

**Notice of Planning and Zoning Commission Regular Meeting
AGENDA**

August 01, 2023 at 6:00 PM

NOTICE IS HEREBY GIVEN that a Meeting of the Montgomery Planning and Zoning Commission Regular Meeting will be held on **Tuesday, August 01, 2023** at **6:00 PM** at the City of Montgomery City Hall, 101 Old Plantersville Road, Montgomery, Texas.

Members of the public may view the meeting live on the City's website www.montgomerytexas.gov under Agenda/Minutes and then select **Live Stream Page (located at the top of the page)**. The Meeting Agenda Pack will be posted online at www.montgomerytexas.gov. The meeting will be recorded and uploaded to the City's website.

CALL TO ORDER

VISITOR/CITIZENS FORUM:

Any citizen with business not scheduled on the agenda may speak to the Commission. Prior to speaking, each speaker must be recognized by the Chairman. The Commission may not discuss or take any action on an item but may place the issue on a future agenda. The number of speakers along with the time allowed per speaker may be limited.

CONSIDERATION AND POSSIBLE ACTION:

- 1.** Approval of the Regular Meeting Minutes of July 5, 2023.
- 2.** Consideration and possible action on approval of construction plans for Montgomery Bend Section Two (Dev. No. 2203).

COMMISSION INQUIRY:

Pursuant to Texas Government Code Sect. 551.042 the Planning & Zoning Commission may inquire about a subject not specifically listed on this Agenda. Responses are limited to recitation of existing policy or a statement of specific factual information given in response to the inquiry. Any deliberation or decision shall be limited to a proposal to place on the agenda of a future meeting.

ADJOURNMENT

/s/Nici Browe

Nici Browe, TRMC, City Secretary

I certify that the attached notice of meeting was posted on the bulletin board at City of Montgomery City Hall, 101 Old Plantersville Road, Montgomery, Texas, on July 28, 2023 at 4:00 p.m.

This facility is wheelchair accessible and accessible parking spaces are available. Please contact the City Secretary's office at 936-597-6434 for further information or for special accommodations.

MINUTES OF REGULAR MEETING

June 6, 2023

MONTGOMERY PLANNING AND ZONING COMMISSION

CALL TO ORDER

Chairman Waddell declared a quorum was present and called the meeting to order at 6:00 p.m.

Present: Jeffrey Waddell, Bill Simpson, Daniel Gazda, Britnee Ghutzman (arrived at 6:10 p.m.)

Absent: Merriam Walker

Also Present: Dave McCorquodale, Director of Planning & Development, Katherine Vu, City Engineer

VISITOR/CITIZENS FORUM

None.

1. Consideration and possible action on the Regular Meeting Minutes of June 6, 2023.

Bill Simpson moved to approve the minutes as presented. Dan Gazda seconded the motion, which carried unanimously. (3-0)

2. Consideration and possible action on Lone Star Estates Partial Replat No. 1.

Staff reviewed the packet information and affirmed Jeff Waddell’s question on the purpose of the replat which was to combine lots 10 & 11 and adjust the lot lines between the combined lots and lot 12 so that both properties had water frontage on the community lake. Katherine Vu confirmed that was correct. Matt Tucker with Texas Professional Surveying was in attendance to answer questions from the Commission.

Dan Gazda asked if there are any easements being impacted by the replat. Katherine Vu noted there was an existing 10’ sewer easement shown between lots 10 & 11 that has an existing house located over it. She explained that the infrastructure was installed approximately 20 years ago and there was not a sewer line located within this easement and there would never be a need to locate a sewer line in the easement. Matt Tucker with TPS said they could remove the easement if it pleased the Commission. Jeff Waddell asked if there was an HOA for the neighborhood that might need to know in case HOA fees would be affected by combining the two lots. The surveyor did not have any direct knowledge of the HOA fees.

Bill Simpson asked if a public hearing was required for this item. Dave McCorquodale said that City Council would have to hold a public hearing before acting on the replat since the properties are zoned single family residential. [Britnee Ghutzman arrived at the meeting.] Bill Simpson asked if the neighbors were aware of the replat. Dave McCorquodale said the owners of these lots joined in the action to replat and that letters would be mailed to property owners within 200' notifying them of the public hearing along with the legal notice publication.

Bill Simpson moved to approve the replat contingent of the 10' sewer easement being abandoned as part of the replat process. Dan Gazda seconded the motion, which carried unanimously. (4-0)

3. Consideration and possible action on a recommendation to City Council related to a parking variance request for Home Depot, USA, Inc.

Staff reviewed the packet information and introduced Jordan Corbitt, PE of Kimley-Horn who represented Home Depot and Milestone Properties, the owner of the property. Bill Simpson asked if the parking spaces being reduced by 206 spaces would affect the number of spaces available to employees of Home Depot and how many employees were anticipated to park in the lot per day. Mr. Corbitt estimated that about 70 employees would be at work at the same time. Bill Simpson asked about the amount of spaces that seasonal sales items take up and whether those items would stay in the area indicated on the plan or whether they would be taking up parking spaces at certain times of the year. Mr. Corbitt said the seasonal sales items would only be located as shown on the plan and would not take up any of the available parking spaces shown on the plan. Bill Simpson asked if that was also true for rental trucks, sheds, and trailers. Mr. Corbitt said those items would only be located as shown on the plan. Mr. McCorquodale said that seasonal items, etc., that were located in parking spaces could be addressed through code enforcement.

Bill Simpson said a big concern is that a reduction in the allowed parking would create an issue if the remaining spaces started to be filled with seasonal items and rental equipment. He also asked about contractors coming to Home Depot with a trailer for large items and taking up multiple parking spaces. Mr. Corbitt noted the angled contractor parking spaces shown on the plan that will accommodate customers with trailers to park without taking up multiple spaces.

Jeff Waddell asked how this proposed store and parking lot compares to other Home Depot stores. He also noted that Home Depot is a kind of warehouse with bulk goods that isn't exactly the same as other types of retail. Mr. Corbitt said many other stores have smaller pad sites around the

perimeter that utilize parking areas on the periphery of the property. In this case, those parcels were already platted by Milestone when they developed the Kroger site. Britnee Ghutzman noted the parking lot at the Conroe Home Depot parking lot was routinely congested and difficult to navigate. Mr. Corbitt said one of the reasons this store was being built was to relieve the Conroe location and provide customers in this area a closer store, which would likely reduce some of the volume of customers at that store.

Britnee asked about the sales projections of Home Depot and whether their proposed parking spaces were tied to those projections. Mr. Corbitt said sales projections and the size of the property both affected the request for 399 spaces. Jeff Waddell said one point to keep in mind is that this parking lot is only serving Home Depot unlike the Conroe store that shares the parking lot with the surrounding retail development. Mr. McCorquodale noted that the city's parking ordinance is based on square footage of parking space area with a minimum parking space of 9'x18'. Home Depot is proposing a 9'x19' space and a slightly larger drive aisle, which does reduce the overall number of spaces provided but provides a larger parking stall that helps with parking lot circulation. Jeff Waddell asked about the landscaping plan and how much landscaping the parking lot would include. Mr. Corbitt referenced the included landscape plan in the packet to note the trees planned for the parking lot. Britnee Ghutzman noted the slight discrepancy between the aerial image plan and the landscape plan and asked which was correct. Mr. Corbitt said the aerial plan was the most current and would be provided to the landscape firm to ensure the landscape design reflected the correct parking lot design.

Dan Gazda moved to recommend approval of the parking variance request to City Council. Bill Simpson seconded the motion, which carried unanimously. (4-0)

Commission Inquiry

Jeff Waddell followed up on the College Street question from the last meeting. After discussion with the Commission it was determined that the property in question was 704 Caroline Street. Mr. McCorquodale said the contractor had several issues with missed or failed inspections but had worked through them with staff and should be getting back underway soon.

Adjournment

Britnee Ghutzman moved to adjourn the meeting at 6:40 p.m. Dan Gazda seconded the motion, which carried unanimously. (4-0)

Prepared by: _____ Date approved: _____
Dave McCorquodale

Chairman Jeffrey Waddell

Attest: _____
Nici Browe, City Secretary

Montgomery Planning and Zoning Commission
AGENDA REPORT

Meeting Date: August 1, 2023	Budgeted Amount: N/A
Department: Administration	Prepared By: DMc

Subject

Consideration and possible action on approval of construction plans for Montgomery Bend Section Two (Dev. No. 2203).

Recommendation

Approve the construction plans as submitted.

Discussion

The engineer’s memo is attached and recommends approval of the plans. The City of Montgomery Development Handbook prescribes that P&Z and City Council both approve the construction plans before the final plat is approved.

The engineers base their review and approval of the construction plans on the design requirements found in the City Code of Ordinances and the City’s adopted Design Criteria Manual. One point of note is the Design Criteria Manual covers engineering details and standards for public infrastructure projects. It does not relate to design artistic quality, aesthetics, or overall design of developments.

Section One plans were approved by P&Z on June 5, 2023 and City Council on July 12, 2023.

Approved By

Asst. City Administrator and Director Planning & Development	Dave McCorquodale	Date: 07/27/2023



July 27, 2023

The Planning and Zoning Commission
City of Montgomery
101 Old Plantersville Rd.
Montgomery, Texas 77316

Re: Submission of Water, Sanitary, Drainage, & Paving Plans
Montgomery Bend Sec. 2 (Dev. No. 2203)
City of Montgomery

Dear Commission:

We reviewed the WSD&P plans submission for the referenced development on behalf of the City of Montgomery (the "City"). Our review was based on the City's Code of Ordinances, Chapter 78 Section 60 and any other applicable chapters, and the City's Design Manual. Our review was also based upon the approved development regulations included as part of the development agreement between the Developer and the City.

We offer no objection to the WSD&P plans as submitted, and we recommend the Commission approve the plans.

If you have any questions or comments, please contact me.

Sincerely,

A handwritten signature in blue ink that reads "Chris Roznovsky".

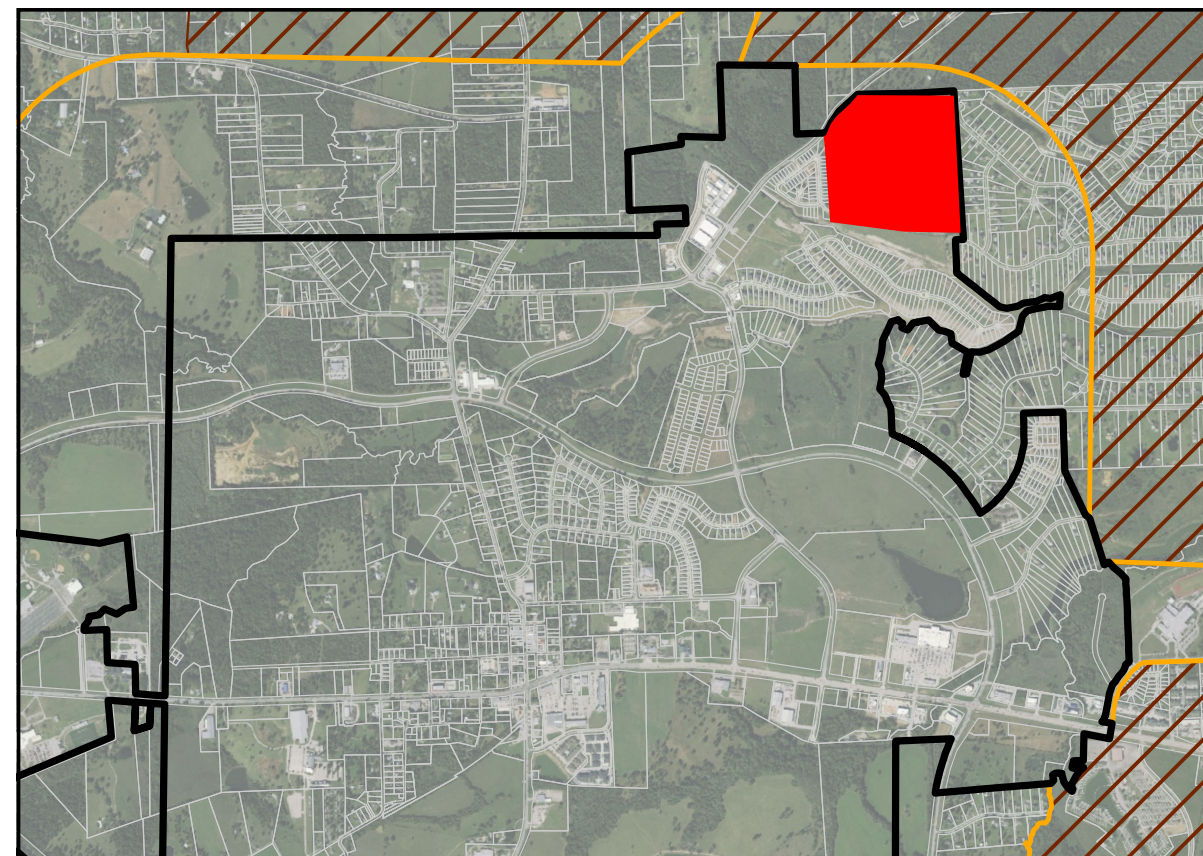
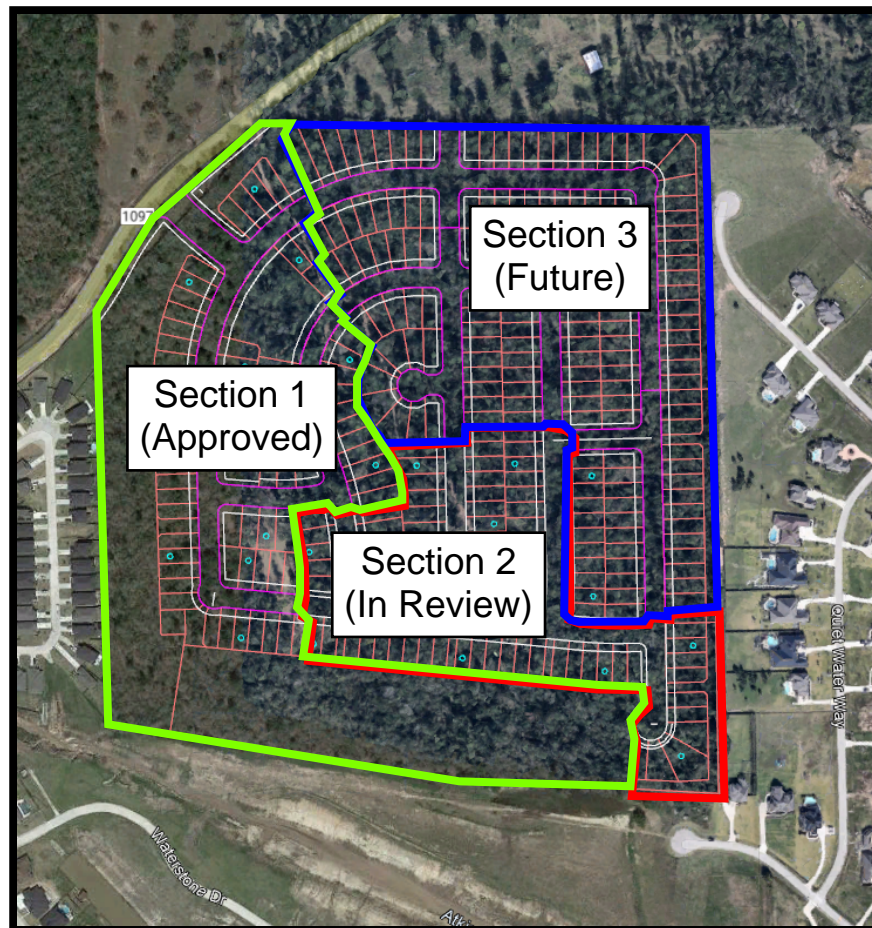
Chris Roznovsky, PE
Engineer for the City

CVR/ajn

Z:\00574 (City of Montgomery)_900 General Consultation\Correspondence\Letters\2023\2023.07.27 MEMO TO P&Z RE
Montgomery Bend Sec.2 WSD&P Plans.docx

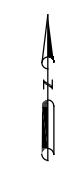
Enclosures: Montgomery Bend Section 2 WSD&P Plans

Cc (via email): The Honorable Mayor and City Council – The City of Montgomery
Mr. Gary Palmer – City of Montgomery, City Administrator
Ms. Nici Browe – City of Montgomery, City Secretary
Mr. Dave McCorquodale – City of Montgomery, Director of Planning & Development
Mr. Alan Petrov – Johnson Petrov, LLP, City Attorney



Development Timeline:

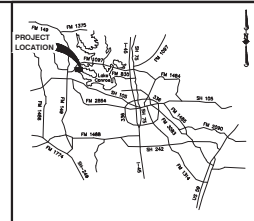
- Escrow Agreement Authorized - April 12, 2022
- Feasibility Presented to the City - May 24, 2022
- Developer Agreement Executed - September 13, 2022
- Clearing & Grubbing Plan Approval - October 25, 2022
- Drainage Impact Analysis Approval - December 22, 2022
- Section 1 Preliminary Plat Approval - March 7, 2023
- Section 2 Preliminary Plat - March 7, 2023
- Mass Grading & Detention Plan Approval - May 3, 2023
- Section 1 WSD&P Plan Approval - July 12, 2023
- Section 2 WSD&P Plan Approval - In Review



DEVELOPER:
 PULTE HOMES OF TEXAS
 1311 BROADFIELD BLVD, SUITE 100
 HOUSTON, TEXAS 77064
 (281) 749-8000

CONSTRUCTION OF WATER, SANITARY, DRAINAGE AND PAVING FACILITIES FOR MONTGOMERY BEND SEC 2

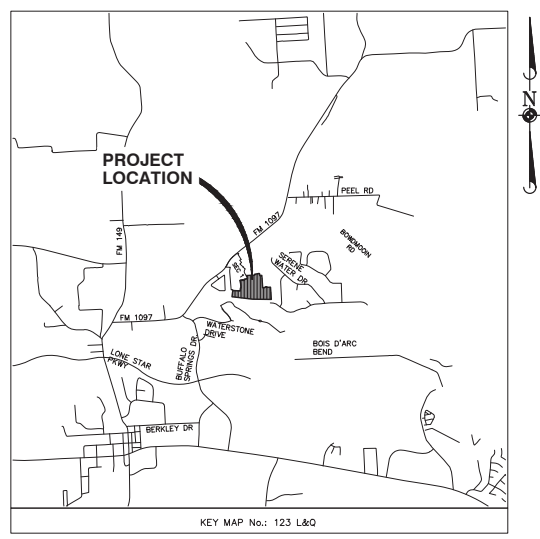
DEVELOPMENT No. 2203
 MONTGOMERY COUNTY MUNICIPAL UTILITY DISTRICT NO. 224
 CITY OF MONTGOMERY
 MONTGOMERY COUNTY, TX
 610.126.006.00



MONTGOMERY COUNTY AREA VICINITY MAP
 N.T.S.

SHEET LIST TABLE

SHEET No.	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	PROJECT OVERALL
4	WATER & SANITARY LAYOUT
5	DRAINAGE LAYOUT
6	DRAINAGE CALCULATIONS
7	GRADING LAYOUT
8	STORM WATER POLLUTION PREVENTION LAYOUT
9	TRAFFIC SIGNAGE & PAVEMENT MARKINGS LAYOUT
10	LONGHORN RUN DRIVE (STA 1+50 TO 10+50)
11	LONGHORN RUN DRIVE & LOST WAGON DRIVE
12	BLUEBONNET BEND DRIVE
13	HIGH MESA LANE
14	SILVER BUCKLE LANE
15	OUTFALL
16	WATER DETAILS
17	SANITARY SEWER DETAILS
18	STORM SEWER DETAILS
19	PAVING DETAILS
20	MISCELLANEOUS DETAILS
21	LANDSCAPE PLAN



KEY MAP No.: 123 L&O
 LOCATION MAP
 N.T.S.

ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
 (713) 223-4567 (In Houston)
 (New Statewide Number Outside Houston)
 1-800-344-8317

48 HOUR NOTICE:
 CONTRACTOR SHALL NOTIFY CHRIS ROZNOVSKY
 THE CITY OF MONTGOMERY ENGINEER AND
 OPERATOR AT 713-789-1900 BEFORE
 STARTING WORK ON THIS PROJECT.

ELEVATION LAND SOLUTIONS IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS OR METHODS OF CONSTRUCTION.



BENCHMARK:
 SOURCE BENCHMARK:
 ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL
 GEODETIC SURVEY MONUMENT DESIGNATION HOCSD 81, PID No.
 A56425
 HAVING PUBLISHED INFORMATION AS FOLLOWS:
 LATITUDE : 30° 21' 12.45392" NORTH
 LONGITUDE : 095° 34' 45.02514" WEST
 ORTHO HEIGHT : 212.4 FT. (64.74 METERS)
 HORIZONTAL DATUM : NAD83 (2011)
 VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:
 ACCORDING TO MAP No. 483380200G OF THE FEDERAL
 EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE
 MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014,
 THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE
 "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE
 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE
 PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM
 FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS
 CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE
 INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD
 STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF
 THE SURVEYOR.

