

*SITE DEVELOPMENT PLANS*

MAP: 20 LOT: 107 & 108

*480-482 RANTOUL STREET*

LOCATED IN

*BEVERLY, MASSACHUSETTS*

DATE: MARCH 25, 2016

REVISED: APRIL 19, 2016

OWNER:

LOT 107  
RANTOUL STREET, LLC  
112 ELLIOTT STREET  
BEVERLY, MASSACHUSETTS 01915

LOT 108

FORCE REALTY, LLC  
112 ELLIOTT STREET  
BEVERLY, MASSACHUSETTS 01915

APPLICANT:

BEVERLY CROSSING 480, LLC  
15 RANTOUL STREET  
BEVERLY, MASSACHUSETTS, 01915

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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SHEET 7	DETAILS
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*[Signature]*  
4/19/16



AREA MAP  
SCALE: 1"=800'

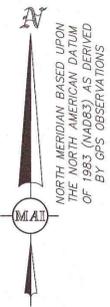


BEVERLY PLANNING BOARD APPROVAL

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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE





**PARKING TABLE:**

**REQUIRED:**  
RESIDENTIAL:

62 ONE BEDROOM UNITS  
1 SPACE PER EACH = 62 SPACES  
28 TWO BEDROOM UNITS  
2 SPACES PER EACH = 56 SPACES  
TOTAL REQUIRED = 118 SPACES

**PROVIDED:**  
RESIDENTIAL:

REGULAR PARKING SPACES = 97 SPACES  
COMPACT PARKING SPACES = 6 SPACES  
HANDICAP PARKING SPACES = 5 SPACES  
TOTAL SPACES = 108 SPACES (SPECIAL PERMIT REQUESTED)  
COMPACT PARKING SPACES LESS THAN 25% OF THE TOTAL  
ON SITE PARKING SPACES AS ALLOWED BY SECTION 30-25(F)(2)(b).

**REQUIRED:**  
RETAIL:

1900 SF OF RETAIL SPACE GROSS FLOOR AREA  
1 SPACE PER 275 SF OF GROSS FLOOR AREA = 7 SPACES

**PROVIDED:**  
RETAIL:

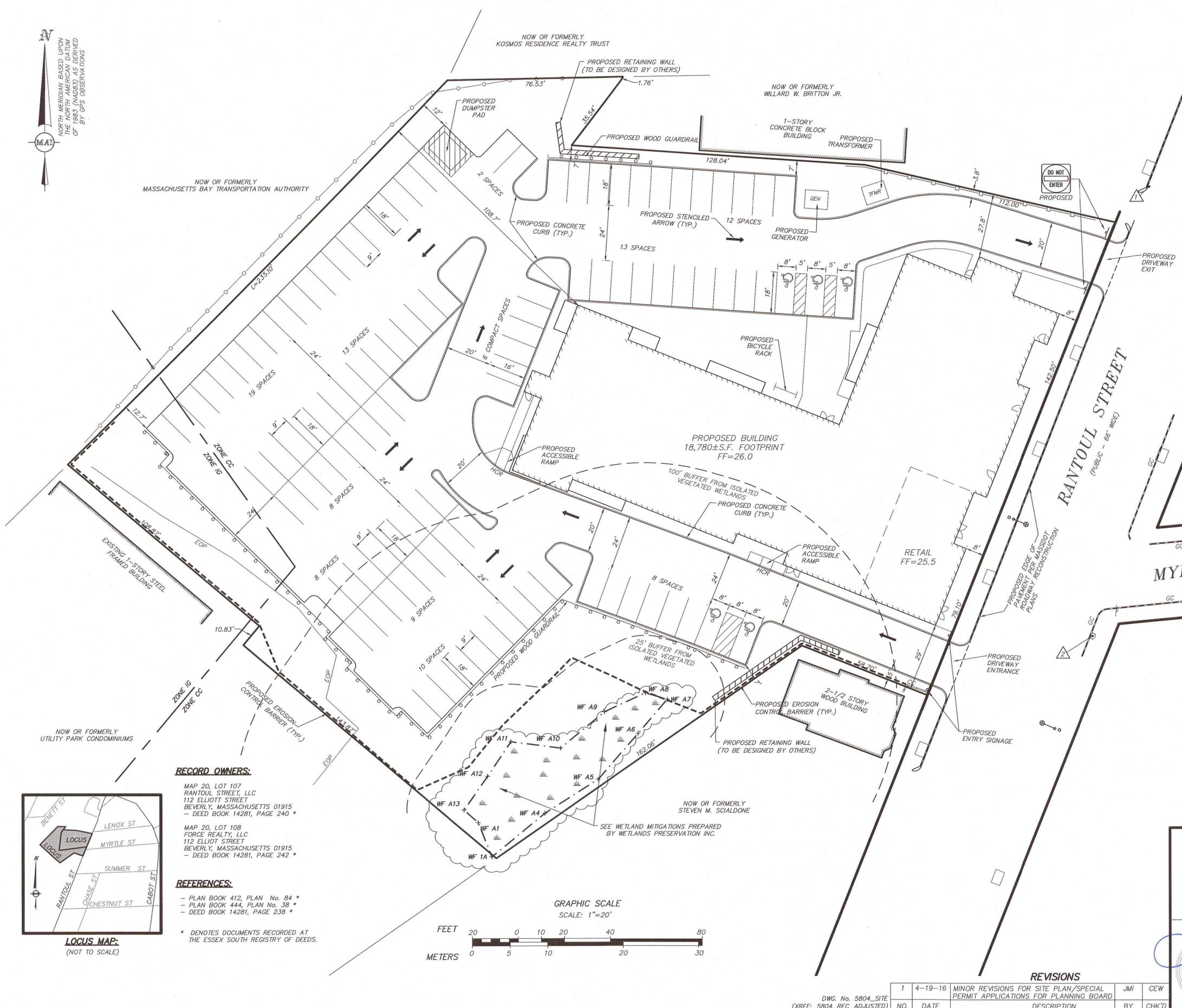
STREET  
RANTOUL STREET ABUTTING PARCEL FRONTAGE = 7 SPACES

