

SITE DEVELOPMENT PLANS PORT WENTWORTH FIRE STATION

HIGHWAY 30 PORT WENTWORTH, GA 31407

PREPARED FOR:

CITY OF PORT WENTWORTH

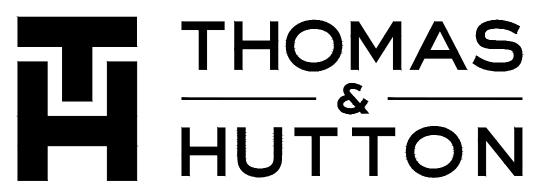
7224 GA HIGHWAY 21 PORT WENTWORTH, GA 31407 STEVE DAVIS STEVEDAVIS@CITYOFPORTWENTWORTH.COM

TM# 7-0976C-01-001

OCTOBER 6, 2023

J-25412.0029

PREPARED BY:

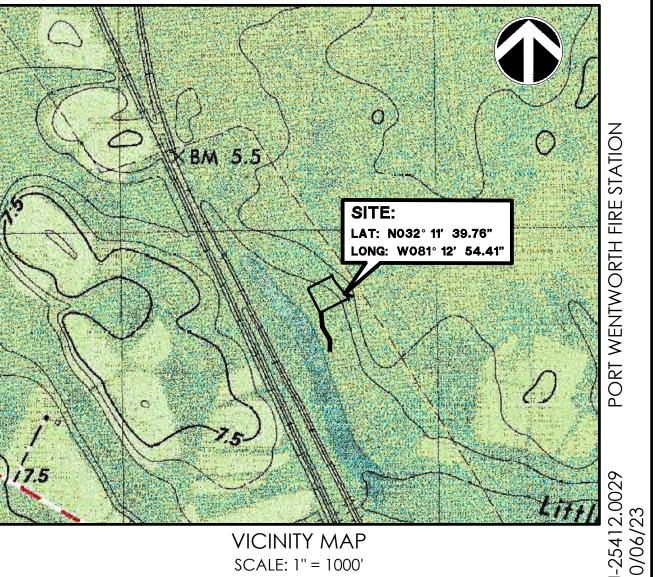




BID SET - NOT FOR CONSTRUCTION

	REVISION HISTORY		
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REV. NO.	REVISION	BY	DATE

SUBMITTAL HISTORY	
ISSUED FOR PERMITTING / BIDDING	10/06/23
SUBMITTED TO	DATE



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50 Park of Commerce Way Savannah, GA 31405 p.912.234.5300

	<u>ABBREVIATIONS</u>									
DBL	DOUBLE	FM	FORCE MAIN (SANITARY SEWER)		PC	POINT OF CURVE		тс	TOP OF CURB	
вот	воттом	FP	FINISH PAD		PH	POST HYDRANT		тн	THROAT ELEVATION	
СВ	CATCH BASIN	FR	FRAME		PT	POINT OF TANGENT		TG	TOP OF GUTTER	
СІ	CURB INLET	GI	GRATE INLET		PVC	POLYVINYL CHLORIDE		ТР	TOP OF PAVEMENT	
со	CLEAN OUT	GV	GATE VALVE		RCP	REINFORCED CONCRETE PIPE		TW	TOP OF WALK	
CPP	CORRUGATED PLASTIC PIPE	HDPE	HIGH DENSITY POLYETHYLENE		RC	ROLL CURB INLET		TYP	TYPICAL	
DBL	DOUBLE	н	HOODED INLET		RCP	REINFORCED CONCRETE PIPE		VI	VALLEY INLET	
DI	DITCH INLET	INV	INVERT ELEVATION		RI	ROOF INLET		w	WATER	
DIP	DUCTILE IRON PIPE	JB	JUNCTION BOX		RJP	RESTRAINED JOINT PIPE		W/	WITH	
EL	ELEVATION	LF	LINEAR FEET		R/W	RIGHT-OF-WAY		wv	WATER VALVE	
ES	END SECTION	MAX	MAXIMUM		SD	STORM DRAINAGE		ΥI	YARD INLET	
FES	FLARED END SECTION	MIN	MINIMUM		SDMH	STORM DRAINAGE MANHOLE		ΥI	YARD INLET	
FG	FINISH GRADE	мн	MANHOLE		SF	SQUARE FEET				
FH	FIRE HYDRANT	ос	ON CENTER		SS	SANITARY SEWER				

	SEWER LEGE	<u> </u>
DESCRIPTION	EXISTING	<u>PROPOSED</u>
GRAVITY PIPE —	ss	
SINGLE SERVICE LATERAL		
DOUBLE SERVICE LATERAL		> —
MANHOLE	\bigcirc	•
CLEANOUT	O ¹	• +
FORCEMAIN — -	IO"FM IO"FM	IO"FM IO"FM
VALVE AND BOX	\otimes	•
FLUSH HYDRANT)	>
REDUCER		•
BACKFLOW PREVENTOR		
CROSS	1_1	1_1
TEE	<u> </u>	1-1
90° BEND - HORIZONTAL	_	_
45° BEND - HORIZONTAL	/	/
22-½° BEND - HORIZONTAL	/	/
II-¼° BEND - HORIZONTAL	/	1 1
BEND - VERTICAL		11
PLUG \ CAP		

PLUG (CAP	I	
DRAI	NAGE LEGI	END_
DESCRIPTION	EXISTING	PROPOSED
PIPE		
DITCH		
CURB INLET (CI) CATCH BASIN (CB)	0	•
CURB INLET - RIGHT (CI) OR CATCH BASIN - RIGHT (CB)	OR OR	OR OR
CURB INLET - LEFT (CI) OR CATCH BASIN - LEFT (CB)	OR O	OR •
CURB INLET - BOTH (CI) OR CATCH BASIN - LEFT (CB)	OR O	OR •
CONTROL STRUCTURE (CS)		
DITCH INLET (DI)		
GRATE INLET (GI)		
HOODED INLET (HI)	or 🔚	OR (m)
JUNCTION BOX (JB)		
MANHOLE (SDMH)	0	•
ROLL CURB INLET (RC)		
ROOF INLET (RI)		
YARD INLET (YI)	®	®
FLARED END SECTION (FES)		

DESCRIPTION	EXISTING	PROPOSED
ATER MAIN	10"W	IO"W
INGLE SERVICE LATERAL		
OUBLE SERVICE LATERAL	<u>></u>	>
ALVE AND BOX	\otimes	•
RE HYDRANT W/VALVE & BOX	\otimes - \diamondsuit -	€-
OST HYDRANT) H)
EDUCER		4
ACKFLOW PREVENTOR		
Ross	_	1_1
EE	<u> </u>	-
O° BEND - HORIZONTAL	_	一
5° BEND - HORIZONTAL	/	/1
2-½° BEND - HORIZONTAL	/	/
-¼° BEND - HORIZONTAL	1	1
END - VERTICAL	[]	11
AP		

OTHER UTILITIES LEGEND						
DESCRIPTION	<u>EXISTING</u>					
NATURAL GAS	UGG					
TELEPHONE	——————————————————————————————————————					
UNDERGROUND TELEPHONE	——————————————————————————————————————					
ELECTRICITY	——————————————————————————————————————					
UNDERGROUND ELECTRICITY	— UGP — UGP —					

GENERAL INFORMATION

COUNTY

ZONING

CHATHAM COUNTY PORT WENTWORTH

R-A

CITY OF PORT WENTWORTH 7724 GA HIGHWAY 21 PORT WENTWORTH, GA 31704 912.964.4379

> **ENGINEER:** THOMAS & HUTTON 50 PARK OF COMMERCE WAY SAVANNAH, GA 31405 912.234.5300

SURVEYOR: THOMAS & HUTTON 50 PARK OF COMMERCE WAY SAVANNAH, GA 31405 912.234.5300

WATER - CITY OF PORT WENTWORTH, (912) 964-4379 SEWER - CITY OF PORT WENTWORTH, (912) 964-4379 POWER - GEORGIA POWER, (912) 306-2162 GAS - ATLANTA GAS LIGHT COMPANY, (912) 239-6526 TELEPHONE - AT&T TELECOMMUNICATIONS, INC., (912) 964-7346 CATV - COMCAST COMMUNICATIONS, (912) 658-6976

GENERAL NOTES

- TOPOGRAPHIC AND BOUNDARY SURVEY INFORMATION PROVIDED BY THOMAS & HUTTON, ALL TOPOGRAPHIC INFORMATION IS BASED ON CONVENTIONAL SURVEY DATA. ELEVATIONS SHOWN ARE BASED ON NAVD 88, UNLESS OTHERWISE NOTED. COORDINATES AND DIRECTIONS SHOWN ARE BASED ON THE GEORGIA STATE PLANE, EAST ZONE, NAD83 COORDINATE SYSTEM.
- 2. CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTACT ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.
- 3. IF WORK IS SUSPENDED OR DELAYED FOR 14 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE DISTURBED AREA AT NO ADDITIONAL COST TO THE
- 4. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH LOCAL UTILITY PROVIDERS BEFORE WORK COMMENCES. VERIFY UTILITIES WITHIN THE PROJECT LIMITS AND NOTIFY THE ENGINEER OF CONFLICTS OR VARIANCES TO THE PLANS PRIOR TO BEGINNING WORK OR PURCHASE OF MATERIALS.
- 5. THE CONTRACTOR WILL NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO BEGINNING ANY REMOVAL OPERATION.
- 6. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY BRACING, SHEETING AND DEWATERING TO COMPLETE THE PROJECT, PROTECT THE CONSTRUCTION WORKERS AND ALL ADJACENT STRUCTURES, TREES, LANDSCAPING, AND IS RESPONSIBLE FOR ALL REPAIR AND COST TO RETURN AREA TO ORIGINAL CONDITION.
- 7. ALL UTILITY POLES ADJACENT TO PROPOSED CONSTRUCTION MUST BE SECURED PRIOR TO ANY ADJACENT DISTURBANCE AND THE CONSTRUCTION PROCEDURE MUST BE ACCEPTABLE TO THE UTILITY COMPANY.
- 8. CONTRACTOR TO DESIGN AND PROVIDE PLAN FOR SECURING POLES TO THE CITY AND UTILITY PROVIDER FOR APPROVAL.
- 9. CONTROL OF STORMWATER THROUGHOUT THE CONSTRUCTION PERIOD, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE EXISTING DRAINAGE CONVEYANCES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL PENALTIES, CLAIMS AND FEES IMPOSED ON THE OWNER AS A RESULT OF DAMAGE CAUSED BY ACTIONS OF THE CONTRACTOR, THEIR EMPLOYEES OR SUBCONTRACTORS SHALL BE BORNE IN FULL BY THE CONTRACTOR.
- IO. ALL SUITABLE MATERIAL EXCAVATED SHALL BE USED ON SITE. ANY EXCESS MATERIAL SUITABLE OR UNSUITABLE SHALL BE DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE.
- II. IT IS THE OBLIGATION OF THE CONTRACTOR TO MAKE THEIR OWN INTERPRETATION OF ALL SURFACE AND SUBSURFACE DATA AVAILABLE AS TO THE NATURE AND EXTENT OF THE MATERIALS TO BE EXCAVATED, WASTED, GRADED, AND COMPACTED. THE INFORMATION SHOWN ON THESE PLANS IN NO WAY GUARANTEES THE AMOUNT OR NATURE OF THE MATERIAL TO BE ENCOUNTERED.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL DEVICES AND MEASURES AS NECESSARY TO MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO OWNER FOR REVIEW AND ACCEPTANCE PRIOR TO STARTING CONSTRUCTION.
- 13. ALL WORK SHALL CONFORM TO APPLICABLE STATE, COUNTY AND MUNICIPAL REQUIREMENTS AND CODES.
- 14. THE CONTRACTOR SHALL COORDINATE DEMOLITION AND IMPROVEMENTS TO MINIMIZE TRAFFIC INTERFERENCE AND OPERATIONS OF FACILITIES.
- 15. ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN ACCEPTABLE WASTE DISPOSAL AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL CONSTRUCTION DEBRIS.
- 16. ALL STORM DRAIN JOINTS ARE TO BE WRAPPED IN FILTER FABRIC.
- 17. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION UNTIL THE PROPER PERMITS HAVE BEEN ISSUED. 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES
- PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES AND FOR AVOIDING ALL CONFLICTS WITH SAME. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE 19. ALL MANHOLE TOPS ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE AND
- SET MANHOLE TOPS RELATIVE TO FINISHED GRADES AS SHOWN ON THE DETAIL. 20. CONTACT THE ONE CALL LOCATE LINE AT I-800-282-74II A MINIMUM OF
- SEVENTY-TWO (72) HOURS PRIOR TO DIGGING FOR LOCATION OF CITY WATER AND SEWER LINES, AND OTHER UTILITIES.
- 21. TREE PROTECTION BARRICADES, IF REQUIRED, SHALL BE INSTALLED PRIOR TO ANY CLEARING ACTIVITY AND MAINTAINED UNTIL INSTRUCTED BY THE OWNER OR ENGINEER TO REMOVE THEM.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING OF UTILITY EASEMENTS AS REQUIRED TO INSTALL THE IMPROVEMENTS AS SHOWN ON
- 23. CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATION OF, AND FEES RELATED TO THE CITY OF PORT WENTWORTH ON VIDEO OF UNDERGROUND SANITARY SYSTEMS, AS WELL AS FOR THE UNDERGROUND STORM SYSTEM.
- 24. DURING INSTALLATION, WHEN PIPE LAYING IS NOT IN PROGRESS, A MECHANICAL JOINT PLUG OR CAP, OR ACCEPTED EQUIVALENT WILL BE USED TO FORM A WATERTIGHT SEAL AT BOTH ENDS OF THE LINE BEING LAID.
- 25. DISCHARGE OF HIGHLY CHLORINATED WATER INTO SURROUNDING AREAS OR STORM DRAINAGE SYSTEM IS PROHIBITED. DISPOSAL OF HIGHLY CHLORINATED WATER SHALL COMPLY WITH THE REQUIREMENTS OF GEORGIA E.P.D. AND AWWA STANDARD C65I, LATEST REVISION. IF REQUIRED BY THE ENGINEER, A REDUCING AGENT SHALL BE USED TO NEUTRALIZE THE CHLORINE.

- 26. CONTRACTOR NEEDS TO OBTAIN A RIGHT OF WAY PERMIT PRIOR TO PERFORMING CONSTRUCTION ACTIVITIES IN CITY'S RIGHT OF WAY.
- 27. CITY OF PORT WENTWORTH HAS THE RIGHT TO ALWAYS ACCESS THE PROPERTY TO INSPECT STORMWATER FACILITIES.
- 28. THE WATER SERVICE LATERAL SERVING THE FACILITY SHALL BE INSTALLED BY THE DEVELOPER / CONTRACTOR FROM THE WATER MAIN TO METERS. THE CITY OF PORT WENTWORTH WILL ONLY MAKE A WET TAP. THE CITY WILL NOT INSTALL THE WATER SERVICE LATERAL.
- 29. ALL WATER USED FOR CONSTRUCTION SHALL BE METERED THROUGH AN ACCEPTABLE BACKFLOW PREVENTION DEVICE AND FIRE HYDRANT METER OBTAINED FROM THE CITY OF PORT WENTWORTH'S CONVEYANCE AND DISTRIBUTION
- DEPARTMENT. 30. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE TO THE CITY OF PORT WENTWORTH'S LATEST CONSTRUCTION SPECIFICATIONS AND
- 31. AN ACCEPTABLE WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL
- 32. ALL MATERIALS USED WHICH COME INTO CONTACT WITH DRINKING WATER DURING ITS DISTRIBUTION SHALL NOT ADVERSELY AFFECT DRINKING WATER QUALITY AND PUBLIC HEALTH AND MUST BE CERTIFIED TO CONFORMANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION STANDARD 61 (ANSI/NSF STANDARD 61).
- 33. IN ALL WATER LINE PROJECTS, CARE WILL BE TAKEN TO KEEP INTERIOR OF WATER PIPE CLEAN PRIOR TO CONNECTION TO THE CITY SYSTEM. THIS WILL BE ACCOMPLISHED BY STRICT ADHERENCE TO FOLLOWING CITY SPECIFICATIONS:
- A. PIPE, FITTINGS, VALVES AND OTHER ACCESSORIES SHALL, UNLESS OTHERWISE DIRECTED, BE UNLOADED AT THE POINT OF DELIVERY, AND STORED WHERE THEY WILL BE PROTECTED AND WILL NOT BE HAZARDOUS TO TRAFFIC. THEY SHALL AT ALL TIMES BE HANDLED WITH CARE TO AVOID DAMAGE. THE INTERIOR OF ALL PIPE, FITTINGS AND OTHER ACCESSORIES SHALL BE KEPT FREE FROM DIRT AND FOREIGN MATTER AT ALL TIMES.
- B. ANY DEFECTIVE, DAMAGED, OR UNSOUND PIPE SHALL BE REJECTED. ALL FOREIGN MATTER OR DIRT SHALL BE REMOVED FROM THE INSIDE OF THE PIPE BEFORE IT IS LOWERED INTO ITS POSITION IN THE TRENCH AND SHALL BE KEPT CLEAN BY ACCEPTABLE MEANS DURING AND AFTER LAYING. CARE SHALL BE TAKEN TO PREVENT DIRT FROM ENTERING THE JOINT SPACE. DURING INSTALLATION, WHEN PIPE LAYING IS NOT IN PROGRESS, A MECHANICAL JOINT PLUG OR CAP, OR ACCEPTED EQUIVALENT, WILL BE USED TO FORM A WATER TIGHT SEAL AT BOTH ENDS OF THE LINE BEING LAID AND NO TRENCH WATER SHALL BE PERMITTED TO ENTER THE PIPE.
- C. CLEAN THE INTERIORS OF ALL PIPE BY BRUSHING, SWABBING OR WASHING OUT OF ALL DIRT BEFORE LAYING.
- D. FLUSH THE NEW PIPE LINES UNTIL THE WATER RUNS CLEAR AT THE END OF ALL MAINS AND LATERALS. THIS SHOULD BE DONE AFTER THE PRESSURE TEST AND BEFORE DISINFECTION. SPECIFY MINIMUM FLUSH TIME AND VELOCITY (2.5 FEET PER SECOND) WHICH ARE NECESSARY TO PURGE THE LINE OF ANY FOREIGN
- 34. ALL OF THE CITY OF PORT WENTWORTH MAINTAINED DRAINAGE PIPE SYSTEM WITHIN PROJECT LIMITS SHALL BE CLEANED. TELEVISED. AND TAPED AFTER CONSTRUCTION. IN CASE ANY OF THESE PIPES NEED TO BE REPAIRED. RE-VIDEO
- TAPE SHALL BE SUBMITTED TO THE CITY OF PORT WENTWORTH FOR REVIEW. 35. ALL PAVEMENT MARKINGS IN THE RIGHT-OF-WAY ARE TO BE THERMOPLASTIC, ALL
- SIGNS IN THE RIGHT-OF-WAY ARE TO BE HIGH INTENSITY OR DIAMOND GRADE. 36. A MINIMUM VERTICAL SEPARATION OF 18" SHALL BE MAINTAINED AT ALL UTILITY
- 37. CONTRACTOR AND SUBCONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, CODES AND ORDINANCES APPLICABLE TO THE WORK.
- 38. LOADING, UNLOADING AND STORAGE OF CONSTRUCTION MATERIAL AND EQUIPMENT, SHALL NOT BE DONE ON PUBLIC RIGHT OF WAY WITHOUT PRIOR APPROVAL BY THE CITY OF PORT WENTWORTH.
- 39. CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AROUND PERIMETER OF SITE PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL ADJUST FENCE LOCATION AS REQUIRED FOR COMPLETION OF WORK. FENCE RELOCATION REQUIRED FOR CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL PAYMENT SHALL BE MADE. TEMPORARY CONSTRUCTION FENCE SHALL BE AN 8' HIGH CHAIN LINK FENCE.
- 40. AS-BUILT DRAWINGS (RECORD DRAWINGS) SHALL BE SUBMITTED TO THE CITY OF PORT WENTWORTH ENGINEERING DEPARTMENT AS REQUIRED BY THE WATER AND SEWER PRIVATE DEVELOPMENT PROJECTS CLOSEOUT POLICY. THE SIZE OF THE DRAWINGS SHALL BE 24" X 36" AS-BUILT DRAWINGS SHALL HAVE A COORDINATE SYSTEM BASED ON THE GEORGIA STATE PLANE COORDINATE SYSTEM, EAST ZONE. NORTH AMERICAN DATUM OF 1983 (NAD 83), WITH SUB-METER ACCURACY. ELEVATIONS SHOWN SHALL BE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ALL MEASUREMENTS AND COORDINATES SHOWN SHALL USE THE U.S. SURVEY FOOT DEFINITION. COORDINATES SHALL BE SHOWN ON ALL DRAINAGE STRUCTURES, DETENTION FACILITIES, MANHOLES, VALVES, FIRE HYDRANTS, TEES AND BENDS.
- 41. CRANE LOCATIONS WILL NEED TO BE APPROVED AS PART OF THE CITY'S RIGHT OF WAY PERMIT PROCESS.

REVISIONS BY DATE



BID SET - NOT FOR CONSTRUCTION



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GENERAL NOTES AND LEGENDS

PORT WENTWORTH FIRE STATION

PROJECT LOCATION:

PORT WENTWORTH, GA 31407

CLIENT/OWNER:

CITY OF PORT WENTWORTH 7224 GA HIGHWAY 21 PORT WENTWORTH, GA 31407 STEVE DAVIS stevedavis@cityofportwentworth.com

Know what's below.

Call before you dig.

PREPARED FOR:

CITY OF PORT WENTWORTH

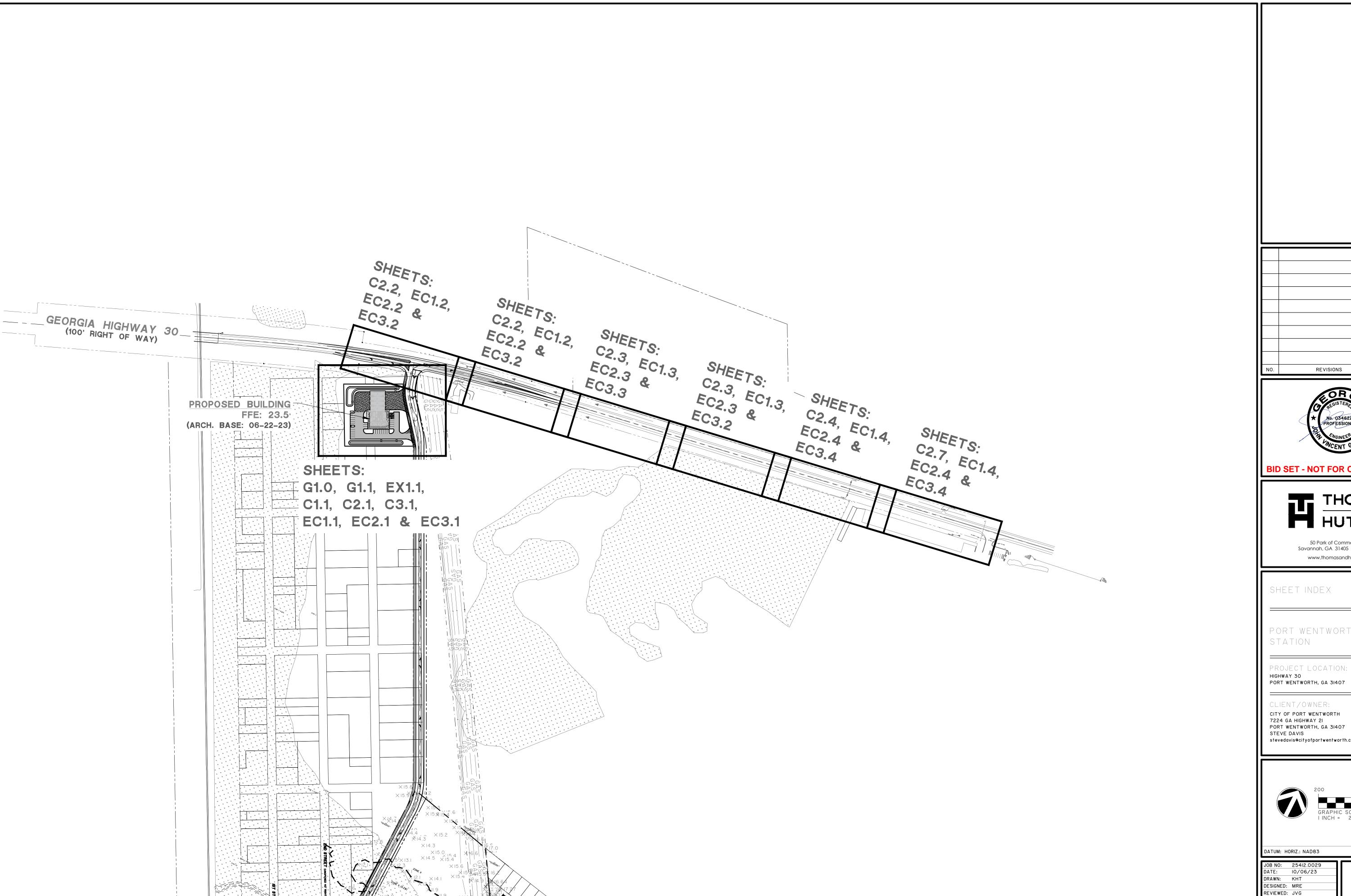
7224 GA HIGHWAY 21

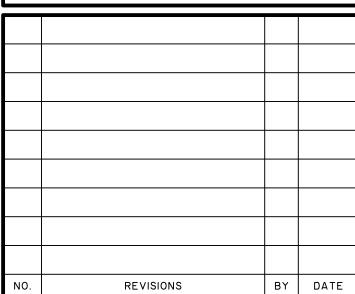
PORT WENTWORTH, GA 31407

DATUM: HORIZ.: NAD83

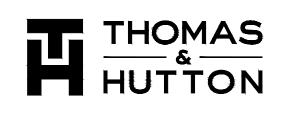
10/06/23 DRAWN: KHT DESIGNED: MRE REVIEWED: JVG APPROVED: JVG

VERT.: NAVD88









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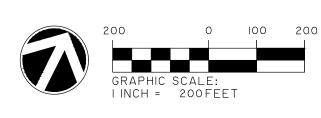
PORT WENTWORTH FIRE

