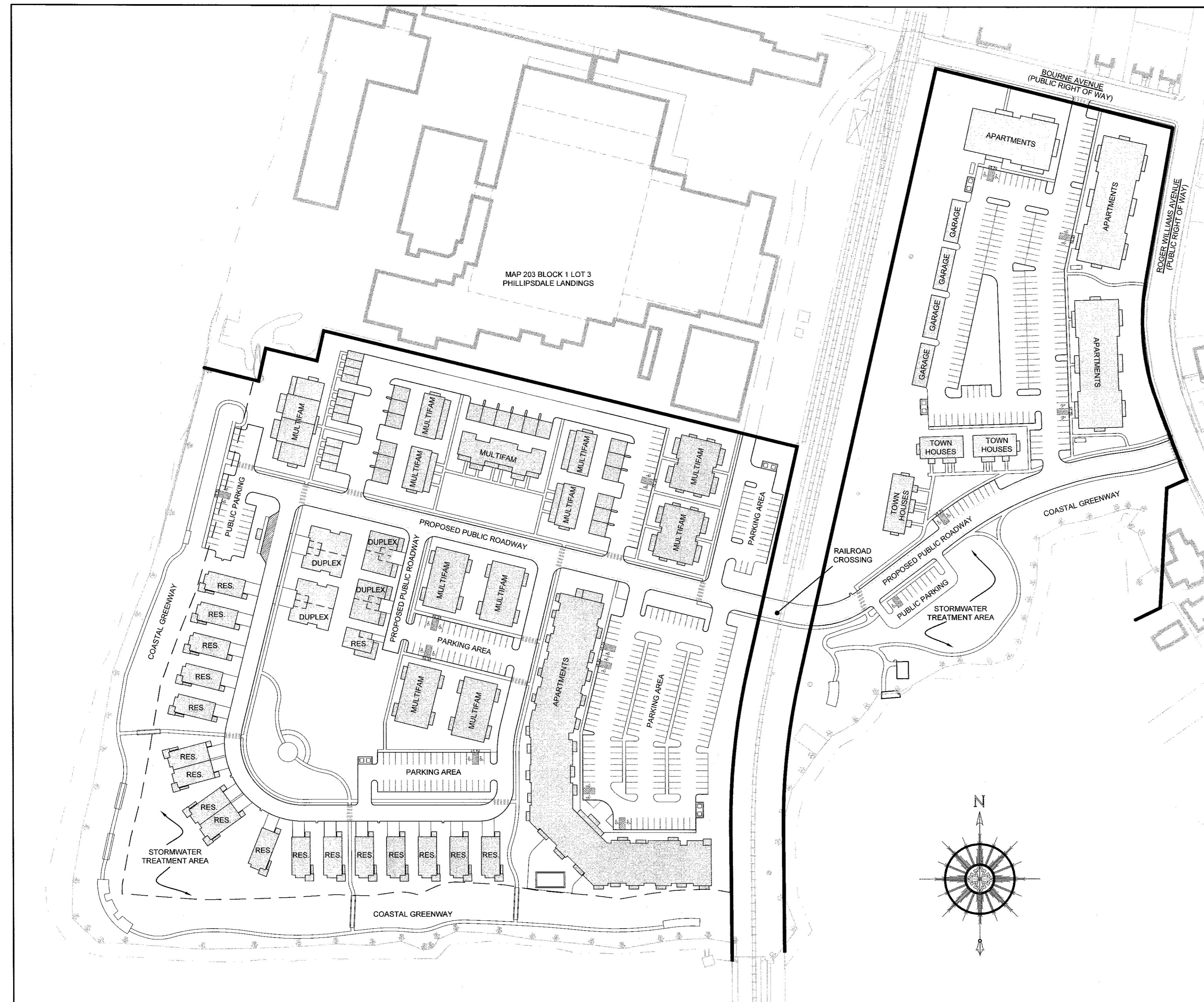


# EAST POINT MULTIFAMILY DEVELOPMENT

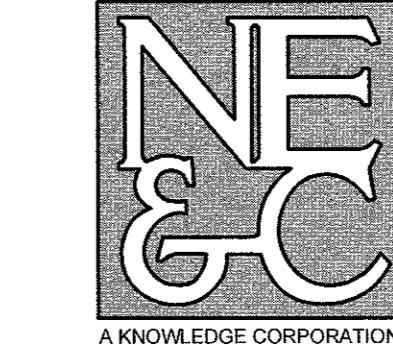
FORMER OCEAN STATE STEEL SITE  
 MAP 203 BLOCK 1 LOT 4 AND MAP 303 BLOCK 13 LOTS 4 & 5  
 ROGER WILLIAMS AVENUE AND BOURNE AVENUE  
 EAST PROVIDENCE, RHODE ISLAND



**SITE PLAN**

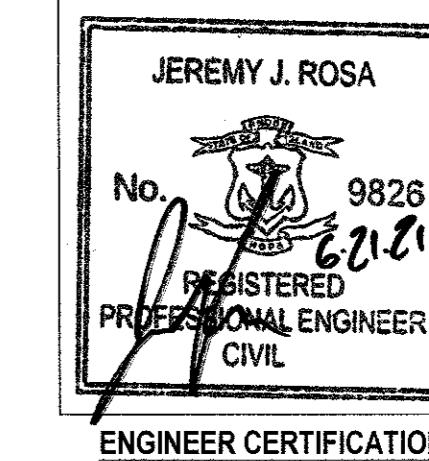
SCALE = 1" = 100'

CIVIL ENGINEER: NORTHEAST ENGINEERS & CONSULTANTS, INC.



SITE/CIVIL  
LAND PLANNING  
WATERFRONT  
SURVEYING  
GEOTECHNICAL  
ENVIRONMENTAL  
TRANSPORTATION  
STRUCTURAL  
MATERIALS TESTING

6 VALLEY ROAD MIDDLETOWN RI 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
WWW.NORTHEAENGINEERS.COM



ENGINEER CERTIFICATION

CLIENT:

NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

LANDSCAPE ARCHITECT:

KEVIN M. ALVERSON LANDSCAPE ARCHIECTURE  
360 ANNAQUATUCKET ROAD  
WICKFORD, RI 02852  
kma@kevinnalversonla.com

ARCHITECT:

UNION STUDIO  
140 UNION STREET  
PROVIDENCE, RI 02903

## JUNE 21, 2021 PERMIT SET

### PLAN INDEX

#### SITE/CIVIL ENGINEERING PLANS

##### TITLE SHEET

##### NOTES

##### INDEX SHEET

##### EXISTING CONDITION PLANS

##### PROPOSED LAYOUT PLANS

##### PROPOSED UTILITY PLANS

##### PROPOSED GRADING AND DRAINAGE PLANS

##### PROPOSED SOIL EROSION AND SEDIMENT CONTROL PLANS

##### PROPOSED ROAD PROFILES

##### PROPOSED DETAILS

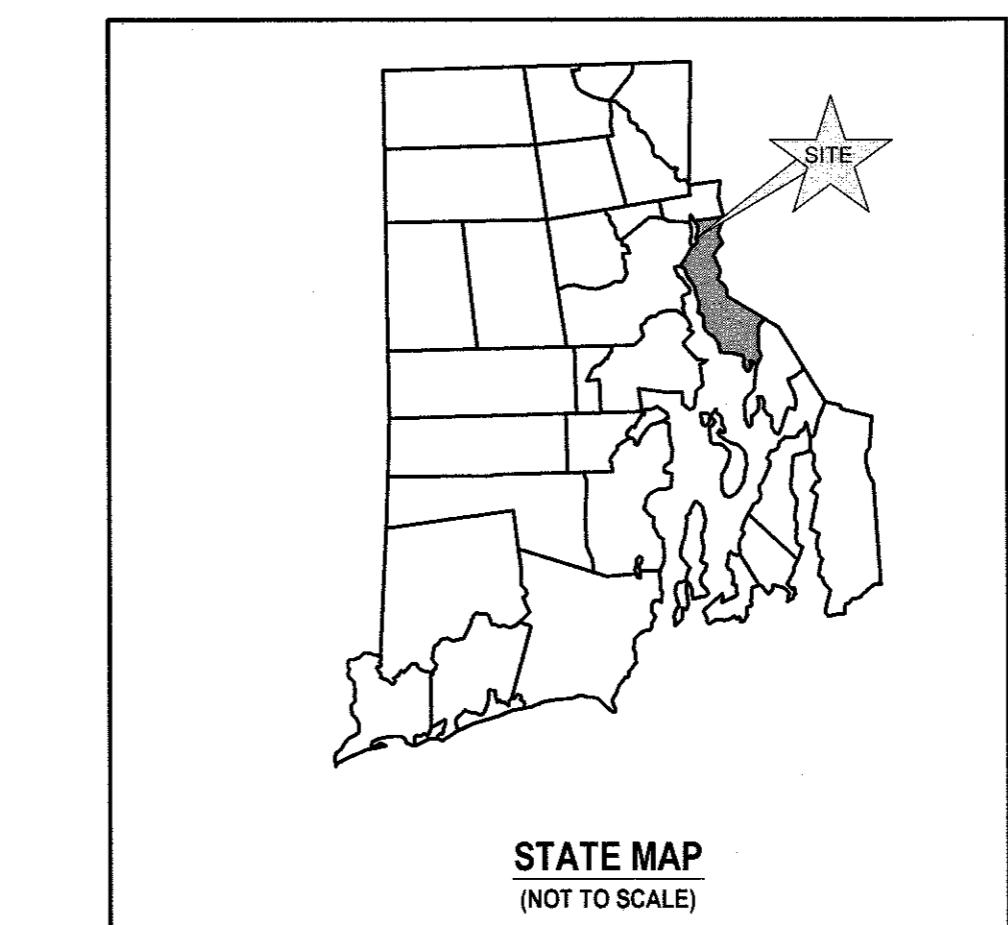
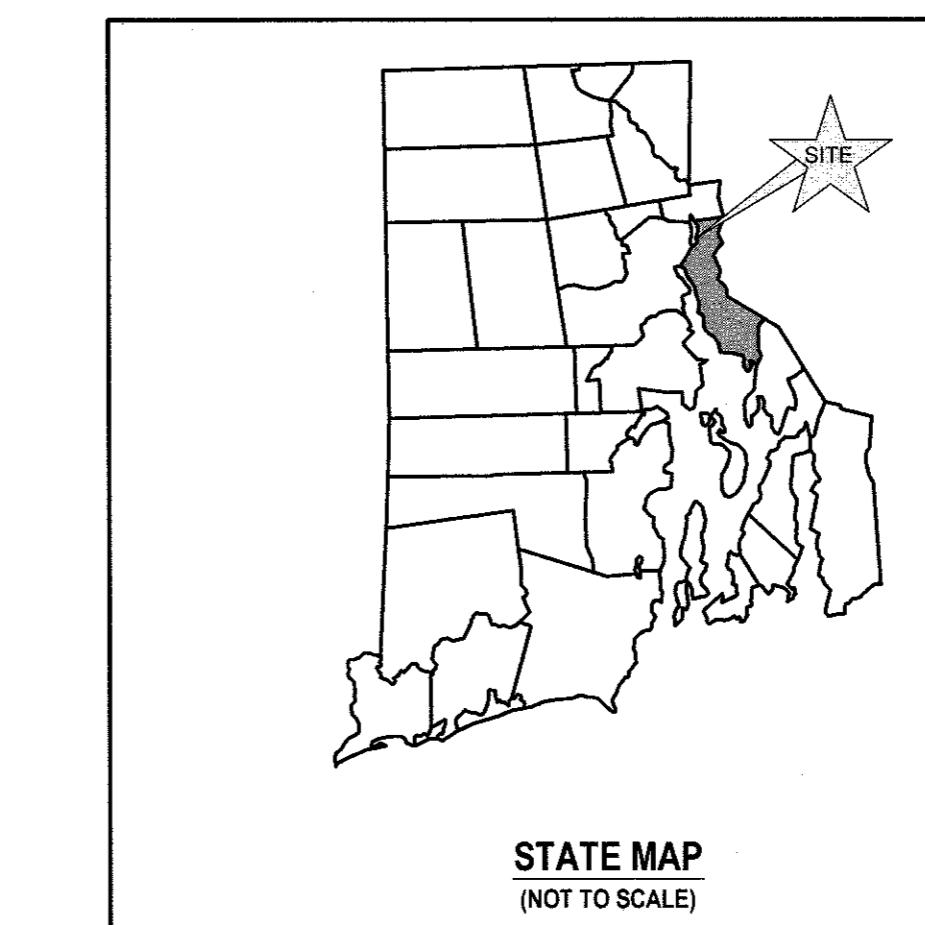
SHEET 1  
 SHEET 2  
 SHEET 3  
 SHEETS 4-5  
 SHEETS 6-7  
 SHEETS 8-9  
 SHEETS 10-11  
 SHEETS 12-13  
 SHEETS 14-17  
 SHEETS 18-22

#### ADDENDUMS

##### PLAN OF LAND (BY OTHERS)

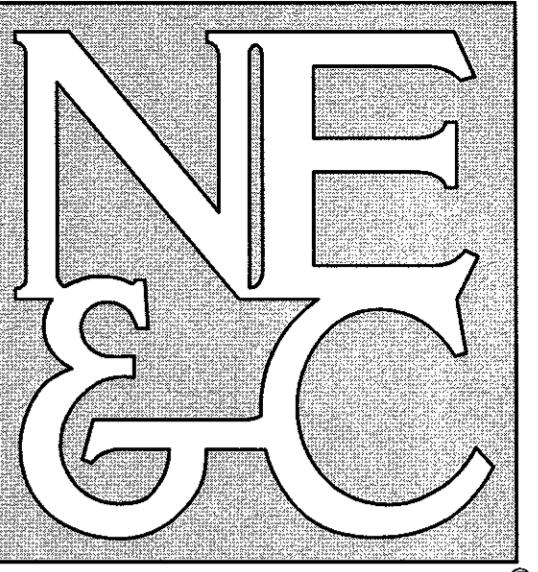
##### LANDSCAPING PLANS

SHEET 1  
 SHEETS L1-L5



#### SUBMISSION AND REVISION SUMMARY

AGENCY OR REVISION	DATE	COMMENTS:
E. PROV. WATERFRONT COMMISSION	APR 23, 2021	
E. PROV. WATERFRONT COMMISSION	MAY 21, 2021	
CRMC	JUNE 17, 2021	
E. PROV. WATERFRONT COMMISSION	JUNE 21, 2021	



A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
WWW.NORTHEASTENGINEERS.COM

#### GENERAL NOTES

- PROPERTY LINE INFORMATION REFERENCED FROM PLAN ENTITLED "BOUNDARY SURVEY PLAN MAP 205 - BLOCK 1 - LOT 4 MAP 303 - BLOCK 13 - LOTS 4 & 5 ROGER WILLIAMS AVE, BOURNE AVE. - EAST PROVIDENCE, RI" PREPARED FOR GEONOVIA DEVELOPMENT COMPANY, PREPARED BY WATERMAN ENGINEERING CO., SHEET 1 OF 1, DATED SEPT. 23, 2002, THROUGH REVISION 2 DATED 8-12-03, STAMPED AND SIGNED BY RICHARD S. LIPSTZ ON 8-15-03.
- TOPOGRAPHY AND PLANIMETRICS OBTAINED BY BOTH ON-GROUND SURVEY PERFORMED BY NEAC IN 2005 THROUGH MULTIPLE DATA COLLECTIONS AND EXISTING CONDITIONS AERIAL PHOTOGRAVIMETRY PROVIDED BY WATERMAN ENGINEERING CO. EXISTING SURVEY CONDITIONS DATA IS CURRENT AND ACCURATE AS OF DECEMBER 2005. EXISTING GROUND FEATURES UPDATED IN JANUARY 2021 BASED ON AERIAL PHOTOGRAPHY. DATUM IS NGVD29.
- SUBJECT PROPERTIES ARE ZONED WATERFRONT DISTRICT / PHILLIPSDALE LANDING.
- NORTH ARROW TAKEN FROM REFERENCE PLAN IN NOTE 1 ABOVE.
- FRESHWATER WETLAND FLAGGING WAS PERFORMED BY NATURAL RESOURCE SERVICES IN OCTOBER 2020 AND FIELD LOCATED BY NE&C. COASTAL FLAGGING PERFORMED BY MASON & ASSOCIATES, INC. IN NOVEMBER 2020 AND FIELD LOCATED BY NE&C.
- PROPERTY IS LOCATED WITHIN A FEMA ZONE "VE" (EL. 15), ZONE "VE" (EL. 13), ZONE "AE" (EL. 13), AND ZONE "X" PER FEMA FIRM 44007C0328J, MAP EFFECTIVE OCTOBER 2, 2015.
- THE UNDERGROUND UTILITIES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AFFECTED UTILITY COMPANY AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. WHEREVER CONNECTION OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES. (PLEASE CALL DIG SAFE PRIOR TO CONSTRUCTION AT 1-888-DIG-SAFE AND ALL LOCAL UTILITY COMPANIES.)
- THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT AND DETAILS WITH THEIR RELATIONSHIP TO THE EXISTING SITE SURVEY. CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING WORK.
- THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATIONS OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
- THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PRESERVE STREET MONUMENTS.
- STREET MONUMENTS THAT ARE DISTURBED SHALL BE RESTORED UNDER THE LICENSED LAND SURVEYOR'S DIRECTION. ANY NEW DATA SUCH AS ELEVATIONS SHALL BE CERTIFIED BY THE SURVEYOR, AND SUBMITTED TO THE CITY OF EAST PROVIDENCE.
- DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE PROJECT ENGINEER, APPROPRIATE AGENCY AND OWNER.
- RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND BE COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATION REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR PROJECT ENGINEER."
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION INCLUDING ALL REVISIONS.
- PROJECT REQUIRES APPROVAL BY THE COASTAL RESOURCES MANAGEMENT COUNCIL.
- BORING LOCATIONS SHOWN ON PLANS WERE PERFORMED IN MARCH OF 2004.

#### GRADING NOTES

- ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE.
- ALL GRADED AREAS SHALL BE SODDED OR PLANTED IMMEDIATELY AFTER THE GRUBBING WORK HAS BEEN COMPLETED.
- THE CITY SHALL BE INFORMED OF THE LOCATION OF THE DISPOSAL SITE, IF ANY, FOR THE PROJECT.
- NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE MUNICIPALITY, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS.
- THE LIMITS OF DISTURBANCE SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE MUNICIPALITY.
- WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE GRADING WORK IS INITIATED.
- TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
- IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
- NONCOMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

#### UTILITY NOTES

**WATER:**

- THE PROPOSED WATER SYSTEM AND ALL SERVICES REQUIRE THE REVIEW AND APPROVAL OF THE EAST PROVIDENCE WATER UTILITIES DIVISION AND THE CITY ENGINEER.
- ALL WATER PIPES AND FITTINGS SHALL BE DUCTILE IRON CLASS 52, CEMENT LINED OR EQUAL WATER PIPE OF THE CLASS, QUALITY AND SIZE SPECIFIED AND REQUIRED BY THE CITY ENGINEER.
- ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 4.5 FEET TO FINAL GRADE.
- ALL VALVES SHALL BE OF A TYPE APPROVED BY THE CITY ENGINEER.
- ALL HYDRANTS SHALL BE OF AN APPROVED TYPE AND INSTALLED IN LOCATIONS SPECIFIED BY THE CITY ENGINEER AND APPROVED BY THE FIRE CHIEF. HYDRANT LOCATIONS SHOWN ON THESE PLANS ARE PRELIMINARY.

**ELECTRICAL AND COMMUNICATIONS:**

- NEW ELECTRIC, TELEPHONE AND CABLE SERVICES SHALL BE INSTALLED UNDERGROUND.
- THE LOCATIONS OF PROPOSED ELECTRICAL CONNECTIONS TO THE EXISTING OVERHEAD SERVICES ARE PRELIMINARY. FINAL DESIGN OF THE ELECTRICAL SERVICES IS SUBJECT TO DESIGN REVIEW AND APPROVAL OF NATIONAL GRID.

**SEWER:**

- THE PROPOSED SEWER SERVICES AND CONNECTIONS TO EXISTING MAINS IN ROGER WILLIAMS AVENUE AND BOURNE AVENUE SUBJECT TO REVIEW AND APPROVAL BY THE EAST PROVIDENCE DEPARTMENT OF PUBLIC WORKS AND THE CITY ENGINEER.
- ALL GRAVITY SEWER MAINS AND SERVICES SHALL BE PVC, ASTM DESIGNATION D3034-SDR 35. WATERTIGHT PIPE AND FITTINGS SHALL BE USED IN ALL AREAS.
- ALL GRAVITY MAINS SHALL HAVE A MINIMUM OF 3 FEET OF COVER.
- ALL PRESSURIZED SEWER MAINS SHALL BE CLASS 200 SDR 21. ALL PUMPED LINES SHALL NOT DRAIN BACK TO PUMP STATIONS AND SHALL BE INSTALLED 4 FT BELOW GRADE. PROPER COMPACTION AND FORCE MAIN INSTALLATION SHALL BE PERFORMED TO ENSURE THAT NO LOW POINTS ARE CREATED. AIR RELIEF VALVES SHALL BE INSTALLED AS NEEDED AT ANY INTENDED HIGH POINTS IN THE SYSTEM.
- PROPOSED PUMP STATIONS SUBJECT TO FURTHER DESIGN AND APPROVAL.

#### GENERAL

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS HE/SHE MAY MAKE OR DERIVE FROM THE SUBSURFACE INFORMATION OR DATA FURNISHED ON THE PLANS. THE CONTRACTOR MUST SATISFY HIMSELF/HERSELF THROUGH HIS/HER OWN INVESTIGATIONS AS TO WHAT SUBSURFACE CONDITIONS ARE TO BE ENCOUNTERED.
- IF THE CONTRACTOR ELECTS NOT TO EXPOSE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES AT CROSSINGS PRIOR TO PIPELINE EXCAVATION, HE/SHE FORFEITS HIS/HER RIGHTS FOR ANY CLAIMS FOR COMPENSATION CAUSED BY ANY CONFLICTS WITH EXISTING UTILITIES AND STRUCTURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EFFLUENT ASSOCIATED WITH THE CONSTRUCTION ACTIVITY AND THE DISINFECTION AND HYDROTESTING OPERATIONS TO SAFEGUARD PUBLIC HEALTH AND SAFETY IN ACCORDANCE WITH APPLICABLE DEPARTMENT OF HEALTH REQUIREMENTS. ALL PERMITS AND LICENSES FOR CONSTRUCTION WATER DISPOSAL, INCLUDING ALL APPLICATIONS, CHARGES, FEES, AND TAXES, ARE THE RESPONSIBILITY OF THE CONTRACTOR.

#### SOIL EROSION AND SEDIMENT CONTROL NOTES

- CONSTRUCTION SEQUENCE:
  - DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
  - ALL CONSTRUCTION VEHICLES SHALL ENTER AND LEAVE THE SITE VIA A PAVED ACCESS POINT OR A CONSTRUCTION ENTRANCE CONFORMING TO THE DETAIL PROVIDED.
  - INSTALL SILT FENCES, SILT SACKS, AND/OR FILTER SOCKS AS INDICATED ON THE DRAWINGS TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION OF DOWNSTREAM AREAS PRIOR TO ANY EARTH MOVING ACTIVITIES.
  - CONTRACTOR TO FIELD DELINEATE ALL ELUR AREAS USING EXISTING RECORDED DOCUMENTS. CONTRACTOR TO LOCATE AND DELINEATE EXISTING SEWER FORCE MAINS TO ENSURE THAT THEY ARE NOT DISTURBED DURING GRADING OPERATIONS.
  - DEMOLISH EXISTING PAVEMENT AND IMPROVEMENTS WITH THE EXCEPTION OF OVERHEAD ELECTRICAL LINES TO REMAIN AND SEWER FORCE MAINS SECTIONS OF EXISTING RAIL TO BE REMOVED SHALL BE COORDINATED WITH THE APPROPRIATE ENTITY. REFER TO RAILWAY CROSSING PLANS BY OTHERS.
  - ANY UTILITY POLES TO BE RELOCATED SHALL BE COORDINATED WITH NATIONAL GRID.
  - ROUGH GRADE SITE PER CONSTRUCTION GRADING PLAN REFER TO EARTHWORK NOTES THIS SHEET.
  - BEGIN CONSTRUCTION OF DRAINAGE SYSTEM MEDIA SHALL NOT BE PLACED IN FILTERING SYSTEM EXCAVATIONS UNTIL SITE GRADING IS COMPLETE. UNTIL THIS TIME, THESE EXCAVATIONS SHALL BE USED AS TEMPORARY SEDIMENT BASINS. CONVEYANCE SYSTEMS SHALL BE CONSTRUCTED FROM THE DOWNSTREAM ENDS OF THE PIPE LINES. TEMPORARY EROSION BLANKETS SHALL BE USED WHERE NECESSARY TO STABILIZE DRAINAGE SWALES.
  - CONSTRUCT SEWER AND WATER CONVEYANCE SYSTEMS. COORDINATE INSTALLATIONS WITH EAST PROVIDENCE PUBLIC WORKS AND THE CITY ENGINEER. CONTRACTOR TO COMPLETE ALL NECESSARY TESTING OF SEWER AND WATER SYSTEMS IN CONFORMANCE WITH CITY STANDARDS.
  - CONSTRUCT UNDERGROUND ELECTRICAL AND COMMUNICATION DISTRIBUTION SYSTEM IN COORDINATION WITH NATIONAL GRID AND OTHER SERVICE PROVIDERS.
  - FINAL GRADE SITE AND INSTALL BINDER PAVEMENT COURSE. SET CURBING PER DETAILS PROVIDED. BUILDING PADS SHALL BE LEVELED, COMPAKTED AND STABILIZED FOR DEVELOPMENT BUILDOUT.
  - REMOVE CONSTRUCTION SEDIMENTS FROM DRAINAGE SYSTEM AND PLACE FILTER MEDIAS.
  - INSTALL COASTAL AND DRAINAGE SYSTEM PLANTINGS ACCORDING TO APPROVED LANDSCAPING PLANS.
  - INSTALL TOP PAVEMENT COURSE AND MAINTAIN SITE IN ACCORDANCE WITH THE MAINTENANCE NOTES.
- EARTHWORK NOTES:
  - DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
  - AREA OF PROPOSED DRAINAGE SYSTEM SHALL NOT BE USED FOR STOCKPILES OR STORAGE OF MATERIALS OR EQUIPMENT.
  - ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE STABILIZED WITHIN FOURTEEN DAYS IN ACCORDANCE WITH TEMPORARY MEASURES IN THE VEGETATIVE PRACTICE NOTES.
  - AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOP SOIL TO REMOVE VEGETATION, ROOTS, AND ANY OTHER OBJECTIONABLE MATERIAL.
  - ALL FILL SHALL BE COMPAKTED TO 95% MAX. DENSITY TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS.
  - FILL INTENDED TO SUPPORT BUILDING STRUCTURES AND CONDUITS, ETC., SHALL BE COMPAKTED IN ACCORDANCE WITH LOCAL CODES AND SPECIFICATIONS.
  - ALL FILL SHALL BE PLACED AND COMPAKTED TO 95% MAX. DENSITY IN LAYERS NOT TO EXCEED 12" IN THICKNESS FILLS.
  - FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
  - FROZEN, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.
  - FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION SUBGRADE.
  - SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
  - ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF FINISH GRADING IN ACCORDANCE WITH THE VEGETATIVE PRACTICE NOTES.
  - MOVE TEMPORARY EROSION CONTROL MEASURES ONCE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED AND VEGETATED AREAS HAVE RECEIVED TWO MOWINGS.
- VEGETATIVE PRACTICE:
  - PERMANENT MEASURES:
    - A. SLOPES SHALL NOT BE STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL UNLESS OTHERWISE SPECIFIED.
    - B. LOAM AND SEED REQUIREMENTS ARE SPECIFIED IN RIDOT "L01 & L02".
    - C. A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2 INCHES SHALL BE REMOVED.
  - TEMPORARY MEASURES (FOR TEMPORARY PROTECTION OF DISTURBED AREAS)
    - LIMESTONE AND FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE: FERTILIZER: 10-10-10 900 LBS/ACRE
    - SEED SHALL BE APPLIED AT THE FOLLOWING RATE: WINTER RYE: 100 LBS/ACRE
    - STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.
- MAINTENANCE
 

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED, THE EROSION CONTROL MEASURES SHALL BE INSPECTED.

  - AT A MINIMUM THE SILT FENCING, STRAW BALES AND FILTER SOCK BARRIERS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REGRADED ON THE SITE.
  - EROSION CONTROL BLANKETS SHALL BE INSPECTED ON A WEEKLY BASIS.
  - SILT SACKS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. DURING HEAVY RAIN EVENT, IT MAY BE NECESSARY TO TEMPORARILY REMOVE SACKS IN ORDER TO PREVENT FLOODING. SEDIMENT TRAPPED WITHIN SACKS SHALL BE DISPOSED OF OFF SITE AT A LICENSED FACILITY OR REGRADED ON THE SITE.
  - STONE RIPRAP SHALL BE INSPECTED MONTHLY FOR EXCESSIVE ACCUMULATION OF SEDIMENT. IT MAY BE NECESSARY TO REMOVE STONES, EXCAVATE SEDIMENT, AND REPLACE STONES.
  - THE STABILIZED CONSTRUCTION ENTRANCES SHALL BE REMOVED PRIOR TO PAVING. DURING CONSTRUCTION THE ENTRANCE SHALL BE INSPECTED WEEKLY, AND RE-ESTABLISHED AS NECESSARY.
  - SEEDED AREAS WILL BE FERTILIZED AND RESEED AS NECESSARY TO INSURE ESTABLISHMENT OF A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF THE CITY ENGINEER.

#### DRAINAGE NOTES

- ALL DRAIN PIPES ON SITE SHALL BE ADS-N12 TYPE IB OR SCH40 PVC UNLESS OTHERWISE NOTED ON THESE PLANS. CLASS IV RCP REQUIRED IN AREAS WITH LESS THAN 2 FEET OF COVER OVER DRAIN PIPES.
- ALL DRAIN STRUCTURES SHALL BE PRECAST CONCRETE AS INDICATED ON THE DETAIL SHEETS UNLESS OTHERWISE NOTED ON THESE PLANS.
- ALL PRECAST CONCRETE CATCH BASINS SHALL HAVE 3-FOOT SUMPS UNLESS OTHERWISE NOTED AS DEEP SUMP ON THE PLANS OR PROFILES IN WHICH CASE THE STRUCTURE SHALL HAVE A 4-FOOT SUMP.

#### PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES

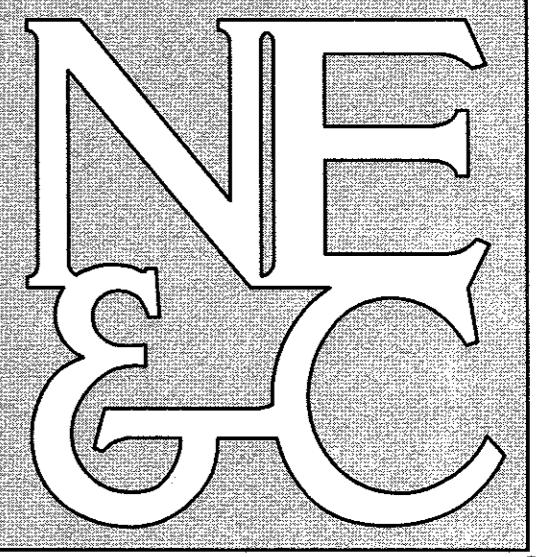
- CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR AT HIS/HER EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SILT OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS AS NECESSARY.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.