**SCHEDULE OF DIMENSIONAL CONTROLS:**

	REQUIRED	EXISTING	PROPOSED
ZONING DISTRICT: CC (CENTRAL BUSINESS DISTRICT)			
MINIMUM LOT AREA:	NONE	85,293 SF	85,293 SF
MAXIMUM BUILDING HEIGHT:	55 FT	-	55 FT
MINIMUM LOT FRONTAGE:	NONE	221.6 FT	221.6 FT
FRONT YARD SETBACK:	NONE	0 FT	8 FT
SIDE YARD SETBACK:	NONE	0 FT	27.8 FT
REAR YARD SETBACK:	NONE	0 FT	108.7 FT

**LEGEND:**

- ⊗ PROPOSED WATER GATE
- PE PROPOSED ELECTRIC LINE
- PG PROPOSED GAS LINE
- PT PROPOSED TELEPHONE LINE
- PS PROPOSED SEWER LINE
- PW PROPOSED WATER LINE
- PC PROPOSED CABLE LINE
- LS LANDSCAPE
- PVC POLYVINYL CHLORIDE
- RWC CONCRETE RETAINING WALL
- TYP. TYPICAL
- PROPOSED EROSION CONTROL
- 34 ONE FOOT CONTOUR
- 35 FIVE FOOT CONTOUR
- + 34.6 SPOT ELEVATION
- D- COMPILED DRAIN
- E- COMPILED ELECTRIC LINE
- S- COMPILED SEWER DRAIN LINE
- G- COMPILED GAS LINE
- W- COMPILED WATER LINE
- TERMINUS UNKNOWN
- GRANITE CURB
- STREET PAINT LINE
- CONCRETE
- CRUSHED STONE
- LANDSCAPE
- RETAINING WALL
- CHAINLINK FENCE
- BUILDING OVERHANG
- ZONING LINE
- WOOD GUARDRAIL
- ELECTRIC MANHOLE
- HH HANDHOLE
- X LIGHT
- ⊕ GAS METER
- ⊕ GAS GATE
- ⊕ MANHOLE
- ⊕ TELEPHONE MANHOLE
- ⊕ SEWER MANHOLE
- ⊕ DRAIN MANHOLE
- ⊕ CATCH BASIN
- ⊕ WATER GATE
- ⊕ HYDRANT
- ⊕ WATER SERVICE
- DECIDUOUS TREE
- ⊕ SIGN
- ⊕ BOLLARD
- A.G. ABOVE GROUND
- BIT. CONC. BITUMINOUS CONCRETE
- CI CAST IRON
- FFF FINISHED FIRST FLOOR
- GC GRANITE CURB
- GC GAS GATE
- HH HANDHOLE



