



Site Investigation Report Crimson Ridge

Site Locations:

8932 Balch Street & 9128 Crimson Lane
City of Ft. Worth, Tarrant County, Texas

Prepared:

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Prepared for:

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I. EXECUTIVE SUMMARY

- The purpose of this report is to investigate the feasibility of developing the Crimson Ridge Project ("Site"), in regard to civil infrastructure requirements and land use controls. The sources of information cited in this report include Site reconnaissance, City of Ft. Worth ("City") and local agency document review and consultations with City and agency staff. The scope of this investigation does not include hazardous materials, subsurface soils, environmental or geology.
- The North Site and South Site have multiple encumbrances that should be considered for final land planning purposes.
- The North Site is zoned "D – High Density Multifamily" and the South Site is zoned "R2 – Townhouse/Cluster Residential." The flag portion of the South Site is not within the City limits and does not have a zoning designation. The proposed uses shown in the Concep Site Plan are allowed in the above mentioned zoning districts.
- The entitlement process will consist of pre-development meetings, platting, infrastructure plan review, community facilities agreement, stormwater development services review, urban forestry, grading permit, and building permits.
- Water exists adjacent to the Site and appears to have capacity to serve the proposed development. This will need to be confirmed by City of Ft. Worth engineering staff.
- Sanitary sewer exists adjacent to the Site and appears to have capacity to serve the proposed development. This will need to be confirmed by City of Ft. Worth engineering staff.
- Stormwater management infrastructure existing adjacent to, and within, the North Site and South Site. These improvements include storm sewer inlets, storm sewer mains, and open channel.
- The Site is located within the service jurisdiction of Oncor Electric Delivery Company for electricity, Atmos Energy for gas service, and AT&T for telecommunications. Service applications will need to be submitted to the various utility providers to confirm capacity of the existing infrastructure, that said, will serve letters and capacity confirmations have been included within this report.
- On-site detention is anticipated to be required for development of the North Site. The channel along the southern portion of the South Site was designed to take developed flows from the South Site, but detention could be required, and additional engineering modeling is required to confirm.
- The North Site is shown to be completely within Zone X (unshaded) and no FEMA permitting is required. The South Site is shown to be within Zone X (unshaded), Zone X (shaded), and Zone AE. A majority of the South Site is within Zone X (unshaded), meaning FEMA permitting would not be required, but the flag portion of the South Site is primarily within Zone AE. If there is a desire to construct within the Zone AE area then discussions with the City floodplain administrator and detailing engineering analysis would be required, along with Conditional Letter of Map Revision ("CLOMR") and Letter of Map Revision ("LOMR") applications with FEMA.

- Freshwater ponds exist in the eastern portion of the North Site and the northern portion of the North Site. The information is potentially dated, as the freshwater pond in the North Site had to be filled in or removed for the construction of Balch. It is recommended that wetlands and waters of the US delineation report is performed to analyze any potential US Army Corp of Engineer's permitting that may be needed to accommodate development of the North Site or South Site.
- A 55-foot Right-of-way ("ROW") dedication is required along Balch, for the frontage of the South Site. The City plans a 110-foot ultimate section for Balch, and this is shown throughout adjacent plats and within the Crimson Ridge Plans. This would require a 55-foot ROW dedication within the South Site totaling an estimated 2.92-acres.
- Impact Fees, which are estimated to total \$1,507,076.44 (\$12,558.97 per unit) and \$4,598,919.74 (\$18,249.68 per unit) for the North Site and South Site, respectively.
- There are no known Extraordinary Infrastructure Costs associated with the North Site. Adequate infrastructure appears to exist adjacent to the North Site to permit development in accordance with the Concept Site Plan. The South Site has potential Extraordinary Infrastructure Costs related to roadways, storm infrastructure, and earthwork. These estimated costs total \$9,778,120.14, including a 25% contingency.

II. GENERAL SITE INFORMATION

A. Location

The Site is comprised of two development parcels, being the North Site and South Site. The North Site and South Site are located at 8932 Balch Street ("Balch") and 9128 Crimson Lane ("Crimson"), respectively. The North Site is bounded by Balch to the east, Scarlet Way to the south and private single-family properties to the west, and private commercial property to the north. The South Site is bounded by Balch to the north and west, and private property to the south and east. A vicinity map is included in Appendix A for reference.

B. North Site Description

Per Tarrant County ("County") recorded document D219258293 the North Site is 5.068-acres and was platted as Lot 1, Block 10, Crimson Ridge Addition, Section Two in 2019. As of the date of the report site-specific ALTA/NSPS Land Title Survey was not available for the North Site.

The North Site, which is historically pasture/native grassland, is generally flat with approximately 2.9% grade from west to east with approximately 14-feet of fall. There are no structures located within the parcel, but the northern and western portions are heavily vegetated with native brush and trees. A copy of the above-mentioned recorded document is included in Appendix A for reference.

C. South Site Description

Per County recorded document D214109111 the South Site was originally 36.686-acres in 2014. That said, it appears that right-of-way dedication for Balch Street along the western portion of the South Site has

decreased the area of this parcel down to approximately +/- 30.99-acres. As of the date of the report site-specific ALTA/NSPS Land Title Survey was not available for the South Site but should be completed prior to final land planning to confirm the boundary of the South Site and the developable acreage.

The South Site includes a “flag” portion, extending from the southeastern portion of the property, that accounts for approximately 2.3-acres of the South Site area.

The South Site, which is historically pasture/native grassland, is generally flat with slopes less than 1% from north to south with approximately 18-feet of fall. There are no structures located within the parcel, but the perimeter is heavily vegetated with native brush and trees.

Aerial photography shows that approximately 8-acres in the middle of the South Site was cleared and utilized for a sediment basin during the construction of developments located west of the South Site. This area has since been filled in and revegetated with native vegetation.

Additionally, the southern portion of the South Site is bisected by a stormwater drainage channel, located within a drainage easement (County recorded document D219247555).

A copy of the above-mentioned recorded documents are included in Appendix A for reference.

D. Concept Site Plan

A Concept Site Plan (“CSP”), prepared by Cross Architects, dated April 19, 2024, shows the development potential for both the North and South Sites.

The potential development of the North Site includes 120 dwelling units, at a proposed density of 23.7 units per acre, within two (2) multi-family buildings. Typical amenities such as a pool, clubhouse/leasing center, surface parking and pedestrian connectivity will also be incorporated.

The potential development of the South Site includes 252 dwelling units, at a proposed density of 8.1 units per acre, within forty (40) buildings. The buildings proposed in the South Site are a mixture of 5-plex, 6-plex, and 7-plex, attached units. This site would also include typical amenities such as a pool, clubhouse/leasing center, surface parking, and pedestrian connectivity.

A copy of the CSP is included in Appendix A for reference.

E. Encumbrances

As of the date of this report no title commitment or site-specific ALTA/NSPS survey was available for review but based on materials provided by the land seller and internet research the following encumbrances potentially exists within the limits of the North Site and South Site.

- North Site
 - Variable width Lone Star Gas Company easement, per County recorded document D159081600, along the western property line. The encumbrance is approximately 0.20-

acres, but this will need to be verified with an updated survey. A copy of the above mentioned document is included in Appendix A for reference.

- Temporary turnaround easement, per County recorded document D216153614, in the southwest corner of the property. The encumbrance is approximately 0.04-acres, but this will need to be verified with an updated survey. It's also possible this easement might not exist anymore given that Scarlet has been extended from Balch to Crimson Lane to the west. A copy of the above mentioned document is included in Appendix A for reference.
- 15-foot sanitary sewer easement, per County recorded document D219258293, in the southeast corner of the property. The encumbrance is approximately 225 square feet, but this will need to be verified with an updated survey.
- Overhead electric, power poles, and guy wires exist along the eastern property line, approximately 12-inches behind the existing sidewalk. It's possible these improvements extended within the property without an easement, but an updated survey would be needed to verify this possible encroachment and if an easement exists, or not, for these improvements.
- South Site
 - Potential Right-of-Way ("ROW") dedication for Balch along the entire length of the South Site frontage. The plat for the North Site, County recorded document D219258293, shows a 55-foot ROW dedication for Balch and also additional ROW dedications extending from Shelby Road ("Shelby") to the north. These additional ROW dedications extending from Shelby suggest that the City desires Balch to have an ultimate ROW width of 110-feet. This would require a 55-foot ROW dedication within the South Site totaling an estimated 2.92-acres. This ROW dedication will need to be confirmed with City staff prior to final land planning.
 - 15-foot water easement, per County recorded document D219247601, near the intersection of Balch and Scarlet. The encumbrance is approximately 225 square feet, but this will need to be verified with an updated survey. A copy of the above mentioned document is included in Appendix A for reference.
 - 15-foot sanitary sewer easement, per County recorded document D219247567, located along the western edge of the property. The encumbrance is approximately 845 square feet, but this will need to be verified with an updated survey. A copy of the above mentioned document is included in Appendix A for reference.
 - 25-foot sanitary sewer easement, per County recorded document D216247565, located along the southern portion of the property and extending within the flag portion as well. The encumbrance is approximately 0.93-acres, but this will need to be verified with an updated survey. A copy of the above mentioned document is included in Appendix A for reference.

- 97-foot drainage easement, per County recorded document D219247555, located in the southern portion of the property. The encumbrance is approximately 2.356-acres, but this will need to be verified with an updated survey. A copy of the above mentioned document is included in Appendix A for reference.
- Temporary turnaround easements, per County recorded documents D219247556 and D219227542, in the southwest corner of the property. The encumbrance is approximately 0.175-acres, but this will need to be verified with an updated survey. A copy of the above mentioned document is included in Appendix A for reference.
- 20-foot pipeline easement, per County recorded document D205114465, near the southeast portion of the property where the flag portion and main body portion of the property meet. The encumbrance is approximately 0.15-acres, but this will need to be verified with an updated survey. A copy of the above mentioned document is included in Appendix A for reference.
- Harrison unit 1H Well site, per County recorded document D205132770, along the southern property line of the property. A 300-foot radius no building zone from the well head is likely required and could limit developable area within the South Site. A copy of the above mentioned document is included in Appendix A for reference.

These easements should be reviewed with a land use attorney prior to final land planning. Again, no title commitment was provided for review as of the date of this report so additional encumbrances could exist on the Site.

III. ZONING

A. Existing Zoning

According to City zoning maps, the North Site is zoned “D – High Density Multifamily” and the South Site is zoned “R2 – Townhouse/Cluster Residential.” The flag portion of the South Site is not within the City limits and does not have a zoning designation.

The “D – High Density Multifamily” zoning district is intended for multifamily dwelling units at a maximum density of 32 dwelling units/acre with design standards. According to City zoning code, the purpose for this zoning district is to, *“provide a specific zone for high density multifamily development. In adopting multifamily design development regulations, it is also the intent of the City Council to encourage the most appropriate uses of land; to encourage higher quality design and materials; to provide safe and improved access to the public walkways, to install street trees and enhanced landscaping along the public walkways to improve the pedestrian environment; and to provide criteria for development of land zoned for multifamily dwelling use.”* The following general design standards apply for residential and nonresidential developments within this zoning district.”

“D” District, Multifamily Design Development	
“D” District, Multifamily Design Development	
Open space	35% minimum
Units per acre	32 maximum
Front yard*	20 feet minimum
Rear yard	5 feet minimum
Side yard*	
Interior lot	5 feet minimum
Corner lot**	10 feet minimum adjacent to side street
Setback adjacent to one- or two-family residential district ***	Three feet for every one foot (3:1) as measured from slab to top of sill plate, or two feet for every one foot (2:1) in overall height when measured from lowest finished grade to the peak of the roof, whichever is greater; 30 feet minimum 1:1 setback with a 10-foot minimum setback for one-story garages and carports 20-foot minimum setback for dumpster enclosures and one-story accessory structures
Height	36 feet maximum, slab to top plate 48 feet maximum, slab to top plate, beyond 250-foot setback to one- and two-family districts (refer to Chapter 6, Development Standards, § 6.100, Height)
Notes:	
* May be subject to projected front yard (§ 6.101(f)). Paving shall not be permitted between the building face and street and must remain as open space.	
** May be subject to other front, side and rear yard setback requirements (See Chapter 6, Development Standards, § 6.101(d), Yards).	
*** A five-foot bufferyard and minimum six-foot screen fence shall be placed on the property line and should be landscaped per point system, see § 6.300 (b), (d), (f), (g). This regulation shall not be required when the property in the one- or two-family district is used for utilities, waterways, railroads or other nonresidential public use or separated by a public right-of-way of at least 300 feet in width.	

“D” District, Nonresidential Development	
“D” District, Nonresidential Development	
Lot width	50 feet minimum
Front yard*	20 feet minimum
Rear yard	5 feet minimum
Side yard*	
Interior lot	5 feet minimum
Corner lot**	10 feet minimum adjacent to side street
Setback adjacent to one- or two-family residential district***	20 feet minimum
Height	35 feet maximum (refer to Chapter 6, Development Standards, § 6.100, Height)
Notes:	
* May be subject to projected front yard (§ 6.101(f)). Paving shall not be permitted between the minimum yard setback line and street and must remain as open space.	
** May be subject to other front, side and rear yard setback requirements (see Chapter 6, Development Standards, § 6.101(d) Yards).	
*** A five-foot bufferyard and minimum six-foot screen fence shall be placed on the property line and should be landscaped per point system, see § 6.300 (b), (d), (f), (g). This regulation shall not be required when the property in the one- or two-family district is used for utilities, waterways, railroads or other nonresidential public use or separated by a public right-of-way of at least 300 feet in width.	

The “R2 – Townhouse/Cluster Residential” zoning district is intended for one-family attached townhouse / rowhouse dwellings, with minimum 15% open space, maximum of 24 dwelling units/acre on average, and a maximum building facade length 250-feet. According to City zoning code, the purpose for this zoning district is, *“to provide a specific zone for the development of row houses and townhouses on unique patterned lots clustered around a common access road or cul-de-sac.”* The following general design standards apply for developments within this zoning district.

Townhouse/Cluster (“R2”) District	
Townhouse/Cluster (“R2”) District	
Open space	15% minimum
Units per acre	Maximum number of 24 units per acre on average, unless located in a “C” or “D” district where authorized density shall apply.
Maximum façade length	Maximum building façade length of 250 feet
Front yard*	None required
Side yard*	
Interior lot	5 feet minimum adjacent to street
Corner lot**	10 feet minimum adjacent to both streets
Height	35 feet maximum (refer to Development Standards, § 6.100, Height)
Bldg. separation	10 feet minimum
Notes:	
* May be subject to projected front yard (see Chapter 6, Development Standards, § 6.101(f), Yards).	
** May be subject to other front, side and rear yard setback requirements (see Chapter 6, Development Standards, § 6.101(d), Yards).	

Since the proposed uses shown in the Concept Site Plan are in alignment with the existing zoning, no Rezoning process with the City is anticipated.

The City zoning map and relevant portions of the City zoning code are included in Appendix B for reference.

IV. ENTITLEMENT/DEVELOPMENT PROCESS

A. Pre-Development

According to the City’s website, the City conducts voluntary Pre-Development conferences to assist developers in understanding their process and confirming the requirements for entitlements.

Pre-Development Conferences are generally scheduled in 30 minute increments and are held twice weekly. Monday conferences are scheduled between 1:00-3:00 and Thursday meetings are held between 9:00-12:00. Pre-Development Conferences with city staff are offered for applicants to learn more about city development policies and procedures and to address site specific issues.

These conferences are meant to be a “discovery” type meeting designed to help developers in their project due diligence. These meetings are not intended to serve as a comprehensive questions and answer sessions, but rather they are useful in uncovering potential issues, are a good platform to create a common

understanding amongst all city departments and help to streamline the development process. Representatives from development related city departments such as transportation and public works, water, planning and development and fire are present to evaluate the project to aid the developer in their project planning.

A copy of the Pre-Development Conference process flowchart is included in Appendix C for reference.

B. Platting

The North Site was platted in 2019 as Lot 1, Block 10, Crimson Ridge Addition Section Two and should not require additional platting.

The South Site is a combination of tracts and will need to be platted to accommodate development. A Minor Plat (Short Form Final Plot) should be required. A Minor Plat is permitted under the following criteria have been met:

- A minor plat is permitted for four (4) or fewer lots that have not been previously platted and recorded.
- All lots on the minor plat must have direct access to and front or abut an existing public street.
- All lots must meet the lot size requirements of the zoning district in which they are located.
- A minor plat does not require a public hearing and is administratively approved by the Plan Commission's Executive Secretary preceding the filing of the plat for record.

The South Site appears to meet the requirements for a Minor Plat, but this should be confirmed with City staff once a final site plan has been developed.

A copy of the City's plat application process flowchart and plat application packet are included in Appendix C for reference.

C. Infrastructure Plan Review Center ("IPRC")

According to the City's website, the City's Infrastructure Plan Review Center ("IPRC") is responsible for the consultation, intake and review of public infrastructure plans that will be constructed pursuant to a Community Facilities Agreement ("CFA") or other agreement between the City and a developer. IPRC reviews construction plans, CFA exhibits, project manuals, easement exhibits, and other documents relating to a given project. The IPRC also assists with reviewing and processing permits and agreements, assists with public bidding when there is City participation in a project, coordinating construction issues, reviews plan revisions, and processes change orders during construction.

IPRC plans will be required for the public improvements related to the development of the North Site and South Site. It's possible the North Site will not require IPRC plans as all utilities and roadways adjacent to this site are in place, but this should be confirmed with City staff once a final site plan has been developed.

The South Site will require IPRC plans for the widening of Balch along the project frontage, modification of the open channel to accommodate an updated site plan, and/or any proposed public improvements within the limits of the South Site.

A copy of the City's IPRC process flowchart is included in Appendix C for reference.

D. Community Facilities Agreement (“CFA”)

According to the City’s website, a Community Facilities Agreement (CFA) is a contract between the City and a developer that is required whenever the construction of public infrastructure is funded entirely or in part by a private developer. It ensures that new development is adequately served by public infrastructure and that the infrastructure improvements are constructed according to city standards.

CFA will be required for the public improvements related to the development of the North Site and South Site. It’s possible the North Site will not require CFA as all utilities and roadways adjacent to this site are in place, but this should be confirmed with City staff once a final site plan has been developed.

The South Site will require CFA for the widening of Balch along the project frontage, modification of the open channel to accommodate an updated site plan, and/or any proposed public improvements within the limits of the South Site. A CFA is run concurrently with the IPRC approval process.

A copy of the City’s CFA process flowchart is included in Appendix C for reference.

E. Storm Water Development Services (“SDS”)

According to the City’s website, Storm Water Development Services (“SDS”) works to safeguard citizens and resources and guide sustainable development while promoting quality growth. SDS serves the City by reviewing Storm Water management plans, floodplain development permits, and storm drain construction plans associated with development projects within the City of Fort Worth and Extra Territorial Jurisdiction (ETJ). SDS reviews applications for conformance to City drainage design and floodplain management criteria, as it relates hydraulics, hydrology, and construction standards.

- Land disturbing activity or platting of 1.0 acre or more or more or land disturbing activity of less than 1.0 acre where the activity is part of a Common Land Plan Development will require an approved Grading Permit and Storm Water Drainage Study.
- When required, a detailed Storm Water Drainage Study (“SWDS”) must be accepted prior to the submittal of a Concept Plan, Preliminary Plat, Final Plat, or the Infrastructure Plans to IPRC.
- Provide a Downstream Assessment through the Zone of Influence and provide an Adequate Outfall as defined in the CFW Storm Water Criteria Manual for Site Development and Construction.
- All drainage ditches and culverts carrying >10cfs require a HEC-RAS model for proper design.
- If infrastructure is not available to convey the fully developed flows from the development, the developer has the option to improve the downstream system and provide adequate outfall, or to detain storm water to pre-developed levels.
- If going through the IPRC process, a Storm Water Pre-con Checklist must be submitted and accepted during the IPRC review period. Items like a floodplain permit (“FDP”) or Storm Water Facility Maintenance Agreement (“SWFMA”) must be approved and/or executed prior to proceeding to construction.
- If detention is proposed, a storm water facilities maintenance agreement must be executed. No crossing utilities are allowed within detention pond areas.
- Maximum allowable driveway discharge is 3 cfs in a 5-year storm event.
- The building finished floor elevation and all electrical/mechanical equipment servicing the building must be 2 feet above the fully developed 100-year Water Surface Elevation (WSE). When platting,

establish the 100-year WSE to include a 10' horizontal buffer and show on the plat in a dedicated floodplain easement.

- All public storm water must be contained in a public drainage easement designed to contain ultimate developed flows. No structures (walls, buildings, poles, etc.) are allowed within a public drainage easement without Development Service's Storm Water approval.
- Retaining walls are not allowed in drainage easements without Development Service's Storm Water approval.
- Maintain existing drainage patterns. No water should be conveyed from one watershed to another.

F. Urban Forestry Permit

According to the City's website, an Urban Forestry Permit is required for, but not limited to:

- New construction that requires a building or grading permit.
- Building expansions or additions that are >3,000 sf or 30% of existing structure.
- Clearing, Grading, and/or Paving including construction or reconstruction of a parking lot, or other flatwork or land disturbance.
- Filling, if fill is to be placed within 50 feet of existing trees.
- Sites to be used for urban agriculture.
- Public projects requiring removal of trees 6" or larger in diameter.
- Change of use from one- or two-family residential to any other use.
- Removal of trees that measure 6" diameter or greater at 4.5 ft. above the ground.
- Exemptions:
 - Construction or reconstruction of a single one- or two-family residence located on a lot that is less than one acre in size, if common ownership of lots within the platted block is less than one acre.
 - Development within a Designated Design District.

A copy of the City's Urban Forestry Ordinance, Urban Forestry process flowchart, and Urban Forestry permit application are included in Appendix C for reference.

G. Grading Permit

According to the City's website, the City has two types of Grading Permits, an optional Early Grading Permit and a Final Grading Permit. The general use for each permit is as follows:

- Early Grading Permit (optional)
 - Allows clearing, grubbing and grading only – no infrastructure or building construction allowed.
 - Final grading permit will be required prior to infrastructure or building construction.
- Final Grading Permit

- Allows installation of infrastructure and, with approved building permits, construction of buildings.
- A final grading permit may be applied for and issued even if an early grading permit has not been issued.

The requirements for a Grading Permit Issuance are the following, as applicable:

- Drainage study at an acceptable level for early grading.
- Drainage study fully accepted for final grading.
- Approved Part One Urban Forestry Permit, including inspection of tree protection, if applicable.
- Approved Floodplain Development Permit, if applicable.
- Review and acceptance of civil plans by Stormwater Development Services, Urban Forestry and Water Department.
- Review and acceptance of the Stormwater Pollution Prevention Program ("SWPPP"), by Environmental Quality.
- Payment of applicable fees.
- Submittal of Stormwater Drainage Study.
- Complete Grading Permit Application.
- Signed and Sealed Civil Plans.
- A Final Grading Certificate must be completed, signed, sealed and submitted upon completion of grading activities. Receipt of Final Grading Certificate will serve as a notification for scheduling of applicable post-grading inspections.

Copies of the Final Grading Certificate and Grading Permit Application are included in Appendix C for reference.

V. UTILITIES

A. Water

According to City maps and the *"Crimson Ridge Plans for the Construction of Paving, Drainage, Water, Sanitary Sewer and Street Light Improvements,"* prepared by Dunaway and dated July 2019 ("Crimson Ridge Plans"), the Site is within the water service jurisdiction of the City. There is an existing 12-inch water main within Scarlet on the south side of the North Site and an 8-inch water main within Balch along the frontage of the South Site, south of Scarlet.

The water lines adjacent to the Site are anticipated to have capacity to serve the proposed development of the North Site and the South Site. The City will need to be contacted, and a water study will be needed confirm this assumption, but the adjacent utilities were installed recently (2019-2020) per the Crimson Ridge Plans and the zoning currently in place was also in place when the water system was originally designed. Assuming the City accounted for the development of the North Site and South Site in accordance with their current zoning, then the water system will have capacity for the development of the two parcels in accordance with the CSP.

Copies of City water maps and the Crimson Ridge Plans are provided in Appendix D for reference.

B. Sanitary Sewer

According to City maps and the Crimson Ridge Plans, the Site is within the sanitary sewer service jurisdiction of the City. There is an existing 12-inch sanitary line within Balch along the eastern frontage of the North Site and western frontage of the South Site. This 12-inch sanitary line is also within a sanitary sewer easement within the South Site along the southern property line, south of the open drainage channel. In addition to the sanitary main, there are 8-inch sanitary service stubs to both the North Site and the South Site. The stubs are generally located in the southeast corner of the North Site and the southwest corner of the South Site.

The sewer lines adjacent to the Site are anticipated to have capacity to serve the proposed development of the North Site and the South Site. The City will need to be contacted, and a sewer study will be needed confirm this assumption, but the adjacent utilities were installed recently (2019-2020) per the Crimson Ridge Plans and the zoning currently in place was also in place when the sewer system was originally designed. Assuming the City accounted for the development of the North Site and South Site in accordance with their current zoning, then the sewer system will have capacity for the development of the two parcels in accordance with the CSP.

Copies of City sewer maps and the Crimson Ridge Plans are provided in Appendix D for reference.

C. Storm Sewer

According to City maps and the Crimson Ridge Plans stormwater management infrastructure existing adjacent to, and within, the North Site and South Site. These improvements include storm sewer inlets, storm sewer mains, and open channels.

The North Site includes an area inlet, generally in the southeast corner, which is intended to collect stormwater runoff from the North Site and convey it downstream within the storm sewer located in Balch.

The storm sewer in Balch conveys stormwater runoff from various properties on the west side of Balch, the Balch roadway itself, and the future Balch roadway expansion, to the open channel that bisects the southern portion of the South Site, ultimately draining to the creek located south of the flag of the South Site.

The South Site does not contain any closed conduit storm sewer improvements, but rather sheet flows towards the open channel that bisects the southern portion of the South Site. The open channel is located within an easement, as indicated above, and will need to remain in place or potentially be rerouted into a series of large box culverts to allow for more developable area. This is discussed in more detail in Section XI below. A small diversion ditch was constructed along the north side of the open channel to direct sheet flow from the South Site east, around the open channel berm, to the main drainageway south of the South Site.

A copy of the Crimson Ridge Plans are provided in Appendix D for reference.

D. Electric

The Site is within the electric service jurisdiction of the Oncor Electric Delivery Company ("Oncor"). Based on an e-mail from Oncor staff, upon them reviewing the CSP, *"....we do have three phase overhead on the*

west side of Balch Street, running from Shelby Road to Scarlet Way. Once we get to Scarlet way, the three phase then goes underground to a loop of switchgears. Needless to say, there are adequate facilities in place to serve this development."

A copy of the above mentioned e-mail, a will serve letter, and relevant Oncor application documents are included in Appendix D for reference.

E. Gas

The Site is within the gas services jurisdiction of Atmos Energy. Based on a will serve letter provided by Atmos Energy, upon them reviewing the CSP, *"...there is a 4-inch gas main located on the West side of Balch Street. Depending on the design and demand of our project a main extension may be needed, which complies with the Company's [Atmos Energy's] current Line Extension Policy, will be required to serve the project."*

A copy of the above mentioned will serve letter and service application is included in Appendix D for reference.

F. Telecommunications

AT&T has indicated that they have infrastructure in the area and can provide telecommunications services to the North Site and South Site.

A copy of a will serve letter is included in Appendix D for reference.

VI. DRAINAGE

A. North Site Drainage Conditions, Infrastructure, and Detention

As mentioned above, the North Site is generally flat with approximately 2.9% grade from west to east with approximately 14-feet of fall. Under existing conditions stormwater sheet flows from west to east into the Balch storm sewer system. Portions of the North Site also flow to an existing area inlet near the southeast corner of the North Site that connects to a 21-inch pipe conveying stormwater to the overall system within Balch. According to the Crimson Ridge Plans, inlet A-15, was designed to accept a 5.07-acre drainage basin (generally the size of the North Site) with a C-value of 0.3 and a 100-year flow of 12.13 cubic feet per second.

This does not represent a fully developed drainage condition for the site and detention will be required to accommodate development of the North Site, as is shown on the Crimson Ridge Plans as well.

For development area between 0-acres and 25-acres the City's preliminary detention pond sizing is estimated to be 0.20 acre feet per acre. The North Site is platted as 5.068-acres, therefore the estimated detention pond size needed for the North Site is approximately 1.01 acre-feet (44,153 cubic feet).

The Crimson Ridge Plans can be seen in Appendix D for reference.

B. South Site Drainage Conditions, Infrastructure, and Detention

As mentioned above, the South Site is generally flat with slopes less than 1% from north to south with approximately 18-feet of fall. Under existing conditions stormwater sheet flows from north to south into the diversion ditch along the northern berm of the existing open channel. From there stormwater is routed around the east side of the open channel and down the flag portion of the South Site to natural drainageway to the south.

Under proposed conditions, Balch will be expanded east into the South Site where additional storm inlets will be installed to convey that roadway drainage directly to the open channel in the southern portion of the South Site. Additionally, storm sewer will be required throughout the South Site to convey stormwater from the development to the open channel.

According to the *Crimson Ridge Detention Pond Memo*, prepared by Dunaway Associates, dated March 29, 2019 ("Pond Memo") the open channel in the South Site was designed for an ultimate 100-year flow of 306 cubic feet per second and accounted for developed flows from the South Site of 137 cubic feet per second assuming an impervious cover of 67.9% for 26.88-acres. This 26.88-acres is assumed to be the area north of the open channel. These assumptions and stormwater modeling will need to be verified with a final site plan to confirm that detention is not required for the development of the South Site, but it appears detention is not required as long as the proposed impervious cover remains at, or below, 67.9% for the portion of the South Site north of the open channel.

If it is determined that the modeling is not correct, then for development areas more than 25-acres the City's preliminary detention pond sizing is estimated to be 0.25 acre feet per acre. Assuming the South Site is roughly 26.88-acres north of the open channel, the estimated detention pond size needed for the South Site is approximately 6.72 acre-feet (293,724 cubic feet).

Relevant portions of the Pond Memo are included in Appendix E for reference.

C. Floodplain

According to the Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") Community Panel Number 48439C0435K, with an effective date of September 25, 2009, the North Site is shown to be completely within Zone X (unshaded). Zone X is described as "areas determined to be outside the 0.2% annual chance floodplain."

The same FEMA FIRM map shows the South Site to be within Zone X (unshaded), Zone X (shaded), and Zone AE. Zone X is described as "areas determined to be outside the 0.2% annual chance floodplain." Zone X (shaded) is described as "areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood." This is essentially the 500-year flood zone. Zone AE is described as "Special Flood Hazard Areas (SFHAs) subject to inundation by the 1% annual chance flood. The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The base flood elevation is the water surface elevation of the 1% annual chance flood." The AE designation indicates the creek has been studied and a base flood elevation has been determined.

A majority of the South Site is within Zone X (unshaded), meaning FEMA permitting would not be required, but the flag portion of the South Site is primarily within Zone AE. If there's a desire to construct within the

Zone AE area then discussions with the City floodplain administrator and detailing engineering analysis would be required, along with Conditional Letter of Map Revision (“CLOMR”) and Letter of Map Revision (“LOMR”) applications with FEMA.

Copies of the FEMA FIRM maps are included in Appendix E for reference.

D. Wetlands

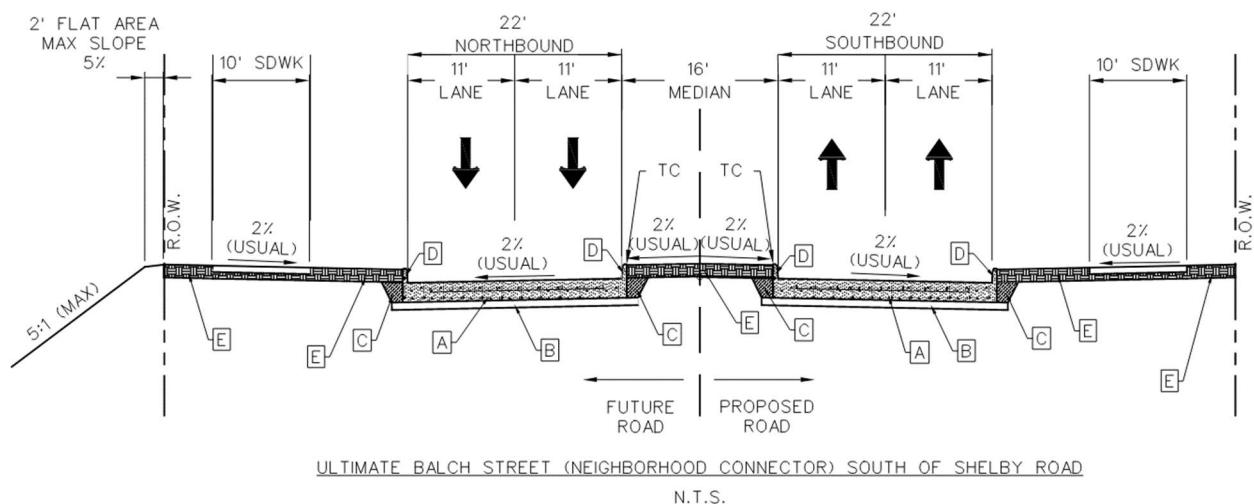
Based on review of the U.S. Fish and Wildlife Services National Wetlands Inventory online mapping system, freshwater ponds exist in the eastern portion of the North Site and the northern portion of the North Site. The information is potentially dated, as the freshwater pond in the North Site had to be filled in or removed for the construction of Balch. It is recommended that wetlands and waters of the US delineation report is performed to analyze any potential US Army Corp of Engineer’s permitting that may be needed to accommodate development of the Site. A copy of the wetland map is included in Appendix E for reference.

VII. TRANSPORTATION

A. Right-of-Way Dedications

A 55-foot Right-of-way (“ROW”) dedication is required along Balch, for the frontage of the South Site. As mentioned above, the City plans a 110-foot ultimate section for Balch, and this is shown throughout adjacent plats and within the Crimson Ridge Plans. This would require a 55-foot ROW dedication within the South Site totaling an estimated 2.92-acres. This ROW dedication will need to be confirmed with City staff prior to final land planning.

In addition to the ROW dedication, the developer of the South Site would be responsible for the construction of the Balch roadway expansion along the site’s frontage. This would include the necessary earthwork, paving, signage, striping, lighting, and storm sewer improvements associated with this two lane expansion. The ultimate roadway section is shown in the following figure and the left portion would need to be constructed by the developer of the South Site. This is considered an extraordinary infrastructure cost and is discussed in more detail in Section IX below.



VIII. IMPACT FEES

Impact Fees, which are estimated to total **\$1,507,076.44 (\$12,558.97 per unit)** and **\$4,598,919.74 (\$18,249.68 per unit)** for the North Site and South Site, respectively, are based on the following assumptions per the Concept Site Plan.

The North Site will be a 120 dwelling unit multifamily project, contained within two (2) residential buildings on approximately 5.068-acres. Each building is estimated to require a 3-inch water tap and meter, but this information will need to be confirmed by the project mechanical plumbing engineering during final site design. The North Site is also estimated to require a 2-inch irrigation meter.

The South Site will be a 252 dwelling unit townhome project, contained within forty (40) residential townhomes buildings (11 - 5-plex/6 – 6-plex/23 – 7-plex) and one clubhouse building on approximately 30.99-acres. All buildings are estimated to require a 1.5-inch water tap and meter, totaling 41 taps, but this information will need to be confirmed by the project mechanical plumbing engineering during final site design. The South Site is also estimated to require a 2-inch irrigation meter.

Fees for the North Site and South Site will be levied from the following agencies/governments:

- Water Impact Fees – City of Ft. Worth
- Waste Water Impact Fees – City of Ft. Worth
- Transportation Impact Fees – City of Ft. Worth
- Park Fee – City of Ft. Worth

Miscellaneous fees will be charged for the building permits, land development applications, grading permits, etc. A copy of the City's current fee schedule is included in Appendix F for reference.

A. Water Impact Fees

Per ordinance, the City assesses Water Impact Fees for domestic and irrigation meters based on the meter size, final recordation date of the final plat, and date of building permit issuance. The City has a spreadsheet available online that can estimate the water impact fees.

For the North Site, which was platted on November 8, 2019, and is assumed to be able to obtain building permits prior to December 31, 2025, the water impact fees are estimated to be the following:

- Two (2) 3-inch water meters = $\$43,087.00 \times 2$ = \$86,174.00
- One (1) 2-inch irrigation meter = \$15,848.00
- **Estimated Total** = **\$102,022.00 (\$850.18 per unit)**

For the South Site, which is assumed to be platted and obtain building permits prior to December 31, 2025, the water impact fees are estimated to be the following:

- Forty one (41) 1.5-inch water meters = $\$9,095 \times 41$ = \$372,895.00
- One (1) 2-inch irrigation meter = \$15,848.00
- **Estimated Total** = **\$388,743.00 (\$1,542.63 per unit)**

Copies of the fee estimate calculations are provided in Appendix F for reference.

B. Wastewater Impact Fees

Per ordinance, the City assesses Wastewater Impact Fees for sanitary sewer services based on the water meter size, final recordation date of the final plat, and date of building permit issuance. The City has a spreadsheet available online that can estimate the water impact fees.

For the North Site, which was platted on November 8, 2019, and is assumed to be able to obtain building permits prior to December 31, 2025, the water impact fees are estimated to be the following:

- Two (2) 3-inch water meters = \$39,063.00 x 2 = \$78,126.00
- **Estimated Total = \$78,126.00 (\$651.05 per unit)**

For the South Site, which is assumed to be platted and obtain building permits prior to December 31, 2025, the water impact fees are estimated to be the following:

- Forty one (41) 1.5-inch water meters = \$8,980 x 41 = \$368,180.00
- **Estimated Total = \$368,180.00 (\$1,461.03 per unit)**

Copies of the fee estimate calculations are provided in Appendix F for reference.

C. Transportation Impact Fees

Per ordinance, the City assesses Transportation Impact Fees based on the location of the project within the City, the proposed land use, and the proposed unit count.

For the North Site, located in service area "Z," being platted on November 8, 2019, and is assumed to be able to obtain building permits prior to December 31, 2024, the transportation impact fees for 120 multifamily low-rise units the estimated transportation impact fee is **\$611,490.00 (\$5,095.75 per unit)**.

For the North Site, located in service area "Z," assumed to be platted before December 31, 2024, and is assumed to be able to obtain building permits prior to December 31, 2024, the transportation impact fees for 252 detached multifamily housing units the estimated transportation impact fee is **\$2,359,220.09 (\$9,361.98 per unit)**.

Per the ordinance, percentage discounts of up to 100% of the transportation impact fee could potentially reduce the above-mentioned fees. These discounts are related to adequate public facilities, mixed-use/multi-modal development, extraordinary investment, and small business. The discounts are applicable as follows:

(1) Adequate public facilities discount.

- a. The Schedule 2 transportation impact fees shall be reduced by 50% for any development where:*
 - 1. One or more points of access serve at least 75% of the peak-hour site-generated traffic volumes;*
 - 2. Such point(s) connect the development to the city's thoroughfare system, as depicted in the city's master thoroughfare plan (MTP) provided however, sites with multiple access points may include a TxDOT facility as one of the access points to meet this criteria; and*

3. *The transportation facility so connected has been improved to its ultimate capacity as classified under the current master thoroughfare plan.*

b. *Eligibility for this discount must be determined no later than issuance of the first building permit for land subject to the final plat.*

(2) *Mixed-use/multi-modal development discount. The amount of transportation impact fees due under Schedule 2 shall be reduced up to 25% for any development where an accepted traffic impact study demonstrates that the development will reduce the vehicle trips from those contained in the adopted land use equivalency table, to one of the following:*

- *5 to 9% trip capture: 10% impact fee reduction*
- *10 to 14% trip capture: 15% impact fee reduction*
- *15% to 20% trip capture: 20% impact fee reduction*
- *21% or > trip capture: 25% impact fee reduction*

(3) *Extraordinary investment discount.*

a. *The amount of transportation impact fees due under Schedule 2 shall be reduced 25% for any development that results in all of the following qualifications, as jointly determined by the Development Services Department and the Department of Economic Development:*

1. *\$25 million in capital investment, excluding land costs;*
2. *Creation of 75 new jobs; and*
3. *The projected salary of the new jobs is at least twice the current federal minimum wage, plus benefits.*

b. *For each additional \$10,000,000 in capital investment or additional 75 qualified new jobs, the impact fee amount due under Schedule 2 will be further reduced by an additional 5% up to a maximum reduction of 50%. A development may receive this discount and have a period of up to four years from the issuance of a building permit to qualify under the terms of this discount. Impact fees otherwise paid shall be refunded to the original payor at the time of issuance of the building permit. A development shall refund a pro rata share of this discount should the development not continue to maintain the number of new jobs for a period of at least ten years from the date of building permit (or the date of qualification for this discount), equal to 10% per annum for each year that the number of jobs is not maintained. The terms related to this discount shall be incorporated within an agreement for credits pursuant to § 30-182.*

(4) *Small business discount.*

a. *The amount of transportation impact fees due under Schedule 2 for building permits, other than new construction building permits, shall be reduced by 25% for a development that meets all of the following qualifications, as jointly determined by the Development Services Department and the Department of Economic Development:*

1. *An independently owned for-profit or non-profit entity with a physical Fort Worth business address;*
2. *Business must not be a subsidiary of a larger company nor a franchisee of a chain with more than five franchises;*
3. *Annual revenues of \$2,500,000 or less for the most recent 12-month period;*
4. *Twenty-five employees or less;*
5. *Business operations established at least one year prior to making application for the discount; and*
6. *Proof of qualifications provided by notarized affidavit.*

b. *Sexually oriented businesses and game rooms are not eligible for this discount.*

c. *The terms related to this discount shall be incorporated within an agreement for credits pursuant to § 30-182.*

A copy of the City's Ultimate Service Area Boundaries and fees estimate calculations are provided in Appendix F for reference.

D. Parkland Dedication

The City requires Parkland Dedication for residential development that cannot dedicate adequate or acceptable parkland within the limits of the development. Assuming the North Site and South Site cannot accommodate parkland within the limits of the following Parkland Dedication fee-in-lieu will be required. The fee is based on the proposed residential land use, proposed unit count, and fair market value of the land. For the purposes of this document, the fair market value of the land was estimated at \$350,000 per acre.

Given the above criteria, the estimated Parkland Dedication Fee-in-Lieu is estimated to be **\$715,438.44 (\$5,961.99 per unit)** and **\$1,482,776.65 (\$5,884.03 per unit)** for the North Site and South Site, respectively.

A copy of the City's parkland ordinance and the fee estimate calculations are provided in Appendix F for reference.

IX. EXTRAORDINARY INFRASTRUCTURE COSTS

As of the date of this report, there are no known Extraordinary Infrastructure Costs associated with the North Site. Adequate infrastructure appears to exist adjacent to the North Site to permit development in accordance with the Concept Site Plan.

As discussed in more detail below, the South Site has potential Extraordinary Infrastructure Costs related to roadways, storm infrastructure, and earthwork. These estimated costs total **\$9,778,120.14**, including a 25% contingency.

As mentioned above in section VII (A), the City will require Balch to be widened to its ultimate section with a 55-foot ROW dedication and associated roadway and storm improvements. This +/-2,312 linear foot roadway widening is considered an Extraordinary Infrastructure Cost estimated to total **\$4,549,713.89**.

As mentioned above in section V(C), the open channel located within the southern portion of the South Site could potentially be rerouted into a series of large box culverts within the property to create more developable area. This is not required to develop the South Site but could be considered by the developer. If this option is pursued it would be considered an Extraordinary Infrastructure Cost. This +/- 950 linear foot culvert improvement is estimated to total **\$756,250.00**.

The South Site is intended to drain to the open channel for drainage purposes, but when those channel improvements were constructed, a berm was created along the northern portion of the channel to divert sheet flow drainage from approximately 26.88-acres. Given this, fill will be required for portions, or all, of the South Site to ensure an outfall connection to the channel in accordance with City requirements. Without a final site plan, current topographic survey of the South Site, and a concept level grading plan it is difficult to determine the exact amount of fill that will be required to properly drain the South Site. Assuming the South Site needs to drain to the channel at an elevation of +/-646.50, and that 6-feet of fill is needed on top of that elevation for storm infrastructure and paving, then the grade at the channel in the southeast corner needs to be +/-652.50. The current elevation in this location is +/-647.00, 5.5-feet lower.

Since the South Site is so flat, to remain conservative it is estimated that 5.5-feet of fill will be needed for approximately 26.88-acres, totaling an estimated 238,515 cubic yards of fill. This is considered an Extraordinary Infrastructure Cost of approximately **\$4,472,156.25**.

A copy of the above mentioned cost estimates is included in Appendix G for reference.

X. LIST OF REFERENCES

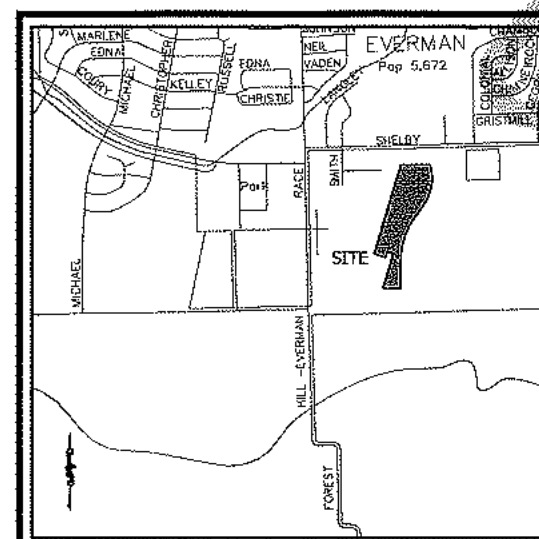
1. City of Ft. Worth Website; 2024. <https://www.fortworthtexas.gov/Home>
2. Federal Emergency Management Agency Website, Federal Emergency Management Agency; 2024. <http://www.fema.gov/>
3. U.S. Fish & Wildlife Services; 2024. <https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>

APPENDIX A



VICINITY MAP

North Site (Red) / South Site (Blue)

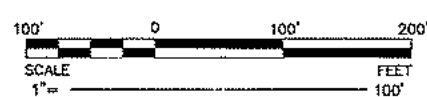
VICINITY MAP
NOT TO SCALE

SURVEYOR
DUNAWAY ASSOCIATES, L.P.
550 BAILEY AVENUE
SUITE 400
FORT WORTH, TEXAS 76107
(817) 335-1121 (PHONE)

OWNER
CRIMSON RIDGE LAND PARTNERS, LLC
3710 RAWLINGS - SUITE 1390
DALLAS, TEXAS 75219
(214) 953-3168

OWNER
HOUSING AUTHORITY OF THE CITY OF
FORT WORTH D/B/A FORT WORTH
HOUSING SOLUTIONS
1201 E. 13TH STREET
FORT WORTH, TEXAS 776102

DEVELOPER
LDG DEVELOPMENT
1305 EAST 6TH STREET #13
AUSTIN, TEXAS 78702
(512) 361-9352



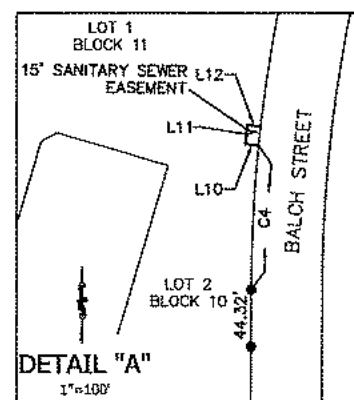
NOTES:

- Bearings shown hereon are based on the Texas State Coordinate System, North Central Zone (NAD83) using GPS observations and measurements.
- All property corners are 5/8" iron rod with cap stamped "Dunaway Assoc LP" unless otherwise noted.
- According to the Flood Insurance Rate Map for Tarrant County and Incorporated Areas, Map Number 484390C435K, Map Effective Date: September 25, 2008, the subject property is located in Zone "X" (shaded). This statement does not reflect any type of flood study by this firm.
- Building setback lines shall be in accordance with the City of Fort Worth Zoning Ordinance.
- No permanent structures shall be constructed over an existing water, sanitary sewer or utility easement.
- Water and sanitary sewer shall be provided by the City of Fort Worth.
- Sidewalks shall be constructed for all public streets per City of Fort Worth standards.
- Parkway improvements such as curb and gutter, pavement tie-ins, drive approaches, sidewalks and drainage inlets may require a parkway permit at the time of building permit.
- Compliance with the City of Fort Worth tree preservation ordinance #18615-05-2009 is required.
- For Lot 1, Block 10:

a. Final ISWM Required. Related to SWM-2018-0612

b. This plat identifies a potential preliminary need for a storm water storage facility known as a detention pond that may or may not be required. It is expressly understood and agreed by the owner or owner's designee of any specific lot or tract within the platted subdivision that the owner or owner's designee of lots or tracts shall be responsible to determine if the site development requires detention and provide for the final detention volume mitigation if required during the site development. If detention is required, the final detailed analysis detention volume and required easement may be more or less than indicated in the Preliminary ISWM. If required, the detention pond design shall be in accordance with the City of Fort Worth Stormwater Criteria Manual current at the time the Final ISWM Plan is submitted.

11. Public Open Space Easement: No structure, object, or plant of any type may obstruct vision from a height of 24-inches to a height of 11-feet above the top of the curb, including, but not limited to buildings, fence, walls, signs, trees, shrubs, cars, trucks, etc., in the public open space easement as shown on this plat.



LAND USE TABLE	
Total Gross Acreage	19.837 Acres
Right-of-Way Dedication	3.234 Acres
Net Acreage	16.603 Acres
Number Non-Residential Lots	2
Non-Residential Acreage	16.603 Acres
Number Residential Lots	0
Residential Lots Acreage	0 Acres
Private Park Acreage	0

P.R.V. REQUIRED	
Private P.R.V.'s will be required; water pressure exceeds 80 P.S.I.	
SIDEWALKS	
Sidewalks are required adjacent to both sides of all public and private streets, in conformance with the Sidewalk Policy per 'City Development Design Standards'.	

Curve Table					
Curve Number	Central Angle	Radius	Arc Length	Chord Bearing	Chord Distance
C1	5'08"50"	425.00'	38.18'	N71°00'42"W	38.17'
C2	4'37"28"	375.00'	30.27'	S71°16'23"E	30.28'
C3	5'39"10"	720.07'	71.04'	S31°51'14"W	71.01'
C4	5'36"37"	1155.13'	113.10'	S02°48'23"W	113.06'
C5	1'30"56"	1155.13'	30.55'	S05°36'10"W	30.55'
C6	1'52'21"	720.07'	23.53'	N20°58'19"E	23.53'
C7	18'21'23"	51.00'	16.34'	S64°17'42"E	16.27'
C8	18'21'23"	25.00'	8.01'	N64°17'42"W	7.98'
C9	9'00'00"	25.00'	39.27'	S61°31'37"W	35.36'
C10	6'75'47"	25.00'	29.63'	S17°25'27"E	27.92'
C11	84'23'25"	51.00'	75.12'	S09°10'48"E	68.51'
C12	5'11'58"	1193.50'	108.31'	S30°24'56"W	108.27'
C13	78°42'07"	51.00'	70.05'	S67°10'00"W	64.68'
C14	9'00'00"	25.00'	39.27'	S61°31'04"W	35.36'
C15	89°57'30"	25.00'	39.25'	S28°27'41"E	35.34'
C16	10'10'37"	25.00'	4.44'	S78°31'45"E	4.43'
C17	7'11'24"	25.00'	3.14'	N69°54'38"W	3.14'
C18	29°44'04"	25.00'	12.97'	S89°20'36"W	12.83'
C19	30°47'34"	51.00'	27.41'	S89°52'21"W	27.08'
C20	84°23'25"	25.00'	36.82'	S09°10'47"E	33.58'
C21	78°42'07"	25.00'	34.34'	S67°10'00"W	31.70'
C22	9'00'00"	51.00'	80.11'	S61°31'04"W	72.12'
C23	89°58'36"	25.00'	39.28'	S61°30'22"W	35.35'
C24	9'01'24"	25.00'	39.28'	N28°29'36"W	35.36'
C25	17'07'33"	125.00'	37.66'	N07°57'17"E	37.52'
C26	17'07'33"	25.00'	7.47'	N07°57'17"E	7.44'

Line Table		
Line Number	Bearing	Distance
L1	S21°59'58"W	6.30'
L2	S68°50'53"W	14.18'
L3	N68°19'50"W	2.47'
L4	S68°49'54"E	2.79'
L5	S20°04'00"E	13.19'
L6	S28°40'08"W	13.17'
L10	N83°43'49"W	10.08'
L11	N06°16'11"E	15.00'
L12	S83°43'49"E	9.99'
L13	S16°24'53"W	15.00'
L14	N16°24'53"E	15.00'
L15	S73°35'07"E	15.00'
L16	N17°46'21"E	18.42'
L17	N16°33'34"E	35.19'

Line Table		
Line Number	Bearing	Distance
L18	N72°52'39"W	79.63'
L19	N72°52'43"W	71.00'
L20	N82°52'58"W	94.64'
L21	S73°27'56"E	1.99'
L22	N16°31'59"E	167.30'
L23	S73°28'01"E	27.20'
L24	N12°07'21"E	19.46'
L25	N17°52'39"W	13.39'
L26	N84°52'39"W	45.54'
L27	N72°52'43"W	70.98'
L28	N82°56'36"W	64.42'



FINAL PLAT
OF

**LOT 1, BLOCK 10 & LOT 1, BLOCK 11
CRIMSON RIDGE ADDITION
SECTION TWO**

Situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth. Being a portion of Tract 1 described in the instrument to Crimson Ridge Land Partners, LLC recorded in Document Number D21409111, Official Public Records of Tarrant County, Texas, and being a portion of the tract of land described in the instrument to Housing Authority of the City of Fort Worth D/B/A Fort Worth Housing Solutions recorded in Document Number D21921945, Official Public Records of Tarrant County, Texas.

2 LOTS - 16.603 ACRES

THIS PLAT WAS PRINTED NOVEMBER 6, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121

FIRM REGISTRATION 10098100

DATE: _____ JOB NUMBER: B003950.001

BUILDING PERMITS

No building permits shall be issued for any lot in this Subdivision until an appropriate CFA or other acceptable provisions are made for the construction of any applicable water, sewer, storm drain, street lights, sidewalks, or paving improvements; and approval is first obtained from the City of Fort Worth.

CONSTRUCTION PROHIBITED OVER EASEMENTS

No permanent buildings or structures shall be constructed over any existing or platted water, sanitary sewer, drainage, gas, electric, cable or other utility easement of any type.

PARKWAY PERMIT

Parkway improvements such as curb and gutter, pavement tie-ins, drive approaches, sidewalks and drainage inlets may be required at time of building permit issuance via a parkway permit.

PRIVATE COMMON AREAS AND FACILITIES

The City of Fort Worth shall not be held responsible for the construction, maintenance or operation of any lots containing private common areas or facilities identified as such on this plat. Said areas shall include, but not be limited to: private streets, emergency access easements, and gated security entrances; recreation areas, landscaped areas and open spaces; water and wastewater distribution systems and treatment facilities; and recreation/clubhouse/exercise/buildings and facilities.

The land owners and subsequent owners of the lots and parcels in this subdivision, acting jointly and severally as a land owners association, shall be responsible for such construction, reconstruction, maintenance and operation of the subdivision's private common areas and facilities, and shall agree to indemnify and hold harmless the City of Fort Worth, Texas, from all claims, damages and losses arising out of or from performance of the obligations of said owners set forth in this paragraph.

PRIVATE MAINTENANCE

The City of Fort Worth shall not be responsible for maintenance of private streets, drives, emergency access easements, public access easements, public pedestrian access easements, recreation areas, open spaces and drainage facilities, and said owners agree to indemnify and hold harmless the City of Fort Worth, Texas, from all claims, damages and losses arising out of or from performance of the obligations of said owners set forth in this paragraph.

SITE DRAINAGE STUDY

A site drainage study, showing conformance with the approved roadway drainage plan, may be required before any building permit will be issued on this site (a grading plan in some instances may be adequate.) If the site does not conform, then a drainage study may be required along with a CFA for any required drainage improvements and the current owner shall submit a letter to the Department of Transportation and Public Works stating awareness that a site Drainage Study will be required before any building permit is issued. The current owner will inform each buyer of the same.

TRANSPORTATION IMPACT FEES

The City of Fort Worth has an ordinance implementing the assessment and collection of transportation impact fees. The total amount assessed is established on the approval date of this plat application, based upon Schedule 1 of the impact fee ordinance in effect as of the date of the plat. The amount to be collected is determined under Schedule 2 of said ordinance, and is due on the date a building permit is issued.

FLOODPLAIN RESTRICTION

No construction shall be allowed within the floodplain easement, without the written approval of the Director of Transportation and Public Works. In order to secure approval, detailed engineering plans and/or studies for the improvements, satisfactory to the Director, shall be prepared and submitted by the party(ies) wishing to construct within the floodplain. Where construction is permitted, all finished floor elevations shall be a minimum of two (2) feet above the floodplain base flood elevation resulting from ultimate development of the watershed.

UTILITY EASEMENTS

Any public utility, including the City of Fort Worth, shall have the right to move and keep moved all or part of any building, fence, tree, shrub, other growth or improvement which in any way endangers or interferes with the construction, maintenance, or efficiency of its respective systems on any of the easements shown on the plat; and they shall have the right at all times to ingress and egress upon said easements for the purpose of construction, reconstruction, inspection, patrolling, maintaining, and adding to or removing all or part of its respective systems without the necessity of any time of procuring the permission of anyone.

WATER / WASTEWATER IMPACT FEES

The City of Fort Worth has an ordinance implementing the assessment and collection of water and wastewater impact fees. The total amount assessed is established on the recordation date of this plat application, based upon Schedule 1 of the current impact fee ordinance. The amount to be collected is determined under Schedule 2 then in effect on the date a building permit is issued, or the connection date to the municipal water and/or wastewater system.

FLOOD PLAIN/DRAINAGE-WAY MAINTENANCE

The existing creek, stream, river, or drainage channel traversing along or across portions of this addition, will remain unobstructed at all times and will be maintained by the individual lot owners whose lots are traversed by, or adjacent to, the drainage-ways. The City of Fort Worth will not be responsible for the maintenance, erosion control, and/or operation of said drainage-ways. Property owners shall keep the adjacent drainage-ways traversing their property clean and free of debris, silt or other substances which would result in unsanitary conditions, and the City shall have the right of entry for the purpose of inspecting the maintenance work by the property owners. The drainage-ways are occasionally subject to storm water overflow and/or bank erosion that cannot be defined. The City of Fort Worth shall not be liable for any damages resulting from the occurrence of those phenomena, nor the failure of any structure(s) within the drainage-ways. The drainage-way crossing each lot is contained within the floodplain easement line as shown on the plat.

FP-18-135
REFERENCE CASE NUMBER PP-18-049

FORT WORTH

**CITY PLAN COMMISSION
CITY OF FORT WORTH, TEXAS**

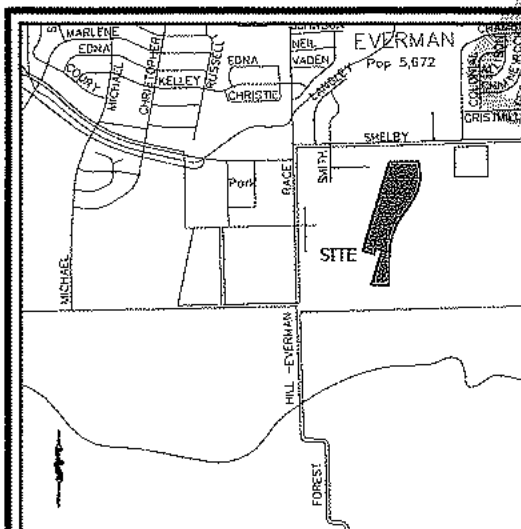
THIS PLAT IS VALID ONLY IF RECORDED WITHIN NINETY (90) DAYS AFTER DATE OF APPROVAL.

Plat Approval Date: 11/2/19

By: *Donald R. Boney* Chairman

By: *Blair J. Smith* Secretary

THIS PLAT FILED IN COUNTY CLERK'S DOCUMENT NO. D

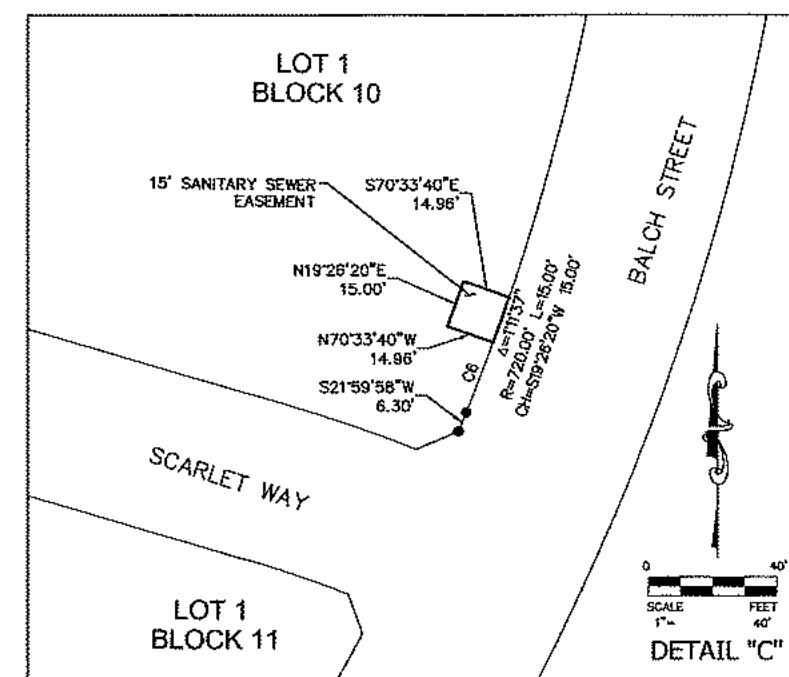
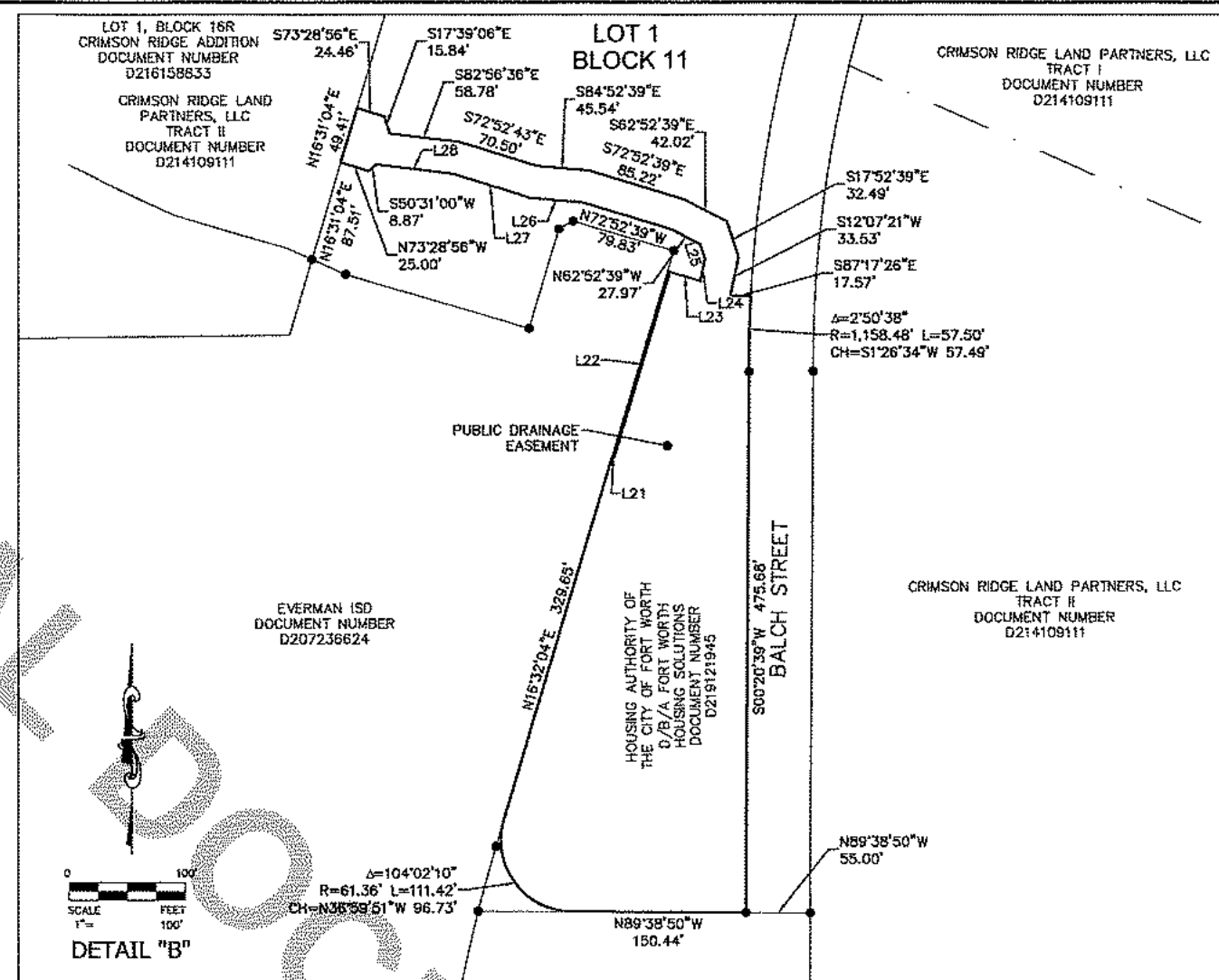
VICINITY MAP
NOT TO SCALE

SURVEYOR
DUNAWAY ASSOCIATES, L.P.
550 BAILEY AVENUE
SUITE 400
FORT WORTH, TEXAS 76107
(817) 335-1121 (PHONE)

OWNER
CRIMSON RIDGE LAND PARTNERS, LLC
3710 RAWLINGS - SUITE 1390
DALLAS, TEXAS 75219
(214) 953-3168

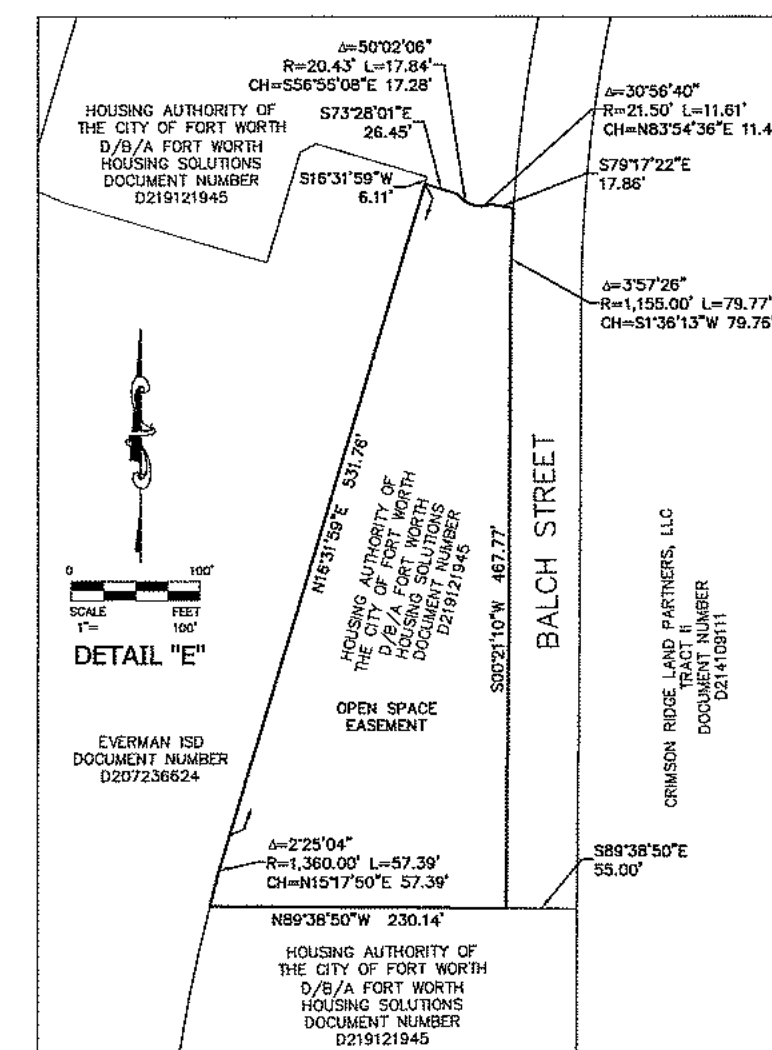
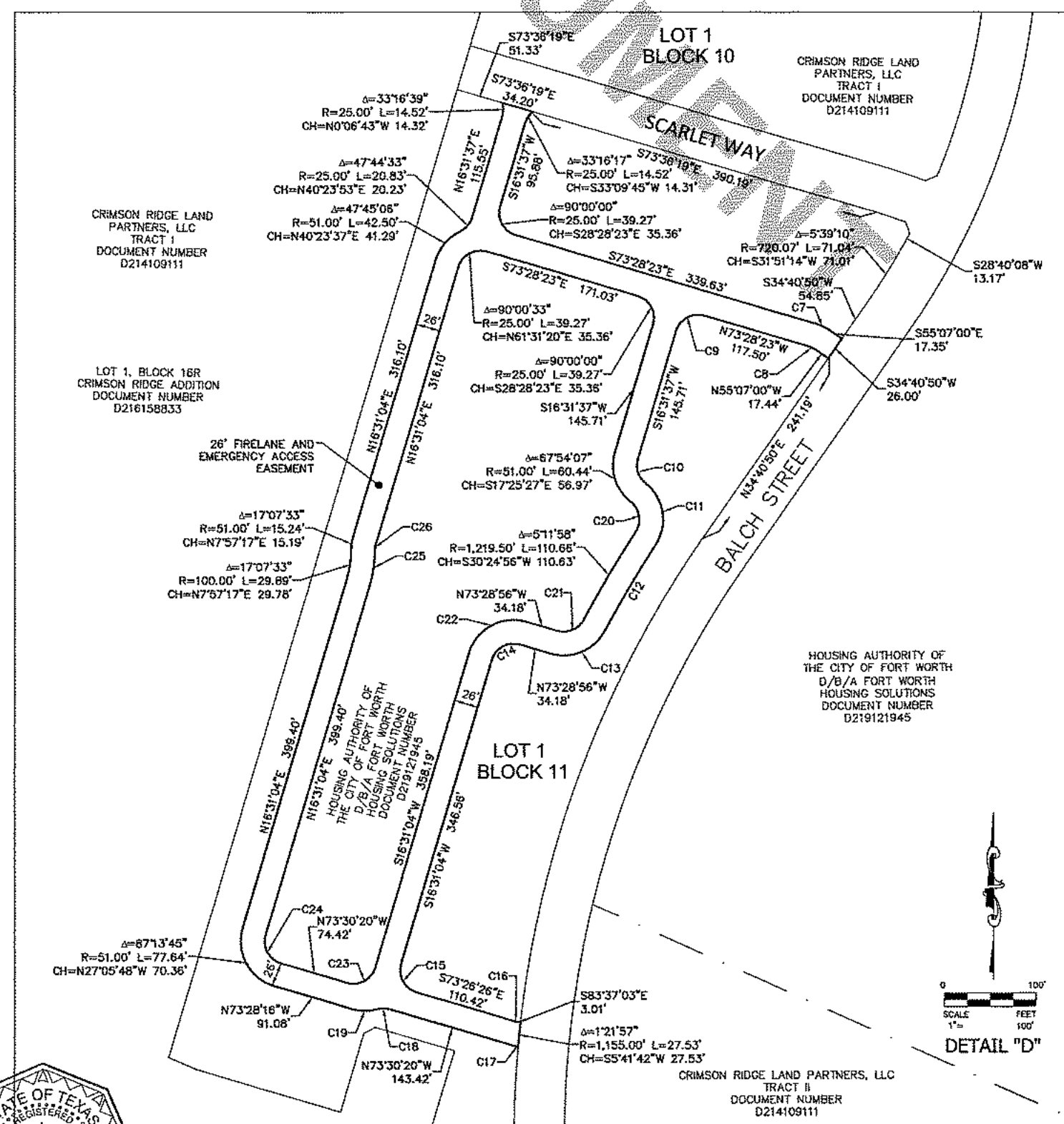
DEVELOPER
HOUSING AUTHORITY OF THE CITY OF
FORT WORTH D/B/A FORT WORTH
HOUSING SOLUTIONS
1201 E. 15TH STREET
FORT WORTH, TEXAS 776102

DEVELOPER
LDG DEVELOPMENT
1305 EAST 6TH STREET #13
AUSTIN, TEXAS 78702
(512) 351-9352



Curve Table				
Curve Number	Central Angle	Radius	Arc Length	Chord Bearing and Distance
C1	5°08'50"	425.00'	38.18'	N71°00'42"W 38.17'
C2	4°37'28"	375.00'	30.27'	S71°16'23"E 30.28'
C3	5°39'10"	720.00'	71.04'	S31°51'14"W 71.01'
C4	5°36'37"	1155.13'	113.10'	S02°48'23"W 113.06'
C5	1°30'56"	1155.13'	30.55'	S05°36'10"W 30.55'
C6	1°52'21"	720.00'	23.53'	N20°58'19"E 23.53'
C7	18°21'23"	51.00'	16.34'	S64°17'42"E 16.27'
C8	18°21'23"	25.00'	8.01'	N64°17'42"W 7.98'
C9	90°00'00"	25.00'	39.27'	S61°31'37"W 35.36'
C10	67°54'07"	25.00'	29.63'	S17°25'27"E 27.92'
C11	84°23'25"	51.00'	75.12'	S09°10'48"E 68.51'
C12	5°11'58"	1193.50'	108.31'	S30°24'56"W 108.27'
C13	78°42'07"	51.00'	70.05'	S67°10'00"W 64.68'
C14	90°00'00"	25.00'	39.27'	S61°31'04"W 35.36'
C15	89°57'30"	25.00'	39.25'	S28°27'41"E 35.34'
C16	10°10'37"	25.00'	4.44'	S78°31'45"E 4.43'
C17	7°11'24"	25.00'	3.14'	N69°54'38"W 3.14'
C18	28°44'04"	25.00'	12.87'	S89°20'36"W 12.83'
C19	30°47'34"	51.00'	27.41'	S89°52'21"W 27.08'
C20	84°23'25"	25.00'	36.82'	S09°10'47"E 33.58'
C21	78°42'07"	25.00'	34.34'	S67°10'00"W 31.70'
C22	90°00'00"	51.00'	80.11'	S61°31'04"W 72.12'
C23	89°58'36"	25.00'	39.26'	S61°30'22"W 35.35'
C24	90°01'24"	25.00'	39.28'	N28°29'38"W 35.36'
C25	17°07'33"	128.00'	37.66'	N07°57'17"E 37.52'
C26	17°07'33"	25.00'	7.47'	N07°57'17"E 7.44'

Line Table		
Line Number	Bearing	Distance
L1	S21°59'58"W	6.30'
L2	S65°50'53"W	14.18'
L3	N68°19'50"W	2.47'
L4	S68°49'54"E	2.79'
L5	S20°04'00"E	13.19'
L6	S28°40'08"W	13.17'
L7	N55°21'42"W	10.01'
L8	S34°38'18"W	15.00'
L9	S55°20'48"E	10.00'
L10	N63°43'49"W	10.06'
L11	N08°16'11"E	15.00'
L12	S83°43'49"E	9.99'
L13	S16°24'53"W	15.00'
L14	N16°24'53"E	15.00'
L15	S73°35'07"E	15.00'
L16	N17°46'21"E	18.42'
L17	N16°33'34"E	35.19'
L18	N72°52'39"W	79.63'
L19	N72°52'43"W	71.00'
L20	N82°52'58"W	94.84'
L21	S73°28'01"E	29.19'
L22	N12°07'21"E	19.46'
L23	N17°52'39"W	13.39'
L24	N62°52'39"W	27.97'
L25	N72°52'39"W	79.83'
L26	N82°56'35"W	64.42'
L27	S50°31'00"W	8.87'
L28	N73°28'56"W	25.00'



SURVEYOR'S CERTIFICATE

I, Gregory S. Ifland, do hereby certify that this plat was prepared from an actual and accurate survey of the land and that the corner monuments indicated thereon were properly placed under my supervision in the month of September, 2018.

Gregory S. Ifland
Registered Professional Land Surveyor
Texas Registration No. 5570



FINAL PLAT
OF
LOT 1, BLOCK 10 & LOT 1, BLOCK 11
CRIMSON RIDGE ADDITION
SECTION TWO

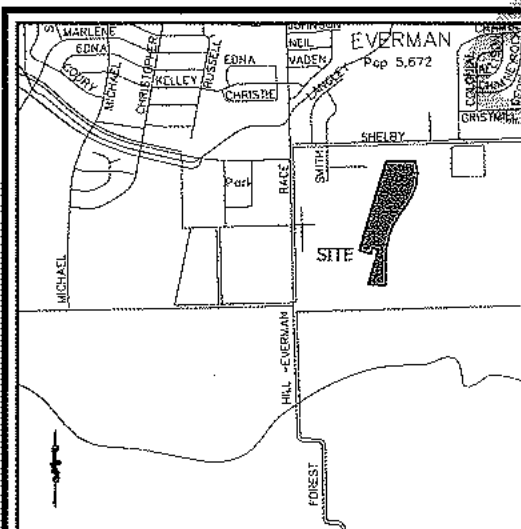
Situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth. Being a portion of Tract I described in the instrument to Crimson Ridge Land Partners, LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas, and being a portion of the tract of land described in the instrument to Housing Authority of the City of Fort Worth D/B/A Fort Worth Housing Solutions recorded in Document Number D219121945, Official Public Records of Tarrant County, Texas.

2 LOTS - 16.603 ACRES

THIS PLAT WAS PRINTED NOVEMBER 6, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100



SURVEYOR
DUNAWAY ASSOCIATES, L.P.
550 BAILEY AVENUE
SUITE 400
FORT WORTH, TEXAS 76107
(817) 335-1121 (PHONE)

OWNER

CRIMSON RIDGE LAND PARTNERS, LLC
3710 RAWLINGS - SUITE 1390
DALLAS, TEXAS 75219
(214) 953-3185

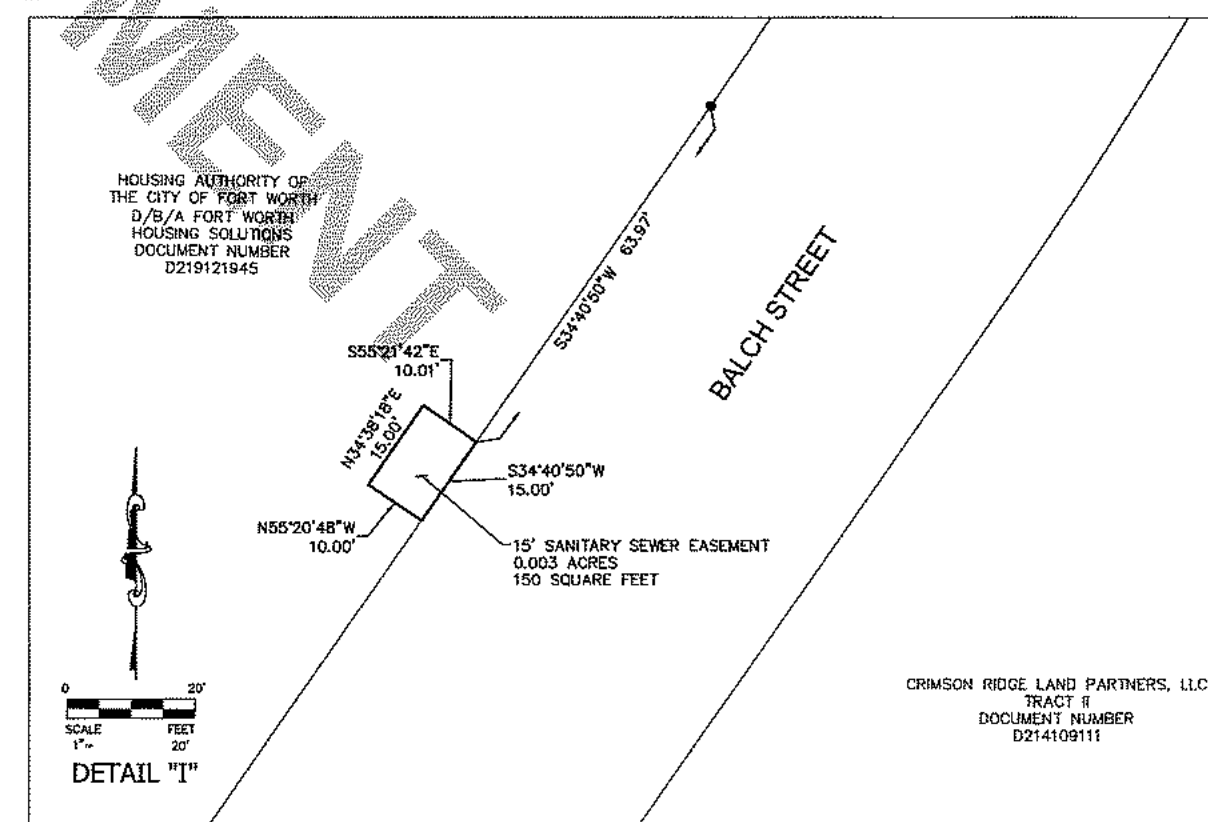
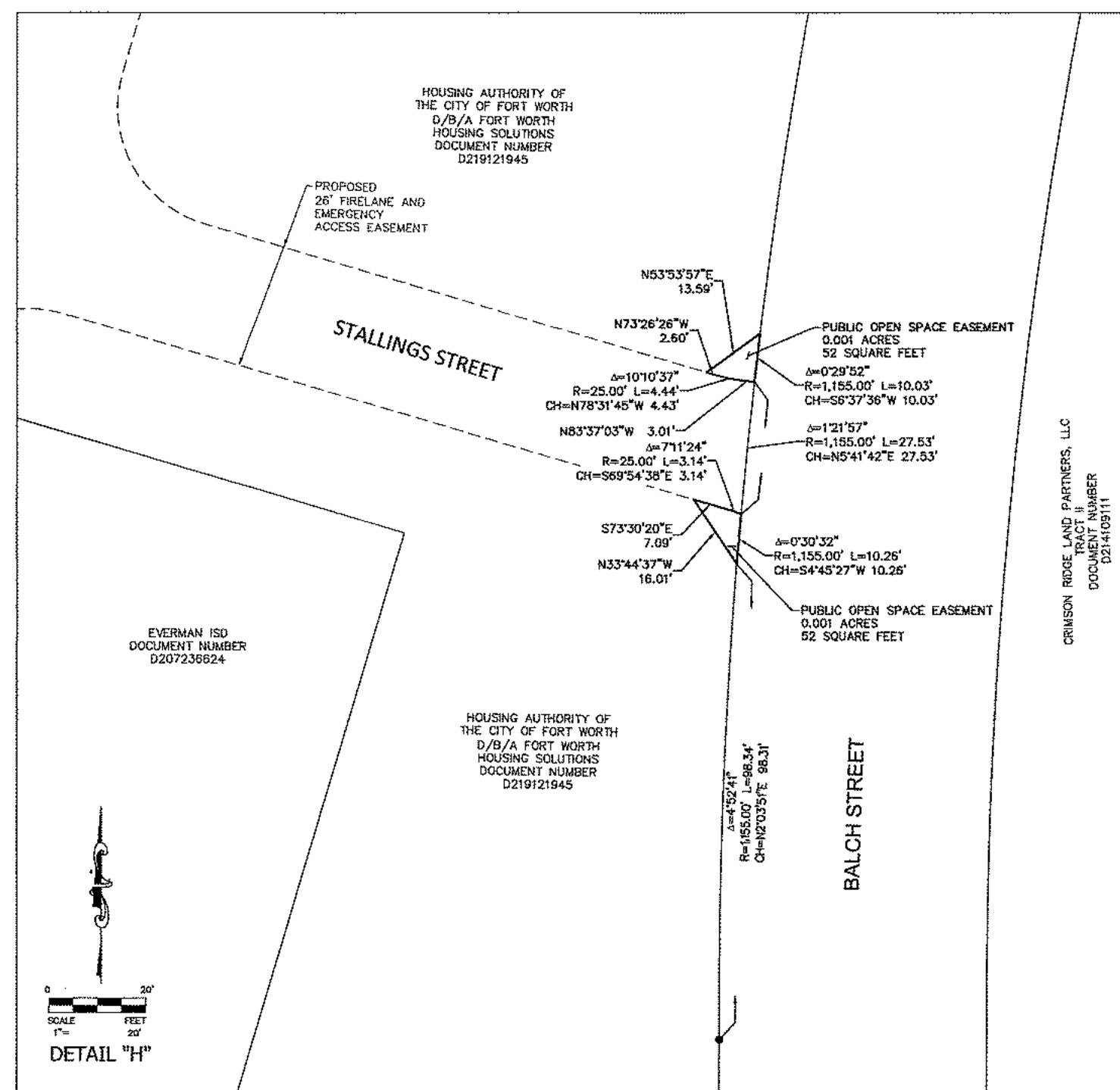
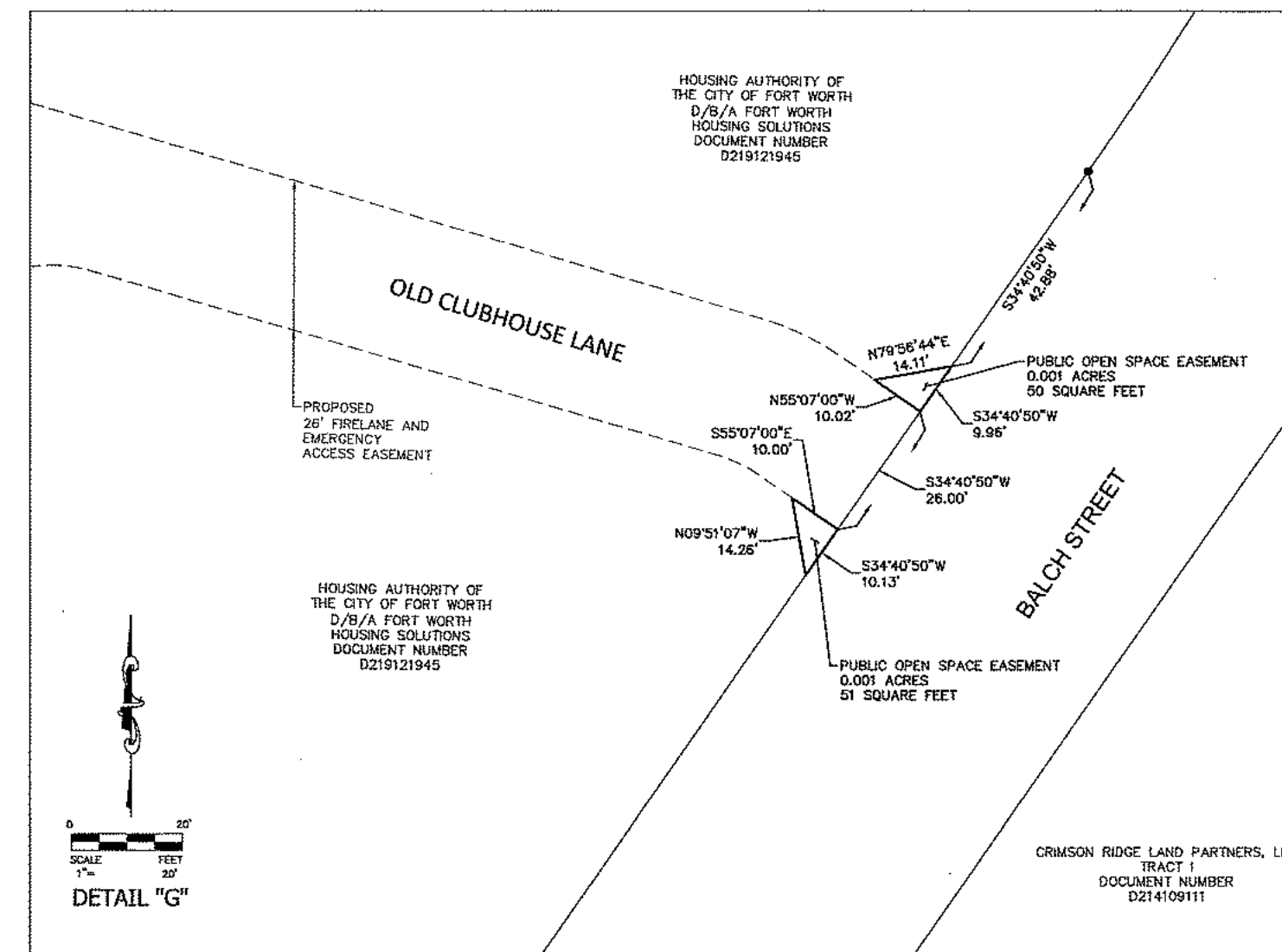
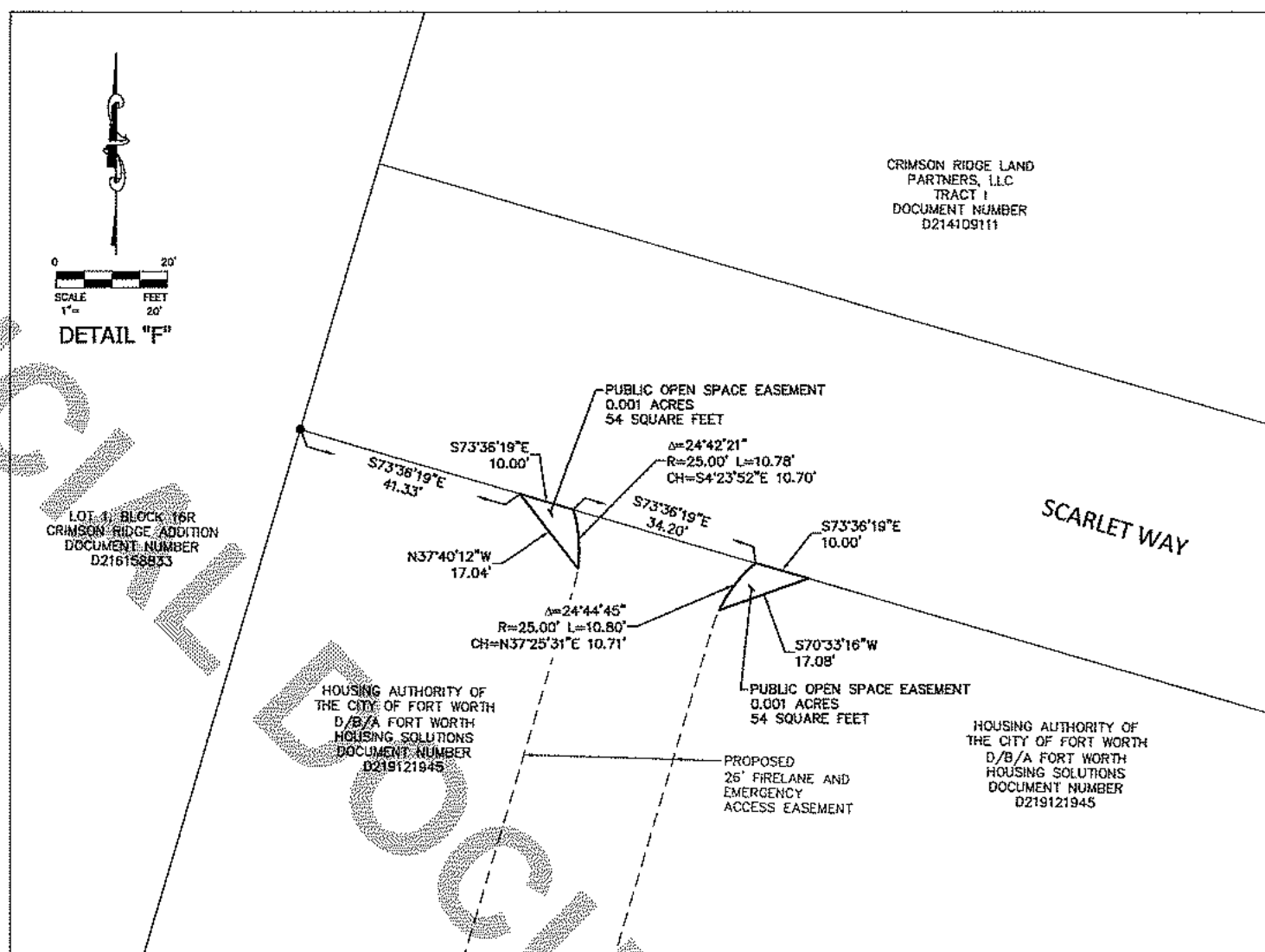
OWNER

HOUSING AUTHORITY OF THE CITY OF
FORT WORTH D/B/A FORT WORTH
HOUSING SOLUTIONS
1201 E. 13TH STREET
FORT WORTH, TEXAS 778102

DEVELOPER

LDG DEVELOPMENT
1305 EAST 6TH STREET #13
AUSTIN, TEXAS 78702
(512) 351-9352

VICINITY MAP
NOT TO SCALE



FINAL PLAT *HERMAN*
OF *4-8-2*
LOT 1, BLOCK 10 & LOT 1, BLOCK 11
CRIMSON RIDGE ADDITION
SECTION TWO

Situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth. Being a portion of Tract 1 described in the instrument to Crimson Ridge Land Partners, LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas, and being a portion of the tract 1 described in the instrument to Housing Authority of the City of Fort Worth D/B/A Fort Worth Housing Solutions recorded in Document Number D219121945, Official Public Records of Tarrant County, Texas.

2 LOTS - 16.60± ACRES

THIS PLAT WAS PRINTED NOVEMBER 6, 201



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121

FIRM REGISTRATION 10098100

JOB NUMBER: B003950.001

THIS PLAT FILED IN COUNTY CLERK'S DOCUMENT NO. D_____ DATE: ____-____-____

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

GENERAL WARRANTY DEED

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

That **BAY MOUNTAIN CAPITAL LLC**

(hereinafter called "Grantor," whether one or more, masculine, feminine or neuter) for and in consideration of the sum of TEN and no/100 DOLLARS and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, paid by

CRIMSON RIDGE LAND PARTNERS LLC

(hereinafter called "Grantee," whether one or more, masculine, feminine or neuter), for which no lien is retained either express or implied, has Granted, Sold and Conveyed, and by these presents does hereby Grant, Sell and Convey, unto the said Grantee all that certain real property located in Tarrant County, Texas and described as follows:

Being two tracts of land out of the Shelby County School Land Survey, Abstract No. 1375, City of Fort Worth, Tarrant County, Texas, attached hereto as Exhibit "A" and made a part hereof by reference;

together with all improvements thereon, if any, and all rights, privileges, tenements, hereditaments, rights of way, easements, appendages and appurtenances, in anyway appertaining thereto, and all right, title and interest of Grantor in and to any streets, ways, alleys, strips or gores of land adjoining the above-described property or any part thereof (hereinafter, the "Property").

This deed is executed and delivered subject to all easements, reservations, conditions, covenants and restrictive covenants as the same appear of record in the office of the County Clerk of the county in which the Property is located.

TO HAVE AND TO HOLD the above described Property, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said Grantee, his, her or its successors, heirs and assigns, as the case may be, forever; and Grantor does hereby bind Grantor and Grantor's successors, heirs, executors and administrators, as the case may be, to Warrant and Forever Defend all and singular the said Property unto the said Grantee and Grantee's successors, heirs and assigns, as the case may be, against every person whomsoever lawfully claiming, or to claim the same, or any part thereof.

Executed to be effective the 29th day of JANUARY, 2014.

BAY MOUNTAIN CAPITAL LLC

By: Phillip Sanchez

Name: **PHILLIP SANCHEZ**

Title: **Manager**

ACKNOWLEDGMENT

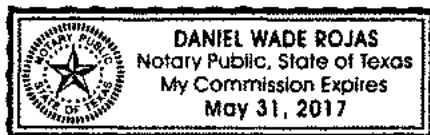
STATE OF TEXAS §

§

COUNTY OF DALLAS §

This instrument was acknowledged before me on this 27 day of May, 2014, by Phillip Sanchez, the Manager of Bay Mountain Capital LLC, a Texas limited liability, on behalf of said entity.

Given under my hand and seal of office this 27 day of May, 2014.



Daniel Wade Rojas
Notary Public, State of Texas
Printed name: Daniel Wade Rojas
Commission expires: 5-31-17

GRANTOR'S ADDRESS:

Bay Mountain Capital LLC
3710 Rawlins, Suite 1310
Dallas, TX 75219

GRANTEE'S ADDRESS:

Crimson Ridge Land Partners LLC
3710 Rawlins, Suite 1310
Dallas, TX 75219

AFTER RECORDING RETURN TO:

Crimson Ridge Land Partners LLC
3710 Rawlins, Suite 1310
Dallas, TX 75219

EXHIBIT "A"

TRACT 1:

BEING A 36.686 ACRE TRACT OF LAND SITUATED IN THE SHELBY COUNTY SCHOOL LAND SURVEY, ABSTRACT NO. 1375, CITY OF FORT WORTH, TEXAS, AND BEING ALL OF LOTS 1-8, BLOCK 13, LOTS 1-5 BLOCK 17; LOTS 9-28, BLOCK 18; LOTS 15-24, BLOCK 19, AND THE ABUTTING RIGHT-OF-WAY TO SAID LOTS OF THE FINAL PLAT OF CRIMSON RIDGE SECTION ONE, AN ADDITION TO THE CITY OF FORTH WORTH, RECORDED IN VOLUME 388-157, PAGE 70, PLAT RECORDS OF TARRANT COUNTY, TEXAS AND PART OF A CALLED 73.366 ACRE TRACT OF LAND DESCRIBED IN DEED TO 12.620 ACRES SHELBY COUNTY SCHOOL LAND SURVEY ABSTRACT NO. 1375 LLC, RECORDED IN INSTRUMENT NUMBER 208092383, OFFICIAL RECORDS, TARRANT COUNTY, TEXAS. SAID 36.686 ACRE TRACT BEARING BASIS BEING TEXAS STATE PLANE COORDINATE SYSTEM NORTH CENTRAL ZONE, N.A.D. 83, HARN ADJUSTMENT, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 1/2 INCH IRON ROD FOUND AT THE NORTHEAST CORNER OF LOT 11, BLOCK 19 OF SAD FINAL PLAT OF CRIMSON RIDGE SECTION ONE AND THE COMMON NORTHWEST CORNER OF SAID CALLED 73.366 ACRE TRACT AND IN THE SOUTH LINE OF A TRACT OF LAND DESCRIBED IN DEED TO LIEVEN J. VAN RIET, TRUSTEE, RECORDED IN VOLUME 7229, PAGE 809, DEED RECORDS, TARRANT COUNTY, TEXAS;

THENCE, NORTH 89 DEGREES 30 MINUTES 04 SECONDS EAST, ALONG THE NORTH LINE OF SAID CALLED 73.366 ACRE TRACT AND THE COMMON SOUTH LINE OF SAID LIEVEN J. VAN RIET, TRUSTEE TRACT, A DISTANCE OF 474.70 FEET TO A 1/2 INCH IRON ROD FOUND FOR THE NORTHEAST CORNER OF SAID CALLED 73.366 ACRE TRACT, AND THE COMMON SOUTHEAST CORNER OF SAID LIEVEN J. VAN RIET, TRUSTEE TRACT, AND IN THE WEST LINE OF A TRACT OF LAND DESCRIBED IN DEED TO UNION-PACIFIC RAILROAD, RECORDED IN VOLUME 4149, PAGE 1919, DEED RECORDS, TARRANT COUNTY, TEXAS;

THENCE, SOUTH 10 DEGREES 14 MINUTES 33 SECONDS EAST, ALONG THE WEST LINE OF SAID CALLED 73.366 ACRE TRACT AND THE COMMON WEST LINE OF SAID UNION-PACIFIC RAILROAD TRACT, A DISTANCE OF 1655.30 FEET TO A POINT FOR CORNER;

THENCE, NORTH 65 DEGREES 37 MINUTES 43 SECONDS WEST, OVER AND ACROSS AFORESAID CALLED 73.366 ACRE TRACT, A DISTANCE OF 1210.90 FEET TO A POINT FOR CORNER, SAD POINT BEING THE SOUTHEAST CORNER OF LOT 1, BLOCK 13 OF AFORESAID CRIMSON RIDGE SECTION ONE AND BEING THE COMMON NORTH LINE OF THE CORRECTION PLAT OF CRIMSON RIDGE

SECTION

ONE, AN ADDITION TO THE CITY OF FORT WORTH ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 388-165, PAGE 64, PLAT RECORDS, TARRANT COUNTY, TEXAS;

THENCE, ALONG THE NORTH LINE OF SAID CORRECTION PLAT AND CONTINUING OVER AND ACROSS SAID CALLED 73.366 ACRE TRACT, THE FOLLOWING COURSES AND DISTANCES:

NORTH 66 DEGREES 20 MINUTES 32 SECONDS WEST, A DISTANCE OF 226.21 FEET TO A POINT FOR CORNER;

NORTH 55 DEGREES 27 MINUTES 37 SECONDS WEST, A DISTANCE OF 169.37 FEET TO A POINT FOR CORNER;

NORTH 46 DEGREES 54 MINUTES 50 SECONDS WEST, A DISTANCE OF 210.02 FEET TO A POINT FOR CORNER;

SOUTH 43 DEGREES 05 MINUTES 10 SECONDS WEST, A DISTANCE OF 5.00 FEET TO A POINT FOR CORNER AND THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 270.00 FEET, A CENTRAL ANGLE OF 03 DEGREES 45 MINUTES 42 SECONDS, A CHORD THAT BEARS SOUTH 41 DEGREES 12 MINUTES 19 SECONDS WEST, A CHORD DISTANCE OF 17.72 FEET;

ALONG SAID NON-TANGENT CURVE TO THE LEFT, AN ARC LENGTH OF 17.73 FEET TO A POINT FOR CORNER;

NORTH 50 DEGREES 40 MINUTES 38 SECONDS WEST, A DISTANCE OF 178.28 FEET TO A 1/2 INCH IRON ROD FOUND FOR THE SOUTHEAST CORNER OF A TRACT OF LAND DESCRIBED IN DEED TO MILTON F. OWENS AND WIFE ALBERTA OWENS, RECORDED IN VOLUME 11757, PAGE 1639, DEED RECORDS, TARRANT COUNTY, TEXAS, IN A WEST LINE OF SAID FINAL PLAT OF CRIMSON RIDGE SECTION ONE;

THENCE, NORTH 00 DEGREES 40 MINUTES 14 SECONDS WEST, ALONG A WEST LINE OF SAID FINAL PLAT OF CRIMSON RIDGE SECTION ONE AND THE COMMON EAST LINE OF SAID MILTON F. OWENS AND WIFE ALBERTA OWENS TRACT, PASSING AT A DISTANCE OF 308.70 FEET, A 1 INCH IRON ROD FOUND FOR THE NORTHEAST CORNER OF SAID MILTON F. OWENS AND WIFE ALBERTA OWENS TRACT AND THE MOST SOUTHERLY SOUTHEAST CORNER OF BLOCK A OF SAID FINAL PLAT OF CRIMSON RIDGE SECTION ONE, AND CONTINUING WITH THE SOUTH LINE OF SAID BLOCK A, A TOTAL DISTANCE OF 329.53 FEET TO A 1/2 INCH IRON ROD FOUND AT AN ANGLE POINT IN THE SOUTH LINE OF SAID BLOCK A;

THENCE, NORTH 89 DEGREES 30 MINUTES 34 SECONDS EAST, CONTINUING ALONG THE SOUTH LINE OF SAID BLOCK A, A DISTANCE OF 111.34 FEET TO A 5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP STAMPED "JACOBS" SET FOR THE SOUTHEAST CORNER OF SAID BLOCK A, IN THE WEST RIGHT-OF-WAY

LINE OF CRIMSON LANE (A CALLED 60 FOOT RIGHT-OF-WAY), RECORDED IN VOLUME 388- 157, PAGE 70, PLAT RECORDS, TARRANT COUNTY, TEXAS;

THENCE, NORTH 00 DEGREES 29 MINUTES 26 SECONDS WEST, ALONG THE EAST LINE OF SAID BLOCK A AND THE COMMON WEST RIGHT-OF-WAY LINE OF SAID CRIMSON LANE, A DISTANCE OF 70.72 FEET TO A 5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP STAMPED "JACOBS" SET FOR CORNER;

THENCE, NORTH 89 DEGREES 30 MINUTES 04 SECONDS EAST, OVER AND ACROSS SAID CRIMSON LANE AND ALONG THE NORTH LINE OF LOTS 28, 13, 12, 11, AND 9, AND THE COMMON SOUTH LINE OF LOTS 1-8, BLOCK 18 OF SAID FINAL PLAT OF CRIMSON RIDGE SECTION ONE, A DISTANCE OF 589.98 FEET TO A 5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP STAMPED "JACOBS" SET FOR THE NORTHEAST CORNER OF SAID LOT 9, BLOCK 18 AND THE COMMON SOUTHEAST CORNER OF SAID LOT 8, BLOCK 18 IN THE WEST RIGHT-OF-WAY LINE OF SCARLET WAY (A CALLED 50 FOOT RIGHT-OF-WAY), RECORDED IN VOLUME 388-157, PAGE 70, PLAT RECORDS, TARRANT COUNTY, TEXAS;

THENCE, SOUTH 16 DEGREES 32 MINUTES 02 SECONDS WEST, ALONG THE EAST LINE OF SAID LOT 9, BLOCK 18 AND THE COMMON WEST RIGHT-OF-WAY LINE OF SAID SCARLET WAY, A DISTANCE OF 3.94 FEET TO A 5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP STAMPED "JACOBS" SET FOR CORNER;

THENCE, SOUTH 73 DEGREES 27 MINUTES 58 SECONDS EAST, OVER AND ACROSS SAID SCARLET WAY AND ALONG THE NORTH LINE OF LOT 15, AND THE COMMON SOUTH LINE OF LOT 14, BLOCK 19, OF SAID FINAL PLAT OF CRIMSON RIDGE SECTION ONE, A DISTANCE OF 195.00 FEET TO A 5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP STAMPED "JACOBS" SET FOR THE NORTHEAST CORNER OF SAID LOT 15, AND THE COMMON SOUTHEAST CORNER OF SAID LOT 14, BLOCK 19, IN THE EAST LINE OF SAID FINAL PLAT OF CRIMSON RIDGE SECTION ONE AND THE COMMON WEST LINE OF SAID CALLED 73.366 ACRE TRACT;

THENCE, NORTH 16 DEGREES 32 MINUTES 02 SECONDS EAST, ALONG THE EAST LINE OF SAID FINAL PLAT AND THE COMMON WEST LINE OF SAID CALLED 73.366 ACRE TRACT, A DISTANCE OF 366.98 FEET TO THE POINT OF BEGINNING, AND CONTAINING 36.686 ACRES OF LAND, MORE OR LESS.

