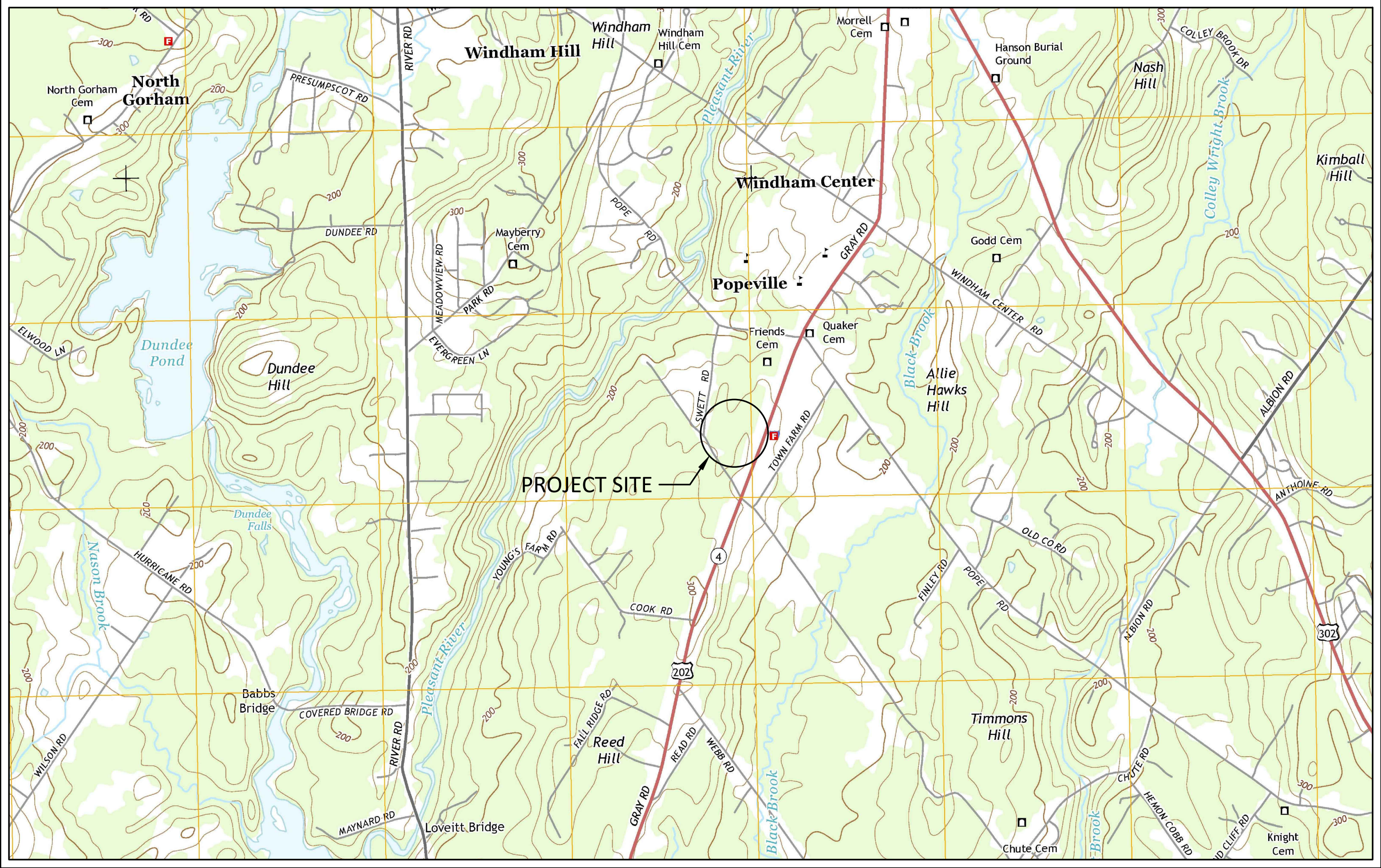


GRAY ROAD RETIREMENT COMMUNITY

GRAY ROAD
WINDHAM, MAINE

CONSULTANTS	
CIVIL ENGINEER	DM ROMA CONSULTING ENGINEERS
LAND SURVEYOR	SURVEY, INC.
SITE EVALUATOR	MARK HAMPTON ASSOCIATES, INC.
WETLAND SCIENTIST	MARK HAMPTON ASSOCIATES, INC.



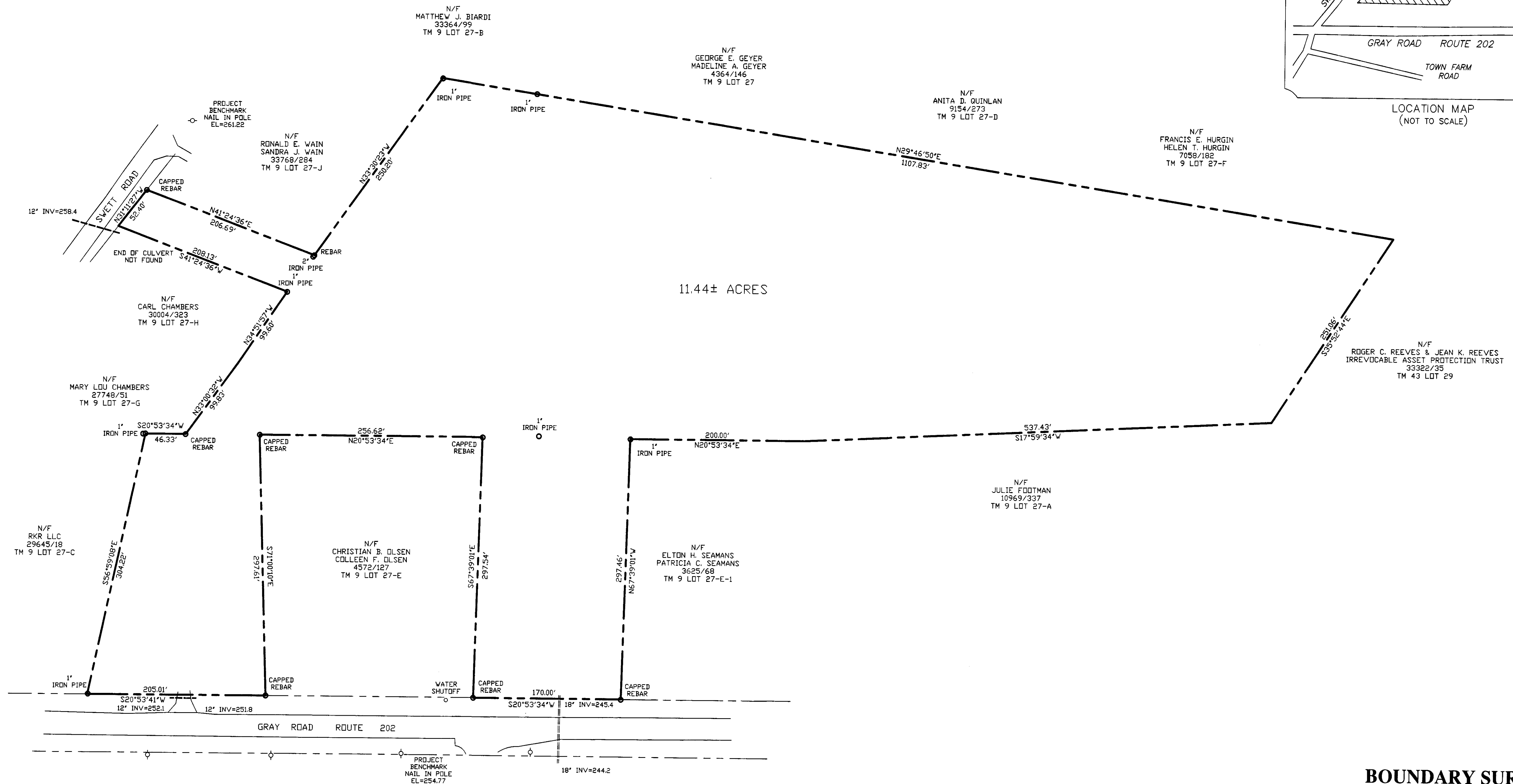
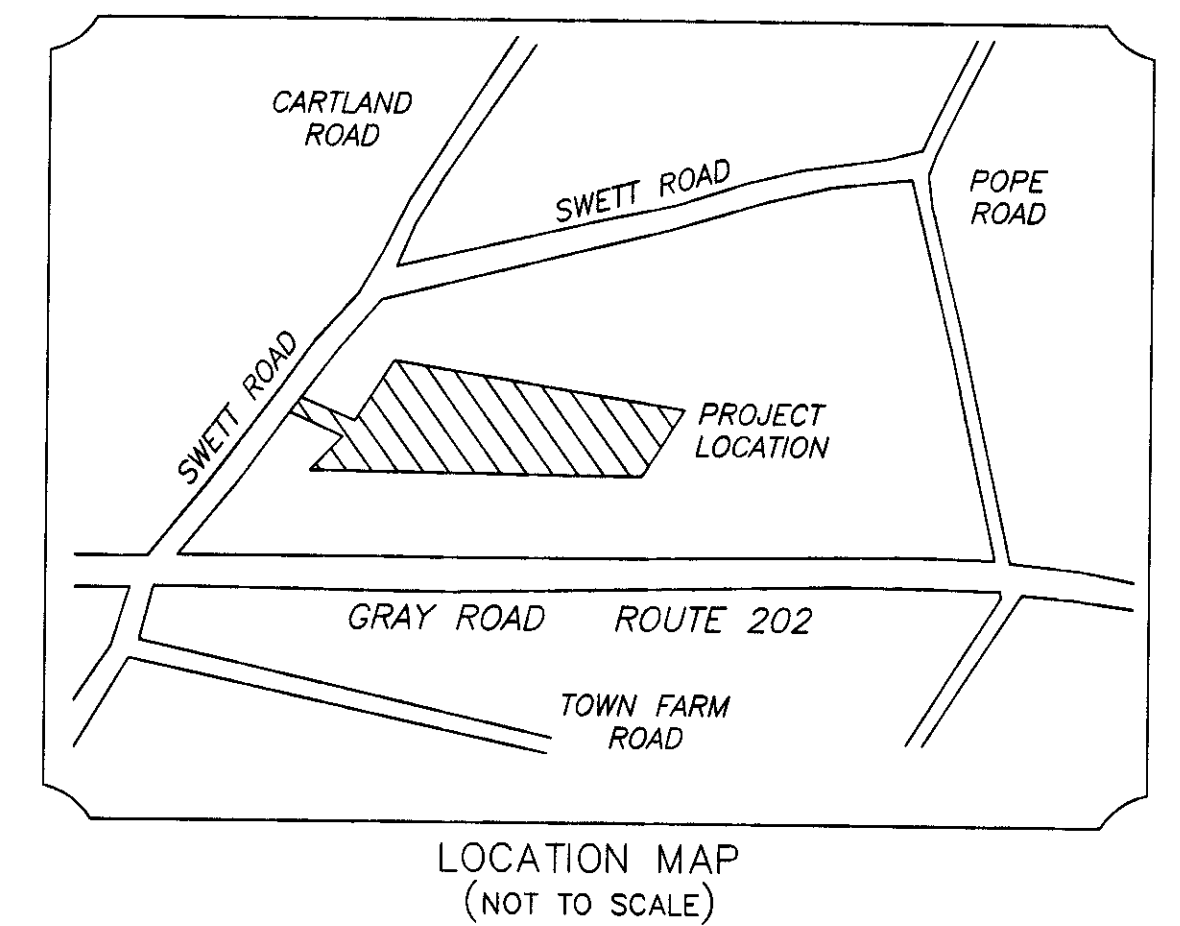
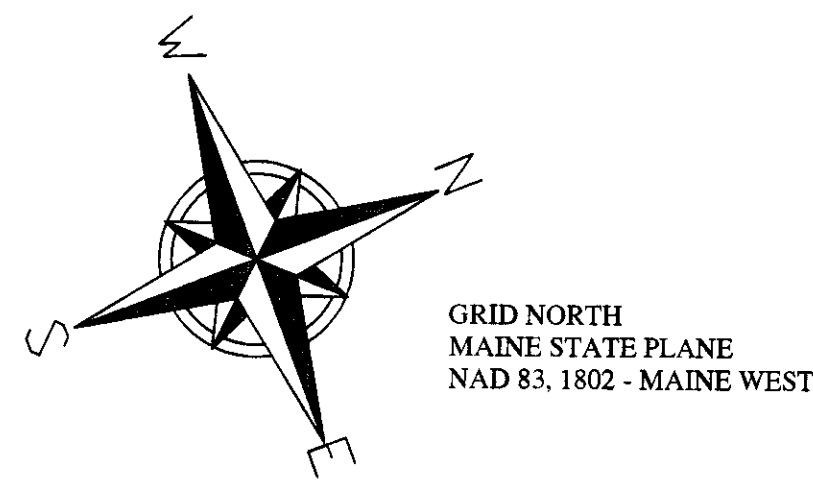
PROJECT VICINITY MAP

