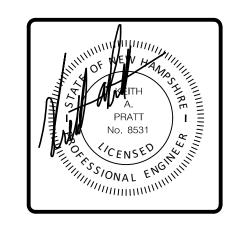


City of Portsmouth, New Hampshire For Construction LITTLE BAY ROAD WATER IMPROVEMENTS NEWINGTON, NH



PREPARED BY UNDERWOOD ENGINEERS, INC. PORTSMOUTH, NEW HAMPSHIRE AUGUST 28, 2024

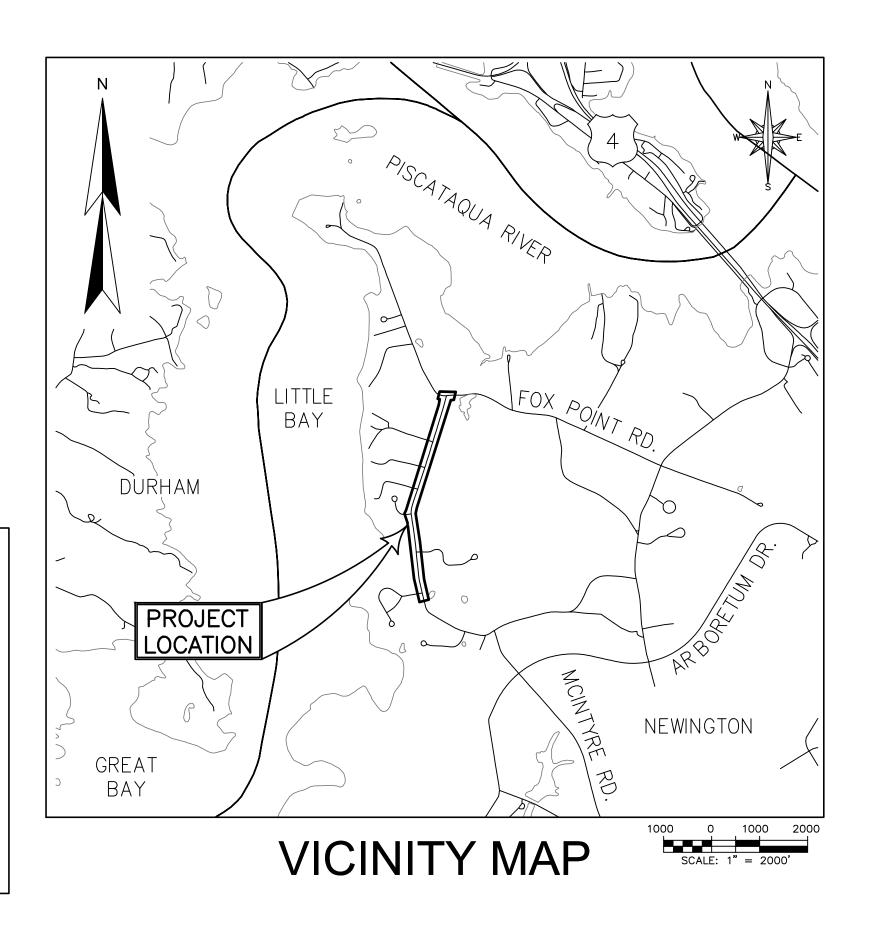
ROCHETTE No. 13457 CENSE



LOCATION

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GENERAL NOTES:

1. THE LINE WORK REPRESENTING THE EXISTING UNDERGROUND STRUCTURES AND PIPES IS BASED ON A FIELD SURVEY. TIE SHEETS. AND OTHER INFORMATION AVAILABLE. INCLUDED IN THE PROJECT MANUAL APPENDIX. THE ENGINEER/SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN ON THE PLANS OR THE PROJECT MANUAL APPENDIX COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE ENGINEER/SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. UG TELEPHONE DUCTS ARE LOCATED BASED ON SURVEY, TELEPHONE SCHEMATICS AND RANDOM TEST PITTING. CONTRACTOR SHALL CONFIRM LOCATION AND DEPTH AT UTILITY CROSSINGS. IN ADDITION, CONTRACTOR SHALL ANTICIPATE THAT EVERY BUILDING OR UNIT WITHIN THE PROJECT AREA HAS A LEAST ONE GAS, SEWER AND WATER SERVICE EXTENDING FROM THE MAIN IN THE STREET TO THE BUILDING. THEREFORE THE CONTRACTOR SHOULD CONSIDER CONFLICTS, HAND EXCAVATION AND POSSIBLE DELAYS IN CONSTRUCTION, WHEN PREPARING THEIR BID.

2. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION, PROTECTION AND REPAIR (IF DAMAGED) OF ALL EXISTING UTILITY MAINS AND SERVICES. THE LOCATIONS OF KNOWN SEWER. WATER AND GAS, MAINS, SHOWN ON THESE DRAWINGS ARE APPROXIMATE. HOWEVER, WATER SERVICE LATERALS ARE NOT ALL SHOWN AND THE CONTRACTOR IS TO ANTICIPATE THEIR EXISTENCE. NOTIFY DIG-SAFE PRIOR TO COMMENCING CONSTRUCTION (1-888-344-7233). CONTRACTOR SHALL GIVE ADEQUATE NOTICE TO THE ENGINEER OF CONFLICTS OF PROPOSED WORK WITH MARKED UTILITIES PRIOR TO CONSTRUCTING THE PROPOSED WORK.

3. THE CONTRACTOR SHALL MAINTAIN SINGLE LANE TRAFFIC AND ACCESS TO BUSINESSES AND PROPERTIES AT ALL TIMES DURING WORKING HOURS. TRAFFIC CONTROL WARNING DEVICES SHALL BE IN ACCORDANCE WITH MUTCD (LATEST EDITION) REQUIREMENTS AND SECTION 01570 OF THE PROJECT MANUAL.

4. ALL STREET OPENINGS SHALL BE BACKFILLED AT THE END OF EACH DAYS OPERATIONS TO ENSURE SAFE VEHICULAR AND PEDESTRIAN TRAFFIC. THE CONTRACTOR SHALL MAINTAIN SAFE PASSAGE FOR 2-LANES OF TRAFFIC AT THE END OF EACH WORK DAY. DUST CONTROL OPERATIONS ARE TO BE CONTINUOUS THROUGHOUT CONSTRUCTION AND IS INCIDENTAL TO THE WORK.

5. THE USE OF PLATES TO COVER OPEN EXCAVATIONS IN LIEU OF BACKFILLING WILL NOT BE PERMITTED UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE OWNER.

6. A NPDES PERMIT FOR CONSTRUCTION ACTIVITIES IS REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS REQUIRED TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND TO SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA TO FULFILL PROJECT REQUIREMENTS. THE SWPPP MUST BE PREPARED IN ACCORDANCE WITH THE EPA'S REQUIREMENTS. NO WORK IS TO PROCEED UNTIL THE SWPPP AND THE NOI IS SUBMITTED AND ACCEPTED BY THE OWNER. A COPY OF THE NOI, SWPPP REQUIREMENTS, AND EXAMPLE SWPPP ARE INCLUDED IN THE PROJECT MANUAL APPENDIX.

7. THIS SET OF PLANS HAS BEEN CREATED TO BE USED IN CONJUNCTION WITH A TECHNICAL SPECIFICATION ENTITLED "PROJECT MANUAL, LITTLE BAY ROAD WATER IMPROVEMENTS, PORTSMOUTH, NH".

