

BUILDING 3 EXPANSION PROJECT

NYE LUBRICANTS, INC.

12-16 RIO WAY FAIRHAVEN, MA



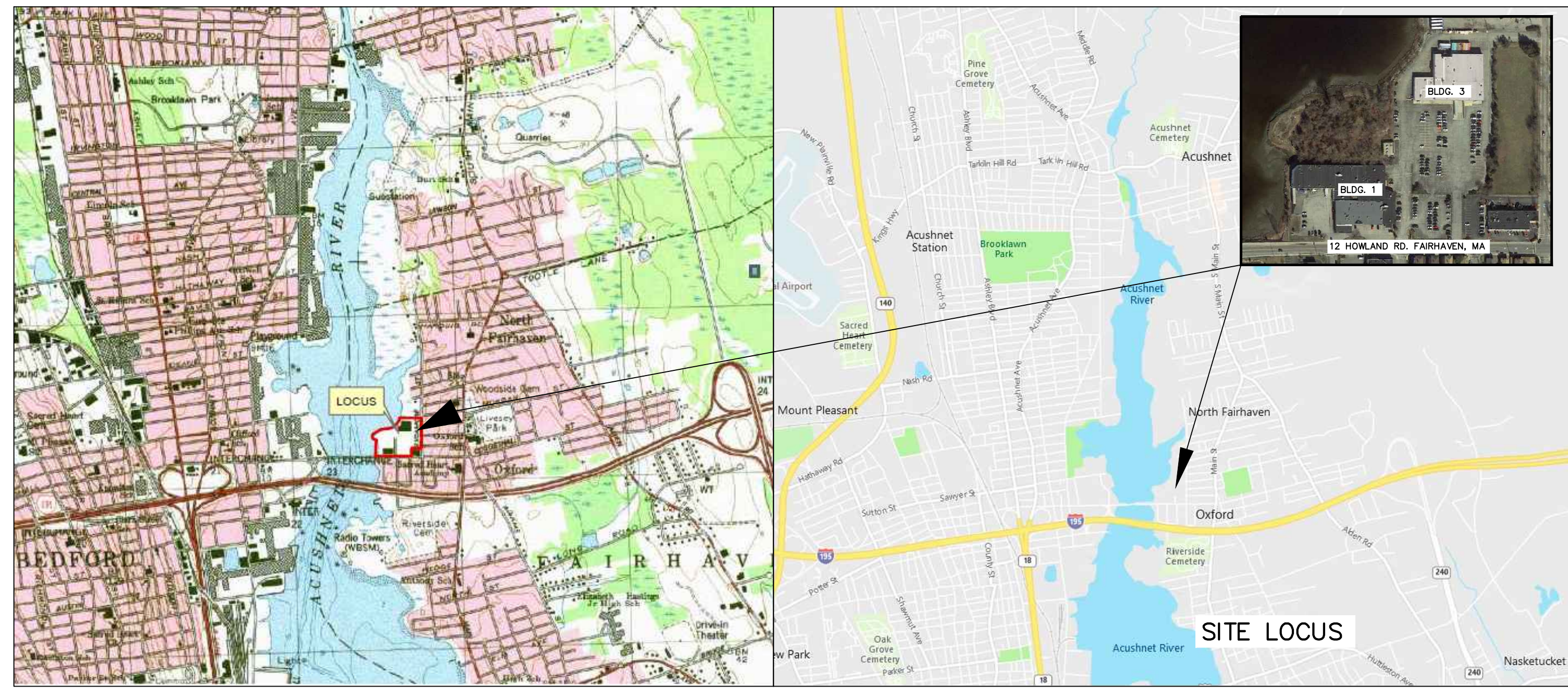
ROCKVILLE, MD
WATERTOWN, MA
NEW BEDFORD, MA
SOUTH WINDSOR, CT
124 WATERTOWN ST. SUITE 3F
WATERTOWN, MA
1213 PURCHASE STREET SUITE 301
NEW BEDFORD, MA
58H CONNECTICUT AVENUE
SOUTH WINDSOR, CT

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LIST OF DRAWINGS:

- T-1 TITLE SHEET
- E-1 EXISTING CONDITIONS
- E-2 EXISTING WATERSHED PLAN
- P-1 PROPOSED CONDITIONS
- P-2 PROPOSED PARKING LAYOUT
- P-3 PROPOSED GRADING AND DRAINAGE PLAN
- P-4 PROPOSED CHAPTER 91 PUBLIC ACCESS
- P-5 PROPOSED WATERSHED PLAN
- ER-1 EROSION CONTROL
- D-1 DETAIL SHEET
- D-2 DETAIL SHEET
- D-3 DETAIL SHEET
- D-4 DETAIL SHEET
- L40-1 LANDSCAPING PLAN
- L40-2 LANDSCAPING PLAN
- L40-3 LANDSCAPING PLAN
- L40-4 LANDSCAPING PLAN



PROJECT OWNER:
NYE LUBRICANTS, INC.
12 HOWLAND ROAD
FAIRHAVEN, MA 02719

DESIGN TEAM:
APEX COMPANIES, LLC
58H CONNECTICUT AVE.
SOUTH WINDSOR, CT 06074

HARRIMAN
19 KINGSTON STREET, SUITE 4
BOSTON, MA 02110

LEC ENVIRONMENTAL CONSULTANTS, INC.
12 RESNIK ROAD, SUITE 1
PLYMOUTH, MA 02360

PROJECT
**NYE LUBRICANTS, INC.
BUILDING 3 EXPANSION
PROJECT**
OWNER
**NYE LUBRICANTS, INC.
12 HOWLAND RD.
FAIRHAVEN, MA**

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING CONTOUR LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING BITUMINOUS CONCRETE CURB
	EXISTING VERTICAL GRANITE CURB
	EXISTING VERTICAL CONCRETE CURB
	EXISTING CAPE COD BERM
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	EXISTING CHAINLINK FENCE
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	EXISTING WATER GATE
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	EXISTING BOLLARD
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	EXISTING UTILITY POLE
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	EXISTING 200 FT RIVERFRONT
	EXISTING FLOOD ZONE
	EXISTING CHAPTER 91 JURISDICTION
	EXISTING ZONING SETBACKS
	PROPOSED CHAINLINK FENCE
	PROPOSED BUILDING EXPANSION AREA
	PROPOSED LANDSCAPED STORMWATER AREA
	PROPOSED NEW ASPHALT AREA
	PROPOSED ENHANCED LANDSCAPED AREA
	SOIL BORING LOCATION
	PROPOSED REINFORCED PERMEABLE AREA

GENERAL NOTES:

- EXISTING CONDITIONS ARE INTENDED TO PROVIDE GENERAL OVERVIEW OF PROJECT SITE CONDITIONS.
- NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
- THE CONTRACTOR IS ADVISED THAT THE DRAWINGS AND SPECIFICATIONS FORM A PART OF THE CONTRACT DOCUMENTS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL KEEP A COPY OF THE DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES DURING THE PROJECT.
- CONTRACTOR SHALL MAINTAIN ADEQUATE SURVEY CONTROL AT ALL TIMES TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND AND SUBMERGED UTILITIES WITHIN THE LIMITS OF WORK PRIOR TO COMMENCING ANY EXCAVATION OR GROUND PENETRATING WORK. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" (1-888-344-7223) AT LEAST 3 BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF THE EXCAVATION OR GROUND PENETRATING ACTIVITY.
- EXISTING UTILITIES WITHIN OR SURROUNDING THE PORTIONS OF THE SITE HAVE NOT BEEN IDENTIFIED. IDENTIFICATION AND PROTECTION OF EXISTING UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL NOTIFY DIGSAFE 72 HOURS PRIOR TO START OF ANY ON SITE WORK.
- ALL DIMENSIONS AND DETAILS OF THE EXISTING CONDITIONS AND THE PROPOSED CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY STATE, LOCAL, AND FEDERAL REGULATIONS AND LAW, AS WELL AS REQUIRED WITHIN EXISTING PERMITS AND APPROVALS.
- ALL APPLICABLE FEDERAL AND STATE REGULATIONS AND PERMITS SHALL BE FOLLOWED, INCLUDING, BUT NOT LIMITED TO, THE CLEAN WATER ACT, THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ACT, AS WELL AS THE ORDER OF CONDITIONS AND SPECIAL PERMITS ISSUED BY THE TOWN OF FAIRHAVEN.

SURVEY NOTES:

- TOPOGRAPHIC AND PROPERTY LINE SURVEY PERFORMED BY FARLAND CORP., IN JANUARY 2021.
- TOPOGRAPHIC SURVEY DATUM IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) IN FEET.
- TO OBTAIN VALUES IN NGVD29 SUBTRACT 1.49 FEET FROM THE INDICATED VALUE AT ANY POINT. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.

FLOOD NOTE:

BY GRAPHIC PLOTTING ONLY, THE PROPERTY DEPICTED ON THIS PLAN FALLS IN ZONE AE AND ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP, JULY 16, 2014, COMMUNITY PANEL 25005 C 0391G.

NOTES:

- WASH STATION TO BE UTILIZED AS NECESSARY TO CLEAN WHEELS OF TRUCK PRIOR TO LEAVING SITE.
- ALL CATCH BASINS ADJACENT TO THE WORK SITES SHALL BE PROTECTED AS DEPICTED ON THE EROSION AND SEDIMENTATION CONTROL PLAN.
- PRIOR TO THE START OF CONSTRUCTION, FILTER FABRIC BARRIERS AND STRAW WATTLE SHALL BE INSTALLED AS SHOWN ON THESE PLANS AND REQUIRED BY REGULATORY AUTHORITIES.
- ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED OR REPAIRED DURING CONSTRUCTION AS NECESSARY.
- CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION OF ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHOWN ON THESE PLANS. THIS RESPONSIBILITY INCLUDES IMPLEMENTATION AS WELL AS MAINTENANCE. ANY PROPOSED CHANGES TO THIS PLAN MUST BE APPROVED BY THE ENGINEER AND/OR THE PROPER AGENCY.
- ANTI-TRACKING APRON SHALL BE INSPECTED REGULARLY TO ENSURE PROPER OPERATION. STONE TO BE ADDED TO OR REPLACED AS REQUIRED, AND CONTRACTOR WILL BE RESPONSIBLE FOR SWEEPING EXISTING ROADS AS REQUIRED.
- OFF SITE FILL TO BE LEFT BARE FOR MORE THAN 14 DAYS SHALL BE TREATED WITH AIR DRIED WOOD CHIPS, MULCH, OR SEEDED WITH PERENNIAL FESCUE-GRASS UNTIL FINAL GRADING AND STABILIZATION IS TO TAKE PLACE.
- AREAS TO BE LEFT BARE FOR MORE THAN 7 DAYS SHALL BE TREATED WITH AIR DRIED WOOD CHIPS, MULCH OR SEEDED WITH PERENNIAL FESCUE-GRASS UNTIL FINAL GRADING AND STABILIZATION IS TO TAKE PLACE.
- ALL DISTURBED SLOPE AREAS IN EXCESS OF 3:1 SHALL IMMEDIATELY RECEIVE MULCH AND TEMPORARY SEEDING IN ACCORDANCE WITH THE FOLLOWING RECOMMENDED APPLICATION RATES:

MULCH:	RATE:
CERTIFIED WEED-FREE STRAW	90# / 1000 S.F.
TEMPORARY SEEDING:	RATE:
PERENNIAL FESCUE-GRASS	1.0# / 1000 S.F.
- CONTRACTOR SHALL PERIODICALLY CLEAN CATCH BASIN SUMPS AS REQUIRED DURING CONSTRUCTION.
- CONTRACTOR SHALL PREVENT SEDIMENT FROM ENTERING THE WATERWAY VIA DISCHARGES THROUGH ANY DRAINAGE STRUCTURES OR RUNOFF FROM WITHIN THE LIMITS OF WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, RESTORING AND REPAIRING ALL DAMAGE AS A RESULT OF UNAUTHORIZED WORTH OR DISCHARGES AT NO ADDITIONAL COST TO THE OWNER.
- EROSION CONTROL BARRIERS SHALL BE MODIFIED OR EXPANDED AS FIELD CONDITIONS WARRANT.
- ALL EROSION CONTROL BARRIERS SHALL BE INSPECTED AT LEAST ONCE PER WEEK. ANY DAMAGED AREAS OF THE EROSION CONTROL BARRIER SHALL BE REPAIRED WITHIN 24 HOURS OF DISCOVERY.
- DEWATERING BASINS SHALL CONSIST OF HAY BALE ENCLOSURES, TANKS, PERMEABLE BLADDERS, OR OTHER APPROPRIATE METHOD. DEWATERING WASTE WATERS SHALL BE PUMPED TO THE DEWATERING BASINS AND TREATED PRIOR TO DISCHARGE.
- DISCHARGE OF TURBID WATER TO THE WATERWAY SHALL BE PROHIBITED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL PROJECT DEMOLITION AND EXCESS MATERIAL IN ACCORDANCE WITH MASSACHUSETTS, LOCAL, AND FEDERAL LAWS.

- THE CONTRACTOR SHALL PROTECT ALL ADJACENT STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ALL DAMAGE TO ADJACENT STRUCTURES AND UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL ENSURE THAT ADEQUATE SHORING AND FALSEWORK ARE PROVIDED TO THE EXISTING STRUCTURE(S) RESULTING IN A STABLE AND SAFE STRUCTURE AT ALL TIMES.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS, METHODS, AND SAFETY OF WORK.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VISIT THE SITE AND SHALL NOTIFY THE ENGINEER OF ANY ADDITIONAL UTILITIES, STRUCTURES, OR ANY OTHER ELEMENTS WHICH MAY IMPED WORK. UTILITY AND/OR STRUCTURE RELOCATIONS, IF NECESSARY, SHALL BE COORDINATED THROUGH THE OWNER'S ENGINEER.
- ALL CONSTRUCTION ACTIVITIES SHALL BE CONFINED TO THE LIMITS OF WORK AND TEMPORARY EASEMENTS DEFINED HEREIN.
- THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A CONSTRUCTION SCHEDULE TO THE OWNER WITH 5 DAYS OF THE NOTICE OF AWARD. THE CONTRACTOR SHALL UPDATE SCHEDULE AS NEEDED THROUGHOUT THE COURSE OF WORK.
- THE CONTRACTOR SHALL STAGE ALL EQUIPMENT IN THE DESIGNATED STAGING AREA. ALL GREASING AND FUELING ACTIVITIES SHALL OCCUR IN THE STAGING AREA. ALL NECESSARY MEASURES SHALL BE TAKE TO PREVENT BY ANY METHOD, OIL, CONSTRUCTION DEBRIS, STOCKPILED MATERIALS, AND OTHER MATERIALS ON THE SITE, FROM ENTERING THE WATERWAY. STAGING/LAYDOWN AREAS, AS APPROVED BY THE ENGINEER, SHALL BE RESTORED BY THE CONTRACTOR TO THE EXISTING CONDITION. IN ADDITION, THE CONTRACTOR SHALL REPLACE ALL DAMAGED MATERIALS AS A RESULT OF HIS OPERATIONS, TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ALL CONSTRUCTION DEBRIS OR WASTE FROM FALLING INTO THE WATER. ANY DEBRIS FALLING INTO THE WATER SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- THE CONTRACTOR SHALL MAINTAIN A SECURE SITE AND PROVIDE APPROPRIATE SAFETY MEASURES TO PREVENT ACCIDENTS. THE SAFETY MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FENCES, FLASHING WARNING LIGHTS, AND POLICING IF NECESSARY.
- IN CASE OF CONTRADICTION BETWEEN THE DRAWINGS, THE SPECIFICATIONS, AND THE CODES, OR IF ANY CHANGE IS REQUIRED, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY. NO CHANGE SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- UPON COMPLETION OF THE PROJECT, CONTRACTOR IS TO PROVIDE TWO AS-BUILT PLAN SETS TO THE OWNER DEPICTING ANY FIELD CHANGES OF DIMENSION OR DETAIL, LOCATION OF UNDERGROUND STRUCTURES AND/OR UTILITIES, CONSTRUCTION DEVIATIONS, CHANGES TO DUE TO FIELD OR CHANGE ORDER, AND DETAILS NOT ON THE ORIGINAL DRAWINGS.

1	7/27/21	BLDG FOOTPRINT	JBM
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NO.	DATE	DESCRIPTION	BY
PROJECT NO.	6893-003		
CADD FILE			
DESIGNED BY	JBM		
DRAWN BY	ANC		
CHECKED BY	JBM		
DATE	4/30/21		
DRAWING SCALE	AS NOTED		

GRAPHIC SCALE

SHEET TITLE

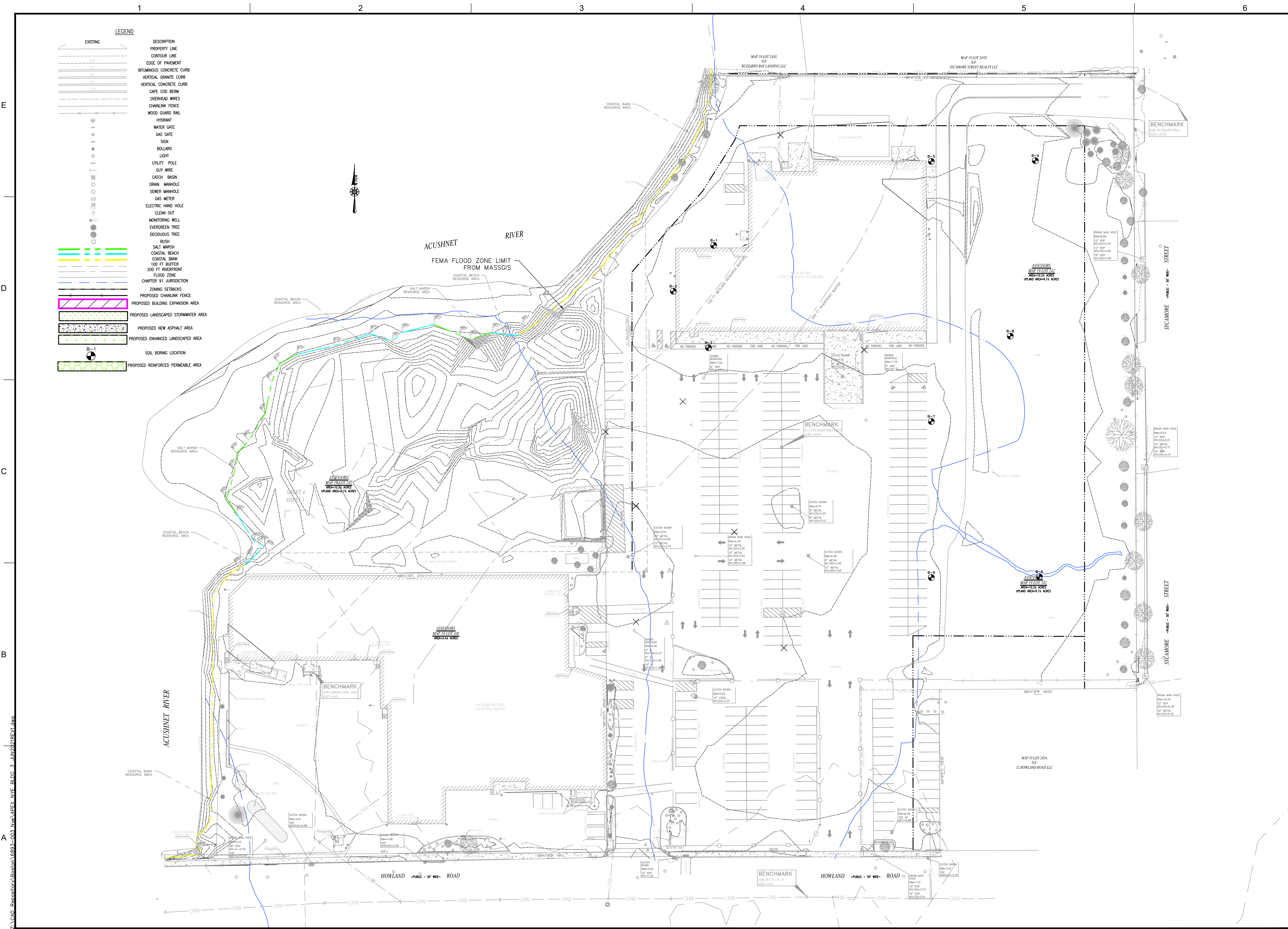
TITLE SHEET

DRAWING NO.