ISSUED TO TOWN FOR PRELIMINARY REVIEW - NOT FOR CONSTRUCTION
JULY 23, 2018

PREPARED BY:
DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506

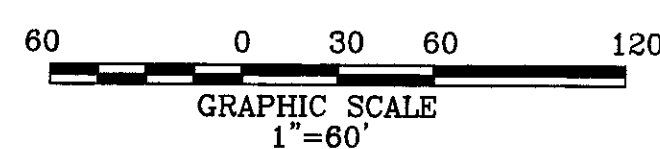
APPLICANT:
WELD, LLC
P.O. BOX 1361
WINDHAM, MAINE 04062

GRAY ROAD RETIREMENT COMMUNITY	
DRAWING SHEET INDEX	
PAGE NO.	DESCRIPTION
1	TITLE SHEET
2	BOUNDARY SURVEY
3	SUBDIVISION PLAN
4	PLAN & PROFILE
5	PLAN & PROFILE
6	DETAILS
7	DETAILS
8	DETAILS



PLAN REFERENCE:

- (1) PLAN OF LAND ON SWETT ROAD IN WINDHAM, MAINE FOR LAURIE CHAMPAGNE DATED DECEMBER 2016 BY WAYNE T. WOOD & CO.
- (2) PLAN SHOWING A STANDARD BOUNDARY SURVEY MADE FOR CHRISTIAN B. AND COLLEEN F. OLSEN 360 GRAY ROAD WINDHAM, MAINE DATED 08-02-05 BY DANIEL J. DALFONSO LLC.



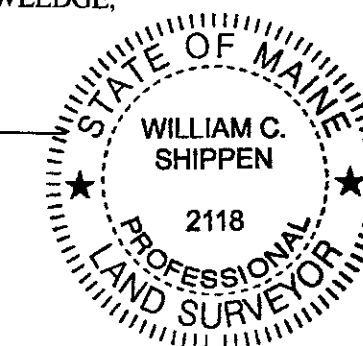
SURVEY NOTES:

- (1) THE RECORD OWNER OF THE PARCEL IS WELD, LLC AS DESCRIBED IN DEEDS RECORDED IN BOOK 33768 PAGE 286 AND BOOK 34816 PAGE 291 IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
- (2) THE PARCEL IS SHOWN AS LOT 27-K AND PORTIONS OF LOT 27-E ON THE TOWN OF WINDHAM'S ASSESSORS MAP 9.
- (3) BEARINGS ARE GRID NORTH, MAINE STATE PLANE 1802 WEST ZONE, BASED ON GPS OBSERVATIONS DURING APRIL 2018.
- (4) VERTICAL DATUM- NAVD 88 BASED ON GPS OBSERVATIONS DURING APRIL 2018.
- (5) BOUNDARIES HEREON REPRESENT A RETRACEMENT OF PLAN REFERENCE 1.

CERTIFICATION:

I CERTIFY THAT THIS SURVEY CONFORMS TO THE STANDARDS OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS AND IS CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

WILLIAM C. SHIPPEN
P.L.S. 2118
7-19-18



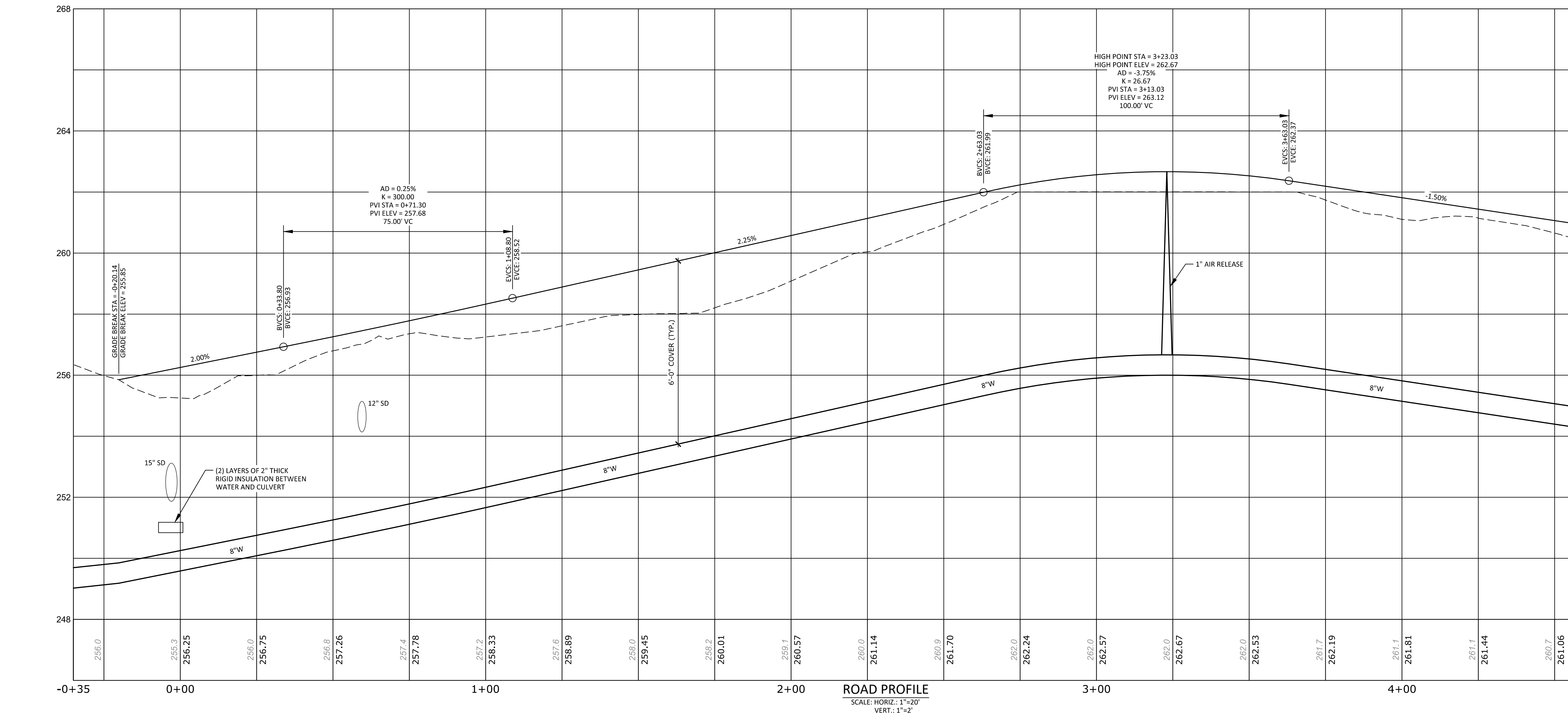
BOUNDARY SURVEY
SWETT ROAD AND ROUTE 202
WINDHAM, MAINE

FOR: **HOLMAN DEVELOPMENT CORPORATION**

PO BOX 1361
WINDHAM, MAINE 04062
(CLIENT)

SURVEY BY: **SURVEY, INC.**
P.O. BOX 210
WINDHAM, ME 04062
(207) 892-2556
INFO@SURVEYINCORPORATED.COM

DWN: WCS
DATE: MAY 2018
CHK: DRR
JOB NO. 18042

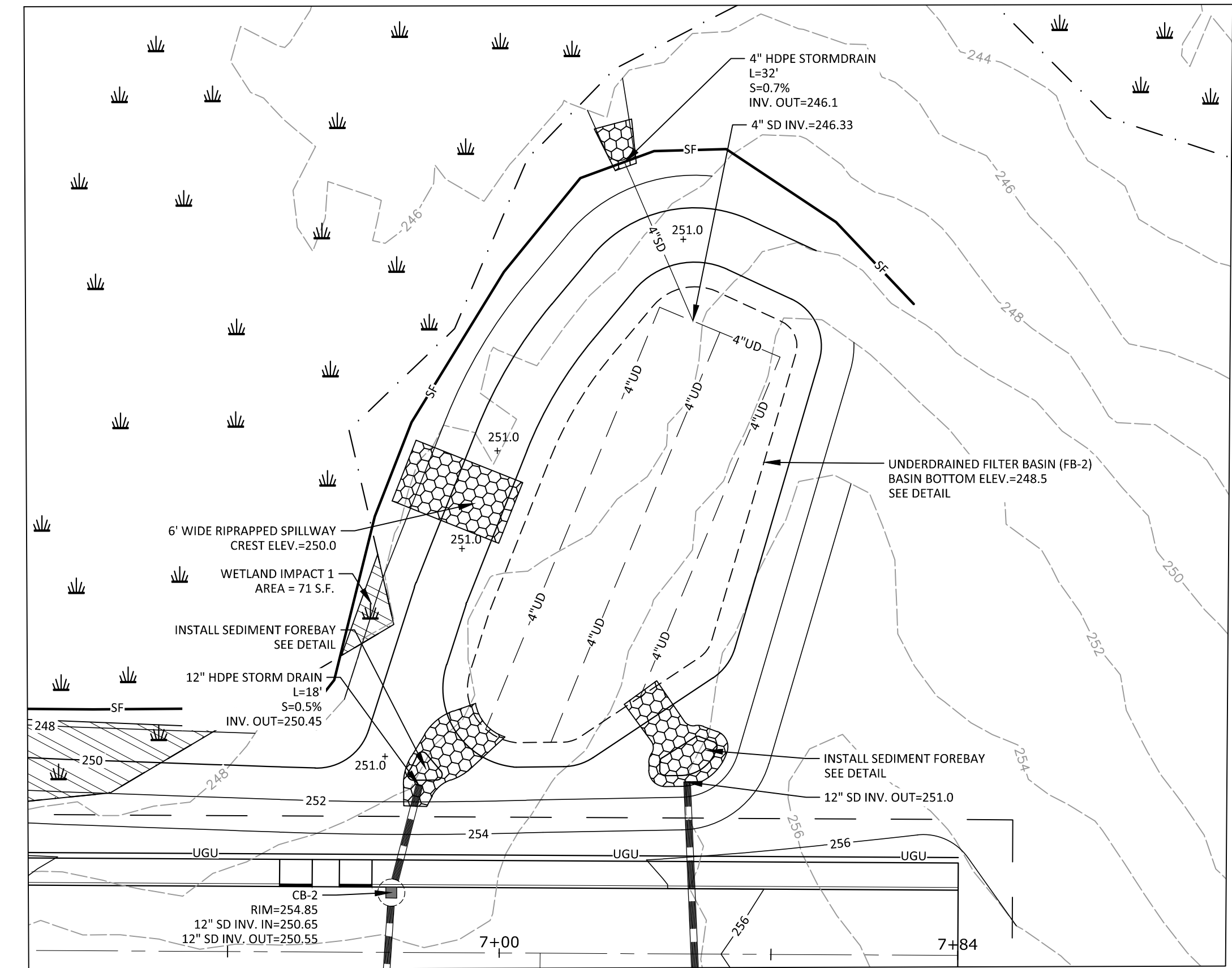


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 11116
WINDHAM, ME 04062
(207) 310 - 0506