TRACT II:

BEING A 36.686 ACRE TRACT OF LAND SITUATED IN THE SHELBY COUNTY SCHOOL LAND SURVEY, ABSTRACT NO. 1375, CITY OF FORT WORTH, TEXAS, AND BEING ALL OF LOTS 9A-19A, BLOCK 13; LOTS 1A-4B, BLOCK 14; LOTS 1A-5A, BLOCK 16; LOTS 6A- 9, BLOCK 17, AND PART OF LOT 19B, BLOCK 13, LOTS 5B-8B, BLOCK 16, AND THE ABUEFING RIGHT-OF-WAY OF THE CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE, AN ADDITION TO THE CITY OF FORT WORTH, RECORDED IN VOLUME 388-165, PAGE 64, PLAT RECORDS, TARRANT COUNTY,

TEXAS AND PART OF A CALLED 73.366 ACRE TRACT OF LAND) DESCRIBED IN DEED TO 12.620 ACRES SHELBY COUNTY SCHOOL LAND SURVEY ABSTRACT NO. 1375 LLC, RECORDED IN INSTRUMENT NUMBER 208092383, OFFICIAL RECORDS, TARRANT COUNTY, TEXAS. SAD 36.686 ACRE TRACT BEARING BASIS BEING TEXAS STATE PLANE COORDINATE SYSTEM NORTH CENTRAL ZONE, N.A.D. 83, HARN ADJUSTMENT, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

COMMENCING AT A 1/2 INCH IRON ROD FOUND AT THE NORTHEAST CORNER OF LOT 11, BLOCK 19 OF THE FINAL PLAT OF CRIMSON RIDGE SECTION ONE, AN ADDITION TO THE CITY OF FORT WORTH, RECORDED IN VOLUME 388-157, PAGE 70, PLAT RECORDS, TARRANT COUNTY, TEXAS AND THE COMMON NORTHWEST CORNER OF SAID CALLED 73.366 ACRE TRACT AND IN THE SOUTH LINE OF A TRACT OF LAND DESCRIBED IN DEED TO LIEVEN J. VAN RIET, TRUSTEE, RECORDED IN VOLUME 7229, PAGE 809, DEED RECORDS, TARRANT COUNTY, TEXAS;

THENCE, NORTH 89 DEGREES 30 MINUTES 04 SECONDS EAST, ALONG THE NORTH LINE OF SAID CALLED 73.366 ACRE TRACT AND THE COMMON SOUTH LINE OF SAID LIEVEN J. VAN RIET, TRUSTEE TRACT, A DISTANCE OF 474.70 FEET TO A 1/2 INCH IRON ROD FOUND FOR THE NORTHEAST CORNER OF SAID CALLED 73.366 ACRE TRACT, AND THE COMMON SOUTHEAST CORNER OF SAID LIEVEN J. VAN RIET, TRUSTEE TRACT, AND IN THE WEST LINE OF A TRACT OF LAND DESCRIBED IN DEED TO UNION-PACIFIC RAILROAD, RECORDED IN VOLUME 4149, PAGE 1919, DEED RECORDS, TARRANT COUNTY, TEXAS;

THENCE, ALONG THE EAST LINE OF SAD CALLED 73.366 ACRE TRACT AND THE COMMON WEST LINE OF SAD UNION-PACIFIC RAILROAD TRACT THE FOLLOWING COURSES AND DISTANCES;

SOUTH 10 DEGREES 14 MINUTES 33 SECONDS EAST, A DISTANCE OF 1655.30 FEET TO THE POINT OF BEGINNING;

SOUTH 10 DEGREES 14 MINUTES 33 SECONDS EAST, A DISTANCE OF 779.36 FEET TO 1 INCH IRON ROD FOUND FOR CORNER;

SOUTH 10 DEGREES 15 MINUTES 22 SECONDS EAST, A DISTANCE OF 890.58 FEET TO A 5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" FOUND FOR THE SOUTHWEST CORNER OF SAID CALLED 73.366 ACRE TRACT;

THENCE, ALONG THE SOUTH LINE OF SAD CALLED 73.366 ACRE TRACT THE FOLLOWING COURSES AND DISTANCES;

SOUTH 79 DEGREES 44 MINUTES 38 SECONDS WEST, A DISTANCE OF 110.00 FEET TO A 5/8 INCH IRON ROD WITH YELLOW PLASTIC CAP STAMPED "CARTER BURGESS" FOUND FOR CORNER;

NORTH 10 DEGREES 15 MINUTES 22 SECONDS WEST, A DISTANCE OF 909.77

FEET TO A 5/8 INCH WON ROD WITH YELLOW PLASTIC CAP STAMPED "JACOBS" SET FOR CORNER IN THE NORTH LINE OF A TRACT OF LAND DESCRIBED IN DEED TO GRANVILLE MARTIN ST. JOHN, RECORDED IN VOLUME 8578, PAGE 1302, DEED RECORDS, TARRANT COUNTY, TEXAS, FROM WHICH A 1/2 INCH IRON ROD FOUND BEARS SOUTH 35 DEGREES EAST, A DISTANCE OF 3.7 FEET;

THENCE, SOUTH 89 DEGREES 38 MINUTES 27 SECONDS WEST, CONTINUING ALONG THE SOUTH LINE OF SAD CALLED 73.366 ACRE TRACT AND THE COMMON NORTH LINE OF SAD GRANVILLE MARTIN ST. JOHN TRACT A DISTANCE OF 1226.34 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR THE SOUTHEAST CORNER OF A

CALLED 26.275 ACRE TRACT OF LAND CONVEYED TO EVERMAN INDEPENDENT SCHOOL DISTRICT, BY INSTRUMENT NUMBER D207236624, OFFICIAL RECORDS, TARRANT COUNTY, TEXAS;

THENCE, ALONG THE WEST AND SOUTH LINES OF SAD CALLED 73.366 ACRE TRACT AND THE EAST AND NORTH LINES OF SAD 26.275 ACRE TRACT, THE FOLLOWING COURSES AND DISTANCES:

NORTH 00 DEGREES 31 MINUTES 46 SECONDS WEST, A DISTANCE OF 54.94 FEET TO A 1/2 INCH WON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER, AND THE BEGINNING OF A TANGENT CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 04 DEGREES 45 SECONDS 10 MINUTES, A RADIUS OF 1460.00 FEET, A CHORD BEARING OF NORTH 02 DEGREES 41 MINUTES 39 SECONDS EAST, WITH A CHORD DISTANCE OF 121.07 FEET;

ALONG SAID TANGENT CURVE TO THE RIGHT AN ARC DISTANCE OF 121.11 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

SOUTH 83 DEGREES 10 MINUTES 13 SECONDS EAST, A DISTANCE OF 99.27 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 06 DEGREES 49 MINUTES 47 SECONDS EAST, A DISTANCE OF 50.00 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER, AND THE BEGINNING OF A TANGENT CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 09 DEGREES 29 MINUTES 11 SECONDS, A RADIUS OF 1360.00 FEET, A CHORD BEARING OF NORTH 11 DEGREES 46 MINUTES 44 SECONDS EAST, WITH A CHORD DISTANCE OF 224.92 FEET;

ALONG SAID TANGENT CURVE TO THE RIGHT AN ARC DISTANCE OF 225.17 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 16 DEGREES 32 MINUTES 57 SECONDS EAST, A DISTANCE OF 537.87 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W.

COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 73 DEGREES 25 MINUTES 28 SECONDS WEST, A DISTANCE OF 90.07 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

SOUTH 61 DEGREES 08 MINUTES 48 SECONDS WEST, A DISTANCE OF 14.16 TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

SOUTH 16 DEGREES 33 MINUTES 14 SECONDS WEST, A DISTANCE OF 89.84 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 73 DEGREES 27 MINUTES 12 SECONDS WEST, A DISTANCE OF 164.88 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 66 DEGREES 14 MINUTES 55 SECONDS WEST, PASSING AT A DISTANCE OF 31.62 FEET THE WEST LINE OF SAD CALLED 73.366 ACRE TRACT AND THE COMMON EAST LINE OF AFORSAD CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE, CONTINUING OVER AND ACROSS SAID CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE, IN ALL A TOTAL DISTANCE OF 55.81 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

THENCE, CONTINUING OVER AND ACROSS SAD CORRECTION PLAT OF CRIMSON RDGE SECTION ONE, THE FOLLOWING COURSES AND DISTANCES:

NORTH 73 DEGREES 27 MINUTES 12 SECONDS WEST, A DISTANCE OF 100.00 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 65 DEGREES 29 MINUTES 02 SECONDS WEST, A DISTANCE OF 50.49 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 63 DEGREES 14 MINUTES 58 SECONDS WEST, A DISTANCE OF 50.80 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 66 DEGREES 36 MINUTES 38 SECONDS WEST, A DISTANCE OF 50.36 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 68 DEGREES 52 MINUTES 46 SECONDS WEST, A DISTANCE OF 50.16 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 71 DEGREES 42 MINUTES 10 SECONDS WEST, A DISTANCE OF 53.69

FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 76 DEGREES 05 MINUTES 17 SECONDS WEST, A DISTANCE OF 60.68 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 79 DEGREES 28 MINUTES 50 SECONDS WEST, A DISTANCE OF 61.05 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

NORTH 81 DEGREES 41 MINUTES 50 SECONDS WEST, A DISTANCE OF 60.10 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

SOUTH 00 DEGREES 20 MINUTES 47 SECONDS EAST, A DISTANCE OF 144.57 FEET TO A 1/2 INCH IRON ROD WITH RED PLASTIC CAP STAMPED "R.W. COOMBS RPLS 5294" FOUND FOR CORNER;

SOUTH 89 DEGREES 20 MINUTES 46 SECONDS WEST, A DISTANCE OF 159.98 FEET TO A 1/2 INCH IRON ROD WITH FOUND FOR THE SOUTHWEST CORNER OF SAID LOT 4B, AND THE COMMON SOUTHEAST CORNER OF LOT 25A, BLOCK 14 OF SAID CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE;

THENCE, NORTH 00 DEGREES 39 MINUTES 14 SECONDS WEST, ALONG THE WEST LINE OF LOTS 4B-1A, AND THE COMMON EAST LINE OF LOTS 25A-28B, BLOCK 14 OF SAID CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE AND OVER AND ACROSS RUSSET TRAIL (A CALLED 60 FOOT RIGHT-OF-WAY), RECORDED IN VOLUME 388-165, PAGE 64, PLAT RECORDS, TARRANT COUNTY, TEXAS, A DISTANCE OF 377.79 FEET TO A POINT IN THE NORTH RIGHT-OF-WAY OF SAID RUSSET TRAIL AND IN THE COMMON SOUTH LINE OF LOT 6A, BLOCK 17 OF SAID CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE;

THENCE, NORTH 89 DEGREES 29 MINUTES 46 SECONDS EAST, ALONG SAID COMMON LINE, A DISTANCE OF 2.50 FEET TO A 1/2 INCH IRON ROD FOUND FOR THE SOUTHWEST CORNER OF SAID LOT 9, AND THE COMMON SOUTHEAST CORNER OF SAID LOT 6A, BLOCK 17;

THENCE, NORTH 00 DEGREES 39 MINUTES 13 SECONDS WEST, ALONG THE WEST LINE OF SAID LOTS 9, AND 8B, AND THE COMMON EAST LINE OF SAID 10A AND 10B, BLOCK 17, A DISTANCE OF 85.31 FEET TO A POINT FOR THE NORTHEAST CORNER OF SAID LOT 10B, BLOCK 17 AND THE COMMON SOUTHEAST CORNER OF SAID LOT 11A, BLOCK 17;

THENCE, NORTH 23 DEGREES 46 MINUTES 17 SECONDS EAST, ALONG THE WEST LINE OF LOTS 8B-6A, AND THE COMMON EAST LINE OF LOTS 11A-13A, BLOCK 17, A DISTANCE OF 296.18 FEET TO A 1/2 INCH IRON ROD FOUND FOR THE NORTHEAST CORNER OF SAID LOT 13A, BLOCK 17, IN A NORTH LINE OF SAID CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE AND THE COMMON SOUTH LINE OF A TRACT OF LAND DESCRIBED IN DEED TO MILTON

F. OWENS AND WIFE ALBERTA OWENS, RECORDED IN VOLUME 11757, PAGE 1639, DEED RECORDS, TARRANT COUNTY, TEXAS;
THENCE, NORTH 89 DEGREES 22 MINUTES 24 SECONDS EAST, ALONG SAID COMMON LINE, A DISTANCE OF 19.97 FEET TO A 1/2 INCH IRON ROD FOUND FOR THE SOUTHEAST CORNER OF SAD MILTON F. OWENS AND WIFE ALBERTA OWENS TRACT, IN A WEST LINE OF AFORESAID FINAL PLAT OF CRIMSON RIDGE SECTION ONE, AND BEING A NORTHWEST CORNER OF SAID CORRECTION PLAT OF CRIMSON RIDGE SECTION ONE;

THENCE, ALONG THE NORTH LINE OF SAID CORRECTION PLAT AND CONTINUING OVER AND ACROSS SAID 73.366 ACRE TRACT, THE FOLLOWING COURSES AND DISTANCES:

SOUTH 50 DEGREES 40 MINUTES 38 SECONDS EAST, A DISTANCE OF 178.28 FEET TO A POINT FOR CORNER AND THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT HAVING A CENTRAL ANGLE OF 03 DEGREES 45 MINUTES 42 SECONDS, A RADIUS OF 270.00 FEET, A CHORD BEARING OF NORTH 41 DEGREES 12 MINUTES 49 SECONDS EAST, WITH A CHORD DISTANCE OF 17.72 FEET;
ALONG SAID NON-TANGENT CURVE TO THE RIGHT AN ARC LENGTH OF 17.73 FEET TO A POINT FOR CORNER;

NORTH 43 DEGREES 05 MINUTES 10 SECONDS EAST, A DISTANCE OF 5.00 FEET TO A POINT FOR CORNER;

SOUTH 46 DEGREES 54 MINUTES 50 SECONDS EAST, A DISTANCE OF 210.02 FEET TO A POINT FOR CORNER;

SOUTH 55 DEGREES 27 MINUTES 37 SECONDS EAST, A DISTANCE OF 169.37 FEET TO A POINT FOR CORNER;

SOUTH 66 DEGREES 20 MINUTES 32 SECONDS EAST, DEPARTING THE EAST LINE OF SAD CORRECTION PLAT AND CONTINUING OVER AND ACROSS SAID 73.366 ACRE TRACT, A DISTANCE OF 226.21 FEET TO A POINT FOR CORNER;

SOUTH 65 DEGREES 37 MINUTES 43 SECONDS EAST, A DISTANCE OF 1210.90 FEET TO THE POINT OF BEGINNING, AND CONTAINING 36.686 ACRES OF LAND MORE OR LESS.

MARY LOUISE GARCIA

COUNTY CLERK



100 West Weatherford Fort Worth, TX 76196-0401

PHONE (817) 884-1195

BAY MOUNTAIN CAPITAL LLC
2633 MCKINNEY AVE STE 130-510
DALLAS, TX 75204

Submitter: BAY MOUNTAIN CAPITAL LLC

DO NOT DESTROY
WARNING - THIS IS PART OF THE OFFICIAL RECORD.

Filed For Registration: 5/28/2014 1:52 PM

Instrument #: D214109111

WD

12

PGS

\$56.00

By: _____

Mary Louise Garcia

D214109111

ANY PROVISION WHICH RESTRICTS THE SALE, RENTAL OR USE OF THE DESCRIBED REAL PROPERTY
BECAUSE OF COLOR OR RACE IS INVALID AND UNENFORCEABLE UNDER FEDERAL LAW.

Mary Louise Nicholson

Mary Louise Nicholson

Crimson Ridge Addition**City Project No. 101913****Balch Street (Shelby Road south towards Proposed Risinger Road)****Parcel #1****STATE OF TEXAS**

§

KNOW ALL MEN BY THESE PRESENTS

§

COUNTY OF TARRANT

§

CITY OF FORT WORTH
DRAINAGE FACILITY EASEMENT

DATE: September 4, 2019

GRANTOR: **CRIMSON RIDGE LAND PARTNERS, LLC****BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY**GRANTOR'S MAILING ADDRESS (including County): **3710 RAWLINS, SUITE 1310**
DALLAS, TX 75219
DALL AS COUNTYGRANTEE: **CITY OF FORT WORTH**GRANTEE'S MAILING ADDRESS (including County):
200 TEXAS ST.
FORT WORTH, TARRANT COUNTY, TX 76102

CONSIDERATION: Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

PROPERTY: Being more particularly described in the attached Exhibits "A" and "B".

Grantor, for the consideration paid to Grantor and other good and valuable consideration, hereby grants, sells, and conveys to Grantee, its successors and assigns, an exclusive, perpetual easement for the construction, operation, maintenance, replacement, upgrade, and repair of a Permanent Drainage Facility, hereafter referred to as "Facility". The Facility includes all incidental underground and aboveground attachments, equipment and appurtenances, including, but not limited to manholes, pipelines, junction boxes, inlets, flumes, headwalls, wingwalls, slope pavement, gabions, rock rip-rap, drop structures and access ramps, and other erosion control measures in, upon, under and across a portion of the Easement Property and more fully described in Exhibit "A" and "B" attached hereto and incorporated herein for all pertinent purposes,

any part thereof, for the purpose of constructing, operating, maintaining, replacing, upgrading, and repairing said Facility. In no event shall Grantor (I) use the Easement Property in any manner which interferes in any material way or is inconsistent with the rights granted hereunder, or (II) erect or permit to be erected within the Easement Property a permanent structure or building, including, but not limited to, monument sign, pole sign, billboard, brick or masonry fences or walls or other structures that require a building permit, or any structure not requiring a building permit but which may threaten the structural integrity or capacity of the Facility and its appurtenances. Grantee shall be obligated to restore the surface of the Easement Property at Grantee's sole cost and expense, including the restoration of any sidewalks, driveways, or similar surface improvements located upon or adjacent to the Easement Property which may have been removed, relocated, altered, damaged, or destroyed as a result of the Grantee's use of the Easement Property granted hereunder provided, however, that Grantee shall not be obligated to restore or replace irrigation systems or other improvements installed in violation of the provisions and intended use of this Easement Property.

TO HAVE AND TO HOLD the above-described Easement Property, together with all and singular the rights and appurtenances thereto in anyway belonging unto Grantee, and Grantee's successors and assigns forever; and Grantor does hereby bind itself and its successors and assigns to warrant and forever defend all and singular the Easement unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

When the context requires, singular nouns and pronouns include the plural.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

GRANTOR: CRIMSON RIDGE LAND PARTNERS, LLC
BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY

By: *Phillip Sanchez*
PHILLIP SANCHEZ, MANAGER

GRANTEE: City of Fort Worth

By (Signature) *Steve Cooke*
(Print Name) Steve Cooke, Title Director, PMB

APPROVED AS TO FORM AND LEGALITY

(Signature) *Jessica Sangsvang*
(Print Name) Jessica Sangsvang, Title Assistant City Attorney

ACKNOWLEDGEMENT

STATE OF TEXAS §
COUNTY OF DALLAS §
~~TARRANT~~

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Phillip Sanchez, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of Crimson Ridge Land Partners LLC and that he/she executed the same as the act of said Crimson Ridge Land Partners LLC for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 9 day of

September 9, 2019.

Daniel Ryznar

ACKNOWLEDGEMENT

STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Steve Cook, Director
Property Management Dept. of the City of Fort Worth, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the City of Fort Worth and that he/she executed the same as the act of the City of Fort Worth for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 29th day of
October, 2019

Katherine Davenport
 Notary Public in and for the State of Texas



EXHIBIT 'A'

METES AND BOUNDS DESCRIPTION

BEING a 2.356 acre tract of land situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth, being a portion of the tract of land described as Tract II in the instrument to Crimson Ridge Land Partners LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas, said 2.356 acre tract of land being more particularly described as follows:

COMMENCING at a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the northeasterly corner of the tract of land described as Tract I in the instrument to Crimson Ridge Land Partners LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas;

THENCE with the easterly line of said Tract 1 South 10° 15' 22" East a distance of 213.08 feet to a 5/8 inch iron rod with a plastic yellow cap stamped "Dunaway Assoc LP" found for corner;

THENCE departing the easterly line of said Tract I South 00° 41' 05" East a distance of 4.56 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the point of curvature of a curve to the right having a radius of 775.00 feet;

THENCE Southwesterly along said curve through a central angle of 35° 21' 55" an arc distance of 478.36 feet with a chord bearing of South 16° 59' 52" West and a chord distance of 470.80 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the point of tangency of said curve;

THENCE South 34° 40' 50" West a distance of 318.04 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the point of curvature of a curve to the left having a radius of 1,100.00 feet;

THENCE Southwesterly along said curve through a central angle of 35° 03' 20" an arc distance of 673.02 feet with a chord bearing of South 17° 09' 10" West and a chord distance of 662.57 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the end of said curve;

THENCE South 00° 21' 10" West a distance of 397.80 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for the POINT OF BEGINNING;

THENCE North 89° 39' 47" East a distance of 84.53 feet to the point of curvature of a curve to the right having a radius of 70.00 feet;

THENCE Southeasterly along said curve through a central angle of $89^{\circ} 34' 25''$ an arc distance of 109.43 feet with a chord bearing of South $45^{\circ} 33' 00''$ East and a chord distance of 98.63 feet to the point of tangency of said curve;

THENCE South $00^{\circ} 45' 48''$ East a distance of 85.31 feet to the point of curvature of a curve to the left having a radius of 13.00 feet:

Description continued on the following page...

B003950.001

PAGE 1 OF 6

A drawing of even date accompanies this metes and bounds description.

AUGUST 28, 2019



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100



DRAINAGE EASEMENT

2.356 ACRES
102,622 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

EXHIBIT 'A'

Description continued from the previous page...

THENCE Southeasterly along said curve through a central angle of $89^{\circ} 38' 57''$ an arc distance of 20.34 feet with a chord bearing of South $45^{\circ} 35' 17''$ East and a chord distance of 18.33 feet to the point of tangency of said curve;

THENCE North $89^{\circ} 35' 15''$ East a distance of 593.98 feet to the point of curvature of a curve to the right having a radius of 100.00 feet;

THENCE Southeasterly along said curve through a central angle of $80^{\circ} 24' 55''$ an arc distance of 140.35 feet with a chord bearing of South $50^{\circ} 12' 18''$ East and a chord distance of 129.11 feet to the point of tangency of said curve;

THENCE South $09^{\circ} 59' 50''$ East a distance of 132.12 feet to a point;

THENCE South $79^{\circ} 20' 44''$ West a distance of 17.76 feet to a point;

THENCE South $10^{\circ} 39' 16''$ East a distance of 14.03 feet to a point;

THENCE South $79^{\circ} 20' 44''$ West a distance of 52.00 feet to a point;

THENCE North $10^{\circ} 39' 16''$ West a distance of 14.03 feet to a point;

THENCE South $79^{\circ} 20' 44''$ West a distance of 15.79 feet to a point;

THENCE North $11^{\circ} 52' 46''$ West a distance of 127.88 feet to the point of curvature of a curve the left having a radius of 8.00 feet;

THENCE Northwesterly along said curve through a central angle of $78^{\circ} 28' 01''$ an arc distance of 10.96 feet with a chord bearing of North $51^{\circ} 06' 46''$ West and a chord distance of 10.12 feet to the point of tangency of said curve;

THENCE South $89^{\circ} 39' 14''$ West a distance of 603.57 feet to the point of curvature of a curve to the right having a radius of 92.00 feet;

THENCE Northwesterly along said curve through a central angle of $91^{\circ} 08' 58''$ an arc distance of 146.36 feet with a chord bearing of North $44^{\circ} 46' 17''$ West and a chord distance of 131.41 feet to the point of tangency of said curve;

THENCE North $00^{\circ} 48' 12''$ East a distance of 98.76 feet to a point;

THENCE North $89^{\circ} 38' 50''$ West a distance of 72.70 feet to a point;

THENCE North $00^{\circ} 21' 10''$ East a distance of 70.66 feet to the POINT OF BEGINNING;

CONTAINING a computed area of 2.356 acres (102,622 square feet) of land.

B003950.001

PAGE 2 OF 6

A drawing of even date accompanies
this metes and bounds description.

AUGUST 28, 2019



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

DRAINAGE EASEMENT

2.356 ACRES
102,622 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

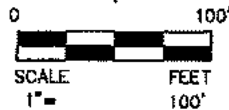
EXHIBIT 'B'

MATCHLINE SHEET 3

MATCHLINE SHEET 4

HOUSING AUTHORITY OF THE
CITY OF FORT WORTH D/B/A
FORT WORTH HOUSING
SOLUTIONS
DOCUMENT NUMBER
D219121945

FOUND 5/8" IRON ROD
WITH CAP STAMPED
"DUNAWAY ASSOC LP"



● = SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.

The basis of bearings for this
survey is the Texas State
Coordinate System, North
Central Zone 4202, based
upon GPS measurements.
Distances and areas hereon
are surface values. A
combined scale factor of
0.999880014 was used for
this project.

FOUND 5/8" IRON ROD
WITH CAP STAMPED
"DUNAWAY ASSOC LP"

SHELBY COUNTY SCHOOL LAND SURVEY
ABSTRACT NO. 1375

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT I
DOCUMENT NUMBER
D214109111

$\Delta = 35^{\circ}03'20"$
 $R = 400.00'$ $L = 673.02'$
 $CH = S77^{\circ}09'10"W$ $662.57'$

MATCHLINE SHEET 4
MATCHLINE SHEET 5

DOCUMENT NUMBER
D214109111
TRACT I

B003950.001

PAGE 4 OF 6

A metes and bounds description of even
date accompanies this drawing.

AUGUST 28, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

DRAINAGE EASEMENT

2.356 ACRES
102,622 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

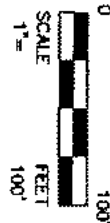
EXHIBIT 'B'

HOUSING AUTHORITY OF THE
CITY OF FORT WORTH D/B/A
FORT WORTH HOUSING SOLUTIONS
DOCUMENT NUMBER
D219121945

POINT OF
BEGINNING
SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

Line Table		
Line Number	Bearing	Distance
L1	S79°20'44"W	17.78'
L2	S10°39'16"E	14.03'
L3	N10°39'16"W	14.03'
L4	S79°20'44"W	15.79'
L5	N89°38'50"W	72.70'

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
B214109111



B003950.001

A metes and bounds description of even
date accompanies this drawing.

AUGUST 28, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

The basis of bearings for this survey is the
Texas State Coordinate System, North
Central Zone 4202, based upon GPS
measurements. Distances and areas hereon
are surface values. A combined scale factor
of 0.999880014 was used for this project.

DRAINAGE EASEMENT
2.356 ACRES
(102,622 SQUARE FEET)

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111

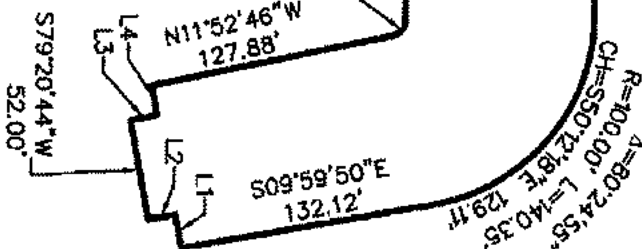
DRAINAGE EASEMENT

2.356 ACRES
102,622 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

PAGE 6 OF 6

● = SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.



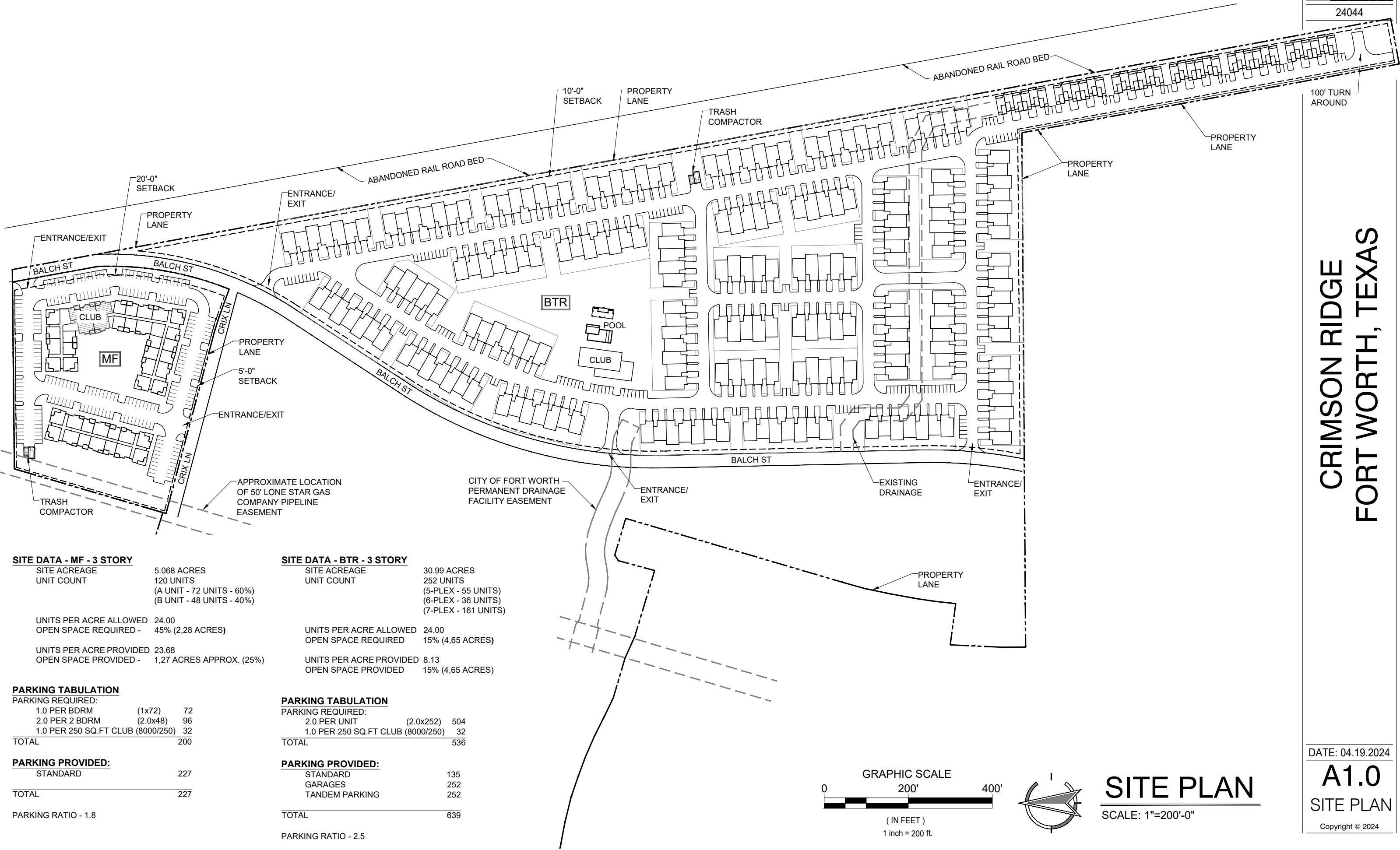
100' TURN
AROUND

CRIMSON RIDGE
FORT WORTH, TEXAS

DATE: 04.19.2024

A1.0
SITE PLAN

Copyright © 2024



SITE DATA - MF - 3 STORY

SITE ACREAGE	5.068 ACRES
UNIT COUNT	120 UNITS (A UNIT - 72 UNITS - 60%) (B UNIT - 48 UNITS - 40%)
UNITS PER ACRE ALLOWED	24.00
OPEN SPACE REQUIRED -	45% (2.28 ACRES)
UNITS PER ACRE PROVIDED	23.68
OPEN SPACE PROVIDED -	1.27 ACRES APPROX. (25%)

PARKING TABULATION

PARKING REQUIRED:		
1.0 PER BDRM	(1x72)	72
2.0 PER 2 BDRM	(2.0x48)	96
1.0 PER 250 SQ.FT CLUB (8000/250)		32
TOTAL		200

PARKING PROVIDED:

STANDARD	227
TOTAL	227

PARKING RATIO - 1.8

SITE DATA - BTR - 3 STORY

SITE ACREAGE	30.99 ACRES
UNIT COUNT	252 UNITS (5-PLEX - 55 UNITS) (6-PLEX - 36 UNITS) (7-PLEX - 161 UNITS)
UNITS PER ACRE ALLOWED	24.00
OPEN SPACE REQUIRED	15% (4.65 ACRES)
UNITS PER ACRE PROVIDED	8.13
OPEN SPACE PROVIDED	15% (4.65 ACRES)

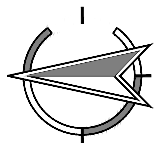
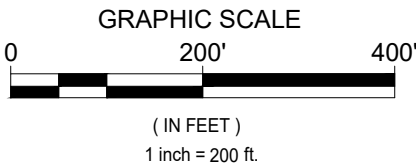
PARKING TABULATION

PARKING REQUIRED:		
2.0 PER UNIT	(2.0x252)	504
1.0 PER 250 SQ.FT CLUB (8000/250)		32
TOTAL		536

PARKING PROVIDED:

STANDARD	135
GARAGES	252
TANDEM PARKING	252
TOTAL	639

PARKING RATIO - 2.5



SITE PLAN

SCALE: 1"=200'-0"

DEED RECORD VOLUME 3391

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TO HAVE AND TO HOLD the above described premises, together with all and singular, the rights and appurtenances thereto in anywise belonging unto the said

Roy S. May and Helen W. May, their heirs and assigns forever; and we do hereby bind ourselves, our heirs, executors and administrators, to Warrant and Forever Defend all and singular the said premises unto the said Roy S. May and Helen W. May, their

heirs and assigns, against every person whomsoever lawfully claiming, or to claim the same or any part thereof.

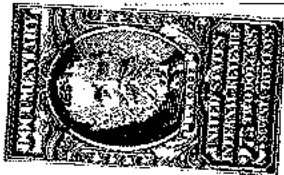
But it is expressly agreed and stipulated that the Vendor's Lien is retained against the above described property, premises and improvements, until the above described note and all interest thereon are fully paid according to its face and tenor, effect and reading, when this deed shall become absolute.

Witness our hands at Fort Worth, Texas,

this 1st day of September, A. D. 1959

Witnesses at Request of Grantor:

Clarence G. Ransom
Texana Ransom



JOINT ACKNOWLEDGMENT

THE STATE OF TEXAS,
COUNTY OF TARRANT

BEFORE ME, the undersigned, a Notary Public,

Clarence G. Ransom

in and for said County, Texas, on this day personally appeared
Texana Ransom,

his wife, both known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they each executed the same for the purposes and consideration therein expressed, and the said

Texana Ransom

wife of the said Clarence G. Ransom, having been

examined by me privily and apart from her husband, and having the same fully explained to her, she, the said Texana Ransom acknowledged such instrument to be her act and deed, and she declared that she had willingly signed the same for the purposes and consideration therein expressed, and that she did not wish to retract it.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 21st day of November, A. D. 1959

(L. S.)

(David Greines)

Notary Public, Tarrant County, Texas.

Filed for Record

NOV 27 1959

at 9:20 a.m.

And Recorded

DEC 2 1959

at 1:14 P.M.

Instrument No. 85670

MELVIN "MEL" FAULK, County Clerk.
Tarrant County, Texas

By H. B. Ruller Deputy

THE STATE OF TEXAS
COUNTY OF TARRANT

KNOW ALL MEN BY THESE PRESENTS: THAT

WHEREAS, under date of February 21, 1920, A. J. Dukes, executed and delivered to Lone Star Gas Company, a corporation, a certain right of way and easement covering 128 acres of land, more or less, out of Block 20, Shelby County School Land, Tarrant County, Texas, more fully described in deed from J. W. Squires, et ux, to A. J. Dukes, recorded in Volume 79, Page 423, Deed Records, said County, and which said right of way agreement is recorded in Volume 653, Page 216, Deed Records, said County, to which record reference is here had and

Copy 11-14-68

85671 2-25

328

made, and

WHEREAS, the said Lone Star Gas Company has been requested to release the above mentioned right of way and easement in so far as same might cover and include that certain 128 acre tract of land out of said Block 20, Shelby County School Land, Tarrant County, Texas, hereinafter more fully described.

NOW, THEREFORE, for and in consideration of the sum of One and No/100 (\$1.00) Dollar, the receipt acknowledged, Lone Star Gas Company, a corporation does hereby release, relinquish and surrender from under the terms and conditions of the aforesaid right of way and easement agreement all that certain 128 acres of land, more or less, out of Block 20, Shelby County School Land, Tarrant County, Texas, SAVE AND EXCEPT a strip of land fifty (50') feet in width upon which Lone Star Gas Company's 16-inch gas pipe line known as Line "J" is presently located, the center line of said excepted strip of land fifty (50') feet in width being more fully described as follows, to-wit:

BEGINNING at the point of intersection of the South line of said Dukes tract with said 16-inch gas pipe line, said point also being 700 feet East from an iron rod set at the intersection of the South line of said tract with the East line of public road, Number 1004, said point also being the entry into said Dukes tract;

THENCE N17°02'E, a distance of 2413 feet to a point an angle in the route herein described;

THENCE N17°24'E, a distance of 309 feet to the South line of a public road No. 1097, a width of 61.5 feet along the North

line of said Dukes tract, said point also being 371 feet S89°48'W from the intersection of the South line of said road with the West line of I & G N.R.R. Company right of way, said point also being the point of exit from said Dukes tract.

Lone Star Gas Company further expressly excepts from the operation of this release and reserves and retains unto itself the right of ingress and egress to and from said strip of land fifty (50') feet in width, the center of which said strip being that part of said land where the pipe line is presently located, for the purpose of operating, inspecting, maintaining and removing its pipe line or lines.

It is expressly understood and agreed that this partial release is limited to the said right of way and easement agreement dated February 21, 1920, and to the premises specifically released, being all the hereinabove described 128 acres out of Block 20, Shelby County School Land, Tarrant County, Texas, Save and Except the hereinabove described strip of land fifty feet (50') in width, together with right of ingress and egress as hereinbefore set out and all other rights, title and interest secured in said right of way and easement agreement insofar as same affect the excepted strip of land and easement to be used in connection therewith, are continued in full force according to its wording, tenor and effect, and as to any and all other easements of Lone Star Gas Company affecting said land and premises, same shall remain in full binding force and effect unless same have been specifically released.

WITNESS THE EXECUTION HEREOF, on this 14th day of SEPTEMBER, A. D.

1959.

DEED RECORD VOLUME 3391

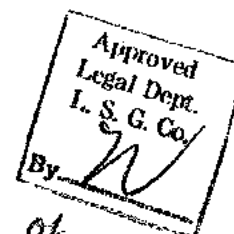
329



LONE STAR GAS COMPANY

By J. M. Riddle
Vice PresidentR.G.M.
9-11-59.

J.H.A.

ok
[Signature]STATE OF TEXAS
COUNTY OF DALLAS

BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared J. M. Riddle, Vice President of LONE STAR GAS COMPANY, a corporation, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity therein stated, and as the act and deed of said corporation.



GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 11th day of September, 1959.

Geraldine Knox
NOTARY PUBLIC IN AND FOR
DALLAS COUNTY, TEXAS

GERALDYNE KNOX, Notary Public
In and for Dallas County, Texas

Filed for Record NOV 27 1959 at 7:24 AM;

And Recorded DEC 2 1959 at 1:16 P.M.

Instrument No. 85671 MELVIN "MEL" FAULK, County Clerk.
Tarrant County, Texas

By H. Rutledge Deputy

85672 2ndORDINANCE NO. 4190

AN ORDINANCE PERMITTING ALICE R. BITTICK, A FINE GOLF, FOR HEIRS AND ASSIGNS, TO LEAVE THE EXISTING BUILDING FOR A MAXIMUM DISTANCE AS IT IS NOW LOCATED IN COLLEGE AVENUE ALONG THE WEST LINE OF THE WEST ONE-THIRD OF LOT 1, BLOCK 3, COLLEGE HILL ADDITION TO THE CITY OF FORT WORTH, TARRANT COUNTY, TEXAS, AND THE STEPS AS THEY ARE NOW LOCATED IN PENNSYLVANIA AVENUE ALONG THE NORTH LINE OF SAID PORTION OF SAID LOT 1, BLOCK 3, COLLEGE HILL ADDITION; AND PROVIDING THAT THIS ORDINANCE SHALL BECOME EFFECTIVE IMMEDIATELY.

WHEREAS, Alice R. Bittick is the owner of the West one-third of Lot 1, Block 3, College Hill Addition to the City of Fort Worth, Tarrant County, Texas, along the west line of which a property encroachment exists in College Avenue, and along the north line of which a property encroachment exists in Pennsylvania Avenue; NOW, THEREFORE,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORT WORTH, TEXAS:

SECTION 1.00.

Stallion Pointe
Parcel # 01
CP # 100120
Lot 1, Block 16R, Crimson Ridge

STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS
COUNTY OF TARRANT §

TEMPORARY TURNAROUND FACILITY EASEMENT

DATE: June 28, 2016

GRANTOR: **CRIMSON RIDGE LAND PARTNERS, LLC**

GRANTOR'S MAILING ADDRESS (including County):
**3710 RAWLINS, SUITE 1390
DALLAS, DALLAS COUNTY, TX 75219**

GRANTEE: **CITY OF FORT WORTH**

GRANTEE'S MAILING ADDRESS (including County):
**1000 THROCKMORTON ST.
FORT WORTH, TARRANT COUNTY, TX 76102**

CONSIDERATION: Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

PROPERTY: Being a portion of that certain tract of land situated in Block 20 of the Shelby County School Land Survey, Abstract No. 1375, being part of Tract 1 - 36.686 acre tract of land described in a deed to Crimson Ridge Land Partners, LLC as recorded in instrument Number D214109111, Official Public Records, Tarrant County, Texas and being more particularly described in Exhibits "A" and "B". (0.185 Acres)

GRANTOR, for the CONSIDERATION paid to GRANTOR and GRANTOR's performance of the condition specified below, hereby grants, sells, and conveys to GRANTEE its successors and assigns, an exclusive temporary easement for the construction, operation, maintenance, and repair of a Paved Turnaround Facility ("Facility") in, upon under and across a portion of the PROPERTY and more fully described in Exhibit "A" and "B" attached hereto and incorporated herein for all pertinent purposes, together with the right and privilege at any and all times to enter PROPERTY, or any part thereof, for the purpose of constructing, maintaining, replacing,

and repairing said Temporary Facility and use by the public. GRANTOR covenants and agrees that within the Easement PROPERTY, no permanent structure or building (including, but not limited to brick or masonry fences or walls or other structures that require a building permit) shall be erected. In addition, GRANTOR covenants and agrees it will not use the Easement PROPERTY in a manner that interferes with the operation, use, repair or maintenance of the Facility.

GRANTOR acknowledges and agrees that GRANTEE'S acceptance of this easement is conditioned upon GRANTOR constructing the turnaround facility to standards and dimensions acceptable to GRANTEE. The standards and dimensions acceptable to GRANTEE are attached as Exhibit "C".

TO HAVE AND TO HOLD the above-described easement, together with all and singular the rights and appurtenance thereto in anyway belonging unto GRANTEE, and GRANTEE's successors and assigns shall continue until: (i) an acceptable permanent turnaround facility is dedicated to GRANTEE or (ii) a plat for the adjacent tract of land known as Tract I - 36.686 acre tract of land described in a deed to Crimson Ridge Land Partners, LLC as recorded in instrument Number D214109111, Official Public Records, Tarrant County, Texas that shows the continuance of the Scarlet Way street abutting the Temporary Turnaround Easement is approved and recorded, such street is shown on the proposed plat attached hereto as Exhibit "D" City Case Number FP-15-120. GRANTOR does hereby bind itself and its successor and assigns to WARRANT AND DEFEND all and singular the easement unto GRANTEE, its successor and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

When the context requires, singular nouns and pronouns include the plural.

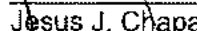
[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

GRANTOR: Crimson Ridge Land
Partners, LLC, a Limited
Liability Corporation

By: Bay Mountain Capital LLC
Its: Manager


By: Dean Lontos
Manager

GRANTEE: City of Fort Worth


Jesus J. Chapa
Assistant City Manager

APPROVED AS TO FORM AND LEGALITY


Assistant City Attorney

ACKNOWLEDGEMENT

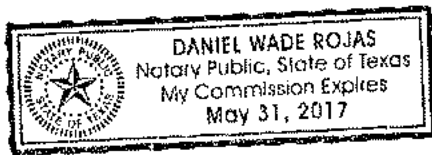
STATE OF TEXAS §

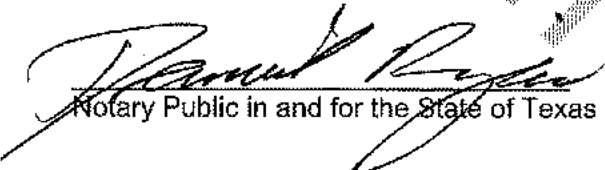
COUNTY OF Dallas §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared **Dean Lontos, Manager of Bay Mountain Capital LLC, the Manager of Crimson Ridge Land Partners, LLC**, a Limited Liability Corporation, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of Crimson Ridge Land Partners, LLC and that he/she executed the same as the act of said Crimson Ridge Land Partners, LLC for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 28 day of

June, 2016.




Notary Public in and for the State of Texas

GRANTEE: CITY OF FORT WORTH

By: Steve Cooke
Steve Cooke
Property Management Director

APPROVED AS TO FORM AND LEGALITY

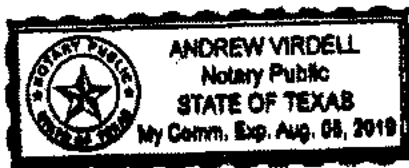
Jessica Sangsray
Assistant City Attorney
Jessica Sangsray

ACKNOWLEDGEMENT

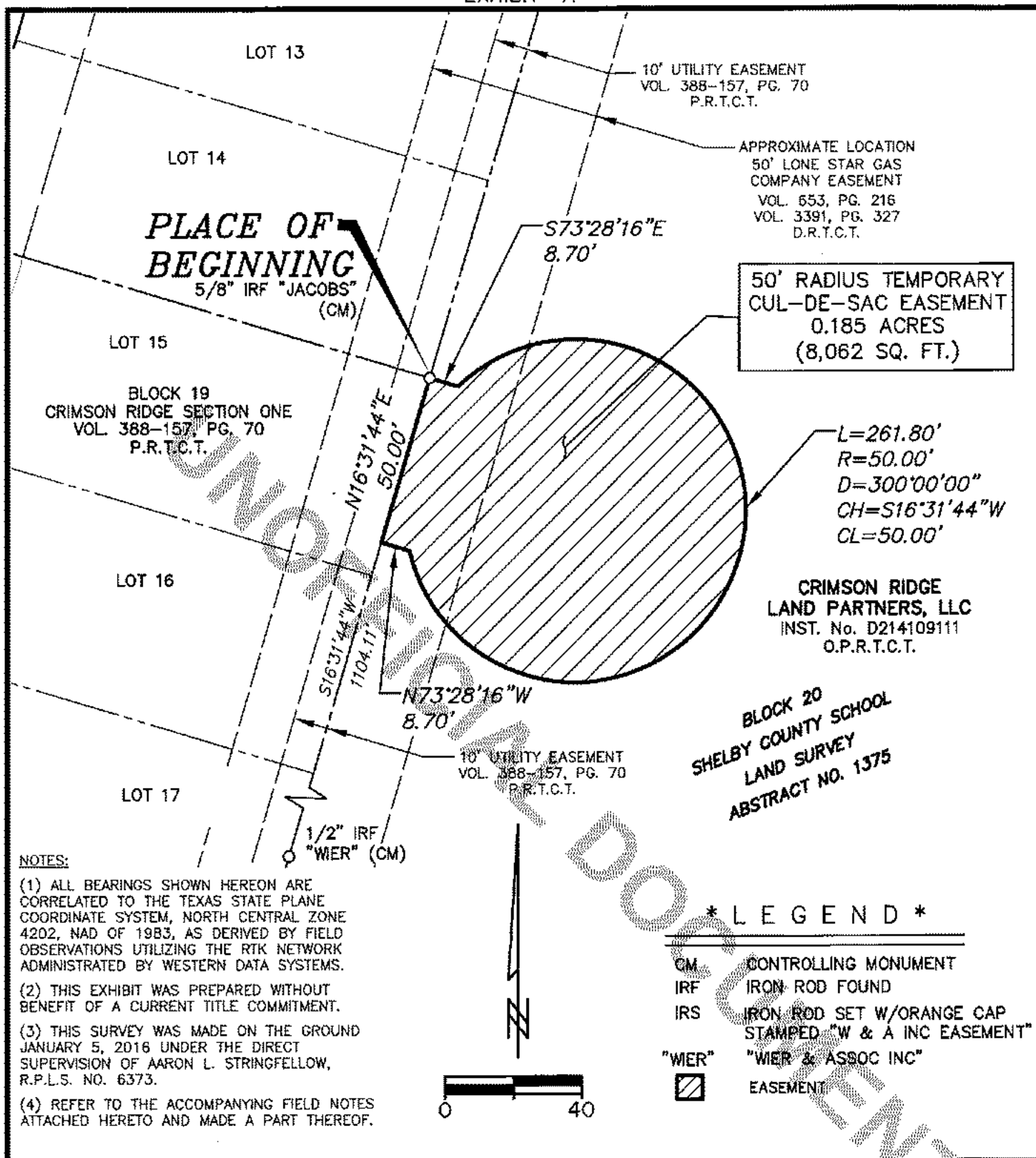
STATE OF TEXAS §
COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared **Steve Cooke, Property Management Director of the City of Fort Worth**, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of City of Fort Worth and that he/she executed the same as the act of City of Fort Worth for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 11th day of July, 2016



Andrew Virdehl
Notary Public, State of Texas





				<div style="text-align: center;">  <h1 style="margin: 0;">FORT WORTH</h1> </div>			
				<div style="text-align: center;"> CRIMSON RIDGE LAND PARTNERS, LLC 50' RADIUS TEMPORARY CUL-DE-SAC EASEMENT CITY OF FORT WORTH, TARRANT COUNTY, TEXAS </div>			
REV.	DATE	BY	DESCRIPTION	CHK.	<div style="display: flex; justify-content: space-between;"> <div> DRAWN BY: JLV CHECKED BY: <i>JS</i> SCALE: 1"=40' </div> <div> DATE: 02-22-2016 DATE: 02-22-2016 APP: <i>JS</i> </div> <div> DWG. NO. <div style="font-size: 2em; text-align: center;">1 OF 2</div> </div> </div>		
SURVEYOR PREPARING THIS EXHIBIT: <div style="display: flex; align-items: center;">  <div> WIER & ASSOCIATES, INC. 2201 LAMAR BLVD., SUITE 200E ARLINGTON, TEXAS 76006 METRO (817)467-7700 Texas Firm Registration No. F-2776 www.WierAssociates.com Texas Board of Land Surveying Registration No. 10033900 </div> </div>							

EXHIBIT "B"

FIELD NOTES - DESCRIPTION
50' RADIUS TEMPORARY CUL-DE-SAC EASEMENT

BEING A TRACT OF LAND LOCATED IN BLOCK 20 OF THE SHELBY COUNTY SCHOOL LAND SURVEY, ABSTRACT No. 1375, TARRANT COUNTY, TEXAS, BEING A PORTION OF A TRACT OF LAND DESCRIBED IN A DEED TO CRIMSON RIDGE LAND PARTNERS, LLC RECORDED IN INSTRUMENT NUMBER D214109111, OFFICIAL PUBLIC RECORDS, TARRANT COUNTY, TEXAS (O.P.R.T.C.T.), AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 5/8" IRON ROD FOUND WITH A CAP STAMPED "JACOBS", SAID IRON ROD BEING THE NORTHEAST CORNER OF LOT 15, BLOCK 19, CRIMSON RIDGE SECTION ONE, AN ADDITION TO THE CITY OF FORT WORTH, TARRANT COUNTY TEXAS, ACCORDING TO THE PLAT RECORDED IN VOLUME 388-157, PAGE 70, PLAT RECORDS, TARRANT COUNTY, TEXAS (P.R.T.C.T.) AND THE SOUTHEAST CORNER OF LOT 14 OF SAID BLOCK 19;

THENCE SOUTH 73°28'16" EAST, DEPARTING THE EAST LINE OF SAID LOT 15, A DISTANCE OF 8.70 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT;

THENCE SOUTHWESTERLY, AN ARC LENGTH OF 261.80 FEET, ALONG SAID NON-TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 50.00 FEET, A DELTA ANGLE OF 300°00'00", AND A CHORD BEARING OF SOUTH 16°31'44" WEST, A DISTANCE OF 50.00 FEET TO A POINT;

THENCE NORTH 73°28'16" WEST, A DISTANCE OF 8.70 FEET TO A POINT IN THE EAST LINE OF SAID LOT 15, FROM WHICH A 1/2" IRON ROD FOUND WITH A CAP STAMPED "WIER & ASSOC INC" BEARS SOUTH 16°31'44" WEST, A DISTANCE OF 1104.11 FEET, SAID IRON ROD BEING IN THE EAST LINE OF LOT 19B, BLOCK 13, CRIMSON RIDGE SECTION ONE, AN ADDITION TO THE CITY OF FORT WORTH, TARRANT COUNTY, TEXAS, ACCORDING TO THE PLAT RECORDED IN VOLUME 388-165, PAGE 64, P.R.T.C.T. AND IN THE NORTH LINE OF A TRACT OF LAND DESCRIBED IN A DEED TO EVERMAN INDEPENDENT SCHOOL DISTRICT RECORDED IN INSTRUMENT NUMBER D207236624, O.P.R.T.C.T.;

THENCE NORTH 16°31'44" EAST, ALONG THE EAST LINE OF SAID LOT 15, A DISTANCE OF 50.00 FEET TO THE PLACE OF BEGINNING AND CONTAINING 0.185 ACRES (8,062 SQUARE FEET) OF LAND, MORE OR LESS.



THIS SURVEY WAS MADE ON THE GROUND UNDER THE DIRECT SUPERVISION OF AARON L. STRINGFELLOW, R.P.L.S. NO. 6373 ON JANUARY 5, 2016. ALL BEARINGS RECITED HEREIN ARE CORRELATED TO THE TEXAS STATE PLANE COORDINATE SYSTEM, NORTH CENTRAL ZONE 4202, NAD OF 1983. REFER TO THE ACCOMPANYING EXHIBIT ATTACHED HERETO AND MADE A PART HEREOF.

REV.	DATE	BY	DESCRIPTION	CHK.

FORT WORTH

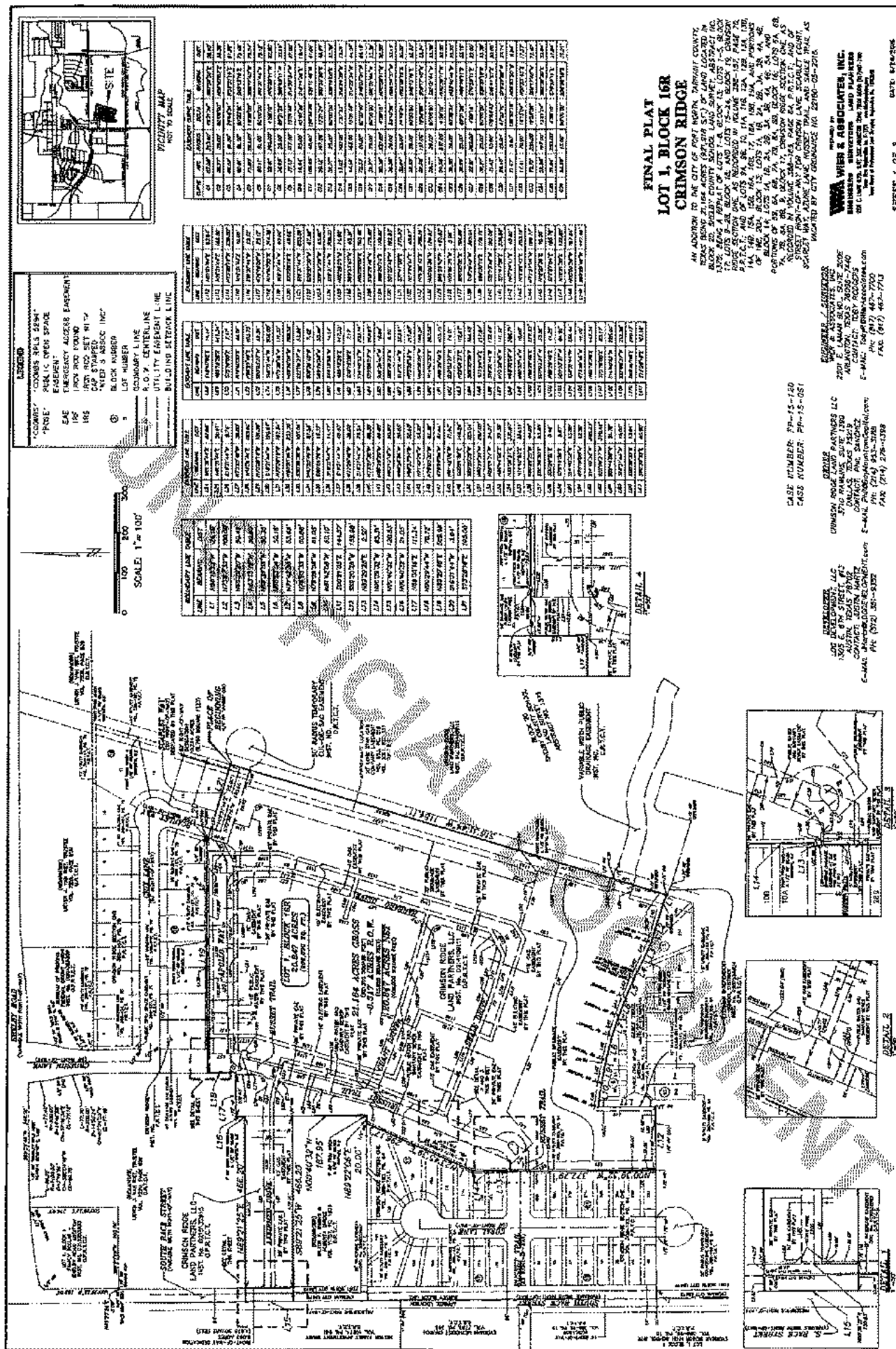


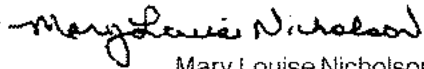
CRIMSON RIDGE LAND PARTNERS, LLC
50' RADIUS TEMPORARY CUL-DE-SAC EASEMENT
CITY OF FORT WORTH, TARRANT COUNTY, TEXAS

WIA SURVEYOR PREPARING THIS EXHIBIT:
WIER & ASSOCIATES, INC.

2201 LAMAR BLVD., SUITE 200E ARLINGTON, TEXAS 76006 METRO (817)467-7700
Texas Firm Registration No. F-2776 www.WierAssociates.com
Texas Board of Land Surveying Registration No. 10033900

DRAWN BY: JLV	DATE: 02-22-2016	DWG. NO.	REV.
CHECKED BY: <i>JB</i>	DATE: 02-22-2016	2 OF 2	
SCALE: N/A	APP.: <i>JB</i>		





Mary Louise Nicholson

Crimson Ridge Addition**City Project No. 101913****Balch Street (Shelby Road south towards Proposed Risinger Road)***Parcel #9***STATE OF TEXAS**

§

§

COUNTY OF TARRANT

§

KNOW ALL MEN BY THESE PRESENTS

CITY OF FORT WORTH
WATER FACILITY EASEMENT

DATE: September 4, 2019

GRANTOR: **CRIMSON RIDGE LAND PARTNERS, LLC****BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY**GRANTOR'S MAILING ADDRESS (including County): **3710 RAWLINS, SUITE 1310****DALLAS, TX 75219****DALLAS COUNTY**GRANTEE: **CITY OF FORT WORTH**

GRANTEE'S MAILING ADDRESS (including County):

200 TEXAS ST.**FORT WORTH, TARRANT COUNTY, TX 76102**

CONSIDERATION: Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

PROPERTY: **Being more particularly described in attached Exhibits "A" and "B"**

Grantor, for the Consideration paid to Grantor and other good and valuable consideration, hereby grants, sells, and conveys to Grantee, its successors and assigns, an exclusive, perpetual easement for the construction, operation, maintenance, replacement, upgrade, and repair of a Permanent Water Main Facility, hereafter referred to as "Facility". The Facility includes all incidental underground and aboveground attachments, equipment and appurtenances, including, but not limited to manholes, manhole vents, lateral line connections, valves, pipelines, water meters, junction boxes in, upon, under and across a portion of the Easement Property and more fully described in Exhibits "A" and "B" attached hereto and

times to enter Easement Property, or any part thereof, for the purpose of constructing, operating, maintaining, replacing, upgrading, and repairing said Facility.

In no event shall Grantor (I) use the Easement Property in any manner which interferes in any material way or is inconsistent with the rights granted hereunder, or (II) erect or permit to be erected within the Easement Property a permanent structure or building, including, but not limited to, monument sign, pole sign, billboard, brick or masonry fences or walls or other structures that require a building permit. However, Grantor shall be permitted to install and maintain a concrete, asphalt or gravel driveway, road or parking lot across the Easement Property. Grantee shall be obligated to restore the surface of the Easement Property at Grantee's sole cost and expense, including the restoration of any sidewalks, driveways, or similar surface improvements located upon or adjacent to the Easement Property which may have been removed, relocated, altered, damaged, or destroyed as a result of the Grantee's use of the Easement Property granted hereunder. Provided, however, that Grantee shall not be obligated to restore or replace irrigation systems or other improvements installed in violation of the provisions and intended use of this Easement Property.

TO HAVE AND TO HOLD the above-described Easement Property, together with all and singular the rights and appurtenances thereto in anyway belonging unto Grantee, and Grantee's successors and assigns forever; and Grantor does hereby bind itself and its successor and assigns to warrant and forever defend all and singular the Easement Property unto Grantee, its successor and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

When the context requires, singular nouns and pronouns include the plural.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

GRANTOR: CRIMSON RIDGE LAND PARTNERS, LLC
BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY

By: *Phillip Sanchez*
PHILLIP SANCHEZ, MANAGER

GRANTEE: City of Fort Worth

By (Signature): *Steve Cooke*
(Print Name) Steve Cooke, Title Director, PMD

APPROVED AS TO FORM AND LEGALITY

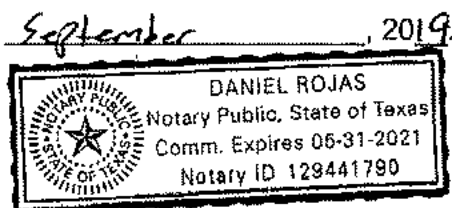
(Signature) *Jessica Sangsawang*
(Print Name) Jessica Sangsawang, Title Assistant City Attorney

ACKNOWLEDGEMENT

STATE OF TEXAS §
DALLAS
COUNTY OF ~~TARRANT~~ §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Phillip Sanchez, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of Crimson Ridge Land Partners LLC and that he/she executed the same as the act of said Crimson Ridge Land Partners LLC for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 9 day of



Daniel Rojas

ACKNOWLEDGEMENT

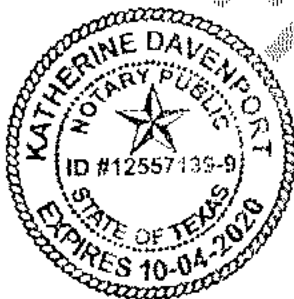
STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this 29th day, personally appeared Steve Cook, Director, Property Mgt. Dept. of the City of Fort Worth, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the City of Fort Worth and that he/she executed the same as the act of the City of Fort Worth for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 29th day ofOctober 2019.

Katherine Davenport
Notary Public in and for the State of Texas



METES AND BOUNDS DESCRIPTION

BEING a 0.005 acre tract of land situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth, being a portion of the tract of land described as Tract I in the Instrument to Crimson Ridge Land Partners LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas, said 0.005 acre tract of land being more particularly described as follows:

COMMENCING at a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the northeasterly corner of said Tract I;

THENCE with the easterly line of said Tract I South 10° 15' 22" East a distance of 213.08 feet to a 5/8 inch iron rod with a plastic yellow cap stamped "Dunaway Assoc LP" found for corner;

THENCE departing the easterly line of said Tract I South 00° 41' 05" East a distance of 4.56 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the point of curvature of a curve to the right having a radius of 775.00 feet;

THENCE Southwesterly along said curve through a central angle of 24° 11' 52" an arc distance of 327.30 feet with a chord bearing of South 11° 24' 51" West and a chord distance of 324.88 feet to a 5/8 inch iron rod with a plastic yellow cap stamped "Dunaway Assoc LP" set for the POINT OF BEGINNING;

THENCE South 62° 20' 11" East a distance of 15.03 feet to a point;

THENCE South 24° 04' 07" West a distance of 15.03 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for corner;

THENCE North 62° 20' 11" West a distance of 15.03 feet to a point in a non-tangent curve to the left having a radius of 775.00 feet;

THENCE Northeasterly along said curve through a central angle of 01° 06' 40" an arc distance of 15.03 feet with a chord bearing of North 24° 04' 07" East and a chord distance of 15.03 feet to the POINT OF BEGINNING;

CONTAINING a computed area of 0.005 acres (225 square feet) of land.

EXHIBIT 'A'

B003950.001

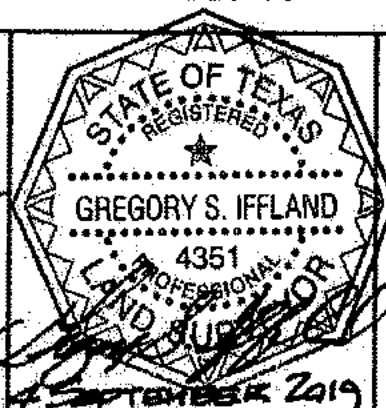
PAGE 1 OF 2

A drawing of even date accompanies
this metes and bounds description.

SEPTEMBER 4, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817-335-1121
FIRM REGISTRATION 10098100



WATER EASEMENT

0.005 ACRES
225 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

LIEVEN J. VAN RIET, TRUSTEE
VOLUME 7229, PAGE 809

SHELBY COUNTY SCHOOL LAND SURVEY
ABSTRACT NO. 1375

POINT OF
COMMENCING
FOUND 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

S10°15'22"E
213.08'

S00°41'05"E
4.56'

FOUND 5/8" IRON ROD
WITH CAP STAMPED
"DUNAWAY ASSOC LP"

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT I
DOCUMENT NUMBER
D214109111

POINT OF
BEGINNING
SET 5/8" IRON ROD
WITH CAP STAMPED
"DUNAWAY ASSOC LP"

WALL 007, LLC
DOCUMENT NUMBER
D217259397

HOUSING AUTHORITY OF THE
CITY OF FORT WORTH
D/B/A FORT WORTH
HOUSING SOLUTIONS
DOCUMENT NUMBER
D219121945

$\Delta=1'06'40"$
R=775.00' L=15.03'
CH=N24°04'07"E 15.03'

$\Delta=24'11'52"$
R=775.00' L=327.30'
CH=S17°24'51"W 324.88'

S62°20'11"E
15.03'

S24°04'07"W
15.03'

N62°20'11"W
15.03'

WATER EASEMENT
0.005 ACRES
(225 SQUARE FEET)

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT I
DOCUMENT NUMBER
D214109111

● =SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.

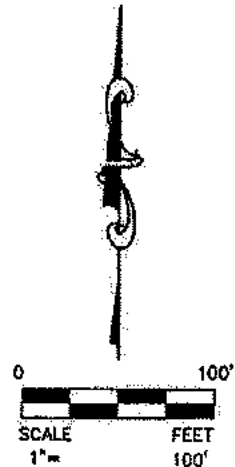


EXHIBIT 'A'

B003950.001

PAGE 2 OF 2

A metes and bounds description of even
date accompanies this drawing.

SEPTEMBER 4, 2019

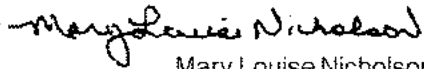
DUNAWAY

650 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.336.1121
FIRM REGISTRATION 10098100

WATER EASEMENT

0.005 ACRES
225 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS



Mary Louise Nicholson

Crimson Ridge Addition**City Project No. 101913****Balch Street (Shelby Road south towards Proposed Risinger Road)****Parcel #6****STATE OF TEXAS**

§

§

KNOW ALL MEN BY THESE PRESENTS**COUNTY OF TARRANT**

§

CITY OF FORT WORTH
SEWER FACILITY EASEMENT

DATE: September 3, 2019

GRANTOR: **CRIMSON RIDGE LAND PARTNERS, LLC**BY: **BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY**

GRANTOR'S MAILING ADDRESS (Including County): **3710 RAWLINS, SUITE 1310**
DALLAS, TX 75219
DALL AS COUNTY

GRANTEE: **CITY OF FORT WORTH**
200 TEXAS STREET
FORT WORTH, TARRANT COUNTY, TX 76102

CONSIDERATION: Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

PROPERTY: **Being more particularly described in the attached Exhibits "A" and "B".**

Grantor, for the consideration paid to Grantor and other good and valuable consideration, hereby grants, sells, and conveys to Grantee, its successors and assigns, an exclusive, perpetual easement for the construction, operation, maintenance, replacement, upgrade, and repair of a Permanent Sewer Line Facility, hereafter referred to as "Facility". The Facility includes all incidental underground and aboveground attachments, equipment and appurtenances, including, but not limited to manholes, manhole vents, lateral line connections, pipelines, junction boxes in, upon, under and across a portion of the Property and more fully described in Exhibit "A" attached hereto and incorporated herein for all pertinent purposes, together with the right and privilege at any and all times to enter Property, or any part thereof,

In no event shall Grantor (I) use the Property in any manner which interferes in any material way or is inconsistent with the rights granted hereunder, or (II) erect or permit to be erected within the easement property a permanent structure or building, including, but not limited to, monument sign, pole sign, billboard, brick or masonry fences or walls or other structures that require a building permit. However, Grantor shall be permitted to install and maintain a concrete, asphalt or gravel driveway, road or parking lot across the Easement Property. Grantee shall be obligated to restore the surface of the Property at Grantee's sole cost and expense, including the restoration of any sidewalks, driveways, or similar surface improvements located upon or adjacent to the Easement Tract which may have been removed, relocated, altered, damaged, or destroyed as a result of the Grantee's use of the easement granted hereunder. Provided, however, that Grantee shall not be obligated to restore or replace irrigation systems or other improvements installed in violation of the provisions and intended use of this Easement.

TO HAVE AND TO HOLD the above-described easement, together with all and singular the rights and appurtenances thereto in anyway belonging unto Grantee, and Grantee's successors and assigns forever; and Grantor does hereby bind itself and its successor and assigns to warrant and forever defend all and singular the easement unto Grantee, its successor and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

When the context requires, singular nouns and pronouns include the plural.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

GRANTOR: CRIMSON RIDGE LAND PARTNERS, LLC
BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY

By: *Phillip Sanchez*
PHILLIP SANCHEZ, MANAGER

GRANTEE: City of Fort Worth

By (Signature): *Steve Cooke*
(Print Name) Steve Cooke, Title Director, PMD

APPROVED AS TO FORM AND LEGALITY
(Signature) *Jessica Sangsvang*
(Print Name) Jessica Sangsvang, Title Assistant City Attorney

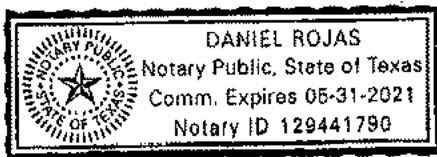
ACKNOWLEDGEMENT

STATE OF TEXAS §
COUNTY OF ~~TARRANT~~ DALLAS §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Phillip Sanchez, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of Crimson Ridge Land Partners LLC and that he/she executed the same as the act of said Crimson Ridge Land Partners LLC for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 9 day of

September 9, 2019.



ACKNOWLEDGEMENT

STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this 29th day personally appeared Steve Cook, Director of the City of Fort Worth, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the City of Fort Worth and that he/she executed the same as the act of the City of Fort Worth for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 29th day of

October, 2019

Katherine Davenport
Notary Public in and for the State of Texas



METES AND BOUNDS DESCRIPTION

BEING a 0.019 acre tract of land situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth, being a portion of the tract of land described as Tract II in the instrument to Crimson Ridge Land Partners LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas, said 0.019 acre tract of land being more particularly described as follows:

COMMENCING at a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the northeasterly corner of the tract of land described as Tract I in the instrument to Crimson Ridge Land Partners LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas;

THENCE with the easterly line of said Tract I South 10° 15' 22" East a distance of 213.08 feet to a 5/8 inch iron rod with a plastic yellow cap stamped "Dunaway Assoc LP" found for corner;

THENCE departing the easterly line of said Tract I South 00° 41' 05" East a distance of 4.56 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the point of curvature of a curve to the right having a radius of 775.00 feet;

THENCE Southwesterly along said curve through a central angle of 35° 21' 55" an arc distance of 478.36 feet with a chord bearing of South 16° 59' 52" West and a chord distance of 470.80 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the point of tangency of said curve;

THENCE South 34° 40' 50" West a distance of 318.04 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the point of curvature of a curve to the left having a radius of 1100.00 feet;

THENCE Southwesterly along said curve through a central angle of 35° 03' 20" an arc distance of 673.02 feet with a chord bearing of South 17° 09' 10" West and a chord distance of 662.57 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the end of said curve;

THENCE South 00° 21' 10" West a distance of 155.03 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for the POINT OF BEGINNING;

THENCE South 89° 38' 50" East a distance of 55.00 feet to a point;

THENCE South 00° 21' 10" West a distance of 15.00 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for corner;

THENCE North 89° 38' 50" West a distance of 55.00 feet to a point;

THENCE North 00° 21' 10" East a distance of 15.00 feet to the POINT OF BEGINNING;

CONTAINING a computed area of 0.019 acres (825 square feet) of land.

EXHIBIT 'A'

B003950.001

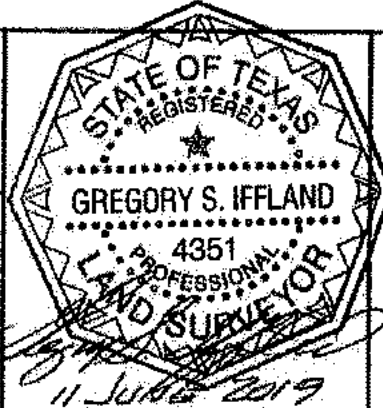
PAGE 1 OF 3

A drawing of even date accompanies
this metes and bounds description.

JUNE 11, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100



SANITARY SEWER EASEMENT

0.019 ACRES
825 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

LIEVEN J. VAN RIET, TRUSTEE
VOLUME 7229, PAGE 809

SHELBY COUNTY SCHOOL LAND SURVEY
ABSTRACT NO. 13775

POINT OF
COMMENCING
FOUND 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

0 100'
SCALE
1" = 100'

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT I
DOCUMENT NUMBER
D214109111

● = SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.

S00°41'05"E
4.56'

FOUND 5/8" IRON ROD
WITH CAP STAMPED
"DUNAWAY ASSOC LP"

WALL 007, LLC
DOCUMENT NUMBER
D217259397

HOUSING AUTHORITY OF THE CITY OF
FORT WORTH D/B/A FORT WORTH
HOUSING SOLUTIONS
DOCUMENT NUMBER
D219121945

FOUND 5/8" IRON ROD
WITH CAP STAMPED
"DUNAWAY ASSOC LP"

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT I
DOCUMENT NUMBER
D214109111

S34°40'50"W
318.04'

FOUND 5/8" IRON ROD WITH
YELLOW CAP STAMPED
"DUNAWAY ASSOC LP"

MATCHLINE SHEET 2
MATCHLINE SHEET 3

EXHIBIT 'B'

PAGE 2 OF 3

A metes and bounds description of even
date accompanies this drawing.

JUNE 11, 2019

DUNAWAY

660 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

SANITARY SEWER EASEMENT

0.019 ACRES
825 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

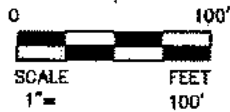
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MATCHLINE SHEET 2

MATCHLINE SHEET 3

FOUND 5/8" IRON ROD WITH
YELLOW CAP STAMPED
"DUNAWAY ASSOC LP"

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT I
DOCUMENT NUMBER
D214109111



- = SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.

HOUSING AUTHORITY OF THE CITY OF
FORT WORTH D/B/A FORT WORTH
HOUSING SOLUTIONS
DOCUMENT NUMBER
D219121945

SHELBY COUNTY SCHOOL
LAND SURVEY
ABSTRACT NO. 1375

DOCUMENT NUMBER
D214109111
TRACT I

DOCUMENT NUMBER
D214109111
TRACT II

FOUND 5/8" IRON ROD WITH
YELLOW CAP STAMPED
"DUNAWAY ASSOC LP"

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111

POINT OF
BEGINNING

SET 5/8" IRON ROD
WITH CAP STAMPED
"DUNAWAY ASSOC LP"

N00°21'10"E
15.00'

S00°21'10"W
155.03'

S89°38'50"E
55.00'

SANITARY SEWER
EASEMENT
0.019 ACRES
(825 SQUARE FEET)

S00°21'10"W
15.00'

N89°38'50"W
55.00'

EXHIBIT 'B'

B003950.001

PAGE 3 OF 3

A metes and bounds description of even
date accompanies this drawing.

JUNE 11, 2019

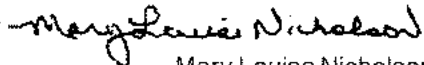
DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

SANITARY SEWER EASEMENT

0.019 ACRES
825 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS



Mary Louise Nicholson

Parcel #5

Crimson Ridge Addition

City Project No. 101913

Balch Street (Shelby Road south towards Proposed Risinger Road)

STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF TARRANT

§

§

CITY OF FORT WORTH
SEWER FACILITY EASEMENT

DATE: September 3, 2019

GRANTOR: CRIMSON RIDGE LAND PARTNERS, LLC

BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY

GRANTOR'S MAILING ADDRESS (Including County): 3710 RAWLINS, SUITE 1310
 DALLAS, TX 75219
 DALL AS COUNTY

GRANTEE: CITY OF FORT WORTH
 200 TEXAS STREET
 FORT WORTH, TARRANT COUNTY, TX 76102

CONSIDERATION: Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

PROPERTY: Being more particularly described in the attached Exhibits "A" and "B".

Grantor, for the consideration paid to Grantor and other good and valuable consideration, hereby grants, sells, and conveys to Grantee, its successors and assigns, an exclusive, perpetual easement for the construction, operation, maintenance, replacement, upgrade, and repair of a Permanent Sewer Line Facility, hereafter referred to as "Facility". The Facility includes all incidental underground and aboveground attachments, equipment and appurtenances, including, but not limited to manholes, manhole vents, lateral line connections, pipelines, junction boxes in, upon, under and across a portion of the Property and more fully described in Exhibit "A" attached hereto and incorporated herein for all pertinent purposes, together with the right and privilege at any and all times to enter Property, or any part thereof,

In no event shall Grantor (I) use the Property in any manner which interferes in any material way or is inconsistent with the rights granted hereunder, or (II) erect or permit to be erected within the easement property a permanent structure or building, including, but not limited to, monument sign, pole sign, billboard, brick or masonry fences or walls or other structures that require a building permit. However, Grantor shall be permitted to install and maintain a concrete, asphalt or gravel driveway, road or parking lot across the Easement Property. Grantee shall be obligated to restore the surface of the Property at Grantee's sole cost and expense, including the restoration of any sidewalks, driveways, or similar surface improvements located upon or adjacent to the Easement Tract which may have been removed, relocated, altered, damaged, or destroyed as a result of the Grantee's use of the easement granted hereunder. Provided, however, that Grantee shall not be obligated to restore or replace irrigation systems or other improvements installed in violation of the provisions and intended use of this Easement.

TO HAVE AND TO HOLD the above-described easement, together with all and singular the rights and appurtenances thereto in anyway belonging unto Grantee, and Grantee's successors and assigns forever; and Grantor does hereby bind itself and its successor and assigns to warrant and forever defend all and singular the easement unto Grantee, its successor and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

When the context requires, singular nouns and pronouns include the plural.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

GRANTOR: CRIMSON RIDGE LAND PARTNERS, LLC
BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY

By: *Phillip Sanchez*
PHILLIP SANCHEZ, MANAGER

GRANTEE: City of Fort Worth

By (Signature): *Steve Cooke*
(Print Name) Steve Cooke, Title Director, PMD

APPROVED AS TO FORM AND LEGALITY

(Signature): *Jessica Sangsvang*
(Print Name) Jessica Sangsvang, Title Assistant City Attorney

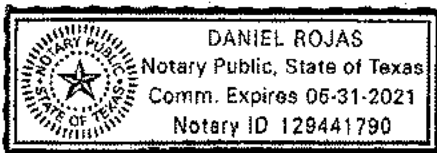
ACKNOWLEDGEMENT

STATE OF TEXAS §
COUNTY OF DALLAS ~~TARRANT~~ §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Phillip Sanchez, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of Crimson Ridge Land Partners LLC and that he/she executed the same as the act of said Crimson Ridge Land Partners LLC for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 4 day of

September 4, 2019



Daniel Rojas

ACKNOWLEDGEMENT

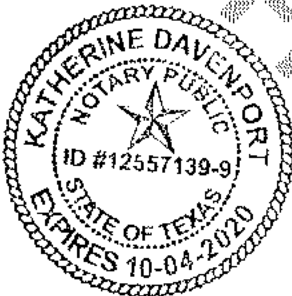
STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Steve Cook, Director Property Mgt. of the City of Fort Worth, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the City of Fort Worth and that he/she executed the same as the act of the City of Fort Worth for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 29th day of October, 2019.

Katherine Davenport
Notary Public in and for the State of Texas



METES AND BOUNDS DESCRIPTION

BEING a 0.933 acre tract of land situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth, being a portion of the tract of land described as Tract II in the instrument to Crimson Ridge Land Partners, LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas, said 0.933 acre tract of land being more particularly described as follows:

COMMENCING at a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the southeasterly corner of the tract of land described in the instrument to Housing Authority of the City of Fort Worth D/B/A Fort Worth Housing Solutions for the beginning of a non-tangent curve to the left having a radius of 1,100.00 feet;

THENCE with the easterly line of said Housing Authority of the City of Fort Worth tract the following:

Northeasterly along said curve through a central angle of $00^{\circ} 39' 44''$ an arc distance of 12.71 feet with a chord bearing of North $12^{\circ} 38' 57''$ East and a chord distance of 12.71 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for the POINT OF BEGINNING;

Northeasterly continuing with said curve through a central angle of $01^{\circ} 19' 53''$ an arc distance of 25.56 feet with a chord bearing of North $11^{\circ} 39' 09''$ East and a chord distance of 25.56 feet to a point;

THENCE departing the easterly line of said Housing Authority of the City of Fort Worth tract North $89^{\circ} 37' 34''$ East a distance of 852.98 feet to a point;

THENCE South $10^{\circ} 16' 15''$ East a distance of 791.76 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for corner;

THENCE South $79^{\circ} 43' 45''$ West a distance of 25.00 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for corner;

THENCE North $10^{\circ} 16' 15''$ West a distance of 770.75 feet to a point;

THENCE South $89^{\circ} 37' 34''$ West a distance of 837.29 feet the POINT OF BEGINNING;

CONTAINING a computed area of 0.933 acres (40,658 square feet) of land.

B003950.001

EXHIBIT 'A' ✓

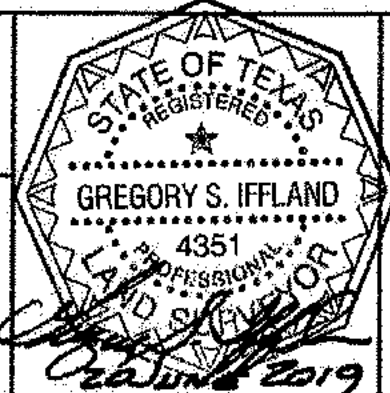
PAGE 1 OF 4

A drawing of even date accompanies
this metes and bounds description.

JUNE 14, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100



SANITARY SEWER EASEMENT
PART 2

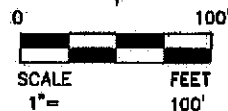
0.933 ACRES
40,658 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

EVERMAN ISD
DOCUMENT NUMBER
D207236624

HOUSING AUTHORITY OF THE CITY OF
FORT WORTH D/B/A FORT WORTH
HOUSING SOLUTIONS
DOCUMENT NUMBER
D219121945

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111



$\Delta=119^{\circ}53'$
 $R=1,100.00'$ $L=25.56'$
 $CH=N11^{\circ}39'09"E$ 25.56'

POINT OF
BEGINNING
SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

POINT OF
COMMENCING
FOUND 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

SANITARY SEWER EASEMENT
PART 2
0.933 ACRES
(40,658 SQUARE FEET)

N89°37'34"E 852.98'

S89°37'34"W 837.29'

S89°37'30"W 829.06'

TTP PARTNERSHIP
DOCUMENT NUMBER
D216210857

MATCHLINE SHEET 2
MATCHLINE SHEET 3

● =SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.

Curve Table				
Curve Number	Central Angle	Radius	Arc Length	Chord Bearing and Distance
C1	0°38'44"	1100.00'	12.71'	N12°38'57"E 12.71'

B003950.001

EXHIBIT 'B' ✓

PAGE 2 OF 4

A metes and bounds description of even
date accompanies this drawing.

JUNE 14, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

SANITARY SEWER EASEMENT
PART 2

0.933 ACRES
40,658 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

MATCHLINE SHEET 2
MATCHLINE SHEET 3

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111

N89°37'34"E 852.98'

S89°37'34"W 837.29'

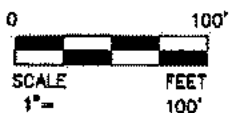
S89°37'30"W 829.06'

FOUND 1/2"
IRON ROD

WALL 007, LLC
DOCUMENT NUMBER
D217259397

TTP PARTNERSHIP
DOCUMENT NUMBER
D218210857

SANITARY SEWER EASEMENT
PART 2
0.933 ACRES
(40,658 SQUARE FEET)



● = SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.

MATCHLINE SHEET 3
MATCHLINE SHEET 4

N10°16'15"W 770.76'
S10°16'15"E 791.76'

B003950.001

EXHIBIT 'B'

PAGE 3 OF 4

A metes and bounds description of even
date accompanies this drawing.

JUNE 14, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

SANITARY SEWER EASEMENT
PART 2

0.933 ACRES
40,658 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

PLOTTED BY: James Cordella ON: Thursday, June 20, 2019 AT: 1:36 PM FILEPATH: G:\Production\SD\00039500\3950.001\Survey\Drawings\B003950.001 Crimson Ridge Sanitary Sewer Easmt 0.933 Acres.dwg

WALL 007, LLC
DOCUMENT NUMBER
D217259397

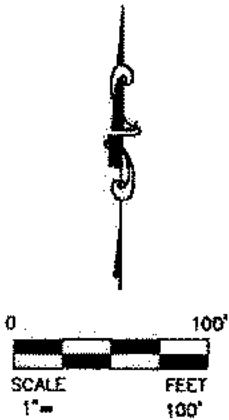
MATCHLINE SHEET 3
MATCHLINE SHEET 4

TTP PARTNERSHIP
DOCUMENT NUMBER
D216210857

SANITARY SEWER EASEMENT
PART 2
0.933 ACRES
(40,658 SQUARE FEET)

S79°43'45"W
25.00'

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111



● = SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"
UNLESS OTHERWISE NOTED.

B003950.001

EXHIBIT 'B'

✓ PAGE 4 OF 4

A metes and bounds description of even
date accompanies this drawing.

JUNE 14, 2019

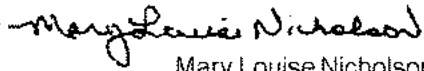
DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100

SANITARY SEWER EASEMENT
PART 2

0.933 ACRES
40,658 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS



Mary Louise Nicholson

Crimson Ridge Addition**City Project No. 101913****Balch Street (Shelby Road south towards Proposed Risinger Road)****Parcel #2****STATE OF TEXAS**

§

KNOW ALL MEN BY THESE PRESENTS**COUNTY OF TARRANT**

§

§

TEMPORARY TURNAROUND FACILITY EASEMENT

DATE: September 4, 2019

GRANTOR: CRIMSON RIDGE LAND PARTNERS, LLC**BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY****GRANTOR'S MAILING ADDRESS (including County): 3710 RAWLINS, SUITE 1310
DALLAS, TX 75219
DALL AS COUNTY****GRANTEE: CITY OF FORT WORTH****GRANTEE'S MAILING ADDRESS (including County):
200 TEXAS ST.
FORT WORTH, TARRANT COUNTY, TX 76102****CONSIDERATION:** Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.**PROPERTY:** Being more particularly described in attached Exhibits "A", "B", "C" and "D".**GRANTOR,** for the **CONSIDERATION** paid to **GRANTOR** and **GRANTOR's** performance of the condition specified below, hereby grants, sells, and conveys to **GRANTEE** its successors and assigns, an exclusive temporary easement for the construction, operation, maintenance, and

repair of a Paved Turnaround Facility ("Facility") in, upon under and across a portion of the PROPERTY and more fully described in Exhibit "A" and "B" attached hereto and incorporated herein for all pertinent purposes, together with the right and privilege at any and all times to enter PROPERTY, or any part thereof, for the purpose of constructing, maintaining, replacing, and repairing said Temporary Facility and use by the public. GRANTOR covenants and agrees that within the Easement PROPERTY, no permanent structure or building (including, but not limited to brick or masonry fences or walls or other structures that require a building permit) shall be erected. In addition, GRANTOR covenants and agrees it will not use the Easement PROPERTY in a manner that interferes with the operation, use, repair or maintenance of the Facility.

GRANTOR acknowledges and agrees that GRANTEE'S acceptance of this easement is conditioned upon GRANTOR constructing the turnaround facility to standards and dimensions acceptable to GRANTEE. The standards and dimensions acceptable to GRANTEE are attached as Exhibit "C".

TO HAVE AND TO HOLD the above-described easement, together with all and singular the rights and appurtenance thereto in anyway belonging unto GRANTEE, and GRANTEE's successors and assigns shall continue until: (i) an acceptable permanent turnaround facility is dedicated to GRANTEE or (ii) a plat for the adjacent tract known as (Name of Addition) Crimson Ridge Addition, Section Two that shows the continuance of the Balch Street (Name of Proposed Street) street abutting the Temporary Turnaround Easement is approved and recorded, such street is shown on the proposed plat attached hereto as Exhibit "D" City Case Number FP-18-135. GRANTOR does hereby bind itself and its successor and assigns to WARRANT AND DEFEND all and singular the easement unto GRANTEE, its successor and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

When the context requires, singular nouns and pronouns include the plural.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

GRANTOR: CRIMSON RIDGE LAND PARTNERS, LLC
BY: BAY MOUNTAIN CAPITAL LLC, MANAGING ENTITY

By: *Phillip Sanchez*
PHILLIP SANCHEZ, MANAGER

GRANTEE: City of Fort Worth

By (Signature): *Steve Cooke*
(Print Name) Steve Cooke, Title Director, PMD

APPROVED AS TO FORM AND LEGALITY

(Signature) *Jessica Sangsvang*
(Print Name) Jessica Sangsvang, Title Assistant City Attorney

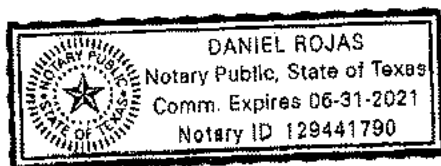
ACKNOWLEDGEMENT

STATE OF TEXAS §
DALLAS
COUNTY OF ~~TARRANT~~ §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Phillip Sanchez, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of Crimson Ridge Land Partners LLC and that he/she executed the same as the act of said Crimson Ridge Land Partners LLC for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 9 day of

September 9, 2019.



Daniel Rojas

ACKNOWLEDGEMENT

STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas,
on this day personally appeared Steve Cooke, Director
Property Management Dept the City of Fort Worth, known to me to be the same person
whose name is subscribed to the foregoing instrument, and acknowledged to me that the same
was the act of the City of Fort Worth and that he/she executed the same as the act of the City of
Fort Worth for the purposes and consideration therein expressed and in the capacity therein
stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 29th day of

October 2019

Katherine Davenport
Notary Public in and for the State of Texas



METES AND BOUNDS DESCRIPTION

BEING a 0.175 acre tract of land situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth, being a portion of the tract of land described as Tract II in the Instrument to Crimson Ridge Land Partners, LLC recorded in Document Number D214109111, Official Public Records of Tarrant County, Texas, said 0.175 acre tract of land being more particularly described as follows:

COMMENCING at a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the southeasterly corner of the tract of land described in the Instrument to Housing Authority of the City of Fort Worth D/B/A Fort Worth Housing Solutions for the beginning of a non-tangent curve to the left having a radius of 1,100.00 feet;

THENCE with the easterly line of said Housing Authority of the City of Fort Worth tract the following:

Northeasterly along said curve through a central angle of 12° 33' 00" an arc distance of 240.94 feet with a chord bearing of North 06° 42' 18" East and a chord distance of 240.46 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for the POINT OF BEGINNING;

Northeasterly continuing with said curve through a central angle of 00° 48' 19" an arc distance of 15.46 feet with a chord bearing of North 00° 01' 39" East and a chord distance of 15.46 feet to the end of said curve;

North 00° 21' 10" East a distance of 119.85 feet to a point;

THENCE departing the easterly line of said Housing Authority of the City of Fort Worth tract South 89° 38' 50" East a distance of 28.29 feet to a point;

THENCE South 00° 22' 57" West a distance of 13.46 feet to the beginning of a non-tangent curve to the right having a radius of 62.77 feet;

THENCE Southwesterly along said curve through a central angle of 170° 01' 10" an arc distance of 186.26 feet with a chord bearing of South 13° 23' 00" West and a chord distance of 125.06 feet to the POINT OF BEGINNING;

CONTAINING a computed area of 0.175 acres (7,613 square feet) of land.

EXHIBIT 'A'

B003950.001

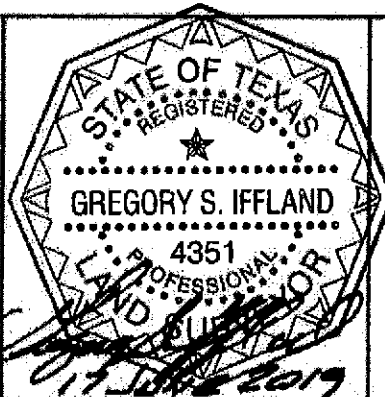
PAGE 1 OF 2

A drawing of even date accompanies
this metes and bounds description.

JUNE 14, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100



TEMPORARY TURN AROUND
EASEMENT
PART 2

0.175 ACRES
7,613 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

EVERMAN ISD
DOCUMENT NUMBER
D207236624

HOUSING AUTHORITY OF THE
CITY OF FORT WORTH D/B/A
FORT WORTH HOUSING
SOLUTIONS
DOCUMENT NUMBER
D219121945



CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111

PAGE 2 OF 2

B003950.001

A metes and bounds description of even
date accompanies this drawing.

JUNE 14, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 13298100

EXHIBIT 'B'

POINT OF
COMMENCING
FOUND 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

POINT OF
BEGINNING
SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

$\Delta=0'48'19''$
 $R=1,100.00' L=15.46'$
 $CH=N0'01'39''E 15.46'$

S89°38'50"E
28.29'
S00°22'57"W
13.46'

TEMPORARY TURN
AROUND EASEMENT
PART 2
0.175 ACRES
(7,613 SQUARE FEET)

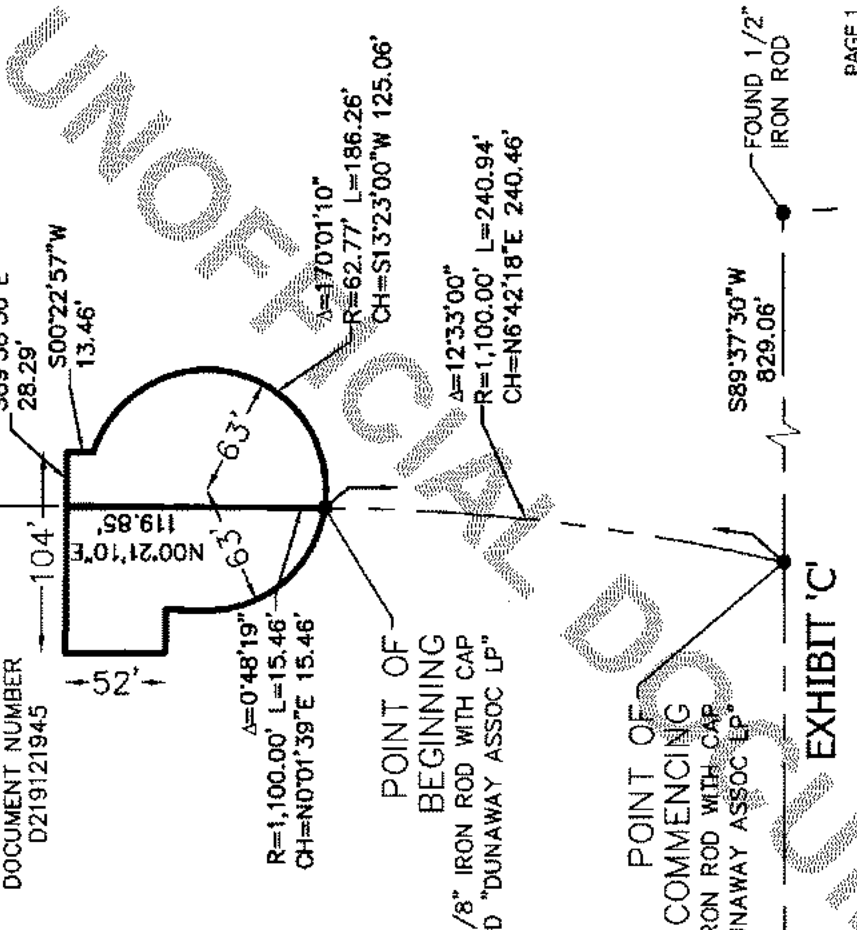
$\Delta=170'01'10''$
 $R=62.77' L=186.26'$
 $CH=S13'23'00''W 125.06'$

$\Delta=12'33'00''$
 $R=1,100.00' L=240.94'$
 $CH=N6'42'18''E 240.46'$

S89°37'30"W
829.06'
FOUND 1/2" IRON ROD

TEMPORARY TURN AROUND
EASEMENT
PART 2

0.175 ACRES
7,613 SQUARE FEET
CITY OF FORT WORTH
TARRANT COUNTY, TEXAS



EVERMAN ISD
DOCUMENT NUMBER
D207236624

SOLUTIONS
DOCUMENT NUMBER
D219121945

CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111

PAGE 1 OF 1

TEMPORARY TURN AROUND EASEMENT

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

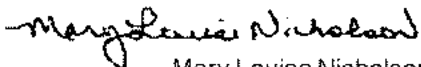
B003950.001

A meter and bounds description of even date accompanies this drawing.

