

*PERMIT SITE DEVELOPMENT PLAN*  
*(TO ACCOMPANY A SMART GROWTH OVERLAY APPLICATION)*  
FOR

**108 SOHIER ROAD**  
LOCATED IN  
**BEVERLY, MASSACHUSETTS**

DATE: SEPTEMBER 17, 2018

APPLICANT:  
HARBORLIGHT COMMUNITY  
PARTNERS, INC  
PO BOX 507  
BEVERLY, MA 01915

OWNER:  
108 SOHIER LLC  
208 MAIN STREET  
WENHAM, MA 01984

PREPARED BY:

 **MERIDIAN  
ASSOCIATES**

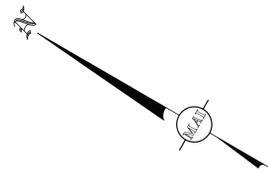
500 CUMMINGS CENTER, SUITE 5950 BEVERLY, MASSACHUSETTS 01915  
69 MILK STREET, SUITE 302 WESTBOROUGH, MASSACHUSETTS 01581  
TELEPHONE: (978) 299-0447 TELEPHONE: (508) 871-7030  
WWW.MERIDIANASSOC.COM

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**LOCUS MAP**  
(SCALE: 1" = 200')



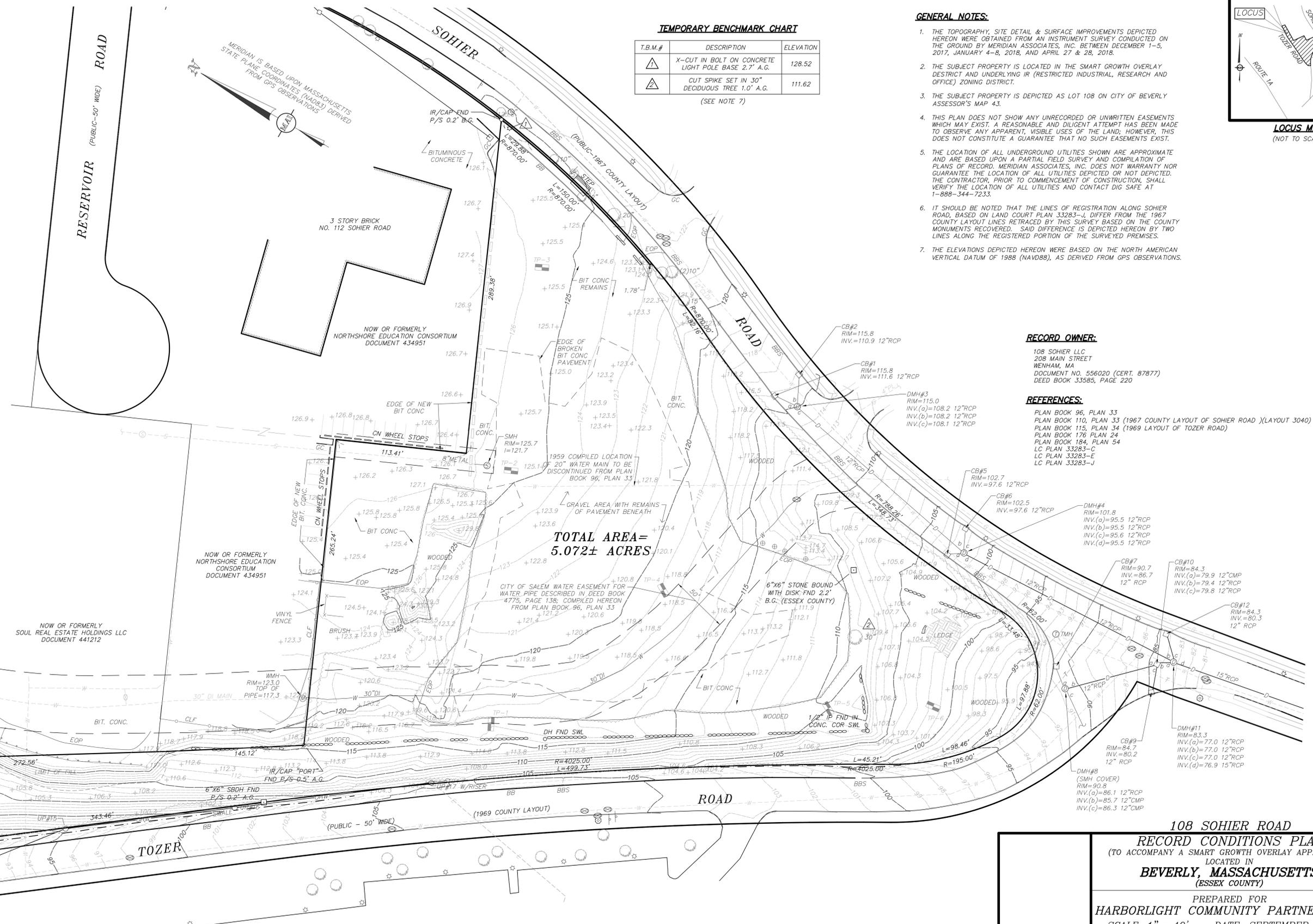
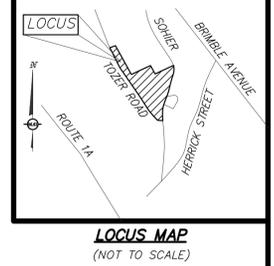
- LEGEND:**
- IP STONE BOUND DRILL HOLE
  - IP IRON PIPE
  - DH DRILL HOLE
  - 11.3 ONE FOOT CONTOUR
  - 115 FIVE FOOT CONTOUR
  - +126.3 SPOT ELEVATION
  - BITUMINOUS BERM
  - GRANITE CURB
  - GUARDRAIL
  - CHAINLINK FENCE
  - WOOD FENCE
  - SWALE
  - RETAINING WALL
  - CONCRETE
  - SIGN
  - DECIDUOUS TREE
  - CONIFEROUS TREE
  - COMPILED GAS LINE
  - GAS GATE
  - GAS METER
  - OHW OVERHEAD WIRES
  - COMPILED ELECTRIC LINE
  - LIGHT
  - UTILITY POLE
  - UTILITY POLE WITH LIGHT
  - GUY WIRE
  - D OBSERVED DRAIN LINE
  - DRAIN MANHOLE
  - W CATCH BASIN
  - W PAINT DELINEATED WATER LINE
  - W COMPILED WATER LINE
  - W WATER GATE
  - S HYDRANT
  - S OBSERVED SEWER LINE
  - S COMPILED SEWER LINE
  - S SEWER MANHOLE
  - S MANHOLE
  - S TERMINUS UNKNOWN
  - A.G. ABOVE GROUND
  - BB BITUMINOUS BERM
  - BIT. CONC. BITUMINOUS CONCRETE
  - CLF CHAINLINK FENCE
  - CI CAST IRON
  - CMP CORRUGATED METAL PIPE
  - CS CORRUGATED STEEL PIPE
  - EOP EDGE OF PAVEMENT
  - FND FOUND
  - INV INVERT
  - OH OVERHANG
  - RCP REINFORCED CONCRETE PIPE
  - RWS STONE RETAINING WALL
  - S.F. SQUARE FEET
  - THRESH THRESHOLD
  - FND FOUND
  - TP TEST PIT

**TEMPORARY BENCHMARK CHART**

T.B.M.#	DESCRIPTION	ELEVATION
△	X-CUT IN BOLT ON CONCRETE LIGHT POLE BASE 2.7' A.G.	128.52
△	CUT SPIKE SET IN 30" DECIDUOUS TREE 1.0' A.G.	111.62

(SEE NOTE 7)

- GENERAL NOTES:**
- THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. BETWEEN DECEMBER 1-5, 2017, JANUARY 4-8, 2018, AND APRIL 27 & 28, 2018.
  - THE SUBJECT PROPERTY IS LOCATED IN THE SMART GROWTH OVERLAY DISTRICT AND UNDERLYING IR (RESTRICTED INDUSTRIAL, RESEARCH AND OFFICE) ZONING DISTRICT.
  - THE SUBJECT PROPERTY IS DEPICTED AS LOT 108 ON CITY OF BEVERLY ASSESSOR'S MAP 43.
  - THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
  - THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILED PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANT OR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION, SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT DIG SAFE AT 1-888-344-7233.
  - IT SHOULD BE NOTED THAT THE LINES OF REGISTRATION ALONG SOHIER ROAD, BASED ON LAND COURT PLAN 33283-J, DIFFER FROM THE 1967 COUNTY LAYOUT LINES RECORDED BY THIS SURVEY BASED ON THE COUNTY MONUMENTS RECOVERED. SAID DIFFERENCE IS DEPICTED HEREON BY TWO LINES ALONG THE REGISTERED PORTION OF THE SURVEYED PREMISES.
  - THE ELEVATIONS DEPICTED HEREON WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS DERIVED FROM GPS OBSERVATIONS.