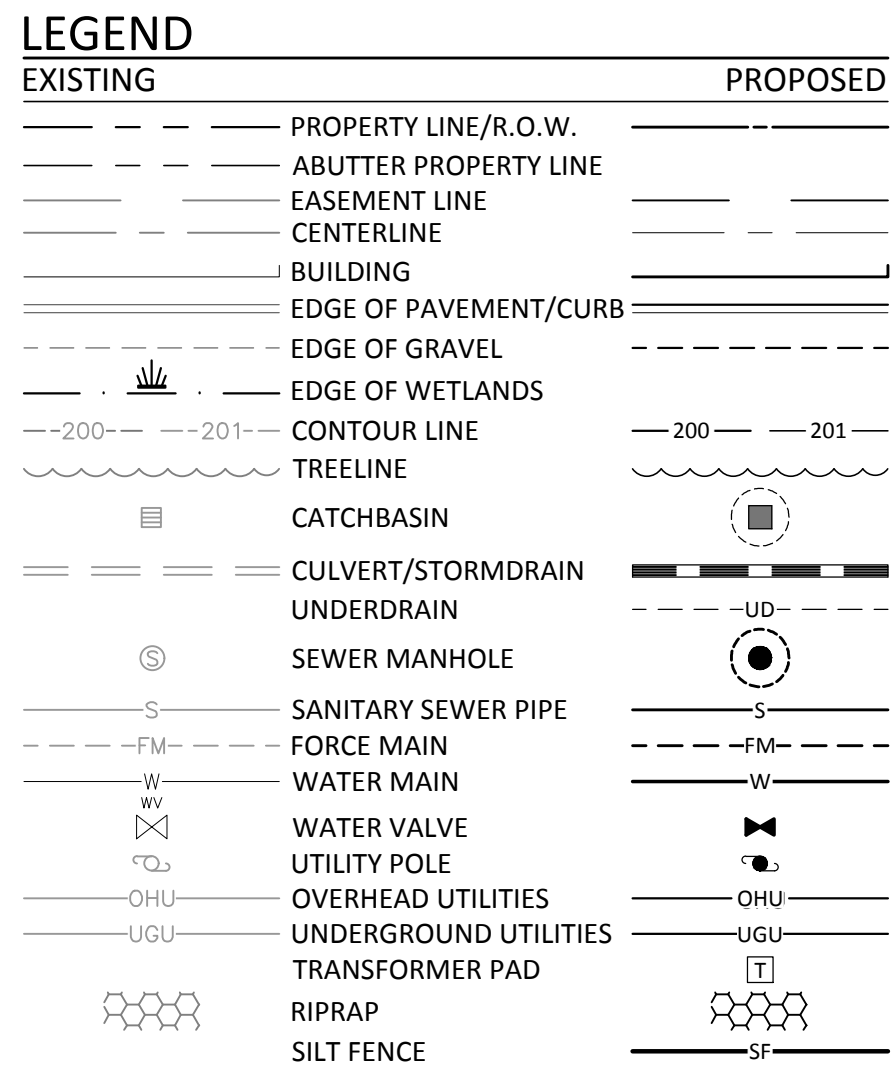
[illegible]

PLAN & PROFILE
GRAY ROAD RETIREMENT COMMUNITY
WINDHAM, MAINE
FOR: **WELD, LLC**
PO BOX 1361
WINDHAM, MAINE 04062

17070 JOB NUMBER:
AS NOTED SCALE:
7-23-2018 DATE:
SHEET 4 OF 8
PP-1



FB-2 DETAIL
SCALE: 1"=20'

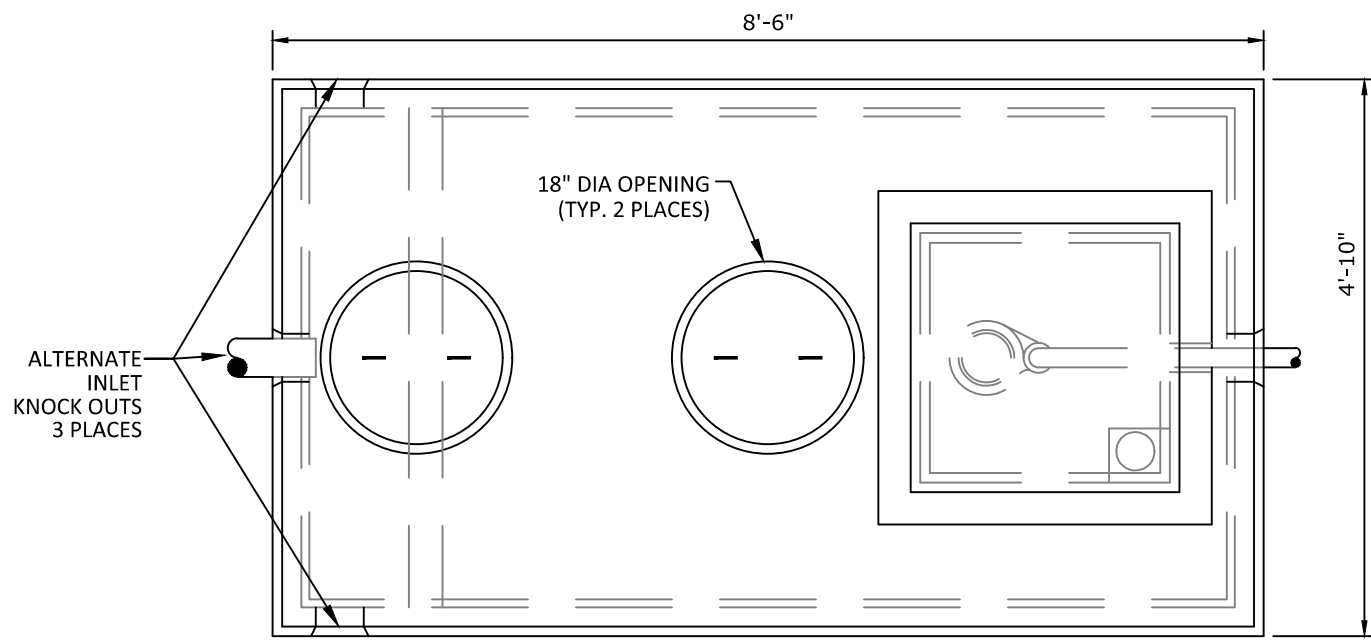


REV	DATE	BY	DESCRIPTION
A	7-23-18	DMR	ISSUED TO TOWN FOR PRELIMINARY REVIEW

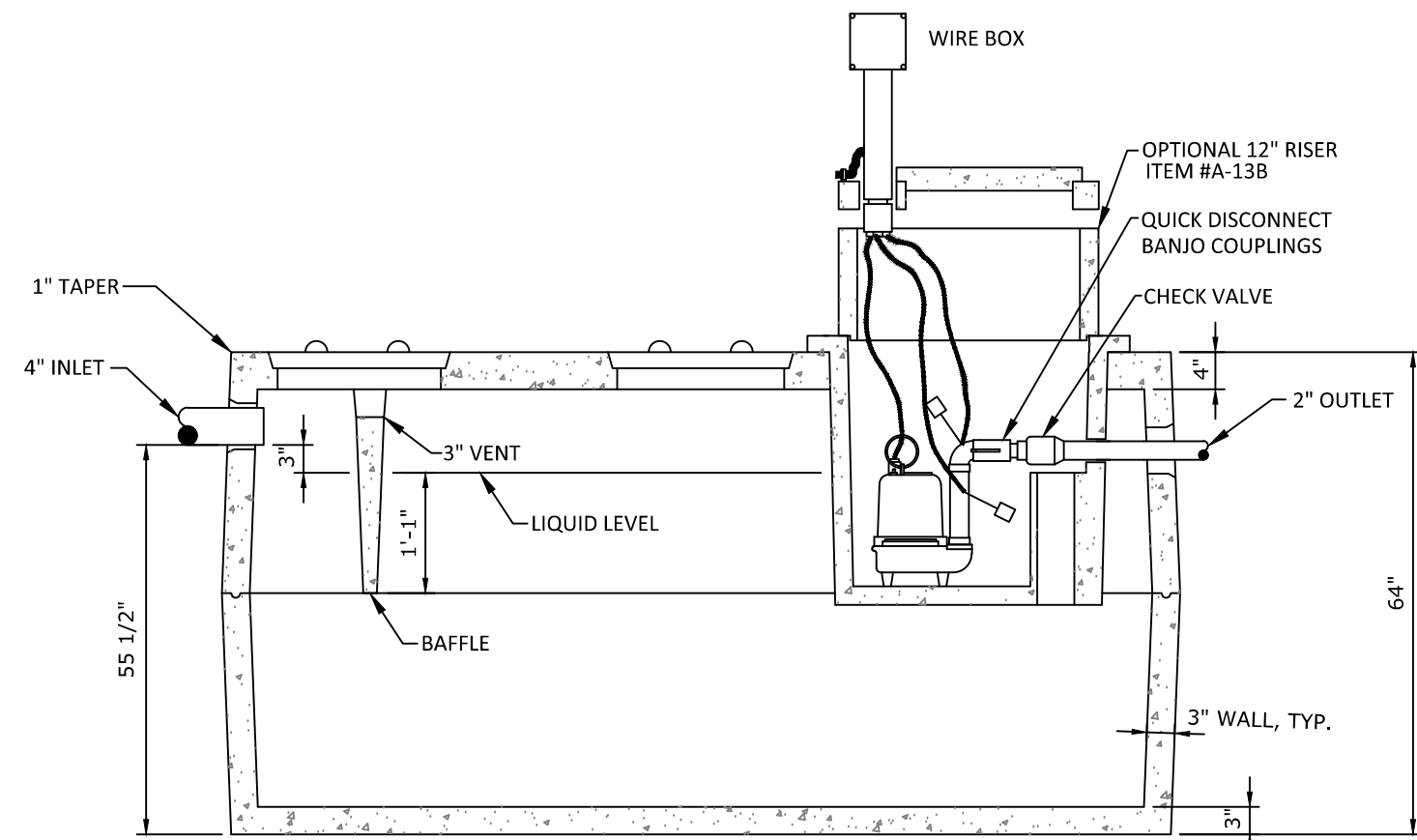
PLAN & PROFILE
GRAY ROAD RETIREMENT COMMUNITY
WINDHAM, MAINE

