 22, 2021, AND RECORDED IN DOCUMENT NO. 216769, BLANCO COUNTY DEED RECORDS, DOES HEREBY SUBDIVIDE SAID TRACT OF LAND TO BE KNOWN AS THE HOMESTEADS AT DEER CREEK, PHASE I, IN ACCORDANCE WITH THE PLAT SHOWN HEREON, SUBJECT TO ANY AND ALL EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED, AND DOES HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON.

MEHUL PATEL, MEMBER
LEGACY CAPITAL FUNDING, LLC, A TEXAS LIMITED LIABILITY COMPANY
10008 LOXELY LANE
AUSTIN, TEXAS, 78717

MEHUL PATEL, MANAGER

STATE OF TEXAS
COUNTY OF BLANCO

BEFORE ME, THIS UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED _____ KNOWN BY ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT. IT HAS BEEN ACKNOWLEDGED TO ME THAT HE/SHE EXECUTED THE FOREGOING INSTRUMENT AS THE OWNER OF THE PROPERTY DESCRIBED HEREON.

NOTARY PUBLIC, STATE OF TEXAS — DATE NOTARY COMMISSION EXPIRES

STATE OF TEXAS
COUNTY OF BLANCO

APPROVED THIS _____ DAY OF _____ 20____ BY THE CITY COUNCIL OF THE CITY OF JOHNSON CITY, TEXAS.

MAYOR — CITY SECRETARY

TAX CERTIFICATE

THE BLANCO COUNTY TAX APPRAISAL DISTRICT, THE TAXING AUTHORITY FOR ALL TAXING ENTITIES IN BLANCO COUNTY, TEXAS, DOES HEREBY CERTIFY THAT THERE ARE CURRENTLY NO DELINQUENT TAXES DUE OR OWNG ON THE PROPERTY DESCRIBED BY THIS PLAT.

DATED ON THE _____ DAY OF _____, 20____

BLANCO COUNTY TAX APPRAISAL DISTRICT

BY:_____

I, LAURA WALLA, COUNTY CLERK OF BLANCO COUNTY, TEXAS, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE THE _____ DAY OF _____, A.D., 20____ AT _____ O'CLOCK __M., IN THE PLAT RECORDS OF BLANCO COUNTY, TEXAS, IN BOOK _____ PAGE _____

WITNESS MY HAND AND SEAL OF OFFICE THIS THE 30TH DAY OF DECEMBER A.D., 20____

LAURA WALLA, COUNTY CLERK
BLANCO, COUNTY, TEXAS

STATE OF TEXAS
COUNTY OF BLANCO

KNOW ALL MEN BY THESE PRESENTS:

THAT I, BRUCE LANE BRYAN, DO HEREBY CERTIFY THAT I MADE AN ACTUAL AND ACCURATE SURVEY OF THE PLATTED LAND AND THAT THE CORNER MONUMENTS SHOWN ON THE FOREGOING PLAT WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION, IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF JOHNSON CITY, TEXAS

FOR REVIEW ONLY

MAY 19, 2022
BRUCE LANE BRYAN — DATE
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 4249
BRYAN TECHNICAL SERVICES, INC.
911 NORTH MAIN
TAYLOR, TX 76574

STATE OF TEXAS · BRUCE LANE BRYAN · 4249 · PROFESSIONAL LAND SURVEYOR

TRACT SURVEYED NOVEMBER 02, 2021

21.281 ACRES MORE FULLY DESCRIBED BY METES & BOUNDS BY SEPARATE FIELD NOTES PREPARED AND ATTACHED TO DEDICATION INSTRUMENT

STATE OF TEXAS
COUNTY OF BLANCO

KNOW ALL MEN BY THESE PRESENTS:

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT I PREPARED ALL DRAINAGE CALCULATIONS AND DESIGNED ALL DRAINS, STREETS/ROADS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF JOHNSON CITY SUBDIVISION REGULATIONS.

LINA CHTAY, P.E. NO. 107211

STATE OF TEXAS · LINA CHTAY · 107211 · LICENSED PROFESSIONAL ENGINEER

SURVEYORS NOTES:

1. THE BEARINGS SHOWN HEREON ARE ORIENTED TO THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD 83, 93 ADJUSTMENT.
2. THE PROPERTY DEPICTED HEREON IS WITHIN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; THE FLOOD AREA BEING IDENTIFIED ON F.I.R.M. PANEL NO. 48031C0135C, EFFECTIVE DATE FEBRUARY 02, 1991, IN ZONE "A".
3. THERE ARE NO ENCROACHMENTS, CONFLICTS OR PROTRUSIONS, EXCEPT AS SHOWN HEREON, AND SAID PROPERTY HAS ACCESS TO AND FROM A DEDICATED CITY ROADWAY.
4. ALL SET IRON RODS HAVE ORANGE PLASTIC CAPS STAMPED "BRYAN TECH SERVICES".
5. THERE IS A METES AND BOUNDS DESCRIPTION WHICH ACCOMPANIES THIS PLAT.
6. WATER AND WASTEWATER IMPACT FEES WERE NOT PAID AT THE TIME OF PLATTING FOR THIS PLAT. ALL IMPACT FEES MUST BE PAID IN FULL AT THE RATE IN EFFECT AT THE TIME OF SERVICE APPLICATIONS, PRIOR TO WATER METER SET AND/OR WASTEWATER SERVICE CONNECTION.
7. ALL LOTS TO HAVE 10' UTILITY EASEMENTS OFFSET FROM THE FRONT BOUNDARY LINE.
8. SETBACK LINES FOR ALL LOTS ARE AS FOLLOWS:
   FRONT – 20'
   SIDE – 5'
   REAR – 15'
9. WHERE THE SUBDIVISION IS TRAVERSED BY A WATERCOURSE, DRAINAGEWAY, CHANNEL OR STREAM, THERE SHALL BE PROVIDED A STORMWATER EASEMENT OR DRAINAGE RIGHT-OF-WAY CONFORMING SUBSTANTIALLY WITH THE LINES FOR SUCH WATERCOURSE AND OF SUFFICIENT WIDTH TO CONVEY ALL STORM AND FLOOD WATER FLOWING THROUGH AS MAY BE DETERMINED BY THE CITY COUNCIL THROUGH ITS AUTHORIZED REPRESENTATIVE, TO ACCOMMODATE FURTHER WIDTH OR CONSTRUCTION AND ALLOW ACCESS FOR MAINTENANCE. IN SUBDIVISION ENTIRELY CONTAINING 'ACREAGE TRACTS' OF FIVE (5) ACRES OR MORE IN SIZE, AN EASEMENT WILL BE ACCEPTED.
10. ADDITIONAL PHASES OF DEVELOPMENT WILL REQUIRE WWTP CAPACITY STUDY. WWTP CAPACITY MEMO/PLAN MUST BE AGREED TO BY THE DEVELOPER'S ENGINEER AND THE CITY ENGINEER FOR PRESENTMENT TO THE CITY COUNCIL FOR CONSIDERATION PRIOR TO FINAL PLATTING APPROVAL.

BLOCK NO.	# OF LOTS
1	11
3	38
4	24
	TOTAL 73

OWNER:
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE, AUSTIN, TEXAS, 78717

FINAL PLAT
(SHEET 1 OF 1)

BELTON ENGINEERING, INC.
Engineering • Design/Build • Planning
106 EAST STREET, BELTON, TEXAS 76513
BELTONENGINEERING@HOTMAIL.COM
WWW.BELTONENGINEERS.COM

BRYAN TECHNICAL SERVICES, INC.
911 NORTH MAIN
TAYLOR, TX 76574
PHONE (512)352-9090
FIRM No. 10128500

NO.	DATE	REVISIONS	BY
01	2/28/22	LOT LINES & PLAT NOTES	RR
02	5/19/22	EASMENT & PLAT NOTES	RR

DRAWN BY: RR — CHECKED BY: BLB
SCALE: 1" = 100' — APPRC/ED BY: BLB
PROJECT FILE: 21032-FP — DATE: MAY 19, 2022

HOMESTEAD AT DEER CREEK, PHASE I

217 281 LOOP, City of Johnson City, Blanco County, Texas

CONTACT INFORMATION

OWNER/DEVELOPER

LEGACY CAPITAL FUNDING, LLC
CONTACT: MEHUL PATEL
10008 LOXLEY LANE
AUSTIN, TX 78717
mehul@darbarhomes.com

SURVEYOR

BRYAN TECHNICAL SERVICES, INC
CONTACT: BRUCE L. BRYAN
911 N. MAIN STREET
TAYLOR, TX 76574
bruce@bryantechnicalservices.com
OFFICE: 512-352-9090

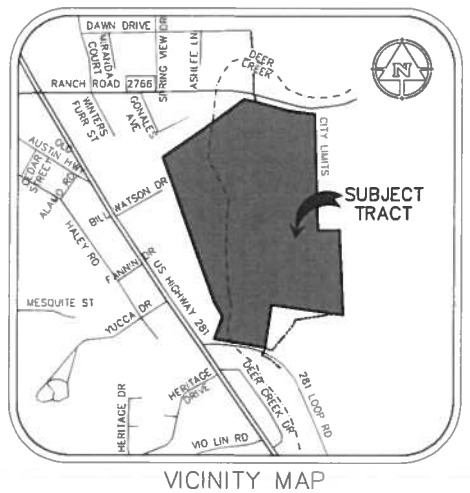
CIVIL

BELTON ENGINEERING, INC
CONTACT: LINA CHTAY, P.E.
106 N. EAST STREET
BELTON, TX 76513
lchtay@beltonengineers.com
OFFICE: 254-731-5600

PROJECT IN:

JOHNSON CITY
CITY HALL
303 E. Pecan Drive
Johnson City, Texas, 78636

DRAWING INDEX



VICINITY MAP

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER

05/06/22

FIRM # F-13392

APPROVED FOR CONSTRUCTION BY:

PUBLIC WORKS DIRECTOR *DATE*

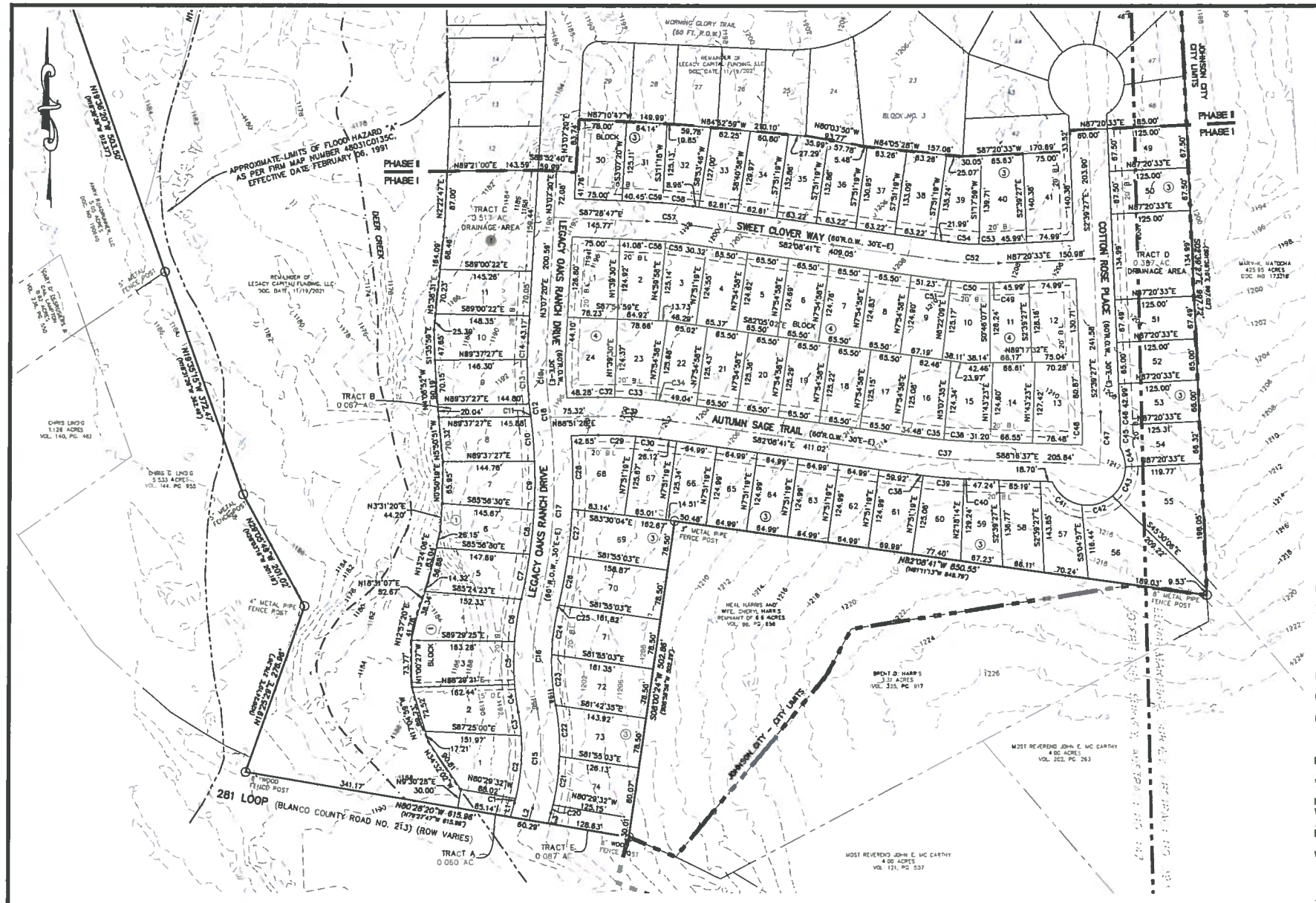
REVISIONS

DATE: DESCRIPTION:

811 Know what's below Call before you dig.

BELTON ENGINEERING, INC.
*Engineering * Design/Build * Planning*
106 EAST STREET, BELTON, TEXAS 76513
LCHTAY@BELTONENGINEERS.COM
DMOJICA@BELTONENGINEERS.COM

JOB NO: 21032 HOMESTEAD AT DEER CREEK



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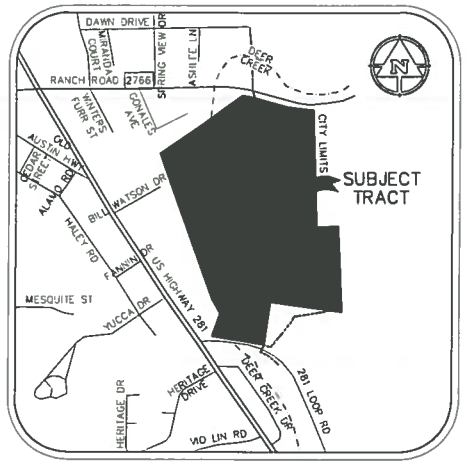

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STATE OF TEXAS
COUNTY OF BLANCO

KNOW ALL MEN BY THESE PRESENTS, THAT LEGACY CAPITAL FUNDING, LLC, A TEXAS LIMITED LIABILITY COMPANY, WHOSE ADDRESS IS 10008 LOXELY LANE, AUSTIN, TEXAS 78717, BEING THE SOLE OWNER OF THAT 91.567 ACRE TRACT OF LAND SITUATED IN THE JOSEPH DUEL SURVEY, ABSTRACT NO. 147, AND THE ELIJAH MARSHALL, ABSTRACT NO 393, BLANCO COUNTY, TEXAS, AS CONVEYED TO IT BY DEED DATED NOVEMBER 22, 2021, AND RECORDED IN DOCUMENT NO. 216769, BLANCO COUNTY DEED RECORDS, DOES HEREBY SUBDIVIDE SAID TRACT OF LAND TO BE KNOWN AS THE HOMESTEADS AT DEER CREEK, PHASE I, IN ACCORDANCE WITH THE PLAT SHOWN HEREON, SUBJECT TO ANY AND ALL EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED, AND DOES HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON.

MEHUL PATEL, MEMBER
LEGACY CAPITAL FUNDING, LLC, A TEXAS LIMITED LIABILITY COMPANY
10008 LOXELY LANE
AUSTIN, TEXAS, 78717

MEHUL PATEL, MANAGER

STATE OF TEXAS
COUNTY OF BLANCO

BEFORE ME, THIS UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED _____ KNOWN BY ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT. IT HAS BEEN ACKNOWLEDGED TO ME THAT HE/SHE EXECUTED THE FOREGOING INSTRUMENT AS THE OWNER OF THE PROPERTY DESCRIBED HEREON.

NOTARY PUBLIC, STATE OF TEXAS — DATE NOTARY COMMISSION EXPIRES

STATE OF TEXAS
COUNTY OF BLANCO

APPROVED THIS _____ DAY OF _____, 20___, BY THE CITY COUNCIL OF THE CITY OF JOHNSON CITY, TEXAS.

MAYOR — CITY SECRETARY

TAX CERTIFICATE

THE BLANCO COUNTY TAX APPRAISAL DISTRICT, THE TAXING AUTHORITY FOR ALL TAXING ENTITIES IN BLANCO COUNTY, TEXAS, DOES HEREBY CERTIFY THAT THERE ARE CURRENTLY NO DELINQUENT TAXES DUE OR OWING ON THE PROPERTY DESCRIBED BY THIS PLAT.

DATED ON THE _____ DAY OF _____, 20___

BLANCO COUNTY TAX APPRAISAL DISTRICT

BY:_____

I, LAURA WALLA, COUNTY CLERK OF BLANCO COUNTY, TEXAS, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE THE _____ DAY OF _____, A.D., 20___ AT _____ O'CLOCK __M., IN THE PLAT RECORDS OF BLANCO COUNTY, TEXAS, IN BOOK _____, PAGE _____.

WITNESS MY HAND AND SEAL OF OFFICE THIS THE 30TH DAY OF DECEMBER A.D., 20___

LAURA WALLA, COUNTY CLERK
BLANCO, COUNTY, TEXAS

STATE OF TEXAS
COUNTY OF BLANCO
KNOW ALL MEN BY THESE PRESENTS:

THAT I, BRUCE LANE BRYAN, DO HEREBY CERTIFY THAT I MADE AN ACTUAL AND ACCURATE SURVEY OF THE PLATTED LAND AND THAT THE CORNER MONUMENTS SHOWN ON THE FOREGOING PLAT WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION, IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF JOHNSON CITY, TEXAS

FOR REVIEW ONLY

MAY 6, 2022

BRUCE LANE BRYAN — DATE
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 4249
BRYAN TECHNICAL SERVICES, INC
911 NORTH MAIN
TAYLOR, TX 76574

STATE OF TEXAS · REGISTERED · BRUCE LANE BRYAN · 4249 · PROFESSIONAL · SURVEYOR

TRACT SURVEYED NOVEMBER 02, 2021

21.281 ACRES MORE FULLY DESCRIBED BY METES & BOUNDS BY SEPARATE FIELD NOTES PREPARED AND ATTACHED TO DEDICATION INSTRUMENT

STATE OF TEXAS
COUNTY OF BLANCO
KNOW ALL MEN BY THESE PRESENTS:

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT I PREPARED ALL DRAINAGE CALCULATIONS AND DESIGNED ALL DRAINS, STREETS/ROADS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF JOHNSON CITY SUBDIVISION REGULATIONS.

LINA CHTAY, P.E. NO. 107211

STATE OF TEXAS · LINA CHTAY · 107211 · LICENSED · PROFESSIONAL · ENGINEER

SURVEYORS NOTES:

1. THE BEARINGS SHOWN HEREON ARE ORIENTED TO THE TEXAS STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD 83, 93 ADJUSTMENT.
2. THE PROPERTY DEPICTED HEREON IS WITHIN A SPECIAL FLOOD HAZARD AREA AS DETERMINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; THE FLOOD AREA BEING IDENTIFIED ON F.I.R.M. PANEL NO. 48031C0135C, EFFECTIVE DATE FEBRUARY 02, 1991, IN ZONE "A".
3. THERE ARE NO ENCROACHMENTS, CONFLICTS OR PROTRUSIONS, EXCEPT AS SHOWN HEREON, AND SAID PROPERTY HAS ACCESS TO AND FROM A DEDICATED CITY ROADWAY.
4. ALL SET IRON RODS HAVE ORANGE PLASTIC CAPS STAMPED "BRYAN TECH SERVICES".
5. THERE IS A METES AND BOUNDS DESCRIPTION WHICH ACCOMPANIES THIS PLAT.
6. WATER AND WASTEWATER IMPACT FEES WERE NOT PAID AT THE TIME OF PLATTING FOR THIS PLAT. ALL IMPACT FEES MUST BE PAID IN FULL AT THE RATE IN EFFECT AT THE TIME OF SERVICE APPLICATIONS, PRIOR TO WATER METER SET AND/OR WASTEWATER SERVICE CONNECTION.
7. ALL LOTS TO HAVE 10' UTILITY EASEMENTS OFFSET FROM THE FRONT BOUNDARY LINE.
8. SETBACK LINES FOR ALL LOTS ARE AS FOLLOWS:
   FRONT – 20'
   SIDE – 10'
   REAR – 15'

LEGEND

IRS	IRON ROD SET STAMPED "BRYAN TECHNICAL SERVICES"
IRF	IRON ROD FOUND
IRFC	IRON ROD FOUND WITH CAP
D.E.	DRAINAGE EASEMENT
U.E.	UTILITY EASEMENT
N.A.E.	NON-ACCESS EASEMENT
B.L.	BUILDING LINE
P.O.B.	POINT OF BEGINNING
E-E	BACK TO BACK OF CURB
R.O.W.	RIGHT-OF-WAY
( )	DEED CALLS

BLOCK NO.	# OF LOTS
1	11
3	38
4	24
	TOTAL 73

OWNER:
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE, AUSTIN, TEXAS, 78717

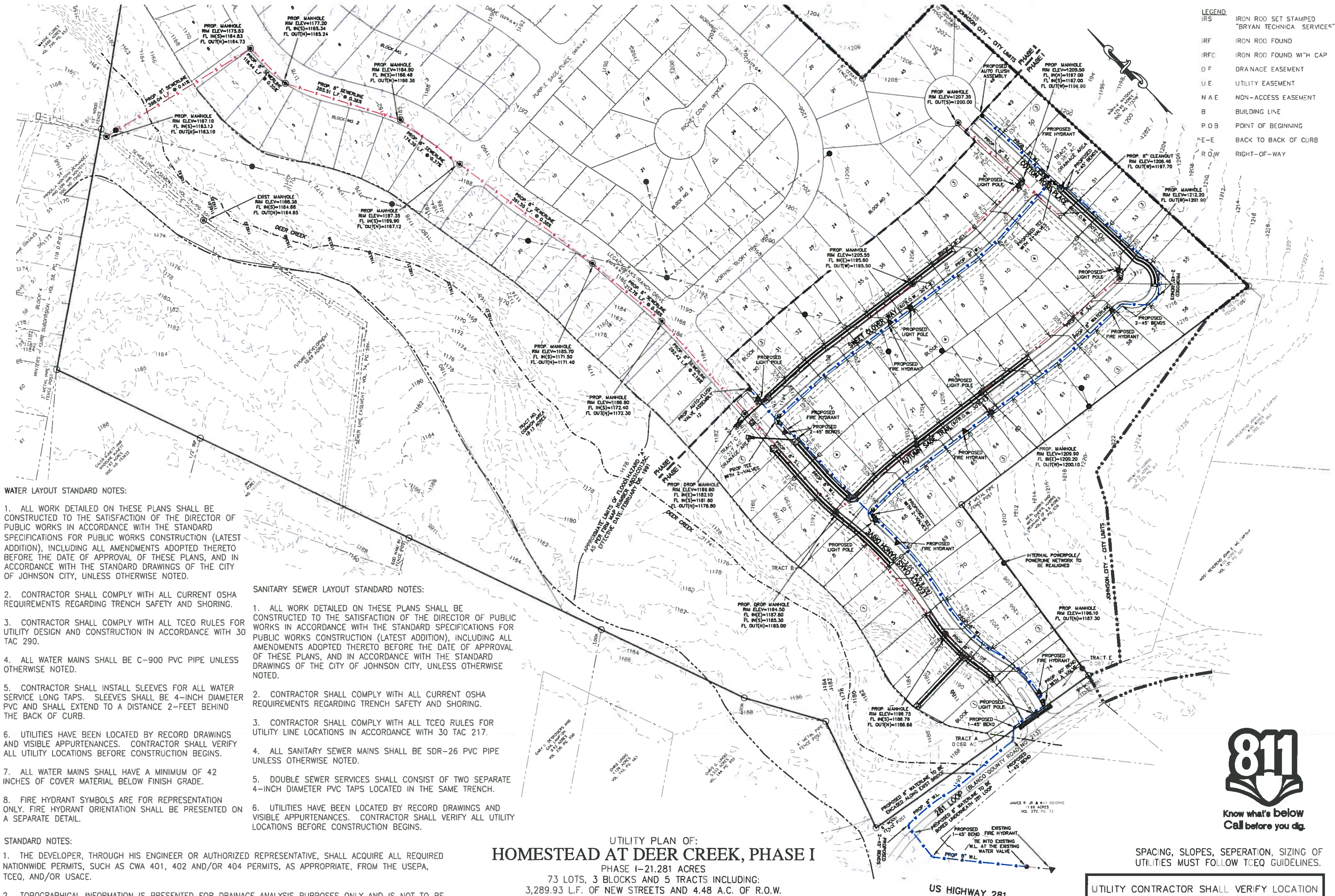
PRELIMINARY PLAT FOR INSPECTION PURPOSES ONLY
(SHEET 1 OF 1)

BELTON ENGINEERING, INC.
Engineering * Design/Build * Planning
106 EAST STREET, BELTON, TEXAS 76513
BELTONENGINEERING@COMCAST.NET
WWW.BELTONENGINEERS.COM

BRYAN TECHNICAL SERVICES, INC.
911 NORTH MAIN
TAYLOR, TX 76574 PHONE (512) 352-9090
FIRM No. 10128500

NO.	DATE	REVISIONS	BY
01	2/28/22	LOT LINES & PLAT NOTES	RR

DRAWN BY: RR — CHECKED BY: BLB
SCALE: 1" = 100' — APPROVED BY: BLB
PROJECT FILE: 21032-FP — DATE: MAY 6, 2022



LEGEND

IRS	IRON ROD SET STAMPED "BRYAN TECHNICA SERVICES"
IRF	IRON ROD FOUND
IRFC	IRON ROD FOUND WITH CAP
D.E.	DRAINAGE EASEMENT
U.E.	UTILITY EASEMENT
N.A.E.	NON-ACCESS EASEMENT
B	BUILDING LINE
P.O.B.	POINT OF BEGINNING
B-B	BACK TO BACK OF CURB
R.O.W.	RIGHT-OF-WAY

WATER LAYOUT STANDARD NOTES:

1. ALL WORK DETAILED ON THESE PLANS SHALL BE CONSTRUCTED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST ADDITION), INCLUDING ALL AMENDMENTS ADOPTED THERETO BEFORE THE DATE OF APPROVAL OF THESE PLANS, AND IN ACCORDANCE WITH THE STANDARD DRAWINGS OF THE CITY OF JOHNSON CITY, UNLESS OTHERWISE NOTED.

2. CONTRACTOR SHALL COMPLY WITH ALL CURRENT OSHA REQUIREMENTS REGARDING TRENCH SAFETY AND SHORING.

3. CONTRACTOR SHALL COMPLY WITH ALL TCEQ RULES FOR UTILITY DESIGN AND CONSTRUCTION IN ACCORDANCE WITH 30 TAC 290.

4. ALL WATER MAINS SHALL BE C-900 PVC PIPE UNLESS OTHERWISE NOTED.

5. CONTRACTOR SHALL INSTALL SLEEVES FOR ALL WATER SERVICE LONG TAPS. SLEEVES SHALL BE 4-INCH DIAMETER PVC AND SHALL EXTEND TO A DISTANCE 2-FEET BEHIND THE BACK OF CURB.

6. UTILITIES HAVE BEEN LOCATED BY RECORD DRAWINGS AND VISIBLE APPURTENANCES. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS BEFORE CONSTRUCTION BEGINS.

7. ALL WATER MAINS SHALL HAVE A MINIMUM OF 42 INCHES OF COVER MATERIAL BELOW FINISH GRADE.

8. FIRE HYDRANT SYMBOLS ARE FOR REPRESENTATION ONLY. FIRE HYDRANT ORIENTATION SHALL BE PRESENTED ON A SEPARATE DETAIL.

SANITARY SEWER LAYOUT STANDARD NOTES:

1. ALL WORK DETAILED ON THESE PLANS SHALL BE CONSTRUCTED TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST ADDITION), INCLUDING ALL AMENDMENTS ADOPTED THERETO BEFORE THE DATE OF APPROVAL OF THESE PLANS, AND IN ACCORDANCE WITH THE STANDARD DRAWINGS OF THE CITY OF JOHNSON CITY, UNLESS OTHERWISE NOTED.

2. CONTRACTOR SHALL COMPLY WITH ALL CURRENT OSHA REQUIREMENTS REGARDING TRENCH SAFETY AND SHORING.

3. CONTRACTOR SHALL COMPLY WITH ALL TCEQ RULES FOR UTILITY LINE LOCATIONS IN ACCORDANCE WITH 30 TAC 217.

4. ALL SANITARY SEWER MAINS SHALL BE SDR-26 PVC PIPE UNLESS OTHERWISE NOTED.

5. DOUBLE SEWER SERVICES SHALL CONSIST OF TWO SEPARATE 4-INCH DIAMETER PVC TAPS LOCATED IN THE SAME TRENCH.

6. UTILITIES HAVE BEEN LOCATED BY RECORD DRAWINGS AND VISIBLE APPURTENANCES. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS BEFORE CONSTRUCTION BEGINS.

STANDARD NOTES:

1. THE DEVELOPER, THROUGH HIS ENGINEER OR AUTHORIZED REPRESENTATIVE, SHALL ACQUIRE ALL REQUIRED NATIONWIDE PERMITS, SUCH AS CWA 401, 402 AND/OR 404 PERMITS, AS APPROPRIATE, FROM THE USEPA, TCEQ, AND/OR USACE.

2. TOPOGRAPHICAL INFORMATION IS PRESENTED FOR DRAINAGE ANALYSIS PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.

3. TOPOGRAPHICAL INFORMATION PRESENTED HEREIN IS DERIVED FROM TNRIS DATA HUB MAPS.

4. THE ENGINEER OF RECORD MUST BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES IN THE PLANS EXIST.

UTILITY PLAN OF:

HOMESTEAD AT DEER CREEK, PHASE I

PHASE I-21.281 ACRES
73 LOTS, 3 BLOCKS AND 5 TRACTS INCLUDING:
3,289.93 L.F. OF NEW STREETS AND 4.48 A.C. OF R.O.W.
JOSEPH DUEL SURVEY, ABSTRACT #147 &
ELIJAH MARSHALL SURVEY ABSTRACT #393, BLANCO COUNTY, TEXAS
A SUBDIVISION IN THE CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS

0 100 200 300

SPACING, SLOPES, SEPERATION, SIZING OF UTILITIES MUST FOLLOW TCEQ GUIDELINES.

UTILITY CONTRACTOR SHALL VERIFY LOCATION OF WATER AND SEWER SERVICES BEFORE TAPPING ANY LINES.

811 Know what's below Call before you dig.

REVISIONS

FIRM # F-13392

BELTON ENGINEERING INC.