**RECORD OWNERS:**

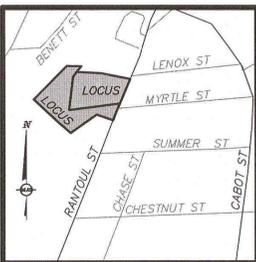
MAP 20, LOT 107  
RANTOUL STREET, LLC  
112 ELLIOT STREET  
BEVERLY, MASSACHUSETTS 01915  
- DEED BOOK 14281, PAGE 240 \*

MAP 20, LOT 108  
FORCE REALTY, LLC  
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**REFERENCES:**

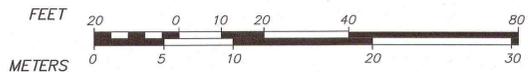
- PLAN BOOK 412, PLAN No. 84 \*  
- PLAN BOOK 444, PLAN No. 38 \*  
- DEED BOOK 14281, PAGE 238 \*

\* DENOTES DOCUMENTS RECORDED AT THE ESSEX SOUTH REGISTRY OF DEEDS.



**LOCUS MAP:**  
(NOT TO SCALE)

GRAPHIC SCALE  
SCALE: 1"=20'



**REVISIONS**

NO.	DATE	DESCRIPTION	BY	CHK'D
1	4-19-16	MINOR REVISIONS FOR SITE PLAN/SPECIAL PERMIT APPLICATIONS FOR PLANNING BOARD	JMI	CEW

DWG. No. 5804\_SITE  
(XREF: 5804\_REC\_ADJUSTED)

**480-482 RANTOUL STREET**  
**LAYOUT PLAN**  
LOCATED IN  
**BEVERLY, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**BEVERLY CROSSING 480, LLC**  
SCALE: 1" = 20' DATE: MARCH 25, 2016

**MERIDIAN ASSOCIATES**

500 CUMMINGS CENTER, SUITE 5950 BEVERLY, MASSACHUSETTS 01915  
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SHEET No. 3 OF 8

PROJECT No. 5804



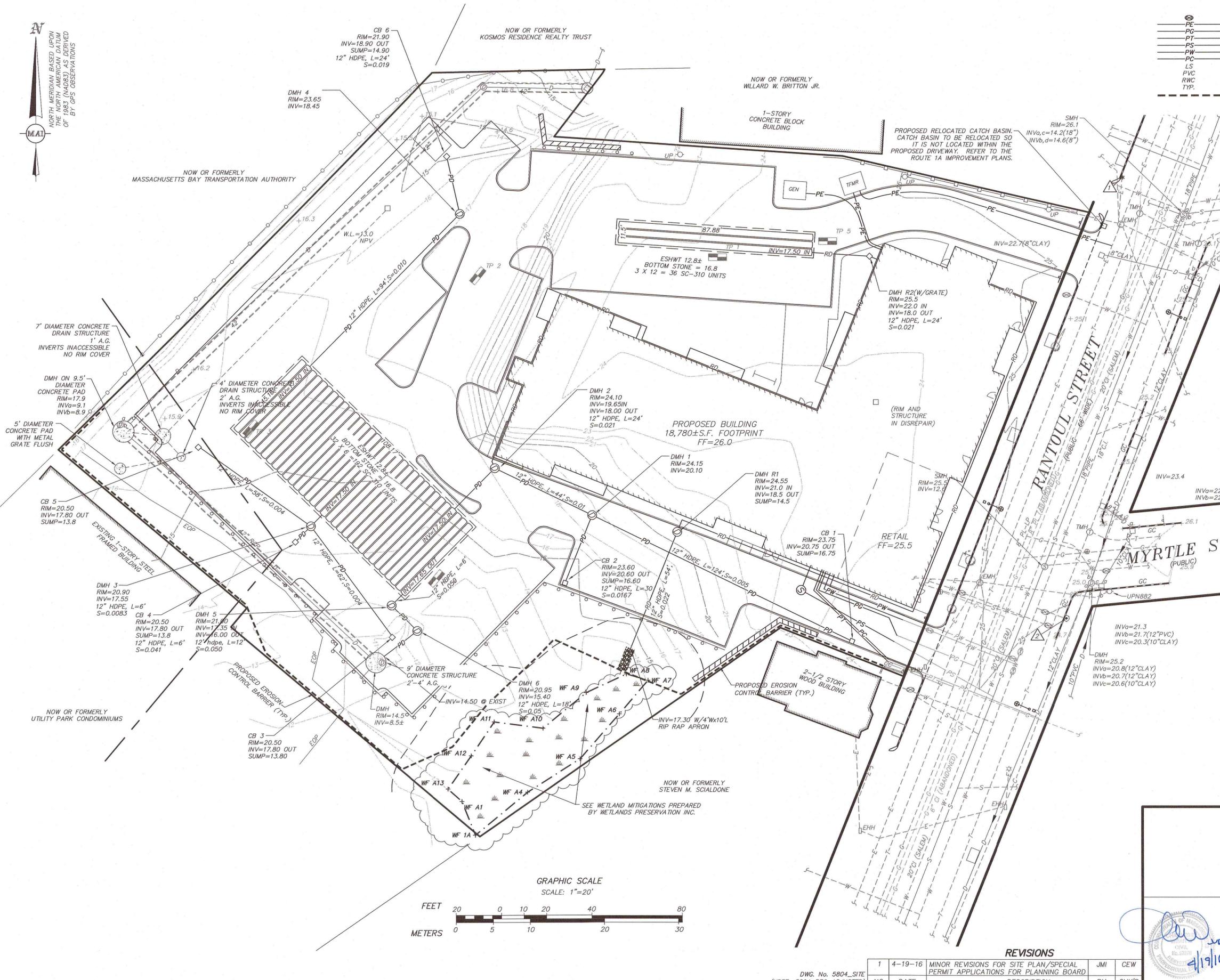
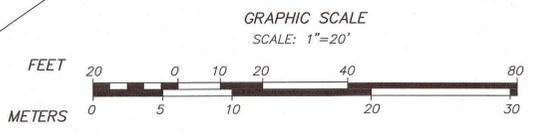
N  
NORTH MERIDIAN BASED UPON  
THE NORTH AMERICAN DATUM  
OF 1983 (NAD83), AS DERIVED  
BY GPS OBSERVATIONS  
M.A.I.