FOR:
WELD, LLC
PO BOX 1361
WINDHAM, MAINE 04062

17070 JOB NUMBER:
AS NOTED SCALE:
7-23-2018 DATE:
SHEET 5 OF 8
PP-2



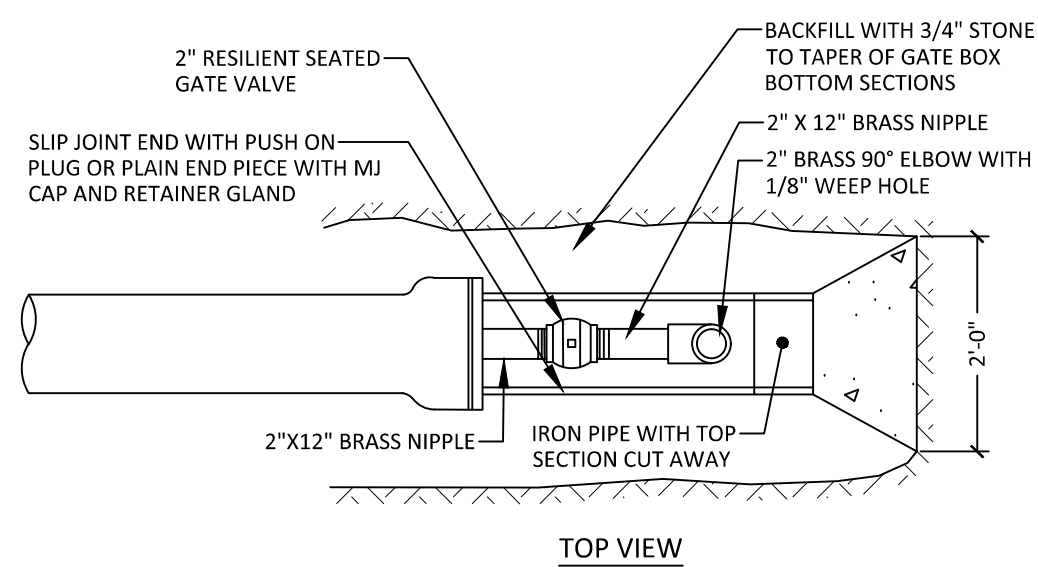
TOP VIEW



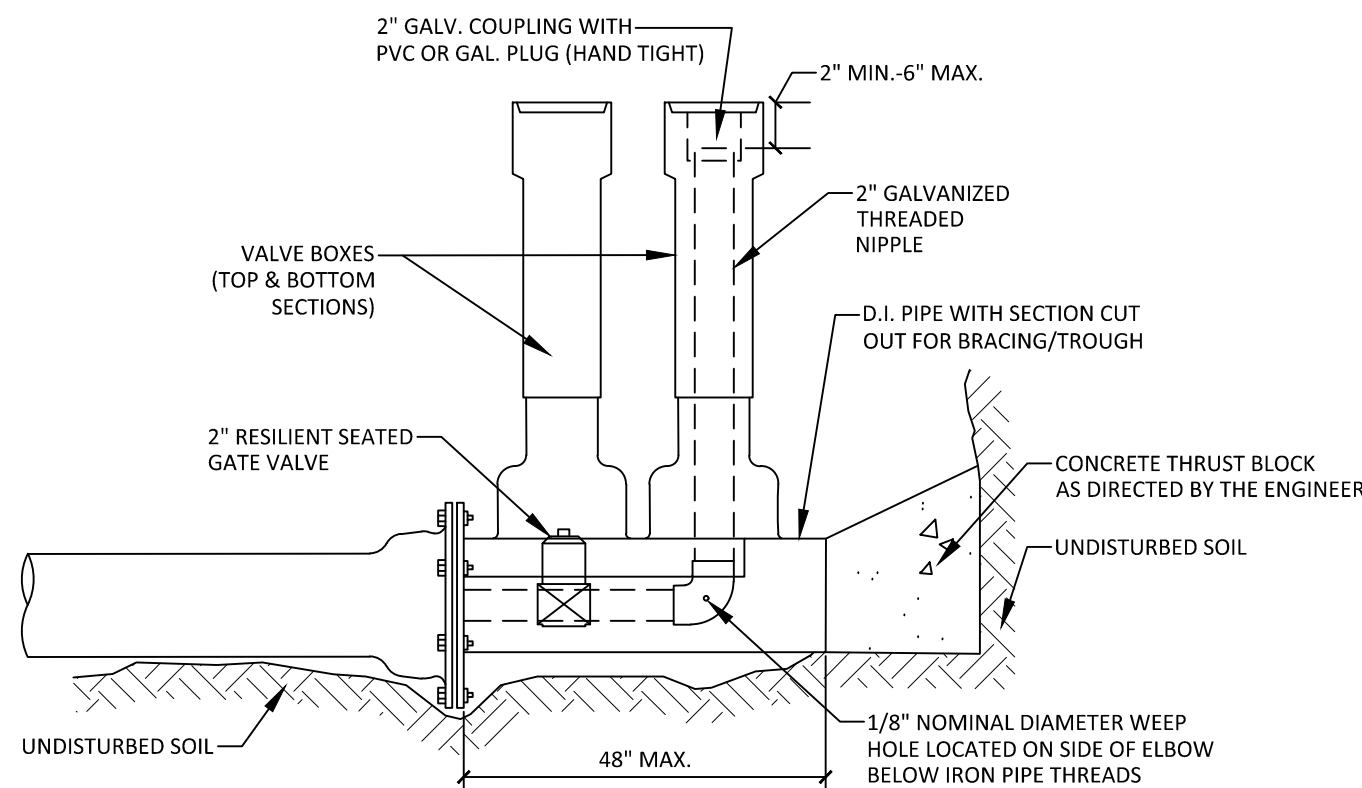
SECTION

- TANK NOTES:**
1. CONCRETE TO BE 4,000 PSI AT 28 DAYS.
 2. THE INLET BAFFLE IS PRECAST AS ONE UNIT WITH THE TOP SECTION OF THE SEPTIC TANK
 3. TANKS REINFORCED WITH 6X6X10 G.A. WIRE.
 4. KEYED JOINTS SEALED WITH ASPHALT SEALANT.
 5. TANKS TO BE RESIDENTIAL COMBO TANKS AS MANUFACTURED BY PRECAST CONCRETE PRODUCTS OF MAINE, INC. OR APPROVED EQUAL.

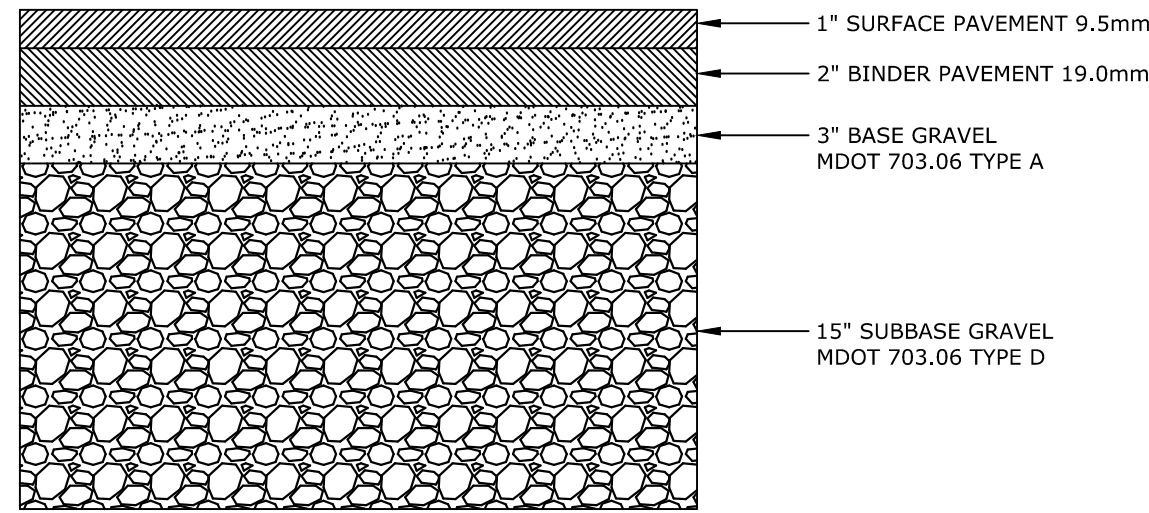
1,000 GALLON COMBINATION SEPTIC TANK
(SEPTIC TANKS 1 & 2)
NOT TO SCALE