DATE	REVISION	APP.

GARRET J. DUHON
 2445 TECHNOLOGY FOREST
 BLD. SUITE 200
 THE WOODLANDS, TX 77381
 (832) 823-2200
 Garret J. Duhon
 TBPE No. F-22671
 07/26/2023

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER
 SIGNATURE VALID FOR ONE (1) YEAR

PM:GJD DFT: MAQ
 DSN:STM DATE: JULY 2023

P:\AUG126_Metry and Engineer_Trest\008_Sec 2\003_Plan_Sect_Drainage\COVER SHEET & GENERAL NOTES.dwg, 7/26/2023, 10:24 AM

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00



GENERAL CONSTRUCTION NOTES

1. MATERIALS, CONSTRUCTION, AND TESTING TO BE IN ACCORDANCE WITH THE SPECIFICATIONS INDICATED IN THE PLANS AND CONTRACTS AND ARE TO BE CONTRACTOR IN ALL SETS OF CONSTRUCTION DRAWINGS.
2. CONTRACTOR TO OBTAIN ALL DEVELOPMENT AND CONSTRUCTION PERMITS REQUIRED BY CITY OF MONTGOMERY, TEXAS AT HIS EXPENSE PRIOR TO COMMENCEMENT OF WORK, WHERE APPLICABLE.
3. CONTRACTOR SHALL GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE OR PUBLIC UTILITIES OR RAILROADS AFFECTED BY HIS OPERATIONS 48 HOURS PRIOR TO COMMENCEMENT OF WORK LOCATED IN STREET RIGHT OF WAYS AND EASEMENTS.
4. ALL EXISTING UNDERGROUND UTILITIES ARE AN APPROXIMATE LOCATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETED OR OBTAINED FROM THE BEST INFORMATION AVAILABLE. CONTRACTOR HAS SOLE RESPONSIBILITY FOR FIELD VERIFICATION TO DETERMINE EXACT LOCATIONS AND DEPTHS FOR ALL EXISTING UTILITIES SHOWN ON DRAWINGS BEFORE COMMENCING ANY WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE COORDINATION OF THEIR CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES AS TO THE RELOCATION OF THEIR FACILITIES. IF NEEDED, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.
5. THE LOCATION OF ALL UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL REQUEST THE EXACT LOCATION OF THESE FACILITIES BY CALLING THE UTILITY COMPANY. AT LEAST 48 HOURS BEFORE COMMENCING WORK, THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH OCCURS DUE TO HIS FAILURE TO REQUEST THE LOCATION AND PRESERVATION OF THESE UNDERGROUND FACILITIES. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF CONSTRUCTION OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
6. TEXAS LAW ARTICLE 1436C, PROHIBITS ALL ACTIVITIES IN WHICH PERSONS OR EQUIPMENT MAY COME WITHIN 6 FEET OF ENERGIZED OVERHEAD POWER LINES. FEDERAL REGULATION TITLE 29, PART 1910.1501) AND PART 1926.440(A)(15) REQUIRE A MINIMUM CLEARANCE OF 10 FEET FROM THESE FACILITIES. THE ABOVE LAWS CARRY BOTH CRIMINAL AND CIVIL LIABILITIES. WITH CONTRACTORS AND OWNERS BEING LEGALLY RESPONSIBLE FOR THE SAFETY OF WORKERS UNDER THESE LAWS. IF THE CONTRACTOR OR THE OWNER MUST WORK NEAR ENERGIZED OVERHEAD POWER LINES, CALL THE COMPANY FOR THE LINES TO BE DEENERGIZED AND/OR MOVED AT YOUR EXPENSE.
7. CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISIONS OF OSHA REGULATIONS AND STATE OF TEXAS LAW CONCERNING TRENCHING AND SHIELDING. CONTRACTOR SHALL PROVIDE A TRENCH SAFETY SYSTEM TO MEET AS A MINIMUM, THE REQUIREMENTS OF OSHA SAFETY AND HEALTH REGULATION, PART 1926, SUB-PART B, AS PUBLISHED IN THE FEDERAL REGISTER, VOLUME 54, NO. 209, DATED OCTOBER 31, 1989.
8. DETAILS PRESENTED IN THESE PLANS DO NOT EXTEND TO INCLUDE DESIGNED OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS, INCLUDING THE PLANS AND SPECIFICATIONS REQUIRED BY CHAPTER 756, SUBCHAPTER "C" OF THE TEXAS HEALTH AND SAFETY CODE.
9. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS. ALONG EXISTING ROADS AND TRADING ROADS, CONTRACTOR SHALL COVER EXCAVATIONS BY INSTALLING ADEQUATE DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE PROJECT ENGINEER. CONSTRUCTION PLANS, INCLUDING THE PLANS AND SPECIFICATIONS REQUIRED BY CONSTRUCTION ACTIVITIES AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE FLAGMEN, SIGNING, STRIPING AND WARNING TRAFFIC CONTROL DEVICES, DURING CONSTRUCTION IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION DURING WORKING HOURS AND PROVIDE ALL WEATHER DETOURS AROUND CONSTRUCTION SITE, PRIOR TO PUBLIC NOTIFICATION, AND USE UNIFORMED POLICE OFFICERS TO CONTROL TRAFFIC, ESPECIALLY IN HEAVY TRAFFIC LOCATIONS.
12. EXISTING PAVEMENT, CURBS, SIDEWALKS, AND DRIVEWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED TO CITY OF MONTGOMERY STANDARDS. ALL ASPHALT AND CONCRETE DRIVEWAYS EXCAVATED DURING CONSTRUCTION SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND (CSS) AND RETURNED TO EXISTING CONDITIONS OR BETTER. ALL STATE AND COUNTY HIGHWAY PAVEMENT AND RAILROAD RIGHT-OF-WAYS TO BE BORDED ACCORDING TO THE RULES, REGULATIONS, AND REQUIREMENTS FOR APPROVAL AND ACCEPTANCE BY AID AGENCIES.
13. EXISTING ROADS AND/OR RIGHT OF WAYS DISTURBED DURING CONSTRUCTION SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING WORK, UPON COMPLETION OF THE PROJECT.
14. AFTER DISTURBED AREAS HAVE BEEN COMPLETED TO THE LINES, GRADES, AND CROSS SECTIONS SHOWN ON THE PLANS, SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS TO ESTABLISH ADEQUATE VEGETATION COVERAGE TO ELIMINATE EROSION. IF NOT, ACTIVITY SHALL BE PERFORMED WITHIN THE DISTURBED CONSTRUCTION AREA. AFTER 14 DAYS OF INACTIVITY, THE AREA MUST BE HYDROMULCHED TO AVOID EROSION. IF NO PROVISION FOR PLANTING GRASS IS INCLUDED IN THE PLANS OR SPECIFICATIONS, THE MINIMUM REQUIREMENT FOR THIS ITEM SHALL BE IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR "SOODING OR SEEDING FOR EROSION CONTROL".
15. ALL TRENCHES, INCLUDING TRENCHES FOR LEADS AND STUBS UNDER PAVEMENT AND TO A POINT ONE (1) FOOT BEHIND BACK OF CURB SHALL BE BACKFILLED WITH CEMENT STABILIZED SAND AS PER CITY OF MONTGOMERY SPECIFICATIONS TO A POINT IMMEDIATELY BELOW THE SUBGRADE. TRENCHES OTHER THAN UNDER PAVEMENT, SHALL BE BACKFILLED WITH SUITABLE EARTH MATERIAL IN 6 INCH LAYERS AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM DESIGNATION D-698/AASTHO 99). MOISTURE CONTENT OF BACKFILL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CEMENT STABILIZED SAND SPECIFICATIONS. ATTACHED DETAILS IN PLANS ARE SPECIFIC FOR BEDDING AND BACKFILL.
16. CONTRACTOR IS TO INCLUDE PRICE OF ALL BEDDING AND BACKFILL OF PIPES REQUIRED, IN PRICE PER LINEAR FOOT OF PIPE.
17. CONTRACTOR IS TO INCLUDE SPREADING AND COMPACTION OF SPILLS INCIDENTAL TO CONSTRUCTION OF ALL UNDERGROUND UTILITIES IN PRICE PER LINEAR FOOT OF PIPE.
18. CONTRACTOR TO REMOVE EXISTING PLUGS AND CONNECT TO EXISTING UTILITY LINES AS INDICATED ON PLANS.
19. UNLESS OTHERWISE NOTED IN PLANS, WHERE MANHOLES ARE LOCATED WITHIN THE UTILITY EASEMENT, THE CONTRACTOR SHALL SET RIM ELEVATIONS THREE INCHES ABOVE FINISHED GROUND ELEVATIONS.
20. WHEN TRENCH CONDITIONS REQUIRE THE USE OF WELL POINTS, THIS IS TO BE REQUESTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE MUD, DIRT, AND DEBRIS DEPOSITED ON EXISTING PAVEMENT DUE TO HIS CONSTRUCTION ACTIVITY DAILY. ALL EXISTING STREETS AND ADJACENT PAVEMENT AREAS AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE CLEANED USING A STREET SWEEPER. THIS ACTIVITY WILL BE INCIDENTAL TO ALL OTHER ITEMS.
22. THE CONTRACTOR SHALL REMOVE ALL NON-PERMANENT SIGNS FROM THE ROW AND/OR EASEMENT LIMITS, AND RETURN THEM TO THE SIGN OWNER FOR THEM TO HAVE PLACED AT THEIR EXPENSE ON PROPERTY OTHER THAN THAT THAT STATED ABOVE UNLESS OTHERWISE SPECIFIED.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING OR REPLACING ALL EXISTING FENCES INSIDE THE WORK ZONE, TO EXISTING OR BETTER CONDITIONS, EXCEPT FOR THOSE THAT FALL WITHIN A ROAD RIGHT OF WAY.
24. THE CONTRACTOR IS RESPONSIBLE FOR RELOCATING ALL EXISTING IRRIGATION OUTSIDE OF THE RIGHT OF WAY AND/OR EASEMENT UNLESS OTHERWISE SPECIFIED ON THE PLANS.
25. ALL EQUIPMENT SHALL BE REMOVED FROM THE PROJECT SITE ONCE THE PROJECT IS COMPLETED, AS WELL AS ALL REMAINING DEBRIS WITHIN THE PROJECT SHALL BE REMOVED AND PROPERLY DISPOSED OF AT AN APPROVED DISPOSAL SITE.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO UTILITIES, PAVEMENT, OR OTHER INFRASTRUCTURE AS A RESULT OF ANY WORK.

GRADING NOTES

1. BEFORE STARTING CONSTRUCTION, CONTRACTOR SHALL VERIFY BENCHMARK ELEVATION AND NOTIFY ENGINEER IF ANY DISCREPANCY AND/OR CONFLICT IS FOUND.
2. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE STARTING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
3. AREAS THAT ARE TO RECEIVE FILL SHALL BE PREPARED AS FOLLOWS (NO SEPARATE PAY):
a. AREAS THAT ARE TO RECEIVE FILL WILL BE STRIPPED TO A DEPTH OF 6". STRIPPINGS SHALL BE STOCKPILED AND THEN SPREAD EVENLY ON SURFACE OF FILLED AREAS.
b. PRIOR TO PLACEMENT OF FILL ON STRIPPED AREAS, THE CONTRACTOR SHALL PROOF ROLL USING A PNEUMATIC ROLLER (12 TON OR APPROVED EQUAL) (NO SEPARATE PAY). SHOULD SOFT UNDESIRABLE MATERIAL BE FOUND IN THE LOTS, THE CONTRACTOR SHALL REMOVE UNDESIRABLE MATERIAL AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE THIS WITH A SUITABLE MATERIAL COMPACTED AS REQUIRED.
4. ALL AREAS REQUIRING FILL SHALL BE FILLED IN 8" LIFTS, WITH TESTS TAKEN AT 100 FOOT INTERVALS IN EACH LIFT, AND MECHANICALLY COMPACTED TO A DENSITY OF NOT LESS THAN 90% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D-698/AASTHO 99). FINISH SURFACE SHALL BE LEVEL, SMOOTH, AND FINE GRADED.
5. FINAL PAVEMENT SHALL BE CONTINGENT ON THE ENGINEER'S VERIFICATION THAT LOT GRADING IS IN ACCORDANCE WITH THE GRADING PLAN, AND THAT SOIL COMPACTION TESTS WERE PERFORMED AS REQUIRED.
6. CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS AND NO PONDING IN PAVED AREAS, AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
7. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIVE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION.
8. ALL EXISTING CONCRETE PAVING, SIDEWALK, AND CURB DEMOLITION SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR. DISPOSAL SHALL BE AT AN APPROVED OFF-SITE, LAWFUL LOCATION, UNLESS DIRECTED OTHERWISE BY THE OWNER.

STORM SEWER NOTES

1. STORM SEWER AND LEADS SHALL BE REINFORCED CONCRETE PIPE, ASTM C-76, CLASS III, WITH 0-30 RUBBER GASKED JOINT, AND SHALL BE INSTALLED, BEDDED AND BACKFILLED IN ACCORDANCE WITH THE SPECIFICATIONS INDICATED IN THE PLANS AND CONTRACTS.
2. ALL PROPOSED PIPE STUB OUTS FROM MANHOLES OR INLETS ARE TO BE PLUGGED WITH 8 INCH BRICK WALLS UNLESS OTHERWISE NOTED.
3. ALL BOX CULVERTS INSTALLED SHALL BE PLACED ON A MINIMUM OF 6 INCHES OF CEMENT STABILIZED SAND (2.0 SACKS PER TON OF SAND). ALL 18" AND 24" DIA. BOX CULVERTS FOR INSTALLATION OF PRE-CAST CONCRETE BOX CULVERTS IN POOR SOIL CONDITIONS, A 7 INCH REINFORCED CONCRETE SLAB SHALL BE INSTALLED. FOR INSTALLATION OF MONOLITHIC REINFORCED CONCRETE BOX CULVERTS IN POOR SOIL CONDITIONS, A 4 INCH THICK CLASS "C" CONCRETE SEAL SLAB SHALL BE INSTALLED, PRIOR TO CONSTRUCTION OF BOX CULVERTS.
4. STORM SEWER MANHOLES, INLETS, AND JUNCTION BOXES SHALL BE STANDARD PRE-CAST, UNLESS OTHERWISE NOTED.
5. ALL INLETS TO BE TYPE "C" UNLESS OTHERWISE STATED ON PLANS.
6. ALL STORM SEWER LEADS SHALL BE 24 INCH MINIMUM UNLESS OTHERWISE INDICATED.
7. GRADE DROP ON LEADS BETWEEN INLETS TO BE A MINIMUM OF 0.20 FOOT GRADE DROP BETWEEN INLET AND MANHOLES TO BE 0.20 FOOT UNLESS OTHERWISE SHOWN.
8. WHEN MANHOLE FRAME AND COVER IS REQUIRED, USE VULCAN FOAM V-1418-2 FRAME AND COVER (OR EQUAL), UNLESS OTHERWISE INDICATED ON THE PLANS.
9. FOR ADJUSTMENT OF MANHOLE LIDS USE STANDARD CONCRETE RINGS.
10. CONCRETE USED FOR ALL POURED-IN-PLACE MANHOLES, INLETS, WINGWALLS, HEADWALLS AND OTHER APPURTENANCES TO BE CLASS "A" CONCRETE WITH 3,000 P.S.I. STRENGTH AT 28 DAYS.
11. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4".
12. ALL STORM SEWER PIPES UNDER OR WITHIN 1' OF PAVEMENT SHALL BE BACKFILLED WITH COMPACTED CEMENT STABILIZED SAND (2.0 SACKS PER TON OF SAND) TO THE BOTTOM OF 6" STABILIZED SUBGRADE.

CITY OF MONTGOMERY GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL CONTACT CITY OF MONTGOMERY CITY ENGINEER, CHRIS ROZNOVSKY AT (713) 799-1950 A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
2. CONTRACTOR SHALL CONTACT CITY OF MONTGOMERY DIRECTOR OF PUBLIC WORKS, MIKE MUCKLEROY AT (936) 597-6434 A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION TO SET UP AN INSPECTION TO VERIFY CITY'S FACILITIES.
3. CONTRACTOR TO CONTACT CITY OF MONTGOMERY UTILITY OPERATOR, JACOB WILLIAMS OF 420 INNOVATIONS AT (281) 353-8800 A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION TO SET UP AN INSPECTION TO VERIFY CITY'S FACILITIES.
4. THE CITY UTILITY OPERATOR AND PUBLIC WORKS FOREMAN SHALL BE NOTIFIED 24 HOURS IN ADVANCE TO WITNESS AND INSPECT ANY SANITARY SEWER LINE CONNECTION. NO SANITARY SEWER LINES SHALL BE BACKFILLED BEFORE THE CITY'S UTILITY OPERATOR OR PUBLIC WORKS FOREMAN HAS INSPECTED THE CONNECTION.
5. CONTRACTOR SHALL CONTACT THE CITY'S OPERATOR OR PUBLIC WORKS FOREMAN TO OPERATE ANY VALVES. AT NO TIME IS THE CONTRACTOR OR CONTRACTOR'S REPRESENTATIVE TO OPERATE ANY PART OF THE CITY OF MONTGOMERY WATER SYSTEM.
6. THE OWNER OR CONTRACTOR SHALL INSTALL AND TEST APPROPRIATE BACKFLOW PREVENTION, PER THE CITY OF MONTGOMERY RULES & REGULATIONS.
7. ALL TAPS TO THE CITY'S SYSTEM SHALL BE MADE BY THE CITY'S OPERATOR AT THE OWNERS EXPENSE.
8. IF THE ELECTRICAL UTILITY PROVIDER STANDARDS CONFLICT WITH THE APPROVED LAYOUT BY THE CITY AND/OR CITY STANDARDS, A VARIANCE MUST BE RECEIVED FROM THE CITY COUNCIL.

CITY OF MONTGOMERY ORDINANCE NOTES:

1. REMAINING TREE COVERAGE MUST COMPLY WITH ALL APPLICABLE CITY OF MONTGOMERY ORDINANCES. A TREE PRESERVATION PLAN SHOWING COMPLIANCE WITH CANOPY COVERAGE REQUIREMENTS WILL BE SUBMITTED WITH CONSTRUCTION PLANS FOR THE DEVELOPMENT.