**LEGEND:**

- ⊗ PROPOSED WATER GATE
- PE — PROPOSED ELECTRIC LINE
- PG — PROPOSED GAS LINE
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- FFF FINISHED FIRST FLOOR
- GC GRANITE CURB
- GG GAS GATE
- HH HANDHOLE

**PROPOSED UTILITY NOTES:**

1. THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER AND ENGINEER FOR RESOLUTION.
2. INSTALL ALL UTILITIES PER UTILITY COMPANY AND LOCAL DPW STANDARDS.
3. CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS WILL BE RESTORED TO ORIGINAL CONDITION AT NO COST TO OWNER.
4. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
5. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEE'S, VALVES, EXPANSION AND/OR CONTRACTION FITTINGS, GATES AND ALL OTHER PARTS AND PIPING NECESSARY FOR THE INSTALLATION OF THE WATER LINES AND FIRE SUPPRESSION LINES. ALL WORK SHALL BE COORDINATED WITH THE CITY OF BEVERLY WATER DIVISION AND FIRE DEPARTMENT.
6. ALL TRENCHING, DIGGING, AND EXCAVATING SHALL BE EXECUTED AND PROTECTED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, INCLUDING, BUT NOT LIMITED TO, MASSACHUSETTS GENERAL LAW 82A ("JACKIE'S LAW", EFFECTIVE JANUARY 1, 2009).
7. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION OF PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANT NOR 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.
8. REFER TO THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION ROUTE 1A (RANTOUL STREET AND CABOT STREET) PLANS.



**REVISIONS**

NO.	DATE	DESCRIPTION	BY	CHK'D
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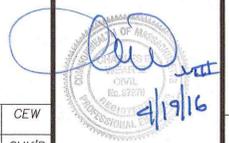
**480-482 RANTOUL STREET**  
**UTILITY PLAN**  
LOCATED IN  
**BEVERLY, MASSACHUSETTS**  
(ESSEX COUNTY)