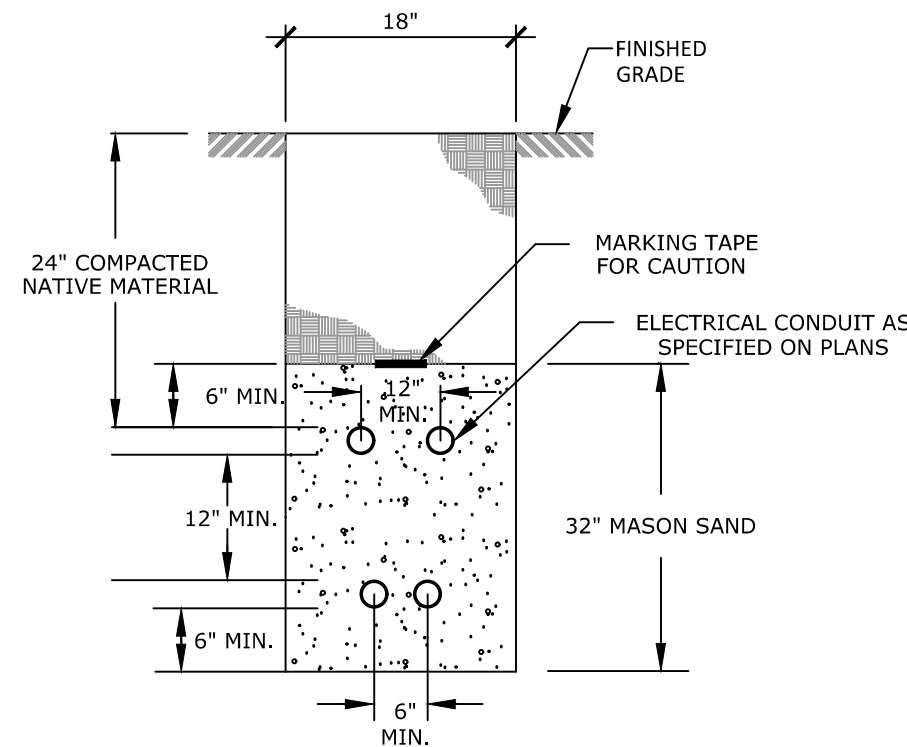
TOP VIEW



STANDARD 2" BLOW OFF
NOT TO SCALE

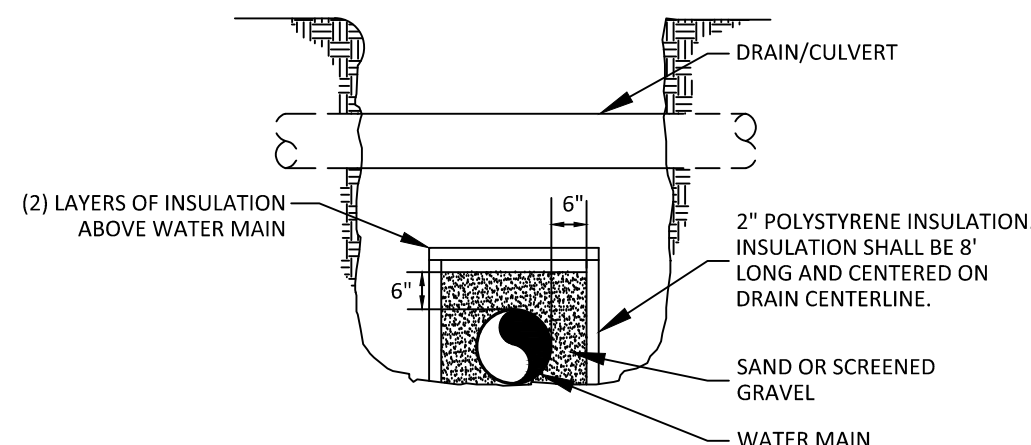


TYPICAL DRIVEWAY SECTION
NOT TO SCALE



UTILITY TRENCH DETAIL
NOT TO SCALE

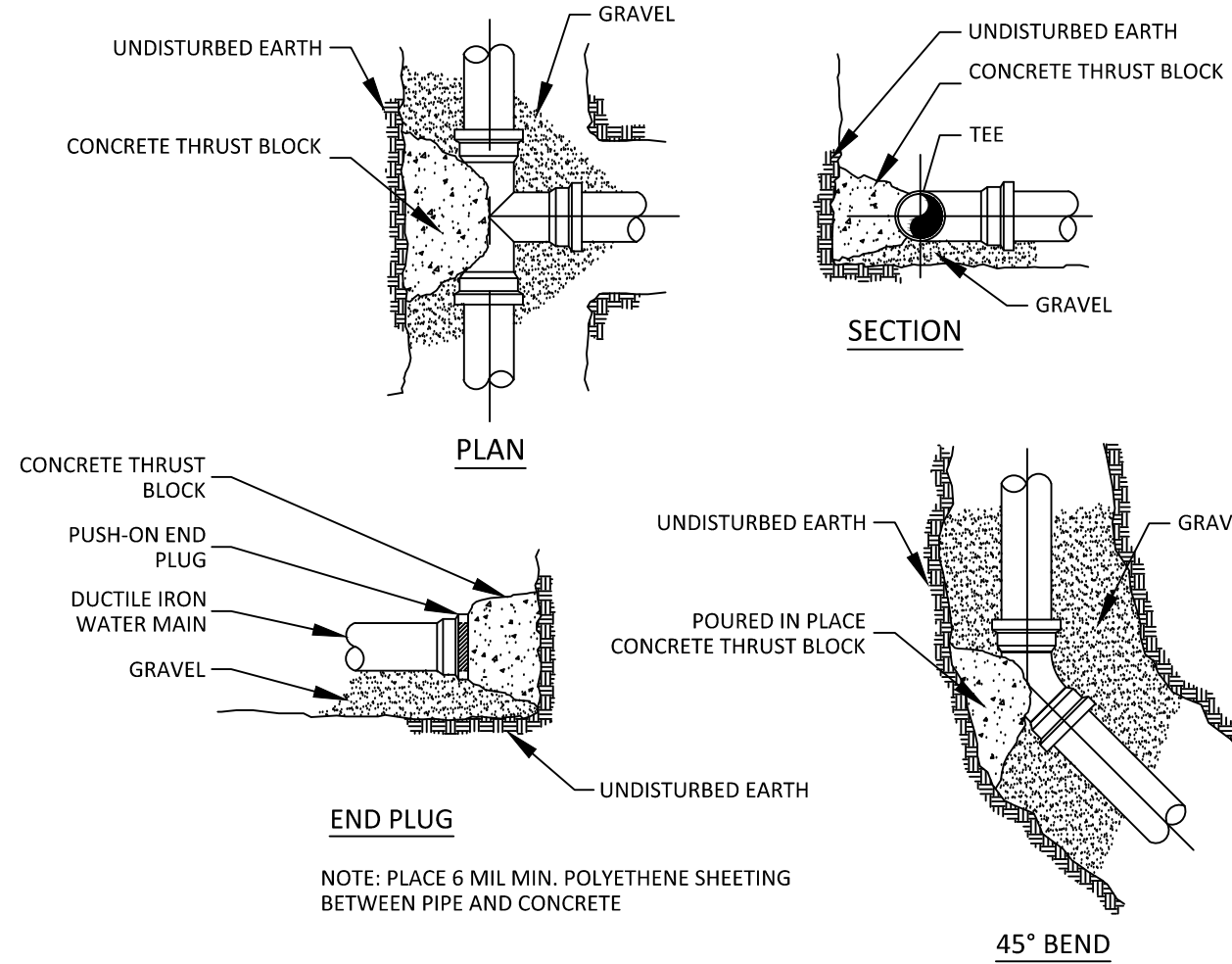
- NOTES:**
1. ALL CONDUITS SHALL BE 4" DIA. PVC SCH 40 EXCEPT FOR ROAD CROSSINGS SHALL BE PVC SCH 80
 2. INSTALLATION SHOULD NOT ALLOW THE INTER-TWINING OF CABLES.
 3. BEDDING AND BACKFILL SHALL BE FREE OF ROOTS, STUMPS AND OTHER DEBRIS.
 4. COMMUNICATION CABLE AND POWER CABLE SHALL HAVE NO LESS THAN 12 INCHES OF RADIAL SEPARATION.



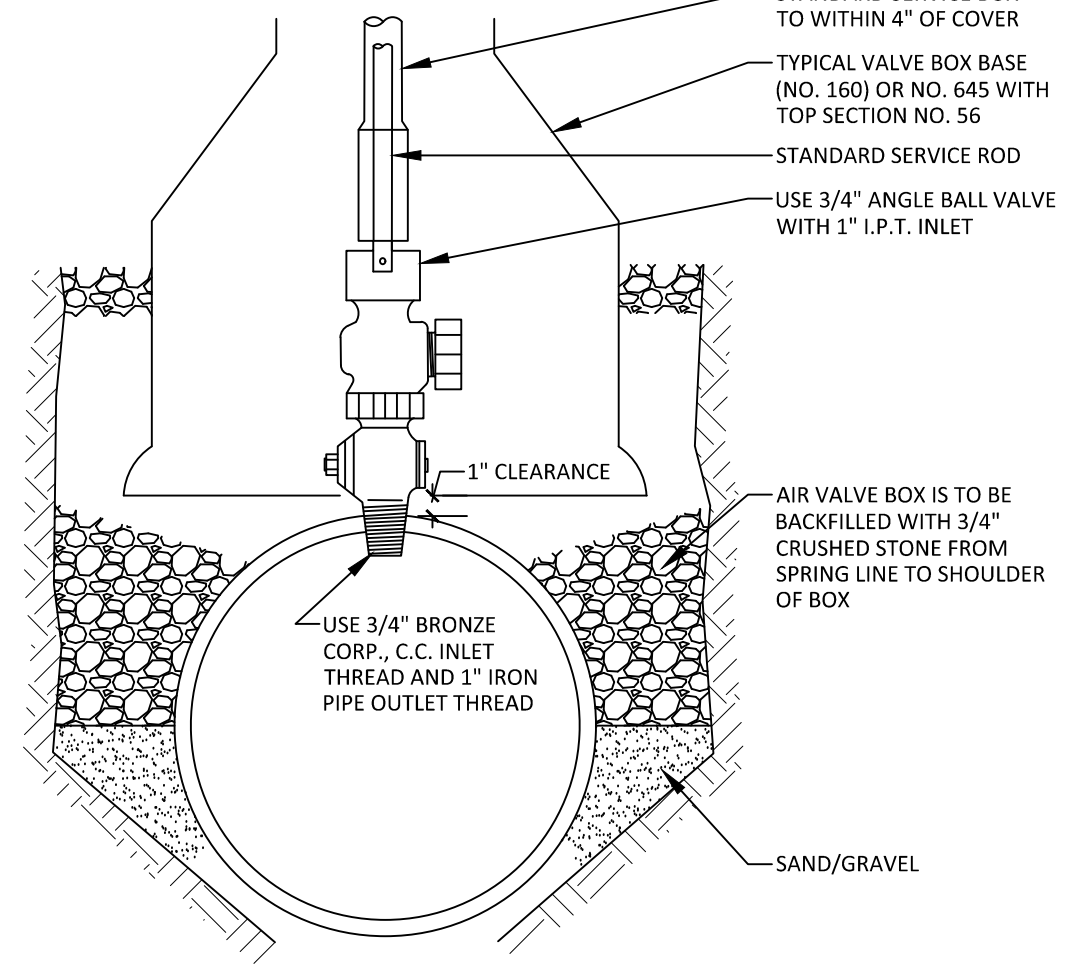
INSULATION DETAIL
NOT TO SCALE

CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
FITTINGS		SQ. FT. OF BEARING ON UNDISTURBED SOIL		
PIPE SIZE	90° BENDS	45° BENDS	TEES AND PLUGS	
	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	9	12
	16"	26	14	19
	20"	40	22	28

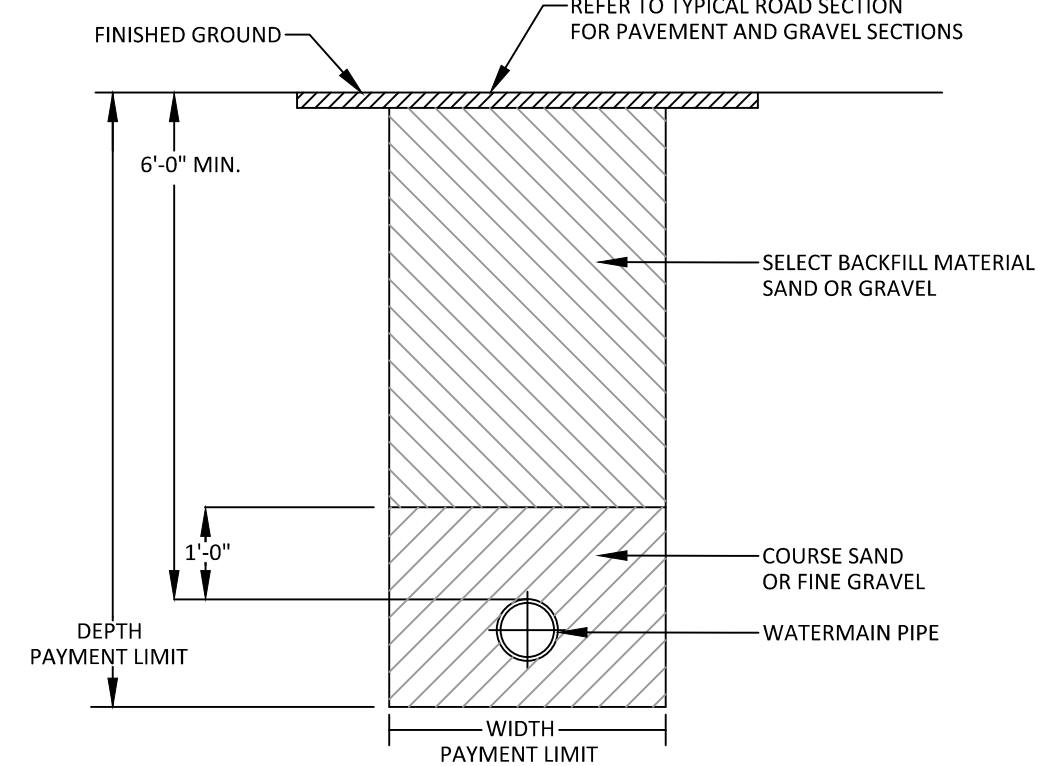
BASED ON SOIL BEARING PRESSURE OF 2000PSF AND 100PSI LINE PRESSURE. COMPACT COURSE TO FINE SANDS AND CLAYS REQUIRE ENGINEERED BLOCKS. ENGINEERED BLOCKS WILL TYPICALLY REQUIRE REINFORCING STEEL OF #5 AT 12".