SANITARY SEWER NOTES:

1. ALL SANITARY SEWER MUST BE IN COMPLIANCE OF TCEQ CHAPTER 217.
2. SANITARY SEWERS SHALL BE INSTALLED AND TESTED IN COMPLIANCE OF THE TCEQ REQUIREMENTS, UNLESS OTHERWISE SPECIFIED.
3. BACKFILL AND BEDDING FOR SANITARY SEWER MUST MEET THE MINIMUM REQUIREMENTS OF ASTM D-2321 AND IN ACCORDANCE WITH THE SPECIFICATIONS AND DETAILS FOUND IN THIS PLAN SET AND IN THE CONTRACTS.
4. SANITARY SEWER PIPE SHALL BE PVC SDR 26 OR PVC SDR 35 (WITH APPROVAL), IN ACCORDANCE WITH ASTM SPECIFICATIONS D-3034, FOR 4" THROUGH 15" AND ASTM F-879 FOR 18" THROUGH 27", UNLESS OTHERWISE SPECIFIED. SANITARY SEWER MAIN IS 6", SDR 35 MAY BE USED WHEN DEPTH IS MORE THAN 3 FEET AND LESS THAN 6 FEET.
5. SEWER LINES SHALL BE LOCATED ON THE OPPOSITE SIDE OF THE STREET FROM WHERE WATER IS LOCATED.
6. CONTRACTOR SHALL PROVIDE A MINIMUM HORIZONTAL CLEARANCE OF 9" (NINE FEET) BETWEEN WATER LINES AND SANITARY SEWER MANHOLES AND LINES PER TCEQ CHAPTER 290.
7. CONTRACTOR SHALL PROVIDE 24-INCHES OF CLEARANCE AT ALL SANITARY SEWERS CROSSING WATER LINES.
8. NO SEWER PIPE SHALL BE LAID ON AN UNSTABLE FOUNDATION. SELECTED MATERIAL SHALL BE USED AND/OR WET SAND CONSTRUCTION DETAILS, WHICHEVER APPLIES IN THE OPINION OF THE ENGINEER. NO PIPE SHALL BE COVERED WITHOUT APPROVAL OF THE ENGINEER OR HIS REPRESENTATIVE. SANITARY SEWERS CONSTRUCTED IN WET SAND SHALL HAVE A SPECIAL PROCEDURE.
9. WHEN THE NATURAL GROUND LEVEL AROUND MANHOLE LIES BELOW THE 100 YEAR FLOODPLAIN ELEVATION, THE MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATION AND DETAILS FOUND IN THE PLAN SET AND IN THE CONTRACTS, FOR A SEALED AND VENTED MANHOLE.
10. A DEFLECTION TEST SHALL BE PERFORMED AFTER THE BACKFILL HAS BEEN IN PLACE A MINIMUM OF 30 DAYS. THIS TEST SHALL BE DONE BY PULLING A HAND LINE WITH AN ATTACHED MANDELR FROM MANHOLE TO MANHOLE. THE MANDELR SHALL HAVE AN OUTSIDE DIAMETER THAT IS AT LEAST 95% OF THE ORIGINAL INSIDE DIAMETER OF THE PIPE MANDELR TO BE MANUFACTURED WITH A MINIMUM OF SEVEN (7) RUNNERS, WITH EACH RUNNER BEING A MINIMUM OF 5 INCHES LONG. ANY PIPE NOT MEETING TEST REQUIREMENTS TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
11. WHERE A SEWER LINE HAS LESS THAN 2" (2) FEET OF COVER, PROVIDE CEMENT STABILIZED SAND BACKFILL MATERIAL.
12. WHEN MANHOLE FRAME AND COVER IS REQUIRED, USE VULCAN FOAM V-1418-2 FRAME AND COVER (OR EQUAL), UNLESS OTHERWISE INDICATED ON THE PLANS.
13. CONTRACTOR SHALL KEEP RECORD OF LOCATION OF ALL STACKS, STUBS, SEWER LEADS, ETC. THE AS-BUILT RECORD SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND THROUGHOUT THE LIFE OF THE PROJECT.
14. IF SANITARY SEWER LEADS ARE INSTALLED DURING CONSTRUCTION OF MAIN LINE, ALL LEADS TO HAVE A MINIMUM SLOPE OF 0.70% OR GREATER. ALL PVC LEADS TO BE THE SAME MATERIAL AS MAIN LINE. ALL DOUBLE SEWER LEADS TO HAVE WYE LOCATED ON THE END OF THE LEAD. ALL SINGLE SEWER LEAD TO BE 6 INCH, AND ALL DOUBLE SEWER LEAD TO BE 6 INCH. IF AN 8 INCH LEAD IS REQUIRED, LEADS MUST HAVE A MINIMUM SLOPE OF 0.44%.
15. BYPASSING (DISCHARGING) OF RAW SEWAGE ON THE SURFACE OR TO ADJOINING WATERWAYS IS STRICTLY PROHIBITED.
16. CONTRACTOR SHALL PERFORM BYPASS PUMPING AS REQUIRED. THERE SHALL BE NO SEPARATE PAYMENT FOR BYPASS PUMPING PERFORMED ON THIS PROJECT.
17. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING WATERLINES DURING CONSTRUCTION. IF THE REQUIRED SEPARATION DISTANCE BETWEEN PARALLEL WATER AND SEWER LINES, AS DETAILED IN TECHNICAL SPECIFICATION SECTION 33 31 13, CANNOT BE MAINTAINED, CONTRACTOR TO RELOCATE WATERLINE AS DIRECTED BY THE ENGINEER.
18. WHERE A WET CONNECTION TO AN EXISTING 6" OR 8" LINE IS TO BE MADE BY CUTTING THE EXISTING LINE, DR18 C-900 PVC PIPE SHALL BE USED TO REPLACE THE SECTION OF OLD ONE REMOVED AND SHALL BE COUPLED TO THE EXISTING ONE WITH A SOUND D.I. SLEEVE. SEPARATE COMPENSATION WILL BE MADE FOR THE REQUIRED DUCTILE IRON FITTINGS. THE BID PRICE FOR WET CONNECTION TO AN EXISTING ONE SHALL INCLUDE LABOR, TOOLS, PIPE, AND MISCELLANEOUS FITTINGS FOR SMALL DIAMETER PIPE NOT OTHERWISE PROVIDED FOR IN THE BID PROPOSAL.
19. ALL PENETRATIONS INTO A SANITARY SEWER MANHOLE, INCLUDING SEWER LEADS SHALL BE SERVED BY AN INVERT. ALL INVERTS SHALL EXTEND ALL THE WAY TO THE WALLS OF THE MANHOLE.
20. INSTALLATION OF GRAVITY SANITARY SEWER PIPE AND FORCE MAIN BY TRENCHLESS CONSTRUCTION SHALL MEET ASTM, ANSI, AND ANWA STANDARDS. IF THERE IS A CONFLICT IN STANDARDS THE MOST STRINGENT SHALL GOVERN.
21. ALL SANITARY SEWER PIPES UNDER OR WITHIN 1' OF PAVEMENT SHALL BE BACKFILLED WITH COMPACTED CEMENT STABILIZED SAND (2.0 SACKS PER TON OF SAND) TO THE BOTTOM OF 6" STABILIZED SUBGRADE.
22. THE PROPOSED CONNECTION OF THE SANITARY SEWER LINE TO THE SANITARY SEWER MANHOLE SHALL BE BY MEANS OF CORE AND BOOT AT SPECIFIED FLOWLINE. THE OPENING IN THE SIDE OF THE MANHOLE SHALL NOT BE MORE THAN 3-INCHES NOR LESS THAN 1-INCH IN DIAMETER THAN THE OUTSIDE DIAMETER FOR THE PROPOSED PIPE. THE PROPOSED PIPE SHALL NOT PRODUCE MORE THAN 3-INCHES PAST THE INSIDE FACE OF THE MANHOLE WALL. FILL THE ENTIRE VOID AROUND THE EXISTING MANHOLE WITH CEMENT-SAND CONNECTION TO EXISTING PUBLIC SANITARY SEWER MANHOLE SHALL BE COMPLETED BY THE CITY OF MONTGOMERY AT THE OWNER'S EXPENSE.

WATER CONSTRUCTION NOTES:

1. CONTRACTOR SHALL PROVIDE ADEQUATE THRUST BLOCKING TO WITHSTAND TEST PRESSURE AS SPECIFIED IN THE SPECIFICATIONS INDICATED IN THE PLANS AND CONTRACTS FOR WATER MAIN CONSTRUCTION AND MATERIALS.
2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NSF INTERNATIONAL (ANSI/NSF) STANDARDS 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
3. ALL PLASTIC PIPES TO BE USED IN PUBLIC WATER SYSTEMS MUST ALSO BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGNATION PRESSURE RATING OF AT LEAST 150 POUNDS PER SQUARE INCH (PSI) OR A STANDARD DIMENSION RATIO OF 26 OR LESS.
4. PRIOR TO INSTALLATION OF WATER METER, WATER METER LEAD OR UNMETERED FIRE SPRINKLER LINE, THE CONTRACTOR SHALL CONTACT THE PROVIDER.
5. PRIOR TO WATER MAIN CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER NO LESS THAN 48 HOURS IN ADVANCE AND COMPLY WITH ALL REQUIREMENTS NECESSARY FOR APPROVAL OF THE WATER MAIN CONSTRUCTION.
6. ALL WATER LINE AND SEWER LINE CROSSINGS SHALL BE CONSTRUCTED PER TCEQ REGULATIONS.
7. TWELVE-INCH (12") AND SMALLER MAINS SHALL HAVE A MINIMUM COVER OF FOUR FEET (4') FROM THE TOP OF CURB OR FIVE FEET (5') FROM THE MEAN ELEVATION OF THE BOTTOM OF THE NEARBY DITCH AND NEARBY RIGHT-OF-WAY ELEVATION FOR OPEN DITCH SECTIONS.
8. MAINS LARGER THAN TWELVE-INCHES (12") SHALL HAVE A MINIMUM COVER OF FIVE FEET (5') FROM THE TOP OF THE CURB OR SIX FEET (6') FROM THE MEAN ELEVATION FOR OPEN DITCH SECTIONS.
9. ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED BEFORE BACTERIOLOGICAL TESTING IN ACCORDANCE WITH ANWA STANDARD C-651.
10. ALL WATER PIPING SHALL BE DISINFECTED AND BACTERIOLOGICALLY TESTED PRIOR TO USE IN ACCORDANCE WITH ANWA STANDARD C-651.
11. ALL WATER MAINS 4" AND LARGER SHALL BE C-900 (SDR-18), UNLESS OTHERWISE NOTED IN PLANS.
12. THE INSTALLATION OF ALL WATER LINES SHALL EXTEND ALONG THE ENTIRE LENGTH OF THE PROPERTY TO THE WATER LINES THAT DEAD END SHALL EXTEND TO THE PROJECT LIMITS FOR FUTURE EXTENSIONS.
13. ALL WATER VALVES SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF ANWA C-500 AND SHALL BE OF THE RESILIENT SEAT TYPE.
14. THE USE OF BRSES AND PIPE FITTINGS THAT CONTAIN MORE THAN 0.25% LEAD OR SOLDERS AND FLUX THAT CONTAINS MORE THAN 0.2% LEAD IS PROHIBITED.
15. WATER MAINS CROSSING OR WITHIN 1' OF PAVEMENT SHALL HAVE A BANK SAND ENVELOPE OF 12" AND THE REMAINING TRENCH FILLED WITH COMPACTED CEMENT STABILIZED SAND (2.0 SACK PER TON SAND) TO BOTTOM OF 6" STABILIZED SUBGRADE.

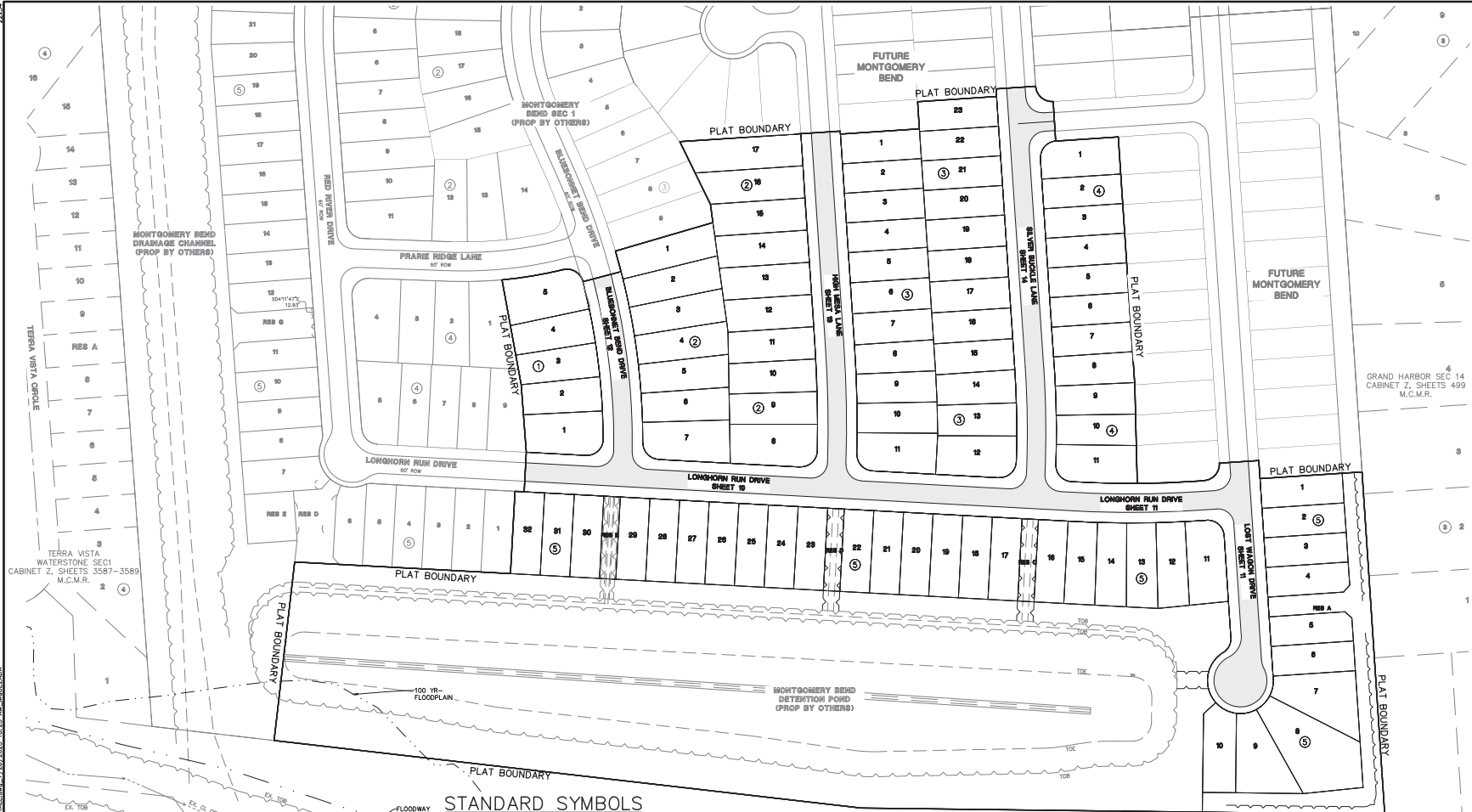
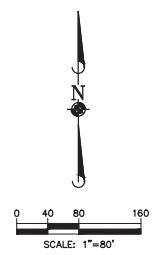
NOTE:
CITY OF MONTGOMERY WILL NOT BE RESPONSIBLE FOR MAINTAINING THE DETENTION POND FOR THIS DEVELOPMENT. MONTGOMERY COUNTY MUNICIPAL UTILITY DISTRICT NO. 224 WILL BE RESPONSIBLE FOR MAINTAINING THE DETENTION POND.

DATE	REVISION	APP.
GARRET J. DUHON 9709 LAKESIDE BLVD. SUITE 200 THE WOODLANDS, TX 77381 (832) 823-2200 TYPE NO. F-22671 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK		
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR	DATE	LIMITS

GENERAL NOTES

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 6110126-006-00

ELEVATION
land solutions
TBP# REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381 832-823-2200



BENCHMARK:
SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION H0550 81, PID NO. A36462
HAVING PUBLISHED INFORMATION AS FOLLOWS:
LATITUDE : 30° 21' 12.45392" NORTH
LONGITUDE : 090° 34' 45.02044" WEST
ORTHO HEIGHT : 212.4 FT. (64.74 METERS)
HORIZONTAL DATUM : NAD83 (2011)
VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:
ACCORDING TO MAP NO. 483300000 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE, ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

GARRET J. DUJON
9709 LAKESIDE BLVD.
SUITE 200
THE WOODLANDS, TX 77381
(832) 823-2200
TBP# NO. F-22671
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER DATE
SIGNATURE VALID FOR ONE (1) YEAR

PROJECT OVERALL

SHEET 3 OF 21

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006.00

STANDARD SYMBOLS

EXISTING	PROPOSED

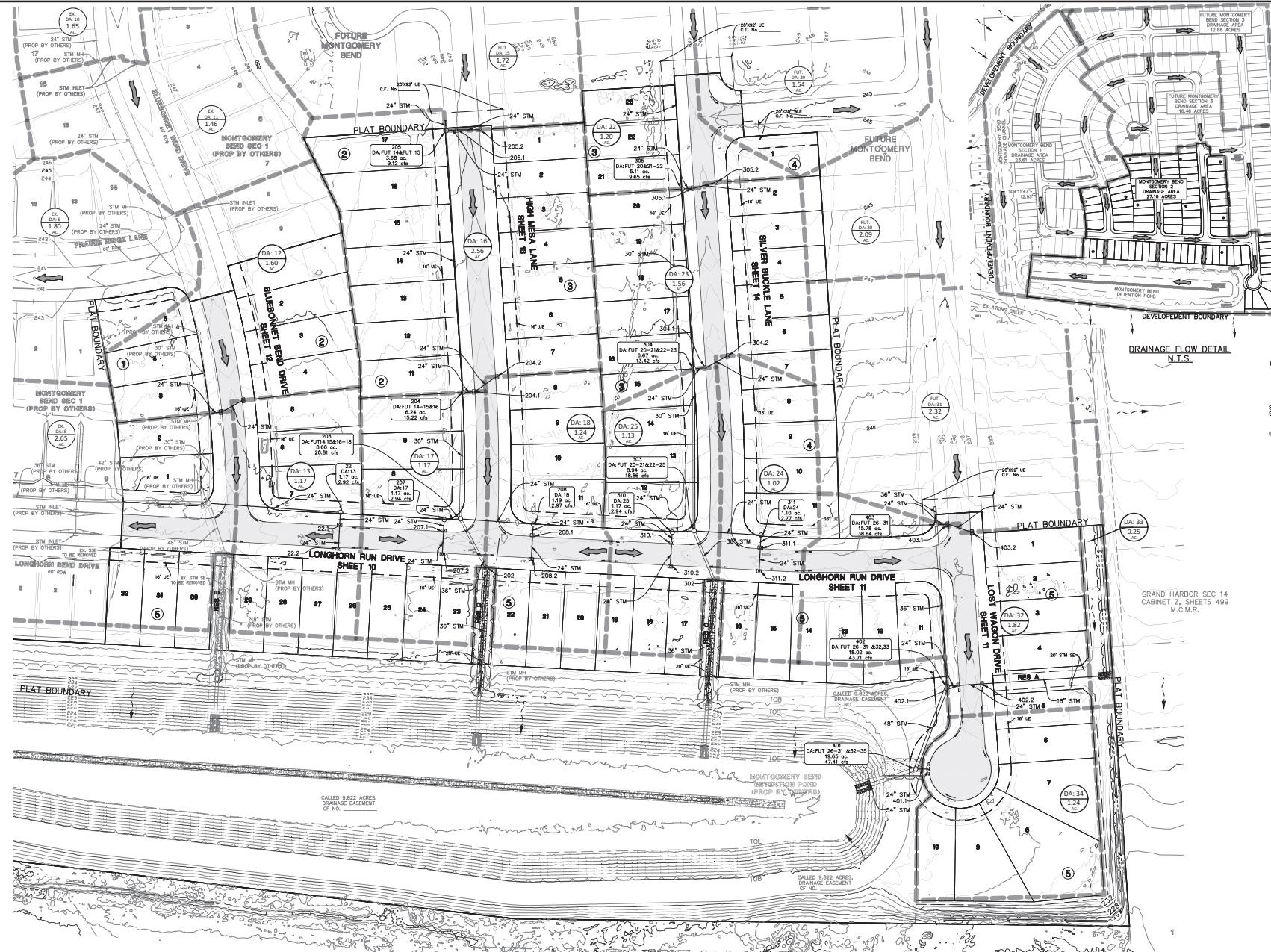
ABBREVIATIONS

ADJ	ADJACENT	PVC	POINT OF VERTICAL CURVATURE
B-B	BACK TO BACK	PVI	POINT OF VERTICAL INTERSECTION
B/C	BACK OF CURB	PVT	POINT OF VERTICAL TANGENCY
C	CENTERLINE	PWT	PAVEMENT
CL	CLEARANCE	PAE	PUBLIC ACCESS EASEMENT
CONC	CONCRETE	PAE	PUBLIC ACCESS EASEMENT
CY	CUBIC YARD	R	RADIUS
DE	DRAINAGE EASEMENT	ROW	RIGHT-OF-WAY
E-E	EDGE TO EDGE	RCP	REINFORCED CONCRETE PIPE
ELEV	ELEVATION	RT	RIGHT
ESMT	EASEMENT	SAN	SANITARY
EX	EXISTING	SF	SQUARE FEET
FL	FLOW LINE	STA	STATION
FM	FORCE MAIN	STM	STORM
FLV	FLUSH VALVE	SY	SQUARE YARDS
GV	GATE VALVE	TEMP	TEMPORARY
LF	LINEAR FEET	TC	TOP OF CURB
LT	LEFT	TYP	TYPICAL
MAX	MAXIMUM	UE	UTILITY EASEMENT
MA	MANHOLE	WL	WATERLINE
MIN	MINIMUM	WLE	WATERLINE EASEMENT
PC	POINT OF CURVATURE	WSE	WATER SURFACE ELEVATION
P/C	POINT OF COMPOUND CURVE		
P/I	POINT OF INTERSECTION		
PROP	PROPOSED		
RT	POINT OF TANGENCY		

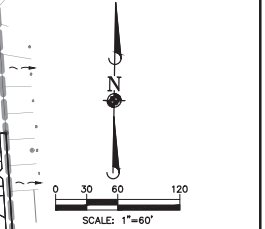
WATERSTONE ON LAKE CONROE
SECTION TWO
CABINET Z, SHEETS 3577
M.C.M.R.