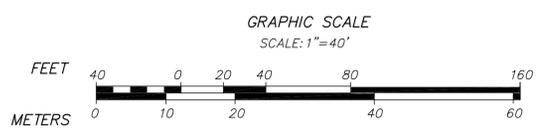


**RECORD OWNER:**

108 SOHIER LLC  
208 MAIN STREET  
WENHAM, MA  
DOCUMENT NO. 556020 (CERT. 87877)  
DEED BOOK 33585, PAGE 220

**REFERENCES:**

- PLAN BOOK 96, PLAN 33
- PLAN BOOK 110, PLAN 33 (1967 COUNTY LAYOUT OF SOHIER ROAD )(LAYOUT 3040)
- PLAN BOOK 115, PLAN 34 (1969 LAYOUT OF TOZER ROAD)
- PLAN BOOK 176 PLAN 24
- PLAN BOOK 184, PLAN 54
- LC PLAN 33283-C
- LC PLAN 33283-E
- LC PLAN 33283-J



**108 SOHIER ROAD**  
**RECORD CONDITIONS PLAN**  
(TO ACCOMPANY A SMART GROWTH OVERLAY APPLICATION)  
LOCATED IN  
**BEVERLY, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**HARBORLIGHT COMMUNITY PARTNERS, INC.**  
SCALE: 1" = 40' DATE: SEPTEMBER 17, 2018



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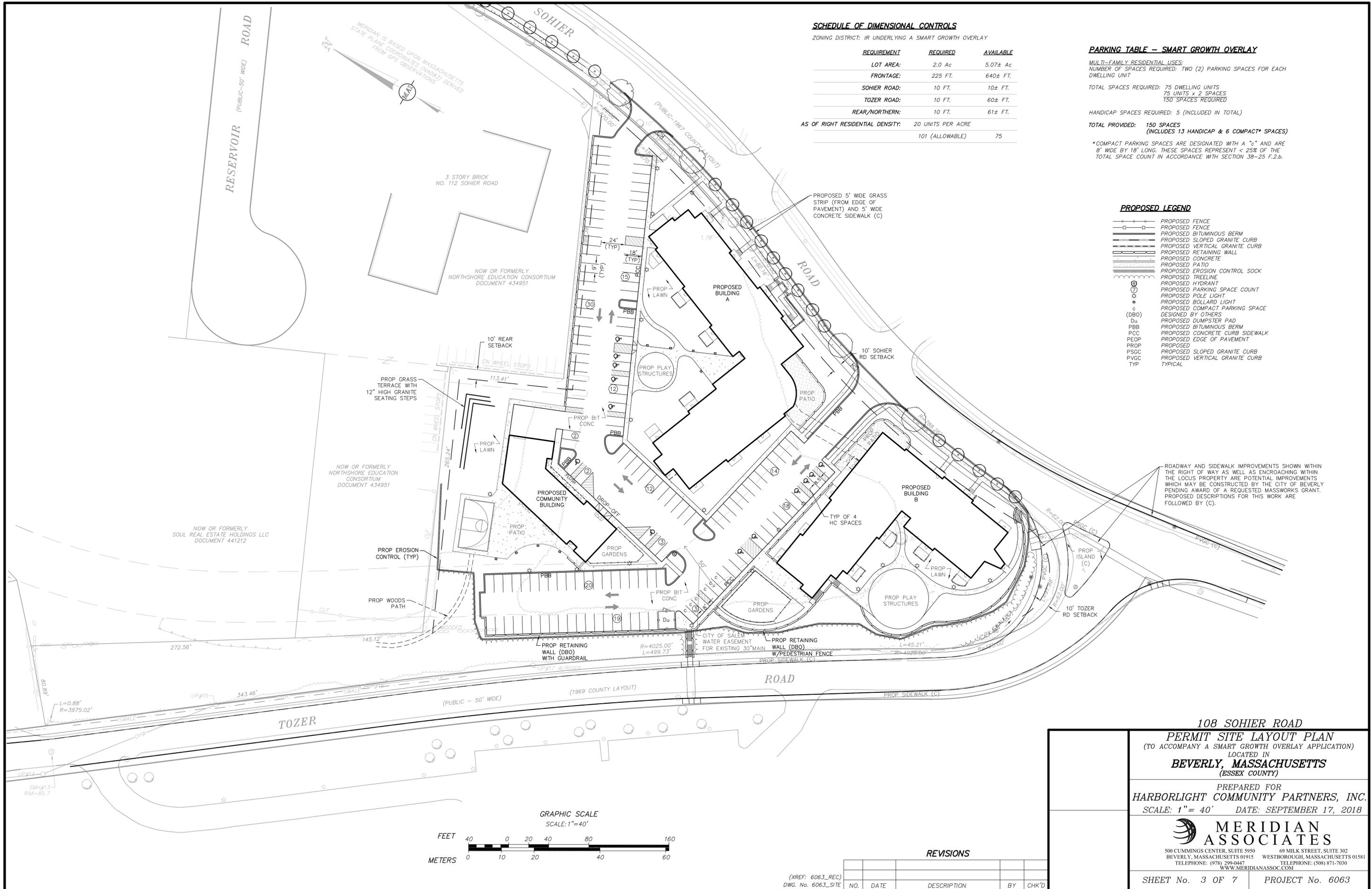
69 MILK STREET, SUITE 302  
WESTBOROUGH, MASSACHUSETTS 01581  
TELEPHONE: (508) 871-7030

SHEET No. 2 OF 7 PROJECT No. 6063

**REVISIONS**

NO.	DATE	DESCRIPTION	BY	CHK'D

BK. #655, PG. #52  
DWG. No. 6063\_REC



**SCHEDULE OF DIMENSIONAL CONTROLS**

ZONING DISTRICT: IR UNDERLYING A SMART GROWTH OVERLAY

REQUIREMENT	REQUIRED	AVAILABLE
LOT AREA:	2.0 Ac	5.07± Ac
FRONTAGE:	225 FT.	640± FT.
SOHIER ROAD:	10 FT.	10± FT.
TOZER ROAD:	10 FT.	60± FT.
REAR/NORTHERN:	10 FT.	61± FT.
AS OF RIGHT RESIDENTIAL DENSITY:	20 UNITS PER ACRE	
	101 (ALLOWABLE)	75

**PARKING TABLE -- SMART GROWTH OVERLAY**

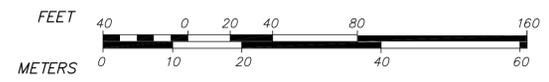
MULTI-FAMILY RESIDENTIAL USES:  
 NUMBER OF SPACES REQUIRED: TWO (2) PARKING SPACES FOR EACH DWELLING UNIT  
 TOTAL SPACES REQUIRED: 75 DWELLING UNITS  
 75 UNITS x 2 SPACES  
 150 SPACES REQUIRED  
 HANDICAP SPACES REQUIRED: 5 (INCLUDED IN TOTAL)  
 TOTAL PROVIDED: 150 SPACES  
 (INCLUDES 13 HANDICAP & 6 COMPACT\* SPACES)  
 \*COMPACT PARKING SPACES ARE DESIGNATED WITH A "c" AND ARE 8' WIDE BY 18' LONG. THESE SPACES REPRESENT < 25% OF THE TOTAL SPACE COUNT IN ACCORDANCE WITH SECTION 38-25 F.2.b.

