Rosebrook Commons - Mixed Use Development

AP 111, Lots 8 & 9

1747 West Main Road
Middletown, Rhode Island

CIVIL ENGINEER:

PARE

PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS

8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755
14 BOBIALA ROAD, SUITE 2B, HOLYOKE, MA 01040, 413.307.3448

OWNER:

CVDD II, LLC & CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

APPLICANT:

MESOLELLA DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SURVEYOR:

E. GREENWICH SURVEYORS, LLC
1050 MAIN STREET, SUITE 31
EAST GREENWICH, RI 02818

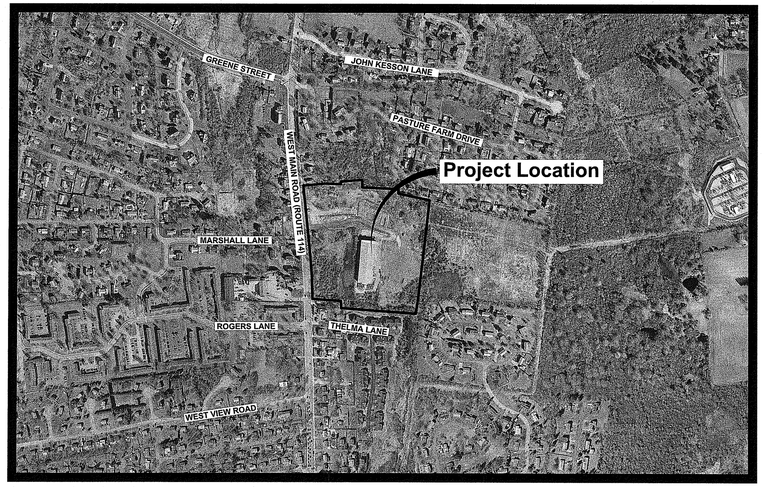
ARCHITECT:

BRANCH ARCHITECTS
151 BROADWAY, SUITE 250
PROVIDENCE, RI 02903

LANDSCAPE ARCHITECT:

Diane C. Soule & Associates, ASLA
Landscape Architecture

422 Farnum Pike
Smithfield, Rhode Island 02917
www.dianesouleandassociates.com



Scale : N.T.S.

RIDEM SUBMISSION
April 8, 2022
Revised October 21, 2022
Revised March 24, 2023

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RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RI Environmental Management
MAR 24 2023
Office of Water Resources

SURVEY & LOCATION PLAN

PREPARED FOR

CVDD II, LLC & CENZ CORP.

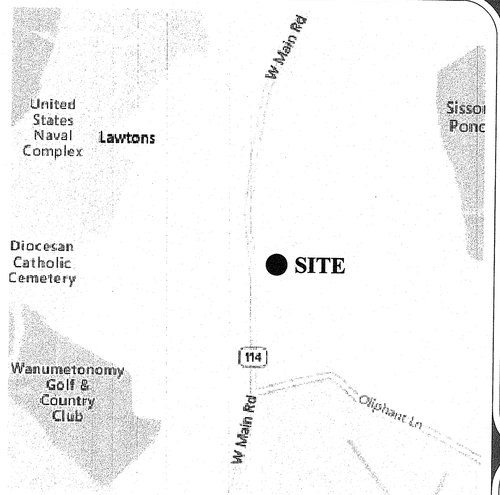
LOCATION

WEST MAIN ROAD (R.I. ROUTE 114)
A.P. 111 / LOTS 8 & 9
MIDDLETOWN, RI

EASEMENT LEGEND

- BLACK: EXISTING EASEMENT TO REMAIN
- GREEN: RELOCATED EASEMENT (WEST MEADOW)
- RED: RELOCATED EASEMENT (TOWN)
- BLUE: EXISTING EASEMENT TO BE RELOCATED (TOWN)
- YELLOW: PORTION OF EASEMENT TO BE RELOCATED (WEST MEADOW)

LOCATION MAP



GENERAL NOTES:

1. THE PARCELS OF LAND DESIGNATED AS LOTS 8 & 9 ON TAX ASSESSOR'S MAP 111 ARE LOCATED IN THE TOWN OF MIDDLETOWN, COUNTY OF NEWPORT & STATE OF RHODE ISLAND.
2. THE CURRENT OWNER OF A.P. 111 / LOT 8 IS CVDD II, LLC BY VIRTUE OF THE DEED RECORDED IN BOOK 1632 AT PAGE 238 IN THE TOWN OF MIDDLETOWN, RHODE ISLAND. THE CURRENT OWNER OF A.P. 111 / LOT 9 IS CENZ CORP. BY VIRTUE OF THE DEED RECORDED IN BOOK 1409 AT PAGE 10 IN THE TOWN OF MIDDLETOWN, RHODE ISLAND.
3. THE PARCEL FALLS IN AN X ZONE (OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN) ON FEMA MAP NUMBER 44005C0091J EFFECTIVE DATE 09/04/2013.
4. THE CURRENT ZONING FOR THESE PARCEL IS L1 & L1A
   DIMENSIONAL REGULATIONS (L1):

MINIMUM LOT AREA:	40,000 SQ FT
MINIMUM FRONTAGE:	150 FEET
MINIMUM FRONT YARD:	10 FEET
MINIMUM REAR YARD (SOLAR):	25 FEET
MINIMUM SIDE YARD (MAIN STRUCTURE):	35 FEET
MINIMUM SIDE YARD (ACCESSORY):	25 FEET
MINIMUM SIDE YARD (SOLAR):	25 FEET
MINIMUM REAR YARD (MAIN STRUCTURE):	40 FEET
MINIMUM REAR YARD (ACCESSORY):	10 FEET
MINIMUM REAR YARD (SOLAR):	25 FEET
MAXIMUM HEIGHT (MAIN STRUCTURE):	40 FEET
MAXIMUM HEIGHT (ACCESSORY):	20 FEET
MAXIMUM HEIGHT (SOLAR):	12 FEET
MAXIMUM BUILDING COVERAGE:	35%

5. A.P. 111 / LOT 8 CONTAINS 12.11 ACRES. A.P. 111 / LOT 9 CONTAINS 3.45 ACRES.
6. TOPOGRAPHY SHOWN ON THIS PLAN IS LIDAR AND WAS OBTAINED BY RIGIS DATABASE, ELEVATIONS ARE REFERENCED TO NAVD88 DATUM.
7. THE APPROXIMATE WETLAND AREAS SHOWN WERE DELINEATED BY OTHERS, REFERENCE RIDEM APPLICATIONS NO. 14–0028 & NO. 18–0326.
8. THERE ARE NO HISTORICAL CEMETERIES LOCATED ON SITE BASED ON THE RHODE ISLAND HISTORICAL CEMETERY COMMISSION WEBSITE AND RESOURCES.
9. THIS PARCEL IS NOT LOCATED IN A CONSERVATION OR PRESERVATION EASEMENT AND DOES NOT HAVE ANY DEED RESTRICTIONS.
10. A.P. 111 / LOT 8 IS SUBJECT TO AN ENVIRONMENT LAND USE RESTRICTION AS REFERENCED IN DEED BOOK 599, PAGES 113–121
11. A.P. 111 / LOT 8 IS SUBJECT TO THE FOLLOWING EASEMENTS OF RECORD:
    DEED BOOK 245, PAGES 250–258
    DEED BOOK 226, PAGES 194–196
    DEED BOOK 197, PAGES 130–132

REFERENCES:

1. "ADMINISTRATIVE SUBDIVISION – 'OMNI ESTATES' A.P. 111, LOTS 8, 9, 9A & 10, WEST MAIN ROAD, MIDDLETOWN, RI, PREPARED FOR CVDD II LLC, PREPARED BY LEDDY LAND SURVEYING COMPANY, 1"=80', JULY, 2012"
2. "EXISTING CONDITIONS PLAN–OMNI DRIVE, A.P. 111, LOTS 8, 9, 9A & 10, WEST MAIN ROAD, MIDDLETOWN, RI, APPLICANT: OMNI LAND COMPANY, PREPARED BY NORTHEAST ENGINEERS & CONSULTANTS, INC., 1"=80', MARCH 2004"
3. "PROPOSED PURCHASE OF LAND FOR NEWPORT ELECTRIC CORPORATION PORTSMOUTH–MIDDLETOWN, R.I. MAY 1983 1"=80' BY BIBEAULT & FLORENTZ ENGINEERING CO."
4. "NEWPORT ELECTRIC CORPORATION: PROPOSED 37 FOOT WIDE EASEMENT ACCROSS OF JENNIE WALSH NEVILLE, JEPSON LANE, 1"=200', JAN. 1955" (DB 56 PG 475).
5. STATE OF RHODE ISLAND HIGHWAY PLAT NO. 952.
6. TOWN OF MIDDLETOWN RI DEED BOOK 1409, PAGE 10.
7. TOWN OF MIDDLETOWN GIS WEBSITE.
8. WWW.BING.COM

LEGEND

DHF/P ◉	DRILL HOLE FOUND/PROPOSED	—OHW—	EXISTING OVERHEAD WIRES
RIHB ▣	EXISTING RI HWY BOUND		EXISTING HYDRANT
	EXISTING STONE WALL	Ⓦ	EXISTING WATER GATE
	APPROXIMATE TREE LINE	Ⓢ	EXISTING SEWER MANHOLE
	EXISTING WETLAND AREA	Ⓖ	EXISTING GAS GATE
UP ##	EXISTING UTILITY POLE	Ⓓ	EXISTING DRAIN MANHOLE
—W—	EXISTING WATER LINE		EXISTING CATCH BASIN
—S—	EXISTING SEWER LINE		

STREET INDEX
WEST MAIN ROAD
R.I. ROUTE 114
LAURA ROAD

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF BOUNDARY SURVEY	MEASUREMENT SPECIFICATION:
COMPREHENSIVE BOUNDARY SURVEY	CLASS I
DATA ACCUMULATION SURVEY	CLASS III

THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS TO ESTABLISH THE PERIMETER OF THE BOUNDARY AND TO DEPICT THE EXISTING CONDITIONS OF THE SITE.

BY: _____
KIRK D. ANDREWS PLS NO. 1684
COA No.: 000A555

KIRK D. ANDREWS
No. 1684
REGISTERED
5/23/22
PROFESSIONAL LAND SURVEYOR

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management
MAR 24 2023
Office of Water Resources

Checked By: K.D.A.	Drawn By: E.J.I.
Scale: 1"=50'	Date: 10-9-2020

NO.	REVISIONS	BY:	DATE
1	TOWN COMMENTS	EJI	2-16-21
2	TOWN COMMENTS	EJI	10-13-21
3	OWNER REQUESTS	EJI	5-23-22
4			

E. GREENWICH SURVEYORS, LLC
LAND SURVEYING AND SITE PLANNING
1050 MAIN STREET, SUITE 31
EAST GREENWICH, RHODE ISLAND 02818
PHONE (401) 339–2681 (401) 368–5574
FAX (401) 884–0017 E–MAIL: KANDREWS1684@AOL.COM

Sheet 1 of 1 sheets

REFERENCE

1. PROJECT LOCATION: ROSEBROOK COMMONS, 1747 WEST MAIN ROAD, MIDDLETOWN, RI, 02842. ASSESSOR'S MAP 111, LOT 8 & 9.
2. EXISTING CONDITIONS MAPPING TAKEN FROM PLAN ENTITLED "SURVEY & LOCATION PLAN" PREPARED BY E. GREENWICH SURVEYORS, LLC, DATED 10/13/2021.
3. WETLAND FLAGS IDENTIFYING WETLAND RESOURCE AREAS WERE PLACED BY PARE CORPORATION ON OCTOBER 8, 2021 AND LOCATED BY PARE CORPORATION USING A GPS DEVICE .

GENERAL NOTES

1. PER AVAILABLE RIDEM MAPPING, THE PROJECT SITE IS NOT LOCATED WITHIN A NATURAL HERITAGE AREA.
2. PER AVAILABLE GIS INFORMATION ON THE TOWN OF MIDDLETOWN GIS MAP, THE PROJECT SITE IS LOCATED WITHIN WATERSHED PROTECTION DISTRICT 1 AND 2, THE WATER SUPPLY DISTRICT AND THE SURFACE WATER PROTECTION AREA.
3. THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED MARCH 2018 WITH ALL REVISIONS AND ADDENDA, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. ALL WORK SHALL MEET OR EXCEED THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WITH LATEST REVISIONS. THE LATEST REVISION OF THE STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION.
4. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE ENGINEER AND OWNER'S REPRESENTATIVE AS REQUIRED.
5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AND/OR BARRIERS AROUND ALL OPEN EXCAVATED AREAS IN ACCORDANCE WITH OSHA FEDERAL, STATE, AND LOCAL REQUIREMENTS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED. NO FIELD ADJUSTMENTS IN THE LOCATION OF SITE ELEMENTS SHALL BE MADE WITHOUT THE ENGINEER'S APPROVAL.
7. IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED, THE CONTRACTOR SHALL IMMEDIATELY CONTACT AND COORDINATE ANY DEVIATIONS WITH THE ENGINEER AND OWNER.
8. ANY AREA OUTSIDE OF THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
9. ALL SITE WORK SHALL MEET OR EXCEED THE SITE WORK SPECIFICATIONS PREPARED FOR THIS PROJECT.
10. ALL SIGNS SHALL BE RETLECTORIZED TYPE III SHEETING AND CONFORM WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST REVISION.
11. ALL UTILITIES (LOCATION AND ELEVATION) DEPICTED SHALL BE CONSIDERED APPROXIMATE ONLY. BEFORE COMMENCING SITE WORK IN ANY AREA, CONTACT "DIG SAFE" AT 1-888-DIG-SAFE (1-888-344-7233) TO ACCURATELY LOCATE UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES AND THE COST TO REPAIR THE DAMAGES TO INITIAL CONDITIONS, AS DEPICTED ON THE PLANS, SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
12. NO EXCAVATION SHALL BE DONE UNTIL UTILITY COMPANIES ARE PROPERLY NOTIFIED IN ADVANCE. NOTE THAT NOT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL RESPECTIVE UTILITY COMPANIES TO VERIFY AND LOCATE EXISTING UTILITIES.

LAYOUT NOTES

1. ALL LINES ARE PERPENDICULAR OR PARALLEL TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
2. ACCESSIBLE RAMPS SHALL BE PER THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES.
3. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PERFORM BENCHMARK FIELD LEVEL VERIFICATION AND COORDINATE LAYOUT CHECK. THE CONTRACTOR SHALL CONTACT PARE CORPORATION IF ANY DISCREPANCIES ARE FOUND.
4. DIMENSIONS OF PARKING SPACES AND DRIVEWAYS ARE FROM FACE OF CURB TO FACE OF CURB. DIMENSIONS FROM BUILDING ARE FROM FACE OF BUILDING TO FACE OF CURB.
5. ALIGN WALKWAYS ON DOORWAYS THEY SERVE TO PROVIDE MINIMUM REQUIRED MANEUVERING CLEARANCE IN ACCORDANCE WITH THE AMERICAN WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES.

DEMOLITION NOTES

1. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION OF STRUCTURES, PAVEMENT AND CONCRETE MATERIALS, AND UTILITIES WITH APPROPRIATE PROPOSED SITE GENERAL, GRADING, UTILITY, AND LANDSCAPING DRAWINGS.
2. ALL NOTED UTILITIES TO BE REMOVED AND DISPOSED OF, RELOCATED OR CAPPED REPRESENT ALL KNOWN SITE CONDITIONS TO BE DEMOLISHED. THE CONTRACTOR SHALL COORDINATE ALL UNFORESEEN CONDITIONS WITH THE PROJECT ENGINEER, OWNER AND/OR RESPECTIVE UTILITY COMPANIES PRIOR TO PROCEEDING WITH WORK.
3. WATER, SEWER, DRAINAGE, GAS, AND OTHER SITE UTILITIES SERVICING THE EXISTING FACILITIES ARE TO REMAIN ACTIVE THROUGHOUT CONSTRUCTION. THERE SHALL BE NO INTERRUPTION OF UTILITY SERVICES DURING THE CONSTRUCTION OPERATION WITHOUT APPROVAL FROM THE OWNER.

GRADING AND UTILITY NOTES

1. UNDERGROUND UTILITIES DEPICTED WERE COMPILED FROM AVAILABLE RECORD PLANS AND SHALL BE CONSIDERED APPROXIMATE ONLY. BEFORE COMMENCING SITE WORK IN ANY AREA, CONTACT "DIG SAFE" AT 1-888-DIG-SAFE (1-888-344-7233) TO ACCURATELY LOCATE UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES DEPICTED OR NOT DEPICTED ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS TO REPAIR SUCH DAMAGES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO EXCAVATION SHALL BE DONE UNTIL UTILITY COMPANIES ARE PROPERLY NOTIFIED.
2. ALL WORK PERFORMED AND ALL MATERIALS FURNISHED SHALL CONFORM WITH THE LINES AND GRADES ON THE PLANS AND SITE WORK SPECIFICATIONS.
3. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT AND CURBS SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
4. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE SURROUNDING SURFACE OR PAVEMENT FINISH GRADE. RIM ELEVATIONS OF STRUCTURES AND MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS.
5. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION OF PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED.
6. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION SHALL BE PROVIDED ON A SKETCH TO SCALE OF THE EXISTING UTILITY WITH TIES TO KNOWN POINTS, PHOTOS AND FURNISHED TO THE ENGINEER FOR RESOLUTION.
7. THE CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS SHALL BE RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
8. GAS, ELECTRIC, AND COMMUNICATIONS ROUTING ARE SUBJECT TO REVIEW AND APPROVAL BY APPROPRIATE UTILITY COMPANIES.
9. DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES BY PROVIDING TEMPORARY SUPPORTS OR SHEETING AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
10. ALL GRAVITY SANITARY PIPING SHALL BE SDR-35 PVC. ALL SEWER CONSTRUCTION SHALL CONFORM TO MIDDLETOWN'S PUBLIC WORKS DEPARTMENT REGULATIONS.
11. ALL WATER LINE BENDS AND TEES SHALL BE REINFORCED WITH THRUST BLOCKS. ALL WATER DISTRIBUTION PIPING AND FITTINGS MUST ADHERE TO THE NEWPORT WATER DIVISION SPECIFICATIONS AND SHALL BE INSPECTED BEFORE, DURING, AND AFTER CONSTRUCTION PRIOR TO TAPPING THE SERVICE MAIN. THE CONTRACTOR SHALL COORDINATE AND CONFIRM ALL WATER DISTRIBUTION MATERIAL PRODUCTS WITH THE NEWPORT WATER DIVISION PRIOR TO ORDERING OR PURCHASING PRODUCTS.
12. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE OWNER.
13. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED OTHERWISE.
14. THE PROPOSED WALKWAYS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% AS SHOWN ON CONSTRUCTION DETAILS AND GRADING PLAN.

STATE RIGHT-OF-WAY NOTES

1. ALL WORK TO BE PERFORMED WITHIN THE STATE RIGHT-OF-WAY (ROW) SHALL CONFORM TO THE RIDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AMENDED MARCH 2018, WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE RIDOT STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS.
2. THE CONTRACTOR SHALL APPLY FOR AND OBTAIN A UTILITY PERMIT FROM THE RIDOT FOR UTILITY WORK WITHIN THE STATE'S ROW AND MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE ENGINEER AND OWNER'S REPRESENTATIVE AS REQUIRED.
3. THE CONTRACTOR SHALL PREPARE A TRANSPORTATION MANAGEMENT PLAN INCLUDING A TEMPORARY TRAFFIC CONTROL PLAN AS REQUIRED FOR THE RIDOT UTILITY PERMIT APPLICATION AT NO ADDITIONAL EXPENSE TO THE OWNER.
4. ALL TEMPORARY TRAFFIC CONTROLS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), LATEST REVISION.

QUALIFYING PERVIOUS AREA INSPECTION, MAINTENANCE, AND REPAIR NOTES

1. THE QUALIFYING PERVIOUS AREAS (QPA'S) MUST BE INSPECTED A MINIMUM OF TWO TIMES PER YEAR FOR SEDIMENT, PONDING, EROSION, AND VEGETATION.
2. REMOVE ACCUMULATED SEDIMENT FROM THE QPA'S IF SEDIMENT EXCEEDS 1".
3. OWNER SHALL REPAIR ANY SLOPES THAT HAVE BEEN DAMAGED DUE TO EROSION OR OTHER MEANS. OWNER SHALL REPLACE ANY VEGETATION THAT HAS DIED OR BEEN DAMAGED.
4. OWNER SHALL MOW GRASS WITHIN THE QPA A MINIMUM OF TWO TIMES ANNUALLY TO MAINTAIN A MINIMUM GRASS HEIGHT OF 6".
5. TRASH AND DEBRIS SHALL BE REMOVED FROM THE QPA'S AS NECESSARY.

DETENTION BASIN (WITH INFILTRATION) INSPECTION, MAINTENANCE, AND REPAIR NOTES

1. BI-ANNUALLY
   - INSPECT BASIN A MINIMUM OF TWO TIMES PER YEAR, ONCE IN APRIL AND ONCE IN OCTOBER.
   - MOW SIDES SLOPES AND BOTTOM OF BASIN A MINIMUM OF TWO TIMES PER YEAR.
   - REMOVED ACCUMULATED SEDIMENT FROM THE DETENTION BASIN TWO TIMES PER YEAR, PREFERABLY IN LATE SPRING AND EARLY FALL, OR IF SEDIMENT EXCEEDS 1" IN THE DETENTION BASIN
3. OWNER SHALL STABILIZE ERODED BANKS AND REPAIR ERODED AREAS AT INFLOW AND OUTFLOW STRUCTURES AS NECESSARY.
4. TRASH AND DEBRIS SHALL BE REMOVED FROM DETENTION BASIN, OUTLET CONTROL STRUCTURE AND DEBRIS SCREEN AS NECESSARY.
5. IF PONDING HAS EXCEEDED 48 HOURS THE FOLLOWING SHALL BE COMPLETED:
   - THE TOP 6" OF SOIL SHALL BE REMOVED AND DISPOSED AT A PERMITTED LOCATION.
   - THE EXPOSED SURFACE SHALL BE SCARIFIED.
   - THE BASIN BOTTOM SHALL BE RESTORED TO THE ORIGINAL DESIGN SPECIFICATIONS WITH A SANDY LOAM TOPSOIL.

EROSION AND SEDIMENTATION CONTROL NOTES - RHODE ISLAND

1. THE CONTRACTOR AND RELEVANT SUBCONTRACTORS SHALL READ AND UNDERSTAND THE RIPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (GENERAL PERMIT) AND THE SITE SPECIFIC SOIL EROSION AND SEDIMENT CONTROL PLAN (SESC) PREPARED FOR THE PROJECT. ALL EROSION CONTROLS SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST REVISION.
2. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CONDITIONS ISSUED FOR THE PROJECT BY RIDEM AND BE RESPONSIBLE FOR CONFORMANCE WITH ALL PERMIT REQUIREMENTS AND CONSTRUCTION DOCUMENTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING OR INSTALLING ALL TEMPORARY SEDIMENT AND EROSION CONTROLS AS SHOWN ON THESE PLANS AND SHALL MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY DURING THE ENTIRE CONSTRUCTION PERIOD.
4. ANTI-TRACKING PADS (R.I. STD. DETAIL 9.9.0) SHALL BE PROVIDED AT ALL POINTS OF VEHICULAR INGRESS AND EGRESS ON THE CONSTRUCTION SITE AND SHALL BE MAINTAINED TO LIMIT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADS.
5. EROSION CONTROL BARRIERS SHALL BE INSTALLED AS SHOWN ON THE EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION OPERATIONS.
6. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EACH STORM EVENT OF 0.25 INCH OR GREATER DURING CONSTRUCTION TO ENSURE THAT CHANNELS, DITCHES AND PIPES ARE CLEAR OF DEBRIS AND THAT THE EROSION CONTROL BARRIERS ARE INTACT. IDENTIFIED DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY.
7. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL CLEAN AND MAINTAIN EROSION CONTROL BARRIER WHEN SEDIMENT ACCUMULATES TO ONE HALF THE HEIGHT OF THE BARRIER. MATERIAL COLLECTED FROM THE SEDIMENTATION BARRIERS SHALL BE REMOVED AS NECESSARY AND DISPOSED IN AN UPLAND AREA.
9. THE CONTRACTOR SHALL SCHEDULE HIS WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PONDING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF SURFACE PAVING. PROVIDE TEMPORARY POSITIVE DRAINAGE, AS REQUIRED, TO STABILIZED DISCHARGE POINTS.
10. INSTALLATION OF THE EROSION CONTROL BARRIERS AS ILLUSTRATED IS INTENDED TO REPRESENT THE MINIMUM SEDIMENTATION CONTROL FACILITIES NECESSARY TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
11. REQUIRED SEDIMENTATION CONTROL FACILITIES MUST BE PROPERLY ESTABLISHED, CLEARLY VISIBLE AND IN OPERATION PRIOR TO INITIATING ANY LAND CLEARING ACTIVITY AND/OR OTHER CONSTRUCTION RELATED WORK. SUCH FACILITIES SHALL REPRESENT THE LIMIT OF WORK. WORKERS SHALL BE INFORMED THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGHOUT THE CONSTRUCTION PERIOD.
12. THE CONTRACTOR SHALL MAINTAIN A SUFFICIENT RESERVE OF VARIOUS EROSION CONTROL MATERIALS ONSITE AT ALL TIMES FOR EMERGENCY PURPOSES OR ROUTINE MAINTENANCE.
13. EXISTING AND NEWLY INSTALLED CATCH BASINS AND STORM DRAIN INLETS SHALL BE PROTECTED WITH APPROPRIATE TEMPORARY INLET PROTECTION IN ACCORDANCE WITH THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.
14. DEWATERING WASTE WATERS PUMPED FROM EXCAVATIONS SHALL BE CONVEYED BY HOSE TO AN UPLAND AREA AND DISCHARGED INTO STRAW BALE CORRALS OR SEDIMENTATION BAGS.
15. THE CONTRACTOR SHALL NOT REMOVE ANY TEMPORARY SEDIMENT CONTROL BARRIERS UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.
16. CONSTRUCTION SITE WASTE MATERIALS SHALL BE PROPERLY CONTAINED ONSITE AND DISPOSED OFF SITE AT A LOCATION IN ACCORDANCE WITH THE LOCAL AND STATE REGULATIONS.
17. RIP-RAP OR OTHER ENERGY DISSIPATERS SHALL BE USED WHERE NECESSARY TO PREVENT SCOUR.
18. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS UPON COMPLETION OF WORK IN THAT AREA.
19. ALL DRAINAGE STRUCTURES SHALL BE CLEARED OF ACCUMULATED SEDIMENT PRIOR TO ACCEPTANCE OF FINAL PROJECT.
20. NEWLY VEGETATED AREAS SHALL BE MAINTAINED REGULARLY TO ENSURE STABLE VEGETATED SURFACES.
21. EROSION AND SEDIMENTATION CONTROLS SHALL BE UTILIZED AS SHOWN ON THE PLANS. POTENTIAL EROSION AND SEDIMENTATION PROBLEMS ASSOCIATED WITH THE CONSTRUCTION OF THE PROJECT SHALL BE AVOIDED THROUGH THE PROJECT SCHEDULING AND THE USE OF APPROPRIATE STANDARD CONTROLS (RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL HANDBOOK) AS ILLUSTRATED ON THE PROJECT PLANS.
22. WHERE EROSION CONTROLS ARE NEEDED ON IMPERVIOUS SURFACES, THE CONTRACTOR SHALL PROVIDE SAND BAG EROSION CONTROL BARRIER.
23. TEMPORARY DIVERSION (TD) MAY CONSIST OF A DITCH OR SWALE, OR MAY BE ACHIEVED USING WOOD CHIPS, COIR LOGS, OR SIMILAR MATERIALS.
24. TEMPORARY SEDIMENT TRAPS (TST) AND TEMPORARY SWALES (TSW) SHALL BE SIZED BY THE CONTRACTOR USING THE PARAMETERS CONTAINED IN THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.

STORMWATER MANAGEMENT SYSTEM INSPECTION AND MAINTENANCE NOTES

DURING CONSTRUCTION (CONTRACTOR'S RESPONSIBILITY)

1. THE CONTRACTOR SHALL REMOVE SEDIMENT AND DEBRIS FROM ALL CATCH BASINS, MANHOLES, AND THE DRAINAGE SYSTEM ON A ROUTINE BASIS, IMMEDIATELY FOLLOWING SITE STABILIZATION, AND PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.
2. THE CLOSED DRAINAGE SYSTEM AND ASSOCIATED STRUCTURES SHALL BE CLEANED AND FLUSHED BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF THE DRAINAGE SYSTEM UNTIL ACCEPTANCE OF THE SYSTEM BY THE ENGINEER AND THE TOWN OF MIDDLETOWN. FOLLOWING ACCEPTANCE OF THE PROPOSED DRAINAGE SYSTEM, THE OWNER OF THE SITE SHALL BE RESPONSIBLE FOR THE LONG-TERM INSPECTION AND MAINTENANCE OF THE DRAINAGE SYSTEM.
3. ANY ACCUMULATION OF PONDING WATER IN AREAS WITHIN THE LIMITS OF DISTURBANCE, OTHER THAN DESIGNATED AREAS, SHALL BE REMOVED ACCORDINGLY AND PREVENTED IN THE FUTURE.

POST CONSTRUCTION (OWNER'S RESPONSIBILITY)

1. TRASH, LITTER, SEDIMENT AND OTHER DEBRIS SHALL BE REMOVED FROM ANY STORMWATER MANAGEMENT SYSTEM FACILITY (INCLUDING BUT NOT LIMITED TO CATCH BASINS, MANHOLES, INLET, OUTLET AND DIVERSION STRUCTURES, AND STORMWATER BEST MANAGEMENT PRACTICES (BMPs)) A MINIMUM OF TWO TIMES PER YEAR, PREFERABLY IN THE SPRING AND FALL.
2. THE PARKING LOT AND ENTRY DRIVE SHALL BE SWEPT BY THE OWNER AS EARLY AS POSSIBLE EVERY SPRING AND ONCE IN THE FALL TO REMOVE SEDIMENTS.
3. ALL CLEANING AND MAINTENANCE OF STORMWATER MANAGEMENT SYSTEMS POST-CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE OWNER.

AREA DRAINS WITH SUMPS INSPECTION, MAINTENANCE, AND REPAIR NOTES

1. INSPECTIONS SHALL BE PERFORMED A MINIMUM OF TWO TIMES PER YEAR (SPRING/FALL). UNITS SHALL BE CLEANED ANNUALLY AND WHENEVER THE DEPTH OF SEDIMENT IS GREATER THAN OR EQUAL TO HALF THE SUMP DEPTH.
2. THE INLET GRATE SHALL NOT BE WELDED TO THE FRAME OR PAVED OVER SO THAT THE SUMP CAN BE EASILY INSPECTED AND MAINTAINED.
3. CARE SHALL BE TAKEN TO AVOID DAMAGING AND DISPLACING HOODS PLACED ON HOODED OUTLETS DURING CLEANING.

SEDIMENT FOREBAY INSPECTION, MAINTENANCE, AND REPAIR NOTES

1. SEDIMENT FOREBAY SHALL BE MAINTAINED TO PREVENT DIMINISHMENT OF DESIGNED FUNCTIONALITY DUE TO ACCUMULATED SETTLEMENT.
2. SEDIMENT FOREBAY SHALL BE INSPECTED A MINIMUM OF FOUR TIMES PER YEAR AND AFTER EVERY STORM OF 1" OR GREATER FOR TRASH, DEBRIS, SEDIMENT, EROSION, STANDING WATER, AND OVERALL PERFORMANCE. DEFECTS SHALL BE REPAIRED BY THE OWNER.
3. SEDIMENT FOREBAYS SHALL BE CLEANED IF SEDIMENT REACHES 1" IN DEPTH.
4. SEDIMENT FOREBAY CHECK DAMS SHALL BE REPLACED IF DRAWDOWN TIMES WITHIN THE SEDIMENT FOREBAY EXCEED 48 HOURS FOLLOWING THE STORM EVENT.
5. ALL SEDIMENTS REMOVED SHALL BE DISPOSED OF AT AN APPROVED AND PERMITTED LOCATION.
6. VEGETATION SHALL NOT EXCEED 18" IN HEIGHT IN THE SEDIMENT FOREBAYS.

BIORETENTION AREA INSPECTION, MAINTENANCE, AND REPAIR NOTES

1. FOLLOWING FIRST 6 MONTHS AFTER CONSTRUCTION
   - INSPECT BIORETENTION AREA AFTER FIRST TWO RAINFALL EVENTS OF 1" OR MORE.
2. FOLLOWING STORM EVENTS WITH RAINFALL EXCEEDING 2.8"
   - INSPECT BIORETENTION AREA FOR TRASH, DEBRIS, SEDIMENT, EROSION, STANDING WATER, AND OVERALL PERFORMANCE. DEFECTS SHALL BE REPAIRED BY OWNER.
3. BI-ANNUALLY
   - INSPECT BIORETENTION AREA A MINIMUM OF TWO TIMES PER YEAR, PREFERABLY IN APRIL AND OCTOBER. SEDIMENT SHALL BE REMOVED FROM BIORETENTION AREA IF THE SEDIMENT EXCEEDS 1".
   - MOW SIDE SLOPES OF BIORETENTION AREA A MINIMUM OF TWO TIMES PER YEAR. BIORETENTION PLANTINGS SHALL BE TRIMMED WHEN PLANTS EXCEED 18 INCHES.
4. QUARTERLY
   - INSPECT BIORETENTION AREA, AREA DRAINS, WEIR WALLS AND ALL OVERFLOW CHANNELS. THE OWNER SHALL STABILIZE ERODED BANKS AND REPAIR ERODED AREAS AT INFLOW AND OUTFLOW STRUCTURES AS NECESSARY.
5. IF SEDIMENT BUILD-UP HAS LIMITED THE FILTERING CAPABILITIES TO BELOW THE DESIGN RATE OR PONDING HAS EXCEEDED 48 HOURS THE FOLLOWING SHALL BE COMPLETED:
   - THE TOP 6" OF SOIL SHALL BE REMOVED AND DISPOSED AT A PERMITTED LOCATION.
   - THE EXPOSED SURFACE SHALL BE SCARIFIED.
   - THE TOP 6" SHALL BE RESTORED TO THE ORIGINAL DESIGN SPECIFICATIONS WITH A SANDY LOAM TOPSOIL.
6. TRASH AND DEBRIS SHALL BE REMOVED FROM BIORETENTION AREA AS NECESSARY.

UNDERGROUND DETENTION SYSTEM BASIN INSPECTION, MAINTENANCE, AND REPAIR NOTES

FOLLOWING CONSTRUCTION, THE COMPLETION OF THE INSPECTION AND MAINTENANCE REQUIREMENTS BELOW SHALL BE THE RESPONSIBILITY OF THE OWNER.

1. THE SYSTEM SHALL BE MAINTAINED AS RECOMMENDED BY THE MANUFACTURER.
2. FOLLOWING STORM EVENTS WITH RAINFALL EXCEEDING 2.8"
   - INSPECT INFILTRATION/DETENTION SYSTEM FOR TRASH, DEBRIS, SEDIMENT, EROSION, STANDING WATER, AND OVERALL PERFORMANCE. DEFECTS SHALL BE REPAIRED BY THE OWNER.
3. BI-ANNUALLY
   - INSPECTIONS SHALL BE PERFORMED A MINIMUM OF TWO TIMES PER YEAR ON THE INSPECTION PORTS AND DRAINAGE STRUCTURES OF THE UNDERGROUND DETENTION SYSTEM TO ENSURE PROPER OPERATION OF THE SYSTEM.
4. THE INLETS AT THE UGDS-03 SHALL BE INSPECTED FOLLOWING STORM EVENTS WITH RAINFALL EXCEEDING 2.8". THE INLET FILTER SHALL BE INSPECTED TO REMOVE TRASH OR OTHER DEBRIS. IF THE FILTER IS DAMAGED THE FILTER SHALL BE REPLACED. THE FILTER SHALL BE REPLACED EVERY YEAR TO ENSURE THE NECESSARY STORMWATER CAPACITY CAN ENTER THE DETENTION SYSTEM.

