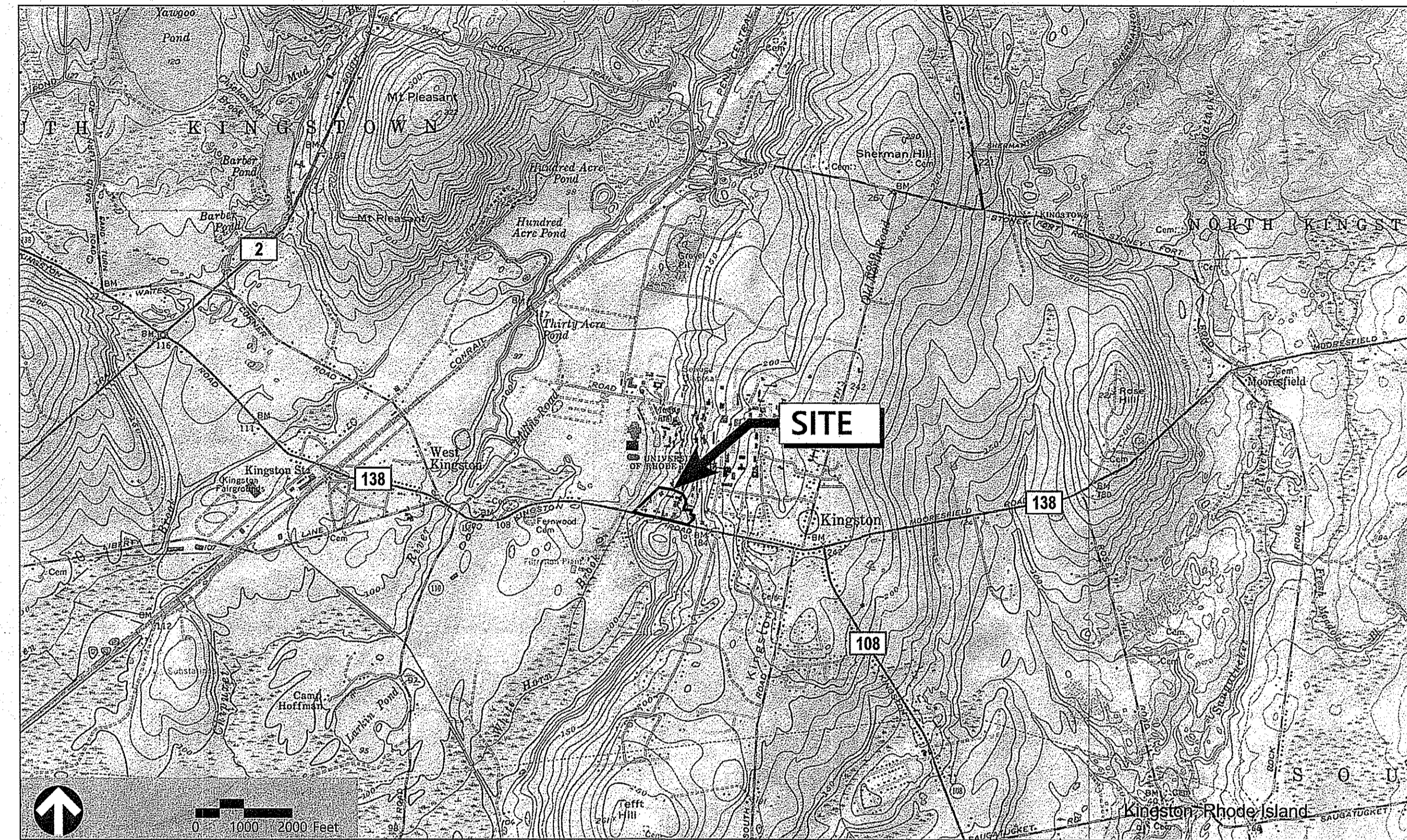


# Site Plans

Issued for RIDEM PDA  
 Date Issued May 29, 2018  
 Latest Issue November 16, 2018

## URI Fraternity Circle Improvements

Kingston, Rhode Island



### Owner

State of Rhode Island Board of Education  
 URI Office of Capital Projects  
 60 Tootell Road - Sherman Building  
 Kingston, RI 02881

### Applicant

State of Rhode Island Board of Education  
 URI Office of Capital Projects  
 60 Tootell Road - Sherman Building  
 Kingston, RI 02881

**Assessor's Map: 23-3; 23-4**  
**Lot: 126, 127; 6, 7**

### Sheet Index

| No.       | Drawing Title   | Latest Issue      |
|-----------|---|-------------------|
| C-1       | Legend and General Notes                                    | November 16, 2018 |
| C-2.1-2.4 | Layout and Materials Plan                                   | November 16, 2018 |
| C-3.1-3.4 | Grading and Drainage Plan                                   | November 16, 2018 |
| C-4.1-4.4 | Utility Plan  | November 16, 2018 |
| C-4.5     | ALTERNATE SEWER PLAN  | November 13, 2018 |
| C-5.1     | Site Details 1  | November 16, 2018 |
| C-5.2     | Site Details 2  | November 16, 2018 |
| C-5.3     | Site Details 3  | November 16, 2018 |
| C-5.4     | Site Details 4  | November 16, 2018 |
| L-1       | Planting Plan   | November 16, 2018 |
| L-2       | Planting and Site Amenity Details                           | November 16, 2018 |
| SESC-1    | Soil Erosion and Sediment Control-General Notes and Details | November 16, 2018 |
| SESC-2.1  | Soil Erosion and Sediment Control - Site Plan 1             | November 16, 2018 |
| SESC-2.2  | Soil Erosion and Sediment Control - Site Plan 2             | November 16, 2018 |

### Reference Drawings

| No.     | Drawing Title            | Latest Issue       |
|---------|--------------------------|--------------------|
| SV-1, 2 | Existing Conditions Plan | September 11, 2017 |
| SV-3, 4 | Drainage and Sewer Plan  | September 11, 2017 |

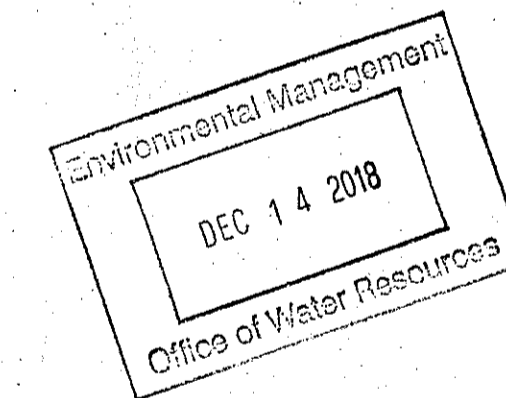
vhb.com



1 Cedar Street  
 Suite 400  
 Providence, RI 02903  
 401.272.8100

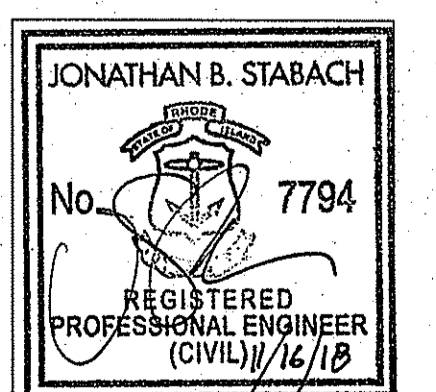
### Subconsultant Electric

Engineering Advantage, Inc.  
 880 Main Street 5th Floor  
 Waltham, Massachusetts  
 02451  
 (617) 288-3969



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JAN 26 2019 FILE # 18-0184  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT ALL TIMES ON SITE

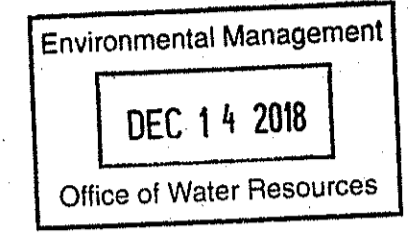
*Jonathan B. Stabach*



VHB Project: 72772.01  
 Issued for: RIDEM PDA 11/7/2018



1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100



Legend

Table with columns: Exist., Prop., and descriptions for various site features like PROPERTY LINE, CONCRETE, UNDERDRAIN, etc.

Matching

Abbreviations

Table with columns: General, Utility, and descriptions for abbreviations like ABAN, ACR, ADJ, etc.

Notes

- INDICATED OTHERWISE ON THE DRAWINGS.
1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL NOTIFY UNIVERSITY OF RHODE ISLAND FACILITIES ( DAVID LAMB, (401)874-7896) BEFORE BEGINNING CONSTRUCTION ACTIVITIES.

Erosion Control

- SEE SESC PLANS FOR EROSION AND SEDIMENTATION CONTROL REQUIREMENTS.
2. AT A MINIMUM THE CONTRACTOR SHALL:
A. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVED DOCUMENTS PERTAINING TO THIS PROJECT.

Utilities

- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.

Existing Conditions Information

- BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VHB. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY VHB DURING AUGUST AND SEPTEMBER 2017, AND SUPPLEMENTED WITH GIS MAPPING PROVIDED TO VHB FROM URI IN AUGUST 2017.
A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB
B. FLAGS MARKING THE WETLANDS WERE LOCATED BY ACTUAL FIELD SURVEY PERFORMED BY VHB.

Document Use

- THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

Permits

- PERMITS LISTED BELOW ARE REQUIRED AND HAVE NOT YET BEEN OBTAINED:
1.1 RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, OFFICE OF WATER RESOURCES REQUEST FOR PRELIMINARY DETERMINATION, INSIGNIFICANT ALTERATION PERMIT AND RIPDES AUTHORIZATION.
1.2 NGRID GAS - GAS SERVICE RELOCATION AGREEMENT, AND MAIN AGREEMENT
1.3 NGRID ELECTRIC - DESIGN OF UNDERGROUND PRIMARY SERVICE
1.4 RHODE ISLAND DEPARTMENT OF TRANSPORTATION PHYSICAL ALTERATION PERMIT

Alternates

- ADD ALTERNATE. SUBSTITUTE ALL PRECAST CONCRETE CURB AND BITUMINOUS BERM WITH VERTICAL GRANITE CURB.
2. ADD ALTERNATE. SANITARY SEWER AS SHOWN ON SHEET C-4.5.

Demolition

- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER RESOURCES FRESHWATER QUALITY PROGRAM AS SPECIFIED IN THE LETTER OF APPROVAL JAN 29 2019 FILE # R-0137 DATED NO CHANGES ALLOWED WITHOUT THE APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE

University of Rhode Island Fraternity Circle Improvements Kingston, Rhode Island

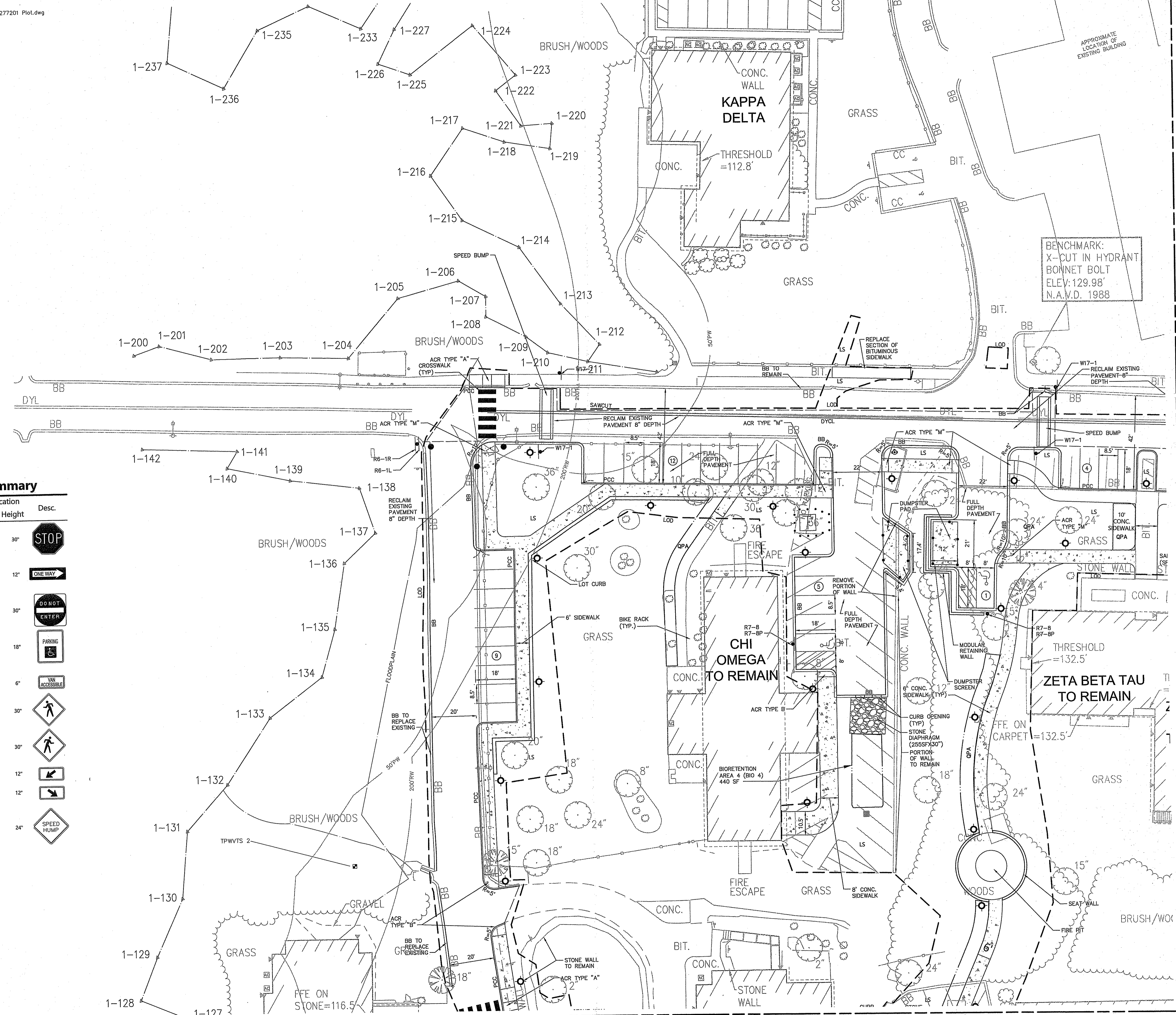
Table with columns: No., Revision, Date, Appr. (1 Revisions Per Client/RIDEM 11/16/2018)

Issued for: RIDEM PDA Date: May 29, 2018

Not Approved for Construction Legend and General Notes

JONATHAN B. STABACH No. 7794 REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18

C-1 Sheet 2 of 28 Project Number 72772.01



**Sign Summary**

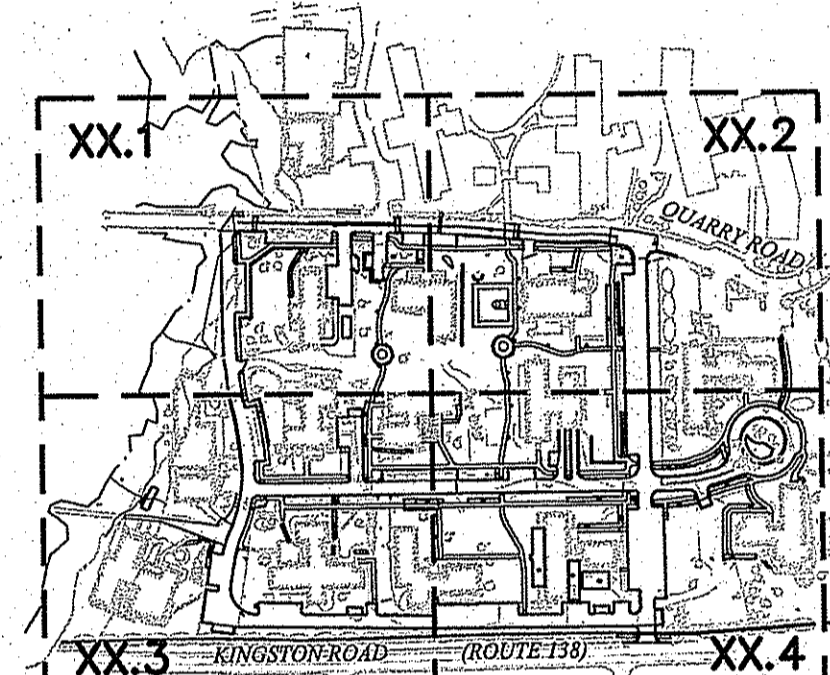
| M.U.T.C.D. Number | Specification Width Height | Desc.          |
|-------------------|----------------------------|----------------|
| R1-1              | 30" 30"                    | STOP           |
| R6-1R<br>R6-1L    | 36" 12"                    | ONE WAY        |
| R5-1              | 30" 30"                    | DO NOT ENTER   |
| R7-8              | 12" 18"                    | PARKING        |
| R7-8P             | 12" 6"                     | VAN ACCESSIBLE |
| W11-2L            | 30" 30"                    | PEDESTRIAN     |
| W11-2R            | 30" 30"                    | PEDESTRIAN     |
| W16-7PL           | 24" 12"                    | LEFT TURN      |
| W16-7PR           | 24" 12"                    | RIGHT TURN     |
| W17-1             | 24" 24"                    | SPEED HUMP     |

**vhb**  
 Environmental Management  
 Cedar Street  
 Suite 400  
 Providence, RI 02903  
 401.272.8100

DEC 14 2018  
 Office of Water Resources

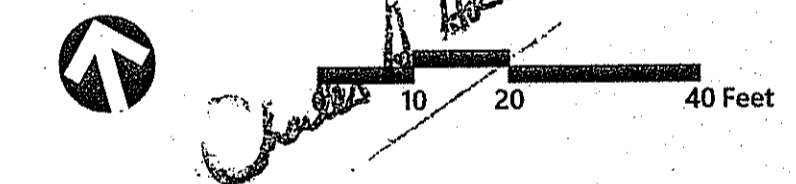
- NOTE:**
1. COLLAPSIBLE BOLLARD SHALL BE MAXIFORCE COLLAPSIBLE BOLLARD AND APPROVED FOR USE IN FIRE LANES PER INTERNATIONAL FIRE CODE (IFC) 503. BOLLARD SHALL BE MCSW-SS1-S-PC W/ P150 INSERT COLOR BLACK W/ REFLECTIVE BLACK TAPE.
  2. ALL SIDEWALKS SHALL BE 6' WIDE UNLESS OTHERWISE NOTED.

- ADD ALTERNATE:**
1. ALL CURBING TO BE VERTICAL GRANITE CURB (VGC).



**KEY PLAN**

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JAN 28 2019 FILE # 18-037  
 NO CHANGES ALLOWED WITHOUT WRITER APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



**University of Rhode Island**  
 Fraternity Circle Improvements  
 Kingston, Rhode Island

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |


Not Approved for Construction  
**Layout and Materials Plan**

**JONATHAN B. STABACH**  
 No. 7794  
 REGISTERED PROFESSIONAL ENGINEER  
 (CIVIL) 11/16/18

**C-2.1**  
 3 of 28  
 Project Number 72772.01

**Sign Summary**

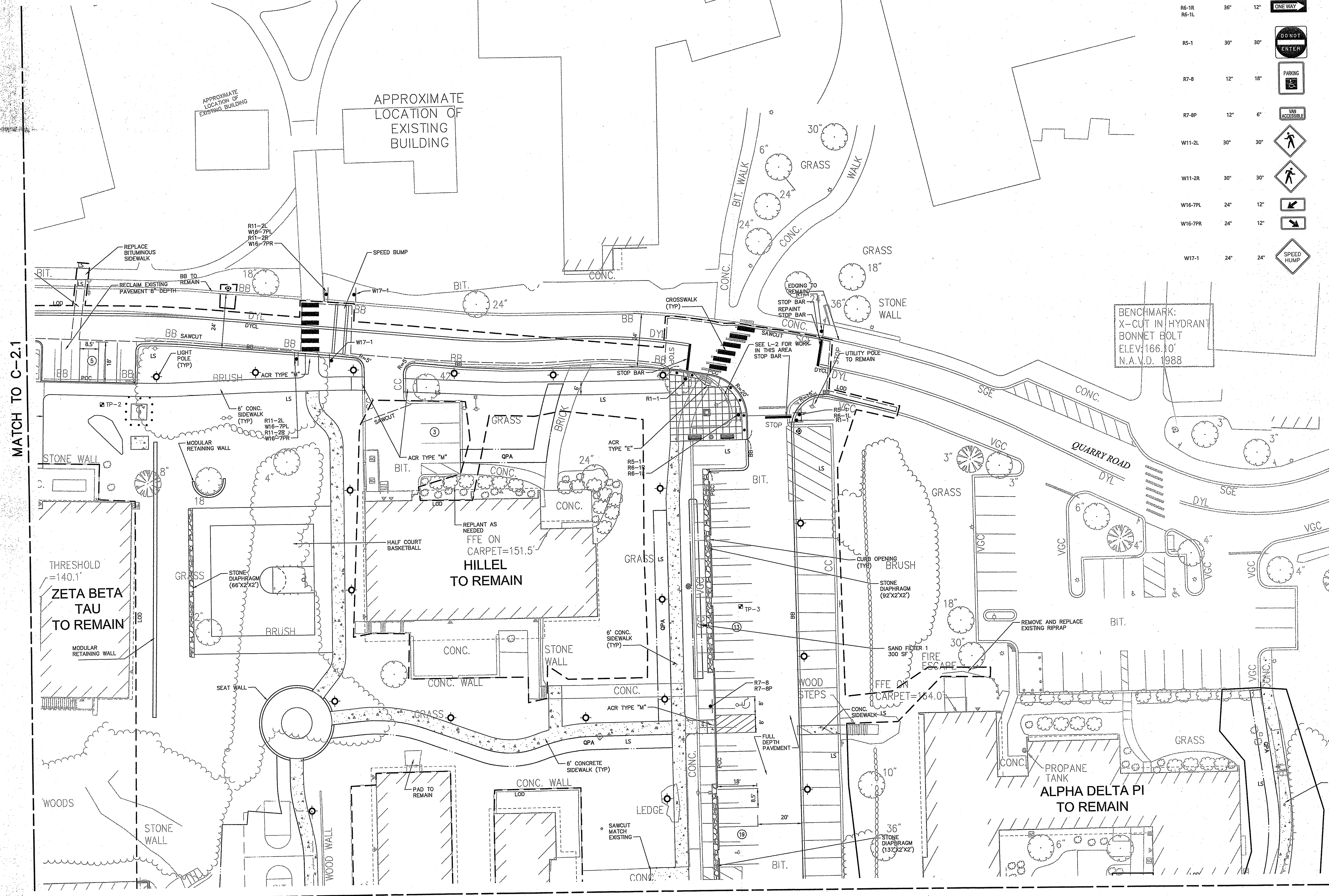
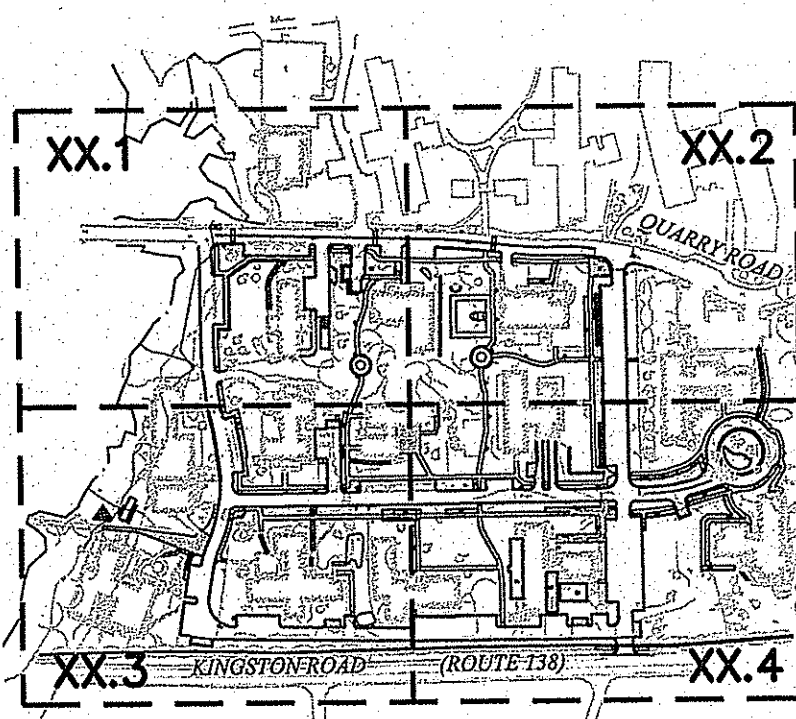
| M.U.T.C.D. Number | Specification Width | Height | Desc.         |
|-------------------|---------------------|--------|---------------|
| R1-1              | 30"                 | 30"    | STOP          |
| R6-1R<br>R6-1L    | 36"                 | 12"    | ONEWAY        |
| R5-1              | 30"                 | 30"    | DONOT ENTER   |
| R7-8              | 12"                 | 18"    | PARKING       |
| R7-8P             | 12"                 | 6"     | WV ACCESSIBLE |
| W11-2L            | 30"                 | 30"    | WALKING       |
| W11-2R            | 30"                 | 30"    | WALKING       |
| W16-7PL           | 24"                 | 12"    | LEFT TURN     |
| W16-7PR           | 24"                 | 12"    | RIGHT TURN    |
| W17-1             | 24"                 | 24"    | SPEED HUMP    |



Environmental Management  
**DEC 14 2018**  
 Office of Water Resources  
 7 Cedar Street  
 Suite 400  
 Providence, RI 02903  
 401.272.8100

NOTE:  
 1. COLLAPSIBLE BOLLARD SHALL BE MAXIFORCE COLLAPSIBLE BOLLARD AND APPROVED FOR USE IN FIRE LANES PER INTERNATIONAL FIRE CODE (IFC) 503. BOLLARD SHALL BE MCSW-SS1-S-PC W/ P150 INSERT COLOR BLACK W/ REFLECTIVE BLACK TAPE.  
 2. ALL SIDEWALKS SHALL BE 6' WIDE UNLESS OTHERWISE NOTED.

ADD ALTERNATE:  
 1. ALL CURBING TO BE VERTICAL GRANITE CURB (VGC).



MATCH TO C-2.1

MATCH TO C-2.4

University of Rhode Island  
 Fraternity Circle Improvements  
 Kingston, Rhode Island

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
 Issued for: RIDEM PDA Date: May 29, 2018

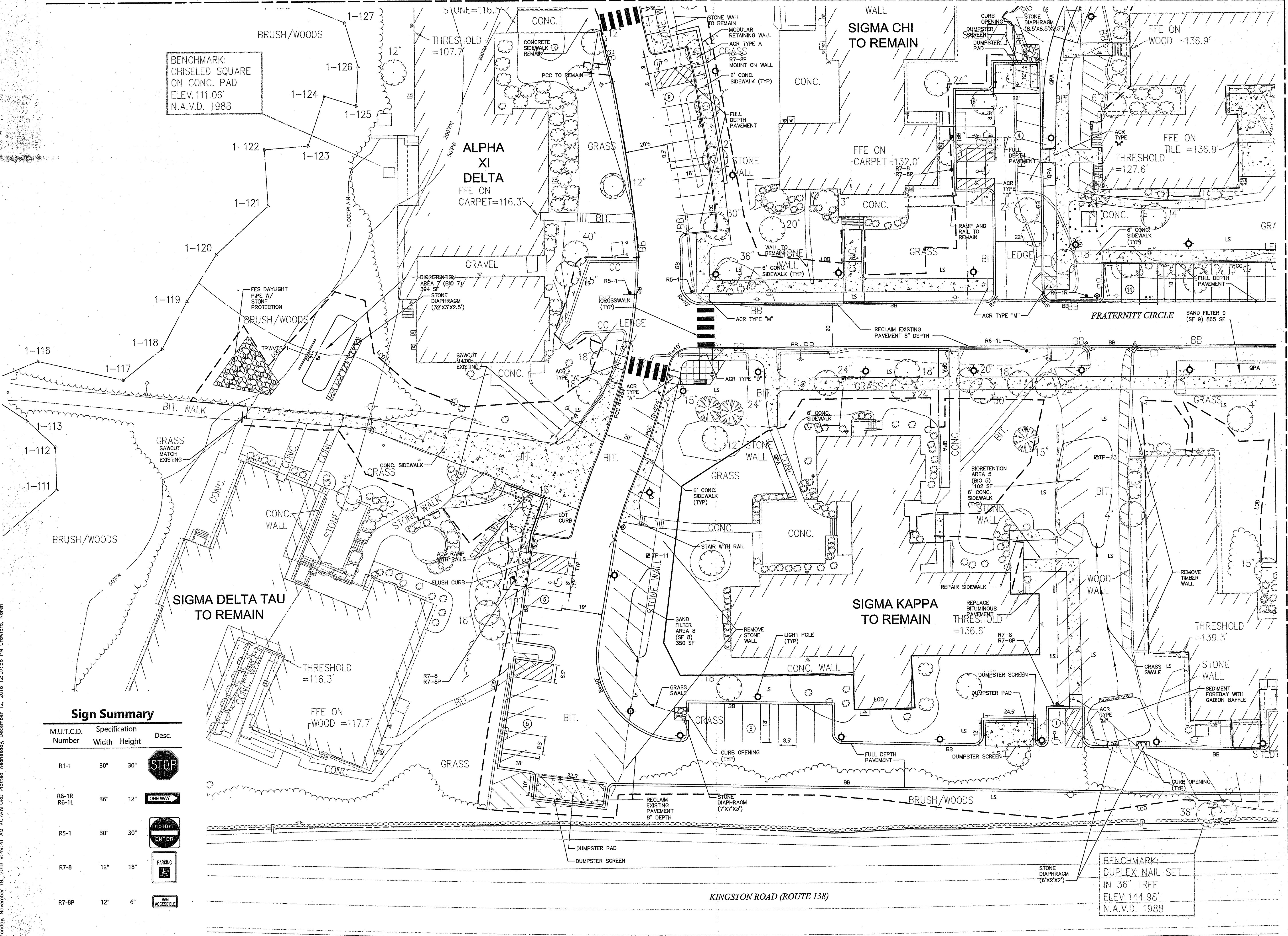
Not Approved for Construction  
**Layout and Materials Plan**

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Jonathan B. Stabach  
 No. 7794  
 REGISTERED PROFESSIONAL ENGINEER  
 (CIVIL) 11/16/18

**C-2.2**  
 Sheet 4 of 28  
 Project Number 72772.01

MATCH TO C-2.1



BENCHMARK:  
CHISELED SQUARE  
ON CONC. PAD  
ELEV: 111.06'  
N.A.V.D. 1988

BENCHMARK:  
DUPLEX NAIL SET  
IN 36" TREE  
ELEV: 144.98'  
N.A.V.D. 1988

**Sign Summary**

| M.U.T.C.D. Number | Specification Width | Specification Height | Desc. |
|-------------------|---------------------|----------------------|-------|
| R1-1              | 30"                 | 30"                  |       |
| R6-1R<br>R6-1L    | 36"                 | 12"                  |       |
| R5-1              | 30"                 | 30"                  |       |
| R7-8              | 12"                 | 18"                  |       |
| R7-8P             | 12"                 | 6"                   |       |

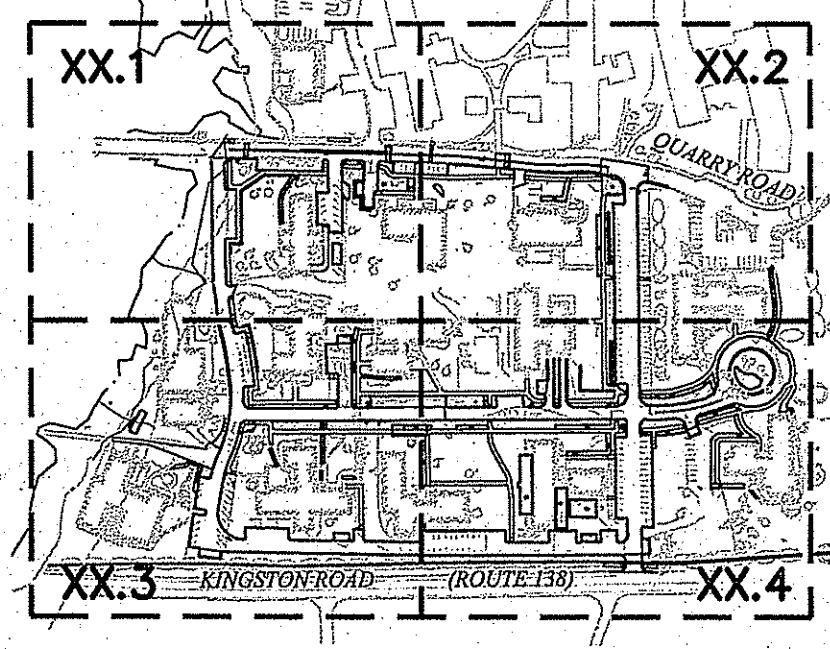


Environmental Management  
DEC 14 2018  
Office of Water Resources

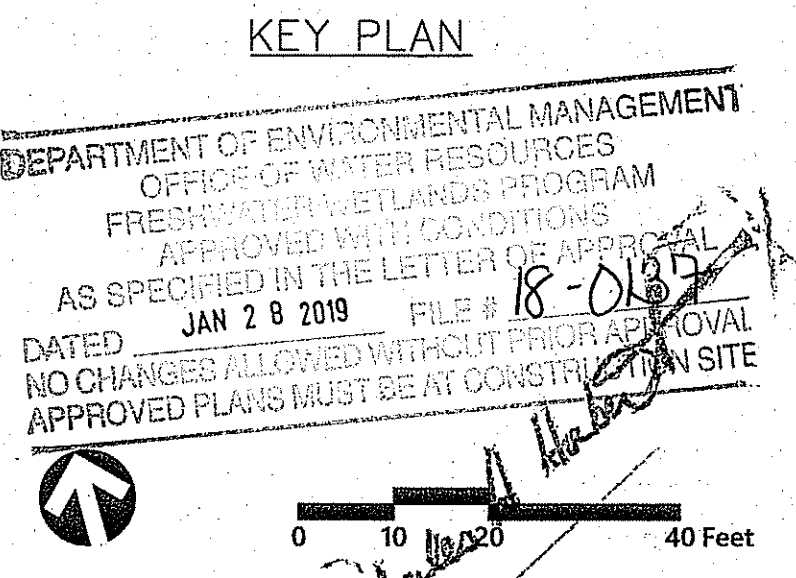
1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

- NOTE:
1. COLLAPSIBLE BOLLARD SHALL BE MAXIFORCE COLLAPSIBLE BOLLARD AND APPROVED FOR USE IN FIRE LANES PER INTERNATIONAL FIRE CODE (IFC) 503. BOLLARD SHALL BE MCSW-SS1-S-PC W/ P150 INSERT COLOR BLACK W/ REFLECTIVE BLACK TAPE.
  2. ALL SIDEWALKS SHALL BE 6' WIDE UNLESS OTHERWISE NOTED.

- DEDUCT ALTERNATE:
1. PRECAST CONCRETE CURB (PCC) INSTEAD OF VERTICAL GRANITE CURB (VGC).
- ADD ALTERNATE:
1. ALL CURBING TO BE VERTICAL GRANITE CURB (VGC).



MATCH TO C-2.4



University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Appr'd |
|-----|----------------------------|------------|--------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |        |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Issued for: RIDEM PDA Date: May 29, 2018

Not Approved for Construction  
Layout and Materials Plan

JONATHAN B. STABACH  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER  
(CIVIL) 11/16/18

2.3

Sheet 5 of 28

Project Number 72772.01

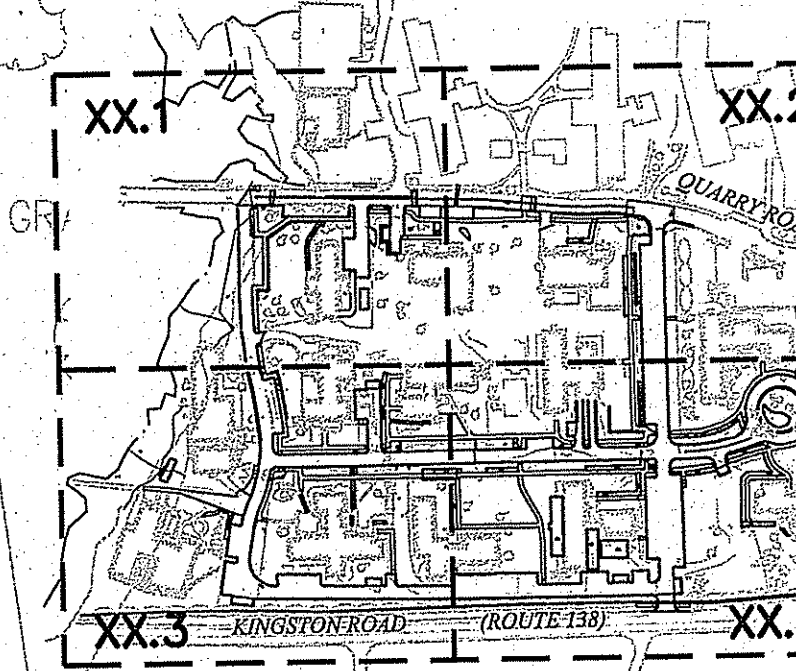


1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

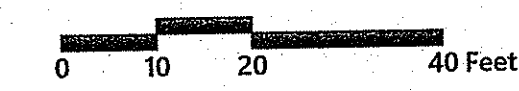
**INVASIVE/HARMFUL SPECIES MANAGEMENT**

- INVASIVE SPECIES REMOVAL AND TREATMENT TO BE CONDUCTED BY A STATE-LICENSED APPLICATOR USING APPROVED MATERIALS FOLLOWING MANUFACTURER'S DIRECTIONS FOR PROPER USE. THE FOLLOWING NON-NATIVE AND INVASIVE SPECIES ARE TO BE REMOVED:
- | SPECIES COMMON NAME  | SCIENTIFIC NAME               |
|----------------------|-------------------------------|
| Privet               | <i>Ligustrum sp.</i>          |
| Burning bush         | <i>Euonymus alatus</i>        |
| Oriental bittersweet | <i>Celastrus orbiculatus</i>  |
| Poison ivy           | <i>Toxicodendron radicans</i> |
| Japanese honeysuckle | <i>Lonicera japonica</i>      |

THE INVASIVE SPECIES CONTRACTOR WILL CUT AND REMOVE PLANT AND THEN WICK THE REMAINING STEM OR STUMP TO CONTROL RE-EMERGENCE. ALTERNATIVE METHODS OF CONTROL MAY BE REQUESTED BY THE CONTRACTOR. DISPOSE OF INVASIVE PLANT MATERIALS IN A DUMPSTER.



KEY PLAN

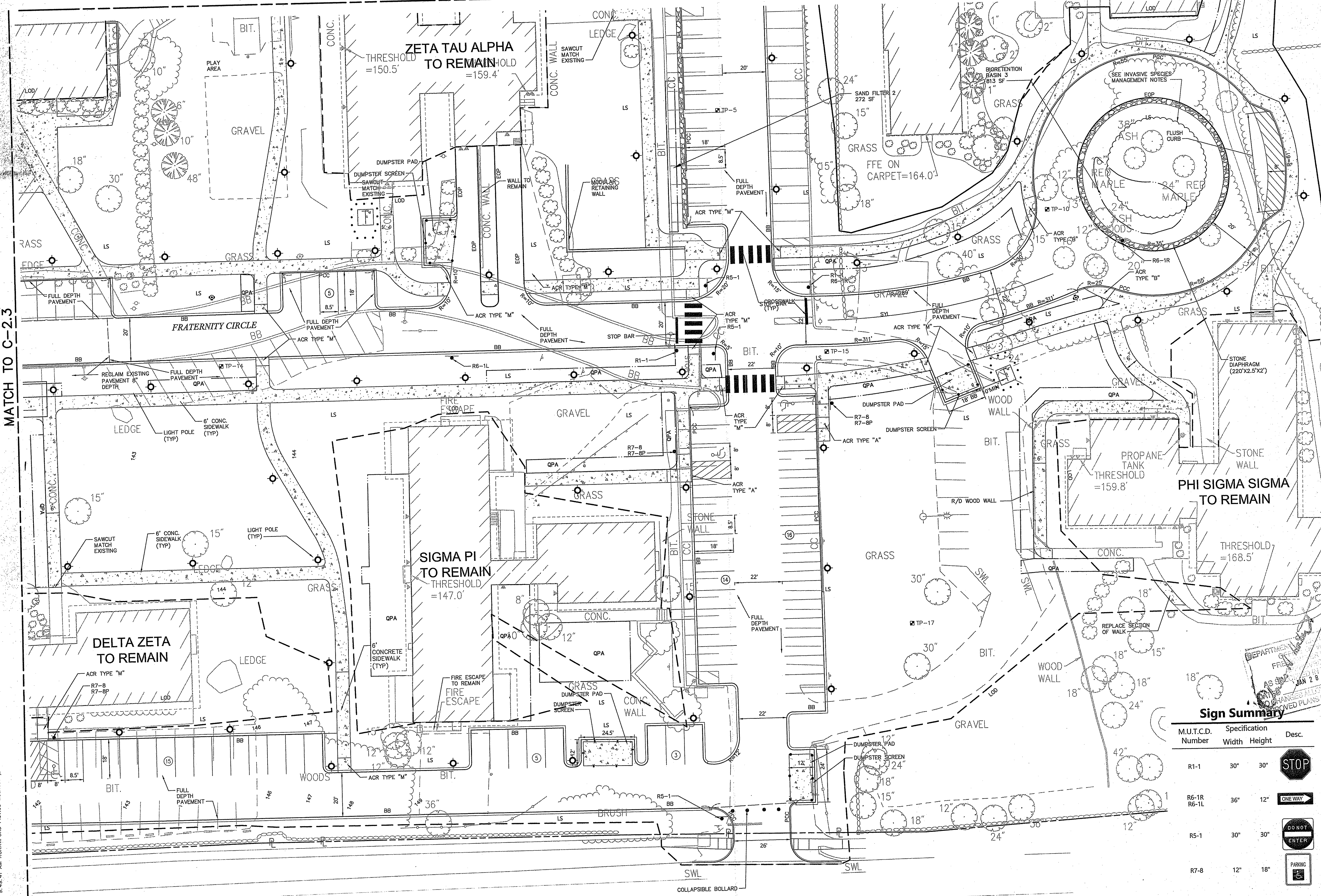


**University of Rhode Island**  
Fraternity Circle Improvements  
Kingston, Rhode Island

DEPARTMENT OF PUBLIC WORKS  
 No. \_\_\_\_\_ Revision \_\_\_\_\_ Date \_\_\_\_\_  
 Issued for \_\_\_\_\_ Date \_\_\_\_\_  
 RIDEM PDA  
 May 29, 2018  
 Not Approved for Construction  
 Drawing Title: **Layout and Materials Plan**  
 Drawing Number: \_\_\_\_\_  
 Project Number: 72772.01

**Sign Summary**

| M.U.T.C.D. Number | Specification | Desc. |
|-------------------|---------------|-------|
| Width             | Height        |       |
| R1-1              | 30" x 30"     |       |
| R6-1R<br>R6-1L    | 36" x 12"     |       |
| R5-1              | 30" x 30"     |       |
| R7-8              | 12" x 18"     |       |
| R7-8P             | 12" x 6"      |       |
| R3-2              | 24" x 24"     |       |



MATCH TO C-2.3

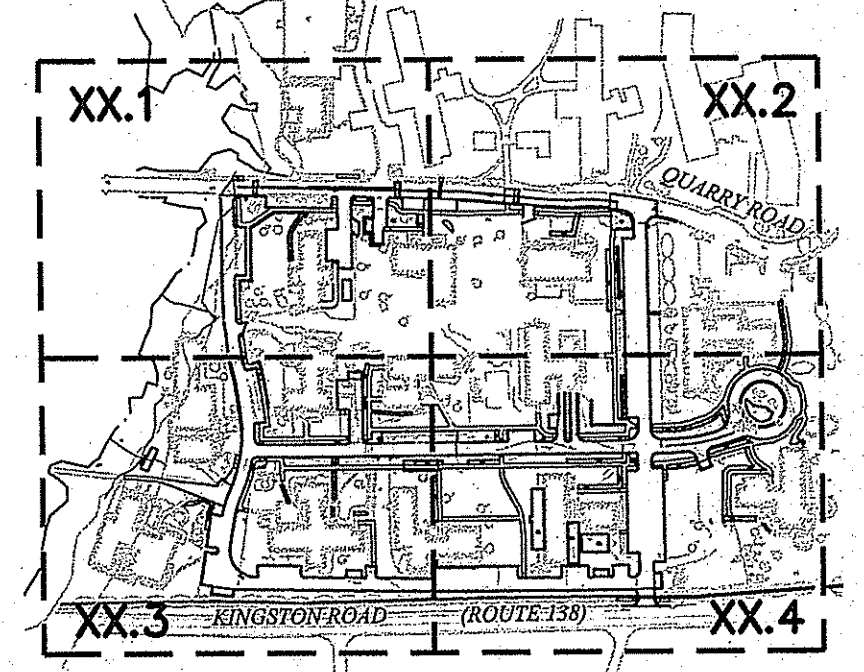
- NOTE:**
- COLLAPSIBLE BOLLARD SHALL BE MAXIFORCE COLLAPSIBLE BOLLARD AND APPROVED FOR USE IN FIRE LANES PER INTERNATIONAL FIRE CODE (IFC) 503. BOLLARD SHALL BE MCSW-SS1-S-P C W/ P150 INSERT COLOR BLACK W/ REFLECTIVE BLACK TAPE.
  - ALL SIDEWALKS SHALL BE 6' WIDE UNLESS OTHERWISE NOTED.
- DEDUCT ALTERNATE:**
- PRECAST CONCRETE CURB (PCC) INSTEAD OF VERTICAL GRANITE CURB (VGC).
- ADD ALTERNATE:**
- ALL CURBING TO BE VERTICAL GRANITE CURB (VGC).

