

EXPRESS OIL CHANGE

JUBAN ROAD

DENHAM SPRINGS, LA

EXPRESS OIL CHANGE & TIRE ENGINEERS

SECTIONS 4, TOWNSHIP 7 SOUTH, RANGE 3 EAST

UTILITY AND GOVERNING AUTHORITIES CONTACT LIST:

ARCHITECT
AHO ARCHITECTS, LLC
1855 DATA DRIVE
Suite 150
HOOVER, AL 35244
Contact: MRS. APRIL R. CAIN
Telephone: (205) 983-6000
e-mail: ACAIN@AHOARCH.COM

GEOTECH
ECS SOUTHEAST, LLP
11211 INDUSTRIPLEX BLVD. STE. 300
Baton Rouge, LA 70809
Contact: Mr. JOE COBENA, P.E.
Telephone: (225) 224-2583

SURVEY
ACADIA LAND SURVEYING, LLC
206 EAST 2ND STREET
THIBODAUX, LA 70301
Contact: MICHAEL P. BLANCHARD
Telephone: (985) 449-0094

DRAINAGE DISTRICT
Gravity Drainage Dist #1
8114 Florida Blvd
Denham Springs, LA 70726
Contact: Mr. Wesley Kinnebrew
Telephone: (225) 664-5827

COUNCIL DISTRICT
LIVINGSTON PARISH COUNCIL
20355 GOVERNMENT BLVD
LIVINGSTON, LA 70754
Contact: Councilman John Wascom
Telephone: (225) 445-5027
e-mail: jwascom@lpcgov.com

CITY ENGINEER
FORTE & TABLADA INC, Engineering Department
1234 DEL ESTE AVE
DENHAM SPRINGS, LA 70726
Contact: Ms. Morgan Sanchez
Telephone: (225) 665-1021

PLANNING
Livingston Parish, Planning
20399 Government Blvd., 2nd Floor
Livingston, LA 70754
Contact: Mrs. Natalie Allen
Telephone: (225) 686-2266
email: info@livingstonparishla.gov

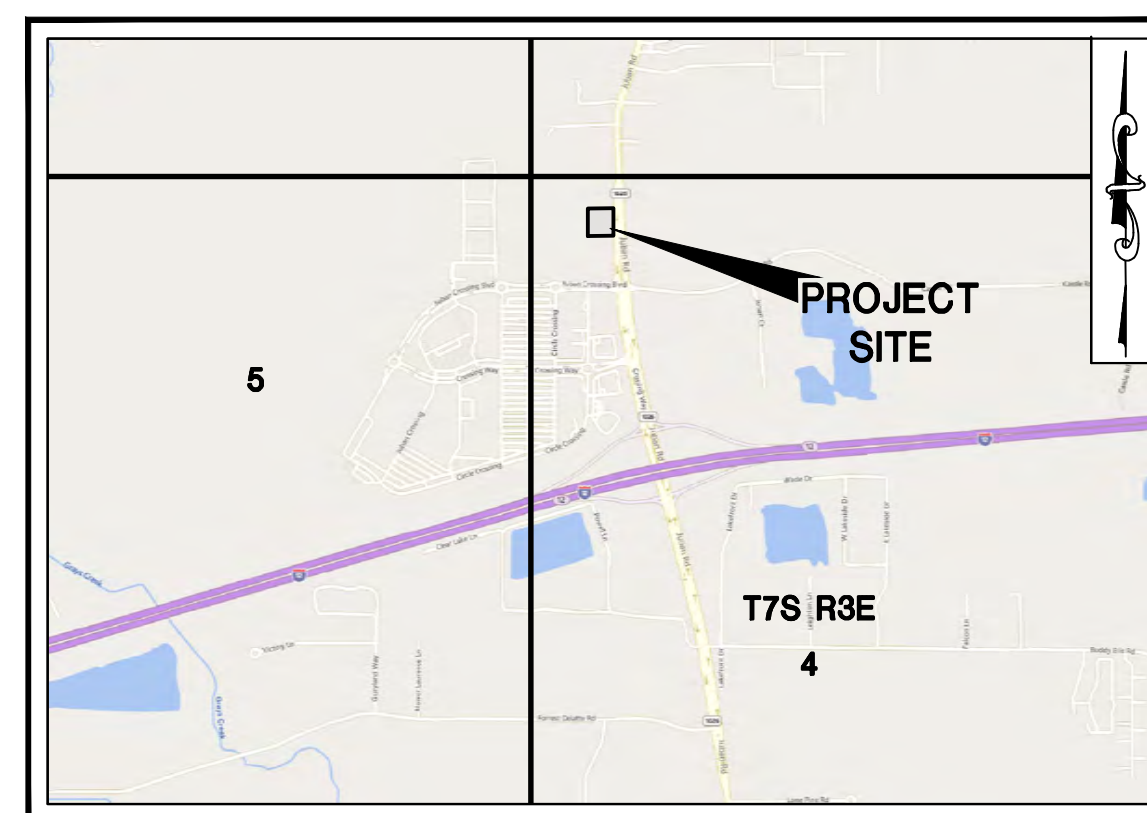
WATER
WARD II WATER
30772 CARTER DR.
Denham Springs, LA 70726
Contact: Mr. Barry LeJeune
Telephone: (225) 665-5188
email: blejeune@ward2water.com

SEWER
DENHAM SPRINGS WASTEWATER DEPARTMENT
9300 FORREST DELATTE ROAD
DENHAM SPRINGS, LA 70726
Contact: Mr. B.J. CLARK
Telephone: (225) 667-1227
email: wastewater@cityofdenhamsprings.com

ELECTRIC
DEMCO
16262 WAX ROAD
GREENWELL SPRINGS, LA 70739
Contact: Mrs. Heather Verrett
Telephone: (255) 262-3063
e-mail: heatherv@demco.org

TELEPHONE:
AT&T
5550 S SHERWOOD FOREST BLVD
BATON ROUGE, LA 70816
Contact: Mr. RICHARD GRAESER
Telephone: (985) 353-3003
e-mail: RG988V@ATT.COM

FIRE DEPARTMENT
Fire District: DISTRICT 5 V.F.D.
P.O. BOX 277
Denham Springs, LA 70726
Joe Koczrowski, Chief
Station: (225) 664-1679
Fax: (225) 664-0245
Cell: (225) 939-3153
email: jkoczrowski@pfpd5.net



SITE LOCATION MAP

SCALE: 1" = 2000'

DDG PROJECT # 23-1404

SHEET INDEX

1. C-0.....COVER SHEET
2.SURVEY PLAT
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7. C-5.....DETAILS
8. C-6.....DETAILS
9. C-7.....DETAILS

NOTE:
ANY IMPROVEMENTS MADE INSIDE
ANY SERVITUDES, SHALL BE
REMOVED, REPLACED OR REPAIRED
BY THE OWNER/DEVELOPER AT
THEIR SOLE EXPENSE SHOULD SAID
IMPROVEMENTS BE DAMAGED
DURING THE NORMAL MAINTENANCE
OF THE UTILITIES.

AGREED UPON:
OWNER/DEVELOPER

OWNER/DEVELOPER _____ DATE _____

APPROVED:
LIVINGSTON PARISH COUNCIL

PLANNING DIRECTOR _____ DATE _____

RECOMMEND TO APPROVE:
LIVINGSTON PARISH E.R.A.

REVIEW ENGINEER - FORTE & TABLADA _____ DATE _____

PROJECT NOTES:

1. THIS PROJECT IS BEING CONSTRUCTED WITHIN THE BOUNDARIES OF OF LIVINGSTON PARISH.
2. THE CONTRACTOR SHALL ENSURE THAT ALL GOVERNMENTAL REQUIRED INSPECTIONS, ALONG WITH THOSE REQUIRED BY PRIVATE UTILITIES, ARE PERFORMED PRIOR TO TURNING THE BUILDING OVER TO EXPRESS OIL CHANGE & TIRE ENGINEERS.
3. THE SITEWORK FOR THIS PROJECT SHALL MEET OR EXCEED SITEWORK RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT PREPARED BY ECS SOUTHEAST, LLP DATED SEPTEMBER 7, 2023 AND/OR THE SITEWORK SPECIFICATIONS FOR LIVINGSTON PARISH, WHICHEVER IS MORE STRINGENT.

DEVELOPER

JOHN DAVIS
EXPRESS OIL CHANGE & TIRE ENGINEER
1880 SOUTHPARK DRIVE
BIRMINGHAM, AL 35244
(205)-397-1164
JDAVIS@EXPRESSOIL.COM

EXPRESS OIL CHANGE
DENHAM SPRINGS, LA
LIVINGSTON PARISH
EXPRESS OIL CHANGE & TIRE
ENGINEERS

DDG

16564 E. BREWSTER ROAD | SUITE 101
COVINGTON, LA
985.249.6180



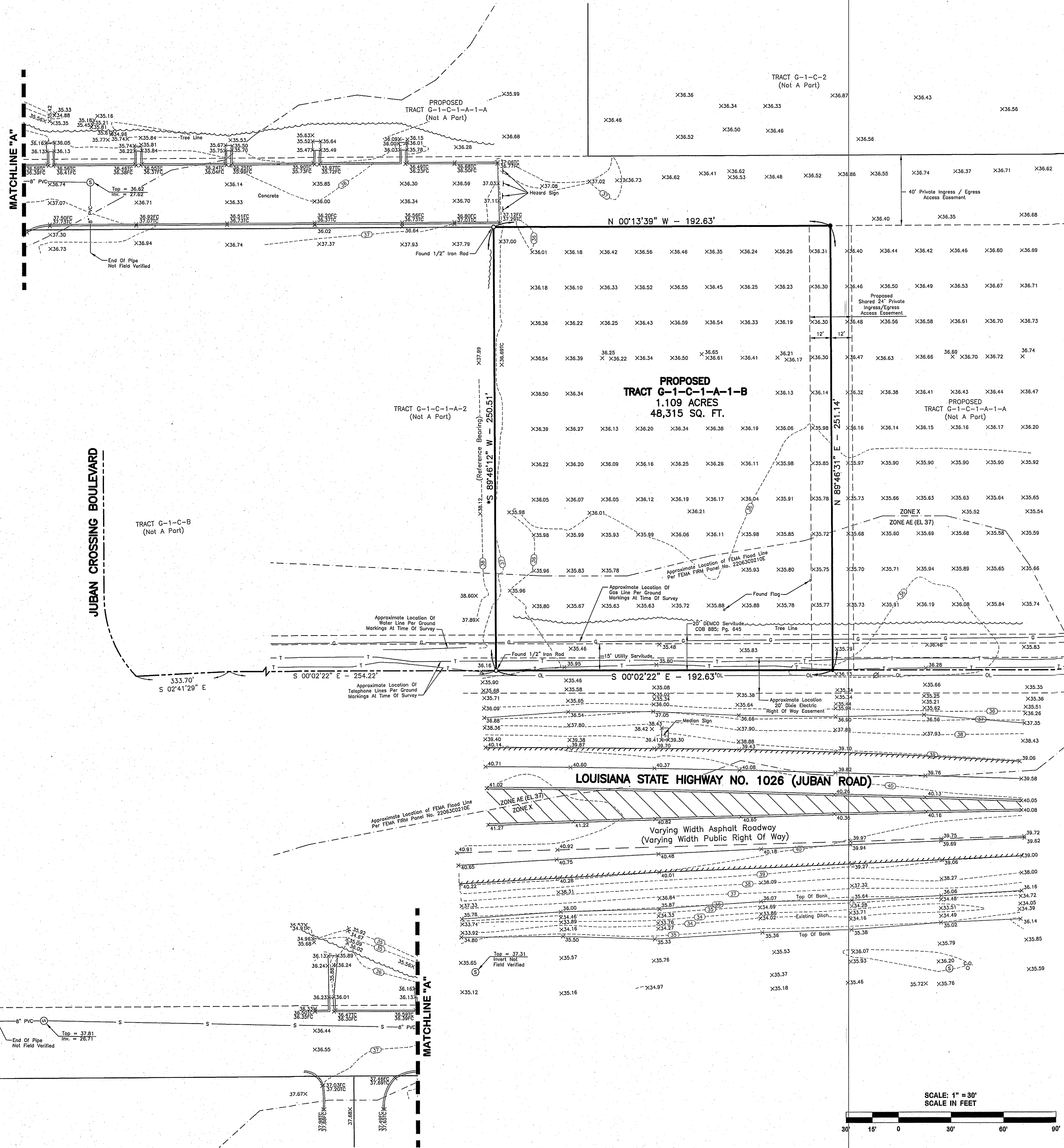
PROJECT NO. 23-1404

PERMITTING
12/11/2023

CHECKED _____ WRK
DRAWN BY _____ ZPP

SHEET NAME

C-0



- TITLE EXCEPTION NOTES:**
- Surveyor's Comments on exceptions to title as listed in Schedule B, Section 2 of a commitment for title insurance provided by Fidelity National Title Insurance Company, Commitment No.: 2234278-KV, Dated: May 2, 2023:
- SCHEDULE B - SECTION II, EXCEPTIONS**
- Items #1-8: Non Survey Issue
- Item #9: Right of Way Grant by Ethel Miller Juban, et al and in favor of The Texas Company, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 75, Page 482, File No./Entry 18773. Does not affect subject property.
- Item #10: Right of Way Grant by Ethel Miller Juban, et al and in favor of State of Louisiana Department of Highways, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 94, Page 551, File No./Entry 39184. Affects subject property right of way widening for LA Hwy. 1026.
- Item #11: Right of Way Grant by Jereyn J. Witter, et al and in favor of State of Louisiana Department of Highways, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 94, Page 603, File No./Entry 39273. Affects subject property right of way widening for LA Hwy. 1026.
- Item #12: Right of Way Grant by Ethel M. Juban, et al and in favor of State of Louisiana Department of Highways, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 94, Page 605, File No./Entry 39274. Affects subject property right of way widening for LA Hwy. 1026.
- Item #13: That utility servitude agreement in favor of Gulf States Utilities Company on file and of record in the office of the clerk and recorder at Book 106, Page 747. Affects subject property, not plottable.
- Item #14: Right of Way Grant by JE Juban, Jr. and in favor of Dixie Electric, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 108, Page 550. Affects subject property as shown.
- Item #15: Oil, Gas, and Mineral Lease by and between Jereyn Juban Witter and Martin Exploration Company, dated June 7, 1978, on file and of record in the office of the clerk and recorder at Book 288, Page 108. Non survey issue.
- Item #16: Oil, Gas, and Mineral Lease by and between Juban Development Company and Doyle & Associates, Inc., dated June 24, 1996, on file and of record in the office of the clerk and recorder at Book 884, Page 764. Non survey issue.
- Item #17: Right of Way Grant by Juban Development Company, Inc. and in favor of Robert S. Mellon, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 885, Page 320, File No./Entry 369155. Affects subject property, not plottable.
- Item #18: Right of Way Grant by Juban Development Company and in favor of Dixie Electric, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 885, Page 645. Affects subject property as shown.
- Item #19: That Boundary Agreement by and between Creekstone Juban I, LLC and Donnie Jean Stevens LeBlanc, et al, dated December 14, 2011 on file and of record in the office of the clerk and recorder at Book 1120, Page 502. Does not affect subject property.
- Item #20: That Reciprocal Easement Agreement by and between Creekstone Juban I, LLC and Belk, Inc. dated on June 6, 2013 on file and of record in the office of the clerk and recorder at Book 1162, Page 1. Affects subject property, not plottable.
- Item #21: Right of Way Grant by Creekstone Juban I, LLC and in favor of Entergy Gulf States LA, LLC, and as recorded in the official records of the Parish of Livingston, State of Louisiana, at Book 1191, Page 993, File No./Entry 818960. Does not affect subject property.
- Item #22: That Landscape Servitude by and between Creekstone Juban I, LLC and Continental 375 Fund, LLC, dated March 3, 2017 on file and of record in the office of the clerk and recorder at Book 1279, Page 931. Affects subject property, not plottable.
- Item #23: That Cooperative Endeavor Agreement by and between The City of Denham Springs and Creekstone Juban I, dated October 12, 2011 on file and of record in the office of the clerk and recorder at Book 1403, Page 787. Does not affect subject property.
- Item #24: Any rights, servitudes, setback lines, easements, interests or claims which may exist by reason of or reflected by the survey dated February 2, 2023, and recorded in the official records of the Clerk and Recorder in and for the Parish of Livingston, State of Louisiana at Book 78, Page 460, File No./Entry 1058728. Affects subject property as shown.

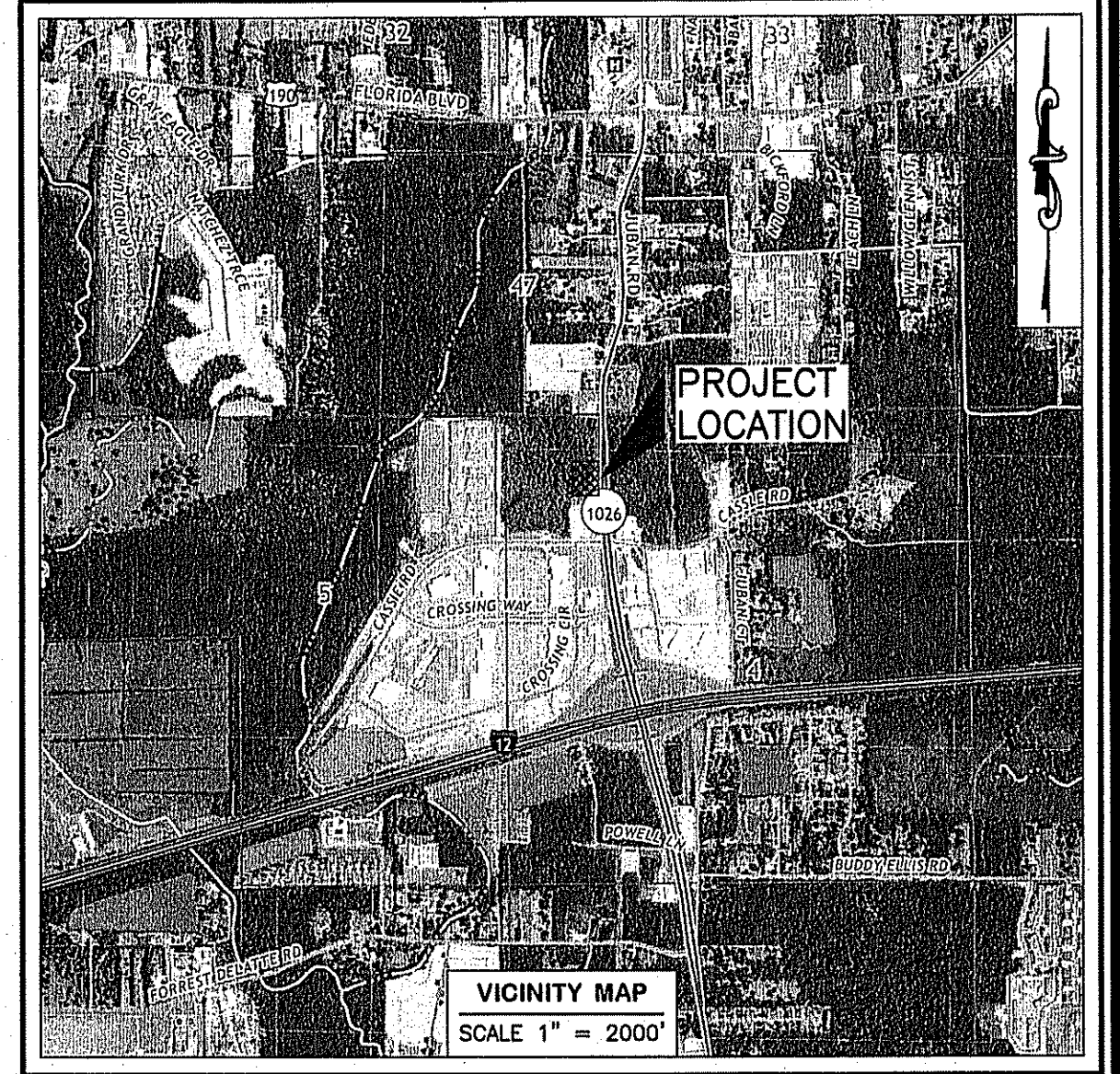
LEGEND	
FOUND PROPERTY CORNER (AS NOTED)	○
SET 5/8" IRON ROD (UNLESS NOTED OTHERWISE)	●
EXISTING POWER POLE	⊙
EXISTING POWER POLE WITH LIGHT	⊙*
EXISTING PARKING LOT LIGHT	⊙*
EXISTING GUY ANCHOR	→
EXISTING ELECTRIC PEDESTAL	⊞
EXISTING OVERHEAD UTILITY LINE	—○—
EXISTING TELEPHONE PEDESTAL	⊞
EXISTING TELEPHONE LINE	—T—
EXISTING GAS METER	GM ⊞
EXISTING GAS VALVE	⊙GV
EXISTING SEWER MANHOLE	⊙
EXISTING SEWER CLEANOUT	⊙C
EXISTING DRAINAGE MANHOLE	⊙D
EXISTING YARD DRAIN	⊙
EXISTING FIRE HYDRANT	⊙
EXISTING WATER METER	WM ⊞
EXISTING WATER VALVE	⊙WV
EXISTING WATER LINE	—W—
EXISTING BARRIER POST	⊙
EXISTING WOOD FENCE	—□—
EXISTING CHAIN LINK FENCE	—○—
EXISTING GAS LINE	—G—

CERTIFICATION:

This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 5, 6, 7(a)(1)(c), 8, 9, 10, 11(a)(b), 13, 14, 15, 16, 17, 18 of Table A thereof. The fieldwork was completed on July 11, 2023. This survey was done by me or under my direct supervision and control, that the survey was done on the ground and was done in accordance with the most recent Minimum Standards of Practice for Land Surveyors as set forth by the State of Louisiana, Board of Registration for Professional Engineers and Land Surveyors and that the accuracy specification and positional tolerances are in accordance with Class "C" surveys indicated by the above standards. I also certify there are no viable encroachments across property lines except as shown.

Michael P. Blanchard, P.L.S.,
REG. NO. 4861
10/12/2023

This survey plot is not valid without the raised or colored ink signature of the Registered Land Surveyor.



- NOTES:**
- 1.) Zoning: MU (Mixed Use District). Setback lines shall be verified by the owner, developer and or contractor prior to any construction, as an abstract has not been performed by the surveyor. Zoning and setbacks are subject to change and should be verified with the local authority's Zoning Department before any design or construction.
 - 2.) Reference Maps:
A.) Survey plot and subdivision of Tract G-1-C-1-A-1, Juban Crossing into Tracts here designated as Tract G-1-C-1-A-1 & Tract G-1-C-1-A-2, Juban Crossing, Greensburg Land District, Situated in Sections 4 & 5, T-7-S, R-3 E, near Denham Springs, Livingston Parish, Louisiana. Prepared By: Riverlands Surveying Company. Dated: February 2, 2023.
B.) Map showing subdivision of a Tract G-1-C-1-A-1 Juban Crossing Subdivision into Tracts G-1-C-1-A-1-A & Tract G-1-C-1-A-1-B, Situated in Sections 4 & 5, T-7-S, R-3 E, Greensburg Land District, Livingston Parish, Louisiana. Prepared By: Benchmark Group Surveying. Dated: July 11, 2023.
 - 3.) Bearings are based on Reference Map "A". (*) Represents the Basis of Bearings. Distances shown are U.S. Survey feet.
 - 4.) Basis of Elevations: The elevations shown hereon are based on the "North American Vertical Datum of 1988 - NAVD 88" (Geoid 12b) using GPS C4Net-RIN System accessed on July 11, 2023.
 - 5.) Flood Note: The property hereon is located in Flood Zone "AE (EL 37)" in accordance with FEMA Flood Insurance Rate Map Panel Number 22063C0210E, dated April 3, 2012, for Livingston Parish, Louisiana; Base Flood Elevation is subject to change and should be verified with the local authority's Flood Plain Administrator before any design or construction.
 - 6.) Utilities: The utilities shown have been located from visible utility features, evidence of buried utilities, and previous construction drawings. The surveyor makes no guarantee that the utilities shown comprise all in the area, either in service or abandoned. Furthermore, the surveyor does not warrant that the utilities shown are in the exact location indicated. No excavations were made during the progress of this survey to locate buried utilities/ structures.
 - 7.) No attempt has been made by Acadia Land Surveying, LLC, to verify title, actual legal ownership, deed restrictions, servitudes, easements, rights-of-way or other burdens on the property, other than that furnished by the client or his representative. There is no representation that all applicable servitudes and restrictions are shown hereon. The surveyor has made no title search or public record search in compiling the data for this survey.
 - 8.) Acadia Land Surveying, LLC, has not and does not provide Delineation of Jurisdictional Wetlands. Acadia Land Surveying, LLC, did not receive nor research the location of wetland areas as delineated by the appropriate authorities.
 - 9.) The words "Certify," "Certifies" or "Certification" as used hereon is understood to be an expression of professional opinion by the surveyor, based upon his best knowledge, information, and belief, as such, it does not constitute a guarantee nor a warranty, expressed or implied.
 - 10.) The surveyor has no knowledge or observed any evidence of the site used as a solid waste dump, pump or sanitary landfill.
 - 11.) The surveyor has no knowledge or observed any evidence of current earth moving work, building construction or building additions.
 - 12.) The surveyor has no knowledge or observed any evidence of proposed changes in street right of ways.
 - 13.) The subject property is contiguous to and has direct access to the right of way of Louisiana State Highway No. 1026 (Juban Road) which is a publicly dedicated roadway.

ALTA/NSPS LAND TITLE SURVEY
OF
PROPOSED
TRACT G-1-C-1-A-1-B
JUBAN CROSSING
LOCATED IN SECTION 4,
TOWNSHIP 7 SOUTH - RANGE 3 EAST
GREENSBURG LAND DISTRICT,
NEAR DENHAM SPRINGS,
LIVINGSTON PARISH, LOUISIANA

ACADIA

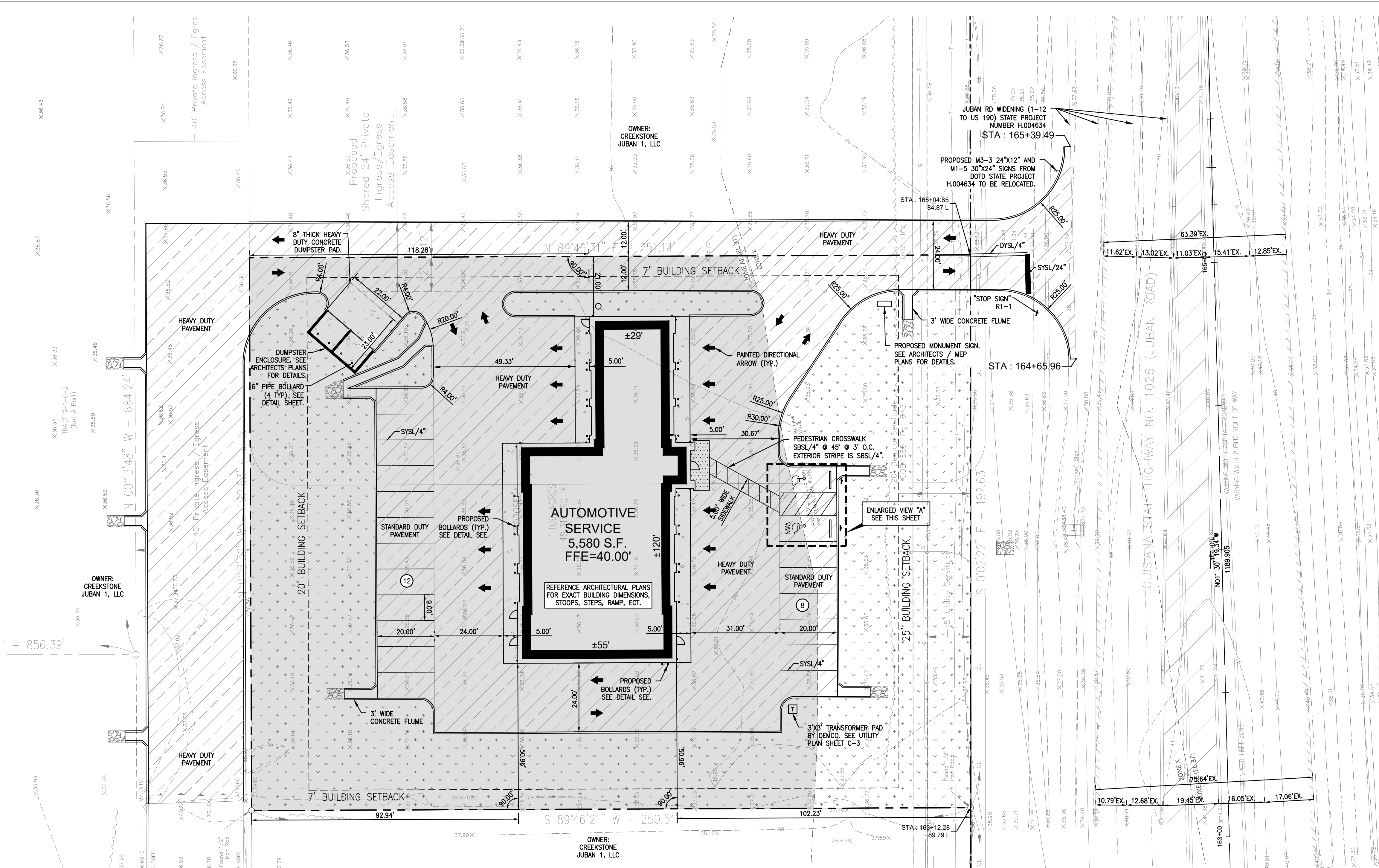
LAND SURVEYING, LLC

LOUISIANA • MISSISSIPPI • ALABAMA • TEXAS

206 EAST 2ND STREET, THIBODAUX, LOUISIANA 70301
Phone • (985) 449-0084 Fax • (985) 449-0085
EMAIL • ACADIA@ACADIALANDSURVEYING.COM

REVISION DESCRIPTION

DATE	10/23/23	INT.
DRAWN BY: CMH	CHECKED BY: MPB	DWT
FIELD BOOK: 377, PG 31 & 32	FIELD WORK COMPLETED ON: JULY 11, 2023	ALS FILE: 2023/23-01-297/23-297s.dwg

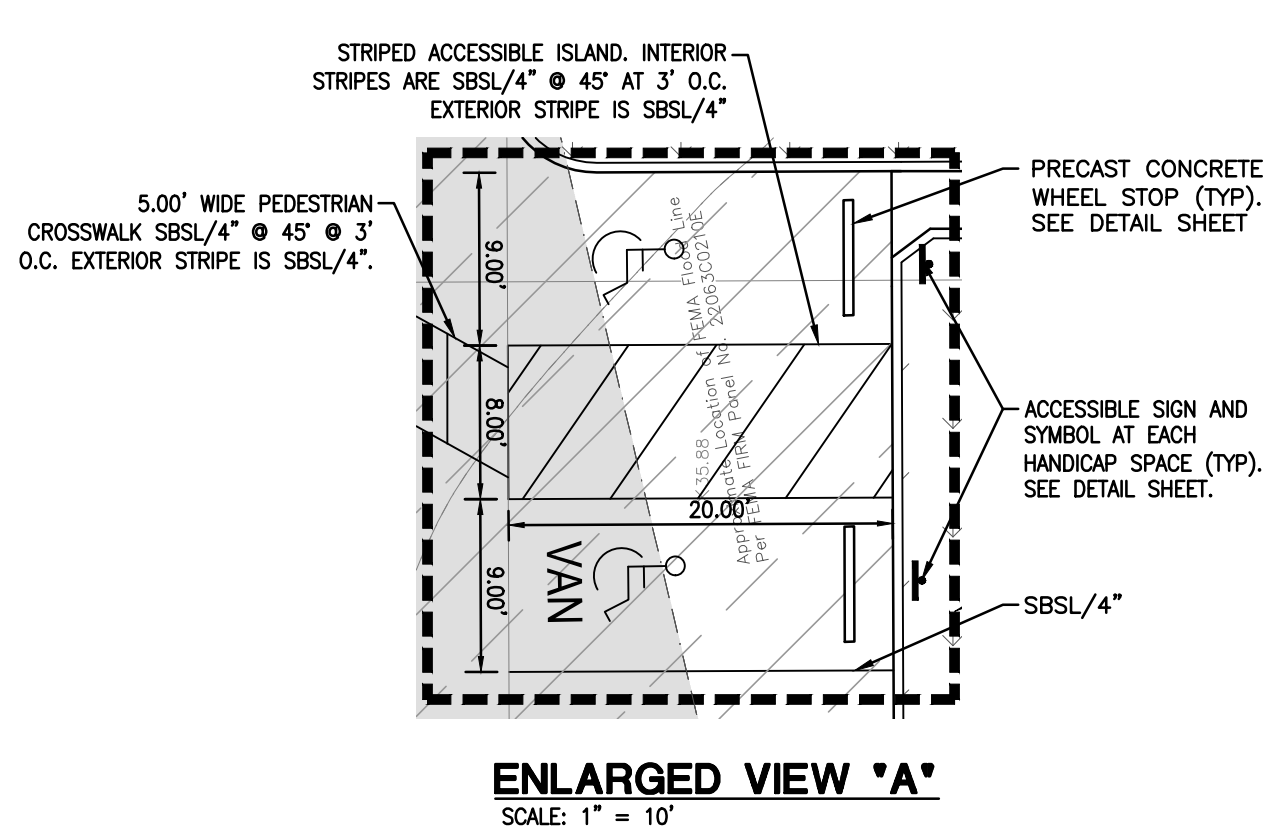


LEGEND - EXISTING

- FOUND PROPERTY CORNER (AS NOTED)
- SET 5/8" IRON ROD (UNLESS NOTED OTHERWISE)
- EXISTING POWER POLE
- EXISTING POWER POLE WITH LIGHT
- EXISTING PARKING LOT LIGHT
- EXISTING GUY ANCHOR
- EXISTING ELECTRIC PEDESTAL
- EXISTING OVERHEAD UTILITY LINE
- EXISTING TELEPHONE PEDESTAL
- EXISTING TELEPHONE LINE
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEANOUT
- EXISTING DRAINAGE MANHOLE
- EXISTING YARD DRAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING WATER LINE
- EXISTING BARRIER POST
- EXISTING WOOD FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING GAS LINE