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL SURPLUS EARTHEN MATERIALS, LEDGE, CURB, PIPE, AND SEWER OR DRAIN STRUCTURES EXCAVATED DURING CONSTRUCTION, UNLESS MATERIALS ARE CLAIMED BY THE OWNER OR OTHERWISE INDICATED IN THE PROJECT MANUAL OR THE DRAWINGS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROPERTY RESTORATION BOTH PUBLIC AND PRIVATE. UTILITIES DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

10. TEMPORARY PAVING REPAIRS SHALL MAINTAIN EXISTING LINE AND GRADE UNLESS OTHERWISE INDICATED OR DIRECTED.

11. OVERHEAD WIRES AND WIRE DROPS TO BUILDINGS ARE NOT SHOWN IN ENTIRETY. THE CONTRACTOR SHALL ANTICIPATE THEIR EXISTENCE IN ALL OPERATIONS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ROADWAY SIGNS. ANY SIGN DAMAGED DURING THE COMPLETION OF WORK SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

13. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

14. CONTRACTOR SHALL NOT USE ANY ADJACENT DRIVEWAYS OR PARKING LOTS WITHOUT WRITTEN PERMISSION FOR PROPERTY OWNER. DAMAGE RESULTING FROM CONSTRUCTION LOADS OUTSIDE PROPOSED LIMITS OF WORK SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.

SURVEY NOTES:

LEAST SQUARE ANALYSIS.

1. REFERENCE:

- UTILIZING THE KEYNET GPS VRS NETWORK.
- 4. VERTICAL DATUM IS BASED ON APPROXIMATE NAVD88(GEOID12A) $(\pm .2')$ VRS NETWORK.
- 5. JURISDICTIONAL WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. DURING FEBRUARY, 2024 USING THE FOLLOWING STANDARDS: • REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND

 - STATES DEPARTMENT OF AGRICULTURE (2018).
 - LOWELL, MA.
 - VERSION 3.5. (2020)
- CONTOURS AT 2' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
- UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVED PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
- 8. THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING; THE ABILITY TO MANHOLE CONFIGURATION, ETC.
- 9. ALL UNDERGROUND UTILITIES (ELECTRIC, GAS, TEL. WATER, SEWER DRAIN LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.
- 10. OVERALL PARCEL BOUNDARIES AS SHOWN HEREON ARE BASED ON NH GRANIT GIS DATA AND ARE IN THEIR ORIGINAL LOCATION.

SURVEY CONTROL DATA:

DOUCET SURVEY CONTROL DATA					
POINT	NORTHING	EASTING	ELE VA TION	DESCRIPTION	
84260002	219283.498	1202526.320	58.62	MAG NAIL SET	
84260003	219592.246	1202434.906	61.29	MAG NAIL SET	
84260007	220994.946	1202259.558	45.93	MAG NAIL SET	
84260010	221655.081	1202483.286	50.32	MAG NAIL SET	
84260014	223136.541	1202923.278	36.82	MAG NAIL SET	
84260050	223434.534	1203029.098	33.19	MAG NAIL SET	

WATER DISTRIBUTION SYSTEM NOTES:

LITTLE BAY ROAD NEWINGTON, NH

2. FIELD SURVEY PERFORMED BY M.A.W. & C.J.V. (DOUCET SURVEY) DURING FEBRUARY, 2023 USING A TOTAL STATION AND A SURVEY GRADE GPS WITH A DATA COLLECTOR AND A DIGITAL LEVEL. TRAVERSE ADJUSTMENT BASED ON

3. HORIZONTAL DATUM BASED ON NAD83(2011) NEW HAMPSHIRE STATE PLANE COORDINATE ZONE (2800) DERIVED FROM REDUNDANT GPS OBSERVATIONS

DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS

DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS. • FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.2. UNITED

• NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2020 VERSION 4. FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION,

• U.S. ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLANT LIST,

6. PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE DIMINISH THE INTEGRITY OF THE DATA, AND DOUCET SURVEY WILL NOT BE

MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS,

SERVICES) ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE

1. THE CONTRACTOR SHALL MAINTAIN WATER SERVICE TO RESIDENTS AT ALL TIMES. CONTRACTOR SHALL PROVIDE TEMPORARY BYPASS PIPING TO MAINTAIN WATER SERVICE AND MINIMIZE INTERRUPTIONS. TEMPORARY INTERRUPTIONS IN WATER SERVICE TO HOMEOWNERS AND BUSINESS OWNERS SHALL BE SCHEDULED ONE WEEK (5 BUSINESS DAYS) IN ADVANCE, WITH CITY OF PORTSMOUTH WATER DEPARTMENT. HOMEOWNERS AND BUSINESS OWNERS SHALL BE GIVEN 2 BUSINESS DAYS (48 HOURS) VERBAL AND WRITTEN NOTICE OF ANY SCHEDULED SERVICE INTERRUPTIONS.

2. NEW AND EXISTING WATER BOXES. OR OTHER CASTINGS TO REMAIN IN PLACE THAT ARE DISTURBED OR RELOCATED BY CONSTRUCTION ACTIVITIES SHALL BE ADJUSTED TO EXISTING LINE AND GRADE, UNLESS SHOWN OTHERWISE ON THESE PLANS OR AS DIRECTED BY THE ENGINEER (SUBSIDIARY).

3. ALL EXISTING WATER PIPE IDENTIFIED AS ABANDONED SHALL BE DEMOLISHED AS FOLLOWS: CAP PIPE AT EACH END AND ABANDON IN PLACE UNLESS REMOVAL IS REQUIRED BECAUSE OF OTHER INTERFERENCES (INCIDENTAL). ASBESTOS PIPE ENCOUNTERED IN THE EXCAVATION. THAT IS IN CONFLICT WITH THE PROPOSED WORK. SHALL BE REMOVED PER PAY ITEM 6.9.

4. ALL SERVICES SHALL BE 1" COPPER UNLESS INDICATED OR DIRECTED OTHERWISE.

5. ALL GATE VALVES SHALL HAVE RESTRAINED MECHANICAL JOINTS AND OPEN RIGHT. (CLOCKWISE)

6. ALL TEES, BENDS, GATE VALVES AND CAPS SHALL BE CONSTRUCTED USING MECHANICAL RESTRAINT JOINTS, FULLY DEVELOPED THRUST RESTRAINED LENGTH. AND THRUST BLOCKS, SUBSIDIARY TO WATER WORK.

7. MAINTAIN A MINIMUM 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAIN AND SEWER PIPING. NOTIFY ENGINEER OF ANY DISCREPANCY.

8. WRAP ALL NEW WATER MAINS IN POLYETHYLENE ENCASEMENT (8 MILS. MINIMUM THICKNESS), SUBSIDIARY TO ITEM 3.1.08.

9. PROVIDE BRASS WEDGES AT ALL PUSH ON JOINTS. PROVIDE A MINIMUM OF 3 WEDGES FOR PIPES LESS THAN OR EQUAL TO 12" DIAMETER. PROVIDE A MINIMUM OF 4 WEDGES FOR PIPES GREATER THAN 12" DIAMETER.

CONSTRUCTION SEQUENCE:

PERFORM WORK IN ACCORDANCE WITH APPROVED SCHEDULE, GENERALLY ACCEPTED INDUSTRY ORDER OF OPERATIONS UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER.

PRIOR TO THE START OF CONSTRUCTION PROVIDE A WRITTEN NARRATIVE OF THE CONSTRUCTION METHODS TO BE USED AND INCLUDE A PRELIMINARY SCHEDULE OF KEY MILESTONES, INCLUDING COORDINATION OF UTILITY PIPE INSTALLATIONS AND COORDINATION WITH GAS COMPANY, AND OTHER UTILITIES AS APPLICABLE.