TREE BOX FILTER INSPECTION, MAINTENANCE, AND REPAIR NOTES

1. FOLLOWING FIRST 6 MONTHS AFTER CONSTRUCTION
   - INSPECT TREE BOX FILTER AFTER FIRST TWO RAINFALL EVENTS OF 1" OR MORE.
   - TREE BOX FILTER SHALL BE INSPECTED AFTER EVERY STORM OF 2.8" OR GREATER FOR TRASH, DEBRIS, SEDIMENT, EROSION, STANDING WATER, AND OVERALL PERFORMANCE. DEFECTS SHALL BE REPAIRED BY THE OWNER.
3. ANNUALLY
   - REMOVE ACCUMULATED SEDIMENT FROM THE TREE BOX FILTER AREA ANNUALLY IN THE SPRING OR IF SEDIMENT EXCEEDS 1" IN THE FILTER AREA.
   - OWNER SHALL RE-MULCH TREE BOX FILTER IN SPRING EVERY YEAR.
4. QUARTERLY
   - REMOVE ACCUMULATED SEDIMENT FROM THE SEDIMENT FOREBAY QUARTERLY OR IF THE SEDIMENT REACHES HALF THE DESIGN DEPTH OR MORE.
5. IF PONDING EXCEEDS 48 HOURS ON THE SURFACE OF THE TREE BOX FILTER REMOVE AND REPLACE DISCOLORED SURFACE MATERIAL.
5. IF RUNOFF TAKES MORE THAN 36 HOURS TO FLOW FROM THE SEDIMENT FOREBAY TO THE TREE BOX FILTER, THE SPILLWAY SHALL BE REPLACED.
6. ALL SEDIMENTS REMOVED SHALL BE DISPOSED OF AT AN APPROVED AND PERMITTED LOCATION.

INFILTRATION BASIN INSPECTION, MAINTENANCE, AND REPAIR NOTES

1. FOLLOWING FIRST 6 MONTHS AFTER CONSTRUCTION
   - INSPECT INFILTRATION PRACTICES AFTER FIRST TWO RAINFALL EVENTS OF 1" OR MORE.
2. FOLLOWING STORM EVENTS WITH RAINFALL EXCEEDING 2.8"
   - INSPECT INFILTRATION BASIN, OUTLET CONTROL STRUCTURES AND DEBRIS SCREEN FOR TRASH, DEBRIS, SEDIMENT, EROSION, STANDING WATER, AND OVERALL PERFORMANCE. DEFECTS SHALL BE REPAIRED BY OWNER.
3. BI-ANNUALLY
   - INSPECT INFILTRATION BASIN A MINIMUM OF TWO TIMES PER YEAR, PREFERABLY IN APRIL AND OCTOBER. SEDIMENT SHALL BE REMOVED FROM INFILTRATION BASIN IF THE SEDIMENT EXCEEDS 1".
   - MOW SIDESLOPES AND BOTTOM OF INFILTRATION BASIN A MINIMUM OF TWO TIMES PER YEAR.
4. QUARTERLY
   - INSPECT INFILTRATION BASIN OUTLET CONTROL STRUCTURE, DEBRIS SCREEN AND ALL OVERFLOW CHANNELS. THE OWNER SHALL STABILIZE ERODED BANKS AND REPAIR ERODED AREAS AT INFLOW AND OUTFLOW STRUCTURES AS NECESSARY
5. IF SEDIMENT BUILD-UP HAS LIMITED THE INFILTRATION CAPABILITIES TO BELOW THE DESIGN RATE OR PONDING HAS EXCEEDED 48 HOURS THE FOLLOWING SHALL BE COMPLETED:
   - THE TOP 6" OF SOIL SHALL BE REMOVED AND DISPOSED AT A PERMITTED LOCATION.
   - THE EXPOSED SURFACE SHALL BE SCARIFIED.
   - THE BASIN BOTTOM SHALL BE RESTORED TO THE ORIGINAL DESIGN SPECIFICATIONS WITH A SANDY LOAM TOPSOIL.
6. TRASH AND DEBRIS SHALL BE REMOVED FROM INFILTRATION BASIN, OUTLET CONTROL STRUCTURES AND DEBRIS SCREEN AS NECESSARY.

Environmental Management
MAR 24 2023
Office of Water Resources

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 **FILE #:** 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS

LEGEND:

- ATD = ASPHALT TURNDOWN (SEE DETAIL)
- ATG = ADJUST TO GRADE
- BOL = BOLLARD
- CFS = COMPOST FILTER SOCK (SEE DETAIL)
- CG = CLEAR AND GRUB VEGETATION
- CM = SAWCUT AND MATCH
- CP = CONCRETE PAD
- CTE = CONNECT TO EXISTING
- CW = CROSS WALK (SEE DETAIL)
- DBLDG = REMOVE AND DISPOSE BUILDING
- DC = REMOVE AND DISPOSE CURB
- DCB = REMOVE AND DISPOSE CATCH BASIN
- DCW = REMOVE AND DISPOSE CONCRETE WALK
- DD = REMOVE AND DISPOSE DRAINGE
- DE = REMOVE AND DISPOSE ELECTRIC
- DF = REMOVE AND DISPOSE FENCE
- DFP = REMOVE AND DISPOSE FLEXIBLE PAVMENT
- DG = REMOVE AND DISPOSE GUARDRAIL
- DSWR = REMOVE AND DISPOSE SEWER
- DW = REMOVE AND DISPOSE WATER
- ETR = EXISTING TO REMAIN. PROTECT DURING CONSTRUCTION.
- GV = GATE VALVE
- HMA = HOT MIXED ASPHALT PAVEMENT (SEE DETAIL)
- HYD = HYDRANT
- LS = LEVEL SPREADER
- PM = PAVEMENT MARKING
- QPA = QUALIFYING PERVIOUS AREA
- RR = RIPRAP EDGE
- RRA = RIPRAP APRON
- RS = RIPRAP SPILLWAY (SEE DETAIL)
- RTAD = REFER TO ARCHITECTURAL DRAWINGS
- RTED = REFER TO ELECTRICAL DRAWINGS
- RTFPD = REFER TO FIRE PROTECTION DRAWINGS
- RTLD = REFER TO LANDSCAPE DRAWINGS
- RTMD = REFER TO MECHANICAL DRAWINGS
- RTPD = REFER TO PLUMBING DRAWINGS
- RTSD = REFER TO STRUCTURAL DRAWINGS
- R&D = REMOVE AND DISPOSE
- R&S = REMOVE AND STOCKPILE
- SFCD = SEDIMENT FOREBAY CHECK DAM (SEE DETAIL)
- SHP = HANDICAP PARKING PAVEMENT MARKING (SEE DETAIL)
- SM = SEDIMENT MARKER
- SRW = SEGMENTAL RETAINING WALL
- TIP = TEMPORARY INLET PROTECTION
- TRM = TURF REINFORCEMENT MAT
- TST = TEMPORARY SEDIMENT TRAP
- VGC = VERTICAL GRANITE CURB
- 4DY = 4" DOUBLE YELLOW EPOXY RESIN PAVEMENT MARKING
- 4W = 4" SOLID WHITE EPOXY RESIN PAVEMENT MARKING
- 12W = 12" SOLID WHITE EPOXY RESIN PAVEMENT MARKING

RIDOT STANDARDS LEGEND:

- 2.3.0 = PRECAST CONCRETE FLARED END SECTION - R.I. STD. 2.3.0
- 3.4.1 = BRICK/SOLID BLOCK ROUND CATCH BASIN WITH GUTTER INLET - R.I. STD. 3.4.1
- 4.2.0 = PRECAST 4'-0" ROUND MANHOLE - R.I. STD. 4.2.0
- 4.2.1 = PRECAST 5'-0' ROUND MANHOLE - R.I. STD. 4.2.1
- 6.3.4 = HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE) - R.I. STD. 6.3.4
- 7.1.0 = PRECAST CONCRETE CURB - R.I. STD. 7.1.0
- 7.1.1 = 3'-0" PRECAST CONCRETE TRANSITION CURB - R.I. STD. 7.1.1
- 7.1.2 = 6'-0" PRECAST CONCRETE TRANSITION CURB - R.I. STD. 7.1.2
- 7.1.8 = PRECAST CONCRETE APRON STONE (FOR ROUND CATCH BASIN) - R.I. STD. 7.1.8
- 7.2.4 = PRECAST CONCRETE CAR STOPS - R.I. STD. 7.2.4
- 7.5.1 = BITUMINOUS BERM - R.I. STD. 7.5.1
- 7.6.0 = CURB SETTING DETAIL - R.I. STD. 7.6.0
- 9.7.0 = DEWATERING BASIN - R.I. STD. 9.7.0
- 9.9.0 = CONSTRUCTION ACCESS - R.I. STD. 9.9.0
- 24.2.0 = SIGN POST SELECTION AND INSTALLATION DETAILS U-CHANNEL POST - R.I. STD. 24.2.0
- 34.4.0 = STEEL BACKED TIMBER GUARDRAIL - R.I. STD. 34.4.0
- 43.1.0M = CEMENT CONCRETE SIDEWALK (MODIFIED) - R.I. STD. 43.1.0M
- 43.3.0M = WHEELCHAIR RAMP - R.I. STD. 43.3.0M
- 43.3.1M = WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS - R.I. STD. 43.3.1M
- 43.3.2M = RAMP-LANDING FOR NARROW SIDEWALK - R.I. STD. 43.3.2M
- 48.1.0 = DETECTABLE WARNING SYSTEM - R.I. STD. 48.1.0

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	SETBACKS	
	EASEMENT LINE	
255	CONTOUR	262
X 407.5	SPOT ELEVATION	×261.5
D D	DRAINAGE LINE	D D
W W	WATER LINE	W W
	FIRE WATER LINE	FW FW
S S	SANITARY SEWER LINE	S S
G G	GAS LINE	G G
E E	ELECTRIC	E E
T T	TELEPHONE LINE	T T
OHW	OVERHEAD ELECTRIC LINE	OHW
	LIMIT OF DISTURBANCE	LOD
	LIMIT OF DISTURBANCE/COMPOST FILTER SOCK	LOD/CFS
	CATCH BASIN	
	HYDRANT	
D	DRAINAGE MANHOLE	
S	SEWER MANHOLE	
	UTILITY POLE	
WV WV	WATER VALVE	
GG	GAS GATE	
	LIGHT POLE	
	TREE LINE	
	STONE WALL	
X X	CHAIN LINK FENCE	
	CURBING	
	FLUSH CURB	
	EDGE OF PAVEMENT	
	SAWCUT LINE	
	SIGN	
	COMPOST FILTER SOCK	
	NO. OF PARKING SPACES	#
A1 A2	WETLAND EDGE	
	50' PERIMETER WETLAND	
	GUARD RAIL	
	INVASIVE SPECIES REMOVAL AREA	

ABBREVIATIONS

- AD = AREA DRAIN
- ADA = AMERICANS WITH DISABILITIES ACT
- ASSF = AREA SUBJECT TO STORM FLOWAGE
- BM = BENCHMARK
- BMP = BEST MANAGEMENT PRACTICE
- BIT. = BITUMINOUS
- BOT. = BOTTOM
- BC = BOTTOM OF CURB (FINISHED GRADE ON LOW SIDE OF CURB)
- BS = BOTTOM OF STAIR (FINISHED GRADE AT BOTTOM STAIR)
- BW = BOTTOM OF WALL (FINISHED GRADE ON LOW SIDE OF WALL)
- CI = CAST IRON
- CB = CATCH BASIN, 4' DIA. UNLESS OTHERWISE NOTED
- CLDI = CEMENT-LINED DUCTILE IRON
- CL. = CLASS
- CLSM = CONTROLLED LOW STRENGTH MATERIAL
- CO = CLEANOUT
- CONC. = CONCRETE
- CC = CONCRETE CURB, VERTICAL
- DEMO = DEMOLITION
- DIA = DIAMETER
- DIV = DIVERSION
- DYL = DOUBLE YELLOW LINE
- DMH = DRAIN MANHOLE
- EOP = EDGE OF PAVEMENT
- ELEV,EL = ELEVATION
- EX, EXIST. = EXISTING
- EXCB = EXISTING CATCH BASIN
- EXDMH = EXISTING DRAIN MANHOLE
- FFE = FINISH FLOOR ELEVATION
- FT = FOOT
- FND. = FOUND
- GTD = GRADE TO DRAIN
- GRAN. = GRANITE
- HDPE = HIGH DENSITY POLYETHYLENE PIPE
- HMA = HOT MIX ASPHALT
- HYD = HYDRANT
- I.D. = INNER DIAMETER
- INV. = INVERT
- LOD = LIMIT OF DISTURBANCE
- LP = LOW POINT
- MUTCD = MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
- MAX. = MAXIMUM
- MIN. = MINIMUM
- MON. = MONITORING
- NTS, N.T.S. = NOT TO SCALE
- OSHA = OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- OWS = OIL WATER SEPARATOR
- OCS = OUTLET CONTROL STRUCTURE
- PERF. = PERFORATED
- PE = POLYETHYLENE
- PVC = POLYVINYL CHLORIDE
- R=X = RADIUS (IN FEET)
- RCP = REINFORCED CONCRETE PIPE
- RIDEM = RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
- RIDOT = RHODE ISLAND DEPARTMENT OF TRANSPORTATION
- RIHP = RHODE ISLAND HIGHWAY PLAT
- RIPDES = RHODE ISLAND POLLUTION DISCHARGE ELIMINATION SYSTEM
- R.I. STD. = RHODE ISLAND STANDARD
- SMH = SEWER MANHOLE
- SWL = SINGLE SOLID WHITE LINE
- SESC = SOIL EROSION AND SEDIMENT CONTROL
- SDR = STANDARD DIMENSIONAL RATIO
- TD = TEMPORARY DIVERSION
- TST = TEMPORARY SEDIMENT TRAP
- TSW = TEMPORARY SWALE
- TP = TEST PIT
- TC = TOP OF CURB
- TS = TOP OF STAIR (FINISHED GRADE OF TOP STAIR)
- TOS = TOP OF STONE
- TW = TOP OF WALL
- TYP. = TYPICAL
- UP = UTILITY POLE
- VGC = VERTICAL GRANITE CURB
- VC = VITRIFIED CLAY
- WPM = WATER PAINT MARK
- w/ = WITH
- YD = YARD DRAIN

Environmental Management
MAR 24 2023
Office of Water Resources

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PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1255

APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

VICTORIA HOWLAND
No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
3/24/23

REVISIONS:

1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS
4	03-24-2023	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	NOT TO SCALE
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
LEGEND

DRAWING NO.:
C1.2

SHEET NO. 4 OF 35

ZONING TABLE		
EXISTING ZONE: LI - LIGHT INDUSTRIAL LIA - LIGHT INDUSTRIAL TRAFFIC SENSITIVE		
LOT AREA AP 111 LOT 8 = 527,522 SF (12.11 ACRES) AP 111 LOT 9 = 150,066 SF (3.45 ACRES) TOTAL = 677,588 SF (15.56 ACRES) DEVELOPABLE LAND AREA = 469,267 SF (10.77 ACRES)		
BUILDING AREA WAREHOUSE (EXISTING) = 30,405 SF MIXED USE = 24,000 SF RESIDENTIAL = 66,600 SF		
	REQUIRED (LI)	PROVIDED
BUILDING SETBACK		
FRONT SETBACK	10 FT	88 FT
SIDE SETBACK	50 FT**	68 FT
REAR SETBACK	40 FT	58 FT
MAX. BUILDING HEIGHT (PRIMARY)	35, 40 FT*	40 FT
BUILDING COVERAGE	35%	20%
MIN. LOT AREA	40,000 SF	677,588 SF
MIN. FRONTAGE	150 FT	795 FT

* MAX. BUILDING HEIGHT FOR MIXED-USE DEVELOPMENT = 35 FT, MAX. BUILDING HEIGHT PER LI ZONE = 40 FT

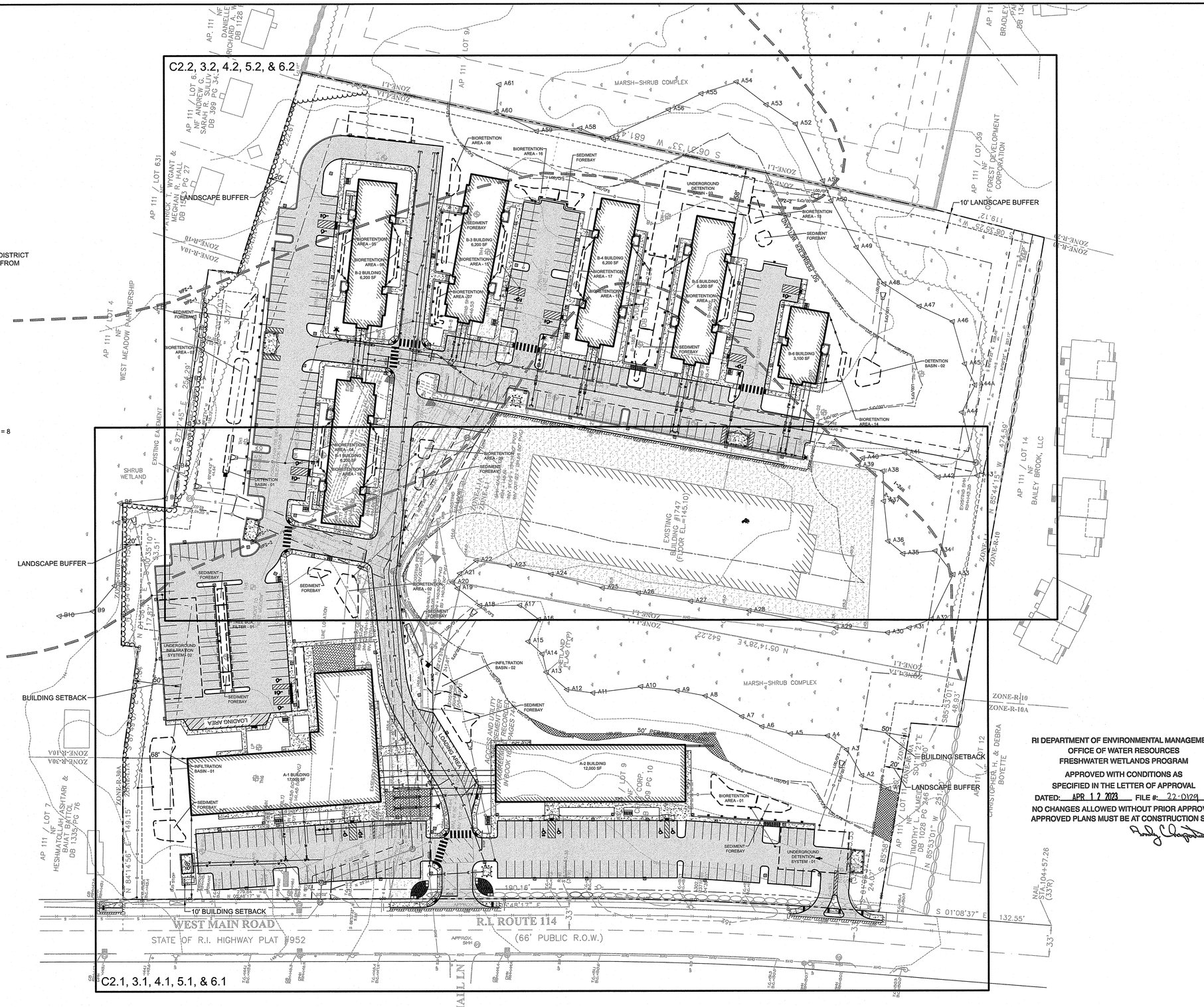
**724.B.4, WHERE A LIGHT INDUSTRIAL DISTRICT ABUTS A RESIDENTIAL DISTRICT OR USE, ALL BUILDINGS SHALL MAINTAIN A MINIMUM 50 FOOT SETBACK FROM PROPERTY LINES ABUTTING THE RESIDENTIAL DISTRICT OR USE.

PARKING SUMMARY		
	REQUIRED+	PROVIDED
STANDARD SPACES (9'x18')	349	316
ACCESSIBLE SPACES++	8	17
TOTAL SPACES	357	333

\+ SMALL SCALE SHOPPING CENTER: 3 SPACES/1,000 SF GFA
23,000 x 3 = 69 SPACES

RESIDENTIAL DWELLINGS: 2 SPACES PER DWELLING UNIT
144 x 2 = 288 SPACES

++ ADA REQUIREMENT FOR PARKING LOT 301 TO 400 TOTAL SPACES = 8 SPACES



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MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

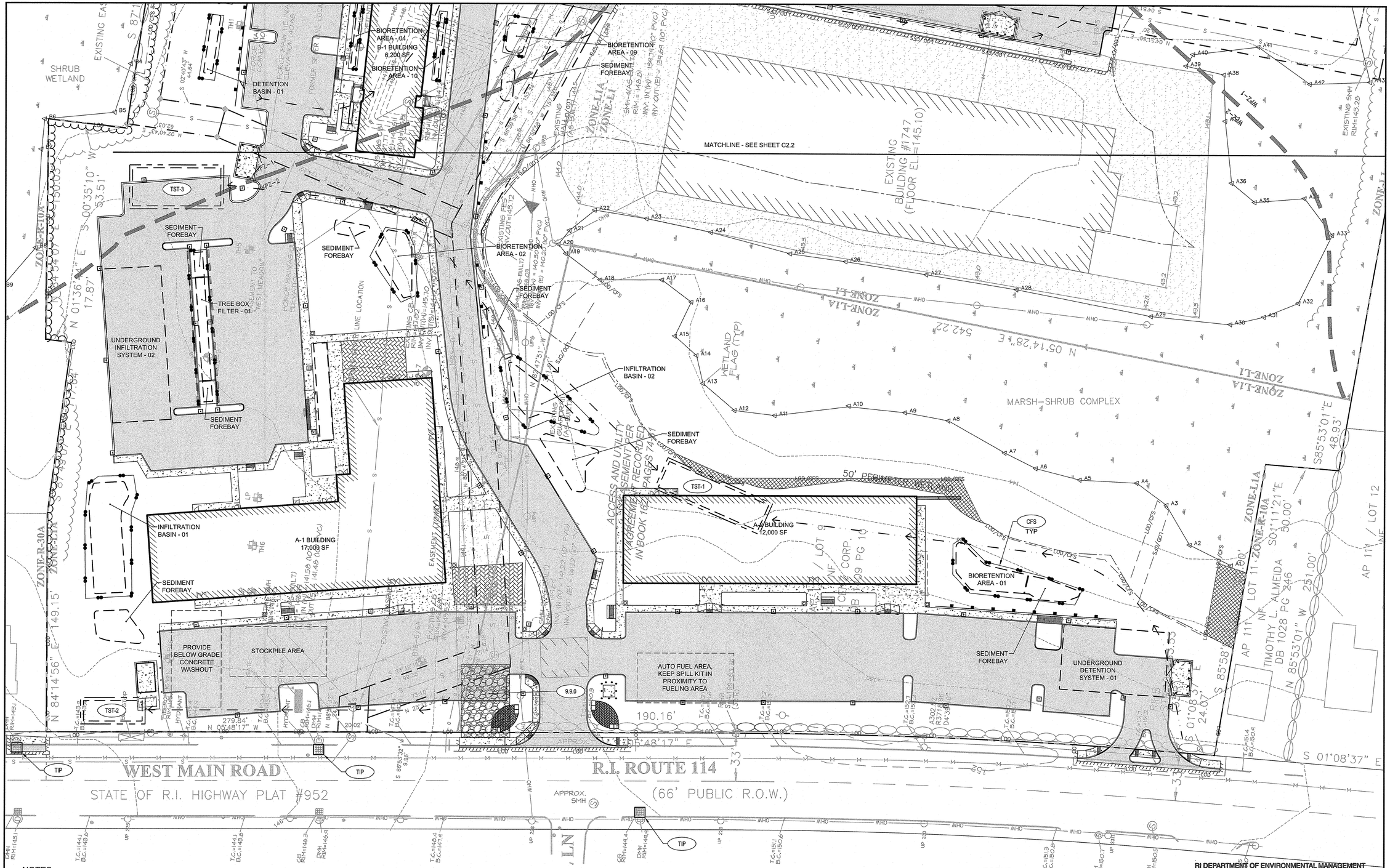
REVISIONS:		
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS
4	03-24-2023	RESPONSE TO COMMENTS

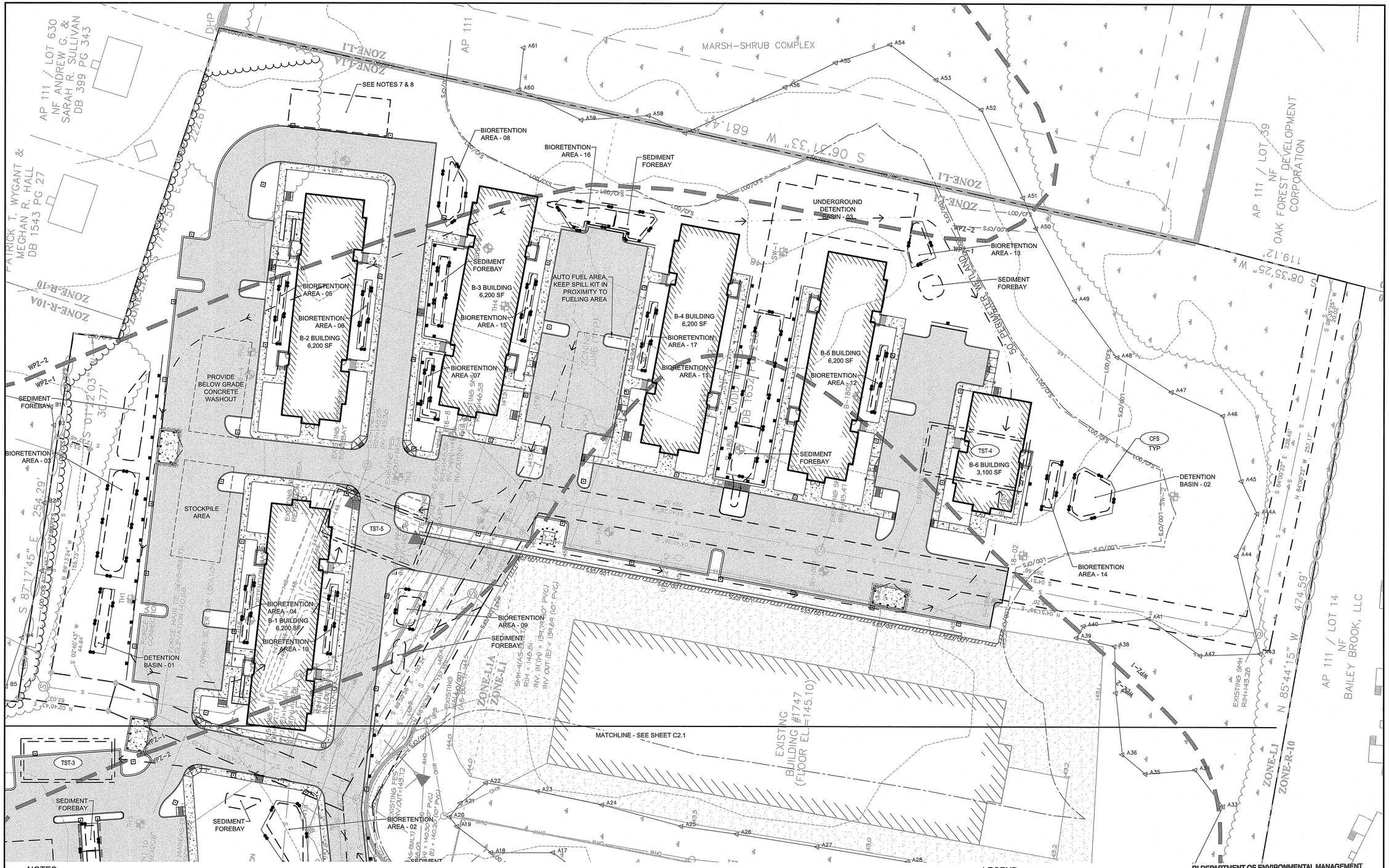
PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	1"=50'
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
OVERALL PLAN

DRAWING NO.:
C1.3

SHEET NO. 5 OF 35


MATCHLINE - SEE SHEET C2.2
BIORETENTION AREA -04 B-1 BUILDING 6,200 SF
BIORETENTION AREA - 10
BIORETENTION AREA - 09
SEDIMENT FOREBAY
DETENTION BASIN - 01
SHRUB WETLAND
EXISTING BUILDING #1747 (FLOOR EL.=145.10)
TST-3
SEDIMENT FOREBAY
TREE BOX FILTER - 01
UNDERGROUND INFILTRATION SYSTEM - 02
BIORETENTION AREA - 02
INFILTRATION BASIN - 02
WETLAND FLAG (TYP)
MARSH-SHRUB COMPLEX
ACCESS AND UTILITY EASEMENT AGREEMENT RECORDED IN BOOK 162 PAGES 74-81
TST-1
A-2 BUILDING 12,000 SF
50' PERIMETER WETLAND
BIORETENTION AREA - 01
INFILTRATION BASIN - 01
A-1 BUILDING 17,000 SF
PROVIDE BELOW GRADE CONCRETE WASHOUT
STOCKPILE AREA
AUTO FUEL AREA, KEEP SPILL KIT IN PROXIMITY TO FUELING AREA
SEDIMENT FOREBAY
UNDERGROUND DETENTION SYSTEM - 01
TST-2
WEST MAIN ROAD
STATE OF R.I. HIGHWAY PLAT #952
R.I. ROUTE 114
(66' PUBLIC R.O.W.)
TIP
ZONE-LIA
ZONE-R-10A
ZONE-R-30A
N 84°14'56" E 149.15'
N 01°36'44" E 17.87'
S 00°35'10" W 33.51'
N 05°14'28" E 542.22'
S 85°53'01" E 48.93'
S 01°08'37" E 24.07'
N 85°53'01" W 251.00'
S 01°11'21" E 30.00'
N 84°48'17" W 279.84'
S 84°48'17" E 190.16'
S 85°58'
AP 111 / LOT 11
AP 111 / LOT 12
TIMOTHY L. ALMEIDA DB 1028 PG 246
EXISTING SMH RIM=143.28
EXISTING CB RIM=145.70
EXISTING SMH RIM=145.12
EXISTING CB (AS-BUILT) RIM=145.58
EXISTING SMH RIM=144.39
EXISTING CB RIM=144.12
EXISTING CB RIM=144.58
EXISTING CB RIM=144.58
EXISTING CB RIM=144.58



NOTES:

1. THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE PLANS ARE INTENDED TO REPRESENT THE MINIMUM CONTROLS NECESSARY TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL MEASURES SHALL BE IMPLEMENTED AS CONDITIONS WARRANT OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
2. CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN SILT SACKS IN ALL EXISTING AND NEWLY INSTALLED CATCH BASINS UNTIL THE UPSTREAM AREA IS STABILIZED.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION ENTRANCES AT ALL POINTS OF EGRESS FROM THE SITE THROUGHOUT CONSTRUCTION.
4. THE CONTRACTOR SHALL MAINTAIN EROSION CONTROLS THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL REPLACE DAMAGED EROSION CONTROLS AT THE OWNER AND ENGINEER'S REQUEST AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. THE CONTRACTOR SHALL NOT LEAVE DISTURBED AREAS UNSTABILIZED FOR PERIODS MORE THAN 14 DAYS. PROVIDE TEMPORARY SEED OR MULCH ON DISTURBED AREAS THAT WILL REMAIN EXPOSED FOR GREATER THAN 14 DAYS.
6. INSTALL EROSION CONTROLS DOWNSTREAM OF ANY DISTURBED AREAS TO REDUCE POTENTIAL FOR EROSION. CONTRACTOR SHALL INDICATE LOCATIONS OF EROSION CONTROLS FOR REVIEW WITH GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.
7. PRIOR TO CONSTRUCTION OF THE STORMWATER BMP, THE CONTRACTOR SHALL SCARIFY 12" BELOW THE SUBGRADE. FOLLOWING INSTALLATION OF THE STORMWATER BMP, COMPOST FILTER SOCK SHALL BE INSTALLED AT THE TOP OF THE SLOPE UNTIL THE CONTRIBUTING AREA IS STABILIZED.
8. AT NO TIME SHALL ANY CONSTRUCTION EQUIPMENT OR MATERIAL BE STORED IN THE STORMWATER BMP FOOTPRINT. AVOID THE USE OF HEAVY MACHINERY WITHIN FOOTPRINT TO MINIMIZE THE POTENTIAL FOR COMPACTING EXISTING SOILS. ALL UPSTREAM AREAS SHALL BE STABILIZED PRIOR TO USE OF STORMWATER BMP.
9. THE CONTRACTOR SHALL MITIGATE DUST ON SITE SO THAT ZERO DUST MIGRATES PAST THE PROPERTY LINES ON SITE.
10. REFER TO "CIVIL NOTES AND LEGEND" FOR ADDITIONAL NOTES.