LEGEND - NEW IMPROVEMENTS

- 4" THICK SIDEWALK CONCRETE PAVEMENT
- HEAVY DUTY PAVEMENT
- 8" THICK REINFORCED CONCRETE
- STANDARD DUTY PAVEMENT
- GRASSLANDSCAPE AREA
- "AE" FLOODZONE
- RIP RAP
- BUILDING
- CURB & GUTTER
- PARKING SPACES
- DIRECTIONAL ARROWS
- CONCRETE FLUME
- TRANSFORMER PAD
- BOLLARD



AREA ANALYSIS		
TRACT G-1-C-1-A-3		+/-1.109 AC.
SITE ANALYSIS		
AUTOMOTIVE SERVICE		5,580 S.F.
PARKING REQUIRED		0 SPACES
PARKING PROVIDED		20 SPACES
RATIO		3.58 / 1000 S.F.
*NOTE: LIVINGSTON PARISH HAS NO PARKING REQUIREMENTS		

- SITE PLAN NOTES**
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS & DIMENSIONS OF BUILDING, PAY STATIONS, SIDEWALKS, EXIT PORCHES, RAMPS & EXACT BUILDING UTILITY SERVICE ENTRANCE LOCATIONS AT THE BUILDING.
 - ALL UNSURFACED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED, MULCH, OR SOD, & WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED AS INDICATED ON THE LANDSCAPING PLAN.
 - PROPERTY & TOPOGRAPHIC SURVEY WAS PREPARED ON 07/11/2023 BY ACADIA LAND SURVEYING, LLC.
 - CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING BENCHMARK.
 - EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED PRIOR TO CONSTRUCTION.
 - CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS & SPECIFICATIONS FOR ENTRY LOCATION OF ALL WATER, SEWER SERVICE, ELECTRICAL & TELEPHONE SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS & ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO THE LOCATION & TIE-IN CONNECTIONS TO THEIR FACILITIES.
 - SEE C-0 FOR LIST OF UTILITY COMPANIES & CONTACT PERSONS.
 - ALL DIMENSIONS SHOWN TO BUILDING ARE TO OUTSIDE FACE OF BUILDING.
 - THE EARTHWORK FOR ALL BUILDING FOUNDATIONS & SLABS SHALL BE IN ACCORDANCE WITH THE SITE PREPARATION NOTES FOUND ON GRADING PLAN.
 - ALL NECESSARY PERMITS & APPROVALS FROM AGENCIES GOVERNING THE CONSTRUCTION OF THIS WORK SHALL BE SECURED PRIOR TO BEGINNING CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL AREAS INDICATED TO REMAIN UNDISTURBED OR TO REMAIN AS BUFFERS, ALL PROPERTY CORNERS, & REPLACING ALL PINS ELIMINATED OR DAMAGED DURING CONSTRUCTION.
 - CONTRACTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
 - THE SITE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND UTILITIES WITH HIS WORK. ALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, STORM SEWER, ELECTRICAL CONDUIT, IRRIGATION SYSTEMS, & ANY OTHER MISC. UTILITIES) SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF BASE COURSE MATERIAL, & THE PLACEMENT OF ANY APPROPRIATE SOIL STABILIZATION TECHNIQUE.
 - CONTRACTOR SHALL PROVIDE BOLLARDS FOR PROTECTION OF ALL ABOVE GROUND UTILITIES & APPURTENANCES ADJACENT TO DRIVE AREAS.
 - CONTRACTOR SHALL MATCH EXISTING PAVEMENT IN GRADE & ALIGNMENT.
 - CONSTRUCTION WITH ALL GOVERNING CODES & BE CONSTRUCTED TO THE SAME.
 - ALL WORK SHOWN SHALL BE DONE IN ACCORDANCE WITH THE PLANS.
 - ALL STRIPING SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION.
 - ANY WORK IN THE RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE LIVINGSTON PARISH STANDARDS & SPECIFICATIONS.
 - THE PROPERTIES SHOWN HEREIN LIE WITHIN ZONES "X" AND "AE", ACCORDING TO FLOOD AREAS OF INSURANCE RATE MAPS PUBLISHED BY F.E.M.A. COMMUNITY PANEL NO. 22063C0210E DATED APRIL 3, 2012.
 - THE EARTHWORK FOR ALL BUILDING FOUNDATIONS & SLABS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PROJECT NO. 65-1437 BY ECS SOUTHEAST, LLC DATED SEPTEMBER 7, 2023.

- LEGEND - STRIPING**
- SWSL4" - SINGLE WHITE SOLID LINE / 4" WIDE
 - SYSL4" - SINGLE YELLOW SOLID LINE / 4" WIDE
 - SBSL4" - SINGLE BLUE SOLID LINE / 4" WIDE
 - SWSL24" - SINGLE WHITE SOLID LINE / 24" WIDE
 - SWSL8" - SINGLE WHITE SOLID LINE / 8" WIDE
 - DYSL4" - DOUBLE YELLOW SOLID LINE / 4" WIDE EACH
 - SYSL24" - SINGLE YELLOW SOLID LINE / 24" WIDE
- SITE LAYOUT NOTES**
- SITE AREA = +/- 1.109 ACRES.
 - DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED
 - ALL RADI ARE 5 FEET UNLESS NOTED OTHERWISE
 - SEE DRAWING C-5 THROUGH C-7 FOR DETAILS.

- SITE LIGHTING NOTES**
- SEE ELECTRICAL PLANS FOR ELECTRIC CIRCUITRY LAYOUT, PHOTO METRIC PLAN, AND POLE AND FOUNDATION DETAILS.
 - SEE STRUCTURAL PLANS FOR LIGHT POLE BASE DETAIL.

NOTE:
ANY IMPROVEMENTS MADE INSIDE ANY SERVITUDES, SHALL BE REMOVED, REPLACED OR REPAIRED BY THE OWNER/DEVELOPER AT THEIR SOLE EXPENSE SHOULD SAID IMPROVEMENTS BE DAMAGED DURING THE NORMAL MAINTENANCE OF THE UTILITIES.

ACREED UPON:
OWNER/DEVELOPER

OWNER/DEVELOPER	DATE
-----------------	------

APPROVED:
LIVINGSTON PARISH COUNCIL

PLANNING DIRECTOR

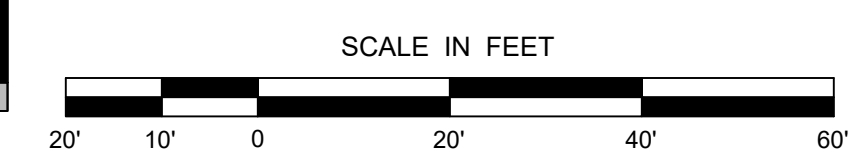
RECOMMEND TO APPROVE:
LIVINGSTON PARISH E.R.A.

REVIEW ENGINEER - FORTI & TABLADA

DATE



SITE PLAN

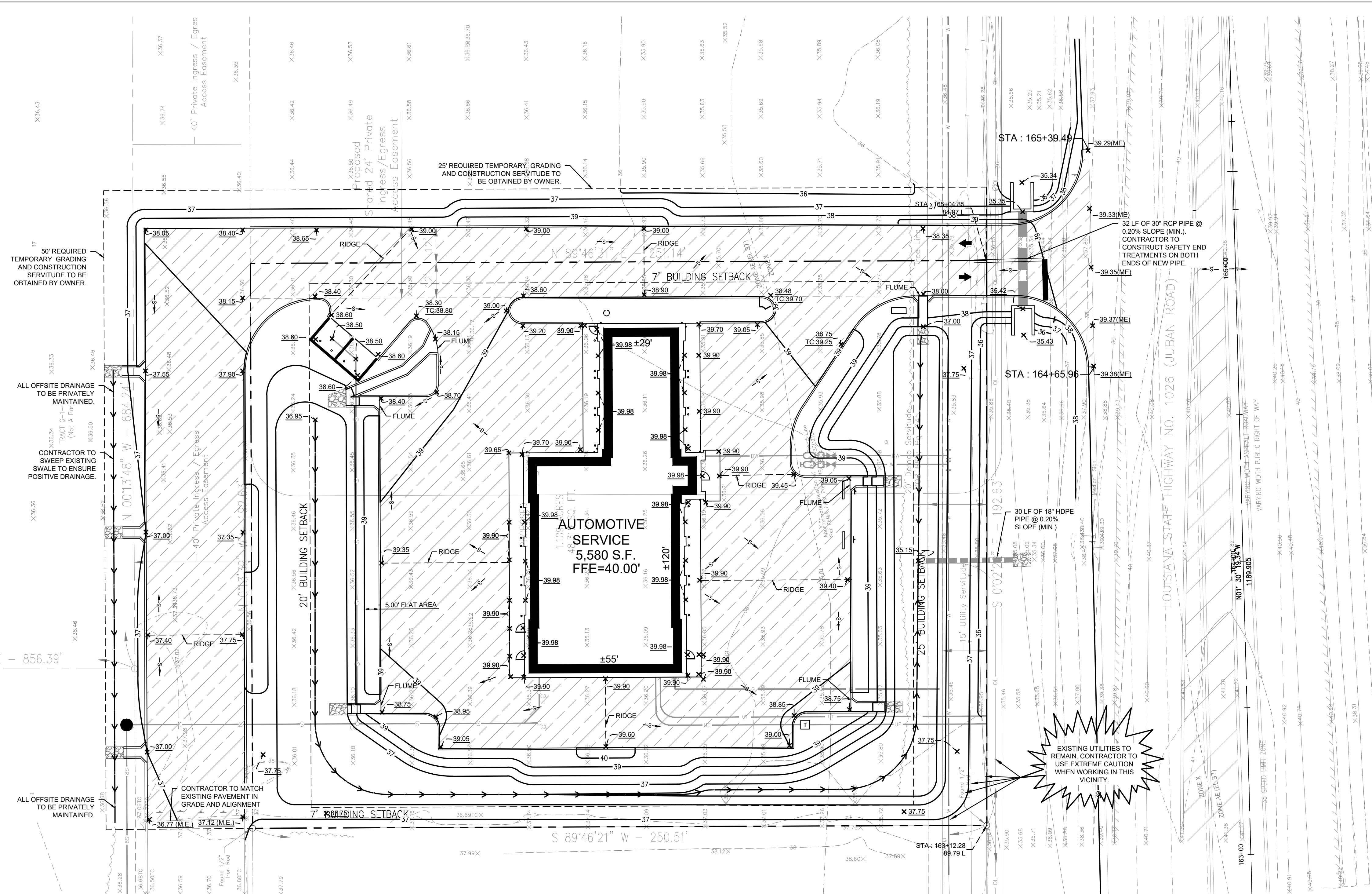


EXPRESS OIL CHANGE
DENHAM SPRINGS, LA
LIVINGSTON PARISH
EXPRESS OIL CHANGE & TIRE
ENGINEERS



PROJECT NO.	23-1404
PERMITTING	12/11/2023
CHECKED DRAWN BY	WRK ZPP
SHEET NAME	

C-1



LEGEND - EXISTING

- FOUND PROPERTY CORNER (AS NOTED)
- SET 5/8" IRON ROD (UNLESS NOTED OTHERWISE)
- EXISTING POWER POLE
- EXISTING POWER POLE WITH LIGHT
- EXISTING PARKING LOT LIGHT
- EXISTING GUY ANCHOR
- EXISTING ELECTRIC PEDESTAL
- EXISTING OVERHEAD UTILITY LINE
- EXISTING TELEPHONE PEDESTAL
- EXISTING TELEPHONE LINE
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEANOUT
- EXISTING DRAINAGE MANHOLE
- EXISTING YARD DRAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING WATER LINE
- EXISTING BARRIER POST
- EXISTING WOOD FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING GAS LINE

LEGEND - NEW IMPROVEMENTS

- CONTOUR
- EXISTING CONTOUR
- SPOT ELEVATION
- SPOT ELEVATION (MATCH EXISTING)
- SPOT ELEVATION (LOW POINT)
- SPOT ELEVATION (TOP OF CURB)
- SLOPE
- SUBSURFACE DRAINAGE
- CONCRETE FLUME
- RIP RAP

GRADING NOTES

- TOPOGRAPHIC INFORMATION WAS TAKEN FROM A TOPOGRAPHIC SURVEY BY ACADIA LAND SURVEYING, LLC DATED 07/11/2023. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR & SUBMIT IT TO THE OWNER FOR REVIEW AND APPROVAL.
- EXISTING AND PROPOSED GRADE CONTOURS ARE SHOWN AT ONE FOOT (1') INTERVALS.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES & WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE REQUIRED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES & NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY HORIZONTAL & VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PIPES, & ALL UTILITIES PRIOR TO CONSTRUCTION.
- CLEARING & GRUBBING LIMITS SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UNDISTURBED AREAS, ALL PROPERTY CORNERS, & REPLACING ALL PINS ELIMINATED OR DAMAGED DURING CONSTRUCTION.
- THE EARTHWORK FOR ALL BUILDING FOUNDATIONS & SLABS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT #5-1437 PREPARED BY ECS SOUTHEAST, LLC DATED SEPTEMBER 7, 2023.
- CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES & BE CONSTRUCTED TO THE SAME.
- THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING VERTICAL CONTROL INCLUDING THE SETTING OF CONSTRUCTION BENCHMARKS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE SOIL OR 4 INCHES OF TOPSOIL, SEED, MULCH, WATER, ETC. CONTRACTOR SHALL GRASS DISTURBED AREAS IN ACCORDANCE WITH LANDSCAPING PLAN UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- THE GEOTECHNICAL REPORT #5-1437 BY ECS SOUTHEAST, LLC IS CONSIDERED A PART OF THIS DOCUMENT. IF DIFFERENCES ARE NOTED BETWEEN THESE PLANS AND THE GEOTECHNICAL REPORT, REQUIREMENTS OUTLINED IN THE GEOTECHNICAL REPORT WILL GOVERN. THE CONTRACTOR MUST CONTACT THE OWNER, CIVIL ENGINEER, AND GEOTECHNICAL ENGINEER FIRM AND INFORM THEM OF ALL DISCREPANCIES AND PLAN MODIFICATIONS.
- CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARD OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION & TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, & OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED TO, ACCESS & EGRESS FROM ALL EXCAVATION & TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
- ADEQUATE DRAINAGE MEASURES MUST BE ESTABLISHED, MAINTAINED, AND TEMPORARILY ADJUSTED AS NEEDED THROUGHOUT CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES AND PREVENT ACCUMULATION OF SURFACE WATER. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SUBGRADE CONDITIONS AND PROTECTING THE CONDITION OF PREVIOUSLY PERFORMED EARTHWORK.
- DEWATERING: GROUNDWATER LEVELS CAN FLUCTUATE DEPENDING ON TIME OF YEAR. THE CONTRACTOR SHALL INCLUDE PROVISIONS IN THEIR BASE BID FOR WATER CONTROL DURING CONSTRUCTION INCLUDING (BUT NOT LIMITED TO) DEEP EXCAVATIONS, DEMOLITION, PROOF ROLLING ACTIVITIES, FOUNDATION/FOOTING WORK, PLACEMENT OF FILL, AND INSTALLATION OF SUB-SURFACE IMPROVEMENTS.

STORM DRAINAGE NOTES

- ALL PIPES ENTERING STORM SEWER STRUCTURES SHALL BE SEALED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
- ALL PIPES & STRUCTURES ON STREET RIGHT-OF-WAY SHALL BE PER LADOTD STANDARDS & SPECIFICATIONS.
- REFERENCE DETAIL SHEETS FOR CONSTRUCTION DETAILS.

PIPE NOTES

IN THE DRAINAGE CHART, THE "PIPE TYPE" COLUMN DEFINES THE SIZE & MATERIAL TYPE OF THE PIPE. WHERE A SPECIFIC PIPE TYPE IS CALLED FOR, THAT SPECIFIC PIPE TYPE MUST BE UTILIZED. WHERE AN ASTERISK (*) IS SPECIFIED, THE CONTRACTOR MAY UTILIZE ANY ONE OF THE PIPE TYPES LISTED BELOW, THE #S LISTED REFER TO THE FOLLOWING PIPE TYPES:

- REINFORCED CONCRETE PIPE (RCP/RCPA)
- POLYVINYL CHLORIDE PIPE (PVC)
- ADS HIGH PERFORMANCE POLYPROPYLENE (PP) PIPE (ADS HP STORM)

NOTES

- THE CONTRACTOR SHALL SUBMIT BUOYANCY CALCULATION ON ALL RUNS OF PIPE THAT DO NOT UTILIZE CONCRETE PIPE. BUOYANCY CALCULATIONS SHALL BE PREPARED, SIGNED, & SEALED BY A REGISTERED ENGINEER. SHALL REPRESENT ACTUAL FIELD CONDITIONS, & SHALL DEMONSTRATE THAT THE PIPE UTILIZED WILL NOT BECOME BUOYANT. THE CONTRACTOR MAY ELECT TO PROVIDE A RESTRAINING SYSTEM, DESIGNED BY A REGISTERED ENGINEER, ADEQUATE TO RESIST BUOYANT FORCES WHERE NECESSARY.
- ALL PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND THE LATEST EDITION OF THE LOUISIANA DEPARTMENT OF TRANSPORTATIONS STANDARD SPECIFICATIONS, WHERE DISCREPANCY EXISTS BETWEEN SPECIFICATIONS, THE MORE STRINGENT SHALL BE ADHERED TO.

STRUCTURE TYPES

- DRAINAGE STRUCTURES SHALL BE PRECAST OR CAST-IN-PLACE CONCRETE IN ACCORDANCE WITH LADOTD.
- ALL INLET FRAMES & GRATES SHALL BE VULCAN FOUNDRY CORP. CATALOG #V-524-1 FOR SQUARE GRATES AND V-5662 FOR RECTANGULAR GRATES OR APPROVED EQUAL. UNLESS OTHERWISE NOTED, TYPE "C" GRATE PER LADOTD CB-01 DETAIL IS TO BE USED.
- ALL STORM MANHOLES LIDS AND FRAMES SHALL BE JORDON IRON WORKS, V-1403 FRAME AND V-1501 COVER.

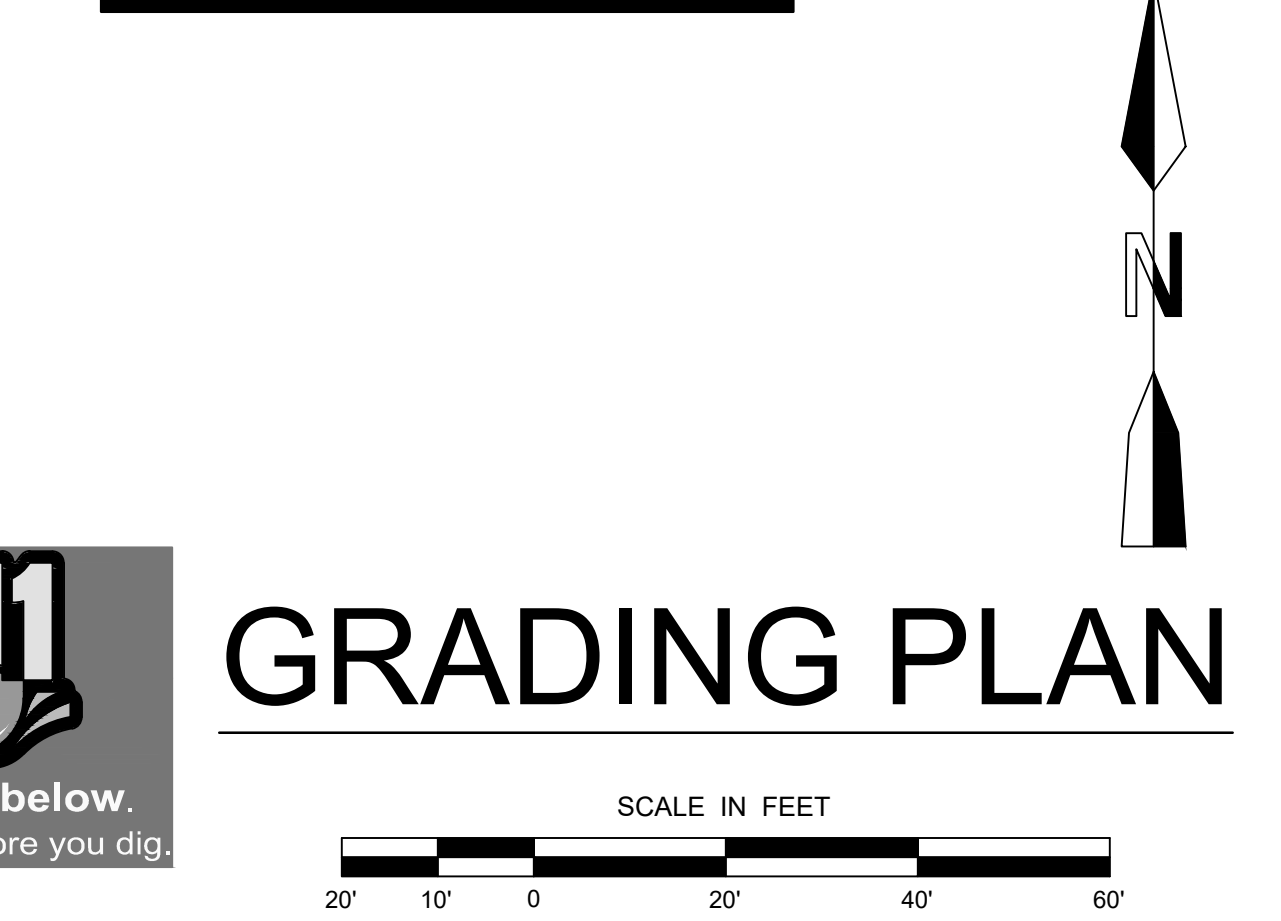
NOTE:
THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

SITE PREPARATION NOTES

- THE EXISTING SOILS ARE MOISTURE SENSITIVE AND WILL BECOME INADEQUATE WHEN ABOVE THEIR OPTIMUM MOISTURE CONTENT AS EVALUATED BY ASTM D698. EFFECTIVE SITE DRAINAGE SHALL BE IMPLEMENTED AT THE BEGINNING OF AND MAINTAINED THROUGHOUT CONSTRUCTION ACTIVITIES. CARE SHALL BE TAKEN TO KEEP CONSTRUCTION TRAFFIC TO A MINIMUM DURING AND IMMEDIATELY AFTER TIMES OF INCLEMENT WEATHER. ECS SHALL BE ON-SITE FULL-TIME DURING EARTHWORK AND FOUNDATION CONSTRUCTION ACTIVITIES TO DOCUMENT THAT OUR RECOMMENDATIONS ARE STRICTLY FOLLOWED AND TO PROVIDE RECOMMENDATIONS FOR REMEDIAL ACTIVITIES, IF NECESSARY.
- THE SUBGRADE PREPARATION SHALL CONSIST OF CLEARING REMAINING TREES AND VEGETATION AND STRIPPING UP TO 12 INCHES OF SURFICIAL SILT SOILS, EXISTING FILL, CONSTRUCTION DEBRIS, EXISTING FOUNDATION ELEMENTS AND UTILITIES AND SOFT OR YIELDING MATERIALS FROM THE 10-FOOT EXPANDED BUILDING LIMITS, AND 5 FEET BEYOND THE TOE OF STRUCTURAL FILLS. NOTE: FOLLOWING STRIPPING AND GRUBBING THE ENTIRE CONSTRUCTION AREA SHALL BE PROOFROLLED AS OUTLINED IN SECTION 5.1.2 OF THIS REPORT. SOILS OBSERVED TO RUT OR DEFLECT GREATER THAN AN INCH IN DEPTH SHALL BE UNDERCUT AND REPLACED OR OTHERWISE MITIGATED. DEEPER TOPSOIL OR ORGANIC LADEN SOILS MAY BE PRESENT IN WET, CRAWLING, AND POORLY DRAINED AREAS, IN WOODED AREAS. THE ROOT BALLS MAY EXTEND AS DEEP AS ABOUT 2 FEET AND WILL REQUIRE ADDITIONAL LOCALIZED STRIPPING DEPTH TO COMPLETELY REMOVE THE ORGANICS. ECS SHALL BE RETAINED TO EVALUATE THAT TOPSOIL AND POOR SURFICIAL MATERIALS HAVE BEEN REMOVED PRIOR TO THE PLACEMENT OF STRUCTURAL FILL OR CONSTRUCTION OF STRUCTURES.
- FOLLOWING CLEARING ACTIVITIES AND PRIOR TO FILL PLACEMENT OR OTHER CONSTRUCTION ON SUBGRADES, THE SUBGRADES SHALL BE EVALUATED BY AN ECS FIELD TECHNICIAN. THE EXPOSED SUBGRADE SHALL BE THOROUGHLY PROOFROLLED WITH A HALF LOADED TANDEM-AXLE DUMP TRUCK OR SIMILAR CONSTRUCTION EQUIPMENT WEIGHING A MINIMUM OF 15 TONS. PROOFROLLING SHALL BE TRAVERSED IN TWO PERPENDICULAR DIRECTIONS WITH OVERLAPPING PASSES OF THE VEHICLE UNDER THE OBSERVATION OF AN ECS TECHNICIAN TO ASSIST IN IDENTIFYING LOCALIZED YIELDING MATERIALS. WHERE PROOFROLLING IDENTIFIES AREAS OF YIELDING OR "PUMPING" SUBGRADE PRIOR TO THE PLACEMENT OF SUBSEQUENT STRUCTURAL FILL OR OTHER CONSTRUCTION MATERIALS, OBSERVATIONS OF YIELDING OR "PUMPING" SHALL BE ADDRESSED WITH ECS TO ESTABLISH THE APPROPRIATE REMEDIATION AS OUTLINED IN SECTION 5.1.3.
- METHODS OF STABILIZATION INCLUDE UNDERCUTTING, MOISTURE CONDITIONING, OR CHEMICAL STABILIZATION. TEST PITS MAY BE REQUIRED PRIOR TO THE PLACEMENT OF SUBSEQUENT STRUCTURAL FILL TO HELP IN DETERMINING THE CAUSE OF THE OBSERVED INADEQUATE MATERIALS, AND TO ASSIST IN THE EVALUATION OF APPROPRIATE REMEDIAL ACTIONS TO STABILIZE THE SUBGRADE. ANTICIPATED METHODS OF SUBGRADE STABILIZATION OF THE NEAR SURFACE SOILS ARE PROVIDED BELOW. MOISTURE CONDITIONING: IF IT IS ESTABLISHED THAT HIGH MOISTURE CONTENT IS THE CAUSE OF THE INADEQUATE SUBGRADE, THE GEOTECHNICAL ENGINEER MAY REQUIRE THE EARTHWORK CONTRACTOR PROCESS THE UPPER 12 TO 18 INCHES OF IN-SITU SUBGRADE BY WINDROWING WITH A DOZER OR PLOWING WITH A SET OF HEAVY-DUTY DISK HARROWS UNTIL SOIL MOISTURE IS OBSERVED TO BE WITHIN 2 PERCENT OF ITS OPTIMUM MOISTURE CONTENT AS EVALUATED BY ASTM D698 TO IMPROVE SUBGRADE CONDITIONS BEFORE CONSIDERATION OTHER MITIGATION APPROACHES. THE DRYING EFFORT SHALL BEGIN AFTER THE EXPOSED SUBGRADE IS FREE OF STANDING WATER AND THE WINDROWING/DISKING SHALL BE CONTINUOUS DURING A PERIOD OF DRY WEATHER. ECS SHALL BE ONSITE TO PERIODICALLY PERFORM SOIL MOISTURE TESTING. THE PROCESSED AREAS SHALL BE SEALED WITH COMPACTION EQUIPMENT AND A FLAT DRUM ROLLER OR DOZER BLADE AT THE END OF THE DAY IN CASE OF OVERNIGHT RAIN. IF WEATHER CONDITIONS DO NOT ALLOW APPROPRIATE TIME TO DRY THE NATIVE SUBGRADE, THE GEOTECHNICAL ENGINEER MAY RECOMMEND CHEMICAL TREATMENT WITH LIME OR CEMENT IN ORDER TO PROVIDE AN ADEQUATE WORKING SURFACE FOR FILL PLACEMENT. **UNDERCUT AND REPLACE:** WHERE PROOFROLLING IDENTIFIES AREAS OF YIELDING OR "PUMPING" SUBGRADE THOSE AREAS CAN BE REPAIRED BY UNDERCUT OF THE YIELDING OR "PUMPING" SOILS. THE UNDERCUT AREAS SHALL BE BACKFILLED WITH COMPACTED STRUCTURAL FILL. UNDERCUT SHOULD EXTEND TO ADEQUATE SUBGRADE SOILS AS OBSERVED BY THE GEOTECHNICAL ENGINEER OR THEIR QUALIFIED REPRESENTATIVE. **LIME STABILIZATION:** LIME STABILIZATION MAY BE USED TO MODIFY ONSITE CLAY SOILS TO ACHIEVE AN ADEQUATE WORKING SURFACE AND ACHIEVE PIS BETWEEN 10 AND 25 FOR REUSE AS STRUCTURAL FILL. THE AMOUNT OF LIME NECESSARY TO ACHIEVE LIME STABILIZATION WILL VARY DEPENDING ON THE CLAY MINERAL, PLASTICITY AND TYPE OF LIME USED FOR STABILIZATION. FOR ESTIMATING PURPOSES 4 TO 6% PERCENT OF LIME BY VOLUME SHALL BE USED; HOWEVER, A LABORATORY LIME SERIES SHALL BE PERFORMED AT THE TIME OF CONSTRUCTION TO ESTABLISH THE OPTIMUM LIME CONTENT. SURFICIAL SAMPLES SHALL BE COLLECTED FROM ACROSS THE SITE AND TESTING SHALL BE CONDUCTED ON THE COMPOSITE SAMPLE. THE SUBGRADE SOILS SHOULD MEET THE REQUIREMENTS OF SECTION 305.4, AND LIME TREATMENT OF THE SUBBASE SHALL MEET THE REQUIREMENTS OF SECTION 304 - TYPE B, OF THE LATEST EDITION OF THE LSSRB. AN ECS FIELD ENGINEER OR SENIOR TECHNICIAN SHOULD BE PRESENT DURING LIME TREATMENT ACTIVITIES TO OBSERVE LIME QUANTITIES AND DOCUMENT THAT TREATED AREAS ARE IN CONFORMANCE WITH THE PROJECT REQUIREMENTS. PLEASE NOTE THAT CAUTION SHOULD BE USED WHEN POWDERED LIME IS USED IN CLOSELY POPULATED AREAS. TO CONTROL DUST, A LIME SLURRY OR PELLETED LIME MAY BE USED WHERE DUST MUST BE CONTROLLED. IN ADDITION, PELLETED LIME WILL GENERALLY REQUIRE 2 TO 3 TIMES THE EFFORT TO PROPERLY PULVERIZE AND MIX INTO THE CLAY SOILS THAN A POWDER OR SLURRY. **CEMENT STABILIZATION:** WHEN SOILS HAVE PI VALUES OF 15 OR BELOW, CEMENT STABILIZATION SHALL BE USED IN LIEU OF LIME TREATMENT. ADDITIONALLY, 12 INCHES OF CEMENT STABILIZED SOIL CAN BE USED AS AN ALTERNATIVE TO AGGREGATE BASE COURSE FOR LIGHT AND MEDIUM DUTY FLEXIBLE PAVEMENT. A MINIMUM OF 10% BY VOLUME OF CEMENT IS RECOMMENDED TO USE FOR A CEMENT STABILIZED BASE COURSE AND SHALL BE PREPARED IN GENERAL ACCORDANCE WITH LSSRB, SECTION 303.04. NOTE THAT THE CEMENT TREATMENT OF THE ROADWAYS SHALL BE CONDUCTED IN GENERAL ACCORDANCE WITH LSSRB, SECTION 303. CEMENT STABILIZED BASE COURSE SHALL YIELD A COMPRESSIVE STRENGTH OF AT LEAST 250 PSI AT 7 DAYS AS EVALUATED BY A MIX DESIGN IN ACCORDANCE WITH DOTD TR 432 STANDARD PROCEDURE. THE TREATED SOIL SHALL BE COMPACTED AT LEAST 95% OF MAXIMUM DRY DENSITY +/-3% THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH THE SUBSECTION 303.11 OF LSSRB.

