

# LEWIS LANDING

## PROPOSED MULTI-UNIT RESIDENTIAL DEVELOPMENT HUTTLESTON AVE. FAIRHAVEN, MASSACHUSETTS

### SCHEDULE OF DRAWINGS

SHEET NUMBER	PLAN TITLE
-	COVER SHEET
1	EXISTING CONDITIONS PLAN
2	SITE LAYOUT AND LANDSCAPING PLAN
3	GRADING & UTILITIES PLAN
4	EROSION CONTROL PLAN
5	DETAIL SHEET-1
6	DETAIL SHEET-2
7	ARCHITECTURAL PLANS

#### WAIVERS REQUESTED

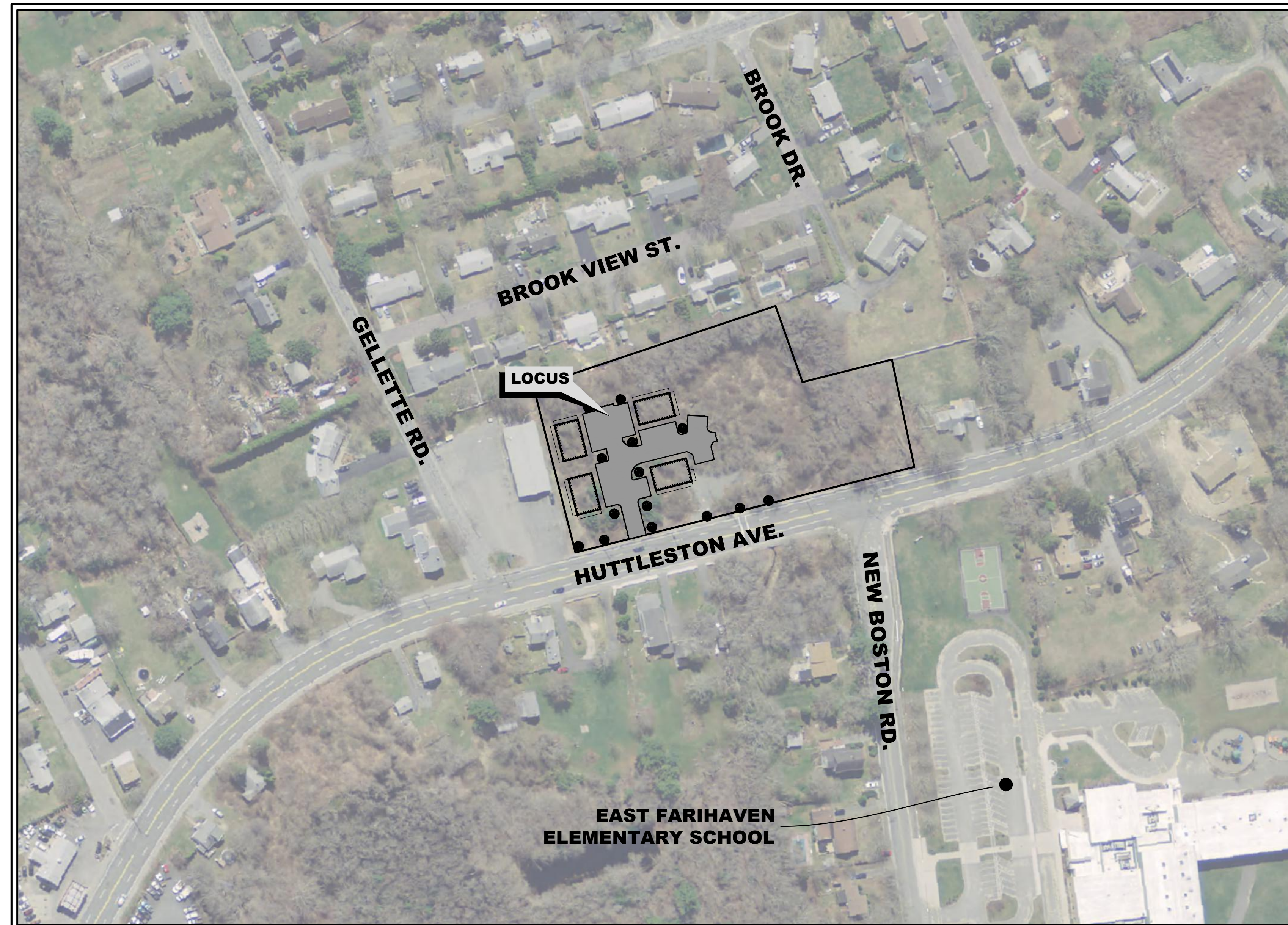
1. FAIRHAVEN ZONING BYLAW 198-31.1 (C) (2) (g) [6] REQUIRING BASINS AND PONDS TO HAVE 4:1 SIDE SLOPES AND SEDIMENT FOREBAYS TO HAVE 3:1 SIDE SLOPES.
2. FAIRHAVEN ZONING BYLAW 198-31.1(C)(2)(I) - REQUIRING FENCE ENCLOSURE FOR STORMWATER BASINS.
3. FAIRHAVEN ZONING BYLAW 198-31.1(C)(3) [(C)(4)(A) THROUGH (C)] - THE POCKET WETLAND WETLAND IS REQUESTED FOR APPROVAL THROUGH (C)(3)(d).



**PREPARED BY:**



CIVIL ENGINEERING—LAND SURVEYING—ENVIRONMENTAL ASSESSMENT  
P.O. BOX 1088, 350 BEDFORD STREET, LAKEVILLE, MA 02347  
TEL: 508.947.0050 FAX: 508.947.2004

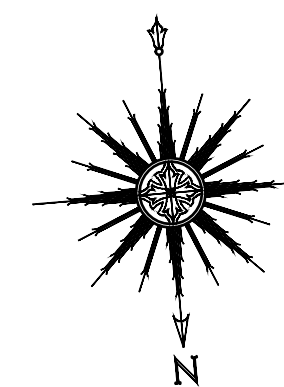


**APPLICANT/OWNER:**

DANA LEWIS  
18 TANNER LANE  
FAIRHAVEN, MA 02719

**LOCUS:**

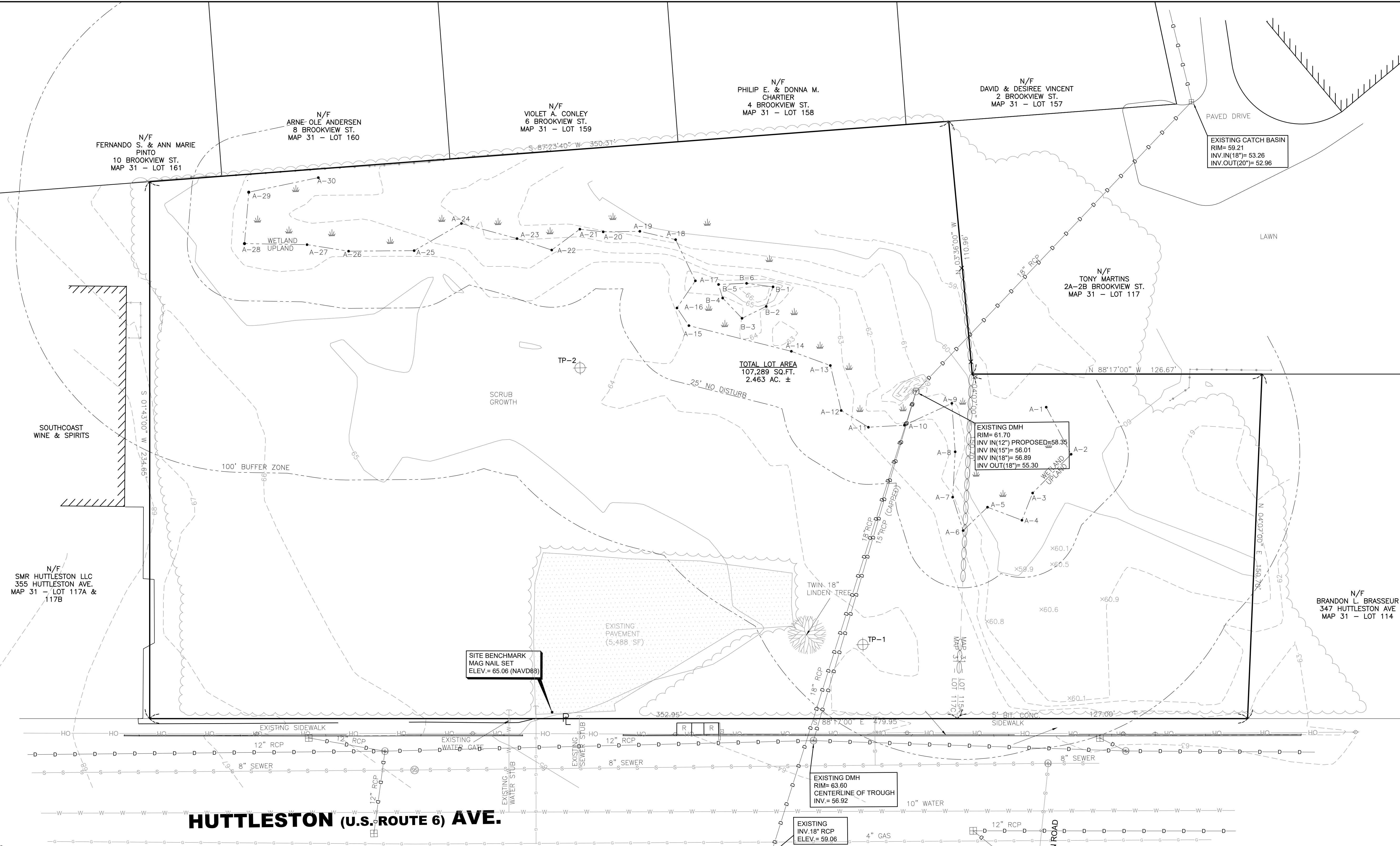
MAP 31 - LOT 117C AND LOT 115A  
HUTTLESTON AVENUE  
FAIRHAVEN, MA



SCALE: 1"=100'

**SEPTEMBER 9, 2019**

REVISED: AUGUST 5, 2021



**SITE ADDRESS**  
 0 HUTTLESTON AVENUE  
 FAIRHAVEN, MA 02719  
 (VACANT LOT)

**CURRENT OWNERS**  
 DANA LEWIS  
 18 TANNER LANE  
 FAIRHAVEN, MA 02719

**ASSESSORS' REFERENCE**  
 MAP 31 - LOT 115A & 117C

**DEED REFERENCE**  
 BK. 12776 - PG. 341

**PLAN REFERENCE**  
 PB. 11 - PG. 2 FB. 65 - PG. 16

**ZONING DESIGNATION**  
 SINGLE RESIDENCE DISTRICTS- RC

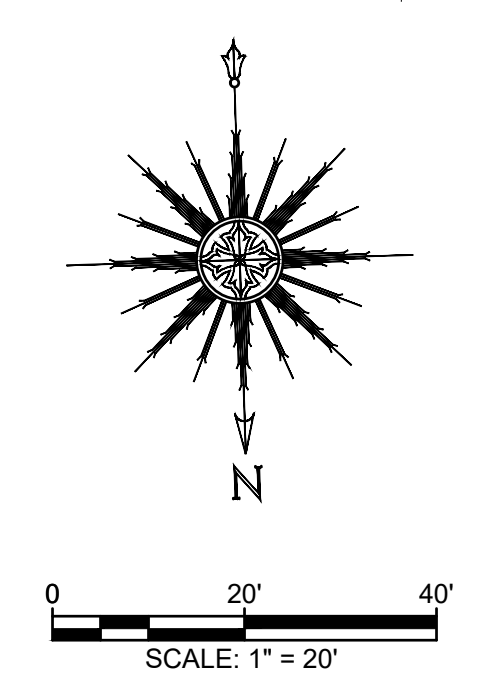
**VERTICAL DATUM SHOWN**  
 NAVD88

**FEMA FLOODZONE DESIGNATION**  
 ZONE X- AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. AS SCALED FROM FLOOD INSURANCE RATE MAP NUMBER: 25005-C-0413F, EFFECTIVE DATE: 7/7/2009

**NOTE:**  
 THE WETLAND DELINEATION LINE SHOWN HEREON WAS BASED ON A PLAN BY ALLEN D. QUINTIN, DATED JANUARY 11, 2017 AND WAS NOT FIELD LOCATED BY PRIME ENGINEERING INC. DELINEATION APPROVED BY FAIRHAVEN CONSERVATION COMMISSION.

ELEV. (FEET)	TP-1 (INCHES)	DEPTH (INCHES)	ELEV. (FEET)	TP-2 (INCHES)	DEPTH (INCHES)
64.3	0	0	64.2	0	0
59.30	60	60	59.20	60	60
58.30	72	72	58.20	72	72
58.30	96	96	56.20	96	96
58.30	96	96	55.20	108	108

SEEPAGE ENCOUNTERED @ 60"



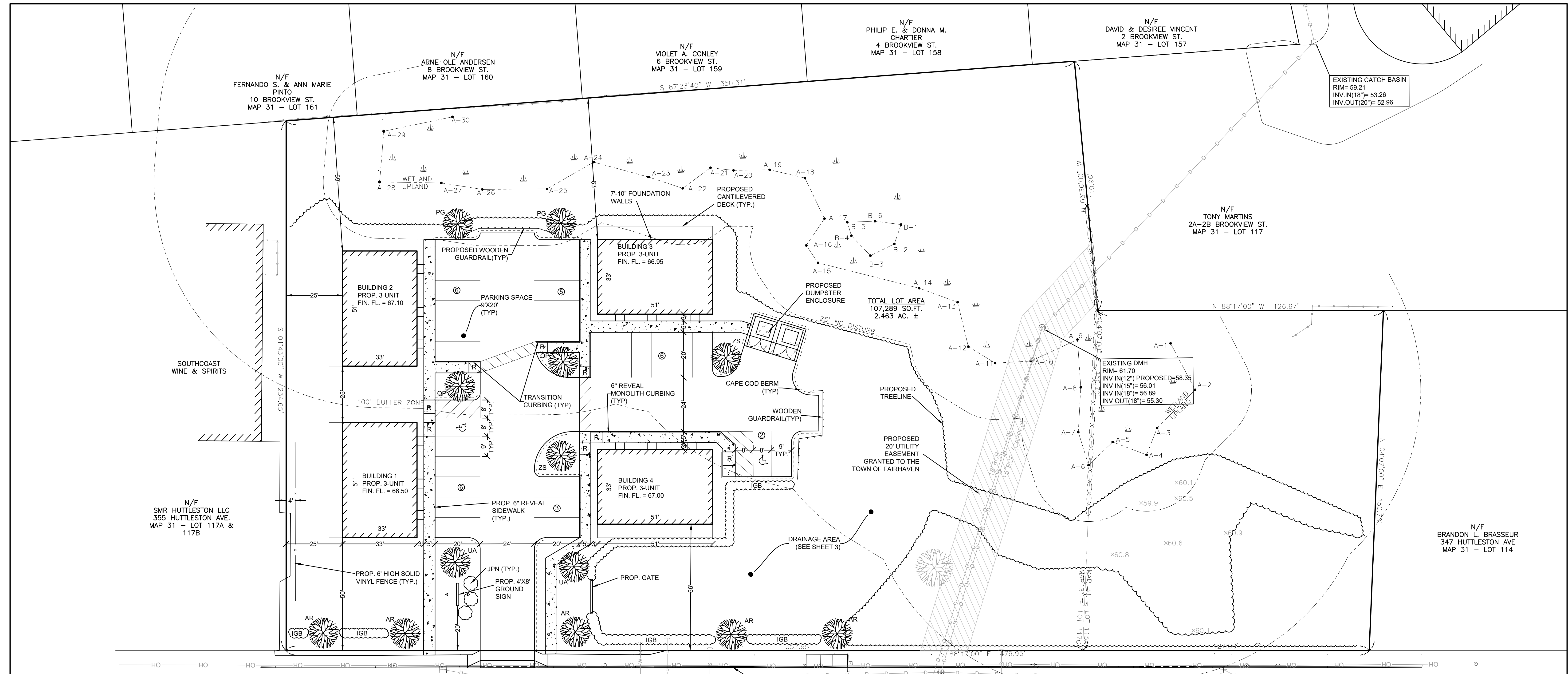
REV	DATE	DESCRIPTION	BY	APP.
10	8/5/2021	GENERAL REVISIONS	SWL	RJR
9	7/9/2021	GENERAL REVISIONS	SWL	RJR
8	1/28/2021	PEER REVIEW COMMENTS INCORPORATED	SEK	RJR
7	12/7/2020	GENERAL REVISIONS	SEK	RJR
6	7/8/2020	GENERAL REVISIONS	SWL	RJR
5	6/25/2020	RESPONSE TO COMMENTS	SWL	RJR
4	2/14/2020	RESPONSE TO COMMENTS	SWL	RJR
3	1/22/2020	RESPONSE TO COMMENTS	SWL	RJR
2	12/4/2019	RESPONSE TO COMMENTS	SWL	RJR
1	11/8/2019	RESPONSE TO COMMENTS	SWL	RJR

DRAWING TITLE		EXISTING CONDITIONS PLAN		SCALE:	1" = 20'
PROJECT		MAP 31- LOT 117C FAIRHAVEN, MASSACHUSETTS		DATE:	SEPT. 9, 2019
CLIENT		DANA LEWIS FAIRHAVEN, MASSACHUSETTS		DRAWN BY:	SWL
DESIGNED BY:		RJR		CHECKED BY:	RJR
APPROVED BY:		RJR		PROJECT NO.:	2729-01-01

**PRIME ENGINEERING INC.**  
 P.O. BOX 1088  
 350 BEDFORD ST.  
 LAKEVILLE, MA 02347  
 TEL: 508.947.0050  
 FAX: 508.947.2004

**RICHARD J. RHEAUME**  
 No. 28373  
 CIVIL  
 REGISTERED

**SHEET NO. 1 OF 7**



**SITE ADDRESS**  
 0 HUTTLESTON AVENUE  
 FAIRHAVEN, MA 02719  
 (VACANT LOT)

**CURRENT OWNERS**  
 DANA LEWIS  
 18 TANNER LANE  
 FAIRHAVEN, MA 02719

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 MAP 31 - LOT 115A & 117C

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**ZONING DESIGNATION**  
 SINGLE RESIDENCE DISTRICTS- RC

**VERTICAL DATUM SHOWN**  
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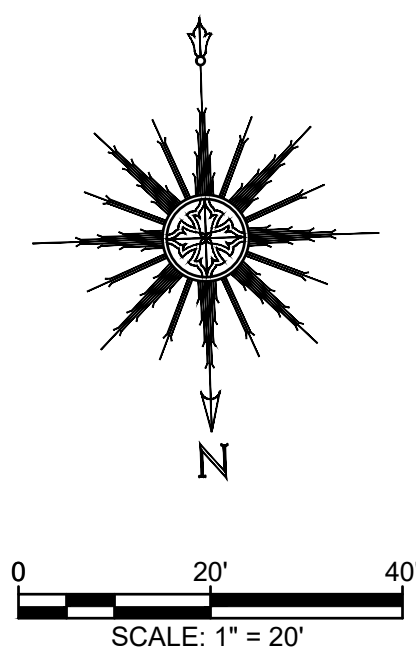
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LOT 2 PLANTING SCHEDULE (REQUIRED TREES ONLY)							
DECIDUOUS TREES							
SYMBOL	QUANTITY	% OF TOTAL	BOTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT	MATURE WIDTH
AR	5	40%	ACER RUBRUM 'RED SUNSET'	RED MAPLE	2.5"-3 CAL.	60'	40'
QP	2	15%	QUERCUS PALUSTRIS	PIN OAK	2.5"-3 CAL.	65'	50'
UA	2	15%	ULMUS AMERICANA 'VALLEY FORGE'	VALLEY FORGE ELM	2.5"-3 CAL.	70'	60'
ZS	2	15%	ZELKOVA SERRATA 'VILLAGE GREEN'	JAPANESE ZELKOVA	2.5"-3 CAL.	60'	60'
% DECIDUOUS TREES: 85%							
EVERGREEN TREES							
PG	2	15%	PICEA GLAUCA	BLUE SPRUCE	4'-6' HT.	75'	N/A
DECIDUOUS SHRUBS							
IGB	75	-	ILEX GABRA	INKBERRY HOLLY	GAL	4'	4'
JPN	4	-	JUNIPER PROCUMBENS NANA	DWARF JAPANESE JUIPER	GAL	1'	3'

**RC ZONING TABLE**

REQUIREMENT	REQUIRED	PROVIDED
MINIMUM FRONTAGE	100 LF.	479.95 LF.
MINIMUM LOT AREA	15,000 S.F.	107,289 S.F.
MINIMUM SETBACKS:		
FRONT	50 FT.	50.0 FT.
SIDES	25 FT.	25.0 FT.
REAR	50 FT.	59.4 FT.
MINIMUM CONTIGUOUS UPLAND	70,000 S.F.	85,151 S.F.
MAXIMUM LOT COVERAGE	50%	21.9%
MAXIMUM BUILDING COVERAGE	25%	6.3%



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**DRAWING TITLE**  
 SITE LAYOUT AND LANDSCAPING PLAN

**PROJECT**  
 MAP 31- LOT 117C  
 FAIRHAVEN, MASSACHUSETTS  
 DANA LEWIS  
 FAIRHAVEN, MASSACHUSETTS

**CLIENT**  
 DANA LEWIS  
 FAIRHAVEN, MASSACHUSETTS

**SCALE:** 1" = 20'

**DATE:** SEPT. 9, 2019

**DRAWN BY:** SWL

**DESIGNED BY:** RJR

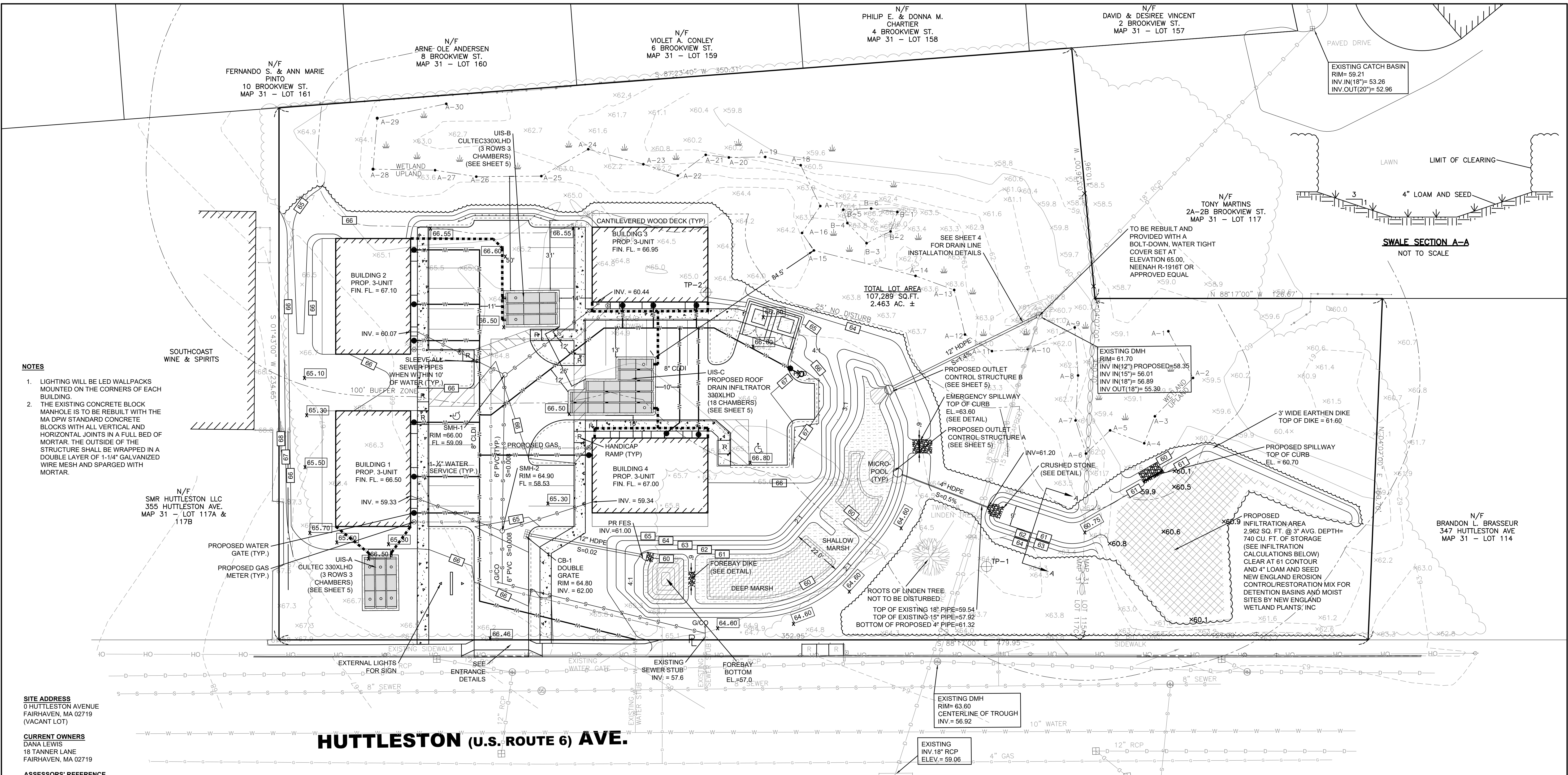
**CHECKED BY:** RJR

**APPROVED BY:** RJR

**SHEET NO. 2 OF 7**

**PROJECT NO. 2729-01-01**

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- NOTES**
- LIGHTING WILL BE LED WALLPACKS MOUNTED ON THE CORNERS OF EACH BUILDING
  - THE EXISTING CONCRETE BLOCK MANHOLE IS TO BE REBUILT WITH THE MA DPW STANDARD CONCRETE BLOCKS WITH ALL VERTICAL AND HORIZONTAL JOINTS IN A FULL BED OF MORTAR. THE OUTSIDE OF THE STRUCTURE SHALL BE WRAPPED IN A DOUBLE LAYER OF 1-1/4" GALVANIZED WIRE MESH AND SPARGED WITH MORTAR.

