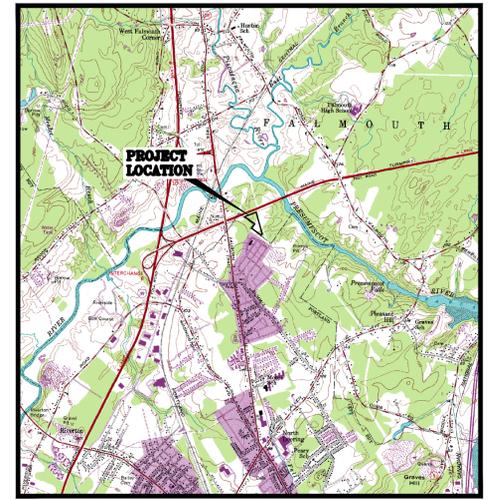


PROJECT PARCEL SITE PORTLAND ASSESSOR'S MAP & LOT NUMBERS	
MAP	LOT
448	A004

Applicant:
LBW, LLC
P.O. BOX 1382
PORTLAND, ME 04104
CLIENT PHONE 207-776-0742

BRANDY LANE SUBDIVISION PORTLAND, MAINE



LOCATION MAP
N.T.S.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	RIGHT OF WAY	
	PROPERTY LINE	
	BUILDING SETBACK	
	ZONE LINE	
	WETLAND BOUNDARY	
	GUIDE RAIL	
	EDGE OF PAVEMENT	
	EDGE OF GRAVEL DRIVE	
	GRADING CONTOUR LINE	
	SPOT ELEVATION	
	TREELINE TREES & HEDGES	
	POLE WITH LIGHT FIXTURE(S)	
	UTILITY POLE	
	FREESTANDING SIGN	
	PAINTED DIRECTIONAL TRAFFIC ARROW	
	OVERHEAD ELECTRIC/TELEPHONE	
	UNDERGROUND ELECTRIC/TELEPHONE	
	WATER LINE	
	STORM DRAIN LINE	
	CULVERT	
	HYDRANT	
	WATER GATE VALVE	
	WATER SHUT OFF VALVE	
	MANHOLE	
	CATCH BASIN	
	TEST PIT	
	IRON ROD (SET)	
	IRON ROD (FOUND)	
	MONUMENT	
	RIPRAP	
	SILT FENCE - PERIMETER	
	STONE SEDIMENT BARRIER	
	FENCE	
	WELL	

GENERAL NOTES

GENERAL NOTES

1. TOPOGRAPHIC DATA AND EXISTING CONDITIONS WAS PREPARED BY TITCOMB ASSOCIATES OF FALMOUTH MAINE.
2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER, THE CITY OF PORTLAND OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
4. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
5. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, AND/OR CITY OF PORTLAND SPECIFICATIONS.
6. WETLANDS ON THIS PLAN WERE DELINEATED AND GPS LOCATED BY TRC.
7. ELEVATIONS FOR THIS PROJECT ARE ON THE CITY'S DATUM.

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A SUBDIVISION APPROVAL FROM THE CITY OF PORTLAND. THE CONSTRUCTION WILL BE GOVERNED BY THE CITY OF PORTLAND ZONING ORDINANCE WHICH IS AVAILABLE FOR VIEWING AT THE OFFICE OF THE ENGINEER OR THE MUNICIPAL OFFICE.
2. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

LAYOUT NOTES

LAYOUT NOTES

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB.
2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.
3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE-HALF OF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
4. PROPERTY LINE AND R.O.W. MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION. IF DISTURBED, THEY SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE, BY A MAINE LICENSED LAND SURVEYOR.
5. PROPOSED RIGHT OF WAY MONUMENTS AND PROPERTY LINE PINS SHALL BE INSTALLED UNDER THE DIRECTION OF A MAINE LICENSED LAND SURVEYOR.
6. CURB RADI UNLESS OTHERWISE NOTED ON THE PLAN SHALL BE A MINIMUM OF 3'.

UTILITY NOTES

UTILITY NOTES

1. ALL WATER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO PORTLAND WATER DISTRICT STANDARDS. ALL WATER DISTRIBUTION PIPING SHALL BE CLASS 52 DUCTILE IRON PIPE, DOUBLE CEMENT LINED AND BITUMINOUS COATED CONFORMING TO AWWA/ANSI C104/A21.4. DISINFECTION OF WATER LINES SHALL CONFORM TO AWWA STANDARD C651, LATEST REVISION.
2. THE LOCATION OF THE PROPOSED UNDERGROUND ELECTRICAL SERVICE IS APPROXIMATE AND THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION WITH CENTRAL MAINE POWER COMPANY.
3. THRUST BLOCKS AND/OR LOCKING RETAINER GLANDS SHALL BE PLACED ON THE WATER DISTRIBUTION LINES AT ALL BENDS, TEES, VALVES, CHANGES IN DIRECTION, ETC. THE THRUST BLOCKS OR LOCKING RETAINER GLANDS SHALL MEET THE REQUIREMENTS OF THE PORTLAND WATER DISTRICT.
4. TEST PITS AT ALL UTILITY CROSSINGS SHALL BE COMPLETED TWO WEEKS IN ADVANCE OF THE START OF CONSTRUCTION OR ORDERING OF MATERIALS. TEST PIT INFORMATION SHALL BE PROMPTLY PROVIDED TO ENGINEER FOR REVIEW.
5. ALL GAS UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO UNITIL STANDARDS.

GRADING AND DRAINAGE NOTES

GRADING AND DRAINAGE NOTES

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603-- PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:
 REINFORCED CONCRETE PIPE, CLASS III
 POLYVINYL-CHLORIDE (PVC) PIPE
 SMOOTH BORE POLYETHYLENE - ADS OR HANCOR
2. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY THE OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.
3. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

EROSION CONTROL NOTES

EROSION CONTROL NOTES

1. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE. THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE CONSTRUCTION ENTRANCE.
2. PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, ALL GROUND AREAS DISTURBED FOR CONSTRUCTION WILL BE GRADED, LOAMED AND SEEDED AS SOON AS POSSIBLE. PERMANENT SEED MIXTURE SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL NOTES INCLUDED ON SHEET C408.
3. PRIOR TO PAVING, THE CONTRACTOR SHALL FLUSH SEDIMENT FROM ALL STORM DRAIN LINES, REMOVE ACCUMULATED SEDIMENT FROM SUMPS AND INVERTS AND PROPERLY DISPOSE OF.
5. ALL CATCH BASINS WITH OUTLET PIPES 18" DIAMETER OR LESS SHALL BE PROVIDED WITH A "SNOUT" SEDIMENTATION HOOD PER DETAIL.
6. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES.
7. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCE AS IT BECOMES SATURATED WITH MUD TO ENSURE THAT IT WORKS AS PLANNED DURING CONSTRUCTION.
8. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.
9. EROSION CONTROL NOTES ACCOMPANY THIS PLAN SET AND ARE CONTAINED ON DRAWING C408 OF THIS PLAN SET.
10. THE MAINTENANCE SCHEDULE FOR THE CATCH BASIN SEDIMENT SUMPS IS CONTAINED IN THE EROSION CONTROL NOTES INCLUDED ON SHEET C408.
11. THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION, EROSION/SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS BASED UPON ANY THIRD PARTY REVIEW (ie MDEP) MAY RESULT IN MONETARY PENALTIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.
12. ALL NON-PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE LOAMED AND SEED, UNLESS OTHERWISE DIRECTED BY THE OWNER.
13. ALL DISTURBED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL PRIOR TO PERMANENT SEEDING.

UTILITIES

WATER:
PORTLAND WATER DISTRICT
225 DOUGLASS STREET
PORTLAND, MAINE 04102
(207) 774-5961
CONTACT: JAY ARNOLD

SEWER:
PORTLAND PUBLIC WORKS DEPT.
55 PORTLAND STREET
PORTLAND, MAINE 04101
(207) 874-8871
CONTACT: BRAD ROLAND

ELECTRIC:
CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
(207) 826-2869
CONTACT: JAMIE COUGH

TELEPHONE:
VERIZON
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
(207) 797-1842

CABLE:
TIME WARNER CABLE
118 JOHNSON ROAD
PORTLAND, MAINE 04102
(207) 775-3431
CONTACT: MARK PELLETIER

INDEX

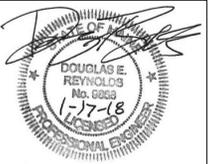
C001	COVER SHEET, GENERAL NOTES, & LEGEND
C100	BRANDY LANE SUBDIVISION PLAT (TITCOMB ASSOCIATES)
C100	OVERALL SUBDIVISION PLAN
C101	LAYOUT AND UTILITY PLAN AND PROFILE
C101A	EXISTING WATER MAIN PLAN AND PROFILE
C102	LAYOUT AND UTILITY PLAN AND PROFILE
C103	OVERALL GRADING, DRAINAGE, AND EROSION CONTROL PLAN
C104	GRADING AND DRAINAGE PLAN AND PROFILE
C105	GRADING AND DRAINAGE PLAN AND PROFILE
C401	SITE DETAILS
C402	SITE, UTILITY, AND EROSION CONTROL DETAILS
C403	DRAINAGE AND UTILITY DETAILS
C404	SEWER AND WATER DETAILS
C405	DRAINAGE DETAILS
C406	SOIL FILTER PLAN AND DETAILS
C407	FOCALPOINT DETAILS
C408	EROSION CONTROL NOTES
WQ	WATER QUALITY PLAN
W1	PRE DEVELOPMENT WATERSHED MAP
W2	POST DEVELOPMENT WATERSHED MAP

PERMITS

TYPE OF PERMIT	GOVERNING BODY	STATUS
NRPA TIER 2	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 312 CANCO ROAD PORTLAND, ME 04103 (207) 822-6300	SUBMITTED: ANTICIPATED JAN 2018
SUBDIVISION APPLICATION	CITY OF PORTLAND PLANNING DEPARTMENT 398 CONGRESS STREET PORTLAND, ME 04101 (207) 874-8719	SUBMITTED: MAY 24, 2017

CALL BEFORE YOU DIG
1-888-344-7233

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS

Design:	Draft:	Date:
BMG	CG	JAN 2018
Checked: DER	Scale: 1"=40'	Job No.: 98089.08
File Name: 98089-08-COVER.dwg		

Issued For	Revision	Date	By
LEVEL III SUBDIVISION APPLICATION		5/12/17	DER
MDEP STORMWATER PRE APP		1/23/17	AMP
PRICING		9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY		6/24/16	AMP

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www.gorrillpalmer.com
207.772.2515

Drawing Name:	Cover Sheet, General Notes, and Legend
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
C001

Approved by the City of Portland Planning Board

Dated _____

see note 2



N/F Robert L. Adam 23889/320

N/F City of Portland 17463/276

N/F City of Portland 17463/276

- LEGEND**
- Monument - to be set (6"x6"/3' offset)
 - Monument - found
 - Iron marker - found
 - Iron marker - to be set (#5 rebar)
 - Property line (locus)
 - - - Property line (abutter)
 - - - Proposed property line
 - - - Easement line
 - N/F Now or formerly of
 - 1234/567 Deed reference (Book/Page)

PLAN REFERENCES

- (1) Plan of Property for Robert Adam made by Land Use Consultants dated August 1978. Recorded in Plan Book 125, Pages 45 and 46.
- (2) Presumpscot River Place Amended Recording Plat made for The Teal Company by Land Use Consultants dated May 10, 1983 and revised February 6, 1984. Recorded in Plan Book 141, Page 42.
- (3) Plan of Crestview Acres, Section 5, made for Donald R. Peters by H.I. & E.C. Jordan dated December 24, 1969. Recorded in Plan Book 81, Page 23.
- (4) Third Amended Recording Plat of Alice Street Subdivision made for Lloyd B. Wolf by Land Use Consultants dated February 27, 1996. Recorded in Plan Book 196, Page 319.
- (5) Plan of Oatnuts Park owned by A.M. Hayes. Recorded on February 18, 1902 in Plan Book 9, Page 103.
- (6) Plan of Valley View Heights (Curtis Road) made for C.H. Hanson Co. by H.I. & E.C. Jordan Company dated January 31, 1967. Recorded in Plan Book 74, Page 1.
- (7) Presumpscot River Place II made for The Teal Company by Land Use Consultants dated June 28, 1984 and revised August 9, 1985. Recorded in Plan Book 149, Page 64.
- (8) Auburn Pines Subdivision Plan made for Neptune Properties, Inc. by Pinkham & Greer dated April 28, 1999. Recorded in Plan Book 199, Page 393.
- (9) Presumpscot River Place III-Subdivision Plan made for Robert Adam and Burt Wolf by Titcomb Associates dated December 4, 2001. Recorded in Plan Book 202, Page 650.
- (10) Riverwalk Subdivision Plan made for Gorrill-Palmer by Titcomb Associates dated October 25, 2005 and revised February 24, 2006. Recorded in Plan Book 206, Page 412.

NOTES

- (1) Surveyors seal is for interior lot dimensions only. Property perimeter is based on plan reference #1.
- (2) Bearings are based on True North as shown on plan reference #1. The Maine State Coordinates labeled for the perimeter corners were derived from GPS observations utilizing the NOAA OPUS application (NAD83 West Zone).
- (3) Abutters noted on this plan are per City of Portland and Town of Falmouth records.
- (4) Property lies within Zone X based on FIRM Community #230045 Panel #0008 B, dated October 16, 1984. It does not lie within a special flood hazard area.
- (5) Reference is herein made to Private & Special Laws of Maine, Second Regular Session of the 120th Legislature, Chapter 52, S.P. 499-L.D. 1586, An Act to Separate Territory from the Town of Falmouth and Annex it to the City of Portland, approved April 2, 2002.
- (6) The street monuments to be set will be in accordance with the City of Portland standards.

EASEMENTS / ENCUMBRANCES

- 1) Property is subject to a Temporary Easement granted to the City of Portland by Lloyd B. Wolf recorded in Book 26744, Page 103.
- 2) Property is subject to a Temporary Pedestrian Easement granted to the City of Portland by Lloyd B. Wolf recorded in Book 23889, Page 346.
- 3) Property is subject to a Pedestrian Easement granted to the City of Portland by Lloyd B. Wolf recorded in Book 23889, Page 348.
- 4) Property is subject to an easement conveyed to Portland Water District recorded in Book 2267, Page 257.
- 5) Property is subject to an easement conveyed to Central Maine Power Company by Philip E. Hamlin and Elizabeth G. Hamlin recorded in Book 2167, Page 435.

TOTAL AREA

281,318 square feet / 6.46 acres (includes the Remaining Land)

OWNER OF RECORD

Lloyd B. Wolf: Book 23889, Page 327
9 Lovett's Field, South Portland, Maine

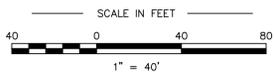
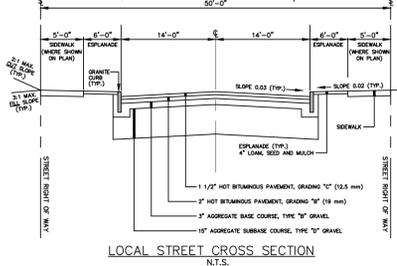
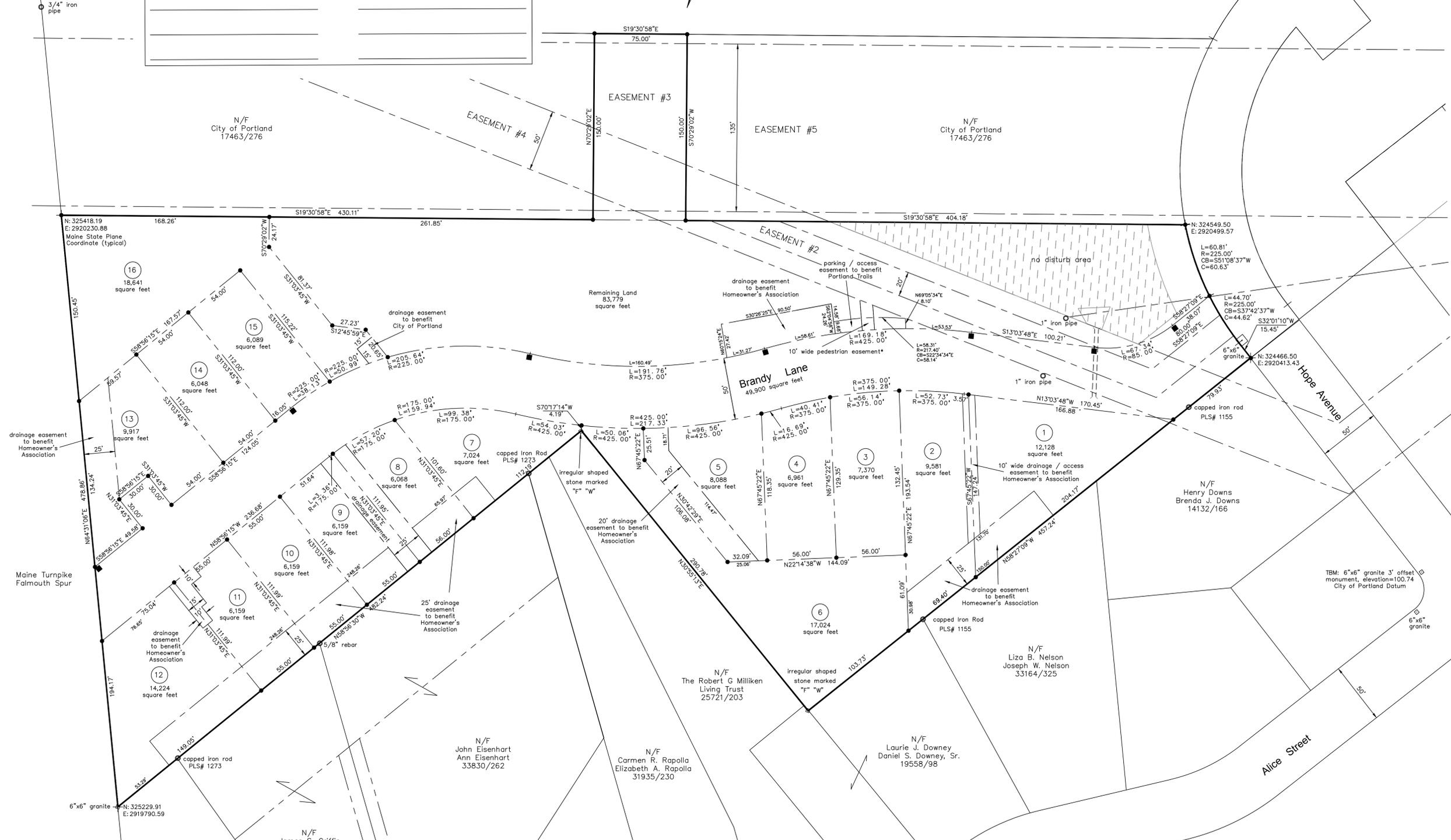
PLAN OF Brandy Lane Subdivision Plat

MADE FOR
LBW, LLC
Portland, Maine

PO Box 1382
JOB #99064 DATE: January 15, 2018 SCALE: 1" = 40'

BOOK #
99064 Brandy Lane Sub

133 Gray Road, Falmouth, Maine 04105
(207)797-9199 www.titcombsurvey.com



SURVEYOR'S SEAL IS FOR INTERIOR LOT CALCULATIONS ONLY. THE BOUNDARY PERIMETER IS BASED ON INFORMATION PROVIDED BY THE OWNER AND INFORMATION SHOWN ON A PLAN OF PROPERTY MADE FOR ROBERT ADAM BY LAND USE CONSULTANTS DATED AUGUST 1978 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 125, PAGES 45 AND 46. NO CERTIFICATIONS ARE STATED OR IMPLIED REGARDING THE ACCURACY OR VALIDITY OF THE PERIMETER BOUNDARIES.



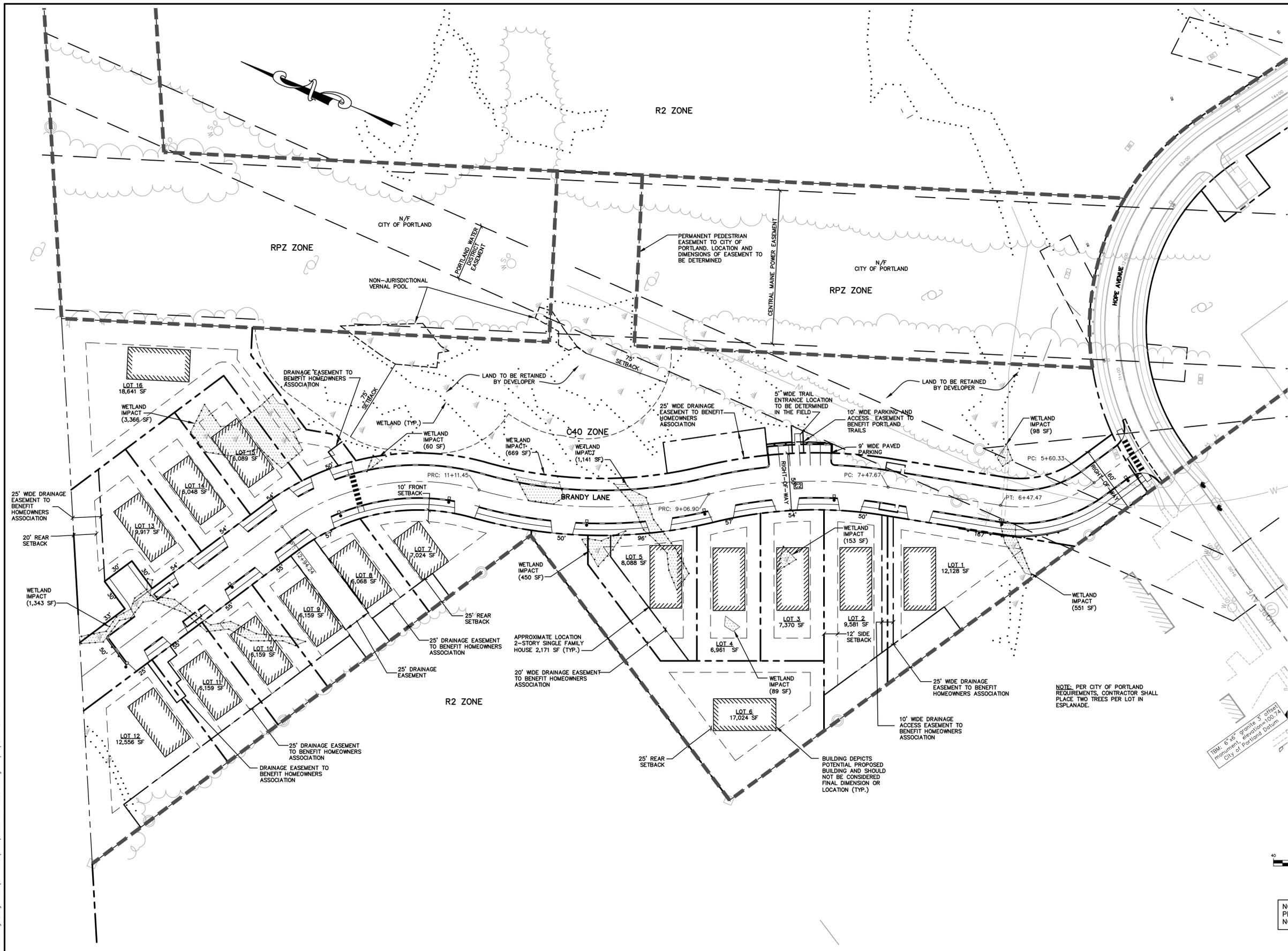
Rex J. Croteau
MAINE PLS #2273

State of Maine, Cumberland ss
Registry of Deeds
Received _____ 20
at _____ m _____ M and recorded in
Plan Book _____ Page _____
Attest: _____
Register

SPACE AND BULK STANDARDS	
ZONE	REQUIRED
MIN. LOT SIZE	6,000 S.F.
BUILDING SETBACKS	
FRONT	10'
SIDE	12'
REAR	20*
MIN. FLOOR AREA	1,000 S.F.
MAX. STRUCTURE HEIGHT	35 FT.
MIN. STREET FRONTAGE	50 FT.
MAX. LOT COVERAGE	40%
MIN. LOT WIDTH	50 FT.