**PROPOSED LEGEND**

- PROPOSED FENCE
- PROPOSED FENCE
- PROPOSED BITUMINOUS BERM
- PROPOSED SLOPED GRANITE CURB
- PROPOSED VERTICAL GRANITE CURB
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE
- PROPOSED PATIO
- PROPOSED EROSION CONTROL SOCK
- PROPOSED TREELINE
- ⊙ PROPOSED HYDRANT
- ⊙ PROPOSED PARKING SPACE COUNT
- ⊙ PROPOSED POLE LIGHT
- ⊙ PROPOSED BOLLARD LIGHT
- c PROPOSED COMPACT PARKING SPACE
- (DBO) DESIGNED BY OTHERS
- Du PROPOSED DUMPSTER PAD
- PBB PROPOSED BITUMINOUS BERM
- PCC PROPOSED CONCRETE CURB SIDEWALK
- PEOP PROPOSED EDGE OF PAVEMENT
- PROP PROPOSED
- PSGC PROPOSED SLOPED GRANITE CURB
- PVGC PROPOSED VERTICAL GRANITE CURB
- TYP TYPICAL

ROADWAY AND SIDEWALK IMPROVEMENTS SHOWN WITHIN THE RIGHT OF WAY AS WELL AS ENCROACHING WITHIN THE LOCUS PROPERTY ARE POTENTIAL IMPROVEMENTS WHICH MAY BE CONSTRUCTED BY THE CITY OF BEVERLY PENDING AWARD OF A REQUESTED MASSWORKS GRANT. PROPOSED DESCRIPTIONS FOR THIS WORK ARE FOLLOWED BY (C).

GRAPHIC SCALE  
 SCALE: 1"=40'



**108 SOHIER ROAD**  
**PERMIT SITE LAYOUT PLAN**  
 (TO ACCOMPANY A SMART GROWTH OVERLAY APPLICATION)  
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PREPARED FOR  
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 SCALE: 1"= 40' DATE: SEPTEMBER 17, 2018



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SHEET No. 3 OF 7 PROJECT No. 6063

**REVISIONS**

NO.	DATE	DESCRIPTION	BY	CHK'D

(XREF: 6063\_REC)  
 DWG. No. 6063\_SITE

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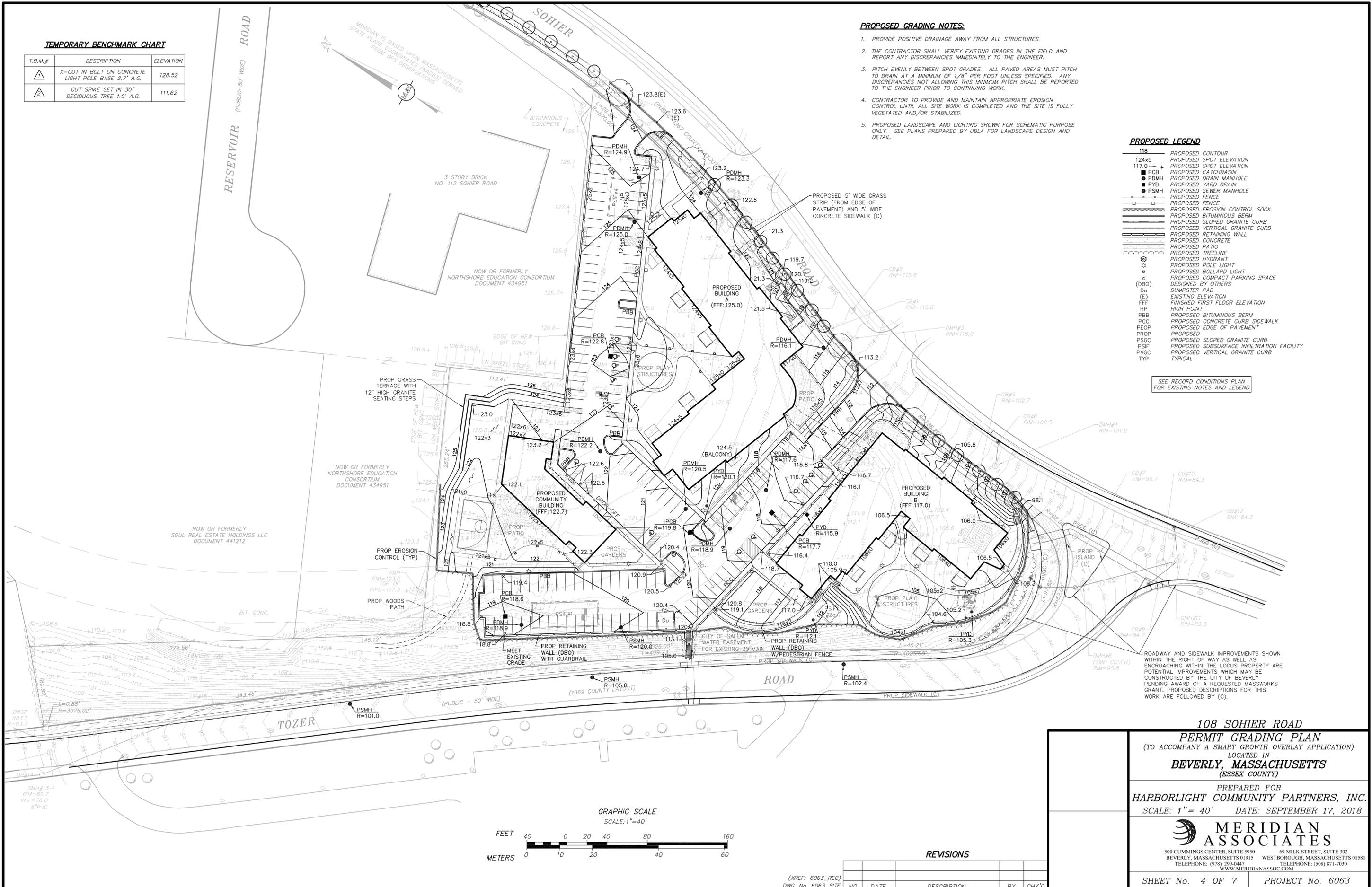
**PROPOSED GRADING NOTES:**

1. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
2. THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM OF 1/8" PER FOOT UNLESS SPECIFIED. ANY DISCREPANCIES NOT ALLOWING THIS MINIMUM PITCH SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
4. CONTRACTOR TO PROVIDE AND MAINTAIN APPROPRIATE EROSION CONTROL UNTIL ALL SITE WORK IS COMPLETED AND THE SITE IS FULLY VEGETATED AND/OR STABILIZED.
5. PROPOSED LANDSCAPE AND LIGHTING SHOWN FOR SCHEMATIC PURPOSE ONLY. SEE PLANS PREPARED BY UBLA FOR LANDSCAPE DESIGN AND DETAIL.

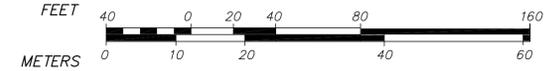
**PROPOSED LEGEND**

118	PROPOSED CONTOUR
124x5	PROPOSED SPOT ELEVATION
117.0	PROPOSED SPOT ELEVATION
■ PCB	PROPOSED CATCHBASIN
● PDMH	PROPOSED DRAIN MANHOLE
■ PYD	PROPOSED YARD DRAIN
● PSMH	PROPOSED SEWER MANHOLE
—	PROPOSED FENCE
—	PROPOSED EROSION CONTROL SOCK
—	PROPOSED BITUMINOUS BERM
—	PROPOSED SLOPED GRANITE CURB
—	PROPOSED VERTICAL GRANITE CURB
—	PROPOSED RETAINING WALL
—	PROPOSED CONCRETE
—	PROPOSED PATIO
—	PROPOSED TREELINE
⊙	PROPOSED HYDRANT
⊙	PROPOSED POLE LIGHT
c	PROPOSED BOLLARD LIGHT
c	PROPOSED COMPACT PARKING SPACE
(DBO)	DESIGNED BY OTHERS
Du	DUMPSTER PAD
(E)	EXISTING ELEVATION
FFF	FINISHED FIRST FLOOR ELEVATION
HP	HIGH POINT
PBB	PROPOSED BITUMINOUS BERM
PCC	PROPOSED CONCRETE CURB SIDEWALK
PEOP	PROPOSED EDGE OF PAVEMENT
PROP	PROPOSED
PSGC	PROPOSED SLOPED GRANITE CURB
PSIF	PROPOSED SUBSURFACE INFILTRATION FACILITY
PVGC	PROPOSED VERTICAL GRANITE CURB
TYP	TYPICAL

