

Monthly Developer/Consultant Process Training

Infrastructure Plan Review Center (IPRC)

Session 1 Part 1: Administrative

Session 1 Part 2: Technical

March 14, 2018

SESSION 1 PART 1: ADMINISTRATIVE

Getting a Submittal Package through the
Infrastructure Plan Review Center (IPRC)

Construction Plan Set and Contract Documents

PIF – Project Information Form (first step)

Provides the necessary information to open up the project account.

Includes: Project Name, Contact information and most importantly:

- Final Plat Number
- Water & Sewer Study Numbers
- Directions on attaining the Preliminary iSWM
- Directions on attaining Street Light requirements

Project Name and Plat

Complete project name as written on the cover sheet: All Storage Double Eagle – Water and Wastewater Improvements to Serve Lots 11, 12, & 13, Block A of Speedway Distribution Center

Complete plat name and FP or FS number: FP-17-073

Contact: Alex Parks at 817-392-2638 or alex.parks@fortworthtexas.gov

Water and Sewer

Water Study Number: NS-2017-198

Sewer Study Number: NS-2017-198

(Even if the project did not require a study or the project doesn't have water or sewer a Water Dept. number is required)

Contact: Amol Amol at 817-392-6430 or amol.amol@fortworthtexas.gov

NEW Preliminary iSWM

For projects that require a Preliminary iSWM the acceptance letter is required with this form. For projects that do not require a Preliminary iSWM a 'iSWM Not Required' email is required with this form.

Contact: gds@fortworthtexas.gov

Street Lights

Confirm Street Lights requirements with Quenell Johnson at quenell.johnson@fortworthtexas.gov

Consultant's Company Name: Kimley-Horn and Associates, Inc.

Consultant's Company Address: 801 Cherry Street, Suite 950, Unit 11, Fort Worth, TX 76102

Company Telephone: 817.339.2275

Fax: [Click here to enter text.](#)

Project Manager's Name: Brandon Middleton

Email Address: Brandon.Middleton@kimley-horn.com

Secondary user:

Name: Jared Helmberger

PRESUBMITTAL FOLDER NOTICE

The **Project Name** pre-submittal folder has been created.

The deadline for uploading the required information is **Tuesday at 12:00 noon.**

For information on using Buzzsaw and the dwf file set up use the following [Using Autodesk Buzzsaw Electronic Review](#) link.

The Infrastructure Plan Review Center utilizes [Detailed Checklists](#) to inform the consultant of the required design information that is to be included for each component of the plan set. If a particular checklist is not applicable to your project still execute the checklist by indicating N/A and submit it.

Upload the following information:

- **All executed Detailed Checklists in one pdf file.**
- **One (1) dwf file of the entire plan set.**

To access your Buzzsaw project folder either click on the URL link below or copy and paste the URL link into your browser.

<https://projectpoint.buzzsaw.com/client/Fortworthgov/New%20Development%20Infrastructure%20Plan%20Review/Projects%20Under%20Review>

Notify the IPRC Coordinator, Dennis Sallis at 817-392-6250 or dennis.sallis@fortworthtexas.gov when you have completed your upload.

PRESUBMITTAL FOLDER NOTICE

- Notify consultant folder is ready
- Deadline for uploading
- Material to upload
- Link to project folder

CONSULTANT'S PRESUB NOTICE

- Project has been accepted
- When review comments will be available
- Date, time and place of the Presub Conference
- What material to bring to the conference

The Trails of Elizabeth Creek Phase 2 project has been accepted for a pre-submittal conference.

The Review Comments will be available: **Tuesday Nov 14, 2017 at 1:30 pm.**

Use the [Access City Staff Comments](#) link for instructions on how to access the 'Markups'.

The consultant shall respond to every comment utilizing the provided [Comment and Response Summary](#) table.

If the PM determines the summary does not effectively address all the comments the project may be rejected and will need to be rescheduled for another conference.

Your Presubmittal Conference is set for: **Thursday Nov. 16, 2017 at 3:30 pm.**

The consultant is required to bring five (5) copies of the fully executed Comment Response Summary and a full size paper copy plan set to the conference.

Conferences are held in Conference Room 255A which is located on the second floor in the TPW area in the southeast part of City Hall.

All additional presubmittal conference comments generated at the conference will be added to the Comment and Response Summary table.

Moving Forward to First Review

The formal First Review is a fourteen (14) calendar day review. Consultant can expect to receive city comments within fourteen calendar days.

Entry requirements

1. Final iSWM – clearance from the Storm Water Group
2. CFA Application – submitted to the CFA Office
3. Plan Review Fee – Paid at the TPW Reception Desk

First Review Submittal Options

1. Electronic Review – Project reviewed electronically in Buzzsaw
2. Hard Copy (paper) – Traditional paper copy

FIRST REVIEW PROJECT FOLDER

- Folder has been created
- Link to the project folder
- Items to be uploaded
- Deadline for uploading

The **Project Name** Buzzsaw project folder has been created.

NOTE: All final response decisions from the presubmittal conference as indicated in the ‘Comment and Response Summary’ table are to be copied inside the originally submitted dwf file. Use the [Respond to City Review Comments](#) link for instructions on how to properly respond to the City staff comments.

To access your project folder, either click on the URL link below or copy and paste the URL link into your browser

<https://projectpoint.buzzsaw.com/client/Fortworthgov/New%20Development%20Infrastructure%20Plan%20Review/Projects%20Under%20Review/Innisbrook%20Place%20Phase%203>

Items to be deposited into the UPLOAD folder:

NOTE: your dwf response files are required to be inside the dwf file originally submitted which is located inside the ‘Original’ folder.

- **Revised dwf file of the entire plan set.** The name of the revised dwf file shall use ‘First Review’ in front of the project name. (include the final plat with the final FS or FP plat number).
- **Comment Response** – your dwf response files are required to be inside the originally submitted dwf file which is located inside the ‘Original’ folder.
- **Draft copy of the contract document book in pdf format.** Use the ‘[Go-By Contract Book](#)’ link or by navigating:

Fortworthgov | Resources | New Development Resources | Specs and Contract Documents | Go-By Contract Document Book

Revise the coversheet and strike out all items not applicable in the Index.

- **CFA Exhibits** – Consultant shall prepare a separate 8½ x 11 exhibit for each category of infrastructure; Water, Sewer, Streets, Storm Drain, Street Lighting, Traffic Signals and Street Name Signs and/or Traffic Signs. Each exhibit shall be uploaded in PDF format and labelled by exhibit name. For example, Sewer Exhibit A-1.pdf or Street signs Exhibit C-1.pdf.
- **Geotechnical Report** - A geotechnical report for Pavement Design is required for all new streets constructed or as required for rehabilitation of existing streets. A geotechnical report is not required if only permanent trench repairs are made after the infrastructure is installed.
- **Vicinity Map** – 8 ½ x 11 pdf document

Recap of Links

1. Using Autodesk Electronic Review
2. Detailed Checklists
3. How to access staff comments
4. Comment and Response Table
5. How to respond to City staff comments

FIRST REVIEW RETURN

- How to access staff comments
- How to respond to comments
- How the next review file should be titled
- What to upload

This project is ready for revision.

The dwf file to be reviewed is located in the 'Original' subfolder inside the Review Plan Set folder.

Use the [Access City Staff Comments](#) link for instructions on how to access the 'Markups'.

Click on the [First Review Respond to City Review](#) Comments link for instructions on to properly respond to the City Staff comments.

Your next submittal shall include:

- Revised dwf file. Use the **Rev1** prefix. i.e. **Rev1(project name)**
- Revised contract document(s).
- Revised CFA Exhibits. Use the **Rev1** prefix. i.e. **Rev1(exhibit name)**
- Quantity Take-off Matrix in Excel form.
- Revised Vicinity Map (if required)
- Geotechnical Report for Street Paving (if required).
- Easement Exhibit(s) along with the meets and bounds in Word Document format if required

FIRST REVIEW NON-COMPLIANCE

This transmittal indicates that there are serious design issues to be worked out that prevents the project from moving forward.

Starting the First Review submittal Process from the beginning

This project has been reviewed and determined to be insufficient to continue in the review process. The project shall be revised and resubmitted for a 14 day first review.

The dwf file to be reviewed is located in the 'Original' subfolder inside the 'Review Plan Set' folder.

Use the [Access City Staff Comments](#) link for instructions on how to access the 'Markups'

Click on the [First Review Respond to City Review Comments](#) link for instructions on how to properly respond to the City staff comments.

Create a new complete revised set of drawings reflecting the changes.

The revised file shall use the prefix **Resub1**- in front of the project name.

Your next submittal shall include:

- Revised dwf file. Use the **Resub1** prefix. i.e. **Resub1(project name)**
- Revised contract document(s).
- Revised CFA Exhibits. Use the **Resub1** prefix. i.e. **Resub1 (exhibit name)**
- Geotechnical Report for street Paving (if required)
- Revised easement exhibit(s) along with the metes and bounds in Word Document format (if required)

SIGNATURE NON-COMPLIANCE

The compliance review of the First Review submittal is incomplete and additional work is required.

This project has been reviewed and found to be incomplete

The dwf file to be reviewed is located in the 'Review' subfolder inside the Review Plan Set folder.

Use the [Access City Staff Comments](#) link for instructions on how to access the 'Markups'.

Click on the [First Review Respond to City Review Comments](#) link for instructions on how to properly respond to the City Staff comments.

Your next submittal shall include:

- Revised dwf file. Use the **Rev2** prefix. i.e. **Rev2 (project name)**
- Revised contract document(s).
- Revised CFA Exhibits. Use the **Rev2** prefix. i.e. **Rev2 (exhibit name)**
- Revised Quantity Take-Off Matrix
- Geotechnical Report for street Paving (if required)
- Revised easement exhibit(s) along with the metes and bounds in Word Document format (if required)

REVIEW COMPLETE

The review for this project has been completed.

Deliver the mylar cover sheet to your IPRC project manager.

The delivered mylar cover sheet shall match the cover sheet that was accepted after the final review by the Project Manager and will be checked for final cover sheet compliance.

You will be notified when to pick up the signed mylar cover sheet.

FINAL PREPARATION

The cover sheet is ready to be picked up.

Electronic files of all final executed material is required to be uploaded into the project folder.

Click on the [Electronic Information](#) link for specific instructions.

Notify your Project Manager once the upload has been completed.

Electronic Information Requirement

Items to be uploaded:

- One (1) pdf of the entire signed plan set. All pdf drawings shall be in one pdf file. The pdf file must be signed and sealed. Only black lines with white background drawings will be accepted.
- One (1) pdf of the fully executed contract book. (**NOTE:** three (3) of the six (6) contract books required with the Distribution package must have original signatures).
- Separate executed copy of the Bid Proposal.
- Pdf of executed permits and agreements.
- Pdf of draft copies of easements if not executed yet. Otherwise upload executed copies.
- Fully executed CFW Developer Project Proposal Tool (see additional information below).

CFW Developer Project Proposal Tool

The CFW Developer Project Proposal Tool is a new price data collection initiative to calculate unit prices in an effort to improve The City's Unit Price Ordinance. A CFW Developer Project Proposal Tool User Guide is available for your use. The Proposal Tool and User guide can be found in Buzzsaw by navigating:

Resources |02-Construction Documents| Standard Bid Items List

Submit Construction Package

Your next submittal will be the Construction Package.

The consultant is required to present a fully executed Final iSWM Approval Form from the CFW Storm Water Group upon delivery of the Distribution Package to the IPRC.

Without this form the Distribution Package will not be accepted.

The consultant shall deliver the following hard copies to the IPRC:

- Fifteen (15) sets of drawings.
- Six (6) fully executed Contract Documents and Specifications books. Minimum three (3) with original signatures.
- Executed copies of all easements, agreements and permits.

NOTE: if an error is found with the distribution package the construction material will not be distributed until both distribution package and the electronic information has been corrected.

This concludes the Project Submittal Process

Q & A

SESSION 1 PART 2: TECHNICAL

- Topics of Discussion:
 - Project Manual – DAP Version
 - Construction Plans
 - Additional Sheets Required
 - Pavement Design
 - TPW Utility Construction Policy
 - CFA Exhibits

PROJECT MANUAL – DAP VERSION (CONTRACT DOCUMENTS)



**PROJECT MANUAL
FOR
THE CONSTRUCTION OF**

**PAVING, WATER, SANITARY SEWER, STORM
DRAIN & STREET LIGHTING IMPROVEMENTS
TO SERVE
LAKEPOINTE PHASE 4**

FEBRUARY 2018

WATER PROJECT NO. 56008-0600430-101282-001480
SANITARY SEWER PROJECT NO. 56008-0700430-101282-001380
FILE NO. W-2536
"X" NO. X-24869
CITY PROJECT NO. 101282

Betsy Price
Mayor

David Cooke
City Manager

Kenneth C. Morgan
Water Director

Douglas W. Wiersig, P.E.
Director, Transportation and Public Works Department

The City of Fort Worth

PREPARED BY
PELTON LAND SOLUTIONS
9800 HILLWOOD PARKWAY, SUITE 250
FORT WORTH, TX 76177
817-562-3350

PROJECT MANUAL

- Before consultants begin assembling the project manual, they should review the **Project Manual Assembly Guide**. The **Project Manual Assembly Guide** will explain when to use CFW DAP (Developer Awarded Projects), EJCDC or even AIA documents.
- All documents in the project manual **must be DAP** Version for CFW documents.
(Example – 00 00 00_Cover_**DAP**.doc)
- Consultants **shall** include all required documents under **Division 00-General Conditions** and **Division 01 – General Requirements** in the project manual.
- Consultants also have the option to use the “**Go-By Contract Book**” in buzzsaw and use the **Project Manual Assembly Guide** to determine which documents are **optional/not required**. There are documents in the “**Go-By Contract Book**” that are related to Public Bid Projects.
- Project Manual documents are located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/30%20-%20New%20Development%20Resources/Specs%20and%20Contract%20Documents?public>

PROJECT MANUAL

- For Developer let projects, include the following documents:
 - 00 00 00_Cover_DAP
 - 00 00 10_Table of Contents_DAP
 - 00 42 43_Bid Proposal_DAP
 - 00 45 12_Prequalification Statement 2015_DAP
 - 00 45 26_Contractor Compliance with Workers_DAP
 - 00 52 43_Agreement_DAP
 - 00 61 25_Certificate of Insurance (Use as place holder)
 - 00 62 13_Performance Bond_DAP
 - 00 62 14_Payment Bond_DAP
 - 00 62 19_Maintenance Bond_DAP
 - 00 73 10_Standard City Condition for Developer...._DAP
- For Developer let projects **with City Cost Participation**, add these additional documents:
 - 00 00 10_Table of Contents_DAP
(Update to include additional documents.)
 - 00 11 13_Invitation to Bidders_DAP
 - 00 21 13_Instructions to Bidders_DAP
 - 00 41 00_Bid Form_DAP
 - 00 43 13_Bid Bond_DAP (If required)
 - 00 45 40_Minority Business Enterprise Goal (If required)
- Consultants **shall not** modify any document other than filling in the designated blanks or removing text in blue.

BID PROPOSAL

- Use standard CFW bid item descriptions.
- Standard CFW bid item descriptions were created to reduce the number of variations of pay items submitted over the years.
- Standard CFW bid items include an 8-digit number in front of the bid item description.
- Bid items provided in the proposal section are used to update CFA Unit Prices.
- If consultants are unaware of how to pay for an improvement or question what a bid item includes, refer back to the specification and it will provide direction on how to pay for the improvement.
- Include all Units required for project.
- Standard bid Item list and specifications are located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Standard%20Bid%20Items%20List?public>

and

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Specifications?public>

00 42 43
DAP - BID PROPOSAL
Page 1 of 7

SECTION 00 42 43
Developer Awarded Projects - PROPOSAL FORM

UNIT PRICE BID **Bidder's Application**

Project Item Information				Bidder's Proposal		
Bid Item No.	Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value
UNIT I: WATER IMPROVEMENTS						
1	0241.2012 Remove 6" sewer Line	02 41 14	LF			
2	0241.2201 Remove 4' sewer Manhole	02 41 14	EA			
3	<i>(Text in Blue is for information or guidance. Remove all blue text in the project final document.)</i>					
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45						
TOTAL UNIT I: WATER IMPROVEMENTS						

CITY OF FORT WORTH
STANDARD CONSTRUCTION SPECIFICATION DOCUMENTS - DEVELOPER AWARDED PROJECTS
Form Version September 1, 2015

00 42 43_Bid Proposal_DAP.xls

BID PROPOSAL

- Bid Summary sheet has been revised to include bidder information and signature block.
- All new projects submitted to IPRC need to include the revised Bid Summary sheet.
- Information is required when final bids are completed and required to be submitted to the CFA office under the new CFA process to reconcile material and inspection fee's prior to scheduling a preconstruction meeting. Blanks must be filled in.

SECTION 00 42 43
Developer Awarded Projects - PROPOSAL FORM

UNIT PRICE BID

Bidder's Application

Project Item Information					Bidder's Proposal	
Bidlist Item No.	Description	Specification Section No.	Unit of Measure	Bid Quantity	Unit Price	Bid Value
Bid Summary						
UNIT I: WATER IMPROVEMENTS						
UNIT II: SANITARY SEWER IMPROVEMENTS						
UNIT III: DRAINAGE IMPROVEMENTS						
UNIT IV: PAVING IMPROVEMENTS						
UNIT V: STREET LIGHTING IMPROVEMENTS						
UNIT VI: TRAFFIC SIGNAL IMPROVEMENTS						
Total Construction Bid						

This Bid is submitted by the entity named below:

BIDDER:
<Company Name Here>
<Address Here>
<Address Here or Blank>
<City, State Zip Code Here>

BY: <Name of Principal Here>

<Signature Here>

TITLE: <Title Here>

DATE: <Date Here>

Contractor agrees to complete WORK for FINAL ACCEPTANCE within calendar days after the date when the CONTRACT commences to run as provided in the General Conditions.