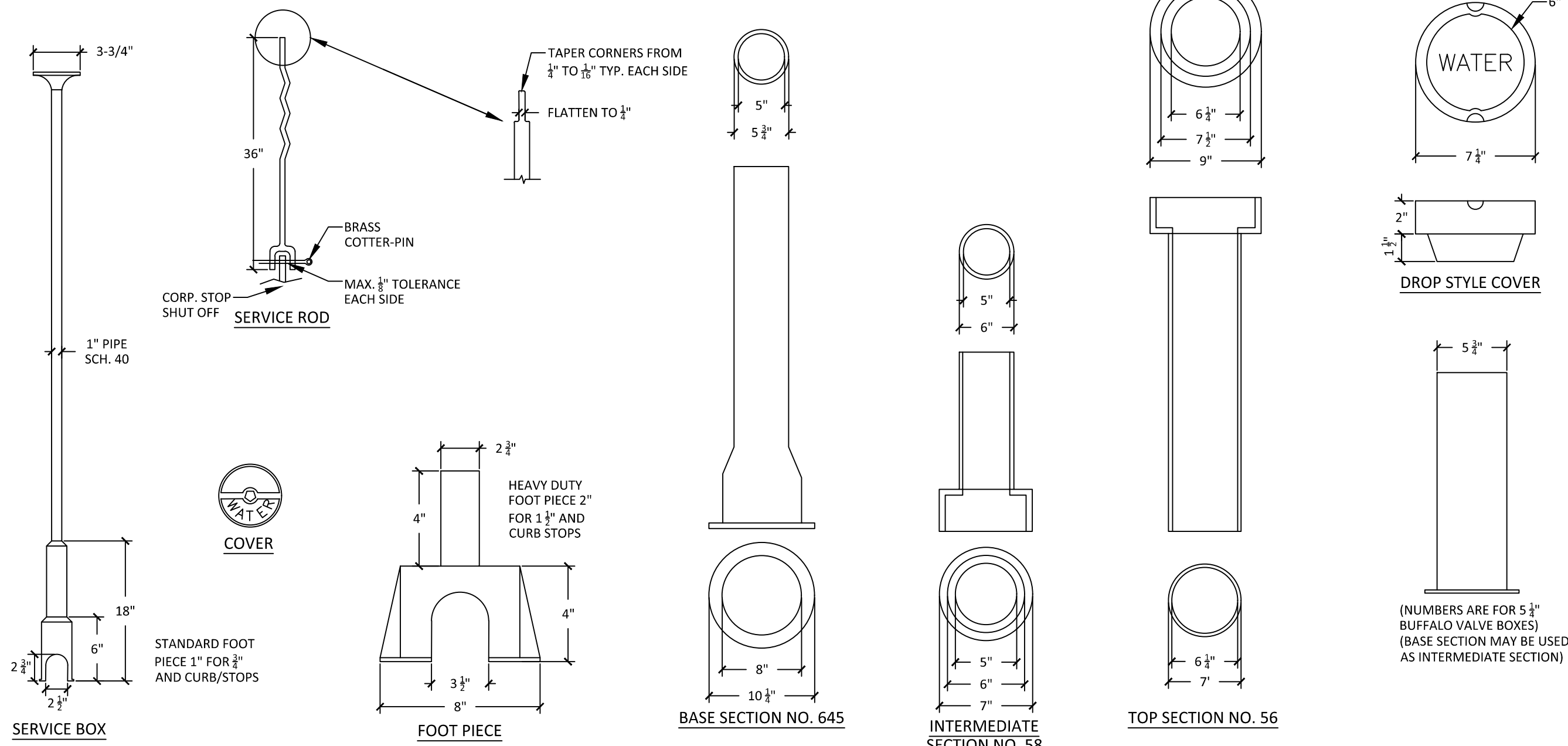
THRUST BLOCK DETAIL
NOT TO SCALE



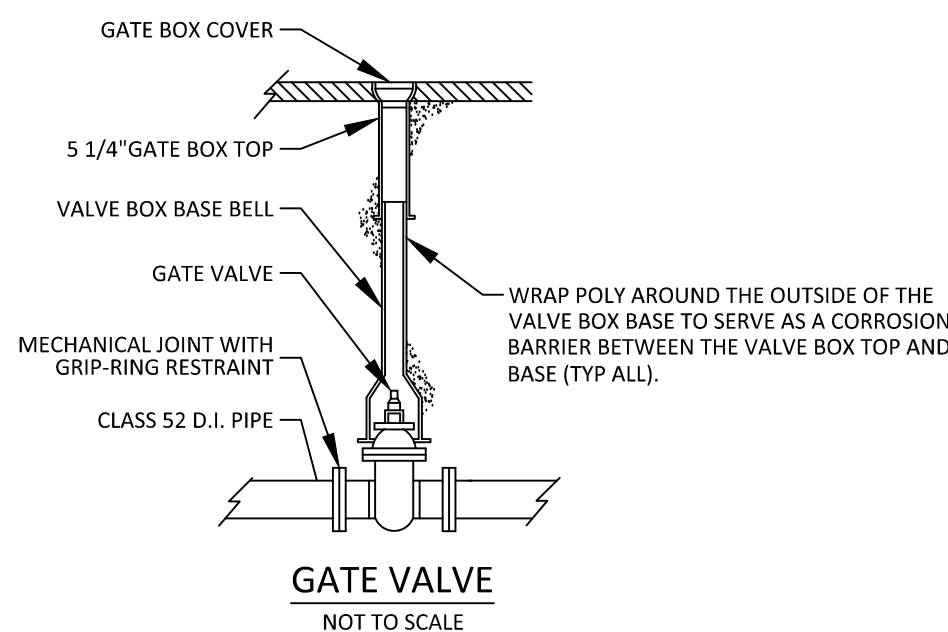
TYPICAL AIR VALVE (1")
NOT TO SCALE



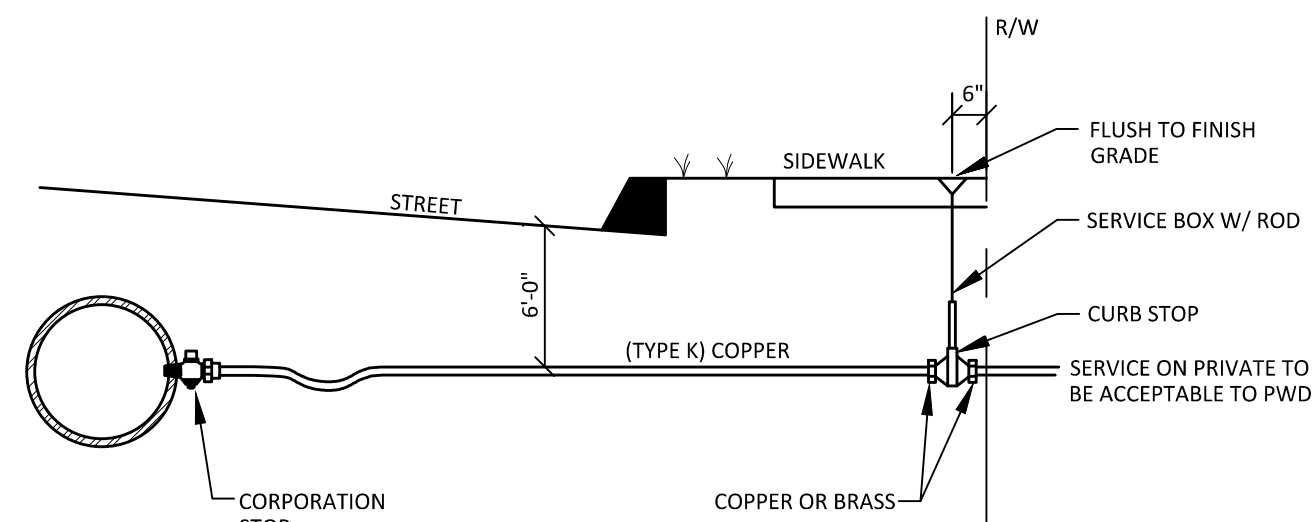
WATERMAIN TYPICAL TRENCH CROSS-SECTION
NOT TO SCALE



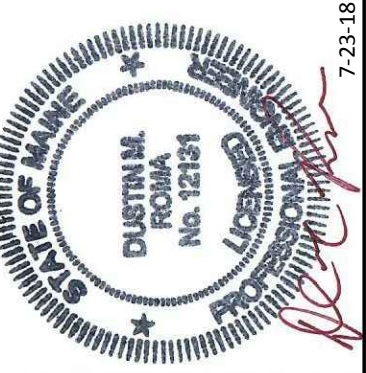
VALVE BOX & COVER
NOT TO SCALE



GATE VALVE
NOT TO SCALE



TYPICAL SERVICE CONNECTION
NOT TO SCALE

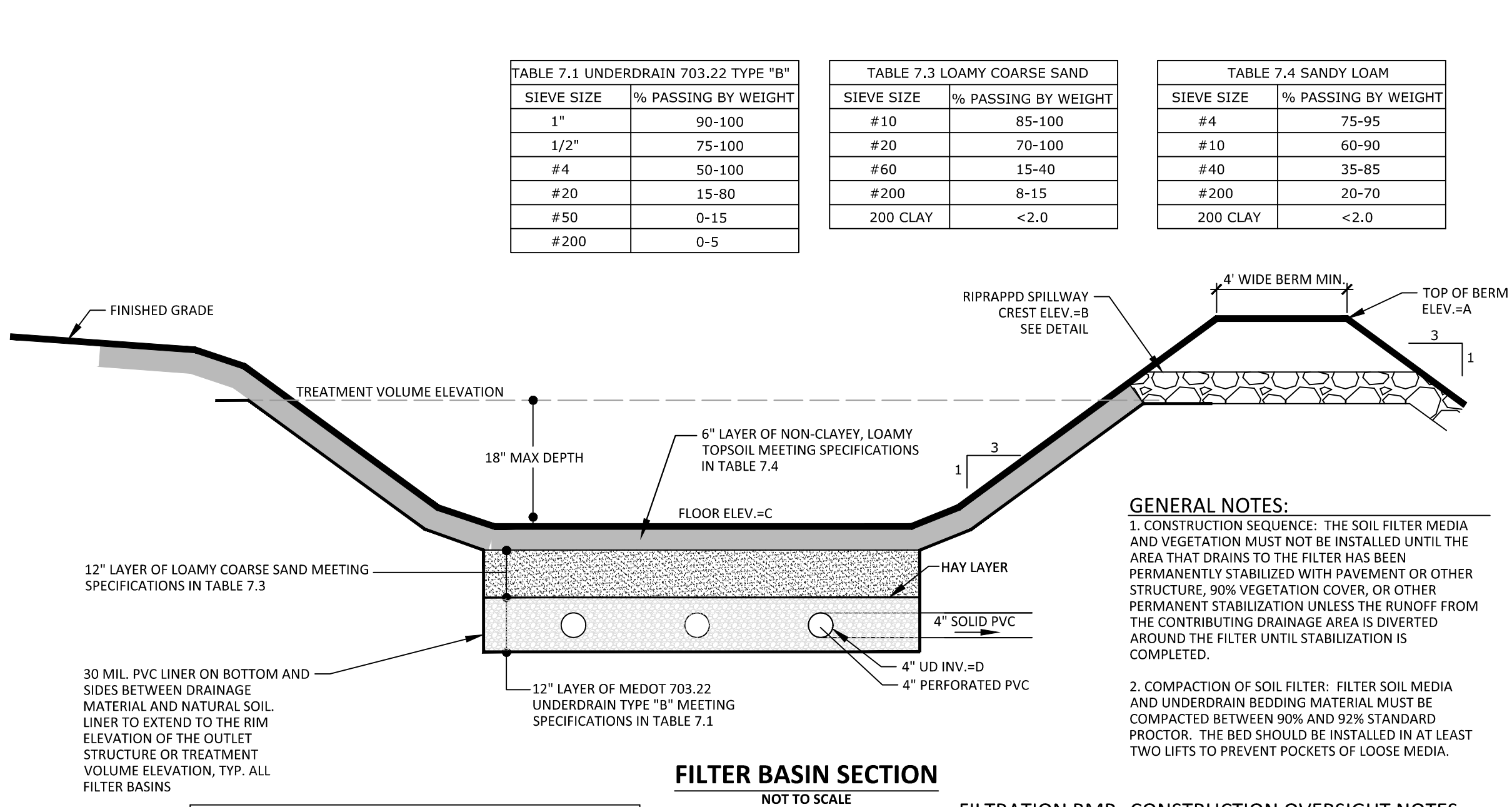


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	7-23-18	DMK	ISSUED TO TOWN FOR PRELIMINARY REVIEW