#### STORMWATER MAINTENANCE NOTES

- REFER TO OPERATIONS AND MAINTENANCE DOCUMENT FOR COMPLETE DESCRIPTION OF POST CONSTRUCTION STORMWATER MAINTENANCE. A BASIC OUTLINE OF REQUIRED MAINTENANCE IS PROVIDED BELOW.
- SAND FILTER MAINTENANCE:
  - GRASSES AND/OR SPECIFIED VEGETATION SHALL BE PLANTED AROUND AND WITHIN THE SAND FILTER IMMEDIATELY FOLLOWING CONSTRUCTION TO STABILIZE SLOPES AND PREVENT EROSION.
  - THE FILTER SHOULD BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ANNUALLY AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT (2.8 INCHES).
  - THE FOLLOWING SHALL ALSO BE COMPLETED ON AN ANNUAL BASIS:
    - THE FILTER SHOULD BE PRUNED FOR EROSION AND GULLYING.
    - REINFORCE THE EXISTING RIPRAP IF IT IS FOUND TO BE DEFICIENT, EROSION IS PRESENT AT THE OUTLET STRUCTURES, OR ANY EXISTING RIPRAP HAS BEEN COMPROMISED.
    - IN ANY AREAS WITHIN THE EXTENTS OF THE FILTER THAT ARE SUBJECT TO EROSION OR GULLYING SHOULD BE REPLANTED WITH THE ORIGINAL DESIGN MATERIAL AND REVERGATED ACCORDING TO DESIGN DRAWINGS. SLOPE PROTECTION MATERIAL SHOULD BE PLACED IN AREAS PRONE TO EROSION. EMBANKMENT STABILITY SHOULD BE INSPECTED FOR SEEPAGE AND BURROWING ANIMALS.
    - MOW THE GRASS AROUND THE PERIMETER OF AND WITHIN THE FILTER. SEED BARE AREAS, AND REMOVE LITTER AND DEBRIS AT LEAST THREE TIMES PER GROWING SEASON. MAINTAIN MAXIMUM GROWTH HEIGHTS LESS THAN ONE INCH. MOVE ANY INVASIVE PLANTS AND WEEDS AS THEY APPEAR. THE FILTER SHOULD BE PRUNED OR REMOVED IF IT IS OBSTRUCTING ACCESS TO THE FILTER. IF THE FILTER HAS BEEN COMPROMISED, IT SHOULD BE REPLANTED ACCORDING TO THE ORIGINAL DESIGN DOCUMENTS.
- CONVEYANCE STRUCTURE MAINTENANCE:
  - ALL STRUCTURE INLET / OUTFLOW PIPES ARE TO BE INSPECTED AT LEAST THREE TIMES IN THE FIRST SIX MONTHS OF OPERATION. EVIDENCE OF CLOGGING, OR RAPID RELEASE OF FLOW SHALL BE REPORTED TO THE PROJECT ENGINEER AND REMEDIED IMMEDIATELY.
  - CONVEYANCE STRUCTURES SHOULD BE INSPECTED QUARTERLY. ANY STRUCTURAL FAULTS SHOULD BE REPAIRED AS NECESSARY FOR PROPER FUNCTION OF THE STRUCTURE. CATCH BASIN Sumps SHALL BE VACUUMED OUT BIANNUALLY OR EACH TIME 50% OF THE AVAILABLE STORAGE HAS BEEN DEPLETED.
  - POOF RUNOFF STRUCTURES SUCH AS GUTTERS AND DOWNSPOUTS SHOULD BE CLEAN AND FREE OF OBSTRUCTIONS THAT REDUCE FLOW. A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF NECESSARY TO DETERMINE WHETHER A STRUCTURE HAS BEEN COMPROMISED.
  - ALL PARKING LOTS AND ROADWAYS RE TO BE SWEEPED USING A VACUUM TRUCK TWICE A YEAR.
  - UPON COMPLETION OF THE CONSTRUCTION, MAINTENANCE OF THE STORMWATER SYSTEM SHALL BECOME THE RESPONSIBILITY OF THE OWNER. REFER TO THE STORMWATER OPERATIONS AND MAINTENANCE DOCUMENT.
  - MAINTENANCE OF THE STORMWATER SYSTEM DURING CONSTRUCTION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

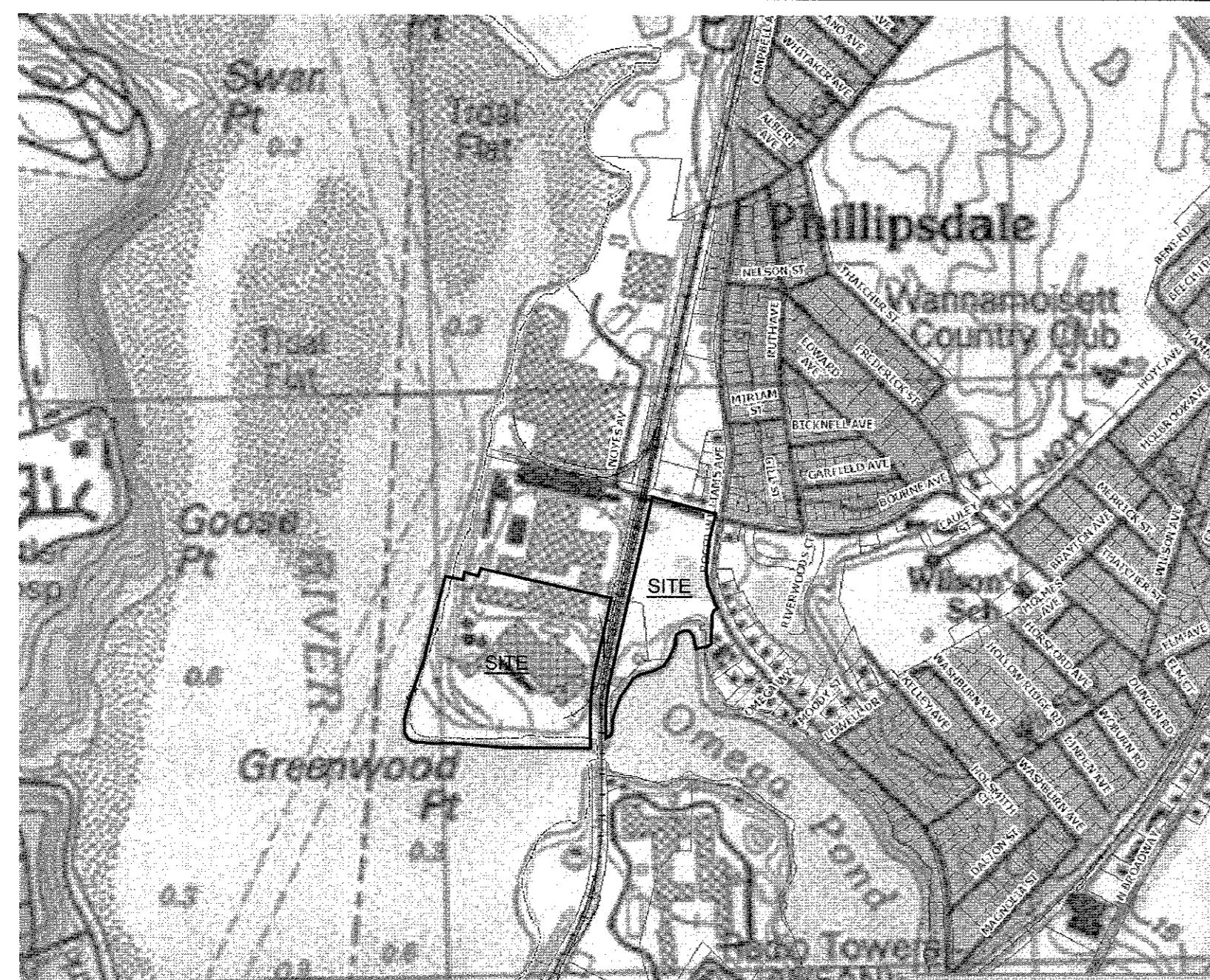
#### ABBREVIATIONS

AC	ASPHALT PAVEMENT
ADJ	ADJACENT
AP	ASSESSOR'S PLAT
ACCESS	ACCESSIBLE
ARCH	ARCHITECT
BC	BOTTOM OF CURB
BH	BORING HOLE
BIT	BITUMINOUS
BOW	BOTTOM OF WALL
CUR	CURB
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONN	CONNECT
COTG	CUT GRADE
CF	CUBIC FOOT
DEMO	DEMOLISH
DI	DRAIN INLET
DIA	DIAETER
DMH	DOWNHOLE
DP	DROP PIPE
DS	DOWNSPOUT
DWG	DRAWING
E	ELECTRIC
ELEVEL	ELEVATION
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EQ	EQUAL
EXIST	EXISTING

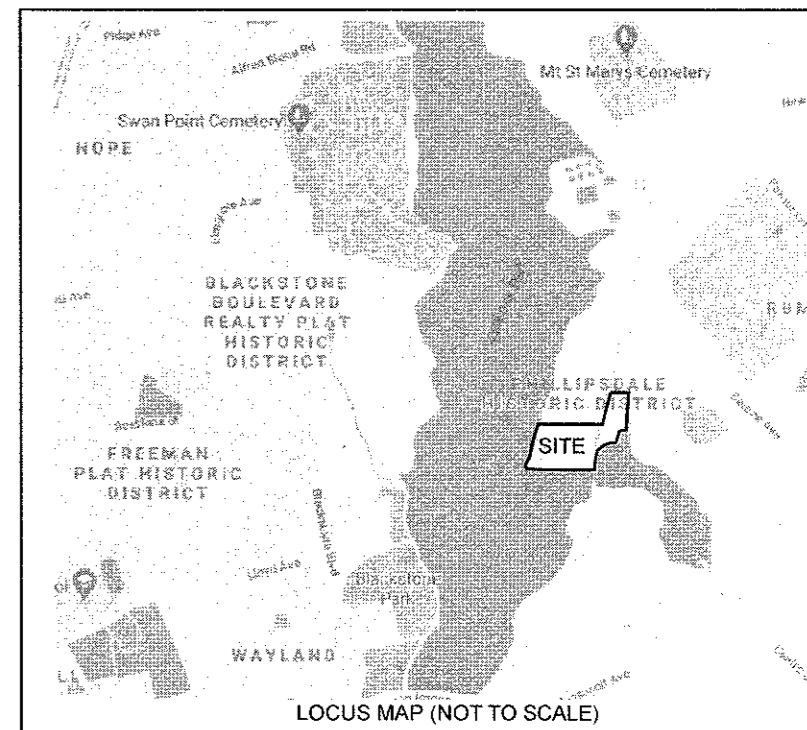
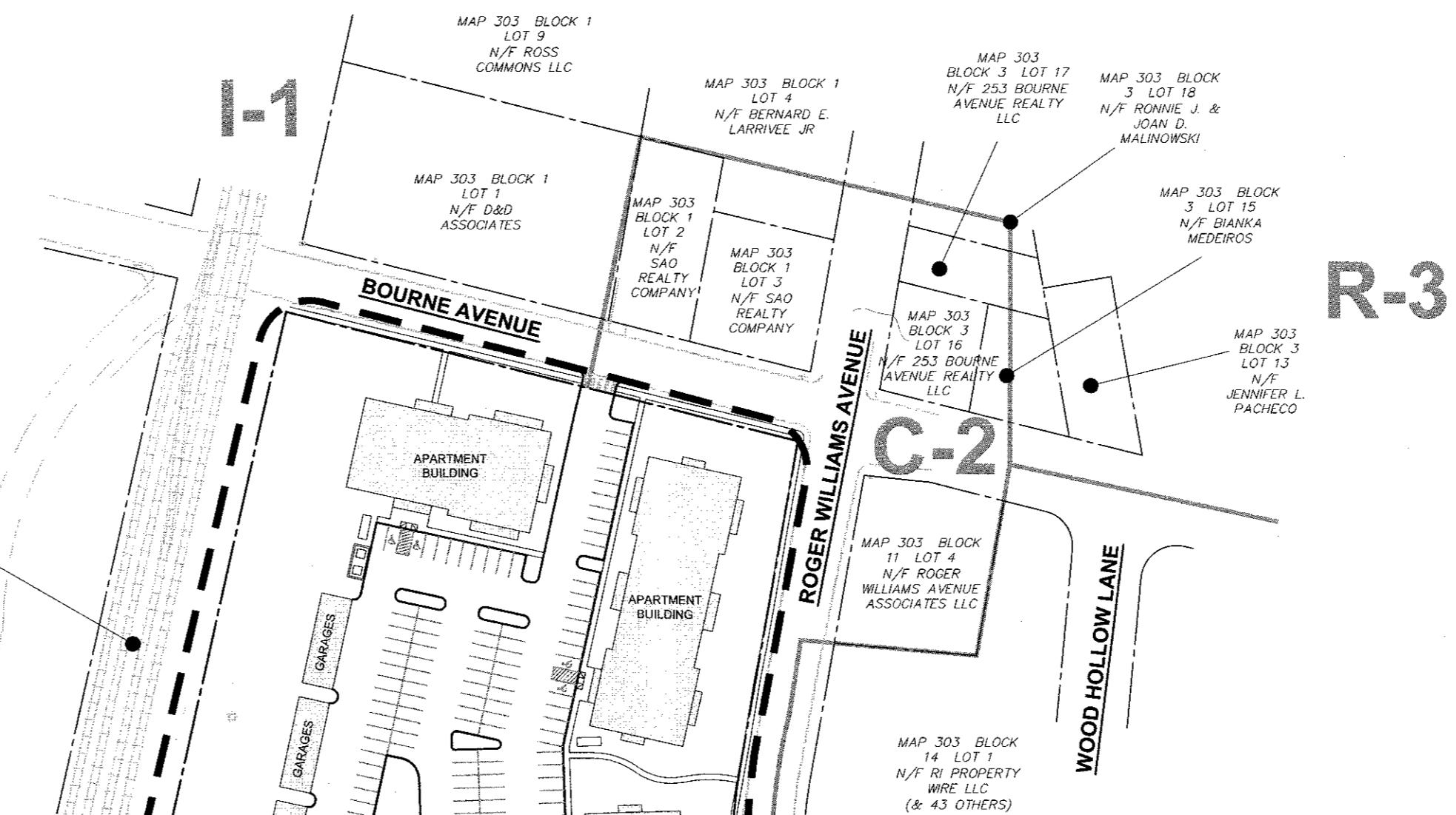


A KNOWLEDGE CORPORATION®

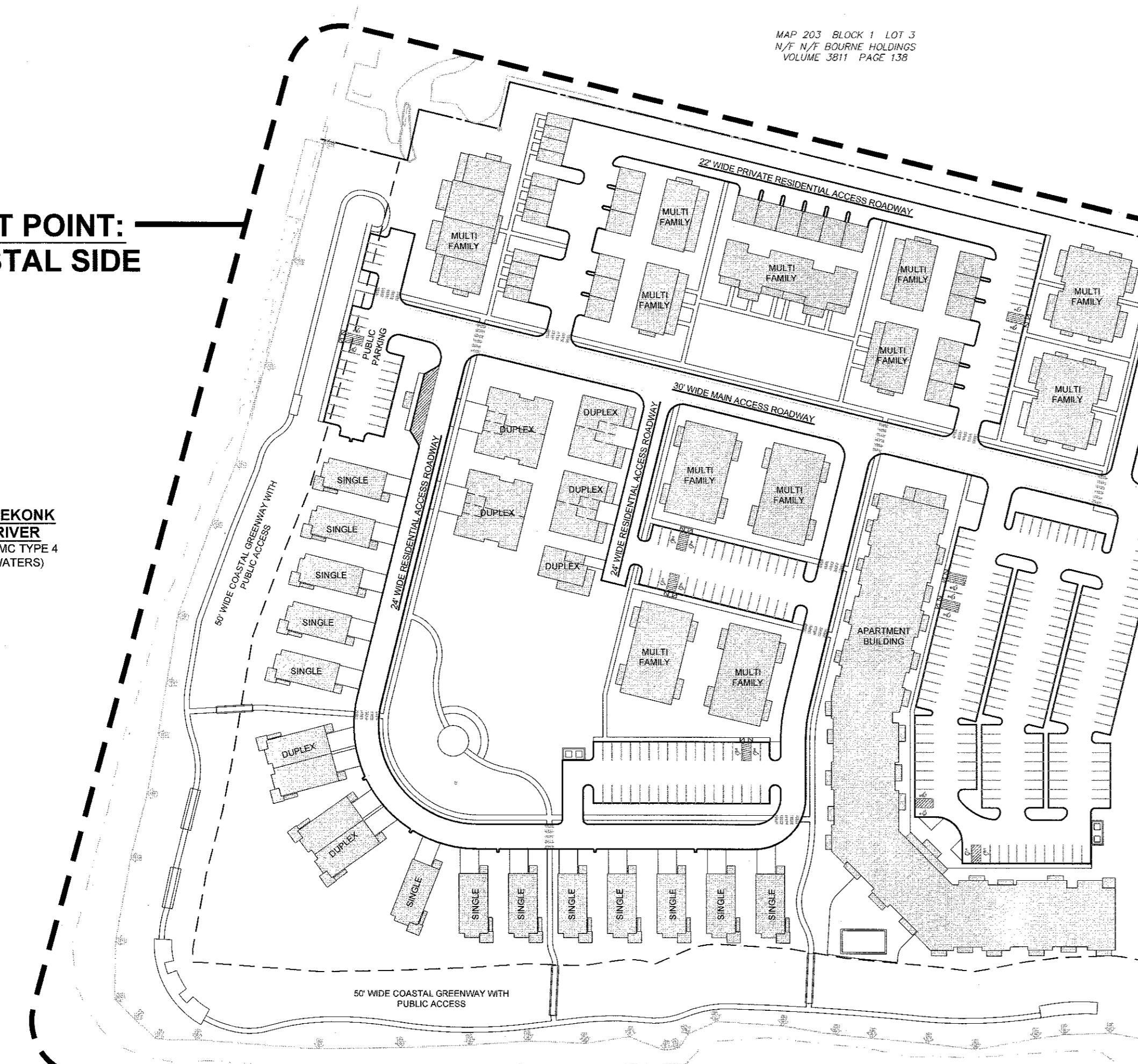
SITE/CIVIL  
LAND PLANNING  
WATERFRONT  
SURVEYING  
GEOTECHNICAL  
ENVIRONMENTAL  
TRANSPORTATION  
STRUCTURAL



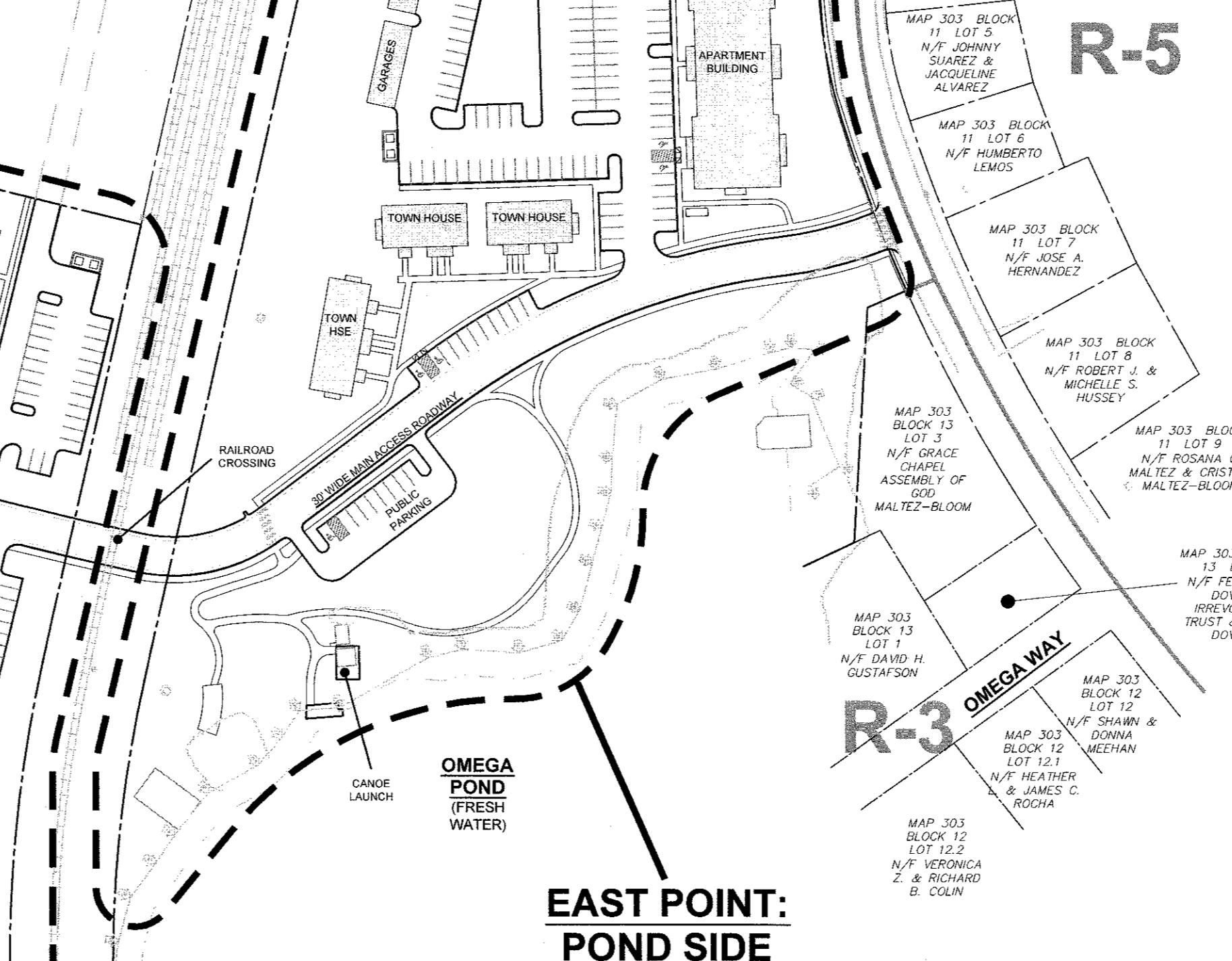
USGS INSET



**EAST POINT:  
COASTAL SIDE**

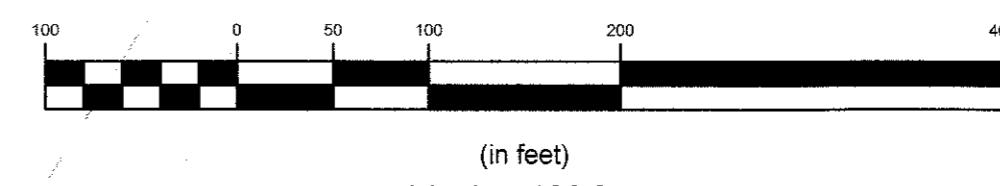


SEEKONK  
RIVER  
(CRMC TYPE 4  
WATERS)



**EAST POINT:  
POND SIDE**

**GRAPHIC SCALE**



2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21
No.	Revision	Date App.

Designed By: JJR Drawn by: JJR Checked by: GES

Scale: 1"=100' Date: 22APR21

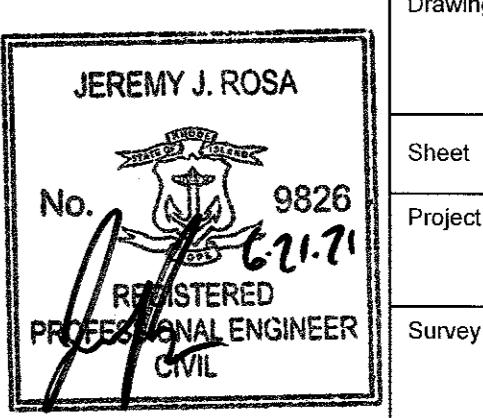
Project Title:

**"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND**

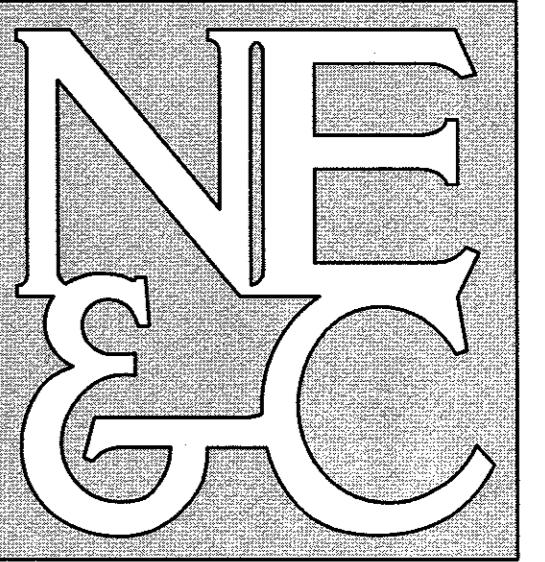
Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

Issued for:  
PERMITTING

Drawing Title:  
**INDEX PLAN  
(SHOWING 200' ABUTTERS)**

Drawing Number:	
C-3	
Sheet 3 of 22	
Project Number:	
20072.0	
Survey Index:	
	
No. 9826-62171	
REGISTERED PROFESSIONAL ENGINEER CIVIL	

OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.



A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETON RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-1469  
WWW.NORTHEASTENGINEERS.COM

LEGEND:

—	PROPERTY LINE
—	ABUTTER PROPERTY LINE
—	UTILITY EASEMENT LINE
—	ACCESS EASEMENT LINE
—	FENCE LINE
—	GRAPHIC CONTOUR
—	SEWER MAIN (18")
—	SEWER MAIN (DIA. UNIDENTIFIED)
—	GAS MAIN (8")
—	GAS MAIN (8')
—	GAS MAIN (12")
—	GAS MAIN (DIA. UNIDENTIFIED)
—	WATER MAIN (10")
—	DRAIN LINE (DIA. UNIDENTIFIED)
—	OVERHEAD WIRES
—	SEWER FORCE MAIN
—	EDGE OF COASTAL FEATURE / WETLAND
—	50' SETBACK FROM COASTAL FEATURE / WETLAND
—	FEMA FLOOD LINE
—	BRUSH LINE
—	COASTAL FEATURE FLAG
—	FRESHWATER WETLAND FLAG
—	IRON ROD
—	SURVEY NAIL
—	CONCRETE BOUND
—	FIRE HYDRANT
—	DRAIN MANHOLE
—	CATCH BASIN INLET
—	SEWER MANHOLE
—	UTILITY POLE
—	LIGHT POLE
—	GUY WIRE
—	SOIL BORING LOCATION

1	SUBMISSION REVISIONS	21MAY21	
	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES		

Scale: 1"=50' Date: 22APR21

Project Title:

"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND

Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

Issued for:

PERMITTING

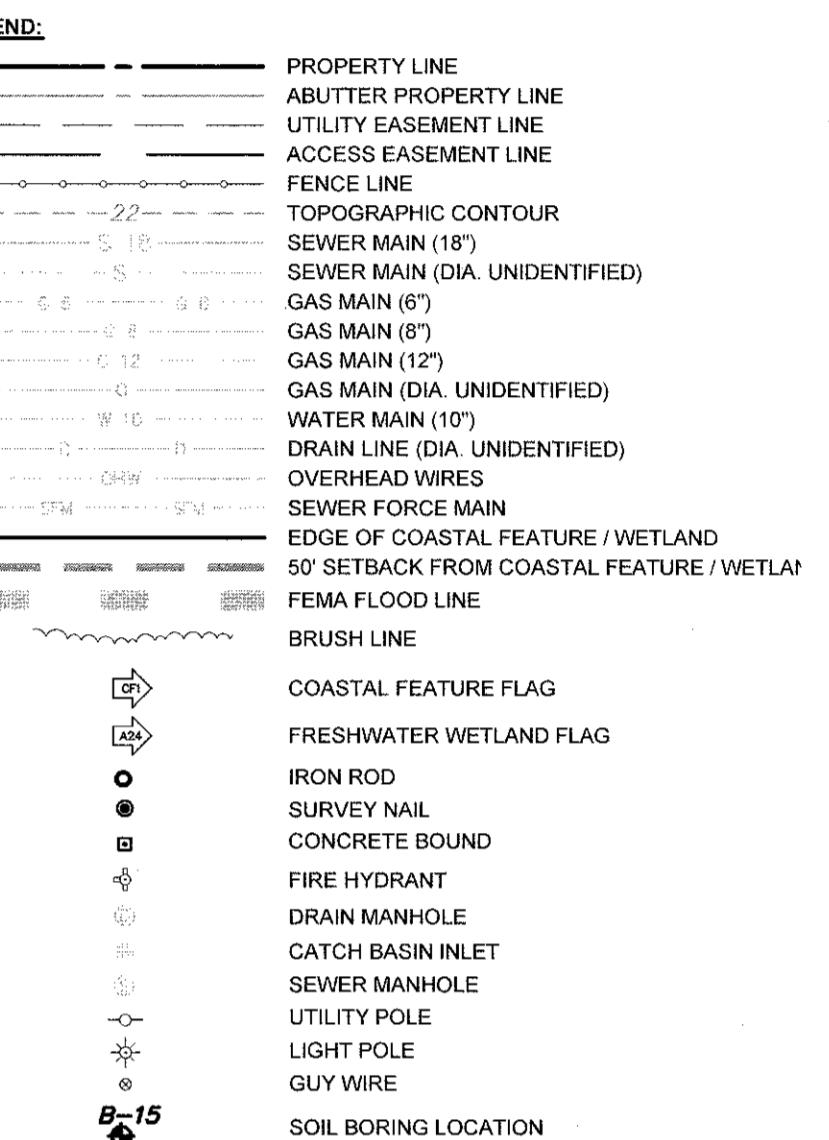
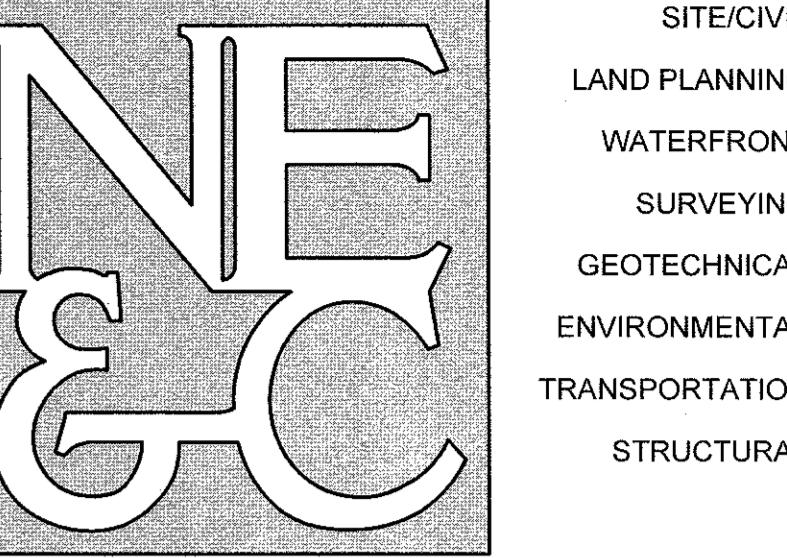
Drawing Title:

EXISTING CONDITIONS  
(COASTAL SIDE)

Drawing Number: C-4	
No. 9826	
Project Number: 20072.0	
Survey Index: - - -	
Drawing by: JEREMY J. ROSA	
Signature:	
Title: REGISTERED PROFESSIONAL ENGINEER CIVIL	

OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PURPOSE, OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.





SUBMISSION REVISIONS		21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Checked by:	GES		

Scale: 1'=50' Date: 22APR21  
Project Title: "EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND

Client/Owner: NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

Issued for: PERMITTING  
Drawing Title:

EXISTING CONDITIONS  
(POND SIDE)

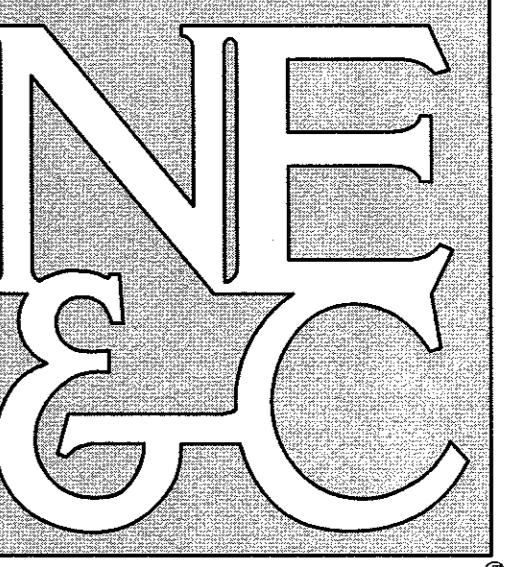
Drawing Number: C-5	
Sheet 5 of 22	
Project Number: 20072.0	
Survey Index: -	
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. DOCUMENTS MAY NOT BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.	



NOTES:  
1. REFER TO COMPLETE PROJECT NOTES ON SHEET 2.

GRAPHIC SCALE  
(in feet)  
1 inch = 50 feet

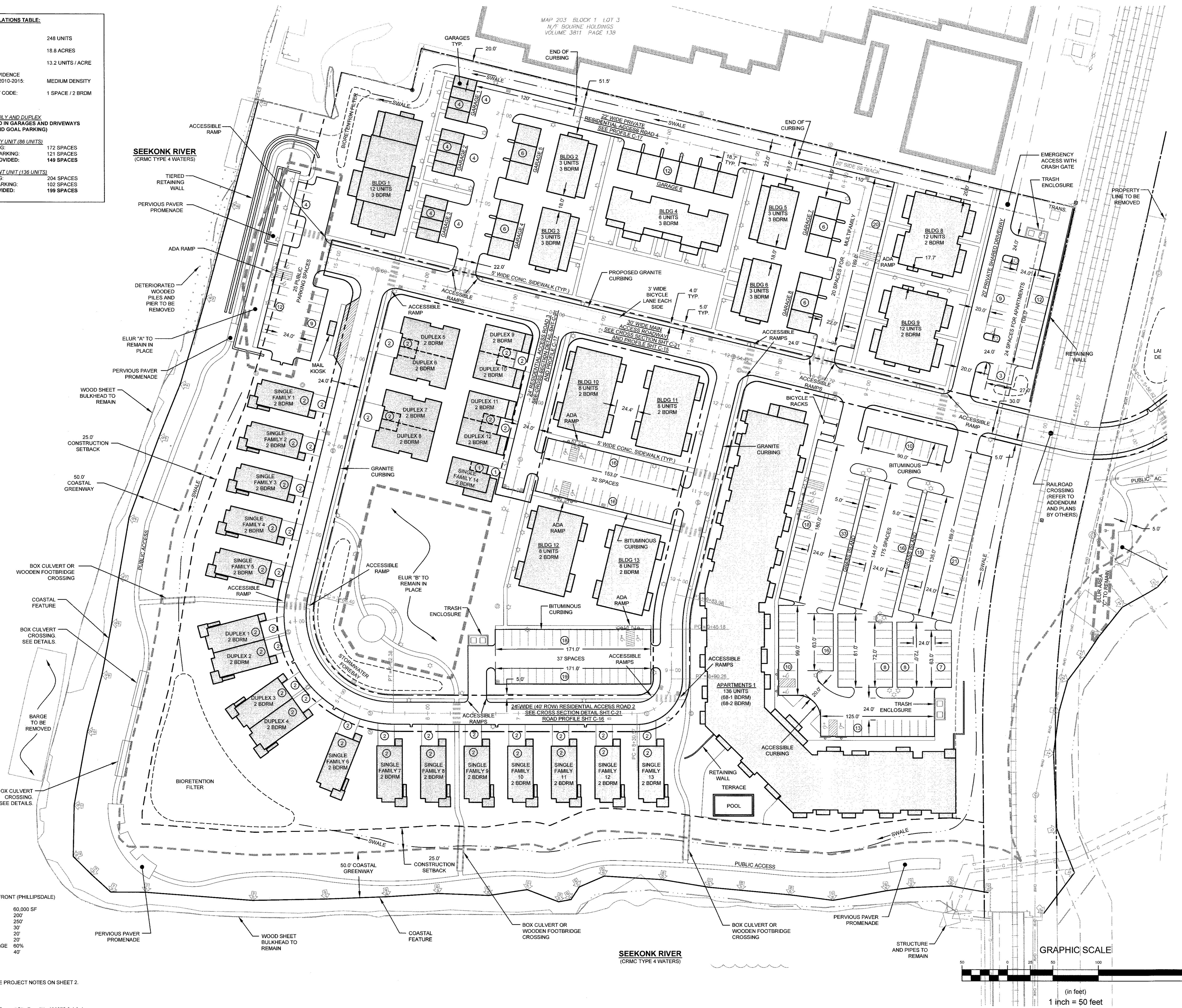
# NORTHEAST ENGINEERS & CONSULTANTS, INC.