END OF SECTION

PREQUALIFICATION STATEMENT

- Only list work that is prequalified on the Prequalification Statement for Major Work Type. Refer back to the Bidders Prequalification Application for work types.
- Consultants **must** list all contractors and subcontractors involved on the project.
- Make sure all contractor/subcontractor prequalification's are up to date. Contractors not listed on prequalified contractors list will not be allowed.
- Prequalified contractor lists are located on buzzsaw at:

SECTION 00 45 12
DAP – PREQUALIFICATION STATEMENT

Each Bidder is required to complete the information below by identifying the prequalified contractors and/or subcontractors whom they intend to utilize for the major work type(s) listed. In the "Major Work Type" box provide the complete major work type and actual description as provided by the Water Department for water and sewer and TPW for paving.

Major Work Type	Contractor/Subcontractor Company Name	Prequalification Expiration Date
<List Work Type Here or Blank> Example: Wastewater New Development Open Cut (35" and under); Water New Development Open Cut (24" and under)	<Company Name Here or Blank>	<Date Here or Blank>
<List Work Type Here or Blank>	<Company Name Here or Blank>	<Date Here or Blank>
<List Work Type Here or Blank>	<Company Name Here or Blank>	<Date Here or Blank>
<List Work Type Here or Blank>	<Company Name Here or Blank>	<Date Here or Blank>

The undersigned hereby certifies that the contractors and/or subcontractors described in the table above are currently prequalified for the work types listed.

BIDDER:

<Company Name Here>
<Address Here>
<Address Here or Blank>
<City, State Zip Code Here>

BY: <Name of Principal>

(Signature)

TITLE: <Title Here>

DATE: <Date Here>

END OF SECTION

100% CONSTRUCTION PLAN SET DEFINED

DEFINITION OF 100% CONSTRUCTION PLAN SET


- IPRC defines a 100% construction plan set as having all the required components in a set of plans for review.
- Basic required components in a plan set are a cover sheet, plat, general notes, water, sanitary sewer, grading, erosion control, drainage, pavement, street light plans, traffic control and construction details (whichever is applicable for the project).
- Only include public improvements. However, if there are private utilities that are crossing public infrastructure, those items need to be shown.
- Construction plans submitted should reflect the items checked in the **Detailed Checklist**.
- Detailed Checklists are located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/30%20-%20New%20Development%20Resources/Detailed%20Checklists?public>

COVER SHEET

- No longer using DOE NO.
- Make sure you have your preliminary P.E. information
- P.E. has to be registered in State of Texas. (If not registered in State of Texas, plans **will not** be accepted for review).
- Provide TX Firm Number (If not registered in State of Texas, plans **will not** be accepted).
- Developer Cover Page template is located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Plan%20Sheet%20Templates?public>



BETSY PRICE
MAYOR

DAVID COOKE
CITY MANAGER

DOUGLAS W. WIERSIG, P.E.
DIRECTOR, TRANSPORTATION
AND PUBLIC WORKS DEPARTMENT

KENNETH C. MORGAN
DIRECTOR, WATER DEPARTMENT

THE CITY OF FORT WORTH, TEXAS

WATER, SANITARY SEWER, STORM DRAIN, PAVING & STREET LIGHTING IMPROVEMENTS

TO SERVE
LAKE POINTE
PHASE 4

X-24869

UNIT I - WATER & SEWER IMPROVEMENTS

SHEET NO.	DESCRIPTION
001	COVER SHEET
002	FINAL PLAN
003	FINAL PLAN
004	WATER PLAN
005	WATER PLAN & PROFILE
006	SEWER PLAN
007	SANITARY SEWER PLAN & PROFILE - LINE SS-3
008	SANITARY SEWER PLAN & PROFILE - LINE SS-3
009	SANITARY SEWER PLAN & PROFILE - LINE SS-3
010	SANITARY SEWER PLAN & PROFILE - LINE SS-4
011	SANITARY SEWER PLAN & PROFILE - LINE SS-4
012	SANITARY SEWER PLAN & PROFILE - LINE SS-4
013	WATER DETAILS
014	WATER DETAILS
015	WATER DETAILS
016	WATER DETAILS
017	SANITARY SEWER DETAILS
018	SANITARY SEWER DETAILS
019	EROSION & SEDIMENT CONTROL PLAN
020	EROSION & SEDIMENT CONTROL DETAILS
021	OFF OF FORT WORTH GENERAL NOTES
022	GENERAL CONSTRUCTION NOTES

UNIT II - DRAINAGE & PAVING IMPROVEMENTS

SHEET NO.	DESCRIPTION
023	OVERALL DRAINAGE AREA MAP
024	IRREGULAR LINE SHIP
025	PRE DEVELOPMENT DRAINAGE AREA MAP
026	SECTION FORD
027	SECTION FORD PROFILES
028	STRAIGHT CALCULATIONS
029	DRAINING PLAN
030	DRAINING PLAN
031	DRAINING PLAN
032	DRAINING PLAN
033	DRAINING PLAN
034	SECTIONAL PLAN - WOODHARSHLUFF DRIVE
035	PAVING PLAN & PROFILE - WEST WINDY DRIVE
036	PAVING PLAN & PROFILE - WEST WINDY DRIVE
037	PAVING PLAN & PROFILE - ANCHORAGE LANDING DRIVE
038	PAVING PLAN & PROFILE - ANCHORAGE LANDING DRIVE
039	PAVING PLAN & PROFILE - SETTLED PEAK ROAD
040	PAVING PLAN & PROFILE - CAMPANA DRIVE
041	PAVING PLAN & PROFILE - LOCKWOOD DRIVE
042	PAVING PLAN & PROFILE - BRIDGEMAN DRIVE
043	PAVING PLAN & PROFILE - BRIDGEMAN DRIVE
044	TRAFFIC CONTROL PLAN
045	STORM DRAIN PLAN & PROFILE - LINES SS-1, SS-2, SS-3, SS-4
046	STORM DRAIN PLAN & PROFILE - LINES SS-1 & SS-2
047	STORM DRAIN PLAN & PROFILE - LINES SS-3 & SS-4
048	STORM DRAIN PLAN & PROFILE - LINES SS-1 & SS-2
049	STORM DRAIN PLAN & PROFILE - LINES SS-3 & SS-4
050	PAVING CONSTRUCTION DETAILS
051	PAVING CONSTRUCTION DETAILS
052	PAVING CONSTRUCTION DETAILS
053	PAVING CONSTRUCTION DETAILS
054	PAVING CONSTRUCTION DETAILS
055	TRAFFIC CONTROL DETAILS
056	IRREGULAR DETAILS
057	IRREGULAR DETAILS
058	STREET LIGHTING PLAN
059	STREET LIGHTING DETAILS
060	EROSION & SEDIMENT CONTROL PLAN
061	EROSION & SEDIMENT CONTROL DETAILS
062	OFF OF FORT WORTH GENERAL NOTES
063	GENERAL CONSTRUCTION NOTES

PRELIMINARY - FOR REVIEW ONLY

These documents are for Design Review and not intended for Construction, Bidding or Permit Purposes. They were prepared by or under supervision of:

MARC P. FAGUETTE PE # 13532917
Title: PE
Date: _____

Firm Number 12207

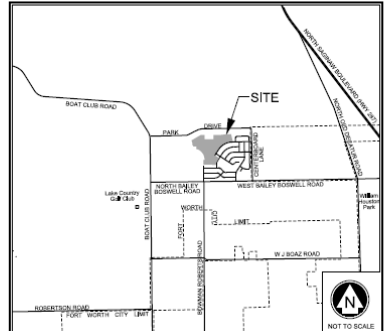
RICHARD ZAVALA DATE: _____
DIRECTOR, PARKS AND RECREATION SERVICES

DOUGLAS W. WIERSIG, P.E. DATE: _____
DIRECTOR, TRANSPORTATION AND PUBLIC WORKS

RECOMMENDED PROGRAM MANAGER DATE: _____

REVIEWED: PROJECT MANAGER DATE: _____

X-24869



LOCATION MAP
N.T.S.
MAPSCO PAGE 32M
COUNCIL DISTRICT NO. 7

OWNER / DEVELOPER:
PULTE HOMES OF TEXAS, LP
4800 REGENT BLVD, SUITE 100
IRVING, TEXAS 75063
214-276-6500

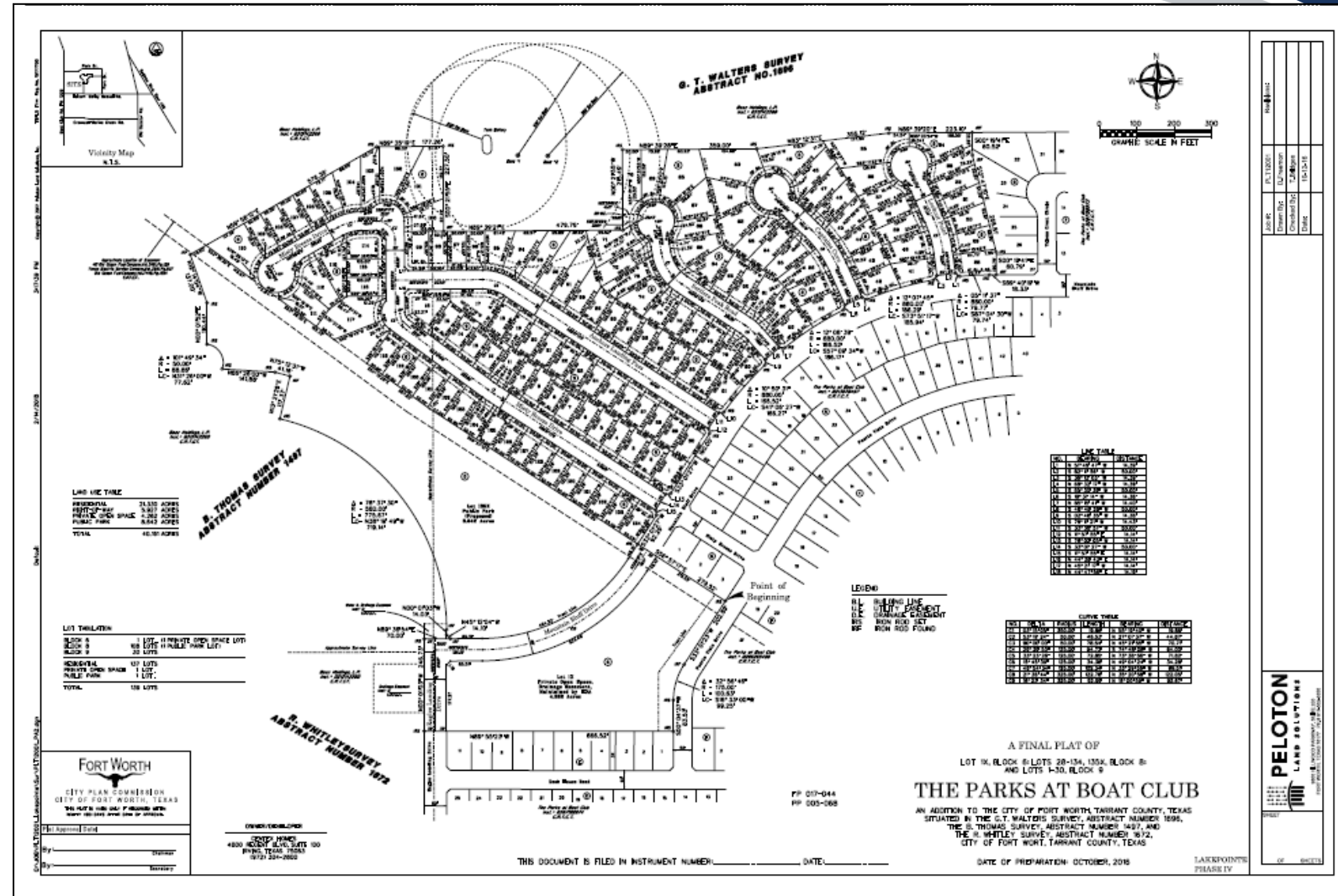
ENGINEER: PELOTON
1440
8800 HILLWOOD PARKWAY
SUITE 250
FORT WORTH, TX 76177
PHONE: 817-463-3350
TX FIRM NO 12207

FEBRUARY 2018

WATER, SANITARY SEWER, STORM DRAIN, PAVING & STREET LIGHTING IMPROVEMENTS LAKE POINTE PHASE 4
WATER PROJECT NO. 56008-0600430-101282-001480
SEWER PROJECT NO. 56008-0700430-101282-001380
FILE NO. W-2536
CITY PROJECT NO.: 101282

FINAL PLAT

- A final plat can be either a F.P. or F.S. number.
 - *F.P. = Final Plat
 - *F.S. = Short Plat
- Planning and Development will assign the final plat number.
- When plans are submitted to IPRC, the plan set shall have a final plat number shown on the plat (Handwritten final plat numbers are **not accepted**).