106 NO. EAST STREET
BELTON, TEXAS 76513
OFFICE (254)731-5600
MOBILE (254)289-7273
BELTONENGINEERS.COM

Engineering Design/Build Planning

UTILITY PLAN OF:
HOMESTEAD AT DEER CREEK, PHASE I
217 281 LOOP
CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE, AUSTIN, TEXAS, 78717

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER
05/06/22

SCALE: 1"=100'
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DATE: 05/06/22
JOB NO.: 21032
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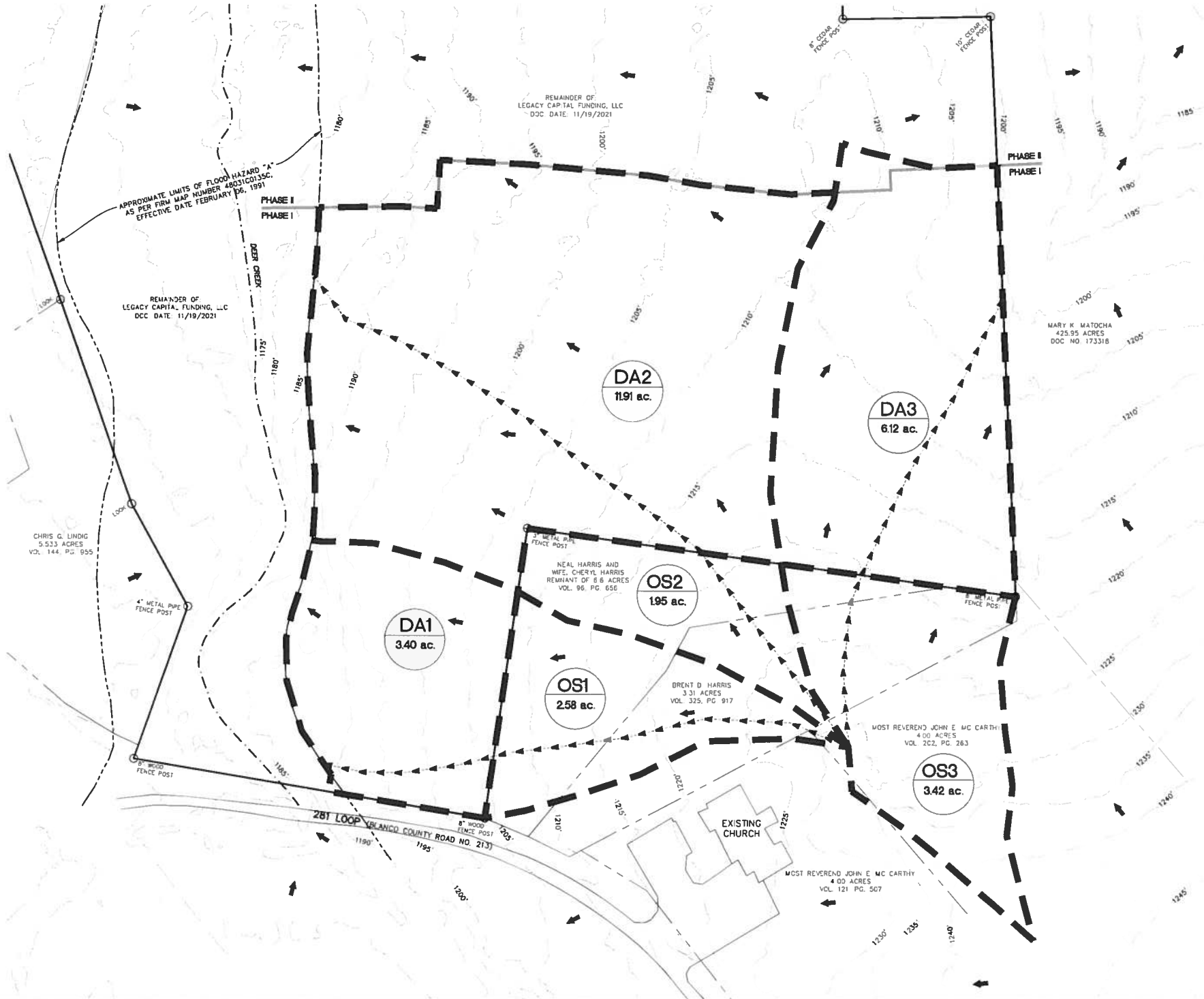

TIME OF CONENTRATION - PRE DEVELOPMENT

POST		Sheet				Shallow				Concentrated							Total	Calc.
DA	Area	n	L	S	Tc	n	L	S	Tc	Chl/P	n	L	S	Wp	X-Area	Tc	Tc	Tc
OS1+DA1	5.98	0.13	300	0.033	2.402	0.13	622.64	0.052	7.933								10.3	10.3
OS2+DA2	13.86	0.13	300	0.033	2.402	0.13	948.45	0.042	13.73								16.1	16.1
OS3+DA3	9.54	0.13	300	0.037	2.312	0.13	532.57	0.038	8.268								10.6	10.6

Drainage Calculations, Existing Conditions

DA	AREA	T_c	C_{10}	I_{10}	Q_{10}	C_{25}	I_{25}	Q_{25}	C_{100}	I_{100}	Q_{100}
	(acres)	(min.)		(in./hr.)	(cfs)		(in./hr.)	(cfs)		(in./hr.)	(cfs)
OS1+DA1	5.98	10.3	0.38	7.14	16.23	0.42	8.78	22.06	0.49	11.45	33.53
OS2+DA2	13.86	16.1	0.38	5.97	31.42	0.42	7.37	42.89	0.49	9.68	65.74
OS3+DA3	9.54	10.6	0.38	7.08	25.69	0.42	8.71	34.91	0.49	11.36	53.10

100 200 300

REVISIONS

FIRM # F-13392

BELTON ENGINEERING INC.

106 NO. EAST STREET
BELTON, TEXAS 76513
OFFICE (254)731-5600
MOBILE (254)289-7273
BELTONENGINEERS.COM

Engineering
Design/Build
Planning

PRE DRAINAGE PLAN OF:
HOMESTEADS AT DEER CREEK
217 LOOP 281
JOHNSON CITY TX 78636, BLANCO COUNTY

MEHUL DARBAR

STATE OF TEXAS
LINA CHAY
107211
LICENSED
PROFESSIONAL ENGINEER

05/05/22

SCALE: 1"=100'
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DATE: 05/05/22
JOB NO.: 21032
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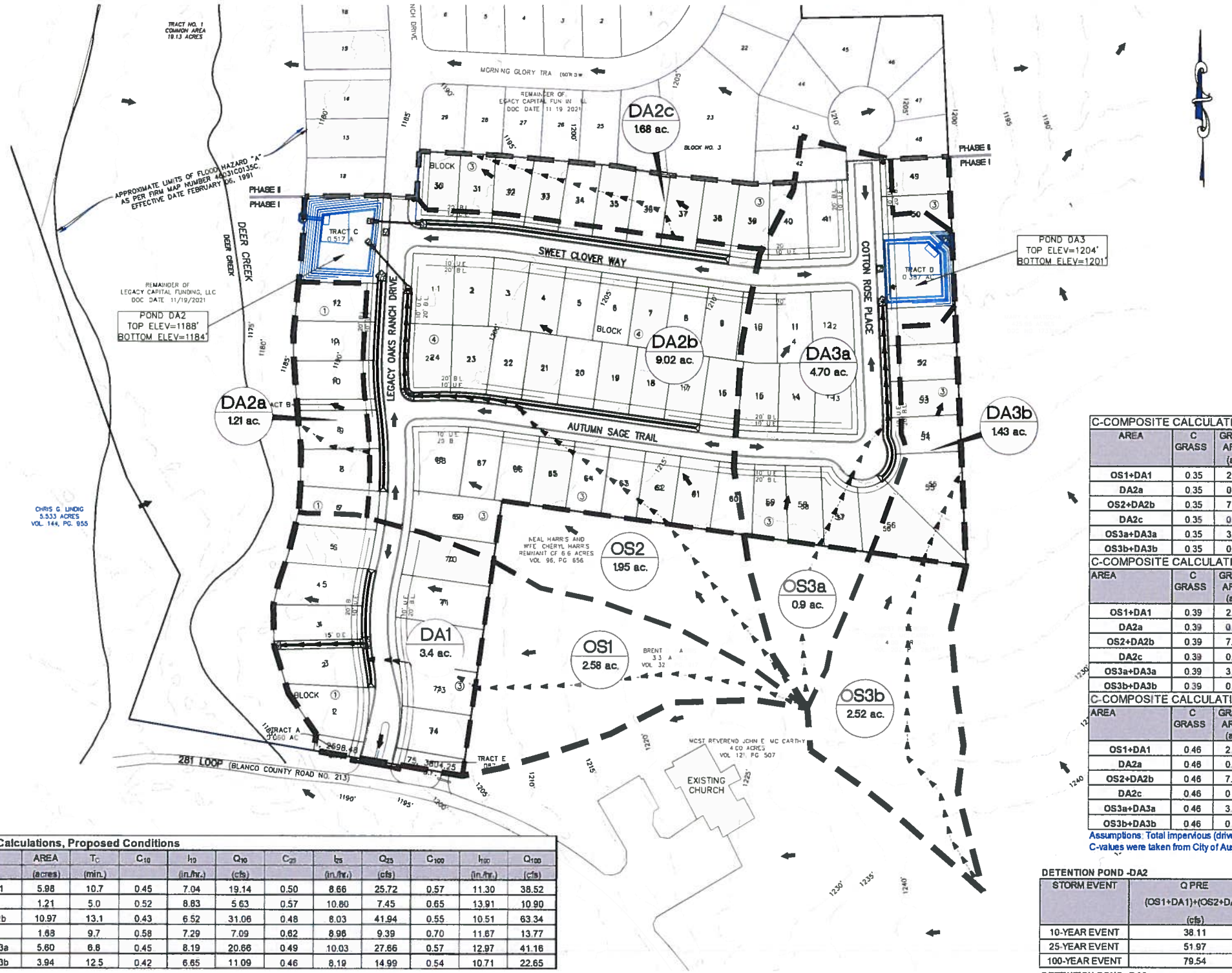
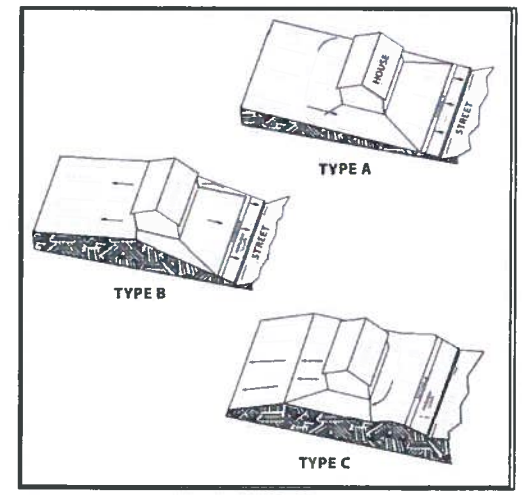




NOTE:
1. THE ENGINEER OF RECORD M ST BE NOTIFIED IMMEDIATELY IF ANY DISCREPANC ES IN THE PLANS EX ST.
2. THE HOMEBUILDER S TO MAINTAIN DRAINAGE BETWEEN LOTS AS SHOWN ON THIS DRAINAGE PLAN.

C-COMPOSITE CALCULATIONS 10 YR

AREA	C GRASS	GRASS AREA (ac.)	C RANGE	RANGE AREA (ac.)	C ROOF/CONC	ROOF/CONC AREA (ac.)	TOTAL AREA (ac.)	C COMPOSITE
OS1+DA1	0.35	2.26	0.38	2.58	0.83	1.14	5.98	0.45
DA2a	0.35	0.77	0.38	0.00	0.83	0.44	1.21	0.52
OS2+DA2b	0.35	7.22	0.38	1.95	0.83	1.81	10.97	0.43
DA2c	0.35	0.87	0.38	0.00	0.83	0.80	1.68	0.58
OS3a+DA3a	0.35	3.58	0.38	0.90	0.83	1.12	5.60	0.45
OS3b+DA3b	0.35	0.98	0.38	2.52	0.83	0.44	3.94	0.42

C-COMPOSITE CALCULATIONS 25 YR

AREA	C GRASS	GRASS AREA (ac.)	C RANGE	RANGE AREA (ac.)	C ROOF/CONC	ROOF/CONC AREA (ac.)	TOTAL AREA (ac.)	C COMPOSITE
OS1+DA1	0.39	2.26	0.42	2.58	0.88	1.14	5.98	0.50
DA2a	0.39	0.77	0.42	0.00	0.88	0.44	1.21	0.57
OS2+DA2b	0.39	7.22	0.42	1.95	0.88	1.81	10.97	0.48
DA2c	0.39	0.87	0.42	0.00	0.88	0.80	1.68	0.62
OS3a+DA3a	0.39	3.58	0.42	0.90	0.88	1.12	5.60	0.49
OS3b+DA3b	0.39	0.98	0.42	2.52	0.88	0.44	3.94	0.46

C-COMPOSITE CALCULATIONS 100 YR

AREA	C GRASS	GRASS AREA (ac.)	C RANGE	RANGE AREA (ac.)	C ROOF/CONC	ROOF/CONC. AREA (ac.)	TOTAL AREA (ac.)	C COMPOSITE
OS1+DA1	0.46	2.26	0.49	2.58	0.97	1.14	5.98	0.57
DA2a	0.46	0.77	0.49	0.00	0.97	0.44	1.21	0.65
OS2+DA2b	0.46	7.22	0.49	1.95	0.97	1.81	10.97	0.55
DA2c	0.46	0.87	0.49	0.00	0.97	0.80	1.68	0.70
OS3a+DA3a	0.46	3.58	0.49	0.90	0.97	1.12	5.60	0.57
OS3b+DA3b	0.46	0.98	0.49	2.52	0.97	0.44	3.94	0.54

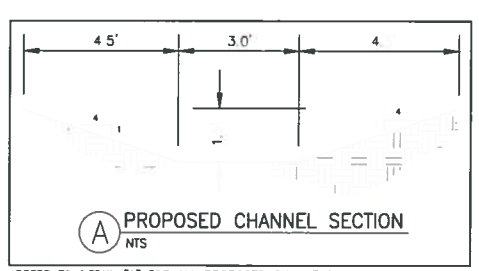
Assumptions: Total impervious (driveways and rooftops is 3500sf/ Lot)
C-values were taken from City of Austin Drainage Criteria Manual

Drainage Calculations, Proposed Conditions

DA	AREA	T_C	C_{10}	I_{10}	Q_{10}	C_{25}	I_{25}	Q_{25}	C_{100}	I_{100}	Q_{100}
	(acres)	(min.)		(in./hr.)	(cfs)		(in./hr.)	(cfs)		(in./hr.)	(cfs)
OS1+DA1	5.98	10.7	0.45	7.04	19.14	0.50	8.66	25.72	0.57	11.30	38.52
DA2a	1.21	5.0	0.52	8.83	5.63	0.57	10.80	7.45	0.65	13.91	10.90
OS2+DA2b	10.97	13.1	0.43	6.52	31.06	0.48	8.03	41.94	0.55	10.51	63.34
DA2c	1.68	9.7	0.58	7.29	7.09	0.62	8.96	9.39	0.70	11.67	13.77
OS3a+DA3a	5.60	6.8	0.45	8.19	20.66	0.49	10.03	27.66	0.57	12.97	41.16
OS3b+DA3b	3.94	12.5	0.42	6.65	11.09	0.46	8.19	14.99	0.54	10.71	22.65

TIME OF CONENTRATION - POST DEVELOPMENT

POST		Sheet				Shallow				Concentrated							Total	Calc.
DA	Area	n	L	S	Tc	n	L	S	Tc	Ch/P	n	L	S	Wp	X-Area	Tc	Tc	Tc
OS1+DA1	5.98	0.13	300	0.033	2.402	0.13	309.42	0.040	4.598	A1	0.035	200	0.04	9.36	12.9	0.062	10.7	10.7
						0.24	167	0.060	3.617									
						0.015	33	0.030	0.067									
DA2a	1.21	0.24	143.67	0.052	1.819												1.8	5.0
OS2+DA2b	10.97	0.13	300	0.033	2.402	0.13	119.7	0.033	1.993	A3	0.035	400	0.03	10.59	6.15	0.804	13.1	13.1
						0.24	298.5	0.044	7.827									
						0.015	42.78	0.023	0.102									
DA2c	1.68	0.24	150	0.017	2.973	0.24	256.14	0.043	6.773								9.7	9.7
OS3a+DA3a	5.60	0.13	300	0.040	2.233	0.24	135.43	0.041	3.703	A5	0.035	250.7	0.024	11.08	6.78	0.508	6.8	6.8
						0.015	106.94	0.017	0.31									
OS3b+DA3b	3.94	0.13	300	0.040	2.233	0.13	345.43	0.038	5.356								12.5	12.5
						0.24	180.95	0.041	4.888									



*REFER TO DETAIL "A" FOR ALL PROPOSED CHANNELS

DETENTION POND -DA2

STORM EVENT	Q PRE (OS1+DA1)+(OS2+DA2) (cfs)	Q POST (OS1+DA1)+DA2a+DA2c+ (POND DA2) (cfs)	Q DISCHARGE POND DA2 (cfs)	MAX ELEV (ft)	MAX STORAGE (cf)
10-YEAR EVENT	38.11	35.90	16.57	1185.61	2,936
25-YEAR EVENT	51.97	48.32	22.20	1185.85	5,301
100-YEAR EVENT	79.54	67.97	32.29	1086.47	12,009

DETENTION POND -DA3

STORM EVENT	Q PRE OS3+DA3 (cfs)	Q POST (OS3b+DA3b)+POND DA3 (cfs)	Q POST POND DA3 (cfs)	MAX ELEV (ft)	MAX STORAGE (cf)
10 YEAR EVENT	25.31	21.08	12.02	1201.91	5,570
25-YEAR EVENT	34.42	27.81	16.32	1202.11	7,575
100-YEAR EVENT	52.38	43.93	25.32	1202.49	11,476

*Hydrographs are provided on sheets C3.02 and C3.03 for combined areas

BELTON ENGINEERING INC.
106 NO. EAST STREET
BELTON, TEXAS 76513
OFFICE (254)731 56
MOB LE (254)289 7273
BELTONENG NEERS M
Engineering Design/Build Planning

POST DRAINAGE PLAN OF:
HOMESTEADS AT DEER CREEK
217 LOOP 281
JOHNSON CITY TX 78636, BLANCO COUNTY
MEHUL DARBAR

05/05/22

SCALE: 1"=100'
DRAWN.: AM
DATE: 05/05/22
JOB NO.: 21003
04 OF 29
C3.01

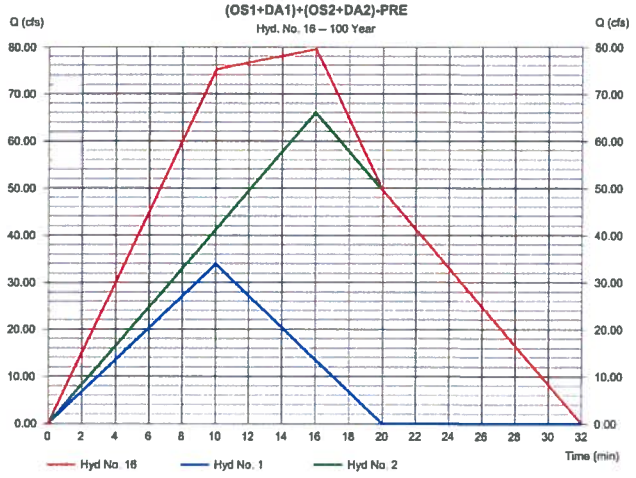
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 16

(OS1+DA1)+(OS2+DA2)-PRE

Hydrograph type	= Combine	Peak discharge	= 79.54 cfs
Storm frequency	= 100 yrs	Time to peak	= 16 min
Time interval	= 1 min	Hyd. volume	= 83,681 cuft
Inflow hyds	= 1, 2	Contrib. drain. area	= 19.840 ac



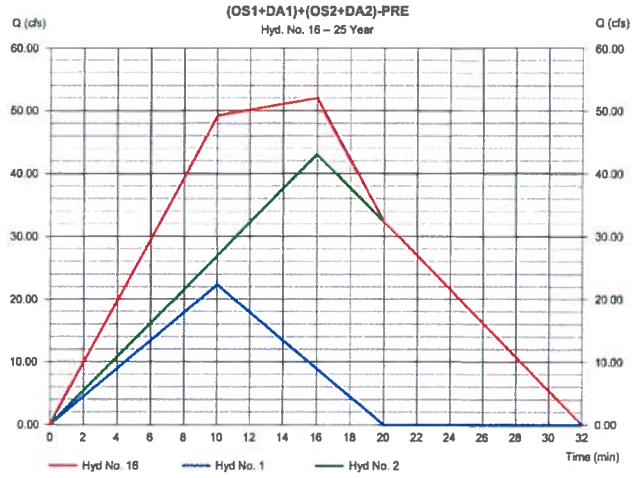
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 16

(OS1+DA1)+(OS2+DA2)-PRE

Hydrograph type	= Combine	Peak discharge	= 51.97 cfs
Storm frequency	= 25 yrs	Time to peak	= 16 min
Time interval	= 1 min	Hyd. volume	= 54,715 cuft
Inflow hyds.	= 1, 2	Contrib. drain. area	= 19.840 ac



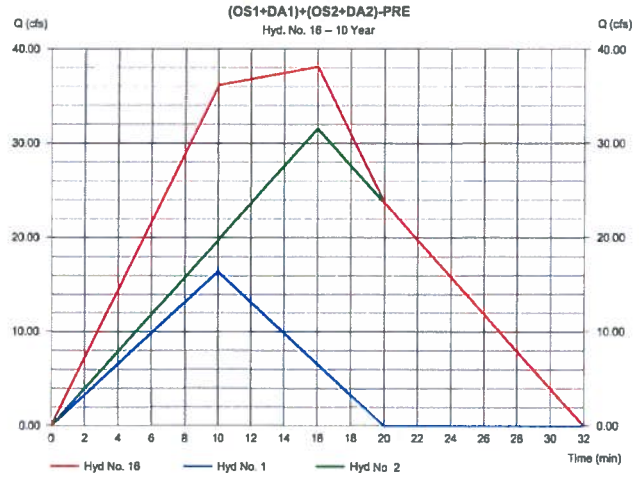
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 4 2022

Hyd. No. 16

(OS1+DA1)+(OS2+DA2)-PRE

Hydrograph type	= Combine	Peak discharge	= 38.11 cfs
Storm frequency	= 10 yrs	Time to peak	= 16 min
Time interval	= 1 min	Hyd. volume	= 40,133 cuft
Inflow hyds	= 1, 2	Contrib. drain. area	= 19.840 ac



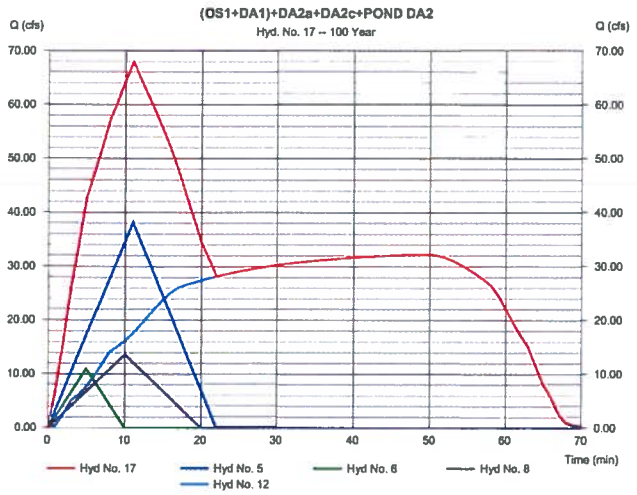
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 17

(OS1+DA1)+DA2a+DA2c+POND DA2

Hydrograph type	= Combine	Peak d scharge	= 67.97 cfs
Storm frequency	= 100 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 133,484 cuft
Inflow hyds.	= 5, 6, 8, 12	Contrib. drain. area	= 8.870 ac



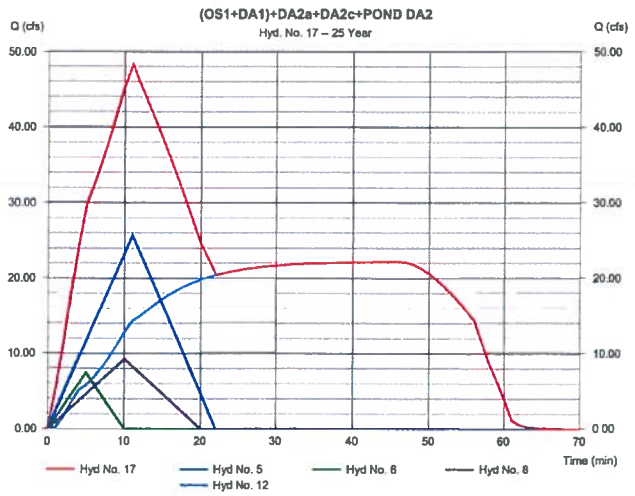
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 17

(OS1+DA1)+DA2a+DA2c+POND DA2

Hydrograph type	= Combine	Peak discharge	= 48.32 cfs
Storm frequency	= 25 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 86,141 cuft
Inflow hyds	= 5, 6, 8, 12	Contrib. drain. area	= 8.870 ac



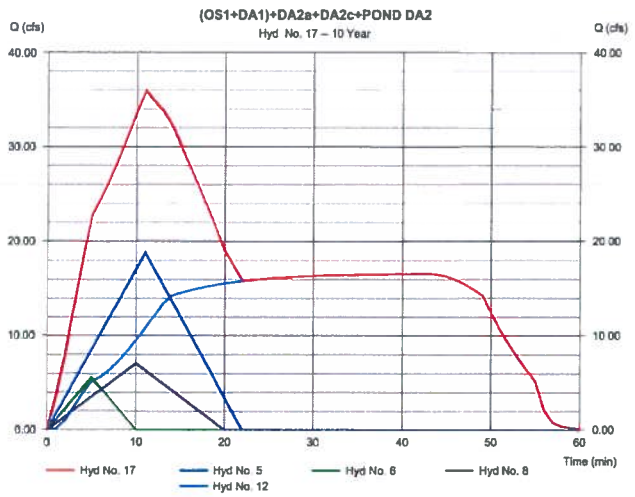
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 17

(OS1+DA1)+DA2a+DA2c+POND DA2

Hydrograph type	= Combine	Peak discharge	= 35.90 cfs
Storm frequency	= 10 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 81,180 cuft
Inflow hyds	= 5, 6, 8, 12	Contrib. drain. area	= 8.870 ac



REVISIONS

FIRM # F-13392

BELTON ENGINEERING INC.
106 NO. EAST STREET
BELTON, TEXAS 76513
OFFICE (254)731-5600
MOBILE (254)289-7273
BELTONENGINEERS COM

Engineering
Design/Build
Planning

POND DA2 DRAINAGE AREA HYDROGRAPHS FOR:
HOMESTEADS AT DEER CREEK
217 LOOP 281
JOHNSON CITY TX 78636, BLANCO COUNTY

MEHUL DARBAR

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER

SCALE: NTS
DRAWN.: AM
ELEC. DRAWING FILE
C:\21032-DR.DWG
DATE: 05/05/22
JOB NO.: 21032
05 OF 29
C3.02

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 3

OS3+DA3-PRE

Hydrograph type	= Rational	Peak discharge	= 25.31 cfs
Storm frequency	= 10 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 16,707 cuft
Drainage area	= 9.540 ac	Runoff coeff.	= 0.38
Intensity	= 6.983 in/hr	Tc by User	= 11.00 min
IDF Curve	= Johnson City.IDF	Asc/Rec limb fact	= 1/1

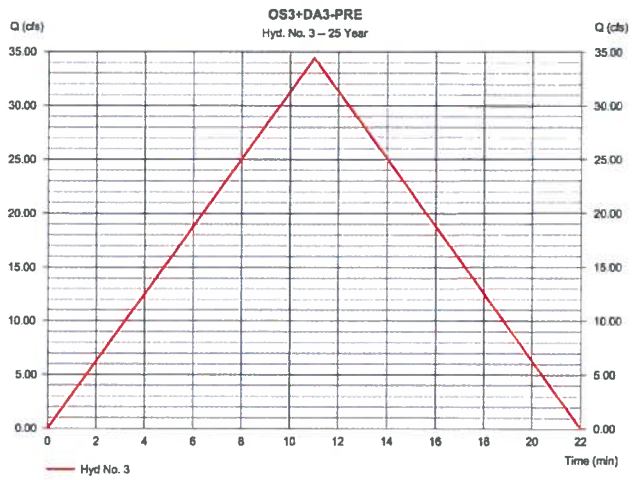
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 3

OS3+DA3-PRE

Hydrograph type	= Rational	Peak discharge	= 34.42 cfs
Storm frequency	= 25 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 22,717 cuft
Drainage area	= 9.540 ac	Runoff coeff.	= 0.42
Intensity	= 8.590 in/hr	Tc by User	= 11.00 min
IDF Curve	= Johnson City IDF	Asc/Rec limb fact	= 1/1



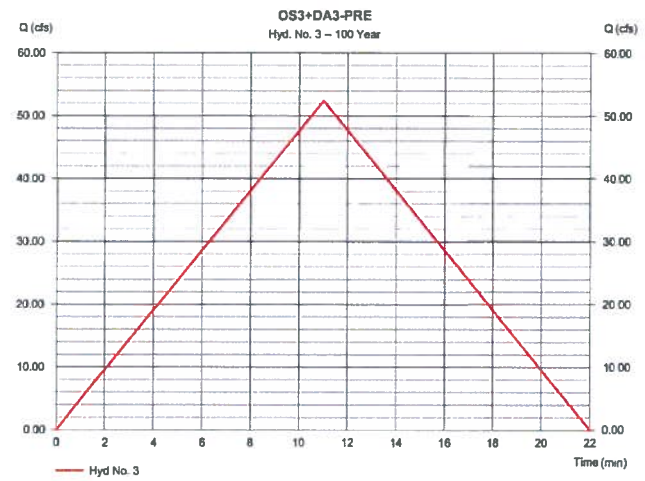
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 3

OS3+DA3-PRE

Hydrograph type	= Rational	Peak discharge	= 52.38 cfs
Storm frequency	= 100 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 34,571 cuft
Drainage area	= 9.540 ac	Runoff coeff.	= 0.49
Intensity	= 11.205 in/hr	Tc by User	= 11.00 min
IDF Curve	= Johnson City IDF	Asc/Rec limb fact	= 1/1



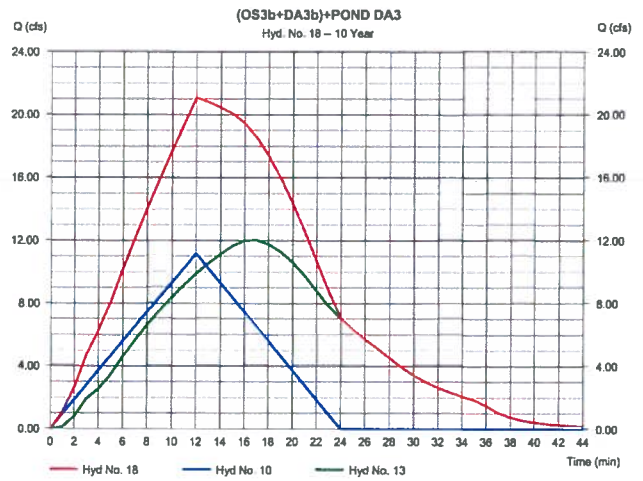
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 18

(OS3b+DA3b)+POND DA3

Hydrograph type	= Combine	Peak discharge	= 21.08 cfs
Storm frequency	= 10 yrs	Time to peak	= 12 min
Time interval	= 1 min	Hyd. volume	= 22,000 cuft
Inflow hyds.	= 10, 13	Contrib. drain. area	= 3.940 ac



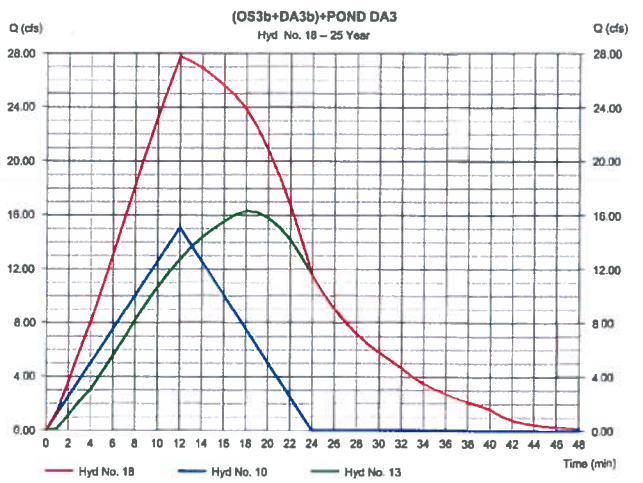
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 18

(OS3b+DA3b)+POND DA3

Hydrograph type	= Combine	Peak discharge	= 27.81 cfs
Storm frequency	= 25 yrs	Time to peak	= 12 min
Time interval	= 1 min	Hyd. volume	= 30,997 cuft
Inflow hyds.	= 10, 13	Contrib. drain. area	= 3.940 ac



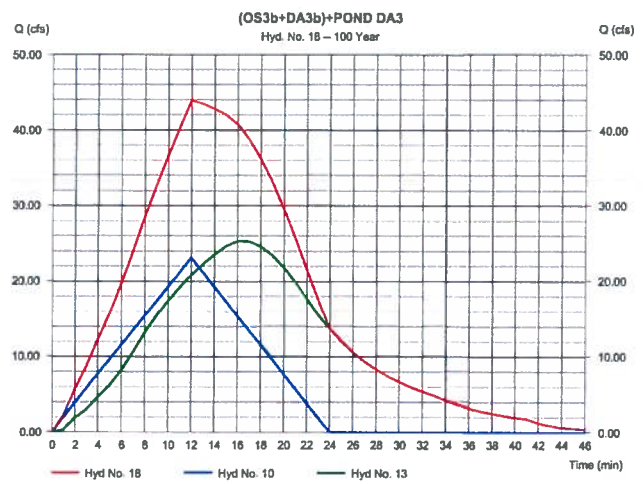
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 18

(OS3b+DA3b)+POND DA3

Hydrograph type	= Combine	Peak discharge	= 43.93 cfs
Storm frequency	= 100 yrs	Time to peak	= 12 min
Time interval	= 1 min	Hyd. volume	= 45,264 cuft
Inflow hyds	= 10, 13	Contrib. drain. area	= 3.940 ac



REVISIONS

FIRM # F-13392

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POND DA3 DRAINAGE AREA HYDROGRAPHS FOR:
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SCALE: NTS
DRAWN.: AM
ELEC. DRAWN
C:\21032- R W
DATE: 05/05/22
JOB NO.: 21003
06 OF 29

C3.03

Hydrograph Report

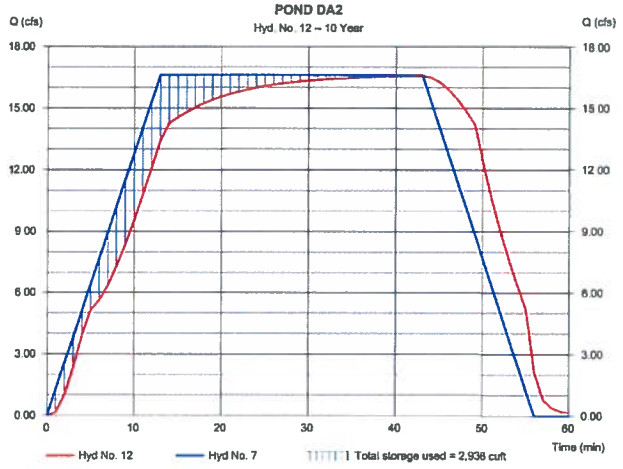
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 12

POND DA2

Hydrograph type	= Reservoir	Peak discharge	= 16.57 cfs
Storm frequency	= 10 yrs	Time to peak	= 43 min
Time interval	= 1 min	Hyd. volume	= 42,884 cuft
Inflow hyd. No.	= 7 - OS2+DA2b-POST	Max. Elevation	= 1185.61 ft
Reservoir name	= POND DA2	Max. Storage	= 2,936 cuft

Storage Indication method used.