* FOR LOTS ABUTTING 195, REAR SETBACK IS 25'

NOTE:
TOTAL WETLAND IMPACT = 7,920 SF



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Design: DJG	Draft: CG	Date: JAN 2018
Checked: DER	Scale: 1"=40'	Job No.: 98089.08
File Name: 98089-08-SUBDIV.dwg		
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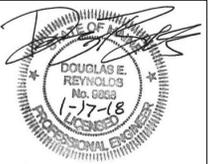
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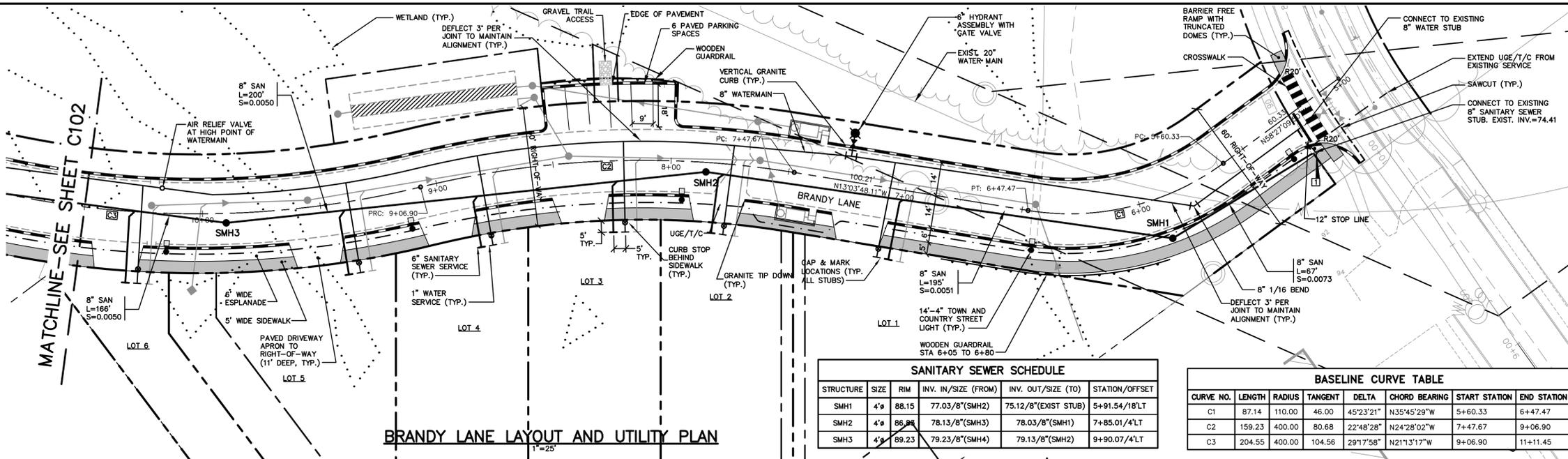
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Drawing Name:	Overall Plan
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
C100



NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



PAVEMENT LEGEND

ALL PAVEMENT SHALL BE STANDARD DUTY EXCEPT AS FOLLOWS:

- BITUMINOUS SIDEWALK

CURBING LEGEND

- VERTICAL GRANITE CURB

STRIPING LEGEND

SIGNAGE, STRIPING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REGARDING SIZE, INSTALLATION, LOCATION & REFLECTIVITY.

- 12" SL - 12" WIDTH STOP LINE
- 4" SWLL - 4" WIDTH SOLID WHITE LANE LINE
- 4" DYCL - 4" WIDTH DOUBLE YELLOW CENTERLINE
- 4" DWLL - 4" WIDTH DASHED WHITE LANE LINE

SIGN LEGEND

R1-1
30"x 30"

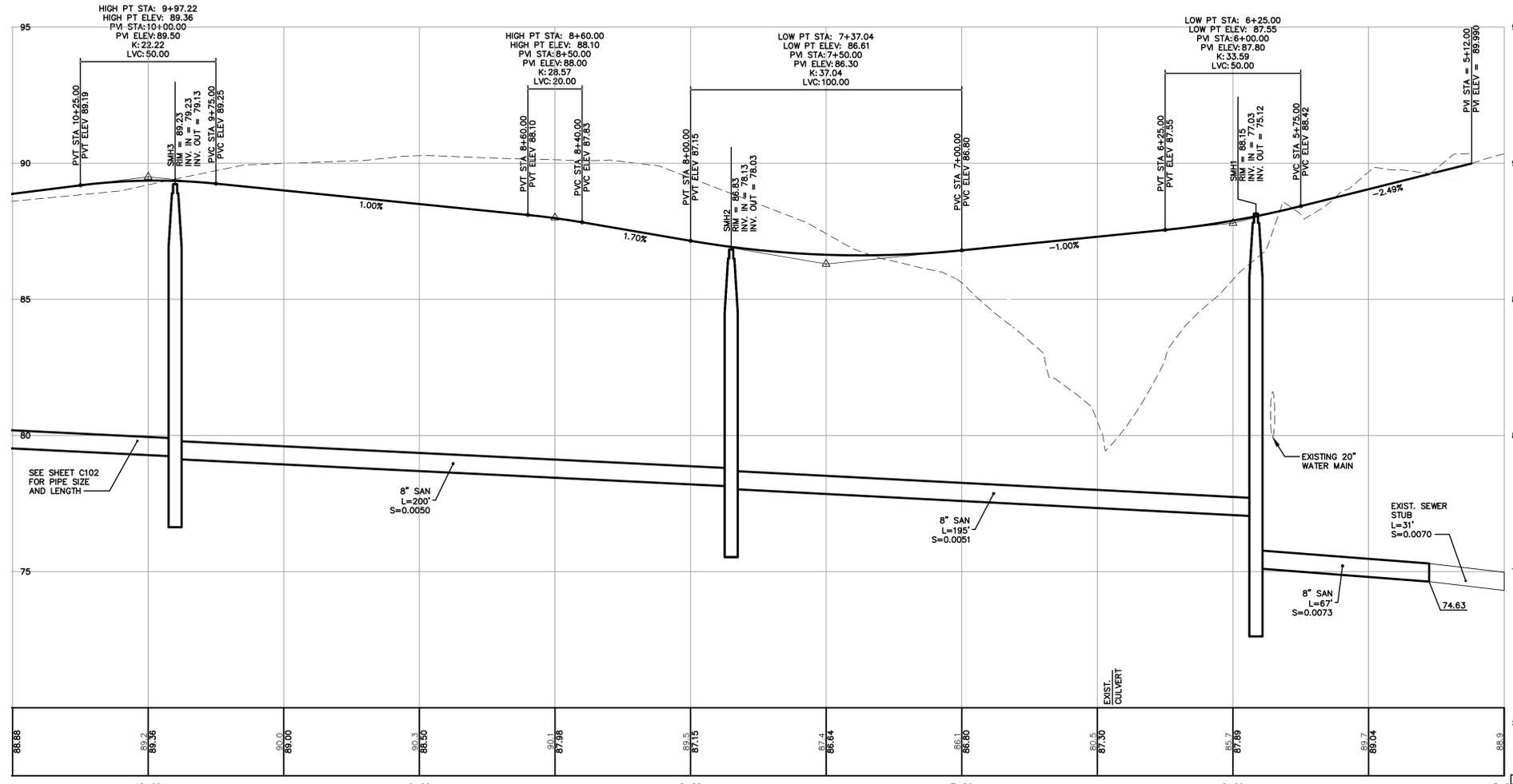
SANITARY SEWER SCHEDULE

STRUCTURE	SIZE	RIM	INV. IN./SIZE (FROM)	INV. OUT./SIZE (TO)	STATION/OFFSET
SMH1	4"ø	88.15	77.03/8"(SMH2)	75.12/8"(EXIST STUB)	5+91.54/18"LT
SMH2	4"ø	86.86	78.13/8"(SMH3)	78.03/8"(SMH1)	7+85.01/4"LT
SMH3	4"ø	89.23	79.23/8"(SMH4)	79.13/8"(SMH2)	9+90.07/4"LT

BASELINE CURVE TABLE

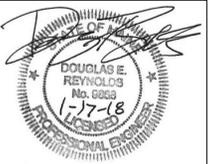
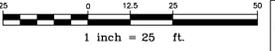
CURVE NO.	LENGTH	RADIUS	TANGENT	DELTA	CHORD BEARING	START STATION	END STATION
C1	87.14	110.00	46.00	45°23'21"	N35°45'29"W	5+60.33	6+47.47
C2	159.23	400.00	80.68	22°48'28"	N24°28'02"W	7+47.67	9+06.90
C3	204.55	400.00	104.56	29°17'58"	N21°13'17"W	9+06.90	11+11.45

BRANDY LANE LAYOUT AND UTILITY PLAN



BRANDY LANE ROADWAY AND SEWER PROFILE

- UTILITY NOTES:**
- INSTALL WATER SERVICE 10' FROM DRIVEWAY OR IN DRIVEWAY PROTECTED WITH VALVE BOX.
 - 5' SEPARATION BETWEEN WATER AND SEWER.



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Design: BMG Draft: CG Date: JAN 2018
 Checked: DER Scale: 1"=25' Job No.: 98089.08
 File Name: 98089-08-PP-SF.dwg
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GP GORRILL PALMER

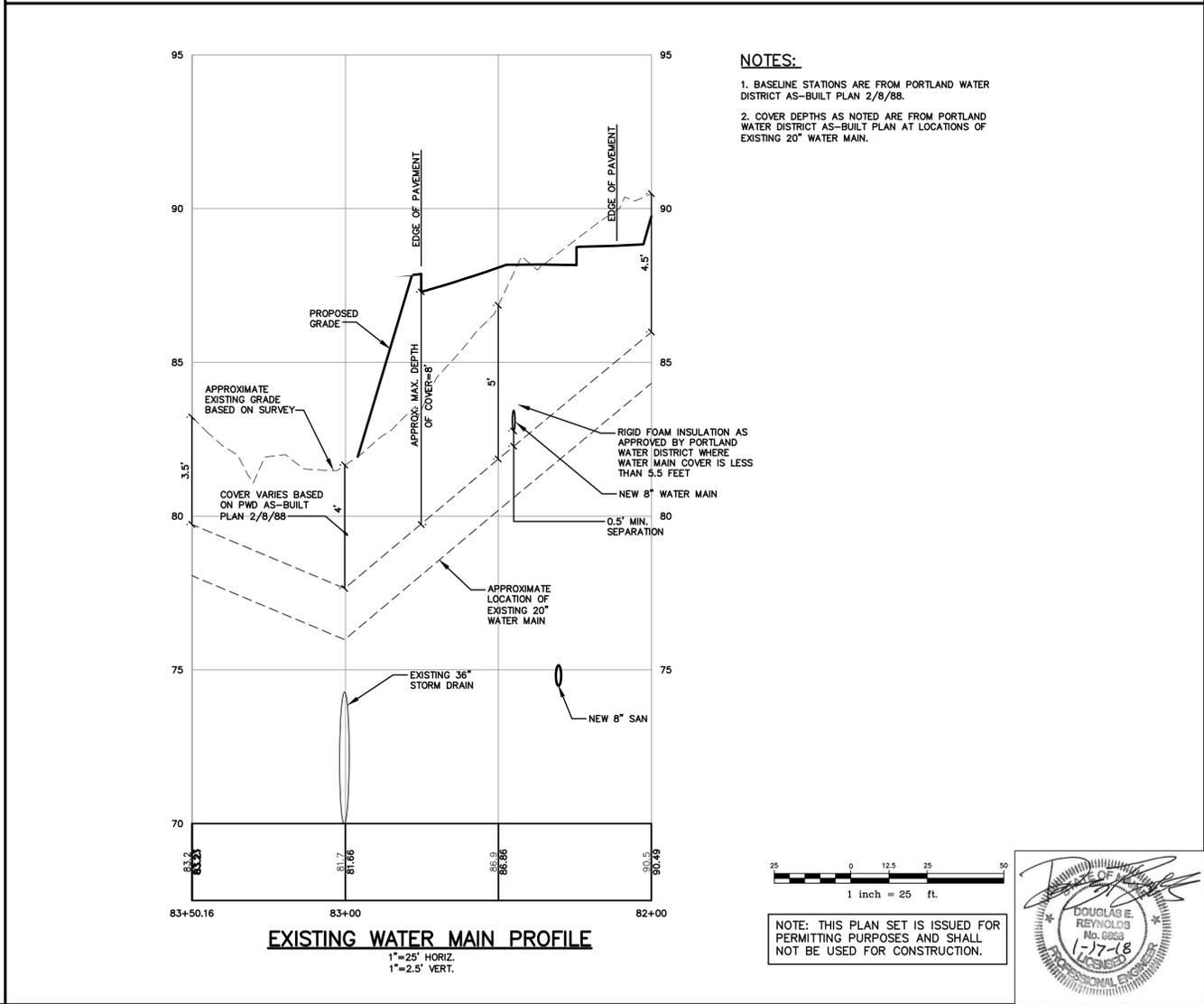
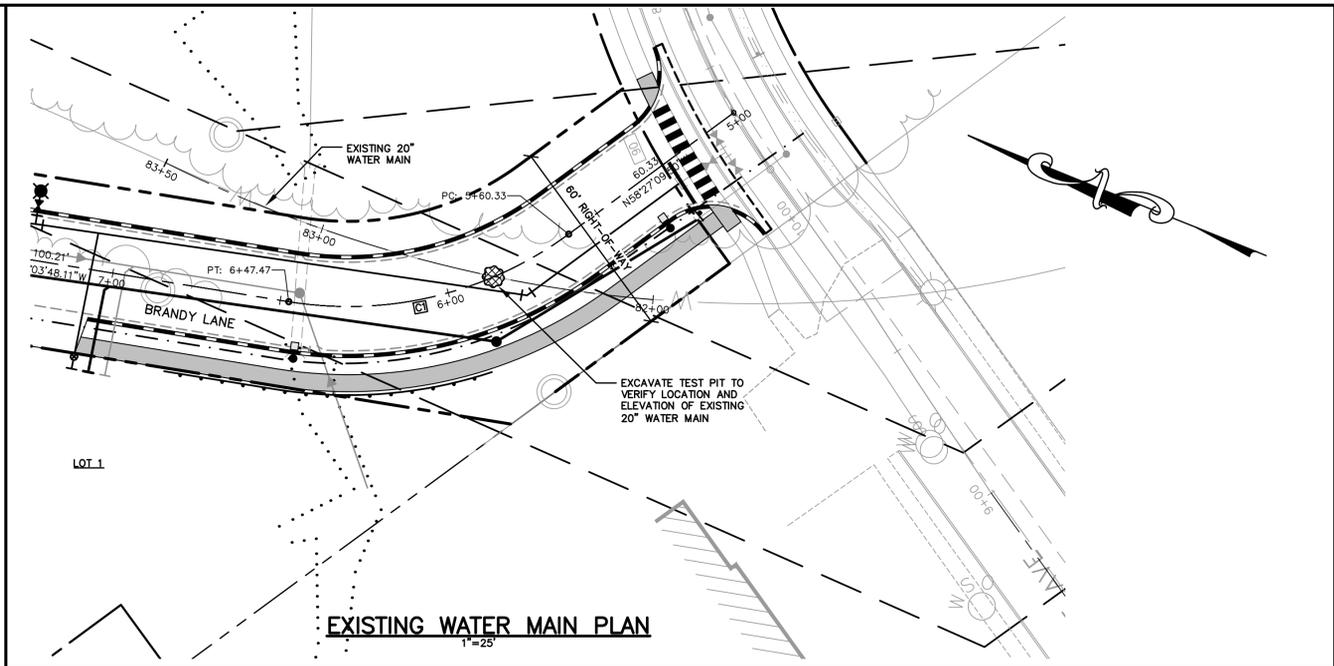
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Drawing Name: **Layout and Utility Plan and Profile**

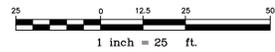
Project: **Brandy Lane**
Portland, Maine

Client: **LBW, LLC**
PO Box 1382, Portland, Maine 04104

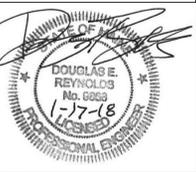
Drawing No.
C101



- NOTES:**
1. BASELINE STATIONS ARE FROM PORTLAND WATER DISTRICT AS-BUILT PLAN 2/8/88.
 2. COVER DEPTHS AS NOTED ARE FROM PORTLAND WATER DISTRICT AS-BUILT PLAN AT LOCATIONS OF EXISTING 20" WATER MAIN.



NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS

Issued For	Revision	Date	By
LEVEL III SUBDIVISION APPLICATION		5/12/17	DER
MDEP STORMWATER PRE APP		1/23/17	AMP
PRICING		9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY		6/24/16	AMP

Design: BMG	Draft: CG	Date: JAN 2018
Checked: DER	Scale: 1"=25'	Job No.: 98089.08
File Name: 98089-08-PP-SF.dwg		

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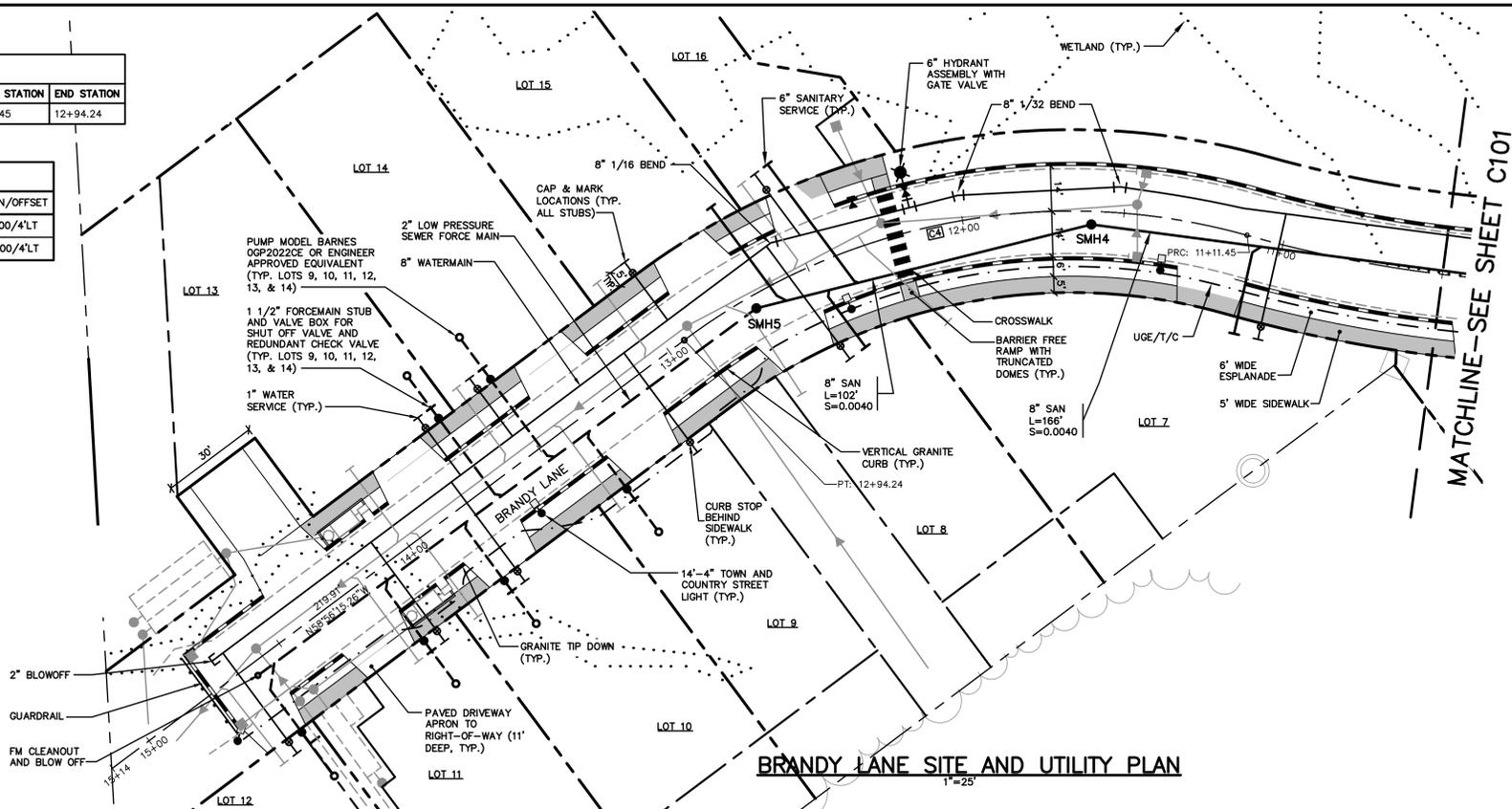
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Drawing Name:	Existing Water Main Plan and Profile
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
C101A