**SITE ADDRESS**  
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 (VACANT LOT)

**CURRENT OWNERS**  
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 18 TANNER LANE  
 FAIRHAVEN, MA 02719

**ASSESSORS' REFERENCE**  
 MAP 31 - LOT 115A & 117C

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**HUTTLESTON (U.S. ROUTE 6) AVE.**

**RECHARGE CALCULATION**

ALL ROOF DRAINAGE TO FLOW TO CULTTEC 330XLHD UNDERGROUND INFILTRATORS  
 REQUIRED STORM DEPTH = 0.25"/SF OF IMP. AREA  
 INFILTRATION REQUIREMENT = 23,478 SF IMP. X 0.25"/SF = 490 CF  
 PROPOSED 36 CULTTEC 330XLHD CHAMBERS = 1,978 CF (CHAMBER STORAGE)  
 1,978 CF OF STORAGE PROPOSED > 490 CF OF STORAGE REQUIRED  
 DESIGN MEETS REQUIREMENT

**INFILTRATION CALCULATIONS**

INFILTRATION REQUIREMENT = 23,449 SF OF PR IMP. X 65% = 15,242 SF  
 MINUS ROOF AREA (100% INFILTRATED) = 15,242 - 6,732 = 8,510 SF REQUIRED  
 VOLUME = 0.25" RAINFALL X 8,510 SF = 178 CF REQUIRED  
 740 CF PROVIDED IN INFILTRATION AREA > 178 CF REQUIRED

**DEEP MARSH PLANTINGS**

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
NUPHAR LUTEUM	YELLOW WATER LILY	TUBERS	10
NYMPHAEA ODORATA	WHITE WATER LILY	TUBERS	10
PONTERDERIA CORDATA	PICKEREL WEED	2" PLUG	20
POTAMOGETON NODOSUS	LONG LEAF PONDWEED	RHIZOMES	10
POTAMOGETON	SAGO PONDWEED	TUBERS	10
PECTINATUS			
VALLISNERIA AMERICANA	WILD CELERY	TUBERS	10

**SHALLOW MARSH PLANTINGS**

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
ACORUS AMERICANA	SWEET FLAG	2" PLUG	10
AJISMA	WATER PLANTAIN		10
SUBCORDATUM		2" PLUG	20
SYMPHYTRICHUM PUNICUEM	SWAMP ASTER	2" PLUG	20
CALAMAGROSTIS CANADENSIS	BLUE JOINT GRASS	2" PLUG	20
CAREX COMOSA	BEARDED SEDGE	2" PLUG	20
CAREX STRICTA	TUSsock SEDGE	2" PLUG	20

**DETENTION BASIN PLANTING SCHEDULE**

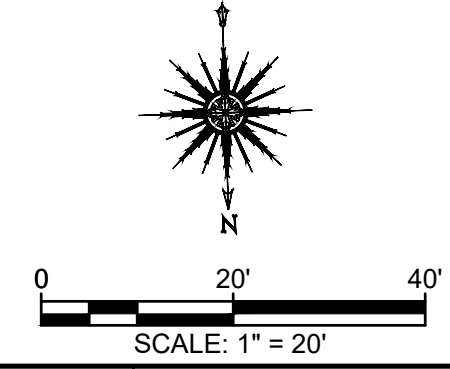
**TOP OF PIPE CALCULATIONS**

EXISTING 15" RCP CAPPED  
 SLOPE = (56.92 - 56.01) / 159 FT = .0057 SLOPE  
 INV. AT PIPE CROSSING = 56.92 - (66 FT TO BASIN X .0057) = 56.54  
 TOP EL. OF PIPE AT CROSSING = 56.54 + 1.25 FT DIAM. + .21 PIPE THICKNESS = 58.00

EXISTING 18" RCP  
 SLOPE = (59.06 - 56.89) / 209 FT = .0103 SLOPE  
 INV. AT BASIN = 59.06 - (119 FT TO BASIN X .0103) = 57.83  
 TOP EL. OF PIPE AT CROSSING = 57.83 + 1.5 FT DIAM. + .21 PIPE THICKNESS = 59.54

**LEGEND**

100	EXISTING CONTOURS
x 98.5	EXISTING SPOT ELEVATION
TP-101	OBSERVATION HOLE LOCATION
100.0	PROPOSED CONTOURS
100.0	PROPOSED SPOT ELEVATION
	PROPOSED WATER
	EXISTING TREELINE
	PROPOSED TREELINE
R	HANDICAP RAMP
	PROPOSED GAS
	PROPOSED SEWER



EXISTING DMH  
 RIM = 63.60  
 CENTERLINE OF TROUGH  
 INV. = 56.92

EXISTING 18" RCP  
 ELEV. = 59.06

NEW BOSTON ROAD

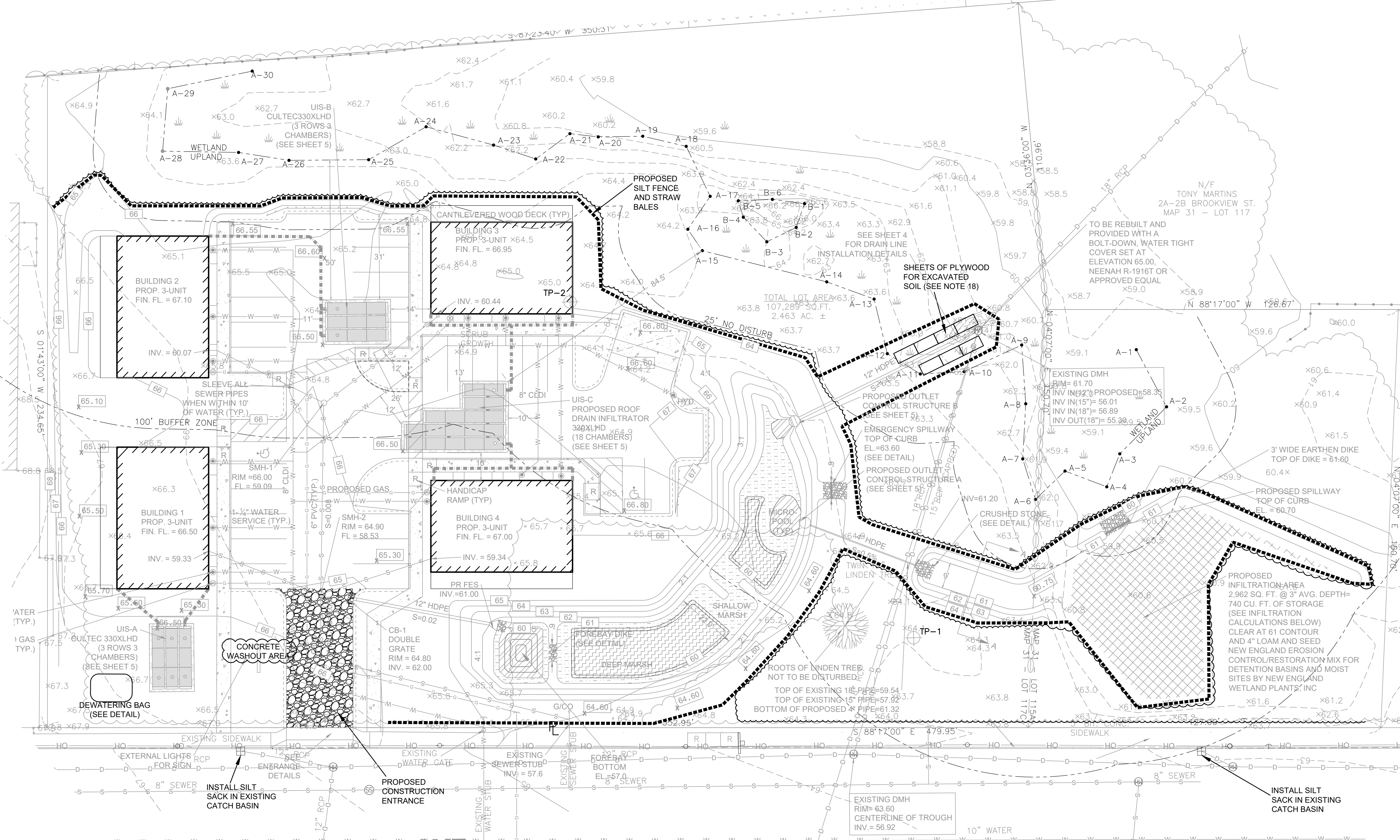
<b>DRAWING TITLE</b>		<b>SCALE</b>	
GRADING AND UTILITIES PLAN		1" = 20'	
<b>PROJECT</b>		<b>DATE</b>	
MAP 31- LOT 117C FAIRHAVEN, MASSACHUSETTS		SEPT. 9, 2019	
<b>CLIENT</b>		<b>DRAWN BY</b>	
DANA LEWIS FAIRHAVEN, MASSACHUSETTS		SWL	
<b>DESIGNED BY</b>		<b>CHECKED BY</b>	
RJR		RJR	
<b>APPROVED BY</b>		<b>PROJECT NO.</b>	
RJR		2729-01-01	

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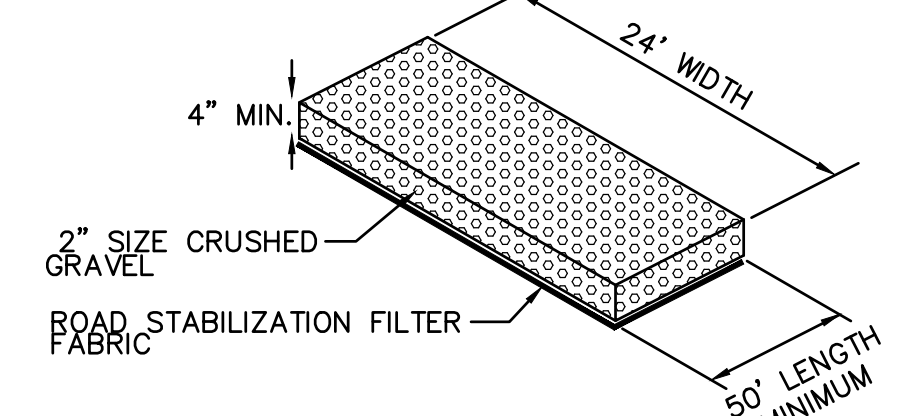
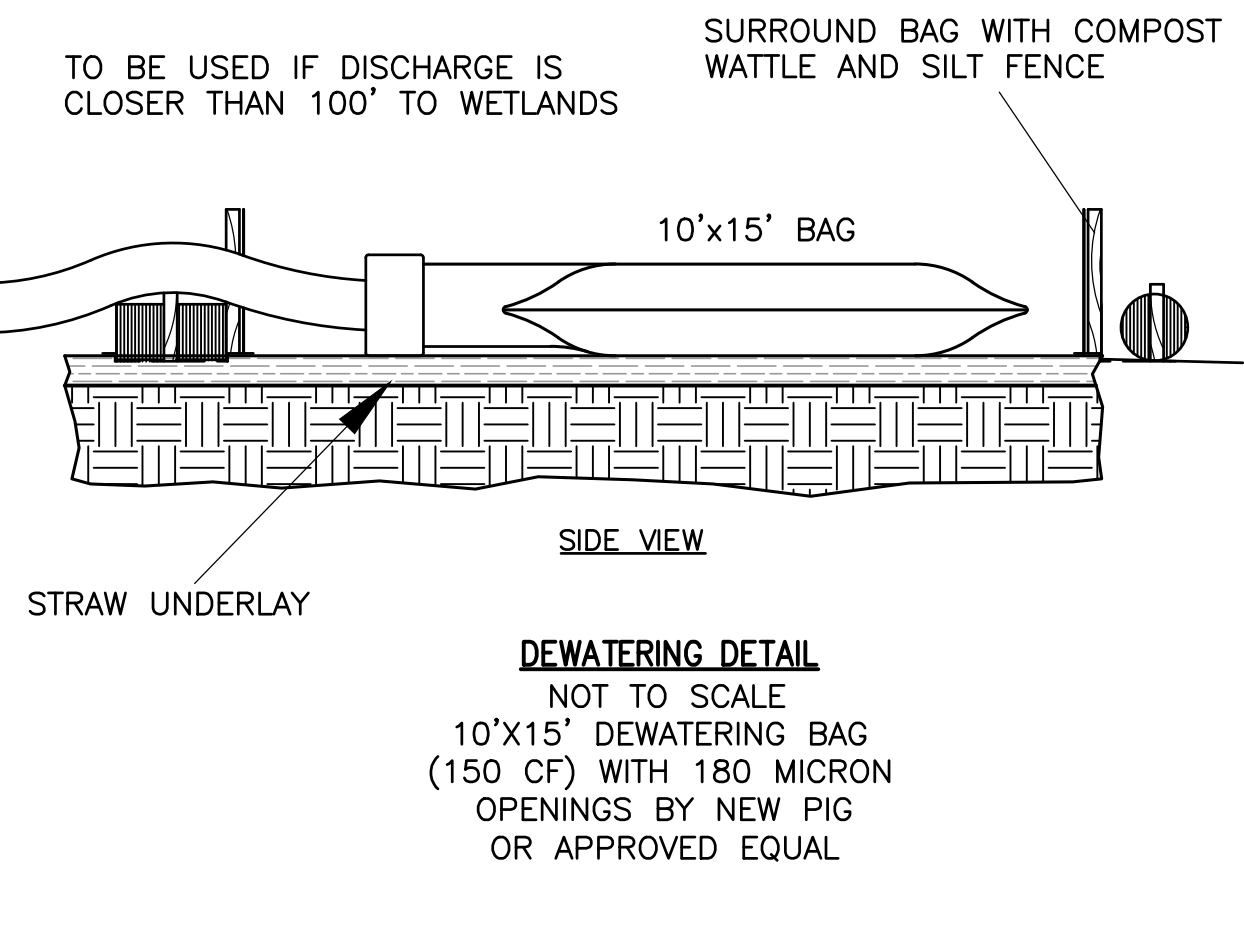
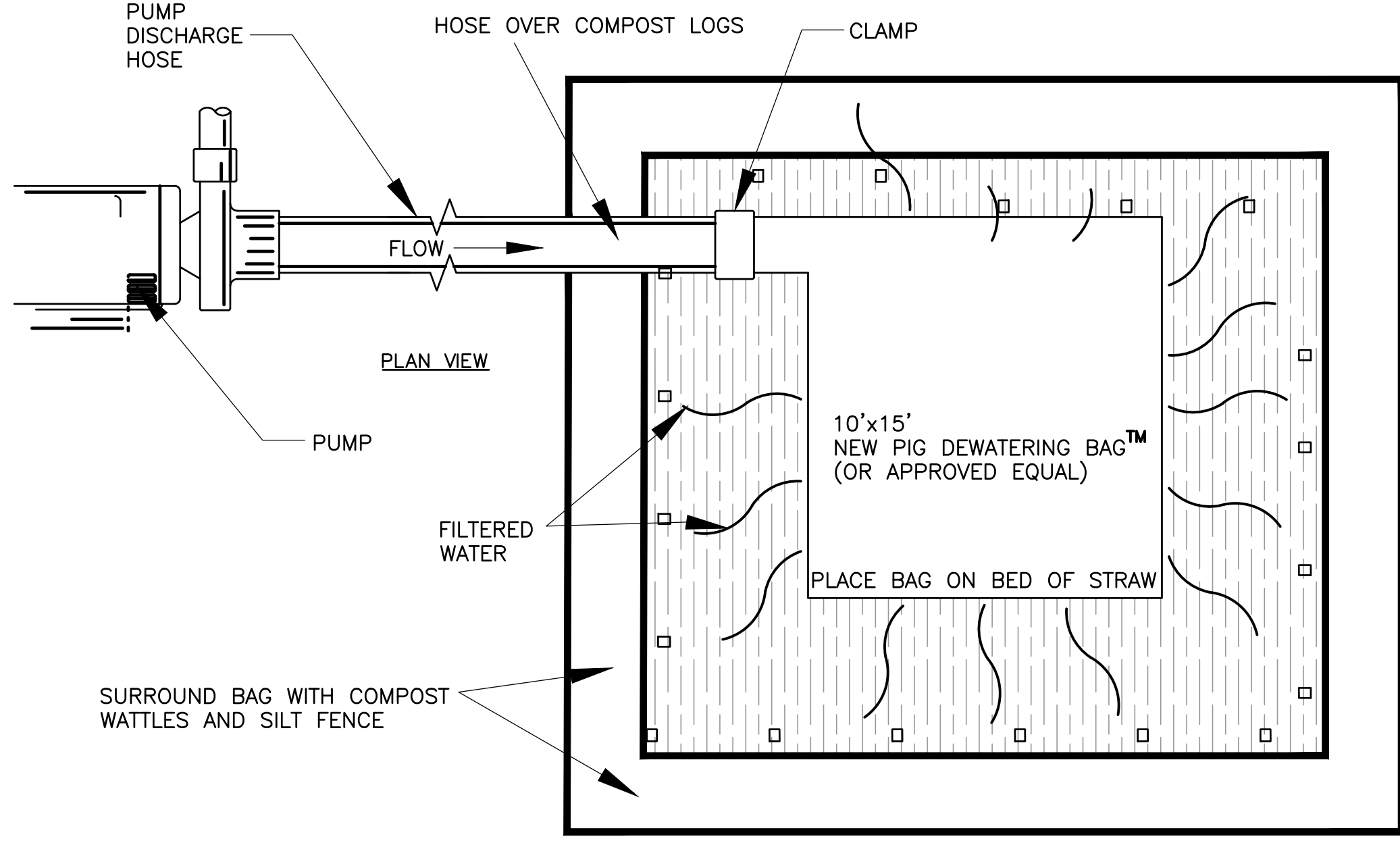
**SHEET NO. 3 OF 7**

**EROSION & SEDIMENT CONTROL NOTES:**

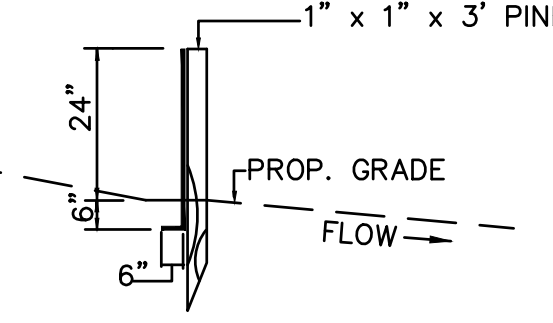
- THE FOLLOWING IS THE MINIMUM REQUIREMENTS THE CONTRACTOR SHALL FOLLOW TO PREVENT IMPACTS CAUSED BY EROSION AND SEDIMENTATION DURING CONSTRUCTION. THE CONTRACTOR MAY, AT HIS DISCRETION, IMPLEMENT ADDITIONAL MEASURES IF NECESSARY.
- EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO STUMP REMOVAL AND CONSTRUCTION. STABILIZATION OF ALL REGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
  - ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL MUNICIPAL REGULATIONS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION. A STAKED STRAW BALE DAM SHALL BE INSTALLED DOWN GRADIENT OF ALL DRAINAGE OUTFALLS.
  - ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING THE CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE OWNER OR AGENTS OF THE OWNER.
  - CATCH BASINS WILL BE PROTECTED WITH STRAW BALE FILTERS THROUGHOUT THE CONSTRUCTION PERIOD UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. FILTER FABRIC SHOULD BE INSTALLED UNDER GRATE OPENING UNTIL PAVEMENT IS IN PLACE AND GROUND SURFACE IS STABILIZED.
  - SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:  
 KENTUCKY BLUE GRASS 45%  
 CREEPING RED FESCUE 45%  
 PERENNIAL RYEGRASS 10%  
 SEED TO BE APPLIED AT A RATE OF 4 LBS./1000 SQ. FT.  
 FERTILIZER SHALL BE APPLIED AT A RATE OF 2 LBS./1000 SQ. FT.  
 PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 1. AFTER OCTOBER 1, AREAS WILL BE STABILIZED WITH STRAWBALE CHECK, FILTER FABRIC, OR WOODCHIP MULCH, AS REQUIRED, TO CONTROL EROSION.
  - AREAS TO BE LEFT BARE BEFORE FINISHED GRADING AND SEEDING IS ACHIEVED, SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYEGRASS APPLIED TO A RATE OF 2 LBS./1,000 SQ. FT. AT A DEPTH OF 1/2 INCH LIMESTONE (EQUIVALENT TO BE 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF 90 LBS./1,000 SQ. FT. PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 1. WHERE GRASS PREDOMINATES, FERTILIZE ACCORDING TO A SOIL TEST AT A MINIMUM APPLICATION RATE OF 1 LB. OF NITROGEN PER 1,000 SQ. FT. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRYED WOOD CHIP MULCH, FREE OF COARSE MATTER, TREATED WITH 1-2 LBS. NITROGEN PER TON, APPLIED AT A RATE OF 185-275 LBS./1,000 SQ. FT.
  - AT ALL PROPOSED FILL AREAS WHICH ARE NOT CURRENTLY SHOWN ON THESE PLANS, THE CONTRACTOR SHALL ESTABLISH AN EROSION CONTROL LINE (STRAW BALE CHECK OR FILTER FABRIC) ABOUT TEN (10) FEET FROM TOE TO SLOPE OF PROPOSED FILL AREAS PRIOR TO BEGINNING FILL INSTALLATION. STABILIZATION OF SLOPES IN FILL AREAS (USING MULCH OR GRASS) SHALL BE INITIATED WITHIN THIRTY (30) DAYS OF COMMENCEMENT OF FILL INSTALLATION.
  - STABILIZATION OF SLOPES IN CUT AREAS (USING MULCH OR GRASS) AND THE INSTALLATION OF CONTROL LINE (STRAW BALE CHECK OR FILTER FABRIC) AT THE TOE OF SLOPE SHALL BE INITIATED WITHIN THIRTY (30) FEET.
  - SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN. ALL STRAW BALES OR SILT FENCE RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS SHALL BE REPAIRED OR REPLACED.
  - CONTRACTOR WILL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFYING THE PROPER TOWN AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
  - THE CONTRACTOR SHALL SECURE THE SERVICES OF A PROFESSIONAL ENGINEER, WHO SHALL VERIFY IN THE FIELD THAT THE CONTROLS REQUIRED BY THIS PLAN ARE PROPERLY INSTALLED, SHALL MAKE INSPECTION OF SUCH FACILITIES NOT LESS FREQUENTLY THAN EVERY 14 DAYS OR AFTER A RAINFALL IN EXCESS OF 1/4 INCH, WHICHEVER OCCURS FIRST.
  - STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH. IF SOIL STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF STRAW BALES. SIDE SLOPES SHALL NOT EXCEED 2:1.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO SPRINKLING OF WATER ON EXPOSED SOILS AND HAUL ROADS AS NEEDED. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC.
  - IF FINAL GRADING IS TO BE DELAYED FOR MORE THAN THIRTY (30) DAYS AFTER LAND DISTURBANCES CEASE, TEMPORARY VEGETATION OR MULCH SHALL BE USED TO STABILIZE SOILS.
  - STRAW BALES SHALL BE USED ONLY AS A TEMPORARY MEASURE. WHERE CONTROL MEASURES WILL BE REQUIRED FOR LONGER THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED.
  - WHERE Dewatering IS NECESSARY, THERE SHALL NOT BE A DISCHARGE DIRECTLY INTO WETLANDS OR WATERCOURSES. PROPER METHODS AND DEVICES SHALL BE UTILIZED TO THE EXTENT PERMITTED BY LAW, SUCH AS PUMPING WATER INTO A TEMPORARY SEDIMENTATION BOWL, PROVIDING SURGE PROTECTION AT THE INLET AND THE OUTLET OF PUMPS, OR FLOATING THE INTAKE OF THE PUMP, OR OTHER METHODS TO MINIMIZE AND RETAIN THE SUSPENDED SOLIDS. IF A PUMPING OPERATION IS CAUSING TURBIDITY PROBLEMS, SAID OPERATION SHALL CEASE UNTIL SUCH TIME AS FEASIBLE MEANS OF CONTROLLING TURBIDITY ARE DETERMINED AND IMPLEMENTED. SAID DISCHARGE POINTS SHALL BE LOCATED OVER 100 FEET FROM THE DELINEATED WETLANDS AS INDICATED ON THIS PLAN.
  - THE CONTRACTOR SHALL OBTAIN AN NPDES PERMIT PRIOR TO THE START OF CONSTRUCTION.
  - THE INSTALLATION OF THE DRAIN LINE IN THE WETLANDS SHOULD BE DONE BY A SMALL BACKHOE, SUCH AS A BOBCAT, OPERATING ON MATS. THE ORGANIC TOPSOIL SHALL BE SEGREGATED FROM THE UNDERLYING SOIL ON PLYWOOD. THE UNDERLYING SOIL SHALL ALSO BE PLACED ON PLYWOOD. THE PROCESS SHALL BE OBSERVED BY AN AGENT FROM PRIME ENGINEERING. ONCE THE PIPE IS INSTALLED IT SHALL BE BACKFILLED SO THE ORGANIC TOPSOIL IS AT THE SURFACE AND IS SEED WITH A WETLAND SEED MIX.