Hydrograph Report

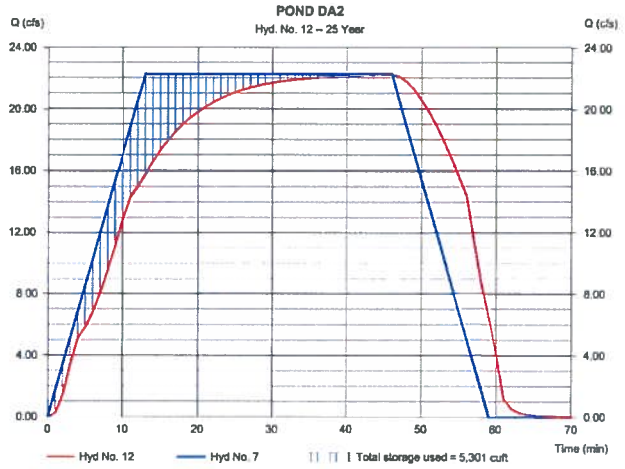
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 12

POND DA2

Hydrograph type	= Reservoir	Peak discharge	= 22.20 cfs
Storm frequency	= 25 yrs	Time to peak	= 46 min
Time interval	= 1 min	Hyd. volume	= 61,402 cuft
Inflow hyd. No.	= 7 - OS2+DA2b-POST	Max. Elevation	= 1185.85 ft
Reservoir name	= POND DA2	Max. Storage	= 5,301 cuft

Storage Indication method used.



Hydrograph Report

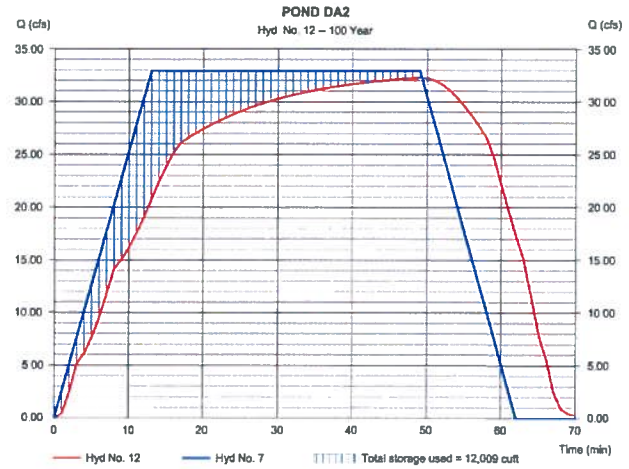
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 12

POND DA2

Hydrograph type	= Reservoir	Peak discharge	= 32.29 cfs
Storm frequency	= 100 yrs	Time to peak	= 49 min
Time interval	= 1 min	Hyd. volume	= 96,840 cuft
Inflow hyd. No.	= 7 - OS2+DA2b-POST	Max. Elevation	= 1186.47 ft
Reservoir name	= POND DA2	Max. Storage	= 12,009 cuft

Storage Indication method used.



Pond Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Pond No. 1 - POND DA2

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Beginning Elevation = 1185.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1185.00	181	0	0
0.25	1185.25	2,477	330	330
0.50	1185.50	9,489	1,496	1,826
1.00	1186.00	10,291	4,945	6,771
2.00	1187.00	11,391	11,141	17,912
3.00	1188.00	13,621	12,906	30,817

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRar]
Rise (in)	= 0.00	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 0	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

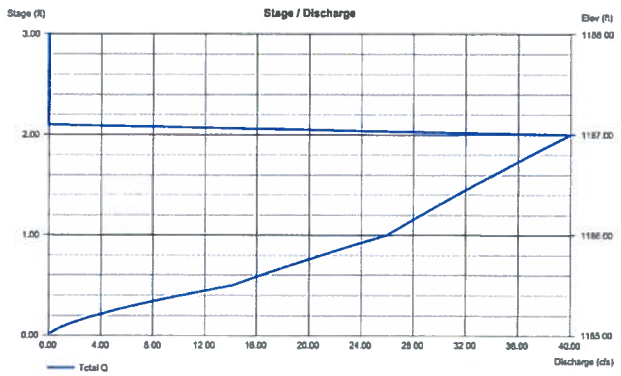
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 1.50	0.00	0.00	0.00
Crest El. (ft)	= 1184.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= No	No	No	No

Exfil (in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir flows checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

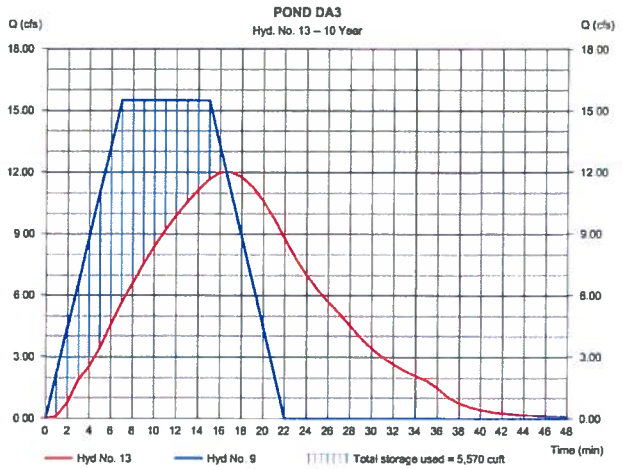
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 13

POND DA3

Hydrograph type	= Reservoir	Peak discharge	= 12.02 cfs
Storm frequency	= 10 yrs	Time to peak	= 17 min
Time interval	= 1 min	Hyd. volume	= 13,952 cuft
Inflow hyd. No.	= 9 - OS3a+DA3a-POST	Max. Elevation	= 1201.91 ft
Reservoir name	= POND DA3	Max. Storage	= 5,570 cuft

Storage Indication method used.



Hydrograph Report

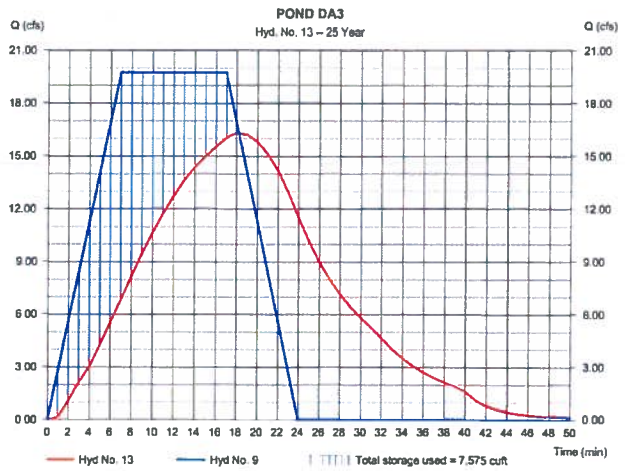
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 13

POND DA3

Hydrograph type	= Reservoir	Peak discharge	= 16.32 cfs
Storm frequency	= 25 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 20,144 cuft
Inflow hyd. No.	= 9 - OS3a+DA3a-POST	Max. Elevation	= 1202.11 ft
Reservoir name	= POND DA3	Max. Storage	= 7,575 cuft

Storage Indication method used.



Hydrograph Report

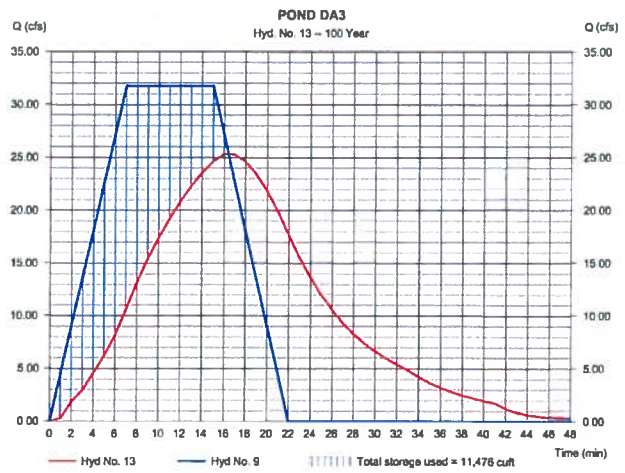
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Hyd. No. 13

POND DA3

Hydrograph type	= Reservoir	Peak discharge	= 25.32 cfs
Storm frequency	= 100 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 28,619 cuft
Inflow hyd. No.	= 9 - OS3a+DA3a-POST	Max. Elevation	= 1202.49 ft
Reservoir name	= POND DA3	Max. Storage	= 11,476 cuft

Storage Indication method used.



Pond Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® 2019 by Autodesk, Inc. v12 — Wednesday, 05 / 4 / 2022

Pond No. 2 - POND DA3

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Beginning Elevation = 1201.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1201.00	245	0	0
0.25	1201.25	2,803	387	387
0.50	1201.50	8,803	1,457	1,844
1.00	1202.00	9,564	4,586	6,454
2.00	1203.00	11,148	10,351	16,805
2.50	1203.50	11,990	5,785	22,588

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRar]
Rise (in)	= 0.00	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 0	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

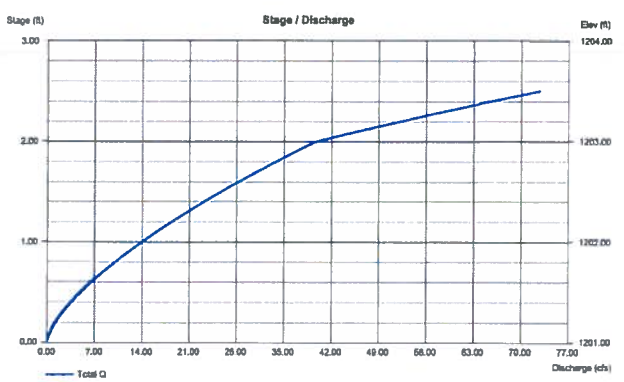
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.20	0.00	0.00	0.00
Crest El. (ft)	= 1201.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= No	No	No	No

Exfil (in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir flows checked for orifice conditions (ic) and submergence (s).



REVISIONS

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Engineering Design/Build Planning

DETENTION POND HYDROGRAPHS FOR:
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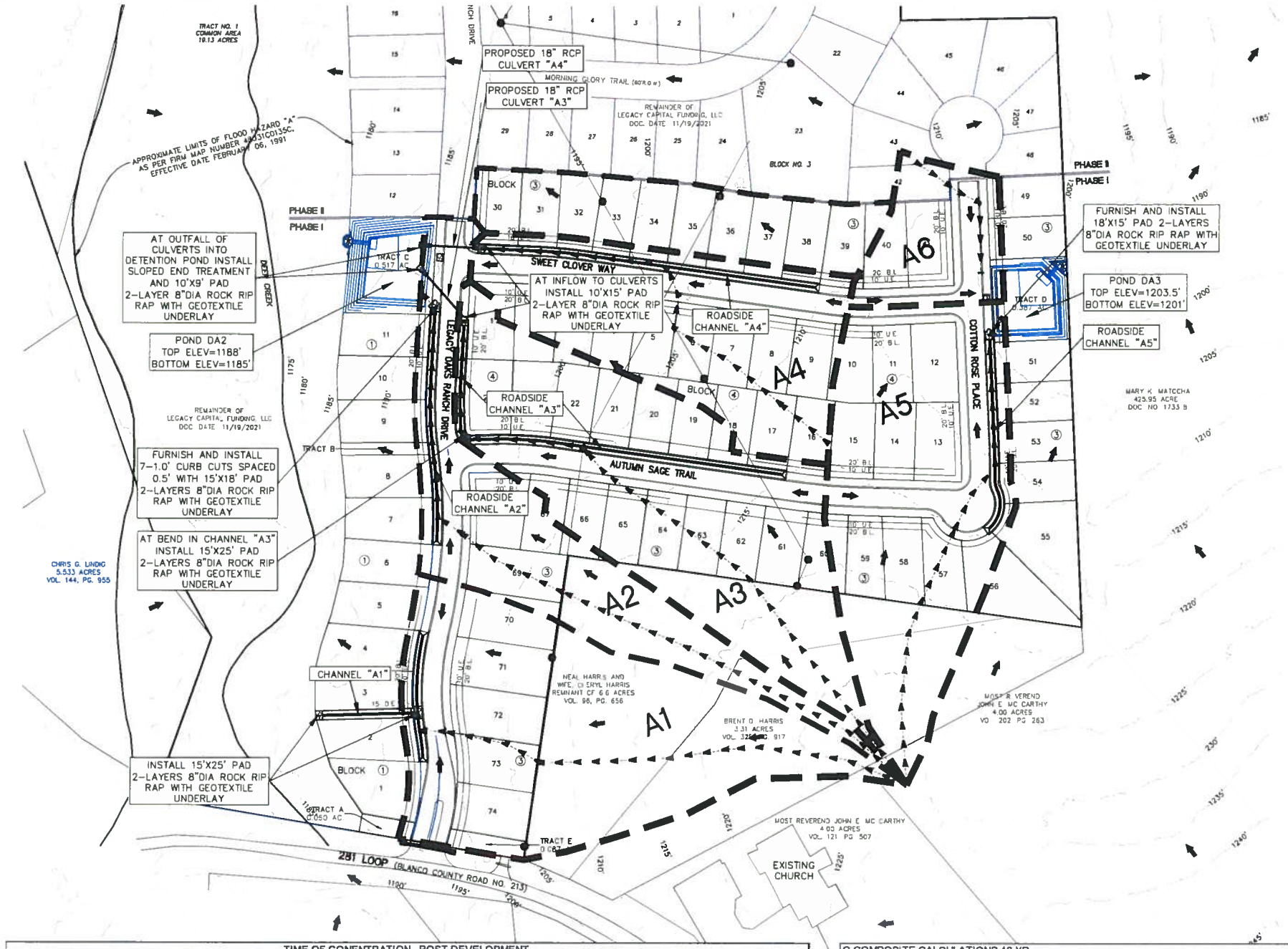
MEHUL DARBAR

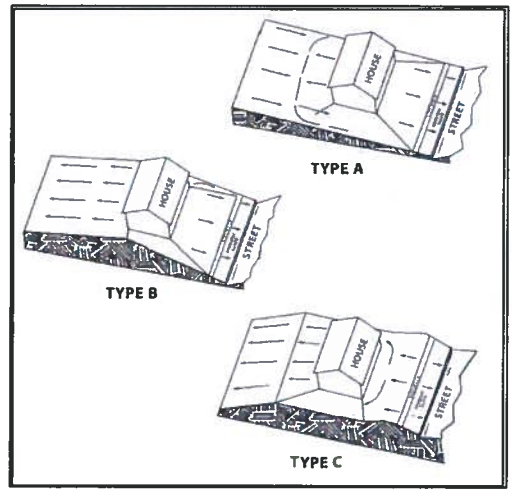
STATE OF TEXAS
UNA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER

05/05/22

SCALE: NTS
DRAWN.: AM
ELEC DRAWING FILE
C\21032 DR DWG
DATE: 05/05/22
JOB NO.: 21032
07 OF 29

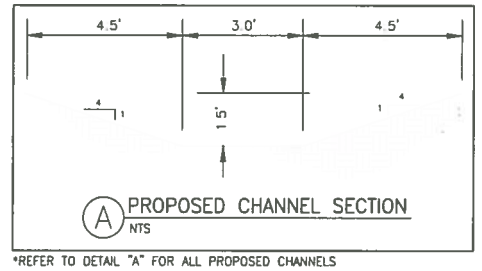
C3.04





NOTE:
1. THE ENGINEER OF RECORD MUST BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES IN THE PLANS EXIST

2 THE HOMEBUILDER IS TO MAINTAIN DRAINAGE BETWEEN LOTS AS SHOWN ON THIS DRAINAGE PLAN



*REFER TO DETAIL "A" FOR ALL PROPOSED CHANNELS

CULVERT TABLE		
PIPE SIZE	BLOCK	LOTS
12"	1	4
18"	1	2,3, 8-12
12"	3	36-38
18"	3	30-35
12"	4	17-19
18"	4	20-24

TIME OF CONENTRATION - POST DEVELOPMENT

POST		Sheet				Shallow				Concentrated								Total	Calc
DA	Area	n	L	S	Tc	n	L	S	Tc	Ch/P	n	L	S	Wp	X-Area	Tc		Tc	Tc
A1	4.74	0.13	300	0.033	2.402	0.13	309.42	0.040	4.598	A1	0.035	64.73	0.005	9.36	12.9	0.056		10.7	10.7
						0.24	167	0.060	3.617										
						0.015	33	0.030	0.067										
A2	2.66	0.13	300	0.033	2.402	0.13	350.64	0.043	5.034	A2	0.035	373.8	0.024	9.18	4.5	1.192		13.9	13.9
						0.24	187.49	0.040	5.174										
						0.015	60	0.033	0.115										
A3	4.65	0.13	300	0.033	2.402	0.13	119.7	0.033	1.993	A3	0.035	400	0.034	10.59	6.15	0.751		13.1	13.1
						0.24	298.5	0.044	7.827										
						0.015	42.78	0.023	0.102										
A4	3.15	0.24	100	0.030	1.699	0.24	270	0.031	8.602	A4	0.035	321.2	0.028	9.35	4.682	0.906		11.3	11.3
						0.015	55	0.036	0.1										
A5	4.06	0.13	300	0.040	2.233	0.24	135.43	0.041	3.703	A5	0.035	250.7	0.03	11.08	6.78	0.456		6.7	6.7
						0.015	106.94	0.017	0.31										
A6	1.07	0.24	117.34	0.030	1.935	0.015	154	0.016	0.456									2.4	5.0

Drainage Calculations, Proposed Conditions

DA	AREA	T_c	C_{10}	I_{10}	Q_{10}	C_{25}	I_{25}	Q_{25}	C_{100}	I_{100}	Q_{100}
	(acres)	(min.)		(in/hr.)	(cfs)		(in./hr.)	(cfs)		(in./hr.)	(cfs)
A1	4.74	10.7	0.44	7.05	14.73	0.48	8.66	19.82	0.56	11.30	29.76
A2	2.66	13.9	0.49	6.36	8.22	0.53	7.84	11.02	0.60	10.28	16.50
A3	4.65	13.1	0.46	6.53	13.96	0.50	8.04	18.76	0.58	10.53	28.22
A4	3.15	11.3	0.55	6.91	12.03	0.60	8.50	15.99	0.68	11.10	23.61
A5	4.06	6.7	0.53	8.20	17.54	0.57	10.05	23.26	0.65	13.00	34.17
A6	1.07	5.0	0.53	8.83	5.04	0.57	10.80	6.67	0.65	13.91	9.75

C-COMPOSITE CALCULATIONS 10 YR

AREA	C GRASS	GRASS AREA (ac.)	C RANGE	RANGE AREA (ac.)	C ROOF/CONC	ROOF/CONC AREA (ac.)	TOTAL AREA (ac.)	C COMPOSITE
A1	0.35	1.42	0.38	2.58	0.83	0.74	4.74	0.44
A2	0.35	1.00	0.38	0.96	0.83	0.70	2.66	0.49
A3	0.35	2.66	0.38	0.99	0.83	1.00	4.65	0.46
A4	0.35	1.82	0.38	0.00	0.83	1.33	3.15	0.55
A5	0.35	1.73	0.38	0.90	0.83	1.44	4.06	0.53
A6	0.35	0.67	0.38	0.00	0.83	0.41	1.07	0.53

C-COMPOSITE CALCULATIONS 25 YR

AREA	C GRASS	GRASS AREA (ac.)	C RANGE	RANGE AREA (ac.)	C ROOF/CONC	ROOF/CONC AREA (ac.)	TOTAL AREA (ac.)	C COMPOSITE
A1	0.39	1.42	0.42	2.58	0.88	0.74	4.74	0.48
A2	0.39	1.00	0.42	0.96	0.88	0.70	2.66	0.53
A3	0.39	2.66	0.42	0.99	0.88	1.00	4.65	0.50
A4	0.39	1.82	0.42	0.00	0.88	1.33	3.15	0.60
A5	0.39	1.73	0.42	0.90	0.88	1.44	4.06	0.57
A6	0.39	0.67	0.42	0.00	0.88	0.41	1.07	0.57

C-COMPOSITE CALCULATIONS 100 YR

AREA	C GRASS	GRASS AREA (ac.)	C RANGE	RANGE AREA (ac.)	C ROOF/CONC	ROOF/CONC AREA (ac.)	TOTAL AREA (ac.)	C COMPOSITE
A1	0.46	1.42	0.49	2.58	0.97	0.74	4.74	0.56
A2	0.46	1.00	0.49	0.96	0.97	0.70	2.66	0.60
A3	0.46	2.66	0.49	0.99	0.97	1.00	4.65	0.58
A4	0.46	1.82	0.49	0.00	0.97	1.33	3.15	0.68
A5	0.46	1.73	0.49	0.90	0.97	1.44	4.06	0.65
A6	0.46	0.67	0.49	0.00	0.97	0.41	1.07	0.65

Assumptions. Total impervious (driveways and rooftops is 3500sf/ Lot)
C-values were taken from City of Austin Drainage Criteria Manual

REVISIONS

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STREET CAPACITY DRAINAGE PLAN OF:
HOMESTEADS AT DEER CREEK
217 LOOP 281
JOHNSON CITY TX 78636, BLANCO COUNTY

MEHUL DARBAR

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER
/22

SCALE: 1"=100'
DRAWN.: AM
ELEC. DRAWING FI
C:\21032-DR.DW
DATE: 05/05/22
JOB NO.: 21032
08 OF 29

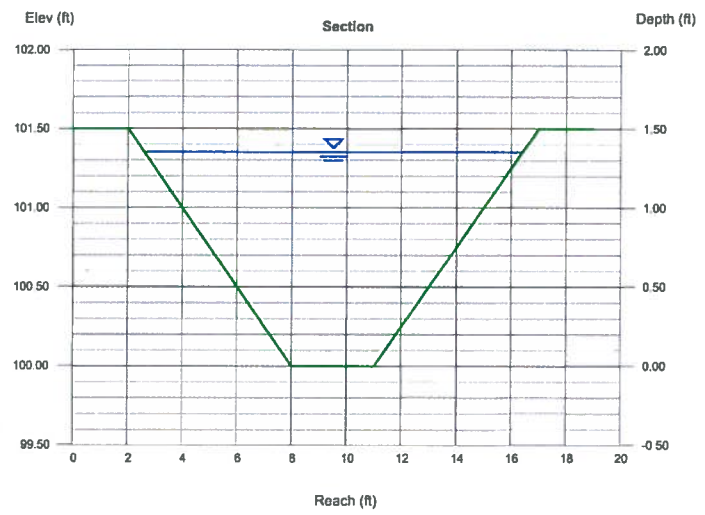
C3.05

Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Thursday, May 5 2022

ROADSIDE CHANNEL - A1 - 100YR

Trapezoidal		Highlighted	
Bottom Width (ft)	= 3.00	Depth (ft)	= 1.35
Side Slopes (z:1)	= 4.00, 4.00	Q (cfs)	= 29.76
Total Depth (ft)	= 1.50	Area (sqft)	= 11.34
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 2.62
Slope (%)	= 0.52	Wetted Perim (ft)	= 14.13
N-Value	= 0.035	Crit Depth, Yc (ft)	= 0.97
		Top Width (ft)	= 13.80
Calculations		EGL (ft)	= 1.46
Compute by:	Known Q		
Known Q (cfs)	= 29.76		

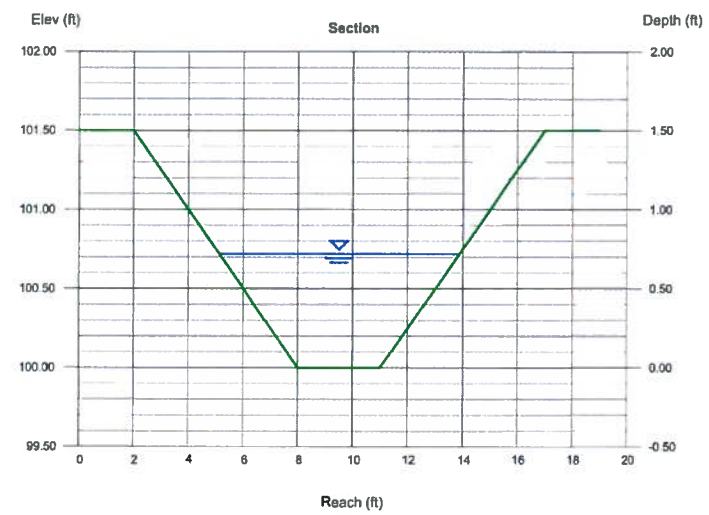


Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Thursday, May 5 2022

ROADSIDE CHANNEL - A2 - 100YR

Trapezoidal		Highlighted	
Bottom Width (ft)	= 3.00	Depth (ft)	= 0.72
Side Slopes (z:1)	= 4.00, 4.00	Q (cfs)	= 16.50
Total Depth (ft)	= 1.50	Area (sqft)	= 4.23
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 3.90
Slope (%)	= 2.35	Wetted Perim (ft)	= 8.94
N-Value	= 0.035	Crit Depth, Yc (ft)	= 0.72
		Top Width (ft)	= 8.78
Calculations		EGL (ft)	= 0.96
Compute by:	Known Q		
Known Q (cfs)	= 16.50		

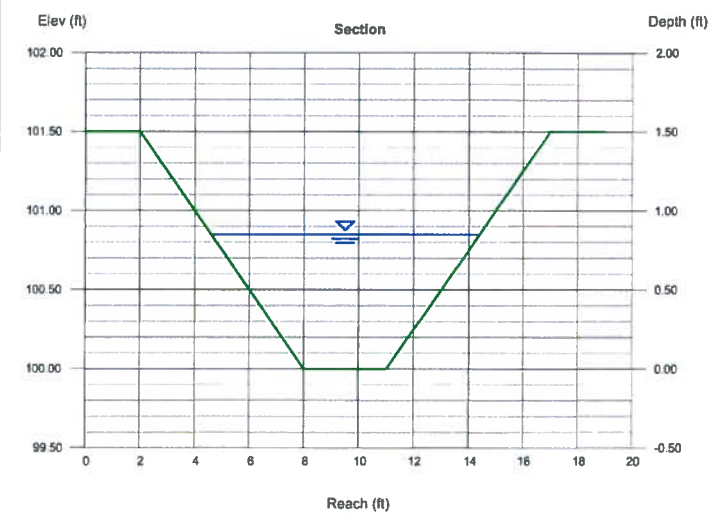


Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Thursday, May 5 2022

ROADSIDE CHANNEL - A3 - 100YR

Trapezoidal		Highlighted	
Bottom Width (ft)	= 3.00	Depth (ft)	= 0.85
Side Slopes (z:1)	= 4.00, 4.00	Q (cfs)	= 28.22
Total Depth (ft)	= 1.50	Area (sqft)	= 5.44
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 5.19
Slope (%)	= 3.44	Wetted Perim (ft)	= 10.01
N-Value	= 0.035	Crit Depth, Yc (ft)	= 0.95
		Top Width (ft)	= 9.80
Calculations		EGL (ft)	= 1.27
Compute by:	Known Q		
Known Q (cfs)	= 28.22		

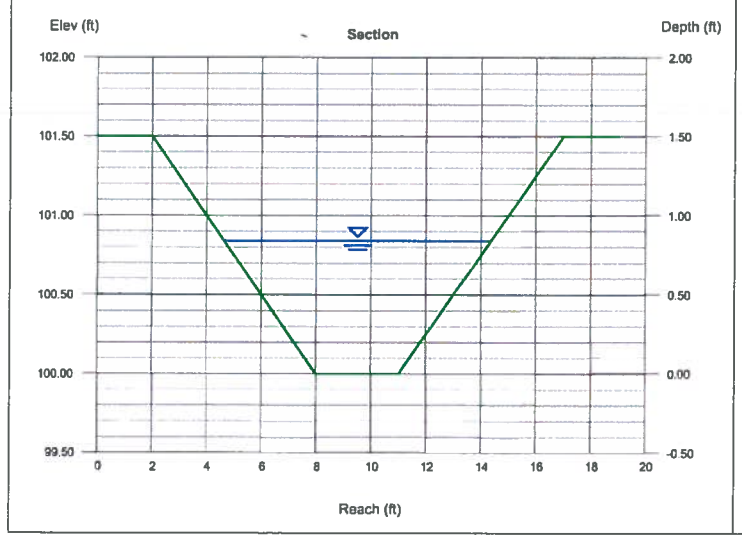


Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Thursday, May 5 2022

ROADSIDE CHANNEL - A4 - 100YR

Trapezoidal		Highlighted	
Bottom Width (ft)	= 3.00	Depth (ft)	= 0.84
Side Slopes (z:1)	= 4.00, 4.00	Q (cfs)	= 23.61
Total Depth (ft)	= 1.50	Area (sqft)	= 5.34
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 4.42
Slope (%)	= 2.55	Wetted Perim (ft)	= 9.93
N-Value	= 0.035	Crit Depth, Yc (ft)	= 0.87
		Top Width (ft)	= 9.72
Calculations		EGL (ft)	= 1.14
Compute by:	Known Q		
Known Q (cfs)	= 23.61		

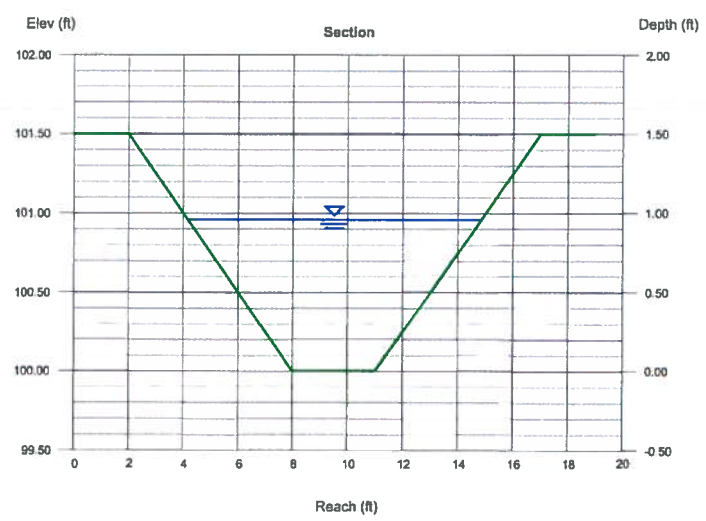


Channel Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. Thursday, May 5 2022

ROADSIDE CHANNEL - A5 - 100YR

Trapezoidal		Highlighted	
Bottom Width (ft)	= 3.00	Depth (ft)	= 0.96
Side Slopes (z:1)	= 4.00, 4.00	Q (cfs)	= 34.17
Total Depth (ft)	= 1.50	Area (sqft)	= 6.57
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 5.20
Slope (%)	= 2.97	Wetted Perim (ft)	= 10.92
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.04
		Top Width (ft)	= 10.68
Calculations		EGL (ft)	= 1.38
Compute by:	Known Q		
Known Q (cfs)	= 34.17		



REVISIONS

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CHANNEL REPORTS FOR:
HOMESTEADS AT DEER CREEK
217 LOOP 281
JOHNSON CITY TX 78636, BLANCO COUNTY

MEHUL DARBAR

STATE OF TEXAS
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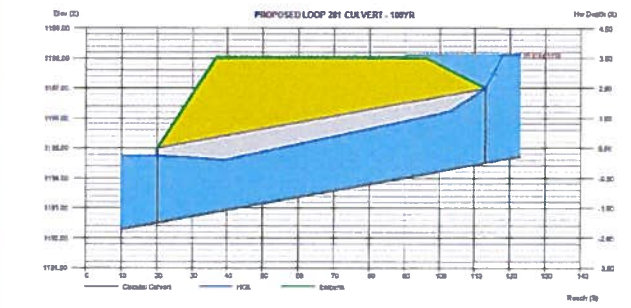
Culvert Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. — Thursday, May 5 2022

PROPOSED LOOP 281 CULVERT - 100YR

Invert Elev Dn (ft)	= 1192.50	**Calculations**	
Pipe Length (ft)	= 93.00	Qmin (cfs)	= 83.57
Slope (%)	= 2.15	Qmax (cfs)	= 83.57
Invert Elev Up (ft)	= 1194.50	Tailwater Elev (ft)	= (dc+D)/2
Rise (in)	= 30.0		
Shape	= Circular	**Highlighted**	
Span (in)	= 30.0	Qtotal (cfs)	= 83.57
No. Barrels	= 2	Qpipe (cfs)	= 69.25
n-Value	= 0.012	Qovertop (cfs)	= 14.32
Culvert Type	= Circular Concrete	Veloc Dn (ft/s)	= 7.44
Culvert Entrance	= Square edge w/headwall (C)	Veloc Up (ft/s)	= 8.23
Coeff. K,M,c,Y,k	= 0.0098, 2, 0.0398, 0.67, 0.5	HGL Dn (ft)	= 1194.75
		HGL Up (ft)	= 1196.50
Embankment		Hw Elev (ft)	= 1198.13
Top Elevation (ft)	= 1198.00	Hw/D (ft)	= 1.45
Top Width (ft)	= 59.50	Flow Regime	= Inlet Control
Crest Width (ft)	= 100.00		

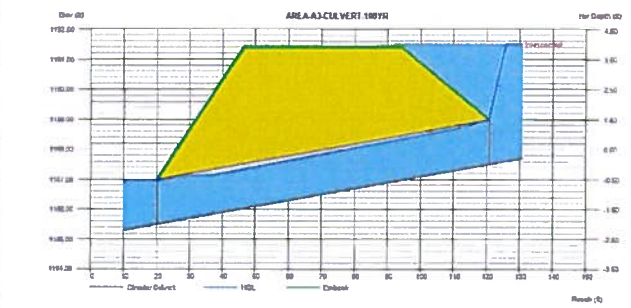


Culvert Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. — Thursday, May 5 2022