BASELINE CURVE TABLE							
CURVE NO.	LENGTH	RADIUS	TANGENT	DELTA	CHORD BEARING	START STATION	END STATION
C4	182.79	200.00	98.34	52°21'58"	N32°45'16"W	11+11.45	12+94.24

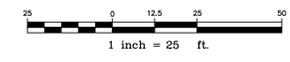
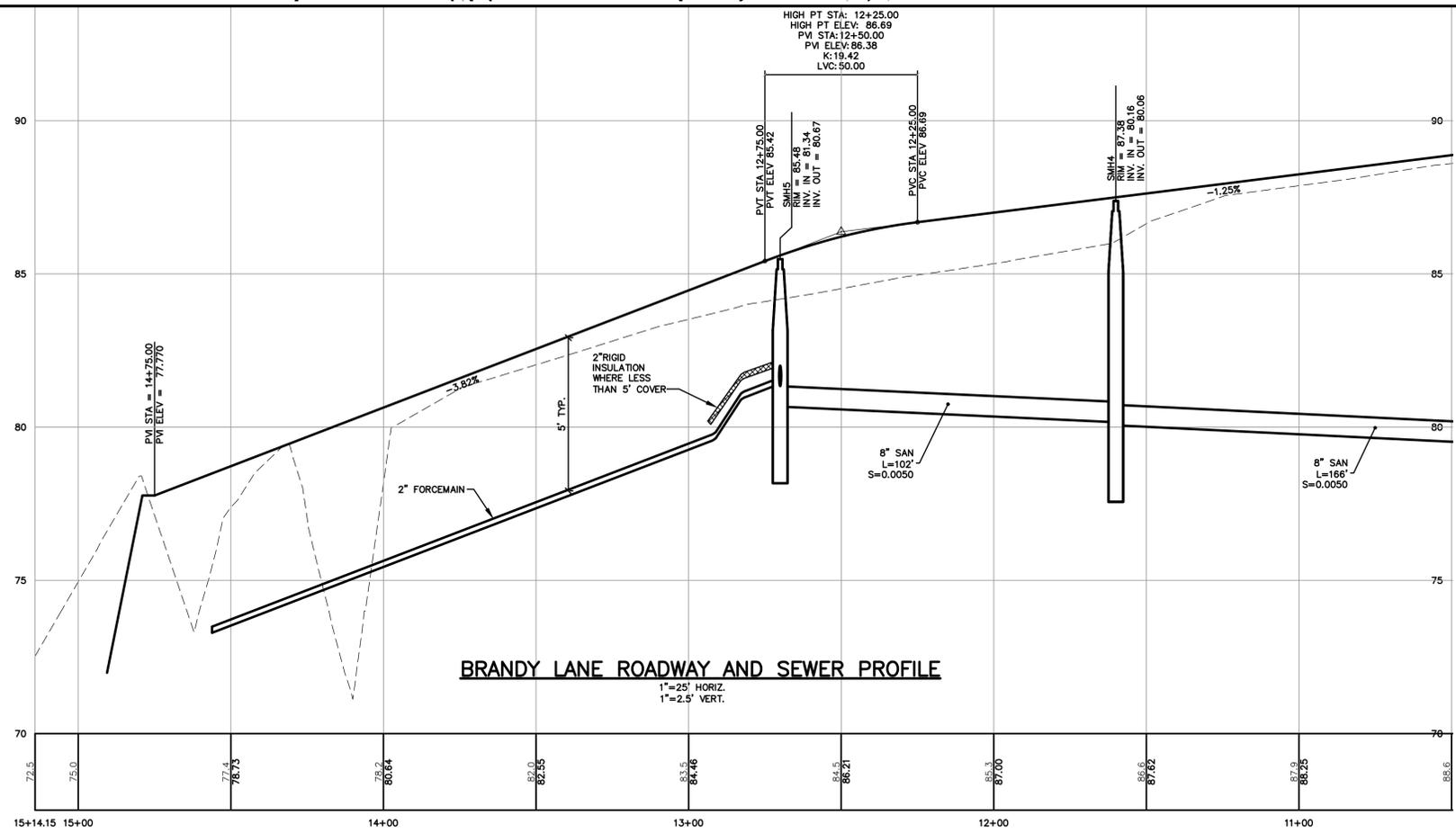
SANITARY SEWER SCHEDULE						
STRUCTURE	SIZE	RIM	INV. IN./SIZE (FROM)	INV. OUT./SIZE (TO)	STATION/OFFSET	
SMH4	4'	87.38	80.16/8"(SMH5)	80.06/8"(SMH3)	11+60.00/4'LT	
SMH5	4'	85.48	81.34/2"(FM)	80.67/8"(SMH4)	12+70.00/4'LT	



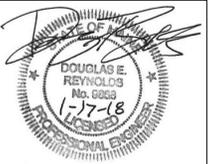
PAVEMENT LEGEND	
ALL PAVEMENT SHALL BE STANDARD DUTY EXCEPT AS FOLLOWS:	
	BITUMINOUS SIDEWALK

CURBING LEGEND	
	VERTICAL GRANITE CURB

- UTILITY NOTES:**
1. INSTALL WATER SERVICE 10' FROM DRIVEWAY OR IN DRIVEWAY PROTECTED WITH VALVE BOX.
 2. 5' SEPARATION BETWEEN WATER AND SEWER.
 3. THE HOMEOWNERS ASSOCIATION WILL RETAIN OWNERSHIP AND PROVIDE MAINTENANCE TO THE LOW PRESSURE SEWER SYSTEM.



NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS

Issued For	Date	By
LEVEL III SUBDIVISION APPLICATION	5/12/17	DER
MDEP STORMWATER PRE APP	1/23/17	AMP
PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP

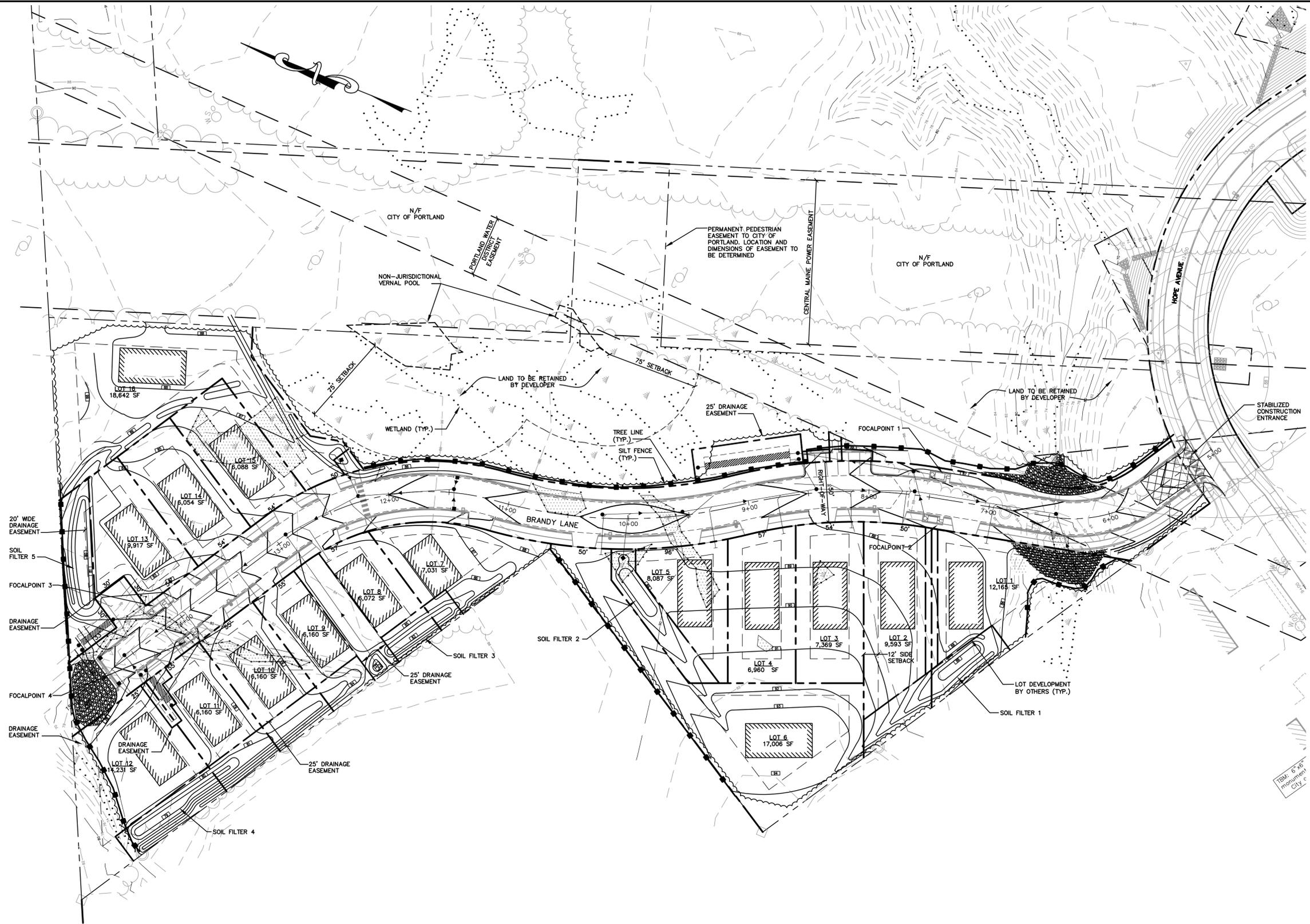
Design: BMG Draft: CG Date: JAN 2018
 Checked: DER Scale: 1"=25' Job No.: 98089.08
 File Name: 98089-08-PP-SP.dwg
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Drawing Name:	Layout and Utility Plan and Profile
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

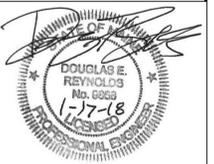
Drawing No.
C102



- NOTES:**
1. GRADING SHOWN WITHIN BUILDING ENVELOPES OF RESIDENTIAL LOTS IS PRELIMINARY AND MAY BE MODIFIED FOR CONSTRUCTION OF HOUSE SUCH THAT IT DOES NOT EFFECT SUBCATCHMENT DRAINAGE AREAS.
 2. GRADING OF STORMWATER TREATMENT BMP'S AND DRAINAGE SWALES SHALL BE COMPLETED AS SHOWN ON THIS PLAN AND THE DETAIL SHEETS.
 3. DRIVEWAYS FOR LOTS 6 AND 16 SHALL BE SUPER ELEVATED TO DIVERT FLOW TO STORM WATER FEATURE AS SHOWN ON THIS PLAN.
 4. CONTRACTOR TO PLANT 2 TREES PER LOT IN ESPLANADE



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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS

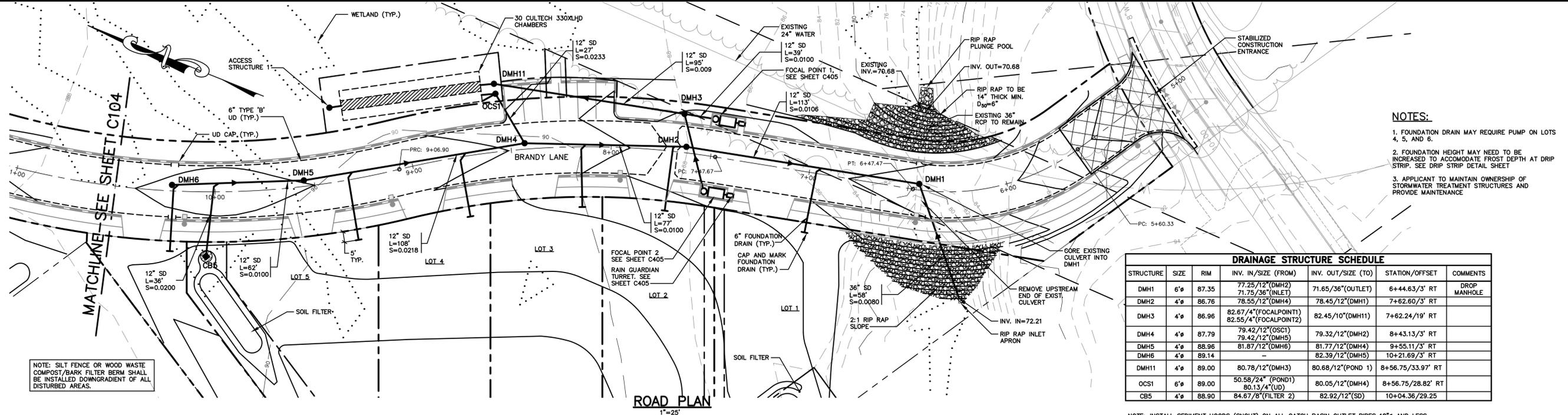
Issued For	Date	By
LEVEL III SUBDIVISION APPLICATION	5/12/17	DER
MDEP STORMWATER PRE APP	1/23/17	AMP
PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP

Design: BMG Draft: CG Date: MAY 2017
 Checked: DER Scale: 1"=40' Job No.: 98089.08
 File Name: 98089-08-GRADE-OVERALL.dwg
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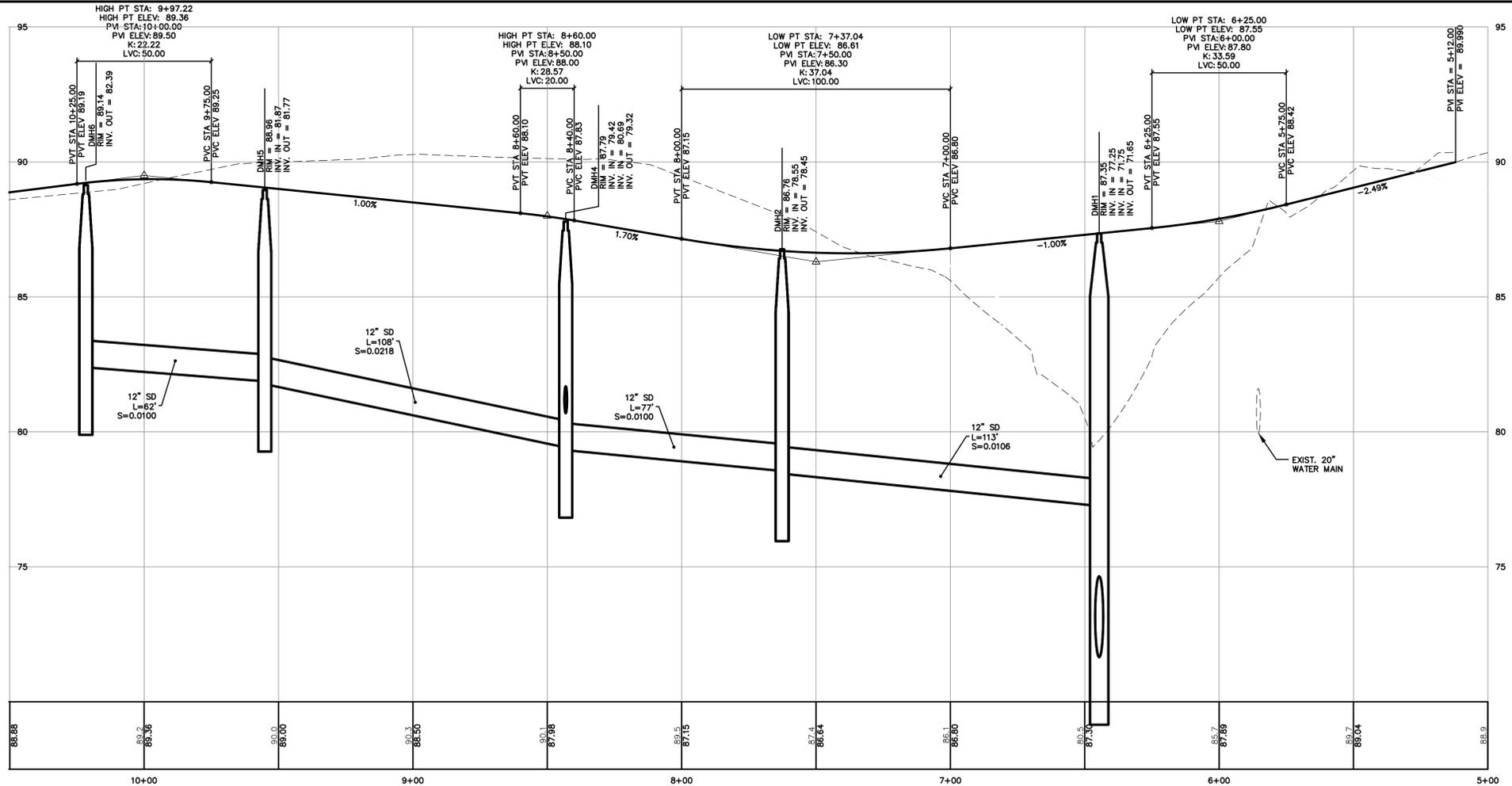
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Drawing Name:	Overall Grading, Drainage, and Erosion Control Plan
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

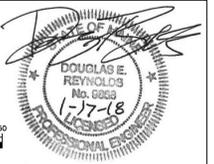
Drawing No.
C103



DRAINAGE STRUCTURE SCHEDULE						
STRUCTURE	SIZE	RIM	INV. IN/SIZE (FROM)	INV. OUT/SIZE (TO)	STATION/OFFSET	COMMENTS
DMH1	6"	87.35	77.25/12" (DMH2)	71.65/36" (OUTLET)	6+44.63/3' RT	DROP MANHOLE
DMH2	4"	86.76	78.55/12" (DMH4)	78.45/12" (DMH1)	7+62.60/3' RT	
DMH3	4"	86.96	82.67/4" (FOCALPOINT1) 82.55/4" (FOCALPOINT2)	82.45/10" (DMH11)	7+82.24/19' RT	
DMH4	4"	87.79	79.42/12" (OCS1)	79.32/12" (DMH2)	8+43.13/3' RT	
DMH5	4"	88.96	81.87/12" (DMH6)	81.77/12" (DMH4)	9+55.11/3' RT	
DMH6	4"	89.14	-	82.39/12" (DMH5)	10+21.69/3' RT	
DMH11	4"	89.00	80.78/12" (DMH3)	80.68/12" (POND 1)	8+56.75/33.97' RT	
OCS1	6"	89.00	50.58/24" (POND1) 80.13/4" (UD)	80.05/12" (DMH4)	8+56.75/28.82' RT	
CBS5	4"	88.90	84.67/8" (FILTER 2)	82.92/12" (SD)	10+04.36/29.25	



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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS

Issued For	Date	By
LEVEL III SUBDIVISION APPLICATION	5/12/17	DER
MDEP STORMWATER PRE APP	1/23/17	AMP
PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP

Design: BMG	Draft: CG	Date: JAN 2018
Checked: DER	Scale: 1"=25'	Job No.: 98089.08
File Name: 98089-08-PF-GRADE.dwg		

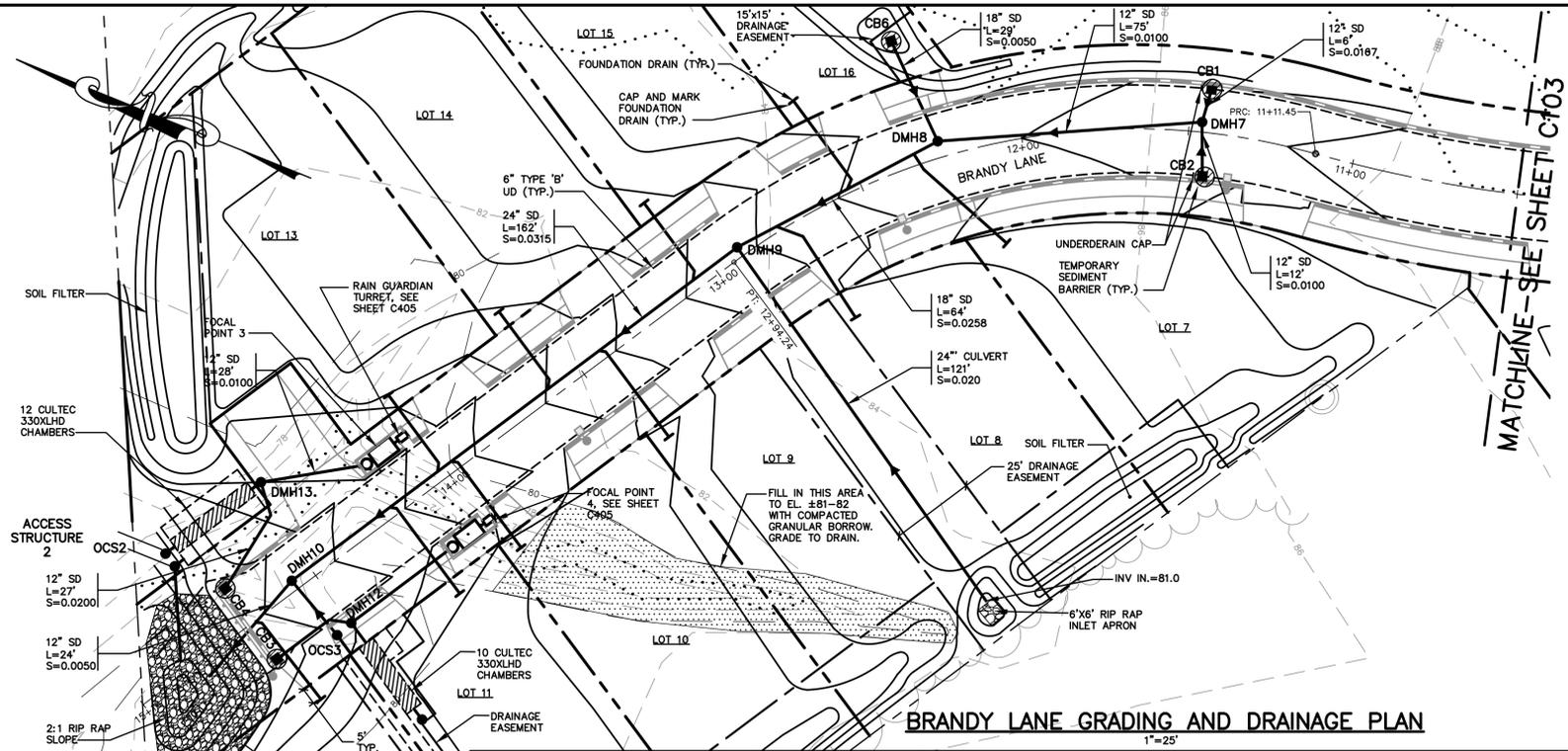
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Drawing Name:	Grading and Drainage Plan and Profile
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
C104