SEE RECORD CONDITIONS PLAN FOR EXISTING NOTES AND LEGEND



GRAPHIC SCALE  
SCALE: 1" = 40'



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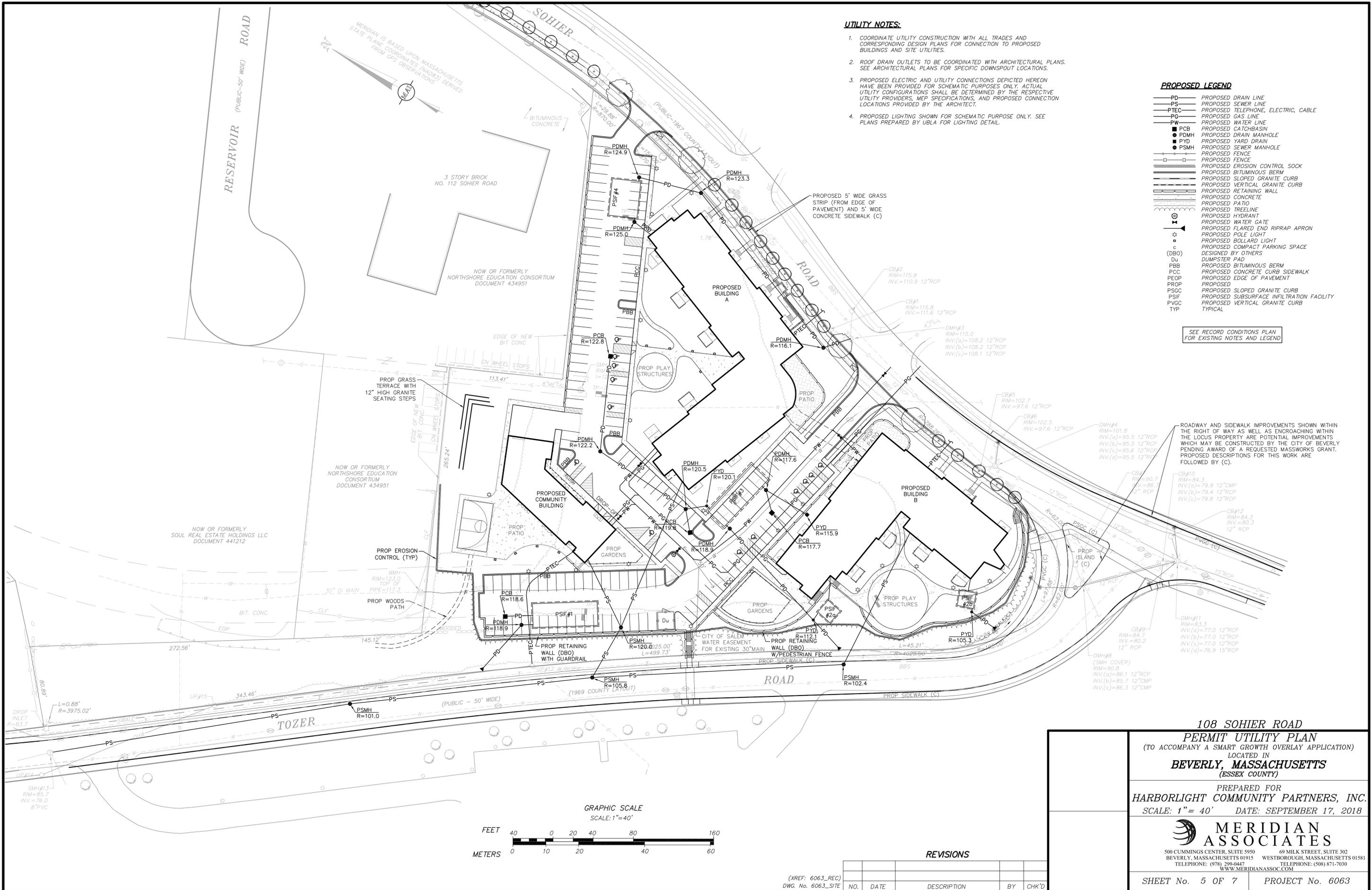
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SHEET No. 4 OF 7    PROJECT No. 6063



**UTILITY NOTES:**

- COORDINATE UTILITY CONSTRUCTION WITH ALL TRADES AND CORRESPONDING DESIGN PLANS FOR CONNECTION TO PROPOSED BUILDINGS AND SITE UTILITIES.
- ROOF DRAIN OUTLETS TO BE COORDINATED WITH ARCHITECTURAL PLANS. SEE ARCHITECTURAL PLANS FOR SPECIFIC DOWNSPOUT LOCATIONS.
- PROPOSED ELECTRIC AND UTILITY CONNECTIONS DEPICTED HEREON HAVE BEEN PROVIDED FOR SCHEMATIC PURPOSES ONLY. ACTUAL UTILITY CONFIGURATIONS SHALL BE DETERMINED BY THE RESPECTIVE UTILITY PROVIDERS, MEP SPECIFICATIONS, AND PROPOSED CONNECTION LOCATIONS PROVIDED BY THE ARCHITECT.
- PROPOSED LIGHTING SHOWN FOR SCHEMATIC PURPOSE ONLY. SEE PLANS PREPARED BY UBLA FOR LIGHTING DETAIL.

**PROPOSED LEGEND**

- PD PROPOSED DRAIN LINE
- PS PROPOSED SEWER LINE
- PTEC PROPOSED TELEPHONE, ELECTRIC, CABLE
- PG PROPOSED GAS LINE
- PW PROPOSED WATER LINE
- PCB PROPOSED CATCHBASIN
- PDMH PROPOSED DRAIN MANHOLE
- PYD PROPOSED YARD DRAIN
- PSMH PROPOSED SEWER MANHOLE
- PROPOSED FENCE
- PROPOSED EROSION CONTROL SOCK
- PROPOSED BITUMINOUS BERM
- PROPOSED SLOPED GRANITE CURB
- PROPOSED VERTICAL GRANITE CURB
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE
- PROPOSED PATIO
- PROPOSED TREELINE
- PROPOSED HYDRANT
- PROPOSED WATER GATE
- PROPOSED FLARED END RIPRAP APRON
- PROPOSED POLE LIGHT
- PROPOSED BOLLARD LIGHT
- PROPOSED COMPACT PARKING SPACE DESIGNED BY OTHERS
- (DBO) DUMPSTER PAD
- Du PROPOSED BITUMINOUS BERM
- PBB PROPOSED CONCRETE CURB SIDEWALK
- PEOP PROPOSED EDGE OF PAVEMENT
- PROP PROPOSED
- PSGC PROPOSED SLOPED GRANITE CURB
- PSIF PROPOSED SUBSURFACE INFILTRATION FACILITY
- PVGC PROPOSED VERTICAL GRANITE CURB
- TYP TYPICAL

SEE RECORD CONDITIONS PLAN FOR EXISTING NOTES AND LEGEND

ROADWAY AND SIDEWALK IMPROVEMENTS SHOWN WITHIN THE RIGHT OF WAY AS WELL AS ENCROACHING WITHIN THE LOCUS PROPERTY ARE POTENTIAL IMPROVEMENTS WHICH MAY BE CONSTRUCTED BY THE CITY OF BEVERLY PENDING AWARD OF A REQUESTED MASSWORKS GRANT. PROPOSED DESCRIPTIONS FOR THIS WORK ARE FOLLOWED BY (C).