AREA-A3-CULVERT-100YR

Invert Elev Dn (ft)	= 1185.50	**Calculations**	
Pipe Length (ft)	= 100.80	Qmin (cfs)	= 28.22
Slope (%)	= 1.98	Qmax (cfs)	= 28.22
Invert Elev Up (ft)	= 1187.50	Tailwater Elev (ft)	= (dc+D)/2
Rise (in)	= 18.0		
Shape	= Circular	**Highlighted**	
Span (in)	= 18.0	Qtotal (cfs)	= 28.22
No. Barrels	= 1	Qpipe (cfs)	= 15.38
n-Value	= 0.012	Qovertop (cfs)	= 12.84
Culvert Type	= Circular Concrete	Veloc Dn (ft/s)	= 8.77
Culvert Entrance	= Square edge w/headwall (C)	Veloc Up (ft/s)	= 8.91
Coeff. K,M,c,Y,k	= 0.0098, 2, 0.0398, 0.67, 0.5	HGL Dn (ft)	= 1188.96
		HGL Up (ft)	= 1188.91
Embankment		Hw Elev (ft)	= 1191.50
Top Elevation (ft)	= 1191.39	Hw/D (ft)	= 2.67
Top Width (ft)	= 48.00	Flow Regime	= Inlet Control
Crest Width (ft)	= 100.00		

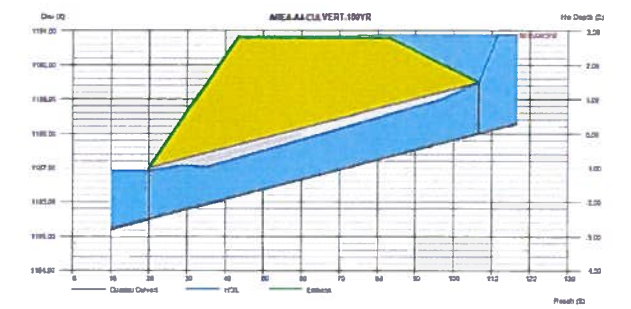


Culvert Report

Hydraflow Express Extension for Autodesk® AutoCAD® Civil 3D® by Autodesk, Inc. — Thursday, May 5 2022

AREA-A4-CULVERT-100YR

Invert Elev Dn (ft)	= 1185.50	**Calculations**	
Pipe Length (ft)	= 86.60	Qmin (cfs)	= 23.61
Slope (%)	= 2.89	Qmax (cfs)	= 23.61
Invert Elev Up (ft)	= 1188.00	Tailwater Elev (ft)	= (dc+D)/2
Rise (in)	= 18.0		
Shape	= Circular	**Highlighted**	
Span (in)	= 18.0	Qtotal (cfs)	= 23.61
No. Barrels	= 1	Qpipe (cfs)	= 12.25
n-Value	= 0.012	Qovertop (cfs)	= 11.36
Culvert Type	= Circular Concrete	Veloc Dn (ft/s)	= 7.10
Culvert Entrance	= Square edge w/headwall (C)	Veloc Up (ft/s)	= 7.42
Coeff. K,M,c,Y,k	= 0.0098, 2, 0.0398, 0.67, 0.5	HGL Dn (ft)	= 1186.91
		HGL Up (ft)	= 1189.32
Embankment		Hw Elev (ft)	= 1190.89
Top Elevation (ft)	= 1190.79	Hw/D (ft)	= 1.93
Top Width (ft)	= 40.00	Flow Regime	= Inlet Control
Crest Width (ft)	= 100.00		



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CULVERT REPORTS FOR:
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217 LOOP 281
JOHNSON CITY TX 78636, BLANCO COUNTY
MEHUL DARBAR

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER

05/05/22

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DATE: 05/05/22
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NOTE:
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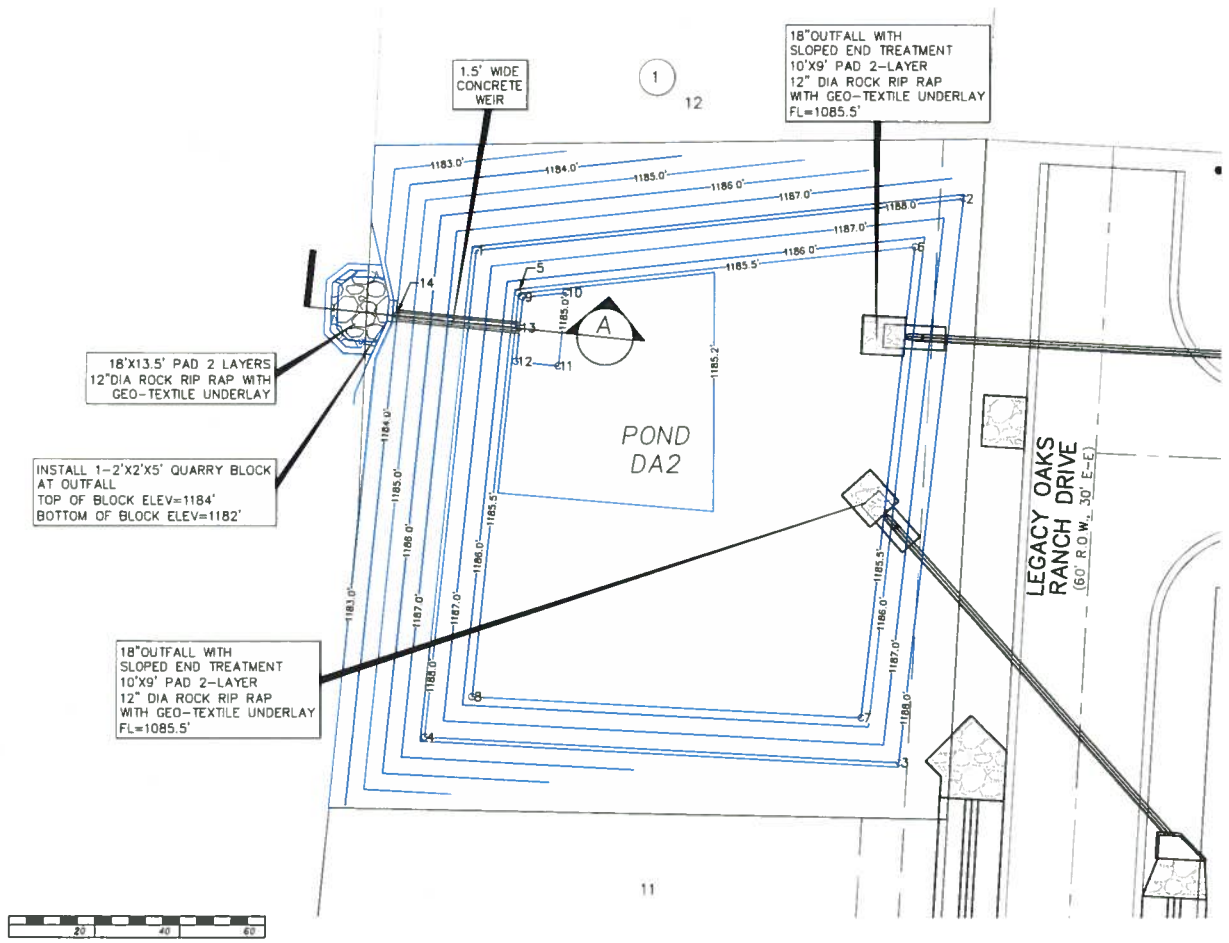
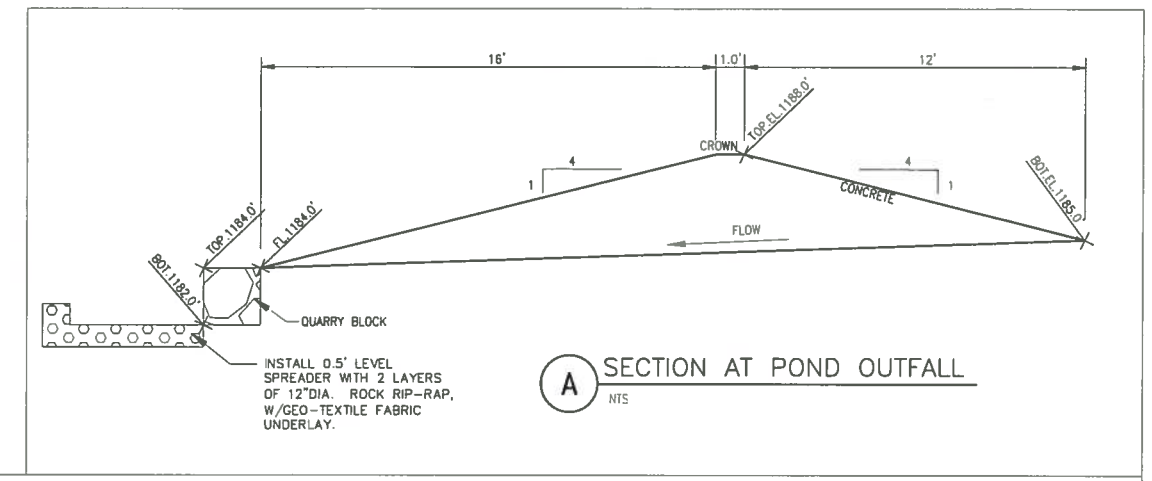
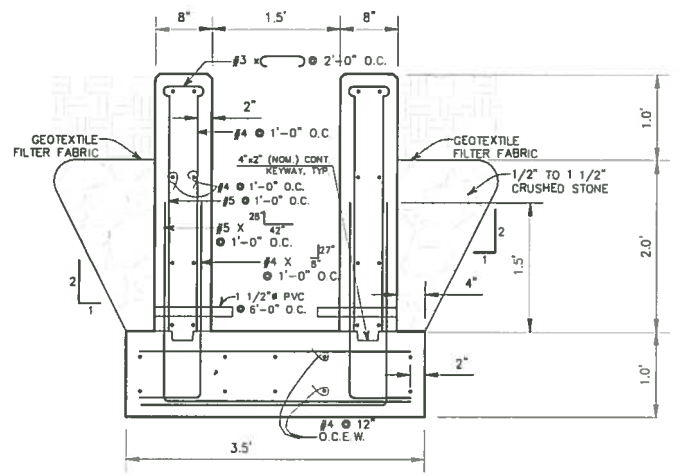




A SECTION AT POND OUTFALL
NTS



1 OUTFALL REINFORCEMENT DETAIL
NTS

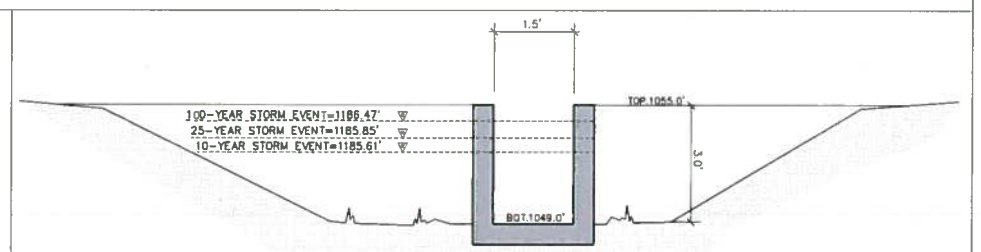
** THE SELECT FILL MATERIAL SHALL BE A NON-EXPANSIVE, WELL-GRADED SOIL OR CRUSHED STONE WITH SUFFICIENT BINDER MATERIAL FOR COMPACTION PURPOSES. THE FILL SHALL CONFORM TO THE FOLLOWING:

MAXIMUM AGGREGATE	2"
LIQUID LIMIT	40 MAXIMUM
PLASTICITY INDEX	5-20

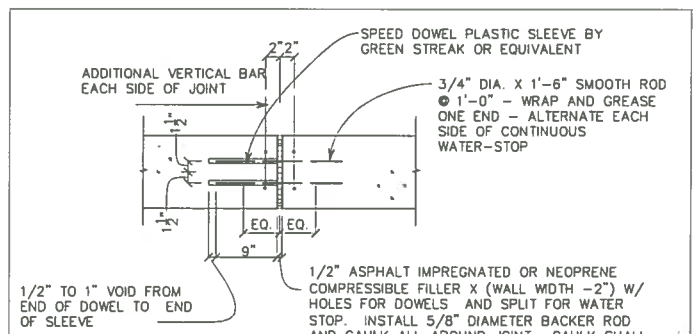
** SELECT FILL SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM LABORATORY DENSITY DETERMINED IN ACCORDANCE WITH AMERICAN SOCIETY OF TESTING MATERIALS, METHOD ASTM D 1557. MOISTURE CONTENT OF THE COMPACTED MATERIAL SHALL BE WITHIN 2% POINTS OF OPTIMUM MOISTURE AT TIME OF COMPACTION. THE DESIGN ENGINEER SHALL APPROVE SELECT FILL UTILIZED AT THIS SITE.

CAST IN PLACE CONCRETE NOTES:-

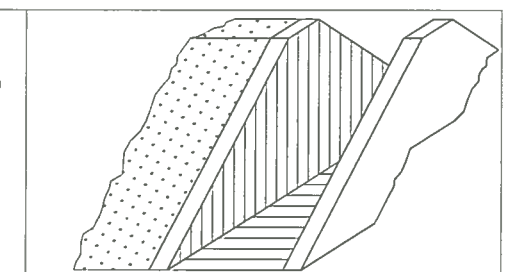
1) CONCRETE SHALL CURE A MINIMUM OF 10 DAYS. IMMEDIATELY REMOVE CURING COMPOUND RESIDUE AND INSTALL SEALER PER MFR RECOMMENDATIONS.
2) CONCRETE SHALL NOT BE CAST AGAINST SAND.
3) PLACE AN EXPANSION JOINT EVERY 22'
4) CONCRETE COMPRESSIVE STRENGTH TO BE 3500 PSI



2 OUTFALL STRUCTURE-ELEV. VIEW
NTS



3 EXPANSION JOINT DETAIL @ CONC. WALL FOOTING
NTS



4 OUTFALL SCHEMATIC ISO-VIEW
NTS

Point Table				
Point #	Raw Description	Elevation	Northing	Easting
1	TOP	1188.000	10067009.1348	2908553.3945
2	TOP	1188.000	10067021.3939	2908867.6971
3	TOP	1188.000	10066889.3984	2908653.0998
4	TOP	1188.000	10066895.2936	2908541.8461
5	BOTTOM	1185.250	10066999.1489	2908583.4380
6	BOTTOM	1185.500	10067010.1238	2908658.3897
7	BOTTOM	1185.500	10066899.8841	2908644.1982
8	BOTTOM	1185.500	10066904.7243	2908552.8541
9	BOTTOM	1185.000	10066998.2411	2908564.3510
10	BOTTOM	1185.000	10066999.3290	2908574.4946
11	BOTTOM	1185.000	10066982.1599	2908572.7529
12	BOTTOM	1185.000	10066983.1674	2908562.8219
13	WEIR UP	1184.000	10066991.0340	2908563.6199
14	WEIR DOWN	1183.000	10066993.9606	2908534.7680

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POND "DA2" DETAIL SHEET OF:
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STATE OF TEXAS
LINA CHTAY
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DATE: 05/05/22
JOB NO.: 21037
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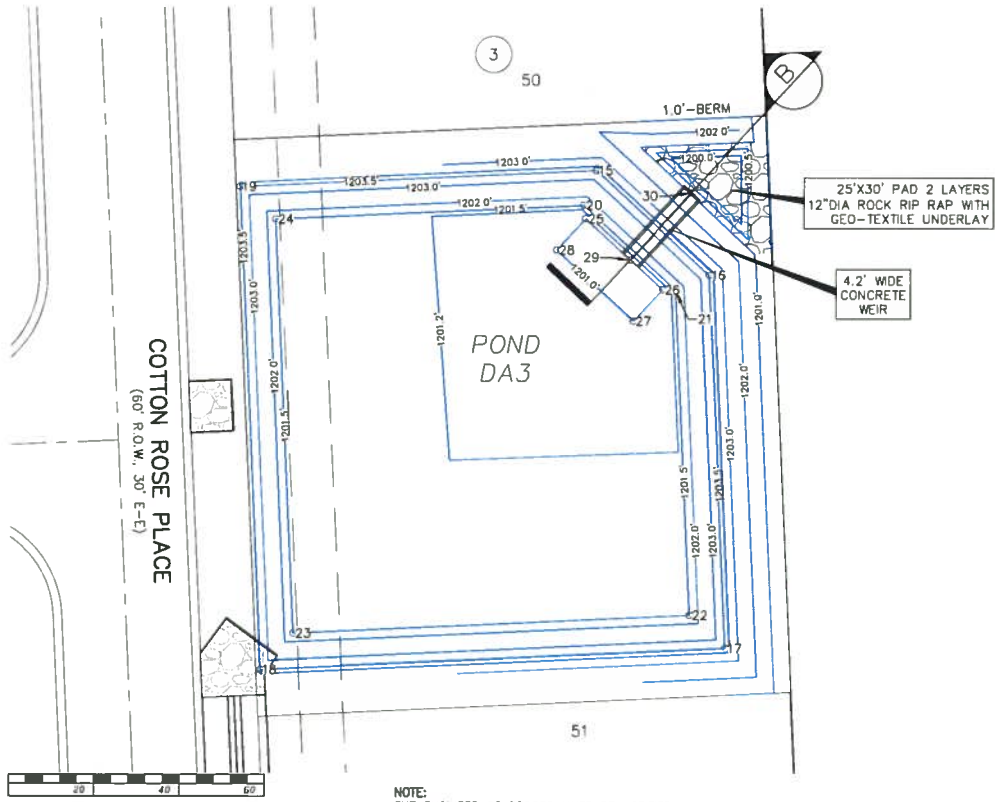

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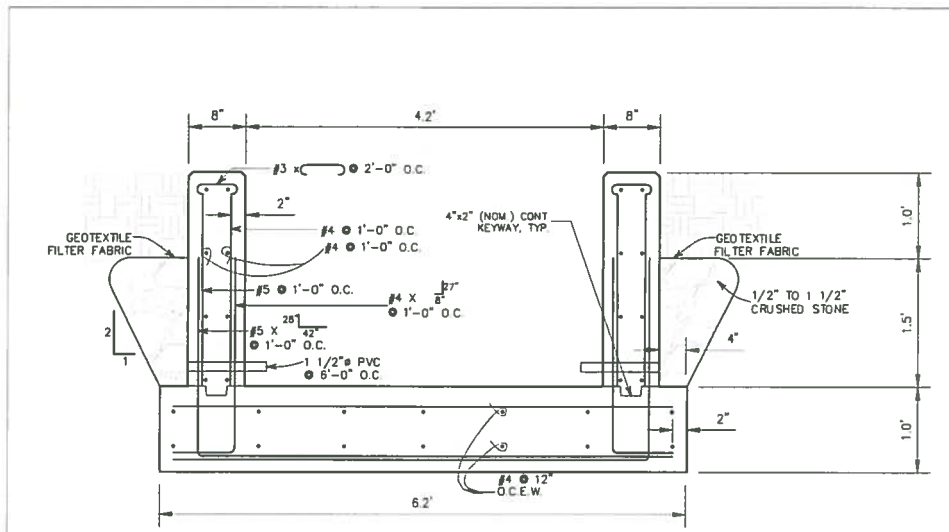


1 OUTFALL REINFORCEMENT DETAIL
NTS

** THE SELECT FILL MATERIAL SHALL BE A NON-EXPANSIVE, WELL-GRADED SOIL OR CRUSHED STONE WITH SUFFICIENT BINDER MATERIAL FOR COMPACTION PURPOSES. THE FILL SHALL CONFORM TO THE FOLLOWING:

MAXIMUM AGGREGATE	2"
LIQUID LIMIT	40 MAXIMUM
PLASTICITY INDEX	5-20

** SELECT FILL SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM LABORATORY DENSITY DETERMINED IN ACCORDANCE WITH AMERICAN SOCIETY OF TESTING MATERIALS, METHOD ASTM D 1557. MOISTURE CONTENT OF THE COMPACTED MATERIAL SHALL BE WITHIN 2% POINTS OF OPTIMUM MOISTURE AT TIME OF COMPACTION. THE DESIGN ENGINEER SHALL APPROVE SELECT FILL UTILIZED AT THIS SITE.

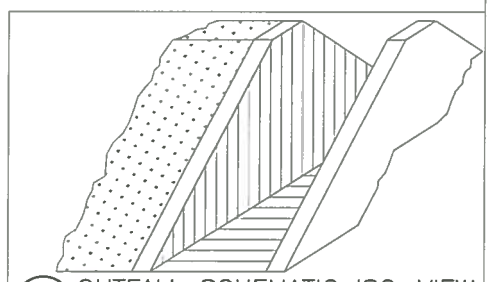
CAST IN PLACE CONCRETE NOTES: -

1) CONCRETE SHALL CURE A MINIMUM OF 10 DAYS. IMMEDIATELY REMOVE CURING COMPOUND RESIDUE AND INSTALL SEALER PER MFR RECOMMENDATIONS.

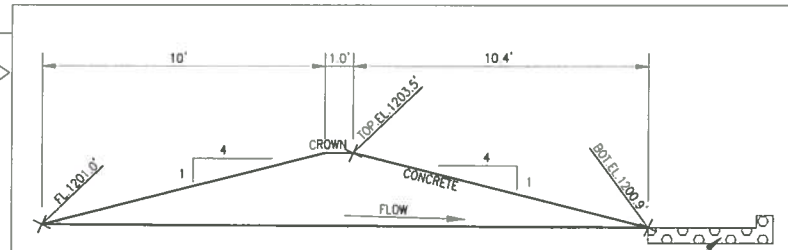
2) CONCRETE SHALL NOT BE CAST AGAINST SAND.

3) PLACE AN EXPANSION JOINT EVERY 22'

4) CONCRETE COMPRESSIVE STRENGTH TO BE 3500 PSI

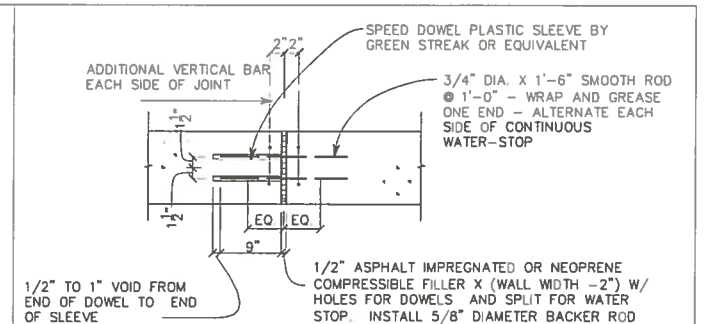


4 OUTFALL SCHEMATIC ISO-VIEW
NTS



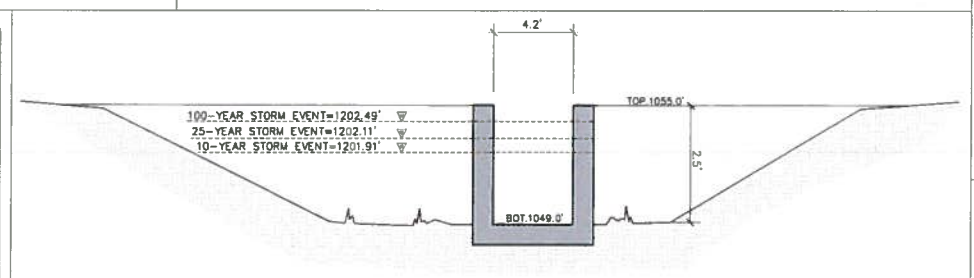
B SECTION AT POND OUTFALL
NTS

INSTALL 0.5' LEVEL SPREADER WITH 2 LAYERS OF 12"DIA. ROCK RIP-RAP, W/GEO-TEXTILE FABRIC UNDERLAY.



3 EXPANSION JOINT DETAIL @ CONC. WALL FOOTING
NTS

Point Table				
Point #	Raw Description	Elevation	Northing	Easting
15	TOP	1203.500	10066959.5574	2909665.4059
16	TOP	1203.500	10066935.0437	2909891.8816
17	TOP	1203.500	10066847.8589	2909895.9284
18	TOP	1203.500	10066842.8049	2909587.0456
19	TOP	1203.500	10066955.6770	2909581.8065
20	BOTTOM	1201.500	10066951.4106	2909662.4295
21	BOTTOM	1201.500	10066931.3096	2909684.0421
22	BOTTOM	1201.500	10066855.4783	2909687.5651
23	BOTTOM	1201.500	10066851.1672	2909594.8661
24	BOTTOM	1201.500	10066948.0565	2909590.1688
25	BOTTOM	1201.000	10066948.2483	2909862.9012
26	BOTTOM	1201.000	10066931.6143	2909880.8665
27	BOTTOM	1201.000	10066924.2766	2909874.0725
28	BOTTOM	1201.000	10066940.9105	2909656.1072
Point Table				
Point #	Raw Description	Elevation	Northing	Easting
29	WEIR UP	1201.000	10066938.5599	2909673.3850
30	WEIR DOWN	1200.900	10066954.2826	2909687.9041



2 OUTFALL STRUCTURE-ELEV. VIEW
NTS

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MOBILE (254)289-7273
BELTONENGINEERS.COM

Engineering
Design/Build
Planning

POND "DA3" DETAIL SHEET OF:
HOMESTEADS AT DEER CREEK
217 LOOP 281
JOHNSON CITY TX 78636, BLANCO COUNTY
MEHUL DARBAR

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER
05/05/22

SCALE: NTS
DRAWN.: AM
ELEC. DRAWING FILE
C:\21037-DR.DWG
DATE: 05/05/22
JOB NO.: 21037
12 OF 29

C3.09

B1.3.2 STABILIZED CONSTRUCTION ENTRANCE/EXIT

THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE/EXIT IS TO PROVIDE A STABLE ENTRANCE/EXIT CONDITION FROM THE CONSTRUCTION SITE AND KEEP MUD AND SEDIMENT FROM VEHICLES AND EQUIPMENT FROM BEING DEPOSITED ONTO PUBLIC ROADS OR OTHER PAVED AREAS USED BY PRIVATE OR PUBLIC PARTIES. A LEVELIZED CONSTRUCTION ENTRANCE IS A STABILIZED PAD OF 3- TO 8-INCH STONE LOCATED AT ANY POINT TRAFFIC WILL BE ENTERING OR LEAVING THE CONSTRUCTION SITE FROM/TO A RIGHT-OF-WAY, STREET, DRIVE, ALLEY, SIDEWALK, OR PARKING AREA. THIS PRACTICE SHOULD BE USED AT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS (SEE FIGURES B-14 AND B-15).

EXCESSIVE AMOUNTS OF MUD PRESENT A SAFETY HAZARD TO DRIVERS. TO MINIMIZE THE AMOUNT OF SEDIMENT LOSS TO NEARBY ROADS, ACCESS TO THE CONSTRUCTION SHOULD BE LIMITED TO AS FEW POINTS AS POSSIBLE AND VEGETATION AROUND THE PERIMETER SHOULD BE PROTECTED WHERE ACCESS IS NOT NECESSARY. A ROCK STABILIZED CONSTRUCTION ENTRANCE SHOULD BE USED AT ALL DESIGNATED ACCESS POINTS.

MATERIALS

THE PAD AGGREGATE SHOULD CONSIST OF 3- TO 8-INCH WASHED STONE OVER A STABLE FOUNDATION (TYPICALLY, GEOTEXTILE REINFORCED). THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.

THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 4 OZ/YD2.

IF A VEHICLE OR EQUIPMENT FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4-INCH DIAMETER WASHED STONE OR COMMERCIAL RACK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASH WATER TO A SEDIMENT TRAP OR BASIN.

Table B-7
Rock and Brush Berm and Erosion Control Logs Spacing

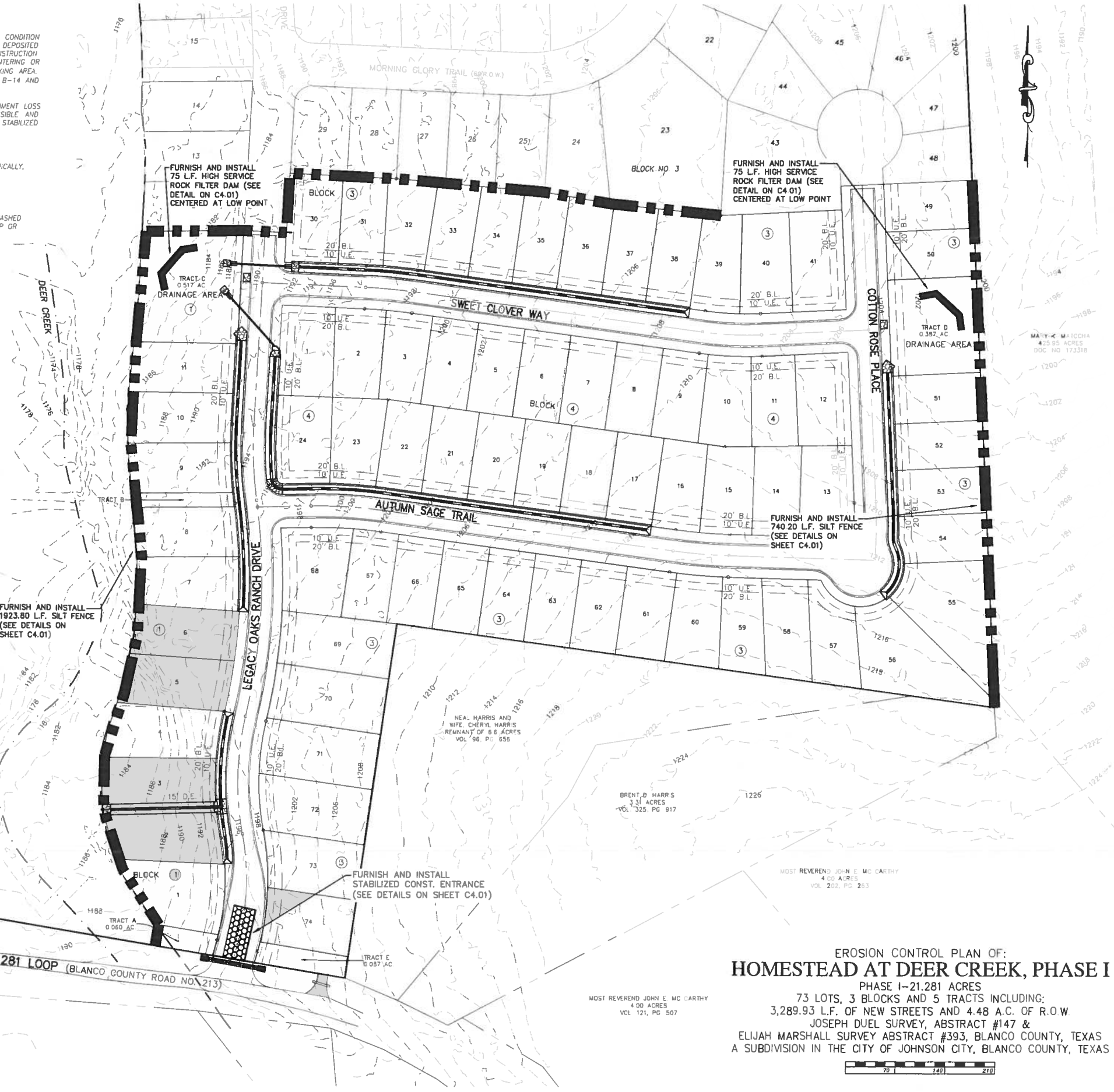
Ditch slope (%)	Spacing (ft)pl
30	10
20	15
15	20
10	35
5	55
3	100
2	150
1	300
0.50	600

SODDING FOR EROSION CONTROL

BLOCK OR ROLL SOD

COMMON NAME	BOTANICAL NAME
COMMON BERMUDA GRASS	CYNODAN DACTYLAN

SODDING NOTES:
1. ALL SOD (BLOCKS OR ROLLS) WILL BE PLACED WITHIN 24 HOURS OF DELIVERY TO THE SITE.
2. SOD WILL BE PLACED ONLY AFTER SOIL PREPARATION IS COMPLETE AND FERTILIZER HAS BEEN APPLIED TO SOIL.
3. SOD BLOCKS WILL BE PLACED FIRMLY AGAINST ADJACENT SOD BLOCKS.
4. SOD WILL BE PLACED WITH JOINTS ALTERNATING ON EACH ROW TO PREVENT ALL JOINTS FROM LINING UP.
5. SOD WILL BE WATERED IMMEDIATELY FOLLOWING PLACEMENT. HOT, DRY SOIL MAY REQUIRE PRE-WATERING BEFORE PLACING SOD.



EROSION CONTROL PLAN OF:

HOMESTEAD AT DEER CREEK, PHASE I

PHASE I-21.281 ACRES
73 LOTS, 3 BLOCKS AND 5 TRACTS INCLUDING;
3,289.93 L.F. OF NEW STREETS AND 4.48 A.C. OF R.O.W.
JOSEPH DUEL SURVEY, ABSTRACT #147 &
ELIJAH MARSHALL SURVEY ABSTRACT #393, BLANCO COUNTY, TEXAS
A SUBDIVISION IN THE CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS

70 140 210

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Engineering Design/Build Planning

EROSION CONTROL PLAN OF:
HOMESTEAD AT DEER CREEK, PHASE I
217 281 LOOP
CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS

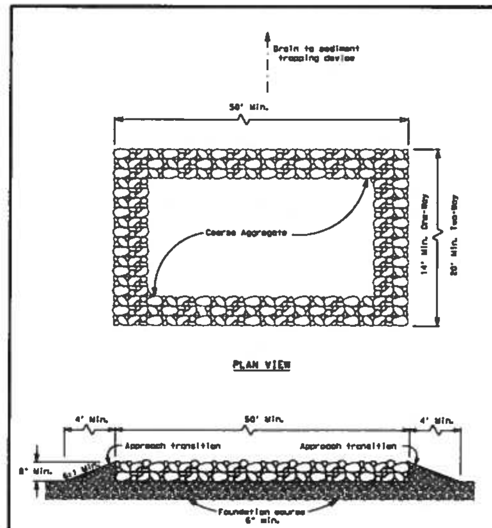
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE, AUSTIN, TEXAS, 78717

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER

05/06/22

SCALE: 1"=70'
DRAWN.: RR
ELEC. DRAWING FILE
C:\21032-ECP.DWG
DATE: 05/06/22
JOB NO.: 21032
13 OF 29

C4.00



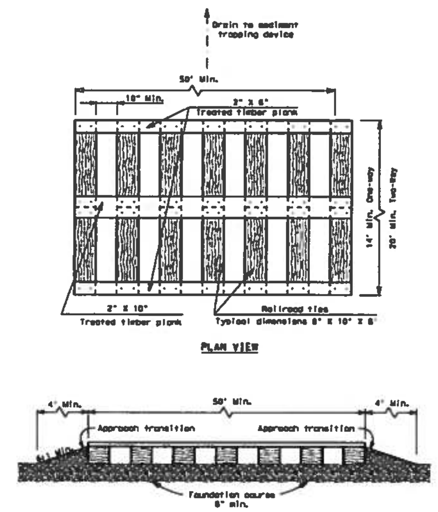
ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 1)

ROCK CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 1)

1. The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
2. The coarse aggregate should be open graded with a size of 4" to 8".
3. The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
4. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other materials approved by the Engineer.
5. The construction exit shall be graded to allow drainage to a sediment trapping device.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
7. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.