T-1

1 OF 13

PLOT SCALE 1/16"=1'-0"



LEGEND

EXISTING	DESCRIPTION
[Symbol]	PROPERTY LINE
[Symbol]	CONTOUR LINE
[Symbol]	EDGE OF PAVEMENT
[Symbol]	BRITANNIUM CONCRETE CURB
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ROCKVILLE, MD
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PROJECT NYE LUBRICANTS BUILDING 3 EXPANSION PROJECT	OWNER NYE LUBRICANTS, INC. 12 HOWLAND RD. FAIRHAVEN, MA
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NO.	DATE	DESCRIPTION	BY
1	7/27/21	BLDG FOOTPRINT	JBM

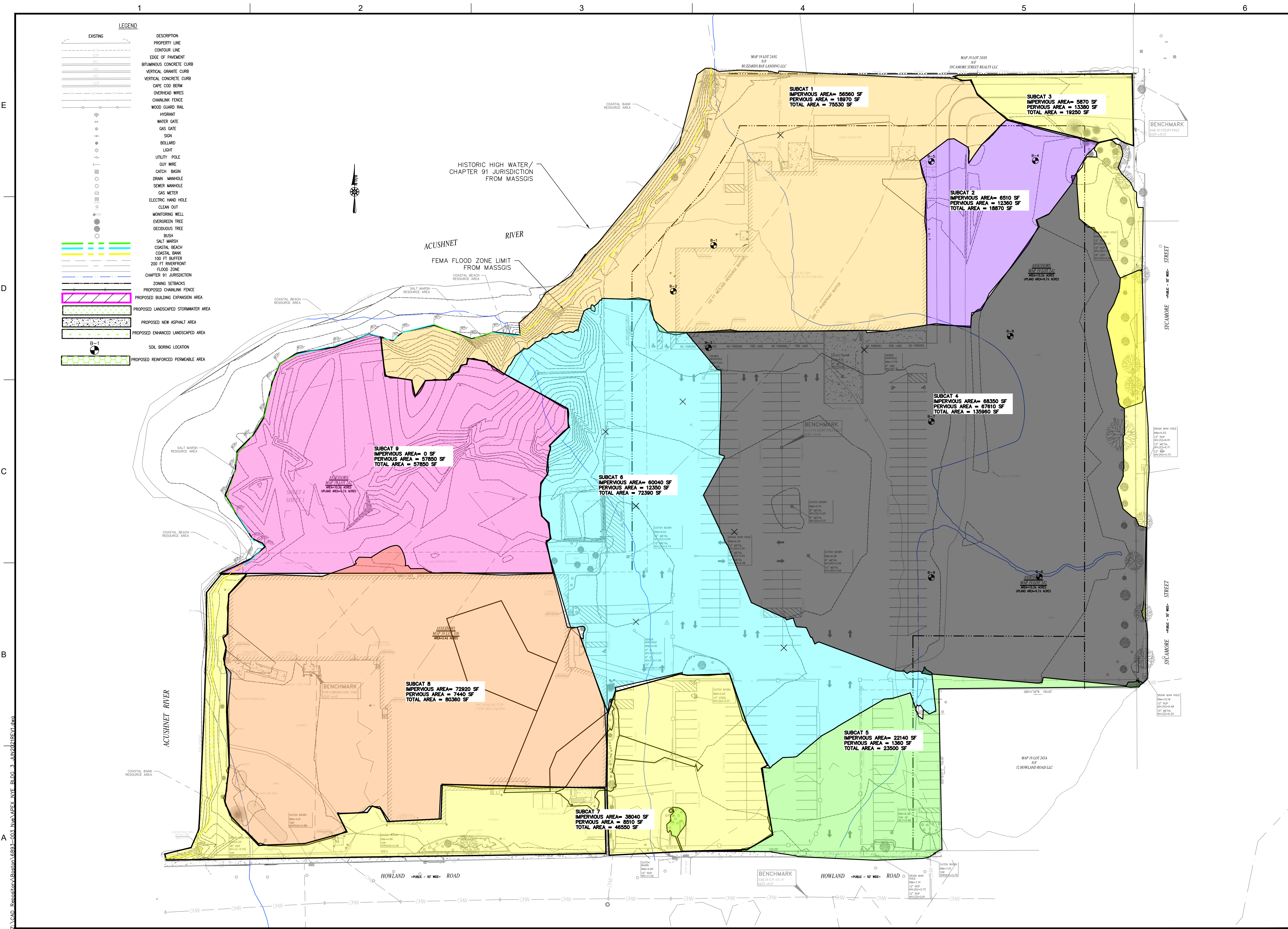
PROJECT NO.	6893-003
CADD FILE	
DESIGNED BY	JBM
DRAWN BY	ANC
CHECKED BY	JBM
DATE	4/30/21
DRAWING SCALE	1" = 60'

GRAPHIC SCALE

SHEET TITLE
EXISTING CONDITIONS
DRAWING NO.
E-1

2 OF 13

PLOT SCALE 1/16"=1'-0"



ROCKVILLE, MD
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 BUILDING 3 EXPANSION
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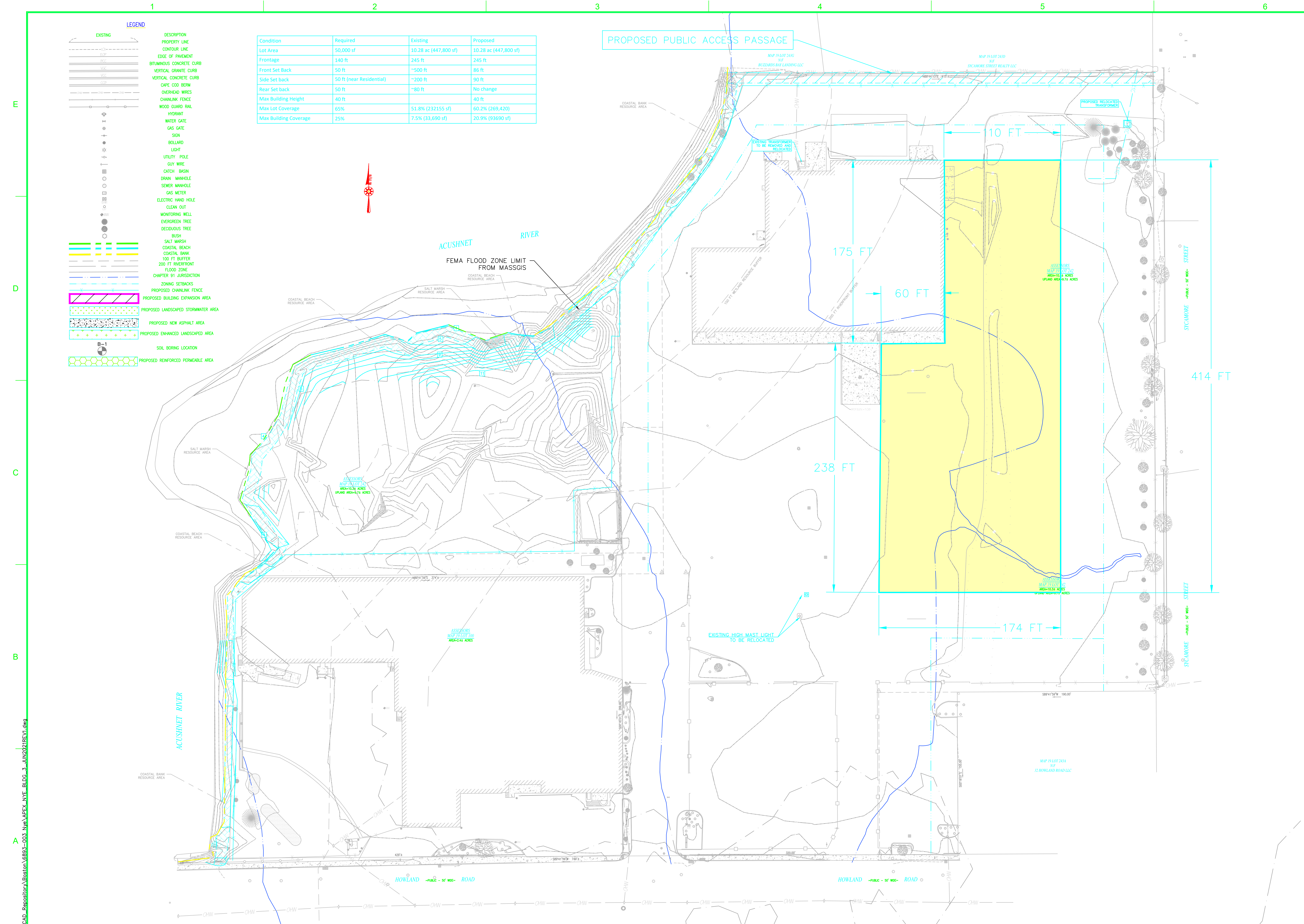
GRAPHIC SCALE

SHEET TITLE

EXISTING WATERSHED PLAN

DRAWING NO.

E-2



Condition	Required	Existing	Proposed
Lot Area	50,000 sf	10.28 ac (447,800 sf)	10.28 ac (447,800 sf)
Frontage	140 ft	245 ft	245 ft
Front Set Back	50 ft	~500 ft	86 ft
Side Set Back	50 ft (near Residential)	~200 ft	90 ft
Rear Set back	50 ft	~80 ft	No change
Max Building Height	40 ft		40 ft
Max Lot Coverage	65%	51.8% (232155 sf)	60.2% (269,420)
Max Building Coverage	25%	7.5% (33,690 sf)	20.9% (93690 sf)

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 - GAS GATE
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 - LIGHT
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APEX

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SHEET TITLE
 PROPOSED
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4 OF 13

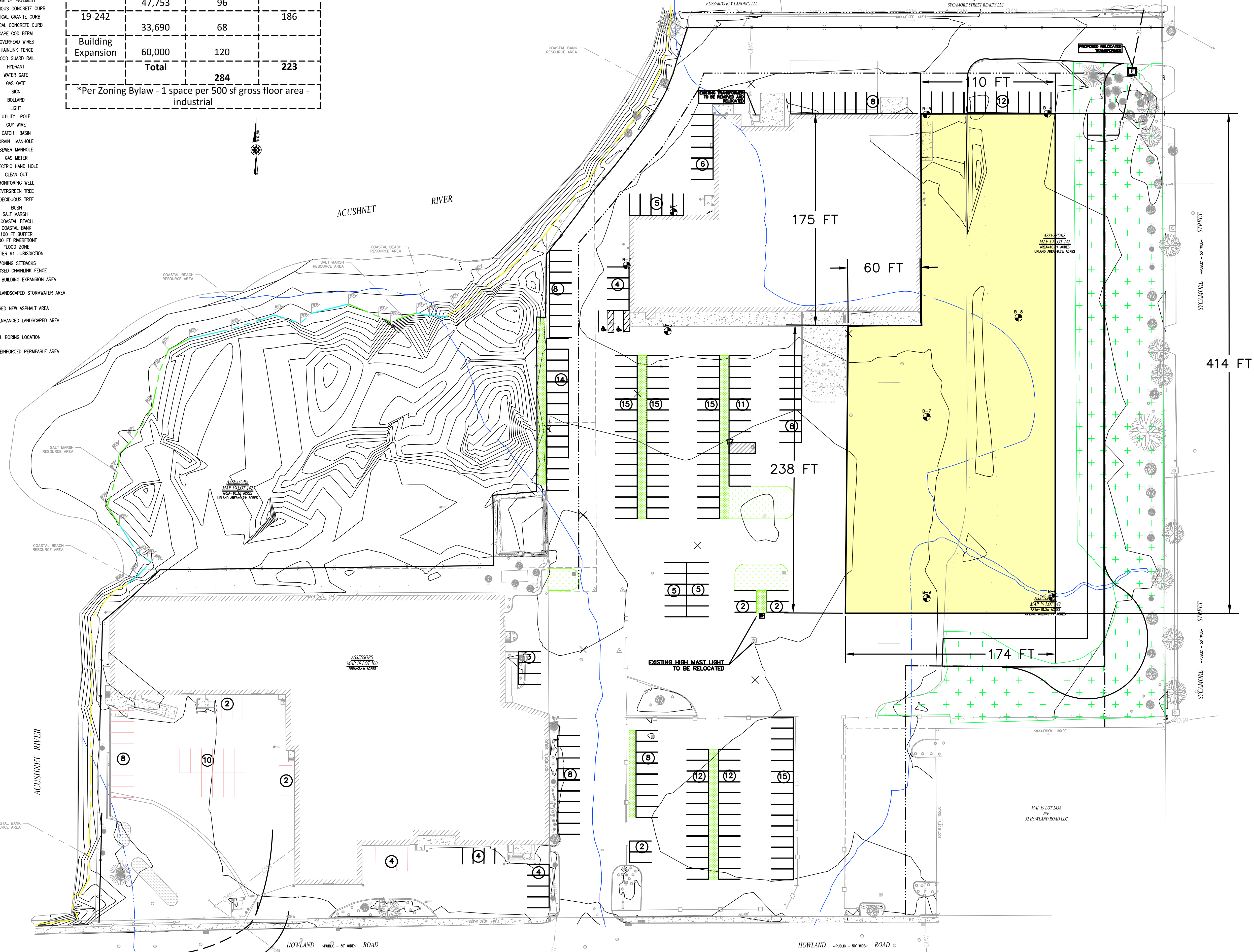
Nye Building Parking Layout			
Parcel	Building Size	Parking Spaces Required	Parking Spaces Provided
19-100	47,753	96	37
19-242	33,690	68	186
Building Expansion	60,000	120	
Total		284	223

NOTE:
PARKING SPACES ARE SHOWN AS POTENTIAL CAPACITY, NOT ALL SPACES WILL BE STRIPED, AS PARKING DEMAND IS NOT ANTICIPATED TO MEET THE LOADING REQUIREMENTS.

*Per Zoning Bylaw - 1 space per 500 sf gross floor area - industrial

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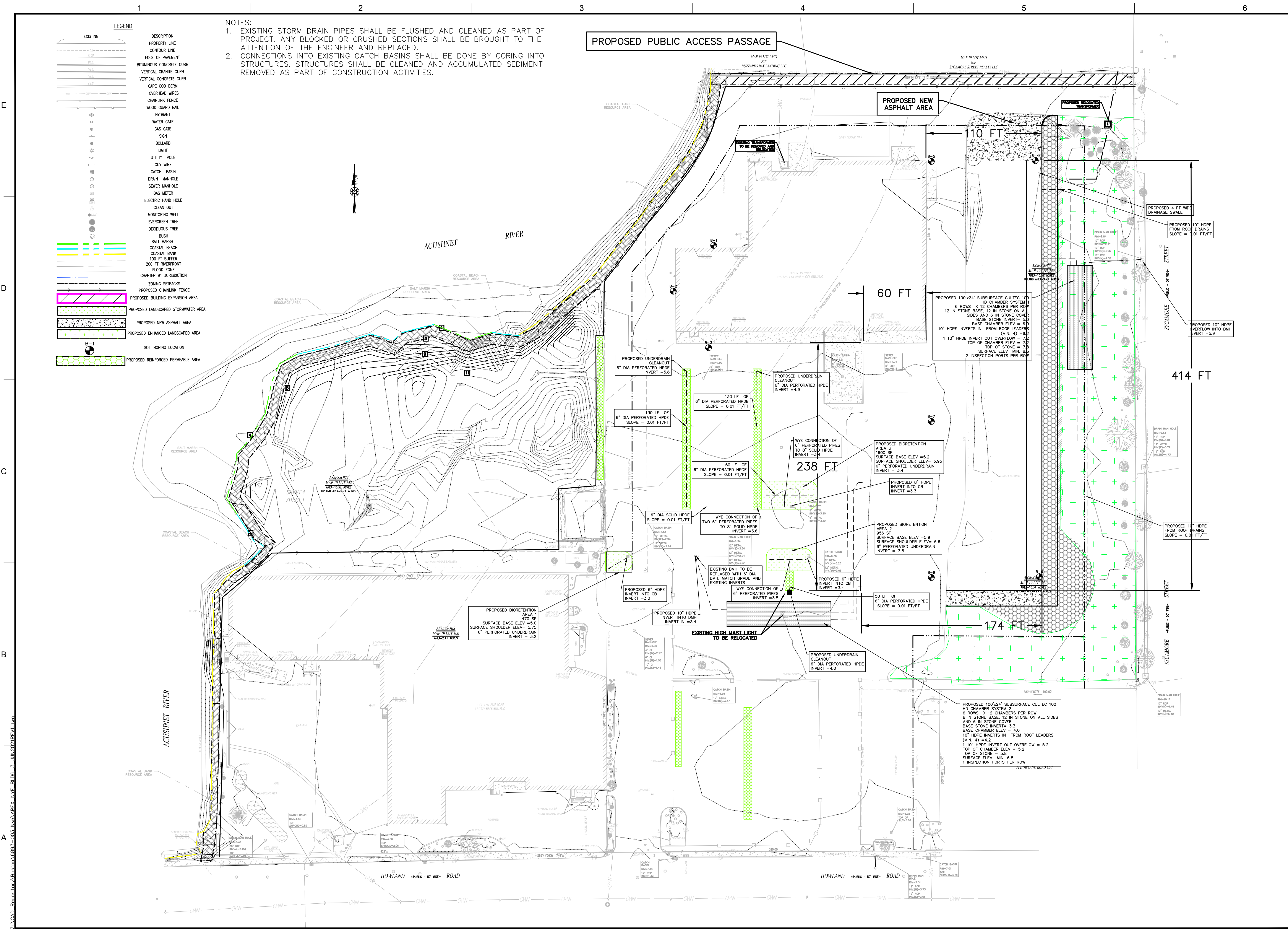
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GRAPHIC SCALE

SHEET TITLE
PROPOSED PARKING CONDITIONS


DRAWING NO.
P-2




- NOTES:
- EXISTING STORM DRAIN PIPES SHALL BE FLUSHED AND CLEANED AS PART OF PROJECT. ANY BLOCKED OR CRUSHED SECTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND REPLACED.
 - CONNECTIONS INTO EXISTING CATCH BASINS SHALL BE DONE BY CORING INTO STRUCTURES. STRUCTURES SHALL BE CLEANED AND ACCUMULATED SEDIMENT REMOVED AS PART OF CONSTRUCTION ACTIVITIES.