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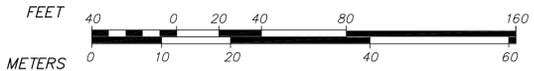
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SHEET No. 5 OF 7 PROJECT No. 6063

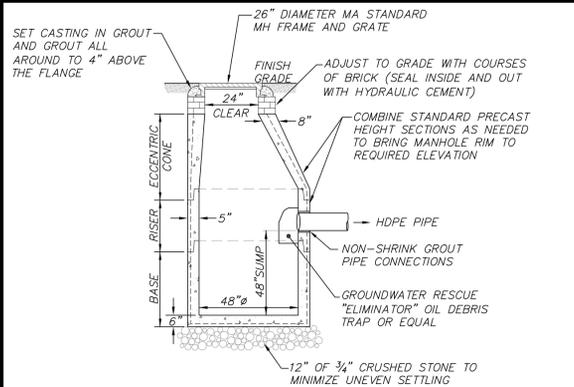
GRAPHIC SCALE  
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**REVISIONS**

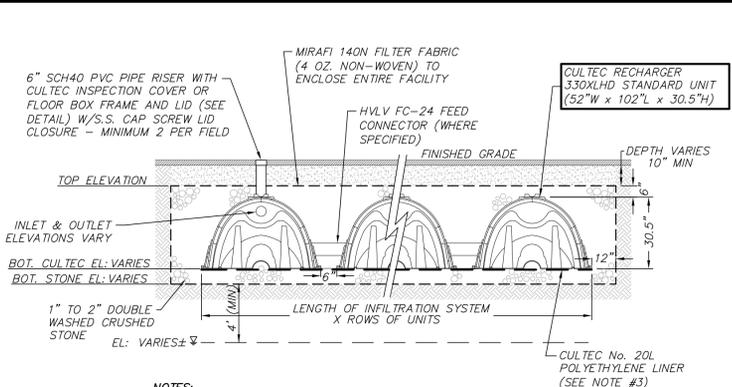
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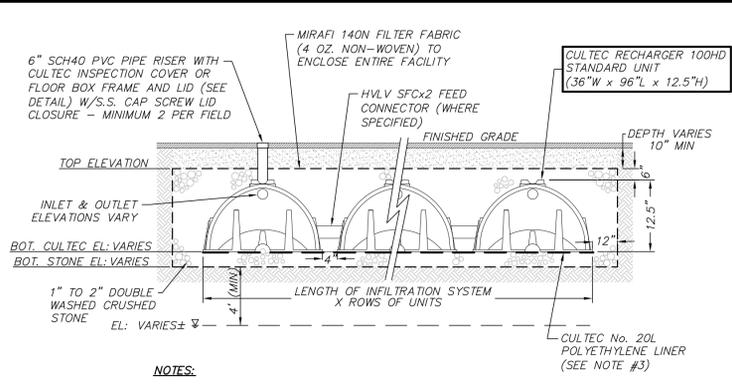
- NOTES:**
- 48" DIAMETER CATCHBASIN MANHOLE AS MANUFACTURED BY SHEA CONCRETE PRODUCTS OR EQUAL.
  - CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
  - REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ IN/LINEAL FT AND 0.12 SQ IN (BOTH WAYS) BASE BOTTOM.
  - H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS.
  - PROVIDE EXTERIOR DAMPPROOFING AS REQUIRED.

**CATCHBASIN WITH OIL DEBRIS TRAP**  
(NOT TO SCALE)



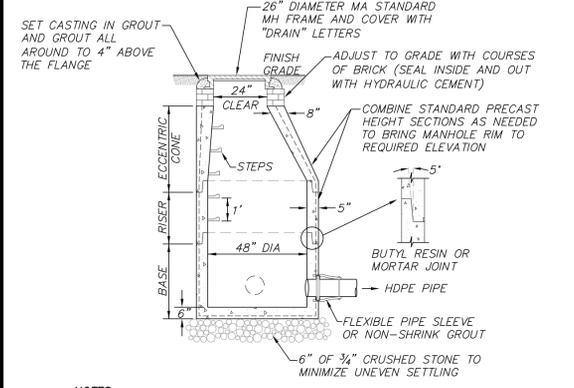
- NOTES:**
- PROVIDE MINIMUM 4 FOOT SEPARATION BETWEEN BOTTOM OF THE 6 INCH DOUBLE WASHED STONE LAYER AND SEASONAL HIGH GROUNDWATER TABLE.
  - REMOVE ALL TOPSOIL AND SUBSOIL IN AREA OF PROPOSED INFILTRATION FACILITY AND REPLACE WITH SAND CONFORMING TO 310 CMR 15.255(3), MASSACHUSETTS STATE ENVIRONMENTAL CODE, TITLE V.
  - CULTEC No. 20L POLYETHYLENE LINER TO BE PLACED BENEATH CHAMBERS UTILIZING INTERNAL MANIFOLD ONLY.

**SUBSURFACE INFILTRATION FACILITY**  
(NOT TO SCALE)



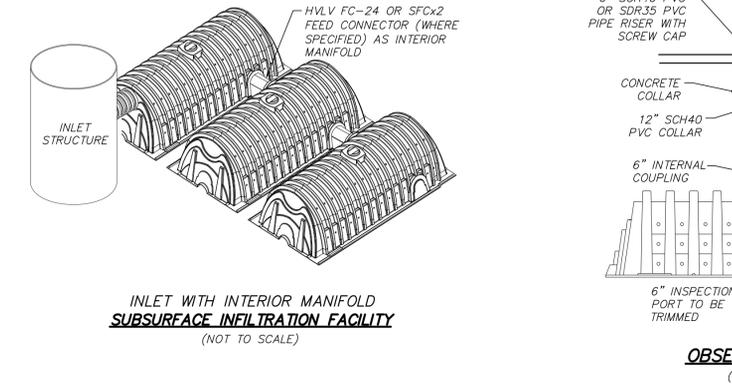
- NOTES:**
- PROVIDE MINIMUM 4 FOOT SEPARATION BETWEEN BOTTOM OF THE 6 INCH DOUBLE WASHED STONE LAYER AND SEASONAL HIGH GROUNDWATER TABLE.
  - REMOVE ALL TOPSOIL AND SUBSOIL IN AREA OF PROPOSED INFILTRATION FACILITY AND REPLACE WITH SAND CONFORMING TO 310 CMR 15.255(3), MASSACHUSETTS STATE ENVIRONMENTAL CODE, TITLE V.
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**SUBSURFACE INFILTRATION FACILITY**  
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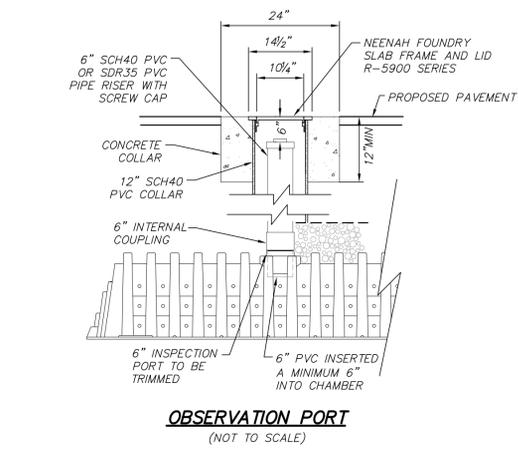
- NOTES:**
- 48" DIAMETER DRAIN MANHOLE AS MANUFACTURED BY SHEA CONCRETE PRODUCTS OR EQUAL.
  - CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
  - REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ IN/LINEAL FT AND 0.12 SQ IN (BOTH WAYS) BASE BOTTOM.
  - H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS.
  - BUTYL RESIN JOINT CONFORMS TO LATEST ASTM C990 SPEC.
  - STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP CONFORMS TO LATEST ASTM C478 SPEC.
  - PROVIDE EXTERIOR DAMPPROOFING AS REQUIRED.

**DRAIN MANHOLE DETAIL**  
(NOT TO SCALE)

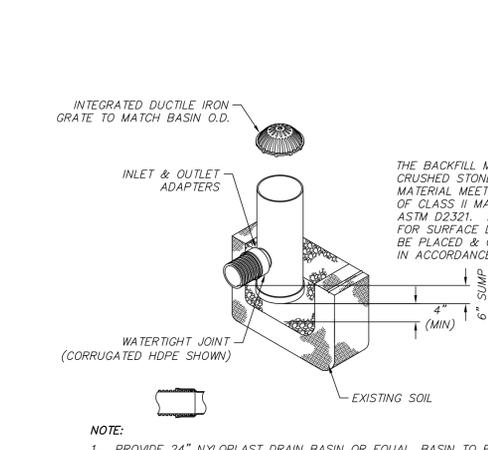


- NOTES:**
- PROVIDE MINIMUM 4 FOOT SEPARATION BETWEEN BOTTOM OF THE 6 INCH DOUBLE WASHED STONE LAYER AND SEASONAL HIGH GROUNDWATER TABLE.
  - REMOVE ALL TOPSOIL AND SUBSOIL IN AREA OF PROPOSED INFILTRATION FACILITY AND REPLACE WITH SAND CONFORMING TO 310 CMR 15.255(3), MASSACHUSETTS STATE ENVIRONMENTAL CODE, TITLE V.
  - CULTEC No. 20L POLYETHYLENE LINER TO BE PLACED BENEATH CHAMBERS UTILIZING INTERNAL MANIFOLD ONLY.