JUNE 14, 2019



3550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.336.1121
FIRM REGISTRATION 10095100



Mary Louise Nicholson

Property Management Department Real Property Division
 City Project No. 101913
 Balch Street (Shelby Road south towards Proposed Risinger Road)

Parcel #3

STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF TARRANT

§

TEMPORARY TURNAROUND FACILITY EASEMENT

DATE: September 4, 2019

GRANTOR: HOUSING AUTHORITY OF THE CITY OF FORT WORTH D/B/A FORT WORTH
 HOUSING SOLUTIONS

GRANTOR'S MAILING ADDRESS (including County):
 1201 E. 13TH ST
 FORT WORTH, TARRANT COUNTY, TX 76102

GRANTEE: CITY OF FORT WORTH

GRANTEE'S MAILING ADDRESS (including County):
 200 TEXAS ST.
 FORT WORTH, TARRANT COUNTY, TX 76102

CONSIDERATION: Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged.

PROPERTY: Being more particularly described in attached Exhibits "A", "B", "C" and "D".

GRANTOR, for the CONSIDERATION paid to GRANTOR and GRANTOR's performance of the condition specified below, hereby grants, sells, and conveys to GRANTEE its successors and assigns, an exclusive temporary easement for the construction, operation, maintenance, and

repair of a Paved Turnaround Facility ("Facility") in, upon under and across a portion of the PROPERTY and more fully described in Exhibit "A" and "B" attached hereto and incorporated herein for all pertinent purposes, together with the right and privilege at any and all times to enter PROPERTY, or any part thereof, for the purpose of constructing, maintaining, replacing, and repairing said Temporary Facility and use by the public. GRANTOR covenants and agrees that within the Easement PROPERTY, no permanent structure or building (including, but not limited to brick or masonry fences or walls or other structures that require a building permit) shall be erected. In addition, GRANTOR covenants and agrees it will not use the Easement PROPERTY in a manner that interferes with the operation, use, repair or maintenance of the Facility.

GRANTOR acknowledges and agrees that GRANTEE'S acceptance of this easement is conditioned upon GRANTOR constructing the turnaround facility to standards and dimensions acceptable to GRANTEE. The standards and dimensions acceptable to GRANTEE are attached as Exhibit "C".

TO HAVE AND TO HOLD the above-described easement, together with all and singular the rights and appurtenance thereto in anyway belonging unto GRANTEE, and GRANTEE's successors and assigns shall continue until: (i) an acceptable permanent turnaround facility is dedicated to GRANTEE or (ii) a plat for the adjacent tract known as (Name of Addition) Crimson Ridge Addition, Section Two that shows the continuance of the Balch Street (Name of Proposed Street) street abutting the Temporary Turnaround Easement is approved and recorded, such street is shown on the proposed plat attached hereto as Exhibit "D" City Case Number FP-18-135. GRANTOR does hereby bind itself and its successor and assigns to WARRANT AND DEFEND all and singular the easement unto GRANTEE, its successor and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

When the context requires, singular nouns and pronouns include the plural.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE]

GRANTOR:

Housing Authority of the City of Fort Worth
d/b/a Fort Worth Housing Solutions.

By: Mary Margaret Lemons
Mary-Margaret Lemons, President

GRANTEE: City of Fort Worth

By (Signature) [Signature]
(Print Name) Steve Cooke, Title Director

APPROVED AS TO FORM AND LEGALITY

(Signature) [Signature]
(Print Name) Jessica Sangsvang, Assistant City Attorney

ACKNOWLEDGEMENT

STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Mary-Margaret Lemons, President, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of Housing Authority of the City of Fort Worth, Texas and that he/she executed the same as the act of said Housing Authority of the City of Fort Worth, Texas for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 10th day of

September, 2019.

[Signature]
Notary Public in and for the State of Texas

ACKNOWLEDGEMENT

STATE OF TEXAS §

COUNTY OF TARRANT §

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared STEVE COOKE, DIRECTOR, PROPERTY MANAGEMENT DEPARTMENT, of the City of Fort Worth, known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the City of Fort Worth and that he executed the same as the act of the City of Fort Worth for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 3rd DAY OF October, 2019.



Katherine Davenport
Notary Public in and for the State of Texas

METES AND BOUNDS DESCRIPTION

BEING a 0.175 acre tract of land situated in the Shelby County School Land Survey, Abstract Number 1375, Tarrant County, Texas, in the City of Fort Worth, being a portion of the tract of land described in the instrument to Housing Authority of the City of Fort Worth D/B/A Fort Worth Housing Solutions recorded in Document Number D219121945, Official Public Records of Tarrant County, Texas, said 0.175 acre tract of land being more particularly described as follows:

COMMENCING at a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" found for the southeasterly corner of said Housing Authority of the City of Fort Worth tract for the beginning of a non-tangent curve to the left having a radius of 1,100.00 feet;

THENCE with the easterly line of said Housing Authority of the City of Fort Worth tract Northeasterly along said curve through a central angle of 12° 33' 00" an arc distance of 240.94 feet with a chord bearing of North 06° 42' 18" East and a chord distance of 240.46 feet to a 5/8 inch iron rod with a yellow plastic cap stamped "Dunaway Assoc LP" set for the POINT OF BEGINNING for the beginning of a non-tangent curve to the right having a radius of 62.77 feet;

THENCE departing the easterly line of said Housing Authority of the City of Fort Worth tract Northwesterly along said curve through a central angle of 85° 47' 43" an arc distance of 93.99 feet with a chord bearing of North 38° 42' 34" West and a chord distance of 85.45 feet to the end of said curve;

THENCE North 02° 05' 39" East a distance of 16.67 feet to a point;

THENCE South 89° 35' 45" West a distance of 22.26 feet to a point;

THENCE North 00° 10' 55" West a distance of 52.45 feet to a point;

THENCE South 89° 38' 50" East a distance of 76.00 feet to a point in the easterly line of said Housing Authority of the City of Fort Worth tract;

THENCE with the easterly line of said Housing Authority of the City of Fort Worth tract the following:

South 00° 21' 10" West a distance of 119.65 feet to the beginning of a non-tangent curve to the right having a radius of 1,100.00 feet;

Southwesterly along said curve through a central angle of 00° 48' 19" an arc distance of 15.46 feet with a chord bearing of South 00° 01' 39" West and a chord distance of 15.46 feet to the POINT OF BEGINNING;

CONTAINING a computed area of 0.175 acres (7,622 square feet) of land.

EXHIBIT 'A'

B003950.001

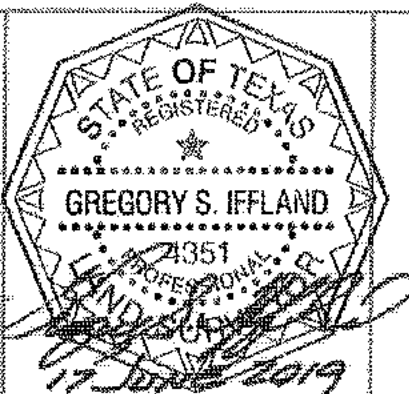
PAGE 1 OF 2

A drawing of even date accompanies
this metes and bounds description.

JUNE 14, 2019

DUNAWAY

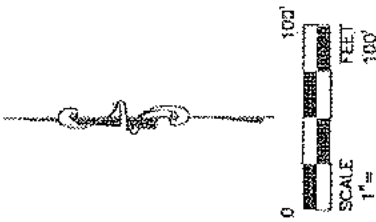
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 10098100



TEMPORARY TURN AROUND
EASEMENT
PART 1

0.175 ACRES
7,622 SQUARE FEET

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS



CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111

TEMPORARY TURN
AROUND EASEMENT
PART 1
0.175 ACRES
(7,622 SQUARE FEET)

POINT OF
BEGINNING
SET 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

TEMPORARY TURN AROUND
EASEMENT
PART 1
0.175 ACRES
7,622 SQUARE FEET
CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

S89°38'50"E
76.00'
N00°10'55"W
52.45'
S89°55'45"W
22.26'
N02°05'39"E
16.67'
Δ=85°47'43"
R=62.77' L=93.99'
CH=N38°42'34"W 85.45'

HOUSING AUTHORITY OF THE CITY OF
FORT WORTH D/B/A FORT WORTH
HOUSING SOLUTIONS
DOCUMENT NUMBER
D219121945

POINT OF
COMMENCING
FOUND 5/8" IRON ROD WITH CAP
STAMPED "DUNAWAY ASSOC LP"

Δ=12°33'00"
R=1,100.00' L=240.94'
CH=N6°42'18"E 240.46'

S89°37'30"W
829.06'

FOUND 1/2" IRON ROD

EXHIBIT 'B'

PAGE 2 OF 2

EVERMAN ISD
DOCUMENT NUMBER
D207236624

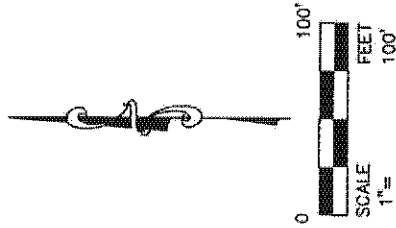
A metes and bounds description of even
date accompanies this drawing

JUNE 14, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
FIRM REGISTRATION 0098100

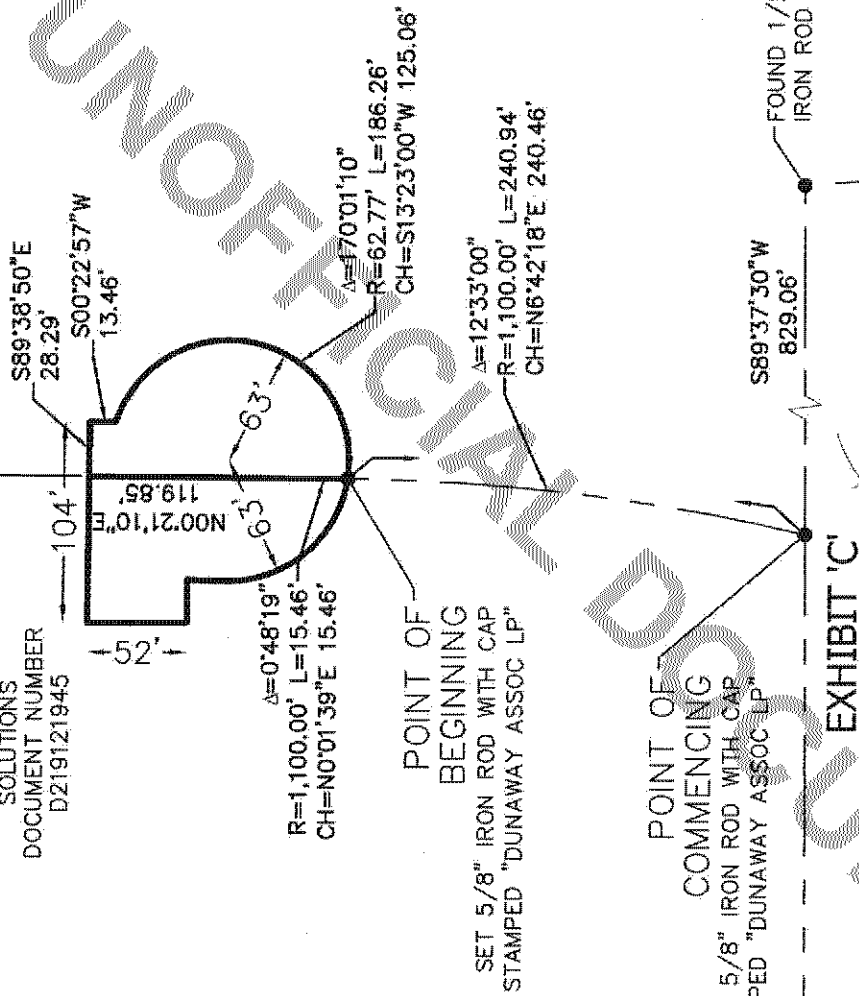
B003950.001



CRIMSON RIDGE LAND
PARTNERS, LLC
TRACT II
DOCUMENT NUMBER
D214109111

HOUSING AUTHORITY OF THE
CITY OF FORT WORTH D/B/A
FORT WORTH HOUSING
SOLUTIONS
DOCUMENT NUMBER
D219121945

EVERMAN ISD
DOCUMENT NUMBER
D207236624



PAGE 1 OF 1

TEMPORARY TURN AROUND
EASEMENT

CITY OF FORT WORTH
TARRANT COUNTY, TEXAS

EXHIBIT 'C'

A metes and bounds description of even
date accompanies this drawing.

JUNE 14, 2019

DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817 335 1121
FIRM REGISTRATION 10098100

B003950.001

4

PIPELINE EASEMENT AND RIGHT OF WAY

STATE OF TEXAS

§

KNOW ALL MEN BY THESE PRESENTS:

§

COUNTY OF TARRANT

§

This Pipeline Easement and Right of Way Agreement ("Agreement") is by and between Robert L. Harrison, ("Grantors") and Antero Resources Pipeline, LP, a Texas limited partnership, 1625 Seventeenth Street, Suite 300, Denver, Colorado, 80202 ("Grantee" or "Antero").

RECITALS

A. Grantor is the owner of the surface of certain lands, part of which is described on Exhibit A (the "Lands").

B. Grantee wishes to receive a right of way and easement across the Lands as such right of way and easement is more particularly described on Exhibit A (the "Easement").

C. Grantor wishes to grant the Easement to Grantee and Grantee wishes to accept the Easement and use the Easement, all pursuant to the terms of this Agreement.

GRANT OF EASEMENT AND AGREEMENT

Now therefore, for and in consideration of \$100.00 and other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, Grantor and Grantee agree as follows:

1. Grant of the Easement. Grantor hereby grants, sells and conveys to Grantee, its successors and assigns, a free and unobstructed easement and right of way as described on Exhibit A, to lay, construct, inspect, maintain, repair, operate, alter, replace, relocate, change the size of, abandon in place and remove at will, in whole or in part, pipeline for the transportation of oil, gas, petroleum and other gases, fluids or substances which can be transported through a pipeline and all appurtenant facilities thereto, including without limitation, all drips, valves, fittings, meters, aerial markers, graphite and steel anodes and other devices for the control of pipeline corrosion, and similar appurtenances as may be necessary or convenient in the operation of said pipeline(s) over, across, under and upon the lands described in Exhibit A.

2. The Easement. The Easement shall be 50 feet wide during construction, reverting to 20 feet in width described by metes and bounds and as shown on Exhibit A. The pipeline shall be buried a minimum of 36 inches deep. Grantee shall also be entitled to use an additional 25 feet of Grantor's adjacent land and additional land ("Additional Lands") as reasonably necessary at road, creek and railroad crossings for construction purposes and this right is to terminate upon completion of the initial construction. Grantee agrees to pay Grantor any and all actual damages that Grantor suffers by reason, of Grantee's use of said Additional Lands.

3. Grantee's Use of the Easement. Grantee shall have all of the rights and benefits necessary and convenient for the full enjoyment and use of the Easement and the rights herein granted, including, without limitation, the right of ingress to and egress to and from the Easement and the right from time to time to cut all trees, undergrowth and other obstructions that, in Grantee's sole judgment, may injure, endanger or interfere with the Grantee's use of the Easement. Grantor shall not construct nor permit to be constructed, any house, building or any other structure or facility on the Easement without the express prior consent of Grantee, such consent not to be unreasonably withheld. Grantor agrees not to change the grade, remove dirt from the surface of the Easement or impound water over the Easement without the prior approval of Grantee.

4. Covenants Running With The Land. This Agreement, together with the other provisions of this grant of Easement, shall constitute covenants running with the land, binding upon Grantor, its heirs, legal representatives, successors and assigns, for the benefit of Grantee, its successors and assigns. Grantee's rights hereunder may be assigned in whole or in part to one or more assignees.

5. Surface Damage Payments. The initial consideration paid by Grantee to Grantor includes any and all damages that may be sustained by original construction of the pipeline(s) within the Easement, including without limitation, cutting trees and damages to land, trees, buildings, fences and growing crops. After the original construction of the Pipeline(s), Grantee will pay to the owner of the Land and, if leased, to his tenant, actual damages done to timber, fences and growing crops by reason of entry to repair, maintain and remove said pipeline(s), or for any future construction within the Easement done by Grantee.

6. Special Warranty of Title. Grantor hereby binds himself, his heirs and legal representatives, successors and assigns, to warrant and forever defend all and singular the above described Easements and rights, unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof by through and under Grantor.

7. Reversion. The Easement granted herein, and all rights and privileges in connection herewith, shall automatically revert to Grantor, its successors and assigns, if and when the Easement shall cease to be used by Grantee for the aforesaid purposes for a period of 24 consecutive months without suspension of use for regulatory reasons or events of force majeure.

8. Prohibited Activities. Grantee may not hunt, fish, or bring firearms or alcoholic beverages or illegal drugs on the Easement.

10. Entire Agreement. This Agreement constitutes the entire understanding among the Grantor and Grantee, their respective partners, members, trustees, shareholders, officers, directors and employees with respect to the subject matter hereof, superseding all negotiations, prior discussions and prior agreements and understandings relating to such subject matter.

11. Reservation by Grantor. Grantor hereby reserves the right to use the Easement in any manner that will not prevent or interfere with the exercise by Grantee of its rights hereunder.

12. Indemnity. Grantee shall maintain and /or restore the land to its same condition and shall indemnify and hold Grantor, its agents and employees, harmless from any claims for damage to property or injury to persons that may arise due to Grantee's, its agents, contractors, subcontractors and employees presence on Grantor's land.

In witness whereof, Grantor and Grantee have executed this Agreement on the dates set forth in the acknowledgments below.

GRANTOR
Robert L. Harrison



ACKNOWLEDGMENTS

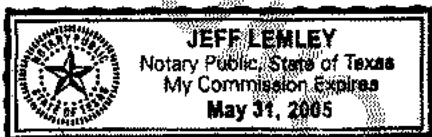
STATE OF TEXAS

§
§
§

COUNTY OF Tarrant

BEFORE ME, the undersigned authority, on this day personally appeared Robert L. Harrison, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 9th day of April, A.D. 2005.



Jeff Lemley
Notary Public in and for the State of Texas

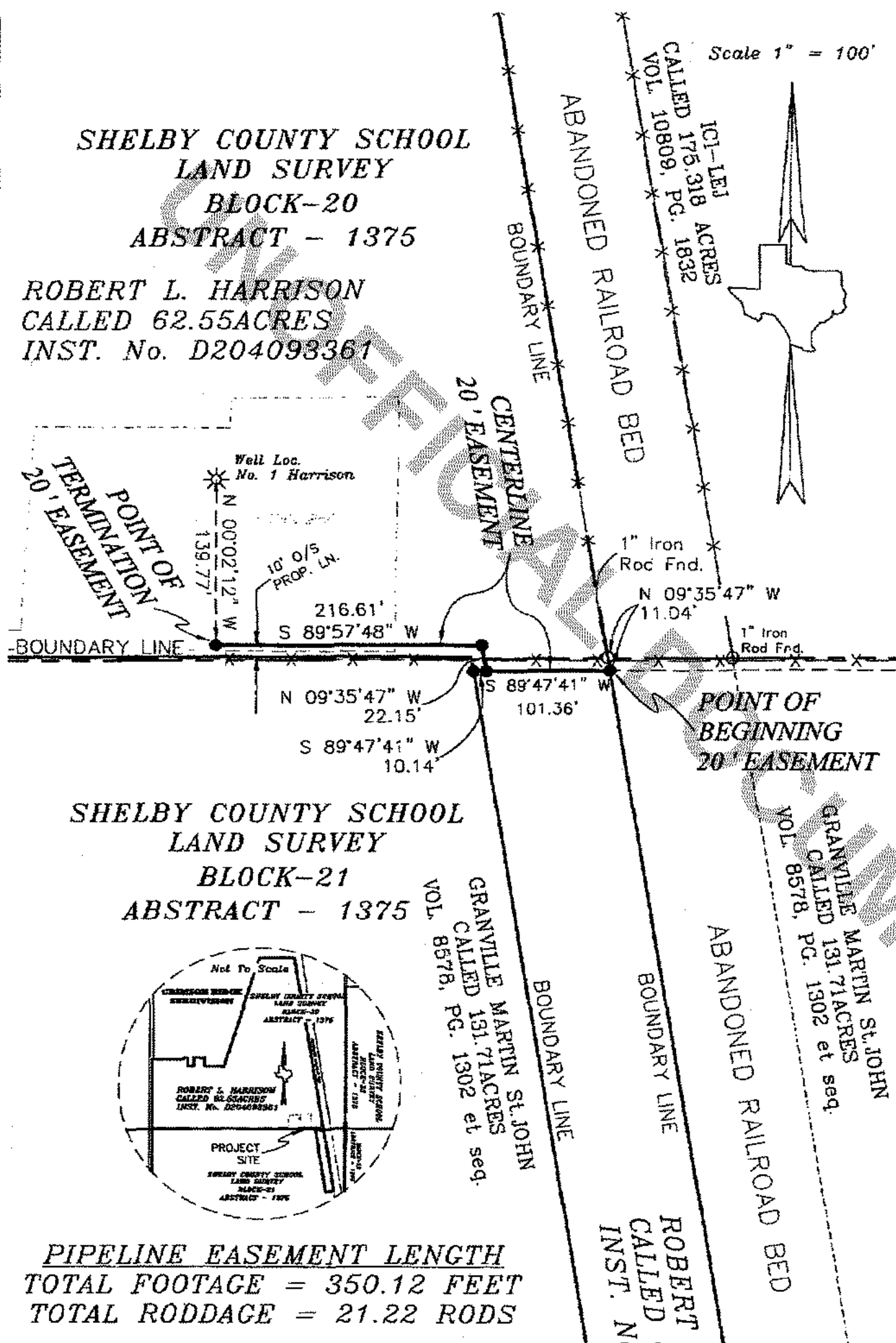
My Commission Expires: May 31, 2005

OFFICIAL DOCUMENT

TARRANT COUNTY, TEXAS

SHELBY COUNTY SCHOOL
LAND SURVEY
BLOCK-20
ABSTRACT - 1375

ROBERT L. HARRISON
CALLED 62.55ACRES
INST. No. D204093361



PIPELINE EASEMENT LENGTH
TOTAL FOOTAGE = 350.12 FEET
TOTAL RODDAGE = 21.22 RODS

DRAWN BY:	PROJECT:	SURV. NAME:	SHT. NOS.
DATE: April 08, 2005	ANTERO	HARRISON	1
JOB NO.: TARR. 1375-03	RESOURCES	WELL CONNECT	OF
REV. No./Date: 02/Apr. 20, 2005	PIPELINE L.P.	CROSSING	1
		HARRISON	
		TRACT	

EXHIBIT "A"



LEMLEY CONSULTING INC
1010 SOUTHRIDGE RD

MINERAL WELLS TX 76067

Submitter: LARRY COMINSKY

SUZANNE HENDERSON
TARRANT COUNTY CLERK
TARRANT COUNTY COURTHOUSE
100 WEST WEATHERFORD
FORT WORTH, TX 76196-0401

DO NOT DESTROY
WARNING - THIS IS PART OF THE OFFICIAL RECORD.

Filed For Registration: 04/25/2005 10:42 AM
Instrument #: D205114465
OPR 5 PGS \$20.00

By:  _____



D205114465

ANY PROVISION WHICH RESTRICTS THE SALE, RENTAL OR USE
OF THE DESCRIBED REAL PROPERTY BECAUSE OF COLOR OR
RACE IS INVALID AND UNENFORCEABLE UNDER FEDERAL LAW.



**DESIGNATION OF UNIT
HARRISON UNIT 1H WELL**

STATE OF TEXAS §§
COUNTY OF TARRANT §§

KNOW ALL MEN BY THESE PRESENTS:

1. **Designation of Unit.** The undersigned (the "Owner") is the owner of valid and subsisting oil, gas, and mineral leases listed in Exhibit A (together with all amendments and corrections thereto, the "Leases") insofar as the Leases cover and affect the land and depths described on Exhibit A. Pursuant to the Leases and with the consent of the lessors of the Leases where required, the Owner hereby pools, consolidates, combines, and unitizes said Leases and associated leasehold rights, overriding royalty, and royalty interests for the purpose of drilling for, development, and production of oil, gas, and liquid hydrocarbons (including condensate, distillate, and other liquids) from the Unit (as defined below). If at any time any tract of land or interest within the Unit is not properly pooled or unitized hereby or is not otherwise committed to the Unit, such fact shall not affect, terminate, impair, or invalidate the Unit as to any interest properly pooled or unitized hereby or otherwise.

2. **Description of the Unit.** The unit ("Unit") includes the Leases, or portions thereof, and the interval, as described on Exhibit A, and is comprised only of the lands described in Exhibit B as depicted on the map attached as Exhibit C.

3. **Production from the Unit.** This Designation of Unit covers all production from the land and depths described on the attached Exhibits A, B and C, which is produced from any well drilled to the unitized interval underlying the Unit area. Production from the Unit shall be allocated proportionately among all of the tracts within the Unit in the proportion that the number of surface acres in each of such tracts bears to the total number of surface acres in the Unit.

4. **Amendment.** The Owner reserves the right to amend this Designation of Unit from time to time, and at any time, in order to correct any error herein or to include in this Unit any newly acquired interests within the Unit boundaries or to enlarge or reduce the Unit area in accordance with the applicable rules and regulations of any governmental regulatory body or agency having jurisdiction insofar as such right is granted in the Leases, by appropriate amendments or instruments.

5. **Counterpart Signatures.** This instrument may be executed as one document signed by all parties, or parties named herein may join herein by execution of a counterpart or ratification, with the same effect as if all parties executed this instrument. Executed signature pages from different originals may be combined to form a single original instrument for recording purposes. The failure of any one or more persons owning an interest in the Unit to execute this instrument or a counterpart or ratification thereof shall not in any manner affect the validity of same as to the parties who do execute this instrument. This Unit may not be ratified or joined in by any party who is not named below without the consent of the parties hereto.

6. **Effective Date.** The Unit hereby created shall be effective as of the date of first

production from the Unit, or from the date operations are commenced anywhere on the Unit, whichever occurs first, and shall remain in force as long as the pooled minerals are being produced from the Unit, or so long as the leases covering the Unit are maintained in force by payment or tender of shut-in royalties or by other means, in accordance with the terms of the Leases.

This Designation of Unit shall be binding on the Owners and their representatives, successors and assigns.

IN WITNESS WHEREOF, this Designation of Unit is executed on this 10th day of May, 2005.

OWNER:

ANTERO RESOURCES I, LP
By its General Partner
Antero Resources I GP, LLC


Edwin S. Ryan, Jr.
Sr. Vice President - Land

STATE OF TEXAS §
 §
COUNTY OF TARRANT §

This instrument was acknowledged before me on the 10 day of May, 2005, by Edwin S. Ryan, Jr., the Sr. Vice President-Land of Antero Resources I GP, LLC, General Partner for Antero Resources I, LP, a Texas Limited Partnership, on behalf of said company in the capacity therein stated.




Notary Public, State of Texas

EXHIBIT "A"

**ATTACHED TO AND MADE A PART OF
THAT CERTAIN DESIGNATION OF UNIT
HARRISON UNIT 1H WELL**

1. Oil, Gas and Mineral Lease dated January 24, 2005, between Kathy King, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205071778 of the Official Records of Tarrant County, Texas.
2. Oil, Gas and Mineral Lease dated January 25, 2005, between Armando Plascencia and Matilde Plascencia, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205049282 of the Official Records of Tarrant County, Texas.
3. Oil, Gas and Mineral Lease dated January 25, 2005, between Russell McCullen, Jr., as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205047276 of the Official Records of Tarrant County, Texas.
4. Oil, Gas and Mineral Lease dated January 25, 2005, between Lachaun L. Benson, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205039296 of the Official Records of Tarrant County, Texas.
5. Oil, Gas and Mineral Lease dated January 25, 2005, between Chryss Okonofua and Modupe Okonofua, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205049280 of the Official Records of Tarrant County, Texas.
6. Oil, Gas and Mineral Lease dated January 24, 2005, between Natasha L. Green, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205039298 of the Official Records of Tarrant County, Texas.
7. Oil, Gas and Mineral Lease dated January 25, 2005, between Clement Onsomu, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205049281 of the Official Records of Tarrant County, Texas.
8. Oil, Gas and Mineral Lease dated January 24, 2005, between Melody Rockwell, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205039297 of the Official Records of Tarrant County, Texas.
9. Oil, Gas and Mineral Lease dated January 25, 2005, between Zacchaeus Oladejo and Bridget E. Oladejo, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205039293 of the Official Records of Tarrant County, Texas.
10. Oil, Gas and Mineral Lease dated January 24, 2005, between Christopher Sides, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205071777 of the Official Records of Tarrant County, Texas.
11. Oil, Gas and Mineral Lease dated January 25, 2005, between Jusiel M. Tercero and Sylvia M. Tercero, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205047277 of the Official Records of Tarrant County, Texas.
12. Oil, Gas and Mineral Lease dated June 7, 2004, between Robert L. Harrison, as Lessor, and Antero Resources, I, LP, as Lessee, a Memorandum of which is recorded at D204199649 of the Official Records of Tarrant County, Texas.
13. Oil, Gas and Mineral Lease dated January 14, 2005, between Milton F. Owens and Alberta Owens, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205038665 of the Official Records of Tarrant County, Texas.

14. Oil, Gas and Mineral Lease dated February 14, 2005, between GCC Minerals, Ltd., as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205071775 of the Official Records of Tarrant County, Texas.
15. Oil, Gas and Mineral Lease dated March 8, 2005, between Bureau of Prisons Federal Credit Union, as Lessor, and Antero Resources, I, LP, as Lessee, recorded at D205075268 of the Official Records of Tarrant County, Texas.

INSOFAR as the above described leases cover those depths from the top of the Barnett Shale Formation down to the Base of the Barnett Shale Formation it being the intent of the parties to pool and unitize only the Barnett Shale Formation.

EXHIBIT "B"

**ATTACHED TO AND MADE A PART OF
THAT CERTAIN DESIGNATION OF UNIT
HARRISON UNIT 1H WELL**

BEING a called 111.997 acre mineral tract less and except a 2.997 mineral tract leaving a net acreage of 109.00 acres situated in the Shelby School Land Survey, Abstract 1375 Tarrant County, Texas. Said called 111.997 acre unit to be more particularly described as follows:

BEGINNING at 1/2" iron rod found at the Northeast corner of said called 111.997 acre unit;
THENCE South 10°14' East a distance of 188 feet to a point for corner;
THENCE South 10°12' East a distance of 2436 feet to a point for corner;
THENCE South 89°16' West a distance of 1821 feet to a point for corner;
THENCE North 00°56' West a distance of 653 feet to a point for corner;
THENCE South 89°14' West a distance of 503 feet to a point for corner;
THENCE North 00°12' East a distance of 321 feet to a point for corner;
THENCE North 89°04' East a distance of 288 feet to a point for corner;
THENCE North 00°08' West a distance of 421 feet to a point for corner;
THENCE North 24°18' East a distance of 343 feet to a point for corner;
THENCE South 89°23' West a distance of 455 feet to a point for corner;
THENCE North 00°37' West a distance of 309 feet to a point for corner;
THENCE North 89°23' East a distance of 34 feet to a point for corner;
THENCE North 00°38' West a distance of 522 feet to a point for corner;
THENCE North 75°15' East a distance of 139 feet to a point for corner;
THENCE North 80°58' East a distance of 139 feet to a point for corner;
THENCE North 89°32' East a distance of 248 feet to a point for corner;
THENCE South 81°34' East a distance of 105 feet to a point for corner;
THENCE North 81°16' East a distance of 84 feet to a point for corner;
THENCE North 81°03' East a distance of 84 feet to a point for corner;
THENCE North 87°19' East a distance of 61 feet to a point for corner;
THENCE South 89°15' East a distance of 107 feet to a point for corner;
THENCE North 89°30' East a distance of 912 feet back to the **PLACE of BEGINNING**
and containing a called 111.997 acres of land.

LESS AND EXECPT THE FOLLOWING CALLED 2.997 ACRES

COMMENCING at a 1/2" iron rod found at the Northeast corner of said called 111.997 acre mineral tract;

THENCE South 66°34' West a distance of 476 feet to a point at the **PLACE OF BEGINNING**;
THENCE South 16°32' West a distance of 364 feet to a point for corner;
THENCE North 73°24' West a distance of 195 feet to a point for corner;
THENCE South 89°34' West a distance of 133 feet to a point for corner;
THENCE North 00°35' West a distance of 120 feet to a point for corner;
THENCE South 89°35' West a distance of 82 feet to a point for corner;
THENCE North 00°29' West a distance of 170 feet to a point for corner;
THENCE North 89°29' East a distance of 509 feet back to the **PLACE of BEGINNING** and containing a called 2.997 acres of land.

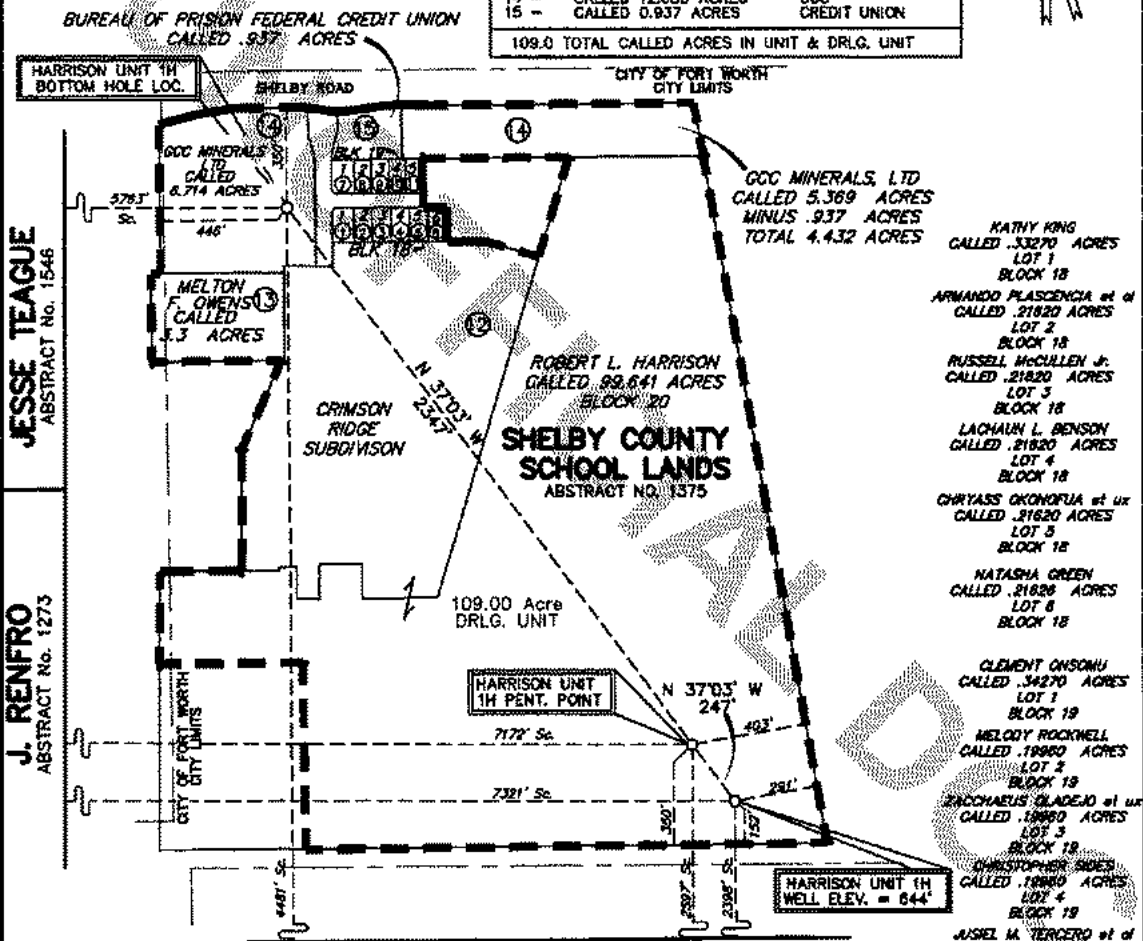
**** NOTES ****

This plot does not represent a boundary survey. Acreages shown hereon are deed called or calculated from deeds furnished by others. Monumentation shown hereon was found. Surface Location ties are shown from the location surveyed 4/05/05. The Bearing Base is "GRID", N.A.D. 83' Datum, Tx. North Central Zone, Convergence: +00°39'54".3 at the Surface Location.

1	-	CALLLED 0.33270 ACRES	KING
2	-	CALLLED 0.21820 ACRES	PLASCENCIA
3	-	CALLLED 0.21820 ACRES	McCULLEN
4	-	CALLLED 0.21820 ACRES	BENSON
5	-	CALLLED 0.21820 ACRES	OKONOFUA
6	-	CALLLED 0.21826 ACRES	GREEN
7	-	CALLLED 0.34270 ACRES	ONSONU
8	-	CALLLED 0.19980 ACRES	ROCKWELL
9	-	CALLLED 0.19980 ACRES	OLADEJO
10	-	CALLLED 0.19980 ACRES	SIDES
11	-	CALLLED 0.19980 ACRES	TERCERO
12	-	CALLLED 90.1252 ACRES	HARRISON
13	-	CALLLED 3.30 ACRES	OWENS
14	-	CALLLED 12.083 ACRES	GCC
15	-	CALLLED 0.937 ACRES	CREDIT UNION

109.0 TOTAL CALLED ACRES IN UNIT & DRLG. UNIT

+00°39'54".3



SURFACE LOCATION HARRISON UNIT 1H, IN THE SHELBY COUNTY SCHOOL LANDS, A-1375, BEING 7321' FROM THE WEST LINE OF SAME BEING THE EAST LINE OF THE J. RENFRO SURVEY, A-1273 AND 2398' FROM THE SOUTH LINE OF THE SHELBY COUNTY SCHOOL LANDS, A-1375, SAME BEING THE NORTH LINE OF THE MICHAEL OZEE SURVEY, A-1187, ALSO BEING 152' FROM THE SOUTH UNIT LINE, ALSO BEING 251' FROM THE EAST UNIT LINE.

MICHAEL OZEE
ABSTRACT NO 1187

PENETRATION POINT HARRISON UNIT 1H, IN THE SHELBY COUNTY SCHOOL LANDS, A-1375, BEING 7172' FROM THE WEST LINE OF SAME BEING THE EAST LINE OF THE J. RENFRO SURVEY, A-1273 AND 2597' FROM THE SOUTH LINE OF THE SHELBY COUNTY SCHOOL LANDS, A-1375, SAME BEING THE SOUTH LINE OF THE MICHAEL OZEE SURVEY, A-1187, ALSO BEING 350' FROM THE SOUTH UNIT LINE, ALSO BEING 403' FROM THE EAST UNIT LINE.

BOTTOM HOLE HARRISON UNIT 1H, IN THE SHELBY COUNTY SCHOOL LANDS, A-1375, BEING 5763' FROM THE WEST LINE OF SAME BEING THE EAST LINE OF THE JESSE TEAGUE SURVEY, A-1546 AND 4481' FROM THE SOUTH LINE OF THE SHELBY COUNTY SCHOOL LANDS, A-1375, SAME BEING THE NORTH LINE OF THE MICHAEL OZEE SURVEY, A-1187, ALSO BEING 350' FROM THE NORTH UNIT LINE, ALSO BEING 448' FROM THE WEST UNIT LINE.

N.A.D. 83 DATUM
TEXAS NORTH CENTRAL ZONE

**** SURFACE LOCATION HARRISON UNIT 1H WELL ****

N: 6808562.29
E: 2343650.39
LAT.: 32°37'02".94
LONG.: 97°16'49".88

**** PENETRATION POINT HARRISON UNIT 1H WELL ****

N: 8909756.38
E: 2343801.59
LAT.: 32°37'02".90
LONG.: 97°16'31".70

**** BOTTOM HOLE LOCATION HARRISON UNIT 1H WELL ****

N: 6911632.24
E: 2342387.50
LAT.: 32°37'21".60
LONG.: 97°17'07".87

WELL LOCATION PLAT
ANTERO RESOURCES I, LP.
HARRISON UNIT 1H WELL
109.0 ACRE UNIT
TARRANT COUNTY, TEXAS
SCALE: 1" = 500'

WALKER & ASSOCIATES SURVEYING, INC.
TYLER, TEXAS PH: 903-534-9000

I, Dennis H. Walker, Registered Professional Land Surveyor do hereby state that this plat was prepared from a partial survey and from public record information and is true and correct to the best of my knowledge.

GIVEN UNDER MY HAND AND SEAL, this the 05th day of April, 2005.



Dennis H. Walker
Registered Professional Land Surveyor
State of Texas No. 2117

Surface Location is located
5.0 Miles Northeast of Crowley
"BURLESON" Quadrangle

SCOTT BEDBALEK
770 W ROCK CREEK 117

NORMAN OK 73069

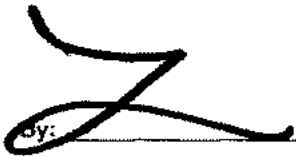
Submitter: TEXHOMA



SUZANNE HENDERSON
TARRANT COUNTY CLERK
TARRANT COUNTY COURTHOUSE
100 WEST WEATHERFORD
FORT WORTH, TX 76196-0401

DO NOT DESTROY
WARNING - THIS IS PART OF THE OFFICIAL RECORD.

Filed For Registration: 05/10/2005 04:06 PM
Instrument #: D205132770
OPR 7 PGS \$24.00

by: 

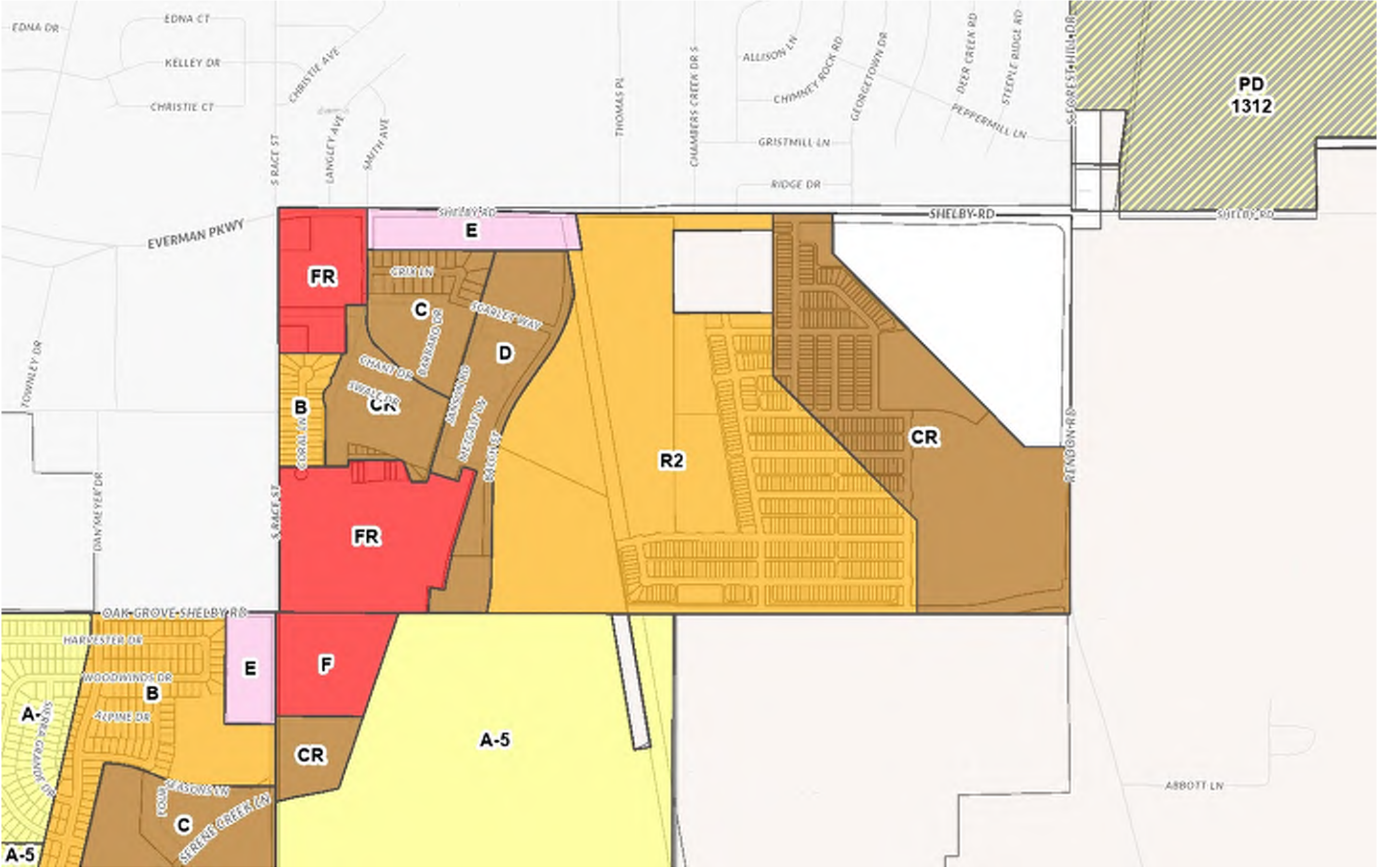


D205132770

ANY PROVISION WHICH RESTRICTS THE SALE, RENTAL OR USE
OF THE DESCRIBED REAL PROPERTY BECAUSE OF COLOR OR
RACE IS INVALID AND UNENFORCEABLE UNDER FEDERAL LAW.

APPENDIX B

Crimson Ridge Zoning Map



Legend

NCTCOG Freeways 9,028
Streets Label 9,028

☐ Zoning Outline

Overlay Districts

- <Null>
- 21047
- AO
- APZ 1
- APZ 2
- CIRCLE PARK
- CZ
- DOWNTOWN URBAN
- I-35W CENTRAL
- I-35W NORTH
- I-35W SOUTH
- TCU
- TUP 1
- TUP 2
- TUP 3
- TUP 4
- TUP 5
- TUP 6
- TUP 7

Zoning Fill

- AG - Agricultural
- A-5; A-7.5; A-10; AR Single Family
- A-2.5A; A-43- Residential (Single Family, One-Acre +)
- A-21- Residential (Single Family, 1/2 Acre +)
- MH- Residential (Manufactured Housing)
- B; R1; R2- Low Density Residential
- C; CR; D Multi Family
- UR- Urban Residential
- CF- Community Facility
- ER; E; EP - Neighborhood Commercial
- FR; F; G; OM- General Commercial
- Mixed Use, Downtown, and Form Based Districts
- IP; I- Light Industrial
- J; K- Heavy Industrial
- O-2; O-1- Floodplain
- Planned Development (A-5; PD, A5; PD, A-10; PD, A-5; PD, A-43)
- Planned Development (A-21- Residential (Single Family, 1/2 Acre +)
- Planned Development (AG- Agricultural)
- Planned Development (J; K- Heavy Industrial)
- Planned Development (FR; F; G; OM- General Commercial)
- Planned Development (IP; I- Light Industrial)
- Planned Development (B; R1; R2- Low Density Residential)
- Planned Development (C; CR; D Multi Family)
- Planned Development (ER; E; EP- Neighborhood Commercial)
- Planned Development (CF - Community Facility)
- Planned Development (UR - Urban Residential)
- Planned Development (Mixed Use, Downtown, and Form Based Districts)

City Flood Risk Areas - Future Regulator

☐ Lots

☐ City Limit

☒ Conditional Use Permits

Parker County Streets

Denton County Streets

NCTCOG Freeways 9,028

Streets 9,028

30 5/6/24 10:45 AM

31 - 35

36 - 40

41 - 4,028

46 - 60



This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. The City of Fort Worth assumes no responsibility for the accuracy of said data.

NCTCOG ORTHOPHOTOGRAPHY



**Development Services Department
Summary of Zoning Districts of the City of Fort Worth**

Residential

"A-2.5A" One-Family	One-family detached dwellings (min. lot size 2 ½ acres)
A-43" One-Family	One-family detached dwellings (min. lot size 1 acre)
"A-21" One-Family	One-family detached dwellings (min. lot size ½ acre)
"A-10" One-Family	One-family detached dwellings (min. lot size 10,000 sq. ft.)
"A-7.5" One-Family	One-family detached dwellings (min. lot size 7,500 sq. ft.)
"A-5" One-Family	One-family detached dwellings (min. lot size 5,000 sq. ft.)
"AR" One-Family Restricted	One-family detached zero-lot line dwellings (min. lot size 3,500 sq. ft.)
"B" Two-Family	One-family and two-family detached and attached (min. lot size 5,000 sq. ft. for two <u>attached</u> dwellings on a single lot; and 7,500 sq. ft. min. lot size for two <u>detached</u> on a single lot)
"R1" Zero Lot Line / Cluster	One-family detached min. 3,000 sq. ft. lot; one-family zero lot line min. 2,500 sq. ft. lot; two-family attached zero lot line min. 2,500 sq. ft. lot
"R2" Townhouse/Cluster	One-family attached townhouse / rowhouse dwellings, w/ min. 15% open space, and max. of 24 dwelling units / ac. on average, maximum building façade length 250 ft.

Multifamily

"CR" Low Density	Multifamily dwelling units at a maximum density of 16 dwelling units / acre with design standards
"C" Medium Density	Multifamily dwelling units at a maximum density of 24 dwelling units / acre with design standards
"D" High Density	Multifamily dwelling units at a maximum density of 32 dwelling units / acre with design standards
"UR" Urban Residential	Higher density, residential only, form-based development for mixed-use growth centers and urban villages, to provide multi-family land use in transitional areas between mixed use and one- and two-family. Height range 2-3 stories with available height bonus to 4 stories.

Commercial

Low Intensity

"ER" Neighborhood Commercial Restricted	Beauty/barber shops, bookstores, drug stores, studios, offices, public and civic uses and health care. <u>Alcohol sales prohibited.</u> Maximum 35 ft. height.
"E" Neighborhood Commercial	All uses permitted in "ER", plus retail sales, banks, restaurants, gasoline sales, bakeries, and alcohol sales for off premise consumption and as part of food service. Maximum 45 ft. height.

Moderate Intensity

"FR" General Commercial Restricted	All uses permitted in "E", plus theaters, auto sales & repair, hotels, health care facilities, commercial and business clubs, bowling alleys, large retail stores, home improvement centers. <u>Alcohol sales prohibited.</u> Maximum 45 ft. height.
"F" General Commercial	All uses permitted in "FR", plus amusement e.g. nightclubs, bars, skating rinks, etc. <u>Alcohol sales and on-premises consumption permitted</u> in "F" thru "K" districts. Maximum 45 ft. height.

High Intensity

“G” Intensive Commercial	All uses permitted in “F” with maximum 12-story/120 ft. height.
“H” Central Business	All uses permitted in “G”, plus multifamily residential, printing/publishing. No height restrictions and permissive area regulations. Restricted to designated Central Business District. DUDD overlay.

Industrial

“I” Light Industrial	All uses permitted in “G”, plus food processing, animal hospitals and outdoor kennels, trans. terminals, temp. batch plant, warehousing, outside sales/storage, printing and light manuf. Max. 55 ft. height.
“J” Medium Industrial	All uses permitted in “I”, plus breweries, cement products, power plants, grain elevators, poultry slaughtering, and light manufacturing. Max. 120 ft. height.
“K” Heavy Industrial	All uses permitted in “J”, plus heavy industrial uses incl. metal fabrication, asphalt mixing plants, machine shops, soap manufacturing, stock yards, permanent batch plants, welding shops, etc. Max. 120 ft. height.

Overlay Districts

“DD” Demolition Delay	Special overlay districts to provide for protection and preservation of places and areas of historic and cultural importance and significance. Subject to review by Historic and Cultural Landmarks Commission.
“HC” Historic and Cultural	
“HSE” Highly Sig. Endang.	
“DUDD” Downtown	Design overlay districts to provide for additional review and/or requirements as appropriate in the context of the site. Subject to review by Urban Design Commission or Downtown Design Review Board. (Panther Island) Peripheral I-35W/N/Central/S
“TUP” Trinity Uptown	
“CUZ” Compatible Use Zone	Airport overlay districts to provide additional regulations to ensure compatibility with airport flight operations.
“AO” Airport Overlay	
“TCU Residential”	Residential overlay district to limit the number of unrelated persons living in a one-family district as a family in a single housekeeping unit.
“CUP” Conditional Use Permit	Special overlay districts adding specific residential, commercial, and industrial uses requiring site plan approval prior to development. Provides for time limits and renewal considerations.

Special Purpose Districts

“AG” Agricultural	Farms, ranches or nurseries for the growing of plants and raising of livestock. Also permitted are public service facilities such as churches, schools, libraries, etc.
“CF” Community Facilities	Public facilities including churches, govt. offices, health services, public safety, colleges and schools, community and group homes, and recreation facilities.
“MH” Manufactured Hsg.	Manufactured Housing / Mobile Home Parks and Subdivisions, and their related uses. (dwelling purposes only)
“PD” Planned Developmt.	Special district permitting specific residential, commercial, industrial and mixed uses, normally requiring site plan approval prior to development.

Mixed-Use/Form Based

“MU-1” Low Intensity Mixed-Use	Higher density, mixed-use, pedestrian-oriented development for designated mixed-use growth centers and urban villages, so as to concentrate a variety of housing types among neighborhood-serving commercial and institutional uses. MU-1 is encouraged in the central city. Maximum height 3-5 stories with available height bonus. Subject to review by Urban Design Commission.
“MU-2” High Intensity Mixed-Use	Higher density, mixed-use, pedestrian-oriented development for designated mixed-use growth centers and urban villages, so as to concentrate a variety of housing types among commercial, institutional, and select light industrial uses. Maximum height 5-10 stories with available height bonus not to exceed 10 stories. Subject to review by Urban Design Commission.
“CB” Camp Bowie	High density, mixed-use, pedestrian-oriented development for designated area along Camp Bowie Blvd. corridor south of I-30 to SW Loop 820. Subject to review by Urban Design Commission.
“NS” Near Southside	High density, mixed-use, pedestrian-oriented development for designated area south of Downtown. Subject to review by Urban Design Commission. <u>Bars and Light Industrial uses prohibited in NS/T4R.</u>

“PI” Panther Island	High density, mixed-use, pedestrian-oriented development for designated area north of Downtown. Subject to review by Urban Design Commission.
“TL” Trinity Lakes	High density, mixed-use, pedestrian-oriented development for designated area at East 820 and Trinity Blvd. Subject to review by Urban Design Commission.
“BU” Berry University	High density, mixed-use and higher density residential, pedestrian-oriented development for designated area on Berry from University to Cleburne Rd. Subject to review by Urban Design Commission.

<https://www.fortworthtexas.gov/departments/development-services/zoning/ordinance>

§ 4.709 TOWNHOUSE/CLUSTER (“R2”) DISTRICT.

(a) *Purpose and intent.* It is the purpose of the townhouse/cluster ("R2") district to provide a specific zone for the development of row houses and townhouses on unique patterned lots clustered around a common access road or cul-de-sac.

(b) *Uses.* In the townhouse/cluster ("R2") district, no building or land shall be used and no building shall be hereafter erected, reconstructed, altered or enlarged, nor shall a certificate of occupancy be issued, except in accordance with the use tables in Chapter 4, Articles 6 and 8 and the supplemental use standards of Chapter 5.

(c) *Property development standards.* Property in R2 may be developed to the property development standards defined in the "R1" district. The minimum dimension of lots and yards and the height of buildings in the townhouse/cluster ("R2") district shall be as shown in the accompanying table. See division (d)(3) below.

Townhouse/Cluster (“R2”) District	
Townhouse/Cluster (“R2”) District	
Open space	15% minimum
Units per acre	Maximum number of 24 units per acre on average, unless located in a “C” or “D” district where authorized density shall apply.
Maximum façade length	Maximum building façade length of 250 feet
Front yard*	None required
Side yard*	
Interior lot	5 feet minimum adjacent to street
Corner lot**	10 feet minimum adjacent to both streets
Height	35 feet maximum (refer to Development Standards, § 6.100, Height)
Bldg. separation	10 feet minimum
Notes:	
* May be subject to projected front yard (see Chapter 6, Development Standards, § 6.101(f), Yards).	
** May be subject to other front, side and rear yard setback requirements (see Chapter 6, Development Standards, § 6.101(d), Yards).	

Commentary.

(1) *Carports/porte cocheres* – allowed in side, rear and front yard in certain circumstances. (See Chapter 5, Supplemental Use Standards, § 5.301 Accessory Buildings on Residential Lots, and § 6.101 Yards.)

(2) *Fences* – Two feet high in public open space easement, eight feet high behind front yard. (See Chapter 6 Supplemental Use Standards Fences for fence requirements for fences allowed for residential dwellings.)

(3) *Facade* – materials and appearance. See Chapter 6 Development Standards, § 6.507 Single-Family Residential Design Districts.

(d) *Other development standards.* Development in the townhouse/cluster (“R2”) district may be subject to a variety of general development standards in Chapter 6 , and the following provisions:

(1) *Signs.* On-premises signs subject to the following:

a. An unilluminated nameplate bearing the family name of the occupants residing in the residence not to exceed one square foot in area.

b. An unilluminated sign for those uses permitted that are not residential. The sign shall not exceed 30 square feet in area, shall be no higher than six feet above grade, and shall be placed a minimum of ten feet behind the property line. Such sign shall not be placed within 20 feet of drives providing ingress and egress to the property.

(2) *Parking.* Two spaces per dwelling unit, located behind the front building line, except for limited local streets or private access easements, where four spaces shall be required, located behind the front building line or may be provided within the development. For nonresidential uses, see Chapter 6 Development Standards, Article 2 Off Street Parking and Loading, § 6.200.

(3) *Residential design standards.* A site plan for residential development is required.

a. *General.* Under this provision, townhouses, rowhouses or the clustering of residential units may be permitted where such units cluster around a common access road or feed from a loop or cul-de-sac and provided that such development shall conform to the following regulations regarding buildings and structures.

b. *Plat required.* Such properties shall be platted showing the following, if applicable:

1. Public streets.

2. Private streets and private access.

3. Private open space and open space easements.
4. Utility easements.
5. Public parks.
6. Pedestrian walkways and bicycle trails.
7. Lot, block and addition name.

c. *Open space.*

1. The open space, exclusive of paved areas, parking spaces and patios, must be not less than 15 percent of the total lot area.
2. Provisions, such as a homeowner's association, shall be instituted to provide maintenance for all common open space.

d. *One building per lot.* Each residential building shall be located on a separately platted lot.

e. *Maximum building façade length.* Building face shall not exceed a maximum of 250 feet.

f. *Development plan.*

1. Unless setbacks are shown or described on the plat, a development plan must be submitted showing the proposed setbacks on each lot.

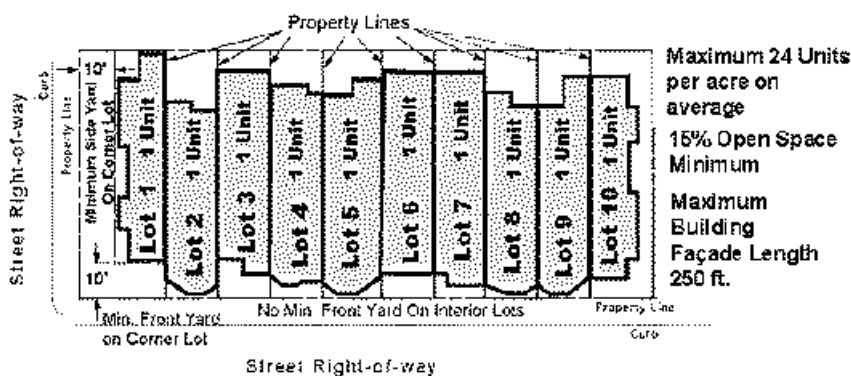
2. Adjustments in the development plan that change the setbacks from one lot to another will not be accepted without a written release from all property owners involved in the adjustment. When amendments are accepted, the original development plan must be withdrawn in its entirety.

3. A development plan shall be reviewed as a site plan under the requirements of § 6.506, unified residential development. (See also § 5.302, accessory uses in unified residential development.)

(4) *Landscaping and buffers.* Nonresidential uses may require landscaping or buffers. See Chapter 6 Development Standards, Article 3 Landscaping, Buffers, and Urban Forestry, § 6.300.

(5) *Reconstruction of nonconforming accessory buildings.* A nonconforming accessory building that is damaged by fire, the elements, or other cause beyond the control of the owner may be repaired or reconstructed in the same rear and side yard setbacks provided the construction is limited to the identical footprint (replacement of the foundation is allowed); the building is the same design, height and roof pitch (use of different material is allowed) and the owner or an agent obtains a building permit to repair the structure within six months after the damage date. The owner shall have the burden of proof to establish the damage date.

(6) *Garage/carport.* No more than one garage and one carport or porte cochere shall be allowed per residential unit on a single residential lot, unless the additional garages or porte cocheres are an integral part of the main residential structure with the same roofline and driveway as the residential structure.



Picture 4.25
"R2" District Townhouse/Cluster

Picture 4.25

(Ord. 20159-04-2012, § 1 (Exh. A), passed 4-3-2012; Ord. 21672-03-2015, § 2, passed 3-3-2015, eff. 3-19-2015)

§ 4.712 HIGH DENSITY MULTIFAMILY ("D") DISTRICT.

(a) *Purpose and intent.* It is the purpose of the high density multifamily ("D") district to provide a specific zone for high density multifamily development. In adopting multifamily design development regulations, it is also the intent of the City Council to encourage the most appropriate uses of land; to encourage higher quality design and materials; to provide safe and improved access to the public walkways, to install street trees and enhanced landscaping along the public walkways to improve the pedestrian environment; and to provide criteria for development of land zoned for multifamily dwelling use.

(b) *Uses.* In the high density multifamily ("D") district, no building or land shall be used and no building shall be hereafter erected,

reconstructed, altered or enlarged, nor shall a certificate of occupancy be issued, except in accordance with the use tables in Chapter 4, Articles 6 and 8 and the supplemental use standards of Chapter 5. No permit shall be issued for construction, alteration or revision in a Multifamily Design development area unless there has been a site plan approved by the development services director or an authorized representative and a subdivision plat approved by the plan commission.

(c) *Property development standards.*

(1) All one-family and two-family residential development may be developed under the property development standards of §§ 4.705 through 4.709 for one-family or two-family use. See the selected district and also see § 6.507 Single-Family Residential Design Standards.

(2) a. All multifamily residential development (three or more dwelling units) shall meet the property development standards of Multifamily Development and the minimum dimension of lots and yards shall be as shown in the accompanying table.

“D” District, Multifamily Design Development	
“D” District, Multifamily Design Development	
Open space	35% minimum
Units per acre	32 maximum
Front yard*	20 feet minimum
Rear yard	5 feet minimum
Side yard*	
Interior lot	5 feet minimum
Corner lot**	10 feet minimum adjacent to side street
Setback adjacent to one- or two-family residential district ***	Three feet for every one foot (3:1) as measured from slab to top of sill plate, or two feet for every one foot (2:1) in overall height when measured from lowest finished grade to the peak of the roof, whichever is greater; 30 feet minimum 1:1 setback with a 10-foot minimum setback for one-story garages and carports 20-foot minimum setback for dumpster enclosures and one-story accessory structures
Height	36 feet maximum, slab to top plate 48 feet maximum, slab to top plate, beyond 250-foot setback to one- and two-family districts (refer to Chapter 6, Development Standards, § 6.100, Height)
Notes:	
* May be subject to projected front yard (§ 6.101(f)). Paving shall not be permitted between the building face and street and must remain as open space.	
** May be subject to other front, side and rear yard setback requirements (See Chapter 6, Development Standards, § 6.101(d), Yards).	
*** A five-foot bufferyard and minimum six-foot screen fence shall be placed on the property line and should be landscaped per point system, see § 6.300 (b), (d), (f), (g). This regulation shall not be required when the property in the one- or two-family district is used for utilities, waterways, railroads or other nonresidential public use or separated by a public right-of-way of at least 300 feet in width.	

b. Carports are not allowed between the front of the building face and street, see §§ 6.101(a) and 6.300(b).

(3) For all nonresidential uses in the high density multifamily ("D") district, the minimum dimension of lots and yards and the height of buildings shall be as shown in the accompanying table.

“D” District, Nonresidential Development	
“D” District, Nonresidential Development	
Lot width	50 feet minimum
Front yard*	20 feet minimum
Rear yard	5 feet minimum
Side yard*	
Interior lot	5 feet minimum
Corner lot**	10 feet minimum adjacent to side street
Setback adjacent to one- or two-family residential district***	20 feet minimum
Height	35 feet maximum (refer to Chapter 6, Development Standards, § 6.100, Height)
Notes:	

* May be subject to projected front yard (§ 6.101(f)). Paving shall not be permitted between the minimum yard setback line and street and must remain as open space.
** May be subject to other front, side and rear yard setback requirements (see Chapter 6, Development Standards, § 6.101(d) Yards).
*** A five-foot bufferyard and minimum six-foot screen fence shall be placed on the property line and should be landscaped per point system, see § 6.300 (b), (d), (f), (g). This regulation shall not be required when the property in the one- or two-family district is used for utilities, waterways, railroads or other nonresidential public use or separated by a public right-of-way of at least 300 feet in width.

(d) *Other development standards.* Development in the high density multifamily ("D") district may be subject to a variety of general development standards, including, but not limited to the following.

(1) *Signs.*

a. For non-multifamily development on-premises signs are subject to the following:

i. An unilluminated nameplate bearing the family name of the occupants residing in the residence not to exceed one square foot in area; and

ii. An unilluminated sign for those uses permitted that are not residential. The sign shall not exceed 30 square feet in area, shall be no higher than six feet above grade and shall be placed a minimum of ten feet behind the property line. Such sign shall not be placed within 20 feet of drives providing ingress and egress to the property.

b. Identification signs for multifamily development shall be permitted, subject to the following provisions:

i. Signs shall be permitted to identify the use or uses of the property upon which displayed.

ii. A sign or combination of signs shall have a maximum allowable area of exposure on each dedicated street frontage of not more than one square foot of sign area for each ten linear feet of frontage along said street; provided, however, at least one sign shall be allowed having an area of 12 square feet.

iii. Signs may be illuminated, but the source of light shall not be visible and shall not be intermittent or flashing; revolving signs shall not be permitted.

iv. Not more than 50% of the total allowable sign area may be located in the required yard space along a dedicated street. However, no individual sign in such required yard space shall exceed 20 square feet in sign area.

v. Symbols which are designed as an integral part of the building structure and symbols and signs which are not visible or readable from the public street shall not be limited by the above regulations.

vi. Nothing contained herein shall exempt the owner of any multifamily building from placing identification signs on buildings as required by the City of Fort Worth fire code.

(2) *Parking.*

a. One- and two-family residential development shall meet the parking requirements for the selected district.

b. For nonresidential parking requirements see Chapter 6, Development Standards, Article 2, Off-Street Parking and Loading, § 6.200.

c. Multifamily development parking requirements shall be as follows:

i. No parking or driveways shall be provided between a building and a public or private street. Parking shall be provided per § 6.201. Frontage on a controlled access highway shall not be considered a street for purposes of this section.

Use	Requirement
Multifamily Residential	1 space per bedroom plus 1 space per 250 square feet of common areas, offices and recreation (less laundry rooms and storage); 2 spaces may be tandem if assigned to the same unit and restricted from use for storage.
Multifamily Residential: Townhouse configuration	Two spaces per dwelling unit, located within a garage of the individual unit, having access to and from that unit, and not accessible or usable by other residential units. Plus 1 space per 250 square feet of common areas, offices and recreation (less laundry rooms and storage).

ii. On-street parking along the lot frontage may be applied toward the minimum parking requirements only when located fully out of the travel lanes as defined in the Master Thoroughfare Plan when there is parking on both sides of the street. On-street parking that is applied toward minimum parking requirements shall be counted towards the maximum parking limitations.

(3) *Accessory uses in Multifamily Design developments.* In addition to other uses which qualify as accessory uses, the following

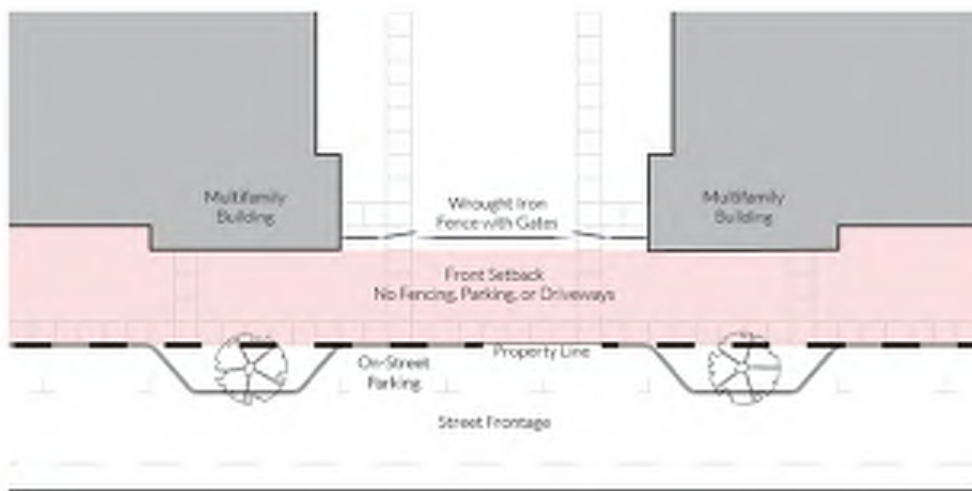
shall be considered as accessory uses to Multifamily Design development:

- a. Recreation areas and spaces within buildings primarily for use of the dwelling occupants;
- b. Kindergarten and day care center primarily for the use of the dwelling occupants;
- c. Mechanical and storage buildings necessary for operation and maintenance of the Multifamily Design development;
- d. Manager's office; and
- e. Garages, carports.

(4) *Fences and gates.*

a. One- and Two-Family residential development. Open Design fences up to five feet high in front yard and projected front yard for one-family and two-family residential dwellings per regulations in § 5.305(b)(2)

b. Multifamily development. Fences shall not be located in the area between building facades and the property line. Frontage on a controlled access highway shall not be considered a street for purposes of this section. Perimeter security fencing is prohibited; however, security fencing is permitted on interior property lines. Solid screening fences are required when adjacent to a one or two family district unless adjacent to a public park or controlled access highway when a solid screening fence is not permitted and an open design fence shall be installed, if a fence is installed.



c. Exterior security fences and gates that are located along public streets, along a public access easement, or along publicly accessible open space shall not extend beyond building facades.

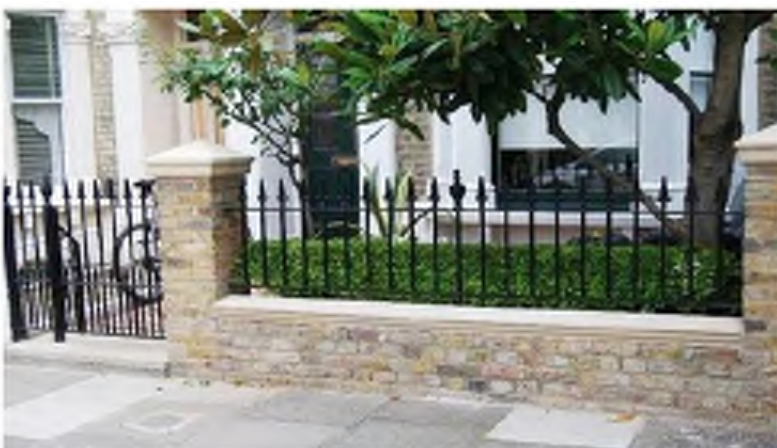
d. All fences and railings shall be architecturally compatible with the character of the building and be constructed of high quality materials including: wrought iron, composite fencing, treated wood, aluminum, or metal. Chain link, barbed wire, and concertina wire material is prohibited.

e. All walls shall be architecturally compatible with the character of the building and constructed of high quality materials including stone, decorative blocks, brick, cast stone, or stucco over standard concrete masonry blocks.

f. For private residential patios and yards, a fence, railing, or low wall may extend beyond the building facade if the following requirements are met.

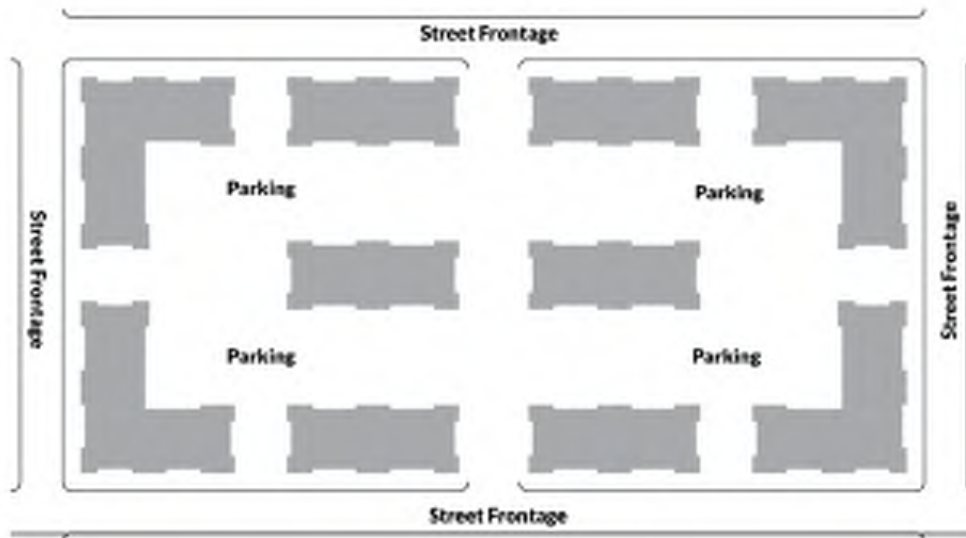
i. Fences, railings, and walls shall not exceed four feet (48") in total height as measured from the ground to the top of the fence, railing and/or the wall; however,

ii. For elevated residential stoops the total fence railing and/or wall height shall not exceed five feet (60") total.



(5) *Facade and building orientation standards for multifamily development.* The following design standards apply:

a. *Building Orientation.* Buildings located on public streets must face the street with the longest length of the building placed parallel/adjacent to the street. Where site constraints require, the building end (shortest length of the building) may face a public street only when the same exterior quality to the building facade is provided including architecture, masonry and fenestration proportion on the side of other buildings facing the public street.



b. *Facade design standards.*

1. *Required drawings.* To illustrate compliance with the following standards, elevation drawings shall be submitted as part of the multifamily design site plan review to the planning and development department for those building facades that are oriented to:

- Public streets.
- Private streets and walkways that are publicly accessible through a public use easement; or
- Publicly accessible open space.

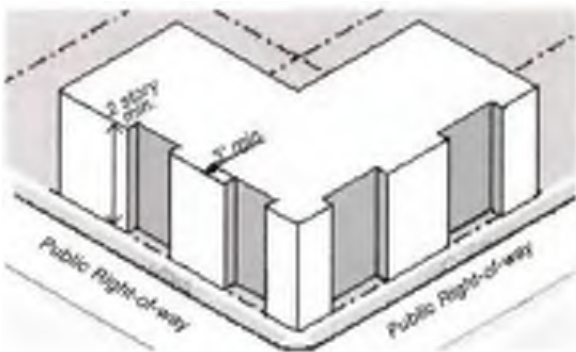
2. *Facade variation.*

a. Each new building facade oriented to a publicly accessible street or open space shall incorporate each of the following scaling elements. For building facades less than 50 feet in width, a minimum of two elements are required. The following items and calculations shall be provided as part of the multifamily design submittal for review:

1. Expression of building structural elements such as:

- Floors (banding, belt courses, etc. not less than one inch deep and four inches wide).
- Columns (pilasters, piers, quoins, etc. not less than one inch deep and six inches wide).
- Foundation (water tables, rustication).

2. At least two variations in wall plane not less than three feet in depth or projection and not less than two stories in height for multi-story buildings. Such elements could include patterns of door and window openings by utilizing sills, mullions, and other scale providing window elements, and/or more pronounced architectural features such as porches, alcoves, and roof dormers;



3. Changes in material, material pattern, or noticeable change in color or shade. Each change of material shall involve a minimum one inch variation in wall plane or noticeable change in color.

b. New building facades oriented to a publicly accessible street or open spaces shall include differentiation between the first and second level and the upper levels with a cornice, canopy, balcony, arcade, or other architectural features.

c. If a project consists of more than one block face, each sequential block of new construction shall contain a different building facade to encourage architectural variety within large projects, using the required architectural elements listed in and/or other architectural features.



3. *Building materials.* Not less than 70% of all new building facades (not including door and window areas) facing publicly accessible streets or open space shall be constructed of the following masonry materials:

- i. Stone.
- ii. Brick.
- iii. Terra cotta.
- iv. Patterned pre-cast concrete.
- v. Cement plaster stucco.
- vi. Cement board siding.
- vii. Cast stone or prefabricated brick panels.

(6) *Landscaping.*

a. *Enhanced landscaping point system requirement.* Enhanced landscaping is required along all public rights-of-way, see Section (h)(4), and shall earn a minimum set of points that are awarded for providing and maintaining specific landscaping and design features. The points are accumulated as follows:

ENHANCED LANDSCAPING SYSTEM		
20 points required		
10 of the required points shall come from the installation of street trees as described below:		
Public Feature	Requirement	Points Awarded
ENHANCED LANDSCAPING SYSTEM		
20 points required		
10 of the required points shall come from the installation of street trees as described below:		
Public Feature	Requirement	Points Awarded
Street Trees	Trees shall be planted within a planting strip or flush with the sidewalk surface; location and type as approved by the City Forester if within the right of way. If trees cannot be installed within the right of way, trees shall be installed in a location where the tree canopy affects the public sidewalk. Required Spacing as specified below or as approved by the City Forestry Small/Medium Canopy = 25-30 ft. on center Large Canopy = 35-40 ft. on center <i>*Where necessary spacing exceptions may be made to accommodate mature trees, curb cuts, fire hydrants and other infrastructure elements.</i> Street trees may be counted toward the planting requirements for the Urban Forestry required tree canopy coverage.	10
Pedestrian- Scaled Lighting	*1 light post for every 60-70 ft. (based on size of street tree) of street frontage. <i>Style to be approved by the Transportation and Public Works Department (TPW) and consistent with other pedestrian lights on the same block.</i>	10
Paved Walkway Enhancement	1 pt. for every additional foot of sidewalk width over the city standard (up to 15 ft. wide total).	1- 11
Private Feature	Requirement	Points Awarded
Pool/Playground	5 percent (%) of net land area with minimum area not less than 1,000 sf.	5 for each
Private Park/dog park	Must provide recreational facilities/amenities. May include open drainage area/easement/pond as long as amenities are provided	5
Community Garden	1 pt. for every 250 sf. with minimum area not less than 1,250 sf.	5- 10
Proximity to Public Park	Within 1,000 ft. as measured from property line to property line	5
Sustainable Landscaping	Xeriscaping, rain gardens, bio-swales, landscaped bio retention area. See Chapter 6, Table A for a recommended list of native plants for landscape use in North Central Texas Landscaped bio-retention areas are encouraged for natural drainage channels to reduce runoff and increase infiltration of water into the soil.	5

**If no pedestrian lights or street trees exist on the project's block face, measure from the end of the block to determine spacing. For trees, begin 40 feet from the curb intersection to accommodate public open space easement requirement. If trees or lights exist, measure from existing trees or lights.*

- i. Points shall be awarded only one for each feature category, per project.
 - ii. *Submittal of site plan.* The location and description of decorative paving, sidewalk furniture or other decorative elements, if any, shall be indicated on the site plan.
 - iii. All landscaped areas shall:
 1. Be located outside the perimeter of the footprint of a building or structure;
 2. Protected by wheel stops, curbs or other physical barriers where adjacent to vehicle use areas; and
 3. Be covered with grass, organic mulch or low maintenance groundcover.
 - iv. In addition to required trees, all of the open space and unpaved areas must be covered with grass, organic mulch, live groundcover, or decorative paving.
- b. *Landscaping in parking and driveway areas.*
- i. Parking lots and driveways that are located adjacent and parallel to a public street shall be screened from the public right-of-way with landscaping, berms, fences, or walls up to four (4') feet in height. Landscaping installed to comply with this section shall be shown on the site plan.

Parking lot screening: Perspective



ii. Landscape islands, linear landing strips, bio-swales, or rain gardens shall be required in parking lots with 12 or more spaces. All parking areas shall provide tree canopy coverage per the Urban Forestry Ordinance, § 6.302.

- c. Submission of applicable urban forestry plans for review shall follow § 6.302(g), Urban Forestry Plan/Permits.

(7) *General site plan requirements.*

- a. *Location of buildings.* All buildings and structures shall be shown on the site plan with dimensions of the buildings and adequate dimensions showing distance from property lines, easements, driveways, parking spaces and other buildings.
- b. *Driveways and parking spaces.* The location of all driveways and parking spaces shall be shown on the site plan, including ingress-egress, and all calculations for required parking.
- c. *Emergency access.* Emergency access as required in accordance with the Fire Code and addresses approved by the Fire Department shall be shown on the multifamily design site plan.
- d. *Landscape and walkways.* Show enhanced landscaping point chart, landscape materials, required and proposed height of perimeter walls, bufferyards and recreational facilities. Walkways shall be provided to connect to all buildings, parking areas and recreational facilities and shall be shown on the site plan. Walkways shall connect to public streets where street frontage exceeds 500 feet and to adjacent public property, commercial areas, and trails.
- e. *Garbage collection.* Garbage collection locations shall be shown on the site plan. Such locations shall not be placed within 20 feet of adjacent one- or two-family districts. Dumpsters shall be visually screened, except from the access side, and shall not be placed within the required open space. Access shall face internally and not face upon adjacent properties or the public street.
- f. *Open space and recreational facilities.* All open space and recreational facilities shall be identified on the site plan. Open space is the ratio of open space to net land area (see Chapter 9, Definitions).
- g. Open space shall be clustered in areas upon the site to provide views and vistas for a given group of buildings. Open spaces and

recreational amenities shall be designed as functional space with appropriate distribution on the total site plan. Any recreational facilities shall be used primarily by the residents and their guests. No alcohol, beer or wine shall be sold on the premises unless permitted in a district zoned for that use.

- i. Except for required front yards, no space or area less than 25 feet in either dimension shall be counted as open space.
- ii. Patios adjacent to dwelling units, unless enclosed, may be included as part of the open space.

h. *Miscellaneous requirements.*

- i. The developer shall submit a site plan which shows the zoning of all adjacent properties.
- ii. The submitted site plan shall include a location map, north point, scale and date.
- iii. The face of the site plan shall include a table showing net land area, floor area, open space area, number of parking spaces, maximum units per acre and maximum height.
- iv. The developer shall prepare and submit a checklist to accompany the submitted site plan which shall constitute an application and include a listing of those basic requirements found in the zoning ordinance, the subdivision ordinance and the plan commission rules and regulations.

(8) *Site plan expiration.* A multifamily development site plan submitted to the planning and development department shall expire one year from the date of site plan submittal if not approved. If approved, the site plan shall expire two years from the date of approval unless a certificate of occupancy is issued for a multifamily use building in accordance with the approved site plan.

(9) *Certificate of occupancy requirements.*

- a. No certificate of occupancy shall be issued for a multifamily development until a final landscape plan has been approved by the development services director or a designated representative and all landscaping required by the plans has been installed.
- b. During the construction phase where development regulations contained herein have not been met, construction permits may be issued, and construction may proceed, but no certificate of occupancy shall be issued until all regulations have been complied with. The city shall refuse any final connection of utilities prior to issuance of a certificate of occupancy.

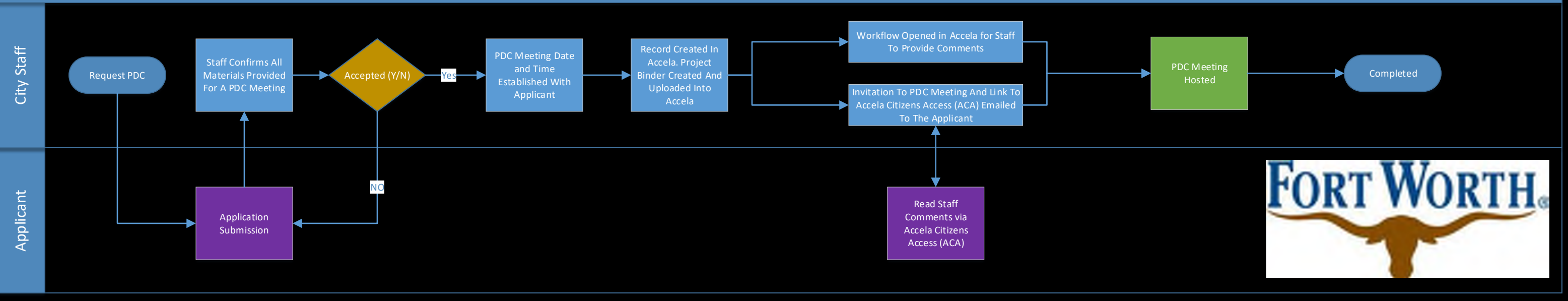
(Ord. 20159-04-2012, § 1 (Exh. A), passed 4-3-2012; Ord. 23495-12-2018, § 3, passed 12-4-2018; Ord. 24030-02-2020, § 22, passed 2-4-2020)

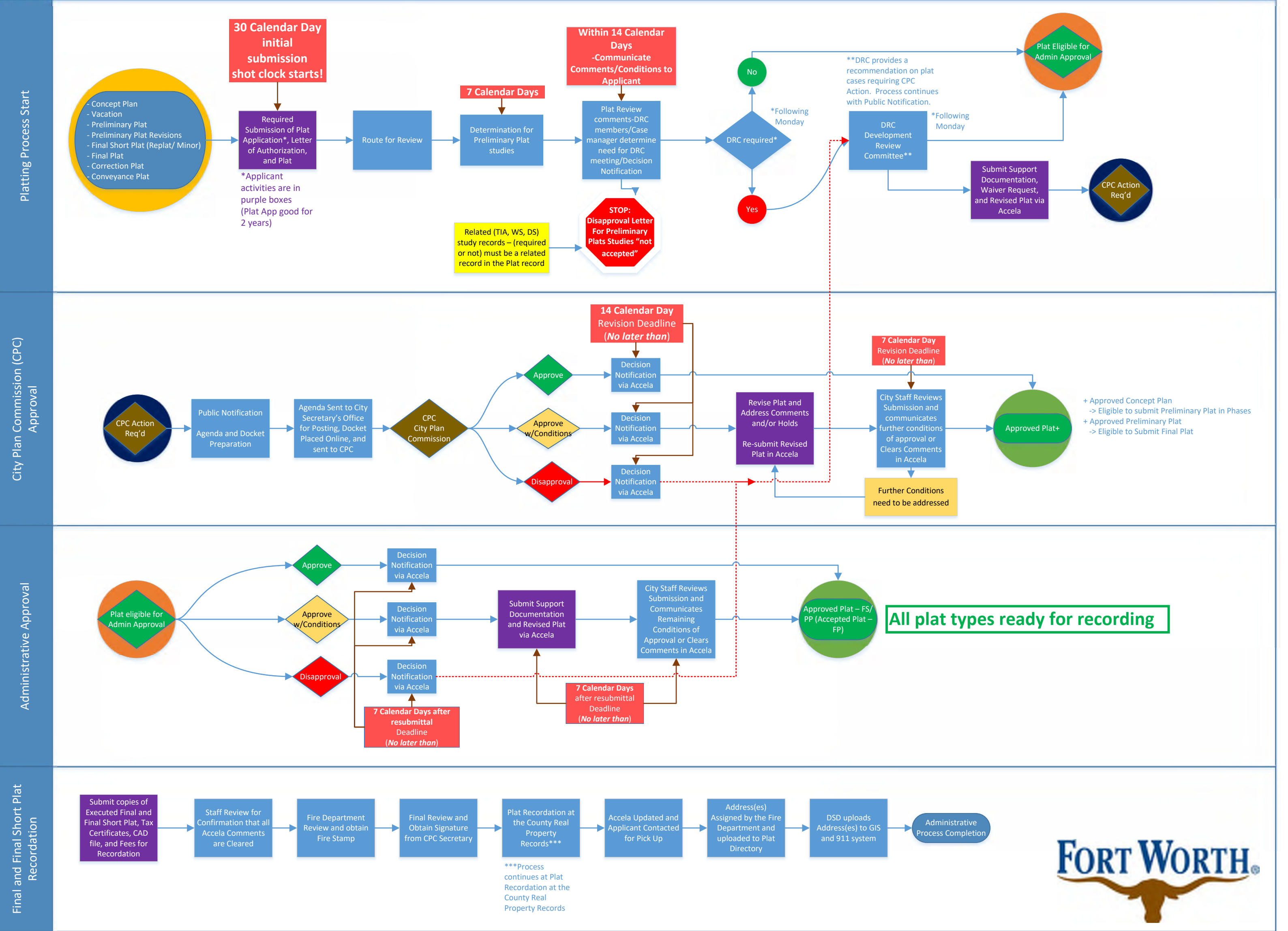
APPENDIX C

Pre-Development Conference (PDC)

Project Facilitation

Pre-Development Conference Process – October 2023





CITY OF FORT WORTH, TEXAS – DEVELOPMENT SERVICES DEPARTMENT

Platting Applications

FEE SCHEDULE

As of October 1, 2022

A. SUBDIVISION PLATS

1. Concept Plan.....\$900
2. Preliminary Plat:
 - a. Application fee\$850**plus \$15 per lot single family
*plus \$30 per acre non-single family
*plat revisions after 1st.....\$220
3. Final Plat:
 - a. Application fee\$385**plus \$30 per lot single family
*plus \$25 per acre non-single family
4. Minor Plat and Re-Plat (no public hearing)\$425*
- *plus \$25 per lot single family
*plus \$25 per acre non-single family
*plat revisions after 1st.....\$220
5. Plat Correction..... \$50
6. Conveyance Plat \$200
7. Other Matters of Business/Waivers.....\$220
8. Filing fees with the county: Filing fees for the appropriate county will be in addition to fees above.
9. Technology Fee \$15

B. VACATIONS OR CLOSURES

1. Street and Alley ROW\$700
2. Emergency & Public Access Easements\$700
3. Plat Vacation \$400

C. MTP – AMENDMENT

1. Master Thoroughfare Plan Change\$700

D. ANNEXATION

1. Annexation (Owner – initiated)
 - a. 25 acres or less (commercial/industrial use only).....fee waived
 - b. 75 acres or less\$700
 - c. More than 75 acres.....\$700**plus \$10 per acre over 75 acres
2. Annexation (Limited Purpose) \$3,000
3. Private ETJ Release\$400

E. SPECIAL DISTRICTS (MUDS/WCIDS)

1. Petition.....\$15,000
2. Agreement amendments.....\$10,000

F. HEARING CONTINUANCE

\$600

At applicant's request after public notice of City Plan Commission public hearings



Application for Subdivision Plat Approval

(Complete all information) (Applications must be submitted on-line)

(Check One)

- | | | | |
|---------------------------------------|---|--|---|
| <input type="checkbox"/> Concept Plan | <input type="checkbox"/> Preliminary Plat | <input type="checkbox"/> Final Plat | <input type="checkbox"/> Conveyance Plat |
| <input type="checkbox"/> Minor Plat | <input type="checkbox"/> Replat | <input type="checkbox"/> Correction Plat | <input type="checkbox"/> Plat Abandonment |

Subdivision Name Name: _____ Lots & Blocks : _____	File Case No. Reference Case No.
---	---

Record Owner of Property / Agent*		Primary Contact	
Printed Name: _____ Signature: _____ Date: _____		Phone () Fax () Email	
Address	City	State	Zip

Applicant (Developer / Subdivider)		Primary Contact	
Printed Name: _____		Phone () Fax () Email	
Address	City	State	Zip

Engineer/ Surveyor		Primary Contact	
Firm: _____ Representative Name (Print) : _____		Phone () Fax () Email	
Address	City	State	Zip

Development Yield	Gross Site Area (Acreage): _____	Total Number Lots: _____
Residential Lots: Number _____	Total Number Dwelling Units: _____	
Acreage: Single Family Detached _____ Single Family Attached _____ Two Family _____ Multifamily _____		
Non-Residential Lots: Number _____		
Acreage: Commercial Lots _____ Industrial Lots _____ Open Space Lots _____ Right-of-Way _____		

Complete Application
<p>A plat application will not be considered filed pursuant to Section 212.009 of the Texas Local Government Code until all required documents and fees have been submitted and <i>all of the terms and conditions of the Subdivision Ordinance, including all necessary studies, plans and supporting information are accepted and approved</i>, or the applicant has filed a waiver request for sections from which the plat deviates. Once a plat meets the requirements to be considered filed with the City, the application will be placed on the Development Review Committee agenda and the Plan Commission agenda for consideration under the time requirements set out in Section 212.009. Plat applications that are incomplete will expire in 180 days/ six months.</p>

Fee:	Received by:	Date:
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* Note: An Agent must furnish a **signed 'Letter of Authorization' from the owner**, when submitting this application.

2-2023



REPLAT/ MINOR PLAT (FS) CHECKLIST

Complete Application

A check for application completeness will be made with the applicant prior to plat filing. A plat application will not be considered filed pursuant to HB 3167 until ***all fees have been submitted, all requirements of zoning and the Subdivision Ordinance are satisfied, and all required documents have been accepted.*** Required documents include any and all necessary studies, plans, and supporting information and these must be accepted (approved) by the reviewing department. Plat applications that do not meet these requirements will be rejected.

Once a plat meets the requirements to be considered filed, the application will be placed on the Development Review Committee agenda and the Plan Commission agenda for consideration under the time requirements set out in HB 3167. A decision for approval or denial must be made within 30 days from the submittal of the application. A completed checklist must be submitted with each application.

Pre-Application Items

Prior to submitting a plat application, ***all required infrastructure studies must be accepted and site/ infrastructure/ construction plans approved.*** Verify that the following studies are required or not applicable. For clarity on which items will be required for your project prior to application submission, please schedule an optional pre-submittal meeting.

Studies Accepted/Approved

Required

- | | |
|--|--------------------------|
| <input type="checkbox"/> Water/Sewer Loading/Demand Study form | |
| <input type="checkbox"/> Traffic Impact Assessment, or Traffic Study form | |
| <input type="checkbox"/> Drainage Study Letter form | |
| <input type="checkbox"/> ETJ Plats: Authorization for Water Wells/Septic Systems from appropriate County Authority | <input type="checkbox"/> |
| <input type="checkbox"/> ETJ Plats: Annexation (if property is eligible) | <input type="checkbox"/> |
| <input type="checkbox"/> TXDOT conditional approval of required access (if applicable) | <input type="checkbox"/> |
| <input type="checkbox"/> Other Entity Approval (if applicable) | <input type="checkbox"/> |
| <input type="checkbox"/> Community Facilities Agreement or Miscellaneous Projects filed | <input type="checkbox"/> |
| <input type="checkbox"/> Construction plans approved through IPRC | <input type="checkbox"/> |
| <input type="checkbox"/> Right-of-Way Vacation(s) with City Plan Commission recommendation | <input type="checkbox"/> |
| <input type="checkbox"/> Board of Adjustment request filed (if applicable) | <input type="checkbox"/> |
| <input type="checkbox"/> Takings Impact Assessment (TIA) Waiver Form (Tarrant County Only) | <input type="checkbox"/> |
| <input type="checkbox"/> Concept Plan/Preliminary Plat/Master Plan | <input type="checkbox"/> |

Not Applicable

Filed Applications

- | | |
|---|--------------------------|
| <input type="checkbox"/> Zoning Change | <input type="checkbox"/> |
| <input type="checkbox"/> Master Thoroughfare Plan (MTP) Amendment | <input type="checkbox"/> |

Mandatory Application Items

- ☐ Application Form: complete application signed by the property owner(s) and/ or Signed Letter of Authorization Form by all record property owner(s) and the engineer/surveyor or record.
- ☐ Application Fee: Complete payment of application fee in accela portal: <https://aca-prod.acela.com/CFW>
- ☐ Waiver Fee: \$220. If a waiver to the Subdivision Ordinance is being requested a waiver letter will be required. Address the letter to Chairman Don Boren, City Plan Commission.

- ☐ Plat Exhibit: Digital Submission (\$15 technology fee).

Minor Plat/Replat Access and Design Criteria:

The Subdivision Ordinance (SO) describes access and design criteria to which the plat must conform. Submissions that are not consistent with the Subdivision Ordinance will require revisions or must request a waiver. ***If a waiver request is not submitted, the application will be recommended for denial.*** Common design issues include, but are not limited to, the items below:

- ☐ Plat boundaries: Include all contiguous unplatted property in common ownership within the plat boundary. Do not leave remainder portions of the original unplatted tract. If the application is a replat, ensure that no remainder or partial lots are being created by the proposed plat. [SO, Sec. 31-41 (a)]. All property owners of land within the depicted plat boundary must be signatories on the plat application.
- ☐ Zoning: Plats that are in conflict with their underlying zoning cannot be processed. Applicants seeking a zoning change or variance from zoning must request the change from the appropriate Board or Commission prior to plat submission. If zoning is a Planned Development (PD) the applicant must provide the approved site plan. If property is in a form based code area (MU/UR/H, design overlays) applicants should coordinate their proposed design with the appropriate commission and board (UDC, DDRB).
- ☐ Lot Access: Ensure all lots have direct paved access to a public or private street [SO, Sec. 31-81 (a) (1)]. Lots zoned commercial or industrial may take their sole access from a Public Access Easement instead if the property is platted with a minimum of 100-feet of frontage on the public access easement (PAE). [SO, Sec. 31-81 (i)]
- ☐ Public Access Easements: [SO, Sec. 31-106 (i)] Public access easements must be constructed to City street standards and are a minimum of 24-feet in width for commercial uses and 80-feet in width for industrial uses [SO, Sec. 31-81 (i)]. Public access easements must not terminate within the lot as a cul-de-sac (dead-end). [SO, Sec. 31-106 (e) (1)]
- ☐ Residential Access and Lot Standards: Ensure residential lots do not have their primary frontage on an arterial or collector and do not have double-frontage on two local streets [SO, Sec. 31-103 (b)]. Residential subdivisions must have a minimum of two points of access for more than 30 single family units, or more than 100 multifamily units. [SO, Sec. 31-101 (c)].
- ☐ Residential Driveway Access Limitation: Proposed lots which are less than 50-feet in width should provide driveway access by rear entry access from the abutting rear alley. [SO, Sec 31-106 (13)]
- ☐ Two points of ingress/egress: Final short plats consisting of more than 100 multifamily units cannot be recorded without two points of ingress/egress to a public street [SO, Sec. 31-101 (c) (1)] that are fully constructed and accepted by the city.
- ☐ Access Management: If a proposed lot is taking its sole access from a Master Thoroughfare road or a Texas Department of Transportation road, provide proof of approval of driveway locations from the relevant agency. Limited driveway spacing on thoroughfares may require properties to be served by public access easements. If access requires crossing a private utility easement, a Utility Access Agreement signed by affected parties is required.
- ☐ Right-of-Way Dedication: Required dedications to adjacent rights-of-way must be shown on the plat. Required street sizing for use types may be found in the Master Thoroughfare Plan. The minimum width for an urban local cross section is 50-feet [SO, Sec. 31-106] and 60-feet in the ETJ.
- ☐ Alley Standards: Alleys may not dead-end and must be sized appropriately for adjacent uses: 16-foot minimum for residential, 20-foot minimum for commercial and industrial uses. [SO, Sec. 31-106 (c) (9)]

- ☐ ROW Corner Clip: A triangular right of way dedication measuring 10-feet by 10-feet, measured at the property line, is required on corner lots at the intersection of two streets in which there are no traffic signals or all-way stop signs (label: "dedicated by this plat"); No dedication is required at all-way stops and signalized intersections. [SO, Sec. 31-106 (c) (9)] Public Open Space Easements (P.O.S.E.) are required at the intersection of two easements. [SO, Sec. 31-104 (c)].
- ☐ Vacations: If a proposed development is incorporating unconstructed ROW (road or alley), a vacation application for this ROW must be approved by City Council and the ordinance number issued prior to plat recordation.
- ☐ Easements: Easements within the boundary of the project should be labeled as "dedicated by this plat." Any plat easements or offsite easement recording information must be shown. If all or portion of an existing easement is to be abandoned, label as "abandoned by this plat." Easements may be filed by separate instrument, however all recording must be completed prior to plat submission. Contact this office for standard easement language and process for filling.
- ☐ Street extension and continuation: Urban local streets shall be extended to the subdivision boundary to connect with adjoining streets or, where no adjacent streets are available for such connection, to allow for the future connection with adjoining un-platted property. [SO, Sec. 31-106 (a) (7)]

Format & General Standards

- ☐ Include reference the case number on the plat (FS-XX-XXX).
- ☐ Include date that the plat was prepared.
- ☐ Provide north arrow, graphic scale, and written scale in close proximity to each other.
- ☐ Use engineer scales 1" = 10', 20', 30', 40', or 50'.
- ☐ Orient Plat so that north is to the top or left-hand side of sheet.
- ☐ Provide a vicinity map in the same orientation of plat/replat showing subject property, and its location within the County, north arrow, (label "not to scale"), the nearest unincorporated area, and adjacent thoroughfares. Include city limit line or ETJ boundary, if within the vicinity map.
- ☐ Preparer contact: company name, preparer name, address, e-mail, and phone number or email address.
- ☐ Owner/subdivider contact: company name, name of representative signing on behalf of company, and full address (street, city, state, and zip code) for all owners at time of recordation of the plat.
- ☐ Utilize the City of Fort Worth approval block, 4 1/2" x 5", for city approval stamps.
- ☐ Include a County Commissioners approval block for ETJ plats in Tarrant County.
- ☐ Show land use table with development yield. Show Land Use Table on the plat, showing Gross Acre/Net Acre/ROW Dedication/Lot Use Type.
- ☐ Identify items used for block and boundary and boundary corners/monuments.
- ☐ Show a recording information block that reads "This plat recorded in Document Number _____ Date _____". This should be placed prominently at the bottom of the plat with room for handwritten numbers.
- ☐ Surveyor's signature and notary block, or surveyor's seal.
- ☐ If replat, state purpose of revision (e.g., "The purpose of this replat is....")

Site Information

- ☐ Indicate plat/replat boundary with heavy/bold line weight.
- ☐ Label proposed lot and block designations. Show proposed property boundaries/lot lines in solid lines, and existing lot lines grayed out.
- ☐ Adjacent property info: Show and label properties contiguous to the site. For platted properties, show lot lines and label subdivision name, lot and block designation, and plat record information for each lot. For unplatted

properties, show parcel lines and label record owner and deed record information for each parcel.