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[Symbol]	ZONING SETBACKS
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[Symbol]	PROPOSED BUILDING EXPANSION AREA
[Symbol]	PROPOSED LANDSCAPED STORMWATER AREA
[Symbol]	PROPOSED NEW ASPHALT AREA
[Symbol]	PROPOSED ENHANCED LANDSCAPED AREA
[Symbol]	SOIL BORING LOCATION
[Symbol]	PROPOSED REINFORCED PERMEABLE AREA



ROCKVILLE, MD
WATERTOWN, MA
NEW BEDFORD, MA
SOUTH WINDSOR, CT
124 WATERTOWN ST, SUITE 3F
WATERTOWN, MA
1213 PURCHASE STREET SUITE 301
NEW BEDFORD, MA
58H CONNECTICUT AVENUE
SOUTH WINDSOR, CT



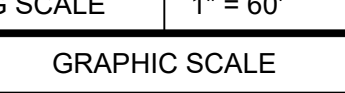
85721
JOHN B. MULLISTER
CIVIL
NO. 47862
REGISTERED PROFESSIONAL ENGINEER

PROJECT NYE LUBRICANTS BUILDING 3 EXPANSION PROJECT	OWNER NYE LUBRICANTS, INC. 12 HOWLAND RD. FAIRHAVEN, MA
---	---

NO.	DATE	DESCRIPTION	BY
	7/27/21	BLDG FOOTPRINT	JBM

PROJECT NO.	6893-003
CADD FILE	
DESIGNED BY	JBM
DRAWN BY	ANC
CHECKED BY	JBM
DATE	4/30/21
DRAWING SCALE	1" = 60'

GRAPHIC SCALE



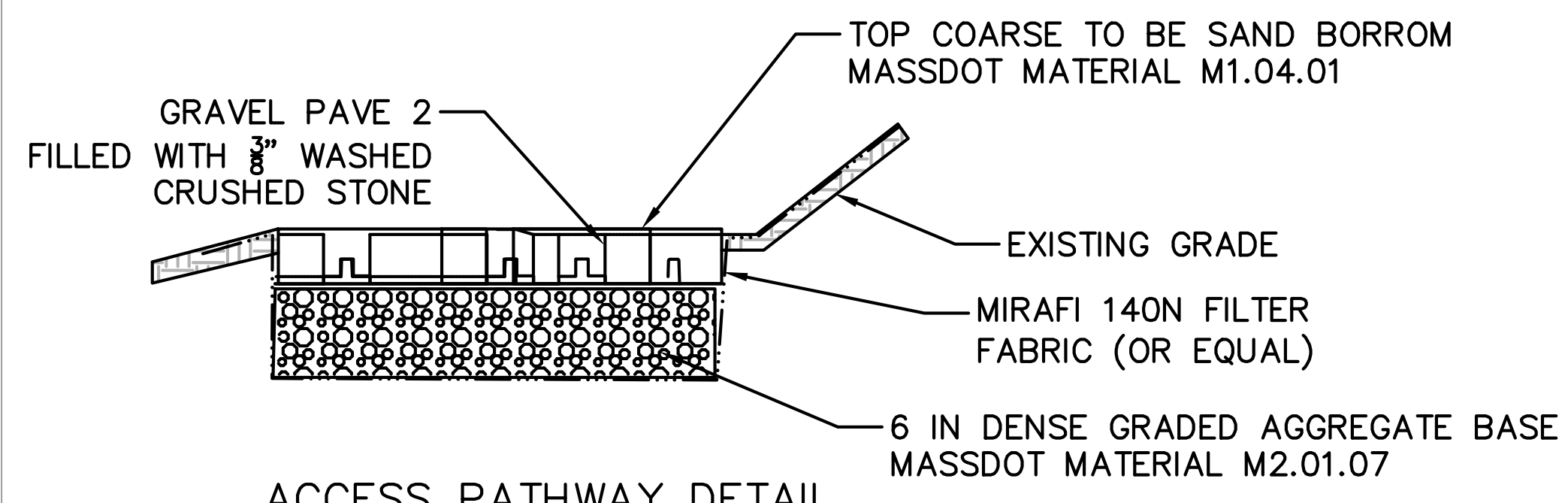
SHEET TITLE

PROPOSED GRADING & DRAINAGE PLAN

DRAWING NO.	P-3
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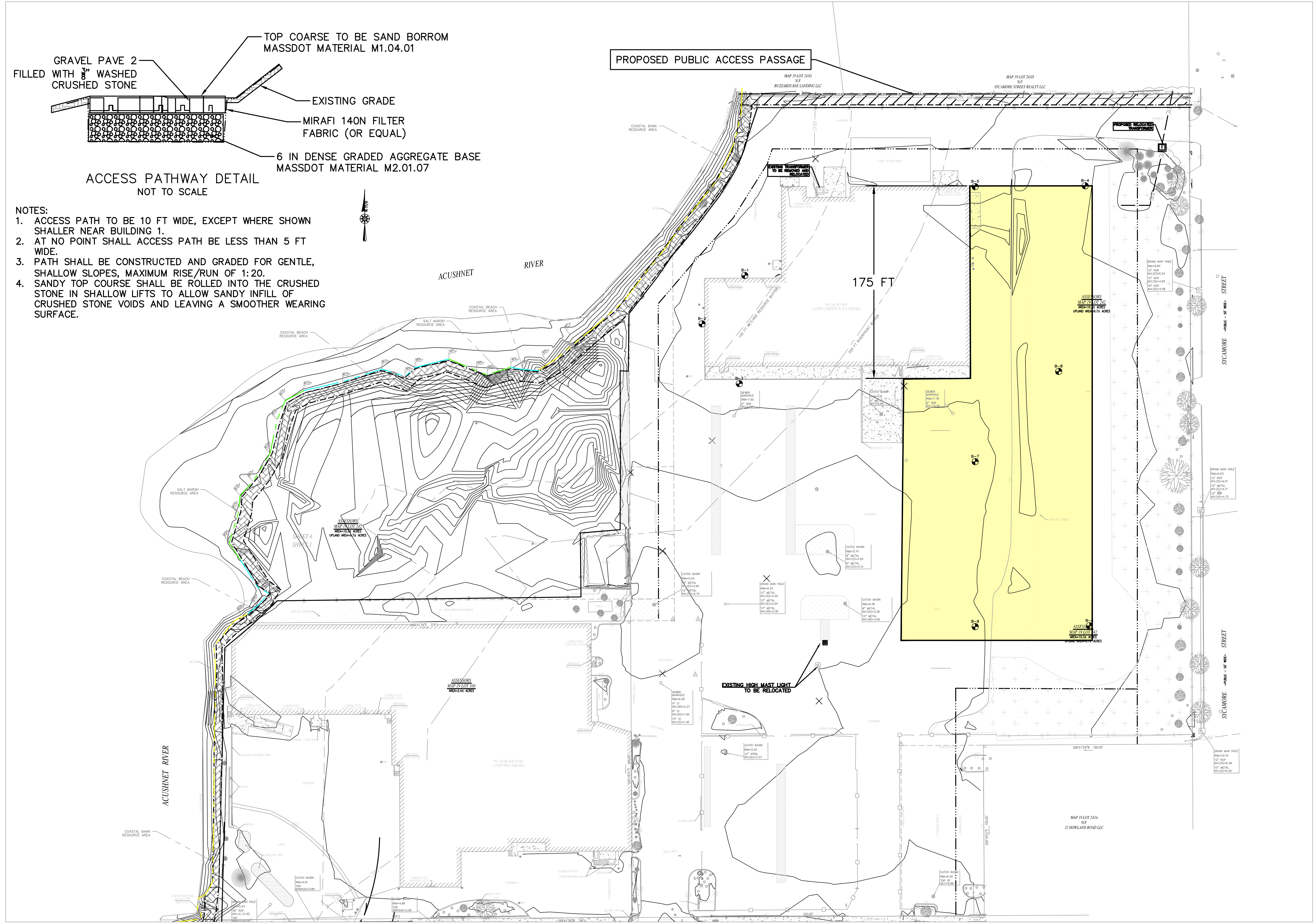
6 OF 13

PLOT SCALE 1/16"=1'-0"



- NOTES:
1. ACCESS PATH TO BE 10 FT WIDE, EXCEPT WHERE SHOWN SHALLER NEAR BUILDING 1.
 2. AT NO POINT SHALL ACCESS PATH BE LESS THAN 5 FT WIDE.
 3. PATH SHALL BE CONSTRUCTED AND GRADED FOR GENTLE, SHALLOW SLOPES, MAXIMUM RISE/RUN OF 1:20.
 4. SANDY TOP COURSE SHALL BE ROLLED INTO THE CRUSHED STONE IN SHALLOW LIFTS TO ALLOW SANDY INFILL OF CRUSHED STONE VOIDS AND LEAVING A SMOOTHER WEARING SURFACE.

PROPOSED PUBLIC ACCESS PASSAGE



ROCKVILLE, MD
WATERTOWN, MA
NEW BEDFORD, MA
SOUTH WINDSOR, CT
124 WATERTOWN ST, SUITE 3F
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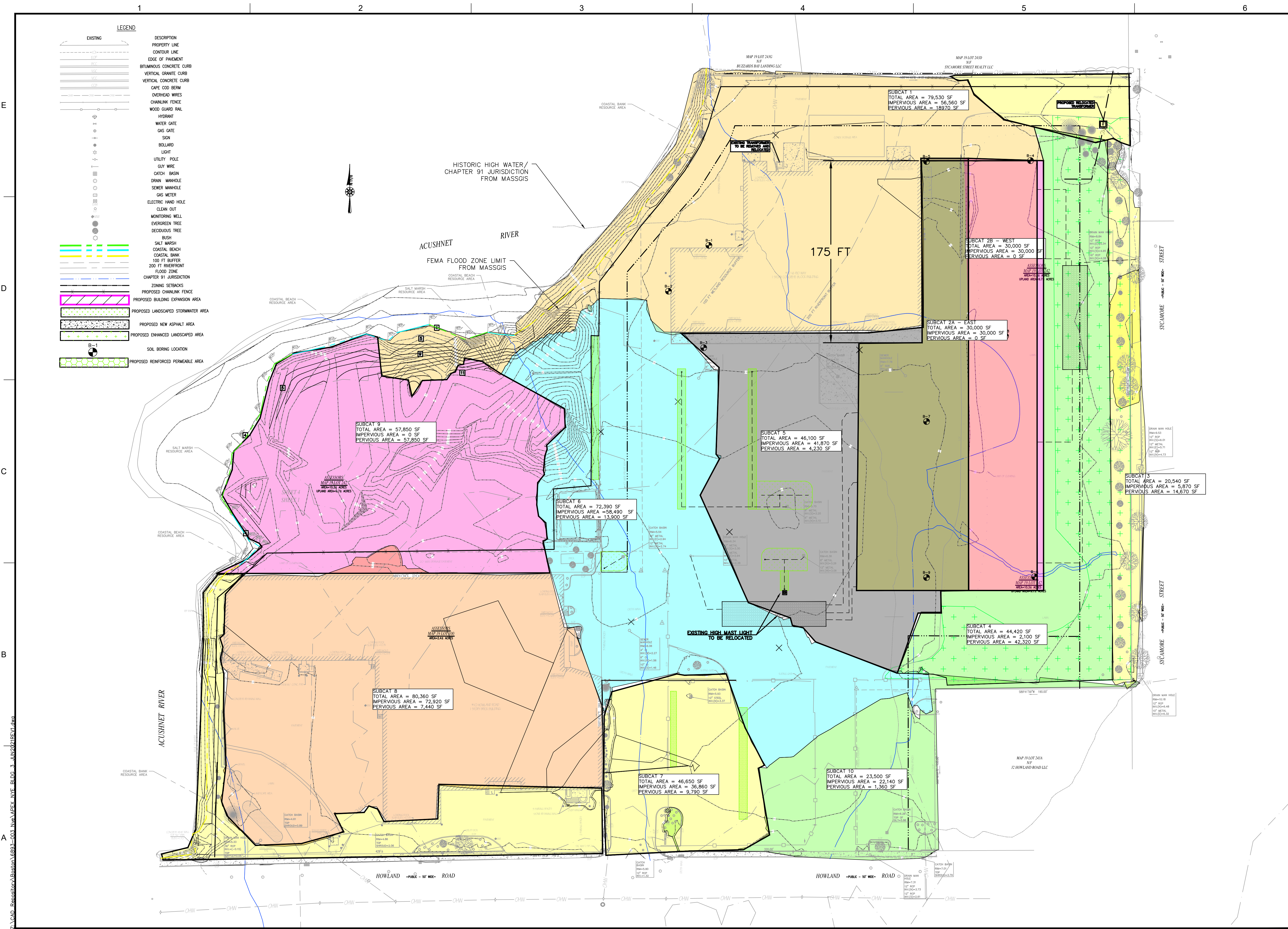
PROJECT	NYE LUBRICANTS BUILDING 3 EXPANSION PROJECT		
OWNER	NYE LUBRICANTS, INC. 12 HOWLAND RD. FAIRHAVEN, MA		

NO.	DATE	DESCRIPTION	BY
1	7/27/21	BLDG FOOTPRINT	JBM
PROJECT NO.		6893-003	
CADD FILE			
DESIGNED BY		JBM	
DRAWN BY		ANC	
CHECKED BY		JBM	
DATE		4/30/21	
DRAWING SCALE		1" = 60'	

GRAPHIC SCALE

SHEET TITLE
PROPOSED CHAPTER 91 PUBLIC ACCESS

DRAWING NO.
P-4



LEGEND

EXISTING	DESCRIPTION
[Symbol]	PROPERTY LINE
[Symbol]	CONTOUR LINE
[Symbol]	EDGE OF PAVEMENT
[Symbol]	BITUMINOUS CONCRETE CURB
[Symbol]	VERTICAL GRANITE CURB
[Symbol]	VERTICAL CONCRETE CURB
[Symbol]	CAPE COD BERM
[Symbol]	OVERHEAD WIRES
[Symbol]	CHAINLINK FENCE
[Symbol]	WOOD GUARD RAIL
[Symbol]	WIDENING
[Symbol]	WATER GATE
[Symbol]	GAS GATE
[Symbol]	SION
[Symbol]	BOLLARD
[Symbol]	LIGHT
[Symbol]	UTILITY POLE
[Symbol]	GUY WIRE
[Symbol]	CATCH BASIN
[Symbol]	DRAIN MANHOLE
[Symbol]	SEWER MANHOLE
[Symbol]	GAS METER
[Symbol]	ELECTRIC HAND HOLE
[Symbol]	CLEAN OUT
[Symbol]	MONITORING WELL
[Symbol]	EVERGREEN TREE
[Symbol]	DECIDUOUS TREE
[Symbol]	BUSH
[Symbol]	SALT MARSH
[Symbol]	COASTAL BEACH
[Symbol]	COASTAL BANK
[Symbol]	100 FT RIVERFRONT
[Symbol]	FLOOD ZONE
[Symbol]	CHAPTER 91 JURISDICTION
[Symbol]	ZONING SETBACKS
[Symbol]	PROPOSED CHAINLINK FENCE
[Symbol]	PROPOSED BUILDING EXPANSION AREA
[Symbol]	PROPOSED LANDSCAPED STORMWATER AREA
[Symbol]	PROPOSED NEW ASPHALT AREA
[Symbol]	PROPOSED ENHANCED LANDSCAPED AREA
[Symbol]	SOIL BORING LOCATION
[Symbol]	PROPOSED REINFORCED PERMEABLE AREA

APEX

ROCKVILLE, MD
WATERTOWN, MA
NEW BEDFORD, MA
SOUTH WINDSOR, CT

124 WATERTOWN ST, SUITE 3F
WATERTOWN, MA

1213 PURCHASE STREET SUITE 301
NEW BEDFORD, MA

58H CONNECTICUT AVENUE
SOUTH WINDSOR, CT

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PROJECT
NYE LUBRICANTS
BUILDING 3 EXPANSION
PROJECT

OWNER
NYE LUBRICANTS, INC.
12 HOWLAND RD.
FAIRHAVEN, MA

NO.	DATE	DESCRIPTION	BY
1	7/27/21	BLDG FOOTPRINT	JBM

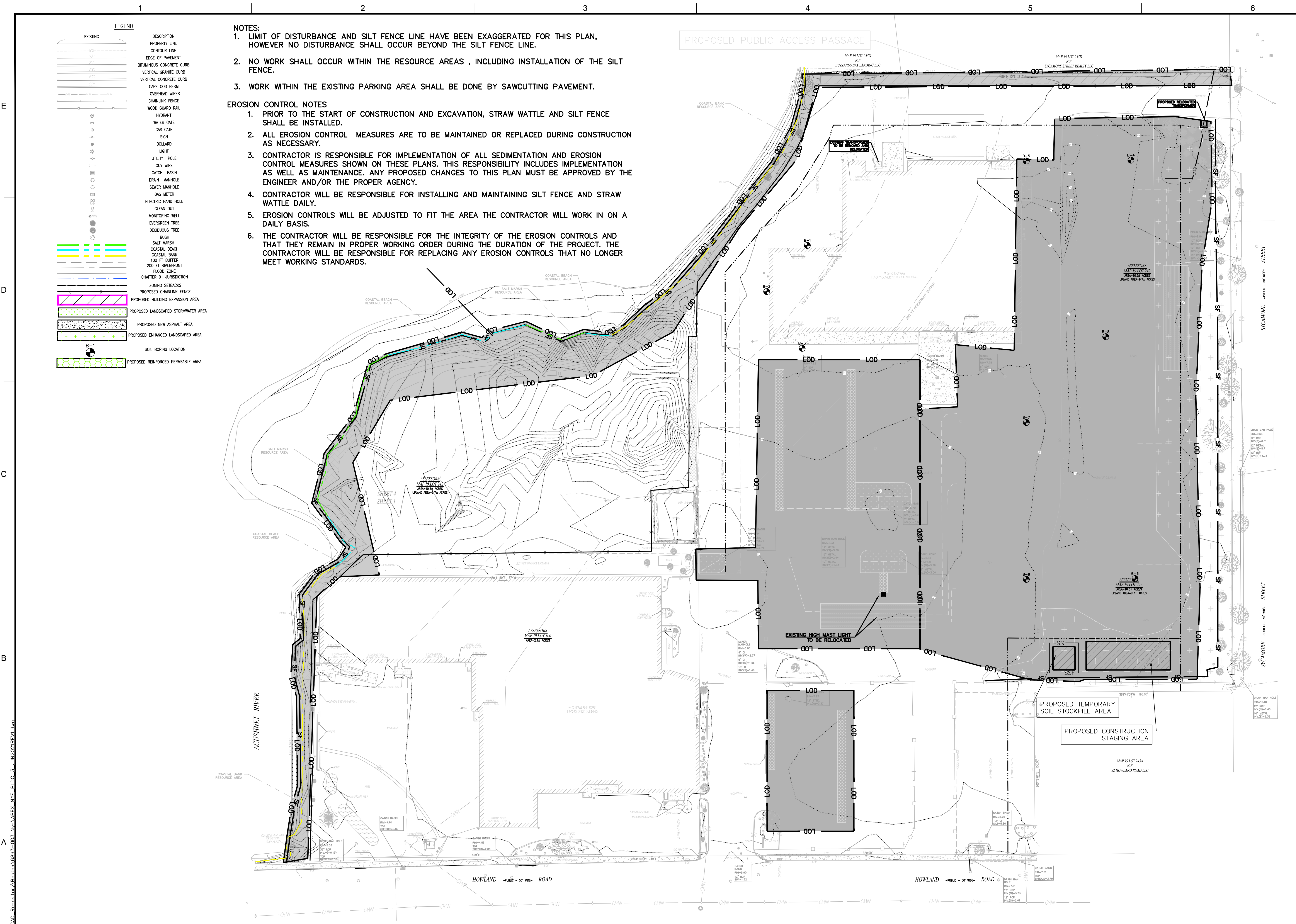
PROJECT NO.	6893-003
CADD FILE	
DESIGNED BY	JBM
DRAWN BY	ANC
CHECKED BY	JBM
DATE	4/30/21
DRAWING SCALE	1" = 60'