P:\AUD128_Metry and Engineer\Trest\008_Sec 2\03\03_0726\2023_105.25_AM_M02E20A

P:\LID128_Metry and Customer_Trajectory_Plan_Sett_Drainage\WARRANTAGE_LAYOUT.dwg - 7/26/2023 10:27 AM C:\DWG



ELEVATION
land solutions
TPPE REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381-832-2200



LEGEND

- INLET
- DRAINAGE AREA NUMBER
- DRAINAGE AREA IN ACRES
- STORM SEWER
- 5 YEAR FLOW IN C.F.S.
- DRAINAGE AREA BOUNDARY
- DIRECTION OF 100 YEAR FLOW
- OFFSITE DRAINAGE FLOW

BENCHMARK:
SOURCE BENCHMARK:
ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HIGGS0 81, PID NO. A36460.
HAVING PUBLISHED INFORMATION AS FOLLOWS:
LATITUDE : 30° 21' 12.45392" NORTH
LONGITUDE : 095° 34' 45.02544" WEST
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HORIZONTAL DATUM : NAD83 (2011)
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FLOODPLAIN INFORMATION:
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DATE	REVISION	APP.

GARRET J. DUHON
9709 LAKESIDE BLD.
SUITE 200
THE WOODLANDS, TX 77381
(832) 823-2200
Garrett J. Duhon
Professional Engineer
130733
07/26/2023

TPPE NO. F-22671
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK
CITY OF MONTGOMERY CITY ENGINEER DATE
SIGNATURE VALID FOR ONE (1) YEAR

DRAINAGE LAYOUT
SHEET 5 OF 21

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00



Project: Montgomery Bend Section 2
Job Number: 610.126.006.00
Design By: Salvador Talavera
Jurisdiction: Montgomery County Outside Houston ETJ
Storm Year 1: 5-yr
Storm Year 2: 100-yr
Storm Year 3:

Table with 3 columns: Flowline, 5-yr HGL, 100-yr HGL. Rows include Outfall_1, Outfall_2, Outfall_3, Outfall_4.

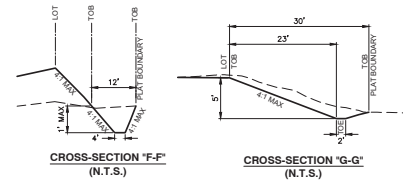
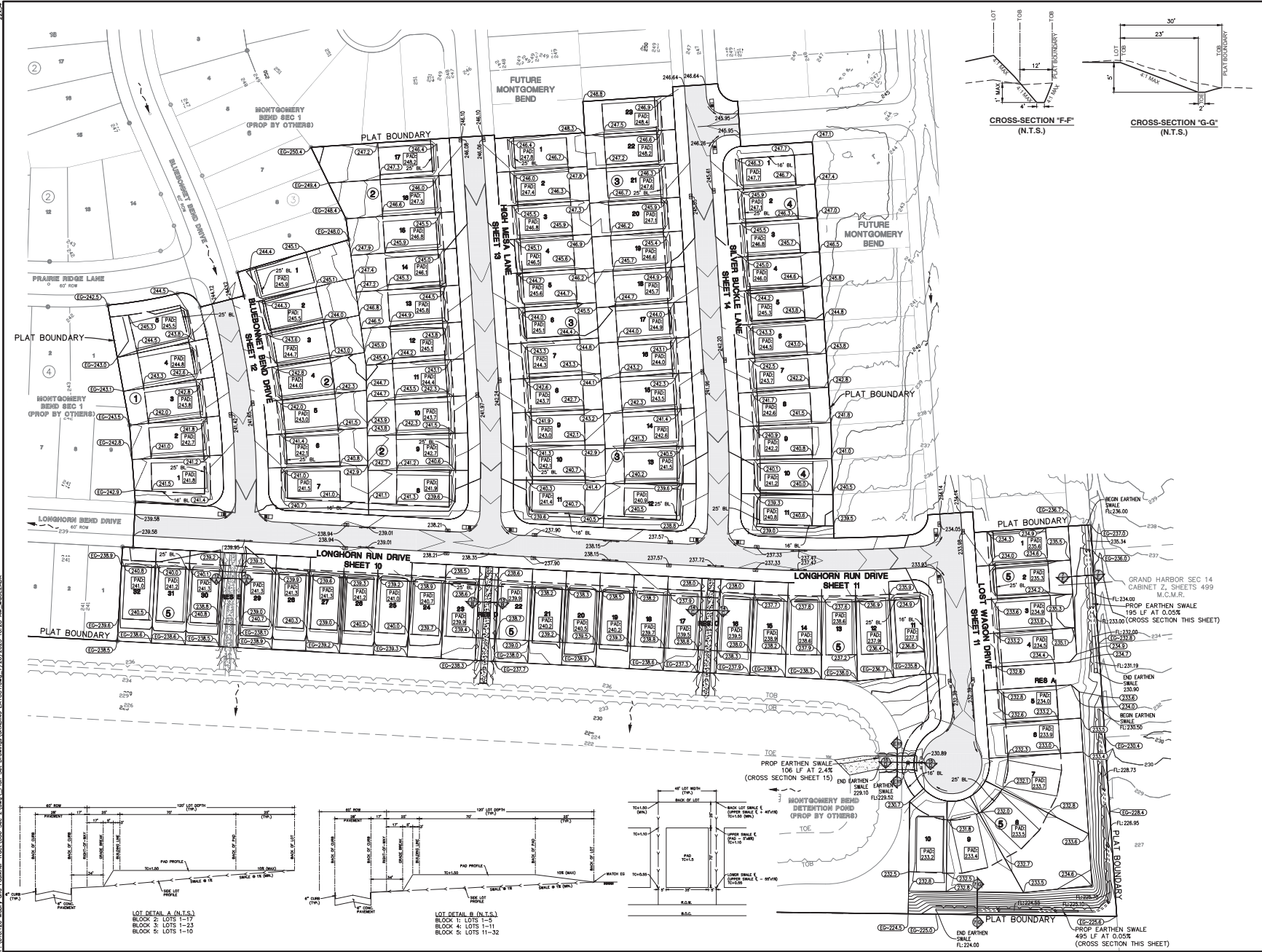
Intensity (I) = (b / (a + Tc)^b) * Cc
Upstream Tc = 15 + 10 * (Ac^0.17)

Intensity Coefficients for Montgomery County Outside Houston ETJ. Table with 2 columns: 5-yr, 100-yr. Rows include b, a, c, Cf.

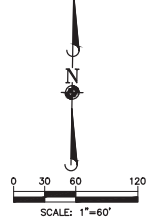
Main data table with columns: Alignment/Road, Node Upstream, Node Downstream, Pipe Length, Pipe Diameter or Box Span, Slope, Manning's 'n', Design Capacity, Design Velocity, Top of Curb, Gutter Elevation, Gutter Slope, Drainage Area, Intensity & Flow, TOC, 5-yr Hydraulic Grade Line, 100-yr Hydraulic Grade Line, TP 101 - Method 1.

Revision table with columns: DATE, REVISION, APP. Includes a signature block for Garret J. DuHou and a professional engineer seal.

DRAINAGE CALCULATIONS



ELEVATION
land solutions
TPPE REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381 832-2200



LEGEND

- EC-245.0 MATCH EXISTING GROUND ELEV.
- 55.0 LOT GRADE ELEVATION
- 55.55 TOP OF CURB ELEVATION
- PAD ELEVATION
- PROPOSED GRADE BREAK
- OFFSITE DRAINAGE FLOW

BENCHMARK:
SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HIGGS2 81, PID NO. A36402
HAVING PUBLISHED INFORMATION AS FOLLOWS:
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DATE	REVISION	APP.

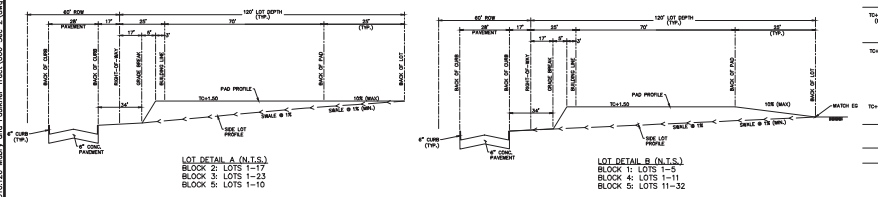
GRAND HARBOR SEC 14
CABINET Z, SHEETS 499
M.C.M.R.
FL:24.00
PROP EARTHEN SWALE
195 LF AT 0.05%
FL:233.00 (CROSS SECTION THIS SHEET)
FL:232.00
FL:231.90
END EARTHEN SWALE
230.90
REG A
PROP EARTHEN SWALE
330.50
BEGIN EARTHEN SWALE
FL:230.50
FL:228.75
FL:228.4

GARRET J. DUHON
9709 LAKESIDE BLVD.
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THE WOODLANDS, TX 77381
(832) 823-2200
Garrett J. Duhon
TPPE NO. F-22671
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

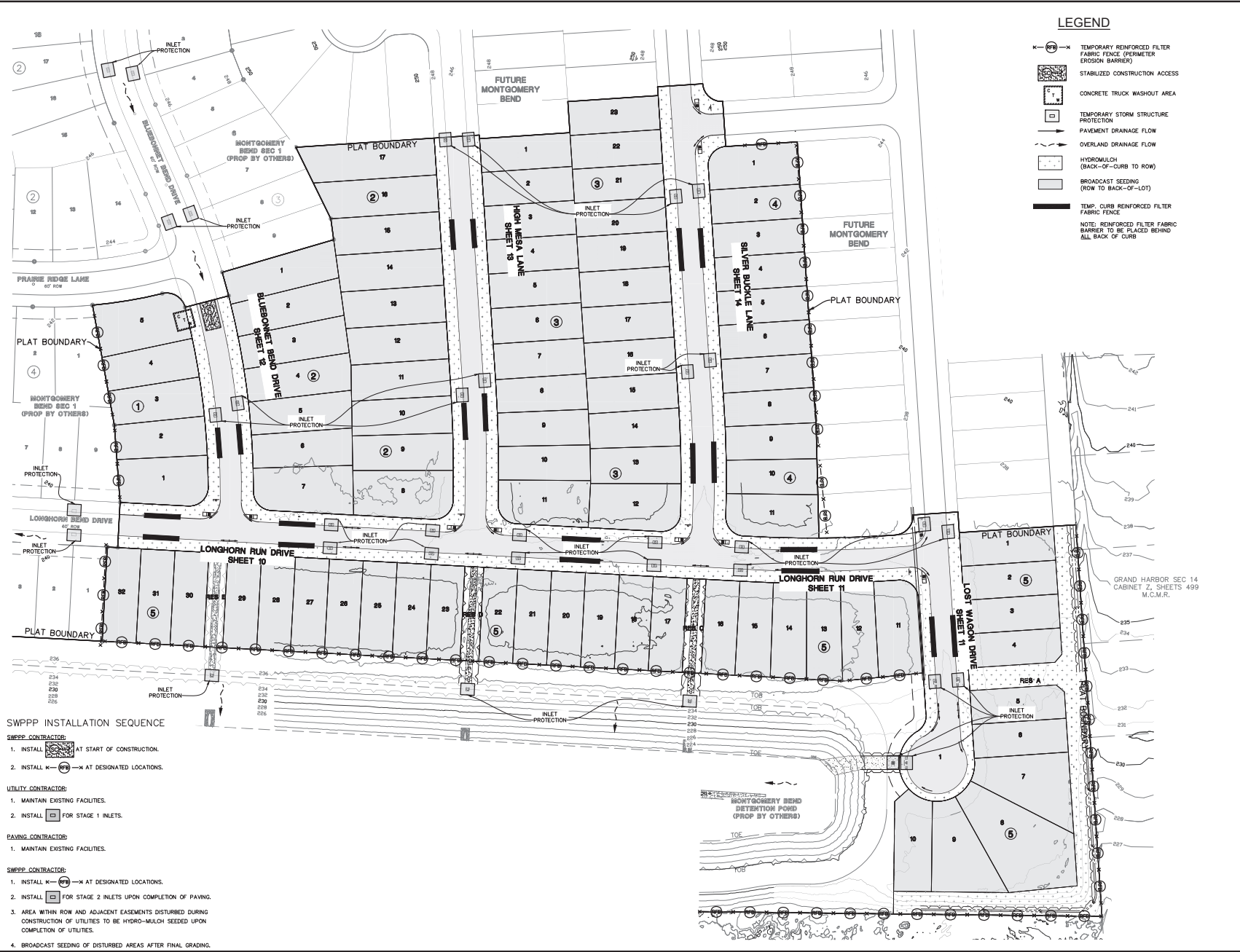
CITY OF MONTGOMERY
CITY ENGINEER
DATE
SIGNATURE VALID FOR ONE (1) YEAR

GRADING LAYOUT

SHEET 7 OF 21



P:\AUG126_Metry and Coulter_Traffic_Sol_Drawing\STORM_WATER_POLLUTION_PREVENTION_PLANS\SES 77267223_10-28-AM_MSD\22672

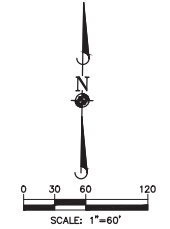


LEGEND

- TEMPORARY REINFORCED FILTER FABRIC FENCE (PERIMETER EROSION BARRIER)
- STABILIZED CONSTRUCTION ACCESS
- CONCRETE TRUCK WASHOUT AREA
- TEMPORARY STORM STRUCTURE PROTECTION
- PAVEMENT DRAINAGE FLOW
- OVERLAND DRAINAGE FLOW
- HYDROMULCH (BACK-OF-CURB TO ROW)
- BROADCAST SEEDING (ROW TO BACK-OF-LOT)
- TEMP. CURB REINFORCED FILTER FABRIC FENCE

NOTE: REINFORCED FILTER FABRIC BARRIER TO BE PLACED BEHIND ALL BACK OF CURB

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TPPE REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381 832-823-2200



- SWPPP INSTALLATION SEQUENCE**
- SWPPP CONTRACTOR:**
1. INSTALL AT START OF CONSTRUCTION.
 2. INSTALL AT DESIGNATED LOCATIONS.
- UTILITY CONTRACTOR:**
1. MAINTAIN EXISTING FACILITIES.
 2. INSTALL FOR STAGE 1 INLETS.
- PAVING CONTRACTOR:**
1. MAINTAIN EXISTING FACILITIES.
- SWPPP CONTRACTOR:**
1. INSTALL AT DESIGNATED LOCATIONS.
 2. INSTALL FOR STAGE 2 INLETS UPON COMPLETION OF PAVING.
 3. AREA WITHIN ROW AND ADJACENT EASEMENTS DISTURBED DURING CONSTRUCTION OF UTILITIES TO BE HYDRO-MULCH SEEDED UPON COMPLETION OF UTILITIES.
 4. BROADCAST SEEDING OF DISTURBED AREAS AFTER FINAL GRADING.

BENCHMARK:
SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HCSSD 81, PID NO. A36402
HAVING PUBLISHED INFORMATION AS FOLLOWS:
LATITUDE : 30° 21' 12.45392" NORTH
LONGITUDE : 090° 34' 45.02014" WEST
ORTHO HEIGHT : 212.4 FT. (64.74 METERS)
HORIZONTAL DATUM : NAD83 (2011)
VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:
ACCORDING TO MAP NO. 485300006 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

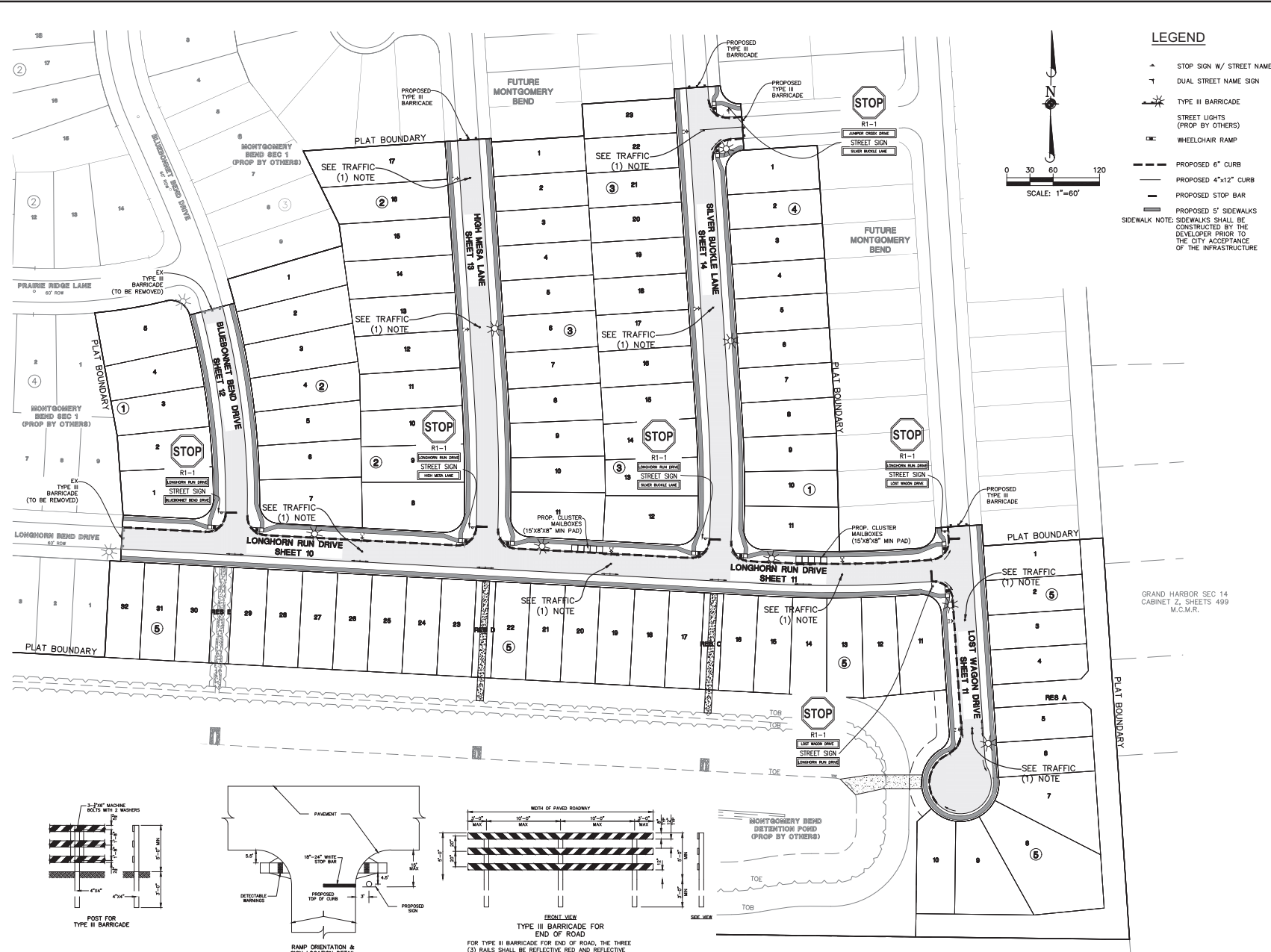
GARRET J. DUHON
9709 LAKESIDE BLD.
SUITE 200
THE WOODLANDS, TX 77381
(832) 823-2200
Garrett J. Duhon
Professional Engineer
130733
07/26/2023
TPPE NO. F-22671
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER DATE
SIGNATURE VALID FOR ONE (1) YEAR

STORM WATER POLLUTION PREVENTION LAYOUT

SHEET 8 OF 21

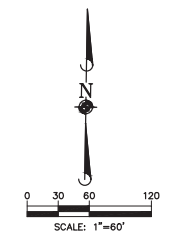
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LEGEND

- ▲ STOP SIGN W/ STREET NAME
- ◆ DUAL STREET NAME SIGN
- ✦ TYPE III BARRICADE
- ☀ STREET LIGHTS (PROP BY OTHERS)
- ▬ WHEELCHAIR RAMP
- PROPOSED 6" CURB
- PROPOSED 4"x12" CURB
- PROPOSED STOP BAR
- ▬ PROPOSED 5' SIDEWALKS

SIDEWALK NOTE: SIDEWALKS SHALL BE CONSTRUCTED BY THE DEVELOPER PRIOR TO THE CITY ACCEPTANCE OF THE INFRASTRUCTURE



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- STREET LIGHTS:**
- POLES MUST BE A MINIMUM OF 3FT. OF BACK OF CURB.
 - IF THE ELECTRICAL UTILITY PROVIDER STANDARDS CONFLICT WITH THE APPROVED LAYOUT BY THE CITY AND/OR CITY STANDARDS, A VARIANCE MUST BE RECEIVED FROM CITY COUNCIL.
- TRAFFIC BUTTONS & MEDIAN NOSES:**
- PAUSE BLUE TRAFFIC BUTTONS 6" OFF THE CENTERLINE OF THE ROADWAY TOWARDS THE RELATED FLUSH VALVE.
 - ALL MEDIAN NOSES SHALL BE PAINTED YELLOW.
- STREET SIGN NOTES:**
- CONTRACTOR TO VERIFY ALL STREET SIGNS WITH THE RECORDED PLAT PRIOR TO ORDERING THE SIGNS.
 - ALL R-1 STOP SIGNS SHALL BE 30" X 30" DIAMOND GRADE SHEETING.
 - PLACE STREET NAME SIGNS 3" ABOVE STOP SIGNS.
 - ALL STREET NAME SIGNS SHALL BE 9" BLADE.
 - CONTRACTOR TO COORDINATE STREET SIGN COLOR AND TEXT STYLE WITH THE ENGINEER PRIOR TO ORDERING STREET SIGNS.
 - ALL COMBINATION STREET AND REGULATORY SIGNS SHALL BE LOCATED AT CURB RETURNS UNLESS OTHERWISE NOTED.