Saved Monday, November 19, 2018 9:48:41 AM KCRANFORD Plotted Wednesday, December 12, 2018 12:08:29 PM Crowford, Karen



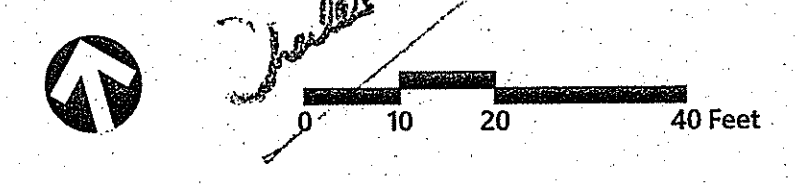
1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

Environmental Management  
DEC 14 2018  
Office of Water Resources



KEY PLAN

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019 FILE # 18-0287  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



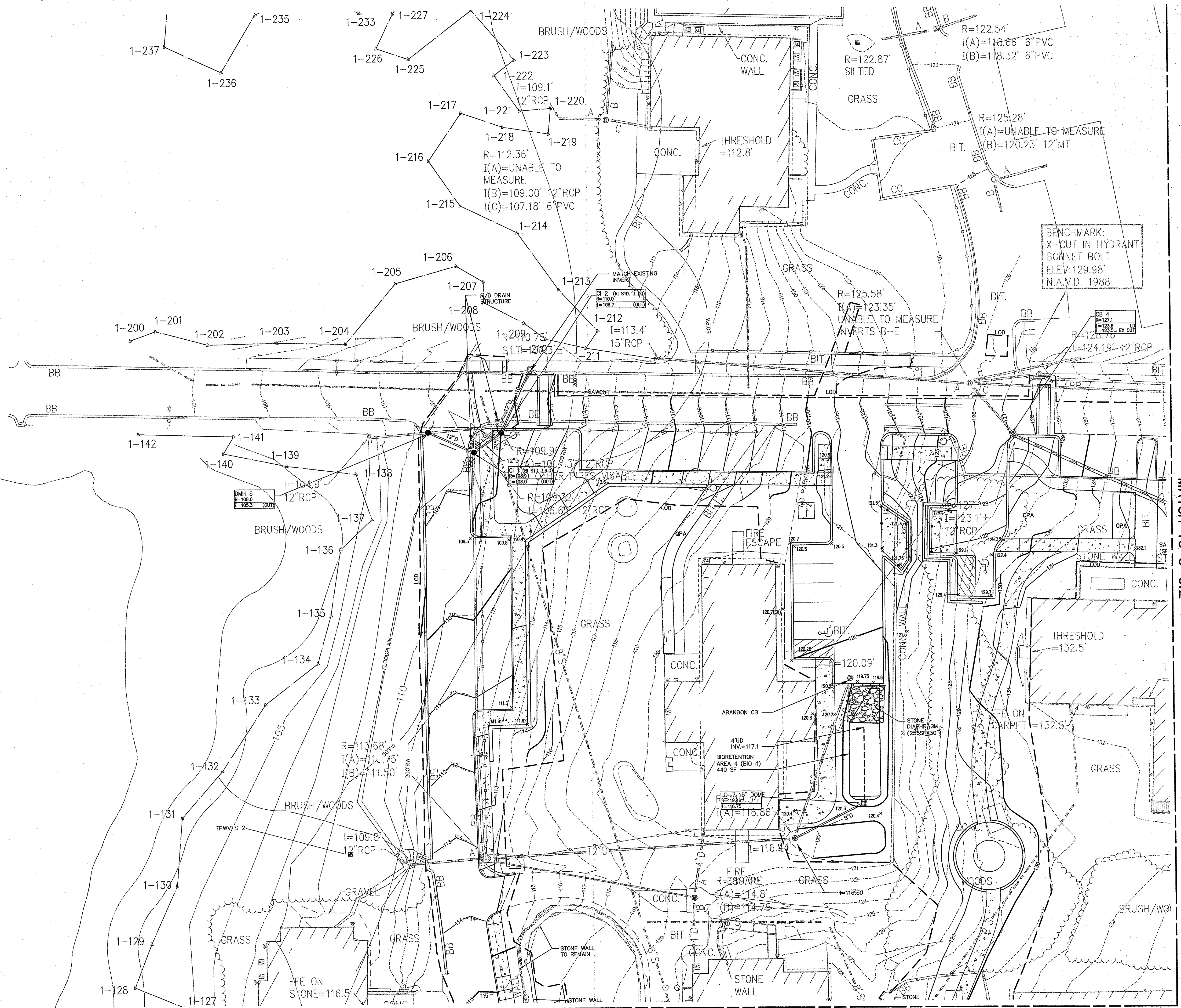
University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Prepared by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Issued for: RIDEM PDA Date: May 29, 2018

Not Approved for Construction  
Grading and Drainage Plan  
Drawing Number

JONATHAN B. STABACH  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18  
Sheet 7 of 28  
Project Number 72772.01



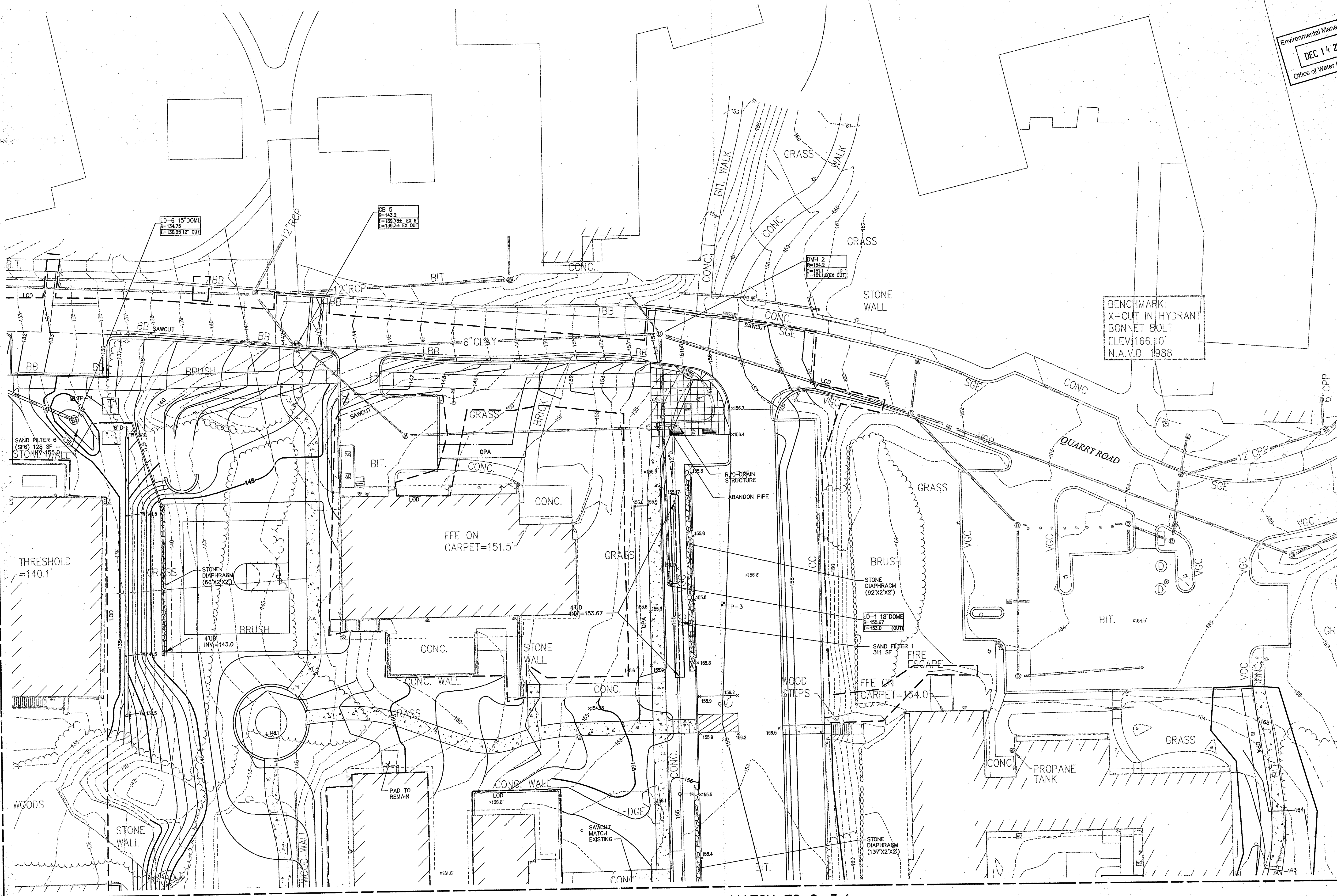
MATCH TO C-32

MATCH TO C-33



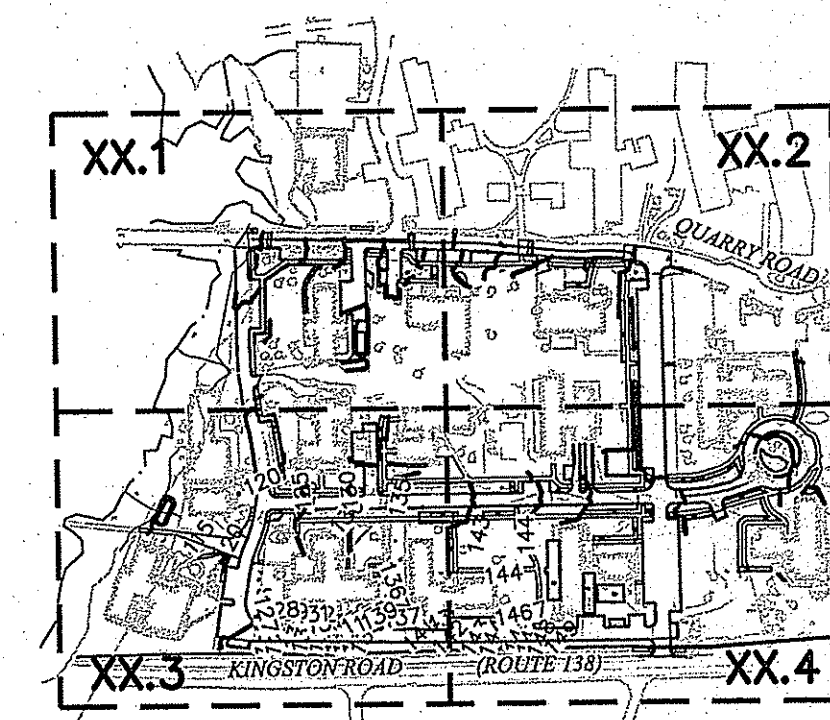
1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

Environmental Management  
DEC 14 2018  
Office of Water Resources



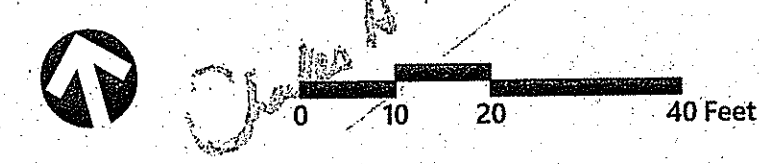
MATCH TO C-3.1

MATCH TO C-3.4



KEY PLAN

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WETLANDS CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019 FILE # 81037  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



### University of Rhode Island Fraternity Circle Improvements Kingston, Rhode Island

| No. | Revision                   | Date       | Apprd. |
|-----|----------------------------|------------|--------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |        |

Prepared by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Issued for: RIDEM PDA Date: May 29, 2018

Not Approved for Construction  
Grading and Drainage Plan

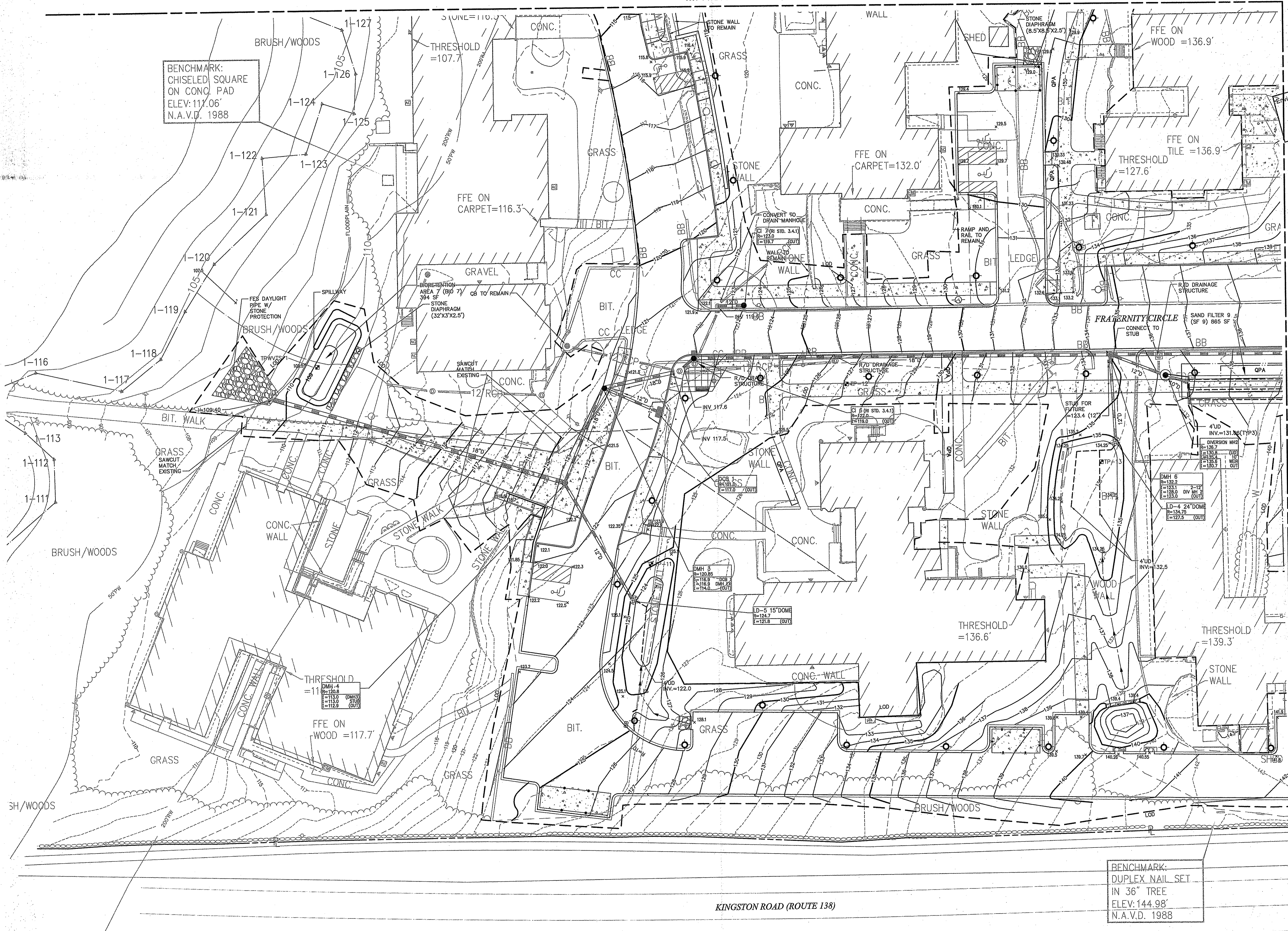
JONATHAN B. STABACH  
REGISTERED PROFESSIONAL ENGINEER  
(CIVIL) 11/16/16

# C-3.2

Sheet 8 of 28

Project Number 72772.01

MATCH TO C-3.1



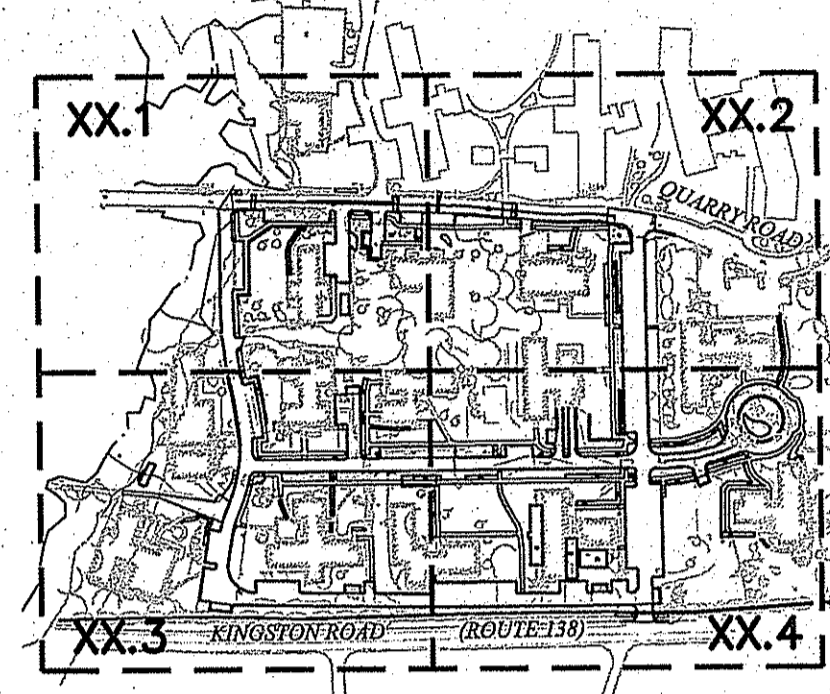
BENCHMARK:  
CHISELED SQUARE  
ON CONC PAD  
ELEV: 117.06'  
N.A.V.D. 1988

BENCHMARK:  
DUPLEX NAIL SET  
IN 36" TREE  
ELEV: 144.98'  
N.A.V.D. 1988



Environmental Management  
Office of Water Resources  
DEC 14 2018

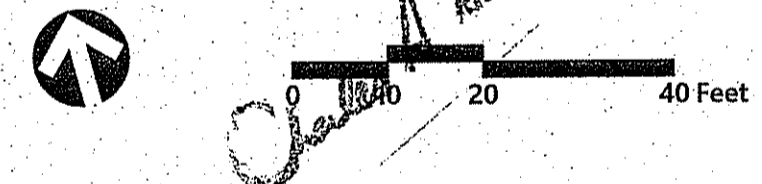
1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100



KEY PLAN

MATCH TO C-3.4

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019  
NO CHANGES ALLOWED WITHOUT PRE-APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Apprv. |
|-----|----------------------------|------------|--------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |        |

Issued for: RIDEM PDA  
Date: May 29, 2018

Not Approved for Construction  
Grading and  
Drainage Plan

JONATHAN B. STABACH  
No. 7794  
REGISTERED  
PROFESSIONAL ENGINEER  
(CIVIL) 1/16/18

C-3.3

Sheet 9 of 28

Project Number 72772.01

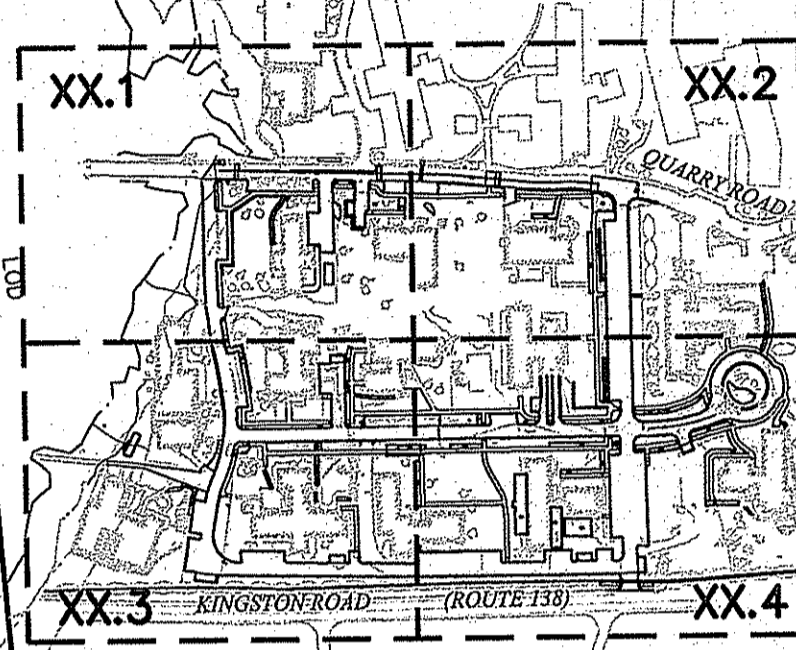
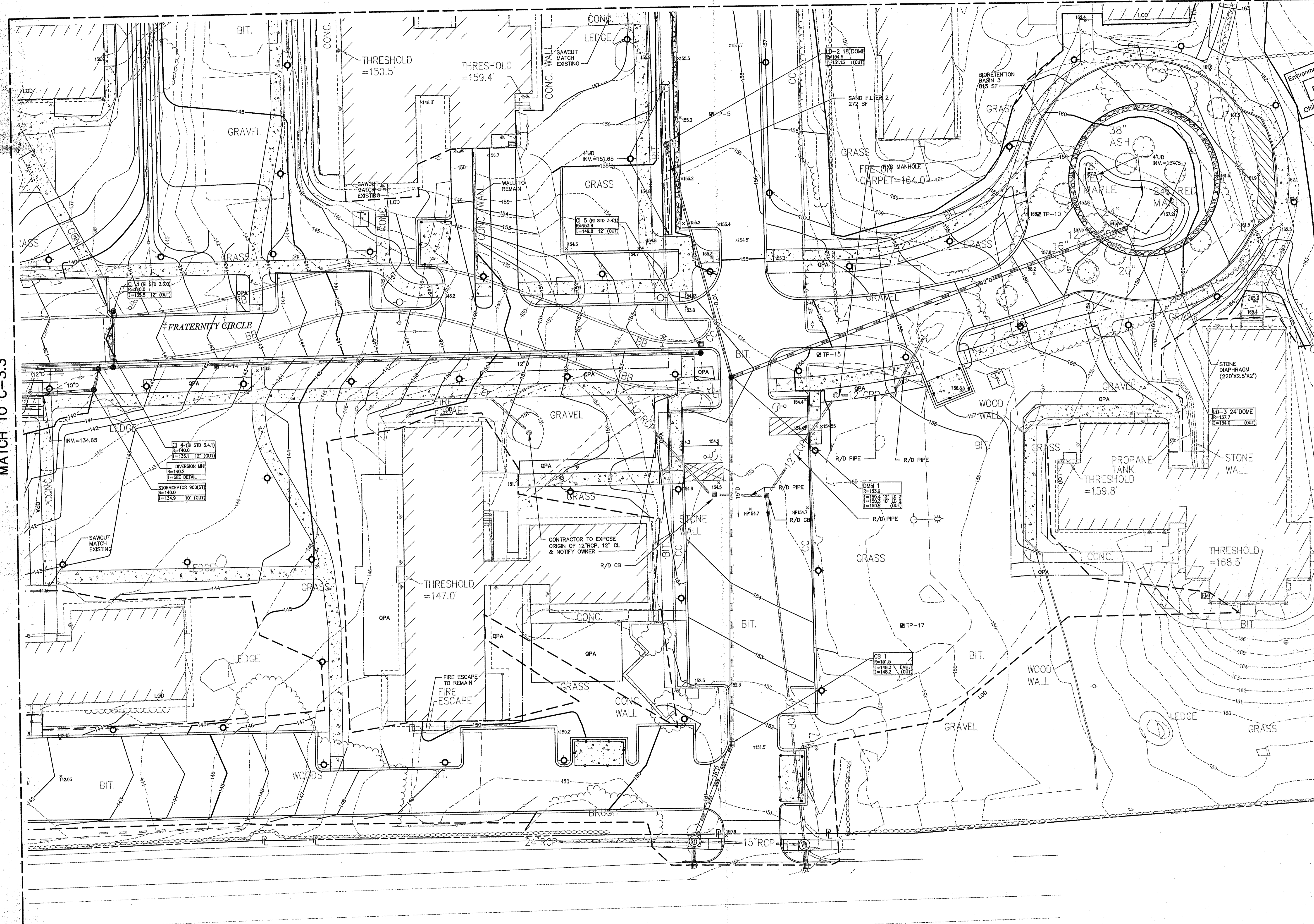
MATCH TO C-3.2



1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

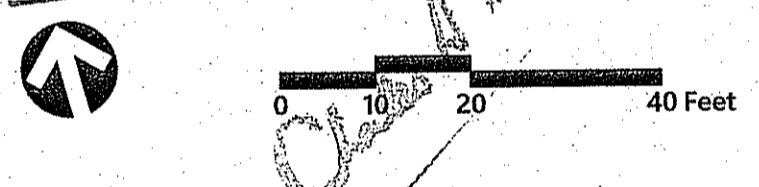
Environmental Management  
DEC 14 2018  
Office of Water Resources

MATCH TO C-3.3



KEY PLAN

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019 FILE # 18-0037  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Designed by: \_\_\_\_\_  
Checked by: \_\_\_\_\_  
Issued for: RIDEM PDA  
Date: May 29, 2018

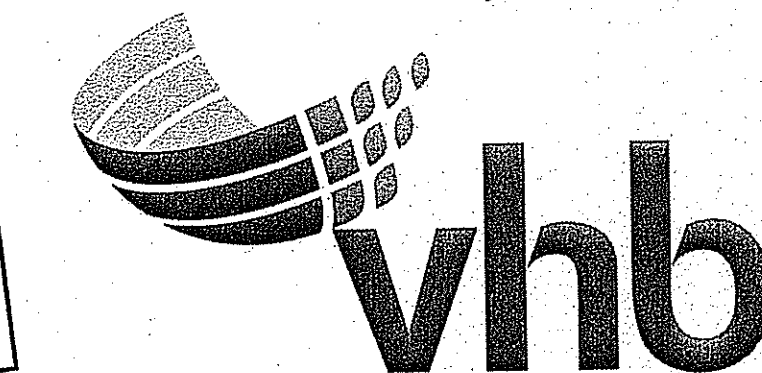
Not Approved for Construction  
Grading and  
Drainage Plan

JONATHAN B. STABACH  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER  
(CIVIL) 11/16/18

C-3.4

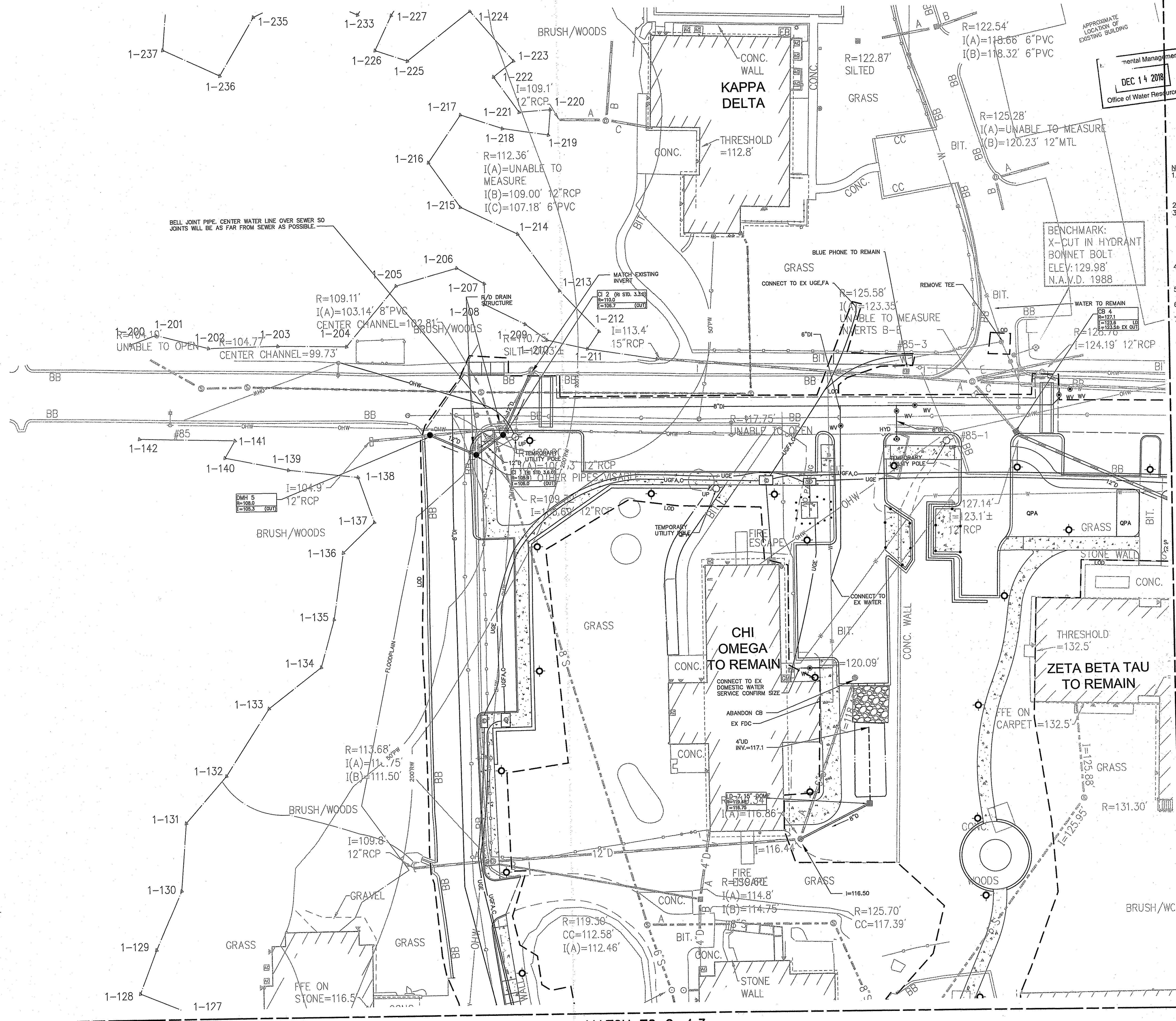
Sheet 10 of 28

Project Number 72772.01

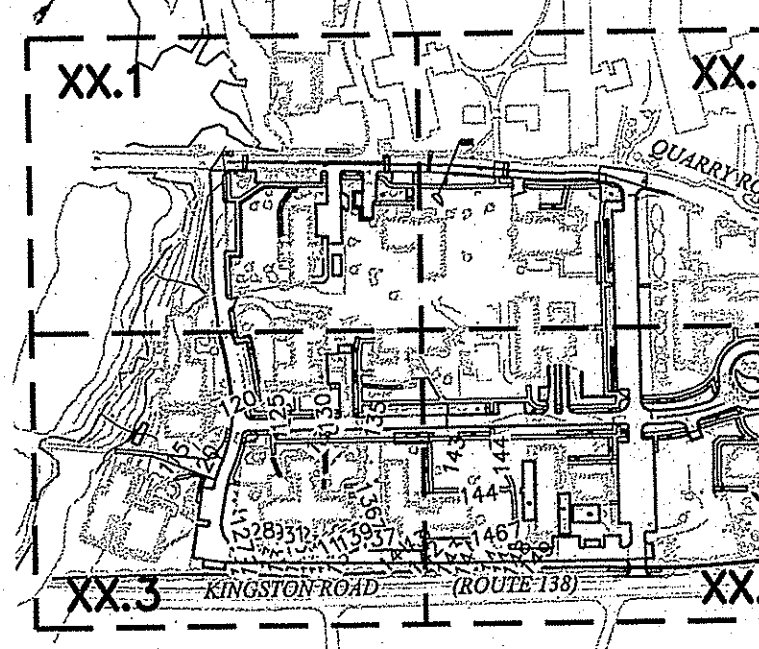


1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

mental Management  
DEC 14 2018  
Office of Water Resources



- NOTES:
- CONTRACTOR WILL BE REQUIRED TO COORDINATE BUILDING SERVICE LOCATIONS FOR ELECTRIC, FIRE ALARM, AND COMMUNICATION SERVICES WITH EACH INDIVIDUAL FRATERNITY HOUSE.
  - ALL FIRE ALARM CONDUIT SHALL BE 2 INCH PVC. ELECTRIC MANHOLE, TRANSFORMER PADS, TRANSFORMER BOLLARDS, CONDUIT, AND DUCT BANK CONSTRUCTION SHALL BE IN ACCORDANCE WITH NGRID SPECIFICATIONS FOR ELECTRICAL INSTALLATIONS. UNDERGROUND COMMERCIAL DISTRIBUTION (UCD) INSTALLATION AND RESPONSIBILITY GUIDE.
  - SITE LIGHTING SHOWN FOR COORDINATION ONLY. SEE SITE ELECTRIC PLAN FOR LIGHT POLES, POLE LOCATIONS AND WIRING ETC.
  - ALL ASBESTOS CONCRETE PIPE TO BE REMOVED SHALL BE PROPERLY DISPOSED OF.
  - CONNECTION TO EXISTING WATER PIPE SHALL BE DONE USING A SLID SLEEVE WHERE APPLICABLE.
  - SEE ADDITIONAL UTILITY DEMOLITION NOTES ON DRAWING C-1A.
- AS SPECIFIED IN THE LETTER OF APPROVAL DATED JAN 28 2019 FILE # 18-033
- NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE



KEY PLAN

0 10 20 40 Feet

### University of Rhode Island Fraternity Circle Improvements Kingston, Rhode Island

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Issued for: \_\_\_\_\_ Date: May 29, 2018

RIDEM PDA

Not Approved for Construction

Utility Plan

Jonathan B. Stabach  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18

**C-4.1**

Sheet 11 of 28

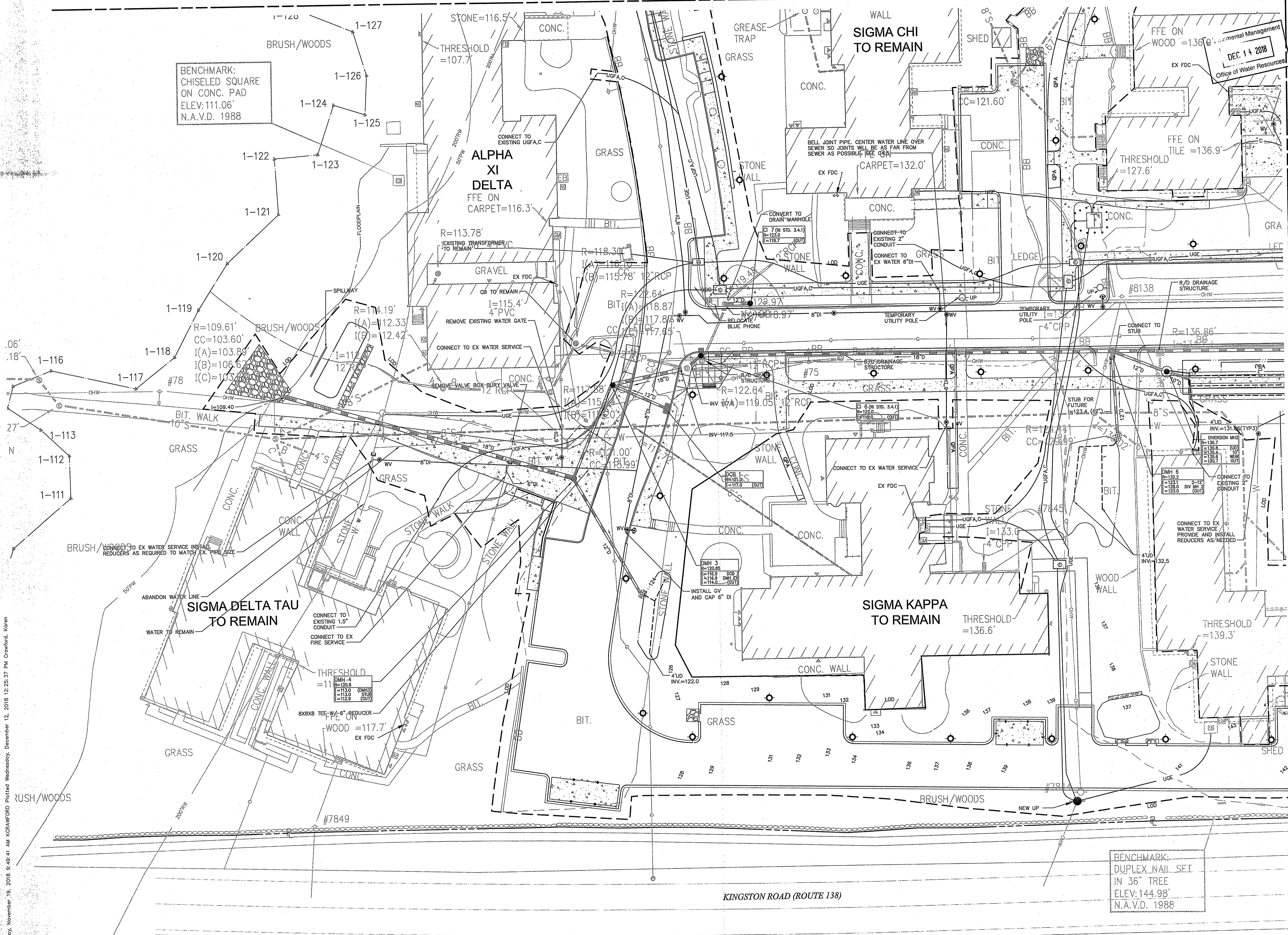
Project Number 72772.01



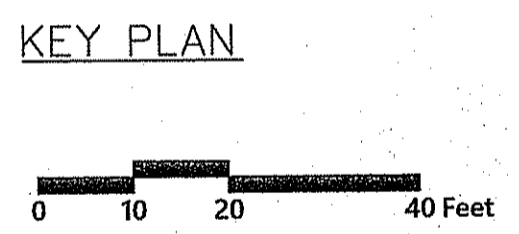
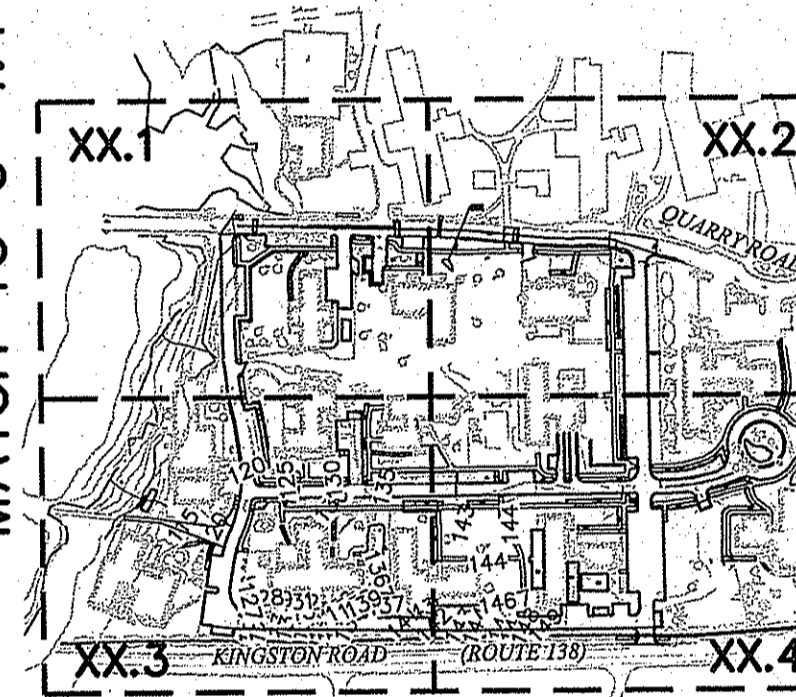


1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

- NOTES:
- CONTRACTOR WILL BE REQUIRED TO COORDINATE BUILDING SERVICE LOCATIONS FOR ELECTRIC, FIRE ALARM, AND COMMUNICATION SERVICES WITH EACH INDIVIDUAL FRATERNITY HOUSE.
  - ALL FIRE ALARM CONDUIT SHALL BE 2 INCH PVC.
  - ELECTRIC MANHOLE, TRANSFORMER PADS, TRANSFORMER BOLLARDS, CONDUIT, AND DUCT BANK CONSTRUCTION SHALL BE IN ACCORDANCE WITH NGRID SPECIFICATIONS FOR ELECTRICAL INSTALLATIONS: UNDERGROUND COMMERCIAL DISTRIBUTION (UCD) INSTALLATION AND RESPONSIBILITY GUIDE.
  - SITE LIGHTING SHOWN FOR COORDINATION ONLY. SEE SITE ELECTRIC PLAN FOR LIGHT POLES, POLE LOCATIONS AND WIRING ETC.
  - ALL ASBESTOS CONCRETE PIPE TO BE REMOVED SHALL BE PROPERLY DISPOSED OF.
  - CONNECTION TO EXISTING WATER PIPE SHALL BE DONE USING A SOLID SLEEVE WHERE APPLICABLE.
  - SEE ADDITIONAL UTILITY DEMOLITION NOTES ON DRAWING C-1.