GRAPHIC SCALE

SHEET TITLE
PROPOSED WATERSHED PLAN

DRAWING NO.
P-5

8 OF 13



ROCKVILLE, MD
WATERTOWN, MA
NEW BEDFORD, MA
SOUTH WINDSOR, CT
124 WATERTOWN ST, SUITE 3F
WATERTOWN, MA
1213 PURCHASE STREET SUITE 301
NEW BEDFORD, MA
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SOUTH WINDSOR, CT



PROJECT
NYE LUBRICANTS
BUILDING 3 EXPANSION
PROJECT

OWNER
NYE LUBRICANTS, INC.
12 HOWLAND RD.
FAIRHAVEN, MA

NO.	DATE	DESCRIPTION	BY
1	7/27/21	BLDG FOOTPRINT	JBM
PROJECT NO.		6893-003	
CADD FILE			
DESIGNED BY		JBM	
DRAWN BY		ANC	
CHECKED BY		JBM	
DATE		4/30/21	
DRAWING SCALE		1" = 60'	
GRAPHIC SCALE			

SHEET TITLE
PROPOSED
EROSION AND
SEDIMENTATION
CONTROLS
PLAN

DRAWING NO.
ER-1

9 OF 13



ROCKVILLE, MD
WATERTOWN, MA
NEW BEDFORD, MA
SOUTH WINDSOR, CT
124 WATERTOWN ST, SUITE 3F
WATERTOWN, MA

1213 PURCHASE STREET SUITE 301
NEW BEDFORD, MA

58H CONNECTICUT AVENUE
SOUTH WINDSOR, CT

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PROJECT
NYE LUBRICANTS
BUILDING 3 EXPANSION
PROJECT

OWNER
NYE LUBRICANTS, INC.
12 HOWLAND RD.
FAIRHAVEN, MA

NO.	DATE	DESCRIPTION	BY
1	7/27/21	BLDG FOOTPRINT	JBM

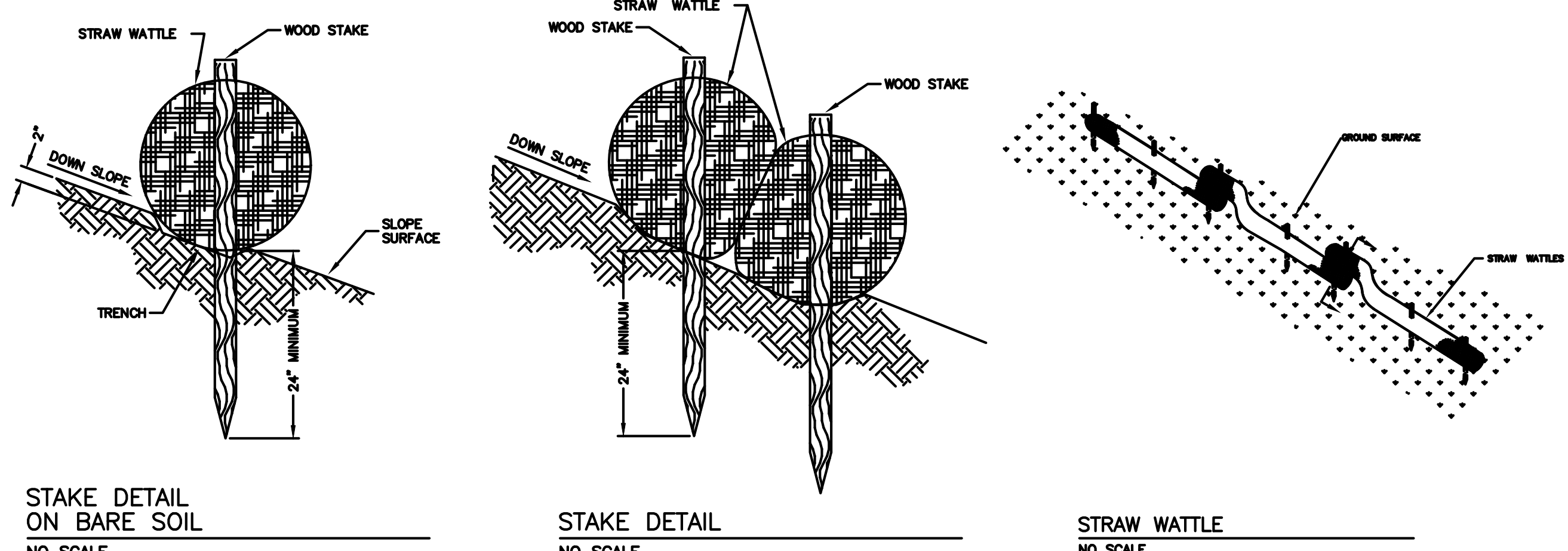
PROJECT NO.	6893-003
CADD FILE	
DESIGNED BY	JBM
DRAWN BY	ANC
CHECKED BY	JBM
DATE	4/30/21
DRAWING SCALE	AS NOTED

GRAPHIC SCALE

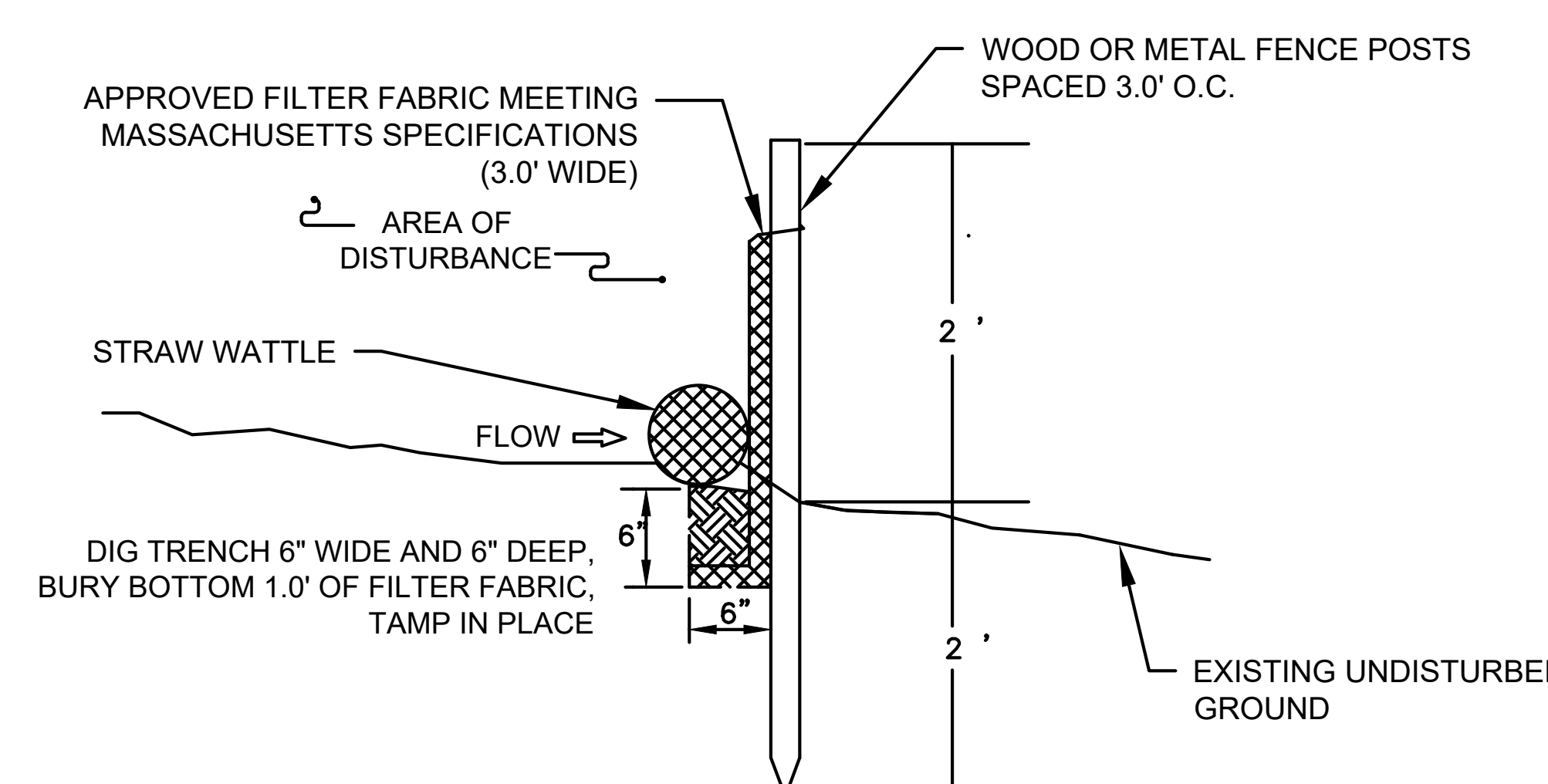
SHEET TITLE
DETAIL SHEET

DRAWING NO.
D-1

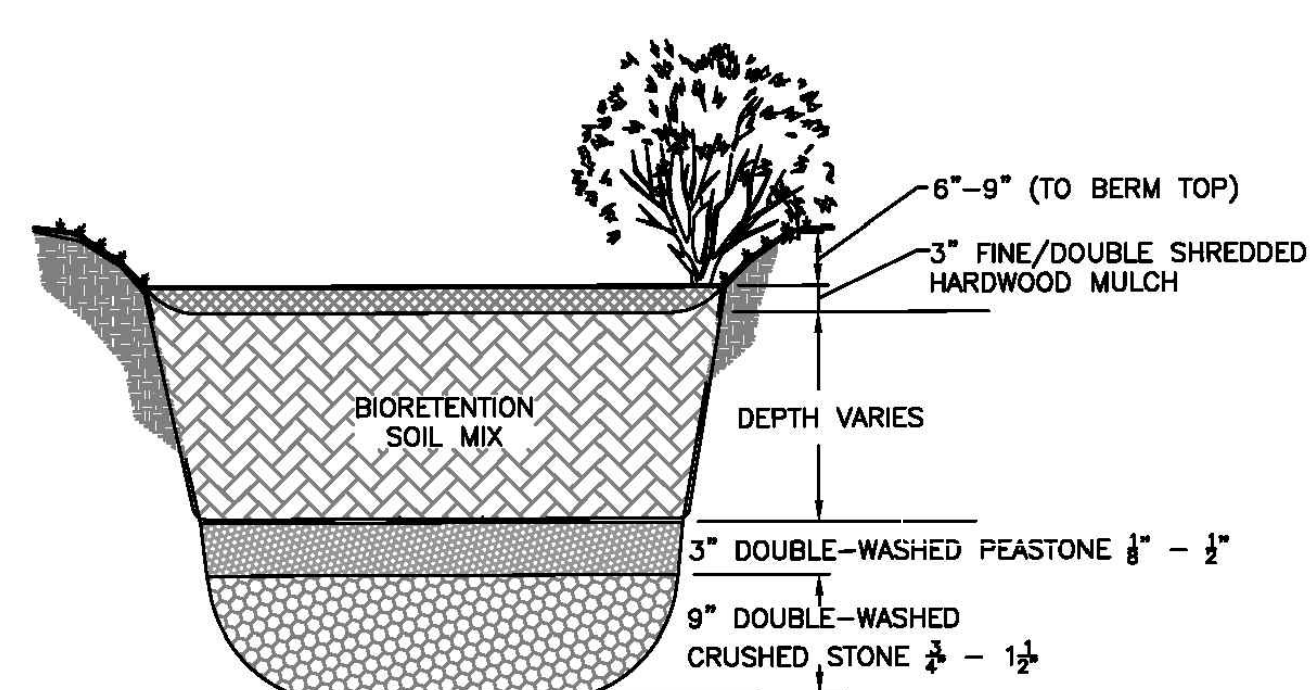
10 OF 13



- NOTES:**
- CONTRACTOR WILL BE RESPONSIBLE FOR CONTROLLING WATER IN THE EXCAVATION AREA AND MEETING THE PERFORMANCE STANDARDS OF THE CONTRACT, PARTICULARLY FOR WATER QUALITY. CONTRACTOR TO SUBMIT A TRENCH DEWATERING PLAN THAT WILL ADDRESS, AT A MINIMUM, SOME FORM OF SEDIMENTATION/TURBIDITY REDUCTION BEST MANAGEMENT PRACTICE AS TO COMPLY WITH THE WATER QUALITY REQUIREMENTS.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING SILT FENCE/STRAW WATTLE THROUGHOUT THE CONTRACT AND ENSURING IT IS PLACED IN A MANNER TO PROTECT THE SENSITIVE DOWNSTREAM RECEPTORS AND OFF-SITE AREAS.
 - EROSION AND SEDIMENTATION CONTROL SHALL REMAIN IN PLACE AND IN PROPER WORKING ORDER THROUGHOUT THE DURATION OF THE CONTRACT. IF INITIAL CONTROLS DO NOT PROVE TO BE SUFFICIENT, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS.

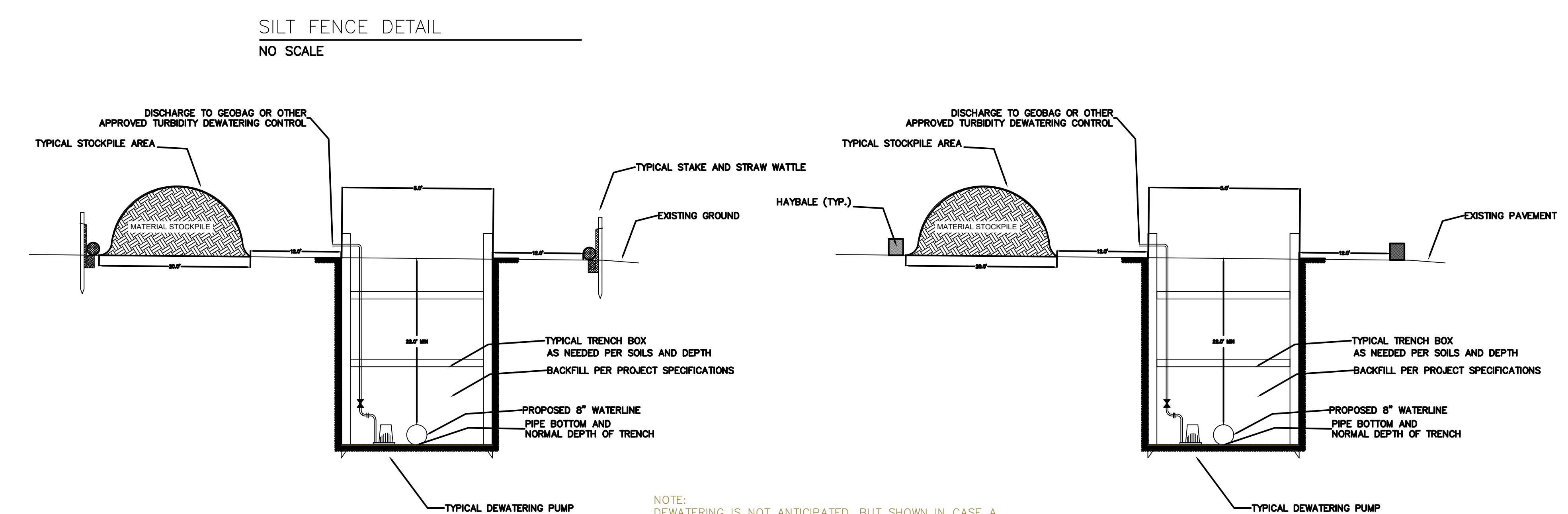


- NOTES:**
- SILT FENCING SHALL BE PLACED AS SHOWN ON PROJECT DRAWINGS.
 - BOTTOM 1 FOOT OF SILT FENCING SHALL BE BURIED IN 6" X 6" TRENCH DUG AT BASE OF FENCING.
 - SILT FENCING SHALL BE ANCHORED IN PLACE WITH WOODEN OR METAL FENCE POSTS SPACED AT 3 FT. O.C.
 - INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE PROMPT (WHEN NEEDED).
 - SILT FENCING SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS.
 - SILT FENCING TO BE PLACED DOWN-GRADIENT OF HAY BALES.