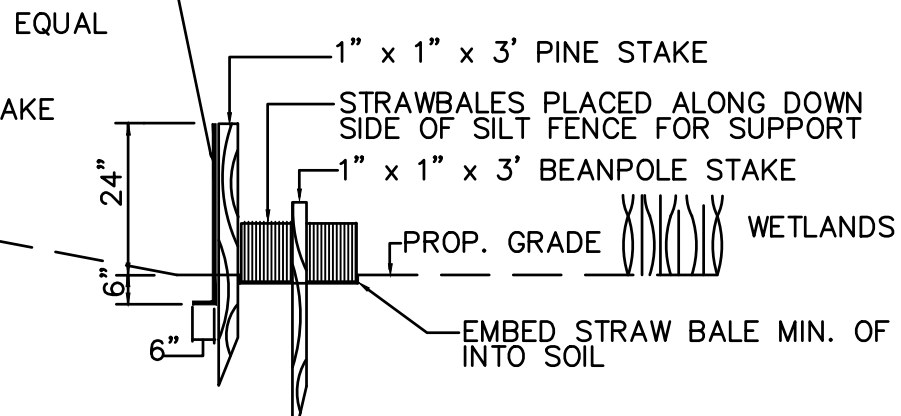
**HITTLESTON (U.S. ROUTE 6) AVE.**



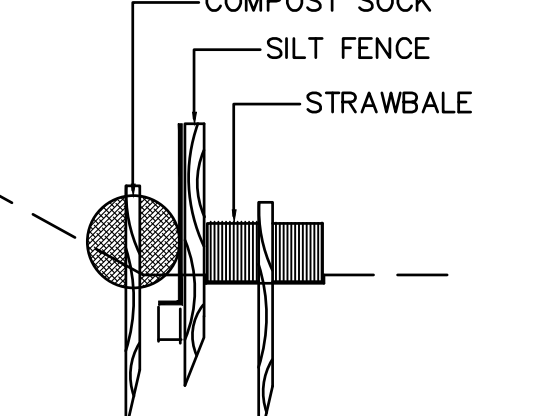
**CONSTRUCTION ENTRANCE**  
NOT TO SCALE



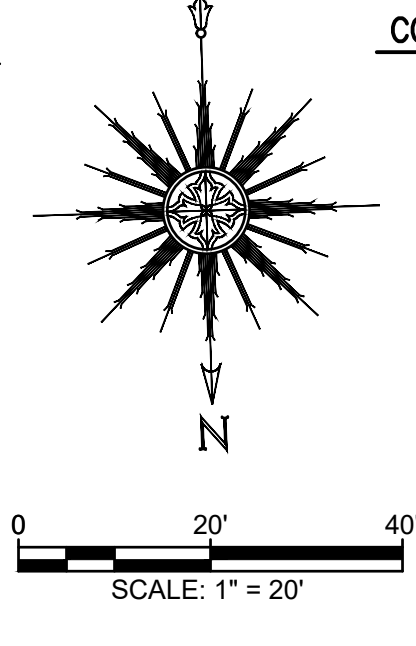
**SILT FENCE DETAIL**  
AT FLAT SLOPES  
NOT TO SCALE



**STRAWBALE AND SILT FENCE**  
AT MODERATE SLOPES  
1:6 OR LESS  
NOT TO SCALE

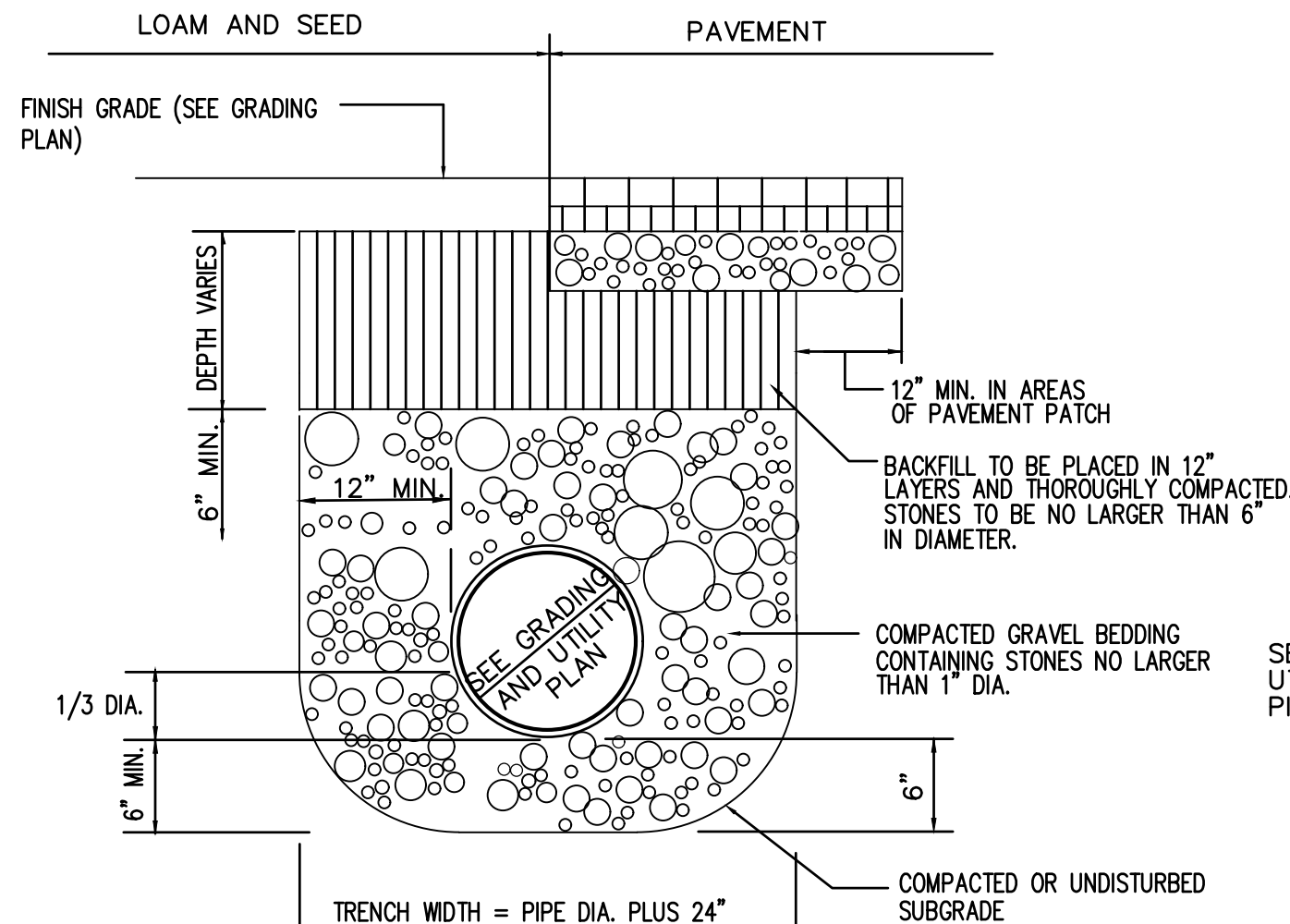


**COMPOST SOCK, STRAWBALE, AND SILT FENCE**  
AT TOE OF STEEP SLOPES  
1:6 OR MORE  
NOT TO SCALE

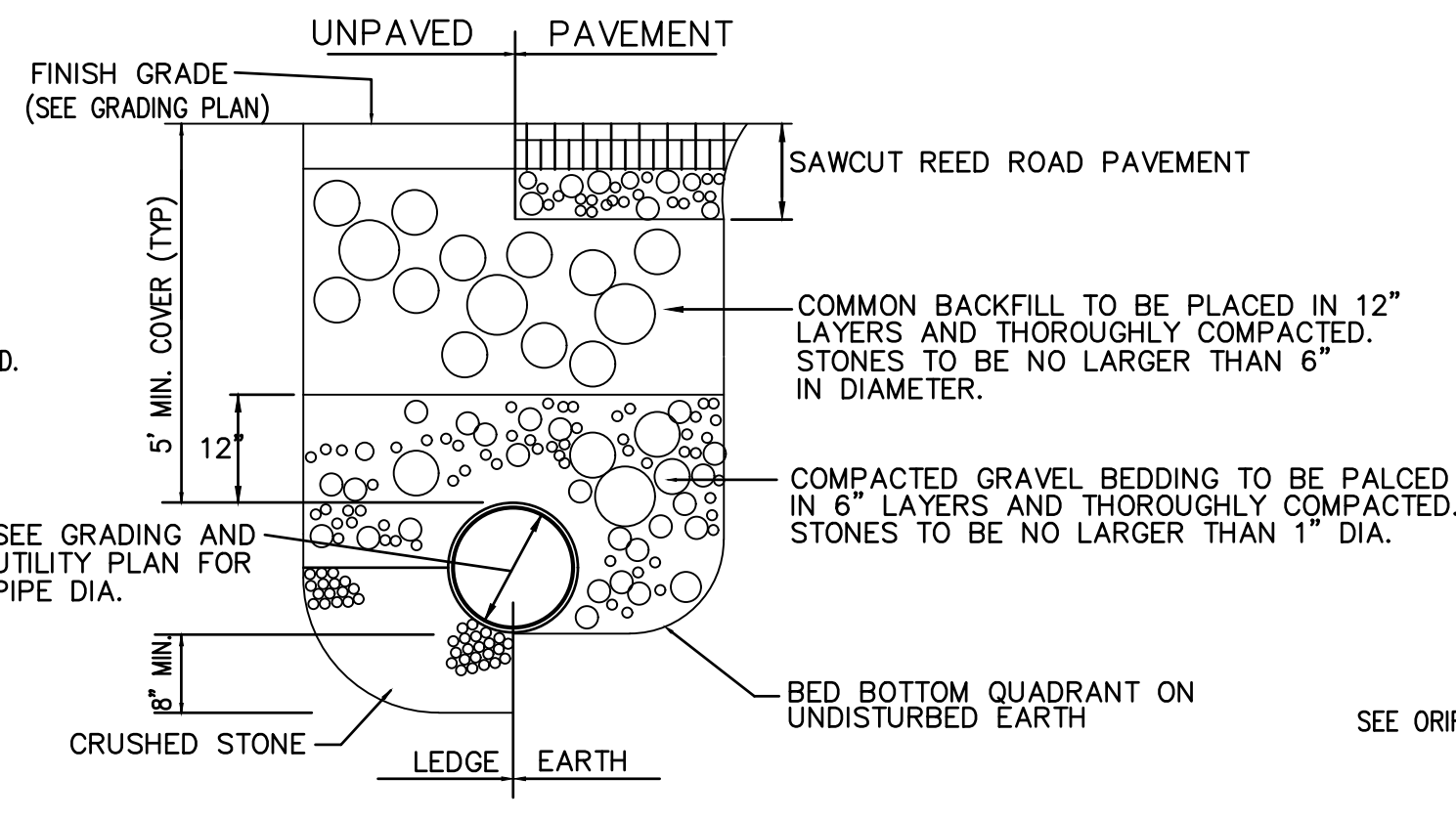


REV	DATE	DESCRIPTION	BY	APP.
10	8/5/2021	GENERAL REVISIONS	SWL	RJR
9	7/9/2021	GENERAL REVISIONS	SWL	RJR
8	1/28/2021	PEER REVIEW COMMENTS INCORPORATED	SEK	RJR
7	12/7/2020	GENERAL REVISIONS	SEK	RJR
6	7/8/2020	GENERAL REVISIONS	SWL	RJR
5	6/25/2020	RESPONSE TO COMMENTS	SWL	RJR
4	2/14/2020	RESPONSE TO COMMENTS	SWL	RJR
3	1/22/2020	RESPONSE TO COMMENTS	SWL	RJR
2	12/4/2019	RESPONSE TO COMMENTS	SWL	RJR
1	11/8/2019	RESPONSE TO COMMENTS	SWL	RJR

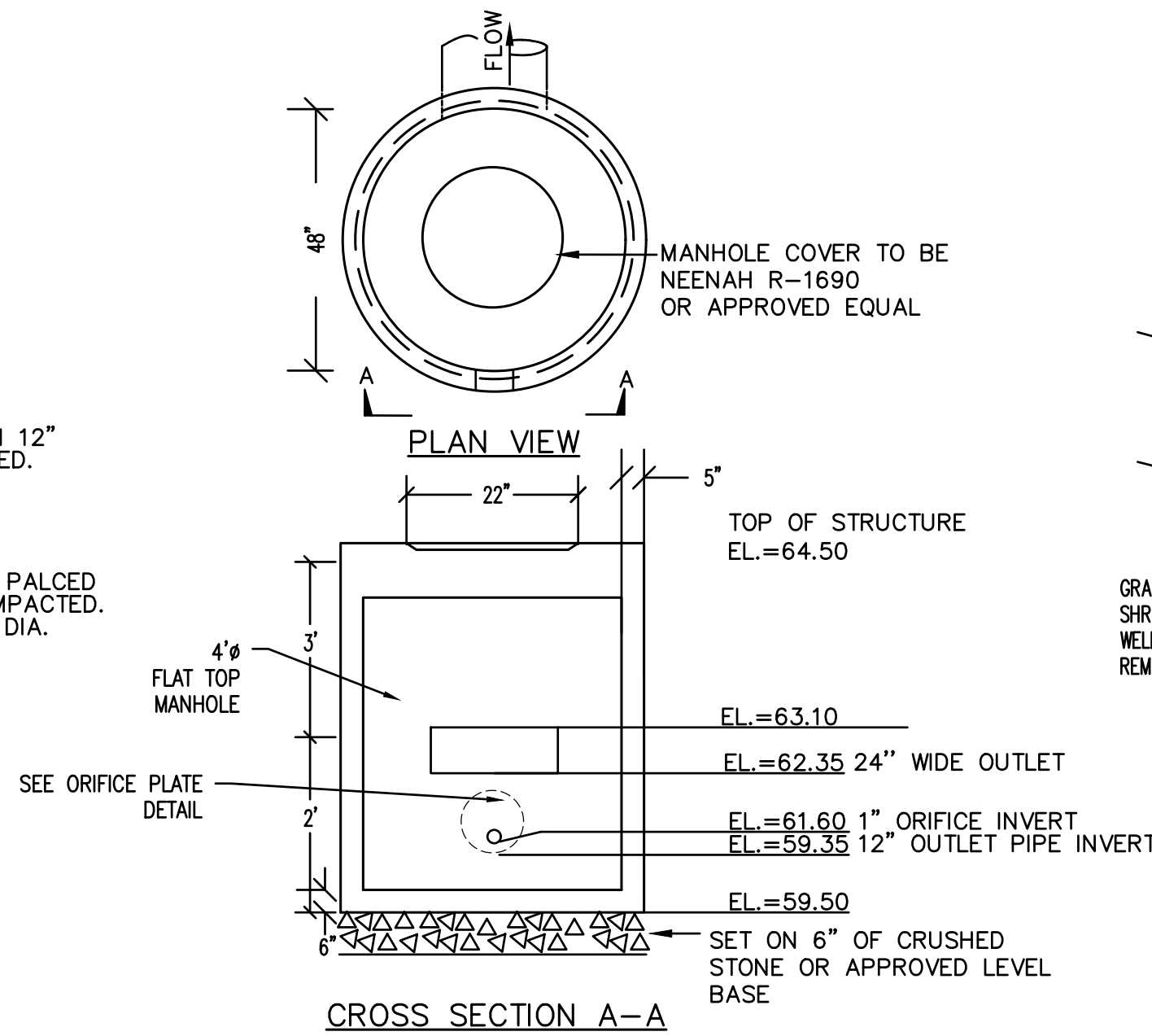
GENERAL REVISIONS	SWL	RJR	DRAWING TITLE <b>EROSION CONTROL PLAN</b>	SCALE 1" = 20'
GENERAL REVISIONS	SWL	RJR		
PEER REVIEW COMMENTS INCORPORATED	SEK	RJR	PROJECT MAP 31- LOT 117C FAIRHAVEN, MASSACHUSETTS	DATE: SEPT. 9, 2019
GENERAL REVISIONS	SEK	RJR		
GENERAL REVISIONS	SWL	RJR	CLIENT DANA LEWIS FAIRHAVEN, MASSACHUSETTS	DRAWN BY: SWL
RESPONSE TO COMMENTS	SWL	RJR		
RESPONSE TO COMMENTS	SWL	RJR	DESIGNED BY: RJR	CHECKED BY: RJR
RESPONSE TO COMMENTS	SWL	RJR		
RESPONSE TO COMMENTS	SWL	RJR	APPROVED BY: RJR	SHEET NO. <b>4 OF 7</b>
RESPONSE TO COMMENTS	SWL	RJR		
DESCRIPTION	BY	APP.	 <b>PRIME ENGINEERING</b> P.O. BOX 1088 350 BEDFORD ST. LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.0054	PROJECT NO. 2729-01-01



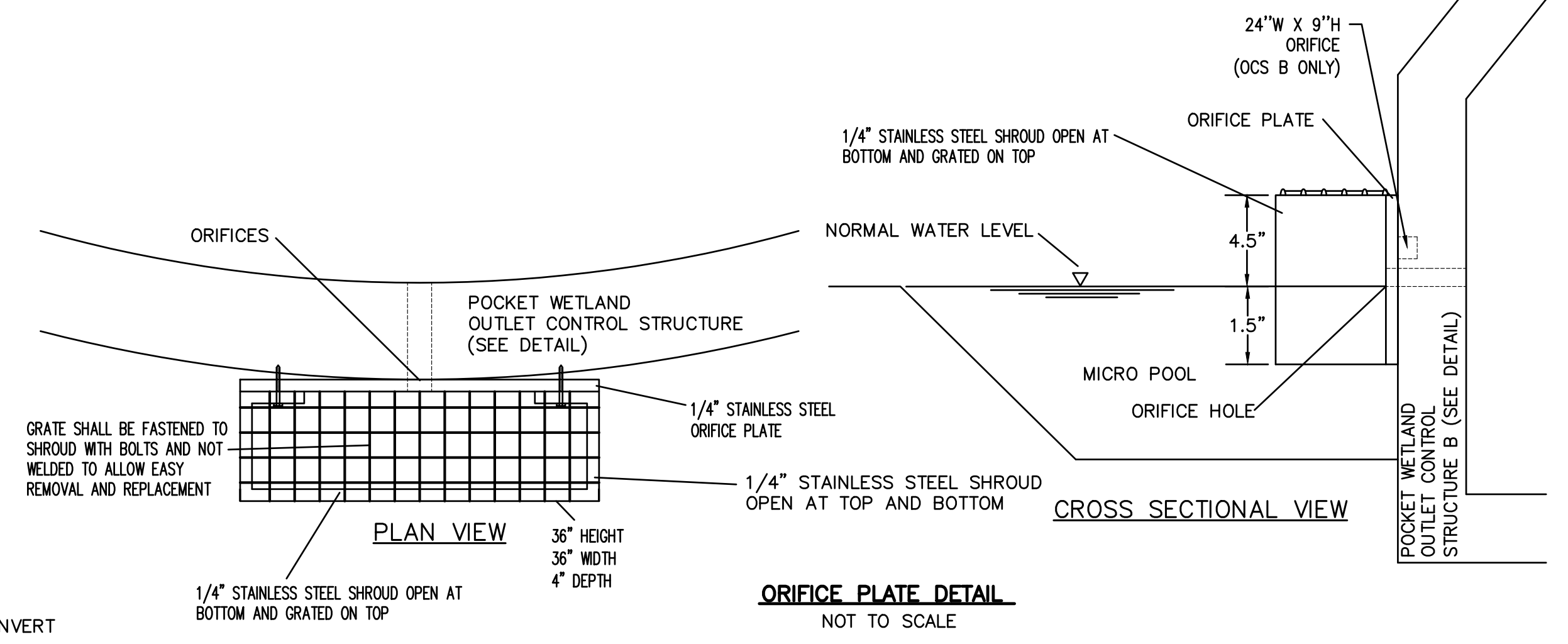
**DRAINAGE PIPE TRENCH DETAIL**  
NOT TO SCALE



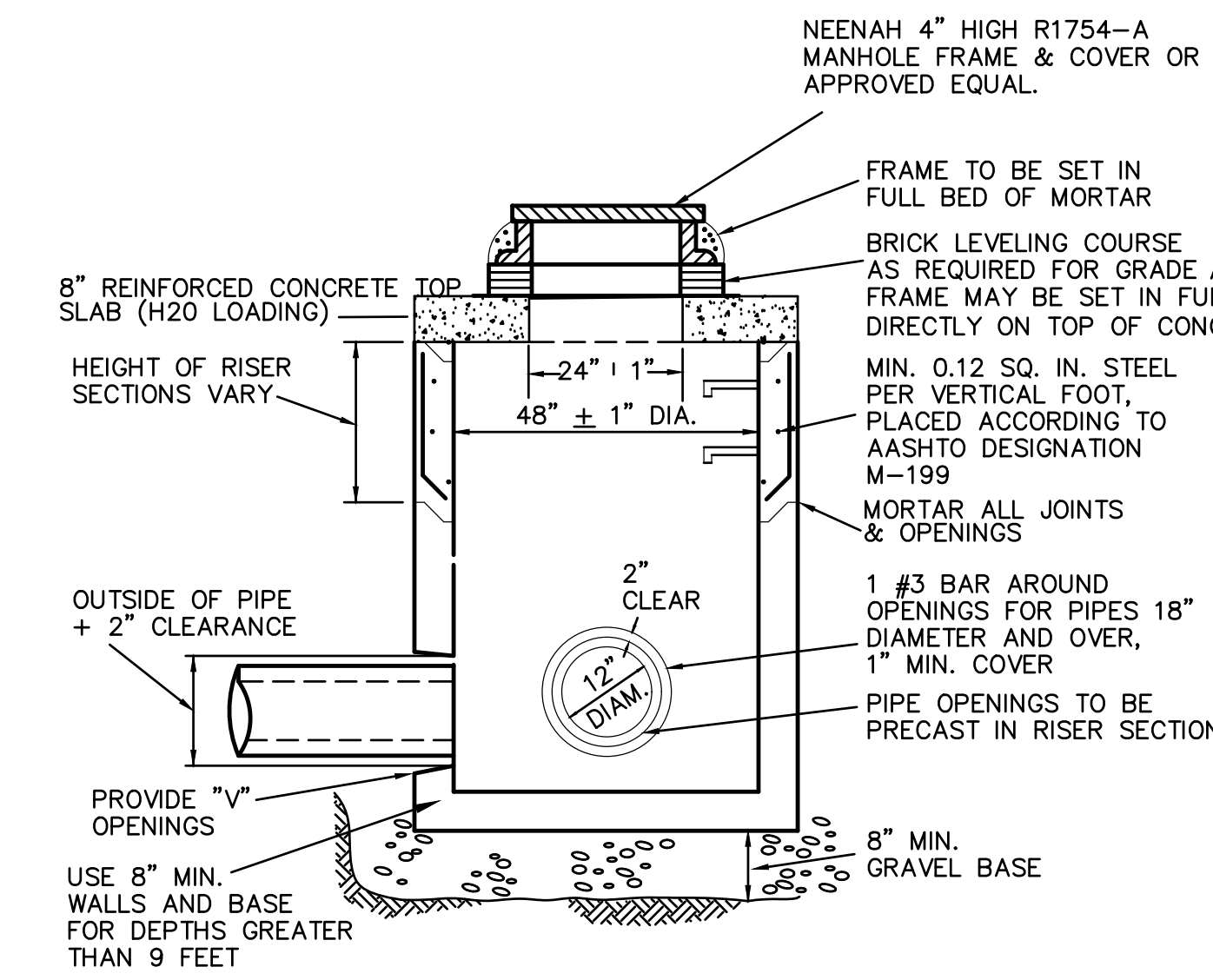
**WATER MAIN TRENCH DETAIL**  
NOT TO SCALE



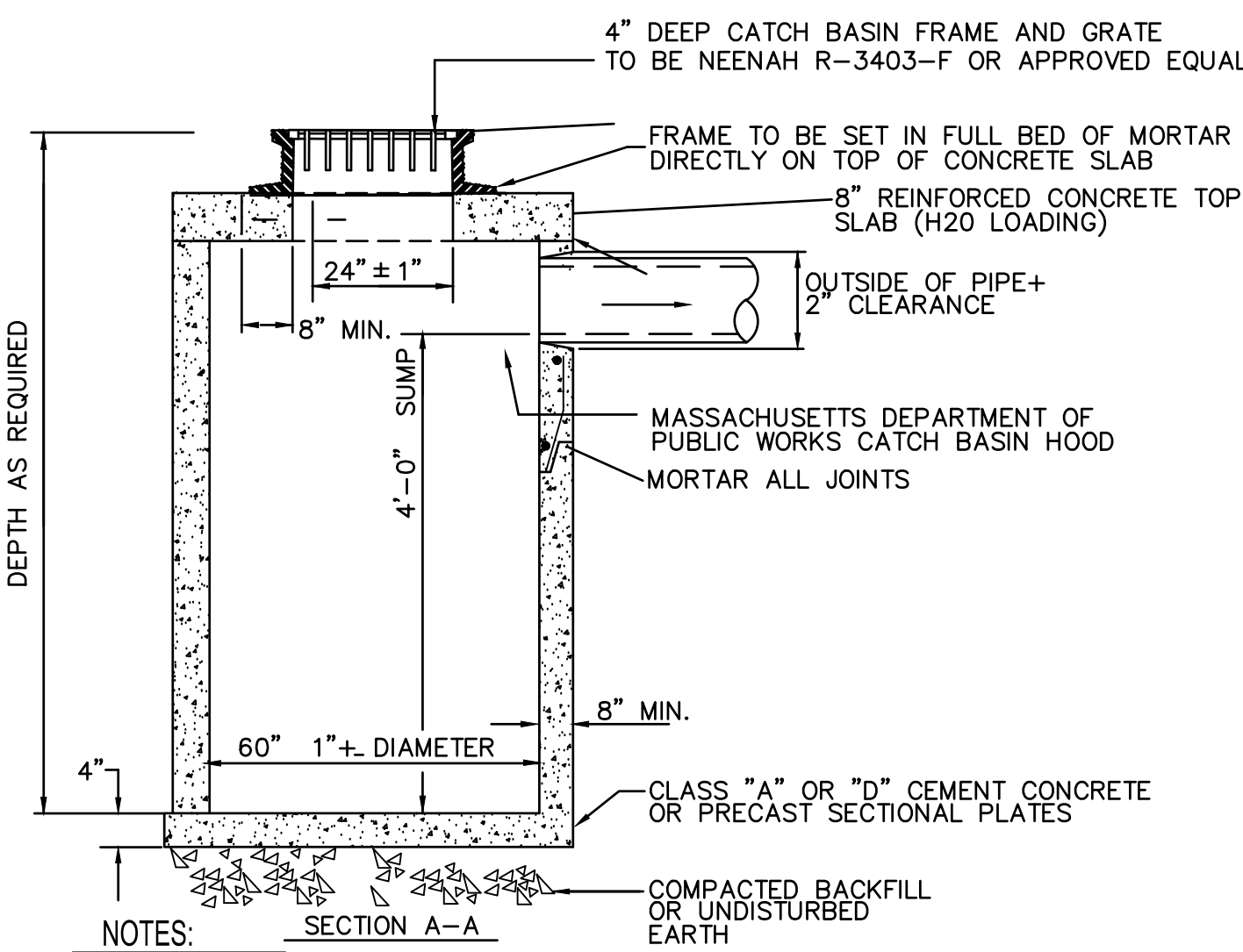
**POCKET WETLAND OUTLET CONTROL STRUCTURE B DETAIL**  
NOT TO SCALE



