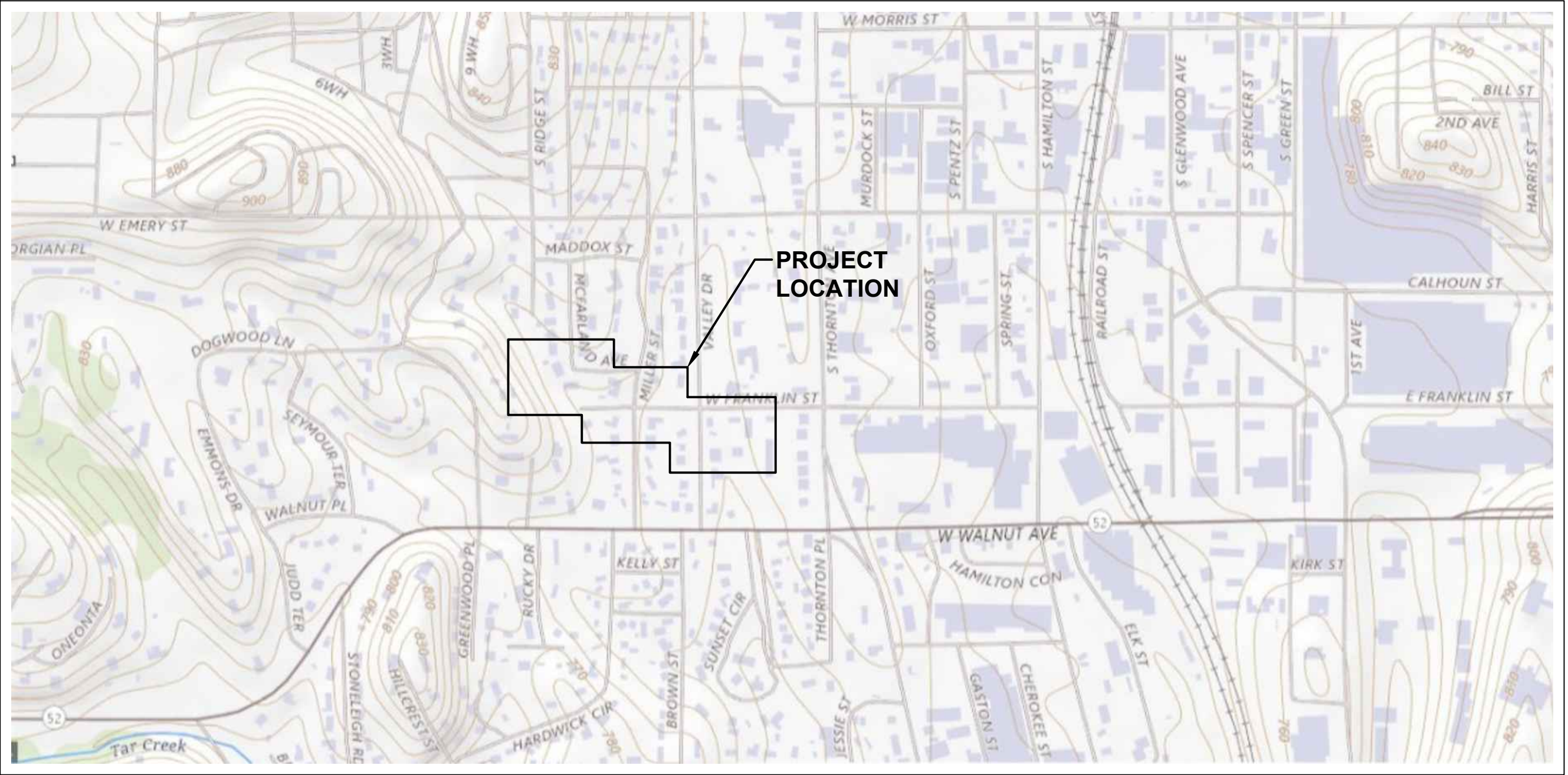


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# LOCATION MAP

1" = 600'

# OCTOBER 2024

## ISSUED FOR CONSTRUCTION

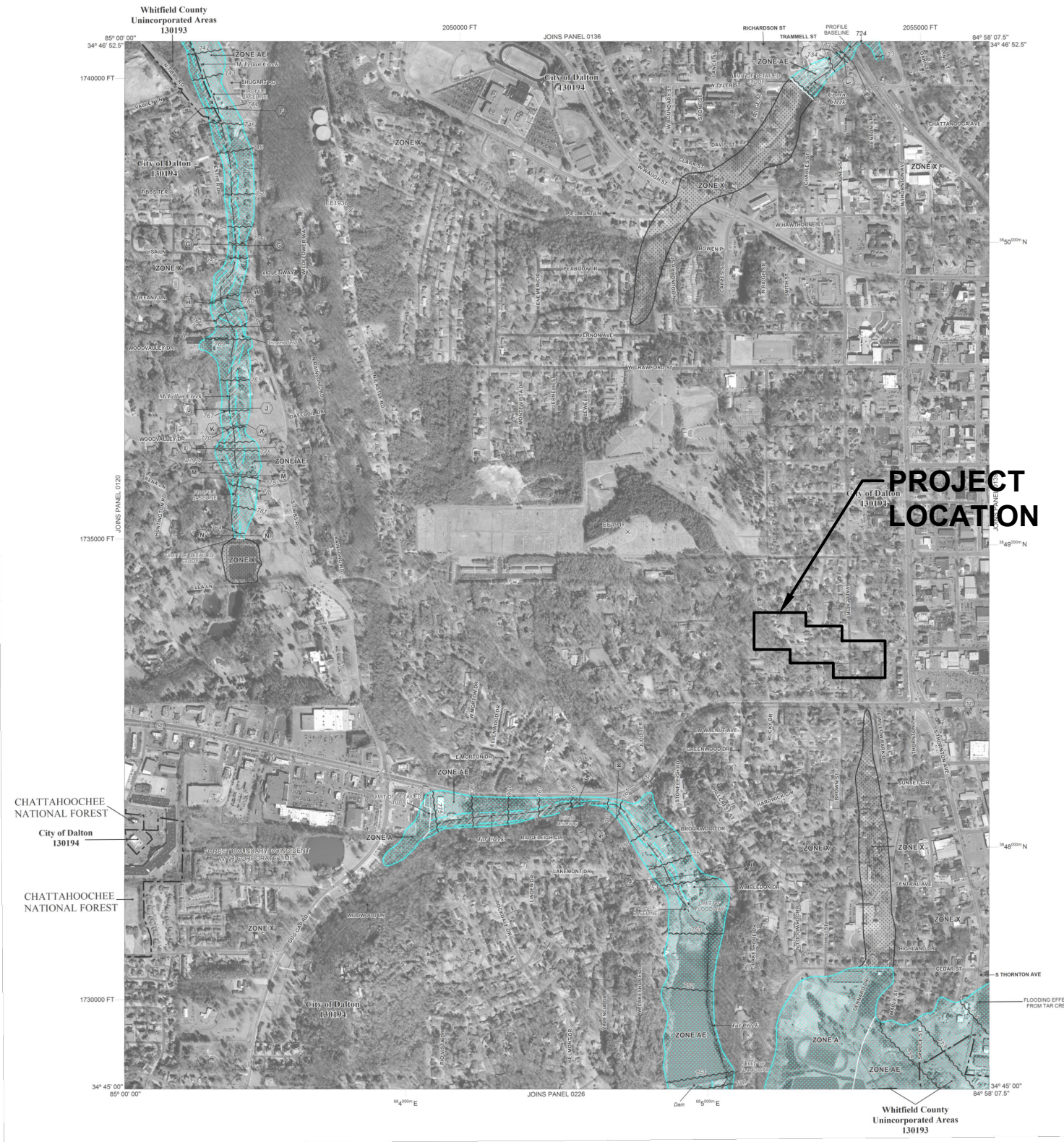


PROJECT ENGINEER:	RICH GREUEL, PE
GEORGIA REGISTRATION NO:	28402
PHONE:	770-384-6574

**LEGAL ENTITY: ARCADIS U.S., INC.**



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**FEMA MAP NUMBER: 13313C0138D**



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GENERAL NOTES

1. THE CONTRACTOR SHALL FURNISH ALL MATERIALS FOR, AND PROPERLY RESTORE ALL PAVEMENT, DRIVES, SIDEWALK, AND CURBS, WHICH MAY HAVE BEEN DAMAGED, REMOVED OR DISTURBED AS RESULT OF ACCOMPLISHING THE WORK.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING GRADES AND DIMENSIONS AND NOTIFYING THE ENGINEER IN ADVANCE AND IN WRITING OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK.
3. EXISTING UTILITY LOCATIONS SHOWN ARE BASED ON SURFACE OBSERVATION AND LIMITED DETECTION SERVICES. NOT ALL EXISTING UTILITIES ARE SHOWN ON THE DRAWING. CONTRACTOR IS RESPONSIBLE FOR DETERMINING BOTH THE EXACT LOCATION OF ALL EXISTING UTILITIES AND FOR DETERMINING THEIR PROTECTION DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL OPERATIONS WITH ALL UTILITIES WHICH MAY BE IN CONFLICT WITH HIS WORK. CONTRACTOR TO COORDINATE CONFLICTS WITH DALTON UTILITIES AND NOTIFY THE CITY OF DALTON PUBLIC WORKS.
4. A COPY OF THE APPROVED SET OF CONSTRUCTION PLANS MUST BE ON THE JOBSITE AT ALL TIMES DURING CONSTRUCTION.
5. NO WORK SHALL TAKE PLACE PRIOR TO 7:00AM OR AFTER 5:30PM, MONDAY THROUGH FRIDAY. WORK ON WEEKENDS SHALL BE PROHIBITED UNLESS AUTHORIZED BY THE CITY OF DALTON PUBLIC WORKS PROJECT MANAGER.
6. UNLESS NOTED OTHERWISE ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF DALTON AND STATE OF GEORGIA STANDARDS AND SPECIFICATIONS.
7. WHERE SHOWN ON DRAWINGS ALL SUBSURFACE TOPOGRAPHICAL FEATURES WHICH INCLUDE GROUND WATER TABLE, PARTIALLY WEATHERED ROCK, AND ROCK SHOWN ARE APPROXIMATE. THE CONTRACTOR AT HIS EXPENSE SHALL CONDUCT ADDITIONAL SUBSURFACE SOIL EXPLORATION IF DEEMED NECESSARY.
8. ALL WORK AROUND THE EXISTING UTILITIES AND UTILITY STRUCTURES WHETHER ABOVE OR BELOW GROUND SHALL BE PERFORMED IN A MANNER THAT WILL AVOID DAMAGE TO THE UTILITIES AND STRUCTURES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL ACCURATELY LOCATE ABOVE AND BELOW UTILITIES WHICH MAY BE AFFECTED BY THE WORK AND PROTECT ALL UTILITIES NOT DESIGNATED FOR REMOVAL, RESTORATION, OR REPLACEMENT IN THE COURSE OF CONSTRUCTION. PROVIDE 72 HOURS OF ADVANCE NOTICE TO DALTON UTILITIES PRIOR TO BEGINNING CONSTRUCTION IN THE VICINITY OF THE EXISTING UTILITIES. FOR EXISTING UTILITY LOCATION ASSISTANCE CALL THE UNDERGROUND UTILITIES PROTECTION CENTER (GA 811).
9. ANY DAMAGE TO EXISTING UTILITIES CAUSED BY THE CONTRACTOR, CONTRACTOR'S CREW AND/OR EQUIPMENT SHALL BE THE CONTRACTOR'S COST AND RESPONSIBILITY TO REPLACE PER OWNER'S STANDARDS AND SPECIFICATIONS.
10. ANY REFUSE RESULTING FROM CLEARING AND GRUBBING OPERATIONS SHALL BE HAULED TO A DISPOSAL SITE SECURED BY THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, COUNTY AND MUNICIPAL REGULATIONS. NO DEBRIS OF ANY KIND SHALL BE DEPOSITED IN ANY STREAM OR BODY OF WATER, OR IN ANY STREET OR ALLEY. NO DEBRIS SHALL BE DEPOSITED UPON ANY PRIVATE PROPERTY EXCEPT BY WRITTEN CONSENT OF THE PROPERTY OWNER. IN NO CASE SHALL ANY MATERIAL BE LEFT ON THE PROJECT, PLACED ONTO ABUTTING PRIVATE PROPERTIES, OR BE BURIED IN THE EMBANKMENTS OR TRENCHES ON THE PROJECT.
11. THIS PROJECT IS LOCATED IN THE VICINITY OF POLES AND POWER LINES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITIES TO OBTAIN AN OVERHEAD UTILITY TICKET PRIOR TO WORKING ADJACENT TO THE POWER LINES AND POLES.
12. THE CONTRACTOR SHALL COMPLY WITH THE STATE OF GEORGIA MANUAL FOR EROSION AND SEDIMENT CONTROL STANDARDS, LATEST EDITION.
13. IN THE EVENT ACTIVE UTILITY SERVICES REQUIRE INTERRUPTION, THE CONTRACTORS SHALL COORDINATE AND CONSULT WITH THE OWNER OR/OWNERS AND OBTAIN APPROVAL FROM THEM PRIOR TO SERVICES BEING DISRUPTED.
14. THE CONTRACTOR SHALL ALL TIMES CONTROL DUST AND DEBRIS FROM THE OPERATIONS TO A LEVEL ACCEPTABLE TO THE CITY OF DALTON AND LOCAL BUSINESSES AT ALL TIMES. CONTRACTOR TO STREET SWEEP DAILY TO ENSURE THAT THERE IS NO MUD TRACKING OFFSITE ONTO ADJACENT ROADWAYS.
15. ALL UTILITY WORK WITHIN THE CITY OF DALTON RIGHT OF WAY SHALL BE PERFORMED IN ACCORDANCE TO DALTON UTILITIES STANDARDS AND SPECIFICATIONS, LATEST EDITION. WORK ON THE SITE SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
16. TEMPORARY DISCONNECTION, REMOVAL AND/OR REPLACEMENT OF THE FOLLOWING ITEMS INCLUDING BUT NOT LIMITED TO: FIRE HYDRANTS, WATER METERS, BACK FLOW PREVENTION DEVICES, VAULTS, MANHOLE AND OTHER POTABLE WATER SYSTEM APPURTENANCES SHALL BE IN STRICT ACCORDANCE WITH THE LATEST DALTON UTILITIES AND CITY OF DALTON PUBLIC WORKS STANDARDS AND SPECIFICATIONS. BEFORE CONNECTION, REMOVAL AND/OR REPLACEMENT OF ANY UTILITIES. THE CONTRACTOR SHALL CONTACT AND OBTAIN APPROVAL FROM CITY OF DALTON PUBLIC WORKS REPRESENTATIVES PRIOR TO CONSTRUCTION.
17. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH DALTON UTILITIES OR LOCAL AUTHORITY FIRE MARSHAL PRIOR TO REMOVING ANY FIRE HYDRANTS OR ANY FIRE PROTECTION UTILITIES. ANY WORK OR MATERIALS REQUIRED BY THE FIRE MARSHAL TO TEMPORARILY PROVIDE FOR FIRE PROTECTION TO THE LOCAL BUSINESS SHALL BE PART OF THE CONTRACTOR'S SCOPE OF WORK. "OUT-OF-SERVICE RINGS" WILL BE REQUIRED FOR HYDRANTS WHILE OUT OF SERVICE.
18. ALL EXCAVATION SHALL BE ADEQUATELY SHORED TO ENSURE WORKER SAFETY. ALL PIPE LAYING OPERATIONS SHALL COMPLY WITH OSHA REQUIREMENTS FOR TRENCH SAFETY.
19. CONTRACTOR SHALL PROVIDE A CONSTRUCTION SEQUENCING PLAN TO THE CITY OF DALTON PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION COMMENCEMENT.
20. 72 HOURS NOTICE IS REQUIRED TO GEORGIA 811 UTILITY PROTECTION CENTER BEFORE ANY PLANNED DIGGING. <http://www.georgia811.com>

MATERIAL NOTES

1. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL MILL AND OVERLAY THE FULL WIDTH OF W FRANKLIN STREET AND VALLEY DRIVE WITHIN THE LIMITS OF DISTURBANCE UPON COMPLETION OF THE STORMWATER BYPASS SYSTEM CONSTRUCTION. MILL AND OVERLAY ON ALL ADJACENT SIDE STREETS SHALL BE RESURFACED TO THE END OF THE RADIUS RETURNS.
3. MILLING/REMOVAL OF ASPHALT AROUND MANHOLE, GAS VALVE, OR WATER VALVE TO PREPARE FOR RESURFACING:
  - 3.1. THIS MILLING WILL REQUIRE A SMALL MILLING MACHINE TO APPROPRIATELY MILL AROUND THE UTILITY INFRASTRUCTURE AT THE SAME MILLING DEPTH SPECIFIED FOR THIS STREET TO PREPARE FOR RESURFACING. THE UNIT PRICE FOR THIS WORK SHOULD INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE WORK.

STAKING NOTES

1. THE EXISTING CONDITIONS SITE FEATURES ARE BASED ON FIELD SURVEY CONDUCTED BY PROFESSIONAL LAND SURVEYORS, LLC., IN MAY OF 2023.
2. HORIZONTAL DATUM IS REFERENCED TO NAD-83 GEORGIA STATE PLANE, WEST ZONE.
3. VERTICAL DATUM IS REFERENCED TO NAVD 88.

GRADING NOTES:

1. CONTRACTOR SHALL NOT PERMIT EQUIPMENT TO BE USED IN SUCH A MANNER AS TO CAUSE EQUIPMENT TO EXCESSIVELY BUMP OR RUT THE SUBGRADE OR OTHER PREPARED AREAS.
2. CONTRACTOR SHALL GRADE IN A MANNER TO ESTABLISH LONG SMOOTH GRADIENTS IN ORDER TO REDUCE ABRUPT CHANGES, DIPS AND SHARP TRANSITIONS IN THE FINISHED GRADE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE POSITIVE DRAINAGE ON GRADED SURFACE AREAS AT 1% MINIMUM ON HARDSCAPE AT 2% MINIMUM ON GRADE UNLESS OTHERWISE INDICATED.
4. ANY REQUIRED DETENTION FACILITIES AND EROSION CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
5. ELEVATIONS GIVEN ARE TO FINISH GRADE UNLESS OTHERWISE SHOWN.
6. SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.
7. UNLESS SHOWN ON THE EROSION & SEDIMENT CONTROL PLANS AND / OR LANDSCAPING PLANS, ALL DISTURBED AREAS NOT RECEIVING A SURFACE SHALL BE COVERED IN GRASS.
8. GENERALLY TAKE STANDARD PRECAUTIONS TO PROTECT TREES. SEE EROSION & SEDIMENT PLANS FOR TREE PROTECTION REQUIREMENTS WHEN APPLICABLE.

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL DEMOLISH AND REMOVE ALL EXISTING, PAVEMENT, SIDEWALK, CURB, GUTTER, PAVERS, ETC., NOTED TO BE REMOVED WITHIN THE DEMOLITION LIMITS AS SHOWN ON THIS PLAN UNLESS OTHERWISE NOTIFIED.
2. CONTRACTOR TO PROVIDE AND MAINTAIN NECESSARY FENCES, BARRICADES, LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL MEASURES AS REQUIRED FOR THE PROTECTION AND SAFETY OF THE PUBLIC THROUGHOUT THE DEMOLITION AND CONSTRUCTION ACTIVITIES ON THE SITE.
3. CONTRACTOR SHALL MINIMIZE THE IMPACT OF CONSTRUCTION ACTIVITIES ON THE TRAFFIC FLOW TO SURROUNDING FACILITIES TO REMAIN.
4. CONTRACTOR SHALL SAW CUT PAVEMENT, SIDEWALKS AND CURB & GUTTER AT THE LIMIT OF DEMOLITION FOR REMOVAL.
5. ALL EXISTING PIPE TO BE ABANDONED SHALL BE CUT, AND PLUGGED OR CAPPED AT EACH END. WHERE EXISTING PIPING INTERFERES WITH NEW PIPING OR CONSTRUCTION, IT SHALL BE REMOVED BEYOND THE LIMITS REQUIRED FOR THE PROPER COMPLETION OF THE WORK AND THE OPEN ENDS PLUGGED OR CAPPED UNLESS OTHERWISE SHOWN. LINES SHALL BE PLUGGED OR CAPPED AT LEAST 12-INCHES BEHIND OR BELOW FINISH BUILDING SURFACE AND AT LEAST 12-INCHES BELOW PROPOSED GRADE SURFACE.
6. THE CONTRACTOR SHALL INSTALL ALL INITIAL EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO BEGINNING DEMOLITION OPERATIONS.

TRAFFIC CONTROL:

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL ROAD PERMITS FROM THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS INCLUDING PROVIDING ANY RESTORATION BONDS. THE CONTRACTOR SHALL PROVIDE A DETAILED PHASED TRAFFIC CONTROL PLAN BASED ON THE PROPOSED WORK PHASING AS DETERMINED BY THE CONTRACTOR. THE DETAILED PHASED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY OF DALTON PUBLIC WORKS FOR APPROVAL. THE CONTRACTOR SHALL UTILIZE THE LATEST EDITION OF THE "MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES" TO DEVELOP PLANS.
2. THE CONTRACTOR SHALL COORDINATE WITH AND OBTAIN APPROVAL FROM THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY LANE CLOSURES.
3. BECAUSE THE PROJECT CONSTRUCTION SITE IS LOCATED ON RESIDENTIAL STREETS AND ADJACENT TO OCCUPIED RESIDENCES, ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN SUCH A MANNER THAT WILL PROVIDE ACCEPTABLE LEVELS OF SAFETY AND MAINTENANCE OF UTILITIES, ROADWAY, TRAFFIC, DRIVEWAYS, SIDEWALKS, ETC. TO ALL OWNERS, CITY OF DALTON DEPARTMENT OF PUBLIC WORKS, MANAGEMENT, AND UTILITY COMPANIES. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN AND PROTECT ALL UTILITY SERVICES AND DRIVEWAY ACCESS, INCLUDING BUT NOT LIMITED TO, RESIDENTS, EMERGENCY SERVICES, VEHICLES, AND PEDESTRIAN TRAFFIC, ETC.
4. CONTRACTOR TO PROVIDE DRIVEWAY ACCESS TO RESIDENTS ADJACENT TO PROJECT AREA. IF THE CONTRACTOR REQUIRES RESTRICTED ACCESS TO A RESIDENCE'S DRIVEWAY THEN WRITTEN NOTICE MUST BE GIVEN TO THE HOMEOWNER AND CITY OF DALTON PUBLIC WORK'S WITH 72 HOURS NOTICE PRIOR TO ANY DISRUPTION.

PROJECT COMPLETION

1. PRIOR TO ACCEPTANCE AND FINAL PAYMENT, CONTRACTOR IS TO PROVIDE AN AS-BUILT SURVEY, WHICH IS A DRAWING PREPARED AND SIGNED BY A REGISTERED LAND SURVEYOR REGISTERED IN THE STATE OF GEORGIA ILLUSTRATING THE LOCATIONS, DIMENSIONS AND ELEVATIONS OF A DEVELOPMENT AS IT HAS BEEN CONSTRUCTED FOLLOWING COMPLETION OF CONSTRUCTION ON DIRECT FIELD MEASUREMENTS AND SHOWN TO SCALE.



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CONSULTANTS

ISSUED FOR CONSTRUCTION

SEALS



WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	RG/TT
NO.	DATE	ISSUED FOR	BY

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DATE: OCTOBER 2024

PROJECT NO.: 30064797

FILE NAME:

DESIGNED BY: T. TITLE

DRAWN BY: A. DOTTL

CHECKED BY: R. GREUEL

SHEET TITLE

GENERAL

GENERAL NOTES

SCALE: AS SHOWN

G-01

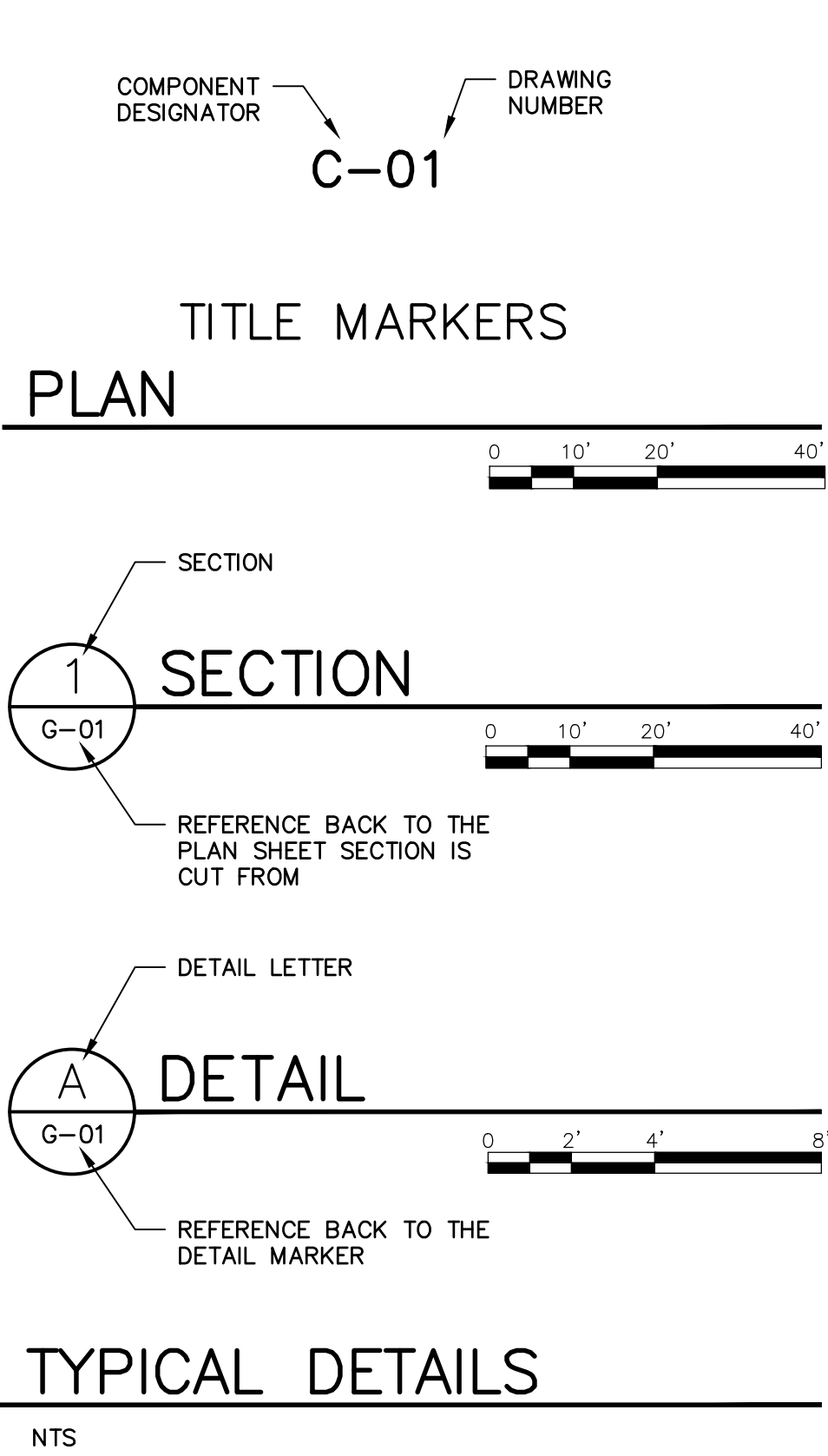


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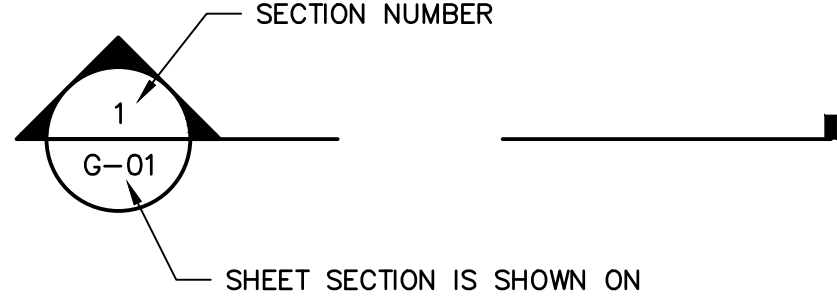
SYMBOLS	
	EXISTING SANITARY SEWER
	EXISTING STORM PIPE
	EXISTING GAS LINE
	ELECTRIC LINE (UNDERGROUND)
	ELECTRIC LINE (OVERHEAD)
	WATER LINE
	RIGHT-OF-WAY
	PROPERTY BOUNDARY
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING FENCE
	EXISTING TREES
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING STORM SEWER MANHOLE
	EXISTING CATCH BASIN
	EXISTING SANITARY SEWER MANHOLE
	EXISTING UTILITY VALVE
	EXISTING FIRE HYDRANT
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED STORM SEWER MANHOLE
	PROPOSED STORM PIPE
	PROPOSED CATCH BASIN
	PROPOSED SANITARY SEWER MANHOLE
	PIPE FLOW DIRECTION
	WETLAND (NWI)
	100-YEAR FLOOD PLAIN
	FLOODWAY
	25-FT STATE BUFFER
	50-FT MUNICIPAL BUFFER
	OPEN CHANNEL CENTERLINE
	LIMITS OF DISTURBANCE
	SEDIMENT BARRIER
	TO BE REMOVED
	TO BE REMOVED
	ABANDON IN PLACE
	PAVEMENT REPLACEMENT
	PROPOSED RIP RAP

GENERAL, CIVIL, AND MECHANICAL ABBREVIATIONS			
AB	ANCHOR BOLT	ID	INSIDE DIAMETER
ABAN.	ABANDONED	IF	INSIDE FACE
ADD'L.	ADDITIONAL	IN., "	INCHES
ADJ.	ADJUSTABLE	INF.	INFLUENT
AH	ACCESS HATCH	INV.	INVERT
ALUM.	ALUMINUM	JST.	JOIST
ALT.	ALTERNATE	JT.	JOINT
BF	BLIND FLANGE	K	KIP (1000 POUNDS)
BL	BITUMINOUS	KSF	KIPS PER SQUARE FOOT
BLDG.	BUILDING	LF	LINEAR FEET
BMK	BENCH MARK	LG.	LONG
BM.	BEAM	LLH	LONG LEG HORIZONTAL
BOP	BOTTOM OF PIPE	LLV	LONG LEG VERTICAL
BOT.	BOTTOM	LR	LONG RADIUS
BRG	BEARING	LSH	LEVEL SWITCH HIGH
BRP	BUILDING REFERENCE POINT	LSLL	LEVEL SWITCH LOW LOW
¢	CENTERLINE	MAS	MASONRY
C/C	CENTER TO CENTER	MAX.	MAXIMUM
CB	CATCH BASIN	MCC	MOTOR CONTROL CENTER
CFB	CHEMICAL FEED BANK	MFR.	MANUFACTURER
CIPP	CURED-IN-PLACE PIPE	MGD	MILLION GALLONS PER DAY
CJ	CONSTRUCTION JOINT	MH	MANHOLE
CL.	CLEAR	MIN.	MINIMUM
CMH	COMMUNICATION MANHOLE	MJ	MECHANICAL JOINT
CO	CLEANOUT	MO	MASONRY OPENING
COL.	COLUMN	NC	NORMALLY CLOSED
CONC.	CONCRETE	NF	NEAR FACE
CONT.	CONTINUED	NO	NORMALLY OPEN
CPG.	COUPLING	NO.	NUMBER
CY.	CUBIC YARD(S)	NWI	NATIONAL WETLANDS INVENTORY
DET.	DETAIL	OC	ON CENTER
DIP	DUCTILE IRON PIPE	OD	OUTSIDE DIAMETER
DIA.	DIAMETER	OF	OUTSIDE FACE
DISCH.	DISCHARGE	OPNG.	OPENING
DMH	DROP MANHOLE	OPP.	OPPOSITE
DN.	DOWN	PC	POINT OF CURVATURE
DWL.	DOWELS	PE	PLAIN END
EA.	EACH	PI	POINT OF INTERSECTION
EF	EACH FACE	PL, P	PLATE OR PROPERTY LINE
EFF.	EFFLUENT	PSF	POUNDS PER SQUARE FOOT
EJ	EXPANSION JOINT	PSI	POUNDS PER SQUARE INCH
EL.	ELEVATION	PT	POINT OF TANGENCY
ELEC.	ELECTRIC	PROP	PROPOSED
EMH	ELECTRICAL MANHOLE	R	RISER
EQ.	EQUAL	RBF	REBAR FOUND
EW	EACH WAY	RBR	REBAR
EX., EXST	EXISTING	RED.	REDUCER
FCA	FLANGED COUPLING ADAPTER	REINF.	REINFORCEMENT OR REINFORCE
FD	FLOOR DRAIN	REQ'D.	REQUIRED
FDN	FOUNDATION	RJ	RESTRAINED JOINT
FDND	FOUNDATION DRAIN	RM.	ROOM
FF	FAR FACE	ROW	RIGHT OF WAY
FIN.	FINISHED	SHT.	SHEET
FL.	FLUSHING	SPA.	SPACING
FLEX.	FLEXIBLE	SR	SHORT RADIUS
FLG.	FLANGE	SS	STAINLESS STEEL
FLR.	FLOOR	STD.	STANDARD
FM	FLOWMETER	STL.	STEEL
FS	FLOW SWITCH	STRUC.	STRUCTURAL
FTG.	FOOTING	T&B	TOP AND BOTTOM
FT., '	FEET	TCB	TOP CURB BACK
GA.	GAGE OR GAUGE	THK.	THICK
GALV.	GALVANIZED	TYP.	TYPICAL
GE	GROOVED END JOINT	UNLESS OTHERWISE NOTED	
GRD.	GROUND	USG	UNITED STATES STANDARD GAGE
GRAT.	GRATING	VERT.	VERTICAL
HB	HOSE BIB	W/	WITH
HORIZ.	HORIZONTAL	WP	WORK POINT
HW	HEADWALL	WS	WATER STOP
		WSF	WELDED WIRE FABRIC

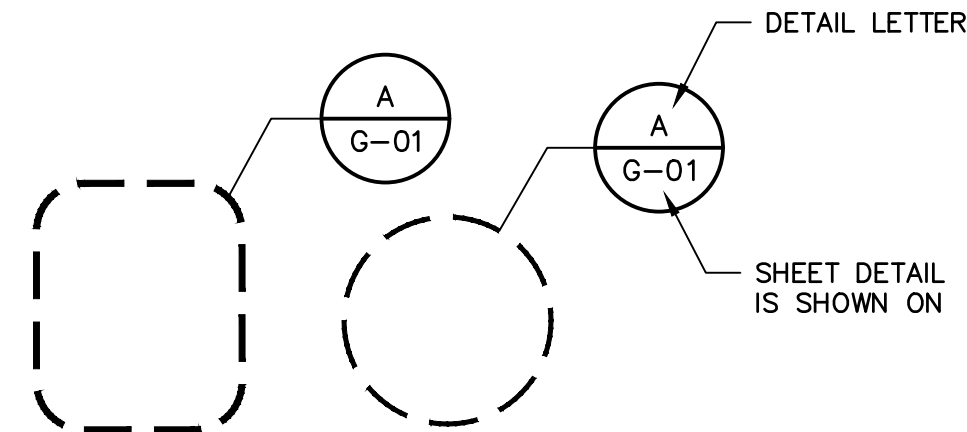
DRAWING NUMBER EXPLANATION



SECTION MARKERS



DETAIL MARKERS



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CONSULTANTS

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WHITFIELD COUNTY, GEORGIA  
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WEST FRANKLIN STREET  
BYPASS SYSTEM

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DATE: OCTOBER 2024

PROJECT NO.: 30064797

FILE NAME:

DESIGNED BY: T. TITTLE

DRAWN BY: A. DOTTL

CHECKED BY: R. GREUEL

SHEET TITLE

GENERAL

LEGEND AND  
ABBREVIATIONS

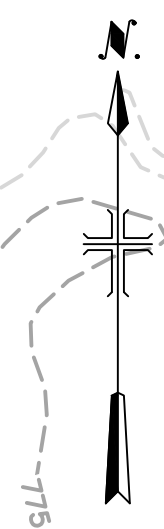
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G-02



Know what's below.  
Call before you dig.