MATCH TO C-4.4



University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

APPROVED FOR CONSTRUCTION

AS SPECIFIED IN THE LETTER OF APPROVAL DATED JAN 29 2019

NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL

APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Issued for: RIDEM PDA Date: May 29, 2018

Not Approved for Construction  
Utility Plan

Jonathan B. Stabach  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18

C-4.3  
Sheet 13 of 28

Project Number: 72772.01

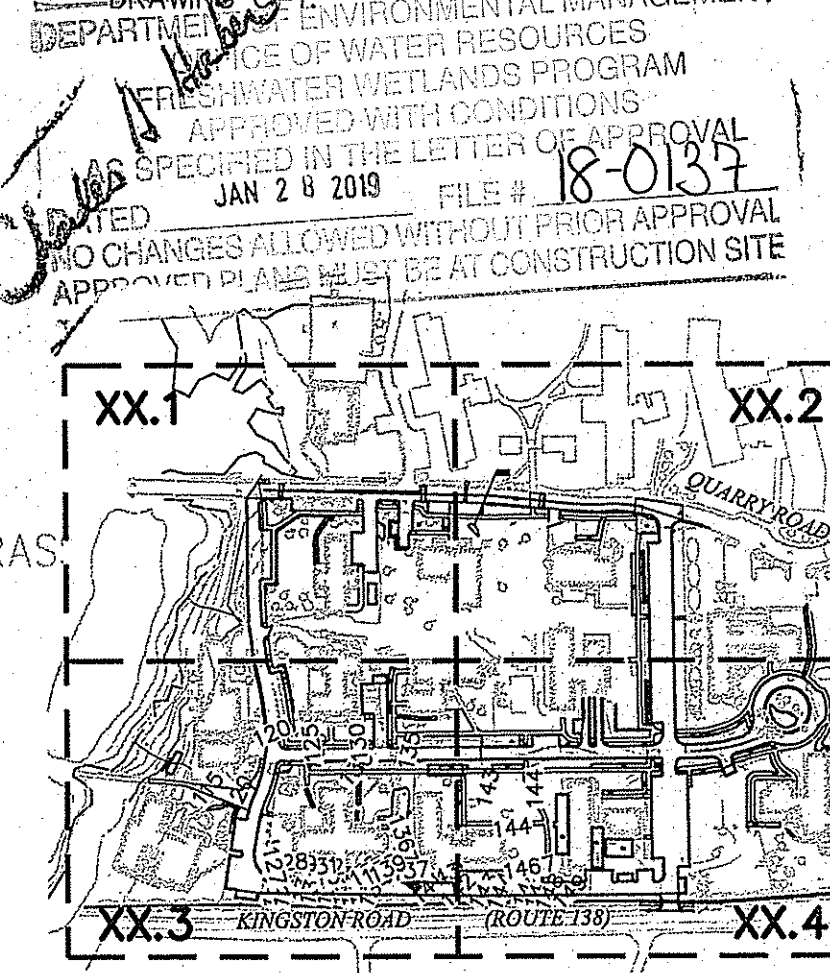
Saved Monday, November 19, 2018 9:49:41 AM KCCRAWFORD Plotted Wednesday, December 12, 2018 12:26:37 PM Crawford, Karen



Environmental Management  
DEC 14 2018  
Office of Water Resources

1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

- NOTES:
1. CONTRACTOR WILL BE REQUIRED TO COORDINATE BUILDING SERVICE LOCATIONS FOR ELECTRIC, FIRE ALARM, AND COMMUNICATION SERVICES WITH EACH INDIVIDUAL FRATERNITY HOUSE.
  2. ALL FIRE ALARM CONDUIT SHALL BE 2 INCH PVC. ELECTRIC MANHOLE, TRANSFORMER PADS, TRANSFORMER BOLLARDS, CONDUIT, AND DUCT BANK CONSTRUCTION SHALL BE IN ACCORDANCE WITH NGRID SPECIFICATIONS FOR ELECTRICAL INSTALLATIONS: UNDERGROUND COMMERCIAL DISTRIBUTION (UCD) INSTALLATION AND RESPONSIBILITY GUIDE.
  3. SITE LIGHTING SHOWN FOR COORDINATION ONLY. SEE SITE ELECTRICAL PLAN FOR LIGHT POLES, POLE LOCATIONS AND WIRING ETC.
  4. ALL ASBESTOS CONCRETE PIPE TO BE REMOVED SHALL BE PROPERLY DISPOSED OF.
  5. CONNECTION TO EXISTING WATER PIPE SHALL BE DONE USING A SOLID SLEEVE WHERE APPLICABLE.
  6. SEE ADDITIONAL UTILITY DEMOLITION NOTES ON DRAWING OF ENVIRONMENTAL MANAGEMENT DEPARTMENT OFFICE OF WATER RESOURCES FRESHWATER WETLANDS PROGRAM APPROVED WITH CONDITIONS SPECIFIED IN THE LETTER OF APPROVAL JAN 28 2019 FILE # 18-0134
  7. NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE



University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

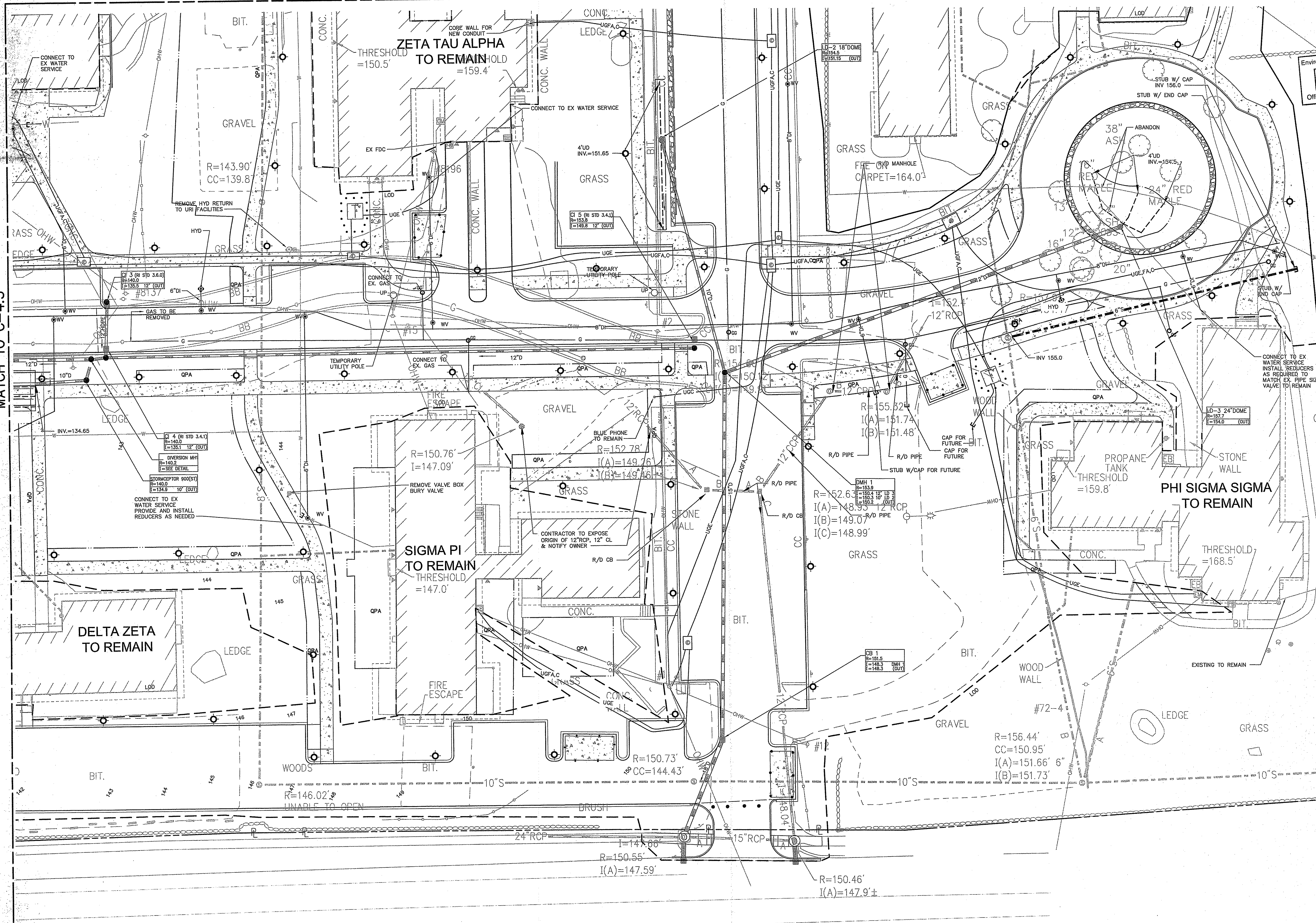
Designed by: \_\_\_\_\_  
Checked by: \_\_\_\_\_  
Date: \_\_\_\_\_

Issued for: RIDEM PDA  
Date: May 29, 2018

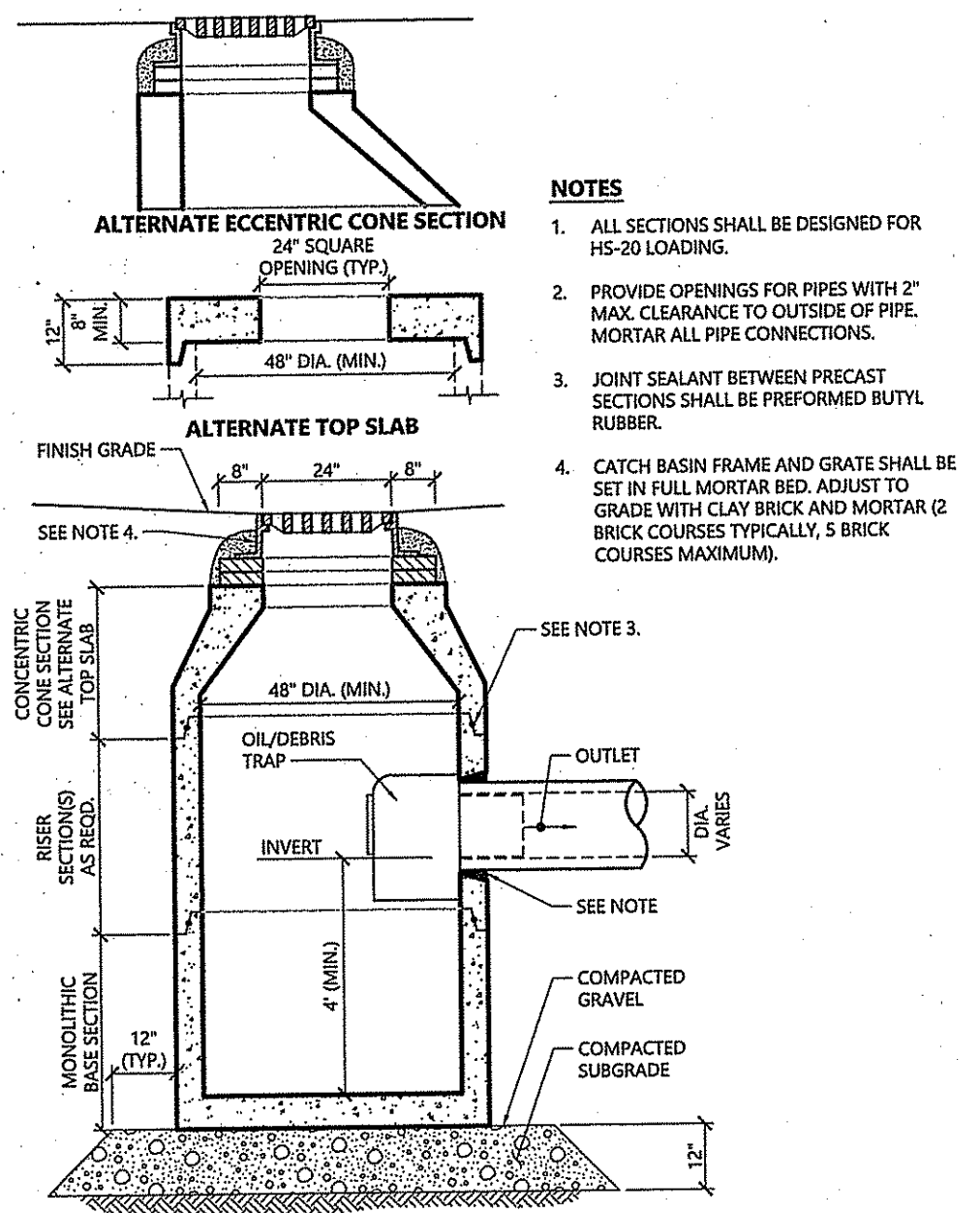
Not Approved for Construction  
Utility Plan

JONATHAN B. STABACH  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18  
C-4.4  
Sheet 14 of 28  
Project Number 72772.01

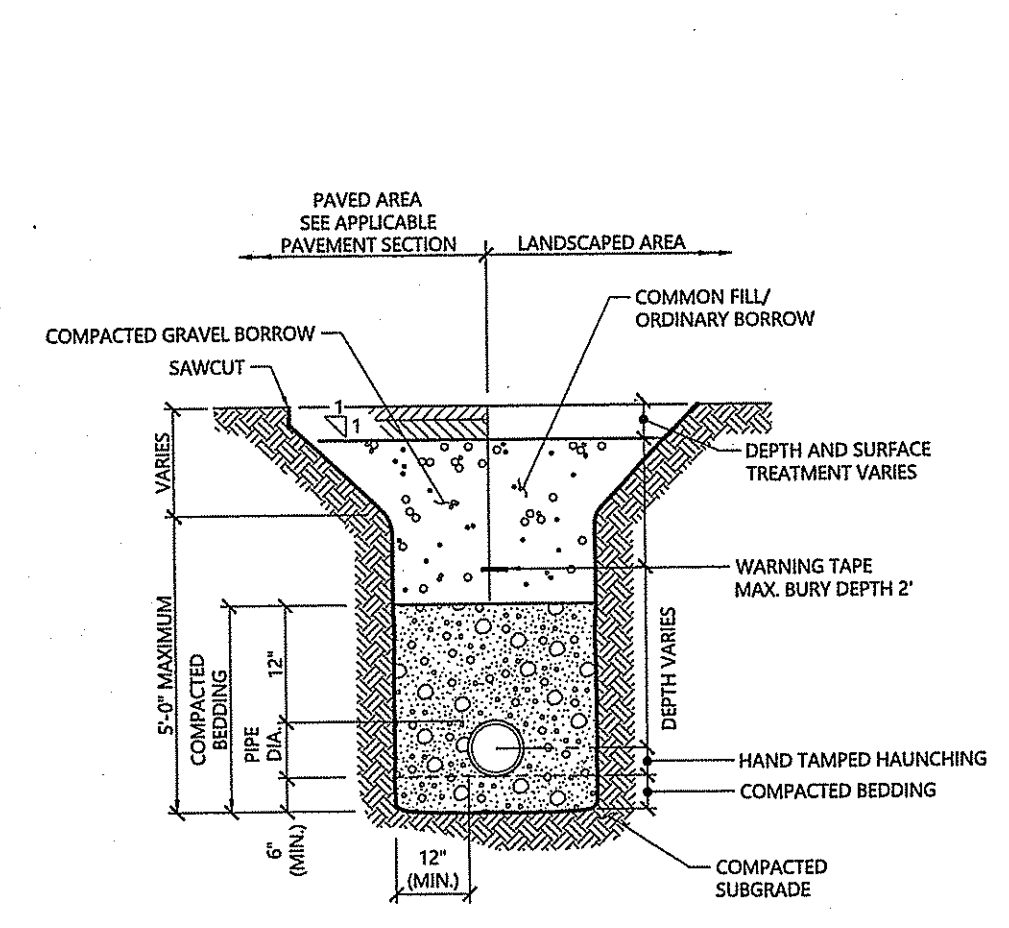
MATCH TO C-4.3



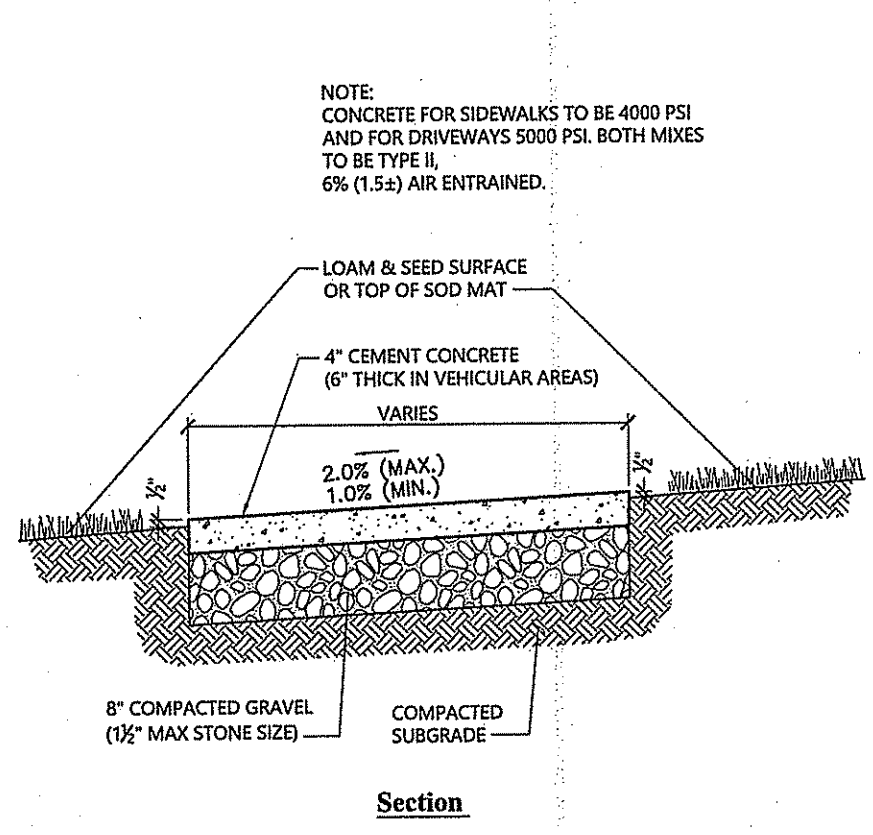




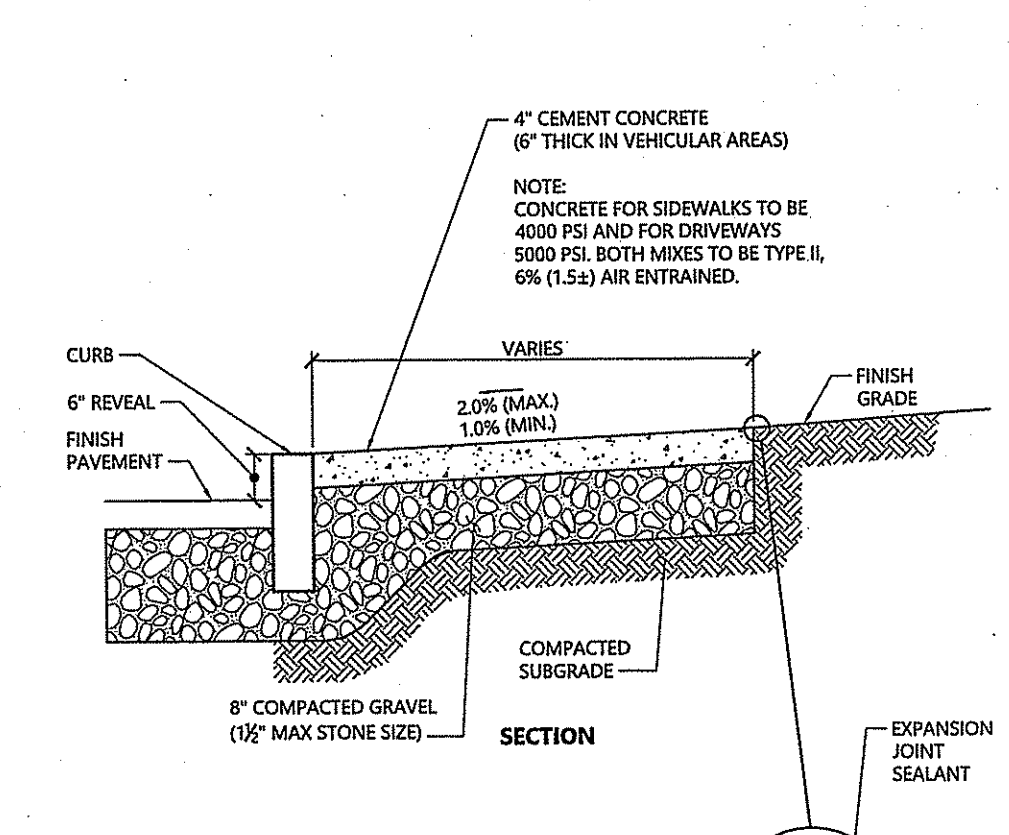
**Catch Basin (CB) With Oil/Debris Trap** 1/16  
N.T.S. Source: VHB LD\_101



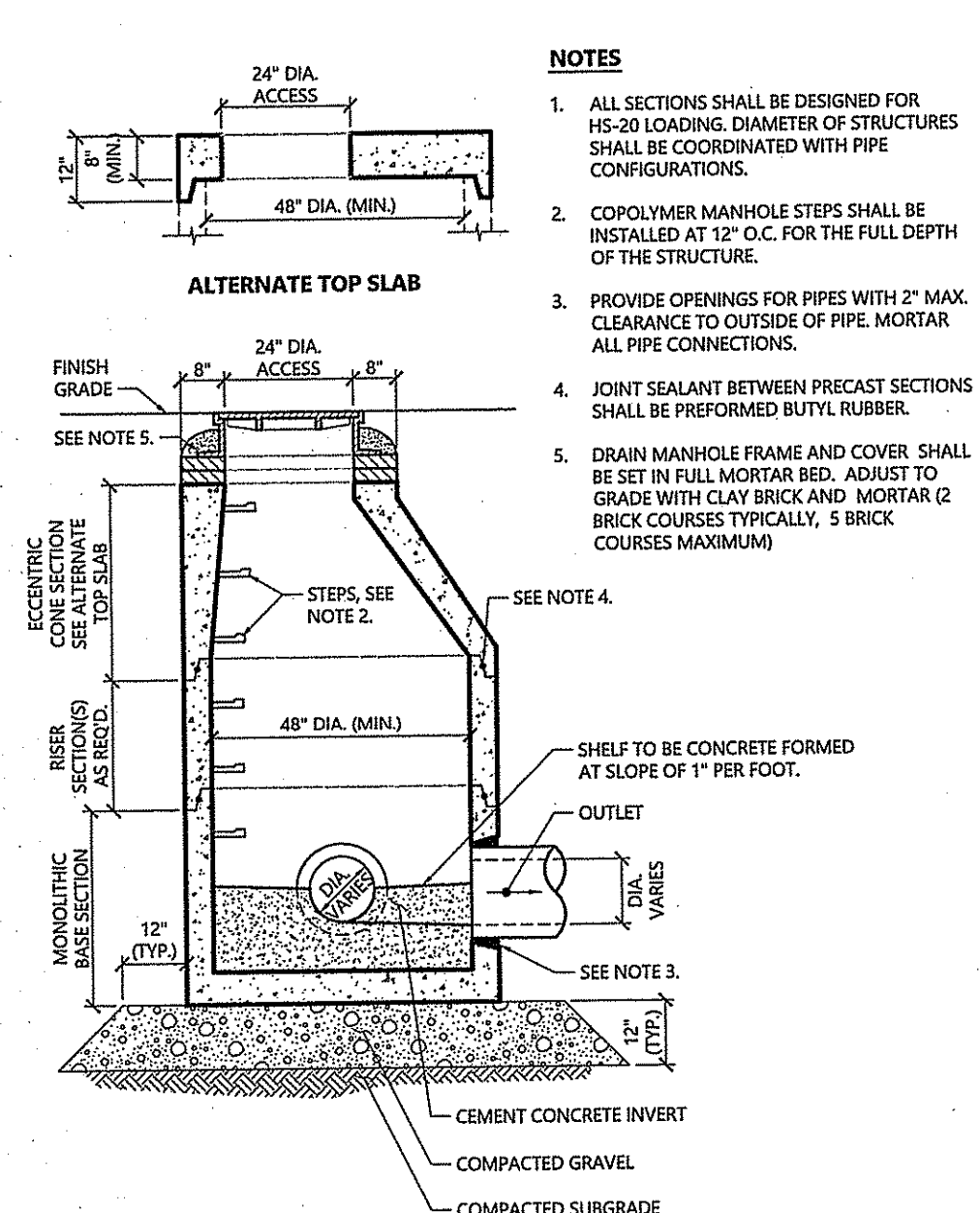
**Utility Trench** 1/16  
N.T.S. Source: VHB REV LD\_300



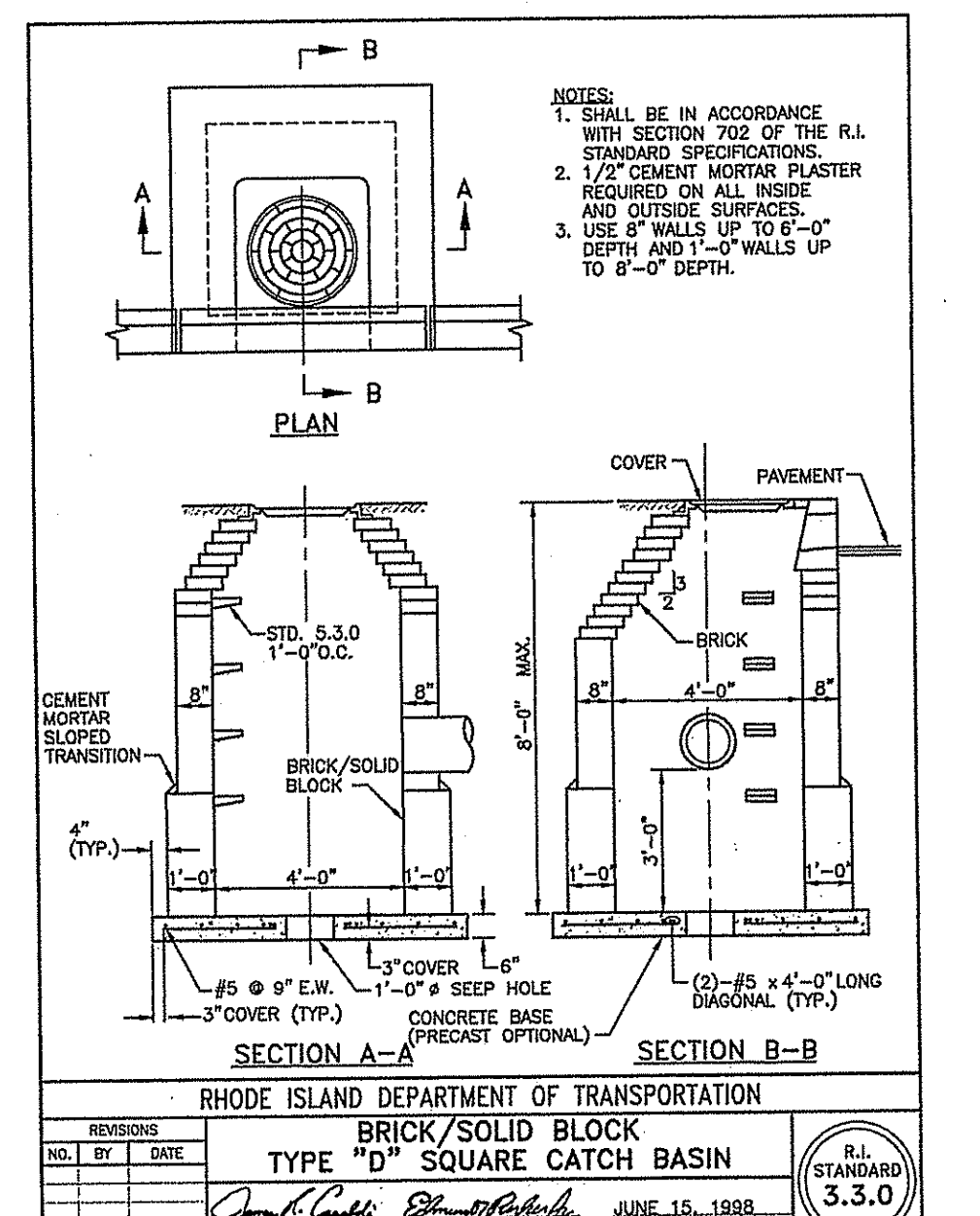
**Concrete Sidewalk in Landscape Area** 1/16  
N.T.S. Source: VHB REV LD\_426



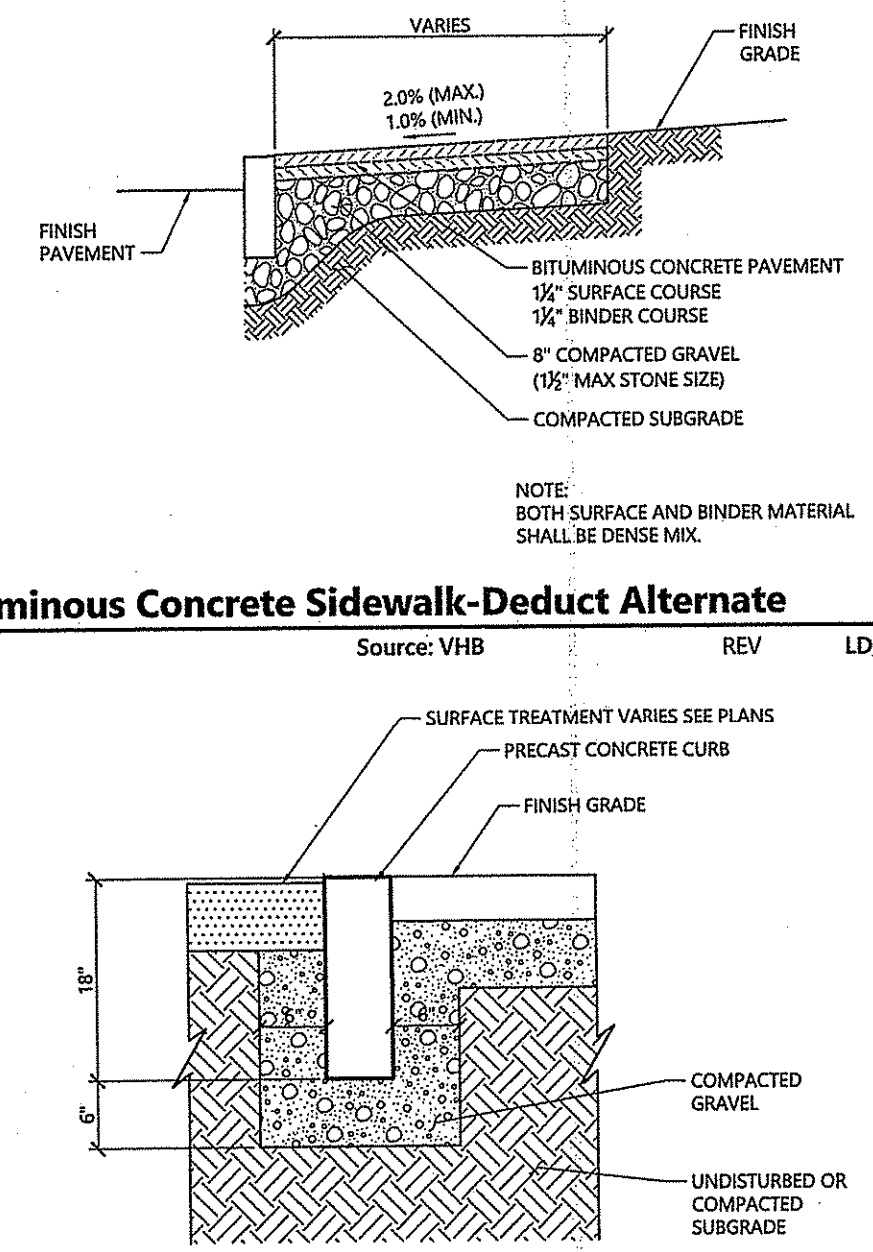
**Concrete Sidewalk** 1/16  
N.T.S. Source: VHB REV LD\_420



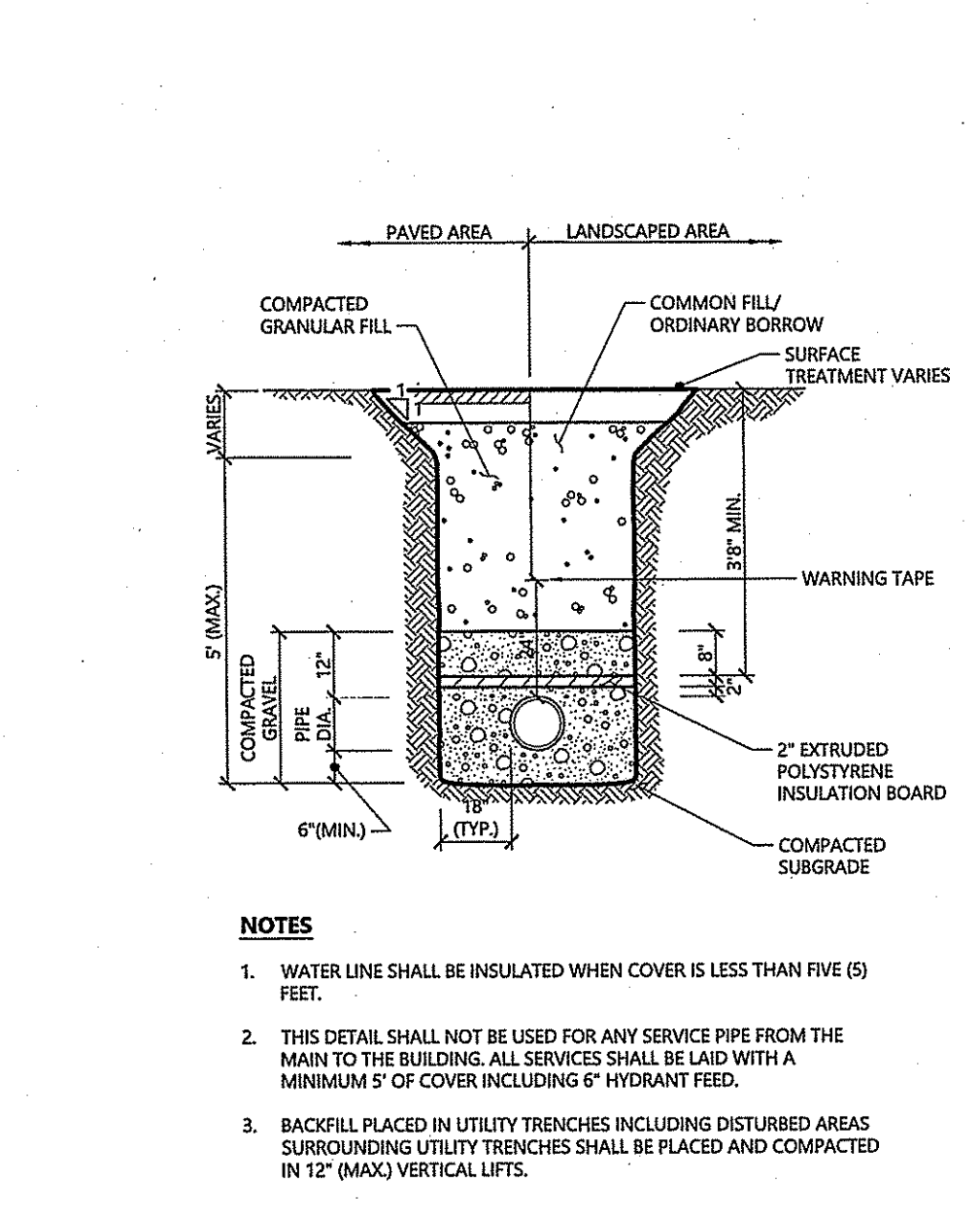
**Drain Manhole (DMH)** 1/16  
N.T.S. Source: VHB LD\_115



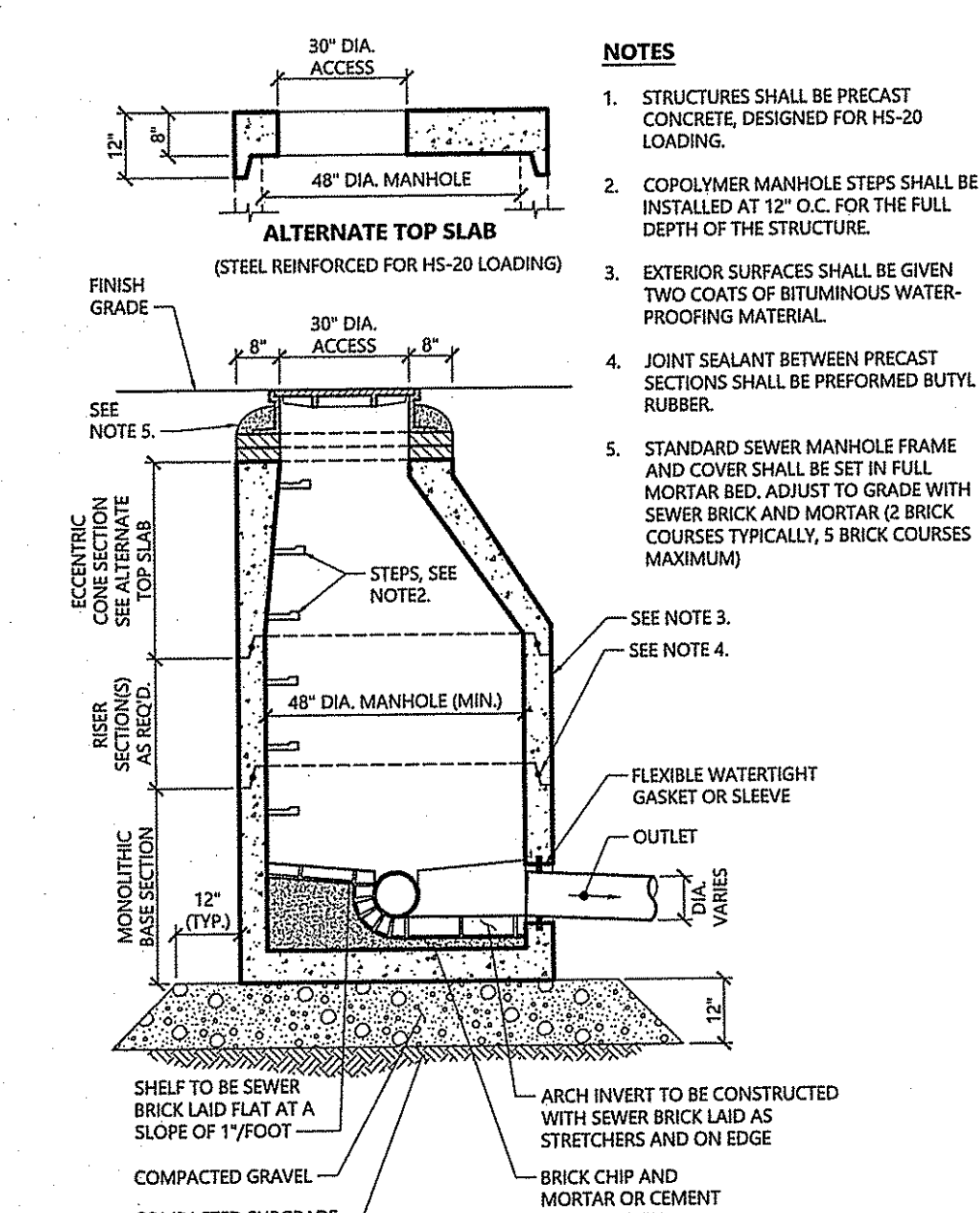
**Brick/Solid Block Type 'D' Square Catch Basin** 1/16  
N.T.S. Source: VHB REV LD\_409



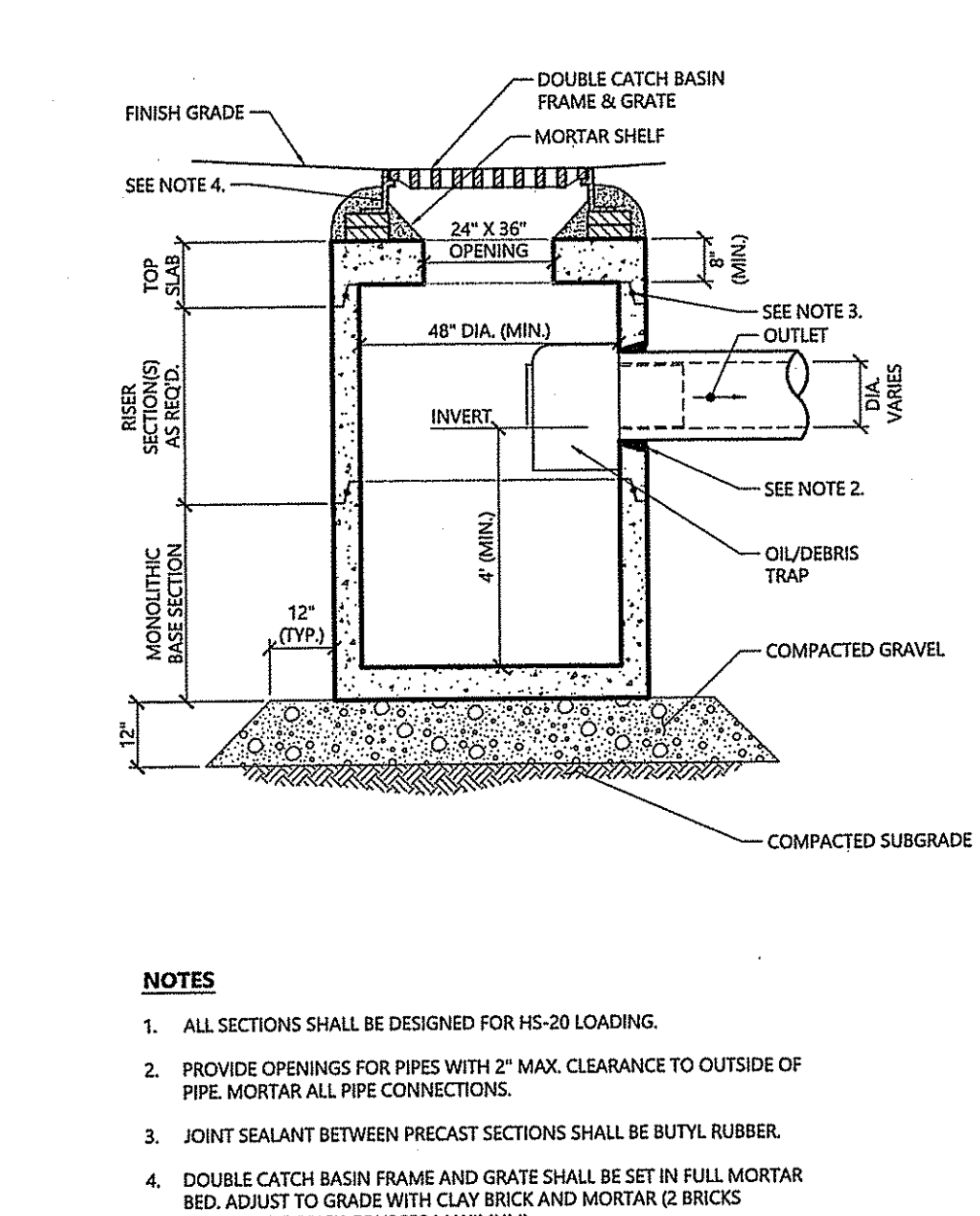
**Flush Curb** 1/16  
N.T.S. Source: VHB REV LD\_422



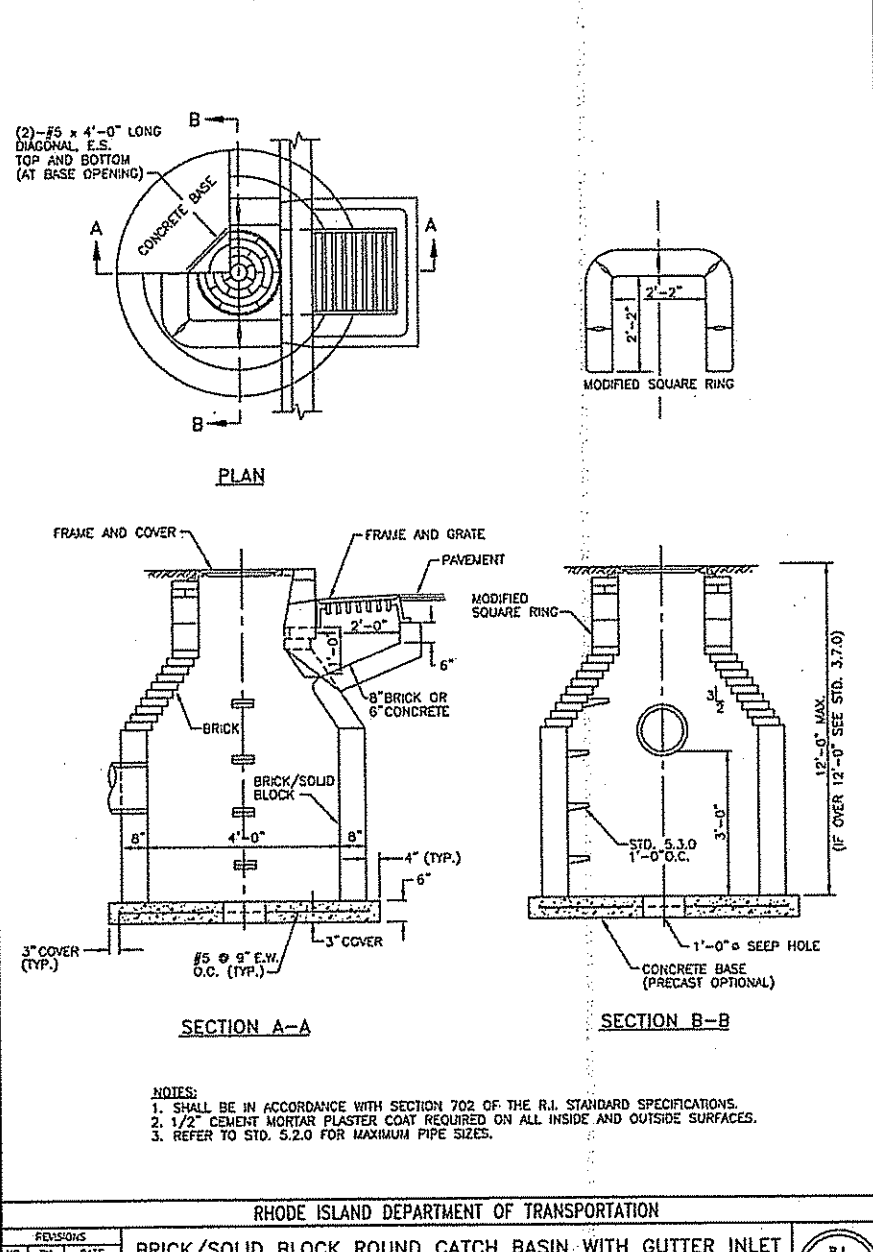
**Water Utility Trench - Pipe Insulation** 1/16  
N.T.S. Source: VHB REV LD\_305



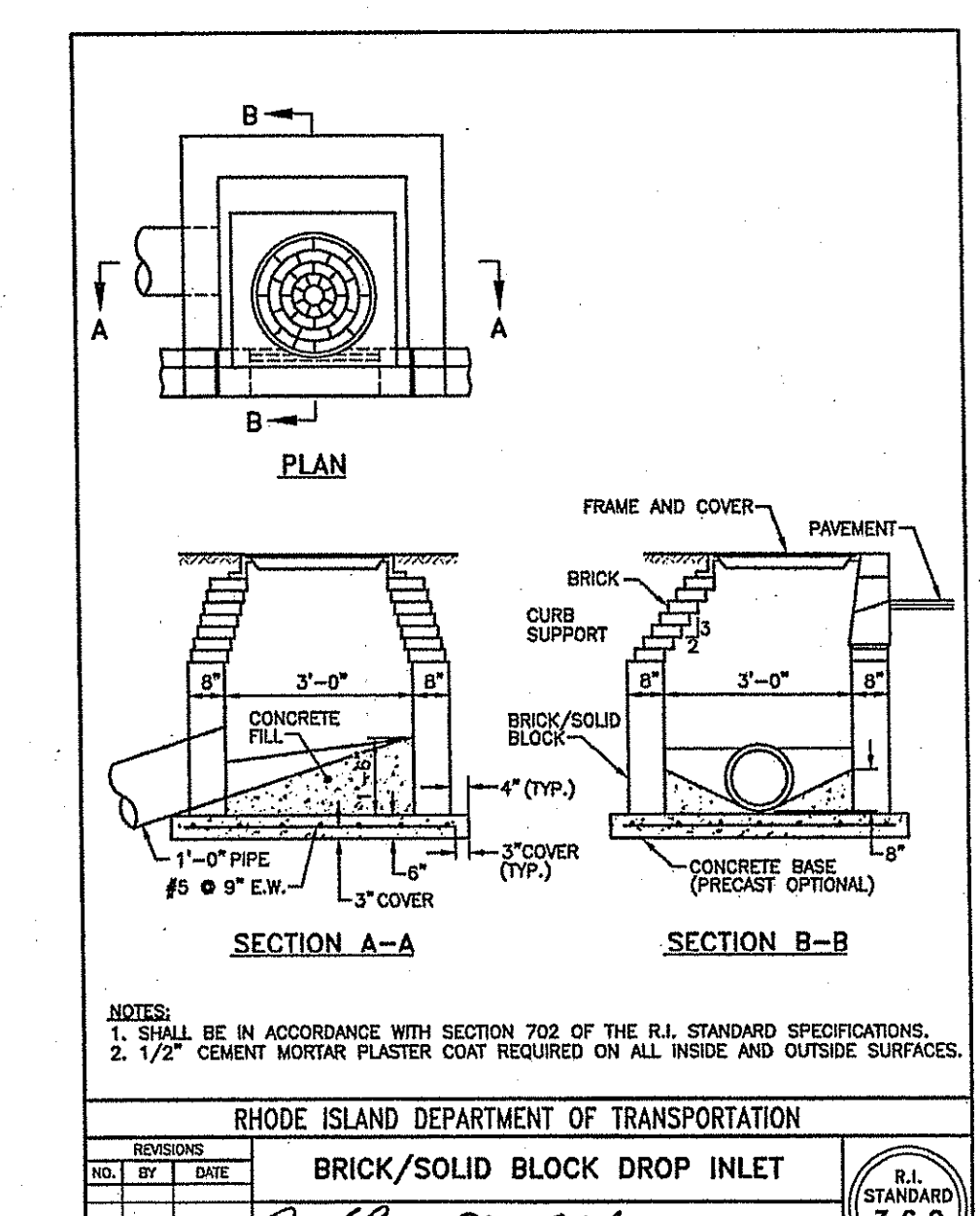
**Sanitary Sewer Manhole (SMH)-Add Alternate** 1/16  
N.T.S. Source: VHB REV LD\_200