2. REFER TO SECTION 01010 (SUMMARY OF WORK) AND SECTION POW (PROSECUTION OF WORK) FOR ADDITIONAL SCHEDULE AND PROJECT REQUIREMENTS.

3. INSTITUTE EXPLORATORY EXCAVATION PROGRAM WITH ENGINEER AS NECESSARY TO IDENTIFY POTENTIAL CONFLICTS AT UTILITY CROSSINGS. EXPLORATORY EXCAVATION COMPLETED WITHOUT PRIOR APPROVAL FROM THE ENGINEER WILL BE AT NO ADDITIONAL COST TO THE OWNER.

4. DISPOSE OF SURPLUS AND UNSUITABLE MATERIALS AS THE WORK PROGRESSES. STOCKPILE OF MATERIALS WILL ONLY BE PERMITTED IN AREAS APPROVED BY THE CITY OF PORTSMOUTH, DPW.

5. INSTALL AND MAINTAIN TEMPORARY AND PERMANENT EROSION CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PERIOD (INCLUDING WINTER SHUT DOWN PERIODS AS REQUIRED) AS SHOWN IN THE APPROVED SWPPP. ON THE DRAWINGS. OR AS APPROVED BY THE ENGINEER.

6. PRE-DRAIN AND/OR DEWATER EXCAVATIONS BEFORE INSTALLING PIPE. INSTALL PIPE ON STABLE BEDDING (IN DRY CONDITIONS) TO THE ELEVATIONS SHOWN ON DRAWINGS.

7. IMMEDIATELY STABILIZE DISTURBED AREAS AFTER PIPE INSTALLATION AND REESTABLISH TEMPORARY EROSION CONTROL DEVICES MOVED DURING CONSTRUCTION.

8. INSTALL CRUSHED GRAVEL OR RECLAIMED BASE AS SHOWN ON DRAWINGS, IN TRENCH AT END OF EACH DAY. CONSTRUCT PAVEMENT TRENCH REPAIRS AS SOON AS PRACTICAL, FOLLOWING UTILITY INSTALLATIONS AND TESTING.

9. RESTORE ALL DRAINAGE SWALES AND CULVERT PIPES IMMEDIATELY AFTER PIPE INSTALLATION. DRAINAGE CROSS CULVERTS TO REMAIN DAMAGED AS A RESULT OF CONTRACTOR'S OPERATIONS SHALL BE SATISFACTORILY REPAIRED AT NO ADDITIONAL COST TO THE OWNER.

10. FINISH GRADING, LOAM AND SEED DISTURBED AREAS AND BACK UP PAVEMENT WITH GRAVEL IMMEDIATELY FOLLOWING PAVEMENT REPAIRS.

11. REMOVE ALL TEMPORARY EROSION CONTROL DEVICES AS SOON AS VEGETATION IS ESTABLISHED AND AREAS ARE STABILIZED.

WA	TER KEY NOTES:
(1)	CONNECT NEW 1" WATER SERVICE AT EXISTING CURB STOP LOCATION UNLESS OTHERWISE NOTED
(1A)	EXISTING SERVICE LOCATION UNKNOWN. CONTRACTOR TO LOCATE AND CONNECT NEW 1" WATER SERVICE AT EXISTING CURB STOP LOCATION UNLESS OTHERWISE NOTED.
2	CONNECT NEW 2" WATER SERVICE AT EXISTING CURB STOP LOCATION UNLESS OTHERWISE NOTED
(2A)	EXISTING SERVICE LOCATION UNKNOWN. CONTRACTOR TO LOCATE AND CONNECT NEW 2" WATER SERVICE AT EXISTING CURB STOP LOCATION UNLESS OTHERWISE NOTED.
3	PROPOSED WATER SERVICES SHALL BE INSTALLED UNDER EXISTING WATER.
4	ABANDON EXISTING VALVE IN PLACE IN THE CLOSED POSITION AND REMOVE VALVE BOX COVER.
5	REMOVE HYDRANT AND ASSOCIATED VALVES
6	INSTALL HYDRANT ASSEMBLY INCLUDING ANCHORING TEE, 6" BRANCH PIPING, AND 6" GATE VALVE.

FURNISH AND INSTALL 8" GATE VALVE AND VALVE BOX, ITEM 3.5.08.