NOTE:
ANY IMPROVEMENTS MADE INSIDE ANY SERVIDUTES, SHALL BE REMOVED, REPLACED OR REPAIRED BY THE OWNER/DEVELOPER AT THEIR SOLE EXPENSE SHOULD SAID IMPROVEMENTS BE DAMAGED DURING THE NORMAL MAINTENANCE OF THE UTILITIES.
AGREED UPON:
OWNER/DEVELOPER

OWNER/DEVELOPER	DATE
APPROVED: LIVINGSTON PARISH COUNCIL	
PLANNING DIRECTOR	DATE
RECOMMEND TO APPROVE: LIVINGSTON PARISH E.R.A.	
REVIEW ENGINEER - FORTÉ & TABLADA	DATE



EXPRESS OIL CHANGE
DENHAM SPRINGS, LA
LIVINGSTON PARISH
EXPRESS OIL CHANGE & TIRE ENGINEERS

DDG
16564 E. BREWSTER ROAD | SUITE 101
COVINGTON, LA
985.249.6180

STATE OF LOUISIANA
WILLIAM R. KROSP
License No. 10666
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
William Krosp

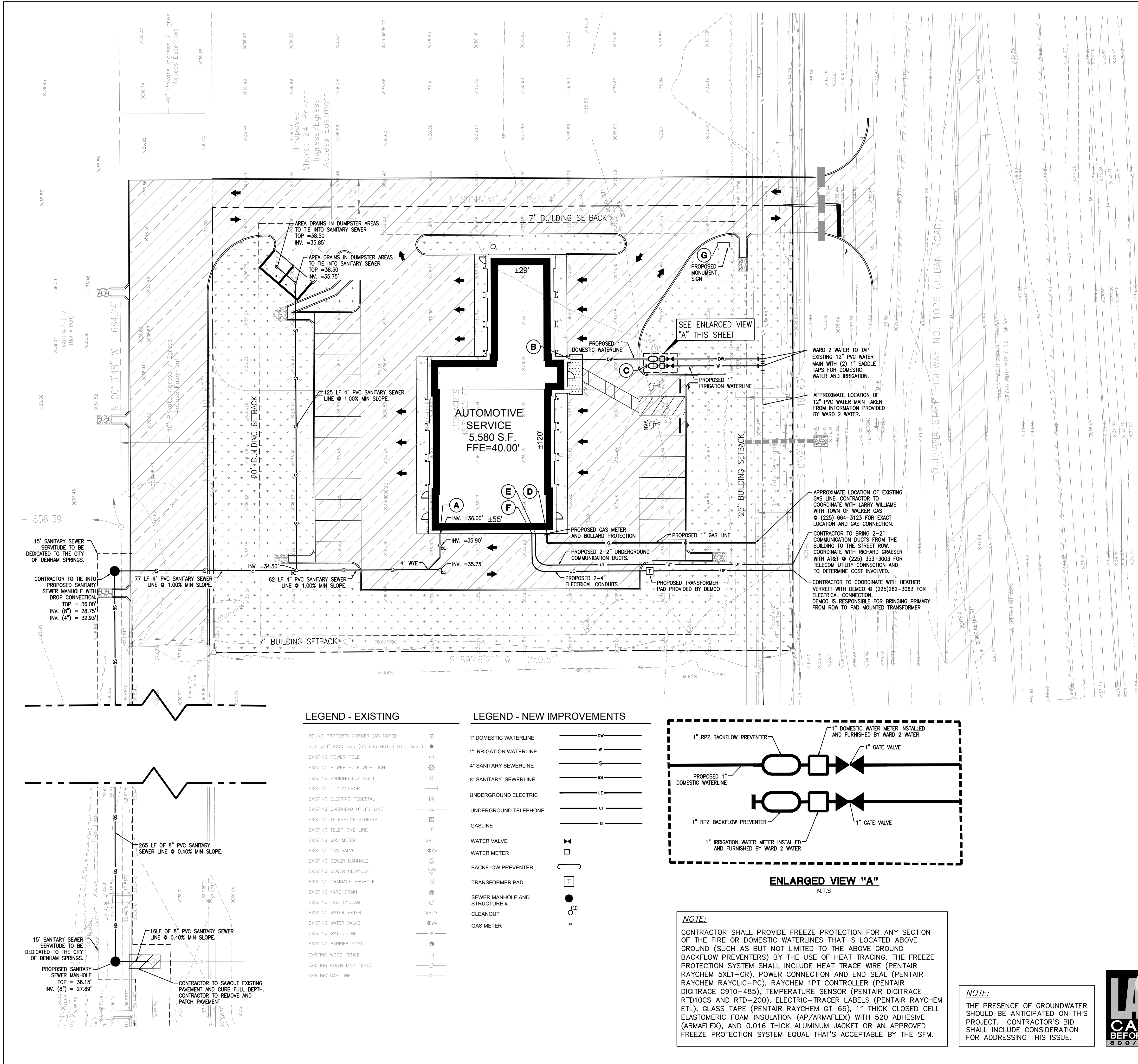
PROJECT NO. 23-1404
PERMITTING
12/11/2023

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WRK
ZPP

SHEET NAME

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UTILITY NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES & NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING CONSTRUCTION.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION &/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES &, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. CONTRACTOR SHALL VERIFY HORIZONTAL & VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PIPES, & ALL UTILITIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR TO REMOVE OR RELOCATE WHEN APPLICABLE, ALL EXISTING BUILDINGS, FOUNDATIONS, EASEMENTS, & CONNECTING IMPROVEMENTS, DRAIN PIPES, SANITARY SEWER PIPE, POWER POLES & GUY WIRES, WATER METERS & WATER LINES, WELLS, SIDEWALKS, SIGN POLES, UNDERGROUND GAS, SEPTIC TANKS, & ASPHALT, SHOWN & NOT SHOWN, WITHIN CONSTRUCTION LIMITS & WHERE NEEDED, TO ALLOW FOR FILL MATERIAL, UNLESS OTHERWISE DENOTED, TO BE REMOVED AS UNCLASSIFIED EXCAVATION.
5. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, UTILITIES, PAVEMENT, STRIPING, CURBS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
6. CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS & SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC & FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, & CABLE T.V. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS & ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH CITY UTILITY REQUIREMENTS AS TO LOCATIONS & SCHEDULING FOR TIE-INS/CONNECTIONS PRIOR TO CONNECTING EXISTING FACILITIES.
7. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL PLANS, POWER COMPANY, & TELEPHONE COMPANY FOR ACTUAL ROUTING OF POWER & TELEPHONE SERVICE TO BUILDING.
8. CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES & BE CONSTRUCTED TO SAME.
9. SEE SPECIFICATIONS & DETAIL SHEETS FOR BACKFILLING & COMPACTION REQUIREMENTS ON UTILITY TRENCHES.
10. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARD OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION & TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, & OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED TO, ACCESS & EGRESS FROM ALL EXCAVATION & TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA OF OSHA.
11. CONTRACTOR SHALL COORDINATE WITH OTHER UTILITIES TO ASSURE PROPER DEPTH & PREVENT ANY CONFLICT OF UTILITIES.
12. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER & SEWER LINE IS TEN (10) FEET, OR MINIMUM VERTICAL SEPARATION BETWEEN THE CLOSEST TWO POINTS OF THE WATER & SEWER LINE IS EIGHTEEN (18) INCHES.
13. CONTRACTOR SHALL GROUT AROUND ALL PIPE ENTRANCES TO SANITARY SEWER MANHOLES WITH NON-SHRINKING GROUT TO ASSURE CONNECTION IS WATER TIGHT.
14. CONTRACTOR SHALL ON ALL UTILITIES, COORDINATE INSPECTION WITH THE APPROPRIATE AUTHORITIES PRIOR TO COVERING TRENCHES AT INSTALLATION.
15. CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES & REQUIREMENTS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED INSPECTIONS & TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES & OWNERS INSPECTING AUTHORITIES.
16. SITE CONTRACTOR TO COORDINATE PROPOSED RECONNECTION OF ALL UTILITIES WITH ARCHITECTURAL PLANS AS WELL AS UTILITY COMPANIES & BUILDING CONTRACTOR.
17. ALL NECESSARY INSPECTIONS &/OR CERTIFICATIONS REQUIRED BY CODES &/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION & THE FINAL CONNECTION OF SERVICES.

TELEPHONE NOTES

1. ALL PHONE LINE LOCATIONS ARE APPROXIMATE AND SHOWN FOR COORDINATION PURPOSES ONLY. REFERENCE MEP PLANS FOR ALL BUILDING SERVICE CONNECTIONS.
2. CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE 2-2" PVC CONDUIT INCLUDING TRENCHING BEDDING, PULL WIRE, AND BACKFILLING.
3. THE MINIMUM COVER OVER TELEPHONE CONDUIT SHALL BE 24".

POWER NOTES

1. REFERENCE ARCHITECT'S PLANS FOR ALL BUILDING SERVICE CONNECTIONS.
2. ALL PRIMARY & SECONDARY SERVICE LOCATIONS ARE APPROXIMATE & ARE SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH DEMCO, TO DETERMINE EXACT LOCATION & RESPONSIBILITIES INCLUDING COST.

WATER NOTES

1. ALL WORK SHALL BE DONE TO THE WARD 2 WATER WATER'S STANDARD SPECIFICATIONS.
2. REFERENCE ARCHITECT'S PLANS FOR ALL BUILDING FIRE SERVICE & DOMESTIC SERVICE CONNECTION LOCATIONS.
3. CONTRACTOR SHALL CONSTRUCT WATER SERVICES AS SHOWN, & CONSTRUCT METERS, PITS, & INSTALL CHECK VALVE.
4. ALL DOMESTIC LEADS TO BUILDING SHALL END AT THE FACE OF BUILDING WALL, UNLESS NOTED, & SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END (FOR OTHERS TO REMOVE & EXTEND AS NECESSARY).
5. ALL VERTICAL BENDS ON WATER MAIN SHALL BE RESTRAINED WITH A MECHANICAL JOINT FITTING SUPPLIED WITH THE RETAINER GLANDS. ANY JOINTS 25 FEET OR LESS FROM EITHER SIDE OF VERTICAL BEND SHALL BE RESTRAINED WITH A RETAINER GLAND.
6. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
7. ALL VALVES SHALL BE INSTALLED IN A CAST IRON VALVE BOX WITH COVER.
8. THRUST BLOCKS SHALL BE PROVIDED AT ALL HORIZONTAL BENDS, TEES, & FIRE HYDRANTS. SEE DETAIL.
9. THE MINIMUM COVER ON WATER MAINS SHALL BE 3 FEET.
10. PIPE SIZES 3" & SMALLER SHALL BE PVC. FITTINGS SHALL BE BRASS. SEE DETAIL SHEET.
11. ALL SIZES 4" & LARGER SHALL BE 8" SDR 35 PVC 6900 WATER PIPE. ALL FITTINGS 4" & LARGER SHALL BE CAST IRON CONFORMING TO ANSI & AWWA STANDARD SPECIFICATIONS.
12. GATE VALVES 34" THROUGH 3" SHALL BE BRONZE WEDGE TYPE GATE VALVE. VALVES SHALL HAVE NON-RISING STEM WITH SOLID TEE HEAD OPERATING NUT UNLESS NOTED OTHERWISE.
13. GATE VALVES 34" & LARGER SHALL BE CAST IRON GATE VALVE WITH PARALLEL DOUBLE DISC. VALVES SHALL HAVE MECHANICAL JOINT ENDS & NON-RISING STEM WITH SQUARE OPERATING NUT.
14. CONTRACTOR TO CONTACT BARRY LEJEUNE WITH WARD 2 WATER PRIOR TO CONSTRUCTION.

SANITARY SEWER NOTES

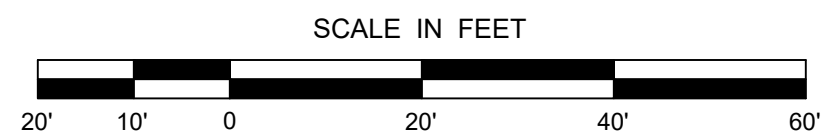
1. ALL WORK SHALL BE DONE TO THE CITY OF DENHAM SPRINGS STANDARD SPECIFICATIONS.
2. REFERENCE ARCHITECT'S PLANS FOR ALL BUILDING SERVICE CONNECTIONS.
3. CONTRACTOR SHALL PAY ALL FEES & CHARGES PERTINENT TO SANITARY SEWER CONSTRUCTION & SHALL COORDINATE WITH CITY OF DENHAM SPRINGS PRIOR TO COMMENCING WITH CONSTRUCTION.
4. ALL STUB-OUTS & WYE LATERALS SHALL BE PLUGGED WITH A STANDARD TYPE PLUG.
5. SANITARY SEWER PIPE OF DIFFERENT MATERIAL SHALL BE JOINED BY A RUBBER SLEEVE WITH STAINLESS STEEL COUPLING, MADE FOR TRANSITIONS FROM ONE MATERIAL TO ANOTHER.
6. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR TO CENTERLINE OF MANHOLE.
7. THE SANITARY SEWER PIPE MATERIAL SHALL BE PVC, SDR 35, SEWER PIPE UNLESS OTHERWISE NOTED ON PLAN.

UTILITY LEGEND

- 4" SANITARY SEWER LINE AT MINIMUM 1.00% SLOPE. CONTRACTOR TO COORDINATE WITH B.J. CLARK WITH CITY OF DENHAM SPRINGS @ (225) 667-1227 FOR SAID WORK AND COSTS INVOLVED. REFER TO MEP PLANS FOR EXACT ENTRY LOCATION AND ELEVATION.
- 1.0" DOMESTIC WATERLINE WITH 1.0" WATER METER AND RPZ BACKFLOW PREVENTER. WARD 2 WATER TO TAP EXISTING 12" PVC WATER MAIN WITH 1" SADDLE TAP AND FURNISH AND INSTALL METER. CONTRACTOR TO PURCHASE AND SET RPZ BACKFLOW PREVENTER, AND IS RESPONSIBLE FOR ALL WORK FROM THE METER TO THE BUILDING. CONTRACTOR TO COORDINATE WITH BARRY LEJEUNE OF WARD 2 WATER @ OFFICE # (225) 665-5188 FOR SAID WORK AND COST INVOLVED. REFER TO PLUMBING PLANS FOR EXACT ENTRY LOCATION. INSULATE ALL EXPOSED PIPES ABOVE GROUND.
- 1.0" IRRIGATION WATER LINE WITH 1.0" METER AND RPZ BACKFLOW PREVENTER. WARD 2 WATER TO TAP EXISTING 12" PVC WATER MAIN WITH 1" SADDLE TAP AND FURNISH AND INSTALL METER. CONTRACTOR TO PURCHASE AND SET RPZ BACKFLOW PREVENTER, AND IS RESPONSIBLE FOR ALL WORK PAST THE METER. CONTRACTOR TO COORDINATE WITH BARRY LEJEUNE OF WARD 2 WATER @ OFFICE # (225) 665-5188 FOR SAID WORK AND COST INVOLVED. CONTRACTOR TO REFER TO IRRIGATION PLANS FOR CONTINUATION.
- GAS SERVICE TO BE PREPARED BY TOWN OF WALKER. CONTRACTOR SHALL COORDINATE WITH TOWN OF WALKER (LARRY WILLIAMS @ OFFICE # (225) 665-4556) FOR SAID WORK AND COSTS INVOLVED. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION.
- UNDERGROUND TELEPHONE/DATA SERVICE. CONTRACTOR TO INSTALL (2) 2" CONDUIT FROM RIGHT-OF-WAY TO BUILDING INCLUDING TRENCHING, BEDDING, BACKFILL, AND PULL STRINGS. COORDINATE WITH AT&T (RICHARD GRAESER @ 225-353-3003) FOR SAID WORK AND COST INVOLVED. REFER TO ELECTRICAL PLANS FOR EXACT ENTRY LOCATION.
- UNDERGROUND ELECTRICAL SERVICE TO BE PROVIDED BY DEMCO. CONTRACTOR SHALL COORDINATE WITH DEMCO (HEATHER VERRETT @ OFFICE # (225) 262-3063) FOR SAID WORK AND COST INVOLVED. DEMCO SHALL BE RESPONSIBLE FOR INSTALLING TRANSFORMER PAD, PAD MOUNTED TRANSFORMER, CONDUITS, PULLING PRIMARY WIRE TO PAD MOUNTED TRANSFORMER, AND PULLING SECONDARY FROM TRANSFORMER TO METER POINT. CONTRACTOR SHALL SET THE METER AND EXTEND UNDERGROUND ELECTRIC FROM METER TO BUILDING.
- 2" PVC SIGN CONDUIT. CONTRACTOR TO FURNISH AND INSTALL CONDUITS, PULL WIRES, TRENCHING, BEDDING, AND BACKFILLING FROM BUILDING TO PROPOSED SIGN LOCATION. STUB UP CONDUITS 18" ABOVE GROUND AND CAP. REFERENCE ELECTRICAL PLANS FOR EXACT ENTRY LOCATION.



UTILITY PLAN



NOTE:
CONTRACTOR SHALL PROVIDE FREEZE PROTECTION FOR ANY SECTION OF THE FIRE OR DOMESTIC WATERLINES THAT IS LOCATED ABOVE GROUND (SUCH AS BUT NOT LIMITED TO THE ABOVE GROUND BACKFLOW PREVENTERS) BY THE USE OF HEAT TRACING. THE FREEZE PROTECTION SYSTEM SHALL INCLUDE HEAT TRACE WIRE (PENTAIR RAYCHEM 5XL1-CR), POWER CONNECTION AND END SEAL (PENTAIR RAYCHEM RAYCLUC-PC), RAYCHEM IPT CONTROLLER (PENTAIR DIGITRACE C910-485), TEMPERATURE SENSOR (PENTAIR DIGITRACE RTD10CS AND RTD-200), ELECTRIC-TRACER LABELS (PENTAIR RAYCHEM ETL), GLASS TAPE (PENTAIR RAYCHEM GT-66), 1" THICK CLOSED CELL ELASTOMERIC FOAM INSULATION (AP/ARMAFLEX) WITH 520 ADHESIVE (ARMAFLEX), AND 0.016 THICK ALUMINUM JACKET OR AN APPROVED FREEZE PROTECTION SYSTEM EQUAL THAT'S ACCEPTABLE BY THE SFM.

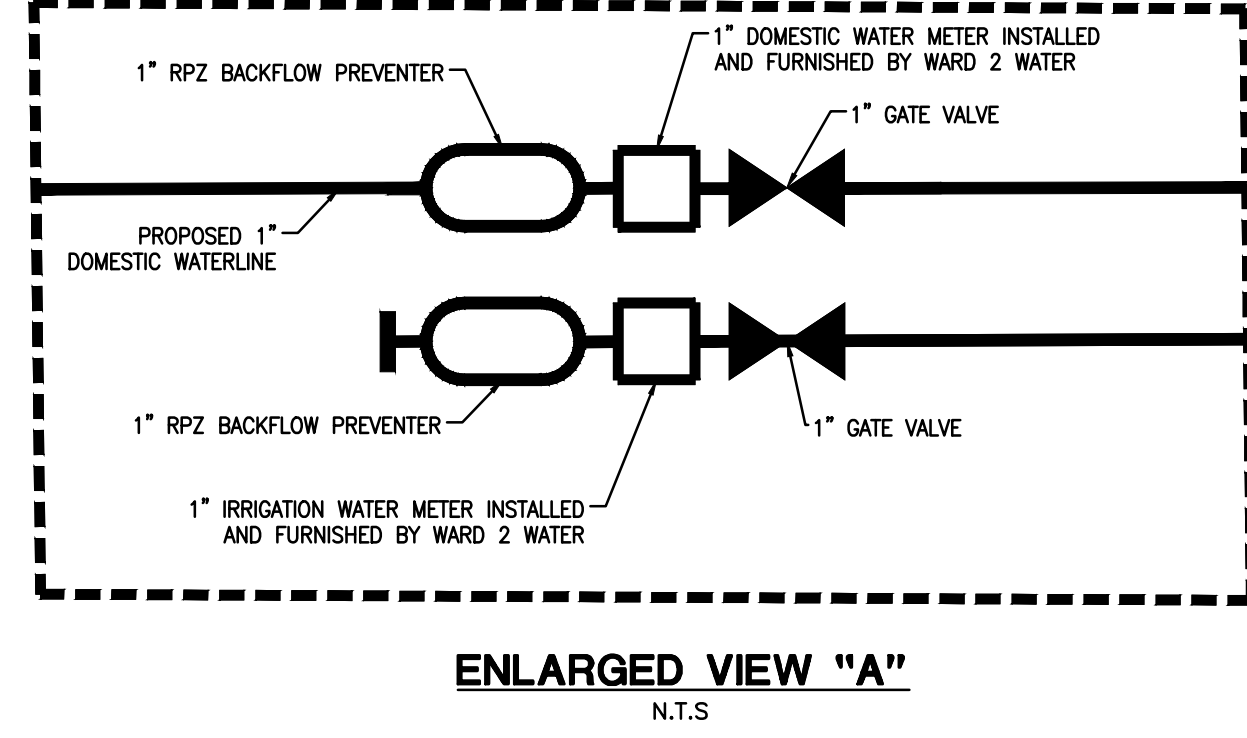
NOTE:
THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

LEGEND - EXISTING

- FOUND PROPERTY CORNER (AS NOTED)
- SET 5/8" IRON ROD (UNLESS NOTED OTHERWISE)
- EXISTING POWER POLE
- EXISTING POWER POLE WITH LIGHT
- EXISTING PARKING LOT LIGHT
- EXISTING GUY ANCHOR
- EXISTING ELECTRIC PEDESTAL
- EXISTING OVERHEAD UTILITY LINE
- EXISTING TELEPHONE PEDESTAL
- EXISTING TELEPHONE LINE
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING SEWER MANHOLE
- EXISTING SEWER CLEANOUT
- EXISTING DRAINAGE MANHOLE
- EXISTING YARD DRAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING WATER LINE
- EXISTING BARRIER POST
- EXISTING WOOD FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING GAS LINE

LEGEND - NEW IMPROVEMENTS

- 1" DOMESTIC WATERLINE
- 1" IRRIGATION WATERLINE
- 4" SANITARY SEWERLINE
- 8" SANITARY SEWERLINE
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- GASLINE
- WATER VALVE
- WATER METER
- BACKFLOW PREVENTER
- TRANSFORMER PAD
- SEWER MANHOLE AND STRUCTURE #
- CLEANOUT
- GAS METER

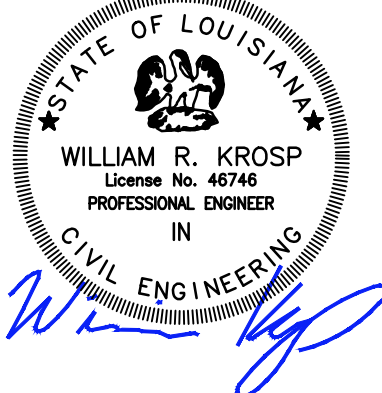


ENLARGED VIEW "A"
N.T.S.

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LIVINGSTON PARISH
EXPRESS OIL CHANGE & TIRE ENGINEERS



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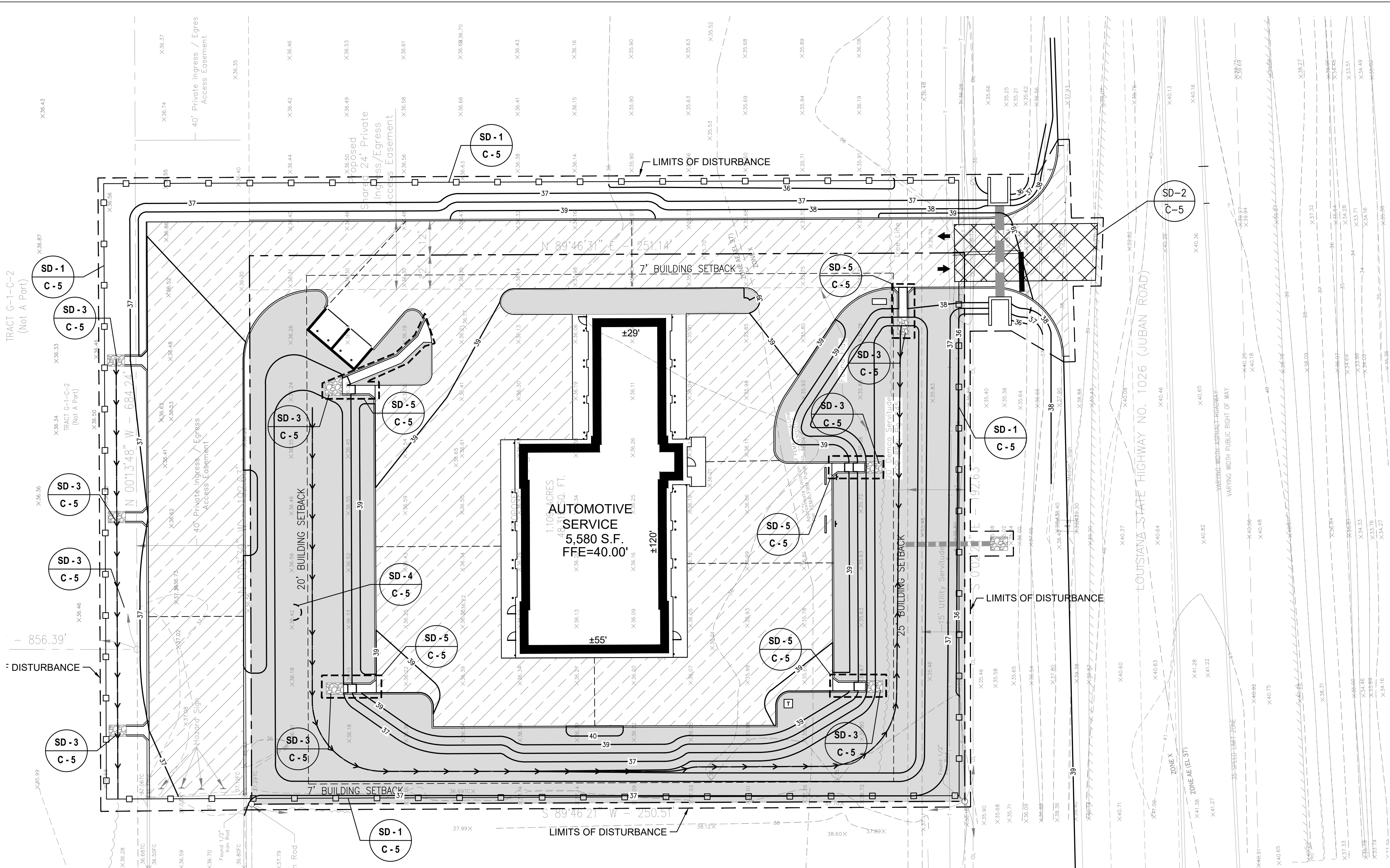


PROJECT NO. 23-1404
PERMITTING
12/11/2023

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C-3



LEGEND - EXISTING

- FOUND PROPERTY CORNER (AS NOTED)
- SET 5/8" IRON ROD (UNLESS NOTED OTHERWISE)
- EXISTING POWER POLE
- EXISTING POWER POLE WITH LIGHT
- EXISTING PARKING LOT LIGHT
- EXISTING GUY ANCHOR
- EXISTING ELECTRIC PEDESTAL
- EXISTING OVERHEAD UTILITY LINE
- EXISTING TELEPHONE PEDESTAL
- EXISTING TELEPHONE LINE
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING SEWER MANHOLE
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- EXISTING FIRE HYDRANT
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- EXISTING WATER VALVE
- EXISTING WATER LINE
- EXISTING BARRIER POST
- EXISTING WOOD FENCE
- EXISTING CHAIN LINK FENCE
- EXISTING GAS LINE

LEGEND - NEW IMPROVEMENTS

- SD-1 SILT FENCE
- SD-2 TEMPORARY STONE CONSTRUCTION EXIT
- SD-3 RIP RAP
- SD-4 PIPE PROTECTION
- SD-5 EROSION EEL
- DIRECTION OF OVERLAND FLOW
- PROPOSED CONTOUR
- GRADE BREAK
- PROPERTY LINE
- LIMITS OF DISTURBANCE
- PROPOSED BUILDING
- PROPOSED STORM DRAINAGE
- TEMPORARY SEEDING (HYDROMULCH) (SLOPES 3:1 OR GREATER SHALL BE SODDED)
- REFERENCES LEGEND
- REFERENCES SHEET FOR DETAIL

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
TEMPORARY CONSTRUCTION EXITS																		
TEMPORARY CONTROL MEASURES																		
SEDIMENT CONTROL BASINS																		
STRIP & STOCKPILE TOPSOIL																		
ROUGH GRADE																		
STORM FACILITIES																		
SITE CONSTRUCTION																		
PERMANENT CONTROL STRUCTURES																		
FOUNDATION / BUILDING CONSTRUCTION																		
FINISH GRADING																		
LANDSCAPING / SEED / FINAL STABILIZATION																		

- 1) CONTRACTOR SHALL UPDATE THE TABLE BY SHADING OR DATING THE APPLICABLE ACTIVITIES AS PROJECT PROGRESSES.
- 2) TIME SCHEDULE MUST COINCIDE WITH SEQUENCE OF CONSTRUCTION.