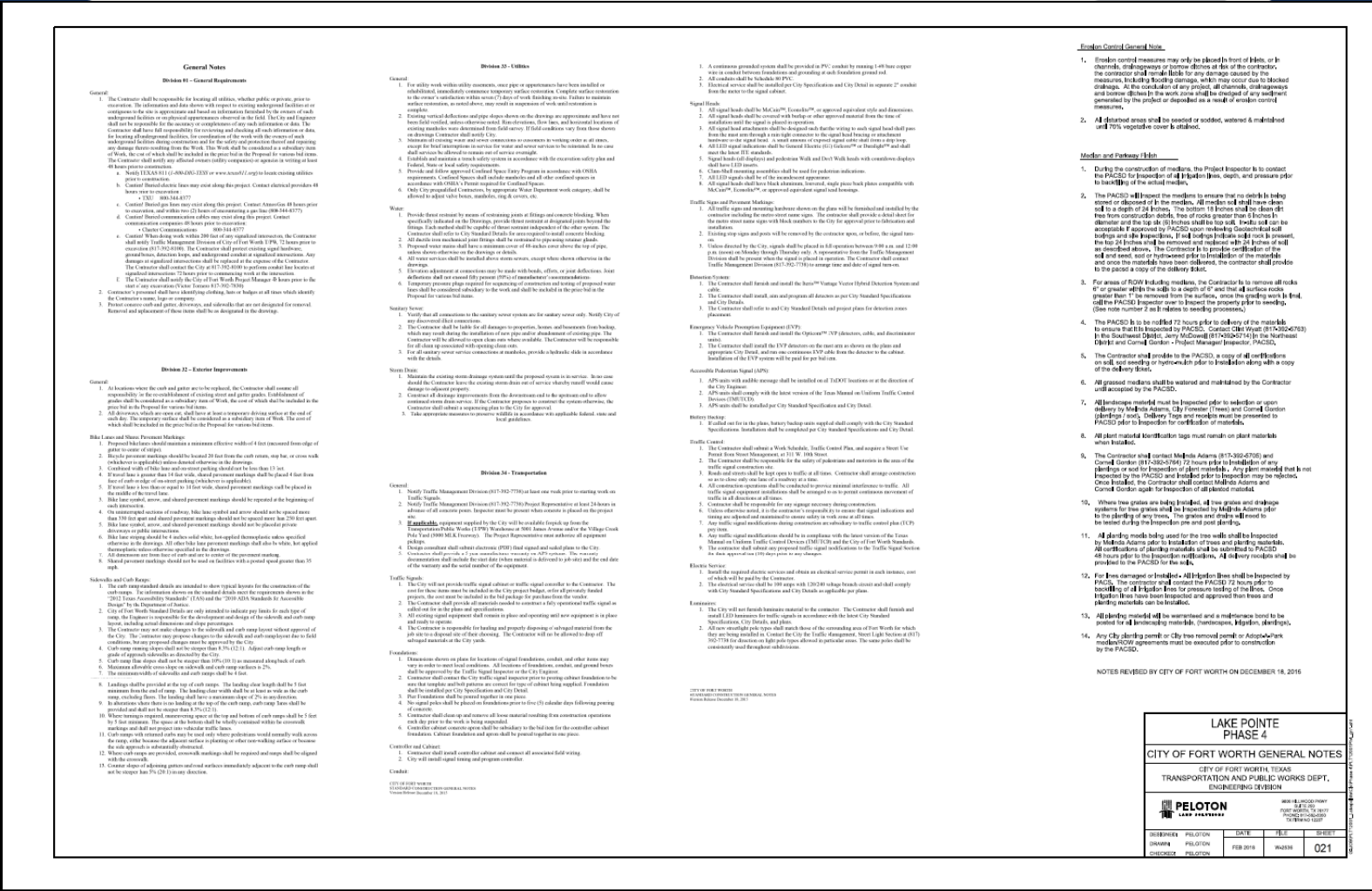




GENERAL NOTES

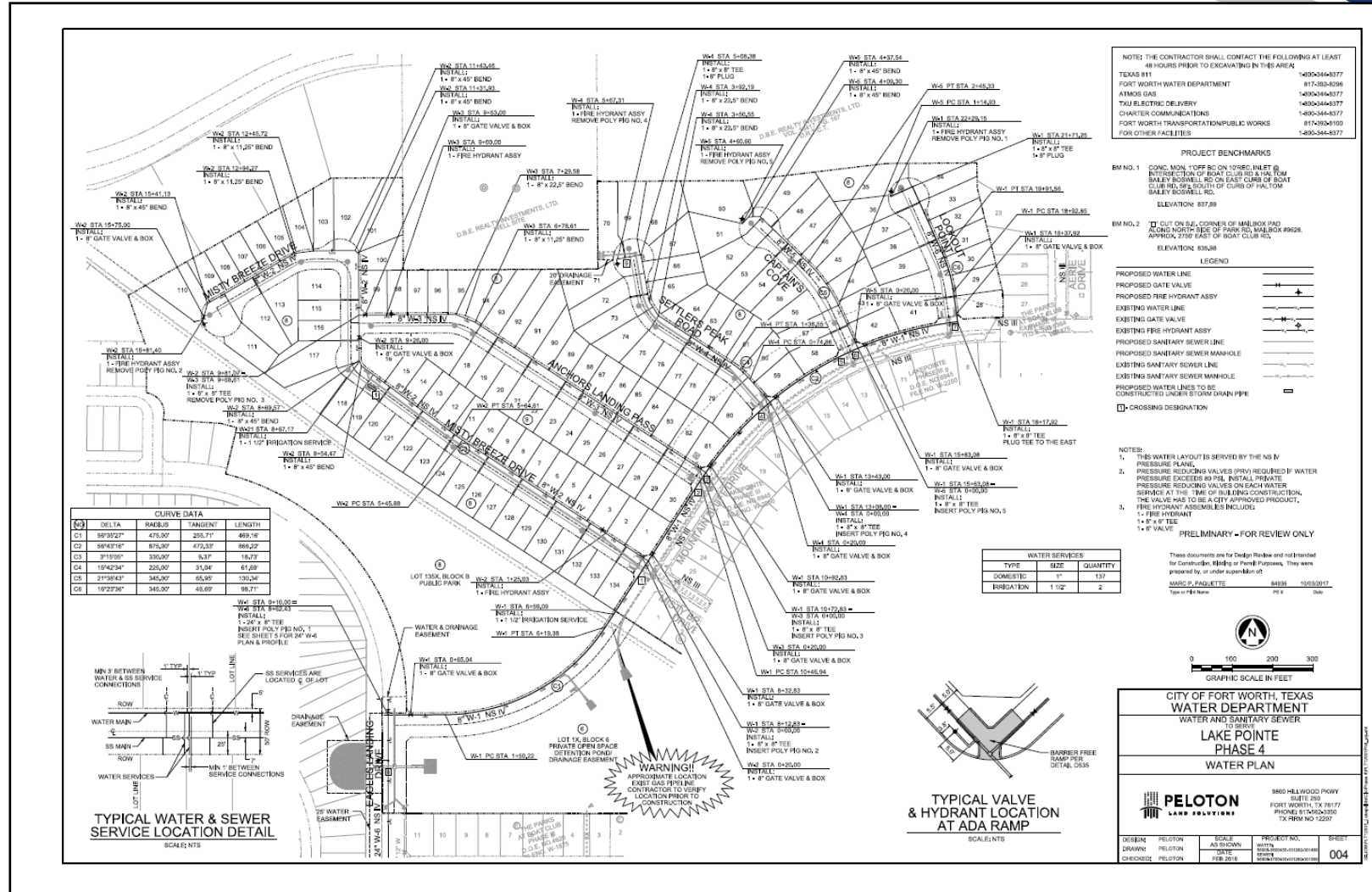
- Make sure you include all divisions applicable to the project.
- Make sure you include the correct PRC Project Manager contact information.
- Water Department is currently updating their water and sanitary sewer notes.
- Notes located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/30%20-%20New%20Development%20Resources/General%20Notes/Link%20to%20General%20General%20Notes?public>



WATER LAYOUT

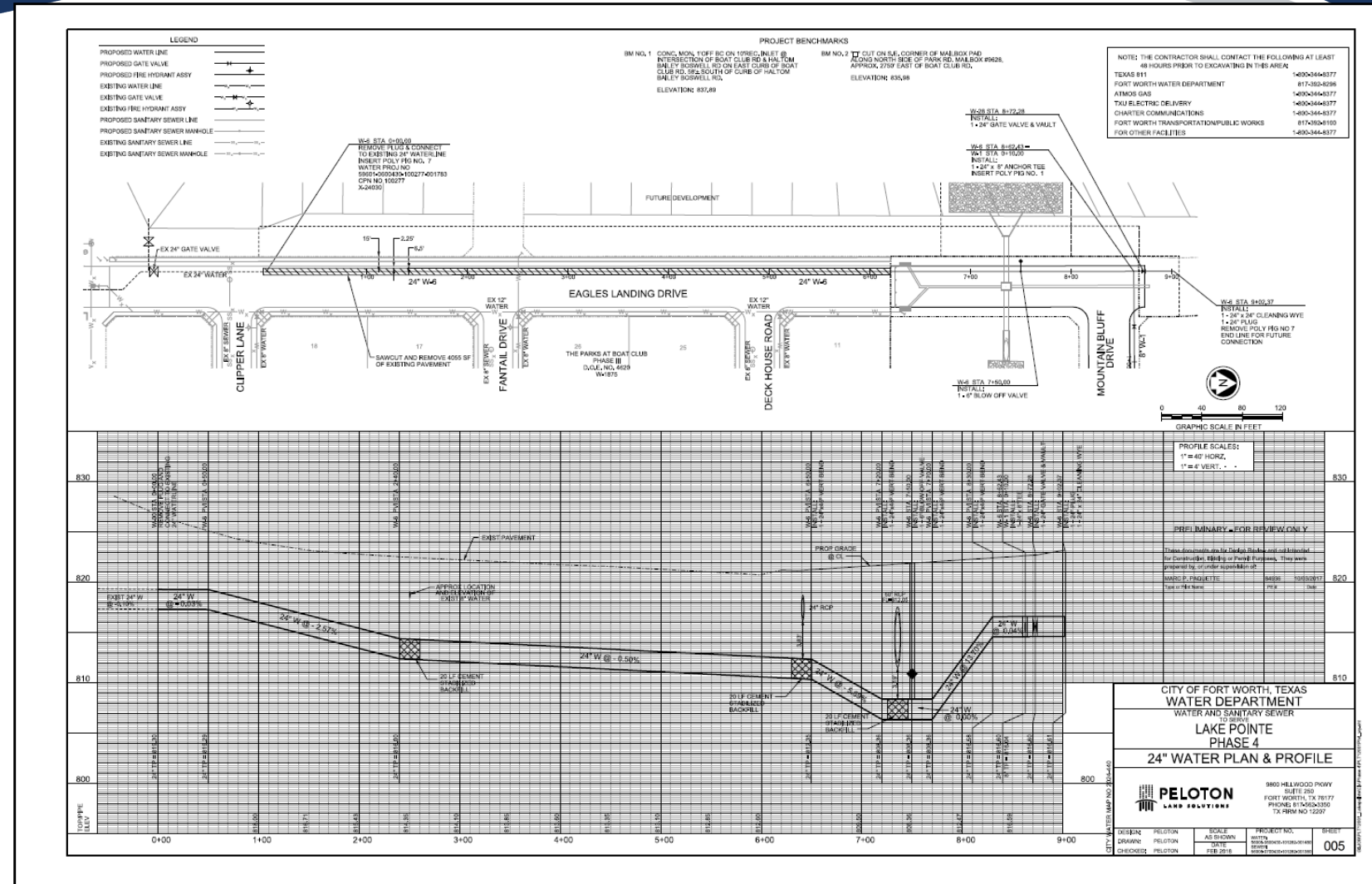
- Use 1" = 100' scale for layout.
- Water Mains are located on north or east side of parkway 5 feet off P.L.
- Provide Curve data.
- Differentiate between pressure plane boundaries and water lines.
- Include insertion/removal of cleaning pigs and wyes for each water line constructed.
- Provide water centerline stationing.
- Show existing/proposed easements.



(Refer back to current Water Department Policy and Procedure Manual)

WATER PLAN AND PROFILE

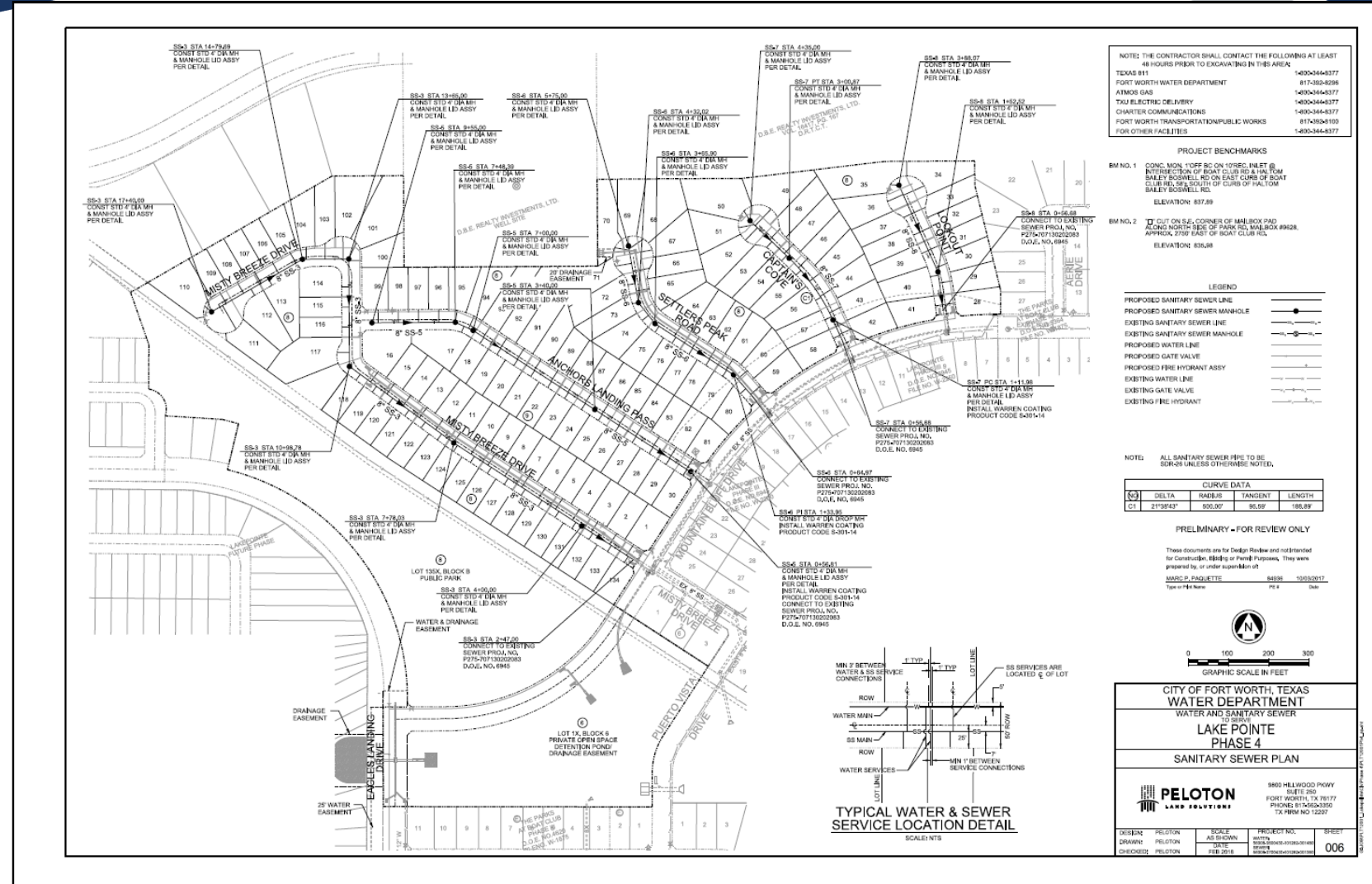
- Use 1" = 40' (H) scales
1" = 4' (V)
- Water lines 12-inches and greater require a plan and profile. Needs to be on one sheet.
(Will be addressed in upcoming manual update.)
- Provide construction sequence when water lines need to be lowered due to conflicts.
- Show existing proposed surface grades and label.
- Provide Top of Pipe elevations.



(Refer back to current Water Department Policy and Procedure Manual)

SEWER LAYOUT

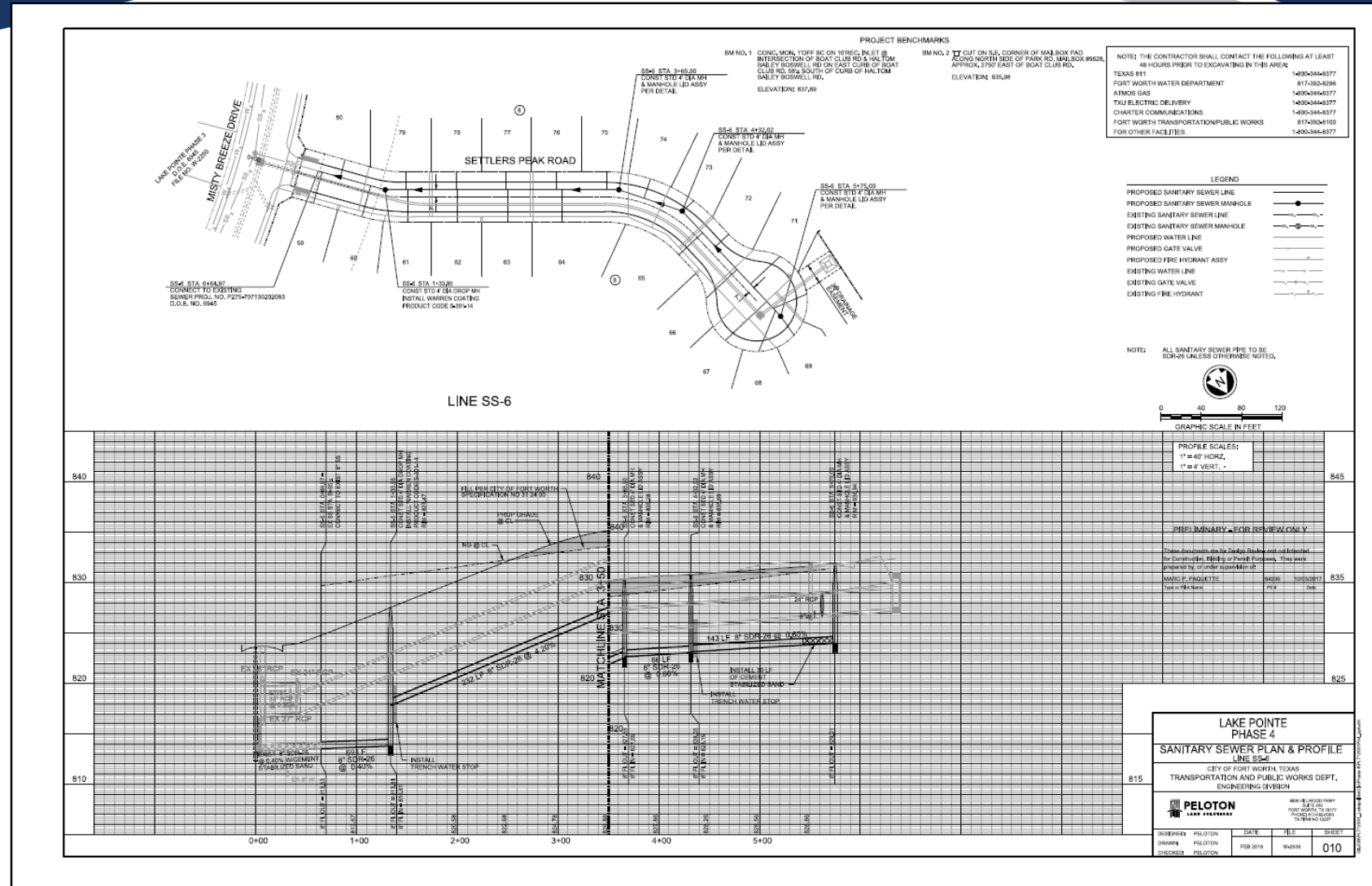
- Use 1" = 100' scale for layout.
- Sewer mains are to be located in the south or west one-quarter of the street.
- Make sure manholes meet maximum spacing requirements.
- Provide Curve data. Minimum radius and manhole spacing needs to comply w/TCEQ Chapter 217 requirements for all sizes.
- Show flow arrows
- Provide sewer centerline stationing.
- Show existing/proposed easements.



(Refer back to current Water Department Policy and Procedure Manual)

SEWER PLAN AND PROFILE

- Use 1" = 40' (H) scales
1" = 4' (V)
- Plan and profile needs to be on one sheet.
(Will be addressed in upcoming manual update.)
- Sewer grades need to meet min and max grades for all pipe sizes.
- Water and sewer crossings need to comply w/TCEQ Chapter 217 requirements.
- Show parallel storm drains.
- Provide pipe capacities for 10-inches and above in MGD.