LEGEND

- TDS - TEMPORARY DIVERSION SWALE/BERM
- TST - TEMPORARY SEDIMENT TRAP
- TST LIMITS OF WET STORAGE AREA
- TST LIMITS OF DRY STORAGE AREA

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Scale: 1"=30'
0 15' 30' 60'

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1255

APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
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Office of Water Resources

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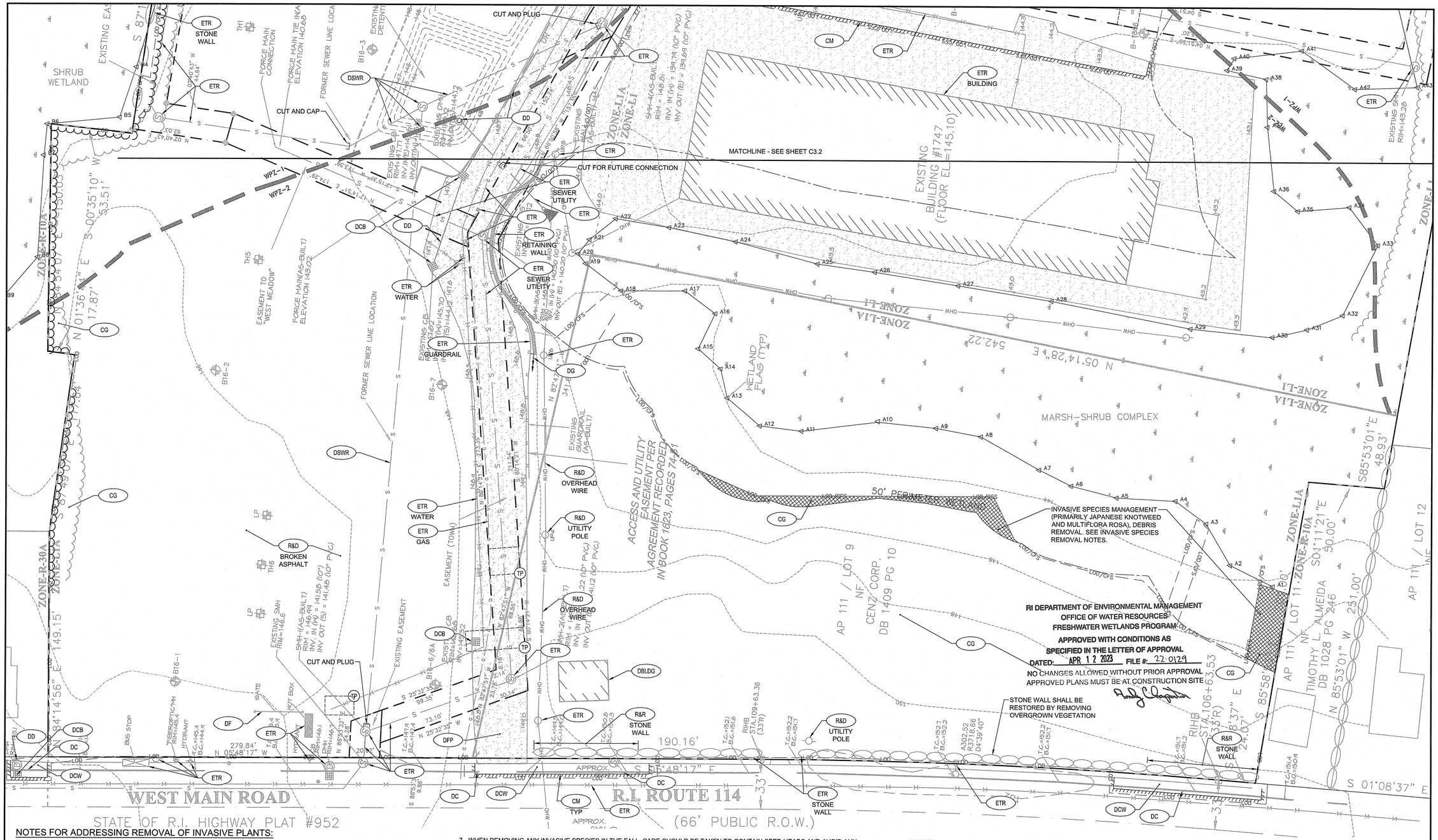
DRAWING TITLE:
EROSION & SEDIMENT CONTROL PLAN 2

DRAWING NO.:
C2.2

SHEET NO. 7 OF 35


MATCHLINE - SEE SHEET C3.2
CUT AND PLUG
CUT AND CAP
CUT FOR FUTURE CONNECTION
WEST MAIN ROAD
STATE OF R.I. HIGHWAY PLAT #952
R.I. ROUTE 114
(66' PUBLIC R.O.W.)
EXISTING BUILDING (FLOOR EL.=145.10)
MARSH-SHRUB COMPLEX
SHRUB WETLAND
ACCESS AND UTILITY EASEMENT PER AGREEMENT RECORDED IN BOOK 1623, PAGES 74-81
50' PERIMETER OF DISTURBANCE
INVASIVE SPECIES MANAGEMENT (PRIMARILY JAPANESE KNOTWEED AND MULTIFLORA ROSA). DEBRIS REMOVAL. SEE INVASIVE SPECIES REMOVAL NOTES.
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
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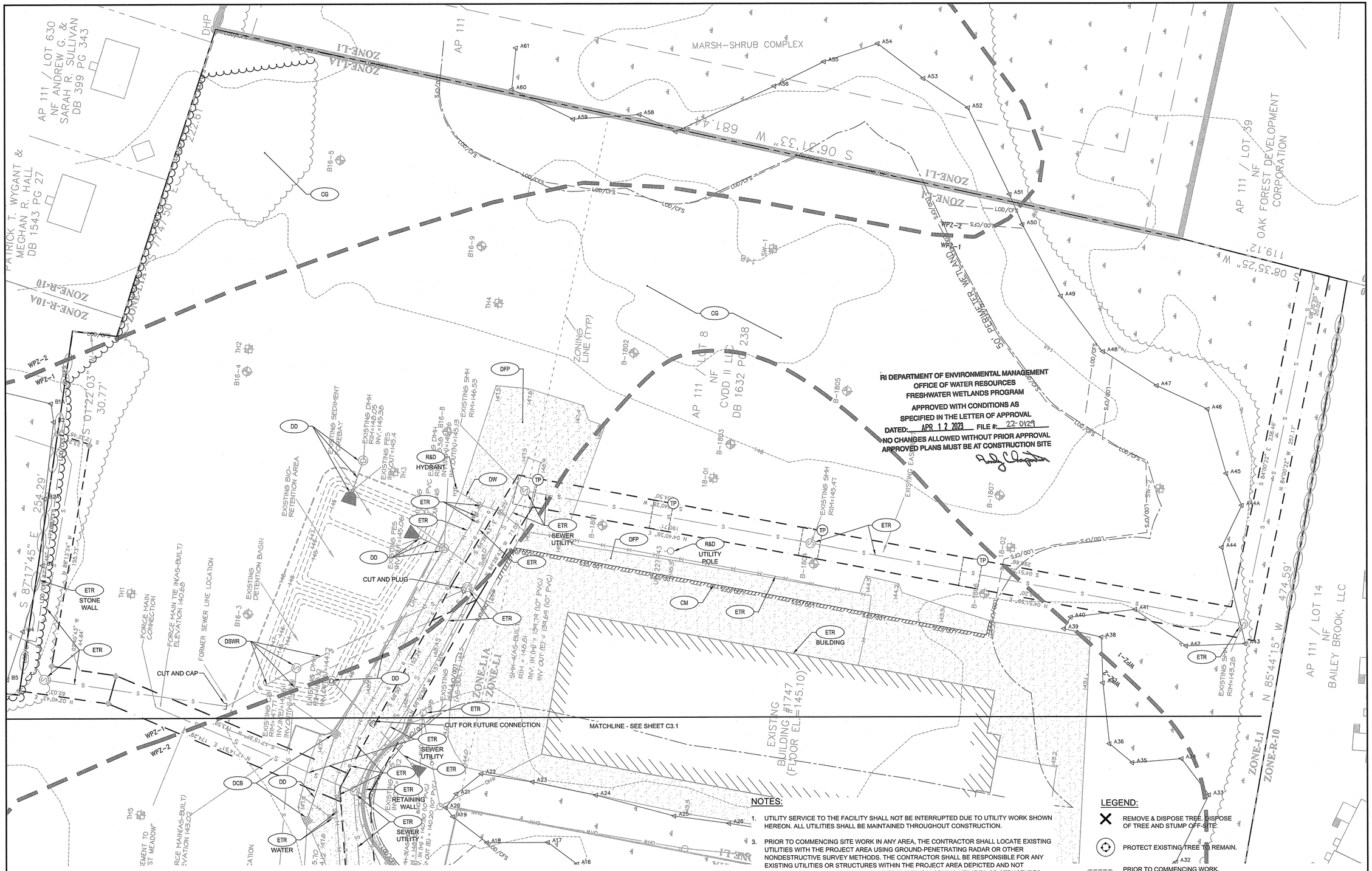
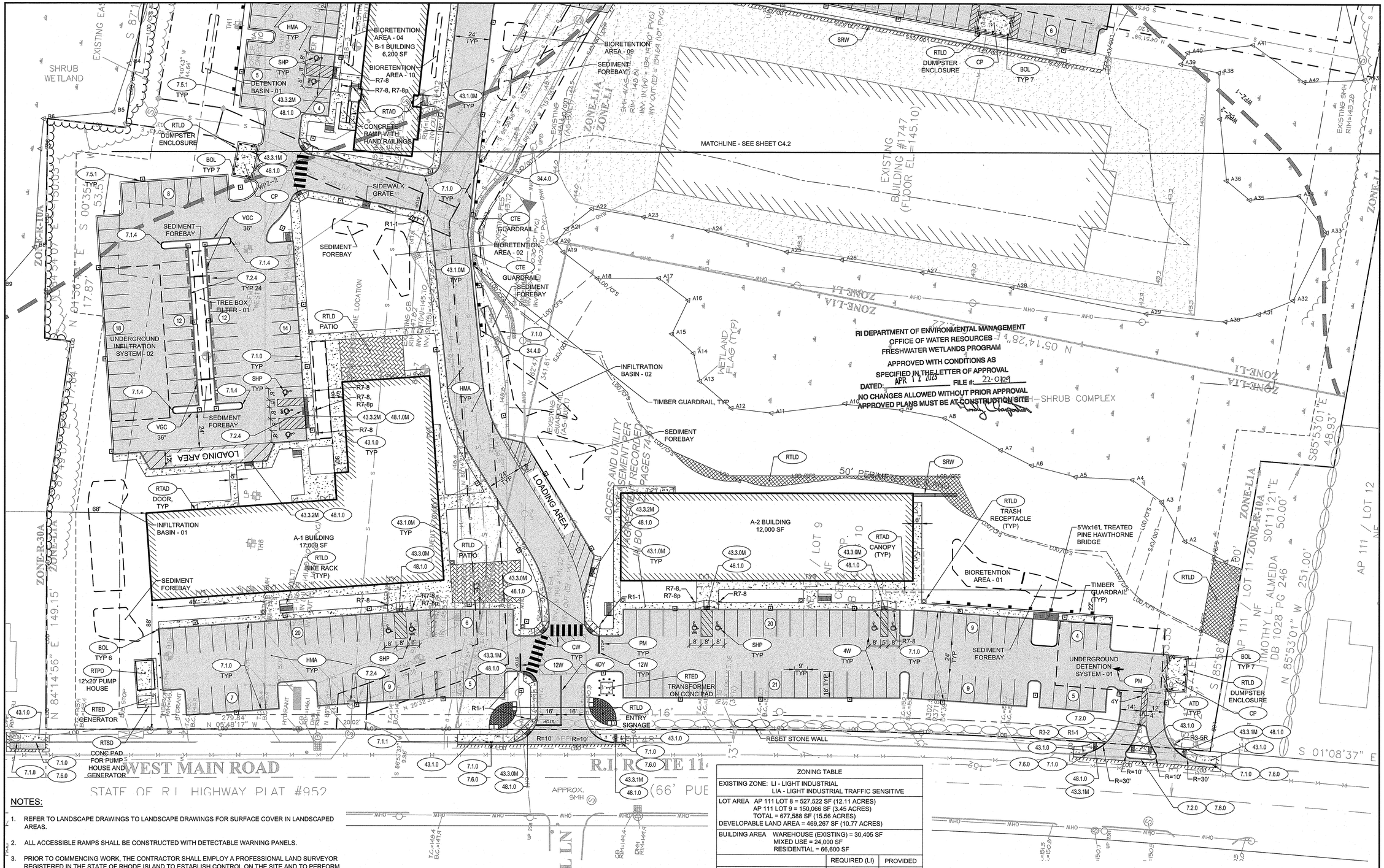
STONE WALL SHALL BE RESTORED BY REMOVING OVERGROWN VEGETATION
EXISTING EASEMENT TO "WEST MEADOW"
FORCE MAIN TIE-IN ELEVATION 140.68
FORCE MAIN CONNECTION
FORCE MAIN (AS-BUILT) ELEVATION 143.02
FORMER SEWER LINE LOCATION
EXISTING EASEMENT (TOWN)
EXISTING GUARDRAIL (AS-BUILT)
EXISTING DETENTION POND
EXISTING CB RIM=145.10 INV=141.46
EXISTING MH RIM=147.17 INV IN (E)=141.59 INV OUT (E)=141.49
EXISTING MH RIM=144.12 INV OUT (E)=134.69 (10" PVC)
EXISTING MH RIM=145.28
SMH-4(AS-BUILT) RIM = 148.80 INV. IN (N) = 134.74 (10" PVC) INV. OUT (E) = 134.69 (10" PVC)
SMH-1(AS-BUILT) INV = 146.49 INV IN (N) = 141.56 (10") INV OUT (S) = 141.46 (10" PVC)
SMH-2(AS-BUILT) RIM = 144.22 INV OUT (E) = 134.12 (10" PVC)
SMH-3(AS-BUILT) RIM = 146.46 INV IN (W) = 141.76 (10" PVC) INV OUT (E) = 141.66 (10" PVC)
EXISTING MH RIM=146.6
EXISTING CB RIM=144.79 INV=140.52
EXISTING CB RIM=145.10 INV IN (S)=141.41 (10" PVC) INV OUT (E)=141.31 (10" PVC)
EXISTING CB RIM=145.10 INV=141.41
EXISTING CB RIM=144.52 INV=140.72
EXISTING CB RIM=144.79 INV=140.52
EXISTING CB RIM=144.79 INV=140.52


AP 111 / LOT 630
NF ANDREW G. & SARAH R. SULLIVAN
DB 399 PG 343
PATRICK T. WYGANT & MEGHAN R. HALL
DB 1543 PG 27
AP 111 / LOT 39
NF OAK FOREST DEVELOPMENT CORPORATION
AP 111 / LOT 8
NF CVDD II LLC
DB 1632 PG 238
AP 111 / LOT 14
NF BAILEY BROOK, LLC
MARSH-SHRUB COMPLEX
50' FRESHWATER WETLAND
ZONE-LI
ZONE-R-10
ZONE-LI/A
ZONE-LI/ZONE-I
ZONING LINE (TYP)
S 87°17'45" E 254.29'
S 01°22'03" E 30.77'
S 06°31'33" W 681.44'
N 85°44'15" W 474.59'
EXISTING #1747 BUILDING (FLOOR EL=145.10)
EXISTING BIO-RETENTION AREA
EXISTING DETENTION BASIN
FORMER SEWER LINE LOCATION
FORCE MAIN TIE IN(AS-BUILT) ELEVATION 140.68
FORCE MAIN(AS-BUILT) ELEVATION 143.02
CUT AND PLUG
CUT AND CAP
CUT FOR FUTURE CONNECTION
MATCHLINE - SEE SHEET C3.1
STONE WALL
RETAINING WALL
SEWER UTILITY
WATER
BUILDING
UTILITY POLE
HYDRANT
EXISTING SEDIMENT FOREBAY
EXISTING DMH RIM=146.25 INV.=145.36
EXISTING FES INV.OUT=145.4
EXISTING SMH RIM=146.55
EXISTING SMH RIM=145.47
EXISTING SMH RIM=143.26
SMH-4(AS-BUILT) RIM = 146.8 INV. IN (N) = 139.79 (10" PVC) INV. OUT (E) = 139.64 (10" PVC)
SMH-3(AS-BUILT) RIM = 145.2 INV. IN (N) = 140.20 (10" PVC) INV. OUT (E) = 140.20 (10" PVC)
EXISTING INV IN=140.2 (10" PVC)
EXISTING INV IN=140.2 (10" PVC)
EXISTING INV IN=140.2


MATCHLINE - SEE SHEET C4.2
BIORETENTION AREA - 04
B-1 BUILDING
6,200 SF
BIORETENTION AREA - 10
R7-8
R7-8, R7-8p
BIORETENTION AREA - 09
SEDIMENT FOREBAY
DETENTION BASIN - 01
CONCRETE RAMP WITH HAND RAILINGS
DUMPSTER ENCLOSURE
SHRUB WETLAND
SIDEWALK GRATE
SEDIMENT FOREBAY
BIORETENTION AREA - 02
CTE GUARDRAIL
SEDIMENT FOREBAY
TREE BOX FILTER - 01
UNDERGROUND INFILTRATION SYSTEM - 02
RTLD PATIO
INFILTRATION BASIN - 02
TIMBER GUARDRAIL, TYP
SEDIMENT FOREBAY
WETLAND FLAG (TYP)
SHRUB WETLAND COMPLEX
EXISTING BUILDING #1747 (FLOOR EL=145.10)
ZONE-LIA
ZONE-LI
ZONE-R-30A
ZONE-R-10A
LOADING AREA
INFILTRATION BASIN - 01
A-1 BUILDING
17,000 SF
A-2 BUILDING
12,000 SF
RTLD BIKE RACK (TYP)
RTLD PATIO
RTAD CANOPY (TYP)
RTLD TRASH RECEPTACLE (TYP)
5'Wx16'L TREATED PINE HAWTHORNE BRIDGE
BIORETENTION AREA - 01
TIMBER GUARDRAIL (TYP)
SEDIMENT FOREBAY
UNDERGROUND DETENTION SYSTEM - 01
RTPD 12'x20' PUMP HOUSE
RTED GENERATOR
RTSD CONC PAD FOR PUMP HOUSE AND GENERATOR
RTED TRANSFORMER ON CONC PAD
RTLD ENTRY SIGNAGE
RTLD DUMPSTER ENCLOSURE
RESET STONE WALL
WEST MAIN ROAD
STATE OF RI HIGHWAY PLAT #952
R.I. ROUTE 11
(66' PUBLIC)
50' PERPETUAL NON-EXCLUSIVE EASEMENT
ACCESS AND UTILITY EASEMENT RECORDED IN BOOK 74 PAGES 74-77
TIMOTHY L. ALMEIDA DB 1028 PG 246
AP 111 / LOT 11
AP 111 / LOT 12
N 84°14'56" E 149.15'
S 85°53'01" E 48.93'
N 85°53'01" W 251.00'
S 01°08'37" E
N 05°48'17" W 279.84'
N 84°14'56" E 117.87'
S 00°35'53" W 53.55'
N 05°14'28" E
S 87°1
EXISTING EASEMENT
EXISTING SMH RIM=149.28
EXISTING SMH RIM=145.10
EXISTING GUARDRAIL (AS-BUILT)
SMH-4(AS-BUILT) RIM = 146.26 INV. IN (N) = 134.70° PVC) INV. OUT (E) = 134.69 (10" PVC)
SMH-3 RIM = 145.10 INV. IN (W) = 134.70° PVC) INV. OUT (S) = 134.60 (10" PVC)
SMH RIM=145.10 INV. IN (W)=145.10 INV. OUT(S)=144.60
CB RIM=146.1 INV. IN (N)=144.20 (12" PVC) INV. OUT (S)=144.10 (12" PVC)
CB RIM=145.8 INV. IN (N)=144.20 (12" PVC) INV. OUT (S)=144.10 (12" PVC)
CB RIM=145.8 INV. IN (N)=144.20 (12" PVC) INV. OUT (S)=144.10 (12" PVC)

NOTES:

1. REFER TO LANDSCAPE DRAWINGS TO LANDSCAPE DRAWINGS FOR SURFACE COVER IN LANDSCAPED AREAS.
2. ALL ACCESSIBLE RAMPS SHALL BE CONSTRUCTED WITH DETECTABLE WARNING PANELS.
3. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL EMPLOY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF RHODE ISLAND TO ESTABLISH CONTROL ON THE SITE AND TO PERFORM FIELD MEASUREMENTS AS REQUIRED TO LAYOUT THE PROPOSED BUILDING AND SITE IMPROVEMENTS. THE CONTRACTOR'S SURVEYOR SHALL COORDINATE THE BUILDING LAYOUT WITH THE PROJECT LAND SURVEYOR TO ACCURATELY LOCATE THE BUILDING ON THE SITE.
4. EXPANSION JOINTS (E.J.) 20 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
5. CONTROL JOINTS (C.J.) 5 FEET O.C. (MAX.) UNLESS OTHERWISE NOTED.
6. ALL PARKING SPACES AND ISLANDS ARE TO BE MARKED WITH 4" THICK WHITE EPOXY PAVEMENT MARKING UNLESS NOTED OTHERWISE. WATERBORNE PAVEMENT MARKINGS ARE NOT ACCEPTABLE.
7. COORDINATE FINAL QUANTITY AND PLACEMENT OF BOLLARDS SURROUNDING TRANSFORMER WITH NGRID.
8. REFER TO "CIVIL NOTES AND LEGEND" FOR ADDITIONAL NOTES.

MATCHLINE - SEE SHEET C4.1

ZONING TABLE		
EXISTING ZONE: LI - LIGHT INDUSTRIAL LIA - LIGHT INDUSTRIAL TRAFFIC SENSITIVE		
LOT AREA AP 111 LOT 8 = 527,522 SF (12.11 ACRES) AP 111 LOT 9 = 150,066 SF (3.45 ACRES) TOTAL = 677,588 SF (15.56 ACRES) DEVELOPABLE LAND AREA = 469,267 SF (10.77 ACRES)		
BUILDING AREA WAREHOUSE (EXISTING) = 30,405 SF MIXED USE = 24,000 SF RESIDENTIAL = 66,600 SF		
	REQUIRED (LI)	PROVIDED
BUILDING SETBACK		
FRONT SETBACK	10 FT	88 FT
SIDE SETBACK	50 FT**	68 FT
REAR SETBACK	40 FT	58 FT
MAX. BUILDING HEIGHT (PRIMARY)	35, 40 FT*	40 FT
BUILDING COVERAGE	35%	20%
MIN. LOT AREA	40,000 SF	677,588 SF
MIN. FRONTAGE	150 FT	795 FT

* MAX. BUILDING HEIGHT FOR MIXED-USE DEVELOPMENT = 35 FT, MAX. BUILDING HEIGHT PER LI ZONE = 40 FT

**724.B.4, WHERE A LIGHT INDUSTRIAL DISTRICT ABUTS A RESIDENTIAL DISTRICT OR USE, ALL BUILDINGS SHALL MAINTAIN A MINIMUM 50 FOOT SETBACK FROM PROPERTY LINES ABUTTING THE RESIDENTIAL DISTRICT OR USE.

PARKING SUMMARY		
	REQUIRED+	PROVIDED
STANDARD SPACES (9'x18')	349	316
ACCESSIBLE SPACES++	8	17
TOTAL SPACES	357	333

\+ SMALL SCALE SHOPPING CENTER: 3 SPACES/1,000 SF GFA
23,000 x 3 = 69 SPACES

RESIDENTIAL DWELLINGS: 2 SPACES PER DWELLING UNIT
144 x 2 = 288 SPACES

++ ADA REQUIREMENT FOR PARKING LOT 301 TO 400 TOTAL SPACES = 8 SPACES

Scale: 1"=30'
0 15' 30' 60'

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MAR 24 2023
Office of Water Resources

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PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755

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DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
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4 FOX PLACE
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SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

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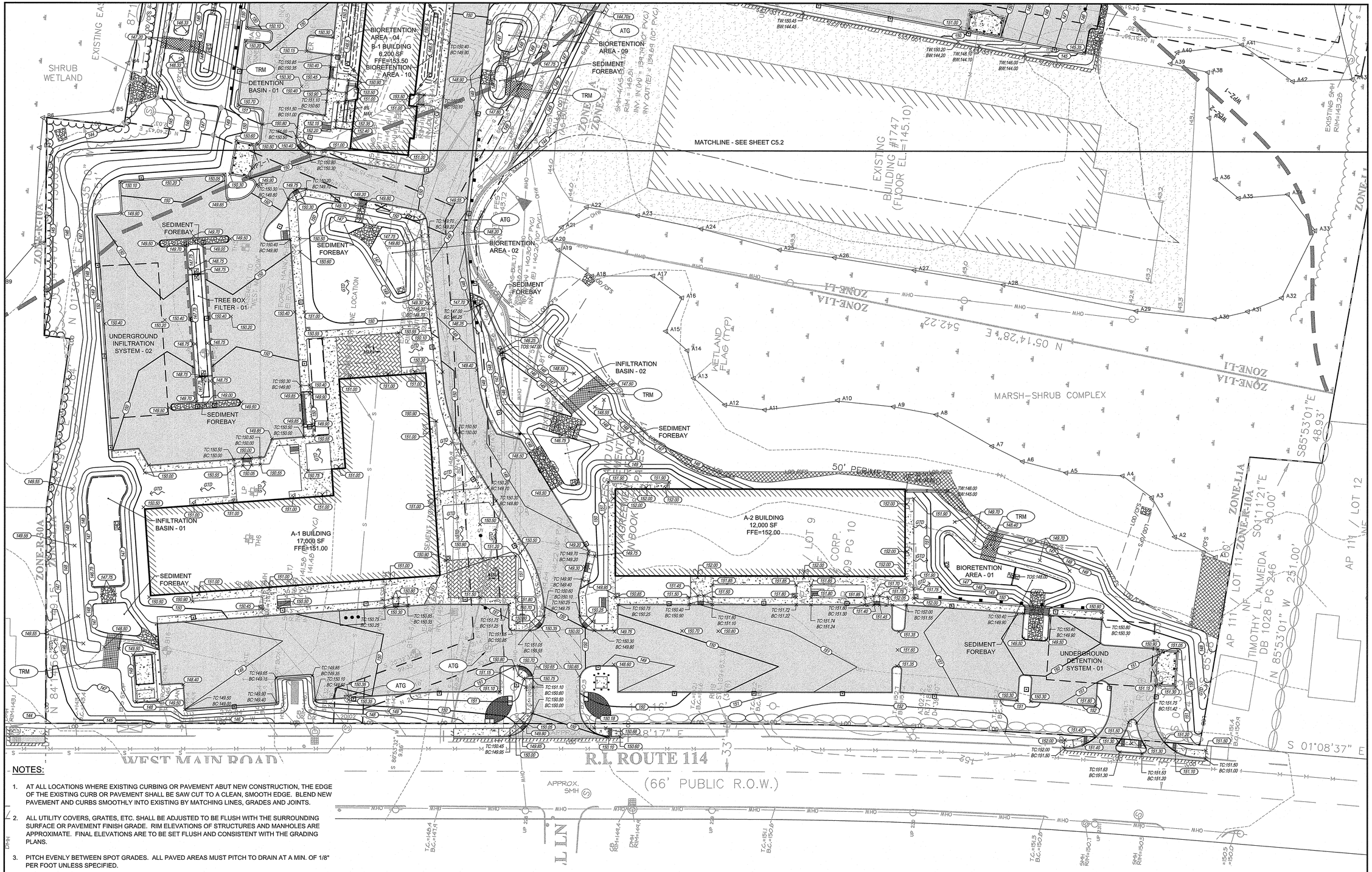
APPROVED BY:	VAH

DRAWING TITLE:
GENERAL PLAN 2

DRAWING NO.:
C4.2
SHEET NO. 11 OF 35



NOTES:

1. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT AND CURBS SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
2. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE SURROUNDING SURFACE OR PAVEMENT FINISH GRADE. RIM ELEVATIONS OF STRUCTURES AND MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS.
3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
4. THE PROPOSED WALKWAYS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% AS SHOWN ON CONSTRUCTION DETAILS.
5. ALL GRADING AT ACCESSIBLE ROUTES SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) OF 2010, LATEST EDITION.
6. BASIN BERM SHALL BE CONSTRUCTED WITH COMMON BORROW PLACED IN 12" LEFTS AND COMPACTED TO 95% TO FINISH GRADE. REMOVE ALL EXISTING TOPSOIL AND ORGANIC MATERIAL PRIOR TO CONSTRUCTING BASIN BERM.
7. TEMPORARY TURF REINFORCEMENT MAT SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER. PERMANENT TURF REINFORCEMENT MAT (TRM) SHALL BE INSTALLED ON ALL SPILLWAY SLOPES.
8. REFER TO "CIVIL NOTES AND LEGEND" FOR ADDITIONAL NOTES.

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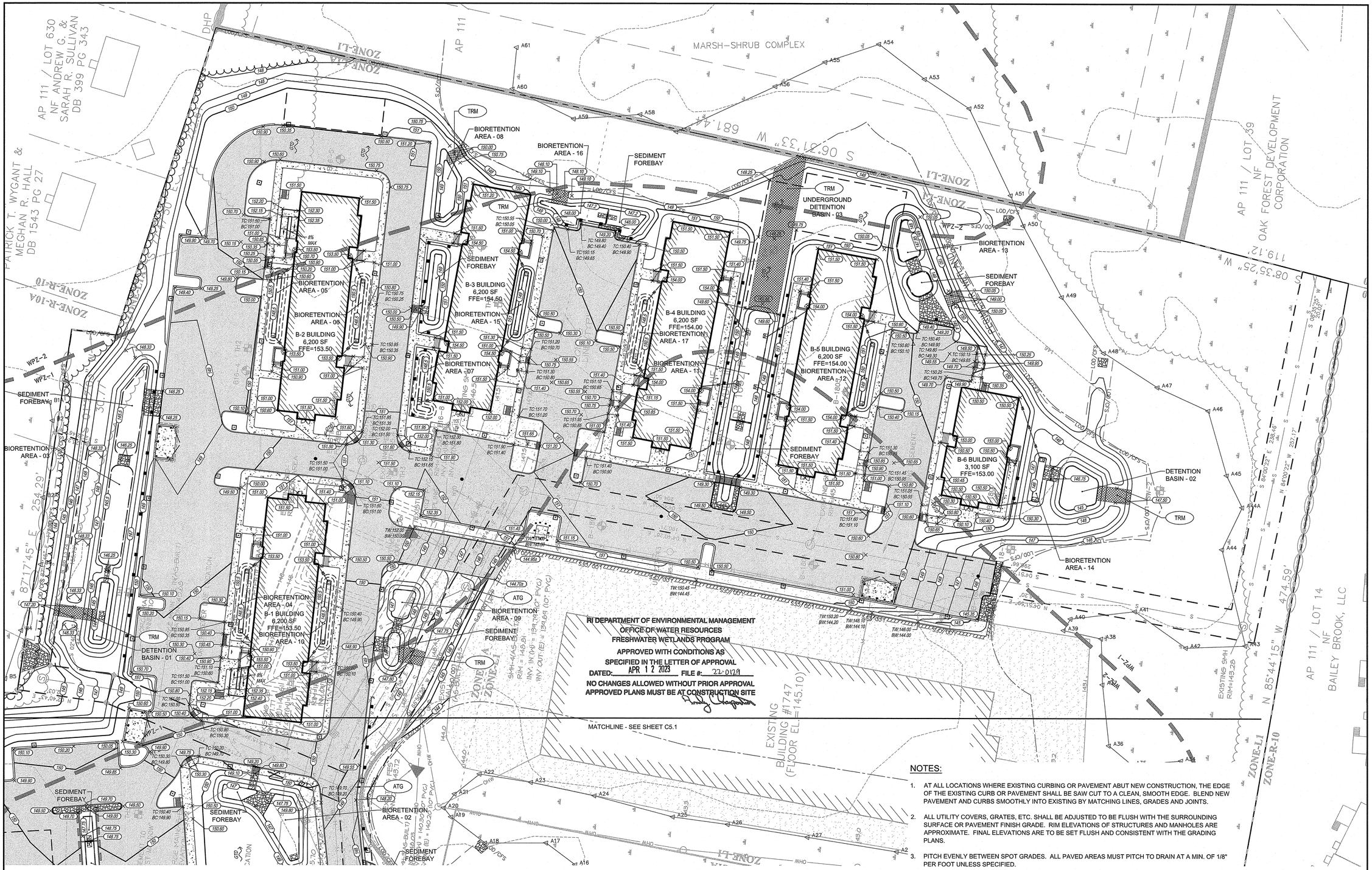
APPROVED BY:	VAH

DRAWING TITLE:
GRADING PLAN 1

DRAWING NO.:
C5.1

SHEET NO. 12 OF 35



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0179
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NOTES:

1. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT AND CURBS SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
2. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE SURROUNDING SURFACE OR PAVEMENT FINISH GRADE. RIM ELEVATIONS OF STRUCTURES AND MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS.
3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
4. THE PROPOSED WALKWAYS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% AS SHOWN ON CONSTRUCTION DETAILS.
5. ALL GRADING AT ACCESSIBLE ROUTES SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) OF 2010, LATEST EDITION.
6. BASIN BERM SHALL BE CONSTRUCTED WITH COMMON BORROW PLACED IN 12" LEFTS AND COMPACTED TO 95% TO FINISH GRADE. REMOVE ALL EXISTING TOPSOIL AND ORGANIC MATERIAL PRIOR TO CONSTRUCTING BASIN BERM.
7. TEMPORARY TURF REINFORCEMENT MAT SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER. PERMANENT TURF REINFORCEMENT MAT (TRM) SHALL BE INSTALLED ON ALL SPILLWAY SLOPES.
8. REFER TO "CIVIL NOTES AND LEGEND" FOR ADDITIONAL NOTES.

Scale: 1"=30'
0 15' 30' 60'

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1795

APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

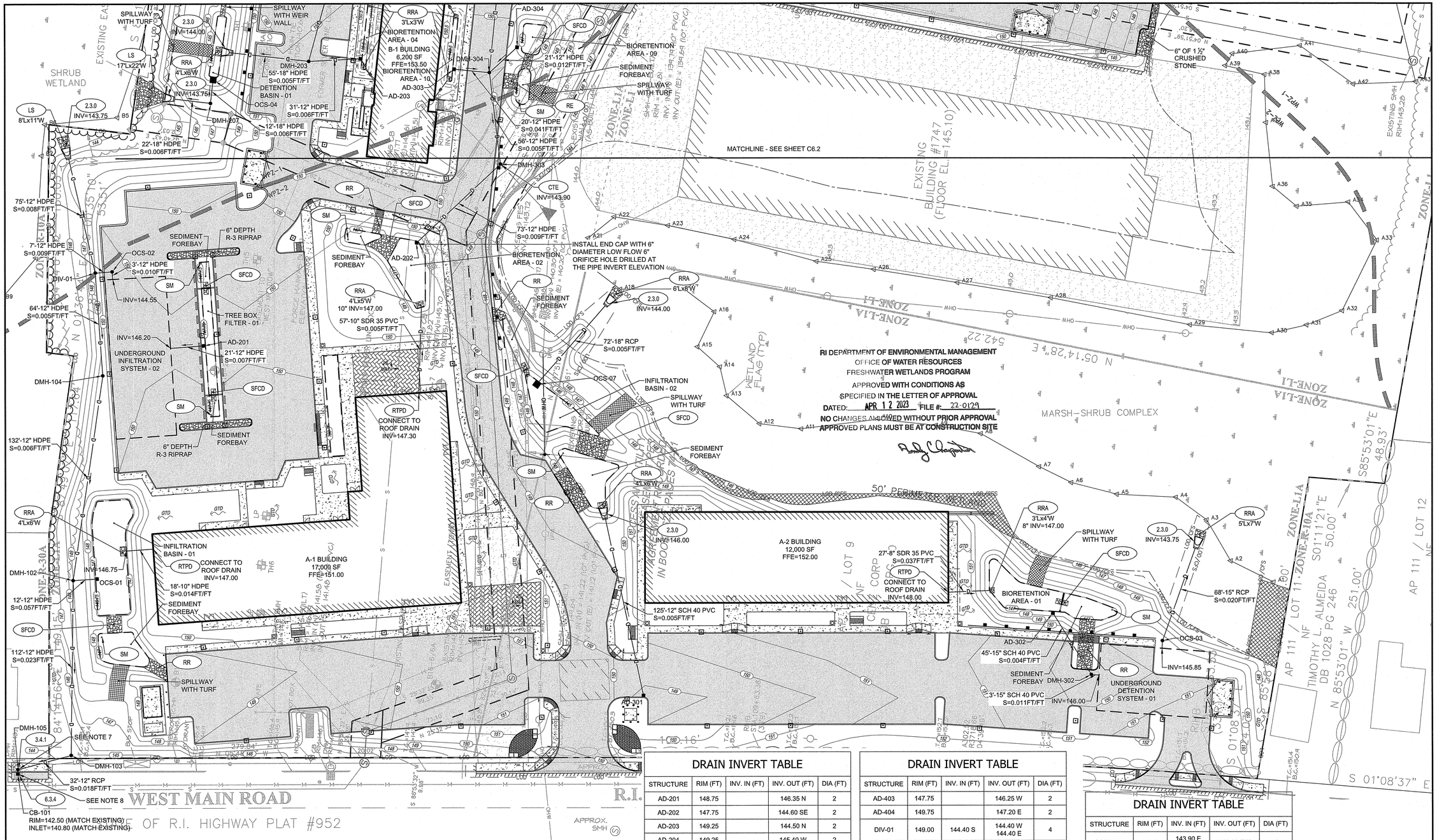
VICTORIA HOWLAND
No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
3-24-23

REVISIONS:		
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	1"=30'
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
GRADING PLAN 2

DRAWING NO.:
C5.2
SHEET NO. 13 OF 35


MATCHLINE - SEE SHEET C6.2
EXISTING BUILDING #1747 (FLOOR EL=145.10)
SHRUB WETLAND
MARSH-SHRUB COMPLEX
WEST MAIN ROAD
R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
INSTALL END CAP WITH 6" DIAMETER LOW FLOW 6" ORIFICE HOLE DRILLED AT THE PIPE INVERT ELEVATION
A-1 BUILDING 17,000 SF FFE=151.00
A-2 BUILDING 12,000 SF FFE=152.00
BIORETENTION AREA - 09
BIORETENTION AREA - 04
BIORETENTION AREA - 10
BIORETENTION AREA - 02
BIORETENTION AREA - 01
INFILTRATION BASIN - 01
INFILTRATION BASIN - 02
UNDERGROUND INFILTRATION SYSTEM - 02
UNDERGROUND DETENTION SYSTEM - 01
SEDIMENT FOREBAY
SPILLWAY WITH TURF
SPILLWAY WITH WEIR WALL
6" DEPTH R-3 RIPRAP
6" OF 1½" CRUSHED STONE
TREE BOX FILTER - 01
CONNECT TO ROOF DRAIN INV=147.00
CONNECT TO ROOF DRAIN INV=148.00
CONNECT TO ROOF DRAIN INV=147.30
DMH-102
DMH-103
DMH-104
DMH-105
DMH-203
DMH-204
DMH-205
DMH-206
DMH-207
DMH-302
DMH-303
DMH-304
DMH-401
DMH-402
DMH-403
DMH-404
AD-201
AD-202
AD-203
AD-204
AD-205
AD-206
AD-207
AD-301
AD-302
AD-303
AD-304
AD-401
AD-402
AD-403
AD-404
OCS-01
OCS-02
OCS-03
OCS-04
OCS-05
OCS-06
OCS-07
DIV-01
CTE INV=143.90
INV=144.00
INV=144.55
INV=146.20
INV=146.75
INV=146.00
INV=143.75
INV=145.85
INV=146.00
INV=143.754
INV=147.00
INV=147.30
INV=147.50
INV=147.75
INV=148.00
INV=149.25
INV=149.50
INV=149.75
INV=150.20
INV=150.90
INV=151.40
INV=151.55
INV=152.00
INV=152.50
INV=153.10
INV=153.20
INV=153.50
INV=154.00
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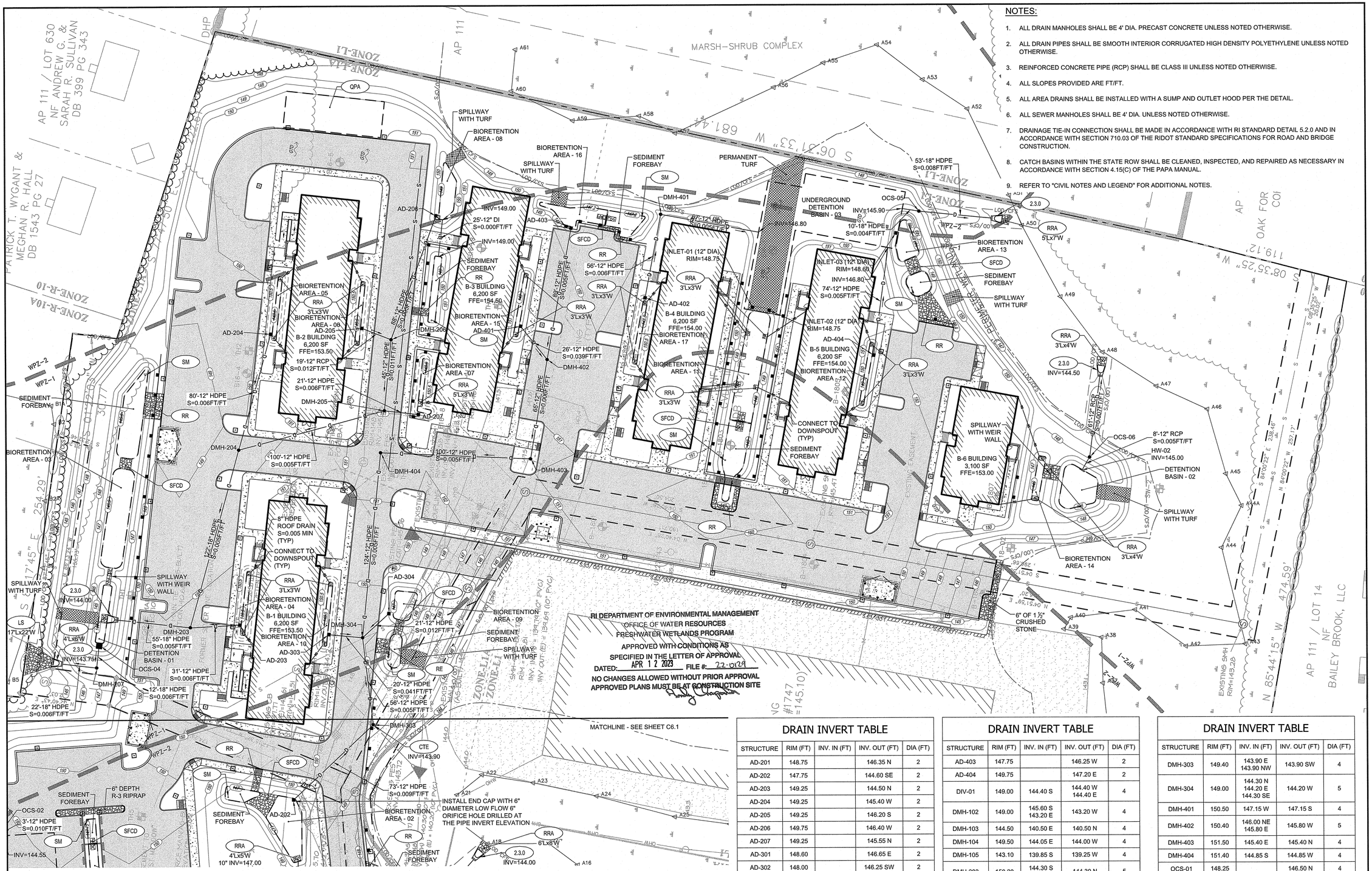