- ☐ Show point of beginning tied to abstract corner if not previously platted, or to subdivision corner if platted. Indicate on graphic and/or in legal description. For property boundary lines, provide distances (to nearest hundredth of feet) and bearings (to nearest second). For property boundary curves, provide curve lengths, curve radii, and chord lengths (to nearest hundredth of feet), and internal angle and chord bearing (to nearest second).
- ☐ Do not show or label existing or proposed improvements including buildings, utilities, landscape areas, parking areas, topography, or fencing.
- ☐ Number all lots and blocks in a systematic order.
- ☐ Label lot area in acres and square feet for non-single-family residential development. For single-family residential development, label lot area in square feet (and net acres for lots to be served by on-site septic systems).
- ☐ Easements: Show, and label, the locations and dimensions of easements for franchise, water, sanitary sewer, and storm sewer utilities. For lots adjacent to, or containing 100-year floodplain/floodway and drainage easements, label minimum finish floor elevation. Easements should be indicated with a dotted or dashed line. Abandonments may be indicated by stipple or crosshatch shading.
- ☐ Emergency Access Easements: Public Access Easements and Emergency Access Easements used for addressing purposes must be shown and named on the plat face. Emergency Access Easements are a minimum of 26 feet wide in multifamily and 24 feet for other uses. Confirm name availability with the fire department.
- ☐ Show Public Street and Alley R.O.W. Label with street name and include recording information or label as proposed. Dimension R.O.W. width from lot boundary to street centerline. Alley are 16-feet in residential areas and 20-feet wide in commercial or industrial areas.
- ☐ Identify all private streets.
- ☐ Show location of existing wells.
- ☐ Show Tie-down measurement to nearest existing public right-of-way intersection
- ☐ Label areas of open space, homeowner association lots, and park land dedications.
- ☐ Show and label city limit lines, county limit lines, and/or survey (abstract) lines, if applicable.

Legal Description, Title Block and Plat/Replat Language

Provide standard replat language for the following key sections:

- Owner's Certificate and property legal description
- Plat boundary information as surveyed
- Owner's Dedication (including certification that all parties with an interest in title to the subject property have joined in such dedication) and signature of approval, with notary block.
- Title block language

Owner's Certification should include:

- ☐ Name of record owner and corresponding deed reference proving ownership of the property (this should match the owner's address block). Include all current owners on the plat.
- ☐ Name of previous addition or subdivision with recording information (by Vol. & Pg., Cab. & Slide, or Doc No.)
- ☐ Name of survey, abstract, county, and state.

Survey of Plat Boundary should include:

- ☐ Metes and bounds legal description for subdivision boundary. Calls and monumentation match plat/replat graphic.
- ☐ Total area of the plat/replat in acres and square feet.

Owner's Dedication should include:

- ☐ Owner's Dedication should include the Lot, Block, and Addition name and match the title block.
- ☐ Owner's Dedication should include the owner at the time of recordation of the plat, and should match the owner listed in the contact paragraph. Provide a separate notary block for each owner's signature.

Title Blocks should include:

- ☐ Title Blocks shall be in the lower, right-hand corner of the plat/replat.
- ☐ The heading should be Final Plat; contain the project name (subdivision name, lot and block designations); the jurisdiction it is an addition to (County or City), and the following:
- ☐ For un-platted land, include gross acreage; city, county and state name; survey and abstract name.
- ☐ For plats in the ETJ, the addition is to the County (see example below).

**Final Plat of
CRAWFORD SHILLING ADDITION
Lots 1 & 2, Block 1
A 10.485 acre Addition to Tarrant County, Texas
Situated in the Joaquin Rendon Survey, Abstract Number 1263
Two single-family lots**

- ☐ Replats shall reference subdivision name and recording information of the original plat in the title block. State the subdivision name, lot and block designations of property being replatted; the recording information of the preceding plat (Document number; Volume & Page, or Cabinet & Slide); PRTCT. For example:

**FINAL PLAT
LOTS 2R AND 3R, BLOCK 4
CHAMPION'S CIRCLE ADDITION
BEING A REPLAT of ALL of LOTS 2 & 3, AND PORTIONS OF LOT 4, CHAMPION'S CIRCLE ADDITION, AN
ADDITION TO THE CITY OF FORT WORTH, TARRANT COUNTY, TEXAS,
AS RECORDED IN VOLUME 2556, PAGE 56, PRTCT**

Plat Notes

City of Fort Worth standard plat notes to be used as indicated. See the application for full note text language.

Plat notes which apply to all plats within the City, or Extraterritorial Jurisdiction (ETJ):

- ☐ Utility Easements
- ☐ Sidewalks
- ☐ Construction Prohibited over Easements
- ☐ Covenants or Restrictions are Unaltered (Applies to replats only)

Plat notes which apply to plats within the city limits only:

- ☐ Water/ Wastewater Impact Fees
- ☐ Transportation Impact Fees
- ☐ Site Drainage Study
- ☐ Building Permits
- ☐ Residential Drive Access Limitation (Applies to residential lots under 50' in width)

Plat notes which apply if the element is present on/nearby the site:

- ☐ Private Common Areas and Facilities
- ☐ Public Open Space Easement
- ☐ Oil or Gas Well Proximity to Buildings

Plat notes which apply at the request of the Watershed/Stormwater Department:

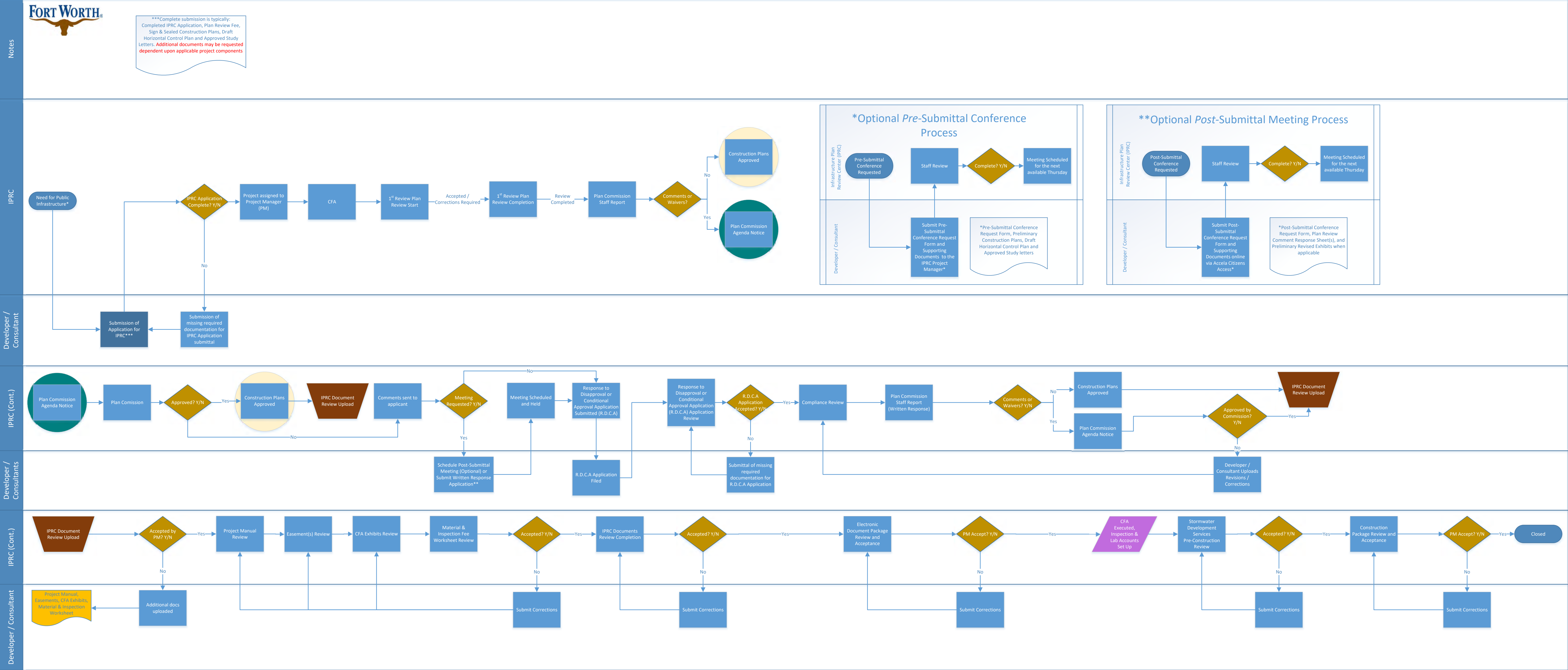
- ☐ Floodplain Restriction
- ☐ Flood Plain/ Drainage Way Maintenance

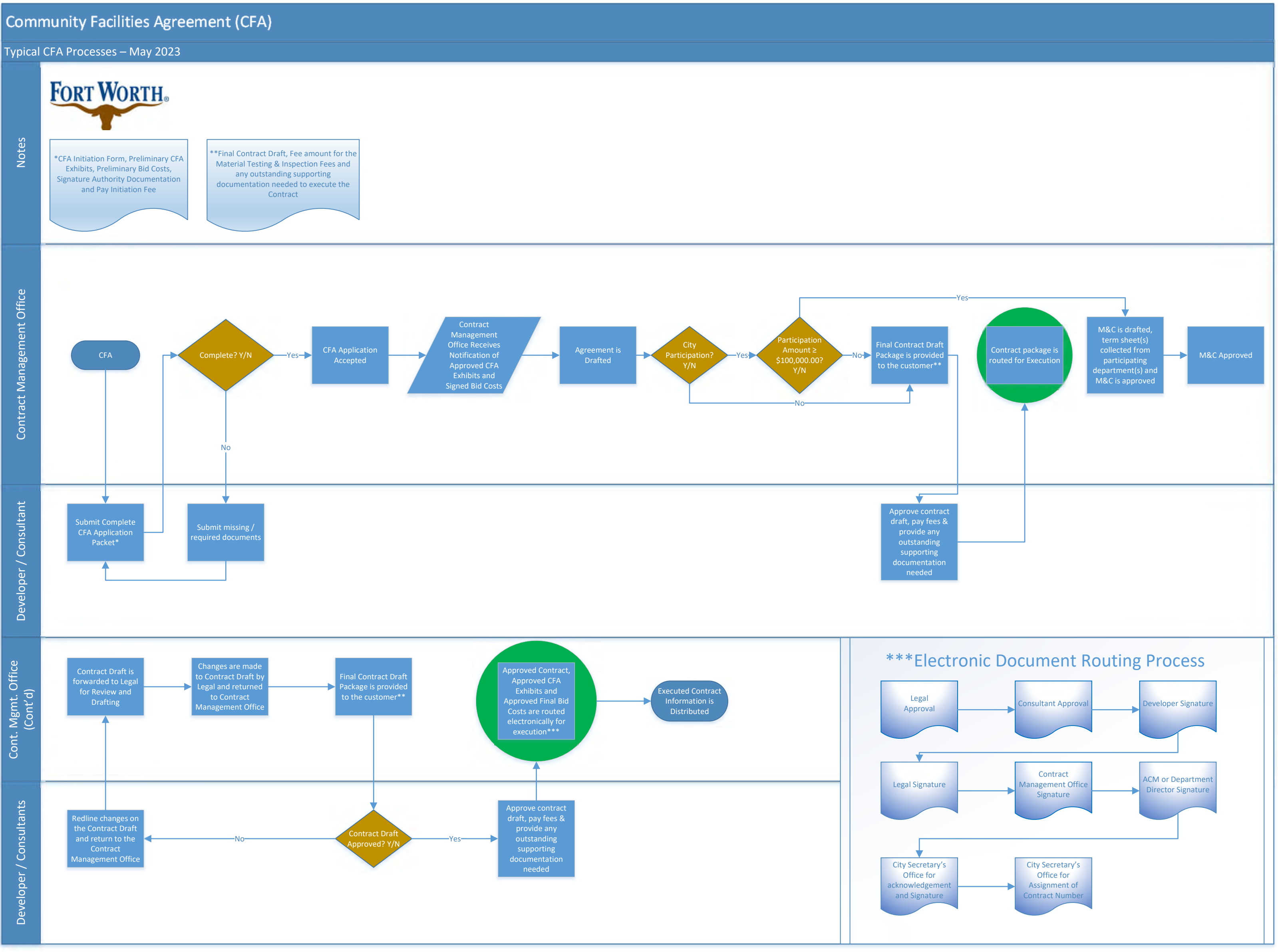
Additional plat notes for all ETJ plats in Tarrant County include the following (if applicable consult with Tarrant County Transportation Services Department):

1. Development in unincorporated Tarrant County shall be subject to applicable municipal regulations, the current Tarrant County Subdivision and Land Use Regulations and the Tarrant County Fire Code.
2. Tarrant County permits required prior to development within this subdivision, as applicable, include, but are not mitigation, and on-site sewage systems.
3. Tarrant County shall not be responsible for private common areas, including but not limited to, private streets, emergency access easements and gated security entrances, recreation areas, landscaped areas and open spaces.
4. All drainage easements shall be kept clear of fences, buildings, foundations, plantings and other obstructions to the operation and maintenance of the drainage facility.
5. The siting and construction of water wells shall be subject to the regulations of the Northern Trinity Groundwater Conservation District.
6. Tarrant County does not enforce subdivision deed restrictions.
7. Land owners and subsequent owners of lots or parcels within this subdivision are encouraged to contact Tarrant County's Transportation Services Department prior to conducting any development activities.

Requirements at the Time of Recording

- ☐ 4 copies of signed, notarized, wet sealed plat
- ☐ Tax Certificates dated within two weeks of filing, showing a zero balance (must be submitted to Tarrant County Transportation Services Department with ETJ final plats)
- ☐ Owners Dedication, if separate from plat
- ☐ For ETJ final plats in Tarrant County, payment for recording fee (consult with Tarrant County Clerk)
- ☐ For ETJ final plats in Tarrant County, Surety Bond for construction of streets and drainage (if applicable, must be submitted to Tarrant County Transportation Services Department with final plat)
- ☐ 2014 AutoCAD file Closure sheet showing the difference between the beginning coordinate and the ending coordinate in the legal description. The closure sheet should include the coordinate geometry (COGO) data for all of the calls as well as any error of closure. Provide the error of closure to no more than six decimal places. Typical error should be between 0.00 to 0.02 feet.





ORDINANCE NO. 18615-05-2009

AN ORDINANCE AMENDING THE COMPREHENSIVE ZONING ORDINANCE OF THE CITY OF FORT WORTH, BEING ORDINANCE NO. 13896, AS AMENDED, CODIFIED AS APPENDIX "A" OF THE CODE OF THE CITY OF FORT WORTH, BY AMENDING CHAPTER 6, "DEVELOPMENT STANDARDS" TO DELETE SUBSECTION K OF SECTION 6.301 "LANDSCAPING" AND RE-LETTER THE REMAINING SUBSECTIONS; TO ADD A NEW SECTION, SECTION 6.302 ENTITLED "URBAN FORESTRY" TO INCLUDE AND REVISE THE CONTENTS OF SUBSECTION K RELATED TO TREE COVERAGE, PRESERVATION, PLANTING AND MAINTENANCE; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, Chapter 211 of the Texas Local Government Code allows a municipality to regulate land use for the purpose of promoting the public health, safety, morals, or general welfare and protecting and preserving places and areas of historical, cultural or architectural importance and significance; and

WHEREAS, the Attorney General of Texas has ruled that a home-rule city may enforce its reasonable land development regulations for the purposes of maintaining aesthetics and property values which would include landscaping and tree preservation (AG Opinion No. GA-0697); and

WHEREAS, in order to maintain and enhance a positive image and a livable city it is important to promote site planning which furthers the preservation of mature trees and to protect trees during construction, to facilitate the design and construction which contribute to the long term viability of existing trees and to control the removal of trees when necessary; and

WHEREAS, a Citizen Advisory Committee was formed in 2004, in response to citizen concerns regarding the practice of clear cutting, to study tree preservation practices in other cities and recommend possible regulations related to tree preservation to the City Council of Fort Worth; and

WHEREAS, the City Council recognized that there was a need to establish regulations addressing the protection of healthy and significant trees and to provide for the replacement and replanting of trees that are necessarily removed during construction, development or redevelopment in an expeditious manner and with due regard for the legal rights of property owners; and

WHEREAS, on October 3, 2006 the City Council of Fort Worth approved Ordinance Number 17228 to provide for regulations for the protection and replacement of trees in the City of Fort Worth; and

WHEREAS, it was the intent of the regulations to limit the removal of tree canopy, promote a multi-aged urban forest, to promote the orderly development of the City of Fort Worth, and to protect the public health, safety and general welfare of the citizens of the City of Fort Worth; and

WHEREAS, the regulations had the following objectives: to eliminate the process of clear cutting; to promote the preservation/conservation of trees throughout the City; to recognize the benefits of trees in the urban environment; to encourage the planting and preservation of quality trees that are suitable to an area; to promote a safe environment that includes trees; to aid in stabilizing the environment's ecological balance by contributing to the process of air purification, oxygen regeneration, ground-water recharge, and storm water runoff retardation, while at the same time aiding in noise, glare, wind and heat abatement; to provide visual buffering within and between land uses of differing character to alleviate the harshness of urban life; to enhance the beautification and aesthetics of the City; to safeguard and enhance property values and to protect public and private investment; to conserve energy; to provide habitat for wildlife; and to encourage the preservation of large trees which, once removed, can be replace only after generations;

WHEREAS, since the adoption of Ordinance Number 17228, staff has recognized a need to amend the regulations to provide clarity and to make the provisions easier to implement by moving the regulations to a separate subsection under landscaping; and

WHEREAS, it is advisable that the City Council amend Ordinance Number 17228 regarding the urban forestry regulations governing the preservation and removal of trees within the City;

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORT WORTH, AS FOLLOWS:

SECTION 1.

The title of Article 3 "Landscaping and Buffers" is hereby amended to add urban forestry to read as follows:

Article 3. Landscaping, Buffers and Urban Forestry

SECTION 2.

Section 6.301 "Landscaping" is hereby amended by deleting subsection K "Preservation of Trees" and re-lettering the remaining sections. The Code of the City of Fort Worth, Texas (1986), as amended, is hereby amended to replace all references to "Section 6.301K" with "Section 6.302."

SECTION 3.

Chapter 6, "Development Standards" of Article 3, "Landscaping, Buffers and Urban Forestry" is hereby amended to add a new section, Section 6.302 "Urban Forestry" to add and revise the contents previously contained in Section 6.301.K relating to tree coverage, preservation, planting and maintenance, to read as follows:

6.302. Urban Forestry

A. Purpose

It is the purpose of this section to achieve thirty percent (30%) tree canopy coverage citywide and to promote a multi-aged urban forest. This may be accomplished by addressing the preservation and protection of healthy and significant trees, providing for the replacement and replanting of trees that are removed during development, and establishing additional tree canopy.

B. Applicability of Urban Forestry Requirements

These requirements shall be applicable to all development as described below, unless subject to the exemptions in Paragraph C:

1. Removal of any trees of six (6) inches or greater in diameter.
2. Construction of new structures for which a building permit is required.
3. Expansion of structures used for commercial/institutional and industrial uses that increase the footprint of existing structures by at least thirty percent (30%) or add at least three thousand (3,000) square feet to existing structures.
4. Clearing of all or a portion of property, including grading or construction of a new parking lot.
5. Subdivision of land greater than one acre for the construction of one- or two-family dwellings, including contiguous lots with the same owner that total more than one acre.
6. Construction of manufactured home parks and recreational vehicle parks for which a permit is required and private recreation facilities located in manufactured housing subdivisions.
7. Mixed Use (MU) zoned properties. These properties must provide, through either preservation or planting, fifty percent (50%) canopy coverage of required open space.
8. New agricultural development that requires tree removal.
9. Public projects that will physically change the surface or will include removal of trees six (6) inches or greater.

C. Exemptions from Urban Forestry Requirements

The following are not subject to Urban Forestry requirements:

1. Structures that do not create or expand building square footage or temporary structures such as job shacks associated with construction activities, when no trees greater than six (6) inches are removed;
2. Any single residential lot with a one- or two-family dwelling that is one (1) acre or less in size.
3. Change in use of an existing structure, unless the structure is expanded in accordance with Paragraph B.3 above;
4. Any area within a design district unless the standards for that district do not address urban forestry.
5. Construction or expansion of structures in the "H" Central Business District.
6. Any area located within an airport operating area as defined by Section 3-1 of the City Code.
7. Any tree that is deemed to be in unsafe condition, or is injurious to common good, or to electrical, gas or water utilities, or sewer pipes, pavement or improvements, or is infested and dangerous to other trees or conflicts with other ordinances or regulations.
8. Gas well sites and natural gas pipeline compressor stations, except as outlined in Chapter 15, Gas Drilling of the City Code.

D. General Requirements

The following requirements apply to all development:

1. Tree Protections and Maintenance:

a. Procedures required prior to development activities:

i. **Protective Fencing:** Prior to development activities, the contractor or subcontractor shall construct and maintain, for each preserved tree or tree cluster on a tract, a protective fence which encircles the outer limits of the critical root zone of the tree to protect it from development activities. All protective fencing shall be in place prior to commencement of any site work and remain in place until all exterior work has been completed. Fencing shall meet the state minimum standards of a four (4) foot orange plastic mesh net with t-posts, including a top rail or other type of support. Significant trees shall be protected with a minimum four (4) foot chain link fence with support cables and t-posts.

ii. **Bark Protection:** In situations where a preserved tree remains in immediate area of intended construction and the City Forester determines the tree bark to be in danger of damage by development activities, the contractor or subcontractor shall protect the tree by enclosing the entire circumference of the tree with two-inch by four-inch (2" x 4") lumber encircled with wire or other means that does not damage the tree.

The intent is to protect the bark of the tree against incidental contact by large construction equipment.

iii. Canopy Coverage Protection: All trees being preserved for canopy coverage under Section 6.302.G.4. or a Significant or Large Tree covered under Section 6.302G.5. due to size will be protected during any development activities. Development activities will include vegetation removal, grading, demolition, installation of utilities and/or construction of structures and site amenities.

- b. Protective measures (as defined in this section) must occur on all trees located within fifty (50) feet of development activities.
- c. Protective measures are required within the critical root zone radius from the trunk at one (1) foot per inch diameter measured at Breast Height (DBH).
- d. The following activities within the critical root zone are prohibited:
 - i. No material intended for use in construction or waste material accumulated due to excavation or demolition shall be place within the limits of the critical root zone of any preserved tree;
 - ii. No equipment shall be cleaned or other liquids deposited or allowed to flow overland with the limits of the critical root zone of a preserved tree. This includes, without limitations, paint, oil, solvents, asphalt, concrete, mortar or similar materials;
 - iii. No signs, wires or other attachments, other than those of a protective nature, shall be attached to any preserved tree;
 - iv. No vehicular and/or construction equipment traffic or parking shall take place within the limits of the critical root zone of any Preserved Tree other than on existing street pavement; or
 - v. No heavy equipment, including but not limited to trucks, tractors, trailers, bulldozers, bobcat tractors, trenchers, compressors and hoists shall be allow inside the critical root zone of any preserved tree on any construction site without the specific approval of the City Forester;
 - vi. No grade change within the critical root zone of any Preserved Tree without submission of a certified arborist/forester report dealing with protections and the report acceptance by the City Forester;
 - vii. No filling activity in the critical root zone of any Preserved Tree may occur as a permanent condition which may damage the tree. Tree wells may be used to ensure that the root zone is protected.

- e. Replacement of any Preserved Tree which dies within five (5) years due to construction or development activities will be the responsibility of the original applicant. Replacement will be new trees with a minimum of three (3) inches each in diameter and equal to five (5) times the lost canopy. Tree replacement will be guaranteed for an additional period of two (2) years.

2. Construction Methods:

- a. *Boring:* Boring of utilities under preserved trees shall be required in those circumstances where it is not possible to trench around the critical root zone of the preserved tree. When required, the length of the bore shall be the width of the critical root zone at a minimum and shall be a minimum depth of forty-eight (48) inches.
- b. *Grade change:* In situations where the City Forester approves a grade change within the critical root zone of a preserved tree, procedures and special conditions shall be approved by the City Forester in advance of any work.
- c. *Trenching:* All trenching shall be designed to avoid trenching across the critical root zone of any preserved tree, unless otherwise approved by the City Forester. All work within the critical root zone requires advance approval by the City Forester. The placement of underground utility lines such as electric, phone, gas, etc., is encouraged to be located outside the critical root zone of preserved trees. Trenching for an irrigation system shall be placed outside the critical root zone, except into the critical root zone perpendicular to the tree trunk and in the manner that has the least possible encroachment into the critical root zone. Boring is required for all underground utility lines that cross the critical root zone.
- d. *Root pruning:* All roots two inches or larger in diameter which are exposed as a result of trenching or other excavation shall be cut off square with a sharp medium tooth saw and covered with pruning compound within two (2) hours of initial exposure.
- e. *Underground utilities:* All onsite underground utilities with backfill other than onsite material shall have a clay dam every two hundred (200) feet for the entire length of the utility placement.
- f. *Paving:* No paving is allowed within the critical root zone of any preserved tree unless otherwise approved by the City Forester. Approvals will be based upon best management practices for tree preservation.

3. Tree planting to achieve the goal of canopy coverage:

- a. Trees planted to provide canopy coverage shall be a minimum of two and one-half to three inches (2.5" to 3") each in diameter and will be credited its canopy coverage at normal maturity. These credits are as follows:

- i. Large canopy tree with typical crown width of fifty (50) feet in diameter--two thousand (2,000) square feet (minimum spacing of forty (40) feet on center);
 - ii. Medium canopy tree with typical crown width of thirty (30) feet in diameter---seven hundred (700) square feet (minimum spacing of twenty-four (24) feet on center);
 - iii. Small canopy tree with typical crown width of ten (10) feet in diameter---one hundred (100) square feet (minimum spacing of eight (8) feet on center).
- b. Tree planting requirements: Table H is a list of desirable and adapted trees for the Fort Worth area. Other trees other than those in Table H will be considered by the City Forester and granted on a case-by-case basis. The approval of additional species will be judged on adaptability, long-term health and growth characteristics of the tree type.
 - c. The minimum size of tree planted will be two and one-half to three inches (2.5" to 3") in diameter. The caliper measurement of the trunk shall be taken at a point six (6) inches above the ground if the resulting measurement is no more than four (4) inches in diameter. If the resulting measurement is more than four (4) inches, the measurement of the caliper shall be taken at twelve (12) inches above the ground. If the tree is multi-trunk, the main stem will be given full credit for its diameter and all other stems will receive one-half (1/2) credit. The total of all must be three (3) inches or greater.
 - d. All newly planted trees that die within two (2) years of the date of project completion will be replaced. The replacement tree carries the same two (2)-year replacement requirement. The requirement to replace the trees shall run with the land.
 - e. A minimum of sixteen (16) square feet of permeable surfaces must be provided for all tree plantings.
 - f. Expansion of structures used for commercial/institutional and industrial uses: Tree plantings to achieve canopy coverage will be based only on the square footage of the expansion footprint rather than the entire site to ensure at least minimal tree replacement. Only tree removal permits for trees greater than six (6) inches in diameter are required for expansions under three thousand (3,000) square feet.

4. Warranty/Replacement:

Any preserved tree that dies or becomes hazardous and a threat to public safety or property due to construction activities within five (5) years following the date of issuance of the Certificate of Occupancy shall be replaced following the criteria outlined above for tree preservation and significant tree replacement by the original applicant or assigned party.

5. A Certificate of Occupancy shall not be issued until the requirements of Section 6.302.G. are met.

E. Specific Requirements based on Land Use

The City's goal to achieve a city-wide tree canopy cover of at least thirty percent (30%) and to promote the functional distribution of that canopy throughout various land uses as development occurs through a combination of planting and retention goals and requirements for tree canopy cover. In support of the overall goal of tree canopy cover for the City, the following land use requirements shall apply:

1. One- and two-family residential land uses:

- a. Minimum retained or planted canopy coverage shall be forty percent (40%).
- b. Canopy for New Subdivisions:

The forty percent (40%) canopy coverage requirement for one- and two- family residential land uses will be reduced to twenty-five percent (25%) if:

- i. One tree per residential lot is planted on all lots up to five thousand (5,000) square feet in area;
- ii. One additional tree for each additional five thousand (5,000) square feet of lot area, or fraction thereof is planted, up to a maximum of nine trees per residential lot; and
- iii. The remaining portion of the twenty-five percent (25%) canopy coverage may be provided in public rights-of-way, parks, homeowner association lots or boundary street parkways.

- c. Phased Development of Residential subdivisions:

Residential subdivisions that are to be developed in phases must provide a plan that complies with the retention requirements at full build-out as approved on the preliminary plat. If a final plat requests credit for trees in undeveloped phases or units that are planned for future development, it will be necessary for all subsequent plats to identify trees for retention or provide mitigation as needed to obtain the required canopy coverage percentage. Updated plans must be provided to Urban Forestry as the subdivision is developed.

- d. Canopy for Existing Platted Residential Lots over one acre:

- i. retained canopy coverage of twenty-five percent (25%);
- ii. overall canopy coverage of forty percent (40%).

2. Multifamily land uses:
 - a. Minimum retained or planted canopy coverage shall be fifty percent (50%) of open space.
3. Institutional land uses:
 - a. Minimum retained or planted canopy coverage shall be thirty percent (30%).
4. Commercial land uses:
 - a. Minimum retained or planted canopy coverage shall be thirty percent (30%).
5. Mixed Use land uses in MU Mixed-Use Zoning:
 - a. Minimum retained or planted canopy coverage shall be fifty percent (50%) of open space.
6. Industrial land uses:
 - a. Minimum retained and planted canopy coverage shall be twenty percent (20%).
7. Surface parking areas:
 - a. Minimum canopy coverage shall be forty percent (40%).
 - b. The canopy coverage shall be achieved through preservation of existing trees or tree planting within the parking field and drives;
 - c. No requirement for one- and two-family residential uses;
 - d. Credit shall be given for preserved or planted trees located outside the subject property within the parkway of adjacent streets.
 - i. Trees planted to provide canopy coverage shall be a minimum of three inches each in diameter and will be credited its canopy coverage at normal maturity. These credits are as follows:
 - (a) Large canopy tree with typical crown width of fifty (50) feet in diameter—two thousand (2,000) square feet (minimum spacing of forty (40) feet on center);
 - (b) Medium canopy tree with typical crown width of thirty (30) feet in diameter—seven hundred (700) square feet (minimum spacing of twenty-four (24) feet on center);

- (c) Small canopy tree with typical crown width of ten (10) feet in diameter—one hundred (100) square feet (minimum spacing of eight (8) feet on center).

8. Public projects (e.g. water, sewer, street, or drainage):

- a. Minimum retained and planted canopy coverage shall be thirty percent (30%);
- b. Public projects may elect to mitigate required canopy coverage through payment into the tree fund at a rate of six hundred dollars (\$600.00) per required tree. No mitigation or payment in to the tree fund shall be required if the public project does not prevent the surface from being restored to its original condition or where the public project will not require tree removal.

9. Agricultural land uses:

- a. Minimum canopy retention shall be twenty-five percent (25%);
- b. New agriculture development will require documentation of the existing canopy coverage and a detailed tree survey of the property prior to clearing or grading of the property. The tree survey will include the location, size and species of tree. At the time of development a payment of two hundred dollars (\$200.00) per diameter inch will be required for up to twenty-five percent (25%) of the removed trees over six (6) inches in diameter. The canopy coverage and total diameter inch total will run with the land provided approved documentation is recorded in the applicable county deed records.

F. Delineation of Artificial Lot

If a developer wishes to develop a portion of a one acre or larger tract, the developer may request that the Planning and Development Director delineate the portion of the tract to be developed as an artificial lot, for purposes of calculating Urban Forestry requirements for the development. Artificial lots may be delineated in any type of development, including schools and places of worship. All artificial lots shall meet the following requirements:

- 1. Contain the entire area on which the development is to occur, including all paved areas;
- 2. Contain a land area of less than fifty percent (50%) of the entire tract, or, if the proposed artificial lot contains more than fifty percent (50%) of the entire tract, the Director must determine that a substantial amount of the tract is not affected by the proposed development; and
- 3. Be delineated on the Urban Forestry Plan as provided in Subsection G, below.

G. Urban Forestry Plan/Permits

No activity subject to the Urban Forestry Requirements shall be conducted without the required permit for such activity, as further described below:

1. Permits:

a. Tree Removal Permit is required:

- i. prior to the removal of a single tree. No permit shall be issued if the remaining canopy coverage is less than the twenty-five percent (25%) minimum retention; or
- ii. for the removal of any tree six (6) inches or greater in diameter.

b. Urban Forestry Permit is required:

- i. for the removal of more than one (1) tree;
- ii. for construction of new structures on properties where a building permit is required, unless exempted under Section 6.302.C.

c. An Urban Forestry Plan is required to be submitted with the Urban Forestry Permit.

d. An approved Urban Forestry Permit will run with the land. If the project scope or configuration changes prior to any disturbance of the land, the approved Urban Forestry Permit is invalid and the owner/developer shall apply for a new permit.

e. An Urban Forestry Permit shall expire on the fifth anniversary of the date the permit was issued if no progress has been made toward implementation of the Urban Forestry Plan.

2. Urban Forestry Plan:

Submission of an Urban Forestry Plan is required for the issuance of an Urban Forestry Permit and is required before or at the time of application for building permit. At the time of submission of the Urban Forestry Plan, the applicant shall elect a method of preservation of existing canopy under Section 6.302.G.4.

If no trees exist on the site, the applicant shall document the existing conditions and comply with Urban Forestry Plan Application Requirements below, but shall not be required to elect a method of preservation of existing canopy under Section 6.302.G.4.

3. Urban Forestry Plan Application Requirements:

Prior to any platting activity, site plan preparation and submission for development, demolition, disruptive activities (including clearing and grading) or tree removal, the following information must be submitted through a two-part process:

a. Part One: Documentation of Existing Conditions:

- i. The first submittal shall include two (2) copies of a scaled diagram of the subject property in which development, disruption or tree removal is proposed. The

scaled diagram may be an engineered drawing, survey, air photo or other illustration. Part One will reflect the existing conditions by including the following information:

- a. Boundaries of the property and its calculated area i.e. acres, square feet;
 - b. Location map showing the proximity of the property to the nearest streets;
 - c. Outline of the existing tree canopy area on the property and the calculated area (square feet or acres) of existing canopy coverage. Properties with no existing canopy shall indicate such conditions;
 - d. Scaled existing or proposed utilities regulated by the Public Utility Commission, and/or Texas Railroad Commission. Indicate the calculated area (square footage or acres) for these rights of ways or easements;
 - e. Location of each Significant or Large Tree as defined in Chapter 9, its species and canopy area;
 - f. Tables B, C, D, and E in Section 6.302.L.
- ii. Upon completion and approval of Part One documentation, tree removals will be granted if a minimum of fifty percent (50%) of the existing tree canopy is retained. The documentation of pre-development canopy coverage shall be maintained with the property until development occurs. The required retention indicated in Part One documentation will be achieved within the area remaining after the initial clearing.
 - iii. Part One documentation shall expire on the second anniversary of the date of approval if no progress has been made toward completion of a Part Two submission.

b. Part Two: Components of the Urban Forestry Plan:

Part Two will overlay the proposed improvements and removals/preservations/ plantings. Two (2) copies shall be provided and shall include the following information:

- i. Scaled site plan depicting the location of proposed structures, parking areas, drives and amenities;
- ii. Tree canopy areas that are desired to be removed;
- iii. Location and description of trees (large, medium or small canopy crown) that will be planted from Table F to reach the minimum canopy as stated in 6.302E;
- iv. Tables G and H in Section 6.302.L.

4. General Preservation Methods of Tree Canopy

At the submission of an Urban Forestry Plan/Permit Application, the applicant shall elect one of the following tree preservation of existing canopy compliance methods:

a. **Method “A”:** *Preservation of existing canopy coverage regardless of tree species:*

- i. At least twenty-five percent (25%) of the existing canopy coverage must be retained, regardless of tree species, on all properties greater than one acre, provided however, Significant or Large Trees must be preserved as outlined in Section 6.302.G.5. The existing canopy can be determined via recent air photo, on the ground survey or other approved method by the City Forester;
- ii. Property located in floodplains or located in areas that will be dedicated to public spaces may be counted toward the required twenty-five percent (25%) minimum retention;
- iii. Calculation of all canopy coverage and retention areas will not include utility rights-of-way or easements covered under the rules and regulation of the public utility commission, and/or Texas Railroad Commission;
- iv. To remove more than the minimum retention will require a waiver from the Urban Design Commission;
- v. The overall canopy coverage percentage requirement must be met by planting the size and species of Protected Trees in Table A, “Protected Trees”, in Section 6.302.L.

b. **Method “B”:** *Preservation of existing canopy coverage using Protected Trees only.* Protected Trees must be on the site to use this method. See Table A of Section 6.302.L. for a list of Protected Trees:

- i. For property greater than one acre, at least twenty-five percent (25%) of the Protected Trees must be retained, provided however, Significant or Large Trees must be preserved as outlined in Section 6.302.G.5. The total overall retained and planted canopy coverage for the applicable land use must meet a total of five percent (5%) over the required minimum canopy coverage. (e.g. residential coverage would be a minimum of forty-five percent (45%), commercial coverage would be a minimum of thirty-five percent (35%) and industrial would be a minimum of twenty-five percent (25%);
- ii. An onsite tree survey noting the location, size and species (diameter of trees six (6) inches or greater) and canopy coverage of each Protected Tree with a diameter of six (6) inches or greater will be required. This survey shall be completed and signed/sealed by one of the following: Texas licensed Landscape Architect,

Certified Arborist, Texas licensed Landscape Contractor or Texas Certified Nurseryman.

5. Preservation of Significant or Large Trees

- a. Significant or Large Trees twenty-seven (27) inches in diameter (84.82 inches in circumference) for the entire city or eighteen (18) inches in diameter (56.55 inches in circumference) for Post Oaks and Blackjack Oaks east of Interstate Highway 35W can only be removed by permit of the City Forester. The reduced diameter for Post Oaks and Blackjack Oaks east of IH 35W is in recognition of the naturally occurring Post Oak Savannas within the Cross Timbers Zone. Preservation of a significant or large tree will be credited to the required canopy cover one and one-half (1½) times the actual canopy size.
- b. Significant or Large Trees may be removed if one of the following conditions is met:
 - i. An area one and one-half (1½) times the area of the canopy of the tree identified for removal is retained on the same site. The one and one-half (1½) retention of existing trees shall be of the same species as the tree being removed in the Post Oak Savanna as indicated on Exhibit "A" or from the protected list if not in the Post Oak Savanna and be in excess of the required tree coverage on the site/tract; or
 - ii. Planting of new trees from the preferred list (see Table F of Section 6.302.L.) at five (5) times greater in canopy area than the removed specific tree canopy. The additional planting of five to one (5 to 1) will be in excess of the required tree coverage on the site; or
 - iii. Payment into the tree fund based upon the total diameter of the specific tree times two hundred dollars (\$200.00) per diameter inch, or four and 94/100 dollars (\$4.94) per square foot of canopy; or
 - iv. Urban Design Commission approves a plan that mitigates the removal of Significant or Large Trees.

6. Urban Forestry Plan Amendments

- a. Minor Amendments: Minor amendments to an approved Urban Forestry Plan may be approved administratively if one of three conditions below is met:
 - i. An increase in the total canopy;
 - ii. Adjustments in the type of tree to be planted, considering that trees from the list of preferred trees must be replaced with trees from said list;

- iii. Any adjustments in planting location required due to site specific issues including traffic circulation, safety, drainage or utilities, given that the adjustments include only the relocation of trees of the same type and size as provided on the approved Urban Forestry Plan. These adjustments cannot include the removal or transplantation of a tree not considered in the approved Urban Forestry Plan.
- b. Amendments that do not meet any of the conditions in subsection a. of this section must be submitted to and approved by the Urban Design Commission before construction begins.

H. Urban Forestry Development Agreement

1. The Urban Forestry Development Agreement ("Agreement")

- a. The Agreement is intended to facilitate the development of large tract developments, other than single family or two-family developments, under common ownership which would meet or exceed an overall canopy coverage of thirty percent (30%) for all properties included in the Agreement. The intent of a development agreement is to allow areas with more extensive canopy to remain and contribute to the thirty percent (30%) overall coverage while allowing the canopy in other development areas to be reduced. Individual properties that are subject to the Agreement are required to maintain canopy coverage requirements for different land use types as outlined in Subsection c. below.
- b. The original application for an Agreement shall include an initial spreadsheet of minimum canopies and acreages, the form of which is provided in Table I of Section 6.302.L. Thereafter, Table J of Section 6.302.L shall be completed with the provided canopies and acreages included at the time of each subsequent submittal as property/tracts are being developed. These updates shall be provided at the time of submittal of each Individual Part One document. No approval shall be granted nor tree removals to be completed without the submission of the Table J form as set forth in Section 6.302.L.
- c. The Agreement must be presented to the City Council for approval prior to its execution. Any amendments may be approved administratively if the regulations of this subsection are satisfied. The initial submission for approval of an Agreement shall include:
 - i. A map all of the properties to be included in the Agreement, identified by land use and acreage;
 - ii. Individual maps of each land use type (commercial, industrial, etc.); and
 - iii. Table I of Section 6.302.L.

2. Overall Part One Permit

An Overall Part One permit as part of an Agreement will be issued if the following conditions are met:

- a. Minimum acreage allowed shall be one thousand (1,000) acres with all of the acres to be located within the same watershed. Applicant shall provide an exhibit depicting all of the property/tracts and acreages that will be subject to the Agreement.
- b. The property/tracts subject to the Agreement shall be separated by land use type, but shall not include single family or two-family development. Applicant will provide exhibits for each land use type for the initial submittal and will update for subsequent submittals. Canopy requirements will be tracked by land use type.

- c. The minimum canopy coverage for each tract described in an Agreement shall be:

Commercial	15%	Parking	40%
Industrial	10%	Parking	20%
Airport Industrial	5%	Parking	20%
Multifamily	25% of required open space		

- d. All of the acreage to be included in an Agreement shall be under common ownership at the time of the agreement, under a currently approved Overall Part I, or part of an approved concept plan or preliminary plat. A list shall be provided of any separate corporations to be included in an Agreement documenting that all are part of the same parent company. The list shall be provided with the initial Overall Part I submission and shall provide the filing number associated with the Articles of Incorporation filed with the Texas Secretary of State.
- e. The Overall Part One permit shall not expire for a period of fifteen (15) years and may be renewed for additional ten (10) year periods. Renewals will be approved administratively if the permit remains under the same terms and conditions of the original Agreement approved by the City Council or with amendments approved administratively. Progress shall be defined as the platting, permitting, or vertical construction on the properties. The expiration period in Section 6.302.G.3.a.iii. shall apply to the Individual Part One submissions. Individual Part One permits shall be defined as property/tracts that are submitted for approval after the date of execution of the Agreement.
- f. The Agreement shall run with the land and properties which are included in the original Agreement and subsequently sold shall remain under the terms of the Agreement regardless of future ownership. The Agreement shall be recorded in the real property records in the county which the property subject to the agreement is located. Recordation shall be the responsibility of the applicant, including the cost of recording fees. Within fourteen (14) days after execution and recordation, a copy of

the recorded documentation shall be provided to the City. The Part One permit shall not be issued until the recorded copy is received.

- g. Future acquired properties by the original applicant of the Agreement may be included in the Agreement after a recalculation of the canopy coverage and approval by Staff if the conditions of this section are met. Acquired properties not included in the Agreement shall be subject to the regulations of Section 6.302. Additional properties may not be included into the Agreement within three (3) years of the end of the initial term of the Agreement. No properties shall be allowed to be added to the Agreement during any renewal terms.

I. Appeals

1. If the City Forester, or other city official, refuses to accept or issue an Urban Forestry Plan/permit, or if the applicant disagrees with the decision of City staff, the applicant may request an appeal of the decision to the Urban Design Commission within ten (10) days after the decision of City Staff. The appeal shall be in writing and shall be transmitted to the executive secretary of the Urban Design Commission within ten days after receipt of notification that the City Forester will not accept the Urban Forestry Plan/permit.
2. The Urban Design Commission shall consider the appeal within thirty (30) days after the appeal is received by the board's executive secretary, unless the applicant requests a later hearing in writing. The Urban Design Commission shall not release the applicant from the requirements of this ordinance, unless the applicant first presents credible evidence from which the Urban Design Commission can reasonably conclude application of this ordinance to the applicant would be likely to deprive the applicant of rights protected by law.
3. The Urban Design Commission may take the following actions on an appeal:
 - a. Deny the appeal, in which case the Urban Forestry Plan/permit shall not be accepted or granted; or
 - b. Grant the appeal, and direct the City Forester to accept and approve the Urban Forestry Plan/permit; or
 - c. Grant the appeal subject to such provisions, conditions, or limitations as deemed appropriate by the Urban Design Commission.
4. In no event shall acceptance of an application guarantee that the City will issue the Urban Forestry Plan/permit, unless the permit application is in compliance with all applicable codes, laws and regulations.
5. Appeals of the Urban Design Commission will be heard by the District Court.

J. Penalty

1. Any person, firm, or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this ordinance may be:
 - a. Assessed a penalty of two hundred dollars (\$200.00) per diameter inch of all trees, regardless of size, removed or damaged without a valid Urban Forestry Permit and/or Tree Removal Permit, four hundred dollars (\$400.00) per diameter inch of Significant or Large Tree removed or damaged without a valid Urban Forestry Plan or permit, and/or
 - b. Issued a citation for a misdemeanor and upon conviction shall be fined not more than five hundred dollars (\$500.00) for the removal or damage of each tree.
2. Where illegal tree removal has occurred and the physical evidence has been removed from the site, a penalty will be assessed based on calculations using aerial photographs available to the City, calculated at a rate of four and 94/100 dollars (\$4.94) per square foot of illegally removed canopy for all trees regardless of size or nine and 88/100 dollars (\$9.88) per square foot of Significant or Large Trees removed or damaged.
3. Any person in a one-family or two-family residentially zoned district who removes or causes to be removed trees without first obtaining the required permit may be issued an after-the-fact permit. An after-the-fact permit shall be issued if:
 - a. The applicant can demonstrate that the criteria for removal in the after-the-fact application would meet the regulations in effect at the time the tree was removed; and
 - b. The applicant has paid the fee for an after-the-fact permit which shall be double the fee of a tree removal permit.

A citation may be issued for a misdemeanor and upon conviction shall be fined not more than five hundred dollars (\$500.00) for the removal or damage of each tree.

If the applicant cannot demonstrate that the criteria for removal in the after-the-fact application would have met the current regulations, then an after-the-fact permit shall not be issued and the person shall be in violation of this section, subject to both criminal and civil penalties.

A second after-the-fact permit shall not be issued if:

- a. another violation of this section occurs by a person previously issued an after-the-fact permit; or
- b. the after-the fact permit was issued on the same site on which an after-the-fact permit was issued within five years of the date of the second violation.

K. Enforcement

Any Code Compliance Officer, the City Forester or his/her designee shall have the authority to enforce the provisions of this ordinance.

L. Tables

TABLE A. Protected Trees

Redbud	<i>Cercis canadensis</i>
Mexican Plum	<i>Prunus mexicana</i>
Cherry Laurel	<i>Prunus caroliniana</i>
Eve's Necklace	<i>Sophora affinis</i>
Crab Apple	<i>Malus angustifolia</i>
Bradford Pear	<i>Pyrus calleryana</i> var. <i>Bradford</i>
Golden Raintree	<i>Koelreuteria paniculata</i>
Caddo Maple	<i>Acer barbatum</i> var. <i>Caddo</i>
Red Maple	<i>Acer rubrum</i>
Bigtooth Maple	<i>Acer grandidentatum</i>
Bur Oak	<i>Quercus macrocarpa</i>
Chinquapin Oak	<i>Quercus muhlenbergii</i>
Live Oak	<i>Quercus virginiana</i>
Shumard Red Oak	<i>Quercus shumardii</i>
Texas Red Oak	<i>Quercus texana</i>
Post Oak	<i>Quercus stellata</i>
Blackjack Oak	<i>Quercus marilandica</i>
Pecan	<i>Carya illinoensis</i>
Lacebark Elm	<i>Ulmus parvifolia</i>
Cedar Elm	<i>Ulmus crassifolia</i>
American Elm	<i>Ulmus americana</i>
Bald Cypress	<i>Taxodium distichum</i>
Black Walnut	<i>Juglans nigra</i>
Green Ash	<i>Fraxinus pennsylvanica</i>

Texas Ash	<i>Fraxinus texensis</i>
Southern Magnolia	<i>Magnolia grandiflora</i>

TABLE B Net Urban Forestry Area

Net Urban Forestry Area	Square Feet	Acres
Gross area of property		
Utility rights-of-way or easements regulated by the Public Utility Commission/Texas Railroad Commission	--	--
Net urban forestry area		

TABLE C Required Tree Canopy Area

	Square feet	Acres
Net Urban Forestry Area		
Land Use/Canopy Coverage ratio		
One- or two-family (40% coverage)		
One- or two-family with trees planted on individual lots (25% coverage)		
Commercial (30% coverage)		
Industrial (20% coverage)		
Additional 5% if only protected trees are being preserved		
Required canopy coverage		

TABLE D Minimum Canopy Retention

	Square feet	Acres
Existing tree canopy area		
Preservation requirement	X 0.25	X 0.25
Additional 5% if only protected trees are being preserved		
Minimum retention		

TABLE E Significant Tree Removal

	Calculation	Inches DBH	Canopy Sq Ft
All Post Oaks/Blackjack Oaks $\geq 20"$ dbh (if east of I-35)	→		
All other trees $\geq 30"$ dbh (regardless of species or location)	→		
Total of significant trees to be preserved	→		
Significant tree preservation credit	(sq ft x 1.5)		
Total of significant trees to be removed	()→		
Removal Options (Choose One):			
Retention of existing canopy 1.5X the canopy of removed significant trees--in excess of minimum retention	(sq ft x 1.5)		
Planting additional trees 5X the canopy of removed significant trees--in excess of total planting	(sq ft x 5)		
Payment into tree fund for total inches dbh of significant trees removed @ \$200 per inch dbh	(sq ft x \$200)		
Urban Design Commission approved plan that mitigates the removal of the significant tree(s)			

TABLE F Preferred Tree List

Large Canopy Trees	
Pecan #	<i>Carya illinoensis</i>
Deodar Cedar	<i>Cedrus deodara</i>
Green Ash	<i>Fraxinus pennsylvanica</i>
Southern Magnolia#	<i>Magnolia grandiflora</i>
Bur Oak*	<i>Quercus macrocarpa</i>
Chinquapin Oak	<i>Quercus muhlenbergii</i>
Shumard Oak #	<i>Quercus shumardii</i>
Texas Red Oak	<i>Quercus buckleyi</i>
Live Oak *	<i>Quercus virginiana</i>
American Elm	<i>Ulmus americana</i>
Cedar Elm *	<i>Ulmus crassifolia</i>
Lacebark Elm	<i>Ulmus parvifolia</i>

Medium Canopy Trees	
Caddo Maple *	<i>Acer barbatum</i> var. <i>Caddo</i>
Bigtooth Maple *	<i>Acer grandidentatum</i>
Common Persimmon	<i>Diospyros virginiana</i>
Texas Ash	<i>Fraxinus texensis</i>
Ginkgo	<i>Ginkgo biloba</i>
Kentucky Coffeetree	<i>Gymnocladus dioicus</i>
Eastern Red-Cedar *	<i>Juniperus virginiana</i>
Golden Raintree	<i>Koelreuteria paniculata</i>
Eldarica (Afghan) Pine *	<i>Pinus eldarica</i>
Italian Stone Pine	<i>Pinus pinea</i>
Chinese Pistache *	<i>Pistacia chinensis</i>
Honey Mesquite *	<i>Prosopis glandulosa</i>
Blackjack Oak *	<i>Quercus marilandica</i>
Monterrey (Mex. White) Oak *	<i>Quercus polymorpha</i>
Western Soapberry *	<i>Sapindus drummondii</i>
Pond Cypress	<i>Taxodium ascendens</i>
Bald Cypress *	<i>Taxodium distichum</i>
Small Canopy Trees	
Japanese Maple #	<i>Acer palmatum</i>
Common Button-bush	<i>Cephalanthus occidentalis</i>
Redbud *	<i>Cercis canadensis</i>
Desert Willow *	<i>Chilopsis linearis</i>
Rough-leaf Dogwood #	<i>Cornus drummondii</i>
Texas Persimmon *	<i>Diospyros texana</i>
Carolina Buckthorn #	<i>Frangula caroliniana</i>
Yaupon Holly *	<i>Ilex vomitoria</i>
Deciduous Holly	<i>Ilex decidua</i>

Creape Myrtle *	<i>Lagerstroemia indica</i>
Mexican Plum *	<i>Prunus mexicana</i>
White Shin Oak *	<i>Quercus sinuata</i> var. <i>breviloba</i>
Flameleaf Sumac *	<i>Rhus lanceolata</i>
Eve's Necklace *	<i>Sophora affinis</i>
Mexican Buckeye *	<i>Unghadia speciosa</i>
Rusty Blackhaw	<i>Viburnum rufidulum</i>

* Drought tolerant species

Not recommended for parking lots or high heat areas

TABLE G Tree Preservation and Planting Area

	Square feet	Acres
Area of existing tree canopy retained		
Planting		
_____ large canopy trees @ 2,000 square feet per tree (minimum spacing of 40 feet on center)		
_____ medium canopy trees @ 700 square feet per tree (minimum spacing of 24 feet on center)		
_____ small canopy trees @ 100 square feet per tree (minimum spacing of 8 feet on center)		
_____ additional trees		
Total preservation and planting		

TABLE H Parking Canopy Area

Parking Areas for Commercial or Industrial Uses	Square feet	Acres
Area of parking and drives		
Required canopy coverage of parking areas	X 0.4	X 0.4
Required canopy coverage		
Area of canopy coverage being provided		

TABLE I Initial Urban Forestry Development Agreement

Overall Canopy <i>(enter Land Use Type) - Part 1</i>		
<u>Net Urban Forestry Area</u>	<u>Square Feet</u>	<u>Acres</u>
Gross Area of Property		
Utility Easements		
Net Urban Forestry Area		
<u>Required Tree Canopy Area</u>	<u>Square Feet</u>	<u>Acres</u>
Net Area		
Canopy Ratio		
Required Tree Canopy Coverage		
<u>Preservation/Retention of Existing Canopy</u>	<u>Square Feet</u>	<u>Acres</u>
Existing Tree Canopy		
Preservation Requirement (20, 30, 40%)		
Minimum Retention of Existing Tree Canopy		
Area of Existing Tree Canopy Retained		
Preservation Ratio		
<u>Retention of Canopy for Significant and Large Tree Canopy Removal</u>	<u>Square Feet</u>	<u>Acres</u>
Significant and Large Tree Canopy to be Removed		
Preservation Requirement (150%)		
Minimum Retention of Existing Tree Canopy for Removal of Significant and Large Tree Canopy		
Area of Existing Tree Canopy Retained for Removal of Significant and Large Tree Canopy		

TABLE J Urban Forestry Development Agreement Canopy Tracking

UFC #	Project Name	Project Address	Site Acreage	Usage Class	Canopy Coverage Required (sq ft)	Canopy Coverage Provided (sq ft)	Off Site Mitigation? (Y/N)	Beginning Land Balance	Ending Land Balance

SECTION 4.

Chapter 9, "Definitions" is hereby amended to add the following definitions:

Caliper: The diameter of a tree, measured at a point six (6) inches above the ground line if the resulting measurement is no more than four (4) inches. If the resulting measurement is more than four (4) inches, the measurement is made at a point twelve (12) inches above the ground line.

City Forester: For the purpose of tree preservation, that person or persons designated by the Director of Planning and Development to provide administrative review and approval of Urban Forestry Plans / Permits (Urban Forestry Compliance Section).

Critical Root Zone: Area around the trunk of the tree that is equal to a radius of one (1) foot per inch diameter measured at breast height (DBH) – four and one-half (4.5) feet.

Diameter at Breast Height of an Existing Tree (DBH): That measurement of the size/diameter of a tree as determined by measuring at four and one-half (4.5) feet above the soil level. For a multi-trunk tree, the diameter shall be the total diameter of the largest trunk plus one-half (1/2) the diameter of each additional trunk.

Disruptive Activity: Any permanent change to existing surface conditions including clearing, grading, trenching, boring, and similar activities. Disruptive activity will NOT include normal mowing or removal of trees less than six inches in diameter.

Landscape Plan: A plan illustrating bufferyard features and landscaping required per Chapter 6, Article 3 of the Zoning Ordinance, and to illustrate trees along arterial streets required per Chapter 6, Article III.B. of the Subdivision Ordinance. Buffer yards are required along common property lines of one- or two-family districts adjacent to nonresidential districts for which certain trees may be credited. In addition, landscape plans are required for commercial, industrial, and manufactured home uses to include shrubs and sod (all references to trees have been removed from the landscaping requirements per Ordinance No. 17367). Trees are required along arterial streets for residential subdivisions of three lots or more.

Public Project: Capital improvement project that includes a disruptive activity that will prevent the surface from being restored to its original condition. Public projects shall specifically exclude utilities regulated by the Public Utility Commission or the Railroad Commission.

Preserved Tree: Any healthy tree retained for the purpose of meeting the requirements under Section 6.302

Protective Measures: Protective fencing surrounding the critical root zone and bark protection to ensure that all prohibited activities in the critical root zone are prevented, including for trees on adjacent properties. In addition, appropriate construction methods as outlined in section 6.301.K. of the Zoning Ordinance – Landscaping and Buffers shall be followed.

Protected Tree: Any tree listed in Table A, Section 6.302.

Significant or Large Tree: A tree twenty-seven (27) inches in diameter (84.82 inches in circumference) for the entire city or eighteen (18) inches in diameter (56.55 inches in circumference) for Post Oaks and Blackjack Oaks east of Interstate Highway 35 West.

Tree Removal: The cutting, destroying, removing, moving, poisoning, banding, marking, or effectively destroying through damaging, any tree six (6) inches or greater in diameter, regardless of species, situated on property regulated by the Zoning Ordinance without first obtaining an Urban Forestry Plan : Permit from the City Forester.

Tree Removal Permit: A permit required for the removal of a single tree as required under Section 6.302.

Urban Forestry Permit: A permit required under Section 6.302 for the removal of more than one (1) tree or the construction of new structures on properties greater than one acre for where a building permit is required.

Urban Forestry Plan: A plan showing the location of existing canopy coverage and any trees that are classified as large or significant as per 6.302.G.3. on the site, the location of all easements, the location of all proposed buildings, a grading plan, if applicable; the trees desired to be removed, the trees that shall remain on the site, and an accompanying document indicating the reason for the proposed removal of any tree, and if applicable, a description on how the existing healthy trees proposed to be retained will be protected from damage from construction.

SECTION 5.

That this ordinance shall be cumulative of all other ordinances of the City of Fort Worth affecting zoning and shall not repeal any of the provisions of such ordinances, except in those instances where provisions of such ordinances are in direct conflict with the provisions of this ordinance.

SECTION 6.

That all rights or remedies of the City of Fort Worth, Texas, are expressly saved as to any and all violations of Ordinance Nos. 3011, 13896, or any amendments thereto that have accrued at the time of the effective date of this ordinance; and as to such accrued violations, and all pending litigation, both civil or criminal, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

SECTION 7.

That it is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared void, ineffective or unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such voidness, ineffectiveness or unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs or sections of this ordinance, since the same would have been enacted by the City Council without the incorporation herein of any such void, ineffective or unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 8.

That this ordinance shall take effect upon adoption.

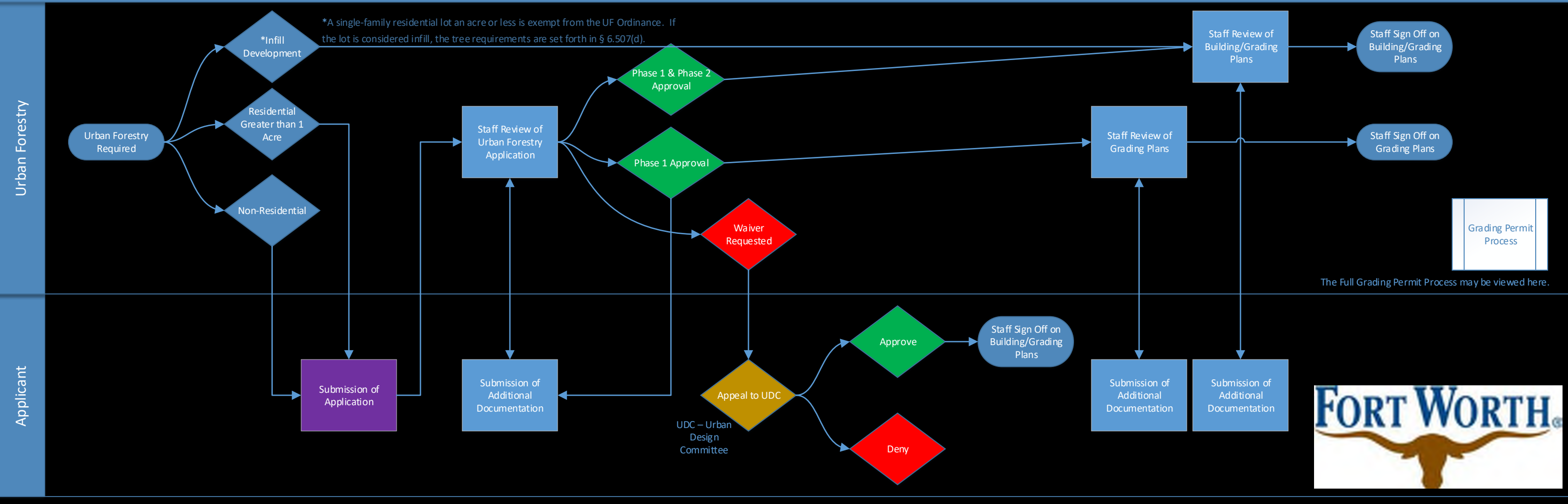
APPROVED AS TO FORM AND LEGALITY:

By: Melinda Ramo
Assistant City Attorney

Adopted: May 12, 2009

Effective: May 19, 2009

Typical Urban Forestry Permit Process – April 2023





Urban Forestry Permits

An **Urban Forestry Permit** is required for, but not limited to:

- New construction that requires a building or grading permit.
- Building expansions or additions that are >3,000 sf or 30% of existing structure.
- Clearing, Grading, and/or Paving including construction or reconstruction of a parking lot, or other flatwork or land disturbance.
- Filling, if fill is to be placed within 50 feet of existing trees.
- Sites to be used for urban agriculture.
- Public projects requiring removal of trees 6" or larger in diameter.
- Change of use from one- or two-family residential to any other use.
- Removal of trees that measure 6" diameter or greater at 4.5 ft. above the ground.

Exemptions:

- Construction or reconstruction of a single one- or two-family residence located on a lot that is less than one acre in size, if common ownership of lots within the platted block is less than one acre.
- Development within a Designated Design District.

Submittal:

- Online submittal required: <https://aca-prod.accela.com/CFW>

For more information:

- Visit [the Urban Forest Website](#)
- Email urbanforestry@fortworthtexas.gov
- Contact urban forestry staff at 817-392-7933 or -7931
- An Excel Calculations Worksheet to facilitate calculations is available by request, submitted to email address listed above.





Tree Preservation and Protection

- Specify if using Preservation Method “A” (all species) or Method “B” (protected species only). If existing canopy calculations for Method “A” are based on aerial photographs, you must still do a ground survey for significant trees. If using Method “B”, you must delineate all existing canopy, provide species classification of existing non-protected canopy, and identify all significant trees regardless of species.
- A **Significant Tree Table** must be provided, including dbh and canopy sf of all significant trees. Mitigation method must be specified for those to be removed. **Significant trees must be identified and clearly labeled on all site plans.**
- Tree protection may be shown on the Phase 1 (existing conditions) plan or submitted as a separate Tree Protection Plan. Plan must show all existing canopy (designated as preserved or removed), delineate the locations of protective fencing, and include a tree protection detail in accordance with the urban forestry ordinance requirements (Section 6.302.D). **Plans must specify chain-link fencing for significant trees.**
- When tree diameter is available, plans should delineate protective fencing at **1 foot per diameter inch**. Otherwise it must be shown at or beyond drip line of existing trees.
- **Tree protection must remain in place throughout construction**, unless urban forestry staff has authorized work within a protected area. In this case, plans must indicate that all fine grading is to be done by hand, no heavy equipment or material storage is allowed in protected area, and that fencing is to remain in place when not actively working in protected area.
- Preserved trees must be shown on Phase 2 (developed conditions) plans. Tree protection should be shown on developed plans to prevent encroachment into critical root zones by landscape beds or other proposed development.

Tree Protection Inspections

- Pre-grading inspection is required prior to issuance of urban forestry or grading permits on projects with preserved trees. A \$100 inspection fee will be assessed to cover pre- and post-grading inspections of tree protection. Additional inspections, including re-inspections, will be billed at \$50 per inspection.
- Following staff approval of proposed tree protection, applicant must notify urban forestry staff or submit online request to schedule tree protection inspections.

Building and Grading Permits

Urban forestry permits must be approved before associated building or grading permits will be issued. To expedite the review process, please ensure that you comply with the following:

- **Building Permits:** You must include a copy of the approved-stamped urban forestry plan in the compiled plan set.
- **Grading Permits:** Ensure that grading plans are consistent with tree preservation shown on the urban forestry plan. Include tree protection on demolition, grading and erosion control sheets to avoid conflicts between the two permits.



Urban Forestry Plan Checklist

Note: The following plan checklist is provided as a service to applicants in order to expedite review by the department. All plans submitted for review are to include a copy of the checklist, calculations, and signed Certification. Submittals made that do not include these items or required plans will be marked as incomplete and will not be routed for review until required elements have been submitted.

A. REQUIRED EXHIBITS (pdf)

- ☐ 1. **Phase 1 (Existing Conditions) Plan, including easements, right-of-way, and tree protection detail and delineation.**
- ☐ 2. **Phase 2 (Proposed Development) Plan, including easements, right-of-way, and tree protection delineation.**
- ☐ 3. **Copy of Plat or Horizontal Control Plan unless applying for Phase 1 permit only.**

Note: Phase 1 and 2 plans may be combined if all required elements can be clearly shown on one plan.

PI	PII	Note: PI (Phase One) – Existing Conditions Plan	PII (Phase Two) – Development Plan
----	-----	---	------------------------------------

B. PLAN FACE ITEMS

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Land owner, developer, and preparer names/addresses/phone numbers/other contact info |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Project name (lower right corner) |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Project address (existing or temporary) or legal description of property |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Vicinity map outlining location with North arrow |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Plan scale (acceptable options: 1 inch = 10,20,30,40,50, or 60 feet) |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Graphic plan scale & North arrow. |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Corporate City Limits line (if adjacent to property) |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. Date of preparation and any revisions. (lower right corner of plan) |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. All adjacent or interior street names (existing or proposed) |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Plat name and number |
| <input type="checkbox"/> | <input type="checkbox"/> | 11. Legal Lot or Artificial Lot boundaries (clearly labeled) with declared measurements |
| <input type="checkbox"/> | <input type="checkbox"/> | 12. Scaled depiction of all existing structures and paving |
| | <input type="checkbox"/> | 13. Scaled depiction of all existing structures/paving to remain and proposed new structures/paving |
| <input type="checkbox"/> | <input type="checkbox"/> | 14. All existing or proposed regulated utility and drainage channel easements labeled per the plat |
| <input type="checkbox"/> | <input type="checkbox"/> | 15. Individual <i>Existing Tree locations</i> and/or outline of tree canopy |
| | <input type="checkbox"/> | 16. Individually labeled <i>Significant Tree locations</i> |
| | <input type="checkbox"/> | 17. Individual locations of all <i>new tree plantings</i> |
| <input type="checkbox"/> | | 18. <i>Existing Tree Legend with separate Significant Tree Calculations</i> : tree #; species; dbh; canopy area; removed/preserved status; totals |
| <input type="checkbox"/> | <input type="checkbox"/> | 19. <i>New Tree Legend</i> : species; caliper; quantity |
| <input type="checkbox"/> | <input type="checkbox"/> | 20. Sheet Key if multiple sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | 21. Calculations from Pages 2 and 3 of application |
| <input type="checkbox"/> | <input type="checkbox"/> | 22. Tree protection detail and delineation. |



LETTER OF AUTHORIZATION FOR URBAN FORESTRY PERMIT REPRESENTATION

I (PRINT OWNER'S NAME) _____ CERTIFY THAT I AM
THE CURRENT OWNER OF THE PROPERTY DESCRIBED BELOW AND HEREBY GRANT AUTHORITY TO
(NAME) _____ TO ACT ON MY BEHALF
IN MAKING APPLICATION AND SUBMITTING TO THE CITY OF FORT WORTH, TEXAS, A REQUEST FOR AN
URBAN FORESTRY PERMIT FOR THE FOLLOWING PROPERTY:

(CERTIFIED LEGAL DESCRIPTION)

ACKNOWLEDGEMENTS:

I certify that the above information is correct and complete to the best of my knowledge and ability and that I am now, or will be, fully prepared to carry out the Urban Forestry Plan as approved should the above representative or their agents fail to do so, or if the property is sold, I will make the new owner and their representatives fully aware of the approved Urban Forestry Plan and the requirements that run with the land. I further certify that I have read and understand the information provided concerning the procedure for consideration of my Urban Forestry Permit request as well as Section 6.302 of the City of Fort Worth Comprehensive Zoning Ordinance concerning the overall Urban Forestry regulations.

I understand that acceptance of an Urban Forestry Permit application does not guarantee that the City will issue the permit unless it is in compliance with all applicable codes, laws, and regulations and all fees have been paid.

I understand that once approved, this permit will expire and become invalid on the fifth anniversary of the approval date if either no progress has been made toward implementation of the plan or the project scope and configuration changes prior to tree removal or site disturbance. I understand that should progress toward implementation, tree removal, or site disturbance occur, the approved permit will not expire until the warranty period for new and preserved trees has ended or a new permit and plan are submitted and approved subject to conditions of the original permit. I understand that an approved plan will run with the land until it is revised and replaced with another approved plan under this or another Urban Forestry Permit. I understand that warranty for new and preserved trees begins once the last building is complete and receives a certificate of occupancy or when all improvements shown on the plan have been completed, whichever is the later date.

I further authorize my representative to act as my agent, if needed, before the Urban Design Commission during any appeal hearings. I understand that if I am not present or represented at a public hearing for an appeal of any requirements of Section 6.302, the Urban Design Commission may deny the request.

THIS AUTHORIZATION WILL REMAIN IN FORCE UNLESS REVOKED BY WRITTEN NOTICE.

OWNER'S SIGNATURE: _____

OWNER'S NAME (printed) _____

ADDRESS and ZIP _____

TELEPHONE: _____ EMAIL: _____



Date Rec'd :

UFC # :

Application for Urban Forestry Permit
(Complete all information listed below)

Check one

<input type="checkbox"/> Residential (1&2 Family)	<input type="checkbox"/> Industrial	<input type="checkbox"/> MU/UR Zoning	<input type="checkbox"/> Public Project
<input type="checkbox"/> Commercial	<input type="checkbox"/> Institutional	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Multi-Family

Select Preservation Method If Applicable To Site

<input type="checkbox"/> Method Option 'A'	<input type="checkbox"/> Method Option 'B'	<input type="checkbox"/> No trees on site
--	--	---

Project Name: _____		Building Permit #: _____	<input type="checkbox"/> Trees to be removed from site
		Final Plat #: _____	<input type="checkbox"/> No trees to be removed from site
Site Street Address and/or Legal Description of Property (Lot, Block, Subdivision): _____			
Applicant (Developer/Sub-divider)			
Printed Name: _____		Phone: _____	
Signature: _____ Date: _____		Fax: _____	
Address: _____		Email: _____	
City, State & Zip: _____			
Agent Or Consultant Representing Applicant			
Printed Name: _____		Phone: _____	
Address: _____		Fax: _____	
City, State & Zip: _____		Email: _____	
Record Owner of Property (if different from Applicant)			
Printed Name: _____		Phone: _____	
Address: _____		Fax: _____	
City, State & Zip: _____		Email: _____	
NOTE: An Approved Urban Forestry Plan/Permit will run with the land and can only be amended by the Urban Design Commission (Urban Forestry Ordinance No. 18615)			
County: _____	Gross Site Area or Artificial Lot (Sq Ft): _____		Acreage: _____

Applicant's Certification

I, the undersigned, hereby certify that the attached plans and data are correct and complete to the best of my knowledge and ability. I understand that if any of the required items are deemed missing from the submittal, the plan will be marked as incomplete and not routed for review. My client is aware of these criteria and will accept all responsibility for delays due to the incomplete submittals. I am enclosing an explanation for each item which I feel is not required and therefore, has not been included in the submittal package.

Applicant signature

Date



LETTER OF AUTHORIZATION FOR URBAN FORESTRY PERMIT REPRESENTATION

I (PRINT OWNER'S NAME) _____ CERTIFY THAT I AM
THE CURRENT OWNER OF THE PROPERTY DESCRIBED BELOW AND HEREBY GRANT AUTHORITY TO
(NAME) _____ TO ACT ON MY BEHALF
IN MAKING APPLICATION AND SUBMITTING TO THE CITY OF FORT WORTH, TEXAS, A REQUEST FOR AN
URBAN FORESTRY PERMIT FOR THE FOLLOWING PROPERTY:

(CERTIFIED LEGAL DESCRIPTION)

ACKNOWLEDGEMENTS:

I certify that the above information is correct and complete to the best of my knowledge and ability and that I am now, or will be, fully prepared to carry out the Urban Forestry Plan as approved should the above representative or their agents fail to do so, or if the property is sold, I will make the new owner and their representatives fully aware of the approved Urban Forestry Plan and the requirements that run with the land. I further certify that I have read and understand the information provided concerning the procedure for consideration of my Urban Forestry Permit request as well as Section 6.302 of the City of Fort Worth Comprehensive Zoning Ordinance concerning the overall Urban Forestry regulations.

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I further authorize my representative to act as my agent, if needed, before the Urban Design Commission during any appeal hearings. I understand that if I am not present or represented at a public hearing for an appeal of any requirements of Section 6.302, the Urban Design Commission may deny the request.

THIS AUTHORIZATION WILL REMAIN IN FORCE UNLESS REVOKED BY WRITTEN NOTICE.

OWNER'S SIGNATURE: _____

OWNER'S NAME (printed) _____

ADDRESS and ZIP _____

TELEPHONE: _____ EMAIL: _____

Use the following tables:

**** If **Significant Trees** on site, complete chart on page 3 first.

Net Urban Forestry Area (phase 1 and 2)		Calculation	Square Feet	Acres
A	Gross area of property (or artificial lot)	→		
B	Regulated utility easements and other deductible areas	→		
C	Net Urban Forestry Area	(A-B)		

Required Tree Canopy Area (phase 2)				
D	Minimum Canopy Coverage Requirement :	C x %)		
	Commercial/Institutional/Public Project (30%)			
	Industrial (20%) Agricultural (0%) Urban Ag (30%)			
	Residential (40%)/ New Subdivision Option (25%)			
	Multifamily (50% of open space requirement)			
	Mixed Use/Township/Township Zoned site (5%+			
E	Additional 5% if using preservation method B ("protected trees")	(C x .05)		
F	Total required canopy coverage for site (including mitigation)	(D+E+ff+gg)		

Preservation/Retention of Existing Canopy (phase 1 and 2)				
G	Existing tree canopy within net urban forestry area	→		
H	If seeking approval for phase 1 only , then preserve a minimum of 50% canopy and stop after completing line M .	(G x .5)		
I	Preservation requirement (25%)	(G x .25)		
J	Additional 5% if using preservation method B ("protected trees")	(G x .05)		
K	Additional preservation option for mitigation of significant tree removal (only if removing significant trees - see pg 3)	(ff)		
L	Total preservation requirement	((H or I)+J+K))		
M	Area of existing canopy preserved	→		
N	Total preservation credit toward planting	(M + dd)		

New Tree Planting (phase 2)				
O	Required new planting coverage	(F – M - dd)		
P	large canopy trees @ 2000 sq ft per tree	(Qty x 2000)		
Q	medium canopy trees @ 700 sq ft per tree	(Qty x 700)		
R	small canopy trees @ 100 sq ft per tree	(Qty x 100)		
S	Total Planting	(P+Q+R)		

Parking Areas: 1 or 2 family residential are exempt (phase 2)				
T	Area of parking	→		
U	Required canopy coverage of parking areas (40%)	(T x .40)		
V	Area of canopy coverage being provided for parking	→		
W	Excess/deficient parking canopy	(V-U)		

Fulfillment of Requirements (phase 2)				
X	Total required canopy coverage for site	(F)		
Y	Provided canopy coverage	(M+S+dd)		
Z	Excess/deficient overall canopy	(Y-X)		

Significant Trees (attach tree table with diameter and canopy data)		Calculation	Inches DBH	Canopy Sq Ft
aa	All Post Oaks/Blackjack Oaks $\geq 18"$ dbh (if east of I-35)	→		
bb	All other trees $\geq 27"$ dbh (regardless of species or location)	→		
cc	Total of significant trees to be preserved	→		
dd	Significant tree preservation credit	(cc sqft x 0.5)		
ee	Total of significant trees to be removed	aa+bb-cc		
Significant Tree - Removal Mitigation Options (Choose One):				
ff	Preservation of existing canopy 1.5X the canopy of removed significant trees in excess of required canopy OR....	(ee sqft x 1.5)		
gg	Planting additional trees 5X the canopy of removed significant trees in excess of required canopy OR....	(ee sqft x 5)		
	Payment into tree fund for total dbh inches of significant trees removed @ \$300 per inch dbh OR....	(ee dbh x \$300) \$		

Large Trees	Site Credit	Spacing	Notes	Species
Pecan	2,000 sqft	40 ft	#	<i>Carya illinoensis</i>
Deodar Cedar	2,000 sqft	40 ft		<i>Cedrus deodara</i>
Green Ash	2,000 sqft	40 ft		<i>Fraxinus pennsylvanica</i>
Southern Magnolia	2,000 sqft	40 ft	#	<i>Magnolia grandiflora</i>
Bur Oak	2,000 sqft	40 ft	*	<i>Quercus macrocarpa</i>
Chinquapin Oak	2,000 sqft	40 ft		<i>Quercus muhlenbergii</i>
Shumard Oak	2,000 sqft	40 ft	#	<i>Quercus shumardii</i>
Texas Red Oak	2,000 sqft	40 ft		<i>Quercus buckleyi</i>
Live Oak	2,000 sqft	40 ft	*	<i>Quercus virginiana</i>
American Elm	2,000 sqft	40 ft		<i>Ulmus americana</i>
Cedar Elm	2,000 sqft	40 ft	*	<i>Ulmus crassifolia</i>
Lacebark Elm	2,000 sqft	40 ft		<i>Ulmus parvifolia</i>
Medium Trees	Site Credit	Spacing	Notes	Species
Caddo Maple	700 sqft	25 ft	*	<i>Acer barbatum</i> var. <i>Caddo</i>
Bigtooth Maple	700 sqft	25 ft	*	<i>Acer grandidentatum</i>
Common Persimmon	700 sqft	25 ft		<i>Diospyros virginiana</i>
Texas Ash	700 sqft	25 ft		<i>Fraxinus texensis</i>
Ginkgo	700 sqft	25 ft		<i>Ginkgo biloba</i>
Kentucky Coffeetree	700 sqft	25 ft		<i>Gymnocladus dioicus</i>
Eastern Red-Cedar	700 sqft	25 ft	*	<i>Juniperus virginiana</i>
Golden Raintree	700 sqft	25 ft		<i>Koelreuteria paniculata</i>
Eldarica (Afghan) Pine	700 sqft	25 ft	*	<i>Pinus eldarica</i>
Italian Stone Pine	700 sqft	25 ft		<i>Pinus pinea</i>
Chinese Pistache	700 sqft	25 ft	*	<i>Pistacia chinensis</i>
Honey Mesquite	700 sqft	25 ft	*	<i>Prosopis glandulosa</i>
Blackjack Oak	700 sqft	25 ft	*	<i>Quercus marilandica</i>
Monterrey (Mex. White) Oak	700 sqft	25 ft	*	<i>Quercus polymorpha</i>
Western Soapberry	700 sqft	25 ft	*	<i>Sapindus drummondii</i>
Pond Cypress	700 sqft	25 ft		<i>Taxodium ascendens</i>
Bald Cypress	700 sqft	25 ft	*	<i>Taxodium distichum</i>
Small Trees	Site Credit	Spacing	Notes	Species
Japanese Maple	100 sqft	8 ft	#	<i>Acer palmatum</i>
Common Button-bush	100 sqft	8 ft		<i>Cephalanthus occidentalis</i>
Redbud	100 sqft	8 ft	*	<i>Cercis canadensis</i>
Desert Willow	100 sqft	8 ft	*	<i>Chilopsis linearis</i>
Rough-leaf Dogwood	100 sqft	8 ft	#	<i>Cornus drummondii</i>
Texas Persimmon	100 sqft	8 ft	*	<i>Diospyros texana</i>
Carolina Buckthorn	100 sqft	8 ft	#	<i>Frangula caroliniana</i>
Yaupon Holly	100 sqft	8 ft	*	<i>Ilex vomitoria</i>
Deciduous Holly	100 sqft	8 ft		<i>Ilex decidua</i>
Creape Myrtle	100 sqft	8 ft	*	<i>Lagerstroemia indica</i>
Mexican Plum	100 sqft	8 ft	*	<i>Prunus mexicana</i>
White Shin Oak	100 sqft	8 ft	*	<i>Quercus sinuata</i> var. <i>breviloba</i>
Flameleaf Sumac	100 sqft	8 ft	*	<i>Rhus lanceolata</i>
Eve's Necklace	100 sqft	8 ft	*	<i>Sophora affinis</i>
Mexican Buckeye	100 sqft	8 ft	*	<i>Ungnadia speciosa</i>
Rusty Blackhaw	100 sqft	8 ft		<i>Viburnum rufidulum</i>

* Drought tolerant species

Not recommended for parking lots or high heat areas



FINAL GRADING CERTIFICATE

Effective Date _____

Grading Permit No. _____

This certification is required after grading activities have been completed.

OWNER/DEVELOPER/PERMITTEE INFORMATION

Project Name _____

Project Location _____

Project Description _____

Owner/Developer/Permittee _____

Address _____

Phone No. _____ e-mail _____

DESIGN PROFESSIONAL OR CONTRACTOR (Responsible Party)

Name _____

Address _____

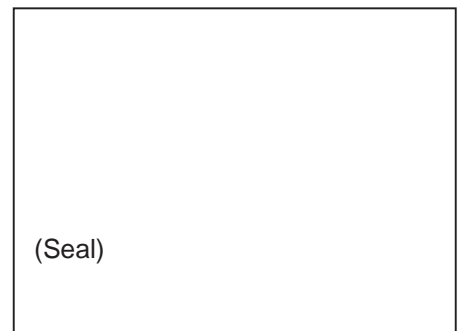
Phone No. _____ e-mail _____

License/Certificate No _____ Expiration Date _____

To the best of my knowledge and personal inspection, the above described project has been constructed in substantial compliance with the plans accepted by the City of Fort Worth. BMPs will be maintained until final stabilization has been achieved.

Signature _____ Date _____

Printed Name _____





GRADING PERMIT APPLICATION for Grading or other Land Disturbance Activities

** A Final Grading Permit is required even if an Early Grading Permit is obtained. **

Applicant to Complete Sections I through IV Below:

Permit #: _____

What Type of Grading Permit is being applied for? (check one): **EARLY** **FINAL**

I. Project Information:

Name: _____ Company: _____

Address: _____

Phone: _____ Email: _____

II. Contacts:

Applicant

Name: _____ Company: _____

Address: _____

Phone: _____ Email: _____

Owner

Name: _____ Company: _____

Address: _____

Phone: _____ Email: _____

Contractor

Name: _____ Company: _____

Address: _____

Phone: _____ Email: _____

Emergency Phone #: _____

III. Associated Plans and Permits:

SWMP # _____

TPDES # _____

Plat # _____

Urban Forestry Permit # _____

IV. Signature of Applicant/Authorized Agent:

Signature: _____

Name: _____

Company: _____ Phone: _____

V. Conditions of Approval

Approval is contingent upon compliance with City grading and development requirements including drainage, floodplain management, urban forestry and construction runoff control. A site grading plan sealed by an engineer is required for all land disturbances of 1.0 acre or more.

City Action

Reviewer:	Date:
Accepted:	Not Accepted:
Comments:	



Civil Plans – GRADING PERMIT CHECKLIST

Plans should be submitted as two (2) compiled sets: Civil Plans and Storm Water Pollution Prevention Plan (SWPPP)

Item	Included or N/A: Page(s)/Permit #
Civil plans must be signed and sealed .	
Civil set should include: <ol style="list-style-type: none"> 1. Grading and Drainage 2. Erosion Control 3. Utility plan sheets. Delineation of tree protection fencing must be shown on demolition, grading, and erosion control plan sheets.	
Grading, drainage, and utility sheets shall show: <ol style="list-style-type: none"> 1. Existing water, sewer, and storm mains 2. Existing water, sewer, and storm easements 3. Contours at 2' and 10' (<i>Existing contours to be shaded back</i>) 4. Notes regarding temporary removal of tree protection, if applicable 5. Other notes as applicable 6. Proposed water, sewer, and storm mains <ol style="list-style-type: none"> a. IMPORTANT: Must include city project number 7. Proposed water, sewer, and storm easements 8. Private water, sewer, and storm drain 9. If applicable, detention Ponds 10. If applicable, retaining walls within 10' of water/sewer/storm main centerlines. Show spot elevations at top of wall and bottom of wall. <ol style="list-style-type: none"> a. IMPORTANT: Include retaining wall permit number 11. Spot Elevations where grading, detention ponds, private storm drain, and retaining walls encroach into existing or proposed water/sewer/storm mains & easements 12. Ensure commercial driveway grades are consistent with Figure 2, High Volume Approach (<i>attached for reference</i>). <p style="text-align: center;">Items <u>1-5</u> are applicable to <u>early grading permits</u>.</p> <p style="text-align: center;">Items <u>1-12</u> are applicable to <u>final grading permits</u>.</p>	
Demolition, Grading, and Erosion Control Sheets shall show <ol style="list-style-type: none"> 1. Locations of protective fencing for all preserved trees located within 50 feet of development activity, consistent with Urban Forestry Tree Protection Plan and Park and Recreation Dept (<i>PARD</i>) permits for trees on City property. 2. Demolition and Grading sheets shall include notes pertaining to temporary removal of protective fencing, if approved by City Forester (<i>see No. 6 under "Important Information" at end of checklist</i>). 	
Urban forestry permit number. (<i>An approved Phase 1 permit is required for grading permit approval</i>)	UFC _____ - _____
Floodplain Development Permit (<i>FDP</i>) from floodplain group (<i>Indicate FDP # in box to right or provide documentation from Floodplain Group an FDP is not required for grading activities.</i>)	



<p>Drainage Study number</p> <p>If an SWMP has not been submitted, please write “not submitted” in the box to the right. Contact SDS for additional information on SWMP submittals/requirements. The early grading permit will not be approved without the drainage study being acceptable at that level. The final grading permit will not be approved without an accepted drainage study.</p>	<p>DS- _____ - _____</p>
<p>EARLY GRADING PERMIT REQUIREMENT ONLY</p> <p>Early Grading Notes shown on grading and erosion plans: <i>Be sure to indicate page numbers, where notes are located, in the box to the right)</i></p> <p>Early Grading Notes:</p> <ol style="list-style-type: none">1. This permit is for Early Grading ONLY. No infrastructure construction that requires the City of Fort Worth inspection is authorized by this permit.2. Avoid any areas that alter drainage patterns.3. Avoid any areas that alter the current spread of runoff (<i>avoid concentration of flow</i>).4. Grading will be at Developer’s risk until the City has approved the construction plans.	

I certify the Civil Plan Checklist and referenced documents were prepared under my responsible supervision and that the information presented on the checklist and attachments is correct to the best of my knowledge. I also understand that an acceptance of this plan by the City does not waive any City standards or requirements unless a specific waiver request has been submitted and approved.

Signed: _____

Printed Name: _____ Date: _____



SWPPP - Grading Permit Checklist

Item	Included or N/A: Page(s)/Permit #
Stormwater Pollution Prevention Plan (SWPPP) including: 1. Description of the nature of activity 2. Schedule of the sequence of activities 3. Total number of acres of disturbance 4. Name of receiving waters 5. Detailed erosion control plan/BMP map 6. Description of BMPs to be utilized 7. Inspection schedule 8. Inspector qualifications	
SWPPP Signed Certification Page <i>Please indicate page numbers in box to right</i>	
Copy of current TPDES TXR150000 Permit <i>Please indicate page numbers in box to right</i>	
Delegation of Authority Page, if applicable	
Delegation of Responsibilities for Operators, if applicable	
Copy of the signed Small or Large* Construction Site Notice (CSN) for each operator	
Copy of the signed Secondary Operator's Construction Site Notice (CSN), if applicable	
Copy of Notice of Intent (NOI) signed and executed, if applicable - a copy of electronic submittal to TCEQ is acceptable <i>Please indicate page numbers in box to right</i>	
Sedimentation Basin or justification statement if not included **	

***NOTE: Common Plan of Development:** Projects that are being developed alongside other projects that disturb greater than 5 acres in total must be permitted as a large site. Projects are also considered a part of a larger Common Plan of Development if they are completed in separate stages or phases. Development can include one or multiple operators.

****NOTE:** A sedimentation basin or equivalent control measure is required as a BMP measure for areas draining 10 acres or more, per the TPDES permit – if this is not included, a statement must be included detailing why it was not included and what additional BMPs are being implemented.

For additional information and resources, please visit: the [Texas Commission on Environmental Quality \(TCEQ\) website](#) or the [City of Fort Worth Environment Quality website](#)

I certify the Environmental Plans Checklist and referenced documents were prepared under my responsible supervision and that the information presented on the checklists and attachments is correct to the best of my knowledge. I also understand that an acceptance of this plan by the City does not waive any City standards or requirements unless a specific waiver request has been submitted and approved.

Signed: _____

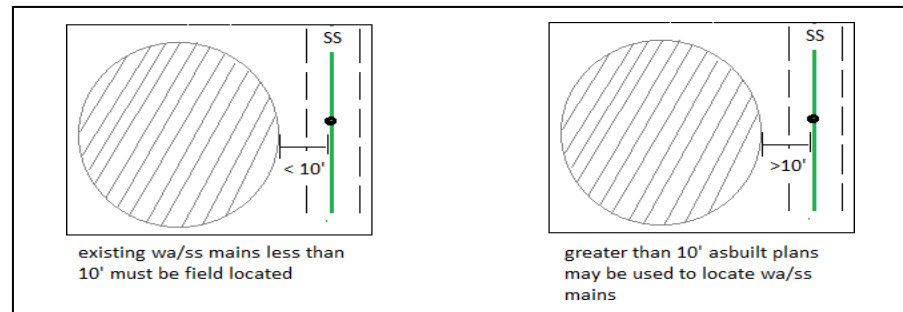
Printed Name: _____ Date: _____



Important Information:

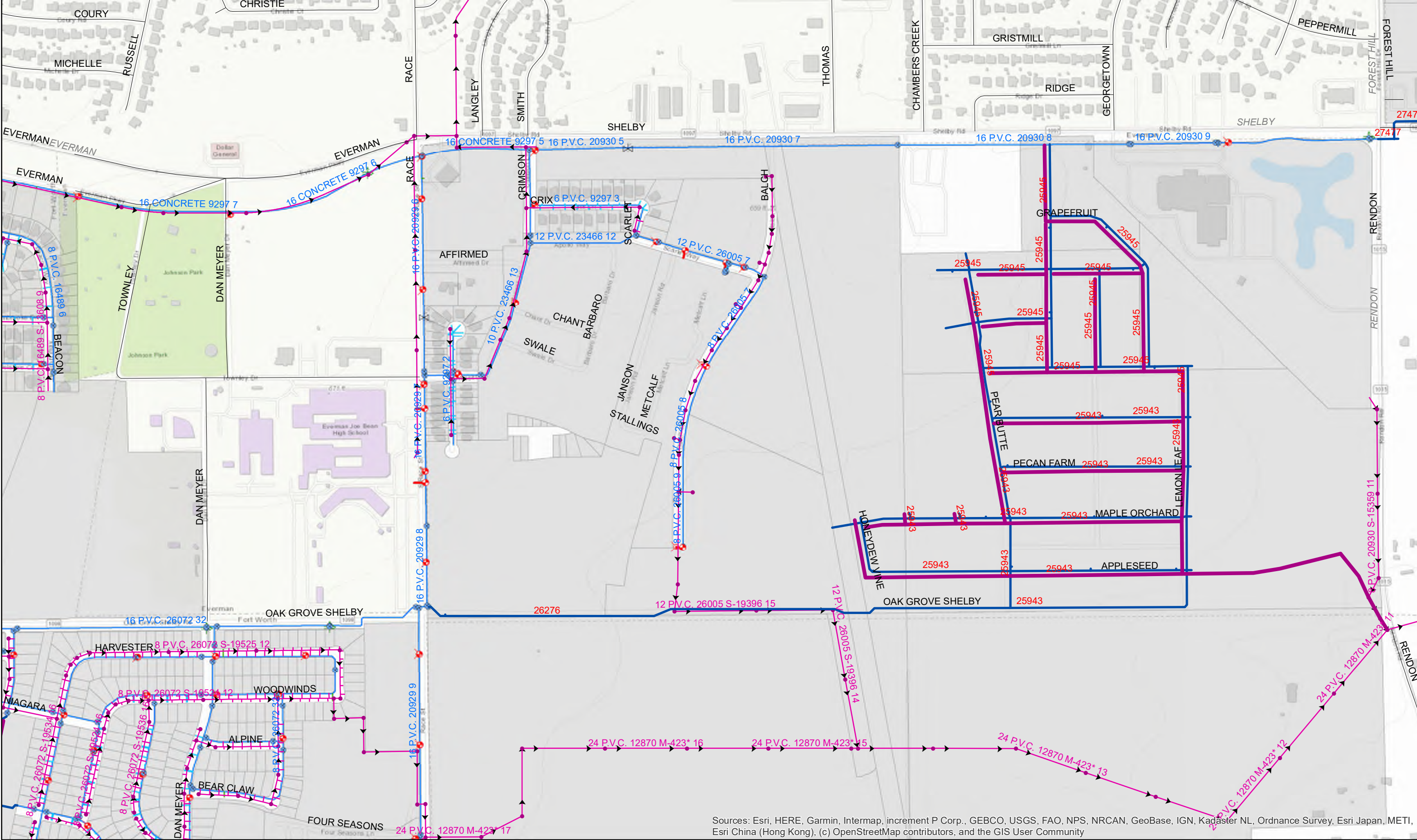
1. Pre and Post CCTV of Sewer main will be determined upon plan review.
2. Location of existing water/sewer line based on as-built plan may be used if proposed grading is not within 10' of centerline of existing water/sewer main. Contact Texas811 to have the water/sewer lines located.

Examples:



3. All water and sewer assets must be adjusted to final grade by pre-qualified contractor under a Community Facilities Agreement (CFA) or In-House Design Project.
4. **Inspection of protective fencing installation is required prior to grading permit approval on sites with preserved trees.** Inspections may be scheduled online under the urban forestry permit number, by phone at 817-392-7933 or 817-392-7931, or email (urbanforestry@fortworthtexas.gov). To facilitate scheduling, please provide grading and urban forestry permit numbers.
5. Inspection fees are \$50 per inspection, billed under the urban forestry permit number. Initial billing is \$100 to cover pre- and post-grading inspections. Additional inspections may be conducted throughout construction. Failed inspections will result in additional inspection fee(s) for re-inspection.
6. Protective fencing must be installed prior to construction, and must remain in place until all work is completed, unless City Forester has authorized temporary removal for work within a protected area. **No heavy equipment or material storage is allowed within protected area.** Work shall be done by hand when possible. Fencing must be replaced immediately when not actively working in protected area. See [urban forestry ordinance](#) for additional restrictions.
7. Tree protection and construction methods must comply with the General Requirements listed in Section D.1. and D.2. of the [Urban Forestry Ordinance](#).
8. No land disturbance is permitted within boundary of property line of a gas well site.

APPENDIX D

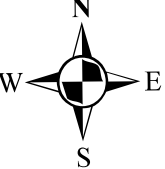


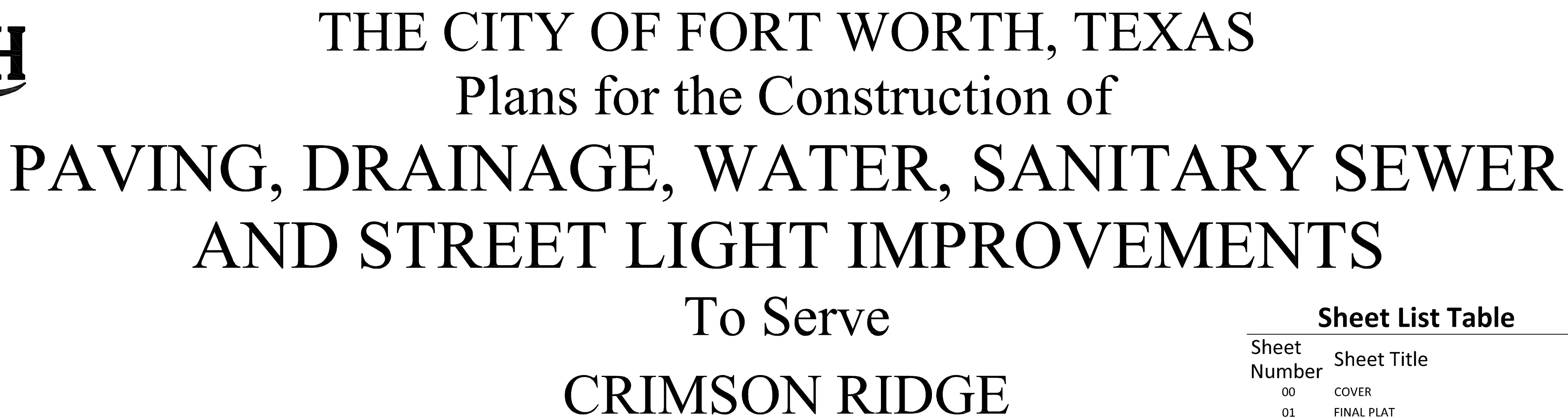
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

5/14/2024

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THE ACCURACY IS NOT TO BE TAKEN / USED AS DATA PRODUCED FOR
ENGINEERING PURPOSES OR BY A REGISTERED PROFESSIONAL LAND
SURVEYOR. THE CITY OF FORT WORTH ASSUMES NO RESPONSIBILITY
FOR THE ACCURACY OF SAID DATA.





BETSY PRICE
MAYOR

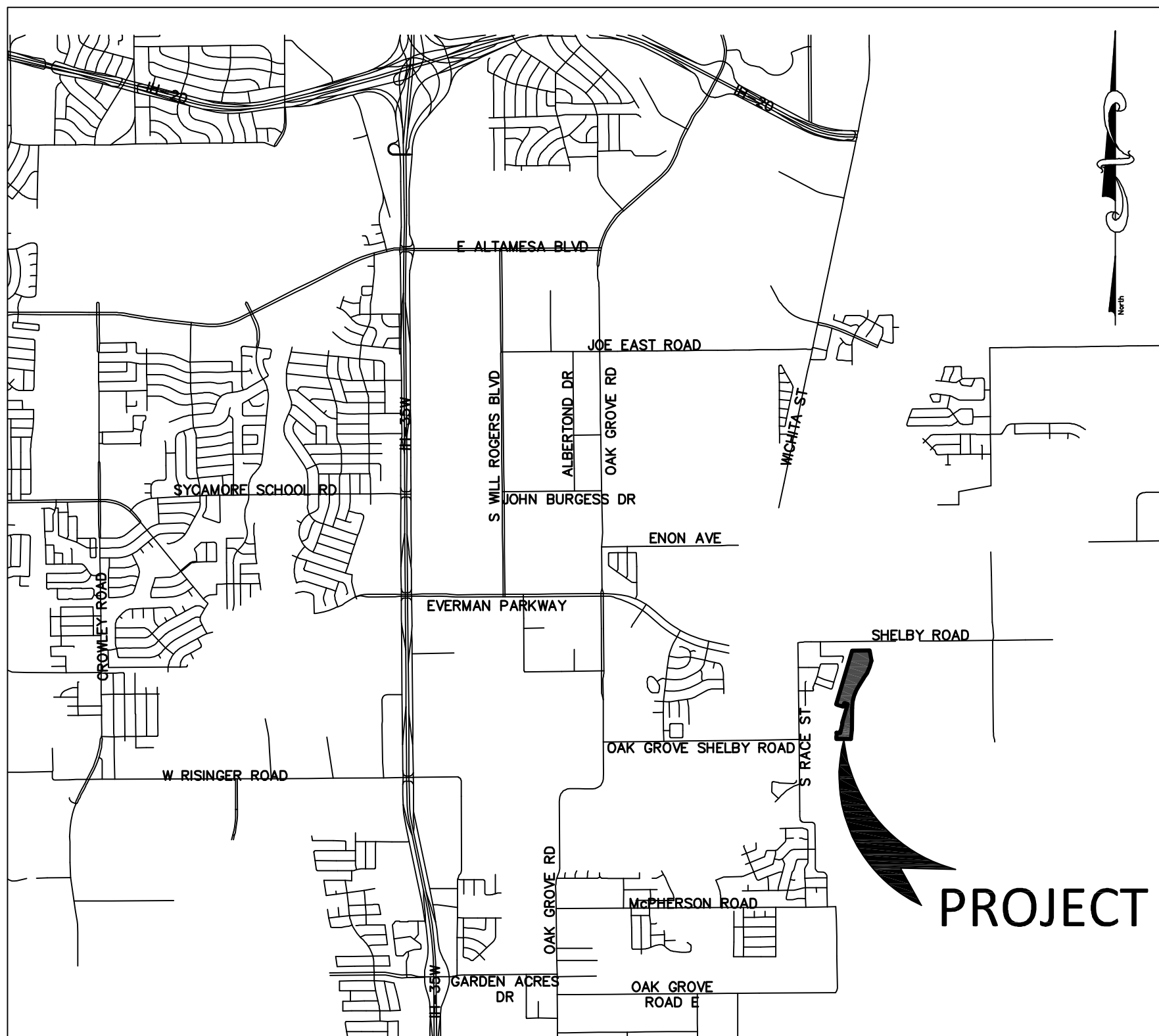
DAVID COOKE
CITY MANAGER

DAVID V. MAGAÑA, P.E.

CITY ENGINEER, TRANSPORTATION AND
PUBLIC WORKS DEPARTMENT

CHRISTOPHER P. HARDER, P.E.