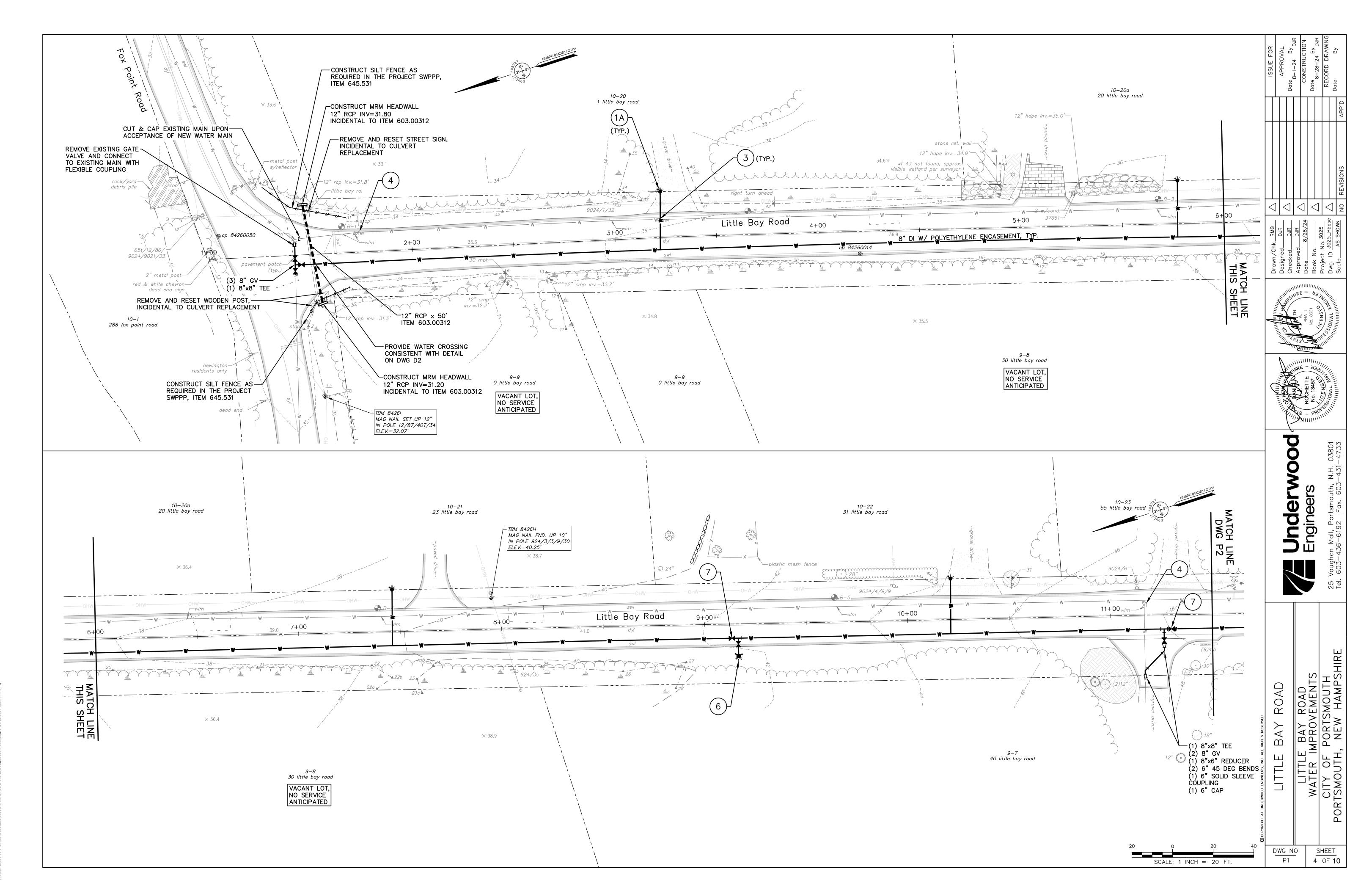
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MATER IMPROVEMENTS EnglicedS No. 13457 No. 134576 No. 13457 No. 13457				PRATT	Date 8/28/24		Ŭ	CONSTRUCTION
Here CENSED CENSED CENSED CENSED COMAL	4	WATER IMPROVEMENTS		21 <u>R</u> =		<	Date	Bv
H CITY OF PORTSMOUTH 25 Vaughan Mall, Portsmouth, N.H. 03801 H <th></th> <th></th> <th>ROF</th> <th></th> <th></th> <th></th> <th></th> <th>8-28-24 ² DJR</th>			ROF					8-28-24 ² DJR
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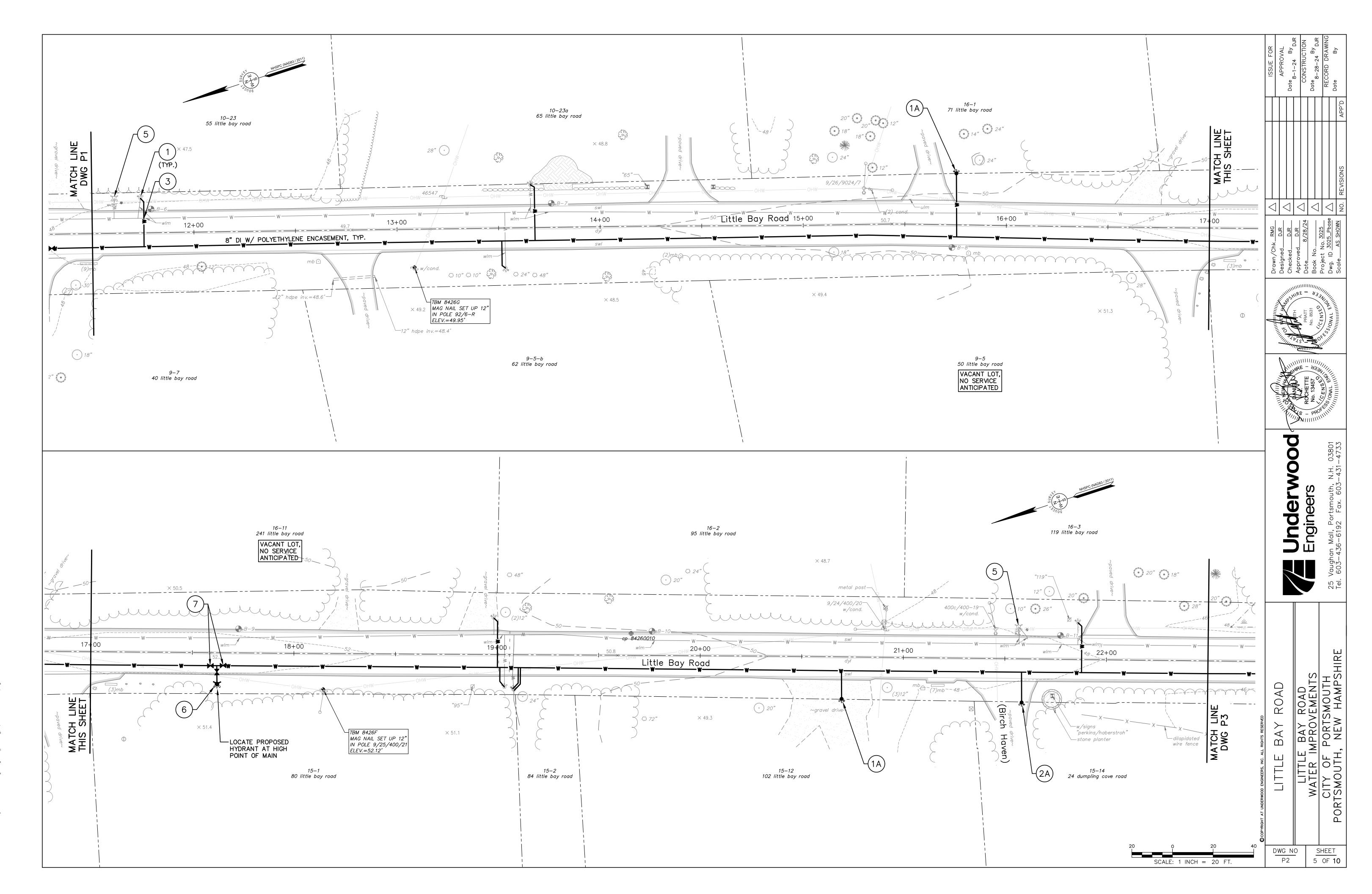
ABBREVIATIONS:

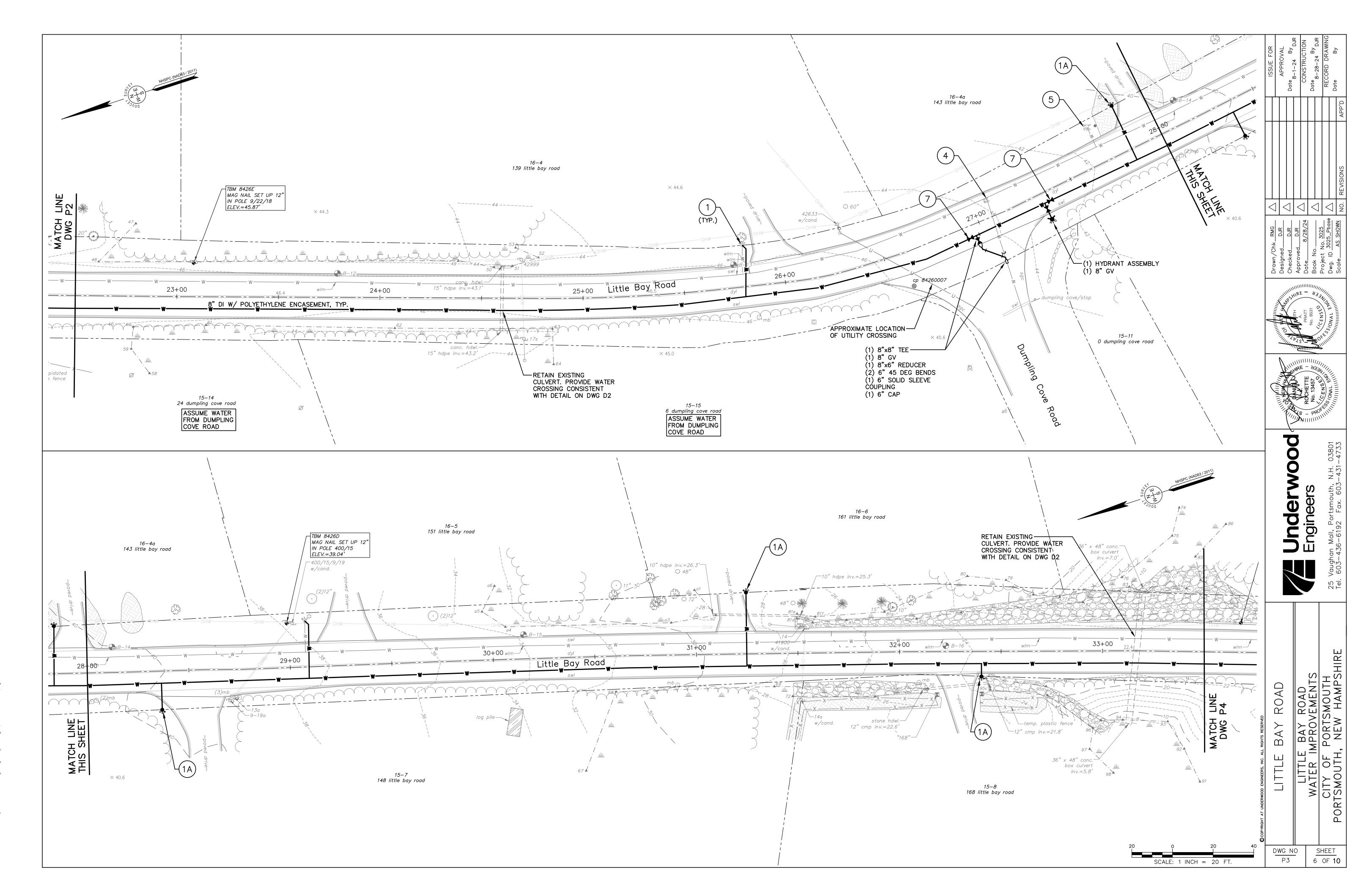
AB AER	ABANDONED AEROBIC (AERATION)	PO PP	POLYMER SOLUTION POTASSIUM PERMANGANATE
AVE	ABOVE FINISHED FLOOR	PS	PRIMARY SLUDGE
ALUM	ALUMINUM	PSF	POUNDS PER SQUARE FOOT
٨N	ANAEROBIC	PSI	POUNDS PER SQUARE INCH
APPROX	APPROXIMATE	PSNH	PUBLIC SERVICE OF NEW HAMPSHIRE
ARCH	ARCHITECTURAL	PT	PRESSURE TREATED
AVG	AVERAGE	PVC	
AX BFP	ANOXIC BACKFLOW PREVENTOR	PVCL PVCU	PVC CHLORINE LINE (VACUUM TUBE CASING) PVC UNDERDRAIN
BIT	BITUMINOUS	PVDR	
3L	BASELINE	PVMT	PAVEMENT
BLDG	BUILDING	PVSA	PVC SAMPLE LINE
СВ	CATCH BASIN	PVSL	PVC SUCTION LINE
ССТ	CHLORINE CONTACT TANK	PW	PLANT WATER
CF	CUBIC FEET	PYCL	· · · · · · · · · · · · · · · · · · ·
CFS	CUBIC FEET PER SECOND	R (RAD)	
CI	CAST IRON PIPE	RAS	RETURN ACTIVATED SLUDGE
CL		RCP	REINFORCED CONCRETE PIPE
CL2 CMH	CHLORINE LINE CHEMICAL MANHOLE	RD RD	ROOF DRAIN ROAD
смн СМР	CORRUGATED METAL PIPE	REM	REMOVE
CONC	CONCRETE	R&D	REMOVE AND DISPOSE
CONST	CONSTRUCT	R&R	REMOVE AND REPLACE
CONT	CONTINUOUS, CONTINUATION	R&S	REMOVE AND SALVAGE
CP	POST CHLORINE PIPE	REF	REFER OR REFERENCE
CRA	CHLORINE RESIDUAL ANALYZER	REQD	REQUIRED
CS	CAUSTIC SODA	RS	RAW SEWAGE
D	DRAIN	ROW	RIGHT OF WAY
DI	DUCTILE IRON	S	MUNICIPAL SEWER
	DIAMETER	S	SLOPE
	DUCTILE IRON PIPE	SA	SAMPLE LINE
	DRAIN MANHOLE	SB	SODIUM BISULFITE
DN DO	DOWN DISSOLVED OXYGEN	SC SCH	SCUM SCHEDULE
EL	ELEVATION	SD	SUMP DISCHARGE
ELEC	ELECTRIC	SE	SECONDARY EFFLUENT
EMER	EMERGENCY	SED	SEDIMENTATION
ENGR	ENGINEER	SEP	SEPTAGE
ENT	ENTRANCE	SEW	SEWAGE
EOP	EDGE OF PAVEMENT	SF	SQUARE FEET
EXIST	EXISTING	SHC	SODIUM HYPOCHLORITE
-DN	FOUNDATION	SHD	SODIUM HYDROXIDE
FF	FINISHED FLOOR	SHT	SHEET
FG	FINISHED GRADE	SI	SECONDARY INFLUENT
FLG	FLANGE	SMH	SEWER MANHOLE
FM FT	FORCE MAIN FOOT OR FEET	S.S.	STAINLESS STEEL SQUARE
GALV	GALVANIZED	SQ ST	STEEL
GAS	PROPANE GAS	STA	STATION
G.C.	GENERAL CONTRACTOR	STD	STANDARD
GEN	GENERATOR	STRS	STAIRS
GHWC	GAS & HOT WATER CONDUIT	STRUCT	STRUCTURAL
GND	GROUND	SUP	SUPERNATANT
GPM	GALLONS PER MINUTE	SW	SEAL WATER
GRD	GRIT DISCHARGE	SYMM	SYMMETRICAL
RO	GRIT OVERFLOW	TBM	TEMPORARY BENCH MARK
IDPE	HIGH DENSITY POLYETHYLENE	TD	
IPS	HIGH PRESSURE SODIUM	TEMP	TEMPORARY
1W JWD	HEADWATER	THK	THICKNESS
IWR IWS	HOT WATER RETURN HOT WATER SUPPLY	TOC TOW	TOP OF CONCRETE TOP OF WALL
1WS N	INCH	TRANS	TRANSFORMER
N NV	INVERT ELEVATION	TWAS	THICKENED WASTE ACTIVATED SLUDGE
.B	POUND	TWAS	TYPICAL
_D _F	LINEAR FEET	UNO	UNLESS NOTED OTHERWISE
GT	LIGHT	V	VOLTS
.PA	LOW PRESSURE AIR	VIF	VERIFY IN FIELD
ANUF	MANUFACTURER	VC	VERTICAL CURVE
/IGD	MILLION GALLONS PER DAY	VCD	VC DRAIN
ИН	MANHOLE	VCP	VITRIFIED CLAY PIPE
۸J	MECHANICAL JOINT	VERT	VERTICAL
ION	MONUMENT	W	WATER
٨W	MUNICIPAL WATER	WAS	WASTE ACTIVATED SLUDGE
	NOT APPLICABLE	WD	WOOD
	NATIONAL GEODETIC VERTICAL DATUM	WI	WROUGHT IRON
N/F	NOW OR FORMERLY	W/ (_)	WITH
NO.		(E)	EAST
	ODOR CONTROL	(N) (S)	NORTH
DD SS	OUTSIDE DIAMETER	(S) (W)	SOUTH
DS PB	OUTLET STRUCTURE	(W) ©	WEST AT (SPACING) NOTE:
- m	PRIMARY BYPASS	Ø	at (spacing) <u>NOTE:</u> diameter
		V/	
PCF	POUNDS PER CUBIC FOOT	•	1. THIS IS A STANDARD LEGEND SHEE
PCF PL PLE	POUNDS PER CUBIC FOOT PROPERTY LINE PLANT EFFLUENT	ዶ # ር	NUMBER1. THIS IS A STANDARD LEGEND SHEENUMBERTHEREFORE SOME ABBREVIATIONS MCENTER LINEAPPEAR ON THIS SHEET AND NOT