DRAIN INVERT TABLE

STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)	DIA (FT)
AD-201	148.75		146.35 N	2
AD-202	147.75		144.60 SE	2
AD-203	149.25		144.50 N	2
AD-204	149.25		145.40 W	2
AD-205	149.25		146.20 S	2
AD-206	149.75		146.40 W	2
AD-207	149.25		145.55 N	2
AD-301	148.60		146.65 E	2
AD-302	148.00		146.25 SW	2
AD-303	149.25		145.25 S	2
AD-304	147.75		144.60 NW	2
AD-401	149.75		147.15 SW	2
AD-402	149.25		147.50 E	2

DRAIN INVERT TABLE

STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)	DIA (FT)
AD-403	147.75		146.25 W	2
AD-404	149.75		147.20 E	2
DIV-01	149.00	144.40 S	144.40 W 144.40 E	4
DMH-102	149.00	145.60 S 143.20 E	143.20 W	4
DMH-103	144.50	140.50 E	140.50 N	4
DMH-104	149.50	144.05 E	144.00 W	4
DMH-105	143.10	139.85 S	139.25 W	4
DMH-203	150.20	144.30 S 144.30 E	144.30 N	5
DMH-204	149.45	144.90 E 144.90 S	144.90 W	5
DMH-205	150.90	145.40 E 145.40 S	145.40 N	4
DMH-206	150.30	145.95 N 145.95 E	145.95 W	4
DMH-207	148.00	143.90 E	143.90 N	4
DMH-302	149.50	146.05 NE	146.05 S	4

DRAIN INVERT TABLE

STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)	DIA (FT)
DMH-303	149.40	143.90 E 143.90 NW	143.90 SW	4
DMH-304	149.00	144.30 N 144.20 E 144.30 SE	144.20 W	5
DMH-401	150.50	147.15 W	147.15 S	4
DMH-402	150.40	146.00 NE 145.80 E	145.80 W	5
DMH-403	151.50	145.40 E	145.40 N	4
DMH-404	151.40	144.85 S	144.85 W	4
OCS-01	148.25		146.50 N	4
OCS-02	150.10	144.50 W	144.50 N	5
OCS-03	150.25	145.20 W	145.20 E	5
OCS-04	147.50		144.00 W	4
OCS-05	150.00	145.85 N	145.85 S	5
OCS-06	148.00	144.95 NW	144.95 E	5
OCS-07	147.00		144.35 SE	4

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SCALE ADJUSTMENT GUIDE
0" 1"
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Environmental Management
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

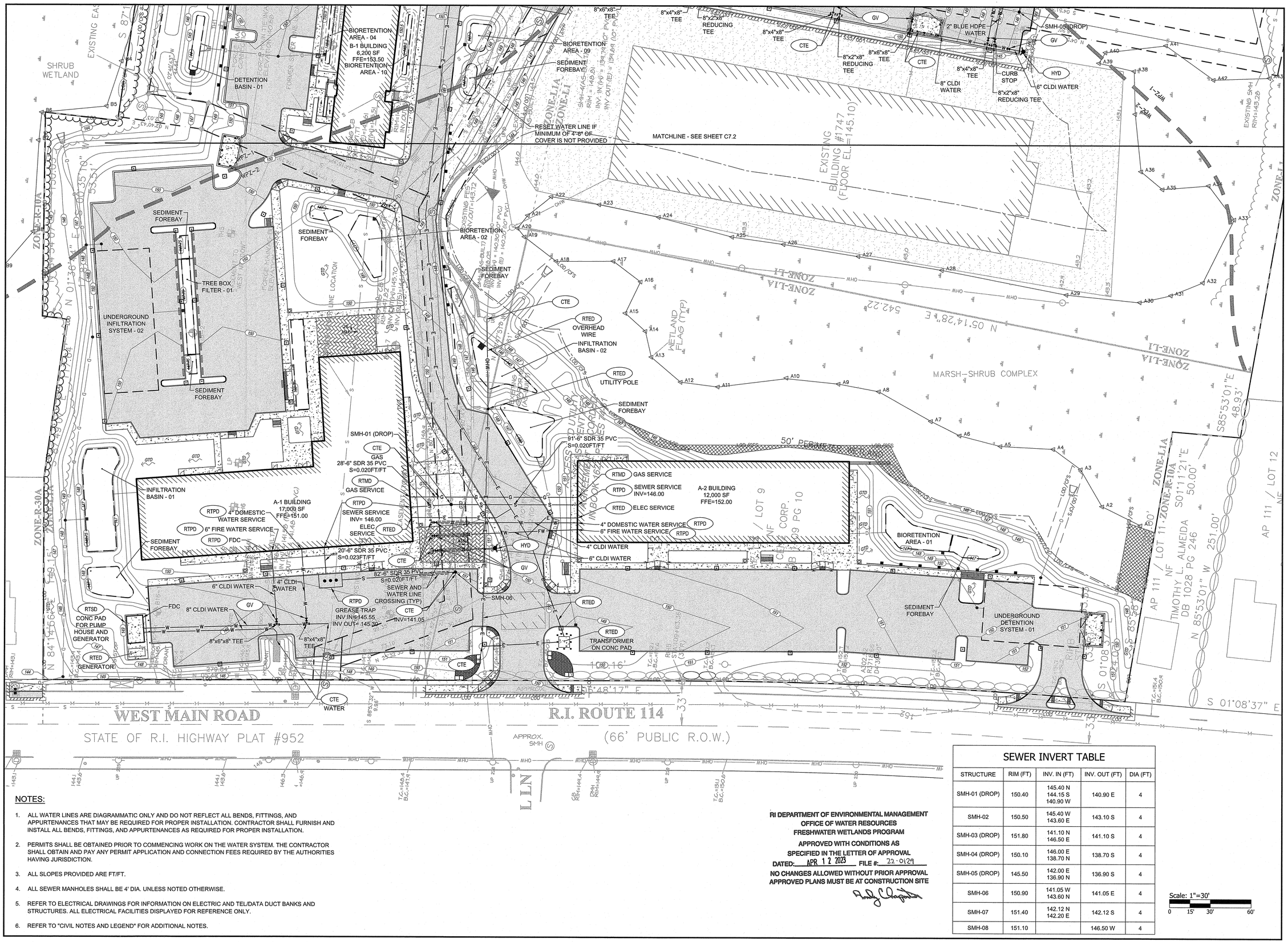
REVISIONS:		
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	1"=30'
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DRAINAGE PLAN 2

DRAWING NO.:
C6.2

SHEET NO. 15 OF 35



NOTES:

1. ALL WATER LINES ARE DIAGRAMMATIC ONLY AND DO NOT REFLECT ALL BENDS, FITTINGS, AND APPURTENANCES THAT MAY BE REQUIRED FOR PROPER INSTALLATION. CONTRACTOR SHALL FURNISH AND INSTALL ALL BENDS, FITTINGS, AND APPURTENANCES AS REQUIRED FOR PROPER INSTALLATION.
2. PERMITS SHALL BE OBTAINED PRIOR TO COMMENCING WORK ON THE WATER SYSTEM. THE CONTRACTOR SHALL OBTAIN AND PAY ANY PERMIT APPLICATION AND CONNECTION FEES REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.
3. ALL SLOPES PROVIDED ARE FT/FT.
4. ALL SEWER MANHOLES SHALL BE 4' DIA. UNLESS NOTED OTHERWISE.
5. REFER TO ELECTRICAL DRAWINGS FOR INFORMATION ON ELECTRIC AND TEL/DATA DUCT BANKS AND STRUCTURES. ALL ELECTRICAL FACILITIES DISPLAYED FOR REFERENCE ONLY.
6. REFER TO "CIVIL NOTES AND LEGEND" FOR ADDITIONAL NOTES.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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DATED: APR 12 2023 **FILE #:** 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

SEWER INVERT TABLE

STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)	DIA (FT)
SMH-01 (DROP)	150.40	145.40 N 144.15 S 140.90 W	140.90 E	4
SMH-02	150.50	145.40 W 143.60 E	143.10 S	4
SMH-03 (DROP)	151.80	141.10 N 146.50 E	141.10 S	4
SMH-04 (DROP)	150.10	146.00 E 138.70 N	138.70 S	4
SMH-05 (DROP)	145.50	142.00 E 136.90 N	136.90 S	4
SMH-06	150.90	141.05 W 143.60 N	141.05 E	4
SMH-07	151.40	142.12 N 142.20 E	142.12 S	4
SMH-08	151.10		146.50 W	4

Scale: 1"=30'
0 15' 30' 60'

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Environmental Management
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

REVISIONS:

1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS
4	03-24-2023	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	1"=30'
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
UTILITY PLAN 1

DRAWING NO.:
C7.1

SHEET NO. 16 OF 35

NOTES:

1. ALL WATER LINES ARE DIAGRAMMATIC ONLY AND DO NOT REFLECT ALL BENDS, FITTINGS, AND APPURTENANCES THAT MAY BE REQUIRED FOR PROPER INSTALLATION. CONTRACTOR SHALL FURNISH AND INSTALL ALL BENDS, FITTINGS, AND APPURTENANCES AS REQUIRED FOR PROPER INSTALLATION.
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RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
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SEWER INVERT TABLE

STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)	DIA (FT)
SMH-01 (DROP)	150.40	145.40 N 144.15 S 140.90 W	140.90 E	4
SMH-02	150.50	145.40 W 143.60 E	143.10 S	4
SMH-03 (DROP)	151.80	141.10 N 146.50 E	141.10 S	4
SMH-04 (DROP)	150.10	146.00 E 138.70 N	138.70 S	4
SMH-05 (DROP)	145.50	142.00 E 136.90 N	136.90 S	4
SMH-06	150.90	141.05 W 143.60 N	141.05 E	4
SMH-07	151.40	142.12 N 142.20 E	142.12 S	4
SMH-08	151.10		146.50 W	4

Scale: 1"=30'
0 15' 30' 60'

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0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

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RECEIVED
MAR 24 2023
Office of Water Resources

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No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

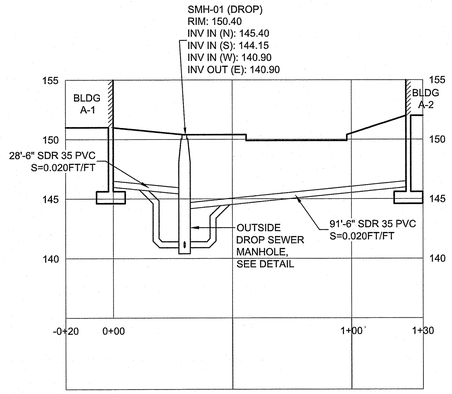
REVISIONS:

1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	1"=30'
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

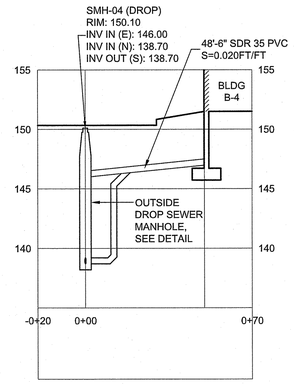
DRAWING TITLE:
UTILITY PLAN 2

DRAWING NO.:
C7.2
SHEET NO. 17 OF 35



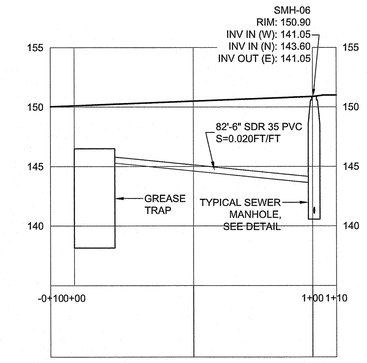
SEWER SERVICE A-1 TO A-2 PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.



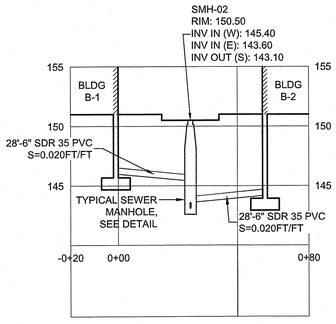
SEWER SERVICE B-4 PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.



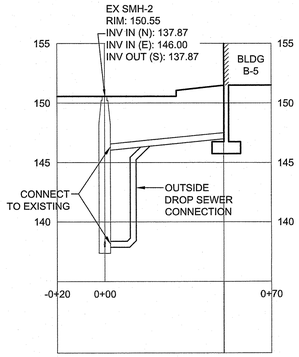
GREASE TRAP TO SMH-06 PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.



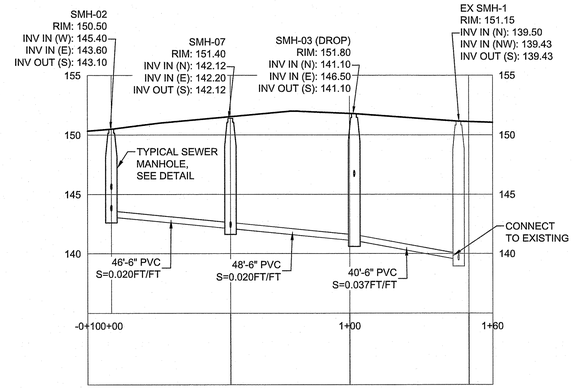
SEWER SERVICE B-1 TO B-2 PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.



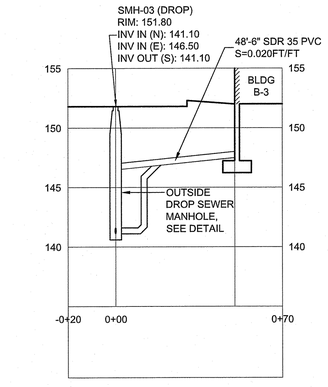
SEWER SERVICE B-5 PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.



SEWER 2 PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.



SEWER SERVICE B-3 PROFILE

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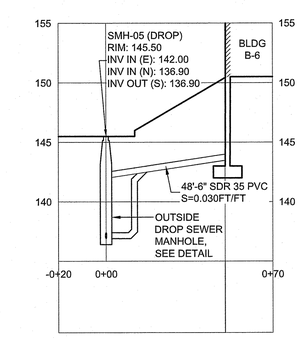
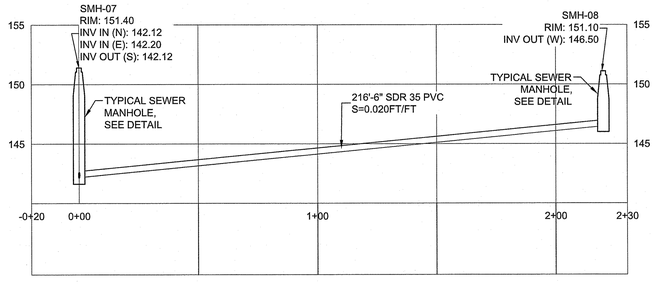
SCALE: 1"=6' VER.



SEWER SERVICE B-6 PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.



SEWER EXTENSION PROFILE

SCALE: 1"=30' HOR.
SCALE: 1"=6' VER.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH **CONDITIONS AS** SPECIFIED IN THE **LETTER OF APPROVAL**
DATED: APR 12 2023 **FILE #:** 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

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4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

REVISIONS:

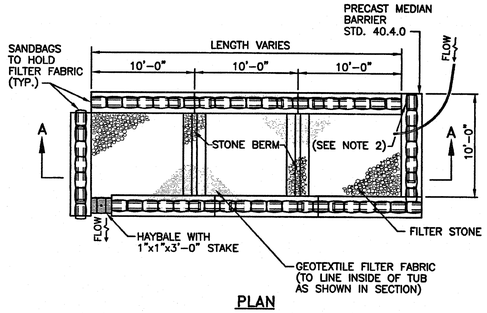
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	1"=30'
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

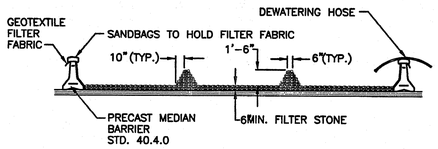
DRAWING TITLE:
DRAINAGE & SEWER PROFILES

DRAWING NO.:
C8.1

SHEET NO. 18 OF 35



PLAN



SECTION

NOTS:
1. SHALL BE IN ACCORDANCE WITH SECTION 208 OF THE R.I. STANDARD SPECIFICATIONS.
2. PROVIDE ADDITIONAL SAND BAGS AS REQUIRED TO FILL SPACE BETWEEN ADJACENT BARRIERS.

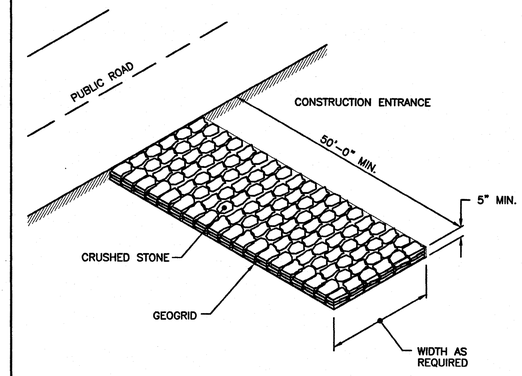
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

DEWATERING BASIN

JUNE 15, 1998 (ISSUE DATE)

R.I. STANDARD 9.7.0



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

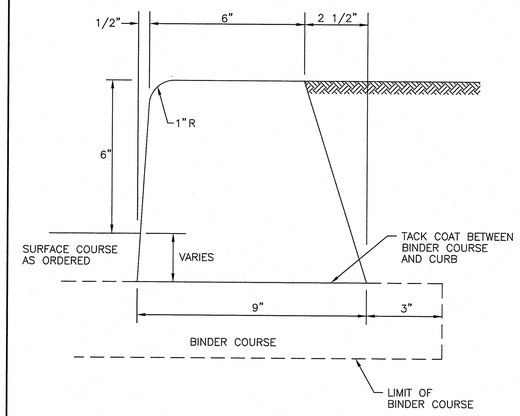
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

CONSTRUCTION ACCESS

JUNE 15, 1998 (ISSUE DATE)

R.I. STANDARD 9.9.0



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.

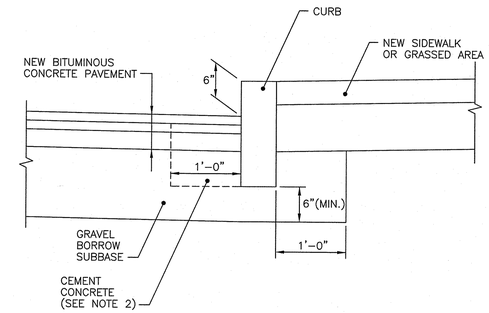
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

BITUMINOUS CONCRETE LIP CURB

JUNE 15, 1998 (ISSUE DATE)

R.I. STANDARD 7.5.0



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

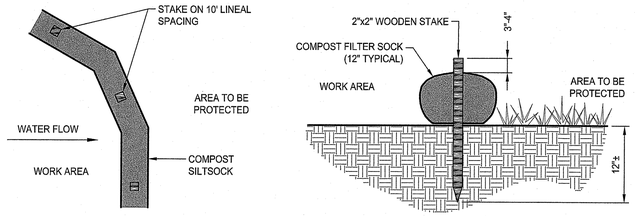
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

CURB SETTING DETAIL

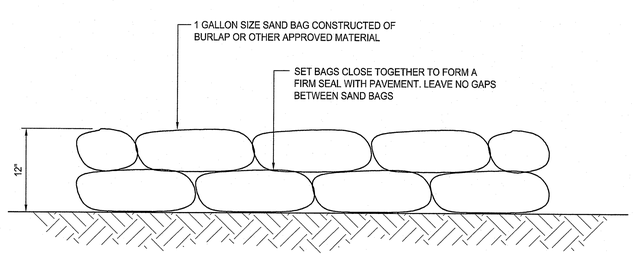
JUNE 15, 1998 (ISSUE DATE)

R.I. STANDARD 7.6.0

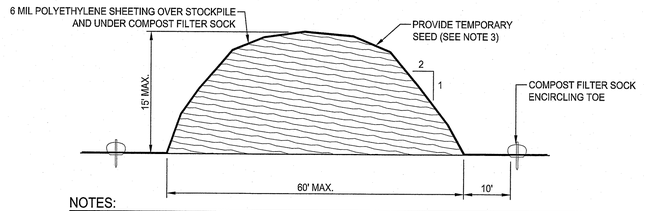


NOTES:
1. COMPOST/ SOIL/ ROCK/ SEED FILL TO MEET APPLICATION REQUIREMENTS.
2. COMPOST MATERIAL TO BE REMOVED OR DISPERSED ON SITE AS DETERMINED BY ENGINEER.
3. IF SOCK NETTING MUST BE JOINED, FIT BEGINNING OF NEW SOCK OVER END OF OLD SOCK, OVERLAPPING BY 2 FEET AND STACK OVERLAP. IF SOCK NETTING IS NOT JOINED, OVERLAP OLD SOCK WITH NEW ONE BY MINIMUM OF 2 FEET.

CFS — COMPOST FILTER SOCK DETAIL
NOT TO SCALE

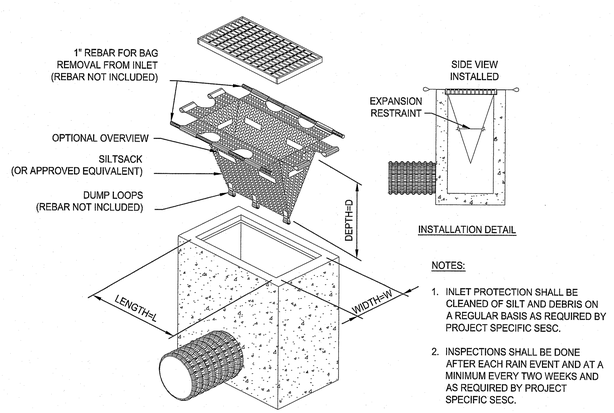


SB — SAND BAG EROSION CONTROL BARRIER
NOT TO SCALE



NOTES:
1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PREPARE A PLAN SHOWING THE PROPOSED LOCATION OF ALL STOCKPILE AREAS.
2. STOCKPILE AREA SHALL NOT EXCEED SPECIFIED DIMENSIONS WITHOUT APPROVAL FROM ENGINEER.
3. STOCKPILED ERODIBLE MATERIAL THAT WILL NOT BE USED FOR GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEED IMMEDIATELY FOLLOWING PLACEMENT.

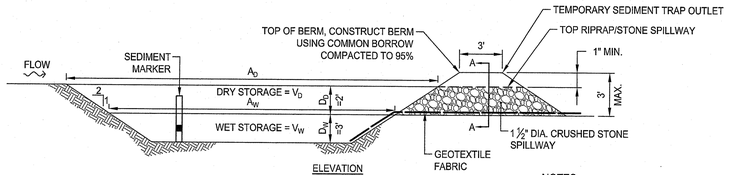
ERODIBLE MATERIAL STOCKPILE
NOT TO SCALE



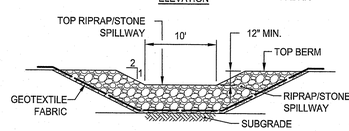
INSTALLATION DETAIL

NOTES:
1. INLET PROTECTION SHALL BE CLEANED OF SILT AND DEBRIS ON A REGULAR BASIS AS REQUIRED BY PROJECT SPECIFIC SESC.
2. INSPECTIONS SHALL BE DONE AFTER EACH RAIN EVENT AND AT A MINIMUM EVERY TWO WEEKS AND AS REQUIRED BY PROJECT SPECIFIC SESC.

TIP — TEMPORARY INLET PROTECTION
NOT TO SCALE



ELEVATION



SECTION A-A

	L_W (FT)	W_W (FT)	A_W (SF)	V_W (CF)	V_D (CF)	TOTAL STORAGE $V_W + V_D$ (CF)
TST-01	75	20	1,500	3825	3,396	7,221
TST-02	40	15	600	1530	1,436	2,966
TST-03	60	25	1,500	3825	3,356	7,181
TST-04	65	30	1,950	4973	4,296	9,269
TST-05	70	35	2,450	6247	5,336	11,584

TST — TEMPORARY SEDIMENT TRAP DETAIL
NOT TO SCALE

NOTES:
1. TEMPORARY SEDIMENT TRAPS SHALL BE CLEANED OR REMOVED EVERY 6 MONTHS.
2. RIPRAP SHALL MEET RIDOT STANDARD SPECIFICATION M.10.03.2.
3. STONE SHALL MEET RIDOT STANDARD SPECIFICATION M.01.09 TABLE I, COLUMN V (FILTER STONE).
4. SEDIMENT MARKER SHALL BE INSTALLED SUCH THAT TOP OF BLACK ENAMEL BAND IS 1.5' FROM THE BOTTOM OF THE SEDIMENT TRAP.
5. REFER TO SOIL EROSION AND SEDIMENT CONTROL PLANS FOR LIMITS OF A_D AND A_W.
6. GEOTEXTILE FABRIC SHALL BE MIRAFI 140N OR APPROVED EQUIVALENT.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 **FILE #:** 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1255

APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED 3-31-23
PROFESSIONAL ENGINEER (CIVIL)

REVISIONS:		
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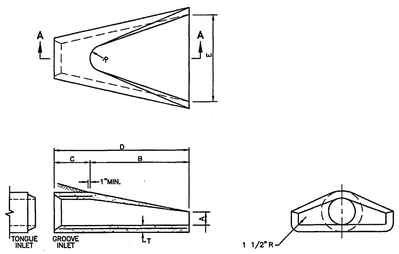
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	NOT TO SCALE
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 1

DRAWING NO.:
C9.1

SHEET NO. 19 OF 35



SECTION A–A

END ELEVATION

DIMENSIONS								REINFORCEMENT
DIA.	A	B	C	D	E	R	T	ONE LAYER REINFORCEMENT IN CENTER OF WALL MIN. AREA OF EACH WAY (SQ. IN./FT.)
1'–0"	4"	2'–0"	4'–0 7/8"	6'–0 7/8"	2'–0"	9"	2"	0.048
1'–3"	6"	2'–3"	3'–10"	6'–1"	2'–6"	11"	2 1/4"	0.054
1'–6"	9"	2'–3"	3'–10"	6'–1"	3'–0"	12"	2 1/2"	0.060
2'–0"	9 1/2"	3'–7 1/2"	2'–6"	6'–1 1/2"	4'–0"	1'–2"	3"	0.072
2'–6"	1'–0"	4'–6"	1'–7 3/4"	6'–1 3/4"	5'–0"	1'–3"	3 1/2"	0.084
3'–0"	1'–3"	5'–3"	2'–10 3/4"	6'–1 3/4"	6'–0"	1'–8"	4"	0.096
3'–6"	1'–9"	5'–3"	2'–11"	8'–2"	6'–6"	1'–10"	4 1/2"	0.108
4'–0"	2'–0"	6'–0"	2'–2"	8'–2"	7'–0"	1'–10"	5"	0.120
4'–6"	2'–3"	5'–5"	2'–11"	8'–4"	7'–6"	2'–0"	5 1/2"	0.132
5'–0"	2'–6"	5'–0"	3'–3"	8'–3"	8'–0"	2'–0"	6"	0.144

NOTE:
SHALL BE IN ACCORDANCE WITH SECTION 701 OF THE R.I. STANDARD SPECIFICATIONS.

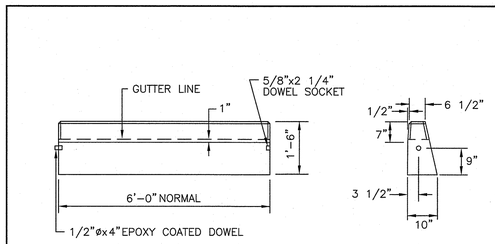
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

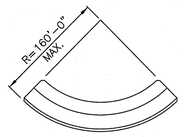
REVISIONS		
NO.	BY	DATE

PRECAST CONCRETE FLARED END SECTION

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 2.3.0





CIRCULAR CURB

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'–0".
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'–0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'–0"RADIUS.
5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

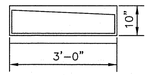
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

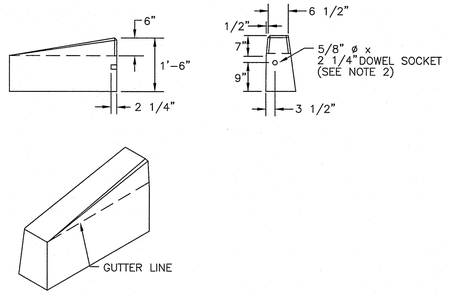
REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE CURB

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.1.0





NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION, FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" ø x 4" EPOXY COATED DOWEL.
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
5. LEFT AND RIGHT SECTIONS SHALL BE INSTALLED AS REQUIRED.

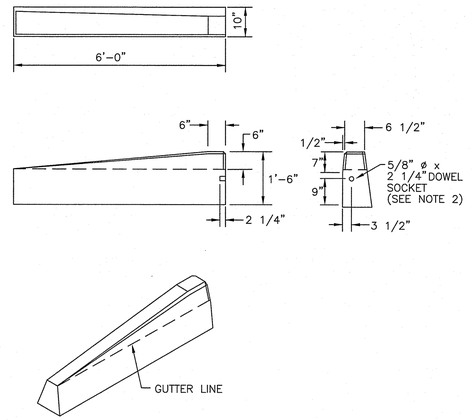
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05
2	MLP	06/01/10

3'–0" PRECAST CONCRETE TRANSITION CURB

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.1.1



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION. FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" ø x 4" EPOXY COATED DOWEL.
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

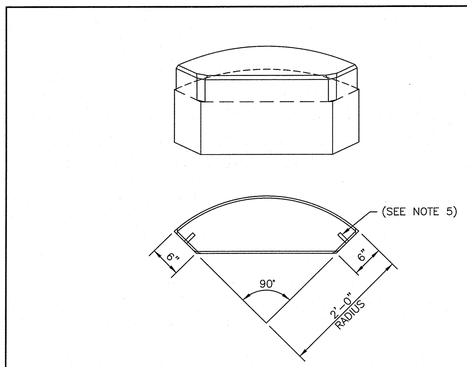
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

6'–0" PRECAST CONCRETE TRANSITION CURB

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.1.2



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
3. NO REINFORCEMENT REQUIRED.
4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
5. SEE STD. 7.1.0 FOR DOWEL SOCKET LOCATION.

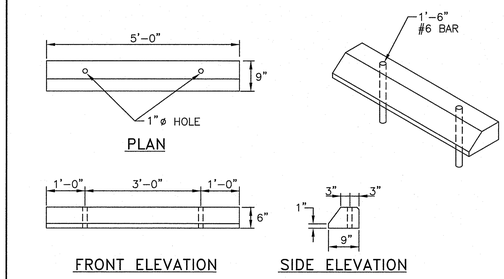
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE 2'–0" RADIUS CORNER

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.1.4



PLAN

FRONT ELEVATION

SIDE ELEVATION

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. ALL EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
3. ALL SURFACES TO HAVE A SPONGE FLOAT FINISH.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
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1	MLP	Mar 05

PRECAST CONCRETE CAR STOPS

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.2.4

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
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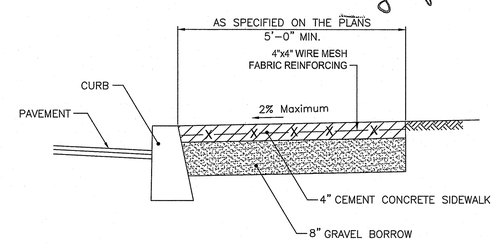


NOTES
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.
3. 4" x 4" WIRE MESH FABRIC REINFORCING SHALL BE IN ACCORDANCE TO RI STANDARD SPECIFICATIONS OF SECTION M.05.02.
4. PROVIDE MEDIUM BROOM FINISH.

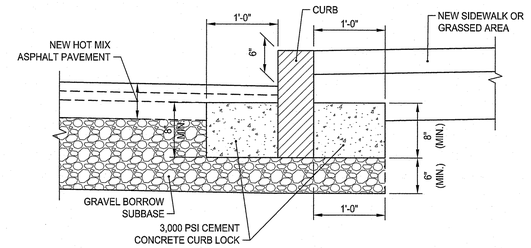
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	3/1/05
2	MLP	06/01/10

CEMENT CONCRETE SIDEWALK

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

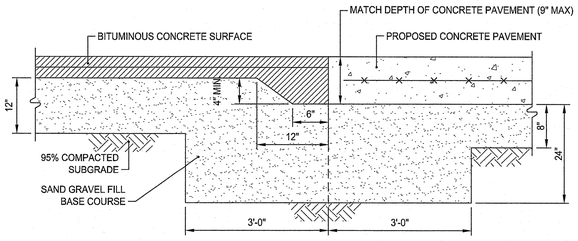
R.I. STANDARD 43.1.0M



NOTES:

1. SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
2. PROVIDE CEMENT CONCRETE CURB LOCK ON ALL CURBS

CURB SETTING DETAIL
NOT TO SCALE



ASPHALT TURNDOWN DETAIL
NOT TO SCALE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1255

APPLICANT:
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DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

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0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

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Mixed Use Development
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MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED 3-24-23
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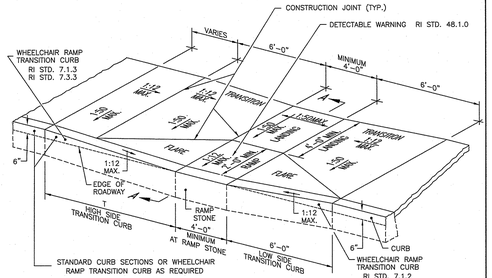
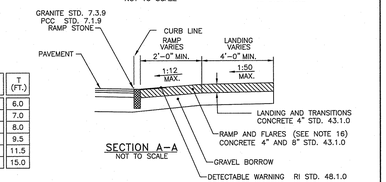
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 2

DRAWING NO.:
C9.2

SHEET NO. 20 OF 35





ROADWAY PROFILE GRADE	T (FT.)
0.00	6.0
0.01	7.0
0.02	8.0
0.03	9.5
0.04	11.5
0.05	15.0

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE RI STANDARD SPECIFICATIONS.
2. WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, THE WHEELCHAIR RAMP SHALL BE PLACED SUCH THAT THE OBSTRUCTION FALLS OUTSIDE OF THE RAMP.
3. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
4. DRAINAGE FACILITIES ARE TO BE LOCATED UP–GRADE OF ALL WHEELCHAIR RAMPS.
5. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
6. IN NO INSTANCE SHALL THE SIDEWALK CROSS SLOPE EXCEED 1:50 EXCEPT WITHIN THE RAMP AREA.
7. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'–0" SHALL BE MAINTAINED.
8. THE WHEELCHAIR RAMP SLOPE AND SIDE SLOPES (TRANSITIONS), MUST NOT BE STEEPER THAN 1:12. HOWEVER, THESE SLOPES MAY BE FLATTER THAN 1:12 WHEN WARRANTED BY SURROUNDING CONDITIONS.
9. WHERE THE ROAD PROFILE EXCEEDS 5% THE HIGH SIDE TRANSITION LENGTH (T) SHALL BE EIGHTEEN FEET (18'–0").
10. IN NO CASE, WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED BEHIND THE STOP LINE.
11. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
12. THE WHEELCHAIR RAMP SHALL BE CENTERED RADIALLY, OPPOSITE THE RADIUS POINT WHEN POSSIBLE.
13. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'–0" (GREATER LENGTHS PREFERRED).
14. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
15. DETECTABLE WARNINGS TO BE PAID FOR UNDER SECTION 942 OF THE RI STANDARD SPECIFICATIONS
16. 8" CONCRETE DEPTH FOR RADIUS WHEELCHAIR RAMPS ONLY. USE 4" DEPTH FOR TANGENT (MID–BLOCK) LOCATIONS.