(Refer back to current Water Department Policy and Procedure Manual)

WATER DETAILS

- Provide all applicable CFW standard details for project.
- For multiple water line lowering's, provide a table. →
(Do not use your own detail)
- For water mains 16-inches and greater, make sure you pay attention to the min. burial depths noted on details for valves, air release, etc.
- Details are located in buzzsaw at:

ANCHORS (CONCRETE) (CONCRETE)	ANCHORS (CONCRETE) (CONCRETE)	ANCHORS (CONCRETE) (CONCRETE)	ANCHORS (CONCRETE) (CONCRETE)	ANCHORS (CONCRETE) (CONCRETE)	ANCHORS (CONCRETE) (CONCRETE)	ANCHORS (CONCRETE) (CONCRETE)
A	B	C	D	E	F	G
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"
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8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"	8 1/2" x 8 1/2"

CITY OF FORT WORTH, TEXAS
 EMBEDMENT FOR WATER SERVICES
 DATE: 06-30-2002
 REVISED: 03-05-10-D104

CITY OF FORT WORTH, TEXAS
 2-INCH STANDARD PLASTIC METER BOX
 (1-1/2" & 2-INCH METERS)
 REVISED: 08-31-2012
 33 12 10-D114

CITY OF FORT WORTH, TEXAS
 HORIZONTAL THRUST BLOCKING
 REVISED: 06-16-2013
 33 11 00-D130

CITY OF FORT WORTH, TEXAS
 WATER LINE LOWERING DETAIL
 REVISED: 05-09-2010
 33 05 12-D162

CITY OF FORT WORTH, TEXAS
 1-1/2" & 2-INCH WATER SERVICE
 REVISED: 12-12-2014
 33 12 10-D112

PRELIMINARY - FOR REVIEW ONLY

These documents are for Design Review and not intended for construction. Bidding or Permit Preparation. They were prepared by, or under supervision of:

MARC P. PAGLIETTI 84838 100532017
 Title of Engineer P.E. Date

CITY OF FORT WORTH, TEXAS			
WATER AND SANITARY SEWER			
LAKE POINTE			
PHASE 4			
WATER DETAILS			
		9800 HILLWOOD PKWY SUITE 250 FORT WORTH, TX 76177 PHONE: 817-462-3370 TX BERM NO. 12227	
DESIGN	PELTON	SCALE	PROJECT NO.
DRAWING	PELTON	AS SHOWN	1212
CHECKED	PELTON	DATE	ISSUED
		FEB 2016	015

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Construction%20Details/000%20-%20GENERAL?public>

and

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Construction%20Details/100%20-%20WATER?public>

WATER LINE LOWERING TABLE EXAMPLE

WATERLINE LOWERING TABLE									
	CROSSING 1	CROSSING 2	CROSSING 3	CROSSING 4	CROSSING 5	CROSSING 6	CROSSING 7	CROSSING 8	CROSSING 9
A	819.22	819.69	819.62	819.95	820.84	820.78	821.22	816.02	817.22
B	822.82	823.29	823.22	823.55	824.44	824.38	824.82	819.62	820.82
C	10.04	8.87	10.43	10.20	9.41	9.46	8.55	11.32	6.42
D	816.49	818.05	816.46	817.06	818.66	818.57	819.92	812.10	831.72
E	33.00	21.00	27.00	33.00	21.00	24.00	24.00	45.00	21.00
F	819.22	819.69	819.62	819.95	820.84	820.78	821.22	816.02	817.22
G	5.04	3.87	5.43	5.20	4.41	4.46	3.55	6.32	1.42
H	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
J	814.18	815.82	814.19	814.75	816.43	816.32	817.67	809.70	815.80

SEWER DETAILS

- Provide all applicable CFW standard details for project.
- Make sure you include the appropriate **Manhole Lid Assembly detail** as there are multiple ones for different scenarios.
- Be mindful that the **min. depth allowed** on Drop Manholes is 2.0'. Hydraulic Slides will be required when this depth cannot be achieved. Refer back to details for specifics.
- Details are located in buzzsaw at:

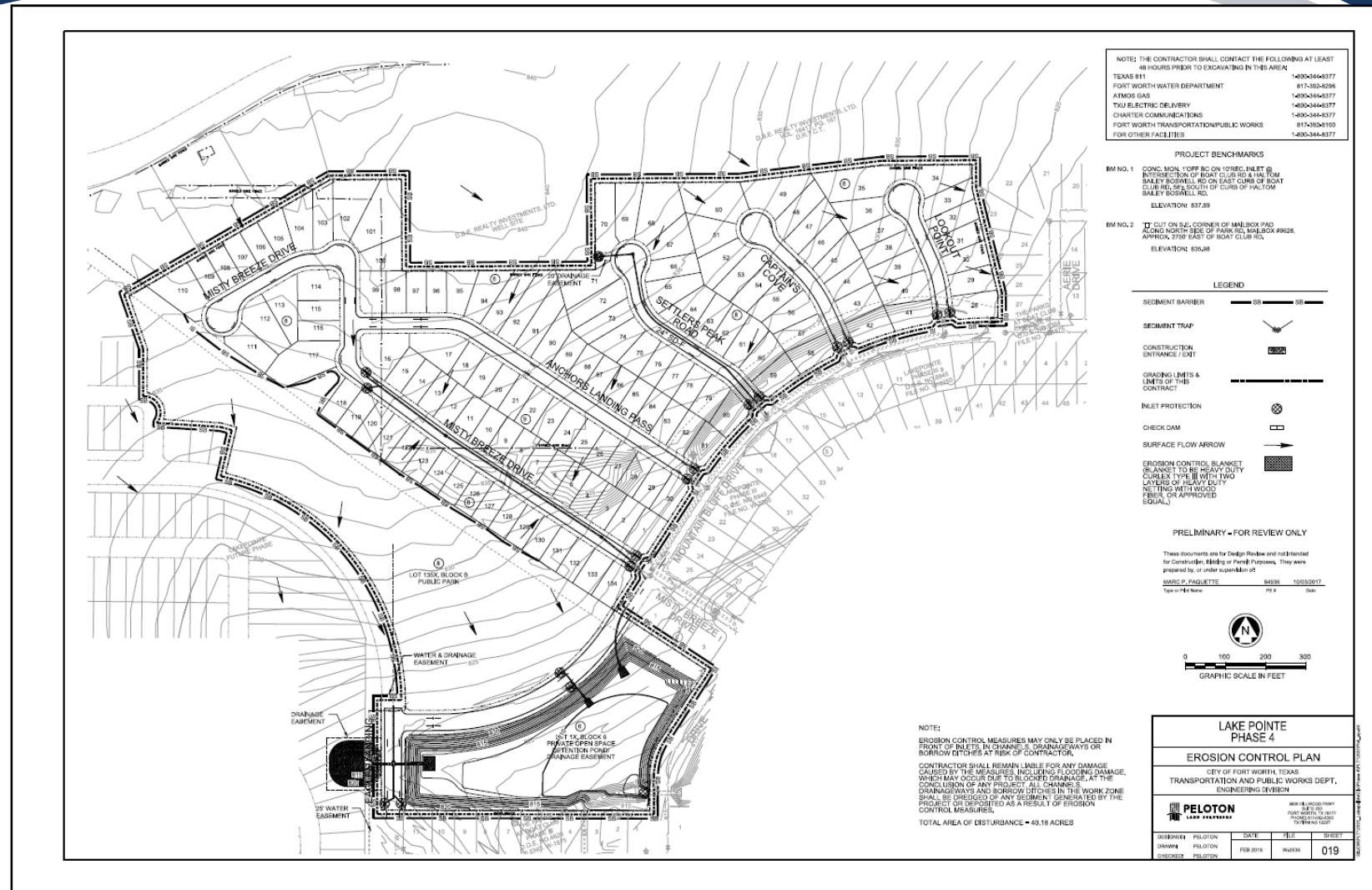
<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Construction%20Details/000%20-%20GENERAL?public>

and

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Construction%20Details/200%20-%20SANITARY%20SEWER?public>

EROSION CONTROL

- Provide standard Erosion Control General Note.
- Provide all applicable erosion and sediment control measures (i.e. sediment ponds when disturbance area > 10 acres).
- Clearly delineate and state Total Area of Disturbance (in acres).
- Show all existing/proposed Stormwater infrastructure.
- Show existing/proposed contours and directional flow arrows.



EROSION CONTROL DETAILS

- Provide all applicable erosion and sediment control details.

ROCK CHECK DAM
NO SCALE

CURB INLET PROTECTION (STAGE ONE)
NO SCALE

ALTERNATE 1 CURB INLET PROTECTION (STAGE TWO)
NO SCALE

ALTERNATE 2 CURB INLET PROTECTION (STAGE TWO)
NO SCALE

CONSTRUCTION ENTRANCE
NO SCALE

HIGH FLOW SILT FENCE DETAIL
NO SCALE

LOW FLOW SILT FENCE DETAIL
NO SCALE

EARTH CONTAINMENT BERM
NO SCALE

SEDIMENT TRAP BERM
NO SCALE

SEDIMENT TRAP OUTLET
NO SCALE

GENERAL NOTES

1. FRAME TO BE MADE OF 4 GAUGE GALVANIZED STEEL, 3"x4" SQUARE FOR SECTION ADJACENT TO FACE OF INLET, 4"x8" SQUARE FOR TOP AND BOTTOM SECTIONS.
2. FILTER FABRIC TO BE TS 500 POLYFELT.
3. CURB INLET PROTECTOR TO BE MANUFACTURED BY TEXAS ENVIRONMENTAL MANAGEMENT, INC. OR EQUAL. (ENGINEER TO APPROVE SUBSTITUTE PRIOR TO INSTALLATION).

PRELIMINARY - FOR REVIEW ONLY

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MARC P. FAQUETTE 64636 10/03/2017
Type or Title Name PE # Date

LAKE POINTE PHASE 4

EROSION CONTROL DETAILS

CITY OF FORT WORTH, TEXAS
TRANSPORTATION AND PUBLIC WORKS DEPT.,
ENGINEERING DIVISION

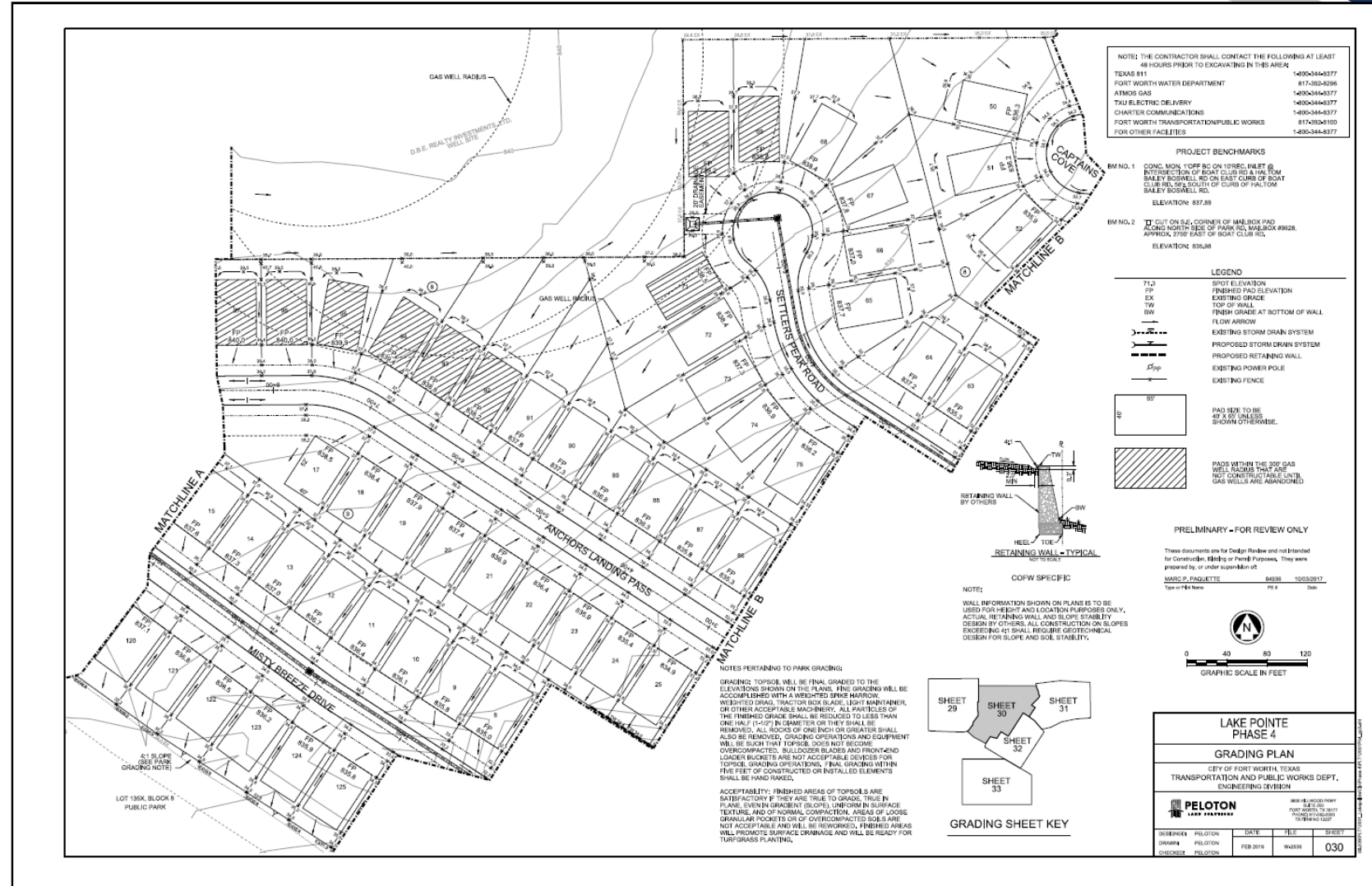
PELTON
LAND DEVELOPMENT

WORK NUMBER: 1500010007
SHEET NO.: 020
DATE: FEB 2016
SCALE: AS SHOWN

DESIGNED BY	CHECKED BY	DATE	TITLE	SHEET
DRAMPA	PELTON	FEB 2016	WADSW	020

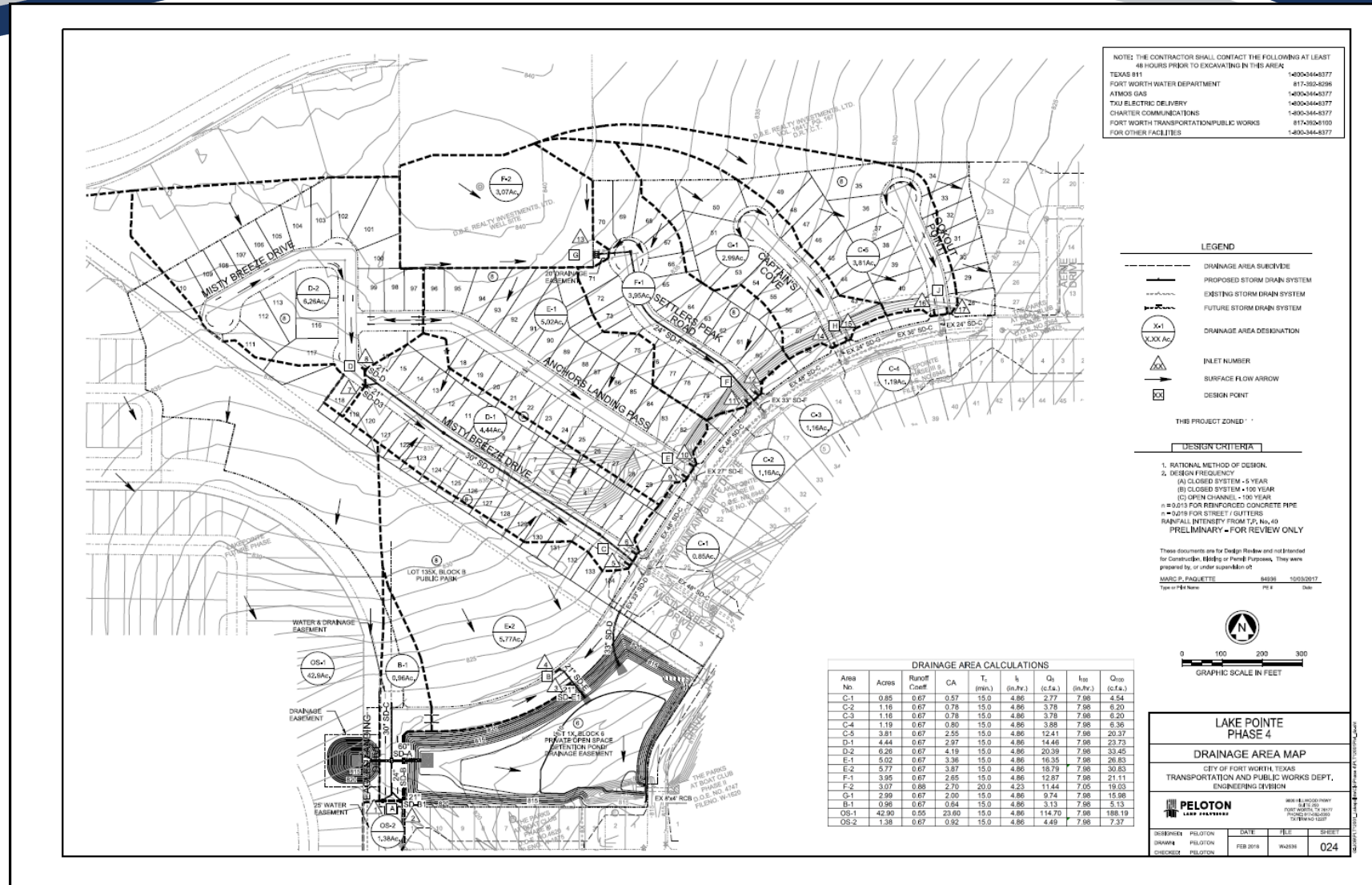
GRADING PLAN

- Show existing and proposed contours.
- Show finish pad elevations
- Show all directional flow arrows for interior lots and streets
- Make sure you show all retaining walls and provide retaining wall details.
- Additional notes maybe required when a development is adjacent to a future dedicated public park.