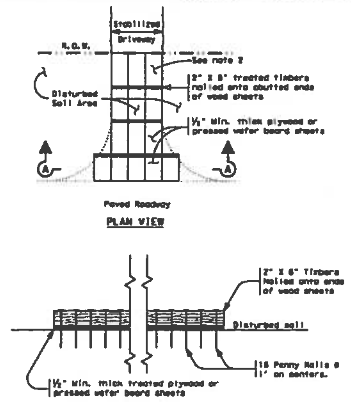
ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 2)

TIMBER CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 2)

1. The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
2. The treated timber planks shall be attached to the railroad ties with ½"x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
5. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
6. The construction exit should be graded to allow drainage to a sediment trapping device.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
8. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.



SECTION A-A

CONSTRUCTION EXIT (TYPE 3)

SHORT TERM

GENERAL NOTES (TYPE 3)

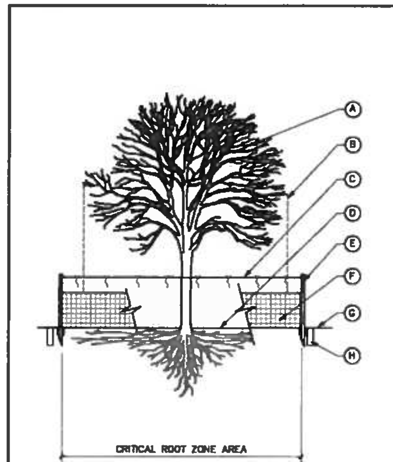
1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

Texas Department of Transportation — Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

CONSTRUCTION EXITS

EC(3)-16



LEGEND:

- (A) EXISTING TREE(S) TO REMAIN
- (B) DRIP LINE OF EXISTING TREE (TYP.)
- (C) CONTINUOUS NYLON TIE STRING TIED TO STAKE TOPS W/ 3' TUNDRA WEIGHT ORANGE STREAMERS AT 3' O.C.
- (D) EXISTING GRADE TO REMAIN
- (E) 2"x2"x8' STEEL POST T-STAKES, 8' O.C. MIN., DRIVEN 2' INTO GROUND AT (OR OUTSIDE) TREE DRIP LINE
- (F) 4' MIN HEIGHT ORANGE PLASTIC FENCING INSTALLED PER CITY-APPROVED MANUFACTURER'S SPECIFICATIONS
- (G) EXISTING GRADE TO BE DISTURBED
- (H) ROOT PRUNING TRENCH 12" OUTSIDE FENCE

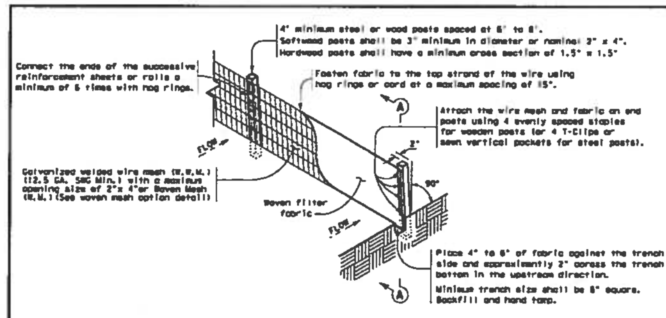
NOTES:

1. PERFORM ROOT PRUNING ON ALL EXISTING TREES TO REMAIN WHERE CONSTRUCTION ACTIVITY FALLS WITHIN DRIP LINE OF EXISTING TREES.
2. NO GRADING, PARKING, STORAGE OR ANY OTHER CONSTRUCTION ACTIVITY WITHIN FENCED AREA.
3. REFER TO TECHNICAL SPECIFICATION 329600.
4. TREE PRUNING BY CERTIFIED TREE TRIMMER OR ARBORIST.

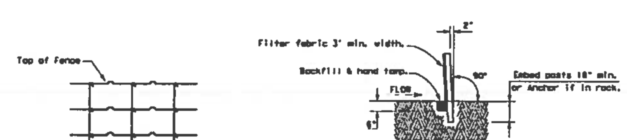
TREE PROTECTION

PLAN DETAIL

L-01



TEMPORARY SEDIMENT CONTROL FENCE



SECTION A-A

HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

Galvanized hinge joint knot woven mesh (12.5 GA.SWG Min.) requires a minimum of five horizontal wires spaced at a maximum of 12 inches apart and all vertical wires spaced at a maximum of 12 inches apart.

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

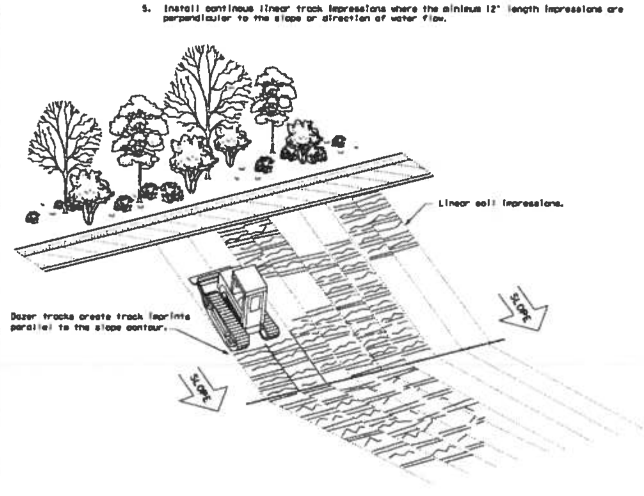
Sediment control fence should be sized to filter a maximum flow through rate of 100 GPM/FT². Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

LEGEND

Sediment Control Fence (SCF)

GENERAL NOTES

1. Vertical tracking is required on projects where soil distributing activities have occurred unless otherwise approved.
2. Perform vertical tracking on slopes to temporarily stabilize soil.
3. Provide equipment with a track undercarriage capable of producing linear soil impressions measuring a minimum of 12" in length by 2" to 4" in width by 1/2" to 2" in depth.
4. Do not exceed 12" between track impressions.
5. Install continous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.



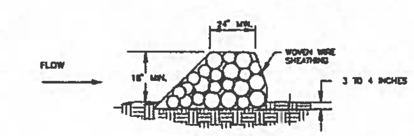
VERTICAL TRACKING

Texas Department of Transportation — Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

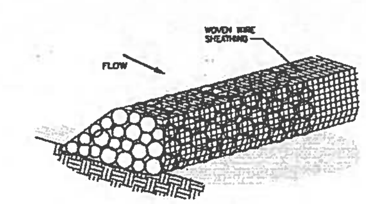
FENCE & VERTICAL TRACKING

EC(1)-16



CROSS SECTION

N.T.S.



ISOMETRIC PLAN VIEW

N.T.S.

Figure B-20: Schematic Diagram of a Rock Berm

ROCK BERM DETAIL

EROSION DETAILS FOR:

HOMESTEAD AT DEER CREEK, PHASE I

217 281 LOOP

IN THE CITY OF JOHNSON CITY, BLANCO COUNTY, TX

REVISIONS

FIRM # F-13392

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BELTONENGINEERS.COM

- Engineering
- Design/Build
- Planning

EROSION DETAILS FOR:
HOMESTEAD AT DEER CREEK, PHASE I
217 281 LOOP
CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS

LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

STATE OF TEXAS — LINA CHTAY — 107211 — LICENSED PROFESSIONAL ENGINEER

05/06/22

SCALE: N.T.S

DRAWN.: RR

ELEC. DRAWING FILE
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DATE: 05/06/22

JOB NO.: 21032

14 OF 29

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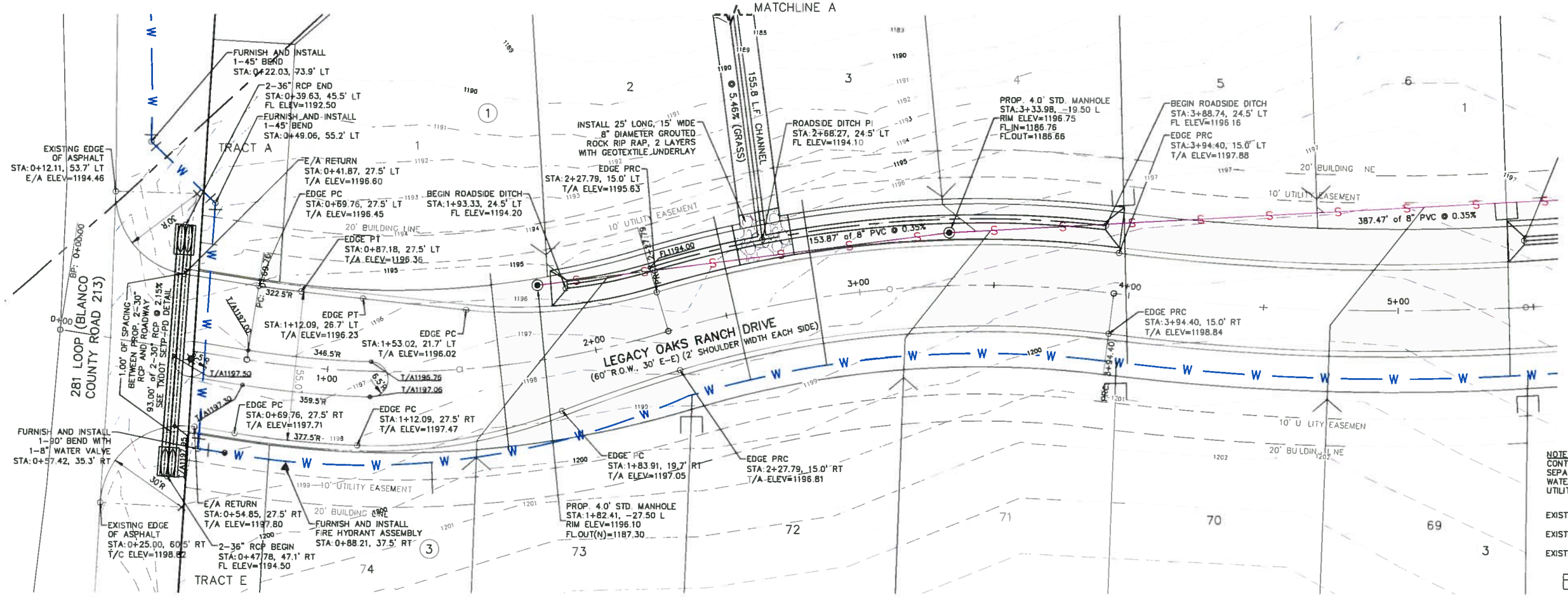
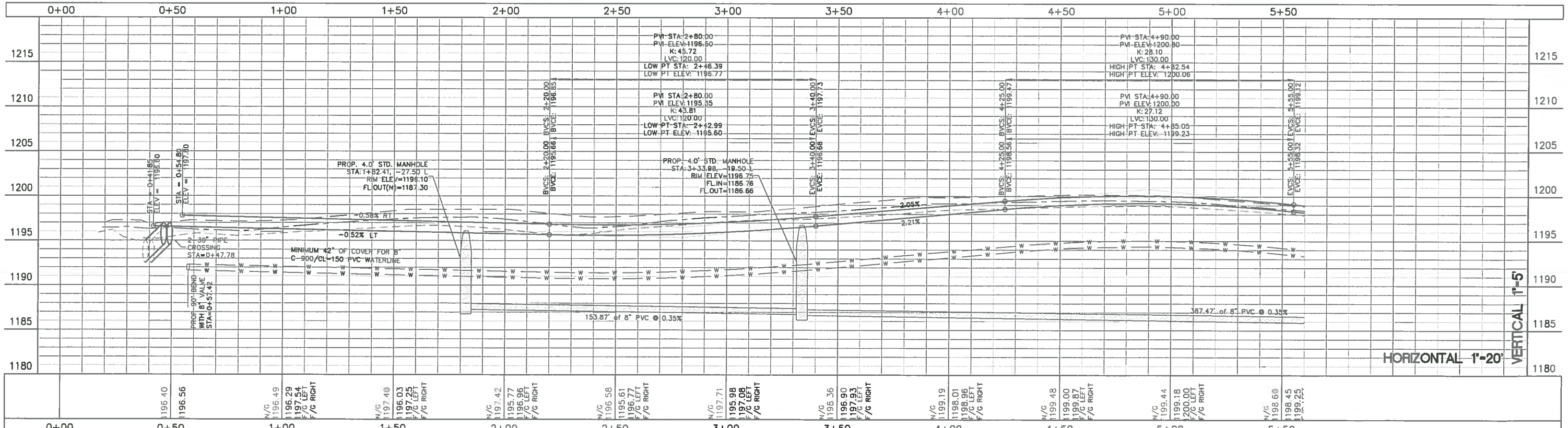


NOTE:
CONTRACTOR TO MAINTAIN MINIMUM SEPARATION DISTANCES BETWEEN WATER, SEWER, DRAINAGE, AND OTHER UTILITIES AS REQUIRED BY TCEQ.

EXISTING GRADE CENTER
EXISTING GRADE 15' LEFT
EXISTING GRADE 15' RIGHT

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER
05/06/22

FIRM # F-13392



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Engineering • Design/Build • Planning
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BELTONENGINEERINGINC@GMAIL.COM
WWW.BELTONENGINEERS.COM

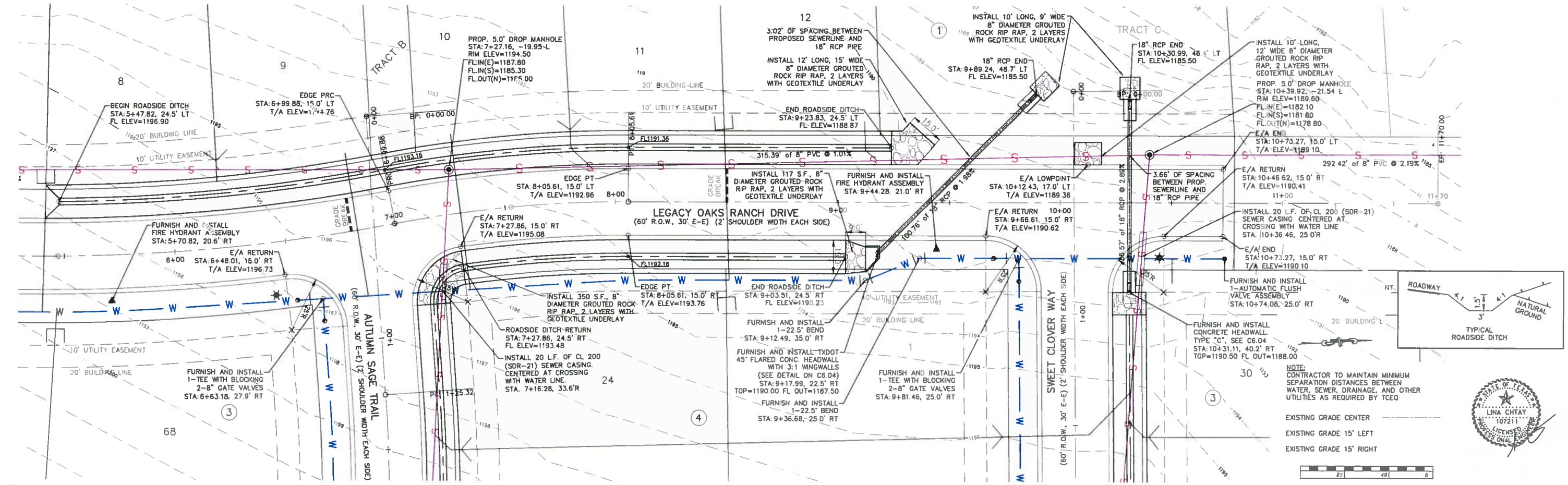
DESIGNED FOR:
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

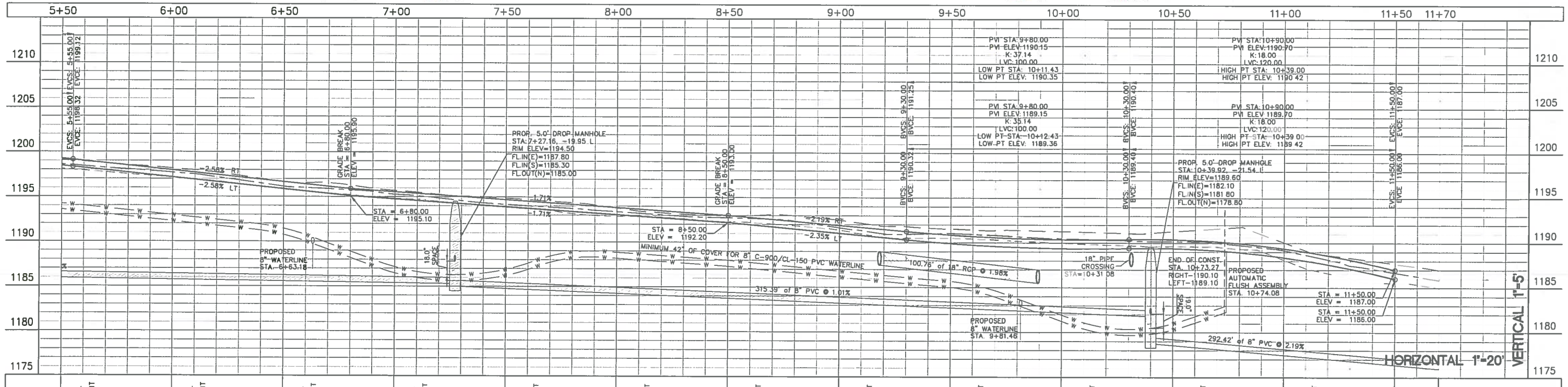
SCALE: 1"=20'
DRAWN.: RR
ELEC. DRAWING FILE

CONSTRUCTION PLAN OF:
LEGACY OAKS RANCH DRIVE
STA. 0+00.00 THRU STA. 5+50.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
20 OF 29
C5.00





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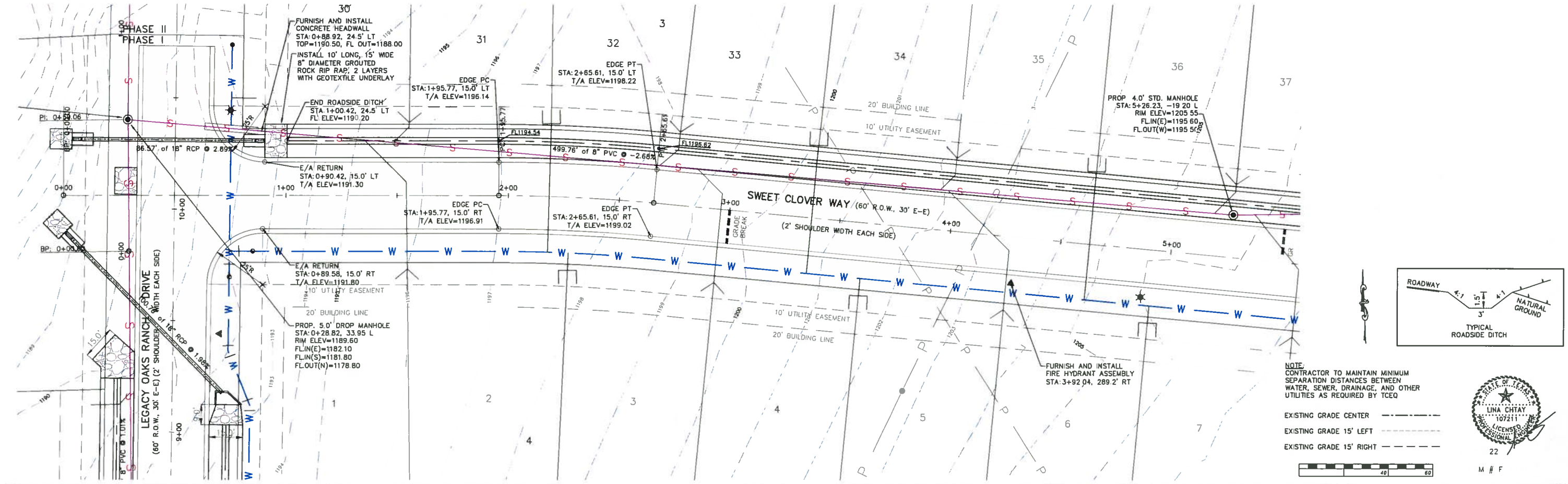
DESIGNED FOR:
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

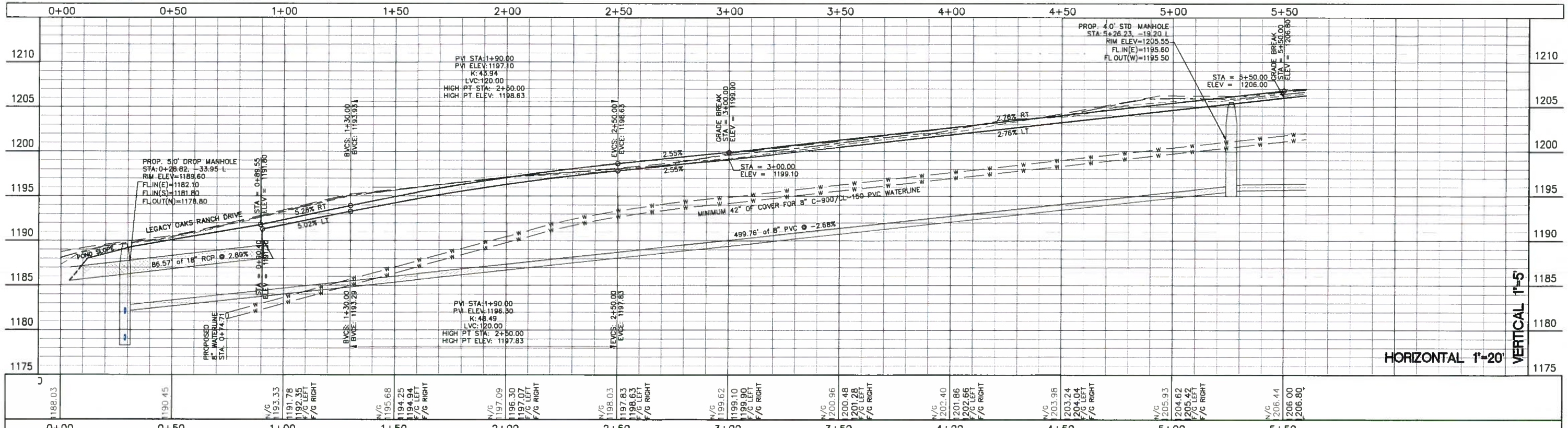
SCALE: 1"=20'
DRAWN.: RR
ELEC DRAWING FILE

CONSTRUCTION PLAN OF:
LEGACY OAKS RANCH DRIVE
STA. 5+50.00 THRU STA. 11+70.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.01





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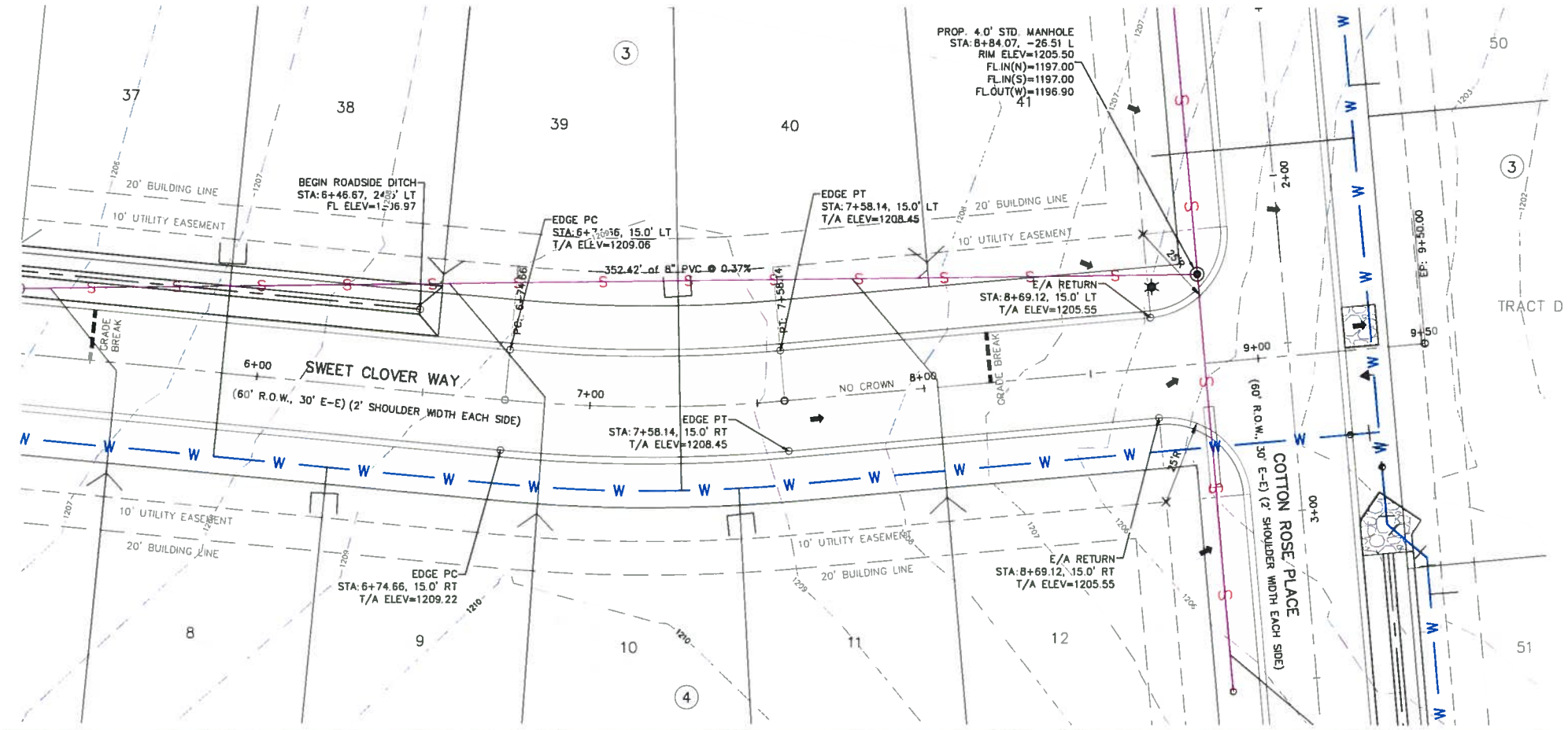
DESIGNED FOR
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

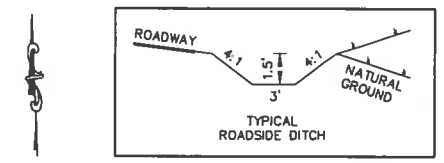
SCALE: 1"=20'
DRAWN.: RR
ELEC. DRAWING FILE

CONSTRUCTION PLAN OF:
SWEET CLOVER WAY
STA. 0+00.00 THRU STA. 5+50.00

PROJECT
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CTY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.02





NOTE:
CONTRACTOR TO MAINTAIN MINIMUM SEPARATION DISTANCES BETWEEN WATER, SEWER, DRAINAGE, AND OTHER UTILITIES AS REQUIRED BY TCEQ.

EXISTING GRADE CENTER

EXISTING GRADE 15' LEFT

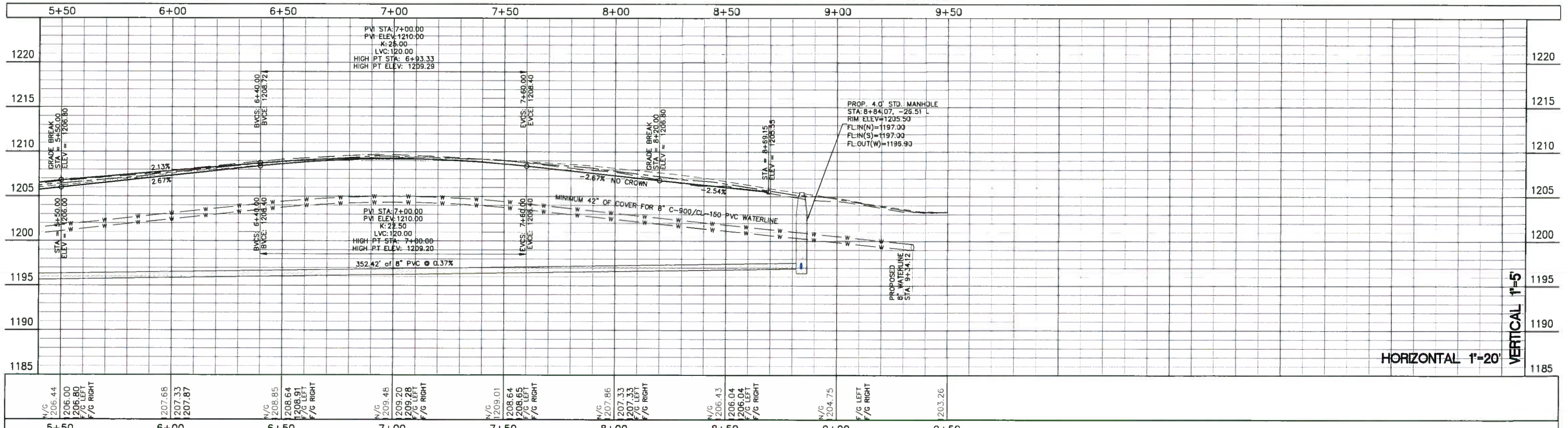
EXISTING GRADE 15' RIGHT

20 40 60

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER

05/06/22

FRM # F-13392



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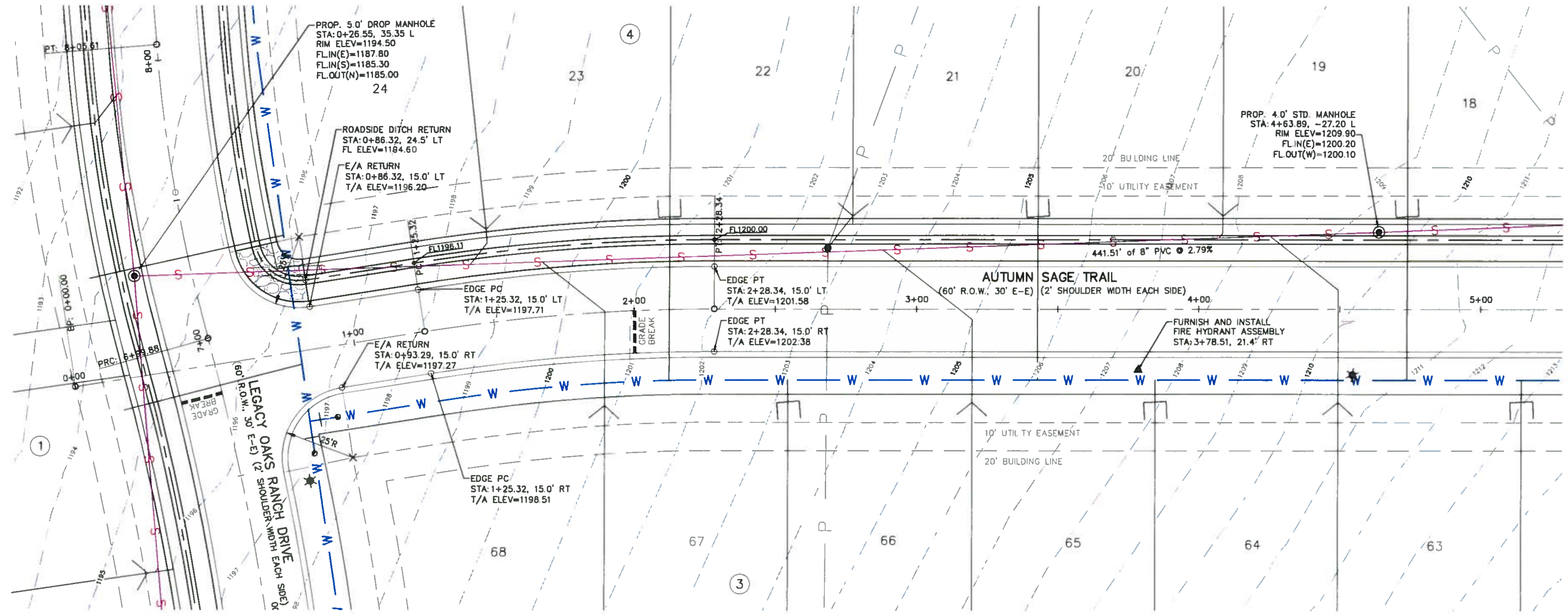
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

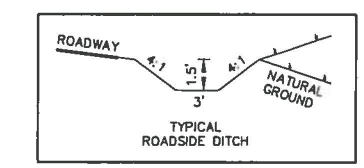
SCALE: 1"=20'
DRAWN.: RR
ELEC. DRAWING FILE

CONSTRUCTION PLAN OF:
SWEET CLOVER WAY
STA. 5+50.00 THRU STA. 9+50.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.03

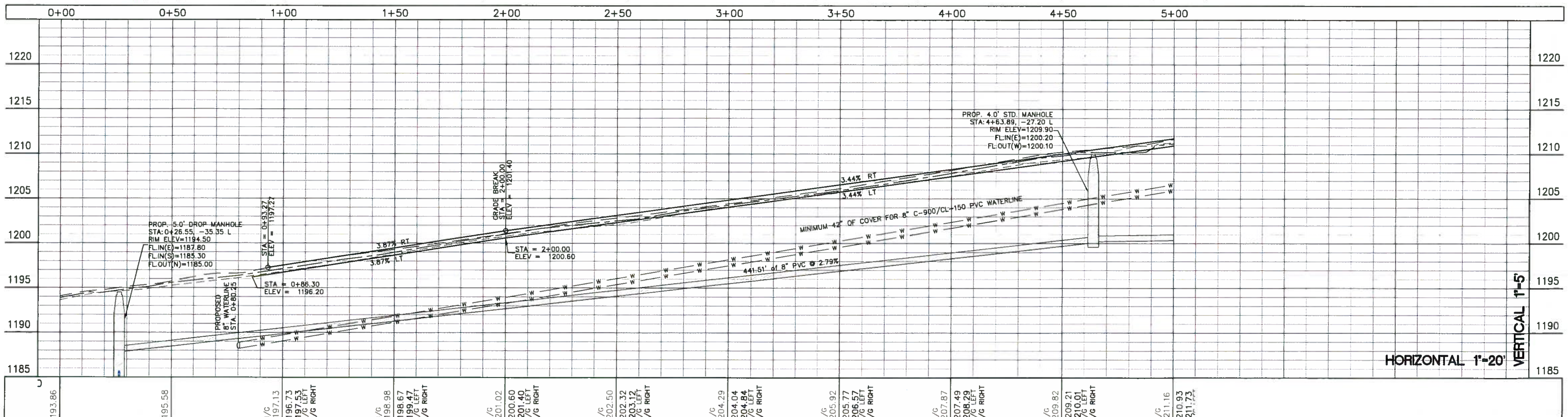




NOTE:
CONTRACTOR TO MAINTAIN MINIMUM SEPARATION DISTANCES BETWEEN WATER, SEWER, DRAINAGE, AND OTHER UTILITIES AS REQUIRED BY TCEQ.