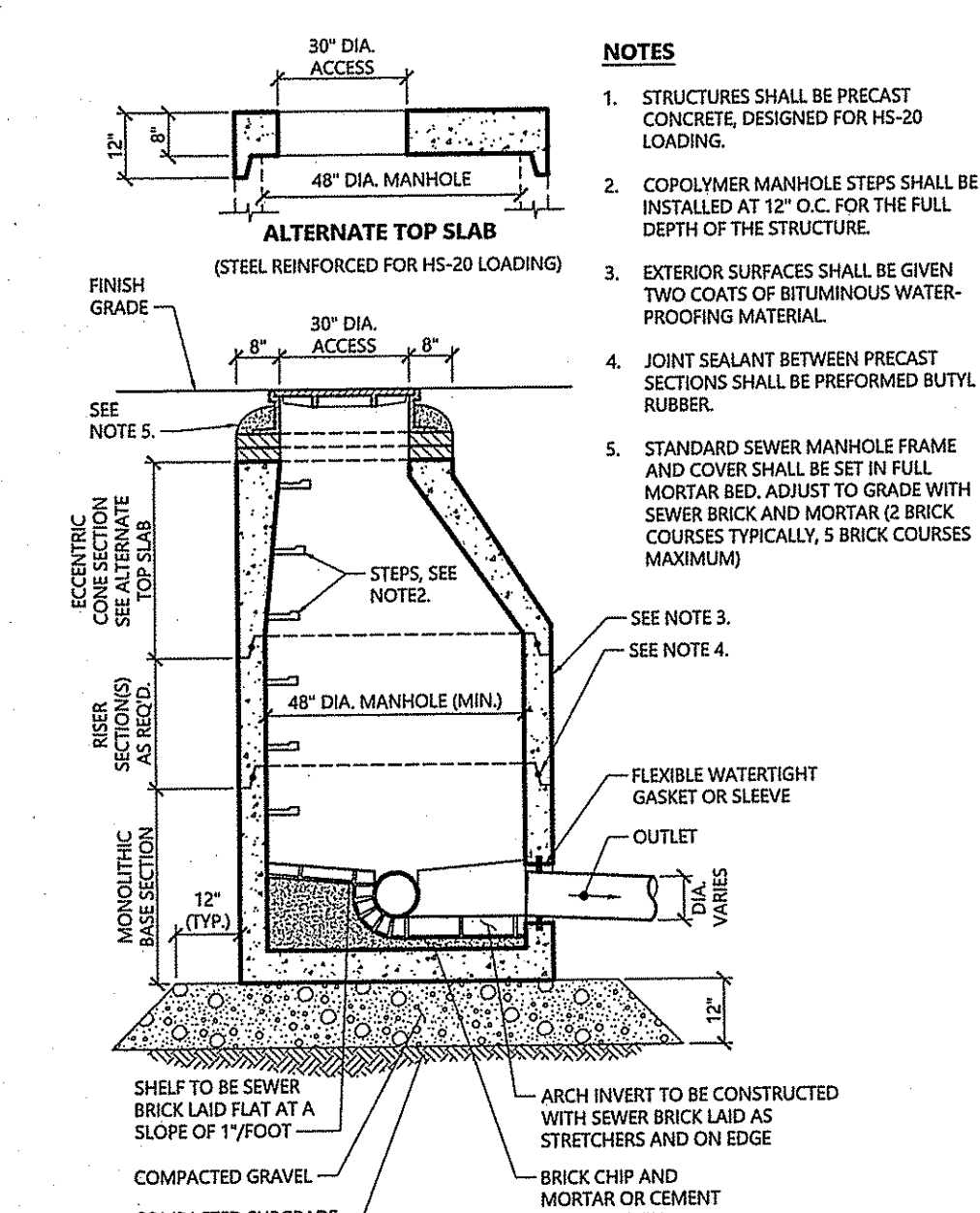
**Double Grate Catch Basin (DCB) with Oil/Debris Trap** 1/16  
N.T.S. Source: VHB LD\_103



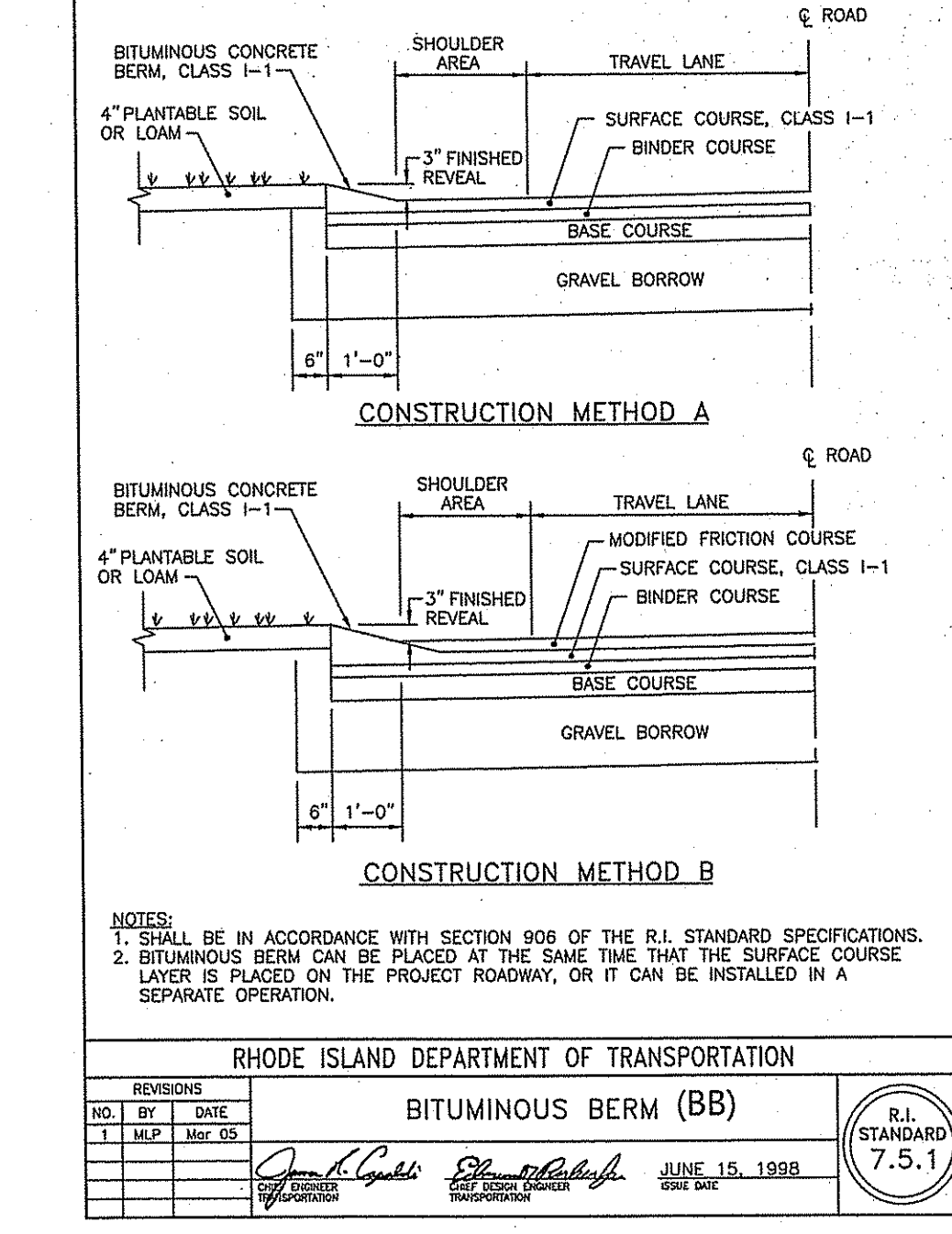
**Brick/Solid Block Drop Inlet** 1/16  
N.T.S. Source: VHB REV LD\_426



**Precast Concrete Curb (PCC)** 1/16  
N.T.S. Source: VHB REV LD\_404



**Vertical Granite Curb (VGC)-Add Alternate** 1/16  
N.T.S. Source: VHB REV LD\_402



**Bituminous Berm (BB)** 1/16  
N.T.S. Source: VHB REV LD\_420

OFFICE OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019 FILE # 18-037  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

**University of Rhode Island**  
Fraternity Circle Improvements  
Kingston, Rhode Island

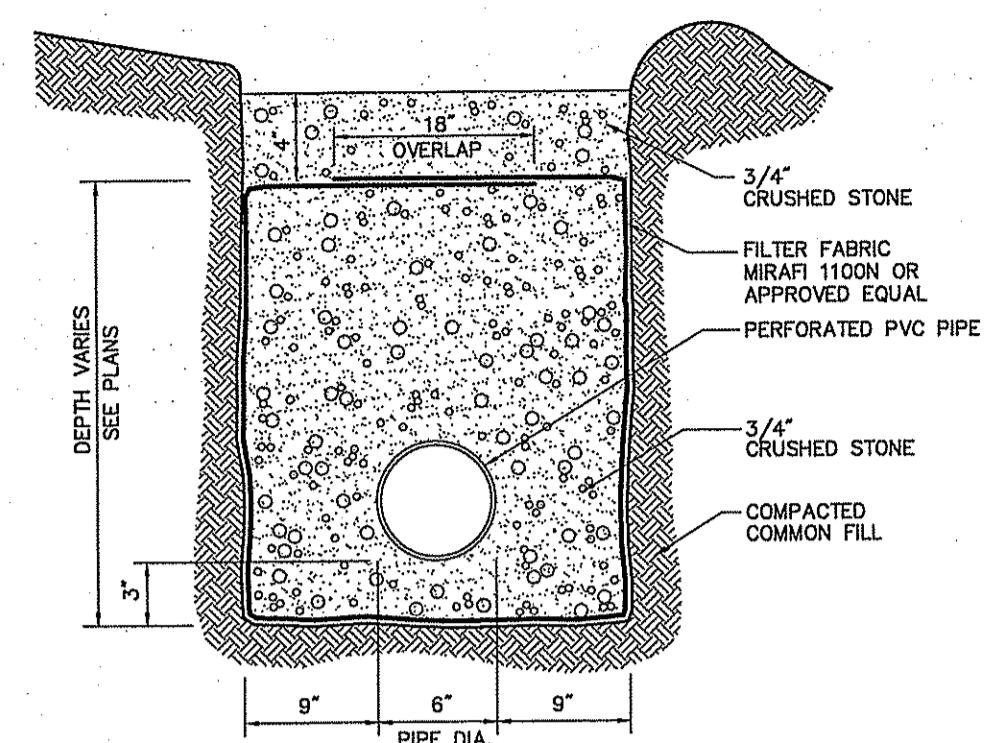
| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Issued for: RIDEM PDA  
Date: May 29, 2018

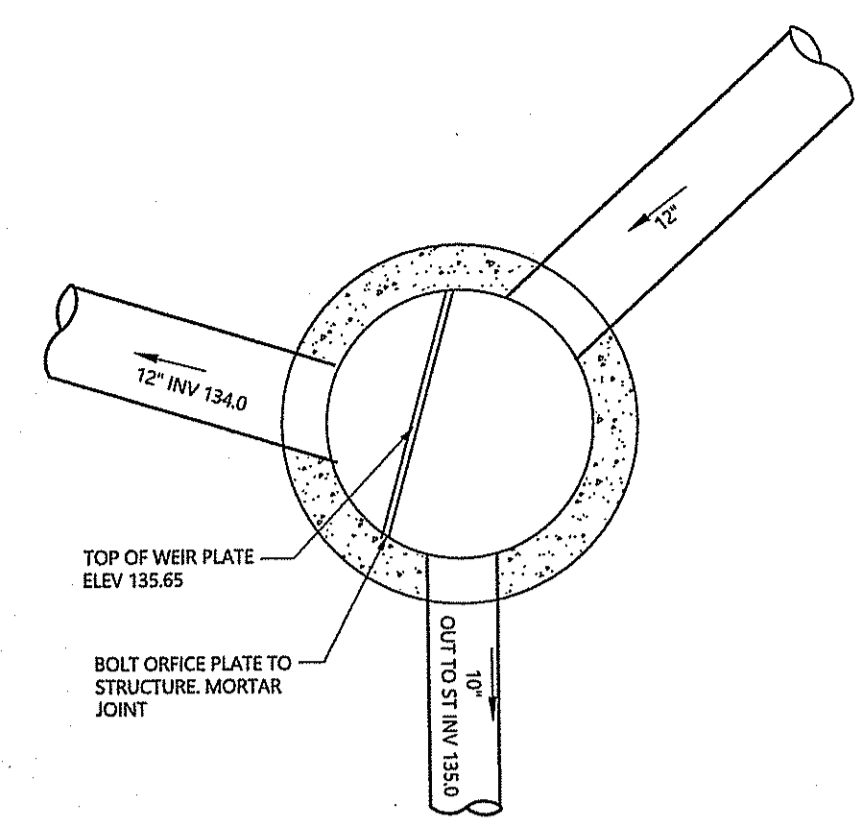
Not Approved for Construction  
**Site Details 1**

Jonathan B. Stabach  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18

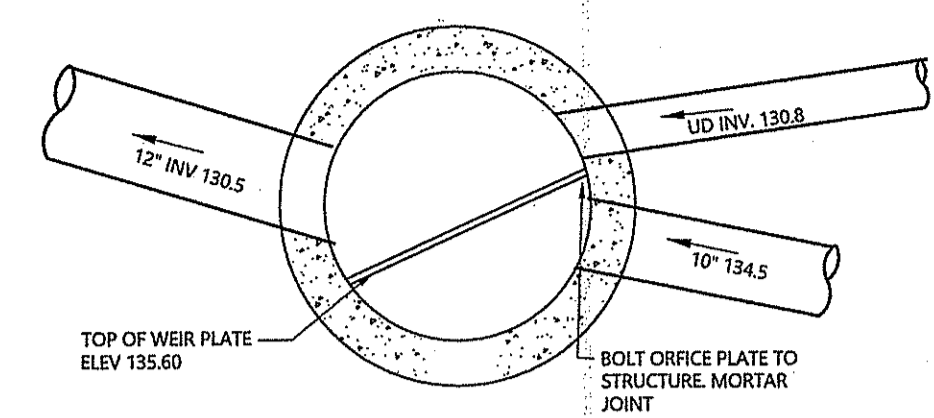
**C-5.1**  
Sheet 16 of 28  
Project Number: 72772.01



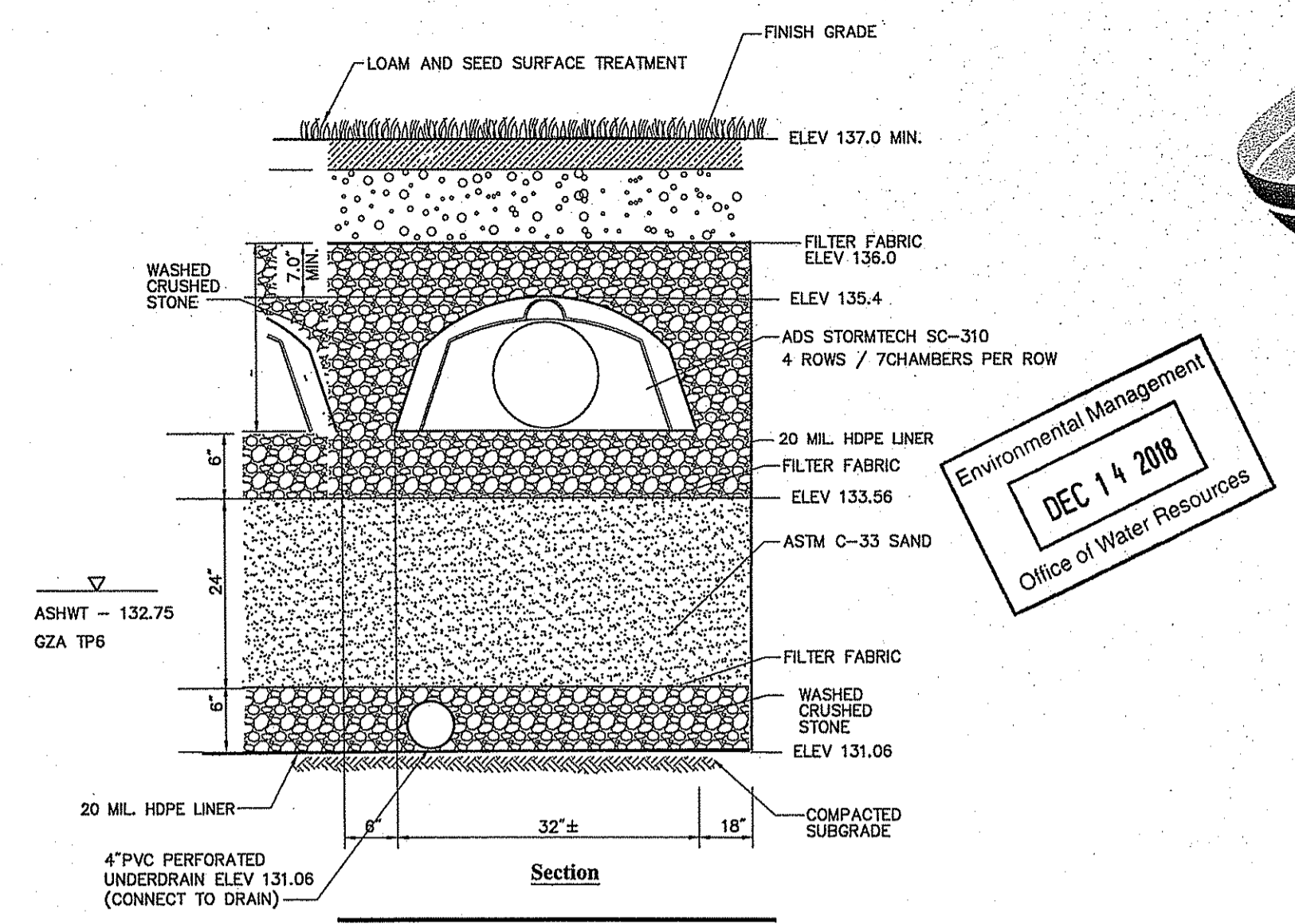
**Stone Trench with Underdrain** 6/08  
N.T.S. Source: VHB REV LD\_184



**Diversion Manhole 1** 6/08  
N.T.S. Source: VHB LD\_165

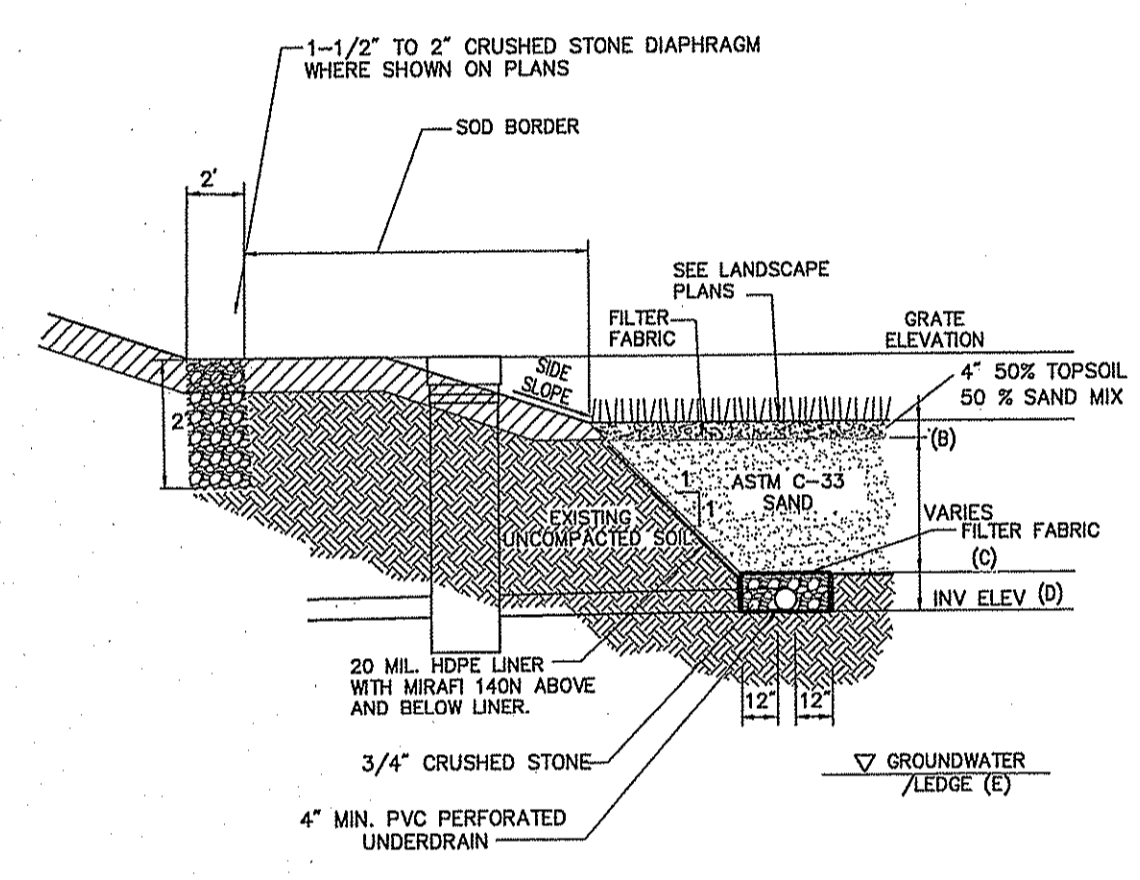


**Diversion Manhole 2** 6/08  
N.T.S. Source: VHB LD\_165



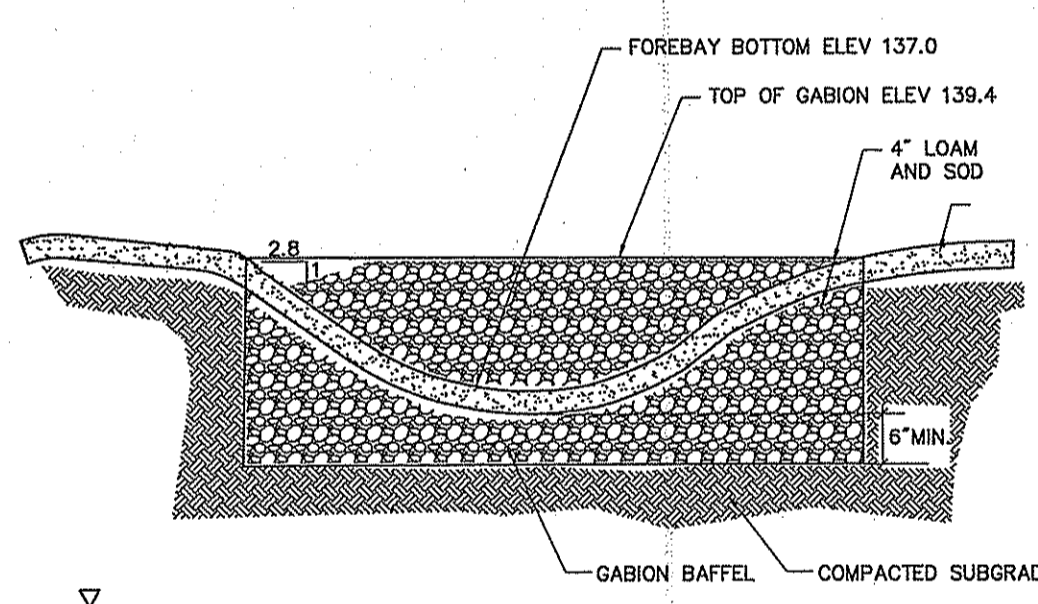
**Sand Filter - SF9** 6/08  
N.T.S. Source: VHB LD\_165

Environmental Management  
DEC 14 2018  
Office of Water Resources

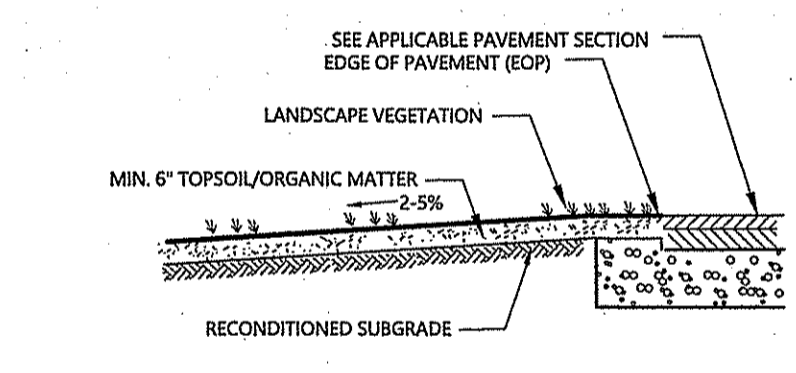


**Sand Filter** 1/16  
N.T.S. Source: VHB REV LD\_350

| ELEVATIONS |        |      |           |      |
|------------|--------|------|-----------|------|
|            | SF 1   | SF 2 | SF 6(NIC) | SF 8 |
| A          | 18\"/> |      |           |      |

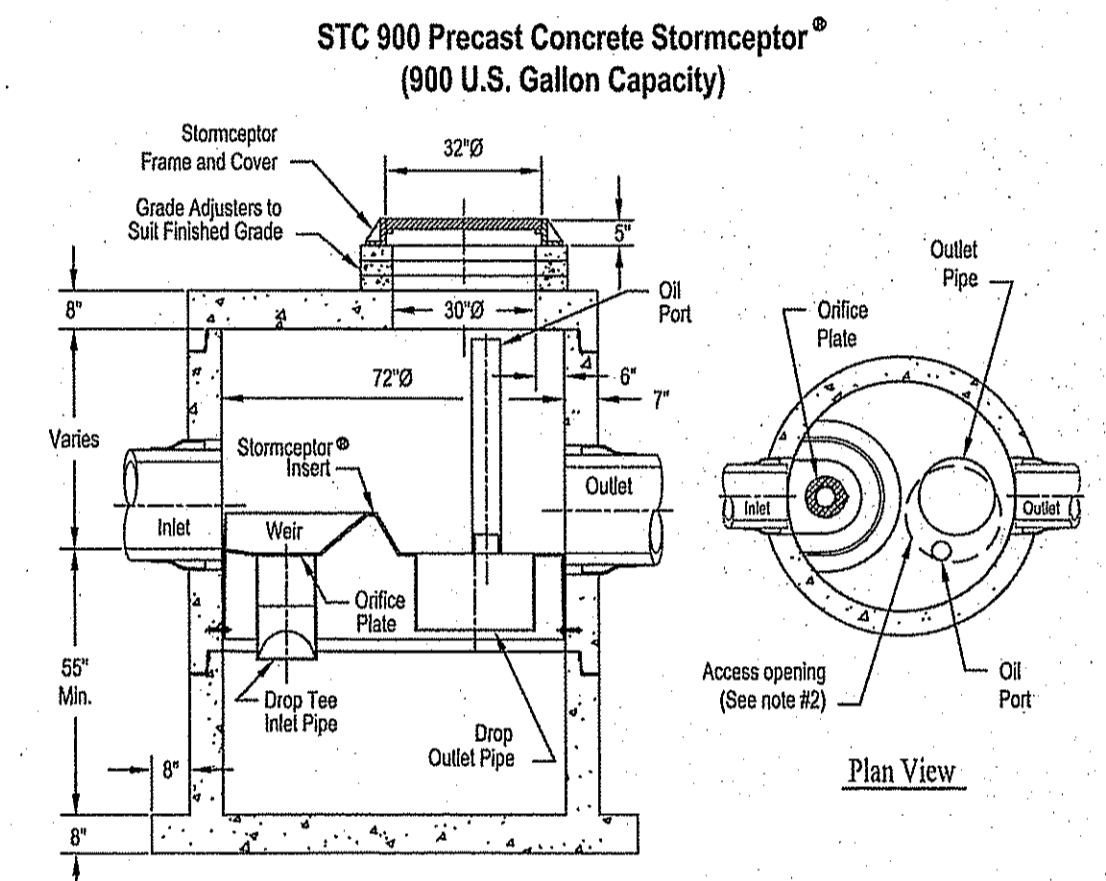


**Sediment Forebay With Gabion - SFB** 6/08  
N.T.S. Source: VHB REV LD\_165



**Qualified Pervious Area (QPA)** 1/16  
N.T.S. Source: VHB REV LD\_350

Rinker Concrete Pipe Division



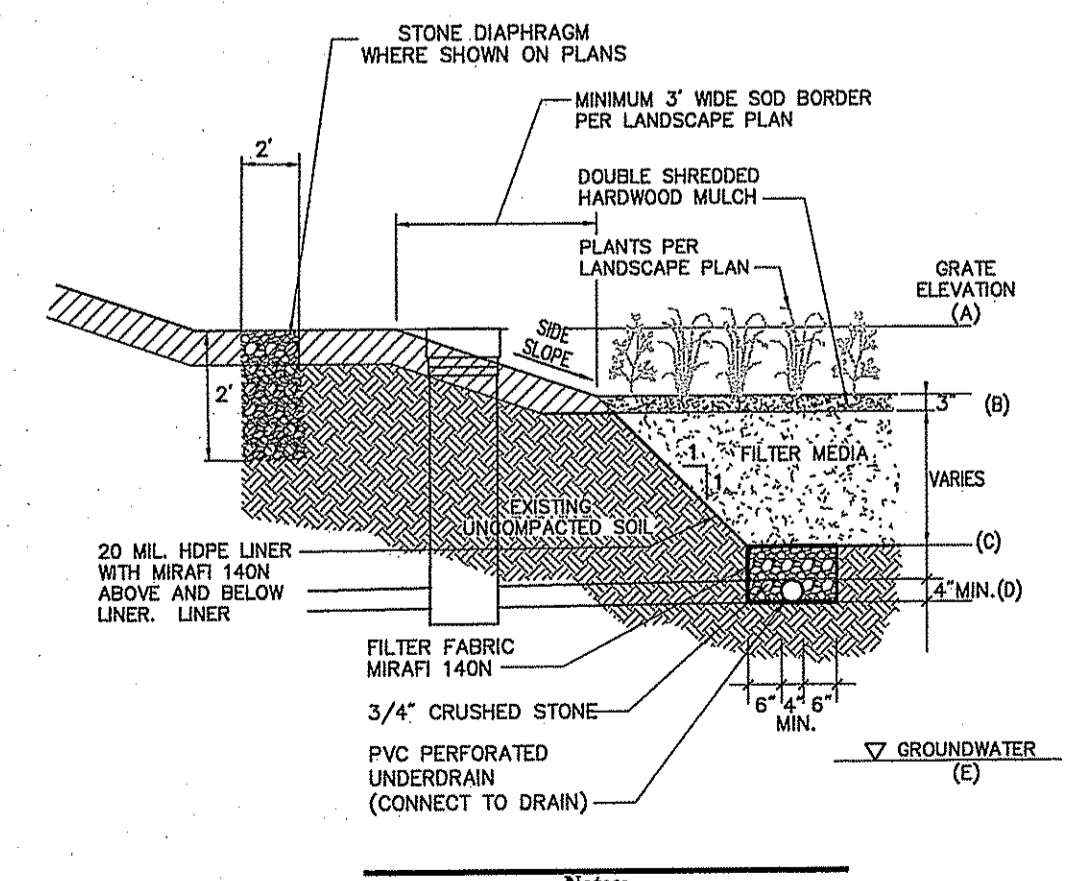
- Notes:
- The Use Of Flexible Connection is Recommended at the Inlet and Outlet Where Applicable.
  - The Cover Should be Positioned Over The Outlet Drop Pipe and The Oil Port.
  - The Stormceptor System is protected by one or more of the following U.S. Patents: 6737115, 6949118, 6808769, 6871690, 6782216, 6766305.
  - Contact a Concrete Pipe Division representative for further details not listed on this drawing.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019 FILE # 18-037  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

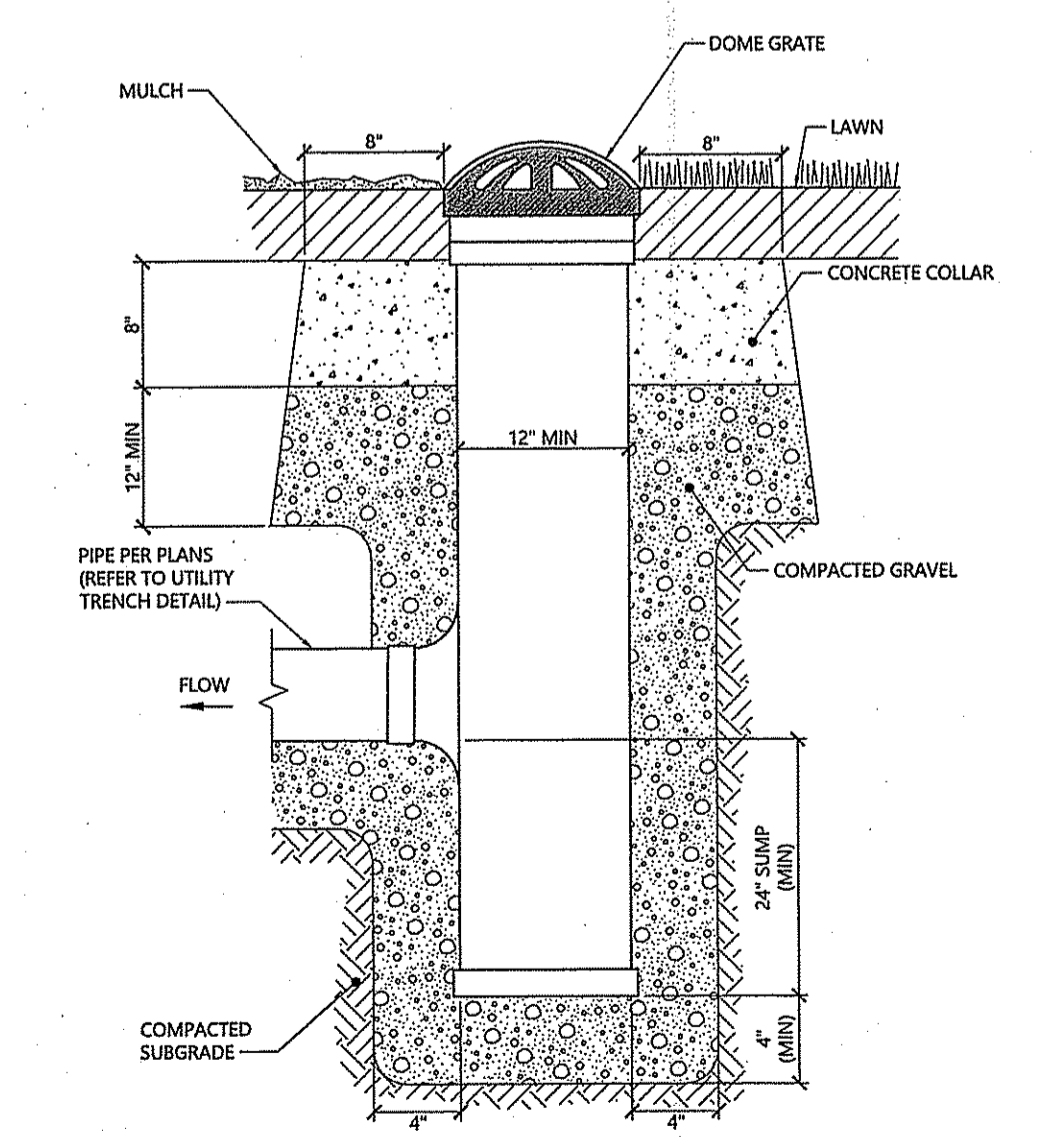
| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Issued for: RIDEM PDA Date: May 29, 2018

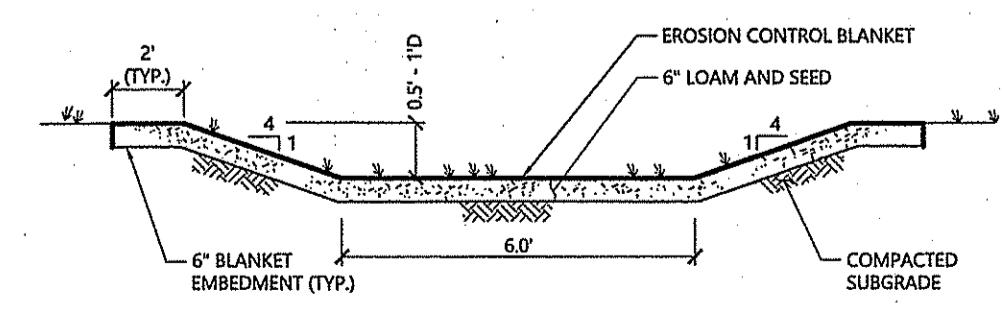


**Bioretention Basin** 1/16  
N.T.S. Source: VHB LD\_350

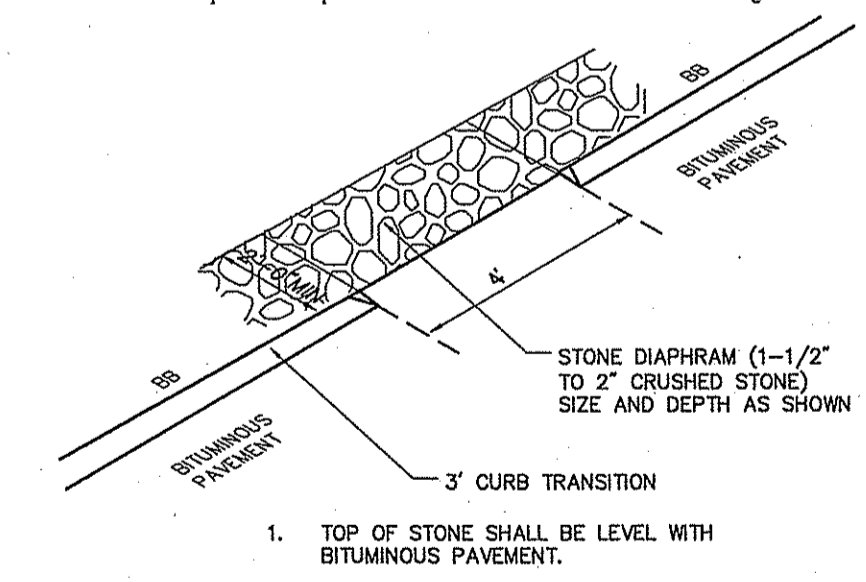
| ELEVATIONS |        |       |       |       |
|------------|--------|-------|-------|-------|
|            | BIO 3  | BIO 4 | BIO 5 | BIO 7 |
| A          | 24\"/> |       |       |       |



**Landscape Drain (LD)** 9/17  
N.T.S. Source: VHB LD\_197



**Grassed Swale** 1/16  
N.T.S. Source: VHB REV LD\_171



**Curb Opening** 1/16  
N.T.S. Source: VHB REV LD\_500

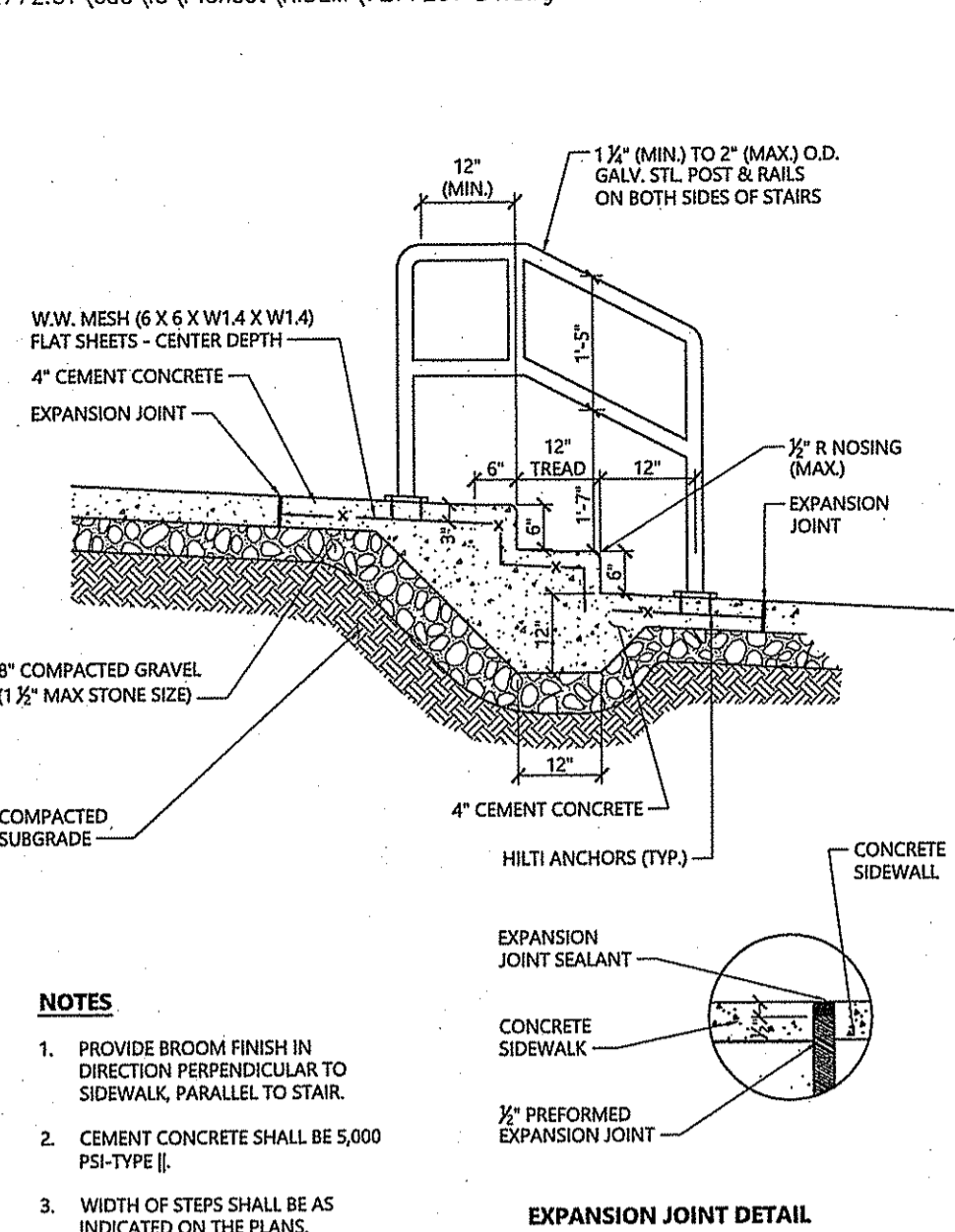
Not Approved for Construction  
Site Details 2

JONATHAN B. STABACH  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18  
C-5.2  
Sheet 17 of 28  
Project Number 7272.01