ACREAGE SUMMARY	
TOTAL PROJECT AREA	+/- 1.58 ACRES
DISTURBED AREA	+/- 1.58 ACRES
UNDISTURBED AREA	+/- 0.00 ACRES



EROSION CONTROL PLAN



EROSION CONTROL NOTES

- SEDIMENT & EROSION CONTROL FACILITIES & STORM DRAINAGE FACILITIES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN EROSION CONTROL FACILITIES DURING THE ENTIRE CONSTRUCTION PERIOD. FACILITIES ARE NOT TO BE REMOVED UNTIL COMPLETION OF THE PROJECT.
- ADDITIONAL DEVICES MAY BE REQUIRED AS DEEMED NECESSARY BY GOVERNING AUTHORITIES.
- SILT FENCES SHALL BE CLEANED OR REPLACED WHEN SILT BUILDS UP TO 1" FROM THE BOTTOM OF THE FENCE.
- EROSION CONTROL MEASURES ARE TO BE INSPECTED WEEKLY & AFTER EACH RAINFALL & REPAIRED AS NECESSARY.
- ALL GRADED AREAS SHALL BE STABILIZED WITH A PERMANENT FAST GROWING COVER &/OR MULCH UPON COMPLETION OF GRADING OPERATIONS. COMPLETION OF GRADING OPERATIONS DOES NOT MEAN AT THE END OF THE PROJECT. AS SOON AS FINAL GRADES ARE ESTABLISHED IN AN UNPAVED AREA, THE CONTRACTOR SHALL STABILIZE WITH A TEMPORARY GRASS OR PERMANENT SOD. IF A TEMPORARY GRASS IS APPLIED, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO APPLY A PERMANENT SEED OR SOD AT THE PROPER TIME OF YEAR. SEE LANDSCAPE PLANS FOR FINAL STABILIZATION.
- FILL SLOPES SHOULD BE PLANTED AS SOON AS AN AREA OF THE SITE IS BROUGHT TO FINAL GRADE. SURFACE RUNOFF SHALL BE INTERCEPTED AT THE TOP OF TEMPORARY & PERMANENT SLOPES DURING CONSTRUCTION SO THAT WATER IS NOT ALLOWED TO FLOW OVER THE SLOPE FACE.
- THE GENERAL CONTRACTOR & THE GRADING CONTRACTOR SHALL REVIEW THEIR GRADING SEQUENCE TO INSURE THAT THE LEAST AMOUNT OF LAND POSSIBLE AT ANY ONE TIME IS DISTURBED WITHOUT PERMANENT STABILIZATION.
- CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCES PRIOR TO ANY EARTHWORK OPERATIONS.
- CONTRACTOR SHALL MAINTAIN SILT FENCES FOR THE DURATION OF THE PROJECT UNTIL ACCEPTED BY THE OWNER AT NO EXPENSE TO OWNER.
- CONTRACTOR SHALL INSPECT ON A DAILY BASIS FOR NEEDED REMOVAL OF ANY ACCUMULATED SILTS, DEBRIS, OR REPAIR OF DAMAGED SILT FENCE AT NO ADDITIONAL EXPENSE TO OWNER.
- PRIOR TO CONSTRUCTION, THE EROSION & SEDIMENT CONTROL MEASURES SHOWN HEREON SHALL BE IN PLACE. CLEARING & GRUBBING OPERATIONS WILL BE ENGAGED IN ONLY AS NECESSARY TO ALLOW THE PLACEMENT OF EROSION & SEDIMENT CONTROL MEASURES AS SHOWN HEREON UNTIL ALL SUCH MEASURES ARE IN PLACE.
- LAND DISTURBING ACTIVITIES WILL BE KEPT TO A MINIMUM & WILL NOT EXTEND BEYOND THE LIMITS SHOWN.
- SEDIMENT & EROSION CONTROL MEASURES WILL BE INSPECTED ON A DAILY BASIS & WILL BE REPAIRED, ADJUSTED & MAINTAINED AS NEEDED OR REQUIRED BY GOVERNING AGENCIES AT NO ADDITIONAL EXPENSE TO THE OWNER TO PROVIDE EROSION & SEDIMENT CONTROL FOR THE DURATION OF CONSTRUCTION & UNTIL ALL DISTURBED AREAS ARE STABILIZED.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLETING THE "PRIME CONTRACTOR CERTIFICATION" & "THE MONTHLY INSPECTION REPORT & CERTIFICATION FORM FOR EROSION & SEDIMENT CONTROLS" LOCATED IN THE SITEMARK SPECIFICATIONS & SUBMITTING THE FORMS TO THE OFFICE OF POLLUTION CONTROL.
- THE CONTRACTOR SHALL ALSO CONSTRUCT THE SILT FENCING AS SHOWN AT THE PERIMETER OF THE SITE PLAN PRIOR TO LAND CLEARING ACTIVITIES.
- ALL EROSION CONTROL MEASURES EXCEPT THE REQUIRED RIP RAP ARE TEMPORARY DEVICES. THESE TEMPORARY DEVICES SHALL BE REMOVED PRIOR TO COMPLETION OF CONSTRUCTION ONCE STABILIZATION OF ALL GRASSED AREAS ARE COMPLETE.

BMP MAINTENANCE EROSION NOTES

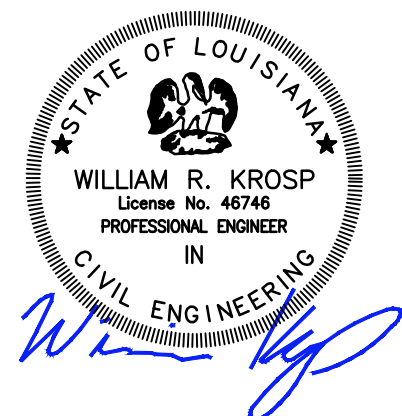
ALL MEASURES STATED ON THIS SITE MAP & IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION & SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, & REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- INLET PROTECTION DEVICES & BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, & RESEED AS NEEDED.
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
- THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
- THE TEMPORARY PARKING & STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING & STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
- OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITION AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.
- PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS &/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.

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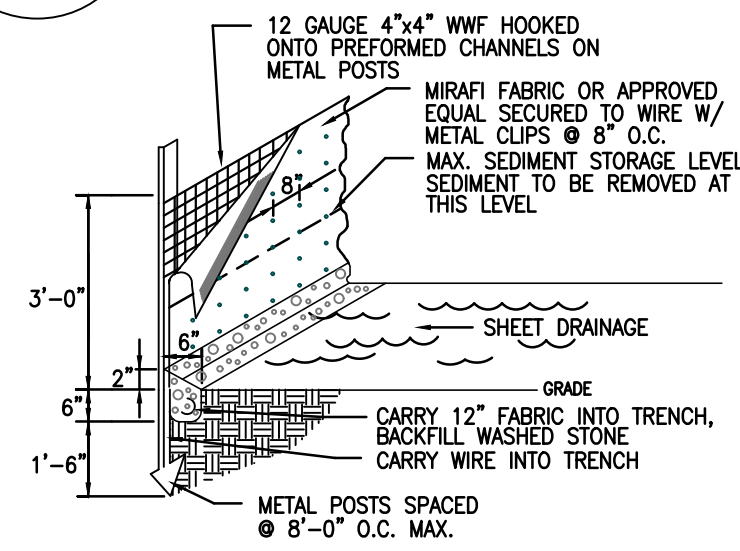
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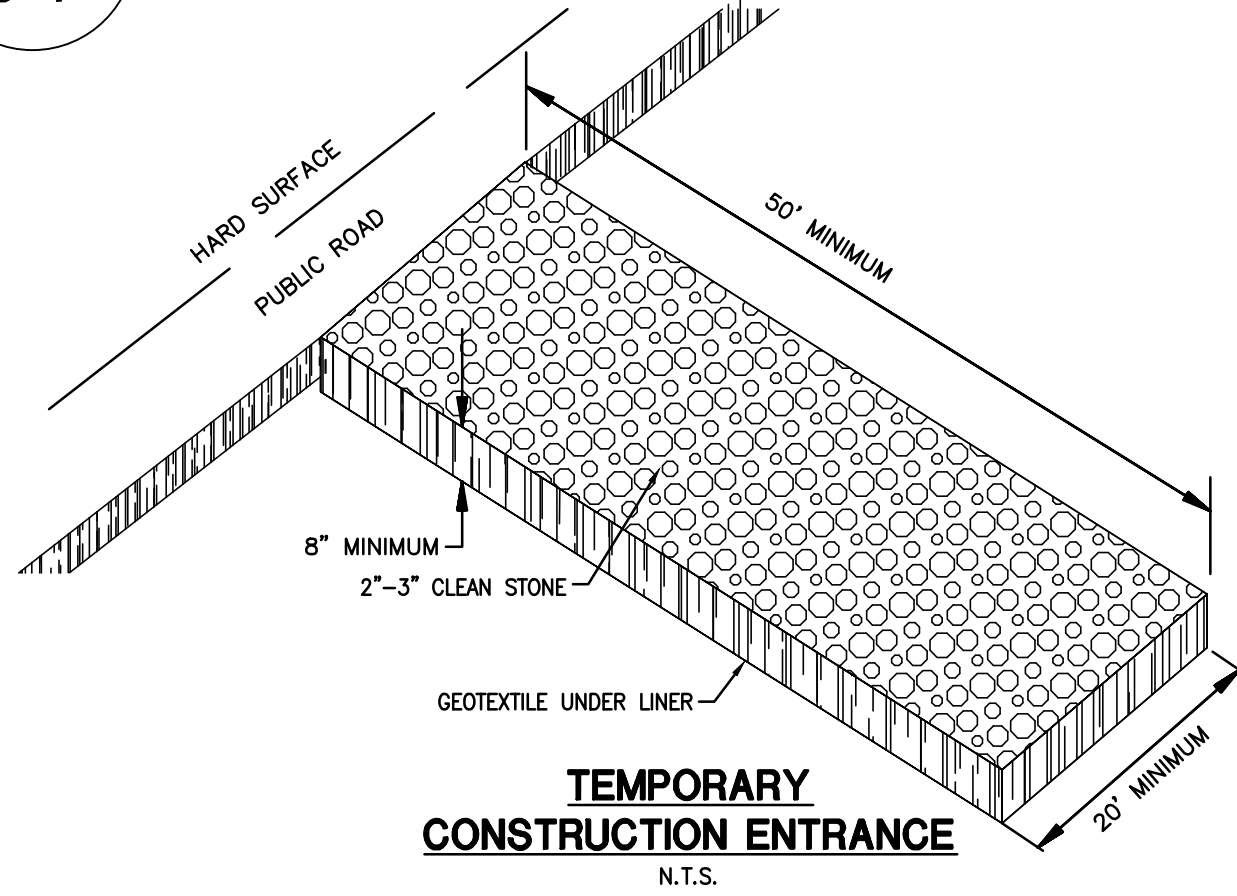
C-4

SD-1
C-4



SILT FENCE DETAIL
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SD-2
C-4



**TEMPORARY
CONSTRUCTION ENTRANCE**
N.T.S.

SD-3
C-4

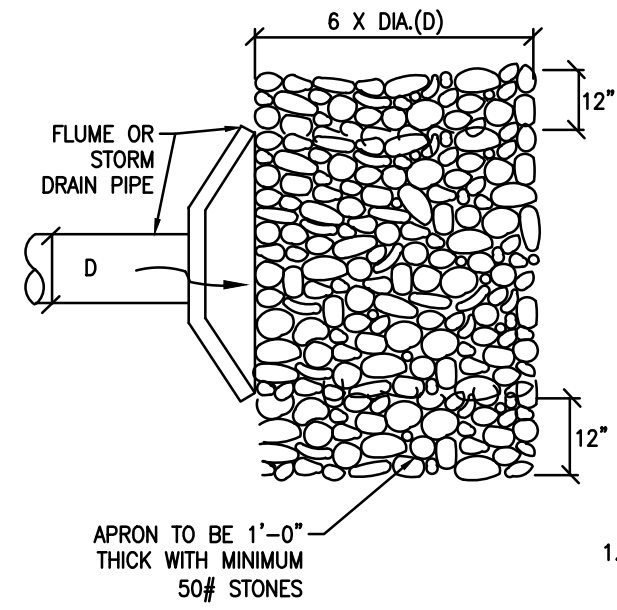
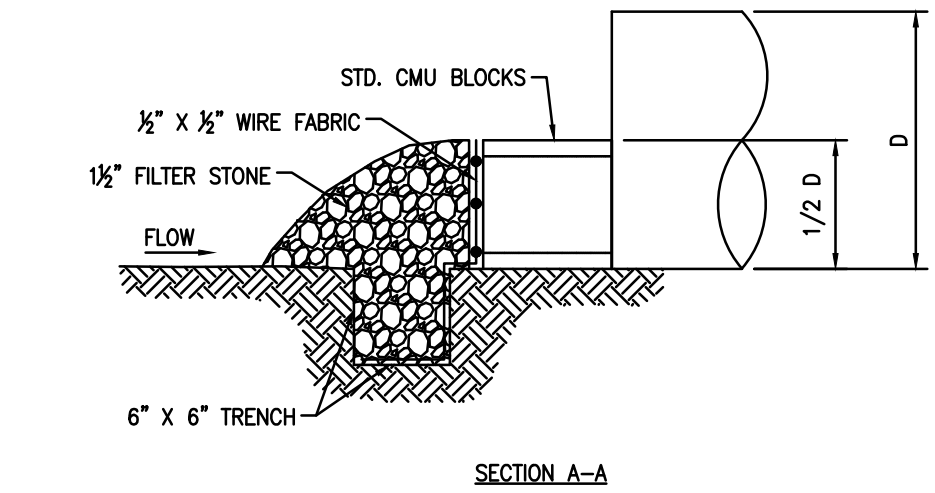
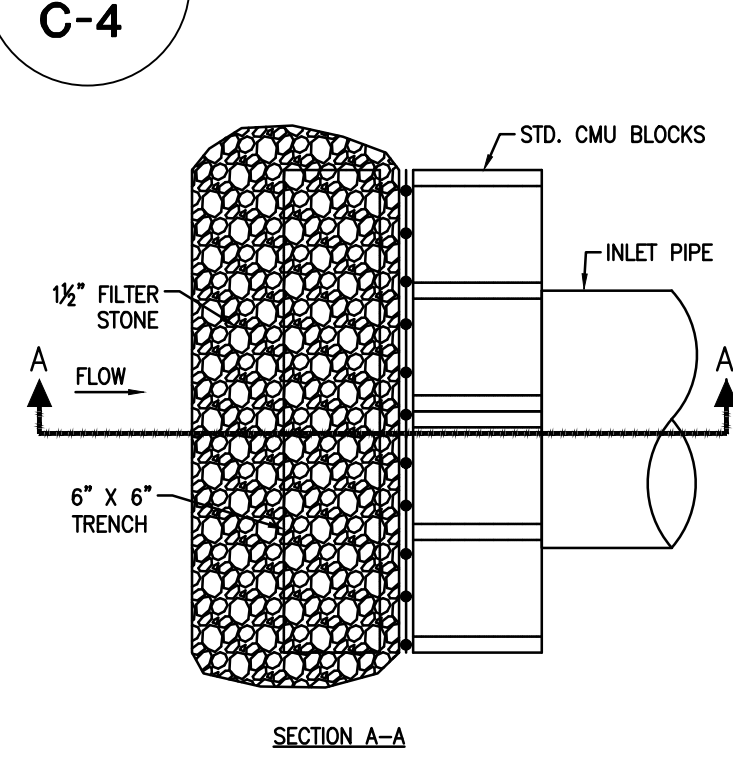


TABLE 5.11 GRADATION OF RIPRAP ROCK					
NSA NUMBER	SIZE IN INCHES				
	MAX.	AVG. (1) D 50	MIN. (2) (NO. 8)	(MIN.) BLANKET THICKNESS	FILTER STONE NSA NO. (3)
R-1	1.50	.75	2.25"		FS-1
R-2	3	1.50	1	4.5"	FS-1
R-3	6	3	2	9"	FS-2
R-4	12	6	3	18"	FS-2
R-5	18	9	5	27"	FS-2
R-6	24	12	7	36"	FS-3
R-7	30	15	12	45"	FS-3
R-8	48	24	15	72"	FS-3

- "AVERAGE SIZE" IS THAT SIZE EXCEEDED BY AT LEAST 50% OF THE TOTAL WEIGHT OF THE TONNAGE SHIPPED. I.E., 50% OF THE TONNAGE SHALL CONSIST OF PIECES LARGER THAN THE "AVERAGE" SIZE (NORMALLY HALF THE SPECIFIED NOMINAL TOP SIZE).
- PIECES SMALLER THAN THE MINIMUM SIZE SHOWN SHALL NOT EXCEED 15% OF THE TONNAGE SHIPPED.
- RIP-RAP SHALL BE GROUTED WITH A NON-SHRINKING GROUT.

RIP RAP DETAIL
(DO NOT SCALE)

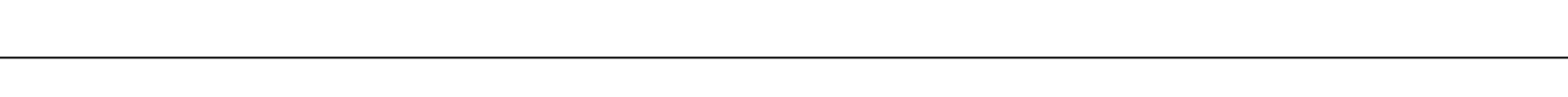
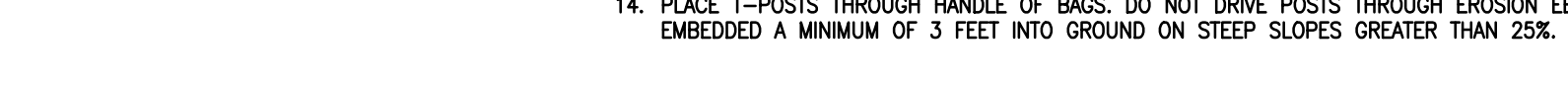
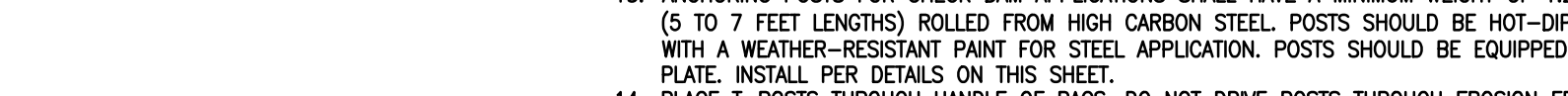
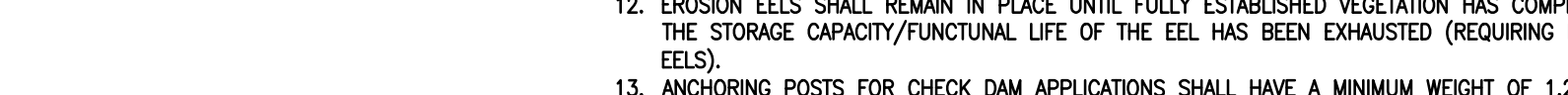
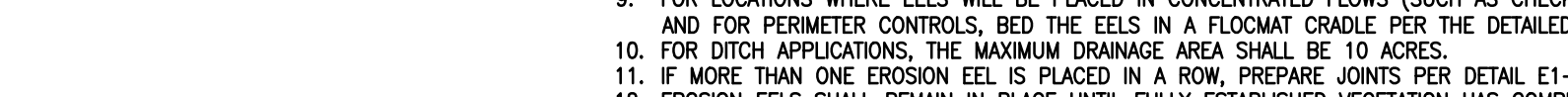
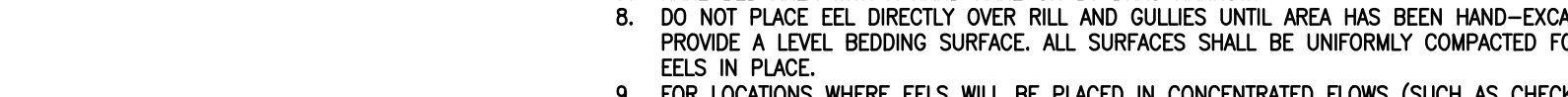
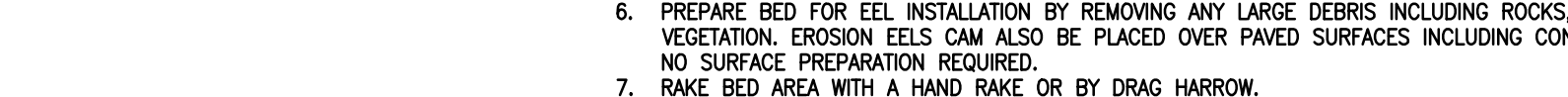
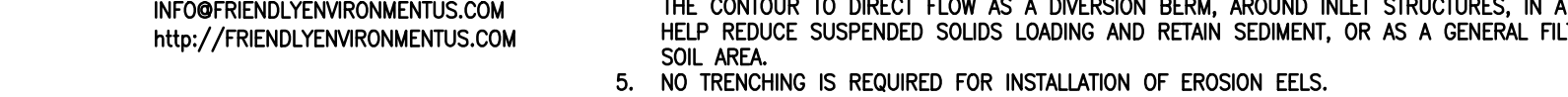
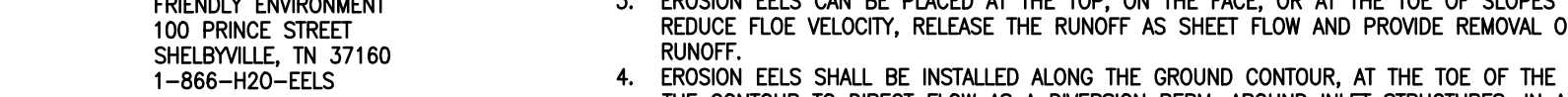
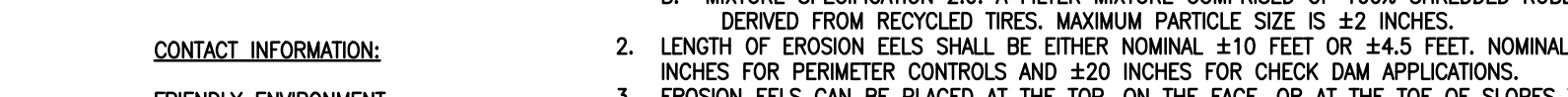
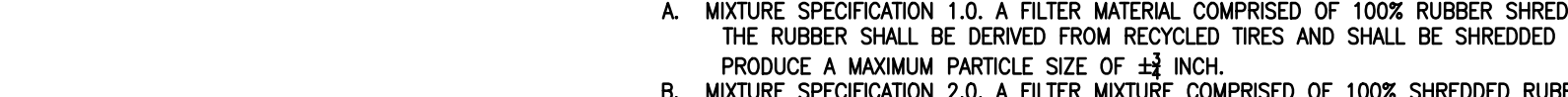
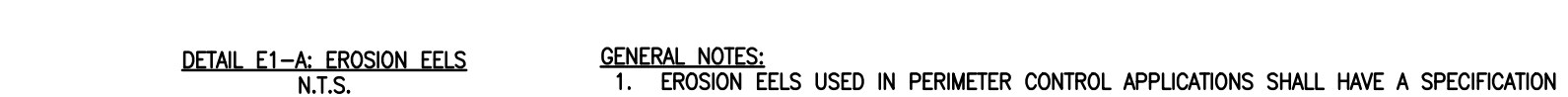
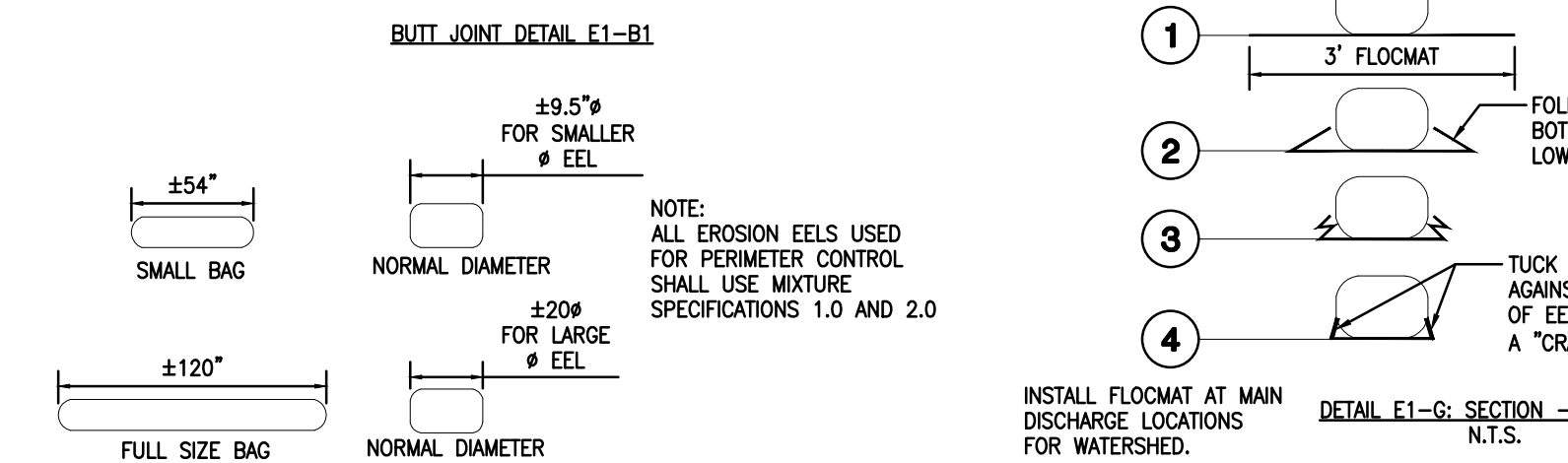
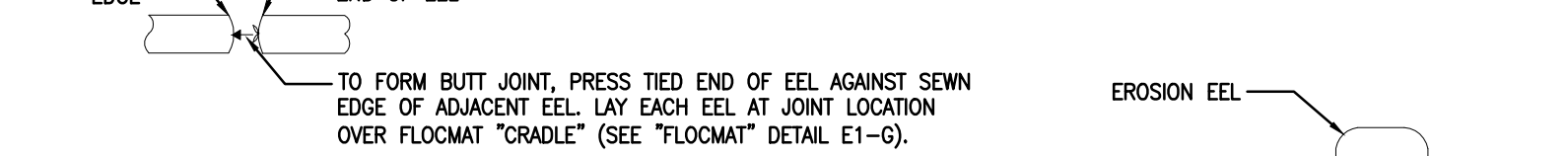
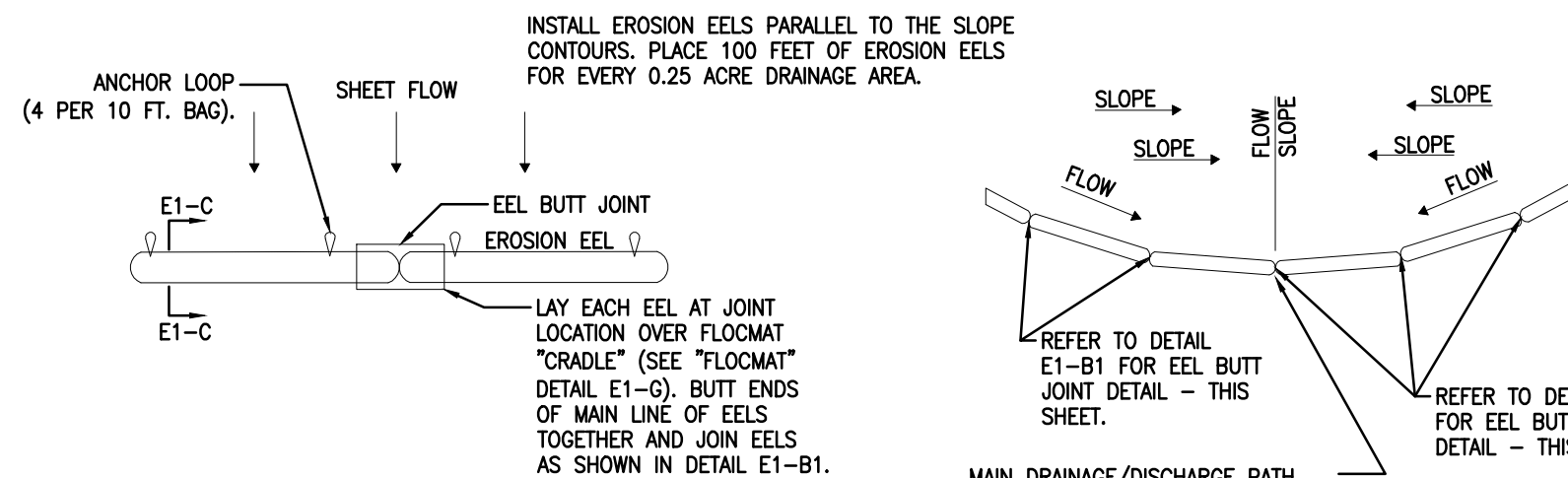
SD-4
C-4