EXFILTRATING BIORETENTION CELL DETAIL
NO SCALE

- NOTES:**
- ALL A & B HORIZON SOILS, AS WELL AS OTHER UNSUITABLE SOILS, UNDERLYING THE BMPs SHALL BE REMOVED AND REPLACED.
 - EXCAVATION FOR ALL BMPs SHALL INCLUDE AN OVERDIG OF 25% OF THE WIDTH OF THE BMP UP TO A MAXIMUM OF 3 FT TO ENSURE SUITABLE SOILS FOR THE BMP.
 - EXCAVATION AND INSTALLATION OF THE BMPs SHALL BE INSPECTED BY THE ENGINEER.
 - UNDERLYING SOILS FOR THE BMPs SHALL NOT BE COMPACTED PRIOR TO PLACEMENT OF THE BMPs.
 - ALL INFILTRATION PRACTICES SHALL BE PROTECTED DURING CONSTRUCTION.
 - THE BIORETENTION SOIL MIX SHALL CONSIST OF A UNIFORM MIXTURE OF TWO PARTS (40% BY VOLUME) COARSE SAND (MASS HIGHWAY DEPARTMENT MATERIAL SPECIFICATION M1.04.0 TYPE A), TWO PARTS (40% BY VOLUME) TOPSOIL (MHD SPECIFICATION M1.05.0 OR M1.06.1) AND ONE PART (20% BY VOLUME) SHREDDED HARDWOOD BARK MULCH.
 - THE LARGEST STONE SIZE SHALL BE 1/2" DIAMETER IN THE TOPSOIL.
 - FINAL PLANTING MATERIALS SHALL BE AS PRESCRIBED BY LANDSCAPE ARCHITECT



CULTEC CONTACTOR® 100HD CHAMBER PRODUCT SPECIFICATIONS

GENERAL
CULTEC CONTACTOR 100HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS

- THE CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
- THE CHAMBER SHALL BE ARCHED IN SHAPE.
- THE CHAMBER SHALL BE OPEN-BOTTOMMED.
- THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC CONTACTOR 100HD SHALL BE 12.5 INCHES (318 mm) TALL, 36 INCHES (914 mm) WIDE AND 8 FEET (2.44 m) LONG. THE INSTALLED LENGTH OF A JOINED CONTACTOR 100HD SHALL BE 7.5 FEET (2.29 m).
- MAXIMUM INLET OPENING ON THE CHAMBER ENDWALL IS 10 INCHES (250 mm).
- THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV SFCx2 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. THE NOMINAL INSIDE DIMENSIONS OF EACH SIDE PORTAL SHALL BE 5.75 INCHES (146 mm) HIGH BY 7.5 INCHES (191 mm) WIDE. MAXIMUM ALLOWABLE OUTER DIAMETER (O.D.) PIPE SIZE IN THE SIDE PORTAL IS 6.9 INCHES (175 mm).
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV SFCx2 FEED CONNECTOR SHALL BE 7.5 INCHES (191 mm) TALL, 12 INCHES (305 mm) WIDE AND 19.7 INCHES (500 mm) LONG.
- THE NOMINAL STORAGE VOLUME OF THE CONTACTOR 100HD CHAMBER SHALL BE 1.988 FT³ (0.173 m³) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED CONTACTOR 100HD SHALL BE 13.965 FT³ / UNIT (0.396 m³ / UNIT) - WITHOUT STONE.
- THE NOMINAL STORAGE VOLUME OF THE HVLV SFCx2 FEED CONNECTOR SHALL BE 0.294 FT³ (0.027 m³) - WITHOUT STONE.
- THE CONTACTOR 100HD CHAMBER SHALL HAVE FORTY-FOUR DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNIT'S CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
- THE CONTACTOR 100HD CHAMBER SHALL HAVE 16 CORRUGATIONS.
- THE ENDWALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
- THE CONTACTOR 100RHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL ENDWALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
- THE CONTACTOR 100HD MIDDLE/END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL ENDWALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
- THE HVLV SFCx2 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CONTACTOR 100HD AND ACT AS CROSS FEED CONNECTIONS.
- CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
- THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- HEAVY DUTY UNITS ARE DESIGNATED BY A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
- THE CHAMBER SHALL HAVE A RAISED INTEGRAL GAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
- THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION.
- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
- THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF APMO PS 83-2016, INCLUDING RESISTANCE TO ASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
- MAXIMUM ALLOWED COVER ON TOP OF UNIT SHALL BE 12.0 FEET (3.66 m).

CULTEC HVLV SFCx2 FEED CONNECTOR

GENERAL
CULTEC HVLV SFCx2 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC CONTACTOR 100HD STORMWATER CHAMBERS.

CHAMBER PARAMETERS

- THE CHAMBER SHALL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE CHAMBER SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
- THE CHAMBER SHALL BE ARCHED IN SHAPE.
- THE CHAMBER SHALL BE OPEN-BOTTOMMED.
- THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV SFCx2 FEED CONNECTOR SHALL BE 7.5 INCHES (191 mm) TALL, 12 INCHES (305 mm) WIDE AND 19.7 INCHES (500 mm) LONG.
- THE NOMINAL STORAGE VOLUME OF THE HVLV SFCx2 FEED CONNECTOR SHALL BE 0.294 FT³ (0.027 m³) - WITHOUT STONE.
- THE HVLV SFCx2 FEED CONNECTOR CHAMBER SHALL HAVE 3 CORRUGATIONS.
- THE HVLV SFCx2 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CONTACTOR 100HD STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
- THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2008 CERTIFIED FACILITY.

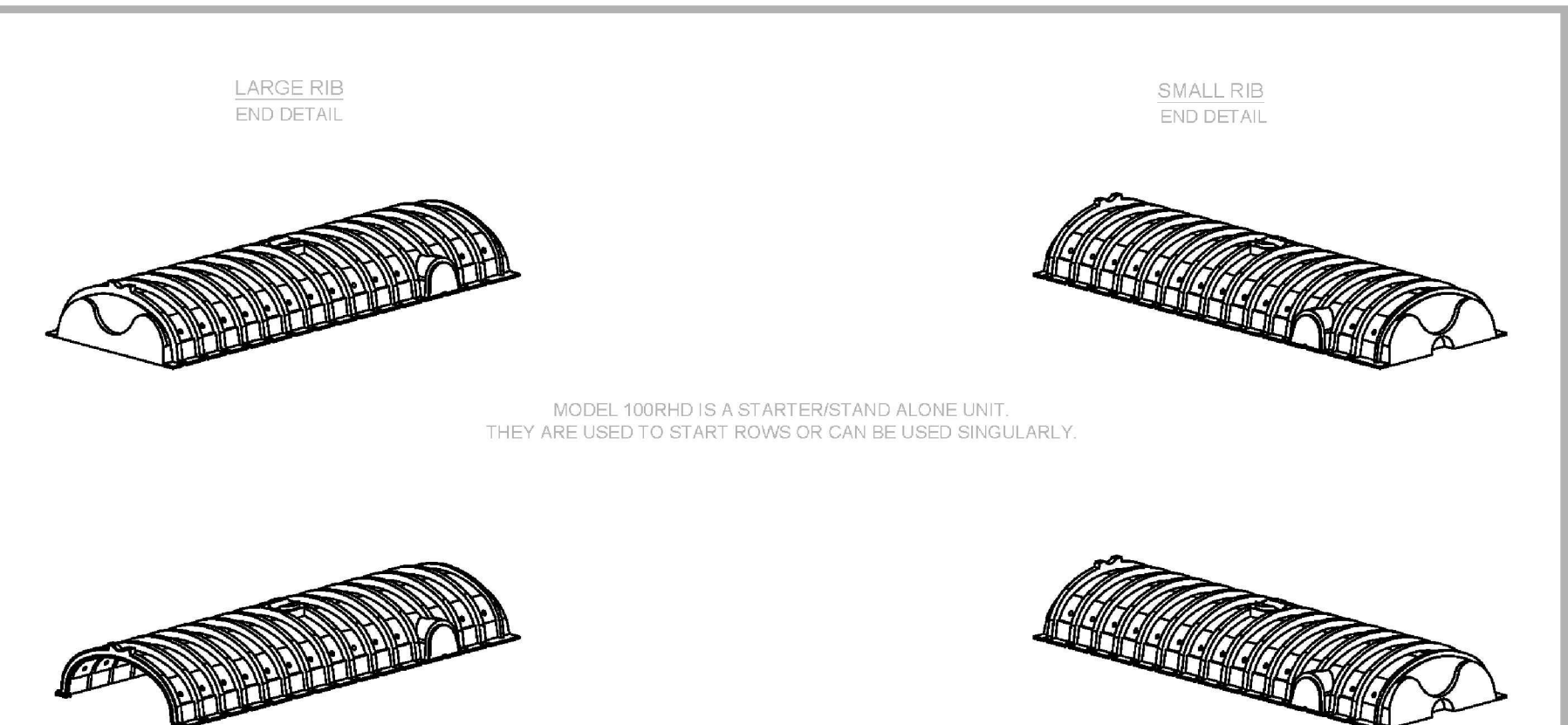
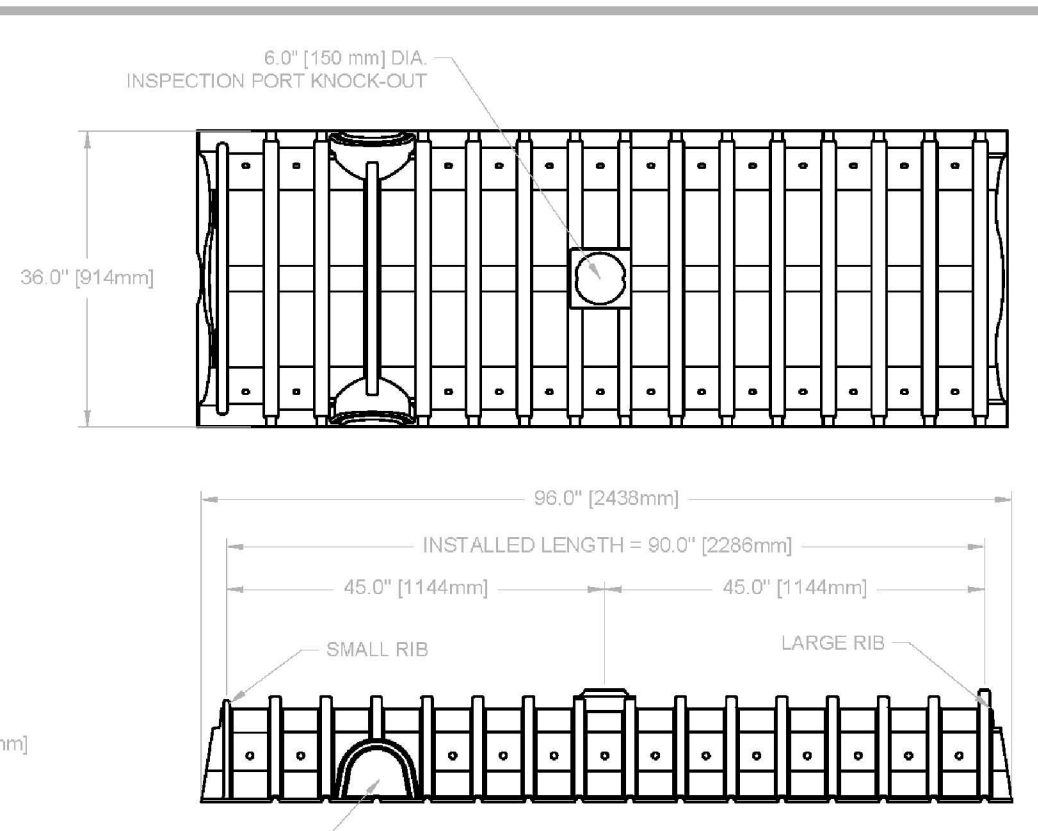
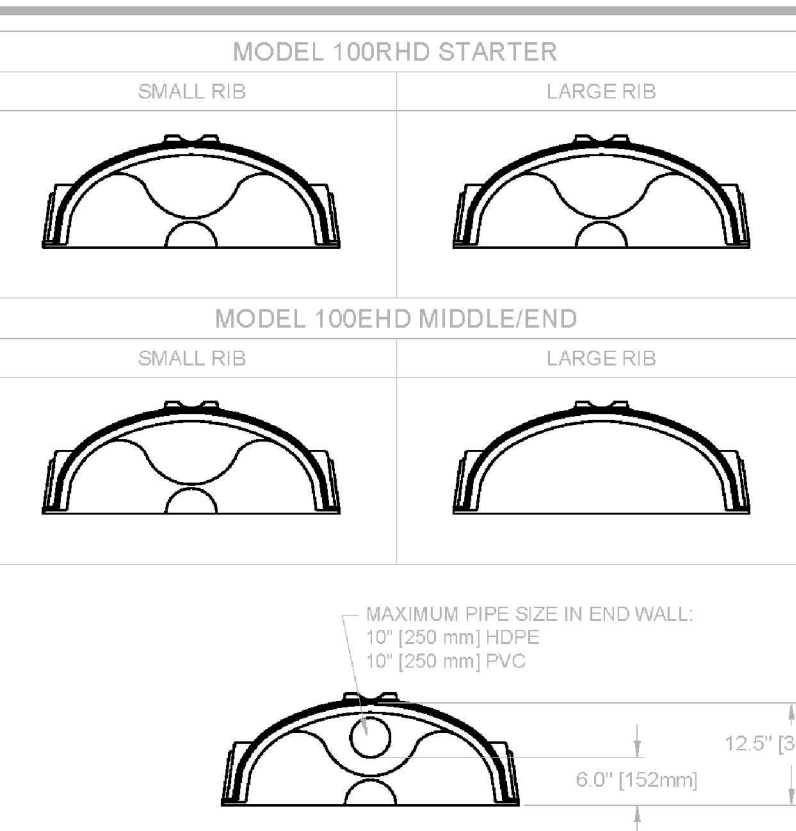
GEOTEXTILE PARAMETERS

- THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, INC. OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
- THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
- THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 4.5 OZ/SY (142 G/M²).
- THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A FRACTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4933 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A CSR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-4 PER ASTM D4491 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 135 GAL/HR/SQ (500 LPM/MSH) PER ASTM D4491 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 300 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC NO. 4800 WOVEN GEOTEXTILE
CULTEC NO. 4800 WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGE® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