WATER DEPARTMENT DIRECTOR



ENGINEER:
DUNAWAY ASSOCIATES L.P.
550 BAILEY AVENUE STE. 400
FORT WORTH, TEXAS 76107
PHONE: (817) 335-1121
FAX:(817) 335-7437
CONTACT: DARRELL HOWARD

VICINITY MAP

NOT TO SCALE
MAPSCO PG.106 SEC. P
COUNCIL DISTRICT #8

OWNER/DEVELOPER:
LDG DEVELOPMENT
1469 SOUTH FOURTH STREET
LOUISVILLE, KENTUCKY 40208
PHONE: (512) 351-9352

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		PHASE 1 EROSION CONTROL
		EROSION CONTROL DETAILS
		STREET LIGHT LAYOUT
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		STREET LIGHT DETAILS
		STREET SIGNS & MARKINGS
		STREET SIGNS & MARKINGS 2
		TRAFFIC CONTROL PLAN
		TRAFFIC CONTROL DETAILS

RICHARD ZAVALA

DIRECTOR, PARK & RECREATION DEPARTMENT

DAVID V. MAGAÑA, P.E.

CITY ENGINEER TRANSPORTATION & PUBLIC WORKS DEPARTMENT

RECOMMENDED

PROGRAM MANAGER

REVIEWED

PROJECT MANAGER

X-25006

IPRC NO. 18-0108

CITY PROJECT NO. 101913

WATER PROJECT NO. 56008-0600430-101913-001580

SEWER PROJECT NO. 56008-0700430-101913-001380

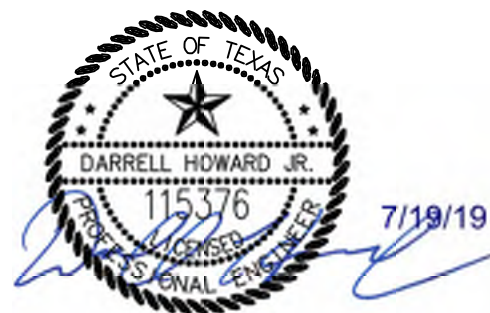
W-2625



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121
(TX REG. F-1114)

DALP JOB NO. 003950.001

JULY 2019



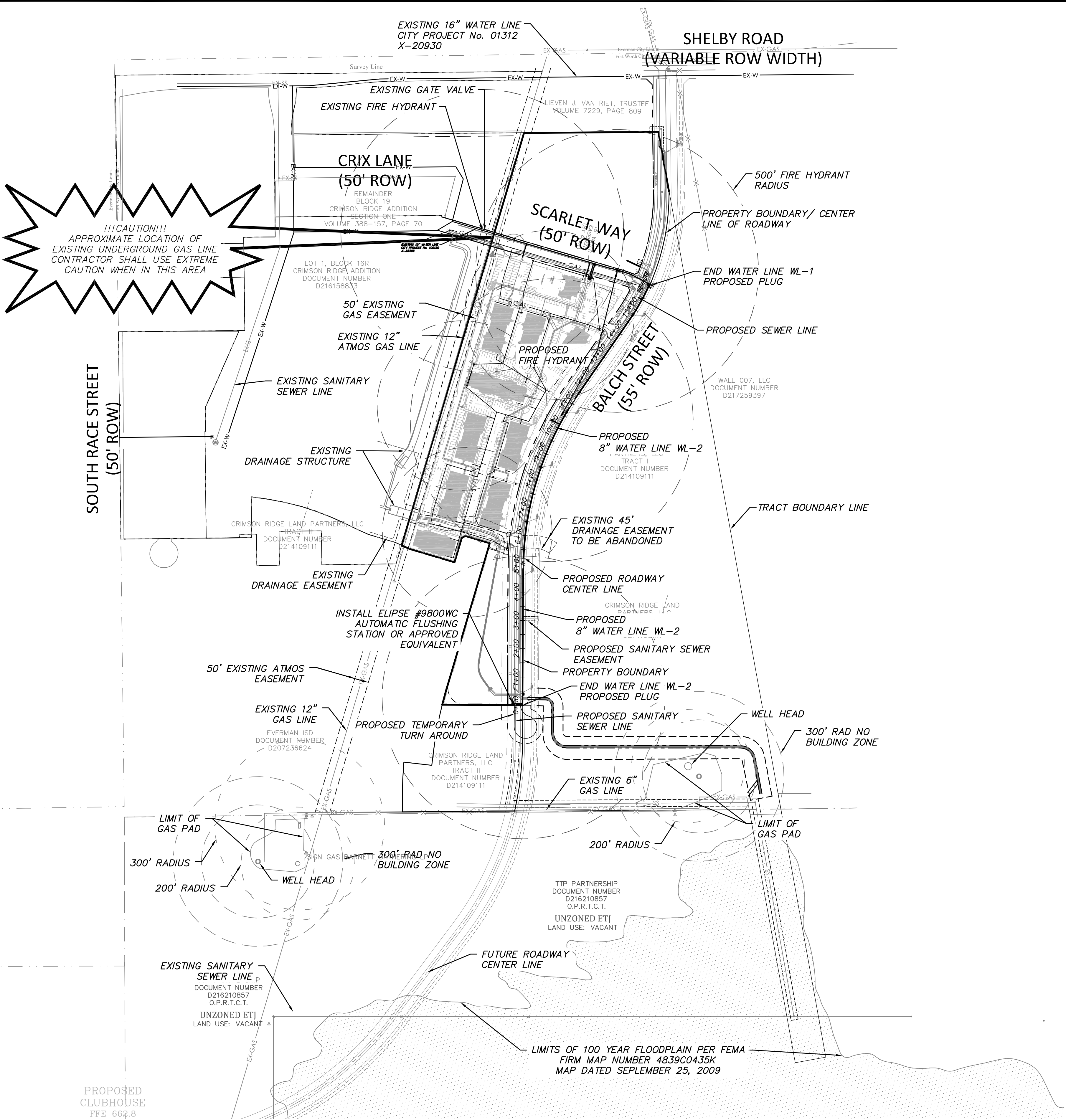
SANITARY SEWER IMPROVEMENTS TO SERVE CREEKSIDE ESTATES PHASE III:

CITY PROJECT NO. 101913

WATER PROJECT NO. 56008-0600430-101913

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 PLOTTED BY: LUIS GUERRERO
 PLOTTED ON: 2019/07/19
 PLOTTED AT: 8:49 AM
 PLOTTED WITH: PDF-XCHANGE FOR AEC/PLOT PROPCS

FILENAME: WATER LAYOUT.dwg
PLOTTER: HP DesignJet 500
PLOT DATE: 7/9/2019
PLOT TIME: 10:43:40 AM
PLOT BY: J. L. GRIFFIN
PLOT SCALE: 1/8" = 1'-0"



UTILITY LEGEND	
	PROPERTY BOUNDARY
	ADJOINERS
	PROPOSED SANITARY SEWER LINE
	PROPOSED WATER LINE
	PROPOSED FIRE HYDRANT
	PROPOSED GATE VALVE
	PROPOSED PLUG
	EXISTING FIRE HYDRANT
	EXISTING GATE VALVE

- NOTE:
- CONTRACTOR TO FIELD VERIFY THE LOCATION OF EXISTING WATER LINE AT CONNECTION POINT
 - CONTRACTOR SHALL RESTORE THE FINAL GRADE TO PRE-CONSTRUCTION ELEVATIONS SO AS NOT TO CHANGE EXISTING FLOW PATTERNS.
 - FIRE HYDRANT LOCATION SHALL BE PER CITY OF FORT WORTH STANDARD DETAIL

REVISIONS			
NO.	DATE	DESCRIPTION	
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	

UTILITY RELOCATION NOTE:

IF ANY EXISTING UTILITY POLES, POWER POLES, GUY WIRES, TELEPHONE UTILITIES, ETC. ARE FOUND TO BE IN CONFLICT WITH THESE CONSTRUCTION PLANS. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY AND COORDINATE THE RELOCATION OF ANY/OR ALL SUCH UTILITIES (NO SPECIAL PAY).

CRITICAL:

LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND ARE BASED ON PUBLIC RECORDS. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES, BOTH HORIZONTALLY AND VERTICALLY, BEFORE THE COMMENCEMENT OF ANY CONSTRUCTION.

WARNING TO CONTRACTOR:

CALL 1-800-344-8377 (DIG-TESS) OR OTHER UTILITY LOCATING SERVICES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. DUNAWAY ASSOC., L.P. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES OR DEPICTING EXACT LOCATIONS OF UTILITIES ON DRAWINGS.

CONTRACTOR ADVISORY:

THE CONTRACTOR, AND HIS AGENTS (SUB-CONTRACTOR) ARE COMPLETELY RESPONSIBLE FOR THE VERIFICATION OF THE ACCURACY OF THE DIMENSION CONTROL FURNISHED HEREIN. THE OWNER, AND HIS AGENTS, ARE NOT RESPONSIBLE FOR THE ACCURACY OF THE COORDINATES FURNISHED. THE CONTRACTOR IS REQUIRED TO VERIFY ALL OF THE COORDINATES FOR ACCURACY AND CONFIRM THE LOCATIONS OF ALL UTILITIES TO BE CONSTRUCTED, BOTH HORIZONTALLY AND VERTICALLY. DISCREPANCIES FOUND BY THE CONTRACTOR SHALL BE REPORTED IN WRITING, TO THE OWNER IMMEDIATELY FOR RECONCILIATION.

PROJECT BENCHMARK:

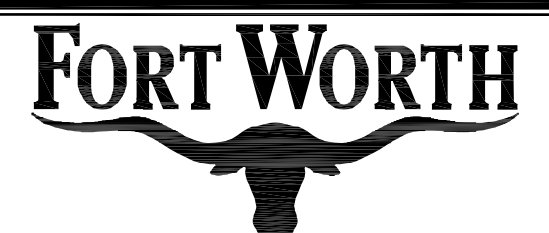
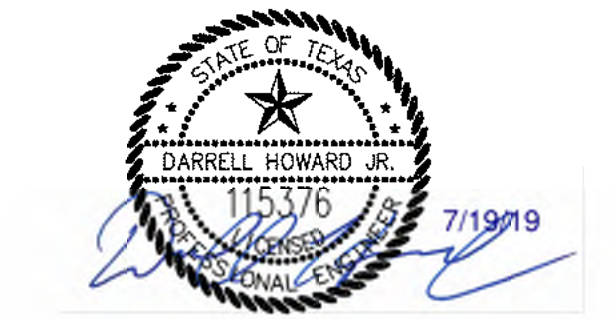
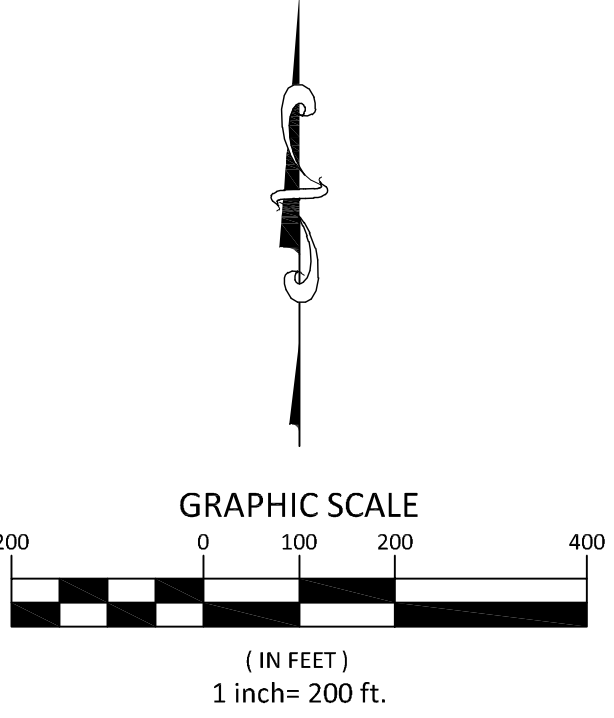
CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4 MILES WEST OF RACE STREET AND 157' WEST OF TESCO STEEL TOWER TRANSMISSION LINE, ON THE SOUTH CURB OF THE SOUTH LANE OF EVERMAN PARKWAY IN THE CENTER OF A 10' CONCRETE INLET

ELEVATION= 657.702'

SITE BENCHMARK:

SITE BM #1
"X" IN CONCRETE ON THE CENTER OF A CONCRETE DRAINAGE STRUCTURE ON THE WEST END OF SAID STRUCTURE NEAR THE SOUTHWEST CORNER OF THE SUBJECT TRACT

ELEVATION = 661.51'



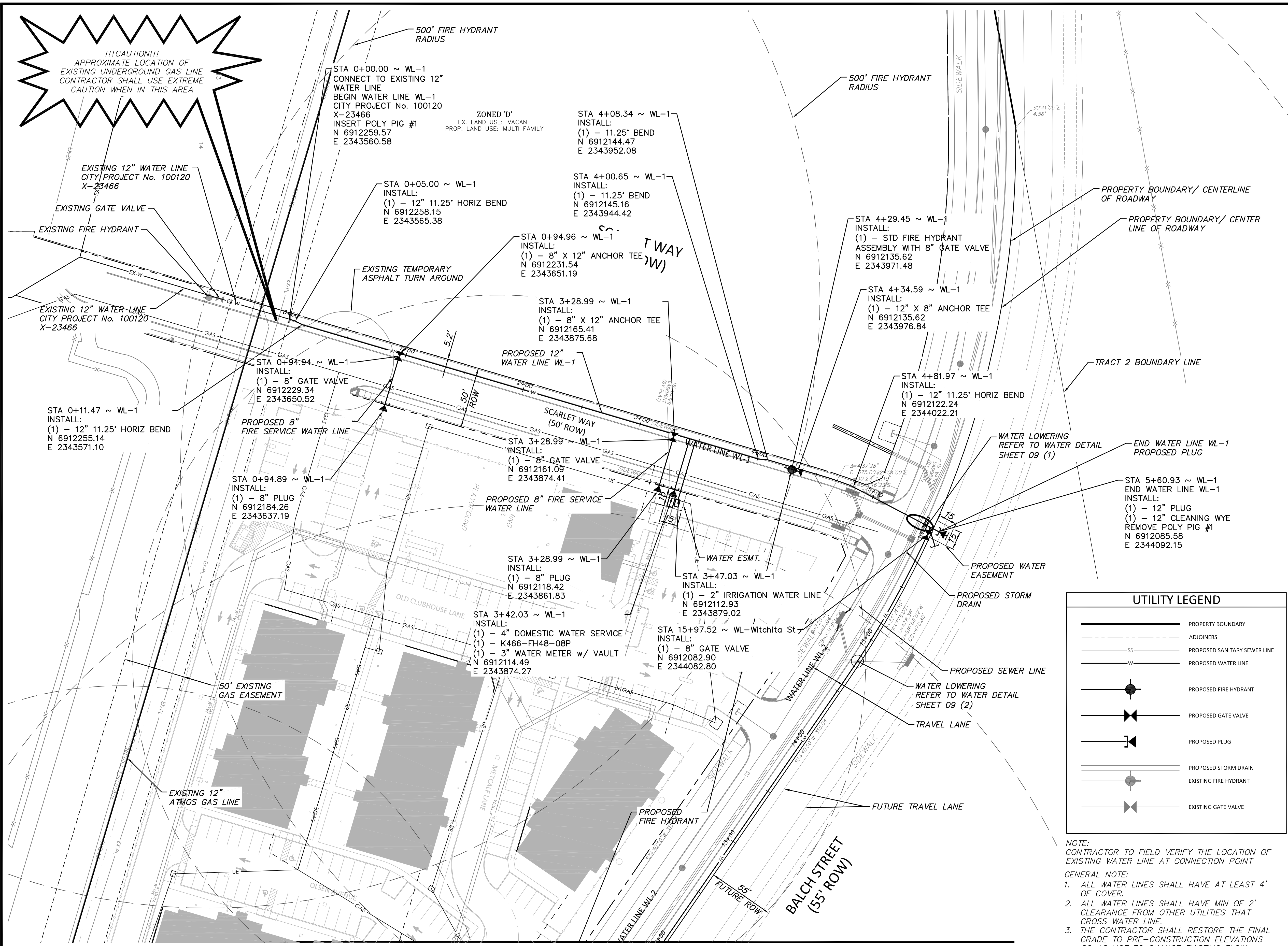
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG F-1114)

CRIMSON RIDGE

OVERALL WATER LAYOUT

DESIGNED: GM	PROJECT NO. 003950.001	SHEET: 04 OF 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		

FILENAME: WATER LAYOUT.dwg
PLOTTER: HP DesignJet 500
PLOT DATE: 7/19/2019
PLOT TIME: 10:43:41 AM
PLOT BY: J. L. DUNAWAY
PLOT SCALE: 1"=40'



MATCH LINE (SEE SHEET 06)

REVISIONS			
NO.	DATE	DESCRIPTION	
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UTILITY RELOCATION NOTE:

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PROJECT BENCHMARK:

CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4 MILES WEST OF RACE STREET AND 157' WEST OF TESCO STEEL TOWER TRANSMISSION LINE, ON THE SOUTH CURB OF THE SOUTH LANE OF EVERMAN PARKWAY IN THE CENTER OF A 10' CONCRETE INLET
ELEVATION= 657.702'

SITE BENCHMARK:

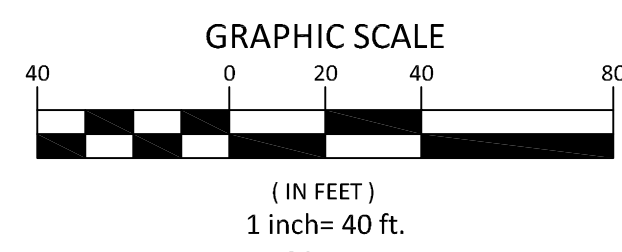
SITE BM #1
"X" IN CONCRETE ON THE CENTER OF A CONCRETE DRAINAGE STRUCTURE ON THE WEST END OF SAID STRUCTURE NEAR THE SOUTHWEST CORNER OF THE SUBJECT TRACT
ELEVATION = 661.51'

UTILITY LEGEND	
	PROPERTY BOUNDARY
	ADJOINERS
	PROPOSED SANITARY SEWER LINE
	PROPOSED WATER LINE
	PROPOSED FIRE HYDRANT
	PROPOSED GATE VALVE
	PROPOSED PLUG
	PROPOSED STORM DRAIN
	EXISTING FIRE HYDRANT
	EXISTING GATE VALVE

NOTE:
CONTRACTOR TO FIELD VERIFY THE LOCATION OF EXISTING WATER LINE AT CONNECTION POINT

GENERAL NOTE:

- ALL WATER LINES SHALL HAVE AT LEAST 4' OF COVER.
- ALL WATER LINES SHALL HAVE MIN OF 2' CLEARANCE FROM OTHER UTILITIES THAT CROSS WATER LINE.
- THE CONTRACTOR SHALL RESTORE THE FINAL GRADE TO PRE-CONSTRUCTION ELEVATIONS SO AS NOT TO CHANGE EXISTING FLOW PATTERNS.
- FIRE HYDRANT LOCATION SHALL BE PER CITY OF FORT WORTH STANDARD DETAIL



FORT WORTH


DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. F-1114)

CRIMSON RIDGE

WATER LINE W-1

DESIGNED: GM	PROJECT NO. 003950.001	SHEET: 05 OF 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		



!!!CAUTION!!!
APPROXIMATE LOCATION OF
EXISTING UNDERGROUND GAS LINE
CONTRACTOR SHALL USE EXTREME
CAUTION WHEN IN THIS AREA

MATCH LINE (SEE SHEET 05)

EXISTING 12"
ATMOS GAS LIN

~~PROPOSED
FIRE HYDRAN~~

- FUTURE TRAVEL LAN

BALCH STREET
(55' ROW)

WATER LOWERING
REFER TO WATER DETAIL
SHEET 09 (3)

STA 10+14.47 ~ WL-Witchita S
INSTALL:
(1) - STD FIRE HYDRANT
ASSEMBLY WITH 6" GATE VALVE
N 6911593.19
E 2343767.59

WATER LOWERING
REFER TO WATER DETAIL
SHEET 09 (4)

8" WATER LINE

WATER LOWERING
REFER TO WATER DETAIL
SHEET 09 (5)

MATCH LINE (SEE SHEET 07)

[illegible]

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PROJECT BENCHMARK

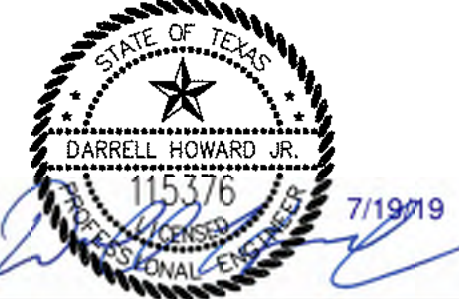
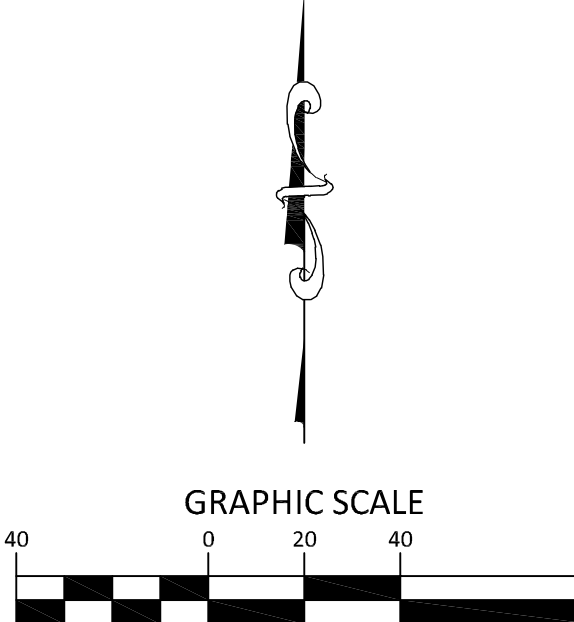
CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4
MILES WEST OF RACE STREET AND 157' WEST
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LINE, ON THE SOUTH CURB OF THE SOUTH
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ELEVATION= 657.70.

SITE BENCHMARK

"X" IN CONCRETE ON THE CENTER OF A
CONCRETE DRAINAGE STRUCTURE ON THE
WEST END OF SAID STRUCTURE NEAR THE
SOUTHWEST CORNER OF THE SUBJECT TRAC

ELEVATION = 661.5



FORT WORTH



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76101
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. F-1114)

CRIMSON RIDGE

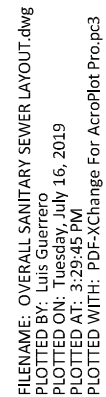
WATER LINE W-1

DESIGNED:	GM	DATE: 7/9/201
DRAWN:	GM	
CHECKED:	DH	

PROJECT NO: 003950.001	SHEET: 06
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FULL PATH: G:\production500\003900\3950\001\Civil\Drawings\plot Sheets PubG\production500\003900\3950\001\Civil\Drawings\plot Sheets Pub\WATR LAYOUT

FILENAME: WATR LAYOUT.dwg
 PLOTTED BY: Luis Guerrero
 PLOTTED ON: Tuesday, July 09, 2019
 PLOTTED AT: 9:33:50 AM
 PLOTTED WITH: PDF-XChange For A



NOTE:
THE CONTRACTOR SHALL RESTORE THE FINAL
GRADE TO PRE-CONSTRUCTION ELEVATIONS SO
AS NOT TO CHANGE EXISTING FLOW PATTERNS.
FROM STATION 0+00 TO 10+00.

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CITY MONUMENT OF EVERMAN PARKWAY 0.4
MILES WEST OF RACE STREET AND 157' WEST
OF TESCO STEEL TOWER TRANSMISSION
LINE, ON THE SOUTH CURB OF THE SOUTH
LANE OF EVERMAN PARKWAY IN THE CENTER
OF A 10' CONCRETE INLET

(IN FEET)

1 inch = 200 ft.

200 0 100 200 400



STATE OF TEXAS

DARRELL HOWARD JR.

115376

PROFESSIONAL ENGINEER

7/19/99

			
			
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107 Tel: 817.335.1121 • Fax: 817.335.7437 (D.B.G. = 1114)			
CRIMSON RIDGE			
OVERALL SANITARY SEWER LAYOUT			
DESIGNED: GM DRAWN: GM CHECKED: DH	<div></div> <div>DATE: 7/16/2019</div>	PROJECT NO: 003950.001	SHEET: <div>11 OF 58</div>

NOTE:
CONTRACTOR TO FIELD VERIFY THE LOCATION
OF EXISTING SANITARY SEWER LINE AT CONNECTION

REVISIONS		
NO.	DATE	DESCRIPTION
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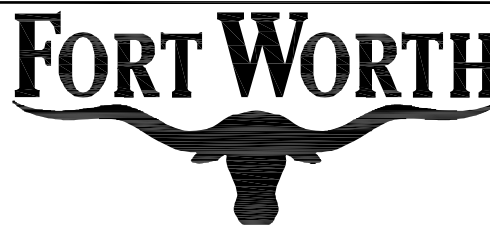
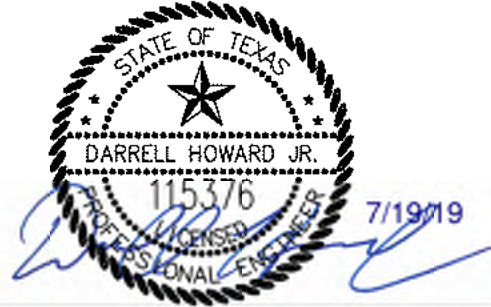
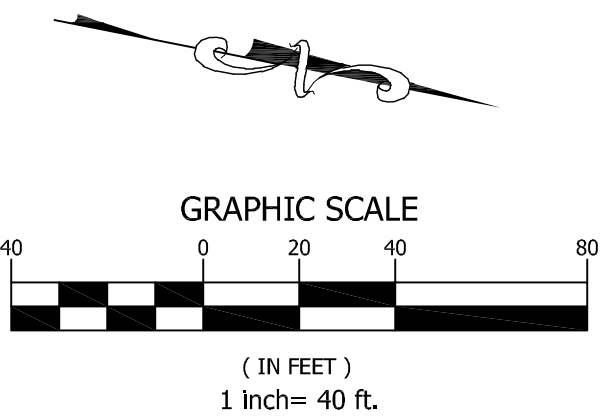
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SITE BENCHMARK:
SITE BM #1
"X" IN CONCRETE ON THE CENTER OF A CONCRETE DRAINAGE STRUCTURE ON THE WEST END OF SAID STRUCTURE NEAR THE SOUTHWEST CORNER OF THE SUBJECT TRACT
ELEVATION = 661.51'



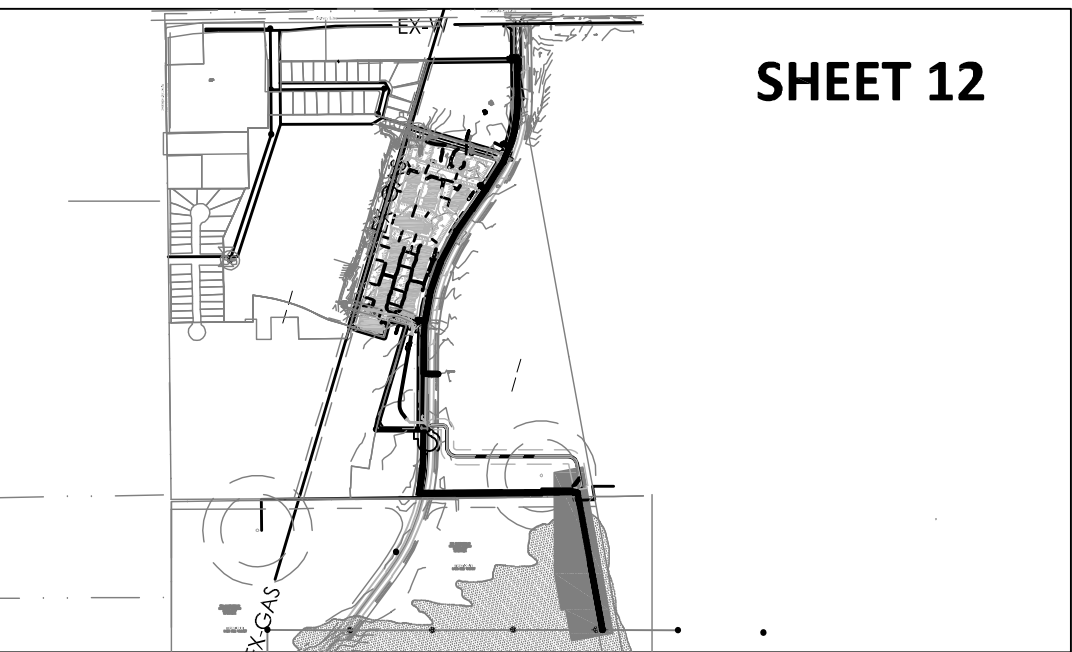
CRIMSON RIDGE

SS LINE 1 P&P

DESIGNED: GM	PROJECT NO. 003950.001	SHEET: 12 OF 58
DRAWN: GM	DATE: 7/16/2019	
CHECKED: DH		

SS LAYOUT KEY MAP

NOT TO SCALE



EX FL 630.70
STA 0+00.00 ~ SS-1
RIM ELEV = 639.57
CONST STD 4' DIA SSMH
(CONTRACTOR TO FIELD VERIFY)
N 6909499.79
E 2344596.90
CONNECT TO EX. 24" SANITARY
SEWER LINE
SEWER PROJECT No.
PS58-070580174710
X-12870
D.O.E. - 2730

LIMITS OF 100YR FLOODPLAIN PER
FEMA FIRM MAP NUMBER 4839C0435K
MAP DATED SEPTEMBER 26, 2009

STA 3+83.75 ~ SS-1
RIM ELEV = 644.03
CONST STD 4' DIA SSMH
N 6909877.39
E 2344528.47

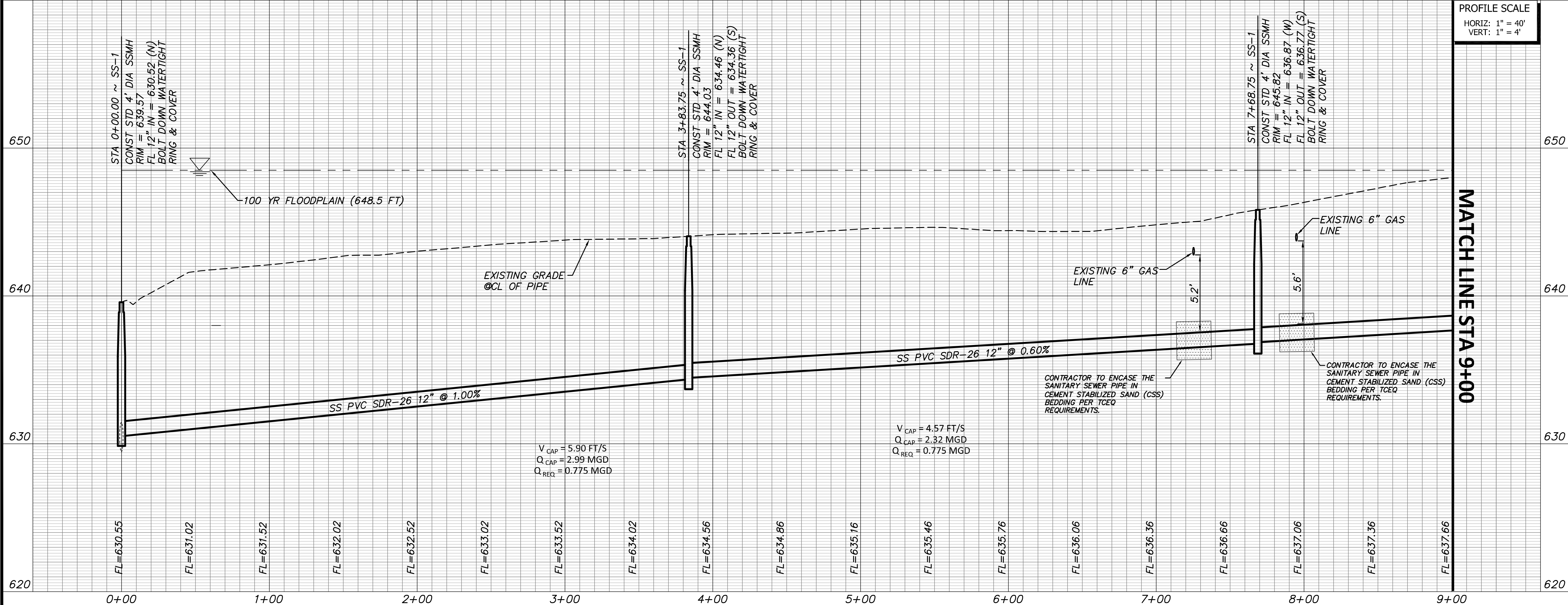
STA 7+94.83 (0.00') ~ SS-1
EXISTING 6" GAS LINE CROSSING
N 6910256.05
E 2344433.75

STA 7+25.24 (0.00') ~ SS-1
EXISTING 6" GAS LINE CROSSING
N 6910213.41
E 2344467.58

STA 7+68.75 ~ SS-1
RIM ELEV = 645.82
CONST STD 4' DIA SSMH
N 6910256.22
E 2344459.82

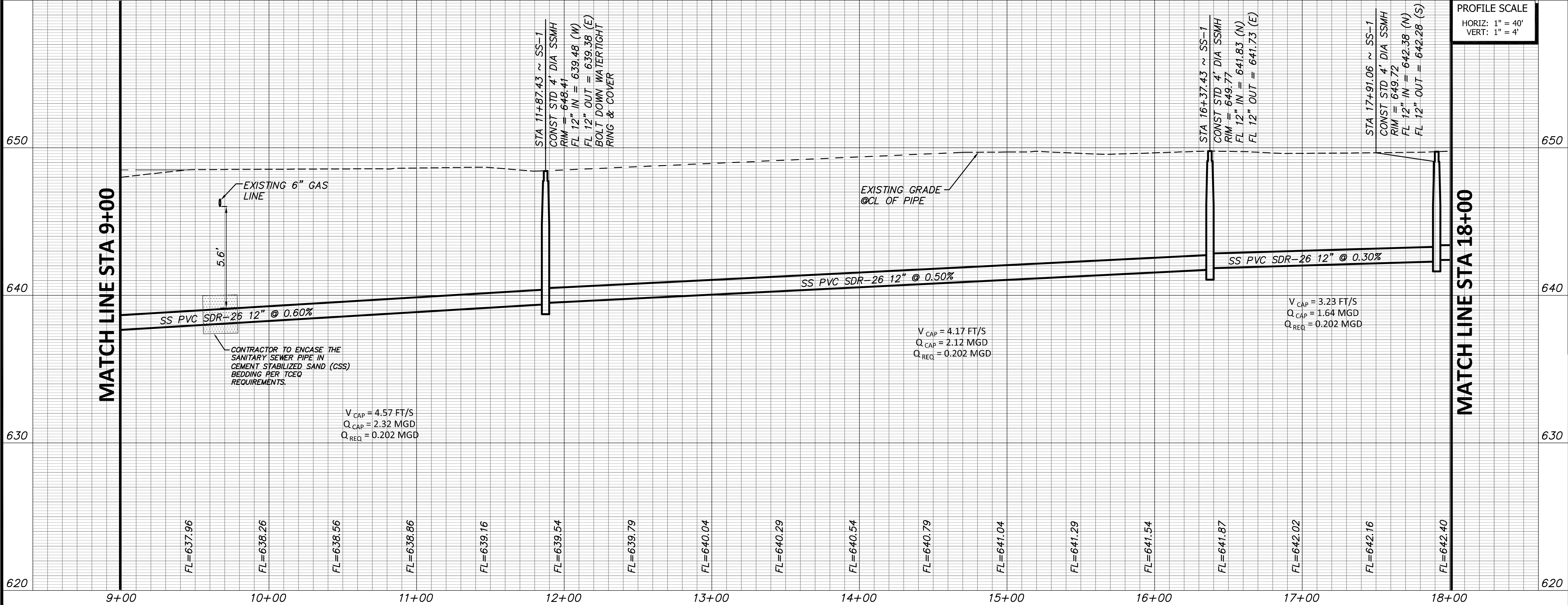
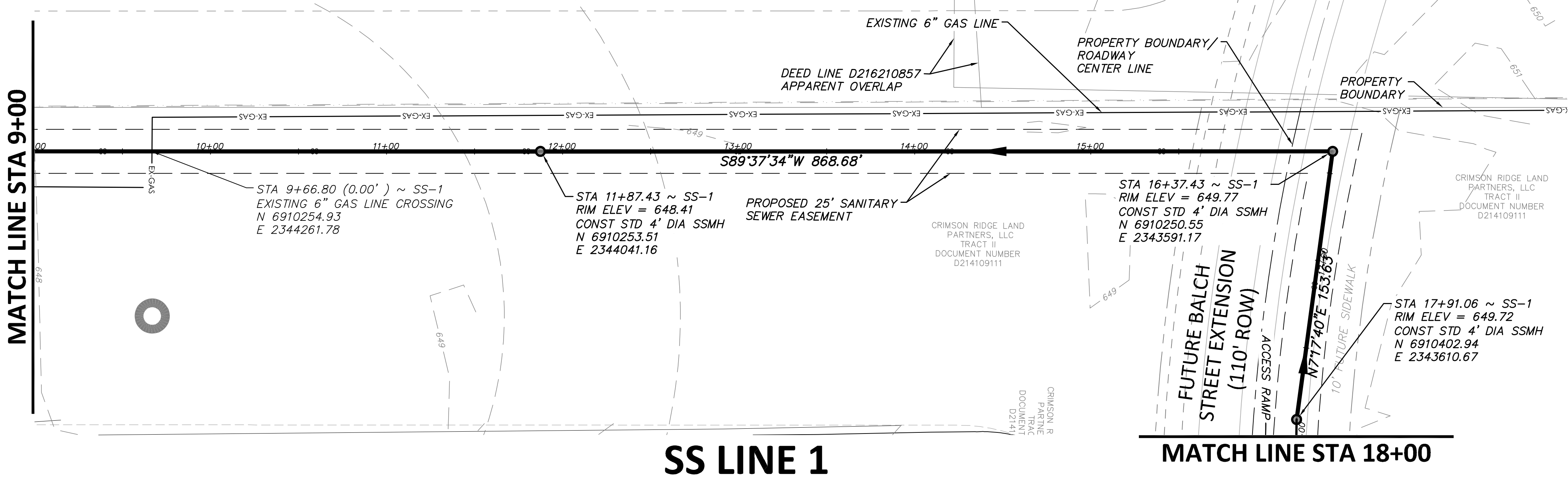
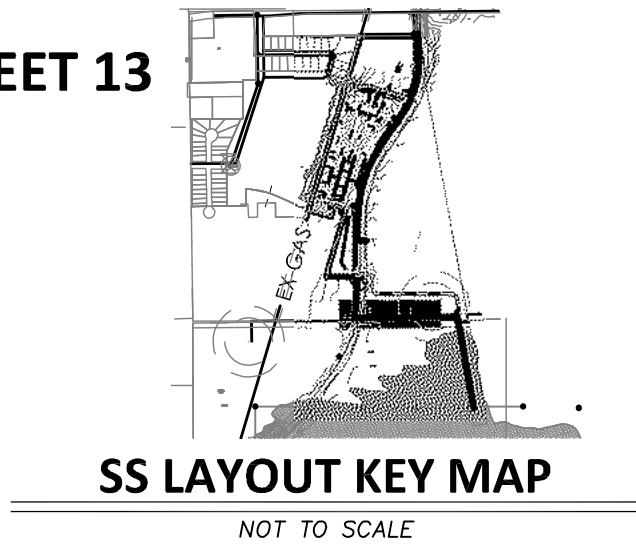
!!!CAUTION!!!
APPROXIMATE LOCATION OF
EXISTING-UNDERGROUND GAS LINE
CONTRACTOR SHALL USE EXTREME
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SS LINE 1



FILE PATH: C:\projects\501003950\501003950\001\12.dwg (Download) Sheets: P&P SS LINE 1 P&P

PLANNED: SS LINE 1 P&P.dwg
PLOTTER: B1: Lark
PLOTTER: B1: Lark
PLOTTER: B1: Lark
PLOTTER: B1: Lark



REVISIONS			
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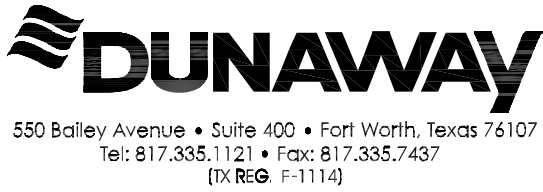
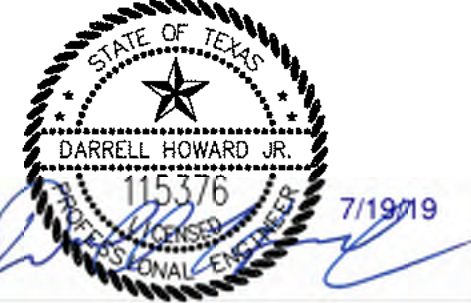
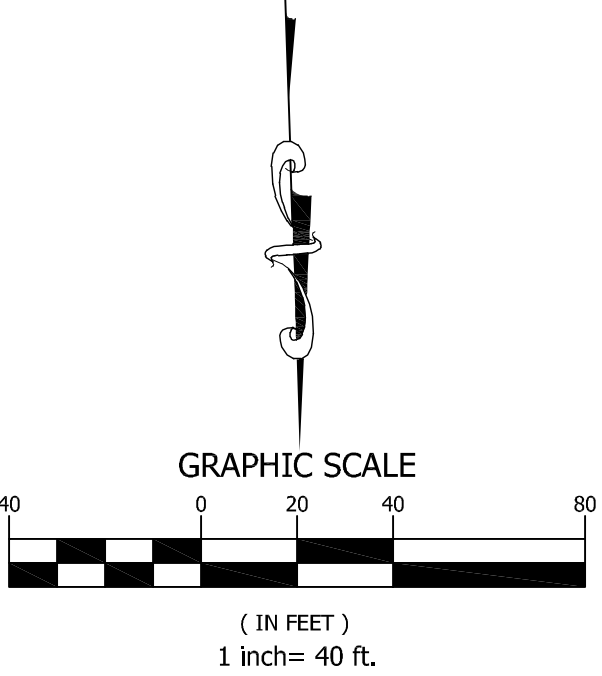
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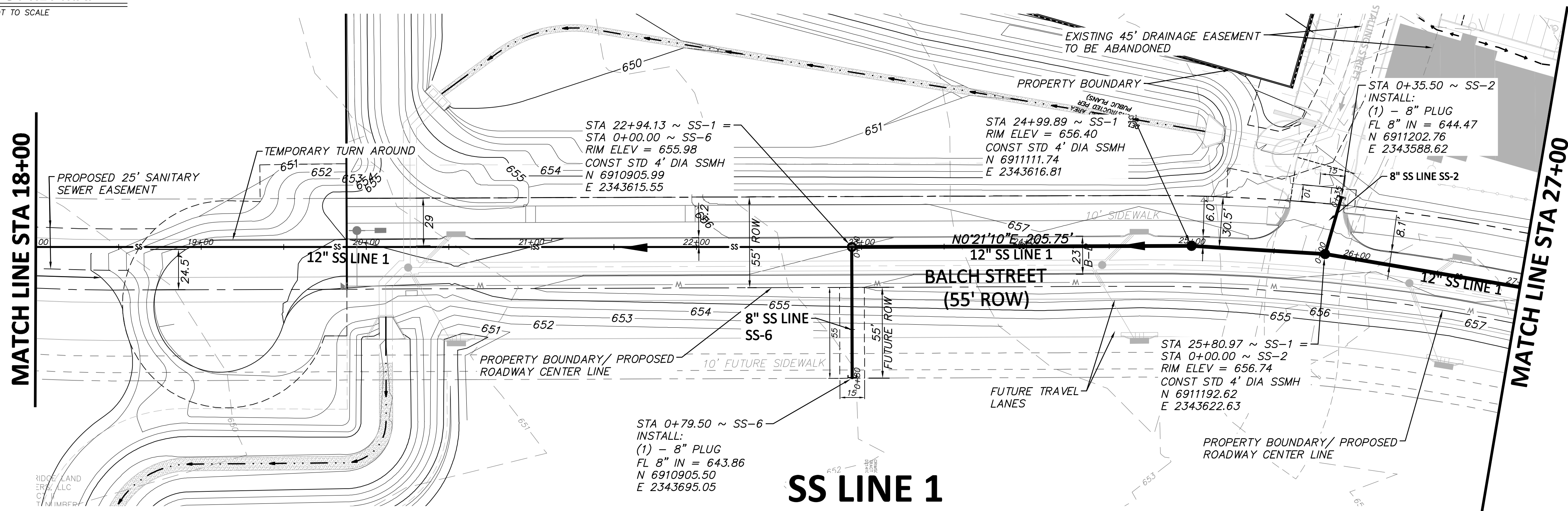


CRIMSON RIDGE

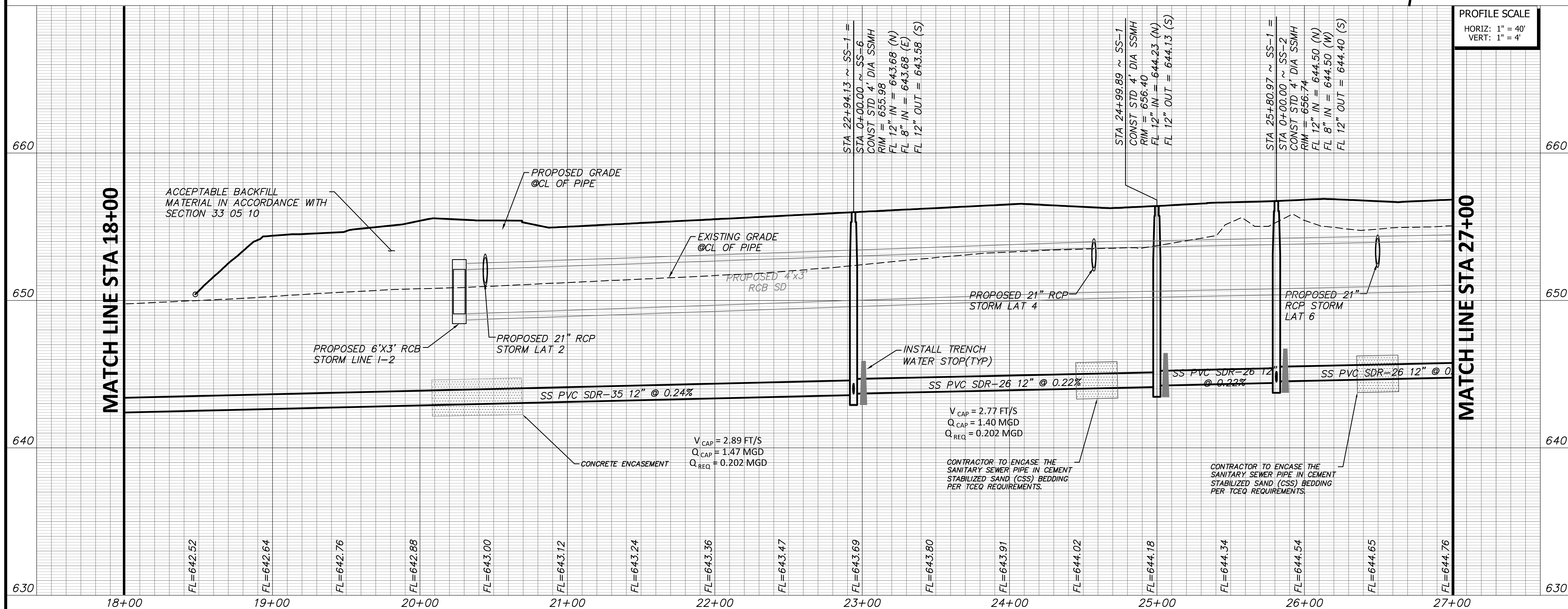
SS LINE 1 P&P 2

DESIGNED: GM	PROJECT NO: 003950.001	SHEET: 13 of 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		

NOT TO SCALE



SS LINE 1

[illegible]

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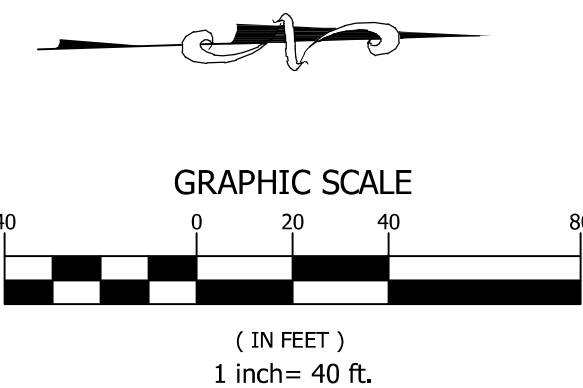
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FORT WORTH



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 7610
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. F-1114)

CRIMSON RIDGE

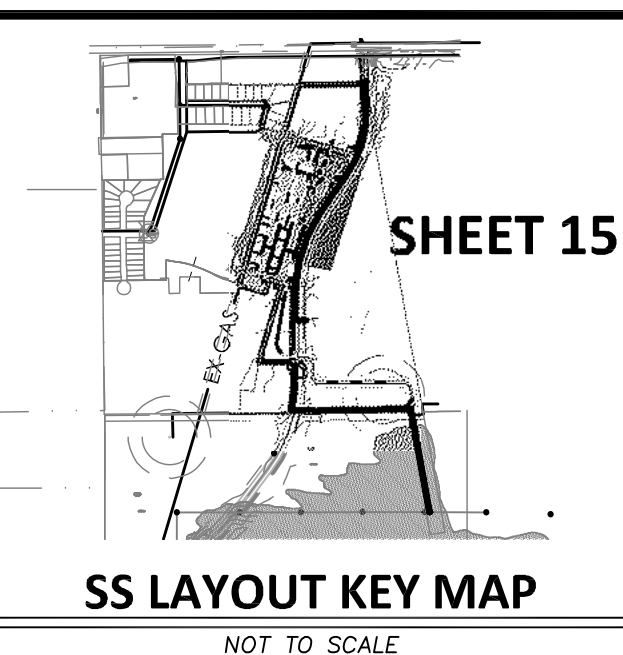
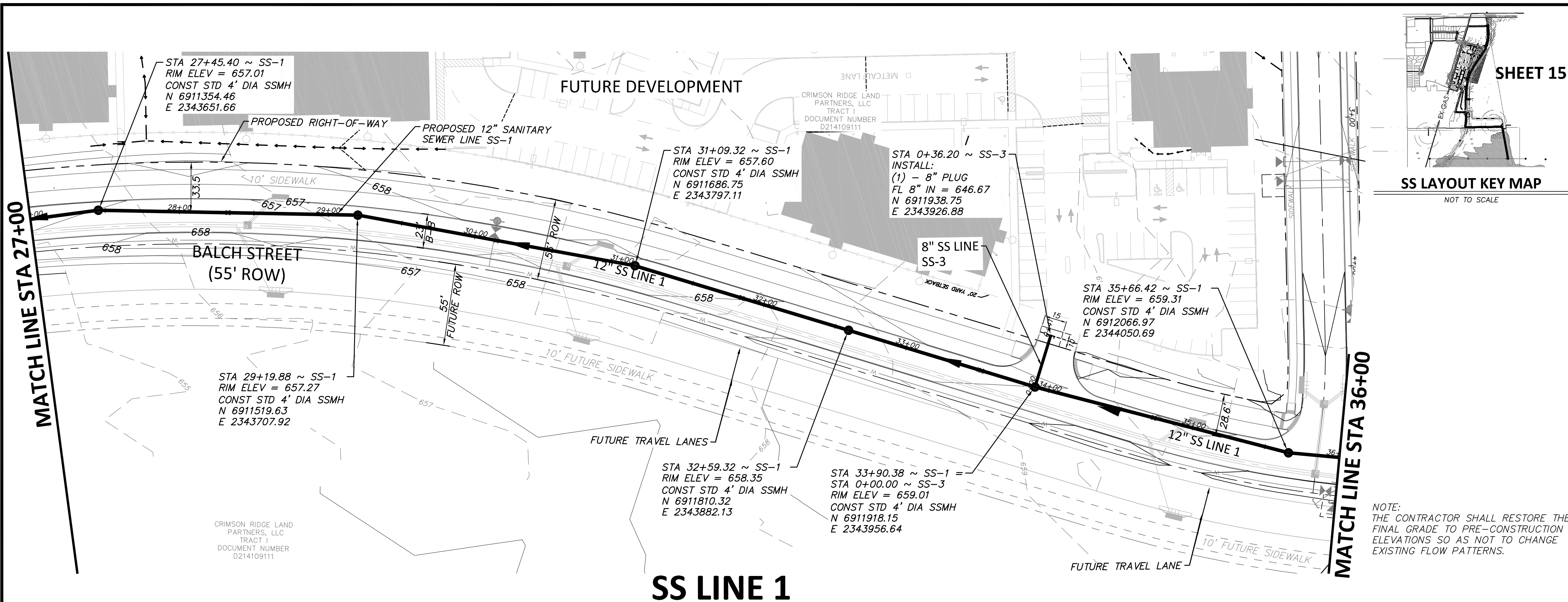
SS LINE 1 P&P 3

DESIGNED:	GM	
DRAWN:	GM	
CHECKED:	DH	DATE: 7/18/2019

PROJECT NO:
003950.001

SHEET:

14 OF 58



REVISIONS			
NO.	DATE	DESCRIPTION	
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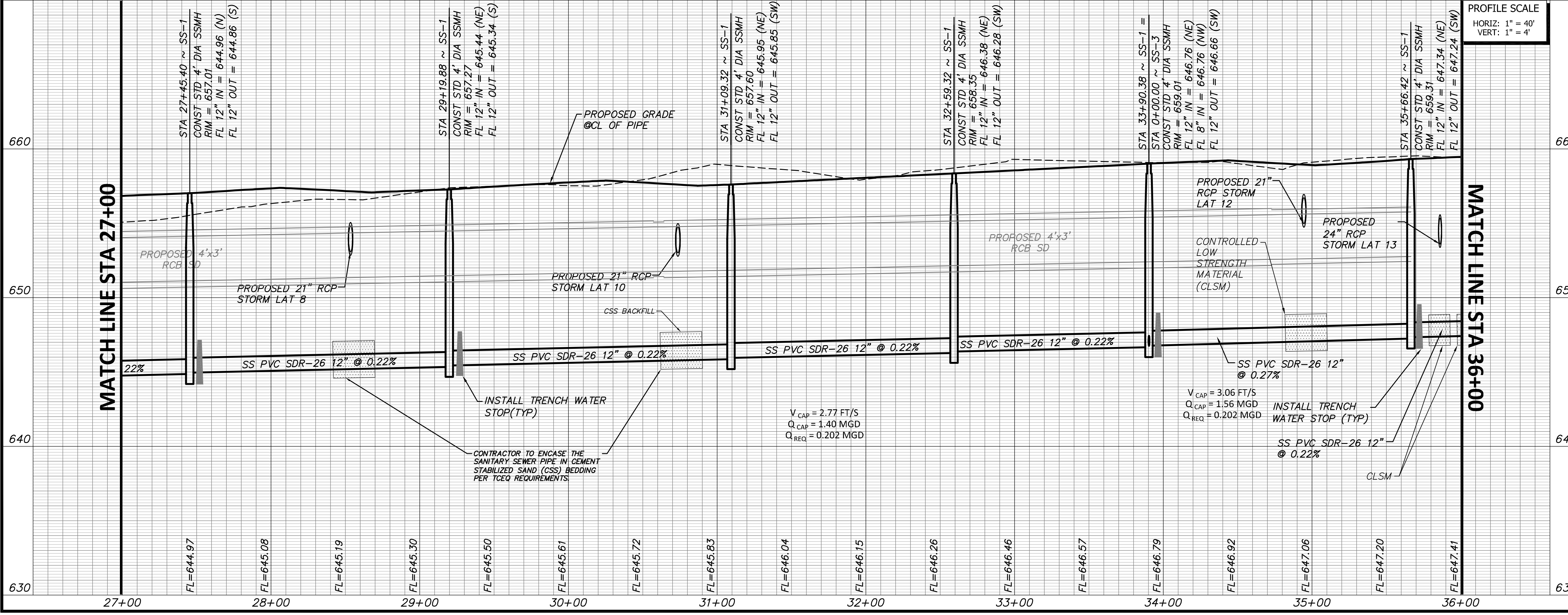
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PROJECT BENCHMARK:
CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4 MILES WEST OF RACE STREET AND 157' WEST OF JESCO STEEL TOWER TRANSMISSION LINE, ON THE SOUTH CURB OF THE SOUTH LANE OF EVERMAN PARKWAY IN THE CENTER OF A 10' CONCRETE INLET
ELEVATION= 657.702'

SITE BENCHMARK:
SITE BM #1
"x" IN CONCRETE ON THE CENTER OF A CONCRETE DRAINAGE STRUCTURE ON THE WEST END OF SAID STRUCTURE NEAR THE SOUTHWEST CORNER OF THE SUBJECT TRACT
ELEVATION = 661.51'

NOTE:
THE CONTRACTOR SHALL RESTORE THE FINAL GRADE TO PRE-CONSTRUCTION ELEVATIONS SO AS NOT TO CHANGE EXISTING FLOW PATTERNS.

SS LINE 1



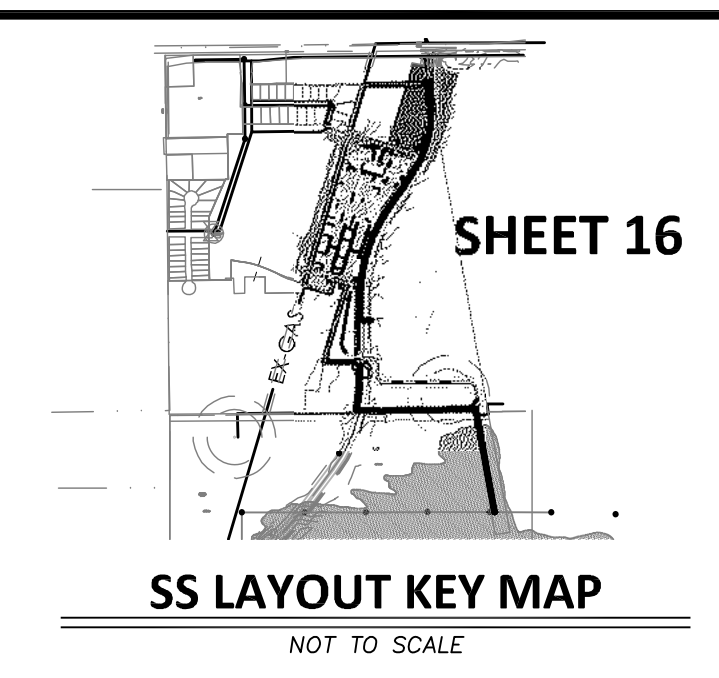
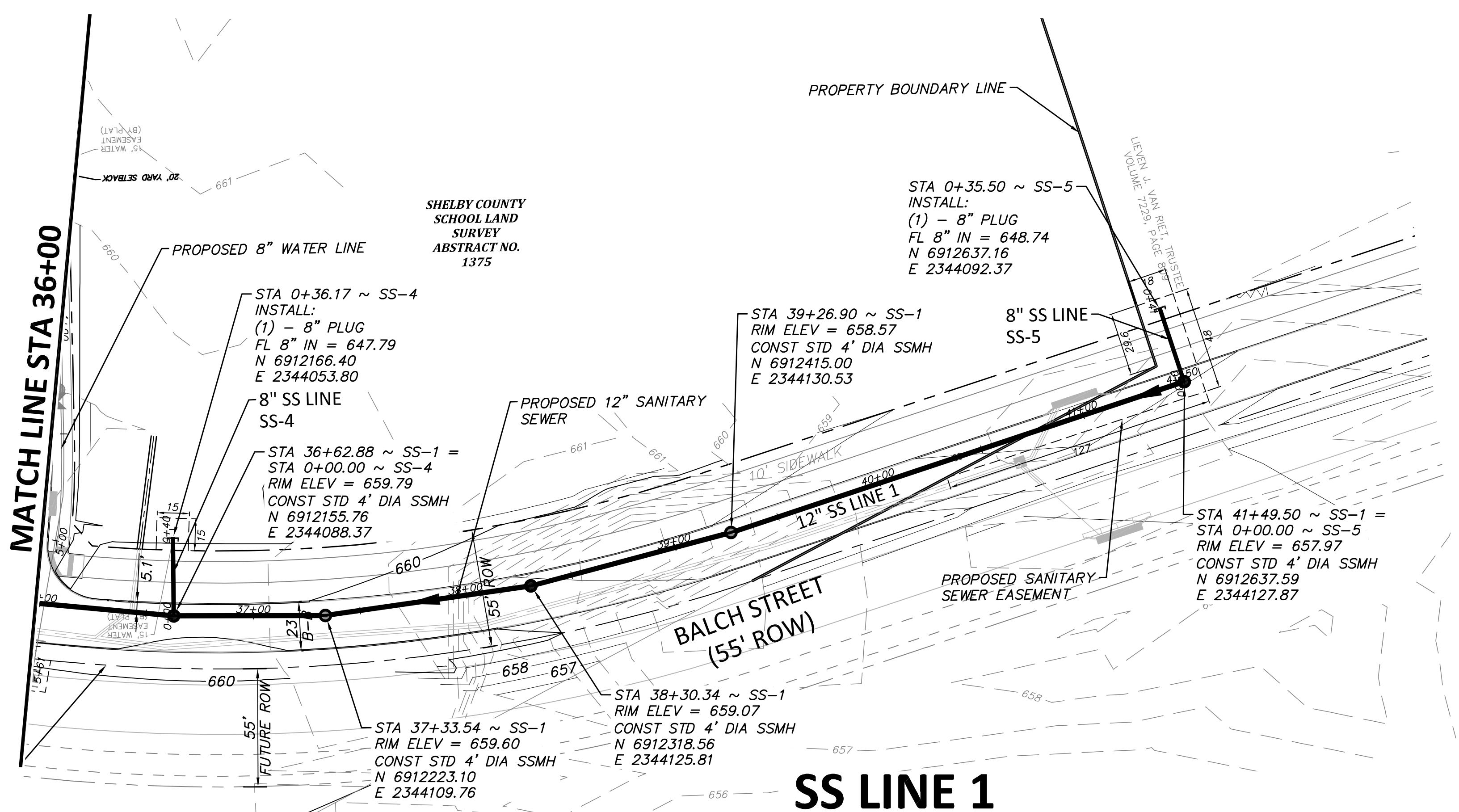
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG F-1114)

CRIMSON RIDGE

SS LINE 1 P&P 4

DESIGNED: GM	PROJECT NO: 003950.001	SHEET: 15 of 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		

FILE NAME: SS LINE 1 P&P.dwg
PLOTTER: HP DesignJet T1100e
PLOT DATE: 7/9/2019
PLOT TIME: 10:30:15 AM
PLOT BY: J. H. HARRIS
PLOT SCALE: 1"=40'



REVISIONS			
NO.	DATE	DESCRIPTION	
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	

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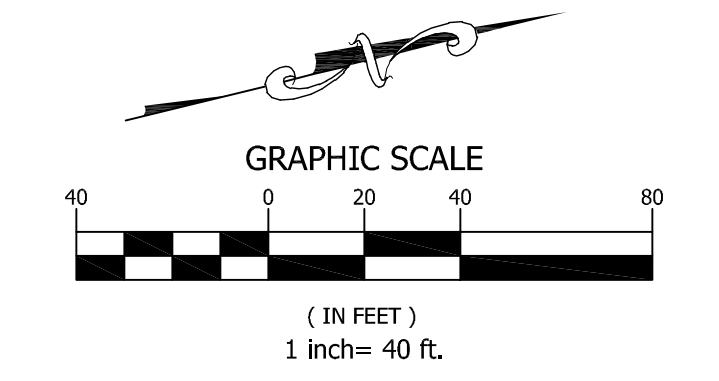
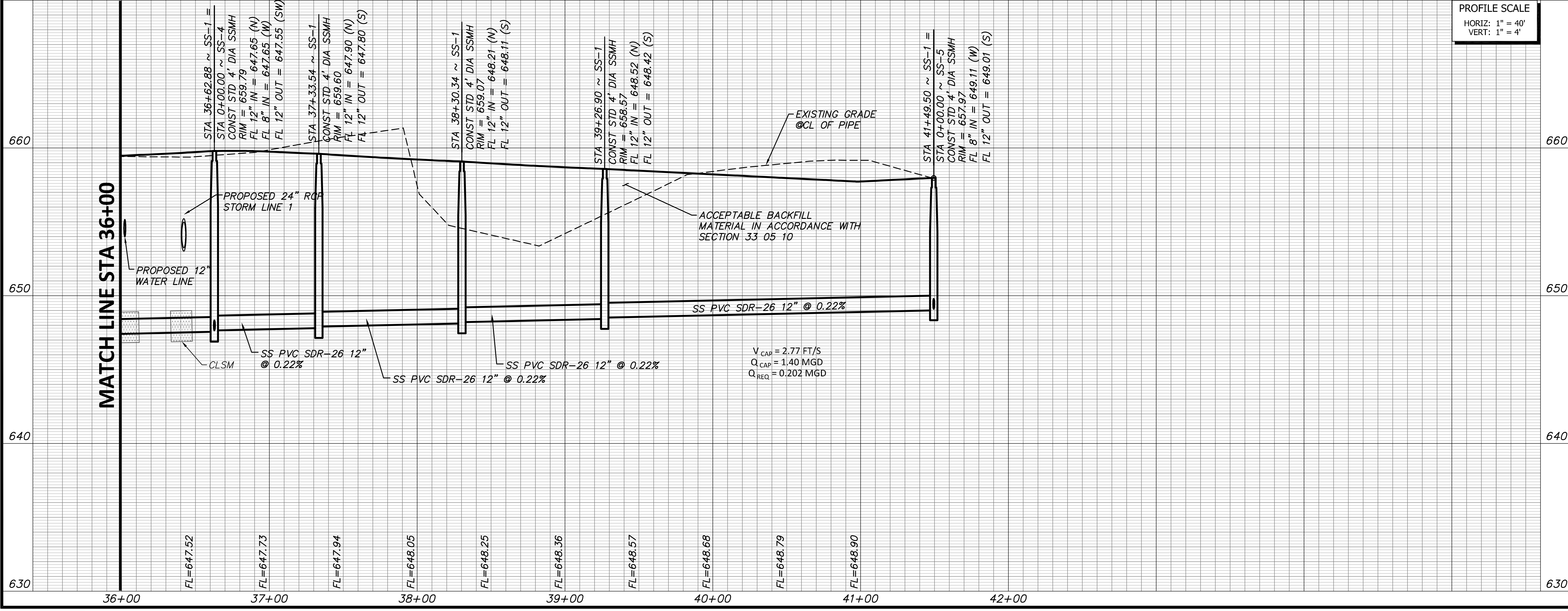
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CRIMSON RIDGE

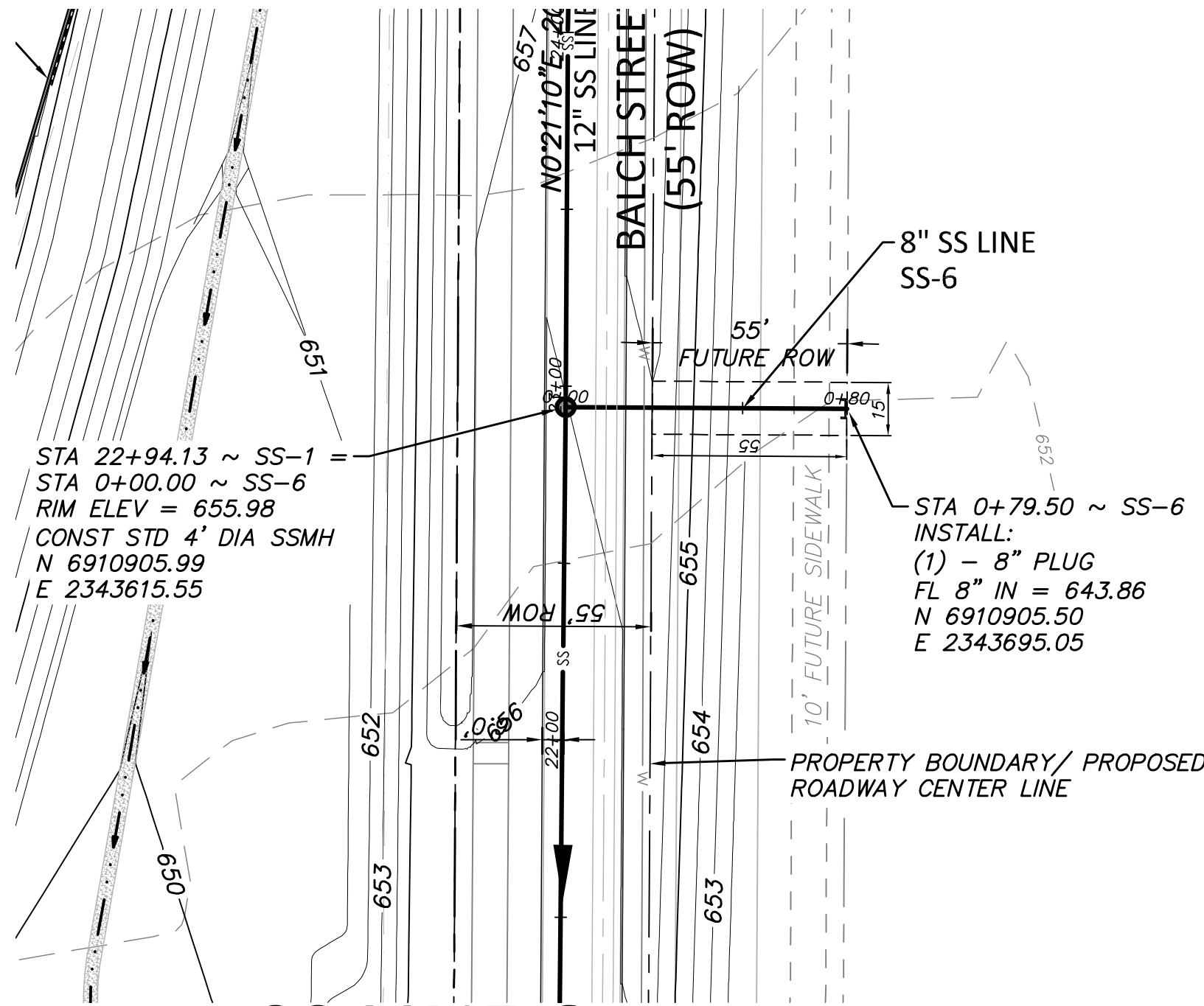
SS LINE 1 P&P 5

DESIGNED: GM	PROJECT NO. 003950.001	SHEET: 16 of 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		

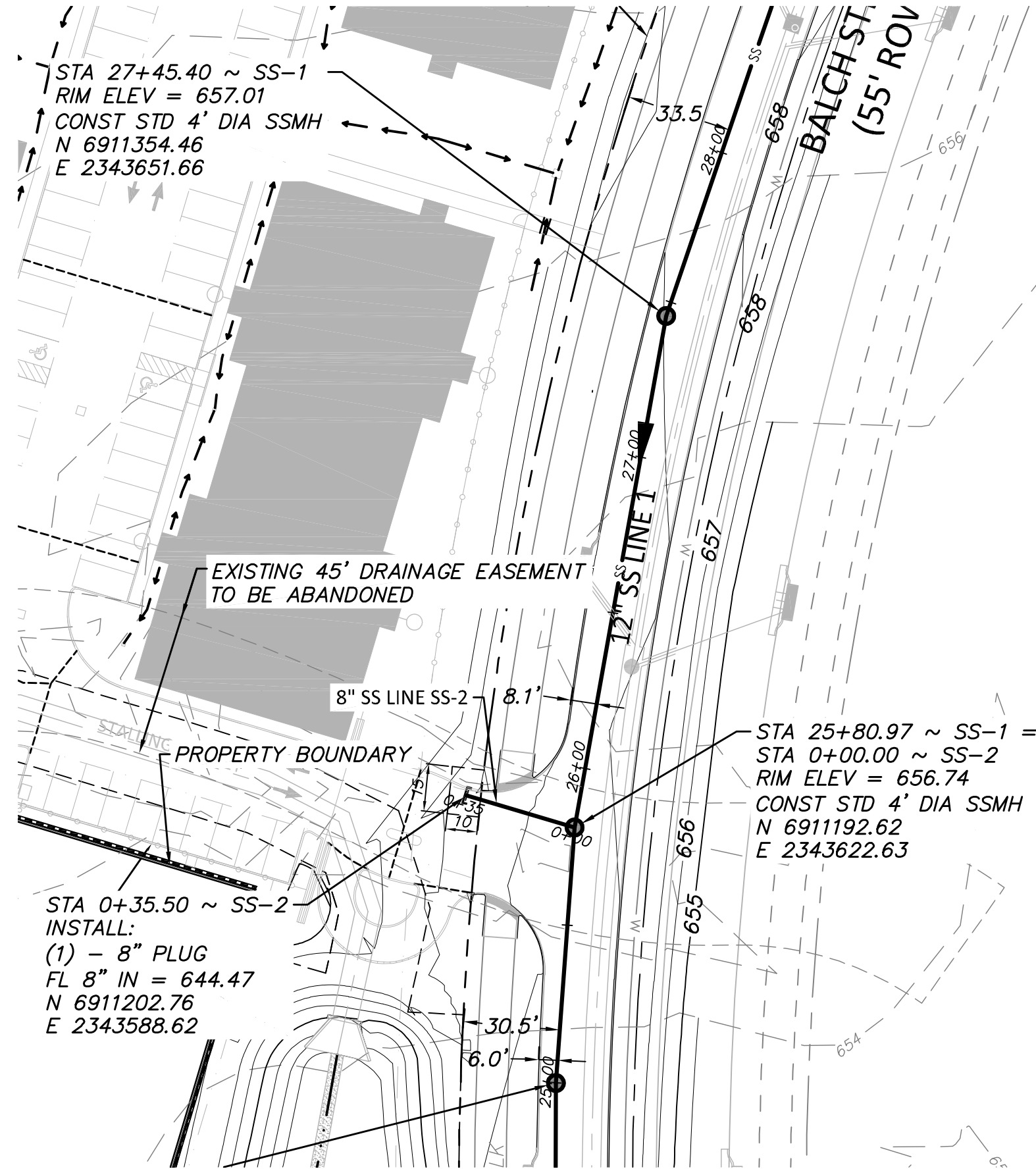
FILE NAME: SS LINE 1 P&P.dwg
PLOTTER: HP DesignJet 5000
PLOT DATE: 7/9/2019
PLOT TIME: 10:00:00 AM
PLOT BY: J. H. HARRIS
PLOT SCALE: 1"=40'

\\F:\DWG\SS LINE 6.dwg
PLOTTER: HP DesignJet 5000
PLOT DATE: 7/19/19
PLOT BY: J. HARRIS

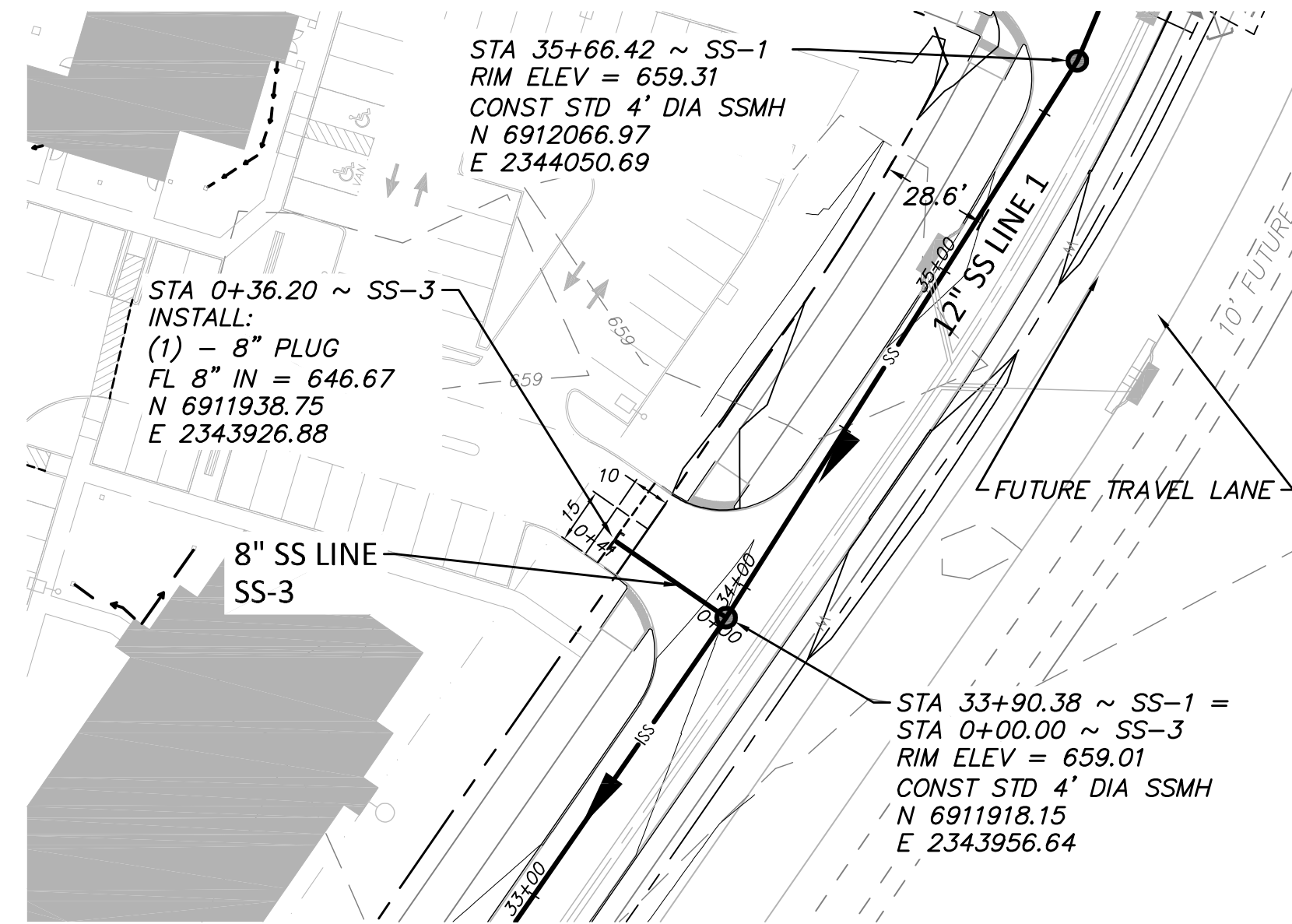
\\F:\DWG\SS LINE 2.dwg
PLOTTER: HP DesignJet 5000
PLOT DATE: 7/19/19
PLOT BY: J. HARRIS



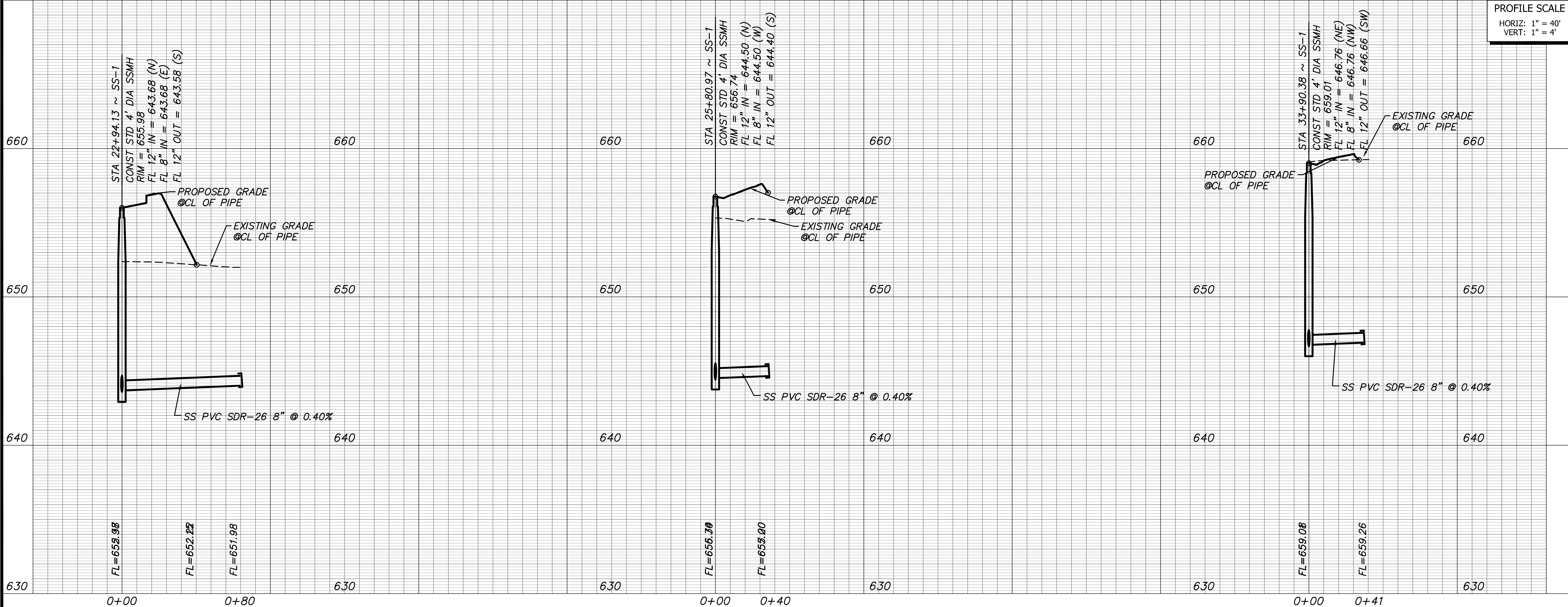
SS LINE 6



SS LINE 2



SS LINE 3



REVISIONS			
NO.	DATE	DESCRIPTION	
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#	#	#	#
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#	#	#	#
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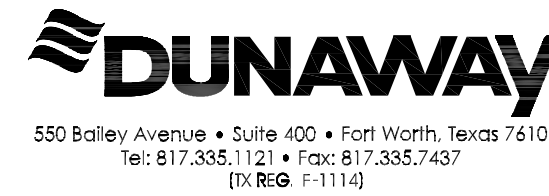
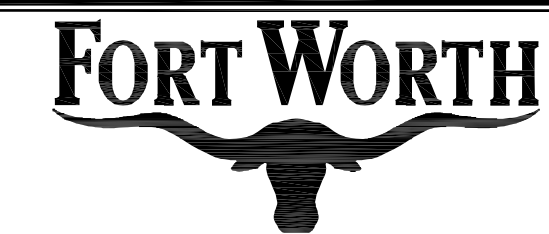
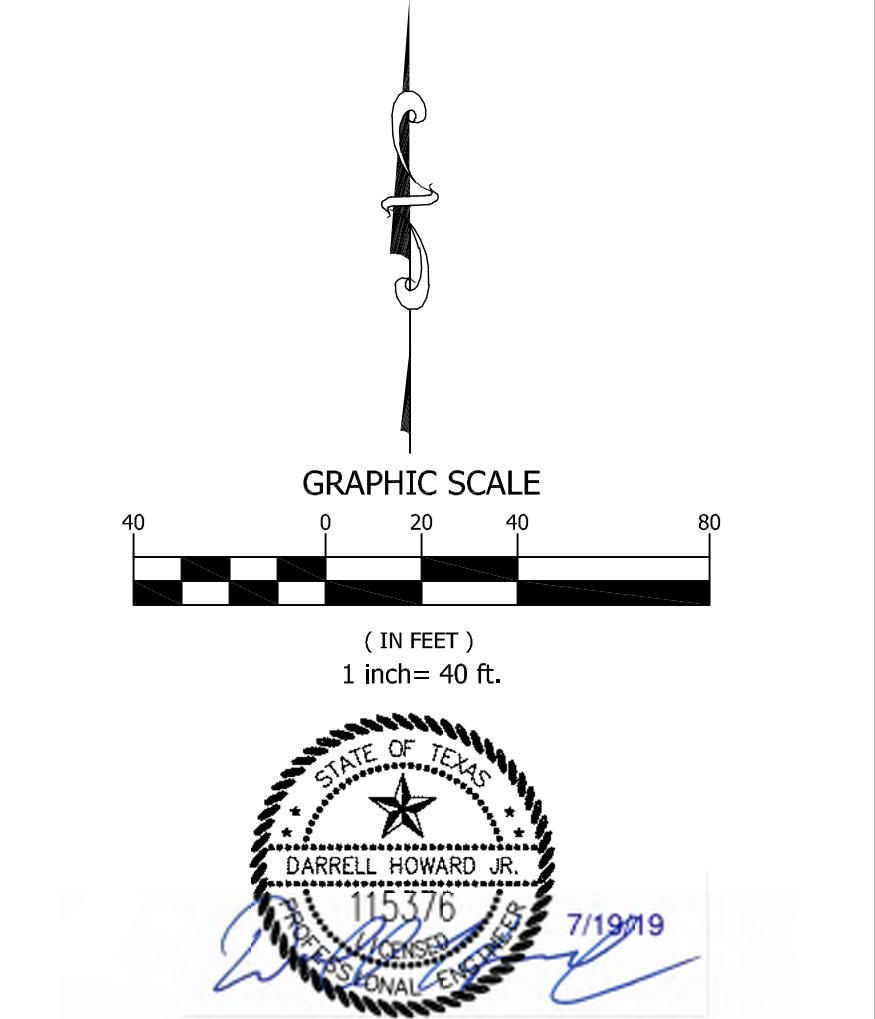
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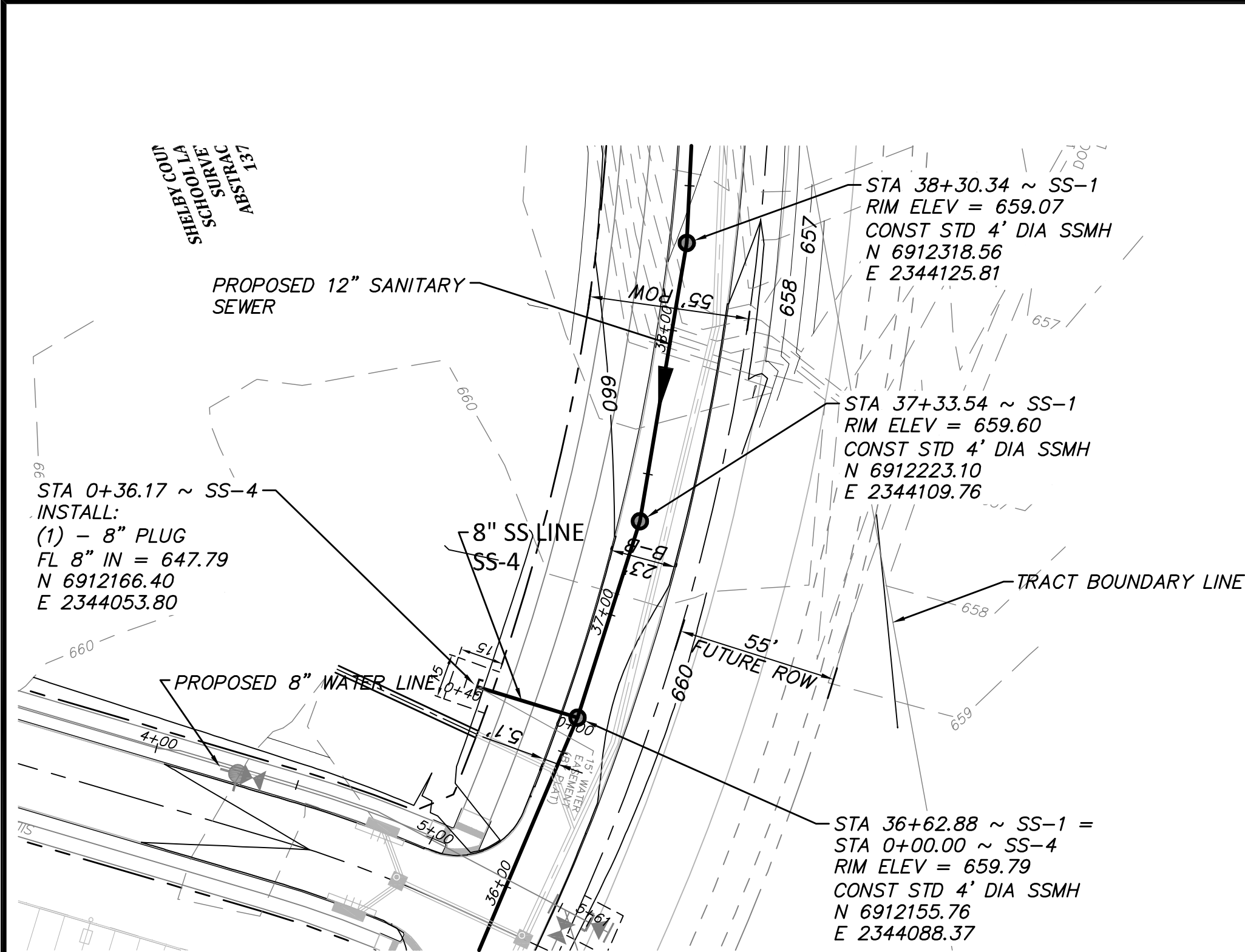


CRIMSON RIDGE

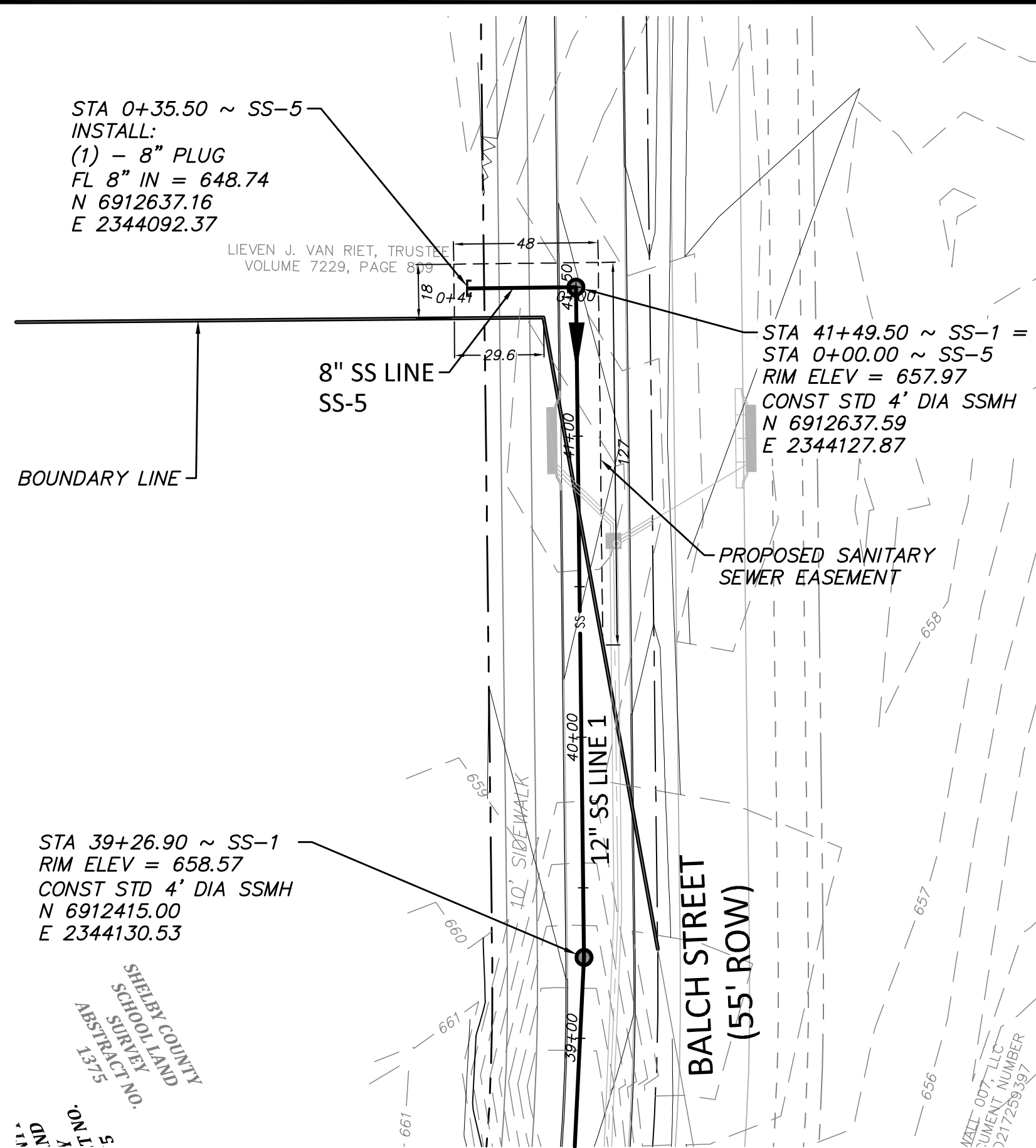
SS LINE 6, 2, & 3 P&P

DESIGNED: GM	PROJECT NO: 003950.001	SHEET: 17 OF 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		

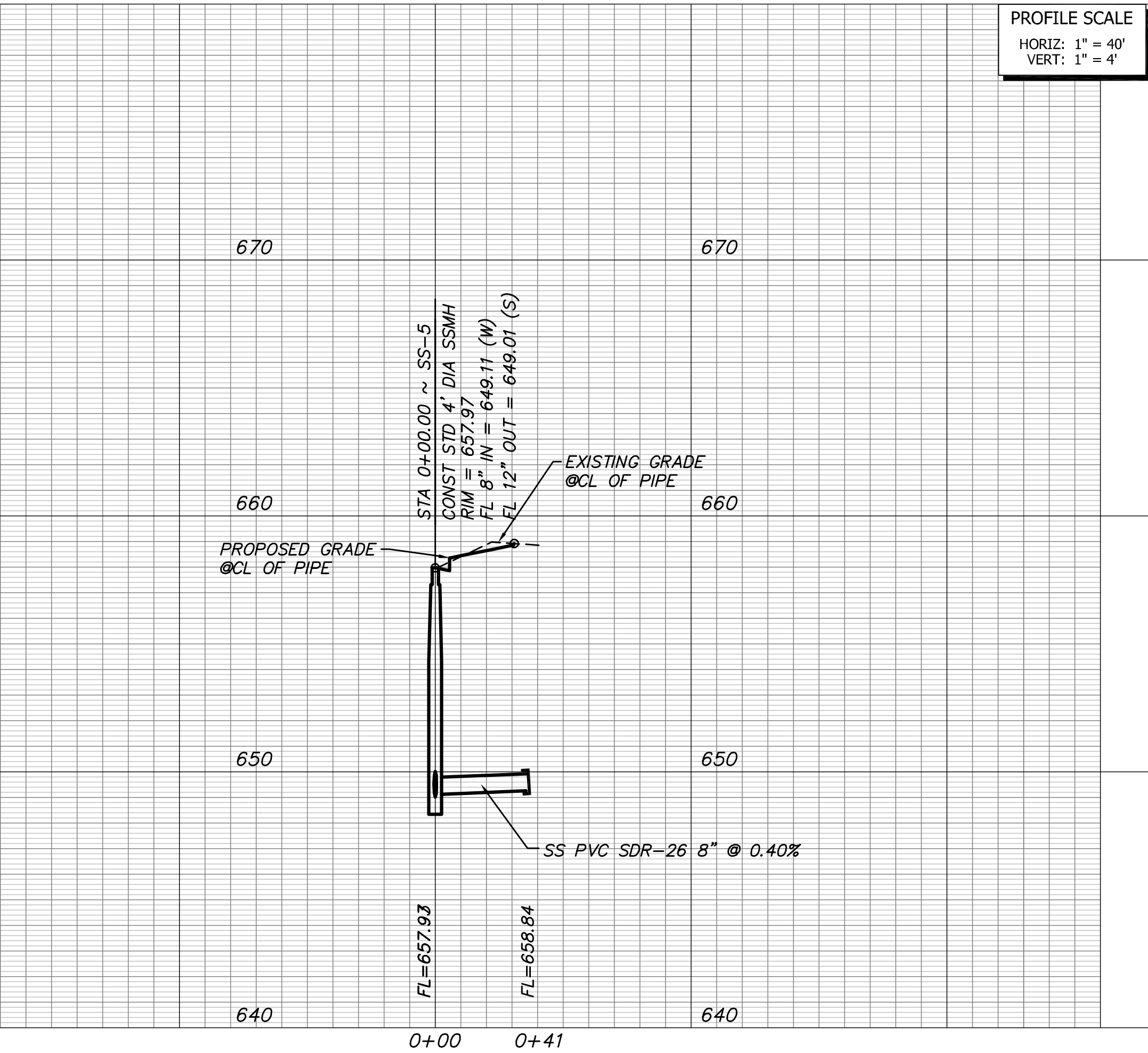
FILE NAME: SS 4 & 5 LAYOUT.dwg
DRAWN BY: LIA DUNAWAY
CHECKED BY: LIA DUNAWAY
DATE: 7/9/2019
PLOT DATE: 7/9/2019
PLOT BY: LIA DUNAWAY
PLOT SCALE: 1" = 40'



SS LINE 4



SS LINE 5



REVISIONS			
NO.	DATE	DESCRIPTION	
#	#	#	#
#	#	#	#
#	#	#	#
#	#	#	#
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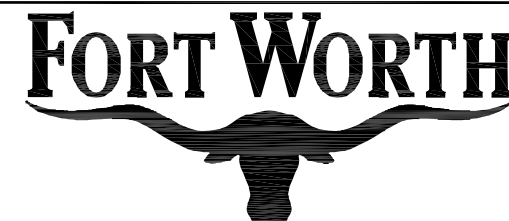
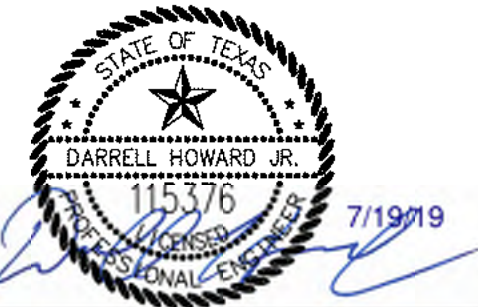
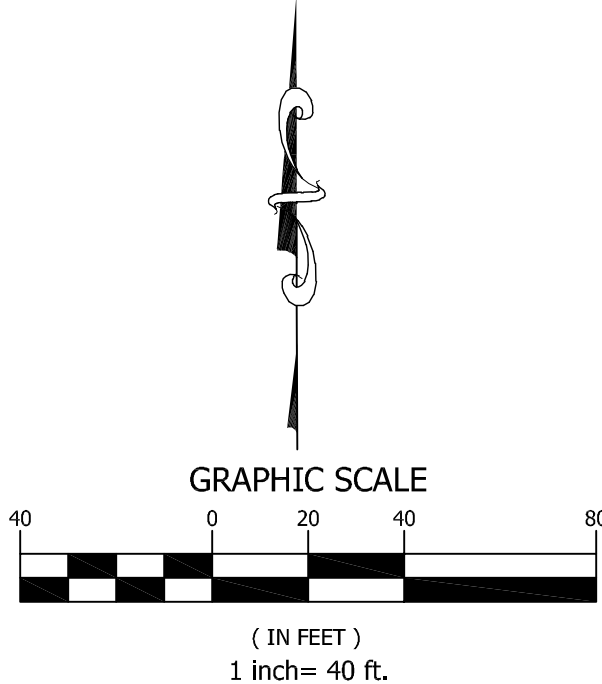
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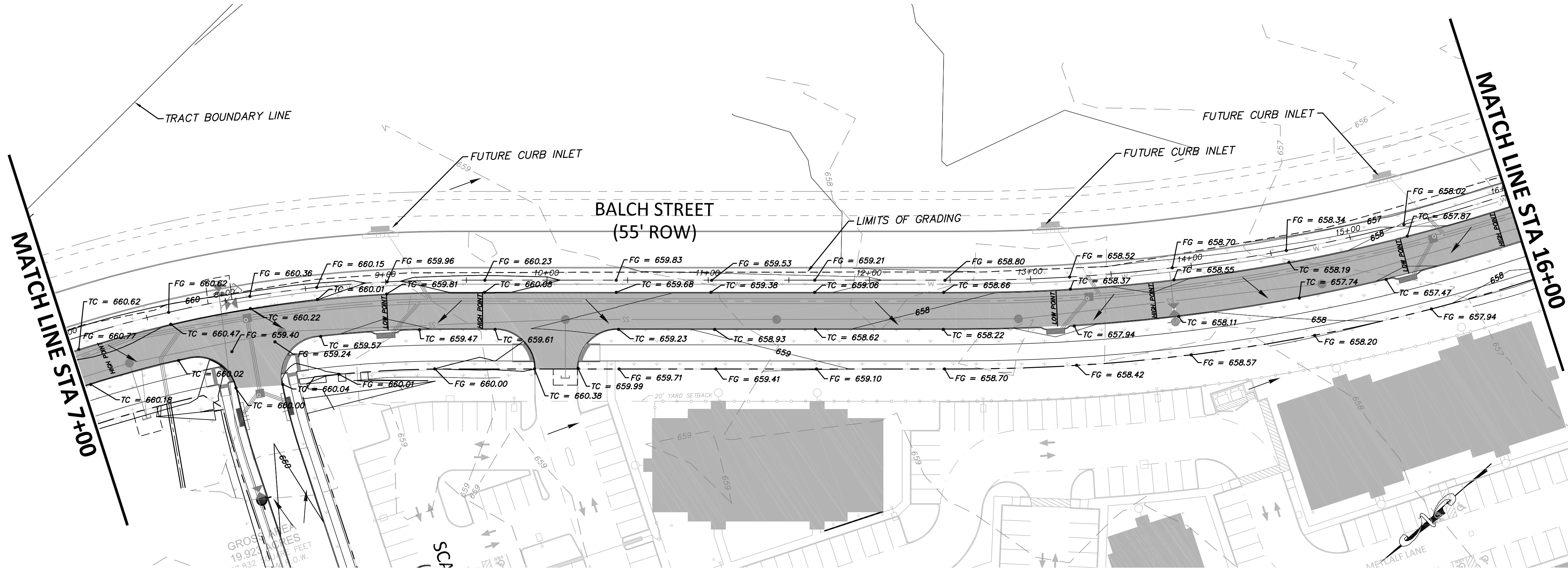
CRIMSON RIDGE

SS LINE 4 & 5 P&P

DESIGNED: GM	PROJECT NO: 003950.001	SHEET: 18 OF 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		

FULL PATH: c:\production\003900\959001\GALDrawing\plot Sheets Pkg\c-produser\0003900\959001\GALDrawing\plot Sheets Pkg\Drawings\PLAN\SQBLET.WIN STA=0-10 TO ENDING

ROUTED BY: Luis Guerrero
ROUTED DATE: 08/07/2019
ROUTED TIME: 9:53:38 AM
ROUTED WITH: RPP-XChange for AutoCAD Project



NOTE:
LIMITS OF CONSTRUCTION TO BE SODDED PER CITY SPECS.