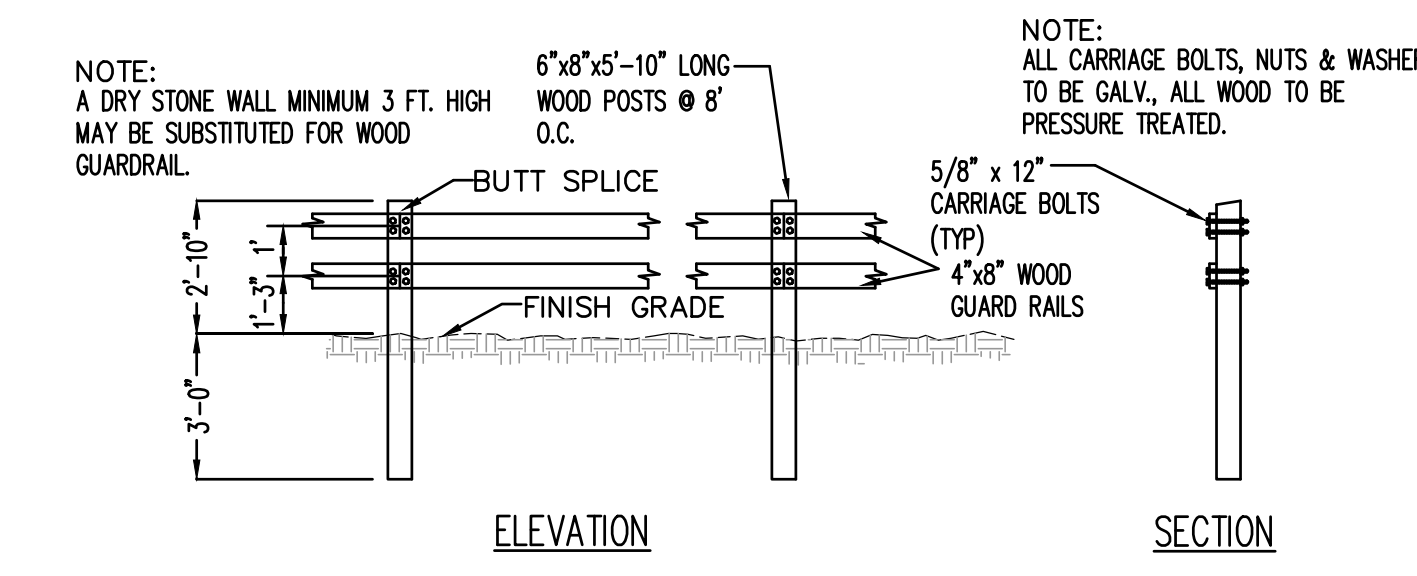
**ORIFICE PLATE DETAIL**  
NOT TO SCALE



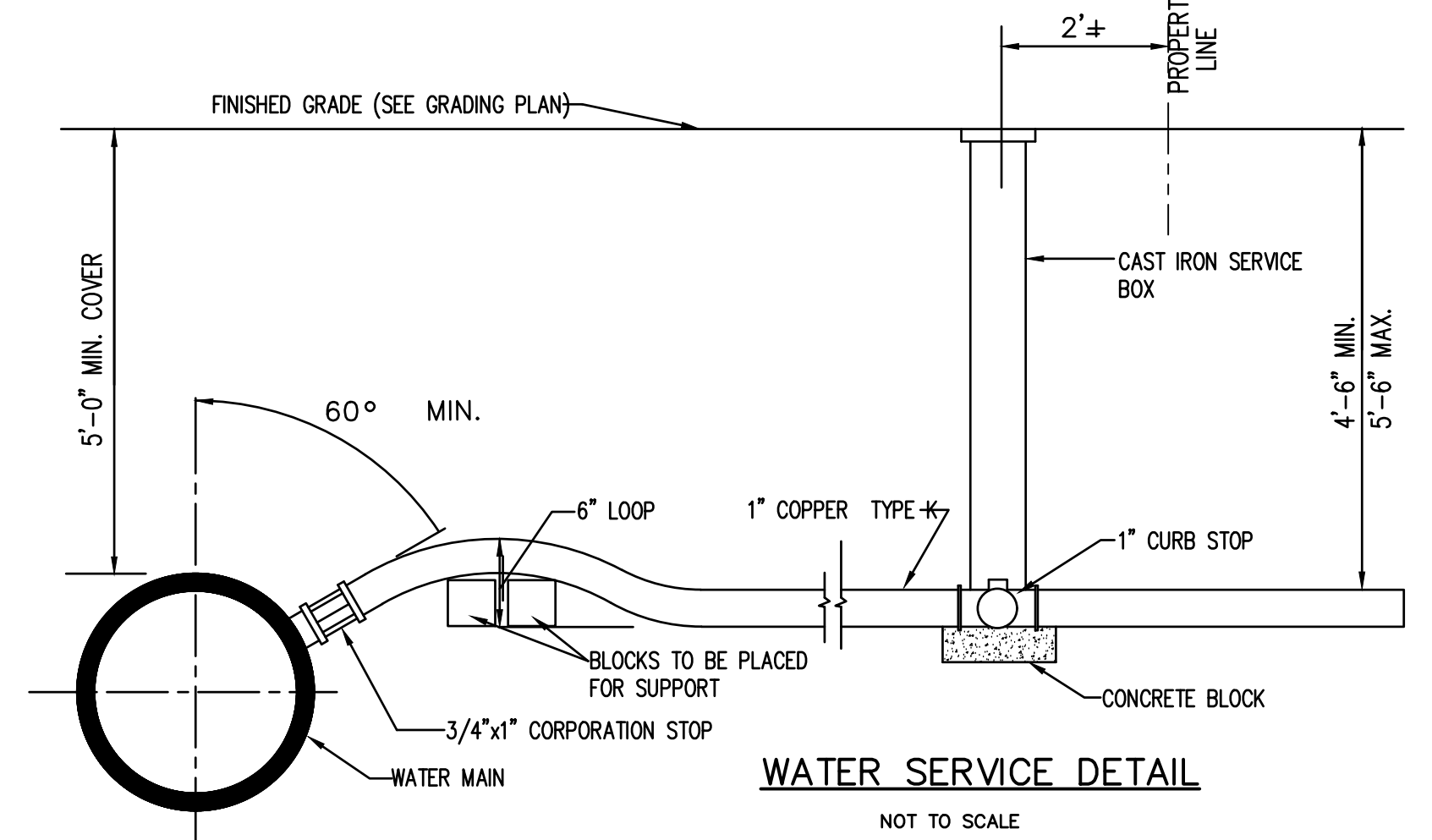
**PRECAST CONCRETE FLAT TOP DRAIN MANHOLE**  
NOT TO SCALE



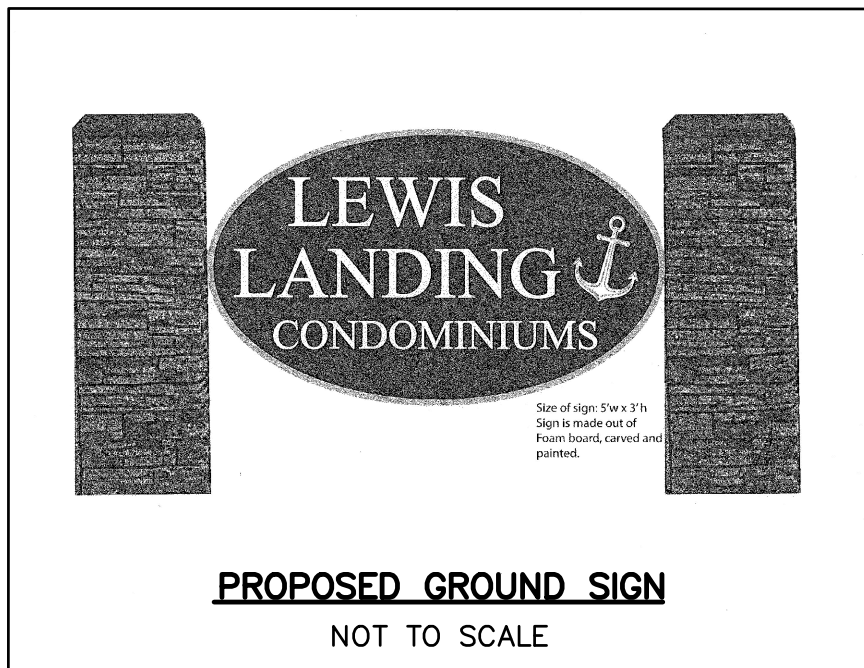
**TYPICAL FLAT TOP CATCH BASIN**  
NOT TO SCALE



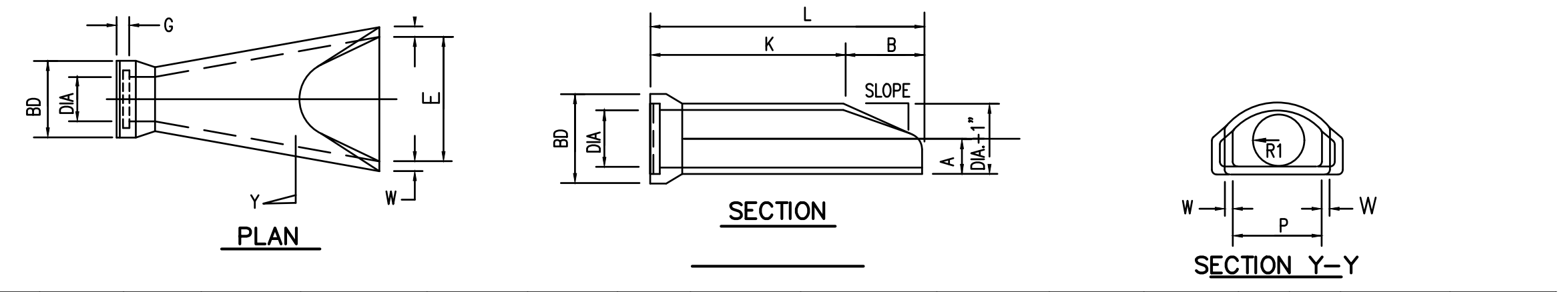
**WOODEN GUARD RAIL DETAIL**  
NOT TO SCALE



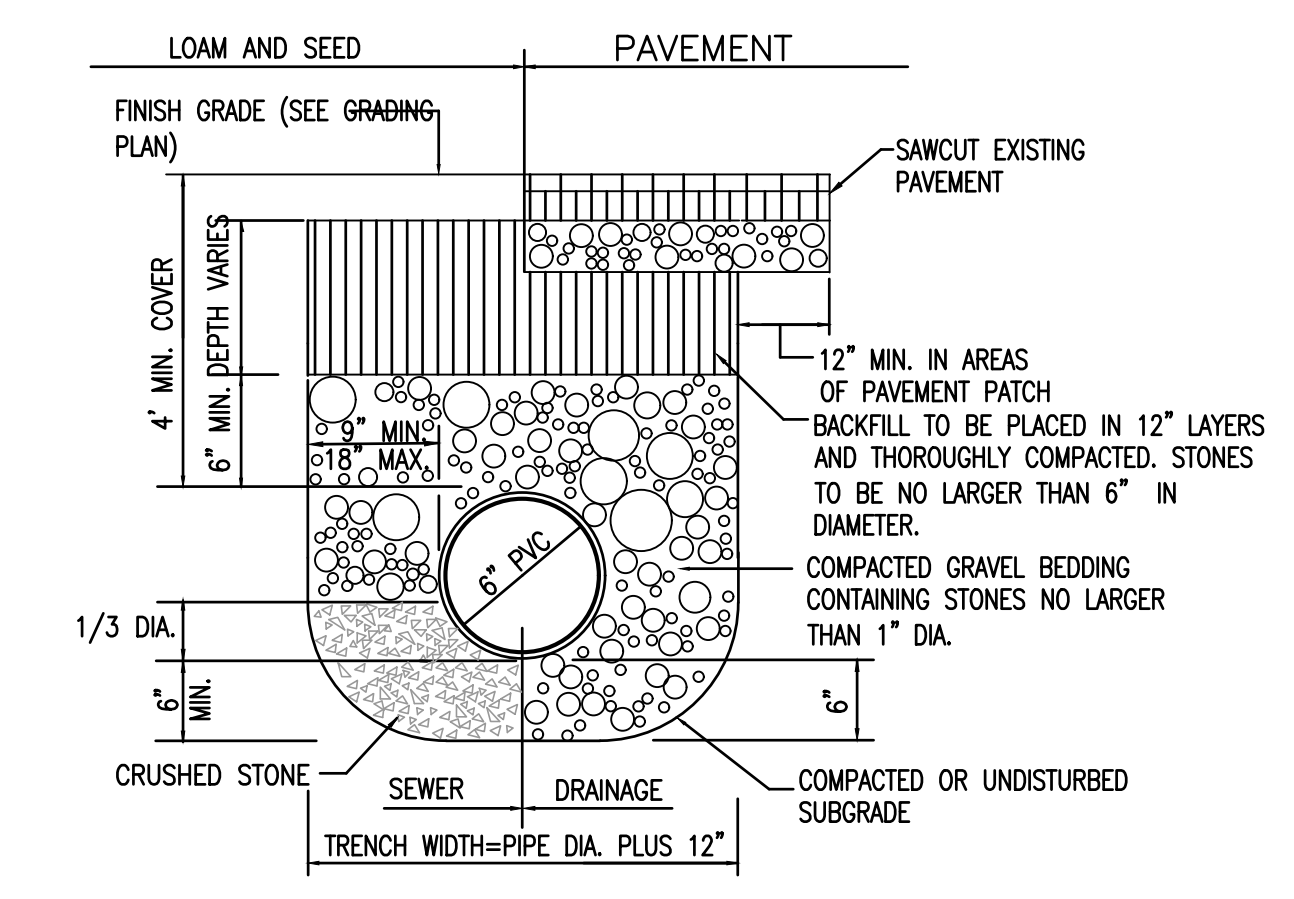
**WATER SERVICE DETAIL**  
NOT TO SCALE



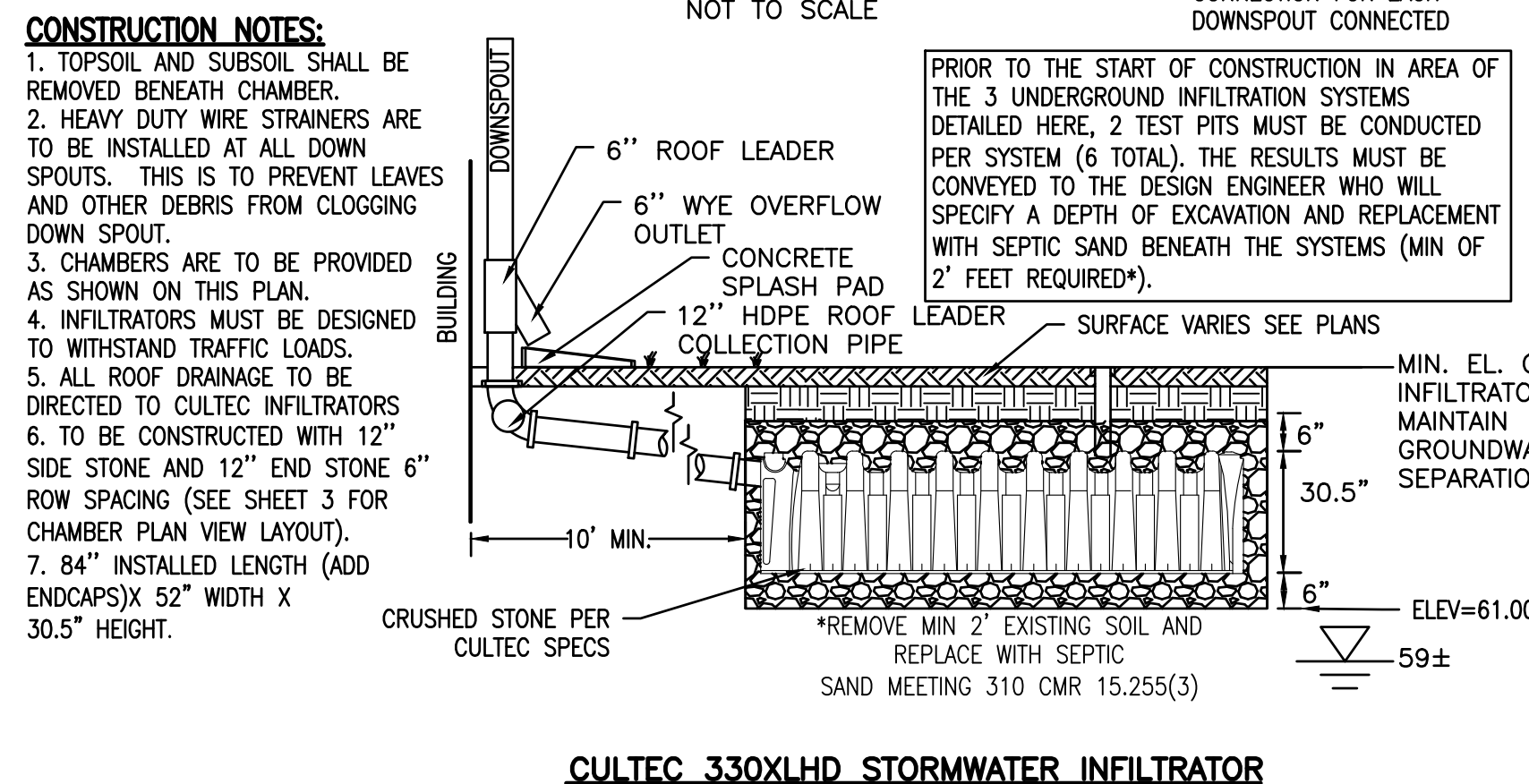
**PROPOSED GROUND SIGN**  
NOT TO SCALE



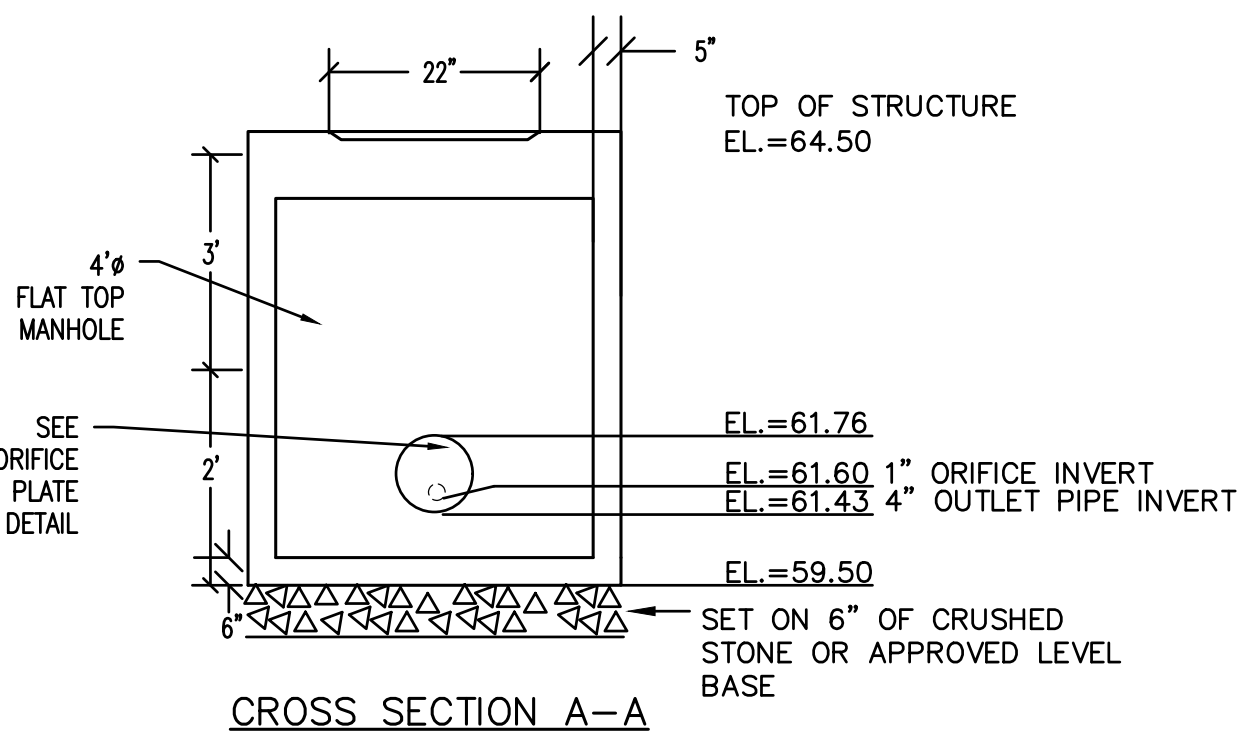
**CONCRETE FLARED END SECTION**  
NOT TO SCALE



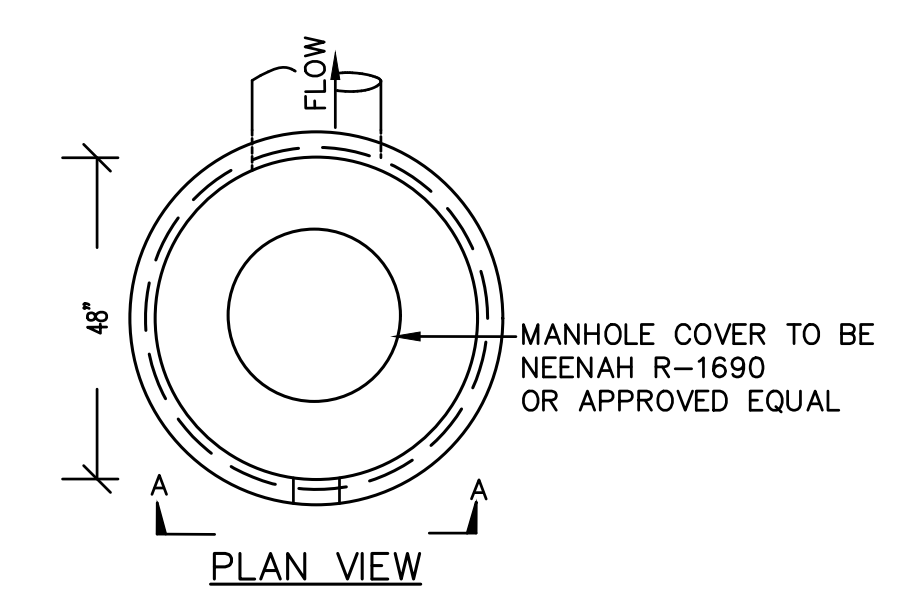
**SEWER PIPE TRENCH DETAIL**  
NOT TO SCALE



**CULTEC 330XLHD STORMWATER INFILTRATOR**  
NOT TO SCALE

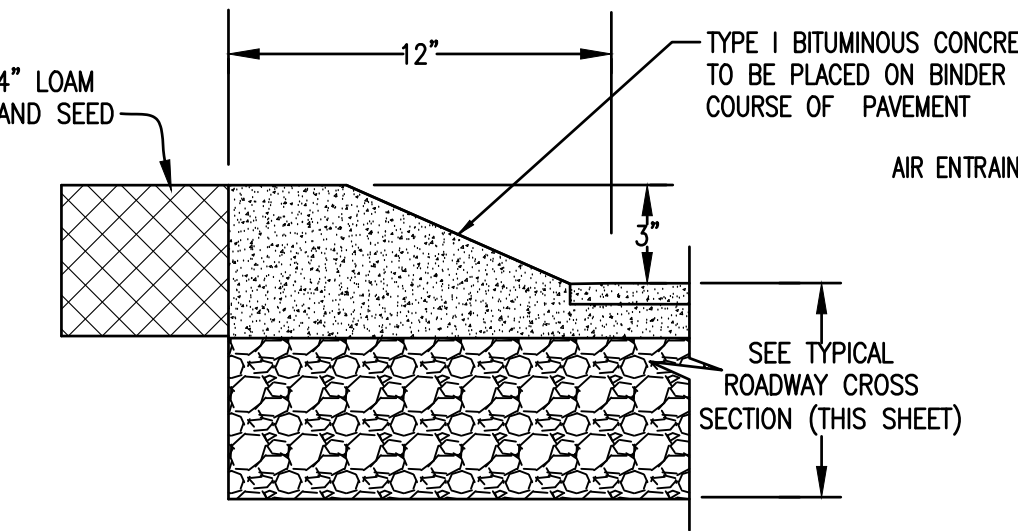


**POCKET WETLAND OUTLET CONTROL STRUCTURE A DETAIL**  
NOT TO SCALE

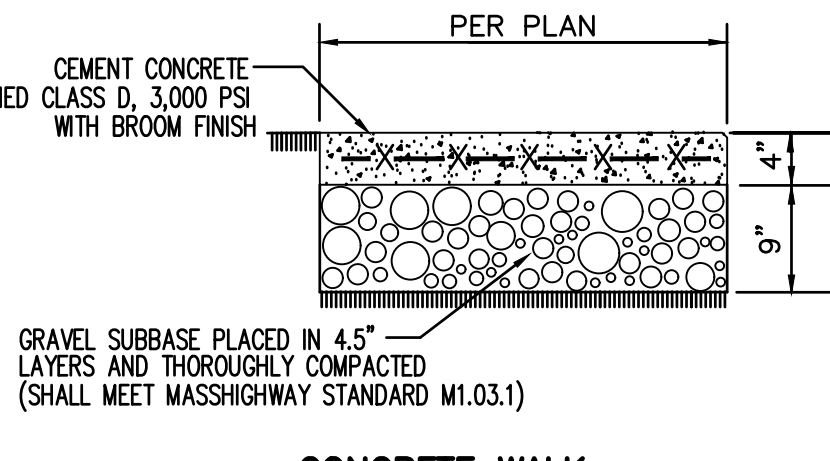


**CRUSHED STONE OUTLET DETAIL**  
NOT TO SCALE

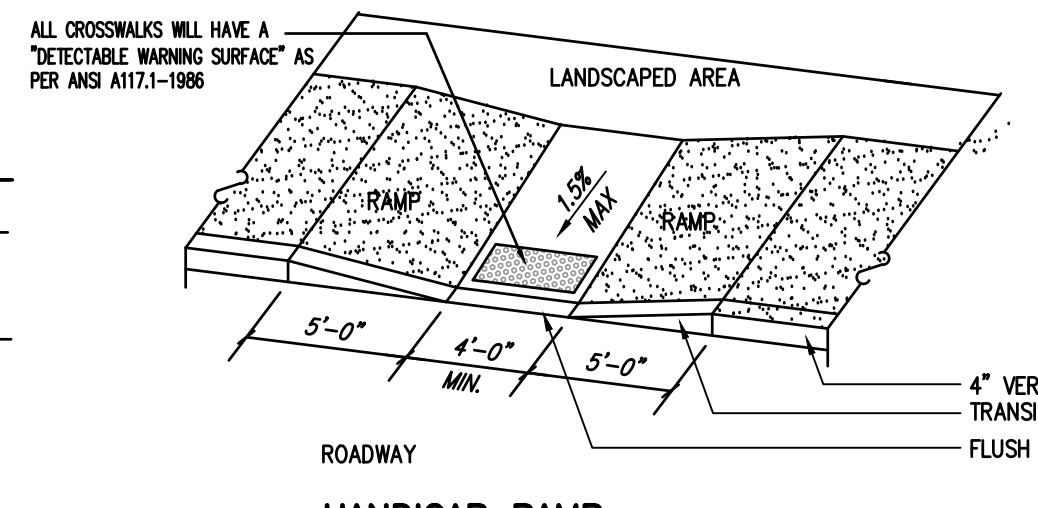
- CONSTRUCTION NOTES:**
1. TOPSOIL AND SUBSOIL SHALL BE REMOVED BENEATH CHAMBER.
  2. HEAVY DUTY WIRE STRAINERS ARE TO BE INSTALLED AT ALL DOWN SPOUTS. THIS IS TO PREVENT LEAVES AND OTHER DEBRIS FROM CLOGGING DOWN SPOUT.
  3. CHAMBERS ARE TO BE PROVIDED AS SHOWN ON THIS PLAN.
  4. INFILTRATORS MUST BE DESIGNED TO WITHSTAND TRAFFIC LOADS.
  5. ALL ROOF DRAINAGE TO BE DIRECTED TO CULTEC INFILTRATORS.
  6. TO BE CONSTRUCTED WITH 12" SIDE STONE AND 12" END STONE 6" ROW SPACING (SEE SHEET 3 FOR CHAMBER PLAN VIEW LAYOUT).
  7. 84" INSTALLED LENGTH (ADD ENDCAPS)X 52" WIDTH X 30.5" HEIGHT.