**INLET WITH INTERIOR MANIFOLD SUBSURFACE INFILTRATION FACILITY**  
(NOT TO SCALE)

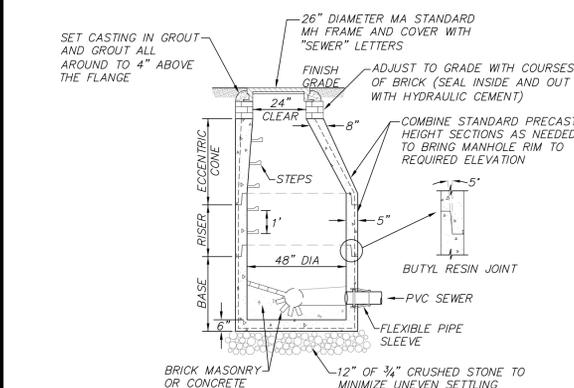


**OBSERVATION PORT**  
(NOT TO SCALE)



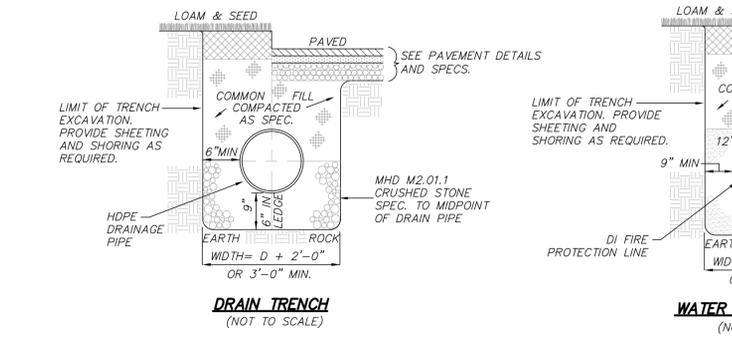
- NOTE:**
- PROVIDE 24" NYLOPLAST DRAIN BASIN OR EQUAL BASIN TO BE MANUFACTURED FROM PVC PIPE STOCK.
  - FRAMES AND GRATES SHALL BE DUCTILE IRON AND COMPLY TO H-20 LOADING CAPACITY.
  - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE.
  - SEE SITE PLAN FOR RIM AND INVERTS.

**PROPOSED YARD DRAIN**  
(NOT TO SCALE)

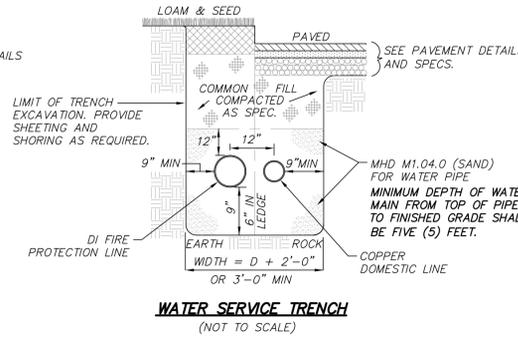


- NOTES:**
- 48" DIAMETER SEWER MANHOLE AS MANUFACTURED BY SHEA CONCRETE PRODUCTS OR EQUAL.
  - CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
  - REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ IN/LINEAL FT AND 0.12 SQ IN (BOTH WAYS) BASE BOTTOM.
  - H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS.
  - BUTYL RESIN JOINT CONFORMS TO LATEST ASTM C990 SPEC.
  - STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP CONFORMS TO LATEST ASTM C478 SPEC.
  - PROVIDE EXTERIOR DAMPPROOFING AS REQUIRED.

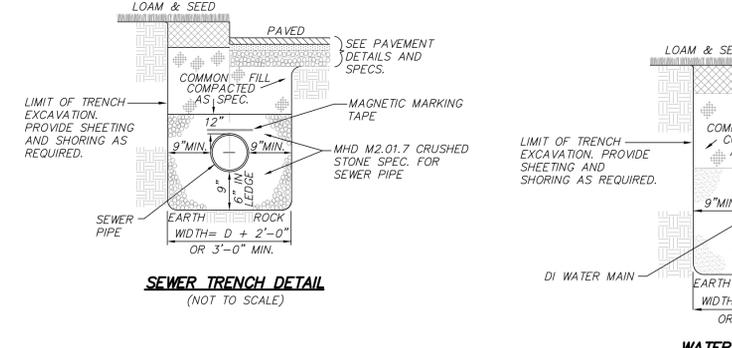
**SEWER MANHOLE DETAIL**  
(NOT TO SCALE)



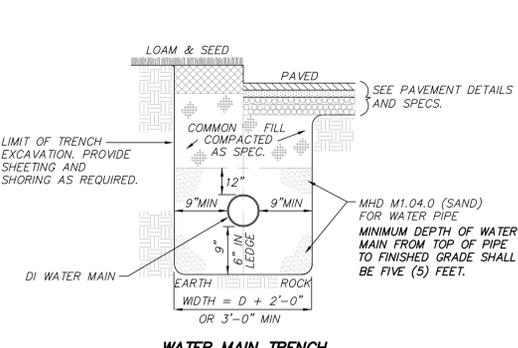
**DRAIN TRENCH**  
(NOT TO SCALE)



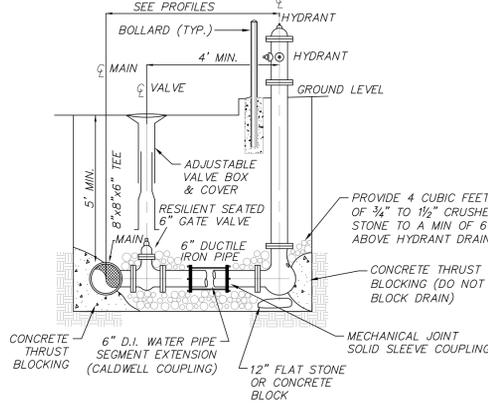
**WATER SERVICE TRENCH**  
(NOT TO SCALE)



**SEWER TRENCH DETAIL**  
(NOT TO SCALE)



**WATER MAIN TRENCH**  
(NOT TO SCALE)



**HYDRANT AND GATE VALVE DETAIL W/ MECHANICAL JOINT COUPLING**  
(NOT TO SCALE)

**SOIL TESTING INFORMATION**

DATE: AUGUST 8, 2018  
CONDUCTED BY: CHRIS BROYLES (SE#13780) FOR MERIDIAN ASSOCIATES, INC.

**TEST PIT TP-1**

0"-10"	A	LOAMY SAND
10"-20"	B <sub>w</sub>	LOAMY SAND
20"-42"	C <sub>1</sub>	EXTREMELY GRAVELLY LOAMY SAND
42"-77"	C <sub>2</sub>	LOAMY SAND
77"-108"	C <sub>3</sub>	GRAVELLY LOAMY SAND
NO ESHGW PRESENT		

**TEST PIT TP-3**

0"-4"	ASPHALT	
4"-10"	HTM/FILL	
10"-24"	C <sub>1</sub>	FINE SANDY LOAMY SAND
24"-126"	C <sub>2</sub>	SANDY LOAM
126"-144"	C <sub>3</sub>	GRAVELLY SANDY LOAM
NO ESHGW PRESENT		

**TEST PIT TP-2**

0"-4"	ASPHALT	
4"-10"	HTM/FILL	
10"-22"	C <sub>1</sub>	SILT LOAM
22"-180"	C <sub>2</sub>	LOAMY SAND
REDOX @ 108"		
WEAPING @ 173"		
STANDING @ 179"		

**TEST PIT TP-4**

0"-51"	HTM/FILL	
51"-60"	B <sub>w</sub>	SANDY LOAM
60"-84"	C <sub>1</sub>	GRAVELLY SANDY LOAM
84"-122"	C <sub>2</sub>	VERY GRAVELLY SANDY LOAM
NO ESHGW PRESENT		