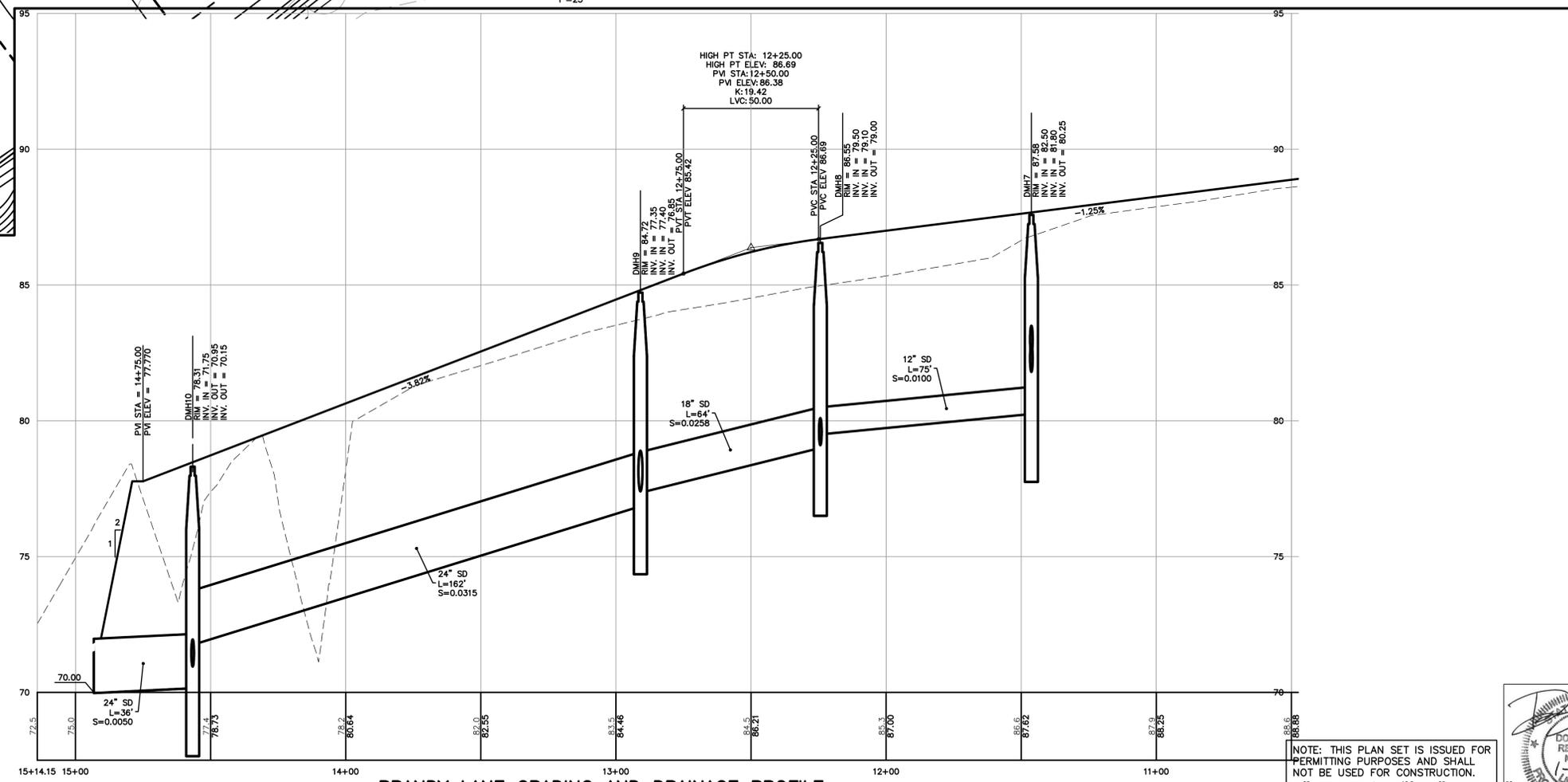
DRAINAGE STRUCTURE SCHEDULE						
STRUCTURE	SIZE	RIM	INV. IN./SIZE (FROM)	INV. OUT./SIZE (TO)	STATION/OFFSET	COMMENTS
DMH7	4"	87.58	82.50/6"(CB1) 81.80/6"(CB2)	80.25/12"(DMH8)	11+46.24/3' RT	
DMH8	4"	86.55	79.5/12"(DMH7) 79.1/18"(CB6)	79.00/18"(DMH9)	12+24.33/5' RT	
DMH9	4"	84.72	77.35/18"(DMH8) 78.58/24"(CULVERT)	76.85/24"(DMH10)	12+90.93/3' RT	
DMH10	6"	78.07	71.75/24"(DMH9) 72.87/24"(OCS3)	70.18/24"(OUTFALL)	14+56.64/3' RT	
DMH12	4"		73.68/12"(CB3) 75.49/12"(BEEHIVE)	72.20/24"(POND3)	14+50.04/17.66' LT	
DMH13	4"	80.00	73.58/12"(CB4) 75.83/12"(BEEHIVE)	72.2/12"(POND2)	14+45.63/32.08' RT	
CB1	4"	87.11	83.60/6"(UD)	82.60/12"(DMH7)	11+44.48/13' RT	
CB2	4"	87.11	83.60/6"(UD)	81.92/12"(DMH7)	11+44.48/13' LT	
CB3	4"	77.26	-	73.93/12"(DMH12)	14+73.94/13' LT	
CB4	4"	77.26	-	73.93/12"(DMH13)	14+73.88/13' RT	
CB6	4"	83.23	-	79.23/18"(DMH8)	12+28.33/37' RT	NEENAH R-1878 BGG DOUBLE GRATE
OCS2	6"	81.16	72.10/24"(POND2) 71.65/4"(UD)	71.55/24"(OUTFALL)	14+56.64/22' RT	
OCS3	6"	81.66	72.08/24"(POND3) 71.59/4"(UD)	71.49/24"(DMH10)	14+56.64/22' LT	

NOTE: INSTALL SEDIMENT HOODS (SNOUT) ON ALL CATCH BASIN OUTLET PIPES 18" AND LESS.

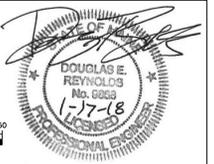
NOTES:

- FOUNDATION DRAIN MAY REQUIRE PUMP ON LOTS 4, 5, AND 6.
- FOUNDATION HEIGHT MAY NEED TO BE INCREASED TO ACCOMMODATE FROST DEPTH AT DRIP STRIP. SEE DRIP STRIP DETAIL SHEET

NOTE: SILT FENCE OR WOOD WASTE COMPOST/BARK FILTER BERM SHALL BE INSTALLED DOWNGRADIENT OF ALL DISTURBED AREAS.



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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS

Issued For	Date	By
LEVEL III SUBDIVISION APPLICATION	5/12/17	DER
MDEP STORMWATER PRE APP	1/23/17	AMP
PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP

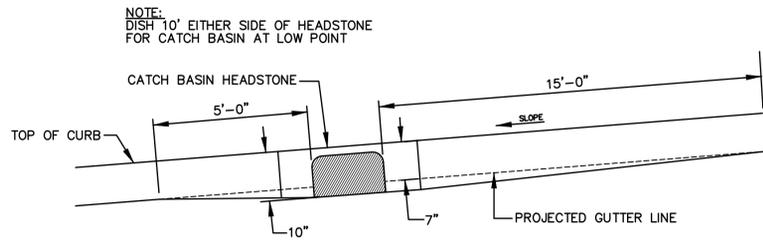
Design: BMG Draft: CG Date: JAN 2018
 Checked: DER Scale: 1"=25' Job No.: 98089.08
 File Name: 98089-08-PF-GRADE.dwg
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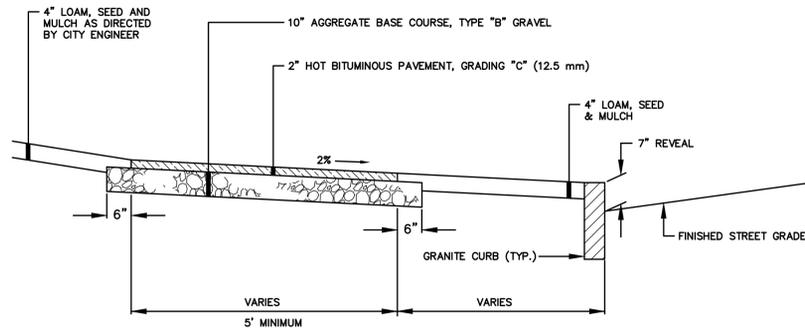
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Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
C105



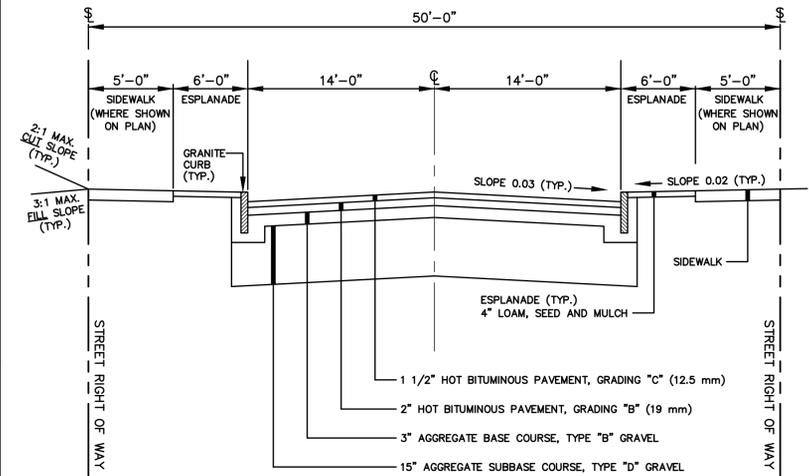
TYPICAL PAVEMENT GRADING ON SLOPES FOR CATCH BASIN AND INLET

N.T.S.



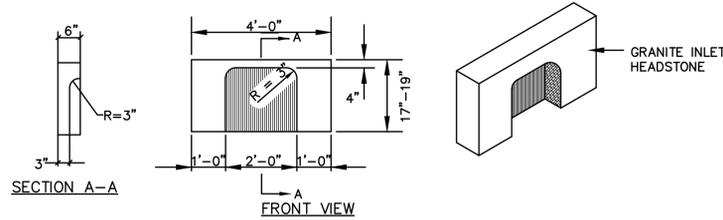
BITUMINOUS SIDEWALK

N.T.S.



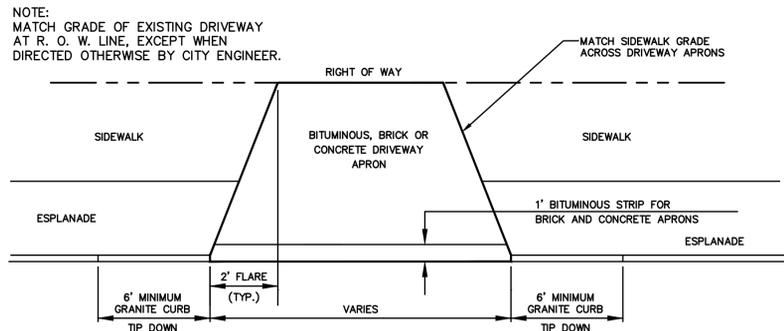
LOCAL STREET CROSS SECTION

N.T.S.



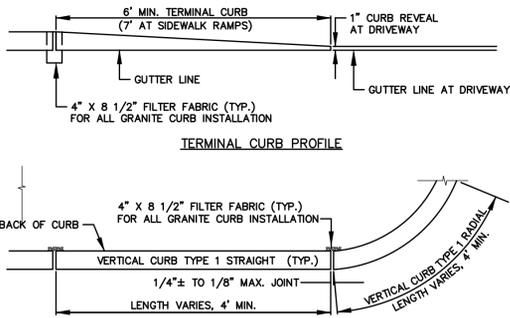
4' GRANITE HEADSTONE FOR CATCH BASIN INLET

N.T.S.



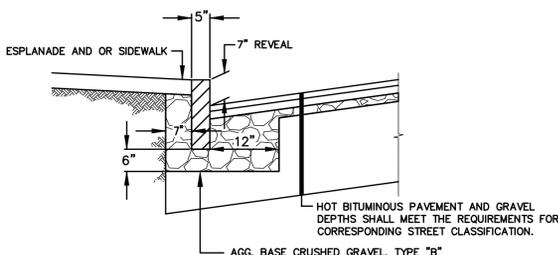
DRIVEWAY APRON LAYOUT

N.T.S.



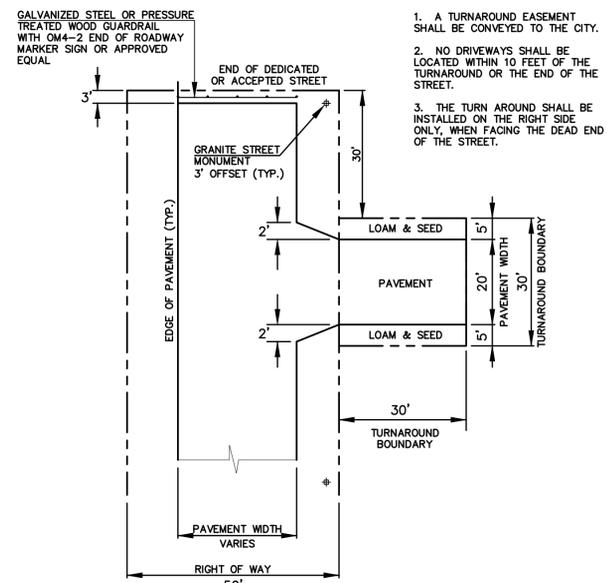
TERMINAL CURB PROFILE

VERTICAL GRANITE CURB PLAN VIEW



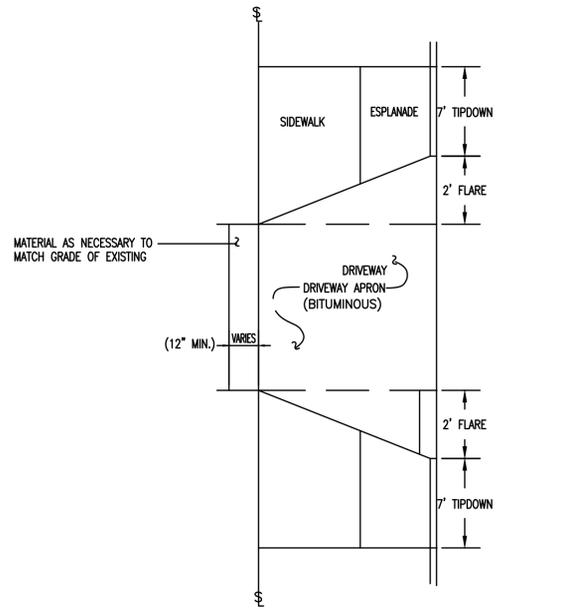
VERTICAL GRANITE CURB FULL DEPTH STREET CONSTRUCTION

N.T.S.



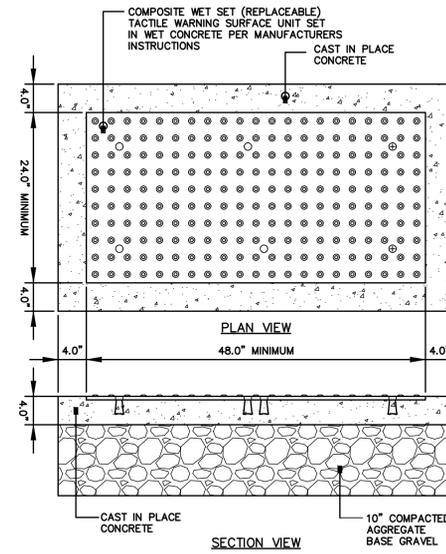
TURNAROUND ON DEAD END STREET

N.T.S.



SIDEWALK AND DRIVEWAY CONSTRUCTION

N.T.S.

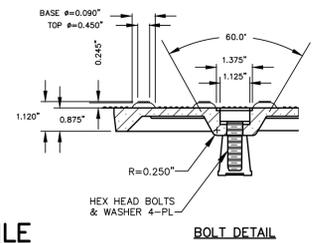


SIDEWALK RAMP DETECTABLE WARNING TILE

N.T.S.

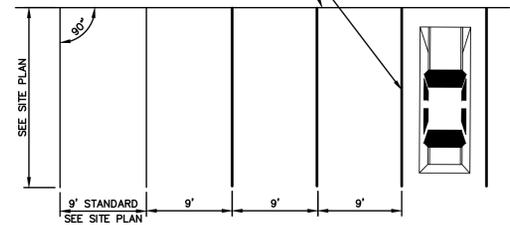
NOTES:

- COMPOSITE WET SET (REPLACEABLE) TACTILE WARNING SURFACE UNITS SHALL BE AS MANUFACTURED BY ADA SOLUTIONS, INC. (WWW.ADATILE.COM), OR APPROVED EQUAL.
- CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MDOT CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE CONCRETE SHALL BE SEALED PRIOR TO SETTING PANELS. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A GROoved EDGE BETWEEN THE TILE AND CONCRETE, ALONG WITH A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
- TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
- FOR ALL SIDEWALK RAMPS MADE OF CONCRETE OR ASPHALT, FEDERAL YELLOW COLORED (#33538) TILES SHALL BE USED. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
- FOR ALL SIDEWALK RAMPS MADE OF BRICK, SEATTLE YELLOW (#23594) COATED COLORED TILES SHALL BE USED.



BOLT DETAIL

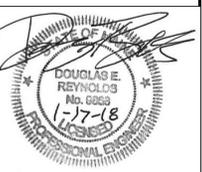
4" WIDE TRAFFIC PAINT STRIPE TYPICAL WHITE PAINT ON BITUMINOUS PAVEMENT AND YELLOW PAINT ON PORTLAND CEMENT PAVEMENT. STRIPING FOR ANY NON-BARRIER FREE PARKING SPACE WITH A WIDTH LESS THAN 9' OR A LENGTH LESS THAN 18' SHALL BE PAINTED BLUE.



PARKING SPACE DIMENSIONS

NOT TO SCALE

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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS

LEVEL III SUBDIVISION APPLICATION	5/12/17	DER
MDEP STORMWATER PRE APP	1/23/17	AMP
PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP
Issued For	Date	By

Design: BMG	Draft: CG	Date: JAN 2018
Checked: DER <td>Scale: NTS</td> <td>Job No.: 98089.08</td>	Scale: NTS	Job No.: 98089.08
File Name: 98089-08-DETAILS.dwg		