EXISTING GRADE CENTER
EXISTING GRADE 15' LEFT
EXISTING GRADE 15' RIGHT

LINA CHITAY 107211 LICENSED PROFESSIONAL ENGINEER — STATE OF TEXAS
05/06/22
FRM # F-13392



REVISIONS

■ FOR REVIEW ONLY ☐ FOR CONSTRUCTION

BELTON ENGINEERING, INC.
Engineering • Design/Build • Planning
106 EAST STREET, BELTON, TEXAS 76513
BELTONENGINEERINGINC@GMAIL.COM
WWW.BELTONENGINEERS.COM

DESIGNED FOR:
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

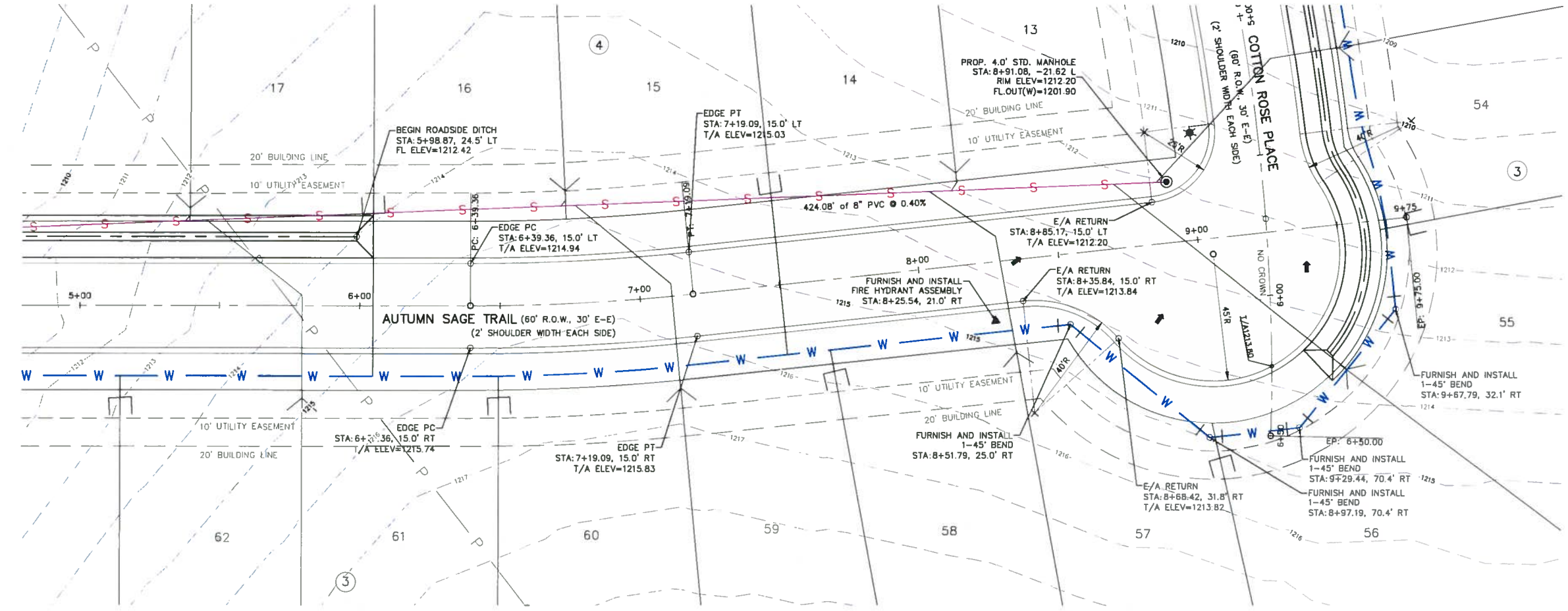
SCALE: 1"=20'
DRAWN.: RR
ELEC. DRAWING FILE

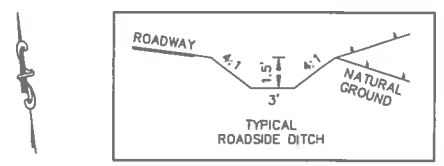
CONSTRUCTION PLAN OF:
AUTUMN SAGE TRAIL
STA. 0+00.00 THRU STA. 5+00.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29

C5.04





NOTE:
CONTRACTOR TO MAINTAIN MINIMUM SEPARATION DISTANCES BETWEEN WATER, SEWER, DRAINAGE, AND OTHER UTILITIES AS REQUIRED BY TCEQ.

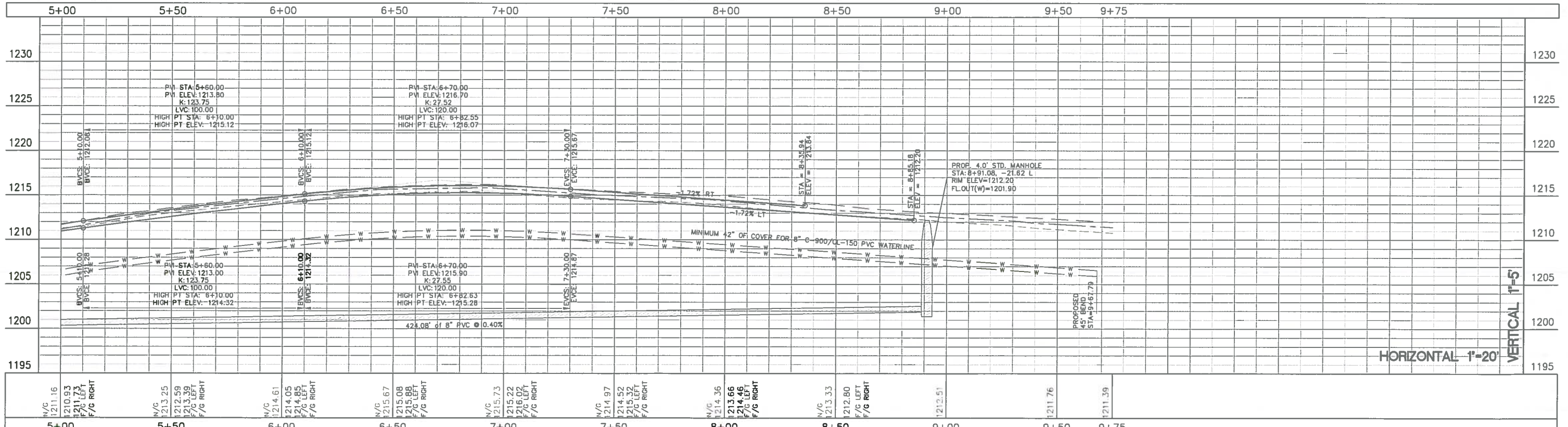
EXISTING GRADE CENTER

EXISTING GRADE 15' LEFT

EXISTING GRADE 15' RIGHT

05/06/22

FIRM # F-13392



5+00	5+50	6+00	6+50	7+00	7+50	8+00	8+50	9+00	9+50	9+75
N/G 1211.16	N/G 1213.25	N/G 1214.61	N/G 1215.67	N/G 1215.73	N/G 1214.97	N/G 1214.36	N/G 1213.33	1212.51	1211.76	1211.39
1210.93 F/G LEFT	1212.59 F/G LEFT	1214.05 F/G LEFT	1215.08 F/G LEFT	1215.22 F/G LEFT	1214.52 F/G LEFT	1213.66 F/G LEFT	1212.80 F/G LEFT			
1211.73 F/G RIGHT	1213.39 F/G RIGHT	1214.85 F/G RIGHT	1215.88 F/G RIGHT	1216.02 F/G RIGHT	1215.32 F/G RIGHT	1214.46 F/G RIGHT				

REVISIONS

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Engineering • Design/Build • Planning
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WWW.BELTONENGINEERS.COM

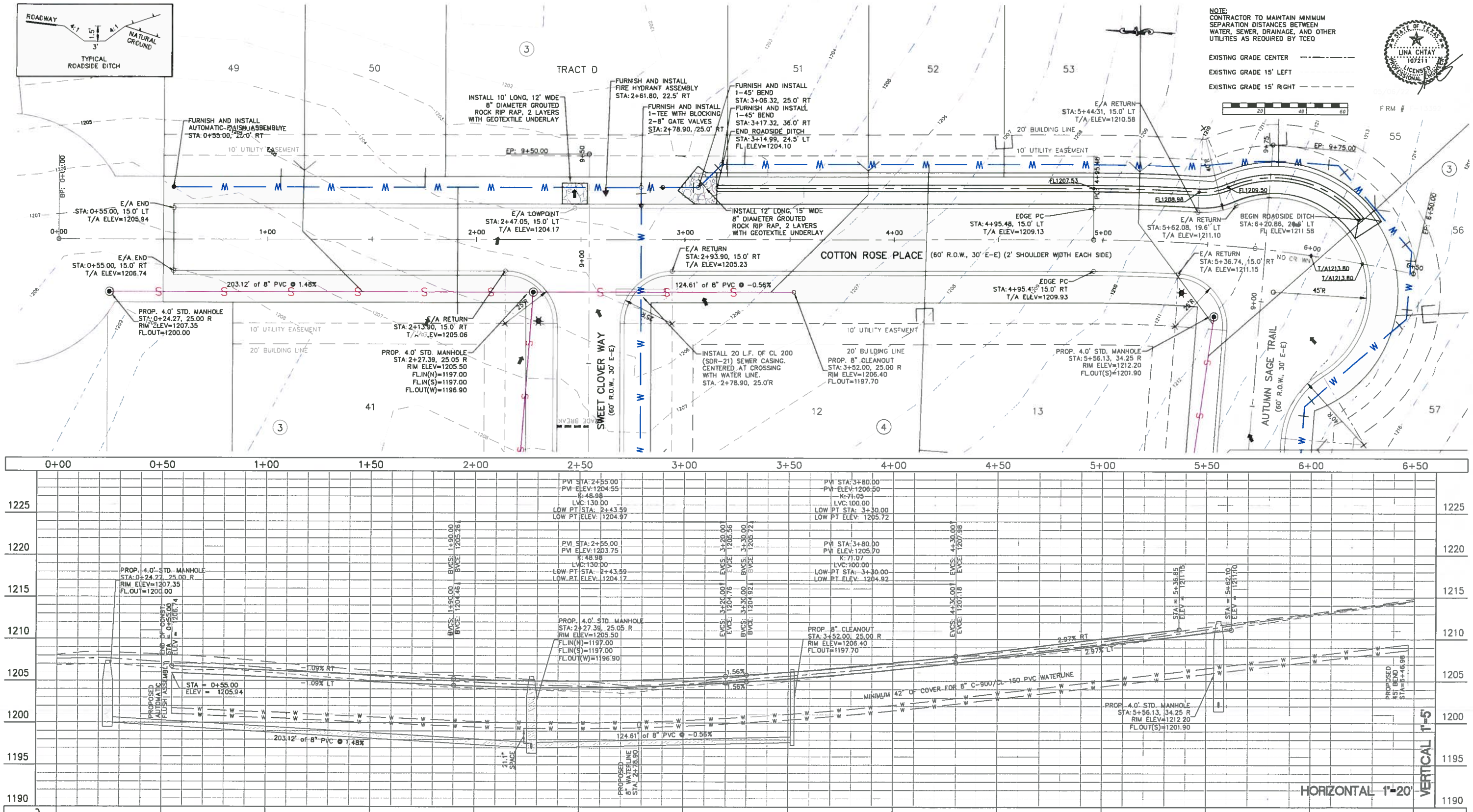
DESIGNED FOR:
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

SCALE: 1"=20'
DRAWN.: RR
ELEC. DRAWING FILE

CONSTRUCTION PLAN OF:
AUTUMN SAGE TRAIL
STA. 5+00.00 THRU STA. 9+75.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.05



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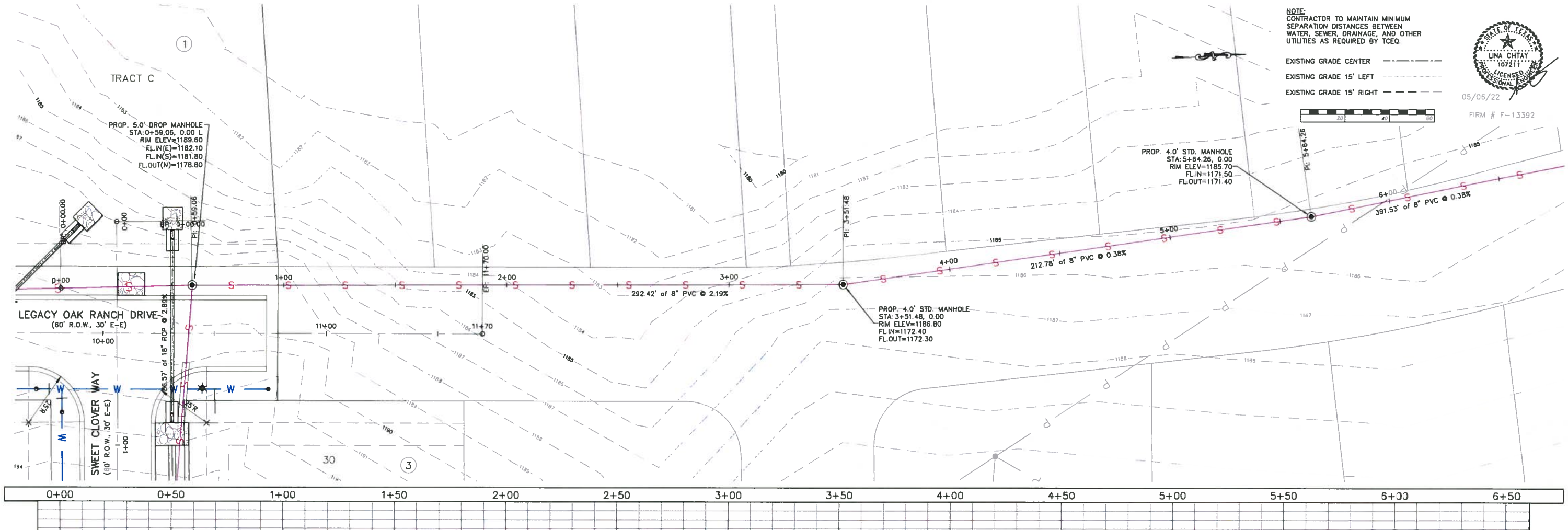
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

SCALE: 1"=20'
DRAWN.: RR
ELEC DRAWING FILE

CONSTRUCTION PLAN OF:
COTTON ROSE PLACE
STA. 0+00.00 THRU STA. 6+50.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.06



NOTE:
CONTRACTOR TO MAINTAIN MINIMUM SEPARATION DISTANCES BETWEEN WATER, SEWER, DRAINAGE, AND OTHER UTILITIES AS REQUIRED BY TCEQ.

EXISTING GRADE CENTER
EXISTING GRADE 15' LEFT
EXISTING GRADE 15' RIGHT

STATE OF TEXAS
UNA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER
05/06/22

FIRM # F-13392

0+00	0+50	1+00	1+50	2+00	2+50	3+00	3+50	4+00	4+50	5+00	5+50	6+00	6+50
190.03	189.58	189.28	185.27	184.12	182.80	184.11	186.22	185.77	185.37	185.16	185.23	185.06	185.34

REVISIONS

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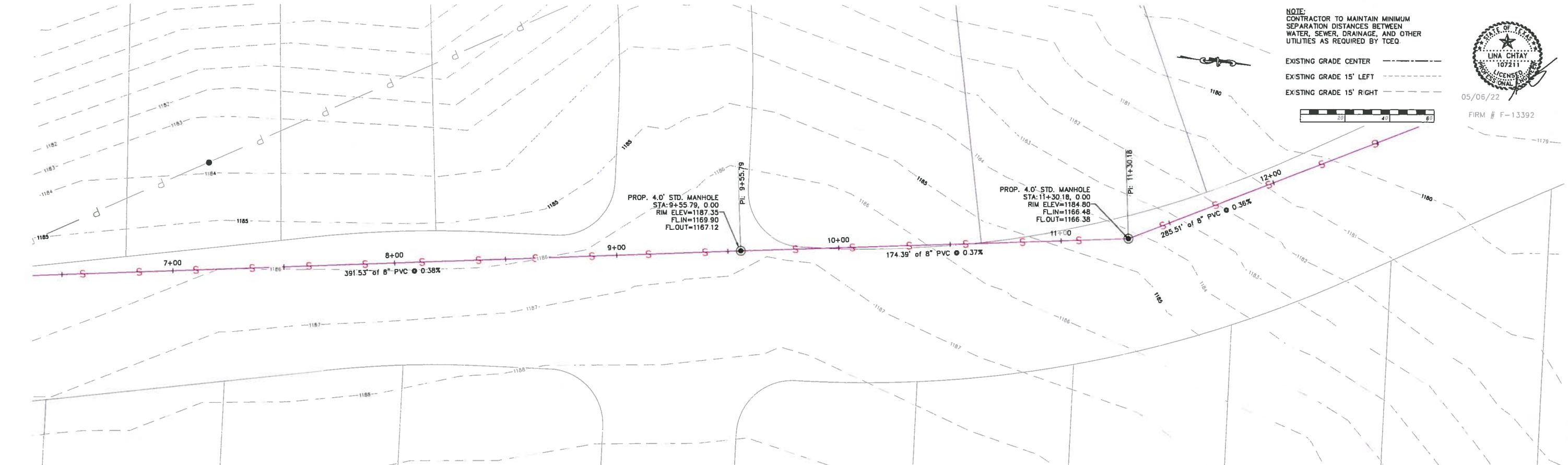
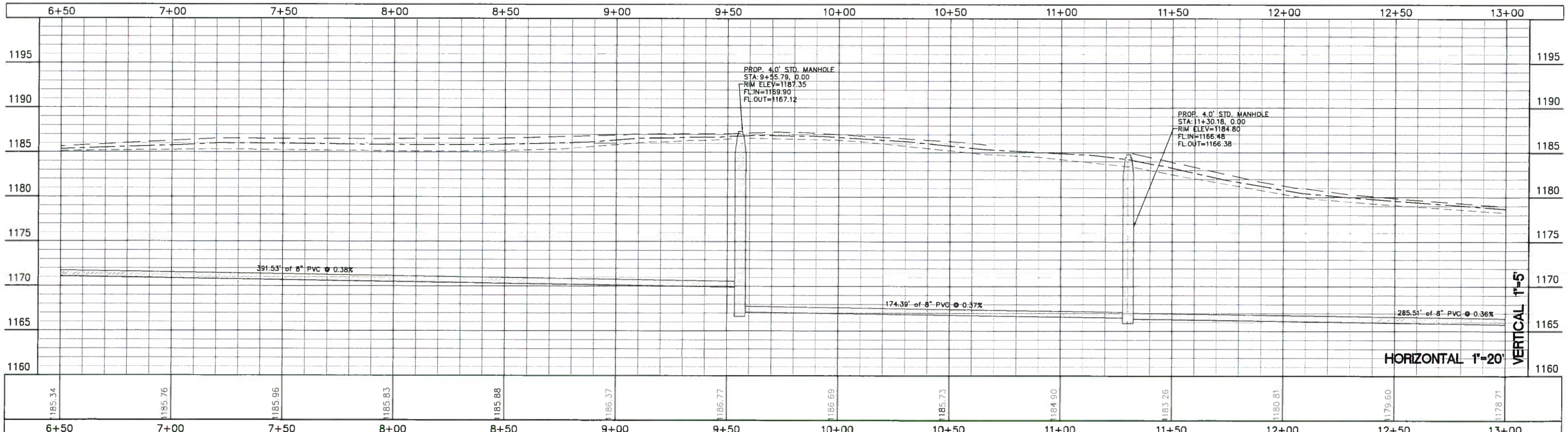
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

SCALE: 1"=20'
DRAWN.: RR
ELEC. DRAWING FILE

CONSTRUCTION PLAN OF:
SEWERLINE EXTENSION
STA. 0+00.00 THRU STA. 6+50.00
PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.07





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DESIGNED FOR:
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10008 LOXLEY LANE
AUSTIN, TEXAS 78717

SCALE: 1"=20'
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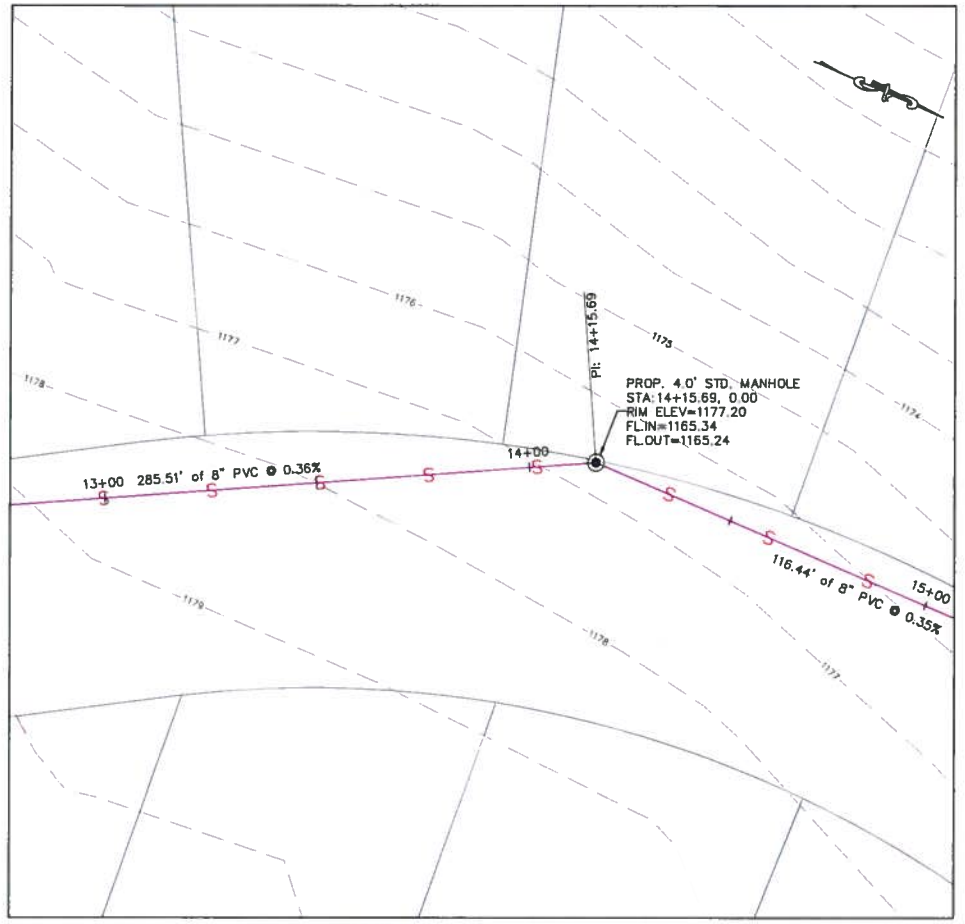
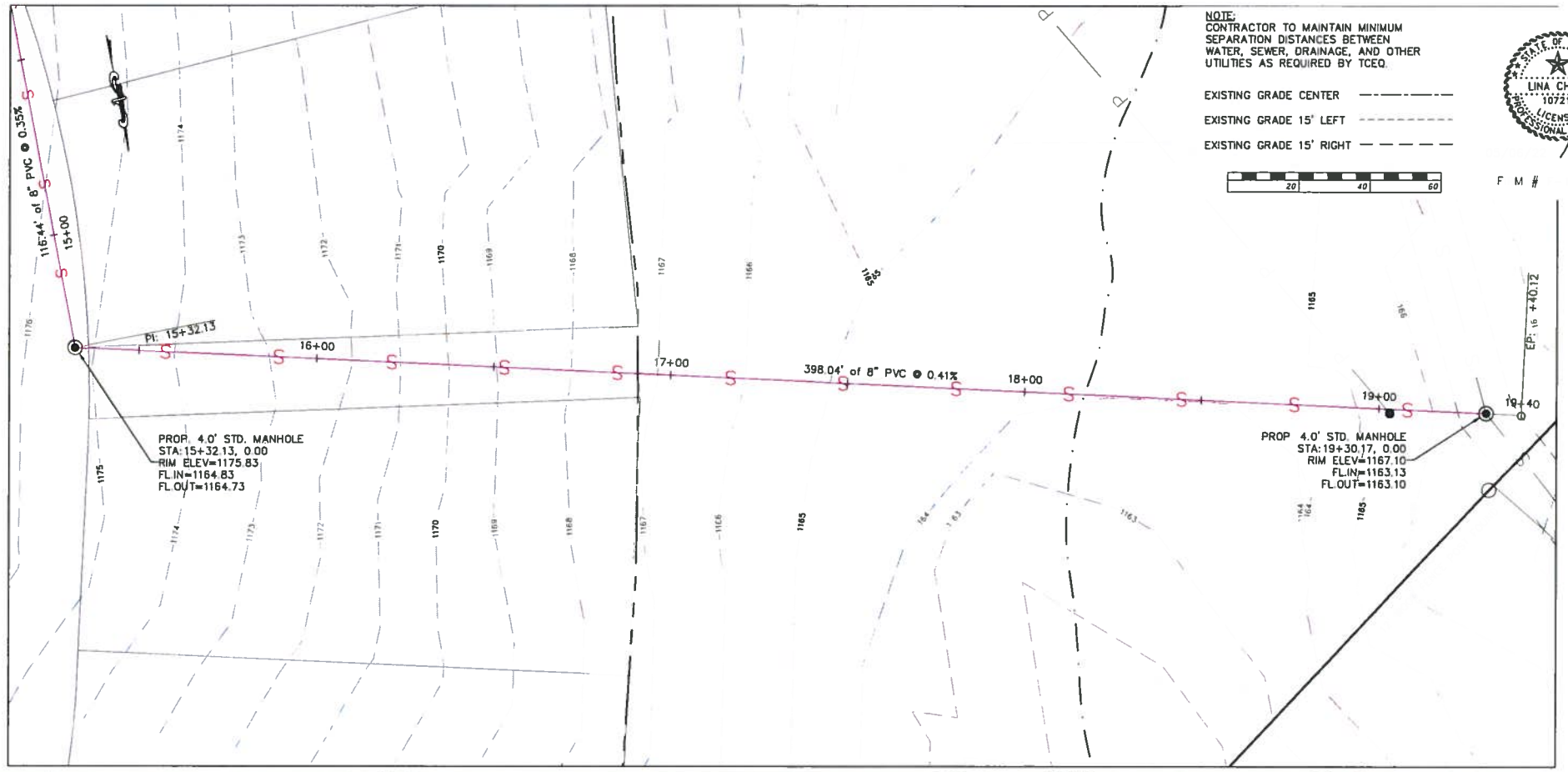
CONSTRUCTION PLAN OF:
SEWERLINE EXTENSION
STA. 6+50.00 THRU STA. 13+00.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.08





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EXISTING GRADE CENTER

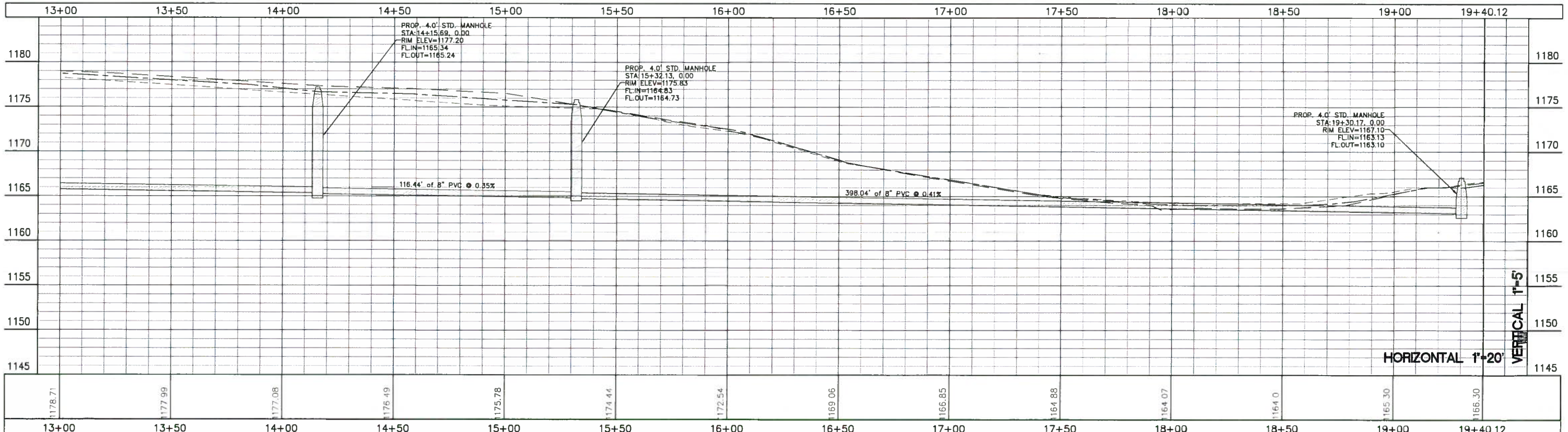
EXISTING GRADE 15' LEFT

EXISTING GRADE 15' RIGHT

20 40 60

F M #

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER



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Engineering • Design/Build • Planning
106 EAST STREET, BELTON, TEXAS 76513
BELTONENGINEERINGINC@GMAIL.COM
WWW.BELTONENGINEERS.COM

DESIGNED FOR:
LEGACY CAPITAL FUNDING, LLC

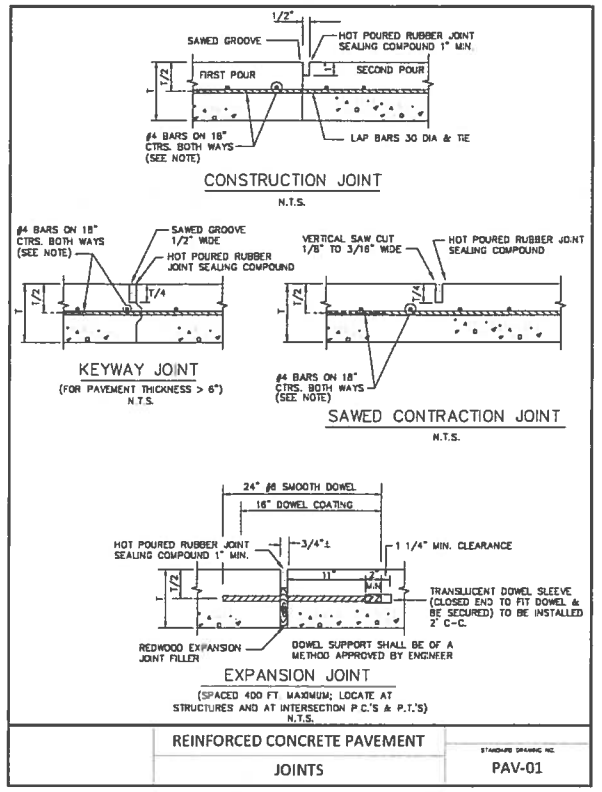
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

SCALE: 1"=20'
DRAWN.: RR
ELEC. DRAWING FILE

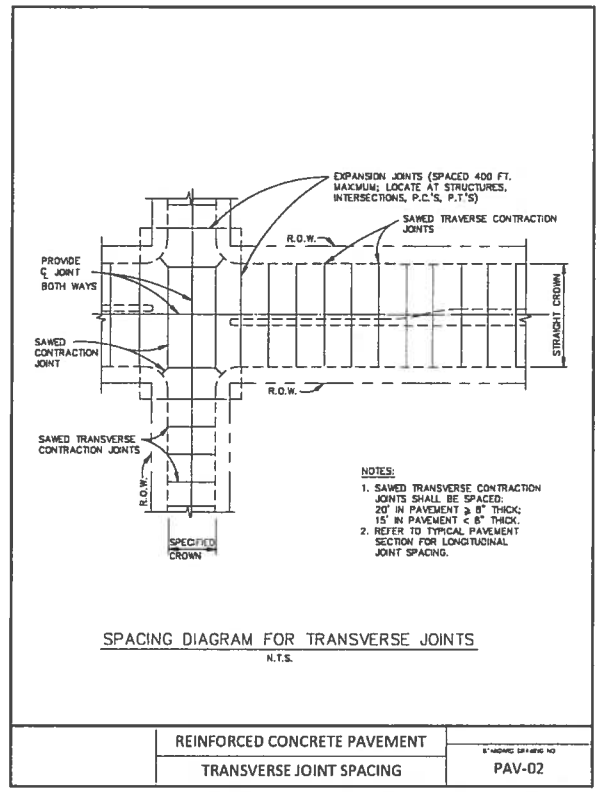
CONSTRUCTION PLAN OF:
SEWERLINE EXTENSION
STA. 13+00.00 THRU STA. 19+40.00