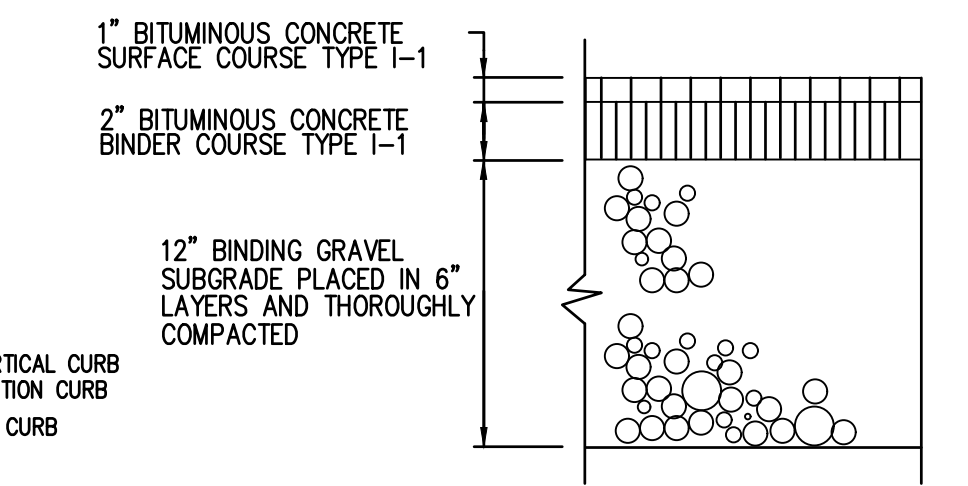
**CAPE COD BERM**  
NOT TO SCALE



**CONCRETE WALK**  
NOT TO SCALE



**HANDICAP RAMP**  
NOT TO SCALE



**BITUMINOUS CONCRETE PAVEMENT**  
NOT TO SCALE

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2	12/4/2019	RESPONSE TO COMMENTS	SWL	RJR
1	11/8/2019	RESPONSE TO COMMENTS	SWL	RJR

**DETAIL SHEET-1**

SCALE: 1" = 20'

DATE: SEPT. 9, 2019

DRAWN BY: SWL

DESIGNED BY: RJR

CHECKED BY: RJR

APPROVED BY: RJR

PROJECT: MAP 31- LOT 117C  
FAIRHAVEN, MASSACHUSETTS  
DANA LEWIS  
FAIRHAVEN, MASSACHUSETTS

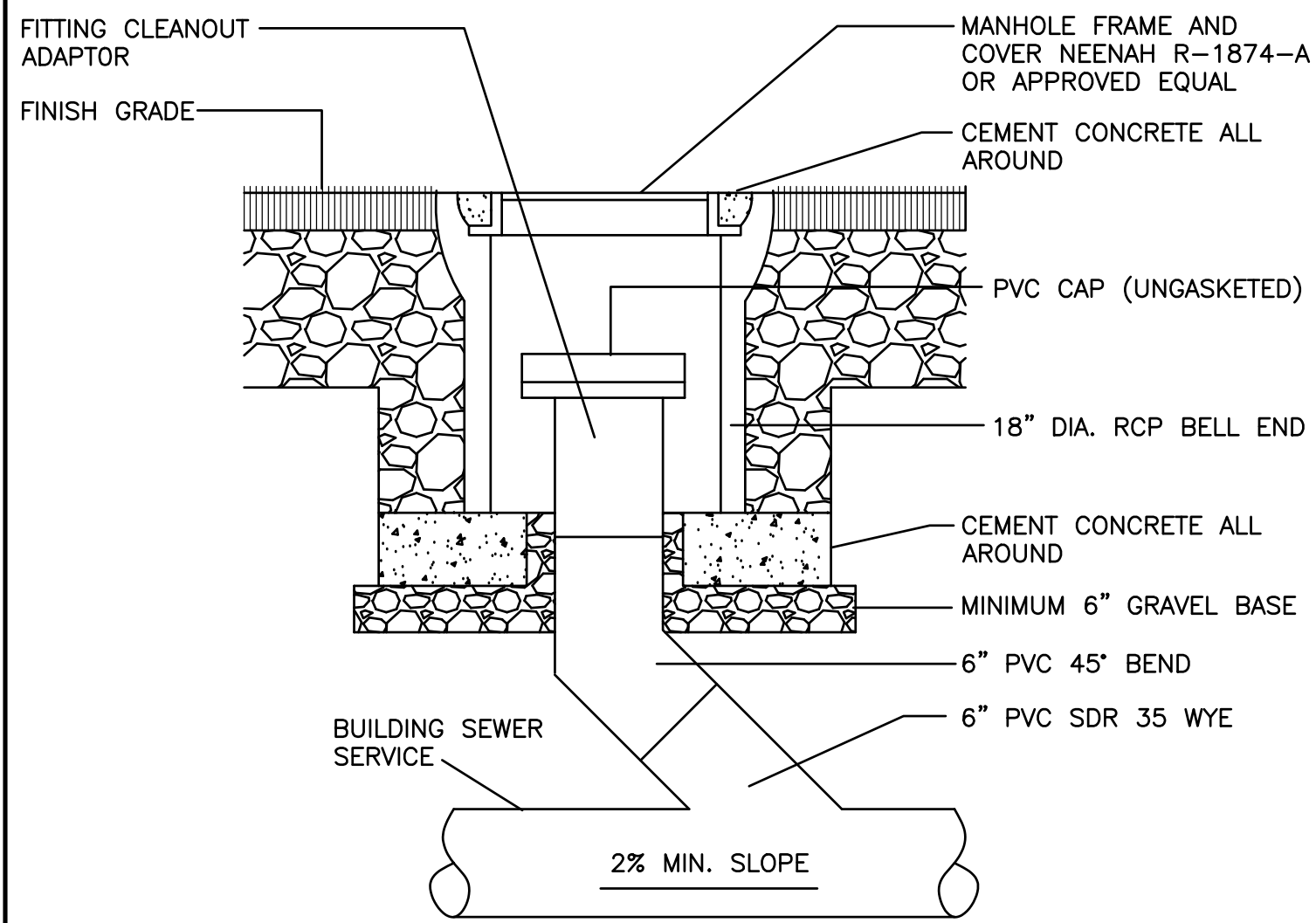
CIVIL ENGINEERING  
LAND SURVEYING  
ENVIRONMENTAL ASSESSMENT

P.O. BOX 1088  
350 BEDFORD ST.  
LAKEVILLE, MA 02347  
TEL: 508.947.0050  
FAX: 508.947.2004

**PRIME ENGINEERING**

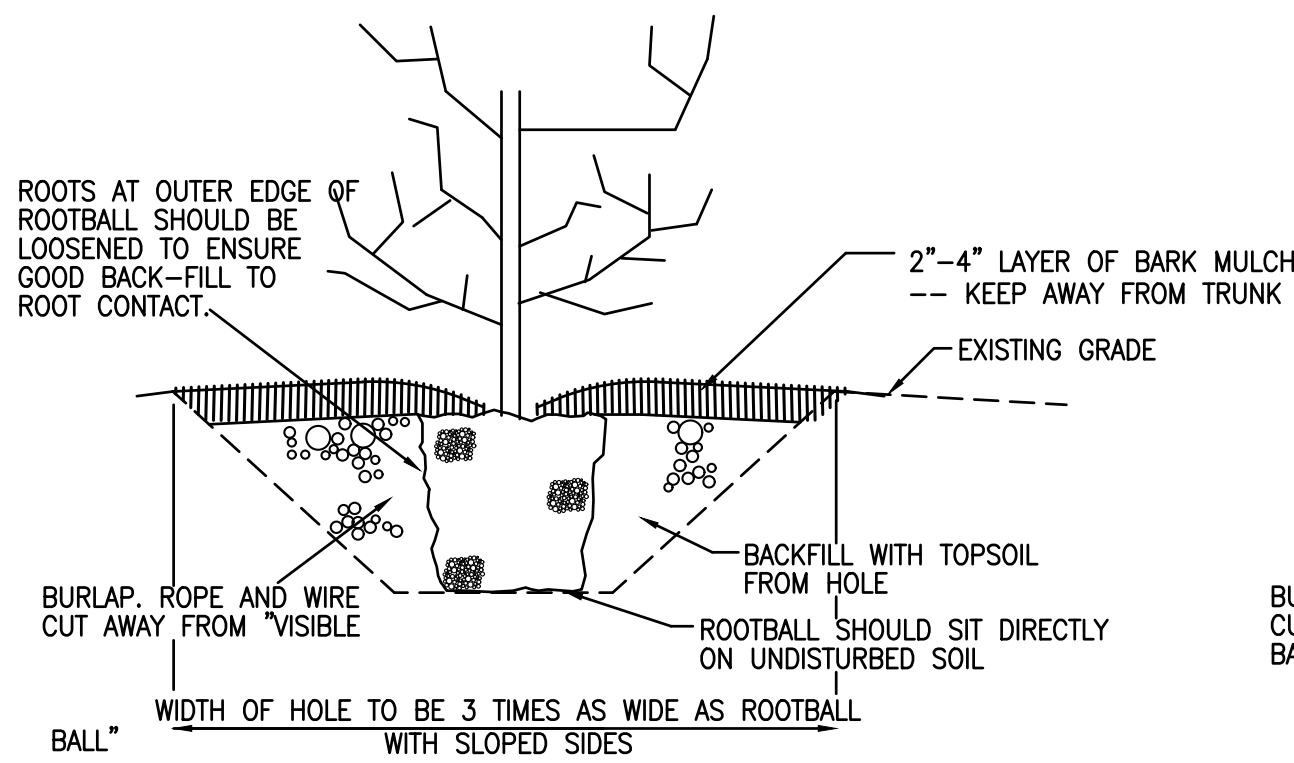
SHEET NO. 5 OF 7

PROJECT NO. 2729-01-01



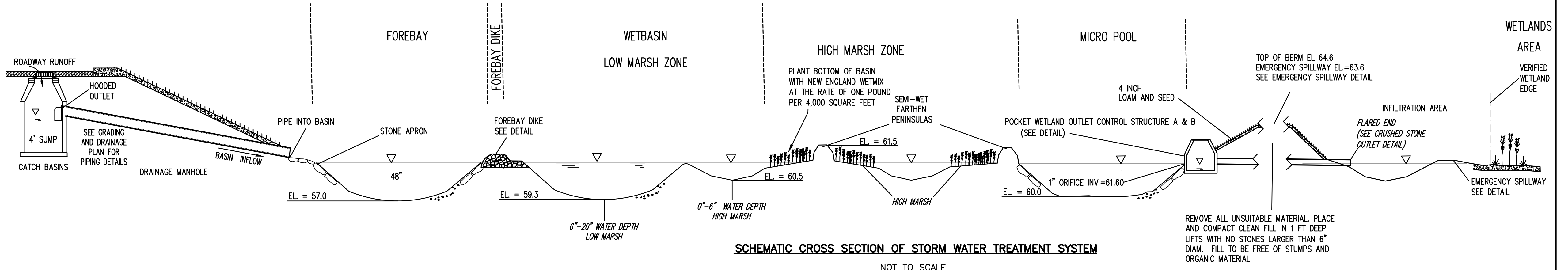
**STANDARD SEWER SERVICE CLEANOUT**

NOT TO SCALE



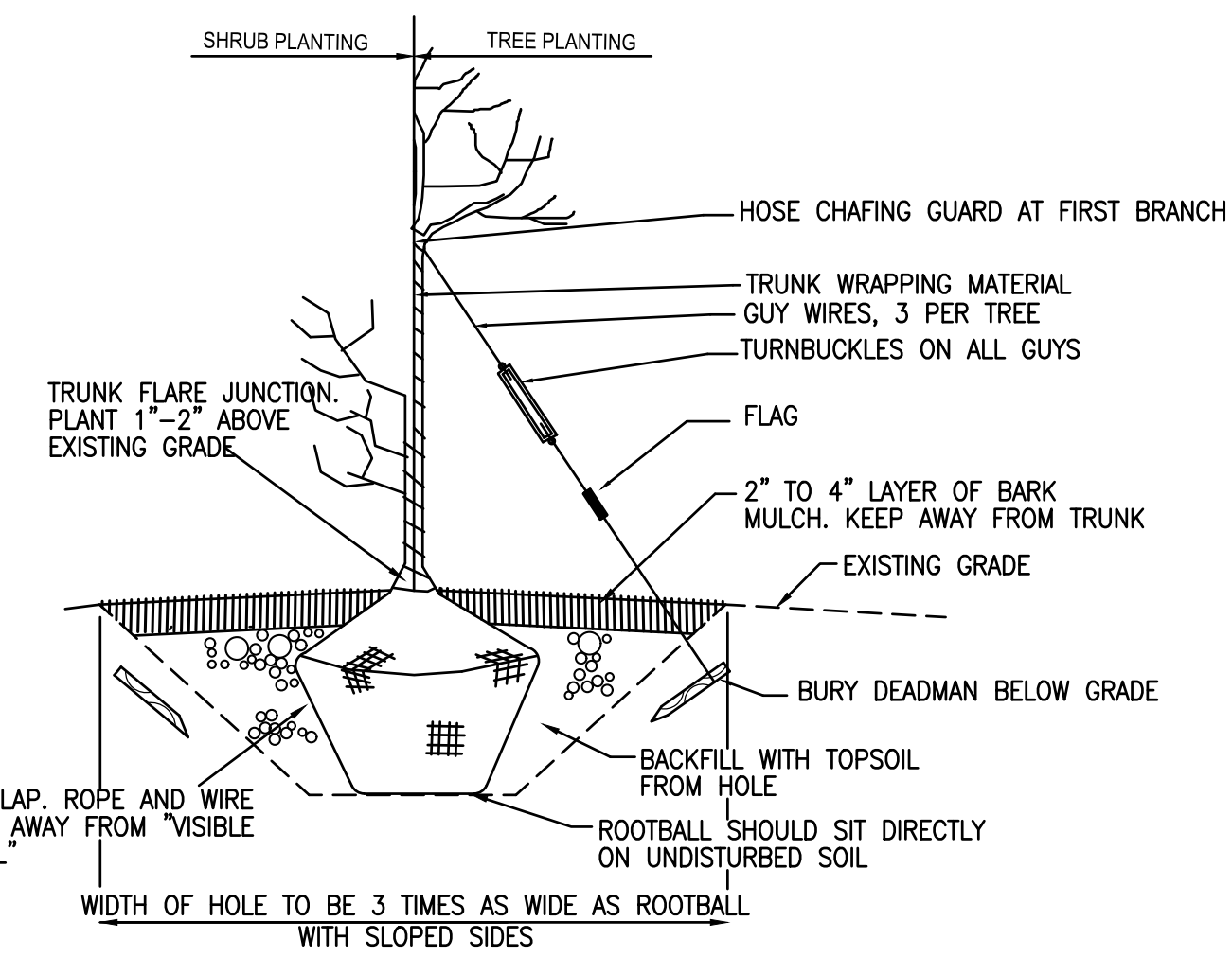
**CONTAINER GROWN SHRUB AND TREE PLANTING DETAIL**

NOT TO SCALE



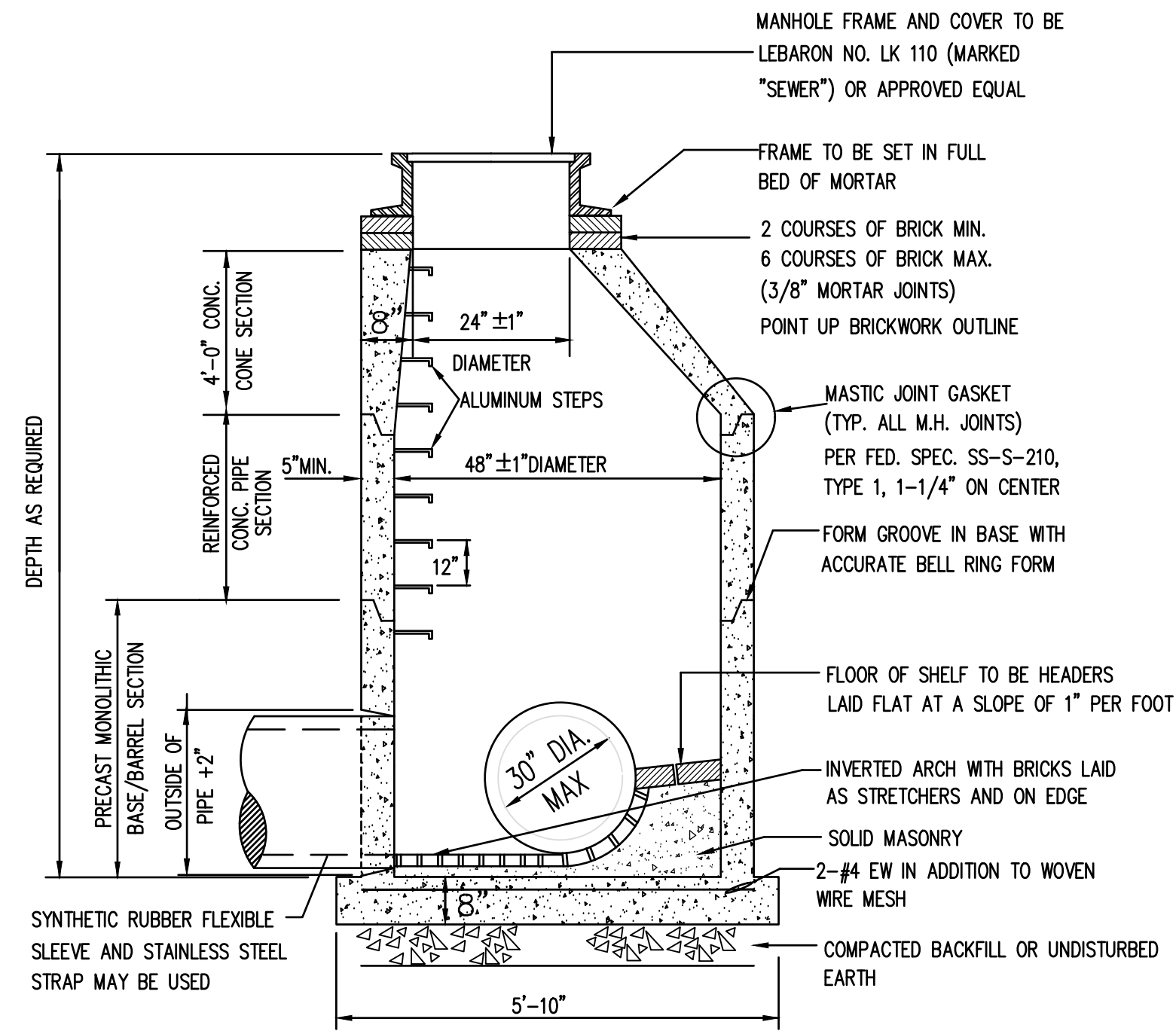
**SCHEMATIC CROSS SECTION OF STORM WATER TREATMENT SYSTEM**

NOT TO SCALE



**B&B TREE AND SHRUB PLANTING DETAIL**

NOT TO SCALE



**PRECAST CONCRETE SEWER MANHOLE**

NOT TO SCALE

**FOREBAY SIZING CALCULATIONS**

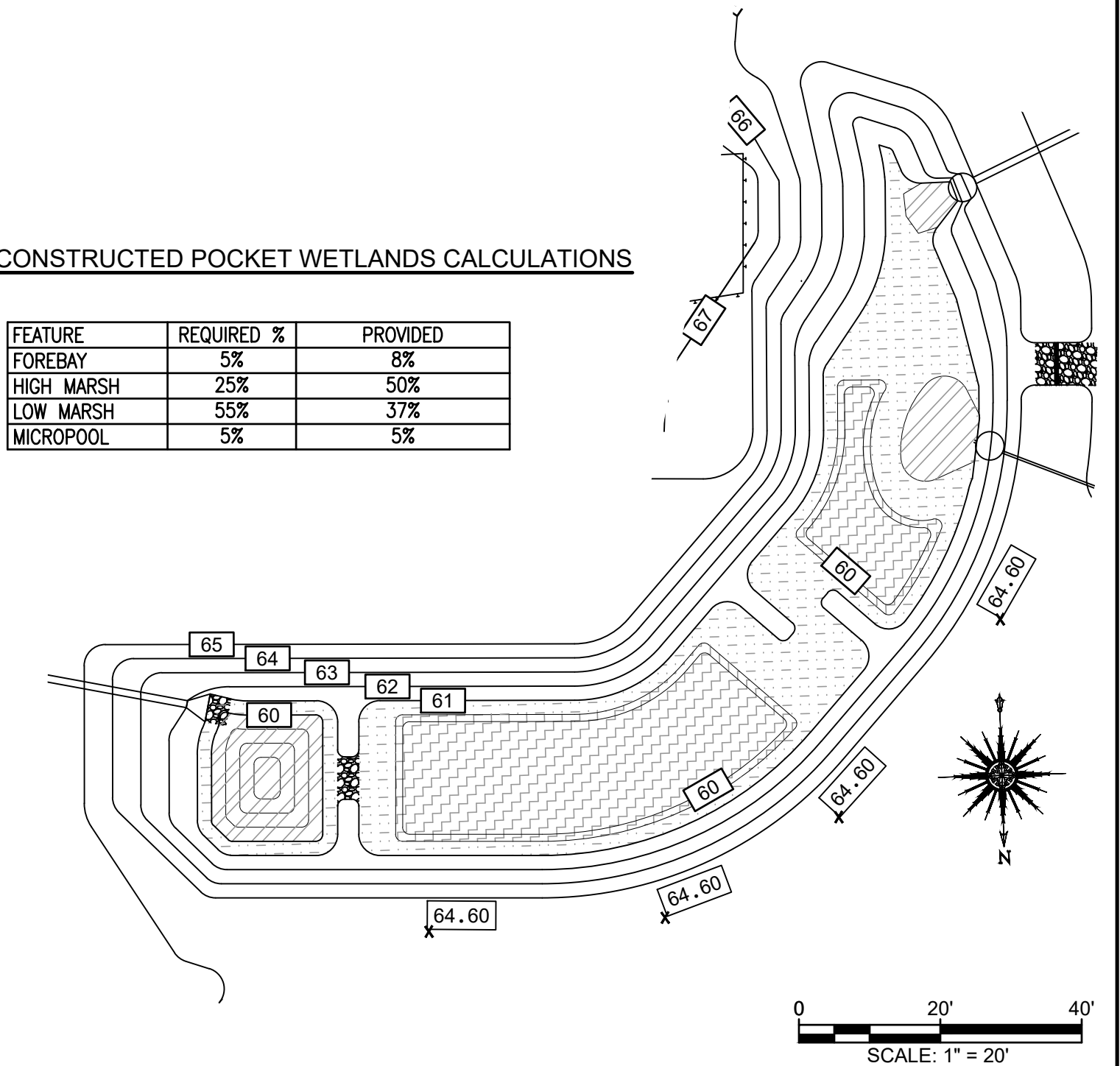
CONTRIBUTING IMPERVIOUS AREA: 23,449 SQ. FT.  
 (23,449 SQ. FT.) X (0.25 IN.) X (1 FT./12 IN.) = 489 CU. FT.  
 VOLUME PROVIDED = ((275 SQ. FT. @ EL. 61)+22 SQ. FT. @ EL. 57/2) X 4 FT. DEPTH = 594 CU. FT.

**WATER QUALITY CALCULATIONS**

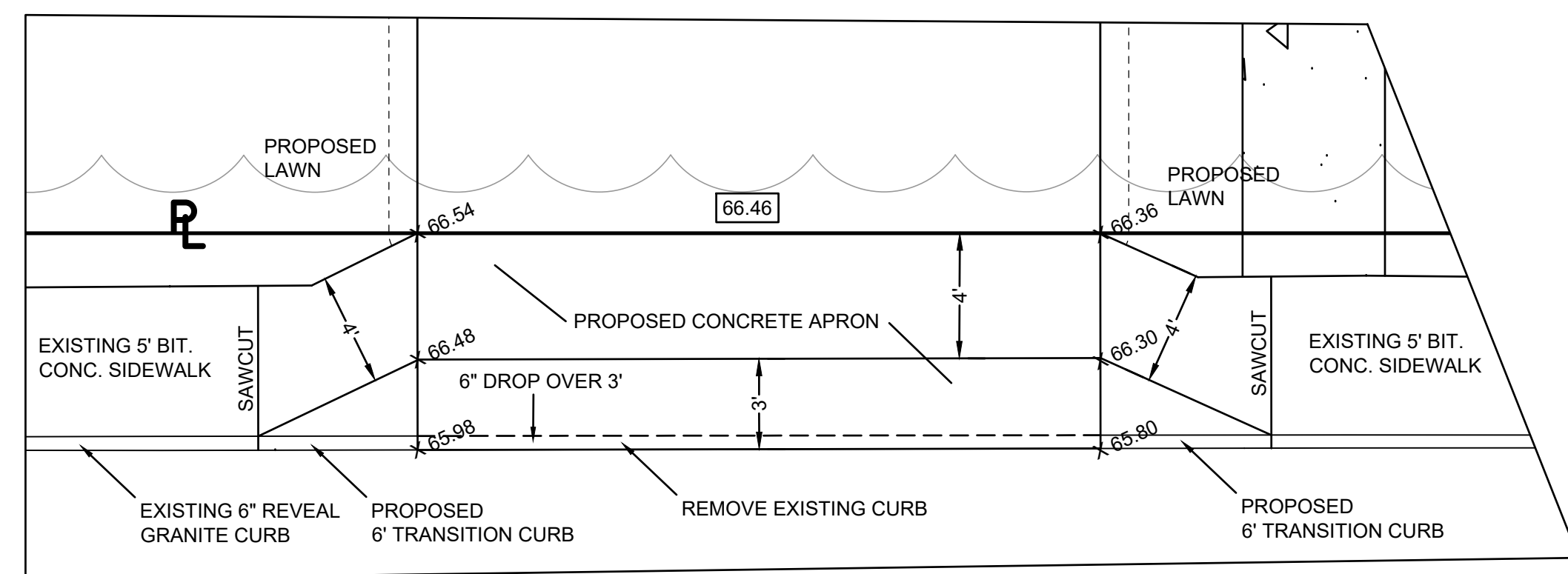
16,717 SQ. FT. X 1.25 IN. X 1 FT./12 IN. = 1,742 CU. FT.  
 \*\*DOES NOT INCLUDE ROOF AREAS AS THEY WILL BE INFILTRATED  
 PROVIDED (DEPTHS RELATIVE TO 1" ORIFICES INV. AT 61.60):  
 LOW MARSH: 1,260 SQ. FT. X 1.7 FT. = 2,142 CU. FT.  
 HIGH MARSH: 1,669 SQ. FT. X .5 FT. = 835 CU. FT.  
 MICROPOOL: 164 SQ. FT. X 1 FT. = 164 SQ. FT.  
 FOREBAY: 594 CU. FT.  
 TOTAL: 2,142 + 835 + 164 + 594 = 3,735 CU. FT.  
 3,735 CU. FT. STORAGE > 1,742 CU. FT. WATER QUALITY VOLUME