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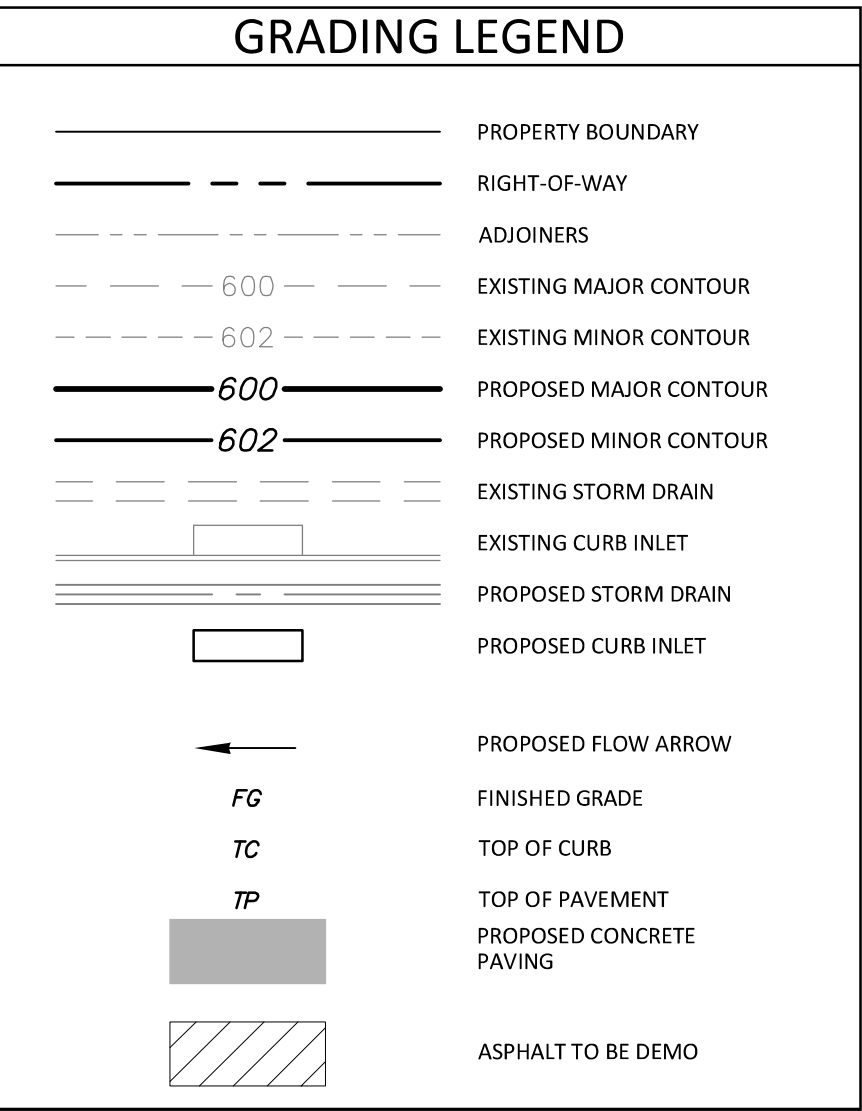
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 <p>550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107 Tel: 817.335.1121 • Fax: 817.335.7437 (TX REG F-1114)</p>			
<p align="center">CRIMSON RIDGE</p>			
<p align="center">GRADING PLAN</p> <p align="center">BALCH STREET STA 0+00 TO STA 16+00</p>			
DESIGNED:	GM	PROJECT NO: <p align="center">003950.001</p>	SHEET: <p align="center">21 of 58</p>
DRAWN:	GM		
CHECKED:	DH		
DATE: <p align="center">7/9/2019</p>			

FULL PATH: G:\products\500103900\35501\CivilDrawings\Sheet_Pkg; productid=500103900; sheetid=35501; CivilDrawings\sheet_Pkg
FILENAME: GRADING PLAN SCARLET WAY STA 0+0 TO END JWG
PLOTTER BY: jwg
PLOTTED BY: jwg
PLOT DATE: 7/16/2019
PLOT TIME: 3:38:11 PM
PLOT WITH: Pdf-Change For Acrobat Pro

[illegible]

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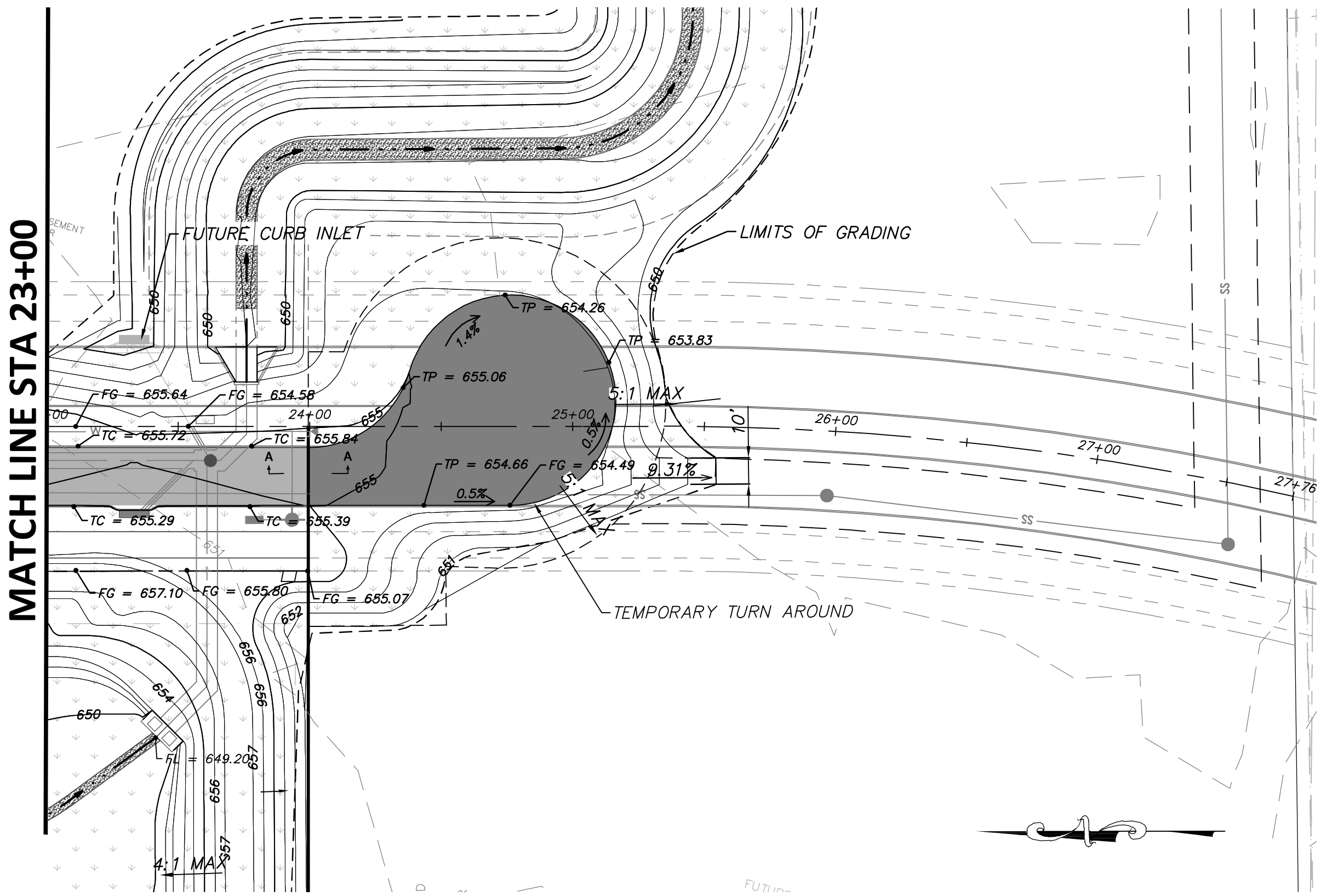
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ELEVATION= 657.702'

ELEVATION = 661.51'



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. F-1114)

GRADING PLAN

BALCH STREET STA 16+00 TO END

22 OF 58

CONTRACTOR NOTE:
SEE PAVING PLAN AND PROFILE SHEETS FOR HORIZONTAL
ALIGNMENT, PAVING STATIONING AND VERTICAL ELEVATIONS.

GRADING LEGEND

- PROPERTY BOUNDARY
- RIGHT-OF-WAY
- ADJOINERS
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING STORM DRAIN
- EXISTING CURB INLET
- PROPOSED STORM DRAIN
- PROPOSED CURB INLET
- PROPOSED FLOW ARROW
- FINISHED GRADE
- TOP OF CURB
- TOP OF PAVEMENT
- PROPOSED CONCRETE PAVING
- ASPHALT TO BE REMOVED

REVISIONS

NO.	DATE	DESCRIPTION
#	#	#
#	#	#
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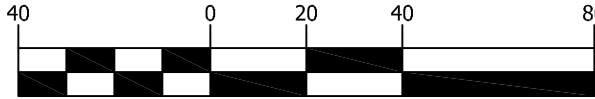
ELEVATION= 657.702'

SITE BENCHMARK:

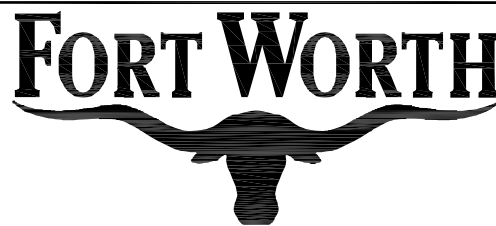
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SOUTHWEST CORNER OF THE SUBJECT TRACT

ELEVATION = 661.51'

GRAPHIC SCALE



(IN FEET)
1 inch= 40 ft.



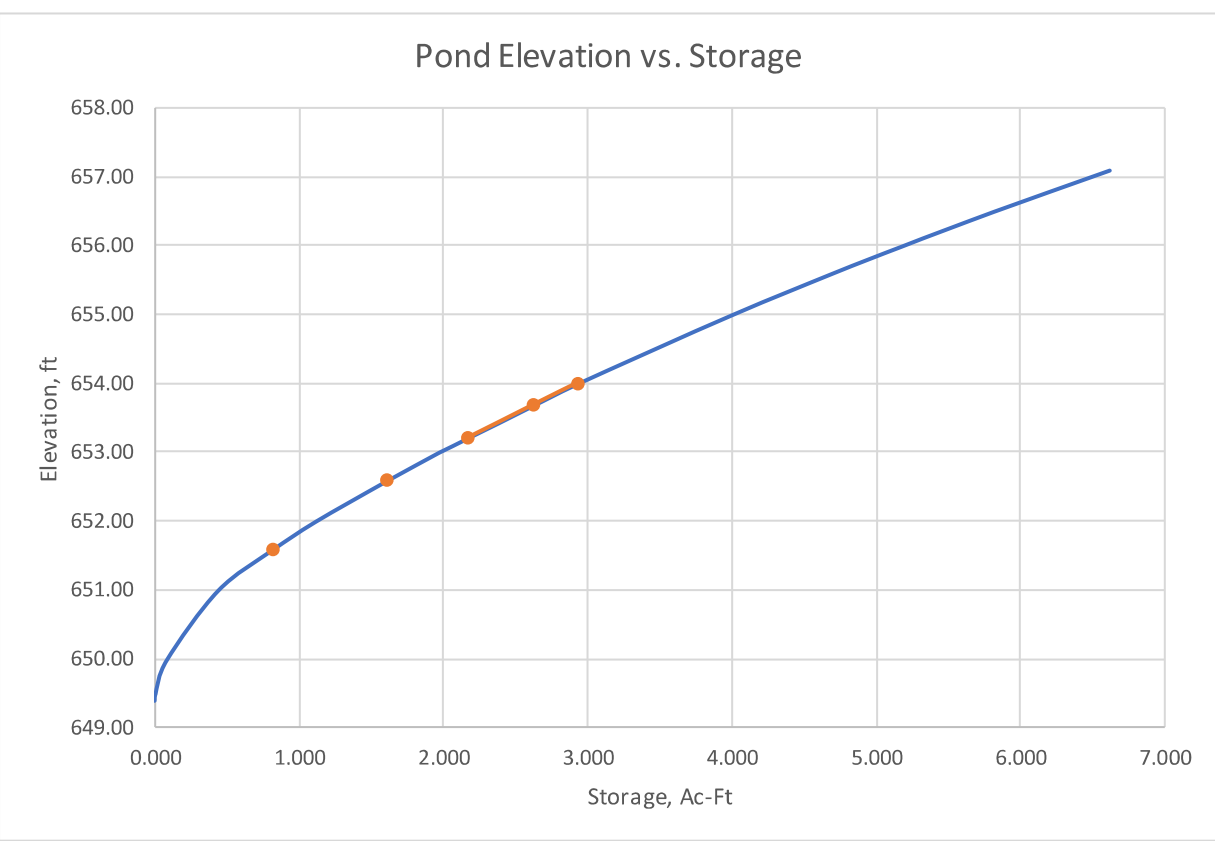
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. F-1114)

CRIMSON RIDGE

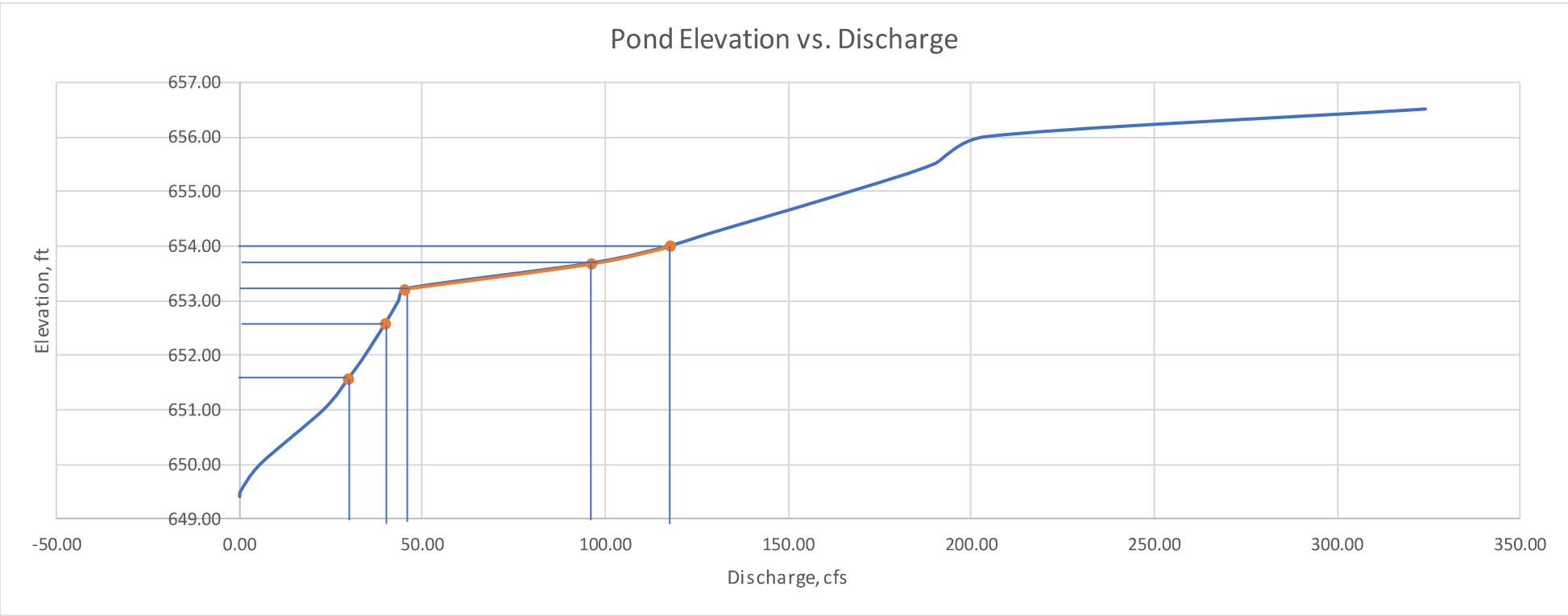
GRADING PLAN
SCARLET WAY STA 0+00 TO END

DESIGNED: GM	PROJECT NO: 003950.001	SHEET: 23 of 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		

Pond Elevation (ft)	Cumulative Volume (ac-ft)	Return (Years)
649.40	0.000	
649.50	0.005	
650.00	0.086	
651.00	0.440	
651.58	0.810	1
652.00	1.115	
652.58	1.600	5
653.00	1.970	
653.21	2.170	10
653.68	2.620	50
654.00	2.929	100
655.00	3.997	
655.60	4.689	
656.00	5.175	
656.50	5.808	
657.10	6.610	



Pond Elevation (ft)	Discharge (cfs)	Return, Years
649.40	0.00	
649.50	0.22	
650.00	5.70	
651.00	22.98	
651.58	29.87	1
652.00	34.33	
652.58	39.84	5
653.00	43.51	
653.21	45.28	10
653.68	95.94	50
654.00	117.69	100
654.25	129.80	
655.00	167.36	
655.50	190.06	
656.00	204.15	
656.50	324.28	



GRADING LEGEND	
---	PROPERTY BOUNDARY
- - -	RIGHT-OF-WAY
- - -	ADJOINERS
- - - 600	EXISTING MAJOR CONTOUR
- - - 602	EXISTING MINOR CONTOUR
- - - 600	PROPOSED MAJOR CONTOUR
- - - 602	PROPOSED MINOR CONTOUR
- - -	EXISTING STORM DRAIN
- - -	EXISTING CURB INLET
- - -	PROPOSED STORM DRAIN
- - -	PROPOSED CURB INLET
→	PROPOSED FLOW ARROW
FG	FINISHED GRADE
TC	TOP OF CURB
TP	TOP OF PAVEMENT
	PROPOSED CONCRETE PAVING
	ASPHALT TO BE REMOVED

REVISIONS			
NO.	DATE		DESCRIPTION
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	

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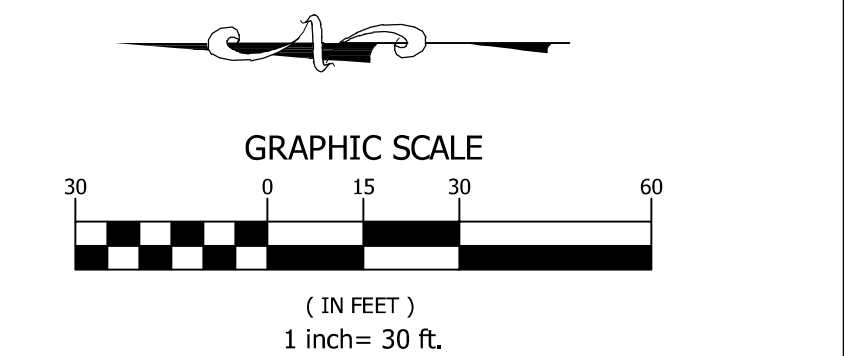
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PROJECT BENCHMARK:
CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4 MILES WEST OF RACE STREET AND 157' WEST OF TESCO STEEL TOWER TRANSMISSION LINE, ON THE SOUTH CURB OF THE SOUTH LANE OF EVERMAN PARKWAY IN THE CENTER OF A 10' CONCRETE INLET

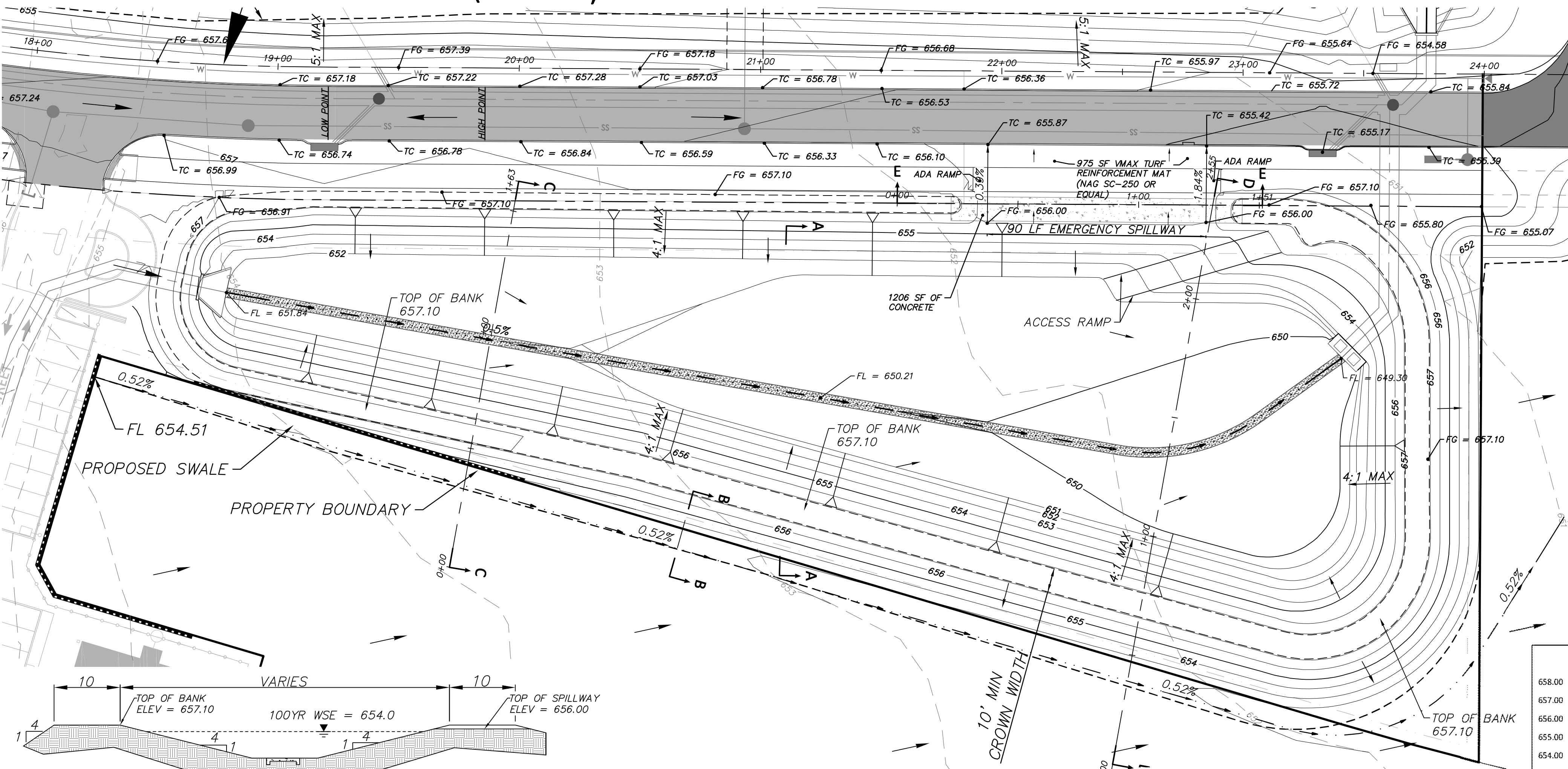
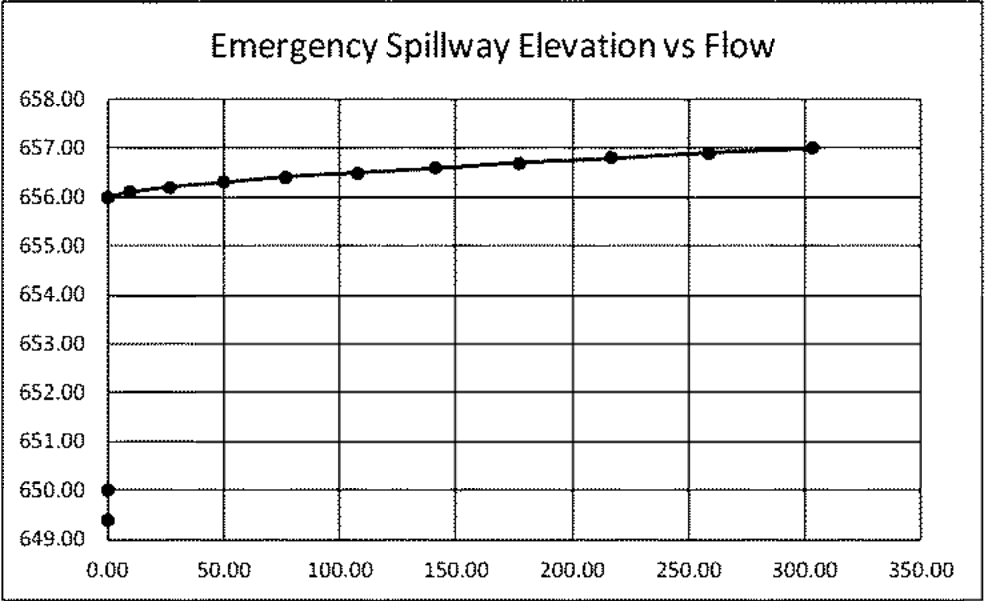
ELEVATION= 657.702'

SITE BENCHMARK:
SITE BM #1
"X" IN CONCRETE ON THE CENTER OF A CONCRETE DRAINAGE STRUCTURE ON THE WEST END OF SAID STRUCTURE NEAR THE SOUTHWEST CORNER OF THE SUBJECT TRACT

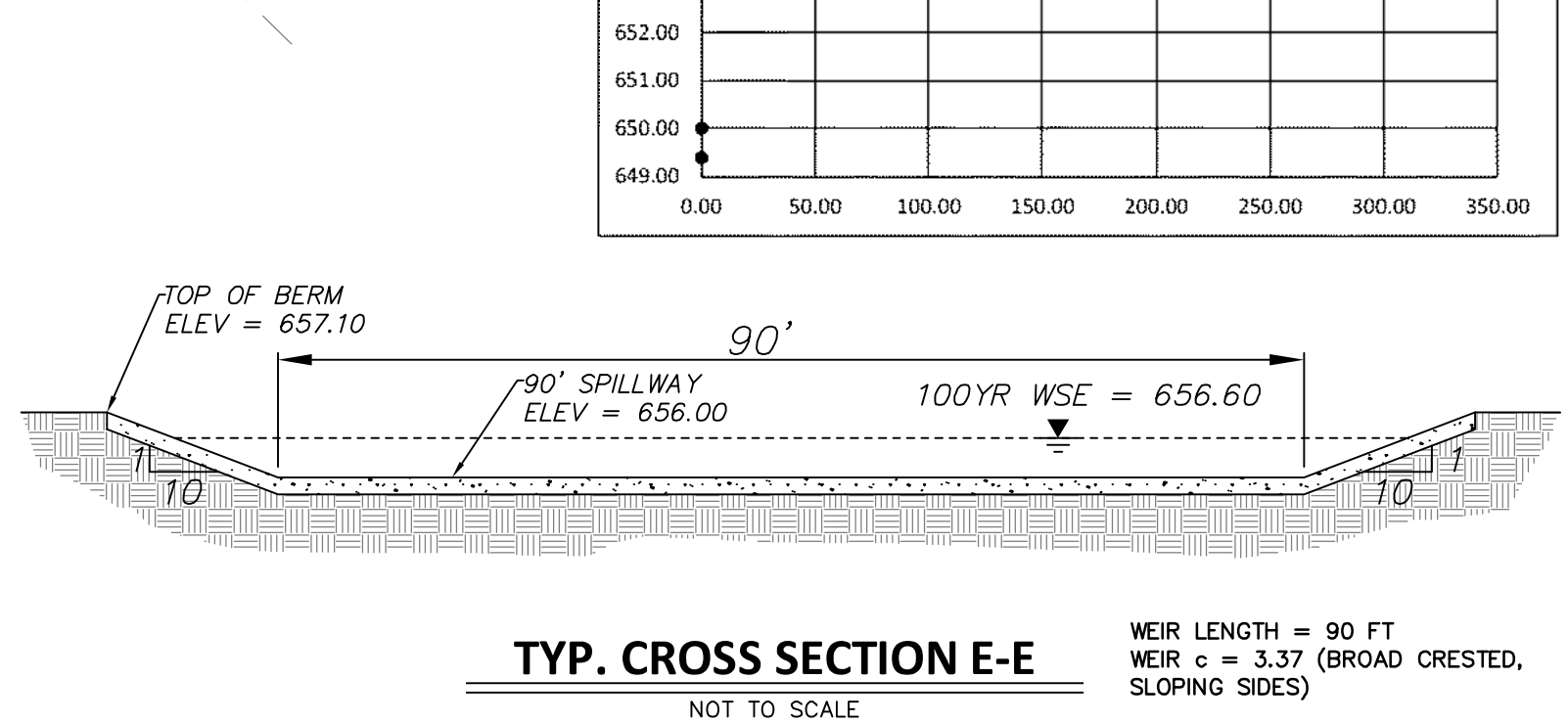
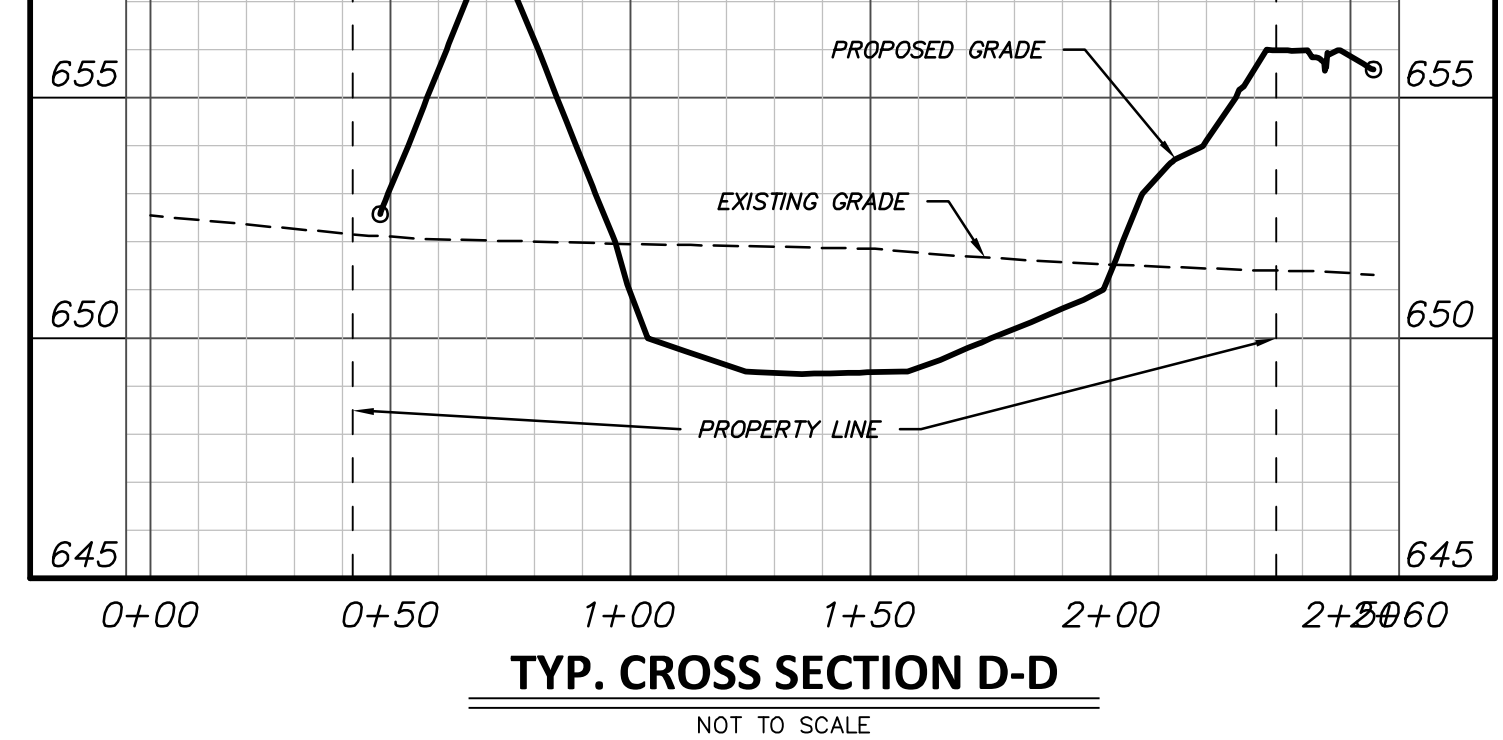
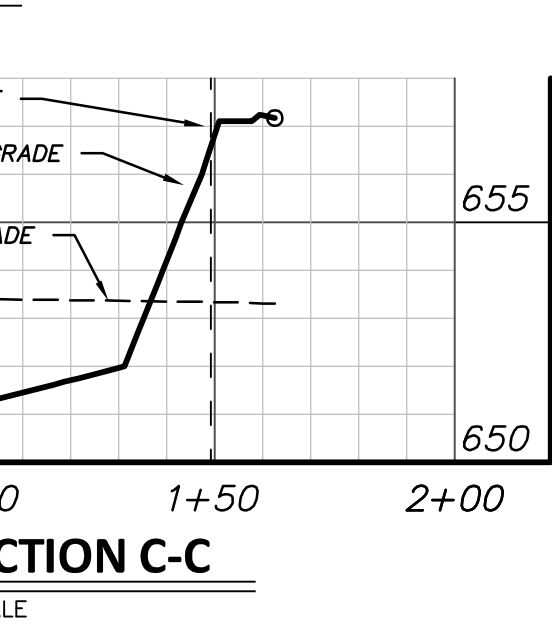
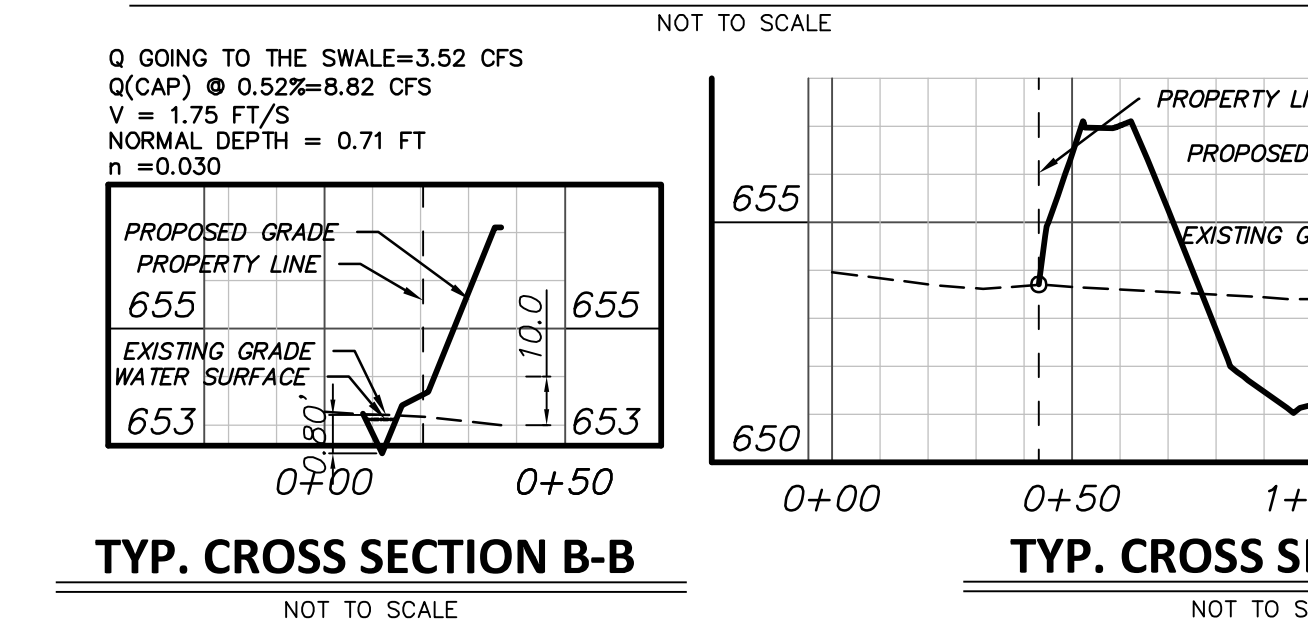
ELEVATION = 661.51'



Water Surface (ft)	Depth (ft)	Flow (ft³/s)
649.40	0.0	0.00
650.00	0.0	0.00
655.00	0.0	0.00
656.10	0.1	9.59
656.20	0.2	27.13
656.30	0.3	49.84
656.40	0.4	76.73
656.50	0.5	107.23
656.60	0.6	140.96
656.70	0.7	177.63
656.80	0.8	217.02
656.90	0.9	258.96
657.00	1.0	303.30
657.10	1.1	349.91



POND CROSS SECTION FLOW FROM EAST TO WEST TYPICAL CROSS SECTION A-A

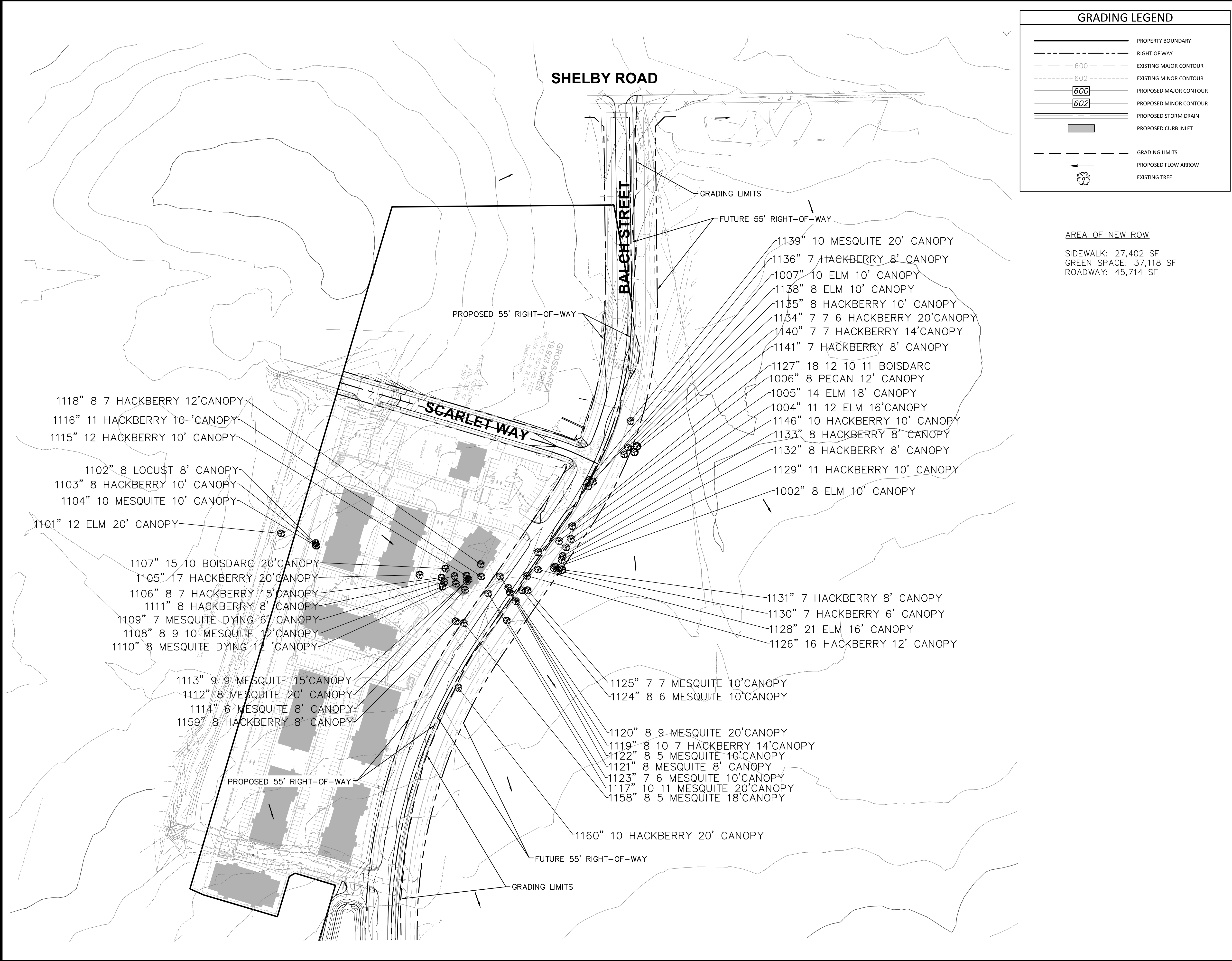


FORT WORTH
DUNAWAY
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. 1-1114)

CRIMSON RIDGE
GRADING PLAN
DETENTION POND

DESIGNED: GM
DRAWN: GM
CHECKED: DH
PROJECT NO: 003950.001
DATE: 7/18/2019
SHEET: 24 OF 58

FILENAME: GRADING PLAN TREE INVENTORY.dwg
PLOTTER: HP DesignJet T1200
PLOT DATE: 7/18/2019
PLOT TIME: 10:48:14 AM
PLOT BY: J. GARCIA
PLOT SCALE: 1/8"=1'-0"



REVISIONS			
NO.	DATE	DESCRIPTION	
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	
#	#	#	

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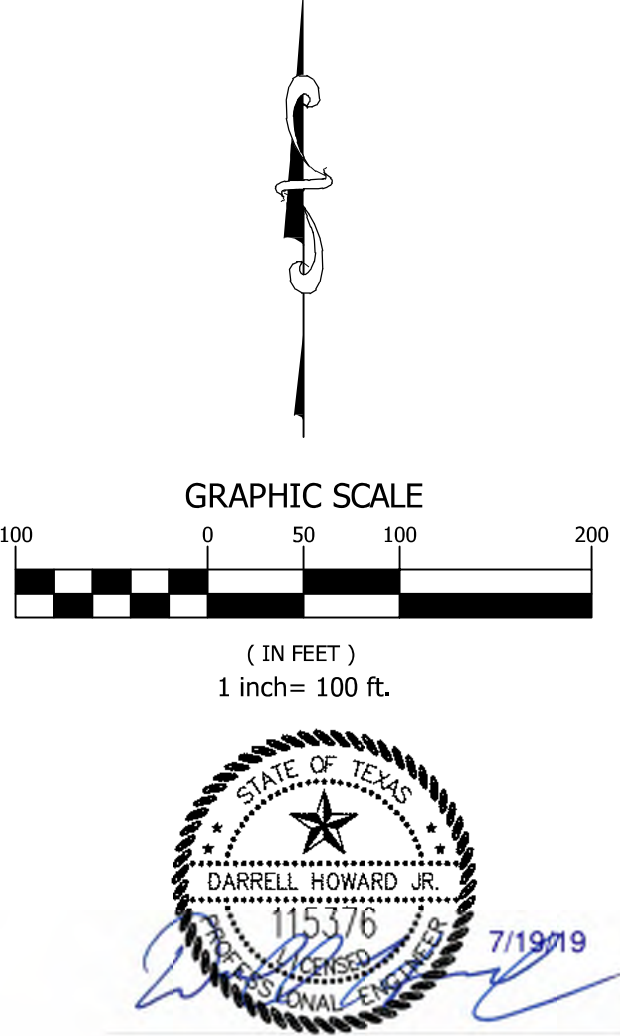
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CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4 MILES WEST OF RACE STREET AND 157' WEST OF TESCO STEEL TOWER TRANSMISSION LINE, ON THE SOUTH CURB OF THE SOUTH LANE OF EVERMAN PARKWAY IN THE CENTER OF A 10' CONCRETE INLET
ELEVATION= 657.702'

SITE BENCHMARK:
SITE BM #1
"X" IN CONCRETE ON THE CENTER OF A CONCRETE DRAINAGE STRUCTURE ON THE WEST END OF SAID STRUCTURE NEAR THE SOUTHWEST CORNER OF THE SUBJECT TRACT
ELEVATION = 661.51'



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. F-1114)

CRIMSON RIDGE

GRADING PLAN TREE INVENTORY

DESIGNED: GM
DRAWN: GM
CHECKED: DH

PROJECT NO:
003950.001
DATE:
7/18/2019

SHEET:
25 OF 58

[illegible]

CRITICAL:

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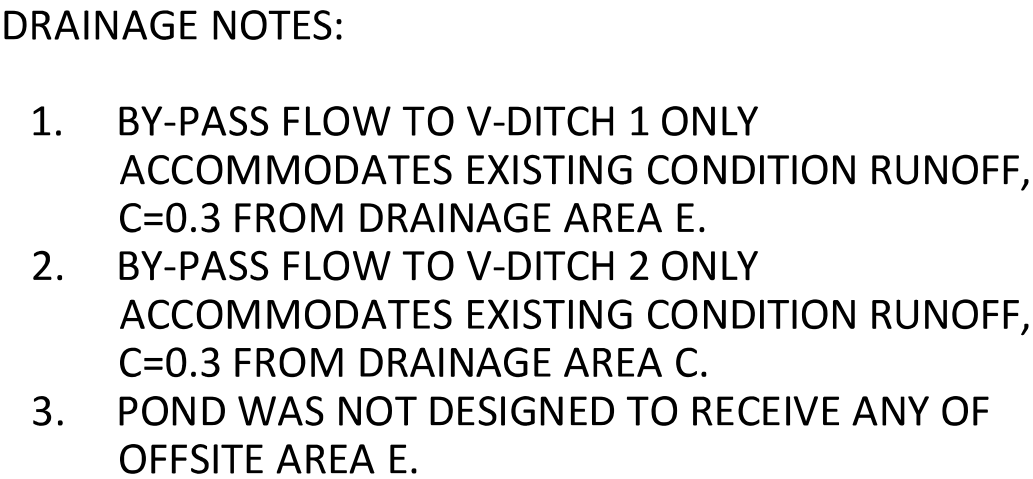
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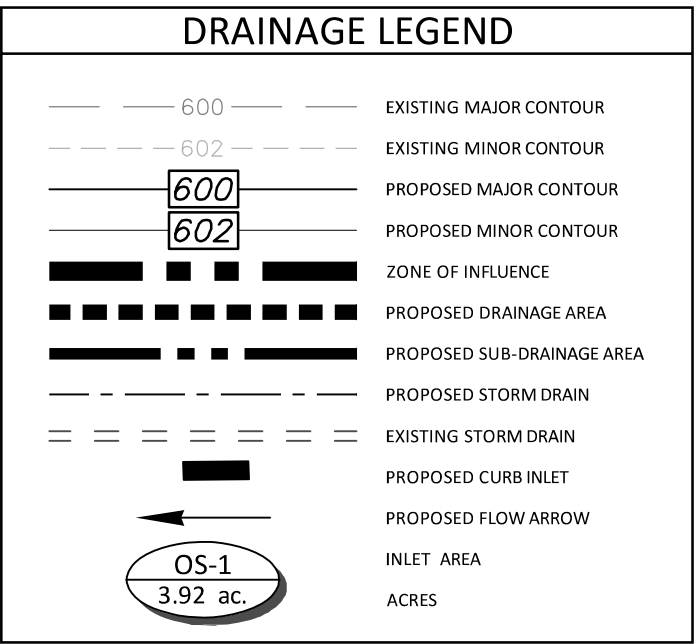
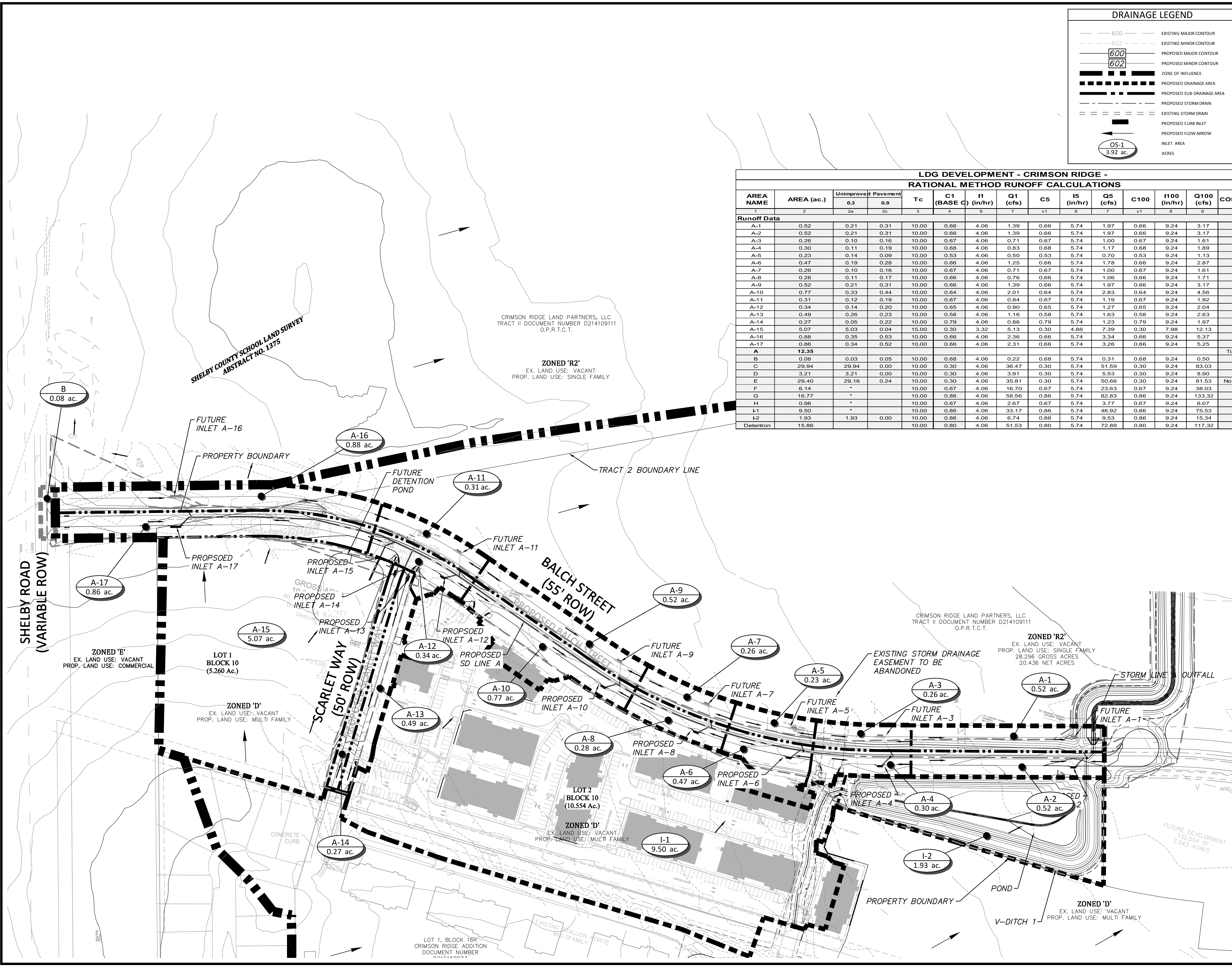
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 <p>550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107 Tel: 817.335.1121 • Fax: 817.335.7437 TX REG F-1114</p>			
<p align="center">CRIMSON RIDGE</p>			
<p align="center">OVERALL DRAINAGE AREA MAP</p>			
DESIGNED:		PROJECT NO: 003950.001	SHEET: 26 OF 58
DRAWN:			
CHECKED:	DATE: 7/18/2019		

FILE NAME: C:\projects\50103950\50103950.dwg
PLOTTER: HP DesignJet 5000
PLOT DATE: 7/18/2019
PLOT TIME: 10:45:18 AM
PLOT BY: J. L. GRIFFIN
PLOT FOR: CRIMSON RIDGE

FILE NAME: SITE DRAINAGE AREA MAP.dwg
PLOTTER: HP DesignJet 5000
PLOT DATE: 7/18/2019
PLOT TIME: 10:45:18 AM
PLOT BY: J. L. GRIFFIN
PLOT FOR: CRIMSON RIDGE



REVISIONS			
NO.	DATE	DESCRIPTION	
#	#	#	#
#	#	#	#
#	#	#	#
#	#	#	#
#	#	#	#
#	#	#	#

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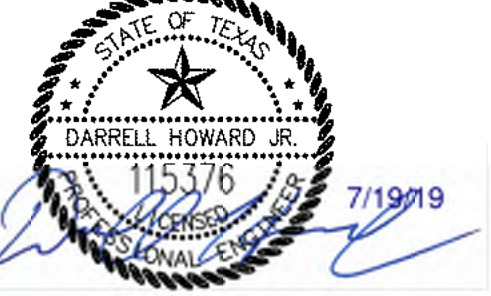
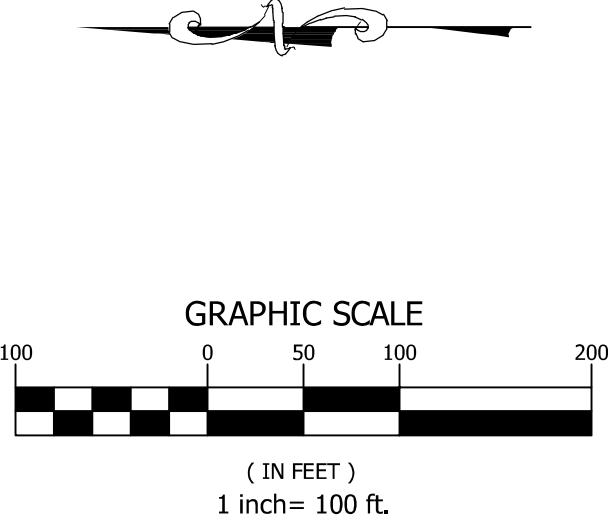
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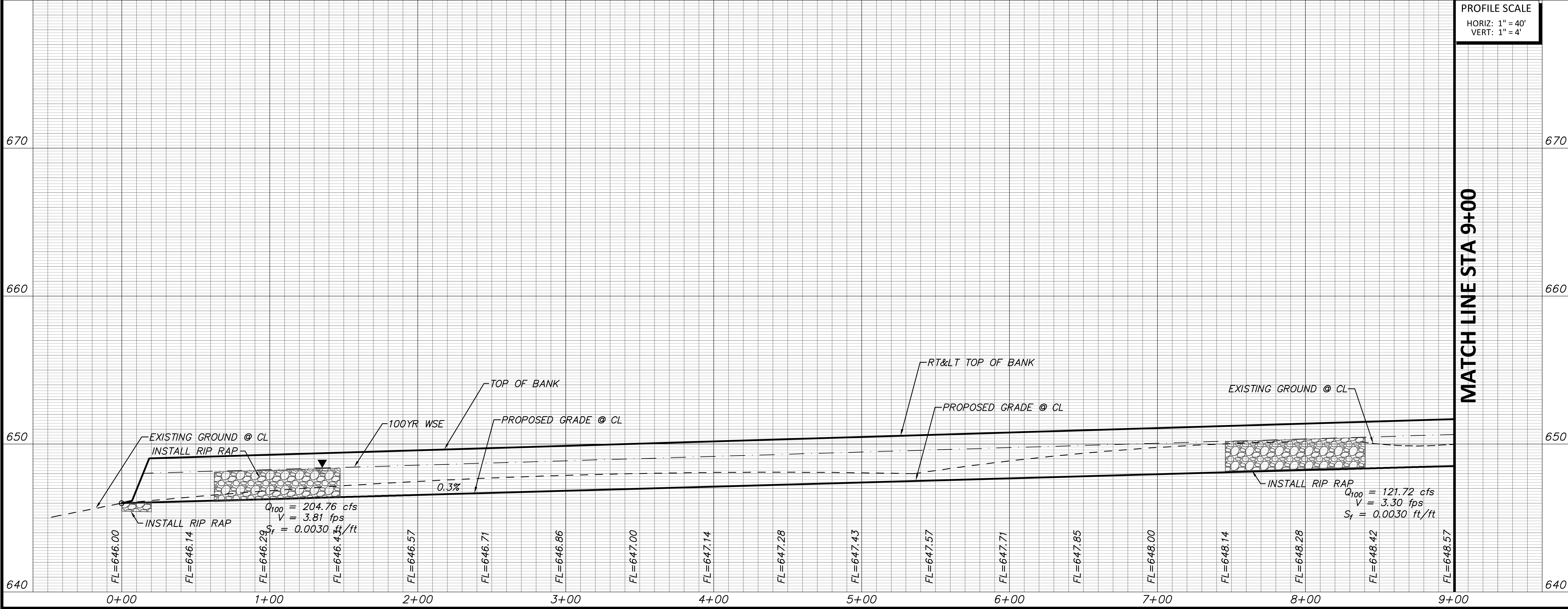
FORT WORTH

DUNAWAY
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG. F-1114)

CRIMSON RIDGE

SITE DRAINAGE AREA MAP

DESIGNED:	PROJECT NO:	SHEET:
DRAWN:	003950.001	27 of 58
CHECKED:	DATE: 7/18/2019	



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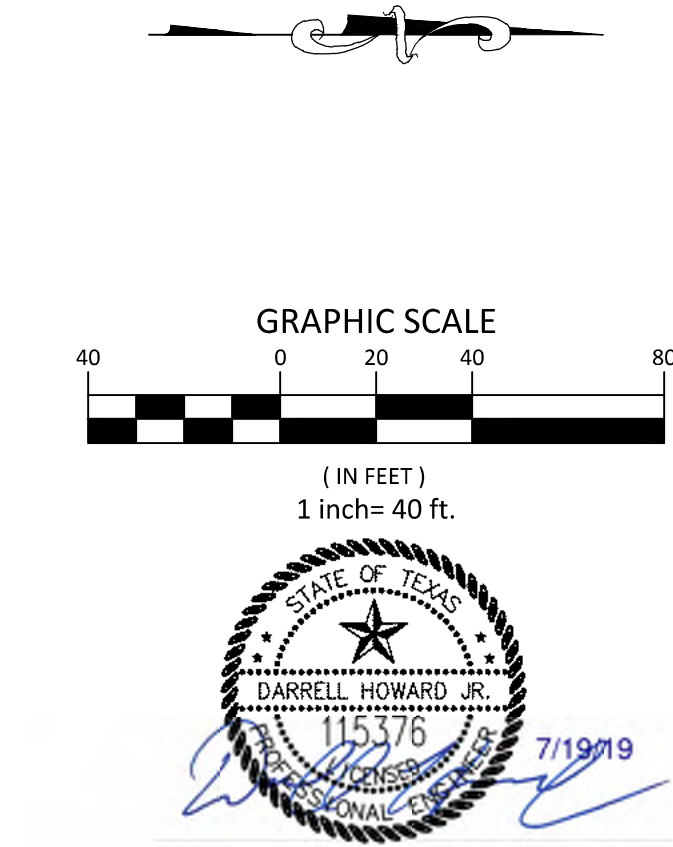
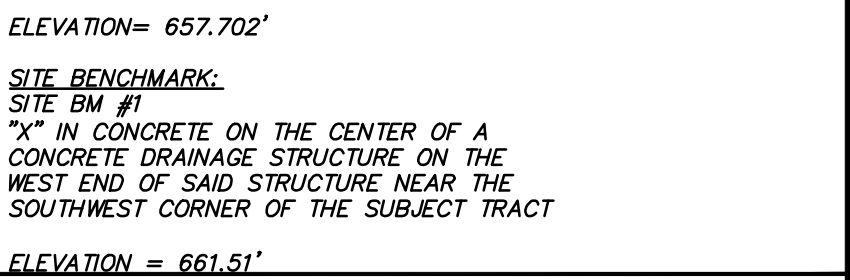
CITY OF FORT WORTH MONUMENT B668
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LINE, ON THE SOUTH CURB OF THE SOUTH
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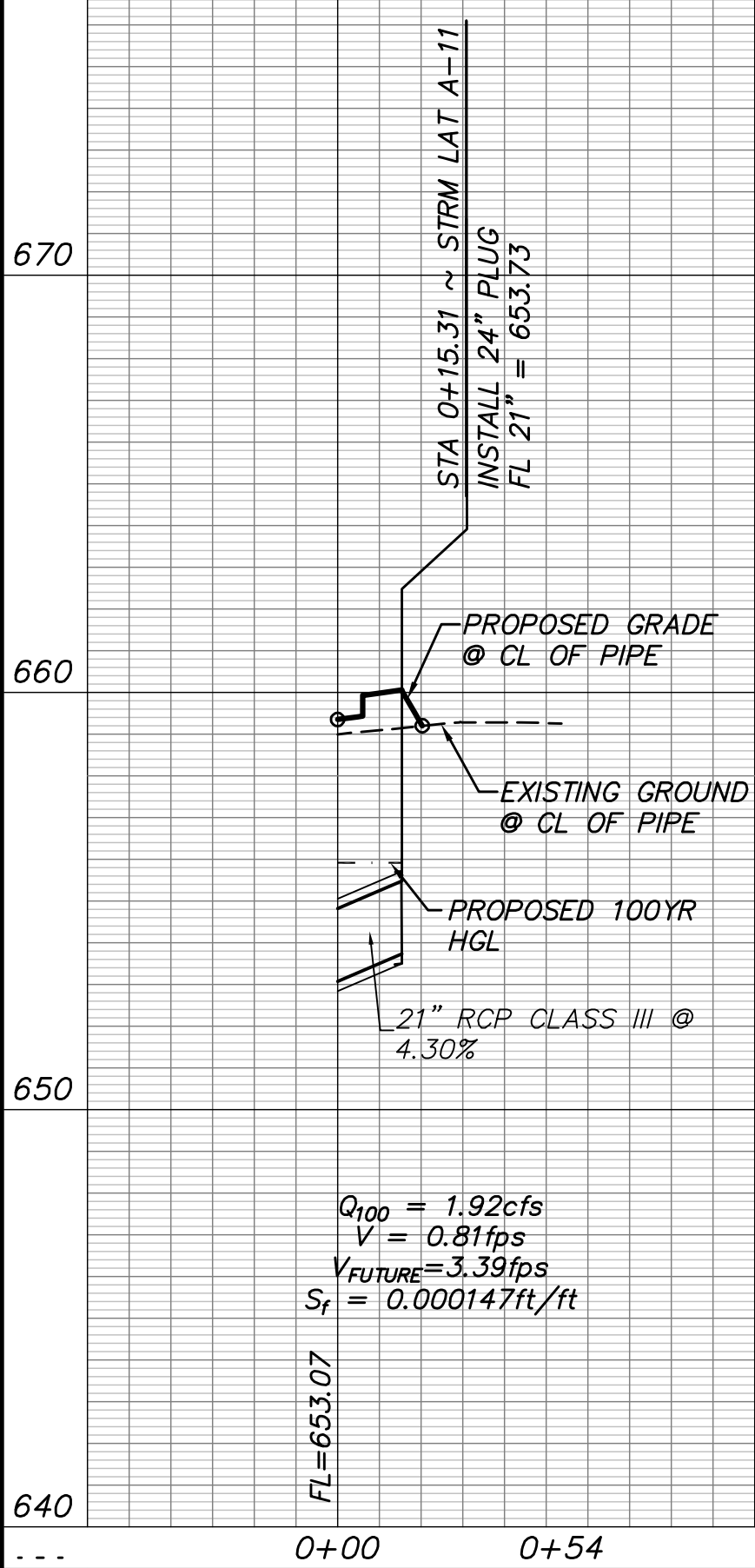


			
			
<p>550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107 Tel: 817.335.1121 • Fax: 817.335.7437 (X-regs. F1114)</p>			
<p>CRIMSON RIDGE</p>			
<p>CHANNEL A STA 9+00 TO END STORM LINE A STA 0+00 TO STA 7+00</p>			
DESIGNED:	GM	PROJECT NO: 003950.001	SHEET: 31 OF 58
DRAWN:	GM		
CHECKED:	DH		
DATE: 7/18/2019			

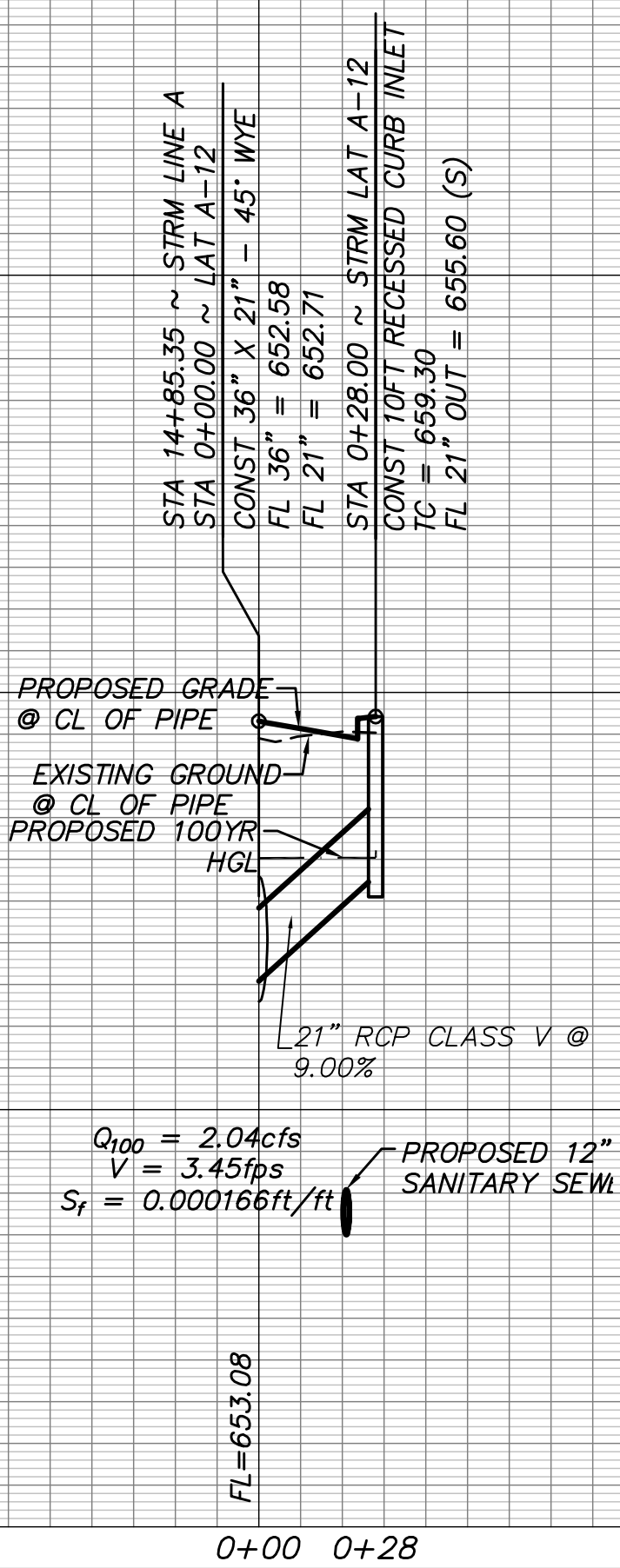
\\FLL\PATH\G:\projects\000\003950\003950\001\Civil\Drawings\plan sheets\Pub\STORM LATERALS A-11 TO A-12

FILENAME: STORM LATERALS A-11 TO A-12.dwg
PLOTTER: HP DesignJet 500
PLOTTER: HP DesignJet 500
PLOTTER: HP DesignJet 500
PLOTTER: HP DesignJet 500

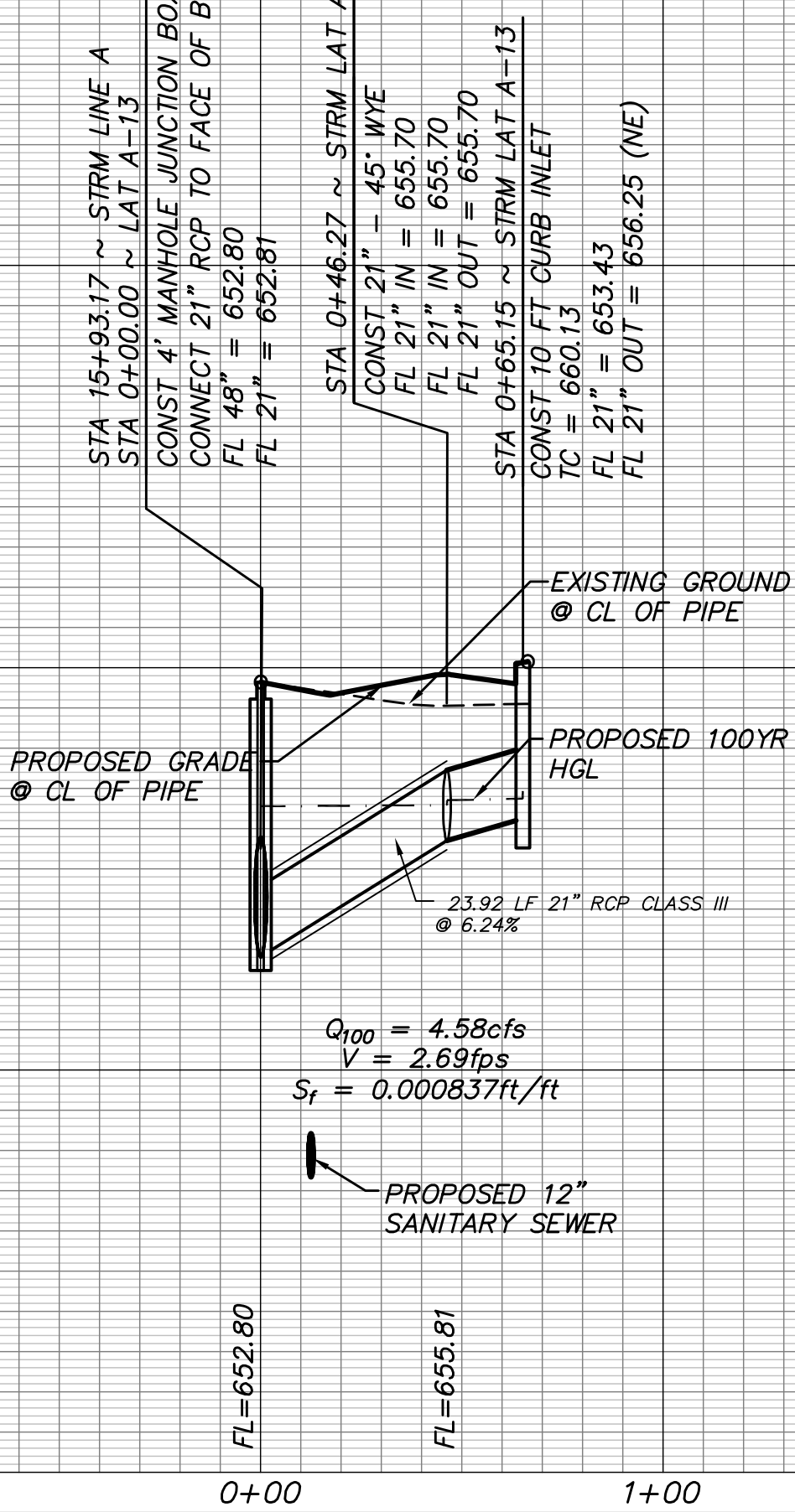
LAT A-11



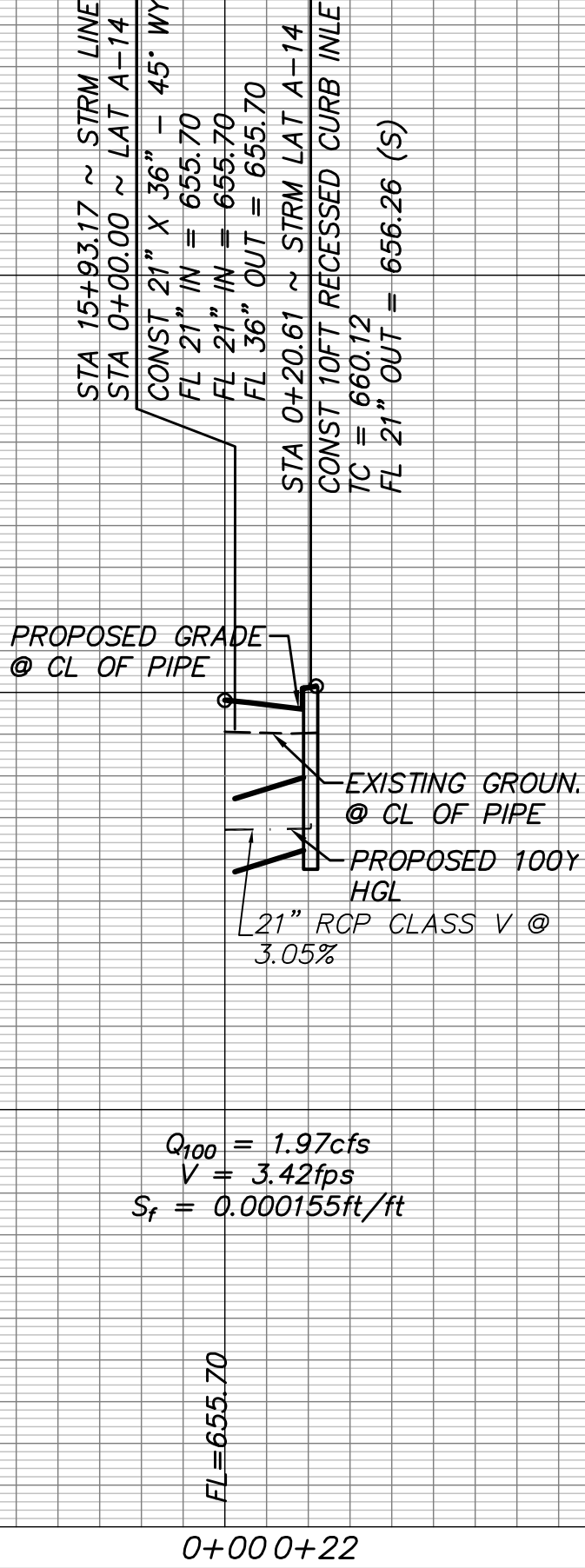
LAT A-12



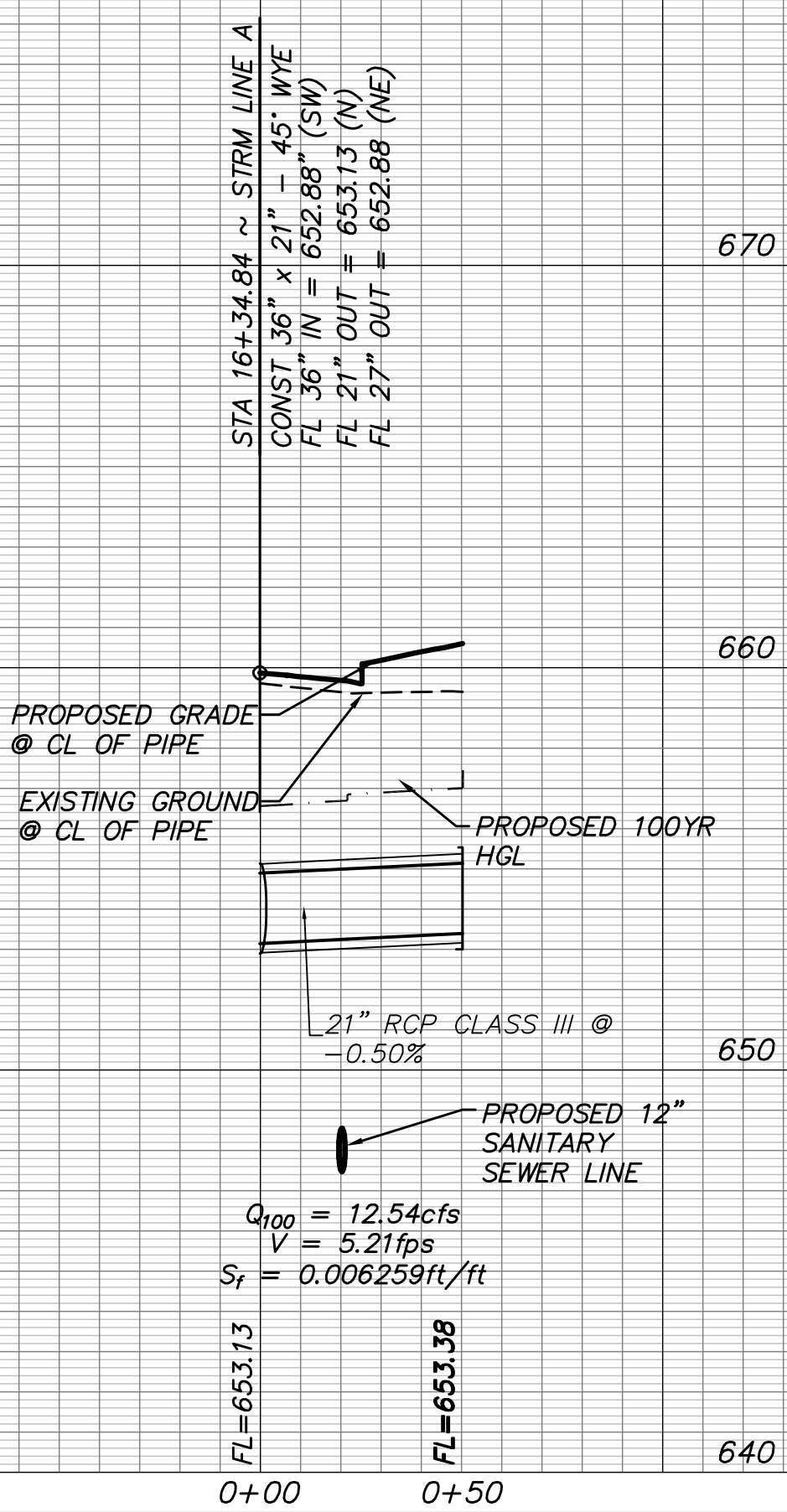
LAT A-13



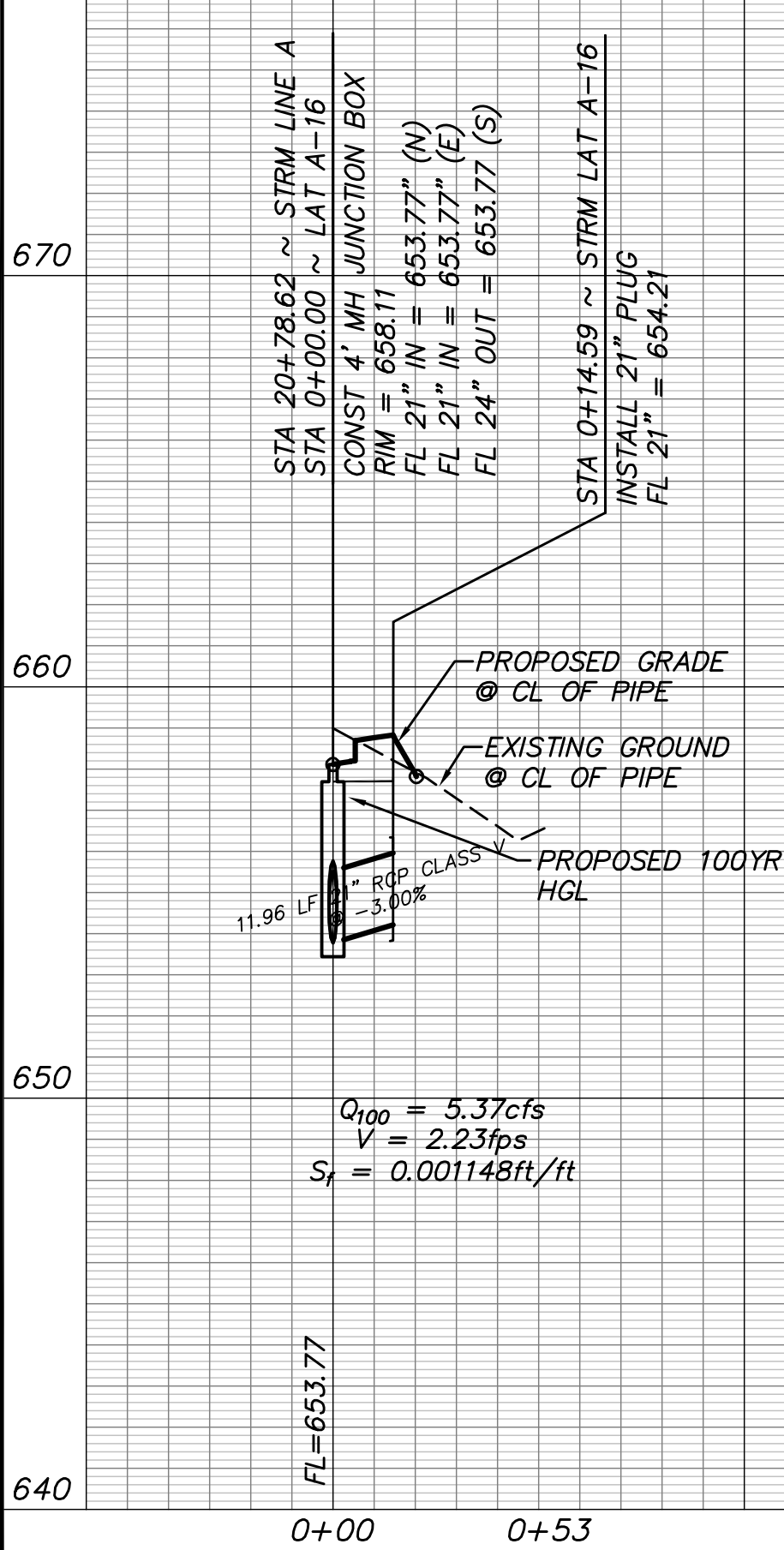
LAT A-14



LAT A-15



LAT A-16



REVISIONS

NO.	DATE	DESCRIPTION
#	#	#
#	#	#
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#	#	#

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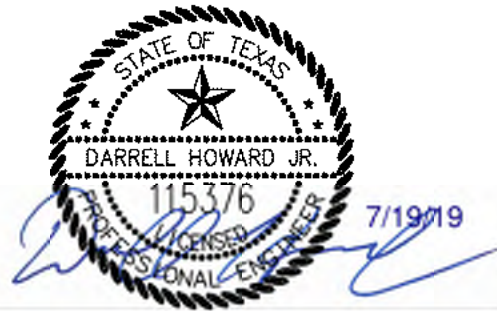
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ELEVATION = 661.51'

NOTE:
CONTRACTOR REFER TO PAVING SHEETS 42-46 FOR LOCATION AND TC ELEVATION OF CURB INLET



FORT WORTH

DUNAWAY

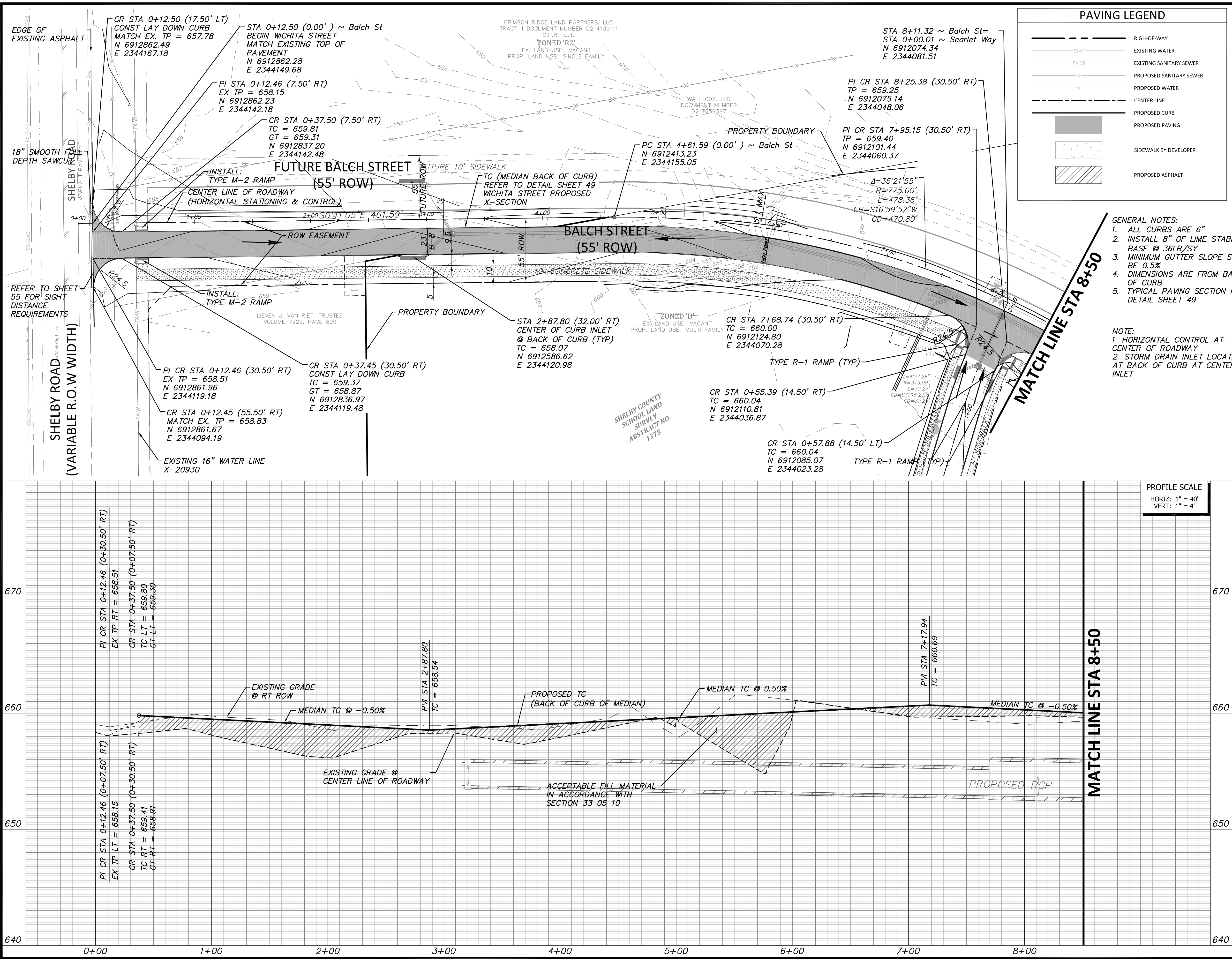
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG F-1114)

CRIMSON RIDGE

STORM LATERALS A-11 TO A-16

DRAWN: GM	PROJECT NO. 003950.001	SHEET: 36 OF 58
CHECKED: DH	DATE: 7/9/2019	

PLAN NAME: SCARLET WAY STA 0+00 TO STA 8+50
DRAWN BY: M. J. C. (M. J. C.)
CHECKED BY: M. J. C. (M. J. C.)
DATE: 7/19/19
PROJECT NO: 003950.001
SHEET: 42 OF 58



REVISIONS		
NO.	DATE	DESCRIPTION
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

UTILITY RELOCATION NOTE:
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PROJECT BENCHMARK:
CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4 MILES WEST OF RACE STREET AND 157' WEST OF TESCO STEEL TOWER TRANSMISSION LINE, ON THE SOUTH CURB OF THE SOUTH LANE OF EVERMAN PARKWAY IN THE CENTER OF A 10' CONCRETE INLET
ELEVATION= 657.702'

SITE BENCHMARK:
SITE BM #1
"X" IN CONCRETE ON THE CENTER OF A CONCRETE DRAINAGE STRUCTURE ON THE WEST END OF SAID STRUCTURE NEAR THE SOUTHWEST CORNER OF THE SUBJECT TRACT
ELEVATION = 661.51'

PAVING LEGEND

---	RIGH-OF-WAY
---	EXISTING WATER
---	EXISTING SANITARY SEWER
---	PROPOSED SANITARY SEWER
---	PROPOSED WATER
---	CENTER LINE
---	PROPOSED CURB
---	PROPOSED PAVING
---	SIDEWALK BY DEVELOPER
---	PROPOSED ASPHALT

GENERAL NOTES:

- ALL CURBS ARE 6"
- INSTALL 8" OF LIME STABILIZED BASE @ 36LB/SY
- MINIMUM GUTTER SLOPE SHALL BE 0.5%
- DIMENSIONS ARE FROM BACK OF CURB
- TYPICAL PAVING SECTION PER DETAIL SHEET 49

NOTE:

- HORIZONTAL CONTROL AT CENTER OF ROADWAY
- STORM DRAIN INLET LOCATION AT BACK OF CURB AT CENTER OF INLET

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

PROFILE SCALE

HORIZ: 1" = 40'
VERT: 1" = 4'

FORT WORTH

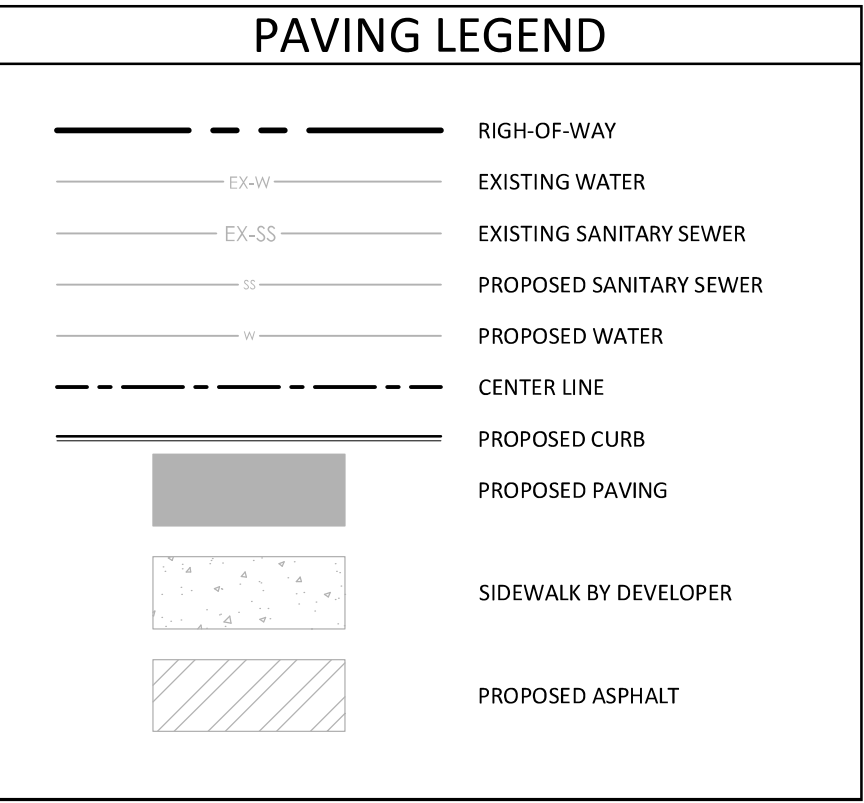
DUNAWAY

550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG F-1114)

CRIMSON RIDGE

BALCH STREET PLAN & PROFILE
STA 0+00 TO STA 8+50

DESIGNED: GM	PROJECT NO: 003950.001	SHEET: 42 OF 58
DRAWN: GM	DATE: 7/9/2019	
CHECKED: DH		



NOTE:
STORM DRAIN INLET LOCATION AT
BACK OF CURB AT CENTER OF
INLET

[illegible]

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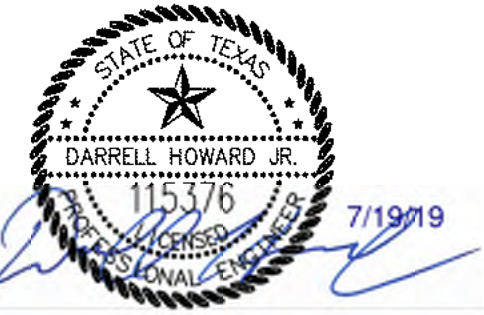
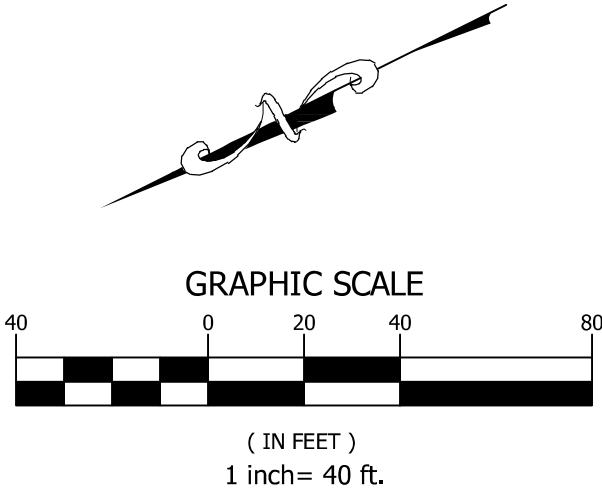
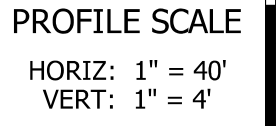
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SOUTHWEST CORNER OF THE SUBJECT TRACT











ELEVATION = 661.51'



		
 <p>550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107 Tel: 817.335.1121 • Fax: 817.335.7437 (TX REG F-1114)</p>		
<p align="center">CRIMSON RIDGE</p>		
<p align="center">BALCH STREET PLAN & PROFILE STA 8+50 TO STA 16+00</p>		
DESIGNED: GM DRAWN: GM CHECKED: DH	 DATE: 7/13/2019	PROJECT NO: 003950.001 SHEET: <p align="center">43 OF 58</p>

FILENAME: SCARLET WAY STA 0+10 TO END BRIDGE
 PLOTTED BY: Luis Guerrero
 PLOTTED ON: 11/15/2019
 PLOTTED AT: 4:04:43 PM
 PLOTTED WITH: PDF-XChange For Acrobat Pro



PAVING LEGEND	
	RIGH-OF-WAY
 EX-W	EXISTING WATER
 EX-SS	EXISTING SANITARY SEWER
 SS	PROPOSED SANITARY SEWER
 W	PROPOSED WATER
	CENTER LINE
	PROPOSED CURB
	PROPOSED PAVING
	SIDEWALK BY DEVELOPER
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NOTE:
STORM DRAIN INLET LOCATION AT
BACK OF CURB AT CENTER OF
INLET

[illegible]

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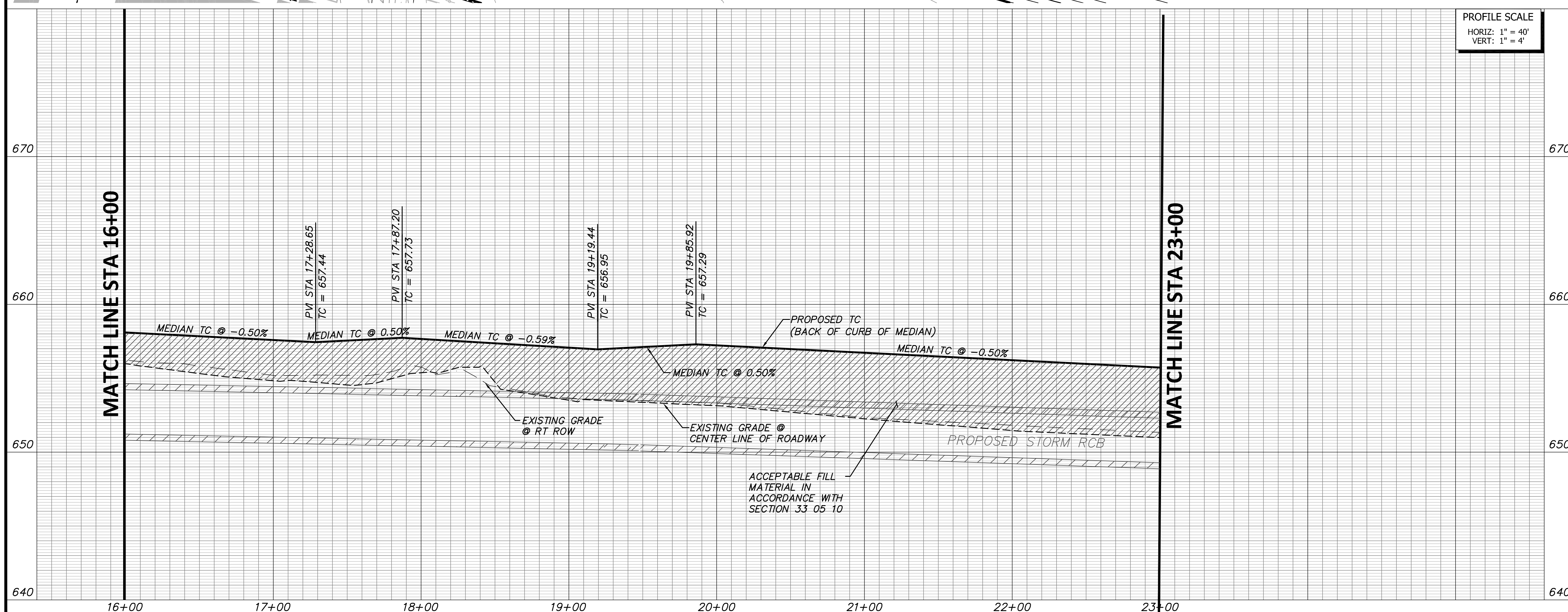
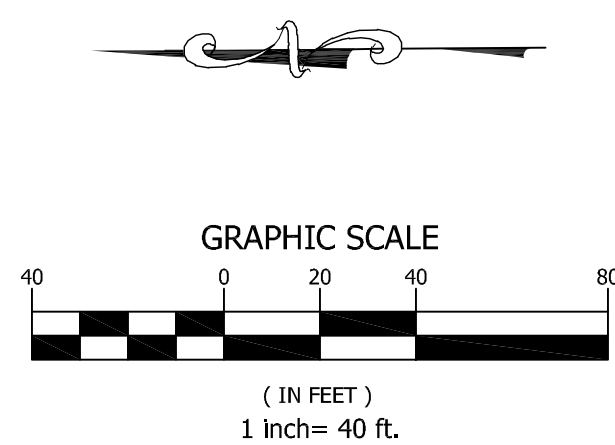
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LINE, ON THE SOUTH CURB OF THE SOUTH
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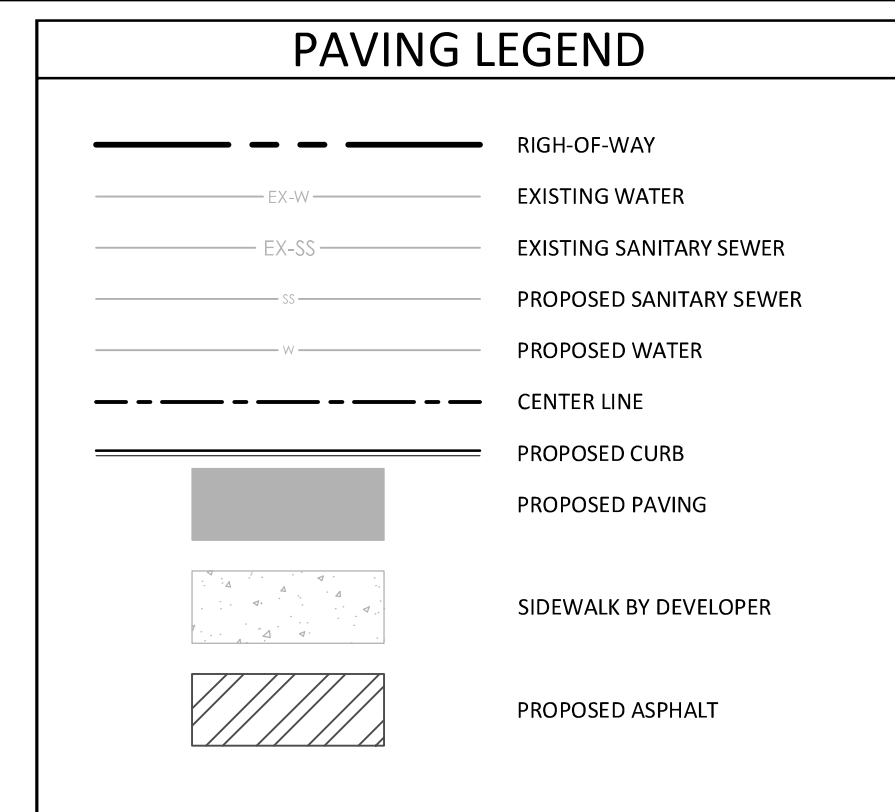
FORT WORTH

DUNAWAY
550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.335.1121 • Fax: 817.335.7437
(TX REG F-1114)

CRIMSON RIDGE

**BALCH STREET PLAN & PROFILE
STA 16+00 TO STA 23+00**

DESIGNED:	GM	PROJECT NO: 003950.001	SHEET: 44 OF 58
DRAWN:	GM		
CHECKED:	DH		



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[illegible]

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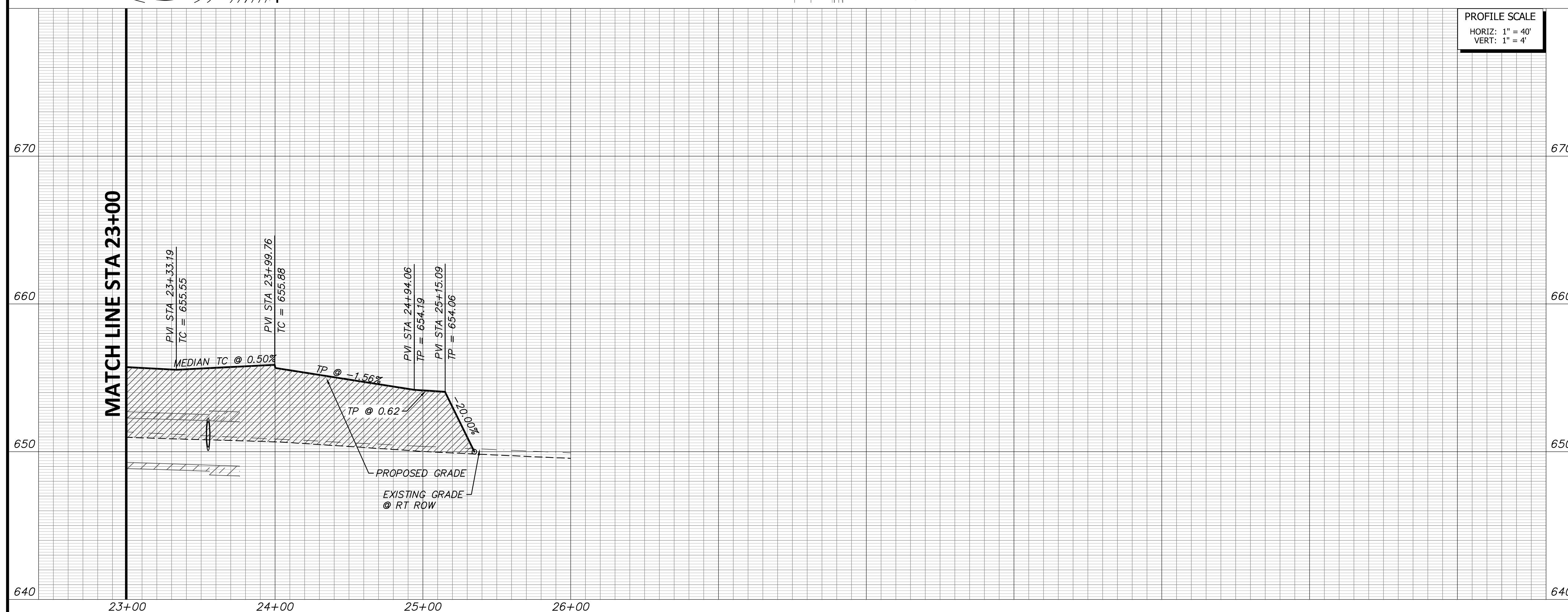
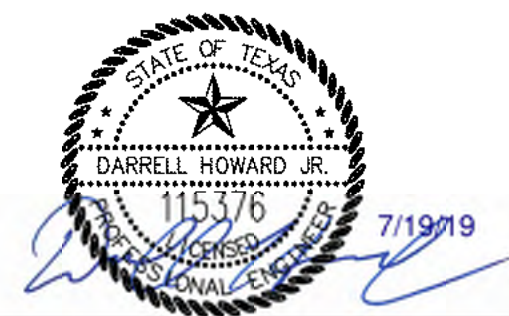
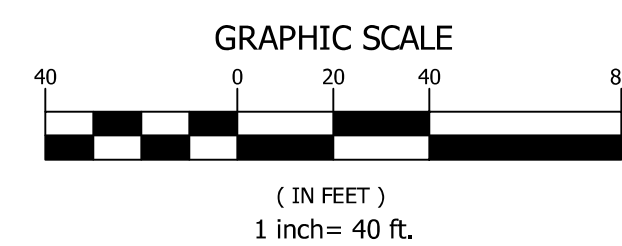
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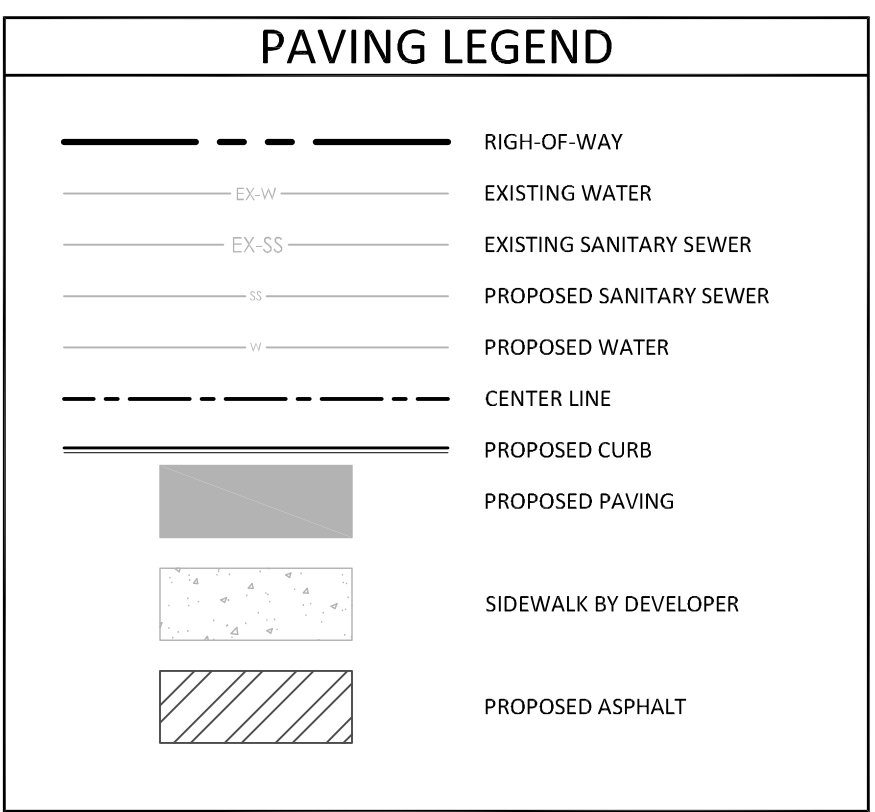
FORT WORTH