PROJECT:
HOMESTEAD AT DEER CREEK, PHASE I
JOHNSON CITY, BLANCO COUNTY, TEXAS

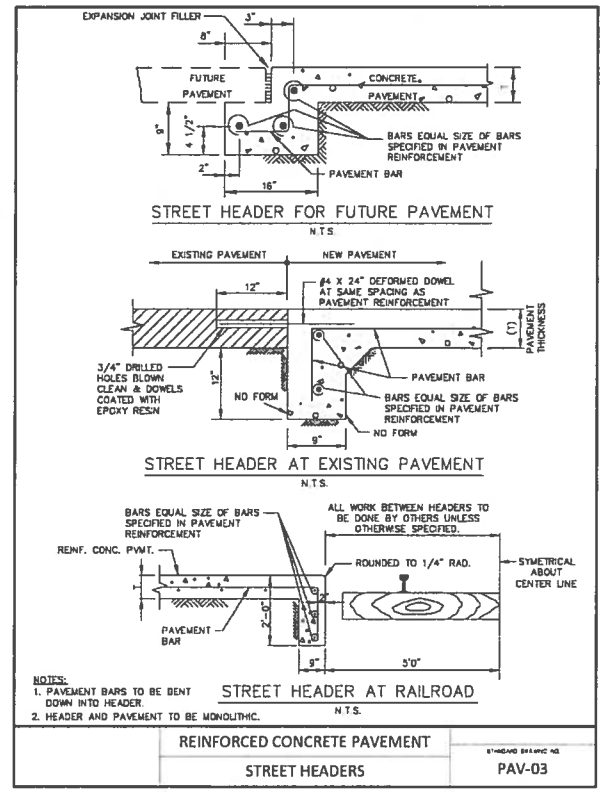
DATE: 05/06/22
JOB NO.: 21032
21 OF 29
C5.09



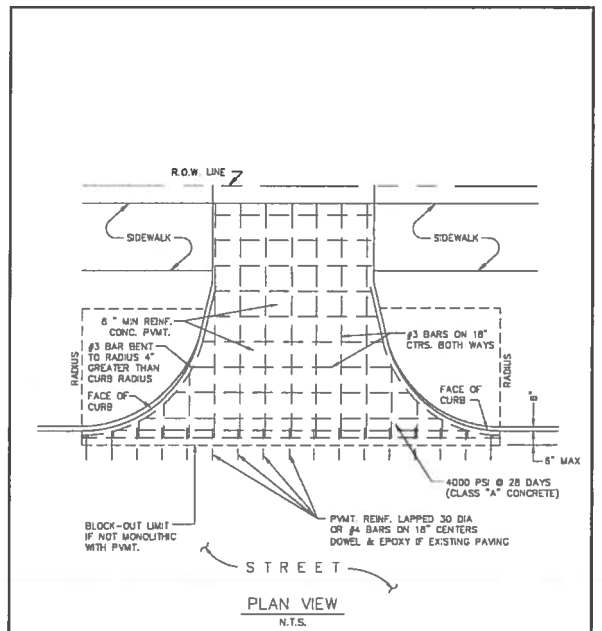
REINFORCED CONCRETE PAVEMENT	STANDARD DRAWING NO.
JOINTS	PAV-01



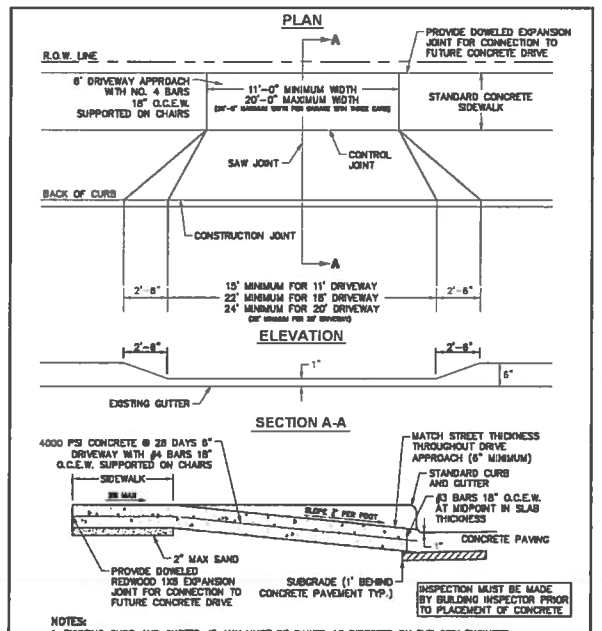
REINFORCED CONCRETE PAVEMENT	STANDARD DRAWING NO.
TRANSVERSE JOINT SPACING	PAV-02



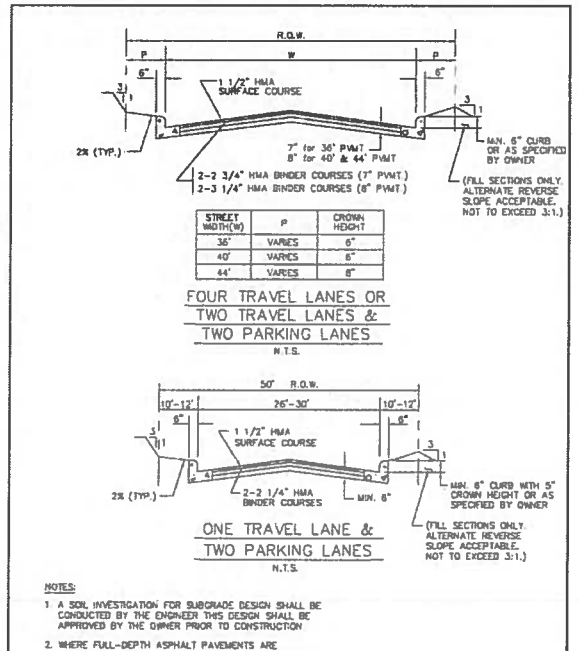
REINFORCED CONCRETE PAVEMENT	STANDARD DRAWING NO.
STREET HEADERS	PAV-03



CONCRETE DRIVEWAY APPROACH	STANDARD DRAWING NO.
RADIUS RETURN	PAV-07



CONCRETE DRIVEWAY APPROACH	STANDARD DRAWING NO.
RESIDENTIAL	PAV-08



HOT MIX ASPHALT PAVEMENT	STANDARD DRAWING NO.
2- & 4-LANE UNDIVIDED THOROUGHFARE	PAV-14

REVISIONS

FIRM # F-13392

BELTON ENGINEERING INC.

106 NO. EAST STREET
BELTON, TEXAS 76513
OFFICE (254)731-5600
MOBILE (254)289-7273
BELTONENGINEERS.COM

- *Engineering*
- *Design/Build*
- *Planning*

PAVING DETAILS FOR:
HOMESTEAD AT DEER CREEK, PHASE I
217 281 LOOP
CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS

LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER

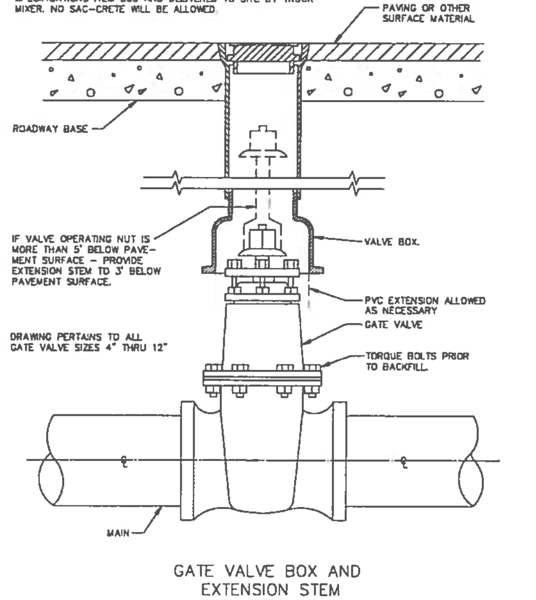
05/06/22

SCALE: N.T.S
DRAWN.: RR
ELEC. DRAWING FILE
C:*21032-details.DWG
DATE: 05/06/22
JOB NO.: 21032
25 OF 29
C6.00

PAVING DETAILS FOR:
HOMESTEAD AT DEER CREEK, PHASE I
217 281 LOOP
IN THE CITY OF JOHNSON CITY, BLANCO COUNTY, TX

NOTE:

IN UNPAVED AREAS, INSTALL 2' x 2' x 6" CONCRETE VALVE PAD FLUSH WITH THE TOP OF VALVE BOX. REINFORCE WITH #3 BARS ON 6" CENTERS BOTH WAYS. CONCRETE SHALL BE IN ACCORDANCE WITH 5TH EDITION NCTCOG STANDARD SPECIFICATIONS ITEM 303 AND DELIVERED TO SITE BY TRUCK MIXER. NO SAC-CRETE WILL BE ALLOWED.



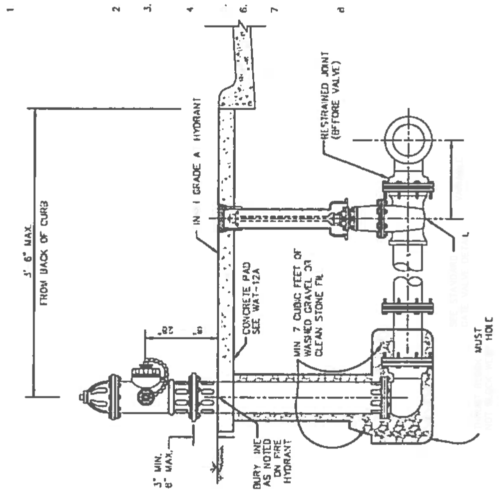
GATE VALVE BOX AND EXTENSION STEM

N.T.S.

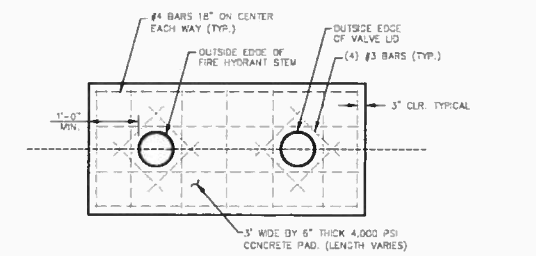
GATE VALVE 4" TO 12"	STANDARD DRAWING NO.
BOX & EXTENSION STEM	WAT-01

NO S:

1. IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECI ICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502. FIRE HYDRANTS SHALL HAVE A 5 1/4" MIN VALVE OPENING AND A BARREL APPROXIMA Y 7" INSIDE DIAMETER. ALL YDRAN S SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE.
2. ALL JOINTS SHALL BE MECHANICAL JOINTS.
3. YPICAL VALVE ACTUAL VALVE LOCATION EPEN ON OCATION OF WATER MAIN
4. H NO CLOSER THAN 18" TO EXISTING OR PROPOSED SIDEWALKS. (USUAL)
5. ANDAR B RY DEPTH 5' FEET.
6. SET FIRE HYDRANT ON THE LOT LINE EXTENDED WHEN POSSIBLE.
7. F.H. SHALL BE LOCATED MINIMUM 1 FT OUTSIDE OF THE AREA BETWEEN THE P.C.'S OF THE CORNER TURNING RADII AT INTERSECTIONS. (SEE PLAN VIEW ON WA 12A)
8. NO MORE THAN 2 XTENSIONS SHALL BE PERMI D

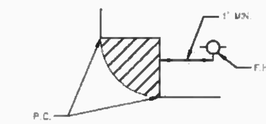


FIRE HYDRANT	
INSTALLATION	WAT-12



PLAN VIEW - REBAR

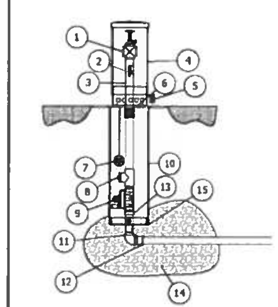
N.T.S.



PLAN VIEW - PLACEMENT

N.T.S.

FIRE HYDRANT	STANDARD DRAWING NO.
REBAR & PLACEMENT	WAT-12A



ITEM	ITEM DESCRIPTION	OPTIONAL	BY HERS
1	2" WATER FLOW RESTRICTOR		
2	SAMPLING POINT		
3	2" PVC PIPE		
4	UV RESISTANT LOCKABLE DOME ENCLOSURE		
5	LOCKING POINT		
6	REMOVABLE ACCESS PLATE		
7	CONTROLLER		
8	AUTOMATIC DRAIN		
9	2" AUTOMATIC VALVE		
10	SDR 35 SEWER PIPE		
11	2" SS MIP INLET	X	X
12	2" MIP x COMPRESSION ADAPTER		X
13	O-RING CONNECTOR		
14	1" CLEAN ROCK		X
15	DEBRIS PLATE		

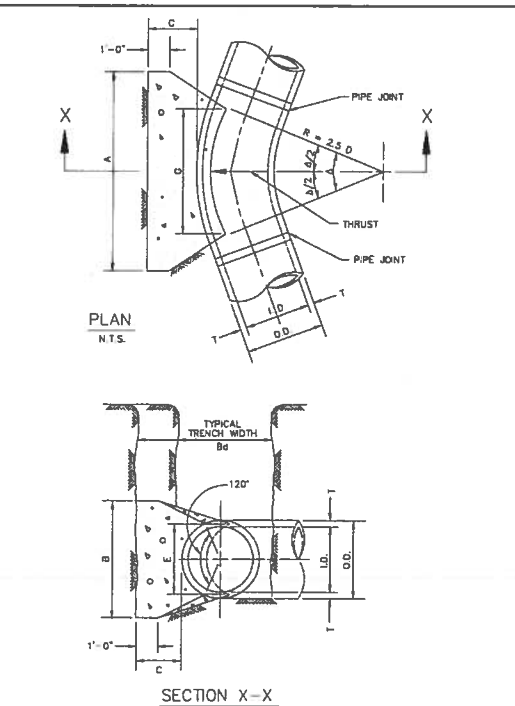
NOTES:

1. AUTOMATIC FLUSHING DEVICE SHA HAVE A 2" STAINLESS STEEL MIP INLET, THAT W LEAD VERTICALLY TO THE BOTTOM INTO A 2 AUTOMATIC FLUSHING VALVE
2. THE FLUSHING VALVE SHALL CONTROL THE FLOW OF WATER THROUGH THE HYDRANT AND TS DIAPHRAGM WITH THE EXTENSION AND RETRACTION OF A DC LATCHING SOLENOID AND HAVE A RATING
3. EACH UNIT SHALL BE FURNISHED WITH A STAND ALONE VALVE CONTROLLER. VALVE CONTROLLER NOT REQUIRE A SECOND HAND-HELD DEVICE FOR PROGRAMMING. CONTROLLER MUST HAVE MIN 12 POSSIBLE FLUSHING CYCLES PER DAY
4. SHALL BE SUBMERSIBLE TO 12 FEET, OPERATE WITH A 9 VOLT BATTERY AND HAVE R SIN-SEA ELECTRICAL COMPONENTS.
5. SOLENOID SHALL HAVE NO LOOSE PARTS WHEN REMOVED FROM VALVE. REMOVAL OF 2 SOLEN VALVE SHALL BE POSSIBLE VIA AN O RING CONNECTOR LOCATED UNDER THE VALVE AFTER REM OF STAINLESS STEEL ACCESS PLATE.
6. VALVE ASSEMBLY SHALL BE CONTAINED WITHIN A UV RESISTANT LOCKING COVER
7. UNIT MODEL # SHALL BE 9400 AS MANUFACTURED BY KUPFERLE FOUNDRY COMPANY. MODEL #9 LOUIS, MO. 1 800 231 3990, OR APPROVED EQUAL.
8. FLUSH WATER LINES FREE OF DEBRIS BEFORE INSTALLATION

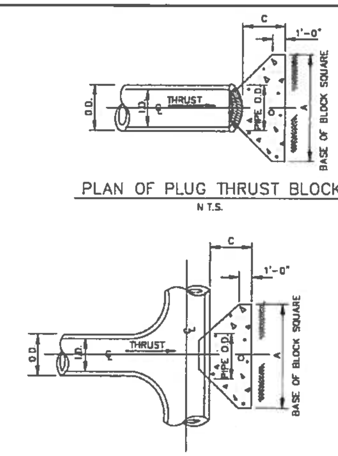
AUTOMATIC FLUSHING DEVICE

N.T.S.

AUTOMATIC FLUSH VALVE	STANDARD DR
	WAT-18



HORIZONTAL THRUST BLOCK	STANDARD DRAWING NO.
AT PIPE BEND (1 OF 3)	WAT-20



PLAN OF PLUG THRUST BLOCK

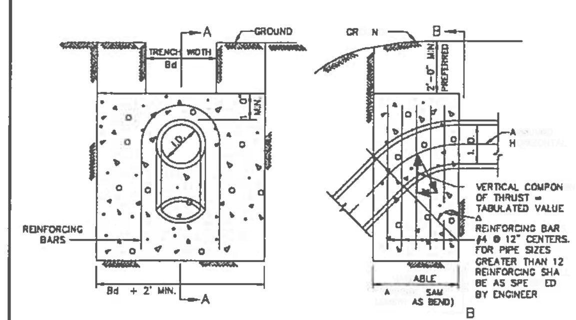
N.T.S.

PLAN OF TEE THRUST BLOCK

N.T.S.

			EARTH		ROCK	
I.D. (IN.)	THRUST (TONS)	C (FT.)	A (FT.)	VOL. (C.Y.)	A (FT.)	VOL. (C.Y.)
4,6,8	5.1	1.5	2.5	0.3	2.0	0.2
10,12	11.3	1.5	3.5	0.6	2.5	0.3
16,18	25.5	2.0	5.5	1.6	4.0	0.9
20	31.5	2.0	6.0	1.9	4.0	0.9
24	45.2	2.5	7.0	3.1	5.0	1.7
30	53.0	3.0	7.5	4.1	5.5	2.4
36	76.3	4.0	9.0	7.3	6.5	4.2
42	104.0	4.5	10.5	11.0	7.5	6.2
48	136.0	5.0	12.0	15.6	8.5	8.7
54	172.0	5.5	13.5	21.4	9.5	11.9
60	212.0	6.0	15.0	28.4	10.5	15.7
66	257.0	6.5	16.5	36.8	11.5	20.5
72	305.0	7.5	17.5	47.2	12.5	27.2
78	358.0	8.0	19.0	58.9	13.5	33.7
84	416.0	8.5	20.5	72.3	14.5	41.2
90	477.0	9.0	22.0	87.7	15.5	49.7
96	543.0	9.5	23.5	104.8	16.5	61.0

HORIZONTAL THRUST BLOCK	STANDARD DRAWING NO.
AT TEES & PLUGS	WAT-21



A	11.25°		22.50°		30°		45°		67.50°		90°		A
I.D. (IN.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	I.D. (IN.)
4,6,8	1.0	0.5	2.0	1.0	2.5	1.3	3.6	1.8	4.6	2.3	5.0	2.5	4,6,8
10,12	2.2	1.1	4.3	2.2	5.7	2.8	8.0	4.0	10.5	5.2	11.3	5.7	10,12
16,18	5.0	2.5	9.7	4.9	12.7	6.4	18.0	9.0	23.5	11.8	25.5	12.7	16,18
20	6.1	3.1	12.0	6.0	15.7	7.9	22.2	11.1	29.2	14.5	31.4	15.7	20
24	8.2	4.4	17.3	8.7	22.6	11.3	32.0	16.0	41.8	20.9	45.2	22.6	24
30	10.5	5.2	20.3	10.1	26.5	13.3	37.5	18.8	49.0	24.5	53.1	26.5	30
36	14.9	7.5	29.2	14.6	38.2	19.1	54.0	27.0	70.5	35.3	76.4	38.2	36
42	20.3	10.1	39.8	19.9	52.0	26.0	73.5	36.7	96.0	48.0	104.0	52.0	42
48	26.5	13.2	51.9	26.0	67.9	33.9	96.0	48.0	126.0	62.7	136.0	67.9	48
54	33.5	16.8	65.7	32.9	85.9	42.9	122.0	60.7	159.0	79.4	172.0	85.9	54
60	41.4	20.7	81.2	40.6	106.0	53.0	150.0	75.0	196.0	98.0	212.0	106.0	60
66	50.1	25.0	98.2	49.1	128.0	64.2	182.0	90.7	237.0	119.0	257.0	128.0	66
72	59.6	29.8	117.0	58.4	153.0	76.3	216.0	108.0	282.0	141.0	305.0	153.0	72
78	69.9	35.0	137.0	68.6	179.0	90.0	254.0	127.0	331.0	166.0	358.0	179.0	78
84	81.1	4 .5	159.0	79.5	208.0	104.0	294.0	147.0	384.0	192.0	416.0	208.0	84
90	93.1	46.5	183.0	91.3	239.0	119.0	337.0	169.0	441.0	221.0	477.0	239.0	90
96	106.0	53.0	208.0	104.0	272.0	136.0	384.0	192.0	502.0	251.0	543.0	272.0	96

VERTICAL THRUST BLOCK	STANDARD DRAWING NO.
AT PIPE BEND	WAT-22

GEN

CRETE FOR BLOCK N

L CALCULATIONS AR A ON, P.V.C., AND 150 P

UMES OF THRUST B K E CORRESPONDING WEI EATER THAN THE VER

4. WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
5. POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.
6. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NO BE LESS THAN SHOWN HERE.
7. THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND 2000 LBS./S.F. IN ROCK.
8. USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND, TEE, OR PLUG TO PREVENT THE CONCRETE FROM STICKING TO IT.
9. CONCRETE SHALL NOT EXTEND BEYOND JOINTS.

THRUST BLOCK	
GENERAL NOTES	WA 23

WATER DETAILS FOR:

HOMESTEAD AT DEER CREEK, PHASE I

217 281 LOOP

IN THE CITY OF JOHNSON CITY, BLANCO COUNTY, TX

REVISIONS

FRM # F-13392

BELTON ENGINEERING INC.

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Planning

WATER DETAILS FOR:
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217 281 OOP
CITY OF JOHNSON CITY BLANCO OUNTY, TEXAS

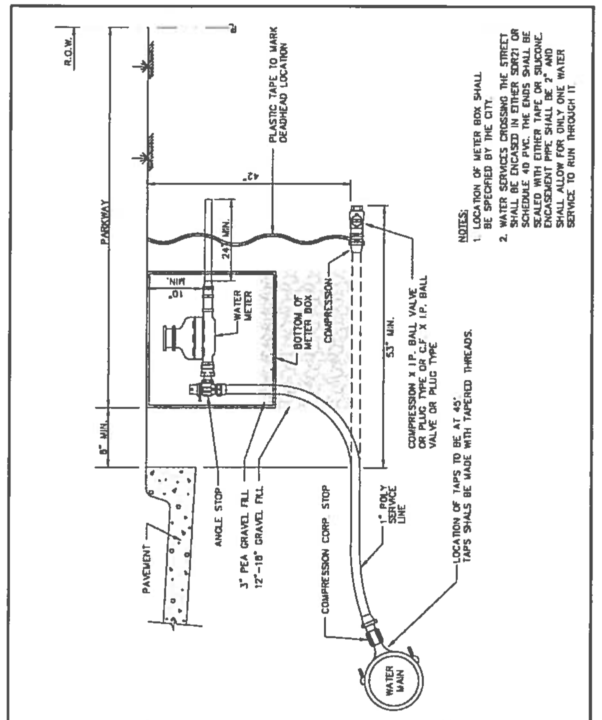
LEGACY CAPITAL FUNDING, LLC
10008 OX EY LANE
A N, TEXA 871

STATE OF TEXAS — LINA CHTAY — 107211 — LICENSED PROFESSIONAL ENGINEER

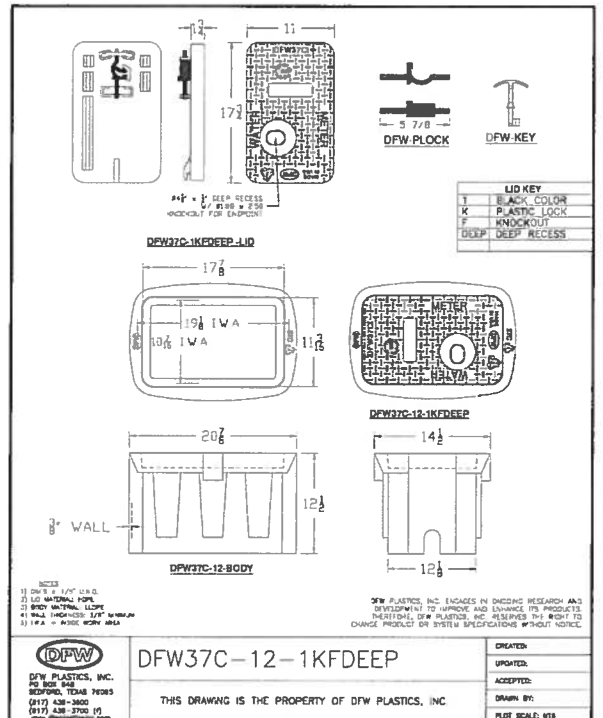
SCALE: N.T.S
DRAWN.: RR

DATE: 05/06/22
JOB NO.: 21032
26 OF 29

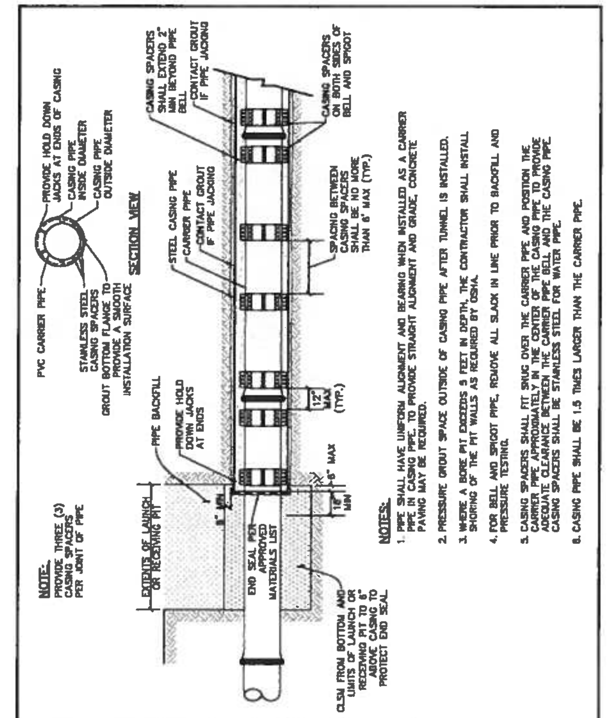
C6.01


R.O.W.
PARKWAY
PAVEMENT
ANGLE STOP
3" PEA GRAVEL FILL
12"-18" GRAVEL FILL
WATER METER
BOTTOM OF METER BOX
COMPRESSION
COMPRESSION CORP. STOP
1" POLY SERVICE LINE
WATER MAIN
53" MIN.
42"
PLASTIC TAPE TO MARK DEADHEAD LOCATION
COMPRESSION X I.P. BALL VALVE OR PLUG TYPE OR C.F. X I.P. BALL VALVE OR PLUG TYPE
LOCATION OF TAPS TO BE AT 45°. TAPS SHALS BE MADE WITH TAPERED THREADS.
NOTES:
1. LOCATION OF METER BOX SHALL BE SPECIFIED BY THE CITY.
2. WATER SERVICES CROSSING THE STREET SHALL BE ENCASED IN EITHER SDR21 OR SCHEDULE 40 PVC. THE ENDS SHALL BE SEALED WITH EITHER TAPE OR SILICONE. ENCASEMENT PIPE SHALL BE 2" AND SHALL ALLOW FOR ONLY ONE WATER SERVICE TO RUN THROUGH IT.

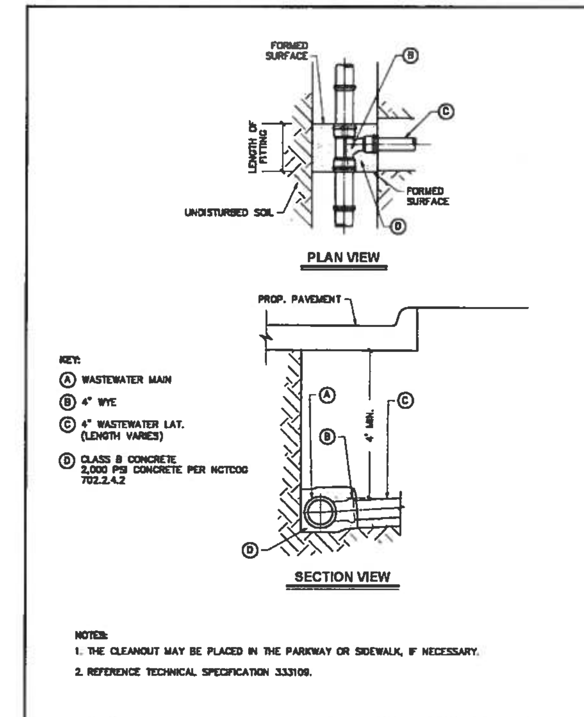
WATER SERVICE INSTALLATION	
1" LINE	WAT-13



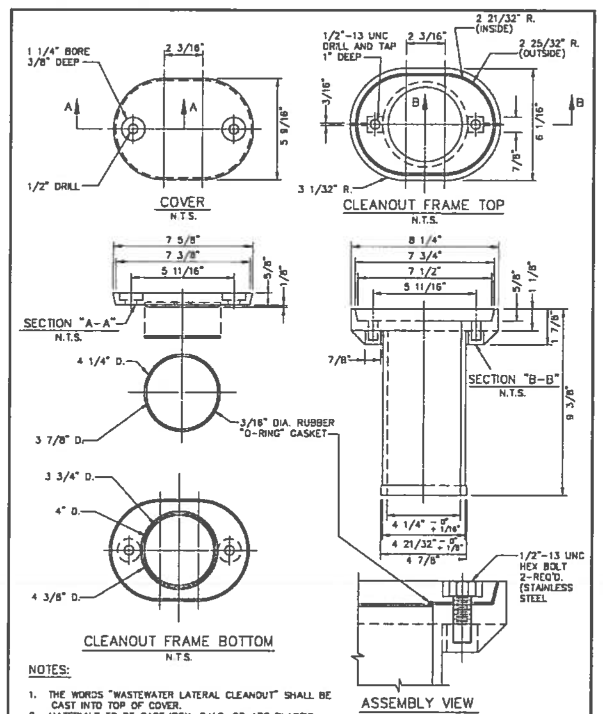
WATER METER LID	
METERS UP TO 1"	WAT-19


NOTE:
PROVIDE THREE (3) CASING SPACERS PER JOINT OF PIPE
PVC CARRIER PIPE
PROVIDE HOLD DOWN JACKS AT ENDS OF CASING
STAINLESS STEEL CASING SPACERS
CASING PIPE INSIDE DIAMETER
CASING PIPE OUTSIDE DIAMETER
GROUT BOTTOM FLANGE TO PROVIDE A SMOOTH INSTALLATION SURFACE
SECTION VIEW
EXTENTS OF LAUNCH OR RECEIVING PIT
PIPE BACKFILL
PROVIDE HOLD DOWN JACKS AT ENDS
STEEL CASING PIPE
CARRIER PIPE
CONTACT GROUT IF PIPE JACKING
CASING SPACERS SHALL EXTEND 2" MIN BEYOND PIPE BELL
END SEAL PER APPROVED MATERIALS LIST
CLSM FROM BOTTOM AND LIMITS OF LAUNCH OR RECEIVING PIT TO 6" ABOVE CASING TO PROTECT END SEAL.
SPACING BETWEEN CASING SPACERS SHALL BE NO MORE THAN 6' MAX (TYP.)
CASING SPACERS ON BOTH SIDES OF BELL AND SPIGOT
NOTES:
1. PIPE SHALL HAVE UNIFORM ALIGNMENT AND BEARING WHEN INSTALLED AS A CARRIER PIPE IN CASING PIPE. TO PROVIDE STRAIGHT ALIGNMENT AND GRADE, CONCRETE PAVING MAY BE REQUIRED.
2. PRESSURE GROUT SPACE OUTSIDE OF CASING PIPE AFTER TUNNEL IS INSTALLED.
3. WHERE A BORE PIT EXCEEDS 5 FEET IN DEPTH, THE CONTRACTOR SHALL INSTALL SHORING OF THE PIT WALLS AS REQUIRED BY OSHA.
4. FOR BELL AND SPIGOT PIPE, REMOVE ALL SLACK IN LINE PRIOR TO BACKFILL AND PRESSURE TESTING.
5. CASING SPACERS SHALL FIT SNUG OVER THE CARRIER PIPE AND POSITION THE CARRIER PIPE APPROXIMATELY IN THE CENTER OF THE CASING PIPE TO PROVIDE ADEQUATE CLEARANCE BETWEEN THE CARRIER PIPE BELL AND THE CASING PIPE. CASING SPACERS SHALL BE STAINLESS STEEL FOR WATER PIPE.
6. CASING PIPE SHALL BE 1.5 TIMES LARGER THAN THE CARRIER PIPE.