DETAILS
GRAY ROAD RETIREMENT COMMUNITY
WINDHAM, MAINE
FOR: WELD, LLC
PO BOX 1351
WINDHAM, MAINE 04092

17070
JOB NUMBER:
AS NOTED
SCALE:
7-23-2018
DATE:
SHEET 7 OF 8
D-2

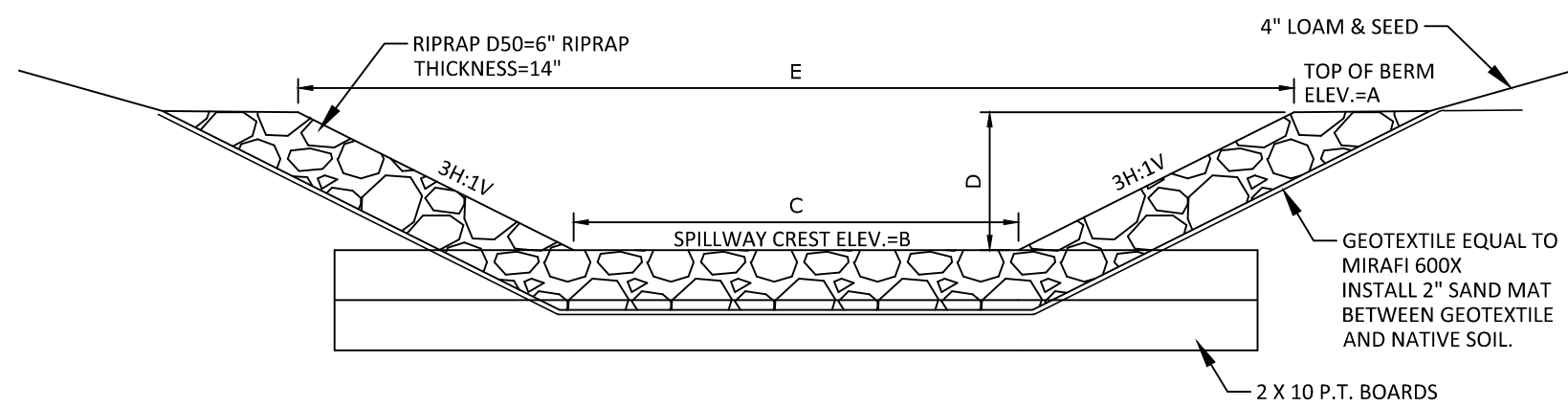


FILTER BASIN SECTION
NOT TO SCALE

FILTRATION BMPs CONSTRUCTION OVERSIGHT NOTES:

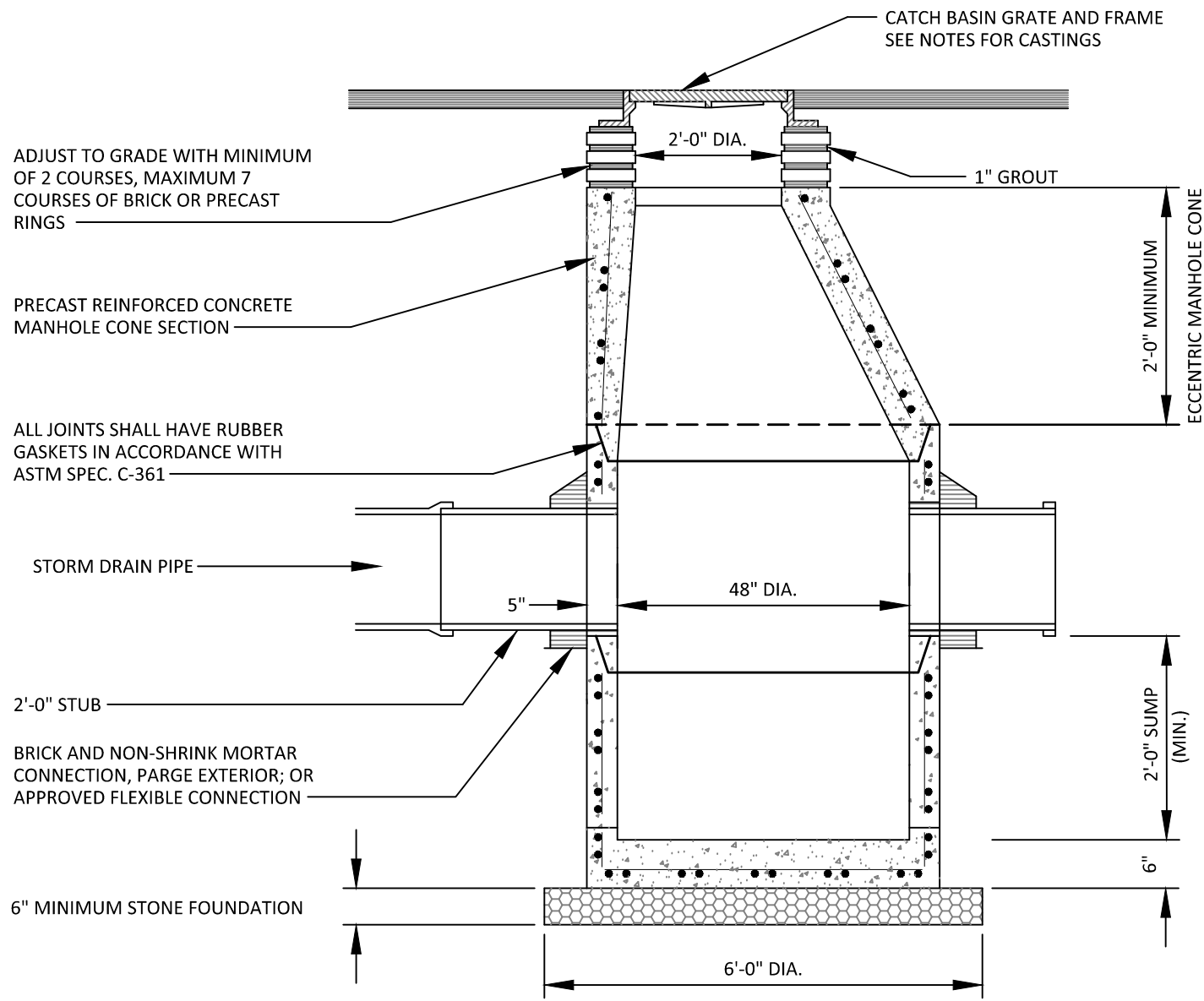
1. INSPECTION BY THE DESIGN ENGINEER OR SUITABLE THIRD PARTY WILL OCCUR AT A MINIMUM:
- A) AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
- B) AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
- C) AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED.
- D) AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
- E) ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING MDEP SPECIFICATIONS.

2. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
- A) SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
- B) PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED BY HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
- C) PERFORM A PERMIABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698



SPILLWAY DATA					
POND ID	A	B	C	D	E
FB-1	256.25	255.25	6'	1.00'	12.0'
FB-2	251.00	250.00	6'	1.00'	12.0'

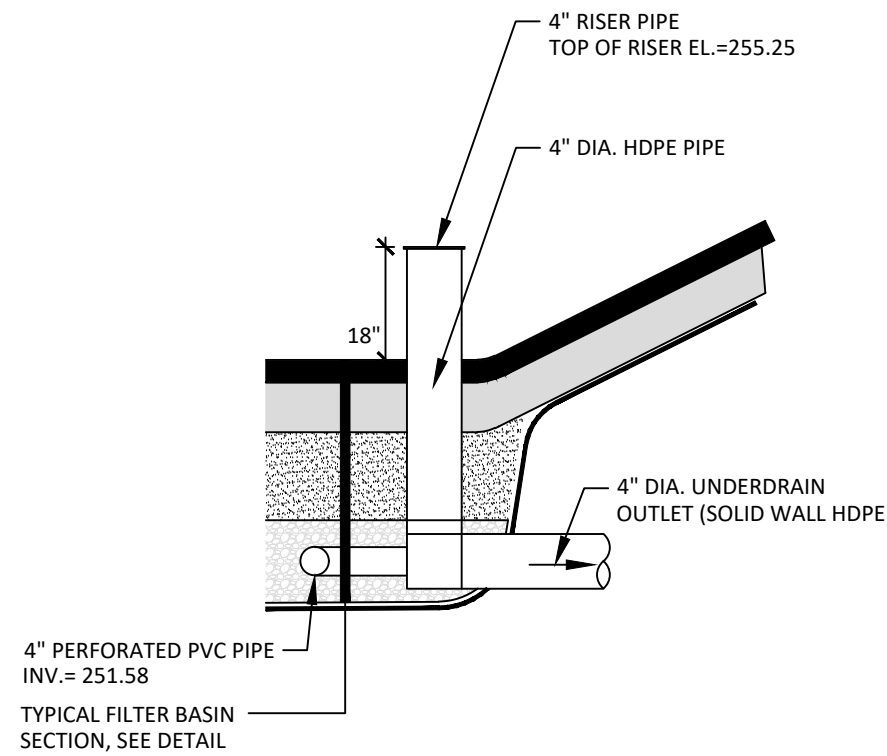
RIPRAPPED SPILLWAY CROSS-SECTION
NOT TO SCALE



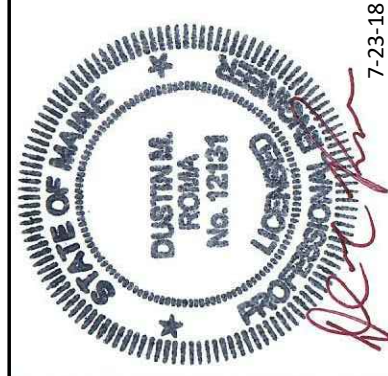
NOTES:

1. LARGER DIAMETER STRUCTURES MAY BE REQUIRED DUE TO SIZE OR GEOMETRY OF PIPE CONNECTIONS AT MANHOLE. WALL THICKNESS TO INCREASE BY 1" FOR EACH 1'-0" DIA. INCREASE. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. CAST IRON GRATES AND FRAMES SHALL BE EQUAL TO GENERAL FOUNDARIES, INC. PRODUCT NO. 12442 - 24"DIA. 4" FRAME HEIGHT HEAVY DUTY, BUILT UP TYPE FRAME, SLOTTED GRATE. SUBMIT CATALOG SHEETS TO ENGINEER FOR APPROVAL.