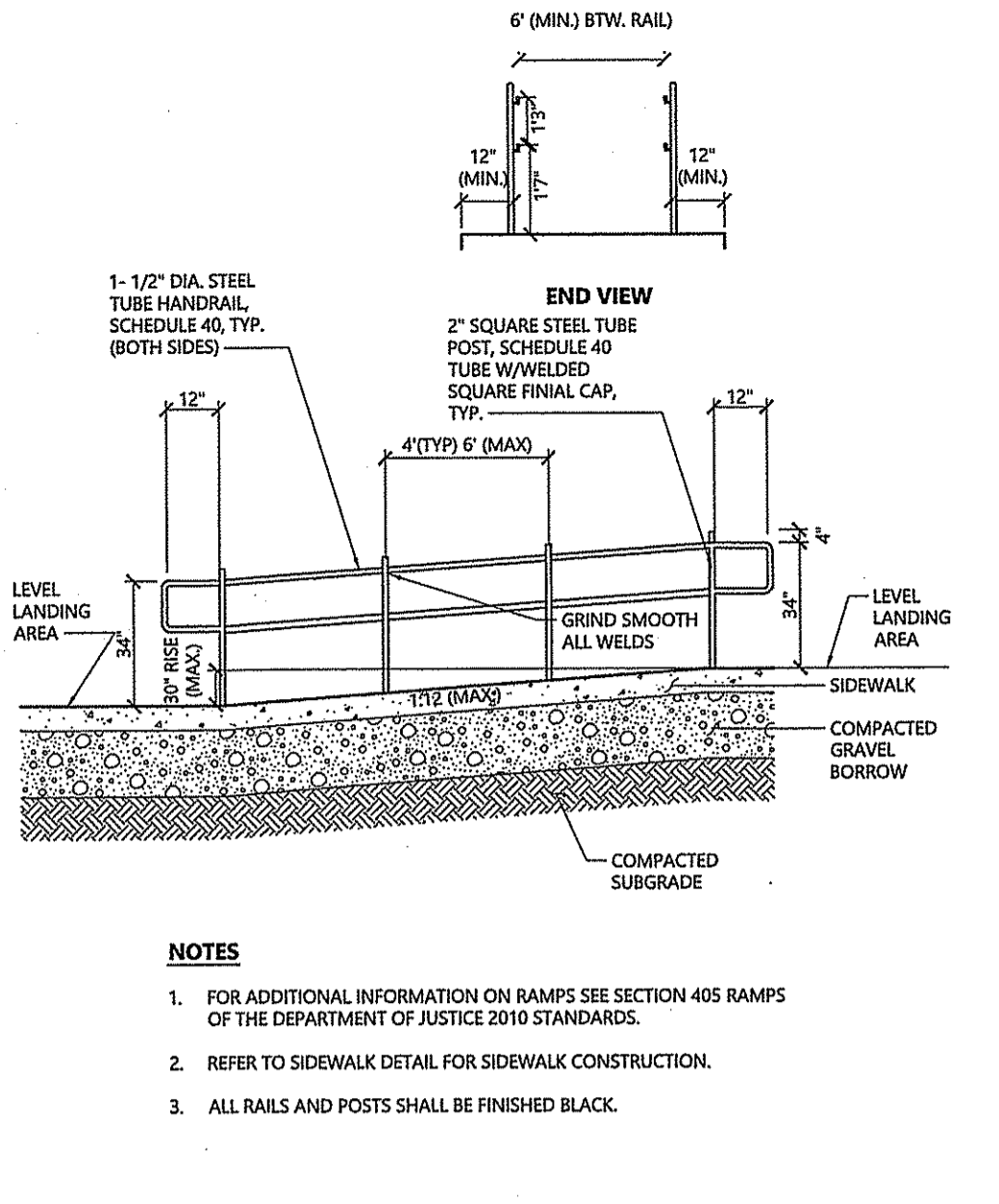


1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

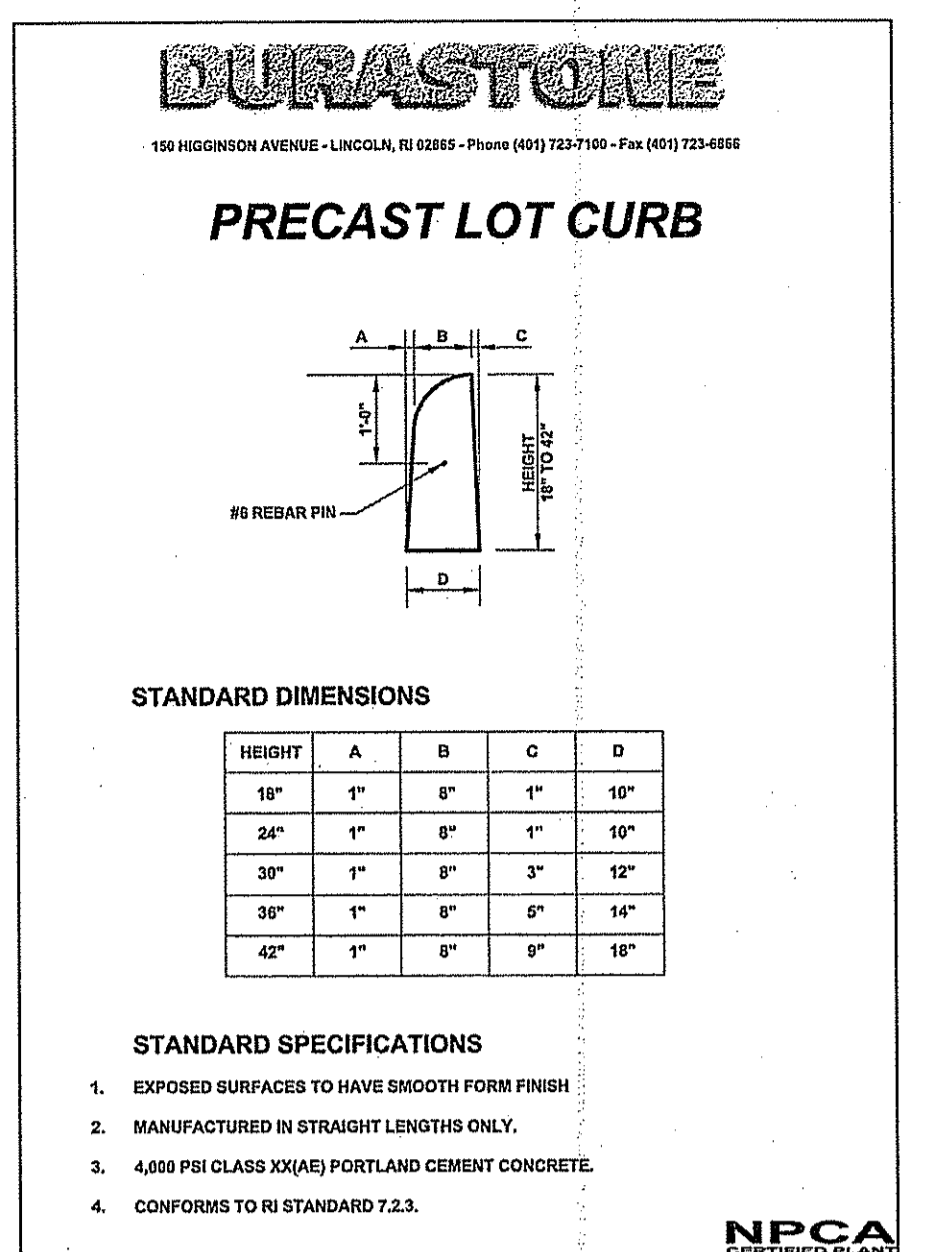
Environmental Management  
DEC 14 2018  
Office of Water Resources



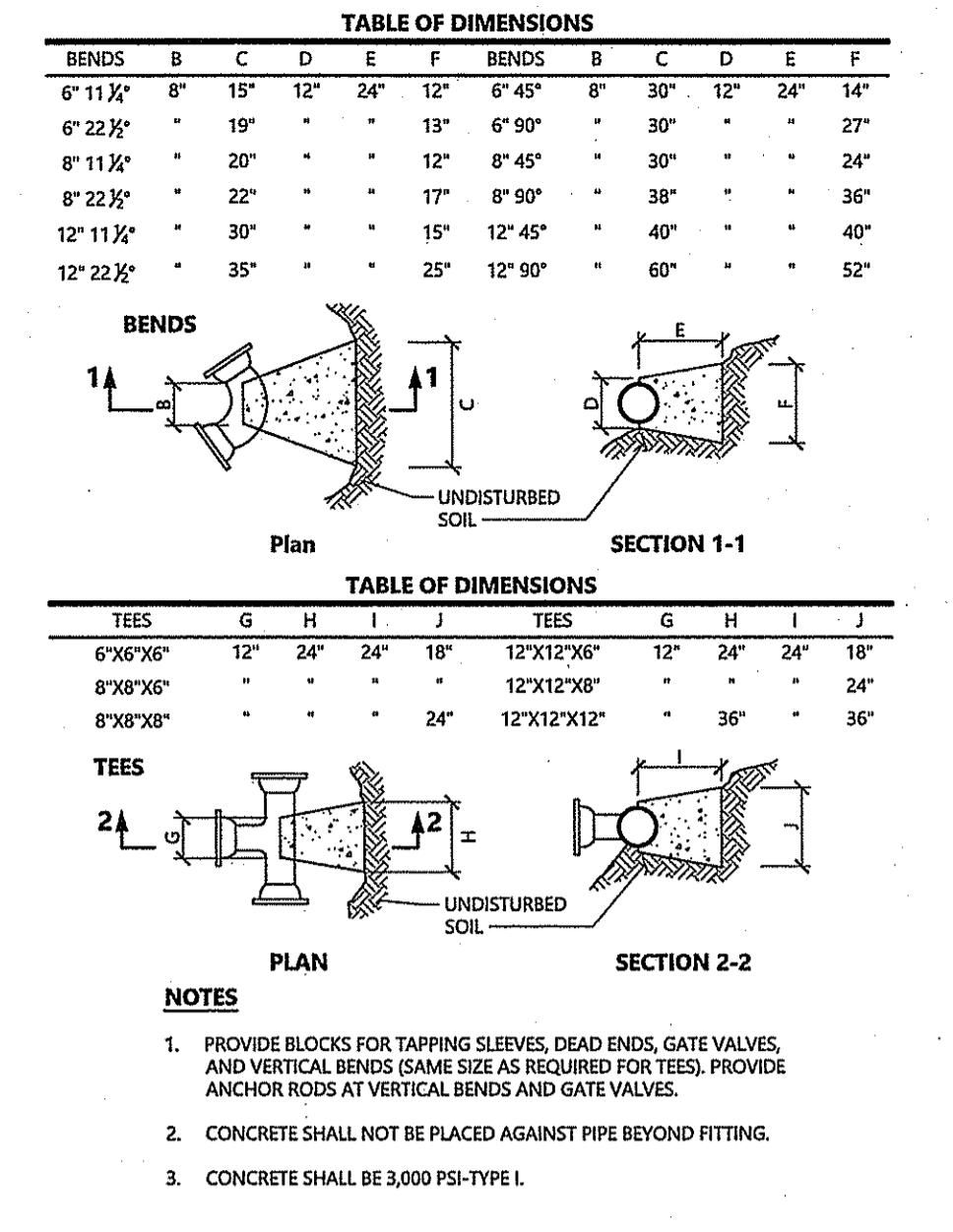
**Concrete Steps and Sidewalk** 1/16  
N.T.S. Source: VHB LD\_766



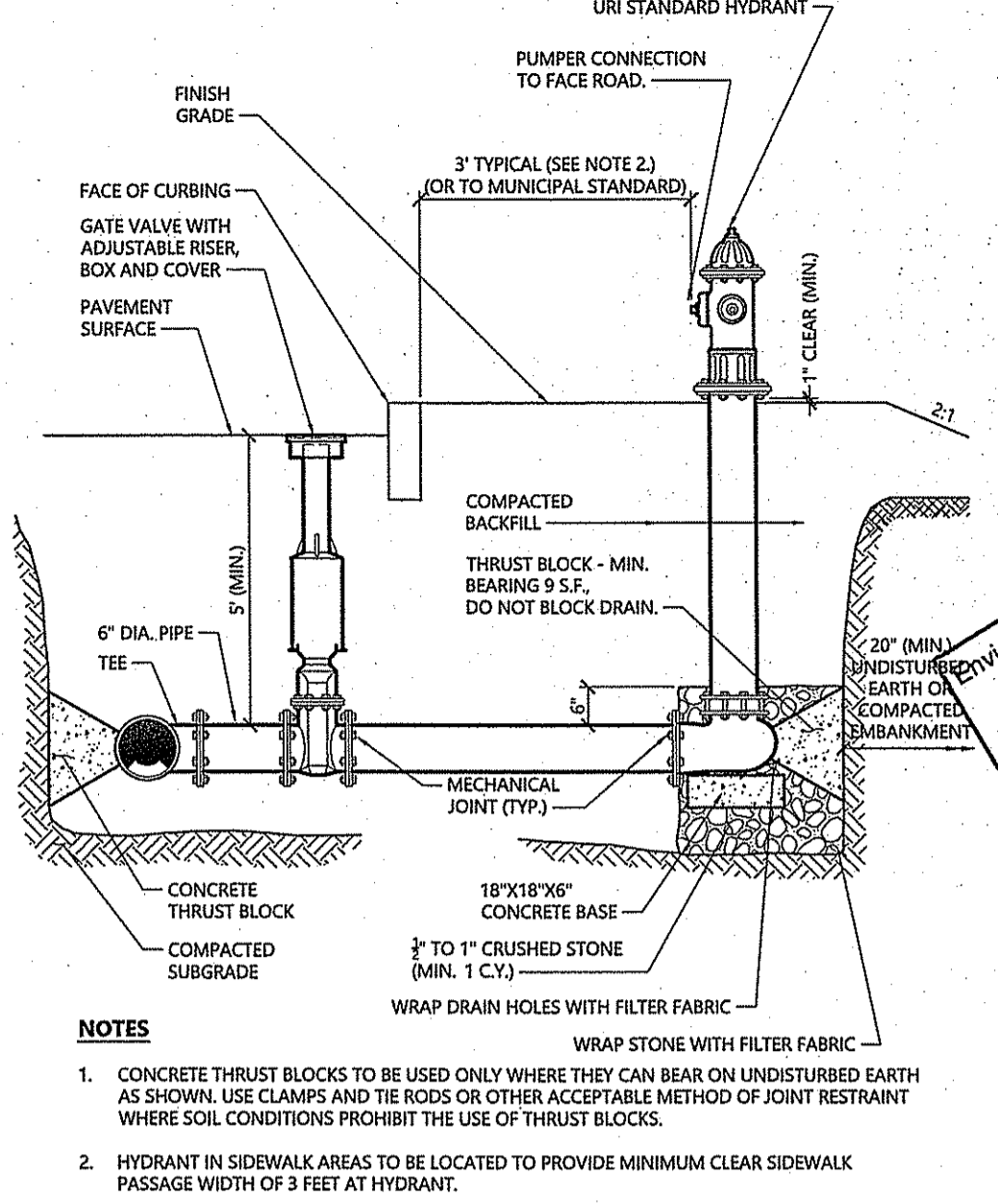
**ADA Ramp** 1/16  
N.T.S. Source: VHB REV LD\_764A



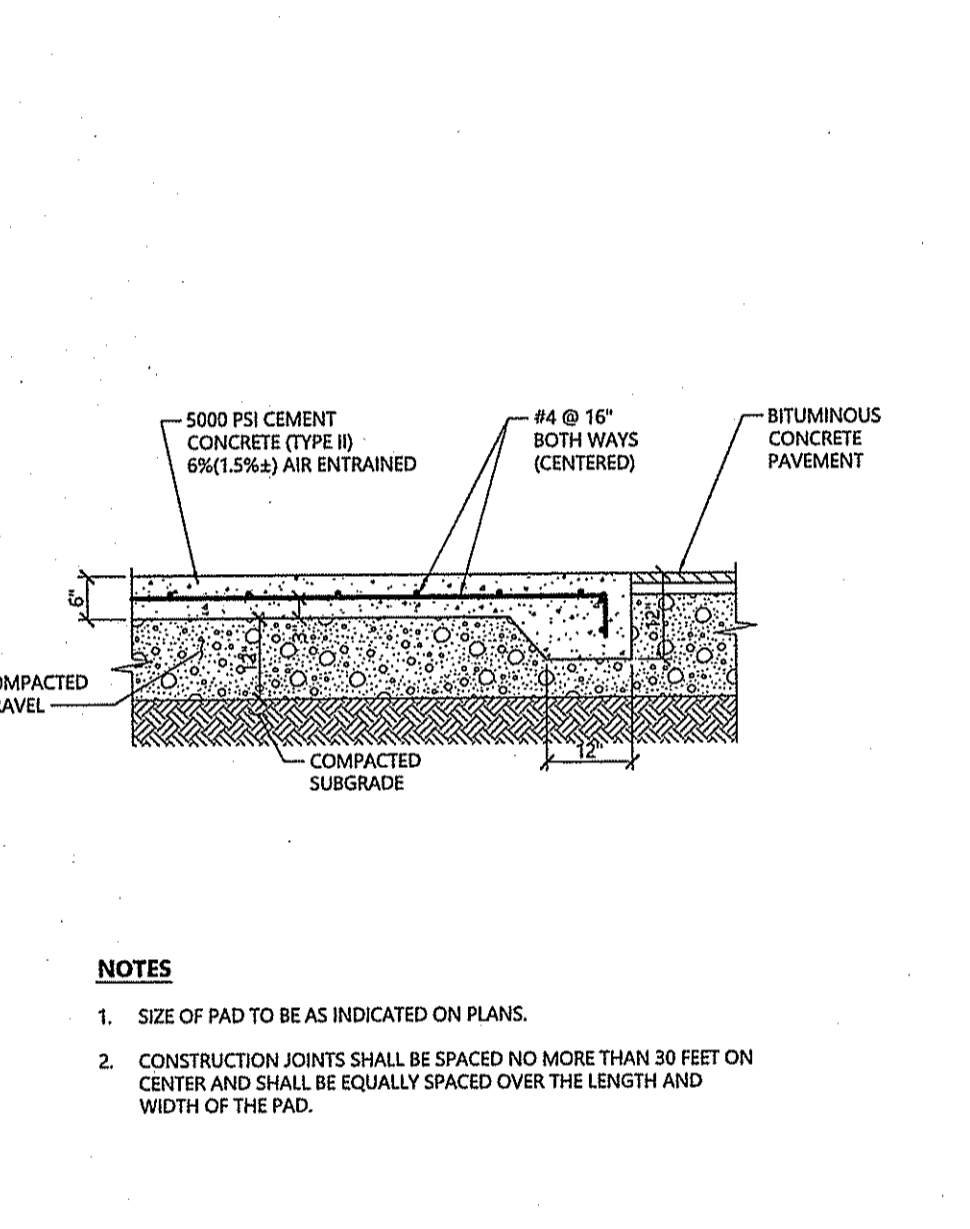
**Precast Lot Curb** 9/18  
N.T.S. Source: Durastone



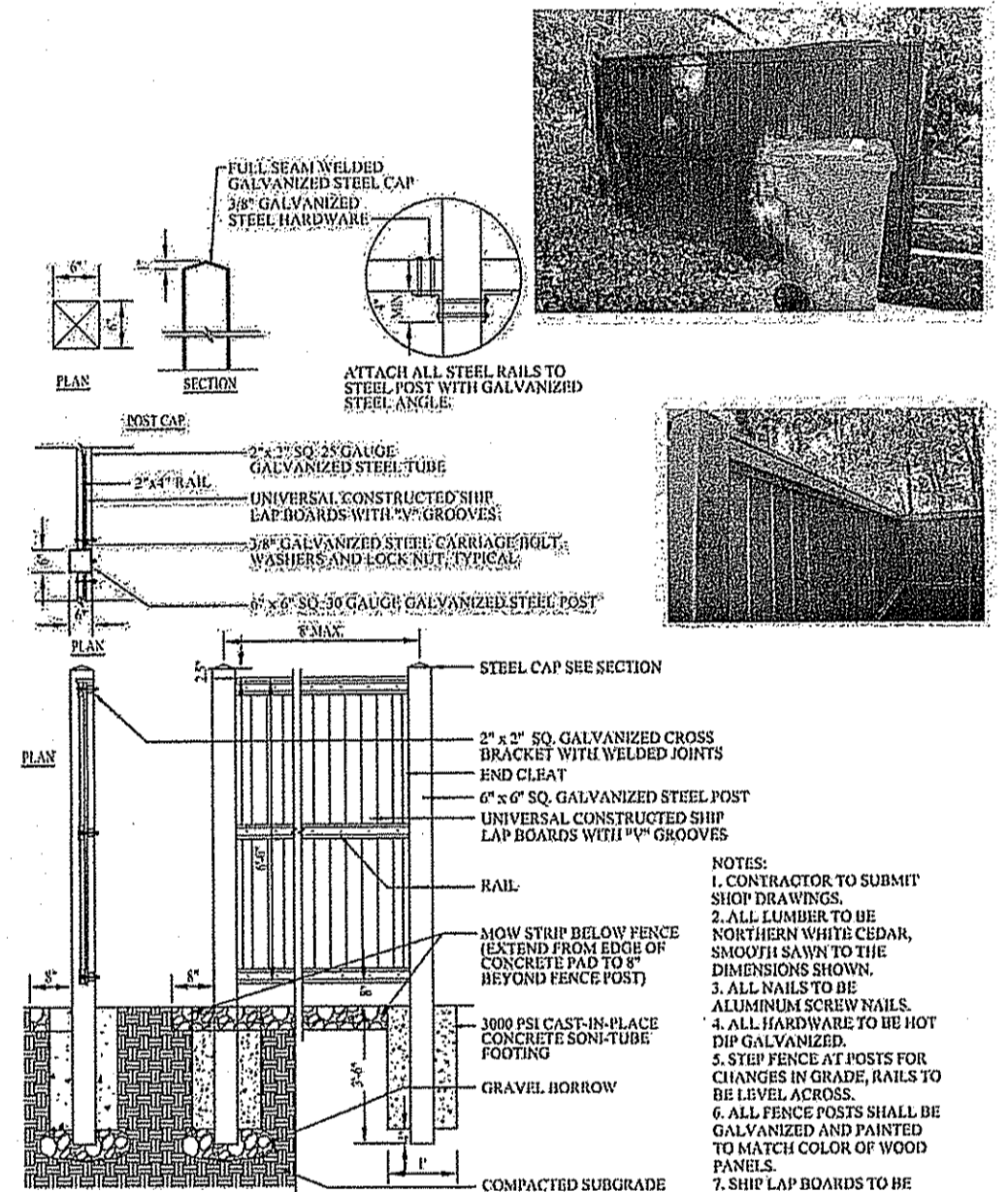
**Concrete Thrust Block** 1/16  
N.T.S. Source: VHB LD\_260



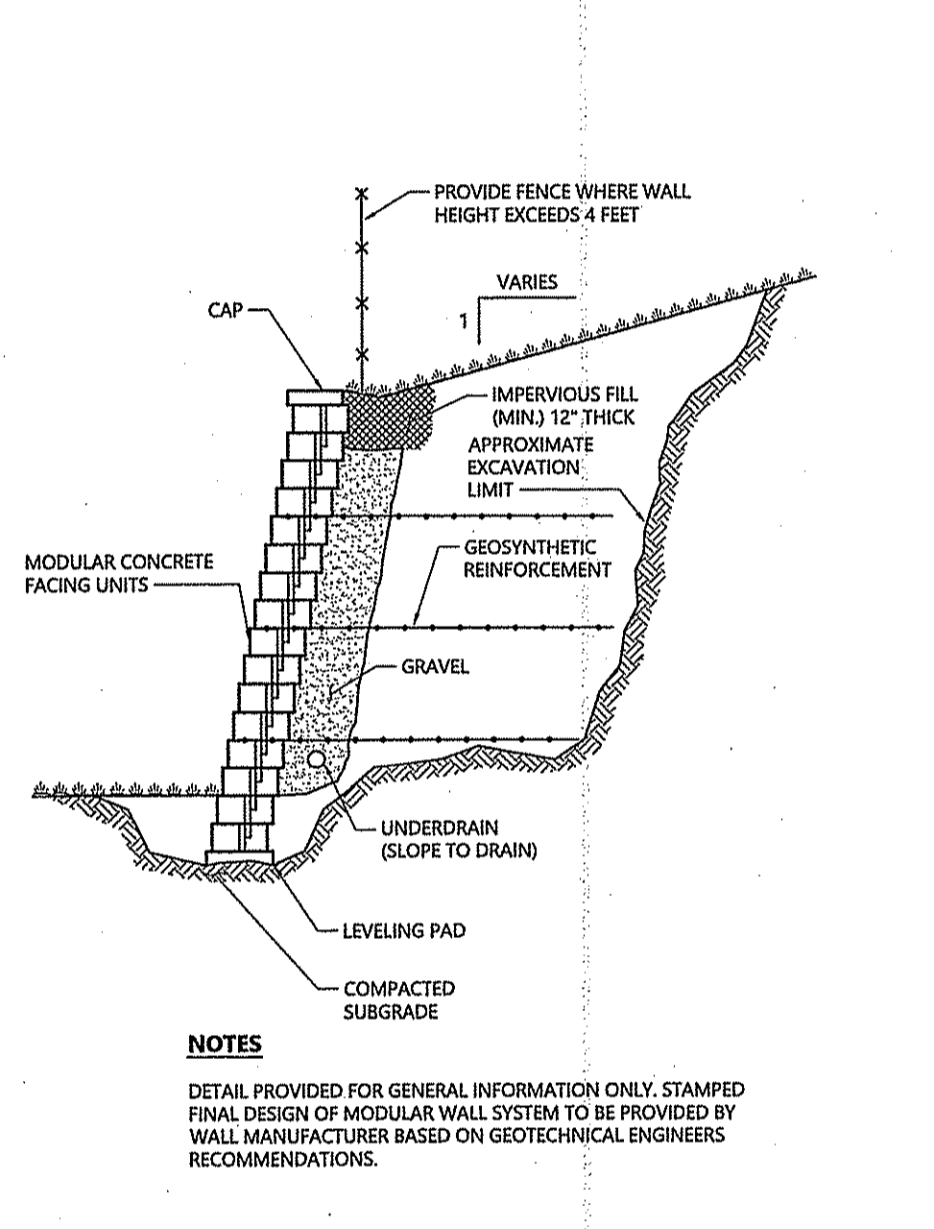
**Hydrant Construction** 1/16  
N.T.S. Source: VHB REV LD\_250



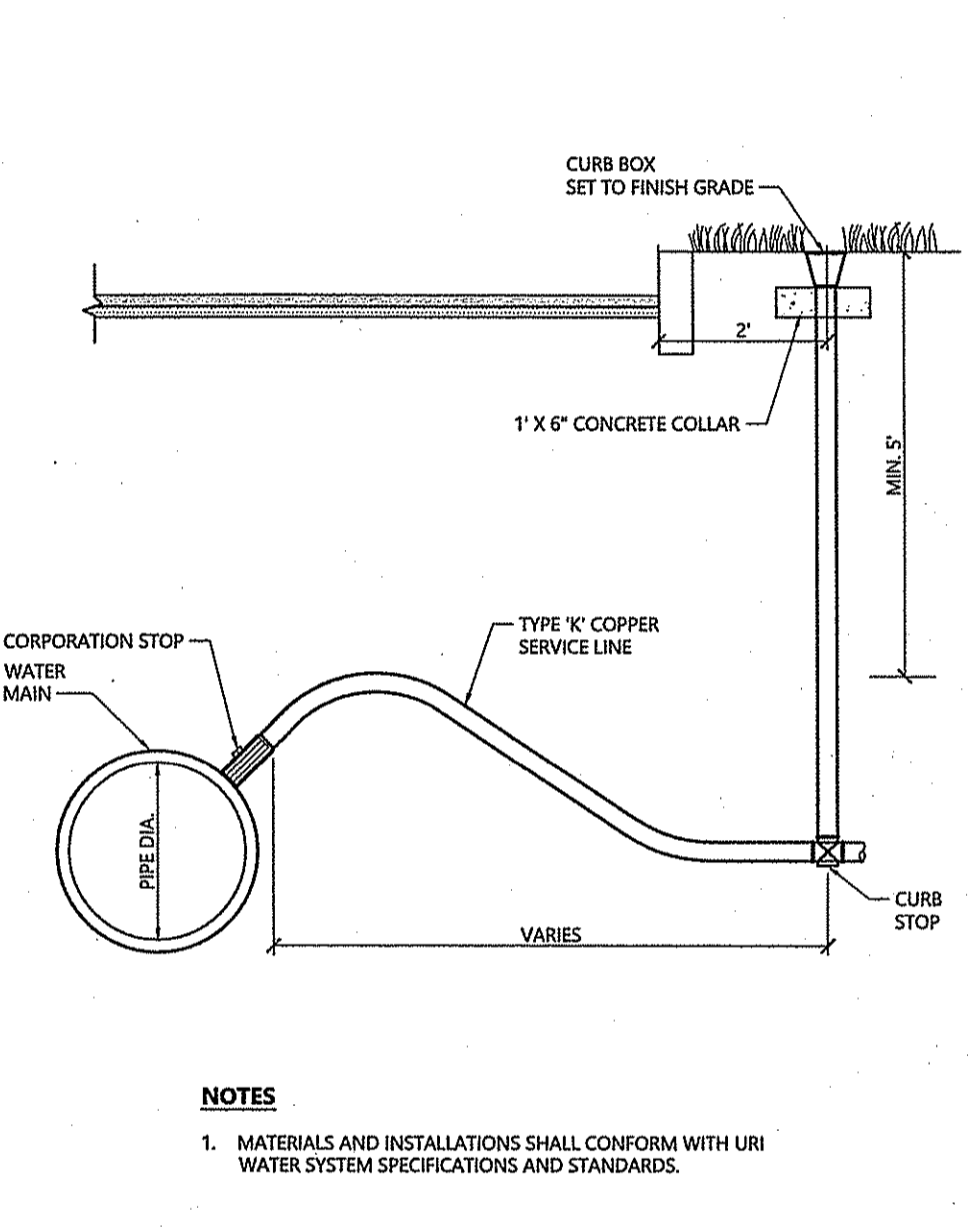
**Dumpster Pad** 1/16  
N.T.S. Source: VHB LD\_710



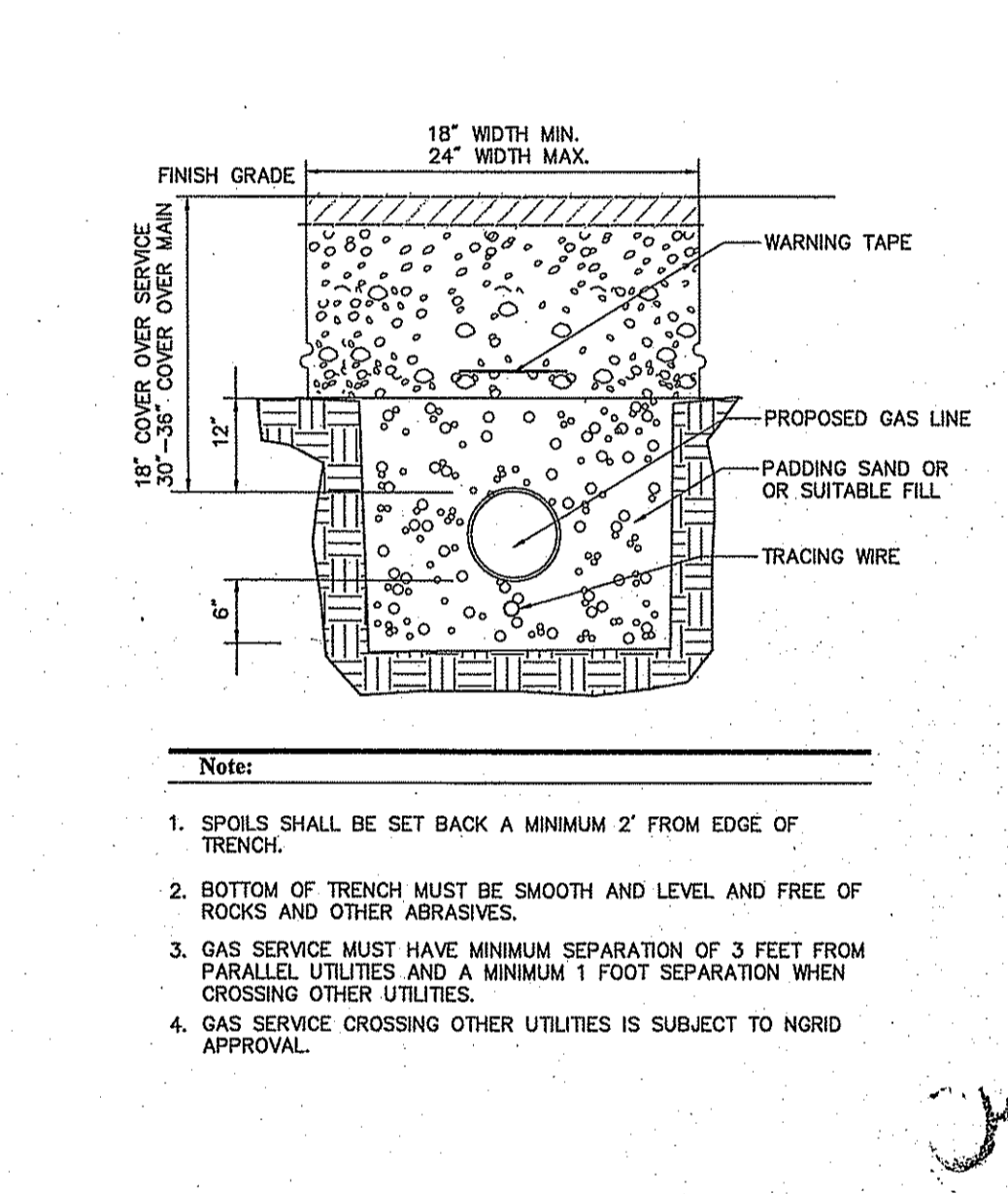
**DUMPSTER SCREEN RESIDENTIAL AREAS** NO SCALE 12



**Modular Retaining Wall** 1/16  
N.T.S. Source: VHB LD\_750

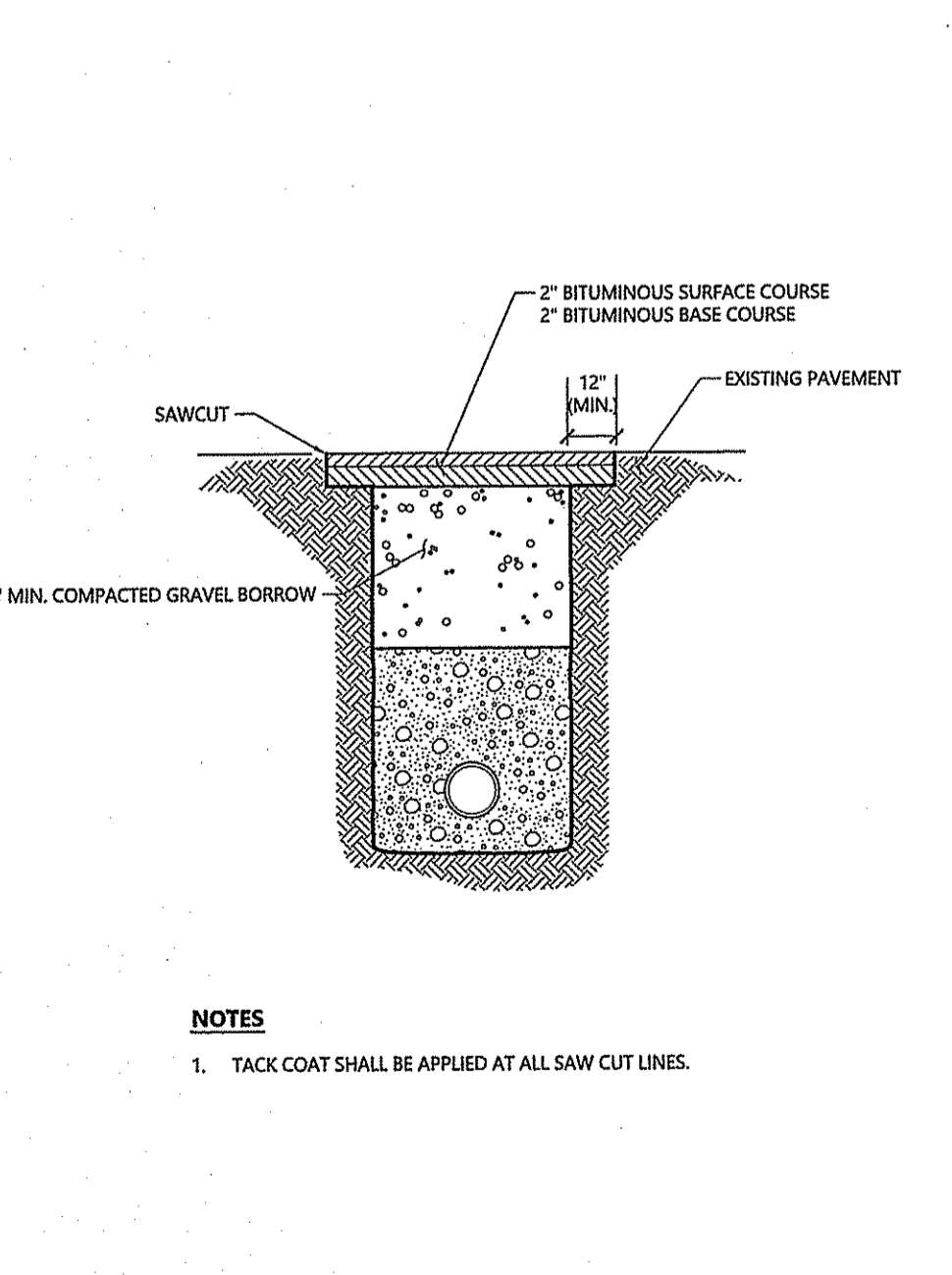


**Corporation/Curb Stop with Box** 1/16  
N.T.S. Source: VHB REV LD\_256

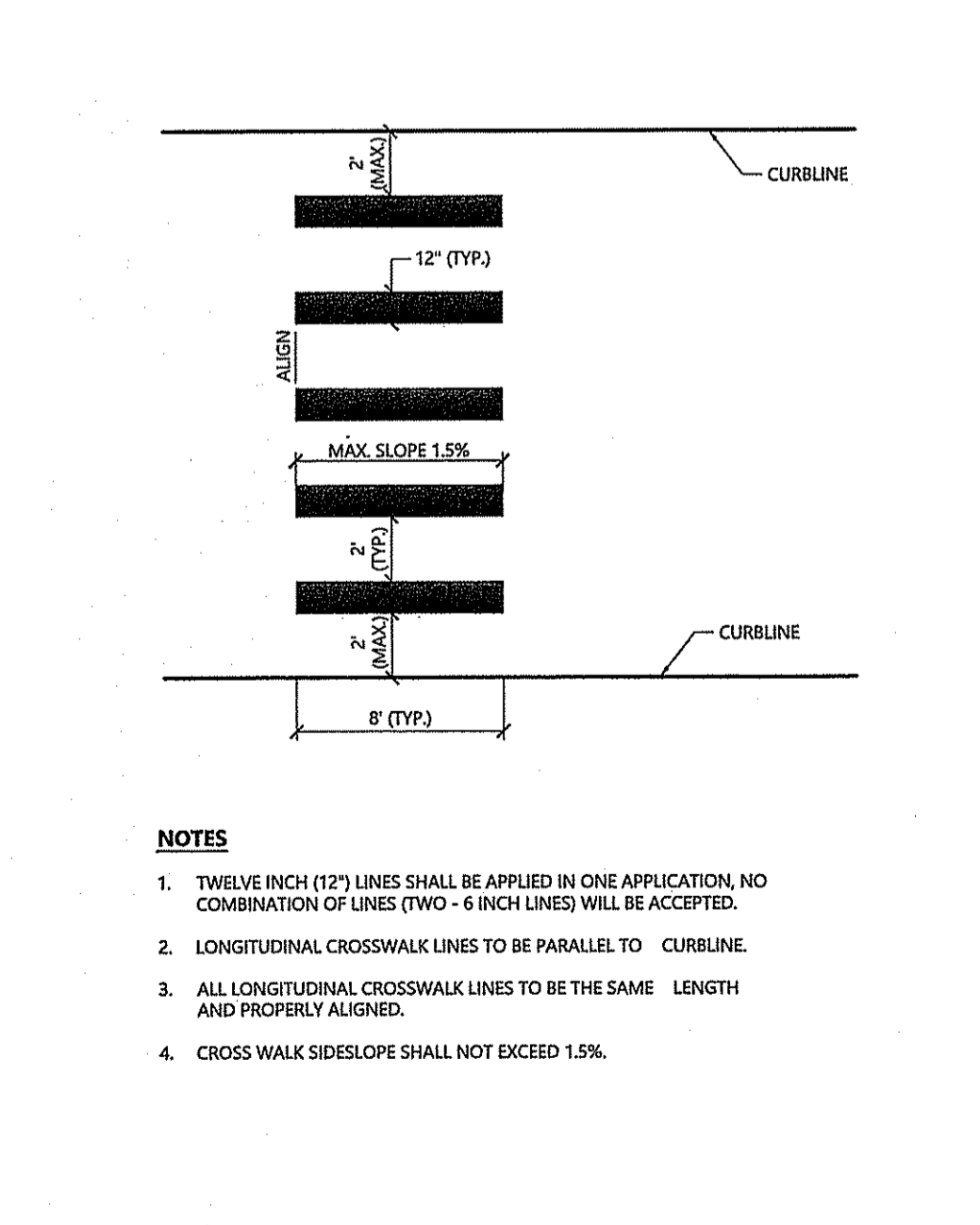


**NGRID Gas Trench** 7/13  
N.T.S. Source: VHB

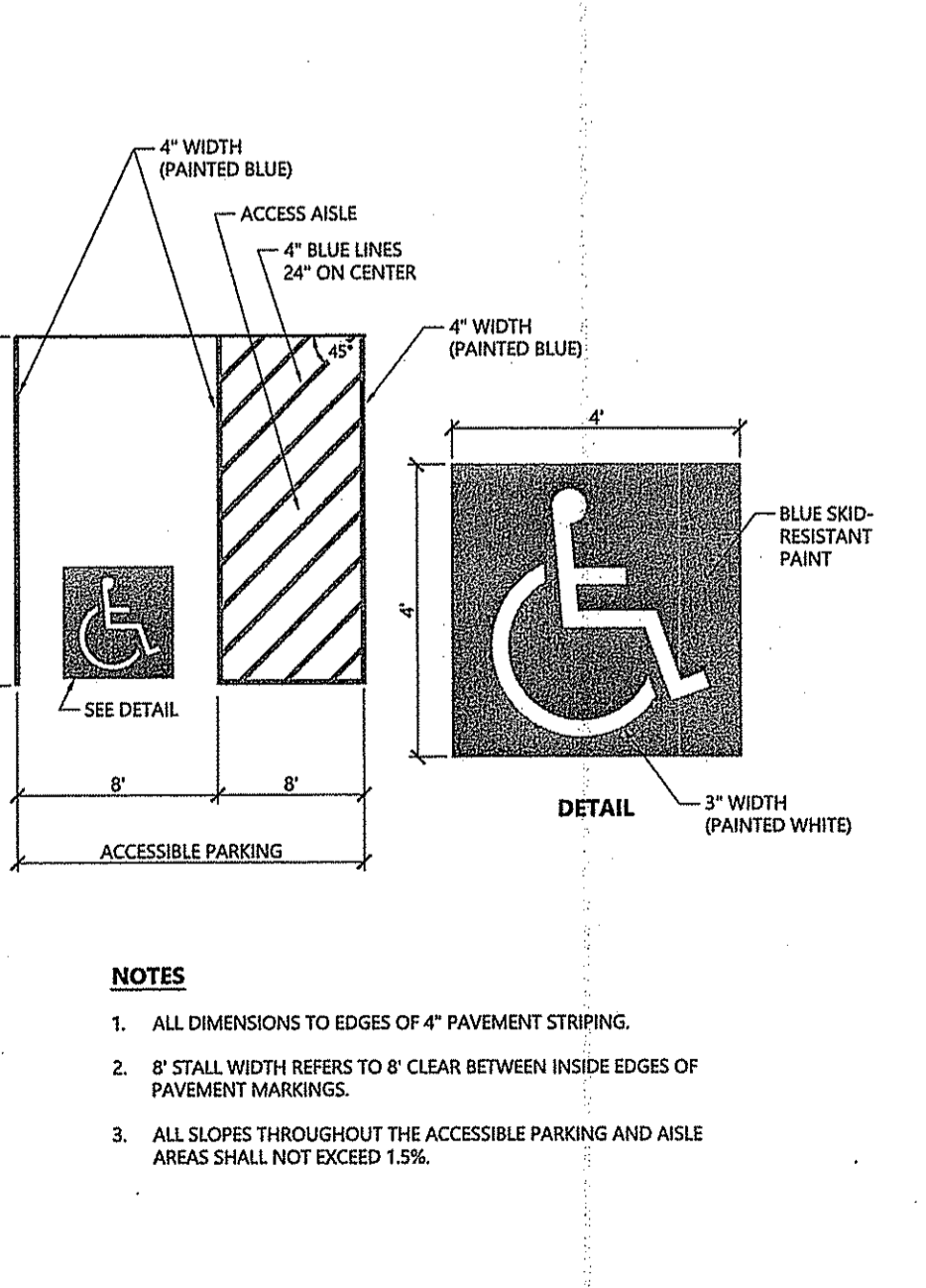
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019 FILE # 18-037  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



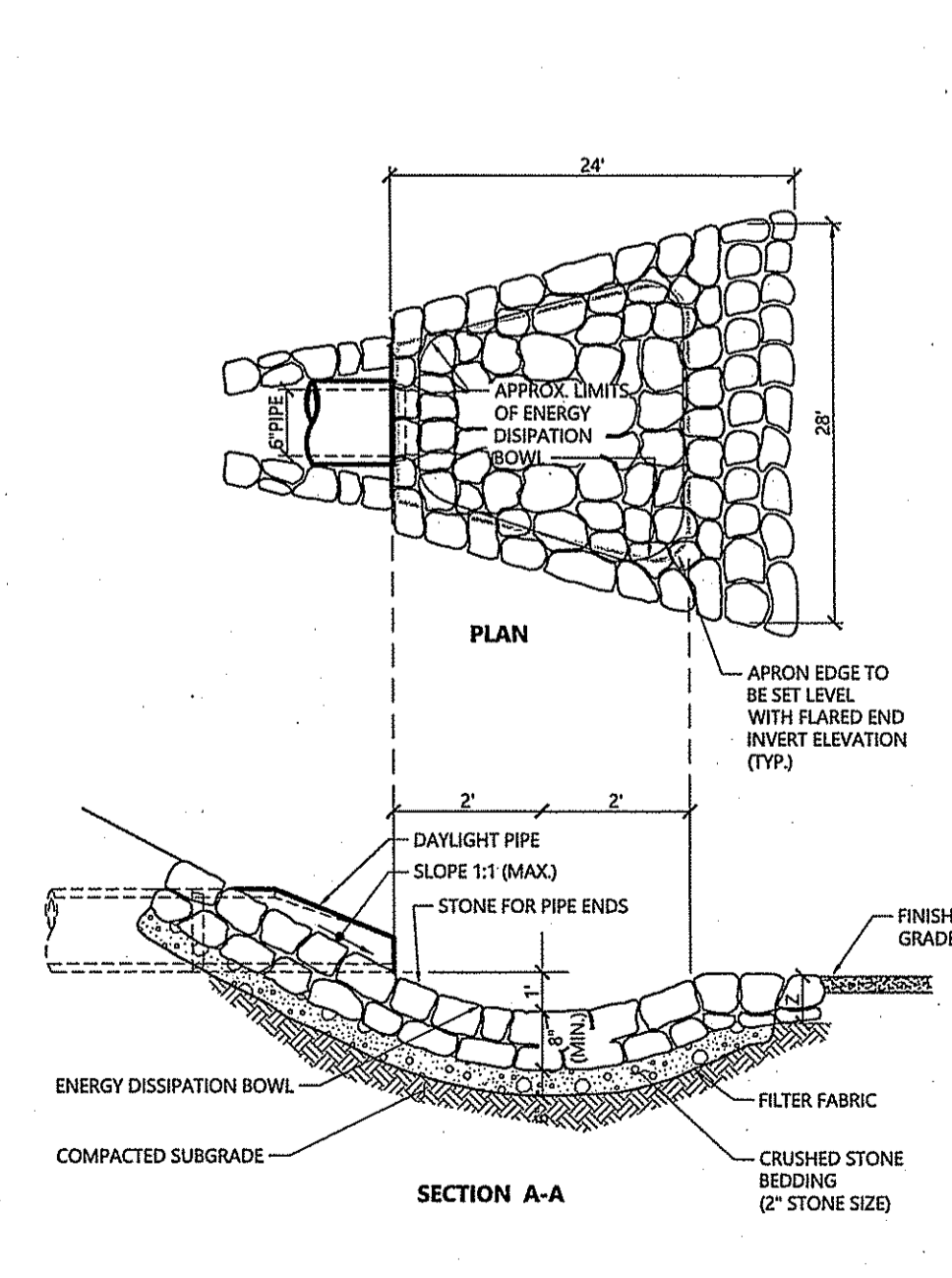
**Permanent Utility Patch** 1/16  
N.T.S. Source: VHB REV LD\_300