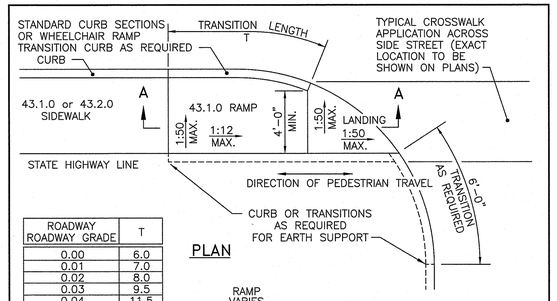
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Oct. 2005
2	MLP	Jun 2008
3	MLP	Sep 2012

WHEELCHAIR RAMP

Jonathan K. Cedrone, CHIEF ENGINEER TRANSPORTATION; Edward M. Pitts Jr., CHIEF DESIGN ENGINEER TRANSPORTATION; JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 43.3.0



ROADWAY ROADWAY GRADE	T
0.00	6.0
0.01	7.0
0.02	8.0
0.03	9.5
0.04	11.5
0.05	15.0

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. THIS DETAIL IS TO BE USED ONLY WHEN STATE RIGHT–OF–WAY IS LIMITED TO BACK OF SIDEWALK, AND SIDEWALK IS NARROW WITH NO PEDESTRIAN TRAFFIC FROM SIDE STREET.
3. WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, IF POSSIBLE, THE OBSTRUCTION SHALL BE PLACED SUCH THAT IT FALLS OUTSIDE OF THE RAMP.
4. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
5. DRAINAGE FACILITIES ARE TO BE LOCATED UP–GRADE OF ALL WHEELCHAIR RAMPS.
6. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
7. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
8. WHERE THE ROAD PROFILE EXCEEDS 5% THE TRANSITION LENGTH (T) SHALL BE EIGHTEEN FEET (18'–0").
9. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
10. NO CASE, WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED BEHIND THE STOP LINE.
11. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'–0" SHALL BE MAINTAINED.

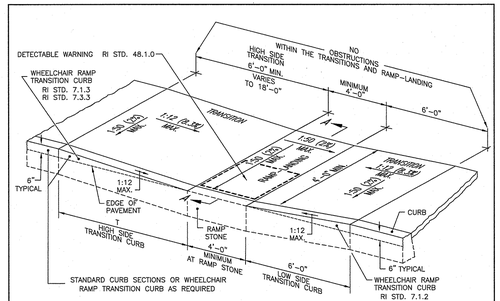
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

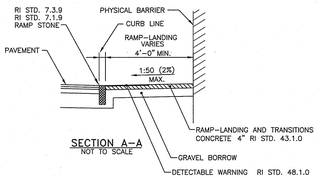
REVISIONS		
NO.	BY	DATE
1	MLP	Dec 2005
2	MLP	Sep 2012

WHEELCHAIR RAMP FOR LIMITED RIGHT–OF–WAY AREAS

Jonathan K. Cedrone, CHIEF ENGINEER TRANSPORTATION; Edward M. Pitts Jr., CHIEF DESIGN ENGINEER TRANSPORTATION; JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 43.3.1





ROADWAY PROFILE GRADE	T (FT.)
0.00	6.0
0.01	7.0
0.02	8.0
0.03	9.5
0.04	11.5
0.05	15.0
> 0.05	18.0

NOTES:
1. THIS DETAIL MAY BE USED WHEN A PHYSICAL BARRIER IS PRESENT AND THERE IS INSUFFICIENT ROOM TO PROPERLY CONSTRUCT AN ADA ACCESSIBLE RAMP AND LANDING; A TECHNICAL INFEASIBILITY FINDING IS REQUIRED.
2. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE RI STANDARD SPECIFICATIONS.
3. THE RAMP–LANDING AND TRANSITIONS SHALL BE FREE OF OBSTRUCTIONS.
4. LOCATION OF THE RAMP–LANDING IS AS SHOWN ON CONTRACT DRAWINGS.
5. AN UNOBSTRUCTED PEDESTRIAN ACCESS ROUTE (PATH OF TRAVEL) WITH A MINIMUM WIDTH OF 4'–0" SHALL BE MAINTAINED.
6. THE ENTRANCE OF THE RAMP–LANDING SHALL BE FLUSH WITH THE PAVEMENT.
7. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'–0" (GREATER LENGTHS PREFERRED).
8. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
9. DETECTABLE WARNINGS TO BE PAID FOR UNDER SECTION 942 OF THE RI STANDARD SPECIFICATIONS

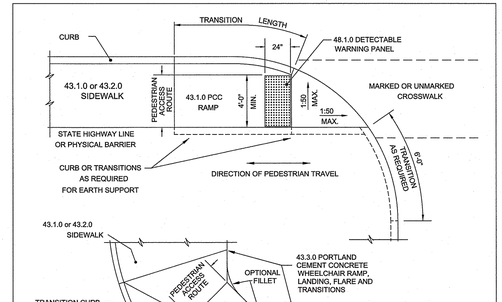
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

RAMP–LANDING FOR NARROW SIDEWALK

Victoria Howland, CHIEF ENGINEER TRANSPORTATION; Vincent Vecchia, CHIEF DESIGN ENGINEER TRANSPORTATION; MARCH 31, 2015 ISSUE DATE

R.I. STANDARD 43.3.2



NOTES
1. DETECTABLE WARNING PANEL SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE RHODE ISLAND STANDARD SPECIFICATIONS; PANEL TO MATCH RAMP WIDTH.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

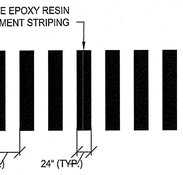
REVISIONS		
NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Sep 2012

DETECTABLE WARNING PANEL PLACEMENT

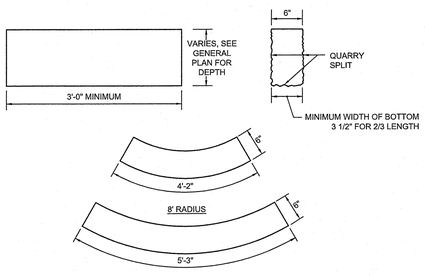
Jonathan K. Cedrone, CHIEF ENGINEER TRANSPORTATION; Edward M. Pitts Jr., CHIEF DESIGN ENGINEER TRANSPORTATION; JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 48.1.0

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

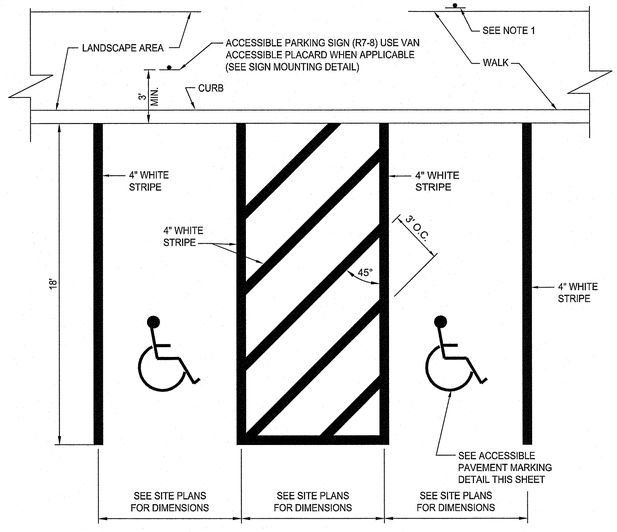


CW TYPICAL CROSSWALK DETAIL
NOT TO SCALE



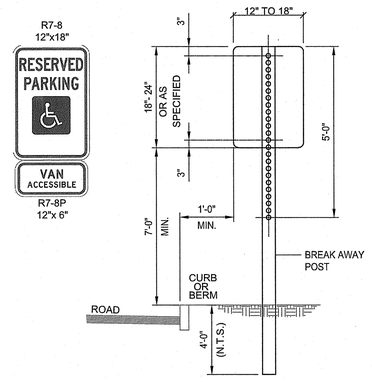
NOTES:
1. MAXIMUM LENGTHS USING 8' & 10' RADII, WITH 90° ANGLE, ARE 4'-2" AND 5'-3" RESPECTIVELY.
2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
3. TOP SURFACE TO BE DRESSED BY SAW.
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 100' OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 100' RADIUS.
5. GRANITE CURB SHALL CONFORM TO RIDOT STD. SPECIFICATION MATERIALS.
6. 3000 PSI CONCRETE CURB LOCK BACKFILL IS REQUIRED FOR ALL GRANITE CURB.
7. VERTICAL GRANITE CURB DEPTHS VARY, REFER TO GENERAL PLAN FOR CURB DEPTH. IF OTHERWISE NOT SPECIFIED USE 30" VERTICAL GRANITE CURB.

VGC VERTICAL GRANITE CURB
NOT TO SCALE



NOTE:
1. WHERE STALLS ABUT SIDEWALK, PARKING SIGNS SHOULD BE PLACED AT BACK EDGE OF SIDEWALK.
2. ALL PAVEMENT MARKINGS TO BE EPOXY RESIN.

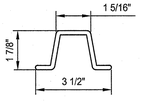
ACCESSIBLE PARKING STALLS @ 90°
NOT TO SCALE



NOTE:
5/16" x 2-1/2" GALVANIZED BOLTS & WASHERS

STEEL SPECIFICATION - A.S.T.M. DESIGNATION A499-64 ZINC (HOT GALVANIZED) SPECIFIED BY- A.S.T.M. A 123.

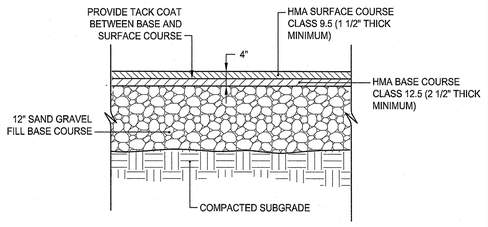
WT./FT.	3.00	#
Mom. Ix-x	0.484in	4
Sec Mod x-x	0.569in	3
Mon Iy-y	0.886in	4
Sec Mod y-y	0.506in	3



PARKING SIGNS SHALL BE SET AT AN ANGLE OF NOT LESS THAN 30° NOR MORE THAN 45° IN A LINE PARALLEL TO THE FLOW OF TRAFFIC.

NOTES:
1. ALL LAG SCREWS, BOLTS AND WASHERS SHALL BE GALVANIZED 5/16"x2 1/2" LONG UNLESS OTHERWISE NOTED.
2. WASHERS SHALL BE 0.07" THICK.
3. ALL SIGN COLORS, RADII AND BORDERS AS SPECIFIED IN "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
4. SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE STANDARD SPECIFICATIONS.
5. PARKING SIGNS SHALL BE SET AT AN ANGLE OF NOT LESS THAN 30° NOT MORE THAN 45° WITH A LINE PARALLEL TO FLOW OF TRAFFIC, 1'-6" (1'-0" MIN.) FROM THE EDGE OF CURB FACE.
6. ALL ACCESSIBLE PARKING AND SIGNAGE SHALL BE IN CONFORMANCE WITH THE RULES & REGULATIONS AS SPECIFIED BY THE AMERICAN DISABILITIES ACT (ADA).
7. SIGN(S) SHALL BE LOCATED SO THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.
8. FOR ACCESSIBLE VAN SPACE USE SIGN AS DETAILED.
9. FOR ACCESSIBLE SPACE FOR AUTOMOBILES USE ONLY ACCESSIBLE PARKING SIGN.

ACCESSIBLE SIGN MOUNTING
NOT TO SCALE



NOTE:
1. SUBMIT JOB MIX FORMULAS TO ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.

HMA HOT MIX ASPHALT PAVEMENT
NOT TO SCALE

LEGEND	DESIGNATION	SIZE
STOP	R1-1	(30" x 30")
	R3-2	(30" x 30")
ONLY	R3-5R	(12" x 18")
RESERVED PARKING	R7-8	(12" x 18")
VAN ACCESSIBLE	R7-8P	(12" x 6")
	GENERAL DIRECTIONAL SIGN, REFER TO PLANS FOR TEXT	(24" x 18") OR AS REQUIRED

NOTE:
1. SIGNS SHALL BE CONSTRUCTED OF TYPE III REFLECTORIZED SHEETING AND IN ACCORDANCE WITH MUTCD REQUIREMENTS, LATEST REVISION.
2. THE CONTRACTOR SHALL SUBMIT SAMPLE SIGNS TO THE OWNER FOR APPROVAL PRIOR TO FURNISHING.
3. LETTERS, COLOR, AND FONT FOR NON-STANDARD SIGNS SHALL BE SELECTED BY THE OWNER.
4. ALL SIGN MOUNTING SHALL CONFORM TO R.I. STD. DETAIL 24.2.0 EXCEPT R7-8 AND R7-8P. R7-8 AND R7-8P SHALL CONFORM TO ACCESSIBLE SIGN MOUNTING DETAIL.

SIGN SCHEDULE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755

APPLICANT:
MESOLELLA DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management MAR 24 2023 Office of Water Resources

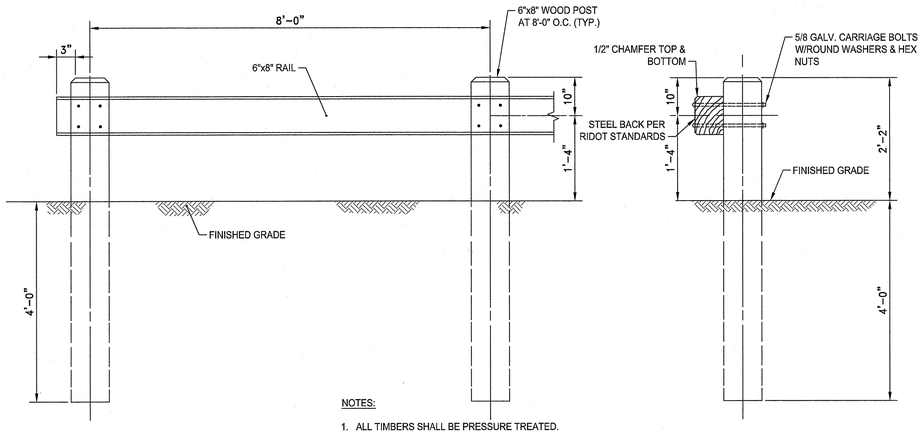
VICTORIA HOWLAND No. 12076 REGISTERED 3RD FLOOR PROFESSIONAL ENGINEER (CIVIL)

REVISIONS:		
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	NOT TO SCALE
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 3

DRAWING NO.:
C9.3
SHEET NO. 21 OF 35

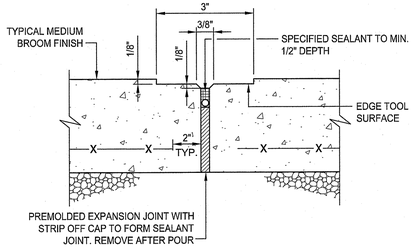


NOTES:

1. ALL TIMBERS SHALL BE PRESSURE TREATED.
2. THE TIMBER GUARD RAIL SHALL HAVE A STEEL BACK THAT IS CRASH RATED PER RIDOT STANDARDS.

TIMBER GUARD RAIL

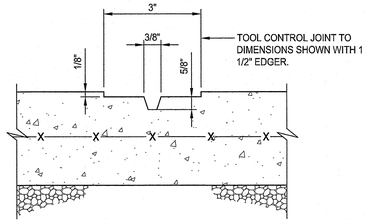
NOT TO SCALE



EXPANSION JOINT AT 20' O.C. (TYP)

NOTES:

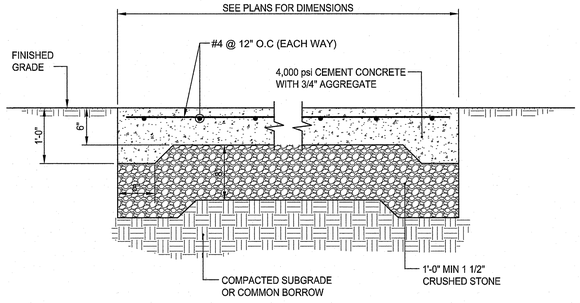
1. EXPANSION JOINTS (E.J.) 20 FEET O.C. UNLESS OTHERWISE NOTED.
2. CONTROL JOINTS (C.J.) 5 FEET O.C. UNLESS OTHERWISE NOTED.
3. WHERE EXISTING AND NEW CONCRETE SIDEWALKS MEET, SAWCUT EXISTING WALK AND INSTALL EXPANSION JOINT AND DOWELS AS SHOWN. DRILL EXISTING CONCRETE WALK EDGE TO RECEIVE STEEL DOWELS AT EXPANSION JOINT.
4. REFER TO LANDSCAPE PLANS FOR LOCATIONS.



CONTROL JOINT AT 5' O.C. (TYP)

EXPANSION AND CONTROL JOINTS FOR SIDEWALK PAVING

NOT TO SCALE

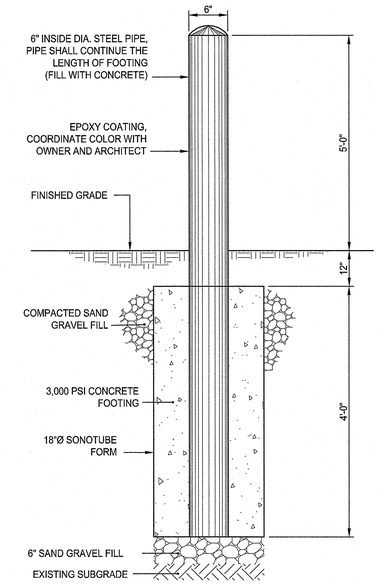


NOTES:

1. FOR PAD LOCATIONS SEE GENERAL PLAN.
2. REINFORCING TO BE #4 GRADE 60 BARS AND SHALL CONFORM TO ASTM STANDARD A-615 OF THE LATEST DATA. REINFORCING RODS TO BE LOCATED IN THE CENTER OF THE SLAB, WITH A MINIMUM OF 2" CLEARANCE FROM FACE OF CONCRETE.
3. CEMENT CONCRETE SHALL CONFORM TO RIDOT STANDARD SPECIFICATION SECTION 501.
4. CRUSHED STONE SHALL CONFORM TO SUB SECTION M.01.04 OF THE RIDOT STANDARD SPECIFICATION.

CP CEMENT CONCRETE DUMPSTER PAD

NOT TO SCALE

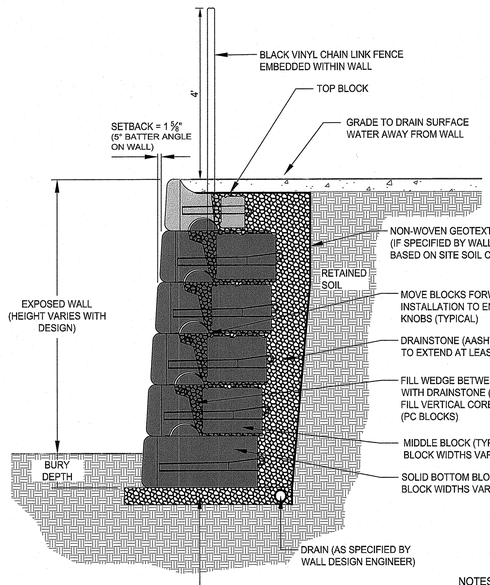


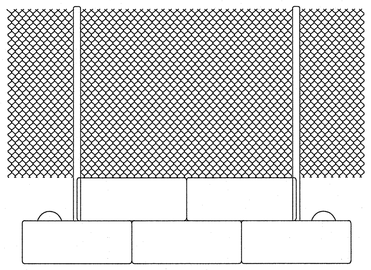
BOL BOLLARD DETAIL

NOT TO SCALE

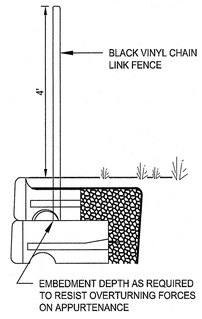
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Fence Connection

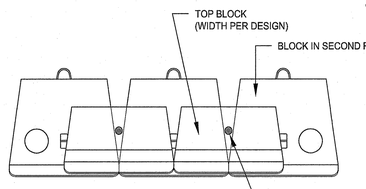




Front View



Side View



Top View

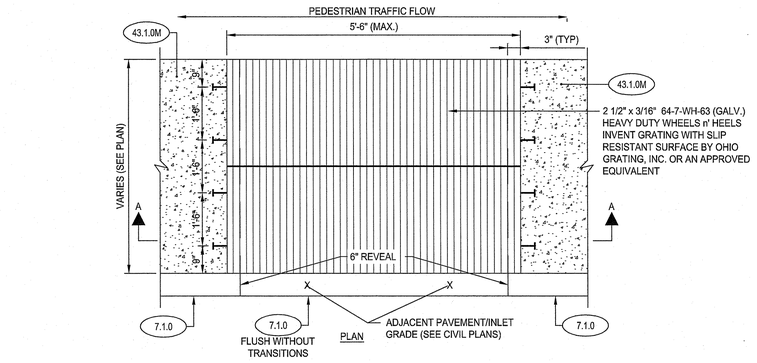
FENCE POST CONNECTION
CORE THROUGH TOP BLOCK AND GROUT POSTS IN V-SHAPED OPENING BETWEEN LOWER BLOCKS
- SPACING IN MULTIPLES OF 4⅛ 1/8"
- WEIGHT OF A 2 ADJACENT BLOCKS ON SECOND LEVEL DOWN AND 3 TOP ROW BLOCKS AVAILABLE TO RESIST OVERTURNING FORCES

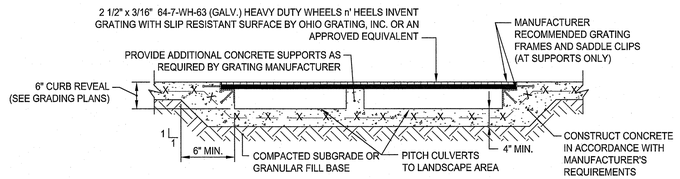
NOTES:

1. SEGMENTAL BLOCK RETAINING WALL SHALL BE REDI ROCK® OR APPROVED EQUIVALENT.
2. CONTRACTOR SHALL PROVIDE SUBMITTAL WITH WALL SHOP DRAWING AND DESIGN CALCULATIONS PREPARED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF RHODE ISLAND FOR REVIEW AND APPROVAL. WALL DESIGN SHALL INCLUDE FORCES IMPACTED BY THE FENCE AND SIDEWALK IN ACCORDANCE WITH LOCAL AND STATE BUILDING CODES.

SEGMENTAL BLOCK RETAINING WALL

NOT TO SCALE





SECTION A-A

NOTES:

1. PROVIDE SUBMITTAL DEPICTING GRATE, CONCRETE WALK, SUPPORTS AND OTHER INFORMATION FOR REVIEW BY OWNER'S REPRESENTATIVE.
2. GRATING SHALL BE IN COMPLIANCE WITH ADA ACCESSIBILITY GUIDELINES.

SIDEWALK GRATE

NOT TO SCALE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755

APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development

AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED 3/24/23
PROFESSIONAL ENGINEER (CIVIL)

REVISIONS:

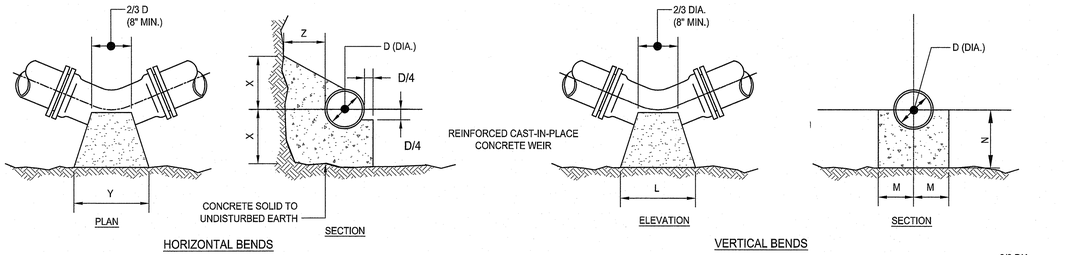
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	NOT TO SCALE
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 4

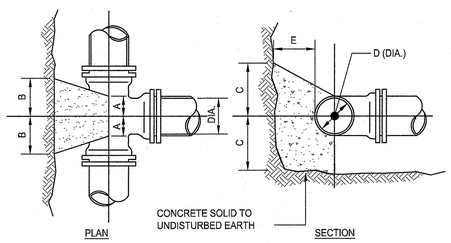
DRAWING NO.:
C9.4

SHEET NO. 22 OF 35

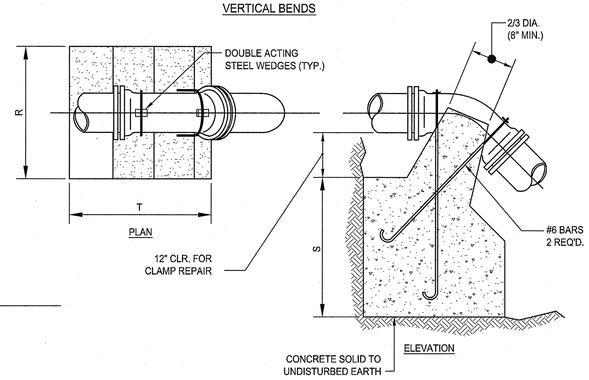


HORIZONTAL BENDS

VERTICAL BENDS



TEES



CONC. ANCHORAGE

NOTES:

1. CONCRETE THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH. IN AREAS WHERE BEARINGS SOILS HAVE BEEN DISTURBED, RESTRAINED JOINTS SHALL BE USED.
2. ALL FORCE MAIN BENDS, TEES, MAIN TAPS, AND END CAPS SHALL REQUIRE A CONCRETE THRUST BLOCK.

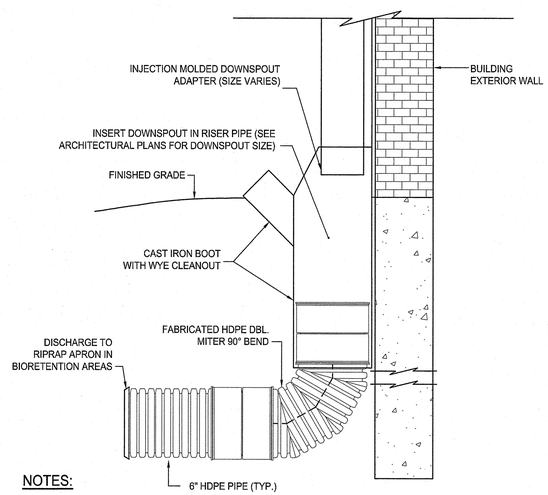
TEES		PIPE SIZE-D (DIA.)				
		6"	8"	12"	16"	20"
	A	8"	10"	1'-0"	1'-3"	1'-6"
	B	8"	10"	1'-2"	1'-4"	1'-6"
	C	10"	1'-0"	1'-3"	1'-6"	1'-8"
	E	8"	10"	1'-2"	1'-6"	1'-10"

HORTIZONTAL BENDS		PIPE SIZE-D (DIA.)				
BEND		6"	8"	12"	16"	20"
1/8	X	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"
	Y	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"
	Z	8"	10"	1'-2"	1'-4"	1'-6"
1/16	X	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"
	Y	1'-0"	1'-4"	1'-6"	1'-9"	2'-6"
	Z	8"	10"	1'-2"	1'-4"	1'-6"
1/32	X	1'-0"	1'-0"	1'-0"	1'-2"	1'-4"
	Y	1'-0"	1'-0"	1'-2"	1'-4"	1'-6"
	Z	8"	10"	1'-2"	1'-4"	1'-6"

VERTICAL BENDS		PIPE SIZE-D (DIA.)				
BEND		6"	8"	12"	16"	20"
1/8	L	1'-3"	1'-8"	2'-6"	3'-6"	4'-8"
	M	7"	8"	11"	1'-4"	1'-6"
	N	7"	8"	11"	1'-4"	1'-6"
1/16	L	9"	1'-0"	1'-9"	2'-6"	3'-0"
	M	7"	7"	10"	1'-0"	1'-2"
	N	7"	7"	8"	10"	1'-0"
1/32	L	6"	8"	1'-0"	1'-4"	1'-9"
	M	7"	7"	10"	1'-0"	1'-2"
	N	7"	7"	8"	10"	1'-0"

ANCHORAGES		PIPE SIZE-D (DIA.)				
BEND		6"	8"	12"	16"	20"
1/8	R	2'-6"	3'-0"	4'-6"	5'-4"	6'-0"
	S	2'-6"	2'-9"	3'-6"	2'-6"	5'-6"
	T	3'-0"	4'-0"	4'-9"	7'-0"	9'-6"
1/16	R	2'-0"	2'-8"	4'-0"	4'-6"	5'-0"
	S	1'-9"	2'-3"	2'-6"	3'-2"	3'-8"
	T	2'-6"	3'-4"	4'-0"	6'-0"	8'-6"
1/32	R	1'-6"	2'-0"	3'-0"	3'-8"	4'-3"
	S	1'-3"	1'-9"	2'-0"	2'-4"	2'-6"
	T	2'-0"	2'-6"	3'-0"	4'-6"	5'-9"

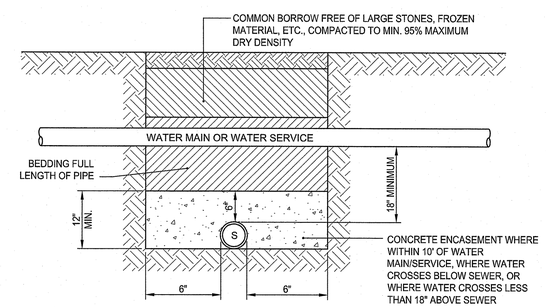
CONCRETE THRUST BLOCKS
NOT TO SCALE



NOTES:

1. COORDINATE WITH OWNER AND ARCHITECT ON STYLE AND TYPE OF CAST IRON BOOT. CAST IRON BOOT SHOWN HERE FOR GENERAL COORDINATION PURPOSES ONLY.
2. CONTRACTOR SHALL INSTALL CAST IRON BOOT IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
3. DOWNSPOUT ADAPTORS SHALL BE INSTALLED AT ALL DOWNSPOUTS ROUTING TO UNDERGROUND DRAINAGE SYSTEMS.

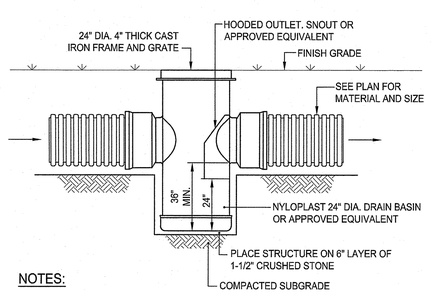
DOWNSPOUT ADAPTOR TO HEADER
NOT TO SCALE



NOTES:

1. THE VERTICAL SEPARATION BETWEEN THE WATER MAIN/SERVICE AND THE PROPOSED SEWER MAIN/SERVICE SHALL BE A MINIMUM OF 18 INCHES.
2. THE HORIZONTAL SEPARATION BETWEEN THE WATER MAIN AND THE PROPOSED UTILITY SHALL BE A MINIMUM OF 10 FEET.
3. IF 1 OR 2 CANNOT BE MAINTAINED THE PROPOSED SEWER MAIN/SERVICE SHALL BE INSTALLED WITHIN A CARRIER PIPE OR ENCASED IN CONCRETE.
4. IF SEWER MAIN AND SERVICES CROSS OVER THE TOP OF WATER MAIN, INSTALL SEWER MAIN/SERVICE WITHIN A CARRIER PIPE. MINIMUM VERTICAL SEPARATION OF 18" SHALL BE PROVIDED.

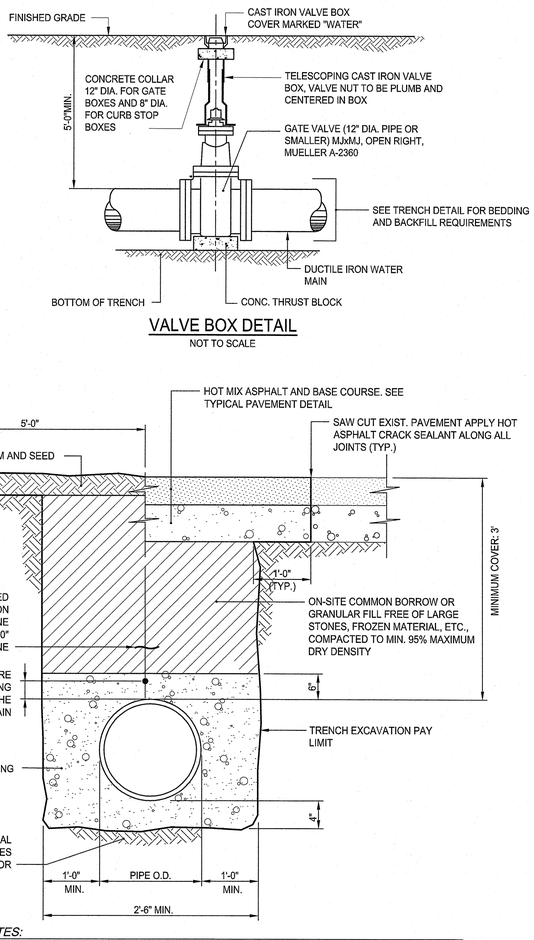
SEWER AND WATER LINE CROSSINGS
NOT TO SCALE



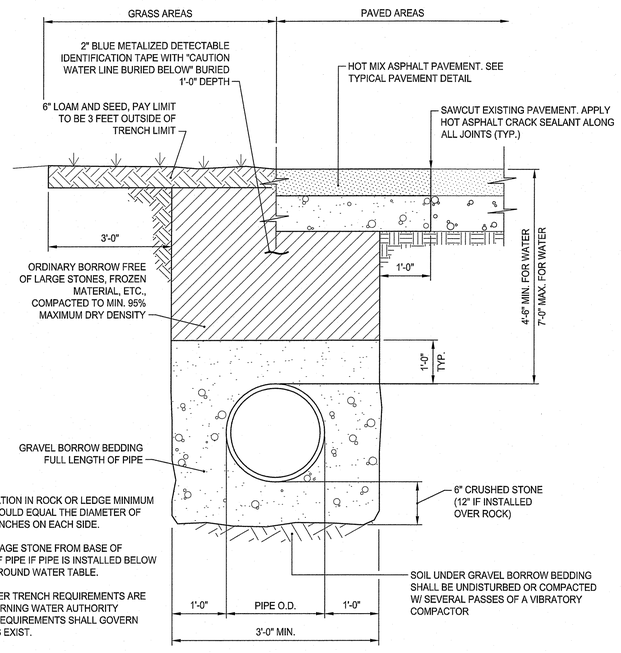
NOTES:

1. AREA DRAIN SHALL BE CUSTOM MANUFACTURED FOR THE PROJECT WITH THE INLETS AND OUTLETS REQUIRED.
2. STRUCTURES SHALL BE CONSTRUCTED TO WITHSTAND LOADS IMPOSED BY CONSTRUCTION VEHICLES.
3. PROVIDE HOODED OUTLET ON ALL AREA DRAINS.
4. FRAME AND GRATE SHALL BE CONSTRUCTED OF DUCTILE IRON AND CONFORM TO ASTM A536 GRADE 70-50-05. PROVIDE NYLOPLAST 3299CGRF30BIC OR APPROVED EQUIVALENT.