SITE/CIVIL  
AND PLANNING  
WATERFRONT  
SURVEYING  
GEOTECHNICAL  
ENVIRONMENTAL  
TRANSPORTATION  
STRUCTURAL

VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
[WWW.NORTHEASTENGINEERS.COM](http://WWW.NORTHEASTENGINEERS.COM)

<u>COASTAL SIDE PARKING CALCULATIONS TABLE:</u>	
TOTAL NUMBER OF UNITS:	248 UNITS
TOTAL ACREAGE:	18.8 ACRES
COASTAL SIDE DENSITY:	13.2 UNITS / ACRE
DENSITY RATING PER EAST PROVIDENCE COMPREHENSIVE PLAN UPDATE 2010-2015:	MEDIUM DENSITY
PARKING PER UNIT REQUIRED BY CODE:	1 SPACE / 2 BRDM
PARKING GOALS:	
<u>2 SPACES PER SINGLE FAMILY AND DUPLEX (PARKING ACCOMMODATED IN GARAGES AND DRIVEWAYS MEETS CODE REQUIRED AND GOAL PARKING)</u>	
<u>2 SPACES PER MULTIFAMILY UNIT (86 UNITS)</u>	
MULTIFAMILY GOAL PARKING:	172 SPACES
MULTIFAMILY CODE REQ. PARKING:	121 SPACES
MULTIFAMILY PARKING PROVIDED:	149 SPACES
<u>1.5 SPACES PER APARTMENT UNIT (136 UNITS)</u>	
APARTMENT GOAL PARKING:	204 SPACES
APARTMENT CODE REQ. PARKING:	102 SPACES
APARTMENT SPACES PROVIDED:	199 SPACES



2	SUBMISSION REVISIONS		21JUN21	
1	SUBMISSION REVISIONS		21MAY21	
No.	Revision		Date	App.
Designed By:	JJR	Drawn by:	JJR	Checked by: GES
Scale:	1"=50'	Date:	22APR21	

**"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND**

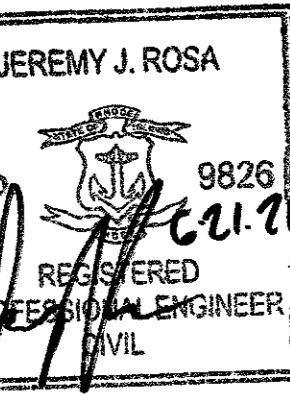
Client/Owner:

Issued for:

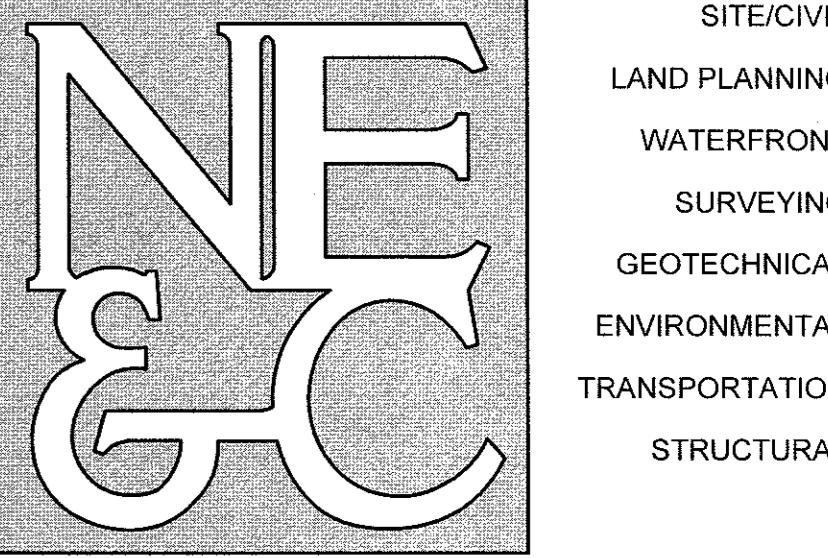
## PERMITTING

Drawing Title:

# LAYOUT PLAN (COASTAL SIDE)

	Drawing Number:
	C-6
Sheet 6 of 22	Project Number:
	20072.0
	Survey Index: - - -





LEGEND:	
PROPERTY LINE	ABUTTER PROPERTY LINE
ACCESS EASEMENT LINE	FENCE
TOPOGRAPHIC CONTOUR	SEWER MAIN (18")
SEWER MAIN (18")	SEWER MAIN (DIA. UNIDENTIFIED)
GAS MAIN (6")	GAS MAIN (6")
GAS MAIN (8")	GAS MAIN (8")
GAS MAIN (12")	GAS MAIN (12")
GAS MAIN (DIA. UNIDENTIFIED)	WATER MAIN (10")
WATER MAIN (10")	DRAIN LINE (DIA. UNIDENTIFIED)
DRAIN LINE (DIA. UNIDENTIFIED)	OVERHEAD WIRES
OVERHEAD WIRES	SEWER FORCE MAIN
SEWER FORCE MAIN	EDGE OF COASTAL FEATURE / WETLAND
EDGE OF COASTAL FEATURE / WETLAND	50' SETBACK FROM COASTAL FEATURE / WETLAND
50' SETBACK FROM COASTAL FEATURE / WETLAND	COASTAL FEATURE FLAG
COASTAL FEATURE FLAG	FRESHWATER WETLAND FLAG
FRESHWATER WETLAND FLAG	IRON ROD
IRON ROD	SURVEY NAIL
SURVEY NAIL	CONCRETE BOUND
CONCRETE BOUND	FIRE HYDRANT
FIRE HYDRANT	DRAIN MANHOLE
DRAIN MANHOLE	CATCH BASIN INLET
CATCH BASIN INLET	SEWER MANHOLE
SEWER MANHOLE	PROPOSED 25' CONSTRUCTION SETBACK
PROPOSED 25' CONSTRUCTION SETBACK	PROPOSED DRAIN LINE
PROPOSED DRAIN LINE	PROPOSED CONTOUR
PROPOSED CONTOUR	PROPOSED SPOT ELEVATION
PROPOSED SPOT ELEVATION	PROPOSED CATCH BASIN
PROPOSED CATCH BASIN	PROPOSED DRAIN MANHOLE
PROPOSED DRAIN MANHOLE	PROPOSED 8" WATER MAIN
PROPOSED 8" WATER MAIN	PROPOSED 8" SEWER MAIN
PROPOSED 8" SEWER MAIN	PROPOSED 6" SEWER SERVICE
PROPOSED 6" SEWER SERVICE	PROPOSED 6" SEWER FORCE MAIN
PROPOSED 6" SEWER FORCE MAIN	PROPOSED LG ELECTRICAL CONDUIT
PROPOSED LG ELECTRICAL CONDUIT	PROPOSED SEWER MANHOLE
PROPOSED SEWER MANHOLE	PROPOSED WATER GATE / SERVICE

2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21
No.	Revision	Date App.
Designed By:	JJR	Drawn by: JJR Checked by: GES
Scale:	1"=50'	Date: 22APR21

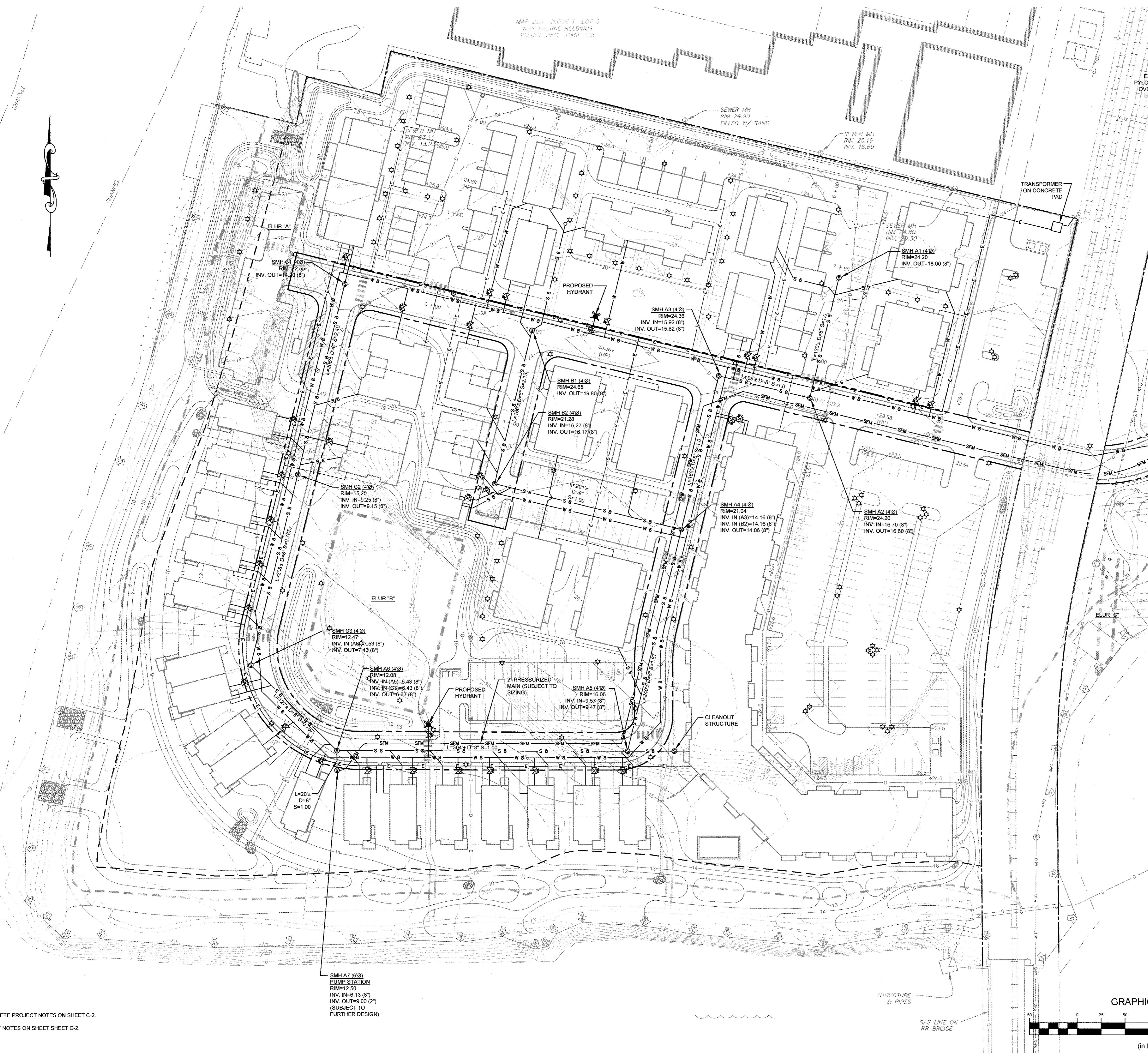
Project Title:  
"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND

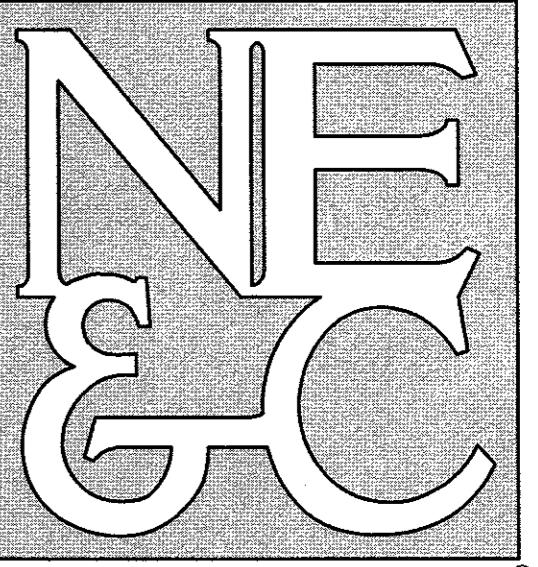
Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

Issued for:  
PERMITTING

Drawing Title:  
UTILITY PLAN  
(POND SIDE)

Drawing Number: <b>C-8</b>	
Sheet 8 of 22	
Project Number: <b>20072.0</b>	
Survey Index: — —	
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICES, ARE THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.	





A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
WWW.NORTHEASTENGINEERS.COM

LEGEND:

PROPERTY LINE
ABUTTER PROPERTY LINE
ACCESS EASEMENT LINE
PERMIT EASEMENT
TOPOGRAPHIC CONTOUR
SEWER MAIN (18")
SEWER MAIN (DIA. UNIDENTIFIED)
GAS MAIN (6")
GAS MAIN (8")
GAS MAIN (12")
GAS MAIN (DIA. UNIDENTIFIED)
WATER MAIN (10")
DRAIN LINE (DIA. UNIDENTIFIED)
OVERHEAD WIRES
SEWER FORCE MAIN
EDGE OF COASTAL FEATURE / WETLAND
50' SETBACK FROM COASTAL FEATURE / WETLAND
COASTAL FEATURE FLAG
FRESHWATER WETLAND FLAG
IRON ROD
SURVEY NAIL
CONCRETE BOUND
FIRE HYDRANT
DRAIN MANHOLE
CATCH BASIN INLET
SEWER MANHOLE
PROPOSED 25' CONSTRUCTION SETBACK
PROPOSED DRAIN LINE
PROPOSED CONTOUR
PROPOSED SPOT ELEVATION
PROPOSED CATCH BASIN
PROPOSED DRAIN MANHOLE
PROPOSED 8" WATER MAIN
PROPOSED WATER SERVICE
PROPOSED 6" SEWER MAIN
PROPOSED 6" SEWER SERVICE
SMF
SM
PROPOSED 8" SEWER FORCE MAIN
PROPOSED UG ELECTRICAL CONDUIT
PROPOSED SEWER MANHOLE
PROPOSED WATER GATE / SERVICE

2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21
No.	Revision	Date App.
Designed By:	JJR	Drawn by: JJR Checked by: GES
Scale:	1"=50'	Date: 22APR21
Project Title:	"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND	

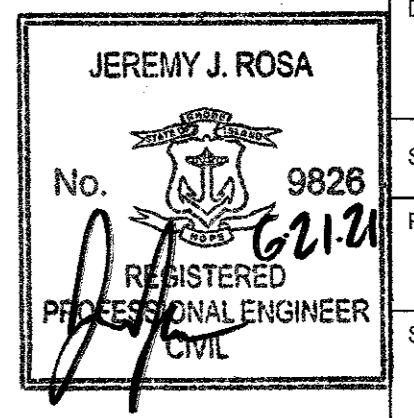
Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

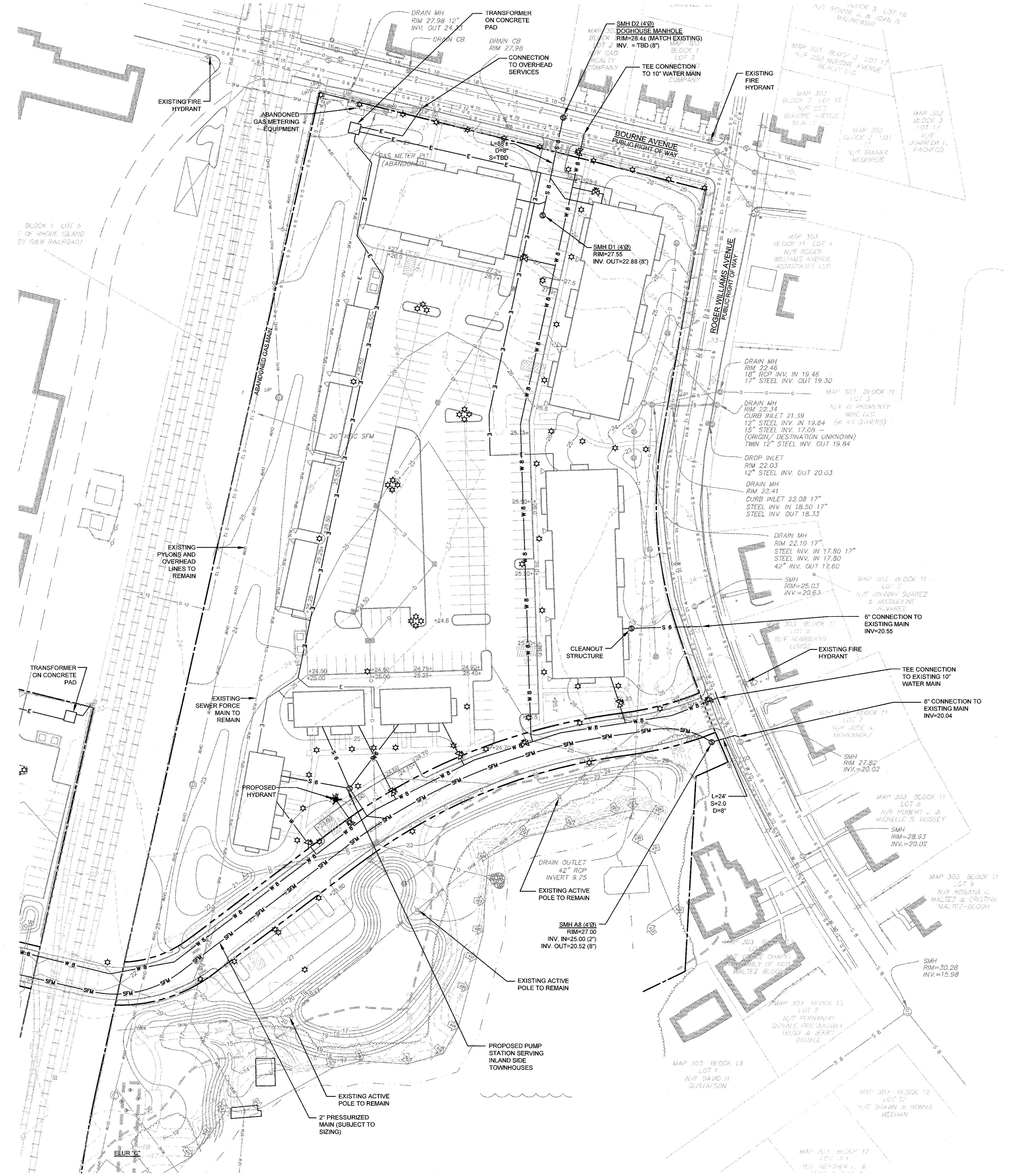
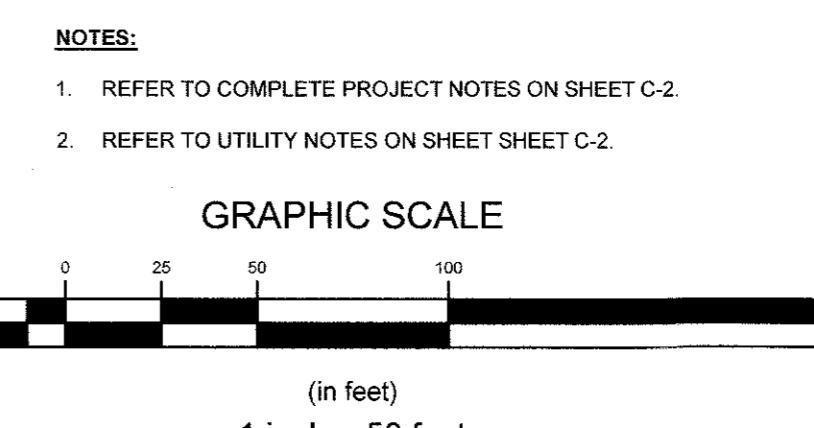
Issued for:

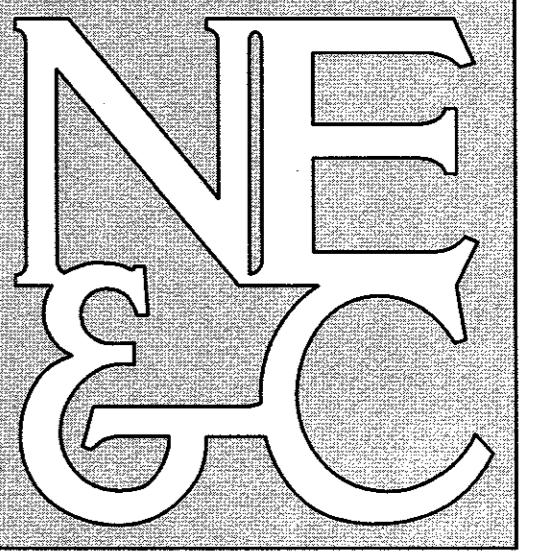
PERMITTING

Drawing Title:

UTILITY PLAN  
(POND SIDE)

Drawing Number: <b>C-9</b>	Sheet <b>9</b> of <b>22</b>
No. <b>9826</b> <b>61-2</b> Project Number: <b>20072.0</b>	
Survey Index: —	
	
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PURPOSE, OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.	





A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETON RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
WWW.NORTHEASTENGINEERS.COM

LEGEND:

PROPERTY LINE	ADJUTTER PROPERTY LINE
ACCESS EASEMENT LINE	ACCESS EASEMENT LINE
SEWER	SEWER
TOPOGRAPHIC CONTOUR	TOPOGRAPHIC CONTOUR
SEWER MAIN (18")	SEWER MAIN (DIA. UNIDENTIFIED)
SEWER MAIN (DIA. UNIDENTIFIED)	SEWER MAIN (DIA. UNIDENTIFIED)
GAS MAIN (6")	GAS MAIN (6")
GAS MAIN (8")	GAS MAIN (8")
GAS MAIN (12")	GAS MAIN (12")
GAS MAIN (DIA. UNIDENTIFIED)	GAS MAIN (DIA. UNIDENTIFIED)
WATER MAIN (10")	WATER MAIN (10")
DRAIN LINE (DIA. UNIDENTIFIED)	DRAIN LINE (DIA. UNIDENTIFIED)
OVERHEAD WIRES	OVERHEAD WIRES
SEWER FORCE MAIN	SEWER FORCE MAIN
EDGE OF COASTAL FEATURE / WETLAND	EDGE OF COASTAL FEATURE / WETLAND
50' SETBACK FROM COASTAL FEATURE / WETLAND	50' SETBACK FROM COASTAL FEATURE / WETLAND
FEMA FLOOD LINE	FEMA FLOOD LINE
COASTAL FEATURE FLAG	COASTAL FEATURE FLAG
FRESHWATER WETLAND FLAG	FRESHWATER WETLAND FLAG
IRON ROD	IRON ROD
SURVEY NAIL	SURVEY NAIL
CONCRETE BOUND	CONCRETE BOUND
FIRE HYDRANT	FIRE HYDRANT
DRAIN MANHOLE	DRAIN MANHOLE
CATCH BASIN INLET	CATCH BASIN INLET
SEWER MANHOLE	SEWER MANHOLE
PROPOSED 25' CONSTRUCTION SETBACK	PROPOSED 25' CONSTRUCTION SETBACK
PROPOSED DRAIN LINE	PROPOSED DRAIN LINE
PROPOSED CONTOUR	PROPOSED CONTOUR
PROPOSED SPOT ELEVATION	PROPOSED SPOT ELEVATION

2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21
No.	Revision	Date App.
Designed By:	JJR	Drawn by: JJR Checked by: GES
Scale:	1'=50'	Date: 22APR21

Project Title:  
**"EAST POINT"**  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND

Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

Issued for:  
PERMITTING

Drawing Title:  
**GRADING AND DRAINAGE**  
(COASTAL SIDE)

Drawing Number:  
**C-10**

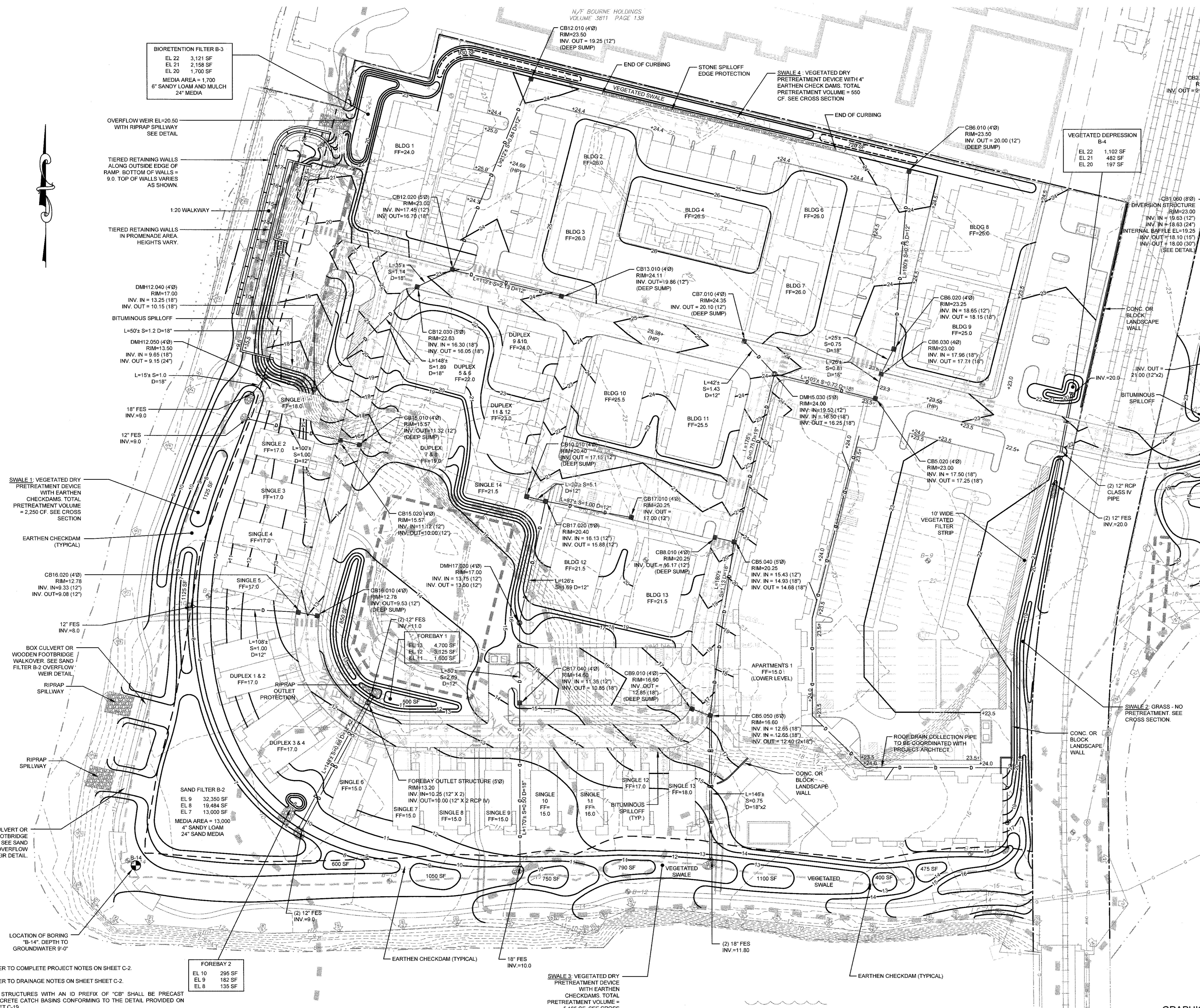
Sheet 10 of 22

Project Number:  
**20072.0**

Survey Index:  
— —

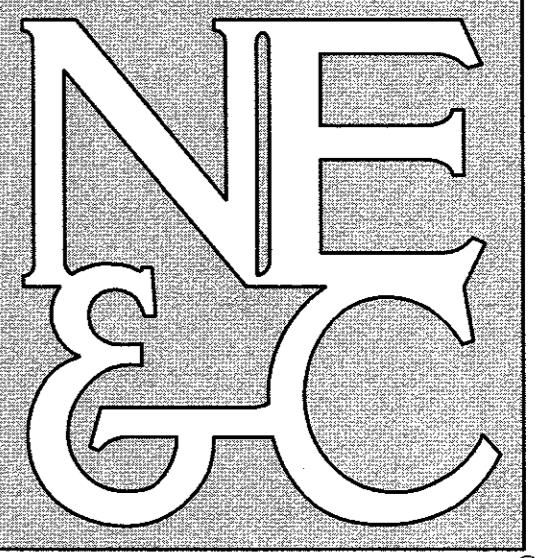
Signature:  
JEREMY J. ROSA  
No. 9820  
RE-REGISTERED  
PROFESSIONAL ENGINEER  
CIVIL

OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE THE EXCLUSIVE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE COPIED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.





# NORTHEAST ENGINEERS & CONSULTANTS, INC.



A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
[WWW.NORTHEASTENGINEERS.COM](http://WWW.NORTHEASTENGINEERS.COM)

**LEGEND:**

— 22 —	PROPERTY LINE
S 18 —	ABUTTER PROPERTY LINE
S —	ACCESS EASEMENT LINE
G 6 — G 6 —	FENCE LINE
G 8 — G 8 —	TOPOGRAPHIC CONTOUR
G 12 —	SEWER MAIN (18")
G — G —	SEWER MAIN (DIA. UNIDENTIFIED)
W 10 —	GAS MAIN (6")
D — D — D —	GAS MAIN (8")
CHW —	GAS MAIN (12")
SPN — SFM —	GAS MAIN (DIA. UNIDENTIFIED)
WATER MAIN (10")	WATER MAIN (10")
DRAIN LINE (DIA. UNIDENTIFIED)	DRAIN LINE (DIA. UNIDENTIFIED)
OVERHEAD WIRES	OVERHEAD WIRES
SEWER FORCE MAIN	SEWER FORCE MAIN
EDGE OF COASTAL FEATURE / WETLAND	EDGE OF COASTAL FEATURE / WETLAND
50' SETBACK FROM COASTAL FEATURE / WETLAND	50' SETBACK FROM COASTAL FEATURE / WETLAND
	FEMA FLOOD LINE
	COASTAL FEATURE FLAG
	FRESHWATER WETLAND FLAG
	IRON ROD
	SURVEY NAIL
	CONCRETE BOUND
	FIRE HYDRANT
	DRAIN MANHOLE
	CATCH BASIN INLET
	SEWER MANHOLE
— — — — —	PROPOSED 25' CONSTRUCTION SETBACK
D — — — —	PROPOSED DRAIN LINE
— — — — —	PROPOSED CONTOUR
20 — — — —	PROPOSED SPOT ELEVATION
+20.0	

2	SUBMISSION REVISIONS		21JUN21	
1	SUBMISSION REVISIONS		21MAY21	
No.	Revision		Date	App.
Designed By:	JJR	Drawn by:	JJR	Checked by: GES
Scale:	1"=50'	Date:	22APR21	

**"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND**

Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

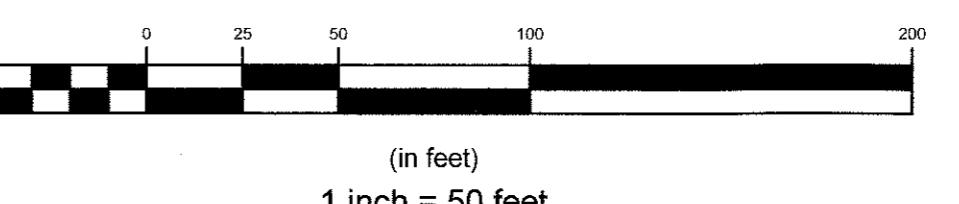
Issued for:

## GRADING AND DRAINAGE

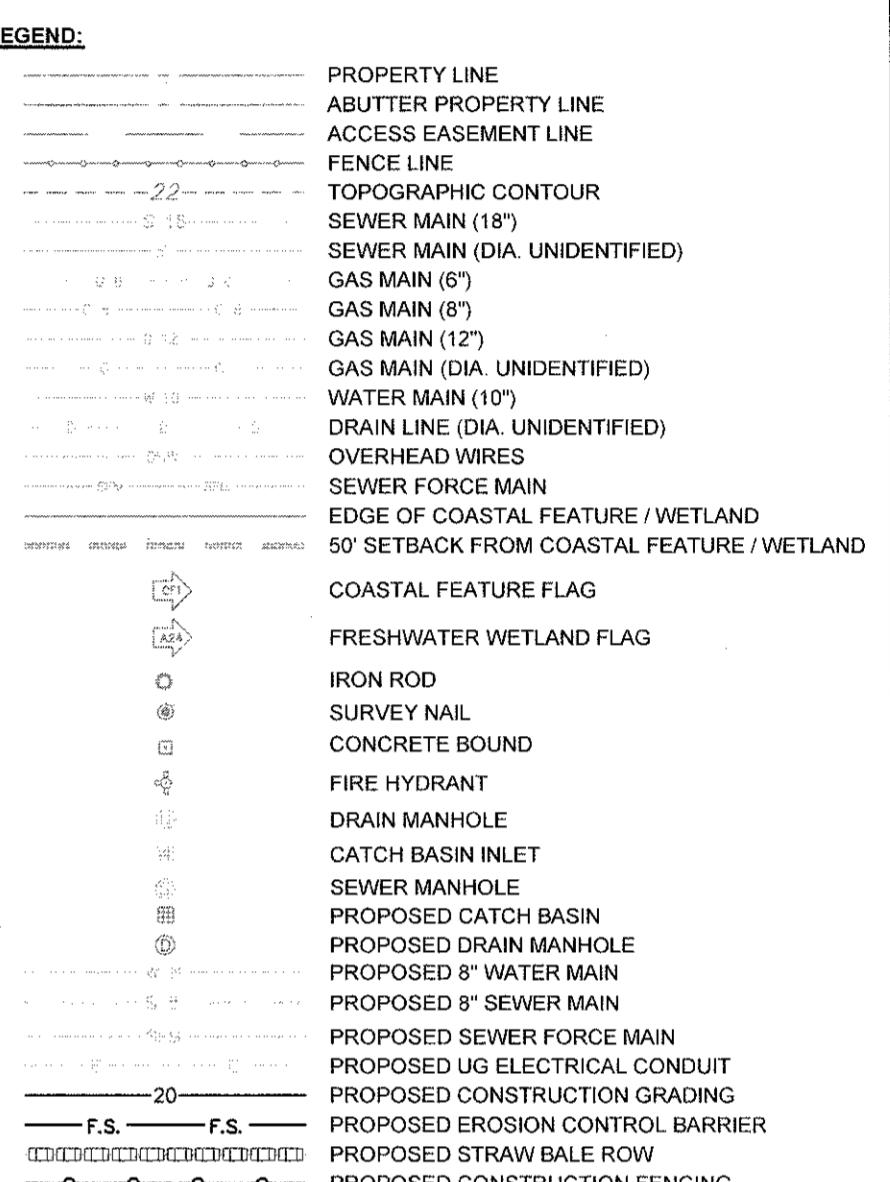
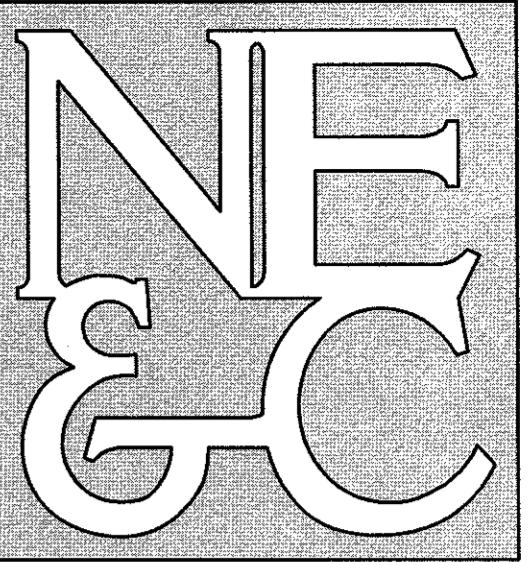
**NOTES:**

1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.
2. REFER TO DRAINAGE NOTES ON SHEET C-2.
3. ALL STRUCTURES WITH AN ID PREFIX OF "CB" SHALL BE PRECAST CONCRETE CATCH BASINS CONFORMING TO THE DETAIL PROVIDED ON SHEET C-19.
4. ALL STRUCTURES WITH AN ID PREFIX OF "DMH" SHALL BE PRECAST CONCRETE DRAIN MANHOLES CONFORMING TO THE DETAIL PROVIDED ON SHEET C-19.
5. ALL STRUCTURES WITH AN ID PREFIX OF "YD" SHALL BE 12" DIA. HDPE YARD DRAINS WITH PEDESTRIAN SAFE GRATES. OWNER SHALL SELECT

## GRAPHIC SCALE



OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.