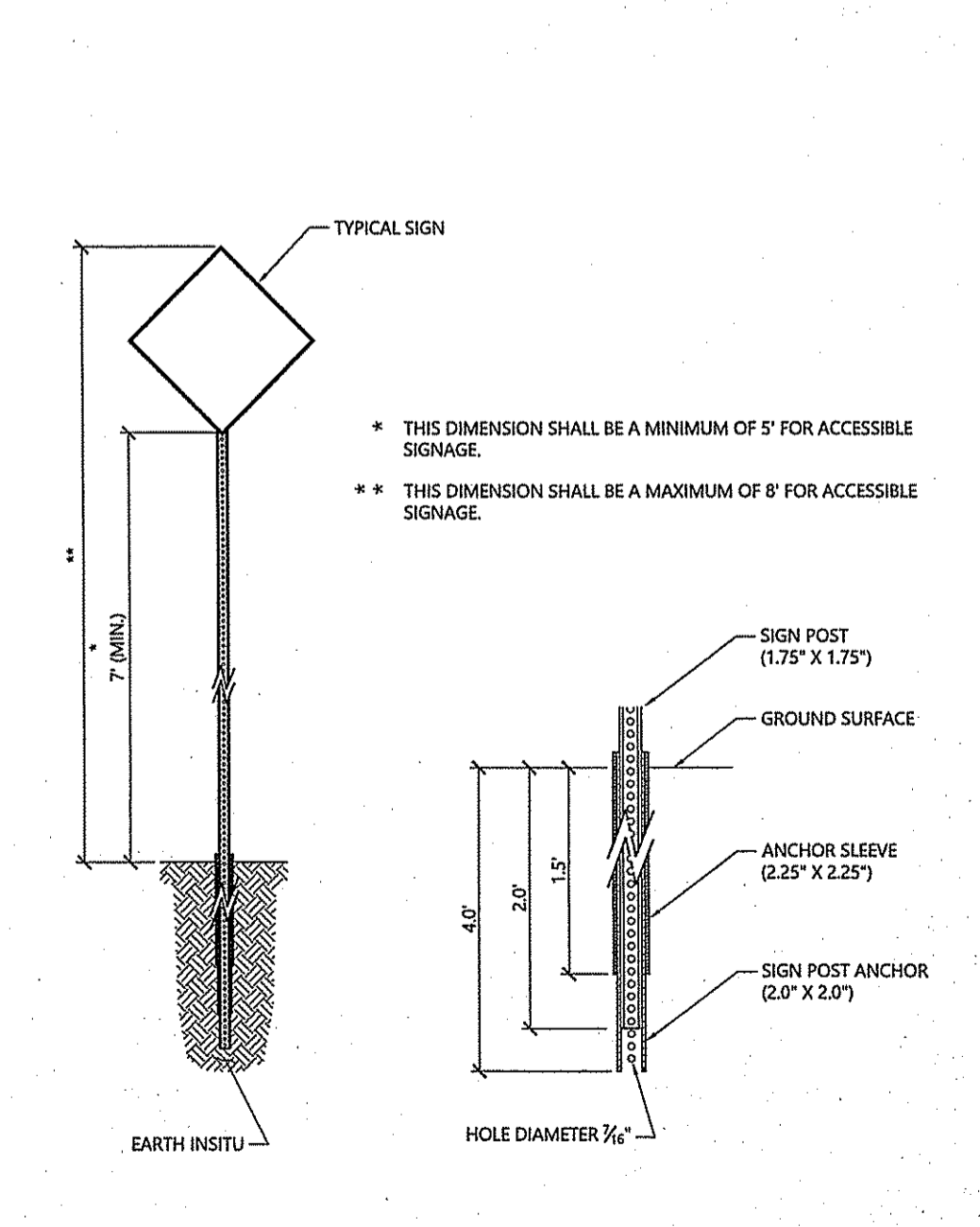
**Crosswalk** 1/16  
N.T.S. Source: VHB REV LD\_553



**Accessible Parking Space** 1/16  
N.T.S. Source: VHB REV LD\_552



**Daylight Pipe with Stone Protection** 1/16  
N.T.S. Source: VHB REV LD\_134



**Sign Post - Type 'B'** 1/16  
N.T.S. Source: VHB LD\_702

**University of Rhode Island**  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Issued for: \_\_\_\_\_ Date: \_\_\_\_\_  
**RIDEM PDA** May 29, 2018

Not Approved for Construction  
**Site Details 3**  
Drawing Number: \_\_\_\_\_  
Project Number: 72772.01

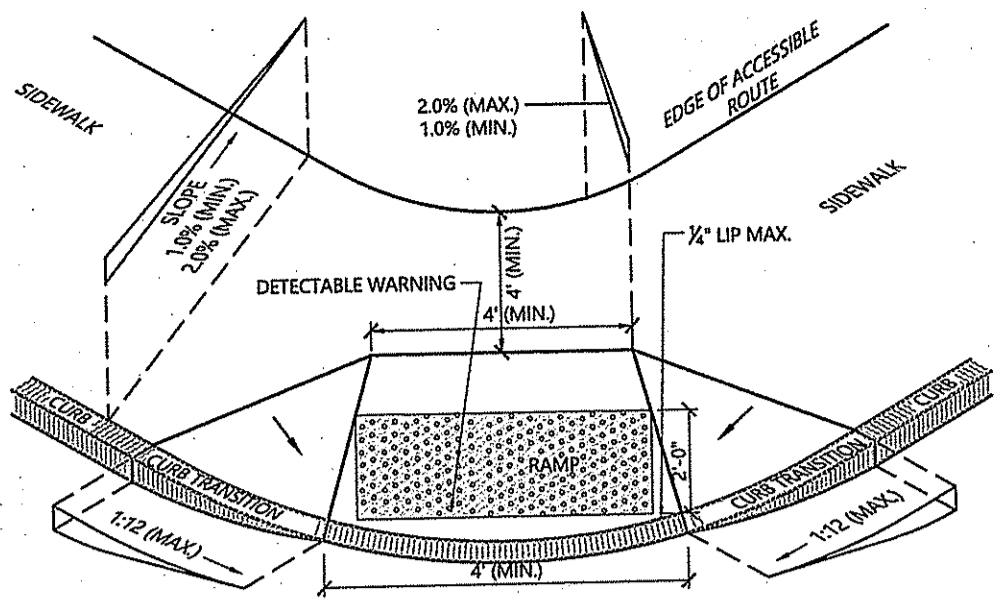
JONATHAN B. STABACH  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER  
(CIVIL) 11/16/18

**C-5.3**  
Sheet 18 of 28



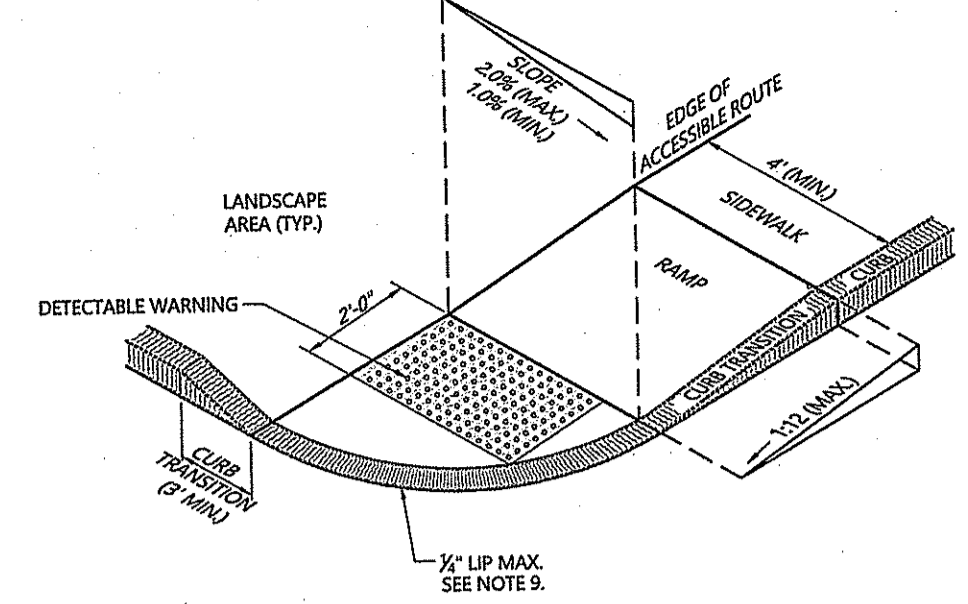
1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

Environmental Management  
DEC 14 2018  
Office of Water Resources



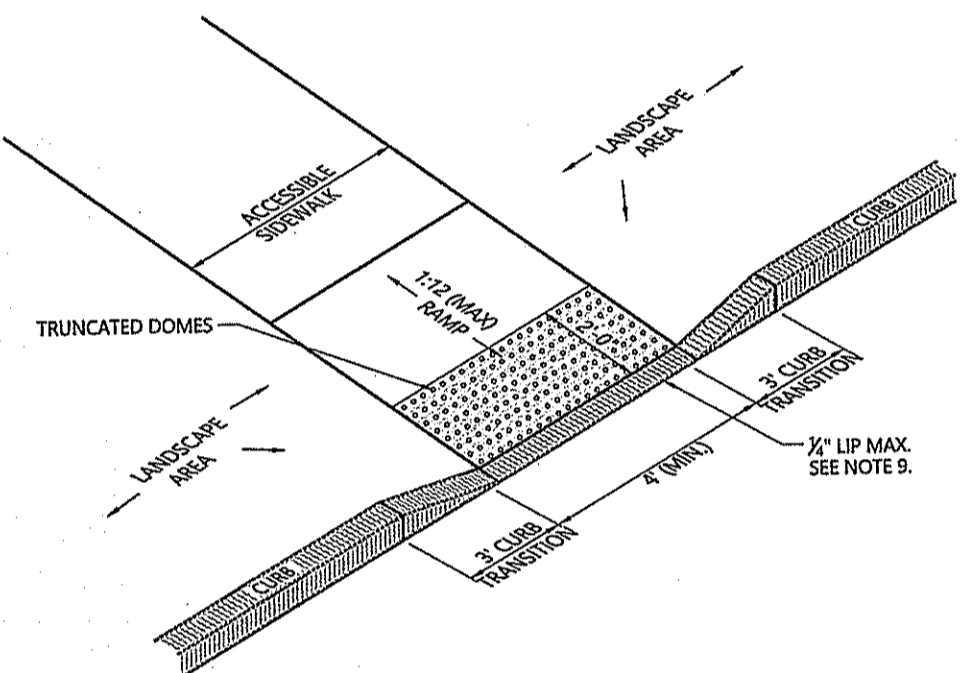
- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2% MAX.
  2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
  3. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
  4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
  5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
  6. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
  7. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
  8. DETECTABLE WARNINGS SHALL BE PRECAST CONCRETE DETECTABLE WARNING PAVERS, COLOR GRAY.
  9. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

**Accessible Curb Ramp (ACR) Type 'E'** 1/16  
N.T.S. Source: VHB REV LD\_504



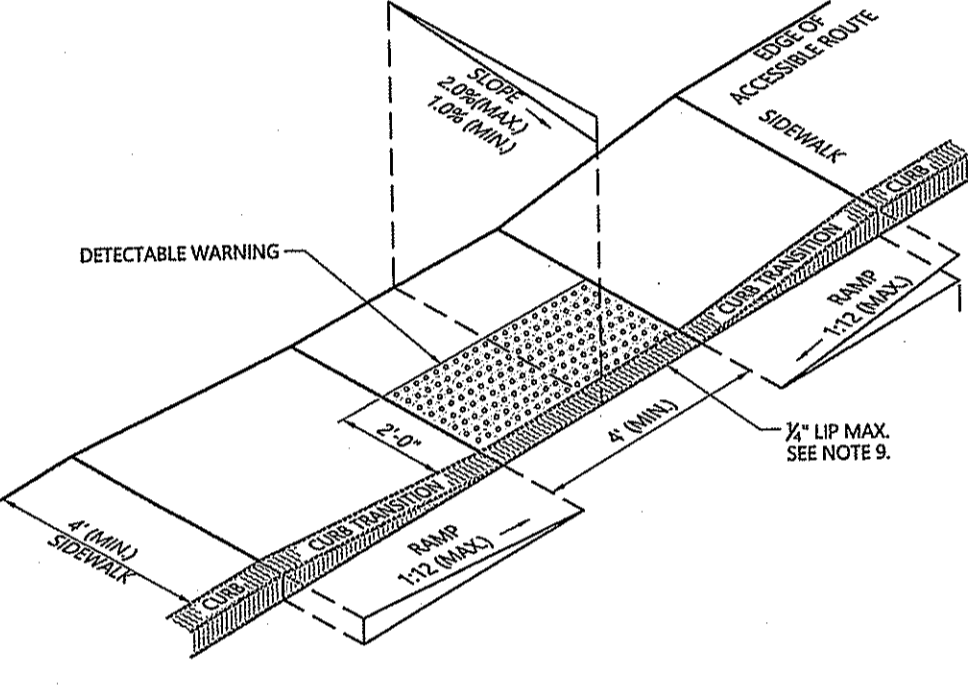
- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2% MAX.
  2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
  3. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
  4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
  5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
  6. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
  7. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
  8. DETECTABLE WARNINGS SHALL BE PRECAST CONCRETE DETECTABLE WARNING PAVERS, COLOR GRAY.
  9. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

**Accessible Curb Ramp (ACR) - Type 'B'** 1/16  
N.T.S. Source: VHB REV LD\_501



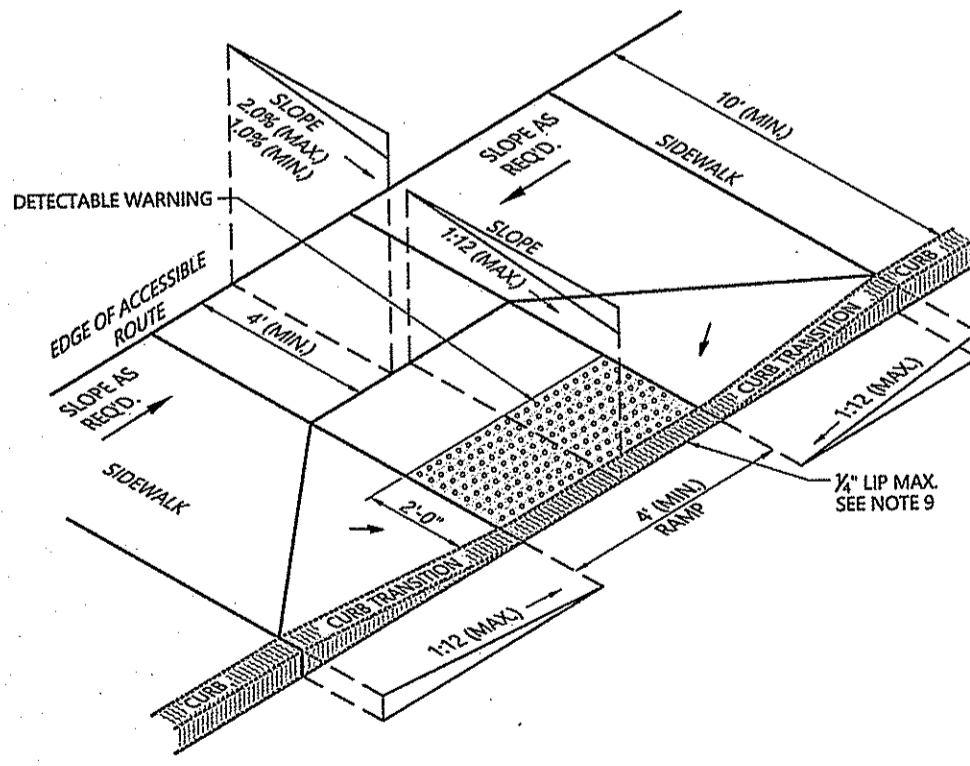
- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2% MAX.
  2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
  3. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
  4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
  5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
  6. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
  7. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
  8. DETECTABLE WARNINGS SHALL BE PRECAST CONCRETE DETECTABLE WARNING PAVERS, COLOR GRAY.
  9. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

**Accessible Curb Ramp (ACR) Type 'M'** 1/16  
N.T.S. Source: VHB REV LD\_512



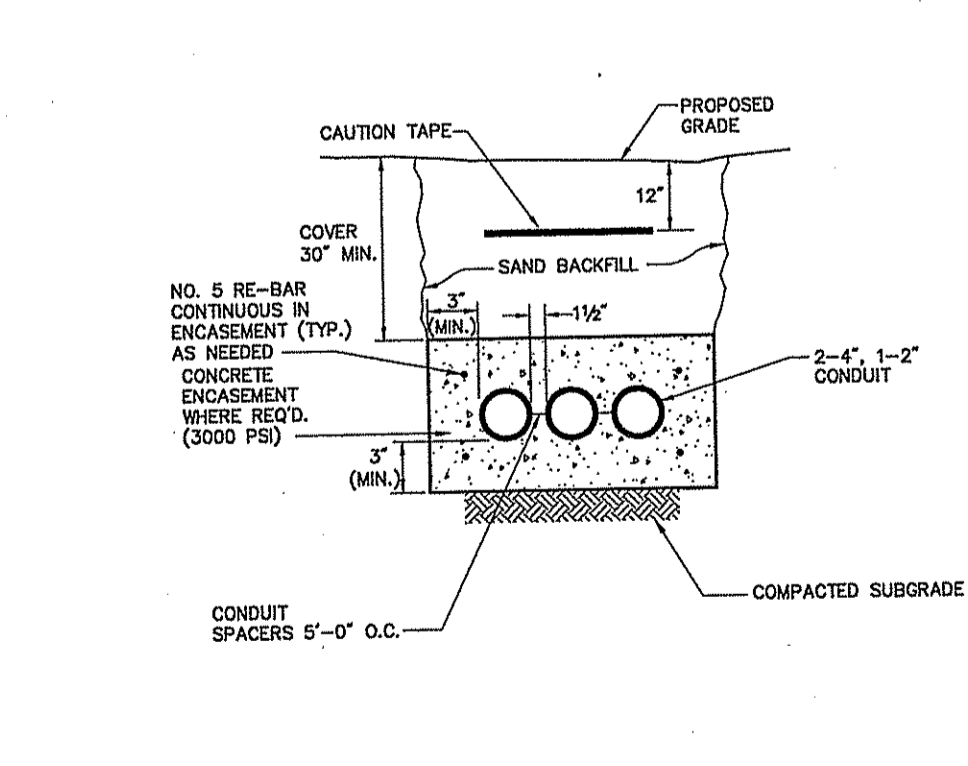
- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2% MAX.
  2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
  3. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
  4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
  5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
  6. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
  7. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
  8. DETECTABLE WARNINGS SHALL BE PRECAST CONCRETE DETECTABLE WARNING PAVERS, COLOR GRAY.
  9. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

**Accessible Curb Ramp (ACR) Type 'A'** 1/16  
N.T.S. Source: VHB REV LD\_500



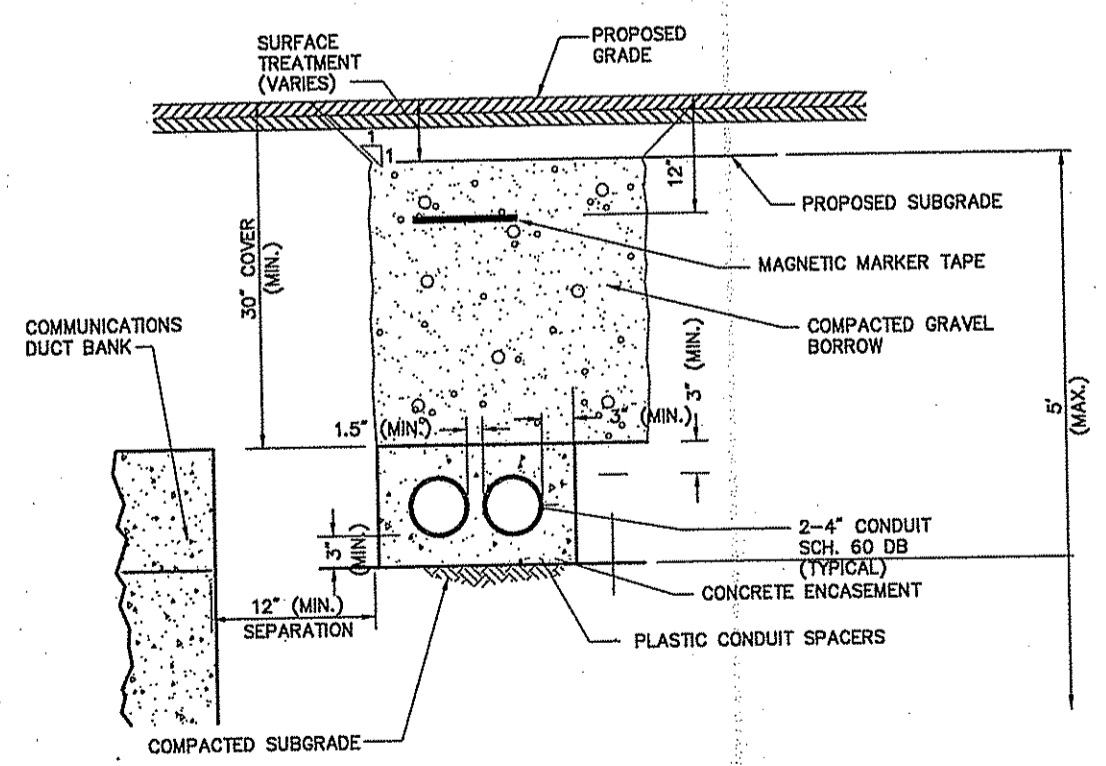
- NOTES**
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2.0 (1% MIN).
  2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
  3. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
  4. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
  5. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
  6. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
  7. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
  8. DETECTABLE WARNINGS SHALL BE PRECAST CONCRETE DETECTABLE WARNING PAVERS, COLOR GRAY.
  9. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

**Accessible Curb Ramp (ACR) Type 'D'** 1/16  
N.T.S. Source: VHB REV LD\_503



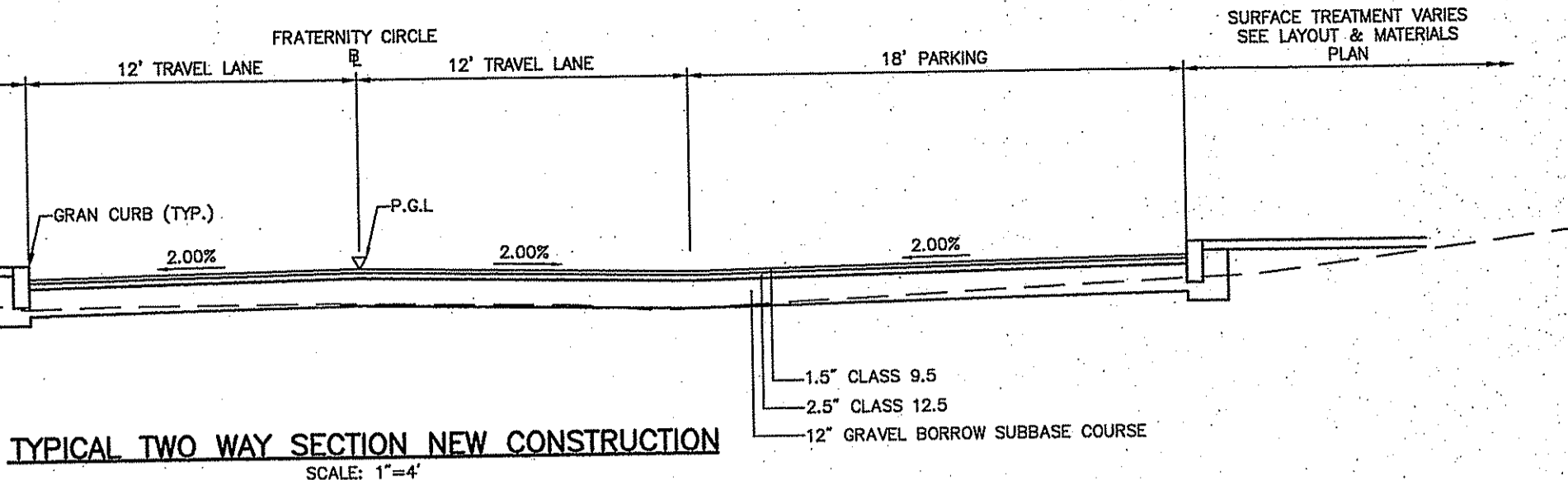
- NOTES:**
1. 90° SWEEPS SHALL BE MADE USING RIGID GALVANIZED STEEL, CONFORMING TO ASTM A120.
  2. DUCT BANKS SHALL BE CONCRETE ENCASED IN AREAS SUBJECT TO VEHICULAR TRAFFIC SUCH AS ROADWAY OR PARKING AREAS. ALL OTHER AREAS SHALL HAVE SAND BACKFILL.
  3. OVER BLAST 12\"/>

**Communications Duct Bank Section** 1/16  
N.T.S.

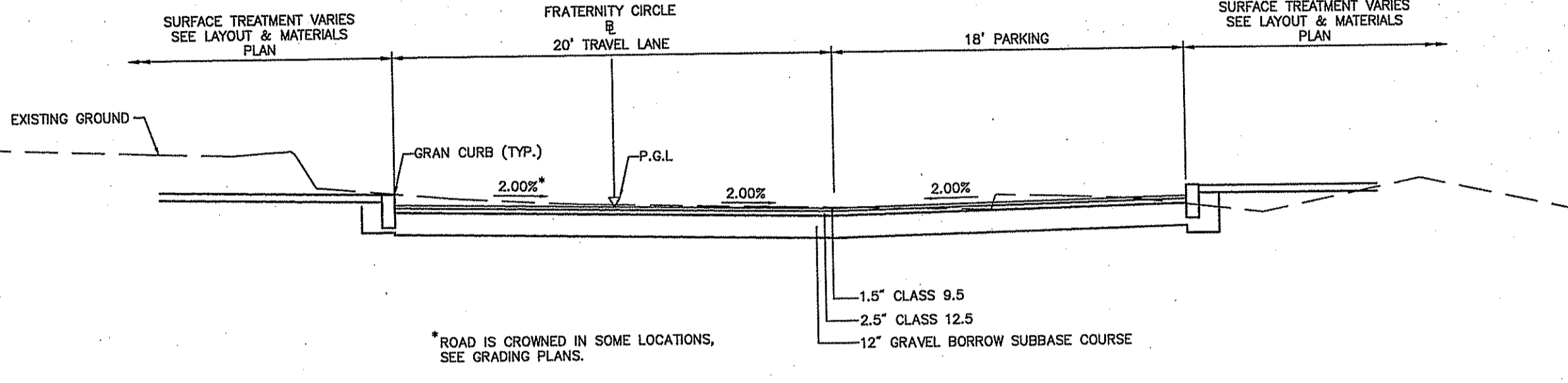


- NOTES:**
1. ALL PRIMARY ELECTRIC SHALL CONFORM TO NGRD ELECTRIC STANDARDS.

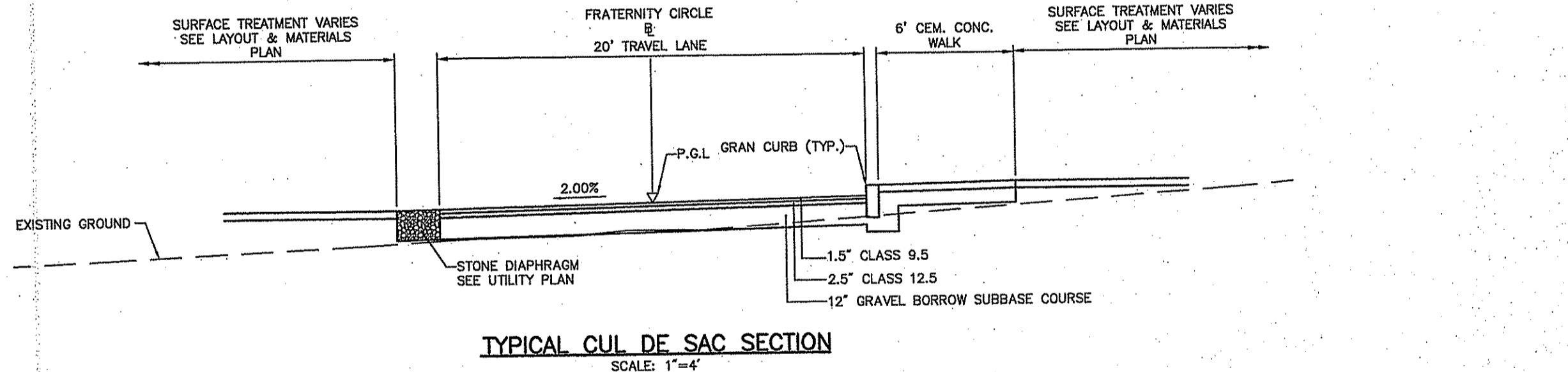
**Electrical Duct Bank Section - Secondary Electric** 1/16  
N.T.S.



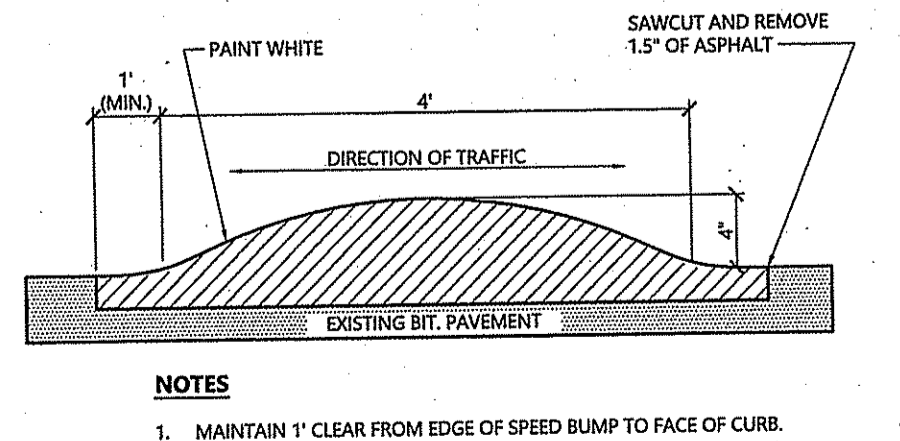
**TYPICAL TWO WAY SECTION NEW CONSTRUCTION**  
SCALE: 1\"/>



**TYPICAL ONE WAY SECTION NEW CONSTRUCTION**  
SCALE: 1\"/>

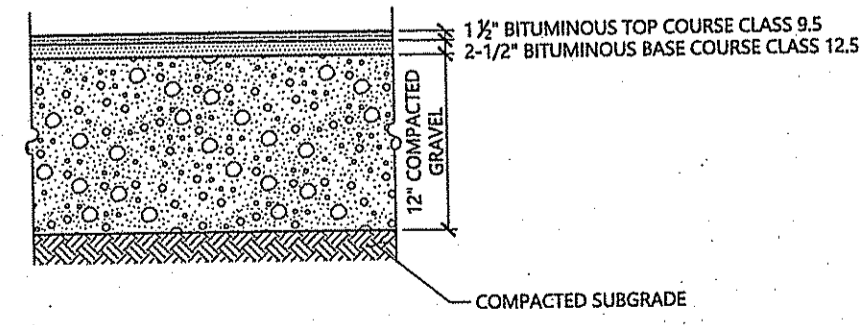


**TYPICAL CUL DE SAC SECTION**  
SCALE: 1\"/>



- NOTES**
1. MAINTAIN 1' CLEAR FROM EDGE OF SPEED BUMP TO FACE OF CURB.

**Speed Bump** 1/16  
N.T.S. Source: VHB REV LD\_706



- NOTES**
- PAVEMENT TOP COURSE AND BASE COURSE SHALL CONFORM TO RIDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 401, WITH NO PAY ADJUSTMENTS.

**Bituminous Concrete Pavement Sections** 1/16  
N.T.S. Source: VHB REV LD\_490

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
FILE # 18-0137  
DATED JAN 28 2019  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE


**University of Rhode Island**  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Appvd. |
|-----|----------------------------|------------|--------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |        |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Issued for: RIDEM PDA Date: May 29, 2018

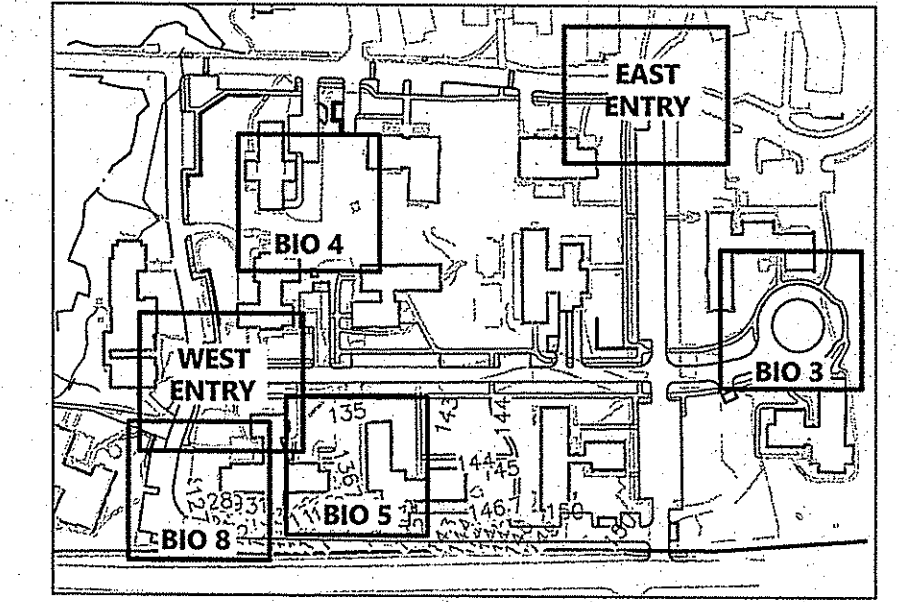
**Not Approved for Construction**  
Site Details 4

JONATHAN B. STABACH  
No. 7794  
REGISTERED PROFESSIONAL ENGINEER (CIVIL) 11/16/18  
Sheet 19 of 28  
Project Number 72772.01



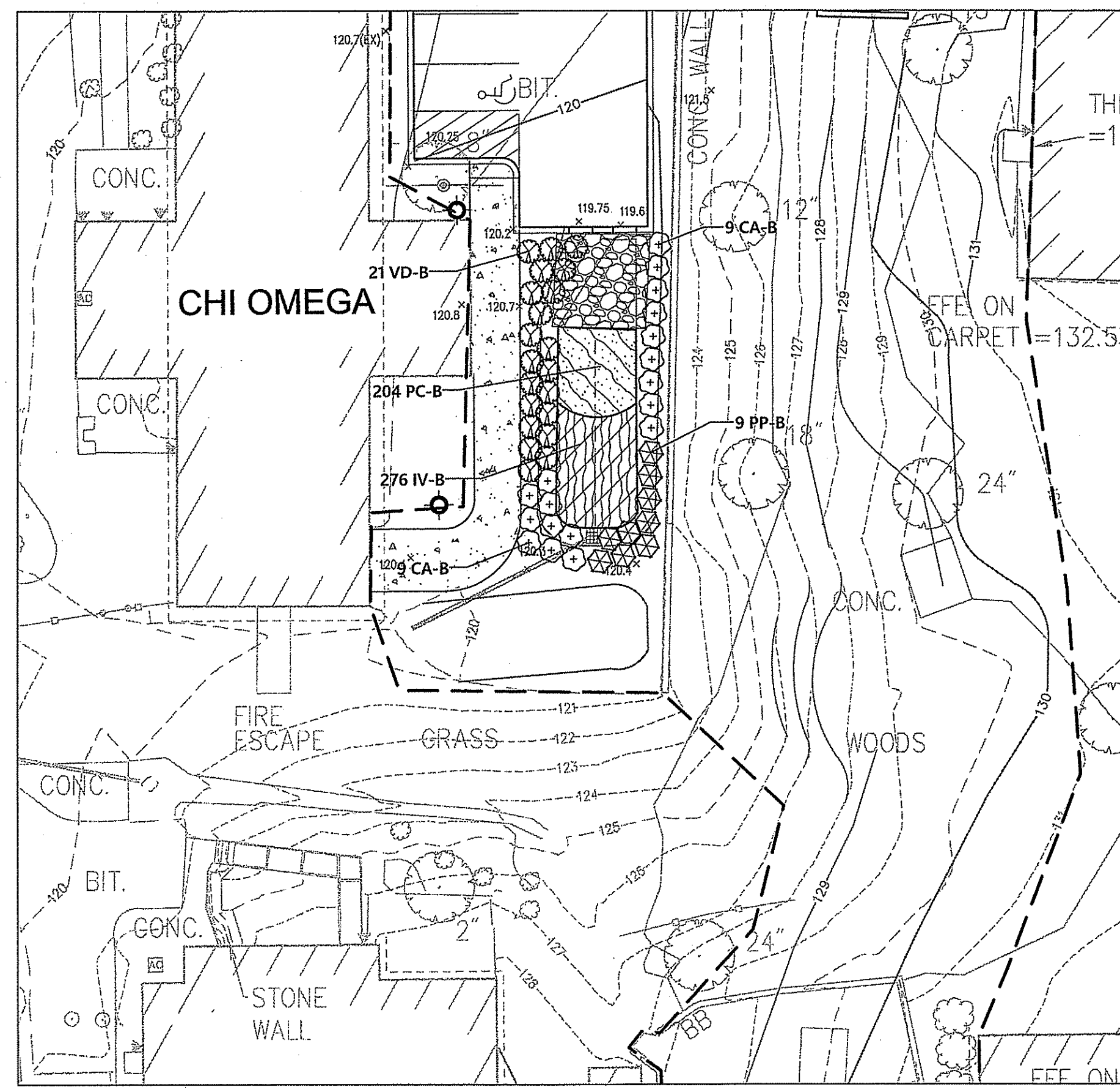
1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

Environmental Management  
DEC 14 2018  
Office of Water Resources

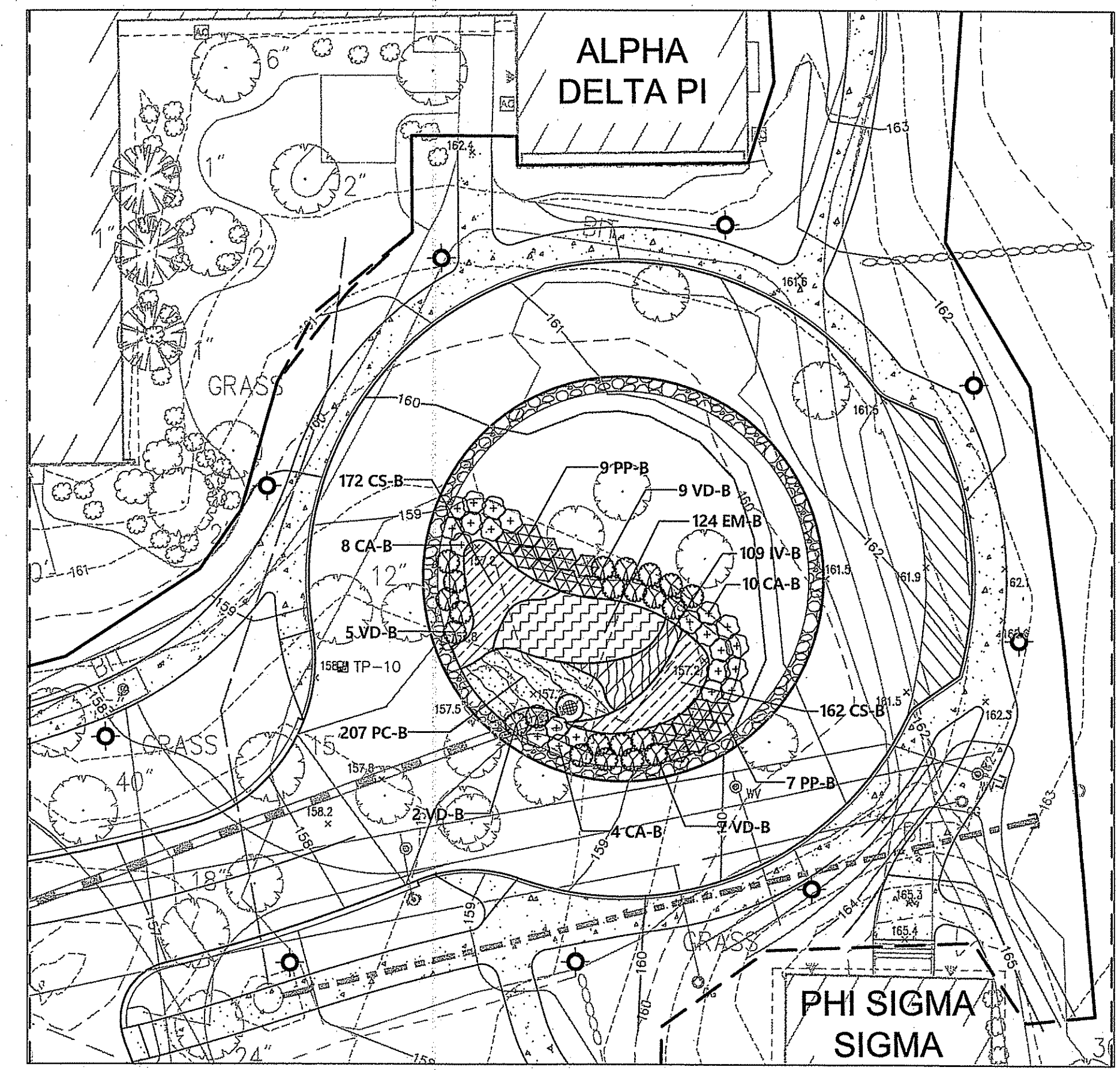


KEY PLAN

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER ECOSYSTEMS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
JAN 28 2019 FILE # R-0137  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



BIORETENTION BASIN 4



BIORETENTION BASIN 3

**Tree Protection**

- EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY CONSTRUCTION FENCE. ERECT FENCE AT EDGE OF THE TREE DRUPLINE PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL NOT OPERATE VEHICLES WITHIN THE TREE PROTECTION AREA. CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS, OR DISPOSE OF ANY WASTE MATERIALS, WITHIN THE TREE PROTECTION AREA.
- DAMAGE TO EXISTING TREES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY A CERTIFIED ARBORIST AT THE CONTRACTOR'S EXPENSE.