DUNAWAY
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[TX REG F-1114]

CRIMSON RIDGE

BALCH STREET PLAN & PROFILE STA 23+00 TO END

DESIGNED:	GM	PROJECT NO: 003950.001	SHEET: 45 OF 58
DRAWN:	GM		
CHECKED:	DH		

[illegible]

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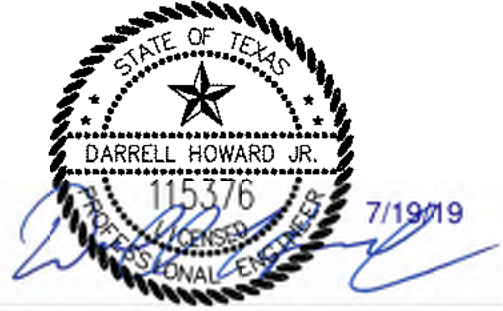
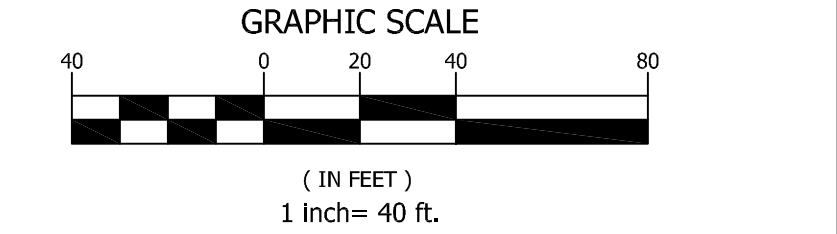
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SITE BM #1
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SOUTHWEST CORNER OF THE SUBJECT TRACT



FORT WORTH



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(TX REG. F-1114)

SCARLET WAY PLAN & PROFILE STA 0+00 TO END

DESIGNED:	GM	PROJECT NO: 003950.001	SHEET: 46 OF 58
DRAWN:	GM		
CHECKED:	DH DATE: 7/9/2019		

FILENAME: SCARLET WAY STA 0+00 TO END.dwg
PLOTTED BY: Luis Guerrero
PLOTTED ON: Tuesday, July 09, 2019
PLOTTED AT: 10:28:16 AM
PLOTTED WITH: PDF-XChange For Acrobat Pro.pc3



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CRIMSON RIDGE

PHASE I EROSION CONTROL PLAN

DESIGNED:	GM	PROJECT NO: 003950.001	SHEET: 50 OF 58
DRAWN:	GM		
CHECKED:	DH DATE: 7/18/2019		

TOTAL QUANTITIES	
POLE QUANTITY	14
POLE TYPE	TYPE 6
MOUNTING HEIGHT	30'
LUMINAIRE TYPE	ATB2-TYP2-138W NW-NL-7PIN 3K
FOUNDATION TYPE	* TYPE 3
ARM TYPE (WICHITA ROAD)	24A
ARM TYPE (SCARLET WAY)	33B
GROUND BOXES	X
LUMINAIRE HEADS	14
CONTACTOR	X

* SEE FOUNDATION DESIGN TABLE ON
STREET LUMINAIRE POLE DETAILS SHEET

ONCOR LEGEND	
-----	2" SCHEDULE 80 PVC STREET CROSSING CONDUIT
-----	3" SCHEDULE 80 PVC STREET CROSSING CONDUIT

SUMMARY OF ONCOR STREET CROSSING CONDUIT			
SIZE		LENGTH IN FEET	BORE(B) TRENCH(T)
PROP.	EXIST.		
2" SCHEDULE 80 PVC		234	T
3" SCHEDULE 80 PVC		1028	T

LEGEND			
EXISTING		PROPOSED	
	LUMINAIRE		WATER METER
	POLE MOUNTED TRANSFORMER		CONDUIT
	SIGN		TRANSFORMER
	OVERHEAD WIRE		SWITCH GEAR
	GROUND BOX		WOOD POLE
			DBL ARM LUMINAIRE
			POLE MOUNTED TRANSFORMER
			STOP SIGN - STREET NAME
			OVERHEAD WIRE
			WOOD POLE
			SINGLE ARM LUMINAIRE
			FUTURE SINGLE ARM LUMINAIRE
			GROUND BOX
			CONDUIT
			TRANSFORMER
			SWITCH GEAR
			CONTACTOR
			PEDESTAL OR HAND HOLE

REVISIONS		
NO.	DATE	DESCRIPTION

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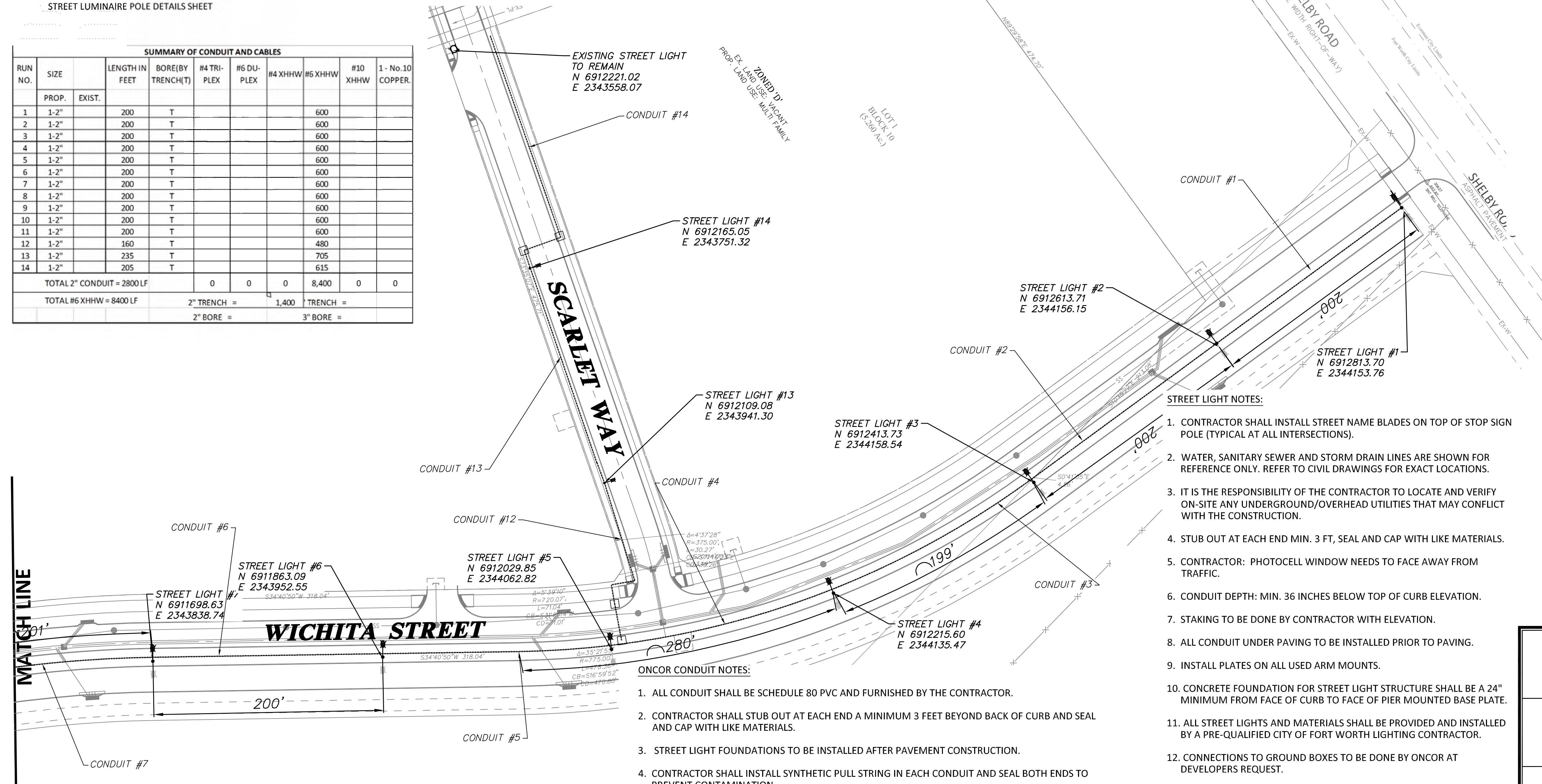
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SOUTHWEST CORNER OF THE SUBJECT TRACT
ELEVATION = 661.51'

SUMMARY OF CONDUIT AND CABLES									
RUN NO.	SIZE	LENGTH IN FEET	BORE(BY TRENCH(T))	#4 TRI- PLEX	#6 DU- PLEX	#4 XHHW	#6 XHHW	#10 XHHW	1 - No.10 COPPER.
	PROP.	EXIST.							
1	1-2"		200	T			600		
2	1-2"		200	T			600		
3	1-2"		200	T			600		
4	1-2"		200	T			600		
5	1-2"		200	T			600		
6	1-2"		200	T			600		
7	1-2"		200	T			600		
8	1-2"		200	T			600		
9	1-2"		200	T			600		
10	1-2"		200	T			600		
11	1-2"		200	T			600		
12	1-2"		160	T			480		
13	1-2"		235	T			705		
14	1-2"		205	T			615		
TOTAL 2" CONDUIT = 2800 LF			0	0	0	8,400	0	0	
TOTAL #6 XHHW = 8400 LF			2" TRENCH =		1,400	TRENCH =			
			2" BORE =			3" BORE =			

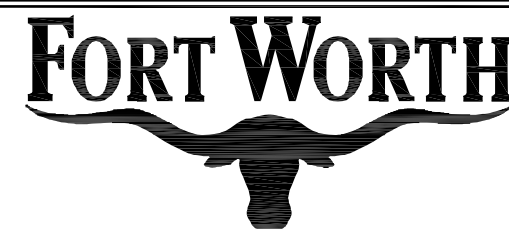
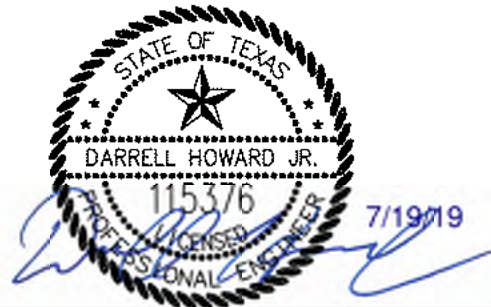
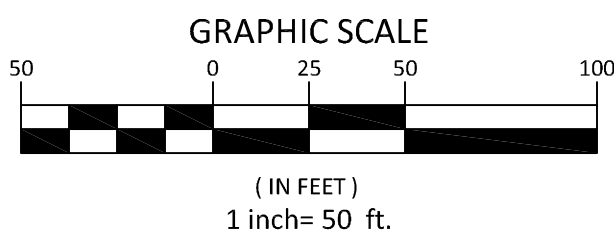
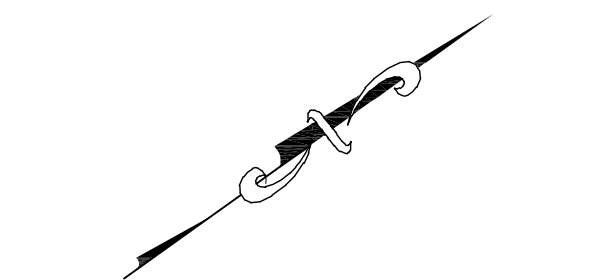


STREET LIGHT NOTES:

1. CONTRACTOR SHALL INSTALL STREET NAME BLADES ON TOP OF STOP SIGN POLE (TYPICAL AT ALL INTERSECTIONS).
2. WATER, SANITARY SEWER AND STORM DRAIN LINES ARE SHOWN FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS FOR EXACT LOCATIONS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND VERIFY ON-SITE ANY UNDERGROUND/OVERHEAD UTILITIES THAT MAY CONFLICT WITH THE CONSTRUCTION.
4. STUB OUT AT EACH END MIN. 3 FT, SEAL AND CAP WITH LIKE MATERIALS.
5. CONTRACTOR: PHOTOCCELL WINDOW NEEDS TO FACE AWAY FROM TRAFFIC.
6. CONDUIT DEPTH: MIN. 36 INCHES BELOW TOP OF CURB ELEVATION.
7. STAKING TO BE DONE BY CONTRACTOR WITH ELEVATION.
8. ALL CONDUIT UNDER PAVING TO BE INSTALLED PRIOR TO PAVING.
9. INSTALL PLATES ON ALL USED ARM MOUNTS.
10. CONCRETE FOUNDATION FOR STREET LIGHT STRUCTURE SHALL BE A 24" MINIMUM FROM FACE OF CURB TO FACE OF PIER MOUNTED BASE PLATE.
11. ALL STREET LIGHTS AND MATERIALS SHALL BE PROVIDED AND INSTALLED BY A PRE-QUALIFIED CITY OF FORT WORTH LIGHTING CONTRACTOR.
12. CONNECTIONS TO GROUND BOXES TO BE DONE BY ONCOR AT DEVELOPERS REQUEST.
13. DUNAWAY ASSOCIATES LP SHALL BE HELD HARMLESS FOR THE FINAL DESIGN, LOCATION AND INSTALLATION OF ALL CITY STREET LIGHTS ASSOCIATED WITH THIS PROJECT.
14. CALL 817-999-7923 PRIOR TO ANY STREET LIGHT CONSTRUCTION INCLUDING CONDUITS.

ONCOR CONDUIT NOTES:

1. ALL CONDUIT SHALL BE SCHEDULE 80 PVC AND FURNISHED BY THE CONTRACTOR.
2. CONTRACTOR SHALL STUB OUT AT EACH END A MINIMUM 3 FEET BEYOND BACK OF CURB AND SEAL AND CAP WITH LIKE MATERIALS.
3. STREET LIGHT FOUNDATIONS TO BE INSTALLED AFTER PAVEMENT CONSTRUCTION.
4. CONTRACTOR SHALL INSTALL SYNTHETIC PULL STRING IN EACH CONDUIT AND SEAL BOTH ENDS TO PREVENT CONTAMINATION.
5. CONDUIT DEPTH: MIN. 36 INCHES BELOW TOP OF CURB ELEVATION.
6. CONTRACTOR SHALL COORDINATE WITH ONCOR TO DETERMINE LOCATION OF TRANSFORMERS.
7. STREET LIGHT FOUNDATION SHALL BE 5' FROM WATER LINES.



550 Bailey Avenue • Suite 400 • Fort Worth, Texas 76107
Tel: 817.385.1121 • Fax: 817.335.7437
(TX REG. F-1114)

CRIMSON RIDGE

STREET LIGHT LAYOUT

DESIGNED: RD	PROJECT NO. 003950.001	SHEET: 52 of 58
DRAWN: RD	DATE: 7/9/2019	
CHECKED: DH		

TOTAL QUANTITIES	
POLE QUANTITY	14
POLE TYPE	TYPE 18
MOUNTING HEIGHT	40'
LUMINAIRE TYPE	ATB2-TYP2-138W NW-NL-7PIN 3K
FOUNDATION TYPE	* TYPE 3
ARM TYPE	33B
GROUND BOXES	X
LUMINAIRE HEADS	14
CONTACTOR	X

* SEE FOUNDATION DESIGN TABLE ON
STREET LUMINAIRE POLE DETAILS SHEET

ONCOR LEGEND	
-----	2" SCHEDULE 80 PVC STREET CROSSING CONDUIT
-----	3" SCHEDULE 80 PVC STREET CROSSING CONDUIT

LEGEND			
EXISTING		PROPOSED	
	LUMINAIRE		WATER METER
	POLE MOUNTED TRANSFORMER	---	CONDUIT
	SIGN		TRANSFORMER
— OH —	OVERHEAD WIRE		SWITCH GEAR
	GROUND BOX		WOOD POLE
			DBL ARM LUMINAIRE
			POLE MOUNTED TRANSFORMER
			STOP SIGN - STREET NAME
		— OH —	OVERHEAD WIRE
			WOOD POLE
			SINGLE ARM LUMINAIRE
			FUTURE SINGLE ARM LUMINAIRE
			GROUND BOX
		---	CONDUIT
			TRANSFORMER
			SWITCH GEAR
			CONTACTOR
			PEDESTAL OR HAND HOLE

REVISIONS		
NO.	DATE	DESCRIPTION
	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

UTILITY RELOCATION NOTE:
IF ANY EXISTING UTILITY POLES, POWER POLES, CUY WIRES, TELEPHONE UTILITIES, ETC. ARE FOUND TO BE IN CONFLICT WITH THESE CONSTRUCTION PLANS. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY AND COORDINATE THE RELOCATION OF ANY/OR ALL SUCH UTILITIES (NO SPECIAL PAY).

CRITICAL:
LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND ARE BASED ON PUBLIC RECORDS. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES, BOTH HORIZONTALLY AND VERTICALLY, BEFORE THE COMMENCEMENT OF ANY CONSTRUCTION.

WARNING TO CONTRACTOR:
CALL 1-800-344-8377 (DIG-TESS) OR OTHER UTILITY LOCATING SERVICES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY. DUNAWAY ASSOC., L.P. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES OR DEPICTING EXACT LOCATIONS OF UTILITIES ON DRAWINGS.

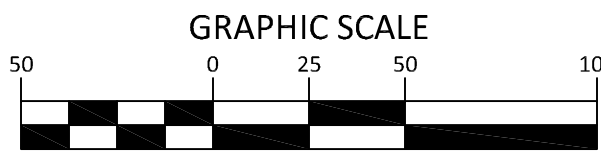
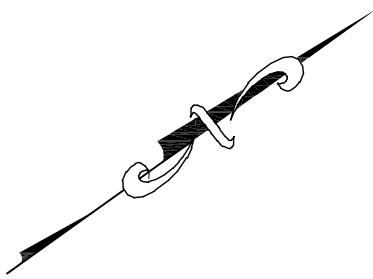
CONTRACTOR ADVISORY:
THE CONTRACTOR, AND HIS AGENTS (SUB-CONTRACTOR) ARE COMPLETELY RESPONSIBLE FOR THE VERIFICATION OF THE ACCURACY OF THE DIMENSION CONTROL FURNISHED HEREIN. THE OWNER, AND HIS AGENTS, ARE NOT RESPONSIBLE FOR THE ACCURACY OF THE COORDINATES FURNISHED. THE CONTRACTOR IS REQUIRED TO VERIFY ALL OF THE COORDINATES FOR ACCURACY AND CONFIRM THE LOCATIONS OF ALL UTILITIES TO BE CONSTRUCTED. BOTH HORIZONTALLY AND VERTICALLY. DISCREPANCIES FOUND BY THE CONTRACTOR SHALL BE REPORTED IN WRITING, TO THE OWNER IMMEDIATELY FOR RECONCILIATION.

PROJECT BENCHMARK:
CITY OF FORT WORTH MONUMENT B668
CITY MONUMENT OF EVERMAN PARKWAY 0.4
MILES WEST OF RACE STREET AND 157' WEST
OF TESCO STEEL TOWER TRANSMISSION
LINE, ON THE SOUTH CURB OF THE SOUTH
LANE OF EVERMAN PARKWAY IN THE CENTER
OF A 10' CONCRETE INLET

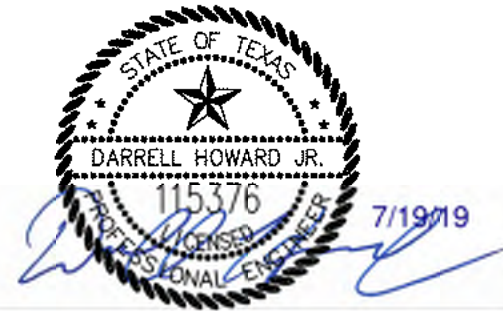
ELEVATION= 657.702'

SITE BENCHMARK:
SITE BM #1
"X" IN CONCRETE ON THE CENTER OF A
CONCRETE DRAINAGE STRUCTURE ON THE
WEST END OF SAID STRUCTURE NEAR THE
SOUTHWEST CORNER OF THE SUBJECT TRACT

ELEVATION = 661.51'



(IN FEET)
1 inch= 50 ft.



STREET LIGHT NOTES:

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- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND VERIFY ON-SITE ANY UNDERGROUND/OVERHEAD UTILITIES THAT MAY CONFLICT WITH THE CONSTRUCTION.
- STUB OUT AT EACH END MIN. 3 FT, SEAL AND CAP WITH LIKE MATERIALS.
- CONTRACTOR: PHOTOCELL WINDOW NEEDS TO FACE AWAY FROM TRAFFIC.
- CONDUIT DEPTH: MIN. 36 INCHES BELOW TOP OF CURB ELEVATION.
- STAKING TO BE DONE BY CONTRACTOR WITH ELEVATION.
- ALL CONDUIT UNDER PAVING TO BE INSTALLED PRIOR TO PAVING.
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- CONTRACTOR SHALL COORDINATE WITH ONCOR TO DETERMINE LOCATION OF TRANSFORMERS.
- STREET LIGHT FOUNDATION SHALL BE 5' FROM WATER LINES.

MATCH LINE



05/07/2024 | 12:18:22 PM CDT

Oncor Electric Delivery Company, LLC

Attn: Aidan Franke

7860 Winbrook Dr,

Benbrook, TX 76126

Michael Moore

Harris Kocher Smith

451 S Main St, Suite 210

Fort Worth, Texas 76104

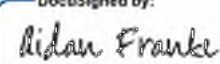
Crimson Ridge Multi-family

Re: SE of Balch St & Scarlet Way, Ft Worth, TX 76140

Please be advised that Oncor Electric Delivery Company LLC, a Delaware limited liability company, can provide electric service to the above referenced site. Service will be provided upon request in accordance with our tariffs and service regulations on file with the Public Utility Commission of Texas.

If you have questions or need additional information, please feel free to contact me.

Sincerely,

DocuSigned by:

Aidan Franke

New Construction Manager

aidan.franke@oncor.com

WWW.ONCOR.COM

DocuSign Envelope ID: 7C30188E-0855-4507-B7D0-1B93E606D7EE

Michael Moore

From: Franke, Aidan <Aidan.Franke@oncor.com>
Sent: Tuesday, May 7, 2024 12:12 PM
To: Michael Moore
Cc: Rowe, Kayla
Subject: RE: WO 24869731 Crimson Ridge - Michael Moore Balch St and Scarlet Way, SE Ft. Worth 76104

Caution: External email

Michael,

Thanks for reaching out. I can send you over a Service availability letter here in a few minutes.

However, I am not able to provide a map of our existing facilities. I can tell you that we do have 3 phase overhead on the W side of Balch st, running from Shelby Rd to Scarlet Way. Once we get to Scarlet way, the 3 phase then goes Underground to a loop of switchgears. Needless to say, there are adequate facilities in place to serve this development. I will also send you over our kickoff email, outlining the required documentation we need in order to move forward with this project and what our process kind of looks like. If you would, please reply to that email explaining your timeline and expectations of when you will be able to provide that information.

Aidan Franke

New Construction Manager

Oncor | New Construction Management

Cell: 682.681.4824

Oncor Core Values: Excellence - Intensity – Ethical Conduct – Innovation – Respect

For all commercial and residential New Serve projects, please follow the link below:

<https://www.oncor.com/SitePages/NewConstruction.aspx>

My Manager: Joe Rice 214-316-3849 Joseph.Rice@oncor.com



From: Michael Moore <mmoore@hkseng.com>
Sent: Tuesday, May 7, 2024 9:06 AM
To: Franke, Aidan <Aidan.Franke@oncor.com>
Cc: Rowe, Kayla <Kayla.Rowe2@oncor.com>
Subject: RE: WO 24869731 Crimson Ridge - Michael Moore Balch St and Scarlet Way, SE Ft. Worth 76104

WARNING: This email message did not originate from Oncor and is from an external organization. **DO NOT CLICK** links or attachments unless you recognize the sender and are certain the content is safe.

Commercial & Industrial - Load Requirements

Please Complete in Full and return to Project Manager
Include a copy of plat and water and sewer prints.



Oncor Electric Delivery Company LLC
a Delaware limited liability company

Company Use ONLY – WR #: _____

Your electric service request will be processed upon form completion in its entirety, **signed and returned** to the appropriate Oncor Electric Delivery Company Project Manager. Allow 10 working days for an estimated cost for providing electric service, including all applicable charges and approximate timeline for construction completion after all required documents have been provided. Please visit the Oncor Electric Delivery web site for information concerning electric service guidelines, approved meter-bases and other service installation requirements. All meters must be located outside the building, cannot be located within an enclosed area, and must meet proper clearance requirements.
http://oncor.com/electricity/construct/guidelines/const_guide.aspx

Project / Customer Name: _____ Project Location / Cross Streets: _____

Physical Address: _____, TX _____
Street Address City Zip Code

Office Phone: _____ Cell Phone: _____ Fax # _____ E-mail Address: _____

General Contractor: _____ Phone: _____ Fax: _____

Electrical Contractor: _____ Phone: _____ Fax: _____

Requested Dates for Electric Service: Temporary Service _____ Permanent Service _____

- If available – Please Provide:

Additional Design Charge

Temporary Premise Number: _____

Permanent Premise Number: _____

This charge is made for preparing iterative designs to provide new service to a specific location where such iterations are at the request of the Retail Customer/CR for the Retail Customer's sole benefit. The initial two designs on a project will be included in the system charges; **any additional designs will be done at Retail Customer's expense pursuant to this charge.**

Designated responsible party for payment of any costs associated with providing electrical service. Contribution in Aid of Construction ("CIAC") shall be payable to Oncor Electric Delivery Company prior to any construction scheduling. Please check only one:

Customer General Contractor Architect Electrical Contractor Other _____

Federal Tax ID #: _____ or Valid Drivers License #: _____ State of _____

ELECTRIC REQUIREMENTS

A site plan will be required identifying the proposed transformer, meter and other Oncor equipment locations. A survey or plat may be required by the Oncor project manager. An easement for the onsite Oncor facilities will be required either by a final plat or by a separate instrument. A copy of the warranty deed will be required if a separate instrument is secured for the Oncor easement.

Hours of Operation: _____ A.M. to _____ P.M. or Other: _____ Days of Operation: _____ thru _____

Number of Electrical Meters Request: _____ and Service in AMPS: _____, _____, _____, _____, _____, _____

Number of Conductors per Phase: _____ Wire Size: _____ Requested Service Type: Overhead Underground

Transocket Delivery Information:

Required Date: _____

Ship to-- Attn: _____ Address: _____ City: _____, TX Zip: _____

- Allow up to 10 business days for preliminary cost estimate and an additional 3 weeks (minimum) for scheduling an Oncor Electric Delivery Crew.
- Required permits, utility easements and surveying will necessitate additional design time.
- All three-phase transformers will require a 14 to 16 week lead time – no exceptions.
- Oncor Electric Delivery will provide the least cost design. This design will be considered Iterative Design #1.
- Excess facilities at the request of the customer shall result in additional charges of the customer.
- It is the customer's responsibility to clear right-of-way for the installation of electric distribution facilities to company specifications.

Signature

Printed Name

Title

Office Phone

Cell Phone

E-Mail Address

Date



Oncor Electric Delivery Company LLC
a Delaware limited liability company

Project / Customer Name: _____

If a commercial project, please provide the total square footage of building and the square footage of HVAC space.

Total Building Square Footage: _____ HVAC Square Footage: _____

Requested Voltage (select only one)

Single Phase 120/240: 3 Phase 120/208Y: 3Phase 120/240: 3 Phase 277/480Y: 3 Phase 480: Other: _____

Indicate only one: New Load Adding Load to an Electrically Energized Service

ELECTRIC LOAD REQUIREMENTS
(Please use an additional page if necessary)

HVAC Load Information:

<u>Quantity</u>	<u>Phase</u>	<u>Volts</u>	<u>Tons</u>	<u>SEER</u>	<u>Connected kW – Each</u>	<u>Heat kW – Each</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

Motor Load Information:

<u>Quantity</u>	<u>Phase</u>	<u>Volts</u>	<u>HP Each</u>	<u>Start Type</u>	<u>Equipment Description</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Lighting & Miscellaneous Load Information:

<u>Quantity</u>	<u>Phase</u>	<u>Volts</u>	<u>Connected kW – Each</u>	<u>Equipment Description</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Signature _____ Printed Name _____ Title _____

Office Phone _____ Cell Phone _____ E-Mail Address _____ Date _____

Multi-Family Development - Customer Requirements



Please Complete in Full and return to Project Manager
Include a copy of plat and water and sewer prints.

Oncor Electric Delivery Company LLC
a Delaware limited liability company

Company Use ONLY – WR #: _____

Complex Name: _____ Location: _____ # Units _____

Developer: _____ Phone: _____ Fax: _____

Mailing Address: _____
Street Address / PO Box City / State Zip Code

Civil Engineer: _____ Phone: _____ Fax: _____

Project Superintendent: _____ Phone: _____ Fax: _____

Electric Only Project

Gas Only Project

Gas / Electric Project

Electric / Gas in Clubhouse

Single Size Apartment Project: Apartment Sq. Footage: _____ Number of Apts. Per Bldg.: _____ Number of Bldgs: _____

Mixed Size Apartment Project: **Building Information:** On a separate sheet of paper, list the number of each apartment plan in each building.

Apartment Plan #: _____ Square Footage: _____ AC Size: _____ Elect Heat: _____ Heat Pump: _____

Apartment Plan #: _____ Square Footage: _____ AC Size: _____ Elect Heat: _____ Heat Pump: _____

Apartment Plan #: _____ Square Footage: _____ AC Size: _____ Elect Heat: _____ Heat Pump: _____

Apartment Plan #: _____ Square Footage: _____ AC Size: _____ Elect Heat: _____ Heat Pump: _____

Apartment Plan #: _____ Square Footage: _____ AC Size: _____ Elect Heat: _____ Heat Pump: _____

Requested voltage: **Single Phase 120/240** _____ **Single phase 120/208** _____

Water Heating Information: Electric Gas Propane

Additional Electric Requirements for Common Areas:

(Please mark location on plat / Please note any specifics related to below additions such as: three phase, pool, clubhouse, etc)

Lift Station Sprinkler System Amenities Center Landscape Lighting Trash Compactor

Additional Design Charge - This charge is made for preparing iterative designs to provide new service to a specific location where such iterations are at the request of the Retail Customer/CR for the Retail Customer's sole benefit. The initial two designs on a project will be included in the system charges; any additional designs will be done at Retail Customer's expense pursuant to this charge.

It is the responsibility of the developer to clear rights-of-way, establish final grade and provide staking of property corners prior to the installation of Company facilities. Developer is also responsible for staking, exposing or otherwise marking any existing facilities where Oncor Electric Delivery Company LLC, a Delaware limited liability company, would need to use caution in digging.

A survey or plat will be required by the Oncor project manager. An easement for the onsite Oncor facilities will be required either by a final plat or by a separate instrument. A copy of the warranty deed will be required if a separate instrument is secured for the Oncor easement.

All meters shall be located outside the building, cannot be located within an enclosed area, and must meet proper clearance requirements. Please visit the Oncor Electric Delivery web site for information concerning electric service guidelines, approved meter-bases and other service installation requirements. http://oncor.com/electricity/construct/guidelines/const_guide.aspx

Signature _____ Printed _____ Name _____ Title _____

Office Phone _____ Cell _____ Phone _____ E-Mail _____ Address _____ Date _____

**Other than Additional Service Design Charges for iterative designs as applicable, no Customer payment is required at the time Customer completes and returns this document to the Company. Any additional Customer charges, if applicable, will be established through a separate agreement between Company and the Customer.*



May 7, 2024

Michael Moore


Re: Gas Availability- Balch St. and Scarlet Way
Fort Worth, TX 76140

Dear: Michael Moore

Upon your request, I have reviewed the location of gas facilities near your project site. It has been determined that gas is currently available near your project location. It appears that there is a 4-inch gas main located on the West side of Balch St. Depending on the design and demand of our project a main extension may be needed, which complies with the Company's current Line Extension Policy, will be required to serve the project.

If you have questions, please contact me at (817) 319-2237.

Sincerely,

DocuSigned by:

0761AE18E0DD48B...

Jason Gilson
Project Specialist

ATMOS ENERGY

COMMERCIAL CUSTOMER LOAD REQUIREMENTS

Please complete and return to Atmos Energy Corporation, Project Manager
Customer or Authorized Representative: please sign and date form
General Information

Company Use:
Project #

Project Name: _____

Project Address: _____

Project Owner/Entity: _____ Phone: _____ Cell: _____

Project Manager: _____ Phone: _____ Cell: _____

Job Superintendent: _____ Phone: _____ Cell: _____

Plumbing Contractor: _____ Phone: _____ Cell: _____

If available – Gas Permanent Account Number: _____

Gas Requirements

- ☐ Site Plan: Mark desired meter location. Survey or other Plats may be required – consult Project Manager on exact requirements.
- ☐ Gas Load Summary – Total _____ ☐ BTU's or ☐ CFH
- ☐ Delivery Pressure: 4 oz. _____ 5 lbs. _____ Other _____
- ☐ ____/____/____ Service Line Request ____/____/____ Gas Meter Manifold or Installation Request

Multi-Tenant Building

(Specify numbers of services to building and number of meters per manifold and break out load for each tenant in Gas Load Detail Below)

Example: 2 services – 6 meter manifolds with left to right feed on 5 lbs. delivery pressure.

GAS LOAD DETAIL

Quantity	Equipment Description	BTU's / Unit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Special Requirements: _____

Signature: _____ Title: _____

Printed Name: _____ Date: _____



AT&T Texas
Fort Worth North Engineering
1116 Houston St., Flr. 14
Fort Worth, TX 76102

May 5, 2024

Attn:

Michael Moore, PE

Vice President

451 S Main St, Suite 210 • Fort Worth, Texas 76104
P: 817.769.6279 • M: 575.644.6339 • D: 682.747.5745
mmoore@hkseng.com • www.harriskochersmith.com

Re: Balch Street and Scarlet Way Fort Worth TX 76140

Michael,

Please accept this letter as your confirmation that the above referenced project is located in an area served by AT&T. Please be advised that this letter is not a commitment by AT&T to provide service to the new development but an acknowledgement that we have service in this area.

Should you have any questions or concerns please contact me at the number or email listed below.

Sincerely,

Bodie Binkley

Bodie Binkley
Manager Engineering Design
817 243-4297
rb6847@att.com

APPENDIX E

Memo

To: Darrell Howard, P.E.

From: Grady H. Beachum, P.E.

Date: March 29, 2019

Dunaway #: B003950.001

Re: Crimson Ridge Detention Pond

This memo outlines the proposed pond, storm drain system, outfall channel, temporary ditches, and downstream assessment for the Crimson Ridge development.

Project Location, Receiving Stream, and Zone of Influence –

The project is located southeast of the intersection of Shelby Road and South Race Street, east of 35W in South Ft. Worth, as shown on **Attachment A, Exhibit 1**. The project zoning is designated as Class D – Multifamily.

The drainage from the project site goes to the southwest and enters a shallow ditch, located adjacent to an abandoned railroad bed. From this point, the runoff continues southward to Stream VC-5, which is a FEMA studied stream, with a drainage area of 2.83 square miles above the abandoned railroad embankment. Please refer to the FEMA work map shown in **Exhibit 2** for drainage connectivity.

The Zone of influence (ZOI) was set at the southwest corner of the overall tract where it leaves the overall project area. This location was chosen as the ditch currently serves as an adequate outfall for the overall tract, and any potential increase in peak discharges will be mitigated through use of detention such that the proposed peak discharges will not have an adverse impact on downstream flooding and streambank conditions. There are no structures adjacent to the existing ditch that would be adversely affected by any increases in peak discharges between the selected Zone of Influence and Stream VC-5. The ZOI is shown on the Existing Drainage Area Map (**Exhibit 3**).

Hydrology –

The hydrology for the overall pond design is based on the Natural Resources Conservation Service (NRCS) Unit Hydrograph method. Soils data for the area are shown on **Exhibit 4** and are used to set the base Curve Number (CN) for the drainage areas, assuming Open Space in with good vegetative cover. Existing Zoning is shown in **Exhibit 5**. Existing impervious areas (**Exhibit 6**) were digitized using recent aerial photography from Google Earth and other sources, assigning 100-percent impervious cover for concrete and asphalt pavement, rooftops and sidewalks, and 43-percent impervious for gravel-covered areas such as well pads.

The time of concentration was determined using the methodologies outlined in the report "Small Watershed Hydrology, TR-55," prepared by the NRCS. Lag times for the sub watersheds was determined to be 60-percent of the time of concentration.

The U.S. Army Corps of Engineers (USACE) program HEC-HMS version 4.2.1 was used to model the existing and proposed conditions. The existing pond from Stallion Pointe Phase 1 is modeled using stage-storage-discharge relationships from existing plans. Existing swales, ditches, and channels were modeled using the Muskingum-Cunge method. Weighted curve numbers and percent impervious were determined using the soils and existing zoning data previously discussed. The schematic for the pre-project drainage is shown in **Exhibit 7**. HMS input data and peak discharges are included in **Attachment B**.

Pre-Project (Existing) Conditions:

The existing pond above the project site was modeled using the stage-discharge and stage-storage curves developed for the Stallion Pointe (Crimson Ridge Addition, Lot 1, Block 16R) by Weir & Associates, Inc. The riser structure uses multiple weirs to discharge to a 5x2 RCB, with a 30-ft wide emergency overflow weir. PondPack v8i was used to process the stage discharge relationship. The following table summarizes the stage versus discharge and storage relationships. As-built plans for the Stallion Pointe pond are included in **Attachment C**.

Table 1, Existing Stallion Pointe Pond, Stage versus Discharge and Storage

Elevation ft	Primary Weir Q1	Secondary Weir Q2	Emergency Overflow Weir Q3	Total Flow cfs	Pond Area Ac.	Pond Incremental Volume ac-ft	Pond Cumulative Volume ac-ft
657.90	0.00	0.00	0.00	0.00	0.000	0.0000	0.0000
658.00	0.31	0.00	0.00	0.31	0.002	0.0001	0.0001
659.00	11.49	0.00	0.00	11.49	0.729	0.2564	0.2565
659.75	25.06	0.00	0.00	25.06	1.351	0.7681	1.0246
660.00	30.31	0.00	0.00	30.31	1.553	0.3627	1.3873
660.36	38.43	1.43	0.00	39.86	1.748	0.5938	1.9811
660.94	52.79	6.05	0.00	58.84	2.059	1.1028	3.0839
661.00	54.36	6.64	0.00	61.00	2.089	0.1244	3.2083
661.10	57.01	7.66	0.00	64.67	2.130	0.2110	3.4193
662.00	82.69	18.78	76.84	178.31	2.521	2.0907	5.5100
663.00	114.71	34.50	235.71	384.92	2.836	2.6770	8.1869

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Peak existing conditions flows for the 1-, 5-, 10-, 50-, and 100-year events were determined and shown in **Table 2**.

Table 2, Pre-Project (Existing) Peak Discharges

Location	HMS Node	Q1 cfs	Q5 cfs	Q10 cfs	Q50 cfs	Q100 cfs
Discharge from Stallion Pointe Ph. 1	Pond-4	20	33	41	64	84
Flow from Project Site (Existing)	J_4-6	31	60	78	123	156
Zone of Influence	ZOI	75	171	231	366	438

With-Project (Proposed) Conditions:

The with-project watershed was determined using the pre-project (existing) drainage area map as the basis, adding the proposed project and roadway (Wichita Street), and adjusting drainage areas as necessary to conform to the development plans. The with-project drainage areas are shown in **Exhibit 8**, and future land use is shown on **Exhibit 9**.

Base curve numbers for the with-project conditions were developed from the existing soils data. The with-project percent impervious for the project site was determined using Zoning Category D – high density multifamily, with a recommended 93-percent impervious cover. The areas representing Wichita Street (drainage areas A-8a thru A-8c) have an 80-percent impervious cover assuming grassed parkways and medians as included in the plans. The percent impervious for off-site areas was derived from existing conditions. A summary of the weighted CN and percent imperviousness is included in **Attachment B**. Times of concentration and Lag times were adjusted to account for proposed improvements See **Attachment B** for lag times.

The proposed schematic showing the connectivity between drainage areas, existing and proposed ponds, roadway underground drainage, and the outfall channel is shown in **Exhibit 10**. Off-site areas A-1, A-2, A-7, and A-9 are left as open space, and are not part of the common design for Crimson Ridge. The design of the drainage infrastructure for the proposed project (storm drain in Wichita Street and the outfall channel from the pond) considers ultimate full development of all connected areas.

The proposed pond is in the southern portion of area A-6. The proposed pond will collect and detain the runoff from area A-6 and the existing Stallion Pointe pond. The proposed storm drain in Wichita Street will collect proposed and future flows from areas A-5, A-7, A-8a, A-8b, and A-8c. The outfall from the proposed pond will connect to the Wichita Street drainage and be conveyed to a proposed channel crossing the southern portion of area A-2 to the ZOI. This channel is sized to convey the proposed and future (ultimate) flows from areas A-1 through A-9 following the City iSWM criteria.

The outlet structure for the pond consists of a 16'-6"x6'-0" rectangular concrete riser 4.75 feet tall. The low flow will be handled by six 14-inch diameter circular openings with a flowline of 649.40 feet each. The primary spillway will consist of four (4) 7'-6"x6" horizontal openings (two on front and back face of the riser) and two (2) 5'-0"x6" horizontal openings (one on each end)

with a flowline elevation of 653.25 feet for each opening. Finally, the emergency spillway will consist of two (2) 4'x4' grates set in the top of the riser with an elevation of 654.25 feet or 1-foot below the top of berm. Please refer to the attached plans for the details of the riser.

The proposed pond was sized to mitigate the increased impervious area and shortened lag times caused by the proposed Crimson Ridge project and Wichita Street. The proposed Crimson Ridge pond will have side slopes are 4:1. The minimum adjacent ground elevation is approximately 651 feet and the top of berm is 655.25 feet, therefore the maximum height of the proposed embankment is approximately 4.25 feet. The pond elevation, area, and volume relationships are shown in **Table 3**.

Table 3, Proposed Pond Elevation-Area-Depth-Volume Relationship

Elevation Ft	Surf. Area Ac	Cum. Vol. Ac-Ft	Description
649.40	0.004	0.000	Minimum Pond Elevation
649.50	0.092	0.004	
650.00	0.210	0.077	
651.00	0.730	0.521	
652.00	0.830	1.301	
653.00	0.930	2.180	
653.25	0.960	2.416	
654.00	1.040	3.165	
654.25	1.070	3.428	
655.00	1.150	4.259	
655.25	1.180	4.550	Minimum Top of Berm

The discharge from the riser will be handled by one 8'x3' RCB to the east and connect to the drainage in Wichita Street, and to an outfall channel to the ZOI. The 8x3 box section will have a flowline elevation at the riser of 649.40' and a slope of 0.20%. The tailwater of the outflow culvert is controlled by an earthen channel (nominal 30-ft bottom, 4:1 side slopes, $n = 0.05$, with 8-ft concrete pilot) with a slope of 0.30-percent. The elevation vs. discharge relationship was for the riser was prepared using PondPack v8i. **Table 4** reflects the stage-discharge relationship for the pond outflow structure.

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Table 4, Pond Stage-Discharge Relationship

Water Surface Elevation (ft)	Orifice 1 (6-14" I.D. Openings) El. = 649.40' Q (cfs)	Orifice 2 (4-7.5'x0.5' + 2-5'x0.5') El. = 653.25 Q (cfs)	Emergency Spillway (2-4'x4' Grates) El. = 654.25' Q (cfs)	Total Discharge Q (cfs)	Tailwater Elevation (ft)
649.40	0.00	0.00	0.00	0.00	648.90
649.50	0.22	0.00	0.00	0.22	649.08
650.00	5.74	0.00	0.00	5.74	649.57
651.00	23.01	0.00	0.00	23.01	650.13
652.00	34.32	0.00	0.00	34.32	650.36
653.00	43.65	0.00	0.00	43.65	650.53
653.25	45.77	0.00	0.00	45.77	650.57
654.00	37.20	83.36	0.00	120.56	651.52
654.25	37.51	96.26	0.00	133.77	651.66
655.00	30.10	93.84	62.36	186.30	652.18
655.25	25.94	80.90	96.00	202.84	652.27

Routing for the proposed ditch below the pond outfall and Wichita Street drainage system was determined using HEC-RAS version 5.0.3 for the proposed outfall channel. The proposed outfall channel in the HMS model was analyzed using the Modified Puls method. Please refer to the Hydraulics section below for more information on the outfall channel.

The resulting discharges for the with-project condition are shown in **Table 5**. A comparison between pre-project and with-project conditions is shown in **Table 6**.

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Table 5, With-Project Peak Discharge

Location	HMS Node	Q1 cfs	Q5 cfs	Q10 cfs	Q50 cfs	Q100 cfs
Discharge from Stallion Pointe Ph. 1	Pond-4	20	33	41	64	84
Combined flow to Proposed Pond	J_4-6	54	77	93	128	144
Discharge from Proposed Pond	Pond-6	28	39	44	94	117
Discharge from Project Site	Jct_8-2	42	63	76	129	163
Peak Outfall Channel Discharge	Jct_Channel	60	109	138	222	280
Zone of Influence	ZOI	87	171	223	348	430

For the 100-year discharge, the maximum pond elevation is 653.90 feet, which provides 1.35-ft of freeboard to the top of berm surrounding the pond.

Table 6, Peak discharges at Zone of Influence

Condition at ZOI	1-Year	5-Year	10-Year	50-Year	100-year
Pre-Project	75	171	231	366	438
With-Project	87	171	223	348	430
Difference	12	0	-8	-18	-8

From this information, for the 5-year through 100-year flows, the proposed pond and related drainage system improvements will mitigate for any increase in discharge at the ZOI. For the 1-year conditions, we show an increase of 12 cfs, but this increase will result in no adverse impact downstream, which drains into the floodplain of Stream VC-5, a tributary of Village Creek.

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The following table summarizes the proposed Crimson Ridge pond return event versus elevation, storage, and peak flows:

Table 7, Crimson Ridge Pond Summary

Return (years)	Peak Elevation (ft)	Peak Storage (ac-ft)	Peak Inflow (cfs)	Peak Discharge (cfs)
1	651.40	0.90	53.30	28.30
5	652.50	1.70	76.80	38.70
10	653.10	2.30	92.20	44.40
50	653.70	2.80	126.80	93.50
100	653.90	3.10	143.80	117.30

Due to the proposed pond having a water surface greater than the adjacent off-site area A-1, drainage from this area will be diverted around the pond using a v-ditch. This diversion ditch is studied in more detail in a later section.

Ultimate (Future) Conditions:

Ultimate conditions within the watershed were simulated by taking the with-project model and increasing the percent impervious cover within the open spaces with areas A-1, A-2, A-3, a-7, and A-9. Lag times, routing characteristics, and other parameters were left unchanged from proposed conditions..

The following table summarizes the percent impervious versus land use:

Table 8, Future Land Use vs. Percent Impervious

Future Land Use Category	Percent Impervious
Single Family	61
Low Density Residential	65
General Commercial / Neighborhood Commercial	96
Institutional	96
Infrastructure	96

Table 9 summarizes the ultimate peak discharges.

Table 9, Ultimate (Future) Conditions Peak Discharge

Location	HMS Node	Q1 cfs	Q5 cfs	Q10 cfs	Q50 cfs	Q100 cfs
Discharge from Stallion Pointe Ph. 1	Pond-4	21	33	41	65	85
Combined flow to Proposed Pond	J_4-6	54	78	93	128	145
Discharge from Proposed Pond	Pond-6	29	39	45	95	118
Discharge from Project Site	Jct_8-2	50	70	83	135	169
Peak Outfall Channel Discharge	Jct_Channel	94	143	171	250	306
Zone of Influence	ZOI	167	249	297	410	489

The 100-year ultimate flow at the outfall channel was used to design the outfall channel.

Interconnected Pond Analysis –

HEC-HMS is an excellent model for analyzing ponds as long as the pool elevation of downstream ponds has negligible impact on the tailwater of any upstream ponds or intervening control structures. The proposed Crimson Ridge pond has the potential of impacting the existing Stallion Pointe pond, therefore a separate PondPack model was developed. PondPack was chosen as it allows for analysis of interconnected ponds and will adjust stage versus discharge caused by downstream conditions that cannot be determined by direct analysis in HMS.

The HMS model was used to provide the starting drainage information. The pond control structure for Stallion Points was input using as-built data. The control structure for Crimson Ridge was input from the proposed plans. An intermediate structure representing the proposed 8x3 RCB conveying flow between the existing and proposed ponds was analyzed as a pond, with the elevation versus storage area based on the proposed catch basin to be located just downstream of the Stallion Pointe pond. This configuration was run for the proposed 1-year through 100-year events.

Results of the interconnected pond analysis places the 100-year water surface of the 8x3 RCB and catch basin below the flowline of the 5x2 culvert acting as the primary spillway for Stallion Pointe, therefore the new pond does not influence the tailwater from the existing pond for the 1-year through 100-year conditions. The results of the interconnected model are included in **Attachment D**.

Outfall Channel Hydraulics –

The proposed outfall channel between Wichita Street was analyzed using HEC-RAS version 5.0.3. The channel consists of a 30-foot bottom with 4:1 earthen side slopes. The channel longitudinal slope was set at 0.30-percent to tie-in to the existing grades at the ZOI. The proposed bottom has a 12:1 slope as shown in the City of Fort Worth 2015 iSWM Criteria Manual. Maximum channel depth was set to 3.58 feet. An eight-foot wide concrete pilot channel is used to convey low flows and allow for easier channel maintenance. The proposed channel was run under two scenarios: with overgrown banks ($n = 0.05$, for freeboard check) and clean well-kept banks ($n = 0.035$, for velocity check).

The 100-year runoff for ultimate, fully developed conditions was used to design the outfall channel.

The drainage area of receiving stream (Stream VC-5) is 2.83 square miles near the ZOI, or a ratio of 17:1 to the overall area above the ZOI. From the NCTCOG and USACE recommendations for analysis of coincident peak event, a 50-year return event in Stream VC-5 will be used for the minimum starting water surface elevation. A check of the existing FEMA FIS water surface profiles for Stream VC-5 shows that the 50-year water surface elevation is approximately 644.3 near the abandoned railroad crossing. Cross-sections were cut to model the existing ditch adjacent to the toe of the abandoned railroad embankment and draining to Stream VC-5. A starting friction slope of 0.00556 ft/ft was used for the existing ditch at the confluence of the unnamed tributary with VC-5.

The computed starting water surface at RS -(8+40) is 644.54 feet for the ultimate 100-year event for clean and overgrown conditions. A summary of the RAS analysis is included in **Attachment E**. Ras schematic and typical section shown in **Exhibit 11**. The downstream existing ditch draining to Stream VC-5 is shown in **Exhibit 12**.

Table 9, Ultimate 100-Year Hec-Ras Summary

Sta.	Clean Channel ($n = 0.035$)				Overgrown Channel ($n = 0.035$)				Difference			
	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)
1025	306	651.45	2.38	4.80	306	651.63	2.56	4.31	0	0.18	0.18	-0.49
1000	306	651.38	2.39	4.78	306	651.55	2.56	4.30	0	0.17	0.17	-0.48
960	306	651.26	2.39	4.78	306	651.43	2.56	4.30	0	0.17	0.17	-0.48
940	306	651.20	2.39	4.78	306	651.37	2.56	4.30	0	0.17	0.17	-0.48
900	306	651.08	2.39	4.78	306	651.25	2.56	4.30	0	0.17	0.17	-0.48
850	306	650.93	2.39	4.78	306	651.10	2.56	4.30	0	0.17	0.17	-0.48
840	306	650.90	2.39	4.78	306	651.07	2.56	4.30	0	0.17	0.17	-0.48
820	306	650.84	2.39	4.78	306	651.01	2.56	4.30	0	0.17	0.17	-0.48
800	306	650.78	2.39	4.78	306	650.95	2.56	4.30	0	0.17	0.17	-0.48
780	306	650.72	2.39	4.78	306	650.89	2.56	4.30	0	0.17	0.17	-0.48
750	306	650.63	2.39	4.78	306	650.80	2.56	4.30	0	0.17	0.17	-0.48

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Sta.	Clean Channel (n = 0.035)				Overgrown Channel (n = 0.035)				Difference			
	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)
700	306	650.48	2.39	4.78	306	650.65	2.56	4.30	0	0.17	0.17	-0.48
650	306	650.33	2.39	4.78	306	650.50	2.56	4.30	0	0.17	0.17	-0.48
600	306	650.18	2.39	4.78	306	650.35	2.56	4.31	0	0.17	0.17	-0.47
550	306	650.03	2.39	4.78	306	650.20	2.56	4.31	0	0.17	0.17	-0.47
500	306	649.88	2.39	4.78	306	650.05	2.56	4.31	0	0.17	0.17	-0.47
450	306	649.73	2.39	4.78	306	649.89	2.55	4.32	0	0.16	0.16	-0.46
400	306	649.58	2.39	4.79	306	649.74	2.55	4.32	0	0.16	0.16	-0.47
350	306	649.42	2.38	4.79	306	649.59	2.55	4.33	0	0.17	0.17	-0.46
300	306	649.27	2.38	4.79	306	649.43	2.54	4.35	0	0.16	0.16	-0.44
250	306	649.12	2.38	4.80	306	649.27	2.53	4.37	0	0.15	0.15	-0.43
200	306	648.96	2.37	4.82	306	649.11	2.52	4.41	0	0.15	0.15	-0.41
150	306	648.81	2.37	4.84	306	648.94	2.50	4.46	0	0.13	0.13	-0.38
140	306	648.78	2.37	4.84	306	648.90	2.49	4.47	0	0.12	0.12	-0.37
120	306	648.71	2.36	4.86	306	648.83	2.48	4.50	0	0.12	0.12	-0.36
100	306	648.65	2.36	4.87	306	648.76	2.47	4.54	0	0.11	0.11	-0.33
80	306	648.58	2.35	4.89	306	648.69	2.46	4.58	0	0.11	0.11	-0.31
50	306	648.47	2.33	4.96	306	648.56	2.42	4.68	0	0.09	0.09	-0.28
0	306	647.94	1.95	6.48	306	647.94	1.95	6.48	0	0.00	0.00	0.00
-130	306	646.53	1.64	1.85	306	646.53	1.64	1.85	0	0.00	0.00	0.00
-281	306	646.00	2.10	2.12	306	646.00	2.10	2.12	0	0.00	0.00	0.00
-481	306	645.08	2.93	3.04	306	645.08	2.93	3.04	0	0.00	0.00	0.00
-612	306	644.77	2.93	1.83	306	644.77	2.93	1.83	0	0.00	0.00	0.00
-710	306	644.64	3.96	1.73	306	644.64	3.96	1.73	0	0.00	0.00	0.00
-840	306	644.54	5.62	1.43	306	644.54	5.62	1.43	0	0.00	0.00	0.00

Note: Sections -(1+30) thru -(8+40) are for the existing channel draining to Stream VC-5 downstream of the project limits.

The maximum depth of flow in the proposed channel is 2.56 feet. As the channel depth is 3.58 feet, the channel meets the required 1-foot of freeboard over the 100-year storm under the City iSWM criteria. Under clean conditions, the maximum channel velocity is 6.48 fps at RS 0.00, which is considered erosive. Protection riprap needed will be for the storm drain outfall at Wichita Street and at the outfall channel discharge to the existing receiving ditch.

Currently, the maximum velocity is the connection at the Wichita Street storm drain (6.6 fps). Using the Gregory method, the overall minimum riprap thickness should be 12-inches, with a 6-inch bedding layer and/or a woven geotextile underneath the rock. Backup calculations for HEC-RAS and riprap sizing are attached.

On-Site Storm Drain System –

The on-site storm drain system, including the storm drain within Wichita Street, have been designed following the City of Fort Worth Stormwater Criteria Manual, published September 2015. Underground storm drains were designed for ultimate 100-year conditions. Underground storm drainage was designed using the Rational Method. Please see attached plans for storm drain design, calculations, and details.

Downstream Assessment –

As the proposed project will disturb approximately 18.35 acres out of 106.8 acres above the ZOI, the ratio of the area above the ZOI to the disturbed area is 5.82:1, therefore a separate downstream assessment was run for the receiving Stream VC-5. As documented in a separate downstream assessment (see **Attachment F**), the proposed project will not negatively impact Stream VC-5 for the 100-year return event.

Temporary Ditches –

As mentioned in a previous discussion for the proposed pond, the adjacent area A1 to the west cannot drain to the proposed pond, requiring a diversion to a point below the pond. In order to minimize impacts to the vacant tract comprising area A1, an earthen ditch will be required along the property line. The peak discharge for Ditch 1 was determined using the Rational Method, using a C value representing the current conditions, undeveloped open space of 0.30. The time of Concentration was determined using the NRCS methodology and was determined to be approximately 26 minutes. Calculations are included on **Exhibit 13**.

As shown on **Exhibit 13**, the drainage area to be diverted measures 4.99 acres and has a peak 100-year discharge of 9.3 cfs. The proposed ditch will be an earthen v-ditch with 4:1 side slopes, and a longitudinal slope of 0.39-percent. Bentley FlowMaster was used to analyze the ditch as the peak discharge is less than 10 cfs. The channel will begin near the northwest corner of the pond on the adjacent tract and extend approximately 500 feet along the boundary adjacent to the proposed pond and turn southeast to drain following the natural flow direction. The maximum depth of flow is 1.3 feet ($n = 0.050$), and the peak velocity is 1.79 fps ($n = 0.035$). The ditch will be contained in a private easement and it is anticipated that the ditch will be modified or replaced when the adjacent tract is developed.

A second earthen ditch will be placed along the northern berm for the proposed outfall channel discussed earlier. This ditch will capture existing runoff from Area A-2 which cannot otherwise

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be collected in the outfall channel. An existing C of 0.30 was used representing undeveloped open space. The computed Tc for the area was determined to be in excess of the maximum allowable time of 30 minutes, therefore the maximum was used. This ditch will collect runoff from approximately 22.49 acres with a peak discharge of 38.9 cfs. The ditch will have a v-section with 4:1 side slopes. The ditch will run parallel to and north of the outfall channel between Stations 0+00 and 7+50 and connect with the existing ditch below Station 0+00. This ditch was analyzed using HEC-RAS for clean and overgrown channel conditions, using the existing ditch draining to Stream VC-5 below station 0+00 to set the starting conditions. The maximum computed depth of flow is 2.28 feet (100-year, $n = 0.050$) with a peak velocity of 2.94 fps (10-year, $n = 0.035$). It is anticipated that this ditch will be removed once area A-2 develops and all runoff drains to the outfall ditch.

Calculations for the two temporary ditches is included in **Attachment G**.

Conclusions and Recommendation –

The proposed pond will reduce the with-project peak discharge below pre-project conditions for the proposed Crimson Ridge development for the 5-year through 100-year storm events. The 12 cfs increase for the 1-year with-project storm is minor and will not adversely affect the existing well pads below the ZOI.

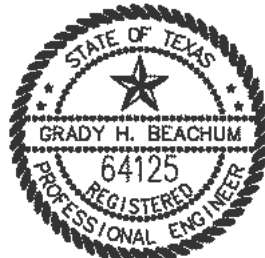
The proposed pond will require an outfall channel to the ZOI. The proposed channel will be in accordance with City of Fort Worth standards and have a concrete pilot channel. The channel is sized to carry future flows from the project site as well as adjacent drainage areas. The outfall channel will connect with the existing ditch located near the toe of the existing abandoned railroad embankment.

Temporary ditches will be required to handle flows from portions of off-site areas that cannot otherwise be drained by the proposed pond or outfall channel due to existing grades. The temporary ditches are sized to convey the existing 100-year runoff, with the expectation that future conditions will necessitate replacement of the ditches with either underground drainage Facilities or improved channels as necessary.

A downstream assessment was prepared for Stream VC-5 which shows no negative impacts to the receiving stream.

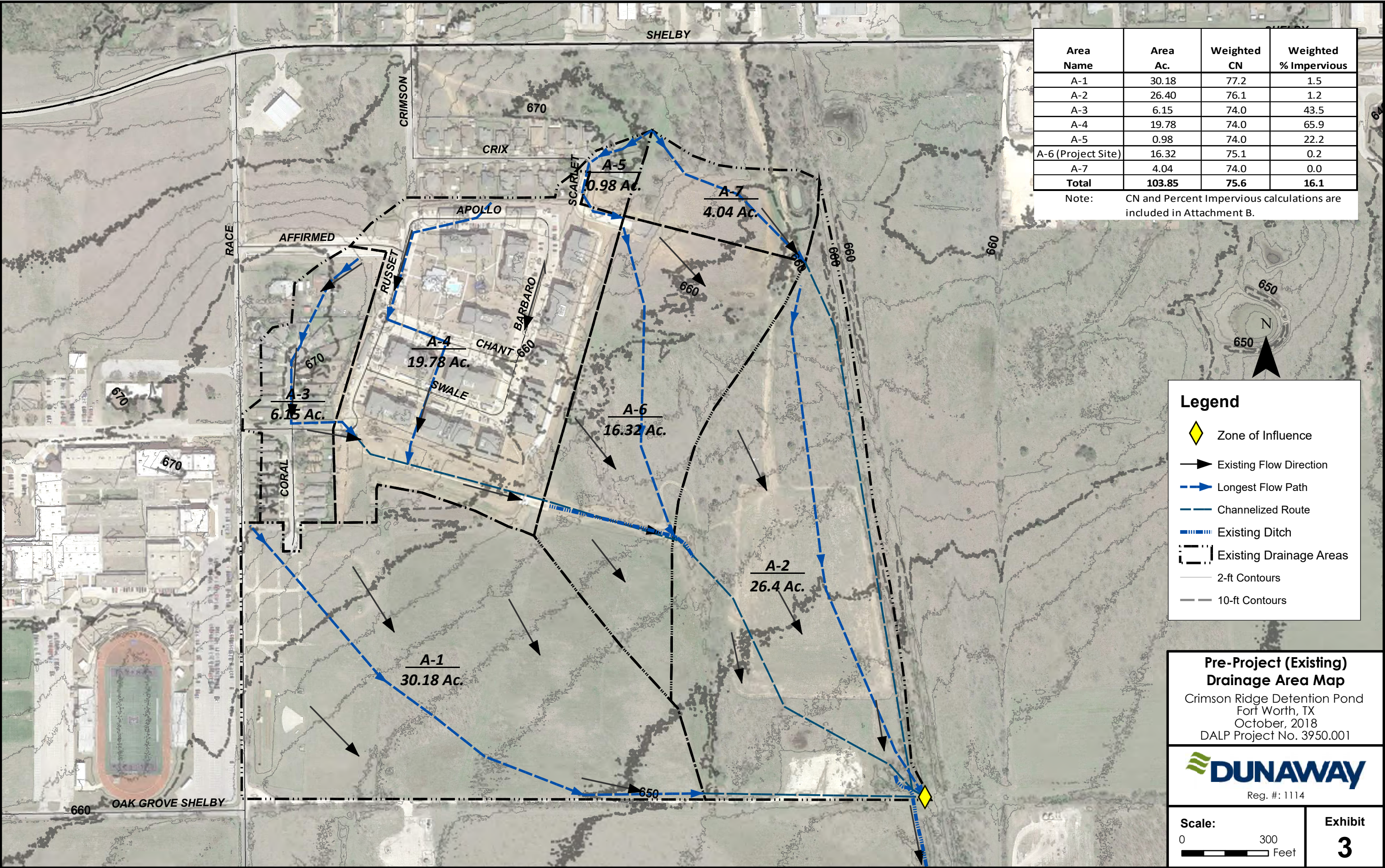
We therefore recommend that the iSWM plans, including storm drainage and pond be accepted. Exhibits, Structure sketches, and HMS models are attached.

Grady Beachum
4-3-2019



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Area Name	Area Ac.	Weighted CN	Weighted % Impervious
A-1	30.18	77.2	1.5
A-2	26.40	76.1	1.2
A-3	6.15	74.0	43.5
A-4	19.78	74.0	65.9
A-5	0.98	74.0	22.2
A-6 (Project Site)	16.32	75.1	0.2
A-7	4.04	74.0	0.0
Total	103.85	75.6	16.1

Note: CN and Percent Impervious calculations are included in Attachment B.

Legend

Zone of Influence

Existing Flow Direction

Longest Flow Path

Channelized Route

Existing Ditch

Existing Drainage Areas

2-ft Contours

10-ft Contours

**Pre-Project (Existing)
Drainage Area Map**
Crimson Ridge Detention Pond
Fort Worth, TX
October, 2018
DALP Project No. 3950.001

Reg. #: 1114

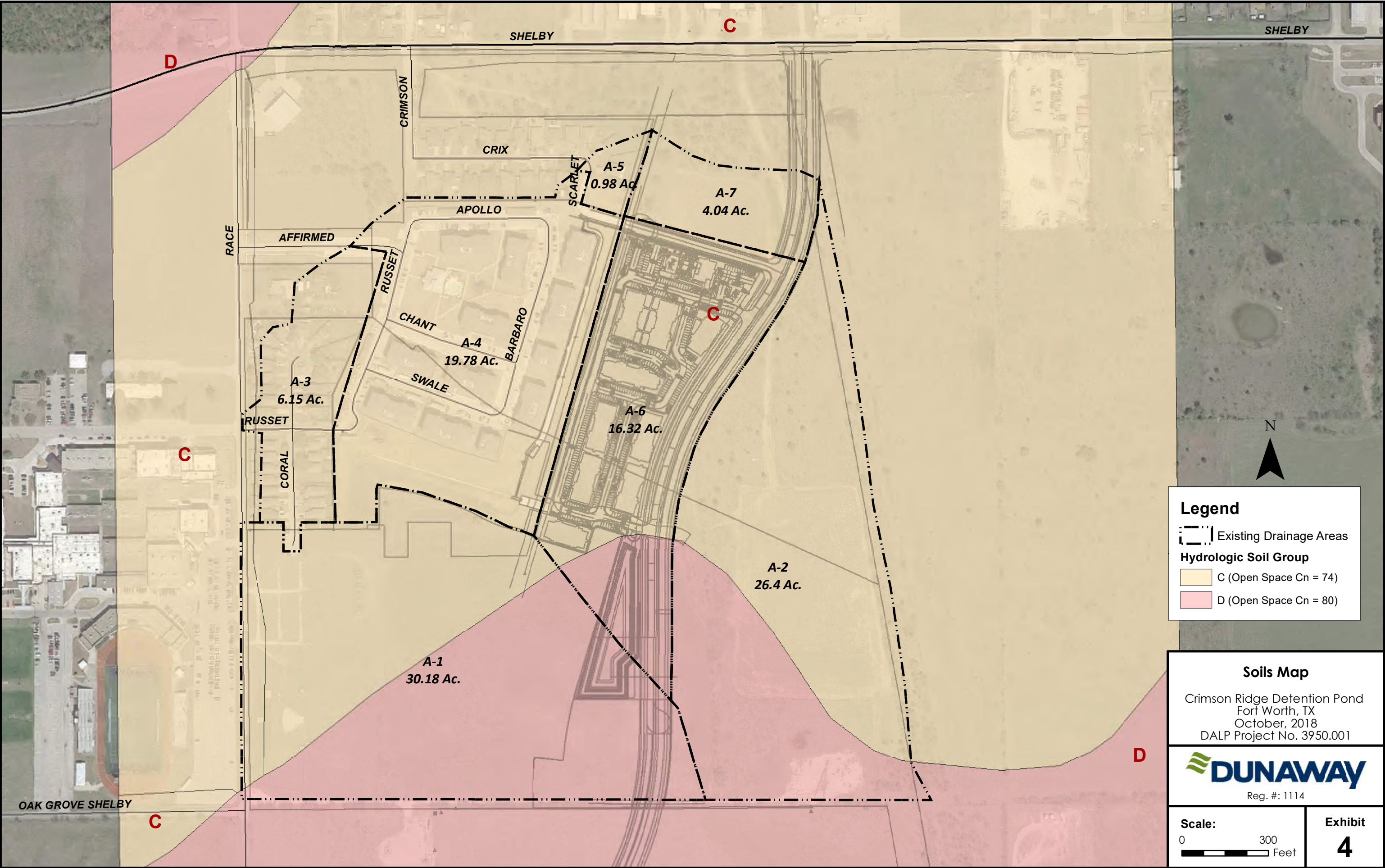
Scale:

0300

Feet

Exhibit

3



Legend

Existing Drainage Areas

Hydrologic Soil Group

C (Open Space Cn = 74)

D (Open Space Cn = 80)

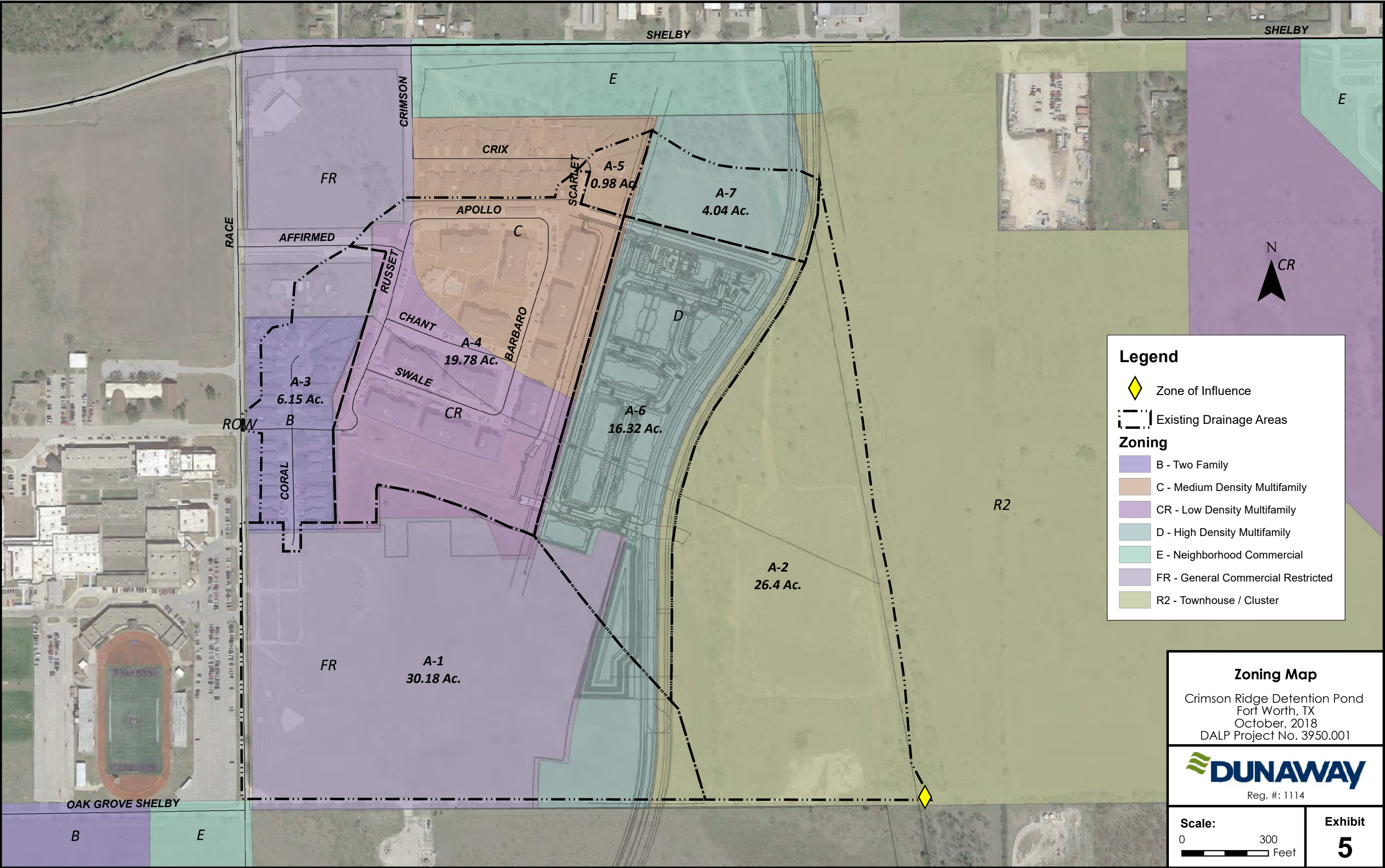
Soils Map

Crimson Ridge Detention Pond
Fort Worth, TX
October, 2018
DALP Project No. 3950.001

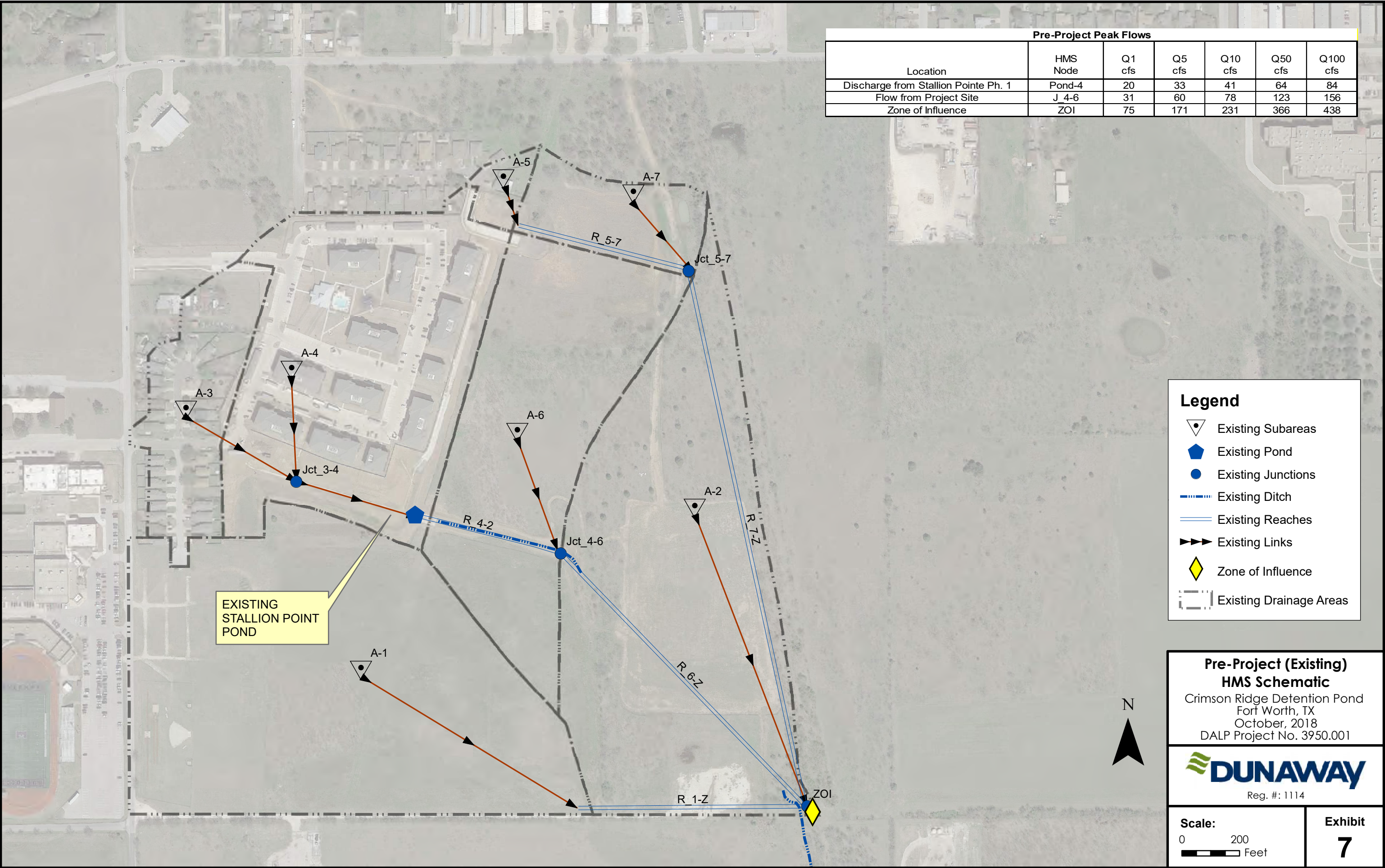
DUNAWAY

Reg. #: 1114

<p>Scale:</p> <p>0 300 Feet</p>	<p>Exhibit</p> <p>4</p>
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Pre-Project Peak Flows						
Location	HMS Node	Q1 cfs	Q5 cfs	Q10 cfs	Q50 cfs	Q100 cfs
Discharge from Stallion Pointe Ph. 1	Pond-4	20	33	41	64	84
Flow from Project Site	J 4-6	31	60	78	123	156
Zone of Influence	ZOI	75	171	231	366	438

Legend

Existing Subareas

Existing Pond

Existing Junctions

Existing Ditch

Existing Reaches

Existing Links

Zone of Influence

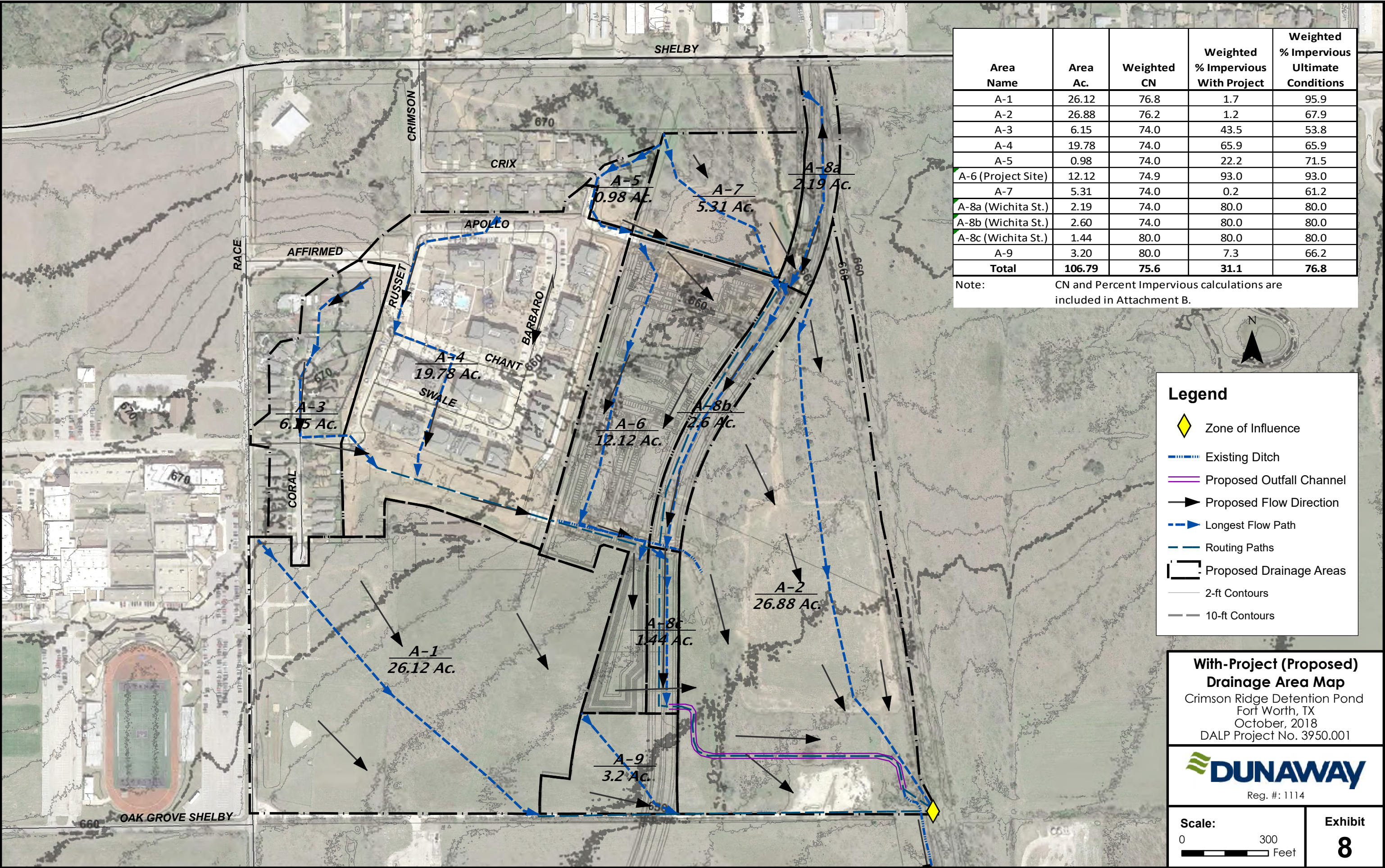
Existing Drainage Areas

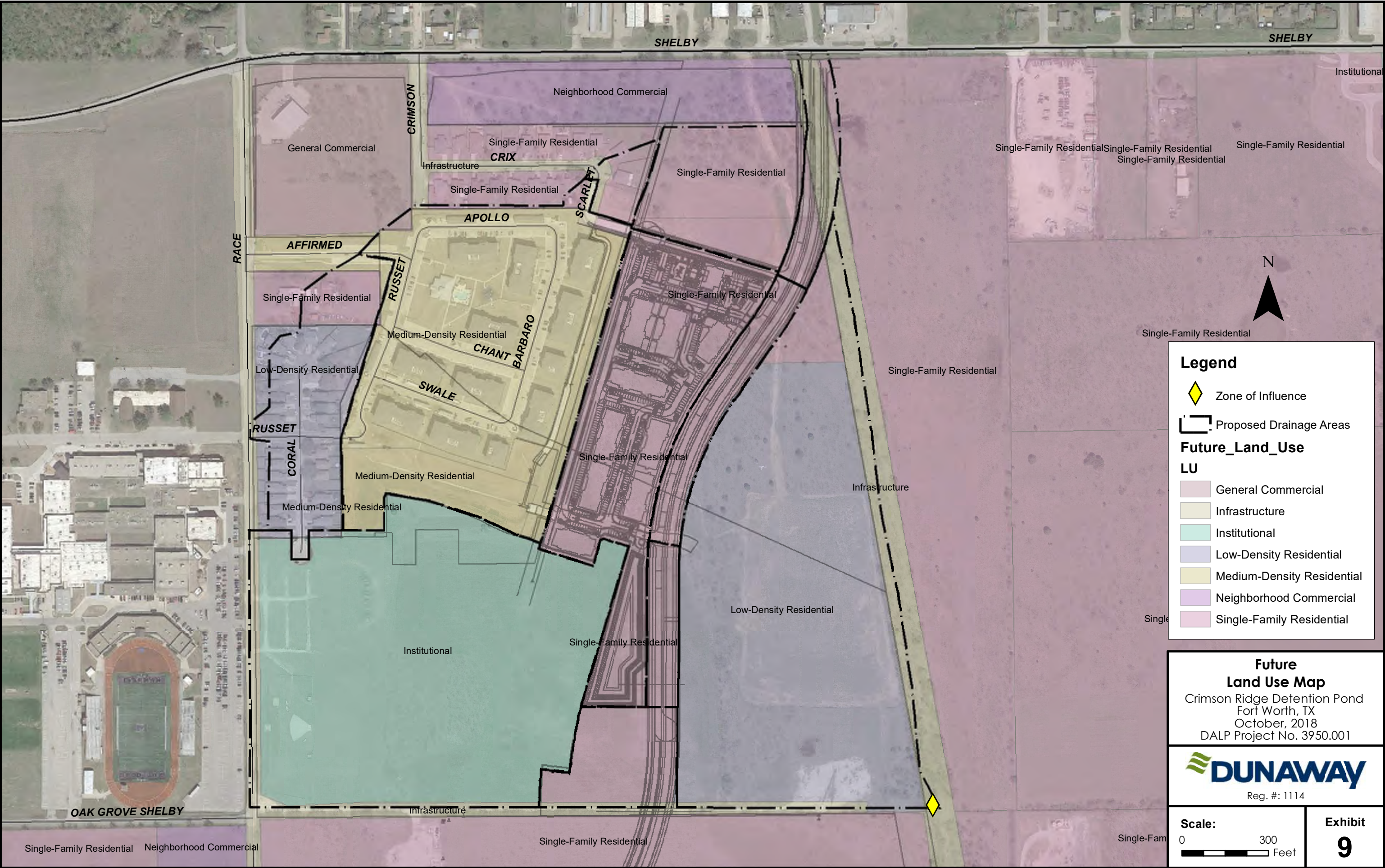
**Pre-Project (Existing)
HMS Schematic**
Crimson Ridge Detention Pond
Fort Worth, TX
October, 2018
DALP Project No. 3950.001

Reg. #: 1114

Scale:
0 200
Feet

Exhibit
7





Legend

Zone of Influence

Proposed Drainage Areas

Future_Land_Use

LU

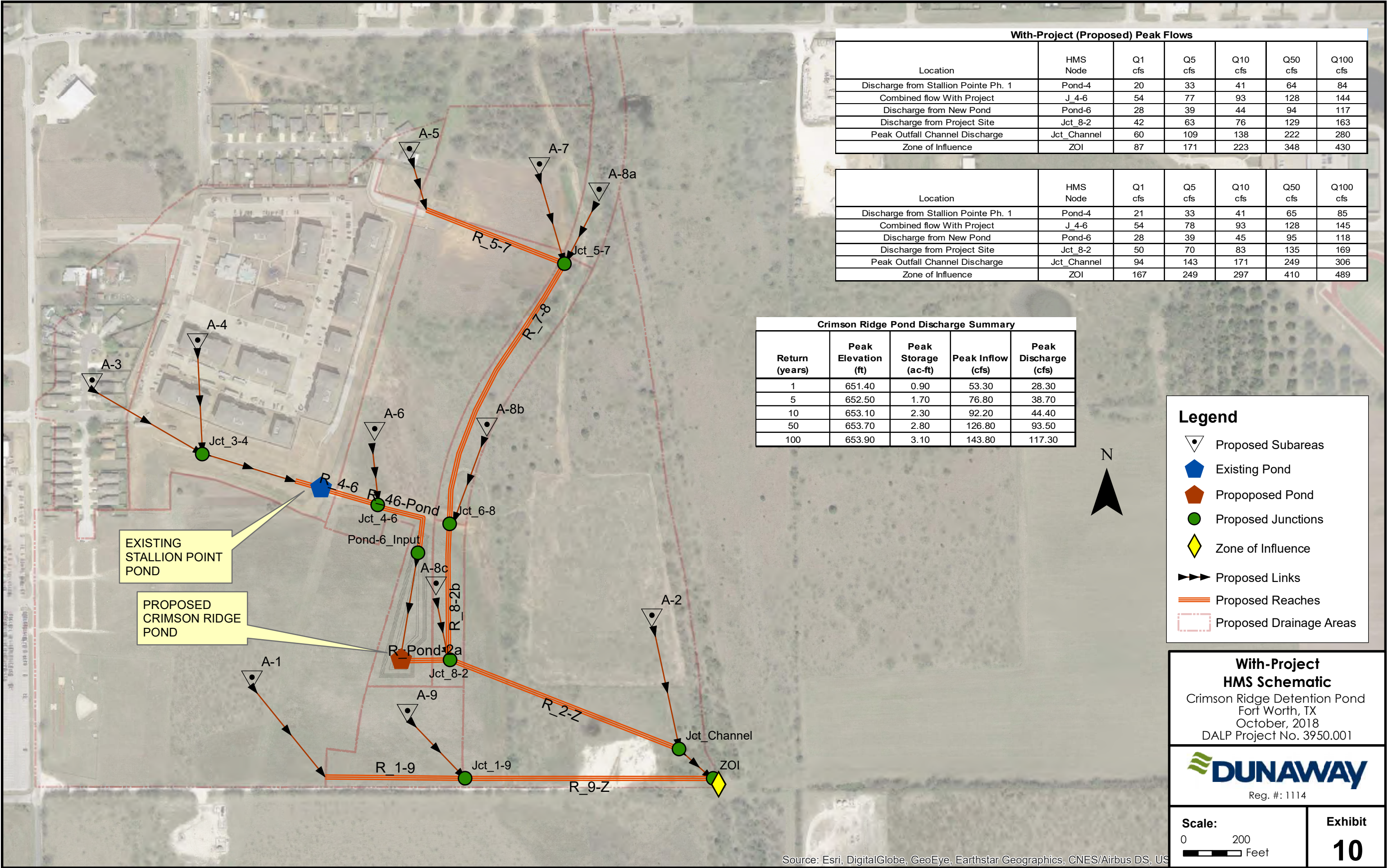
- General Commercial
- Infrastructure
- Institutional
- Low-Density Residential
- Medium-Density Residential
- Neighborhood Commercial
- Single-Family Residential

Future Land Use Map
Crimson Ridge Detention Pond
Fort Worth, TX
October, 2018
DALP Project No. 3950.001

DUNAWAY
Reg. #: 1114

Scale:
0 300
Feet

Exhibit
9



With-Project (Proposed) Peak Flows						
Location	HMS Node	Q1 cfs	Q5 cfs	Q10 cfs	Q50 cfs	Q100 cfs
Discharge from Stallion Pointe Ph. 1	Pond-4	20	33	41	64	84
Combined flow With Project	J 4-6	54	77	93	128	144
Discharge from New Pond	Pond-6	28	39	44	94	117
Discharge from Project Site	Jct_8-2	42	63	76	129	163
Peak Outfall Channel Discharge	Jct_Channel	60	109	138	222	280
Zone of Influence	ZOI	87	171	223	348	430

Location	HMS Node	Q1 cfs	Q5 cfs	Q10 cfs	Q50 cfs	Q100 cfs
Discharge from Stallion Pointe Ph. 1	Pond-4	21	33	41	65	85
Combined flow With Project	J 4-6	54	78	93	128	145
Discharge from New Pond	Pond-6	28	39	45	95	118
Discharge from Project Site	Jct_8-2	50	70	83	135	169
Peak Outfall Channel Discharge	Jct_Channel	94	143	171	249	306
Zone of Influence	ZOI	167	249	297	410	489

Crimson Ridge Pond Discharge Summary				
Return (years)	Peak Elevation (ft)	Peak Storage (ac-ft)	Peak Inflow (cfs)	Peak Discharge (cfs)
1	651.40	0.90	53.30	28.30
5	652.50	1.70	76.80	38.70
10	653.10	2.30	92.20	44.40
50	653.70	2.80	126.80	93.50
100	653.90	3.10	143.80	117.30

Legend

Proposed Subareas

Existing Pond

Proposed Pond

Proposed Junctions

Zone of Influence

Proposed Links

Proposed Reaches

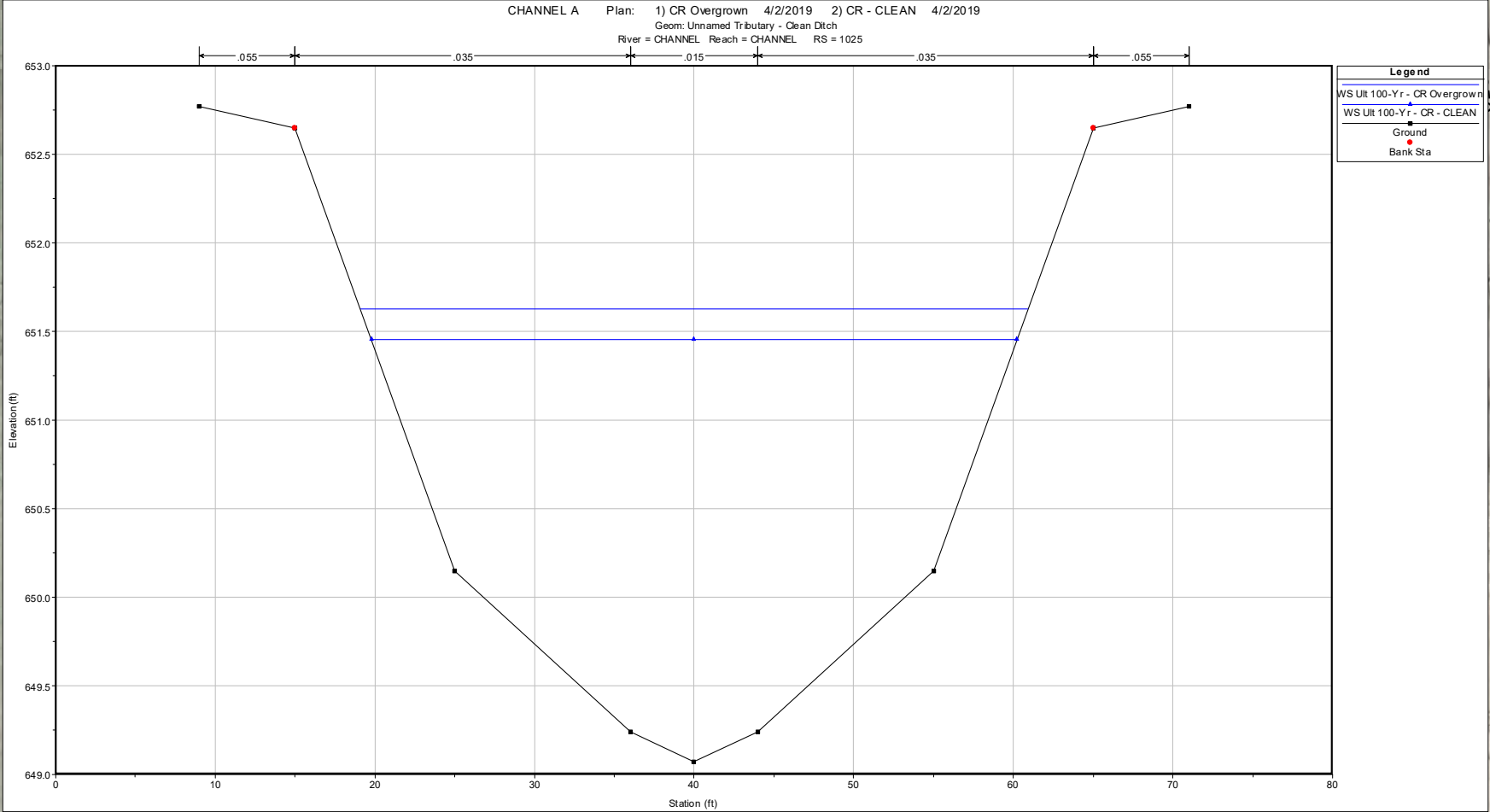
Proposed Drainage Areas

**With-Project
HMS Schematic**
Crimson Ridge Detention Pond
Fort Worth, TX
October, 2018
DALP Project No. 3950.001

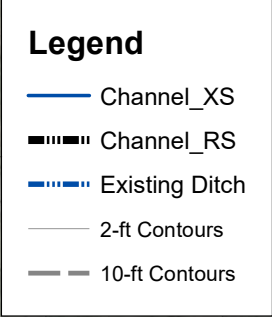
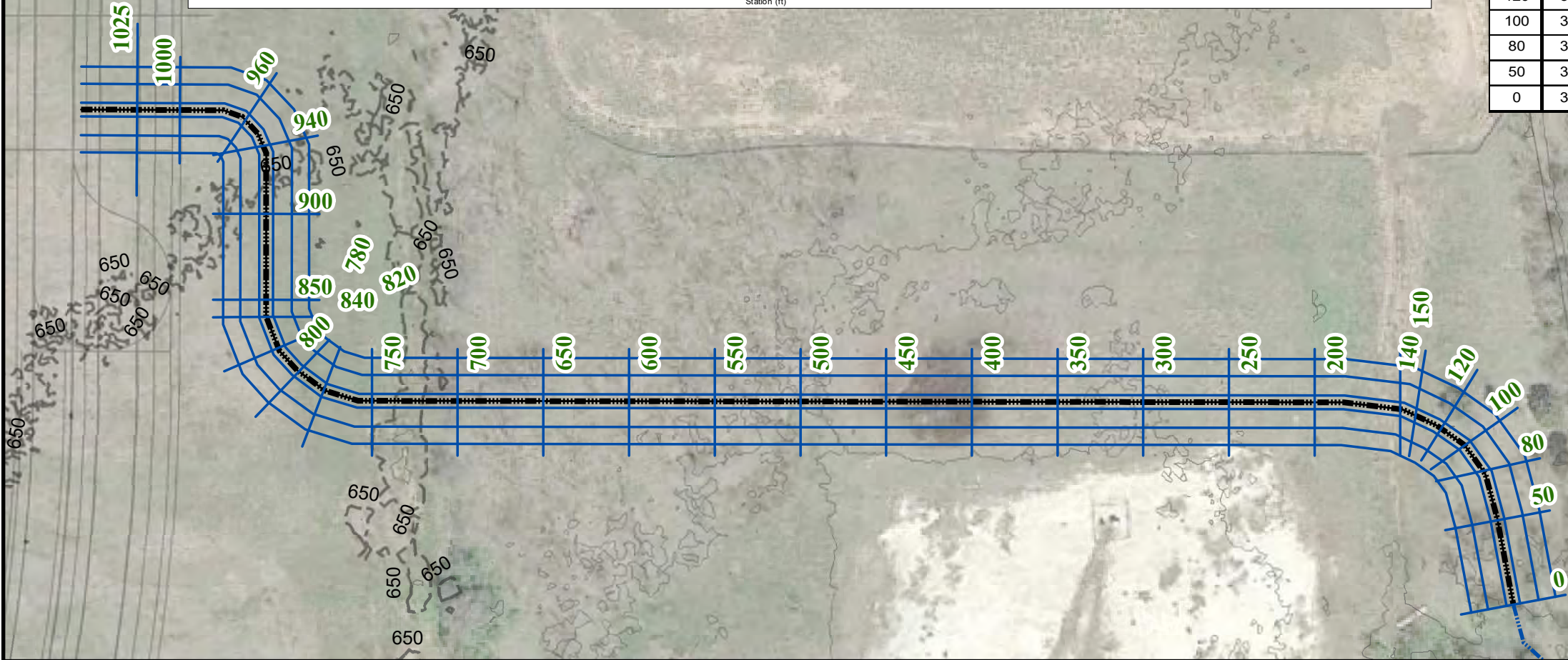
Reg. #: 1114

Scale:
0 200
Feet

Exhibit
10



Sta.	Clean Channel (n = 0.035)				Overgrown Channel (n = 0.05)			
	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)	Q (cfs)	W.S. (ft)	Depth (ft)	Vchan (fps)
1025	306	651.45	2.38	4.80	306	651.63	2.56	4.31
1000	306	651.38	2.39	4.78	306	651.55	2.56	4.30
960	306	651.26	2.39	4.78	306	651.43	2.56	4.30
940	306	651.20	2.39	4.78	306	651.37	2.56	4.30
900	306	651.08	2.39	4.78	306	651.25	2.56	4.30
850	306	650.93	2.39	4.78	306	651.10	2.56	4.30
840	306	650.90	2.39	4.78	306	651.07	2.56	4.30
820	306	650.84	2.39	4.78	306	651.01	2.56	4.30
800	306	650.78	2.39	4.78	306	650.95	2.56	4.30
780	306	650.72	2.39	4.78	306	650.89	2.56	4.30
750	306	650.63	2.39	4.78	306	650.80	2.56	4.30
700	306	650.48	2.39	4.78	306	650.65	2.56	4.30
650	306	650.33	2.39	4.78	306	650.50	2.56	4.30
600	306	650.18	2.39	4.78	306	650.35	2.56	4.31
550	306	650.03	2.39	4.78	306	650.20	2.56	4.31
500	306	649.88	2.39	4.78	306	650.05	2.56	4.31
450	306	649.73	2.39	4.78	306	649.89	2.55	4.32
400	306	649.58	2.39	4.79	306	649.74	2.55	4.32
350	306	649.42	2.38	4.79	306	649.59	2.55	4.33
300	306	649.27	2.38	4.79	306	649.43	2.54	4.35
250	306	649.12	2.38	4.80	306	649.27	2.53	4.37
200	306	648.96	2.37	4.82	306	649.11	2.52	4.41
150	306	648.81	2.37	4.84	306	648.94	2.50	4.46
140	306	648.78	2.37	4.84	306	648.90	2.49	4.47
120	306	648.71	2.36	4.86	306	648.83	2.48	4.50
100	306	648.65	2.36	4.87	306	648.76	2.47	4.54
80	306	648.58	2.35	4.89	306	648.69	2.46	4.58
50	306	648.47	2.33	4.96	306	648.56	2.42	4.68
0	306	647.94	1.95	6.48	306	647.94	1.95	6.48

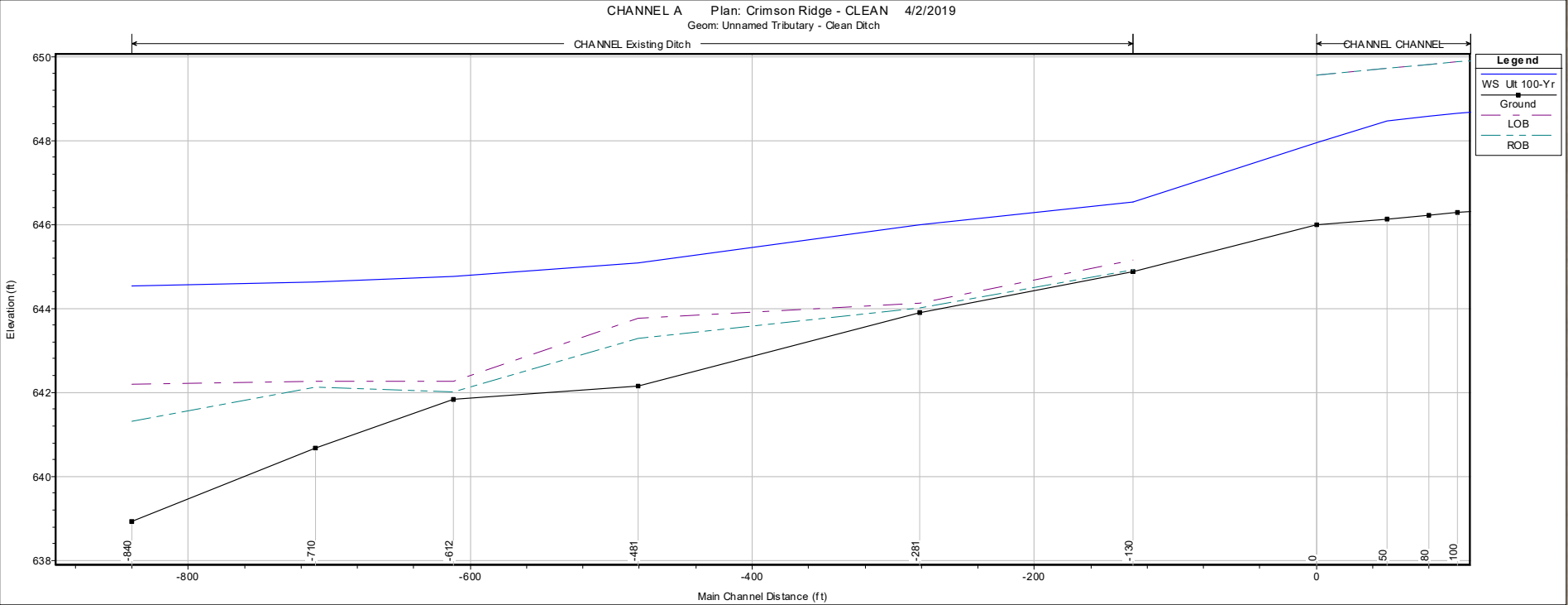
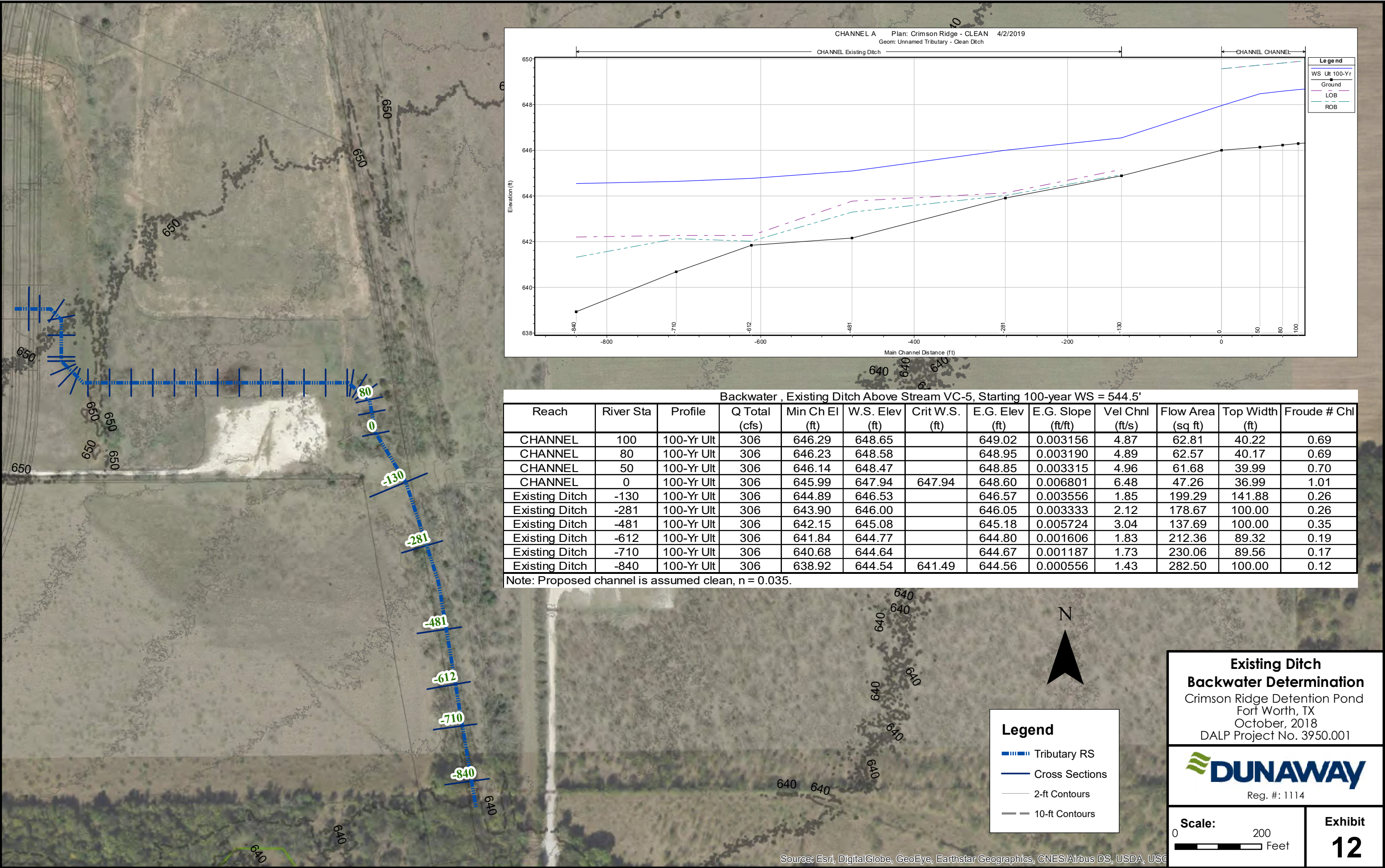


Outfall Channel
Crimson Ridge Detention Pond
Fort Worth, TX
October, 2018
DALP Project No. 3950.001

Reg. #: 1114

Scale: 0 80 Feet

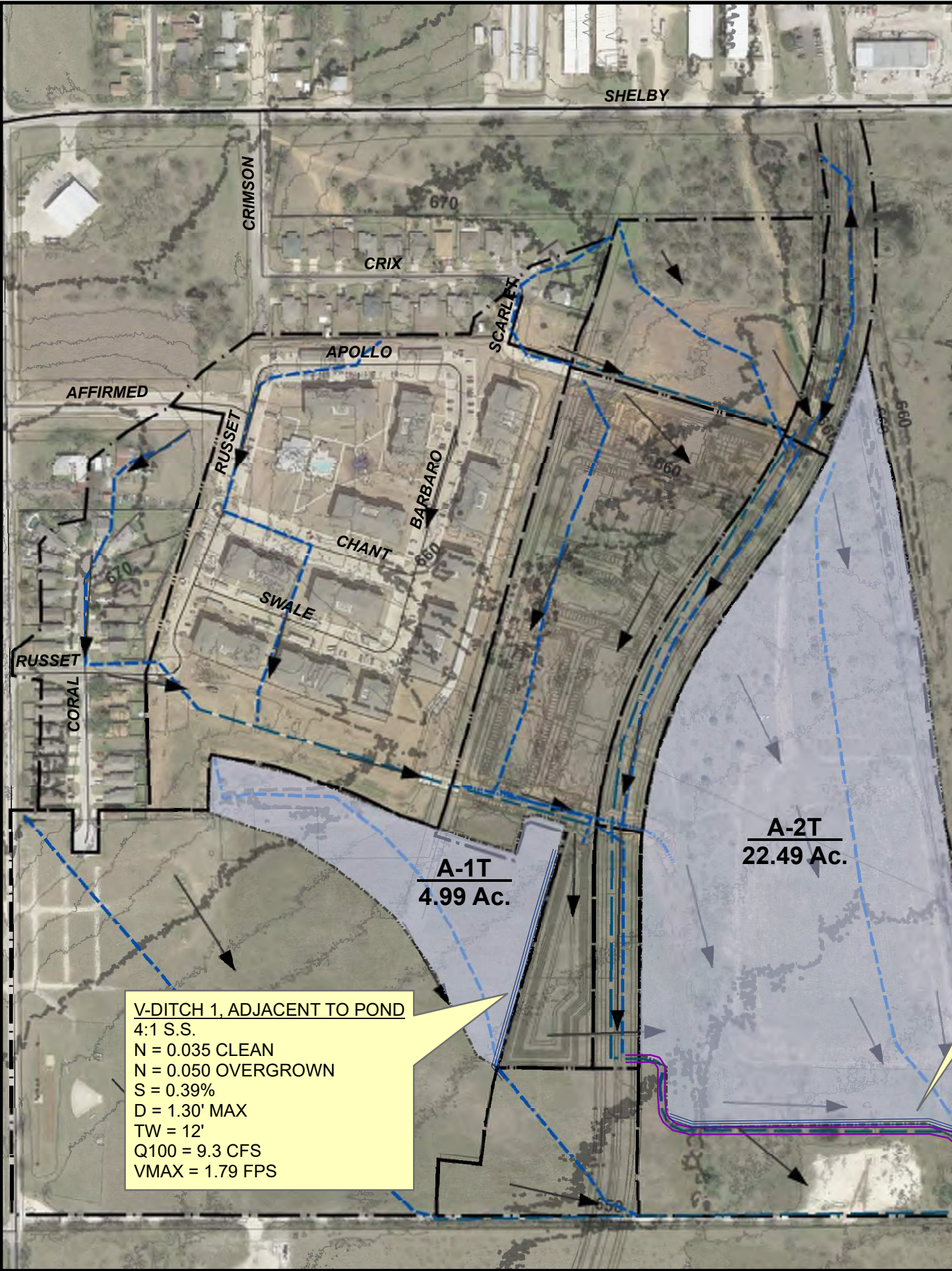
Exhibit
11



Backwater , Existing Ditch Above Stream VC-5, Starting 100-year WS = 544.5'

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
CHANNEL	100	100-Yr Ult	306	646.29	648.65		649.02	0.003156	4.87	62.81	40.22	0.69
CHANNEL	80	100-Yr Ult	306	646.23	648.58		648.95	0.003190	4.89	62.57	40.17	0.69
CHANNEL	50	100-Yr Ult	306	646.14	648.47		648.85	0.003315	4.96	61.68	39.99	0.70
CHANNEL	0	100-Yr Ult	306	645.99	647.94	647.94	648.60	0.006801	6.48	47.26	36.99	1.01
Existing Ditch	-130	100-Yr Ult	306	644.89	646.53		646.57	0.003556	1.85	199.29	141.88	0.26
Existing Ditch	-281	100-Yr Ult	306	643.90	646.00		646.05	0.003333	2.12	178.67	100.00	0.26
Existing Ditch	-481	100-Yr Ult	306	642.15	645.08		645.18	0.005724	3.04	137.69	100.00	0.35
Existing Ditch	-612	100-Yr Ult	306	641.84	644.77		644.80	0.001606	1.83	212.36	89.32	0.19
Existing Ditch	-710	100-Yr Ult	306	640.68	644.64		644.67	0.001187	1.73	230.06	89.56	0.17
Existing Ditch	-840	100-Yr Ult	306	638.92	644.54	641.49	644.56	0.000556	1.43	282.50	100.00	0.12

Note: Proposed channel is assumed clean, n = 0.035.