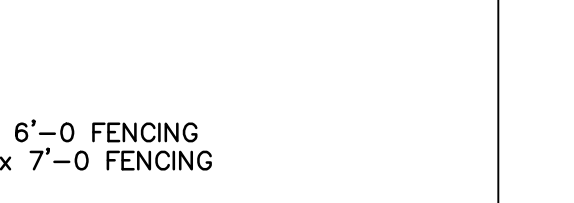
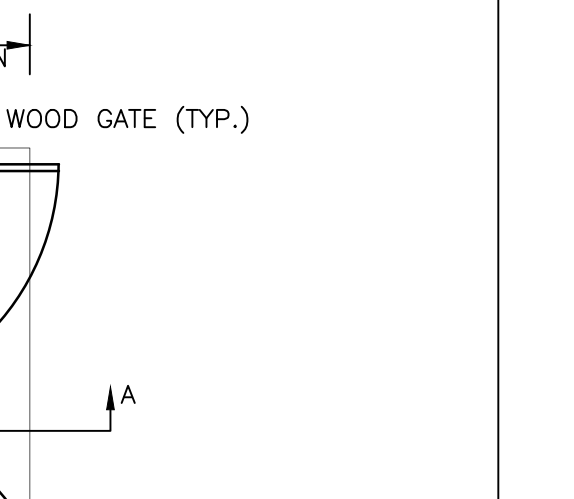
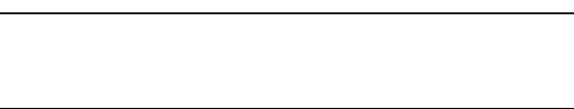
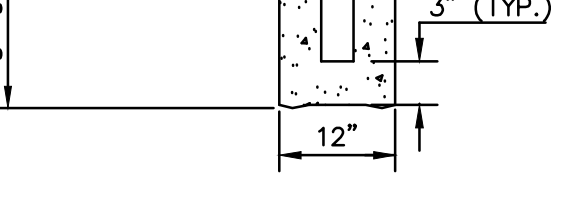
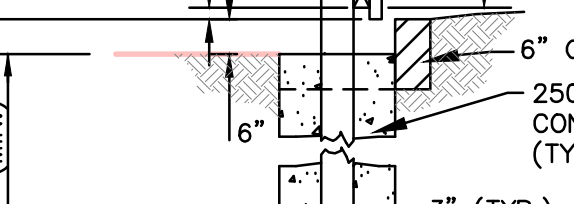
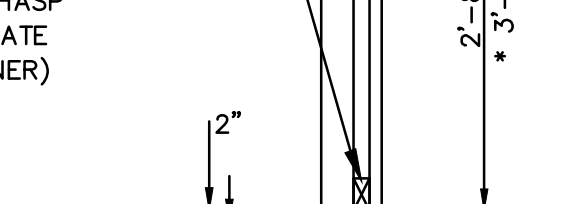
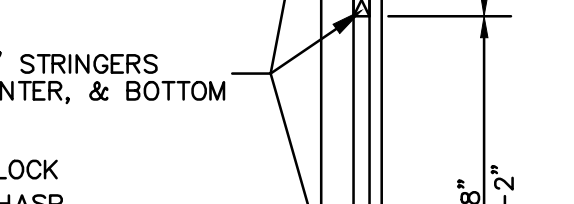
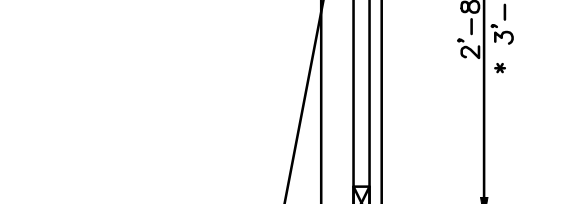
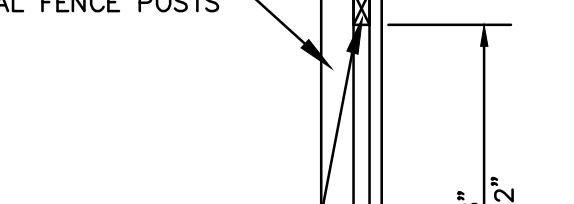
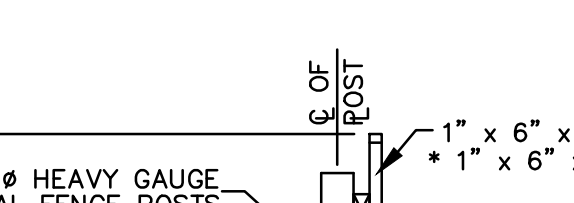
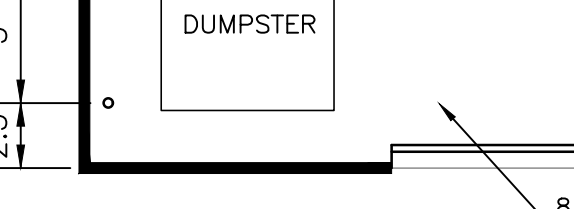
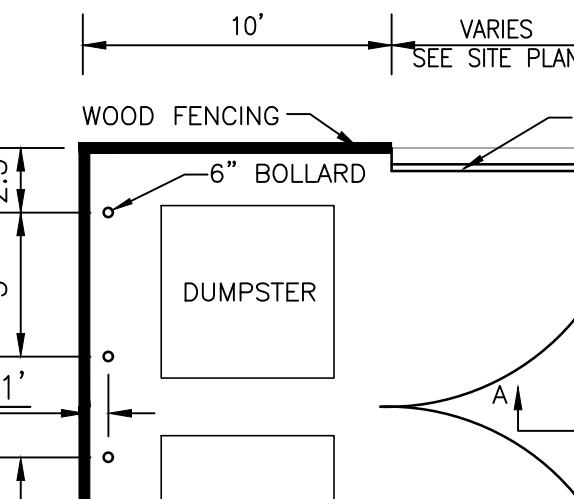
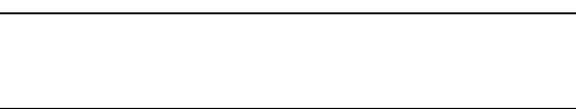
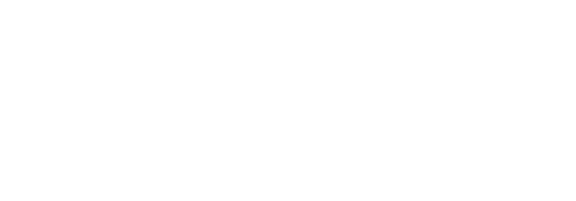
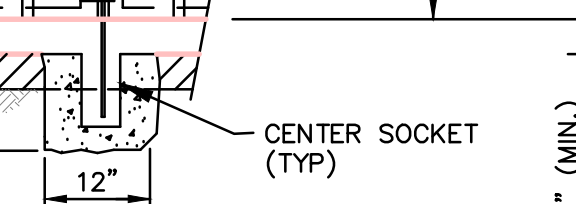
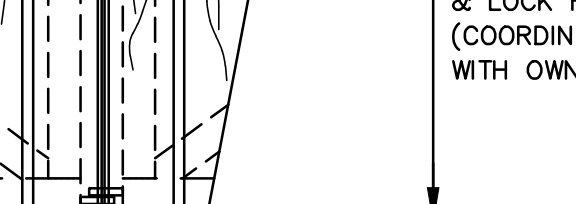
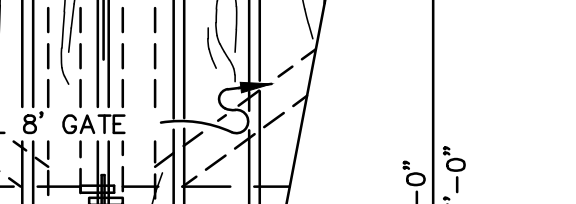
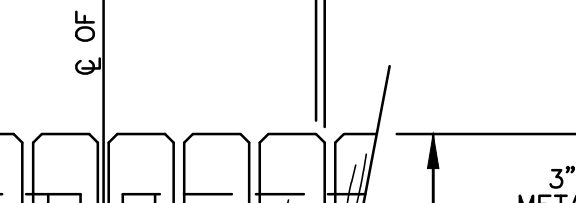
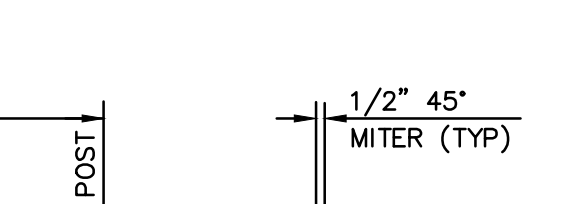
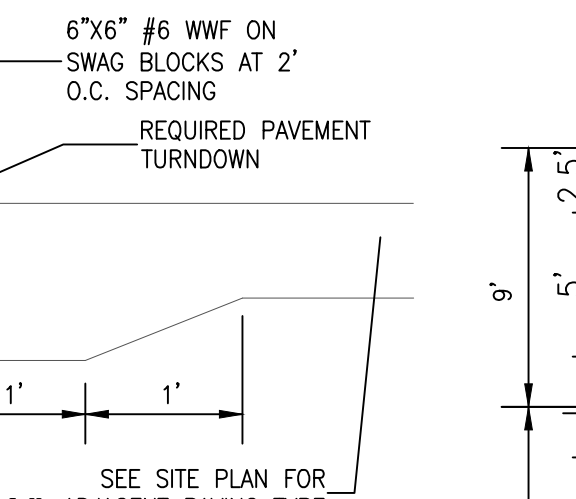
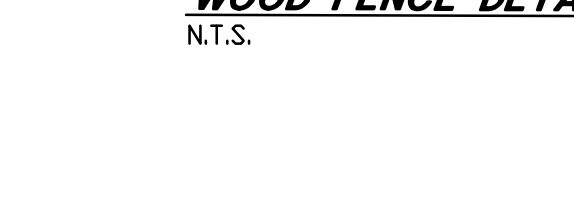
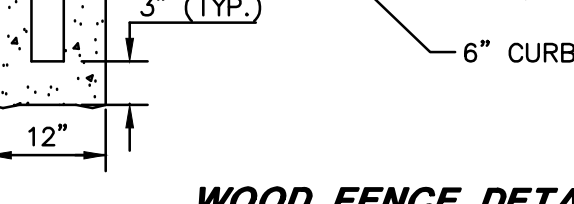
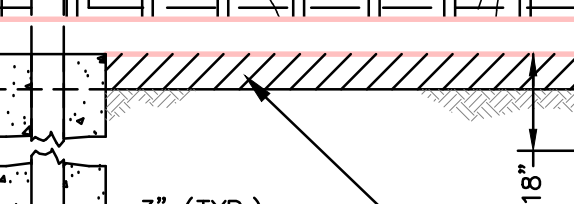
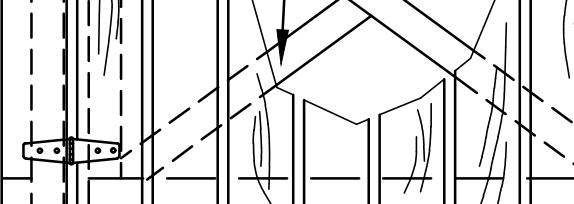
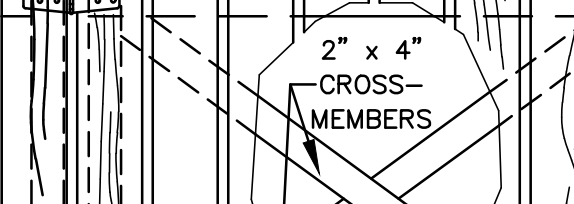
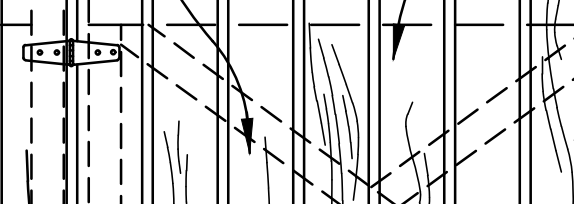
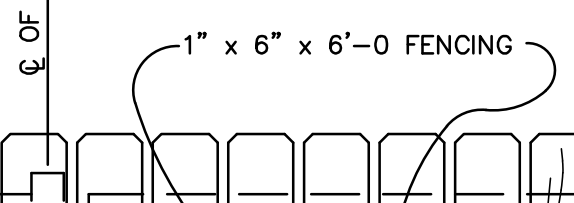
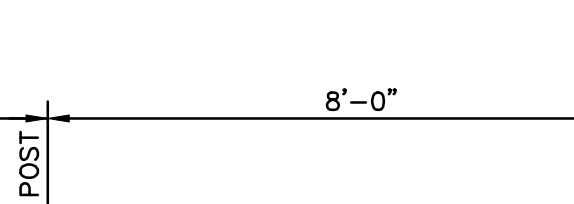
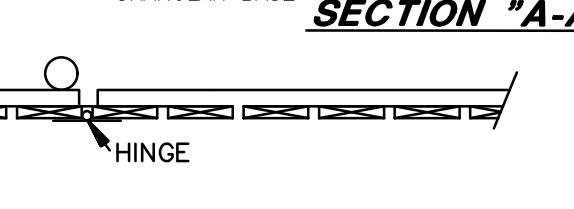
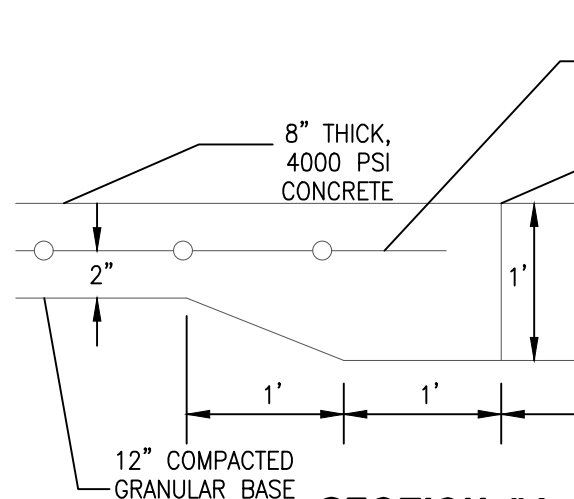
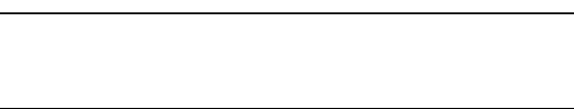
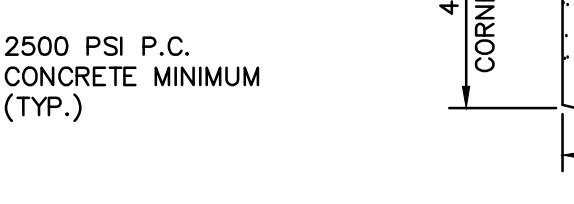
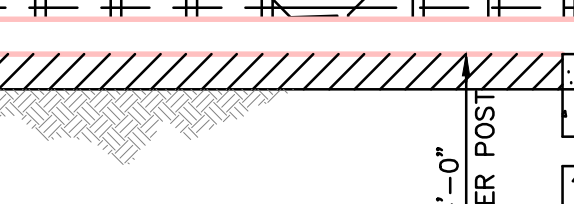
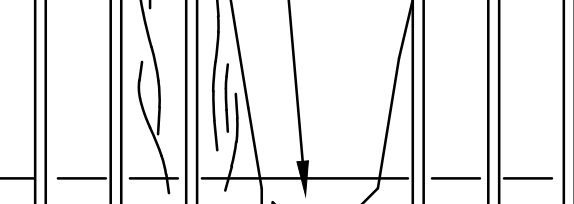
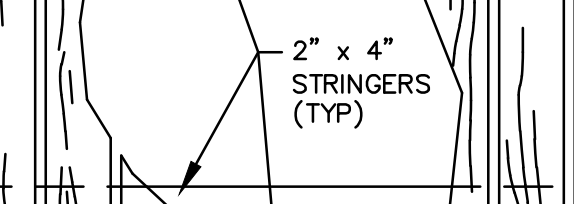
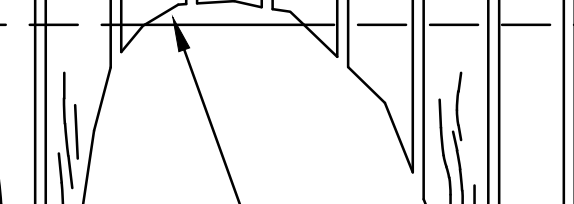
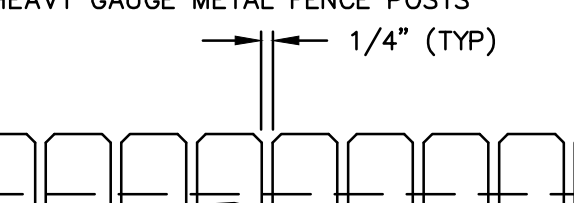
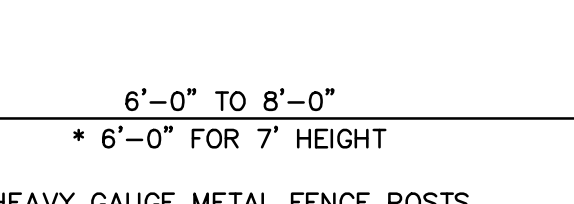
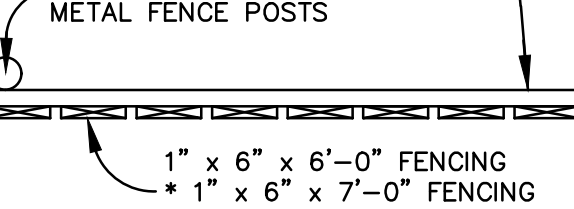
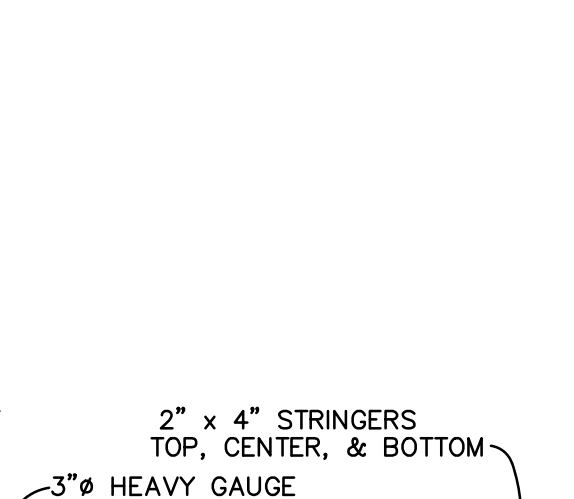
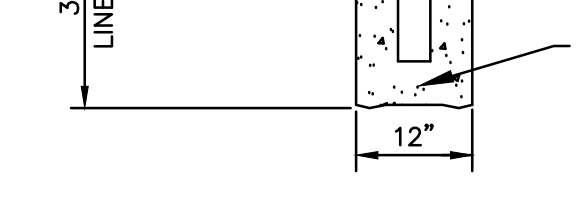
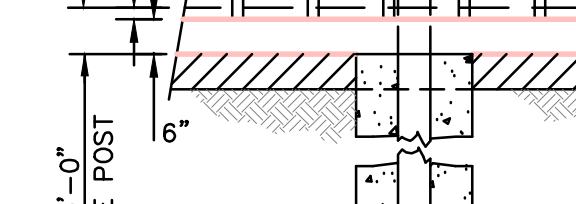
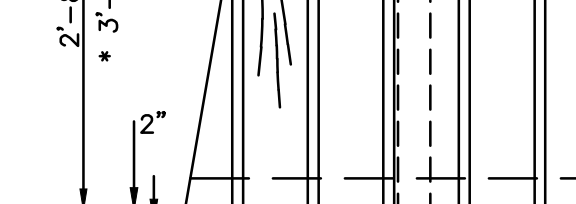
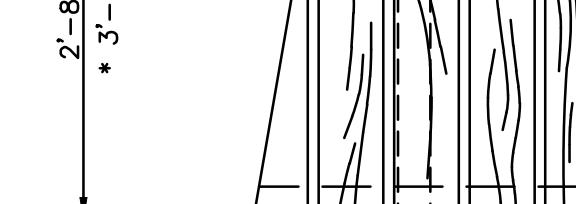
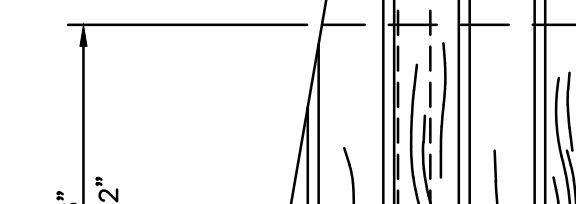
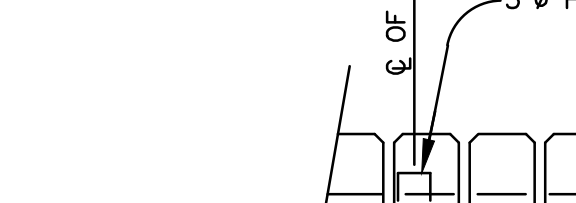
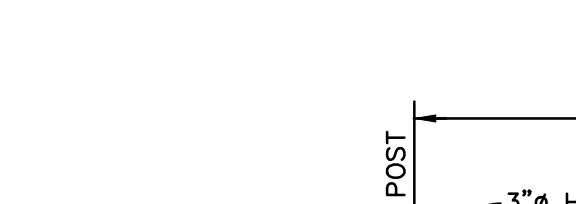
- NOTES:
- PIPE INLET PROTECTION SHALL BE INSPECTED WEEKLY AND AFTER MAJOR RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY.
 - CONTRACTOR TO REMOVE SEDIMENT FROM THE SEDIMENT STORAGE AREA WHEN THE DEPTH OF THE SEDIMENT HAS BUILT UP TO ONE-HALF OF THE DESIGN DEPTH.
 - IF DE-WATERING OF THE STORAGE VOLUME IS NOT OCCURRING, CLEAN AND/OR REPLACE THE FILTER STONE SURROUNDING THE INLET PIPE.
 - CONTRACTOR TO CLEAN THE STONE SURFACE THE FIRST FEW TIMES BY RAKING.
 - CONTRACTOR TO REPLACE FILTER STONE IF SEDIMENT BUILD-UP IS REPEATED.

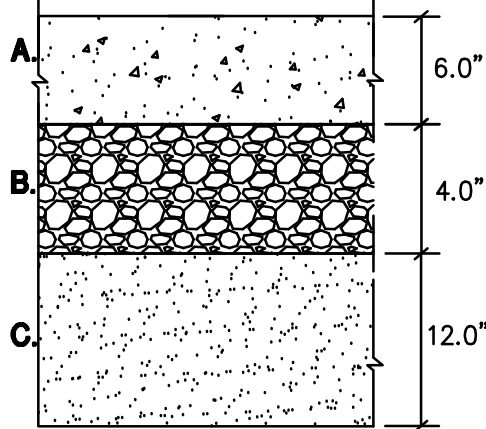
**STORM PIPE OUTLET PROTECTION FOR
30" AND SMALLER**
N.T.S.

SD-5
C-4



- WOOD FENCE NOTES
- ALL STRINGERS SHALL BE OSMOSIS TREATED OR PENTA TREATED PINE, TO BE APPROVED BY ENGINEER.
 - ALL FENCE SIDING SHALL BE UNTREATED CEDAR.
 - ALL METAL FASTENERS SUCH AS BOLTS, NAILS, HASPS, AND ETC. SHALL BE HOT DIPPED GALVANIZED.
 - FENCE DIRECTION AS NOTED ON PLANS OR AS DIRECTED BY OWNER.
 - SPLICE STRINGERS AT POSTS ONLY.
- FOR 7'-0" FENCE HEIGHT





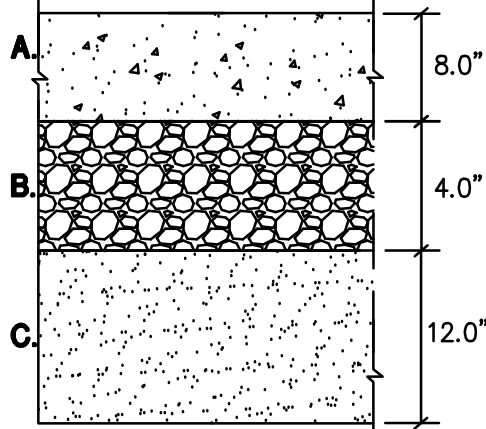
**STANDARD DUTY
CONCRETE PAVEMENT**
N.T.S.

STANDARD DUTY CONCRETE PAVEMENT

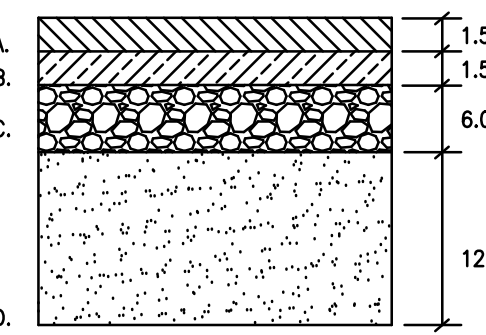
- A.** 6.0" PORTLAND CEMENT CONCRETE (4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS). THE CONCRETE SHALL BE DESIGNED WITH ± 1 PERCENT AIR ENTRAINED.
- B.** 4.0" OF AGGREGATE BASE, COMPACTED IN MAXIMUM LIFTS OF 8 INCHES TO AT LEAST 95 PERCENT OF THE AGGREGATE'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 STANDARD PROCTOR WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
- C.** 12.0" MIN. COMPACTED ENGINEERED FILL OR PROOFROLLED IN-SITU LEAN CLAY.
- NOTES:**
- 1) A WOVEN GEOTEXTILE CONSISTING OF MIRAFI 600X OR EQUIVALENT SHOULD BE PLACED OVER ANY SOFT SUBGRADE IN THE PARKING AREAS TO IMPROVE SOFT SOIL SUBGRADE CONDITIONS. REFER TO GEOTECHNICAL REPORT 65:1190 PREPARED BY ECS DATED MARCH 31, 2022.
 - 2) SUBGRADE SOILS SHALL BE SCARIFIED & COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 FOR A DEPTH OF AT LEAST 12' BELOW THE SURFACE. THE ACTUAL STRIPPING AND UNDERCUTTING DEPTH SHALL BE DETERMINED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION.
 - 3) ALL FILL SHALL BE FREE OF ORGANIC DELETERIOUS MATERIALS, HAVE A MAXIMUM PARTICLE SIZE LESS THAN 2 INCHES, A LIQUID LIMIT LESS THAN 40, AND A PLASTICITY INDEX OF BETWEEN 10 AND 25 FOR CLAY SOILS TO BE REUSED AS STRUCTURAL FILL AND BETWEEN 10 TO 15 TO ACCEPT CEMENT TREATMENT.
 - 4) ALL SUBGRADE, BASE & PAVEMENT CONSTRUCTION OPERATIONS SHOULD MEET MINIMUM REQUIREMENTS OF THE LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT.
 - 5) CONTROL JOINT SPACING SHALL BE A MAXIMUM OF 15 FEET IN EACH DIRECTION. IF SAWCUT, CONTROL JOINTS SHOULD BE CUT WITHIN 6 TO 12 HOURS OF CONCRETE PLACEMENT.
 - 6) EXPANSION JOINT SPACING SHALL BE A MAXIMUM OF 75 FT.
 - 7) REINFORCING STEEL AND DOWELS AT EXPANSION JOINTS SHALL BE $\frac{1}{2}$ INCH BARS, 18 INCHES IN LENGTH, WITH ONE END TREATED TO SLIP, SPACED AT 18 INCHES ON CENTERS IN EACH DIRECTION AT EACH JOINT.
 - 8) JOINTS SHALL BE FILLED WITH A PAVEMENT JOINT SEALING MATERIAL THAT MEETS THE REQUIREMENTS OF ASTM D3405 OR D1190.

HEAVY DUTY CONCRETE PAVEMENT

- A.** 8.0" PORTLAND CEMENT CONCRETE (4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS). THE CONCRETE SHALL BE DESIGNED WITH ± 1 PERCENT AIR ENTRAINED.
- B.** 4.0" OF AGGREGATE BASE, COMPACTED IN MAXIMUM LIFTS OF 8 INCHES TO AT LEAST 95 PERCENT OF THE AGGREGATE'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 STANDARD PROCTOR WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
- C.** 12.0" MIN. COMPACTED ENGINEERED FILL OR PROOFROLLED IN-SITU LEAN CLAY.
- NOTES:**
- 1) A WOVEN GEOTEXTILE CONSISTING OF MIRAFI 600X OR EQUIVALENT SHOULD BE PLACED OVER ANY SOFT SUBGRADE IN THE PARKING AREAS TO IMPROVE SOFT SOIL SUBGRADE CONDITIONS. REFER TO GEOTECHNICAL REPORT 65:1190 PREPARED BY ECS DATED MARCH 31, 2022.
 - 2) SUBGRADE SOILS SHALL BE SCARIFIED & COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 FOR A DEPTH OF AT LEAST 12' BELOW THE SURFACE. THE ACTUAL STRIPPING AND UNDERCUTTING DEPTH SHALL BE DETERMINED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION.
 - 3) ALL FILL SHALL BE FREE OF ORGANIC DELETERIOUS MATERIALS, HAVE A MAXIMUM PARTICLE SIZE LESS THAN 2 INCHES, A LIQUID LIMIT LESS THAN 40, AND A PLASTICITY INDEX OF BETWEEN 10 AND 25 FOR CLAY SOILS TO BE REUSED AS STRUCTURAL FILL AND BETWEEN 10 TO 15 TO ACCEPT CEMENT TREATMENT.
 - 4) ALL SUBGRADE, BASE & PAVEMENT CONSTRUCTION OPERATIONS SHOULD MEET MINIMUM REQUIREMENTS OF THE LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT.
 - 5) CONTROL JOINT SPACING SHALL BE A MAXIMUM OF 15 FEET IN EACH DIRECTION. IF SAWCUT, CONTROL JOINTS SHOULD BE CUT WITHIN 6 TO 12 HOURS OF CONCRETE PLACEMENT.
 - 6) EXPANSION JOINT SPACING SHALL BE A MAXIMUM OF 75 FT.
 - 7) REINFORCING STEEL AND DOWELS AT EXPANSION JOINTS SHALL BE $\frac{1}{2}$ INCH BARS, 18 INCHES IN LENGTH, WITH ONE END TREATED TO SLIP, SPACED AT 18 INCHES ON CENTERS IN EACH DIRECTION AT EACH JOINT.
 - 8) JOINTS SHALL BE FILLED WITH A PAVEMENT JOINT SEALING MATERIAL THAT MEETS THE REQUIREMENTS OF ASTM D3405 OR D1190.

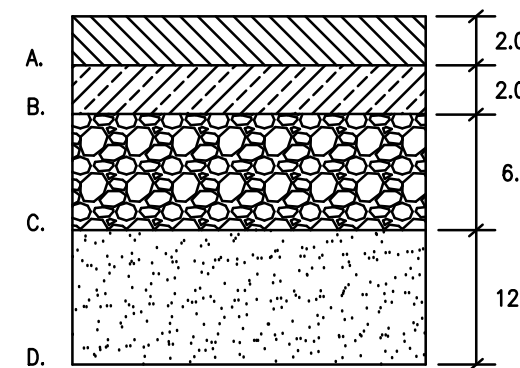


**HEAVY DUTY
CONCRETE PAVEMENT**
N.T.S.



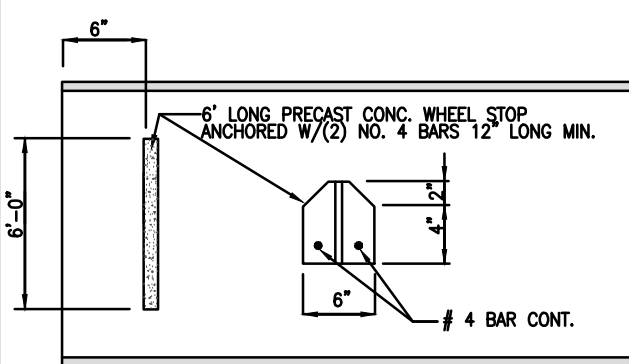
**LIGHT DUTY
ASPHALTIC PAVEMENT**
N.T.S.

- A.** 1.5" ASPHALTIC CONCRETE WEARING COURSE
- B.** 1.5" ASPHALTIC CONCRETE BINDER COURSE
- C.** 6.0" AGGREGATE BASE, COMPACTED IN MAXIMUM LIFTS OF 8 INCHES TO AT LEAST 95 PERCENT OF THE AGGREGATE'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 STANDARD PROCTOR WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
- D.** 12.0" MIN. COMPACTED ENGINEERED FILL OR PROOFROLLED IN-SITU LEAN CLAY.
- NOTES:**
- 1) THE ASPHALTIC CONCRETE SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE LOUISIANA STANDARD SPECIFICATION FOR ROADS AND BRIDGES (LSSRB) AND SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE DENSITY OF THE LABORATORY MOLDED SPECIMEN.
 - 2) THE CLASS II BASE SHALL MEET LSSRB, SECTION 1003.03.
 - 3) ALL SUBGRADE, BASE & PAVEMENT CONSTRUCTION OPERATIONS SHALL MEET THE MINIMUM REQUIREMENTS OF THE LOUISIANA DEPARTMENT OF TRANSPORTATION.
 - 4) SHOULD SOFT SOIL CONDITIONS BE ENCOUNTERED, A WOVEN GEOTEXTILE CONSISTING OF MIRAFI 600X OR EQUIVALENT SHALL BE PLACED OVER THE SOFT SOIL SUBGRADE IN THE PAVEMENT AREAS TO IMPROVE ITS CONDITION. THE GEOTEXTILE, WHICH IS SOLD IN ROLLS OF VARIOUS SIZES, SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND BE OVERLAPPED A MINIMUM OF TWO (2) FEET. REFERENCE ECS GEOTECHNICAL REPORT 65:1190 FOR MORE INFORMATION.

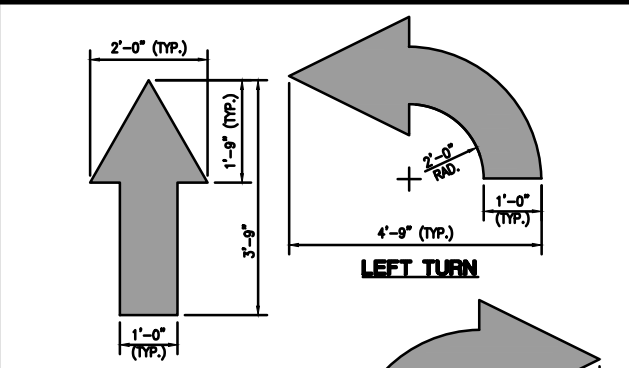


**MEDIUM DUTY
ASPHALTIC PAVEMENT**
N.T.S.

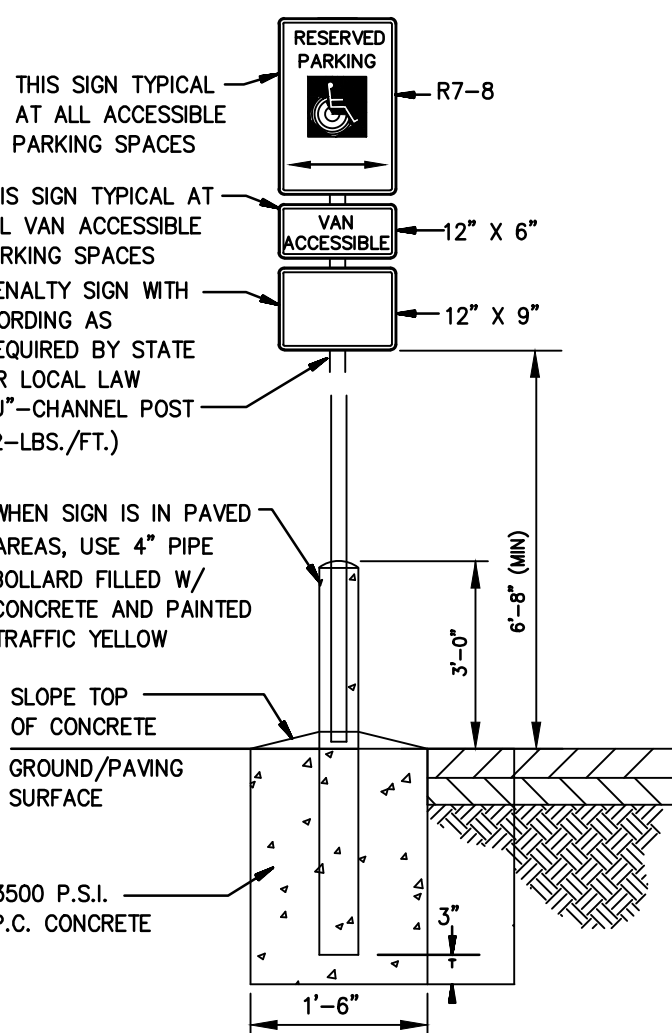
- A.** 2.0" ASPHALTIC CONCRETE WEARING COURSE
- B.** 2.0" ASPHALTIC CONCRETE BINDER COURSE
- C.** 6.0" AGGREGATE BASE, COMPACTED IN MAXIMUM LIFTS OF 8 INCHES TO AT LEAST 95 PERCENT OF THE AGGREGATE'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 STANDARD PROCTOR WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
- D.** 12.0" MIN. COMPACTED ENGINEERED FILL OR PROOFROLLED IN-SITU LEAN CLAY.
- NOTES:**
- 1) THE ASPHALTIC CONCRETE SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE LOUISIANA STANDARD SPECIFICATION FOR ROADS AND BRIDGES (LSSRB) AND SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE DENSITY OF THE LABORATORY MOLDED SPECIMEN.
 - 2) THE CLASS II BASE SHALL MEET LSSRB, SECTION 1003.03.
 - 3) ALL SUBGRADE, BASE & PAVEMENT CONSTRUCTION OPERATIONS SHALL MEET THE MINIMUM REQUIREMENTS OF THE LOUISIANA DEPARTMENT OF TRANSPORTATION.
 - 4) SHOULD SOFT SOIL CONDITIONS BE ENCOUNTERED, A WOVEN GEOTEXTILE CONSISTING OF MIRAFI 600X OR EQUIVALENT SHALL BE PLACED OVER THE SOFT SOIL SUBGRADE IN THE PAVEMENT AREAS TO IMPROVE ITS CONDITION. THE GEOTEXTILE, WHICH IS SOLD IN ROLLS OF VARIOUS SIZES, SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND BE OVERLAPPED A MINIMUM OF TWO (2) FEET. REFERENCE ECS GEOTECHNICAL REPORT 65:1190 FOR MORE INFORMATION.