BENCHMARK:

SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION H0550 B1, PID No. A36402

HAVING PUBLISHED INFORMATION AS FOLLOWS:
 LATITUDE : 30° 21' 12.45392" NORTH
 LONGITUDE : 095° 34' 45.02544" WEST
 ORTHO HEIGHT : 212.4 FT. (64.74 METERS)
 HORIZONTAL DATUM : NAD83 (2011)
 VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:

ACCORDING TO MAP NO. 4833000008 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

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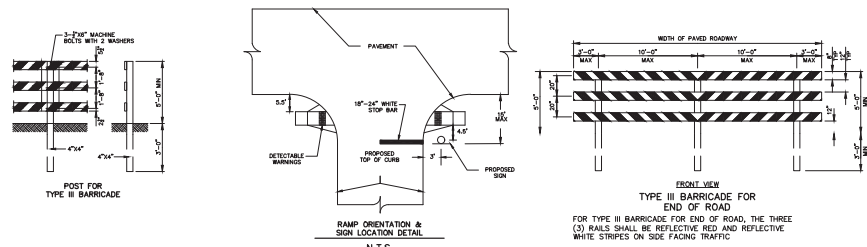
DATE	REVISION	APP.

GARRET J. DUHON
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 9709 LAKESIDE BLVD.
 THE WOODLANDS, TX 77381
 (832) 823-2200

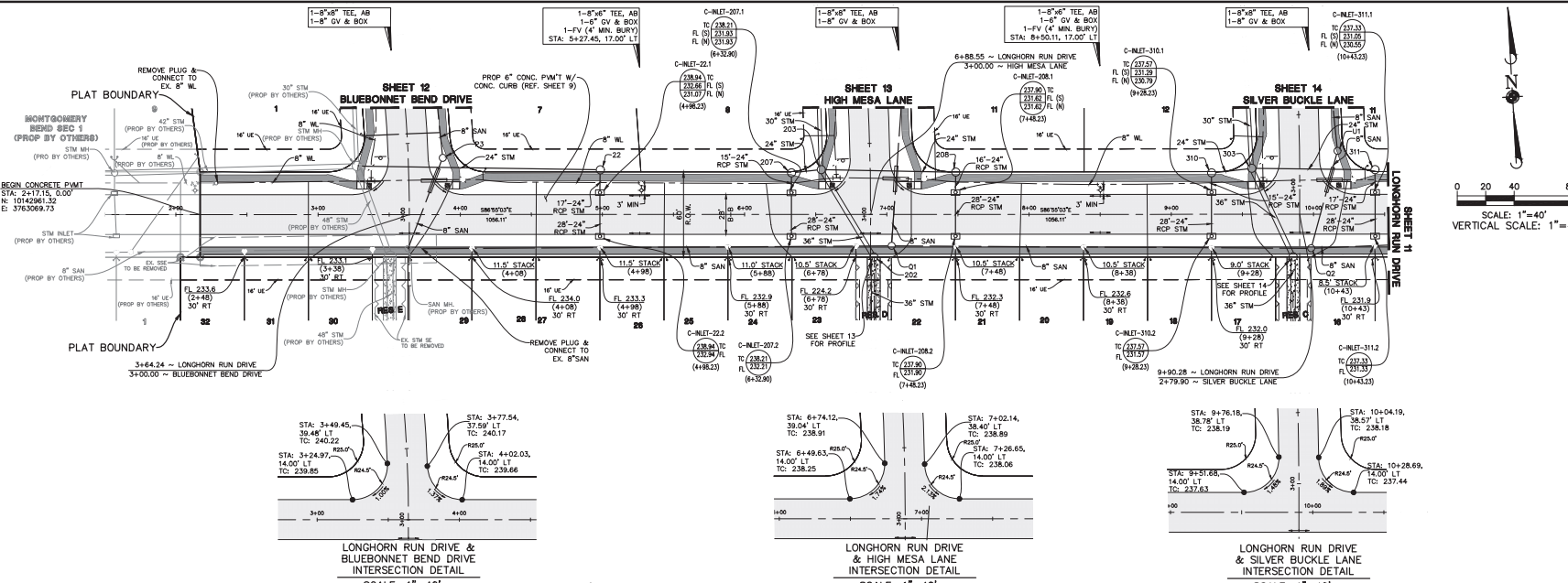
 TPPE No. F-22671
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK
 CITY OF MONTGOMERY CITY ENGINEER DATE
 SIGNATURE VALID FOR ONE (1) YEAR

TRAFFIC SIGNAGE & PAVEMENT MARKINGS LAYOUT

SHEET 9 OF 21



P:\AUD128_Metry and Customer_Traffic\08_Sec 2\0803_Prop_Sect_Dimensions\LONGHORN RUN DRIVE STA 1+50 TO 10+50.DWG 7/29/2023 10:50 AM STALANRAMEA



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TPRE REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381 832-823-2200

KEY MAP

SCALE: 1"=40'
VERTICAL SCALE: 1"=4'

WATER LINE-SANITARY SEWER CROSSING NOTE:

POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE FOR DIAMETERS LESS THAN 24 INCHES AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE. NO SEPARATE PAY.

- FILL NOTES:**
- EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPILL BANKS IN MAXIMUM 8' LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO METHOD T-99.
 - EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEANED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 6" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1. NO SEPARATE PAY.
 - ROADWAY EMBANKMENT: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

BENCHMARK:

SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION H4352 B1, PID NO. A36402.

HAVING PUBLISHED INFORMATION AS FOLLOWS:
 LATITUDE : 30° 21' 12.45392" NORTH
 LONGITUDE : 095° 34' 45.02544" WEST
 ORTHO HEIGHT : 2124.4 FT. (64.74 METERS)
 HORIZONTAL DATUM : NAD83 (2011)
 VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:

ACCORDING TO MAP NO. 48533-0008 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

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DATE	REVISION	APP.

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 SUITE 200
 THE WOODLANDS, TX 77381
 (832) 823-2200

Garret J. Duhon

TPRE NO. F-22671 07/29/2023
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER DATE
 SIGNATURE VALID FOR ONE (1) YEAR

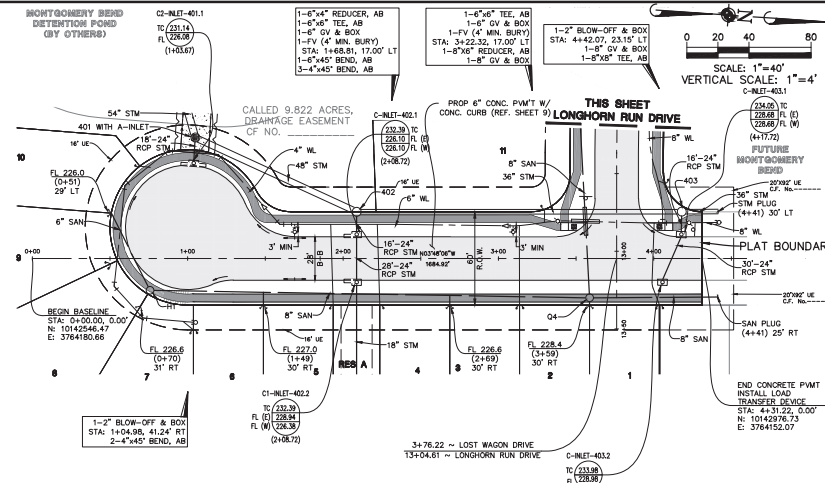
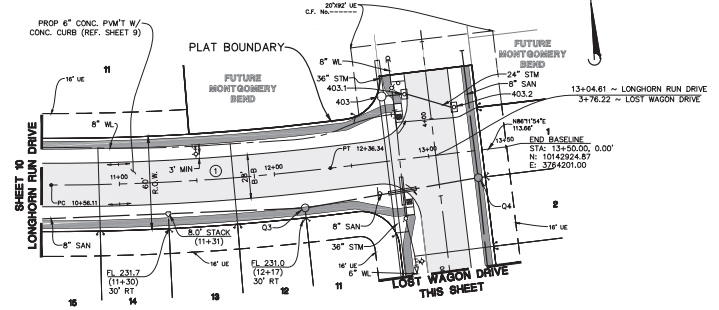
LONGHORN RUN DRIVE (STA 1+50 TO 10+50)

SHEET 10 OF 21

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610176-006-00

1-8" x 8" TEE, AB
 1-8" GV & BOX
 1-FV (4" MIN. BURY)
 STA: 11+50.38, 17.00' LT

CURVE DATA
 STA=10+56.11' TO
 STA=12+96.34'
 R=1097.93'
 L=180.33'
 T=1500.00'
 T=90.22'



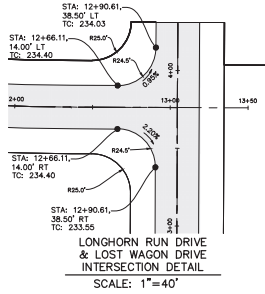
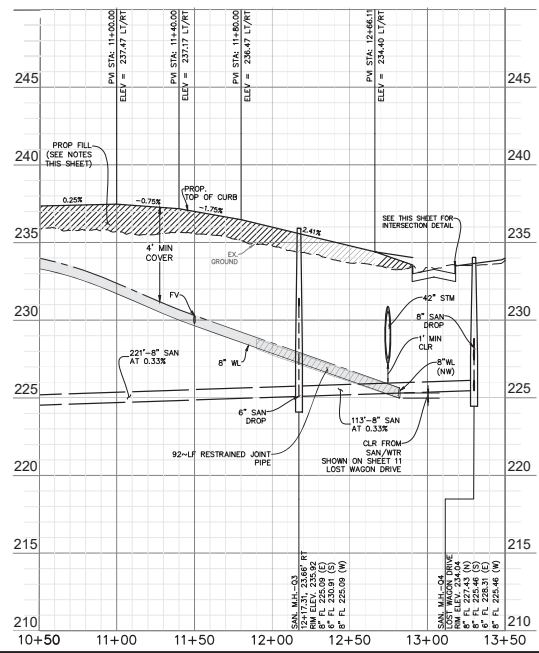
ELEVATION
 land solutions

TPBE REGISTRATION NUMBER F-22671

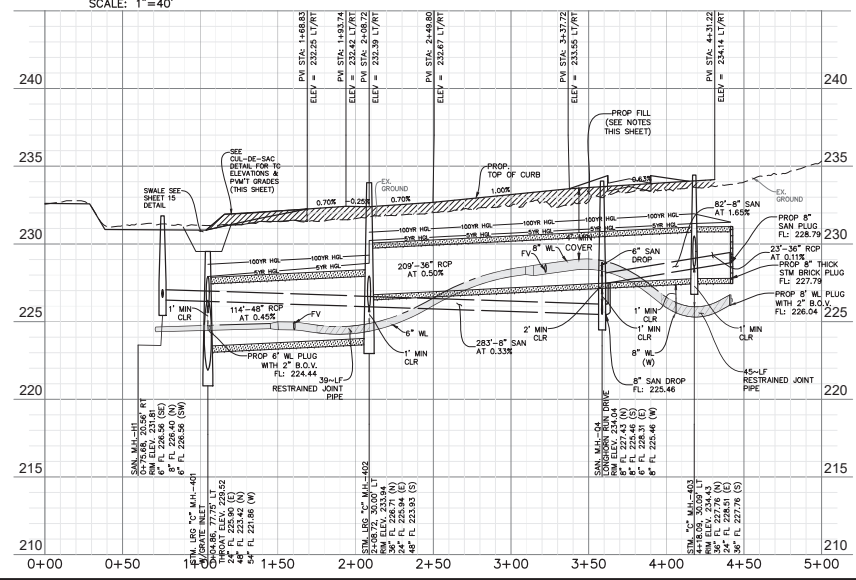
9709 LAKESIDE BLVD., SUITE 200
 THE WOODLANDS, TX 77381 (832) 823-2200

KEY MAP

LONGHORN RUN DRIVE



LOST WAGON DRIVE



WATER LINE-SANITARY SEWER CROSSING NOTE:
 POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH GRENBY STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE. NO SEPARATE PAY.

- FILL NOTES:**
- EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPOIL BANKS IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO TEST METHOD T-99.
 - EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEANED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 6" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1. NO SEPARATE PAY.
 - ROADWAY EMBANKMENT: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

BENCHMARK:
 ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HICSD8 81, PID NO. A36402.
 HAVING PUBLISHED INFORMATION AS FOLLOWS:
 LATITUDE : 30° 21' 12.45392" NORTH
 LONGITUDE : 090° 34' 40.62044" WEST
 ORTHO HEIGHT : 212.4 FT. (64.74 METERS)
 HORIZONTAL DATUM : NAD83 (2011)
 VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:
 ACCORDING TO MAP NO. 48530-000-0 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X" DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

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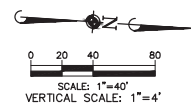
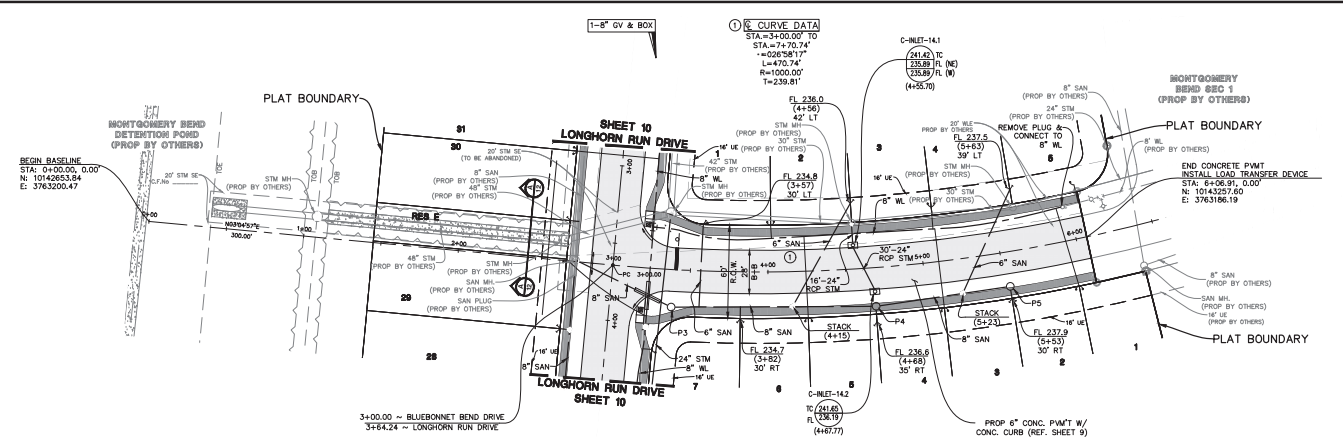
DATE	REVISION	APP.

GARRET J. DUHON
 STATE OF TEXAS
 PROFESSIONAL ENGINEER
 LICENSE NO. 130733
 EXPIRES 07/26/2023

TPBE NO. F-22671
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK
 CITY OF MONTGOMERY CITY ENGINEER DATE
 SIGNATURE VALID FOR ONE (1) YEAR

LONGHORN RUN DRIVE & LOST WAGON DRIVE

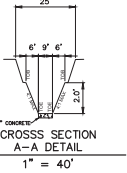
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ELEVATION
 land solutions
 TPBE REGISTRATION NUMBER F-22671
 9709 LAKESIDE BOULEVARD, SUITE 200
 THE WOODLANDS, TX 77381 832-823-2200

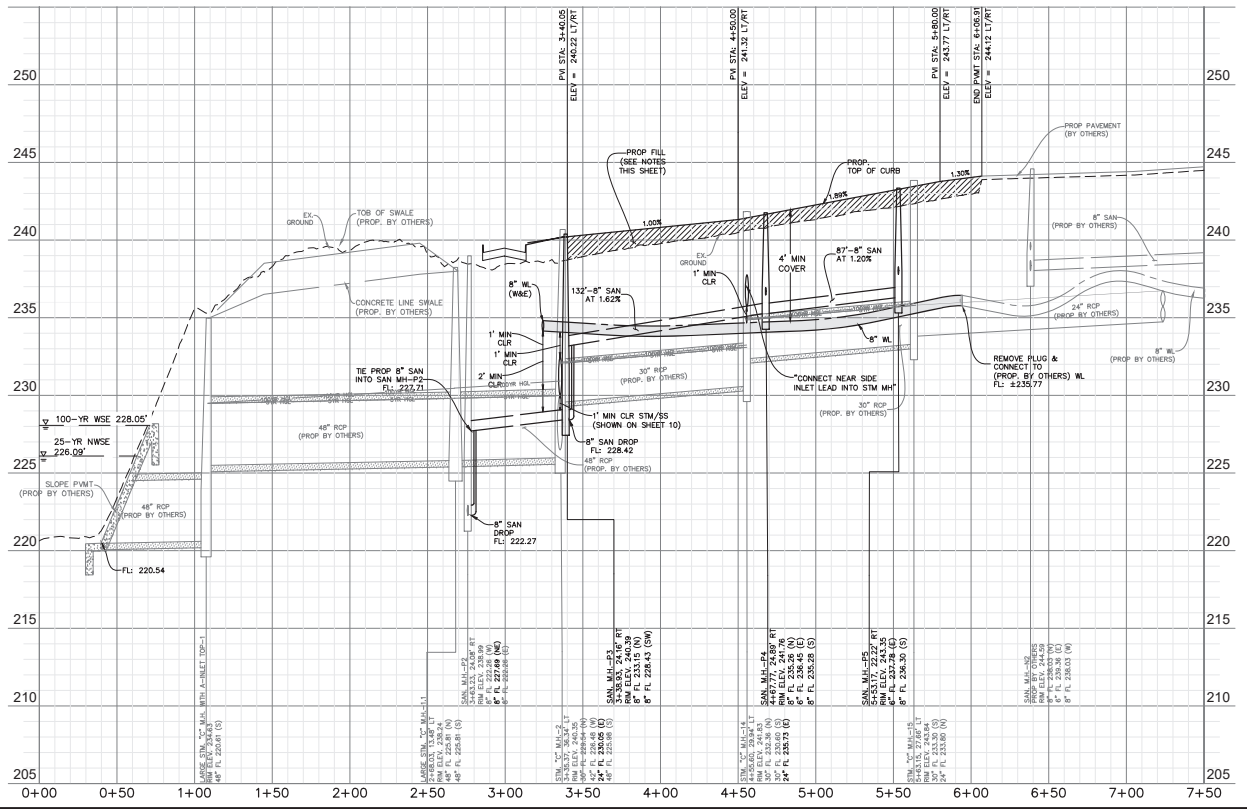
KEY MAP

BLUEBONNET BEND DRIVE



SWALE CAPACITY CALCULATION
 $Q = 1.49 \cdot A \cdot R^{2/3} \cdot S^{1/2}$

CHANNELS + COEFFICIENT	SLOPE	DEPTH	FREE BOARD	WIDTH	TOP WIDTH	CROSS-AREA	WETTED PERIMETER	VELOCITY	FLOW
0.013	1.30%	2.0'	1.20'	9"	25"	60.48	44.21	6.20	



WATER LINE-SANITARY SEWER CROSSING NOTE:
 POSITION ONE FULL SECTION OF RESTRAINED JOINT WATERLINE AND SANITARY SEWER PIPE CENTERED AT CROSSING. INSERT SANITARY SEWER PIPE WITH CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS ONE FOOT BEYOND THE JOINTS ON EACH END. FOR CROSSINGS WHERE PROPOSED WATERLINE IS UNDER PROPOSED SANITARY SEWER, PUT RESTRAINED JOINT DUCTILE IRON PIPE WATERLINE (FOR DIAMETERS LESS THAN 24 INCHES) AND RESTRAINED JOINT PRESSURE RATED (MIN 150 PSI) SANITARY 24" MIN CLEARANCE. NO SEPARATE PAY.