PORT WENTWORTH, GA 31407

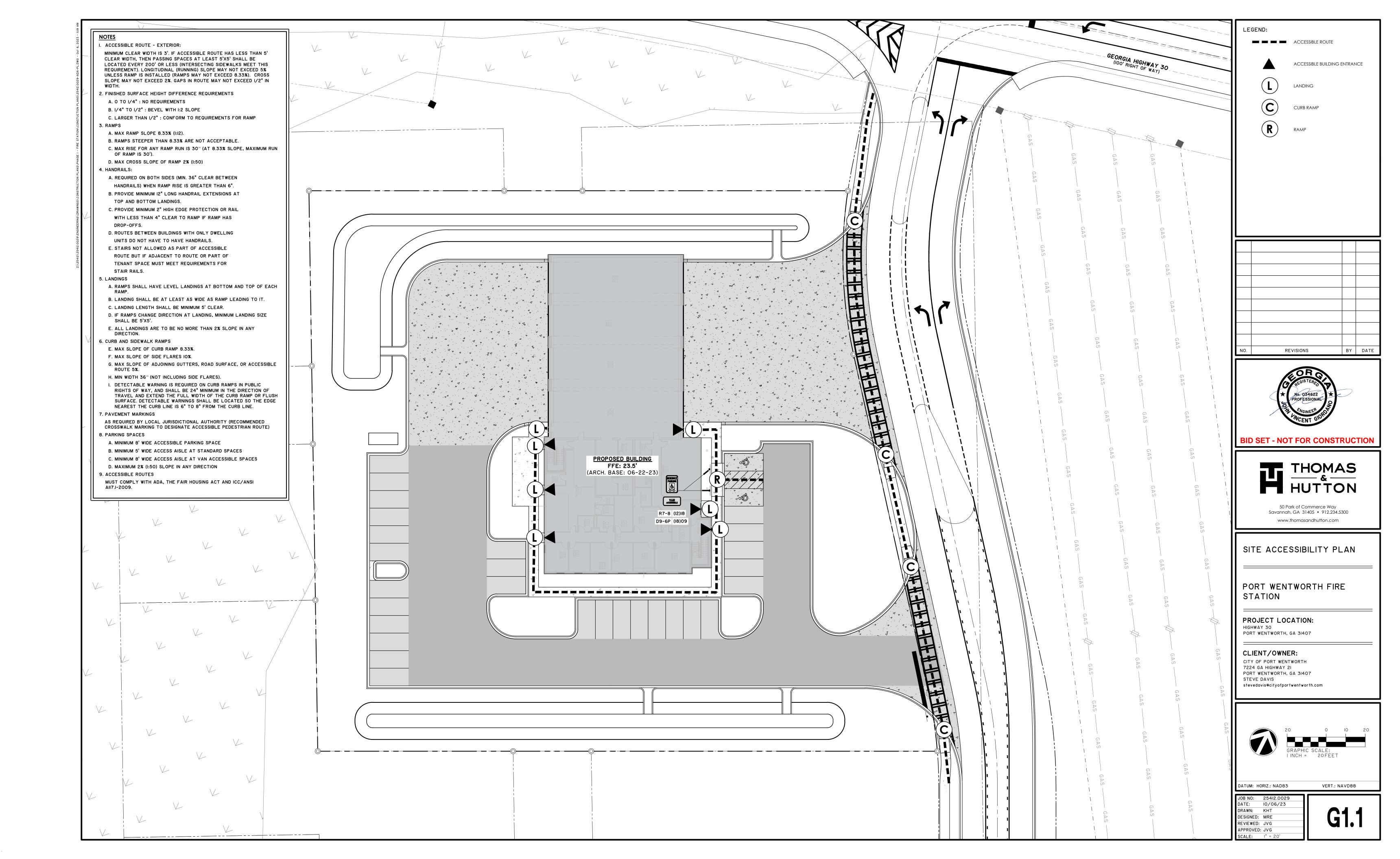
APPROVED: JVG

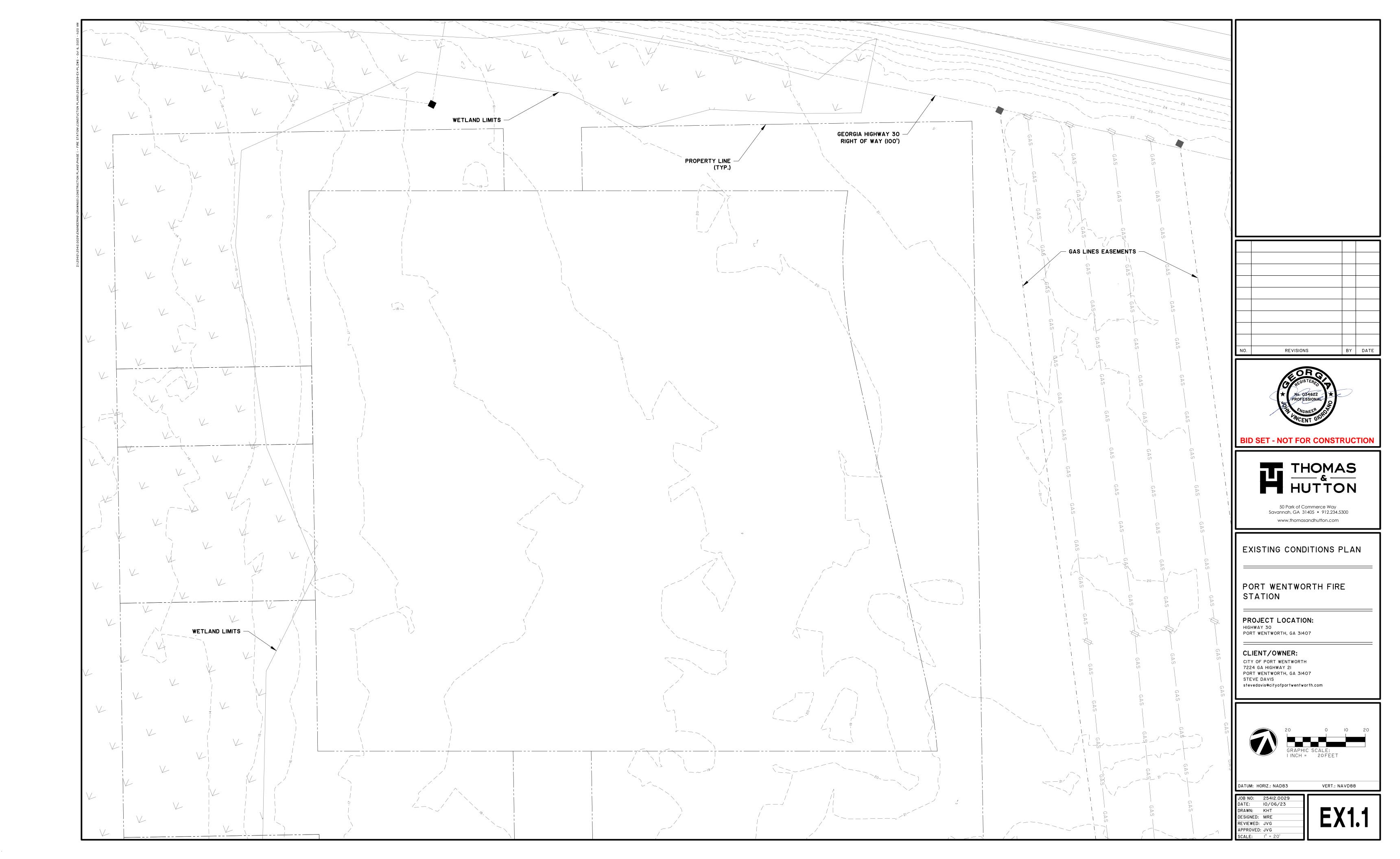
CLIENT/OWNER: CITY OF PORT WENTWORTH 7224 GA HIGHWAY 21 PORT WENTWORTH, GA 31407

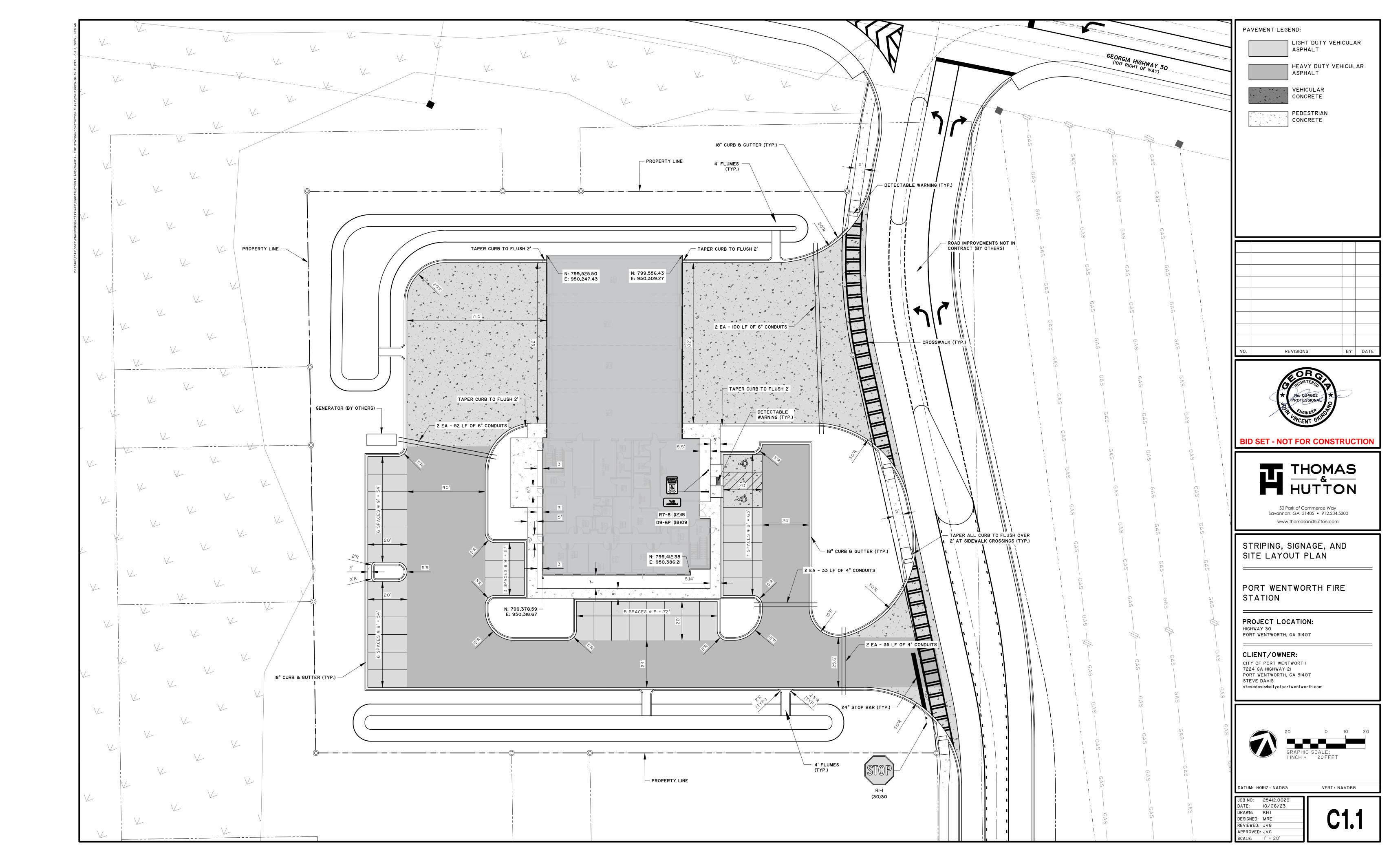
stevedavis@cityofportwentworth.com

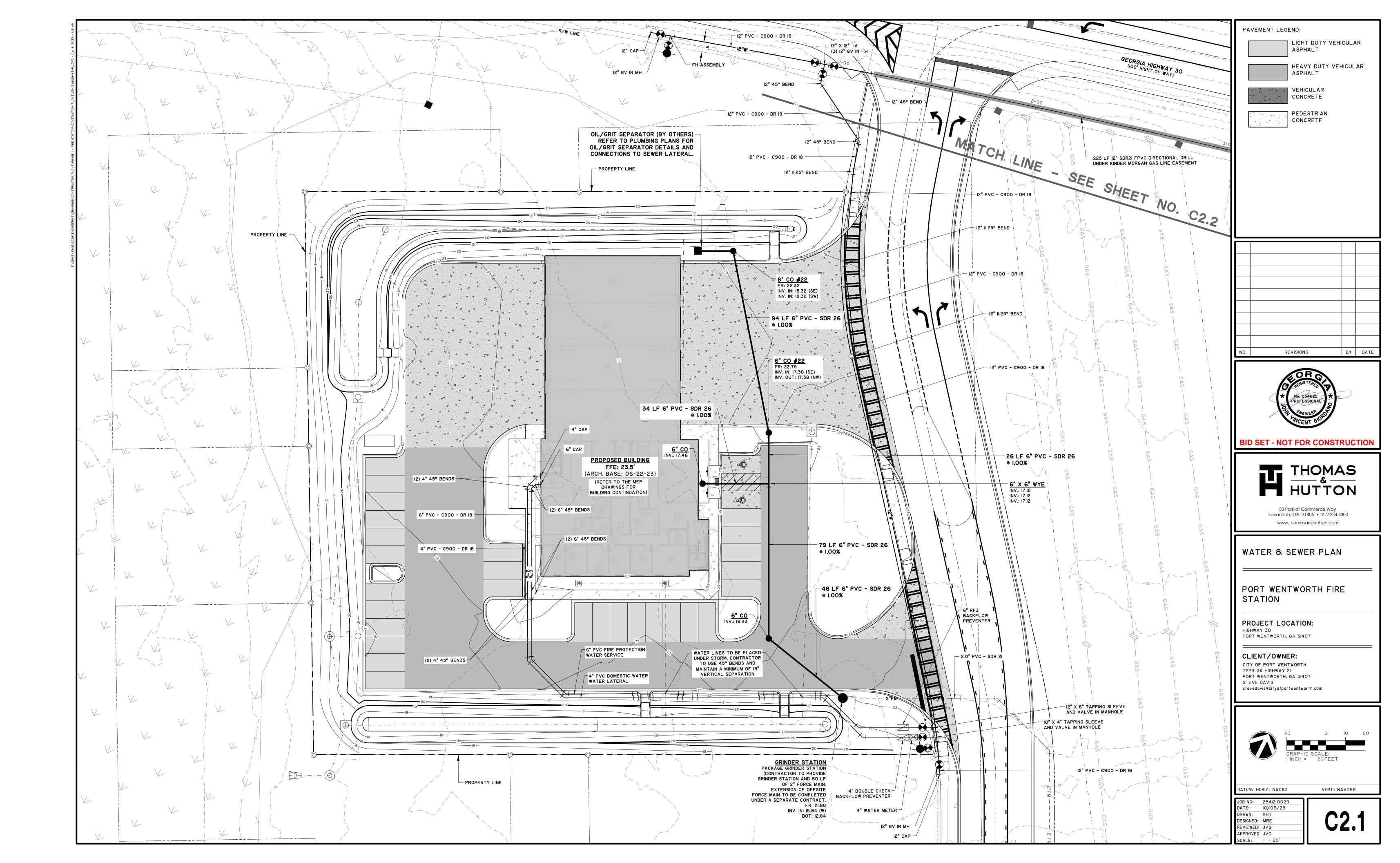


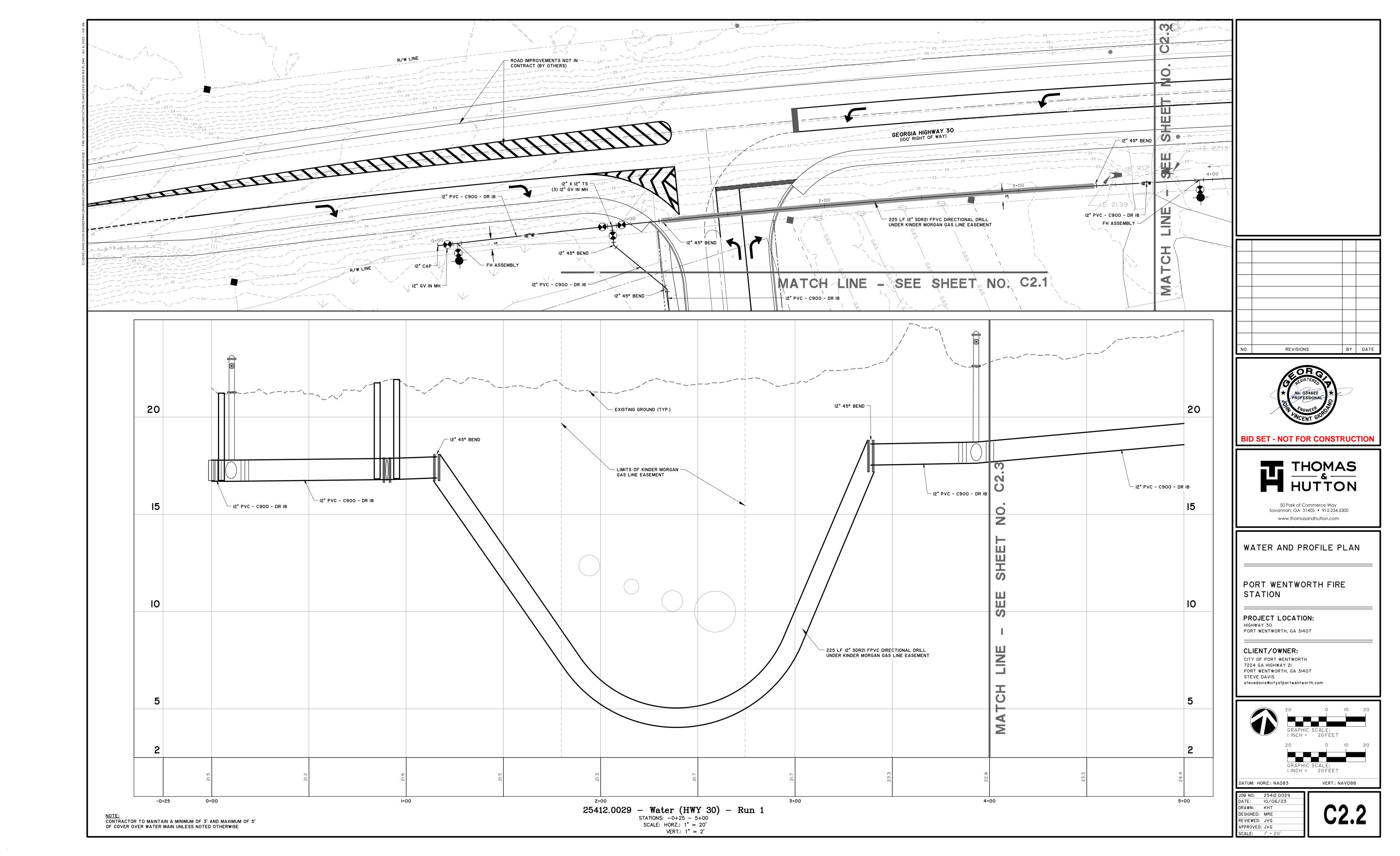
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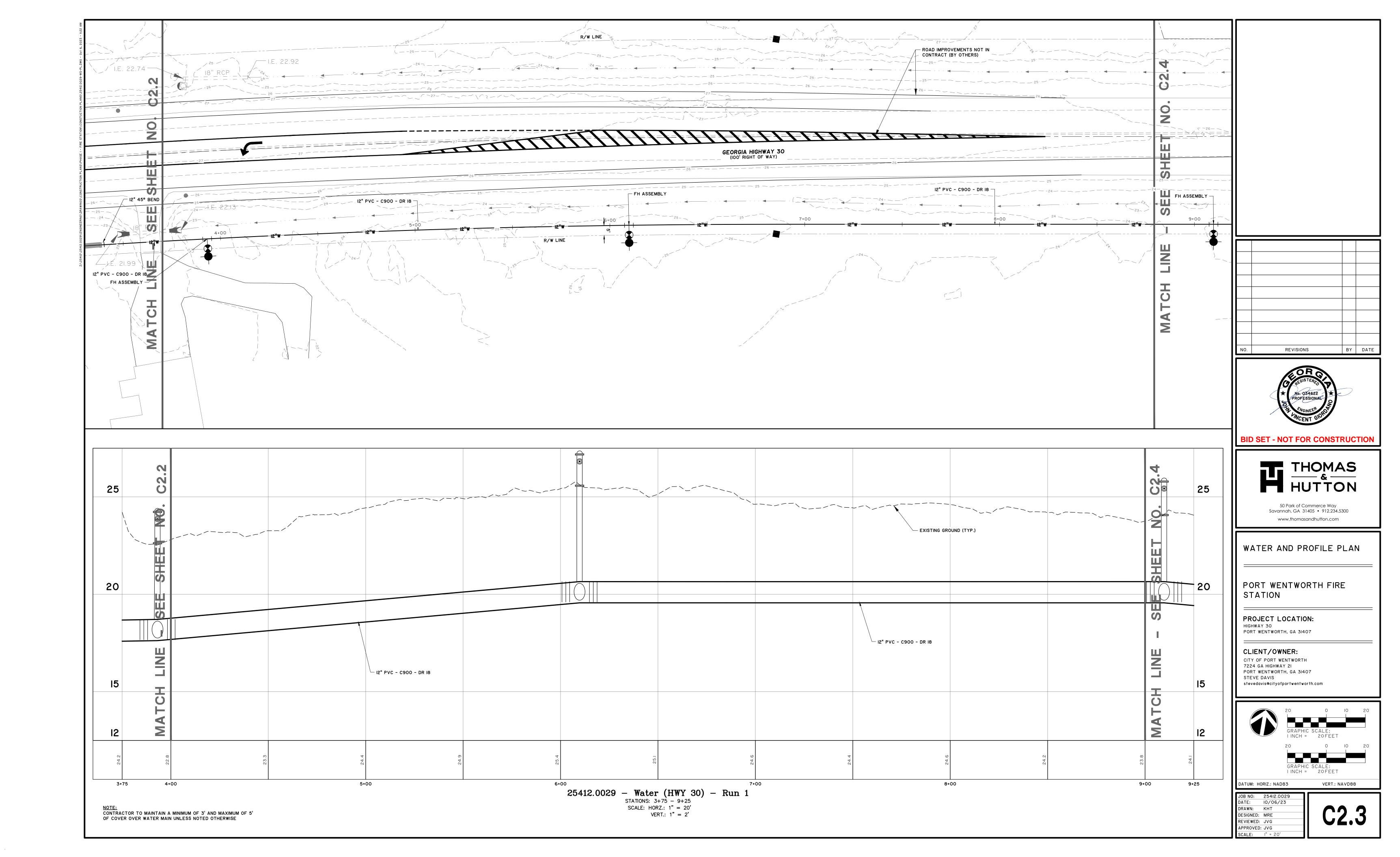