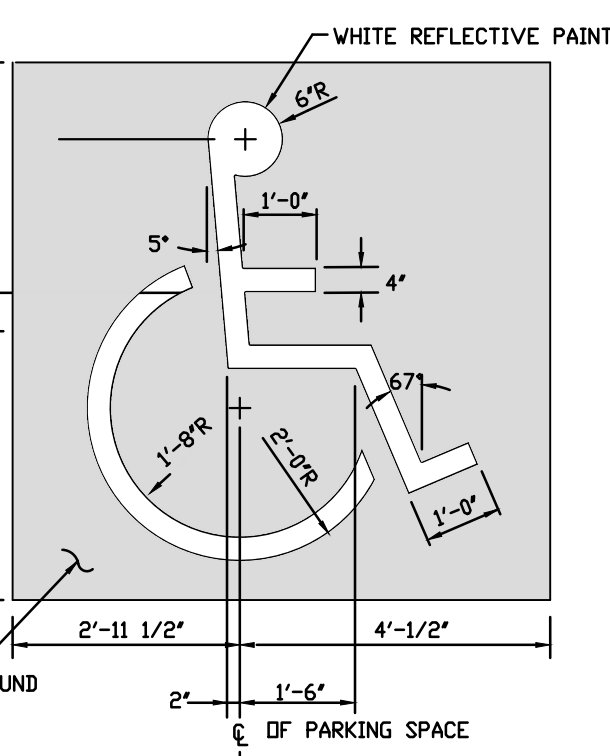
CONCRETE WHEEL STOP
N.T.S.



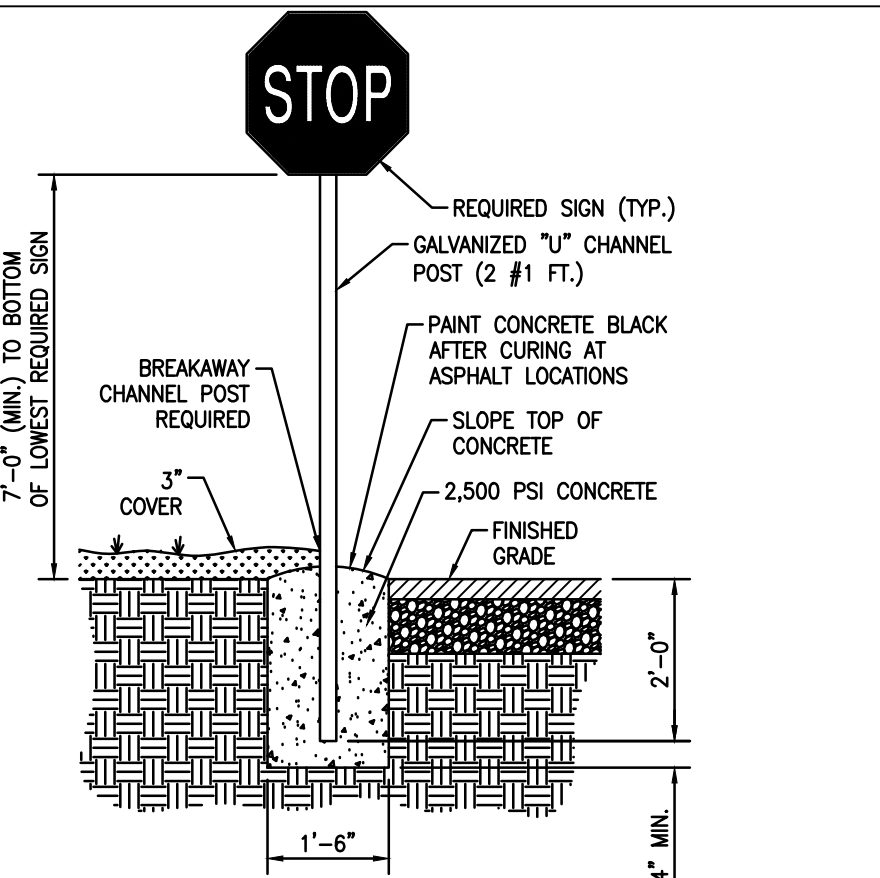
**INTERNAL TRAFFIC
FLOW ARROW DETAIL**
N.T.S.



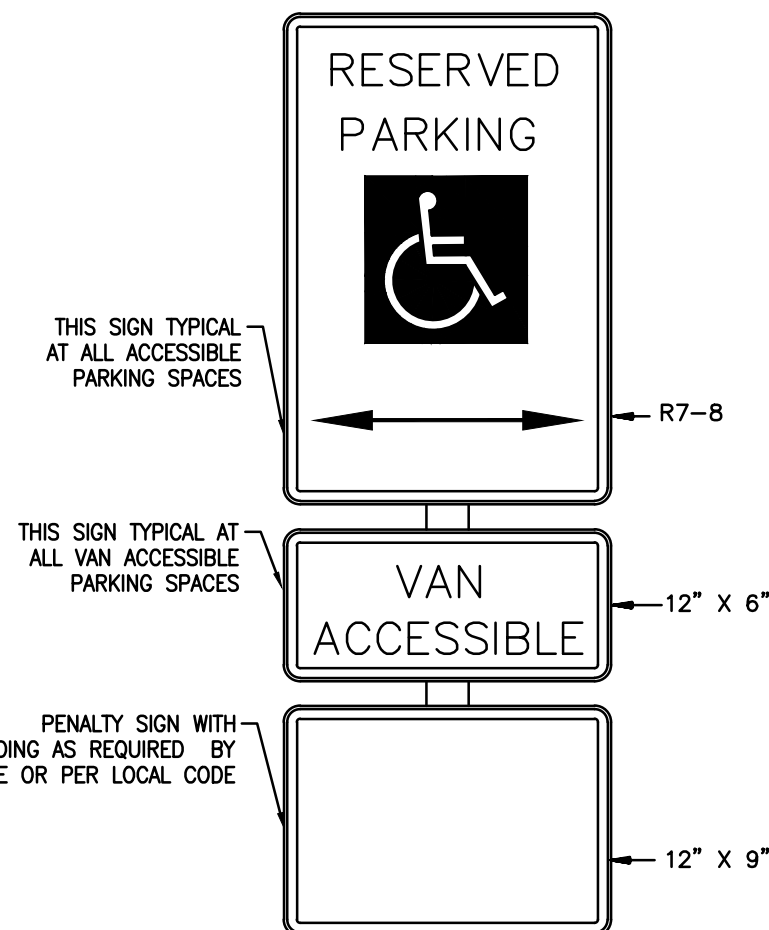
ACCESSIBLE PARKING SIGN
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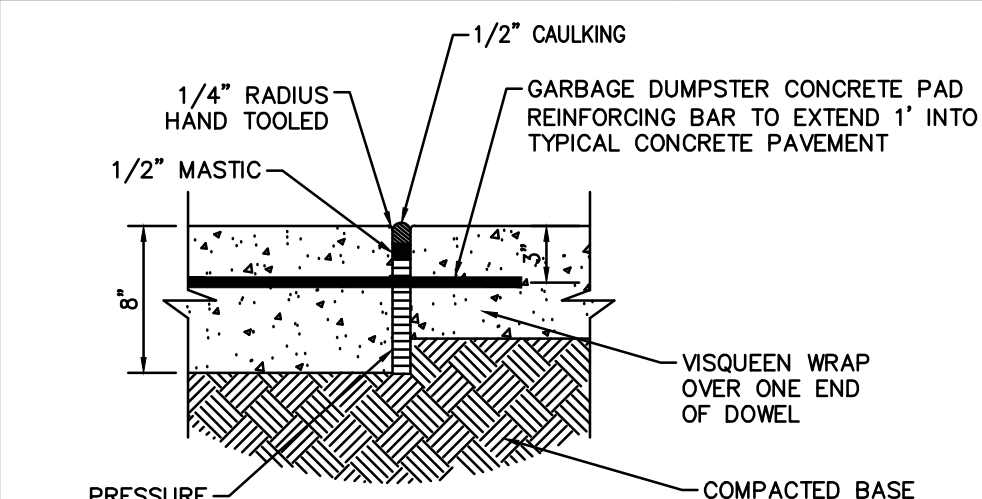
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**STANDARD SIGN
POST DETAIL**
N.T.S.

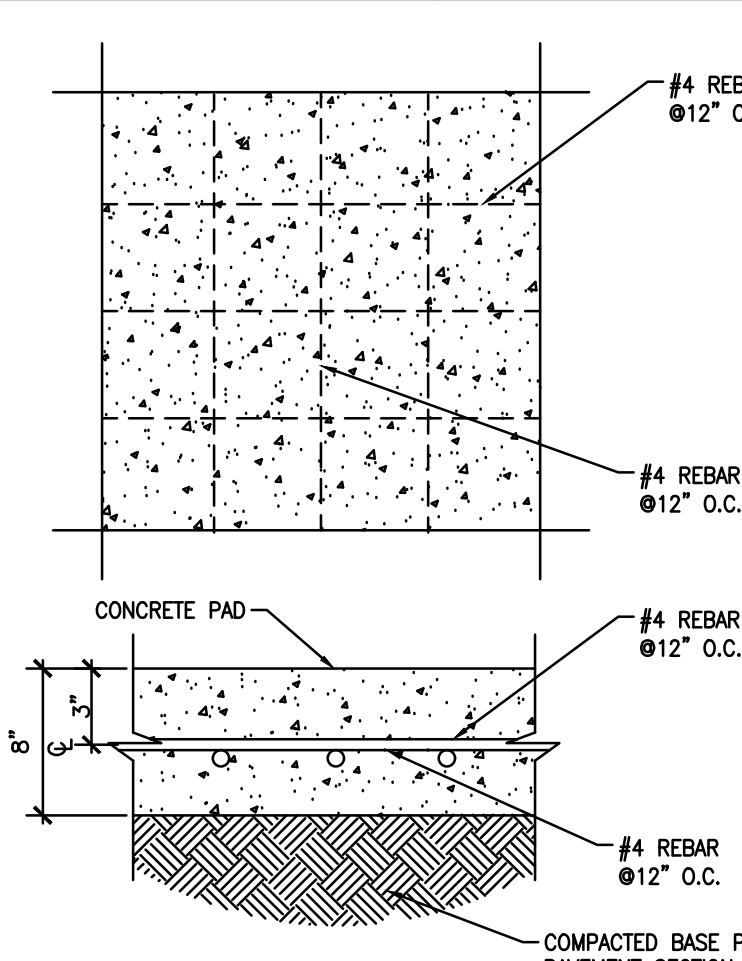


ACCESSIBLE PARKING SIGN
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EXPANSION JOINT

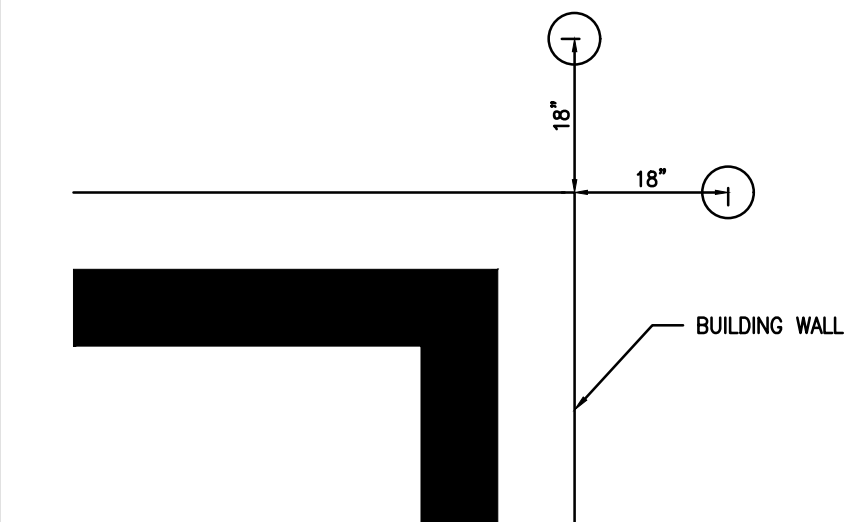
- NOTES:**
1. REFER TO SITE PLAN FOR LOCATION OF GARBAGE DUMPSTER CONCRETE PAD.
 2. CONCRETE IN FRONT OF DUMPSTER ENCLOSURE IS TO BE 8" THICK. SEE SITE PLAN FOR LOCATIONS.
 3. TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT INTERVALS THAT WILL PROVIDE A SLAB SIZE THAT DOES NOT EXCEED 15' BY 15'.
 4. A MINIMUM OF 2" OF COVER SHALL BE PROVIDED FOR ALL REBAR AT LOCATIONS WHERE SLAB DOES NOT CONNECT TO CONCRETE PAVEMENT.



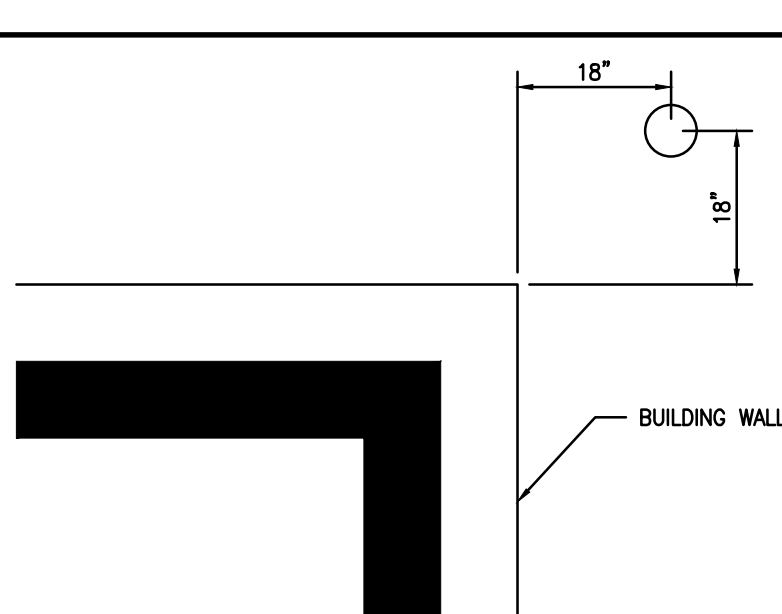
REBAR LAYOUT

HEAVY DUTY CONCRETE DUMPSTER PAD DETAIL

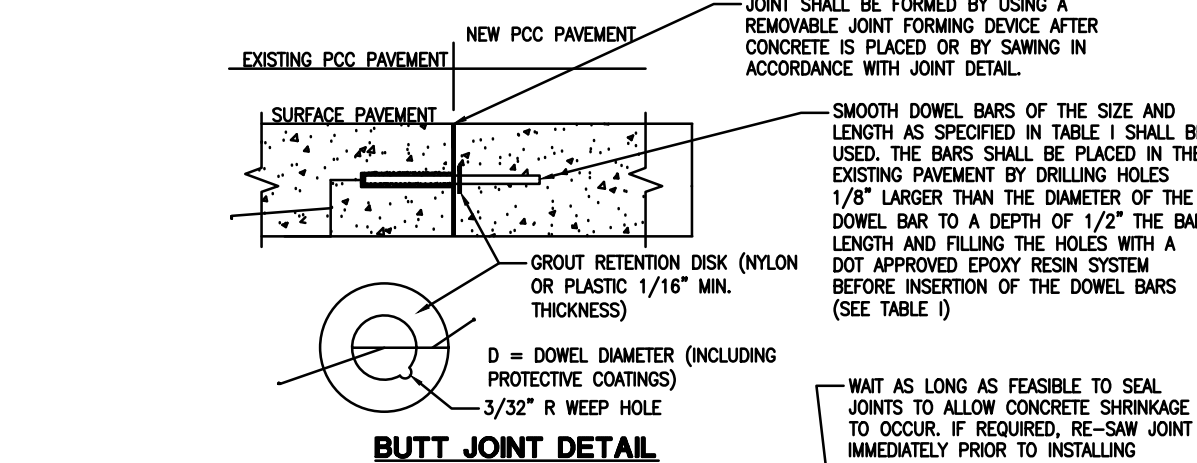
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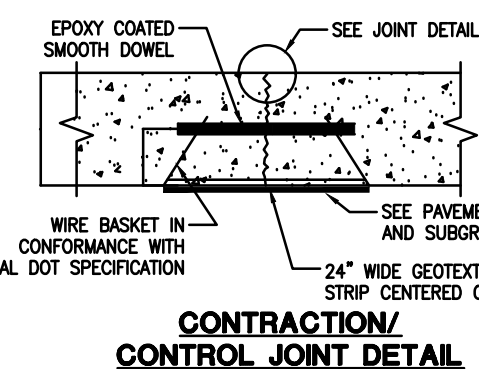
**ALTERNATE BOLLARD
PLACEMENT DETAIL**
N.T.S.



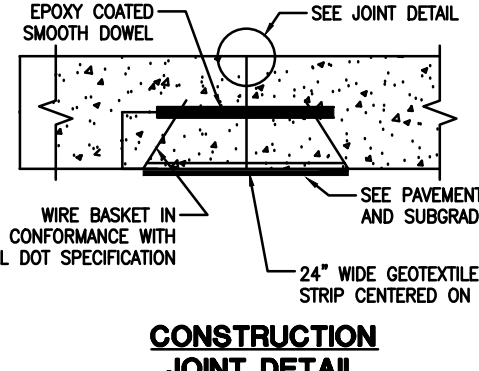
**TYPICAL BOLLARD
PLACEMENT DETAIL**
N.T.S.



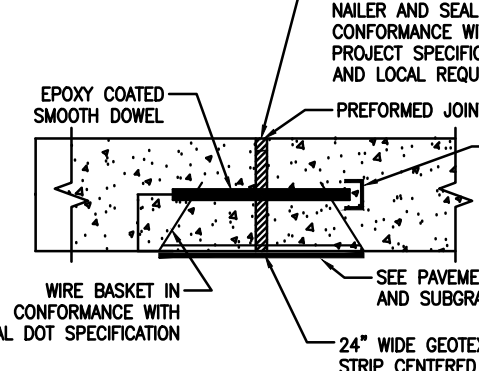
BUTT JOINT DETAIL



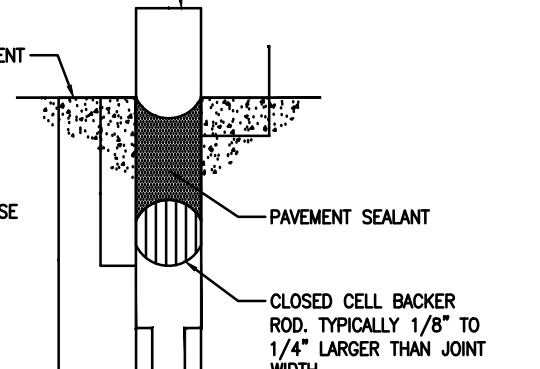
**CONTRACTION/
CONTROL JOINT DETAIL**



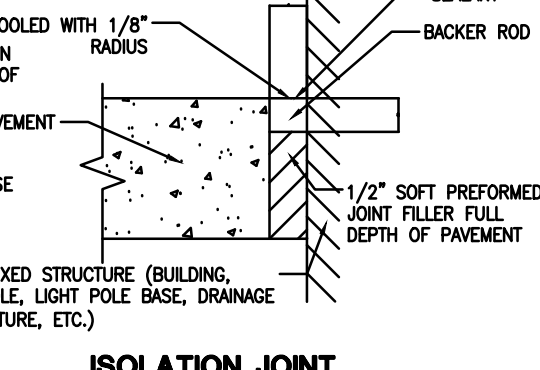
**CONSTRUCTION
JOINT DETAIL**



**EXPANSION
JOINT DETAIL**



JOINT DETAIL



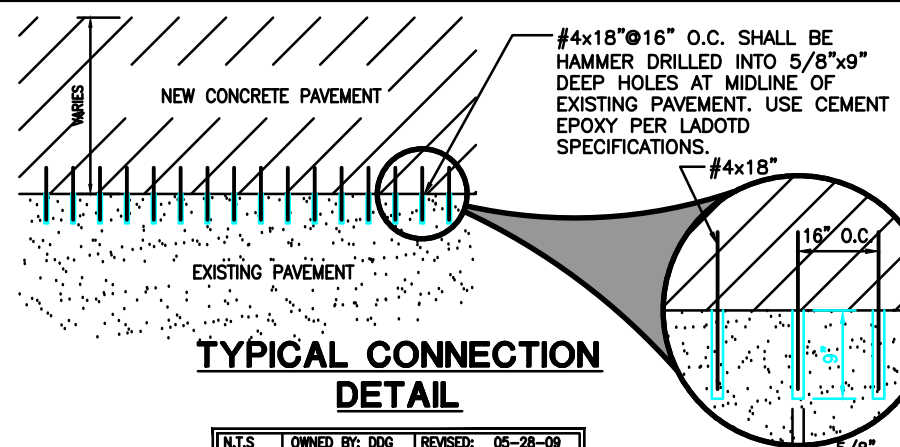
**ISOLATION JOINT
AT STRUCTURES**

CONCRETE JOINT DETAILS
N.T.S.

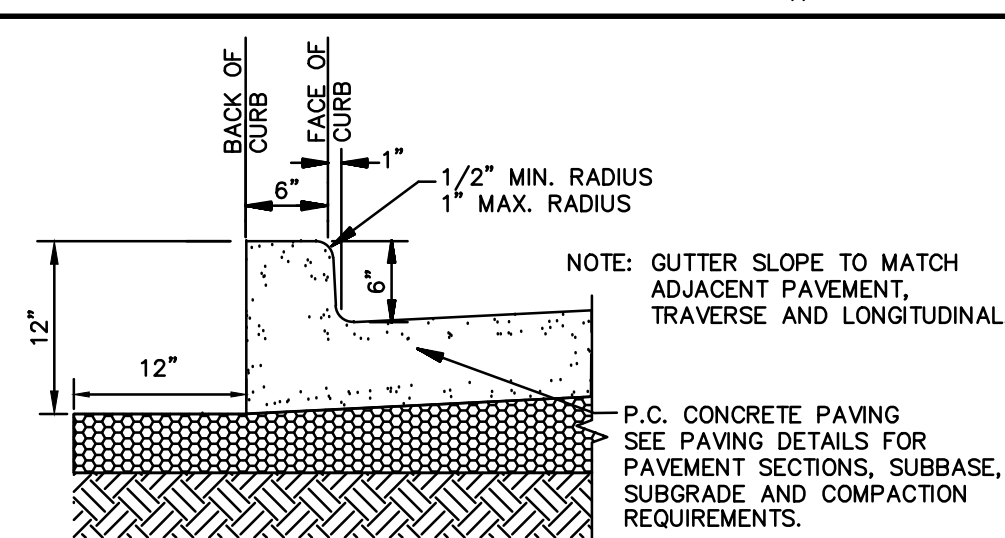
TABLE 1

PAVEMENT THICKNESS	SMOOTH DOWEL BARS				MINIMUM JOINT DEPTH
" T " (IN)	SIZE Ø (IN)	LENGTH (IN)	SPACING (IN)	" D " (IN)	
5"	1/2"	12"	18"	1 1/2"	
6"	3/4"	14"	12"	1 3/4"	
7"	1"	16"	12"	2"	
8"	1 1/4"	18"	12"	3"	
9"	1 1/4"	18"	12"	3"	
10"	1 1/4"	18"	12"	3 1/4"	

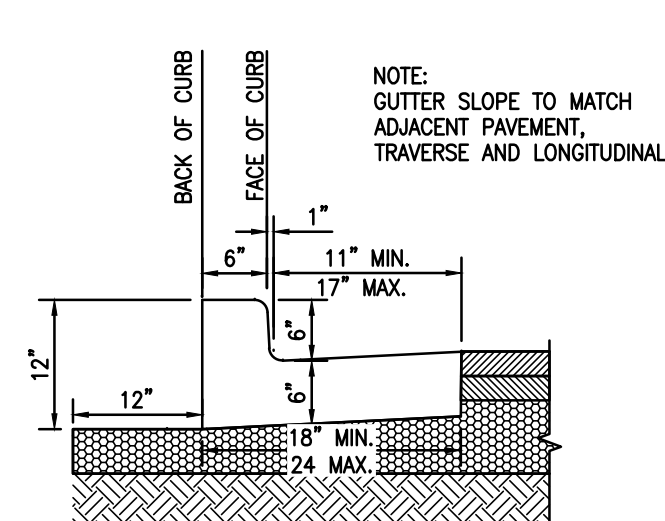
- NOTES:**
1. JOINTS SHALL BE SAWCUT AS SOON AS THE CONCRETE HAS REACHED SUFFICIENT STRENGTH TO SUPPORT THE SAWING EQUIPMENT AND TEARING OF CONCRETE DOES NOT OCCUR.
 2. GEOTEXTILE FABRIC SHALL BE CONSTRUCTED OF NON-WOVEN POLYPROPYLENE FIBERS RESISTANT TO CHEMICAL ATTACK, MELDOW, AND ROT. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A GEOTEXTILE AND OTHER MATERIALS SUBMITTAL FOR APPROVAL.
 3. CONSTRUCT EXPANSION, WEAKENED PLANE CONTROL (CONTRACTION), AND CONSTRUCTION JOINTS STRAIGHT WITH FACE PERPENDICULAR TO CONCRETE SURFACE.
 4. CONSTRUCT CONTROL JOINTS FOR DEPTH EQUAL TO AT LEAST 1/4 OF THE CONCRETE THICKNESS AS FOLLOWS:
A. FORM TOOLED JOINTS IN FRESH CONCRETE BY GROOVING TOP WITH RECOMMENDED TOOL AND FINISHING EDGE WITH JOINTER.
B. FORM SAWED JOINTS USING POWERED SAWS EQUIPPED WITH SHATTERPROOF ABRASIVE OR DIAMOND RANDED BLADES. CUT JOINTS INTO HARDENED CONCRETE AS SOON AS SURFACE WILL NOT BE TORN, ABRADED, OR OTHERWISE DAMAGED BY CUTTING ACTION.
 5. CONSTRUCTION JOINTS: PLACE CONSTRUCTION JOINTS AT END OF PLACEMENTS AND AT LOCATIONS WHERE PLACEMENTS OPERATIONS ARE STOPPED FOR PERIOD OF MORE THAN 1/2 HOUR, EXCEPT WHERE SUCH PLACEMENTS TERMINATE AT EXPANSION JOINTS. CONSTRUCT JOINTS IN ACCORDANCE WITH DETAILS.
 6. EXPANSION JOINTS: LOCATE EXPANSION JOINTS AT MAXIMUM OF 75'-0" ON CENTERS, MAXIMUM EACH WAY UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS. PROVIDE PRE-MOLDED JOINT FILLER FOR EXPANSION JOINTS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, SEEDBANKS, AND OTHER FIXED OBJECTS.
 7. BUTT JOINTS: FOR JOINTS AGAINST EXISTING PAVEMENT, PLACE DOWELS OF THE SIZE INDICATED IN TABLE 1 INTO HOLES DRILLED INTO CENTER OF EXISTING SLAB. EPOXY DOWELS INTO HOLES WITH APPROVED EPOXY COMPOUND. PLACE DOWELS PRIOR TO CONCRETE PLACEMENT FOR NEW CONCRETE. DOWEL SPACING TO BE AS INDICATED IN TABLE 1. SAW JOINTS AND FILL WITH JOINT SEALER.
 8. JOINT FILLERS: EXTEND JOINT FILLER FULL WIDTH AND DEPTH OF JOINT, AND NOT LESS THAN 1/2-INCH OR MORE THAN 1-INCH BELOW FINISHED SURFACE WHERE JOINT SEALER IS INDICATED. FURNISH JOINT FILLERS IN 1' PIECE LENGTHS FOR FULL WIDTH BEING PLACED, WHEREVER POSSIBLE. WHERE MORE THAN 1' LENGTH IS REQUIRED LACE OR CLIP JOINT FILLER SECTIONS TOGETHER.
 9. JOINT SEALANTS: JOINTS SHALL BE SEALED WITH APPROVED EXTERIOR PAVEMENT JOINT SEALANTS AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 10. DOWELS SHALL NOT BE PLACED CLOSER THAN 12" TO A JOINT INTERSECTION.



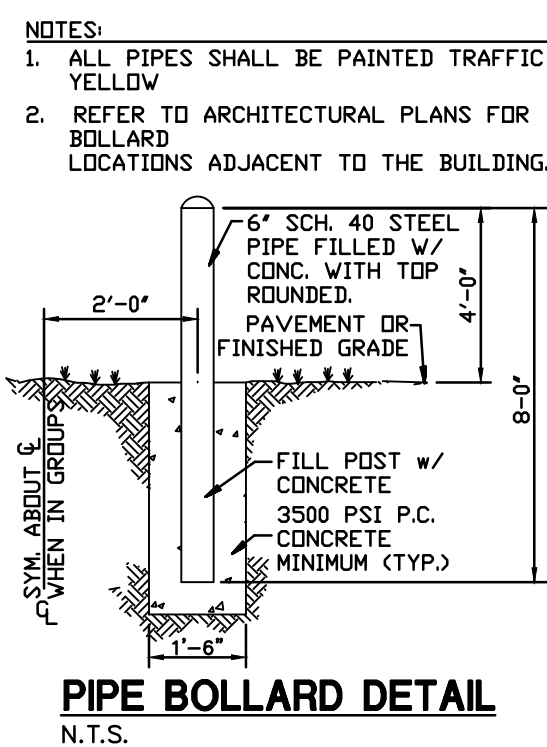
**TYPICAL CONNECTION
DETAIL**
N.T.S.



TYPE "B" CURB & GUTTER
(FOR USE EXCLUSIVELY WITH CONCRETE PAVEMENT)
N.T.S.



**TYPE "A" CONCRETE
CURB AND GUTTER**
N.T.S.



PIPE BOLLARD DETAIL
N.T.S.