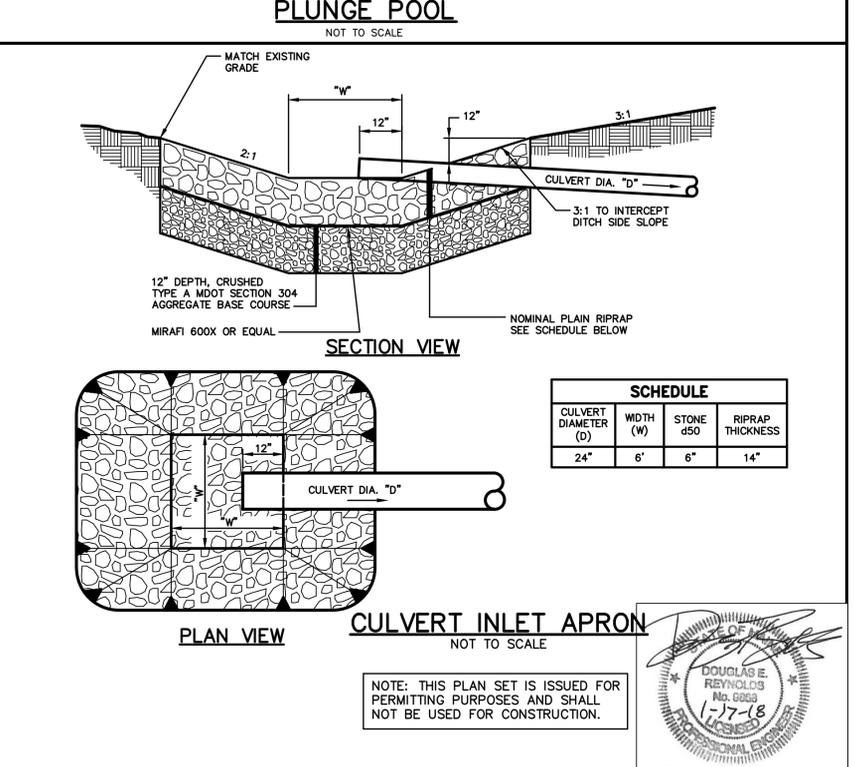
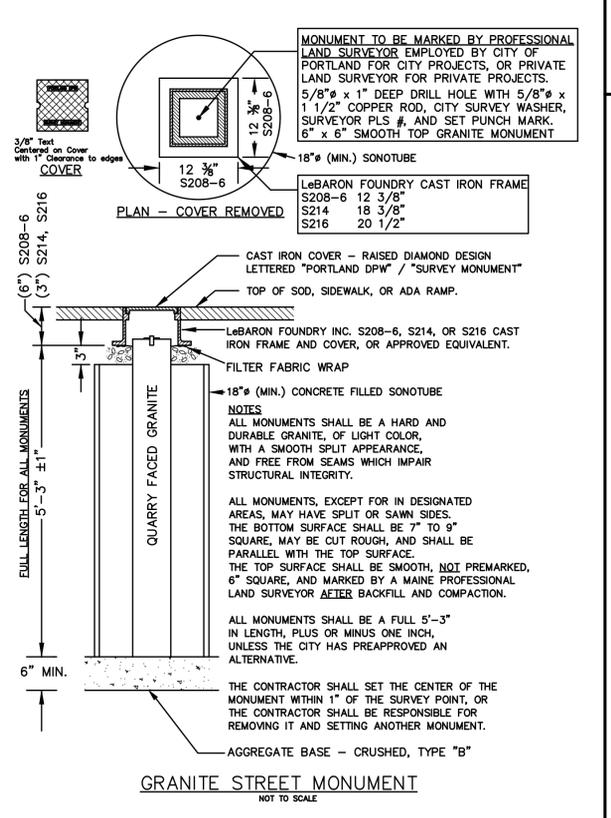
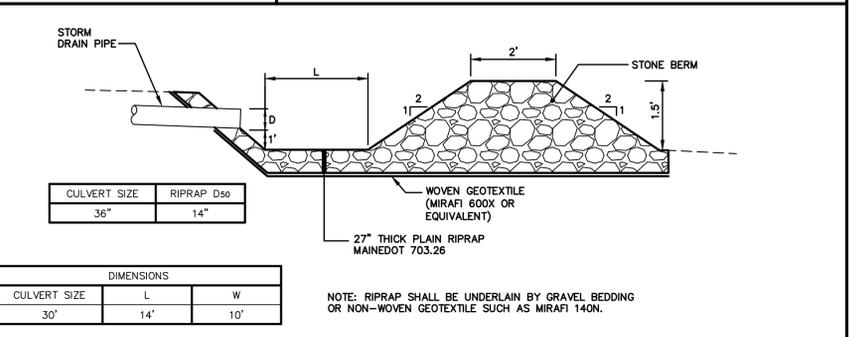
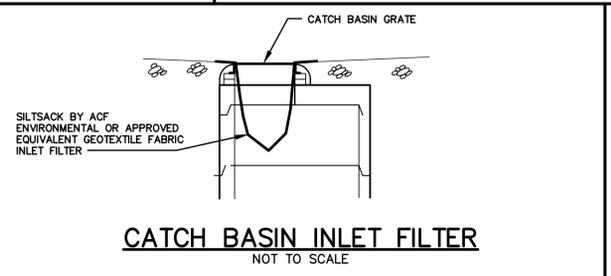
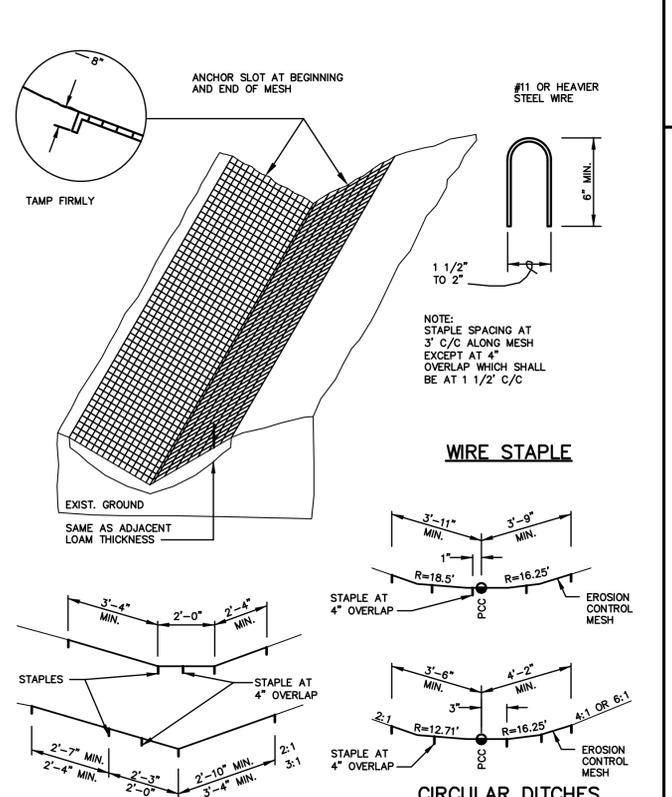
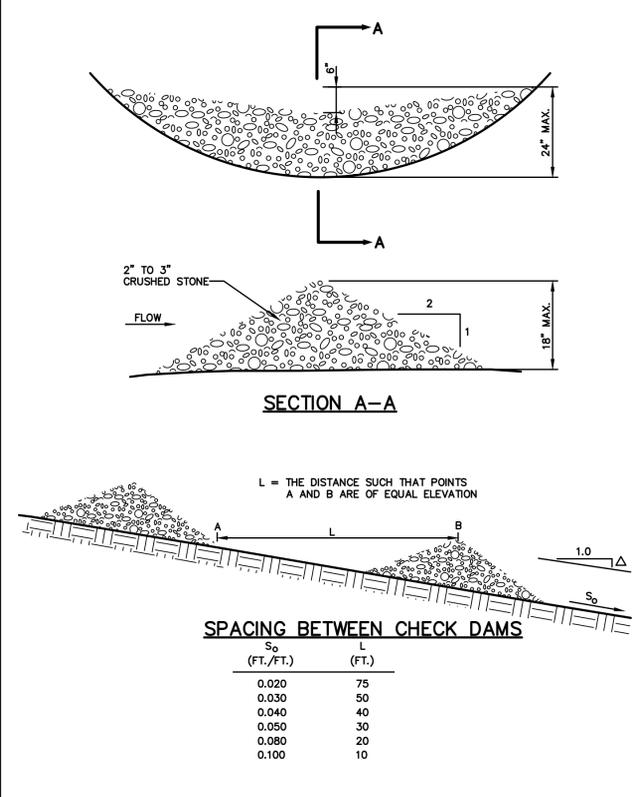
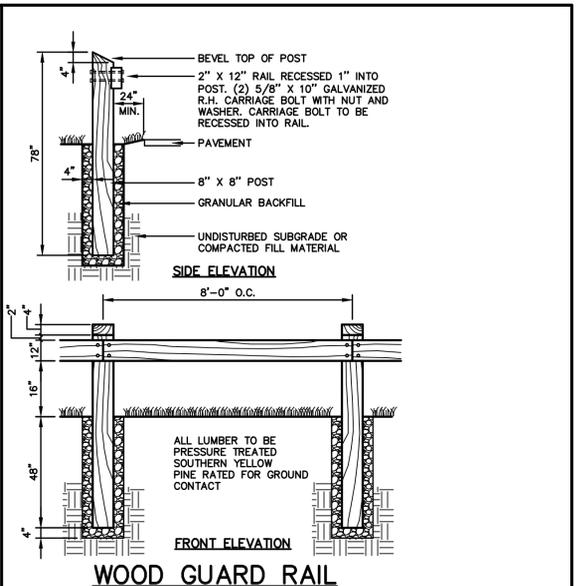
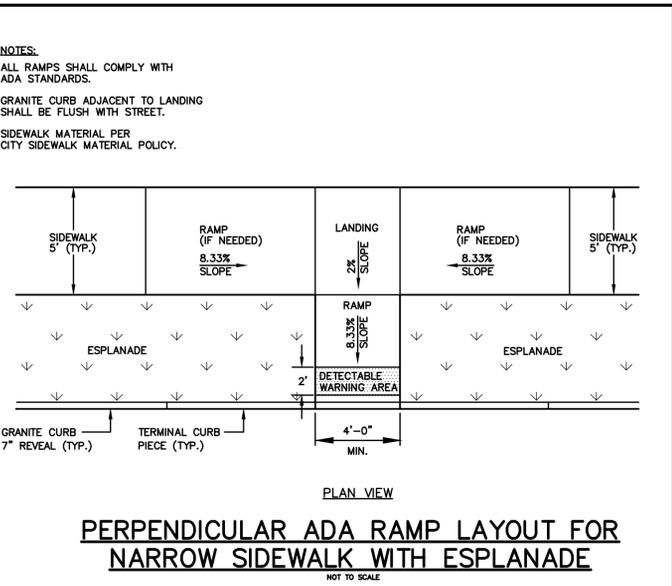
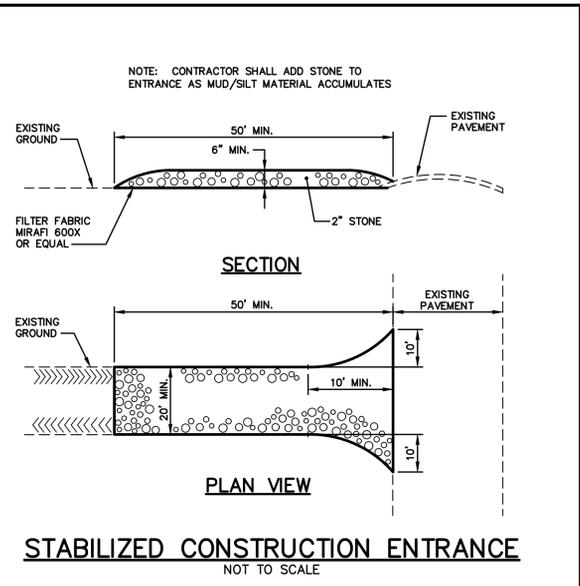
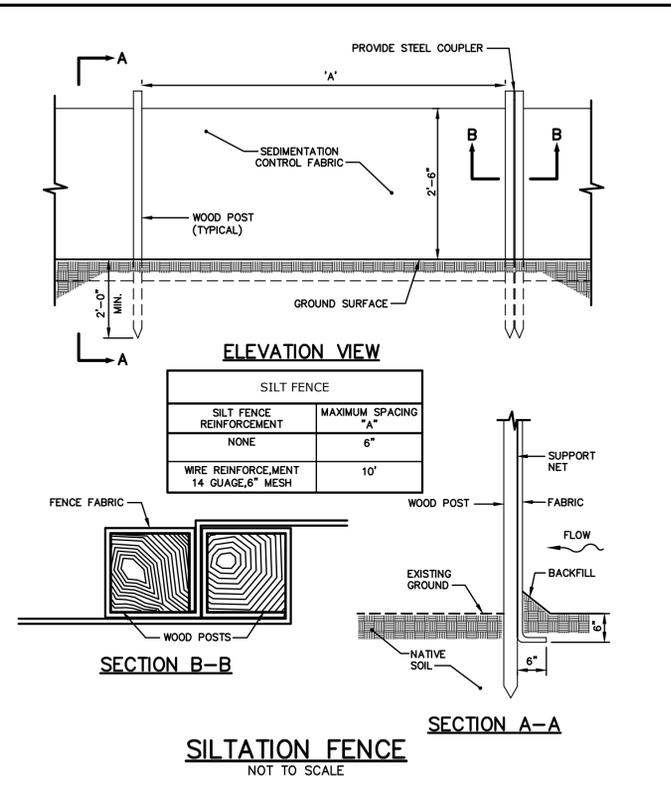
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Drawing Name:	Site Details
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
C401



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Rev.	Date	Revision
3	1/17/18	REVISED PER CITY STAFF COMMENTS
2	9/28/17	REVISED PER CITY COMMENTS
1	12/21/16	REVISED LAYOUT PER CITY COMMENTS
	12/21/16	Issued For

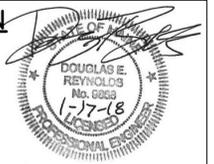
LEVEL III SUBDIVISION APPLICATION	5/12/17	DER
MDEP STORMWATER PRE APP	1/23/17	AMP
PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP
Issued For	Date	By

Design: BMG	Draft: CG	Date: JAN 2018
Checked: DER	Scale: NTS	Job No.: 98089.08
File Name: 98089-08-DETAILS.dwg		
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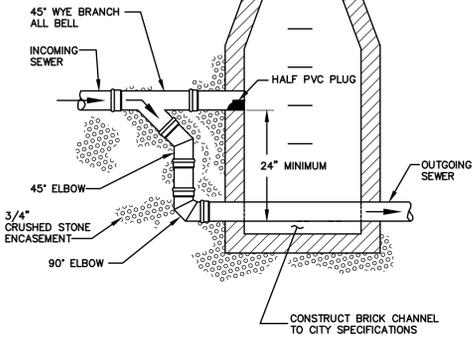
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Drawing Name:	Site, Utility, and Erosion Control Details
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

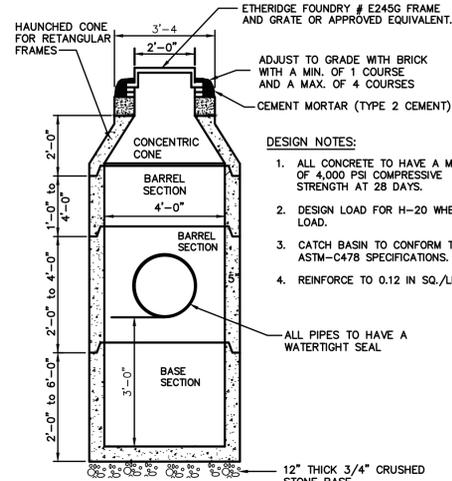
Drawing No.
C402



NOTE: DROP MANHOLES ARE NOT REQUIRED FOR STORMWATER SYSTEMS.

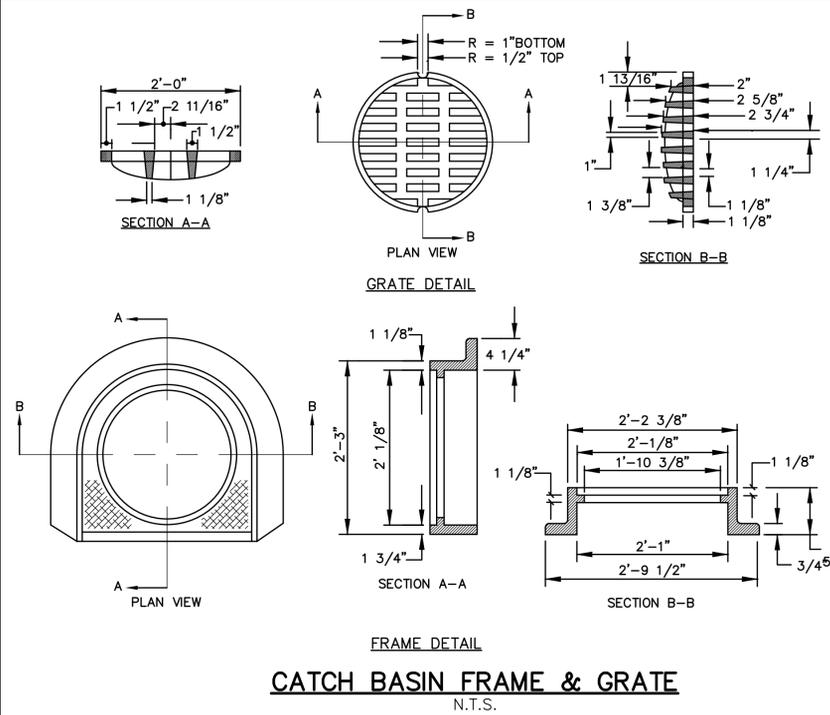


TYPICAL OUTSIDE DROP MANHOLE
N.T.S.



NOTE:
1. "THE SNOOT" SHALL BE PROVIDED ON CATCH BASIN PIPES 18" OR LESS
2. FRAME AND GRATE SHALL HAVE 24" MIN. CLEAR OPENING.

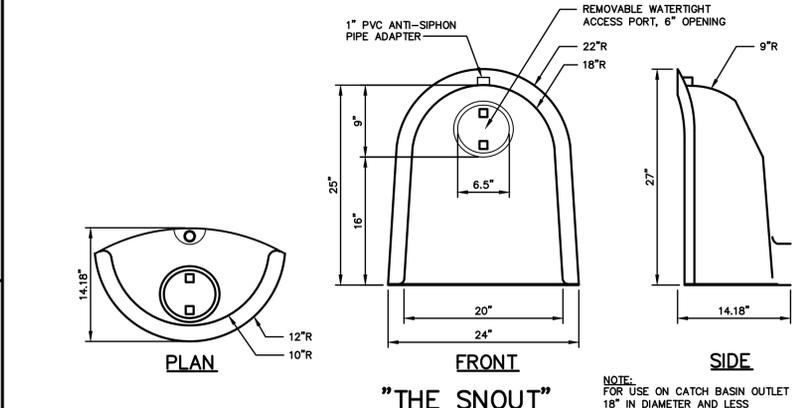
4'-0" PRECAST CATCH BASIN
N.T.S.



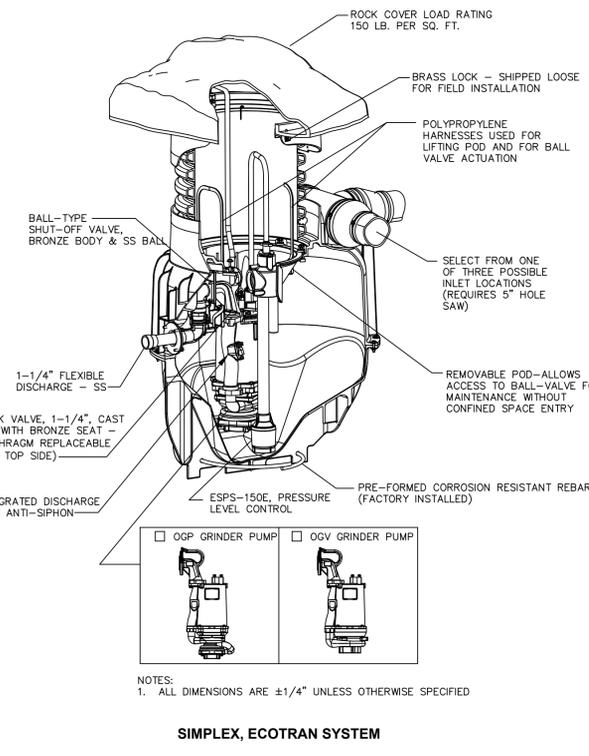
CATCH BASIN FRAME & GRATE
N.T.S.

GENERAL NOTES FOR MANHOLES AND CATCH BASINS

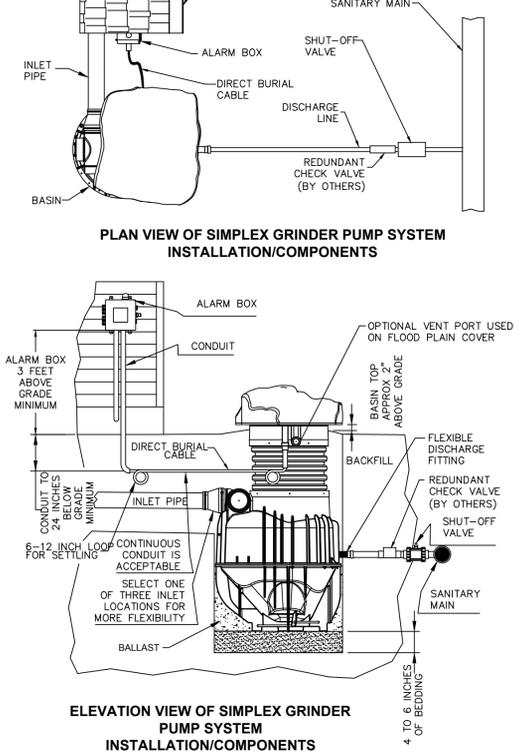
- ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 LBS. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
- MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
- PRECAST REINFORCED CONE BARREL MANHOLES MANUFACTURED PER ASTM SPEC. C-478.
- ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE LOCATED 8" FROM THE CENTER OF THE COVER.
- ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
- ALL MANHOLE RISERS SHALL BE ETHERIDGE 24" OR APPROVED EQUAL.
- SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
- ALL SANITARY MANHOLES SHALL HAVE A WATERPROOFING COATING APPLIED TO THE EXTERIOR SURFACE.
- CATCH BASIN FRAMES FOR TYPE A4 CATCH BASIN CURB INLETS SHALL BE ETHERIDGE DR5A OR APPROVED EQUAL.
- CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35.
- EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.
- ALL CATCH BASIN OUTLETS SHALL BE INSTALLED WITH A CASCO TRAP. SEE FIGURE II-09.



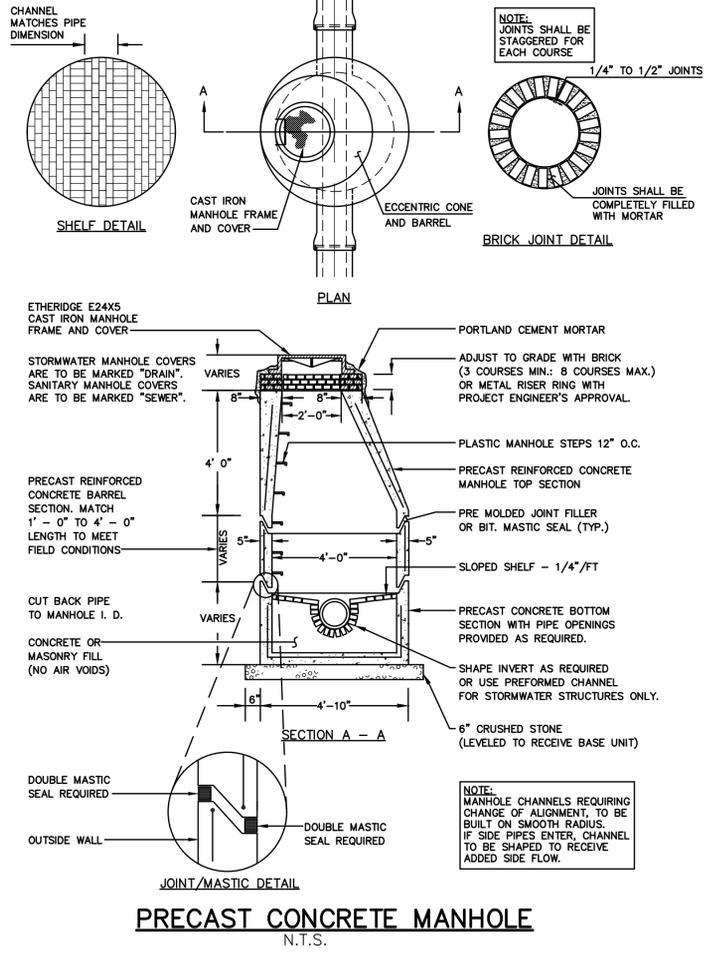
"THE SNOOT"
NOTE: FOR USE ON CATCH BASIN OUTLET 18" IN DIAMETER AND LESS



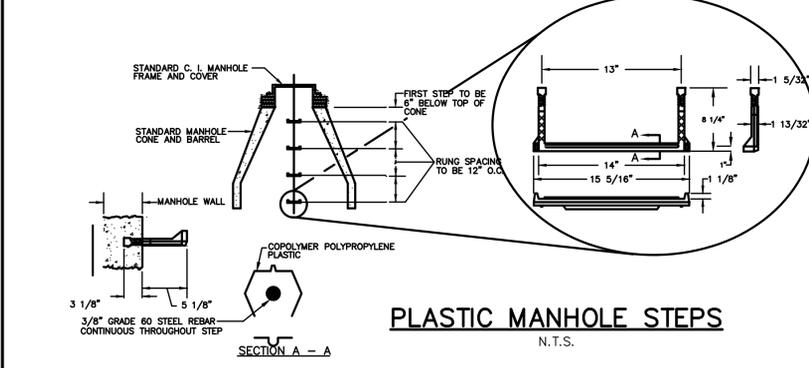
SIMPLEX, ECOTRAN SYSTEM



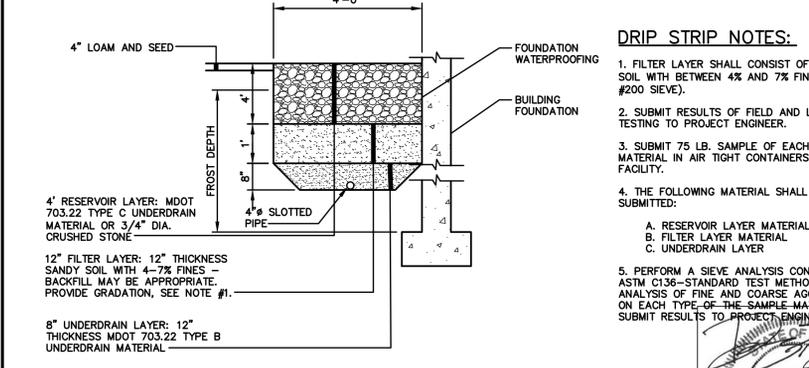
ELEVATION VIEW OF SIMPLEX GRINDER PUMP SYSTEM INSTALLATION/COMPONENTS



PRECAST CONCRETE MANHOLE
N.T.S.