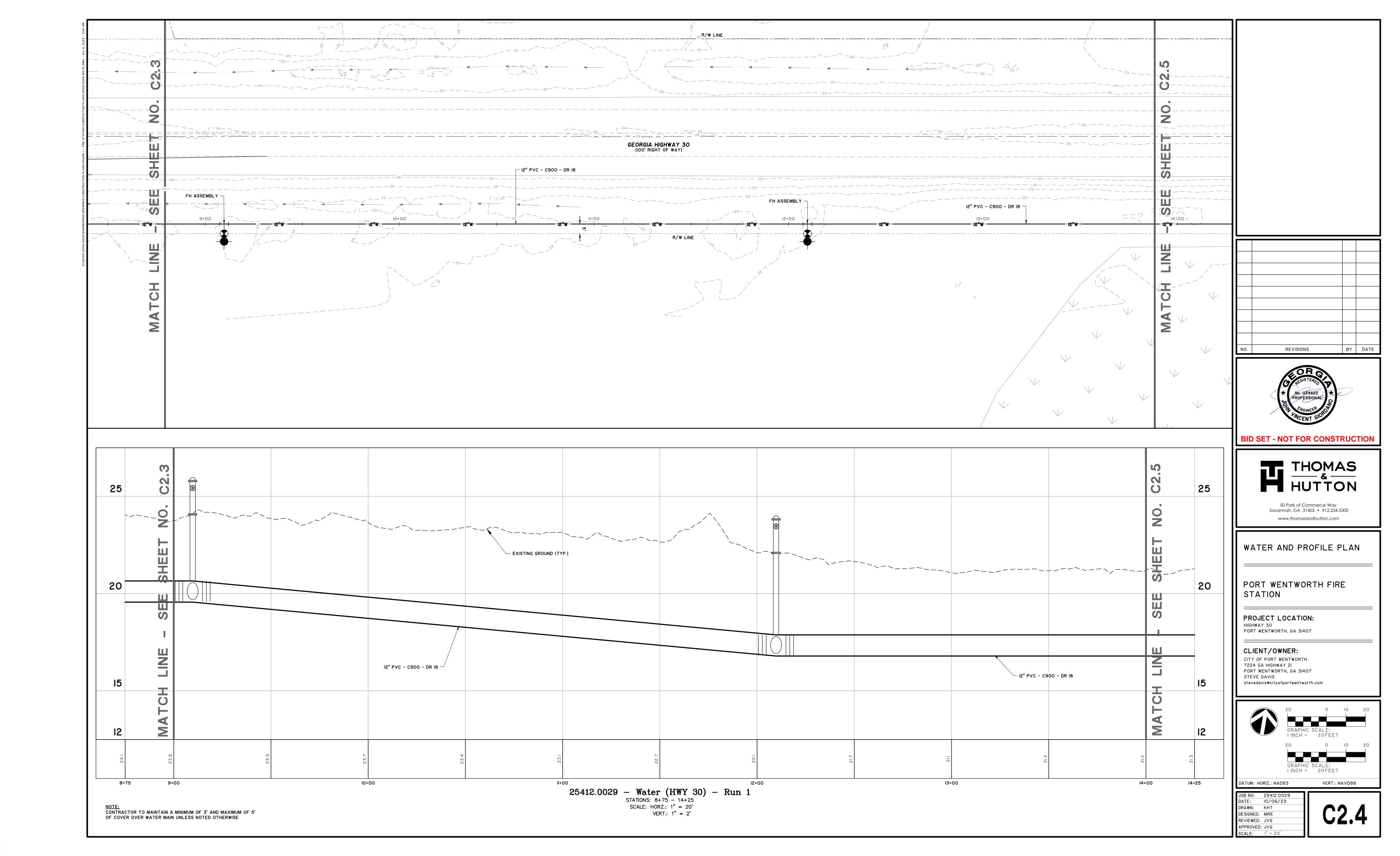


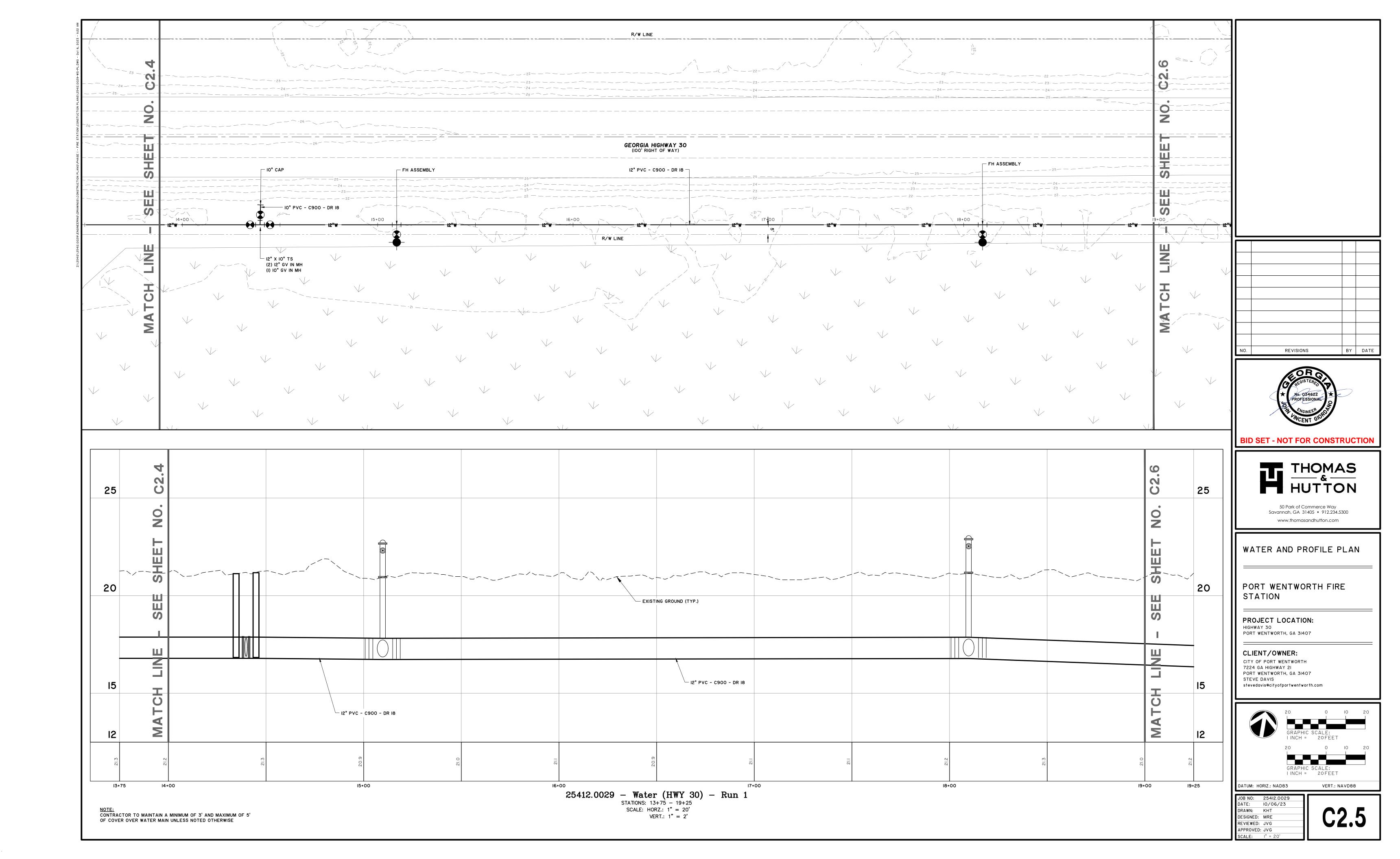


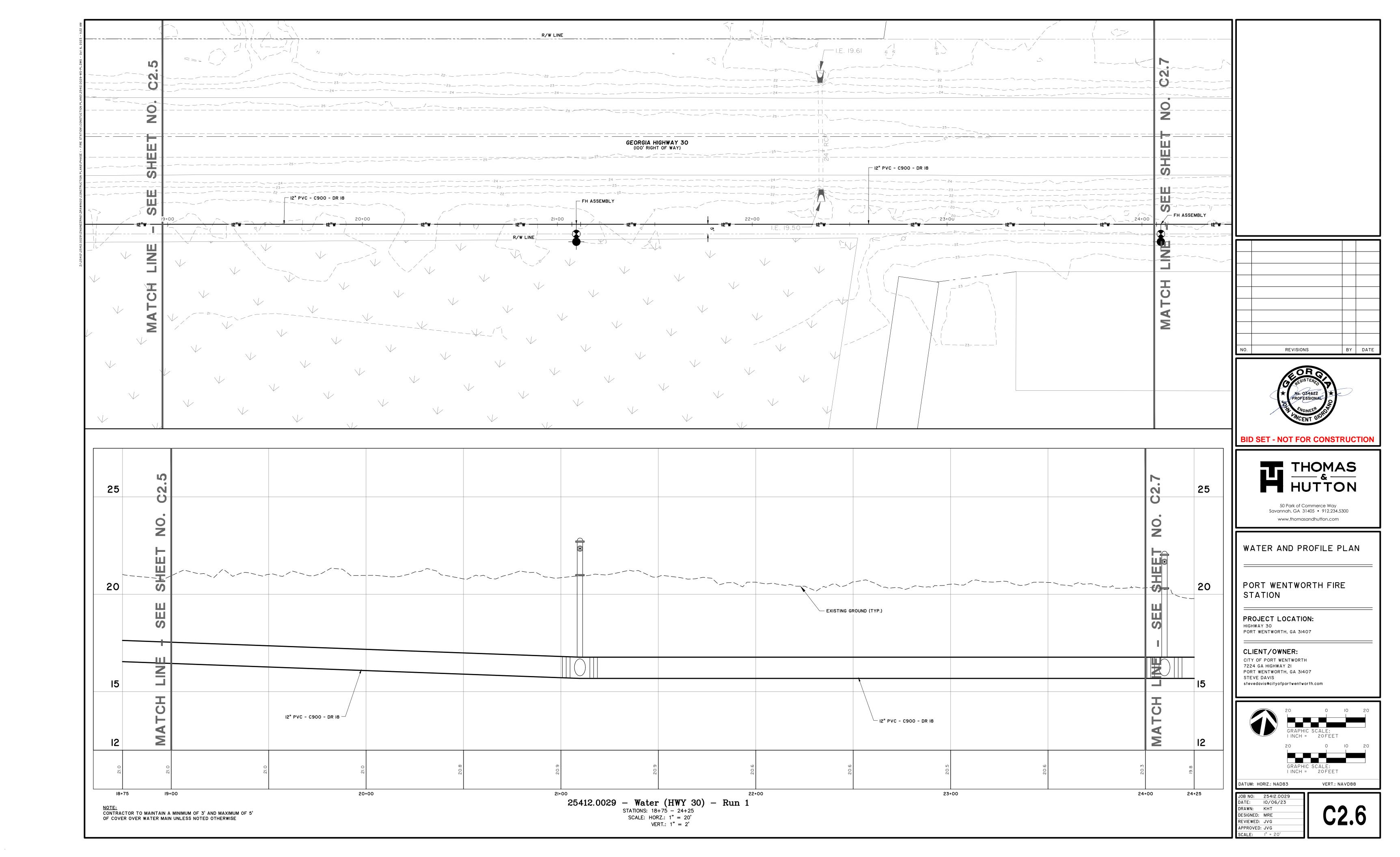


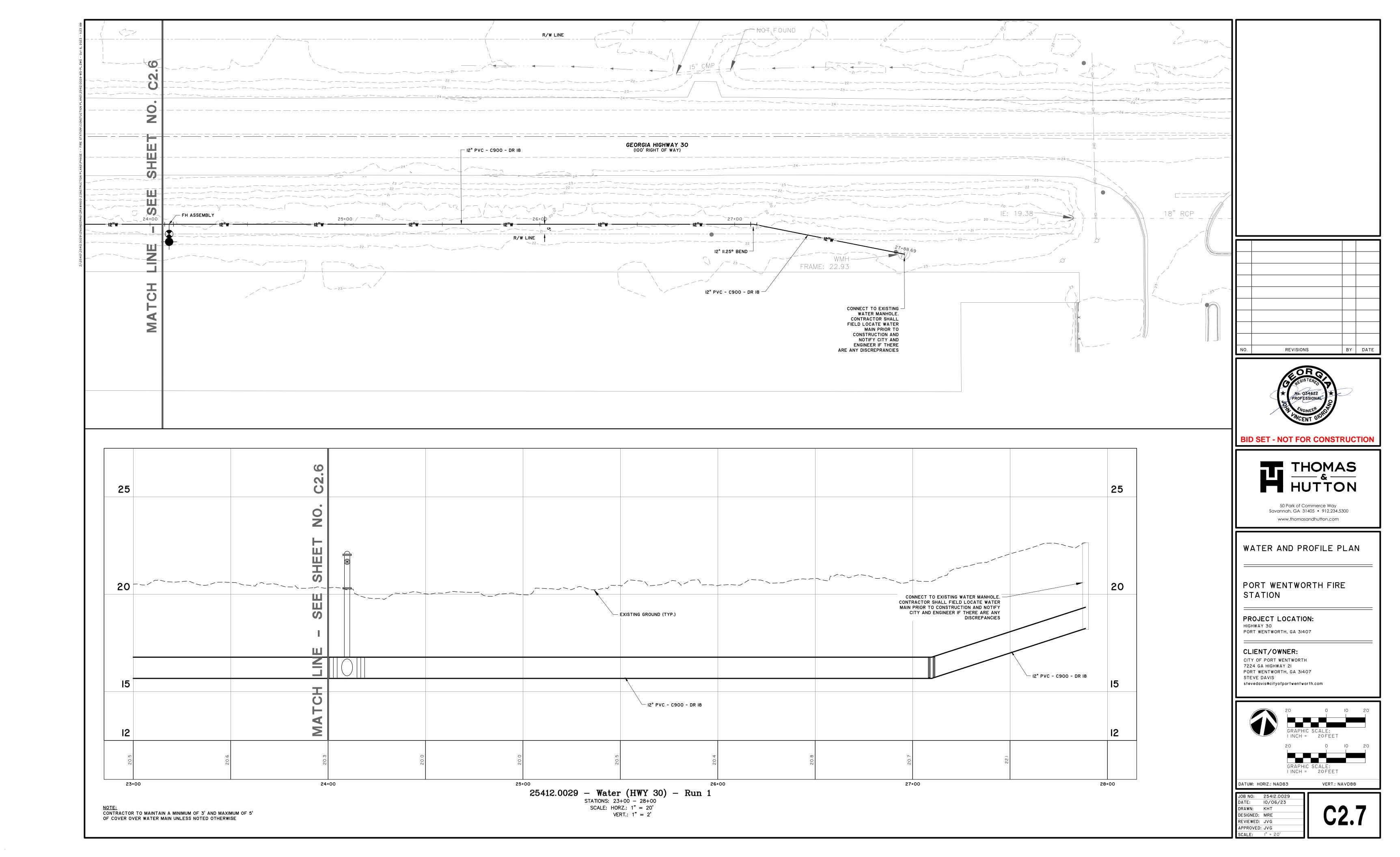


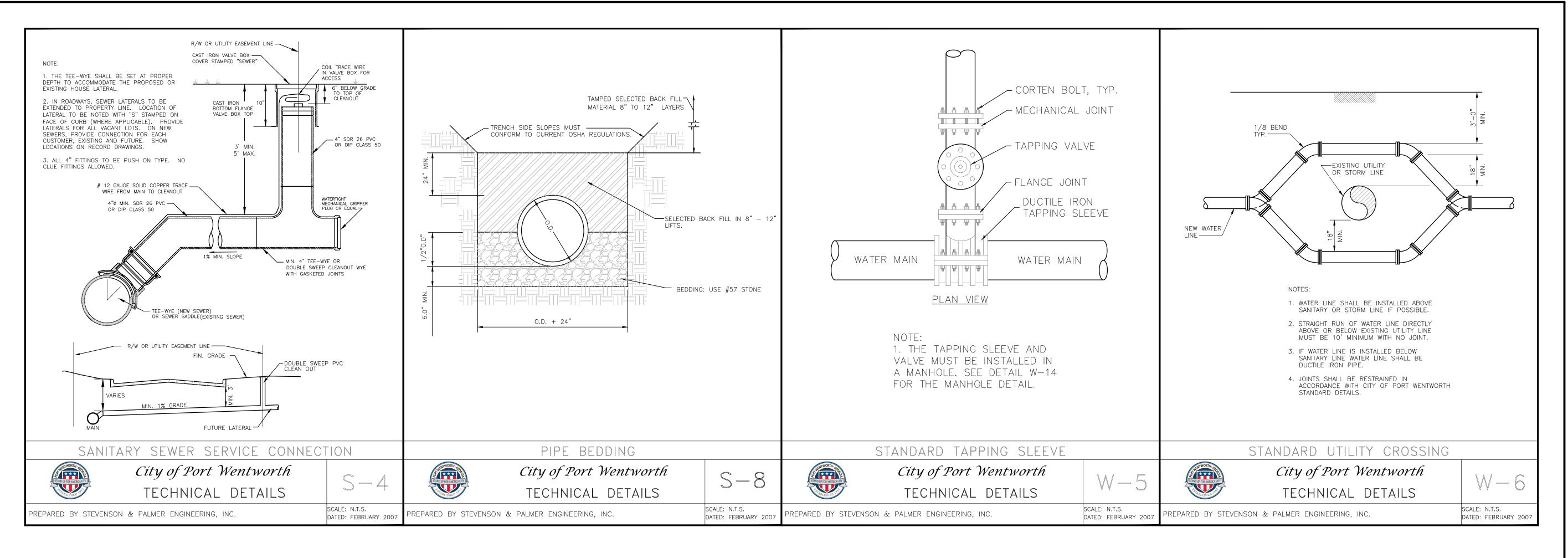


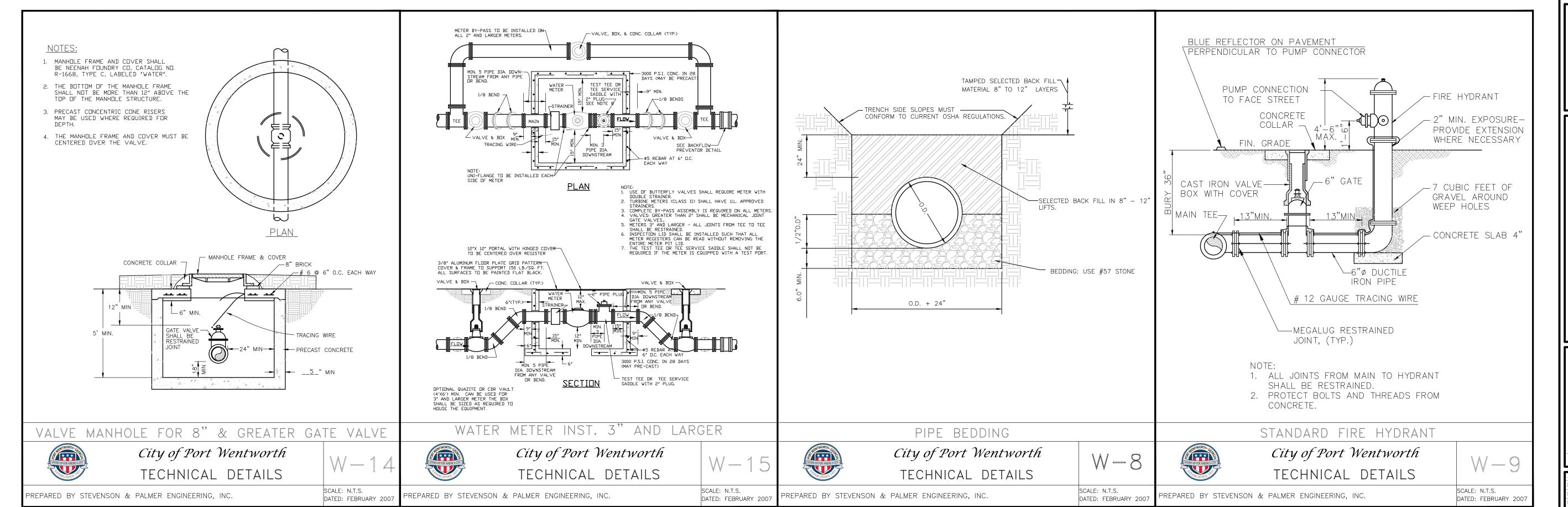


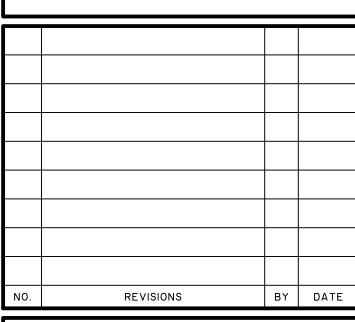


















WATER & SEWER DETAILS

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PORT WENTWORTH FIRE STATION

PROJECT LOCATION:
HIGHWAY 30
PORT WENTWORTH, GA 31407

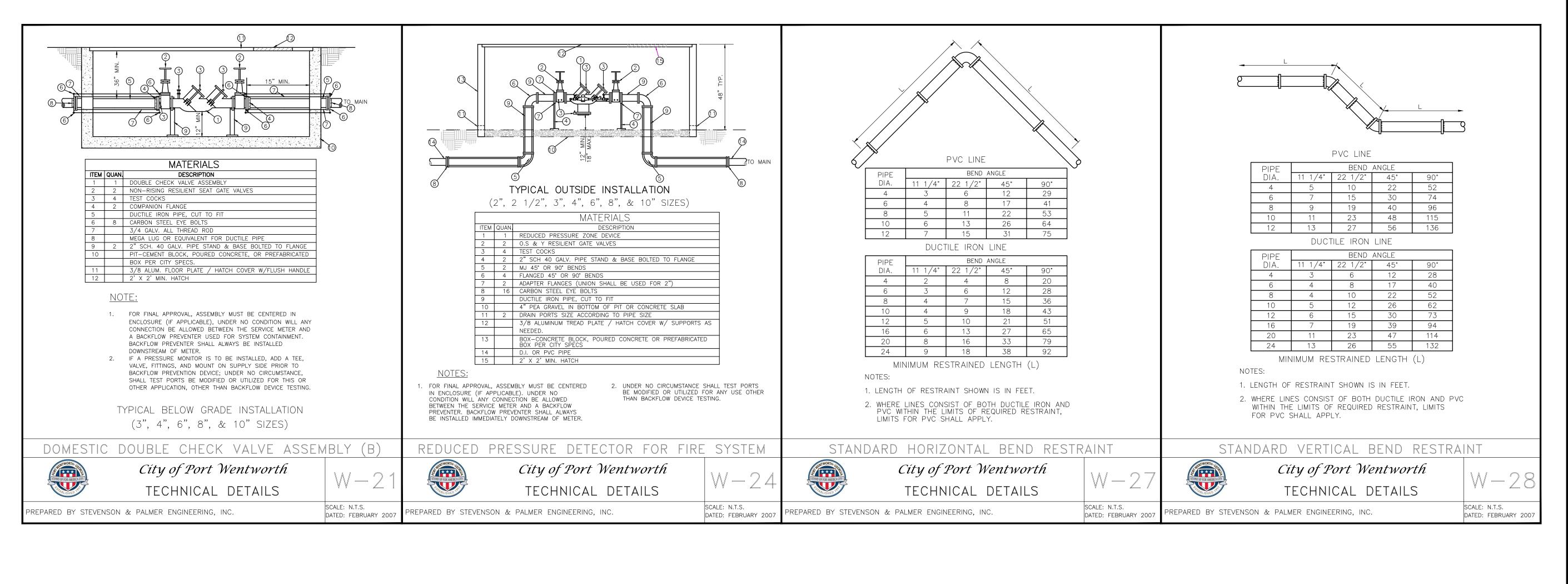
CLIENT/OWNER:
CITY OF PORT WENTWORTH

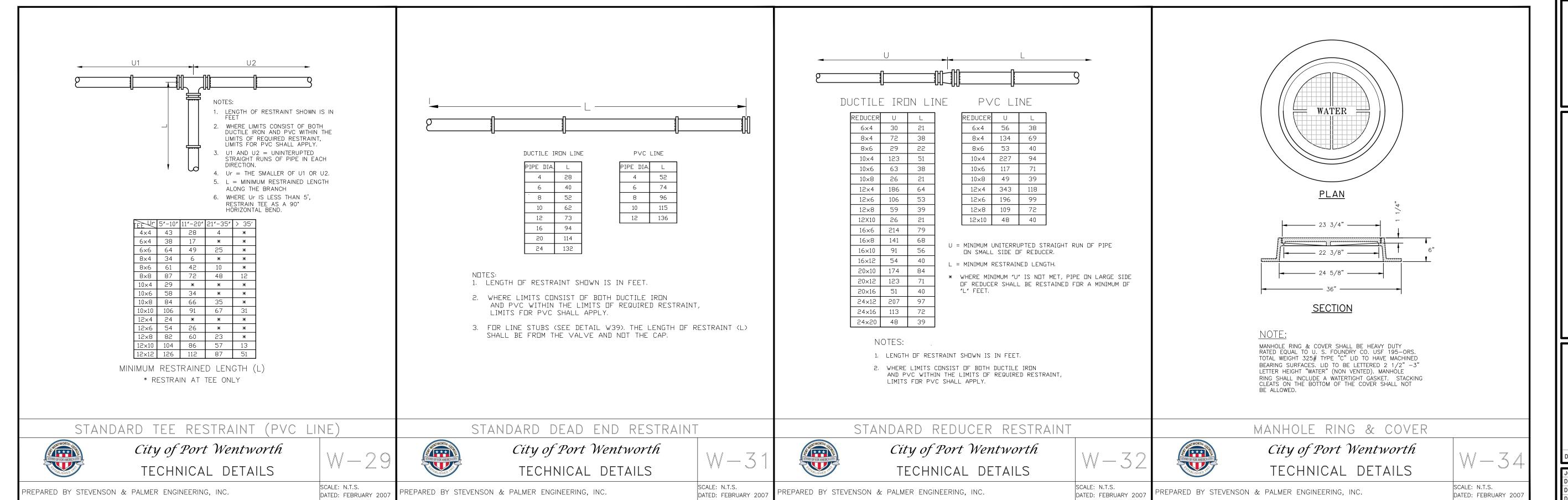
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PORT WENTWORTH, GA 31407
912.964.4379

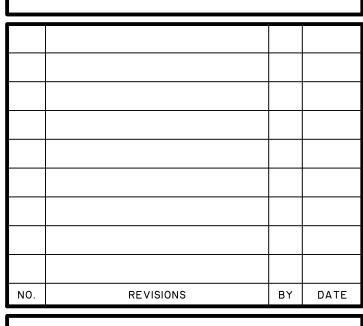
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JOB NO: 25412.0029
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DRAWN:
DESIGNED:
REVIEWED:
APPROVED:

C2.8











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WATER & SEWER DETAILS

PORT WENTWORTH FIRE STATION

PROJECT LOCATION:
MONTEITH RD
PORT WENTWORTH, GA 31407

CLIENT/OWNER:

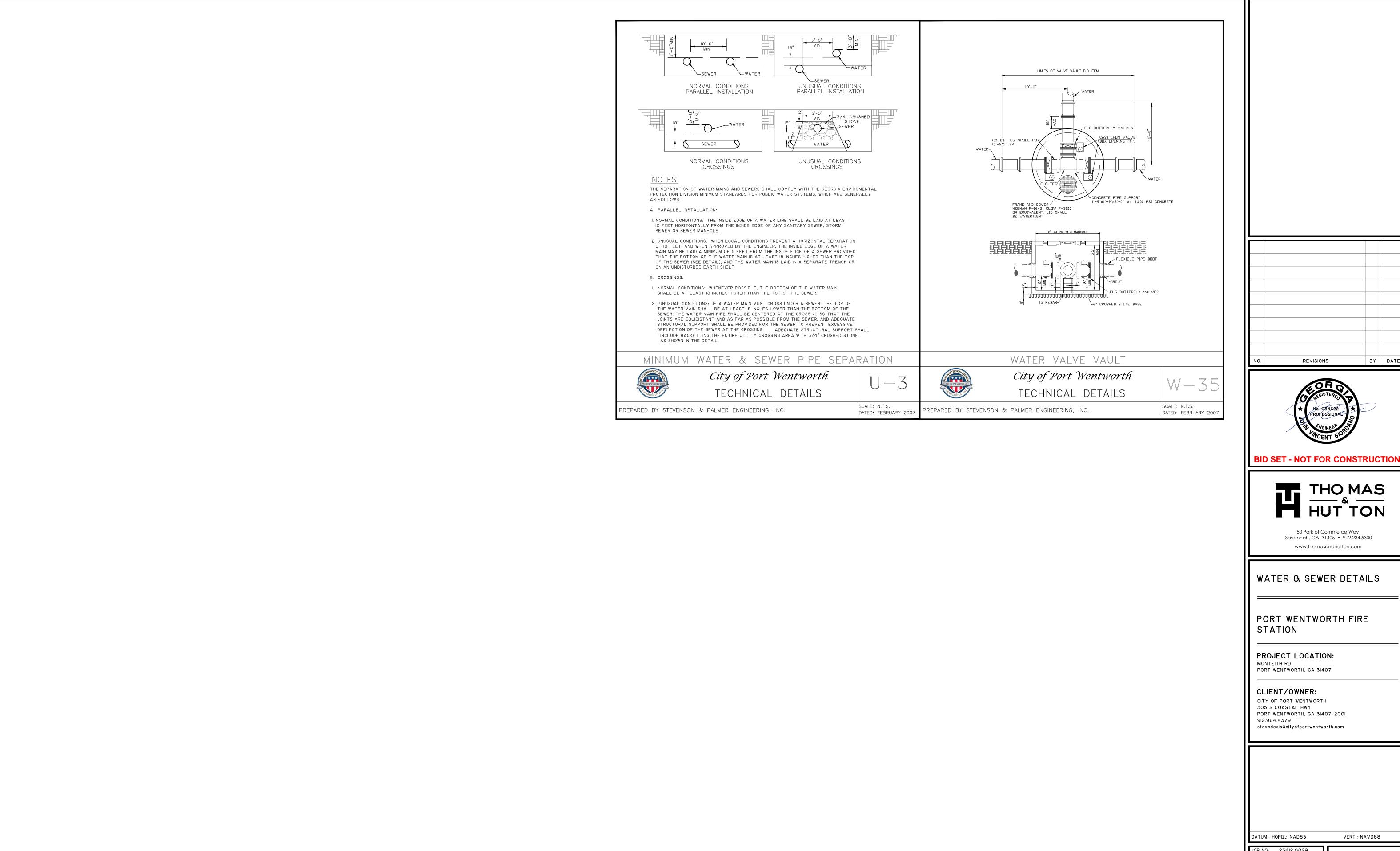
CITY OF PORT WENTWORTH 305 S COASTAL HWY PORT WENTWORTH, GA 31407-2001 912.964.4379 stevedavis@cityofportwentworth.com

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REVIEWED:

APPROVED:

C2.9



DRAWN: DESIGNED: REVIEWED: APPROVED:

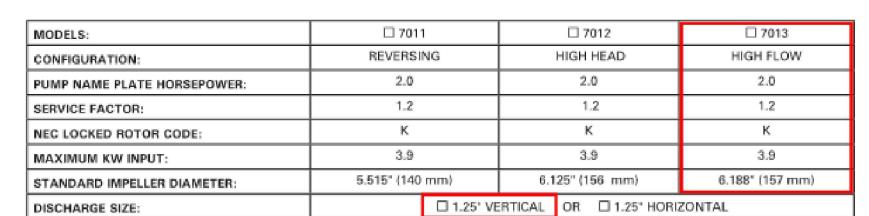
VERT.: NAVD88

BY DATE

70 SERIES - MODELS 7011-7012-7013

TECHNICAL DATA

2 HP GRINDER PUMPS- DUAL SEAL



IMPELLER TYPE:	VORTEX	TANDEM SEALS:	STANDARD		
CUTTER & PLATE:	440C SS HARDENED TO RC 55-60	MOTOR DESIGN LETTER:	NEMA B (A L (1Ph)	
PUMP NET WEIGHT:	137 lbs. (1 PH), 132 lbs. (3 PH) 62 kg. (1 PH), 60 kg. (3 PH)	POWER CORD LENGTH: ft (m) (20' STANDARD)	□ 25° (7.6 m)	□ 35 ⁻ (10.7 m)	□ 50° (15.2 m)
O-RINGS:	VITON	POWER CORD:	14 GAUGE	soow	
MOTOR SHAFT:	416 SS	SENSOR CORD:	18 GAUGE	soow	
RPM:	3450	STATOR & LEAD WIRES INSULATION:	CLASS F		
MOTOR TYPE:	SUBMERSIBLE	MAXIMUM STATOR TEMPERATURE:	311 °F (15	5 °C)	

	STANDARD	CARBON/CERAMIC UPPER CARBON/SILICON CARBIDE LOWER				
SHAFT SEAL CONSTRUCTION:	OPTIONAL UPPER	☐ CARBON /SILICON CARBIDE ☐ SILICON CARBIDE/SILICON CARBIDE				
	OPTIONAL LOWER	☐ SILICON CARBIDE/SILICON CARBIDE				
CTANDADD CENCING DEVICES	MOTOR THERMAL SHUTOFF	INTEGRAL OVERLOAD (1 PH) OR THERMAL SENSOR (3 PH)				
STANDARD SENSING DEVICES*	MOISTURE DETECTION	MOISTURE DETECTION PROBES				
IMPELLER MATERIAL	7011 & 7013	STANDARD DUCTILE IRON				
IMPELLER MATERIAL	7012	STANDARD BRONZE				
IMPELLER TRIM - MODELS 7011 & 7013 ONLY: ☐ OPTIONAL		DESIGN POINT: GPM @' TDH, IMPELLER DIA"				
MAXIMUM WATER TEMPERATURE:		130 °F (54 °C)				

OPEN TOP W/

ANTI-FLOTATION BOTTOM W/

42"OD X 3/8"THK. FLG

---- 36"I.D. ----

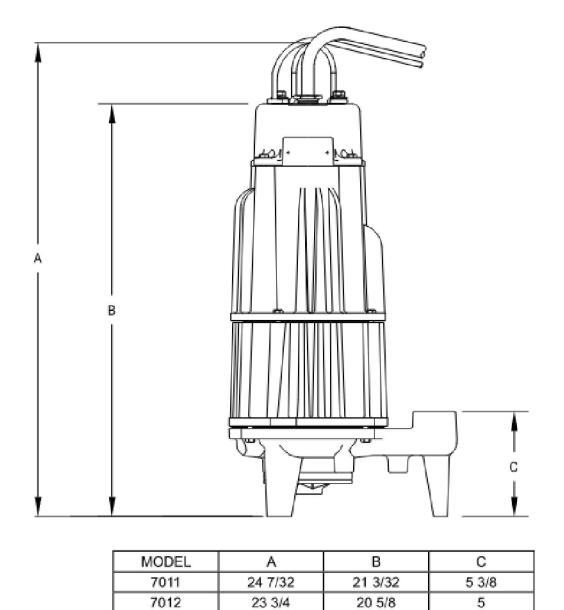
42"O.D.

42"OD X 3/8"THK.FLG

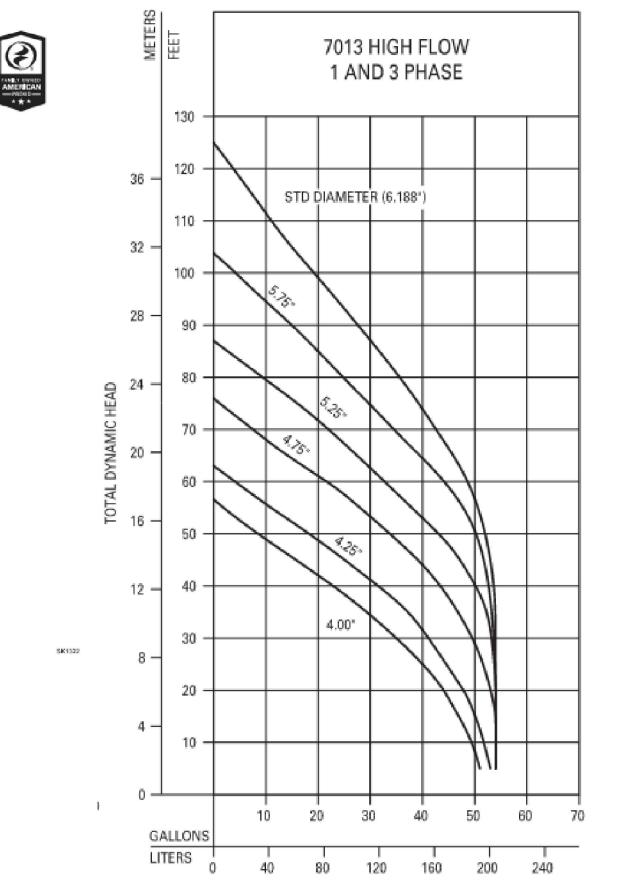
* Requi	* Requires a circuit in control panel to function.													
SERVICE		□ 200	OV / 1 PH	□ 230	V / 1 PH	□ 200	OV / 3 PH	□ 230	V / 3 PH	□ 460	V / 3 PH	□ 575	V / 3 PH	
MODEL	HP	FACTOR	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA	FLA	LRA
7011	2.0	1.2	20.0	60.7	17.2	57.3	12.3	47.0	10.8	28.0	5.5	20.6	4.5	16.2
7012	2.0	1.2	20.0	60.7	17.2	57.3	12.3	47.0	10.8	28.0	5.5	20.6	4.5	16.2
7013	2.0	1.2	20.0	60.7	17.2	57.3	12.3	47.0	10.8	28.0	5.5	20.6	4.5	16.2

"Single phase units require a set of capacitors and relay starting components.