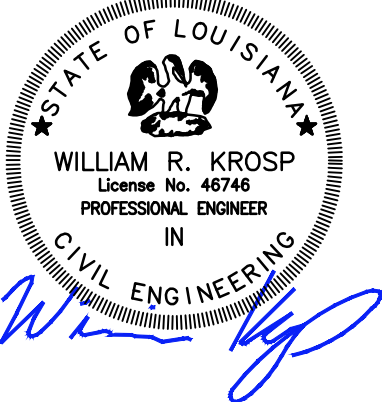
DETAILS

EXPRESS OIL CHANGE

DENHAM SPRINGS, LA
LIVINGSTON PARISH
EXPRESS OIL CHANGE & TIRE
ENGINEERS

DDG

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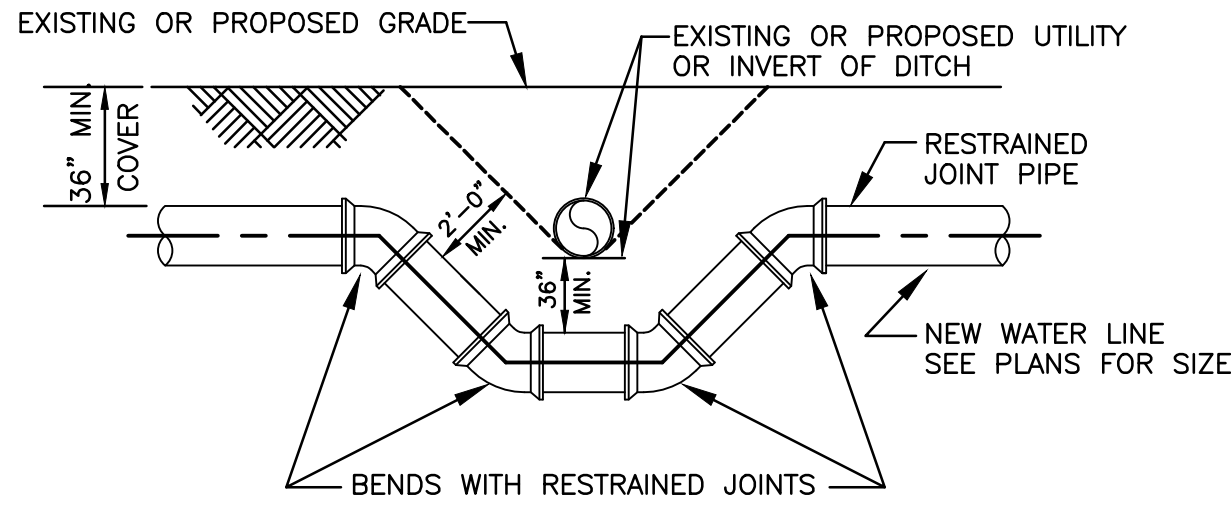
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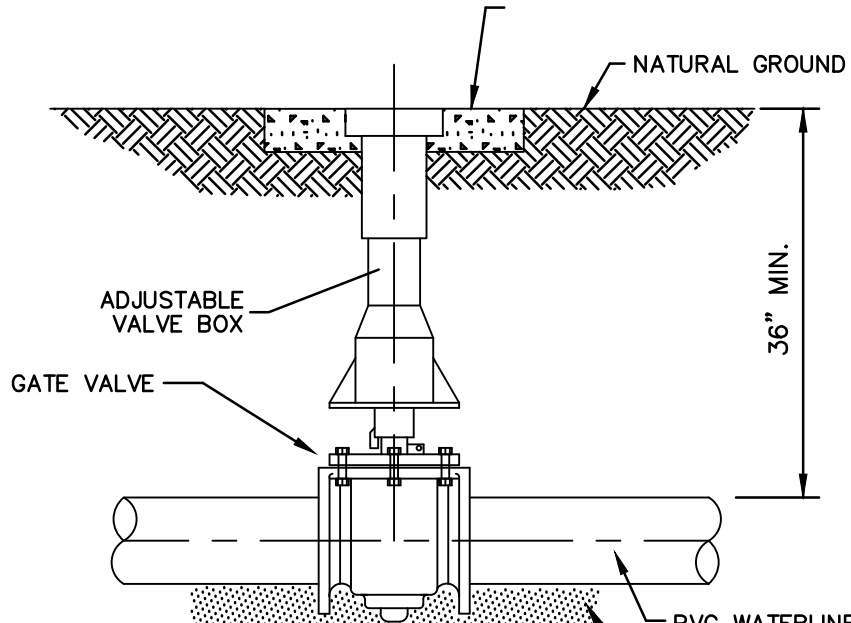
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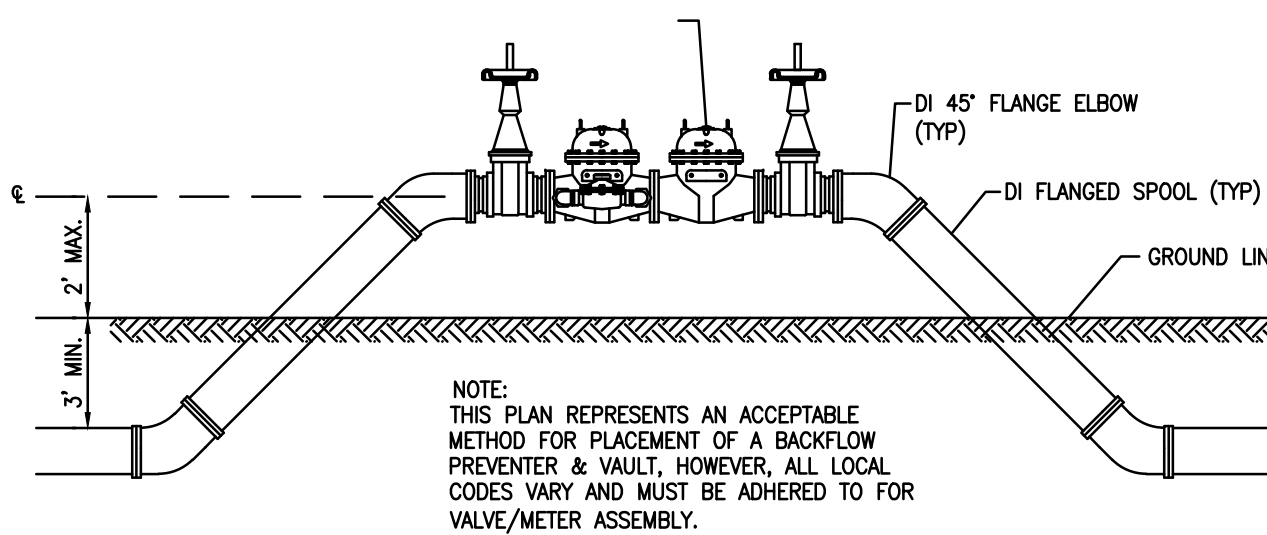
C-6



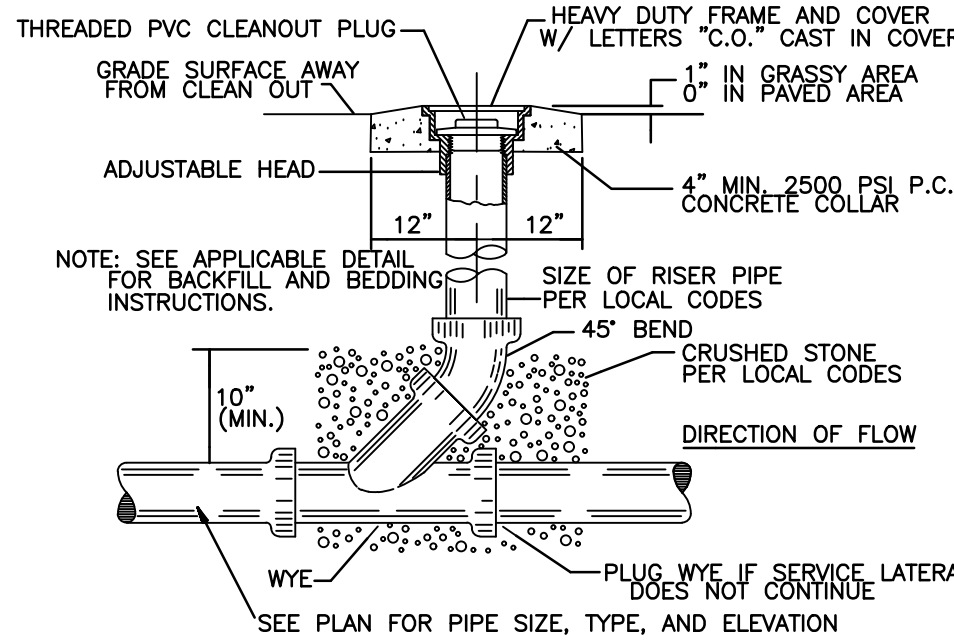
PROPOSED WATER LINE OFFSET DETAIL
N.T.S.



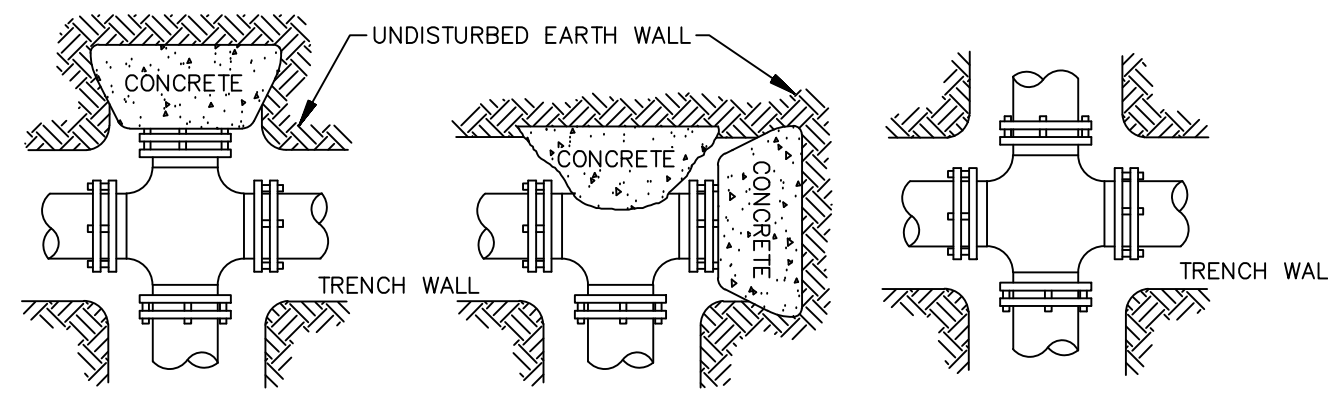
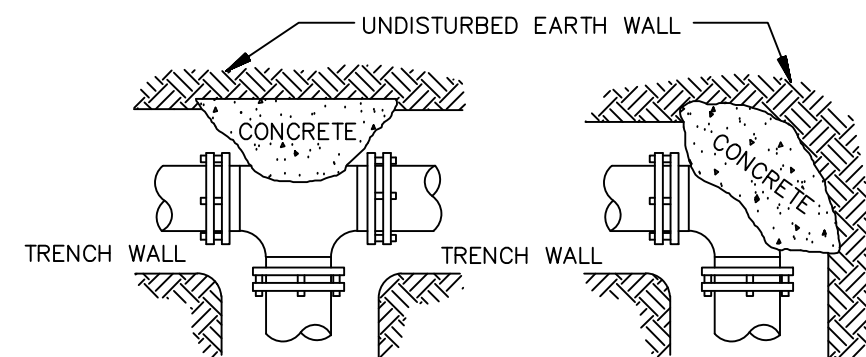
TYPICAL VALVE w/ VALVE BOX INSTALLATION
N.T.S.



ABOVE GROUND BACKFLOW PREVENTER
N.T.S. REFER TO UTILITY SHEET C-3 FOR FREEZE PROTECTION LOCATION AND NOTES.



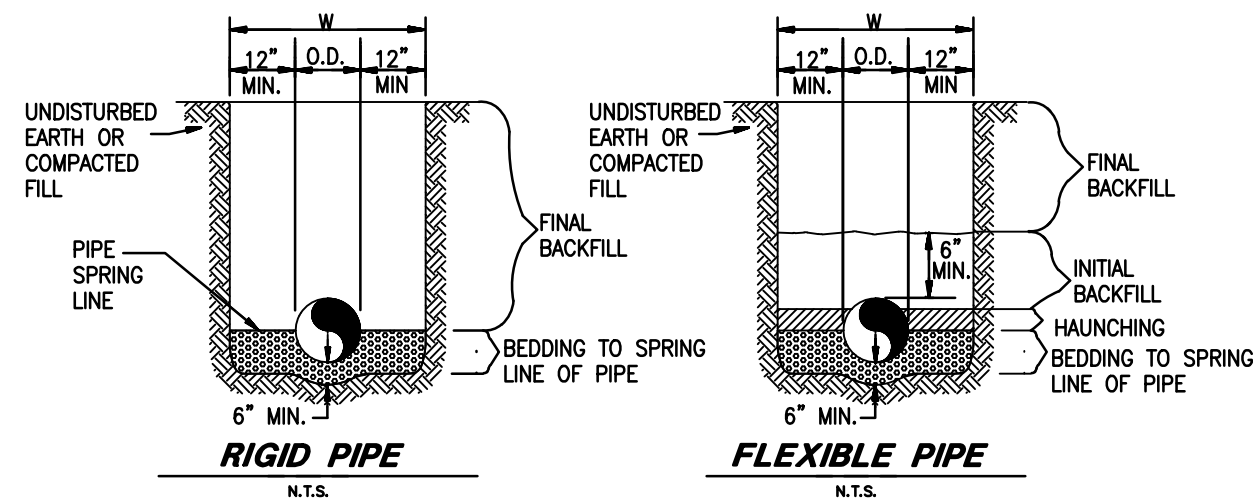
SANITARY SEWER CLEAN-OUT
N.T.S.



CROSS WITH PLUG TEE WITH PLUG CROSS

- NOTES:
- DO NOT COVER BELLS OR FLANGES WITH CONCRETE
 - WRAP ALL FITTINGS WITH VISQUEEN.
 - BACK ALL TEES ACCORDING TO SIZE OF BRANCH.
 - BACKING FUTURE LINE EXTENSIONS SHALL BE SUCH THAT LATER REMOVAL IS POSSIBLE.
 - ALL BENDS WHERE FITTINGS ARE USED, BOTH HORIZONTAL OR VERTICAL SHALL BE BACKED.
 - REACTION BACKING TABLE IS BASED ON 200 P.S.I. AND SOIL BEARING PRESSURE OF 2000 lb./sq.ft. ADDITIONAL BACKING MAY BE REQUIRED IN SOME AREAS AS DIRECTED BY ENGINEERS.
 - ALL CONCRETE SHALL BE 2500 P.S.I.
 - 18" AND LARGER REQUIRES SPECIFIC ANTI-THRUST DESIGN.

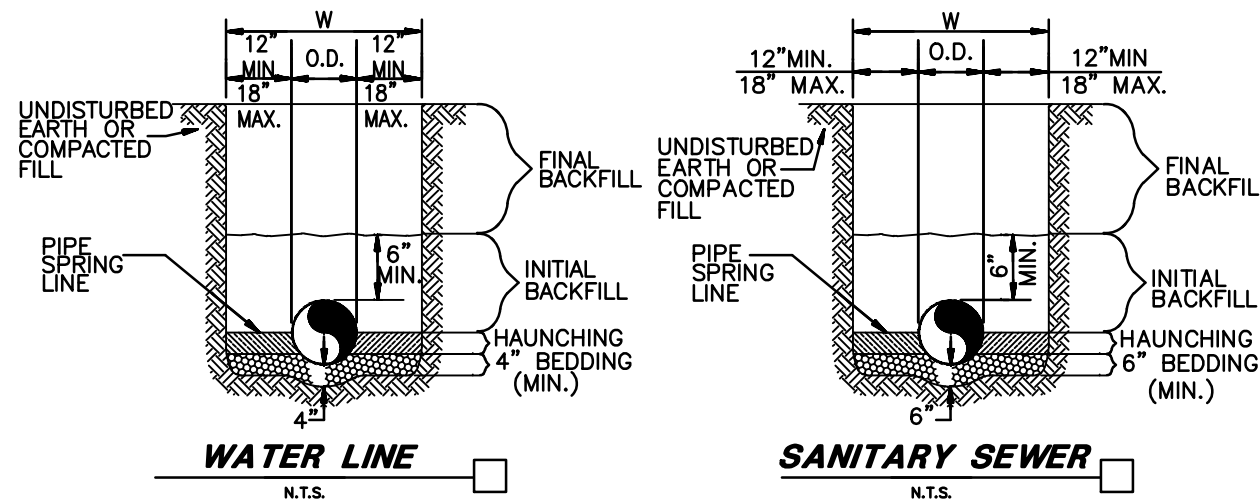
THRUST BLOCK DETAILS
N.T.S.



GENERAL NOTES

- BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B OR CLASS II COMPACTED TO 95% STANDARD PROCTOR.
- HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS II COMPACTED TO 95% PROCTOR.
- INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 95% STANDARD PROCTOR.
- INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
- FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.
- FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV-A COMPACTED TO 95% STANDARD PROCTOR.
- ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-LATEST EDITION.
- ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
- FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
- ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES.

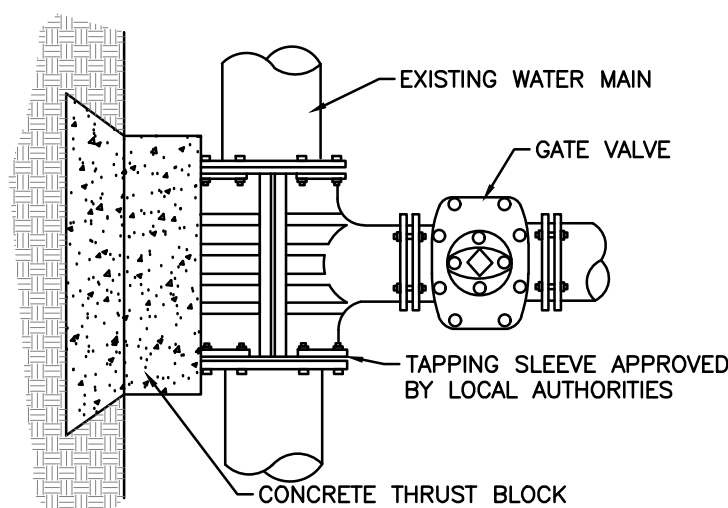
STORM SEWER TRENCH AND BEDDING
N.T.S.



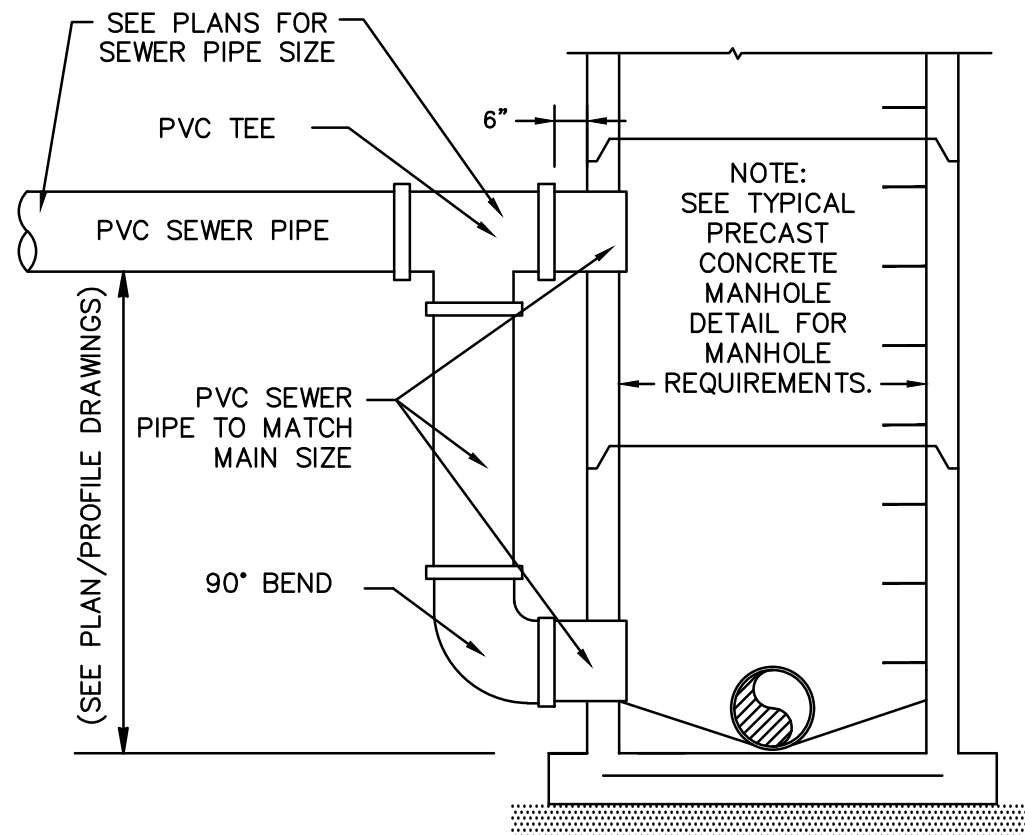
GENERAL NOTES

- BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 95% STANDARD PROCTOR.
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- ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
- ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
- FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
- ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES.

UTILITY TRENCH AND BEDDING
N.T.S.

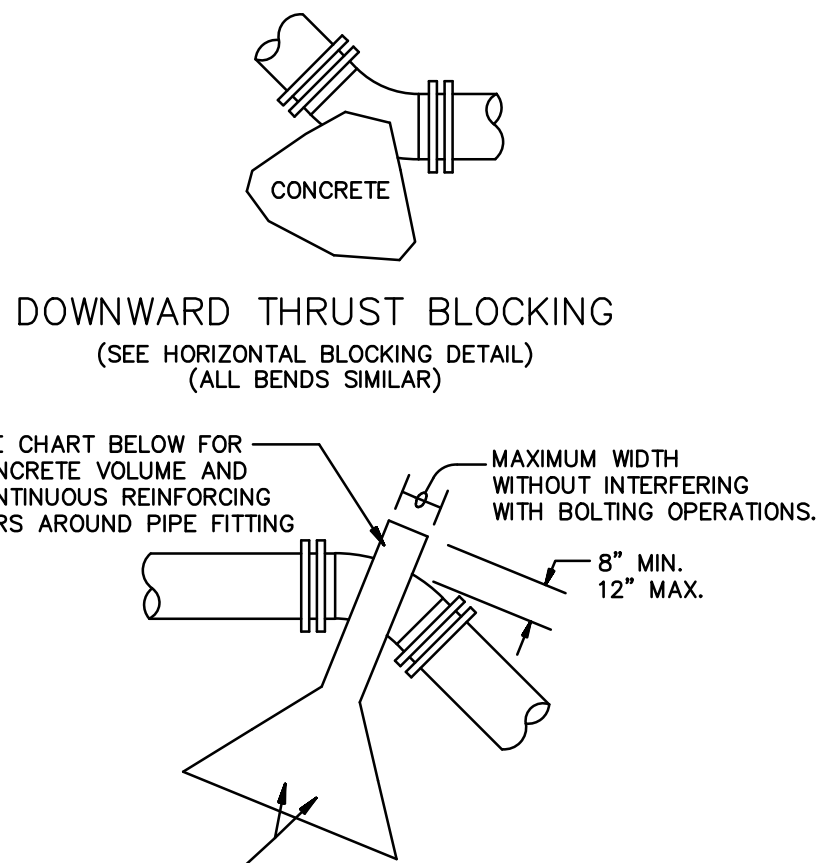


TYPICAL TAPPING SLEEVE & VALVE
N.T.S.



TYPICAL CONNECTION AT DROP MANHOLE
N.T.S.

CLASS	TYPE	SOIL GROUP SYMBOL	DESCRIPTION
1A	MANUFACTURED AGGREGATES; OPEN-GRADED, CLEAN	NONE	ANGULAR, CRUSHED STONE OR ROCK, CRUSHED GRAVEL, BROKEN CORAL, CRUSHED SLAG, CINDERS OR SHELLS; LARGE VOID CONTENT, CONTAIN LITTLE OR NO FINES
1B	MANUFACTURED, PROCESSED AGGREGATES; DENSE-GRADED, CLEAN.	NONE	ANGULAR, CRUSHED STONE (OR OTHER CLASS 1A MATERIALS) AND STONE/SAND MIXTURES WITH GRADATIONS SELECTED TO MINIMIZE MIGRATION OF ADJACENT SOILS; CONTAIN LITTLE OR NO FINES (SEE 1.8)
II	COARSE-GRAINED SOILS CLEAN	GW	WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES; LITTLE OR NO FINES
		GP	POORLY-GRADED GRAVELS AND GRAVEL-SAND MIXTURES; LITTLE OR NO FINES
		SW	WELL-GRADED SANDS AND GRAVELY SANDS; LITTLE OR NO FINES
		SP	POORLY-GRADED SANDS AND GRAVELY SANDS; LITTLE OR NO FINES
	COARSE-GRAINED SOILS BORDERLINE CLEAN TO W/ FINES	e.g. GW-GC, SP-SM	SANDS AND GRAVELS WHICH ARE BORDERLINE BETWEEN CLEAN AND WITH FINES
III	COARSE-GRAINED SOILS WITH FINES	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
		SM	SILTY SANDS, SAND-SILT MIXTURES
		SC	CLAYEY SANDS, SAND-CLAY MIXTURES
IV-A	FINE-GRAINED SOILS (INORGANIC)	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
IV-B	FINE-GRAINED SOILS (INORGANIC)	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
V	ORGANIC SOILS	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
		PT	PEAT AND OTHER HIGH ORGANIC SOILS.
	HIGHLY ORGANIC		



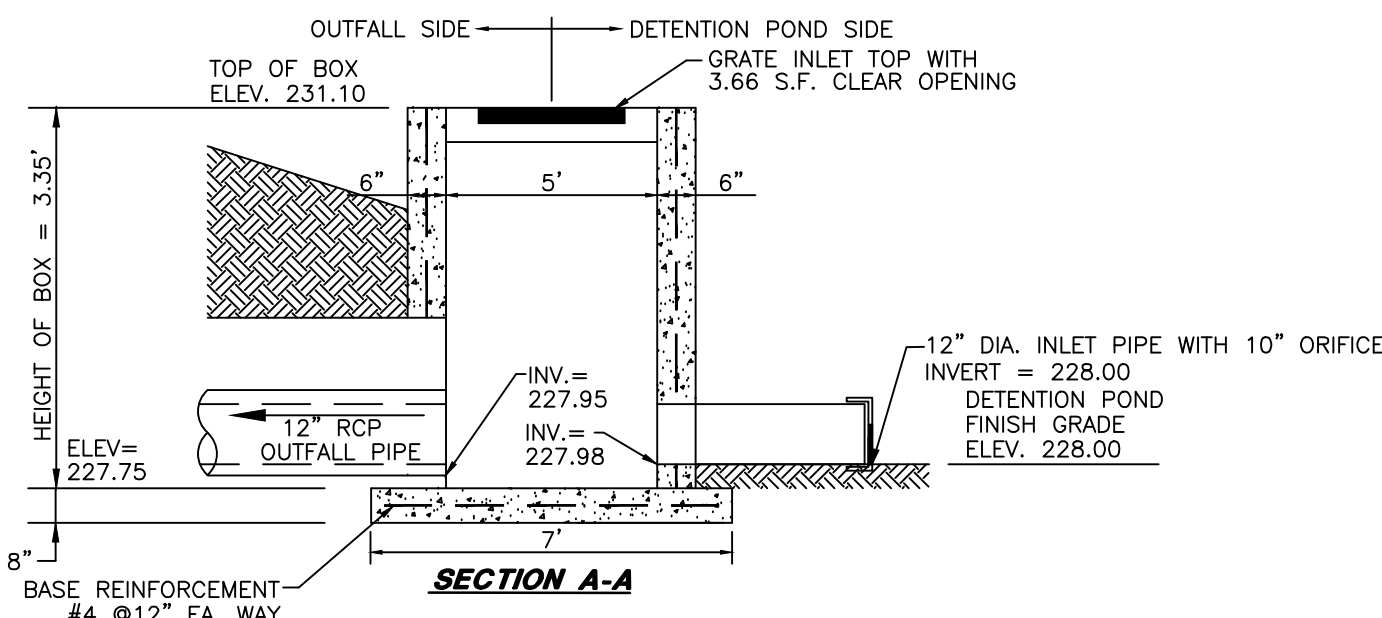
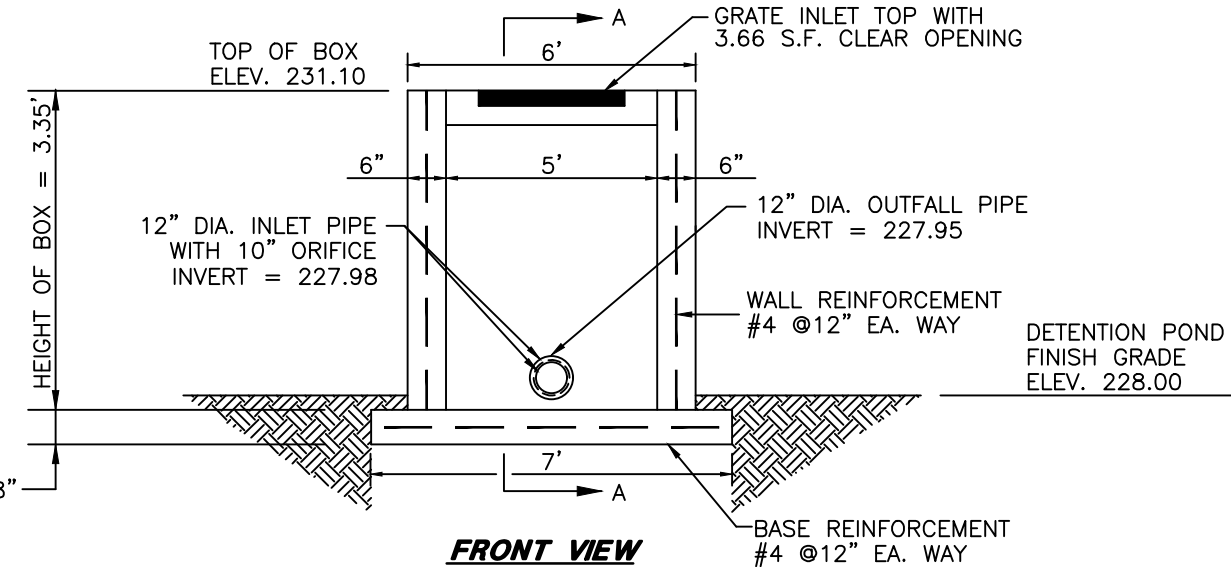
UPWARD THRUST BLOCKING

UPWARD THRUST BLOCKING												
(REQUIRED REINFORCING BARS & CUBIC YARDS OF P.C. CONCRETE)												
PIPE SIZE	90° BEND			45° BEND			22½° BEND			11¼° BEND		
	CONC. C.Y.	REINF. QTY.	SIZE	CONC. C.Y.	REINF. QTY.	SIZE	CONC. C.Y.	REINF. QTY.	SIZE	CONC. C.Y.	REINF. QTY.	SIZE
6	1.9	4	5	1.2	4	5	0.6	4	5	0.3	4	5
8	3.3	4	5	1.9	4	5	1.0	4	5	0.6	4	5
10	5.3	6	5	2.9	4	5	1.4	4	5	0.7	4	5
12	7.6	6	5	4.3	6	5	2.2	4	5	1.2	4	5

NOTES:

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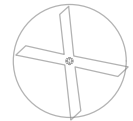
VERTICAL THRUST BLOCKING
N.T.S.



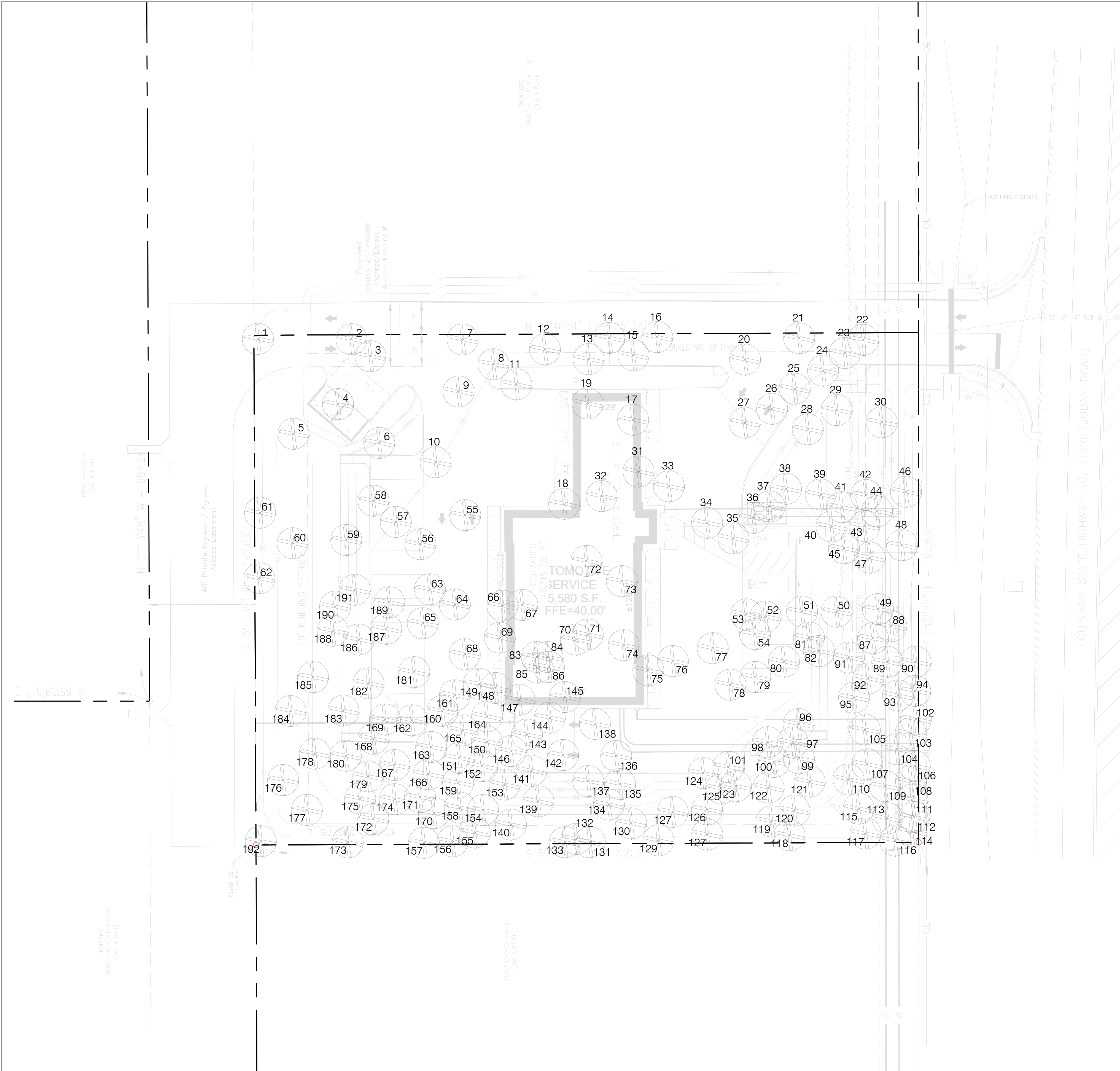
OUTLET CONTROL STRUCTURE (STR. 10)
N.T.S.