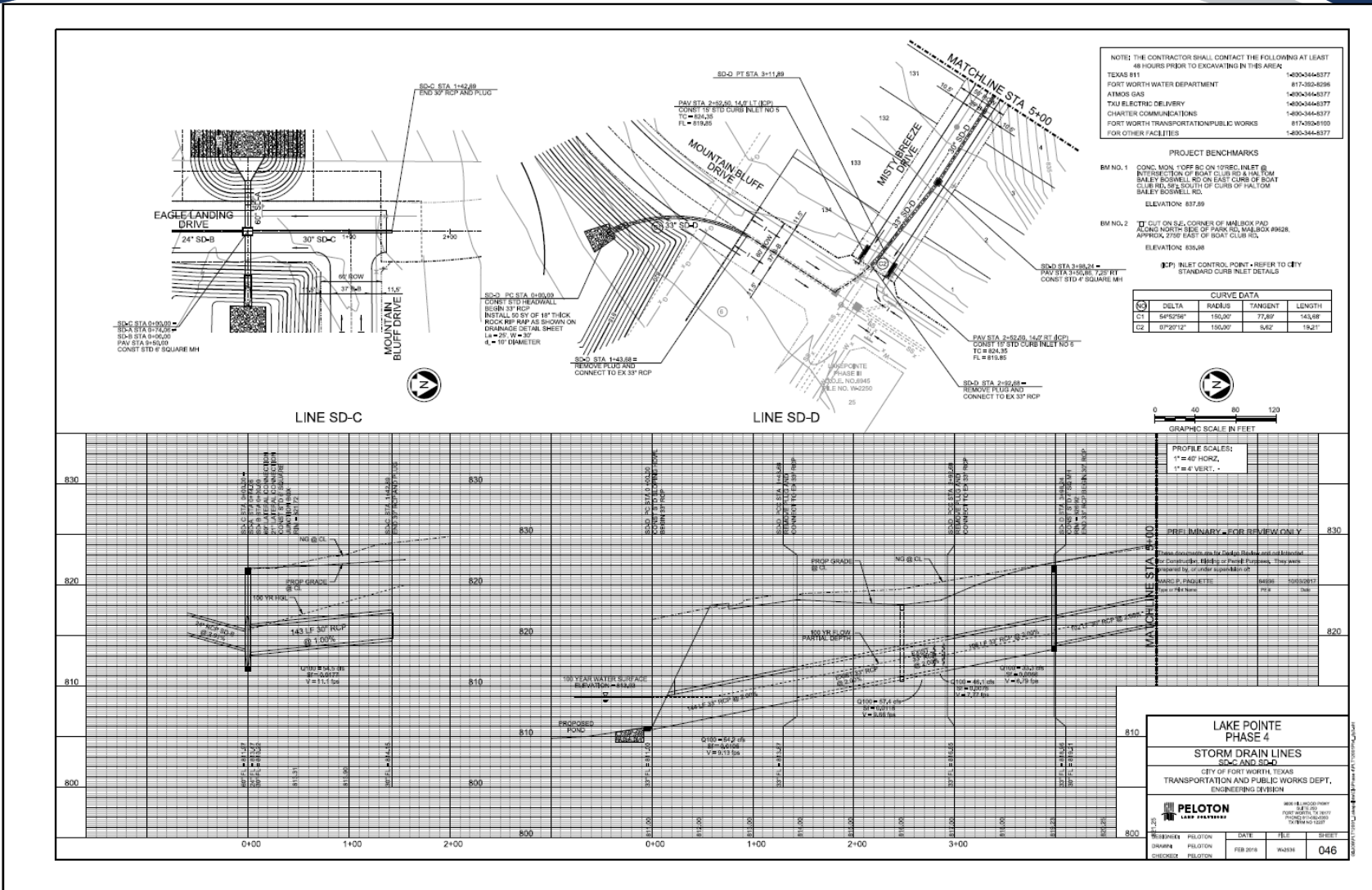
DRAINAGE MAP

- Show drainage area designations.
- Provide drainage area calculations.
- Show site and immediate adjoining property contours. (max. 2' intervals)
- Show existing and proposed storm drains.
- Show drainage flow arrows and break points in streets.
- Show existing and proposed easements.



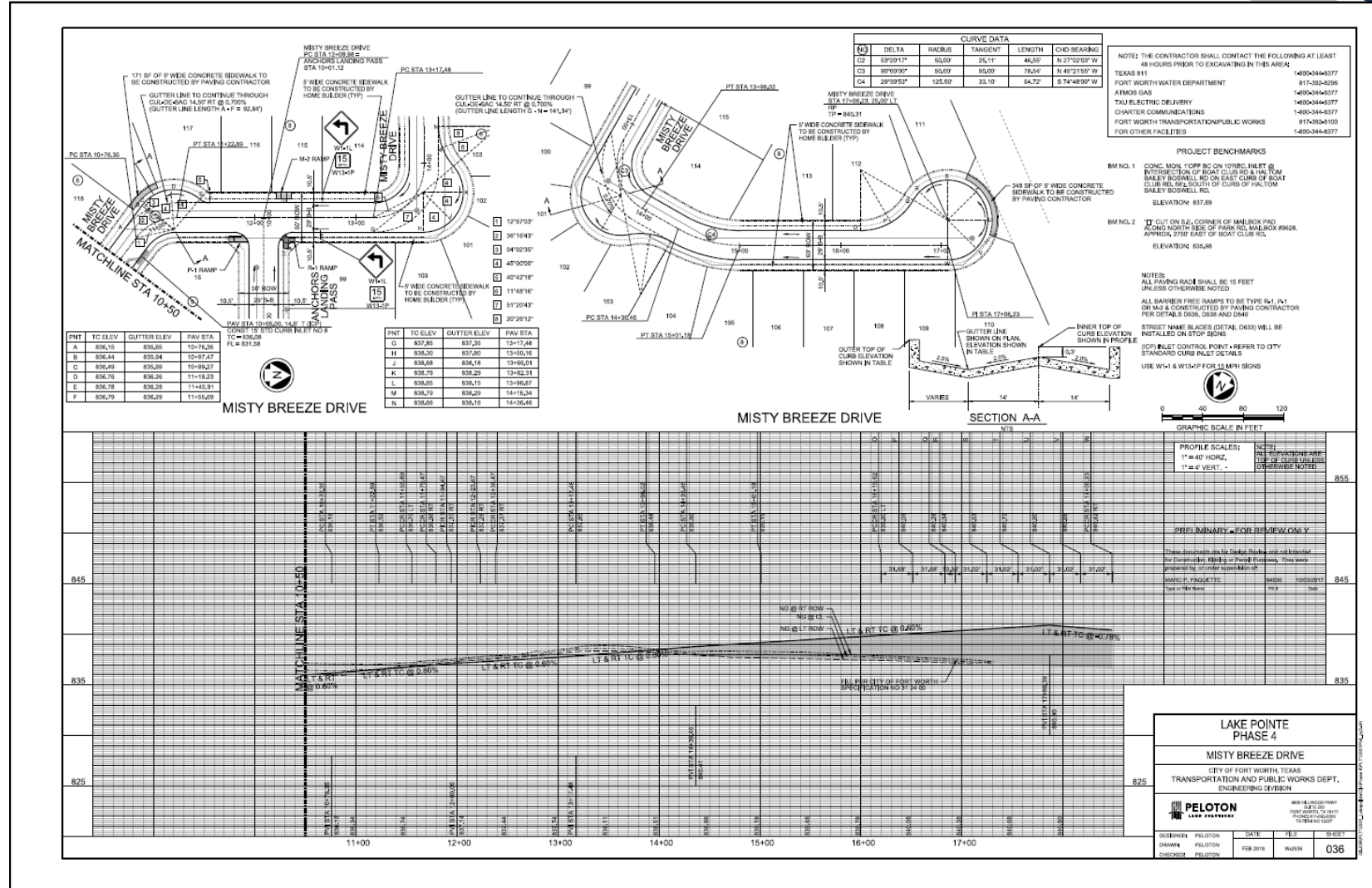
STORM DRAIN PLAN AND PROFILE

- Use 1" = 40' (H) scales
1" = 4' (V)
- Provide curve data.
- Place storm drain in opposite quarter point of street of sewer.
- Show HGL and 100 WSEL where outfalls occur.
- Show all utility crossings.
- Show existing/proposed easements



PAVING PLAN AND PROFILE

- Use 1" = 40' (H) scales
1" = 4' (V)
- Provide horizontal and vertical curve data when applicable.
- Show elbow and cul-de-sac geometrics including cross section for elbows.
- Hatch and label all fill areas per current CFW Specification.
- Street grades need to meet min. and max. grades for all street classifications
- Provide dimensions for existing/proposed streets



PAVEMENT DETAILS

- Provide all applicable paving details. Additional details will be required when different cross sections are involved.
- Parabolic sections are not allowed for new streets.
- Details shall reflect recommendations from geotechnical report and pavement manual for pavement thickness, reinforcement, etc.
- Details are located in buzzsaw at:

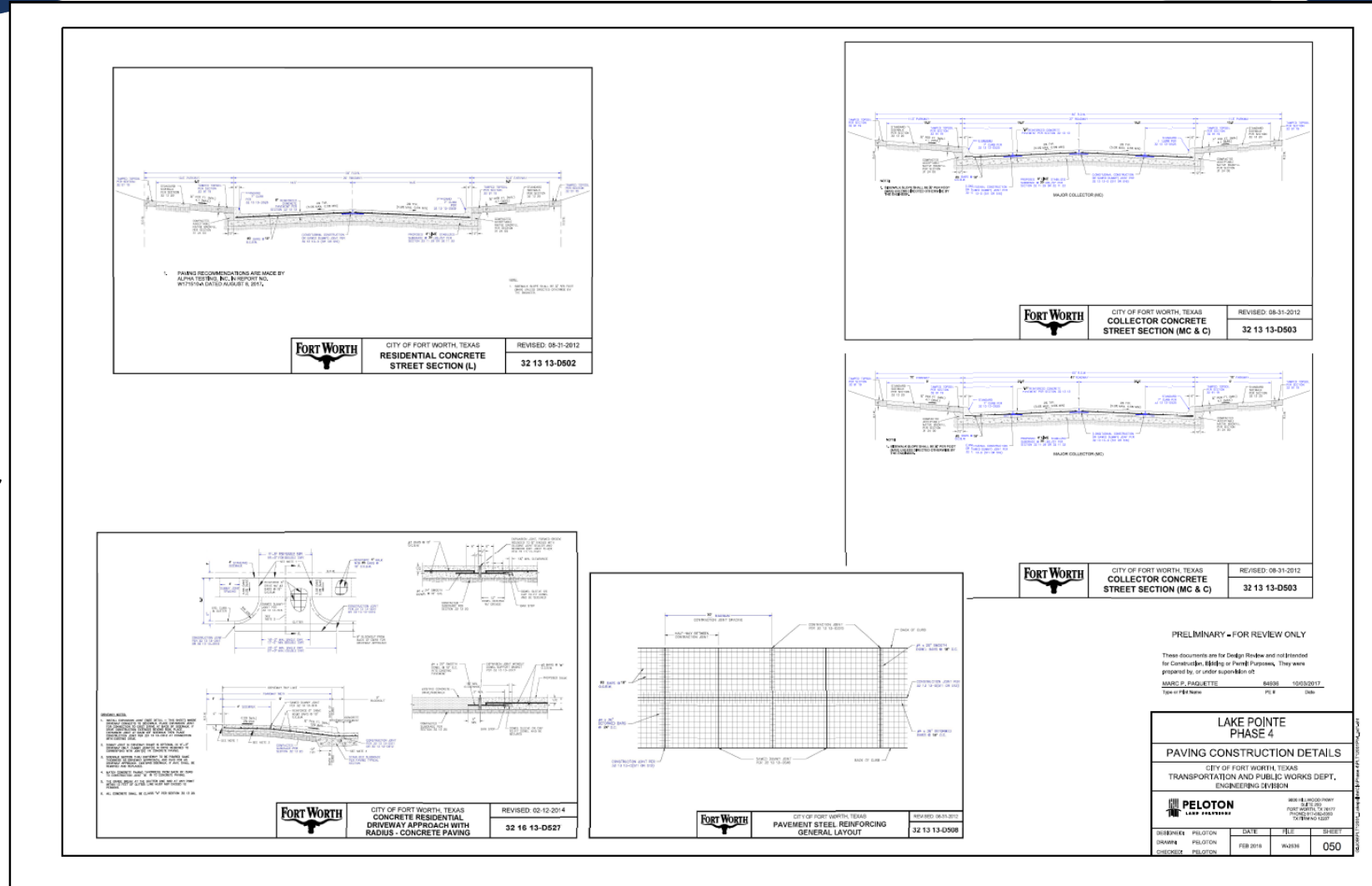


Table 1: Residential Concrete Street Section (L)


	CITY OF FORT WORTH, TEXAS RESIDENTIAL CONCRETE STREET SECTION (L)	REVISED: 08-31-2012 32 13 13-D502
---	---	--------------------------------------

Table 2: Collector Concrete Street Section (MC & C)


	CITY OF FORT WORTH, TEXAS COLLECTOR CONCRETE STREET SECTION (MC & C)	REVISED: 08-31-2012 32 13 13-D503
---	--	--------------------------------------

Table 3: Collector Concrete Street Section (MC & C)


	CITY OF FORT WORTH, TEXAS COLLECTOR CONCRETE STREET SECTION (MC & C)	REVISED: 08-31-2012 32 13 13-D503
---	--	--------------------------------------

Table 4: Concrete Residential Driveway Approach with Radius - Concrete Paving


	CITY OF FORT WORTH, TEXAS CONCRETE RESIDENTIAL DRIVEWAY APPROACH WITH RADIUS - CONCRETE PAVING	REVISED: 02-12-2014 32 16 13-D527
---	---	--------------------------------------

Table 5: Pavement Steel Reinforcing General Layout



	CITY OF FORT WORTH, TEXAS PAVEMENT STEEL REINFORCING GENERAL LAYOUT	REVISED: 08-31-2012 32 13 13-D508
---	---	--------------------------------------

Table 6: Project Information

PRELIMINARY - FOR REVIEW ONLY				
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MARC P. PAQUETTE	84898	10052017		
Type of File Name	PL #	Date		
LAKE POINTE PHASE 4				
PAVING CONSTRUCTION DETAILS				
CITY OF FORT WORTH, TEXAS TRANSPORTATION AND PUBLIC WORKS DEPT. ENGINEERING DIVISION				
		JOB # 10052017 PROJECT # 10052017 PROJECT LOCATION LAKE POINTE		
DESIGNER SHARRA PELTON	DATE FEB 2018	FILE W438	SHEET 050	
CHECKER PELTON				

DRAINAGE DETAILS

- Provide all applicable storm drain details.
- TxDOT details will be required when applicable. (i.e. Concrete Headwalls/Wingwalls, etc.)
- Details are located in buzzsaw at:

33 49 10-D409

33 49 10-D411

33 49 10-D414

33 41 10-D416

33 05 10-D402

LAKE POINTE PHASE 4 STORM DRAIN DETAILS

PELTON

DATE: FEB 2018 FILE: W4838 SHEET: 057

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MARC P. PAGUETTE 64930 10/03/2017

Type of File Name: File # Date

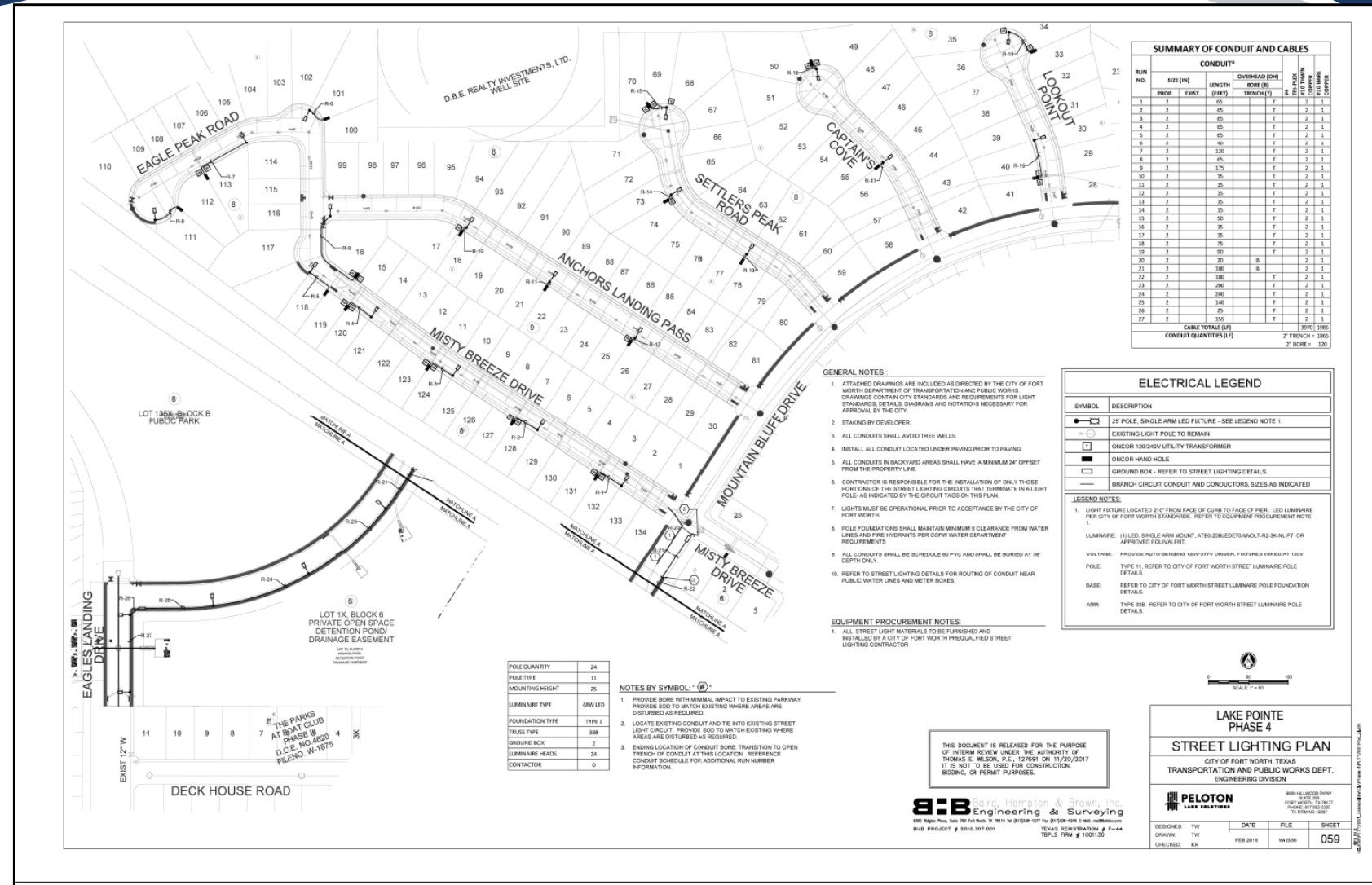
<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Construction%20Details/000%20-%20GENERAL?public>