7013 23 3/4 20 5/8



FLOW PER MINUTE

NO.	REVISIONS	BY	[
	MG. Q34622 AND Q34622 AND Q34622	\supset	

BID SET - NOT FOR CONSTRUCTION



GRINDER STATION DETAILS

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PORT WENTWORTH FIRE STATION

PROJECT LOCATION: HIGHWAY 30

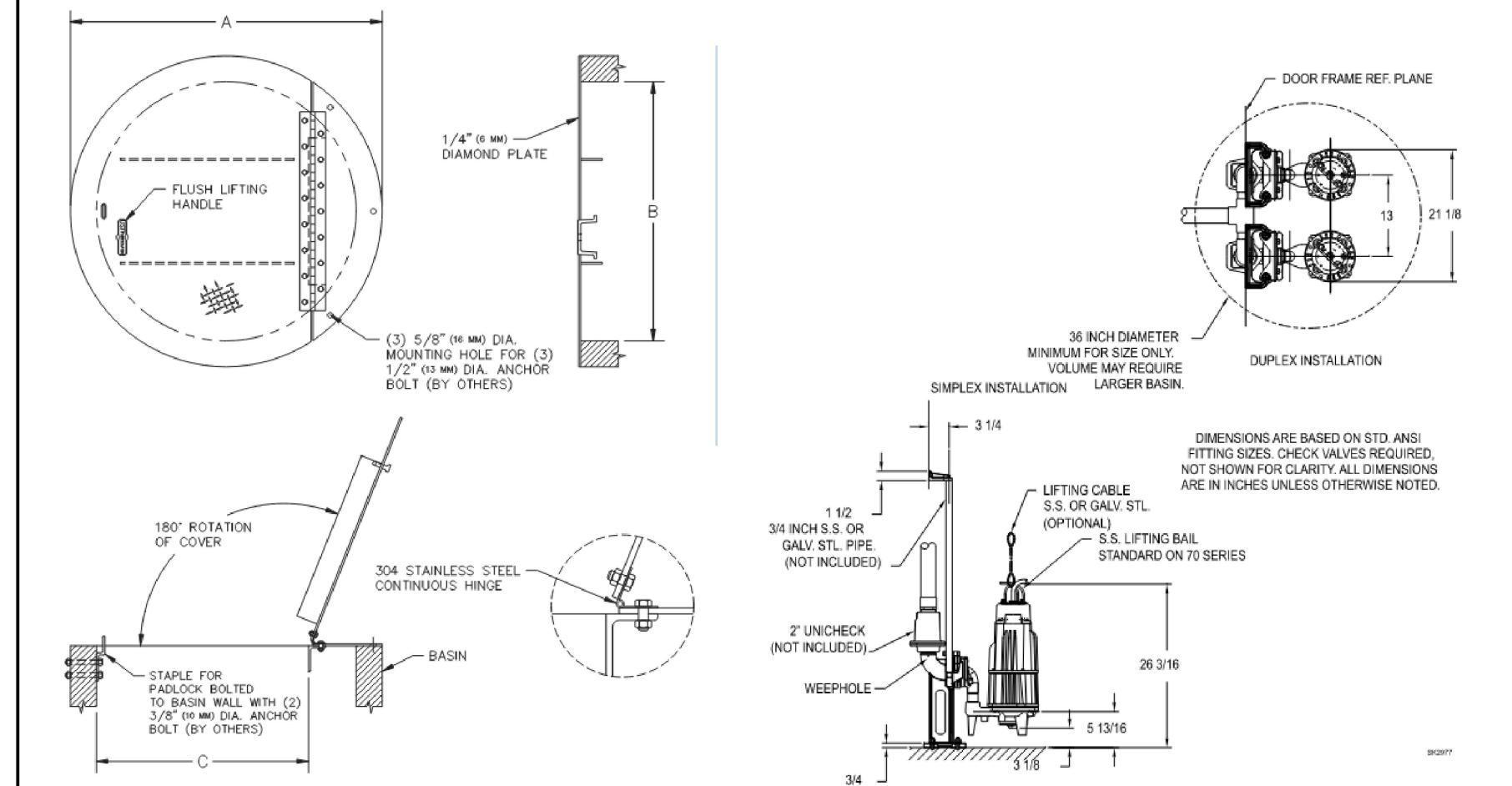
PORT WENTWORTH, GA 31407

CLIENT/OWNER:

CITY OF PORT WENTWORTH 7224 GA HIGHWAY 2I PORT WENTWORTH, GA 31407 STEVE DAVIS stevedavis@cityofportwentworth.com

DATUM: HORIZ.: NAD83 VERT.: NAVD88

JOB NO: 25412.0029 DATE: 10/06/23 DRAWN: KHT DESIGNED: MRE REVIEWED: JVG APPROVED: JVG

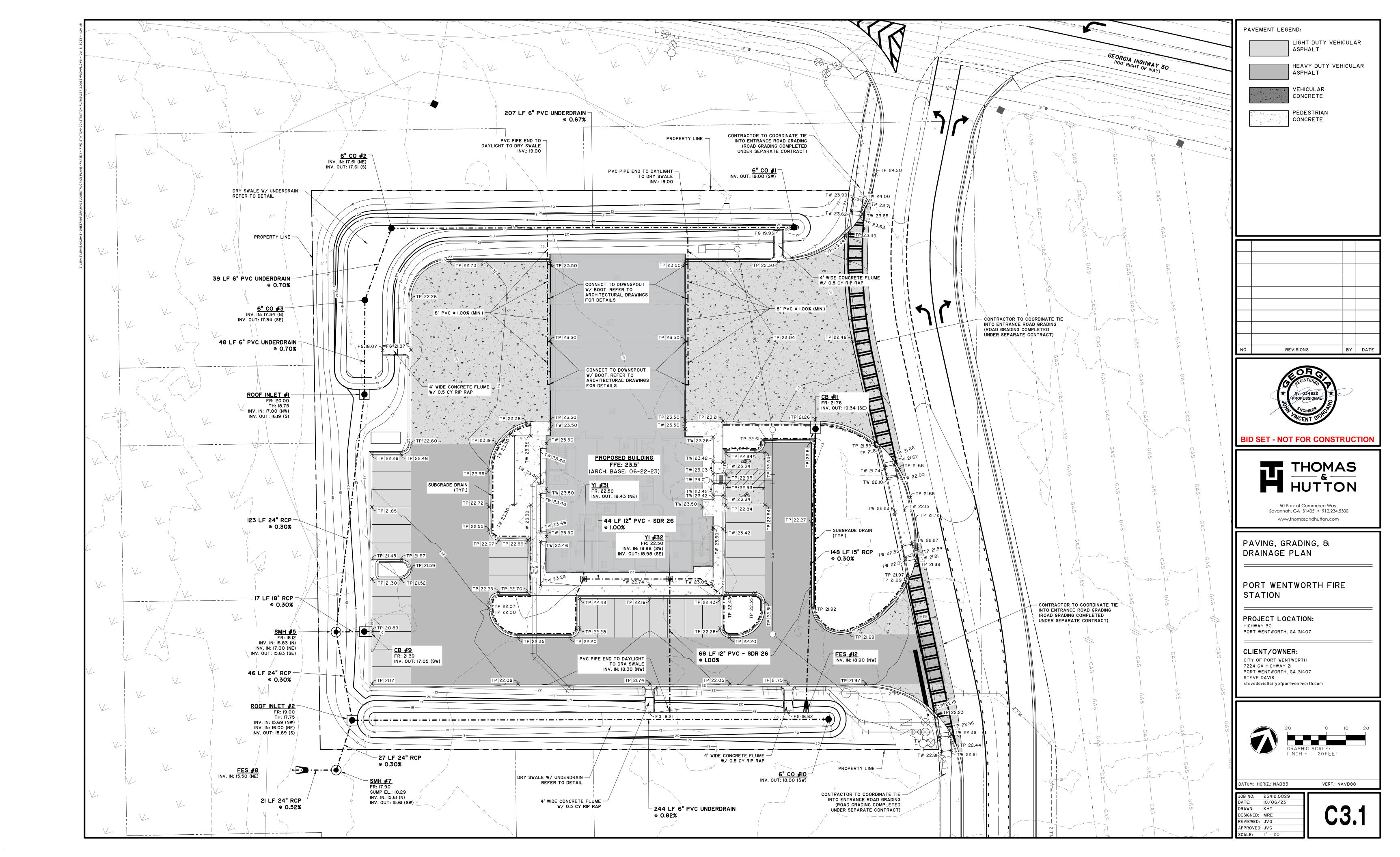


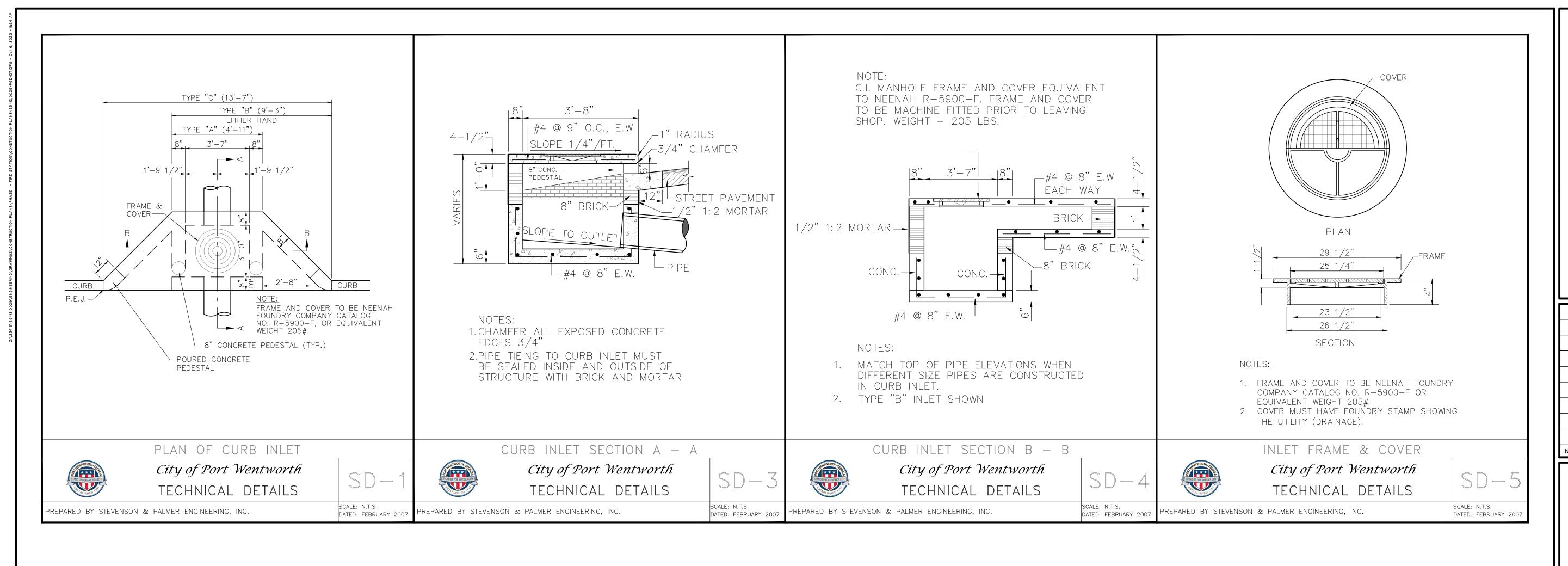
Standard all models - 20 ft. cord - 2 HP					
7013	Co	ion	Listed		
Models	Volts	Ph	Amps	cCSAus	
E7013*	230	1	17.2	Yes	
I7013*	200	1	20.0	Yes	
F7013	230	3	10.8	Yes	
J7013	200	3	12.3	Yes	
G7013	460	3	5.5	Yes	
BA7013	575	3	4.5	Yes	

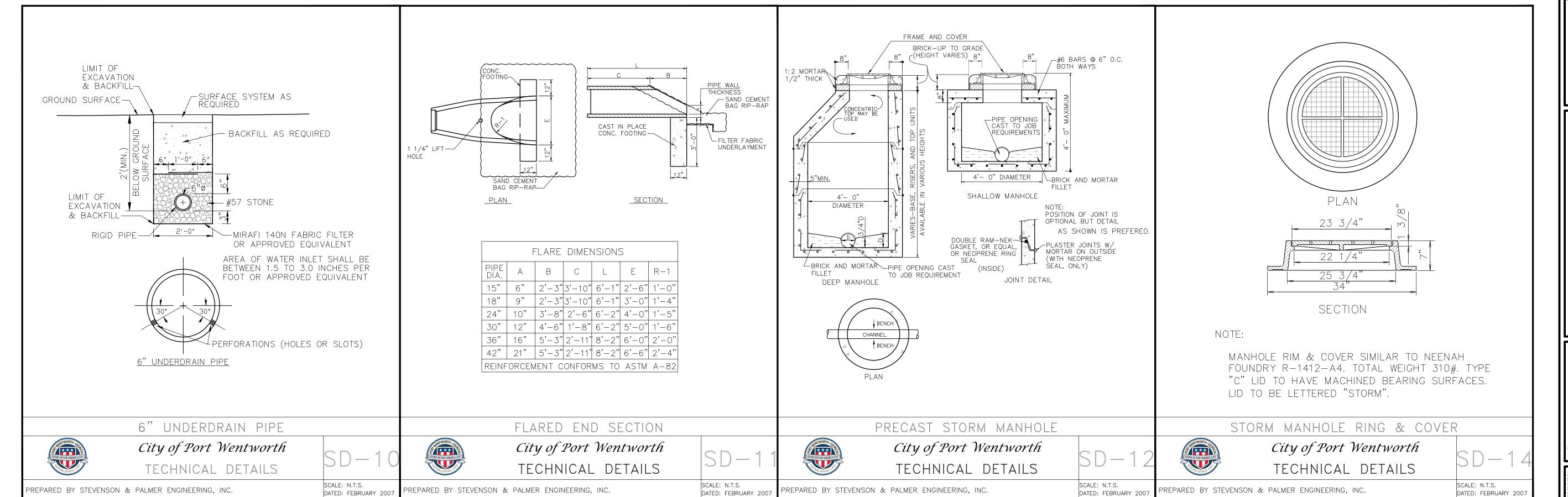
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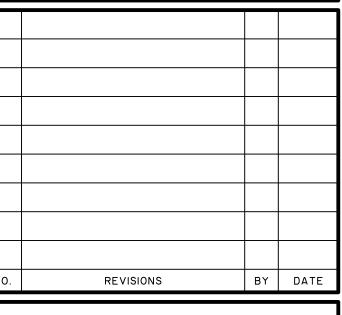
I. CONTRACTOR TO COORDINATE CONTROL PANEL LOCATION WITH PUMP MANUFACTURER AND INSTALLER.

2. REFER TO PLAN SHEET FOR FRAME AND INVERT ELEVATIONS OF WET WELL. 3. CONTRACTOR TO PROVIDE PACKAGE GRINDER STATION COMPLETE, INSTALLED AND TESTED. PACKAGE GRINDER STATION SHALL INCLUDE WETWELL, DUPLEX PUMPS AND ALL NECESSARY APPURTENANCES, INCLUDING BUT NOT LIMITED TO ANY MOUNTING HARDWARE AND ELECTRICAL OR PLUMBING CONNECTIONS AND FITTINGS.













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PAVING & DRAINAGE DETAILS

GHOST PIRATES TRAINING FACILITY

PROJECT LOCATION:
MONTEITH RD
PORT WENTWORTH, GA 31407

CLIENT/OWNER:

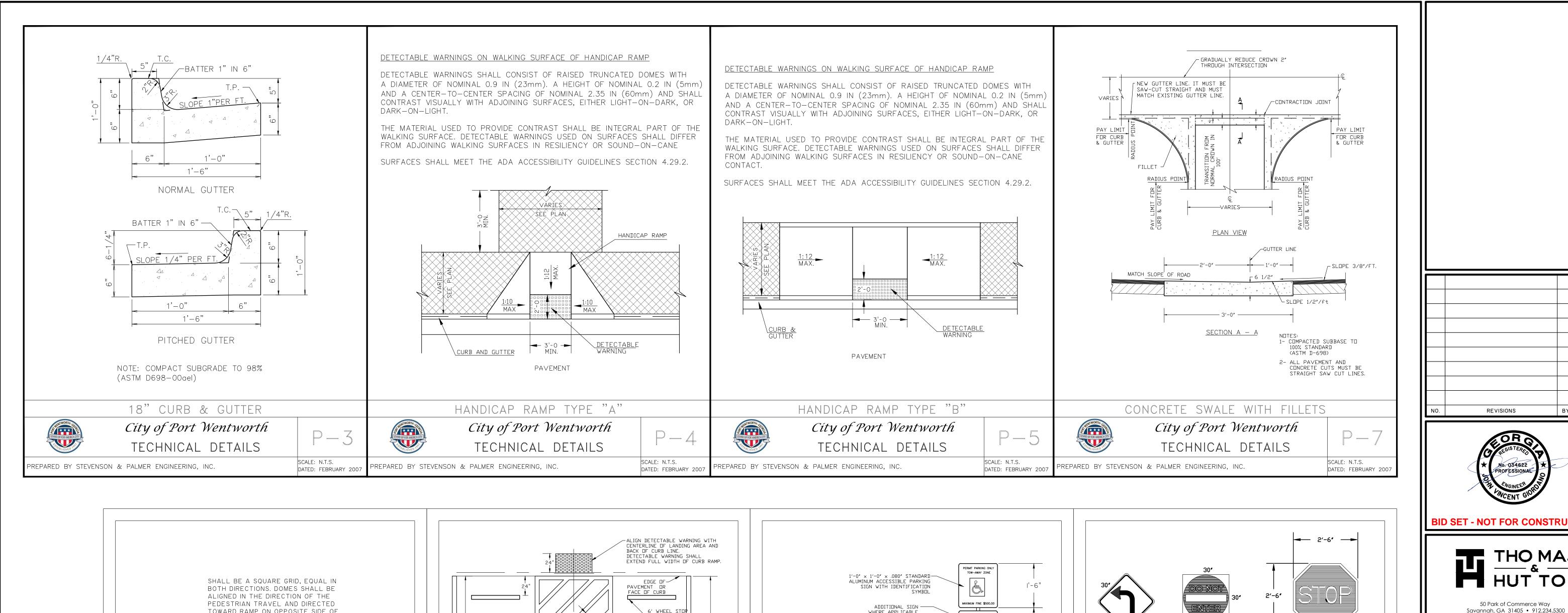
CITY OF PORT WENTWORTH 305 S COASTAL HWY PORT WENTWORTH, GA 31407 912.964.4379 stevedavis@cityofportwentworth.com

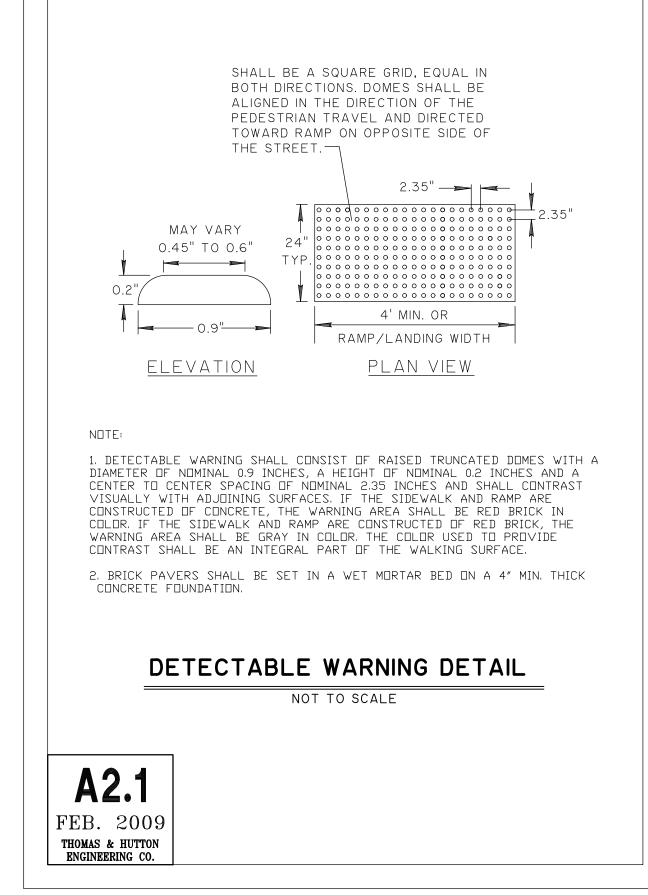
DATUM: HORIZ.: NAD83 VERT.: NAVD88

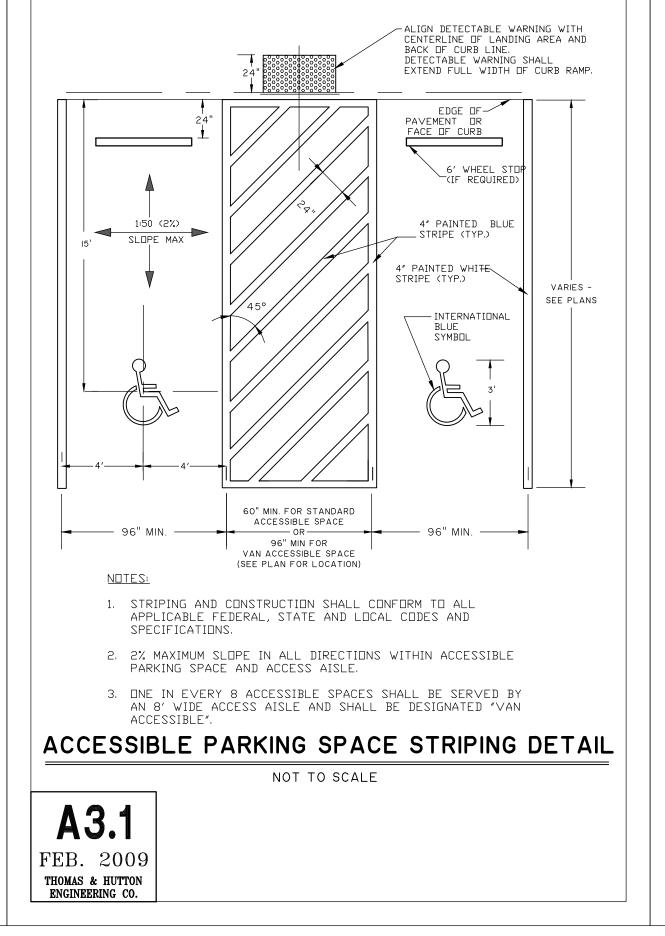
JOB NO: 25412.0029
DATE:
DRAWN:
DESIGNED:
REVIEWED:

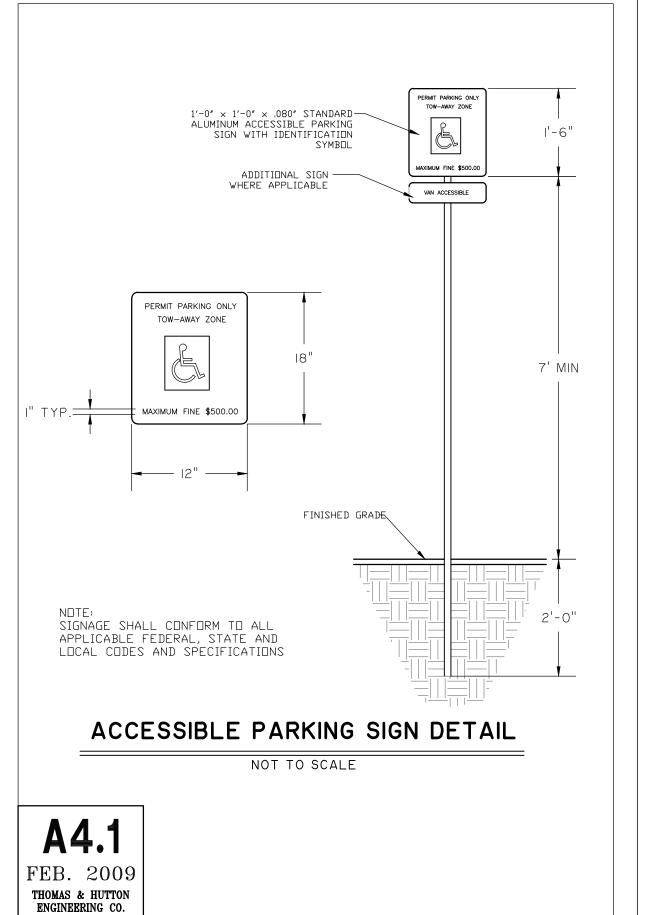
APPROVED:

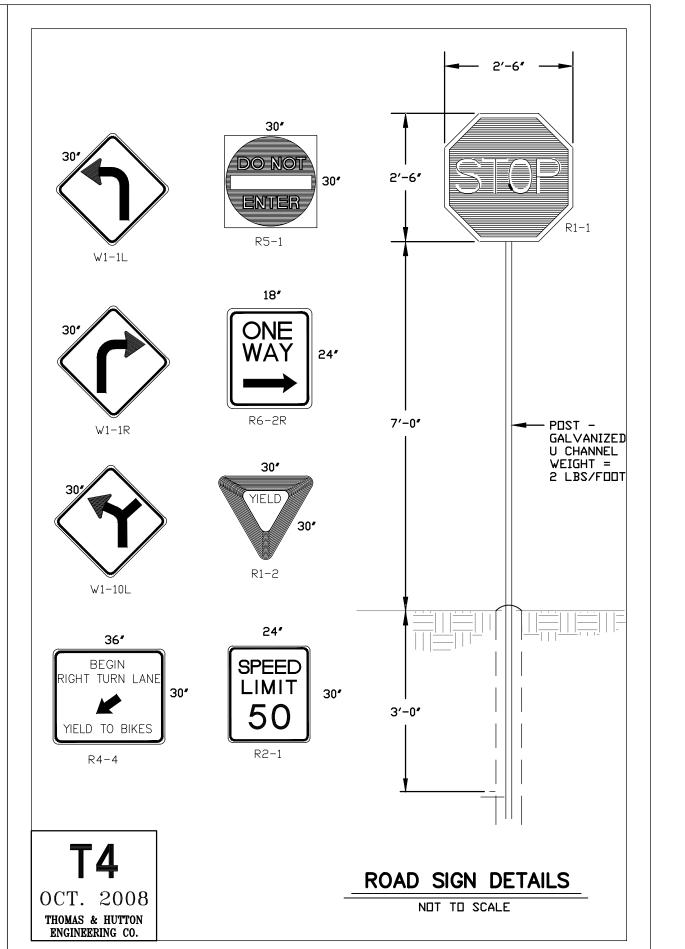
C3.2

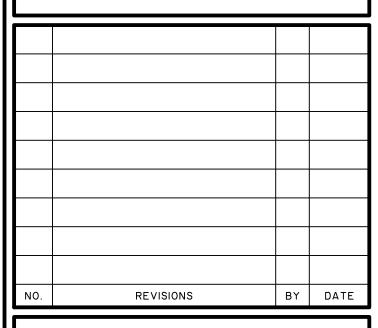
















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PAVING & DRAINAGE DETAILS

GHOST PIRATES TRAINING FACILITY

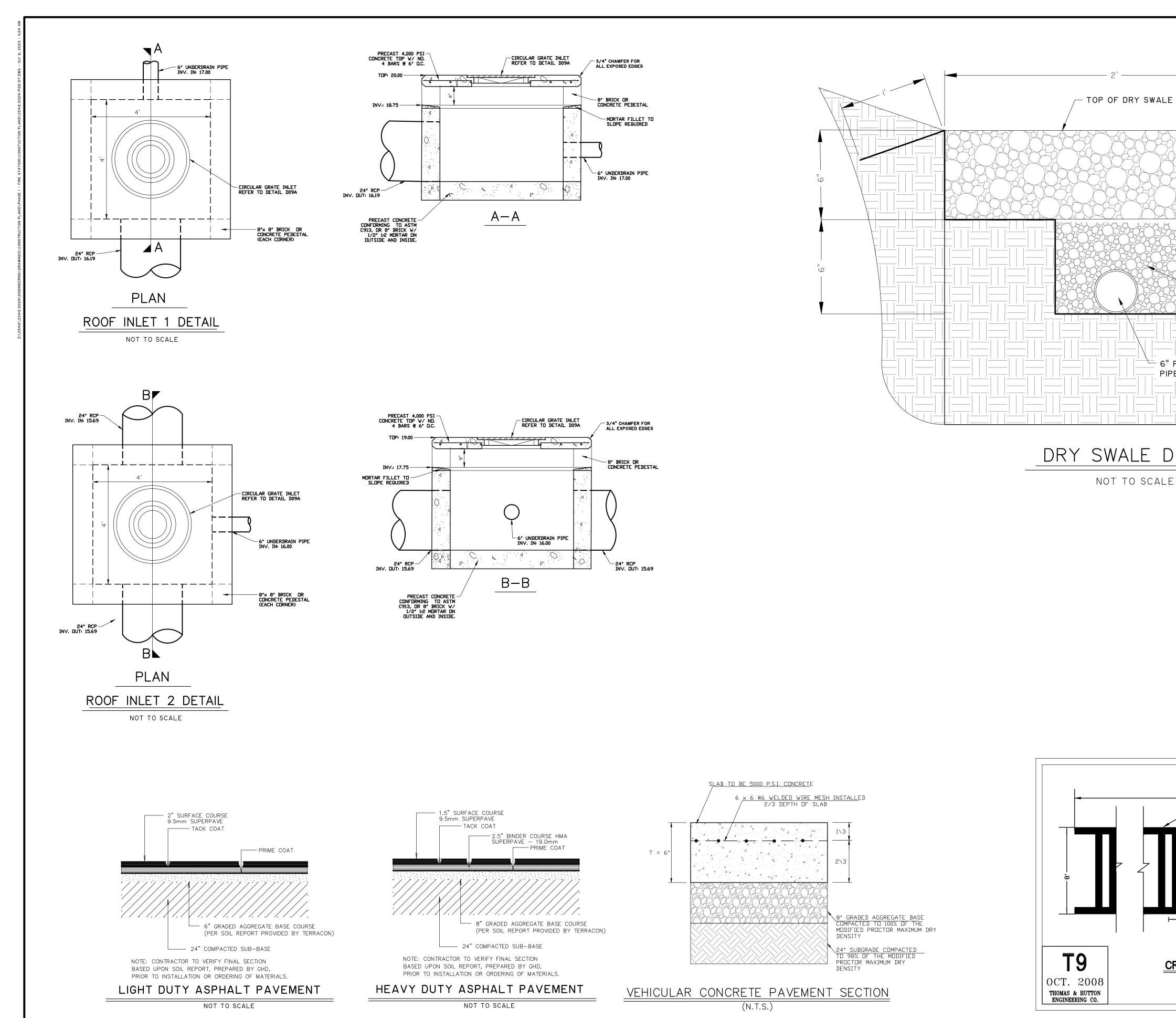
PROJECT LOCATION: MONTEITH RD PORT WENTWORTH, GA 31407

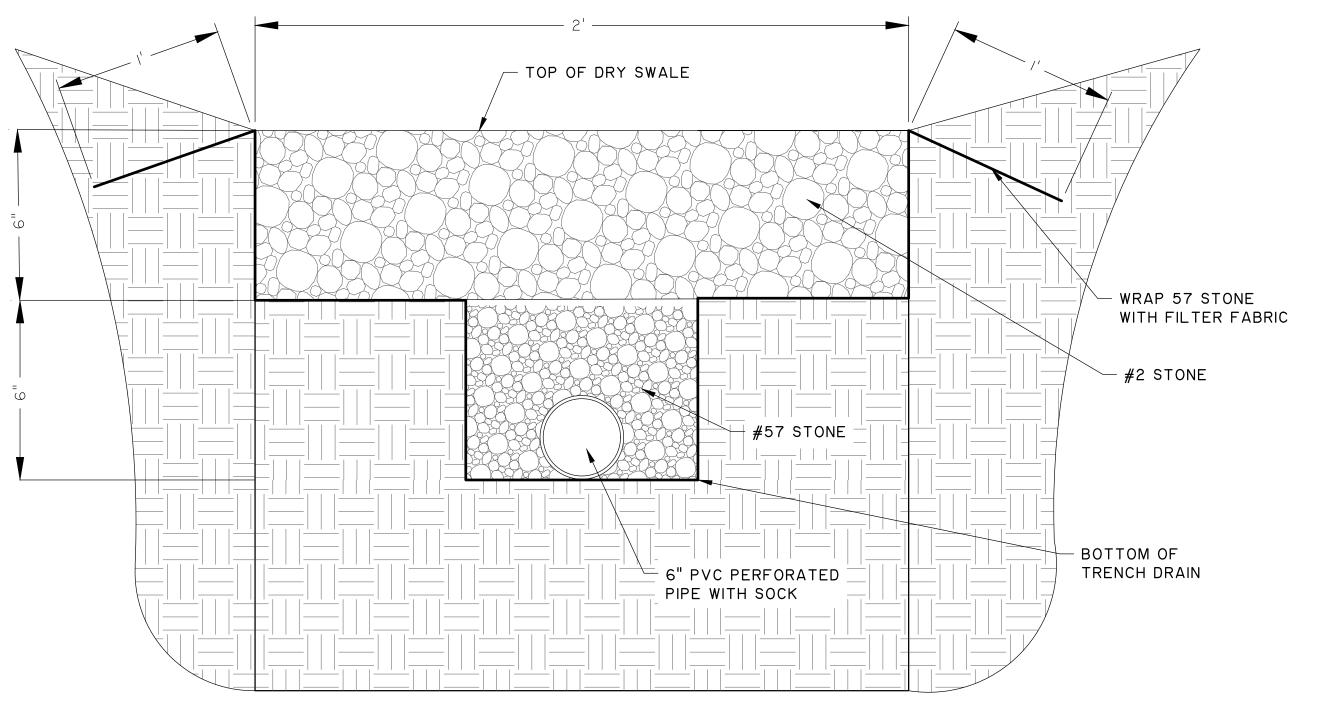
CLIENT/OWNER:

CITY OF PORT WENTWORTH 305 S COASTAL HWY PORT WENTWORTH, GA 31407 912.964.4379 stevedavis@cityofportwentworth.com

DATUM: HORIZ.: NAD83 VERT.: NAVD88

DRAWN: DESIGNED: REVIEWED: APPROVED:





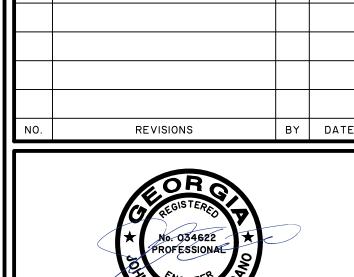
DRY SWALE DETAIL

-LENGTH VARIES-

CROSSWALK STRIPING DETAIL

NOT TO SCALE

_8" GAP, TYP.