PLASTIC MANHOLE STEPS
N.T.S.



DRIP STRIP SECTION
NOTE TO SCALE

- DRIP STRIP NOTES:**
- FILTER LAYER SHALL CONSIST OF A SANDY SOIL WITH BETWEEN 4% AND 7% FINES (PASSING #200 SIEVE).
 - SUBMIT RESULTS OF FIELD AND LABORATORY TESTING TO PROJECT ENGINEER.
 - SUBMIT 75 LB. SAMPLE OF EACH TYPE OF MATERIAL IN AIR TIGHT CONTAINERS TO TESTING FACILITY.
 - THE FOLLOWING MATERIAL SHALL BE SUBMITTED:
A. RESERVOIR LAYER MATERIAL
B. FILTER LAYER MATERIAL
C. UNDERDRAIN LAYER
 - PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136-STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES, ON EACH TYPE OF THE SAMPLE MATERIAL AND SUBMIT RESULTS TO PROJECT ENGINEER.



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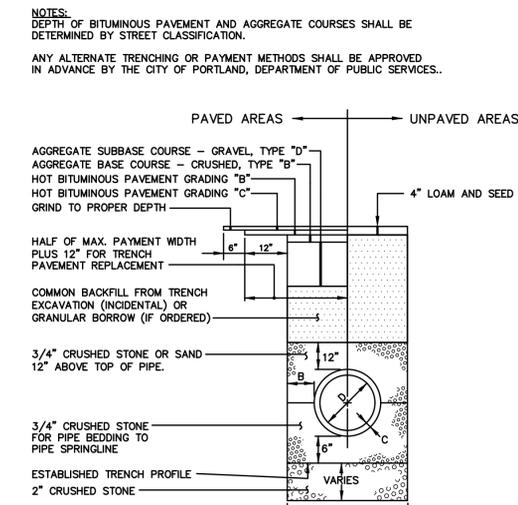
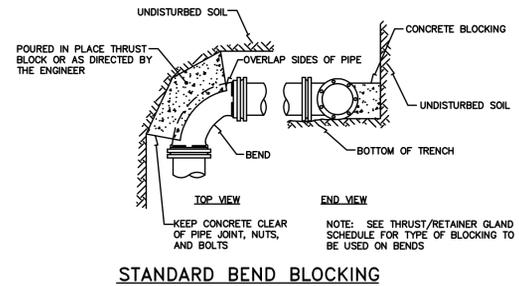
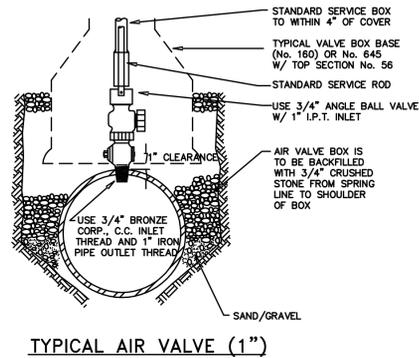
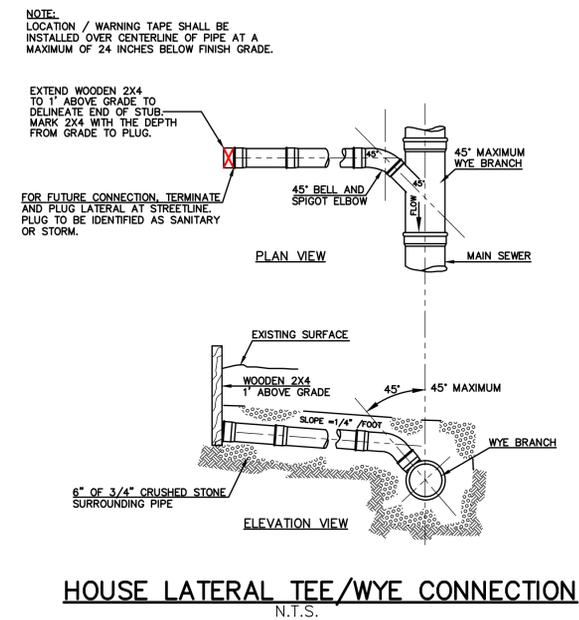
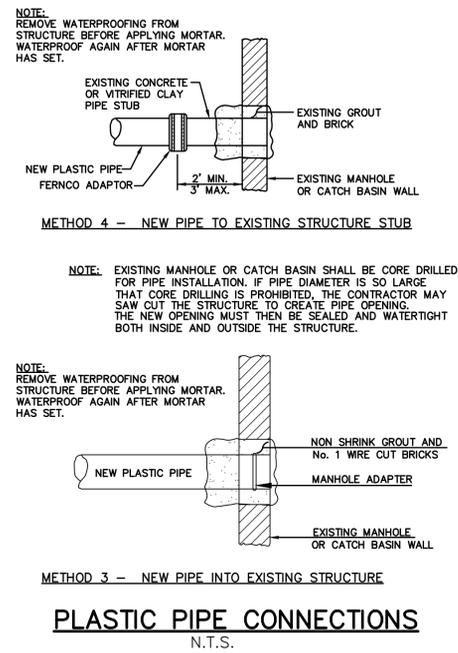
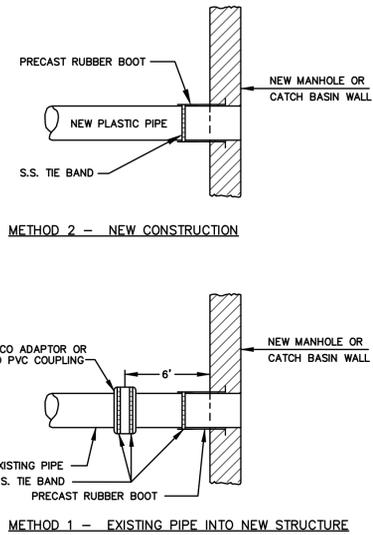
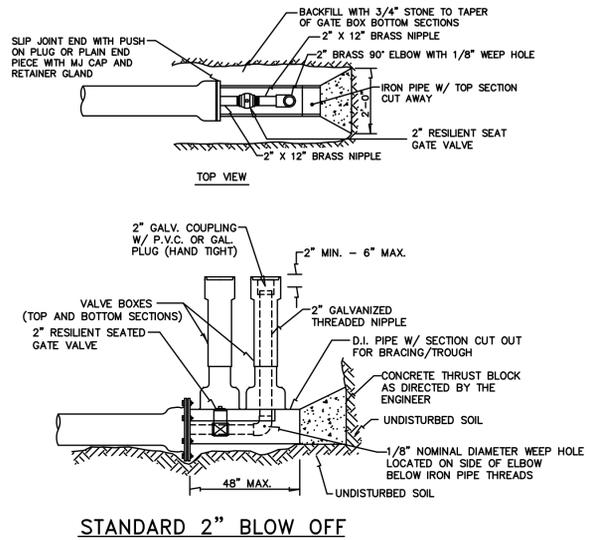
Design: BMG	Draft: CG	Date: JAN 2018
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Drawing Name:	Drainage and Utility Details
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
C403

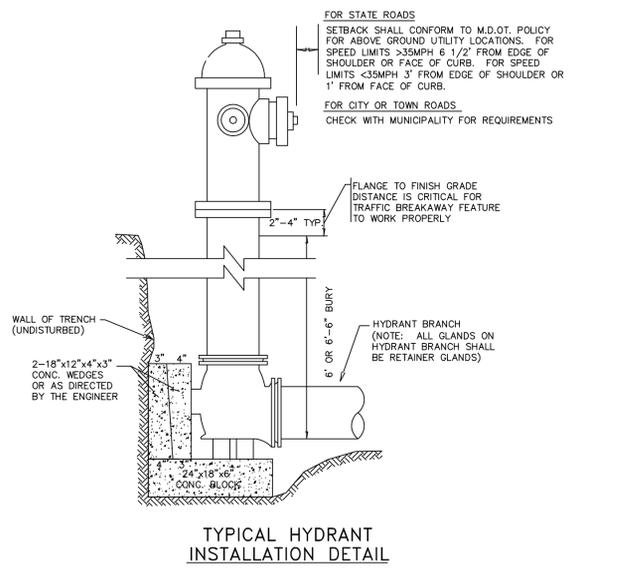
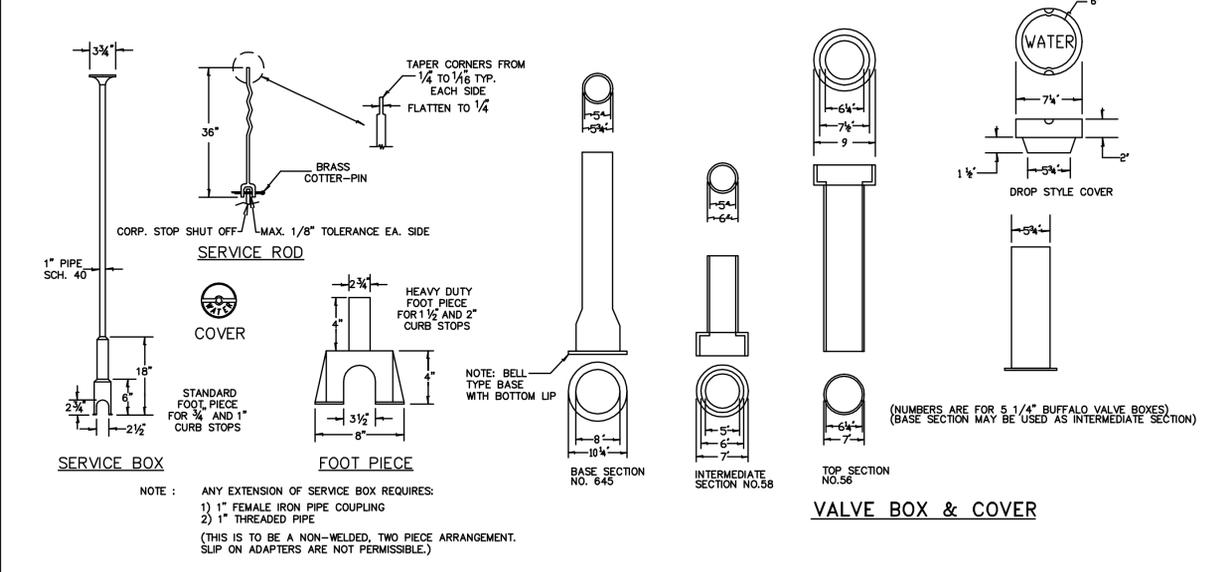


PIPE INSTALLATION - NOTES
N.T.S.

NOTES:

- DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.
- ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.
- ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.
- IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
- DIMENSION B SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES DIMENSION B SHALL BE AT LEAST 9".
- DIMENSION A IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION A SHALL BE BASED ON PIPE DIAMETER D, AS SET FORTH IN THE FOLLOWING TABLE.

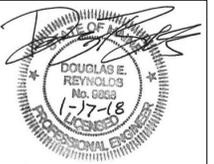
PIPE DIAMETER, D (INCHES)	MAX. TRENCH WIDTH, A (FEET)
4	4.0
6	4.0
8	4.0
10	4.0
12	5.0
15	5.0
18	5.0
21	5.0
24	6.0
27	6.0
30	6.0
36	6.0
42	7.0
48	7.0



PIPE TRENCH INSTALLATION
N.T.S.

PIPE INSTALLATION - NOTES
N.T.S.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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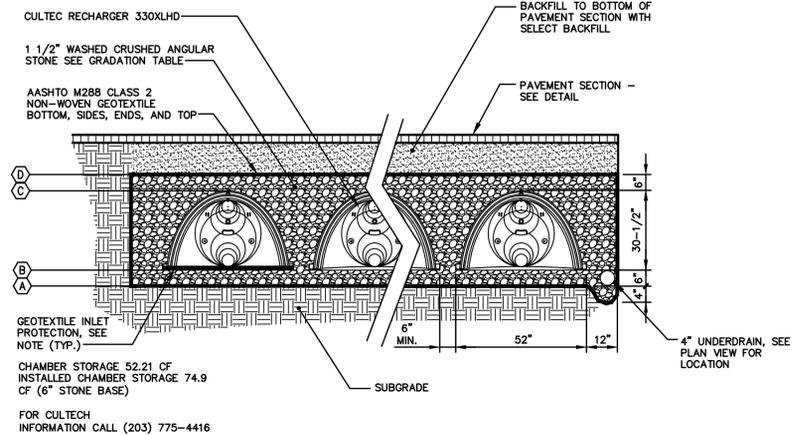
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Drawing Name: **Sewer and Water Details**

Project: **Brandy Lane**
Portland, Maine

Client: **LBW, LLC**
PO Box 1382, Portland, Maine 04104

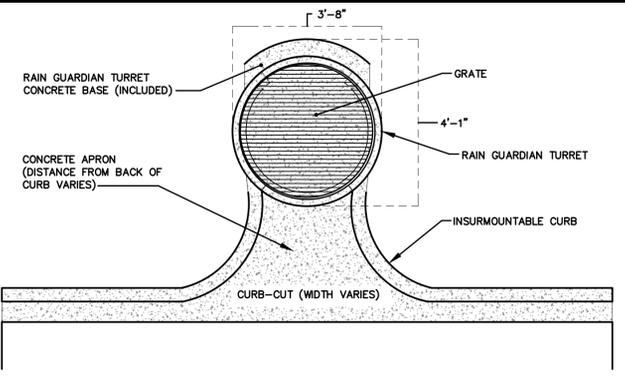
Drawing No. **C404**



CHAMBER CROSS SECTION
NOT TO SCALE

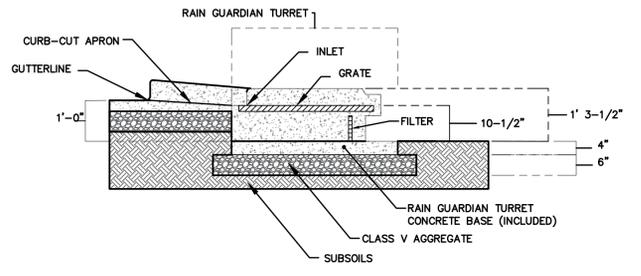
Chambers				
Structure	ELEVATION			
POND	A	B	C	D
1	80.13	80.63	83.17	83.67
2	71.65	72.15	74.69	75.19
3	71.65	72.15	74.69	75.19

GEOTEXTILE INLET PROTECTION NOTE:
AT ALL PIPE INLETS TO CHAMBER PLACE WOVEN GEOTEXTILE THAT MEETS AASHTO M288 CLASS 1 REQUIREMENTS BETWEEN FOUNDATION STONE AND CHAMBER. PLACE A 5' - 6' WIDE STRIP CENTERED ON CHAMBER WIDTH WITH A LENGTH ALONG THE CHAMBERS EQUAL TO THE WIDTH OF THE FABRIC ROLL, BUT NOT LESS THAN 10'.



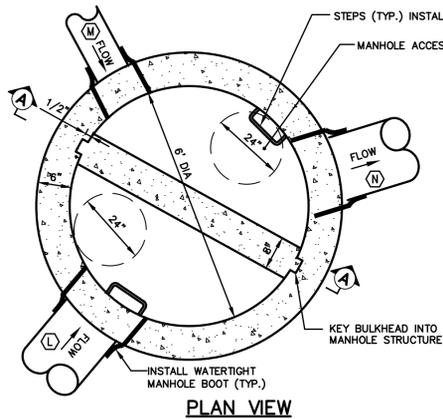
- SPECIFICATIONS:**
- STEEL REINFORCED, COLD JOINT SECURED MONOLITHIC CONCRETE STRUCTURE (1,030 LBS).
 - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. CONCRETE AIR ENTRAINED (4 PERCENT TO 8 PERCENT BY VOLUME).
 - MANUFACTURED AND DESIGNED TO ASTM C858.
 - THREE-POINT PICK USING RECESSED LIFTING POCKETS WITH A STANDARD HOOK.
 - SOIL UNDER BASE TO BE COMPACTED TO 95 PERCENT STANDARD PROCTOR.
 - TWO-PIECE LIGHT-DUTY GALVANIZED GRATE (34.5 LBS/PIECE) FOR 541 LB CONCENTRATED LOAD OR 309 LB/SQFT UNIFORM LOAD.
 - TWO-PIECE HEAVY-DUTY GALVANIZED GRATE (77.5 LBS/PIECE) FOR 2,456 LB CONCENTRATED LOAD OR 1,404 LB/SQFT UNIFORM LOAD.
 - USE EXPANSION JOINT MATERIAL BETWEEN TURRET AND BIORETENTION INLET.

RAIN GUARDIAN TURRET PLAN VIEW
1"=20'

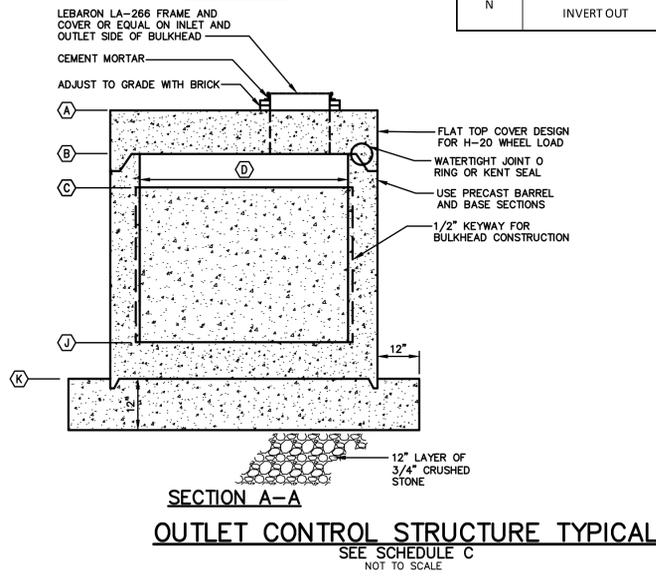


- SPECIFICATIONS:**
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 - USE EXPANSION JOINT MATERIAL BETWEEN TURRET AND BIORETENTION INLET.

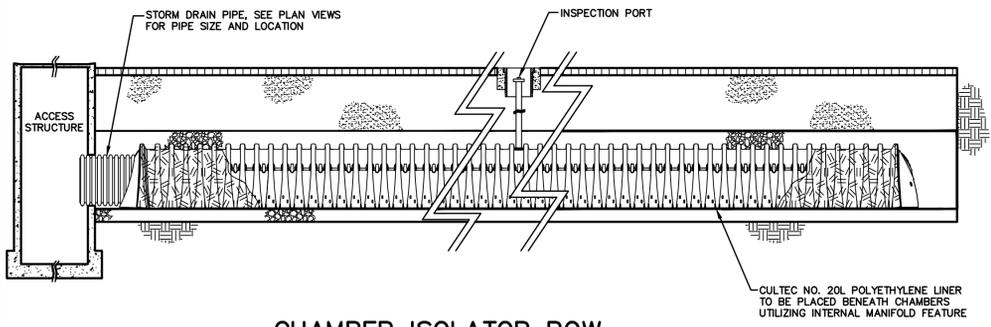
RAIN GUARDIAN TURRET SECTION VIEW
1"=20'



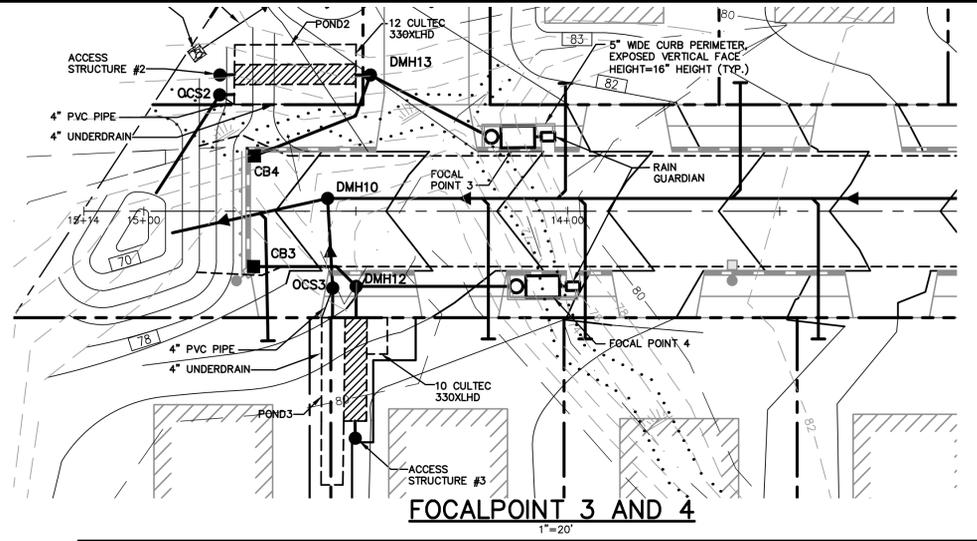
Schedule C			
Item Description	OCS 1	OCS 2	OCS 3
A TOP OF STRUCTURE	88.5	76.9	78.76
B UNDERSIDE TOP SLAB	87.89	76.29	78.15
C TOP CONCRETE BULKHEAD	83.67	75.19	75.19
D WEIR LENGTH	6'	6'	6'
J MANHOLE INVERT	80.05	71.55	71.49
K BOTTOM OF STRUCTURE	79.05	70.57	70.49
L PIPE DIAMETER	12"	12"	12"
L INVERT IN	80.58	72.1	72.08
M PIPE DIAMETER	4"	4"	4"
M INVERT IN	80.15	71.65	71.59
N PIPE DIAMETER	12"	12"	12"
N INVERT OUT	80.05	71.55	71.49