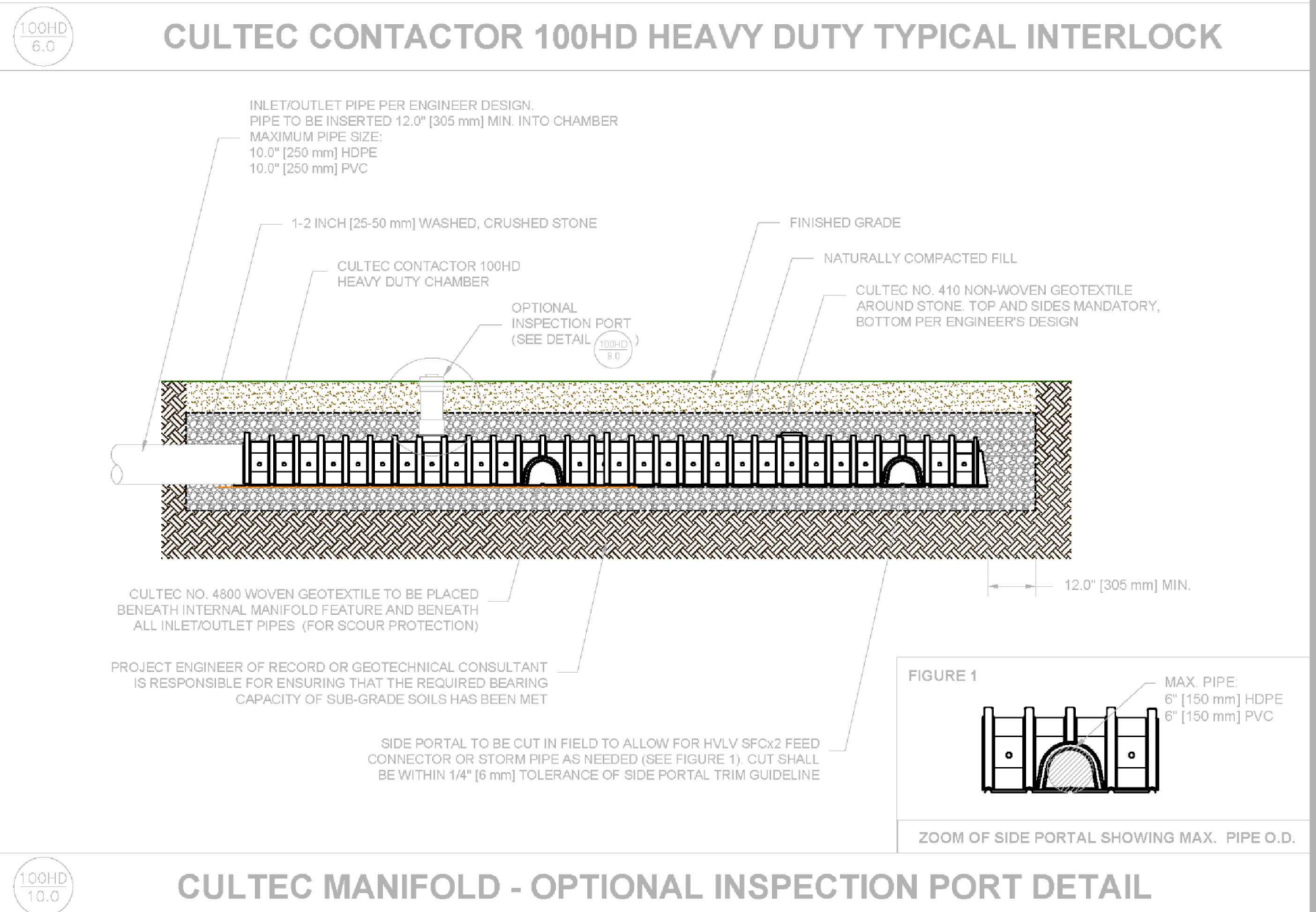
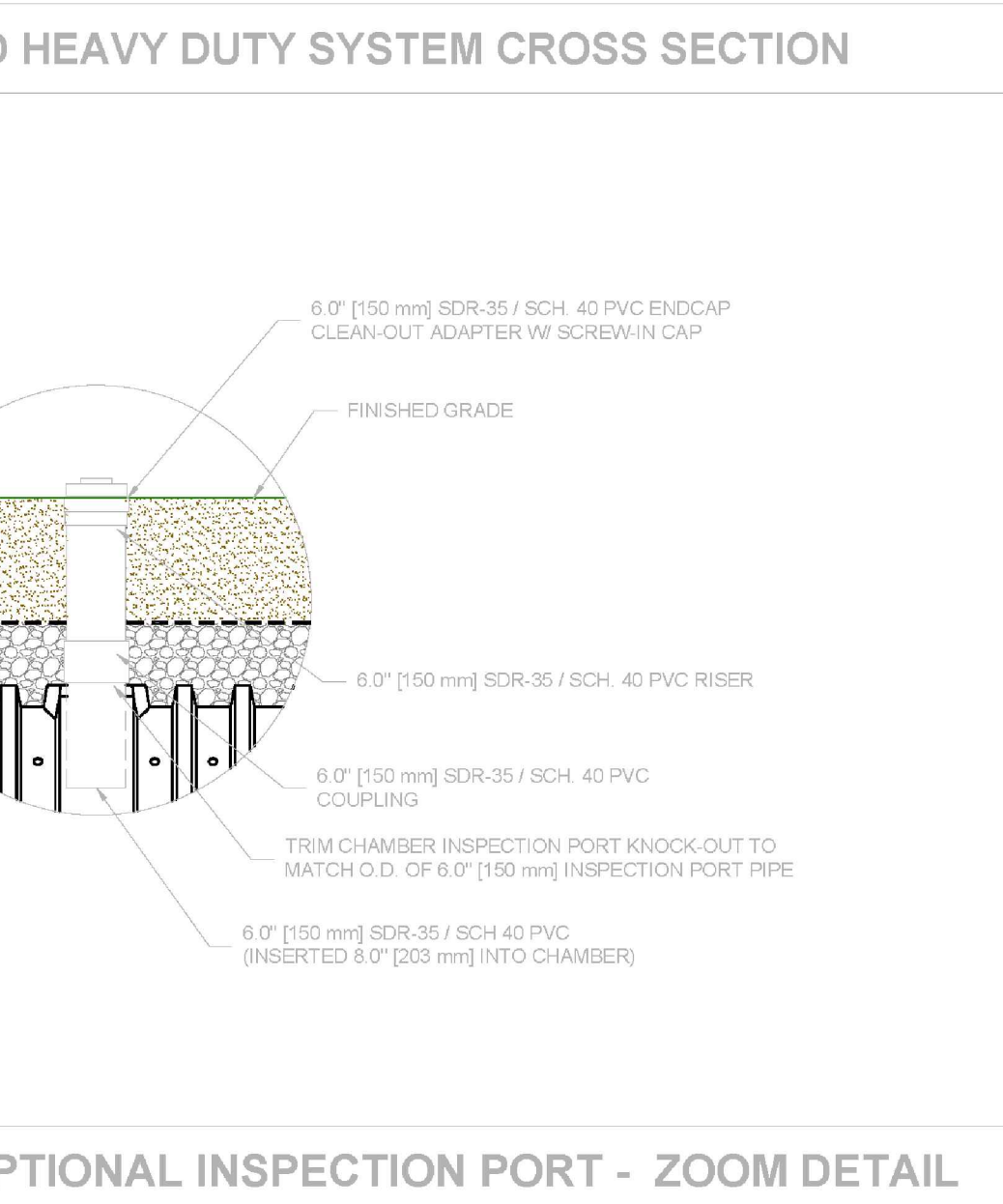
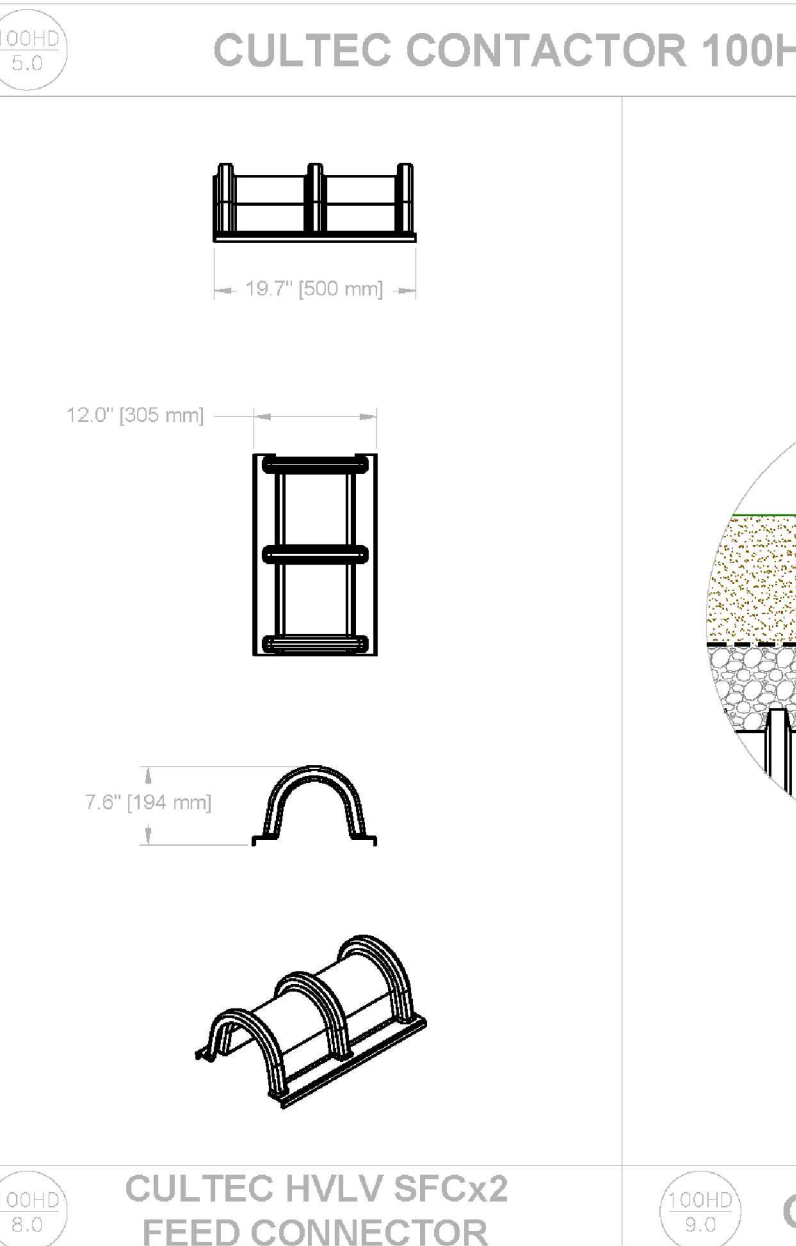
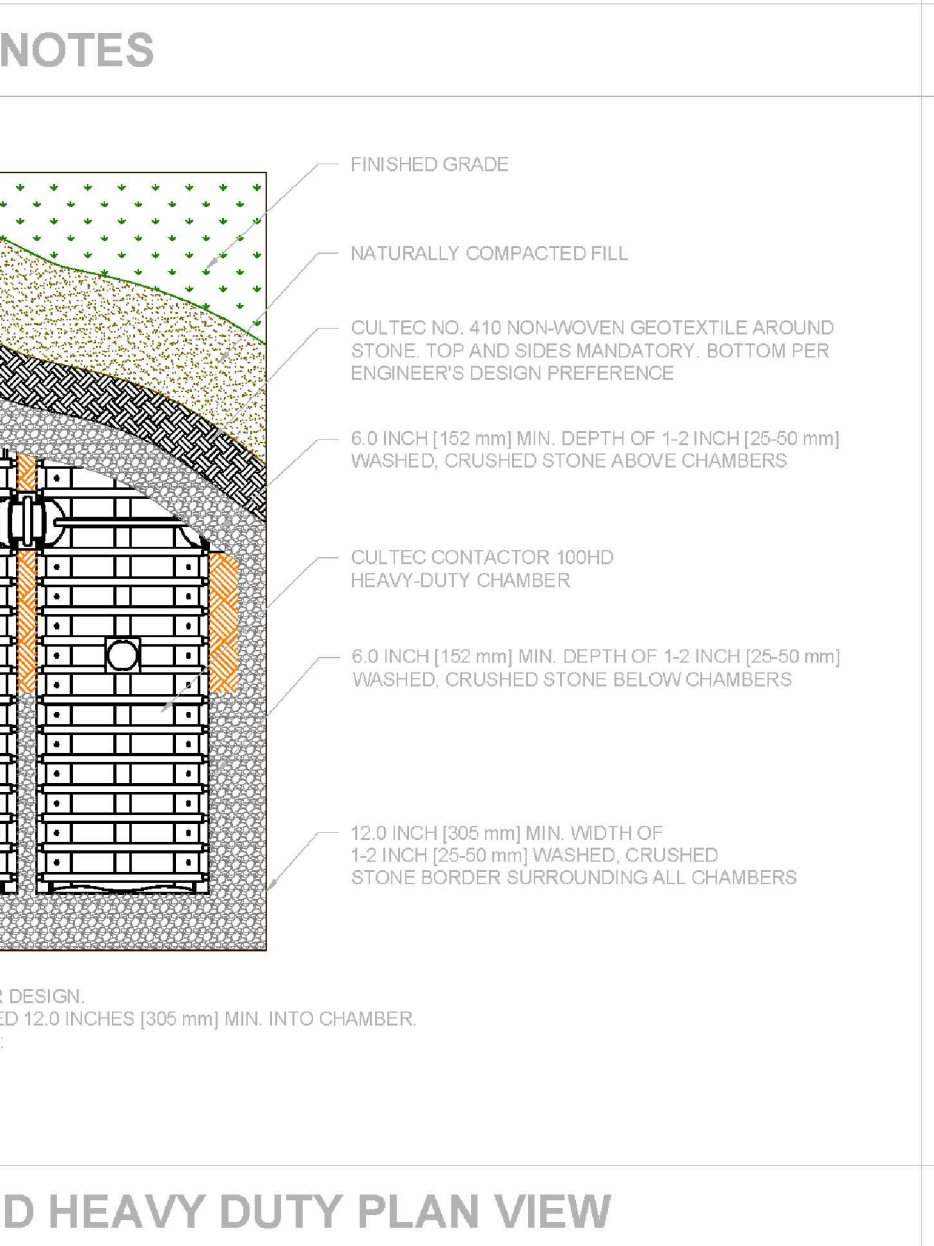
GEOTEXTILE PARAMETERS

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- THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
- THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 550 X 550 LBS (2,448 X 2,448 N) PER ASTM D4632 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK RESISTANCE OF 20 X 20% PER ASTM D4632 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 5,070 X 5,070 LBS/FT (74 X 74 KN/M) PER ASTM D4595 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A CSR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 2% STRAIN OF 960 X 1,096 LBS/FT (14 X 16 KN/M) PER ASTM D4595 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 5% STRAIN OF 2,740 X 2,740 LBS/FT (40 X 40 KN/M) PER ASTM D4595 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE @ 10% STRAIN OF 4,800 X 4,800 LBS/FT (70 X 70 KN/M) PER ASTM D4595 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A CSR PUNCTURE RESISTANCE OF 1,700 LBS (7,560 N) PER ASTM D6241 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 180 X 180 LBS (801 X 801 N) PER ASTM D4533 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 40 U.S. STD. SIEVE (0.425 MM) PER ASTM D4751 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.15 SEC-4 PER ASTM D4491 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 11.5 GPM/FT² (470 LPM/MSH) PER ASTM D4491 TESTING METHOD.
- THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 80% @ 300 HRS. PER ASTM D4355 TESTING METHOD.



GENERAL NOTES

- THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
- THE CHAMBER SHALL BE DESIGNED AND MANUFACTURED TO MEET THE MATERIAL AND STRUCTURAL REQUIREMENTS OF APMO PS 83-2016, INCLUDING RESISTANCE TO ASHTO H-10 AND H-20 HIGHWAY LIVE LOADS, WHEN INSTALLED IN ACCORDANCE WITH CULTEC'S INSTALLATION INSTRUCTIONS.
- MAXIMUM ALLOWED COVER ON TOP OF UNIT SHALL BE 12.0 FEET (3.66 m).



CULTEC, Inc.
Subsurface Stormwater Management Systems
P.O. Box 280
878 Federal Road
Brookfield, CT 06804
www.cultec.com

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PH: (800) 4-CULTEC
FX: (203) 775-1462
tech@cultec.com

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**CONTACTOR 100HD
DETAIL SHEET
NON-TRAFFIC APPLICATION**

CULTEC STORMWATER CHAMBER	
PROJECT NO:	DATE: 2019
DRAWN BY: CULTEC, INC	CHECKED BY: TECH
SCALE: N.T.S.	SHEET NO: 1 OF 1

ROCKVILLE, MD
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SOUTH WINDSOR, CT