Determination of Time of Concentration by NRCS Velocity Method													
Area Name: A-1T Temporary Ditch						Pipes or Channels (Vee, Rectangular, Trapezoidal)							
Category	Surface Type or Description	Length ft	Point 1 elev. ft	Point 2 elev. ft	n	Daimeter in	Left Slope h:1	Bottom W ft	Depth ft	Right Slope h:1	Slope ft/ft	Velocity ft/s	Tn min
Overland, and Shallow flows													
Overland, To	Range (natural)	100	664	662	0.13						0.0200	0.195	8.53
Overland, To					0						0.0000	0.000	0.00
Shallow, Ts	Nearly Bare and Untilled	370	662	658	0.051						0.0108	1.036	5.95
Shallow, Ts	Nearly Bare and Untilled	660	658	652	0.051						0.0091	0.950	11.58
Shallow, Ts					0						0.0000	0.000	0.00
Lined Channels and Conduits													
Tch											0.0000	0.000	0.00
Tch											0.0000	0.000	0.00
Tch											0.0000	0.000	0.00
												Tc	26.06

Area Name: A2-T Temporary Ditch						Pipes or Channels (Vee, Rectangular, Trapezoidal)							
Category	Surface Type or Description	Length ft	Point 1 elev. ft	Point 2 elev. ft	n	Daimeter in	Left Slope h:1	Bottom W ft	Depth ft	Right Slope h:1	Slope ft/ft	Velocity ft/s	Tn min
Overland, and Shallow flows													
Overland, To	Range (natural)	100	658	657	0.13						0.0100	0.148	11.26
Overland, To					0						0.0000	0.000	0.00
Shallow, Ts	Nearly Bare and Untilled	800	657	652	0.051						0.0063	0.788	16.92
Shallow, Ts	Pavement and Small Upland Gullies	800	652	646	0.025						0.0075	1.760	7.57
Shallow, Ts					0						0.0000	0.000	0.00
Lined Channels and Conduits													
Tch											0.0000	0.000	0.00
Tch											0.0000	0.000	0.00
Tch											0.0000	0.000	0.00
												Tc	30.00

- STALLION RIDGE - TEMPORARY DITCH FLOWS										
RATIONAL METHOD RUNOFF CALCULATIONS										
AREA NAME	AREA (ac.)	Tc	C1 (BASE C)	I1 (in/hr)	Q1 (cfs)	I5 (in/hr)	Q5 (cfs)	I100 (in/hr)	Q100 (cfs)	COMMENTS
1	2	3	4	6	7	6	7	8	9	10
Runoff Data										
A-1T	4.99	26.06	0.30	2.40	3.60	3.68	5.50	6.20	9.28	Runoff to Temporary Ditch 1
A-2T	22.49	30.00	0.30	2.20	14.83	3.39	22.89	5.76	38.88	Runoff to Temporary Ditch 2

V-DITCH 1, ADJACENT TO POND
4:1 S.S.
N = 0.035 CLEAN
N = 0.050 OVERGROWN
S = 0.39%
D = 1.30' MAX
TW = 12'
Q100 = 9.3 CFS
VMAX = 1.79 FPS

V-DITCH 2, ADJACENT TO OUTFALL
4:1 S.S.
N = 0.035 CLEAN
N = 0.050 OVERGROWN
S = VARIES, 0.30% TYP.
D = 2.28' MAX
TW = 18.24'
Q100 = 38.9 CFS
VMAX = 2.94 FPS

Legend

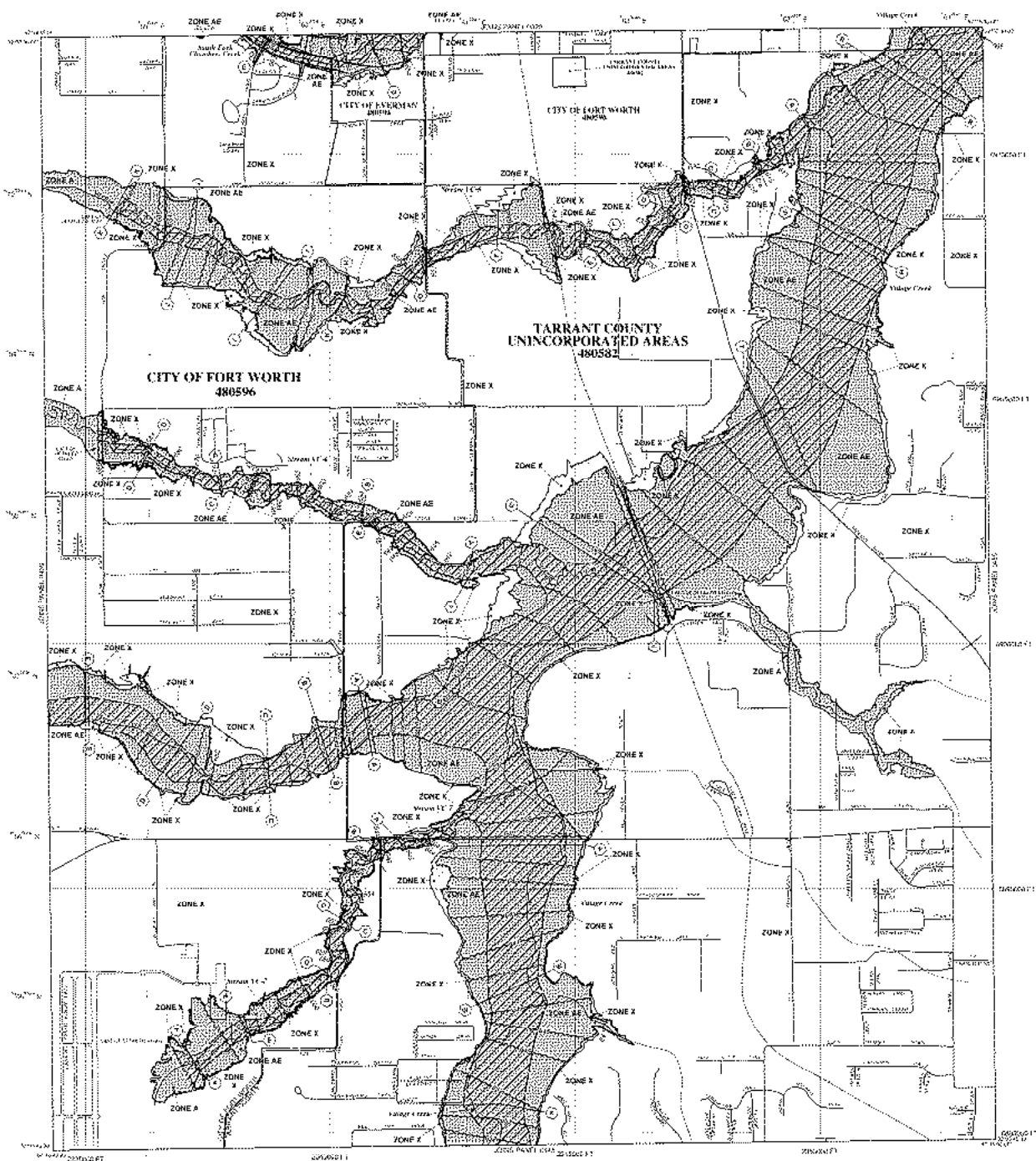
- Temporary Ditches
- Proposed Outfall Channel
- Temporary DA
- Zone of Influence
- Existing Ditch
- Proposed Flow Direction
- Longest Flow Path
- Routing Paths
- Proposed Drainage Areas
- 2-ft Contours
- 10-ft Contours
- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations

Temporary Ditches
Crimson Ridge Detention Pond
Fort Worth, TX
October, 2018
DALP Project No. 3950.001



Scale:
0 300
Feet

Exhibit
13

[illegible][illegible][illegible]

DWL RQDD PRRG-EPUGDHU)6WVWH















ff1



FHOG

4)637 75(6)55 57

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		LWK%RUFSWK =FCH\$ 2.5 9 \$ \$HODWRUJ,PRRG
26.52 26.5		\$DQDQ 800FHJPRRG-EPUG \$JHD/ R DQDQ FROFHIOIRRGZWKDHUDH G-SVKOHV/WKQQRQHRRW RU ZWKQULQ DJHD/R OHV/WKQQRQHVRDUEOHFCH;
		XWXUH800. WLRQ/\$DQD 800FHJPRRG-EPUG =FCH;
		\$JHDZWK\$G-HJPRRG\$WNGHWR HMH 6H RMVH =FCH;
		\$JHDZWKJPRRG\$WNGHWRHMH =FCH'
26.56		\$JHJR DQED PRRG-EPUG =FCH; (IHFWL YHJ
66.56		\$JHJR 800WHUEHGJPRRG-EPUG =FCH'
		800QD 80YHUW RU 8VRURJEU HMH LNH RU PRRGDDO
		8JRW 8FWLRQ/ZWK\$DQD 800FH DVHU 8JUDFH OHYDWLRQ
		8QDWD 7UDQFW %DHJPRRGPHDWLRQLQH %
		LEW R 8VXG
		-XULVLFWLRQ%800DUA
26.56		8QDWD 7UDQFW %DQD LQH
		8JRLQH%DQD LQH
		8JRUDBLFJ DVXUH
66.56		LJLWDD DWD\$DQD LQH
		RJLJLWDD DWD\$DQD LQH
		8055-G

§

74LVBSF80LHVZWKJPRRG-EPUG/IRU WKHXHR
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DFXUDR WDDQDUG/

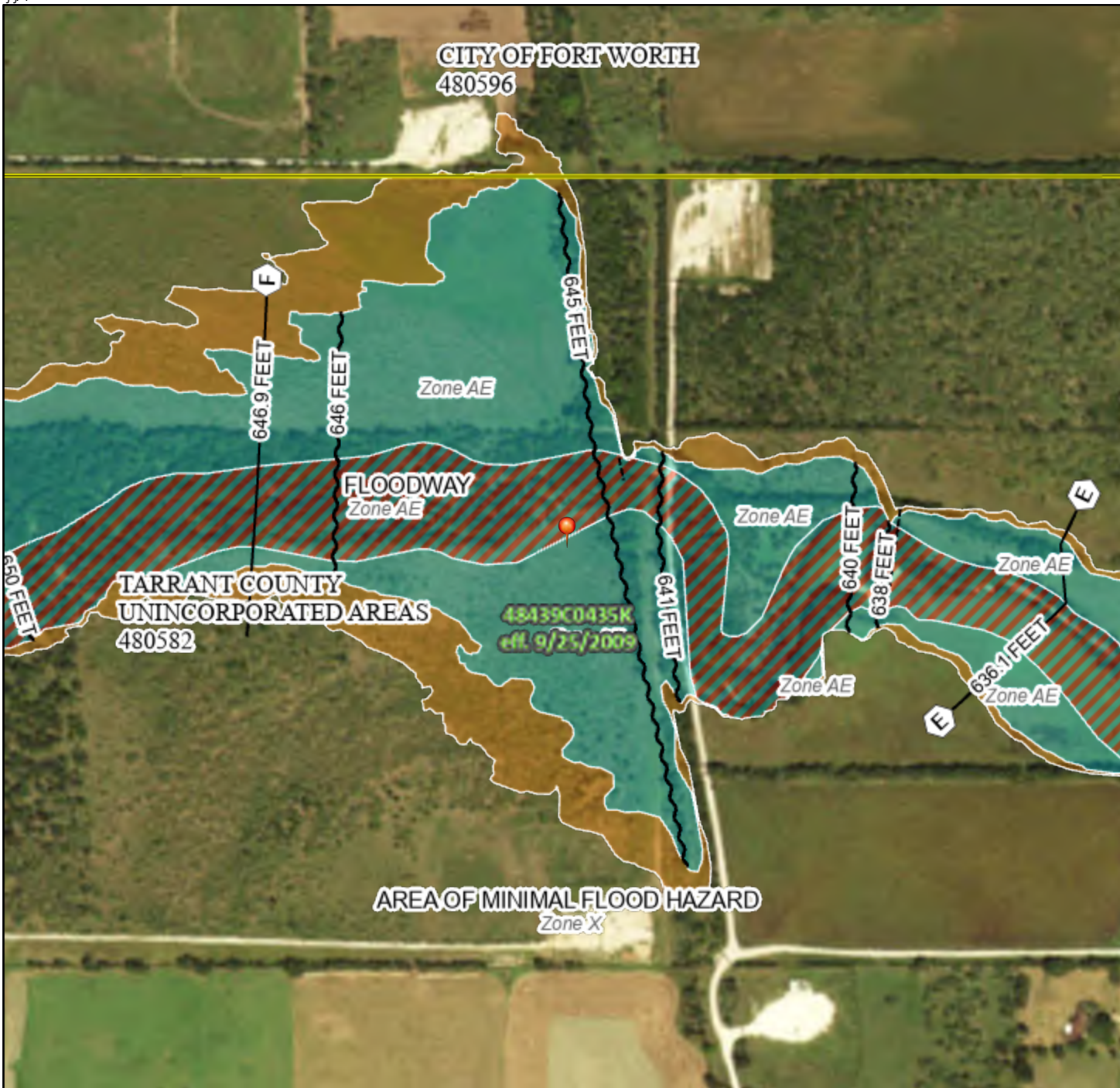
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WLR 74HJDDGHIHFWL YHLQRUBWLRQBFROFH RU
B88V8UWVHGGEQZGDVDRYU WLR

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)88QDQ Q8H DQDQ 800HFWL YHJGDVH D88H/IRU
X888G DQDQX88UQLJGDVH FROQV B88H/IRU
UHQDWRUJ888H/

DWL RQDD PRRG-EPUGDHU)6WVWH



ff1



FHOG

4)637 754(3(4)55 55

65.52
65.55

LWKRW %DHPRGPHDWLRQ %
-FCH\$ 9 \$
LWK%RUFSWK -FCH\$ 25-9 \$
\$KODWRU,PRGDD

26552
2655

\$1000 &100H)PRG-EPUG \$1HD/
R 10000 F100H)PRGZWKDUDH
G-BVKOHV/WKQRQHRRW RU ZWKDUDH
DUHD/R OHV/WKQRQHVRDUHEOHFCH;
XWUH&RQ,VLRLQ/\$1000
&100H)PRG-EPUG -FCH;
\$1HDZWK&G-HG)PRG\$1NGHWR
HMH &H RVH/ -FCH;
\$1HDZWK)PRG\$1NGHWRHMH -FCH'

26556

\$1H)R 10000 PRG-EPUG -FCH;
(1HFWLH/1
\$1H)R 10000 PRG-EPUG -FCH'
--- &10000 &10000 RU 10000
||||| HMH'LN RU 10000

26
2655

10000 &10000 PRG-EPUG
DHW 10000 PRG-EPUG
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%DHPRGPHDWLRQ%
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-XULVLVLRLQ%10000
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10000 PRG-EPUG

65.56

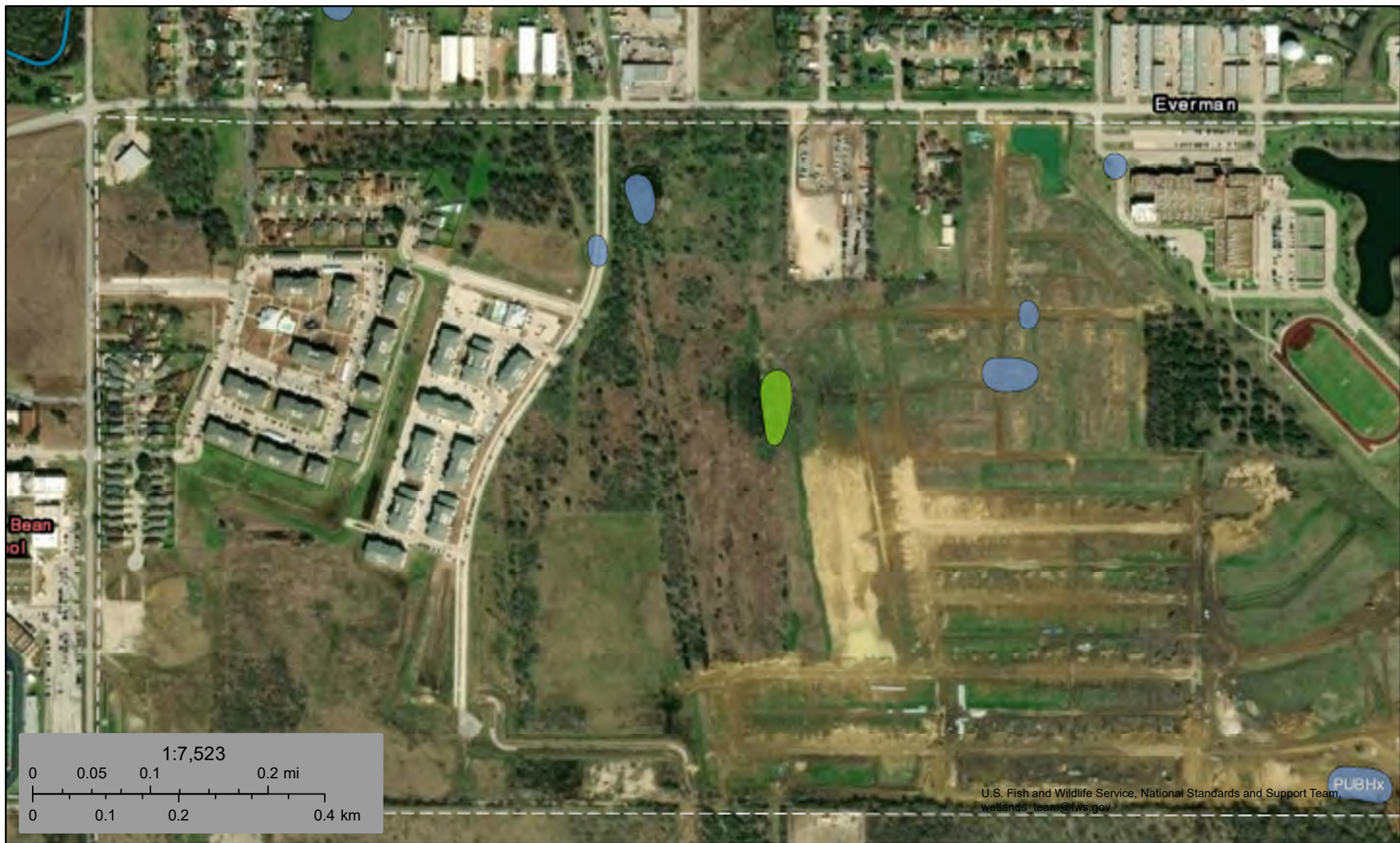
10000 PRG-EPUG
10000 PRG-EPUG
10000 PRG-EPUG

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DQSSURLBSH/DQSSURLBSH

74LVBSF10000/10000/10000/10000
GLJWDD 10000/10000/10000/10000
74HEDHBSV10000/10000/10000/10000
DQSSURLBSH/DQSSURLBSH









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May 6, 2024

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

APPENDIX F

SECTION 119 – FEE TABLES

TABLE NO. 1-A
NON-RESIDENTIAL REMODEL AND ACCESSORY BUILDING PERMIT FEES
INCLUDES FEES FOR NEW CONSTRUCTION WITH NO SQUARE FOOTAGE

TOTAL VALUATION	Permit Fee^{1, 2}	
\$0 to \$2,000.00	\$86.08	
>\$2,000.00 to \$25,000.00	(a) \$86.08 (b) \$17.21	(a) for first \$2,000 (b) for each additional \$1,000.00, or fraction thereof, to and including \$25,000.00
>\$25,000.00 to \$50,000.00	(a) \$482.17 (b) \$12.43	(a) for first \$25,000 (b) for each additional \$1,000.00, or fraction thereof, to and including \$50,000.00
>\$50,000.00 to \$100,000.00	(a) \$793.11 (b) \$8.60	(a) for first \$50,000 (b) for each additional \$1,000.00 or fraction thereof, to and including \$100,000.00
>\$100,000.00 to \$500,000.00	(a) \$1223.63 (b) \$6.68	(a) for first \$100,000 (b) for each additional \$1,000.00 or fraction thereof, to and including \$500,000.00
>\$500,000.00 to \$1,000,000.00	(a) \$3902.44 (b) \$5.73	(a) for the first \$500,000.00 (b) for each additional \$1,000.00 or fraction thereof, to and including \$1,000,000.00
>\$1,000,000.00	(a) \$6772.65 (b) \$3.81	(a) for the first \$1,000,000.00 (b) for each additional \$1,000.00 or fraction thereof

¹ Residential projects (one- and two-family dwellings, and townhouses regulated by the IRC, and their accessory structures):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

² Commercial projects (those not included in item 1 above):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 25% (0.25). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

TABLE 1-A-1
RESIDENTIAL REMODEL FEES
 (Based upon the number of trades required for the project)

Number of Trades	Minimum Permit Fee¹
1	\$100.00
2	\$200.00
3	\$300.00
4	\$400.00
5	\$500.00

- ¹ Residential projects (one- and two-family dwellings, and townhouses regulated by the IRC, and their accessory structures):
- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
 - ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
 - iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure. Work

TABLE No. 1-B

Building Permit Fee Schedule	
1. Permit Application Fee, Applicable to All Permit Types, Excluding Signs:	\$28.00
2. Paper Filing Fee:	\$28.00
3. Technology Fee:	\$15.00
4. Simultaneous Plat and Early Plan Review Fee, per permit:	\$1,120.00
5. Expedited Plan Review:	
Application Fee:	\$200
Plan Review with Meeting, per hour, two hours minimum	\$1,000
Plan Review without Meeting, per hour, one hour minimum	\$1,000
Revisions, per hour, pro-rated, 15-minute time periods	\$1,000
6. Change of Occupancy Permit Fee:	\$80.00
7. Ordinance Inspection Fee (per inspector):	\$50.00
8. Inspection Card Replacement:	\$28.00
9. Record Change Fee per record or permit, applicable to all permit types:	\$28.00
10. Plan Review Deposit*	
Those requiring circulation:	\$246.00
Those without circulation:	\$95.00
Third party requiring circulation:	\$44.00
Third Party without circulation:	\$22.00
*Deposit is not required for additions and remodels to existing Group R-3 Occupancies and additions, remodels or new construction of their accessory structures.	
11. Annual Contractor Registration Fee- Building, Mechanical and Sign:	\$150.00
12. Annual Contractor Registration Fee- Parkway and Utility Contractor	\$500.00
13. Vendor Certificate of Occupancy for Temporary Vendors:	\$93.00
14. Application for Specialized Certificate of Occupancy related to Sexually Oriented Businesses:	
a. New:	\$1,000.00
b. Amended, modified, renewal or transfer	\$1,000.00
15. CFPBOA Application Fee	
1st item per address	\$200.00
Each additional item per address:	\$100.00

16. Demolition and Moving Fees cost per square foot:	
0 to 1000:	\$75.00
1001 through 2000:	\$152.00
2001 through 3000:	\$284.00
3001 through 5000:	\$426.00
5001 through 10000:	\$571.00
10001 through 20000:	\$763.00
20001 and Above:	\$1,527.00
Demolition of structure 45 years old or older add	\$50.00
17. Sidewalk Café, annually:	\$168.00
18. Limited or Temporary Certificate of Occupancy	\$336.00
Inspection and Plan Review Fees Applicable to All Permit Types:	
1. Inspections outside of normal business hours (minimum of 4 hours):	\$100.00
2. Reinspection fee:	\$56.00
3. Inspections for which no fee is specifically indicated, per hour, half hour minimum:	\$56.00
4. Additional plan review required by changes, additions or revisions to plans, per revision, per hour, half hour minimum:	
first revision	\$56.00
second revision	\$100.00
third and fourth revision	\$200.00
fifth revision and up	\$300.00
Third Party plan revisions for Building, Mechanical, Electrical, Plumbing, Energy, per revision, per hour, half hour minimum:	\$35.00
5. Inspections outside of city limits, per hour, 4 hours minimum:	\$84.00

TABLE 1-C-1
A, B, E, H, I, & M USE GROUPS
NEW CONSTRUCTION OR ADDITION
BUILDING PERMIT FEES

NEW SQUARE FOOTAGE	Permit Fee^{1, 2}	
0 to 30	\$86.08	
>30 to 400	(a) \$86.08 (b) \$1.06	(a) for first 30 square feet (b) for each additional square foot, to and including 400
>400 to 790	(a) \$482.17 (b) \$0.796	(a) for first 400 square feet (b) for each additional square foot, to and including 790
>790 to 1365	(a) \$793.11 (b) \$0.748	(a) for first 790 square feet (b) for each additional square foot, to and including 1365
>1365 to 5850	(a) \$1223.63 (b) \$0.596	(a) for first 1365 square feet (b) for each additional square foot, to and including 5850
>5850 to 18,000	(a) \$3902.44 (b) \$0.235	(a) for the first 5850 square feet (b) for each additional square foot, to and including 18,000
>18,000	(a) \$6772.65 (b) \$0.213	(a) for the first 18,000 square feet (b) for each additional square foot

¹ Residential projects (one- and two-family dwellings, and townhouses regulated by the IRC, and their accessory structures):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

² Commercial projects (those not included in item 1 above):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 25% (0.25). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

TABLE 1-C-2
F & S USE GROUPS
NEW CONSTRUCTION OR ADDITION
BUILDING PERMIT FEES

NEW SQUARE FOOTAGE	Permit Fee^{1, 2}	
0 to 75	\$86.08	
>75 to 1080	(a) \$86.08 (b) \$0.393	(a) for first 75 square feet (b) for each additional square foot, to and including 1080
>1080 to 1980	(a) \$482.17 (b) \$0.344	(a) for first 1080 square feet (b) for each additional square foot, to and including 1980
>1980 to 3365	(a) \$793.11 (b) \$0.310	(a) for first 1980 square feet (b) for each additional square foot, to and including 3365
>3365 to 24,675	(a) \$1223.63 (b) \$0.125	(a) for first 3365 square feet (b) for each additional square foot, to and including 24,675
>24,675 to 50,050	(a) \$3902.44 (b) \$0.112	(a) for the first 24,675 square feet (b) for each additional square foot, to and including 50,050
>50,050	(a) \$6772.65 (b) \$0.107	(a) for the first 50,050 square feet (b) for each additional square foot

¹ Residential projects (one- and two-family dwellings, and townhouses regulated by the IRC, and their accessory structures):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

² Commercial projects (those not included in item 1 above):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 25% (0.25). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

TABLE 1-C-3
R USE GROUPS
NEW CONSTRUCTION OR ADDITION
BUILDING PERMIT FEES

NEW SQUARE FOOTAGE	Permit Fee^{1, 2}	
0 to 65	\$86.08 (\$51.64)*	
>65 to 700	(a) \$86.08 (\$51.64)* (b) \$0.622 (0.372)*	(a) for first 65 square feet (b) for each additional square foot, to and including 700
>700 to 1400	(a) \$482.17 (b) \$0.443	(a) for first 700 square feet (b) for each additional square foot, to and including 1400
>1400 to 2700	(a) \$793.11 (b) \$0.330	(a) for first 1400 square feet (b) for each additional square foot, to and including 2700
>2700 to 11,800	(a) \$1223.63 (b) \$0.293	(a) for first 2700 square feet (b) for each additional square foot, to and including 11,800
>11,800 to 24,500	(a) \$3902.44 (b) \$0.225	(a) for the first 11,800 square feet (b) for each additional square foot, to and including 24,500
>24,500	(a) \$6772.65 (b) \$0.165	(a) for the first 24,500 square feet (b) for each additional square foot

*New square footage for Group R-3, up to and including 500 sq.ft., shall be charged the fee in ().

¹ Residential projects (one- and two-family dwellings, and townhouses regulated by the IRC, and their accessory structures):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

² Commercial projects (those not included in item 1 above):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 25% (0.25). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

TABLE 1-C-4
U USE GROUP
NEW CONSTRUCTION OR ADDITION
BUILDING PERMIT FEES

NEW SQUARE FOOTAGE	Permit Fee^{1, 2}	
0 to 175	\$86.08 (\$51.64)*	
>175 to 2500	(a) \$86.08 (b) \$0.170	(a) for first 175 square feet (b) for each additional square foot, to and including 2500
>2500 to 5200	(a) \$482.17 (b) \$0.114	(a) for first 2500 square feet (b) for each additional square foot, to and including 5200
>5200 to 10,200	(a) \$793.11 (b) \$0.085	(a) for first 5200 square feet (b) for each additional square foot, to and including 10,200
>10,200 to 46,500	(a) \$1223.63 (b) \$0.072	(a) for first 10,200 square feet (b) for each additional square foot, to and including 46,500
>46,500 to 96,500	(a) \$1359.74 (b) \$0.057	(a) for the first 46,500 square feet (b) for each additional square foot, to and including 96,500
>96,500	(a) \$6772.65 (b) \$0.045	(a) for the first 96,500 square feet (b) for each additional square foot

*New square footage for accessory Group U uses associated with existing R-3's shall be charged the fee in ().

¹ Residential projects (one- and two-family dwellings, and townhouses regulated by the IRC, and their accessory structures):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

² Commercial projects (those not included in item 1 above):

- i. When plan review and field inspections are performed by Third Party, the permit fee shall be reduced by multiplying the sum by 25% (0.25). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- ii. When plan review is performed by Third Party with field inspections performed by City Staff, the permit fee shall be reduced by multiplying the sum by 70% (0.70). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.
- iii. When plan review is performed by City Staff with field inspections performed by Third Party, the permit fee shall be reduced by multiplying the sum by 55% (0.55). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.

**Table 1-D
Contractor Registration Fee**

First year or portion thereof	\$150.00
Yearly renewal	\$150.00

**Table 1-E
Temporary Encroachment Fees**

Time	Fee
3 or less days	If the time does not exceed three (3) days, the fee will be \$42.80 per day up to and including the third day.
More than 3 days	If the time exceeds three (3) days, the fee per day will be one and one-half cents (\$.015) per square foot of sidewalk or alley space and three cents (\$.03) per square foot of street space used with a minimum fee of \$128.40 per permit.

**Table 1-F
Permanent Encroachments**

	Fee
Applications, Amendments, Assignments and Terminations	\$900.00
Annual Fee	\$2 per linear or square foot of encroachment, as applicable

**Table 1-G
Minimum amount retained by City for permit fee refunds**

The <i>building official</i> shall retain the application and technology fees plus the largest of the following:
(a) 5% of the permit fee; or, (b) the plan review deposit; or, (c) 50 dollars (\$50.00).

Table 1-H
Schedule of Mechanical Fees*

Forced Air Heating-Furnaces Including	
Ducts and/or Vents Attached Thereto:	
Capacity to and including 100,000 BTU input or 20 KW:	\$5.17
Over 100,000 BTU input or 20 KW and Including 400,000 BTU or 40 KW:	\$8.76
Heating Appliances Non-Ducted Air	
Gas Unit or Room Heater, including vent:	\$5.17
Gas Wall Heater, including vent:	\$5.17
Gas Floor Furnace, including vent:	\$5.17
Gas Infra-red Heating Unit:	\$5.17
Electric Heater, Wall, Space, Unit, etc..	\$5.17
Energy-Using Heat Appliance Other Than Above	
Per 1,000 BTU Input:	\$0.10
Minimum:	\$5.57
Per 1 KW:	\$0.26
Minimum:	\$5.57
Each Low or High Pressure Steam or Hot Water Boiler Rated in either BTU's Input Boiler Horsepower Output or KW	
Per 1,000 BTU's Input:	\$0.10
Minimum:	\$5.57
Per Boiler HP Output:	\$2.30
Minimum:	\$5.57
Per KW:	\$0.26
Minimum:	\$5.57
Each Absorber Unit, Electrical Reciprocating, Centrifugal, or Rotary Compressor, Condensing Unit, or Chiller Unit, Each on its Normal Capacity Rating	
Up to and including 2 tons:	\$5.17
Over 2 and including 3 tons:	\$8.76
Over 3 and including 5 tons:	\$13.94
Over 5 and including 7-1/2 tons:	\$19.12
Over 7-1/2 and including 10 tons:	\$24.70
Over 10 and including 30 tons, per ton:	\$2.22
Over 30 and including 100 tons, per ton:	\$2.04
Over 100 and including 320 tons, per ton	\$1.75
Over 320 and including 520 tons, per ton:	\$1.33
Over 520 tons	\$1.01

Each Roof-Top or Combination Including Ducts and Drains	
Cooling Only	Heating and Cooling
Up to and including 3 tons: \$8.76	\$17.53
Over 3 and including 5 tons: \$13.94	\$24.70
Over 5 and including 7-1/2 tons: \$19.12	\$32.67
Over 7-1/2 and including 10 tons: \$24.70	\$39.05
Over 10 tons per ton: \$3.58	\$4.37
Roof-Top Heating Only	
Unit per 1,000 BTU:	\$0.10
Minimum:	\$5.57
Through-the-Wall A/C Units	
All Sizes, Each:	\$7.17
Cooling Tower, Evaporative or Air-Cooled Condenser, Tonnage Based on Local Design Conditions	
All size units per ton refrigeration capacity:	\$0.86
Minimum:	\$5.57
Cooling-Heating Coils	
D.E. or Chill Water per ton:	\$0.86
Minimum:	\$5.57
Steam or Hot Water, per 1,000 BTU:	\$0.10
Minimum:	\$5.57
Fan and Coil Units including Drains and Ducts	
Cool and Heat, per ton:	\$1.75
Minimum:	\$5.57
Cool only, per ton:	\$0.86
Minimum:	\$5.57
Heating Unit only, per 1,000 BTU	\$0.10
Minimum:	\$5.57
Electrical Heat Strips for Units or Duct Installations	
Per KW:	\$0.26
Minimum:	\$5.57
Mixing Box - Conditioned Air:	\$1.75

Mixing Box - Forced Air:	\$3.58
Duct Addition or System not included elsewhere	
Per outlet:	\$0.86
Minimum:	\$5.57
Miscellaneous	
Commercial food preparation hood - Grease Type I:	\$13.94
Commercial food preparation hood - Heat or Moisture Type II:	\$10.36
Commercial hood exhaust fan – Grease:	\$8.76
Commercial hood exhaust fan - Heat or Moisture:	\$7.19
Commercial hood exhaust duct – Grease:	\$8.76
Commercial hood exhaust duct - Heat or Moisture:	\$7.19
Commercial kitchen make-up air unit:	\$8.76
Commercial hood automatic electronic smoke extractor:	\$27.89
Automatic fire-extinguishing equipment system:	\$27.89
Range hood exhaust duct, for R Occupancy:	\$1.75
Toilet exhaust fan and/or duct (per inlet):	\$1.75
Ventilation fan and duct system:	\$7.19
Industrial hood:	\$10.36
Mechanical ventilator:	\$7.19
Flue replacement - U.L. labeled:	\$7.19
Flue or stack for commercial and industrial appliances:	\$8.76
Humidifier:	\$3.58
Vented decorative appliance:	\$7.19
Commercial clothes dryer exhaust duct:	\$8.76
Domestic clothes dryer exhaust duct:	\$1.75
Incinerator, per 1,000 BTU:	\$0.10
Minimum:	\$5.57
Incinerator modification:	\$87.67
Condensate drain-French sump:	\$5.57
Fire or smoke damper:	\$1.75
Circulating water pump:	\$1.75
Evaporative cooler:	\$7.19
Automatic shutoff - products of combustion:	\$8.76
Solar energy system:	\$52.61
Heat recovery devices per 1,000 BTU:	\$0.10
Minimum:	\$16.92
Gas Extension – Test:	\$8.76
For each appliance or piece of equipment by this ordinance for which no other fee is listed:	\$8.76
*When inspections are performed by third party the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.	

Table 1-I
Schedule of Plumbing Fees*

First Fixture or Appliance:	\$8.76
Additional Fixtures or Appliances (each):	\$3.58
Sewer - First 120 feet:	\$8.76
Each additional 100 feet or portion thereof:	\$8.34
Gas Service:	\$8.76
Each Lawn Sprinkler System:	\$100.80
Water Service – First 120 feet:	\$8.76
Each additional 100 feet or portion thereof:	\$8.34
Water Submeter:	\$3.58
Grease Trap or Interceptor:	\$8.76
Sand Trap:	\$16.72
Each Roof Drain:	\$8.34
Temporary Gas Service:	\$8.76
Backflow Preventer:	\$8.76
Floor Drain:	\$3.58
Mobile Homes/Mobile Units: Each mobile unit/space:	\$31.88
Each sewer vent:	\$19.12
Manhole:	\$27.89
Test Well:	\$8.76
Medical gasses and vacuum system:	\$36.96
<p>* For the purpose of this table a sanitary plumbing outlet on or to which a plumbing fixture or appliance may be set or attached or any plumbing fixture or appliance to which a water connection may be made shall be construed to be a fixture. Fees for reconnection and retesting of existing plumbing systems in relocated buildings shall be based on the number of plumbing fixtures, gas systems, water heaters, etc. involved.</p> <p>When inspections are performed by third party the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.</p>	

Table 1-J
Schedule of Electrical Fees*

Temporary Power Letters , per bank of six meters	\$36.96
Light Fixtures, Outlets, Switches, and Receptacles -per item	
Up to 100, each:	\$0.46
Over 100, each:	\$0.38
Fixed Appliances	
Ceiling Fan:	\$1.27
Vent Fan:	\$1.27
Smoke Detectors:	\$1.27
Bath Heater:	\$1.27
Disposal:	\$1.27
Compactor:	\$1.27
Dishwasher:	\$1.27
Washing Machine:	\$1.27
Water Heater:	\$2.54
Dryer:	\$2.54
Range:	\$2.54
Air Conditioner - 3 to 5 ton:	\$5.17
Air Conditioner - over 5 ton to 7 1/2 ton:	\$8.34
Air Conditioner - over 7 1/2 ton:	\$16.72
Heating Unit, Gas:	\$2.54
Heating Unit, Electric, per KW:	\$0.86
Motors	
1 to 3 hp:	\$2.54
Over 3 to 5 hp:	\$5.17
Over 5 to 7 1/2 hp:	\$8.34
Over 7 1/2 hp:	\$16.72
Transformers, Generators and Welders	
0 to 10 KW:	\$5.17
Over 10 KW to 20 KW:	\$8.34
Over 20 KW:	\$16.72
Welders:	\$5.17
Services and Subpanels	
60 amps to 100 amps:	\$16.72
Over 100 amps to 150 amps:	\$24.70
Over 150 amps:	\$33.47

Miscellaneous	
Swimming pools:	\$47.81
Construction pole:	\$24.70
Sign connections, each:	\$7.95
New mobile home hookups** :	\$36.90
Submeters-buildings, leases, apartments, etc.:	\$17.53
<p>*When inspections are performed by third party the permit fee shall be reduced by multiplying the sum by 35% (0.35). The resulting amount will be calculated to the penny with no rounding for the tenth of a penny figure.</p>	
<p>**A Building Code Ordinance Inspection shall be required to inspect and approve power to existing mobile homes in mobile home parks where the name changes on the electric utility account except when the account is being transferred from an individual to the park's name.</p>	

Table 1-K
Schedule of Sign Fees

Application fee:	\$33.00
Permit Fee for New signs =	
Application Fee + Display Area Fee + Height Above Grade Fee + Electrical Amperage Fee	
Display Area Fee:	\$23.90 or \$0.22 per square foot for each display surface, whichever is greater
Height Above Grade Fee, in Feet:	
1-20:	\$23.90
21-30:	\$47.81
31-40:	\$71.75
41-50:	\$95.65
51-60:	\$119.58
Over 60:	\$167.40
Electrical Amps Fee:	
1-40:	\$33.49
41-60:	\$47.81
61-80:	\$71.75
81-100:	\$95.65
Over 100:	\$143.49
Banners and Temporary Signs =	
Application Fee + Display Area + Height Above Grade	
Display Area:	\$23.90
Height above grade at:	\$23.90
*When permits are required for allowable repairs or sign removal the non-refundable application fee shall cover the required permit fee.	

Water and Wastewater Impact Fee Cost Calculation Worksheet

Fort Worth Water



Development Name:	Crimson Ridge
Applicant:	Harris Kocher Smith
Legal Description (Lot, Block):	Insert Legal Description
Final Plat Recordation Date:	11/19/2019
Building Permit Issuance Date:	12/31/2025
Existing Meter Size:	Not Applicable
Proposed Meter Size:	3"

Estimated Water Impact Fee Due Based on the Meter Size Provided (For Domestic or Irrigation Meters):		\$	43,087.00
Estimated Wastewater Impact Fee Due Based on the Meter Size Provided (For Domestic Meters Only):		\$	39,063.00
Total Estimated Impact Fee Cost:		\$	82,150.00

Notes

1. This cost is only for estimation purposes. Actual fees will be determined at the time of building permit.
2. Impact fees beyond December 31, 2025 are subject to change.
3. This spreadsheet calculates the estimated impact fee due based on the collected impact fee (Schedule 2) at the time of the Final Plat Recordation Date.
4. If Final Plat Recordation Date occurs beyond April 1, 2017, the Building Permit Application Date is used to determine the impact fee to be collected.

Worksheet last updated: 09/2021

Water and Wastewater Impact Fee Cost Calculation Worksheet

Fort Worth Water



Development Name:	Crimson Ridge
Applicant:	Harris Kocher Smith
Legal Description (Lot, Block):	Insert Legal Description
Final Plat Recordation Date:	11/19/2019
Building Permit Issuance Date:	12/31/2025
Existing Meter Size:	Not Applicable
Proposed Meter Size:	3"

Estimated Water Impact Fee Due Based on the Meter Size Provided (For Domestic or Irrigation Meters):		\$ 43,087.00
Estimated Wastewater Impact Fee Due Based on the Meter Size Provided (For Domestic Meters Only):		\$ 39,063.00
Total Estimated Impact Fee Cost:		\$ 82,150.00

Notes

1. This cost is only for estimation purposes. Actual fees will be determined at the time of building permit.
2. Impact fees beyond December 31, 2025 are subject to change.
3. This spreadsheet calculates the estimated impact fee due based on the collected impact fee (Schedule 2) at the time of the Final Plat Recordation Date.
4. If Final Plat Recordation Date occurs beyond April 1, 2017, the Building Permit Application Date is used to determine the impact fee to be collected.

Worksheet last updated: 09/2021

Water and Wastewater Impact Fee Cost Calculation Worksheet

Fort Worth Water



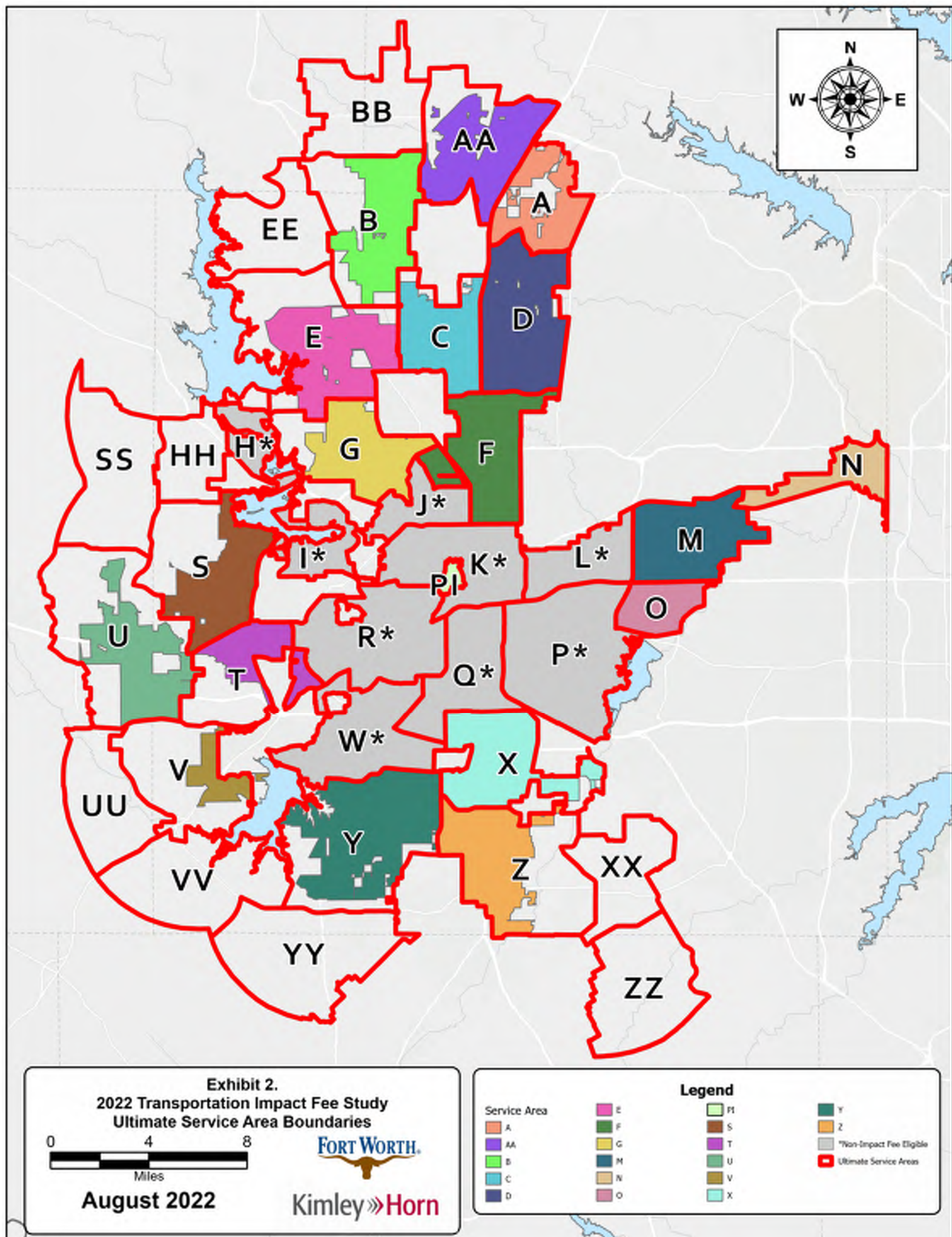
Development Name:	Crimson Ridge
Applicant:	Harris Kocher Smith
Legal Description (Lot, Block):	Insert Legal Description
Final Plat Recordation Date:	12/31/2025
Building Permit Issuance Date:	12/31/2025
Existing Meter Size:	Not Applicable
Proposed Meter Size:	1-1/2"

Estimated Water Impact Fee Due Based on the Meter Size Provided (For Domestic or Irrigation Meters):	\$	9,905.00
Estimated Wastewater Impact Fee Due Based on the Meter Size Provided (For Domestic Meters Only):	\$	8,980.00
Total Estimated Impact Fee Cost:	\$	18,885.00

Notes

1. This cost is only for estimation purposes. Actual fees will be determined at the time of building permit.
2. Impact fees beyond December 31, 2025 are subject to change.
3. This spreadsheet calculates the estimated impact fee due based on the collected impact fee (Schedule 2) at the time of the Final Plat Recordation Date.
4. If Final Plat Recordation Date occurs beyond April 1, 2017, the Building Permit Application Date is used to determine the impact fee to be collected.

Worksheet last updated: 09/2021





THIS WORKSHEET IS FOR ESTIMATION PURPOSES ONLY
ACTUAL FEES WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT

Transportation Impact Fee Estimator Worksheet
City of Fort Worth, Texas

<https://www.fortworthtexas.gov/impact-fees/transportation/fee-information>

Development Name: **Crimson Ridge - North Site**

Applicant: **Harris Kocher Smith**

Legal Description (Lot, Block):

Case Number:

Date:

Publish Date: 8-25-2023 Version 5

Date of Final Plat Approval: 11/9/2019

Study Year: 2017

Date of Building Permit Application Acceptance: 12/31/2024

Service Area (select from list): Z

Notes: (1) Enter dates in XX/XX/XXXX format

(2) Impact fees are not collected within the nine (9) "no fee" service areas (H, I, J, K, L, P, Q, R and W) and for qualified Neighborhood Empowerment Zone (NEZ) projects

Land Use Selection Note: The land use categories are based on the descriptions contained within the ITE Trip Generation Manual. Questions regarding the appropriate category for a particular use may be directed to Development Services Department staff.

NON-RESIDENTIAL ONLY

					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [1] * [5]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
					Sub-Total			\$0.00		

Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.

RESIDENTIAL ONLY

					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [5] * [1]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
Multifamily Housing (Low-Rise)	Dwelling Unit	120.00	2.50	300.00	3,706.00	\$9,265.00	\$1,111,800.00	55%	\$5,095.75	611,490.00
					Sub-Total			\$1,111,800.00		

Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.

MAXIMUM ASSESSABLE TRANSPORTATION IMPACT FEE: \$1,111,800.00

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT: \$611,490.00

If a transportation impact fee is still due following the calculation of credits, a development may qualify for any of the four (4) available transportation impact fee discounts (as defined by Section 1-14D of the ordinance). Discounts are cumulative, so that a development that qualifies for the maximum discount under each provision may reduce impact fees otherwise due up to 100%.

Adequate Public Facilities Discount:
Mixed-use/ Multi-Modal Development Discount:
Extraordinary Investment Discount:
Small Business Discount:

Total Transportation Impact Fee Discounts (Max 100%): 0%

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE AFTER DISCOUNTS: \$ -

Credit Agreement Number:

Transportation Impact Fee Credits (for construction, contribution, or dedication towards the Master Thoroughfare Plan):

TOTAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT AFTER CREDITS AND DISCOUNTS: \$611,490.00



THIS WORKSHEET IS FOR ESTIMATION PURPOSES ONLY
ACTUAL FEES WILL BE DETERMINED AT THE TIME OF BUILDING PERMIT

Transportation Impact Fee Estimator Worksheet
City of Fort Worth, Texas

<https://www.fortworthtexas.gov/impact-fees/transportation/fee-information>

Development Name: Crimson Ridge - South Site

Applicant: Harris Kocher Smith

Legal Description (Lot, Block):

Case Number:

Date:

Publish Date: 8-25-2023 Version 5

Date of Final Plat Approval: 12/31/2024

Study Year: 2022

Date of Building Permit Application Acceptance: 12/31/2024

Service Area (select from list): Z

Notes: (1) Enter dates in XX/XX/XXXX format

(2) Impact fees are not collected within the nine (9) "no fee" service areas (H, I, J, K, L, P, Q, R and W) and for qualified Neighborhood Empowerment Zone (NEZ) projects

Land Use Selection Note: The land use categories are based on the descriptions contained within the ITE Trip Generation Manual. Questions regarding the appropriate category for a particular use may be directed to Development Services Department staff.

NON-RESIDENTIAL ONLY

					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [1] * [5]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
					Sub-Total			\$0.00		

Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.

RESIDENTIAL ONLY

					Schedule 1: Maximum Assessable Impact Fee			Schedule 2: Collection Amount		
Land Use	Dev. Unit	Intensity (# of Dev. Units) [1]	Vehicle-Miles per Dev. Unit [2]	Total Vehicle-Miles [3] = [1] * [2]	Rate Per Vehicle-Mile [4]	Rate Per Dev. Unit [5] = [2] * [4]	Total [6] = [5] * [1]	Percentage of Maximum [7]	Rate per Dev. Unit [8] = [7] * [5]	Collected Impact Fee [9] = [8] * [1]
Detached Multifamily Housing	Dwelling Unit	252.00	2.79	703.08	6,101.00	\$17,021.79	\$4,289,491.08	55%	\$9,361.98	2,359,220.09
					Sub-Total			\$4,289,491.08		

Note: Final Plat Approval and Building Permit Application Acceptance must be entered prior to selecting land use. Once a land use is selected, user must delete cell to select another land use.

MAXIMUM ASSESSABLE TRANSPORTATION IMPACT FEE: \$4,289,491.08

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT: \$2,359,220.09

If a transportation impact fee is still due following the calculation of credits, a development may qualify for any of the four (4) available transportation impact fee discounts (as defined by Section 1-14D of the ordinance). Discounts are cumulative, so that a development that qualifies for the maximum discount under each provision may reduce impact fees otherwise due up to 100%.

Adequate Public Facilities Discount:
Mixed-use/ Multi-Modal Development Discount:
Extraordinary Investment Discount:
Small Business Discount:

Total Transportation Impact Fee Discounts (Max 100%): 0%

TOTAL POTENTIAL TRANSPORTATION IMPACT FEE AFTER DISCOUNTS: \$ -

Credit Agreement Number:

Transportation Impact Fee Credits (for construction, contribution, or dedication towards the Master Thoroughfare Plan):

TOTAL TRANSPORTATION IMPACT FEE COLLECTION AMOUNT AFTER CREDITS AND DISCOUNTS: \$2,359,220.09



ESTIMATED FEES-IN-LIEU OF PARKLAND DEDICATION

BASED ON 2019 NEIGHBORHOOD AND COMMUNITY PARK POLICY

Calendar Year - 2023



PPD	NP UNIT	CP UNIT	COUNCIL DISTRICT	PARK SERVICE DISTRICT
-	-	-	-	-

PLATS	Preliminary	PP	Submitted:	Date
	Final	FP	Submitted:	Date

Subdivision	1	Single-Family Units:	0	@ 3 Persons per unit
	2	Multi-Family Units:	120	@ 2 Persons per unit
	3	Land Value (per acre):	\$350,000.00	FMVA DATE
	4	Population generated:	240	LINE 1 (x 3 persons/unit) + LINE 2 (x 2 persons/unit)

NEIGHBORHOOD PARK	LAND COMPONENT		
	5	Land Dedication Required:	0.7800 Acres
			LINE 4 x 3.25 Acres (per 1,000 Population)
	6	LAND FEE:	\$273,000.00*
			LINE 3 x LINE 5
	DEVELOPMENT COMPONENT		
	7	Street Frontage Required:	258 LF
			See Notes
	8	DEVELOPMENT FEE:	\$97,234.80*
			LINE 5 x \$124,660 per acre
	9	Street Frontage Cost:	\$9,922.68
			LINE 7 x \$38.46 (may change at Final Plat)
	10	Water Infrastructure Cost:	\$6,855.06
			LINE 7 x \$26.57 (may change at Final Plat)
	11	Sewer Infrastructure Cost:	\$7,580.04
			LINE 7 x \$29.38 (may change at Final Plat)
	12	Conference Cost:	\$2,435.78
			10% of (LINE 9 + LINE 10 + LINE 11)
	13	Civil Engineering Cost:	\$1,705.04
			7% of (LINE 9 + LINE 10 + LINE 11)
	14	Design Engineering Cost:	\$1,705.04
			7% of (LINE 9 + LINE 10 + LINE 11)
	15	INFRASTRUCTURE FEE:	\$30,203.64*
			Sum (LINE 9 thru LINE 14)

COMMUNITY PARK	LAND COMPONENT		
	16	Land Dedication Required:	0.9000 Acres
			LINE 4 x 3.75 Acres (per 1,000 Population)
	17	LAND FEE:	\$315,000.00*
			LINE 3 x LINE 16

TOTAL FEE-IN-LIEU

\$715,438.44

LINE 6 + LINE 15 + LINE 17

NOTES	<p>* highlighted fees are invoiced electronically</p> <p>Street Frontage LF required is 35% of the linear measure of a square area equal to LINE 5</p>
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ESTIMATED FEES-IN-LIEU OF PARKLAND DEDICATION

BASED ON 2019 NEIGHBORHOOD AND COMMUNITY PARK POLICY

Calendar Year - 2023



PPD	NP UNIT	CP UNIT	COUNCIL DISTRICT	PARK SERVICE DISTRICT
-	-	-	-	-

PLATS	Preliminary	PP	Submitted:	Date
	Final	FP	Submitted:	Date

Subdivision	1	Single-Family Units:	0	@ 3 Persons per unit
	2	Multi-Family Units:	252	@ 2 Persons per unit
	3	Land Value (per acre):	\$350,000.00	FMVA DATE
	4	Population generated:	504	LINE 1 (x 3 persons/unit) + LINE 2 (x 2 persons/unit)

NEIGHBORHOOD PARK	LAND COMPONENT		
	5	Land Dedication Required:	1.6380 Acres
			LINE 4 x 3.25 Acres (per 1,000 Population)
	6	LAND FEE:	\$573,300.00*
			LINE 3 x LINE 5
	DEVELOPMENT COMPONENT		
	7	Street Frontage Required:	374 LF
			See Notes
	8	DEVELOPMENT FEE:	\$204,193.08*
			LINE 5 x \$124,660 per acre
	9	Street Frontage Cost:	\$14,384.04
			LINE 7 x \$38.46 (may change at Final Plat)
	10	Water Infrastructure Cost:	\$9,937.18
			LINE 7 x \$26.57 (may change at Final Plat)
	11	Sewer Infrastructure Cost:	\$10,988.12
			LINE 7 x \$29.38 (may change at Final Plat)
	12	Conference Cost:	\$3,530.93
			10% of (LINE 9 + LINE 10 + LINE 11)
	13	Civil Engineering Cost:	\$2,471.65
			7% of (LINE 9 + LINE 10 + LINE 11)
	14	Design Engineering Cost:	\$2,471.65
			7% of (LINE 9 + LINE 10 + LINE 11)
	15	INFRASTRUCTURE FEE:	\$43,783.57*
			Sum (LINE 9 thru LINE 14)

COMMUNITY PARK	LAND COMPONENT		
	16	Land Dedication Required:	1.8900 Acres
			LINE 4 x 3.75 Acres (per 1,000 Population)
	17	LAND FEE:	\$661,500.00*
			LINE 3 x LINE 16

TOTAL FEE-IN-LIEU

\$1,482,776.65

LINE 6 + LINE 15 + LINE 17

NOTES	<p>* highlighted fees are invoiced electronically</p> <p>Street Frontage LF required is 35% of the linear measure of a square area equal to LINE 5</p>
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NEIGHBORHOOD AND COMMUNITY PARK DEDICATION POLICY

I. PREMISE

The premise of the Neighborhood and Community Park Dedication Policy is that these “local, close-to-home” park facilities are integral City infrastructure that are needed in residential neighborhoods to ensure the health, safety, welfare and quality of life of the citizens of Fort Worth.

II. PURPOSE

This policy shall ensure the provision of adequate park and recreational areas with needed facilities in the form of Neighborhood Based Parks and Community Parks. New residential development or an increase in density by redevelopment in existing neighborhoods creates the need for additional park and recreation facilities. This Policy shall govern all park dedication and improvement requirements within the corporate limits of the City of Fort Worth. The implementation of the policy shall furnish developed Neighborhood Based Parks that are in place when neighborhoods are built. The policy also shall provide for needed land acquisition for Community Parks that serve new residential development or an increase in density by redevelopment in existing neighborhoods. The City has developed and adopted standards for Neighborhood Based and Community Parks that are included in the Park, Recreation and Open Space Master Plan adopted in Resolution 4399-01-2015 by the City Council on January 27, 2015. These standards are the basis for the adoption and application of amendments to this existing policy.

III. DEFINITION OF TERMS

A. For purposes of this policy, the following terms shall be defined as follows:

1. Central City (PPD4) – will be defined as the area within I-820.
2. City Council – The City Council of the City of Fort Worth, Texas
3. Community Park – Open space area encompassing 30 to 500 acres within a one and a half (1 1/2) mile service radius serving approximately 18,000 to 36,000 in population and six Neighborhood Park Units for the purpose of providing both

preservation of natural features within the urban environment and programmed recreational needs on a community-wide basis. (Refer to the Park, Recreation and Open Space Master Plan for a more detailed description, recreation activity menu and an example of a typical Community Park.)

4. Community Park Unit – A Community Park Unit consists of a minimum of six Neighborhood Park Units and is the designated service area of one Community Park. Community Park Units are defined by the Park & Recreation Department and result from the service area definition included in the Park, Recreation and Open Space Master Plan.
5. Consumer Price Index – The published price index of the United States Department of Labor that indicates increases or decreases in prices of goods and services.
6. Developer or Owner – Individual, firm, association, corporation or any other organization dividing or proposing to divide land for the purpose of developing or making improvements to such land.
7. Director – The ranking official of the Park & Recreation Department, or any successor department of the City of Fort Worth charged with the management of the City parks system.
8. Dwelling Unit – A building, or any portion thereof, containing a complete set of independent living facilities for occupancy and use by one family, including permanent provisions for living, sleeping, eating, sanitation and cooking within a kitchen for the exclusive use of the occupants whose intent is to live in the dwelling unit.
9. Family – Any individual or two or more persons related by blood, adoption, marriage or guardianship, or not more than five unrelated persons operating as a single housekeeping unit and expressly excluding lodging, boarding, fraternity, and sorority houses.
10. Neighborhood Based Park – A classification of parks that include Neighborhood Parks, Pocket Parks and Urban Parks, which are easily accessible by park users and are typically within walking distance of homes in the adjacent neighborhoods.

11. Neighborhood Park – Open space area generally encompassing five (5) to thirty (30) acres. Neighborhood Based Parks should provide a one-quarter (1/4) to one-half (1/2) mile service radius serving approximately 3,000 to 6,000 in population for the purpose of providing daily unprogrammed recreational needs of residential areas within the Neighborhood Unit. (Refer to the Park, Recreation and Open Space Master Plan for a more detailed description, recreation activity menu and an example of a typical Neighborhood Based Park).
12. Neighborhood Based Park Development Concept Plan – A park site plan drawn at an appropriate scale that indicates the required park facilities and the relationship of those facilities to the proposed park development. The Neighborhood Based Park Development Concept Plan must indicate the following: (1) Scale, (2) North arrow, (3) Topography indicating existing one foot (1') contours and any proposed grading with appropriate spot elevations, (4) Location of required facilities proposed for the Neighborhood Based Park. The plan must identify existing and proposed easements, existing vegetation, and indicate if the vegetation will remain or be removed. The plan must indicate the 100 year floodplain, the 100 year floodway and the course of any stream, river, creek, or drainage channel in the proposed Neighborhood Based Park.
13. Neighborhood Park Unit – A residential area bounded by major thoroughfares and geographical boundaries which generally encompasses approximately one square mile and serves approximately 3,000 to 6,000 in population. The Neighborhood Park Unit is defined in the Park, Recreation and Open Space Master Plan.
14. Park & Recreation Department (PARC) – the department of the City of Fort Worth charged with design, construction and management of the City's park system.
15. Park Planning Districts (PPD's) – geographic areas defined by the Park & Recreation Department and derived from the physical characteristics of the City, based on population size, roadways, rivers, creeks, topographic features and/or defined political boundaries.
16. Pocket Parks – are a subset of Neighborhood Based Parks that are less than five (5) acres. Dedication of land for use as a public Pocket Park shall be considered for sites 1.0 acres and greater, at the discretion of the Park & Recreation Department.

17. Subdivision of Land - Division of any lot, tract, or parcel of land into a minimum of five (5) or more lots for the purpose of developing residential dwelling units or the submission of a Multi-Family Development Site Plan whether immediate or future.
18. Urban Park – are a subset of Neighborhood Based Parks and are less than one (1) acre. Dedication of land for use as an Urban Park shall be considered for sites less than 1.0 acres, at the discretion of the Park & Recreation Department.

IV. PLANNING

- A. The overall program and full implementation of the Fort Worth Neighborhood and Community Park Dedication Policy shall generally follow the City of Fort Worth's Comprehensive Plan and the officially adopted Park, Recreation and Open Space Master Plan. The Park & Recreation Department may develop implementation guidelines to ensure the fair and objective application of this park policy.
- B. There should be a minimum of one Neighborhood Based Park within each designated "Neighborhood Unit" as defined by the Park, Recreation and Open Space Master Plan and delineated by the Park & Recreation Department. The park should include needed recreational facilities to service the recreation needs of the neighborhood unit.
- C. The City of Fort Worth shall require residential developers to dedicate subdivision land and recreation improvements for parks to meet the recreational needs as a condition of the platting process and/or the submission of a Multi-Family Development Site Plan, just as land for streets, alleys, utility easements and other improvements directly attributable to the development of a new residential neighborhood is dedicated. A combination of fees and parkland dedication shall be considered at the sole discretion of the Park & Recreation Department.
- D. Where private recreation facilities are built for the residents of a subdivision development, a credit may be given to the Developer/Owner for Neighborhood Based Park Development Fee, neighborhood land dedication or fee-in-lieu thereof, based on the value of such neighborhood park recreational facility development. If the proposed development falls outside the Central City, at the discretion of PARD Director or his/her designee, credit may be issued for up to 50% of the total amount of Neighborhood Based Park Development Fee, and up to 50% of the fair market value

of the required land dedication or fee-in-lieu thereof from such development. Credits exceeding 50%, and up to 75%, will require prior written approval from the Director. Credits greater than 75% will require City Council approval before they can be issued on any development. Credit will be granted for those recreation facilities that are listed as part of the minimum neighborhood park configuration. (See Section IV. G.) Credit may also be given for recreation facilities that address the specific neighborhood recreational needs of the development. The developer must provide sufficient documentation to the Park & Recreation Department demonstrating that the recreational needs of the proposed neighborhood are different than the needs of a typical Neighborhood Park Unit. The Park & Recreation Department may at the discretion of the Director or his/her designee award credit for those recreational facilities that are deemed to meet the neighborhood recreational needs of a new community. If the proposed residential development falls within the Central City (Park Planning District 4), the PARD Director may issue up to 100% credit for qualifying private plazas and recreational facilities that are publicly accessible.

- E. Should a submitted subdivision development be located within a previous development concept or preliminary plat in which park dedication requirements have been met and the submitted development does not increase the overall population density, then additional park dedication requirements shall not be required. However, if the submitted subdivision development reflects an increased population density, then additional park dedication requirements will be required for the increase in population. New preliminary plats within an existing concept plan shall require community park dedication and will also be subject to the application of the Neighborhood Based Park Development Fee based on the portion of the neighborhood park dedication that can be attributed to that preliminary plat. The requirements of this paragraph do not apply to Park Planning District 4.
- F. Neighborhood Park Infrastructure - The Developer shall bear the cost of all improvements, including streets, water, sewer, storm drainage and street frontage directly related to the Neighborhood Based Park site.
 - 1. Required Street Frontage – The Developer shall provide street frontage that is equal to thirty five percent (35%) of the linear measurement of a square area equal to the required Neighborhood Based Park dedication. In the event the subdivision requires the payment of a fee in lieu of park dedication, a fee must also be submitted for Neighborhood Based Park Infrastructure. The Park & Recreation Department may

participate in a Community Facilities Agreement for additional street frontage and infrastructure when there is a need determined by the Park & Recreation Department or it is in the interest of the City of Fort Worth to provide additional street frontage. The determination of the need for additional frontage is at the sole discretion of the Park & Recreation Department.

2. In the event that additional land is donated to the City of Fort Worth for park purposes at the same time as a required park dedication the Park & Recreation Department may elect to participate in park infrastructure development. Any additional street, utility and storm drainage frontage participation is contingent on the availability of capital improvement funds for additional street frontage and City Council approval. The Park & Recreation Department may participate in up to fifty percent (50%) of the cost of additional street frontage, water and sewer front foot charges generated by the additional donation of parkland. When the street frontage is related to a Neighborhood Based Park the 50% participation cap applies to only a residential street section. The Park & Recreation Department will only participate in up to fifty percent (50%) of storm drainage improvements that are directly related to storm water run-off generated by park development. Costs for the required extension of neighborhood storm drainage systems to the cut bank of any existing channels, streams, creeks, rivers or other park water bodies are the responsibility of the developer. Any participation in additional infrastructure is at the sole discretion of the Park & Recreation Department.

G. Neighborhood Park Development

1. The Developer shall bear a proportional cost of improvements of a Neighborhood Based Park which shall include the following recreational facilities as a minimum Neighborhood Based Park configuration:
 - i. Playground;
 - ii. Picnic shelter;
 - iii. Practice field with backstop;
 - iv. Walking trail;

- v. Multi-Use Slab with basketball backboard and goal;
 - vi. Site grading and preparation; and
 - vii. Turf and vegetation
2. The Developer shall pay a Neighborhood Based Park Development Fee for each acre of land required to be dedicated for the subdivision plat which shall be calculated in accordance with section VI(B)(ii) of this Policy. The Per Acre Rate for the Neighborhood Based Park Development Fee shall be as follows:

Calendar Year	Per Acre Rate for the Neighborhood Based Park Development Fee
2018	\$30,000.00
2019	\$47,000.00
2020	\$64,000.00
2021	\$81,000.00
2022	\$98,000.00
2023	\$115,000.00

The Neighborhood Based Park Development Fee is based on the current construction costs of recreational facilities and may be adjusted administratively by the Park & Recreation Department Director or their designee up to the annual amount of the change in the Consumer Price Index. Any fee adjustment greater than the annual amount of change in the Consumer Price Index shall require City Council approval. The acreage of required Neighborhood Based Park dedication will be determined at the time of the preliminary plat. This fee shall be in addition to the amount needed for the developer to provide the Neighborhood Based Park infrastructure development.

3. Development Options and Offsets - If mutually agreed between the Developer and the Park & Recreation Department, the Developer may choose to develop the park site prior to final plat approval in lieu of submitting the Neighborhood Based Park

Development Fee. The cost of the Developer to provide the Neighborhood Based Park and recreation facilities shall offset the required Neighborhood Based Park Development Fee by the amount of the estimated cost of the Developer to design and construct the Neighborhood Based Park recreational facilities based on Park & Recreation Department Facility Standards. The estimated costs for recreational facilities shall be based on current bid prices for similar recreational facilities and be annually updated by January 1 by the Park & Recreation Department. Prior to approval of a Neighborhood Based Park development agreement, the Developer must submit a Neighborhood Based Park Concept Plan to the City indicating the proposed Neighborhood Based Park facilities and their locations. Upon approval of the proposed Neighborhood Based Park Development Concept Plan the Developer may authorize preparation of construction documents for neighborhood park development.

In the event that the Park & Recreation Department and the Developer reach a development agreement for park development prior to final plat approval, the developer shall be required to submit Neighborhood Based Park development construction plans that conform to Park & Recreation Department design, construction and specification standards. The Park & Recreation Department will review the construction documents for compliance with City park construction requirements. The Developer must agree to standard City construction inspections of Neighborhood Based Park improvements. Neighborhood Based Park construction must be approved and accepted by the City of Fort Worth before Neighborhood Based Park fees that have been paid by the Developer are reimbursed to the developer.

V. SITE SELECTION/CHARACTERISTICS OF PARK

- A. In selecting a site for a park, the City shall avoid an accumulation of unrelated parcels of land or an accumulation of land unsuitable for park purposes.
- B. Parks sites shall be selected on the basis of obtaining natural, park-like settings where available and shall consist of diverse topography and open space suitable for the development of recreational facilities.
- C. Neighborhood Park size should generally be a minimum of five (5) acres and obtained as one complete parcel. If a Developer cannot provide the minimum five acre (5) parcel

or a smaller parcel which can potentially be contiguous to existing or future park parcels, then a fee in lieu of parkland or a combination of a fee in lieu of parkland and parkland dedication shall be required at the discretion of the Park & Recreation Department.

- D. Parcels less than five (5) acres outside of Park Planning District 4 will only be considered for a park if they are contiguous with an existing park or school property, unless approved by the Director. Credits for publicly accessible private open spaces less than 1.0 acre will be considered on a case-by-case basis. (See Section IV. D.)
- E. Neighborhood Based Parks to be dedicated as public parkland must meet the following criteria:
 - 1. Park sites to be dedicated to the City as public parkland shall be the appropriate size for the classification;
 - 2. Over 50% of the neighborhood must not be served by existing public or private parkland;
 - 3. Property should meet the needs of the neighborhood;
 - 4. Site should be easily accessible from the neighborhood;
 - 5. No drainage structures shall cut through or drain onto the public park site without the approval of the Director or the Director's designee;
 - 6. Topographically the site shall be suitable for Neighborhood Based Park uses as further defined in the Park, Recreation and Open Space Master Plan, Section V;
 - 7. Land must be out of the floodway and be accessible by maintenance and emergency vehicles;
 - 8. Funding must be identified for maintenance; and
 - 9. Permanent or ongoing maintenance operations must be addressed.

The Director of the PARD or the Director's designee shall have the discretion to allow

Neighborhood Based Parks that do not meet all of the criteria outlined above.

- F. Both Neighborhood Based and Community Park sites shall be located, whenever possible, adjacent to and contiguous with school sites and other public or non-profit agency sites in order to make maximum use of common facilities and grounds.
- G. Careful consideration shall be given to the need for development of linear parks around natural drainage and wooded areas which provide potential recreational uses. Criteria for floodplain area (based upon 100 year floodplain) usage is as follows:
 - 1. Floodplain and natural drainage areas shall generally not exceed seventy five (75%) percent of the total park site.
 - 2. Additional floodplain acreage may be acquired at a ratio of three acres of floodplain for each acre of non-floodplain property required to be dedicated. Any such consideration of additional floodplain acreage shall be as agreed upon between the Park & Recreation Department and the Developer/ Owner.
- H. Proposed parkland boundaries of Community Park dedications shall provide reasonable access to improved street frontage for readily accessible entry into the park area by the public. The minimum size for a Community Park dedication is thirty (30) acres. When the subdivision development is not of sufficient size to generate a thirty (30) acre Community Park, a dedication fee in lieu of park dedication will be assessed or a combination of a fee in lieu of park dedication and park dedication may occur at the discretion of the Park & Recreation Department. The Park & Recreation Department at its sole discretion may determine that land in an amount less than the minimum dedication for a community park is needed: (1) when the property adjoins unplatted land that is zoned residential; (2) when the proposed land use according to the City's Comprehensive plan is residential; (3) when market and development patterns in the area indicate that the property is likely to be rezoned as a residential use; or (4) when there is a larger park system need that will be met by the dedication of Community Park land in an amount less than the minimum size.

VI. LAND DEDICATION AND DEVELOPMENT FEE

- A. If the proposed residential development falls within the Central City (Park Planning District 4), the Developer shall pay a Central City Flat Fee per each additional

residential dwelling unit in lieu of a land dedication and associated fees. Fees will be assessed at the time of building permitting. Fees must be paid before a building permit will be issued. If mutually agreed between the Developer and the Park & Recreation Department, credits against this fee may be granted when there is public or private parkland proposed for the site and/or when park facility development is proposed. Agreements concerning parkland classification and acceptability, and determinations of allowable fee credits, must be formalized prior to release of the first building permit. The Central City Flat Fee is based on current costs for land acquisition and park development and may be adjusted administratively on an annual basis up to the annual amount of change in the Consumer Price Index (CPI). Any fee increase or decrease greater than the CPI shall require the approval of the City Council. The Central City Flat Fee shall be:

Calendar Year	Central City Flat Fee Per Each Additional Residential Dwelling Unit
2018	\$500.00
2019	\$660.00
2020	\$820.00
2021	\$980.00
2022	\$1,140.00
2023	\$1,300.00

- B. For all areas outside of Central City (Park Planning District 4), this policy requires 3.25 acres of Neighborhood Based Park dedication and 3.75 acres of Community Park dedication per 1,000 population. For each submitted residential preliminary plat subdivision or Multi-Family Development Site Plan, the following formula shall apply for the calculation of parkland needs.

1. Neighborhood Based Park Dedication Formula:

$$\frac{3.25 \text{ Acres} \times (\text{No. of Dwelling Units}) \times (\text{Persons/Unit})}{1,000 \text{ population}} = \text{Acres to be dedicated}$$

2. Neighborhood Based Park Development Fee Calculation:

Neighborhood Based Park Acres to be dedicated X Per Acre Neighborhood
Based Park Development Fee Rate (see Section IV.G.2.) = Neighborhood Park
Development Fee

3. Community Park Dedication Formula:

$$\frac{3.75 \text{ Acres} \times (\text{No. of Dwelling Units}) \times (\text{Persons/Unit})}{1,000 \text{ population}} = \text{Acres to be dedicated}$$

C. The number of persons per dwelling unit shall be based on both current U.S. Census information and population data compiled by the City and shall be reviewed and adjusted administratively by the Director of the Park & Recreation Department or their designee as necessary to fairly and accurately reflect trends in household size. The following figures represent the average number of persons per unit by current density categories, and shall be used to calculate parkland dedication.

1. Single Family Detached/Duplex 3.0 Persons/unit

2. Multi-Family 2.0 Persons/Unit

D. Where a subdivision plat is submitted indicating multi-family residential development, and a table of information is not provided indicating the number of dwelling units, the City shall assume the highest density allowed in the zoning classification to be applied to the property by which to determine projected population in order to determine park dedication policy requirements.

E. All determinations of required land dedication shall be based upon review of all preliminary subdivision plats submitted through the City of Fort Worth's Planning and Development Department to the Park & Recreation Department. Failure to indicate proposed park dedications on the submitted preliminary plat shall be sufficient grounds for the Plan Commission to deny a concept plan or preliminary plat. Upon final agreement between the Park & Recreation Department and the Developer/Owner regarding mutually acceptable parkland, such land shall be indicated on the revised preliminary plat and final plat. Such park property shall be conveyed by General Warranty Deed before the Neighborhood Based Park fees are reimbursed to the

Developer. Submission of park dedication documents is required for final plat and Multi-Family Development Site Plan release. Park dedication documents include: (1) a general warranty deed; (2) a metes and bounds description of the park dedication property; (3) a survey plat of the park property only; (4) an abstractors certificate that indicates that the Developer has clear title to the property and the legal ability to deliver the title to the City of Fort Worth; and (5) an environmental statement that indicates that the park site is free of environmental contamination or hazards. The Park & Recreation Department can provide Developers with example documents for use in meeting this submission requirement.

- F. The land required to be conveyed for Neighborhood Based Park dedications may be located inside or outside the subdivision development so long as the land is so located within the Neighborhood Unit and is of such proximity to the development so as to serve or benefit the neighborhood residents. Land required to be conveyed for Community Park dedications may be located within the Park Planning District of the subdivision.
- G. If a replat is filed, the dedication requirements shall be controlled by the policy in effect at the time of replat. Additional land dedication (or fee in lieu of) shall be required if the actual density of structures constructed on the property is greater than the former assumed density.
- H. Prior to dedication of land and/or improvements, the Developer/Owner shall make full disclosure of the presence of any hazardous substances and/or underground storage tanks (U.S.T.'s) and all construction processes affecting the site of which the Developer/Owner has knowledge. The City, at its discretion, may proceed to conduct such initial construction inspections, environmental tests and surveys on the land and improvements as it may deem appropriate, and the Developer/Owner shall grant to the City and its agents and employees such reasonable access to the land as is necessary to conduct such construction inspections, surveys, and tests.

If the results of such construction inspections, surveys and tests indicate a reasonable possibility of construction failure, construction dumping, flawed construction, environmental contamination or the presence of U.S.T.s, or other environmental hazards the City may require further surveys and tests to be performed at the Developer/Owner's expense as the City may deem necessary prior to its acceptance of the dedication and improvements, or in the alternative, the Developer/Owner may be

required to identify alternative property or pay the Neighborhood Based Park Fee in lieu of dedicating parkland.

- I. In areas where the residential density is lower than one unit per acre or it is in the interests of the City, the Park & Recreation Department may combine the Neighborhood and Community Park dedication and development requirements to create an adjoining neighborhood and community park facility that meets the recreational needs of these suburban and rural neighborhoods.

VII. PAYMENT OF FEES IN LIEU OF PARKLAND DEDICATION

- A. If the proposed residential development falls within the Central City (Park Planning District 4), see Section VI(A).
- B. If the calculation for required Neighborhood Based Park dedication within the proposed subdivision development that falls outside Park Planning District 4 results in less than five (5) acres and/or the calculation for required Community Park dedication does not result in thirty (30) acres and/or does not meet site selection criteria as per Section V. of this policy, the Park & Recreation Department may recommend that a fee-in-lieu of Neighborhood Based and/or Community Park land dedication be required.
- C. All fees received for Neighborhood Based Park acquisition and development and Community Park acquisition will be dedicated for the purpose of acquiring and developing parkland within the proposed subdivision development. However, if acquisition and development of a Neighborhood Based or Community Park is not achievable within the proposed subdivision development, then the Park & Recreation Department shall:
 1. Have the discretion of determining if park and recreational needs of the proposed subdivision development would be served by the expansion of existing park sites located within the same Neighborhood Unit where the proposed subdivision development is located.
 2. If such acquisition opportunities are not available within the Neighborhood Unit, then areas within the adjacent contiguous Neighborhood Unit(s) may be considered for acquisition if it will beneficially serve the residents of the proposed subdivision development.

3. If such acquisition opportunities are not available within the adjacent contiguous Neighborhood Unit(s), then areas within the adjacent contiguous Community Park Unit(s) or within the Park Planning District may be considered for acquisition if it will beneficially serve the residents of the proposed subdivision development. Additionally, funding for Community Park acquisition may be accumulated from Community Park Units with the Park Planning District, adjacent contiguous Community Park Units or adjacent Park Planning District equal to the percentage of service radius (1.5 mile) within the adjacent Park Planning District.
 4. Notwithstanding subsections (1) through (3) above, for the Central Business District Community Park Unit and the Near Southside Community Park Unit, as those units are identified in Exhibit A to this Policy, the following rules shall apply:
 - i. All Central City Flat Fees collected within the Central Business District Community Park Unit shall only be spent within the Central Business District Community Park Unit;
 - ii. Central City Flat Fees collected outside the Central Business District Community Park Unit shall not be spent within the Central Business District Community Park Unit;
 - iii. All Central City Flat Fees collected within the Near Southside Community Park Unit shall only be spent within the Near Southside Community Park Unit;
 - iv. Central City Flat Fees collected outside the Near Southside Community Park Unit shall not be spent within the Near Southside Community Park Unit;
- D. The amount of the fee in lieu of parkland dedication shall be determined by the following method:
1. The amount equal to the Fair Market Value of the required land dedication, and, if applicable, less a credit for the value of the land actually dedicated for park

and recreational purposes. The Fair Market Value will be determined by the City of Fort Worth.

2. The Developer/Owner, at their own expense, may obtain an appraisal of the property by a State of Texas certified real estate appraiser, mutually agreed upon by the City and the Developer/Owner, which may be considered by the City in determining fair market value.
 3. If the property was acquired by the developer within the last year the developer may submit the contract for sale or appraisal documents related to the acquisition of the property to be considered by the City in determining Fair Market Value.
- E. Submission of fees related to final plats, which are part of larger preliminary plats.
1. All fee payments made in lieu of land dedication in accordance with this policy shall be pro-rated on a per dwelling unit charge based on the Fair Market Value of the required dedication of the land and relative to the number of dwelling units included in the final plat submittal or the Multi-Family Development Site Plan.
 2. Fees for Neighborhood Based Park development will be pro-rated on a per dwelling unit rate based on the required dedication for that portion of the preliminary plat being submitted as a final plat or a Multi-Family Development Plan.
 3. Time of Payment/Calculation
 - i. Outside Central City (Park Planning District 4)- Fees established at the time of preliminary plat submittal shall apply to subsequent final plats submitted on any or all portions thereof for a period of two years from the date of preliminary plat approval by the Plan Commission. Subsequent Final plat submittals after such two year period shall be reassessed new fee values per dwelling unit as per current Fair Market Value of the land and the current Neighborhood Park Development Fee at time of Final plat submittal.
 - ii. Inside the Central City (Park Planning District 4) - Applicable fees will be assessed and should be paid prior to issuance of a building permit.

- F. For residential developments occurring outside Park Planning District 4, all required fees shall be paid and received before release of the final plat on any or all portions of the subdivision indicated on the original preliminary plat thereof by the City for filing in the County plat record. For residential developments occurring within Park Planning District 4, all fees will be due prior to issuance of a building permit.
- G. All payments made in accordance with this policy shall be deposited in a designated Neighborhood Park Unit Acquisition and Development Fund and/or a Community Park Unit Acquisition Fund. The City shall account for all such funds paid with reference to each subdivision development, neighborhood unit and community park unit.
- H. Interest earned on accumulated park acquisition and development fees designated for a specific subdivision development shall be used for additional acquisition and development as described in this policy.
- I. All fees received must be expended within five years from date of receipt of the last fee paid on the original preliminary plat. If such fees are not expended, the Developer/Owner shall be entitled to a refund on interest earned, less inflation as determined by the Consumer Price Index as published by the U.S. Department of Labor, with the principal held by the City. The Developer/Owner must request such refund in writing within ninety (90) days of entitlement or such right shall be waived.

VIII. INSTALLATION OF PARK IMPROVEMENTS

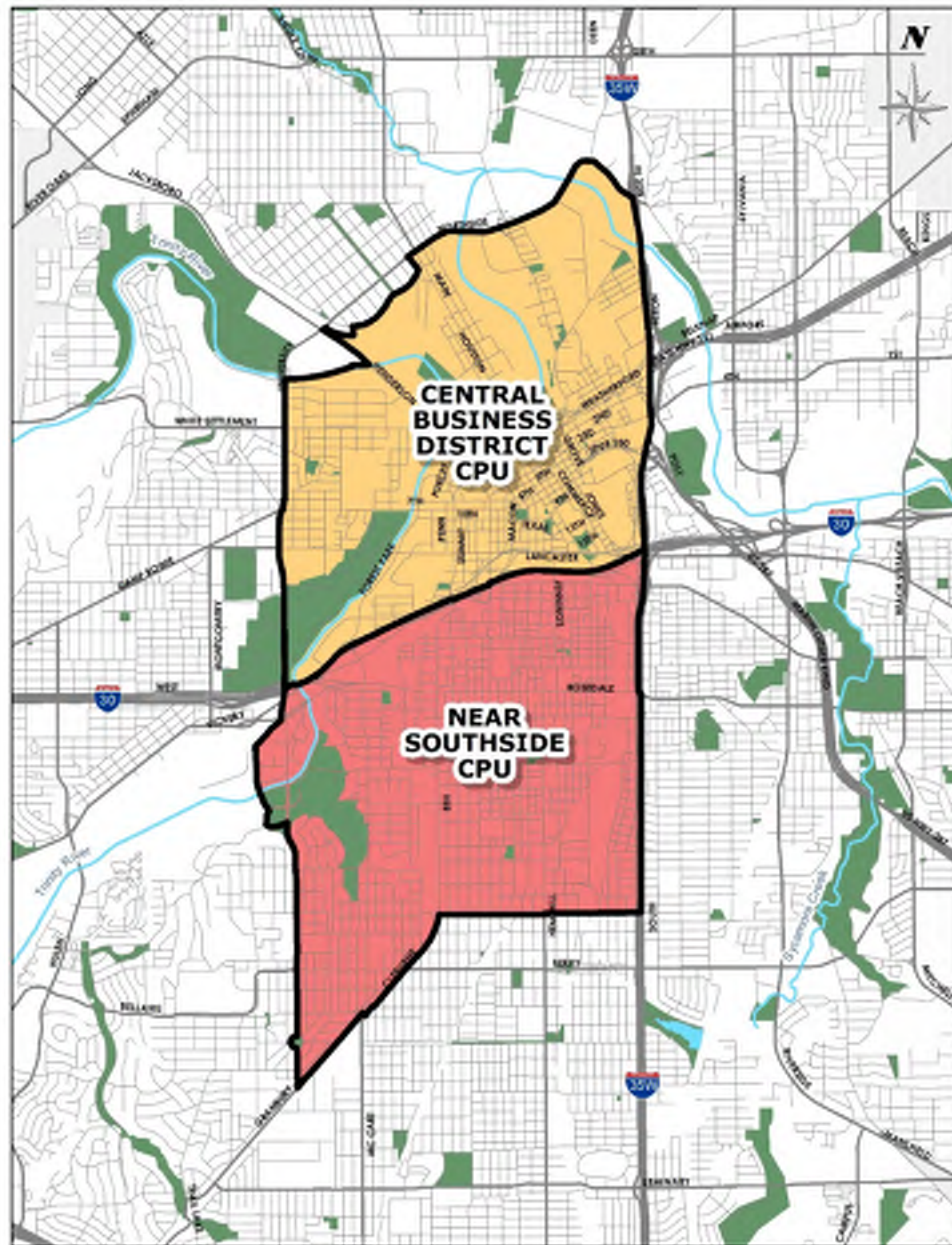
- A. Installation of Neighborhood Based Park improvements by the City generally will occur when there is:
 - 1. A minimum population of 2,000 or, at the City's discretion, a minimum fifty (50%) percent build out within the Neighborhood Park Unit;
 - 2. Availability of funds for such improvement; and
 - 3. Appropriation of maintenance funds for ongoing maintenance operations.
- B. Installation of Community Park improvements by the City generally will occur when there is:

1. A minimum population of 8,000 or, at the City's discretion, a minimum fifty (50%) percent build out within the Community Park Unit, and
2. Availability of funds for such improvement; and
3. Appropriation of maintenance funds for ongoing Community Park maintenance and operations.

IX. DECISION MAKING; APPEALS

- A. Unless otherwise provided in this policy, any decision shall initially be made by the Park & Recreation Department Director or their designee in the exercise of his/her reasonable discretion. In the event that the determination is made by the Director's designee the first recourse of the Developer is an appeal of the decision to the Director.
- B. Decisions of the Park & Recreation Department Director with regard to this policy may be appealed to the City Council in accordance with State law.

EXHIBIT A



APPENDIX G



OPINION OF EXTRAORDINARY INFRASTRUCTURE COSTS
FOR
Crimson Ridge South Site
June 10, 2024

Item	Description	Unit	Quantity	Unit Cost	Total Cost
A. Balch Roadway Improvements					
1	Earthwork (+/-2.5-feet fill)	CY	11,774	\$15.00	\$176,611.11
2	Landscaping	SF	50,864	\$15.00	\$762,960.00
3	10' Concrete Sidewalk (4-inch)	LF	2,312	\$100.00	\$231,200.00
4	23' Concrete Roadway Paving (7-inch with lime)	LF	2,312	\$750.00	\$1,734,000.00
5	Curb Ramps	EA	8	\$2,500.00	\$20,000.00
6	Streetlights	EA	5	\$75,000.00	\$375,000.00
7	Storm Inlets	EA	7	\$20,000.00	\$140,000.00
8	Storm Sewer	LF	1,000	\$200.00	\$200,000.00
Balch Roadway Improvements Subtotal					\$3,639,771.11
Contingency (25%)					\$909,942.78
Balch Roadway Improvements Total					\$4,549,713.89

Item	Description	Unit	Quantity	Unit Cost	Total Cost
B. Culvert Improvements					
1	Junction Boxes	EA	4	\$25,000.00	\$100,000.00
2	12' x 4' Box Culvert	LF	950	\$500.00	\$475,000.00
3	Headwall with Riprap	EA	1	\$30,000.00	\$30,000.00
Culvert Improvements Subtotal					\$605,000.00
Contingency (25%)					\$151,250.00
Culvert Improvements Total					\$756,250.00

Item	Description	Unit	Quantity	Unit Cost	Total Cost
B. Earthwork					
1	Earthwork (Fill)	CY	238,515	\$15.00	\$3,577,725.00
Earthwork Subtotal					\$3,577,725.00
Contingency (25%)					\$894,431.25
Earthwork Total					\$4,472,156.25

Note:

This Opinion of Probable Costs has been prepared using the best available data known to the engineer at the time the cost estimate was prepared and is provided for informational purposes only. It is not a guarantee of project cost.