AREA DRAIN DETAIL
NOT TO SCALE



VALVE BOX DETAIL
NOT TO SCALE

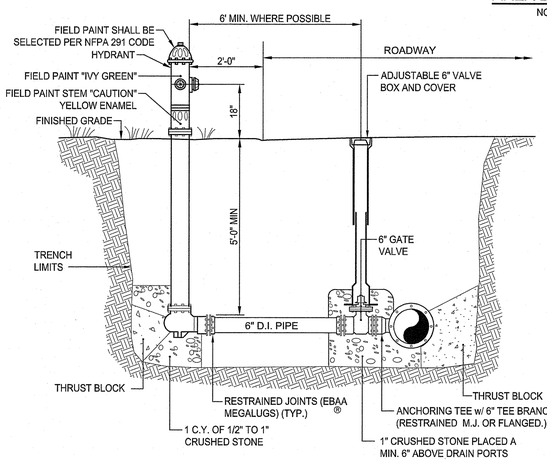


NOTES:

1. FOR PIPE INSTALLATION IN ROCK OR LEDGE MINIMUM TRENCH WIDTH SHOULD EQUAL THE DIAMETER OF THE PIPE PLUS 18 INCHES ON EACH SIDE.
2. PLACE 6" OF DRAINAGE STONE FROM BASE OF TRENCH TO TOP OF PIPE IF PIPE IS INSTALLED BELOW SEASONAL HIGH GROUND WATER TABLE.
3. THE MINIMUM WATER TRENCH REQUIREMENTS ARE SHOWN. THE GOVERNING WATER AUTHORITY STANDARDS AND REQUIREMENTS SHALL GOVERN WHERE CONFLICTS EXIST.

WATER MAIN TRENCH DETAIL
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES MAY BE MADE WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



HYD

HYDRANT DETAIL
NOT TO SCALE

NOTES:

1. WHERE THE DISTANCE BETWEEN THE SAWCUT AND EDGE OF PAVEMENT IS 3' OR LESS, THE CONTRACTOR SHALL REPLACE THE PAVEMENT FROM THE TRENCH EDGE TO THE EXISTING EDGE OF PAVEMENT.
2. WHERE A SLEEVE IS INSTALLED, A TRACING WIRE SHALL BE INSTALLED OUTSIDE OF SLEEVE.
3. GAS TRENCH SHALL BE COORDINATED WITH REQUIREMENTS OF THE GAS COMPANY PRIOR TO COMMENCING WORK.

GAS TRENCH DETAIL
NOT TO SCALE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100
10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
508-543-1755

APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON
ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

RECEIVED
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED 3-21-23
PROFESSIONAL ENGINEER
(CIVIL)

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CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

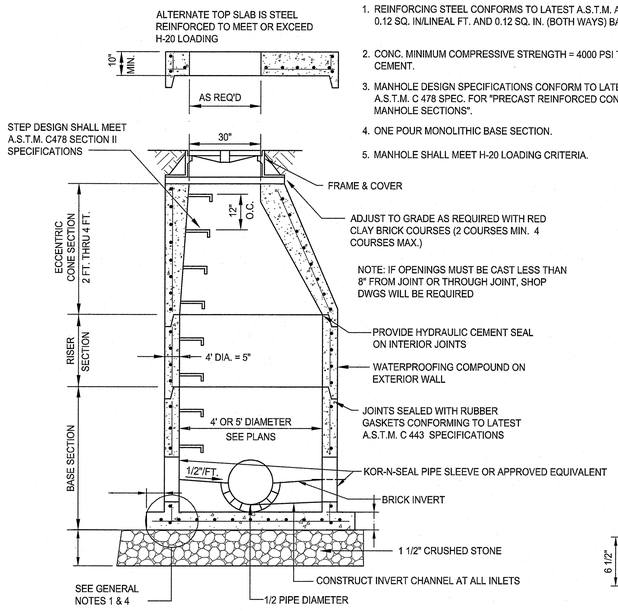
DRAWING TITLE:
DETAILS 5

DRAWING NO.:
C9.5

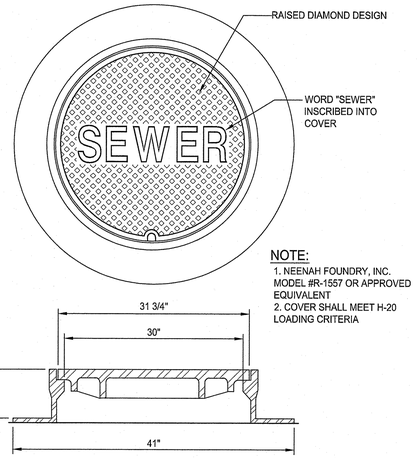
SHEET NO. 23 OF 35

GENERAL NOTES:

1. REINFORCING STEEL CONFORMS TO LATEST A.S.T.M. A 185 SPEC. 0.12 SQ. IN/LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM
2. CONC. MINIMUM COMPRESSIVE STRENGTH = 4000 PSI TYPE III CEMENT.
3. MANHOLE DESIGN SPECIFICATIONS CONFORM TO LATEST A.S.T.M. C 478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. ONE POUR MONOLITHIC BASE SECTION.
5. MANHOLE SHALL MEET H-20 LOADING CRITERIA.

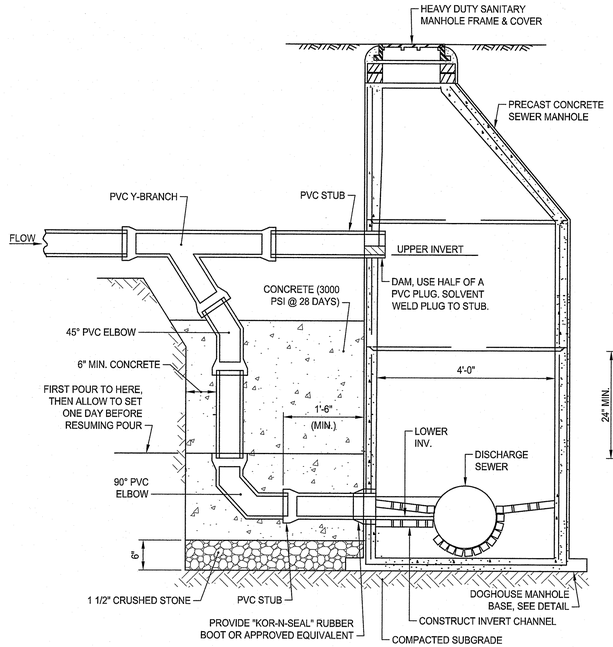


TYPICAL SEWER MANHOLE DETAIL
NOT TO SCALE



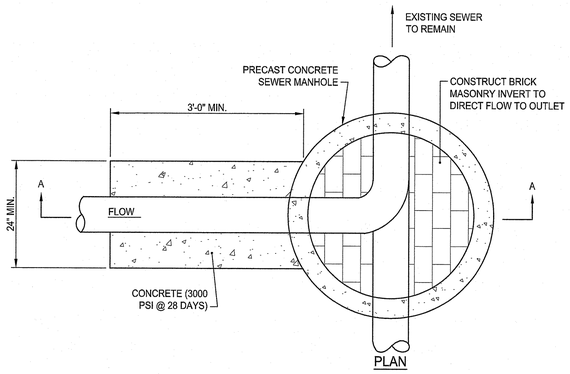
NOTE:
1. NEENAH FOUNDRY, INC. MODEL #R-1557 OR APPROVED EQUIVALENT
2. COVER SHALL MEET H-20 LOADING CRITERIA

SANITARY MANHOLE FRAME & COVER
NOT TO SCALE

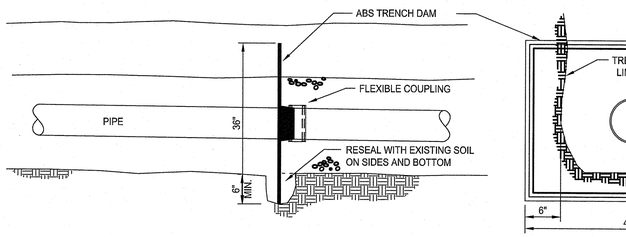


SECTION A-A

OUTSIDE DROP MANHOLE DETAIL
NOT TO SCALE

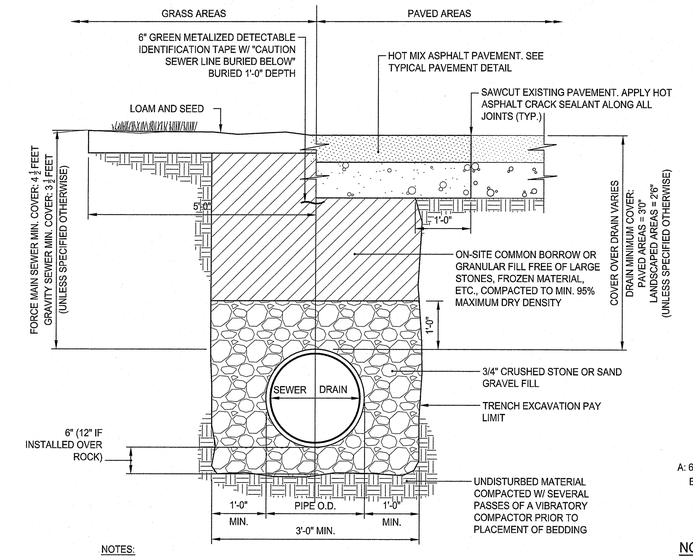


PLAN



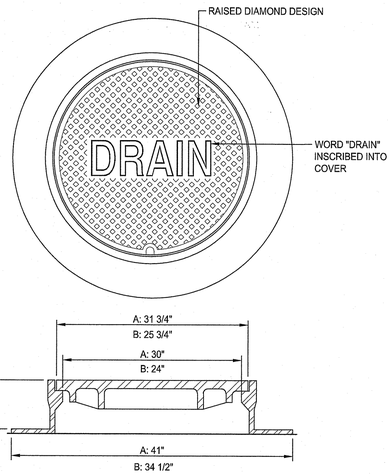
NOTES:
1. INSTALL TRENCH DAM EVERY 300 FEET ALONG PIPE AND PRIOR TO EACH STRUCTURE.
2. TRENCH DAM EVERY 300 FEET ALONG PIPES BELOW THE SEASONAL HIGH-WATER LEVELS.

TRENCH DAM
NOT TO SCALE



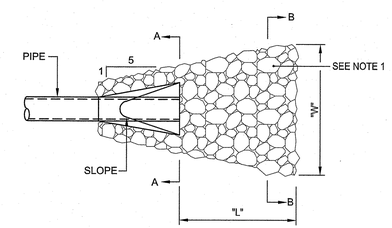
NOTES:
1. WHERE THE DISTANCE BETWEEN THE SAWCUT AND EDGE OF PAVEMENT IS 3' OR LESS, THE CONTRACTOR SHALL REPLACE THE PAVEMENT FROM THE TRENCH EDGE TO THE EXISTING EDGE OF PAVEMENT.
2. 3/4" DIA. CRUSHED STONE SHALL BE USED AS BEDDING WHERE TRENCH IS BELOW THE GROUND WATER TABLE.
3. INSTALL TRENCH DAMS WHERE PIPE IS LOCATED WITHIN THE GROUND WATER TABLE.

SEWER/DRAIN TRENCH DETAIL
NOT TO SCALE

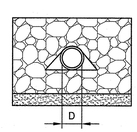


NOTES:
1. ALL FRAMES AND COVERS SHALL MEET H-20 LOADING CRITERIA.
2. PROVIDE:
   A: 30" DIA. DRAIN MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY, INC. MODEL #R-1557 OR APPROVED EQUIVALENT.
   B: 24" DIA. DRAIN MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY, INC. MODEL #R-1556 OR APPROVED EQUIVALENT.
3. ALL DRAIN MANHOLES SHALL HAVE 24" DIA. DRAIN MANHOLE COVER UNLESS NOTED OTHERWISE.

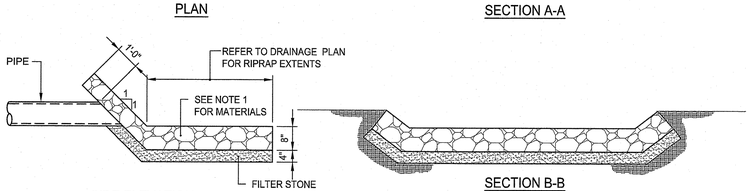
DRAIN MANHOLE FRAME & COVER
NOT TO SCALE



PLAN



SECTION A-A



SIDE ELEVATION

SECTION B-B

NOTE:
1. PROVIDE THE FOLLOWING MATERIALS WHERE INDICATED ON THE PLANS:
   RIPRAP - 6" DIAMETER RIPRAP

LEVEL SPREADER
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 **FILE #:** 22-0129
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APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755

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0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

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Mixed Use Development
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Environmental Management
MAR 24 2023
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VICTORIA HOWLAND
No. 12076
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
3-24-23

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1	08-22-2022	RESPONSE TO COMMENTS
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PROJECT NO.:	13018.01
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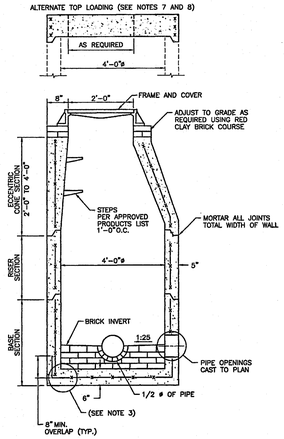
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 6

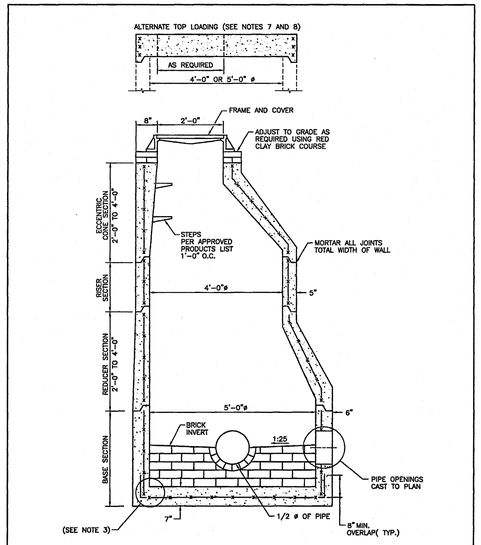
DRAWING NO.:
C9.6

SHEET NO. 24 OF 35



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
2. CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.12 SQ. IN. / LIN. FT. MINIMUM.
3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
4. ONE POUR MONOLITHIC BASE SECTION.
5. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
6. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
7. ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
8. ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
9. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE	PRECAST 4'-0" ROUND MANHOLE	JUNE 15, 1998 ISSUE DATE	R.I. STANDARD 4.2.0



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
2. CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.15 SQ. IN./LIN. FT. MINIMUM.
3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
4. ONE POUR MONOLITHIC BASE SECTION.
5. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
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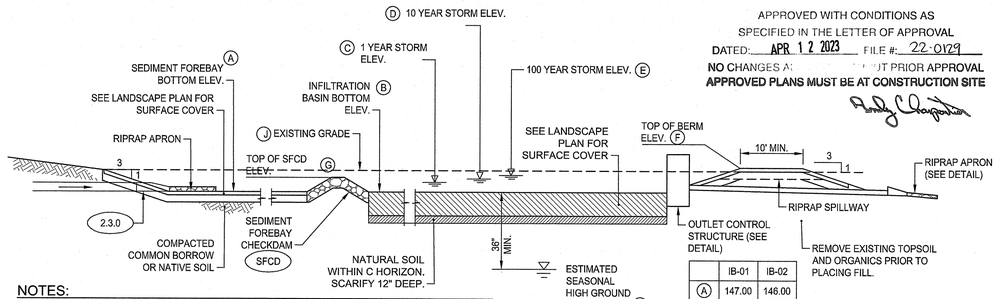
8. ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
9. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
NO.	BY	DATE	PRECAST 5'-0" ROUND MANHOLE	JUNE 15, 1998 ISSUE DATE	R.I. STANDARD 4.2.1

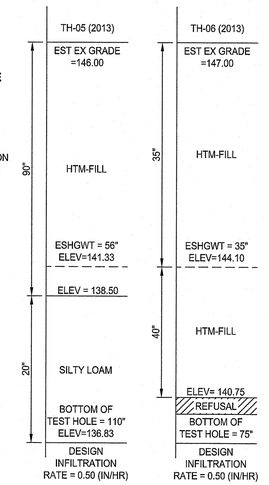


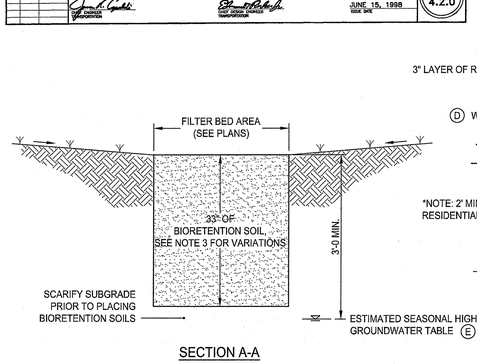
	IB-01	IB-02
(A)	147.00	146.00
(B)	146.75	145.00
(C)	147.90	146.76
(D)	148.35	147.21
(E)	148.60	147.53
(F)	149.55	148.55
(G)	147.75	146.75
(H)	143.60	141.60
(I)	TP-6	TP-5
(J)	146.50	146.20

NOTES:
1. DO NOT COMPACT OR RUN HEAVY MACHINERY WITHIN BASIN.
2. ONCE CONTRACTOR HAS SUBGRADE EXPOSED, THE ENGINEER SHALL BE CONTACTED FOR INSPECTION.
3. INFILTRATION BASIN SHALL BE SCARIFIED 12" DEEP PRIOR TO PLACEMENT OF SAND LAYER.
4. ONCE LOAM AND SEED HAS BEEN INSTALLED RUNOFF SHALL NOT BE DIRECTED INTO THE BASIN UNTIL THE VEGETATION ON THE BASIN BOTTOM AND THE SIDE SLOPES HAS ESTABLISHED.
5. BASIN BERM SHALL BE CONSTRUCTED WITH COMMON BORROW PLACED IN 12" LIFTS AND COMPACTED TO 95% TO FINISH GRADE.
6. CONTRACTOR SHALL OVER EXCAVATE 1' BELOW THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION FOR THE INFILTRATION BASINS. CONSTRUCT SUBGRADE USING ASTM C-33 SAND.
7. THE CONTRACTOR SHALL EXCAVATE UP TO 2 FEET OF EXISTING SOILS ON THE SIDES OF THE BASIN PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF ASTM C-33 SAND.

INFITLRATION BASIN SECTION
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES AND/OR DEVIATIONS FROM PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE





SECTION A-A

BIORETENTION AREA WITH AREA DRAIN SECTION DETAIL

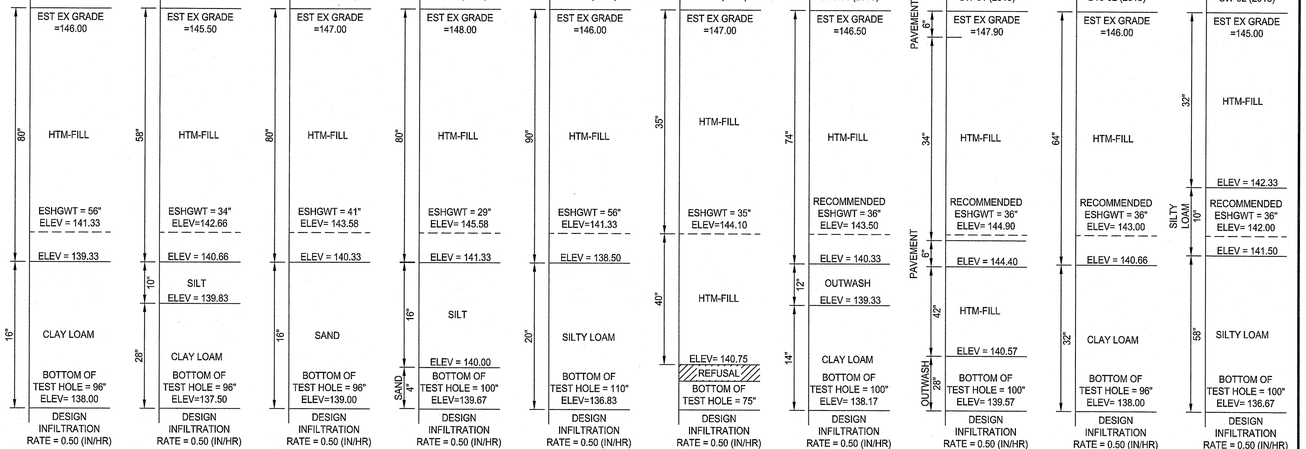
BIORETENTION SOIL: 85-88% SAND, 8-12% SILT, 3-5% COMPOST ORGANIC CONTENT SHALL BE 1.5%-3%

BIORETENTION VEGETATION: BIORETENTION AREA TO BE PLANTED WITH TUSSOCK SEDGE

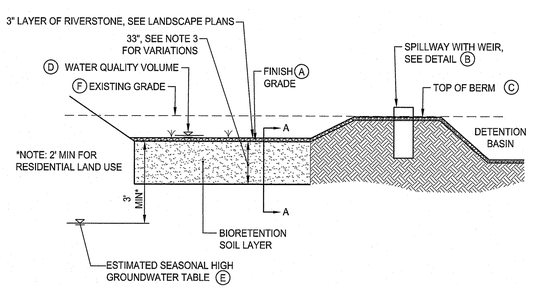
BIO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
(A)	147.00	147.00	145.50	148.50	148.50	148.50	148.50	149.00	147.00	148.50	148.00	149.00	147.85	146.00	149.00	147.20	148.50
(B)	148.00	147.75	146.25	149.25	149.25	149.25	149.25	149.75	147.75	149.25	148.75	149.75	148.60	146.75	149.75	147.75	149.25
(C)	149.70	150.00	148.33	150.50	150.50	150.50	150.50	150.75	149.00	150.50	150.50	151.00	150.05	148.00	151.00	149.10	150.50
(D)	147.26	147.15	145.71	148.83	148.83	148.78	148.76	149.21	147.15	148.87	148.20	149.37	148.07	146.35	149.40	147.50	148.87
(E)	143.60	141.40	142.50	142.30	142.66	143.15	143.11	144.60	143.00	143.30	145.00	144.60	144.80	143.00	144.00	145.20*	145.00
(F)	146.50	146.00	145.40	145.20	145.50	145.60	146.60	147.10	146.50	146.80	148.00	147.60	147.80	146.00	147.00	148.20	148.00
(G)	TP-06(2013)/ TP-05(2013)	TP-05(2013)/ TP-06(2013)	TP-01(2013)/ TP-02(2013)	TP-01(2013)/ TP-05(2013)	TP-04(2013)/ TP-03(2013)	TP-04(2013)/ TP-03(2013)	TP-03(2013)/ TP-04(2013)	TP-04(2013)/ TP-01(2013)	TP-03(2013)/ TP-05(2013)	TP-03(2013)/ TP-01(2013)	SW-01(2018)/ 18-01(2018)	SW-02(2018)/ 18-01(2018)	18-02(2018)/ SW-02(2018)	SW-02(2018)/ 18-02(2018)	SW-01(2018)/ 18-02(2018)	SW-01(2018)/ 18-02(2018)	SW-01(2018)/ SW-02(2018)

NOTES:
1. AREA DRAINS SHALL BE CUSTOM MANUFACTURED FOR THE PROJECT WITH THE INLETS & OUTLETS REQUIRED.
2. AREA DRAINS SHALL BE CONSTRUCTED OF HIGH DENSITY POLYETHYLENE.
3. ALL BIORETENTION SOIL SHALL BE 36" DEEP EXCEPT FOR BIORETENTION AREA-16 WHICH IS 24" OF BIORETENTION SOIL.
4. ESHGT WAS DETERMINED BY OBSERVED REDOX IN SOIL FROM TEST PIT DATA PERFORMED ON MARCH 27, 2013 AND FEBRUARY 6, 2018.
5. INITIAL EXCAVATION SHALL BE CARRIED TO WITHIN 1 FOOT OF THE SUBGRADE ELEVATION. FINAL EXCAVATION TO THE SUBGRADE SHALL BE DEFERRED UNTIL ALL UPSTREAM DISTURBED AREAS HAVE STABILIZED OR PROTECTED.
6. CONTRACTOR SHALL OVER EXCAVATE 1' BELOW THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION FOR THE BIORETENTION AREAS. CONSTRUCT SUBGRADE USING ASTM C-33 SAND.
7. CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO EXPOSING THE SUBGRADE TO COORDINATE THE ENGINEER'S OBSERVATION OF SUBGRADE.
8. SEE PLANS FOR LOCATIONS AND INVERTS OF CATCH BASINS OR AREA DRAINS.
9. THE CONTRACTOR SHALL EXCAVATE UP TO 2 FEET OF EXISTING SOILS ON THE SIDES OF THE BASIN PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF ASTM C-33 SAND.

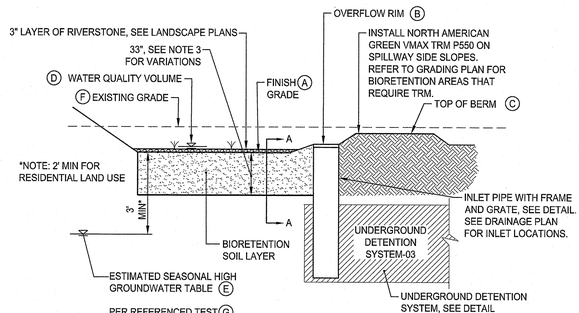
BIORETENTION AREA DETAIL
NOT TO SCALE



TEST PIT PROFILES FOR BIORETENTION AREA NOTES



BIORETENTION AREA - SPILLWAY WITH WEIR SECTION DETAIL



BIORETENTION AREA WITH INLET SECTION DETAIL

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1725

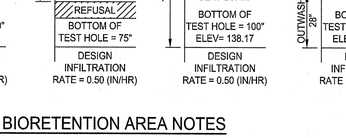
APPLICANT:
MESOLELLA DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources



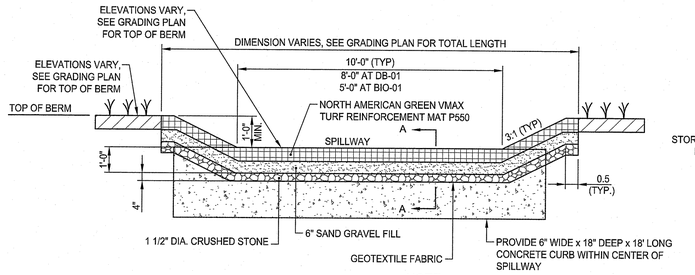
REVISIONS:		
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	NOT TO SCALE
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 7

DRAWING NO.:
C9.7

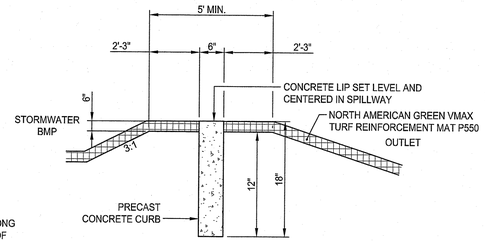
SHEET NO. 25 OF 35



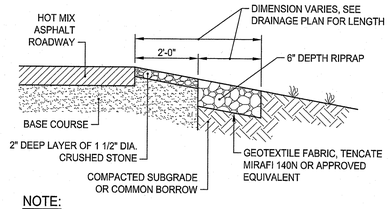
NOTE:

1. CONTRACTOR SHALL FILL VOIDS BETWEEN CURB SECTIONS WITH MORTAR.
2. THE CONTRACTOR SHALL EXCAVATE UP TO 2 FEET OF EXISTING SOILS BELOW THE BOTTOM OF THE FOOTPRINT PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF CLEAN MATERIAL.

SPILLWAY WITH TURF
NOT TO SCALE



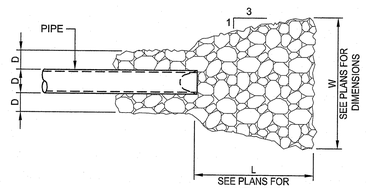
SECTION A-A



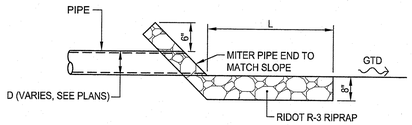
NOTE:

1. THE CONTRACTOR SHALL EXCAVATE UP TO 2 FEET OF EXISTING SOILS BELOW THE BOTTOM OF THE FOOTPRINT PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF CLEAN MATERIAL.

RR **RIPRAP EDGE**
NOT TO SCALE



PLAN

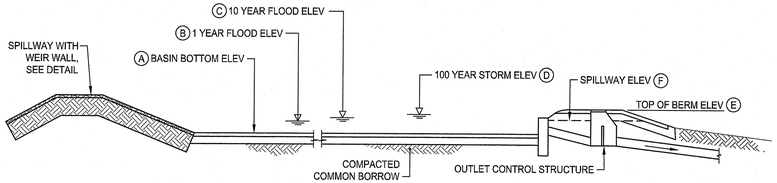


SIDE ELEVATION

NOTE:

1. THE CONTRACTOR SHALL EXCAVATE UP TO 2 FEET OF EXISTING SOILS BELOW THE BOTTOM OF THE FOOTPRINT PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF CLEAN MATERIAL.

RRA **RIPRAP APRON**
NOT TO SCALE

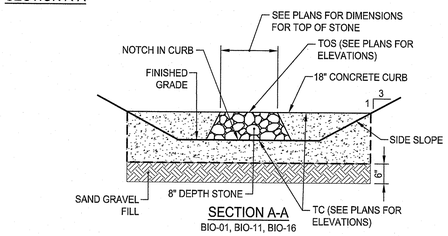


	A	B	C	D	E	F
DB-1	144.00	144.57	146.46	147.11	148.33	147.20
DB-2	145.00	145.35	145.96	146.40	148.00	147.50

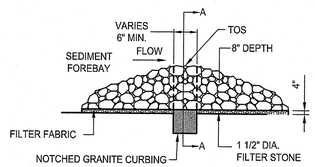
NOTE:

1. THE CONTRACTOR SHALL EXCAVATE UP TO 1' BELOW THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION FOR THE DETENTION BASIN. THE SIDE OF THE BASIN SHALL BE EXCAVATED 2 FEET PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF ASTM C-33 SAND.

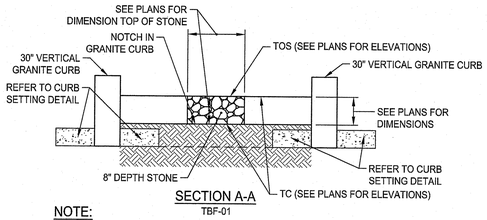
DETENTION BASIN SECTION
NOT TO SCALE



SECTION A-A
BIO-01, BIO-11, BIO-16



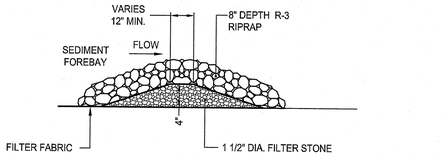
SEDIMENT FOREBAY WITH WEIR



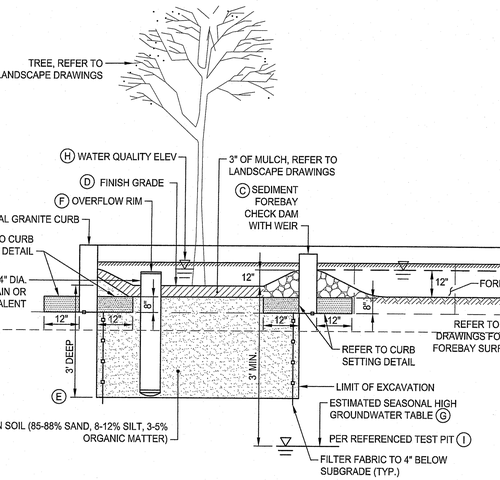
NOTE:

1. THE CONTRACTOR SHALL EXCAVATE UP TO 2 FEET OF EXISTING SOILS BELOW THE BOTTOM OF THE FOOTPRINT PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF CLEAN MATERIAL.

SFCD **SEDIMENT FOREBAY CHECK DAM**
NOT TO SCALE



SEDIMENT FOREBAY WITH BERM
INFILTRATION BASIN-01, INFILTRATION BASIN-02, BIO-02, BIO-03, BIO-09, BIO-13



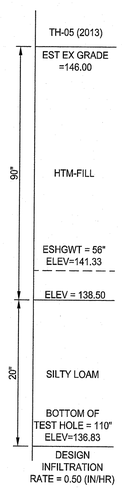
PROFILE VIEW
NOT TO SCALE

	A	B	C	D	E	F	G	H	I	J
TBF-101	149.50	147.75	148.75	147.75	144.75	148.75	141.40	148.75	TP-5	146.10

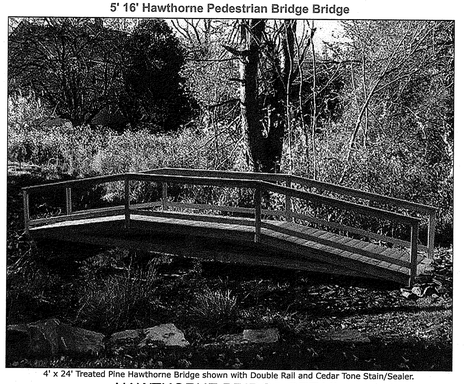
NOTES:

1. REFER TO LANDSCAPE DRAWINGS FOR PLANTINGS.
2. ESHGT WAS DETERMINED BY OBSERVED REDOX IN SOIL FROM TEST PIT DATA PERFORMED ON MARCH 27, 2013 AND FEBRUARY 6, 2018.
3. AREA DRAINS SHALL BE CUSTOM MANUFACTURED FOR THE PROJECT WITH THE INLETS AND OUTLETS REQUIRED.
4. AREA DRAINS SHALL BE CONSTRUCTED OF HIGH DENSITY POLYETHYLENE.
5. INITIAL EXCAVATION SHALL BE CARRIED TO WITHIN 1 FOOT OF THE SUBGRADE ELEVATION. FINAL EXCAVATION TO THE BASIN SUBGRADE SHALL BE DEFERRED UNTIL ALL UPSTREAM DISTURBED AREAS HAVE STABILIZED OR PROTECTED.
6. CONTRACTOR SHALL OVER EXCAVATE 1' BELOW THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION FOR THE TREE BOX FILTER. CONSTRUCT SUBGRADE USING ASTM C-33 SAND.
7. CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO EXPOSING THE SUBGRADE TO COORDINATE THE ENGINEER'S OBSERVATION OF SUBGRADE.
8. SEE PLANS FOR LOCATIONS AND INVERTS OF CATCH BASINS/ AREA DRAINS.
9. THE CONTRACTOR SHALL EXCAVATE UP TO 2 FEET OF EXISTING SOILS ON THE SIDES OF THE BASIN PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF ASTM C-33 SAND.

TBF **TREE BOX FILTER**
NOT TO SCALE

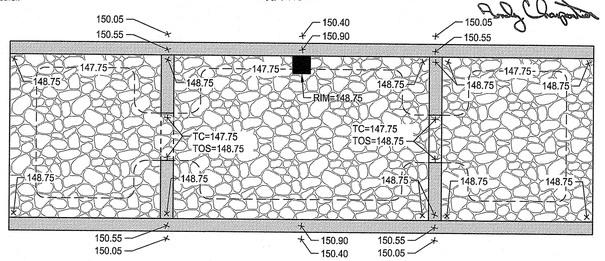


5' 16' Hawthorne Pedestrian Bridge Bridge



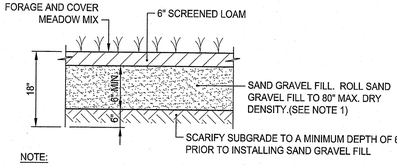
4' x 24' Treated Pine Hawthorne Bridge shown with Double Rail and Cedar Tone Stain/Sealer.

HAWTHORNE BRIDGE DETAIL
NOT TO SCALE



TBF GRADING DETAIL
NOT TO SCALE

GRASS SEED PER 08-02, NATIVE UPLAND WILDLIFE FORAGE AND COVER MEADOW MIX



NOTE:

1. IF SOIL IN THE QPA HAS BEEN COMPACTED, THE SOIL MUST BE SUITABLY AMENDED, TILLED, AND RE-VEGETATED ONCE CONSTRUCTION IS COMPLETE.
2. QUALIFYING PERVIOUS AREA SHALL BE CONSTRUCTED WITH A MAXIMUM SLOPE OF 5% PER THE STATE SPECIFICATIONS.
3. THE CONTRACTOR SHALL EXCAVATE UP TO 1' BELOW THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION. THE SIDE OF THE BASIN SHALL BE EXCAVATED 2 FEET PER THE REMEDIAL ACTION WORK PLAN. THE EXCAVATED SOIL SHALL THEN BE REPLACED WITH 2 FEET OF ASTM C-33 SAND.