2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21
No.	Revision	Date App.
Designed By:	JJR	Drawn by JJR Checked by GES
Scale:	1"=50'	Date: 22APR21

**"EAST POINT"**  
MAP 203 BLOCK 1 LOT 3  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND

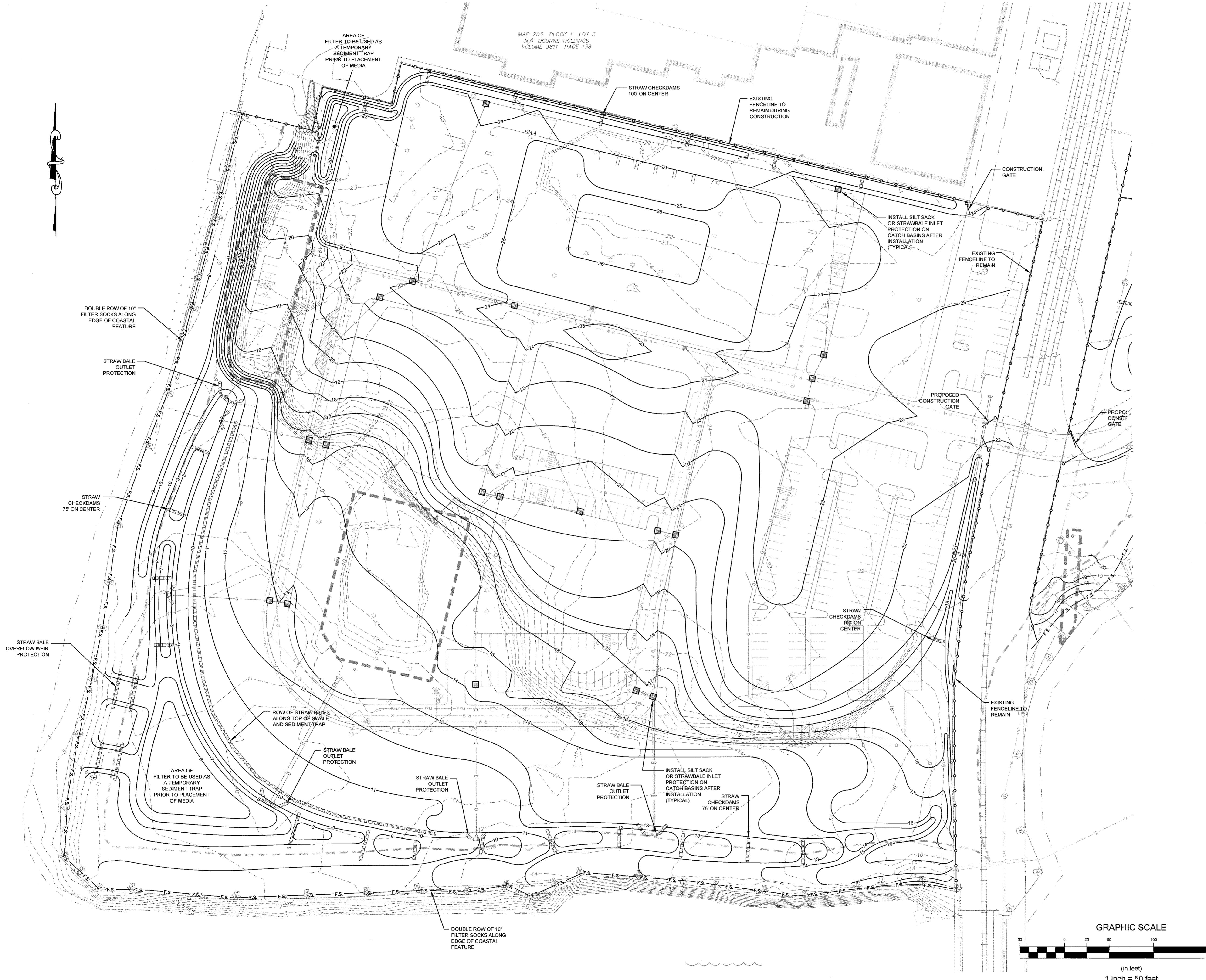
Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

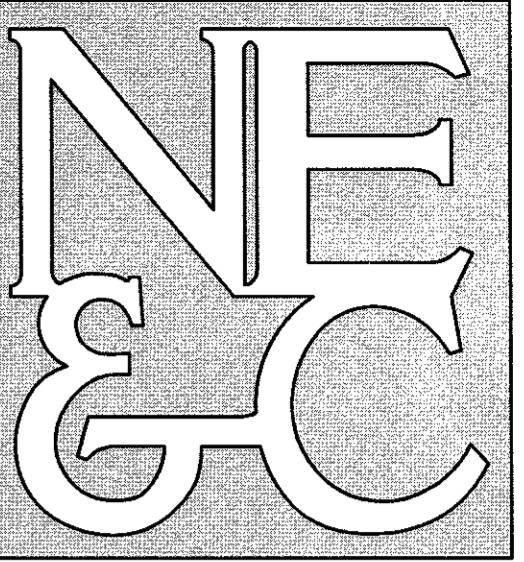
Issued for:  
PERMITTING

Drawing Title:  
**SOIL EROSION AND  
SEDIMENT CONTROL  
(SHOWING CONSTRUCTION GRADING)**

Drawing Number: <b>C-12</b>	
No.	9826
Street	12 of 22
Project Number:	20072.0
Survey Index:	—

OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND  
SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL  
SERVICES, ARE THE PROPERTY OF THE  
ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED,  
IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR  
PURPOSES, OR BY ANY OTHER PARTIES THAN  
THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT  
THE EXPRESS AUTHORIZATION OF THE ENGINEER.





ORTHEAST ENGINEERS  
CONSULTANTS, INC.

SITE/CIVIL  
LAND PLANNING  
WATERFRONT  
SURVEYING  
GEOTECHNICAL  
ENVIRONMENTAL  
TRANSPORTATION  
STRUCTURAL

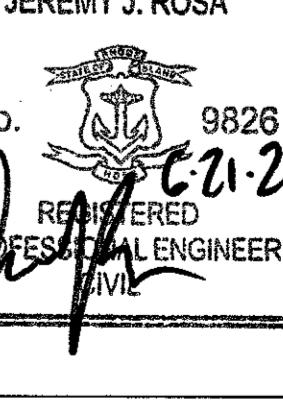
KNOWLEDGE CORPORATION®  
VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
[WWW.NORTHEASTENGINEERS.COM](http://WWW.NORTHEASTENGINEERS.COM)

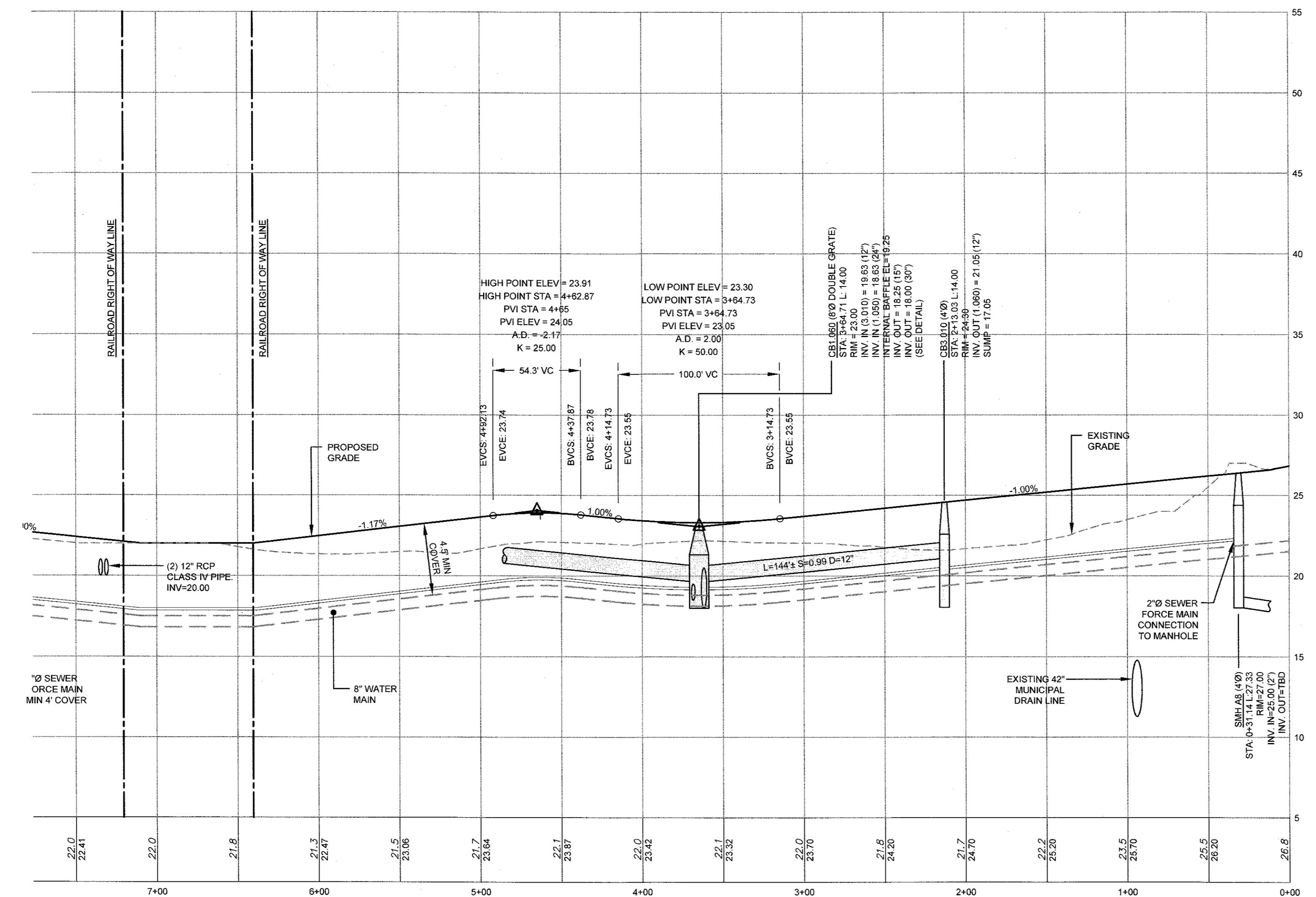
GRAPHIC SCALE

0 25 50 100 200

(in feet)

1 inch = 50 feet

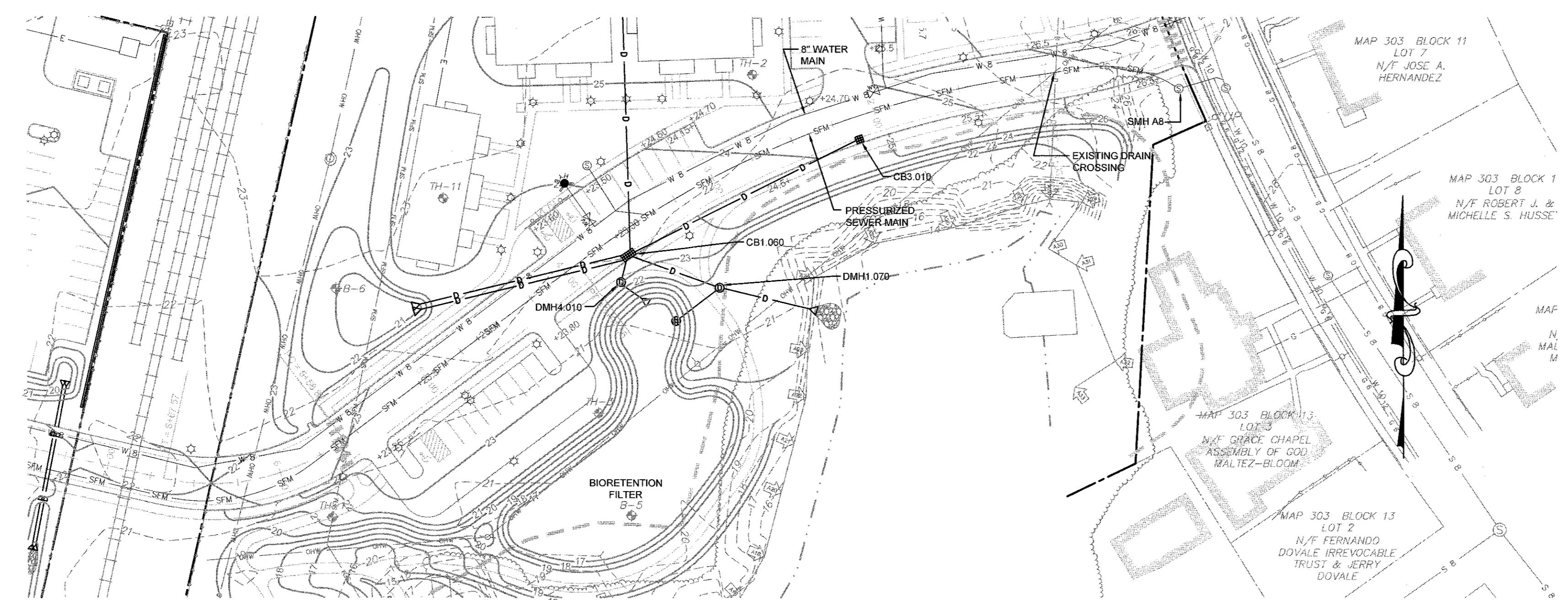
2	SUBMISSION REVISIONS		21JUN21	
1	SUBMISSION REVISIONS		21MAY21	
No.	Revision		Date	App.
Designed By:	JJR	Drawn by:	JJR	Checked by: GES
Scale:	1"=50'		Date:	22APR21
Project Title:				
<p style="text-align: center;"><b>"EAST POINT"</b></p> <p style="text-align: center;"><b>MAP 203 BLOCK 1 LOT 4</b></p> <p style="text-align: center;"><b>MAP 303 BLOCK 13 LOTS 4 &amp; 5</b></p> <p style="text-align: center;">ROGER WILLIAMS AVENUE</p> <p style="text-align: center;">EAST PROVIDENCE</p> <p style="text-align: center;">RHODE ISLAND</p>				
Client/Owner:				
<p style="text-align: center;">NOBLE DEVELOPMENT, LLC</p> <p style="text-align: center;">10 GREEN STREET</p> <p style="text-align: center;">PROVIDENCE, RI 02903</p>				
Issued for:				
<b>PERMITTING</b>				
Drawing Title:				
<p style="text-align: center;"><b>SOIL EROSION AND</b></p> <p style="text-align: center;"><b>SEDIMENT CONTROL</b></p> <p style="text-align: center;">(SHOWING CONSTRUCTION GRADING)</p>				
			<p>Drawing Number: <b>C-13</b></p> <p>Sheet <b>13</b> of <b>22</b></p> <p>Project Number: <b>20072.0</b></p> <p>Survey Index: <b>— — —</b></p>	
<p>OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.</p>				



### MAIN ACCESS ROAD 1 PROFILE (POND SIDE)

## HORIZONTAL S

### VERTICAL SCALE



## MAIN ACCESS ROAD 1 PLAN (POND SIDE)

SCALE: 1" = 50'

## GRAPHIC SCALE

50 100

Figure 7. (continued)

(in feet)

JEREMY J. ROSA

No. 9826 6-21-71

REGISTERED  
PROFESSIONAL ENGINEER  
CIVIL

OWNERSHIP AND USE OF DESIGN  
SPECIFICATIONS, AS INSTANTIATED  
IN THE CONTRACT, SHALL REST WITH  
THE ENGINEER. THESE DOCUMENTS  
IN WHOLE OR PART, FOR ANY  
PURPOSES, OR BY ANYONE  
THOSE PROPERLY AUTHORIZED  
THE EXPRESS AUTHORITY.

Drawing Number: **C-14**

---

Sheet **14** of **22**

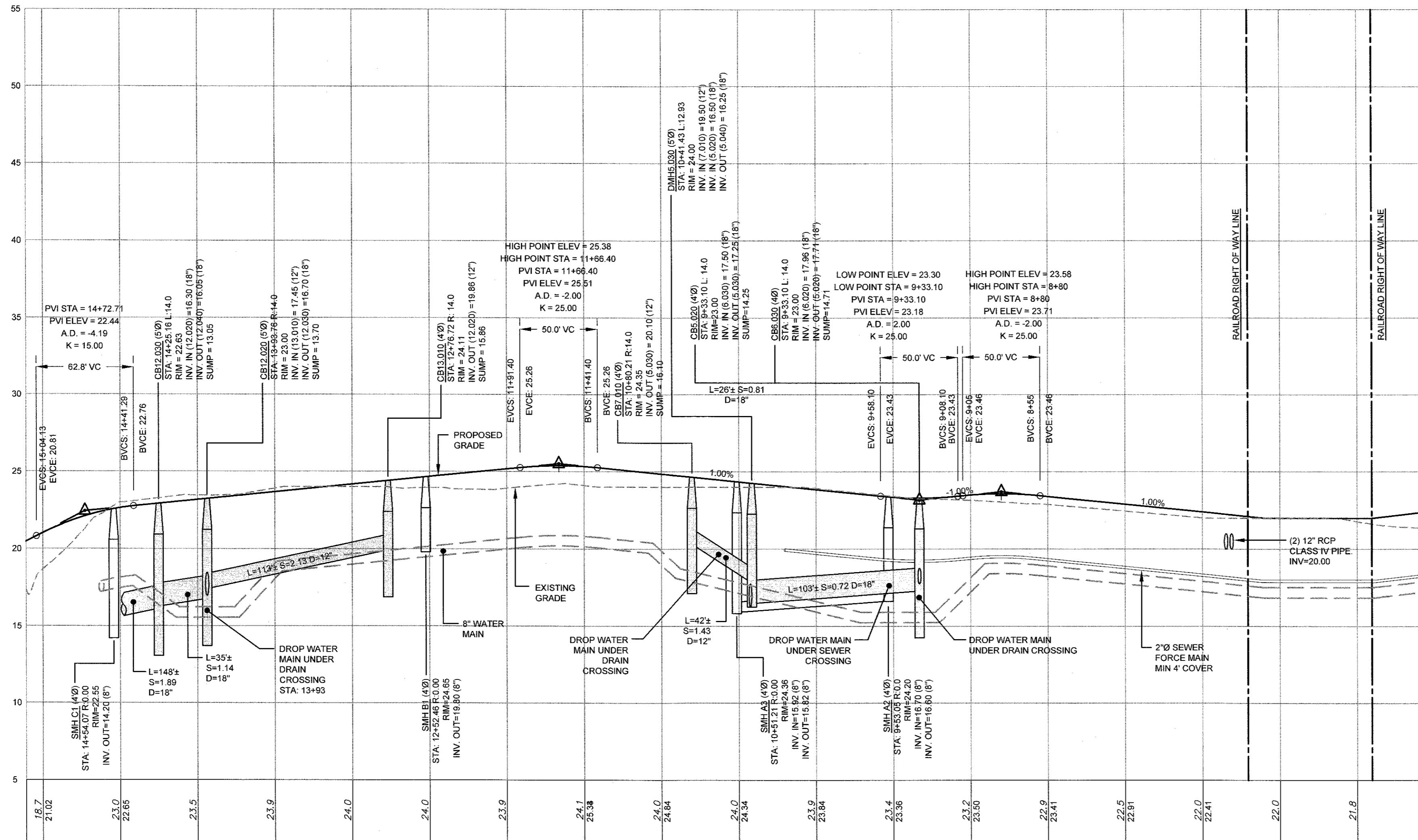
---

Project Number: **20072.0**

---

Survey Index: **— —**

DOCUMENTS: DRAWINGS AND  
MENTS OF PROFESSIONAL  
MAIN THE PROPERTY OF  
ENTS ARE NOT TO BE USED,  
Y OTHER PROJECTS OR  
THER PARTIES, THAN  
D BY CONTRACT, WITHOUT  
ITION OF THE ENGINEER.



## MAIN ACCESS ROAD 1 PROFILE (COASTAL SIDE)

**HORIZONTAL SCALE: 1"**  
**VERTICAL SCALE: 1" =**

**NOTES:**

2	SUBMISSION REVISIONS		21JUN21	
1	SUBMISSION REVISIONS		21MAY21	
No.	Revision		Date	App.
Designed By:	JJR	Drawn by:	JJR	Checked by: GES
Scale:	1"=50'	Date:	22APR21	

**"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND**

Property Owner:  
**NOBLE DEVELOPMENT, LLC**  
**10 GREEN STREET**  
**PROVIDENCE, RI 02903**

## PERMITTING

---

ing Title:

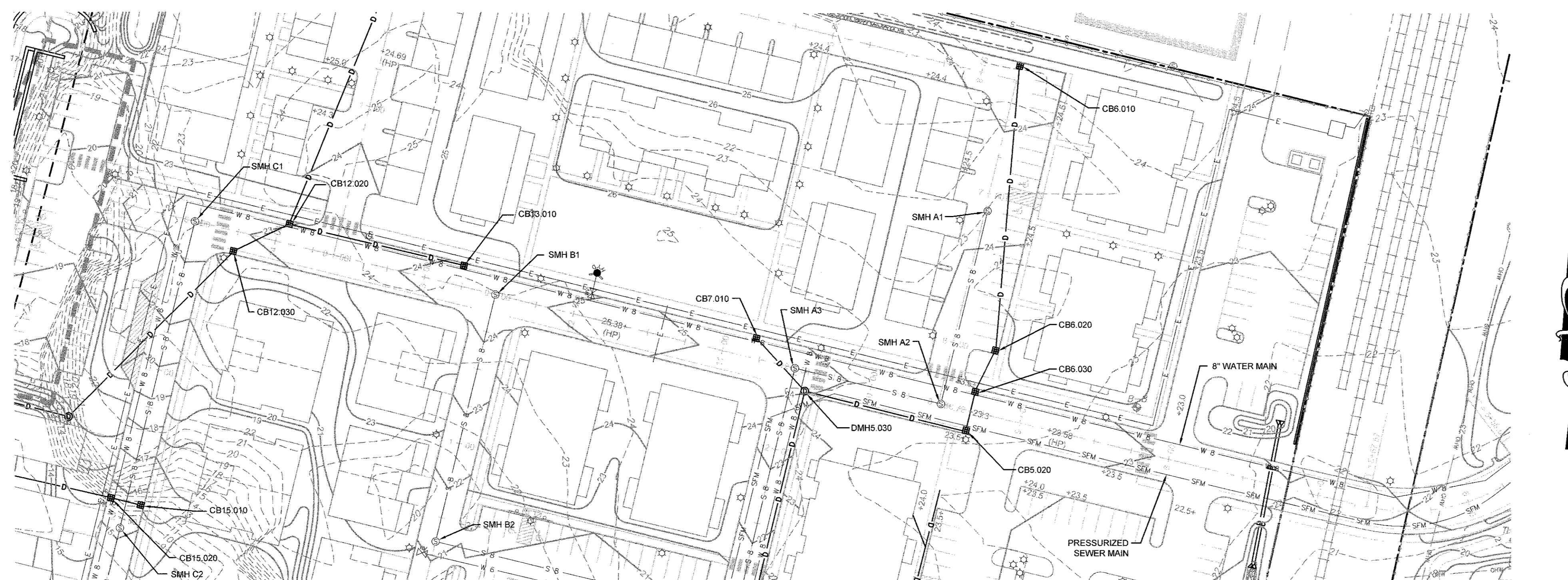
**ROAD PROFILE**

**SHEET 2**

1. *Leucosia* *leucosia* (L.) *leucosia* (L.) *leucosia* (L.)

JEREMY J. ROSA		Drawing Number:	
 <b>REGISTERED</b> <b>PROFESSIONAL ENGINEER</b> <b>CIVIL</b>		<b>C-15</b>	
No.	9826	Sheet <b>15</b>	of <b>22</b>
		Project Number:	
		<b>20072.0</b>	
		Survey Index:	

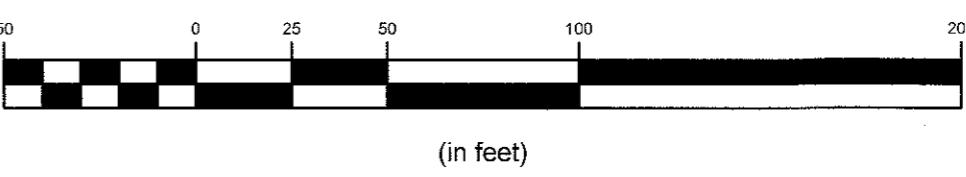
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.

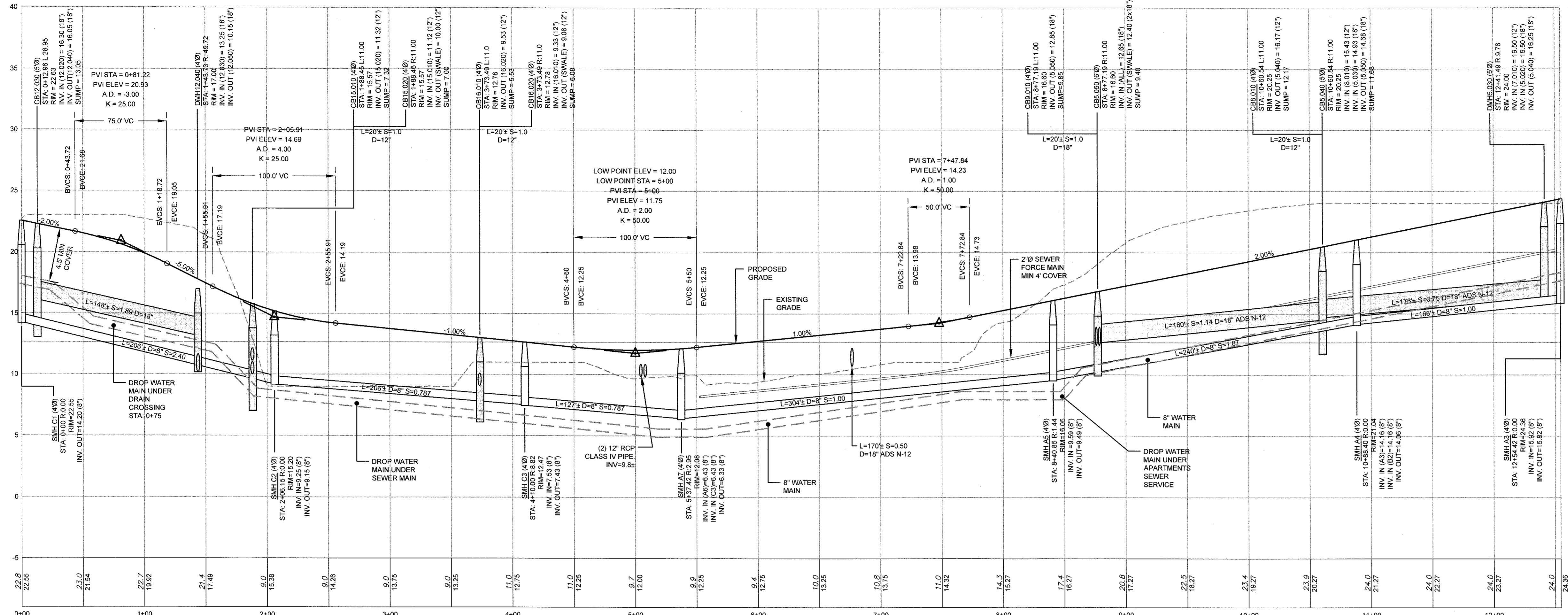
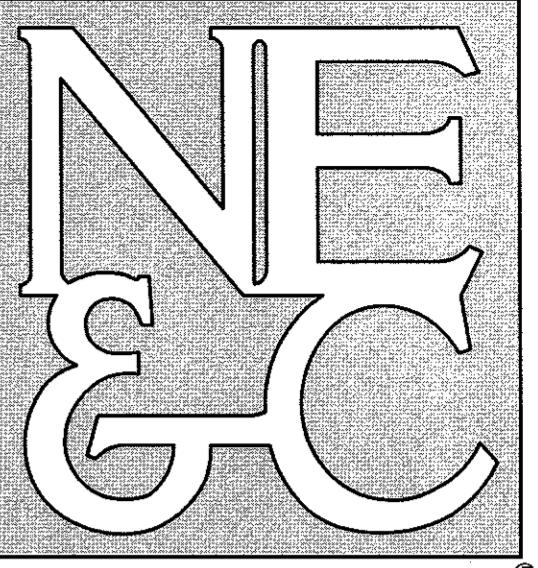


**MAIN ACCESS ROAD 1 PLAN (COASTAL SIDE)**

SCALE: 1" = 5

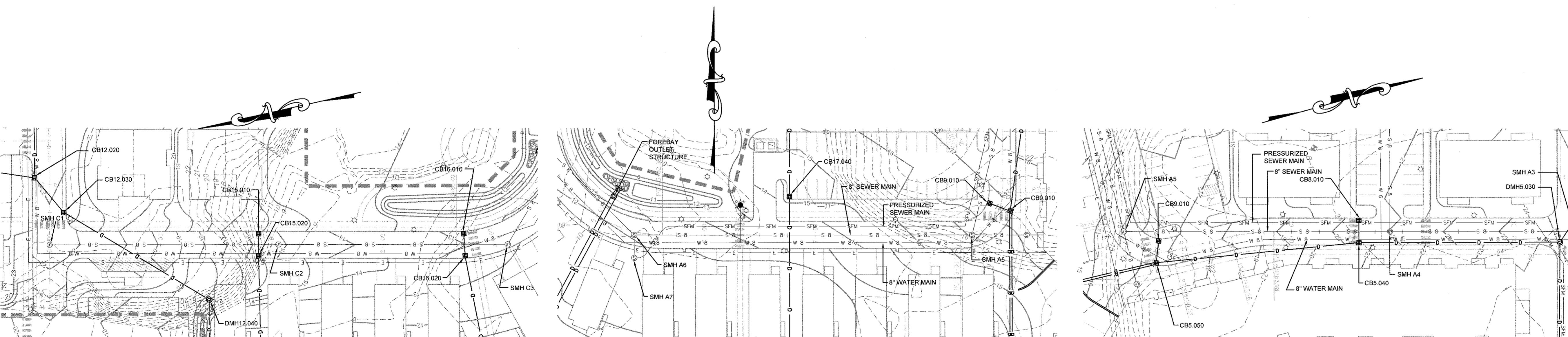
## GRAPHIC SCALE





NOTES:  
1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

RESIDENTIAL ACCESS ROAD 2 PROFILE  
HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 5'

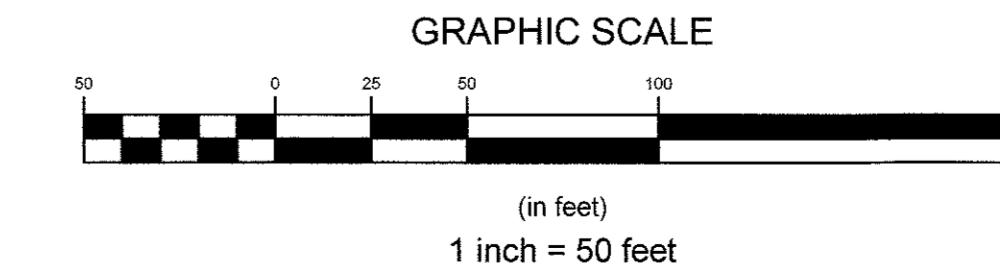


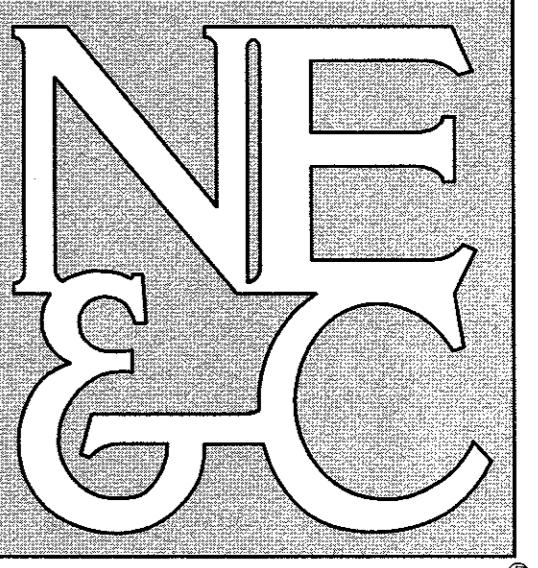
RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 1)  
SCALE: 1" = 50'

RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 2)  
SCALE: 1" = 50'

RESIDENTIAL ACCESS ROAD 2 PLAN (SECTION 3)  
SCALE: 1" = 50'