and

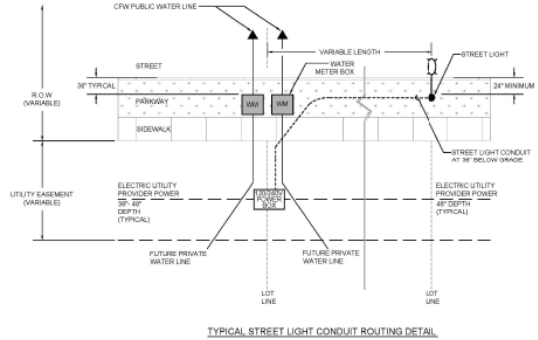
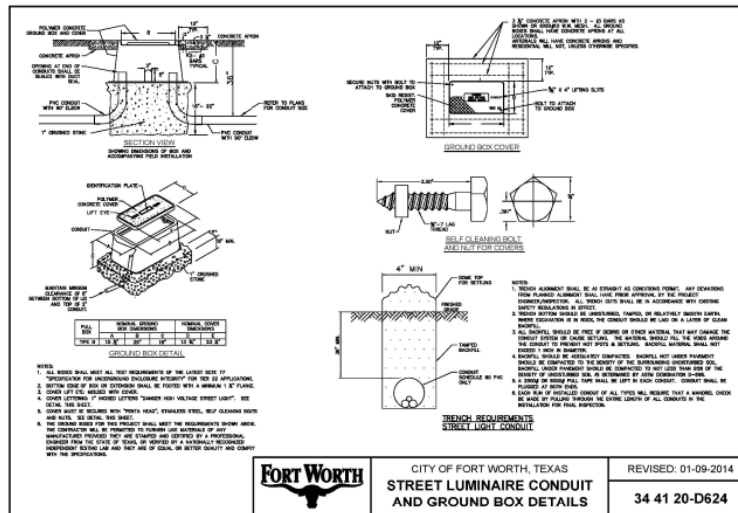
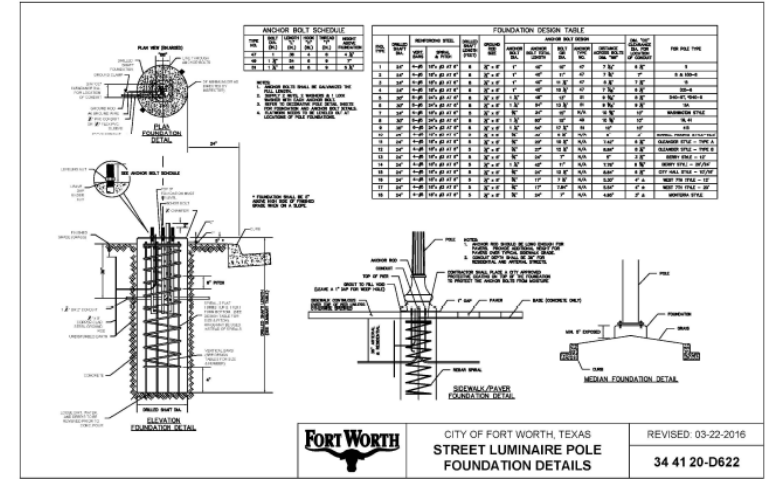
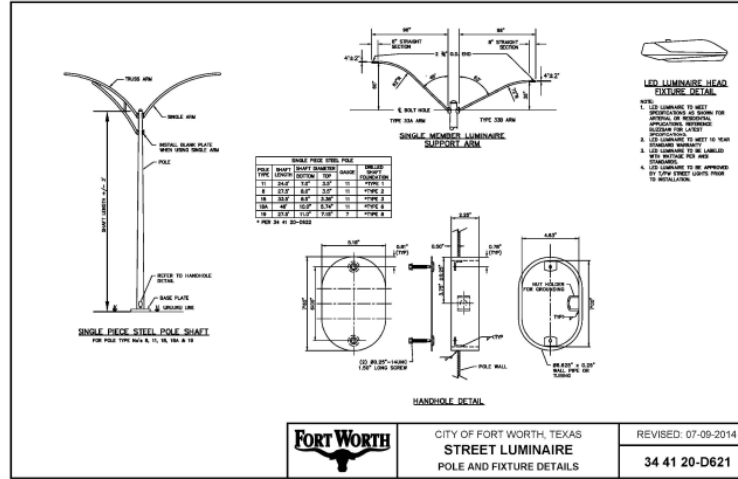
<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Construction%20Details/400%20-%20STORM%20DRAIN?public>

STREET LIGHT PLAN

- Use 1" = 80' scale.
- Show existing/proposed street lights, conduit runs, ground boxes, etc.
- Make sure street lights are located on the opposite side of water mains.
- Provide Conduit and Cable summary table.
- Provide quantity take off table.



STREET LIGHT DETAILS



THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF THOMAS E. WILSON, P.E., 12/20/2017. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

LAKE POINT PHASE 4 STREET LIGHT DETAILS

CITY OF FORT WORTH, TEXAS
 TRANSPORTATION AND PUBLIC WORKS DEPT.
 ENGINEERING DIVISION

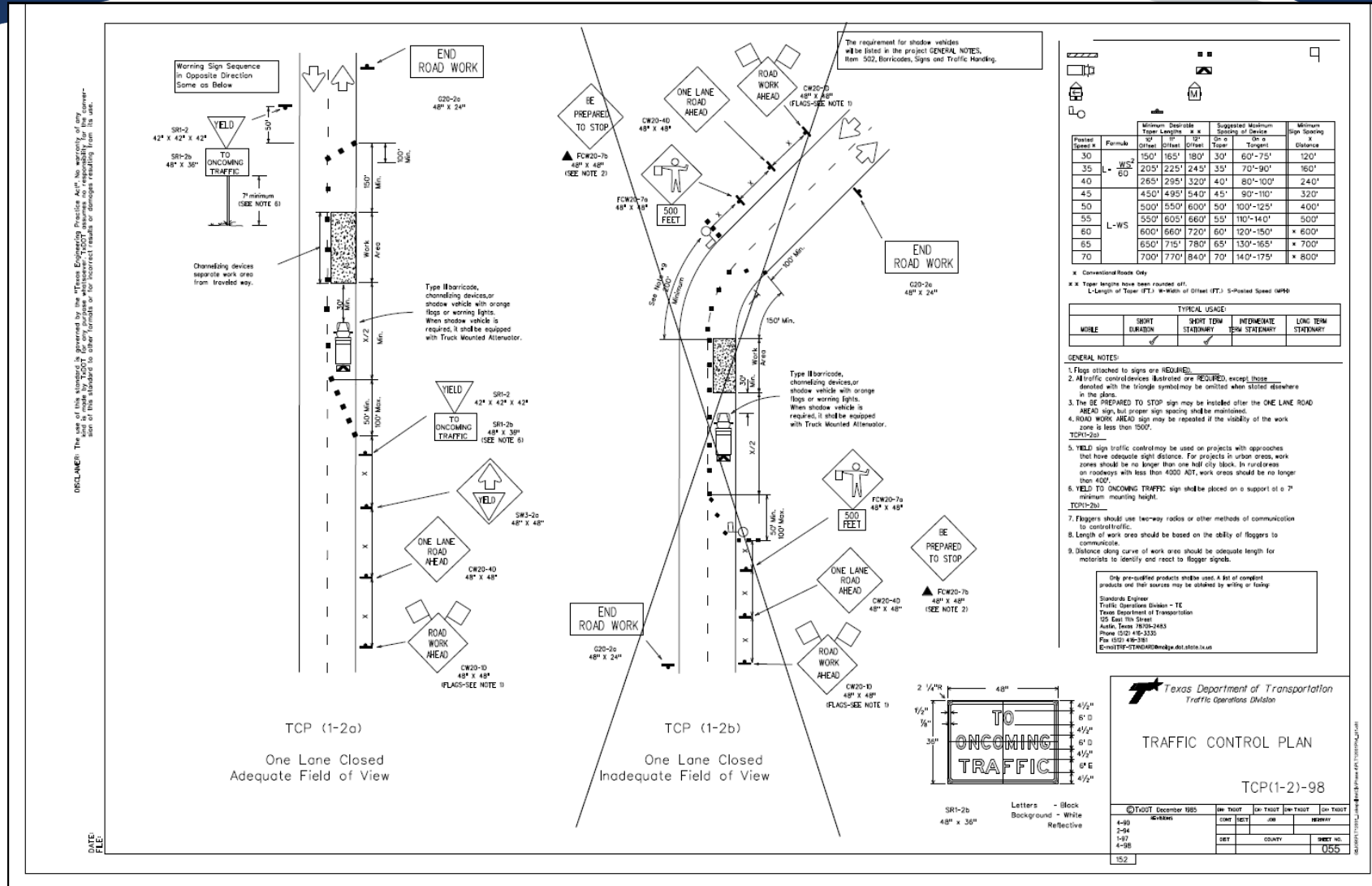
PELTON
 LAKE POINT PHASE 4

DESIGNED: TW DATE: FILE: SHEET: 060
 DRAWING: TW FEB 2018 WK:358
 CHECKED: KB

- Provide all applicable street light details for project.
- Details are located in buzzsaw at:

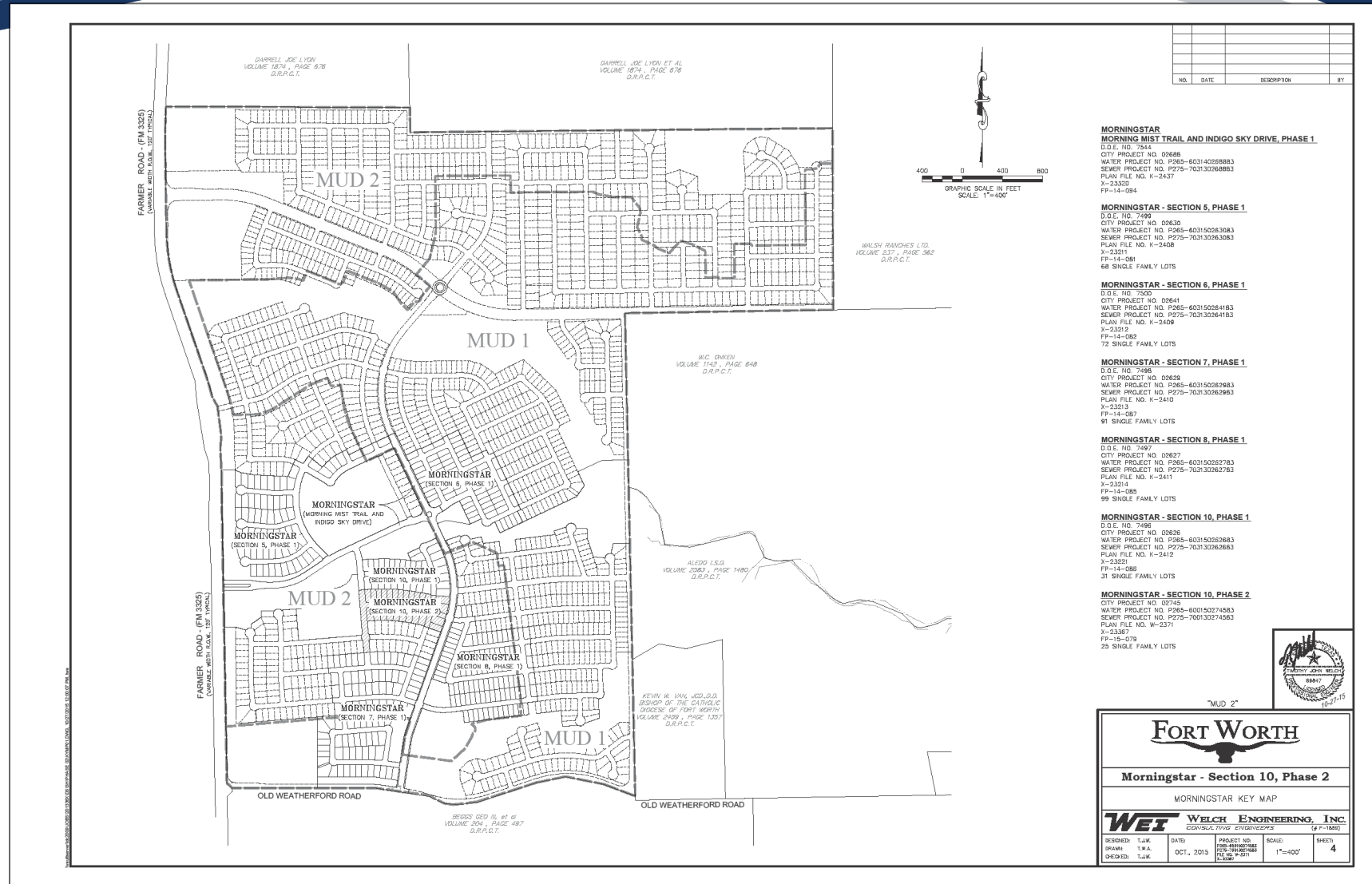
TRAFFIC CONTROL

- Plans can be site specific or general traffic control details can be utilized.



KEY MAP

- This sheet is mainly required for residential developments with multiple phases.
- The intent of the key map is to keep track of which phases are dependent on other phases for infrastructure. In addition, this will provide information to reviewers on what phases have been constructed.
- Basic requirements are name of project, CPN, water/sewer project numbers and file numbers.



PAVEMENT DESIGN

TYPES OF PAVEMENT

- Flexible Pavement (Asphalt)**
- Rigid Pavement (Concrete)

** Please note that while the design manual mentions flexible pavement design, it is only provided for reference. All **new streets** are to be **designed and built as** rigid, portland cement, **concrete pavement**. The primary reason for this policy is to minimize the impact on maintenance costs and City's maintenance forces.

(Section One - Introduction/Page 1 & Section Three Pavement Design Input Values/Page 11 – Pavement Manual)**

PAVEMENT DESIGN MANUAL

- Pavement Design Manual consists of six sections.
 - Section One
(Introduction)
 - Section Two
(Geotechnical Parameters)
 - Section Three
(Pavement Design Input Values)
 - Section Four
(Reinforcing Steel, Dowels and Joints)
 - Section Five
(Summary)
 - Section Six
(References)
- Pavement Design Manual is located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/10%20-%20Design%20Guidelines/Traffic/Pavement%20Manual.pdf?public>

STREET CLASSIFICATIONS

- Per Current 2016 Master Thoroughfare Plan (MTP), street classifications are as follows:
- Local Streets:
 - Limited Local
 - Standard Local
- Collector **
 - Standard – Two-Way Left-Turn Lane (TWLTL)
 - Standard – Undivided

**** Also used in residential areas with daily traffic volumes exceeding 2,500 vehicles****
- Industrial
- Thoroughfares (Formerly Arterials):
 - Activity Street
 - Commercial Mixed Use
 - Neighborhood Connector
 - Commercial Connector
 - System Link
- Current MTP is located at : <http://fortworthtexas.gov/MTP/>



GEOTECHNICAL REPORT

- Geotechnical Engineer/Consultant shall use Pavement Design Manual dated January 29, 2015 (with a Revised Date of December 14, 2015).
- Geotechnical Report needs to meet minimum Pavement Design Manual requirements based on street classification.
- Reports are required at 1st Review to City when public streets/public access easements are to be built (Need to include WinPAS Design Printout).
- If CFW Project Manager deems the geotechnical report insufficient, a revised report/addendum will be required.
- CFW does not provide traffic counts. Traffic counts should be provided through a Traffic Impact Analysis (TIA) to determine annual ESAL's.