- FILL NOTES:**
- EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPILL BANKS IN MAXIMUM 6" LOGS, LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO TEST METHOD T-99.
 - EXISTING DRAINAGE SWALES: ALL EXISTING DRAINAGE SWALES UNDER PROPOSED CONCRETE PAVEMENT SHALL BE CLEARED, MUCKED OUT AND SCARIFIED TO A MINIMUM DEPTH OF 6" AND FILLED AS SPECIFIED ABOVE IN FILL NOTE NO. 1. NO SEPARATE PAY.
 - ROADWAY EMBANKMENT: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

BENCHMARK:
 SOURCE BENCHMARK: HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION HICSD8 81, PID No. AX4640.
 HAVING PUBLISHED INFORMATION AS FOLLOWS:
 LATITUDE : 30° 21' 12.45392"-NORTH
 LONGITUDE : 095° 34' 45.02514"-WEST
 ORTHO HEIGHT : 212.4 FT. (64.74 METERS)
 HORIZONTAL DATUM : NAD83 (2011)
 VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:
 ACCORDING TO MAP NO. 485390008 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAPS FOR MONTGOMERY COUNTY, DATED AUGUST 18, 2014, THE SUBJECT TRACT IS SITUATED WITHIN UNSHADED ZONE "X", DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAIN.

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DATE	REVISION	APP.

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 SUITE 200
 THE WOODLANDS, TX 77381
 (832) 823-2200

Garret J. Duhon
 130733
 PROFESSIONAL ENGINEER
 07/26/2023

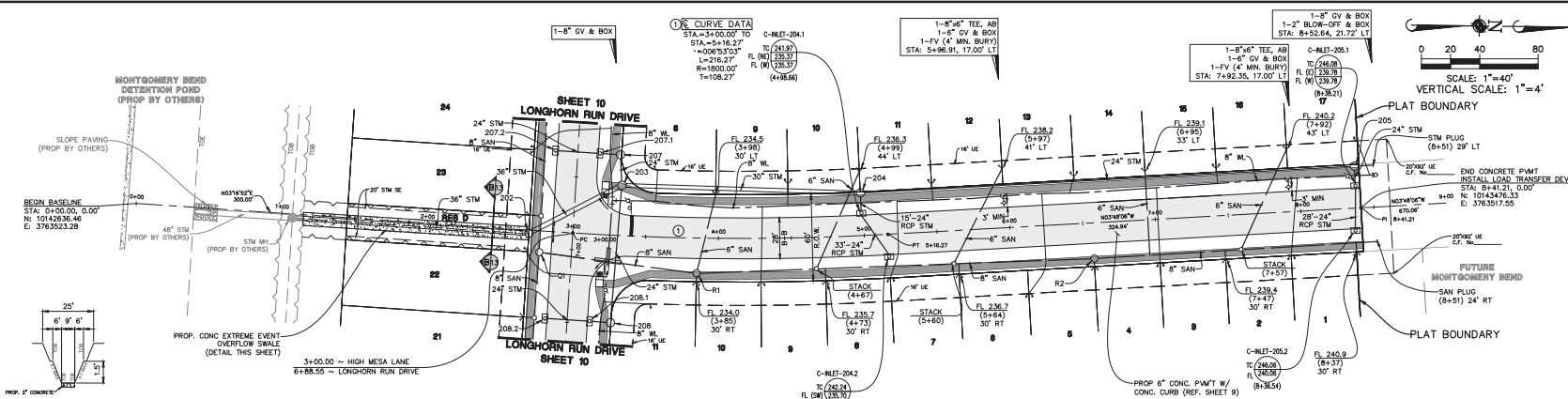
TPBE NO. F-22671

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER
 SIGNATURE VALID FOR ONE (1) YEAR

DATE

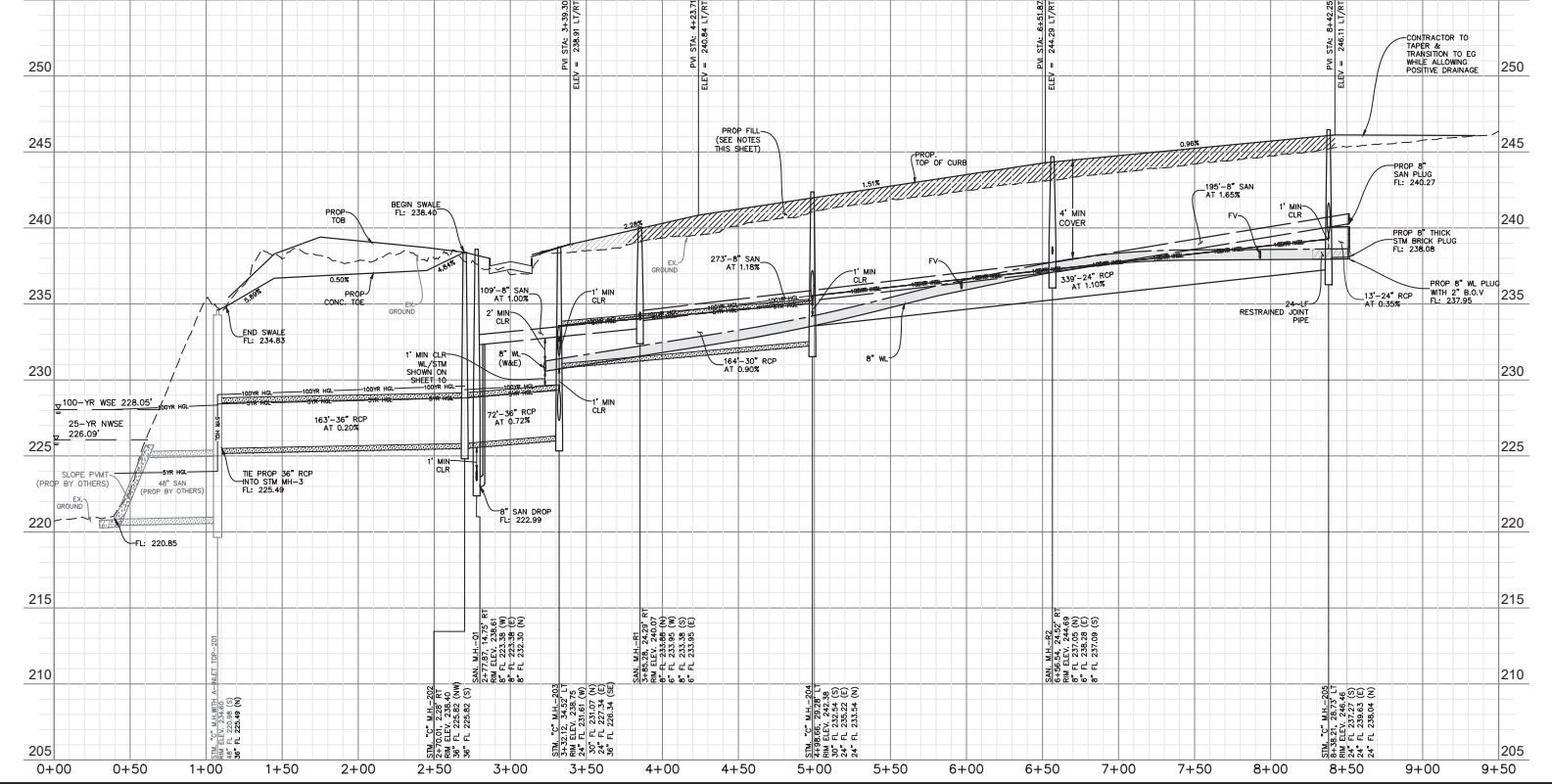
P:\MID\128_Midway and Coulter_Traffic\008_Sec 2\Utility_Plan_Sect_Drawing\MCH MESA LANE Sec 7\26-2023_10-14_MID\23-04



CROSS SECTION
B-B DETAIL
1" = 40'

MANHOLE COEFFICIENT	SLOPE	DEPTH	BOTTOM WIDTH	TOP WIDTH	CAPACITY	VELOCITY
0.02	0.50%	1.50'	9"	25"	61.95	4.47

HIGH MESA LANE



ELEVATION
land solutions
TPBE REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381 (832) 823-2200

KEY MAP

WATER LINE-SANITARY SEWER CROSSING NOTE:
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FILL NOTES:

- EXISTING GRADE SWALES: ALL EXISTING DRAINAGE SWALES SHALL BE FILLED AS SHOWN WITH MATERIAL FROM EXISTING ADJACENT SPOIL BANKS IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO 95% PROCTOR DENSITY AS PER AASHTO TEST METHOD T-99.
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- ROADWAY EMBANKMENT: STRIP 3" OF VEGETATION FROM AREA TO BE FILLED AND RE-COMPACT SOIL TO 95% PROCTOR DENSITY. PLACE FILL MATERIAL AS SPECIFIED IN FILL NOTE NO. 1.

BENCHMARK:
SOURCE BENCHMARK: ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC SURVEY MONUMENT DESIGNATION H2552 81, PID No. A36462.
HAVING PUBLISHED INFORMATION AS FOLLOWS:
LATITUDE : 30° 21' 12.45392" NORTH
LONGITUDE : 090° 34' 45.02514" WEST
ORTHO HEIGHT : 2124.4 FT. (64.7 METERS)
HORIZONTAL DATUM : NAD83 (2011)
VERTICAL DATUM : NAVD83

FLOODPLAIN INFORMATION:
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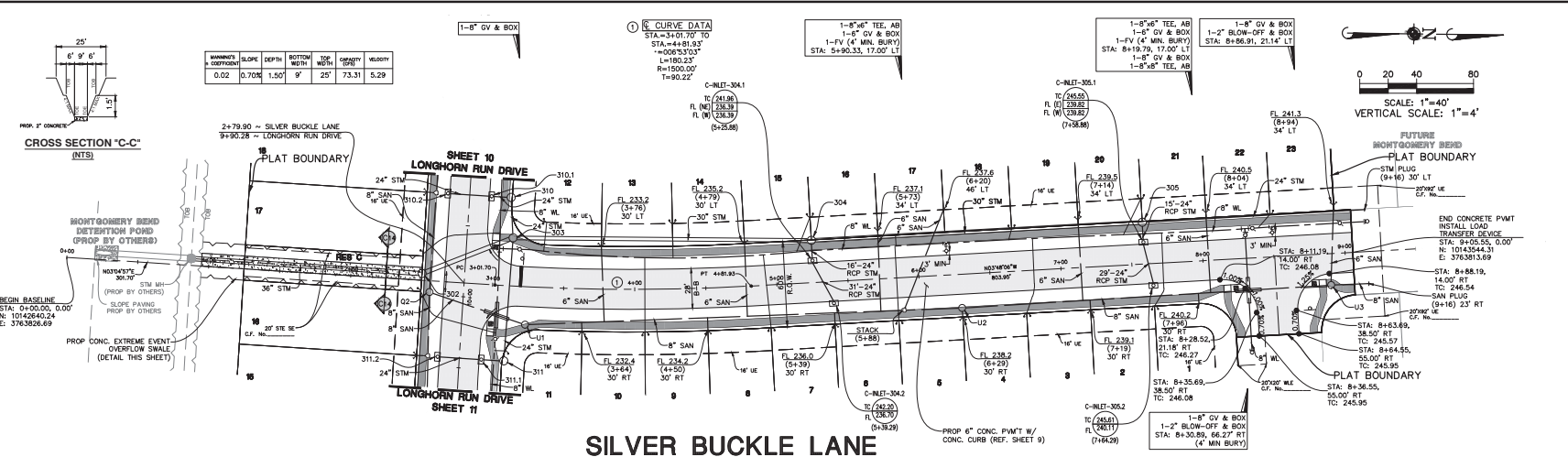
GARRET J. DUHON
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SUITE 200
THE WOODLANDS, TX 77381
(832) 823-2200
Garret J. Duhon
Professional Engineer
130733
07/26/2023

TPBE No. F-22671
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER DATE
SIGNATURE VALID FOR ONE (1) YEAR

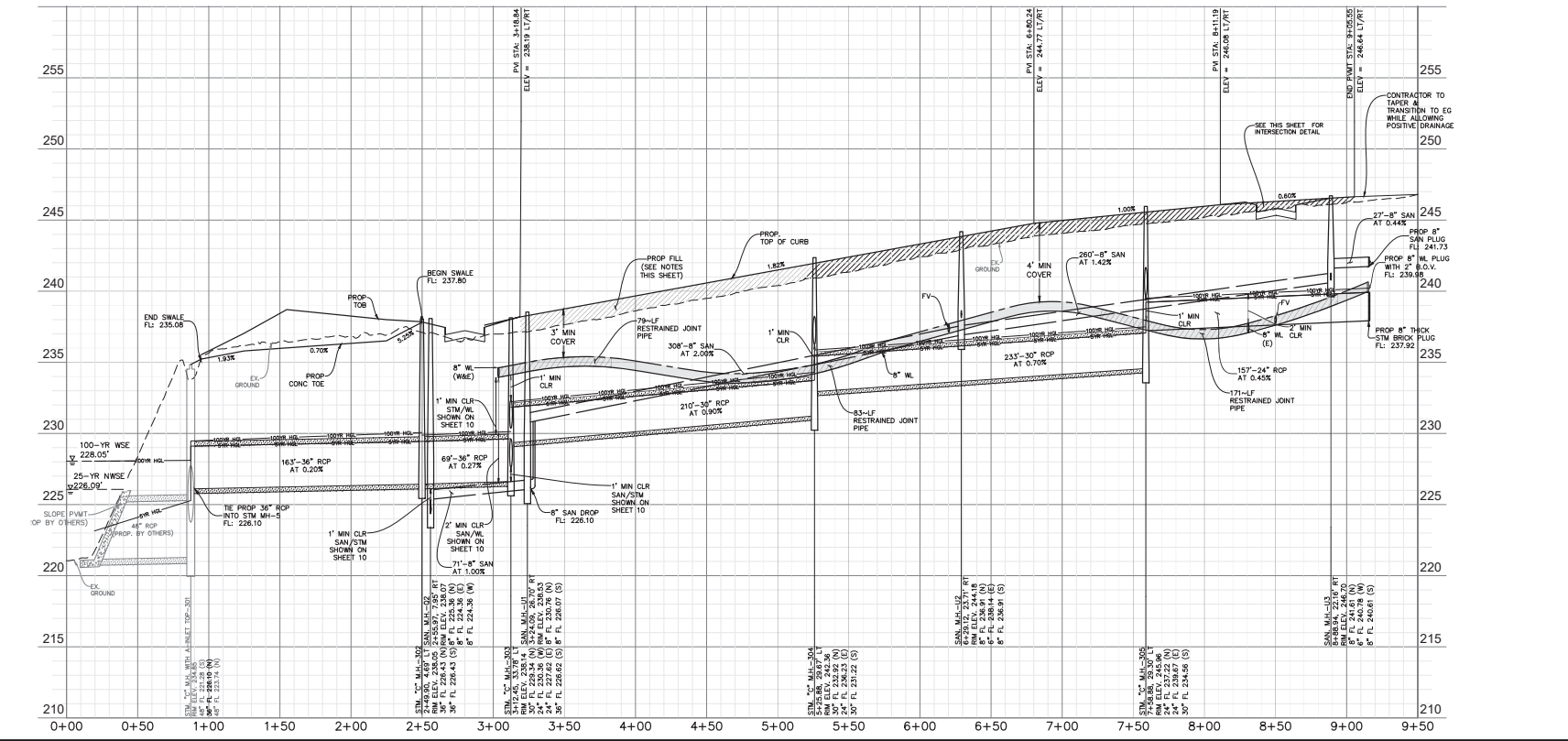
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SHEET 13 OF 21

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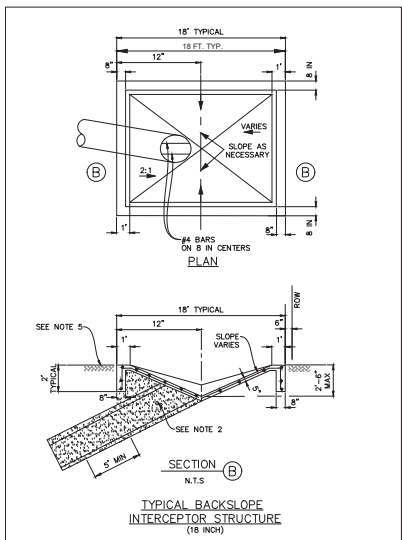
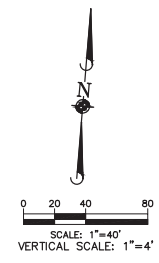
ELEVATION
land solutions
TPBE REGISTRATION NUMBER F-22671
9709 LAKESIDE BLVD., SUITE 200
THE WOODLANDS, TX 77381 832-823-2200

KEY MAP

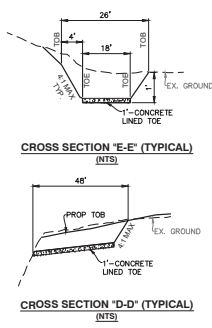
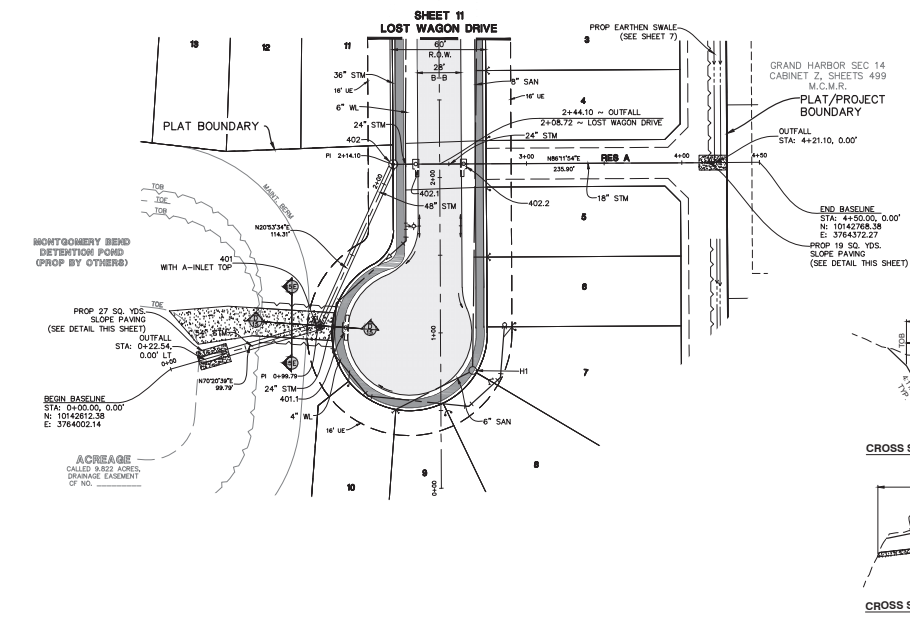


ELEVATION
land solutions
TPPE REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381 (832) 823-2200

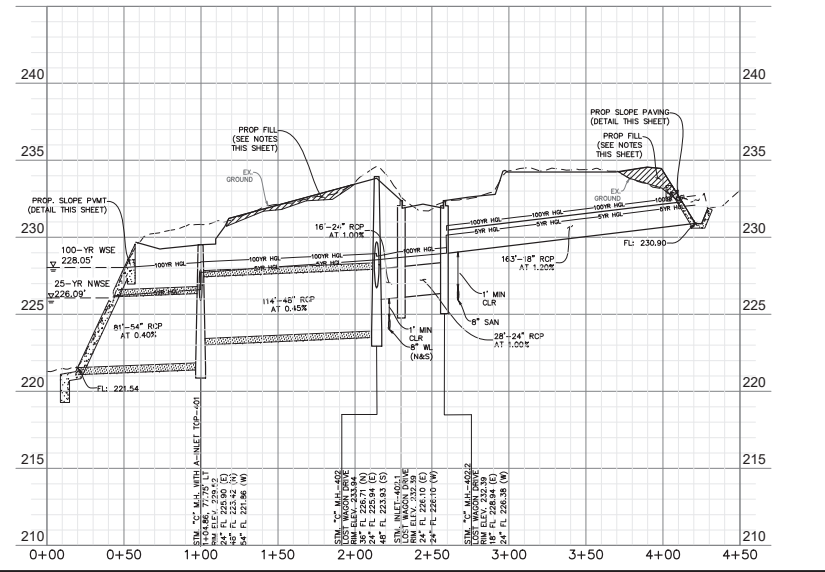
KEY MAP



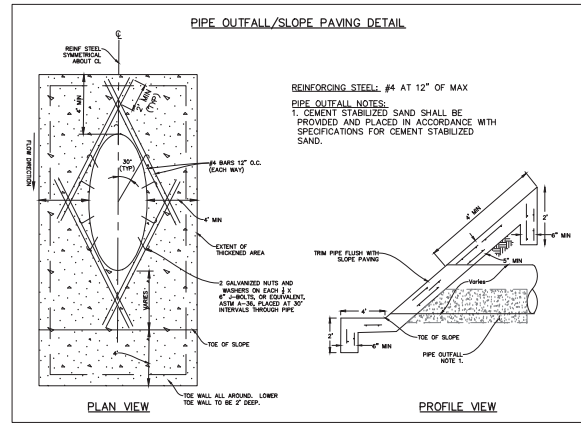
- NOTES**
- BACKSLOPE INTERCEPTOR STRUCTURE PIPES SHALL BE RCP PIPE IN ACCORDANCE WITH SPECIFICATION SECTION 02811 - REINFORCED CONCRETE PIPE. PROVIDE AND PLACE CEMENT STABILIZED SAND IN ACCORDANCE WITH SPECIFICATION SECTION 02311-CEMENT STABILIZED SAND AND SECTION 02316 - STRUCTURAL EXCAVATING.
 - EXCAVATION, FILL AND BACKFILL FOR INTERCEPTOR OUTFALLS SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02316 - EXCAVATION AND BACKFILL FOR STRUCTURES.
 - CONCRETE SHALL BE STRUCTURAL CONCRETE IN ACCORDANCE WITH SPECIFICATION SECTION 02315-CONCRETE FOR UTILITY CONSTRUCTION.
 - INTERCEPTOR STRUCTURES:
 - ADJUST LENGTH AND WIDTH IN FIELD AS NECESSARY.
 - 2- FEET DEEP X 8-INCH WIDE TOE ALL AROUND THE STRUCTURE.
 - STEEL REINFORING-#4 BARS (GRADE 60) AT 12 INCHES ON CENTER EACH WAY.
 - ANY INTERCEPTOR OUTFALL PIPE LARGER THAN MAXIMUM SIZE INDICATED REQUIRES A SEPARATE DETAIL.
 - INDICATED REQUIRES A SEPARATE DETAIL.
 - MATCH TOP OF CONCRETE WITH NATURAL GROUND.
- BACKSLOPE AND INTERCEPTOR STRUCTURE ELEVATIONS AND LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE. FINAL ELEVATIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION.
- STRUCTURAL CONCRETE WITH #4 BARS (GRADE 60) 12 INCH O.C. EACH WAY, 3 ROWS MIN. EACH WAY. - FOR COLLARS ONLY. WAIT A MINIMUM OF 24 HOURS AFTER PLACING CONCRETE TO BACKFILL.