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SHEET TITLE

CIVIL  
EXISTING CONDITIONS  
PLAN (SHEET 1 OF 3)

SCALE: AS SHOWN

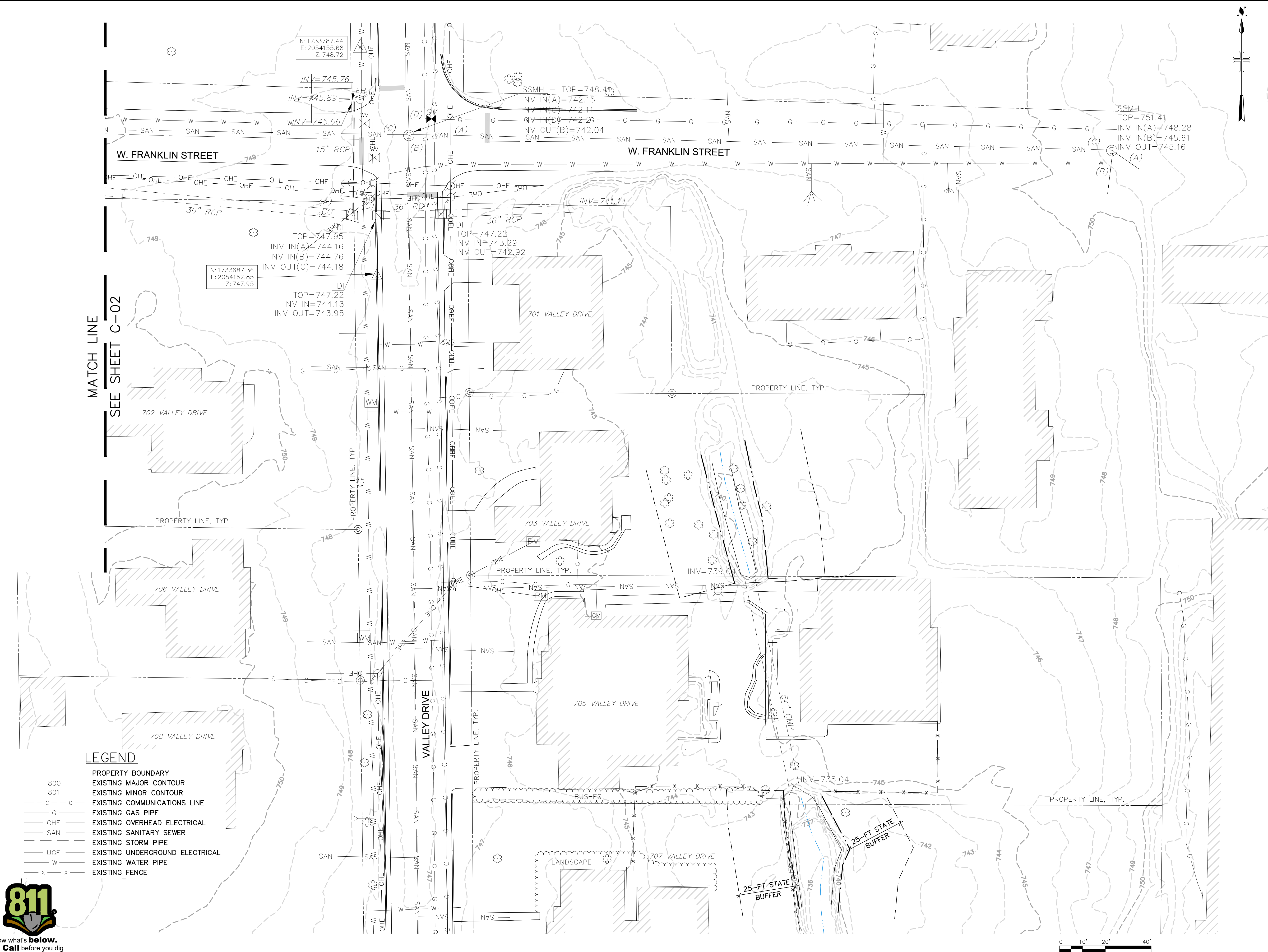
C-01







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ATLANTA, GA 30339  
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WWW.ARCADIS.COM  
CONSULTANTS

ISSUED FOR CONSTRUCTION



WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	RG/TT
NO.	DATE	ISSUED FOR	BY

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DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTT  
CHECKED BY: R. GREUL

SHEET TITLE  
CIVIL  
EXISTING CONDITIONS  
PLAN (SHEET 3 OF 3)

SCALE: AS SHOWN

C-03



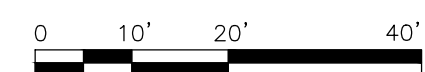
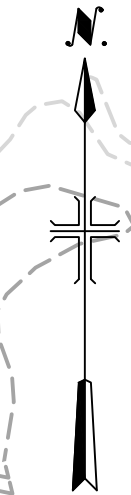
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LEGEND

- PROPERTY BOUNDARY
- TEMPORARY CONSTRUCTION AND PERMANENT DRAINAGE EASEMENT

NOTES:  
1. DALTON PUBLIC WORKS AND CONTRACTOR TO FIELD VERIFY REQUIRED EASEMENTS WITH PROPERTY OWNER PRIOR TO CONSTRUCTION.



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ARCADIS PROJ. NO. 30078891

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PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

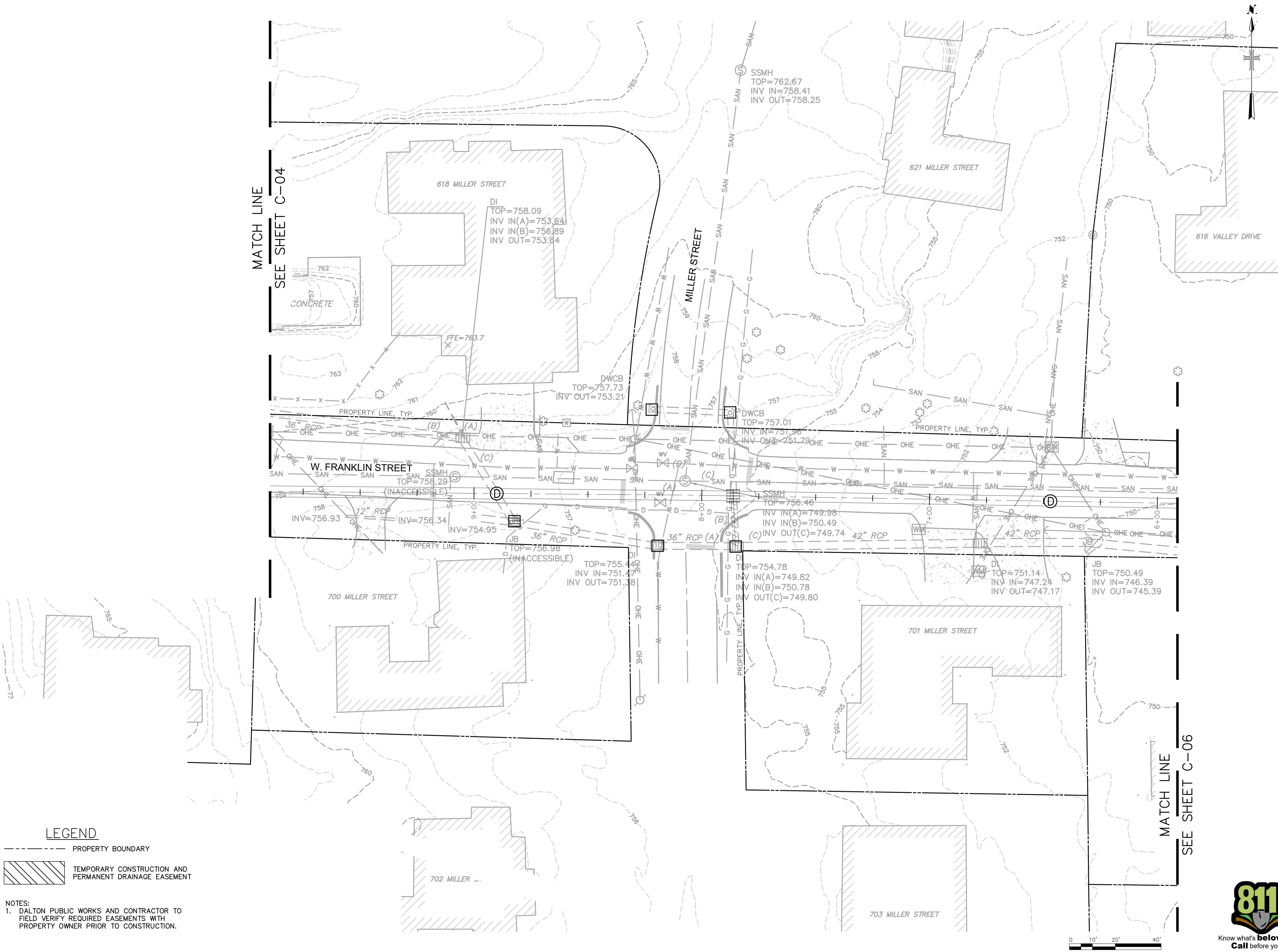
CIVIL  
EASEMENT PLAN  
(SHEET 1 OF 3)

SCALE: AS SHOWN

C-04



User:ACRAIN Spec:AUS-NSMOD File:C:\USERS\ACRAIN\DC\ACCORDS\ARCADIS\AUS-30064797-PHASE 3 ? WEST FRANKLIN STREET SYSTEM\PROJECT FILES\01 - WP\CIVIL\SHEETS\02\_EASEMENT.DWG Scale:1:1 SavedDate:10/16/2024 Time:11:10 Plot Date: Dotti, Angelo; 10/16/2024; 12:14 : Layout:11



LEGEND

- PROPERTY BOUNDARY
- TEMPORARY CONSTRUCTION AND PERMANENT DRAINAGE EASEMENT

NOTES:  
1. DALTON PUBLIC WORKS AND CONTRACTOR TO FIELD VERIFY REQUIRED EASEMENTS WITH PROPERTY OWNER PRIOR TO CONSTRUCTION.

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SHEET TITLE

CIVIL  
EASEMENT PLAN  
(SHEET 2 OF 3)

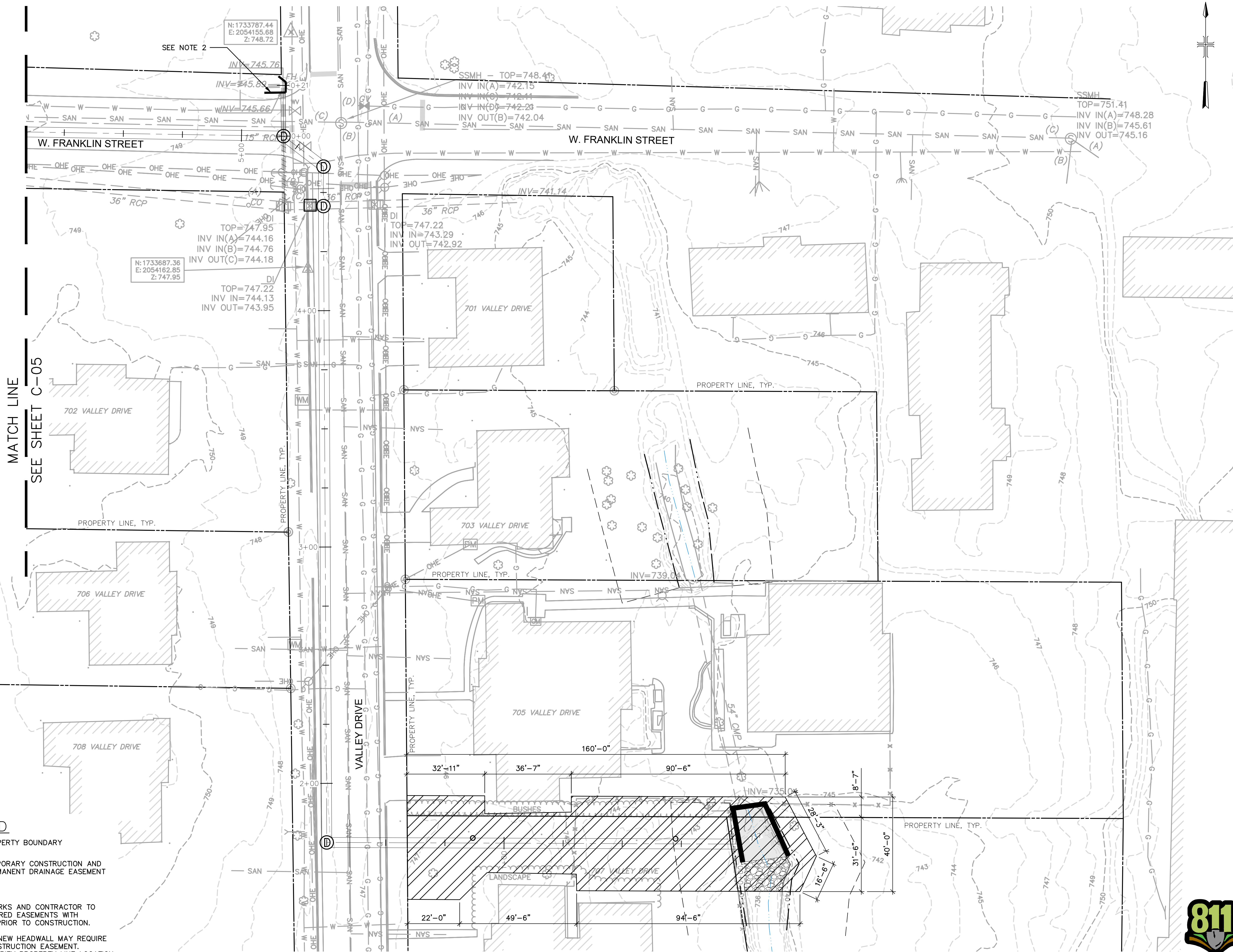
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C-05





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LEGEND

- PROPERTY BOUNDARY
- TEMPORARY CONSTRUCTION AND PERMANENT DRAINAGE EASEMENT

- NOTES:
- DALTON PUBLIC WORKS AND CONTRACTOR TO FIELD VERIFY REQUIRED EASEMENTS WITH PROPERTY OWNER PRIOR TO CONSTRUCTION.
  - CONSTRUCTION OF NEW HEADWALL MAY REQUIRE A TEMPORARY CONSTRUCTION EASEMENT. CONTRACTOR TO VERIFY PROPERTY LINE LOCATION AND DETERMINE LIMITS OF WORK.



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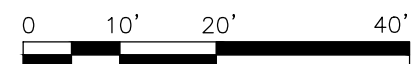
DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL  
EASEMENT PLAN  
(SHEET 3 OF 3)

SCALE: AS SHOWN

C-06









User:ACRAIN Spec:AUS-NSMOD File:C:\USERS\ACRAIN\DC\ACCORDS\ARCADIS\AUS-30064797-PHASE 3 ? WEST FRANKLIN STREET SYSTEM\PROJECT FILES\01 - WP1\CIVIL\SHEETS\03.DEMO.DWG Scale:1:1 SavedDate:10/16/2024 Time:11:13 Plot Date: Dattl, Angela 10/16/2024 12:15 : Layout:7

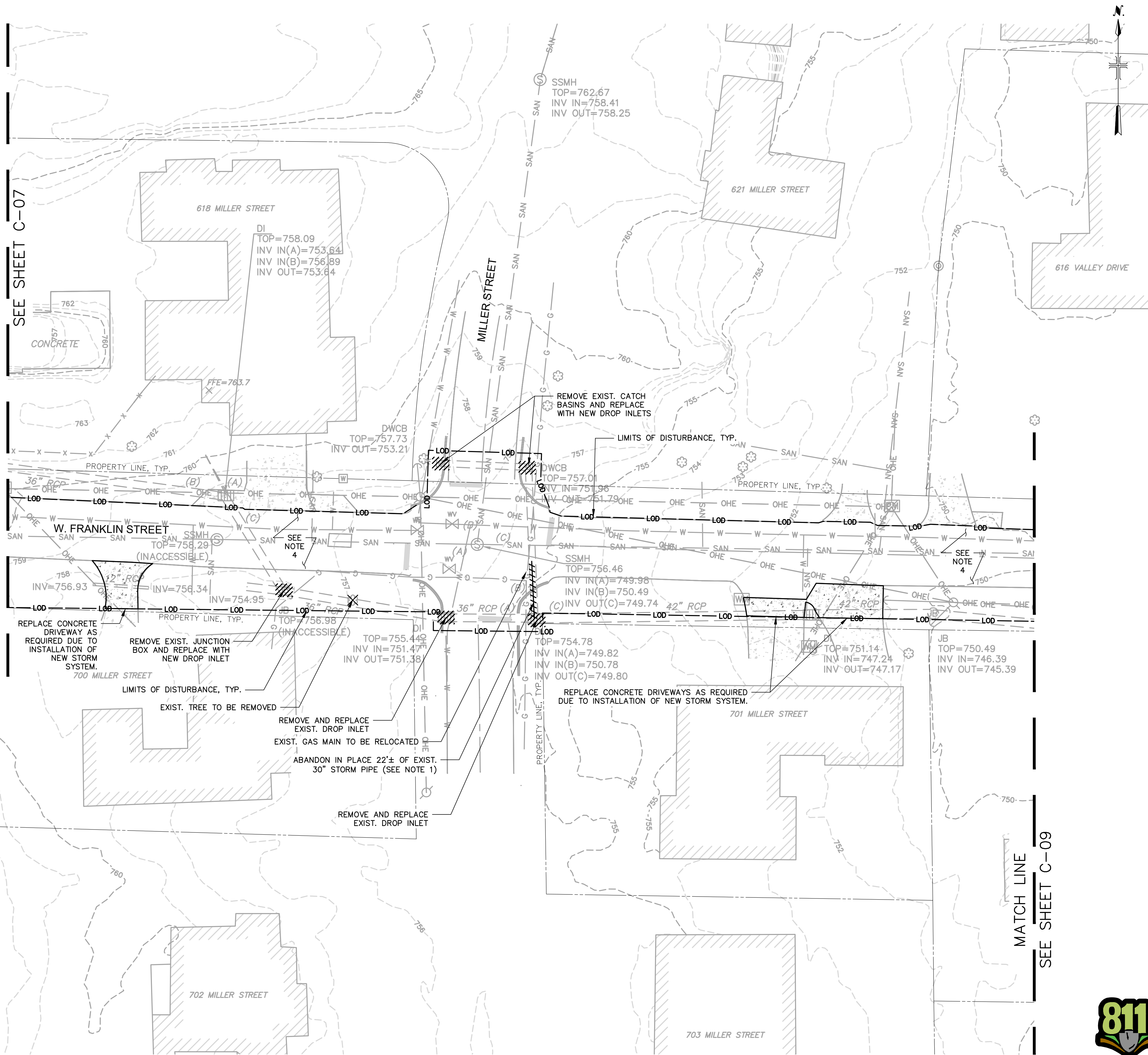
LEGEND

- PROPERTY BOUNDARY
- 800- EXISTING MAJOR CONTOUR
- 801- EXISTING MINOR CONTOUR
- C-C- EXISTING COMMUNICATIONS LINE
- G- EXISTING GAS PIPE
- OHE- EXISTING OVERHEAD ELECTRICAL
- SAN- EXISTING SANITARY SEWER
- W- EXISTING STORM PIPE
- UGE- EXISTING UNDERGROUND ELECTRICAL
- W- EXISTING WATER PIPE
- X·X·X·X·X·X·X· TO BE REMOVED
- ////// TO BE REMOVED
- ##### ABANDON IN PLACE

NOTES:

- ALL EXISTING PIPE TO BE ABANDONED SHALL BE CUT, AND PLUGGED OR CAPPED AT EACH END. WHERE EXISTING PIPE INTERFERES WITH NEW PIPING OR CONSTRUCTION, IT SHALL BE REMOVED 3-FT BEYOND THE LIMITS REQUIRED FOR THE PROPER COMPLETION OF THE WORK AND THE OPEN ENDS PLUGGED OR CAPPED UNLESS OTHERWISE SHOWN.
- ALL UTILITIES SHALL REMAIN ACTIVE AND IN PLACE UNLESS OTHERWISE NOTED ON PLANS.
- THE LOCATION OF THE EXISTING UTILITIES SHOWN ARE APPROXIMATE LOCATIONS AND DEPTHS. THE CONTRACTOR SHALL PERFORM ADDITIONAL POT-HOLING AND COORDINATE WITH THE UTILITY COMPANIES TO DETERMINE THE EXACT LOCATION OF UTILITIES PRIOR TO COMMENCING WORK.
- CONTRACTOR TO MILL AND OVERLAY THE FULL WIDTH OF W FRANKLIN STREET AND VALLEY DRIVE WITHIN THE LIMITS OF DISTURBANCE UPON COMPLETION OF THE STORMWATER BYPASS SYSTEM CONSTRUCTION. MILL AND OVERLAY ON ALL ADJACENT SIDE STREETS SHALL BE RESURFACED TO THE END OF THE RADIUS RETURNS.
- MILLING/REMOVAL OF ASPHALT AROUND MANHOLE, GAS VALVE, OR WATER VALVE TO PREPARE FOR RESURFACING - CONTRACTOR SHALL PROVIDE UNIT PRICING TO PERFORM THE NECESSARY MILLING AROUND IN-PAVEMENT UTILITY MANHOLES AND VALVES. THIS MILLING WILL REQUIRE A SMALL MILLING MACHINE TO APPROPRIATELY MILL AROUND THE UTILITY INFRASTRUCTURE AT THE SAME MILLING DEPTH SPECIFIED FOR THIS STREET TO PREPARE FOR RESURFACING. THE UNIT PRICE FOR THIS WORK SHOULD INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE WORK.

MATCH LINE  
SEE SHEET C-07



MATCH LINE  
SEE SHEET C-09

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SEALS  
  
TN 30064797

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

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PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTT  
CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL  
DEMOLITION PLAN  
(SHEET 2 OF 3)

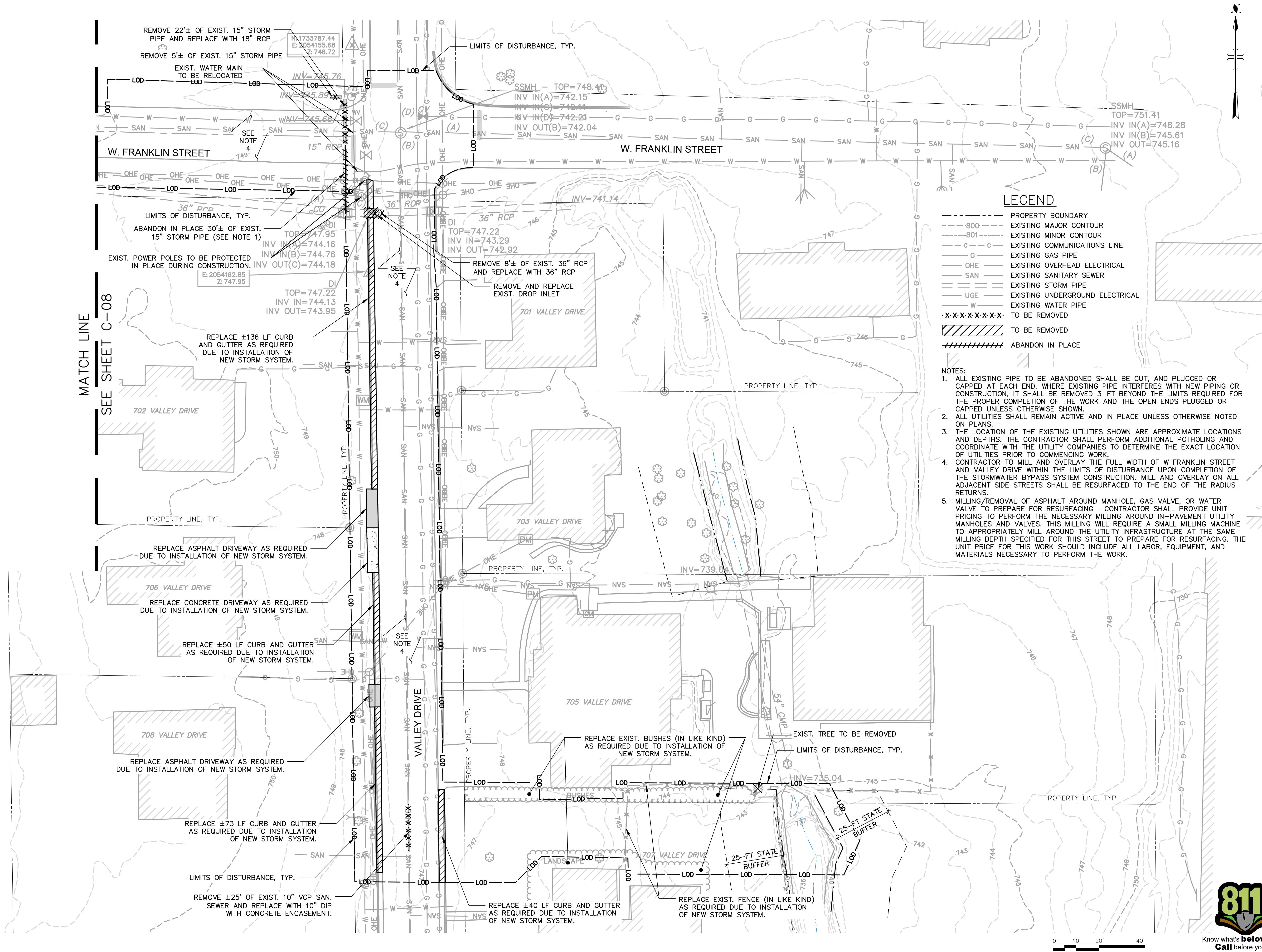
SCALE: AS SHOWN

C-08





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WHITFIELD COUNTY, GEORGIA  
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BYPASS SYSTEM

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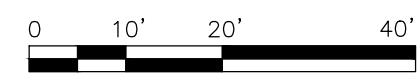
DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITLE  
DRAWN BY: A. DOTT  
CHECKED BY: R. GREUL

SHEET TITLE

CIVIL  
DEMOLITION PLAN  
(SHEET 3 OF 3)

SCALE: AS SHOWN

C-09





SEALS



WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

## WEST FRANKLIN STREET BYPASS SYSTEM

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PROJECT NO.: 30064797

FILE NAME: \_\_\_\_\_

DESIGNED BY: T. TITTLE

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CHECKED BY: R. GREUEL

SHEET TITLE
CIVIL

## OVERALL STORMWATER IMPROVEMENTS PLAN

SCALE: AS SHOWN

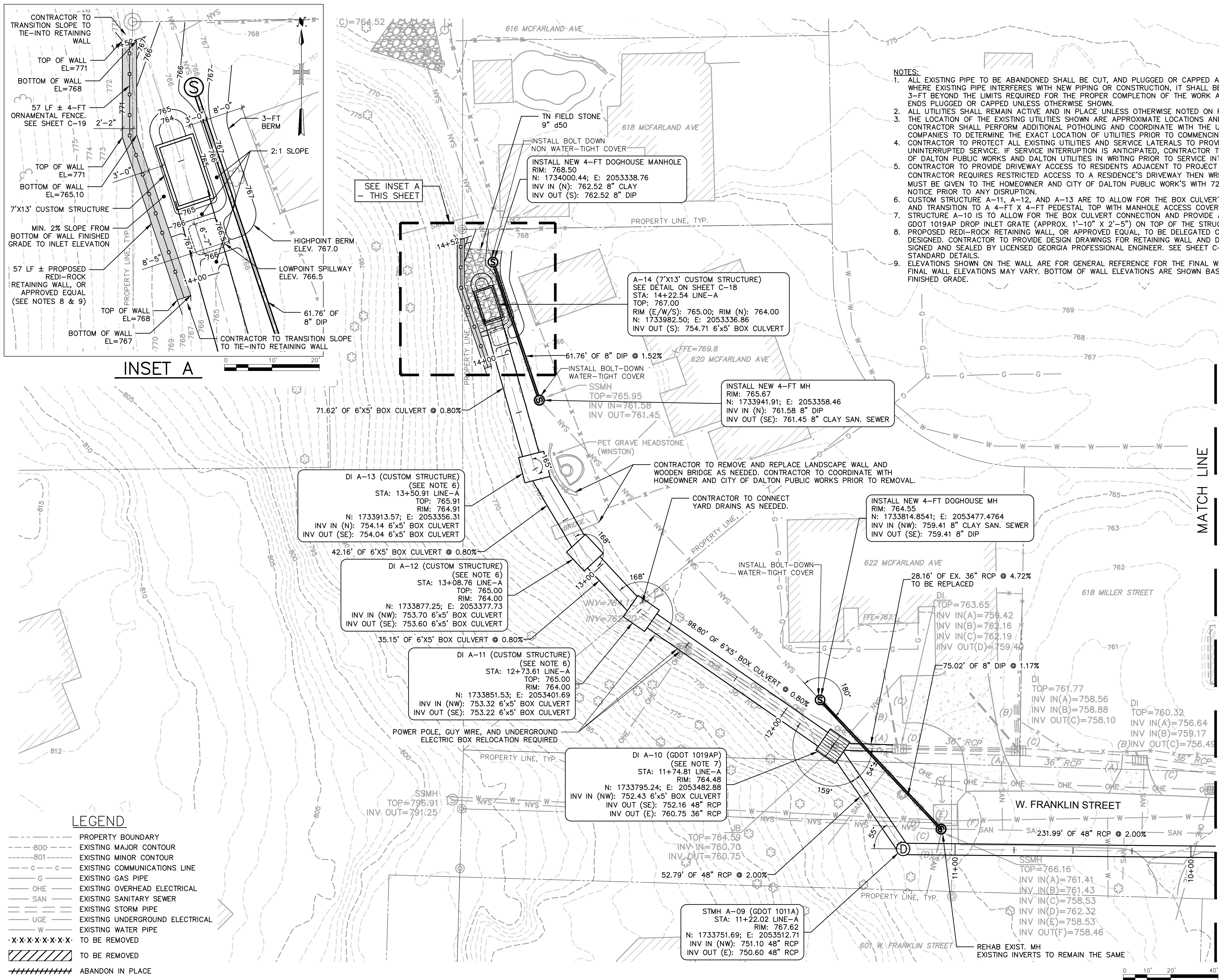
C-10




Know what's **below**.  
**Call** before you dig.



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BYPASS SYSTEM

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DRAWN BY: A. DOTTL

CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL

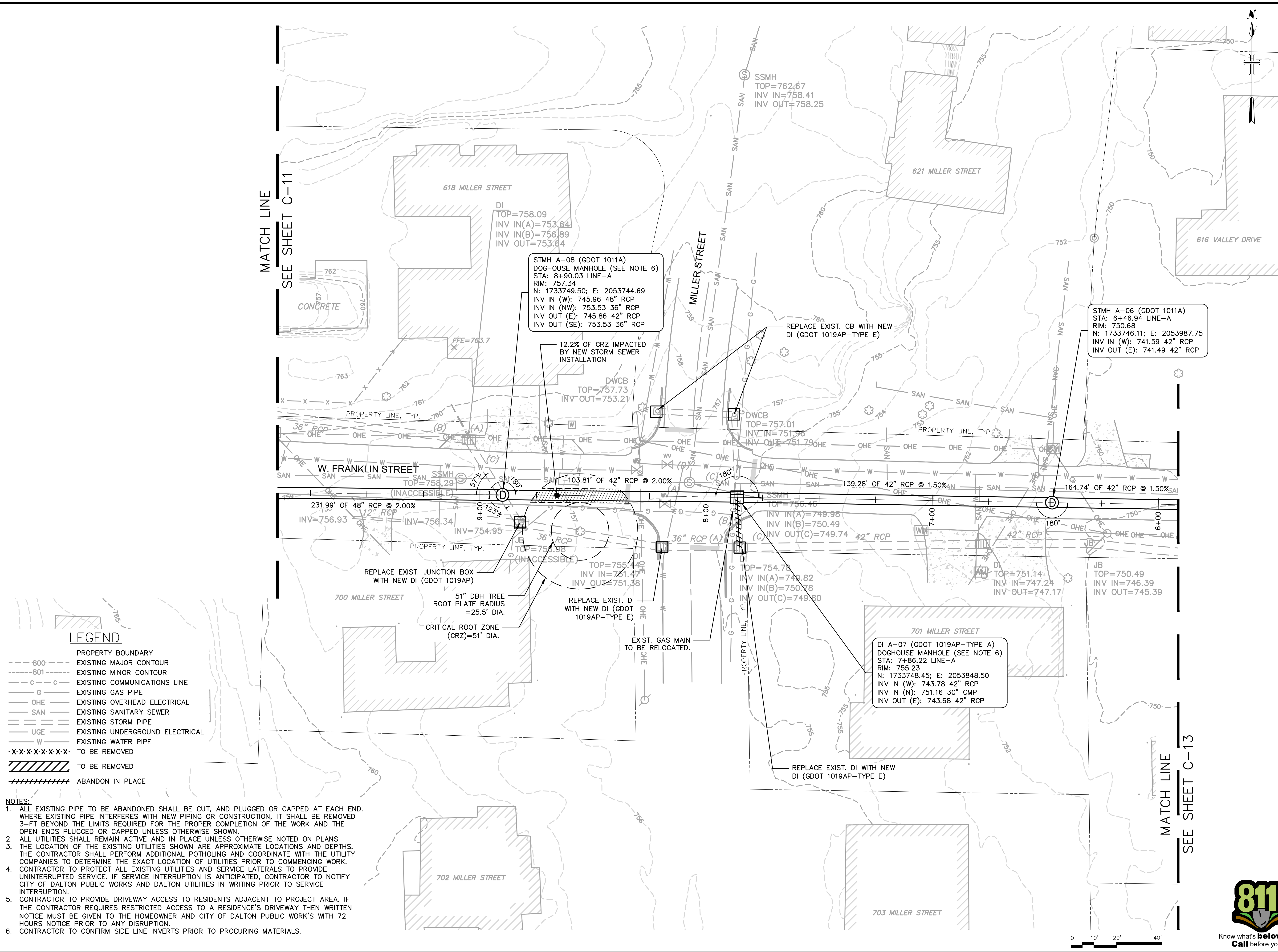
STORMWATER IMPROVEMENTS PLAN  
(SHEET 1 OF 3)