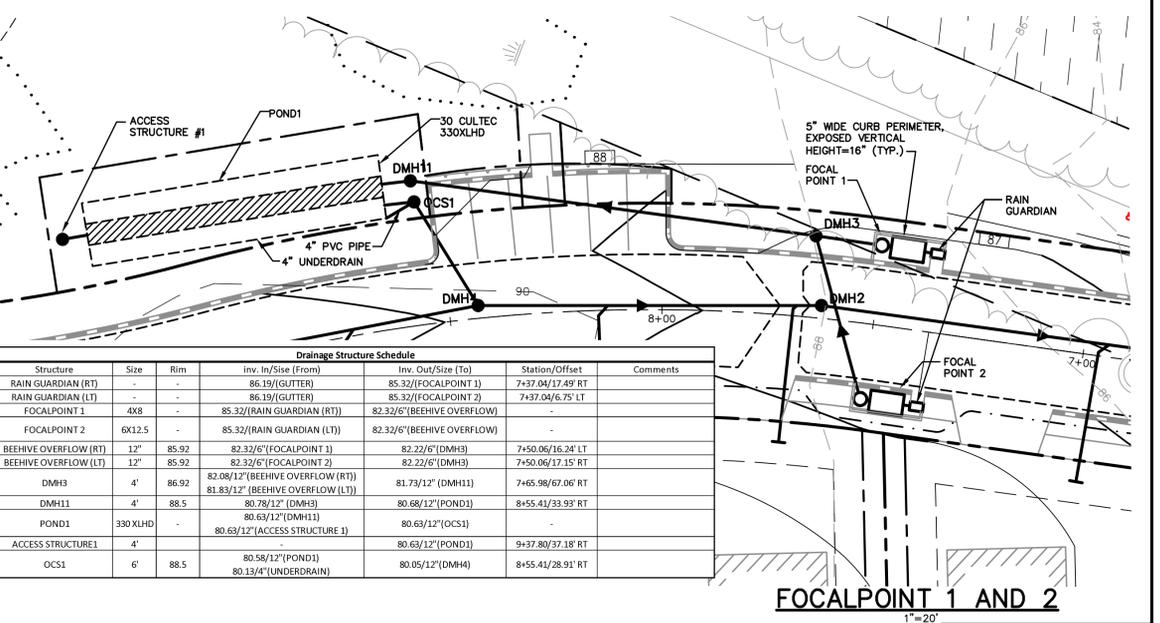
SECTION A-A
OUTLET CONTROL STRUCTURE TYPICAL
SEE SCHEDULE C
NOT TO SCALE



CHAMBER ISOLATOR ROW
NOT TO SCALE

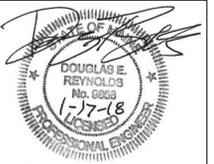


Drainage Structure Schedule						
Structure	Size	Rim	Inv. In/Size (From)	Inv. Out/Size (To)	Station/Offset	Comments
RAIN GUARDIAN (RT)	-	-	80.08/(GUTTER)	79.21/(FOCALPOINT 3)	14+3.07/14' RT	
FOCALPOINT 3	4X8	-	79.21/(RAIN GUARDIAN (RT))	76.21/(BEEHIVE OVERFLOW)	-	
BEEHIVE OVERFLOW	12"	79.81	76.21/(FOCALPOINT 3)	76.11/(DMH13)	14+17.78/17.51' RT	
CB4	4'	77.43	-	73.93/(DMH13)	14+77.73/13' RT	
DMH13	4'	78.79	75.83/(BEEHIVE OVERFLOW)	72.2/(POND2)	14+45.63/32.08' RT	
POND2	330XLHD	-	72.15/(DMH13)	72.15/(OCS2)	-	
ACCESS STRUCTURE 2	4'	-	72.15/(ACCESS STRUCTURE 2)	72.15/(POND2)	14+82.88/31.99	
OCS2	6'	76.9	72.10/(POND2)	71.55/(OUTFALL)	14+82.88/27.33' RT	
RAIN GUARDIAN (LT)	-	-	80.38/(GUTTER)	79.51/(FOCALPOINT 4)	13+97.54/14' LT	
FOCALPOINT 4	6X6	-	79.51/(RAIN GUARDIAN (LT))	76.51/(BEEHIVE OVERFLOW)	-	
BEEHIVE OVERFLOW	12"	80.01	76.51/(FOCALPOINT 4)	76.41/(DMH12)	14+13.05/17.60' LT	
CB3	4'	77.43	-	73.93/(DMH12)	14+77.73/13' LT	
DMH12	4'	78.9	75.49/(BEEHIVE OVERFLOW)	72.2/(POND3)	14+50.04/17.66' LT	
POND3	330XLHD	-	72.15/(DMH12)	72.15/(OCS3)	-	
ACCESS STRUCTURE 3	4'	-	72.15/(ACCESS STRUCTURE 3)	72.15/(POND3)	14+50.04/53.30' LT	
OCS3	6'	78.76	72.08/(POND3)	71.59/(DMH10)	14+56.47/18.08' LT	



Drainage Structure Schedule						
Structure	Size	Rim	Inv. In/Size (From)	Inv. Out/Size (To)	Station/Offset	Comments
RAIN GUARDIAN (RT)	-	-	86.19/(GUTTER)	85.32/(FOCALPOINT 1)	7+37.04/17.49' RT	
RAIN GUARDIAN (LT)	-	-	86.19/(GUTTER)	85.32/(FOCALPOINT 2)	7+37.04/6.75' LT	
FOCALPOINT 1	4X8	-	85.32/(RAIN GUARDIAN (RT))	82.32/(BEEHIVE OVERFLOW)	-	
FOCALPOINT 2	6X12.5	-	85.32/(RAIN GUARDIAN (LT))	82.32/(BEEHIVE OVERFLOW)	-	
BEEHIVE OVERFLOW (RT)	12"	85.92	82.32/(FOCALPOINT 1)	82.22/(DMH3)	7+50.06/16.24' LT	
BEEHIVE OVERFLOW (LT)	12"	85.92	82.32/(FOCALPOINT 2)	82.22/(DMH3)	7+50.06/17.15' RT	
DMH3	4'	86.92	82.08/(BEEHIVE OVERFLOW (RT))	81.73/(DMH11)	7+65.98/67.06' RT	
DMH11	4'	88.5	80.78/(DMH3)	80.68/(POND1)	8+55.41/33.93' RT	
POND1	330XLHD	-	80.63/(DMH11)	80.63/(OCS1)	-	
ACCESS STRUCTURE1	4'	-	80.63/(ACCESS STRUCTURE 1)	80.63/(POND1)	9+37.80/37.18' RT	
OCS1	6'	88.5	80.58/(POND1)	80.05/(DMH4)	8+55.41/28.91' RT	

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Design: BMG Draft: CG Date: JAN 2018
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Drawing Name:	Drainage Details
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

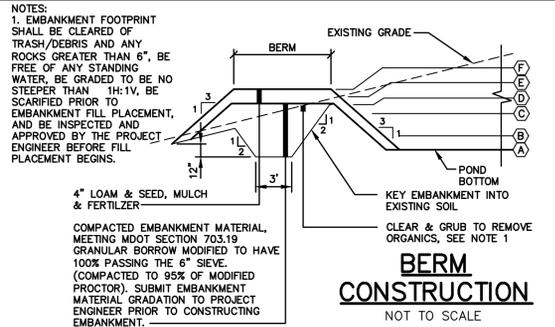
Drawing No.
C405

CONSTRUCTION OVERSIGHT

INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE DEP. AT A MINIMUM, INSPECTIONS WILL OCCUR:

- AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
- AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
- AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED.
- AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
- ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

NOTE: CONTRACTOR SHALL NOTIFY PROJECT ENGINEER 48 HOURS PRIOR TO THE MILESTONES LISTED ABOVE TO ALLOW FOR INSPECTION.



SCHEDULE B - EMBANKMENT SCHEDULE

ITEM DESCRIPTION	DIMENSION/ELEVATION				
	1	2	3	4	5
(A) POND BASE ELEVATION	86.00	88.00	83.00	79.00	80.00
(B) PEAK ELEVATION - CHANNEL PROTECTION VOLUME	86.70	88.70	83.50	79.55	80.60
(C) PEAK ELEVATION - 2 YEAR STORM	86.80	88.54	83.47	79.64	80.87
(D) PEAK ELEVATION - 10 YEAR STORM	87.51	88.58	83.98	80.25	81.51
(E) PEAK ELEVATION - 25 YEAR STORM	87.56	88.60	84.37	80.52	81.57
(F) TOP OF BERM	88.10	89.30	85.00	81.50	82.10

TYPICAL POND CROSS SECTION
NOT TO SCALE

GRASSED UNDERDRAINED SOIL FILTER NOTES:

SOIL SPECIFICATIONS:

- THE SOIL FILTER MEDIA SHALL BE A LAYERED SYSTEM CONSISTING OF THE FOLLOWING FROM THE BOTTOM:
 - 12" OF LOAMY COARSE SAND, SEE TABLE 1.
 - 2" LAYER OF TOPSOIL (SEE "C" BELOW) ROTOTILLED INTO THE LOAMY COARSE SAND LAYER.
 - 6" OF NON-CLAYEY, LOAMY TOPSOIL SUCH AS USDA SANDY LOAM TOPSOIL WITH 5-8% HUMIFIED ORGANIC MATTER. SUPERHUMUS OR EQUIVALENT MAY BE ADDED TO THE TOPSOIL TO INCREASE ORGANIC CONTENT, SEE TABLE 3.
- SOIL FILTER MEDIA MIXTURE SHALL HAVE A PERMEABILITY OF 2.4 IN./HR. TO 4 IN./HR UPON COMPACTION BETWEEN 90% AND 92% STANDARD PROCTOR (ASTM D698).

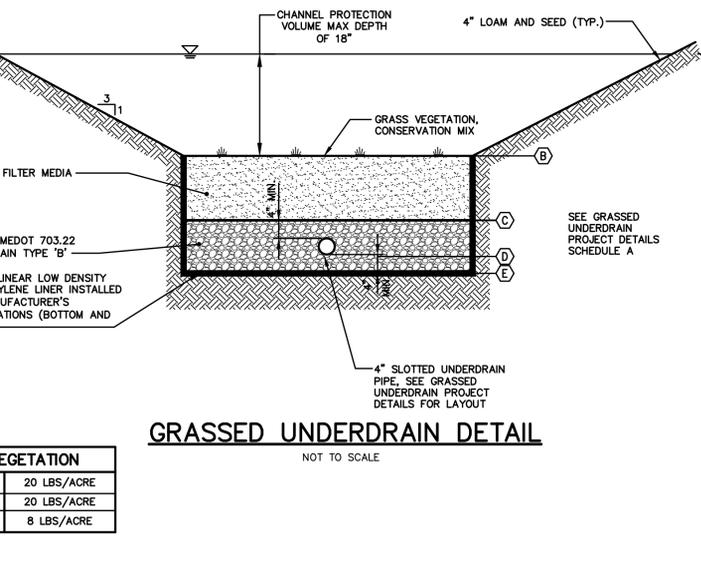
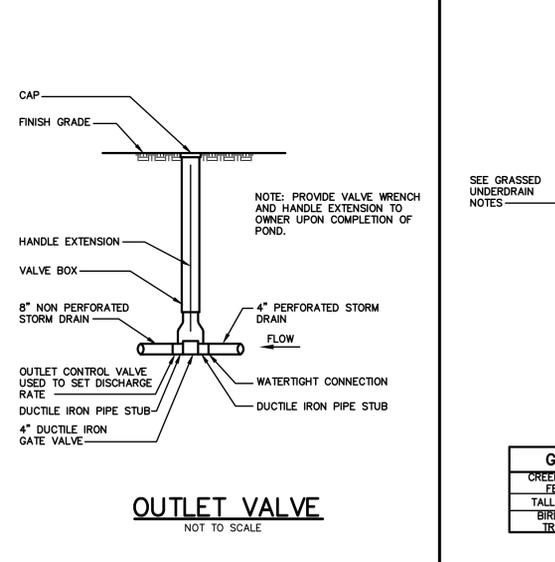
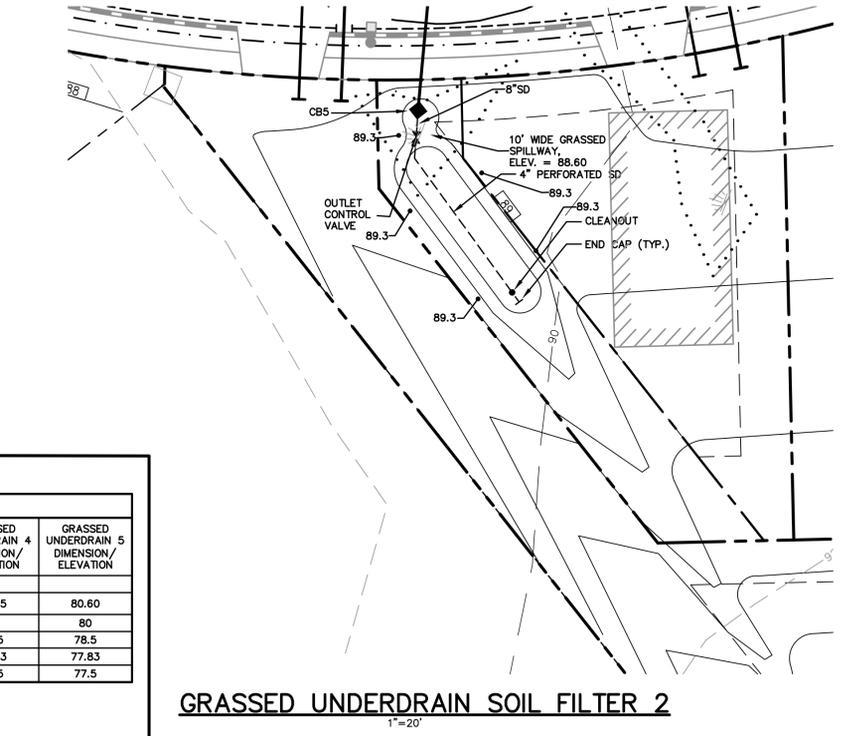
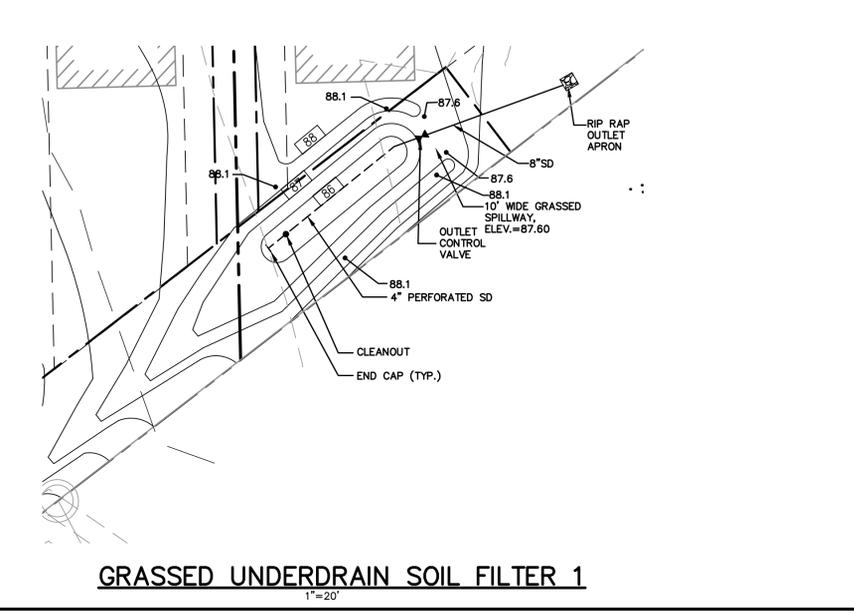
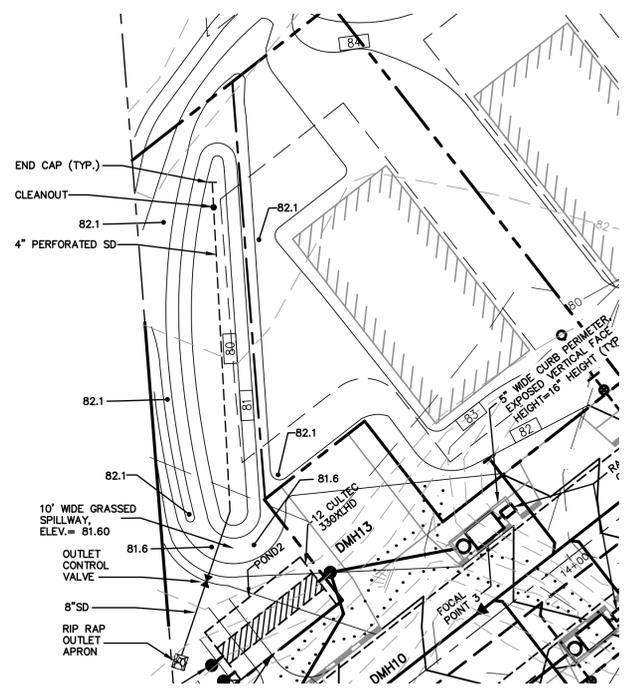
SUBMITTALS:

- SUBMIT RESULTS OF FIELD AND LABORATORY TESTING TO PROJECT ENGINEER.
- SUBMIT 75 lb. SAMPLE OF EACH TYPE OF MATERIAL: SUBMIT IN AIR TIGHT CONTAINERS TO PROJECT ENGINEER.
- THE FOLLOWING MATERIAL SHALL BE SUBMITTED:
 - SAND.
 - UNDERDRAIN BEDDING MATERIAL.
- PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 - STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES; 1996 ON EACH TYPE OF THE SAMPLE MATERIAL AND SUBMIT RESULTS TO PROJECT ENGINEER.
- PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90% TO 92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698. SUBMIT RESULTS TO THE PROJECT ENGINEER.
- PERFORM ONE COMPACTION DENSITY TEST ON THE IN PLACE SOIL FILTER FOR EVERY 2,000 SQUARE FEET OF FILTER SURFACE AREA. TEST SHALL CONFORM TO ASTM D 2922 - STANDARD TEST METHODS FOR DENSITY OF SOIL AND SOIL-AGGREGATE IN PLACE BY NUCLEAR METHODS (SHALLOW DEPTH); 1996. SUBMIT RESULTS TO THE PROJECT ENGINEER.

CONSTRUCTION:

- SOIL FILTER MEDIA AND UNDERDRAIN BEDDING MATERIAL SHALL BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR.
- PERFORATED UNDERDRAIN PIPE SHALL BE 4" PIPE. SPACED 15 FEET ON CENTER MAXIMUM.
- TRIBUTARY AREAS SHALL BE STABILIZED PRIOR TO INSTALLATION OF THE SOIL FILTER MEDIA MIXTURE AND UNDERDRAIN. STABILIZED IS DEFINED AS PAVED IF IN A PARKING AREA OR ROADWAY, AND 90% GRASS CATCH IF IN A VEGETATED AREA.
- OUTFLOW OF THE VEGETATED UNDERDRAIN SHALL BE CONTROLLED BY A 4" DUCTILE IRON GATE VALVE WITH VALVE WRENCH AND EXTENSION (AVAILABLE FROM E.J. PRESCOTT OR EQUIVALENT). A THREE PIECE VALVE BOX (AVAILABLE FROM E.J. PRESCOTT OR EQUIVALENT) SHALL BE INSTALLED OVER THE VALVE.
- ALL EQUIPMENT USED WITHIN THE LIMITS OF THE VEGETATED UNDERDRAIN SHALL BE LOW GROUND PRESSURE VEHICLES (LESS THAN 2.0 PS) WHEN FULLY LOADED.
- UPON COMPLETION OF THE INSTALLATION OF THE SOIL FILTER MEDIA AND THE ESTABLISHMENT OF A 90% CATCH OF GRASS OVER THE FILTER MEDIA, THE CONTRACTOR SHALL FLOOD THE VEGETATED UNDERDRAIN TO THE DESIGN ELEVATION WITH CLEAN WATER AND ADJUST THE VALVE TO OBTAIN A 24 HOUR TO 32 HOUR RELEASE TIME.