**TEST PIT TP-5**

0"-4"	ASPHALT	
4"-10"	HTM/FILL	
10"-32"	C <sub>1</sub>	LOAMY SAND
32"-62"	C <sub>2</sub>	LOAMY SAND
62"-90"	C <sub>3</sub>	LOAMY SAND
NO ESHGW PRESENT		

**TEST PIT TP-6**

6"-0"	O	ORGANICS
0"-6"	A	SANDY LOAM
6"-18"	B <sub>w</sub>	SANDY LOAM
18"-48"	C	SANDY LOAM
NO ESHGW PRESENT		

**108 SOHIER ROAD**

**PERMIT SITE DETAILS**  
(TO ACCOMPANY A SMART GROWTH OVERLAY APPLICATION)  
LOCATED IN  
**BEVERLY, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**HARBORLIGHT COMMUNITY PARTNERS, INC.**  
SCALE: 1" = 40' DATE: SEPTEMBER 17, 2018

**MERIDIAN ASSOCIATES**

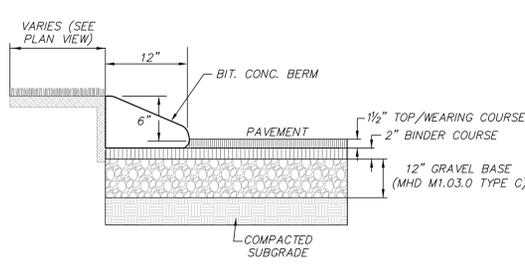
500 CUMMINGS CENTER, SUITE 5950 BEVERLY, MASSACHUSETTS 01915  
69 MILK STREET, SUITE 302 WESTBOROUGH, MASSACHUSETTS 01581  
TELEPHONE: (978) 299-0447 TELEPHONE: (508) 871-7030  
WWW.MERIDIANASSOC.COM

SHEET No. 6 OF 7 PROJECT No. 6063

**REVISIONS**

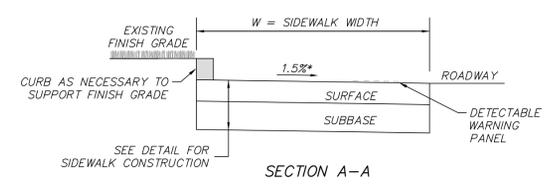
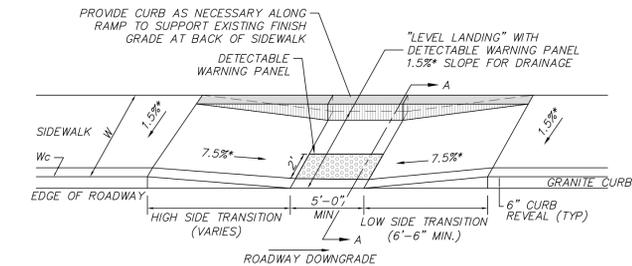
NO.	DATE	DESCRIPTION	BY	CHK'D

DWG. No. 6063\_DETAIL



**NOTE:**  
THE WEARING AND BINDER COURSES SHALL CONSIST OF CLASS I TYPE I-1 BITUMINOUS CONCRETE

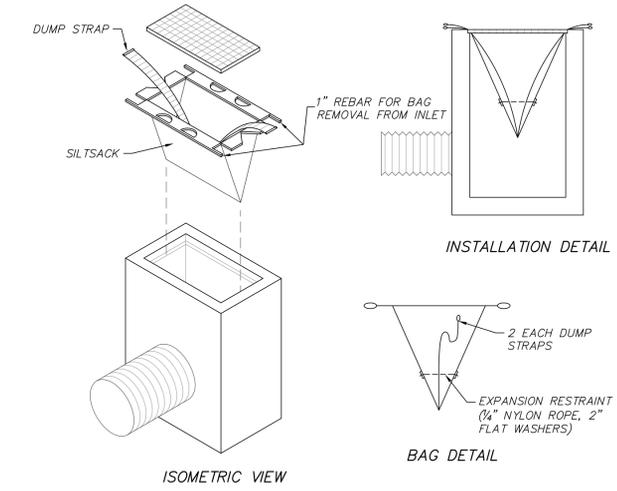
**BITUMINOUS CONCRETE AND BERM**  
(NOT TO SCALE)



**LEGEND:**  
HSL = HIGH SIDE TRANSITION (SEE MASSDOT CONSTRUCTION STANDARD E 107.9.0)  
W = SIDEWALK WIDTH  
\* = TOLERANCE FOR CONSTRUCTION ±0.5%  
USABLE SIDEWALK WIDTH PER AAB = W-Wc  
USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"

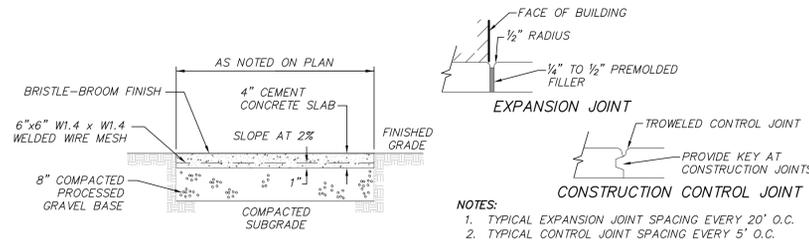
- NOTES:**
1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT REGULATION OF THE ARCHITECTURAL ACCESS BOARD, THE AMERICANS WITH DISABILITIES ACT AND CURRENT MASSDOT CONSTRUCTION STANDARDS.
  2. DETECTABLE WARNING PANELS SHALL BE INSTALLED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD E 107.6.5.

**IN-LINE WHEELCHAIR RAMP**  
(NOT TO SCALE)



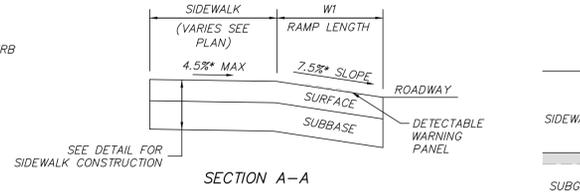
**NOTE:**  
SILT SACKS SHALL BE INSPECTED WEEKLY AND SILT SHALL BE REMOVED WHEN ACCUMULATED TO ALLOW CATCH BASIN TO FUNCTION PROPERLY

**CATCH BASIN FILTER (SILT SAC) DETAIL**  
(NOT TO SCALE)



**CONCRETE WALKWAY**  
(NOT TO SCALE)

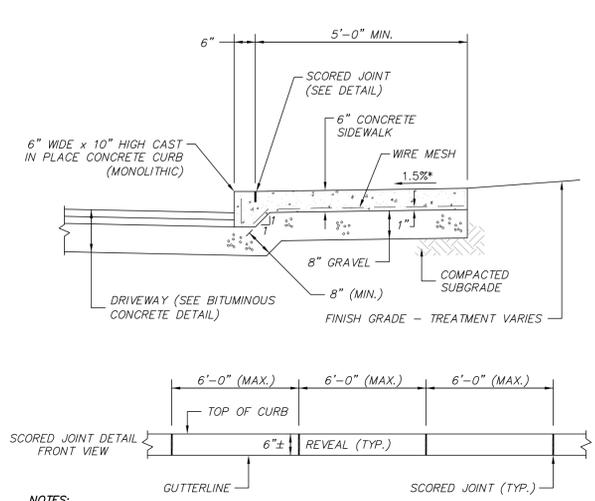
- NOTES:**
1. TYPICAL EXPANSION JOINT SPACING EVERY 20' O.C.
  2. TYPICAL CONTROL JOINT SPACING EVERY 5' O.C.