SCALE: AS SHOWN

C-11





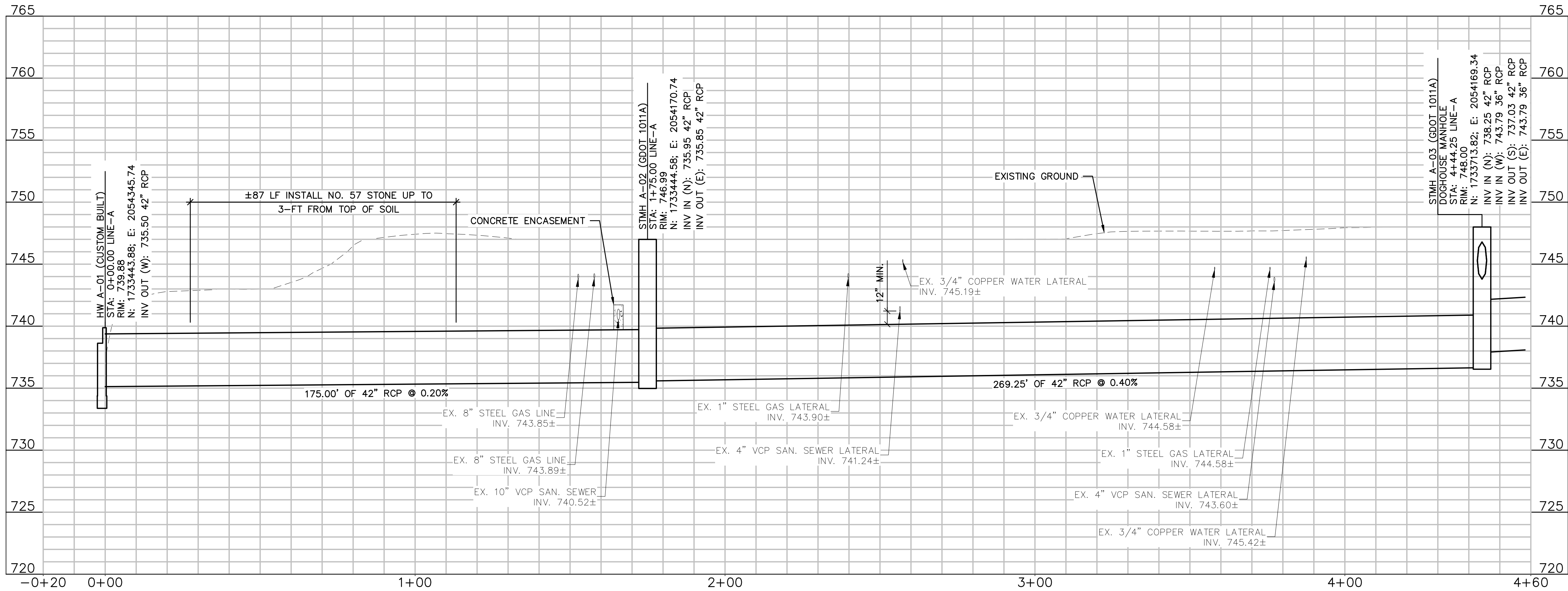




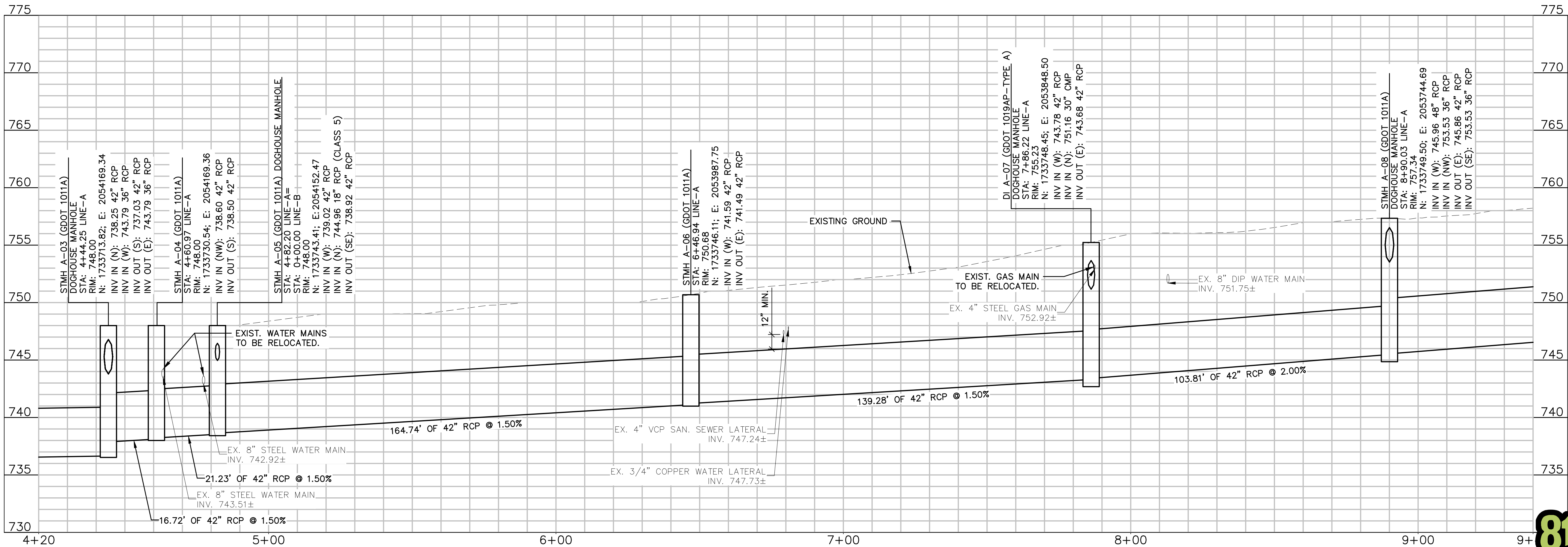




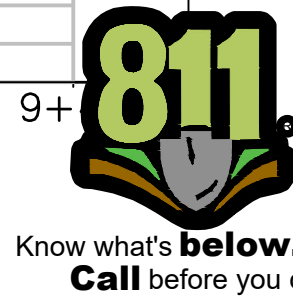
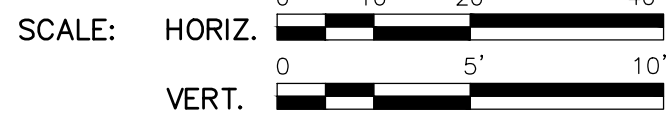
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LINE-A STORMWATER PROFILE: HEADWALL A-01 TO STMH A-03



LINE-A STORMWATER PROFILE: STMH A-03 TO STMH A-08



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SHEET TITLE

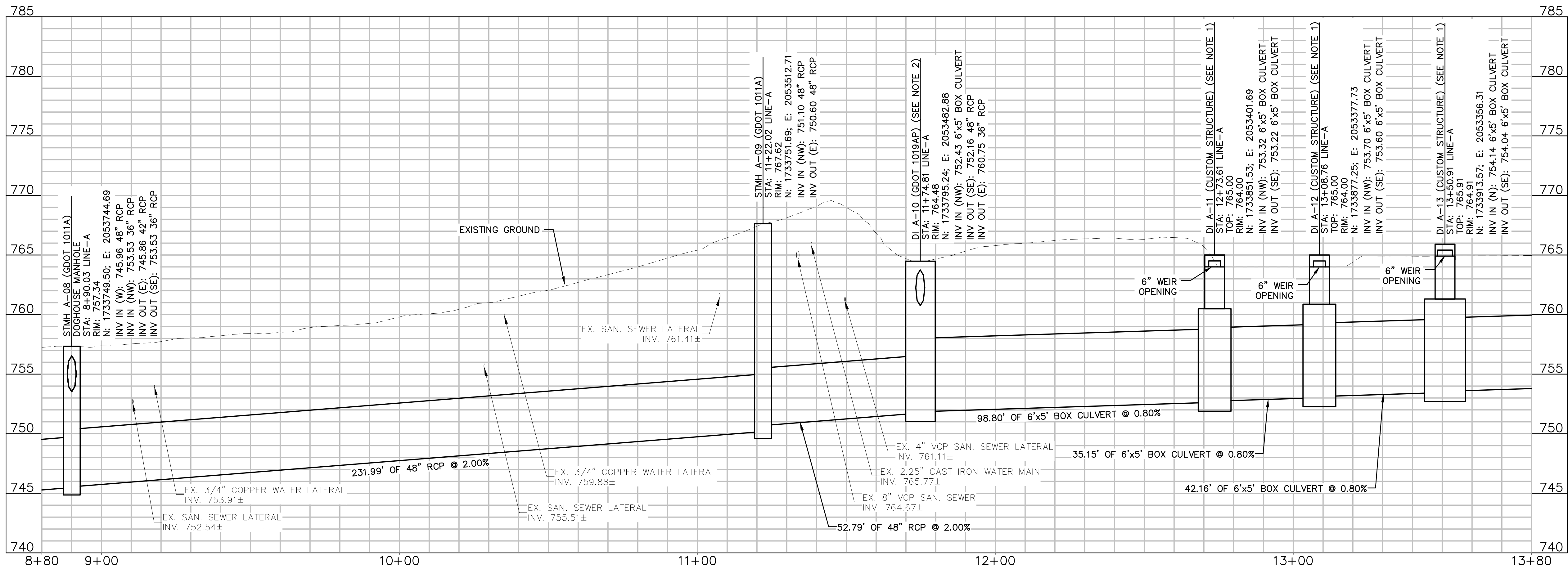
CIVIL  
LINE-A STORMWATER  
IMPROVEMENTS PROFILE

SCALE: AS SHOWN

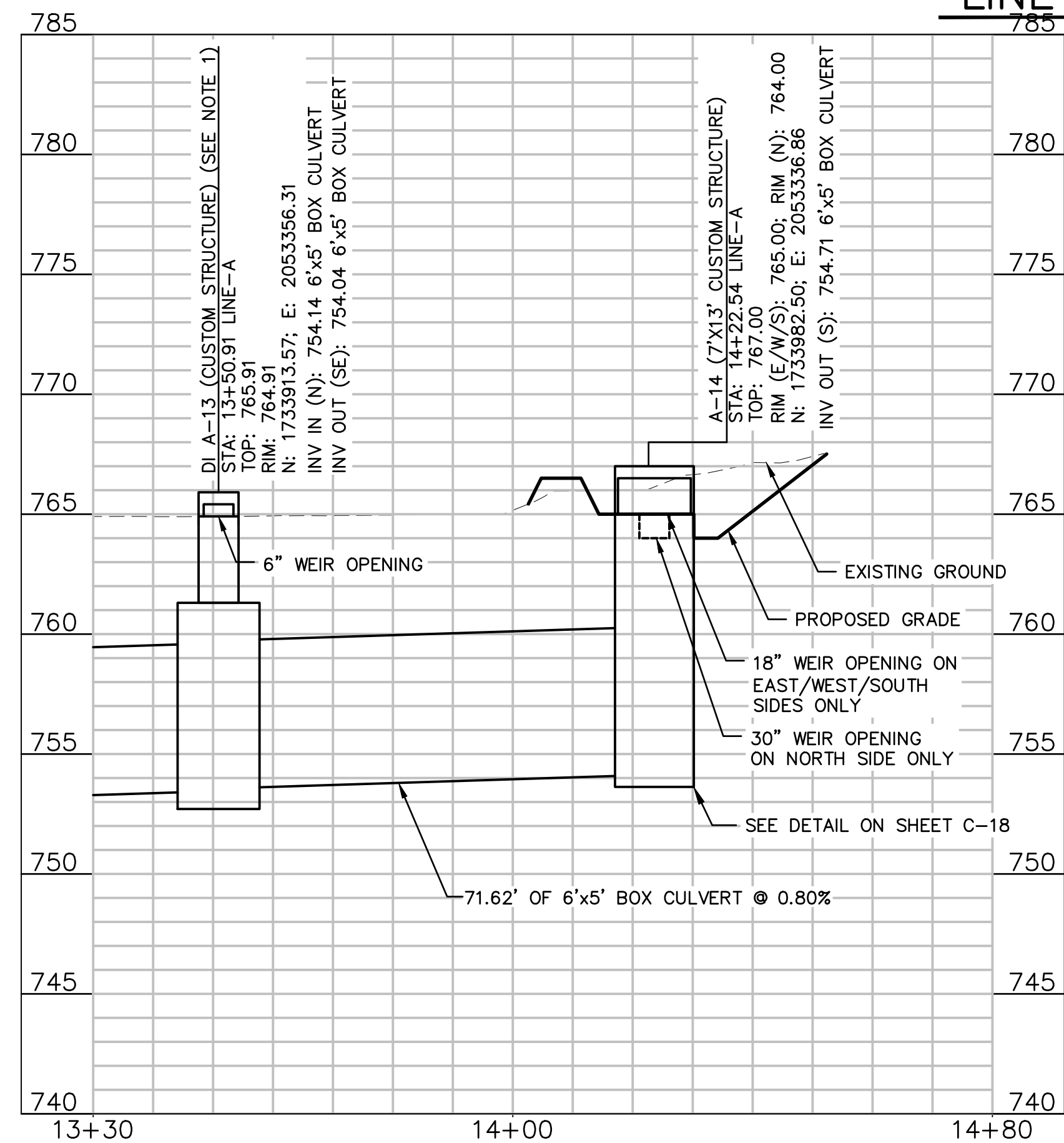
C-14



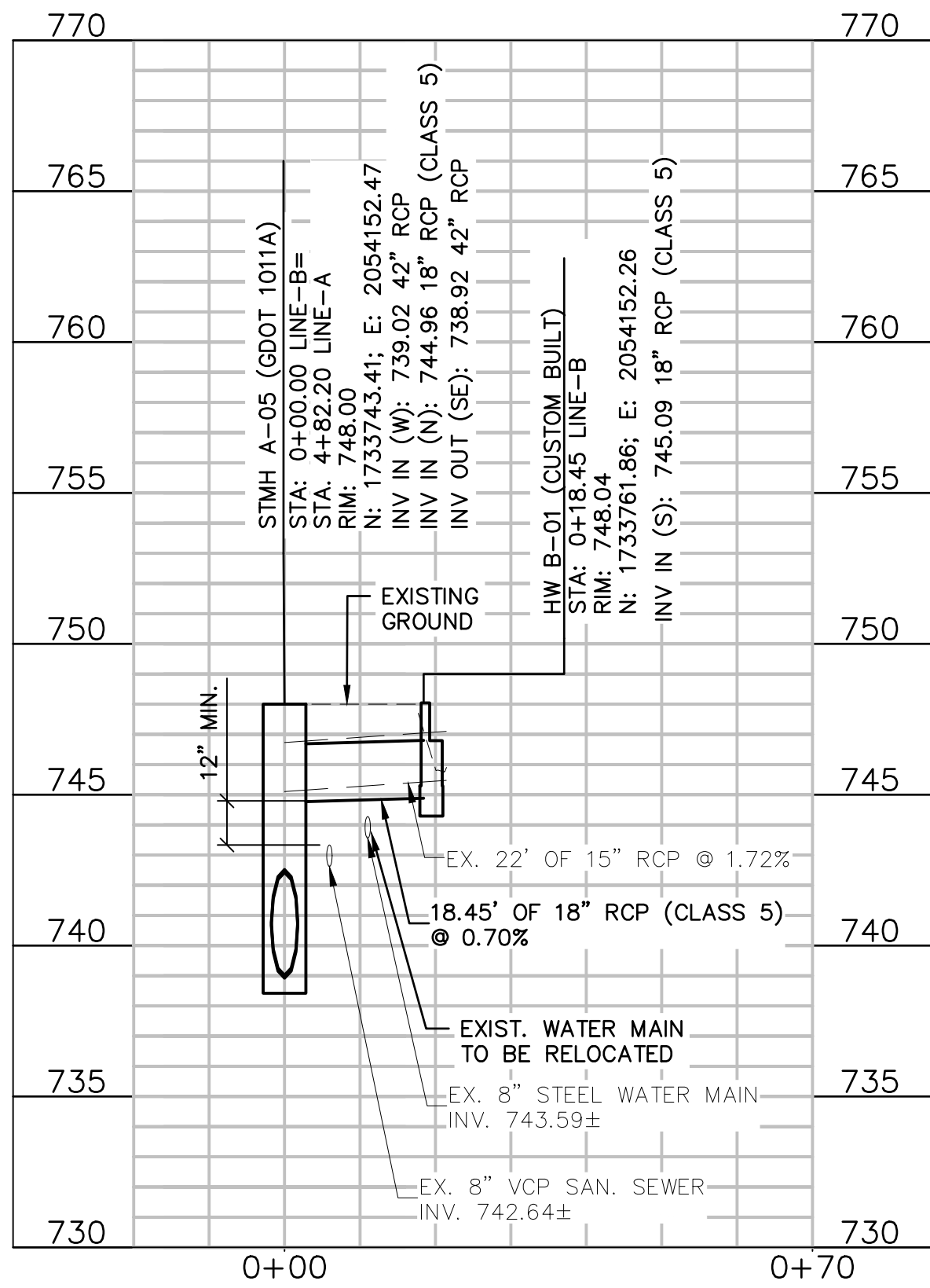
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LINE-A STORMWATER PROFILE: STMH A-08 TO DI A-13

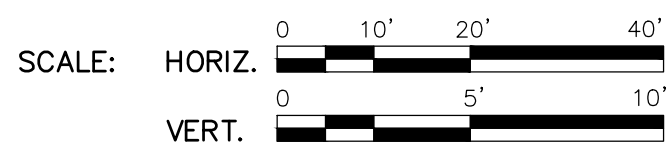


LINE-A STORMWATER PROFILE  
DI A-13 TO A-14



LINE-B STORMWATER PROFILE  
STMH A-05 TO DI B-01

- NOTES:
- CUSTOM STRUCTURE A-11, A-12, AND A-13 ARE TO ALLOW FOR THE BOX CULVERT CONNECTION AND TRANSITION TO A 4-FT X 4-FT PEDESTAL TOP WITH MANHOLE ACCESS COVER.
  - STRUCTURE A-10 IS TO ALLOW FOR THE BOX CULVERT CONNECTION AND PROVIDE A STANDARD DOT 1019AP DROP INLET GRATE (APPROX. 1'-10" X 2'-5") ON TOP OF THE STRUCTURE.



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WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

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CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL

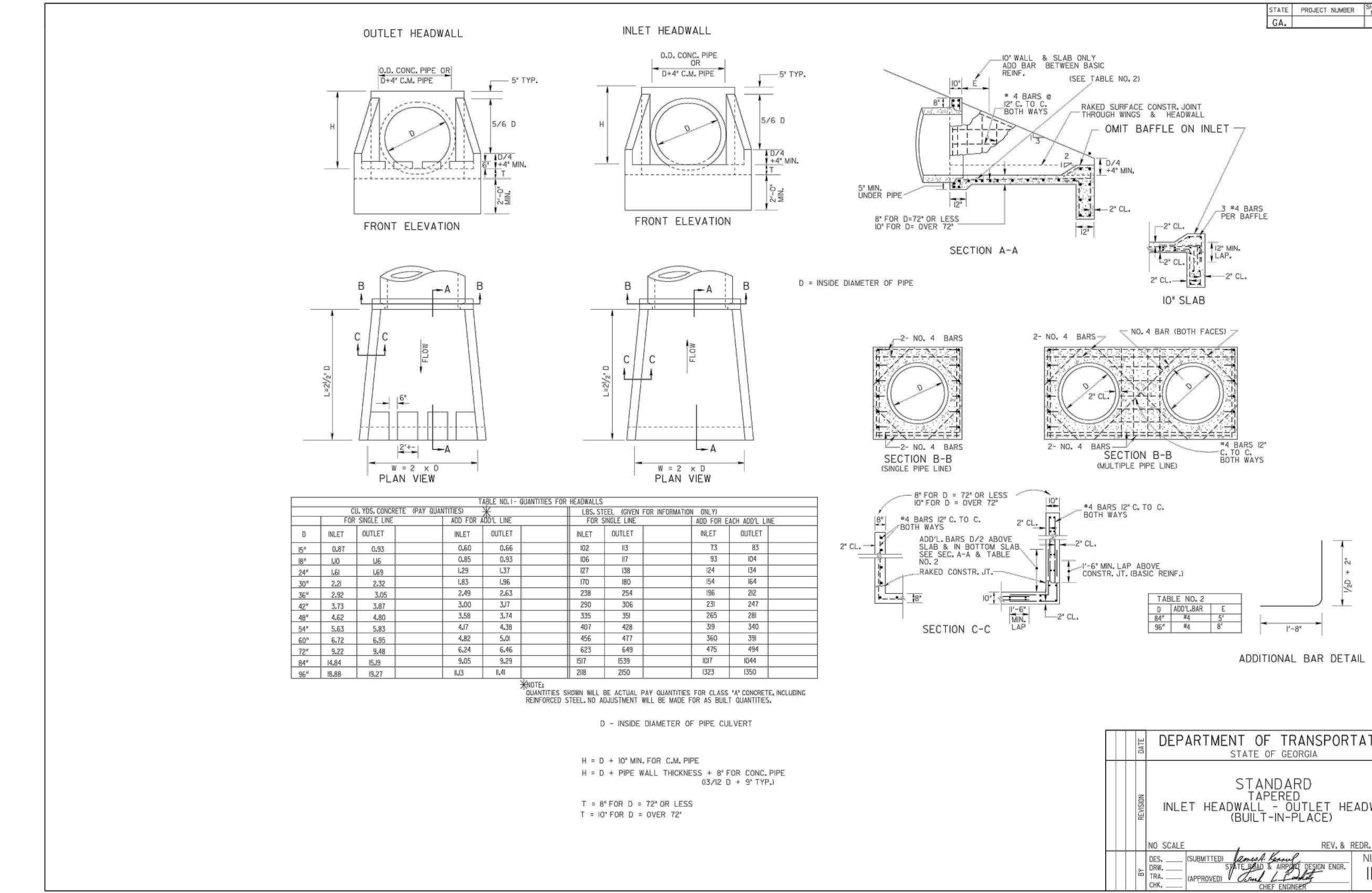
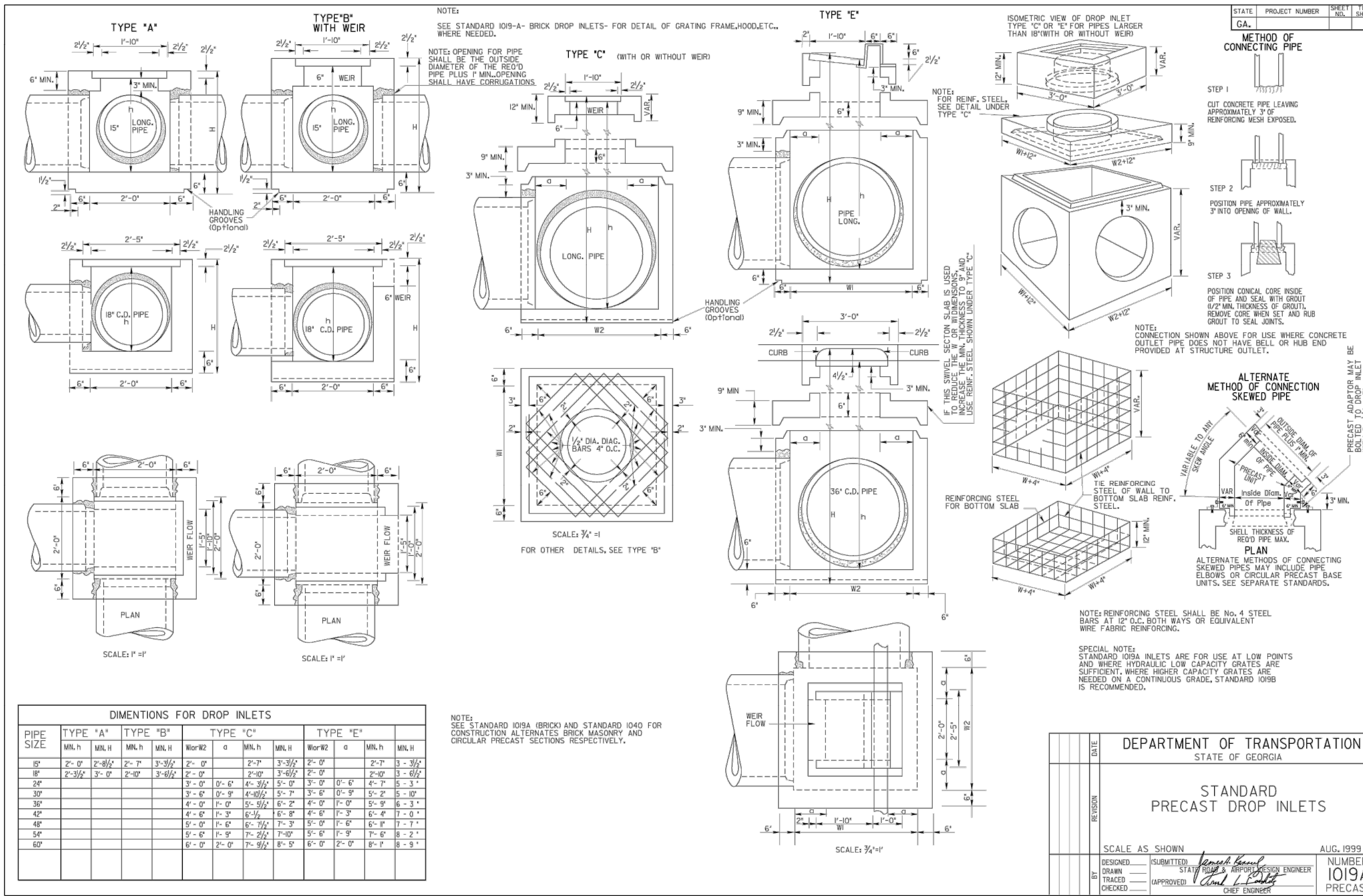
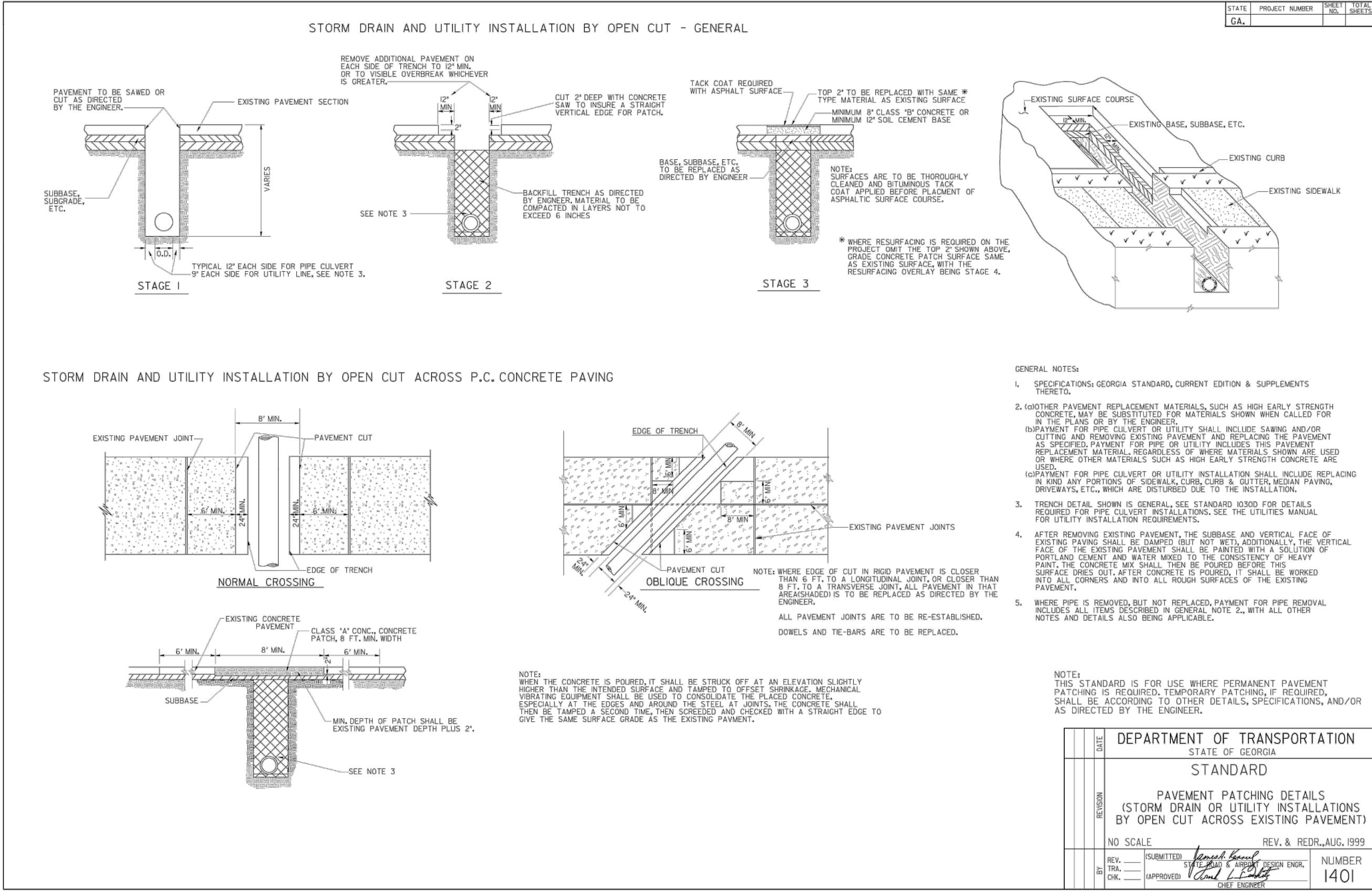
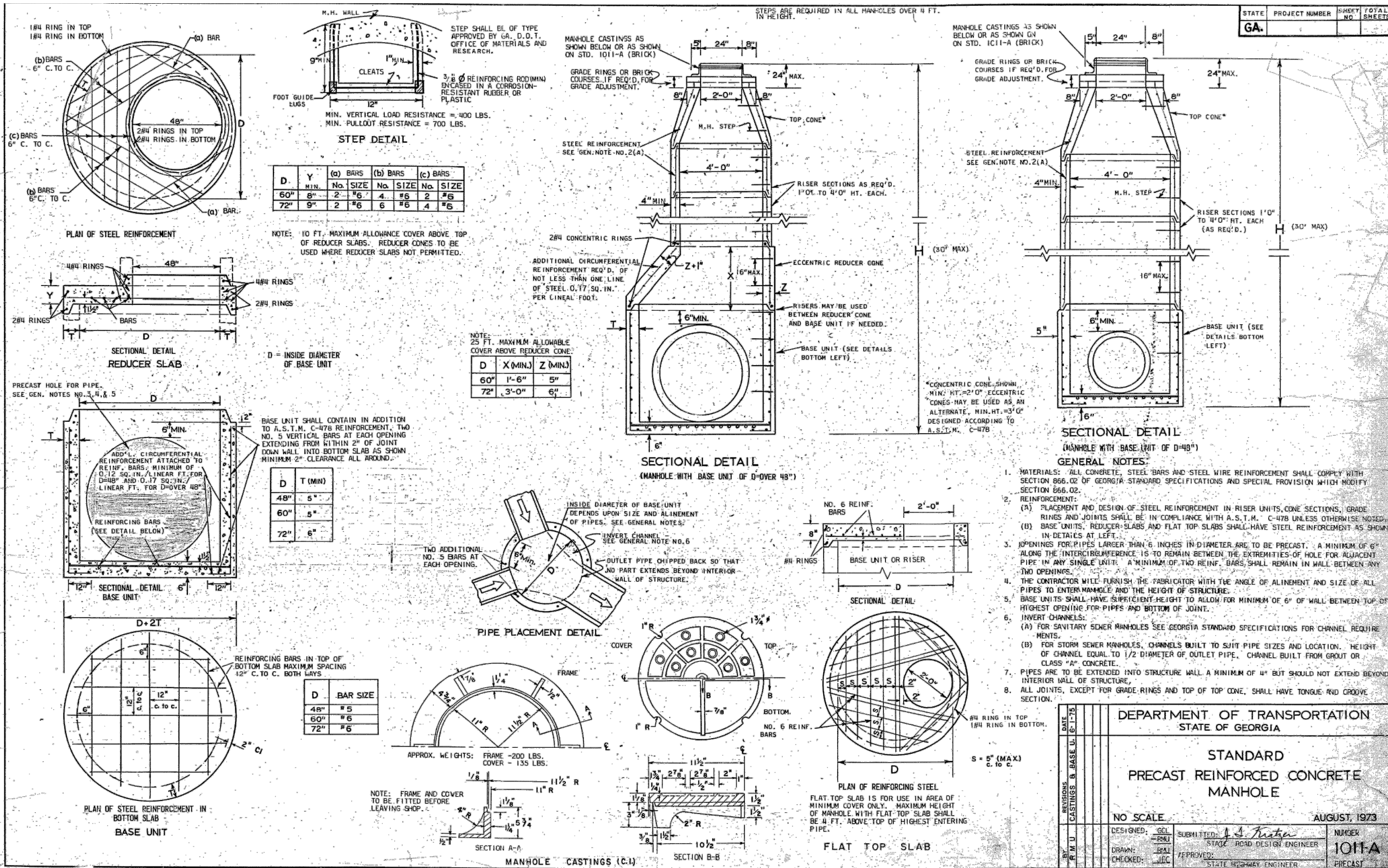
LINE-A AND LINE-B  
STORMWATER  
IMPROVEMENTS  
PROFILES

SCALE: AS SHOWN

C-15



User:ACRIN Spec:AUS-NSM0D File:C:\USERS\ACRIN\DC\ACCORDS\ARCADIS\AUS-30064797-PHASE 3 WEST FRANKLIN STREET SYSTEM\PROJECT FILES\01 - WP\CIVIL SHEETS\CIVIL DETAILS.DWG Scale:1:1 SavedDate:10/16/2024 Time:11:31 Plot Date: Dotti, Angelo: 10/16/2024: 12:17 : Layout:16



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REGISTERED PROFESSIONAL ENGINEER  
No. 28402  
12-18-24  
RICHARD ALLEN GRIFFIN  
TN 50064797

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

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PROJECT NO.: 30064797

FILE NAME:

DESIGNED BY: T. TITLE

DRAWN BY: A. DOTTL

CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL

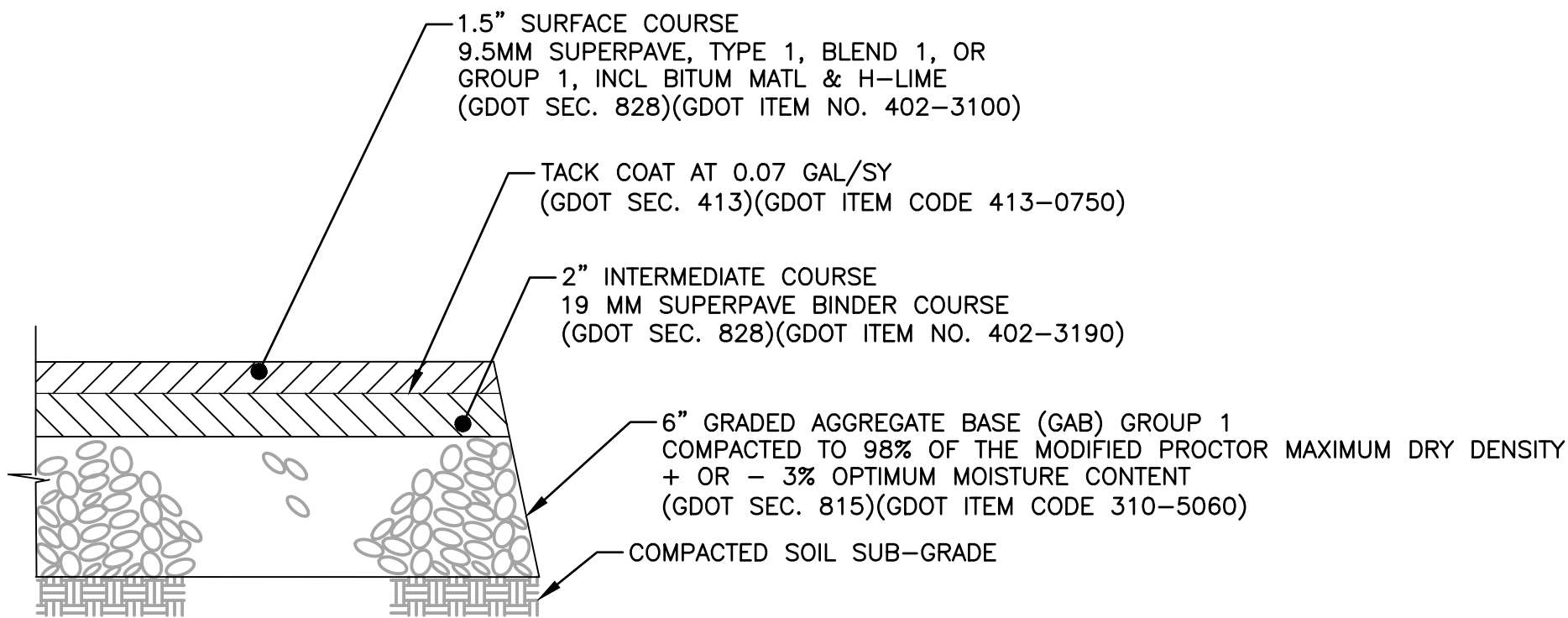
STANDARD DETAILS  
(SHEET 1 OF 4)