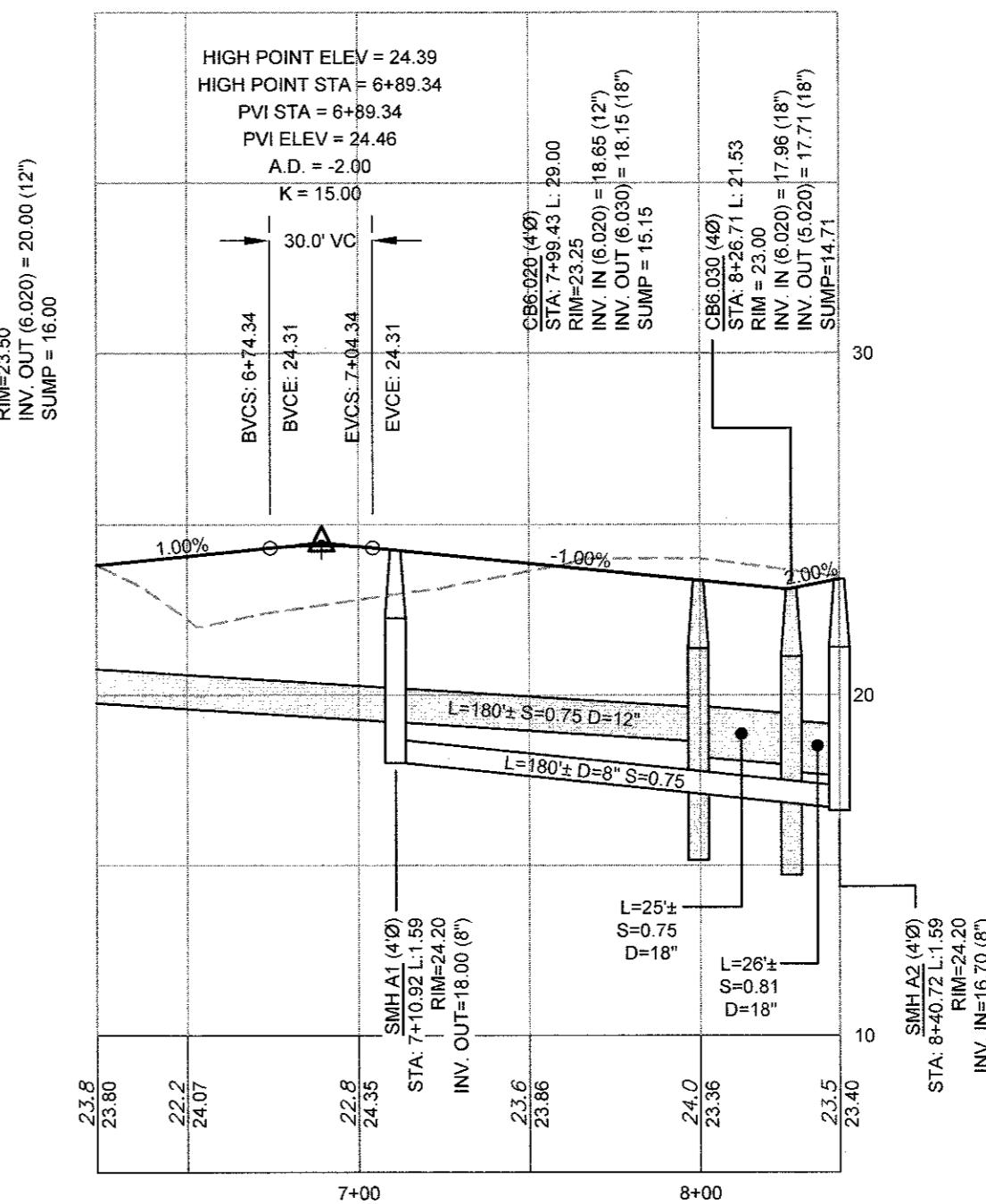
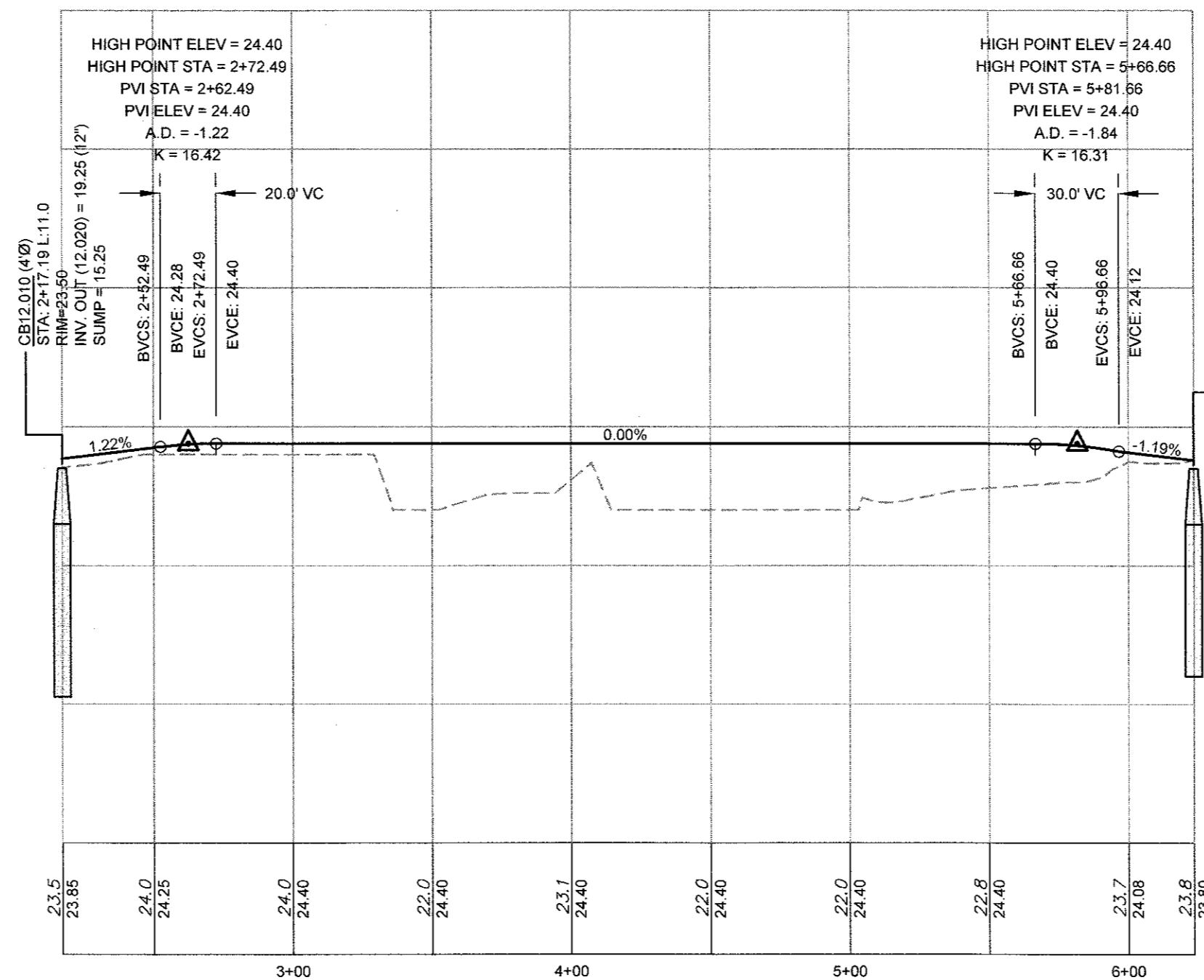
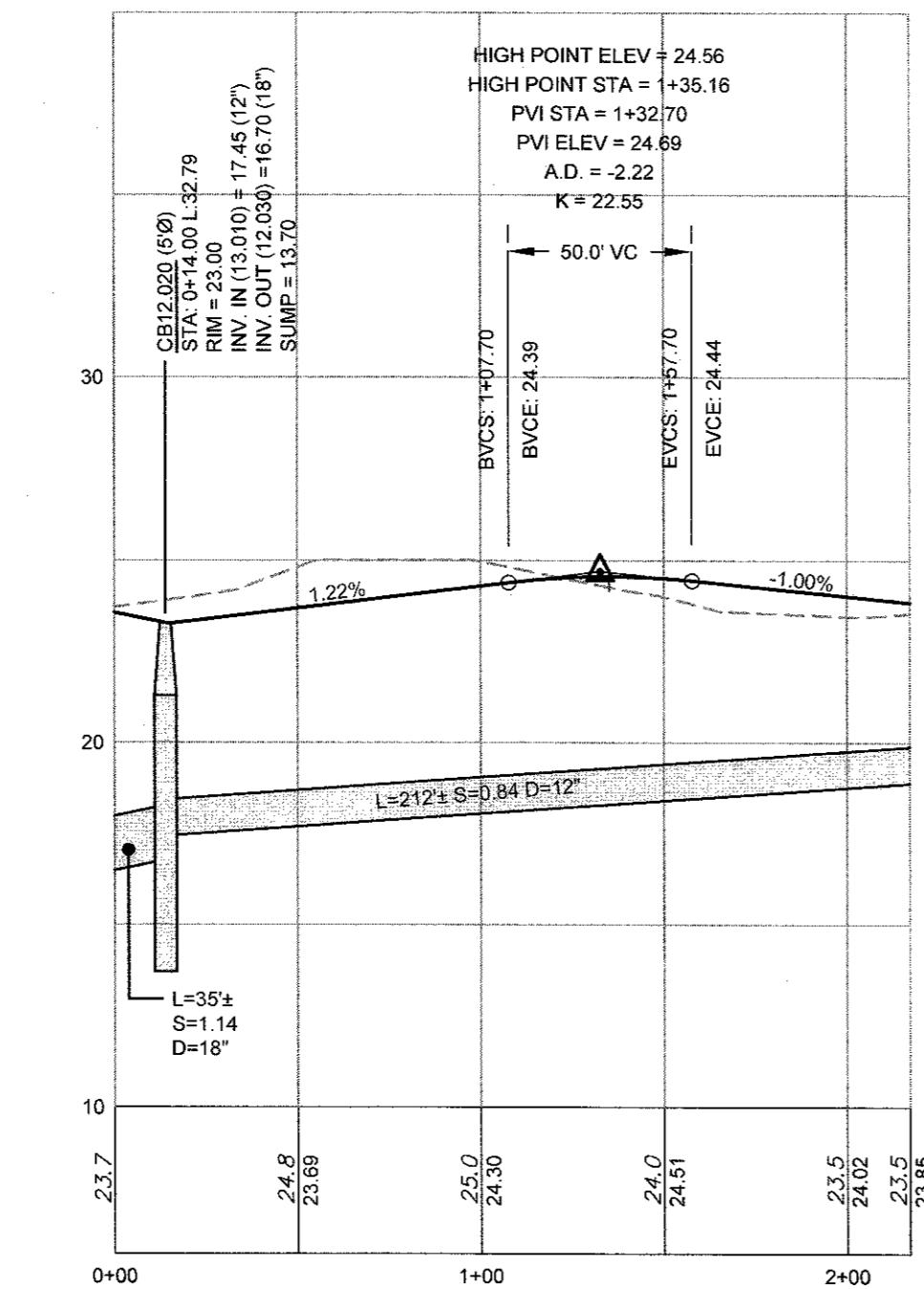
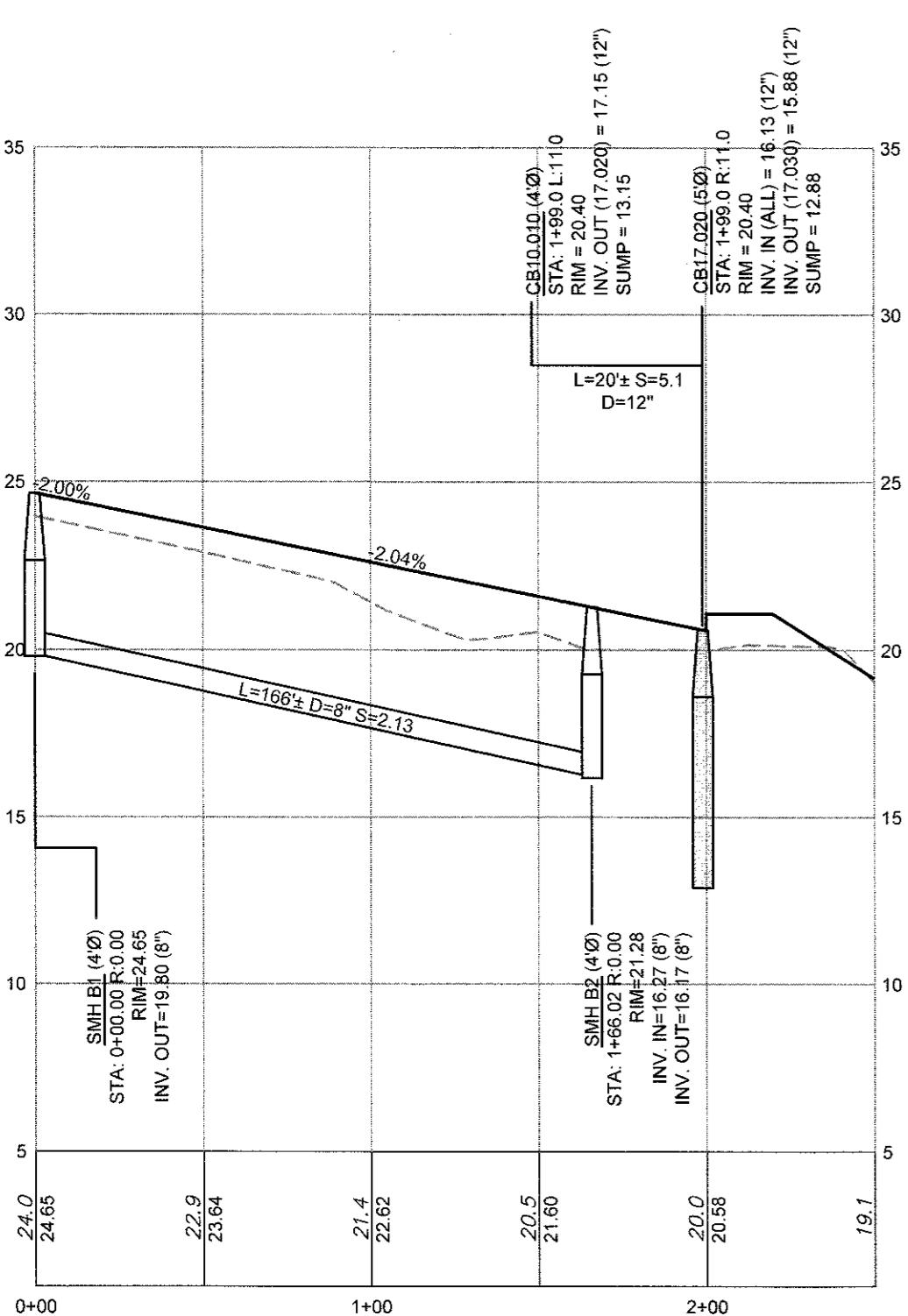
2	SUBMISSION REVISIONS	21JUN21			
1	SUBMISSION REVISIONS	21MAY21			
No.	Revision	Date			
Designed By:	JJR	Drawn by:	JJR	Checked by:	GES
Scale:	1"=50'	Date:	22APR21		
Project Title: <b>"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 &amp; 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND</b>					
Client/Owner: NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903					
Issued for: PERMITTING					
Drawing Title: <b>ROAD PROFILE SHEET 3 (RESIDENTIAL ACCESS ROAD 2)</b>					
Drawing Number: <b>C-16</b>					
No.	9826	Sheet	16	of	22
Project Number: <b>20072.0</b>					
Survey Index: — —					
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF THE ENGINEER. THE ENGINEER THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.					





A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETON RHODE ISLAND 02842  
PHONE (401) 849-0810 FAX (401) 846-4169  
WWW.NORTHEASTENGINEERS.COM



NOTES:  
1. REFER TO COMPLETE PROJECT NOTES ON SHEET C-2.

2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21
No.	Revision	Date
Designed By: JJR	Drawn by: JJR	Checked by: GES

Scale: 1" = 50' Date: 22APR21

Project Title:

"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND

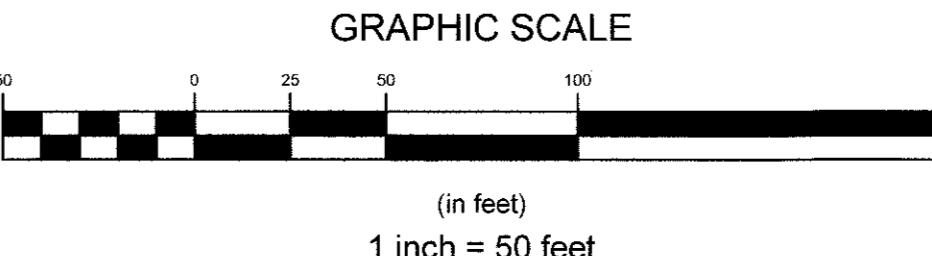
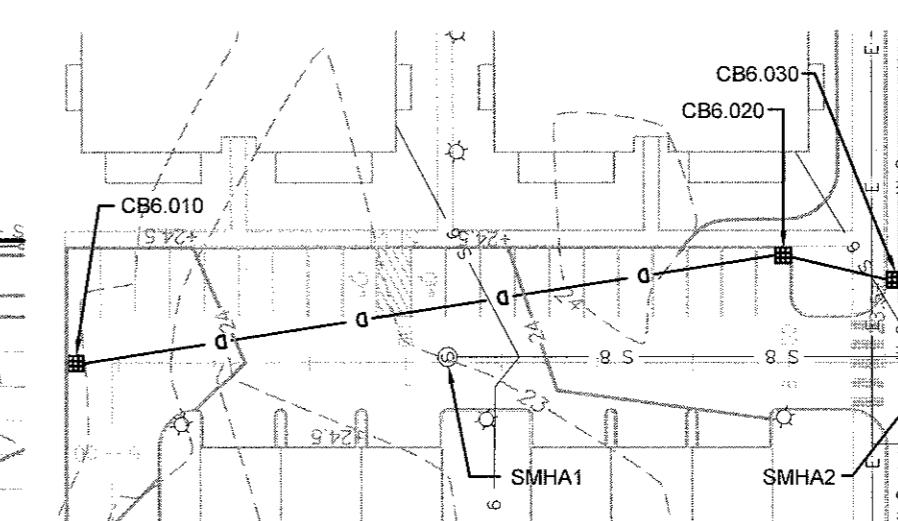
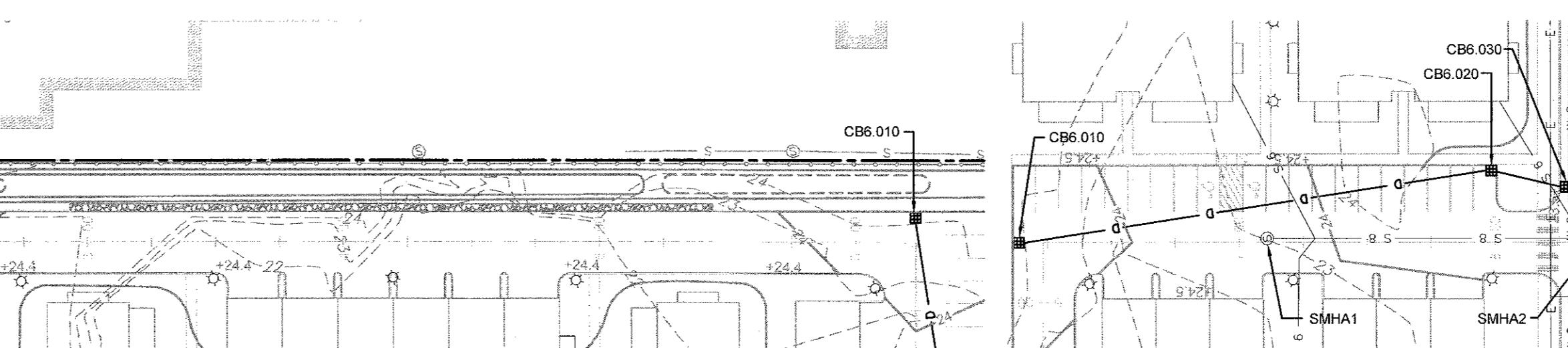
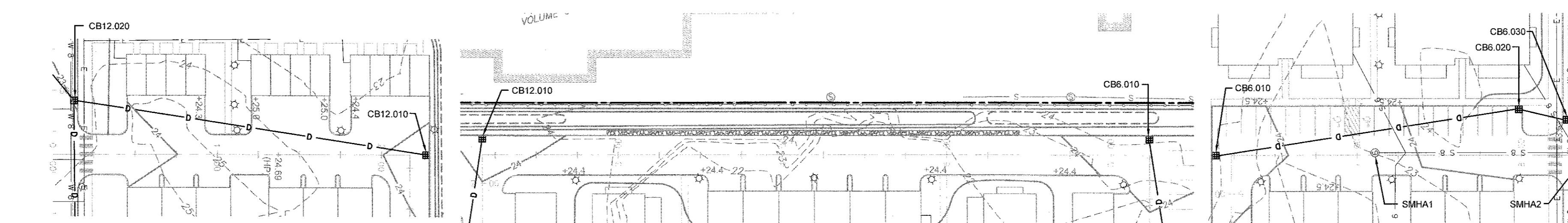
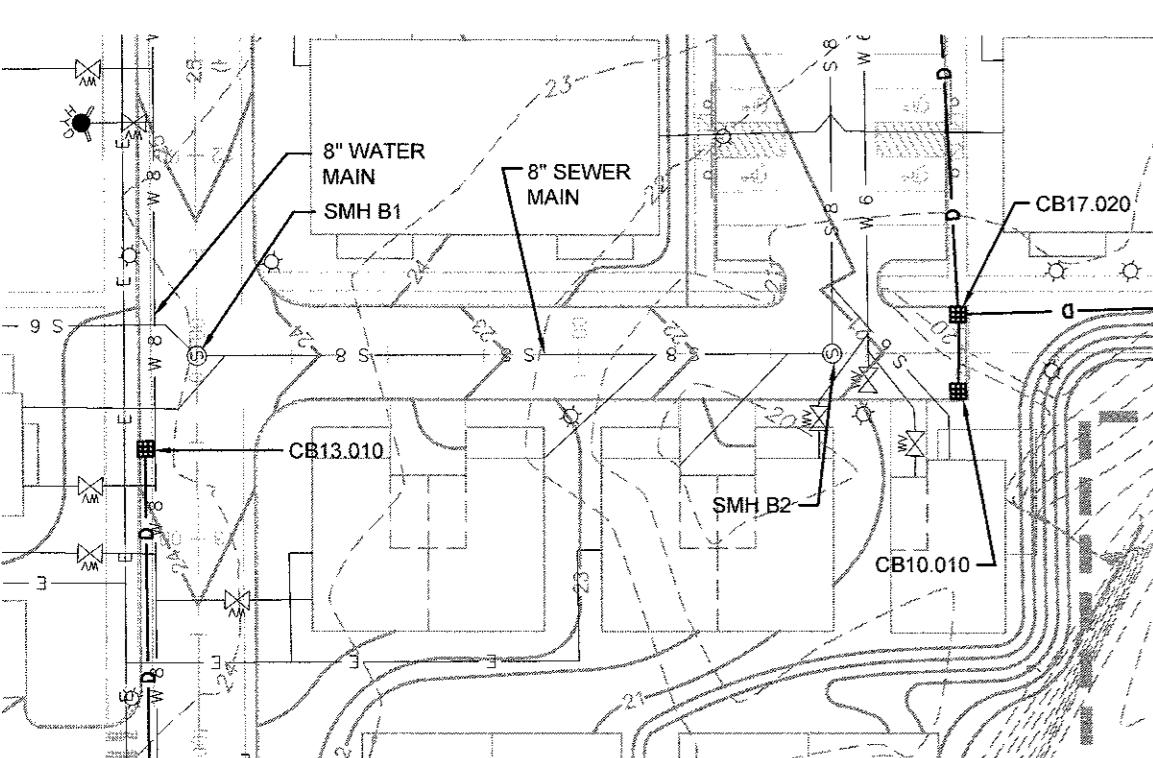
Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

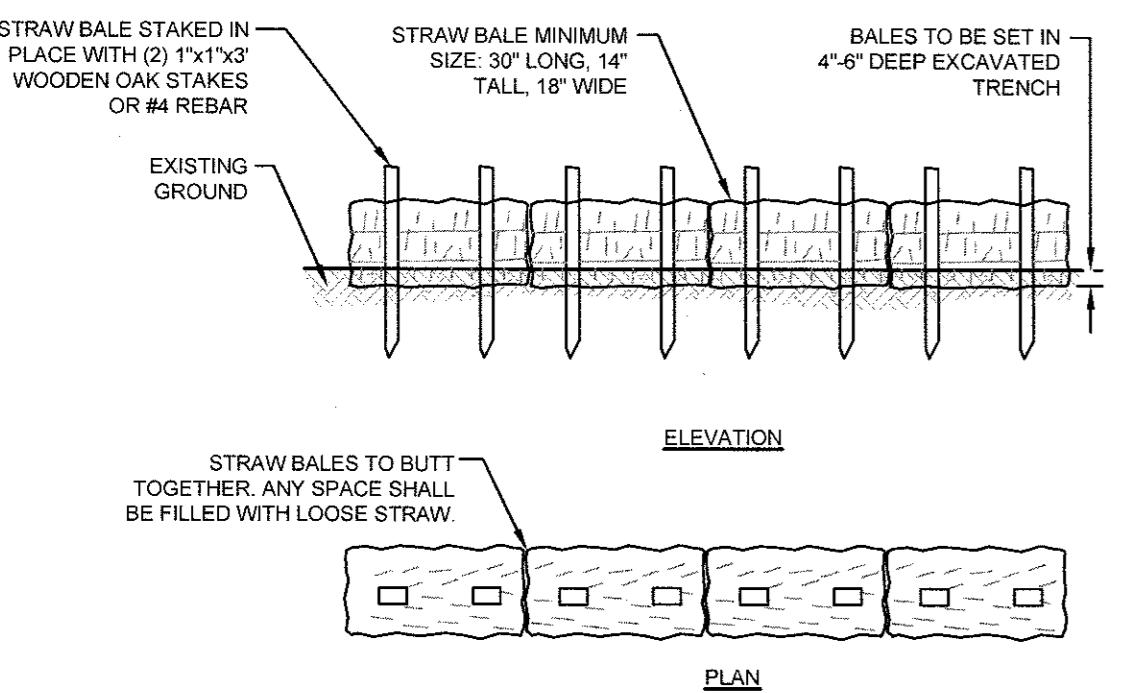
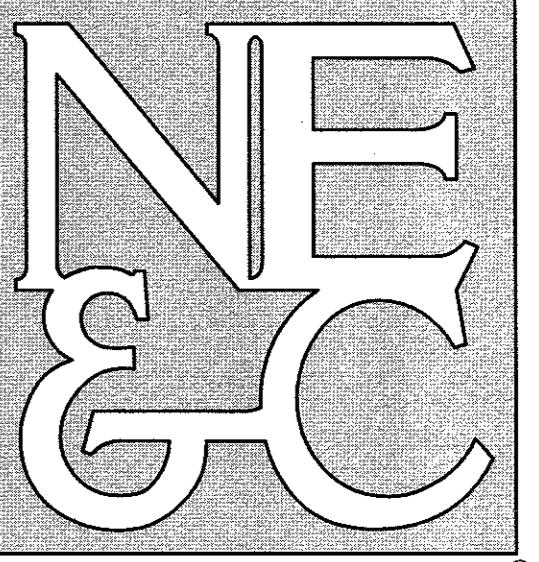
Issued for:  
PERMITTING

Drawing Title:  
ROAD PROFILE  
SHEET 4  
(RESIDENTIAL ACCESS ROADS 3 & 4)

Drawing Number: C-17	
Sheet 17 of 22	
Project Number: 20072.0	
Survey Index: —	

OWNERSHIP AND USE OF DOCUMENTS, DRAWINGS AND SPECIFICATIONS AS PREPARED BY THE PROFESSIONAL ENGINEER AND CONSULTANT SHALL REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.



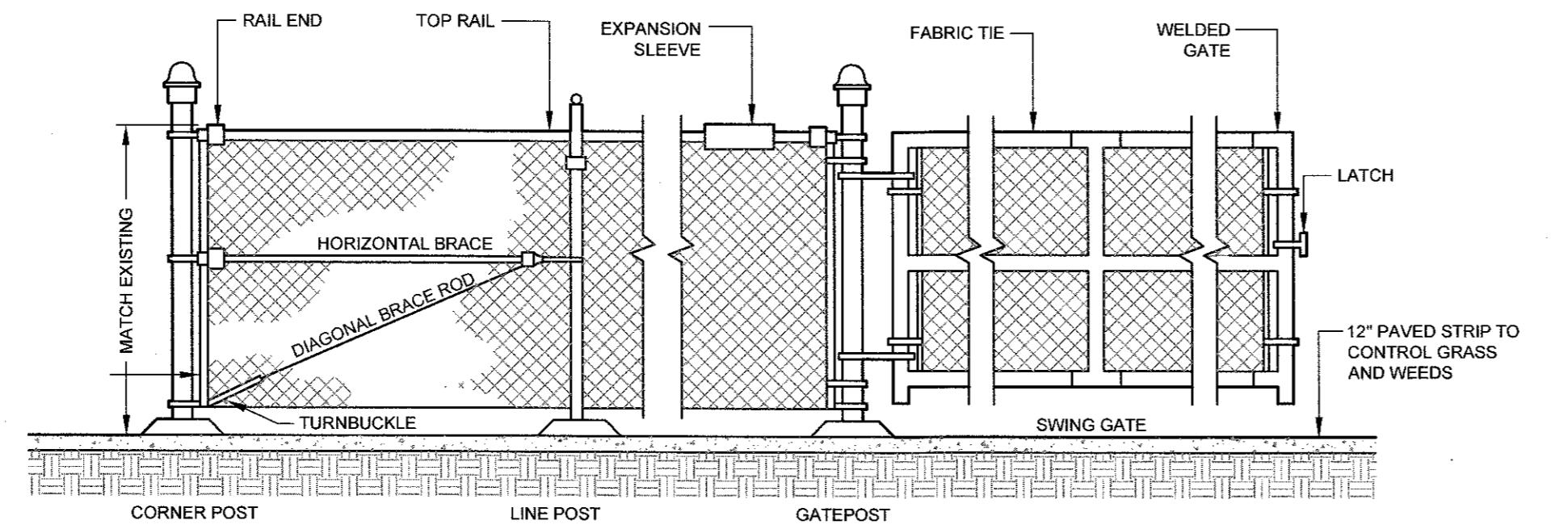


NOTES:

1. BALE WEIGHT SHALL NOT BE LESS THAN 50 LBS AND SHALL BE BOUND WITH NO LESS THAN TWO STRINGS OR WIRES CONTAINING A MINIMUM OF FIVE (5) CUBIC FEET OF MATERIAL. MINIMUM DIMENSIONS SHOWN IN DETAIL.
2. STRAW BALES SHALL BE CERTIFIED AS BEING NOXIOUS WEED-FREE BALES. TO BE "CERTIFIED" MEANS THAT THE PRODUCT IS FREE OF ANY NOXIOUS WEEDS.
3. STAKES SHALL BE DRIVEN THROUGH STAKES AT A SLIGHT UPSTREAM ANGLE TO PREVENT BALE FROM OVERTURNING.
4. LOOSE STRAW SHALL BE WEDGED BETWEEN BALES AFTER INSTALLATION.
5. MATERIAL EXCAVATED FROM TRENCH SHALL BE BACKFILLED, COMPAKTED, AND STABILIZED.