**CONSTRUCTED POCKET WETLANDS CALCULATIONS**

FEATURE	REQUIRED %	PROVIDED
FOREBAY	5%	8%
HIGH MARSH	25%	50%
LOW MARSH	55%	37%
MICROPOOL	5%	5%

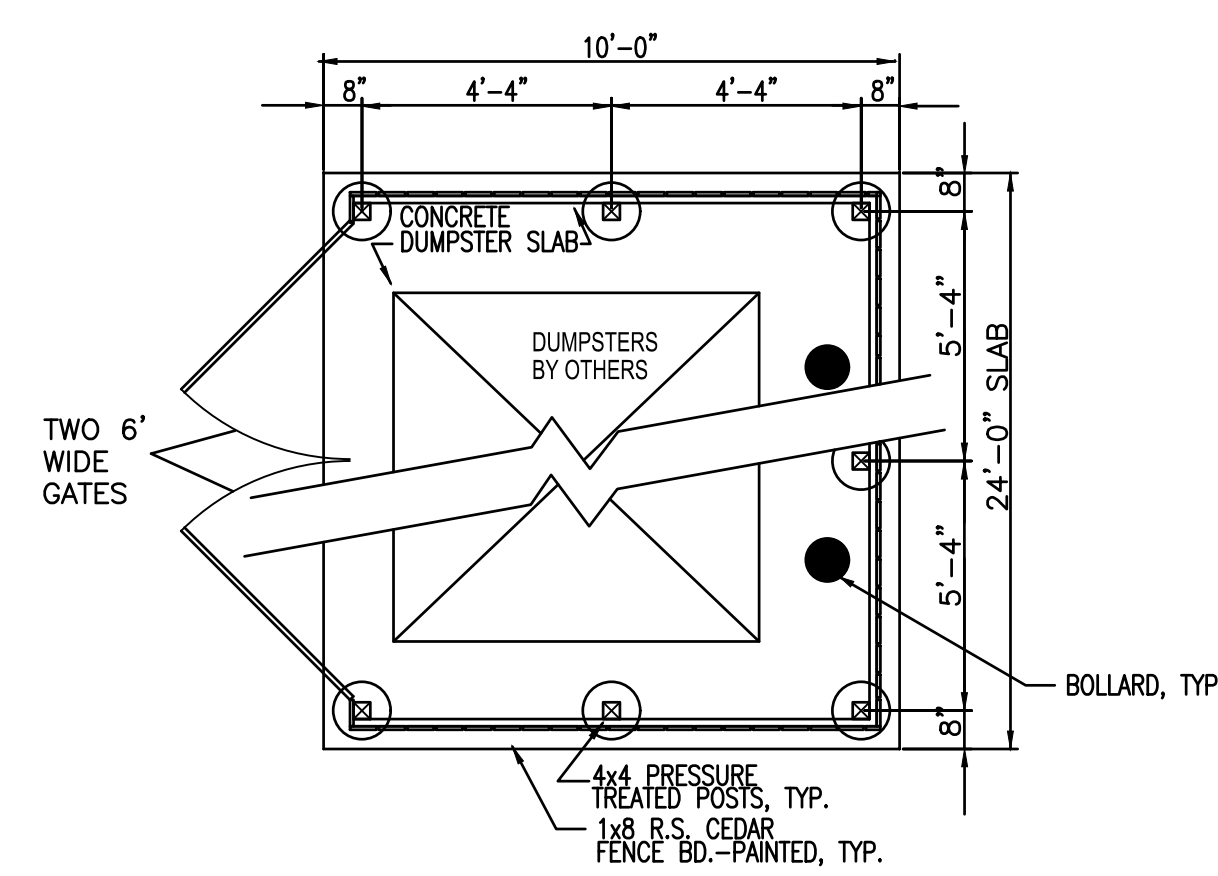


SCALE: 1" = 20'



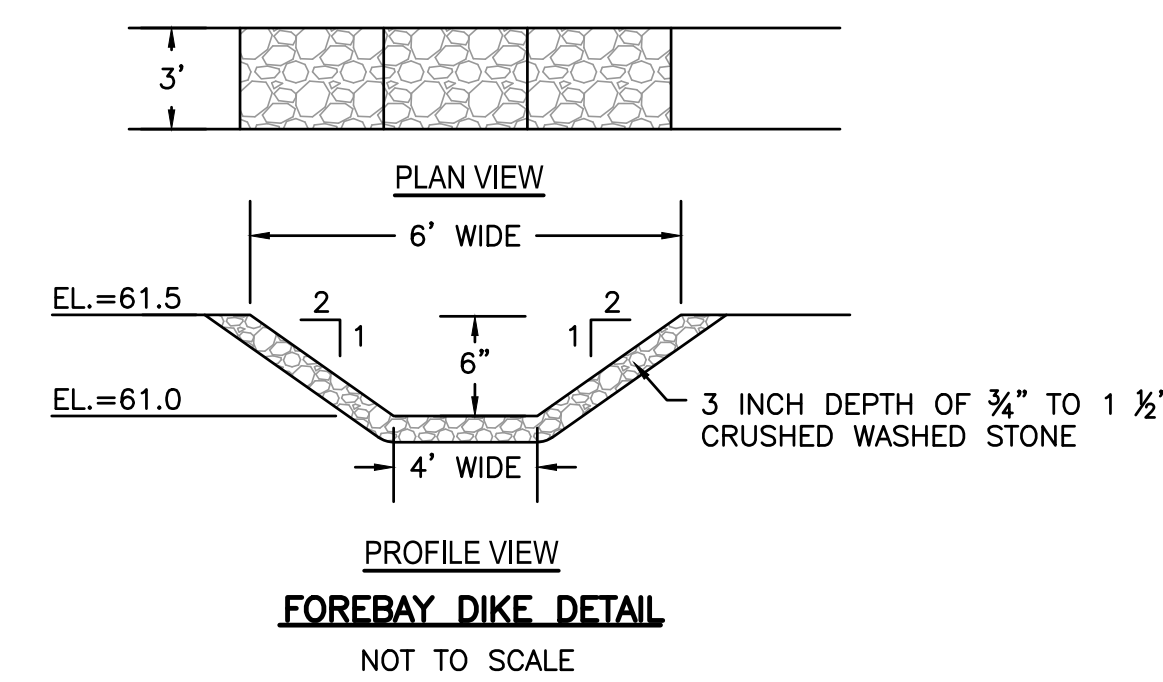
**ENTRANCE DRIVE DETAIL**

SCALE: 1"=5'



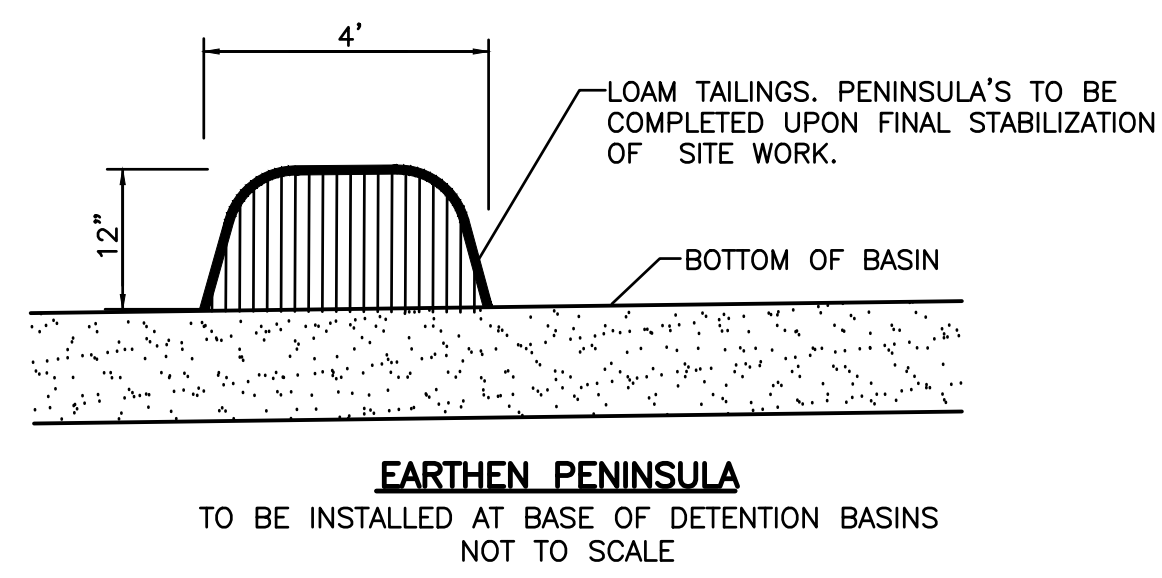
**DUMPSTER ENCLOSURE**

NOT TO SCALE



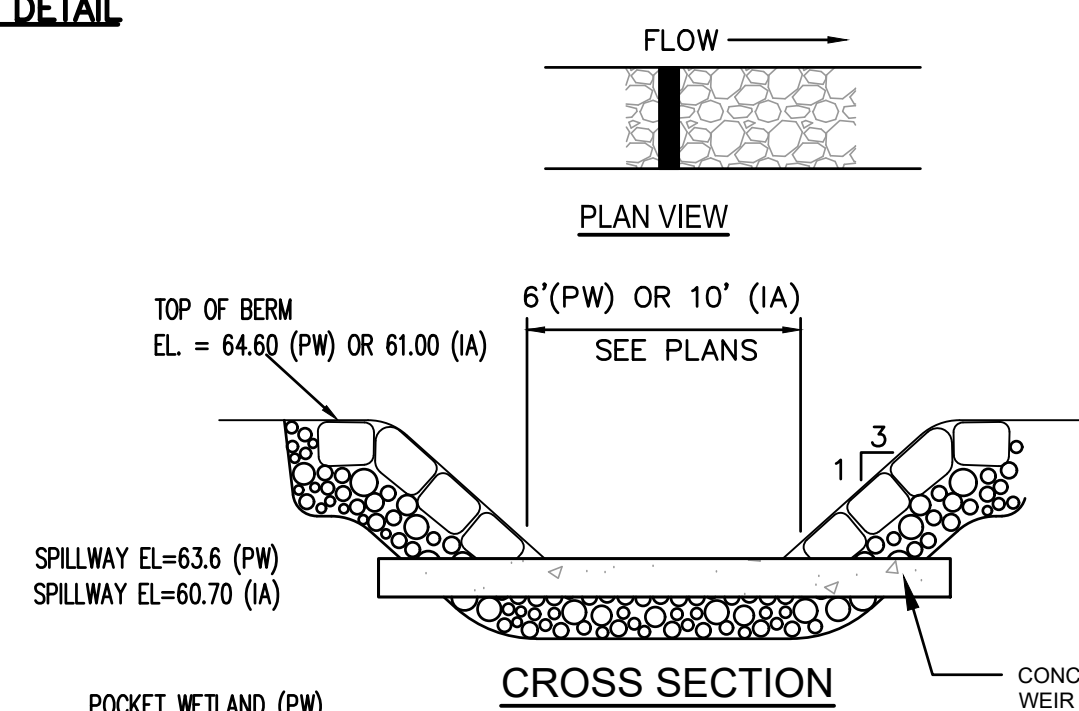
**FOREBAY DIKE DETAIL**

NOT TO SCALE



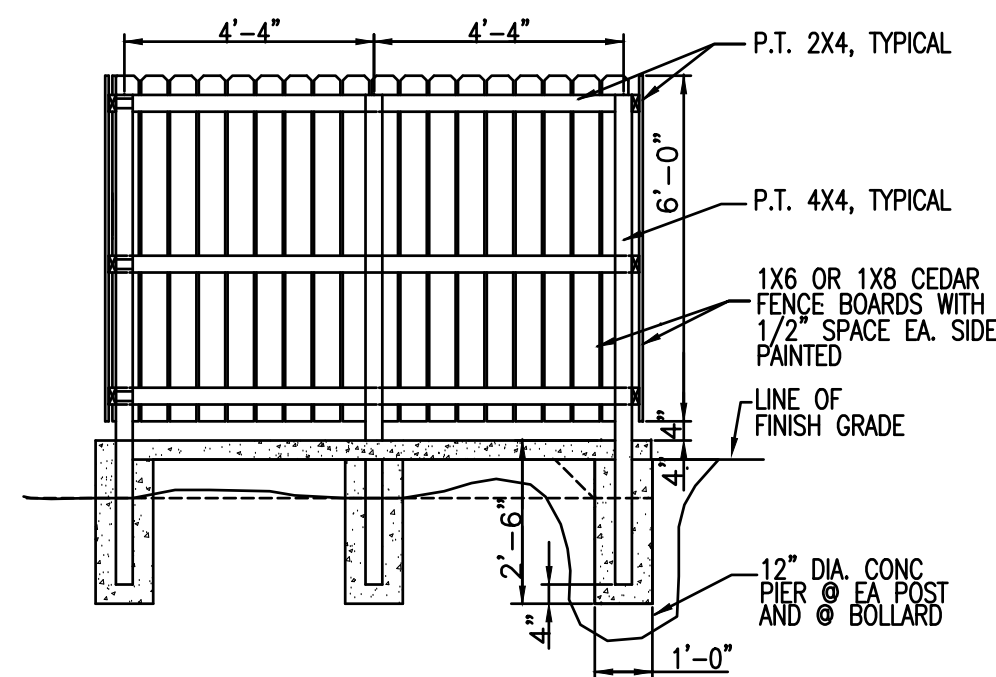
**EARTHEN PENINSULA**

TO BE INSTALLED AT BASE OF DETENTION BASINS  
 NOT TO SCALE



**EMERGENCY SPILLWAY DETAIL**

NOT TO SCALE



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7	12/7/2020	GENERAL REVISIONS	SEK	RJR
6	7/8/2020	GENERAL REVISIONS	SWL	RJR
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4	2/14/2020	RESPONSE TO COMMENTS	SWL	RJR
3	1/22/2020	RESPONSE TO COMMENTS	SWL	RJR
2	12/4/2019	RESPONSE TO COMMENTS	SWL	RJR
1	11/8/2019	RESPONSE TO COMMENTS	SWL	RJR
REV	DATE	DESCRIPTION	BY	APP.

**DETAIL SHEET-2**

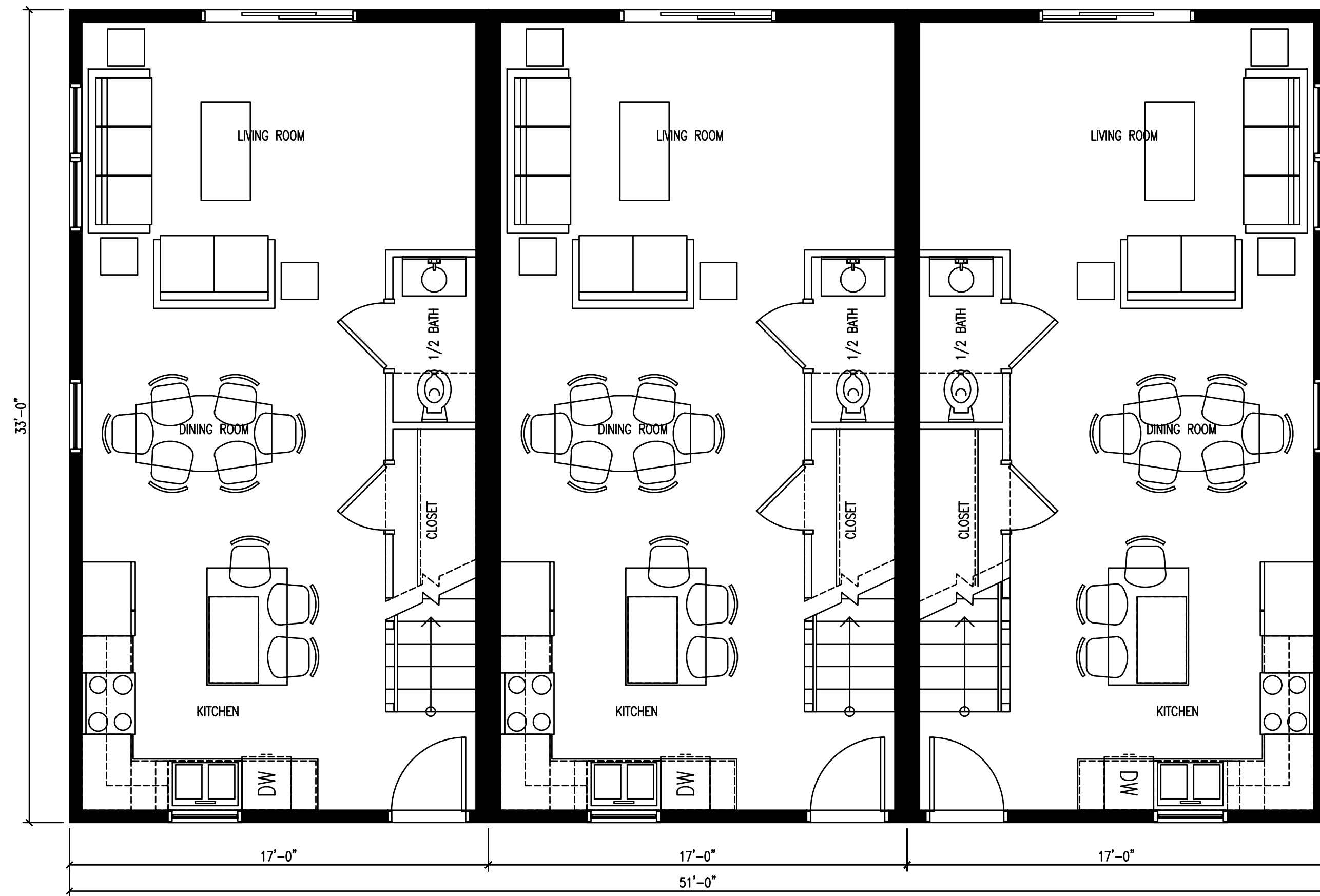
MAP 31- LOT 117C  
 FAIRHAVEN, MASSACHUSETTS  
 DANA LEWIS  
 FAIRHAVEN, MASSACHUSETTS

SCALE: 1" = 20'  
 DATE: SEPT. 9, 2019  
 DRAWN BY: SWL  
 DESIGNED BY: RJR  
 CHECKED BY: RJR  
 APPROVED BY: RJR

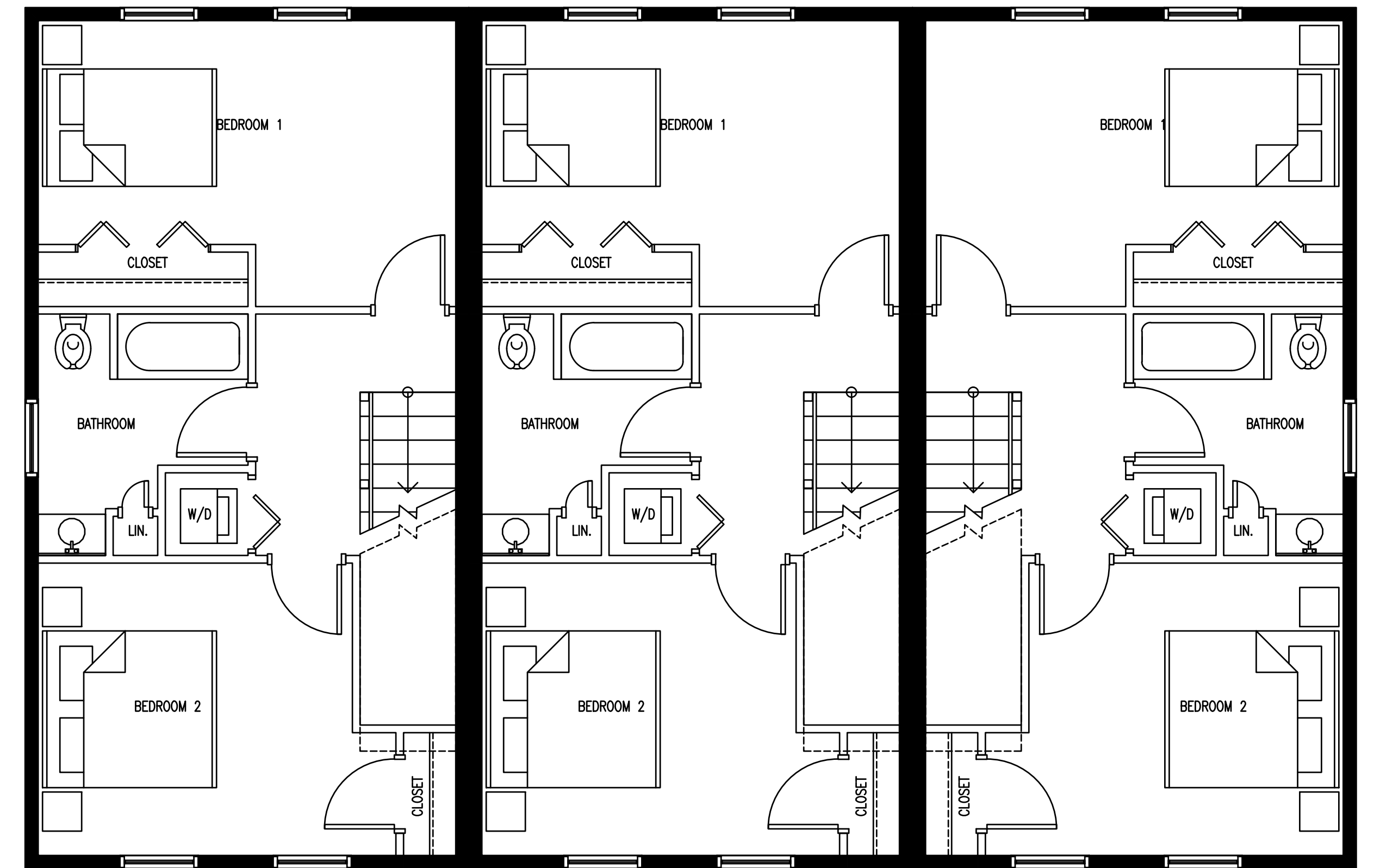
**PRIME ENGINEERING**  
 P.O. BOX 1088  
 350 BEDFORD ST.  
 LAKEVILLE, MA 02347  
 TEL: 508.947.0050  
 FAX: 508.947.2004

RICHARD J. RHEAUME  
 No. 28373  
 CIVIL  
 REGISTERED ENGINEER

SHEET NO. **6 OF 7**  
 PROJECT NO. 2729-01-01



1 PROPOSED FIRST FLOOR PLAN  
A-1.1 1/4"=1'-0"



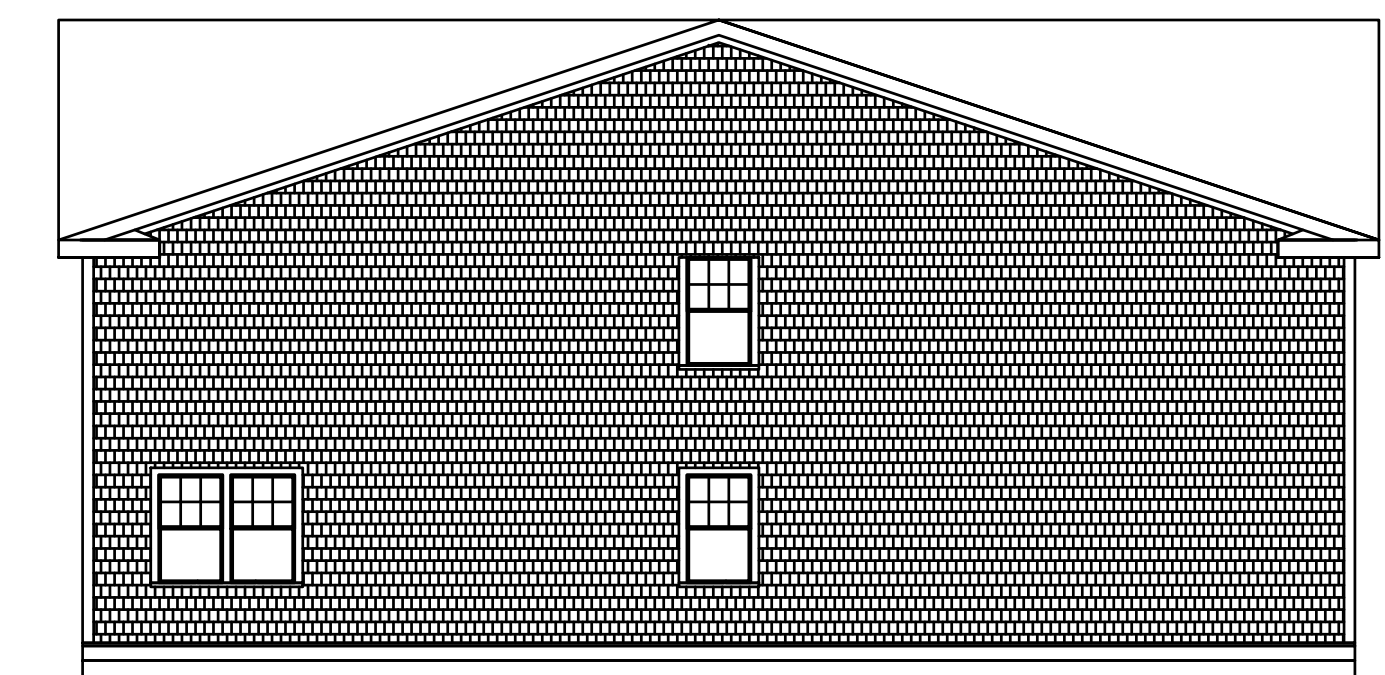
1 PROPOSED SECOND FLOOR PLAN  
A-1.2 1/4"=1'-0"



1 PROPOSED FRONT ELEVATION  
A-2.0 1/8"=1'-0"



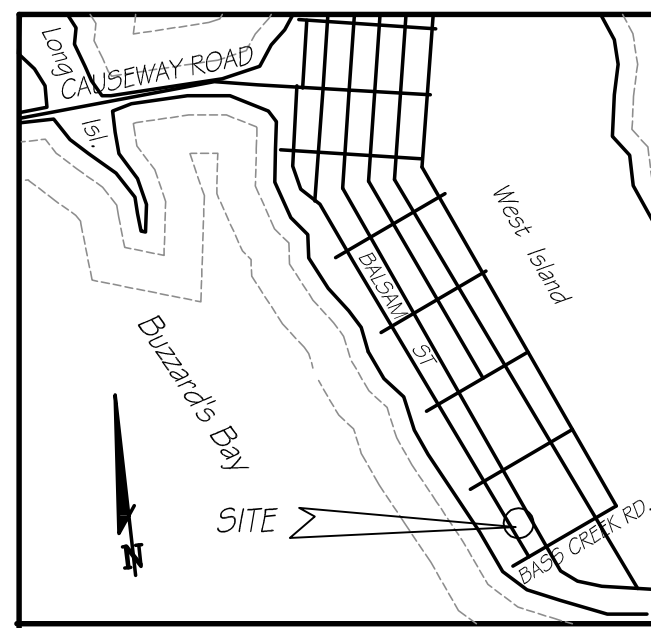
1 PROPOSED REAR ELEVATION  
A-2.1 1/8"=1'-0"