BID SET - NOT FOR CONSTRUCTION



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PAVING & DRAINAGE DETAILS

GHOST PIRATES TRAINING FACILITY

PROJECT LOCATION: MONTEITH RD PORT WENTWORTH, GA 31407

CLIENT/OWNER:

CITY OF PORT WENTWORTH 305 S COASTAL HWY PORT WENTWORTH, GA 31407 912.964.4379 stevedavis@cityofportwentworth.com

DATUM: HORIZ.: NAD83 VERT.: NAVD88

DRAWN: DESIGNED: REVIEWED:

APPROVED:

	EROSI	ON, SEDIMENTATION & POLLUTION CONTROL PLAN	CHEC
		SWCD: <u>COASTAL</u> PROJECT NAME: <u>PORT WENTWORTH FIRE STATION</u> CITY/COUNTY: <u>SAVANNAH/CHATHAM</u>	
ATTACHED YES 1.	THE APPLICABLE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN CHECKLIST ESTABLISHED BY THE COMMISSION AS OF JANUARY I OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED. (THE COMPLETED CHECKLIST MUST BE SUBMITTED WITH THE ES&PC PLAN OR THE PLAN WILL NOT BE REVIEWED) (PERMIT IV.D.I PG 3I)	ECO. YES 13. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE PERMITTEE'S ES&PC PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BMP'S AND SAMPLING TO MEET PERMIT REQUIREMENTS AS STATED ON PART IV PAGE 19 OF THE PERMIT.	ECO.I
	PLEASE FIND THE CURRENT STAND ALONE EROSION, SEDIMENTATION AND POLLUTION CONTROL CHECKLIST ATTACHED.	I CERTIFY THAT THE PERMITEE'S EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA	
ALL YES 2	LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL. (SIGNATURE, SEAL AND LEVEL II NUMBER MUST BE ON EACH SHEET PERTAINING TO ES&PC PLAN OR THE PLAN WILL NOT BE REVIEWED)	WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY I OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS	ECO.I
	PLEASE FIND ON EACH SHEET OF THIS PLAN THE GSWCC LEVEL II CERTIFICATION NUMBER, SIGNATURE AND SEAL FOR MR. JOHN V. GIORDANO, PE.	PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE	
ECO.I YES 3	LIMITS OF DISTURBANCE SHALL BE NO GREATER THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE EPD DISTRICT OFFICE. IF EPD APPROVES THE REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME, THE PLAN MUST INCLUDE AT LEAST 4 OF THE BMPs LISTED IN APPENDIX I OF THIS CHECKLIST AND THE EPD APPROVAL LETTER. (A COPY OF THE THE WRITTEN APPROVAL BY EPD MUST BE ATTACHED TO THE PLAN FOR THE PLAN TO BE REVIEWED) (PERMITIV.D.3 PG 30)	GENERAL NPDES PERMIT NO. GAR 100001. JOHN V. GIORDANO, PE	ECO.I
	LIMITS OF DISTURBANCE DO NOT EXCEED 50 ACRES. TOTAL DISTURBANCE OF THE SITE DEVELOPMENT PROJECT IS 2.91 ACRES.	GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION #000004494I EXPIRATION DATE: 01/01/2025	
ECO.I YES 4	THE NAME AND PHONE NUMBER OF 24-HOUR LOCAL CONTACT RESPONSIBLE FOR EROSION, SEDIMENTATION AND POLLUTION CONTROLS. (PERMIT II.B.I.C PG I2, II.B.2.e PGI4, II.B.3.B PG I5)	ECO. YES 14. CLEARLY NOTE THE STATEMENT THAT "THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN 7 DAYS AFTER INSTALLATION. (PERMIT IV.A.5 PG25)	ECO.I
ECO.I YES 5	OMAR SENATI MARTINEZ/ 912-966-7424 osenati@cityofportwentwoth.com PROVIDE THE NAME, ADDRESS, EMAIL ADDRESS AND PHONE NUMBER OF PRIMARY PERMITTEE. (PERMIT II.B.I.c PG 12, II.B.2.e PG14, II.B.3.B PG 15)	THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN 7 DAYS AFTER	
	CITY OF PORT WENTWORTH 7224 GA HIGHWAY 21, PORT WENTWORTH, GA 31407 STEVE DAVIS 912-964-4379 - stevedavis@cityofportwentworth.com	DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATIONOF THE INITIAL SEDIMENT STORAGE REQUIREMENTS	ECO.I
ECO.I YES 6	. NOTE TOTAL AND DISTURBED ACREAGE OF THE PROJECT OR PHASE UNDER CONSTRUCTION. (PERMIT IV.D.2.c PG 30)	AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION.	
	TOTAL PARCEL ACREAGE IS 1.92 ACRES. TOTAL DISTURBED ACREAGE FOR THE PROJECT IS 2.91 ACRES.	I CERTIFY THE SITE WAS WITH THE ES&PC PLAN ON THE	ECO.I
ECO.I YES 7	. PROVIDE THE GPS LOCATION OF THE CONSTRUCTION EXIT FOR THE SITE. GIVE THE LATITUDE AND LONGITUDE IN DECIMAL DEGREES. (PERMIT II.B.1.a PG 12, II.B.3.a PG 15)	DATE OF INSPECTION	
	CONSTRUCTION EXITS ARE LOCATED AT: LAT: N 32° II' 42.62" (32.1952); LONG: W 81° 12' 55.99" (-81.2156)	GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION # INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN	ECO.I
ALL YES 8	. INITIAL DATE OF THE PLAN AND THE DATES OF ANY REVISIONS MADE TO THE PLAN INCLUDING THE ENTITY WHO REQUESTED THE REVISIONS.		
	PLEASE FIND THE INITIAL DATE OF THE PLAN AND ALL REVISIONS ON THE COVER SHEET AS WELL AS EACH INDIVIDUAL SHEET OF THE PLAN.		
ECO.I YES	DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY AND EXISTING CONDITIONS. (PERMIT IV.D.2.a PG 29)	THESE DEFICIENCIES MUST BE ADDRESSED IMMEDIATELY AND A	
	THE CONSTRUCTION ACTIVITY AT THE SITE WILL INVOLVE CLEARING AND GRADING, CONSTRUCTION OF WATER AND SEWER UTILITIES AND STORM DRAINAGE INFRASTRUCTURE FOR PROPOSED FIRE STATION. THE EXISTING CONDITIONS CONSIST OF A LAND OF TREES WITH WETLANDS AT THE SOUTHWEST OF THE PROPERTY. THE EXISTING	RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED. ECO. YES 15. CLEARLY NOTE THE STATEMENT THAT "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	
COVER YES	ELEVATIONS RANGE FROM 20' TO 16'. D. PROVIDE VICINITY MAP SHOWING SITE'S RELATION TO SURROUNDING AREAS. INCLUDE	MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS." (PERMIT IV.(i) - (iv) PG 19-24)	
	DESIGNATION OF SPECIFIC PHASE, IF NECESSARY. (PERMIT IV.D.2.e PG 30) PLEASE FIND THE VICINITY MAP LOCATED ON THE COVER SHEET OF THE	NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE	
ECO.I;0.3 YES	PLANS. IDENTIFY THE PROJECT RECEIVING WATERS AND DESCRIBE ALL SENSITIVE ADJACENT AREAS INCLUDING STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WHICH MAY BE	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.	
	AFFECTED. (PERMIT IV.D.2.f PG 30) THIS PROJECT DISCHARGES TO THE CITY OF PORT WENTWORTH DRAINAGE SYSTEM AND THE RECEIVING WATER IS LITTLE HEARST	ECO. YES 16. PROVIDE A DESCRIPTION OF ANY BUFFER ENCROACHMENTS AND INDICATE WHETHER A BUFFER VARIANCE IS REQUIRED.	
	CANAL.	THERE WILL BE NO BUFFER ENCROACHMENTS AS PART OF THE PROJECT THUS A BUFFER VARIANCE IS NOT REQUIRED.	
ECO.I YES I	2. DESIGN PROFESSIONAL'S CERTIFICATION STATEMENT AND SIGNATURE THAT THE SITE WAS VISITED PRIOR TO DEVELOPMENT OF THE ES&PC PLAN AS STATED ON PART IV PAGE 19 OF THE PERMIT.	ECO.I YES 17. CLEARLY NOTE THE STATEMENT THAT "AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL." (PERMIT IV.C PG 26)	
	I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR AUTHORIZED AGENT UNDER MY SUPERVISION.	AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.	
	JOHN V. GIORDANO, PE GSWCC LEVEL II DESIGN PROFESSIONAL CERTIFICATION #0000044941	ECO.I YES 18. CLEARLY NOTE THE STATEMENT THAT "WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT. (PERMIT IV.D.3.c(I) PG 30)	
	EXPIRATION DATE: 01/01/2025	WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.	

ECKLIST - STAND ALONE CONSTRUCTION PROJECTS BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES."

ADDRESS: MEINHARD ROAD, PORT WENTWORTH, GA DATE ON PLANS: <u>IO/O6/23</u>

<u>NAME AND EMAIL OF PERSON FILLING OUT CHECKLIST</u>: JOHN V. GIORDANO giordano.j@tandh.com

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.

YES 20.CLEARLY NOTE THE STATEMENT THAT "EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR ECO. YES 27. DESCRIPTION OF PRACTICES TO PROVIDE COVER FOR BUILDING MATERIALS AND BUILDING EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE."

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.

YES 21. CLEARLY NOTE THE STATEMENT "ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING." (PERMIT IV.D.3.a (I) PG 28)

> ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

YES 22. ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT, OR WITHIN I LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III.C. OF THE PERMIT. INCLUDE THE COMPLETED APPENDIX I LISTING ALL THE BMP'S THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT. (PART III.C.2.A - V. PG 19-21)

> THE SITE DOES NOT DISCHARGE WITHIN I LINEAR MILE UPSTREAM OF AN IMPAIRED STREAM SEGMENT.

YES 23.IF A TMDL IMPLEMENTATION PLAN FOR SEDIMENT HAS BEEN FINALIZED FOR THE IMPAIRED STREAM SEGMENT (IDENTIFIED IN ITEM 22 ABOVE) AT LEAST SIX MONTHS PRIOR TO SUBMITTAL OF NOI, THE ES&PC PLAN MUST ADDRESS ANY SITE-SPECIFIC CONDITIONS OR REQUIREMENTS INCLUDED IN THE TMDL IMPLEMENTATION PLAN. (PART III.C.I PG 15)

YES 24.BMP'S FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF THE VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED. (PERMIT IV.D.3.c.(6) PG 3I)

> NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

YES 25. PROVIDE BMP'S FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS. (PERMIT IV.D.3.c.(5) PG 3I)

> NO PETROLEUM WILL BE STORED ON SITE. THE CONTRACTOR SHALL USE A MOBILE MAINTENANCE VEHICLE FOR FUELING AND MAINTENANCE OF EQUIPMENT. EMERGENCY PROCEDURES FOR SPILLS SHALL BE KEPT IN THE CONSTRUCTION TRAILER INCLUDING EMERGENCY CONTACT NUMBERS. ANY LEAKS OR SPILLS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTAIN, CONTROL AND REMEDIATE WITH ALL LOCAL, STATE AND DEFERRAL GUIDELINES, ORDINANCES AND LAWS.

> REGULARLY INSPECT FOR CRACKS OR LEAKAGE IN CONTAINERS/TANKS.

SPILL CLEANUP AND CONTROL PRACTICES

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST, AND
- PROPERLY LABELED PLASTIC AND MEAL WASTE CONTAINERS. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT I-800-424-8802.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPD WILL BE CONTACTED WITHIN 24 HOURS.
- 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.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL 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 THAT LICENSED PROFESSIONAL.

YES 19. CLEARLY NOTE THE STATEMENT THAT "THE ESCAPE OF SEDIMENT FROM THE SITE SHALL ECO.I YES 26. DESCRIPTION OF THE MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

> THERE ARE NOT STORM PIPE DISCHARGING TO THE PROPOSED POND. PERMANENT GRASSING AND LANDSCAPING WILL BE INSTALLED TO PROTECT EARTHEN AREAS FROM EROSION ONCE CONSTRUCTION IS COMPLETE.

PRODUCTS ON SITE. (PERMIT IV.D.3.c.(2) PG 30)

THE CONTRACTOR IS TO PROVIDE COVER FOR: BUILDING MATERIALS, PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZER, PESTICIDES, HERBICIDES, DETERGENTS, AND SANITARY WASTE THAT ARE STORED ON SITE BY USING PLASTIC SHEETING AS COVER AND PROTECTION FROM PRECIPITATION. THE ABOVE PRODUCTS WILL BE STORED IN A LOCATION THAT WOULD MINIMIZE THE RISK OF EXPOSURE TO STORM WATER.

ECO. YES 28. DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES. (PERMIT IV PG 24)

POLLUTANT PREVENTION

THE FOLLOWING MATERIALS ARE EXPECTED ONSITE DURING CONSTRUCTION: PETROLEUM BASED FUELS AND LUBRICANTS FOR EQUIPMENT, ADDITIVES FOR SOIL STABILIZATION, PESTICIDES, FERTILIZERS, HERBICIDES, CRUSHED STONE, CONCRETE PRODUCTS, ASPHALT, TAR, LUMBER, , PAINTS/STAINS/FINISHING TREATMENTS, PAINT SOLVENTS, CLEANING SOLVENTS, PLASTICS AND METAL PIPES. PRACTICES SUCH AS GOOD HOUSEKEEPING, PROPER HANDLING OF HAZARDOUS PRODUCTS AND PROPER SPILL CONTROL PRACTICES WILL BE FOLLOWED TO REDUCE THE RISK OF SPILLS FROM DISCHARGING INTO STORM WATER RUNOFF.

GOOD HOUSEKEEPING

- QUANTITIES ONSITE WILL BE LIMITED TO THE AMOUNT NEEDED FOR
- PRODUCTS AND MATERIALS WILL BE STORED IN A NEAT, ORDERLY MANNER IN APPROPRIATE CONTAINERS PROTECTED FROM RAINFALL, WHERE POSSIBLE.
- PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH MANUFACTURER'S LABELS LEGIBLE AND VISIBLE.
- PRODUCT MIXING, DISPOSAL, AND DISPOSAL OF PRODUCT CONTAINERS WILL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR WILL INSPECT SUCH MATERIALS TO ENSURE PROPER USE, STORAGE AND DISPOSAL.

PRODUCT SPECIFIC PRACTICES

FERTILIZER/HERBICIDES/PESTICIDES/DETERGENTS - THESE 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 SEDIMENTATION CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS. DO NOT DISCHARGE WASH WATER INTO STORM WATER SYSTEM. INSTALL CURBS OR DIKES AROUND STORAGE AREA TO PROTECT AGAINST SPILLS. LIMIT USE OF DETERGENTS ON-SITE.

PAINTS/FINISHES/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 THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

CONCRETE TRUCK WASHING- NO CONCRETE TRUCKS WILL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ONSITE.

BUILDING MATERIALS- NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

ECO.I YES 29. DESCRIPTION AND CHART OR TIMELINE OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH DISTURB SOILS FOR THE MAJOR PORTIONS OF THE SITE (I.E., INITIAL PERIMETER AND

SEDIMENT STORAGE BMP'S, CLEARING AND GRUBBING ACTIVITIES, EXCAVATION ACTIVITIES, UTILITY ACTIVITIES, TEMPORARY AND FINAL STABILIZATION). (PERMIT IV.D.2.b PG 27) A SPECIFIED WORK SCHEDULE IS NEEDED TO COORDINATE THE TIMING OF

LAND DISTURBING ACTIVITIES WITH THE INSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES.

THE PURPOSE OF THE SCHEDULE IS TO REDUCE ON-SITE EROSION AND OFF-SITE SEDIMENTATION BY PERFORMING LAND DISTURBING ACTIVITIES AND INSTALLING EROSION AND SEDIMENTATION CONTROL PRACTICES IN ACCORDANCE WITH A PLANNED SCHEDULE.

IN PLANNING CONSTRUCTION WORK, IT MAY BE HELPFUL TO OUTLINE ALL LAND DISTURBING ACTIVITIES NECESSARY TO COMPLETE THE PROPOSED PROJECT. THEN LIST ALL PRACTICES NEEDED TO CONTROL EROSION AND SEDIMENTATION ON THE SITE. THESE TWO LISTS CAN THEN BE COMBINED IN LOGICAL ORDER TO PROVIDE A PRACTICAL AND EFFECTIVE CONSTRUCTION SEQUENCE SCHEDULE THAT BECOMES PART OF THE EROSION AND SEDIMENTATION CONTROL PLAN.

BY DATE REVISIONS



BID SET - NOT FOR CONSTRUCTION



50 Park of Commerce Way Savannah, GA 31405 • 912.234.5300 www.thomasandhutton.com

ES & PC NOTES

PORT WENTWORTH FIRE STATION

PROJECT LOCATION: HIGHWAY 30 PORT WENTWORTH, GA 31407

CLIENT/OWNER: CITY OF PORT WENTWORTH

7224 GA HIGHWAY 21 PORT WENTWORTH, GA 31407 STEVE DAVIS stevedavis@cityofportwentworth.com

VERT.: NAVD88

DATUM: HORIZ.: NAD83

DATE: 10/06/23 DRAWN: KHT DESIGNED: MRE REVIEWED: JVG APPROVED: JVG

PROJECT NAME: PORT WENTWORTH FIRE STATION CITY/COUNTY: SAVANNAH/CHATHAM

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.

4. CERTIFIED PERSONNEL (PROVIDED BY PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.e. UNTIL A NOTICE OF TERMINATION IS 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).

5. 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.THE PRIMARY PERMITTEE MUST AMEND THE PLAN IN ACCORDANCE WITH PART IV.D.4.B.(5). WHEN A SECONDARY PERMITTEE NOTIFIES THE PRIMARY PERMITTEE OF ANY PLAN DEFICIENCIES.

6. 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 AN INCIDENT, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION 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.

AN "EROSION & SEDIMENTATION INSPECTION AND MAINTENANCE REPORT" SHEET IS ATTACHED. SHOULD THE INSPECTION REVEAL ANY DEFICIENCIES, A COPY SHALL BE SENT TO:

JOHN V. GIORDANO, P.E. THOMAS AND HUTTON P.O. BOX 2727 SAVANNAH, GEORGIA 31402 (912) 721-4054

CONSTRUCTION ACTIVITY

. OBTAIN ALL PLAN APPROVALS AND OTHER

2. FLAG THE WORK LIMITS AND MARK THE TREES AND BUFFER AREAS FOR PROTECTION

LEAST ONE WEEK PRIOR TO STARTING

ENTRANCE, CONSTRUCTION ROUTES,

6. RUNOFF CONTROL - DIVERSIONS,

FOUIPMENT PARKING AREAS.

3. HOLD PRE CONSTRUCTION CONFERENCE AT

4. CONSTRUCTION ACCESS - CONSTRUCTION

5. SEDIMENT TRAPS AND BARRIERS - BASIN

PERIMETER DIKES, WATER BARS, AND OUTLET

7. RUNOFF CONVEYANCE SYSTEM- STABILIZE

STREAM BANKS, STORM DRAINS, CHANNELS,

INLET AND OUTLET PROTECTION, SLOPE

8. LAND CLEARING AND GRADING - SITE

GRADING, SEDIMENTATION TRAPS, BARRIERS,

DIVERSIONS, DRAINS, SURFACE ROUGHENING.

PERMANENT SEEDING, MULCHING, SODDING,

IO. BUILDING CONSTRUCTION- BUILDINGS

SEEDING, MULCHING, SODDING RIPRAP.

II. LANDSCAPING AND FINAL STABILIZATION -

TOPSOILING, TREES AND SHRUBS, PERMANENT

UTILITIES, PAVING.

ACTIVITY

PERIMETER BMPS

TEMPORARY SEDIMENT

TEMPORARY GRASSING

UTILITY INSTALLATION

ROAD CONSTRUCTION

PERMANENT GRASSING

FINAL STABILIZATION/

BMP MAINTENANCE

SITE CLEARING

CONTROL BMPS

SITE GRADING

SITE PAVING

CONSTRUCTION

BMP REMOVAL

BUILDING

9. SURFACE STABILIZATION - TEMPORARY AND

PREPARATION CUTTING, FILLING AND

TRAPS, SEDIMENT FENCES, AND OUTLET

APPLICABLE PERMITS.

CONSTRUCTION

PROTECTION.

PROTECTION.

SCHEDULE CONSIDERATION

FIRST LAND DISTURBING ACTIVITY - STABILIZE

TEMPORARY VEGETATION AS CONSTRUCTION

BARE AREAS IMMEDIATELY WITH GRAVEL AND

CONSTRUCTION SITE IS ACCESSED. INSTALL

INSTALL KEY PRACTICES AFTER PRINCIPAL

SEDIMENT TRAPS AND BEFORE LAND GRADING

WHERE NECESSARY. STABILIZE STREAM BANKS

AS FARLY AS POSSIBLE, INSTALL PRINCIPAL

RUNOFF CONVEYANCE SYSTEM WITH RUNOFF-

CONTROL MEASURES. INSTALL REMAINDER OF

BEGIN MAJOR CLEARING AND GRADING AFTER

CONTROL MEASURES ARE INSTALLED, INSTAL

PROGRESSES. MARK TREES AND BUFFER AREAS

ADDITIONAL CONTROL MEASURES AS GRADING

STABILIZATION MEASURES IMMEDIATELY ON

ALL DISTURBED AREAS WHERE WORK IS

SEDIMENTATION CONTROL PRACTICES AS

AST CONSTRUCTION PHASE--STABILIZE ALL

9

OPEN AREAS, INCLUDING BORROW AND SPOIL

AREAS. REMOVE AND STABILIZE ALL

TEMPORARY CONTROL MEASURES

PRINCIPAL SEDIMENT AND KEY RUNOFF -

APPLY TEMPORARY OR PERMANENT

INSTALL NECESSARY EROSION AND

INSTALL ADDITIONAL RUNOFF-CONTROL

MEASURES DURING GRADING

SYSTEM AFTER GRADING.

FOR PRESERVATION.

DELAYED OR COMPLETE.

WORK TAKES PLACE.

CONSTRUCTION SCHEDULE

MONTH

3

ECO.2 YES 30. PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY THE

INSPECTIONS AND RECORD KEEPING

A. PRIMARY PERMITTEE:

FOR THE REGION.

PRIMARY PERMITEE OR TERTIARY PERMITTEE. (PART IV.D.4.a PG 31-33)

EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN

PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (a) ALL AREAS

OF THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE

STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES

AND EQUIPMENT. (b) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S

SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF

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

REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF

VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE

RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE

3. CERTIFIED PERSONAL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL

DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5

INCHES OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00PM ON

SUNDAY OR ANY FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION

AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE. (b) AREAS

USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT

MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN

THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE

ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING

SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY

AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (a) DISTURBED

ARE EXPOSED TO PRECIPITATION. AND (c) STRUCTURAL CONTROL

OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY.

FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL

VEGETATION AND A SEEDING OF TARGET PERENNIALS

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). FOR AREAS OF A SITE THAT HAVE UNDERGONE

AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE

UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL

INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR

OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE

CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE

PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL

ADDITIONAL TRAPS AND BARRIERS AS NEEDED

INSTALL PRINCIPAL BASINS AFTER

TAKES PLACE.

DURING GRADING.

ECO.2 YES 31. PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS. (PART IV.D.6. PG 35-37 & PART IV.E PG 37)

> THIS PERMIT REQUIRES THE MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS IN ACCORDANCE WITH THIS PERMIT. THIS SECTION IS APPLICABLE TO PRIMARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN ONE (I) ACRE AND TERTIARY PERMITTEES WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN FIVE (5) ACRES. THIS SECTION IS NOT APPLICABLE TO SECONDARY PERMITTEES. THE FOLLOWING PROCEDURES CONSTITUTE EPD'S GUIDELINES FOR SAMPLING TURBIDITY.

- a. SAMPLING REQUIREMENTS SHALL INCLUDE THE FOLLOWING:
- (I) A USGS TOPOGRAPHIC MAP. A TOPOGRAPHIC MAP OR A DRAWING (REFERRED TO AS A TOPOGRAPHIC MAP) THAT IS A SCALE EQUAL TO OR MORE DETAILED THAN A 1:24000 MAP SHOWING THE LOCATION OF THE SITE OR THE STAND ALONE CONSTRUCTION;(a) THE LOCATION OF ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES LOCATED DURING MANDATORY FIELD VERIFICATION, INTO WHICH THE STORM WATER IS DISCHARGED AND (b) THE RECEIVING WATER AND/OR OUTFALL SAMPLING LOCATIONS. WHEN THE PERMITTEE HAS CHOSEN TO USE A USGS TOPOGRAPHIC MAP AND THE RECEIVING WATER(S) IS NOT SHOWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION FOR THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP, THE LOCATION FOR THE RECEIVING WATER(S) MUST BE HAND-DRAWN ON THE USGS TOPOGRAPHIC MAP FROM WHERE THE STORM WATER(S) ENTERS THE RECEIVING WATER(S) TO THE POINT WHERE THE RECEIVING WATER(S) COMBINES WITH THE FIRST BLUE LINE STREAM SHOWN ON THE USGS TOPOGRAPHIC
- (2) THE ANALYTICAL METHOD USED TO COLLECT AND ANALYZE THE SAMPLES INCLUDING QUALITY CONTROL/QUALITY ASSURANCE PROCEDURES. THIS NARRATIVE MUST INCLUDE PRECISE SAMPLING METHODOLOGY FOR EACH SAMPLING LOCATION;
- (3) WHEN THE PERMITTEE HAS DETERMINED THAT SOME OR ALL OUTFALLS WILL BE SAMPLED, A RATIONALE MUST BE INCLUDED ON THE PLAN FOR THE NTU LIMIT(S) SELECTED FROM APPENDIX b. THIS RATIONALE MUST INCLUDE THE SIZE OF THE CONSTRUCTION SITE, THE CALCULATION OF THE SIZE OF THE SURFACE WATER DRAINAGE AREA, AND THE TYPE OF RECEIVING WATER(S) (I.E., TROUT STREAM OR SUPPORTING WARM WATER FISHERIES); AND
- (4) ANY ADDITIONAL INFORMATION EPD DETERMINES NECESSARY TO BE PART OF THE PLAN. EPD WILL PROVIDE WRITTEN NOTICE TO THE PERMITTEE OF THE INFORMATION NECESSARY AND THE TIME LINE FOR SUBMITTAL.

NAME AND EMAIL OF PERSON FILLING OUT CHECKLIST: JOHN V. GIORDANO giordano.j@tandh.com b. 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.

ADDRESS: MEINHARD ROAD, PORT WENTWORTH, GA

DATE ON PLANS: 10/06/23

- I. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES
- 2. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
- 3. LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
- 4. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
- 5. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THE PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E. OF THE PERMIT.
- c. <u>Sampling Points:</u> There will be 2 storm water sampling locations. The SAMPLING LOCATION WILL BE THE UPSTREAM AND DOWNSTREAM POINTS, PER NPDES PERMIT GAR 100001. FOR CONSTRUCTION ACTIVITIES. THE PRIMARY PERMITTEE MUST COMPLETE ALL SAMPLING.
- I. FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN ONE (I) ACRE AND TERTIARY PERMITTEE WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN FIVE (5) ACRES MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORMWATER OUTFALLS USING THE FOLLOWING MINIMUM **GUIDELINES:**
- A. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER 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.
- B. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER 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.
- C. IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNELS(S).
- D. CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
- E. THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- F. THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
- G. PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW 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 AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 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).
- H. 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 STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE.

d. SAMPLING FREQUENCY

- I. THE PRIMARY PERMITTEE WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN ONE (I) ACRE AND TERTIARY PERMITTEE WITH A TOTAL PLANNED DISTURBANCE EQUAL TO OR GREATER THAN FIVE (5) ACRES 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 STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.
- 2. 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 STORM WATER DISCHARGE.