**Planting Notes**

- ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
- NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
- A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
- ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.
- ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
- ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
- AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
- ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
- THIS PLAN IS INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

**PLANT SCHEDULE**

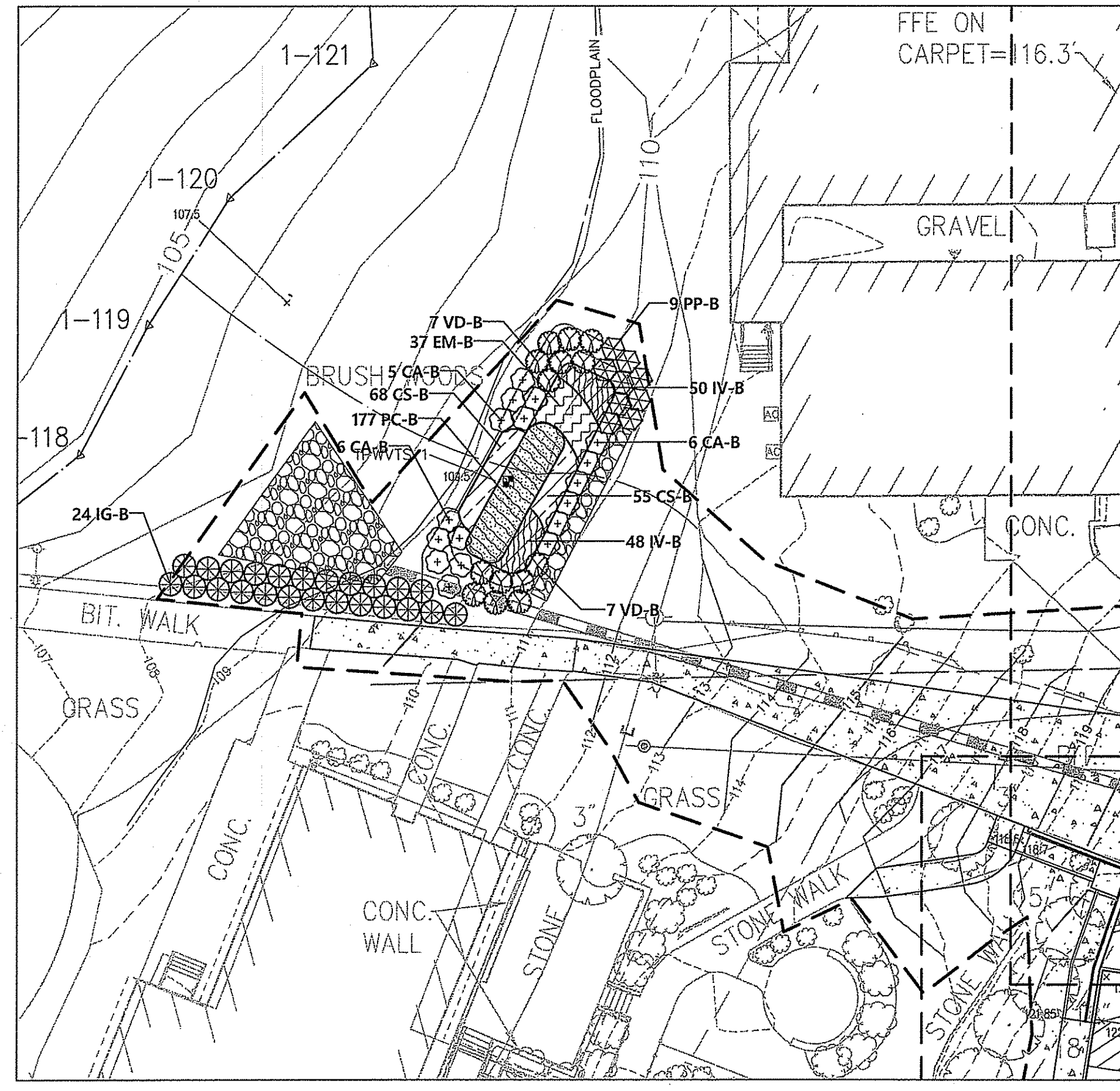
| BIORETENTION BASIN | QTY | BOTANICAL NAME       | COMMON NAME    | SIZE           | SPACING  |
|--------------------|-----|----------------------|----------------|----------------|----------|
| CA-B               | 88  | Clethra alnifolia    | Summersweet    | 2 - 3' HT.     | 48" o.c. |
| IG-B               | 24  | Ilex glabra          | Inkberry Holly | 2 - 2 1/2' HT. | 48" o.c. |
| PP-B               | 66  | Photinia pyrifolia   | Red Chokeberry | 2 - 3' HT.     | 48" o.c. |
| VD-B               | 94  | Viburnum dentatum    | Arrowwood      | 2 - 3' HT.     | 48" o.c. |
| CS-B               | 739 | Carex scoparia       | Broom Sedge    | Plugs          | 12" o.c. |
| EM-B               | 276 | Eupatorium maculatum | Joe-Pye Weed   | Plugs          | 18" o.c. |
| IV-B               | 703 | Iris versicolor      | Blue Flag Iris | Plugs          | 12" o.c. |
| PC-B               | 976 | Pontederia cordata   | Pickrel Weed   | Plugs          | 12" o.c. |

**Bioretention Basin - Construction Notes**

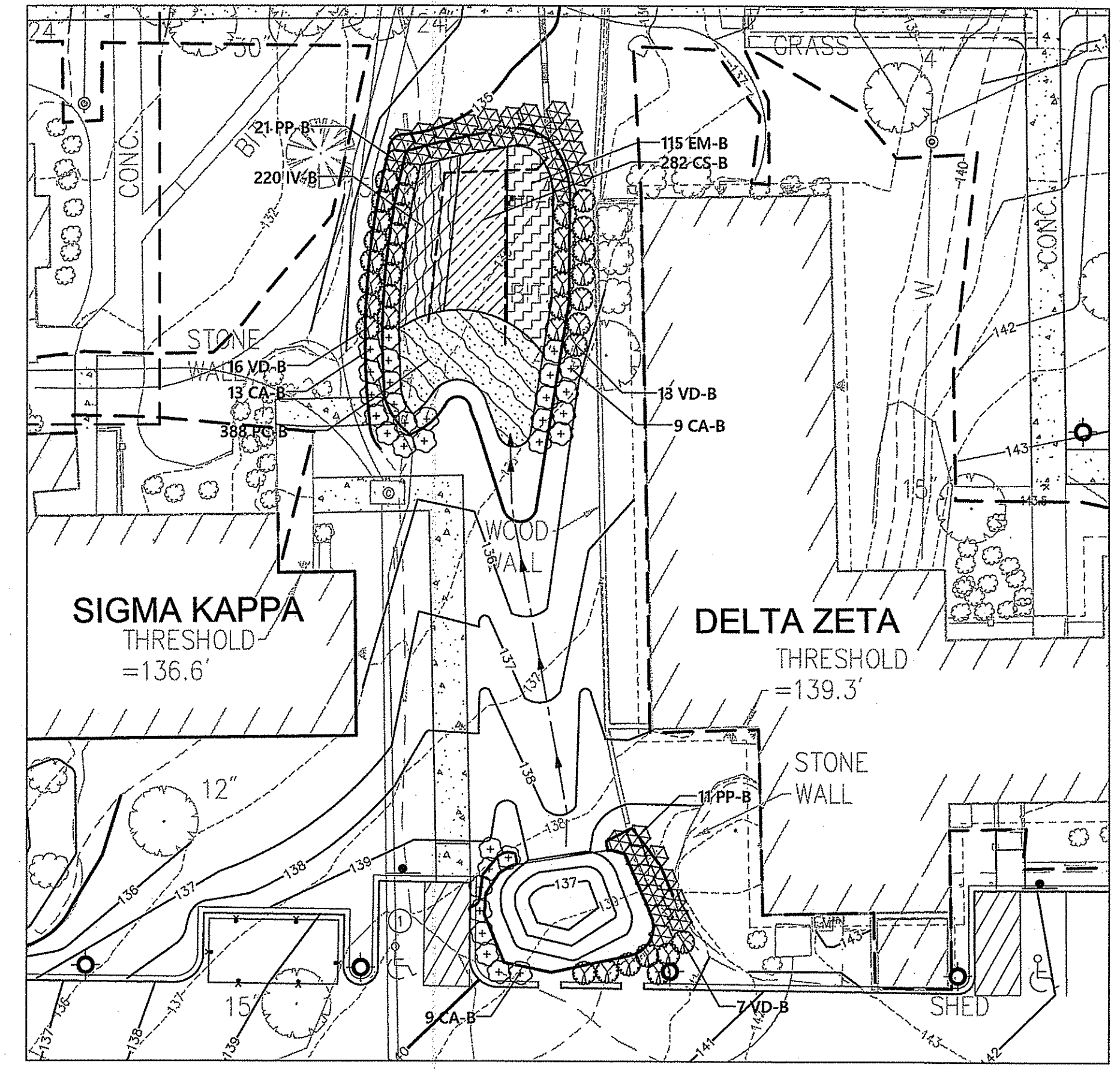
- BIORETENTION BASIN SHALL NOT BE PLACED ON-LINE UNTIL THE ENTIRE CONTRIBUTING BIORETENTION AREA HAS BEEN STABILIZED. THE BIORETENTION BASIN AREA SHALL BE PROTECTED FROM SEDIMENT LADEN RUNOFF.
- THE BIORETENTION BASIN SHALL CONTAIN A PLANTING SOIL OF SANDY LOAM, LOAMY SAND, LOAM (USDA) OR A LOAM/SAND MIX WITH THE FOLLOWING COMPOSITION:
  - SAND 80-85% BY VOLUME
  - CLAY < 2%
  - SILT 0-12%
  - ORGANIC MATTER 3-5%
 SOIL SHALL BE FREE FROM STONES OVER 2" DIAMETER, STUMPS, ROOTS OR OTHER DEBRIS. PLANTING SOIL SHALL CONFORM TO THE FOLLOWING: pH RANGE-6.5 TO 6.8; MAGNESIUM SOLUBLE SALTS - LESS THAN 500 PPM. PROVIDE SOIL TEST RESULTS TO CONFIRM SOIL COMPLIANCE TO THE ABOVE CRITERIA.
- AUGMENT PLANTING SOIL TO 30 - 40% COMPOST. COMPOST SHALL BE PROCESSED YARD WASTE OR AGED LEAVES. COMPOST SHALL NOT CONTAIN BIOSOLIDS.
- PROVIDE A 3" DEEP LAYER OF AGED (6 MOS. MIN), COMPOSTED, SHREDDED PINE MULCH OVER SOIL SURFACE.
- SAND SHALL CONFORM TO ASTM D 422, AND BE FREE OF DELETERIOUS MATERIAL.
- TOPSOIL SHALL CONSIST OF TOPSOIL FROM ON SITE STOCKPILE, OR LOAM BORROW, WITH SOIL AMENDMENTS ADDED TO MEET THE ABOVE SPECIFICATION.
- PLANTING SOIL SHALL BE PLACED IN LIFTS OF LESS THAN 12 INCHES AND LIGHTLY COMPACTED (MINIMUM COMPACTIVE EFFORT) BY TAMPING OR ROLLING WITH A HAND-OPERATED LANDSCAPE ROLLER. HEAVY EQUIPMENT SHALL BE RESTRICTED FROM TRAVELING OVER THE BIORETENTION AREA.
- SEE GRADING, DRAINAGE, AND EROSION CONTROL PLAN FOR DIMENSIONS, ELEVATIONS, PIPE MATERIALS AND SIZES, LOCATIONS AND INVERTS OF BIORETENTION BASIN AND BIORETENTION AREA ELEMENTS.

**Plant Maintenance Notes**

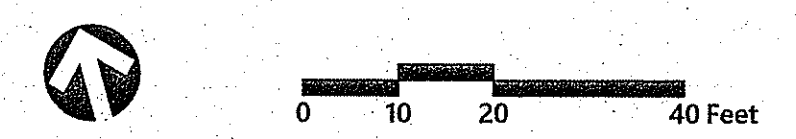
- CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE LAWNS AND PLANTINGS. NO IRRIGATION IS PROPOSED FOR THIS SITE. THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATERING FOR NEW LAWNS AND PLANTINGS DURING THE ONE YEAR PLANT GUARANTEE PERIOD.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER SHALL BE PROVIDED BY THE CONTRACTOR.
- WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
- WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
- CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE END OF THE ONE YEAR GUARANTEE PERIOD. CONTRACTOR SHALL TURN OVER MAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.



BIORETENTION BASIN 7



BIORETENTION BASIN 5

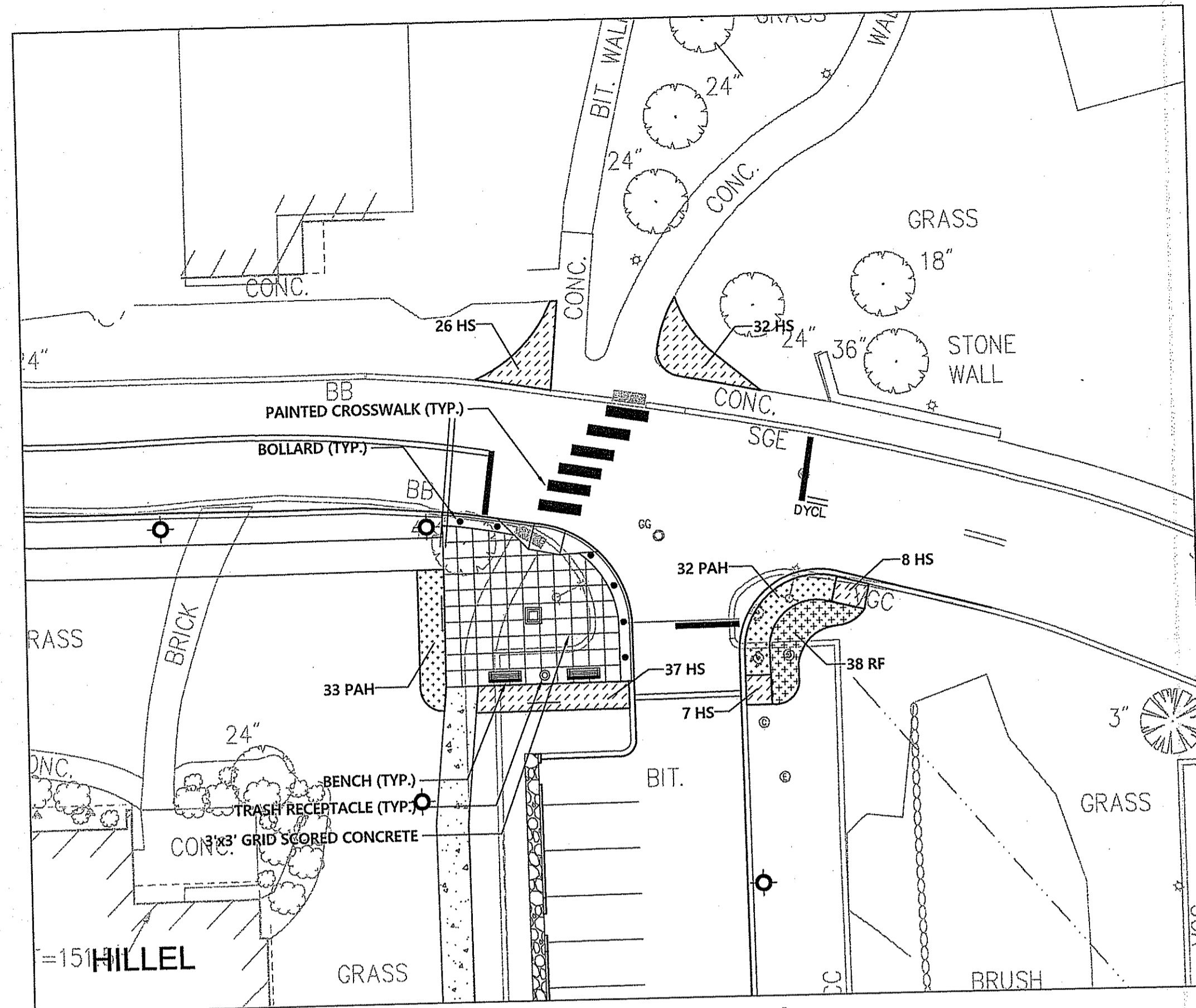


University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision | Per Client/RIDEM | Date       | Appr. |
|-----|----------|------------------|------------|-------|
| 1   |          |                  | 11/16/2018 |       |

Not Approved for Construction  
Planting Plan  
Drawing Number

L-1



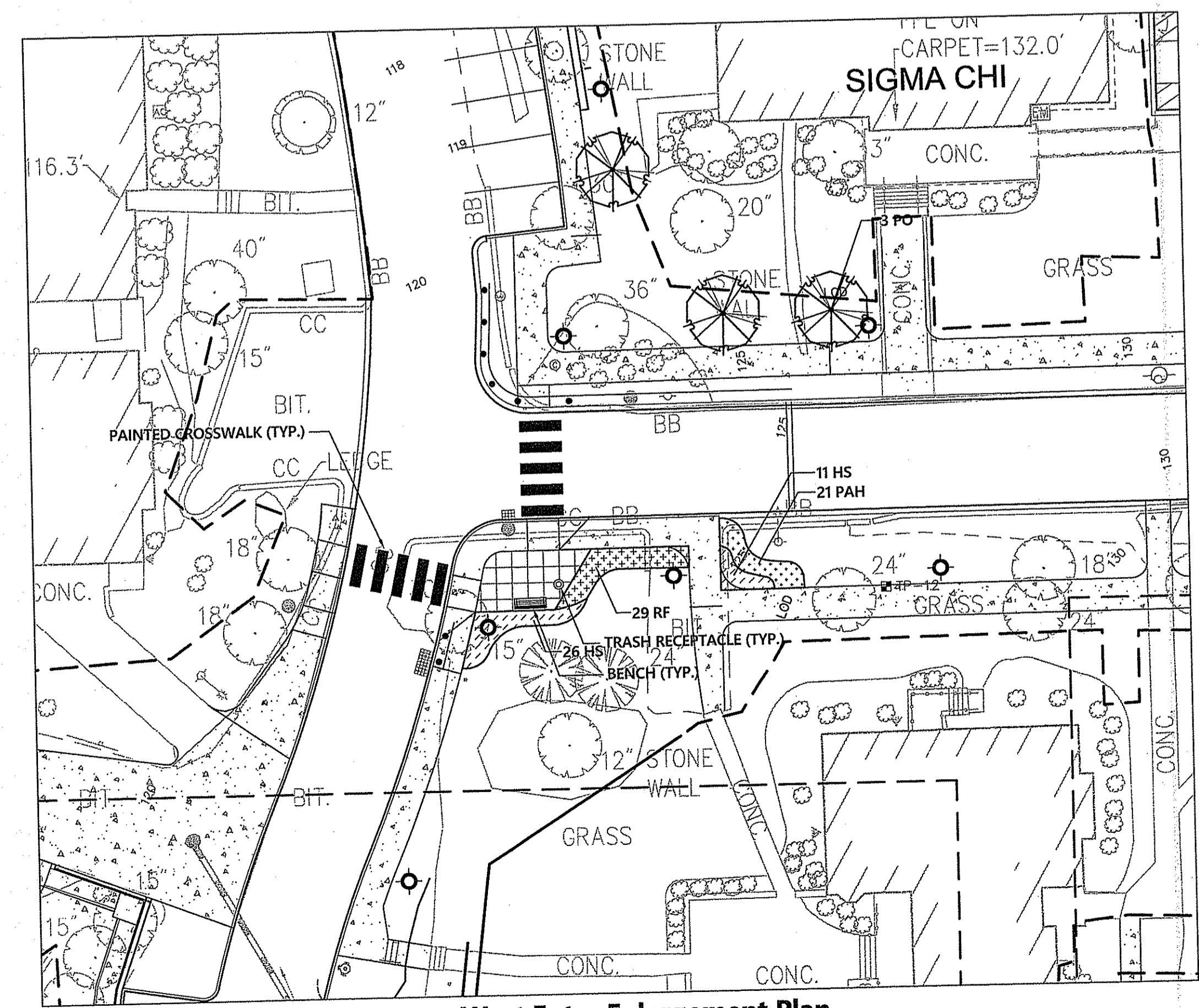
**East Entry Enlargement Plan**

**PLANT SCHEDULE**

| FLOWERING TREES | QTY | BOTANICAL NAME | COMMON NAME  | SIZE            |
|-----------------|-----|----------------|--------------|-----------------|
| PO              | 3   | Prunus x okame | Okame Cherry | 2 1/2 - 3" CAL. |

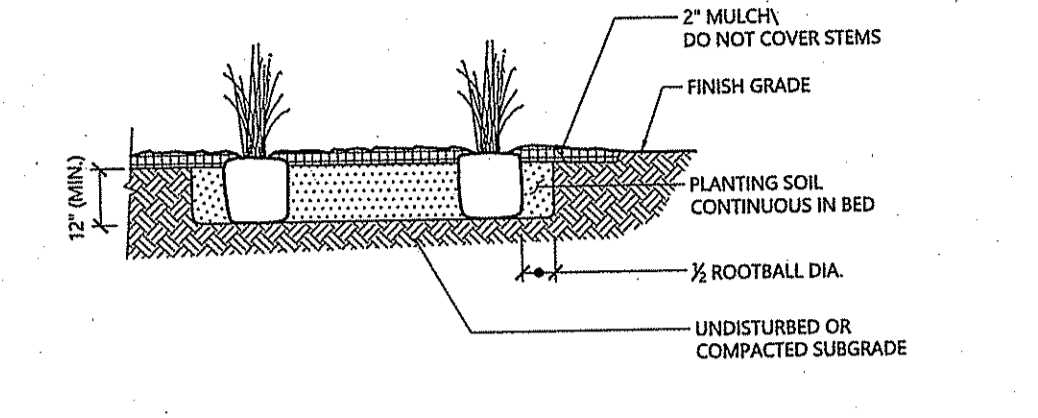
| SHRUB AREAS | QTY | BOTANICAL NAME                  | COMMON NAME                 | SIZE          | SPACING  |
|-------------|-----|---------------------------------|-----------------------------|---------------|----------|
| HS          | 147 | Hemerocallis x 'Stella de Oro'  | Stella de Oro Daylily       | #1 POT        | 24" o.c. |
| PAH         | 86  | Pennisetum alopecuroides Hameln | Hameln Dwarf Fountain Grass | #1 POT        | 24" o.c. |
| RF          | 67  | Rosa acicularis 'The Fairy'     | The Fairy Rose              | 24 - 30" SPD. | 24" o.c. |



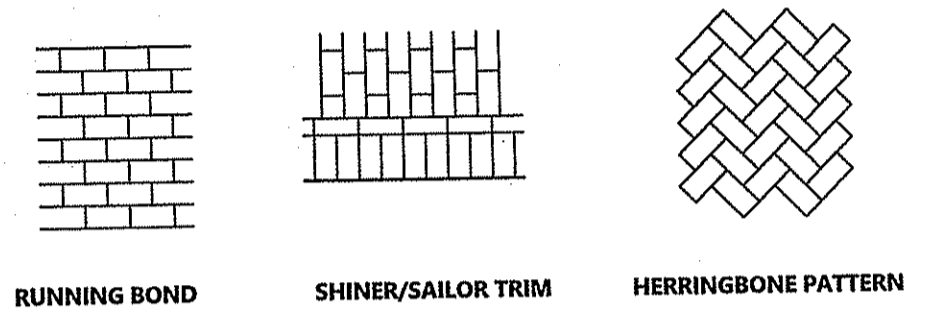
**West Entry Enlargement Plan**

**PLANT SPACING**

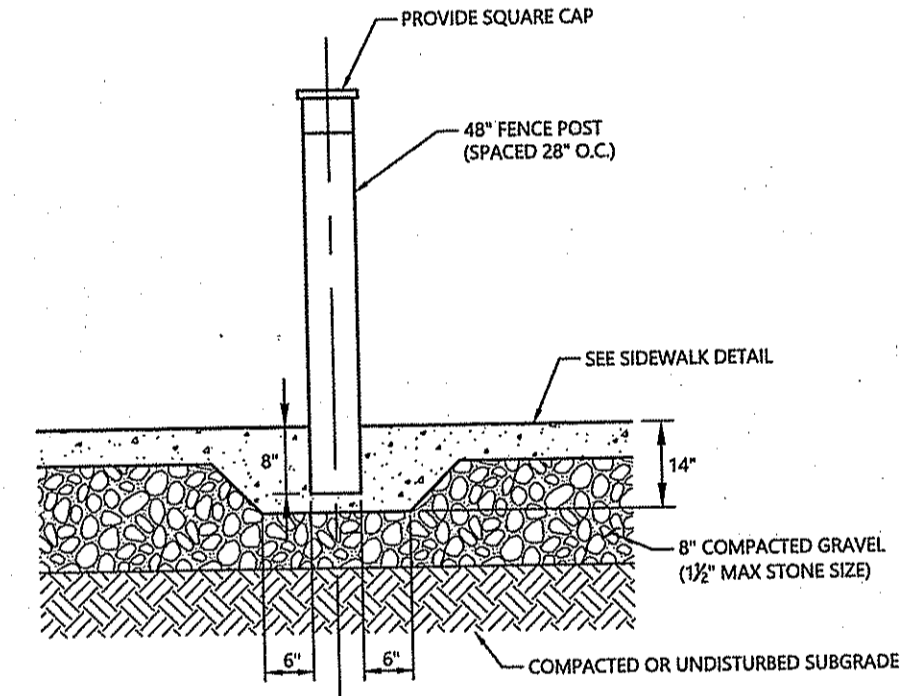
| PLANT SPACING ("A") | ROW SPACING ("B") |
|---------------------|-------------------|
| 6 IN. O.C.          | 5 IN. O.C.        |
| 8 IN. O.C.          | 7 IN. O.C.        |
| 10 IN. O.C.         | 8 1/2 IN. O.C.    |
| 12 IN. O.C.         | 10 1/2 IN. O.C.   |
| 15 IN. O.C.         | 13 IN. O.C.       |
| 18 IN. O.C.         | 16 IN. O.C.       |



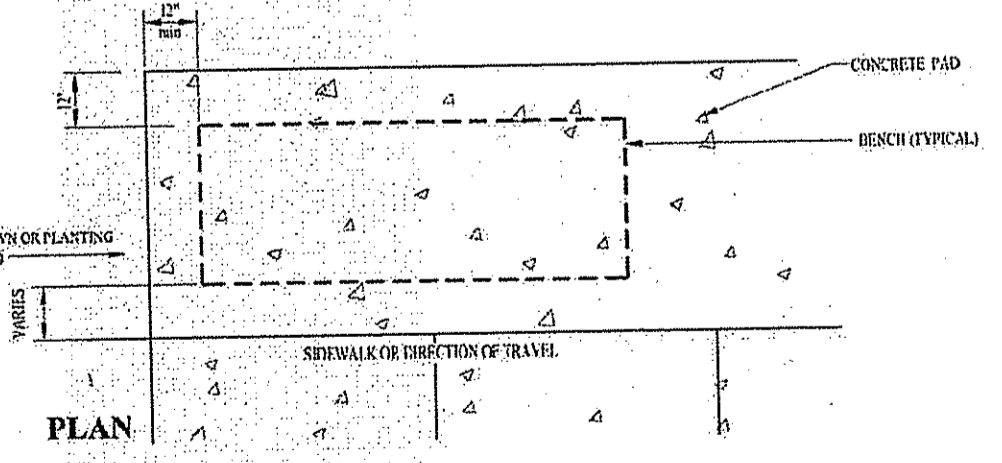
**Perennial and Ornamental Grass Planting** 1/18  
 N.T.S. Source: VHB LD\_618



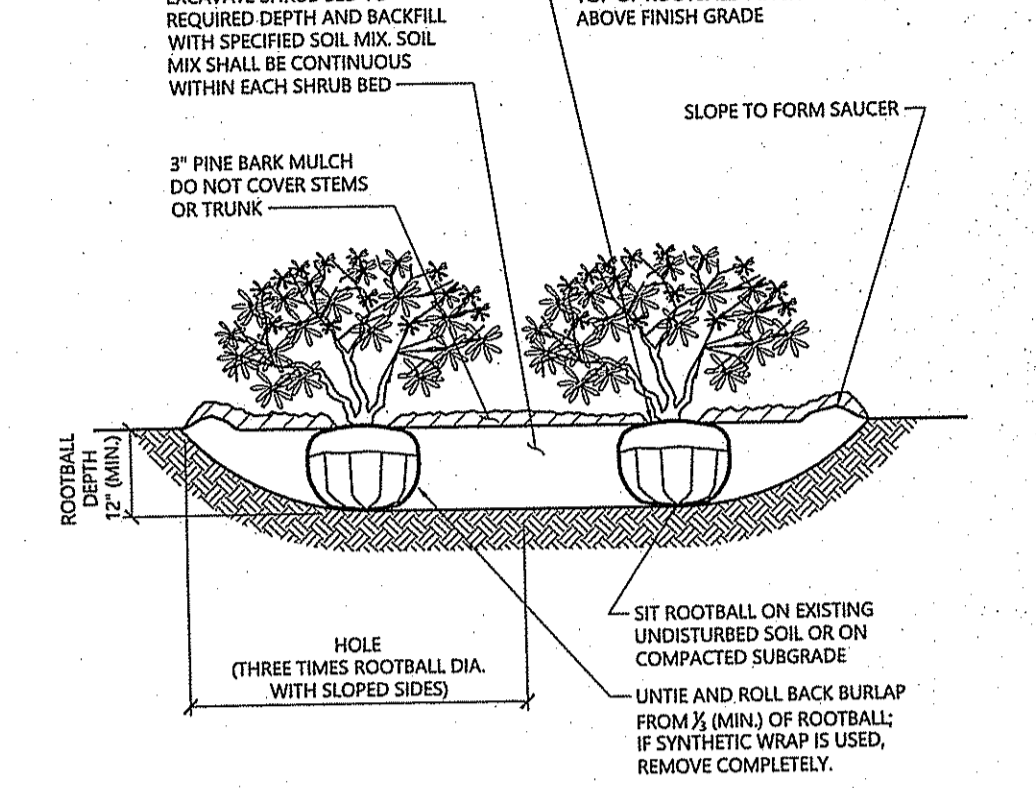
**Stamped Bituminous Patterns** 1/16  
 N.T.S. Source: VHB LD\_814



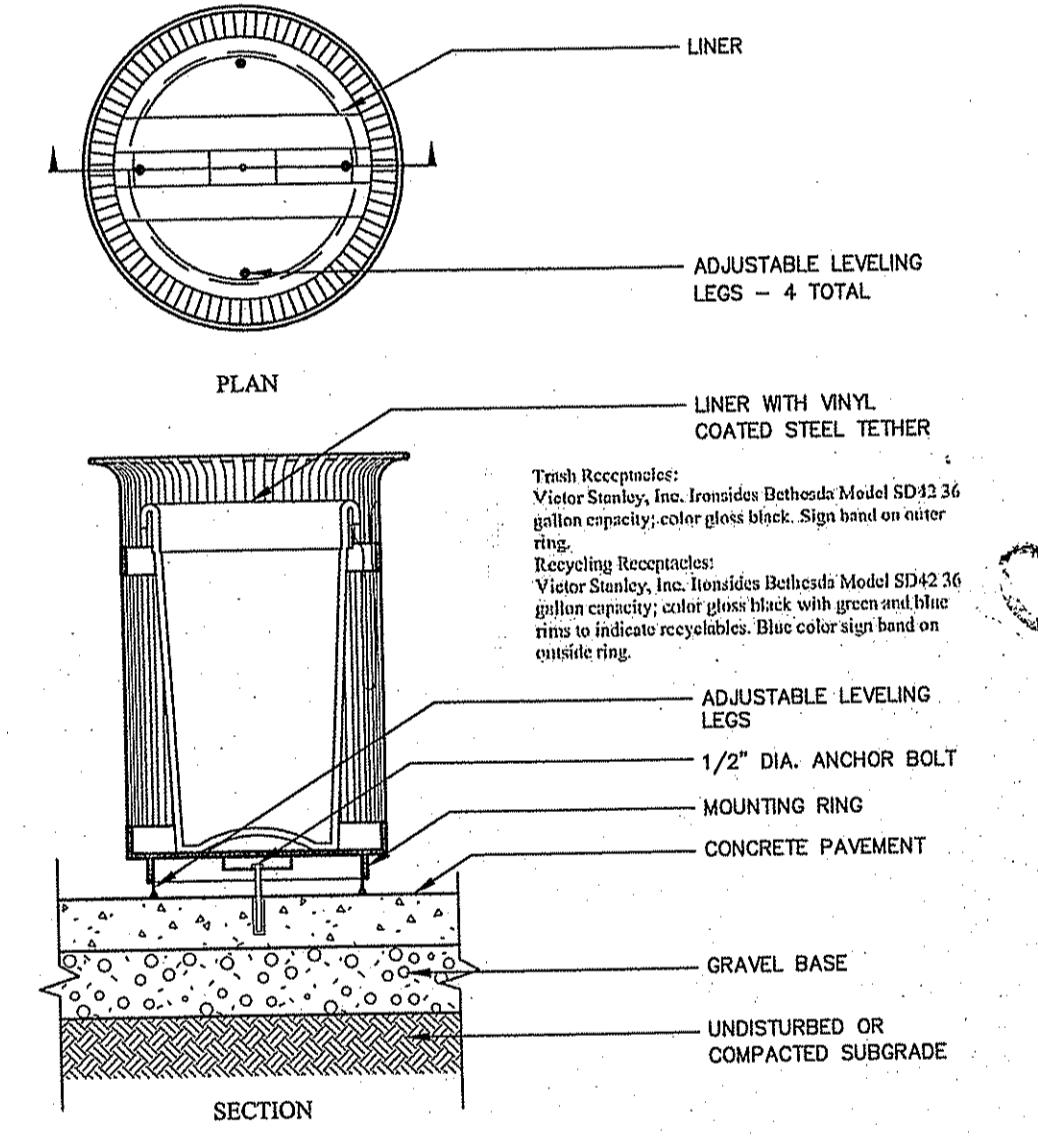
**Site Bollard** 5/18  
 N.T.S. Source: VHB REV



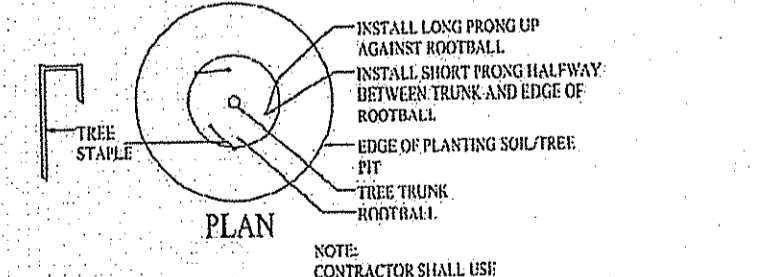
**Bench on Concrete Pad** 5/18  
 N.T.S. Source: URI



**Shrub Bed Planting** 1/16  
 N.T.S. Source: VHB LD\_601

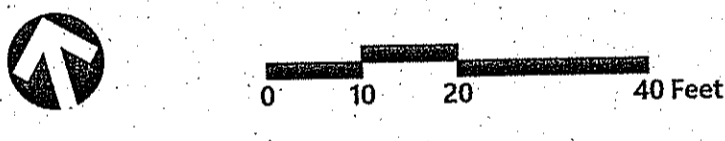


**Trash Receptacle on Concrete** 5/18  
 N.T.S. Source: VHB



**Deciduous Tree Planting** 5/18  
 N.T.S. Source: URI

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JAN 28 2019 FILE # 18-0137  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE



**University of Rhode Island**  
 Fraternity Circle Improvements  
 Kingston, Rhode Island

| No. | Revision                   | Date       | Appd. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
 Issued for: \_\_\_\_\_ Date: May 29, 2018  
**RIDEM PDA**

Not Approved for Construction  
**Planting and Site Amenity Details**

**L-2**

Sheet 21 of 28

Project Number 72772.01

**General**

- CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (PAVEMENTS, WALKS, ETC) SHALL RECEIVE 4 INCHES LOAM AND SEED.
- UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE RIPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND RIDEM JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO COMPLETE AND SUBMIT THE CONTRACTOR'S CERTIFICATION FOUND IN SPECIFICATION SECTION 312500. THE CONTRACTOR SHALL MAINTAIN A SOIL EROSION AND SEDIMENTATION PLAN IN ACCORDANCE WITH THE RIPDES REGULATIONS.
- STAGING AND STOCKPILE AREAS SHALL NOT BE LOCATED WITHIN ANY WETLAND AND ABUTTING RESOURCE AREA AND SHALL BE LOCATED WITHIN THE LOD.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND INSTALLING THE FOLLOWING ITEMS ON SITE AND REDLINING THE PLAN FOR RECORD KEEPING PURPOSES AS REQUIRED BY THE RIPDES PERMIT:
  - BUILDING MATERIALS STAGING AREAS
  - STOCKPILE AREAS. EROSION CONTROLS SHALL BE PLACED AT THE BASE OF ALL STOCKPILES
  - DESIGNATED WASHOUT AREAS
  - TEMPORARY SEDIMENT BASIN AREAS.

**Erosion Control**

- PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES DAILY, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
- CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
- UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
- STABILIZED CONSTRUCTION EXIT. A CROSS SLOPE WILL BE PLACED IN THE ENTRANCE TO DIRECT RUNOFF TO A PROTECTED SETTLING AREA. IF DEEMED NECESSARY AFTER CONSTRUCTION BEGINS, A WASH PAD MAY BE INCLUDED TO WASH OFF VEHICLE WHEELS BEFORE LEAVING THE PROJECT SITE.
- TEMPORARY SEDIMENT BASINS WILL BE DESIGNED EITHER AS EXCAVATIONS OR BERMED STORMWATER DETENTION STRUCTURES THAT WILL RETAIN RUNOFF FOR A SUFFICIENT PERIOD OF TIME TO ALLOW SUSPENDED SOIL PARTICLES TO SETTLE OUT PRIOR TO DISCHARGE. BASINS WILL BE LOCATED AS DETERMINED BY THE CONTRACTOR BASED ON CONSTRUCTION NEEDS. POINT OF DISCHARGE FROM SEDIMENT BASINS WILL BE STABILIZED TO MINIMIZE EROSION.
- VEGETATIVE SLOPE STABILIZATION WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR STEEPER. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING, A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.
- STABILIZATION OF DISTURBED AREAS MUST BE INITIATED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATION OR OTHER EARTH DISTURBANCE ACTIVITIES ARE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT BE RESUMED FOR A PERIOD EXCEEDING FOURTEEN (14) CALENDAR DAYS. STABILIZATION MUST BE COMPLETED USING VEGETATIVE STABILIZATION MEASURES WHERE POSSIBLE.
- ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15TH SHALL BE SEEDED BY THAT DATE. ANY SUCH AREAS WHICH DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION BY NOVEMBER 15TH MUST BE STABILIZED THROUGH THE USE OF NON-VEGETATIVE EROSION CONTROL MEASURES. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15TH TO APRIL 15TH CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THE DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE STABILIZED WITHIN FIVE (5) WORKING DAYS.

**Bioretention areas and Sand Filter Protection During Construction**

FOR THE LONG-TERM FUNCTION OF THE BMP, CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPs):

- THESE AREAS SHALL NOT BE USED AS CONSTRUCTION SEDIMENTATION SYSTEMS.
- ALL STORMWATER RUNOFF FROM EXPOSED SURFACES SHALL BE DIRECTED AWAY FROM THESE AREAS.
- CONSTRUCTION EQUIPMENT, VEHICULAR, AND STOCKPILING OF CONSTRUCTION AND EARTH MATERIALS SHALL BE OUTSIDE THE LIMITS OF THESE AREAS. THE SUBGRADE BENEATH SHALL NOT BE COMPACTED.
- EXCAVATION FOR CONSTRUCTION OF THESE SYSTEMS SHALL BE PERFORMED MANUALLY OR BY HYDRAULIC EXCAVATOR OR SOME OTHER SIMILAR MEANS TO ENSURE THAT THE EQUIPMENT IS NOT IN DIRECT CONTACT WITH THE NATURAL FILTRATION EARTH MATERIAL AND DOES NOT CAUSE COMPACTION OF THE SUBGRADE.
- THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AROUND THE PERIMETER OF THE SYSTEMS TO PREVENT THE USE OF THESE AREAS FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION CAPABILITIES. THE FENCING MAY BE REMOVED FOR BACKFILLING AND FINAL CONSTRUCTION.
- THE SAND FILTER SHALL BE PROTECTED WITH EROSION CONTROLS IMMEDIATELY UPON INSTALLATION TO PREVENT CLOGGING OF FILTER MATERIALS. THESE AREAS SHALL NOT BE USED AS SEDIMENTATION OR DEWATERING BASINS.

**Qualified Pervious Areas (QPA's) Protection During Construction**

FOR THE LONG-TERM FUNCTION OF THE QUALIFIED PERVIOUS AREAS CARE MUST BE TAKEN IN THIS AREA DURING CONSTRUCTION. THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPs):

- CONSTRUCTION VEHICLES SHALL NOT BE ALLOWED TO DRIVE OVER THE AREAS. IF IT BECOMES COMPACTED, THE SOIL MUST BE SUITABLY AMENDED, TILLED, AND RE-VEGETATED ONCE CONSTRUCTION IS COMPLETE TO RESTORE INFILTRATION CAPACITY.
- THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING AROUND THE PERIMETER OF THE SYSTEMS TO PREVENT THE USE OF THESE AREAS FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE INFILTRATION CAPABILITIES. THE FENCING MAY BE REMOVED FOR BACKFILLING AND FINAL CONSTRUCTION.

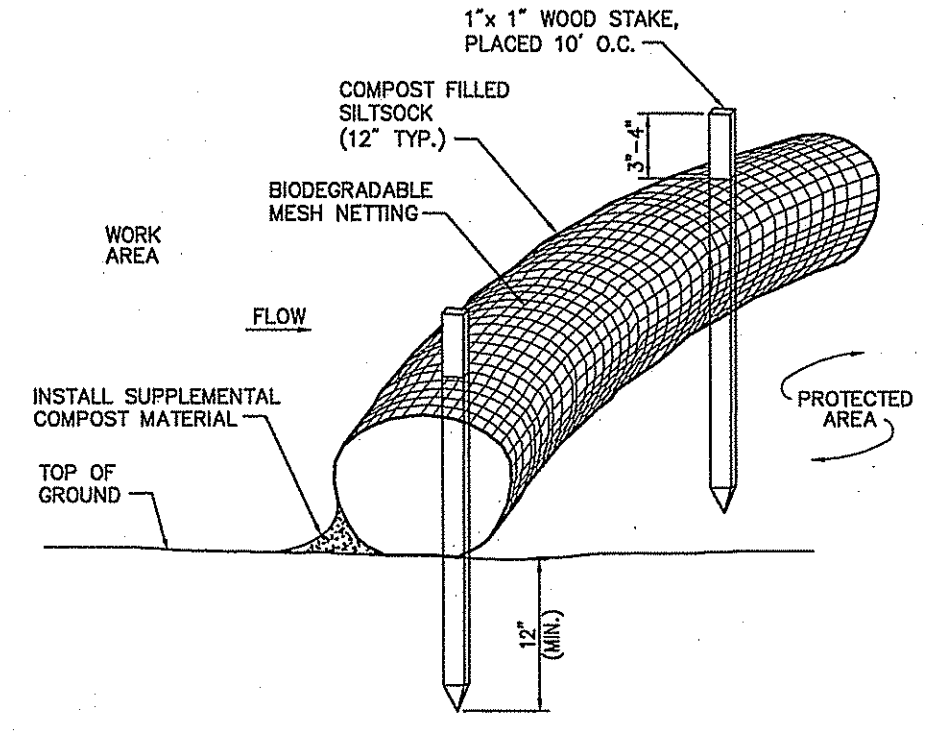
**Erosion Control Maintenance Requirements**

SITE OWNERS AND OPERATORS MUST ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS REMAIN IN EFFECTIVE OPERATING CONDITION AND ARE PROTECTED FROM ACTIVITIES THAT WOULD REDUCE THEIR EFFECTIVENESS. SITE OWNERS AND OPERATORS MUST ALSO ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS ARE INSPECTED AT THE REQUIRED FREQUENCY REQUIREMENTS LISTED BELOW. IF THE DESIGNATED SITE INSPECTOR FINDS A PROBLEM (I.E. EROSION, RUNOFF, SEDIMENT OR POLLUTION PREVENTION CONTROLS REQUIRE REPLACEMENT, REPAIR, OR MAINTENANCE), THE OWNER AND OPERATOR MUST ENSURE THAT THE NECESSARY REPAIRS OR MODIFICATIONS ARE MADE IN ACCORDANCE WITH THE FOLLOWING:

- INITIATE WORK TO FIX THE PROBLEM IMMEDIATELY AFTER DISCOVERING THE PROBLEM, AND COMPLETE SUCH WORK BY THE CLOSE OF THE NEXT WORK DAY, IF THE PROBLEM DOES NOT REQUIRE SIGNIFICANT REPAIR OR REPLACEMENT, OR IF THE PROBLEM CAN BE CORRECTED THROUGH ROUTINE MAINTENANCE.
- WHEN INSTALLATION OF A NEW CONTROL OR A SIGNIFICANT REPAIR IS NEEDED, SITE OWNERS AND OPERATORS MUST ENSURE THAT THE NEW OR MODIFIED CONTROL PRACTICE IS INSTALLED AND MADE OPERATIONAL BY NO LATER THAN SEVEN (7) CALENDAR DAYS FROM THE TIME OF DISCOVERY WHERE FEASIBLE. IF IT IS INFEASIBLE TO COMPLETE THE INSTALLATION OR REPAIR WITHIN SEVEN (7) CALENDAR DAYS, THE REASONS WHY IT IS INFEASIBLE MUST BE DOCUMENTED IN THE SESC PLAN ALONG WITH THE SCHEDULE FOR INSTALLING THE STORMWATER CONTROL(S) AND MAKING IT OPERATIONAL AS SOON AS PRACTICABLE AFTER THE 7-DAY TIMEFRAME. WHERE THESE ACTIONS RESULT IN CHANGES TO ANY OF THE STORMWATER CONTROL MEASURES OUTLINED IN THE SESC PLAN, SITE OWNERS AND OPERATORS MUST MODIFY THE SESC PLAN ACCORDINGLY WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETING THIS WORK IN ACCORDANCE WITH THE FOLLOWING:
  - THE OWNER AND OPERATOR SHALL AMEND THE SESC PLAN WITHIN SEVEN (7) DAYS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE OR OTHER PROCEDURE WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS, OR IF THE SESC PLAN PROVES TO BE INEFFECTIVE IN ACHIEVING ITS OBJECTIVES. IN ADDITION, THE SESC PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW OPERATOR THAT WILL IMPLEMENT A COMPONENT OF THE SESC PLAN. THE AMENDED SESC PLAN MUST BE KEPT ON FILE AT THE CONSTRUCTION SITE AND ANY SESC PLAN MODIFICATIONS MUST BE DOCUMENTED. ANY AMENDMENTS TO CONTROL MEASURES WHICH INVOLVED THE PRACTICE OF ENGINEERING, MUST FIRST BE REVIEWED, SIGNED, AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF RHODE ISLAND.