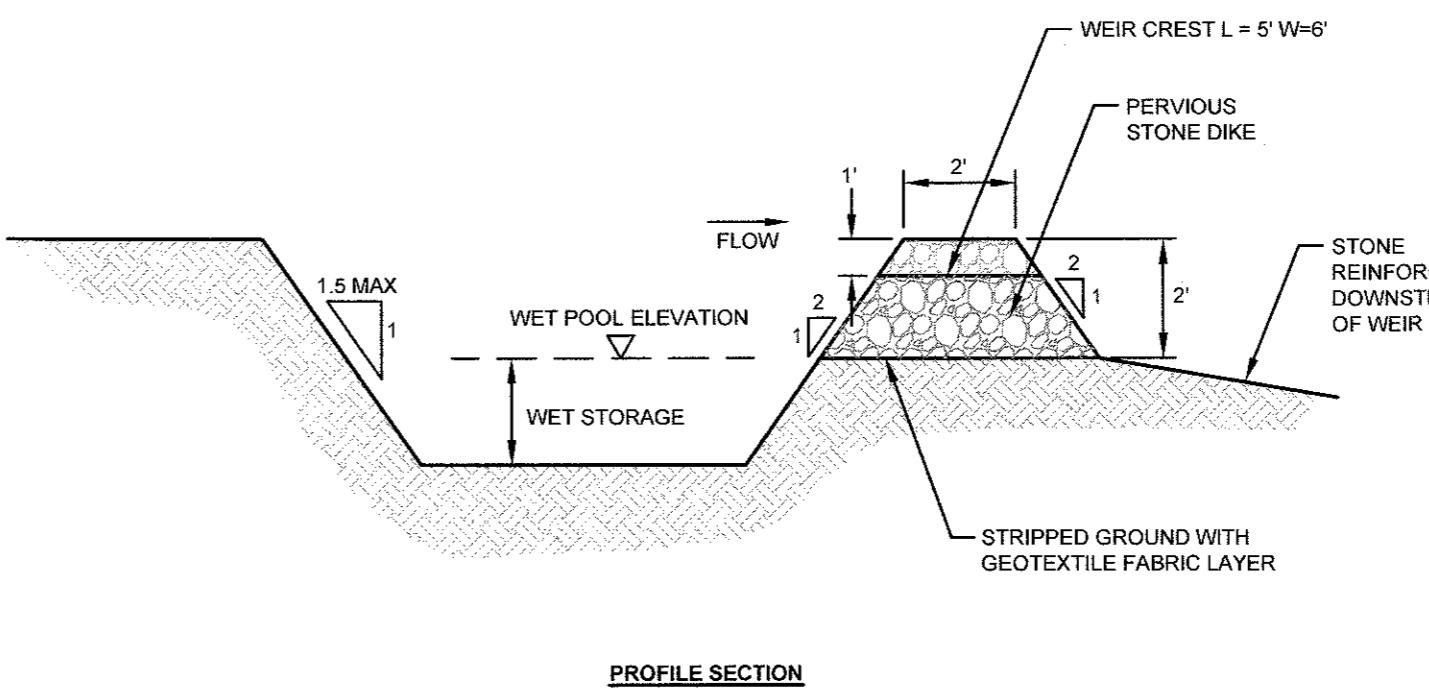
BALED STRAW EROSION CONTROL BARRIER

SCALE: NOT TO SCALE

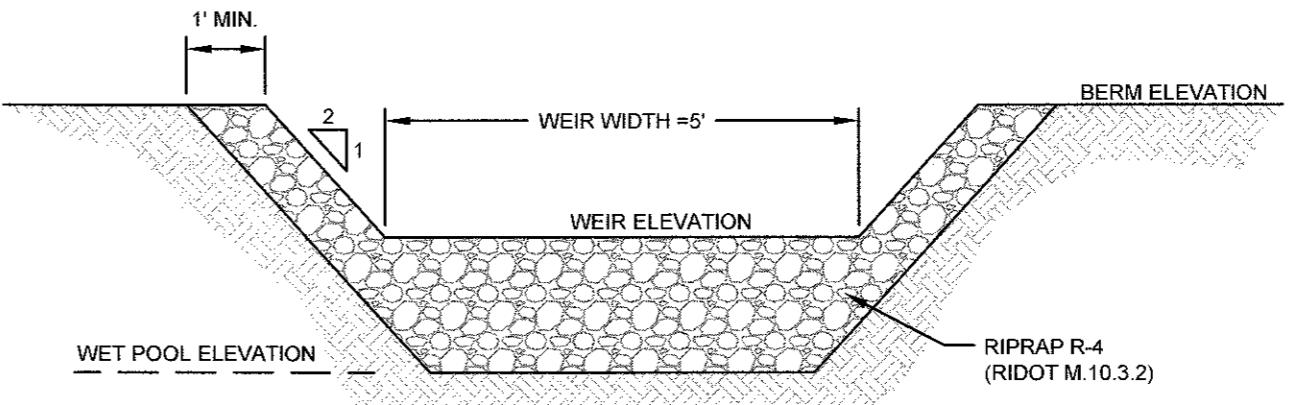


TYPICAL CHAIN LINK FENCE DETAIL

SCALE: NOT TO SCALE

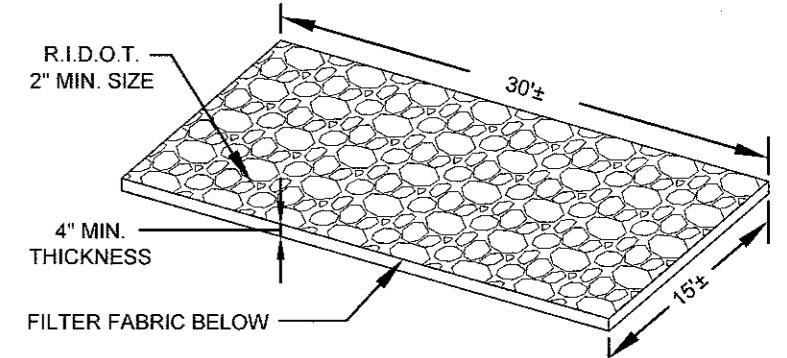


PROFILE SECTION



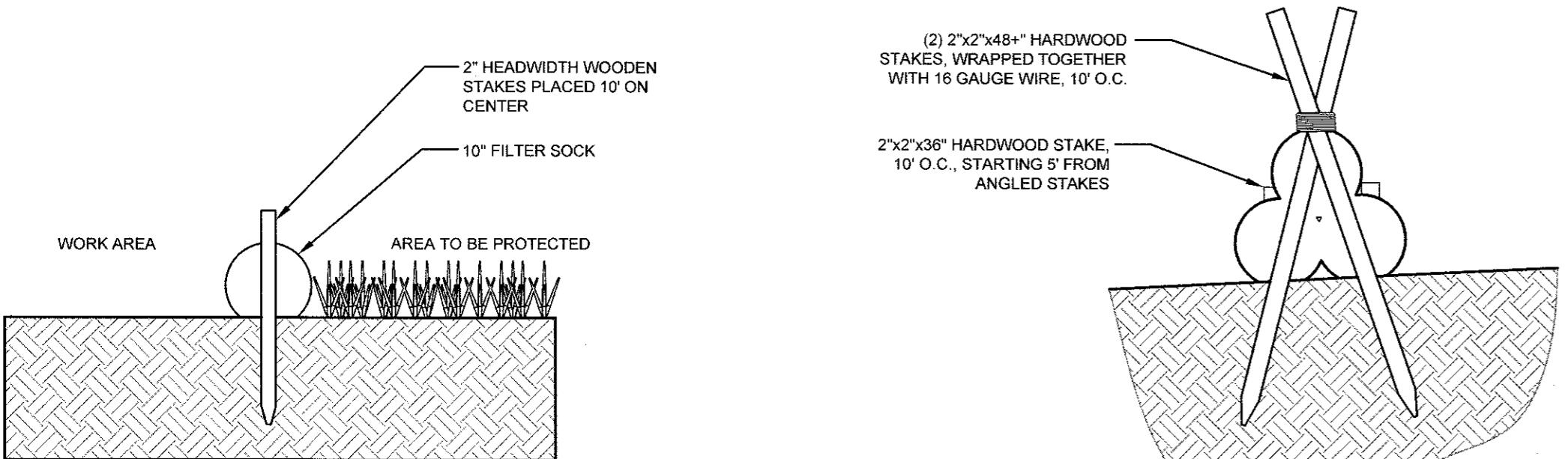
TYPICAL SEDIMENT TRAP DETAILS

SCALE: NOT TO SCALE

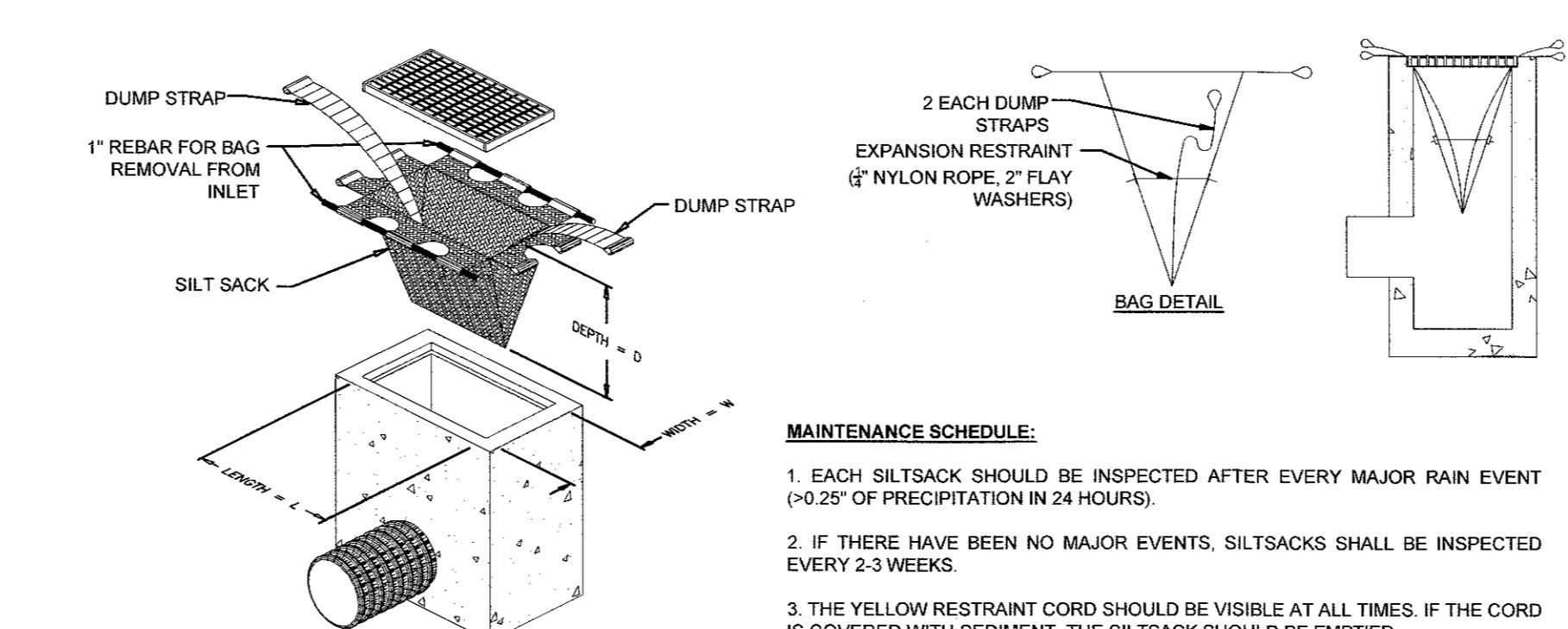


CONSTRUCTION ENTRANCE

SCALE NOT TO SCALE

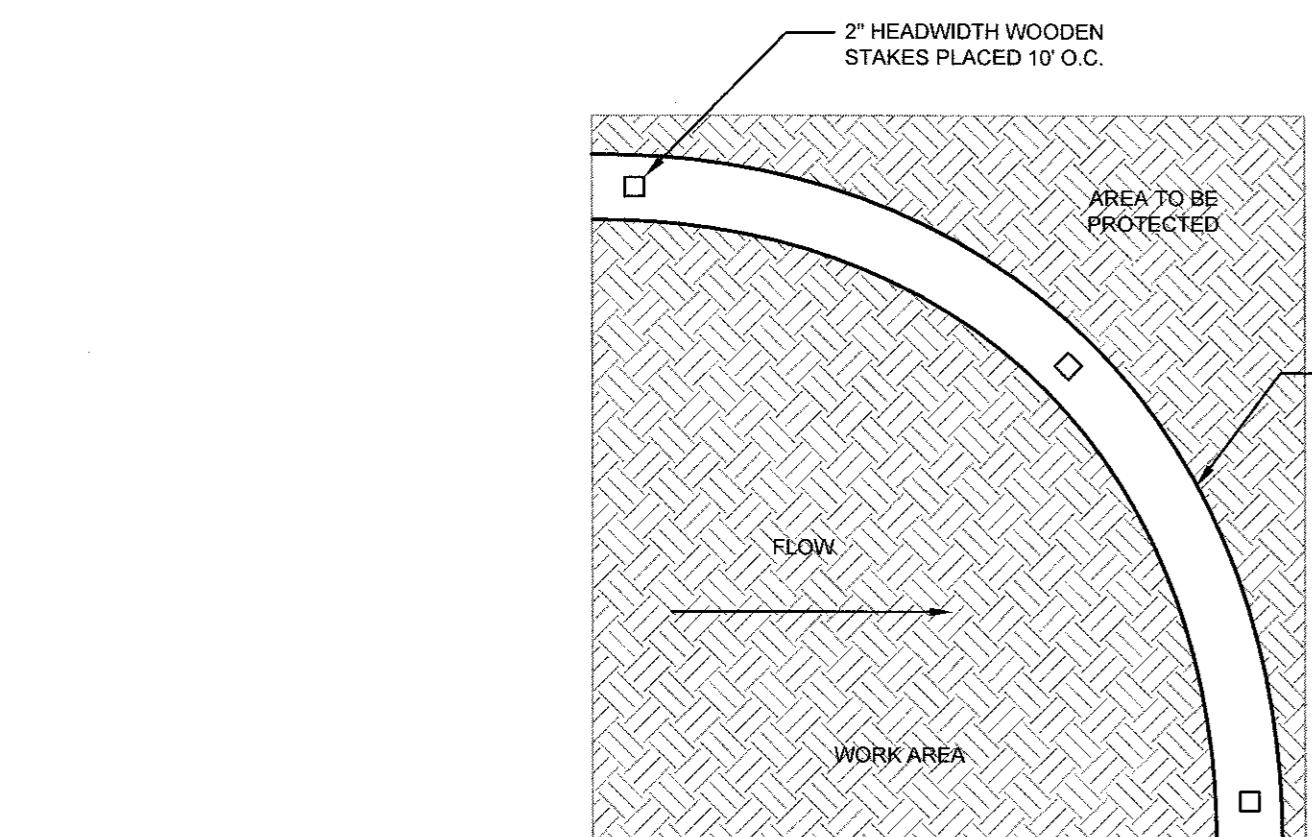


SECTION VIEW



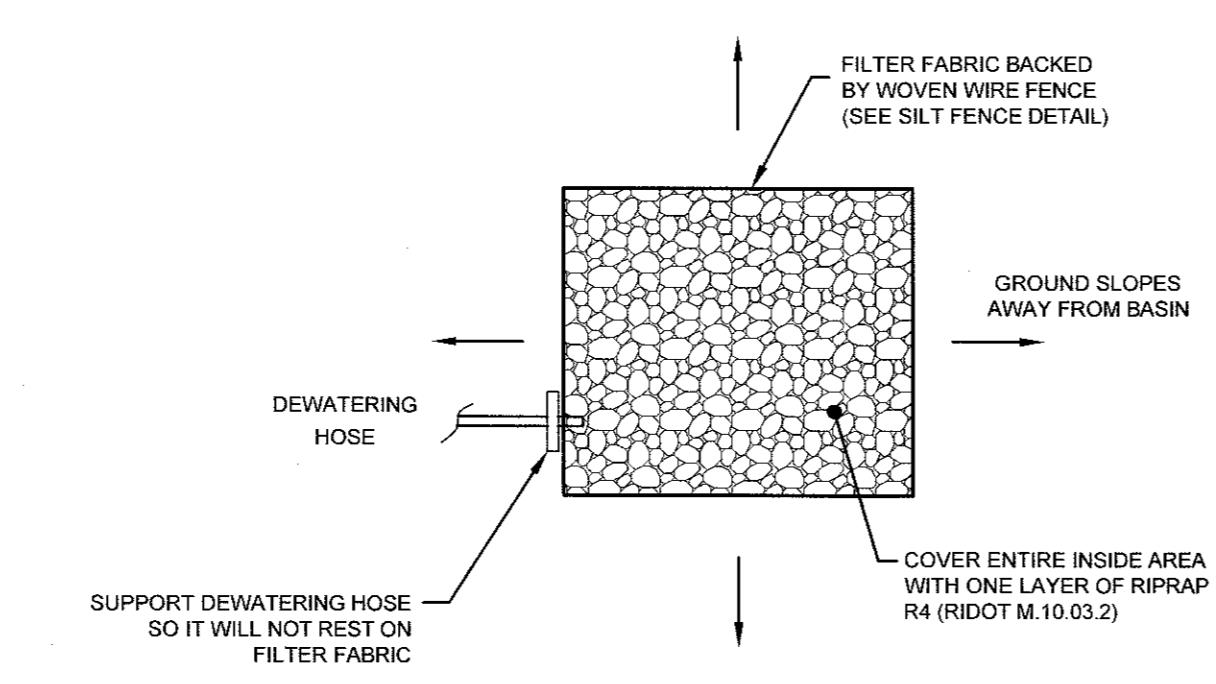
MAINTENANCE SCHEDULE:

1. EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT (>0.25" OF PRECIPITATION IN 24 HOURS).
2. IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.
3. THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.



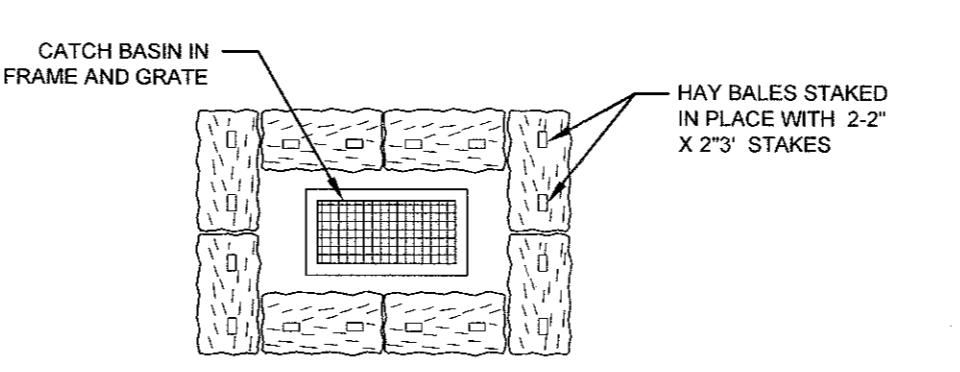
10" FILTER SOCK DETAIL

SCALE: NOT TO SCALE



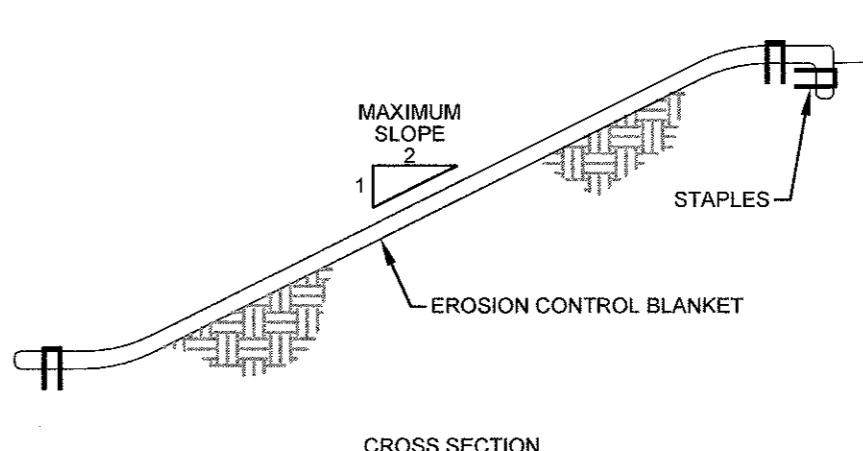
DEWATERING BASIN

SCALE: NOT TO SCALE



STRAW BALE INLET PROTECTION

SCALE: NOT TO SCALE



CROSS SECTION

NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

EROSION CONTROL BLANKET

SCALE: NOT TO SCALE

1	SUBMISSION REVISIONS	21MAY21	
No.	Revision	Date	App.
Designed By:	JJR	Drawn by:	JJR
Scale:	AS SHOWN	Date:	22APR21

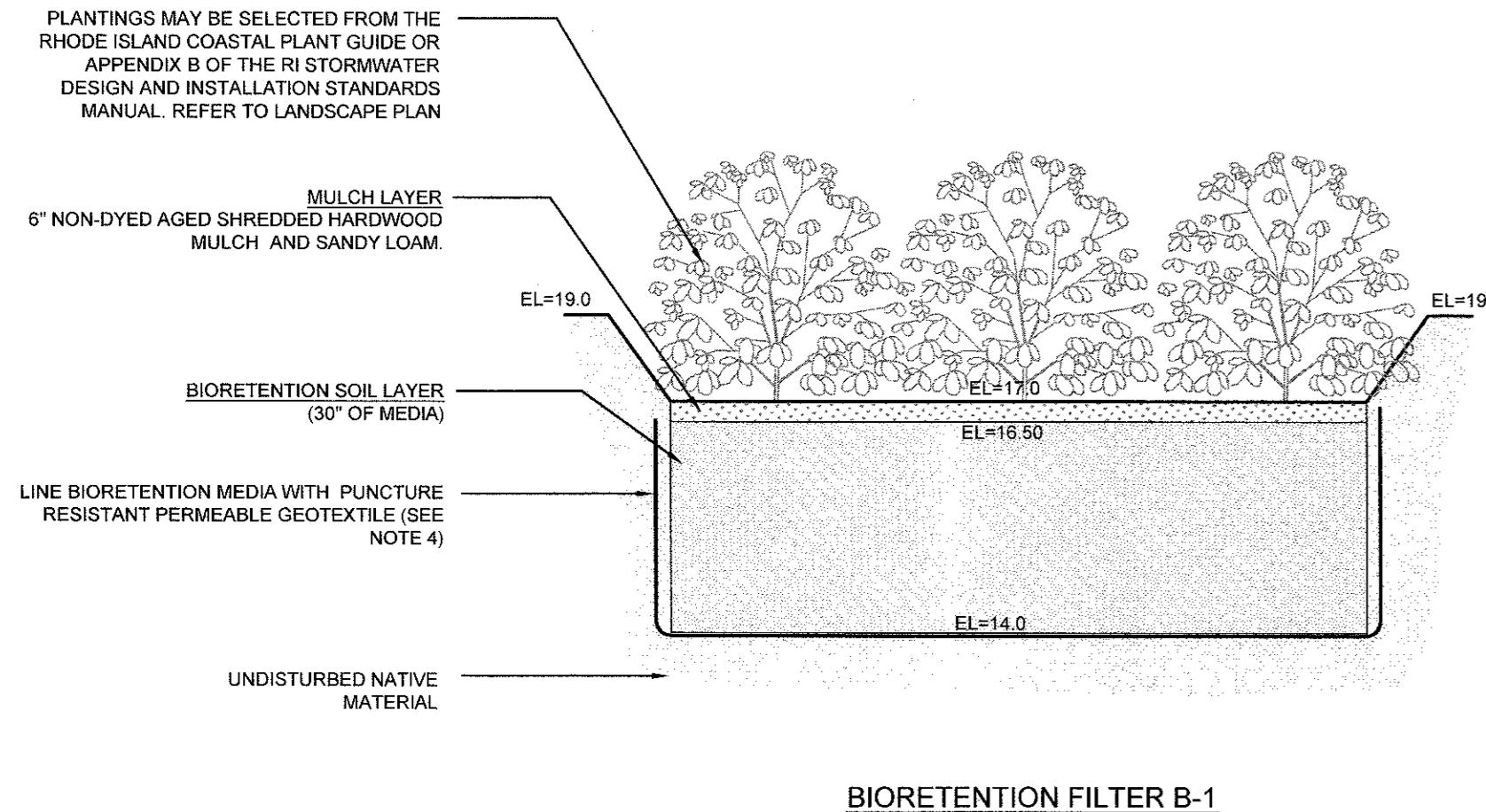
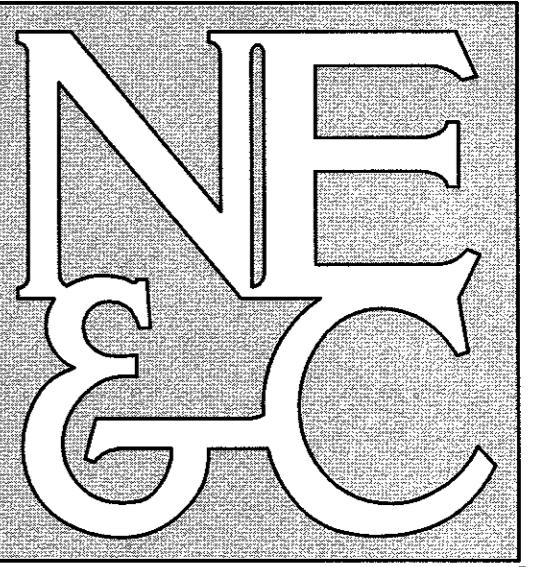
Project Title:	"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 & 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND		
Client/Owner:	NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903		

Issued for:	PERMITTING
-------------	------------

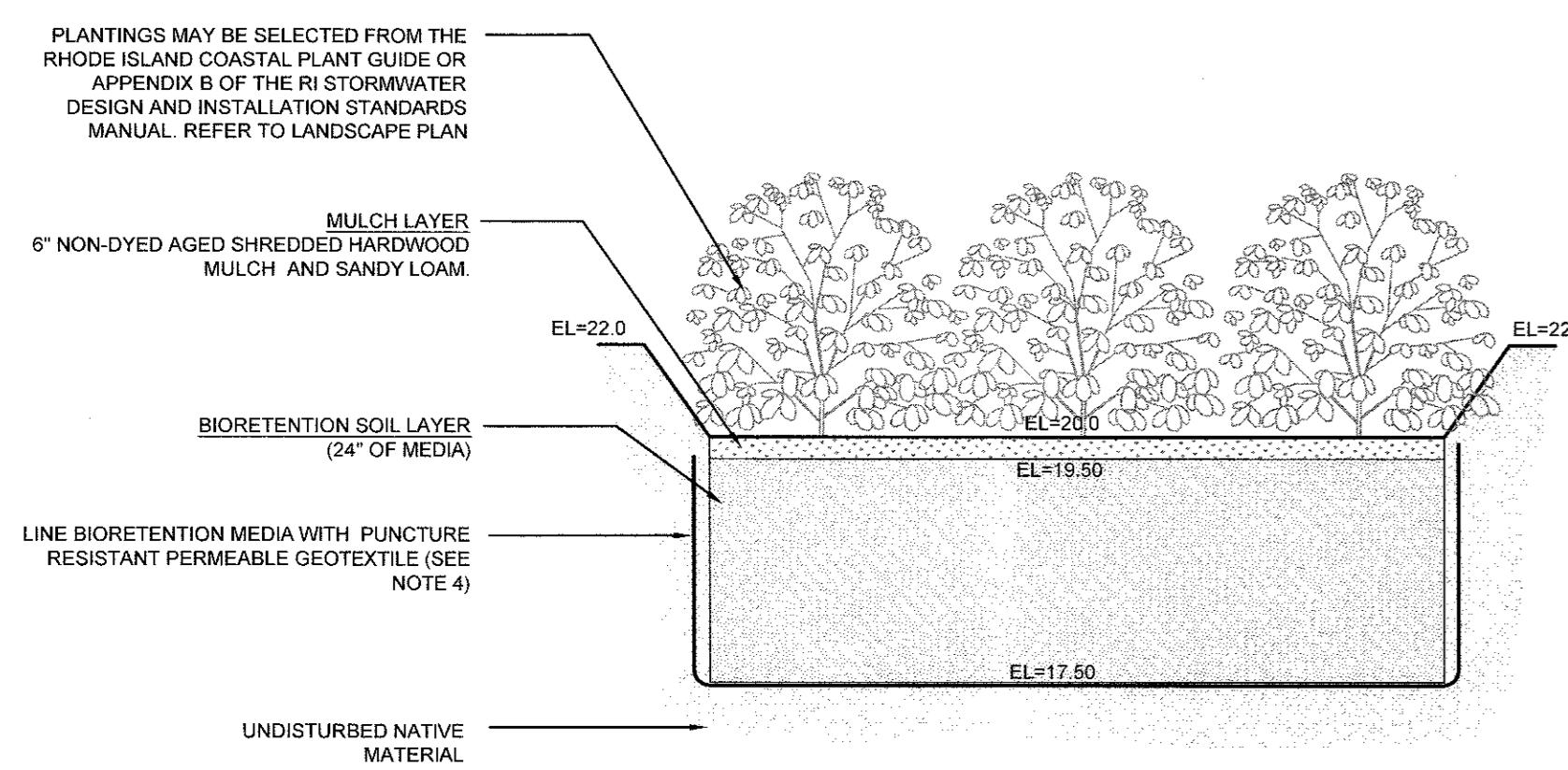
Drawing Title:	PROPOSED
	DETAIL SHEET 1

Drawing Number:	C-18
Sheet	18 of 22
Project Number:	20072.0
Survey Index:	—
No.	9826
Jeremy J. Rosa	REGISTERED PROFESSIONAL ENGINEER CIVIL

OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE AND REMAIN THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE COPIED, IN WHOLE OR PART, FOR ANY OTHER PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.



BIORETENTION FILTER B-1



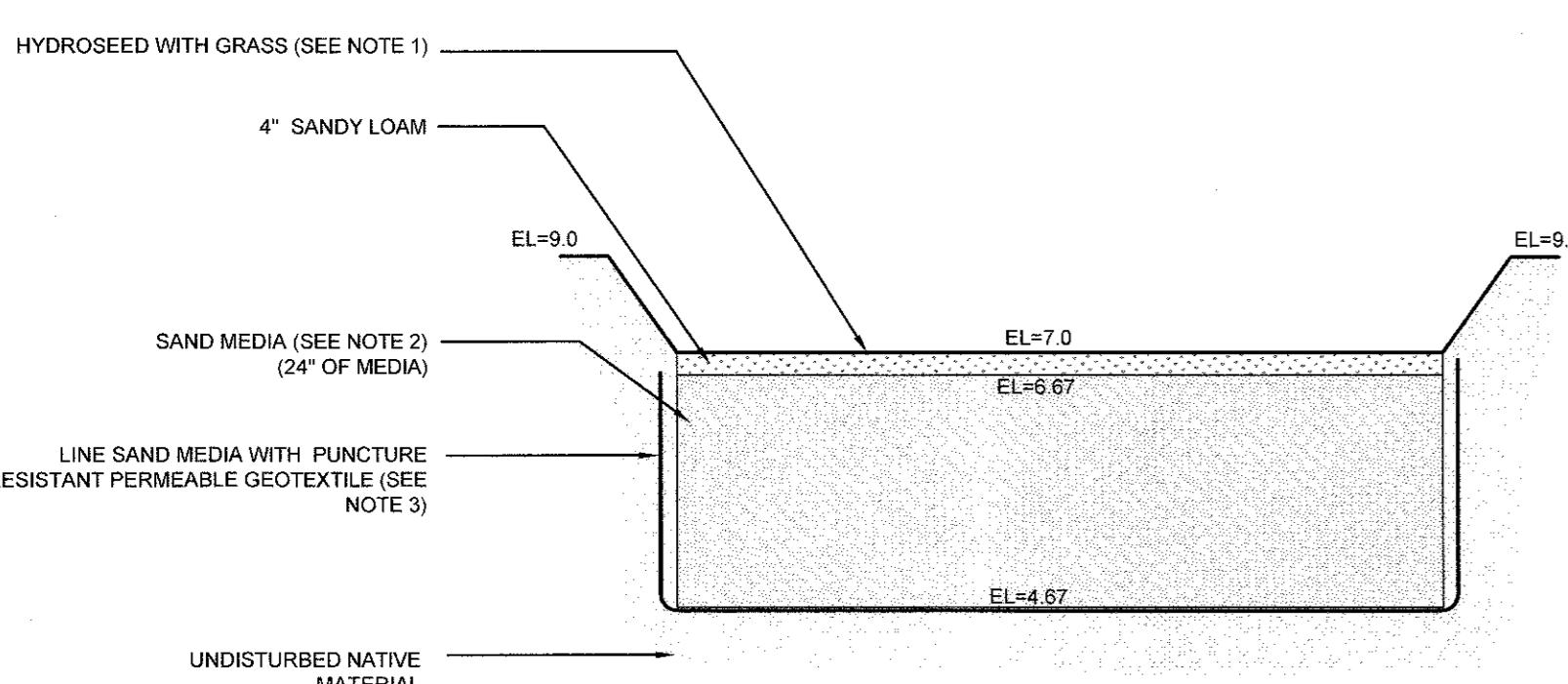
BIORETENTION FILTER B-3

NOTES:

1. BIORETENTION FILTER PLANTINGS MAY BE SELECTED FROM THE RHODE ISLAND COASTAL PLANT GUIDE OR APPENDIX B OF THE RI STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL. REFER TO LANDSCAPE PLANS.
2. PLANTINGS MUST BE DENSE AND COVER THE ENTIRETY OF THE FILTER SURFACE.
3. BIORETENTION SOIL SHALL CONSIST OF USDA LOAMY SAND AND MEET THE FOLLOWING GRADATIONS: SAND 85-88% SILT 8-12%, CLAY 0-2%, AND ORGANIC MATTER (LEAF COMPOST) 3-5%.
4. PERMEABLE GEOTEXTILE FABRIC SHALL HAVE A PUNCTURE STRENGTH OF 125 LBS, A BURST STRENGTH OF 400 PSI (ASTM D 1117) AND A TENSILE STRENGTH OF 300 LBS (ASTM D 1682). FABRIC SHALL BE MIN 0.08" THICK WITH AN EQUIVALENT OPENING SIZE OF #80 SIEVE AND A MINIMUM FLOW RATE OF 125 GPM PER SQUARE FOOT.

BIORETENTION FILTER SECTIONS

SCALE: NOT TO SCALE



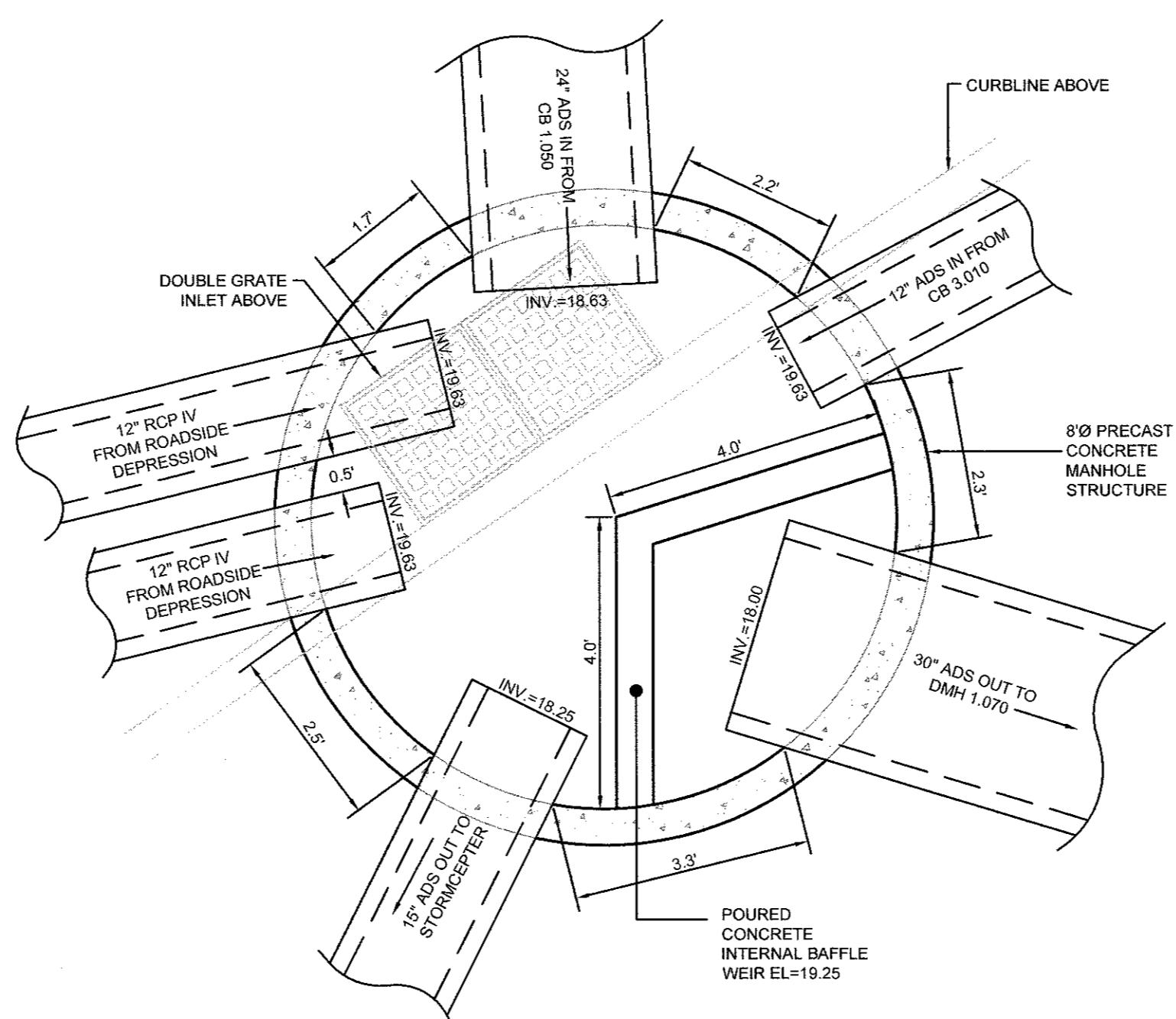
SAND FILTER B-2

SAND FILTER NOTES:

1. SAND FILTER SHALL BE PLANTED WITH NEW ENGLAND WETMIX (WETLAND SEED MIX) BY NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL.
2. SAND FILTER SAND TO BE CLEAN AASHTO M-6 OR ASTM C-33 CONCRETE SAND (0.02" TO 0.04"). SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMATIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO ROCK DUST CAN BE USED AS SAND.
3. PERMEABLE GEOTEXTILE FABRIC SHALL HAVE A PUNCTURE STRENGTH OF 125 LBS, A BURST STRENGTH OF 400 PSI (ASTM D 1117) AND A TENSILE STRENGTH OF 300 LBS (ASTM D 1682). FABRIC SHALL BE MIN 0.08" THICK WITH AN EQUIVALENT OPENING SIZE OF #80 SIEVE AND A MINIMUM FLOW RATE OF 125 GPM PER SQUARE FOOT.