- 3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING **EVENTS:**
- A. 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 STORM WATER 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 SAMPLING LOCATION;
- B. IN ADDITION TO (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 STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THE PERMIT 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 SAMPLING LOCATIONS, WHICHEVER COMES FIRST;
- C. AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (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:**
- D. WHERE SAMPLING PURSUANT TO (A). (B) OR (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 (A), (B) OR (C) ABOVE; AND
- E. 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 (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.
- * NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (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

- I. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C 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 STORM WATER 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. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. 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.
- 2. ALL SAMPLING REPORT SHALL INCLUDE THE FOLLOWING INFORMATION:
- a. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF
- SAMPLING OR MEASUREMENTS;
- b. THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS:
- c. THE DATE(S) ANALYSES WERE PERFORMED;
- d. THE TIME(S) ANALYSES WERE INITIATED;
- e. THE NAMES(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
- f. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED:
- g. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED
- TO DETERMINE THESE RESULTS; h. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS
- "EXCEEDS 1000 NTU;" AND i. CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS
- PER THE PLAN. 3. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY
- RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF EPD 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. IF AN ELECTRONIC SUBMITTAL IS PROVIDED BY EPD THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF REQUIRED, A PAPER COPY MUST ALSO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.

EPD OFFICE: COASTAL DISTRICT - BRUNSWICK OFFICE GEORGIA ENVIRONMENTAL PROTECTION DIVISION 400 COMMERCE CENTER DRIVE BRUNSWICK, GA 31523-8687 912-264-7284

BY DATE REVISIONS



BID SET - NOT FOR CONSTRUCTION



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ES & PC NOTES

PORT WENTWORTH FIRE STATION

PROJECT LOCATION: HIGHWAY 30

PORT WENTWORTH, GA 31407

CLIENT/OWNER:

CITY OF PORT WENTWORTH 7224 GA HIGHWAY 21 PORT WENTWORTH, GA 31407 STEVE DAVIS stevedavis@cityofportwentworth.com

DATUM: HORIZ.: NAD83 VERT.: NAVD88

10/06/23 DRAWN: DESIGNED: MRE REVIEWED: JVG

APPROVED: JVG

DATE ON PLANS: 10/06/23

NAME AND EMAIL OF PERSON FILLING OUT CHECKLIST: JOHN V. GIORDANO giordano.j@tandh.com

ADDRESS: MEINHARD ROAD, PORT WENTWORTH, GA

ECO.3 YES 32. PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F PG 38 OF THE PERMIT.

PERMIT No. GAR 100001.

PERMIT NO. GAR 100001.

NO. GAR 100001.

RETENTION OF RECORDS

I. 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 NOTICE OF TERMINATION IS SUBMITTED IN ACCORDANCE WITH PART VI.

- COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD.
- A COPY OF THE ES&PC PLAN REQUIRED IN PERMIT No. GAR 100001. THE DESIGN PROFESSIONALS REPORT OF THE THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5 IN
- COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD.
- A COPY OF THE ES&PC PLAN REQUIRED IN PERMIT NO. GAR 10000I. THE DESIGN PROFESSIONALS REPORT OF THE THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5 IN
- A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS
- REQUIRED BY IN PERMIT NO. GAR 100001. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A OF PERMIT NO. GAR 100001.
- A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2 IN PERMIT
- DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). IN PERMIT NO. GAR 100001.
- 2. 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 NOTICE OF TERMINATION IS SUBMITTED IN ACCORDANCE WITH PART VI OF THE GARIOOOOI. 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.

ECO.3 YES 33.DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION. (PERMIT IV.D.6.A - C. PG 33-35)

> STORM WATER SAMPLES ARE TO BE ANALYZED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 AND THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT EPA 833-B-92-001.

ECO.3 YES 34.APPENDIX B RATIONALE FOR NTU VALUES AT ALL OUTFALL SAMPLING POINTS WHERE APPLICABLE. (PERMIT IV.D.6.A.(3) PG 33)

> STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATIONS. A DISCHARGE OF STORM WATER 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 CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING 50, THE VALUE THAT WAS SELECTED FROM APPENDIX B IN PERMIT NO. GAR 100001. THE NTU IS BASED UPON THE DISTURBED ACREAGE OF 70 ACRES FOR THE PROJECT SITE, THE SURFACE WATER DRAINAGE AREA OF LESS THAN 4.99 SQUARE MILES AND RECEIVING WATER WHICH SUPPORTS WARM WATER FISHERIES. APPENDIX B WAS USED TO DETERMINE THE NTU ALLOWABLE AND DOWNSTREAM SAMPLING WILL BE PERFORMED FOR THIS PROJECT.

Appendix B Nephelometric Turbidity Unit (NTU) Table Warm Water (Supporting Warm Water Fisheries)

	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+	
.00-10	75	150	200	400	750	750	750	750	
0.01-25	50	100	100	200	300	500	750	750	
5.01-50	50	50	100	100	200	300	750	750	
0.01-10.0	50	50	50	100	100	150	300	600	
00.01+	50	50	50	50	50	100	200	100	

Surface Water Drainage Area, square miles

	SAMPLING POINT SUMMARY						
SAMPLING POINT				RCEIVING WATER	NTU VALUE		
ı	0.90	0-4.99	OUTFALL	WARM	75		
-	-	-	-	-	_		

ECI.I - 3.1 YES 35.DELINEATE ALL SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.(PERMIT IV.D.6.A.(I) PG

> PLEASE SEE PLAN SHEETS FOR DELINEATION OF SAMPLING LOCATIONS, PERENNIAL, INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.

ECO.3 YES 36.A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INCLUDING (I) INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S, (2) INTERMEDIATE GRADING AND DRAINAGE BMP'S, AND (3) FINAL BMP'S. FOR CONSTRUCTION SITES WHERE THERE WILL BE NO MASS GRADING AND THE SEDIMENT STORAGE REQUIREMENTS AND INITIAL PERIMETER CONTROL BMP'S, INTERMEDIATE GRADING AND DRAINAGE BMP'S, AND FINAL BMP'S ARE THE SAME, THE PLAN MAY COMBINE ALL OF THE BMP'S INTO A SINGLE PHASE. (PERMIT IV.D.3. PG 30)

> INITIAL PHASE - THE INITIAL PHASE OF THE ES&PC PLAN WILL INCLUDE THE INSTALLATION OF THE CONSTRUCTION EXIT AND SILT FENCE. TYPE NS SILT FENCE WILL BE USED. STORM POND AND DITCHES WILL BE CONSTRUCTED AND MAINTAINED DURING SITE CLEARING. EXISTING STORM DRAIN OUTLET PROTECTION WILL BE MAINTAINED AT DISCHARGE LOCATION. DUST CONTROL AND MULCHING WILL BE IMPLEMENTED AS NECESSARY.

INTERMEDIATE PHASE - THE INTERMEDIATE GRADING AND DRAINAGE BMP'S WILL INCLUDE THE MAINTENANCE OF ALL SILT FENCE. STORM DRAIN OUTLET PROTECTION WILL BE INSTALLED AT DISCHARGE LOCATIONS. DUST CONTROL, MULCHING, AND TEMPORARY SEEDING WILL BE IMPLEMENTED AS NECESSARY.

FINAL PHASE - THE FINAL GRADING AND DRAINAGE BMP'S WILL INCLUDE THE MAINTENANCE OF ALL SILT FENCE. STORM DRAIN OUTLET PROTECTION WILL BE MAINTAINED AT DISCHARGE LOCATIONS. PERMANENT SEEDING WILL BE IMPLEMENTED FOR SITE STABILIZATION. ONCE THE SITE IS STABILIZED, ALL TEMPORARY BMPS ARE TO BE REMOVED.

ALL YES 37. GRAPHIC SCALE AND NORTH ARROW.

GRAPHIC SCALE AND NORTH ARROW ARE LOCATED ON EACH PLAN SHEET.

ECI.I - 3.1 YES 38.EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL IN ACCORDANCE WITH THE FOLLOWING:

MAP SCALE	GROUND SLOPE	CONTOUR INTERVALS, FT.
I INCH = IOOFT OR LARGER SCALE	FLAT 0 - 2% ROLLING 2 - 8%	0.5 OR I
337.22	STEEP 8% +	2,5 OR 10

EXISTING AND PROPOSED CONTOURS ARE PROVIDED ON ALL ES&PC PLANS.EXISTING AND PROPOSED CONTOURS ARE PROVIDED AT I' INTERVALS.CONTOURS ARE BASED ON NAVD 88 DATUM.

ECI. - 3.1 YES 39.USE OF ALTERNATIVE BMP'S WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMP'S AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION). PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE

ALTERNATIVE BMPS WILL NOT BE USED AS PART OF THIS PROJECT.

ECO.3 YES 40.USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA

DOCUMENT FOUND AT WWW.GASWCC.ORG. (PERMIT IV.D.3.A.(4) PG 32)

ALTERNATIVE BMPS WILL NOT BE USED AS PART OF THIS PROJECT.

ECO.3 YES 41. DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT. (PERMIT IV.D.E PG 30)

> PLEASE SEE THE PLAN FOR THE DELINEATION OF ALL BUFFERS ON THE PLANS.

ALL YES 42.DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200

ALL WETLANDS AND STATE WATERS WITHIN 200 FEET OF THE PROJECT

SITE ARE DELINEATED ON THE PLANS. ATTACHED YES 43.DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.

> (PERMIT IV.D.2.E PG 30) ALL CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE ARE CLEARLY DELINEATED IN THE POST DEVELOPMENT EXHIBIT AS PART OF THE

ATTACHED YES 44.PROVIDE HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH PRE- AND POST-DEVELOPED CONDITIONS.

ATTACHED STORM WATER REPORT.

PLEASE SEE ATTACHED REPORT WITH DETAILS FOR PRE AND POST DEVELOPMENT HYDROLOGY.

ECO.3 YES 45.AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED. (PERMIT IV.D.2.D. PG 30)

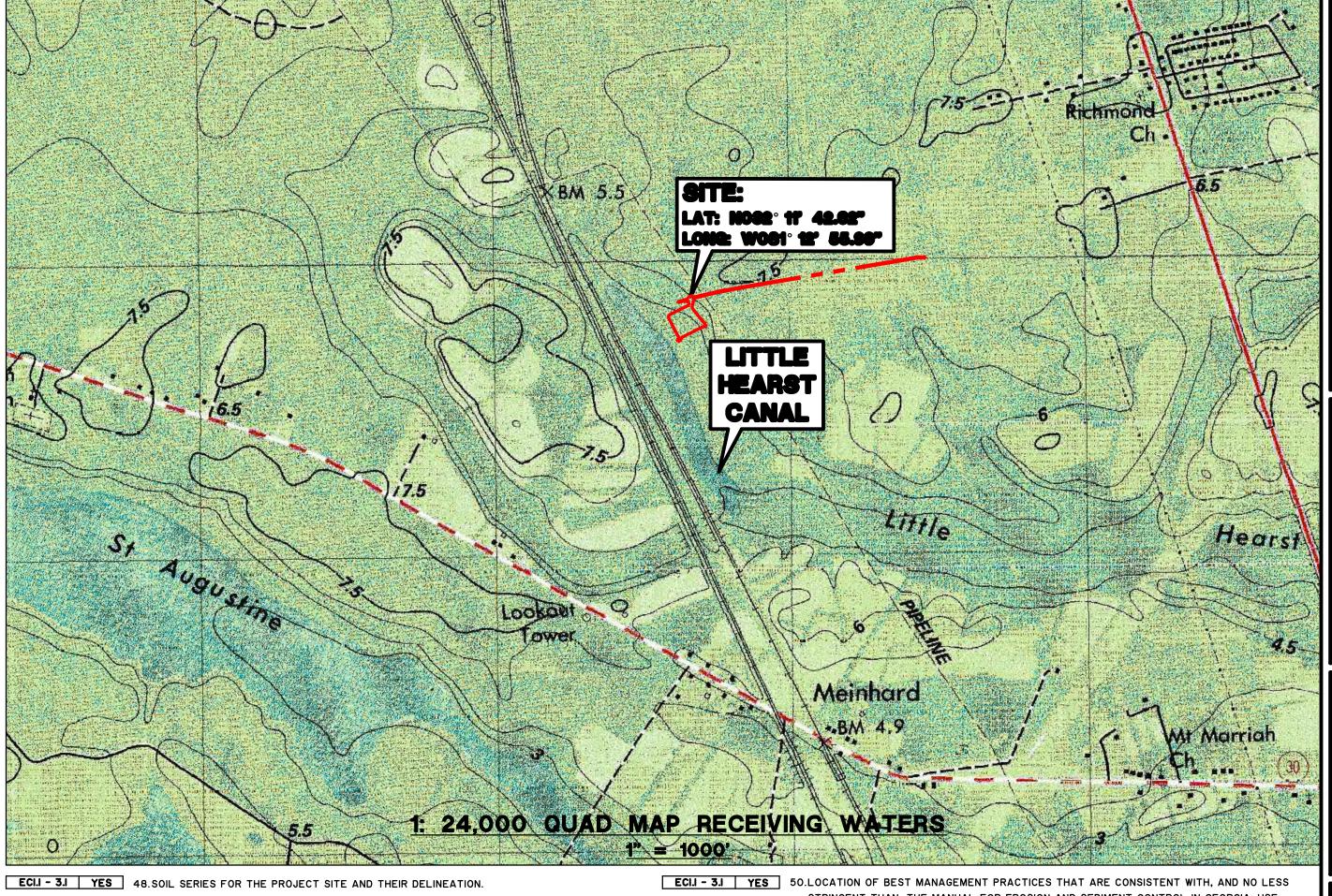
> RUNOFF COEFFICIENT: PRE-CONSTRUCTION CN = 84 POST-CONSTRUCTION CN = 90.6

ECO.3 YES 46.STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION. IDENTIFY/DELINEATE ALL STORM WATER DISCHARGE POINTS.

> THE RIP-RAP CHARTS CONTAIN THE STORMWATER VELOCITIES. THE STORMWATER DISCHARGE POINTS ARE INDICATED ON THE PLANS.

47. THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION. ECI.I - 3.I YES

> PLEASE SEE THE PLAN FOR THE DELINEATION OF THE LIMITS OF DISTURBANCE. INITIAL PHASE DISTURBANCE, DISTURBANCE FOR INTERMEDIATE AND FINAL PHASES IS 2.91 ACRES.



SOILS ARE DELINEATED ON THE EROSION CONTROL SHEETS. THE SOILS FOR THE SITE ARE ARE LISTED IN THE TABLE BELOW.

SOIL SERIES LEGEND				
SOIL SERIES	SOIL DESCRIPTION			
Cc	CAPE FEAR SOILS			
Сх	CRAVEN LOAMY FINE SAND			
Oj	OCILLA COMPLEX			
Pn	POOLER FINE SANDY LOAM			
Waf	WAHEE SANDY LOAM			

ECI.I - 3.I YES 49. PROVIDE A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING ALL LAND DISTURBANCE ACTIVITIES UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED. A WRITTEN JUSTIFICATION EXPLAINING THE DECISION TO USE EQUIVALENT CONTROLS WHEN A SEDIMENT BASIN IS NOT ATTAINABLE MUST BE INCLUDED IN THE PLAN FOR EACH COMMON DRAINAGE LOCATION IN WHICH A SEDIMENT BASIN IS NOT PROVIDED. A WRITTEN JUSTIFICATION AS TO WHY 67 CUBIC YARDS OF STORAGE IS NOT ATTAINABLE MUST ALSO BE GIVEN. WORKSHEETS FROM THE MANUAL MUST BE INCLUDED FOR STRUCTURAL BMPs AND ALL CALCULATIONS USED BY THE STORAGE DESIGN PROFESSIONAL TO OBTAIN THE REQUIRED SEDIMENT STORAGE WHEN USING EQUIVALENT CONTROLS. WHEN DISCHARGING FROM SEDIMENT BASINS AND IMPOUNDMENTS, PERMITEES ARE REQUIRED TO UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE, UNLESS INFEASIBLE. IF OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE ARE NOT FEASIBLE, A WRITTEN JUSTIFICATION EXPLAINING THIS DECISION MUST BE INCLUDED IN THE PLAN. (PERMIT IV.D.3.a.(3) PG 3I)

> SEDIMENT STORAGE - THE PERMIT REQUIRES A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED.

SEDIMENT STORAGE REQUIRED DRAINAGE AREA ACREAGE = 2.91 ac REQUIRED ON SITE SEDIMENT STORAGE= 2.91 ac \times 67 cy/ac = 194.97 cy

INITIAL PHASE
PERIMETER SILT FENCE:

LF OF SILT FENCE FOR STORAGE: 5,820 LF • 7.5 CF OF STORAGE /LF 5,819 LF X 7.5 CF/LF = 43,643 CF OF SEDIMENT STORAGE 43,643 CF X 0.037 CY/CF = 1,615 CY OF STORAGE PROVIDED

INTERMEDIATE & FINAL PHASE RETROFITTED DRY SWALE:

SWALE I: 7,810.79 CF / 27 CF/CY = 306.98 CY SWALE 2: 6,359.16 CF / 27 CF/CY = 235.52 CY TOTAL STORAGE PROVIDED: 542.5 CY

IN ALL PHASES STORAGE PROVIDED EXCEEDS STORAGE REQUIRED (184.97 cy)

STRINGENT THAN, THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. USE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND.

PLEASE SEE THE PLAN SHEETS FOR THE LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA USING THE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6 WITH ACCOMPANYING LEGEND.

EC4.1-4.2 YES 51. PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

> PLEASE SEE THE DETAIL SHEET FOR DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES WITH SPECIFICATIONS MEETING THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA

52. PROVIDE VEGETATIVE PLAN, NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES. INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC FOR APPROPRIATE TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION

PLEASE SEE THE PLAN AND DETAIL SHEETS FOR THE VEGETATIVE PLAN NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES INCLUDING SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. THIS PLAN IS SPECIFIC TO THE SITE AND APPROPRIATE FOR TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.

CERTIFICATION # EXPIRES: 1/1/202

BY DATE

BID SET - NOT FOR CONSTRUCTION



50 Park of Commerce Way Savannah, GA 31405 • 912.234.5300 www.thomasandhutton.com

ES & PC NOTES

PORT WENTWORTH FIRE STATION

PROJECT LOCATION: HIGHWAY 30 PORT WENTWORTH, GA 31407

CLIENT/OWNER:

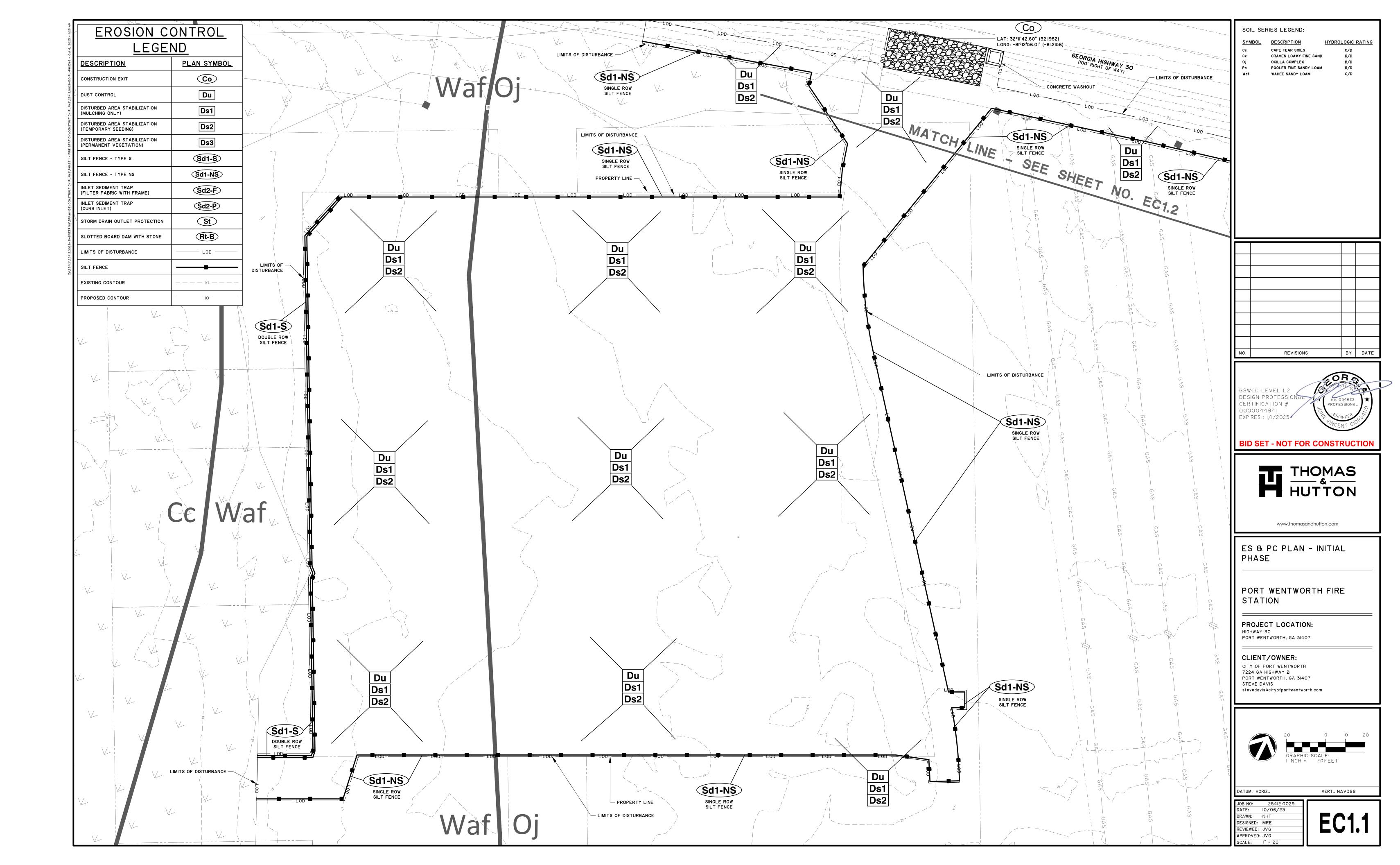
CITY OF PORT WENTWORTH 7224 GA HIGHWAY 21 PORT WENTWORTH, GA 31407 STEVE DAVIS stevedavis@cityofportwentworth.com

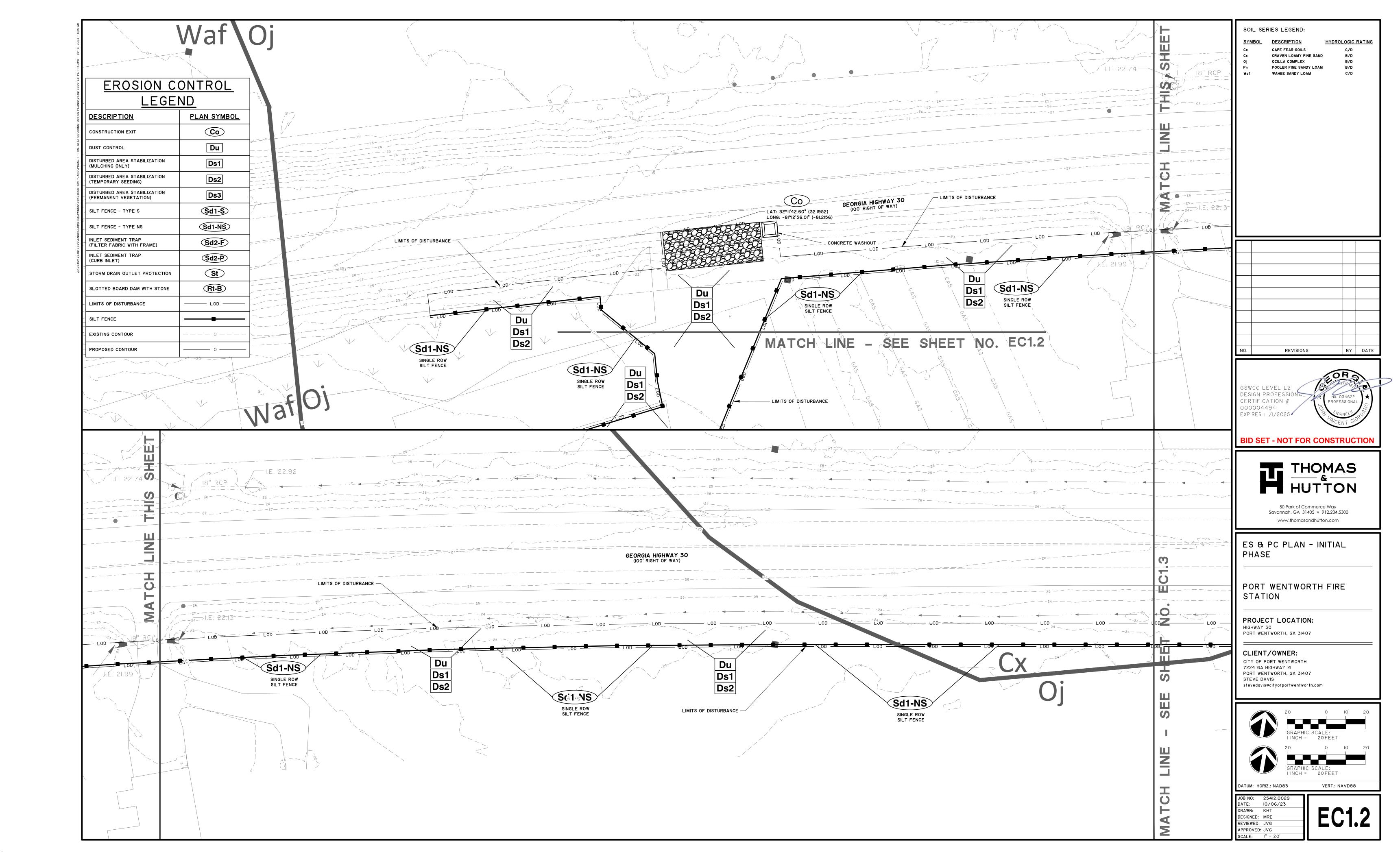
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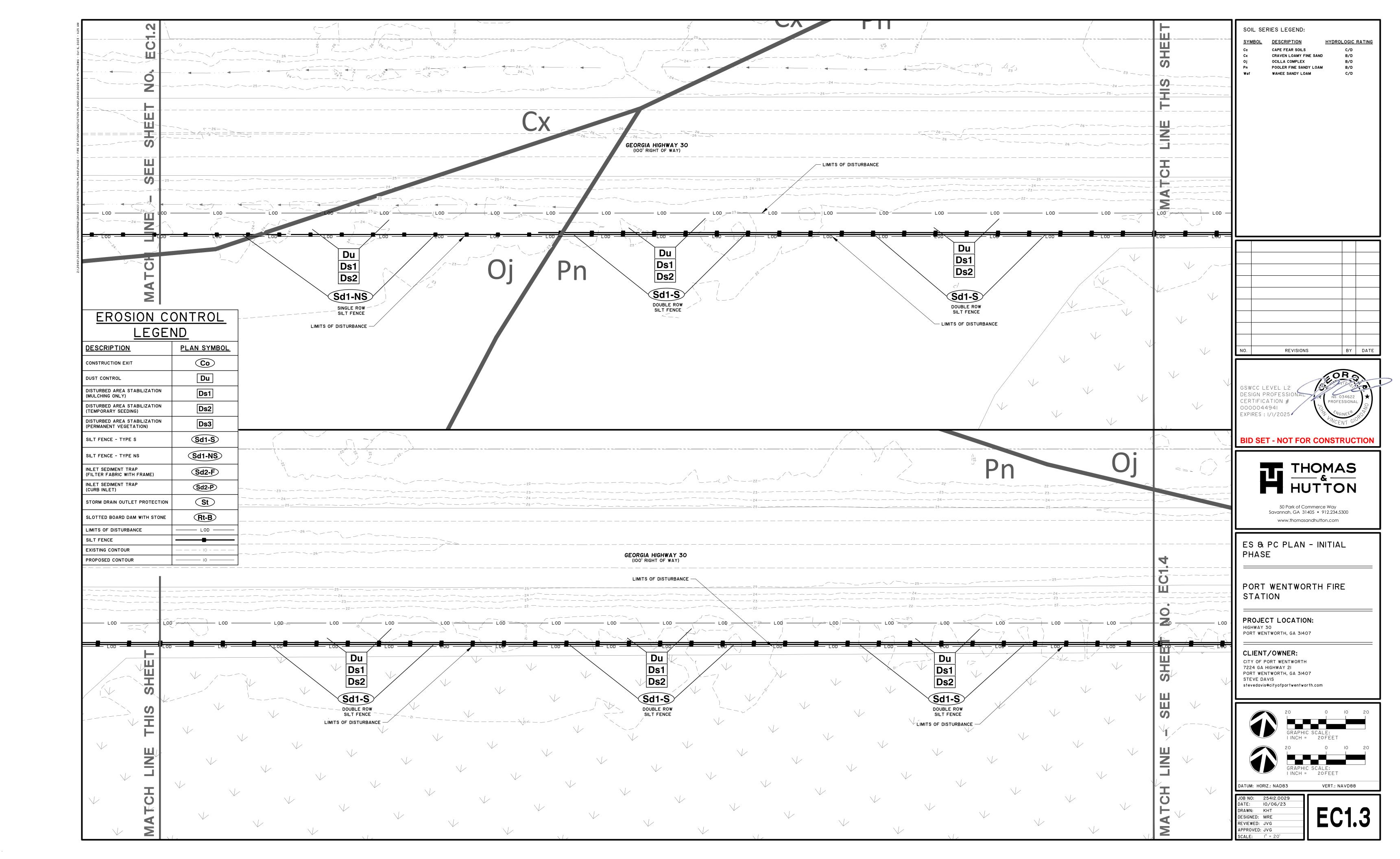
10/06/23 DRAWN: DESIGNED: MRE REVIEWED: JVG