AS SHOWN

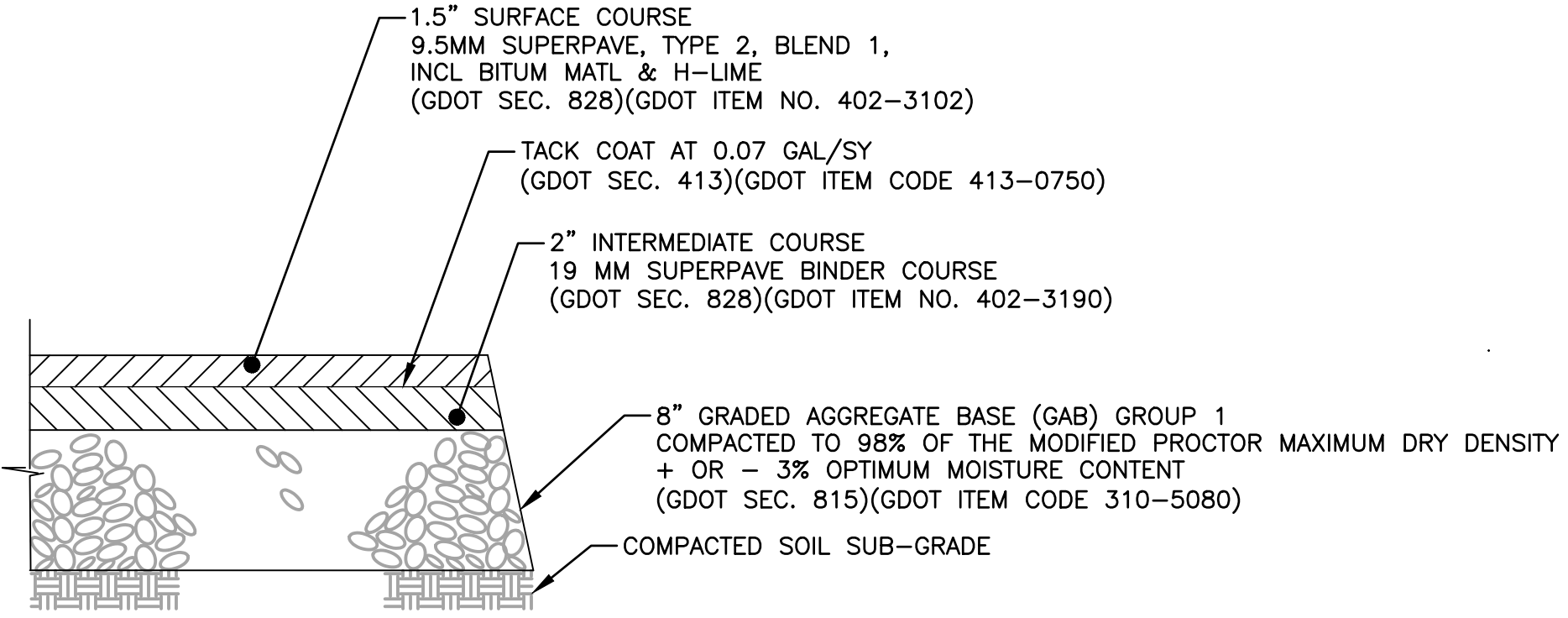
C-16



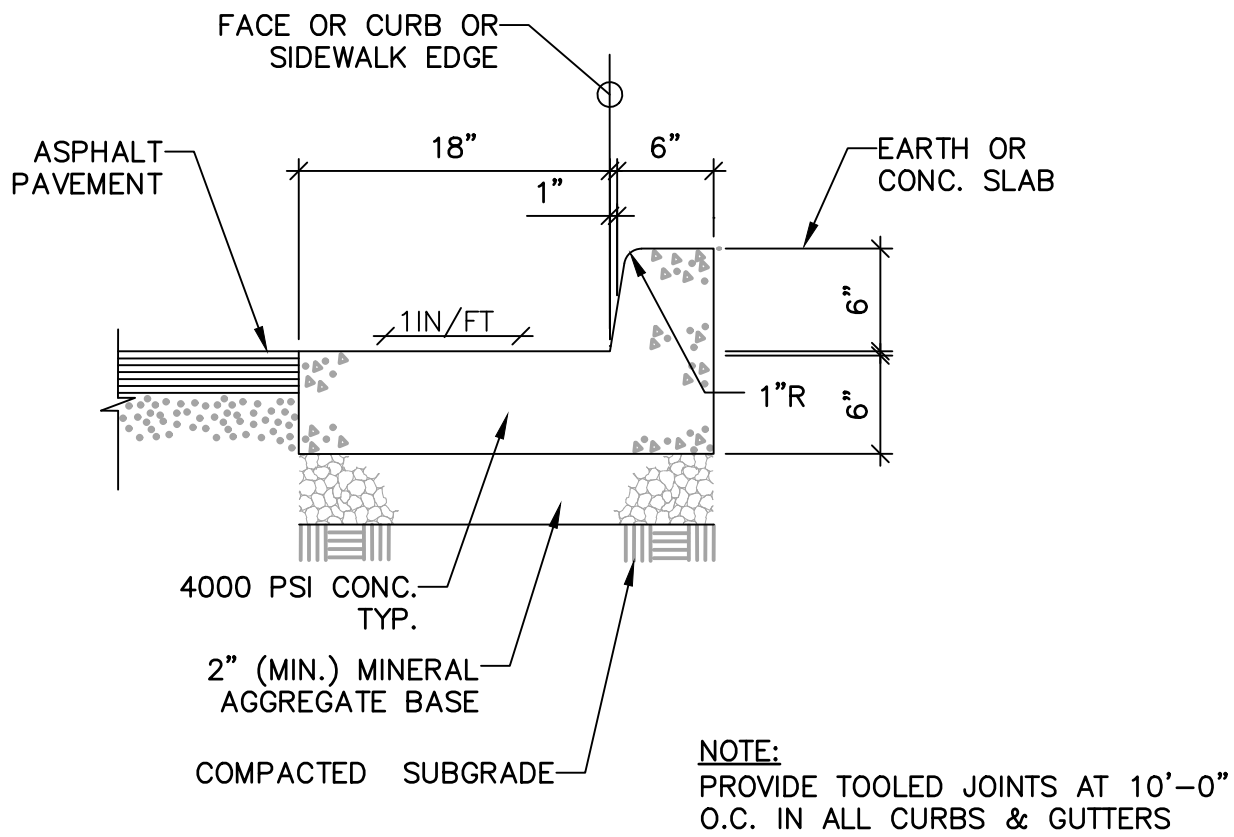
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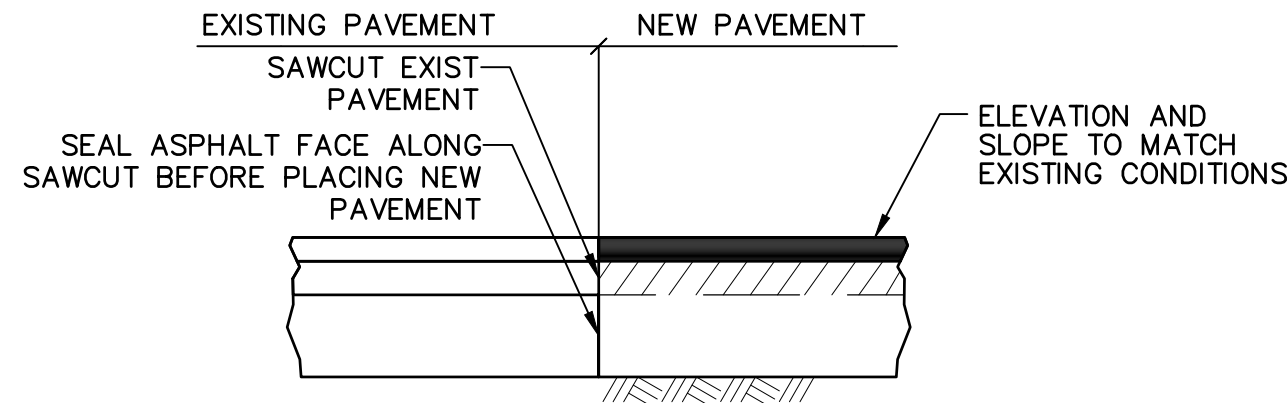
**WEST FRANKLIN ASPHALT TYPICAL PAVEMENT**  
NOT TO SCALE



**VALLEY DRIVE ASPHALT TYPICAL PAVEMENT**  
NOT TO SCALE



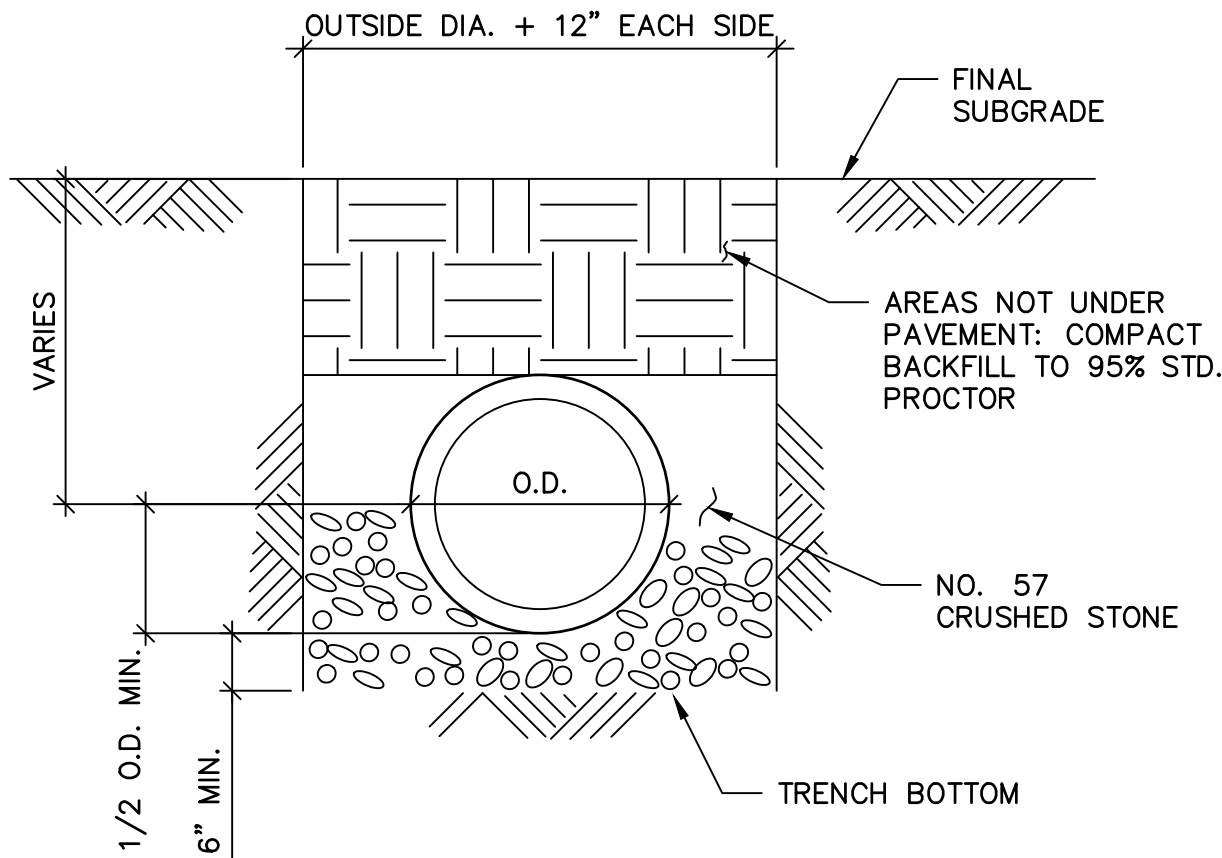
**CONCRETE CURB & GUTTER**



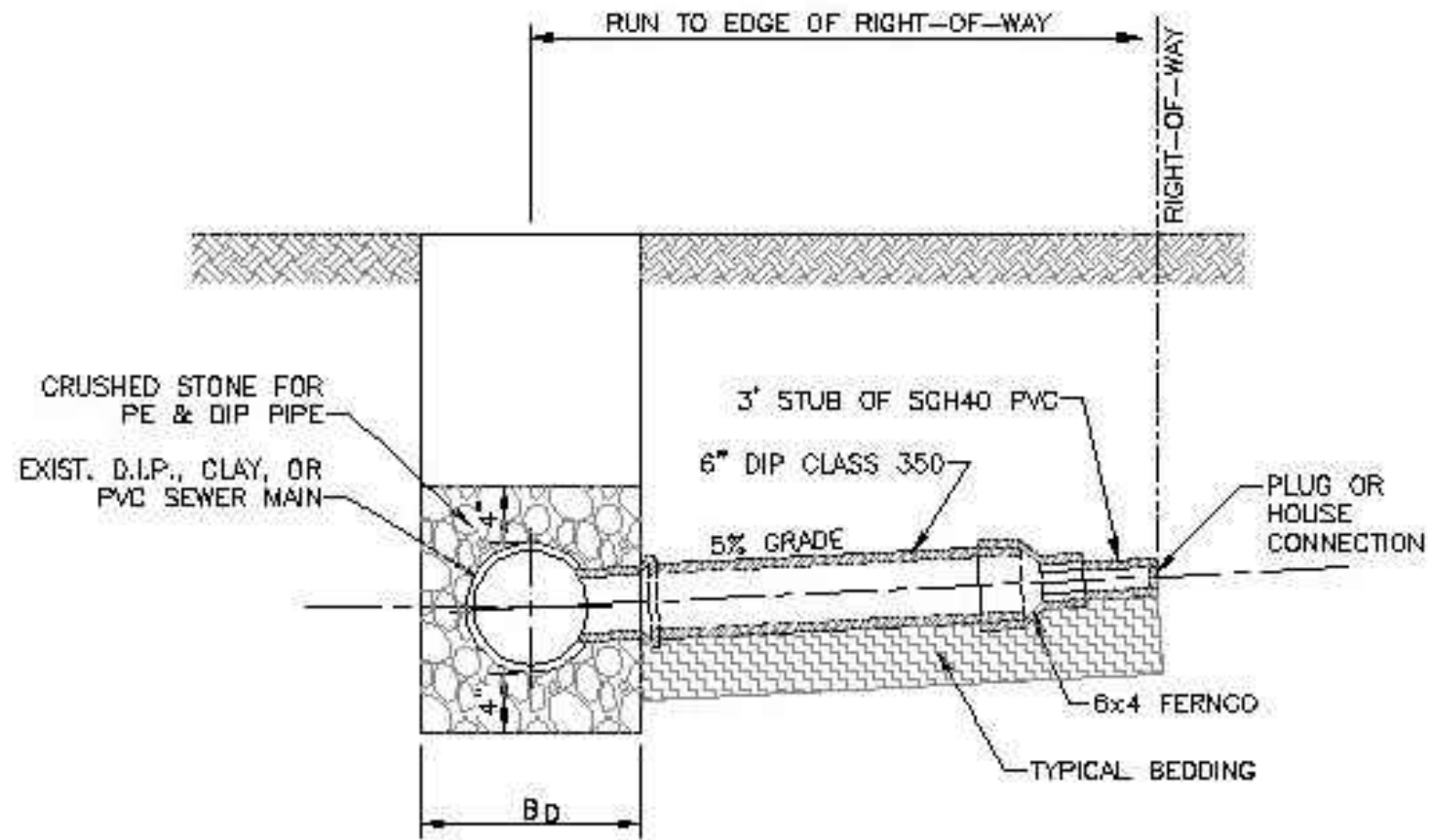
NOTES:  
1. JOINT SHALL BE SMOOTH AND PATCH TO BE LEVEL FROM ONE END TO THE OTHER. IF SURFACE IS NOT SMOOTH, GRIND ASPHALT TO PROVIDE SMOOTH SURFACE.

ASPHALT TO ASPHALT TRANSITION

**PAVEMENT TRANSITION**  
NOT TO SCALE

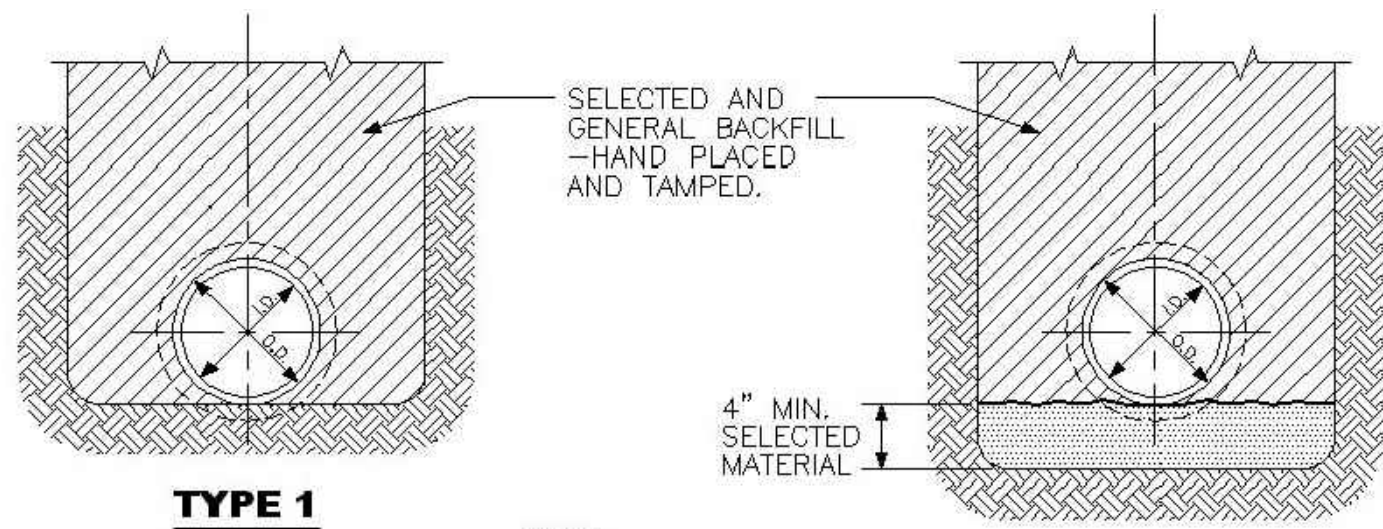


**REINFORCED CONCRETE PIPE BEDDING**  
NOT TO SCALE



SECTION

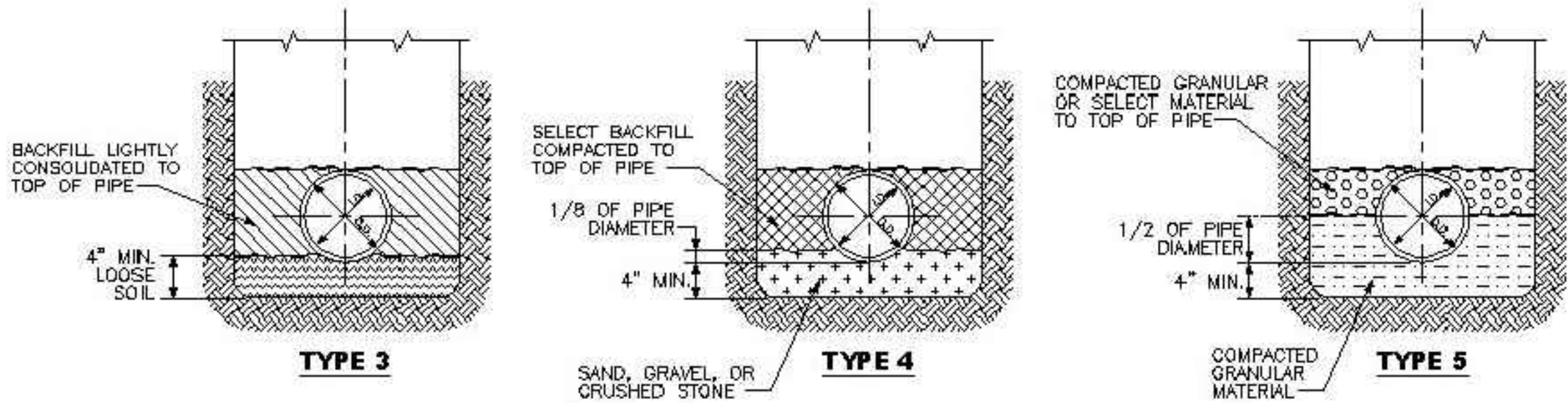
**TYPICAL SERVICE CONNECTION**  
NOT TO SCALE - PROVIDED BY DALTON UTILITIES



**TYPE 1**

**TYPE 2**

NOTE:  
EXCAVATE  
FOR BELL



**TYPE 3**

**TYPE 4**

**TYPE 5**

**SEWER PIPE BEDDING DETAILS**  
NOT TO SCALE - PROVIDED BY DALTON UTILITIES



LEGAL ENTITY:  
ARCADIS U.S., INC.  
2839 PACES FERRY RD SUITE 900  
ATLANTA, GA 30339  
TEL: 770-431-8666  
WWW.ARCADIS.COM  
CONSULTANTS

ISSUED FOR CONSTRUCTION

SEALS



WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	RG/TT
NO.	DATE	ISSUED FOR	BY

COPYRIGHT: ARCADIS U.S., INC. 2024

DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL

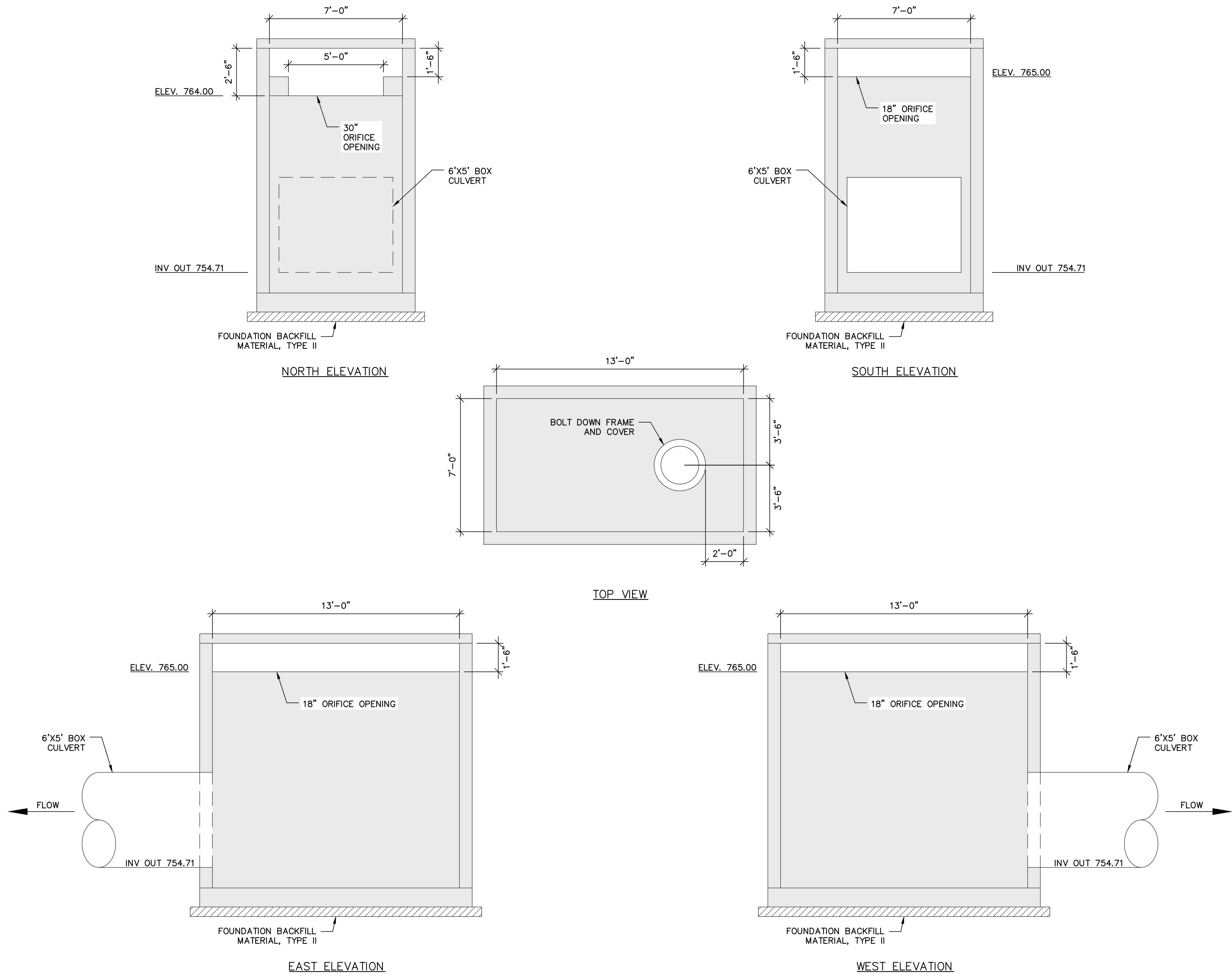
STANDARD DETAILS  
(SHEET 2 OF 4)

SCALE: AS SHOWN

C-17



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**A-14 7'X13' CUSTOM STRUCTURE**  
NOT TO SCALE

**NOTES:**

1. PRECAST MANUFACTURER TO PROVIDE FINAL DESIGN OF CUSTOM STRUCTURE. CRITICAL INVERT ELEVATIONS AND WEIR LENGTHS ARE PROVIDED ON THE SCHEMATIC DETAILS SHOWN BASED UPON THE DESIGN INTENT. ALL OTHER DIMENSIONS TO BE DETERMINED BY PRECAST MANUFACTURER.



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SHEET TITLE

CIVIL  
STANDARD DETAILS  
(SHEET 3 OF 4)

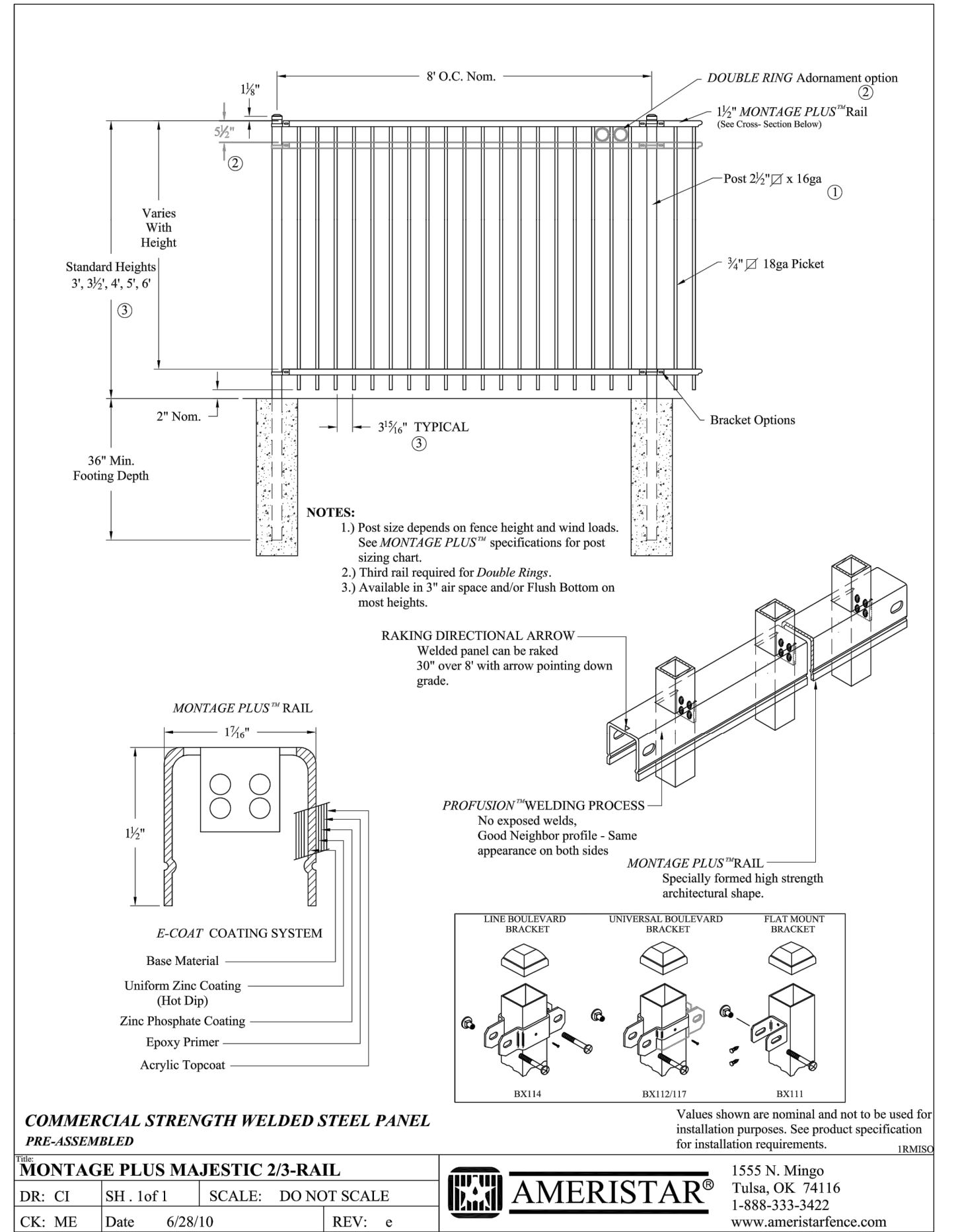
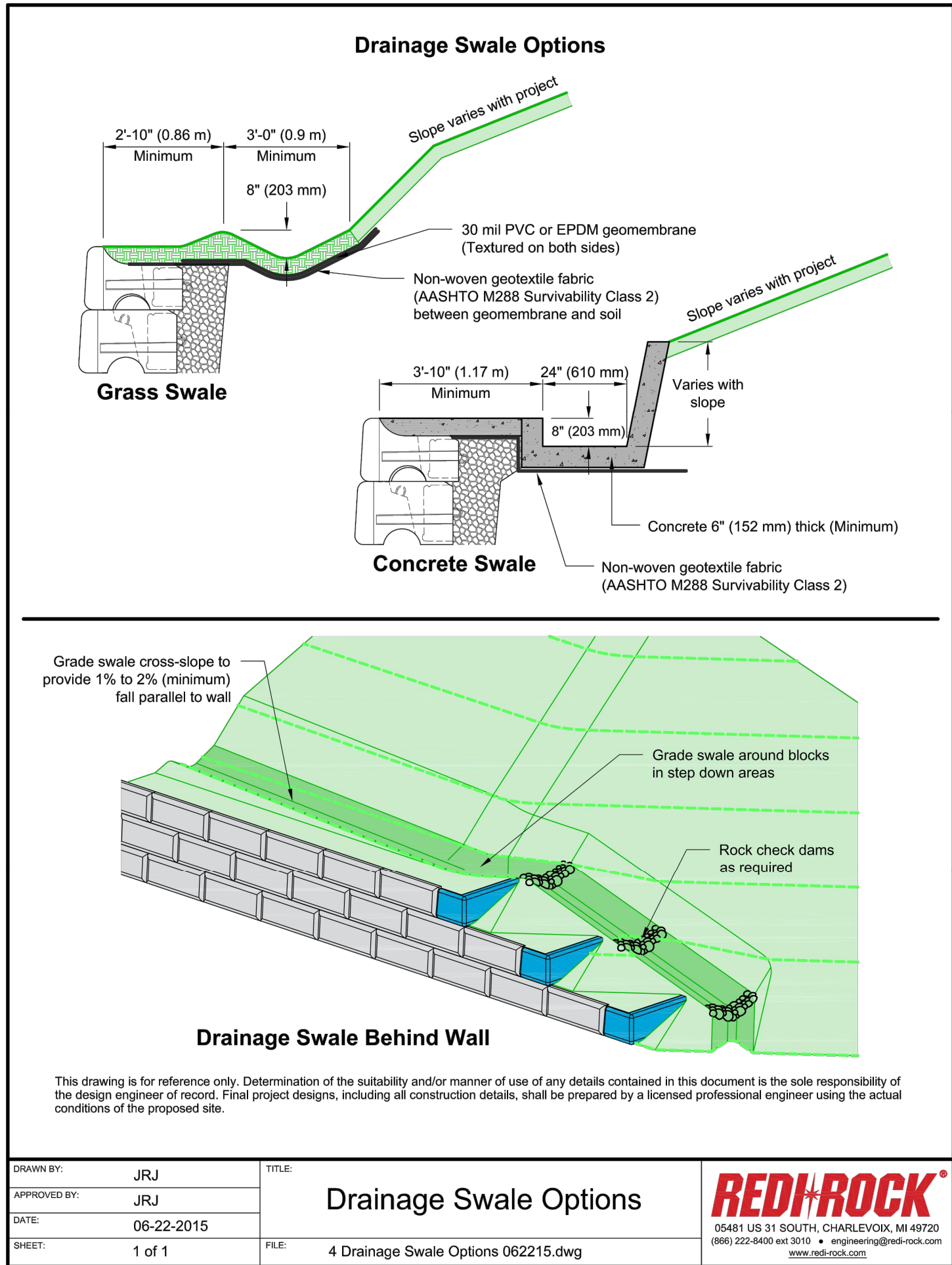
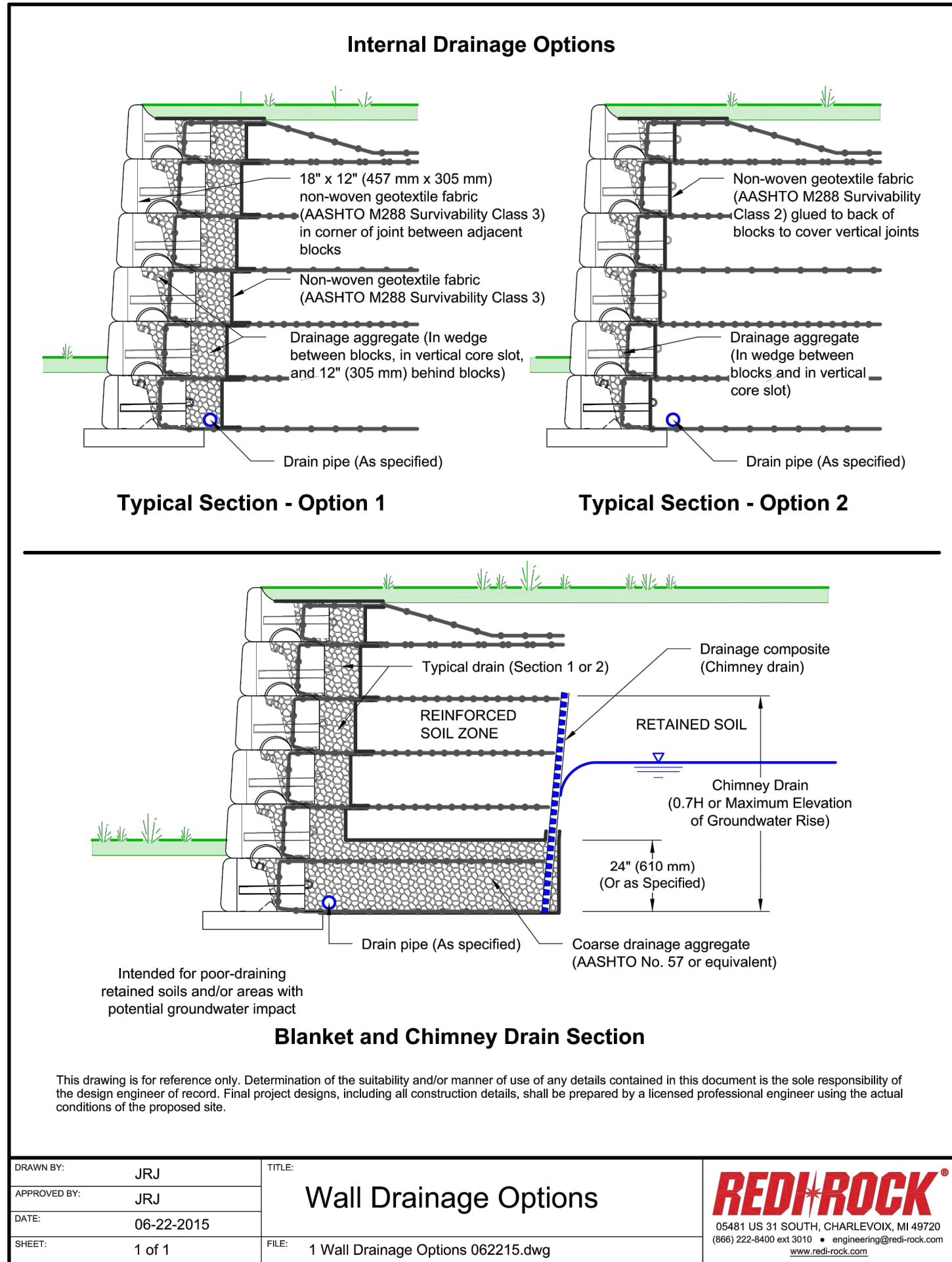
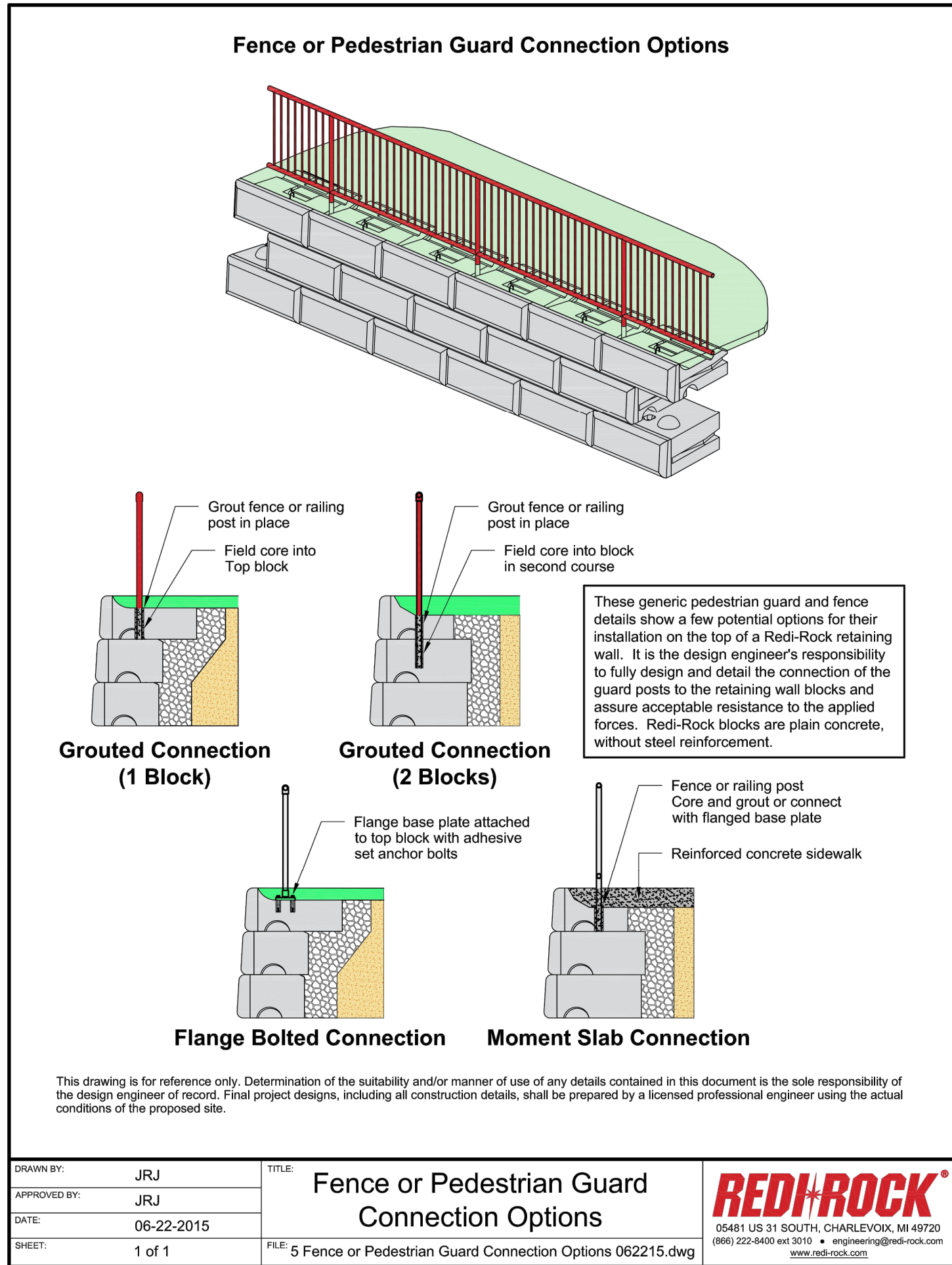
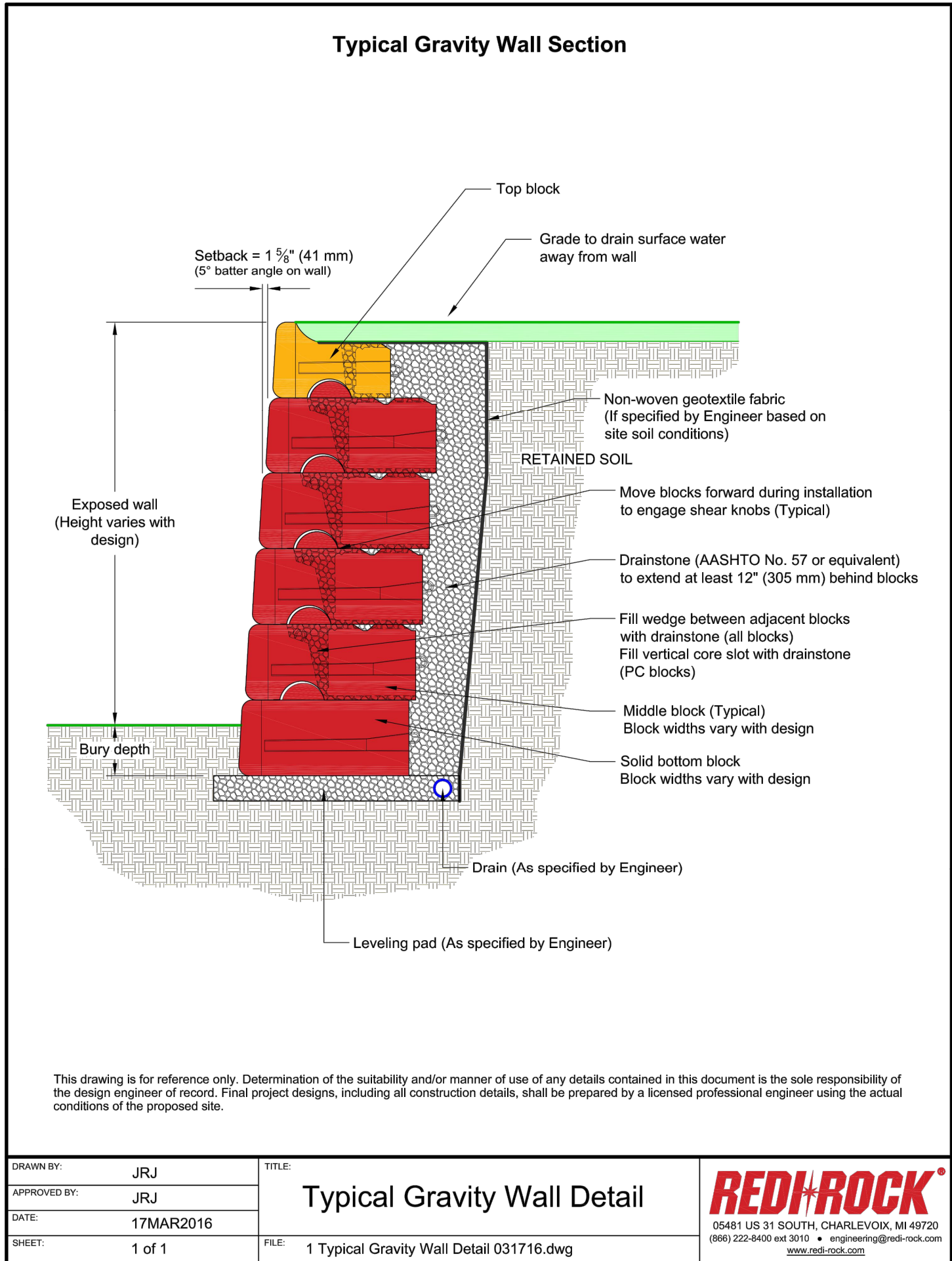
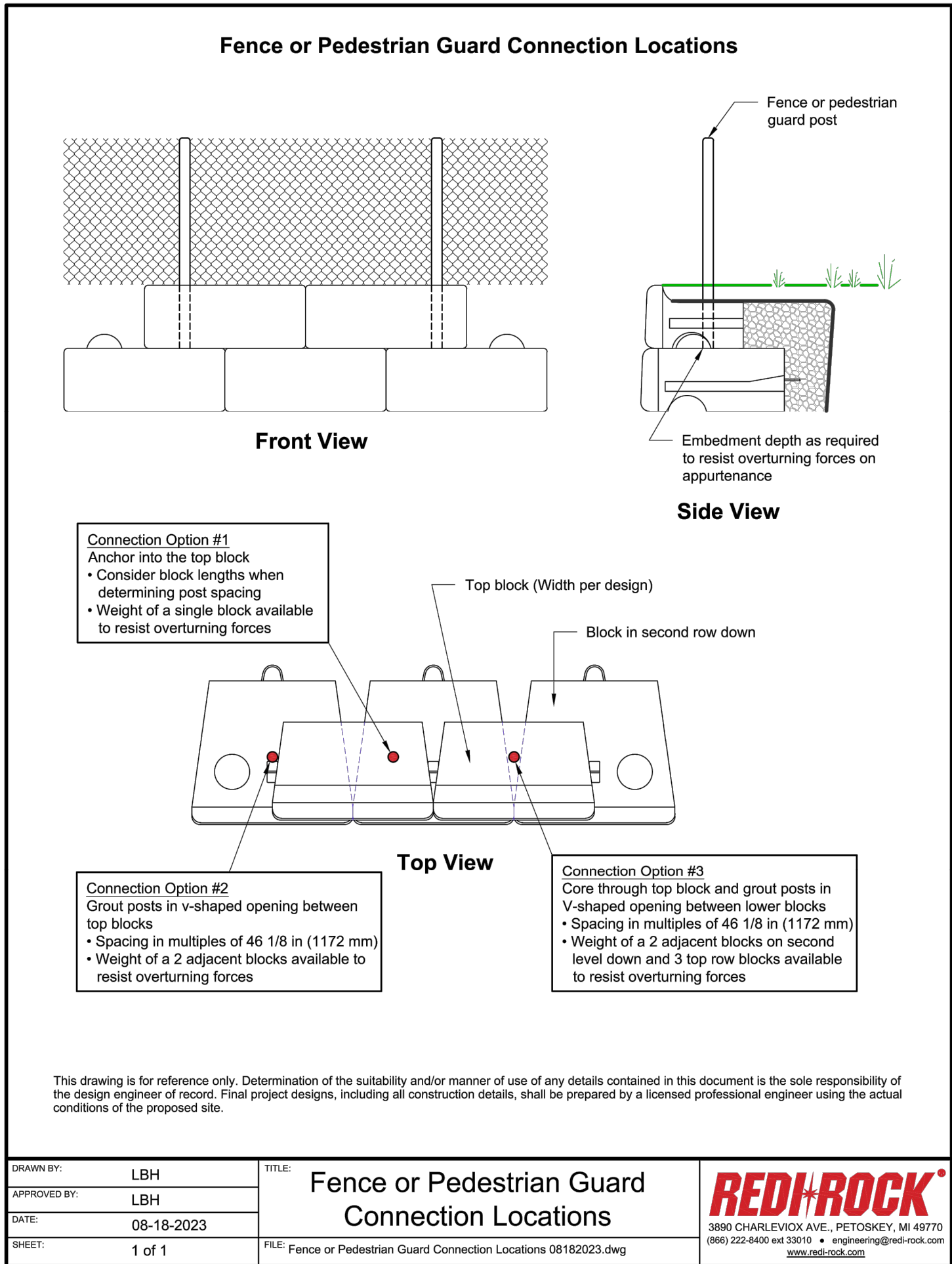
SCALE:

AS SHOWN

C-18



User:ACRAIN Spec:AUS-NSMOD File:C:\USERS\ACRAIN\Documents\ARCADIS\AUS-30064797-PHASE 3 ? WEST FRANKLIN STREET SYSTEM\PROJECT FILES\01 - WP\CIVIL SHEETS\CIVIL DETAILS\REDI-ROCK.DWG Scale:1:1 SavedDate:10/16/2024 Time:11:29 Plot Date: 10/16/2024 12:17 ; Layout:1:9



**NOTES:**

1. RETAINING WALL DETAILS PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO ACQUIRE FINAL RETAINING WALL DRAWINGS AND DETAILS FROM THE APPROVED WALL DESIGNER.
2. CONTRACTOR TO COORDINATE WALL AND FENCE CONNECTION TYPE WITH WALL DESIGNER.

ISSUED FOR CONSTRUCTION

SEALS

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

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DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL  
SHEET TITLE

CIVIL

STANDARD DETAILS  
(SHEET 4 OF 4)

SCALE: AS SHOWN

C-19



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# GEORGIA UNIFORM CODING SYSTEM

## FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

### GEORGIA SOIL AND WATER CONSERVATION COMMISSION

#### STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
	CHORDAM			A small temporary barrier or dam constructed across a weak drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION			A traveway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below, or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNSLOPE STRUCTURE			A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNSLOPE STRUCTURE			A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE			Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING			A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored, allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Sk	FLOATING SURFACE SKIMMER			A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins of a controlled rate of flow.
Spb	SEEP BERM			A linear control device constructed as a diversion perpendicular to the direction of the runoff to enhance dissipation and infiltration of runoff, while creating multiple sedimentation chambers with the employment of intermediate dikes.

#### STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING			A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN			A floating or stacked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).
Tp	TOPSOILING			The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.
Tr	TREE PROTECTION			To protect desirable trees from injury during construction activity.
Vw	VEGETATED WATERWAY OR CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

#### VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE			Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)			Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING)			Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM. SEEDING)			Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SOONING)			A permanent vegetative cover using sods on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS			Controlling surface soil and movement of dust on construction site, roadways and similar sites.
Fl-Co	FLOCCULANTS AND COAGULANTS			Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING PLANT VEGETATION)			The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Ss	SLOPE STABILIZATION			A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKERS AND BINDERS			Substance used to anchor straw or hay mulch by causing the organic material to bind together.

### CONSTRUCTION SEQUENCE:

- FOR EACH STAGE OF CONSTRUCTION THE FOLLOWING SEQUENCE WILL APPLY:
  - CONFIRM LOCATIONS OF AND CONSTRUCT/INSTALL INITIAL EROSION AND SEDIMENT CONTROL BMPs WITHIN THE LIMITS OF THE STAGE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITIES ON SITE. INITIAL EROSION AND SEDIMENT CONTROL BMPs SHALL INCLUDE THE FOLLOWING: CONSTRUCTION FENCING, TREE PROTECTION FENCING, SILT FENCING, INLET SEDIMENT TRAPS, SAND BAG SEDIMENT BARRIER, AND CONSTRUCTION ENTRANCES. ALL EROSION AND SEDIMENT CONTROL BMPs TO BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS.
  - CLEAR AND GRUB TO THE LIMITS REQUIRED FOR CONSTRUCTION AND REMOVE EXISTING TREES AS SHOWN ON THE PLANS.
  - EXCAVATE TRENCHES FOR INSTALLATION OF THE STORM WATER MANAGEMENT SYSTEM. AS NECESSARY, CONSTRUCT PIPE DIVERSIONS TO DIVERT AND BYPASS RUNOFF FROM EXISTING SYSTEM.
  - BEGIN INTERMEDIATE PHASE EXCAVATION AND GRADING ACTIVITIES AFTER ALL REQUIRED INITIAL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND CONSTRUCTED.
  - BEGIN CONSTRUCTION OF STORM DRAINAGE INFRASTRUCTURE, UTILITY RELOCATIONS, CURB AND GUTTER, DRIVEWAYS, ROADWAYS, AND REMAINING STRUCTURES AS SHOWN ON PLANS. INSTALL INLET PROTECTION AS SHOWN ON PLANS.
  - ESTABLISH FINISHED GRADES AT EARLIEST POSSIBLE DATE. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY VEGETATION AND MULCH IF LAND-DISTURBING ACTIVITIES CEASE FOR MORE THAN 14 CALENDAR DAYS IN ACCORDANCE WITH NPDES REQUIREMENTS. ONCE FINAL GRADES ARE ESTABLISHED, APPLY PERMANENT SOIL STABILIZATION IN ACCORDANCE WITH PLANS. ANY DISTURBED AREA REMAINING IDLE FOR 30 DAYS SHALL BE STABILIZED WITH PERMANENT VEGETATION.
- THE FOLLOWING SHALL APPLY AFTER ALL CONSTRUCTION STAGES ARE COMPLETE:
  - AFTER FINAL STABILIZATION FOR THE PROJECT AS DEFINED BY NPDES GAR100002 IS ACHIEVED, RETURN TO THE SITE AND REMOVE ALL TEMPORARY MEASURES INCLUDING SILT FENCES, SEDIMENT TRAPS, AND DIVERSIONS. INSTALL PERMANENT VEGETATION TO ALL AREAS (EXCEPT IMPERVIOUS SURFACES) DISTURBED BY THE TEMPORARY MEASURES.
  - REMOVE ALL TEMPORARY EROSION CONTROL MEASURES INCLUDING CONSTRUCTION FENCING, TREE PROTECTION FENCING, AND CONSTRUCTION ENTRANCES WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION.

### LANDSCAPING:

- CONTRACTOR TO REPLACE ANY DISTURBED LANDSCAPED AREAS TO EXISTING CONDITIONS. CONTRACTOR TO DOCUMENT EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND PROVIDE CITY OF DALTON PUBLIC WORKS WITH DOCUMENTATION OF POST-CONSTRUCTION RESTORATION.

### MANAGEMENT PLAN:

ALL EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY AND AFTER EVERY RAINFALL. ALL NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO PREVENT FURTHER DAMAGE AND EROSION. STRUCTURES THAT SHALL BE INSPECTED INCLUDE:

- SEDIMENT BARRIER – SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. SEDIMENT BARRIERS SHALL BE REPLACED PER MANUFACTURER'S RECOMMENDATIONS OR THE HEIGHT OF THE PRODUCT IS NOT MAINTAINING 80% OF ITS PROPERLY INSTALLED HEIGHT.
- CHECK DAM – SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE-HALF THE ORIGINAL DAM HEIGHT.
- STORM DRAIN OUTLET PROTECTION – INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.
- SLOPE STABILIZATION – ALL EROSION CONTROL BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION. PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL THEY BECOME PERMANENTLY STABILIZED.
- TEMPORARY SEDIMENT TRAP – REPAIR ALL DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION EQUIPMENT AT OR BEFORE THE END OF EACH WORKING DAY. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE SPECIFIED CLEANOUT ELEVATION. THE SEDIMENT SHALL NOT BE DEPOSITED DOWNSTREAM FROM THE EMBANKMENT, ADJACENT TO A STREAM OR FLOODPLAIN.
- INLET SEDIMENT TRAP – TRAP SHOULD BE CLEANED OUT AFTER HEAVY RAIN EVENTS. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE TRAP.
- SEEDING, FERTILIZING, AND MULCHING – SEEDING AREAS SHALL BE INSPECTED FOR FAILURE AND NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY.
- STOCKPILES – STOCKPILES SHALL BE CHECKED FOR EROSION AND STABILIZATION.
- CONSTRUCTION ENTRANCE/EXIT – INSPECT CONSTRUCTION ROAD SURFACE DAILY, MAINTAIN WHEN NEEDED IN A CONDITION TO PREVENT SEDIMENT AND TOPSOIL FROM LEAVING THE SITE.
- DIVERSION – INSPECT FOR ANY EROSION. REMOVE SEDIMENT WHEN SEDIMENT ACCUMULATES TO 4 INCHES.

### SITE SOILS

THE LIMIT OF DISTURBANCE INCLUDES THE FOLLOWING SOIL TYPES AS IDENTIFIED IN THE NRCS WEB SOIL SURVEY:

- EUC: ENDERS-URBAN LAND COMPLES, 2% TO 15% SLOPES
- HnC: HANCEVILLE-URBAN LAND COMPLEX, 2% TO 15% SLOPES

### SITE NOTES:

- PROJECT IS LOCATED IN WHITFIELD COUNTY WITHIN THE CITY OF DALTON, GEORGIA.
- THE TOTAL LAND DISTURBANCE IS 1.45 ACRES. THE CALCULATION FOR DISTURBED AREA FOR THIS PROJECT, INCLUDES THE SUM OF ALL AREAS WITHIN THE LOD (LIMITS OF DISTURBANCE), AS SHOWN ON THE ATTACHED DRAWINGS.
- THE RECEIVING WATER FOR THIS PROJECT IS TAR CREEK. THE SITE CONSTRUCTION STORMWATER DOES NOT DISCHARGE INTO AN IMPAIRED STREAM OR 1-MILE UPSTREAM OF AN IMPAIRED STREAM SEGMENT.
- THE TOTAL CONTRIBUTING DRAINAGE AREA IS APPROXIMATELY 26.8 ACRES.
- IT IS ANTICIPATED THAT THE PROJECT WILL NOT HAVE ANY BUFFER ENCROACHMENTS THAT REQUIRE A BUFFER VARIANCE DUE TO THE INSTALLATION OF STORMWATER INFRASTRUCTURE.
- WETLAND CERTIFICATION: THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED; AND 2) THE APPROPRIATE PLAN SHEET 1 DOES/1X1 DOES NOT INDICATE AREAS OF UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS AS SHOWN ON THE MAPS; AND, 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLAND SHALL NOT OCCUR UNLESS THE APPROPRIATE FEDERAL WETLANDS ALTERATION ("SECTION 404") PERMIT HAS BEEN OBTAINED.
- THIS SITE DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE "AE" OR "A" PER THE FIRM MAPS OF THE CITY OF DALTON FLOOD INSURANCE STUDY. FIRM MAP NUMBER: 13313C0138D, EFFECTIVE DATE: SEPTEMBER 19, 2007.
- THE PRE-DEVELOPMENT RUNOFF COEFFICIENT (CN) IS 74.00 AND THE POST-DEVELOPMENT RUNOFF COEFFICIENT IS 74.00.
- MAINTENANCE AND TRAFFIC: THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL ROAD PERMITS FROM THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION INCLUDING PROVIDING ANY RESTORATION BONDS. THE CONTRACTOR SHALL PROVIDE A DETAILED PHASED TRAFFIC CONTROL PLAN BASED ON THE PROPOSED WORK PHASING AS DETERMINED BY THE CONTRACTOR.
- PRIMARY PERMITTEE & 24-HOUR CONTACT: DALTON PUBLIC WORKS DEPARTMENT ATTN: JACKSON SHEPPARD P.O. BOX 1205 535 ELM STREET PH: 706-277-2606
- CONTRACTOR TO COORDINATE LAYDOWN AND MATERIAL STORAGE AREA WITH CITY OF DALTON PUBLIC WORKS. ALL MATERIAL STORAGE AREA AND LAYDOWN AREAS MUST BE WITHIN THE PERMITTED LIMITS OF DISTURBANCE AND OUTSIDE OF THE STREAM BUFFER.

### EROSION CONTROL

- EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL AND SHALL COMPLY WITH THE STANDARDS / SPECIFICATIONS IN THE "MANUAL FOR EROSION CONTROL AND SEDIMENT CONTROL IN GEORGIA", LATEST EDITION.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE.
- PERMANENT VEGETATION SHALL BE PLACED AT ALL AREAS GRADED TO FINAL GRADE IMMEDIATELY UPON COMPLETION. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDING AREA WITHIN 24 HOURS OF SEEDING. DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER (DS1). ON SLOPES THAT ARE 2:1 OR STEEPER, MULCH WILL BE ANCHORED.
- IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5:1 AND WITH THE HEIGHT TEN FEET OR GREATER, AND CUTS AND FILLS WITHIN STREAM BUFFER, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKET.
- SEDIMENT / EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN ANY ADDITIONAL EROSION CONTROL MEASURES AS DIRECTED BY THE GOVERNING JURISDICTION AND/OR THE ENGINEER.
- THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL DEVICES AND ENSURE THAT THEY ARE PROPERLY FUNCTIONING PRIOR TO ANY LAND DISTURBANCE ACTIVITIES.
- AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- ANY DISTURBED AREAS LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
- BUILDING MATERIALS AND BUILDING PRODUCTS NOT IN USE SHALL BE COVERED BY HEAVY PLASTIC.
- NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.

### TREE PROTECTION

- WHEN DIGGING NEAR TREES, THE CONTRACTOR SHALL PRUNE ALL EXPOSED ROOTS ONE INCH IN DIAMETER OR LARGER ON THE SIDE OF THE TRENCH ADJACENT TO THE TREES. PRUNING SHALL CONSIST OF MAKING A CLEAN CUT FLUSH WITH THE SIDE OF THE TRENCH TO PROMOTE NEW ROOT GROWTH.
- THE CONTRACTOR SHALL PROTECT ALL TREES AND VEGETATION ON SITE EXCEPT AS APPROVED BY THE ENGINEER AND/OR CITY OF DALTON.
- PROTECT THE TRUNKS OF ANY TREES BEING PRESERVED WITHIN THE TEMPORARY OR PERMANENT EASEMENTS WITH STRAPPED ON PLANKING OR SIMILAR PROTECTIVE DEVICE.
- TREE PROTECTION DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY CLEARING, GRUBBING OR GRADING.

- CONTRACTOR TO CONSULT CITY OF DALTON ARBORIST PRIOR TO ANY EXCAVATION NEAR TREES OR TREE PRUNING.

CONSTRUCTION SCHEDULE						
ACTIVITY	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6
SITE PREPARATION						
EROSION CONTROL						
STORMWATER INSTALLATION						
PAVEMENT REPLACEMENT						
RESTORATION						

### POLLUTION CONTROLS

- BMP'S SUCH AS CONSTRUCTION EXITS, WATERING STATIONS, AND SWEEPERS MAY BE UTILIZED TO MINIMIZE OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST.
- NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
- PETROLEUM BASED PRODUCTS- CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT MINIMIZE SITE CONTAMINATION. DISCHARGE OF OILS, FUELS AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL AS REQUIRED BY LOCAL AND STATE REGULATIONS.
  - 3.1. SOLVENTS- ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT MATERIALS USED WITH THESE PRODUCTS AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
  - 3.2. CONCRETE TRUCK WASHING- WASHOUT OF CONCRETE DRUMS AT THE CONSTRUCTION SITE IS PROHIBITED. CONTRACTOR IS TO SELECT LOCATIONS ON THE SITE FOR CONCRETE WASH DOWN THAT MEET THE CONDITIONS OF THE NPDES STAND ALONE PERMIT. CONCRETE WASH DOWN AREA SHOULD BE OUTSIDE OF THE AREA THAT IS MARKED FOR EXCAVATION. CONTRACTOR SHALL SELECT AN EPA RECOMMENDED WASHOUT BMP TO BE USED AND SUBMIT LOCATIONS AND WASH OUT BMP TYPE FOR ENGINEER'S APPROVAL.
  - 3.3. FERTILIZER/HERBICIDES- THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS.
- CONSTRUCTION MATERIALS- NO CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF ACCORDING TO APPLICABLE STATE AND LOCAL REGULATIONS.
- WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
- SOIL CLEANUP AND CONTROL PRACTICES
  - 4.1. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES MADE AVAILABLE TO SITE PERSONNEL.
  - 4.2. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO: DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERTY LABELED PLASTIC AND METAL WASTE CONTAINERS.
  - 4.3. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
  - 4.4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.
  - 4.5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-424-8802.
  - 4.6. FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS A 1-800-424-8802.
  - 4.7. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
  - 4.8. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.
  - 4.9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY A LICENSED PROFESSIONAL.
- SANITARY UNIT WILL BE ONSITE TO COLLECT ALL SANITARY WASTE DURING CONSTRUCTION ACTIVITY.

### PROJECT DESCRIPTION

THE PROPOSED WEST FRANKLIN STREET BYPASS SYSTEM WILL ASSIST IN ADDRESSING LOCALIZED FLOODING ISSUES. THE GOAL IS TO REDUCE THE OCCURRENCE OF FLOODING ALONG W. FRANKLIN STREET BY INCREASING THE CAPACITY OF DRAINAGE INFRASTRUCTURE.

THE W. FRANKLIN STREET BYPASS INCLUDES INSTALLATION OF A NEW CONVEYANCE SYSTEM, AND OTHER DRAINAGE SYSTEM IMPROVEMENTS.



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CONSULTANTS

### ISSUED FOR CONSTRUCTION

SEALS



GSWCC NO. 0000088369  
EXPIRES 7/8/2025

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	RG/TT
NO.	DATE	ISSUED FOR	BY

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DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

EROSION & SEDIMENT CONTROL

EROSION AND  
SEDIMENT CONTROL  
LEGEND AND NOTES

SCALE: AS SHOWN

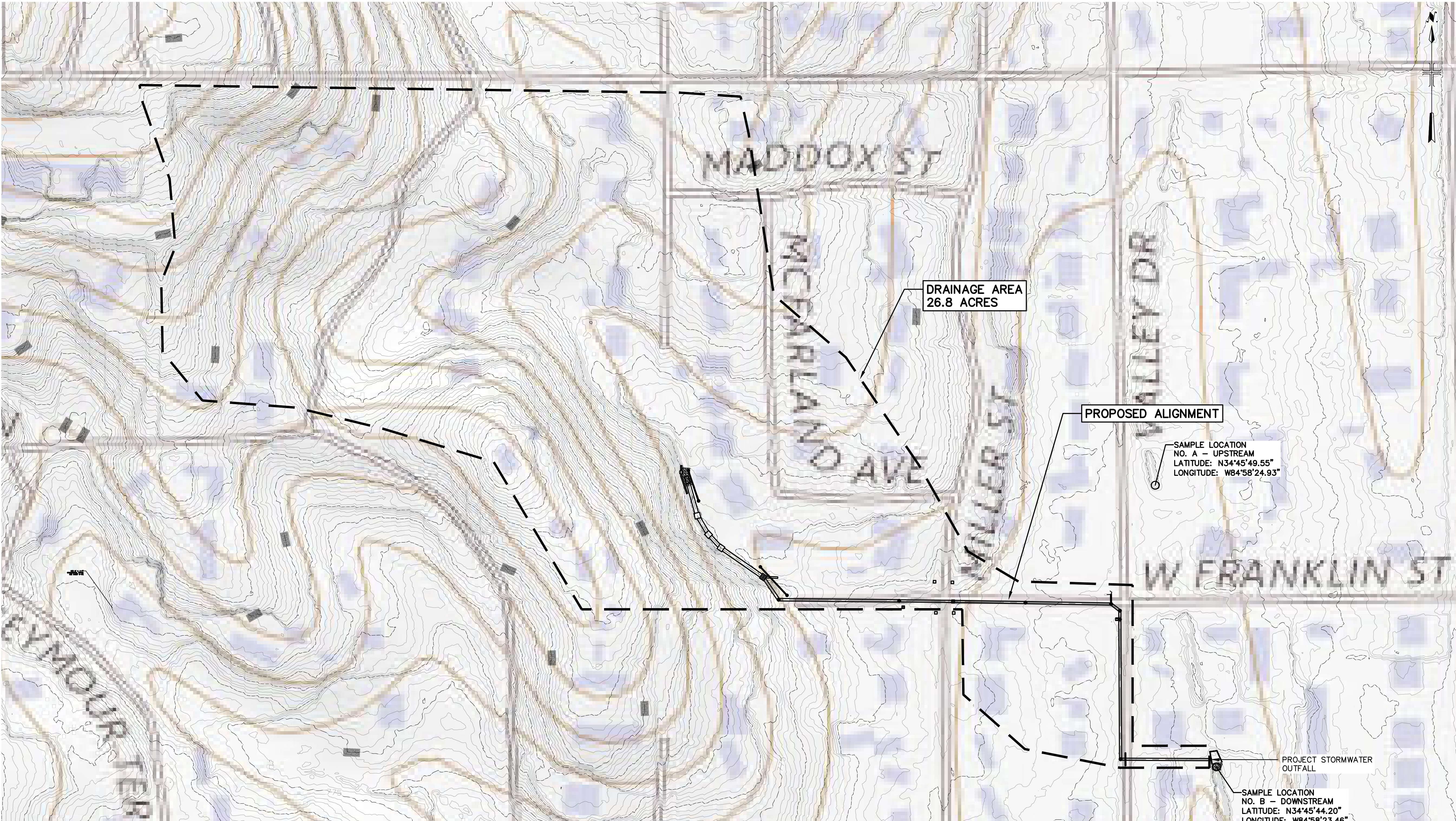
ESC-01







User:ACRAIN Spec:AUS-NSMOD File:C:\USERS\ACRAIN\Documents\ARCADIS\AUS-30064797-PHASE 3 2 WEST FRANKLIN STREET SYSTEM\PROJECT FILES\01 - WP1\CIVIL\SHEETS\ESC-01.DWG Scale:1:1 SavedDate:10/16/2024 Time:11:50 Plot Date: Dotti, Angelo: 10/16/2024; 12:18 : Layout:20



**SEDIMENT STORAGE CALCULATIONS**

Drainage Area No.	Total Drainage Area (Acres)	Required Sediment Storage Volume (CY)	Perimeter Silt Fence						INLET SEDIMENT TRAPS			Total Volume (CY)
			LF OF PRIMARY SILT FENCE @ 20:1 (0.340 CY/LF)	LF OF SECONDARY SILT FENCE @ 20:1 (0.154 CY/LF)	LF OF PRIMARY SILT FENCE @ 10:1 (0.170 CY/LF)	LF OF SECONDARY SILT FENCE @ 10:1 (0.131 CY/LF)	LF OF PRIMARY SILT FENCE @ 6:1 (0.102 CY/LF)	LF OF SECONDARY SILT FENCE @ 6:1 (0.100 CY/LF)	INLET PROTECTION Sd2F (1.89 CY/EACH)	INLET PROTECTION Sd2P (0.394 CY/EACH)	STONE CHECK DAM VOLUME (CY)	
No. 1	26.80	1795.60	388.00	388.00	69.00	69.00	29.00	29.00	8.00	6.00	15.00	250.78
TOTAL	26.80	1795.60	388.00	388.00	69.00	69.00	29.00	29.00	8.00	6.00	15.00	250.78

TOTAL PROJECT DRAINAGE AREA=	26.80 ACRES
TOTAL PROJECT REQUIRED STORAGE VOLUME=	1795.60 CY
TOTAL PROJECT PROVIDED STORAGE VOLUME=	250.78 CY

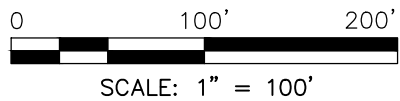
**Assumptions:**  
Minimum slope 20:1 (conservative).  
Minimum 5-ft separation between double row silt fence  
Maximum sediment storage height for silt fence is 11.5"  
Maximum sediment storage height for Sd2F inlet protection is 4.75"  
Maximum sediment storage height for Sd2P inlet protection is 3.25"  
The storage volume in stone check dam is calculated based on the assumption of 40% void space in the stone.

**SEDIMENT STORAGE STATEMENT:**

THE WEST FRANKLIN STREET BYPASS SYSTEM PROJECT CONSISTS OF INSTALLING APPROXIMATELY 1,379 LF OF STORM SEWER PIPING BY CONVENTIONAL EXCAVATION. THE TOTAL PROJECT DRAINAGE AREA IS 26.8 ACRES. THE TOTAL REQUIRED STORAGE VOLUME IS 1,796 CY.

DUE TO MAJORITY OF THE STORM SEWER PIPING BEING LOCATED IN THE STREET, THERE IS INSUFFICIENT AREA AVAILABLE FOR THE INSTALLATION OF TEMPORARY SEDIMENT BASINS OR OTHER EQUIVALENT BMPs CAPABLE OF PROVIDING THE FULL REQUIRED 67 CY/ACRE DRAINED (OR 1,796 CY) SEDIMENT STORAGE. HOWEVER, AS PER THE CALCULATIONS PROVIDED ON THIS SHEET, THROUGH THE USE OF DOUBLE ROW SD1-S SILT FENCING, AND INLET SEDIMENT TRAPS, 251 CY OF SEDIMENT STORAGE IS AVAILABLE THROUGH THE ESC DESIGN PROVIDED.

AS A RESULT OF THE NATURE OF LINEAR INFRASTRUCTURE REPLACEMENT PROJECTS BY CONVENTIONAL EXCAVATION, ONLY SHORT SEGMENTS OF THE 1,379 LF OF STORM SEWER WILL BE EXCAVATED, BEDDED, BACKFILLED AND STABILIZED DAILY. THEREFORE, THE POTENTIAL FOR ENVIRONMENTAL IMPACTS WILL BE MINIMIZED TO THE MAXIMUM EXTENT POSSIBLE, IN THAT ALL BMPs WILL REMAIN IN PLACE AND FUNCTIONAL, PROVIDING THE MAXIMUM POSSIBLE SEDIMENT STORAGE, UNTIL THE PROJECT IS COMPLETED, AND FINAL STABILIZATION IS ACHIEVED AS PER GA EPD AND CITY OF DALTON REQUIREMENTS.