PREPARED FOR  
**BEVERLY CROSSING 480, LLC**  
SCALE: 1" = 20' DATE: MARCH 25, 2016

**MERIDIAN ASSOCIATES**

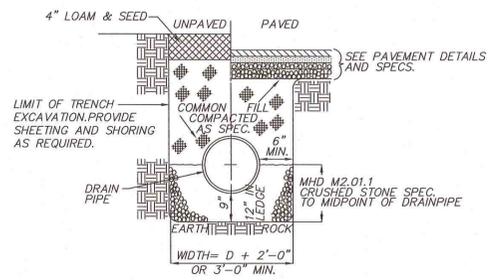
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SHEET No. 5 OF 8 PROJECT No. 5804

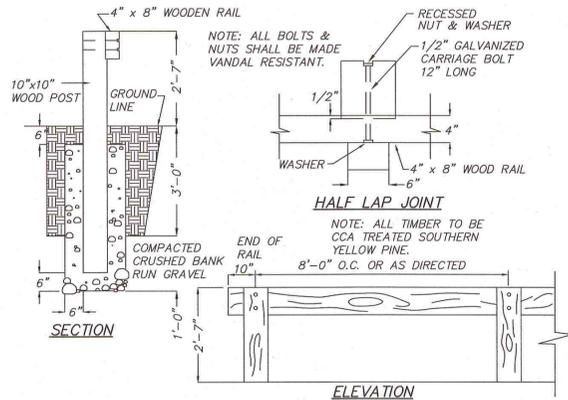




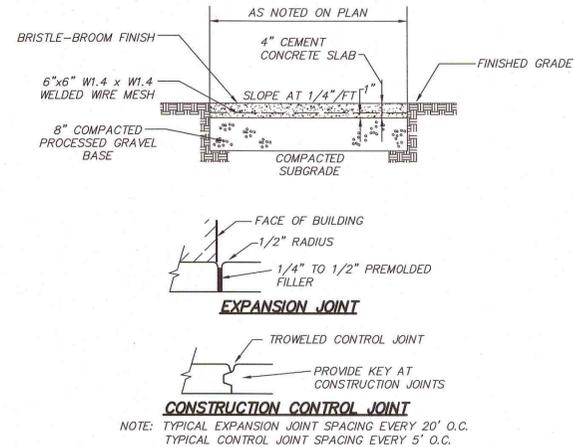




**STORM DRAIN TRENCH DETAIL**  
(NOT TO SCALE)



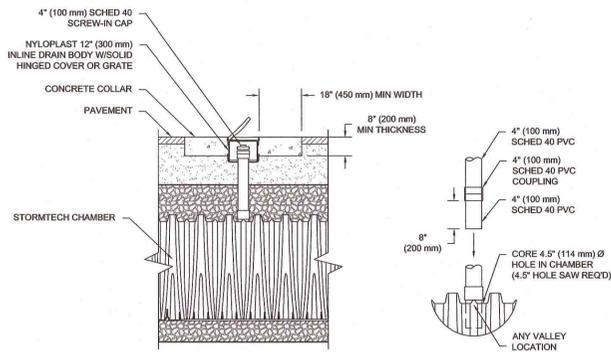
**WOODEN GUARD RAIL**  
(NOT TO SCALE)



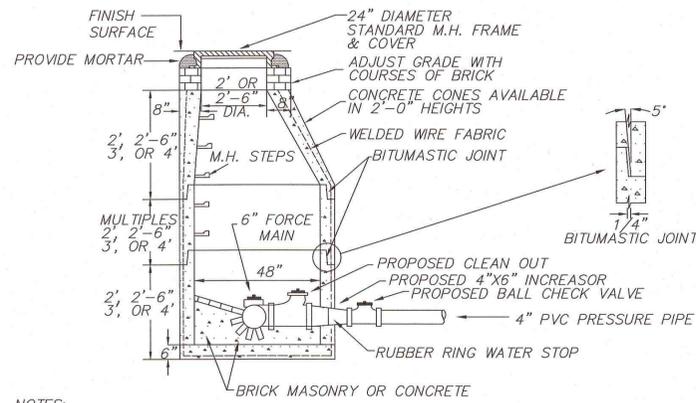
**CONCRETE WALKWAY**  
(NOT TO SCALE)