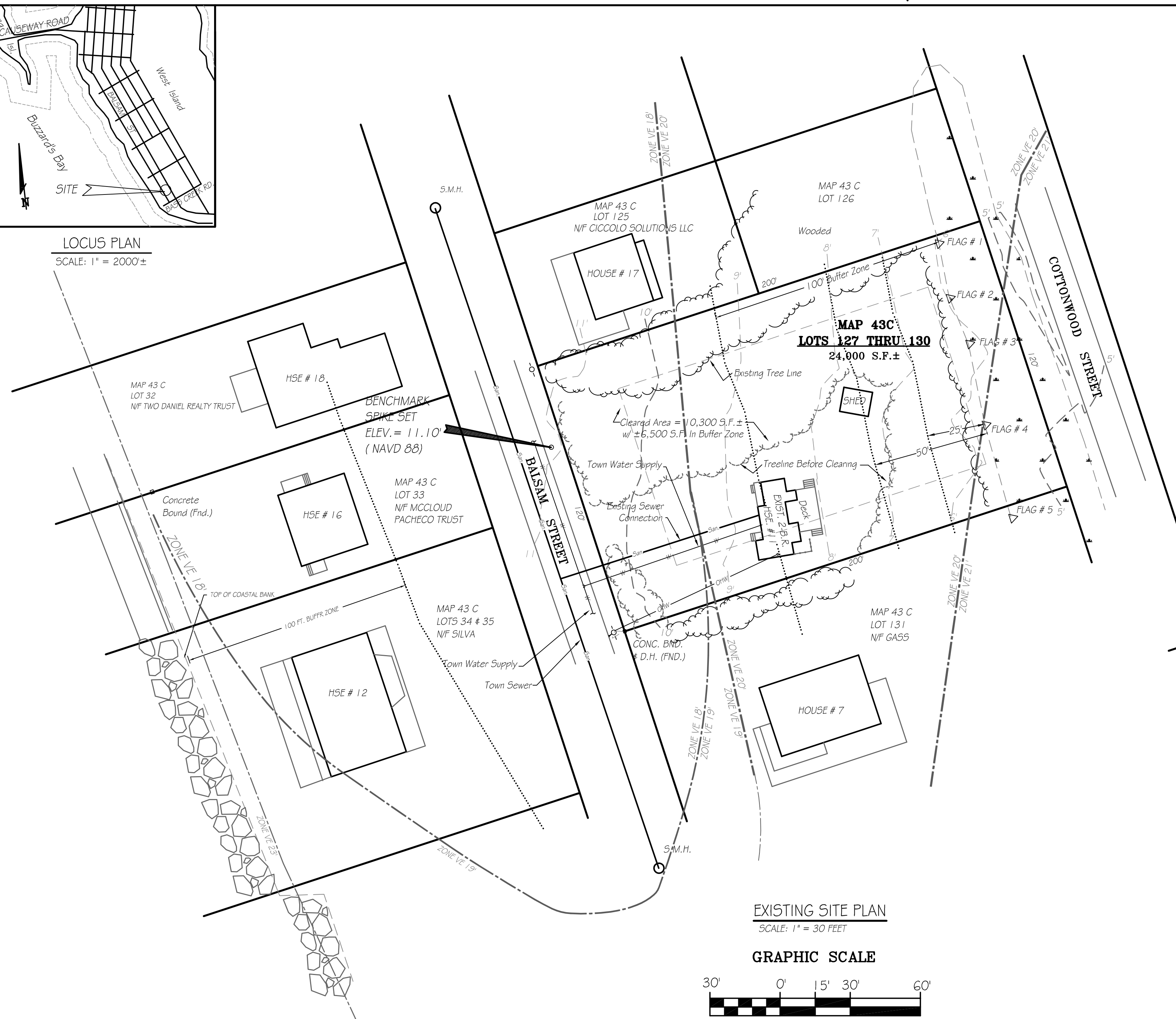
1 PROPOSED SIDE ELEVATION  
A-2.2 1/8"=1'-0"

DRAWING TITLE		ARCHITECTURALS		SCALE	1" = 20'	
PROJECT		MAP 31- LOT 117C FAIRHAVEN, MASSACHUSETTS		DATE	SEPT. 9, 2019	
CLIENT		DANA LEWIS FAIRHAVEN, MASSACHUSETTS		DRAWN BY:	SWL	
DESIGNED BY:		RJR		CHECKED BY:	RJR	
DESIGNED BY:		RJR		APPROVED BY:	RJR	
• CIVIL ENGINEERING • LAND SURVEYING • ENVIRONMENTAL ASSESSMENT				P.O. BOX 1088 350 BEDFORD ST. LAKEVILLE, MA 02347 TEL: 508.947.0050 FAX: 508.947.2004	SHEET NO.	<b>7 OF 7</b>
REV	DATE	DESCRIPTION	BY	APP.	PROJECT NO.	2729-01-01



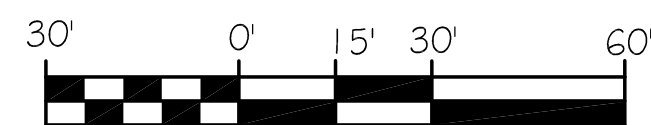


LOCUS PLAN  
SCALE: 1" = 2000±

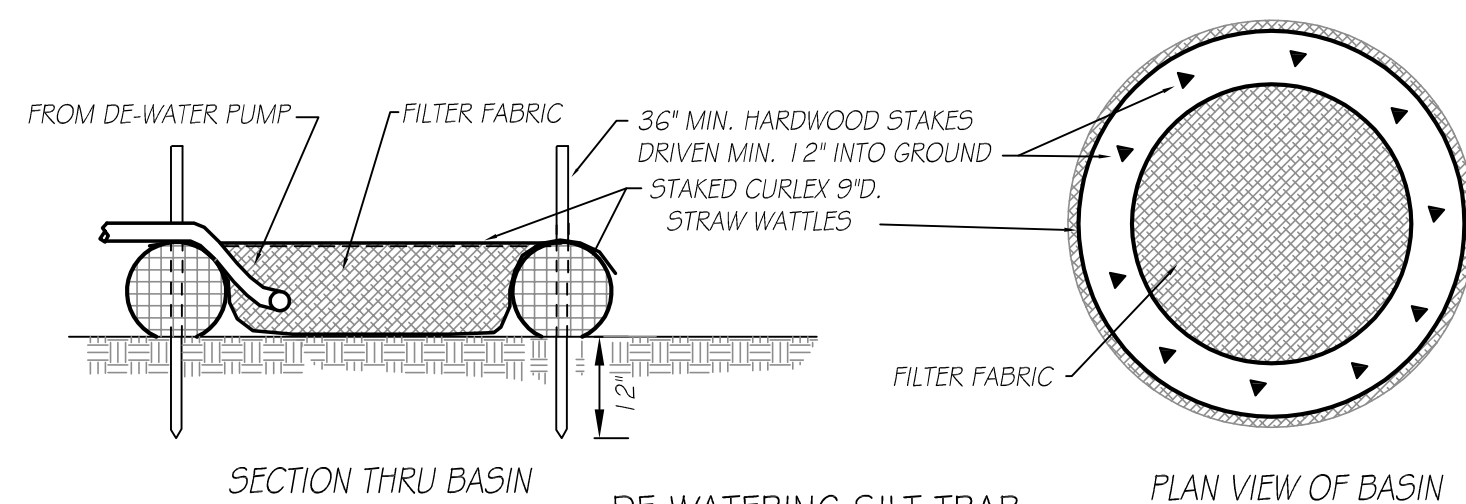


EXISTING SITE PLAN  
SCALE: 1" = 30 FEET

GRAPHIC SCALE

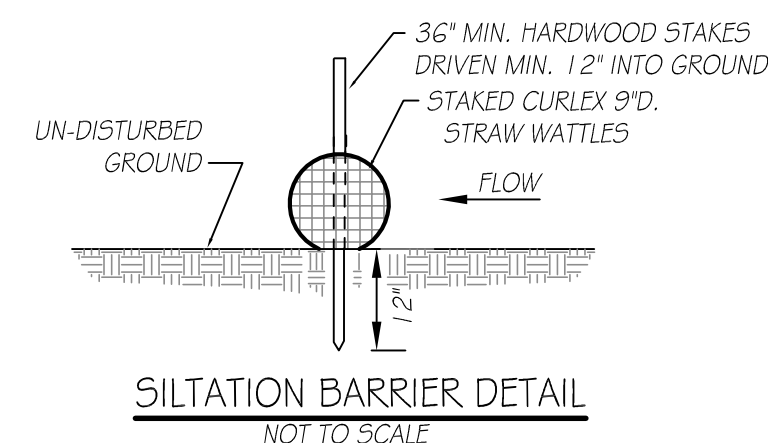


( IN FEET )  
1 inch = 30 ft.



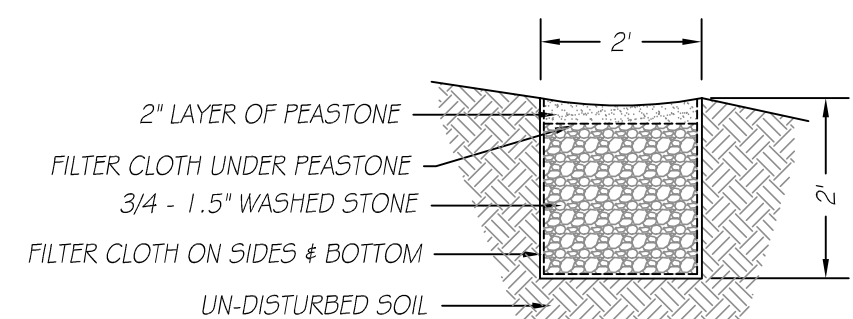
DE-WATERING SILT TRAP  
NOT TO SCALE

NOTE:  
1. ALL EXCAVATION BELOW THE GROUND WATER TABLE SHALL BE DE-WATERED WITH PUMP DISCHARGE TO DE-WATERING SILT TRAP.



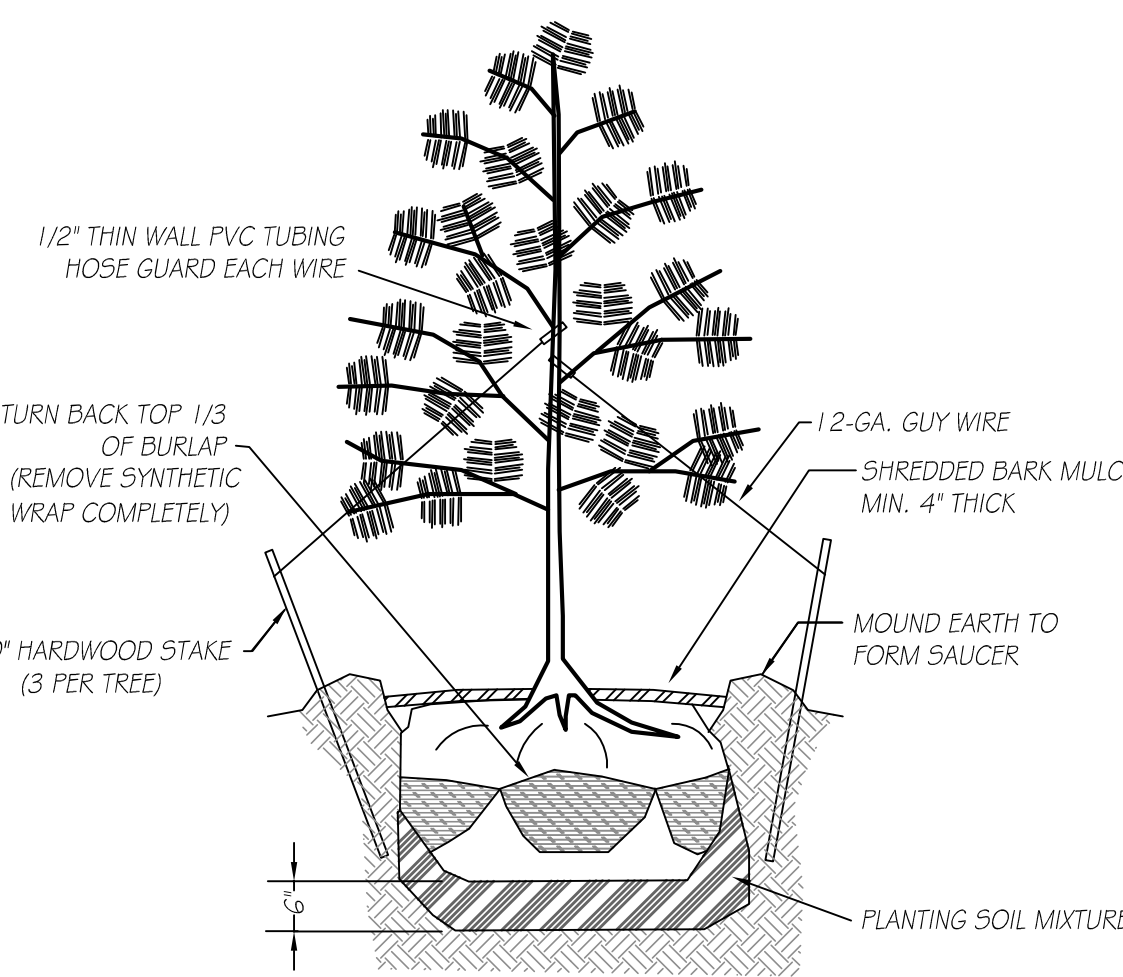
SILTATION BARRIER DETAIL  
NOT TO SCALE

NOTE: STRAW WATTLES SHALL BE COMPOSED OF STRAW FIBERS ENCASED IN DURABLE BIODEGRADABLE NETTING.



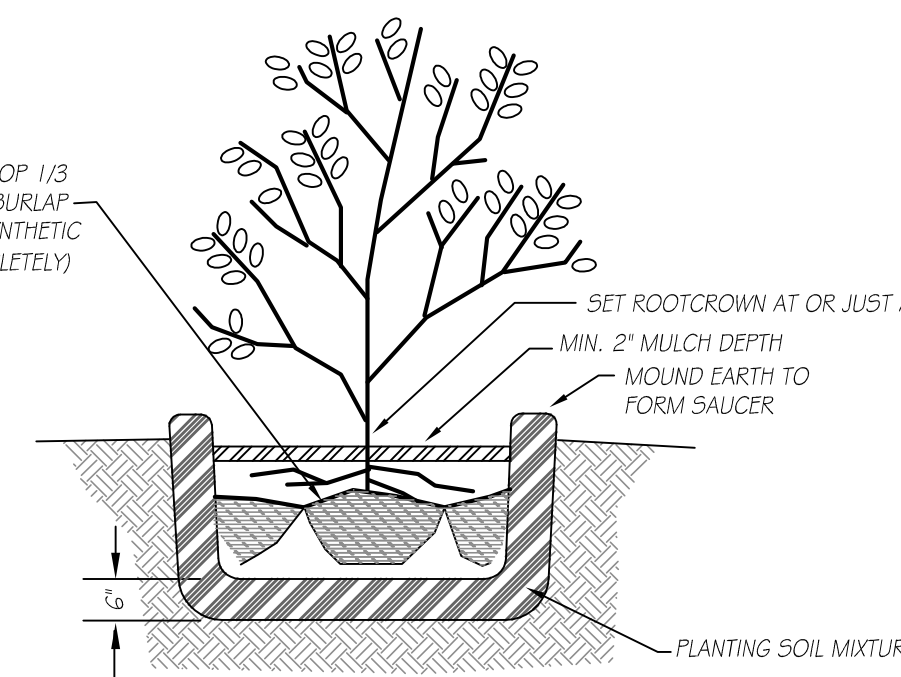
DRAIN TRENCH DETAIL  
N.T.S.

MAINTENANCE: RAKE LEAVES & DEBRIS OVER PEASTONE WHEN NEEDED; REMOVE PEASTONE AND CLEAN TOP LAYER OF FILTER CLOTH WHEN CLOGGED WITH FINES.

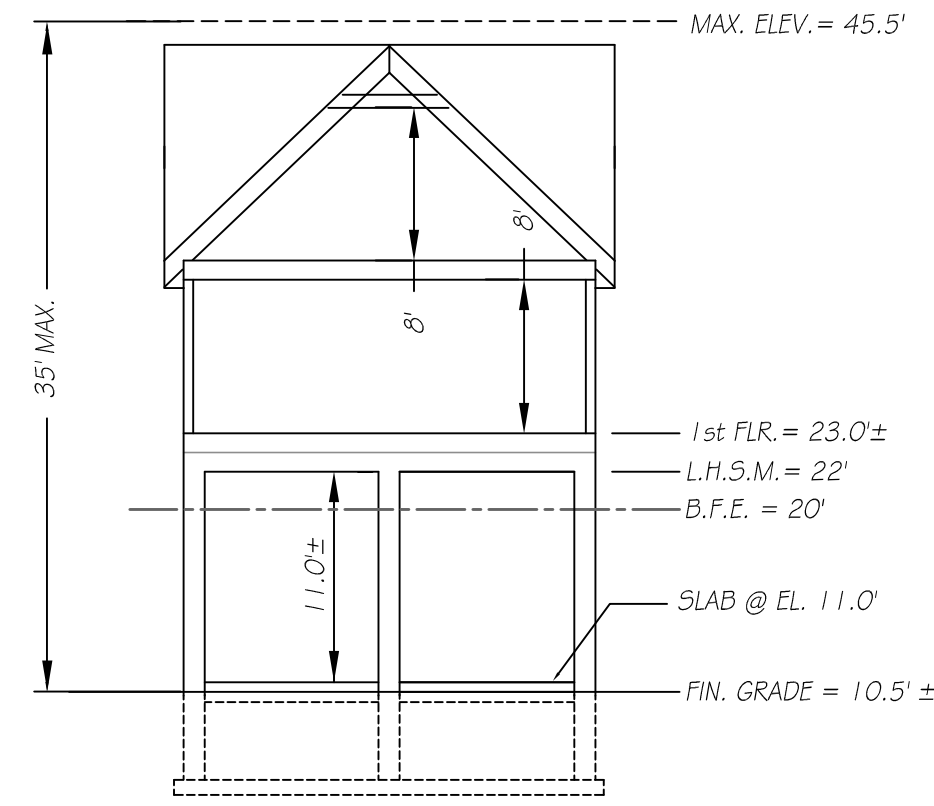


TREE PLANTING DETAIL  
N.T.S.

NOTE: ALL PLANTING HOLES SHALL BE HAND-BACKFILLED WITH NATIVE SOIL AS POSSIBLE. ADDITIONAL SOIL SHALL BE SCREENED TOPSOIL AND COMPOST MIX. ALL PLANTED TREES SHALL RECEIVE ORGANIC SLOW RELEASE FERTILIZER AND BE STAKED AS NECESSARY.



SHRUB PLANTING DETAIL  
N.T.S.



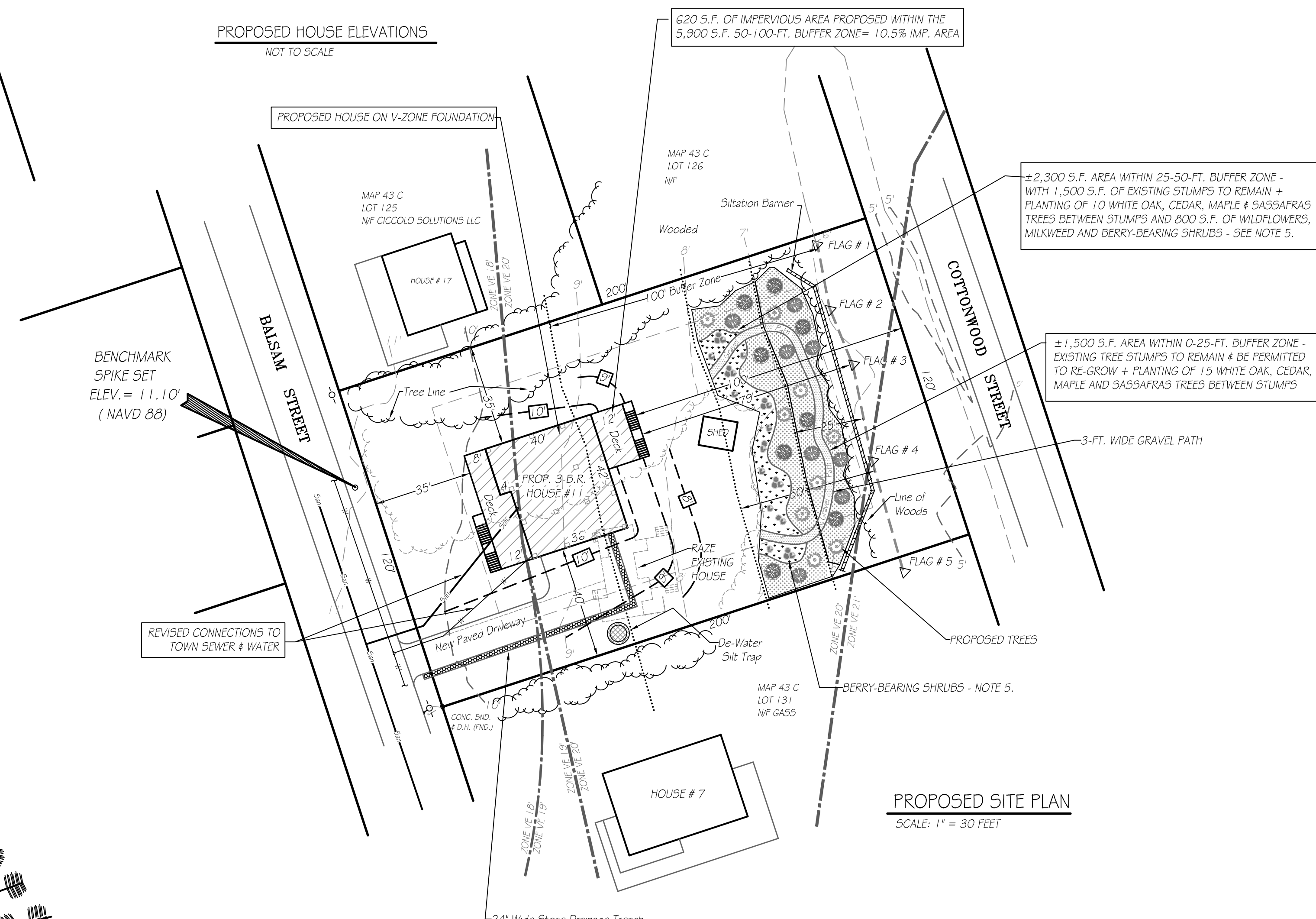
PROPOSED HOUSE ELEVATIONS  
NOT TO SCALE

GENERAL NOTES:

- THIS PARCEL IS SHOWN AS LOTS 127-130 OF ASSESSORS MAP 43C.
- THE DWELLING SHOWN HEREON LIES WITHIN A SPECIAL FLOOD HAZARD AREA, F.E.M.A. ZONE VE, EL. 20' AS DELINEATED ON F.E.M.A. COMMUNITY PANEL 25005C0504F DATED JULY 7, 2009.
- DEED REFERENCE: L.C. CERT. 22937.
- ZONING DISTRICT: RURAL RESIDENCE WITH MIN. 30,000 S.F. AREA, 140' FRONTAGE  
MINIMUM BUILDING SETBACKS: FRONT = 30', SIDE = 20', REAR = 30'; MAX. BLDG. COVERAGE = 15%; MAX. LOT COVERAGE = 25%  
EXISTING BLDG. COVERAGE = (HOUSE @ 743 S.F.) + SHED @ 130 S.F. / 24,000 S.F. = 872 S.F. / 24,000 S.F. = 3.6%  
EXISTING LOT COVERAGE = (BLDG. @ 872 S.F.) / 24,000 S.F. = 3.6%  
PROPOSED BUILDING COVERAGE = (HOUSE @ 2,488 S.F. + SHED @ 130 S.F.) / 24,000 S.F. = 2,618 S.F. / 24,000 S.F. = 10.9%  
PROPOSED LOT COVERAGE = (BLDG. @ 2,618 S.F.) + (DRIVEWAY @ 1,275 S.F.) = 3,893 S.F. / 24,000 S.F. = 16.2%
- BERRY-BEARING SHRUBS SHALL INCLUDE DEER-RESISTANT SPECIES AND SHALL BE PLANTED WITH COMPANION POLLINATOR WHEN POSSIBLE, INCLUDING BRANDYWINE VIBURNUM (*Viburnum Nudum*), CORAL HEDGE BARBERRY (*Berberis x Carolin.*), BAYBERRY (*Myrica Pensilvanica*), AND WINTERBERRY (*Ilex Verticillata*). TREES SHALL BE 1-1/2" TO 2" CALIFER.

SCOPE OF WORK:

THE SCOPE OF WORK INCLUDES REMOVAL OF EXISTING HOUSE & FOUNDATION, CONSTRUCTION OF NEW RESIDENCE ON FLOOD ZONE-COMPLIANT FOUNDATION PER MASS. STATE BUILDING CODE 9TH. EDITION; INCLUDING SITE WORK AND CONNECTIONS TO TOWN SEWER AND WATER & OTHER UTILITIES; AND PLANTING OF TREES, SHRUBS & WILDFLOWERS WHERE NOTED.



PROPOSED SITE PLAN  
SCALE: 1" = 30 FEET

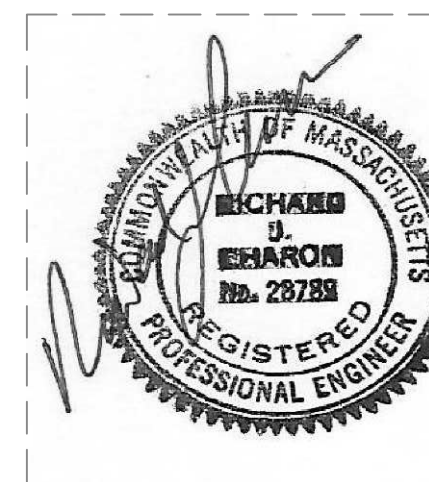
- LEGEND:
- EXISTING CONTOURS: - - - - -
  - PROPOSED CONTOURS: - - - - -
  - EDGE OF WETLANDS: [Symbol]
  - LIMIT OF BUFFER ZONE: [Symbol]
  - LIMITS OF F.E.M.A. ZONES: [Symbol]

- SPOT ELEVATIONS: 53.9
- TEST PIT LOCATION: [Symbol]
  - SEPTIC TANK: [Symbol]
  - DELINEATION FLAG: #6

D.E.P. FILE NO.: 023-1361

PLAN OF SITE, UTILITIES & PROPOSED RESIDENCE  
PREPARED FOR  
NORA & HENRY C. BRADFORD, III  
11 BALSAM STREET  
FAIRHAVEN, MASS.