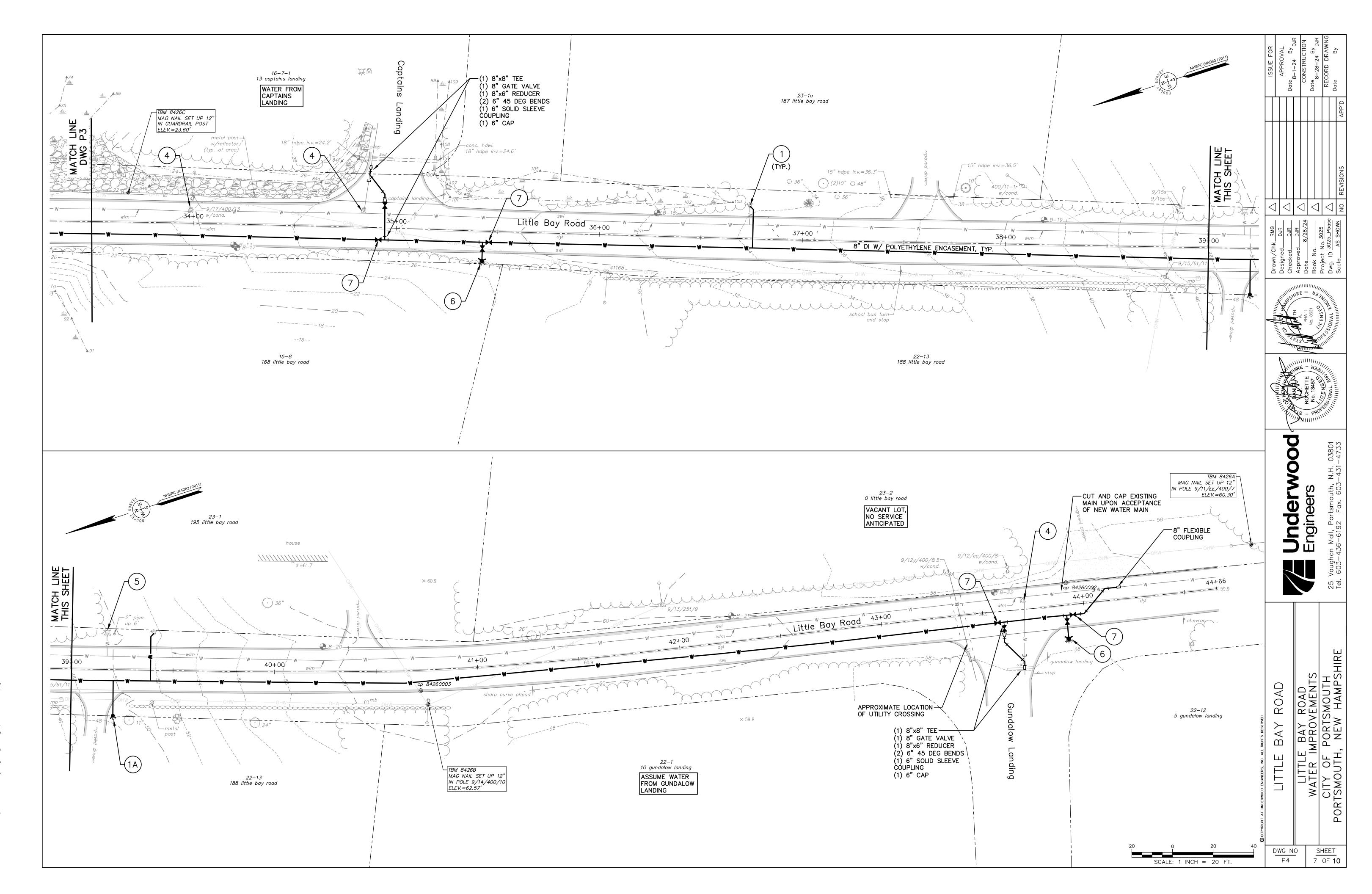
<u>LEGENE</u>	<u>):</u>		<u>LEGE</u>	<u>ND (cont.):</u>	
<u>EXISTING</u>	<u>PROPOSED</u>		<u>EXISTING</u>	PROPOSED	
		STRUCTURES/BUILDINGS		õ	SEWER CLEANOUT
		APPROXIMATE ABUTTERS LOT LINE	, No	X	FIRE HYDRANT
		PAVED ROAD/DRIVE/PATH	WV WV	M	WATER GATE VALVE
		RETAINING WALL	# <u></u> 0	*50	WATER SHUTOFF VALVE
~~~~~		STONE WALL	[CV]		IRRIGATION CONTROL VALVE
— — 40 — —		MAJOR CONTOUR LINE		<b>5 5 5</b>	FITTINGS/BENDS (45,22.5,11.25
42	{42}	MINOR CONTOUR LINE		D	REDUCER
×	42.7 _{xx}	SPOT ELEVATION		щ	TEE
~ C	×	SEWER LINE		<b></b>	THRUST BLOCK
D		DRAIN LINE			COUPLING
G		GAS LINE	G∨		GAS GATE VALVE
	——— w———	WATER LINE			GAS METER
		OVERHEAD WIRE	ogr		GAS REGULATOR VALVE
U		UNIDENTIFIED UNDERGROUND UTILITY	E		ELECTRIC BOX
0 0		CHAIN LINK FENCE	o em		ELECTRIC METER
X X		FENCE	TB		TELEPHONE BOX
<>		POST & RAIL FENCE	()		TELEPHONE MANHOLE
		STOCKADE FENCE	C		CABLE BOX
V		PICKET FENCE	$\boxtimes$		UNIDENTIFIED UTILITY BOX
o		HANDRAIL		<del>- o-</del>	SIGN
		GUARDRAIL	-0-0-	<del>- 0 0 -</del>	SIGN (TWO POSTS)
· · · · · ·		TREE LINE			GRANITE POST
		SHRUB LINE			WOODEN POST
		EDGE OF DELINEATED WETLAND	۲		POST
<u>alt alt alt</u>		WETLAND AREA			BOLLARD
<u> </u>		WETLAND FLAG	$\diamond$		ROCK/BOULDER
- /0		TOP OF DELINEATED BANK			MAILBOX
[이번에 1994 - 1944][N. 1]		CONCRETE	́ В		BORING
		RIP RAP	<b>U</b>	<del>*************************************</del>	SILT FENCE OR WOOD CHIP BER
		LANDSCAPED AREA		~~~~	SAND BAGS (EROSION CONTROL
		CRUSHED STONE			ASBESTOS CONCRETE PIPE
		BRICK	acp bnd. fnd.		BOUND FOUND