GRASSED UNDERDRAIN SOIL FILTER 5
1"=20'



GRASS VEGETATION

CREeping RED FESCUE	20 LBS/ACRE
TALL FESCUE	20 LBS/ACRE
BIRDFOOT TREFOIL	8 LBS/ACRE

SCHEDULE A

ITEM DESCRIPTION	GRASSED UNDERDRAIN 1 DIMENSION/ELEVATION	GRASSED UNDERDRAIN 2 DIMENSION/ELEVATION	GRASSED UNDERDRAIN 3 DIMENSION/ELEVATION	GRASSED UNDERDRAIN 4 DIMENSION/ELEVATION	GRASSED UNDERDRAIN 5 DIMENSION/ELEVATION
A CHANNEL PROTECTION VOLUME STAGE	86.70	88.70	83.50	79.55	80.60
B TOP SOIL FILTER	86	88	83	79	80
C TOP UNDERDRAIN BEDDING STONE	84.5	86.5	81.5	77.5	78.5
D PIPE INVERT: 4" PERF. UD	83.83	85.83	80.83	76.83	77.83
E BOTTOM UNDERDRAIN BEDDING	83.5	85.5	80.5	76.5	77.5

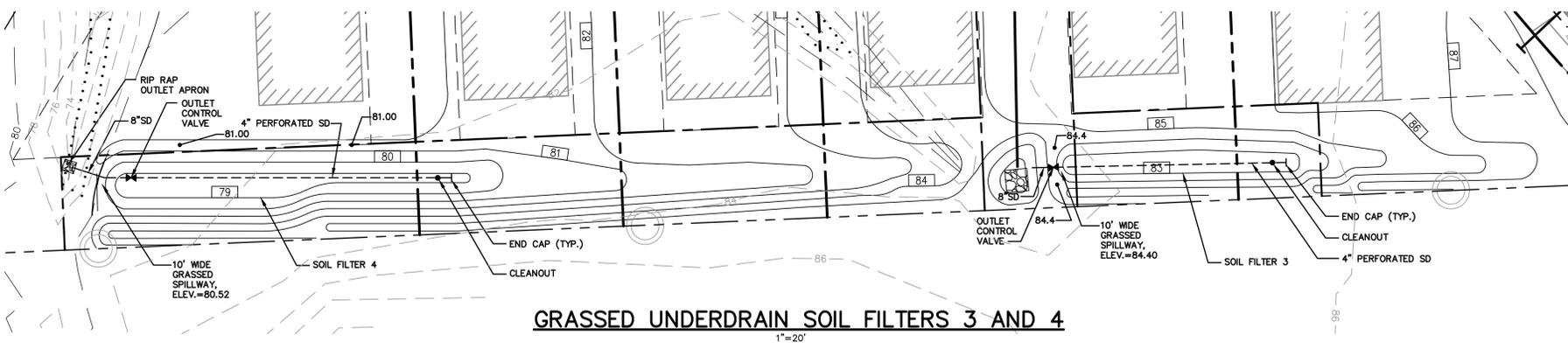


Table 1 Loamy Coarse Sand

SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100
#20	70-100
#60	15-40
#200	8-15
#200 CLAY SIZE	<2.0

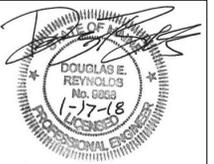
Table 3 Sandy Loam Topsoil

SIEVE SIZE	% PASSING BY WEIGHT
#4	75-95
#10	60-90
#40	35-85
#200	20-70
#200 CLAY SIZE	<2.0

Table 2 MEDOT Specifications for Underdrain Type B (MEDOT #703.22)

SIEVE SIZE	% PASSING BY WEIGHT
1"	90-100
1/2"	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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2	9/28/17	REVISED PER CITY COMMENTS
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LEVEL III SUBDIVISION APPLICATION	5/12/17	DER
MDEP STORMWATER PRE APP	1/23/17	AMP
PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP
Issued For	Date	By

Design: BMG Draft: CG Date: JAN 2018
 Checked: DER Scale: NTS Job No.: 98089.08
 File Name: 98089-08-DETAILS.dwg

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Drawing Name: **Soil Filter Plan and Details**
 Project: **Brandy Lane**
 Portland, Maine
 Client: **LBW, LLC**
 PO Box 1382, Portland, Maine 04104

Drawing No. **C406**

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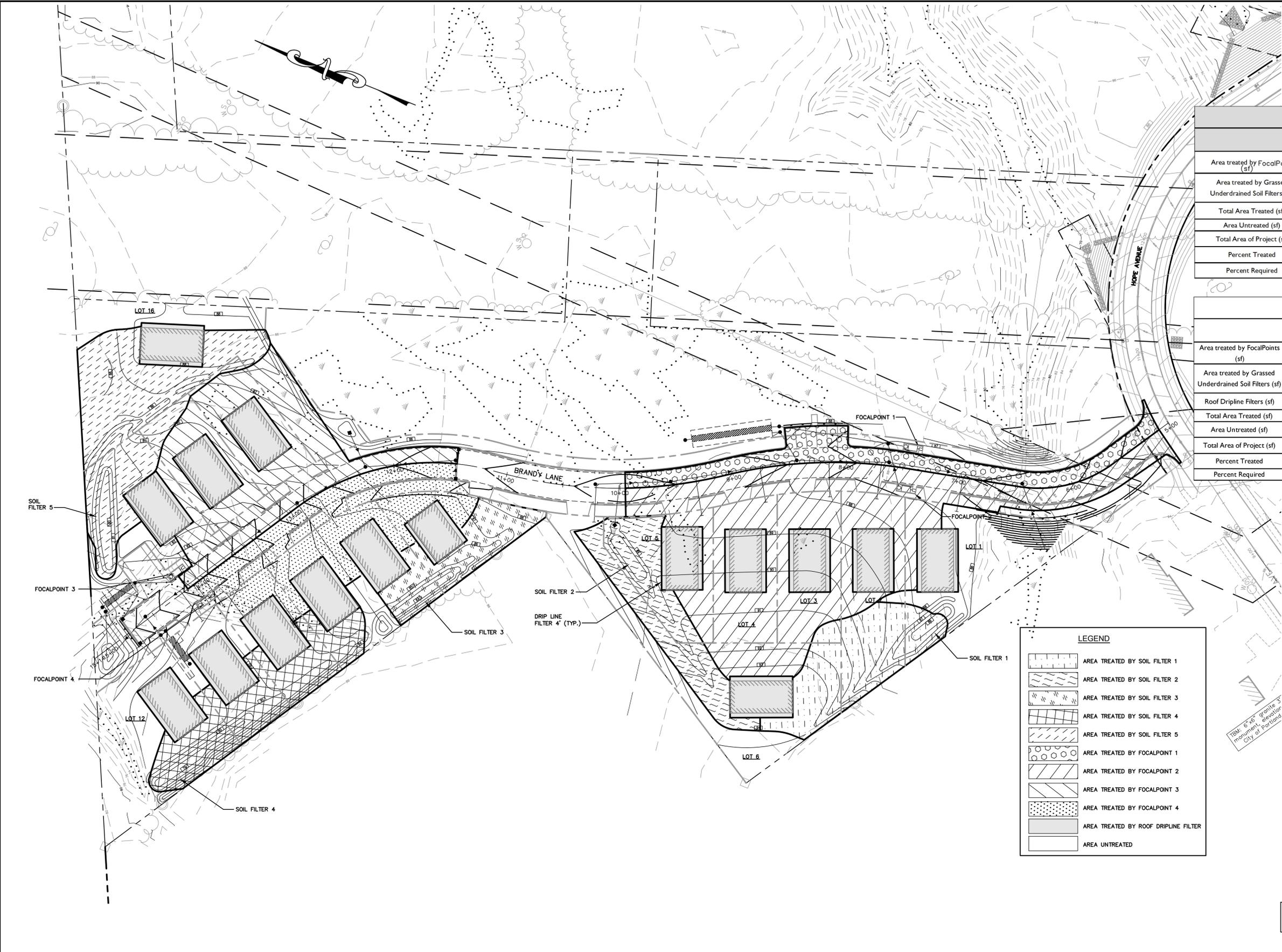


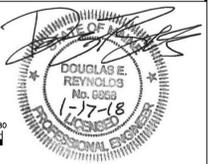
TABLE 11 - LINEAR PORTION		
	IMPERVIOUS	DEVELOPED (Impervious + Landscaped)
Area treated by FocalPoints (sf)	27,761	31,739
Area treated by Grassed Underdrained Soil Filters (sf)	0	0
Total Area Treated (sf)	27,761	31,739
Area Untreated (sf)	8,189	8,855
Total Area of Project (sf)	35,950	40,594
Percent Treated	77.20%	78.20%
Percent Required	75%	50%

TABLE 12 - HOUSE LOTS		
	IMPERVIOUS	DEVELOPED (Impervious + Landscaped)
Area treated by FocalPoints (sf)	5,840	33,768
Area treated by Grassed Underdrained Soil Filters (sf)	3,264	47,108
Roof Dripline Filters (sf)	24,337	36,657
Total Area Treated (sf)	33,441	117,533
Area Untreated (sf)	660	21,331
Total Area of Project (sf)	34,101	138,864
Percent Treated	98%	85%
Percent Required	95%	80%

LEGEND	
[Pattern]	AREA TREATED BY SOIL FILTER 1
[Pattern]	AREA TREATED BY SOIL FILTER 2
[Pattern]	AREA TREATED BY SOIL FILTER 3
[Pattern]	AREA TREATED BY SOIL FILTER 4
[Pattern]	AREA TREATED BY SOIL FILTER 5
[Pattern]	AREA TREATED BY FOCALPOINT 1
[Pattern]	AREA TREATED BY FOCALPOINT 2
[Pattern]	AREA TREATED BY FOCALPOINT 3
[Pattern]	AREA TREATED BY FOCALPOINT 4
[Pattern]	AREA TREATED BY ROOF DRIPLINE FILTER
[Pattern]	AREA UNTREATED

TKM: 6" x 6" profile 3" maximum elevation City of Portland

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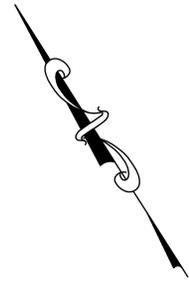
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LEVEL III SUBDIVISION APPLICATION		5/12/17	DER
MDEP STORMWATER PRE APP		1/23/17	AMP
PRICING		9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY		6/24/16	AMP

Design: BMG Draft: CG Date: JAN 2018
 Checked: AMP Scale: 1"=40' Job No.: 98089.08
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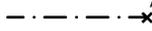
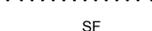
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Drawing Name: **Water Quality Plan**
 Project: **Brandy Lane**
 Portland, Maine
 Client: **LBW, LLC**
 PO Box 1382, Portland, Maine 04104

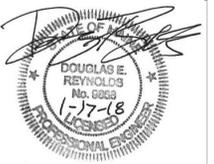
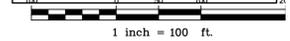
Drawing No. **WQ**



LEGEND

-  SUBCATCHMENT AREA
-  TIME OF CONCENTRATION FLOW PATH
-  WATERSHED BOUNDARY
-  WETLAND BOUNDARY
- SF SHEET FLOW
- PF PIPE FLOW
- SCF SHALLOW CONCENTRATED FLOW
- CF CHANNEL FLOW
- POI POINT OF INTEREST
-  REACH

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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PRICING	9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY	6/24/16	AMP

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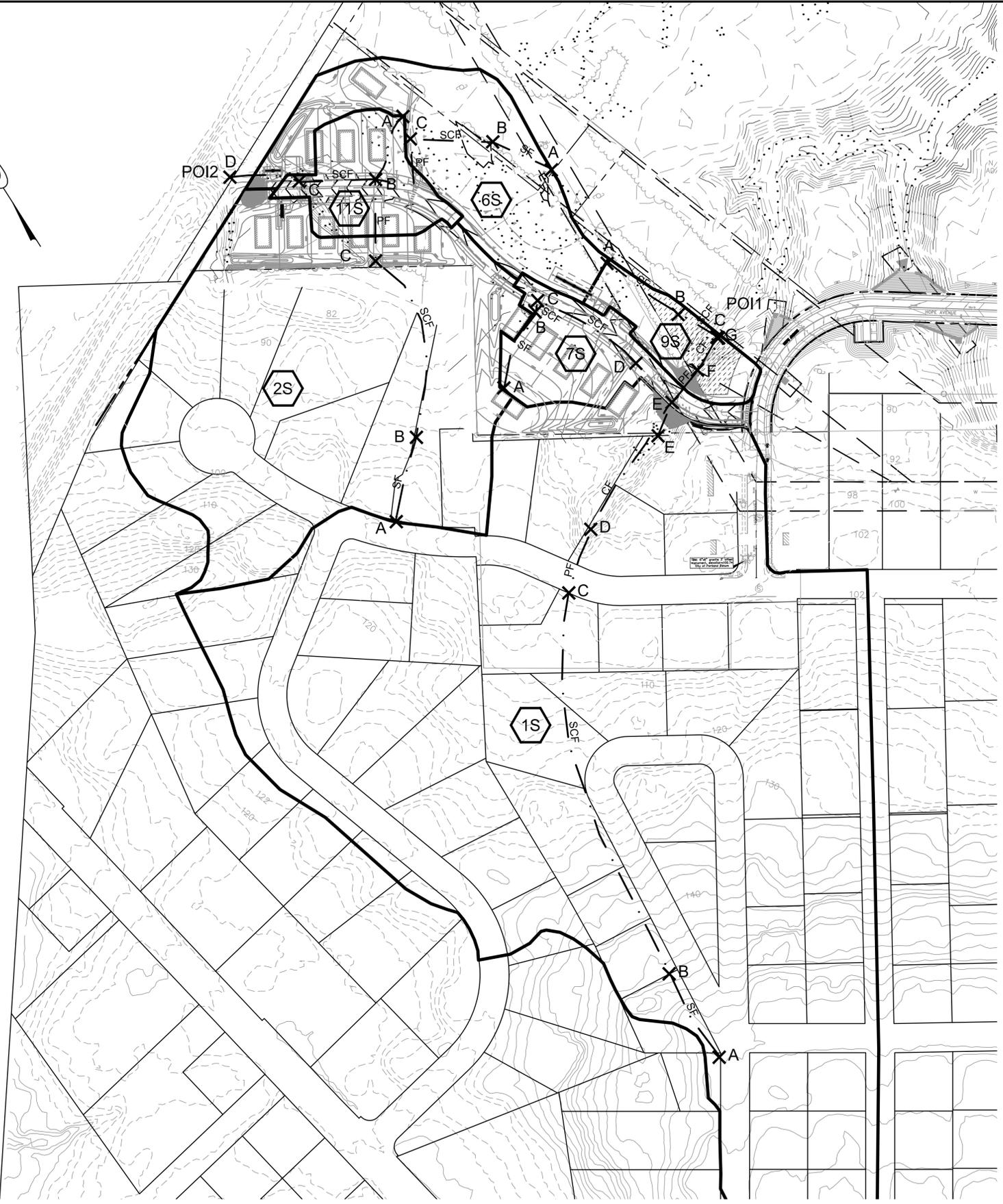
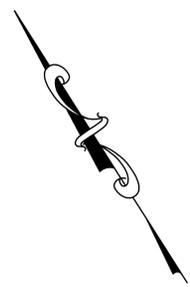


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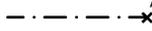
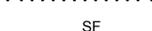
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Drawing Name:	Pre Development Watershed Map
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

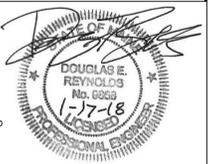
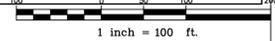
Drawing No.
W1



LEGEND

-  SUBCATCHMENT AREA
-  TIME OF CONCENTRATION FLOW PATH
-  WATERSHED BOUNDARY
-  WETLAND BOUNDARY
-  SF SHEET FLOW
-  PF PIPE FLOW
-  SCF SHALLOW CONCENTRATED FLOW
-  CF CHANNEL FLOW
-  POI POINT OF INTEREST
-  REACH

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.



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PRICING		9/16/16	AMP
PRE-APPLICATION MEETING WITH CITY		6/24/16	AMP

Design: BMG Draft: CG Date: JAN 2018
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Drawing Name:	Post Development Watershe Map
Project:	Brandy Lane Portland, Maine
Client:	LBW, LLC PO Box 1382, Portland, Maine 04104

Drawing No.
W2

Draft Construction Management Plan
September 27, 2017
City of Portland
Brandy Lane Subdivision

Purpose:

Construction Management Plans shall depict the overall planning, coordination, and control of a construction site, including phases as applicable, from beginning to completion. The City's goal for a construction management plan is to support a safe construction site and protect the public safety, accessibility (including preserving accessible pedestrian, bicycle, and vehicular modes of transport throughout the city), and welfare during construction. In addition, the construction management plan shall minimize construction impacts in their duration and magnitude to the surrounding area and develop an effective communication process for resolving concerns and conflicts.

Narrative:

LBW, LLC. has retained Gorrill Palmer to prepare plans and permit applications for the construction of a proposed sixteen (16) lot single family residential subdivision, 960 linear foot roadway, and infrastructure off Hope Avenue in Portland, Maine. The project will develop approximately 4.57 acres and the work will include:

1. Install stabilized construction entrance at the intersection of the access drive and Hope Avenue.
2. Install perimeter silt fence and/or wood waste berms prior to grubbing respective areas.
3. Clear and grub for roadway construction. Install stone check dams at any evident concentrated flow discharge points.
4. Commence earthwork and grading to subgrade.
5. Commence installation of drainage appurtenances.
6. Commence grassed underdrained soil filter construction.
7. Commence installation of water and sewer lines.
8. Continue earthwork and grading to subgrade as necessary for construction.
9. Complete installation of underground utilities to 5' beyond right-of-way.
10. Install sub-base and base gravel within roadway and driveway aprons.
11. Install base course paving for roadway and driveway aprons.
12. Loam, lime, fertilize, seed and mulch disturbed areas.

13. Once the site is stabilized and a 90% catch of vegetation has been obtained, remove all temporary erosion control measures.
14. Touch up loam and seed.
15. Install surface course paving after the base course paving has gone through one complete winter season.
16. Touch up loam and seed.

Performance Guarantees, Inspection Fees, Preconstruction Meeting, and Permits

Part of the Level III Site Plan, the developer will be required to submit a performance guarantee for the proposed work. The performance guarantee will be based upon a cost estimate submitted and approved by the City.

The contractor will be responsible for obtaining street opening and street occupancy permits from the department of public works. All construction in the right of way shall conform to the City of Portland Code.

No blasting is anticipated for this project, but if the need arises, the contractor will be responsible for conforming to all the measures of Article VIII. Regulation of Explosives in the Land Use Code and Section 3.7 Standards for Blasting and Regulation of Explosives in Portland's Technical Manual.

Construction Administration and Communication

This project will be managed by a representative from LBW, LLC.

1. Contact Person and contact information:
 - Developer (LBW, LLC): Burt Wolf (207-776-0742)
 - Contractor: TBD
 - Engineer (Gorrill Palmer): Doug Reynolds, P.E. (207-772-2515)
2. Construction Signage will be posted on the site with the above contact information.
3. All construction site signage is temporary and will be removed at project completion.

Construction Schedule

- Site Plan Approval: Expected Fall 2017
- Preconstruction Meeting: Winter 2018
- Construction of Roadway: Approximately 16 weeks. Expected completion – Fall 2018.

I. Construction Schedule:

Estimated Construction Time:	4 Months
Erosion Control Measures Placed:	Week 1
Site Clearing and grubbing:	Week 2
Construction of road subbase:	Week 3
Stormwater Management area for construction:	Week 4 - Week 14
Utility Improvements and roadway construction:	Week 8 - Week 14
Road Base and Binder course:	Week 14 - Week 15
Sidewalks:	Week 15
Start final seeding on stabilized areas:	Week 14
Vegetated Growth monitoring:	Week 14 - Week 16
Reseeding if necessary:	Week 16
Removal of temporary erosion control measures:	Upon final completion

2. Hours of Construction. Construction may occur during the daytime hours as defined in Section 17-18. Construction Activities for Building permit and Section 25-129. Noise, dust and debris.
3. Extended Hours or Night Work: Pursuant to Section 17-18, this section not apply to emergency utility work or “Situations where the public works authority or the office of building inspections determines that the construction activity is of a unique character which cannot reasonably be completed or performed during the permitted hours and which is not of a recurring nature, provided that prior to engaging in such activity the contractor or his representatives gives notice of the time and scope of such proposed activity, the notice to be given in a manner approved by the public works authority.”
4. If allowed, no construction activity will begin before 8:00 AM on a Saturday, Sunday or legal holiday.
5. Material Deliveries: All deliveries will comply with the noise requirements listed above or be restricted to the hours allowed for construction work.

Security & Public Safety

1. Prior to commencing construction, the contractor will install “Construction Ahead” signs on both the eastbound and westbound lanes to warn traffic and pedestrians of the construction area.
2. The contractor will be responsible for the setup of construction staging area before construction begins. Contractor will provide fencing for staging area if need be. Fenced in areas will be provided with gates that allow emergency vehicles to pass and equipped with a Knox locking device.
3. Contractor will be responsible for the safe storage of materials or equipment on site.
4. Contractor will be responsible with developing a fire safety and emergency protocol and obtain all the necessary contact information.
5. All excavations within the right of way shall be filled on plated for the overnight. Excavations within the site shall be barricaded with construction tape for the overnight.

Construction Permitting and Traffic Control Plans

1. Construction Activity in Public Streets: Construction activity in the public right-of-way is controlled by Chapter 25 Article VII of the City Code of Ordinances. Required licenses and permits, restrictions on activity, and fees & area are outlined in that Chapter. Rules and Regulations for Excavation Activity are available through the Street Opening Clerk at the Department of Public Works. At no time can construction activity including delivery vehicles close or block streets or affect public safety access without prior notice and approval of the Department of Public Works.
2. Sewer and Stormwater: Sewer and stormwater water system connections are controlled by Chapters 24 and 32 of the City Code of Ordinance. Required permits for new connections and/or abandonment of existing connections are available through the Street Opening Clerk at the Department of Public Works. Rules and Regulations for these utility systems are available through the City Engineer's office of the Department of Public Works and in Section II of the Technical Manual.
3. Traffic Control Plans: Construction activity that impacts the existing public street system must be controlled to protect the safety of the construction workers and all modes of the traveling public. Projects that will occur along arterial and or collector streets are required to submit a satisfactory 'maintenance of traffic' (MOT) plan prior to any site plan, subdivision, or street opening permit approval. MOT plans may be required for projects that have impacts on local streets.

Site Management and Controls

The final Construction Management Plan will address maintaining the site in a safe condition and will include the following:

1. Regular trash and debris removal
2. Street cleaning and damage controls
3. Dust controls- The construction shall comply with Portland's requirements under Section 25-129 on Noise, dust and debris (Attachment 2).
4. Noise: The construction shall comply with Portland's requirements under Section 17-18 of the City Code (Attachment 1) and Section 25-129 on Noise, dust and debris Attachment 2).
5. Rodent Control will be provided, if applicable, by a professional exterminator and consistent with Chapter 22 of the City Code.
6. Snow Removal: Pursuant to Section 25-173 Contractors to ensure a safe means of travel within the work zone.
 - a) Snow/ice removal or commence automatically from (1" of snow and up) or Ice
 - b) Remove snow as needed within the work zone, including parking spaces & not to block any driveways or site lines with the piles of snow.
 - c) Clear all walks & ramps with the work zone
 - d) Sand or Salt as needed
 - e) Clear all basin or drainage to help snow melt
 - f) This would include Monday-Friday Sat/Sunday/Holidays

Erosion Control and Preservation of Trees

1. The contractor shall install all erosion and sedimentation controls as depicted on the approved erosion and sedimentation control plan prior to the pre-construction meeting for inspection by the City. The contractor shall regularly inspect the control measures, no less

than weekly and after significant storm events, and maintain any installed temporary or permanent stormwater management systems in working order. The contractor shall document all inspection activities and corrective actions and be prepared to provide these documents for inspection by the City, Maine Department of Environmental Protection or the U.S. Environmental Protection Agency upon request.

2. The contractor shall maintain all tree and landscaping preservation measures as depicted on the landscaping plan (Exhibit) within the area of construction.
3. The storage of materials shall be identified and avoid being located under/near trees.

Construction Staging Area

1. The Construction Management Plan depicts the location of the material and equipment storage area
2. Delivery Truck Holding Areas On-Site: The delivery holding area is shown on the plan and shall not be blocked during construction. On days when the construction activities require multiple truck deliveries, these deliveries will be carefully scheduled so that there is always adequate on-site area for the holding of the trucks until they can be unloaded. Once at the site all vehicles will be brought within the fence line and will make every attempt to avoid queueing on public streets.
3. Delivery Truck Holding Areas Off-Site: In the event that adequate on-site area for holding of trucks is not available, the contractor shall provide an off-site marshalling area will be utilized for trucking.

Parking During Construction

1. Construction Parking: Parking for construction workers shall be on site as indicated on the Construction Management Plan.
2. Truck Routes and Volumes: The Construction Management Plan shows the designated truck routes and expected truck volumes.

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