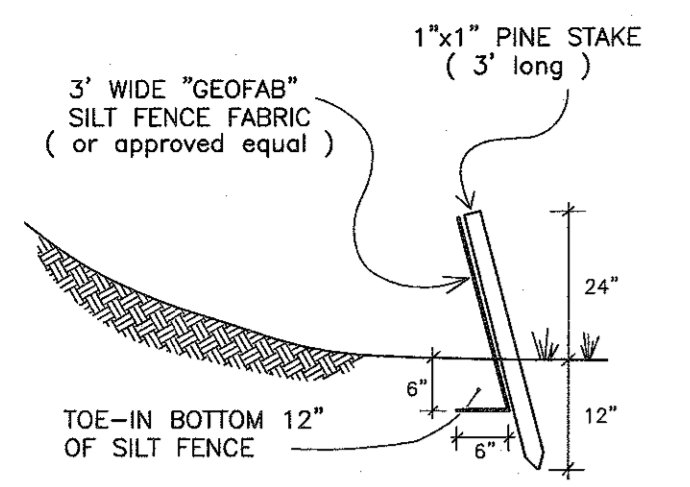
CAI Charon Associates, Inc.  
Consulting Engineers  
323 Neek Road - Rochester, MA 02770  
Tel: 508-763-8362 Fax: 508-763-9582



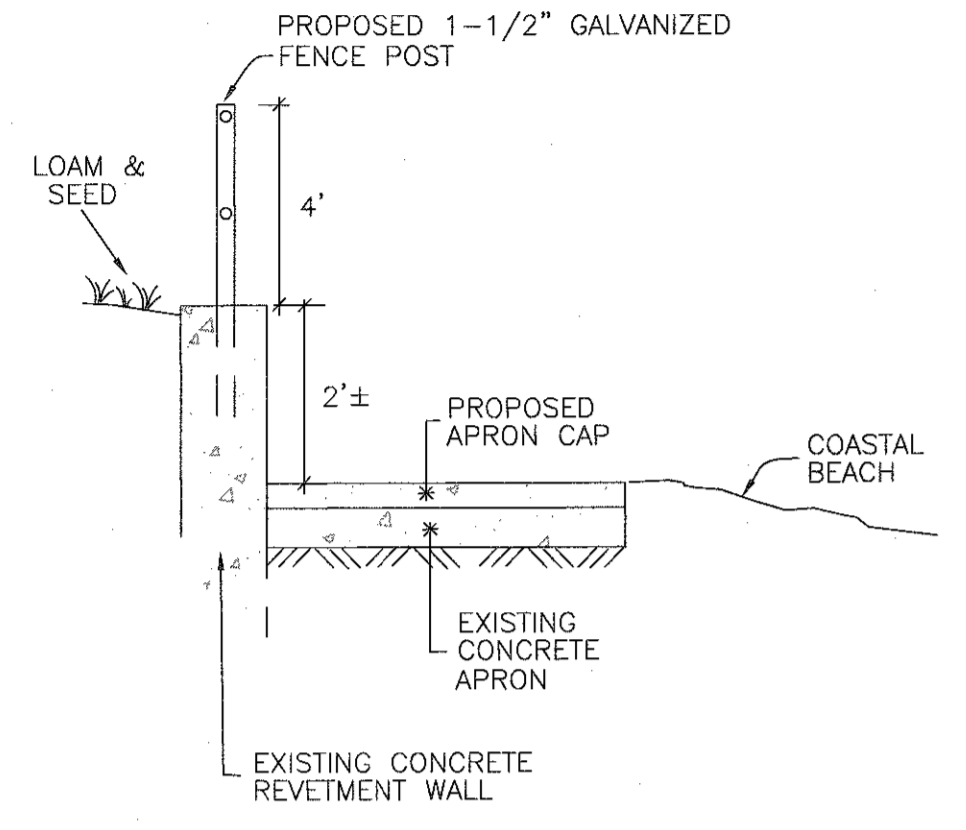
SCALE: AS NOTED  
DATE: JULY 22, 2021  
REV. 1: AUG. 25, 2021.

DWG. NO.  
L-1

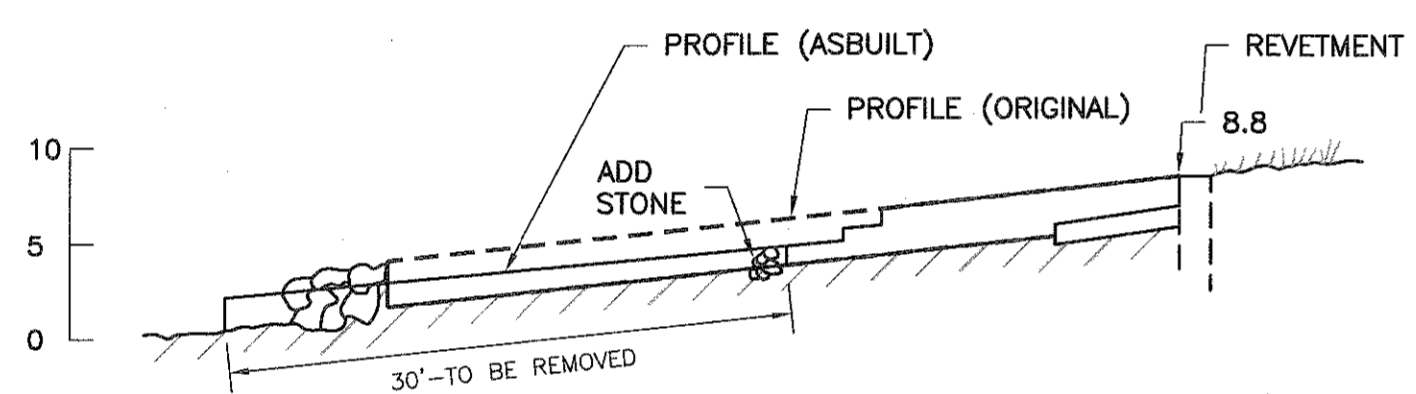




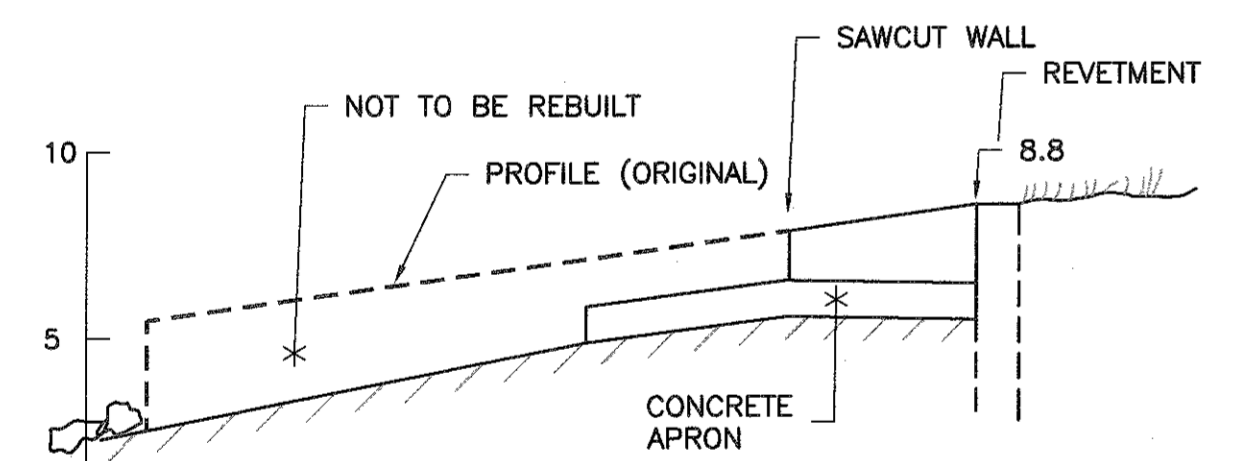
**SILT / EROSION CONTROL FENCING**  
NOT TO SCALE



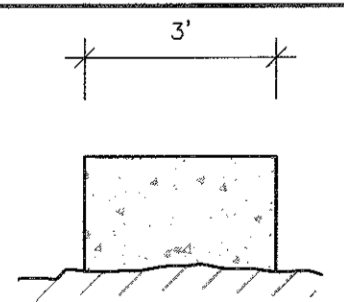
**SECTION A-A**  
(NOT TO SCALE)



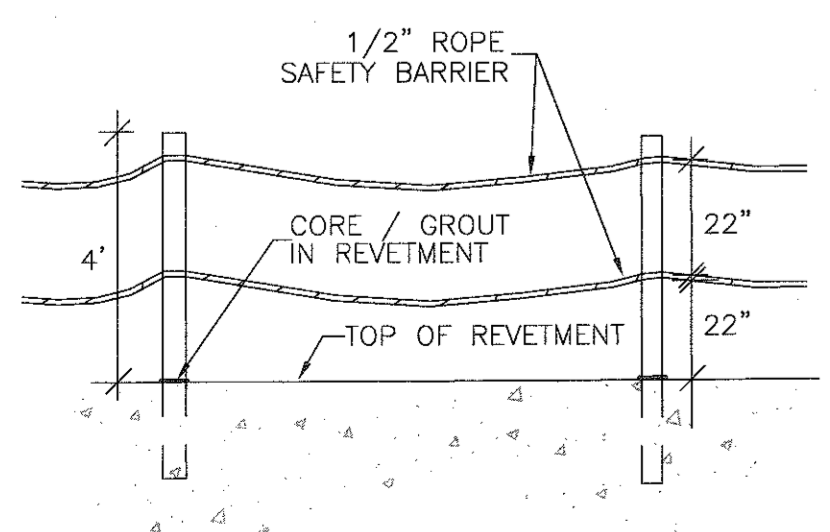
**NORTH GROIN SECTION B-B**  
1"=10'



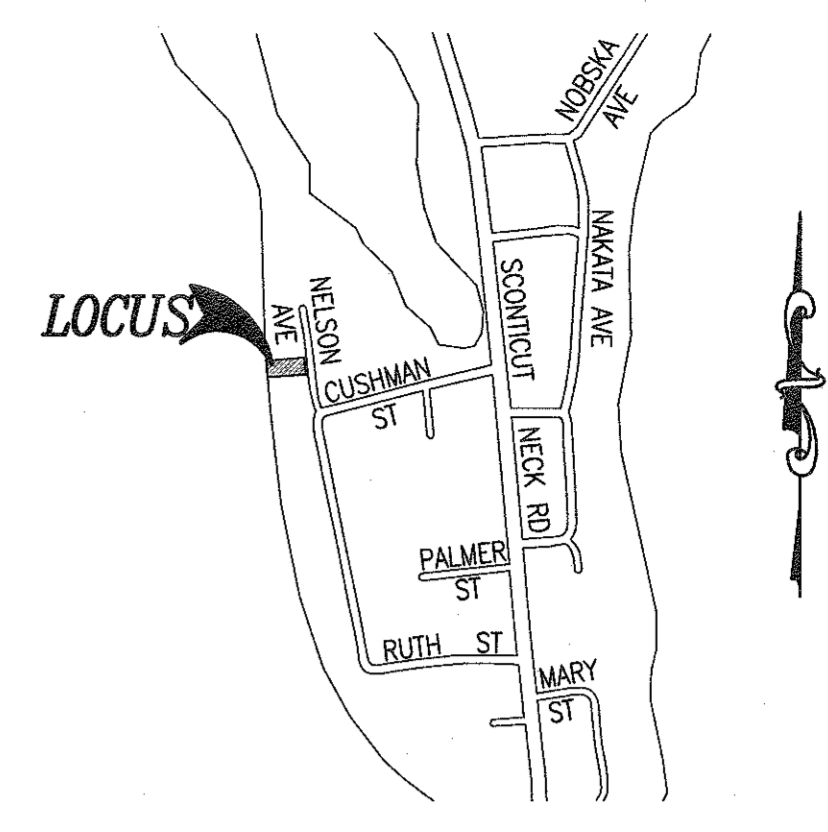
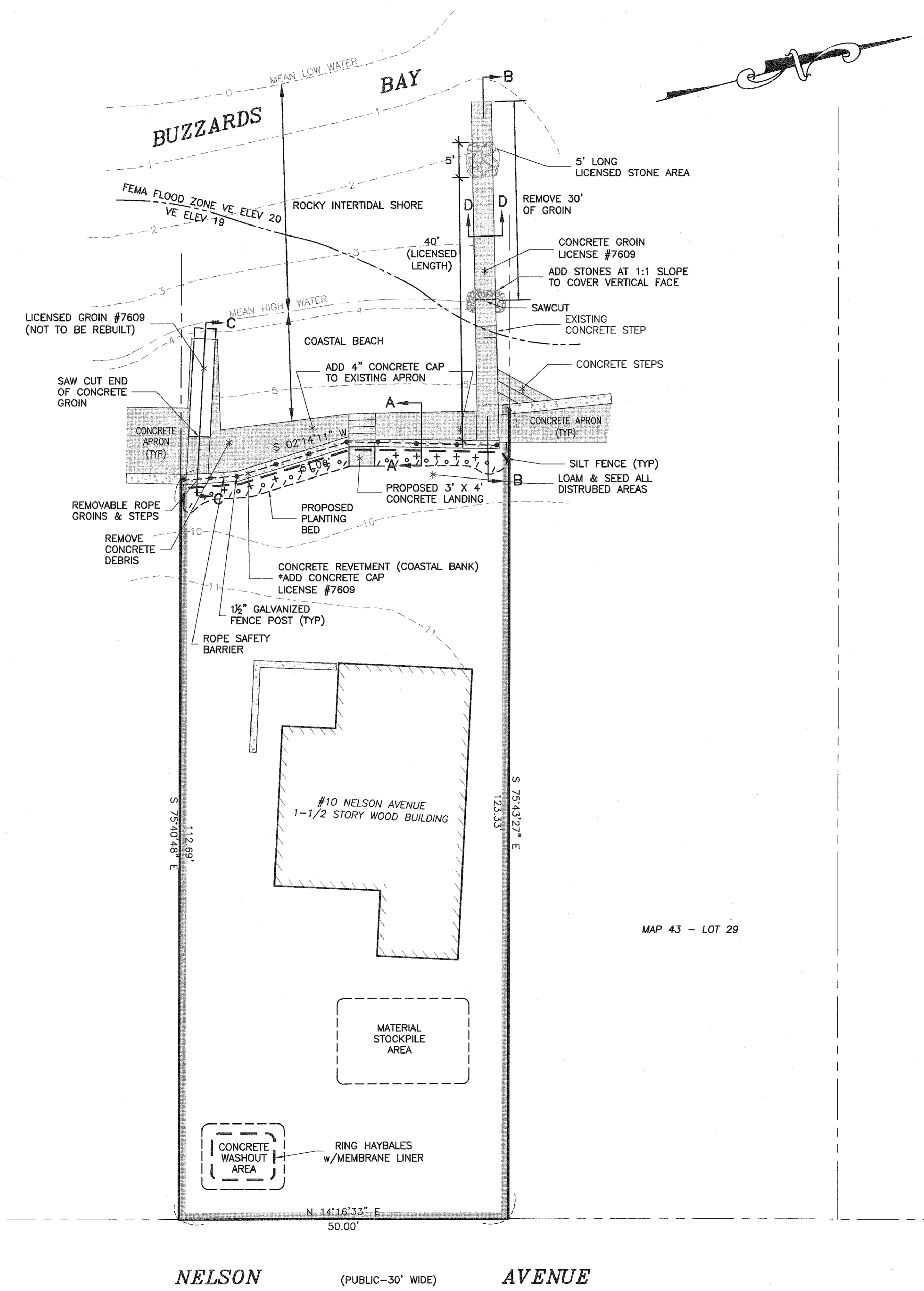
**SOUTH GROIN SECTION C-C**  
1"=5'



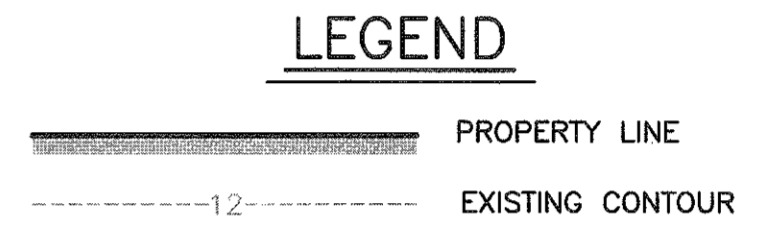
**NORTH GROIN SECTION D-D**  
1"=3'



**ROPE SAFETY BARRIER**  
(NOT TO SCALE)



**LOCUS MAP**  
SCALE: 1"=600'±



**CONSTRUCTION NOTES**

1. ALL WORK DEPICTED ON THIS PLAN IS SUBJECT TO ALL ORDER OF CONDITIONS ISSUED BY THE FAIRHAVEN CONSERVATION COMMISSION. THE CONTRACTOR SHALL HAVE A COPY OF THE ORDER AND APPROVED PLAN ON SITE AT ALL TIME DURING THE CONSTRUCTION PROVIDED.
2. A PRE-CONSTRUCTION MEETING WILL BE SCHEDULED BY THE CONTRACTOR WITH THE CONSERVATION AGENT TO REVIEW THE REQUIREMENTS OUTLINED IN THE ORDER OF CONDITIONS.
3. THE SILT FENCE FOR EROSION CONTROL SHALL BE SET PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS UNTIL ALL DISTURBED AREAS ARE STABILIZED.
4. STOCKPILING OF MATERIALS SHALL BE LIMITED TO THE DESIGNATED UPLAND AREA.
5. IF REQUIRED, A LINED CONCRETE WASHOUT PIT SHALL BE SET IN THE STOCKPILE AREA WITH SILT FENCING SET ALONG THE DOWNGRADIENT PERIMETER OF THE PIT.
6. ALL DISTURBED AREAS SHALL BE IMMEDIATELY STABILIZED WITH LOAM AND SEEDING UPON COMPLETION OF CONSTRUCTION.
7. THE USE OF HEAVY EQUIPMENT ON THE BEACH OR ROCKY INTERTIDAL SHORE IS PROHIBITED.

PLANT LIST		
SYMBOL	QUANTITY	NAME
+	11	'EURYBIA SPECTABILIS' Eastern Showy Aster
o	12	'HEMEROCALLIS SPP.' Daylily Stelladora
/	18	'COREOPSIS ROSEA' Pink Tickseed

**OWNER/APPLICANT:**  
THE DELANO IRREVOCABLE TRUST  
10 NELSON AVENUE  
FAIRHAVEN, MA 02719

No.	Date	Revision Description
1	APR. 05, 2021	REVISED DESIGN/ADD PLANNING
2	APR. 16, 2021	REVISED PLAN DETAILS
3	MAY 17, 2021	REVISE NORTH GROIN
4	JULY 26, 2021	REVISE NORTH GROIN
5	AUG. 20, 2021	REVISE NORTH GROIN

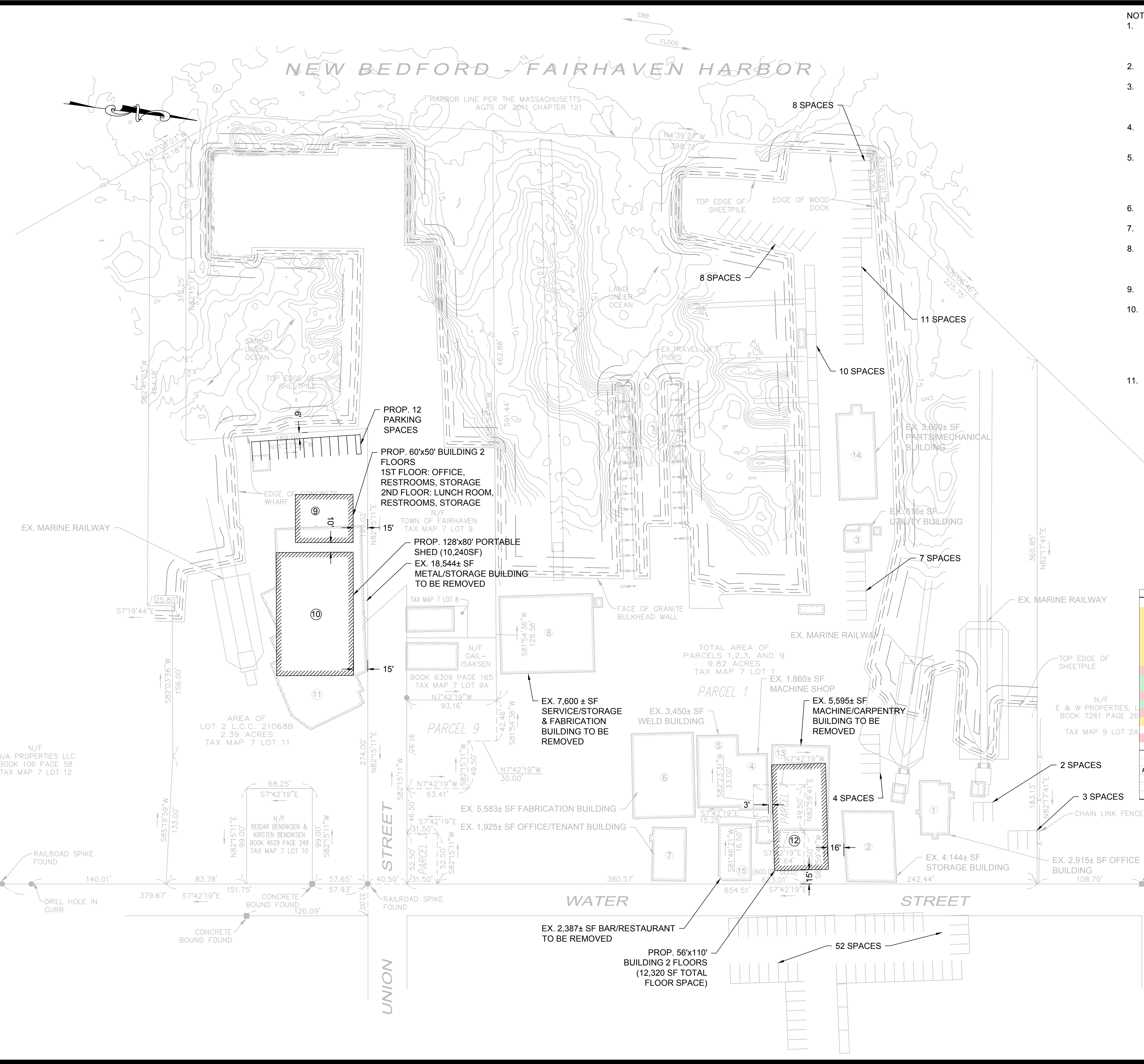
Project: ASSESSORS MAP 43 - LOT 30 10 NELSON AVENUE FAIRHAVEN, MASSACHUSETTS	Client: THE DELANO IRREVOCABLE TRUST Drawing Title: COASTAL STRUCTURE REPAIR PLAN
--	--

Scale: 1"=10'  
 Date: FEBRUARY 11, 2021  
 Drawn: BPL  
 Checked: SDG  
 Approved: SDG  
 Sheet 1 of 1  
 Drawing Number: CSRP-1

Part of Civil & Environmental Consultants, Inc.  
 31 Bellevue Road, Fairhaven, MA 02719  
 Ph: 774.501.2378, 866.212.2024, Fax: 774.501.2689  
 www.sitec.com

Acad No. FHN 20-7610 CSRP.DWG  
File No. 20-7610





NOTES:  
 1. EXISTING CONDITIONS AND PROPERTY LINES ARE FROM PLAN TITLED "PROPERTY RETRACEMENT SURVEY - FAIRHAVEN SHIPYARD - 24 WATER STREET, FAIRHAVEN, MA" BY NITSCH ENGINEERING, DENIS SEQUIN, PLS. SURVEY DATES: MAY 8 & 9, 2018.  
 2. THE SOUNDING DATA SHOWN ON THIS PLAN WAS GATHERED ON MARCH 17, 2016  
 3. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO DEPTHS BELOW THE VERTICAL REFERENCE PLANE. THE VERTICAL REFERENCE PLANE FOR THIS PROJECT IS MEAN LOWER LOW WATER (MLLW) AND IS BASED ON 1960-1978 TIDAL EPOCH.  
 4. THE DATUM IS DEFINED RELATIVE TO THE PRIMARY BENCHMARK, DISK FOUND ON CONCRETE SLAB AT THE GIFFORD STREET BOAT RAMP. PID = BBCC73, OPUS PUBLISHED ELEVATION = 1.518m NAVD88 (GEOID09).  
 5. DATUM CONVERSION FROM NAVD88 TO MLLW IS BASED ON INFORMATION PROVIDED ON THE REPAIR PLANS FOR UNION WHARF. THE OFFSETS WERE MEASURED BY COLER & COLANTONIO, AT THE NEW BEDFORD FAIRHAVEN BRIDGE TIDAL STATION #8447584 1960-1978 TIDAL EPOCH.  
 6. SOUNDINGS SHOWN AS NEGATIVE ARE ABOVE THE REFERENCE PLANE.  
 7. COORDINATES ARE BASED ON NAD 83 STATE PLANE MASSACHUSETTS MAINLAND.  
 8. BENCHMARK / RTK TIDES: TIDES ARE RECORDED USING RTK TIDES IN HYPACK. ELEVATIONS FROM ELLIPSOID TO ORTHOMETRIC NAVD88 USE GEOID 12A. THE OFFSET BETWEEN THE ORTHOMETRIC HEIGHT AND THE LOCAL TIDAL DATUM (K) = 2.32'  
 9. RTK CORRECTIONS: RTK CORRECTIONS FOR THIS SURVEY PROVIDED BY KEYNET - VRS.  
 10. THE INFORMATION DEPICTED ON THIS PLAN REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. CONSULT WITH FOTH-CLE ENGINEERING GROUP FOR MORE DETAILED INFORMATION.  
 11. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT. ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF FOTH-CLE ENGINEERING GROUP.

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**SPECIAL PERMIT APPLICATION  
 BUILDING DEMOLITION & CONSTRUCTION**

**7 UNION WHARF & 24 WATER STREET  
 FAIRHAVEN, MA**

**FAIRHAVEN SHIPYARD COMPANIES, INC.**

PARKING REQUIREMENTS - ZONED INDUSTRIAL					
		Gross Floor Area (sf)	1 Space Per # sf	Spaces Req'd	
1	Office	2915	300	9.7	
2	Storage	4144	500	8.3	
3	Utility	616	500	1.2	
4	Machine Shop	1860	500	3.7	
5	Weld Shop	3450	500	6.9	
6	Fabrication	5583	500	11.2	
7	Office/Tenant	1925	300	6.4	
8	Service/Storage/Fabrication	7600	500	15.2	
9	Office/Storage (2 Floors)	6000	500	12.0	
10	Storage	10,240	500	20.5	
11	Metal/Storage	18,544	500	37.1	
12	Paint/Carpentry Shop (2 Floors)	12320	500	24.6	
13	Machine/Carpentry	5595	500	11.2	
14	Parts/Mechanical	3600	500	7.2	
15	Former Bar/Restaurant	2387	# seats	20.8	
				111.8	
Total Parking Spaces Required:					112
The Number of Parking Spaces Provided (117) exceeds the Number Required (112). Parking Locations May be Modified Within the Site Limits While Maintaining the Required Number.					
					existing building
					remove building
					proposed building

SEAL AND SIGNATURE

REVISIONS

NO.	DATE	DESCRIPTION

SHEET TITLE

**SITE PLAN**

ISSUANCE

SCALE

AS NOTED

DRAWN BY  
TJM

CHECKED BY  
SN

PROJECT NO  
06007.100

DATE  
06/22/2018

SHEET NUMBER

**1**

SHEET 1 OF 1