PAVEMENT DESIGN MANUAL



City of Fort Worth
Department of Transportation
and Public Works

January 29, 2015
(Revised December 14, 2015)

APPENDIX F // Example of the WinPAS Design Printout

WinPAS

Pavement Thickness Design According to
1993 AASHTO Guide for Design of Pavements Structures
American Concrete Pavement Association

Rigid Design Inputs

Agency: City of Fort Worth
Company:
Contractor:
Project Description: Fortside Project
Location: Fort Worth, Texas

Rigid Pavement Design Evaluation

PCC Thickness	9.00 inches	Load Transfer, J	3.00
Design ESALS	15,000,000	Mod. Subgrade Reaction, k	221 ps/in
Reliability	95.00 percent	Drainage Coefficient, Cd	1.00
Overall Deviation	0.25	Initial Serviceability	4.50
Modulus of Rupture	600 psi	Terminal Serviceability	2.50
Modulus of Elasticity	4,200,000 psi		

Modulus of Subgrade Reaction (Resilient Deflection)

Resilient Modulus of the Subgrade: 4,118.2 psi
Resilient Modulus of the Subbase: 12,392.0 psi
Subbase Thickness: 0.30 inches
Depth to Rigid Foundation: 0.00 feet
Less of Support Value (1,1,2,3): 0.0

Modulus of Subgrade Reaction	220.30 ps/in
------------------------------	--------------

STREET CROSS SECTIONS

- CFW only **allows Rooftop** cross sections. Parabolic cross sections are **not allowed** for **new streets**.
- Consultant will need to verify existing pavement cross section on previous development phases to determine what was constructed.
- If a parabolic cross section was constructed, consultant will need to **provide a transition** between parabolic and rooftop section.
(Recommend a minimum 50 ft. transition)

PAVING CONSTRUCTION DETAILS

- The pavement construction detail sheet shall include at minimal the following details:
 - D502, D503, D504, D505, D506 or D507
(Based on street classification)
 - D508
 - D511
 - D512
 - D513
 - D514
 - D515
 - D516
 - D517
 - D518
 - D519
 - D525
 - D527 or D529
 - D535 – D544
(Whichever is applicable)
 - D545
 - D546
- Note that all Machine-Laid concrete shall be Class P 3600 psi and hand-laid concrete shall be Class H 4500 psi. (Refer to Specification 32 13 13_Concrete Paving)
- Pavement Details located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/Construction%20Details/500%20-%20PAVING?public>

TPW UTILITY CONSTRUCTION POLICY

- Policy has been in place since March 14, 2001. **(Future Update - pending)**
- New Pavement Requirements

If a utility company desires to cut the street within the first two (2) years of construction or reconstruction, the utility company must reconstruct the entire street (curb to curb) at its expense.

- Pavement Surface Restoration

Concrete Pavement:

2 years to 10 years	Entire Panel
More than 10 years	Partial Panel Replacement

Asphalt Pavement:

2 years to 10 years	Resurface ½ of pavement, curb to centerline
More than 10 years	Overlay 1 lane width (approximately 12')

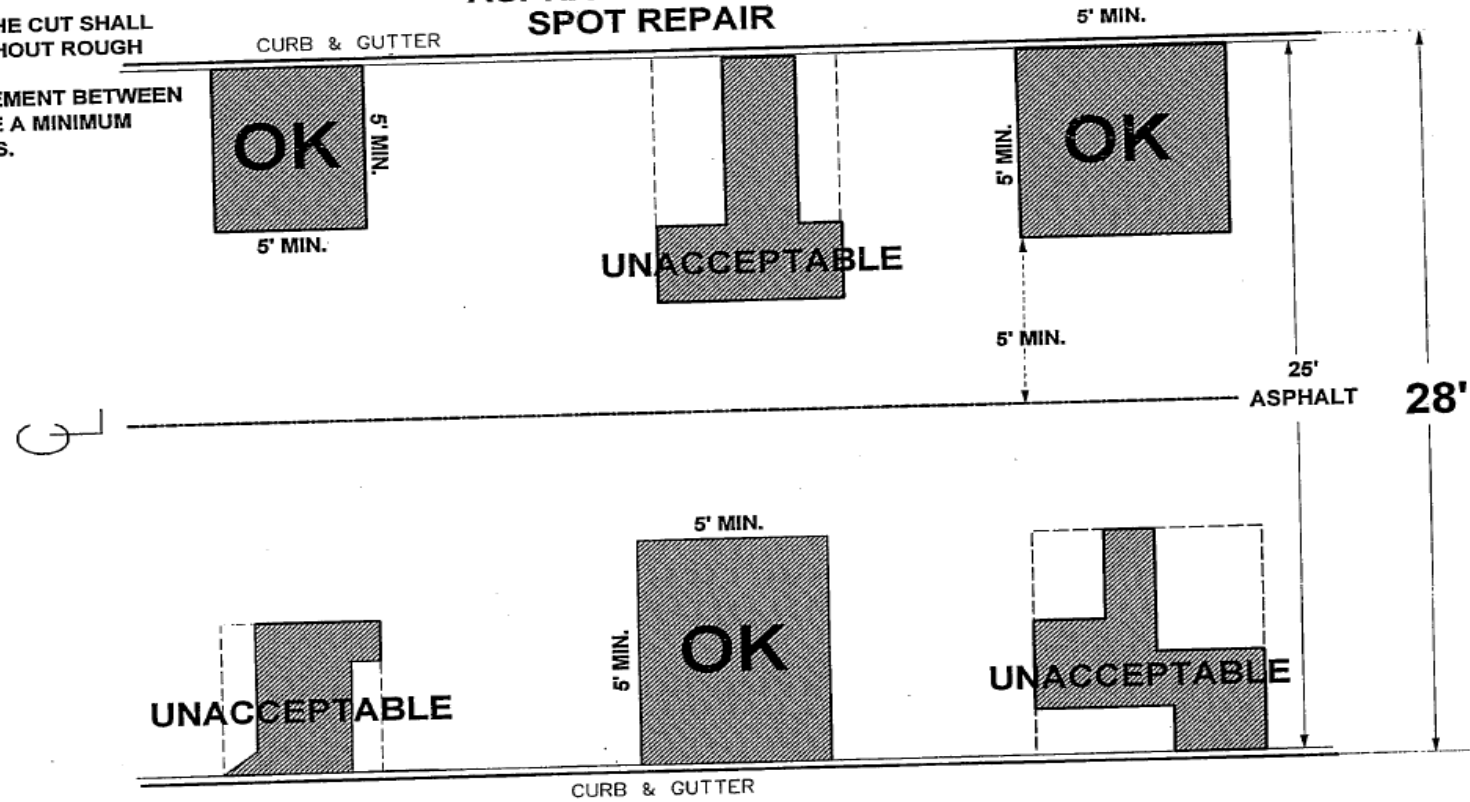
- TPW Utility Construction Policy located in buzzsaw at:

<https://projectpoint.buzzsaw.com/fortworthgov/Resources/02%20-%20Construction%20Documents/Construction%20Plans/General%20Notes?public>

NOTES

1. THE FOUR SIDES OF THE CUT SHALL BE NEATLY SAWED WITHOUT ROUGH EDGES
2. ANY REMAINING PAVEMENT BETWEEN SPOT REPAIRS MUST BE A MINIMUM OF 5' IN ALL DIRECTIONS.

ASPHALT PAVEMENT SPOT REPAIR



TYPICAL 28' WIDE PAVEMENT

RECOMMENDED BY: Y.A. Babish DATE: 2/15/01
 GEORGE A. BEHMANESH,
 ASSISTANT DIRECTOR, TPW

FORT WORTH

 CITY OF FORT WORTH, TEXAS
 TRANSPORTATION/PUBLIC WORKS
 ENGINEERING DIVISION

APPROVED BY: Hugo Malanga DATE: 3/5/01
 HUGO MALANGA
 DIRECTOR, TPW

Rev.

FIG 2000-4B

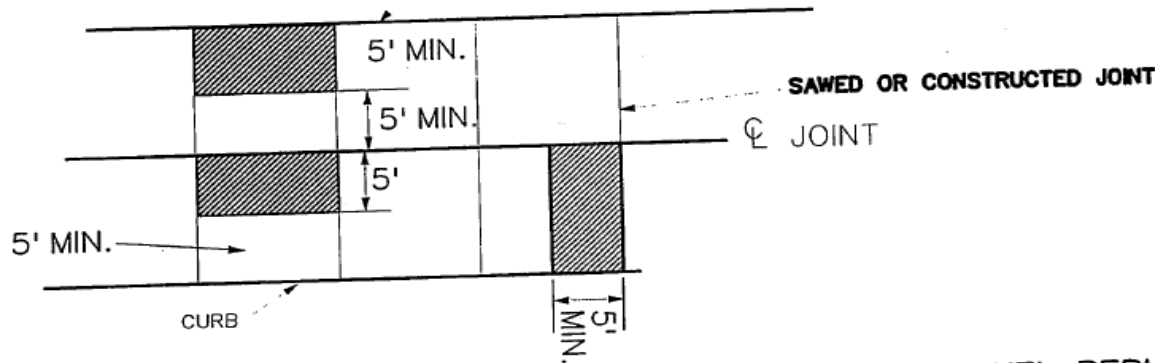
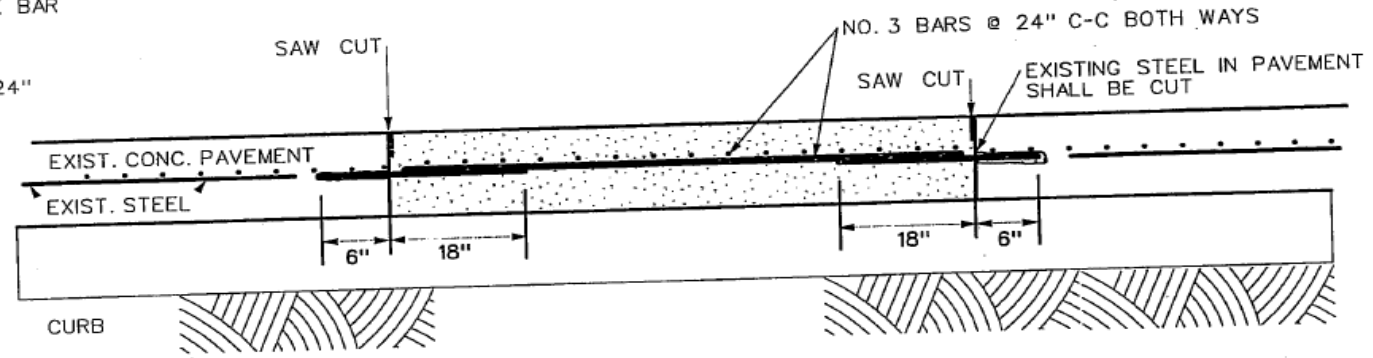
ASPHALT PAVEMENT REPAIR

1. EXISTING CONCRETE SHALL BE SAW CUT FULL DEPTH . . .

2. DRILL AND GROUT NO.5 x 24" TIE BARS AT 24" C-C. PENETRATE MIN. 6" INTO EXISTING PAVEMENT

3. SPLICE NO.3 BARS TO THE NO.5 TIE BAR WITH A MINIMUM 12" OVERLAP.

4. AT EXPANSION JOINT USE REDWOOD EXPANSION JOINT FILLER AND NO.6 x 24" SMOOTH DOWEL AT 24" C-C



JOINT DEPTH	
PAVEMENT THICKNESS	JOINT DEPTH
T= 5"	1-1/4"
T= 6"	1-1/2"
T= 7"	1-3/4"
T= 8"	2"

TYPICAL PARTIAL PANEL REPLACEMENT REINFORCED CONCRETE PAVEMENT

RECOMMENDED BY: GA Behmanesh DATE: 2/15/01

GEORGE A. BEHMANESH,
 ASSISTANT DIRECTOR, TPW

Rev.

FORT WORTH



CITY OF FORT WORTH, TEXAS
 TRANSPORTATION/PUBLIC WORKS
 ENGINEERING DIVISION

APPROVED BY: Hugo Malanga DATE: 3/5/01

HUGO MALANGA
 DIRECTOR, TPW

FIG. 2000-4A

CONCRETE PAVEMENT REPAIR

CFA EXHIBITS

BASIC CONCEPT FOR CFA EXHIBITS

- After several discussions between City Staff, Consultants and Developers, it was agreed that the CFA Exhibits would be a basic “Stick Figure” exhibit and any further design questions would be answered by referring back to the final construction plans.
- CFA Exhibits will still require project information, legend, scales, and line work.
- Additional items such as pressure plane boundaries, pipe abandonment/removal, various pavement widths/thicknesses, pavement markings, etc. not typically depicted on example CFA exhibits may be required when applicable.
- Previously, CFA Exhibits required that you show all appurtenances such as existing/proposed gate valves, fire hydrants, manholes, etc. Now they do not.



STANDARD CFA EXHIBITS

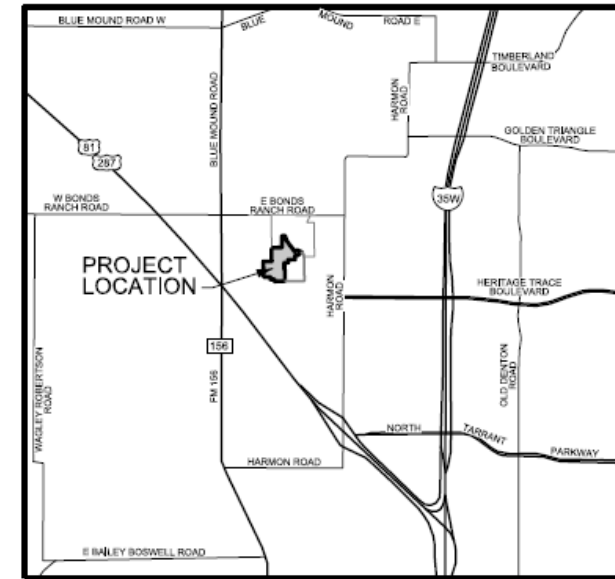
Per the Standard Community Facilities Agreement, the standard exhibits are as follows:

- Location Map
- Exhibit A – Water Improvements
- Exhibit A1- Sewer Improvements
- Exhibit B – Paving Improvements
- Exhibit B1- Storm Drain Improvements
- Exhibit C1- Street Lights and Sign Improvements

Use these **standard designations** for each exhibit submitted to IPRC for review.

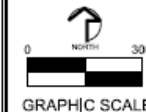
LOCATION MAP

- Provide a vicinity map
- Need to include City Project Number (CPN)
- Include Mapsco No.



CPN 000000
MAPSCO NO.

DISCLAIMER NOTE:
THIS IS A BASIC EXAMPLE FOR CONSULTANTS TO FOLLOW. ADDITIONAL ITEMS ON CFA EXHIBITS SUCH AS PRESSURE PLANE BOUNDARIES, PIPE ABANDONMENT/REMOVAL, VARIOUS PAVEMENT WIDTHS, THICKNESSES, PAVEMENT MARKINGS, ETC. NOT DEPICTED ON EXAMPLE EXHIBITS MAY BE REQUIRED WHEN APPLICABLE.



OWNER / DEVELOPER:
COMPANY NAME
ADDRESS
CITY, STATE ZIP CODE

**SPRINGS AND
MEADOWS
PHASE 2**

ENGINEER:
COMPANY NAME
ADDRESS
CITY, STATE ZIP CODE

(SHEET 1 OF 6)
DATE: JANUARY, 2017

EXHIBIT A WATER IMPROVEMENTS

- Provide a legend and scale
- Show existing/proposed lines. Make sure you label pipe sizes greater than 8-inches.
- No longer required to show existing/proposed valves, fire hydrants, etc.
- For infrastructure that you are connecting to that is not constructed as of yet, provide label stating “NOT EXISTING INFRASTRUCTURE”, Development Phase Name and CPN on exhibit.

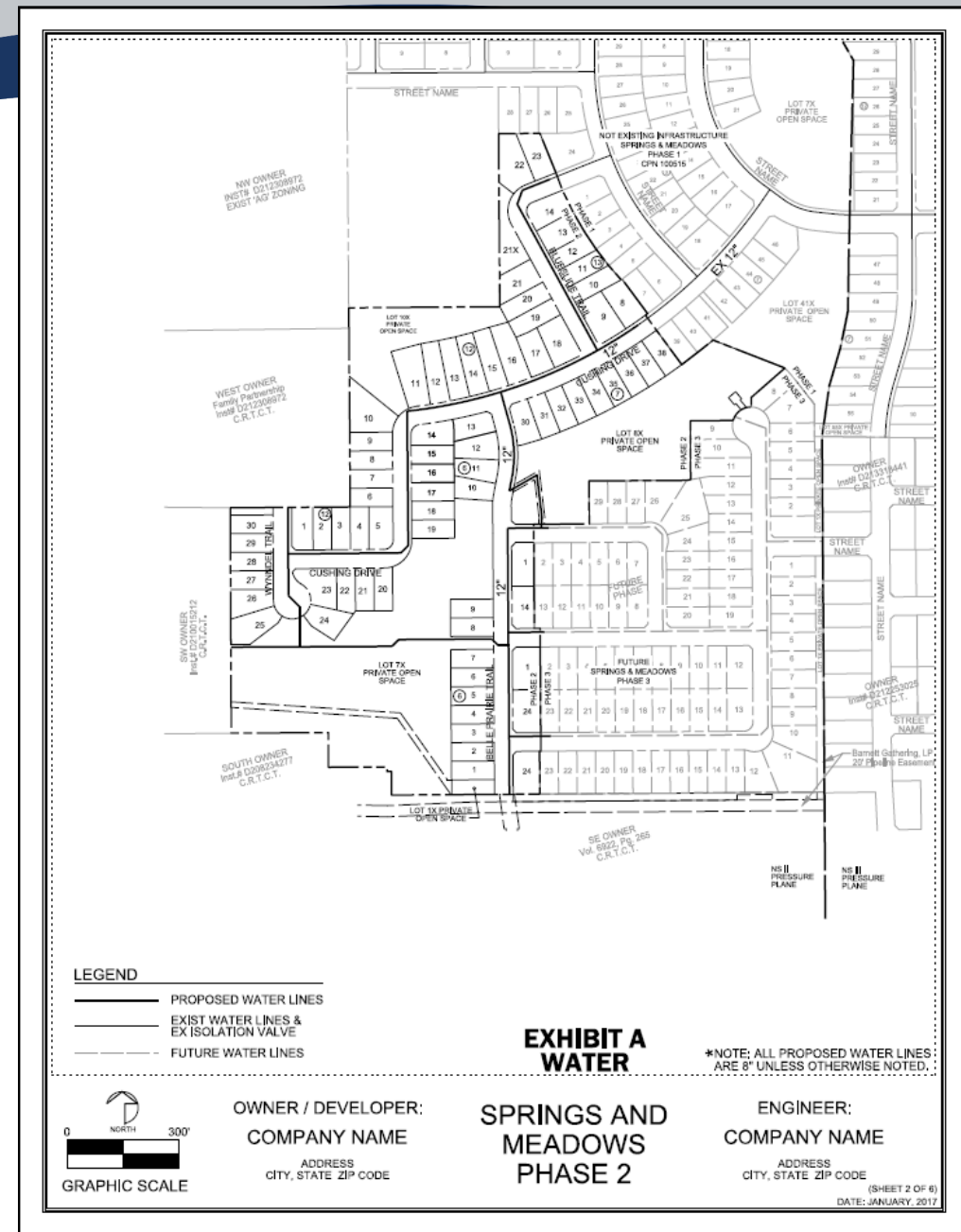


EXHIBIT A1 SEWER IMPROVEMENTS

- Provide a legend and scale
- Show existing/proposed lines. Make sure you label pipe sizes greater than 8-inches.
- No longer required to show existing/proposed manholes.
- For infrastructure that you are connecting to that is not constructed as of yet, provide label stating “NOT EXISTING INFRASTRUCTURE, Development Phase Name and CPN” on exhibit.