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PROJECT
NYE LUBRICANTS
BUILDING 3 EXPANSION
PROJECT

OWNER
NYE LUBRICANTS, INC.
12 HOWLAND RD.
FAIRHAVEN, MA

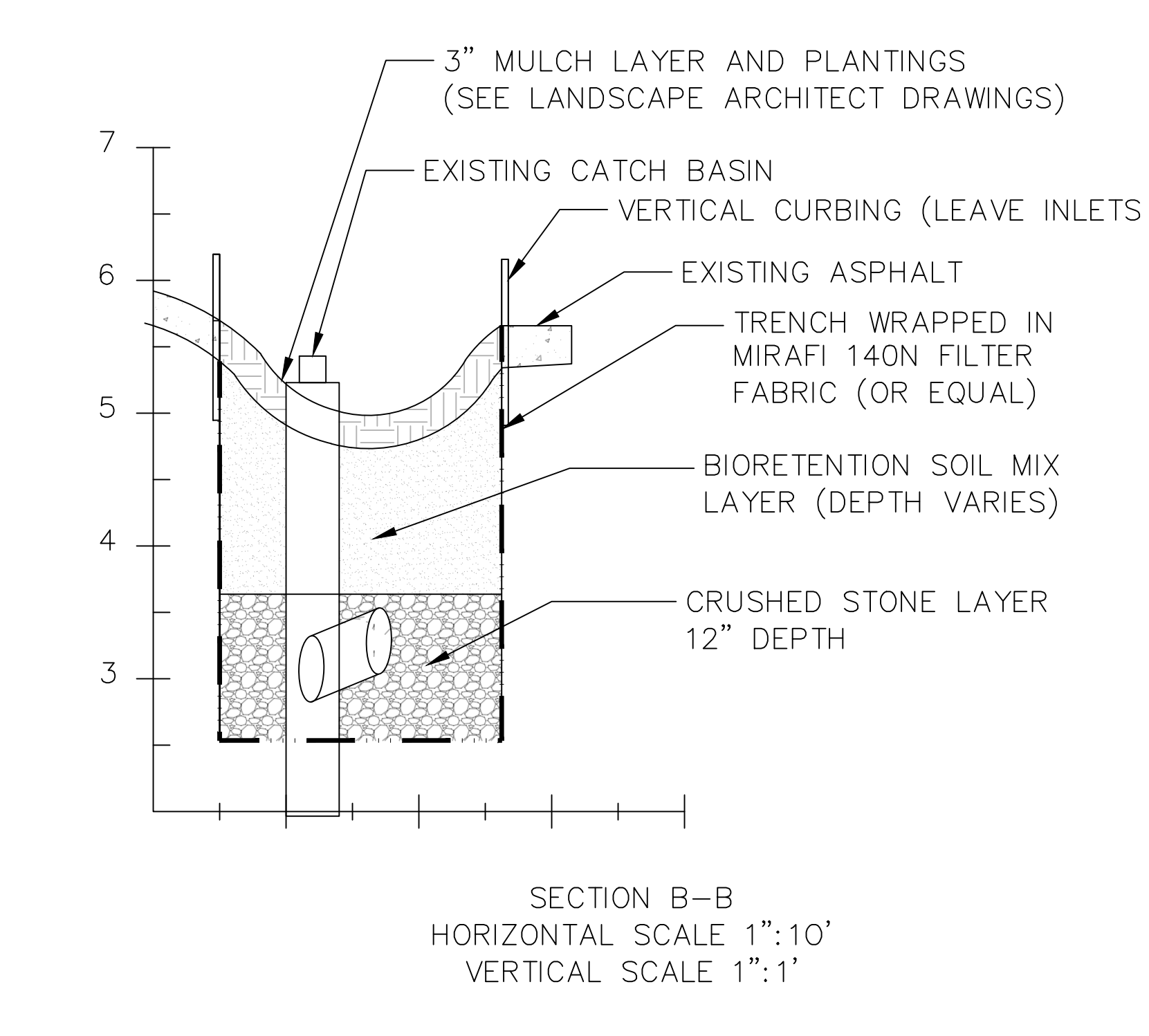
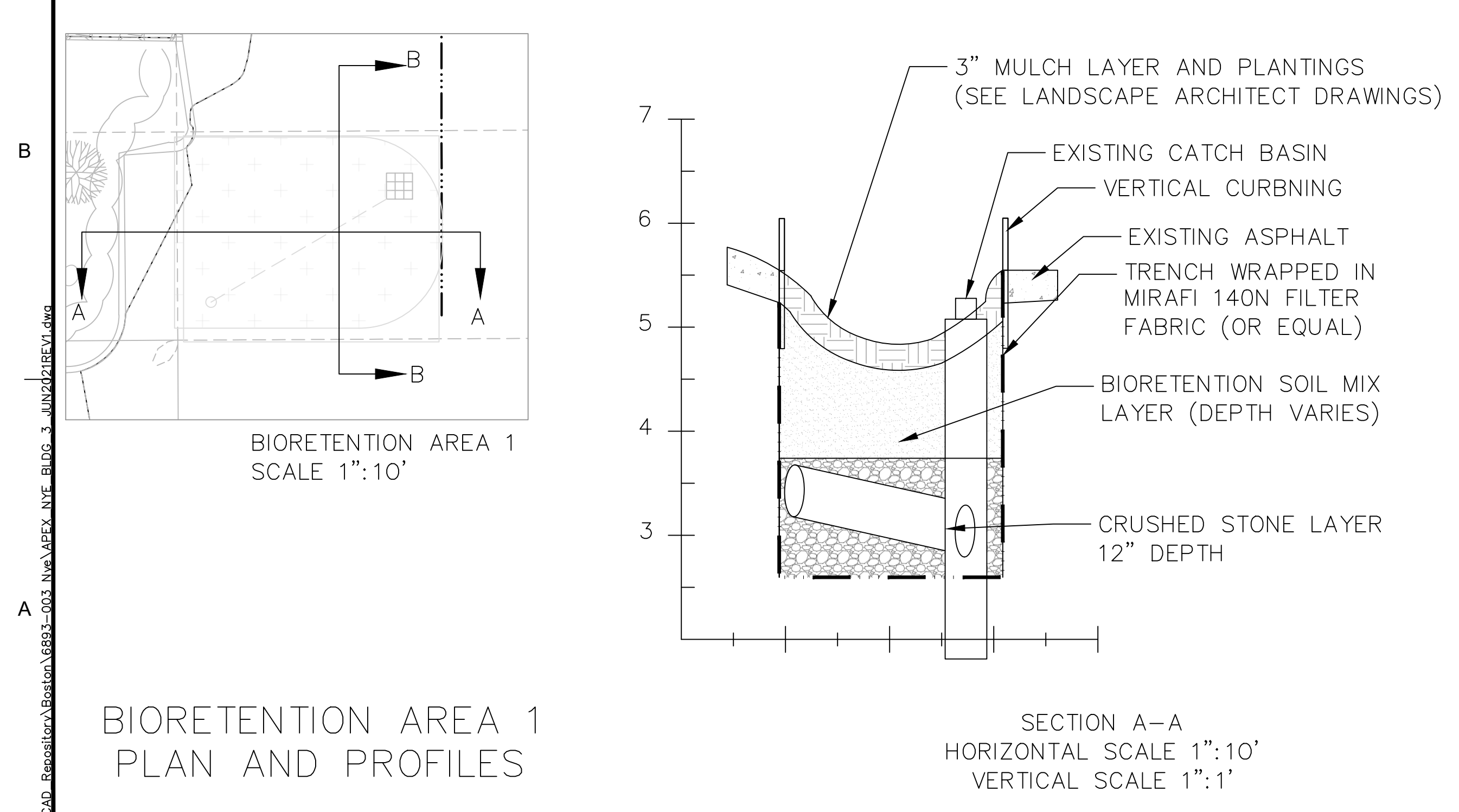
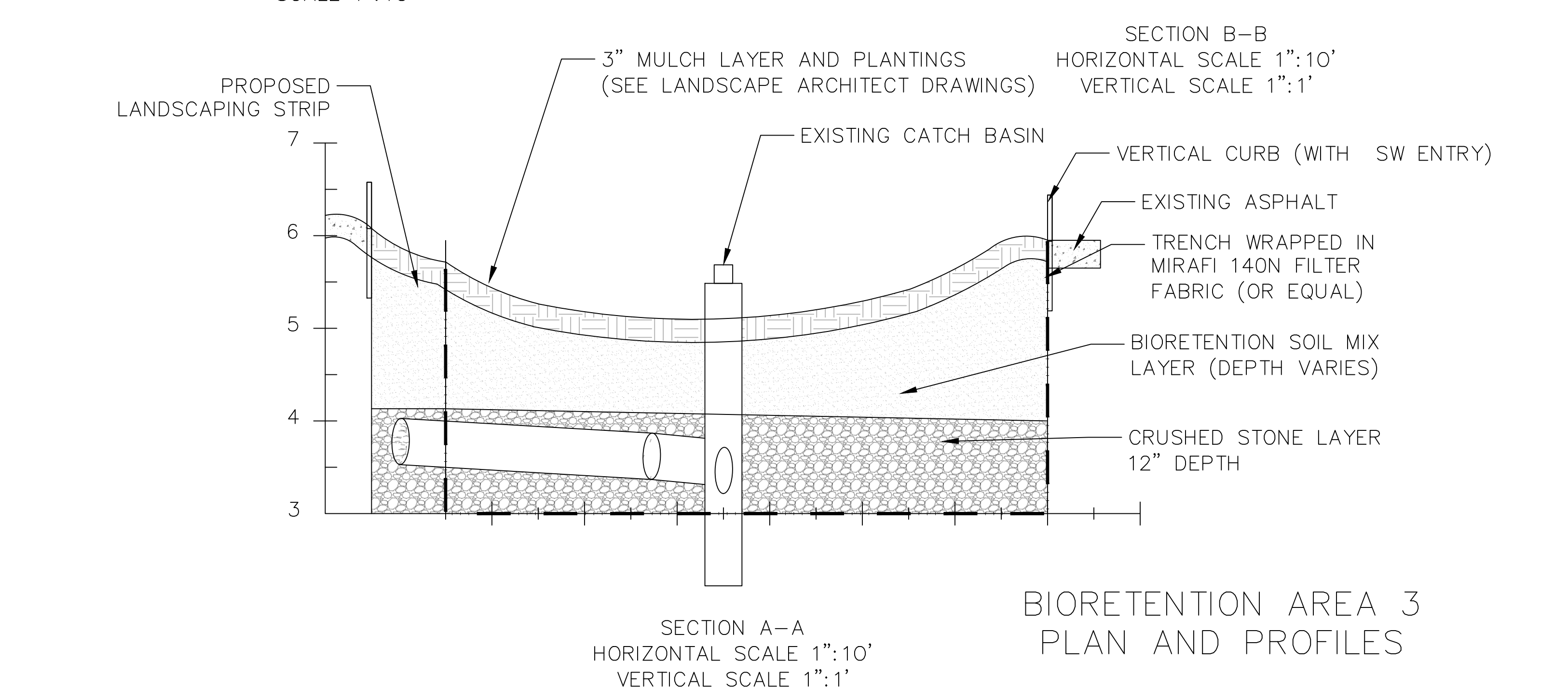
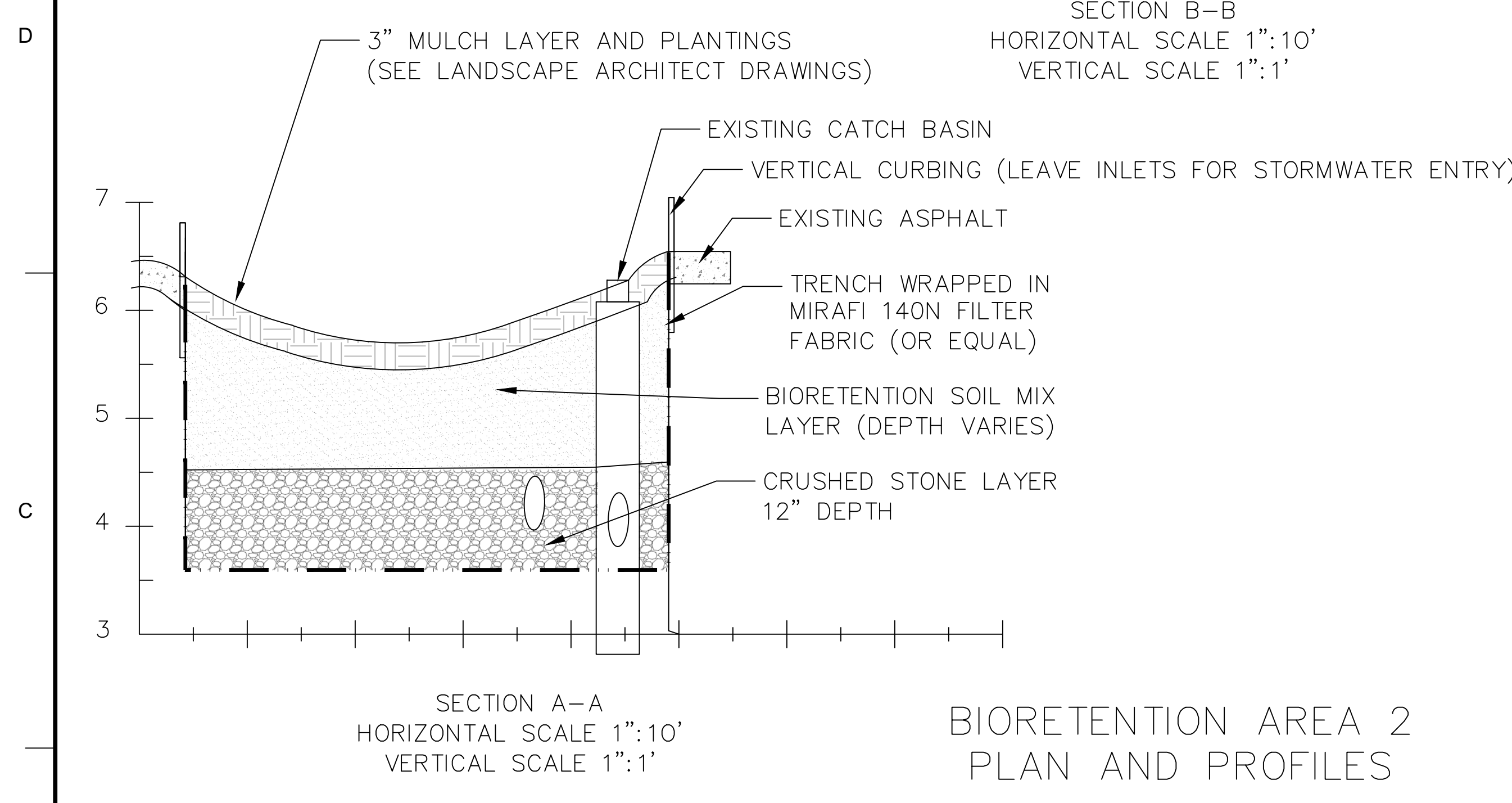
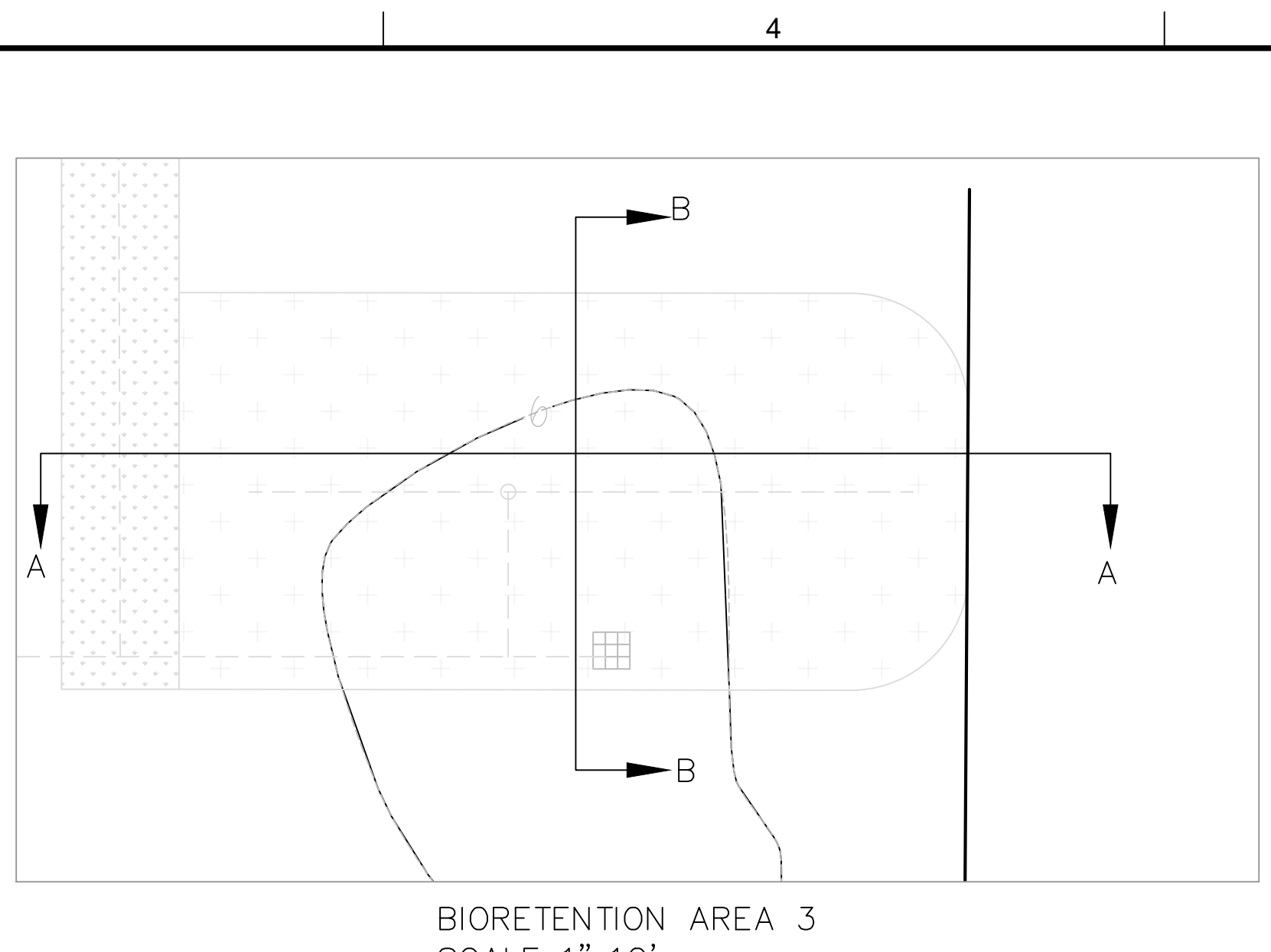
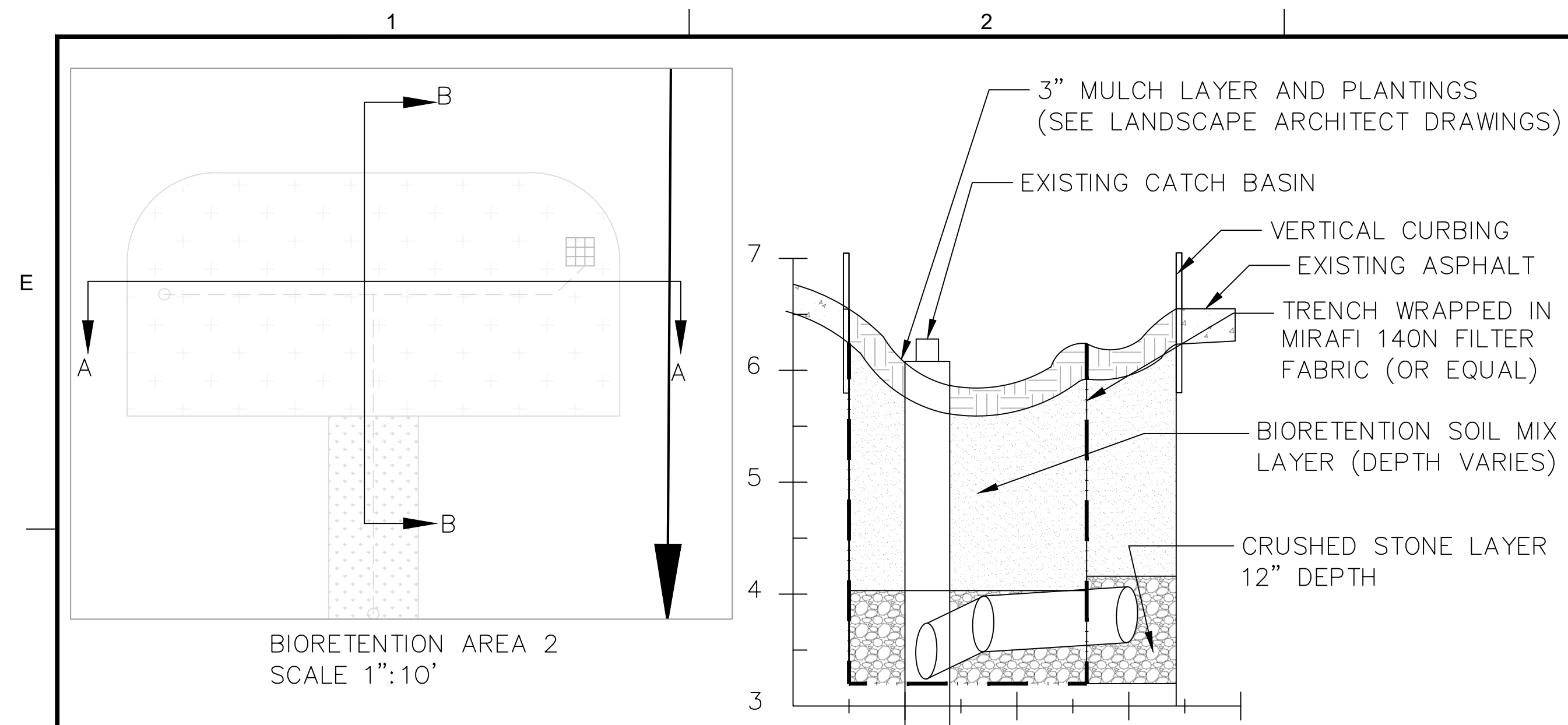
NO.	DATE	DESCRIPTION	BY
1	7/27/21	BLDG FOOTPRINT	JBM

PROJECT NO. 6893-003
CADD FILE
DESIGNED BY JBM
DRAWN BY ANC
CHECKED BY JBM
DATE 4/30/21
DRAWING SCALE AS NOTED

GRAPHIC SCALE

SHEET TITLE
DETAIL SHEET

DRAWING NO.
D-2



- NOTES:
1. VERTICAL CURBING SHALL BE SPACED 6 INCHES EVERY 6 FEET TO ALLOW FOR STORMWATER INFLOW INTO STORMWATER FEATURES.
 2. LANDSCAPE ARCHITECTURE DRAWINGS SHALL TAKE PRECEDENCE ON FINAL LANDSCAPE FEATURES.
 3. CLEANOUTS SHALL BE PROVIDED FOR EACH UNDERDRAIN PIPE.
 4. CATCH BASINS SHALL BE PROTECTED DURING IMPLEMENTATION.



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NYE LUBRICANTS BUILDING 3 EXPANSION PROJECT

OWNER
NYE LUBRICANTS, INC.
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FAIRHAVEN, MA

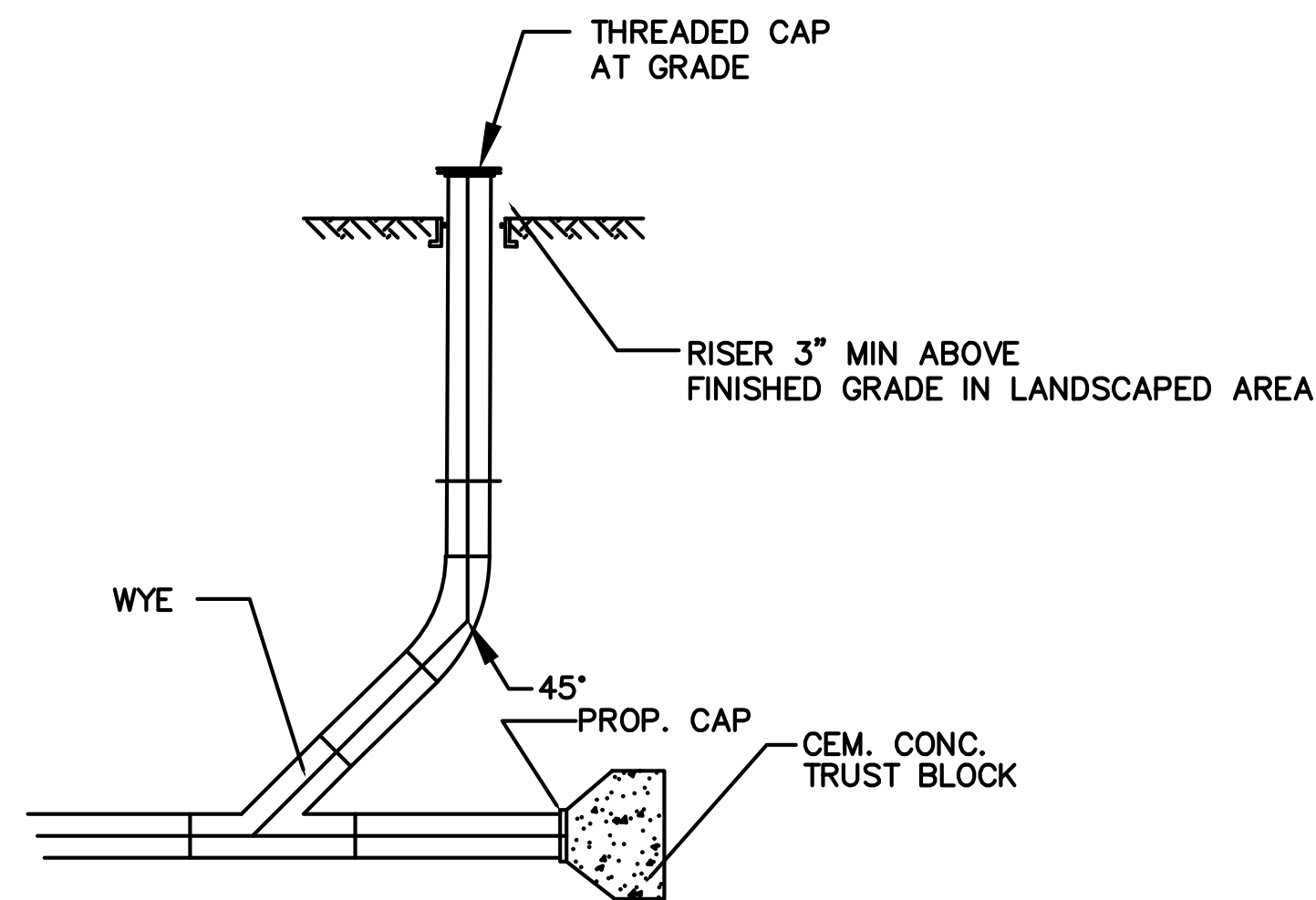
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NO.	DATE	DESCRIPTION	BY

PROJECT NO.	6893-003
CADD FILE	
DESIGNED BY	JBM
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CHECKED BY	JBM
DATE	4/30/21
DRAWING SCALE	AS NOTED