OUTFALL



MANHOLE #	SLOPE	DEPTH	BOTTOM	TOE	CONCRETE	WALL	W/OUT
0.02	1:10X	1.0	18'	26"	54.39	101.80	6.80



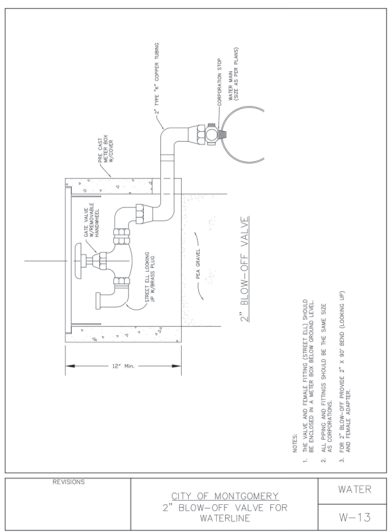
THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY OR STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. ON RARE OCCASIONS FLOODS CAN AND WILL OCCUR AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR.

DATE	REVISION	APP.

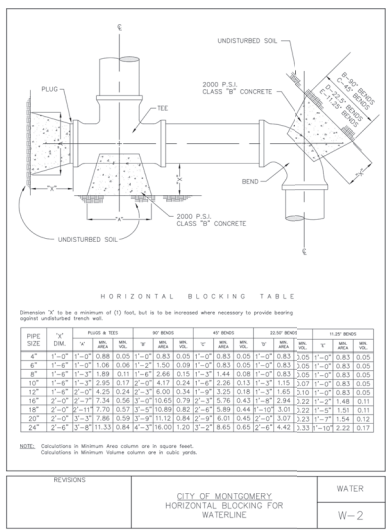
GARRET J. DUHON
9709 LAKESIDE BLVD.
SUITE 200
THE WOODLANDS, TX 77381
(832) 823-2200

TPPE NO. F-22671
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK
CITY OF MONTGOMERY CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

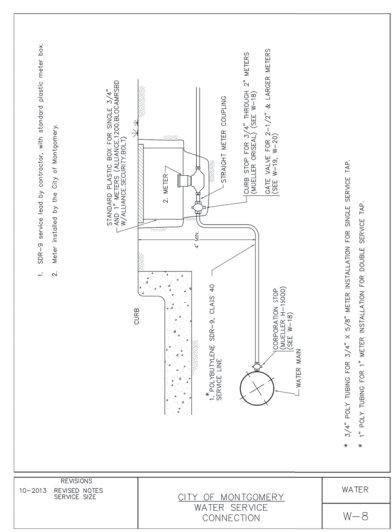
DATE: 07/26/2023



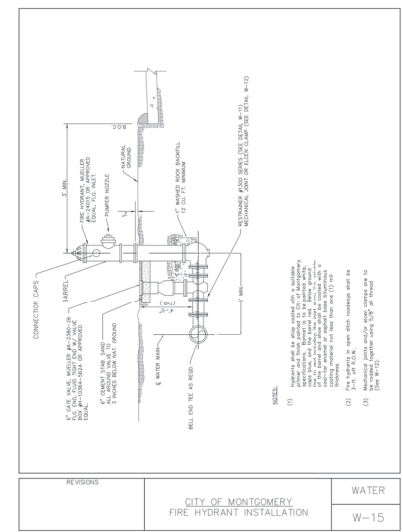
REVISIONS
CITY OF MONTGOMERY
2\"/>



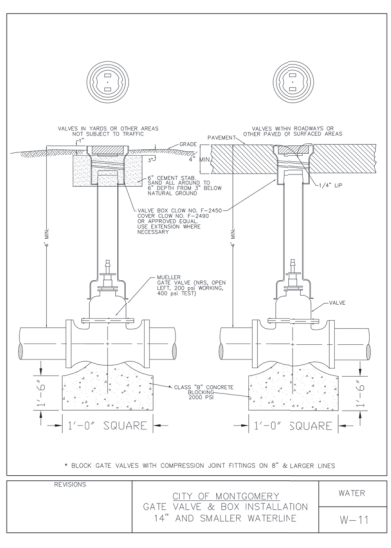
REVISIONS
CITY OF MONTGOMERY
HORIZONTAL BLOCKING FOR WATERLINE
W-2



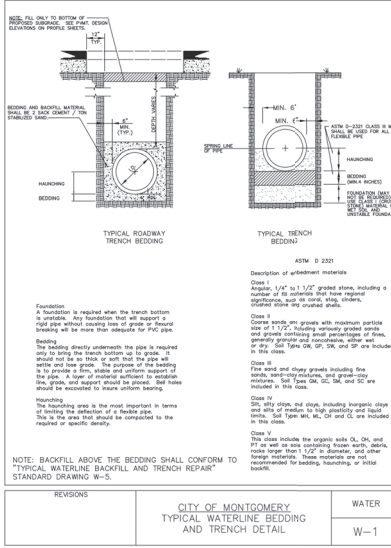
REVISIONS
CITY OF MONTGOMERY
WATER SERVICE CONNECTION
W-8



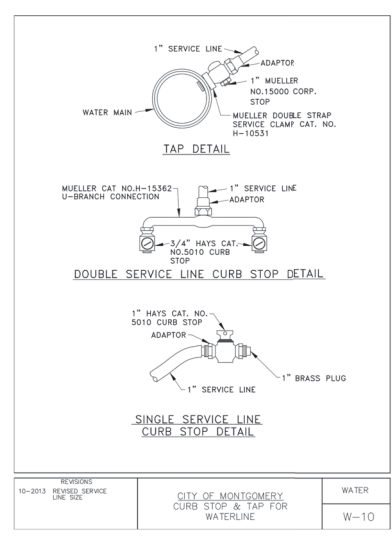
REVISIONS
CITY OF MONTGOMERY
FIRE HYDRANT INSTALLATION
W-15



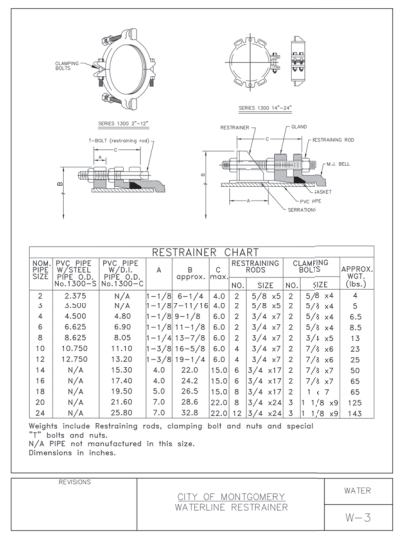
REVISIONS
CITY OF MONTGOMERY
GATE VALVE & BOX INSTALLATION
14\"/>



REVISIONS
CITY OF MONTGOMERY
TYPICAL WATERLINE BEDDING AND TRENCH DETAIL
W-1



REVISIONS
CITY OF MONTGOMERY
CURB STOP & TAP FOR WATERLINE
W-10



REVISIONS
CITY OF MONTGOMERY
WATERLINE RESTRAINER
W-3

DATE	REVISION	APP.

GARRET J. DUHON
9709 LAKESIDE BLVD.
SUITE 200
THE WOODLANDS, TX 77381
(832) 823-2200

Garret J. Duhon

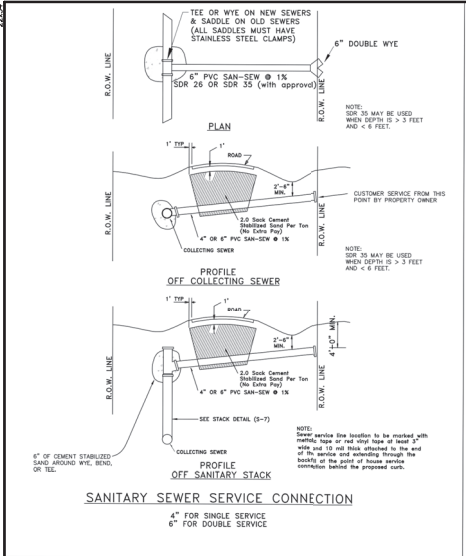
STATE OF TEXAS
PROFESSIONAL ENGINEER
GARRET J. DUHON
130733
EXPIRES 07/26/2023

TPBE NO. F-22671
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

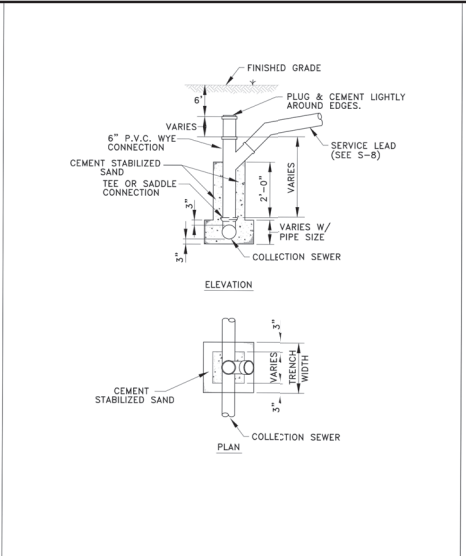
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR

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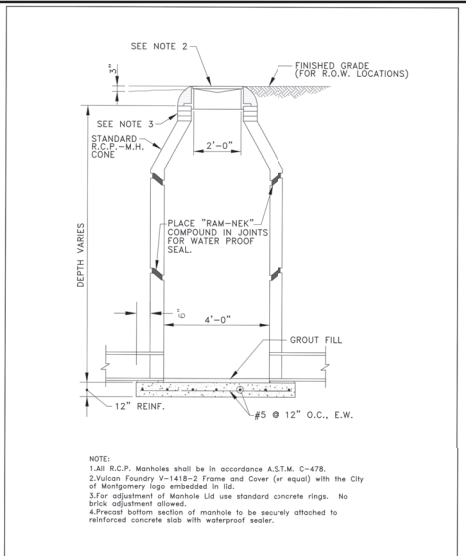
ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610126-006-00



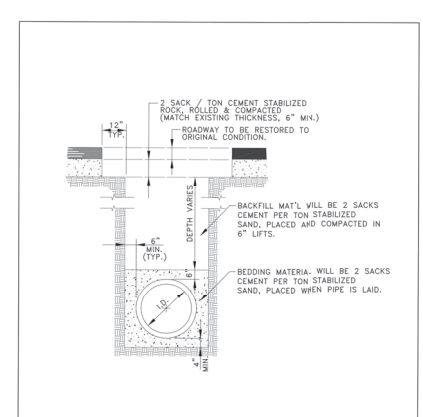
REVISIONS	CITY OF MONTGOMERY RESIDENTIAL SANITARY SEWER SERVICE CONNECTION	SEWER
10-2013	REVISED SERVICE GRADE & NOTES	S-8



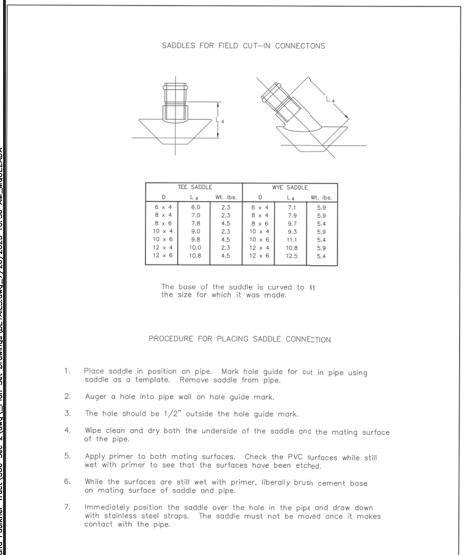
REVISIONS	CITY OF MONTGOMERY SANITARY SEWER STACK DETAIL	SEWER
10-2013	REVISED NOTES	S-7



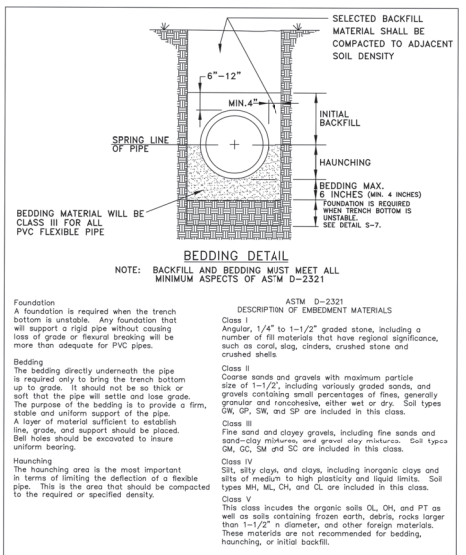
REVISIONS	CITY OF MONTGOMERY STANDARD PRECAST MANHOLE	SEWER
		S-4



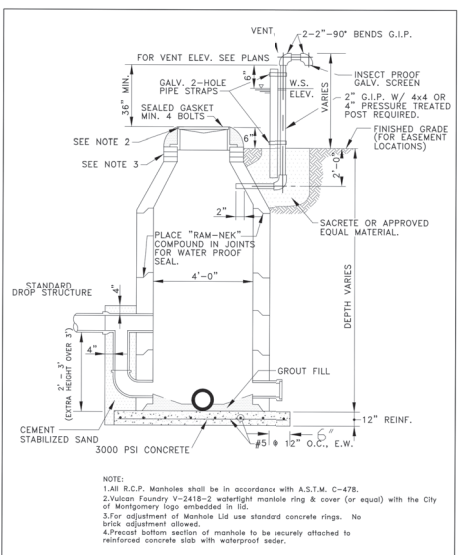
REVISIONS	CITY OF MONTGOMERY TYPICAL ROADWAY TRENCH BEDDING AND BACKFILL DETAIL	SEWER
		S-2



REVISIONS	CITY OF MONTGOMERY TEE & WYE SADDLES FOR PVC PIPE	SEWER
		S-11



REVISIONS	CITY OF MONTGOMERY TYPICAL SANITARY SEWER BEDDING AND TRENCH DETAIL	SEWER
		S-1



REVISIONS	CITY OF MONTGOMERY STANDARD PRECAST MANHOLE W/ DROP CONNECTION & VENT	SEWER
		S-5

DATE	REVISION	APP.

GARRET J. DUHON
 9709 LAKESIDE BLVD.
 SUITE 200
 THE WOODLANDS, TX 77381
 (832) 823-2200
 Garret J. Duhon
 LICENSED PROFESSIONAL ENGINEER
 130733
 07/26/2023

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE VALID FOR ONE (1) YEAR

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00



02632-09

02632-10

CONCRETE PAVING OUT SIDE OF MANHOLE TO BE FINISHED ELEV. OF 2024

STORM SEWER TYPE 'M' INLET
N.T.S.

STORM SEWER TYPE 'M' INLET ON CURB
INDICATING CONC. SURFACE OF 20" DIA. & GRADE
N.T.S.

CITY OF HOUSTON
ENGINEER'S SEAL
STORM SEWER
02632-09
AND 02632-10

02632-06

STORM SEWER TYPE 'C' INLET
N.T.S.

NOTES:
1. THE 'C' INLET SHALL BE A COVER AND FRAME AS SHOWN IN THE PLAN VIEW.
2. THE 'C' INLET SHALL BE REINFORCED CONCRETE.

02632-07

02632-08

STORM SEWER TYPE 'C' INLET
N.T.S.

STORM SEWER TYPE 'C' INLET
N.T.S.

CITY OF HOUSTON
ENGINEER'S SEAL
STORM SEWER
02632-06 THROUGH 08

02317-03

SANITARY OR STORM SEWER BYPASS AND BACKFILL
TYPICAL CROSS-SECTION
N.T.S.

NOTES:
1. THE STORM SEWER SHALL BE 18" DIA. UNLESS OTHERWISE NOTED.
2. THE STORM SEWER SHALL BE REINFORCED CONCRETE.
3. THE STORM SEWER SHALL BE 12" DIA. UNLESS OTHERWISE NOTED.
4. THE STORM SEWER SHALL BE 15" DIA. UNLESS OTHERWISE NOTED.

02317-05

PRECAST CONCRETE BOX STORM SEWER BYPASS AND BACKFILL
TYPICAL CROSS-SECTION
N.T.S.

NOTES:
1. THE STORM SEWER SHALL BE 18" DIA. UNLESS OTHERWISE NOTED.
2. THE STORM SEWER SHALL BE REINFORCED CONCRETE.
3. THE STORM SEWER SHALL BE 12" DIA. UNLESS OTHERWISE NOTED.
4. THE STORM SEWER SHALL BE 15" DIA. UNLESS OTHERWISE NOTED.

02317-06

PRECAST CONCRETE BOX STORM SEWER BYPASS AND BACKFILL
TYPICAL CROSS-SECTION
N.T.S.

NOTES:
1. THE STORM SEWER SHALL BE 18" DIA. UNLESS OTHERWISE NOTED.
2. THE STORM SEWER SHALL BE REINFORCED CONCRETE.
3. THE STORM SEWER SHALL BE 12" DIA. UNLESS OTHERWISE NOTED.
4. THE STORM SEWER SHALL BE 15" DIA. UNLESS OTHERWISE NOTED.

TABLE 1	TABLE 2	TABLE 3
18" DIA.	12" DIA.	15" DIA.
18" DIA.	12" DIA.	15" DIA.
18" DIA.	12" DIA.	15" DIA.

02317-07

PRECAST CONCRETE BOX STORM SEWER BYPASS AND BACKFILL
TYPICAL CROSS-SECTION
N.T.S.

NOTES:
1. THE STORM SEWER SHALL BE 18" DIA. UNLESS OTHERWISE NOTED.
2. THE STORM SEWER SHALL BE REINFORCED CONCRETE.
3. THE STORM SEWER SHALL BE 12" DIA. UNLESS OTHERWISE NOTED.
4. THE STORM SEWER SHALL BE 15" DIA. UNLESS OTHERWISE NOTED.

02632-09

4-FT DIA MANHOLE

5-FT & 6-FT DIA MANHOLE

5-FT & 6-FT DIA MANHOLE

CITY OF HOUSTON
ENGINEER'S SEAL
STORM SEWER TYPE 'C'
PRECAST ROUND MANHOLE
N.T.S.

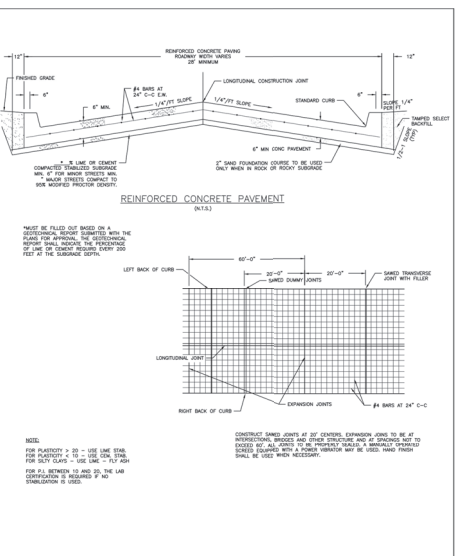
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4-FT DIA.	5-FT DIA.	6-FT DIA.
4-FT DIA.	5-FT DIA.	6-FT DIA.