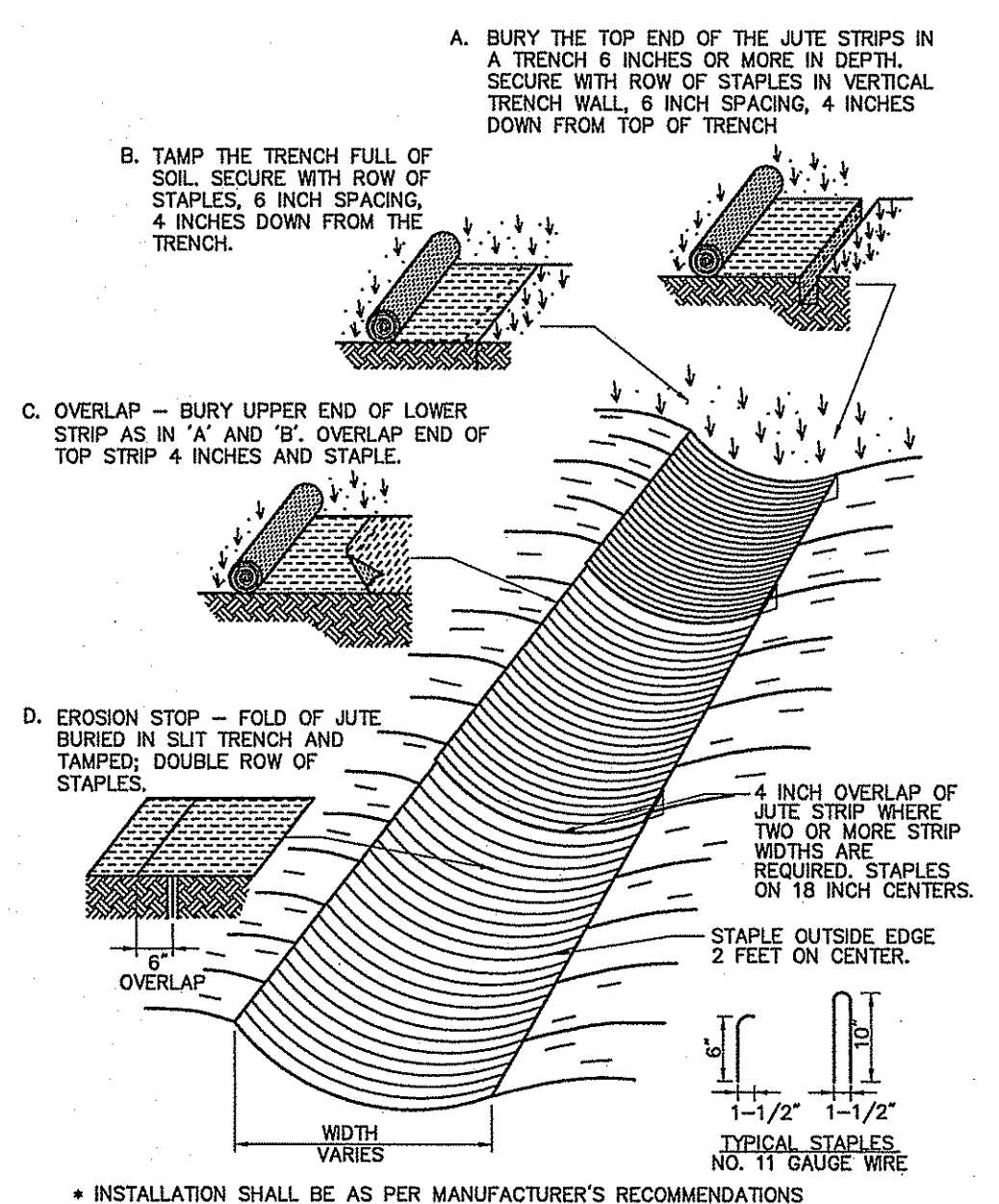
- IF CORRECTIVE ACTIONS ARE REQUIRED, THE SITE OWNER AND OPERATOR MUST ENSURE THAT ALL CORRECTIVE ACTIONS ARE DOCUMENTED ON THE INSPECTION REPORT IN WHICH THE PROBLEM WAS FIRST DISCOVERED. THESE CORRECTIVE ACTIONS MUST BE DOCUMENTED, SIGNED, AND DATED BY THE SITE OPERATOR ONCE ALL NECESSARY REPAIRS HAVE BEEN COMPLETED.

- SOIL EROSION AND SEDIMENT CONTROL INSPECTION REQUIREMENTS
  - MINIMUM FREQUENCY - EACH OF THE FOLLOWING AREAS MUST BE INSPECTED BY OR UNDER THE SUPERVISION OF THE OWNER AND OPERATOR AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER ANY STORM EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAINFALL PER TWENTY-FOUR (24) HOUR PERIOD AND/OR AFTER A SIGNIFICANT AMOUNT OF RUNOFF:
  - ALL AREAS THAT HAVE BEEN CLEARED, GRADED, OR EXCAVATED AND THAT HAVE NOT YET COMPLETED STABILIZATION;
  - ALL STORMWATER EROSION, RUNOFF, AND SEDIMENT CONTROL MEASURES (INCLUDING POLLUTION PREVENTION PRACTICES) INSTALLED AT THE SITE TO COMPLY WITH THIS PERMIT;
  - CONSTRUCTION MATERIAL, UNSTABILIZED SOIL STOCKPILES, WASTE, BORROW, OR EQUIPMENT STORAGE, AND MAINTENANCE AREAS THAT ARE COVERED BY THIS PERMIT AND ARE EXPOSED TO PRECIPITATION;
  - ALL AREAS WHERE STORMWATER TYPICALLY FLOWS WITHIN THE SITE, INCLUDING TEMPORARY DRAINAGE WAYS DESIGNED TO DIVERT, CONVEY, AND/OR TREAT STORMWATER;
  - ALL POINTS OF DISCHARGE FROM THE SITE;
  - ALL LOCATIONS WHERE TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES HAVE BEEN IMPLEMENTED.
  - ALL LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

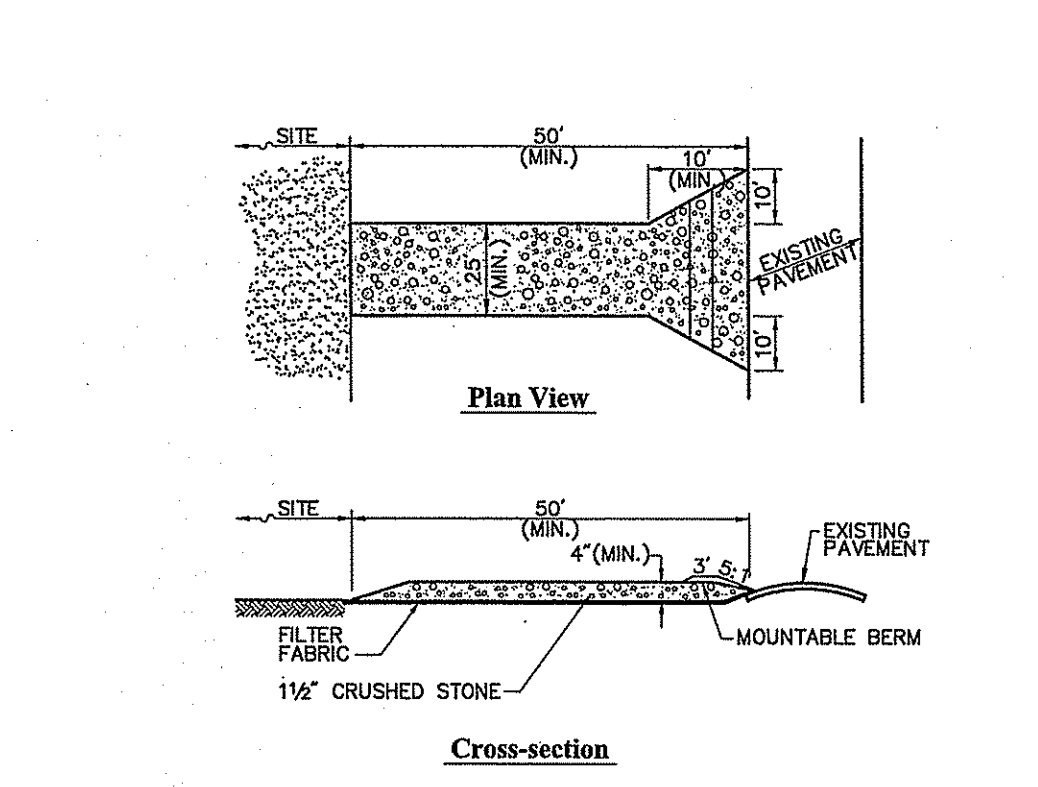


- Notes:**
- SILT SOCK SHALL BE FILTREXX SILT SOCK, OR APPROVED EQUAL.
  - SILT SOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
  - SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
  - COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
  - IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

**Siltsock - Erosion Control Barrier** 8/12  
N.T.S. Source: VHB LD\_658

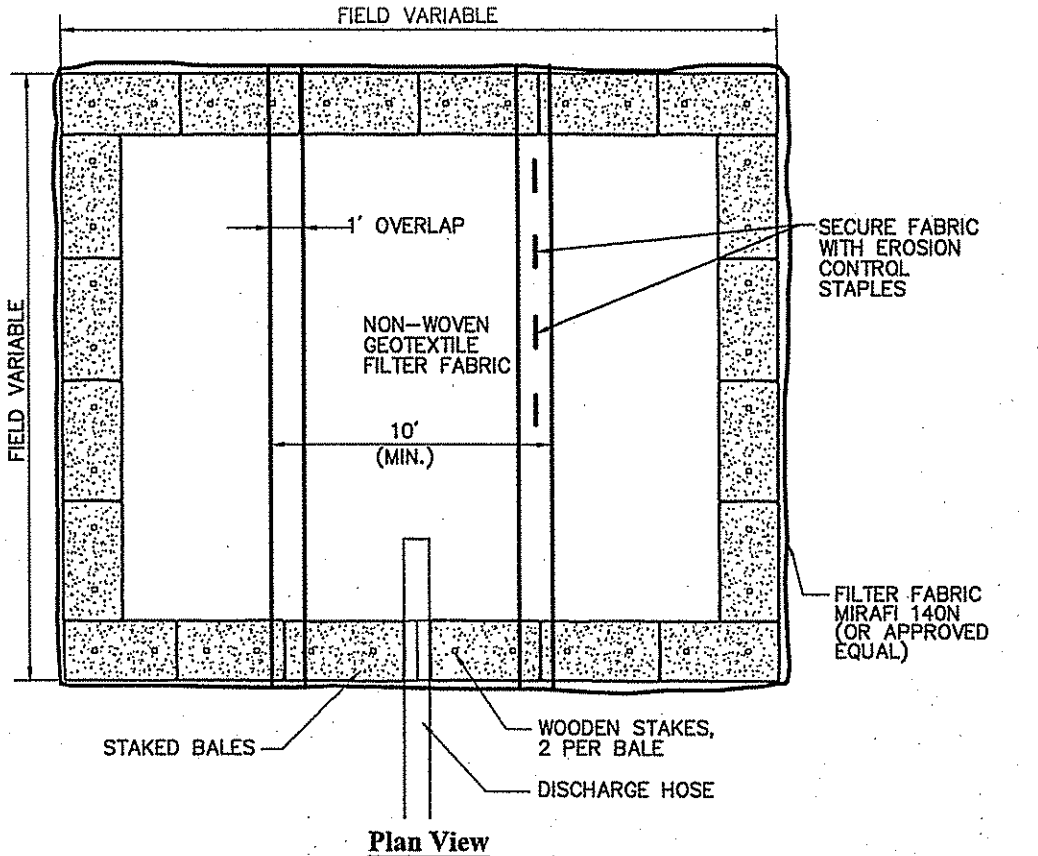


**Erosion Control Blanket Swale Installation** 6/08  
N.T.S. Source: VHB LD\_681



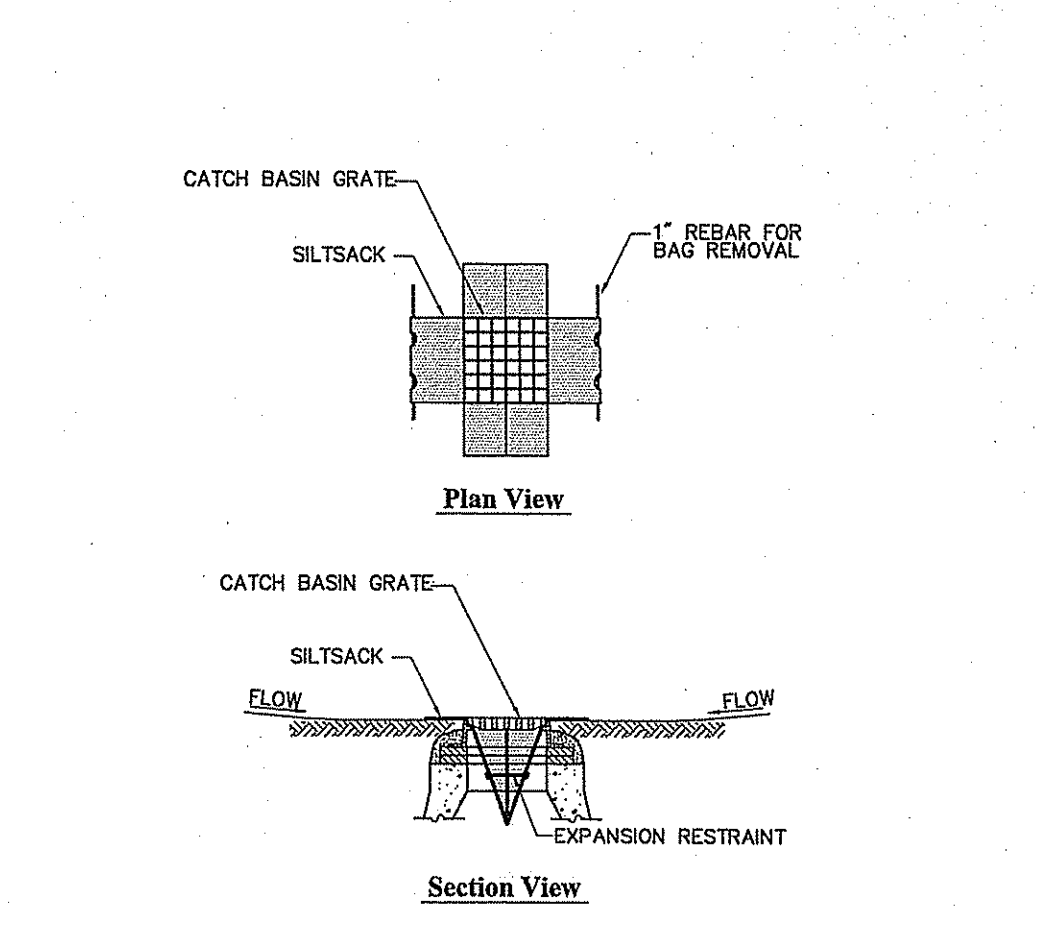
- Notes:**
- ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
  - STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

**Stabilized Construction Exit** 6/08  
N.T.S. Source: VHB LD\_682



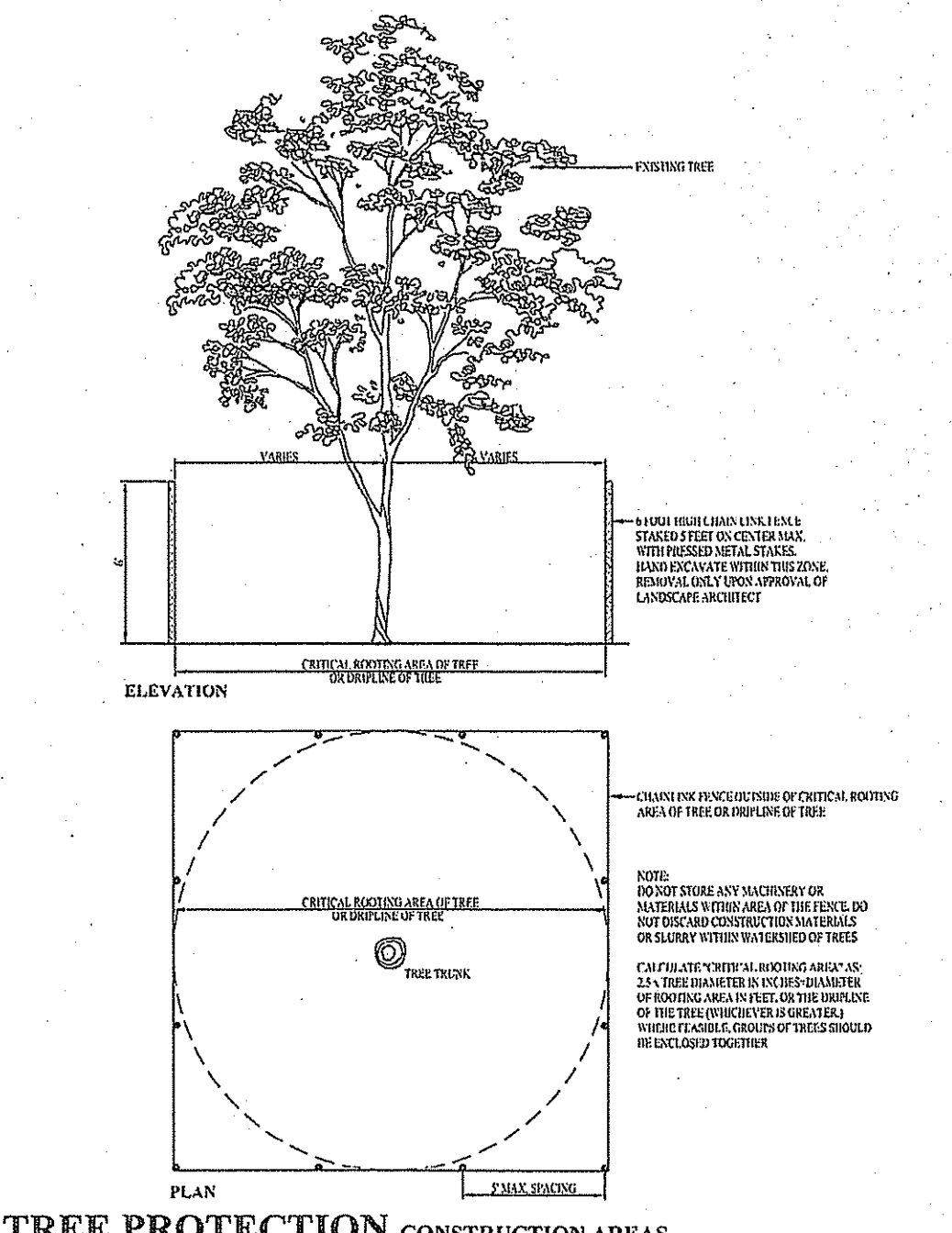
- Notes:**
- NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
  - THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.

**Dewatering Straw Bale Basin** 2/11  
N.T.S. Source: VHB LD\_690



- Notes:**
- INSTALL SILT SOCK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER SINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
  - GRATE TO BE PLACED OVER SILT SOCK.
  - SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

**Siltsock Sediment Trap** 6/08  
N.T.S. Source: VHB LD\_694



**TREE PROTECTION CONSTRUCTION AREAS** NO SCALE

vhb.com

Environmental Management  
**DEC 14 2018**  
 Office of Water Resources

1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
JAN 28 2018 FILE # 18-0137  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

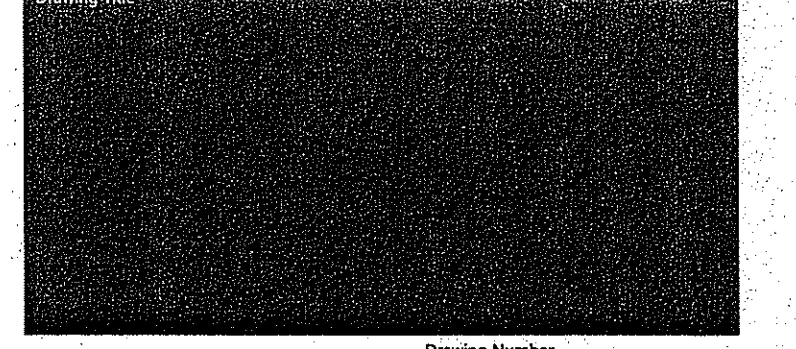
**University of Rhode Island**

**Fraternity Circle Improvements  
Kingston, Rhode Island**

| No. | Revision                   | Date       | App'd |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
 Issued for: **RIDEM PDA** Date: **May 29, 2018**

**Not Approved for Construction**



JONATHAN B. STABACH  
 No. 7794  
 REGISTERED PROFESSIONAL ENGINEER  
 (GVI) 1/16/18

**SESC-1**  
 Sheet 22 of 28  
 Project Number: 72772.01

Environmental Management  
DEC 14 2018  
Office of Water Resources

- LEGEND**
- ← PROPOSED STORMWATER RUNOFF FLOW PATH
  - ▬ PROPOSED SILK SOCK/STRAW WATTLE
  - PROPOSED SILK SACK
  - PROPOSED TREE PROTECTION FENCE

- NOTES**
1. REFER TO SOIL EROSION AND SOIL CONTROL PLAN REPORT FOR ADDITIONAL INFORMATION AND GUIDELINES.
  2. TOTAL SITE AREA = 12.6 ACRES.  
TOTAL SITE DISTURBANCE = 9.1 ACRES.
  3. RECEIVING WATERS: WHITE HORN BROOK TO THE WEST.
  4. NO PORTION OF THE SITE FALLS WITHIN OR DIRECTLY DISCHARGES TO A NATURAL HERITAGE AREA (NHA), OR OTHERWISE IMPACTS THREATENED SPECIES OR HABITATS.
  5. STOCKPILING MUST BE WITHIN PROJECT LIMIT OF WORK BUT OUTSIDE THE BMP AREAS LISTED BELOW AND SHOWN ON THE PLANS AND SUCH THAT CONSTRUCTION VEHICLES DO NOT DRIVE OVER THESE AREAS TO ACCESS THE STOCKPILES.
  6. WASHOUT AND REFUELING AREAS MUST BE WITHIN PROJECT LIMITS BUT OUTSIDE THE BMP AREAS LISTED BELOW AND SHOWN ON THE PLANS.

- BEST MANAGEMENT PRACTICES (BMP)**
- BIO BIOFILTRATION BASIN
  - SD STONE DIAPHRAGM
  - SF SAND FILTER
  - SFB SEDIMENT FOREBAY
  - QPA QUALIFIED PERVIOUS AREA
  - WQU WATER QUALITY UNIT

**University of Rhode Island  
Fraternity Circle Improvements  
Kingston, Rhode Island**

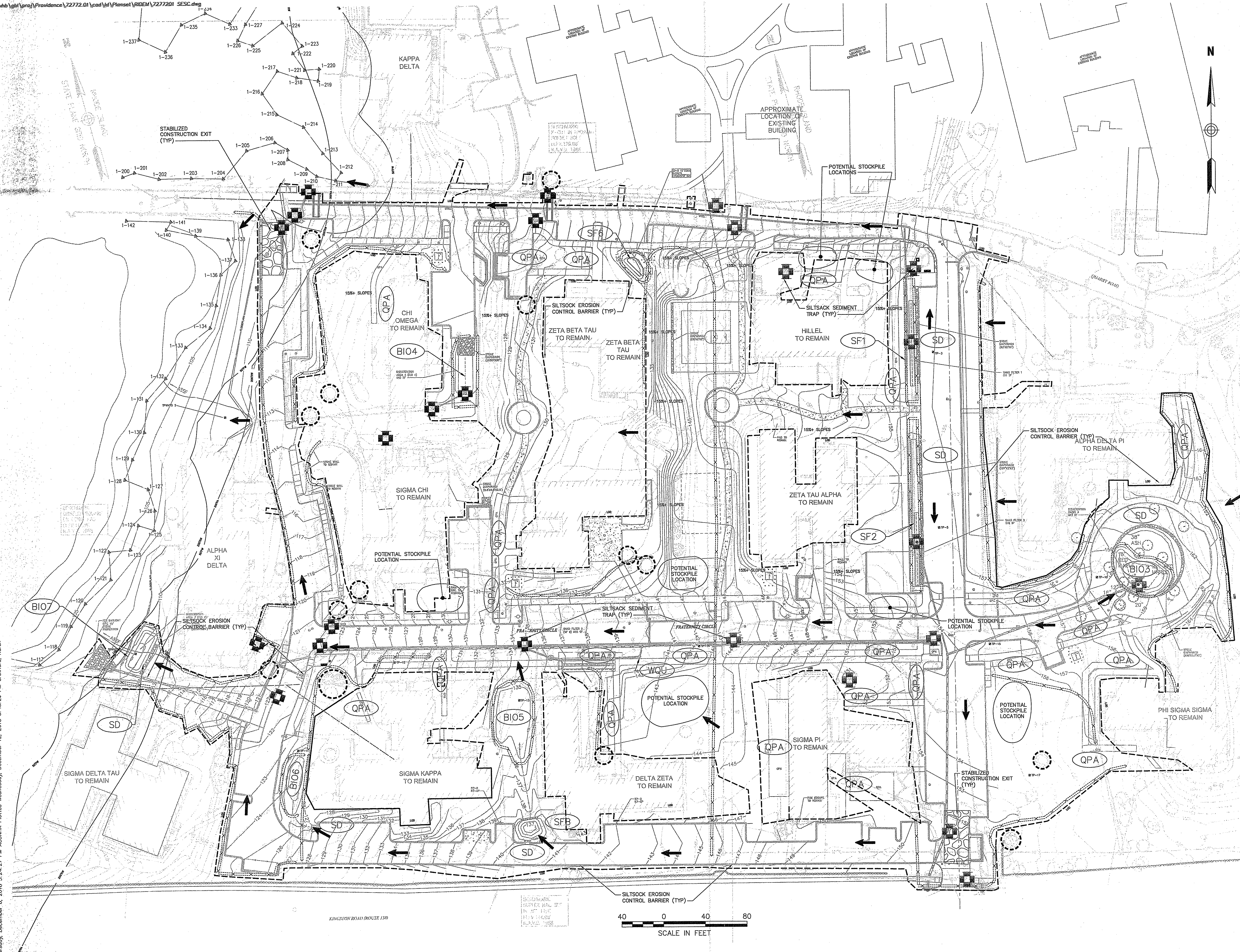
No. \_\_\_\_\_ Date \_\_\_\_\_ Apprd. \_\_\_\_\_  
 1. Revisions - Per Client/RIDEM  
 DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED MAY 29, 2018  
 NO CONSTRUCTION WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Issued for: **RIDEM PDA** Date: **May 29, 2018**

**Not Approved for Construction**  
 Soil Erosion and  
 Sediment Control -  
 Site Plan

Jonathan B. Stabach  
 No. 7794  
 REGISTERED  
 PROFESSIONAL ENGINEER  
 (CIVIL) 11/16/18

**SESC-2.1**  
 Sheet 23 of 28  
 Project Number 72772.01



Saved Thursday, December 6, 2018 3:24:27 PM ADR/RA Plotted Wednesday, December 12, 2018 3:45:28 PM Crawford, Karen



Environmental Management  
DEC 14 2018  
Office of Water Resources

1 Cedar Street  
Suite 400  
Providence, RI 02903  
401.272.8100

LEGEND

- ← PROPOSED STORMWATER RUNOFF FLOW PATH
- PROPOSED SILK SOCK/STRAW WATTLE
- ⊗ PROPOSED SILK SACK
- ⊙ PROPOSED TREE PROTECTION FENCE

NOTES

- REFER TO SOIL EROSION AND SOIL CONTROL PLAN REPORT FOR ADDITIONAL INFORMATION AND GUIDELINES.
- TOTAL SITE AREA = 12.6 ACRES.  
TOTAL SITE DISTURBANCE = 1.57 ACRES.
- RECEIVING WATERS: WHITE HORN BROOK TO THE WEST.
- NO PORTION OF THE SITE FALLS WITHIN OR DIRECTLY DISCHARGES TO A NATURAL HERITAGE AREA (NHA), OR OTHERWISE IMPACTS THREATENED SPECIES OR HABITATS.
- STOCKPILING MUST BE WITHIN PROJECT LIMIT OF WORK BUT OUTSIDE THE BMP AREAS LISTED BELOW AND SHOWN ON THE PLANS AND SUCH THAT CONSTRUCTION VEHICLES DO NOT DRIVE OVER THESE AREAS TO ACCESS THE STOCKPILES.
- WASHOUT AND REFUELING AREAS MUST BE WITHIN PROJECT LIMITS BUT OUTSIDE THE BMP AREAS LISTED BELOW AND SHOWN ON THE PLANS.

BEST MANAGEMENT PRACTICES (BMP)

- QPA QUALIFIED PERVIOUS AREA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JAN 28 2019 FILE # 18-037  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

University of Rhode Island

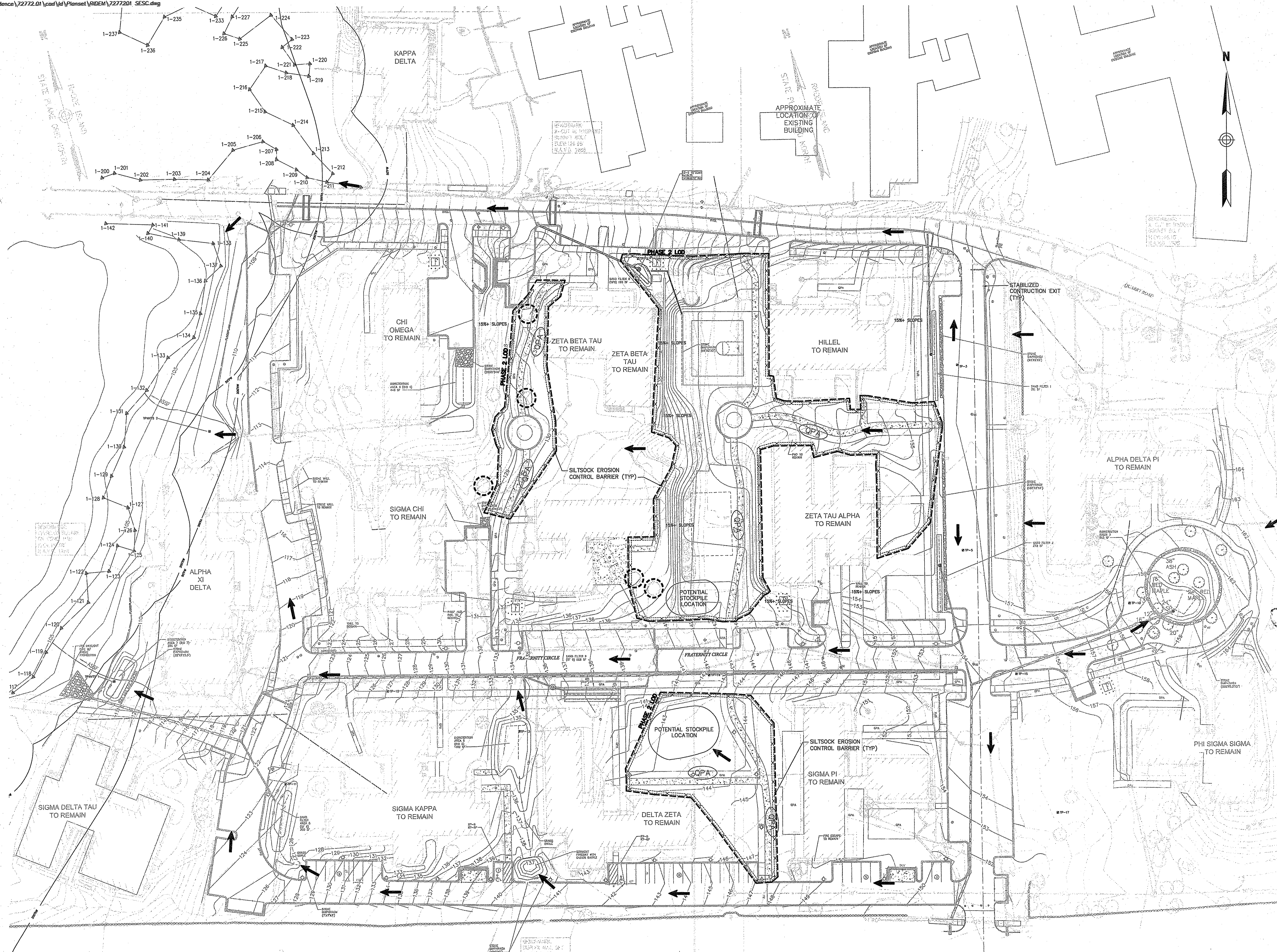
Fraternity Circle Improvements  
Kingston, Rhode Island

| No. | Revision                   | Date       | Appr. |
|-----|----------------------------|------------|-------|
| 1   | Revisions Per Client/RIDEM | 11/16/2018 |       |


Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
 Issued for: RIDEM PDA Date: May 29, 2018

Not Approved for Construction  
 Soil Erosion and Sediment Control - Site Plan Phase 2

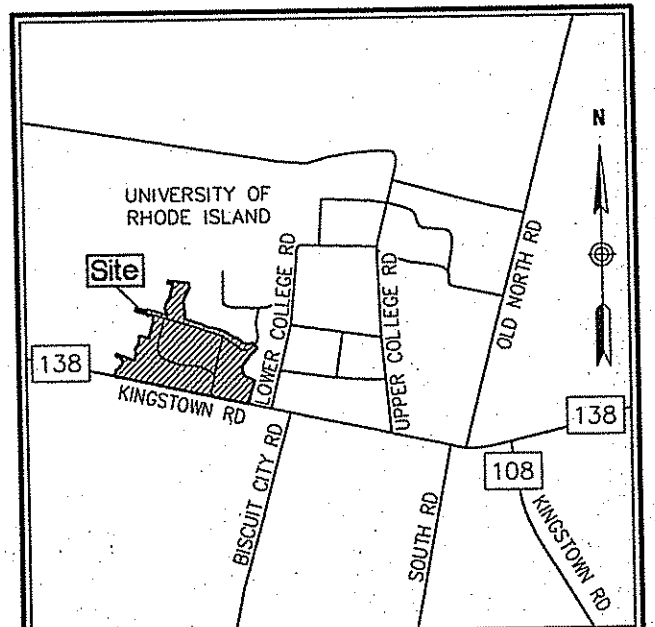
JONATHAN B. STABACH  
 No. 7794  
 REGISTERED PROFESSIONAL ENGINEER (CIVIL) 1/16/18  
 Sheet 24 of 28  
 Project Number 72772.01



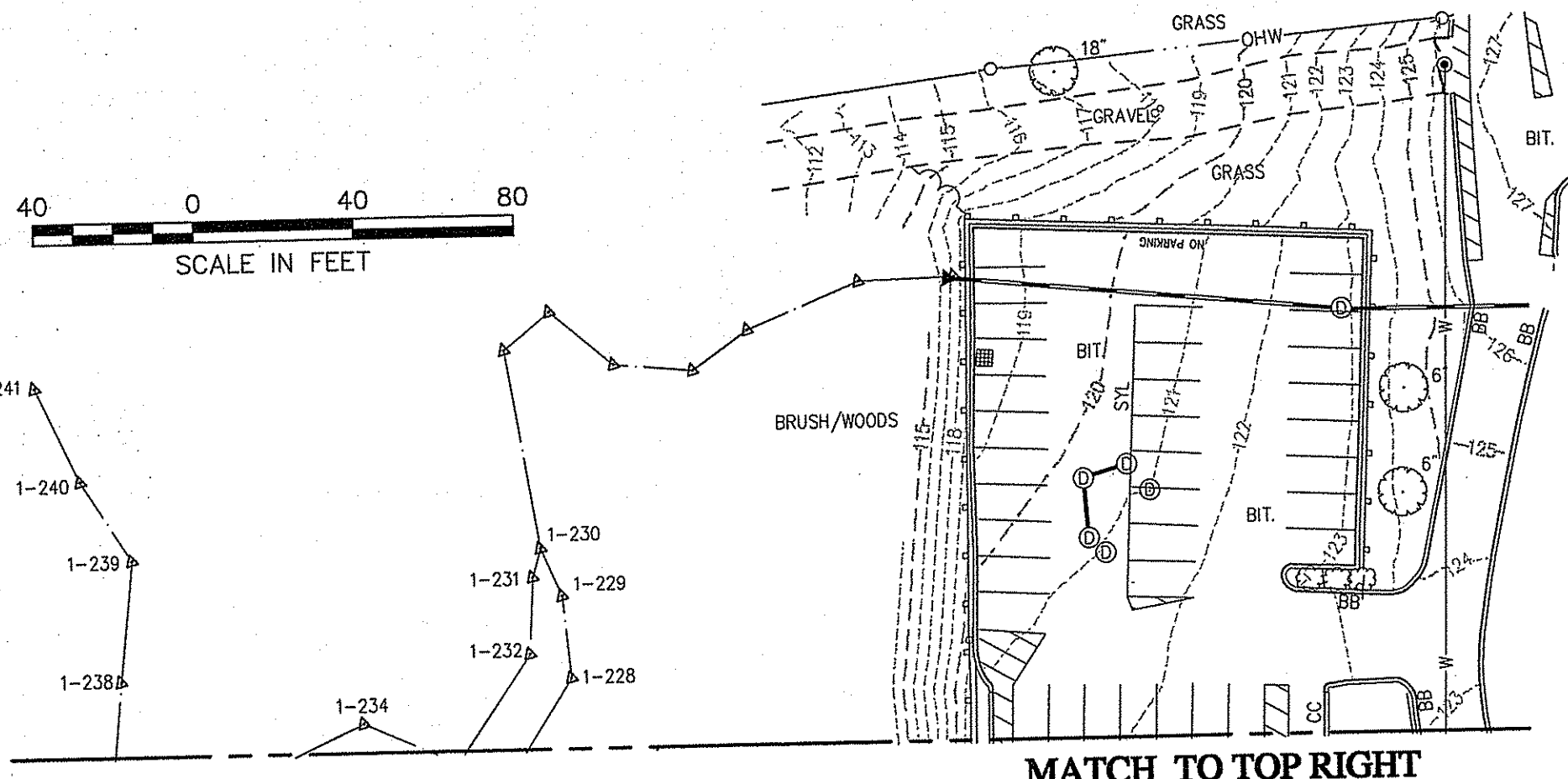
Speed, Thursday, December 5, 2016 3:26:27 PM ACURWA Printed Wednesday, December 12, 2016 3:45:00 PM Crawford, Ron



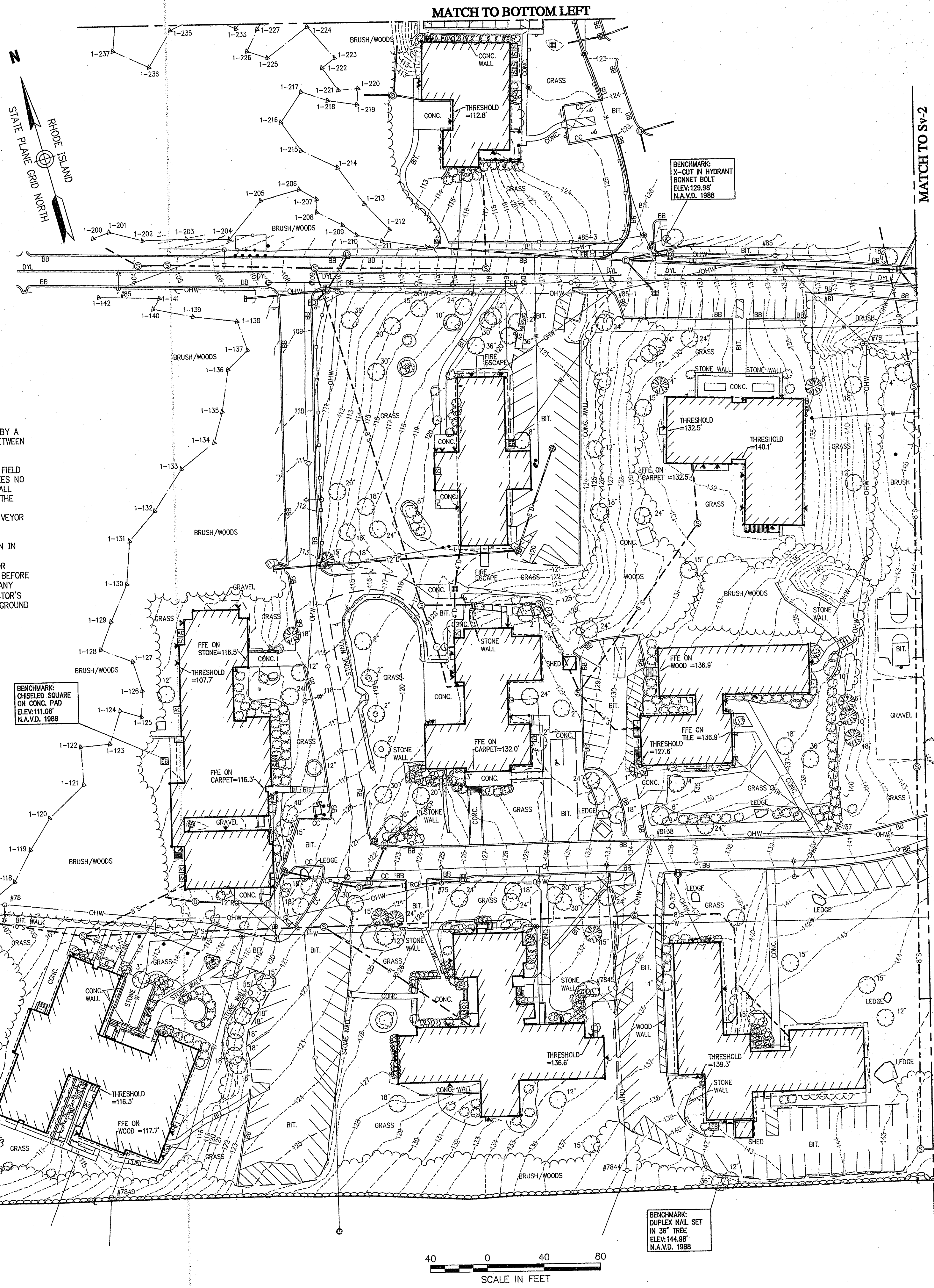
Environmental Management  
**DEC 14 2018**  
 Office of Water Resources  
 1 Cedar Street  
 Suite 400  
 Providence, RI 02903  
 401.272.8100



Locus Map (NOT TO SCALE)



MATCH TO TOP RIGHT



- Legend**
- CATCH BASIN
  - CATCH BASIN
  - ROUND CATCH BASIN
  - ▶ FLARED END SECTION
  - RD DOWNSPOUT
  - DRAIN MANHOLE
  - SEWER MANHOLE
  - ELECTRIC MANHOLE
  - TELEPHONE MANHOLE
  - MANHOLE
  - SIGNAL MANHOLE
  - WATER MANHOLE
  - WATER GATE
  - SIAMSE CONNECTION
  - FIRE HYDRANT
  - GAS GATE
  - STREET SIGN
  - LIGHT POLE
  - FLOOD LIGHT
  - UTILITY POLE
  - UTILITY POLE W/LIGHT
  - GUY WIRE
  - BOLLARD/POST
  - WETLAND FLAG
  - SPOT ELEVATION
  - HANDICAP SYMBOL
  - AIR CONDITIONING
  - ELECTRIC BOX
  - ELECTRIC METER
  - FIRE ALARM
  - GAS METER
  - HAND HOLE
  - PEDESTRIAN PUSH BUTTON
  - TRAFFIC SIGNAL
  - WATER METER
  - PARKING BUMPER
  - EDGE OF PAVEMENT
  - EDGE OF GRAVEL
  - EDGE OF TRAVELED WAY
  - BUILDING OVERHANG
  - CURB
  - WOOD GUARD RAIL
  - CHAIN LINK FENCE
  - WOOD FENCE
  - UNDERGROUND DRAINAGE LINE
  - UNDERGROUND SEWER LINE
  - OVERHEAD WIRE
  - UNDERGROUND ELECTRIC LINE
  - UNDERGROUND GAS LINE
  - UNDERGROUND WATER LINE
  - UNDERGROUND TELEPHONE LINE
  - STONE WALL
  - TREE LINE
  - STREAM
  - WETLAND EDGE
  - PROPERTY LINE
  - EASEMENT LINE
  - STATE FREEWAY LINE
  - STATE HIGHWAY LINE
  - CITY/TOWN LAYOUT LINE
  - ZONING BOUNDARY LINE
  - SHRUBS
  - DECIDUOUS TREE
  - EVERGREEN TREE
- General Notes**
- ALL ELEVATIONS ARE BASED ON N.A.V.D. 1988.
  - THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE LOCATED BY A FIELD SURVEY, CONDUCTED BY VANASSE HANGEN BRUSTLIN, INC. BETWEEN JULY 19, 2017 AND SEPTEMBER 11, 2017.
  - THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
  - THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 8 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015, AS FOLLOWS:

(A) TYPE OF BOUNDARY SURVEY: MEASUREMENT SPECIFICATION:  
 NOT A BOUNDARY SURVEY

(B) OTHER TYPE OF SURVEY III  
 DATA ACCUMULATION SURVEY  
 VERTICAL CONTROL STANDARD  
 TOPOGRAPHIC SURVEY ACCURACY T-2

(C) STATEMENT OF PURPOSE  
 THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS AS FOLLOWS: BASE MAPPING FOR THE DESIGN OF FRATERNITY CIRCLE

BY  
 PATRICK W. McCOURT, P.L.S. #1964  
 C.O.A. #A92

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JAN 28 2019 FILE # 8031  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

University of Rhode Island  
 Fraternity Circle  
 South Kingstown, Rhode Island

| No. | Revision | Date | Appr. |
|-----|----------|------|-------|
|     |          |      |       |
|     |          |      |       |
|     |          |      |       |
|     |          |      |       |

Designed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
 Issued for: \_\_\_\_\_ Date: \_\_\_\_\_  
 Design September 11, 2017

Existing Conditions Plan

Patrick W. McCourt  
 No. 1964  
 PROFESSIONAL LAND SURVEYOR

**Sv-1**

Sheet 1 of 4