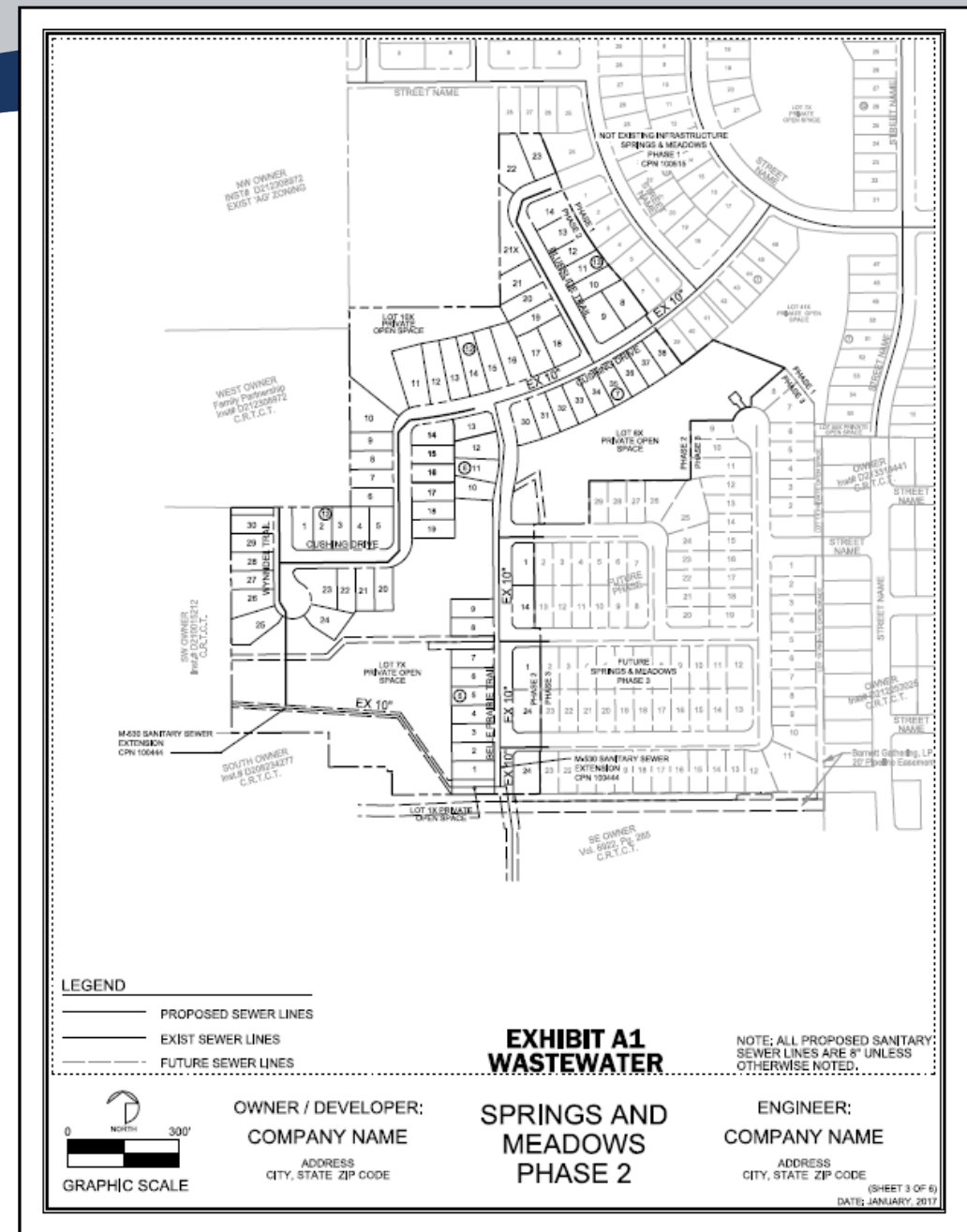


EXHIBIT B PAVING IMPROVEMENTS

- Provide a legend and scale
- Show sidewalk to be constructed by developer and builder.
- Show ADA ramps to be constructed by developer.
- For infrastructure that you are connecting to that is not constructed as of yet, provide label stating “NOT EXISTING INFRASTRUCTURE, Development Phase Name and CPN” on exhibit.

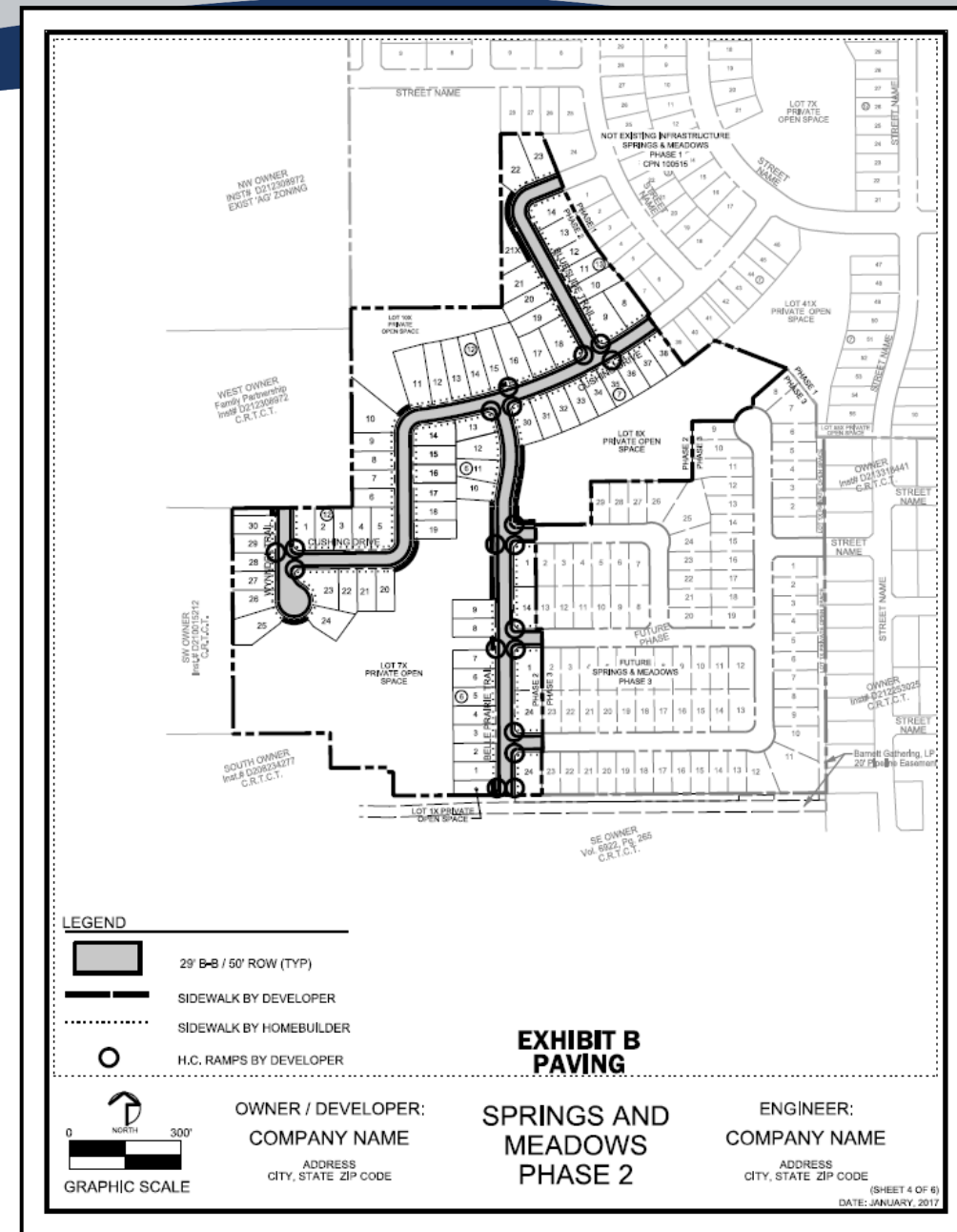


EXHIBIT B1 STORM DRAIN IMPROVEMENTS

- Provide a legend and scale
- Show existing/proposed lines and inlets.
- For infrastructure that you are connecting to that is not constructed as of yet, provide label stating “NOT EXISTING INFRASTRUCTURE, Development Phase Name and CPN” on exhibit.

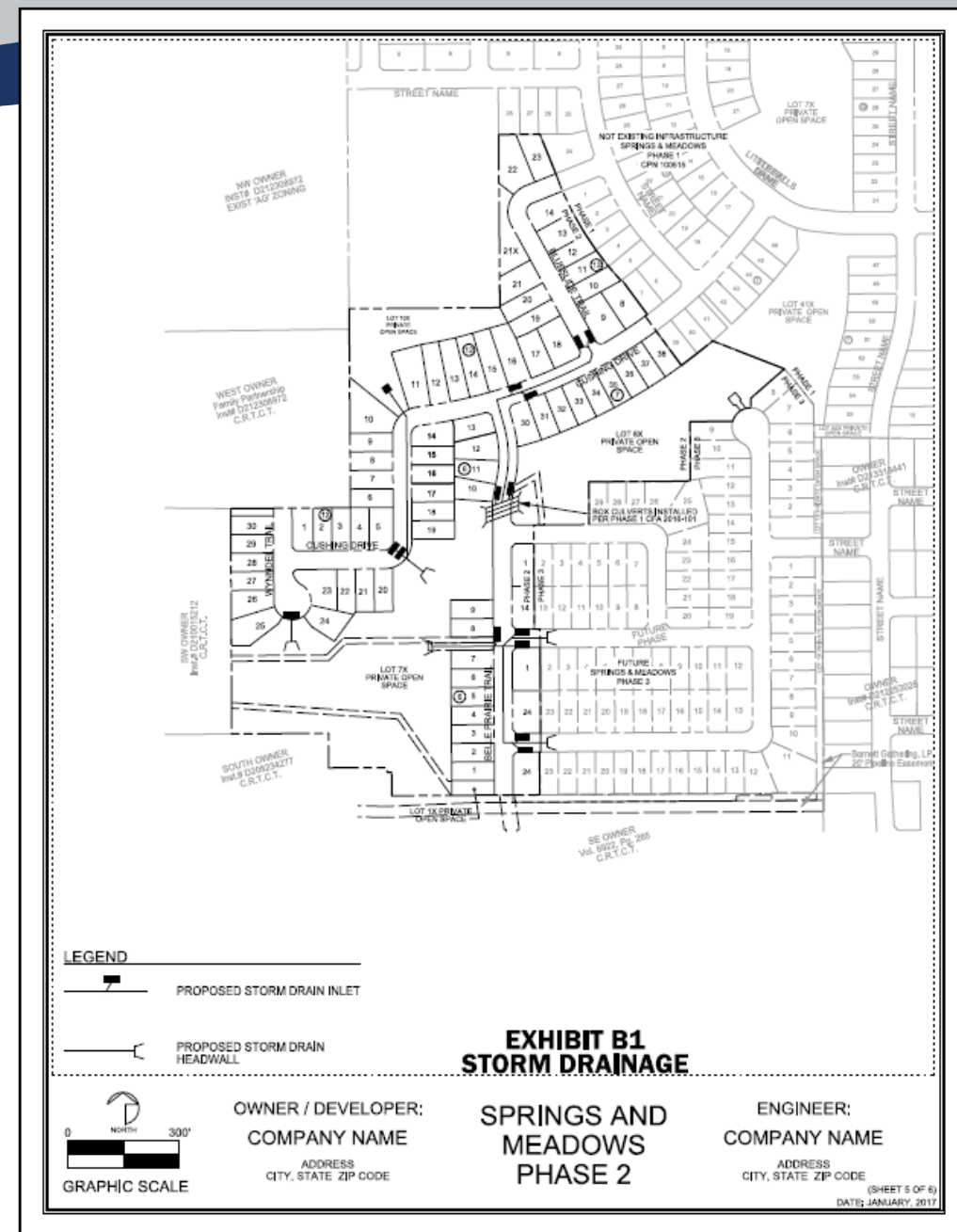
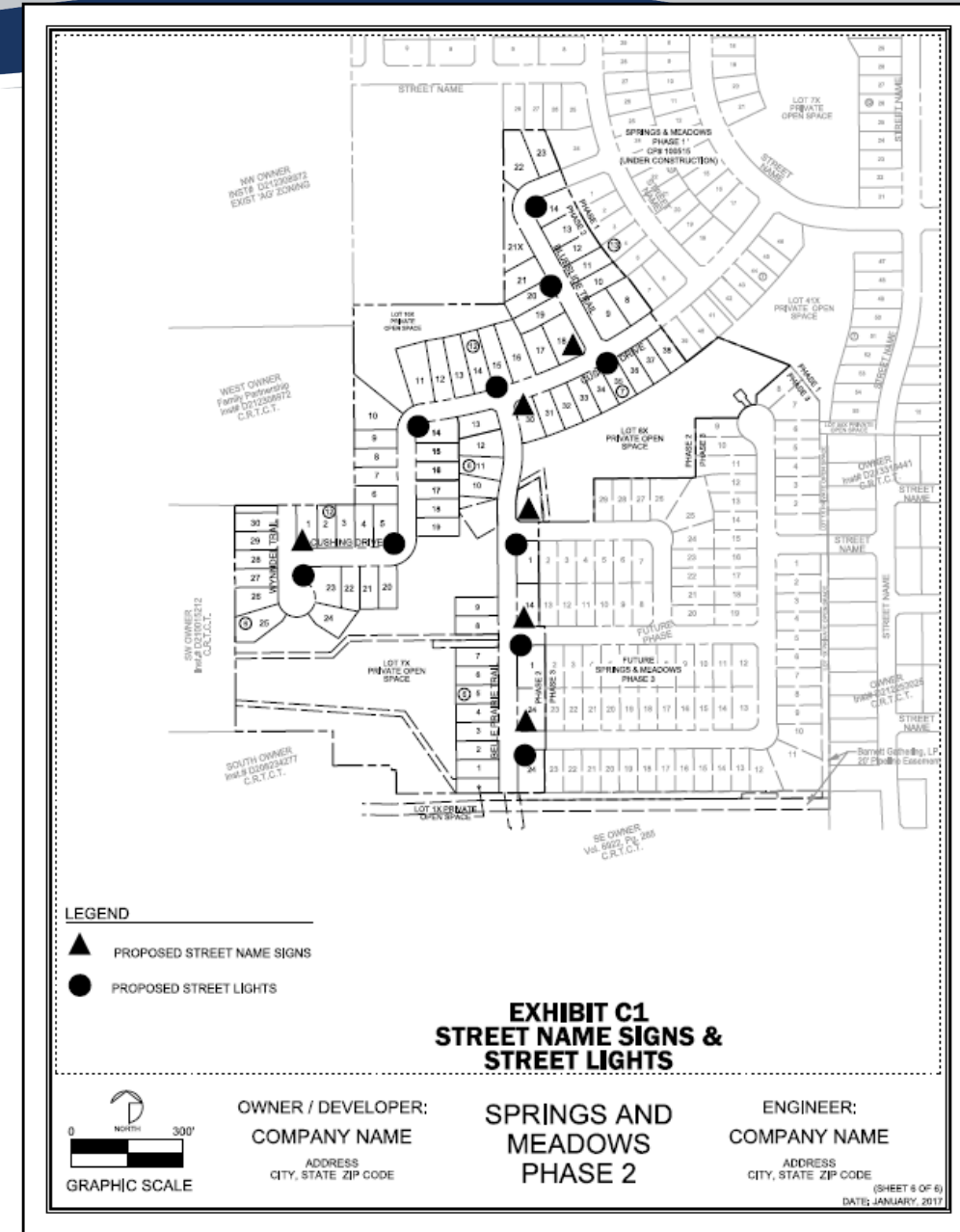


EXHIBIT C1 – STREET NAME SIGNS & STREET LIGHT IMPROVEMENTS

- Provide a legend and scale
- Street lights and Signs need to be shown on one exhibit, not two.
- Show existing/proposed street lights and signs.
- For infrastructure that you are connecting to that is not constructed as of yet, provide label stating “NOT EXISTING INFRASTRUCTURE, Development Phase Name and CPN” on exhibit.



Let's CHILL for
a moment
and have a

Q & A



FORT WORTH®