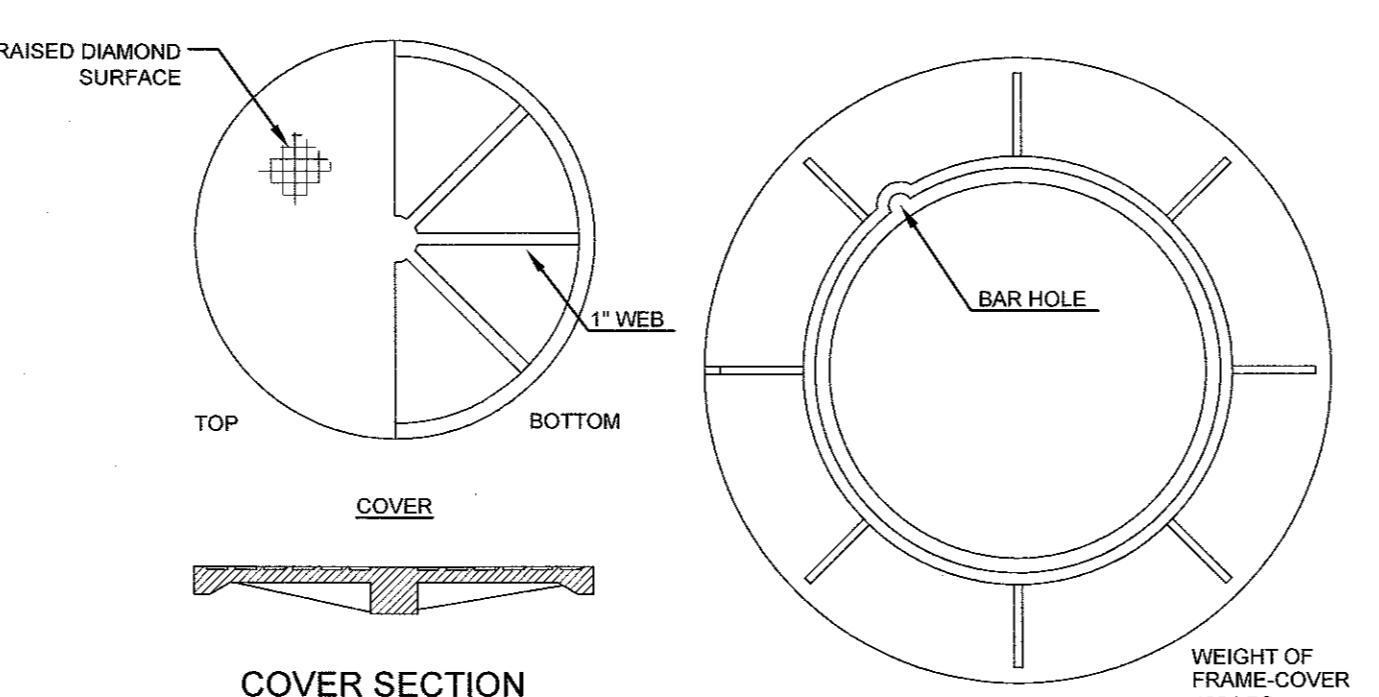
SAND FILTER SECTION

SCALE: NOT TO SCALE

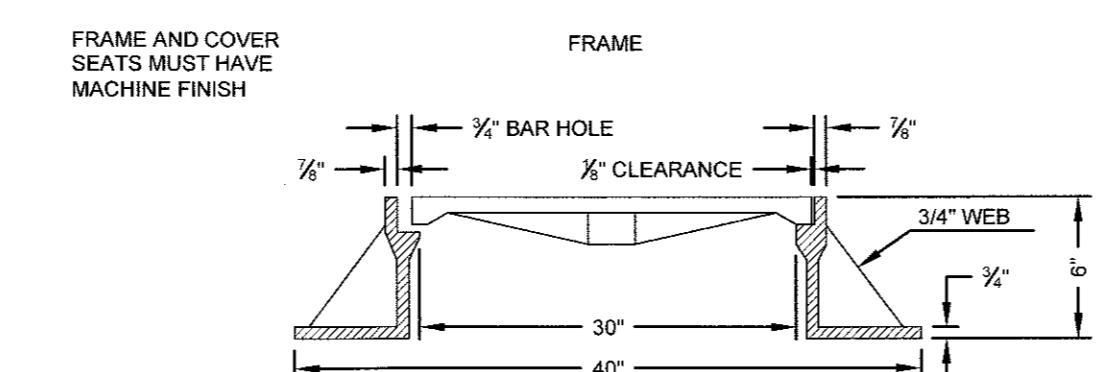


CB1.060 DIVERSION STRUCTURE PLAN VIEW DETAIL

SCALE: 1"=2"

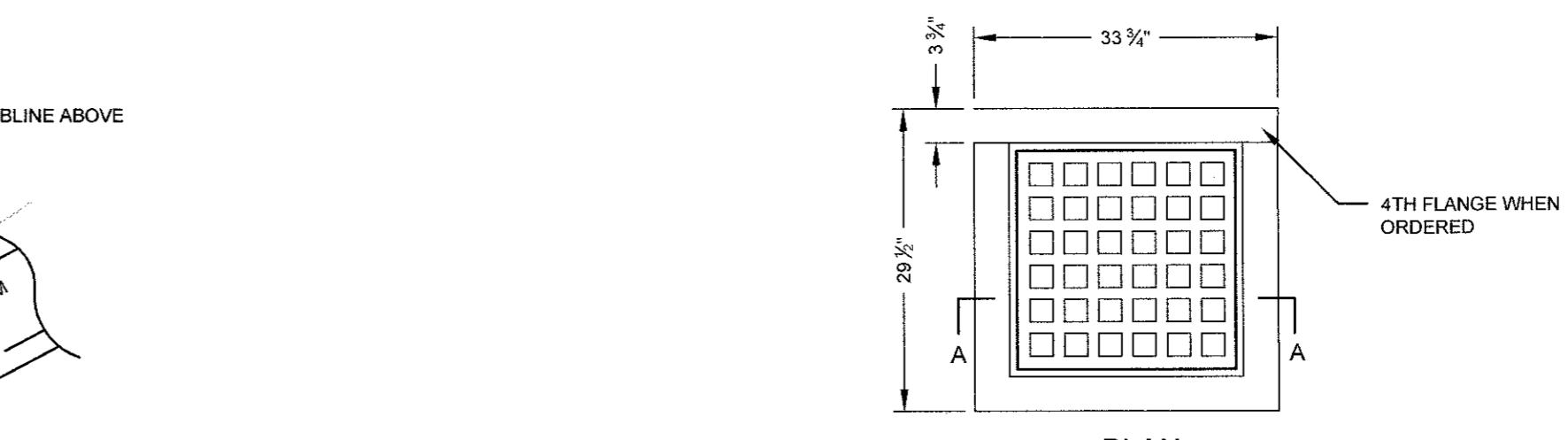


COVER SECTION



ROUND FRAME AND COVER

SCALE: NOT TO SCALE



SECTION A-A

SQUARE FRAME AND GRATE (RIDOT 6.3.0)  
SCALE: NOT TO SCALE

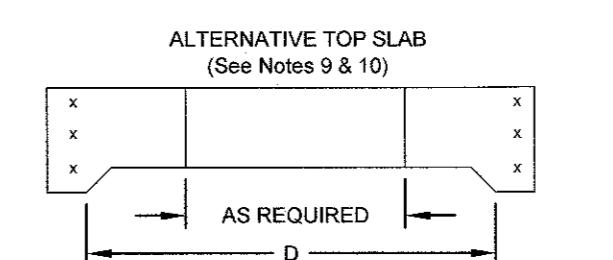
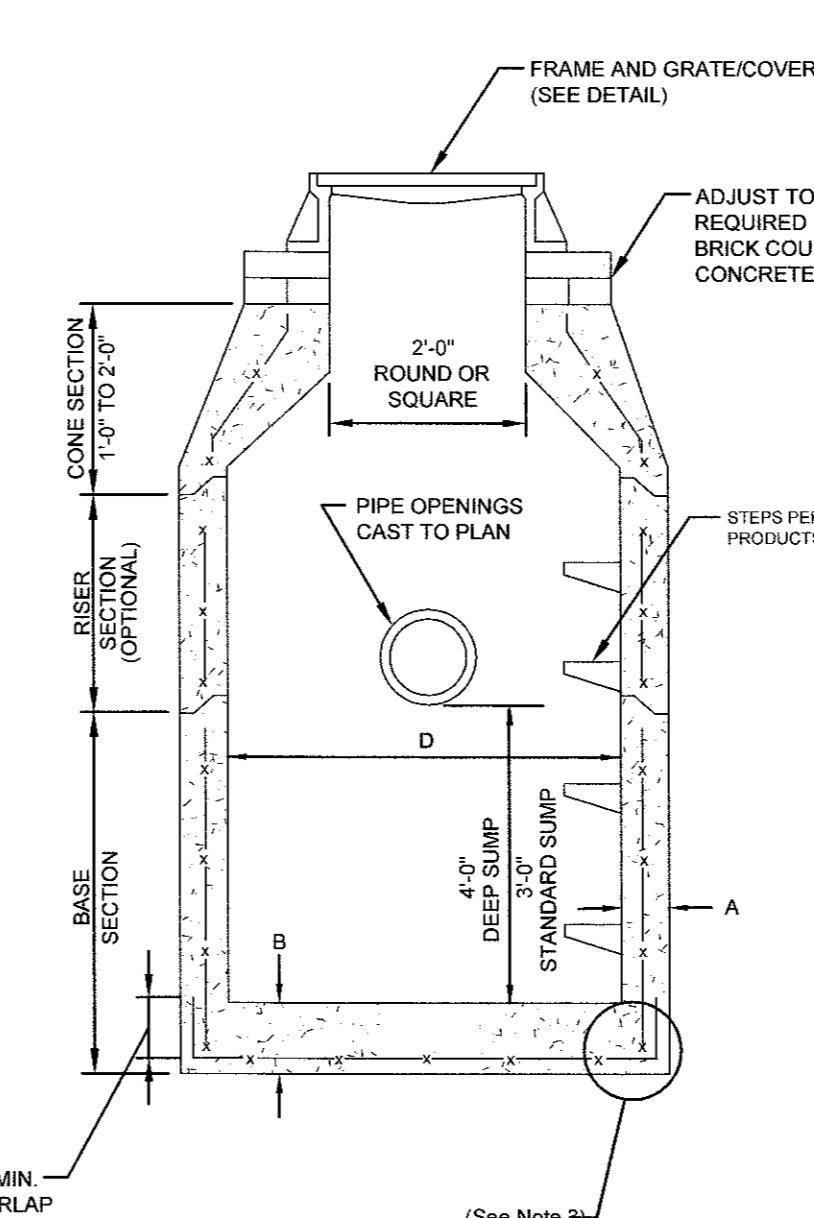


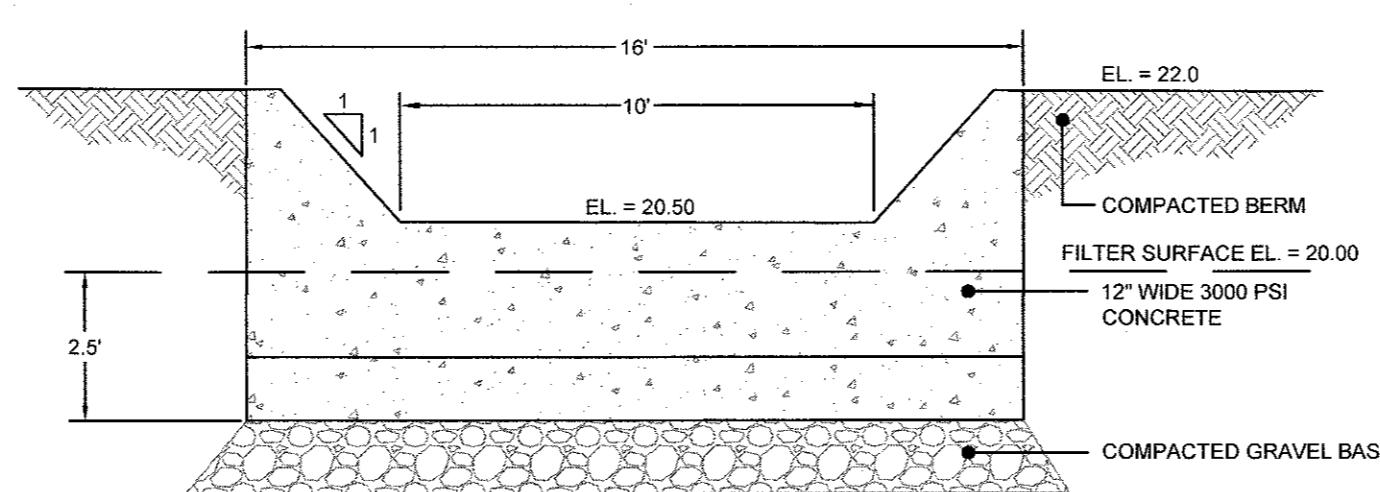
TABLE 1		
CATCH BASIN DIAMETER (D)	A	B
4'-0"	5"	6"
5'-0"	6"	7"
6'-0"	7"	8"
8'-0"	9"	8"

1. FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2.



PRECAST ROUND CATCH BASIN & DRAIN MANHOLE (RIDOT 4.4.0)

SCALE: NOT TO SCALE



BIORETENTION B-3 CONCRETE OUTLET WEIR DETAIL

SCALE: NOT TO SCALE

1	SUBMISSION REVISIONS	21MAY21			
No.	Revision	Date			
Designed By:	JJR	Drawn by:	JJR	Checked by:	GES
Scale:	AS SHOWN	Date:	22APR21		

Project Title:  
"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND

Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

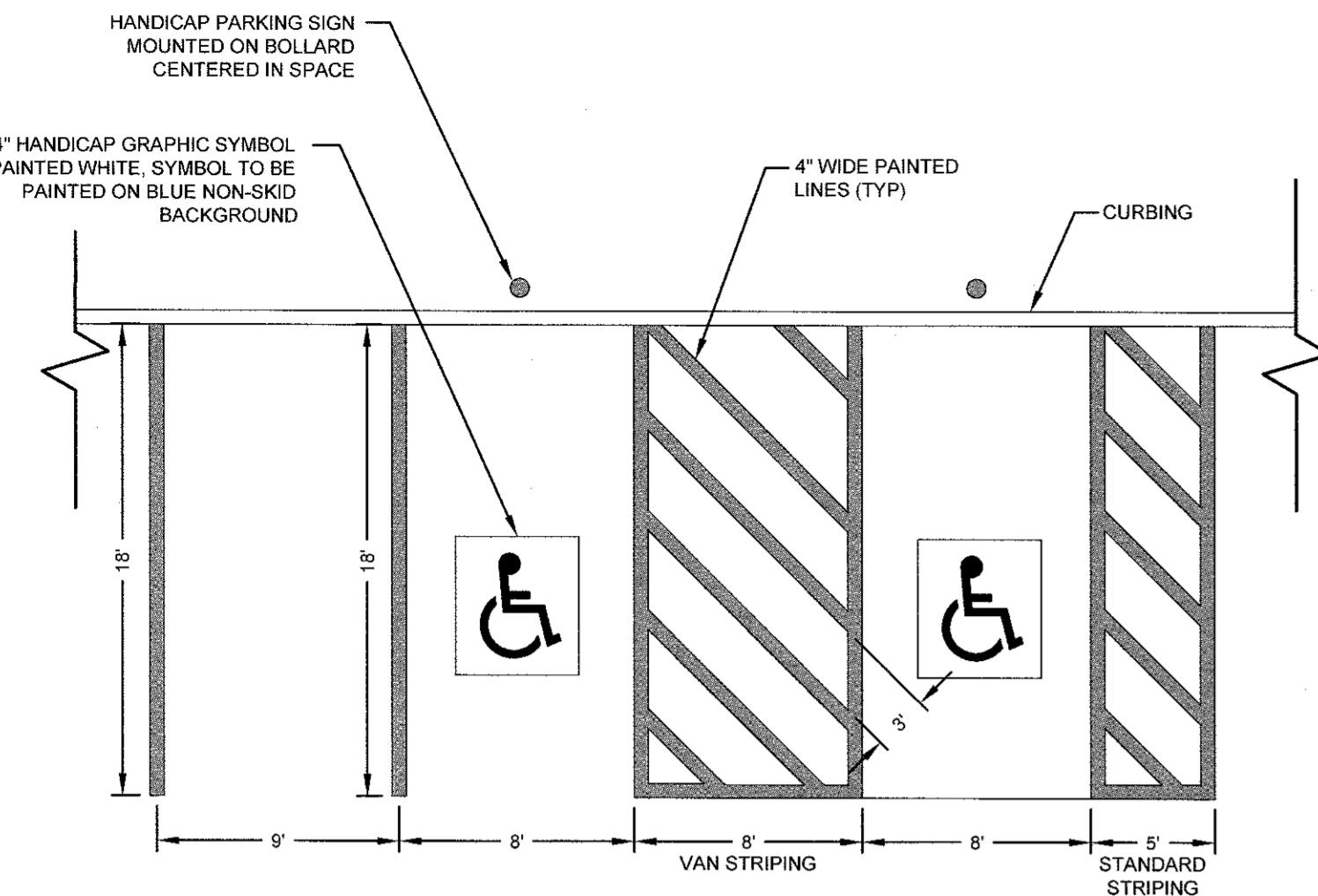
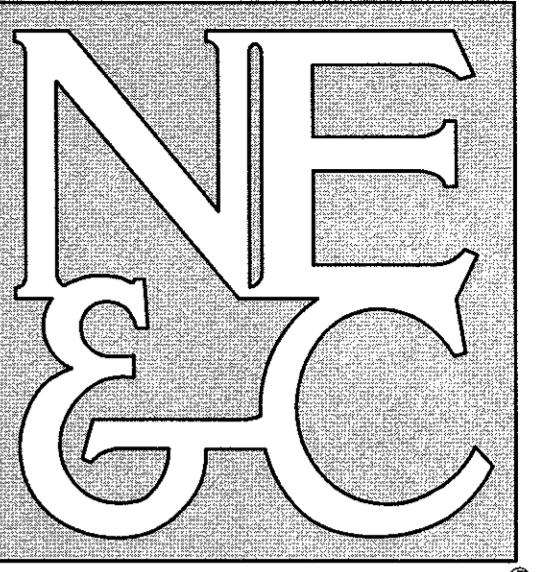
Issued for:  
PERMITTING

Drawing Title:  
PROPOSED  
DETAIL SHEET 2

Drawing Number: C-19	
No.	9826 6219
Sheet	19 of 22
Project Number:	20072.0
Survey Index:	—

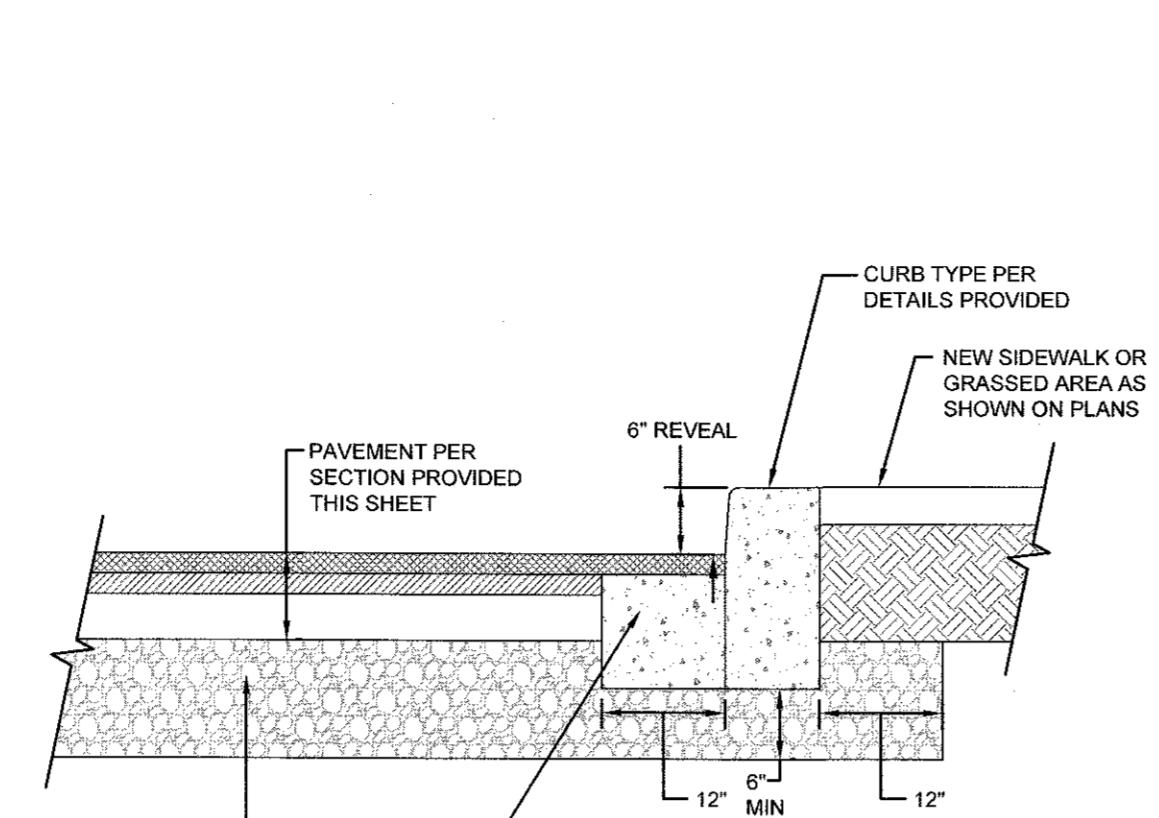
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF THE ENGINEER. THE ENGINEER THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.





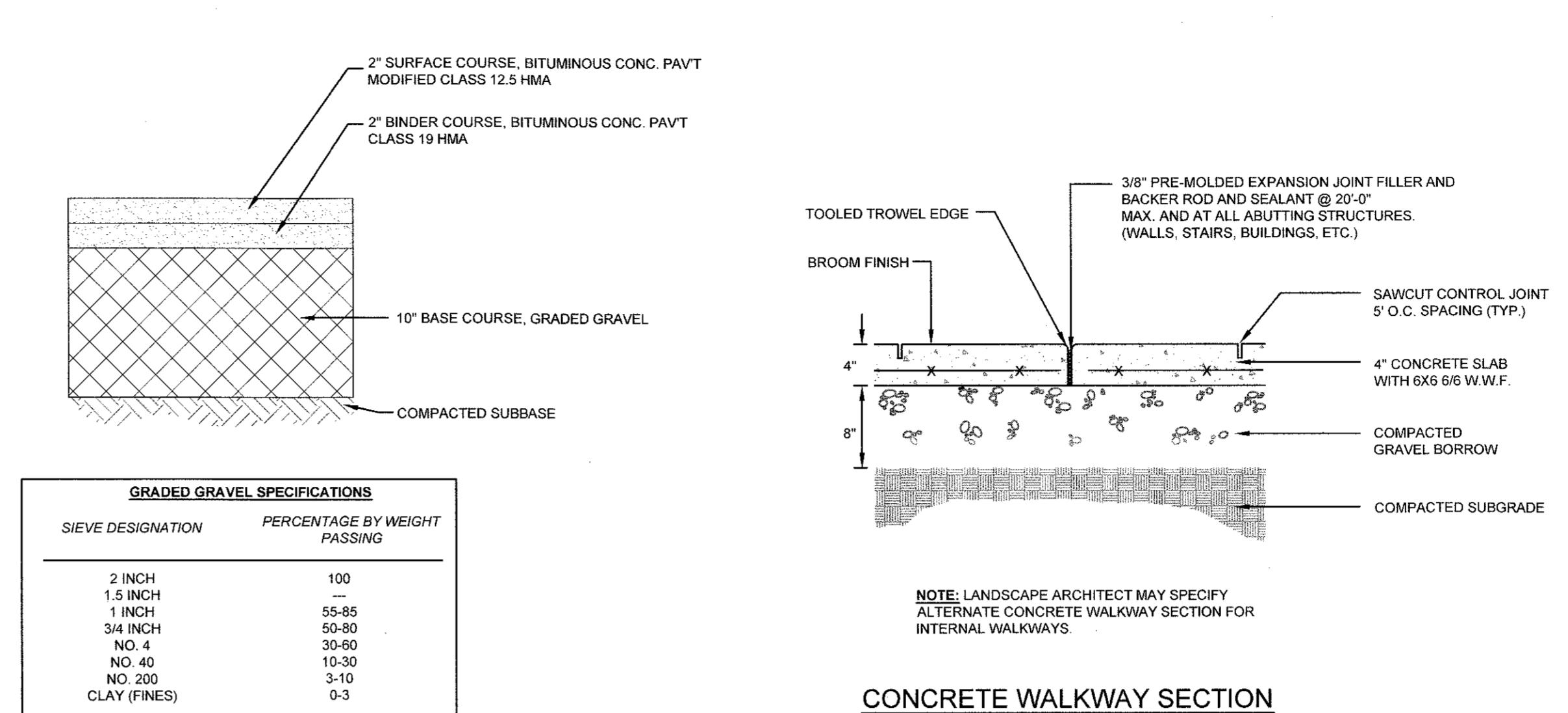
**PARKING STALL STRIPING**

SCALE: NOT TO SCALE



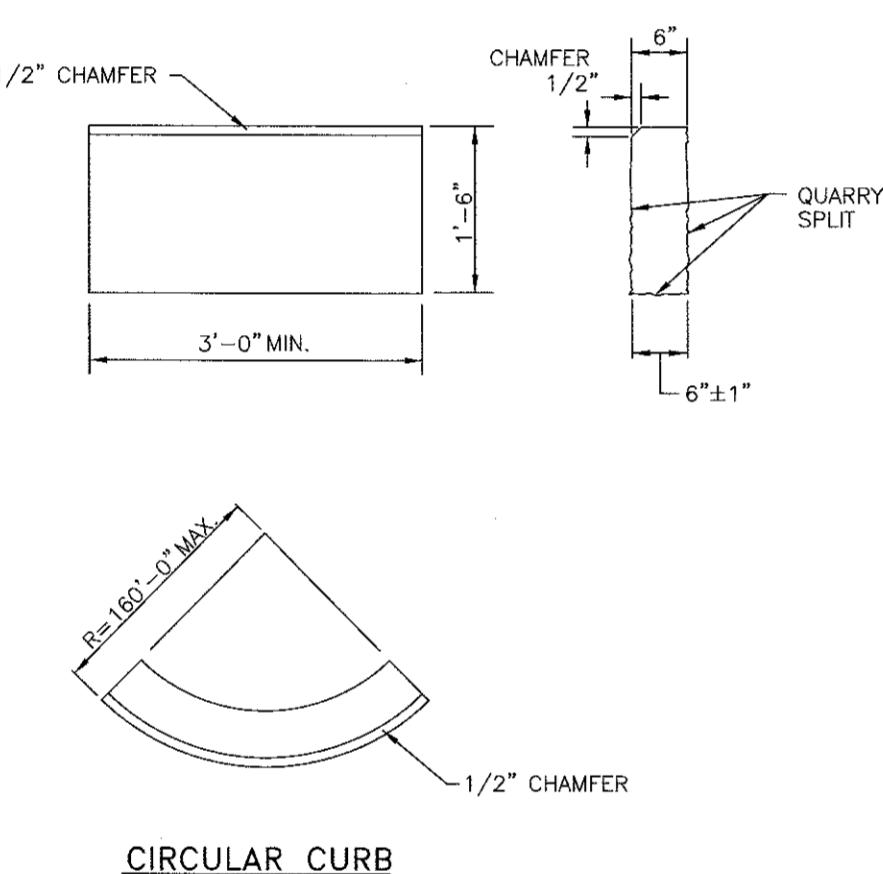
**CURB SETTING DETAIL**

SCALE: NOT TO SCALE



**CONCRETE WALKWAY SECTION**

SCALE: NOT TO SCALE



**CIRCULAR CURB**

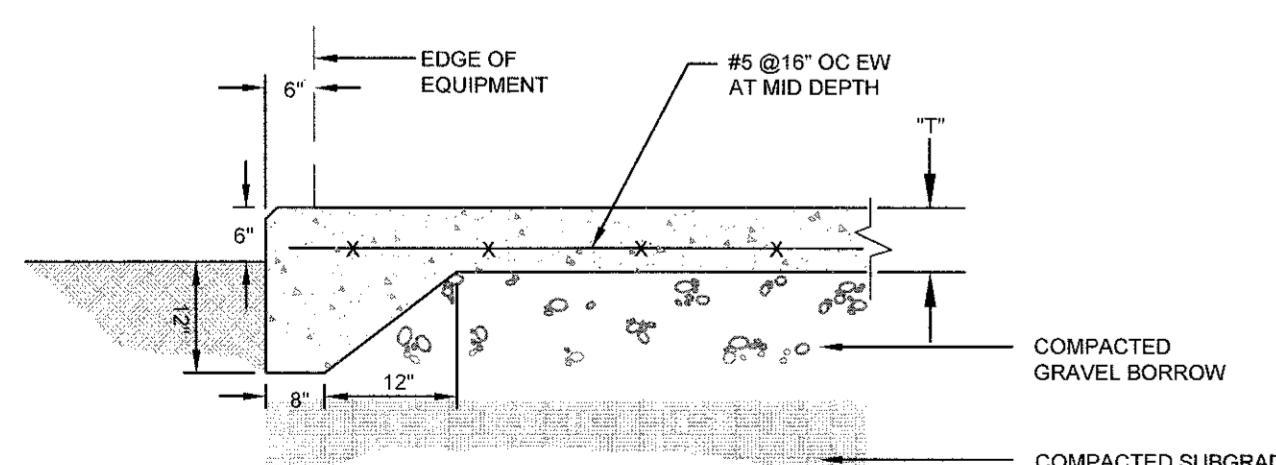
**NOTES:**  
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.  
2. TOP SURFACE TO BE DRESSED IN A CIRCULAR PIECE OR QUARRY SPLIT.  
3. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR PIECES TO BE 3'-0".  
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.

**GRANITE CURB (PUBLIC ROADS ONLY) RIDOT STD 7.3.0**

SCALE: NOT TO SCALE

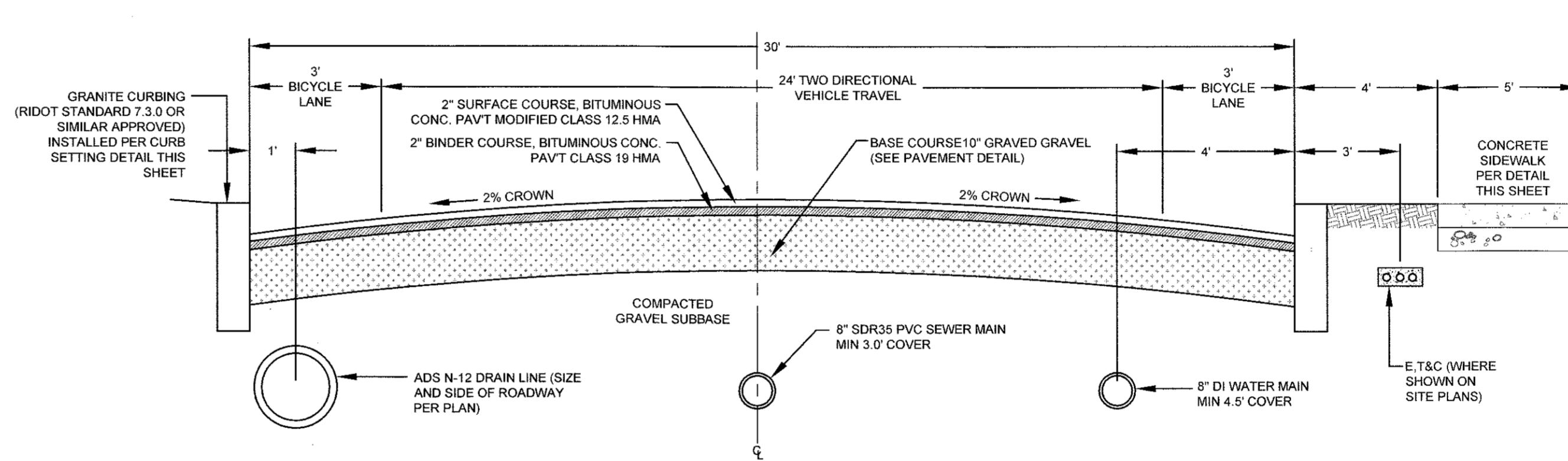
**BITUMINOUS CURB (RESIDENTIAL ACCESS ROADS & PARKING AREAS) RIDOT STD 7.5.0**

SCALE: NOT TO SCALE



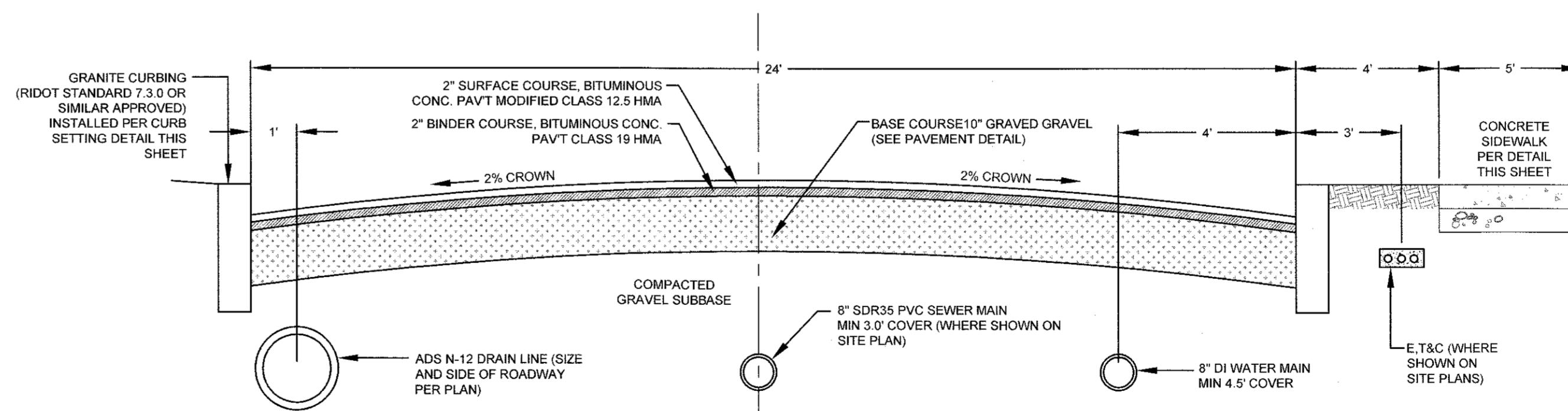
**TYPICAL EXTERIOR EQUIPMENT PAD SECTION**

SCALE: NOT TO SCALE



**ROAD SECTION (30' WIDE MAIN ROAD)**

SCALE: NOT TO SCALE



**ROAD SECTION (24' RESIDENTIAL ACCESS ROADS 2 & 3)**

SCALE: NOT TO SCALE

2	SUBMISSION REVISIONS	21JUN21
1	SUBMISSION REVISIONS	21MAY21

No. Revision Date App.