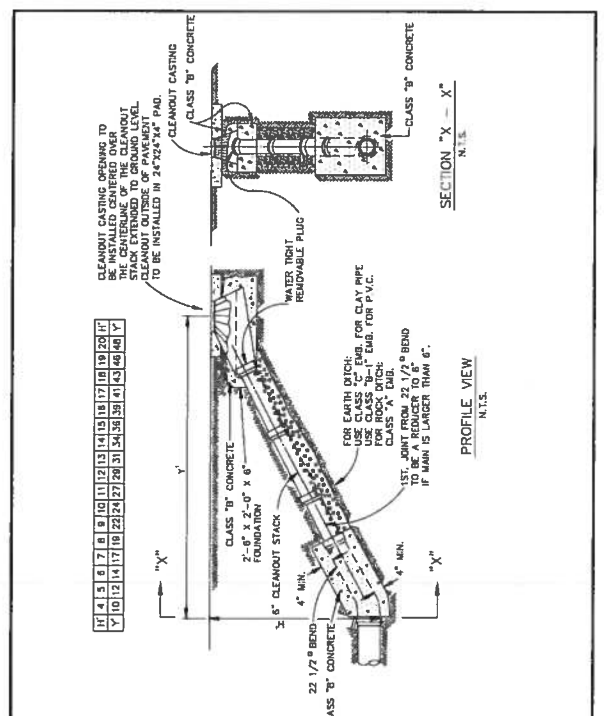
ENCASEMENT PIPE	
WATER LINE BY BORE	WAT-16


FORMED SURFACE
LENGTH OF FITTING
UNDISTURBED SOIL
PLAN VIEW
PROP. PAVEMENT
4" MIN.
SECTION VIEW
KEY:
Ⓐ WASTEWATER MAIN
Ⓑ 4" WYE
Ⓒ 4" WASTEWATER LAT. (LENGTH VARIES)
Ⓓ CLASS B CONCRETE 2,000 PSI CONCRETE PER NCTCOG 702.2.4.2
NOTES:
1. THE CLEANOUT MAY BE PLACED IN THE PARKWAY OR SIDEWALK, IF NECESSARY.
2. REFERENCE TECHNICAL SPECIFICATION 333109.

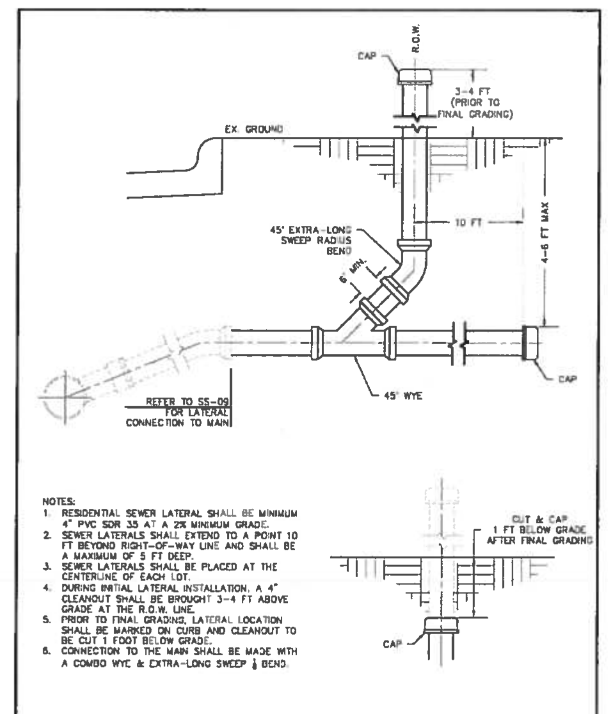
WASTEWATER SERVICES	
LATERAL CONNECTION	SS-09


1 1/4" BORE 3/8" DEEP
1/2" DRILL
COVER
CLEANOUT FRAME TOP
1/2"-13 UNC DRILL AND TAP 1" DEEP
SECTION "A-A"
SECTION "B-B"
3/16" DIA. RUBBER "O-RING" GASKET
CLEANOUT FRAME BOTTOM
ASSEMBLY VIEW
1/2"-13 UNC HEX BOLT 2-REQ'D. (STAINLESS STEEL)
NOTES:
1. THE WORDS "WASTEWATER LATERAL CLEANOUT" SHALL BE CAST INTO TOP OF COVER.
2. MATERIALS TO BE CAST IRON, P.V.C. OR ABS PLASTIC.

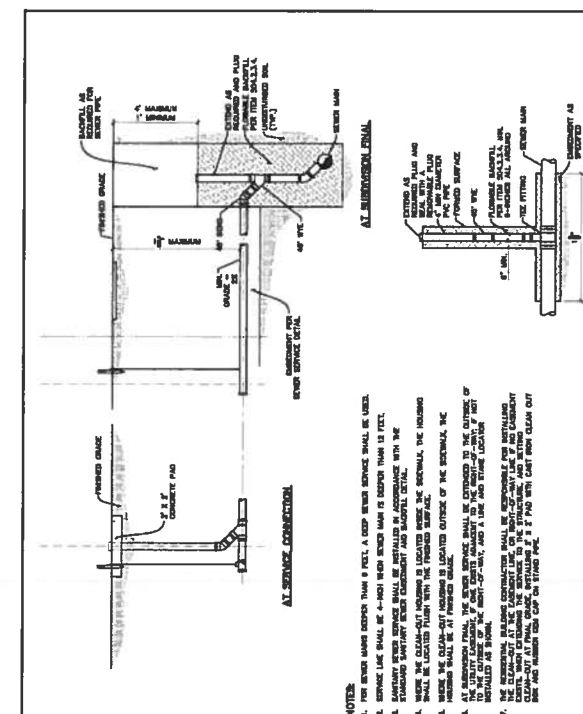
WASTEWATER SERVICES	
CLEANOUT FRAME & COVER	SS-10


CLEANOUT CASTING OPENING TO BE INSTALLED CENTERED OVER THE CENTERLINE OF THE CLEANOUT STACK EXTENDED TO GROUND LEVEL. CLEANOUT OUTSIDE OF PAVEMENT TO BE INSTALLED IN 24"X24"X4" PAD.
CLEANOUT CASTING
CLASS "B" CONCRETE
WATER TIGHT REMOVABLE PLUG
CLASS "B" CONCRETE
2'-0" X 2'-0" X 6" FOUNDATION
6" CLEANOUT STACK
22 1/2° BEND
FOR EARTH DITCH: USE CLASS "C" EMB. FOR CLAY PIPE USE CLASS "B-1" EMB. FOR P.V.C. FOR ROCK DITCH: CLASS "A" EMB.
1ST. JOINT FROM 22 1/2° BEND TO BE A REDUCER TO 6" IF MAIN IS LARGER THAN 6".
PROFILE VIEW
SECTION "X - X"

WASTEWATER MAIN	
CLEANOUT	SS-08


R.O.W.
CAP
3-4 FT (PRIOR TO FINAL GRADING)
EX GROUND
10 FT
4-6 FT MAX
45° EXTRA-LONG SWEEP RADIUS BEND
45° WYE
REFER TO SS-09 FOR LATERAL CONNECTION TO MAIN
CUT & CAP 1 FT BELOW GRADE AFTER FINAL GRADING
NOTES:
1. RESIDENTIAL SEWER LATERAL SHALL BE MINIMUM 4" PVC SDR 35 AT A 2% MINIMUM GRADE.
2. SEWER LATERALS SHALL EXTEND TO A POINT 10 FT BEYOND RIGHT-OF-WAY LINE AND SHALL BE A MAXIMUM OF 5 FT DEEP.
3. SEWER LATERALS SHALL BE PLACED AT THE CENTERLINE OF EACH LOT.
4. DURING INITIAL LATERAL INSTALLATION, A 4" CLEANOUT SHALL BE BROUGHT 3-4 FT ABOVE GRADE AT THE R.O.W. LINE.
5. PRIOR TO FINAL GRADING, LATERAL LOCATION SHALL BE MARKED ON CURB AND CLEANOUT TO BE CUT 1 FOOT BELOW GRADE.
6. CONNECTION TO THE MAIN SHALL BE MADE WITH A COMBO WYE & EXTRA-LONG SWEEP ⅛ BEND.

RESIDENTIAL LATERAL	
WITH CLEANOUT AT PROPERTY LINE	SS-12



WASTEWATER SERVICES	
DEEP LATERAL CONNECTION	SS-11

WATER AND SEWER DETAILS FOR:
HOMESTEAD AT DEER CREEK, PHASE I
217 281 LOOP
IN THE CITY OF JOHNSON CITY, BLANCO COUNTY, TX

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WATER AND SEWER DETAILS FOR:
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CITY OF JOHNSON CITY, BLANCO COUNTY, TEXAS
LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
AUSTIN, TEXAS 78717

STATE OF TEXAS
LINA CHTAY
107211
LICENSED PROFESSIONAL ENGINEER
05/06/22

SCALE: N.T.S
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ELEC. DRAWING FILE
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DATE: 05/06/22
JOB NO.: 21032
27 OF 29
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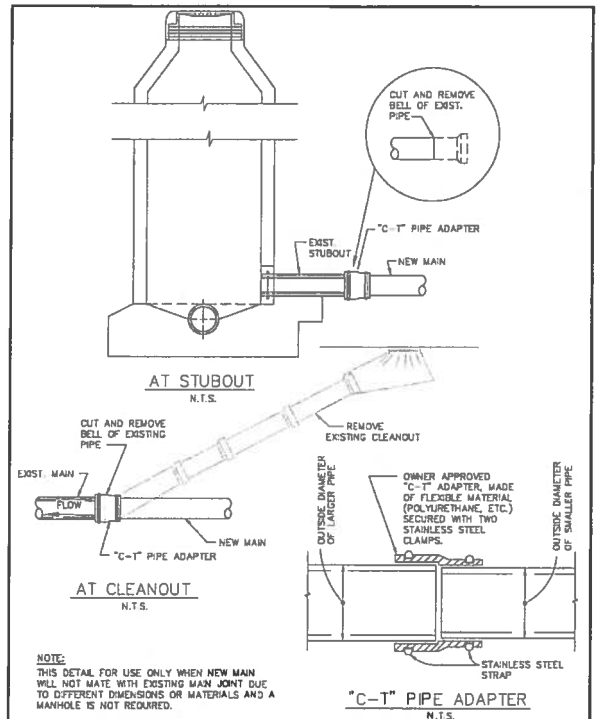
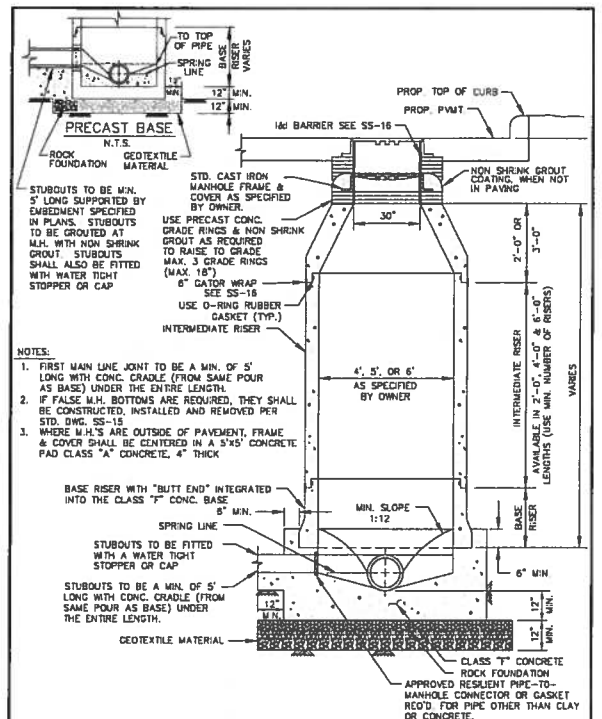
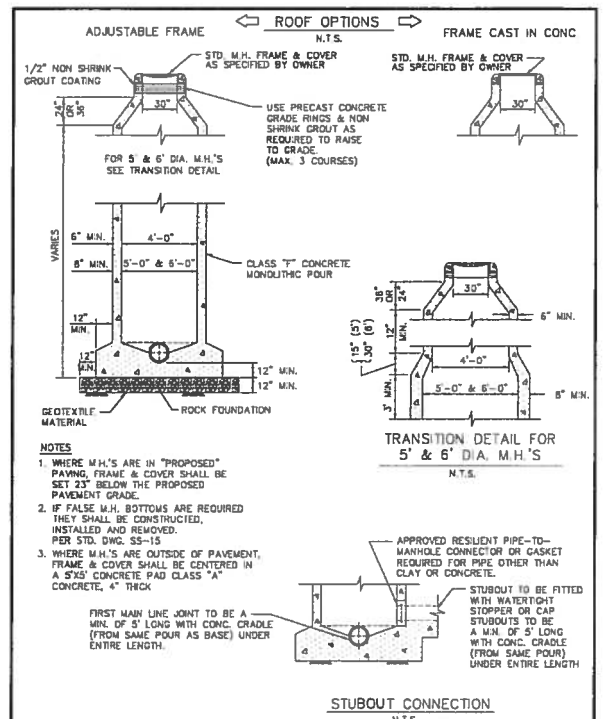


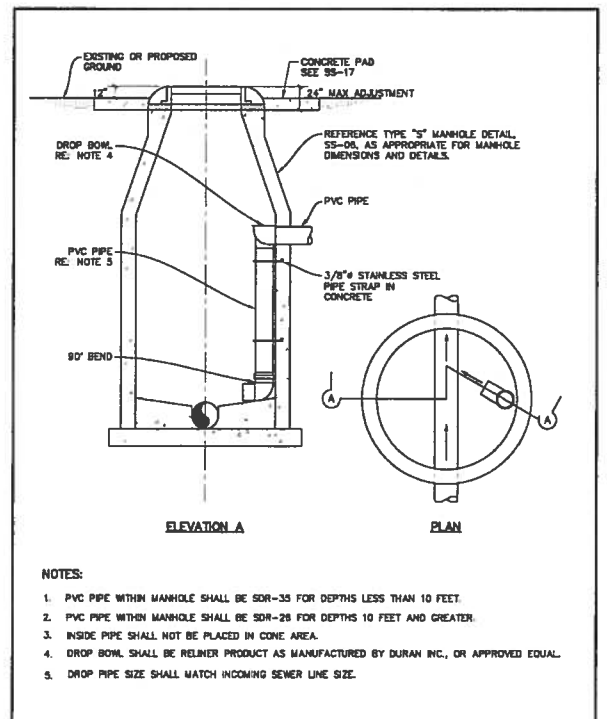
WASTEWATER MAIN TIE-IN	STANDARD DRAWING NO.
AT CLEANOUT OR MANHOLE STUBOUT	SS-01



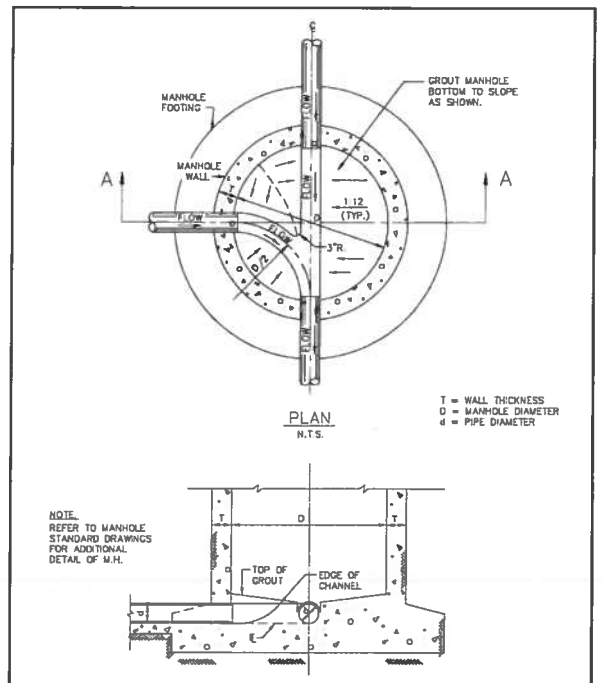
WASTEWATER MANHOLE	STANDARD DRAWING NO.
PRECAST	SS-02



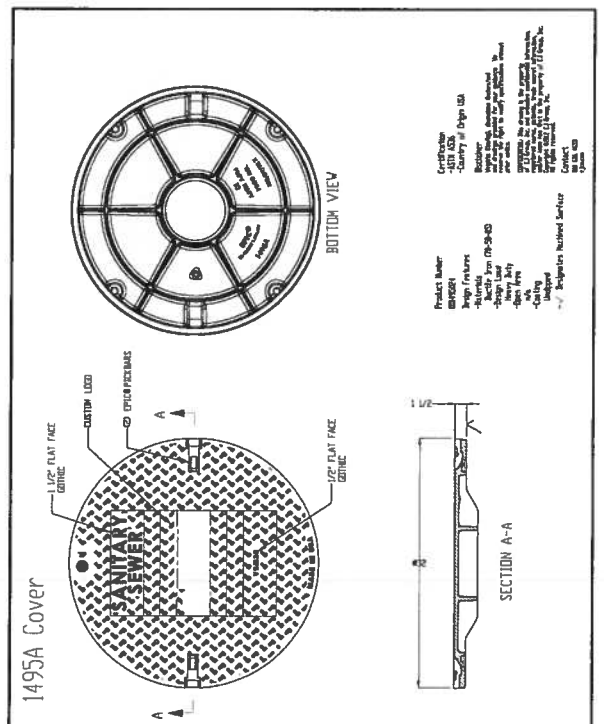
WASTEWATER MANHOLE	STANDARD DRAWING NO.
CAST-IN-PLACE	SS-03



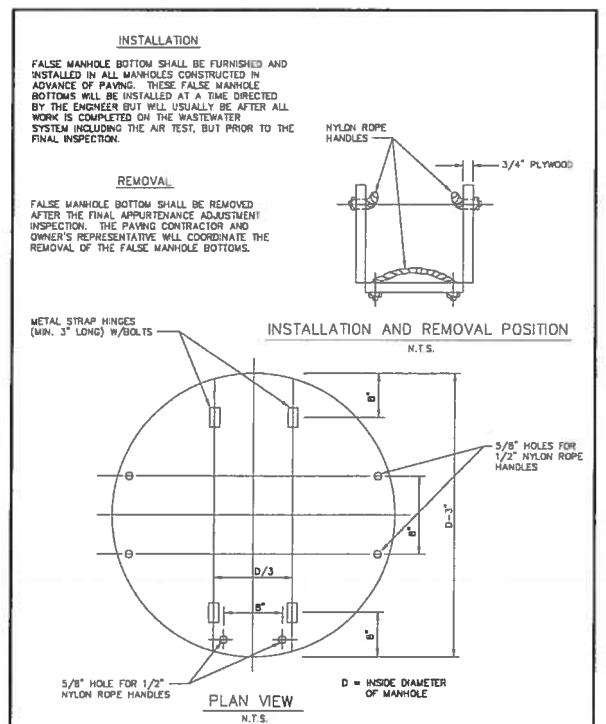
WASTEWATER MANHOLE	STANDARD DRAWING NO.
INTERNAL DROP CONNECTION	SS-05



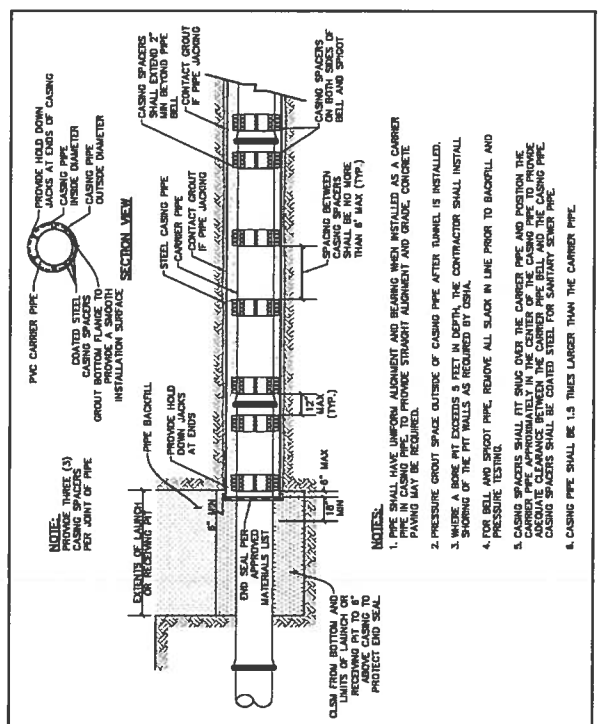
WASTEWATER MANHOLE	STANDARD DRAWING NO.
LINE INTERSECTION	SS-07



WASTEWATER MANHOLE	STANDARD DRAWING NO.
STANDARD COVER	SS-14



WASTEWATER MANHOLE	STANDARD DRAWING NO.
FALSE MANHOLE BOTTOM	SS-15



ENCASEMENT PIPE	STANDARD DRAWING NO.
WASTEWATER LINE BY BORE	SS-13

SANITARY SEWER DETAILS FOR:
HOMESTEAD AT DEER CREEK, PHASE I
217 281 LOOP
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REVISIONS

FIRM # F-13392

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LEGACY CAPITAL FUNDING, LLC
10008 LOXLEY LANE
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28 OF 29
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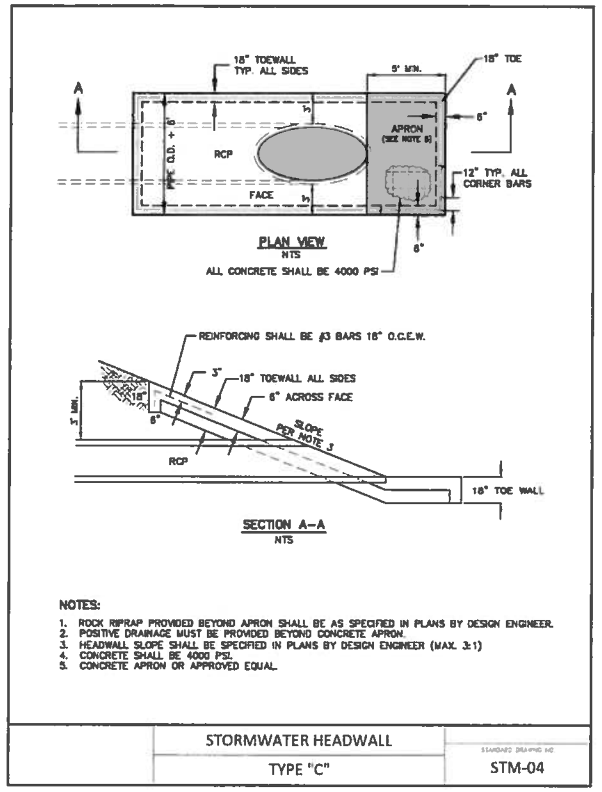

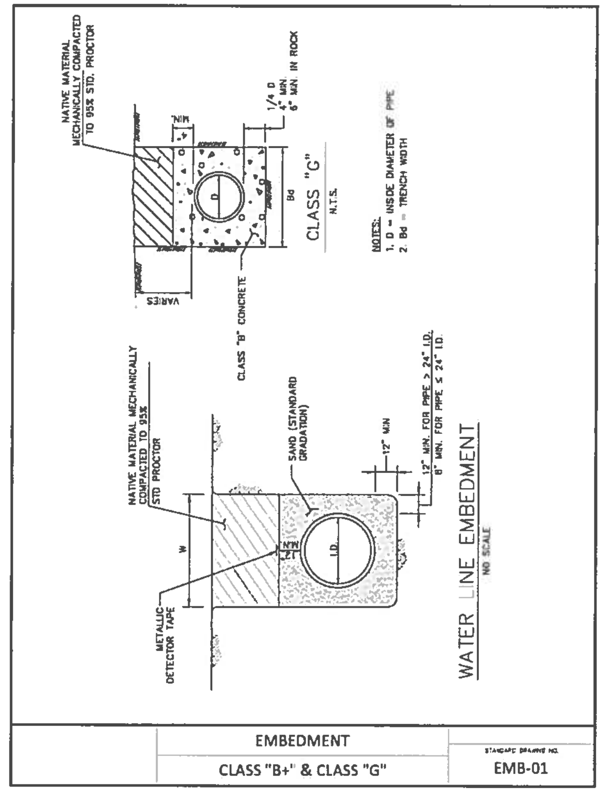

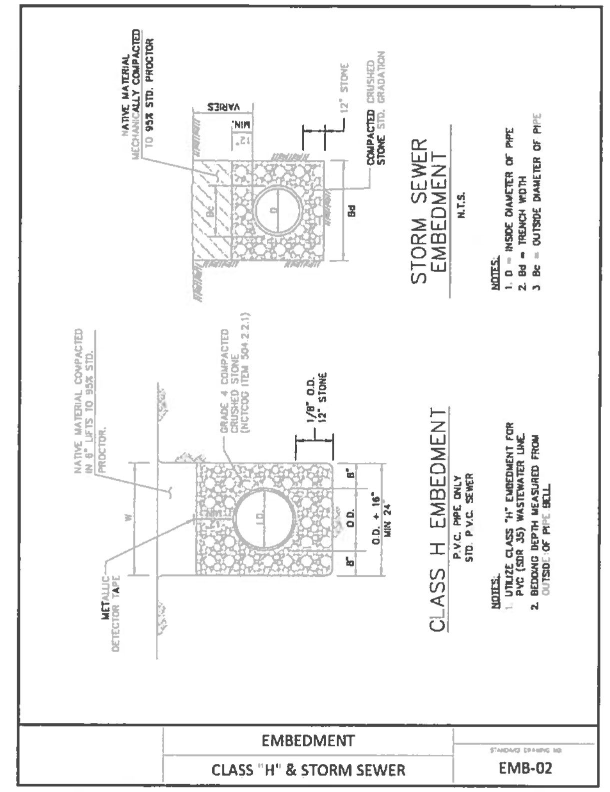

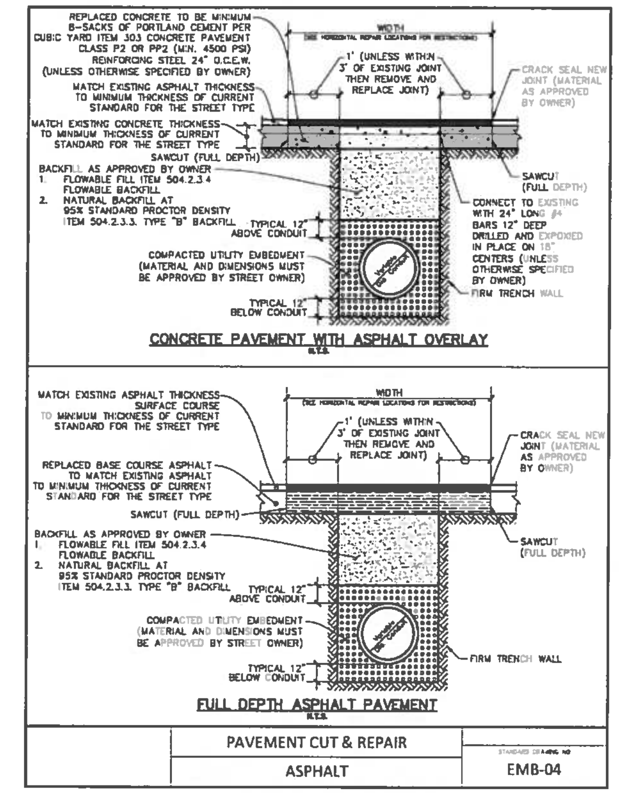

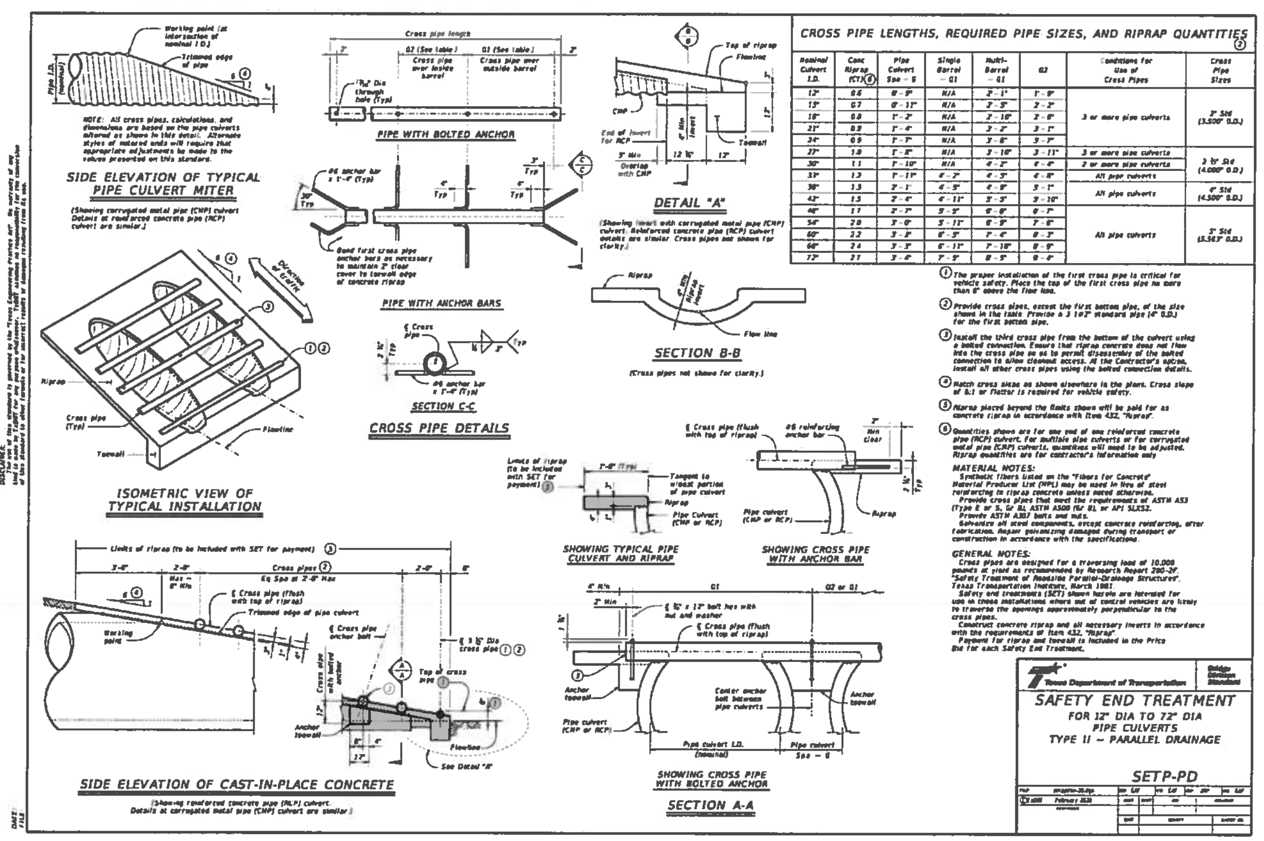

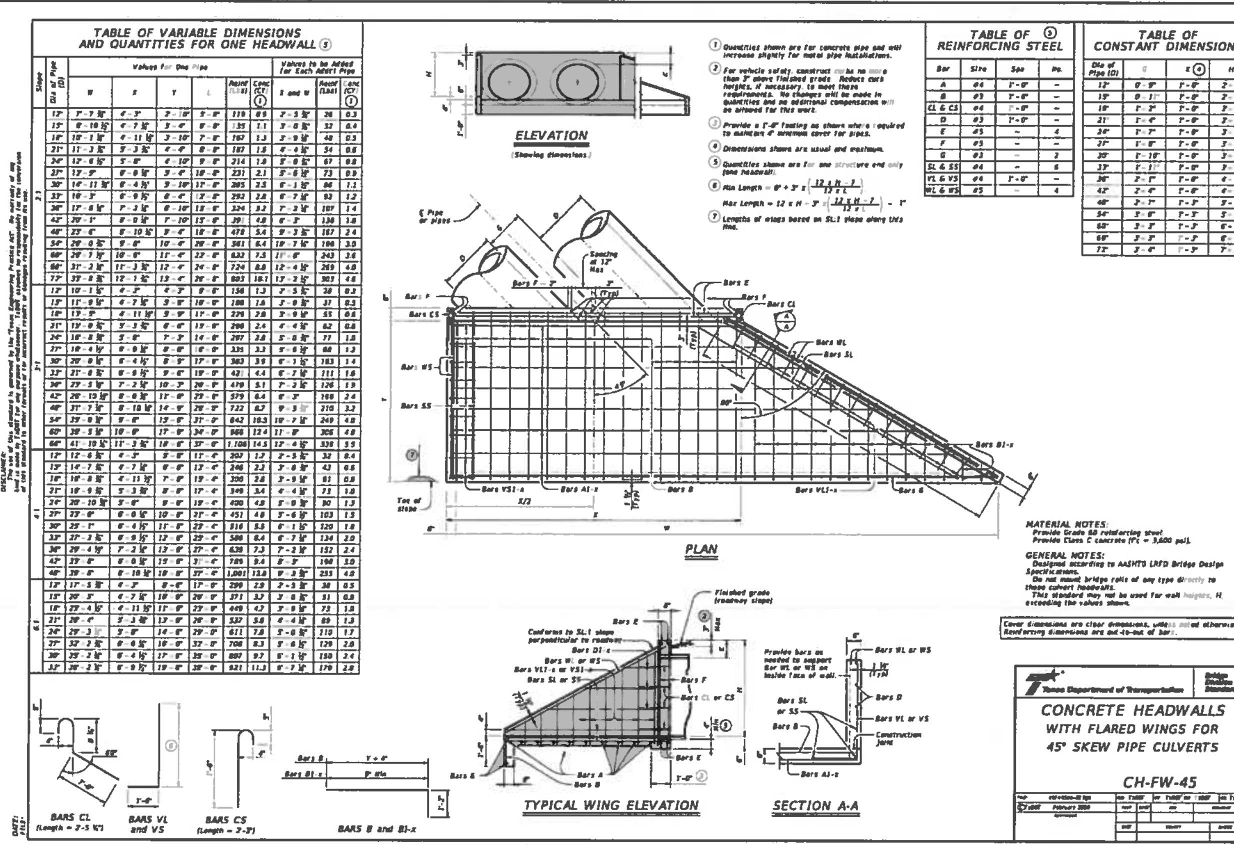

DRAINAGE/EMBEDMENT DETAILS FOR:
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