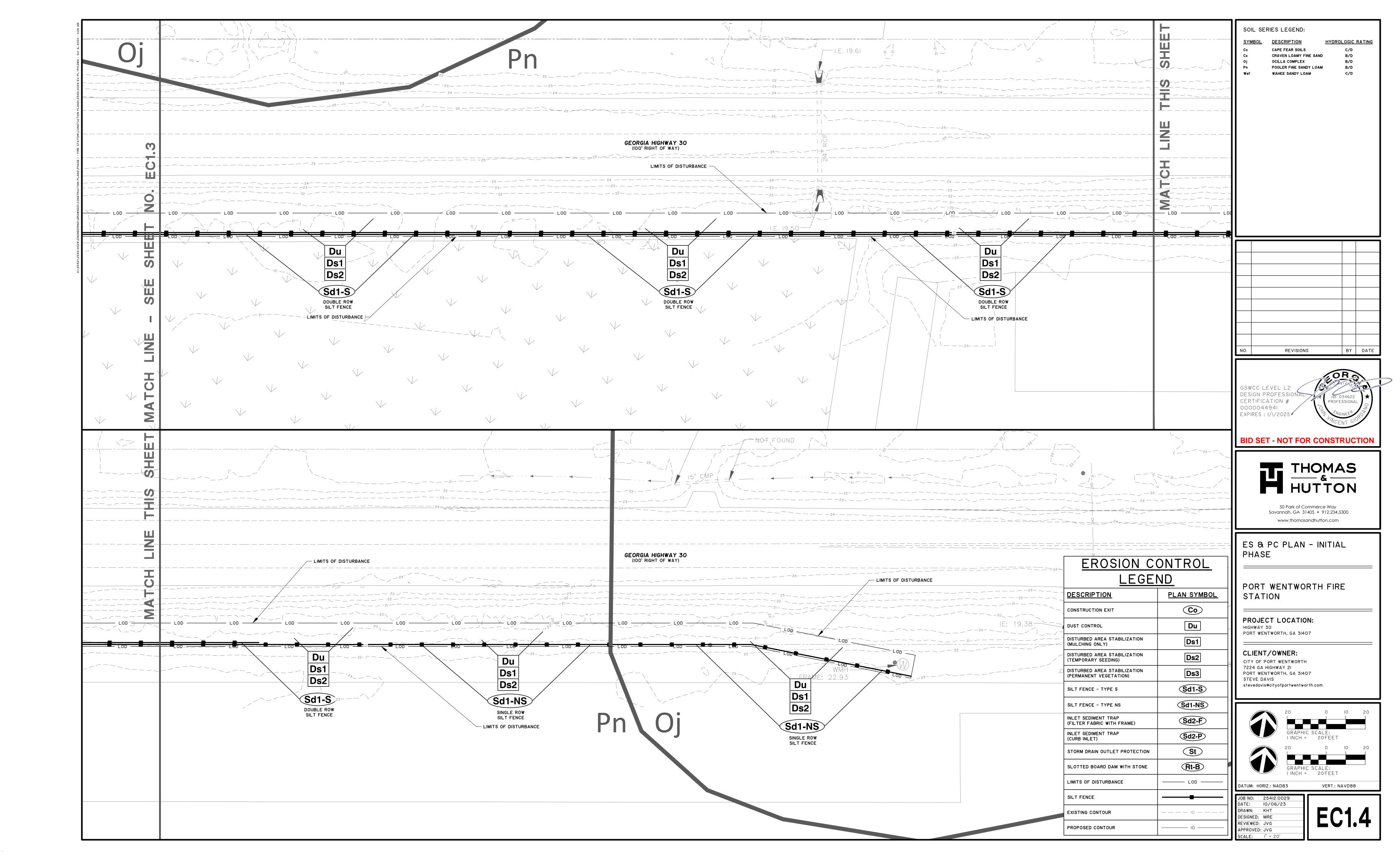
APPROVED: JVG

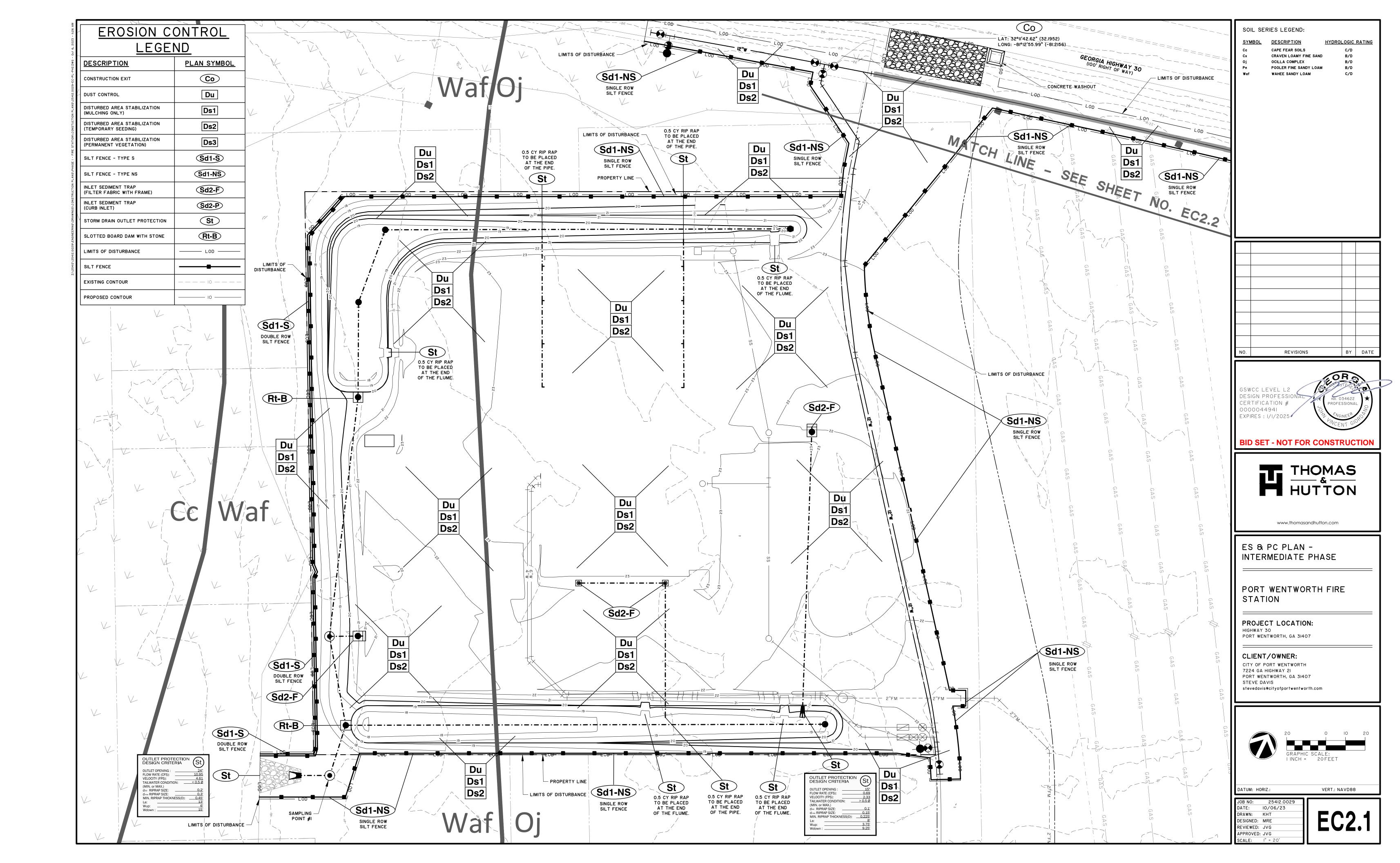
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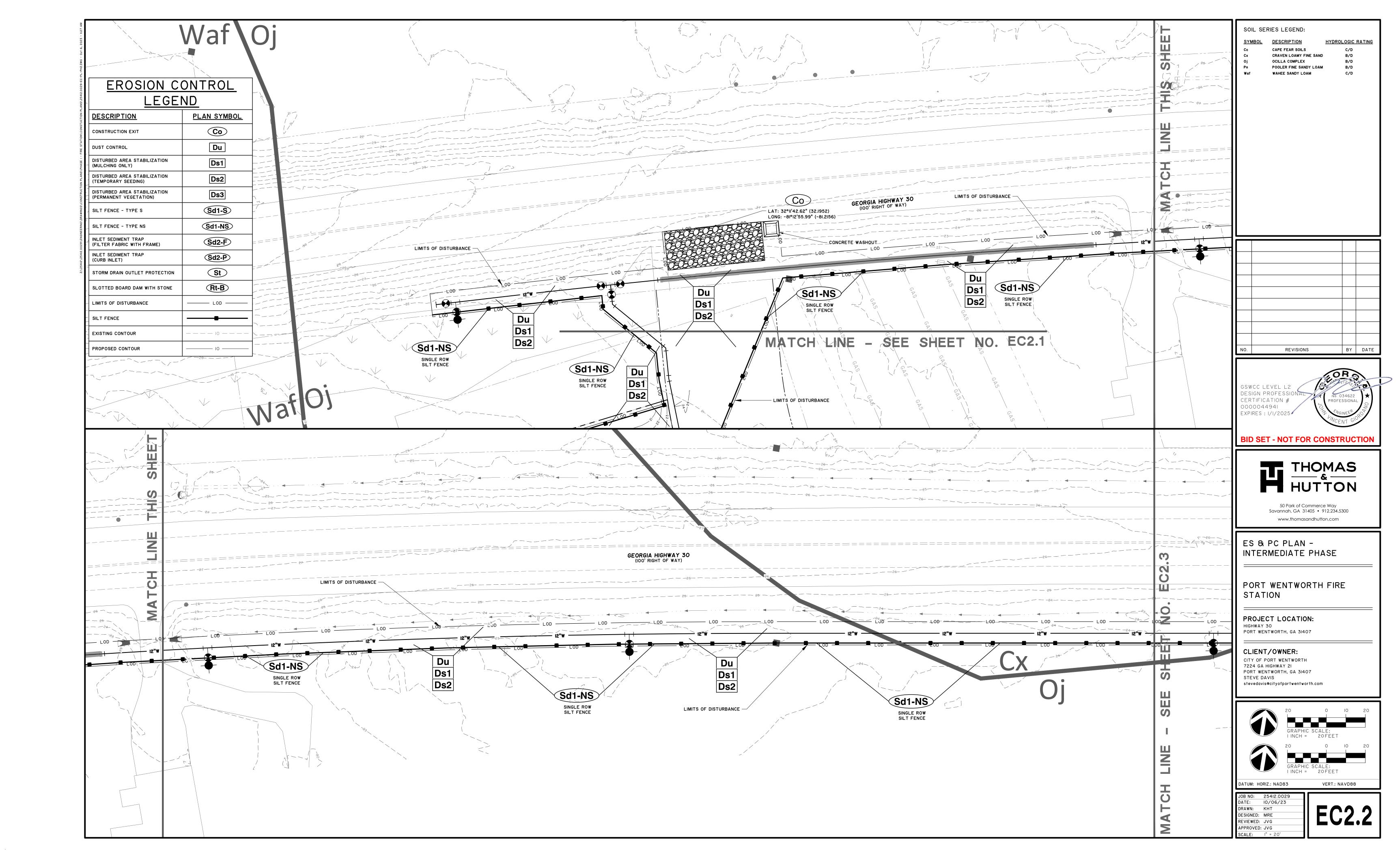