Designed By: JRJ Drawn by: JRJ Checked by: GES

Scale: AS SHOWN Date: 22APR21

Project Title:

**"EAST POINT"  
MAP 203 BLOCK 1 LOT 4  
MAP 303 BLOCK 13 LOTS 4 & 5  
ROGER WILLIAMS AVENUE  
EAST PROVIDENCE  
RHODE ISLAND**

Client/Owner:  
NOBLE DEVELOPMENT, LLC  
10 GREEN STREET  
PROVIDENCE, RI 02903

Issued for:

PERMITTING

Drawing Title:  
**PROPOSED  
DETAIL SHEET 4**

Drawing Number:  
**C-21**

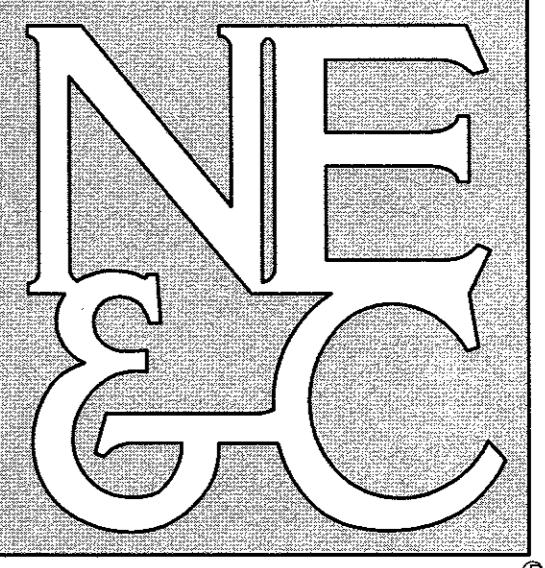
Sheet 21 of 22

Project Number:  
**20072.0**

Survey Index:

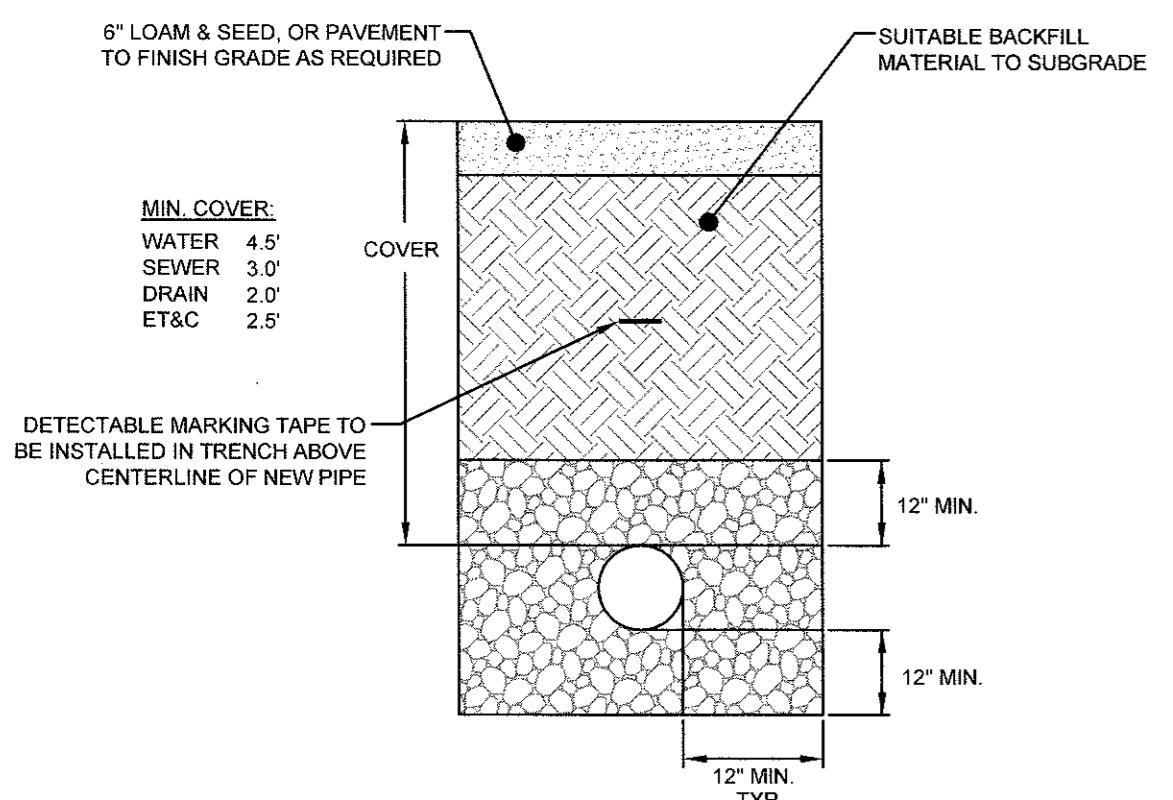
— —

OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICES, ARE THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.



A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETON RHODE ISLAND 02842  
PHONE (401) 846-0169 FAX (401) 846-4169  
WWW.NORTHEASTENGINEERS.COM

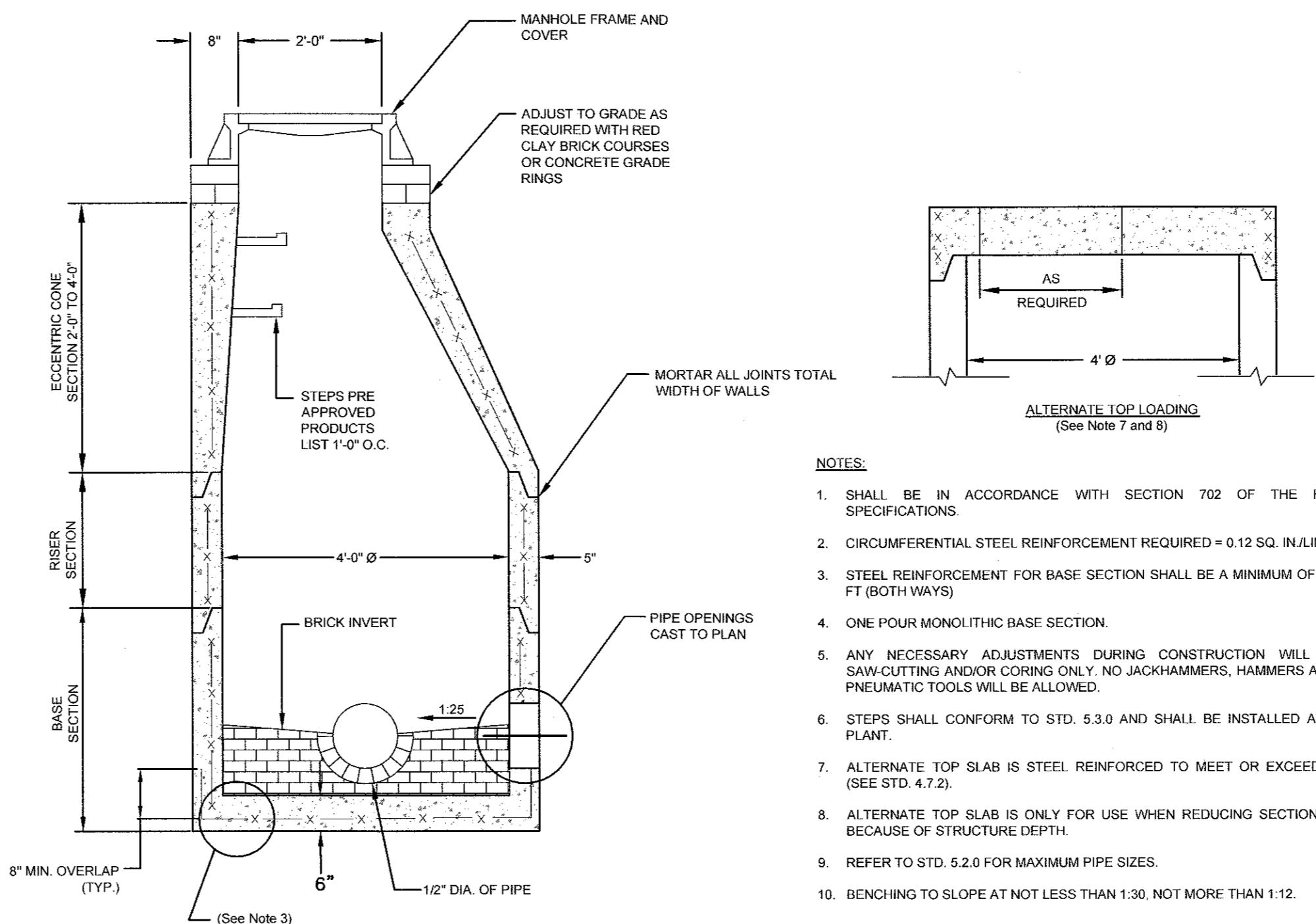


**UTILITY TRENCH DETAIL**

SCALE: NOT TO SCALE

**NOTES:**

1. UNSUITABLE MATERIAL SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 12-INCHES BELOW THE DESIGN INVERT ELEVATION.
2. TRENCH PROTECTION SHALL BE REQUIRED IN ACCORDANCE WITH OSHA REGULATIONS, AND AS OTHERWISE REQUIRED TO PROTECT UTILITIES, ROADWAYS, AND ADJACENT STRUCTURES.
3. SEWER AND DRAIN PIPES SHALL BE LAID BEGINNING AT THE DOWNSTREAM END OF THE PIPE LINE.
4. ALL PVC SEWER PIPES SHALL BE IPEX RING-TIE SDR 35, OR SIMILAR APPROVED.
5. ALL DRAIN PIPES SHALL BE ADS N-12 TYPE IB (SOILTIGHT) UNLESS OTHERWISE INDICATED.
6. ALL SEWER PIPE AND GASKETS SHALL CONFORM TO ASTM 3034 AND ASTM F679.
7. ALL NEW SEWER MANHOLES SHALL HAVE KOR-N-SEAL CONNECTIONS, TYPICAL OR EQUAL.
8. BACKFILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED 12" IN HEIGHT WHEN INSTALLED UNDER LANDSCAPED AREAS ONLY. INSTALLATIONS UNDER PAVEMENT REQUIRE BACKFILL MATERIAL TO BE PLACED IN LAYERS NOT TO EXCEED 6" IN HEIGHT. THESE LAYERS SHALL BE COMPAKTED TO 95% MAXIMUM DENSITY (AASHTO T180). SUITABLE BACKFILL SHALL BE FREE OF LOAM, CLAY, ORGANIC MATTER AND PARTICLES LARGER THAN 2 INCHES IN DIAMETER.
9. SEWER AND DRAINAGE PIPE TRENCHES SHALL BE BEDDED WITH CRUSHED STONE OR SCREENED GRAVEL, THESE MATERIALS MUST CONFORM TO RIDOT STANDARD M.01.09 TYPE II MATERIAL.
10. WATER PIPE TRENCHES MUST BE BEDDED WITH SAND CONTAINING NO PARTICLES LARGER THAN 3/8". THIS MATERIAL MUST CONFORM TO AASHTO M6 REQUIREMENTS.
11. UTILITY INSTALLATIONS SHALL CONFORM TO ALL REQUIREMENTS OF THE CITY OF EAST PROVIDENCE PUBLIC WORKS DEPARTMENT AND THE CITY ENGINEER.
12. WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZE THE EXISTING GROUND TO RENDER IT SAFE AND SECURE, FROM POSSIBLE SLIDES, CAVING, AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT THEM FROM DAMAGE.

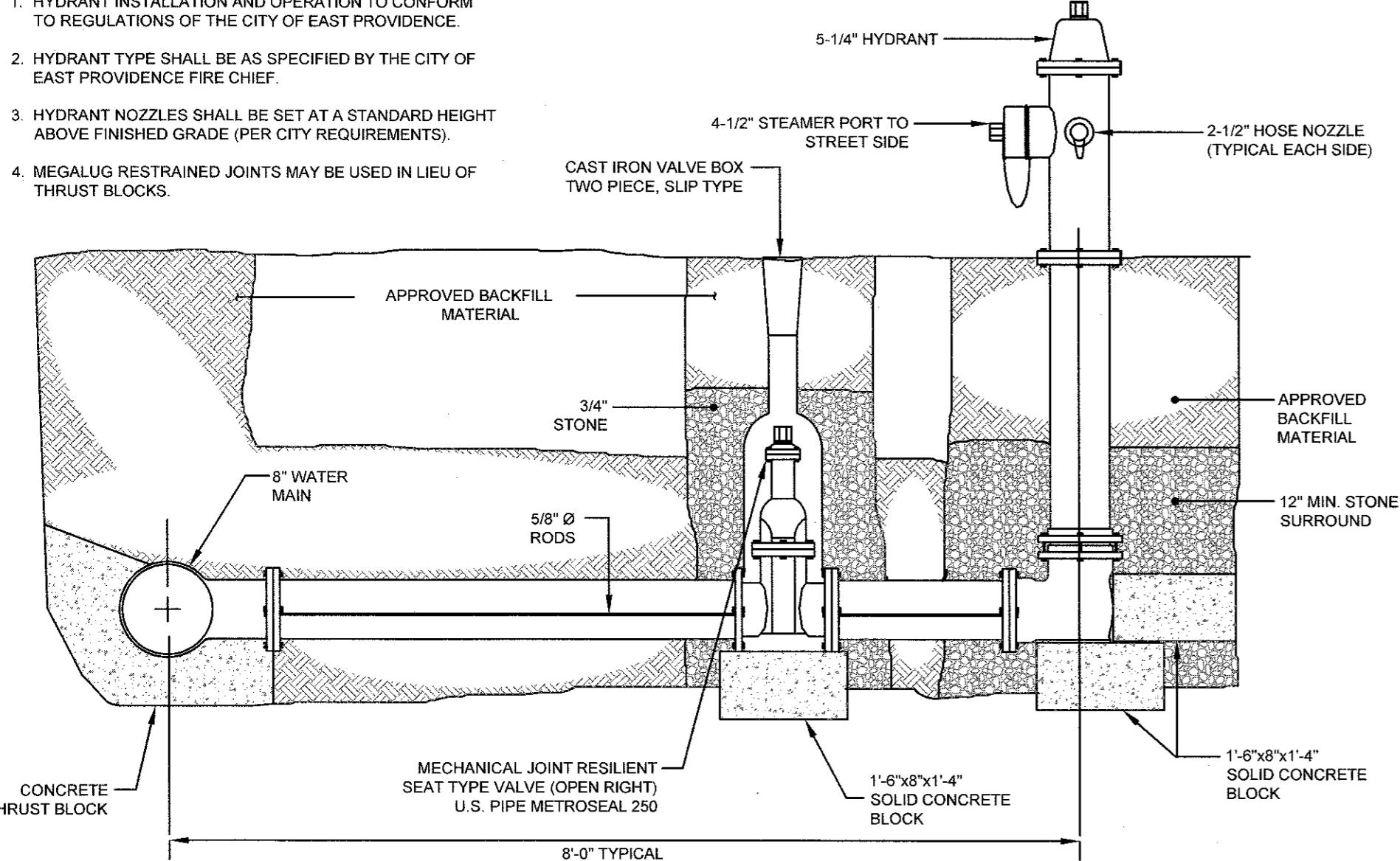


**PRECAST SEWER MANHOLE DETAIL (RIDOT 4.2.0)**

SCALE: NOT TO SCALE

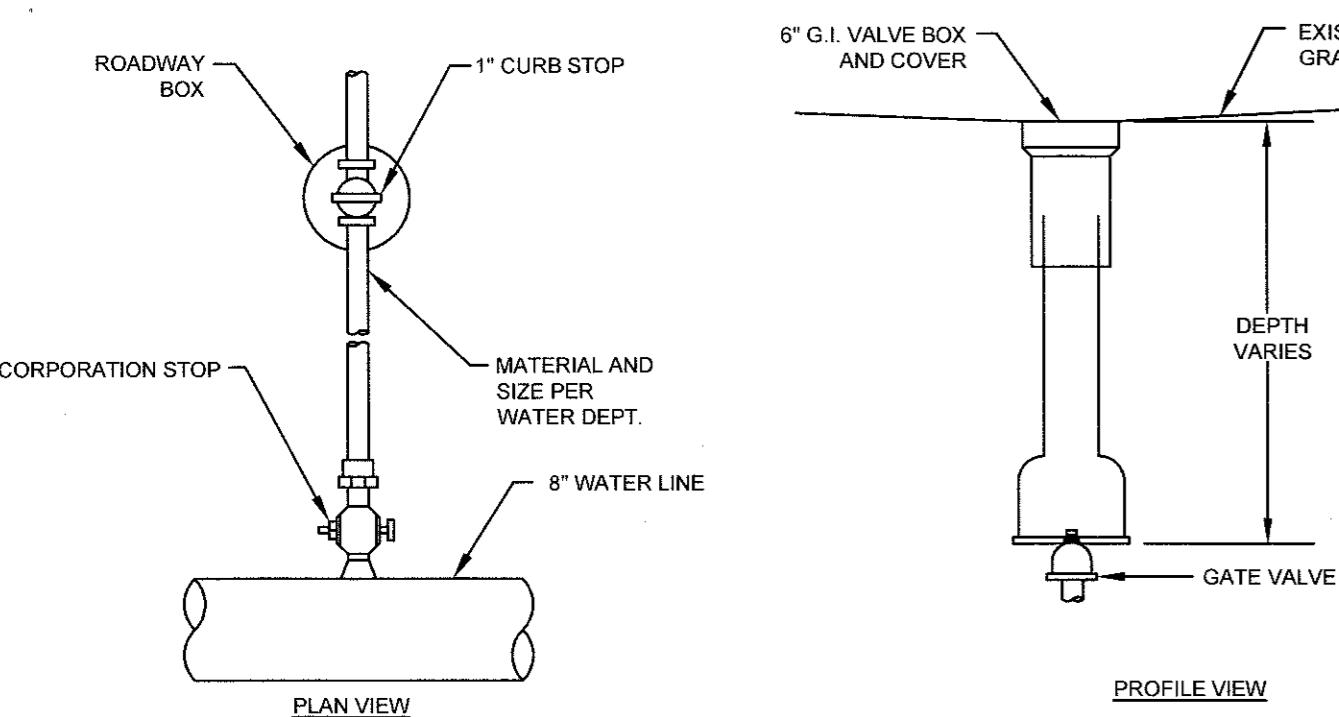
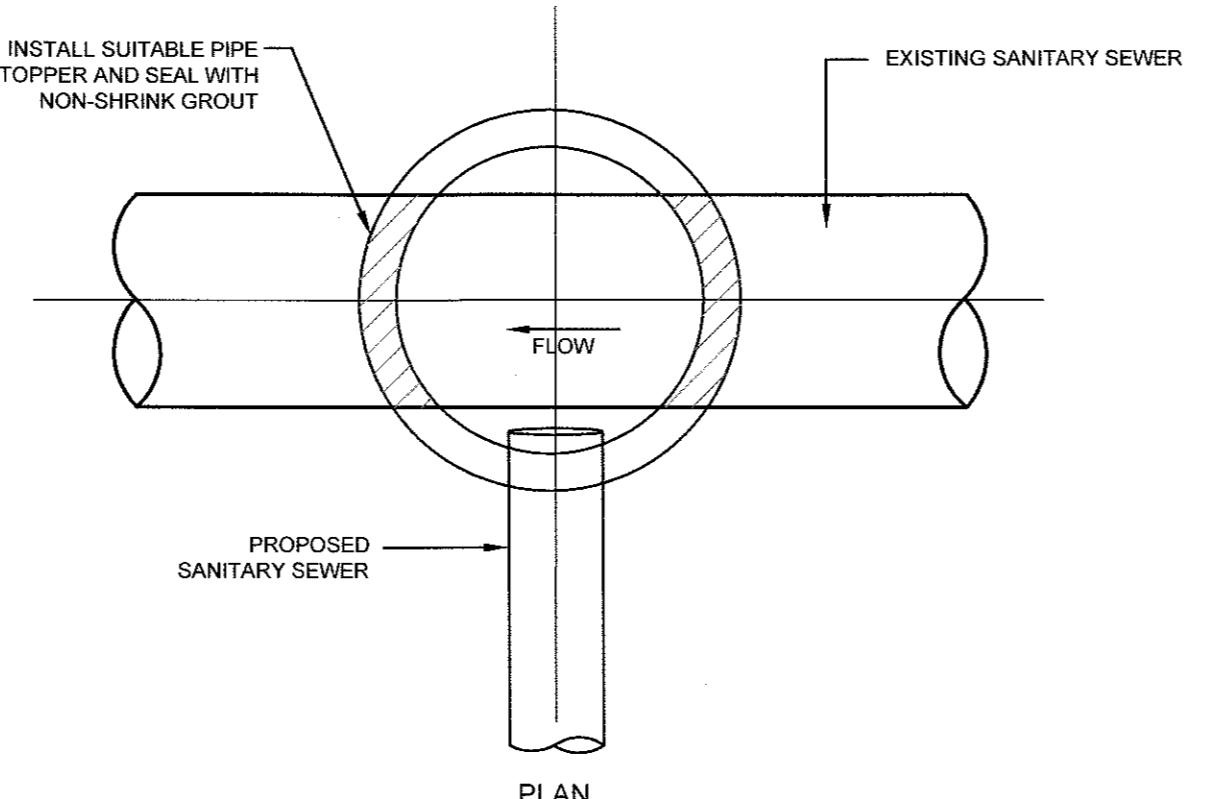
**HYDRANT NOTES**

1. HYDRANT INSTALLATION AND OPERATION TO CONFORM TO REGULATIONS OF THE CITY OF EAST PROVIDENCE.
2. HYDRANT TYPE SHALL BE AS SPECIFIED BY THE CITY OF EAST PROVIDENCE FIRE CHIEF.
3. HYDRANT NOZZLES SHALL BE SET AT A STANDARD HEIGHT ABOVE FINISHED GRADE (PER CITY REQUIREMENTS).
4. MEGALUG RESTRAINED JOINTS MAY BE USED IN LIEU OF THRUST BLOCKS.



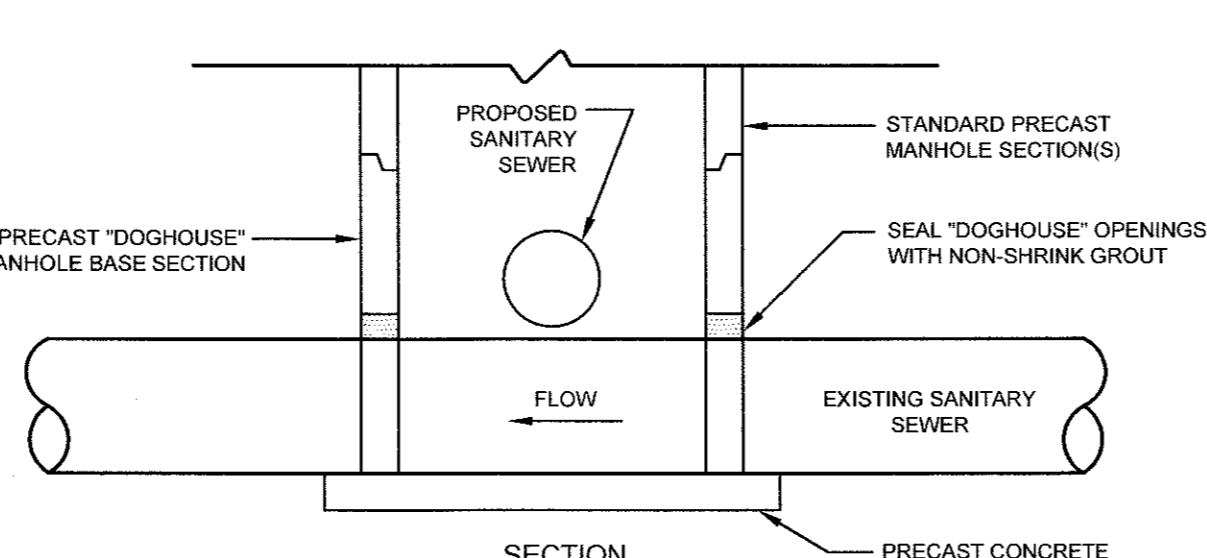
**HYDRANT DETAIL**

SCALE: NOT TO SCALE



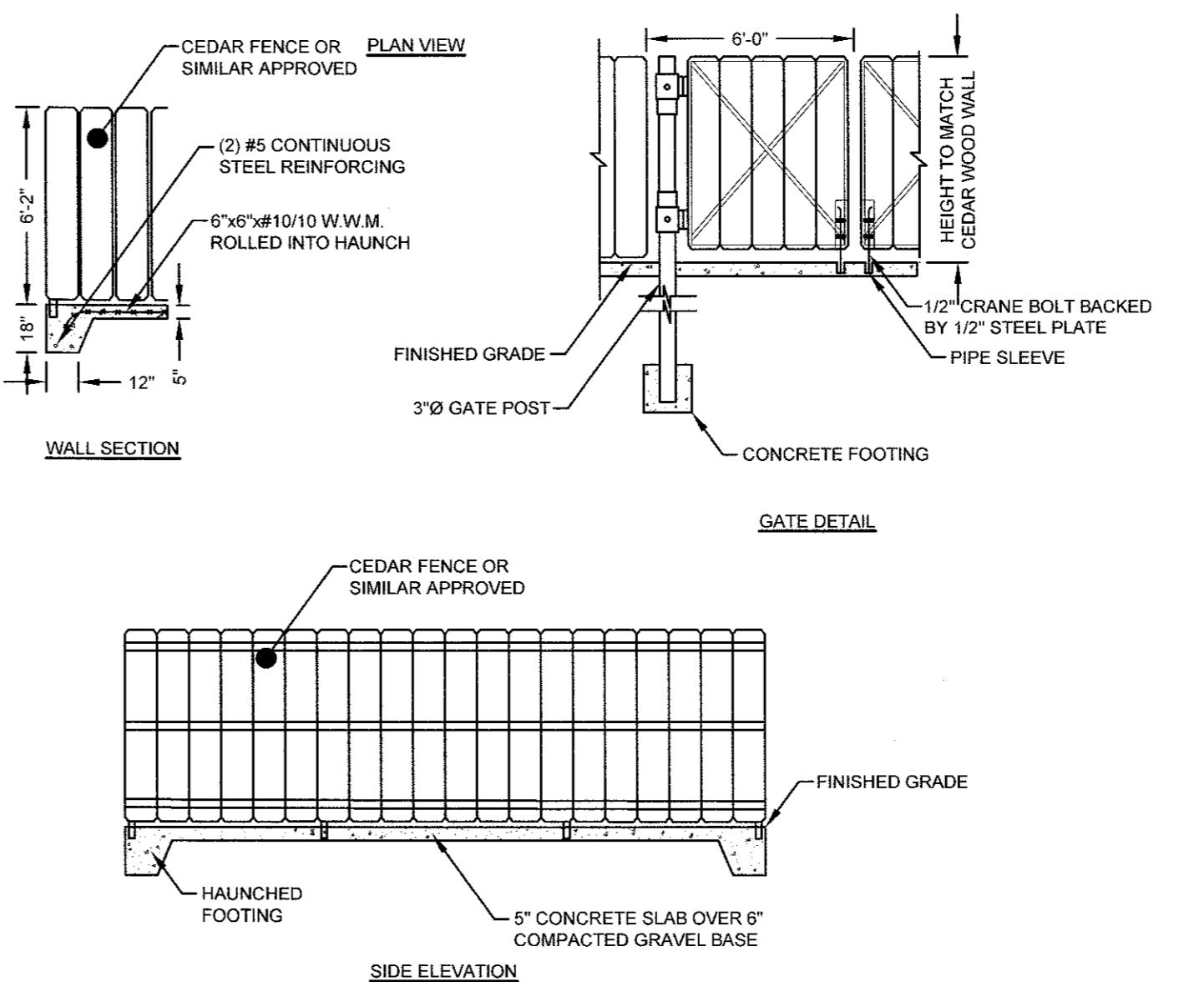
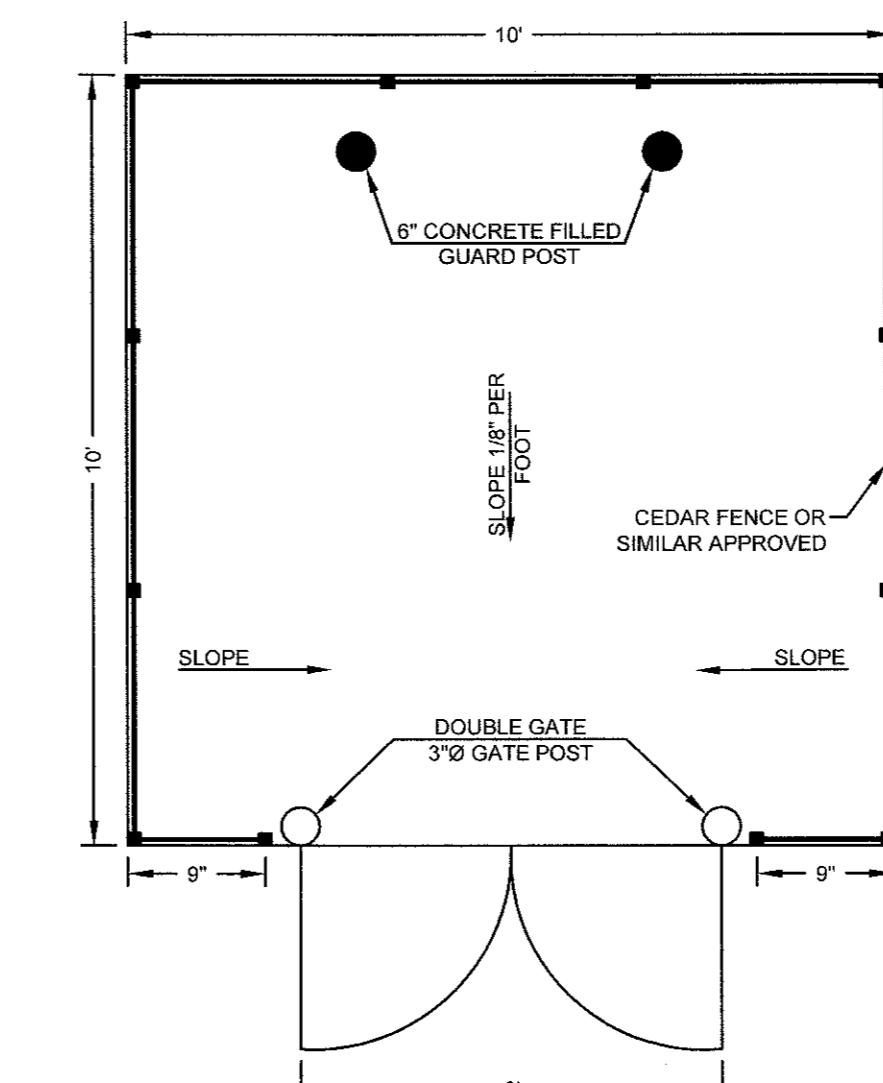
**WATER GATE VALVE/SERVICE CURB STOP**

SCALE: NOT TO SCALE



**DOGHOUSE MANHOLE**

SCALE: NOT TO SCALE



**TYPICAL TRASH ENCLOSURE**

FINAL SIZING OF THE ENCLOSURES TO BE DETERMINED  
ARCHITECT MAY PROVIDE ALTERNATE DESIGN  
SCALE: NOT TO SCALE

2	SUBMISSION REVISIONS	21JUN21			
1	SUBMISSION REVISIONS	21MAY21			
No.	Revision	Date App.			
Designed By:	JJR	Drawn by:	JJR	Checked by:	GES
Scale:	AS SHOWN	Date:	22APR21		
Project Title: <b>"EAST POINT" MAP 203 BLOCK 1 LOT 4 MAP 303 BLOCK 13 LOTS 4 &amp; 5 ROGER WILLIAMS AVENUE EAST PROVIDENCE RHODE ISLAND</b>					
Client/Owner: NOBLE DEVELOPMENT, LLC 10 GREEN STREET PROVIDENCE, RI 02903					
Issued for: PERMITTING					
Drawing Title: <b>PROPOSED DETAIL SHEET 5</b>					
Drawing Number: <b>C-22</b>			Drawing Number: <b>C-22</b>		
Sheet 22 of 22			Project Number: <b>20072.0</b>		
Survey Index: — —			Survey Index: — —		
OWNERSHIP AND USE OF DOCUMENTS: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICES, ARE THE PROPERTY OF THE ENGINEER. THESE DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECTS OR PURPOSES, OR BY ANY OTHER PARTIES, THAN THOSE PROPERLY AUTHORIZED BY CONTRACT, WITHOUT THE EXPRESS AUTHORIZATION OF THE ENGINEER.					