DATE	REVISION	APP.

GARRET J. DUHON
 9709 LAKESIDE BLVD.
 SUITE 200
 THE WOODLANDS, TX 77381
 (832) 823-2200
 Garret J. Duhon
 PROFESSIONAL ENGINEER
 LICENSE NO. 130733
 07/26/2023
 CITY OF HOUSTON
 STORM SEWER TYPE 'C'
 PRECAST ROUND MANHOLE
 N.T.S.
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK
 DATE
 SIGNATURE VALID FOR ONE (1) YEAR

STORM SEWER DETAILS

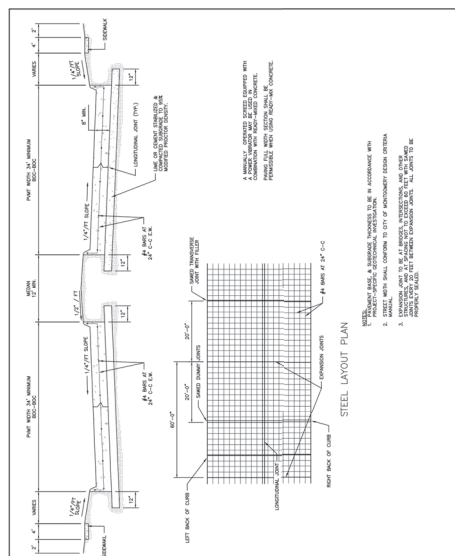
SHEET 18 OF 21



REVISIONS 10-2013 REVISED NOTES

CITY OF MONTGOMERY
TYPICAL NON-RESIDENTIAL
CONCRETE PAVING WITH
STANDARD CURB

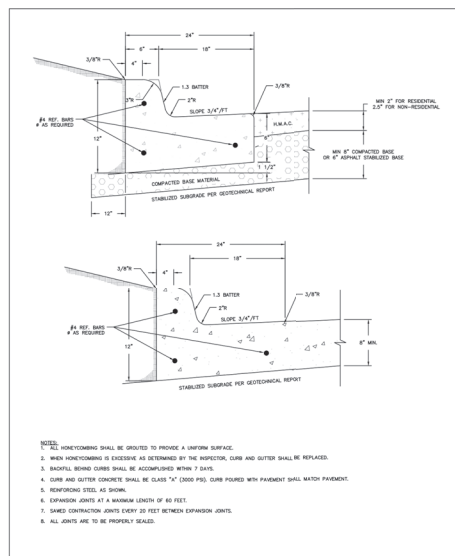
PAVING
P-3



REVISIONS 10-2013 REVISED NOTES

CITY OF MONTGOMERY
DIVIDED ROADWAY CROSS
SECTION

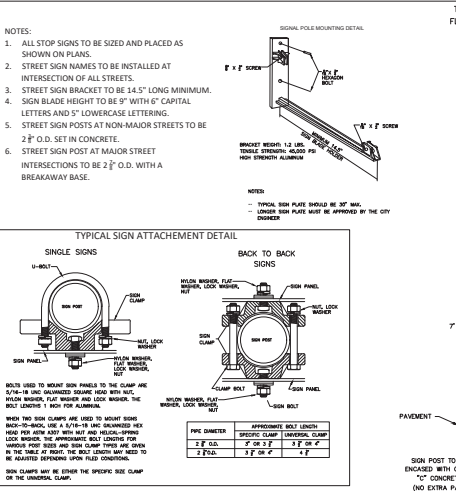
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P-1



REVISIONS 10-2013 REVISED NOTES

CITY OF MONTGOMERY
STANDARD CURB & GUTTER

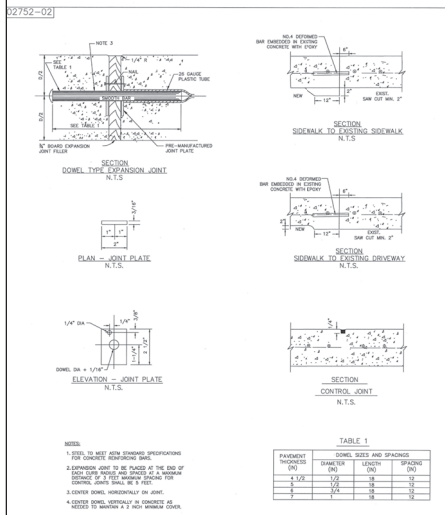
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P-4



REVISIONS 10-2013 REVISED NOTES

CITY OF MONTGOMERY
STANDARD STREET SIGN

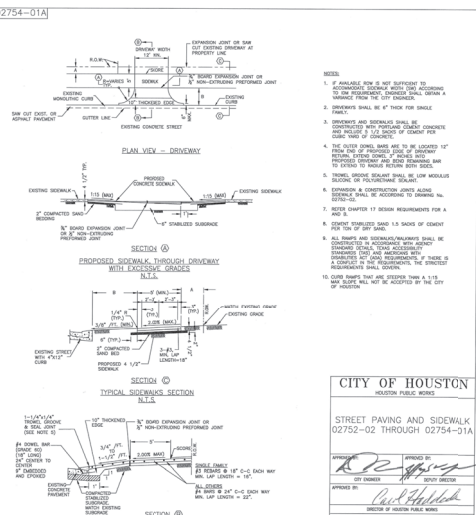
ROAD



REVISIONS 10-2013 REVISED NOTES

CITY OF MONTGOMERY
DIVIDED ROADWAY CROSS SECTION

PAVING
P-1

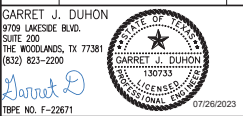


REVISIONS 10-2013 REVISED NOTES

CITY OF MONTGOMERY
STANDARD CURB & GUTTER

PAVING
P-4

DATE	REVISION	APP.



CITY OF HOUSTON
STREET PAVING AND SIDEWALK
02752-02 THROUGH 02754-01A

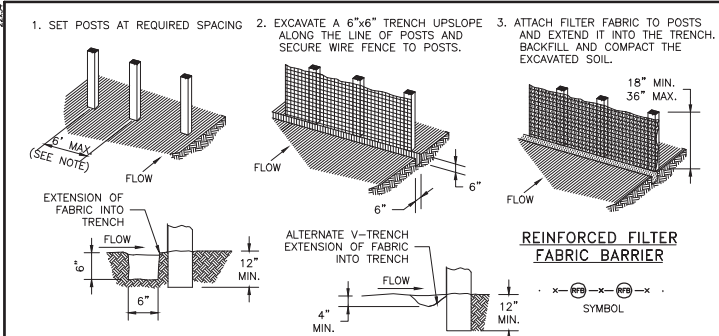
APPROVED BY: *[Signature]*
DATE: 07/26/2023

CITY OF MONTGOMERY CITY ENGINEER
SIGNATURE VALID FOR ONE (1) YEAR

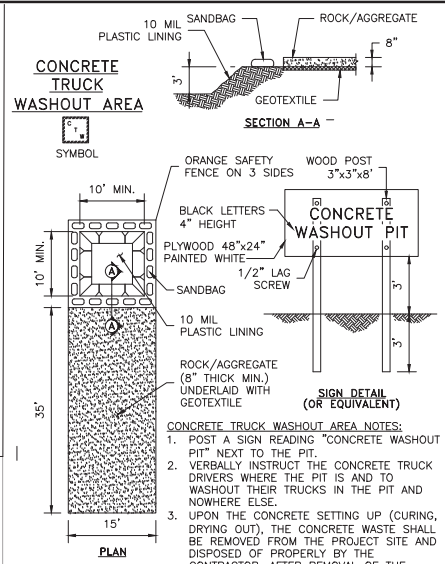
PAVING DETAILS

SHEET 19 OF 21

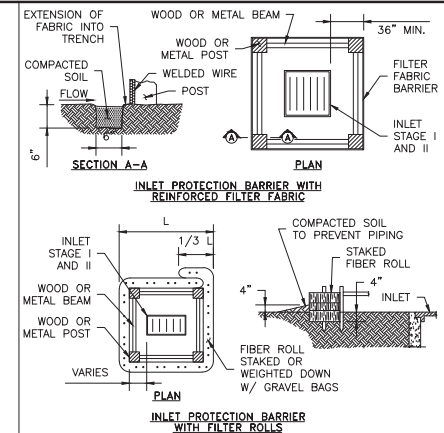
ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 610.126.006.00



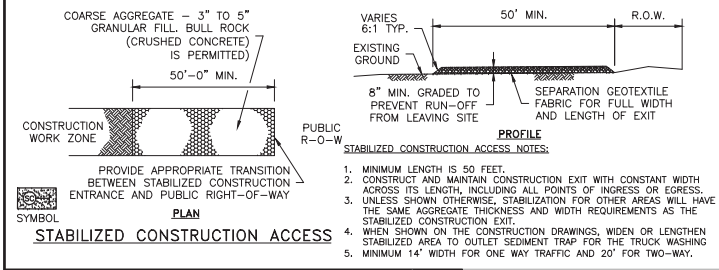
1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES OR TIE WIRES.
2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER, AND ATTACH TO A POST.
4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.



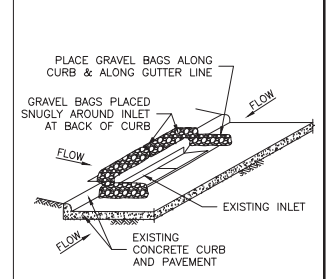
1. POST A SIGN READING "CONCRETE WASHOUT PIT" NEXT TO THE PIT.
2. VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASHOUT THEIR TRUCKS IN THE PIT AND NOWHERE ELSE.
3. UPON THE CONCRETE SETTING UP (CURING, DRYING OUT), THE CONCRETE WASTE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR. AFTER REMOVAL OF THE CONCRETE WASTE, THE WASHOUT PIT SHALL BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE ENGINEER.
4. CONCRETE WASHOUT PITS SHALL NOT BE LOCATED DIRECTLY ADJACENT TO, NOR AT ANY TIME DRAIN INTO THE STORM SEWER SYSTEM OR ANY OTHER SWALE, DITCH, OR WATERWAY.
5. CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCKS EQUIPMENT.



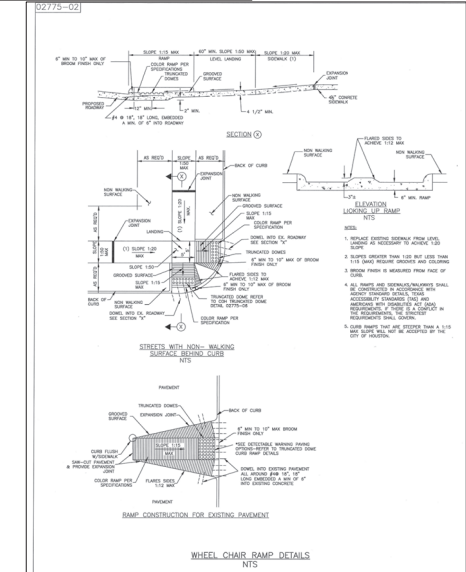
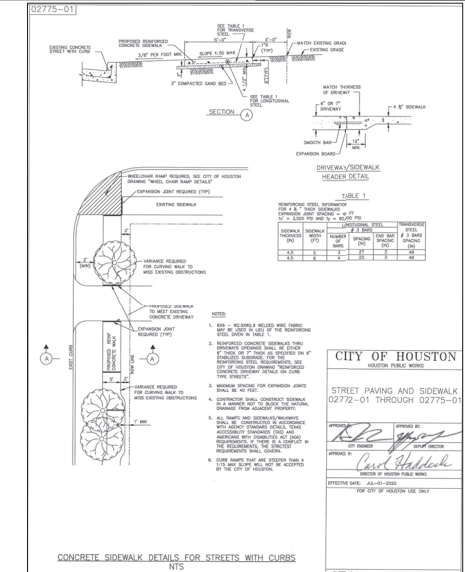
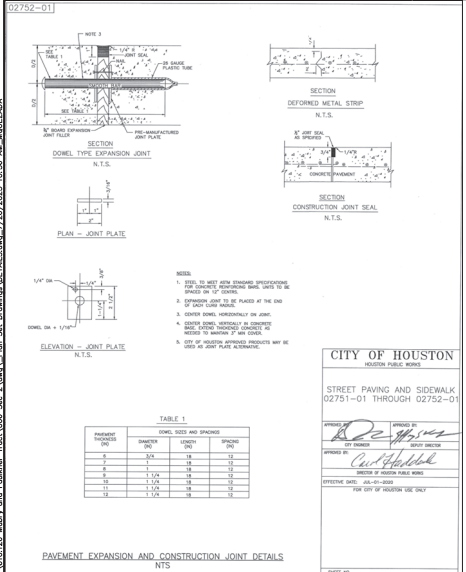
1. FILTER ROLLS WILL BE UTILIZED ONLY WHEN SITE CONDITIONS DO NOT PERMIT THE USE OF FILTER FABRIC BARRIER, AND AS APPROVED BY THE ENGINEER.
- INLET PROTECTION BARRIERS FOR STAGE I INLETS



1. MINIMUM LENGTH IS 50 FEET.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN OTHERWISE, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING.
5. MINIMUM 14' WIDTH FOR ONE WAY TRAFFIC AND 20' FOR TWO-WAY.



1. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE BARRIER.
2. GRAVEL BAGS SHALL NOT BLOCK THROAT OF INLET UNLESS DIRECTED BY ENGINEER.



DATE	REVISION	APP.

GARRET J. DUHON
 9709 LAKESIDE BLVD.
 SUITE 200
 THE WOODLANDS, TX 77381
 (832) 823-2200

Garret J. Duhon
 TPPE NO. F-22671
 CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK

CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK DATE

SIGNATURE VALID FOR ONE (1) YEAR

MISCELLANEOUS DETAILS

SHEET 20 OF 21

Montgomery Bend

Landscape Concept Plan

March 2023

REQUIREMENTS

309 LOTS WITHIN DEVELOPMENT
2 TREES MINIMUM PER LOT REQUIRED

Per Section 78-167
20% OF GROSS PROPERTY AREA OF RESERVES (RI ZONING)

GROSS PROPERTY AREA OF RESERVES=1.57 Acres
20% OF RESERVE AREA=3,678 square feet

16 PARKING SPACES (1 TREE REQUIRED)

PROPOSED

618 TREES PROVIDED IN LOTS (2 PER LOT)
104 TREES WITHIN DEVELOPMENT

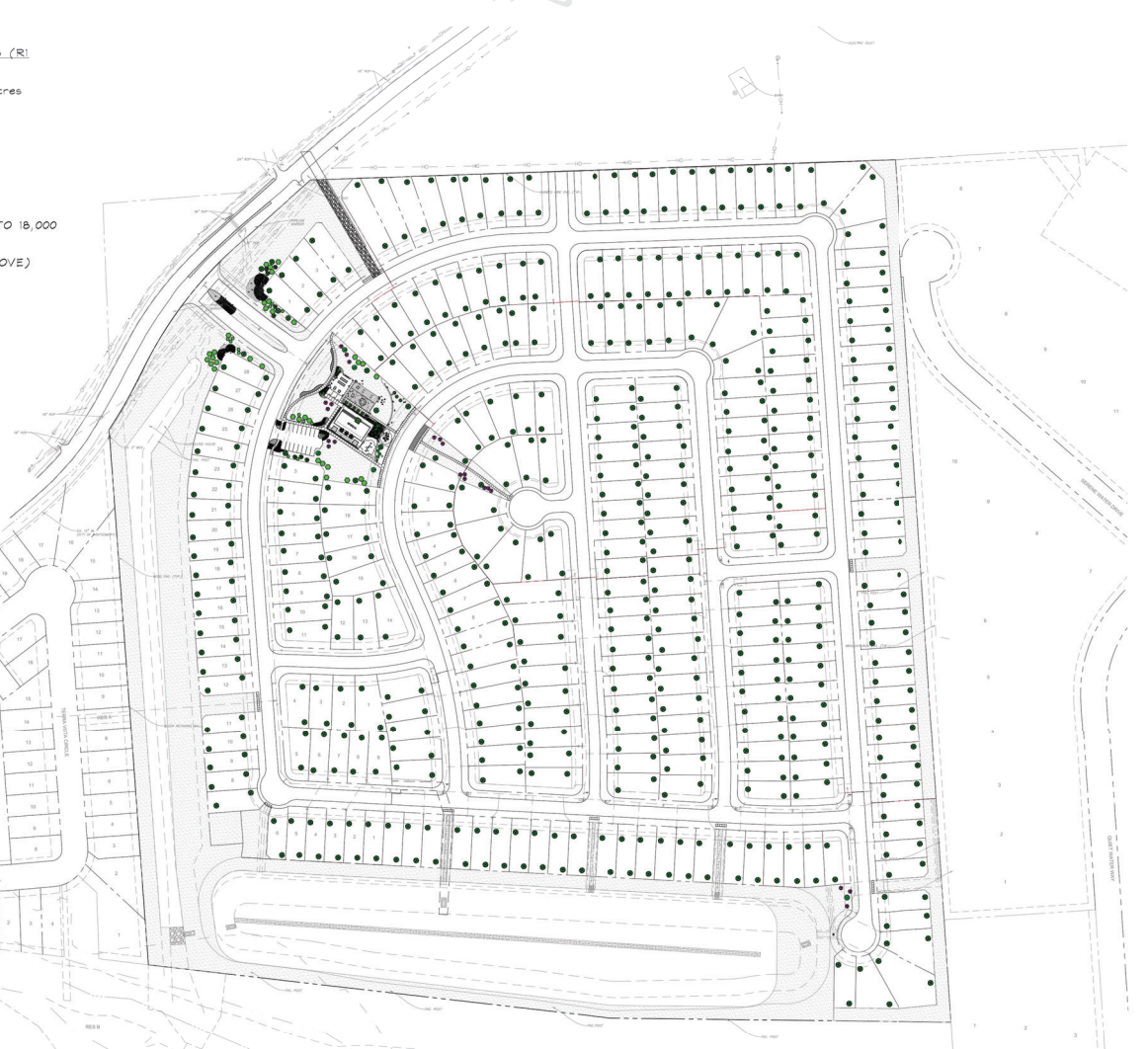
15 QUALIFYING TREES (3' OR ABOVE) EQUAL TO 18,000 square feet canopy equivalent

2 QUALIFYING PARKING LOT TREES (3' OR ABOVE)
722 PROVIDED TREES

NOTE: MIN. TREE SIZE IS 30 GAL.

PLANT SCHEDULE

███ RED BIRD LANTANA	●●● EASTWIND LANTANA 30 GAL
███ BERRY TREE	●●● MONTECASSINO 30 GAL
███ RED TUBE GAP	●●● CHATEAU TREE 30 GAL
███ BERRYBAY	●●● LIVE OAK 30 GAL
███ THORN BRUSH	●●● TRISTE BLUE OAK 30 GAL
███ BLACK-STRIP BURNING	●●● LIVE OAK 30 GAL
███ ARJUN PALM TREE 30 GAL	●●● TOWNSEND HOLLY 30 GAL
███ RED TUBE	●●● LAURELTYE PINE 30 GAL
███ JASMINE	●●● LAURELTYE PINE 30 GAL
███ SHAWB AND VIVIPALE	
███ BERRY BRUSH	
███ BERRYBAY	
███ BLUE PRINCE BRUSH	
███ RED TUBE PALM BRUSH	
███ BERRY BRUSH	



Scale 1"=100'-0"

U&A D FOREST DESIGN, LLC
LANDSCAPE ARCHITECTURE
13037 W. STATE ST. SUITE 100
DALLAS, TEXAS 75244-1100
TEL: 214.343.1100 FAX: 214.343.1101

ELEVATION
land solutions
TBPE REGISTRATION NUMBER F-22671
9709 LAKESIDE BOULEVARD, SUITE 200
THE WOODLANDS, TX 77381 832-823-2200

DATE	REVISION	APP.

GARRET J. DUHON
9709 LAKESIDE BLVD.
SUITE 200
THE WOODLANDS, TX 77381
(832) 823-2200

Garret J. Duhon
CITY OF MONTGOMERY CITY ENGINEER SIGNATURE BLOCK
TBPE NO. F-22671
DATE: 07/26/2023
SIGNATURE VALID FOR ONE (1) YEAR

LANDSCAPE PLAN

SHEET 21 OF 21

ELEVATION LAND SOLUTIONS - MONTGOMERY BEND SEC 2 - PROJECT NO. 61.0.1.26.006.00