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CONSULTANTS

ISSUED FOR CONSTRUCTION

SEALS

GSWCC NO. 0000088369  
EXPIRES 7/8/2025

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	RG/TT
NO.	DATE	ISSUED FOR	BY

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DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

EROSION & SEDIMENT CONTROL

DRAINAGE AREA,  
SEDIMENT STORAGE  
CALCULATIONS, AND  
SAMPLE LOCATIONS  
MAP

SCALE: AS SHOWN

ESC-03



\\NF-CIVIL\WORKSHEETS\ESC-01.DWG Scale:1:1 SavedDate:10/16/2024 Time:11:50 Plot Date: Dotti, Angelo: 10/16/2024: 12:18 : Layout:21 User:ACRAIN Spec:AUS-NSMOD File:C:\USERS\ACRAIN\CAACCDOS\ARCADIS\AUS-30064797-PHASE 3 ? WEST FRANKLIN STREET SYSTEM\PROJECT FILES\01 - WIP\CIVIL\WORKSHEETS\ESC-01.DWG Scale:1:1 SavedDate:10/16/2024 Time:11:50 Plot Date: Dotti, Angelo: 10/16/2024: 12:18 : Layout:21

INSPECTIONS

- EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT:
  - ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND
  - ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.
- CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS:
  - DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE;
  - AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND
  - STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. CERTIFIED PERSONNEL SHALL ALSO CONDUCT INSPECTIONS WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH A STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST). POST-RAIN INSPECTIONS WILL RESET THE 14-DAY INSPECTION FREQUENCY REQUIREMENT. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACT TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED TO EPD) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
- BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.
- A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E. INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5). OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A STATEMENT THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.
- INSPECTIONS BY QUALIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE AND THE ASSOCIATED RECORDS SHALL BE KEPT ON SITE IN COMPLIANCE WITH GAR.10000-(1, 2, OR 3)

RETENTION OF RECORDS

- THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:
  - A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
  - A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
  - THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
  - A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
  - A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT;
  - A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
  - DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2) OF THIS PERMIT.
- COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION), OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

SAMPLING

SAMPLE TYPE:

- ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED), THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT," EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

ANALYTICAL METHODS-SAMPLING POINTS:

- THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORMWATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
- THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORMWATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
- IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORMWATER OUTFALL CHANNEL(S).
- CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORMWATER CHANNEL.
- THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
- PERMITTEES DO NOT HAVE TO SAMPLE SHEET FLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION). FOR INFRASTRUCTURE CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL OR SILVICULTURAL PURPOSES, FINAL STABILIZATION MAY BE ACCOMPLISHED BY STABILIZING THE DISTURBED LAND FOR ITS AGRICULTURAL OR SILVICULTURAL USE.
- ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORMWATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.4 OR III.D.5., WHICHEVER IS APPLICABLE.

SAMPLING FREQUENCY:

- THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.
- HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORMWATER DISCHARGE.
- SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:
  - FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION;
  - IN ADDITION TO (3.A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION, WHICHEVER COMES FIRST;
  - AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (3.A) AND (3.B) ABOVE, IF BMPS IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS\* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED;
- WHERE SAMPLING PURSUANT TO (3.A), (3.B) OR (3.C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.A.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (3.A), (3.B) OR (3.C) ABOVE; AND
- EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (3.A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (3.B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (3.B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (3.C) ABOVE.

\*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (3.A) AND (3.B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

REPORTING:

- THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORMWATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.
- ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
  - THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
  - THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
  - THE DATE(S) ANALYSES WERE PERFORMED;
  - THE TIME(S) ANALYSES WERE INITIATED;
  - THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
  - REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
  - THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;
  - RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND
  - CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.
- ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE EPD DISTRICT OFFICE OR DELIVERY RECEIPT MAIL TO THE APPROPRIATE EPD DISTRICT OFFICE RESOURCE MAILBOX ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

NTU VALUE FOR SAMPLING POINTS:

- RECEIVING WATER/STREAM SAMPLING: STORMWATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) IN THE RECEIVING WATERS AS INDICATED ON THE PLAN. A DISCHARGE OF STORMWATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH DISCHARGE RESULTS IN THE TURBIDITY OF THE RECEIVING WATERS BEING INCREASED BY MORE THAN TWENTY-FIVE (25) NTU FOR A WARM WATER STREAM. THE SAMPLING LOCATIONS ARE SHOWN ON THE PLAN.



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SEALS



GSWCC NO. 0000088369  
EXPIRES 7/8/2025

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

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DATE: OCTOBER 2024

PROJECT NO.: 30064797

FILE NAME:

DESIGNED BY: T. TITTLE

DRAWN BY: A. DOTTL

CHECKED BY: R. GREUEL

SHEET TITLE

EROSION & SEDIMENT CONTROL

EROSION AND  
SEDIMENT CONTROL  
NPDES COMPLIANCE

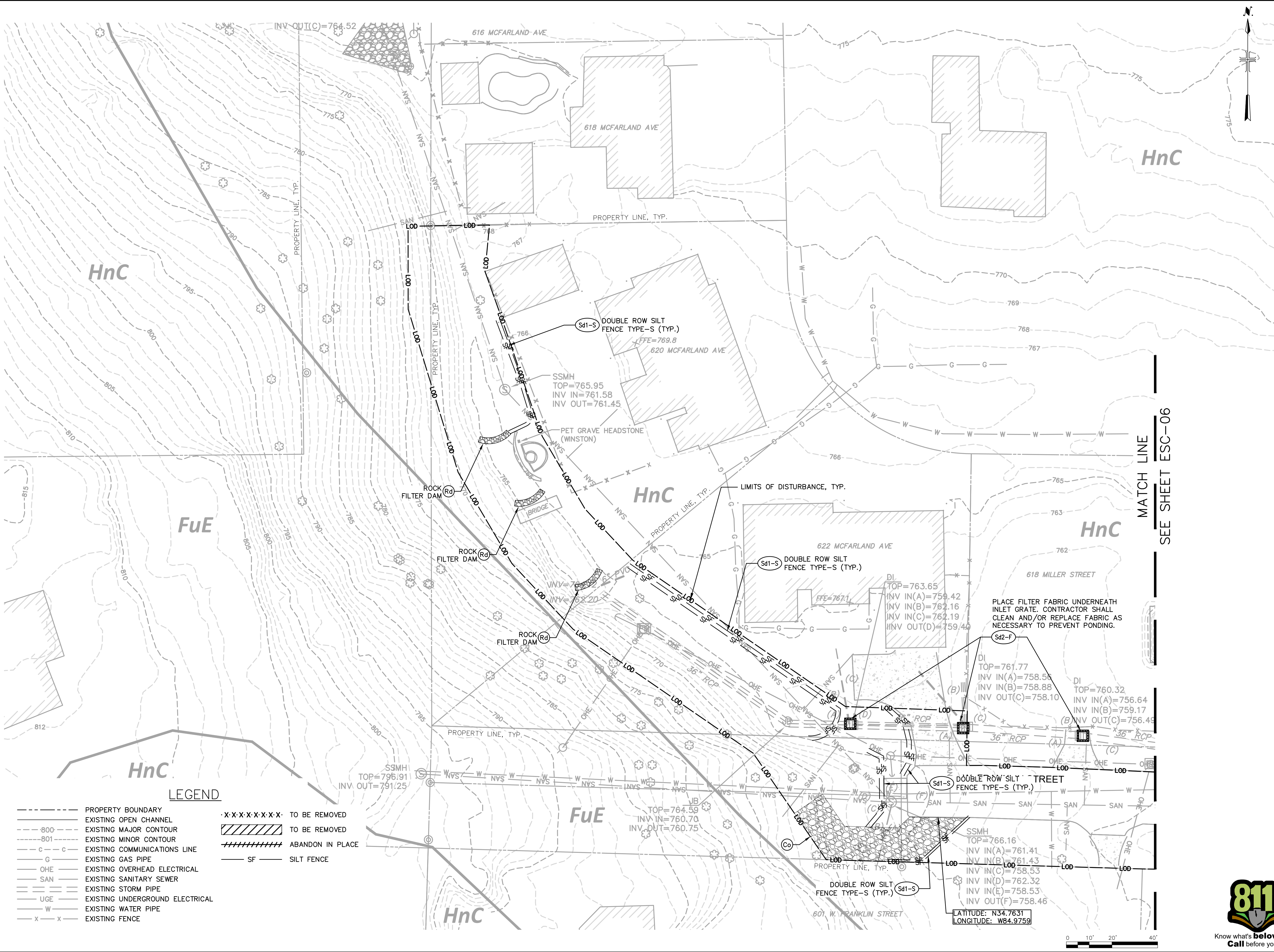
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ESC-04





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FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

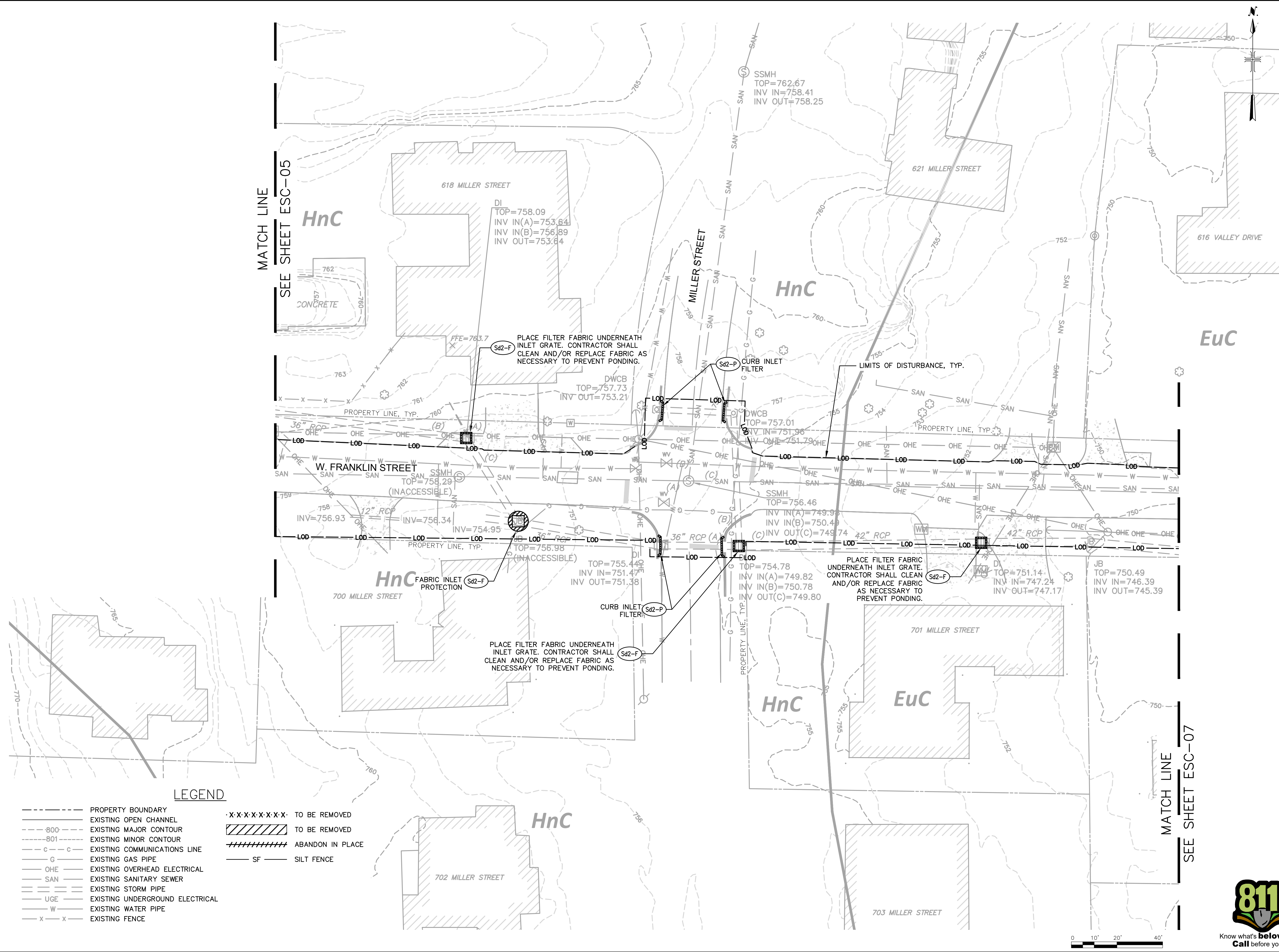
CIVIL  
EROSION & SEDIMENT  
CONTROL PLAN -  
INITIAL PHASE  
(SHEET 1 OF 3)

SCALE: AS SHOWN

ESC-05

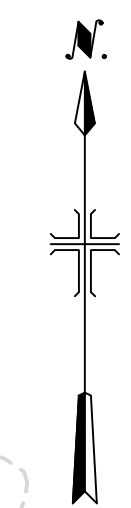
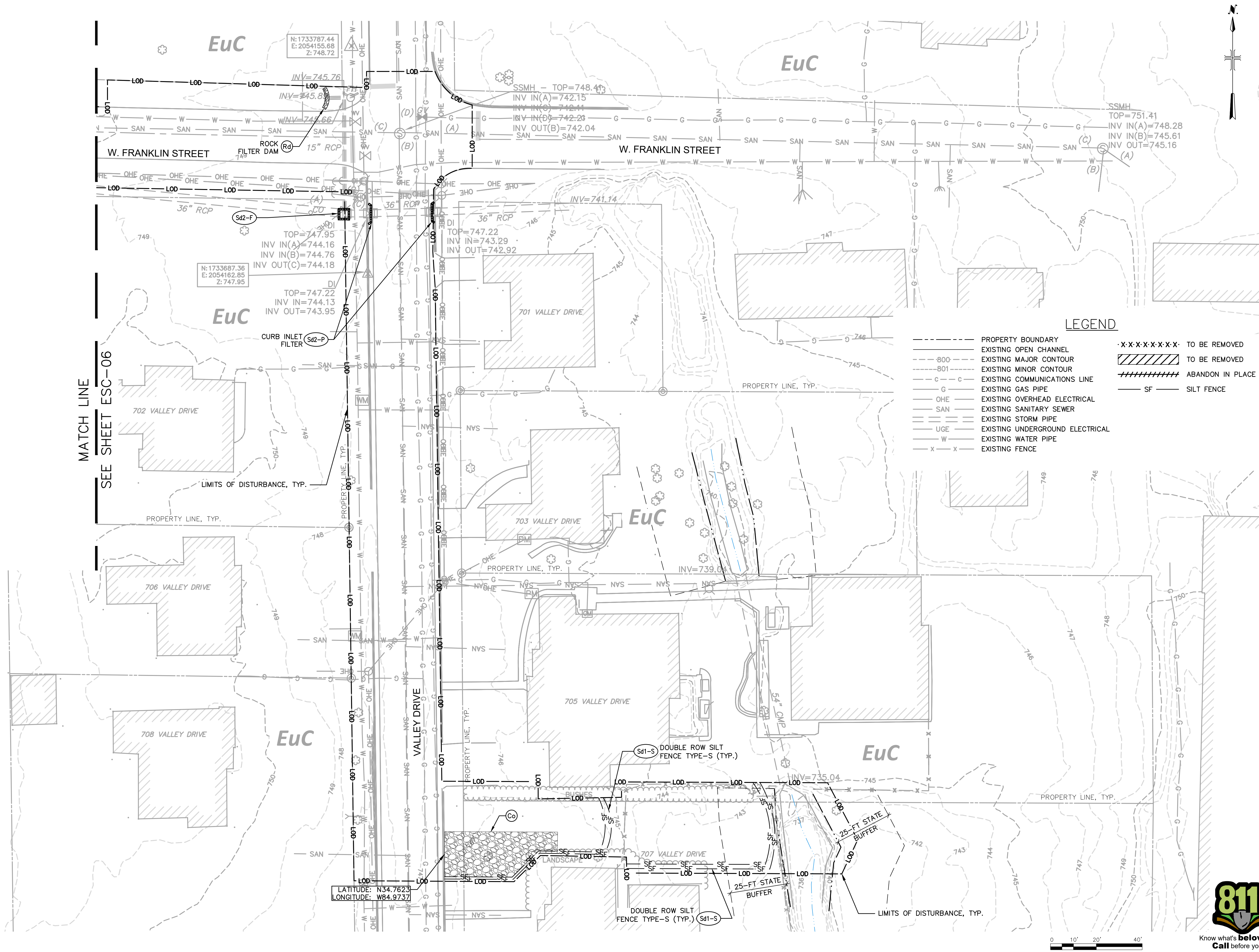








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LEGEND

- PROPERTY BOUNDARY
- EXISTING OPEN CHANNEL
- - - 800 - - - EXISTING MAJOR CONTOUR
- - - 801 - - - EXISTING MINOR CONTOUR
- - - C - C - - EXISTING COMMUNICATIONS LINE
- - - G - - - EXISTING GAS PIPE
- - - OHE - - - EXISTING OVERHEAD ELECTRICAL
- - - SAN - - - EXISTING SANITARY SEWER
- - - --- - - - EXISTING STORM PIPE
- - - UGE - - - EXISTING UNDERGROUND ELECTRICAL
- - - W - - - EXISTING WATER PIPE
- x - x - EXISTING FENCE
- x - x - x - x - x - x - TO BE REMOVED
- [Hatched Box] TO BE REMOVED
- +++++ ABANDON IN PLACE
- SF --- SILT FENCE

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DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL  
EROSION & SEDIMENT  
CONTROL PLAN -  
INITIAL PHASE  
(SHEET 3 OF 3)

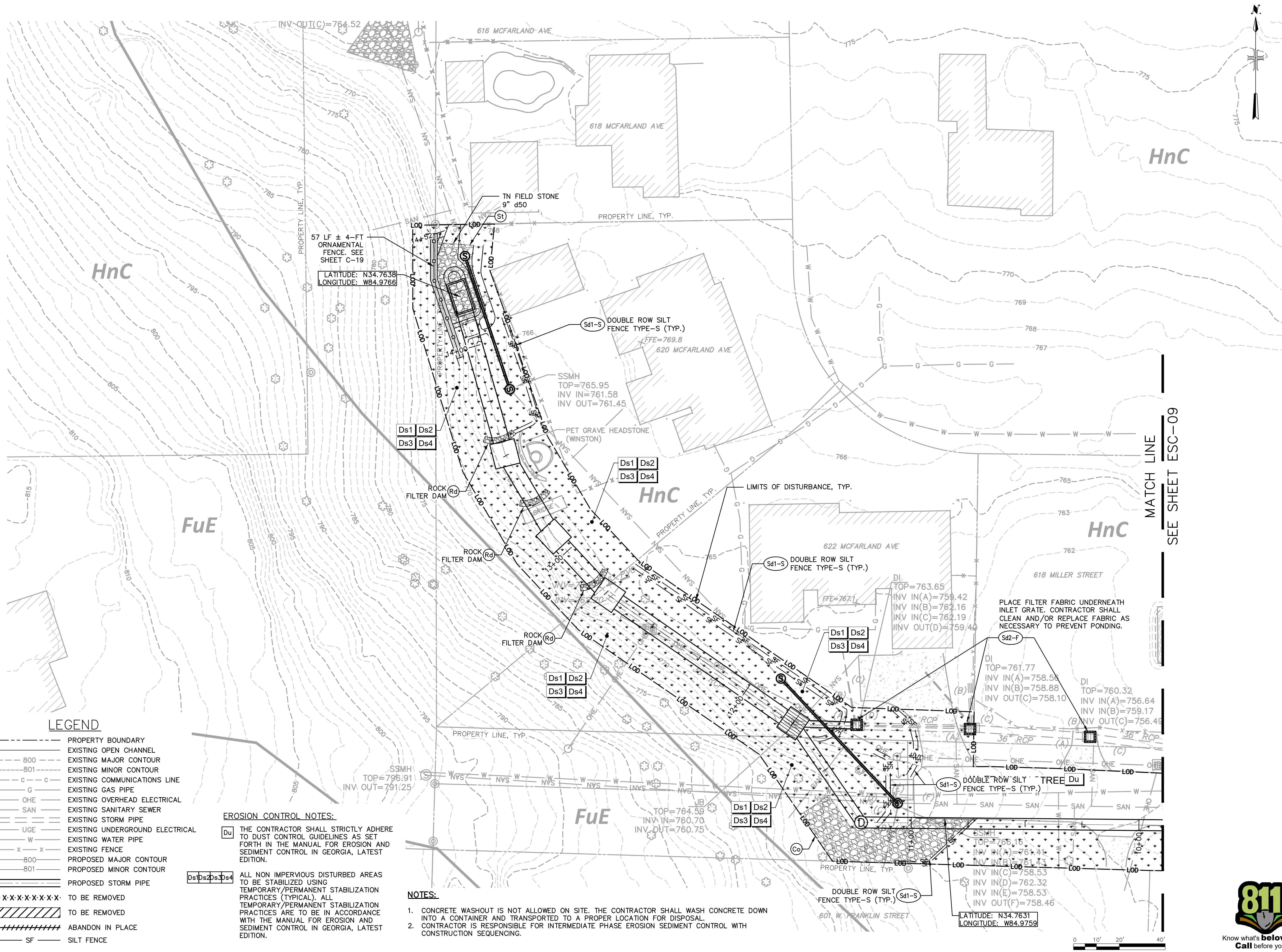
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ESC-07





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LEGEND

- PROPERTY BOUNDARY
- - - EXISTING OPEN CHANNEL
- - - EXISTING MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- - - EXISTING COMMUNICATIONS LINE
- - - EXISTING GAS PIPE
- - - EXISTING OVERHEAD ELECTRICAL
- - - EXISTING SANITARY SEWER
- - - EXISTING STORM PIPE
- - - EXISTING UNDERGROUND ELECTRICAL
- - - EXISTING WATER PIPE
- - - EXISTING FENCE
- - - PROPOSED MAJOR CONTOUR
- - - PROPOSED MINOR CONTOUR
- - - PROPOSED STORM PIPE
- - - TO BE REMOVED
- - - TO BE REMOVED
- - - ABANDON IN PLACE
- - - SILT FENCE

EROSION CONTROL NOTES:

- 1. THE CONTRACTOR SHALL STRICTLY ADHERE TO DUST CONTROL GUIDELINES AS SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.
- 2. ALL NON IMPERVIOUS DISTURBED AREAS TO BE STABILIZED USING TEMPORARY/PERMANENT STABILIZATION PRACTICES (TYPICAL). ALL TEMPORARY/PERMANENT STABILIZATION PRACTICES ARE TO BE IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

NOTES:

- 1. CONCRETE WASHOUT IS NOT ALLOWED ON SITE. THE CONTRACTOR SHALL WASH CONCRETE DOWN INTO A CONTAINER AND TRANSPORTED TO A PROPER LOCATION FOR DISPOSAL.
- 2. CONTRACTOR IS RESPONSIBLE FOR INTERMEDIATE PHASE EROSION SEDIMENT CONTROL WITH CONSTRUCTION SEQUENCING.

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**GEORGIA**  
REGISTERED  
No. 048421  
PROFESSIONAL  
ENGINEER  
TAYLOR HEATH TITLE  
PJ3007891  
GSWCC NO. 0000088369  
EXPIRES 7/8/2025

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

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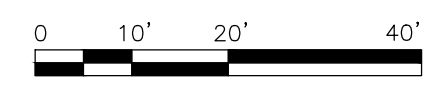
DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL  
EROSION & SEDIMENT  
CONTROL PLAN -  
INTERMEDIATE PHASE  
(SHEET 1 OF 3)

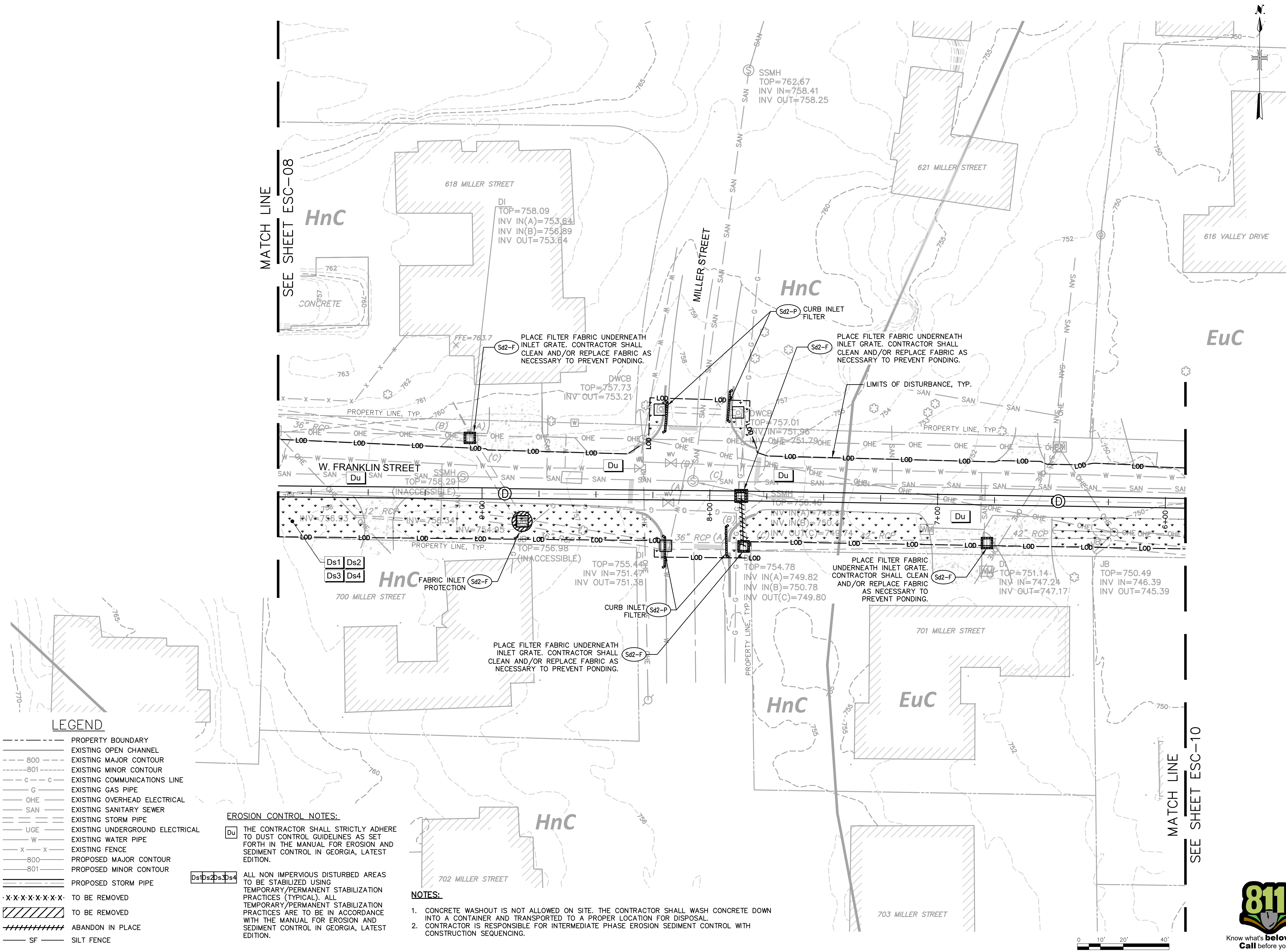
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PROJECT NO.: 30064797

FILE NAME:

DESIGNED BY: T. TITTLE

DRAWN BY: A. DOTTL

CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL

EROSION & SEDIMENT  
CONTROL PLAN –  
INTERMEDIATE PHASE  
(SHEET 2 OF 3)

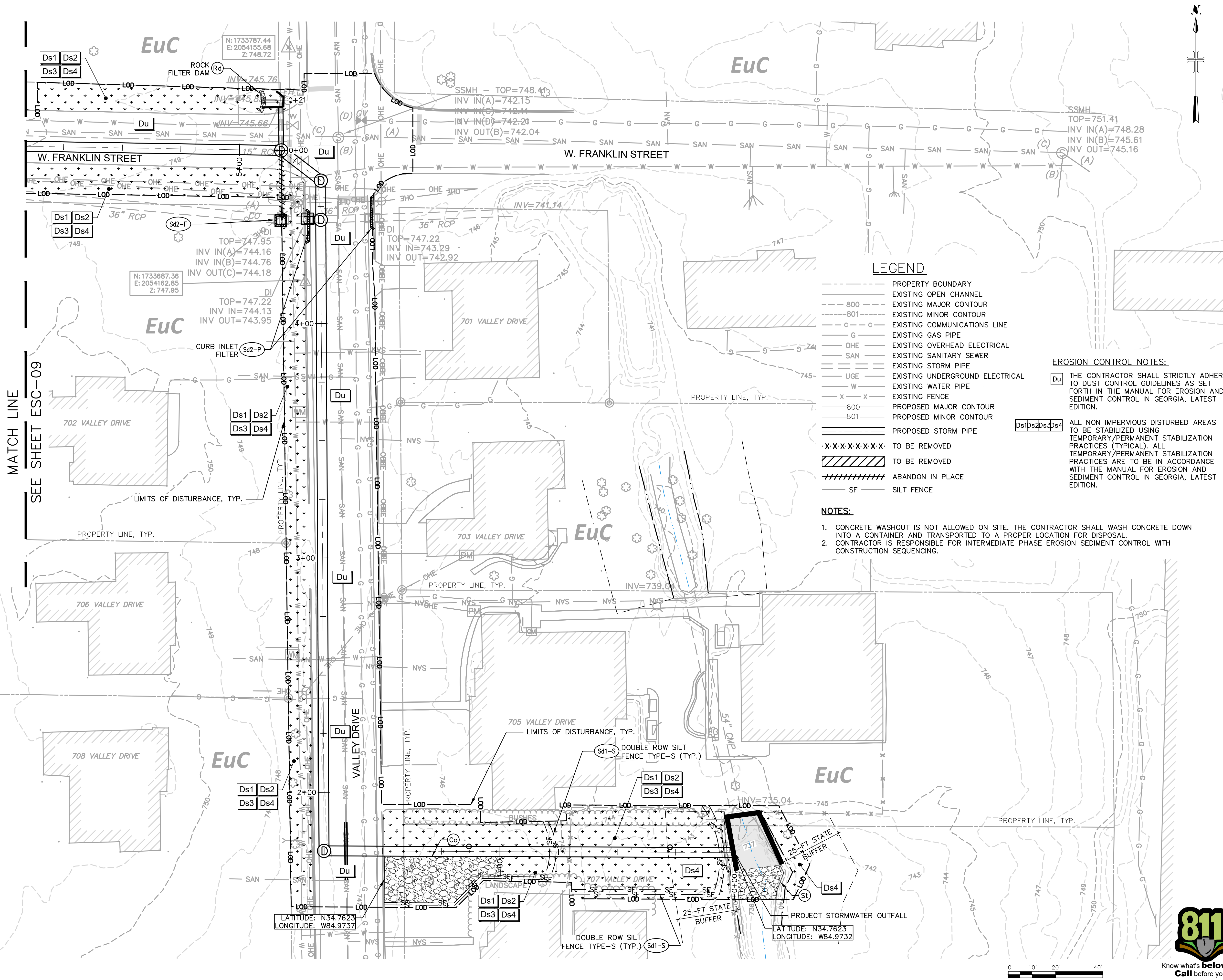
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BYPASS SYSTEM

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DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL  
EROSION & SEDIMENT  
CONTROL PLAN -  
INTERMEDIATE PHASE  
(SHEET 3 OF 3)

SCALE: AS SHOWN

ESC-10

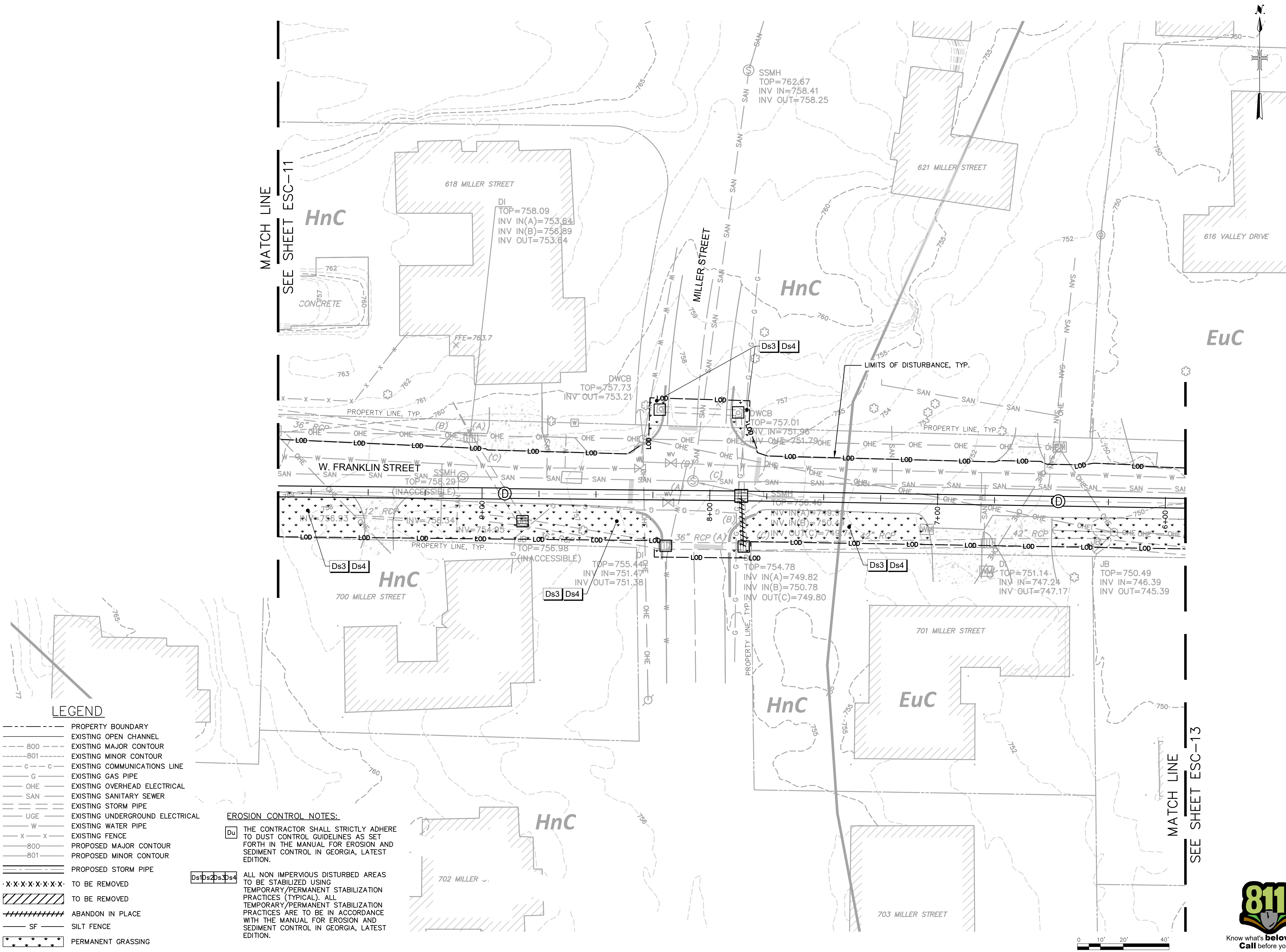








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FILE NAME:

DESIGNED BY: T. TITTLE

DRAWN BY: A. DOTTL

CHECKED BY: R. GREUEL

SHEET TITLE

CIVIL

EROSION & SEDIMENT CONTROL PLAN – FINAL PHASE (SHEET 2 OF 3)

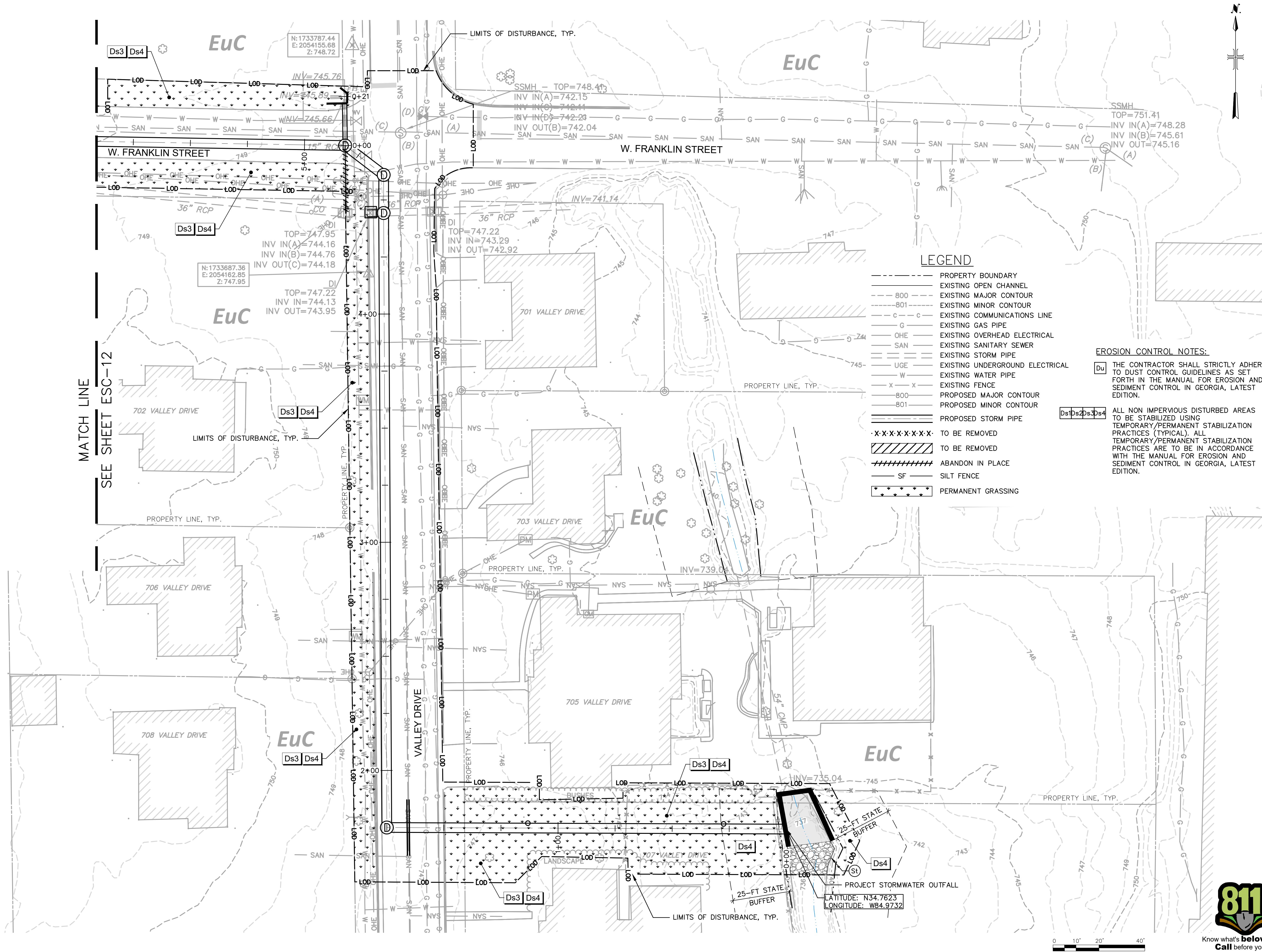
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LEGEND