PRECAST CONCRETE CATCH BASIN STRUCTURE
NOT TO SCALE



RISER PIPE DETAIL (FB-1)
NOT TO SCALE

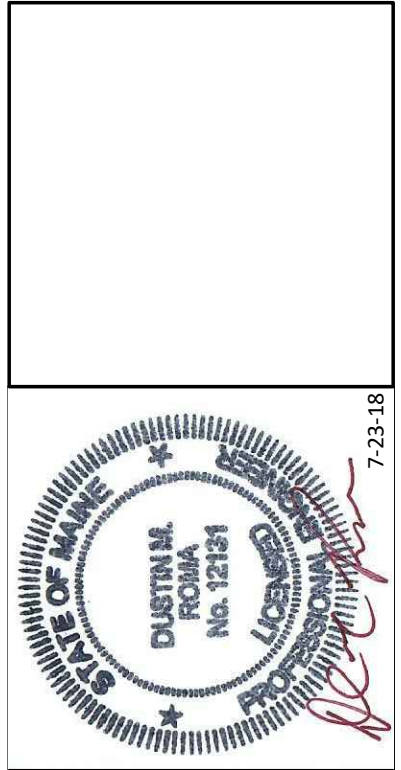
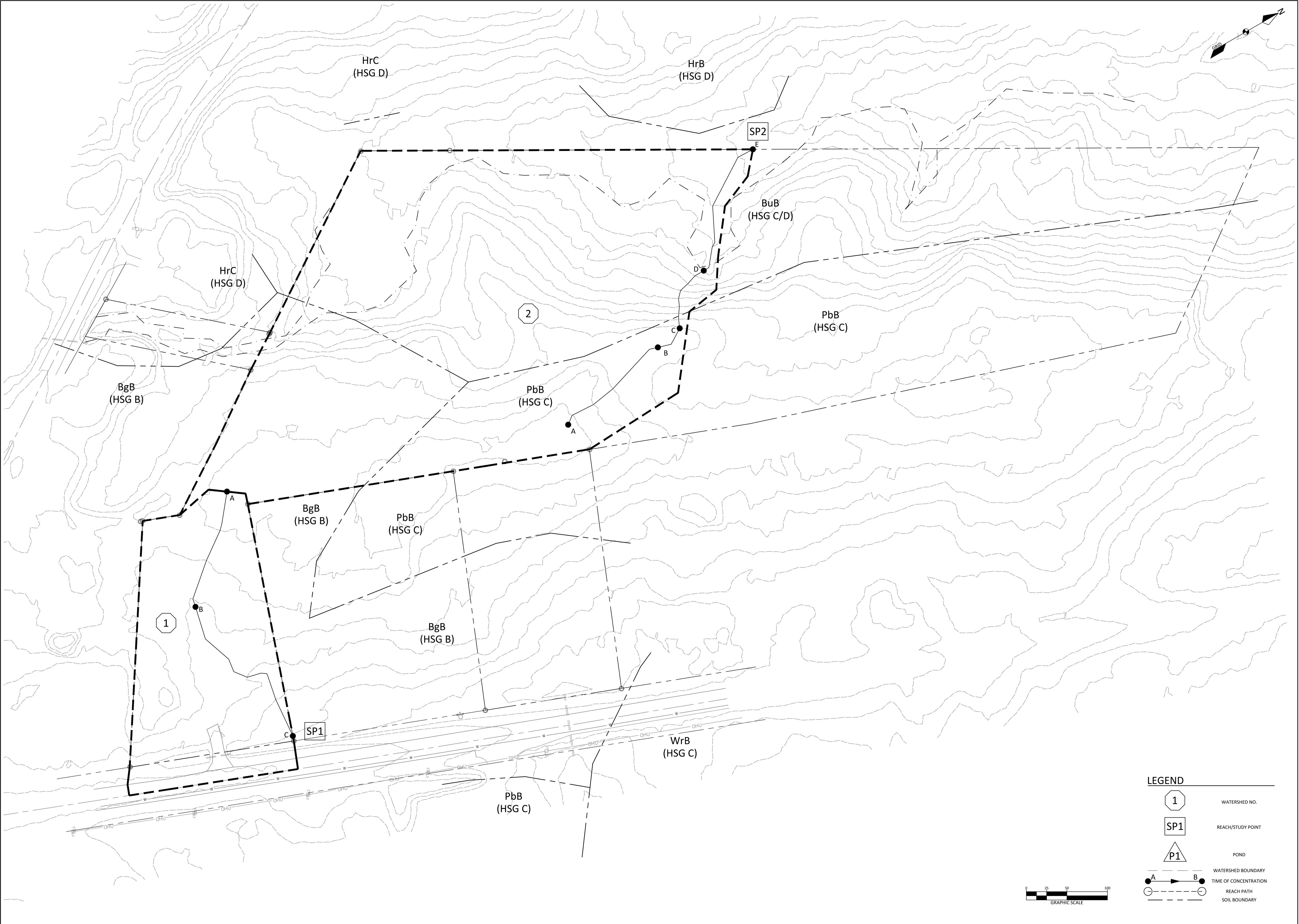


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV.	DATE	BY	DESCRIPTION
A	7-23-18	DMK	ISSUED TO DOWN FOR PRELIMINARY REVIEW

DETAILS
GRAY ROAD RETIREMENT COMMUNITY
WINDHAM, MAINE
FOR: **WELD, LLC**
PO BOX 1393
WINDHAM, MAINE 04062

17070
JOB NUMBER:
AS NOTED
SCALE:
7-23-2018
DATE:
SHEET 8 OF 8
D-3

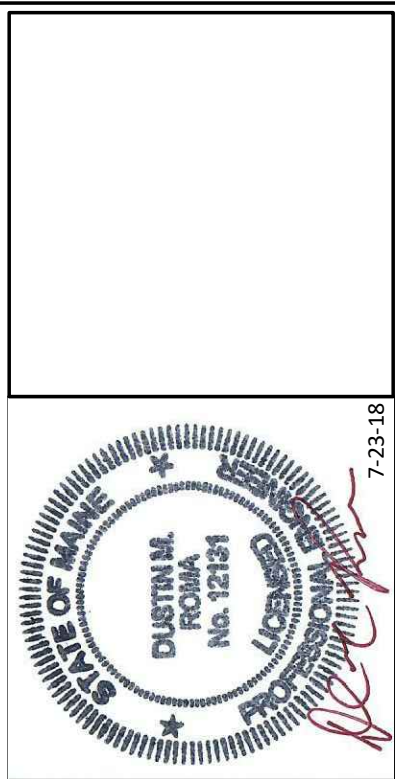
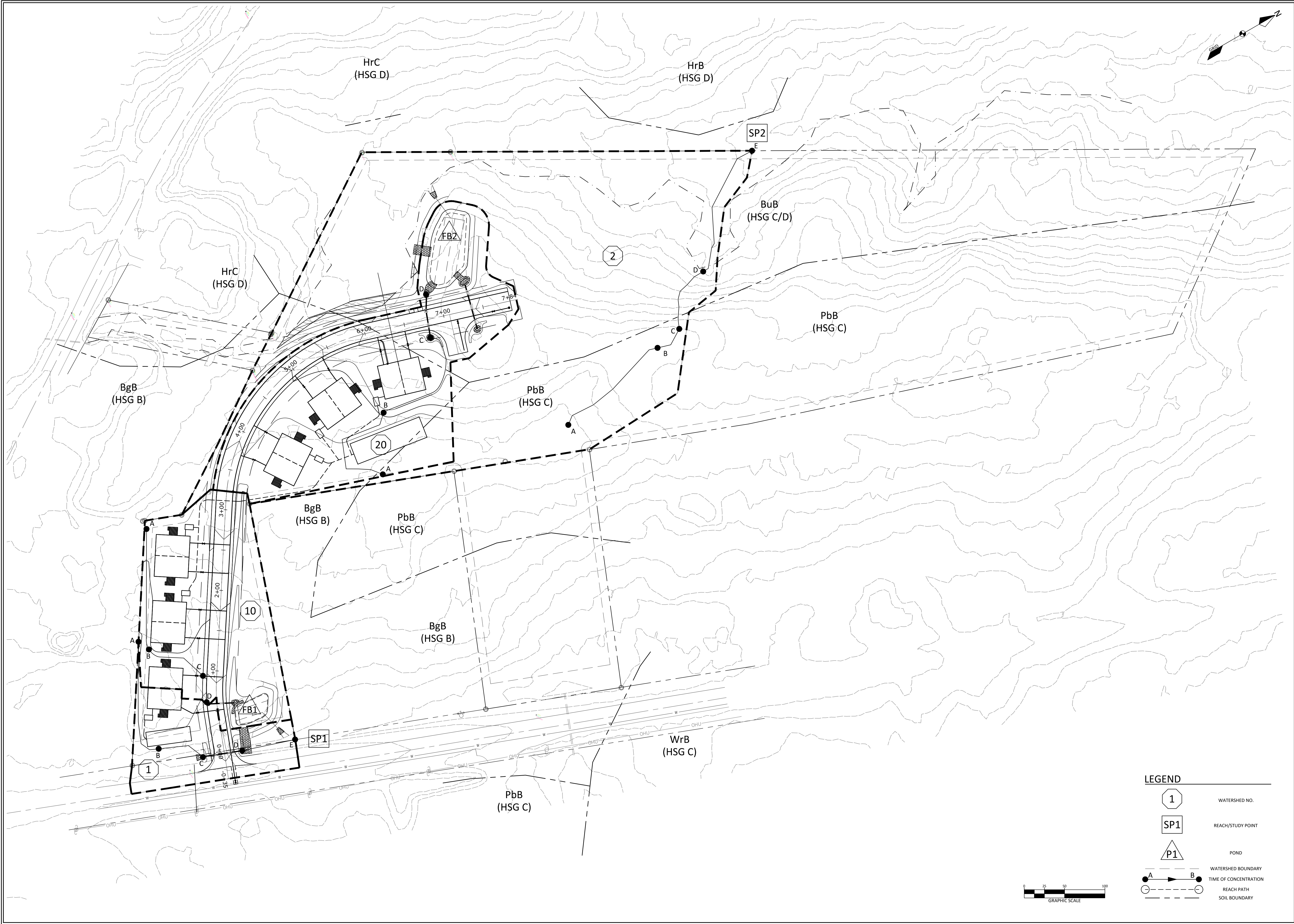


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WINDHAM, ME 04062
(207) 310 - 0506

REV	DATE	BY	DESCRIPTION
A	7-23-18	DMK	ISSUED TO TOWN FOR PRELIMINARY REVIEW

PRE-DEVELOPMENT WATERSHED MAP
GRAY ROAD RETIREMENT COMMUNITY
WINDHAM, MAINE
FOR: **WELD, LLC**
P.O. BOX 1391
WINDHAM, MAINE 04062

17070
JOB NUMBER:
AS NOTED
SCALE:
7-23-2018
DATE:
SHEET 1 OF 2
SWP-1



DM ROMA
CONSULTING ENGINEERS
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WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	7-23-18	DMK	ISSUED TO TOWN FOR PRELIMINARY REVIEW

POST-DEVELOPMENT WATERSHED MAP
GRAY ROAD RETIREMENT COMMUNITY
WINDHAM, MAINE
FOR: **WELD, LLC**
PO BOX 1351
WINDHAM, MAINE 04092

17070
JOB NUMBER:
AS NOTED
SCALE:
7-23-2018
DATE:
SHEET 2 OF 2
SWP-2