		PILE	cip		CAST IRON PIPE
JANNA REAL		CONIFEROUS TREE 10" DIA. OR GREATER	стр		CORRUGATED METAL PIPE
And the second s			conc.		CONCRETE
*		CONIFEROUS TREE LESS THAN 10" DIA.	cond		CONDUIT
$\odot$		DECIDUOUS TREE 10" DIA. OR GREATER	d.h.		DRILL HOLE
		DECIDUOUS TREE LESS THAN 10" DIA.	dip		DUCTILE IRON PIPE
standar City Paranet Paranet		CONIFEROUS SHRUB	dwd		DETECTABLE WARNING DEVICE
С,		DECIDUOUS BUSH	dyl		DOUBLE YELLOW LINE
八		TREE STUMP	em		ELECTRIC METER
⊚ ^{c.p.85}		CONTROL POINT	ff		FINISHED FLOOR ELEVATION
		BOUND FOUND (BND. FND.)			GRANITE
C		CABLE BOX	gran. hdpe		HIGH DENSITY POLYETHYLENE P
		UNIDENTIFIED UTILITY BOX	hdwl.		HEADWALL
0		PIPE/ROD FOUND	i.p.f.		IRON PIPE FOUND
		FENCE POST	"np"		NO PARKING SIGN
Ø		UTILITY POLE	npv		NO PIPE VISIBLE
Ø U		UTILITY POLE & GUY WIRE	pvc		POLYVINYL CHLORIDE PIPE
			"r"		RESERVED PARKING SIGN
J.		UTILITY POLE W/ LIGHT			RESERVED PARKING SIGN
		UTILITY POLE W/ LIGHT LIGHT POLE			
ں۔ جــــہ			rcp		REINFORCED CONCRETE PIPE
ی جے۔۔ہ ب		LIGHT POLE	rcp ret. wall		RETAINING WALL
	Ø	LIGHT POLE LIGHT POLE W/ARM	rcp ret. wall r.s.f.		RETAINING WALL RAILROAD SPIKE FOUND
		LIGHT POLE LIGHT POLE W/ARM MONITORING WELL LOCATION	rcp ret. wall r.s.f. sgc		RETAINING WALL RAILROAD SPIKE FOUND SLOPE GRANITE CURB
	0	LIGHT POLE LIGHT POLE W/ARM MONITORING WELL LOCATION DRAIN MANHOLE	rcp ret. wall r.s.f. sgc s.s.f.		RETAINING WALL RAILROAD SPIKE FOUND SLOPE GRANITE CURB STEEL STAKE FOUND
		LIGHT POLE LIGHT POLE W/ARM MONITORING WELL LOCATION DRAIN MANHOLE CATCH BASIN	rcp ret. wall r.s.f. sgc		RETAINING WALL RAILROAD SPIKE FOUND SLOPE GRANITE CURB