- PROPERTY BOUNDARY
- 800 --- EXISTING OPEN CHANNEL
- 801 --- EXISTING MAJOR CONTOUR
- 801 --- EXISTING MINOR CONTOUR
- C --- C --- EXISTING COMMUNICATIONS LINE
- G --- EXISTING GAS PIPE
- OHE --- EXISTING OVERHEAD ELECTRICAL
- SAN --- EXISTING SANITARY SEWER
- --- EXISTING STORM PIPE
- UGE --- EXISTING UNDERGROUND ELECTRICAL
- W --- EXISTING WATER PIPE
- X --- X --- EXISTING FENCE
- 800 --- PROPOSED MAJOR CONTOUR
- 801 --- PROPOSED MINOR CONTOUR
- --- PROPOSED STORM PIPE
- X --- X --- X --- X --- X --- X --- TO BE REMOVED
- TO BE REMOVED
- ABANDON IN PLACE
- SF --- SILT FENCE
- PERMANENT GRASSING

EROSION CONTROL NOTES:

**Du** THE CONTRACTOR SHALL STRICTLY ADHERE TO DUST CONTROL GUIDELINES AS SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

**Ds1 Ds2 Ds3 Ds4** ALL NON IMPERVIOUS DISTURBED AREAS TO BE STABILIZED USING TEMPORARY/PERMANENT STABILIZATION PRACTICES (TYPICAL). ALL TEMPORARY/PERMANENT STABILIZATION PRACTICES ARE TO BE IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

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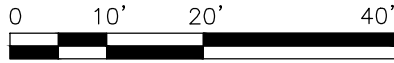
SHEET TITLE

CIVIL

EROSION & SEDIMENT  
CONTROL PLAN –  
FINAL PHASE  
(SHEET 3 OF 3)

SCALE: AS SHOWN

ESC-13





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SEEDING SCHEDULE TEMPORARY COVER

SPECIES	BROADCAST RATES - PLS PER ACRE	BROADCAST RATES - PLS PER 1000 SQ. FT.	RESOURCE AREA*3	PLANTING DATES (SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATED PERMISSIBLE BUT MARGINAL DATES.)
BARLEY (HORDEUM VULGARE)				J F M A M J J J A S O N D
ALONE	3 BU. (144 LBS.)	3.3 LB.	M-L	
IN MIXTURES	½ BU. (24 LBS.)	0.6 LB.	P	
LESPEDEZA, ANNUAL (LEZPEDEZA STRATA)				J F M A M J J J A S O N D
ALONE	40 LBS.	0.9 LB.	M-L	
IN MIXTURES	10 LBS.	0.2 LB.	C	
LOVEGRASS, WEEPING (ERAGROSTIS CURVULA)				J F M A M J J J A S O N D
ALONE	4 LBS.	0.1 LB.	M-L	
IN MIXTURES	2 LBS.	0.05 LB.	P	
MILLET, BROWNTOP (Panicum fasciculatum)				J F M A M J J J A S O N D
ALONE	40 LBS.	0.9 LB.	M-L	
IN MIXTURES	10 LBS.	0.2 LB.	C	
MILLET, PEARL (Pennisetum glaucum)				J F M A M J J J A S O N D
ALONE	50 LBS.	1.1 LB.	M-L	
IN MIXTURES			P	
OATS (Avena sativa)				J F M A M J J J A S O N D
ALONE	4 BU. (128 LBS.)	2.9 LB.	M-L	
IN MIXTURES	1 BU. (32 LBS.)	0.7 LB.	C	
RYE (Secale cereale)				J F M A M J J J A S O N D
ALONE	3 BU. (168 LBS.)	3.9 LB.	M-L	
IN MIXTURES	½ BU. (28 LBS.)	0.6 LB.	P	
TRITICALE (X-TRITICOSECALE)				J F M A M J J J A S O N D
ALONE	3 BU. (144 LBS.)	3.3 LB.	M-L	
IN MIXTURES	½ BU. (24 LBS.)	0.6 LB.	C	
RYEGRASS, ANNUAL (Lolium temulentum)				J F M A M J J J A S O N D
ALONE	40 LBS.	0.9 LB.	M-L	
IN MIXTURES			P	
SUDANGRASS (Sorghum sudanese)				J F M A M J J J A S O N D
ALONE	60 LBS.	1.4 LB.	M-L	
IN MIXTURES			P	
WHEAT (Triticum aestivum)				J F M A M J J J A S O N D
ALONE	3 BU. (180 LBS.)	4.1 LB.	M-L	
IN MIXTURES	½ BU. (30 LBS.)	0.7 LB.	C	

LIME: APPLY AT A RATE OF ONE TON PER ACRE  
FERTILIZER: APPLY 500-700 POUNDS OF 10-10-10 OR EQUIVALENT PER ACRE

SEEDING SCHEDULE PERMANENT COVER

SPECIES	BROADCAST RATES - PLS PER ACRE	BROADCAST RATES - PLS PER 1000 SQ. FT.	RESOURCE AREA*3	PLANTING DATES (SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATED PERMISSIBLE BUT MARGINAL DATES.)
BERMUDA, SPRIGS (CYNODON DACTYLON)				J F M A M J J J A S O N D
ALONE	40 CU. FT. OR SOD PLUGS 3'X3'	0.9 CU. FT.	M-L	
COASTAL COMMON OR TIFT 44			P	
BERMUDA, COMMON (CYNODON DACTYLON)				J F M A M J J J A S O N D
ALONE	10 LBS.	0.2 LB.	M-L	
W/ OTHER PERRENIALS	6 LBS.	0.1 LB.	P	
FESCUE, TALL (FESTUCA ARUNDINACEA)				J F M A M J J J A S O N D
ALONE	50 LBS.	1.1 LB.	M-L	
W/OTHER PERRENIALS	30 LBS.	0.7 LB.	P	
CROWNVTech (CORONILLA VARIA)				J F M A M J J J A S O N D
W/WINTER ANNUALS OR COOL SEASON GRASSES	15 LBS.	0.3 LB.	M-L	
REED CANARY GRASS (PHALARIS ARUNDINACEA)				J F M A M J J J A S O N D
ALONE	50 LBS.	1.1 LB.	M-L	
W/OTHER PERRENIALS	30 LBS.	0.7 LB.	P	
CENTPEDE (EREMOCHLOA OPHIUROIDES)				J F M A M J J J A S O N D
ALONE	BLACK SOD ONLY		P	
LOVEGRASS, WEEPING (ERAGROSTIS CURVULA)				J F M A M J J J A S O N D
ALONE	4 LBS.	0.1 LB.	M-L	
W/OTHER PERRENIALS	2 LBS.	0.05 LB.	C	
LESPEDEZA, SERICEA (LESPEDEZA CUNEATA)				J F M A M J J J A S O N D
SCARIFIED	60 LBS.	1.4 LB.	M-L	
UNSCARIFIED	75 LBS.	1.7 LB.	P	
SEED-BEARING HAY	3 TONS	138 LB.	C	

- NOTE:
- YOU MAY USE ANY OTHER SPECIES IF APPROVED BY MANUAL OF EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.
  - ALL FERTILIZER RATE AND APPLICATION, SEED QUALITY, SEEDBED PREPARATION, INNOCULANTS, PLANTING, AND MULCHING SHALL COMPLY WITH MANUAL OF EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION.

FERTILIZER REQUIREMENTS PERMANENT COVER

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST	6-12-12	1500 lbs./AC.	50-100 lbs./AC. 1/2/
	SECOND	6-12-12	1000 lbs./AC.	---
	MAINTENANCE	10-10-10	400 lbs./AC.	30 lbs./AC.
2. COOL SEASON GRASSES & LEGUMES	FIRST	6-12-12	1500 lbs./AC.	0-50 lbs./AC. 1/
	SECOND	10-10-10	1000 lbs./AC.	---
	MAINTENANCE	10-10-10	400 lbs./AC.	---
3. GROUND COVERS	FIRST	10-10-10	1300 lbs./AC. 3/	---
	SECOND	10-10-10	1300 lbs./AC. 3/	---
	MAINTENANCE	10-10-10	1100 lbs./AC.	---
4. PINE SEEDLINGS	FIRST	20-10-5	ONE 21-GRAM PELLET PER SEEDLING PLACED IN THE CLOSING HOLE	---
5. SHRU LESPEDEZA	FIRST	0-10-10	700 lbs./AC.	---
MAINTENANCE	0-10-10	700 lbs./AC. 4/	---	---
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500 lbs./AC.	30 lbs./AC. 5/
7. WARM SEASON GRASSES	FIRST	6-12-12	1500 lbs./AC.	50-100 lbs./AC. 2/6/
	SECOND	6-12-12	800 lbs./AC.	50-100 lbs./AC. 2/
	MAINTENANCE	10-10-10	400 lbs./AC.	30 lbs./AC.
8. WARM SEASON GRASSES & LEGUMES	FIRST	6-12-12	1500 lbs./AC.	50 lbs./AC. 6/
	SECOND	0-10-10	1000 lbs./AC.	---
	MAINTENANCE	0-10-10	400 lbs./AC.	---

- LIME: APPLY AT A RATE OF ONE TON PER ACRE
- APPLY IN SPRING FOLLOWING SEEDING.
  - APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
  - APPLY IN 3 SPLIT APPLICATIONS.
  - APPLY WHEN PLANTS ARE PRUNED.
  - APPLY TO GRASS SPECIES ONLY.
  - APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

ESTABLISHING A TEMPORARY PROTECTION FOR DISTURBED AREAS USING SPECIFIC MULCH MATERIALS.

- MULCH MATERIALS SHALL CONSIST OF DRY STRAW OR HAY AT 2.5 TONS PER ACRE, WOOD CHIPS AT 6 TO 9 TONS PER ACRE, EROSION CONTROL MATTING OR NETTING, OR POLYETHYLENE FILM.
- THIS STANDARD APPLIED TO GRADES OR CLEARED AREAS WHICH MAY BE SUBJECTED TO EROSION CONTROL FOR 6 MONTHS OR LESS, AND CAN BE STABILIZED WITH A MULCH COVER.

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING)

ESTABLISHING A PERMANENT VEGETATIVE COVER AS A DISTURBED AREA.

1. APPLICABLE ON HIGHLY ERODIBLE OR SEVERELY ERODED AREAS, SOMETIMES CALLED "CRITICAL AREAS" INCLUDING:

- CUT OR FILL SLOPES
- EARTH SPILLWAYS
- BORROW AREAS
- CHANNEL BANKS
- BERMS
- ROADSIDES
- SPOIL AREAS
- GULLIED LANDS

2. GRADING AND SHAPING REQ'D. WHERE FEASIBLE AND PRACTICAL.

3. SEEDBED PREPARATION (NOT REQ'D. IF USING HYDRAULIC SEEDING AND FERTILIZING)

SLOPE SEEDBED

3:1 OR FLATTER > 4" DEEP  
2:1 TO 3:1 1" TO 4" DEEP  
2:1 OR STEEPER DEPRESSIONS EVERY 6"-8" WITH HAND TOOL

4. HAVE SOIL ANALYZED FOR LIME AND FERTILIZER RATE.
5. MULCH ALL SLOPES STEEPER THAN 3%AND IN BOTTOM OF SPILLWAYS AND ON ROADBANKS.
6. ANCHOR MULCH IMMEDIATELY.

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

PYRAMAT 25 REINFORCED MATTING, OR APPROVED EQUAL

3-IN TOPSOIL LAYER

SOD GRASSING

NEW POND EARTHENED BERM SPILLWAY

TYPICAL VEGETATED EMERGENCY SPILLWAY SECTION

NOT TO SCALE

SODDED WATERWAYS

SOD DIRECTIONS

SWALE/WATERWAY SOD AREA

DIRECTION OF FLOW

LAY SOD ACROSS THE DIRECTION OF FLOW.

NETTING DIRECTIONS

PEG OR STAPLE

SOD NETTING

FLOW

LAY NET WITH THE DIRECTION OF FLOW.

PEG DETAIL

6"-10"

IN CRITICAL AREAS, SECURE SOD WITH NETTING USING STAPLES.

USE PEGS OR STAPLES TO FASTEN SOD FIRMLY --- AT THE ENDS OF STRIPS AND IN THE CENTER, OR EVERY 3-4 FEET IF THE STRIPS ARE LONG. WHEN READY TO MOW, DRIVE PEGS OR STAPLES FLUSH WITH THE GROUND.

Source: Va. DSWC

Figure 6-6.1

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDINGS)

Table 6-6.1. Fertilizer Requirements for Soil Surface Application			
Fertilizer Type	Fertilizer Rate (lbs/acre)	Fertilizer Rate (lbs/sq ft)	Season
10-10-10	1000	.025	Fall

Table 6-6.2 Sod Planting Requirements			
Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tiflawn	M-L,P,C P,C P,C	warm weather
Bahiagrass	Pensacola	P,C	warm weather
Centipede	---	P,C	warm weather
St. Augustine	Common Bitterblue Raleigh	C	warm weather
Zoysia	Emerald Myer	P,C	warm weather
Tall Fescue	Kentucky	M-L,P	cool weather

Table 6-6.3 Fertilizer Requirements for Sod				
Types of Species	Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
cool season grasses	first second maintenance	6-12-12 6-12-12 10-10-10	1500 1000 400	50-100 - 30
warm season grasses	first second maintenance	6-12-12 6-12-12 10-10-10	1500 800 400	50-100 50-100 30

Ds4 DISTURBED AREA STABILIZATION (WITH SOD)

SOD MAINTENANCE AND INSTALLATION

SOD LAYOUT AND PREPARATION

LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

INCORRECT CORRECT

BUTTING: ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

DIRECTIONS FOR INITIAL MAINTENANCE

Step 1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL

Step 2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.

Step 3. MOW WHEN THE SOD IS ESTABLISHED --- IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").

APPEARANCE OF GOOD SOD

SHOOTS OR GRASS BLADES: GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH: GRASS CLIPPINGS AND DEAD LEAVES (UP TO 1/2" THICK).

ROOT ZONE: SOIL AND ROOTS. SHOULD BE 1/2"-3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.

Source: Va. DSWC

Figure 6-6.2

ARCADIS

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ARCADIS U.S., INC.  
2839 PACES FERRY RD SUITE 900  
ATLANTA, GA 30339  
TEL: 770-431-8666  
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CONSULTANTS

ISSUED FOR CONSTRUCTION

SEALS



GSWCC NO. 0000088369  
EXPIRES 7/8/2025

WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	RG/TT
NO.	DATE	ISSUED FOR	BY

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DATE: OCTOBER 2024  
PROJECT NO.: 30064797  
FILE NAME:  
DESIGNED BY: T. TITTLE  
DRAWN BY: A. DOTTL  
CHECKED BY: R. GREUEL

SHEET TITLE

EROSION & SEDIMENT CONTROL

EROSION & SEDIMENT  
CONTROL DETAILS  
(SHEET 1 OF 3)

SCALE:

AS SHOWN

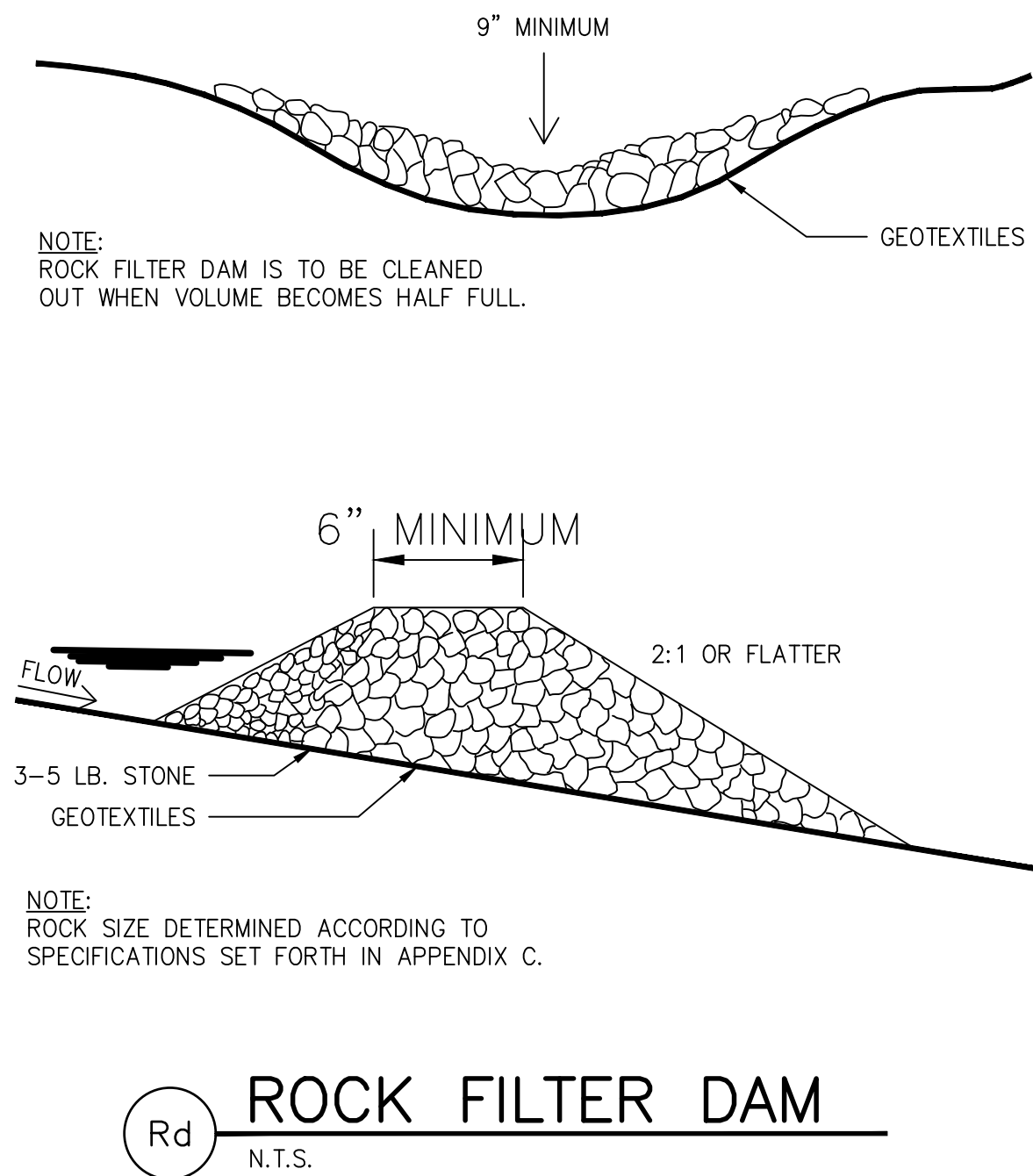
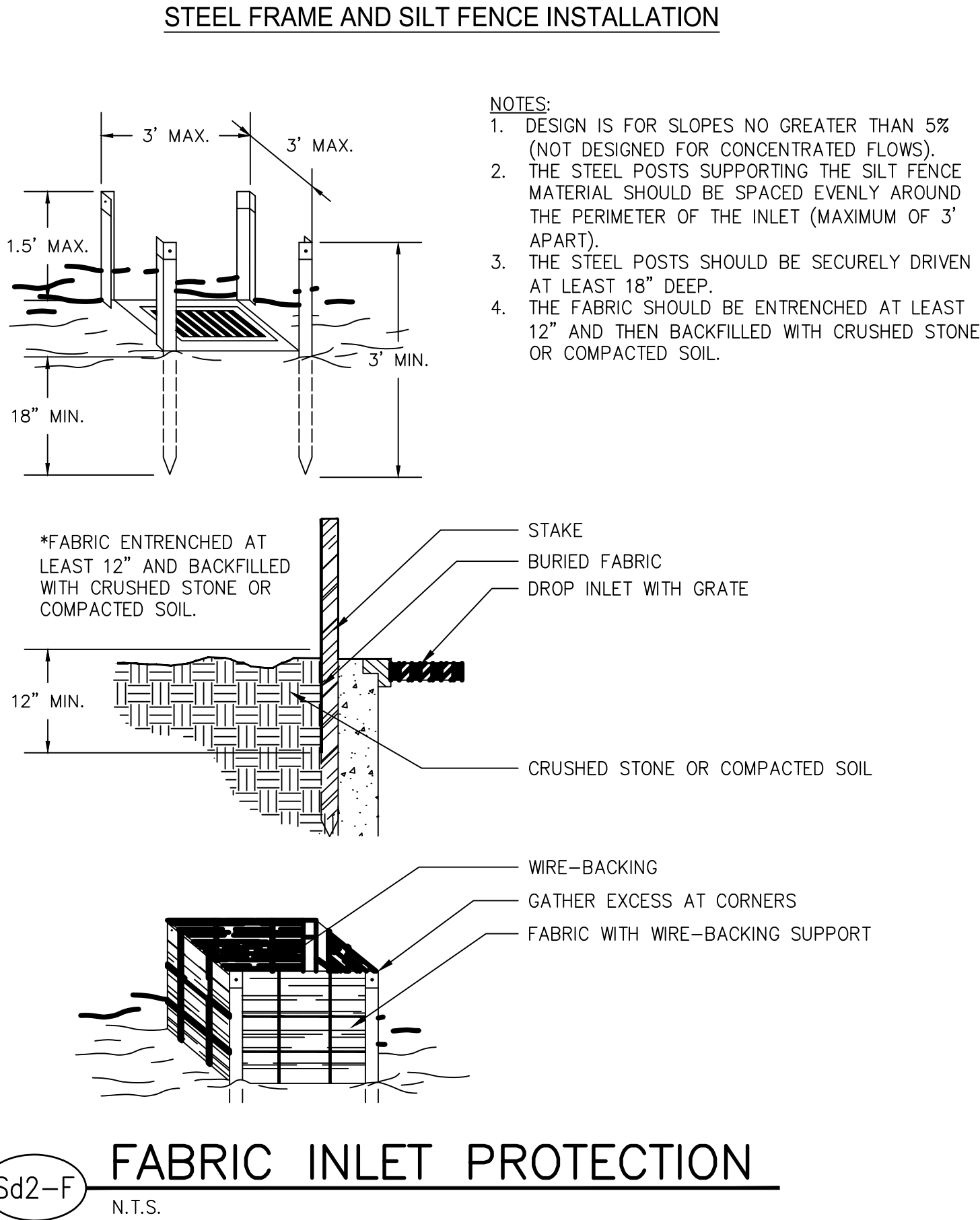
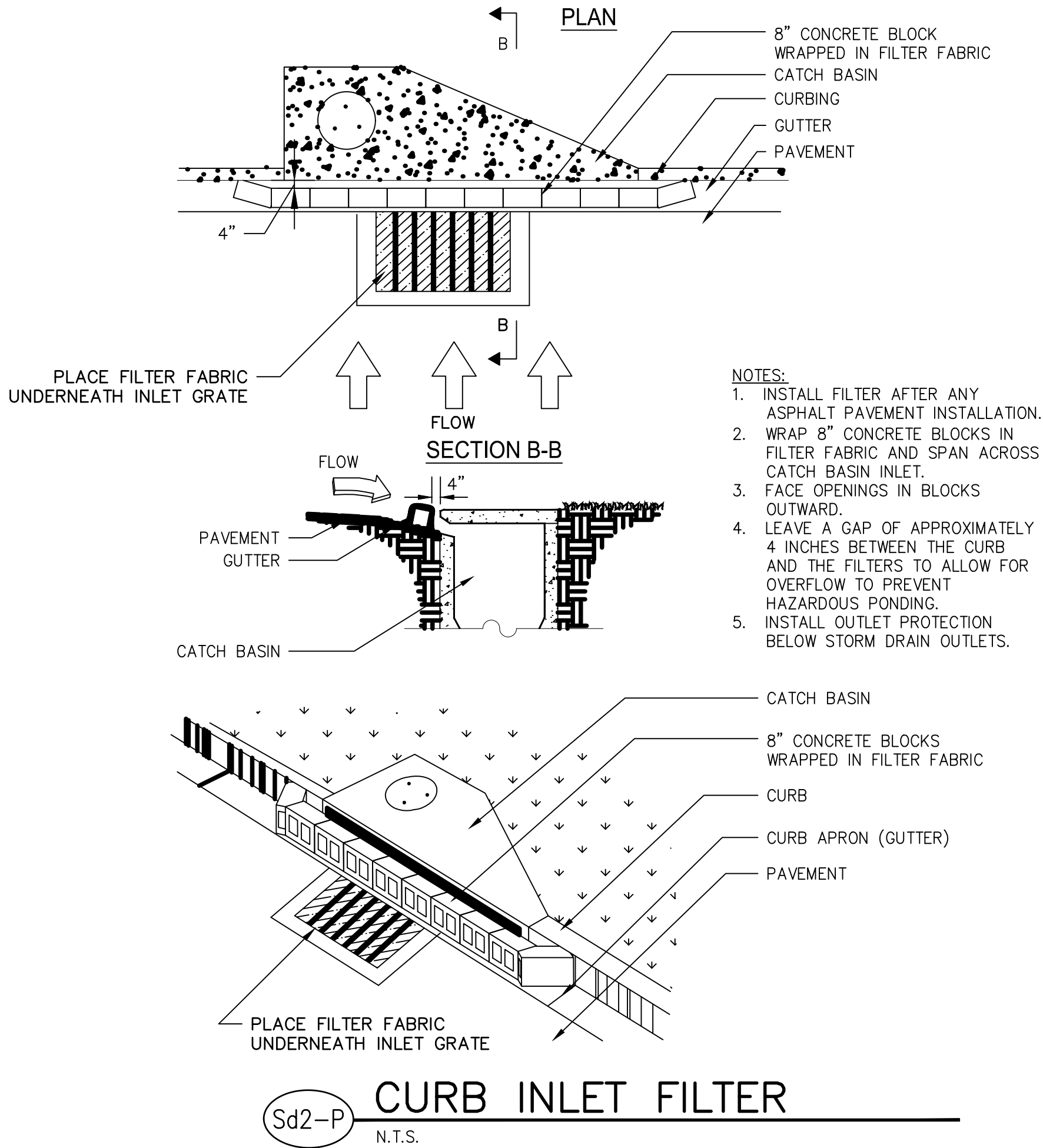
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ISSUED FOR CONSTRUCTION

SEALS



WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	RG/TT
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EROSION & SEDIMENT CONTROL

EROSION & SEDIMENT  
CONTROL DETAILS  
(SHEET 3 OF 3)

SCALE:  
AS SHOWN

ESC-16



User:DWASHINGTON Spec:AUS-NC5MOD File:c:\Users\DWASHINGTON\Documents\ARCADIS\AUS-30064797-PHASE 3 2 WEST FRANKLIN STREET SYSTEM PROJECT FILES\01 - WIP\STRUCT\AUS-01.DWG Scale:1:1 SavedDate:10/19/2024 Time:10:24 Plot Date: Washington, Dwyner, 10/19/2024, 10:24 ; Layout:S-01

GENERAL

1. QUALITY OF CONSTRUCTION REQUIRED, PERFORMANCE LEVELS OF WORKMANSHIP, MANUFACTURING AND INDUSTRY STANDARDS, STRENGTH, AND PHYSICAL REQUIREMENTS OF MATERIALS, CONFORMANCE TO CODES AND REGULATIONS, GUARANTEES AND OTHER PROJECT REQUIREMENTS ARE SPECIFIED IN THE CONTRACT DOCUMENTS.
2. IF MATERIALS AND QUANTITIES, STRENGTHS, OR SIZES INDICATED BY THE DRAWINGS ARE NOT IN THE AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
3. PERFORM ALL WORK IN COORDINATION WITH ALL DRAWINGS AND INFORMATION RELATED TO STRUCTURAL WORK, ANY CHANGES TO THE EQUIPMENT REQUIRING CHANGES TO THE STRUCTURAL SYSTEM SHALL BE REDESIGNED BY A PROFESSIONAL ENGINEER AT NO COST TO THE OWNER AND SUBMITTED TO THE PROJECT ENGINEER. SUBMITTAL SHALL BE ACKNOWLEDGED IN WRITING BEFORE BEGINNING CONSTRUCTION.
4. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS, OR TIE-DOWNS MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
5. STRUCTURAL ITEMS HAVE BEEN DESIGNED FOR DESIGN LOADS SHOWN OR SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRUCTURAL ITEMS SUBJECT TO CONSTRUCTION LOADS EXCEEDING THE DESIGN LOADS AND SHALL NOTIFY THE ENGINEER OF RECORD ANY SUCH ADDITIONAL LOADS.
6. ALL DIMENSIONS AND ELEVATIONS NOTED THUS (+/-) ON STRUCTURES SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD AND SHALL CONFORM TO THOSE SHOWN ON OTHER DRAWINGS.
7. NO STRUCTURAL MEMBERS SHALL BE CUT FOR PIPES, DUCTS, ETC. UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE ENGINEER OF RECORD.
8. ALL SPECIFIED CONCRETE TESTING DURING CONSTRUCTION AND ALL SPECIFIED LABORATORY TEST MIXES SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR.
9. ENGINEER OF RECORD FOR STRUCTURAL DESIGN WILL REVIEW AND APPROVE ALL CONSTRUCTION SUBMITTALS FOR STRUCTURAL WORK PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION OF THOSE COMPONENTS. SUBMITTALS REQUIRED FOR THE FOLLOWING:  
STRUCTURAL FILL, CONCRETE MIX DESIGN (INCLUDING ADMXTURE DATA, GRADATION REPORTS, AND HISTORICAL PERFORMANCE DATA), REINFORCING STEEL.
10. VERIFY EXISTING CONDITIONS AND DIMENSIONS AND NOTIFY ENGINEER OF ANY CONDITIONS WHICH DO NOT COMPLY WITH PLANS AND SPECIFICATIONS. STRUCTURAL DRAWINGS MUST BE COORDINATED WITH CIVIL DRAWINGS.
11. DO NOT SCALE STRUCTURAL DRAWINGS, AND FOR LOCATION OF MISCELLANEOUS ITEMS (OPENINGS, BENT PLATES INSERTS, ETC.) AFFECTING STRUCTURAL WORK, SEE CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.

DESIGN AND CODE INFORMATION

1. ALL CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH GEORGIA AMENDMENTS AND ASCE 7-16.
2. **LIVE LOADS:**  
LIVE LOAD: 20 PSF
3. **SNOW LOADS:**  
GROUND SNOW LOAD Pg = 10.0 PSF  
IMPORTANCE FACTOR Is = 1.0 PSF
4. **WIND LOADS:**  
WIND ULTIMATE DESIGN SPEED: 105 MPH  
RISK CATEGORY: II  
WIND EXPOSURE CATEGORY: C
5. **SEISMIC LOADS:**  
SEISMIC IMPORTANCE FACTOR: 1.0  
RISK CATEGORY: II  
SPECTRAL RESPONSE ACCELERATIONS: Ss = 0.495  
S1 = 0.199  
D  
DEFAULT SITE CLASS: SDS = 0.463  
SPECTRAL RESPONSE COEFFICIENTS: SD1 = 0.188  
SEISMIC DESIGN CATEGORY: C
6. GEOTECHNICAL INFORMATION:  
FOUNDATION DESIGNS ARE BASED ON PRESUMPTIVE SOIL TYPE OF CLAY OR SILTY CLAY SOIL WITH ALLOWABLE SOIL BEARING PRESSURE = 1,500 PSF. IF DURING EXCAVATION SOIL PROPERTIES APPEAR DIFFERENT THAN PRESUMED, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD BEFORE PROCEEDING WITH WORK.
7. LOCATION OF WORK: 705-707 VALLEY DR, DALTON, GA

ABBREVIATIONS

@	AT	INT.	INTERIOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LBS	POUNDS
AISI	AMERICAN IRON AND STEEL INSTITUTE	LP	LOW POINT
ACI	AMERICAN CONCRETE INSTITUTE	MAX	MAXIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MBMA	METAL BUILDING MANUFACTURER'S ASSOCIATION
B/W	BETWEEN	MIN	MINIMUM
CL	COLUMN CENTER LINE	O.C.	ON CENTER
C/L	CENTERLINE	O/O	OUT TO OUT
C/C	CENTER TO CENTER	P	PERIODIC
CMP	CORRUGATED METAL PIPE	PPAWS	PREFORMED PLASTIC ADHESIVE WATERSTOP
COL	COLUMN	PEMB	PRE-ENGINEERED METAL BUILDING
CONC	CONCRETE	PSF	POUNDS PER SQUARE FOOT
CONT	CONTINUOUS	RCP	REINFORCED CONCRETE PIPE
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	SC	SCALE
DIA	DIAMETER	SQ	SQUARE
DWG	DRAWING	STD	STANDARD
Ø	DIAMETER	STL	STEEL
EA	EACH	SST	STAINLESS STEEL
E.W.	EACH WAY	T&B	TOP & BOTTOM
EL	ELEVATION	TBD	TO BE DETERMINED
EX	EXISTING	T/	TOP
EXT.	EXTERIOR	TYP.	TYPICAL
FDN	FOUNDATION	UCWS	UNIFIED SOIL CLASSIFICATION SYSTEM
FTG.	FOOTING	UL	UNDERWRITERS LABORATORY
F.F.	FINISHED FLOOR	UON	UNLESS OTHERWISE NOTED
F.F.E.	FINISHED FLOOR ELEVATION	VERT	VERTICAL
GWB	GYPSPUM WALL BOARD	W/	WITH
HM	HOLLOW METAL		
HORIZ	HORIZONTAL		
HP	HIGH POINT		

FOUNDATIONS

1. IF FILL MATERIAL IS REQUIRED TO ACHIEVE REQUIRED FOOTING OR SLAB SUBGRADE ELEVATIONS, STRUCTURAL FILL SHALL BE USED.
2. WHEN FOUNDATION EXCAVATIONS HAVE BEEN CARRIED DOWN TO PROPOSED BEARING ELEVATIONS, IF LOOSE SOILS ARE REVEALED, ADDITIONAL IN-PLACE MODIFICATION MUST BE PERFORMED USING A BACKHOE-MOUNTED VIBRATORY COMPACTOR (HOE-PAC) OR SIMILAR EQUIPMENT TO ACHIEVE A CONSISTENT BEARING STRATUM. SUITABLE COMPACTION/BEARING OF FOUNDATION SOILS CAN BE VERIFIED AS FOLLOWS AS APPROVED BY THE GEOTECHNICAL ENGINEER:
  - EXHIBITING A COMPACTED (IN-SITU) DRY DENSITY OF AT LEAST 100 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY ASTM D 698. (STANDARD PROCTOR) LABORATORY COMPACTION,
  - A DYNAMIC CONE PENETROMETER (DCP) READING OF AT LEAST 8 BLOWS PER INCREMENT (AVERAGE OVER THREE INCREMENTS), OR
  - OTHER METHODS TO DEMONSTRATE AN EQUIVALENT SPT N-VALUE OF 10 BPF OR GREATER.
3. WHERE EXPOSED FOUNDATION SUBGRADE SOILS CONTAIN MORE THAN TRACE (MORE THAN 5 PERCENT) ORGANICS, IF GRANULAR SOILS CAN NOT BE MODIFIED IN-PLACE, OR OTHER UNSUITABLE FOUNDATION SOILS ARE ENCOUNTERED, OVER-EXCAVATION OF EXISTING SOILS SHALL BE PERFORMED. EXCAVATION SHALL EXTEND THROUGH THESE MATERIALS TO SUITABLE BEARING SOILS. THE BASE OF THE OVER-EXCAVATION SHALL BE WIDENED ONE FOOT FOR EVERY FOOT OF DEPTH BELOW THE PROPOSED BEARING ELEVATION, WITH THE EXCAVATION CENTERED ALONG THE FOUNDATION. THE OVER-EXCAVATED AREAS SHALL BE BACKFILLED AS FOLLOWS OR AS APPROVED BY THE GEOTECHNICAL ENGINEER:
  - DENSE-GRADED AGGREGATE, PLACED IN CONTROLLED LIFTS, AND COMPACTED TO NOT LESS THAN 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698.
  - LEAN CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 1,500 POUNDS PER SQUARE INCH (PSI) OR OTHER FLOWABLE CONTROLLED-DENSITY FILL HAVING A MINIMUM COMPRESSIVE STRENGTH OF 300 PSI.
  - IF FOUNDATIONS WILL BE PLACED AT THE BASE OF THE OVER-EXCAVATION OR THE LEAN CONCRETE FILL OPTION WILL BE UTILIZED, WIDENING THE FOUNDATION OVER-EXCAVATION WILL NOT BE REQUIRED. IF THE CONTROLLED-DENSITY FILL OPTION IS UTILIZED, THE FOUNDATION OVER-EXCAVATION SHALL BE WIDENED AS DISCUSSED ABOVE.
4. IF PERCHED GROUNDWATER IS PRESENT, IT SHALL BE LOWERED TO AT LEAST 1 FOOT BELOW BEARING, BY PUMPING FROM SUMPS AND/OR USE OF MULTIPLE WELL POINTS.
5. STRUCTURAL FILL SHALL CONSIST OF NON-ORGANIC SOILS HAVING A MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698 OF 90 POUNDS PER CUBIC FOOT (PCF) OR GREATER AND SHALL BE WITHIN 3 PERCENT OPTIMUM MOISTURE CONTENT. ON-SITE SOILS MAY BE USED AS STRUCTURAL FILL PROVIDED THAT MATERIALS ARE FREE OF ORGANIC MATTER, DEBRIS, EXCESSIVE MOISTURE, AND ROCK OR STONE FRAGMENTS LARGER THAN 3 INCHES IN DIAMETER.
6. STRUCTURAL FILL SHALL BE PLACED IN UNIFORM LAYERS NO MORE THAN 8 INCHES THICK (LOOSE MEASURE) AND ADEQUATELY KEYED INTO STRIPPED AND SCARIFIED SOILS. ALL FILL WITHIN THE BUILDING AREAS SHALL BE COMPACTED TO NOT LESS THAN 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698.