**EROSION CONTROL NOTES**

- 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.
- PLACE FILTERMATS AT LIMITS OF CONSTRUCTION AND AT THE TOE OF FUTURE SLOPES AS DIRECTED ON THE SITE PLANS. SEE APPROPRIATE DETAILS SHOWING HOW TO PLACE THE FILTERMATS.
- AREAS OF DISTURBANCE TO BE KEPT TO A MINIMUM. THE AMOUNT OF TIME AN AREA IS LEFT UNSTABILIZED WILL BE KEPT TO A MINIMUM.
- STABILIZE ALL DISTURBED AREAS WITH A MINIMUM OF 4" LOAM AND SEED.
- LEAVE TEMPORARY EROSION CONTROL IN PLACE UNTIL ALL DISTURBED AREAS ARE REVEGETATED.
- IF THE SITE IS TO BE LEFT OPEN AFTER OCTOBER 15, ALL DISTURBED AREAS ARE TO BE TEMPORARILY STABILIZED BY COVERING WITH MULCH HAY.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ROADWAY CONSTRUCTION & ARE TO BE PERIODICALLY INSPECTED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT THE PROJECT CONSTRUCTION.

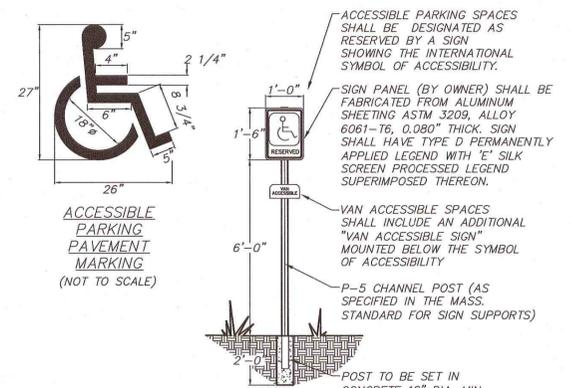


**STORMTECH SYSTEM INSPECTION PORT DETAIL**  
(NOT TO SCALE)

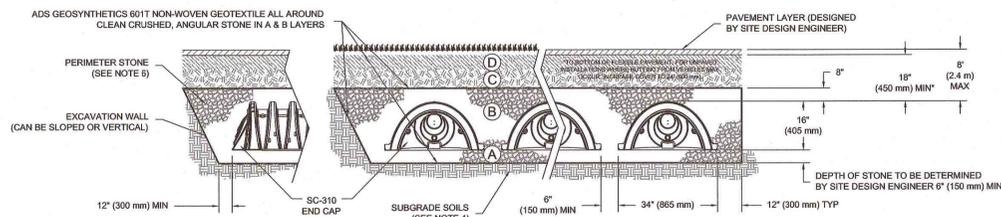


- NOTES:**
- MANHOLE DESIGN TO LATEST ASTM C478.
  - REINFORCING STEEL CONFORMS TO LATEST ASTM A 185.
  - CONCRETE COMPRESSIVE STRENGTH-4,000 PSI @ 28 DAYS.
  - ONE POUR MONOLITHIC BASE.
  - WHEN SPECIFIED, MANHOLES WATERPROOF COATED.
  - STEPS-STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC (PS2-PFSL M.A. INDUSTRIES, INC.) CONFORMS TO LATEST ASTM C478 PARA-12.
  - BITUMASTIC BUTYL RUBBER FOR JOINTS CONFORM TO LATEST ASTM C443 AND FED SS-S-201A SPEC.
  - KOR-N-SEAL FLEXIBLE PIPE CONNECTORS FROM 3.5" TO 21.25" O.D. ASTM C923, A167.

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



**ACCESSIBLE PARKING DETAILS**  
(NOT TO SCALE)



**NOTES:**

- SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

**STORMTECH SYSTEM DETAIL**  
(NOT TO SCALE)

**ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145' A-1, A-2-4, A-3 OR AASHTO M43' 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. **

- PLEASE NOTE:**
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'X' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

**NOTE:**

THE "STANDARD SPECIFICATIONS" AND MATERIALS REFERENCES PROVIDED HEREON REFER TO THE 1988 EDITION OF THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS OF HIGHWAYS AND BRIDGES, INCLUDING THE LATEST AMENDMENTS AND ADDENDUM THERETO.

DWG. No. 5804\_SITE  
(XREF: 5804\_REC\_ADJUSTED)

REVISIONS		BY	CHK'D
1	4-19-16	JMI	CEW
NO.	DATE	DESCRIPTION	



480-482 RANTOUL STREET  
LOCATED IN  
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PREPARED FOR  
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SCALE: NOT TO SCALE DATE: MARCH 25, 2016

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SHEET No. 8 OF 8

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