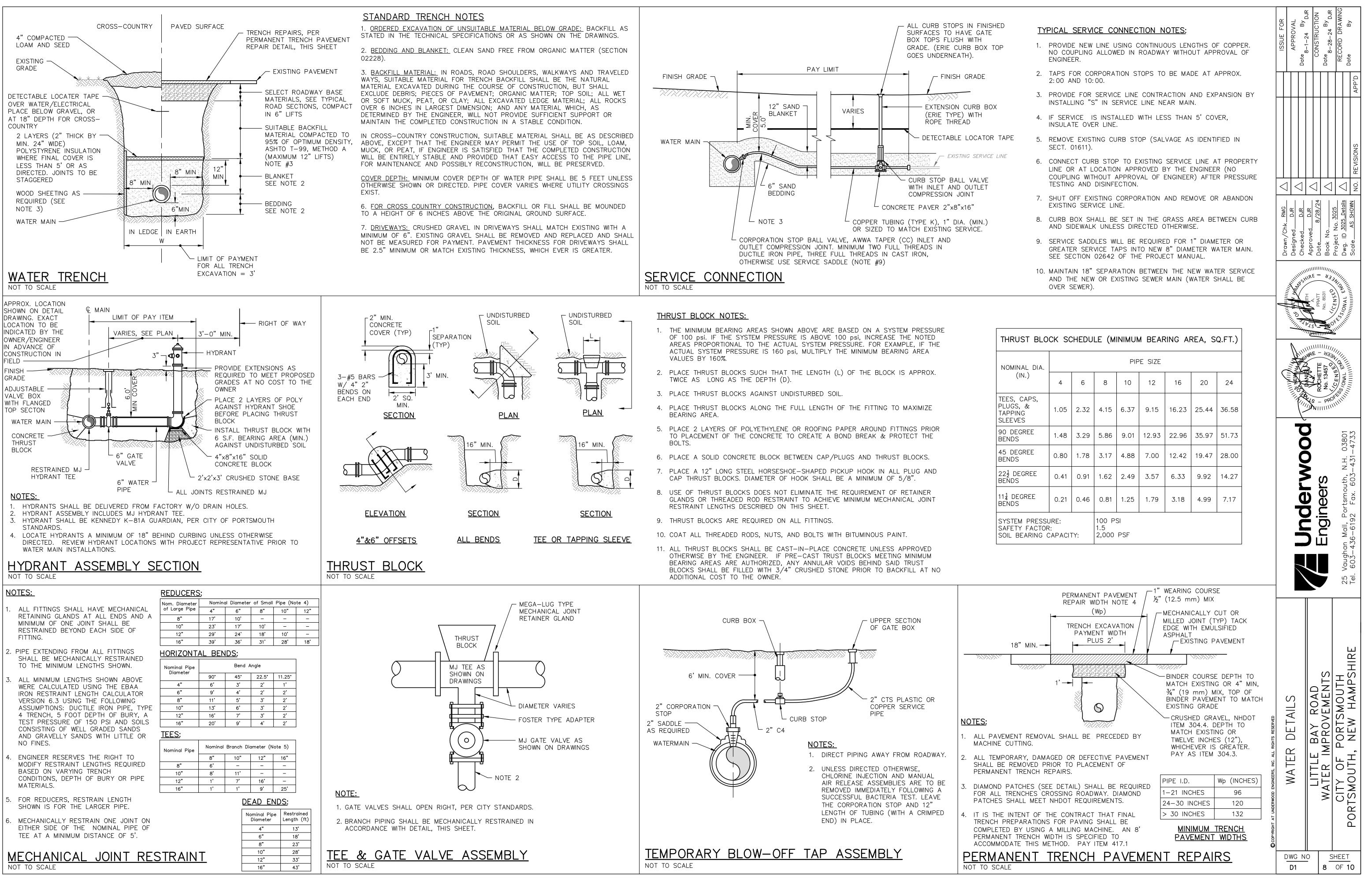
LEGEND	<u>(cont.):</u>		FOR )VAL BV	4 JUR RUCTION 24 ^B y DJR DRAMING By
EXISTING	<u>PROPOSED</u>	TIMBER EDGE / CURB		Date B-24 DJI CONSTRUCTION Date B-28-24 By DJI RECORD DRAWIN Date By
top		TOP OF PIPE		Date CC
typ.		TYPICAL		Q,dd
unk ulm		UNKNOWN UTILITY LINE MARKING (UNKNOWN)		
vcp		VITREOUS CLAY PIPE		
vgc		VERTICAL GRANITE CURB		
wlm		WATER LINE MARKING		REVISIONS
			Chk RMG	AS 30 8
			Drawn/Chk Designed	Approve Date Book No Project Dwg. ID Scale
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				<b>Engineers</b> Ian Mall, Portsmouth, N.H. 03801 436–6192 Fax. 603–431–4733
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				LITTLE BAY ROAD WATER IMPROVEMENTS CITY OF PORTSMOUTH PORTSMOUTH, NEW HAMPSHIRE
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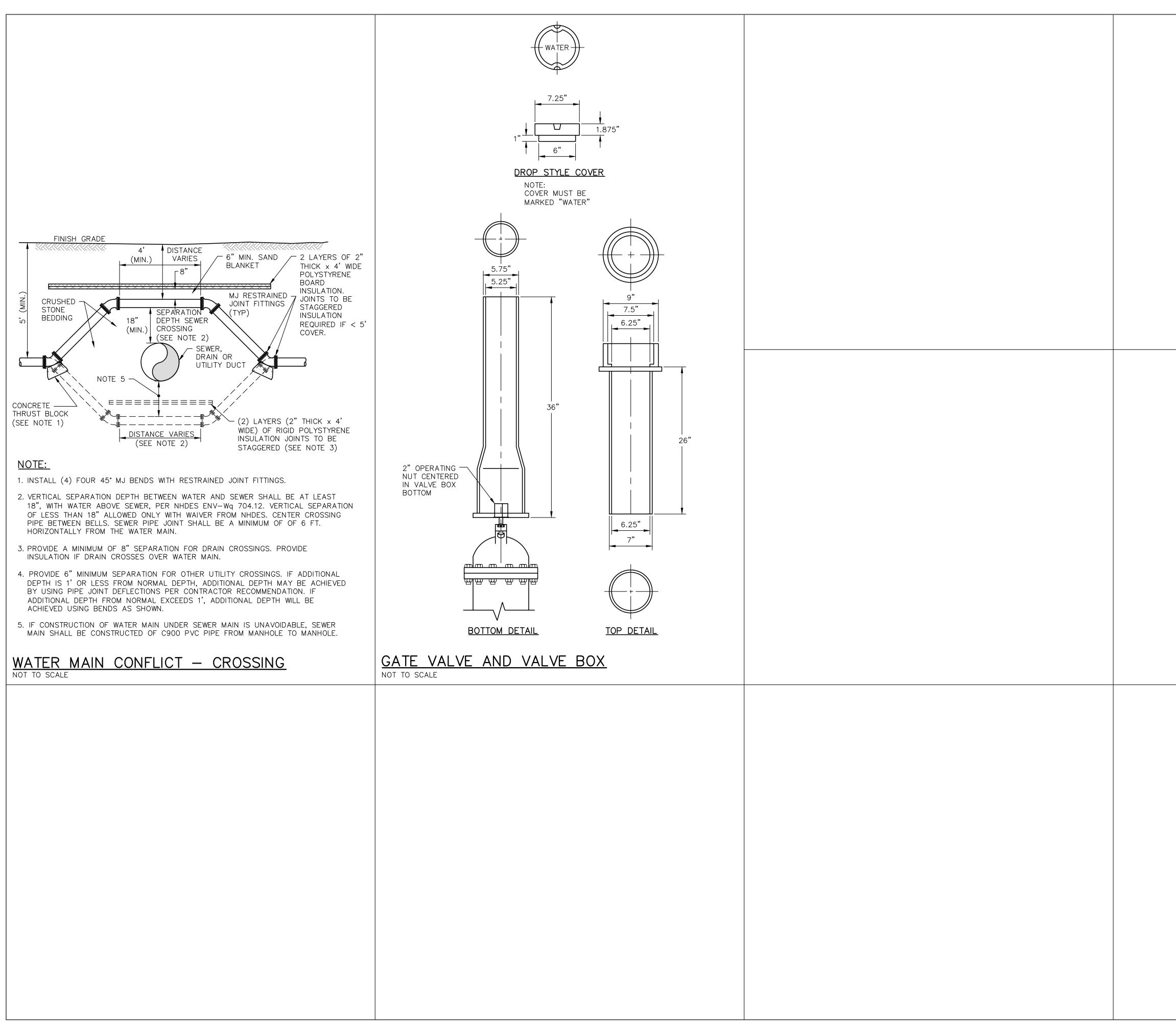




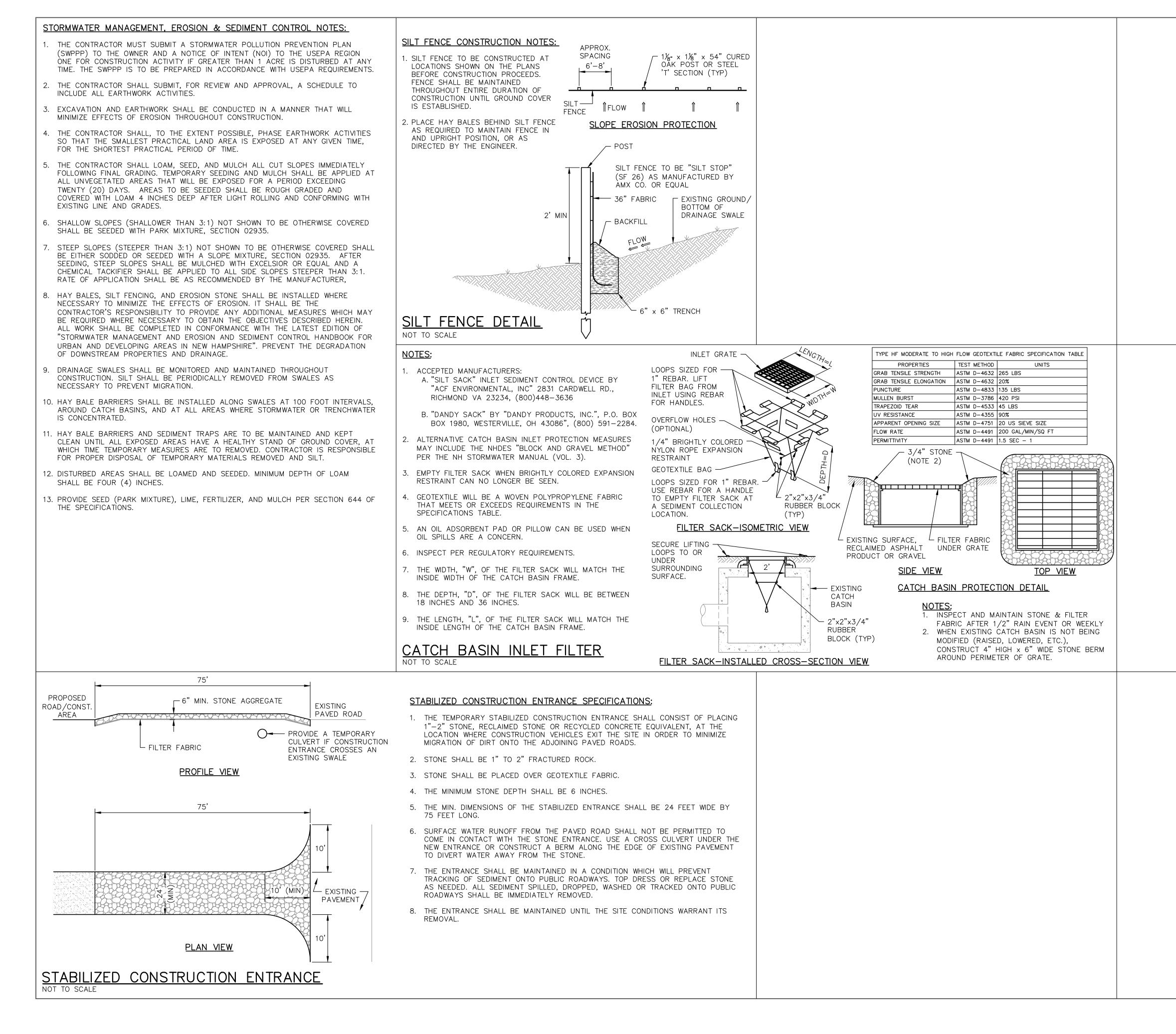








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		25 Vaughan Mall, Portsmouth, N.H. 03801 Tel. 603-436-6192 Fax. 603-431-4733
Copyright at underwood engineers, inc. all rights reserved	WATER DETAILS	LITTLE BAY ROAD WATER IMPROVEMENTS CITY OF PORTSMOUTH PORTSMOUTH, NEW HAMPSHIRE
О	DWG I D2	NO <u>SHEET</u> 9 OF 10



	ISSUE FOR	APPROVAL Date Bv	8-1-24 JJR	Date CONSTRUCTION Date By DJR	RECORD DRAWING	IONS APP'D Date By	
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				Engineers	25 Vauahan Mall. Portsmouth. N.H. 03801		
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