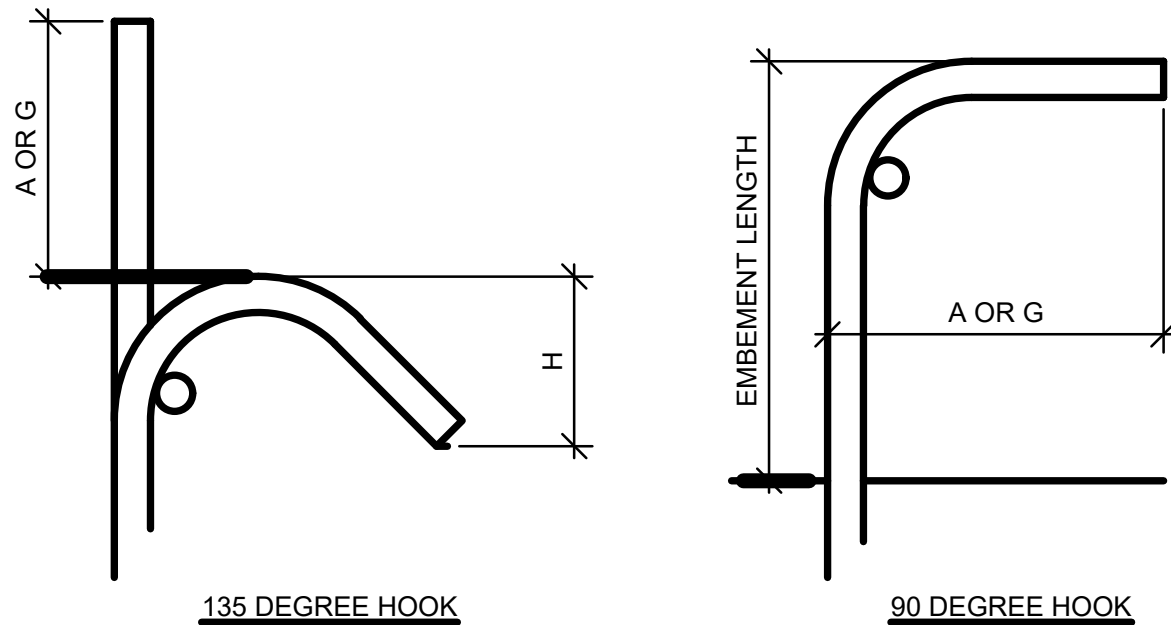
CAST-IN-PLACE CONCRETE

1. COMPLY WITH ACI 301, ACI 318, AND REFERENCED STANDARDS.
2. **FORM MATERIALS**  
**FORMS FOR FINISH CONCRETE:** PLYWOOD, LUMBER, METAL, OR OTHER ACCEPTABLE MATERIAL. PROVIDE LUMBER DRESSED ON AT LEAST TWO EDGES AND ONE SIDE FOR TIGHT FIT.  
**EARTH FORMS:** SUBJECT TO ENGINEER'S APPROVAL.  
**FORM TIES:** FACTORY-FABRICATED REMOVABLE OR SNAP-OFF METAL TYPE DESIGNED TO PREVENT FORM DEFLECTION AND TO PREVENT SPALLING CONCRETE UPON REMOVAL. UNITS TO LEAVE NO METAL CLOSER THAN 1 INCH TO SURFACE.
3. **FORM RELEASE AGENT:** COLORLESS MINERAL OIL WHICH WILL NOT STAIN CONCRETE OR ABSORB MOISTURE, OR IMPAIR NATURAL BONDING OR COLOR CHARACTERISTICS OF COATING INTENDED FOR USE ON CONCRETE INCLUDING CURING COMPOUND, SEALER, OR WATER-PROOFING.
4. **REINFORCEMENT:** REINFORCING STEEL: ASTM A615, 60 KSI YIELD GRADE, DEFORMED BILLET STEEL BARS, UNFINISHED; OR ASTM A616, 60 KSI YIELD GRADE, DEFORMED RAIL STEEL BARS, UNFINISHED.
5. **CONCRETE MATERIALS AND ADMIXTURES:** CEMENT: ASTM C150, TYPE II.  
**FINE AND COARSE AGGREGATES:** ASTM C33 (NORMAL WEIGHT AGGREGATE); MATERIALS CONTAINING DELETERIOUS SUBSTANCES (SPALLING CAUSING) ARE NOT ACCEPTABLE.  
**WATER:** CLEAN POTABLE.  
**AIR ENTRAINMENT:** ASTM C260; MASTER BUILDERS MICRO-AIR, OR AS APPROVED.  
**CHEMICAL:** ASTM C494 TYPE A - WATER-REDUCING, TYPE B - RETARDING, TYPE D - WATER-REDUCING AND RETARDING, TYPE F - WATER-REDUCING, HIGH RANGE, TYPE G - WATER-REDUCING, HIGH RANGE AND RETARDING; CONTAINING NO CHLORIDES; MASTER BUILDERS, W.R. GRACE, OR AS APPROVED.  
**FLY ASH:** ASTM C618 CLASS F OR C; LOSS ON IGNITION LESS THAN 3 PERCENT.
6. **BONDING AGENT:**  
PROVIDE THREE-COMPONENT EPOXY RESIN-CEMENTED BLENDED FORMULATED AS A BONDING AGENT; SIKA ARMATEC 110 EPOCEM, AS MANUFACTURED BY SIKA CORPORATION OR AS APPROVED.
7. **CURING MATERIALS**  
**MEMBRANE CURING COMPOUND:** ASTM C309, TYPE I-D, CLASS B, CLEAR WITH FUGITIVE DYE WHICH DISAPPEARS APPROXIMATELY 24 HOURS AFTER EXPOSURE TO SUNLIGHT; SPRAY-CURE SAFE CURE CLEAR, EUCLID CHEMICAL COMPANY KUREZ DR, OR AS APPROVED. CURING COMPOUND SHALL BE COMPATIBLE WITH COATINGS WHICH ARE TO BE APPLIED TO THE CONCRETE SURFACE.  
**ABSORPTIVE MATS:** BURLAP-POLYETHYLENE, MINIMUM 8 OUNCES PER SQUARE YARD BONDED TO PREVENT SEPARATION DURING HANDLING AND PLACING.
8. **WATER:** POTABLE, NOT DETRIMENTAL TO CONCRETE.
9. **CONCRETE MIX**  
**CONCRETE PROPORTIONS:** COMPLY WITH ACI 301, 4.2.  
**CLASS I CONCRETE:** PROVIDE CONCRETE TO THE FOLLOWING CRITERIA:  
COMPRESSIVE STRENGTH (7 DAY): 3,600 PSI.  
COMPRESSIVE STRENGTH (28 DAY): 4,500 PSI.  
WATER/CEMENT RATIO (MAXIMUM): 0.42 BY WEIGHT.  
AIR ENTRAINED: 6 PERCENT, +1 PERCENT.  
FLY ASH CONTENT: MAXIMUM 25 PERCENT OF CEMENT CONTENT.  
SLUMP (MAXIMUM): 3 INCHES (DUE TO WATER ONLY).  
MID OR HIGH RANGE WATER REDUCER: ADD TO INCREASE SLUMP TO 6 INCHES, +1-1/2 INCHES.
10. **ERECTION - FORMWORK**  
COORDINATE WITH WORK OF OTHER SECTIONS IN FORMING AND PLACING OPENINGS, RECESSES, SLEEVES, BOLTS, ANCHORS, OTHER INSERTS, AND COMPONENTS OF OTHER WORK. PROVIDE CHAMFER STRIPS ON ALL EXTERNAL CORNERS.
11. **GENERAL**  
USE CLASS I CONCRETE FOR STRUCTURAL CONCRETE. VERIFY CONSTRUCTION JOINTS, AND REINFORCEMENT ARE ACCEPTABLE. PLACE EPOXY GROUT IN FULL ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, INCLUDING COMPRESSED AIR CLEANING OF ALL CONTACT SURFACES.
12. **PLACEMENT OF REINFORCEMENT**  
**PLACE, SUPPORT, AND SECURE** REINFORCEMENT AGAINST DISPLACEMENT. DO NOT DEVIATE FROM REQUIRED POSITION. UNLESS NOTED OTHERWISE, MAINTAIN CONCRETE COVER FOR REINFORCEMENT AS FOLLOWS:  
FOOTINGS AND CONCRETE FORMED AGAINST EARTH: 3 INCH  
SLABS ON FILL: 3 INCH  
ALL OTHER: 2 INCH  
LAP SPLICES AS INDICATED ON THIS SHEET.  
DO NOT FIELD-CUT REINFORCEMENT WITHOUT ENGINEER'S PERMISSION.  
THE LONGITUDINAL REINFORCING STEEL IN WALLS AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS.
13. **PLACING CONCRETE**  
NO WATER SHALL BE ADDED TO CLASS I CONCRETE ON SITE. PLACEMENT OF CONCRETE UNDER WATER IS NOT PERMITTED. CONSOLIDATE CONCRETE PER ACI-301-16 SECTION 5.3.2.5. PROTECT CONCRETE FROM PHYSICAL DAMAGE OR REDUCED STRENGTH DUE TO WEATHER EXTREMES DURING MIXING, PLACING AND CURING; IN HOT WEATHER COMPLY WITH ACI 305R, IN COLD WEATHER COMPLY WITH ACI 306R.
14. **CONCRETE FINISHING**  
PROVIDE 3/4" CHAMFER ON ALL EXPOSED EDGES  
CONCRETE FLOOR SURFACES: ACI 301, 5.3.4.2.C, TROWEL FINISH; EXTERIOR TRAFFIC AND TOP OF WALL SURFACES: ACI 301, 5.3.4.2.D, BROOM FINISH. MAXIMUM VARIATION OF SURFACE FLATNESS FOR EXPOSED CONCRETE FLOORS: 1/8 INCH IN 10 FEET. CONCRETE SURFACES NOT EXPOSED: ACI 301, 5.3.3.3.A, ROUGH FORM FINISH. EXPOSED FORMED SURFACES: ACI 301, 5.3.3.4.B, GROUT-CLEANED FINISH.

CAST-IN-PLACE CONCRETE CONTINUED

15. **CURING**  
**HORIZONTAL SURFACES:** CURE FLOOR SURFACES IN ACCORDANCE WITH ACI 301 USING ANY OF THE FOLLOWING ACCEPTED PROCEDURES:  
SPRAYING: SPRAY WATER OVER FLOOR SLAB AREAS AND MAINTAIN WET FOR 7 DAYS.  
ABSORPTIVE MAT: SATURATE BURLAP-POLYETHYLENE AND PLACE BURLAP-SIDE DOWN OVER FLOOR SLAB AREAS, LAPPING ENDS AND SIDES; MAINTAIN IN PLACE FOR 7 DAYS.  
MEMBRANE CURING COMPOUND.  
**VERTICAL SURFACES:** CURE SURFACES USING ANY OF THE FOLLOWING ACCEPTED PROCEDURES:  
**FORMWORK:** KEEP FORMS IN PLACE FOR 7 DAYS; MEMBRANE CURING COMPOUND
16. **FIELD QUALITY CONTROL**  
TESTS OF CONCRETE SLUMP, AIR CONTENT AND STRENGTH SHALL BE MADE IN ACCORDANCE WITH ACI RECOMMENDATIONS. SAMPLES FOR AIR CONTENT AND STRENGTH SHOULD BE TAKEN AS NEAR AS PRACTICAL TO THE POINT OF PLACEMENT INTO THE FORMWORK OR AT A LOCATION WHICH CLOSELY MATCHES THE HANDLING CONDITIONS WHEN THE CONCRETE IS PLACED IN THE FORMS. PRIOR TO THE ADDITION OF A MID OR HIGH-RANGE WATER REDUCER, A SLUMP TEST MAY BE MADE FROM A SAMPLE TAKEN FROM THE VERY FIRST CONCRETE OUT OF THE LOAD.

REINFORCEMENT LAP SPLICE, EMBEDMENT LENGTH, AND STANDARD HOOK TABLE											
BAR SIZE	MIN LAP LENGTHS FOR BEAMS		MIN LAP LENGTHS FOR SLABS AND WALLS		MIN LAP LENGTH FOR COLUMNS	MIN EMBEDMENT LENGTHS			MIN STD HOOKS		
	CLASS B		CLASS B			STRAIGHT BARS		WITH STD HOOKS	90 DEG	135 DEG	
	TOP	OTHERS	TOP	OTHERS		TOP	OTHERS		A OR G	A OR G	H
#3	25	19	16	16	12	19	15	5	6	4	2.5
#4	39	25	20	16	15	25	19	7	8	4.5	3
#5	41	31	25	19	19	31	24	9	10	5.5	3.75
#6	49	37	29	23	23	37	29	10	12	8	4.5
#7	71	54	43	33	27	54	42	12	14	9	5.25
#8	81	62	49	37	30	62	48	14	16	10.5	6
#9	91	70	60	46	34	70	54	15	19	-	-
#10	102	79	74	57	39	79	61	17	22	-	-
#11	114	87	89	69	43	87	67	19	24	-	-



SPLICE TABLE NOTES:

REINFORCEMENT LAP SPLICE, EMBEDMENT LENGTH, AND STANDARD HOOKS TABLE IS BASED ON MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 4,000 PSI AND 60,000 PSI REINFORCEMENT (WITH NO EPOXY COATING).

ALL LAP SPLICES SHALL BE CLASS B SPLICES.

THE MINIMUM LAP LENGTH FOR BEAMS AND STRAIGHT EMBEDMENT ARE BASED ON A 3 BAR DIAMETER CENTER-TO-CENTER BAR SPACING AND A 2-INCH BAR COVER (MINIMUM). IF THE LAP CONDITION DOES NOT CONFORM TO THESE REQUIREMENTS, THEN USE BEAM LAP LENGTHS OR COMPLY WITH THE LAP REQUIREMENTS OF ACI 318 WITH APPROVAL BY ENGINEER.

THE MINIMUM LAP LENGTH FOR SLABS AND WALLS IS BASED ON A 6-INCH BAR SPACING AND A 2-INCH BAR COVER (MINIMUM). IF THE LAP CONDITION DOES NOT CONFORM TO THESE REQUIREMENTS, USE BEAM LAP LENGTHS IN ACCORDANCE WITH ACI 318, WITH APPROVAL BY ENGINEER.

TOP BARS ARE DEFINED AS WALL, BEAM, OR SLAB HORIZONTAL BARS WITH 12" OR MORE OF FRESH CONCRETE BENEATH.

WHERE SPLICES ARE INDICATED BETWEEN BARS OF DIFFERENT SIZES, THE SPLICE LENGTH SHALL BE BASED ON THE SMALLER BAR SIZE.



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SEALS



WHITFIELD COUNTY, GEORGIA  
CITY OF DALTON

WEST FRANKLIN STREET  
BYPASS SYSTEM

ARCADIS PROJ. NO. 30078891

0	10/24	ISSUED FOR CONSTRUCTION	CGC
NO.	DATE	ISSUED FOR	BY

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DATE: OCTOBER 2024

PROJECT NO.: 30064797

FILE NAME:

DESIGNED BY: L. ARMBRUSTER

DRAWN BY: D. WASHINGTON

CHECKED BY: L. BOWE

SHEET TITLE

STRUCTURAL

GENERAL NOTES

SCALE: AS SHOWN

S-01





STRUCTURAL QUALITY ASSURANCE PLAN  
GENERAL

THIS STRUCTURAL QUALITY ASSURANCE PLAN IDENTIFIES THE RESPONSIBILITIES OF THE CONTRACTOR AND THE SPECIAL INSPECTOR IN PERFORMING THE TESTING AND INSPECTION OF THE WORK REQUIRED BY CHAPTER 17 OF THE BUILDING CODE THAT IS WITHIN THE SCOPE OF THE STRUCTURAL ENGINEERING SERVICES FOR THIS PROJECT.

SPECIAL INSPECTOR'S RESPONSIBILITIES:

THE SPECIAL INSPECTOR SHALL BE A LICENSED ENGINEER IN THE STATE OF GEORGIA OR PERFORMING APPROPRIATE DUTIES DIRECTLY UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF GEORGIA AND HAVE A THOROUGH UNDERSTANDING OF THE SPECIAL INSPECTION REQUIREMENTS OF THE GEORGIA BUILDING CODE. THE SPECIAL INSPECTOR SHALL BE AN INDIVIDUAL OR INDIVIDUALS CERTIFIED OR EXPERIENCED TO PERFORM SUCH INSPECTIONS IN A PARTICULAR FIELD.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND FURNISH REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. PERIODIC REPORTS SHALL BE PROVIDED AND SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED TO THE SATISFACTION OF THE SPECIAL INSPECTOR, THE DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE WORK.

A WEEKLY REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED. AT THE COMPLETION OF THE SPECIAL INSPECTIONS, THE LICENSED PROFESSIONAL ENGINEER IN CHARGE OF PERFORMING THE SPECIAL INSPECTION SHALL CERTIFY THE FINAL SPECIAL INSPECTION REPORT AND AFFIX HIS/HER SEAL TO THE SPECIAL INSPECTOR'S FINAL REPORT. PROVIDE THREE (3) COPIES OF THIS REPORT TO THE PROJECT ENGINEER.

SOILS:

CONTRACTOR SHALL PERFORM THE FOLLOWING:

- SUBMIT TEST REPORTS FOR ENGINEERED FILL. CONTRACTOR TO COORDINATE BUILDING DEPARTMENT INSPECTIONS AND SPECIAL INSPECTIONS.

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING:

TABLE 1705.6 REQUIRED VERIFICATION AND INSPECTION OF SOILS		
VERIFICATION AND INSPECTION	C	P
1. VERIFY MATERIALS BELOW FOOTINGS AND SLAB-ON-GRADE ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.		X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.		X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.		X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.		X

C = CONTINUOUS      P = PERIODIC

CAST-IN-PLACE CONCRETE:

CONTRACTOR SHALL PERFORM THE FOLLOWING:

- ESTABLISH CONCRETE MIX DESIGN PROPORTIONS PER ACI 318. SUBMIT THREE COPIES OF THE CONCRETE MIX DESIGNS. INCLUDE THE FOLLOWING:
  - TYPE AND QUANTITIES OF MATERIALS
  - SLUMP
  - AIR CONTENT
  - FRESH UNIT WEIGHT
  - AGGREGATES SIEVE ANALYSIS
  - DESIGN COMPRESSIVE STRENGTH
  - LOCATION OF PLACEMENT IN STRUCTURE
  - METHOD OF PLACEMENT
  - METHOD OF CURING
  - SEVEN-DAY AND 28-DAY COMPRESSIVE STRENGTHS
- SUBMIT A CERTIFICATION FROM EACH MANUFACTURER OR SUPPLIER STATING THAT MATERIALS MEET THE REQUIREMENTS OF THE SPECIFIED ASTM AND ACI STANDARDS.
- SUBMIT CERTIFICATION THAT THE READY-MIXED CONCRETE PLANT COMPLIES WITH THE REQUIREMENTS OF THE NATIONAL READY MIX CONCRETE ASSOCIATION.

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING:

TABLE 1705.3 REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION				
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCE STANDARD	IBC REFERENCE
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT.	-	X	ACI 318: CH 20, 25.2, 25.3, 26.6.1 - 26.6.3	1908.4
2. INSPECTION OF ANCHORS CAST IN CONCRETE PRIOR TO PLACEMENT OF CONCRETE.	-	X	ACI 318: 17.8.2	
3. INSPECTION OF ANCHORS POST -INSTALLED IN HARDENED CONCRETE MEMBERS.	X	X	ACI 318: 17.8.2.4	
4. VERIFYING USE OF REQUIRED DESIGN MIX.	-	X	ACI 318 Ch: 19, 26.4.3, 26.4.4	1904.1-2, 1908.2-3
5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.10
6. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
7. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE ANS TECHNIQUES.	-	X	ACI 318: 26.5.3-26.5.5	1908.9
8. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 26.11.1(b)	-



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DRAWN BY: D. WASHINGTON  
CHECKED BY: L. BOWE

SHEET TITLE

STRUCTURAL  
SPECIAL INSPECTIONS

SCALE: AS SHOWN

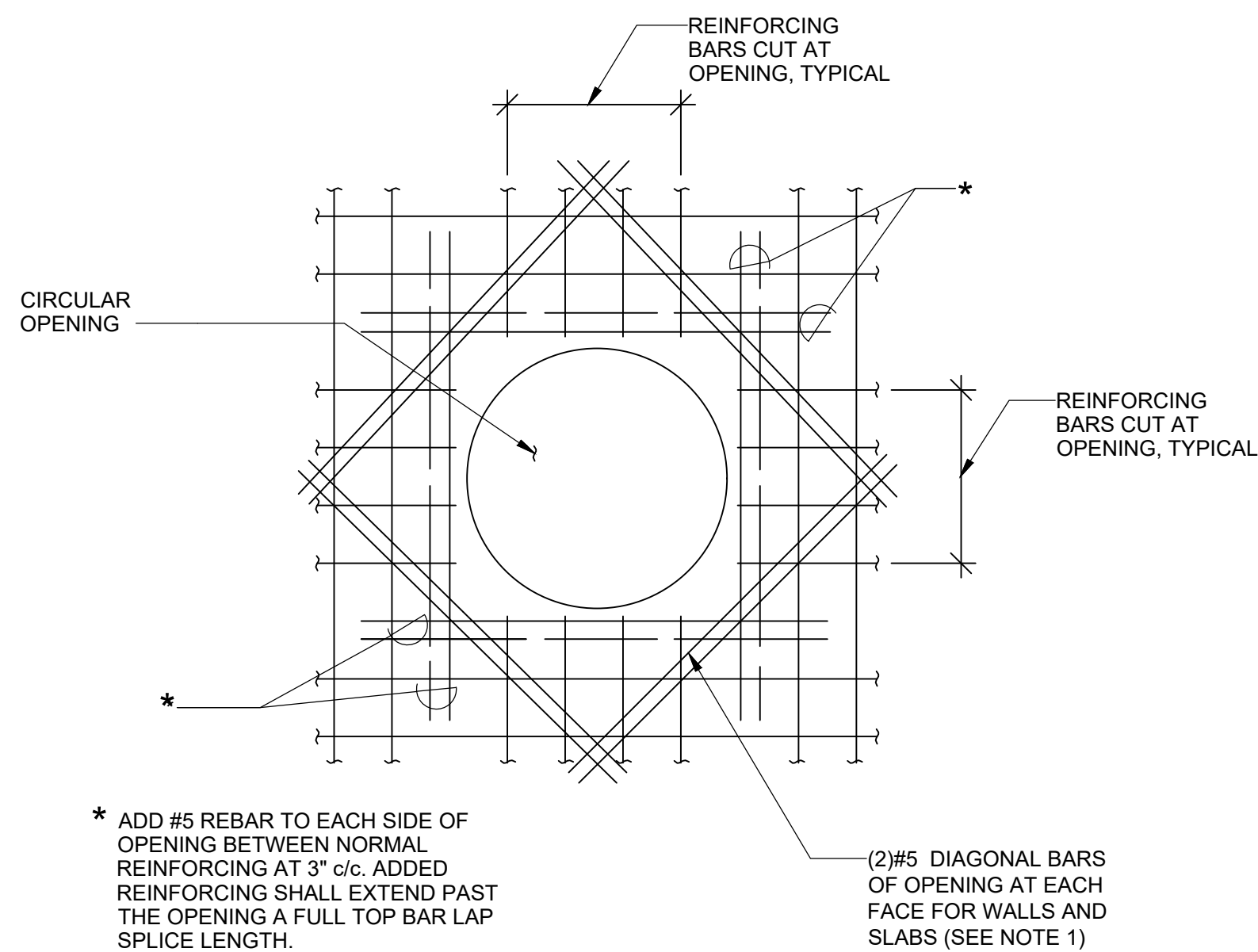
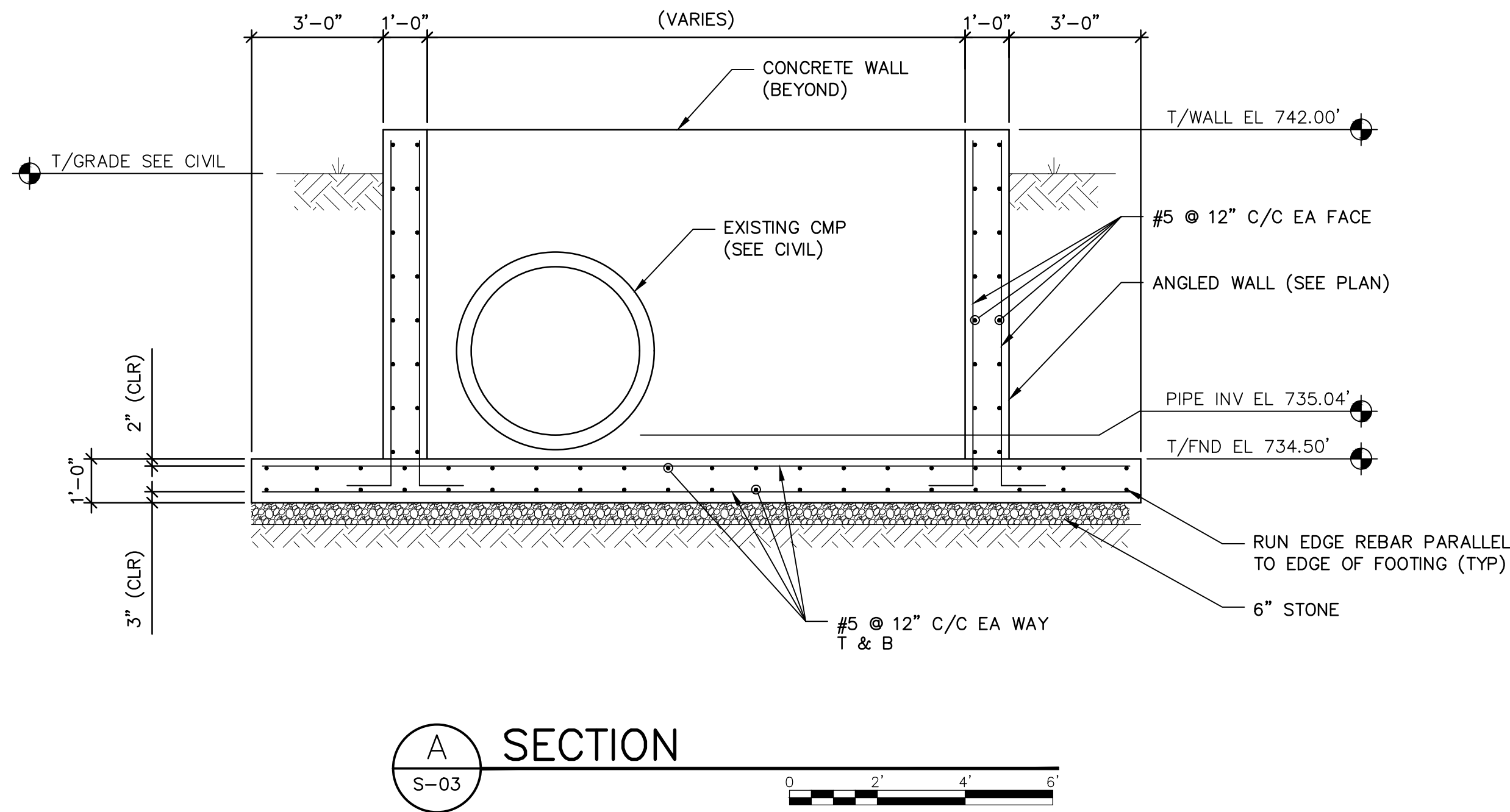
S-02



Know what's below.  
Call before you dig.



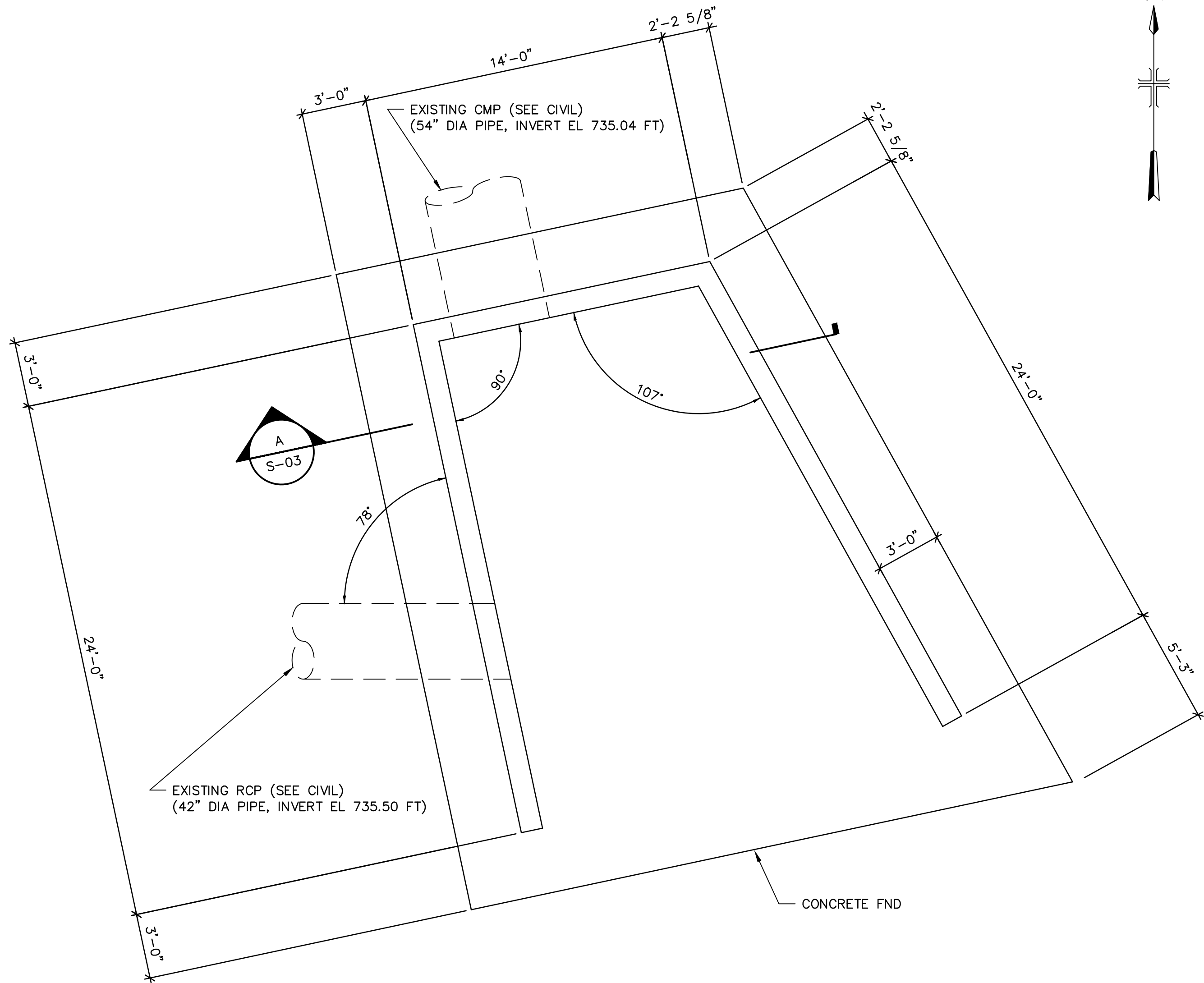
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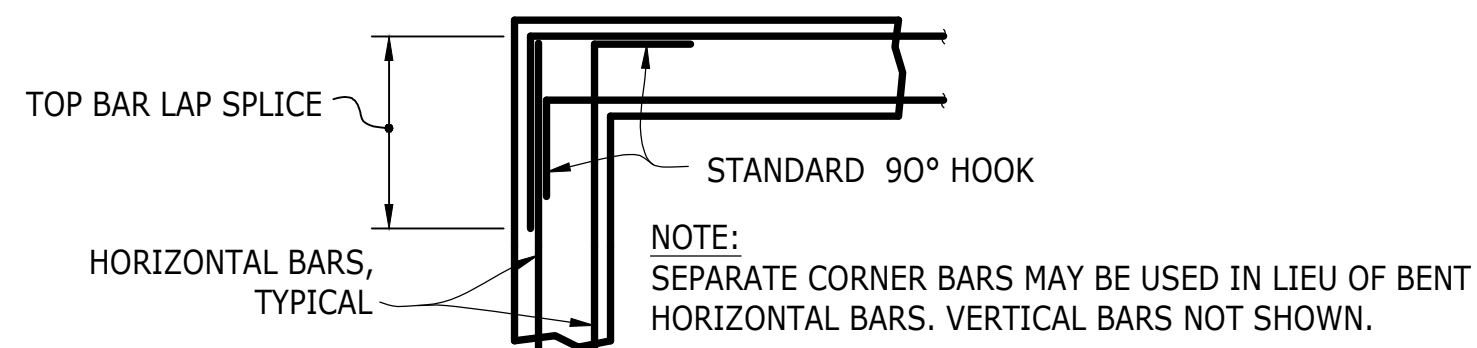
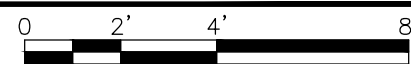
### TYPICAL REINFORCING AROUND OPENINGS IN CONCRETE

SCALE: N.T.S.

DETAIL NOTE:  
1. DIAGONAL BARS SHALL BE EMBEDDED IN THE BASE SLAB PRIOR TO WALL CONSTRUCTION, AS APPLICABLE.



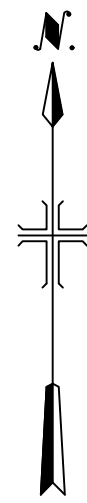
### HEAD WALL A-01 - FOUNDATION PLAN



### SECTIONAL PLAN

### TYPICAL WALL INTERSECTION REINFORCING DETAILS

SCALE: N.T.S.



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SHEET TITLE

STRUCTURAL

HEAD WALL A-01  
PLAN, SECTION &  
DETAILS

SCALE: AS SHOWN

S-03