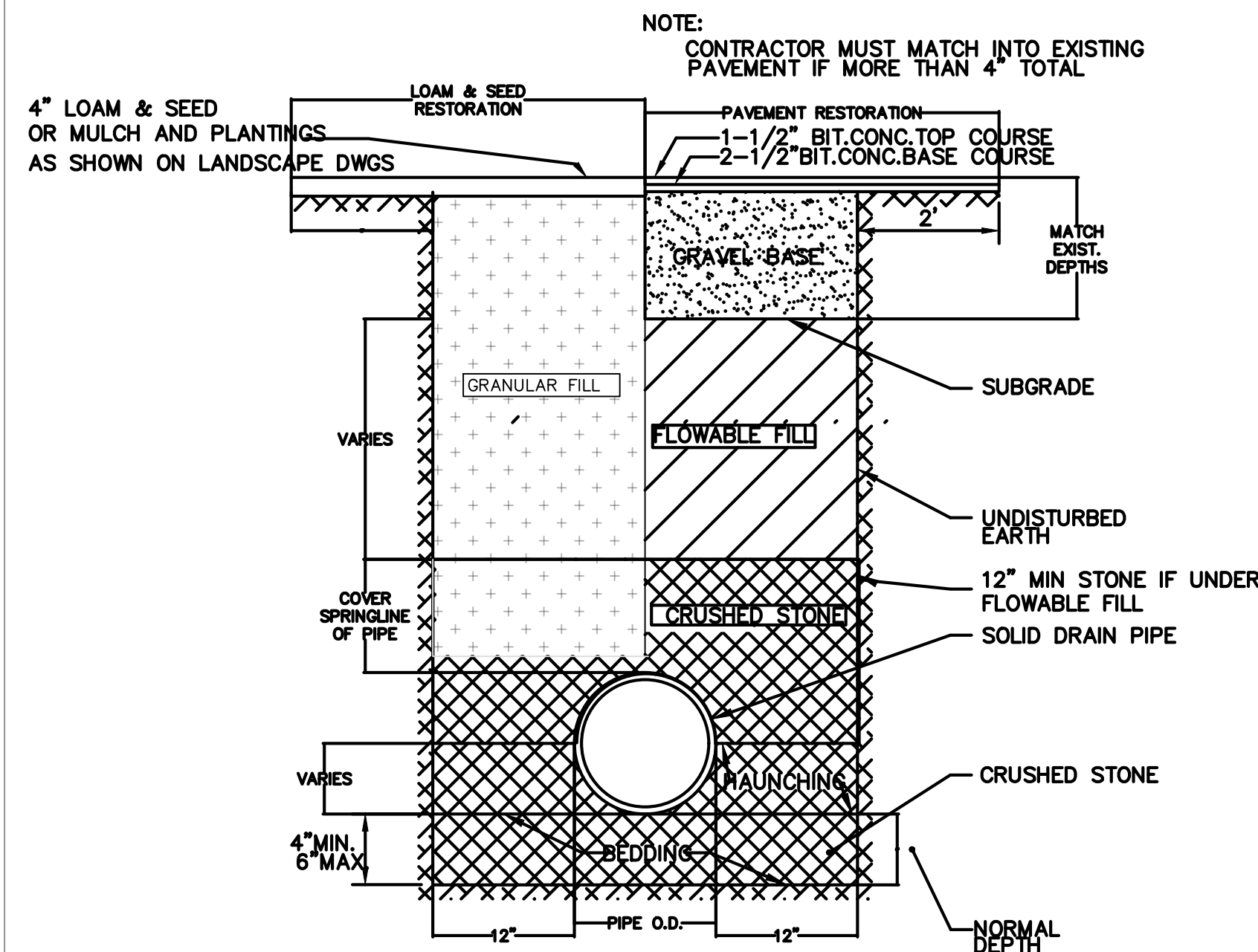
GRAPHIC SCALE

SHEET TITLE
DETAIL SHEET

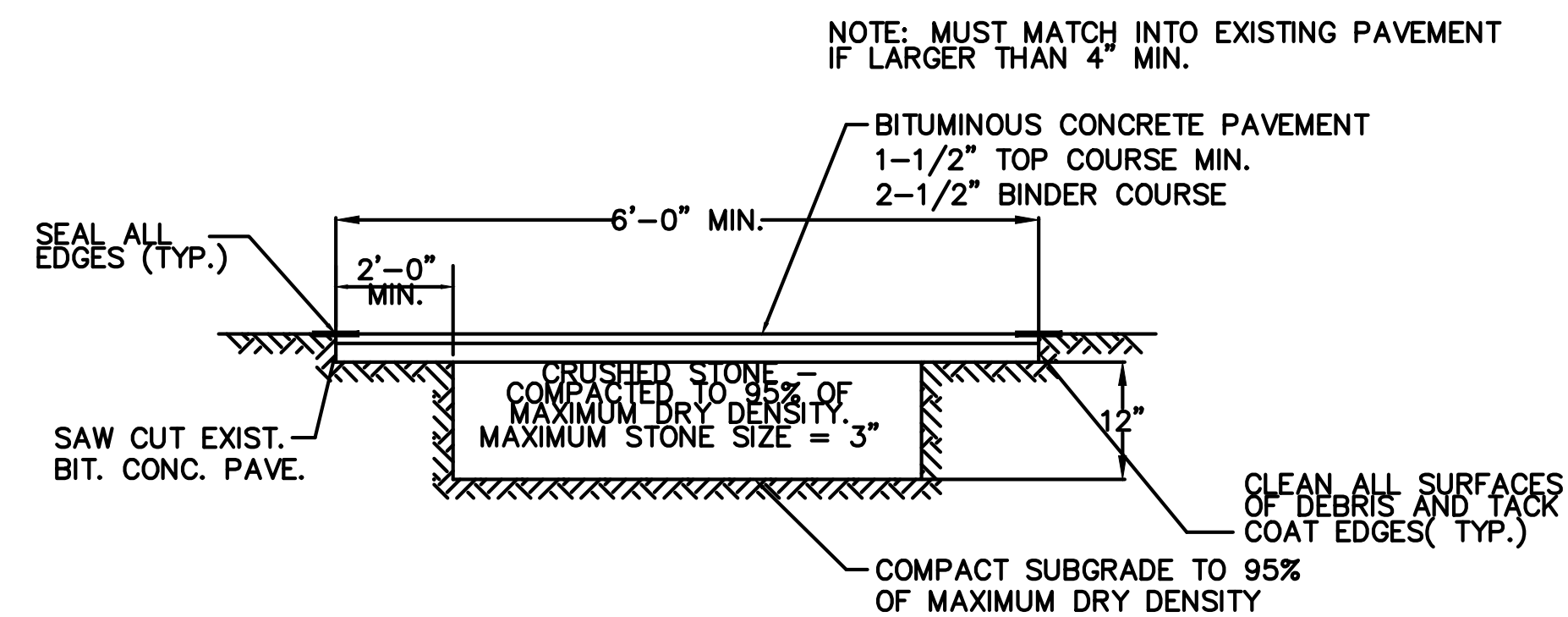
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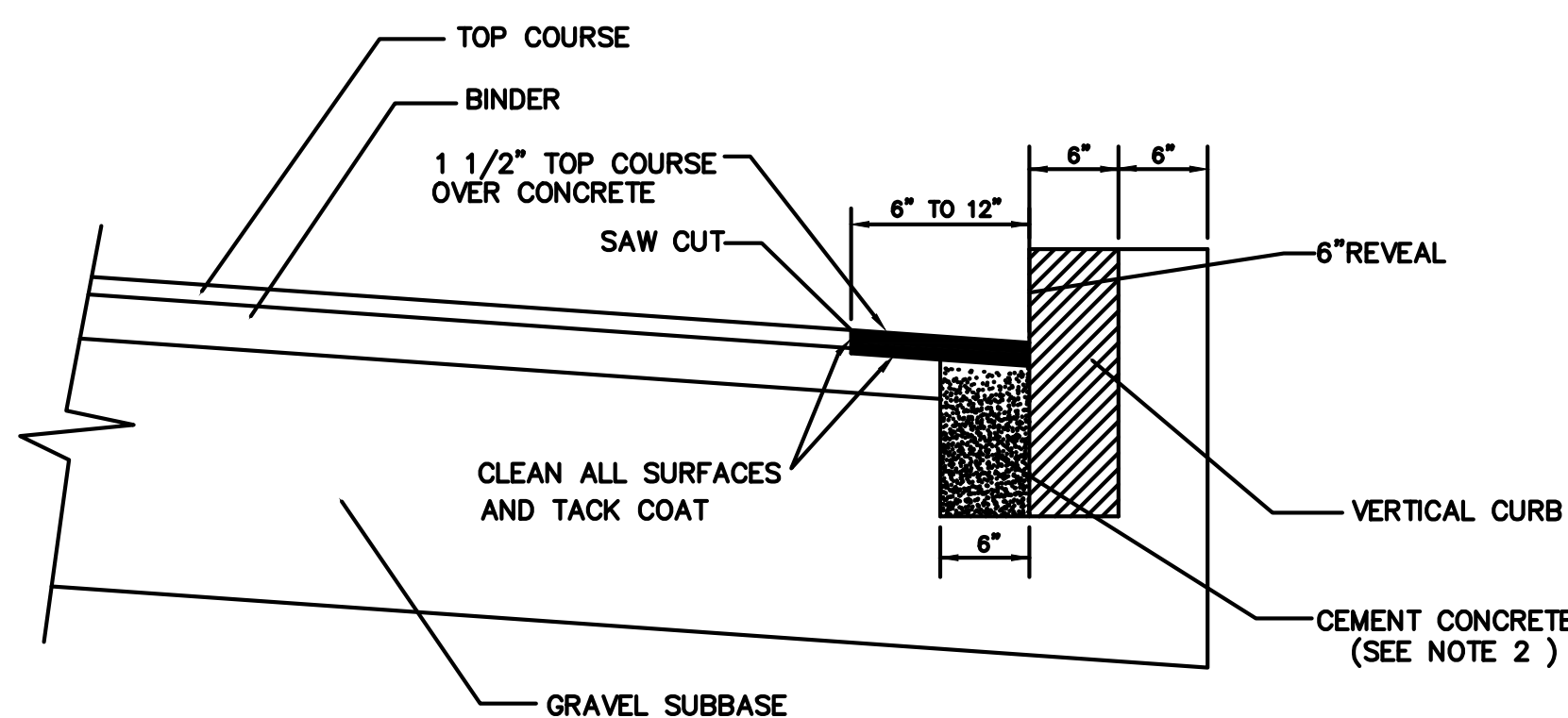
LANDSCAPE AREA DRAIN CLEAN OUT
NOT TO SCALE



TYPICAL TRENCH DETAIL
(ALL PIPES LESS THAN 20" DIA.)
NOT TO SCALE



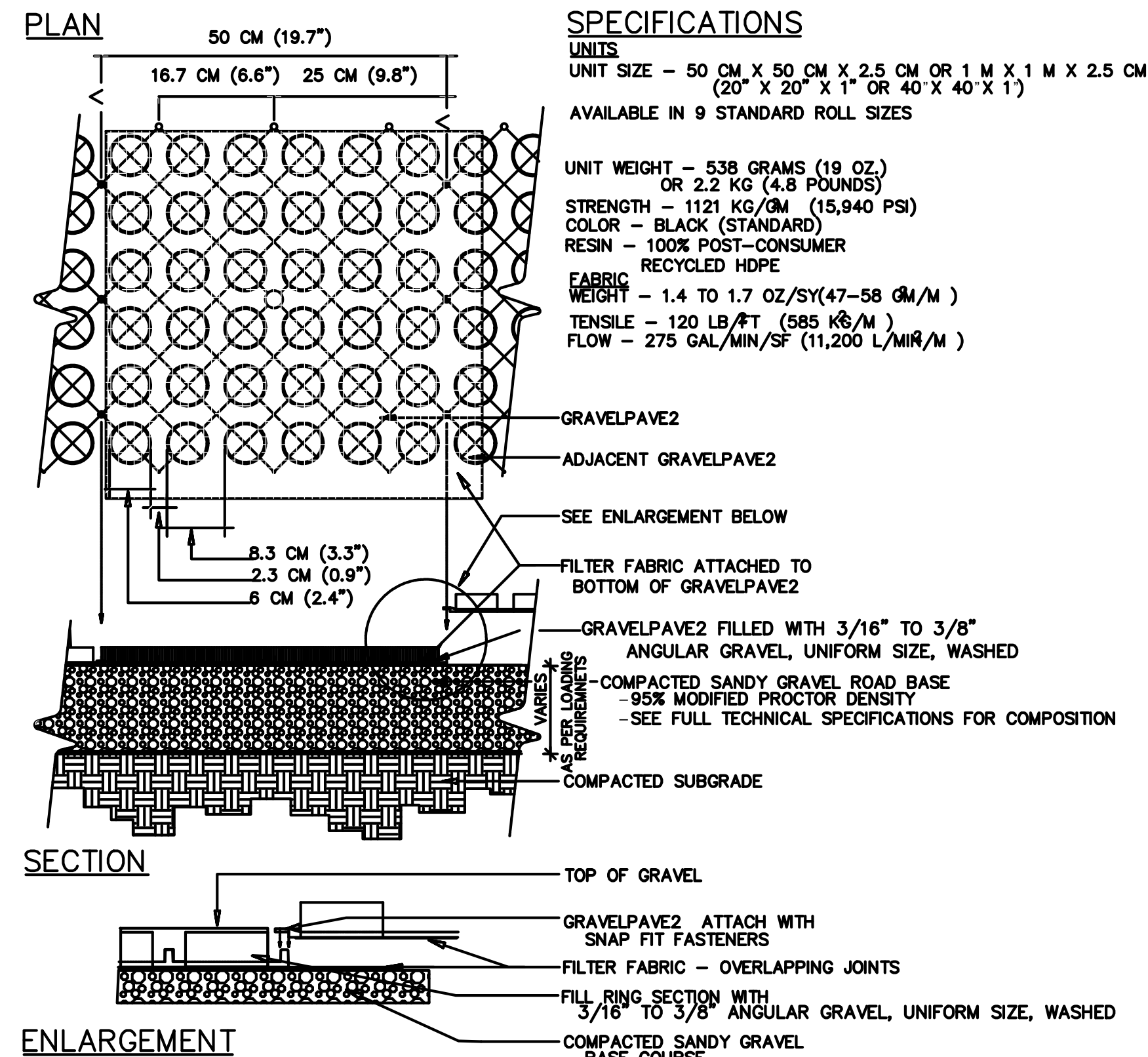
TYPICAL BITUMINOUS CONCRETE PAVEMENT RESTORATION DETAIL
NOT TO SCALE



METHOD OF SETTING VERTICAL CURB
NOT TO SCALE

* PROCEDURE DESCRIBED HEREIN IS APPLICABLE ONLY IF CURB IS TO BE SET AFTER BASE AND/OR BINDER COURSES ARE IN PLACE OTHERWISE CEMENT CONCRETE WILL BE ELIMINATED AND GRAVEL BROUGHT TO BOTTOM OF BASE COURSE.

- NOTES:**
1. SAW CUT NEATLINE 6" TO 12" FROM CURB LINE AND REMOVE BINDER, BASE COURSE AND GRAVEL, REPLACE WITH CEMENT CONCRETE.
 2. ANY CLASS CEMENT CONCRETE THAT IS ACCEPTABLE TO THE DEPT. UNDER SECTION M4 OF THE 1996 STANDARD SPECIFICATIONS, ALL TEST REQUIREMENTS ARE WAIVED. BITUMINOUS CONCRETE IS NOT TO BE USED AS A SUBSTITUTE.
 3. PAYMENT FOR CEMENT CONCRETE WILL BE INCLUDED IN THE PRICE PER LINEAL FOOT OF CURBING.



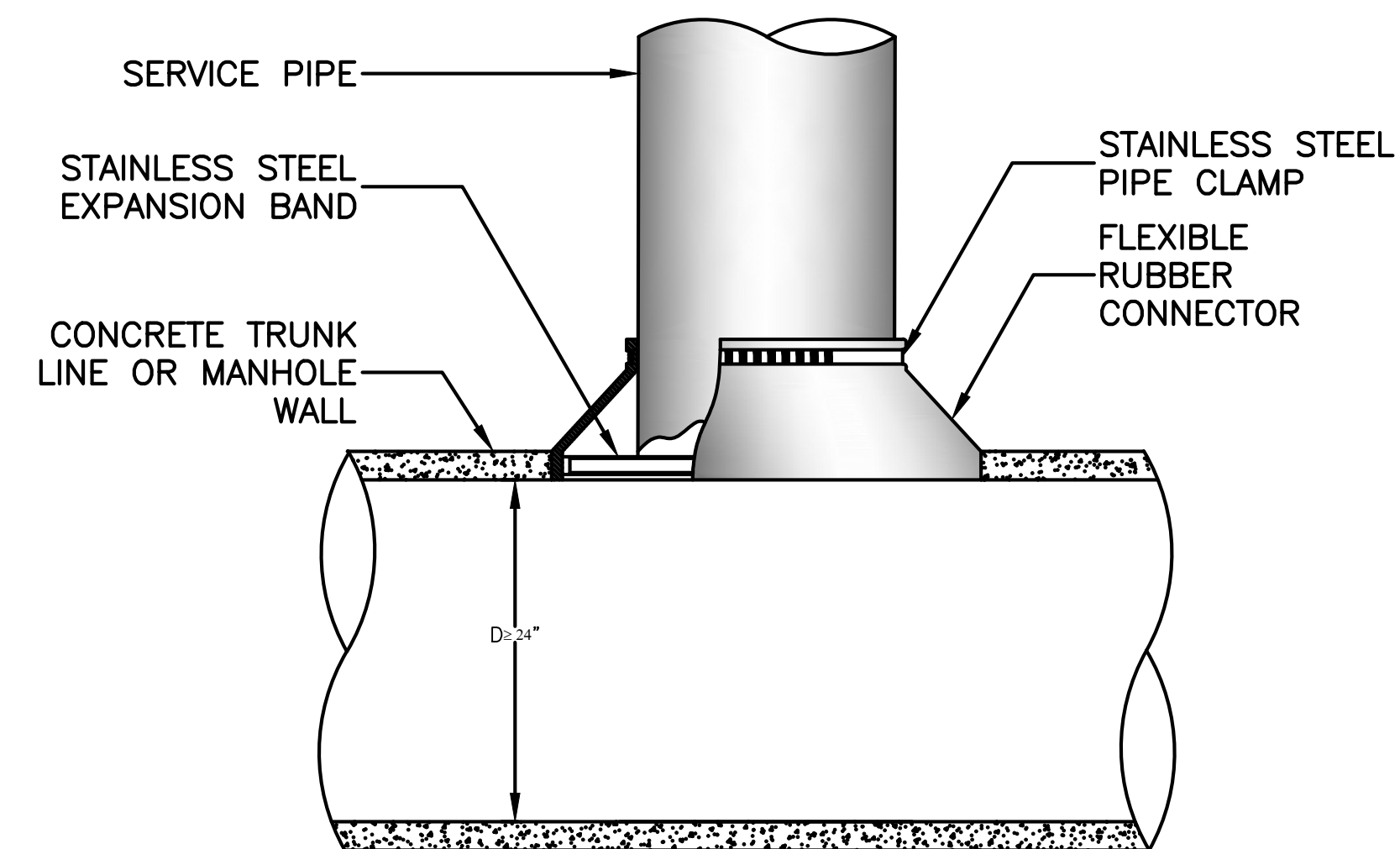
TYPICAL GRAVELPAVE2 DETAIL

NOT TO SCALE

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Invisible Structures, Inc.
GVDET18.DWG



- NOTES:**
1. OPENING IN CONCRETE WALL SHALL BE CORED USING HIGH SPEED DIAMOND DRILL
 2. ALL METAL FIXTURES SHALL BE OF STAINLESS STEEL
 3. SERVICE LINE SHALL BE FLUSH WITH THE INSIDE OF THE CONCRETE PIPE OR WALL
 4. IF TRUNK LINE DIAMETER IS LESS THAN 24" THEN A SADDLE TYPE CONNECTION WILL BE USED

TYPICAL FIELD CONNECTION DETAIL
NOT TO SCALE



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DRAWING SCALE	AS NOTED

GRAPHIC SCALE

SHEET TITLE
DETAIL SHEET

DRAWING NO.
D-4

13 OF 13

PLOT SCALE 1/16"=1'-0"