QPA **QUALIFYING PERVIOUS AREA DETAIL**
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1705

APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

OWNER:
CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED 3-24-23
PROFESSIONAL ENGINEER (CIVIL)

REVISIONS:

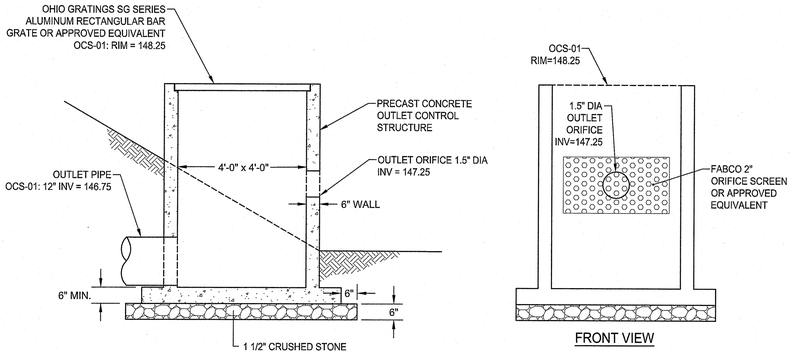
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	NOT TO SCALE
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 8

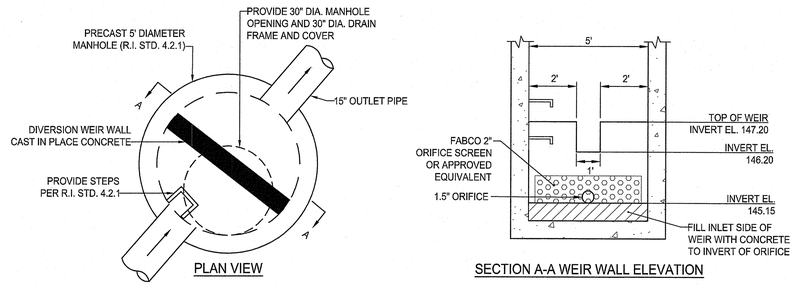
DRAWING NO.:
C9.8

SHEET NO. 26 OF 35



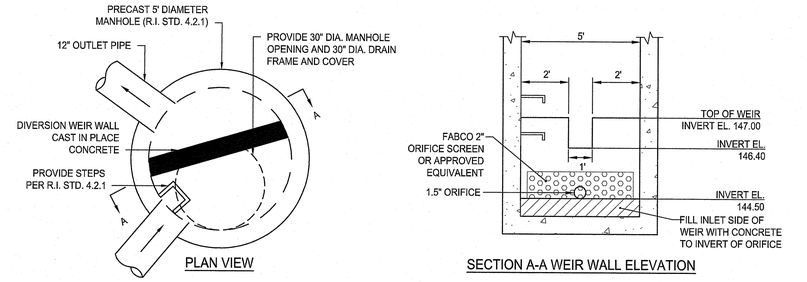
OUTLET CONTROL STRUCTURE DETAIL (OCS-01)

NOT TO SCALE



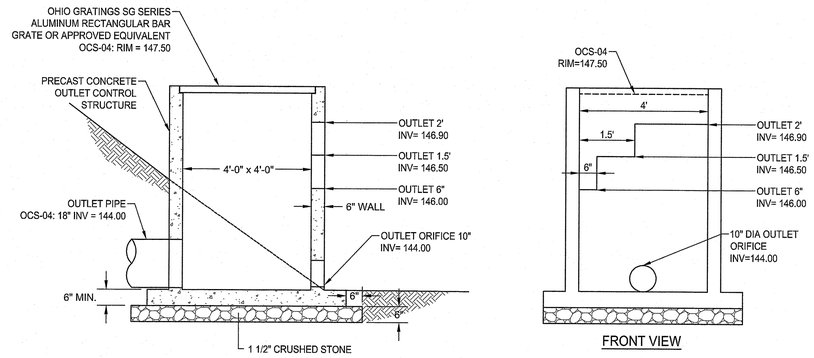
OUTLET CONTROL STRUCTURE (OCS-03)

NOT TO SCALE



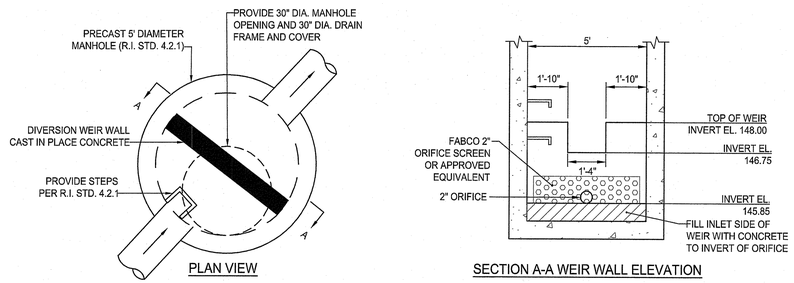
OUTLET CONTROL STRUCTURE (OCS-02)

NOT TO SCALE



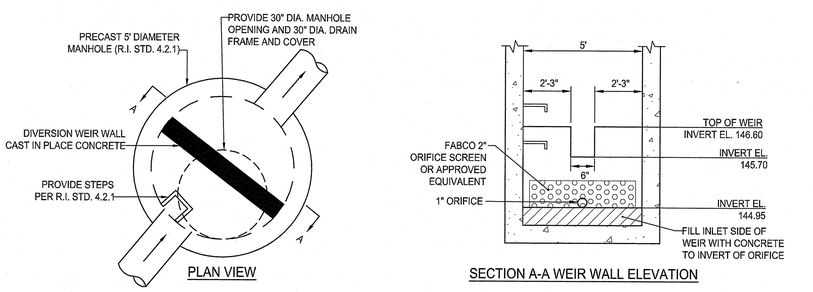
OUTLET CONTROL STRUCTURE DETAIL (OCS-04)

NOT TO SCALE



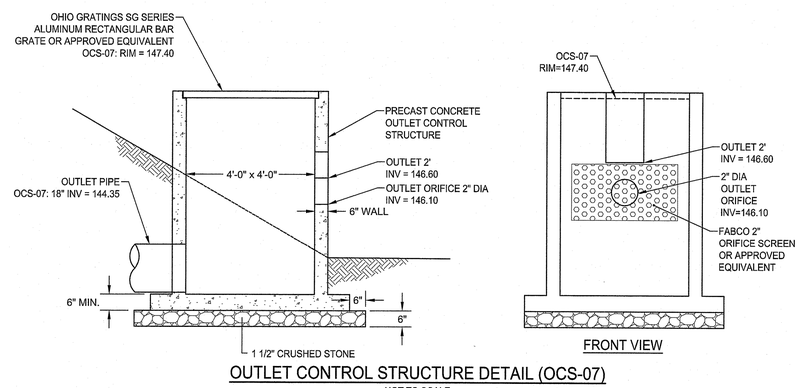
OUTLET CONTROL STRUCTURE (OCS-05)

NOT TO SCALE



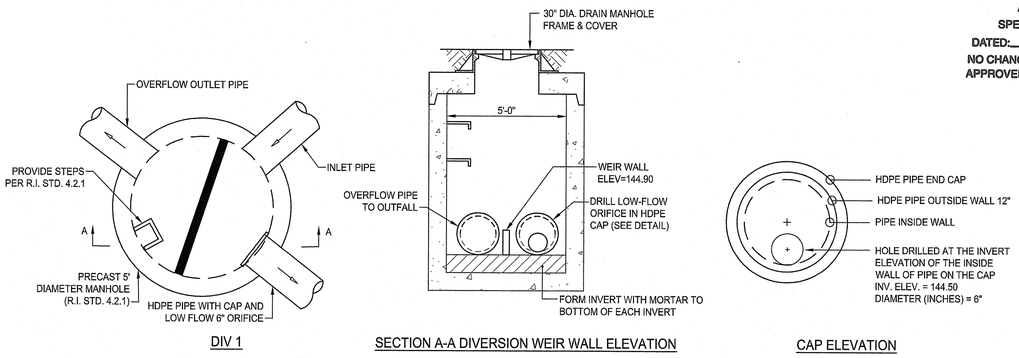
OUTLET CONTROL STRUCTURE (OCS-06)

NOT TO SCALE



OUTLET CONTROL STRUCTURE DETAIL (OCS-07)

NOT TO SCALE



TYPICAL DIVERSION MANHOLE DETAIL (DIV-01)

NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 **FILE #:** 22-0129

NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100
10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
508-543-1705

APPLICANT:
MESOLELLA
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4 FOX PLACE
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CVDD II LLC, CENZ CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON
ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

VICTORIA HOWLAND
No. 12076
REGISTERED 3-24-23
PROFESSIONAL ENGINEER
(CIVIL)

REVISIONS:

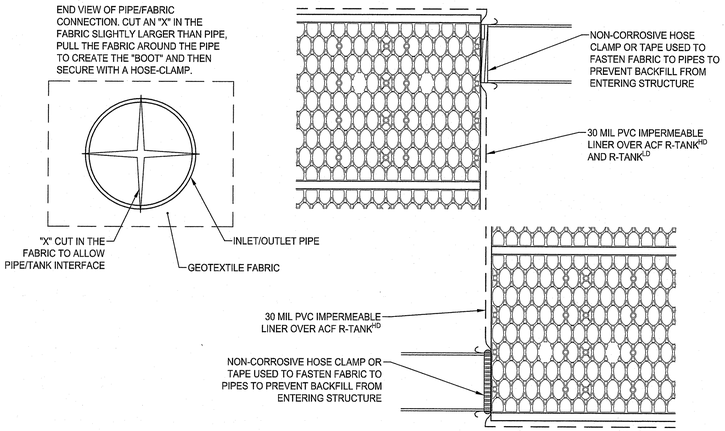
1	08-22-2022	RESPONSE TO COMMENTS
2	10-21-2022	RESPONSE TO COMMENTS

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	NOT TO SCALE
DESIGNED BY:	ACB
CHECKED BY:	JW
DRAWN BY:	AKL
APPROVED BY:	VAH

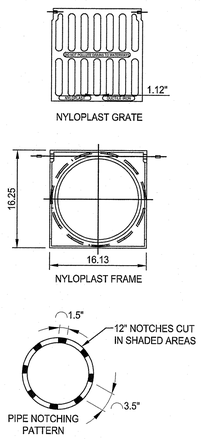
DRAWING TITLE:
DETAILS 9

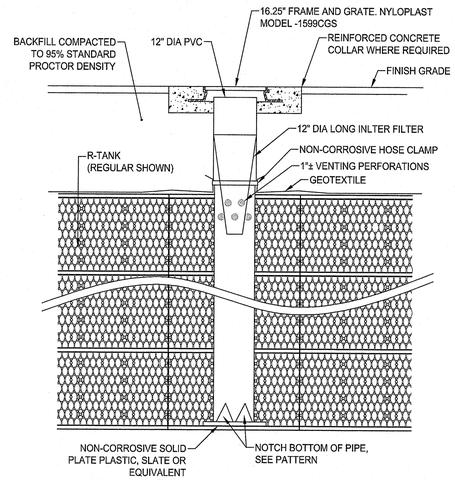
DRAWING NO.:
C9.9

SHEET NO. 27 OF 35

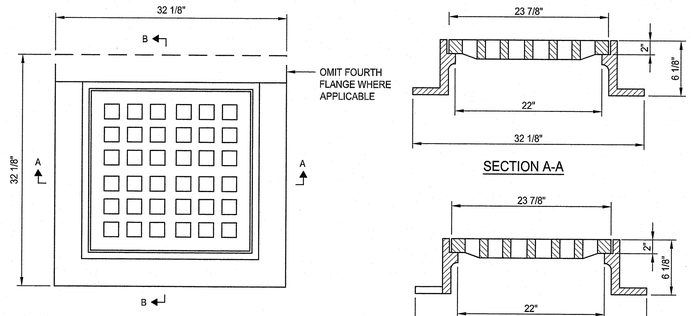


R-TANK™ TYPICAL TANK INLET/OUTLET
NOT TO SCALE





INLET PIPE WITH FRAME AND GRATE
NOT TO SCALE

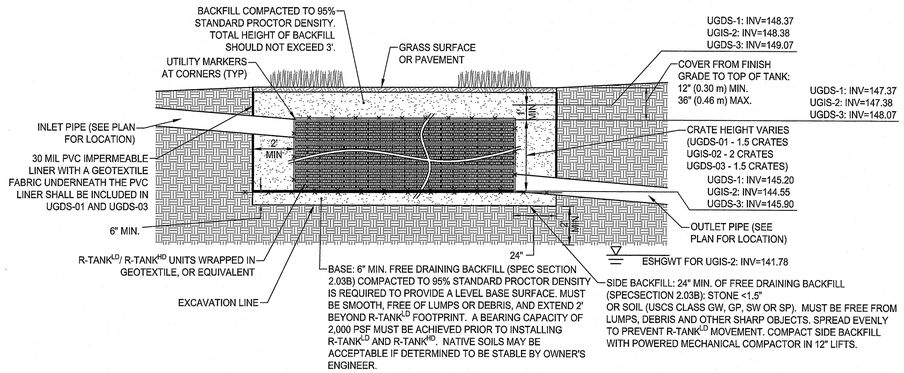


PLAN

NOTES:

1. NEENAH FOUNDRY R-3405-A OR APPROVED EQUIVALENT.
2. FRAME AND GRATE SHALL MEET H-20 LOADING CRITERIA.

FRAME & GRATE
NOT TO SCALE

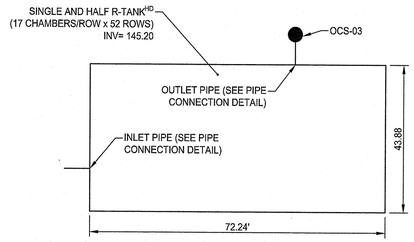


SECTION VIEW

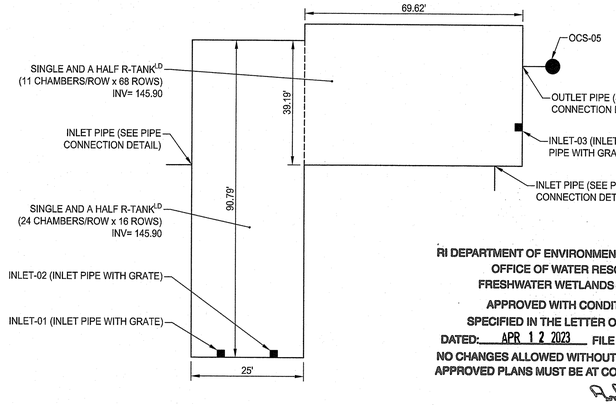
NOTES:

1. THE UNDERGROUND SYSTEMS INCLUDE BOTH UNDERGROUND DETENTION SYSTEMS AND ONE UNDERGROUND INFILTRATION SYSTEM. PLEASE NOTE THAT UGIS-2 IS AN UNDERGROUND INFILTRATION SYSTEM WHICH DOES NOT INCLUDE THE 30 MIL PVC IMPERMEABLE LINER.
2. FOR UGIS-2 THE CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO COMPACT TEH SUBGRADE AND SHALL NOT OPERATE MACHINERY ON SUBGRADE.
3. UGIS-2 SHALL HAVE A MINIMUM 2 FEET SEPARATION FROM THE ESTIMATED SEASONAL HIGH GROUND WATER TABLE.
4. THE CONTRACTOR SHALL INSTALL THE UNDERGROUND SYSTEMS PER THE MANUFACTURER'S RECOMMENDATIONS.

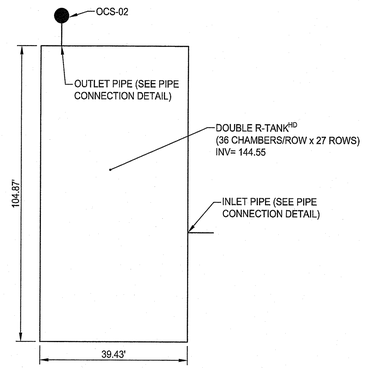
UNDERGROUND SYSTEM
NOT TO SCALE



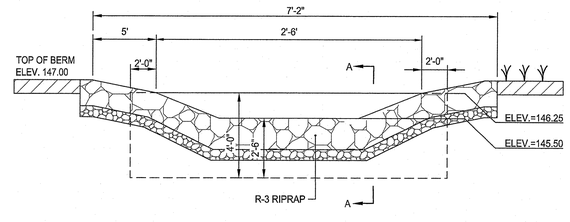
UNDERGROUND DETENTION SYSTEM-01 PLAN VIEW
NOT TO SCALE

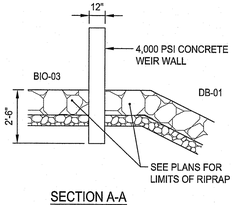


UNDERGROUND DETENTION SYSTEM-03 PLAN VIEW
NOT TO SCALE



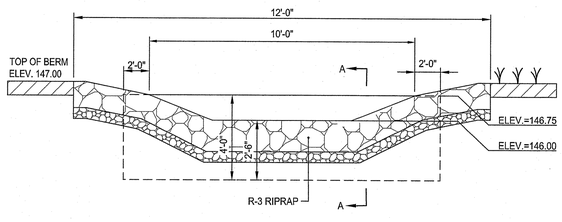
UNDERGROUND INFILTRATION SYSTEM-02 PLAN VIEW
NOT TO SCALE

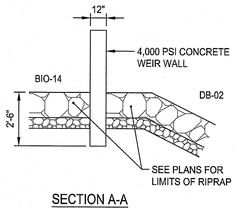




SECTION A-A

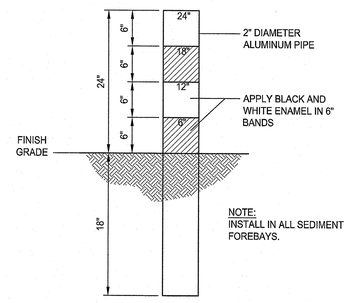
SPILLWAY WITH WEIR WALL AT DB-01
NOT TO SCALE





SECTION A-A

SPILLWAY WITH WEIR WALL AT DB-02
NOT TO SCALE



SM

SEDIMENT MARKER DETAIL
NOT TO SCALE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
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APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
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MAR 24 2023
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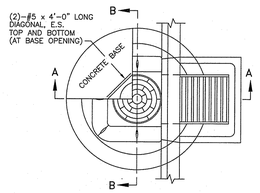
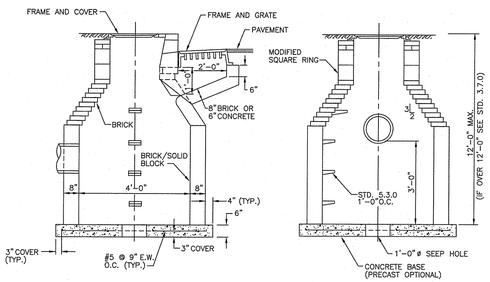
APPROVED BY:	VAH

DRAWING TITLE:
DETAILS 10

DRAWING NO.:
C9.10
SHEET NO. 28 OF 35



PLAN



SECTION A–A SECTION B–B

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
2. 1/2" CEMENT MORTAR PLASTER COAT REQUIRED ON ALL INSIDE AND OUTSIDE SURFACES.
3. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

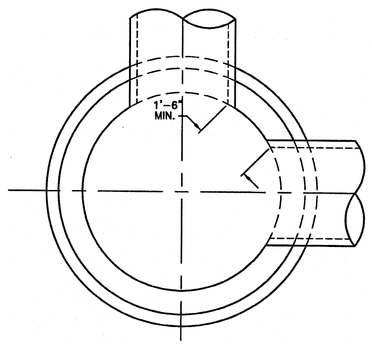
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS NO.	BY	DATE
1	MLP	Mar 05

BRICK/SOLID BLOCK ROUND CATCH BASIN WITH GUTTER INLET

JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 3.4.1



CROSS SECTION OF MANHOLE OR CATCH BASIN

	4 FT. MANHOLE OR CATCH BASIN	5 FT. MANHOLE OR CATCH BASIN	6 FT. MANHOLE OR CATCH BASIN
MAX. PIPE O.D. STRAIGHT THRU TO 45° DEFLECTION	33 1/2" O.D. 27" R.C. PIPE	44" O.D. 36" R.C. PIPE	51" O.D. 42" R.C. PIPE
MAX. PIPE O.D. 90° DEFLECTION	23" O.D. 18" R.C. PIPE	33 1/2" O.D. 27" R.C. PIPE	37" O.D. 30" R.C. PIPE

NOTE:
1. SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
2. THE MINIMUM DISTANCE BETWEEN PIPES ENTERING MANHOLES AND CATCH BASINS MUST BE 1'-6". THE SIZE OF THE CATCH BASIN WILL BE DETERMINED BY THE PIPE SIZE AND ENTRY ANGLE. (SEE TABLE ABOVE.)

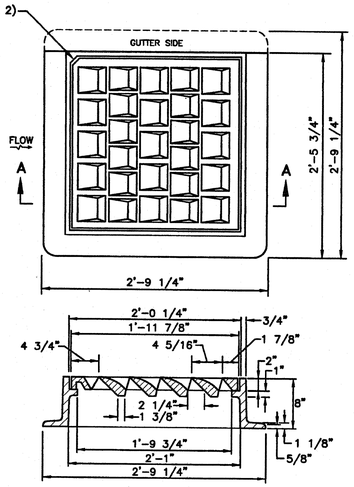
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS NO.	BY	DATE

ROUND MANHOLES AND CATCH BASINS MAXIMUM PIPE SIZE STANDARD

JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 5.2.0



SECTION A–A

NOTES:
1. FRAME AND COVER SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.
2. THIS CORNER LEFT FOR "LEFT" GRATE, DIAGONALLY OPPOSITE CORNER FOR "RIGHT" GRATE TO FIT IN KEYED FRAME.

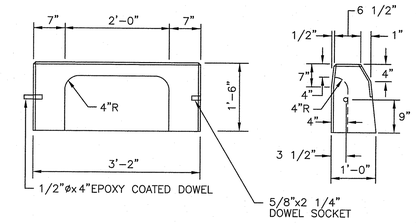
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

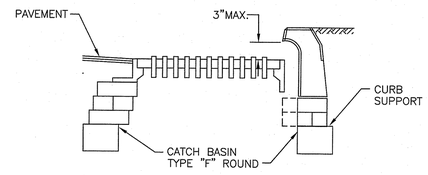
REVISIONS NO.	BY	DATE

HIGH CAPACITY FRAME AND GRATE (BICYCLE SAFE)

JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 6.3.4





NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
3. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

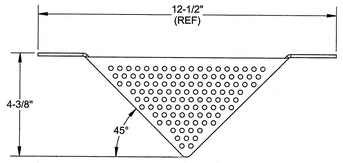
REVISIONS NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE APRON STONE (FOR ROUND CATCH BASIN)

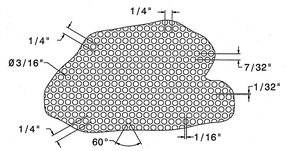
JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.1.8

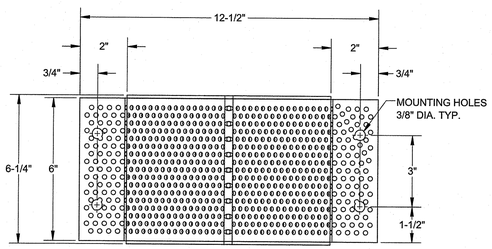
NOTES:
1. WEIGHT: 5-LBS MAX.
2. MATERIALS: 300 SERIES STAINLESS STEEL.
3. FLOW CHARACTERISTICS (SCREEN): 400-GPM (0.9 CFS) @ 6-IN HEAD MIN.
4. THIS UNIT IS DESIGNED SPECIFICALLY FOR INSTALLATION ONTO A FLAT CONCRETE SURFACE AND IS USED TO PROTECT A 2" DIA ORIFICE.
5. TYPICAL INSTALLATION: POSITION THE PROTECTIVE SCREEN DIRECTLY IN FRONT OF THE 2" ORIFICE AND MARK THE (4) MOUNTING HOLE LOCATIONS. DRILL AND INSTALL THE CONCRETE ANCHOR STUDS PROVIDED. SECURE THE ORIFICE SCREEN TO THE STUDS.



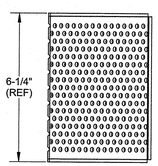
TOP VIEW



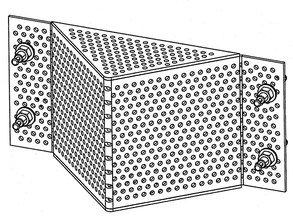
PERFORATED MATERIAL DETAIL



FRONT VIEW



SIDE VIEW



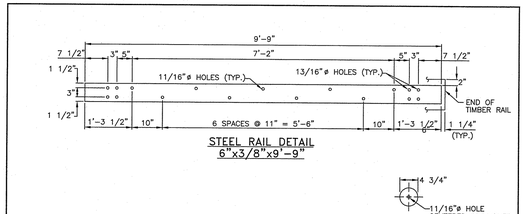
REFERENCE VIEW

PROPRIETARY AND CONFIDENTIAL	UNLESS OTHERWISE SPECIFIED REMOVE ALL BURRS	TOLERANCES: DEC .XX ± .01		APPROVAL	DATE
THIS DOCUMENT IS THE PROPERTY OF FABCO INDUSTRIES AND IS CONVEYED WITH THE EXPRESS CONDITION THAT IT AND THE INFORMATION CONTAINED IN IT SHALL NOT BE COPIED, USED, OR REPRODUCED IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF FABCO INDUSTRIES, AND THAT NO RIGHT IS GRANTED TO DISCLOSE OR RELEASE ANY INFORMATION CONTAINED IN SAID DOCUMENT.	BREAK ALL SHARP EDGES .002 - .020 FILLETS .200 MAX DIMENSIONS ARE IN INCHES AND ARE NOT CHEMICALLY APPLIED OR PLATED FINISHES	FRACT ± 1/16 ANGLE ± 2°	DWN	M.S.	6/13/2018
			CHKD		
			ENGR	J.P.	6/13/2018
			UFO		
PROJECT	FABCO INDUSTRIES, INC. 1000 BROADWAY FARMINGDALE, NY 11735 WWW.FABCO-INDUSTRIES.COM				
MATERIAL					

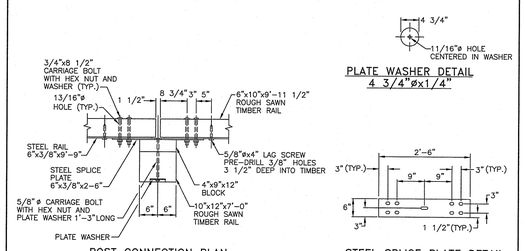
TITLE: 2" ORIFICE SCREEN

SIZE B | DWG. NO. 10382-1-000 | REV A

SCALE NONE | SHEET 1 OF 1

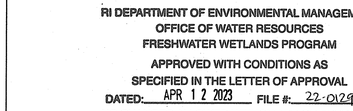


STEEL RAIL DETAIL 6"x3/8"x9'-9"

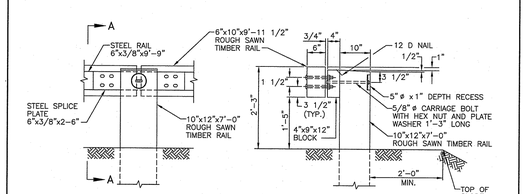


POST CONNECTION PLAN

PLATE WASHER DETAIL 4 3/4"øx1/4"



STEEL SPLICE PLATE DETAIL 6"x3/8"x2'-6"



POST CONNECTION ELEVATION SECTION A–A

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 902 OF THE R.I. STANDARD SPECIFICATIONS.
2. ALL STRUCTURAL STEEL AND FASTENER HARDWARE SHALL BE WEATHERING STEEL AS SPECIFIED.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS NO.	BY	DATE
1	MLP	3/1/2005

STEEL BACKED TIMBER GUARDRAIL

JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 34.4.0

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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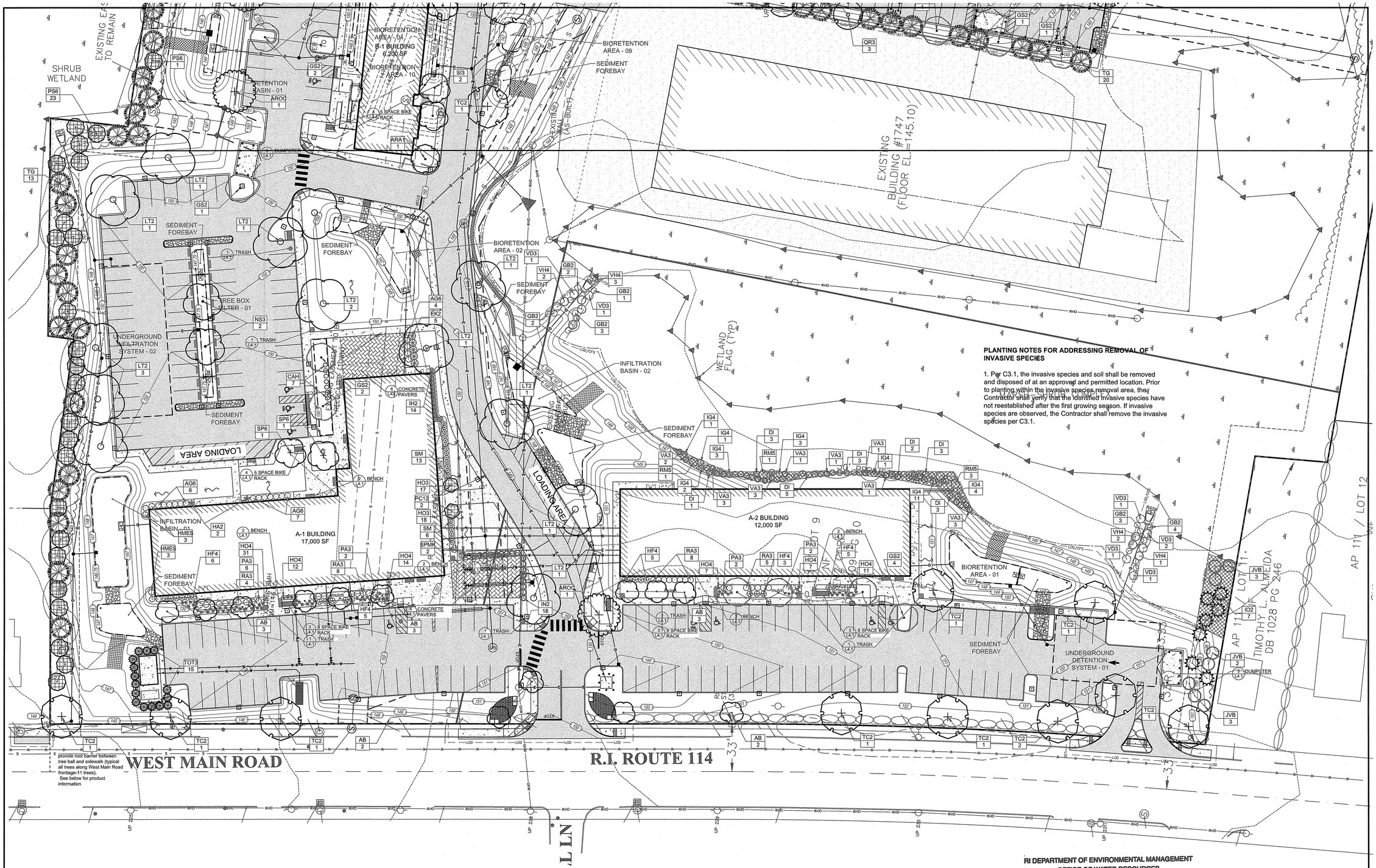
DRAWING TITLE: DETAILS 11

DRAWING NO.: C9.11

SHEET NO. 29 OF 35



PLANTING NOTES FOR ADDRESSING REMOVAL OF INVASIVE SPECIES

1. Per C3.1, the invasive species and soil shall be removed and disposed of at an approved and permitted location. Prior to planting within the invasive species removal area, the Contractor shall verify that the identified invasive species have not reestablished after the first growing season. If invasive species are observed, the Contractor shall remove the invasive species per C3.1.