**LEGEND:**  
W = SIDEWALK WIDTH  
\* = TOLERANCE FOR CONSTRUCTION ±0.5%  
USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'-0"

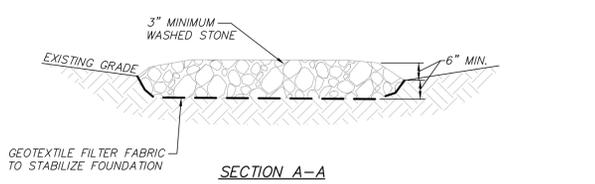
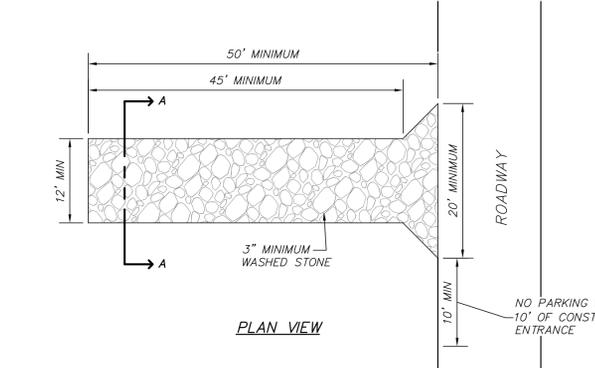
- NOTES:**
1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT REGULATION OF THE ARCHITECTURAL ACCESS BOARD, THE AMERICANS WITH DISABILITIES ACT AND CURRENT MASSDOT CONSTRUCTION STANDARDS.
  2. DETECTABLE WARNING PANELS SHALL BE INSTALLED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD E 107.6.5.

**STRAIGHT WHEELCHAIR RAMP**  
(NOT TO SCALE)



- NOTES:**
1. MONOLITHIC CONCRETE CURB SHALL NOT BE USED ON ANY PUBLIC STREET OR WAY.
  2. MONOLITHIC CONCRETE CURB MAY BE USED ON PRIVATE WAYS, DRIVEWAYS AND IN PARKING LOTS.

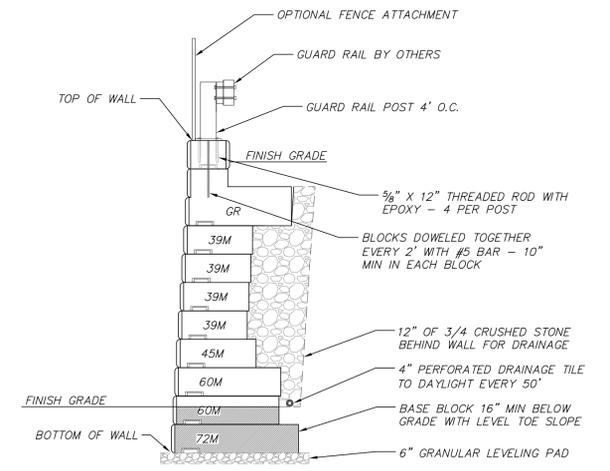
**CAST IN PLACE CONCRETE CURB & SIDEWALK**  
(NOT TO SCALE)



**TEMPORARY STABILIZED CONSTRUCTION ENTRANCE**  
(NOT TO SCALE)

**EROSION CONTROL SEQUENCE**

1. LIMITS OF CONSTRUCTION ARE TO BE STAKED OUT AS THE FIRST STEP. NO CONSTRUCTION EQUIPMENT IS ALLOWED BEYOND THE LIMITS AS STAKED. THE AREA BEYOND THE LIMITS OF CONSTRUCTION IS TO REMAIN UNDISTURBED.
2. PLACE EROSION CONTROL SOCK AT LIMITS OF CONSTRUCTION AND AT TOE OF FUTURE SLOPES AS SHOWN ON THE SITE PLANS.
3. AREAS OF DISTURBANCE TO BE KEPT TO A MINIMUM. THE AMOUNT OF TIME AN AREA IS LEFT UNSTABILIZED WILL BE KEPT TO A MINIMUM.
4. NO MORE THAN 14 DAYS AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED ON A PORTION OF THE PROJECT, STABILIZE THAT DISTURBED AREA WITH TEMPORARY SEEDING, TEMPORARY MULCHING, SOO, HYDROSEED, JUTE NETTING, ETC. AS CONDITIONS WARRANT.
5. LEAVE TEMPORARY EROSION CONTROL IN PLACE UNTIL ALL DISTURBED AREAS ARE REVEGETATED.
6. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND ARE TO BE PERIODICALLY INSPECTED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT THE PROJECT CONSTRUCTION.



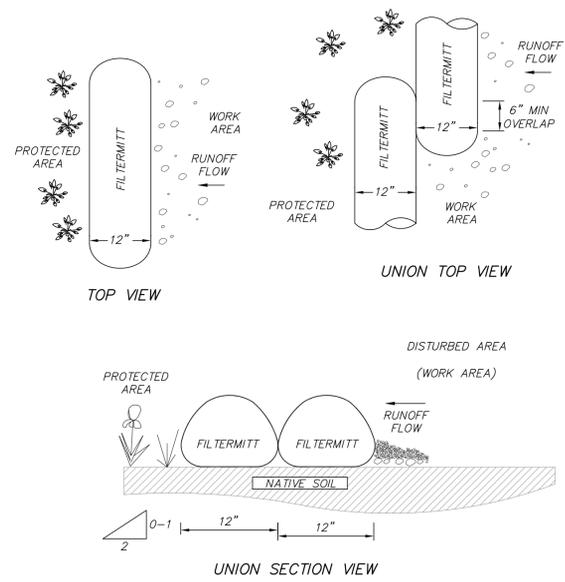
- NOTES:**
1. DETAIL PROVIDED FOR SCHEMATIC PURPOSE ONLY. FINAL WALL DESIGN TO BE PROVIDED BY A STRUCTURAL ENGINEER.
  2. MINIMUM HEIGHT FROM TOP OF GUARDRAIL TO FINISHED GRADE IS 2'-6".
  3. DETAIL PROVIDED BY SHEA CONCRETE, INC.
  4. SEE SITE PLANS FOR WALL LOCATIONS AND ELEVATIONS.

**LARGE CONCRETE BLOCK GRAVITY WALL**  
(NOT TO SCALE)

**FILTERMITT COMPONENTS:**  
OUTSIDE CASING: 100% ORGANIC HESSIAN  
FILLER INGREDIENT: FIBER ROOT MULCH  
• BLEND OF COARSE & FINE COMPOST & SHREDDED WOOD  
• PARTICLE SIZES: 100% PASSING A 3" SCREEN; 90-100% PASSING A 1" SCREEN; 70-100% PASSING A 0.75" SCREEN; 30-75% PASSING A 0.25" SCREEN  
• WEIGHT: APPROXIMATELY 850 LBS/CU YD (AVE 30 LBS/LF)

**NOTE:**  
PROVIDE FILTERMITT EROSION CONTROL AS MANUFACTURED BY GROUNDCSCAPES EXPRESS, INC P.O. BOX 737 WRENTHAM, MA. 02093 (508)-384-7140 OR EQUAL

**FILTERMITT INSTALLATION:**  
WITH THE NEWEST TECHNOLOGY AND EQUIPMENT, SECTIONS CAN BE CONSTRUCTED ON SITE IN LENGTHS FROM 1' TO 100'.  
SECTIONS CAN ALSO BE DELIVERED TO THE SITE IN LENGTHS FROM 1' TO 8'.  
THE FLEXIBILITY OF FILTERMITT ALLOWS IT TO CONFORM TO ANY CONTOUR TERRAIN WHILE HOLDING A SLIGHTLY OVAL SHAPE AT 12" HIGH BY 12" WIDE.  
WHERE SECTION ENDS MEET, THERE SHALL BE AN OVERLAP OF 6" OR GREATER.



**EROSION CONTROL SOCK - FILTERMITT DETAIL**  
(NOT TO SCALE)

**REVISIONS**

NO.	DATE	DESCRIPTION	BY	CHK'D

DWG. No. 6063\_DETAL

**108 SOHIER ROAD**  
**PERMIT SITE DETAILS**  
(TO ACCOMPANY A SMART GROWTH OVERLAY APPLICATION)  
LOCATED IN  
**BEVERLY, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**HARBORLIGHT COMMUNITY PARTNERS, INC.**  
SCALE: 1" = 40' DATE: SEPTEMBER 17, 2018

**MERIDIAN ASSOCIATES**  
500 CUMMINGS CENTER, SUITE 5950 69 MILK STREET, SUITE 302  
BEVERLY, MASSACHUSETTS 01915 WESTBOROUGH, MASSACHUSETTS 01581  
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SHEET No. 7 OF 7 PROJECT No. 6063