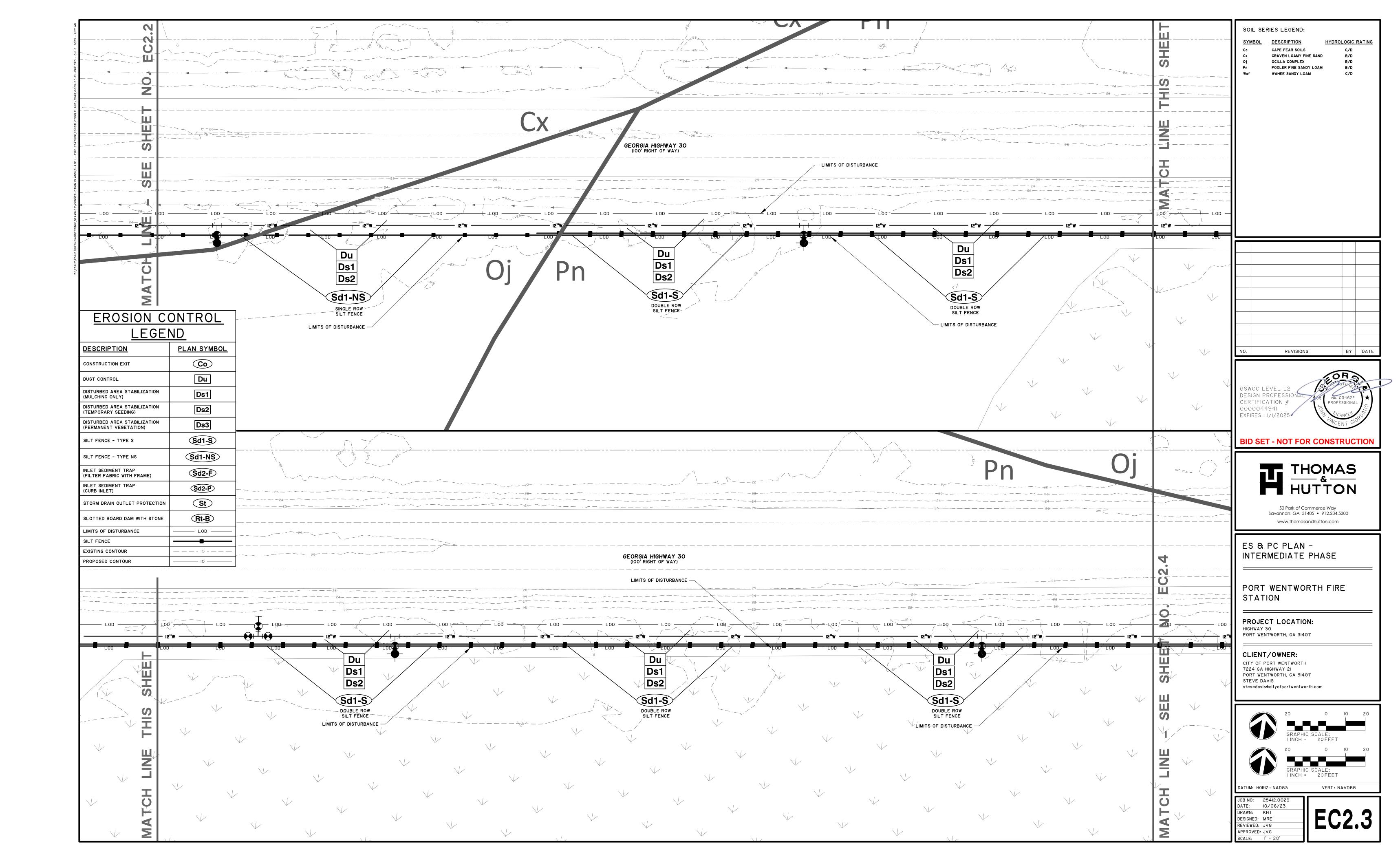


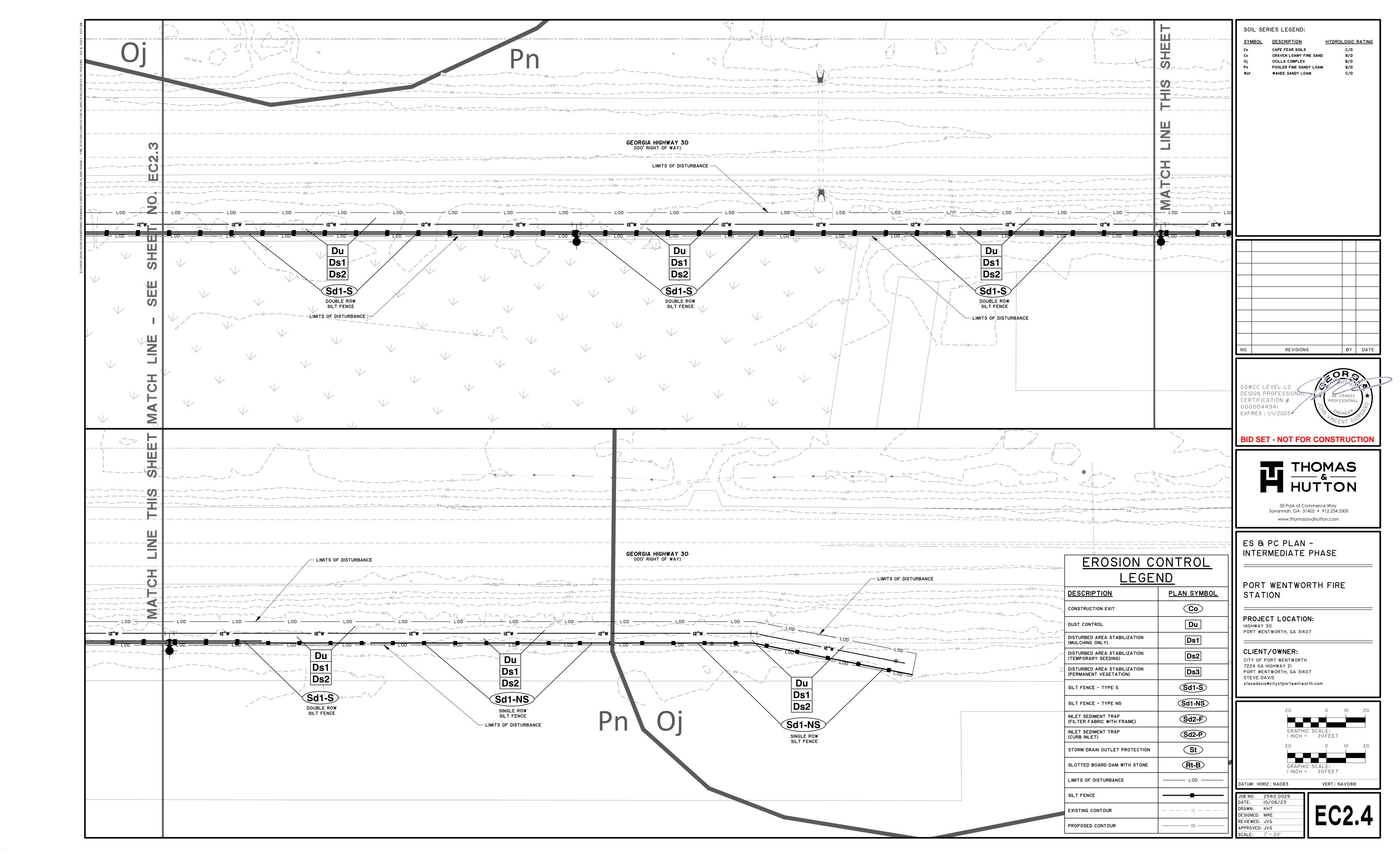


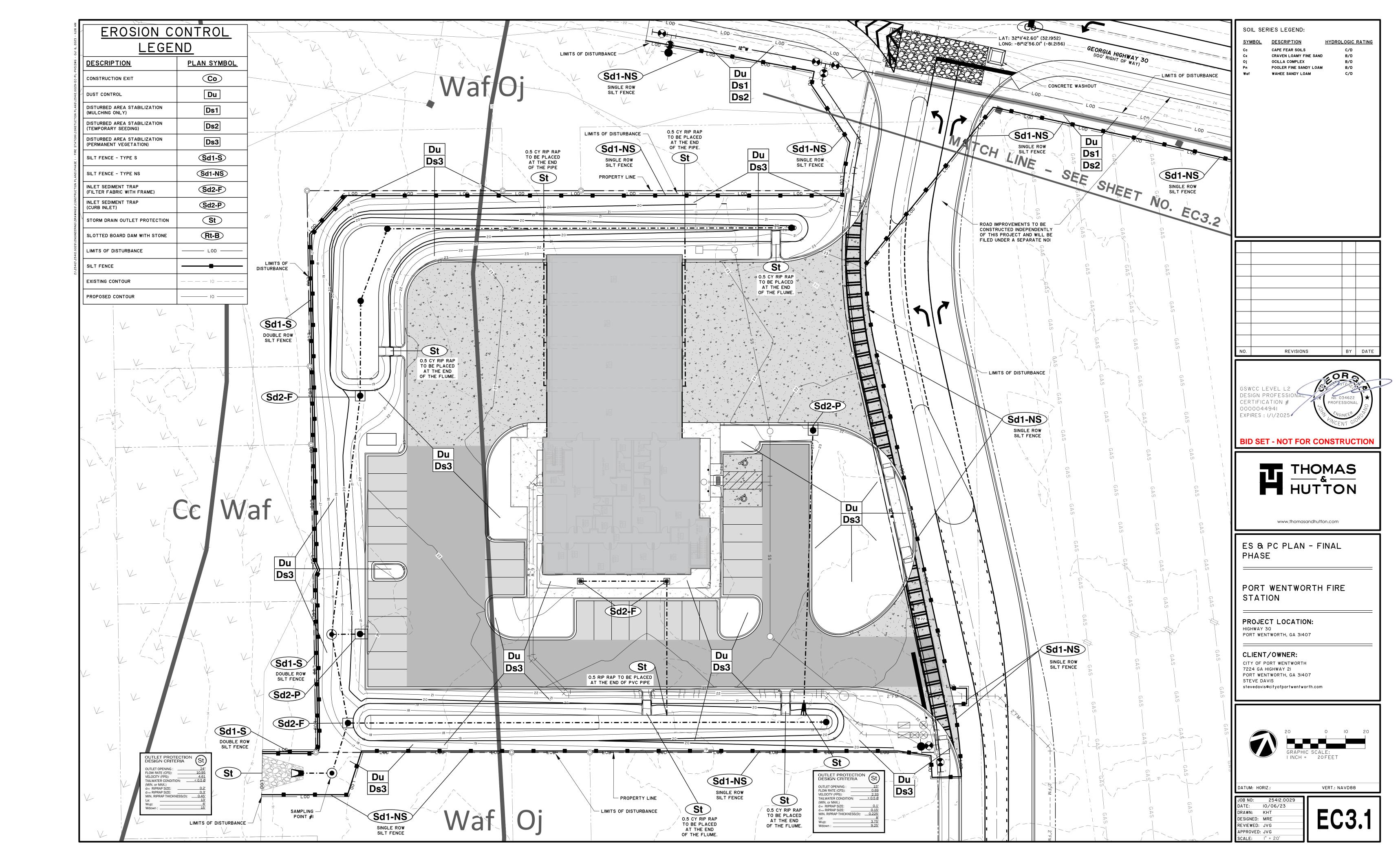


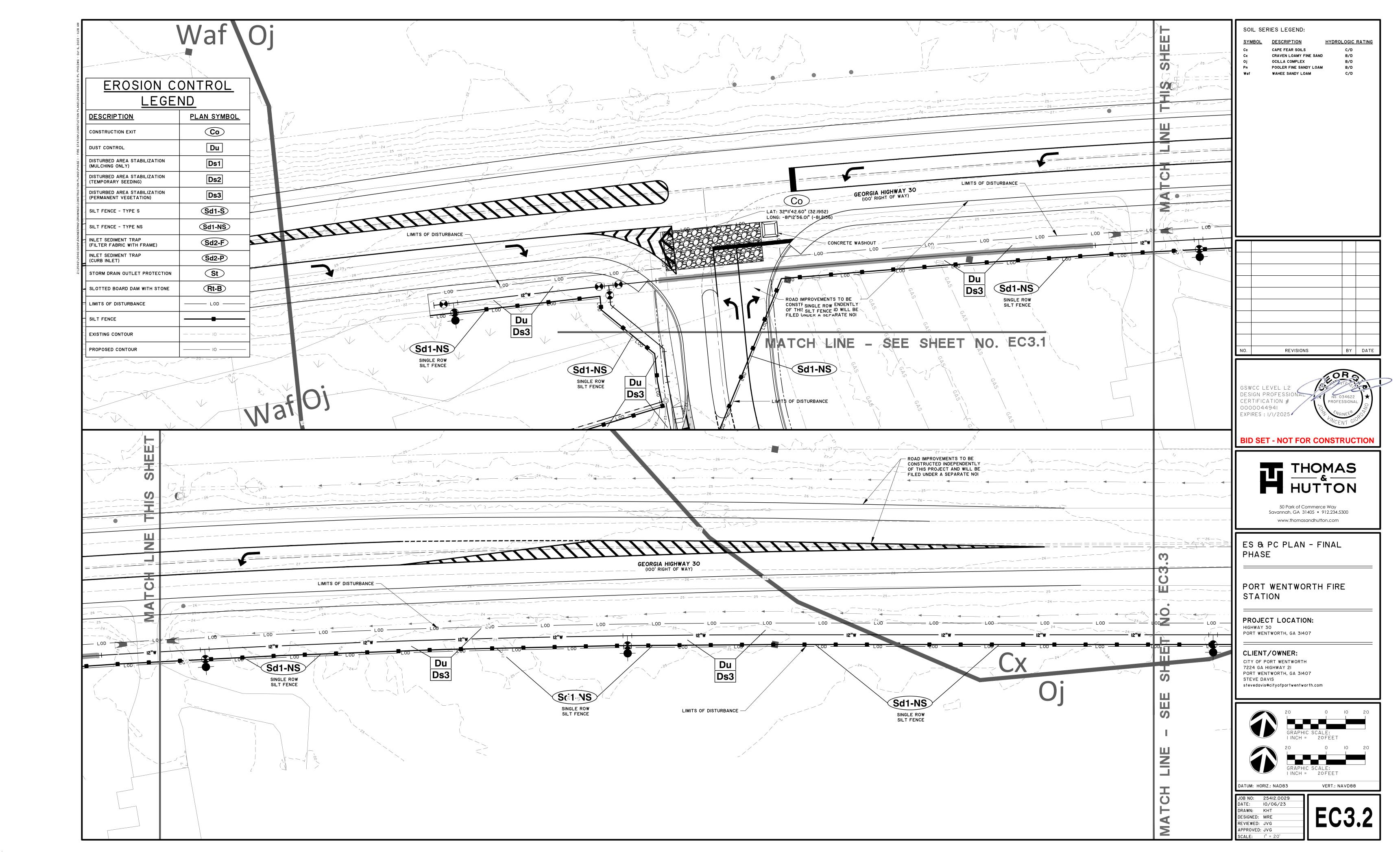


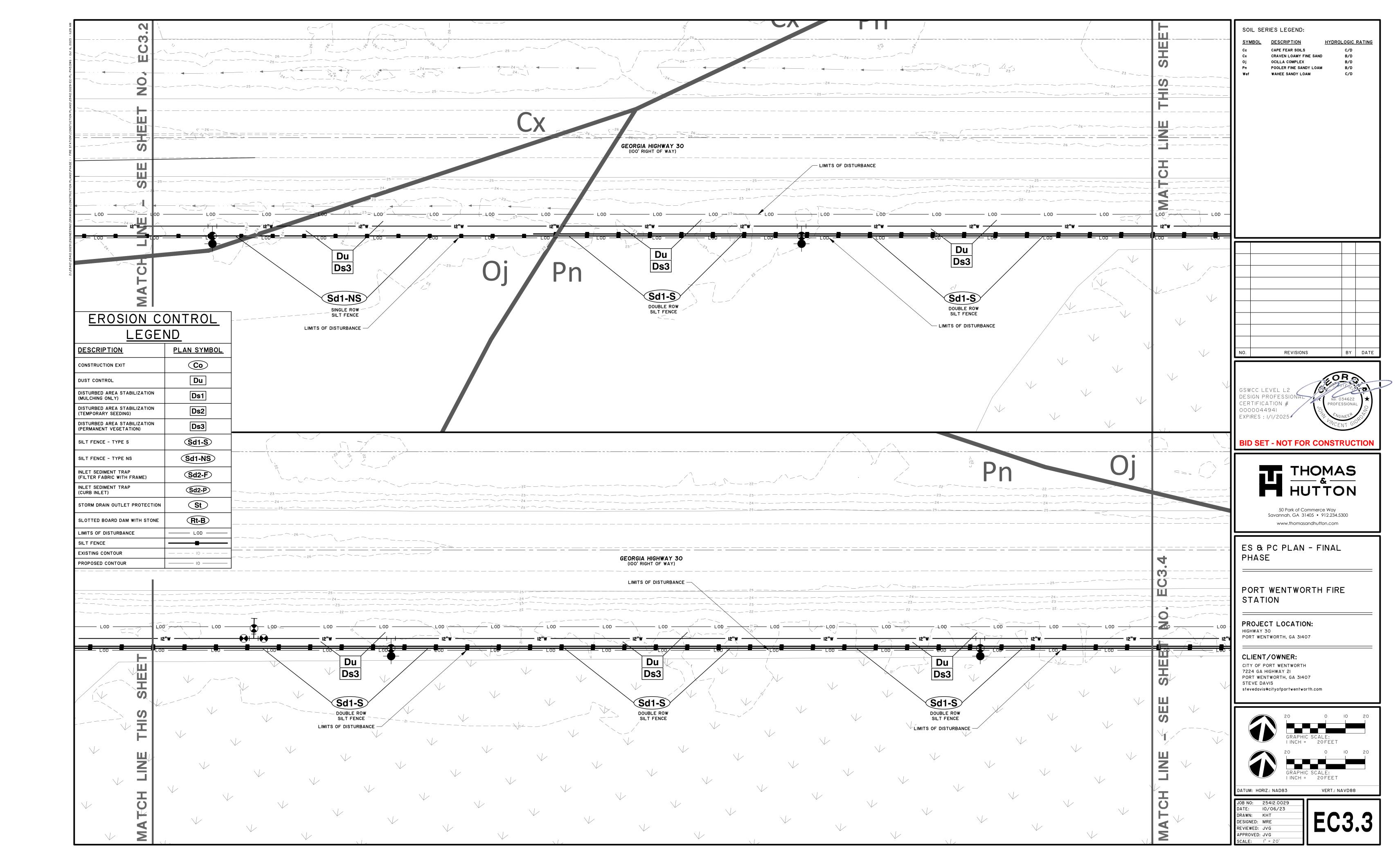


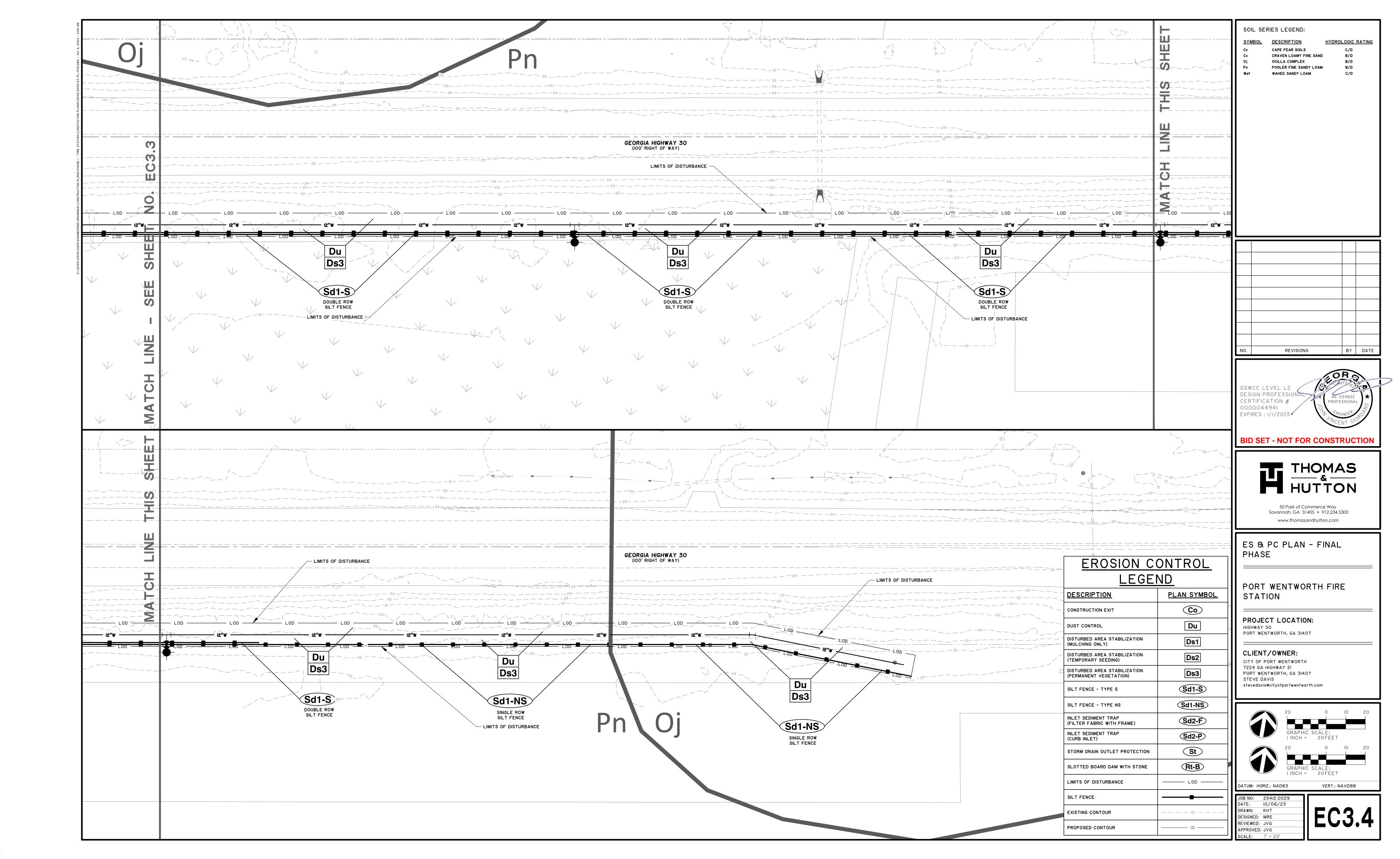












		RATE P	ER ACRE		RATE	PER ACRE
MONTH	TEMPORARY COVER	SEEDED ALONE	ADDED TO MIX	PERMANENT COVER	SEEDED ALONE	ADDED TO MIX
JANUARY	* LESPEDEZA, ANNUAL * RYE * RYEGRASS, ANNUAL * WHEAT	40 lbs. 3 bu. 40 lbs. 3 bu.	IO lbs. .5 bu. - .5 bu.	* BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD LESPEDEZA, SERICEA 1	60 lbs. 10 lbs. - 75 lbs.	30 lbs. 6 lbs. - -
FEBUARY	LESPEDEZA, ANNUAL *LOVEGRASS, WEEPING *RYE *RYEGRASS, ANNUAL	40 lbs. 4 lbs. 3 bu. 40 lbs.	10 lbs. 2 lbs. .5 bu.	* BAHIA, PENSACOLA CENTIPEDE, SOD LESPEDEZA, SEDICEA LESPEDEZA, SEDICEA LOVEGRASS, WEEPING	60 lbs. - 75 lbs. 75 lbs. 4 lbs.	30 lbs. - - - 2 lbs.
MARCH	* LESPEDEZA, ANNUAL LOVEGRASS, WEEPING * RYEGRASS, ANNUAL * SUDANGRASS	40 lbs. 4 lbs. 40 lbs. 60 lbs.	IO lbs. 2 lbs. - -	BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD * LESPEDEZA, SEDICEA 1 LESPEDEZA, SEDICEA 2 LOVEGRASS, WEEPING	60 lbs. 10 lbs. - 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - - 2 lbs.
APRIL	LOVEGRASS, WEEPING MILLET, BROWNTOP * MILLET, PEARL SUDANGRASS	4 lbs. 40 lbs. 50 lbs. 60 lbs.	2 lbs. 10 lbs. - -	BAHIA, PENSACOLA BERMUDA, HULLED CENTIPEDE, SOD * LESPEDEZA, SEDICEA 2 LOVEGRASS, WEEPING	60 lbs. 10 lbs. - 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - - 2 lbs.
МАҮ	LOVEGRASS, WEEPING MILLET, BROWNTOP MILLET, PEARL SUDANGRASS	4 lbs. 40 lbs. 50 lbs. 60 lbs.	2 lbs. 10 lbs. - -	BAHIA, PENSACOLA BERMUDA, HULLED CENTIPEDE, SOD * LESPEDEZA, SEDICEA 1 LESPEDEZA, SEDICEA 2 LOVEGRASS, WEEPING	60 lbs. 10 lbs 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - - 2 lbs.
JUNE	* LOVEGRASS, WEEPING MILLET, BROWNTOP MILLET, PEARL SUDANGRASS	4 lbs. 40 lbs. 50 lbs. 60 lbs.	2 lbs. 10 lbs. - -	BAHIA, PENSACOLA * BERMUDA, UNHULLED * LESPEDEZA, SEDICEA 1 * LESPEDEZA, SEDICEA 2 * LOVEGRASS, WEEPING	60 lbs. 10 lbs. 75 lbs. 75 lbs. 4 lbs.	30 lbs. 6 lbs. - 2 lbs.
SEE	DING RATES F	OR TE	MPOR.	ARY & PERMAN	IENT C	COVER
	TEMPORARY	RATE PER ACRE		PERMANENT	RATE	PER ACRE
MONTH	COVER	SEEDED ALONE	ADDED TO MIX	COVER	SEEDED ALONE	ADDED TO MIX
JULY	* MILLET, BROWNTOP MILLET, PEARL SUDANGRASS	40 lbs. 50 lbs. 60 lbs.	IO lbs. - -	* BAHIA, PENSACOLA * LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
AUGUST	* MILLET, PEARL * RYEGRASS, ANNUAL	50 lbs. 40 lbs.	- -	* BAHIA, PENSACOLA * LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
SEPTEMBER	* BARLEY * OATS * RYE RYEGRASS, ANNUAL * WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. I bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
OCTOBER	BARLEY OATS RYE RYEGRASS, ANNUAL WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. I bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA LESPEDEZA, SEDICEA 1	60 lbs. 75 lbs.	30 lbs. -
NOVEMBER	BARLEY OATS RYE RYEGRASS, ANNUAL WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. I bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD LESPEDEZA, SEDICEA 1	60 lbs. 10 lbs. - 75 lbs.	30 lbs. 6 lbs. - -
DECEMBER	BARLEY OATS RYE RYEGRASS, ANNUAL WHEAT	3 bu. 4 bu. 3 bu. 40 lbs. 3 bu.	.5 bu. I bu. .5 bu. - .5 bu.	* BAHIA, PENSACOLA BERMUDA, UNHULLED CENTIPEDE, SOD LESPEDEZA, SEDICEA 1	60 lbs. 10 lbs. - 75 lbs.	30 lbs. 6 lbs. - -

NOTES

ALL PERMANENT GRASS PLANTINGS SHALL BE MULCHED

* INDICATES MARGINAL (BUT PERMISSIBLE) PLANTING DATE 1. UNSCARIFIED

2. SCARIFIED

3. CENTIPEDE SOD CAN BE USED AS PERMANENT COVER ANYTIME EXCEPT JUNE THRU OCTOBER

FERTILIZER REQUIREMENTS

FERTILIZER REQUIREMENTS					
TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE	
I. COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500lbs./ac. 1000lbs./ac. 400 lbs./ac.	50-100 lbs./ac. * 1 & 2	
2. COOL SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 0-10-10 0-10-10	500 bs./ac. 000 bs./ac. 400 bs./ac.	50-100 lbs./ac. * 1	
3. GROUND COVERS	FIRST SECOND MAINTENANCE	10-10-10 10-10-10 10-10-10	300 bs./ac. * 3 300 bs./ac. * 3 100 bs./ac.		
4. PINE SEEDLINGS	FIRST	20-10-5	ONE 2I-GRAM PELLET PER SEEDLING PLACED IN THE CLOSING HOLE	-	
5. SHRUB LESPEDEZA	FIRST MAINTENANCE	0-10-10 0-10-10	700lbs./ac. 700lbs./ac. * 4	-	
6. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500lbs./ac.	30 lbs./ac. * 5	
7. WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500lbs./ac. 800lbs./ac. 400 lbs./ac.	50-100 lbs./ac. * 2 & 6 50-100 lbs./ac. 30 lbs./ac. * 2	
8. WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 0-10-10 0-10-10	1500lbs./ac. 1000lbs./ac. 400 lbs./ac.	50-100 lbs./ac. * 6	

- * 1 APPLY IN SPRING FOLLOWING SEEDING.
- * 2 APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
- * 3 APPLY IN 3 SPLIT APPLICATIONS. * 4 APPLY WHEN PLANTS ARE PRUNED
- * 5APPLY TO GRASS SPECIES ONLY.
- *6 APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

DUST CONTROL

DEFINITION: CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON LAND-DISTURBING

PURPOSE: PREVENT THE MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND PREVENT THE MOVEMENT OF AIRBORNE SUBSTANCES THAT MAY BE HARMFUL TO HEALTH.

TEMPORARY METHODS	PERMANENT METHODS
- MULCHES - TEMPORARY VEGETATIVE COVER - SPRAY ON ADHESIVES	- PERMANENT VEGETATION - TOPSOILING - STONE COVER
- TILLAGE - IRRIGATION - BARRIERS - CALCIUM CHLORIDE	

APPLY ACCORDING TO APPROVED PLAN, IF SHOWN. MULCH DISTURBED AREAS AND TACKIFY WITH REDSINS SUCH AS ASPHALT, CURASOL OR TERRATACK ACCORDING TO MANUFACTURES RECOMMENDATIONS. STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT VEGETATION. COVER SURFACES WITH CRUSHED STONE OR GRAVEL. APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACES MOIST. APPLY SPRAY-ON ADHESIVES TO MINERAL SOILS (NOT MUCK SOILS AS

TABLE I.	SPRAY-ON	ADHESIVE	APPLICATIO	N REQUIREMENTS

ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL / ACRE)
ANIONIC ASPHALT EMULSION	7: *	COARSE SPRAY	1,200
LATEX EMULSION	I2.5:I *	FINE SPRAY	235
RESIN-IN- WATER EMULSION	4:1 *	FINE SPRAY	300

MAINTENANCE: PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING. SUPPLEMENT SURFACE COVERING AS NEEDED.

OCT. 2008 THOMAS & HUTTON



EROSION CONTROL LEGEND DESCRIPTION PLAN SYMBOL Cd-S CHECK DAM (STONE) Co CONSTRUCTION EXIT Du DUST CONTROL DISTURBED AREA STABILIZATION Ds1 (MULCHING ONLY) DISTURBED AREA STABILIZATION Ds2 (TEMPORARY SEEDING) DISTURBED AREA STABILIZATION Ds3 (PERMANENT VEGETATION) DISTURBED AREA STABILIZATION Ds4 Rt-P PERFORATED HALF-ROUND PIPE Sd1-S SILT FENCE - TYPE S INLET SEDIMENT TRAP Sd2-F (FILTER FABRIC WITH FRAME) INLET SEDIMENT TRAP Sd2-G INLET SEDIMENT TRAP Sd2-P Sd1-NS SILT FENCE - TYPE NS Tr TREE PROTECTION LIMITS OF DISTURBANCE ____ LOD ____ SILT FENCE **EXISTING CONTOUR** _____ PROPOSED CONTOUR _____ IO ____

© CRUSHED STONE CONSTRUCTION EXIT EXIT DIAGRAM CULVERT UNDER ENTRANCE (IF NEEDED) DIVERSION RIDGE (SEE NOTE 6) N.S.A. R-2 (I.5"-3.5") COARSE AGGREGATE GEOTEXTILE UNDERLINER **ENTRANCE ELEVATION** SUPPLY WATER TO WASH -WHEELS IF NECESSARY GEOTEXTILE UNDERLINER

AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.

REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE. 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).

4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6". 5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.

A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.. . INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.

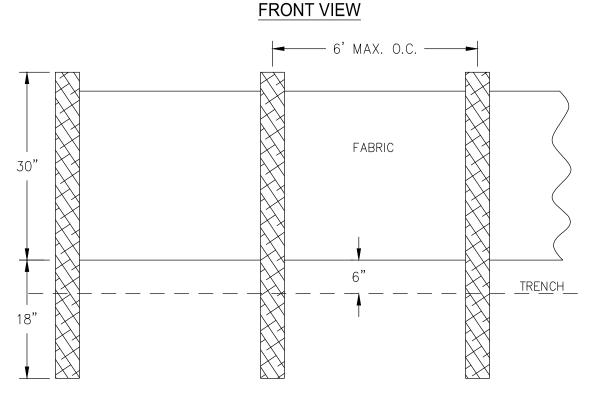
WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).

WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.

O.MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Sd1-NS

SILT FENCE - TYPE NON-SENSITIVE



1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION,

AND POLLUTION CONTROL PLAN. 2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

THIS STANDARD APPLIES TO GRADED OR CLEARED AREAS WHERE SEEDINGS MAY NOT

HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER.

I. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.

SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:

I. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING

COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.

2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3

INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN

ON SITE, BE CHIPPED, AND APPLIED AS MULCH, THIS METHOD OF MULCHING CAN GREATLY

3. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL

WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL

I. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND

THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.

2. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS

OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET

I. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK

SET STRAIGHT OR WITH A SPECIAL "PACKER DISK." DISKS MAY BE SMOOTH OR SERRATED AND

SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE

DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL

LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED

FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND RE-USED.

2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS,

BUT CAN BE STABILIZED WITH A MULCH COVER.

BERMS, TERRACES, AND SEDIMENT BARRIERS.

REDUCE EROSION CONTROL COSTS.

COVERAGE OF THE EXPOSED AREA.

IMMEDIATELY AFTER APPLICATION.

3. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

OR BY MECHANICAL EQUIPMENT.

3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

SITE PREPARATION

MULCHING MATERIALS

APPLYING MULCH

ANCHORING MULCH

REVISIONS BY DATE GSWCC LEVEL L2 DESIGN PROFESSIONA CERTIFICATION # 0000044941 EXPIRES: 1/1/2025

BID SET - NOT FOR CONSTRUCTION



50 Park of Commerce Way Savannah, GA 31405 • 912.234.5300 www.thomasandhutton.com

ES & PC DETAILS

PORT WENTWORTH FIRE STATION

PROJECT LOCATION: HIGHWAY 30

PORT WENTWORTH, GA 31407

CLIENT/OWNER: CITY OF PORT WENTWORTH 7224 GA HIGHWAY 21

PORT WENTWORTH, GA 31407 912.964.4379 stevedavis@cityofportwentworth.com

STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED. TACKIFERS, BINDERS, AND HYDRAULIC MULCH WITH TACKIFER SPECIFICALLY DESIGNED FOR TACKING STRAW CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION TAC-TACKIFERS. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. 2. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS. 3. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

DATUM: HORIZ.: NAD83

DRAWN: DESIGNED: REVIEWED: APPROVED:

VERT.: NAVD88

LIME RATES AND ANALYSIS <u>SPECIFICATIONS: MULCHING WITHOUT SEEDING</u> * AGRICULTURAL LIME SHALL BE APPLIED AT THE RATE OF ONE TO TWO TONS PER

ACRE UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE.

Ds1

MULCHING RATE

REQUIRED.

MULCHING (MULCHING IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE

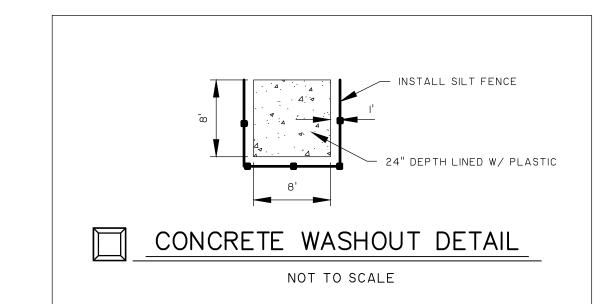
MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED: DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED DRY STRAW SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE. DRY HAY SHALL BE APPLIED AT THE RATE OF 2 1/2 TONS PER ACRE.

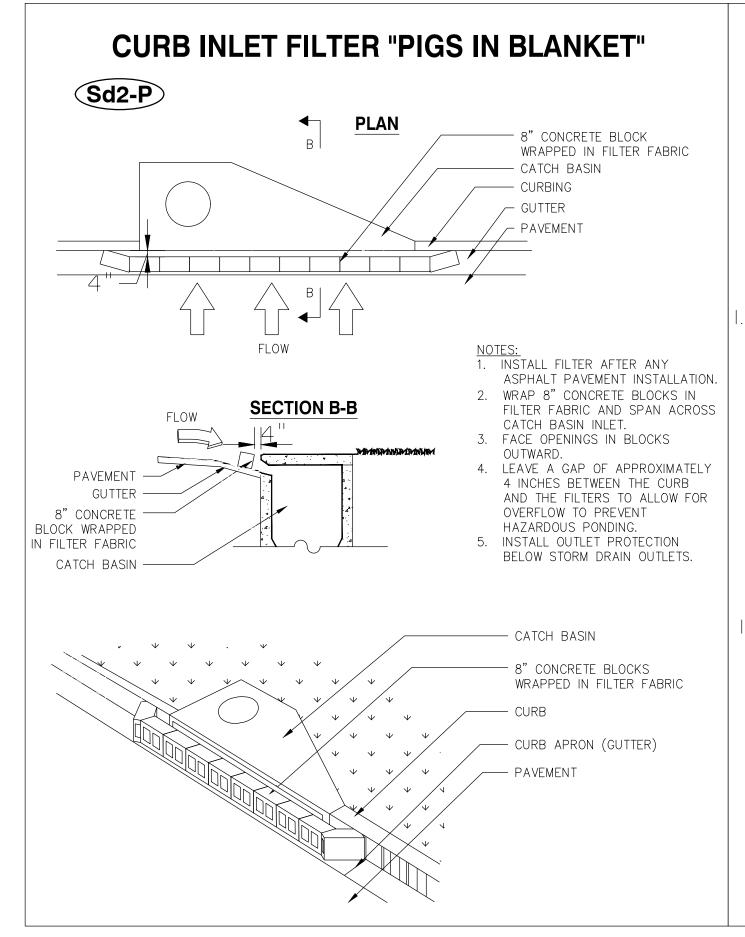
 WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED BELOW) AFTER HYDRAULIC SEEDING.

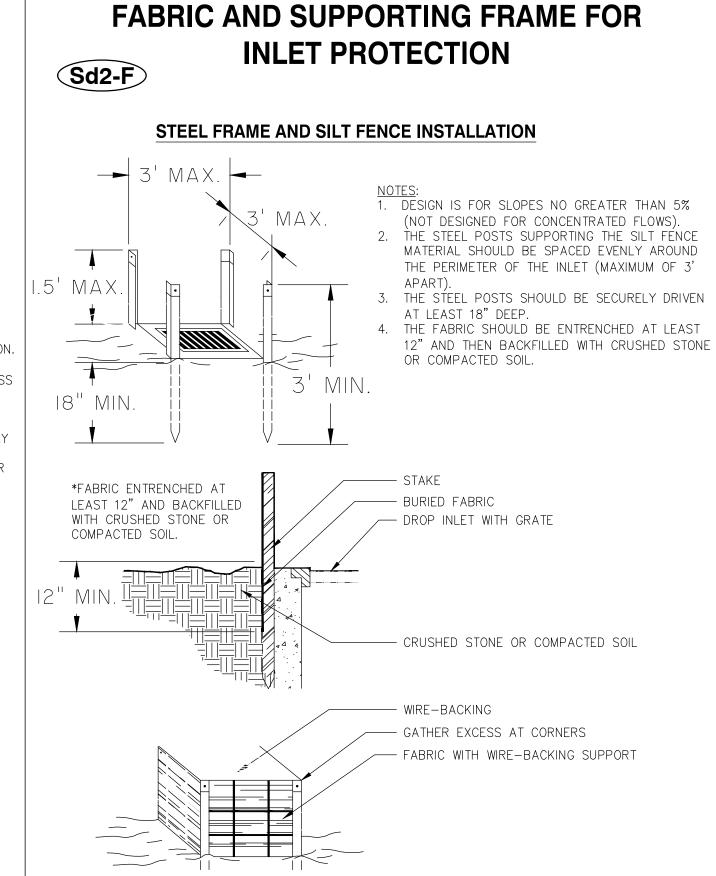
 ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 4:1 OR STEEPER. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE

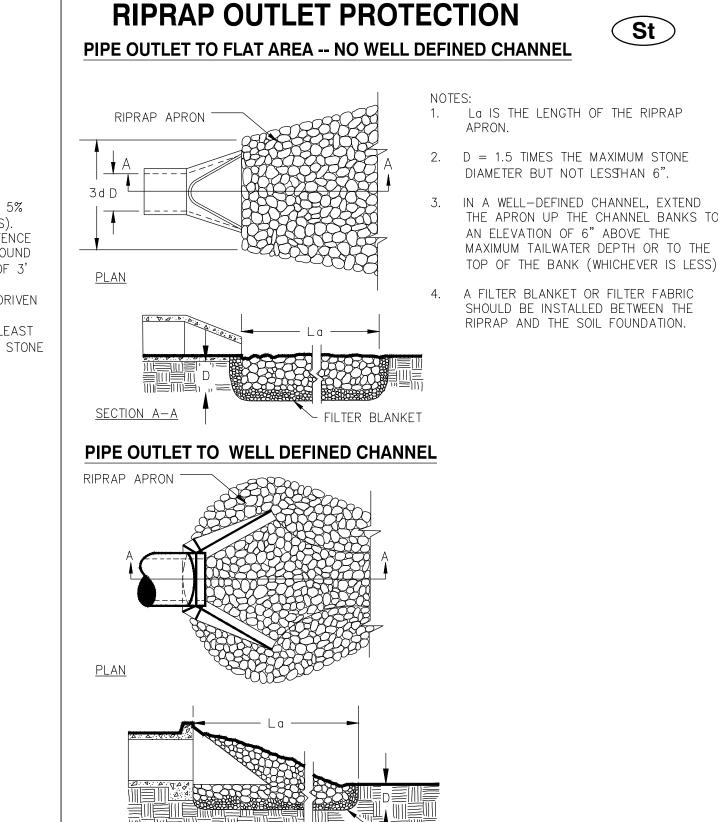
O 3 TONS PER ACRE. • PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT

APPROPRIATE FOR SEEDED AREAS. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLACK SOD, MULCH IS NO





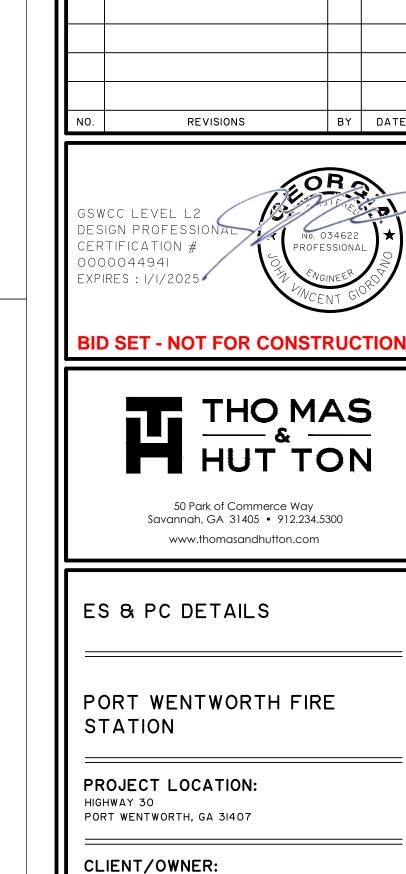


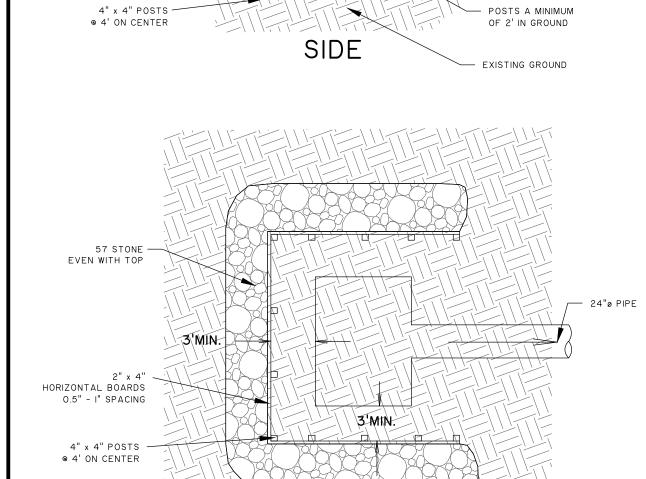


Sd1-S SILT FENCE - TYPE SENSITIVE

SIDE VIEW

SECTION A-A





EMBED 2" x 4" ── BOARDS 12" INTO THE SIDESLOPE

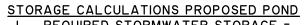
HORIZONTAL BOARDS 0.5" - I" SPACING

EVEN WITH TOP

SLOTTED BOARD DAM WITH STONE

— EXISTING GROUND

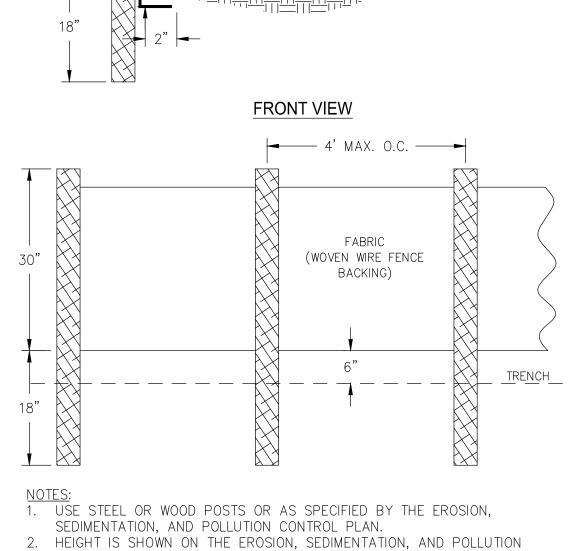
NOT TO SCALE



- I. REQUIRED STORMWATER STORAGE = O CY
- 2. REQUIRED SEDIMENT STORAGE = 194.97 CY (67 CY/AC X 2.91 AC. DISTURBED AREA)
 3. TOTAL REQUIRED STORAGE = 0 + 194.97 = 194.97 CY
- 4. AVAILABLE STORAGE = <u>542.5</u> CY
- 5. IS THE AVAILABLE STORAGE (4) GREATER THAN THE TOTAL REQUIRED STORAGE (3) <u>X</u> YES _____ NO
- 6. IF "NO", THE SEDIMENT STORAGE CAPACITY OF THE POND MUST BE INCREASED. CHOOSE THE METHOD TO BE USED:
- N/A RAISE THE INVERT OF THE OUTLET STRUCTURE ____ INCHES
- N/A UNDERCUT THE POND _____ FEET _ OTHER _
- 7. CLEAN-OUT ELEVATION = <u>I</u> FEET (ELEVATION CORRESPONDING TO 22 CY/AC * 2.91 AC OF DISTURBED AREA)
- 8. IS THE LENGTH-WIDTH RATIO 2:1 OR GREATER?
- 9. IF "NO", THE LENGTH OF FLOW MUST BE INCREASED. CHOOSE THE METHOD TO BE USED: N/A BAFFLES (TYPE OF BAFFLE: ___

N/A OTHER NOTE THE CMP DIAMETER AND HEIGHT IF A HALF-ROUND CMP RETROFIT IS TO BE USED. DIAMETER = N/A INCHES HEIGHT = <u>N/A</u> FEET

FRONT VIEW **→** 4' MAX. O.C. **→** (WOVEN WIRE FENCE BACKING) TRENCH_



CONTROL PLAN.

DATUM: HORIZ.: NAD83 VERT.: NAVD88

DRAWN: DESIGNED: REVIEWED: APPROVED:

CITY OF PORT WENTWORTH

PORT WENTWORTH, GA 31407-2001

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