ROOT TREE BARRIER by
Deep Root
www.deeproot.com

Product:
UB 24-2
Linear
4 Interlocking panels per tree

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Scale: 1"=30'
0 15' 30' 60'

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PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-0765

OWNER/APPLICANT:
MESOLELLA DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
DIANE C. GALE
No. 188

REVISIONS:

#	03/24/2023	Response to Comments

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	
DESIGNED BY:	DCS
CHECKED BY:	DCS
DRAWN BY:	DCS
APPROVED BY:	DCS

DRAWING TITLE:
LANDSCAPE PLAN NO. 1

DRAWING NO.:
L1.0
SHEET NO. 30 OF 35

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100
10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
508-543-3755

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Mixed Use Development
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1747 West Main Road
Middletown, Rhode Island

DUANE C. STOKE
No. 188
REGISTERED PROFESSIONAL ENGINEER

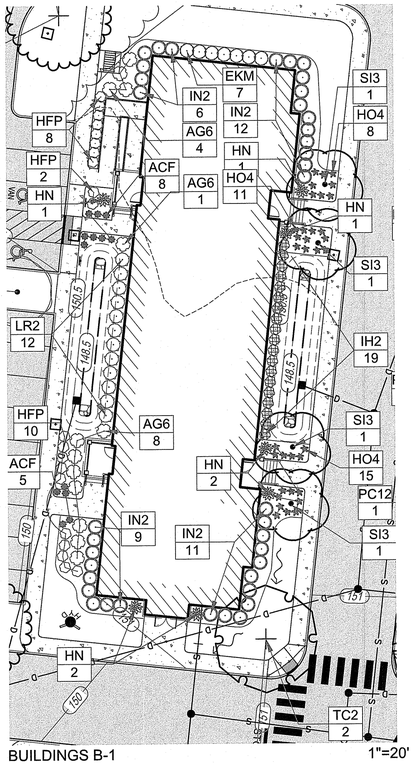
REVISIONS:

4	03/24/2023	Response to Comments

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	
DESIGNED BY:	DCS
CHECKED BY:	DCS
DRAWN BY:	DCS
APPROVED BY:	DCS

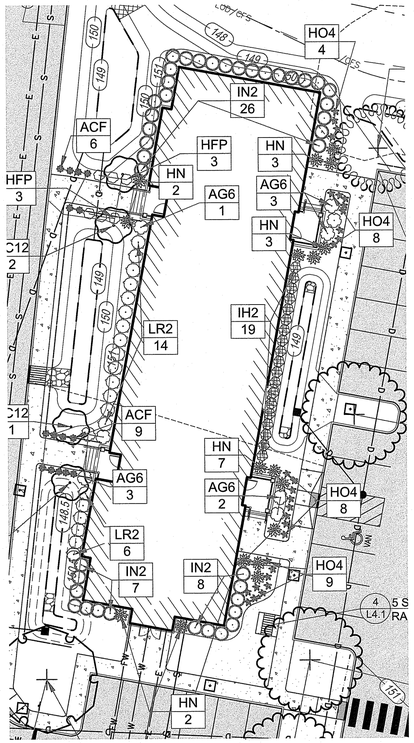
DRAWING TITLE:
LANDSCAPE PLAN
NO. 2

DRAWING NO.:
L2.0
SHEET NO. 31 OF 35



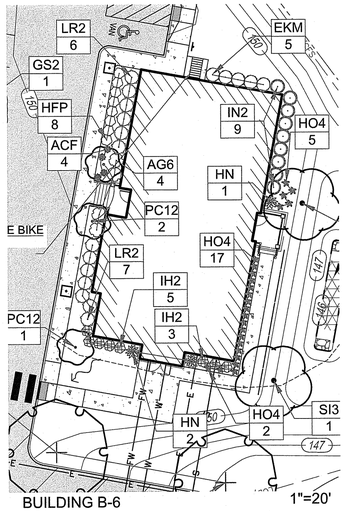
BUILDINGS B-1
B-1 & B-5 SIMILAR

1"=20'



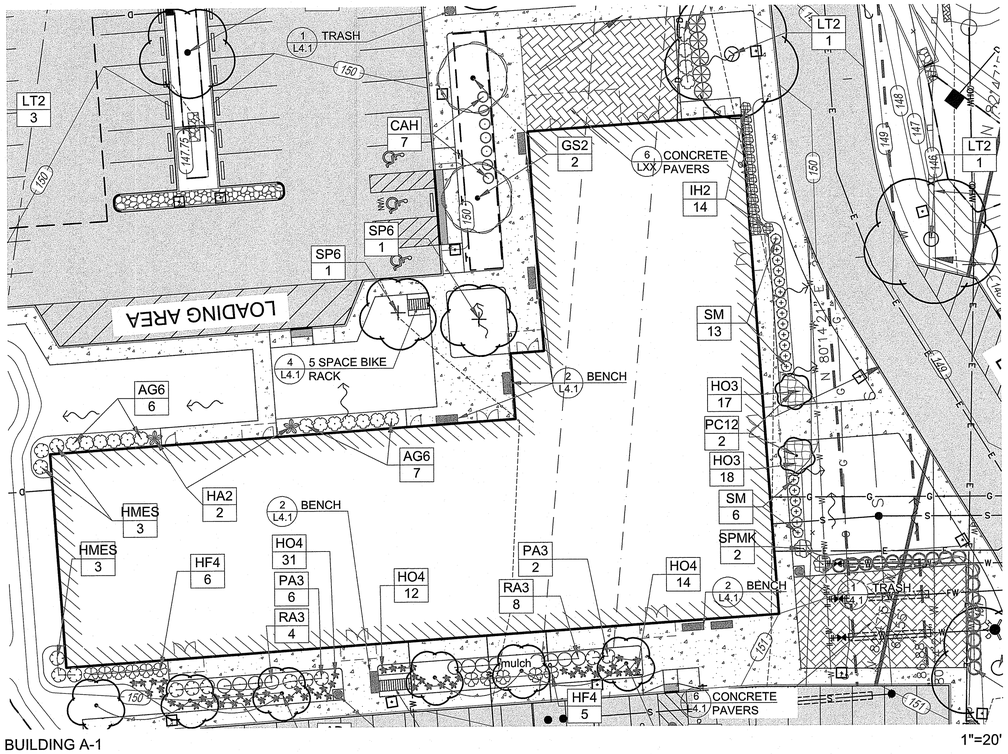
BUILDING B-3
B-4 SIMILAR

1"=20'



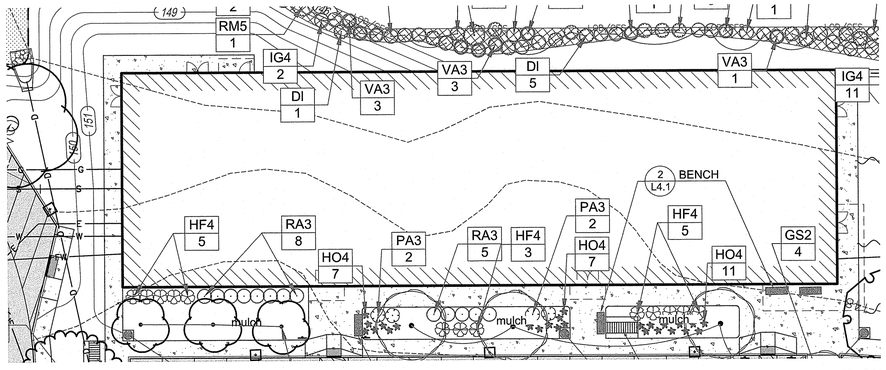
BUILDING B-6

1"=20'



BUILDING A-1

1"=20'



BUILDING A-2

1"=20'

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
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Environmental Management
MAR 24 2023
Office of Water

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PARE CORPORATION
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401-334-4100
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0" 1"
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DIANE G. SOULE
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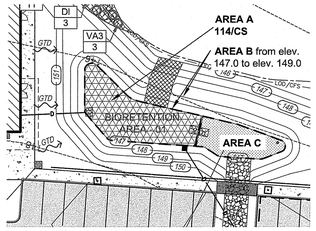
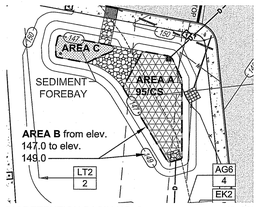
CHECKED BY:	DCS
DRAWN BY:	DCS
APPROVED BY:	DCS

DRAWING TITLE:
BUILDINGS
LANDSCAPE PLAN

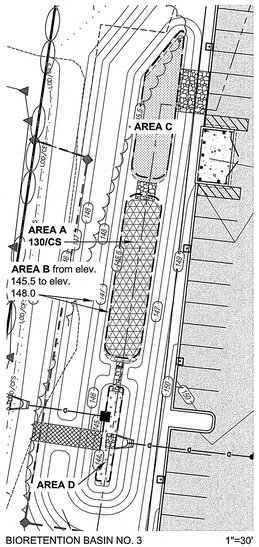
DRAWING NO.:
L3.1
SHEET NO. 32 OF 35



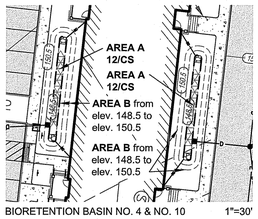
BIORETENTION BASIN NO. 1 1"=30'



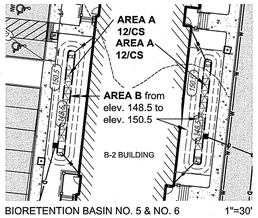
BIORETENTION BASIN NO. 2 1"=30'



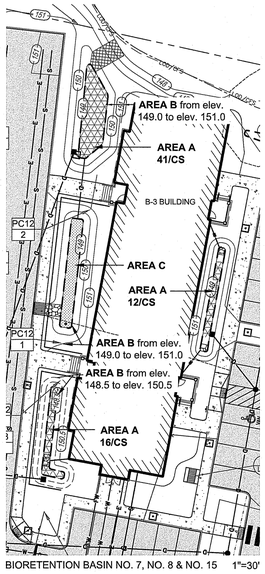
BIORETENTION BASIN NO. 3 1"=30'
DETENTION BASIN NO. 1



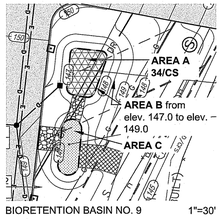
BIORETENTION BASIN NO. 4 & NO. 10 1"=30'



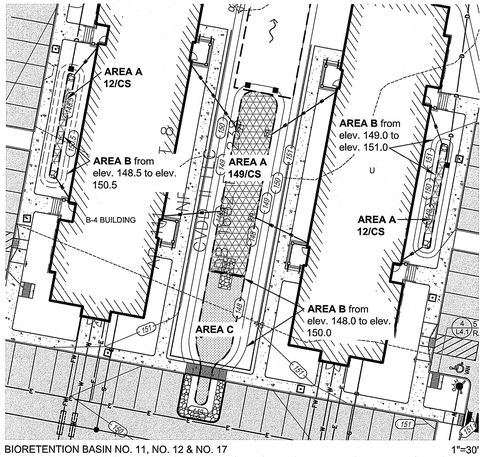
BIORETENTION BASIN NO. 5 & NO. 6 1"=30'



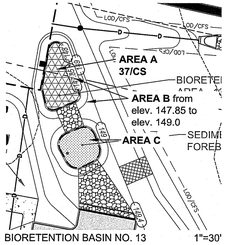
BIORETENTION BASIN NO. 7, NO. 8 & NO. 15 1"=30'



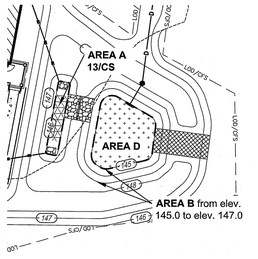
BIORETENTION BASIN NO. 9 1"=30'



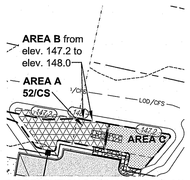
BIORETENTION BASIN NO. 11, NO. 12 & NO. 17 1"=30'



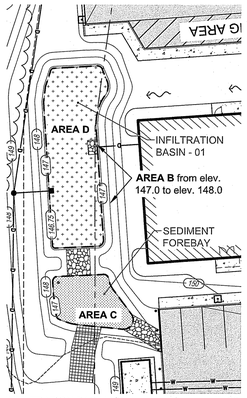
BIORETENTION BASIN NO. 13 1"=30'



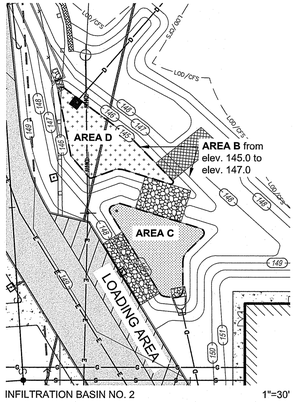
BIORETENTION BASIN NO. 14 & DETENTION BASIN NO. 2 1"=30'



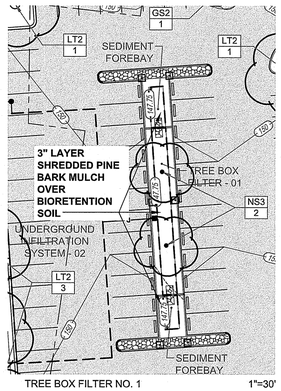
BIORETENTION BASIN NO. 16 1"=30'



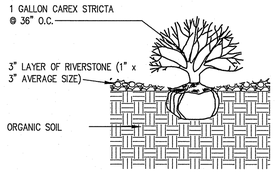
INFILTRATION BASIN NO. 1 1"=30'



INFILTRATION BASIN NO. 2 1"=30'



TREE BOX FILTER NO. 1 1"=30'



BIO-RETENTION PLANTING DETAIL NO SCALE

AREA A

BIO-RETENTION BASIN - PLANT SCHEDULE PROJECT WIDE

QTY.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
805	CS	CAREX STRICTA	TUSSOCK SEDGE	1 GALLON	36" ON CENTER

AREAS B, C & D

INFILTRATION BASIN, SEDIMENT FOREBAY AND DETENTION BASIN SEED MIXES

Area	BOTANICAL NAME	COMMON NAME	INDICATOR
B	**NEW ENGLAND CONSERVATION/WILDLIFE MIX**		
	ELYMUS VIRGINICUS	VIRGINIA WILD RYE	FACW-
	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	FACU
	ANDROPOGON GERARDII	BIG BLUESTEM	FAC
	FESTUCA RUBRA	RED FESCUE	FACU
	SORGHASTRUM NUTANS	INDIAN GRASS	UPL
	PANICUM VIRGATUM	SWITCHGRASS	FAC
	CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	FACU
	DESMODIUM CANADENSE	SHOWY TICK TRIFOIL	FAC
	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	NI
	BIDENS FRONDOSA	BEGGAR TICKS	FACW
	EUPATORIUM PRRPUREUM	PURPLE JOE PYE WEED	FACC
	RUDBECKIA HIRTA	BLACK EYED SUSAN	FACU-
	ASTER PILOSUS	HEATH ASTER	UPL
	SOLIDAGO JUNCEA	EARLY GOLDENROD	OBL

CONTRACTOR TO SOW 25 LBS. OF ABOVE SEED/ACRE. SEED TO BE SHOWN BY THE HAND BROADCAST METHOD.

Area	BOTANICAL NAME	COMMON NAME	INDICATOR
C	**NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR MOIST SITES**		
	AGROSTIS PERENNANS	UPLAND BENTGRASS	FACU
	ARGOSTIS STOLONIFERA	CREPING BENTGRASS	FACW
	ANDROPOGON GERARDII	BIG BLUESTEM, NIAGRA	FAC
	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	FACW-
	CAREX VULPINOIDEA	FOZ SEDGE	OBL
	ELYMUS VIRGINICUS	VIRGINIA WILD RYE	FACW-
	EUPATORIUM PERFOLIATUM	BONESET	FACW
	EUTHAMIA GRAMINIFOLIA (SOLIDAGO G.)	GRASS LEAVED GOLDENROD	FAC
	FESTUCA RUBRA	CREEPING RED FESCUE	FACU
	JUNCUS EFFUSUS	SOFT RUSH	FACW+
	ONOCLEA SENSIBILIS	SENSITIVE FERN	FACW
	PANICUM VIRGATUM	SWITCH GRASS	FAC
	SCHIZACHYRUM SCOPARIUM	LITTLE BLUESTEM	FACU
	SCRIPUS ATROVIRENS	GREEN BULRUSH	OBL
	SCRIPUS CYPERINUS	WOOL GRASS	FACW
	VERBENA HASTATA	BLUE VERVAIN	FACW

NOTE: CONTRACTOR TO SOW 10.5 LBS. OF ABOVE SEED AT 35 LBS/ACRE. SEED TO BE SHOWN BY THE HAND BROADCAST METHOD.

Area	BOTANICAL NAME	COMMON NAME	INDICATOR
D	**NEW ENGLAND WETMIX**		
	ALISMA PLANTAGO-AQUATICA	MUD PLAINTAIN	OBL
	ASCLEPIAS INCARNATA	SWAMP MILKWEED	OBL
	ASTER NOVI-BELGII	NEW YORK ASTER	FACW
	BIDENS CERNUA	NODDING BUR MARIGOLD	OBL
	CAREX COMOSA	BRISTLY/COSMOS SEDGE	OBL
	CAREX CRINITA	FRINGED SEDGE	OBL
	CAREX LUPULINA	HOP SEDGE	OBL
	CAREX LURIDA	LURID SEDGE	OBL
	CAREX SCOPARIA	BLUNT BROOM SEDGE	FACW
	CAREX VULPINOIDEA	FOX SEDGE	OBL
	EUPATORIUM MACULATUM	SPOTTED JOE PYE wEED	FACW
	EUPATORIUM PERFOLIATUM	BONESET	OBL
	GLYCERIA CANADENSIS	RATTLESNAKE GRASS	OBL
	GLYCERIA STRIATA	FOWL MANNAGRASS	OBL
	JUNCUS EFFUSUS	SOFT RUSH	FACW
	MIMULUS RINGENS	SQUARE STEMMED MONKEY FLOWER	OBL
	ONOCLEA SENSIBILIS	SENSITIVE FERN	FACW

NOTE: CONTRACTOR TO SOW 12.6 LBS. OF ABOVE SEED AT 18 LBS/ACRE. SEED TO BE SHOWN BY THE HAND BROADCAST METHOD.

Environmental Management
MAR 24 2023
Office of Water Resources

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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SCALE ADJUSTMENT GUIDE
0" 1"
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DIANE C. SOUZA No. 188 REGISTERED PROFESSIONAL ENGINEER STATE OF RHODE ISLAND

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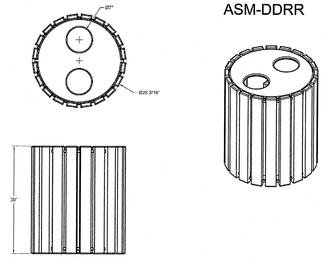
SCALE:	
DESIGNED BY:	DCS
CHECKED BY:	DCS
DRAWN BY:	DCS
APPROVED BY:	DCS

DRAWING TITLE:
STORMWATER LANDSCAPE PLAN

DRAWING NO.:
L3.2
SHEET NO. 33 OF 35

ASM-DDRR

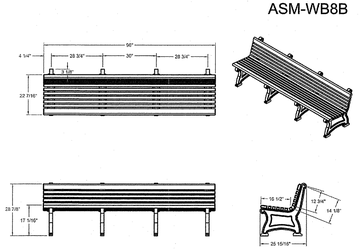


TRASH RECEPTACLE:
MAUNFACTURER: POLLY PRODUCTS
WWW.POLLYPRODUCTS.COM
MODEL: DOUBLE DUTY TRASH RECEPTACLE; SKU DDRR
COLOR: BLACK

NOTE: SUBMIT SHOP DRAWING FOR SURFACE MOUNTING TO CONCRETE PAD

1 TRASH DETAIL
NO SCALE

ASM-WB8B



BENCH:
MAUNFACTURER: POLLY PRODUCTS
WWW.POLLYPRODUCTS.COM
MODEL: WILLOW BENCH; SKU WB8B
COLOR: BLACK BASE; CEDAR TOP COLOR

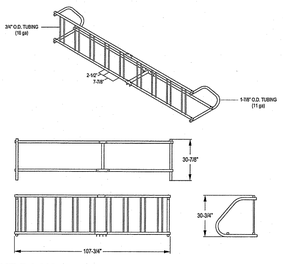
NOTE: SUBMIT SHOP DRAWING FOR SURFACE MOUNTING TO CONCRETE PAD

2 BENCH DETAIL
NO SCALE

BELSON OUTDOORS
627 Amerside Drive
Naperville, IL 60563
Phone: (800) 323-5954
Fax: (630) 857-6373
sales@belson.com

Model # CBBR-9SG-BK | Dimension Sheet

9 GRID BIKE RACK, BLACK



BIKE RACK:
MAUNFACTURER: BELSON OUTDOORS
WWW.BELSON.COM
MODEL: CBBR-9SG-BK
COLOR: BLACK

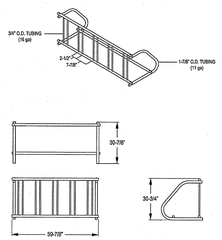
NOTE: SUBMIT SHOP DRAWING FOR SURFACE MOUNTING TO CONCRETE PAD

3 9 SPACE BIKE RACK DETAIL
NO SCALE

BELSON OUTDOORS
627 Amerside Drive
Naperville, IL 60563
Phone: (800) 323-5954
Fax: (630) 857-6373
sales@belson.com

Model # CBBR-5SG-BK | Dimension Sheet

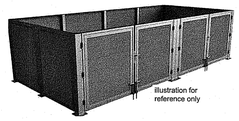
5 GRID BIKE RACK, BLACK



BIKE RACK:
MAUNFACTURER: BELSON OUTDOORS
WWW.BELSON.COM
MODEL: CBBR-5SG-BK
COLOR: BLACK

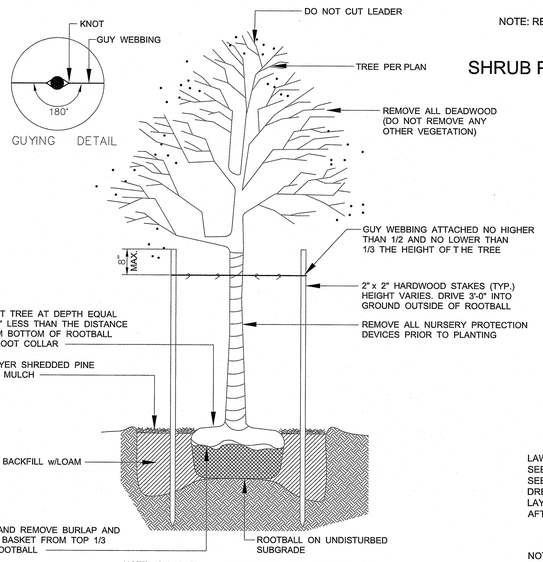
NOTE: SUBMIT SHOP DRAWING FOR SURFACE MOUNTING TO CONCRETE PAD

4 5 SPACE BIKE RACK DETAIL
NO SCALE



DUMPSTER ENCLOSURE:
MAUNFACTURER: PalmSHIELD
PALMSHIELD LOUVERS.COM
MODEL: N/A. SUBMIT SHOP DRAWINGS FOR 12' x 23' ENCLOSURE WITH 1 - 16' DOUBLE SWING GATE.
MATERIAL: AUGUSTUS COMMERCIAL HORIZONTAL COMPOSITE PLANKS-6' HIGH
COLOR: TO BE SELECTED BY OWNER

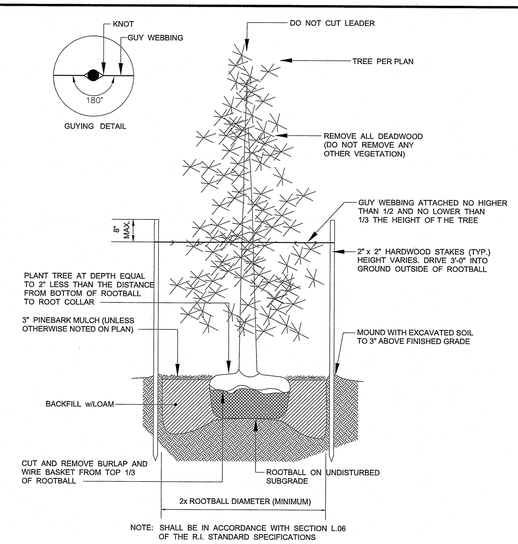
5 DUMPSTER ENCLOSURE DETAIL
NO SCALE



NOTE: SHALL BE IN ACCORDANCE WITH SECTION L.06 OF THE R.I. STANDARD SPECIFICATIONS

TREE PLANTING DETAIL SHALL CHANGE BASED OFF OF LANDSCAPE LOCATION WITHIN THE CONTAMINATED SITE. DETAILS SUBJECT TO CHANGE BASED ON SOIL/GEOLOGICAL VARIABILITY. PLEASE SEE THE REMEDIAL ACTION WORK PLAN FOR LANDSCAPING AND CAPPING INFORMATION.

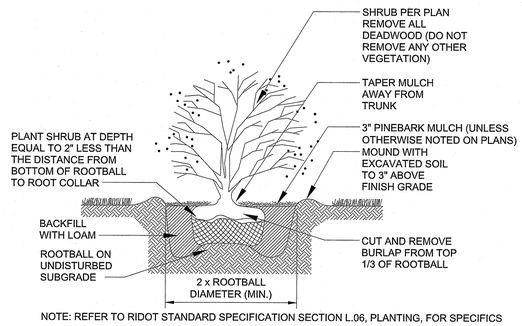
TREE PLANTING DETAIL
no scale



NOTE: SHALL BE IN ACCORDANCE WITH SECTION L.06 OF THE R.I. STANDARD SPECIFICATIONS

EVERGREEN TREE PLANTING DETAIL SHALL CHANGE BASED OFF OF LANDSCAPE LOCATION WITHIN THE CONTAMINATED SITE. DETAILS SUBJECT TO CHANGE BASED ON SOIL/GEOLOGICAL VARIABILITY. PLEASE SEE THE REMEDIAL ACTION WORK PLAN FOR LANDSCAPING AND CAPPING INFORMATION.

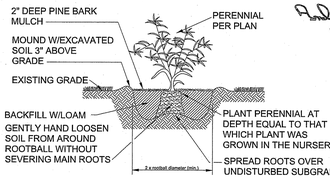
EVERGREEN TREE PLANTING DETAIL
no scale



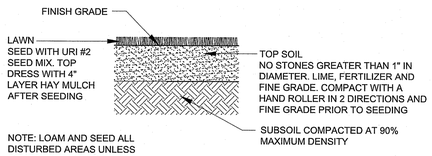
NOTE: REFER TO RIDOT STANDARD SPECIFICATION SECTION L.06, PLANTING, FOR SPECIFICS

SHRUB PLANTING DETAIL
no scale

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: APR 12 2023 FILE #: 22-0129
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



PERENNIAL PLANTING DETAIL
no scale



NOTE: LOAM AND SEED ALL DISTURBED AREAS UNLESS OTHERWISE NOTED

LOAM AND SEED DETAIL SHALL CHANGE BASED OFF OF LANDSCAPE LOCATION WITHIN THE CONTAMINATED SITE. DETAILS SUBJECT TO CHANGE BASED ON SOIL/GEOLOGICAL VARIABILITY. PLEASE SEE THE REMEDIAL ACTION WORK PLAN FOR LANDSCAPING AND CAPPING INFORMATION.

LOAM AND SEED DETAIL
no scale

PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL / COMMON NAME	B&B	CALIPER
	ARA1	1	Acer rubrum `Armstrong` / Armstrong Red Maple	B & B	2.5"Cal
	AB	13	Acer rubrum `Bowhall Red` / Bowhall Red Maple 6`-8" STD.	B & B	2.5"Cal
	AROC	17	Acer rubrum `October Glory` TM / October Glory Maple	B & B	2.5"Cal
	GS2	20	Gleditsia triacanthos `Skyline` / Skyline Honey Locust	B & B;	2.5"Cal
	LT2	13	Liriodendron tulipifera / Tulip Tree	B & B	2.5"Cal
	NS3	2	Nyssa sylvatica / Sour Gum Native to RI	B & B	2"Cal
	NB	4	Nyssa sylvatica `Black Tupelo` / Sour Gum	B & B;	2.5"Cal
	QR3	3	Quercus rubra / Red Oak	B & B	2.5" - 3" Cal.
	TC2	21	Tilia cordata `Corzam` / Corinthian Littleleaf Linden	B & B	2.5"Cal

EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	B&B	CALIPER
	IO2	7	Ilex opaca / American Holly provide 1 male plant in total count with remaing to be female	B&B; 3`-4` HT.	
	JS2	5	Juniperus chinensis `Spartan` / Spartan Juniper	B&B; 3`-4` HT.	
	JVB	8	Juniperus virginiana / Eastern Red Cedar	B & B	
	PS6	43	Pinus strobus / White Pine	B & B; 6` HT.	
	TOT3	15	Thuja occidentalis `Techny` / Techny Arborvitae	B&B; 4`-5` HT.	
	TG	57	Thuja plicata `Green Glant` / Green Glant Arborvitae	B & B; 6` HT.	

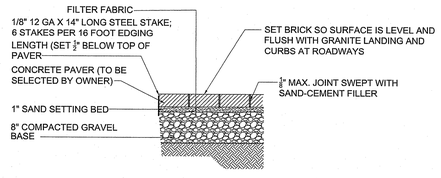
FLOWERING TREES	CODE	QTY	BOTANICAL / COMMON NAME	B&B	CALIPER
	PC12	23	Prunus sargentii `Columnaris` / Columnar Sargent Cherry	B & B	2.5"Cal
	PA7	2	Prunus serrulata `Amanogawa` / Japanese Flowering Cherry	B & B;	2.5"Cal
	SP6	2	Stewartia pseudocamellia / Japanese Stewartia	B & B	2.5"Cal
	SI3	15	Syringa reticulata `Ivory Silk` / Ivory Silk Japanese Tree Lilac Single Trunk	B & B	2.5"Cal

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT/B&B	SIZE
	AG6	100	Azalea Glenn Dale Hybrid `Delaware Valley White` / Delaware Valley White Azalea	CONT	3 gal
	CAH	7	Clethra alnifolia `Hummingbird` / `Hummingbird` Summersweet	1 gal	
	EK2	5	Euonymus kiautschovicus `Manhattan` / Manhattan Euonymus	3`- 4`; B&B	
	EKM	33	Euonymus kiautschovicus `Manhattan` / Spreading Euonymus Mature Height: 6`-8`	CONT	5 gal
	GB2	32	Gaylussacia baccata / Black Huckleberry	CONT	5 gal
	HMES	6	Hydrangea macrophylla `Endless Summer` TM / Bailmer Hydrangea Mature Height: to 5`	CONT	3 gal
	HN	82	Hydrangea macrophylla `Nikko Blue` / Nikko Blue Hydrangea	CONT	5 gal
	IH2	155	Ilex crenata `Hoogendoorn` / Hoogendoorn Japanese Holly	CONT	3 gal
	IN2	302	Ilex glabra `Nordic` / Nordic Inkberry	CONT	5 gal
	LR2	121	Leucothoe fontanesiana `Rainbow` / Rainbow Leucothoe	CONT	3 gal
	PA3	12	Potentilla fruticosa `Abbotswood` / Abbotswood Potentilla	CONT	2 gal
	RA3	25	Rhododendron x `Minnatonka` / Minnatonka Rhododendron	CONT	3 gal
	SM	19	Spiraea japonica `Magic Carpet` / Magic Carpet Spirea	CONT	3 gal
	SPMK	2	Syringa patula `Miss Kim` / Miss Kim Lilac Mature Height: 6`-8`	CONT	5 gal
	VH4	14	Vaccinium corymbosum / Highbush Blueberry	CONT	5 gal
	VD3	19	Viburnum dentatum / Arrowwood Viburnum	CONT	5 gal

PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME	CONT/B&B	SIZE
	ACF	101	Astilbe chinensis `Finale` / Chinese Astilbe	CONT	1 gal
	HO4	329	Hemerocallis x `Stella de Oro` / Stella de Oro Daylily	CONT	1 gal
	HFP	106	Hosta fortunei `Patriot` / Hosta (white edged)	CONT	1 gal
	HF4	24	Hosta x `Frances Williams` / Plantain Lily	CONT	1 gal
	HA2	2	Hosta x `Sum and Substance` / Plantain Lily	CONT	1 gal

WETLAND MITIGATION	CODE	QTY	BOTANICAL / COMMON NAME	CONT/B&B	SIZE
	DI	20	Diervilla lonicera / Dwarf Bush Honeysuckle	CONT	3 gal
	IG4	26	Ilex glabra / Inkberry Holly	2 gal	
	RM5	5	Rhododendron maximum / Rose Bay	5 gal	
	VA3	15	Viburnum dentatum / Viburnum	CONT	5 gal

PERENNIALS	QTY	BOTANICAL / COMMON NAME	CONT/FLAT	SIZE	SPACING
	35	Hemerocallis x `Stella de Oro` / Stella de Oro Daylily	CONT.	1 gal	24" o.c.



6 CONCRETE PAVER DETAIL
NO SCALE

PARE
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865, 401-334-4100
10 LINCOLN ROAD, SUITE 210, FOXBORO, MA 02035, 508-543-1755

OWNER/APPLICANT:
MESOLELLA
DEVELOPMENT CORP.
4 FOX PLACE
PROVIDENCE, RI 02903

SCALE ADJUSTMENT GUIDE
0" 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Rosebrook Commons
Mixed Use Development
AP 111, Lots 8 & 9
1747 West Main Road
Middletown, Rhode Island

Environmental Management
MAR 24 2023
Office of Water Resources

REGISTERED LANDSCAPE ARCHITECT
DIXIE C. STAKE
No. 188

REVISIONS:

#	03/24/2023	Response to Comments

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	
DESIGNED BY:	DCS
CHECKED BY:	DCS
DRAWN BY:	DCS
APPROVED BY:	DCS

DRAWING TITLE:
DETAILS

DRAWING NO.:
L4.1
SHEET NO. 34 OF 35

MIDDLETOWN LANDSCAPE PLANNING DATA

Code of Ordinances - Appendix A July 30, 2021
Subdivision Regulations-Section 521 Commercial Development

CRITERIA	REQUIRED	PROPOSED	REGULATION
BICYCLE RACKS	MINIMUM 1 BICYCLE RACK PER 5 AUTOMOBILE PARKING SPACES (334 SPACES=67 BIKE RACKS)	67 BIKE RACKS PROVIDED	521.1 E.4
WHENEVER POSSIBLE, EXISTING TREES AND VEGETATION SHALL BE USED TO SATISFY LANDSCAPING REQUIREMENTS.	TREES HAVING GREATER THAN 18-INCH CALIPER DBH SHALL BE PRESERVED, WHENEVER POSSIBLE. IF SUCH TREES CANNOT BE PRESERVED, EACH MUST BE REPLACED WITH TWO (2) TREES OF AT LEAST FOUR (4) INCH CALIPER DBH.	N/A NO TREES GREATER THAN 18-INCH CALIPER ON SITE	521.3 A
AMOUNT OF LANDSCAPING REQUIRED	MINIMUM OF 25% OF PROJECT AREA	51% PROVIDED	521.3 B
SCREENING ALONG PROPERTY LINES	USE OF STONE WALLS, BERMS, FENCES OR COMBINATION OF ITEMS	EXISTING AND PROPOSED VEGETATION (SEE PLAN)	521.3 C
PROJECT-WIDE BUFFERS	10 FOOT WIDE BUFFER ALONG ALL PROPERTY LINES	MINIMUM 10 FOOT BUFFER PROVIDED	521.3 D.1
RESIDENTIAL DISTRICT BUFFERS	20 FOOT WIDE BUFFER INCLUDING 6 FOOT HIGH SCREENING	20 FOOT BUFFER PROVIDED WITH 6 FOOT HIGH SCREENING (SEE PLAN)	521.3 D.2
BUFFER BETWEEN BUILDINGS AND PARKING LOTS AND DRIVEWAYS	10 FEET WIDE WITH MINIMUM 5 FOOT PLANTING STRIP	10 FEET WIDE WITH MINIMUM 10 FOOT PLANTING STRIP	521.3 D.3
PLANT SPECIES	PLANTINGS SHALL BE NONINVASIVE	ALL PLANTS NONINVASIVE	521.3 E
STREET TREES	TREES PLANTED ALONG STREET SIDE PROPERTY LINES AND ALONG ANY PRIVATE STREETS AND INTERNAL DRIVEWAYS LOCATED BETWEEN SIDEWALK AND CURB, MAXIMUM 30 FEET ON CENTER WITH MINIMUM CALIPER OF 4 INCHES	TREES PLANTED ALONG STREET SIDE PROPERTY LINES AND PRIVATE STREETS AND INTERNAL DRIVEWAYS LOCATED BETWEEN SIDEWALK AND CURB AVOIDING UG UTILITIES AND STORMWATER BASINS. 75 FEET ON CENTER WHEN POSSIBLE* WITH MINIMUM CALIPER OF 2 1/2 INCHES	521.3 F1
PARKING LOT TREES	1 TREE PER EVERY 5 SPACES WITH MINIMUM CALIPER OF 4 INCHES. TREES MUST BE SURROUNDED BY MINIMUM 25 SQUARE FEET OF UNPAVED AREA	1 TREE FOR EVERY 5 SPACES WITH A 2 ½ CALIPER CALCULATION: 334 PARKING SPACES/5=67 TREES PROVIDED	521.3 F2
MAINTENANCE OF LANDSCAPE	ONGOING MAINTENANCE OF LANDSCAPING SHALL BE A CONTINUING REQUIREMENT OF COMPLIANCE WITH THE REGULATIONS.	LANDSCAPE MAINTENANCE PLAN PROVIDED	521.3 H

*UNDERGROUND UTILITIES AND STORMWATER MANAGEMENT AREAS SOMETIMES PROHIBIT SPACING OF TREES AT 75 FEET ON CENTER.

Code of Ordinances-Appendix A-Article 15 Multifamily Dwellings

CRITERIA	REQUIRED	PROPOSED	REGULATION
OFF STREET PARKING	NO ROWS OR PARKING SPACES SHALL EXCEED 100 FEET WITHOUT A LANDSCAPE SEPARATION OF AT LEAST 10 FEET. THERE SHALL BE A SEPARATION OF AT LEAST 10 FEET BETWEEN ROWS (N/A)	ROWS AND PARKING SPACES RANGE FROM 30 TO 100 FEET OF SEPARATION	1507 (C)

Code of Ordinances-Article 27A Mixed-Use Development Projects

CRITERIA	REQUIRED	PROPOSED	REGULATION
TREATMENT OF AREA WITHIN REQUIRED SETBACKS	THE AREA WITHIN REQUIRED SETBACKS SHALL BE DEVOTED TO LANDSCAPED OR NATURAL BUFFER ZONE	THE AREA WITHIN REQUIRED SETBACKS IS DEVOTED TO LANDSCAPED OR NATURAL BUFFER ZONE	27A07(E)(2)
DEVELOPABLE LAND DEDICATED TO LANDSCAPE AREAS	AT LEAST 25% DEDICATED TO LANDSCAPED AREAS	51% PROVIDED	27A04(D)(2)

LANDSCAPE MAINTENANCE SCHEDULE

January:

1. Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly to encourage strong upward growth.

February:

1. Apply granular fertilizer in late February.
2. Add new mulch to plant beds where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

March:

1. Plant annual color for spring/summer bloom. Landscape plantings and soil disturbance shall conform to Remedial Action Work Plan or Post-Construction Soil Management Plan, as applicable.

April:

1. Add new mulch to plant beds where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

May:

1. Apply fertilizer to all landscape areas. The May fertilization of shrubs/groundcover areas may be deleted when the plants reach maturity or completely fill the plant beds, without space between them.

June:

1. Prune spring flowering shrubs as needed to maintain proper shape.
2. Add new mulch to plant beds where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

July:

No additional items.

August:

1. Apply fertilizer to all landscape areas. The August fertilization of shrubs/groundcover areas may be deleted when the plants reach maturity or completely fill the planters, without space between them.
2. Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

September:

1. Inventory all plant materials. Inventory shall include an exact count of all shrubs and trees, itemized by plant bed. Replace any dead or missing plants subject to the terms of these specifications.
2. Prune perennial bulbs back to ground level as soon as leaf blades yellow and wilt due to cold weather. Apply 3 inches of mulch on ground surface over bulbs to insulate from cold.
3. Plant annual color for fall bloom. Landscape plantings and soil disturbance shall conform to Remedial Action Work Plan or Post-Construction Soil Management Plan, as applicable.

October:

1. Apply fertilizer to all landscape areas. The October fertilization of shrubs/groundcover areas may be deleted when the plants reach maturity or completely fill the plant beds, without space between them.
2. Add new mulch to plant beds where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch not required where shrubs or groundcover completely hide the soil surface from view.

November:

No additional items.

December:

1. Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly to encourage strong, upward growth.
2. Prune summer and fall-blooming shrubs as needed to maintain proper shape.

Environmental Management
MAR 24 2023
Office of Water Resources

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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AP 111, Lots 8 & 9
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Middletown, Rhode Island

RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER
DANE C. SILVA
No. 13151
CERTIFICATE AUTHORIZATION

REVISIONS:

4	03/24/2023	Response to Comments

PROJECT NO.:	13018.01
DATE:	APRIL 8, 2022
SCALE:	
DESIGNED BY:	DCS
CHECKED BY:	DCS
DRAWN BY:	DCS
APPROVED BY:	DCS

DRAWING TITLE:
MISCELLANEOUS

DRAWING NO.:
L4.2
SHEET NO. 35 OF 35