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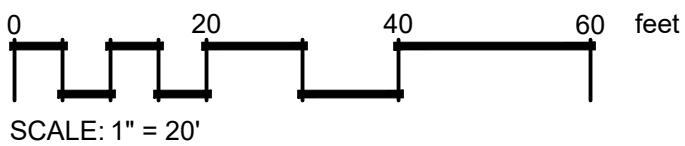
TREE INVENTORY SCHEDULE



TREES TO BE REMOVED 192



TREE PRESERVATION CREDIT TABLE				TREE PRESERVATION CREDIT TABLE CONTINUED			
TREE #	TREE SPECIES	TRUNK DIA. (INCHES)	CONDITION	TREE #	TREE SPECIES	TRUNK DIA. (INCHES)	CONDITION
1	MAPLE	2	POOR	101	PINE	9	POOR
2	MAPLE	3	POOR	102	PINE	10	FAIR
3	MAPLE	2	POOR	103	SWEETGUM	4	FAIR
4	MAPLE	2	POOR	104	PINE	8	FAIR
5	PINE	5	FAIR	105	MAPLE	6	POOR
6	PINE	3	POOR	106	MAPLE	4	POOR
7	WATER OAK	15	GOOD	107	MAPLE	4	POOR
8	MAPLE	8	FAIR	108	MAPLE	4	POOR
9	MAPLE	4	FAIR	109	PINE	8	POOR
10	MAPLE	3	POOR	110	TALLOW	7	POOR
11	MAPLE	8	DEAD	111	MAPLE	5	POOR
12	MAGNOLIA	4	POOR	112	MAGNOLIA	MULTI-TRUNK	POOR
13	MAGNOLIA	6	FAIR	113	MAPLE	6	POOR
14	MAGNOLIA	5	DEAD	114	MAPLE	MULTI-TRUNK	POOR
15	MAGNOLIA	3	POOR	115	TALLOW	MULTI-TRUNK	POOR
16	WATER OAK	8	FAIR	116	MAPLE	3	POOR
17	WATER OAK	12	DEAD	117	MAPLE	MULTI-TRUNK	POOR
18	MAPLE	6	POOR	118	MAPLE	MULTI-TRUNK	POOR
19	MAPLE	4	POOR	119	PINE	MULTI-TRUNK	POOR
20	MAPLE	5	POOR	120	PINE	6	POOR
21	MAGNOLIA	25	GOOD	121	MAPLE	MULTI-TRUNK	POOR
22	WATER OAK	13	FAIR	122	PINE	6	POOR
23	PINE	9	POOR	123	PINE	6	POOR
24	PINE	11	POOR	124	PINE	7	POOR
25	PINE	6	POOR	125	SWEETGUM	6	POOR
26	PINE	5	FAIR	126	WATER OAK	4	POOR
27	MAPLE	4	POOR	127	MAPE	MULTI-TRUNK	POOR
28	WATER OAK	7	POOR	128	MAPLE	MULTI-TRUNK	POOR
29	WATER OAK	8	POOR	129	WATER OAK	MULTI-TRUNK	POOR
30	WATER OAK	8	POOR	130	MAPLE	MULTI-TRUNK	POOR
31	MAPLE	6	POOR	131	WATER OAK	14	FAIR
32	MAPLE	8	POOR	132	WATER OAK	4	POOR
33	MAGNOLIA	8	POOR	133	WATER OAK	3	POOR
34	MAPLE	3	POOR	134	PINE	6	POOR
35	MAPLE	4	POOR	135	PINE	7	POOR
36	MAPLE	3	POOR	136	MAGNOLIA	5	POOR
37	MAPLE	4	POOR	137	PINE	4	POOR
38	MAPLE	5	POOR	138	MAPLE	MULTI-TRUNK	POOR
39	PINE	12	POOR	139	PINE	14	POOR
40	PINE	7	POOR	140	PINE	16	POOR
41	PINE	12	FAIR	141	PINE	8	POOR
42	MAPLE	7	POOR	142	WATER OAK	9	POOR
43	MAPLE	11	POOR	143	PINE	5	POOR
44	MAGNOLIA	4	POOR	144	PINE	9	POOR
45	MAPLE	3	POOR	145	PINE	14	POOR
46	TALLOW	4	POOR	146	WATER OAK	10	POOR
47	WATER OAK	10	POOR	147	PINE	8	POOR
48	PINE	12	FAIR	148	TALLOW	7	POOR
49	PINE	15	FAIR	149	TALLOW	8	POOR
50	PINE	10	FAIR	150	TALLOW	7	POOR
51	WATER OAK	15	POOR	151	PINE	14	POOR
52	WATER OAK	6	POOR	152	PINE	4	POOR
53	WATER OAK	7	POOR	153	PINE	7	POOR
54	WATER OAK	6	POOR	154	MAGNOLIA	6	POOR
55	SWEETGUM	13	POOR	155	PINE	4	POOR
56	MAPLE	12	POOR	156	PINE	12	POOR
57	MAGNOLIA	10	POOR	157	PINE	6	POOR
58	MAGNOLIA	11	POOR	158	PINE	8	POOR
59	WATER OAK	15	POOR	159	WATER OAK	7	POOR
60	WATER OAK	14	POOR	160	SWEETGUM	5	POOR
61	WATER OAK	25	FAIR	161	MAGNOLIA	9	POOR
62	WATER OAK	20	GOOD	162	MAPLE	3	POOR
63	PINE	19	POOR	163	MAPLE	4	POOR
64	MAGNOLIA	8	POOR	164	MAPLE	3	POOR
65	MAPLE	16	POOR	165	MAPLE	4	POOR
66	MAPLE	4	POOR	166	MAPLE	3	POOR
67	MAPLE	2	POOR	167	MAPLE	5	POOR
68	MAPLE	3	DEAD	168	PINE	13	POOR
69	MAPLE	8	DEAD	169	MAGNOLIA	7	POOR
70	PINE	16	FAIR	170	MAGNOLIA	4	POOR
71	MAPLE	18	FAIR	171	MAGNOLIA	9	POOR
72	MAGNOLIA	8	POOR	172	PINE	8	POOR
73	PINE	9	POOR	173	MAGNOLIA	11	POOR
74	SWEETGUM	21	FAIR	174	WATER OAK	3	POOR
75	SWEETGUM	18	POOR	175	SWEETGUM	19	POOR
76	PINE	6	POOR	176	SWEETGUM	25	POOR
77	SWEETGUM	21	FAIR	177	MAGNOLIA	4	POOR
78	PINE	4	POOR	178	MAGNOLIA	8	POOR
79	PINE	9	FAIR	179	MAGNOLIA	3	POOR
80	PINE	7	POOR	180	MAGNOLIA	6	POOR
81	PINE	17	FAIR	181	PINE	26	FAIR
82	PINE	12	FAIR	182	MAGNOLIA	6	POOR
83	TALLOW	6	POOR	183	PINE	19	POOR
84	TALLOW	6	POOR	184	MAGNOLIA	6	POOR
85	TALLOW	6	POOR	185	MAPLE	12	POOR
86	TALLOW	6	POOR	186	MAGNOLIA	6	POOR
87	PINE	7	POOR	187	MAGNOLIA	6	POOR
88	MAPLE	6	POOR	188	MAGNOLIA	5	POOR
89	PINE	8	POOR	189	MAGNOLIA	7	POOR
90	PINE	12	FAIR	190	MAGNOLIA	6	POOR
91	PINE	8	POOR	191	MAGNOLIA	5	POOR
92	SWEETGUM	4	POOR	192	MAGNOLIA	26	POOR
93	WATER OAK	4	FAIR				
94	WATER OAK	3	FAIR				
95	MAGNOLIA	6	FAIR				
96	PINE	15	POOR				
97	PINE	6	POOR				
98	PINE	8	POOR				
99	PINE	10	POOR				
100	PINE	8	POOR				



EXPRESS OIL CHANGE
DENHAM SPRINGS, LA
LIVINGSTON PARISH
EXPRESS OIL CHANGE & TIRE
ENGINEERS



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985.249.6180

FOR REVIEW ONLY
Issued 09/18/2023

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They were prepared by, or under the supervision of:

WILLIAM R. KROSS P.E. #46746
Duplantis Design Group, P.C.

PROJECT NO. 23-1404
PRELIMINARY SITE PLAN APPROVAL
09/18/2023

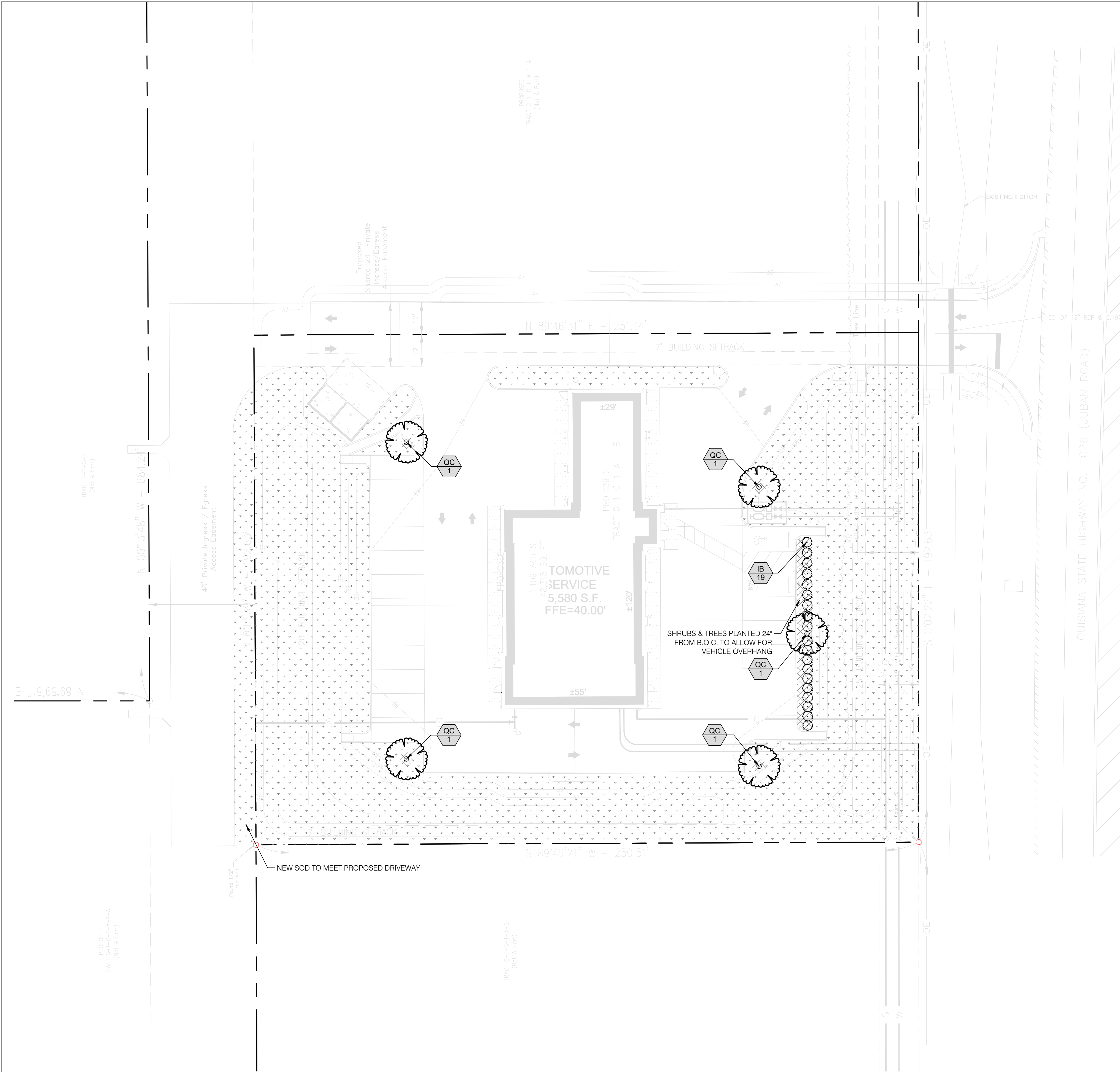
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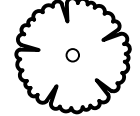


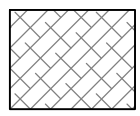
TREE INVENTORY
PLAN

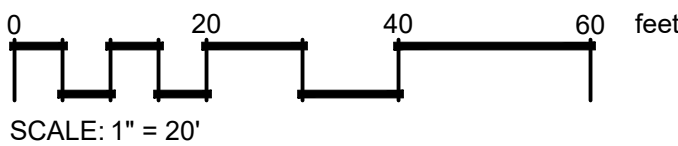
LP-1

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PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	SIZE	CAL.	HT.
	5	Quercus virginiana 'SDLN' TM Cathedral Live Oak	Container or B&B	2" Cal. Min.	12' Ht. Min.
SHRUBS	QTY	BOTANICAL / COMMON NAME	TYPE	SIZE	
	19	Ilex cornuta 'Burfordii Nana' Dwarf Burford Holly	3-Gal	24"HT. MIN.	48" o.c.
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	TYPE	FIELD2	
	23,053 sf	Cynodon dactylon Bermudagrass	Sod		
	499 sf	Mulch Area	Mulch		



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WILLIAM R. KROSP P.E. #46746
Duplantis Design Group, P.C.

PROJECT NO. 23-1404
PRELIMINARY SITE PLAN APPROVAL
09/18/2023

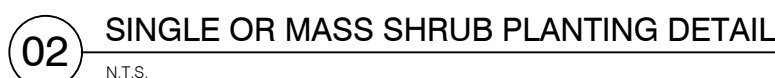
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G.P.
T.M.

PLANTING PLAN

LP-2

1. ALL WORK SHALL COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS GOVERNING PLANT MATERIALS AND LANDSCAPE WORK. CONFORM TO ACCEPTED HORTICULTURE PRACTICE AS USED IN THE TRADE. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND STRUCTURES WHILE HANDLING LARGE MATERIALS AND EQUIPMENT.
2. THE CONTRACTOR IS RESPONSIBLE FOR CALLING UNDERGROUND UTILITY LOCATE FOR IDENTIFICATION (CALL 811.COM 811 IN YOUR STATE) PRIOR TO BEGINNING ANY SUB-SURFACE WORK ACTIVITIES.
3. PLANT QUANTITIES SHOWN ON THE PLAN ARE FOR CONVENIENCE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES AND ENSURING ALL PLANTS ARE PLANTED.
4. CLEAN THE PROJECT SITE BEFORE COMMENCING WORK REMOVING ALL RUBBISH AND OBJECTIONABLE ITEMS PROVIDING A SAFE AND OPEN WORK SPACE. REMOVE AND REPORT OF ALL DEBRIS AND CONSTRUCTION MATERIALS SUCH AS CONCRETE, BRICKS, LUMBER, TRASH, LAWN WASTE, ETC. THESE MATERIALS SHOULD NOT BE MIXED WITH THE PLANTING SOILS. ENSURE THE LANDSCAPE PROJECT SITE IS CLEANED AT THE CONCLUSION OF EACH WORK DAY LEAVING NO TRASH OR LOOSE TOOLS OR EQUIPMENT BEHIND.
5. SECURE THE WATER SOURCE, HOSE WITH SPRINKLER BEFORE STORING OR PLANTING ANY PLANTS. PLANT STAGING AREAS SHOULD BE LOCATED IN THE SHADE DURING THE SUMMER MONTHS WHEN POSSIBLE. GREAT CARE IS TAKEN TO ENSURE CONTINUED VIBRANT HEALTH OF ALL STAGES OF PLANTS UNTIL PLANTING. HANDLE PLANTS WITH THE CONTAINERS AND NOT BY THE FOLIAGE.
6. POOR DRAINING SOILS SHALL BE EXCAVATED AND DISPOSED OF. SOIL AMENDMENTS SHALL BE HIGH IN PINE ORGANICS TO ADD ACIDITY TO THE EXISTING SOILS. THE SHALL CONTAIN SAND CONTENT TO INCREASE DRAINAGE. SOIL AMENDMENTS SHALL BE TILLED INTO THE TOP 6" - 8" OF EXISTING SOILS TO INCREASE FERTILITY, DRAINAGE, AND AERATION.
7. CONTRACTOR SHALL LAYOUT ALL NEW BEDLINES AND PLANTS PER THE PLANTING PLANS AND NOTIFY THE DESIGNER OF ANY DISCREPANCIES. GREAT CARE SHOULD BE GIVEN TO ENSURE BEDLINES ARE PER PLAN. STRAIGHT LINES ARE PRECISE AND CURVED LINES ARE WITHOUT JAGGED EDGES. BEDLINES SHALL BE CUT WITH A PROMINENT V-TRENCH ON ALL SIDES INCLUDING WHEN ADJACENT TO TURF, WALKS, ROADS, BUILDINGS, ETC. THE V-TRENCH SHALL BE KEPT CLEAN AND ANY DEBRIS REMOVED PRIOR TO MULCHING.
8. PLANT HOLES (PITS) SHALL BE DUG SO THAT THEY ARE 1" - 2" SHALLOWER THAN THE SOIL ROOT BALL OF THE PLANT BEING PLANTED. THE PLANT PIT SHALL BE 1.5 - 2 TIMES AS WIDE AS THE EQUIPMENT USED TO PLANT BEING PLANTED. THE SIDES OF THE PIT ARE CUT STRAIGHT AND NOT ANGLED.
9. SET ALL PLANTS IN THE CENTER OF THE PLANT PIT WITH THE BEST SIDE FACING THE VIEWING DIRECTION. ADD ADDITIONAL SOIL AMENDMENTS, FERTILIZERS OR HERBICIDS AS SPECIFIED. THOROUGHLY BACKFILL ALL SIDES OF THE PLANT ROOT BALL WITH THE TILLED AND AMENDED PLANTING SOIL. COMPACT THE SIDES OF THE BACKFILL AS NEEDED TO REMOVE ALL VOIDS AND AIR POCKETS. BUILD A DEFINED WATER RING ON ALL PLANTS 15 GALLON AND LARGER. REMOVE ALL SOILS FROM THE TOP OF THE ROOT BALL WHEN SHOULD STILL BE SITTING 1" - 2" ABOVE FINISH GRADE. WATER PLANT THOROUGHLY, THEN WATER SOME MORE DAILY UNTIL COMPLETION.
10. PRUNE PLANTS AS NEEDED REMOVING ALL TAGS, BAMBOO NURSERY STAKES, DEAD BRANCHES AND LEAVES, WEEDS, TRASH AND DEBRIS. APPLY A FULL MEASURE OF PLANT MULCH TO THE TYPE, COLOR, AND DEPTH SPECIFIED ON THE PLANS.
11. ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROCKS, WEEDS, AND DEBRIS AND THE GROUND BROUGHT TO A SMOOTH FINISH GRADE. ALL DEPRESSIONS SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE RE-GRADED TO OBTAIN A SMOOTH FINISH GRADE.
12. SOD SHALL BE LAID TIGHT EDGE TO EDGE AND SNUG AGAINST ALL EDGES OF WALKS, CURBS, DRIVES, AND BUILDINGS. ENTIRE NEW LAWN AREA SHOULD BE ROLLED WITH A SOD ROLLER REMOVING BUMPS TO OBTAIN A SMOOTH LAWN FINISH. LAWN SHOULD BE WATERED THOROUGHLY THROUGH ESTABLISHMENT.
13. UPON COMPLETION OF ALL PLANTING SCOPES OF WORK, BEFORE WALK AND PUNCHLIST BY DESIGNER OR OWNER'S REPRESENTATIVE. CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS FROM THE SITE. ALL PAVED AREAS SHALL BE SWEEPED AND BLOWN FREE OF ALL DEBRIS. STUBBORN STAINS AND MUD MAY NEED TO BE PRESSURE WASHED TO A NEAT AND ACCEPTABLE CONDITION FOR REVIEW BY THE DESIGNER AND/OR OWNER'S REPRESENTATIVE.
14. ALL PLANTS AND PLANTING SPECIFIED ON THIS PROJECT SHALL BE MAINTAINED BY WATERING, WEEDING, PRUNED, STRAIGHTENED, AND POSSIBLY MOWED AS NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
15. THE WARRANTY PERIOD FOR ALL NEW PLANTINGS, 3-GALLON CONTAINER AND LARGER, PLANTED BY THE CONTRACTOR SHALL BE 1 YEAR FROM THE DATE OF ACCEPTABILITY (FINAL COMPLETION). ANY PLANT 3-GALLON CONTAINER AND LARGER NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REPLACED WITH A NEW PLANT OF THE SAME KIND, AND MULCHED AS SPECIFIED ABOVE, AT NO ADDITIONAL COST TO THE OWNER.
16. AFTER THE CERTIFICATION OF ACCEPTABILITY, THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPING. NEW PLANTINGS SHALL BE WATERED DURING INSTALLATION AND THROUGH A 12-WEEK ESTABLISHMENT PERIOD EACH DAY PROVIDING NO MORE THAN 1" OF WATER. AFTER THE ESTABLISHMENT PERIOD THE LANDSCAPE SHOULD BE WATERED 3-TIMES / WEEK DURING DROUGHT SEASONS PROVIDING NO MORE THAN 1" OF WATER EACH. AUTOMATIC IRRIGATION SYSTEMS MUST BE ADJUSTED FOR THE POST-ESTABLISHMENT WATER RATE. UNDER-WATERING AND OVER-WATERING MAY VOID PLANT REPLACEMENT WARRANTIES.
17. ALL LANDSCAPING SHALL BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE WATERING, MOWING, EDGING, PRUNING, FERTILIZING, WEEDING, AND OTHER SUCH ACTIVITIES AS COMMON TO THE MAINTENANCE OF LANDSCAPING AND TRUE TO THE HORTICULTURE STANDARDS SPECIFIED BY THE AMERICAN HORTICULTURAL SOCIETY, AGRICULTURE UNIVERSITY PUBLICATIONS, COUNTY EXTENSION SERVICES, ETC. DO NOT PRUNE OR VERY LIGHTLY PRUNE PLANT IN THE FIRST 3 YEARS OF GROWTH.



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PROJECT NO. 23-1404

PRELIMINARY SITE PLAN APPROVAL

09/18/2023

CHECKED	G.P.
DRAWN BY	T.M.

PLANTING NOTES & DETAILS

LP-3

IRRIGATION SCHEDULE

<u>SYMBOL</u>	<u>MANUFACTURER/MODEL/DESCRIPTION</u>	<u>QTY</u>	<u>PSI</u>		<u>DETAIL</u>	
	Rain Bird 1806 8 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	15	30			
	Rain Bird 1806 10 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	1	30			
	Rain Bird 1806 12 Series MPR Turf Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	3	30			
	Rain Bird 1812 8 Series MPR Shrub Spray 12in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	8	30			
<u>SYMBOL</u>	<u>MANUFACTURER/MODEL/DESCRIPTION</u>	<u>QTY</u>	<u>PSI</u>	<u>GPM</u>	<u>RADIUS</u>	<u>DETAIL</u>
	Rain Bird 5004-PC-MPR 30 Turf Rotor, 4in. Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green. 35ft=beige.	5	35		30'	
	Rain Bird 5004-PC-MPR 35 Turf Rotor, 4in. Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green. 35ft=beige.	21	35		34'	
<u>SYMBOL</u>	<u>MANUFACTURER/MODEL/DESCRIPTION</u>	<u>QTY</u>				<u>DETAIL</u>
	Rain Bird PGA Globe 1" 1in., 1-1/2in., 2in. Electric Remote Control Valve, Globe.	7				
	Febco 825Y 1" Reduced Pressure Backflow Preventer	1				
	Rain Bird ESPLXME2 12 Station Traditionally-Wired, Commercial Controller. Indoor/Outdoor, Plastic Wall-Mount Enclosure.	1				
	Water Meter 1"	1				
—————	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	1,260	I.f.			
—————	Irrigation Mainline: PVC Class 200 SDR 21 1 1/2"	431.3	I.f.			
-----	Pipe Sleeve: PVC Schedule 40	86.5	I.f.			

Valve Callout

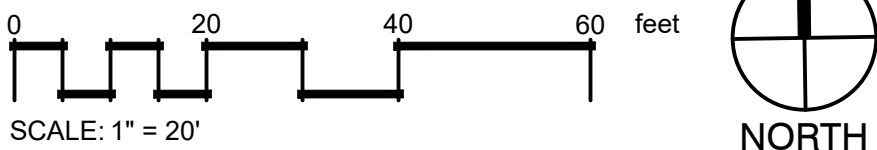
Valve Number

Valve Flow

Valve Size

CRITICAL ANALYSIS

Generated:	2023-10-20 10:54
O.C. NUMBER: 01	
Water Source Information:	
LOW AVAILABLE	
Water Meter Size:	1"
Flow Available:	21.17 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	60 PSI
Elevation Change:	1.00 ft
Service Line Size:	1"
Length of Service Line:	2 ft
Pressure Available:	59 PSI
DESIGN ANALYSIS	
Station Flow:	15.05 GPM
Flow Available at POC:	21.17 GPM
Residual Flow Available:	6.12 PSI
Design Pressure:	35 PSI
Friction Loss:	1.4 PSI
Fittings Loss:	0.14 PSI
Elevation Loss:	0 PSI
Loss through Valve:	5.93 PSI
Pressure Req. at Critical Station:	42.5 PSI
Loss for Fittings:	0.15 PSI
Loss for Main Line:	1.48 PSI
Loss for POC to Valve:	0 PSI
Loss for Backflow:	11.7 PSI
Loss for Water Meter:	1.03 PSI
Station Pressure at POC:	56.9 PSI
Pressure Available:	59 PSI
Residual Pressure Available:	2.13 PSI



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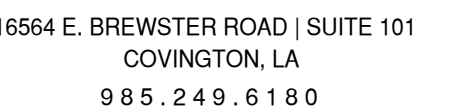
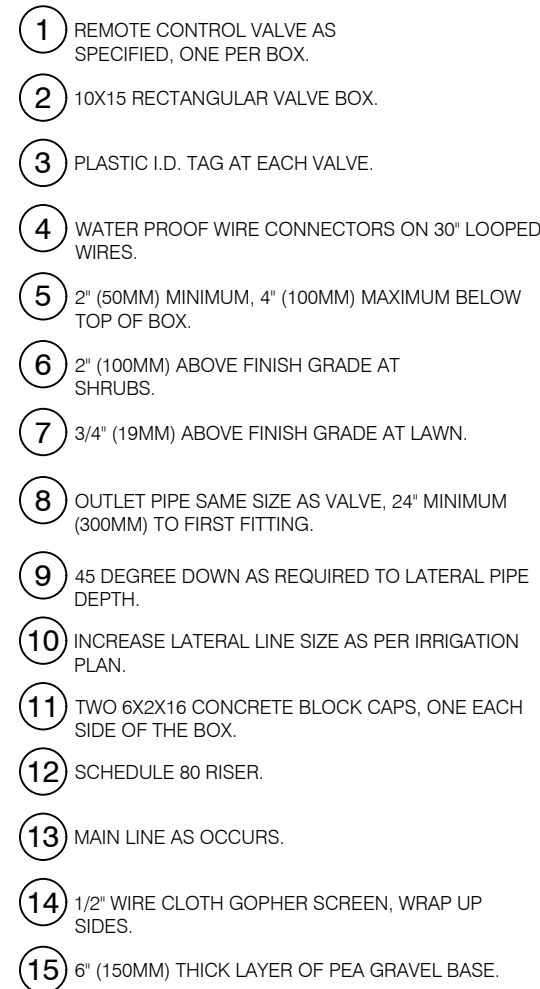
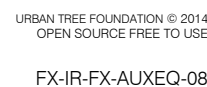
09/18/2023

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DRAWN BY	T.M.

IRRIGATION PLAN

IR-1

1. THE CONTRACTOR IS RESPONSIBLE FOR CALLING UNDERGROUND UTILITY LOCATE FOR IDENTIFICATION (CALL 811.COM/811 IN YOUR STATE) PRIOR TO BEGINNING ANY SUB-SURFACE WORK ACTIVITIES.
2. IRRIGATION SYSTEM DESIGNS AND INSTALLATIONS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL CODES AS WELL AS BEST MANAGEMENT PRACTICES SET FORTH BY THE IRRIGATION ASSOCIATION RECOMMENDATIONS AND CERTIFICATIONS. WORK IN THE R.O.W. SHALL CONFORM TO LOCAL AND/OR STATE HIGHWAY JURISDICTION STANDARDS AND SPECIFICATIONS.
3. IRRIGATION SYSTEMS TO BE CONNECTED TO THE POTABLE WATER SUPPLY WILL REQUIRE A DEDICATED WATER METER AND BACKFLOW PREVENTER, AS REQUIRED BY THE GOVERNING MUNICIPALITY. CONTRACTOR SHALL ENSURE THE OWNER HAS APPLIED AND PAID FOR THE INSTALLATION OF THIS EQUIPMENT PRIOR TO BEGINNING INSTALLATION OF IRRIGATION OR PLANTING OF PLANTS.
4. IRRIGATION SYSTEM SHALL BE CAPABLE OF SUPPLYING AN AVERAGE OF 1" OF WATER PER WEEK WITHIN WATERING RESTRICTIONS AS APPLICABLE. IRRIGATION SYSTEMS TO USE THE LOWEST QUALITY WATER AVAILABLE WHICH SAFELY MEETS THE WATER NEEDS OF THE SYSTEM, SUCH AS STORM WATER, RECLAIMED WATER, OR GRAY WATER WHERE FEASIBLE. DESIGNER SHALL VERIFY THE AVAILABILITY OF RE-USE WATER CURRENTLY OR IN THE FUTURE TO SPECIFY APPROPRIATE EQUIPMENT.
5. WATER OVERTHROW TO IMPERVIOUS SURFACES SHALL BE MINIMIZED. IRRIGATED AREAS SHALL UTILIZE THE MOST EFFICIENT COMBINATION OF DRIP, SPRAY, AND ROTOR SYSTEMS SPOCED TO PROVIDE 100% COVERAGE. ALL PROPOSED TREES AND PALMS IN ROTOR ZONES SHALL BE IRRIGATED WITH BUBBLERS.
6. SET SPRAY HEADS 6", ROTORS 12" IN FROM THE BACK OF CURB OR 24" IN IF THE ROAD HAS NO CURB, AND 3" FROM SIDEWALKS WHERE APPLICABLE. LOCATE ALL VALVES A MINIMUM OF 36" FROM EDGE OF ANY PAVEMENT OR CONCRETE.
7. ALL PRESSURIZED PIPES UNDER ASPHALT OR CONCRETE HARDSCAPES SHALL BE WITHIN SLEEVES AS SPECIFIED. ELECTRICAL WIRES UTILIZING THE SAME SLEEVE AS IRRIGATION SHALL BE IN THEIR OWN CONDUIT.
8. THE SMALLEST DIAMETER LATERAL PIPE SHALL BE 3/4". ALL VALVES SHALL BE INSTALLED IN A PLASTIC VALVE BOX FLUSH WITH THE PROPOSED FINISH GRADE. IRRIGATION CONTROLLER SHALL BE INSTALLED PER PLAN AND TO BE VERIFIED WITH THE OWNER'S AGENT. FASTEN CONTROLLER TO WALL OR POST AT LEAST 3' ABOVE FINISH GRADE.



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IRRIGATION NOTES & DETAILS

R-2

