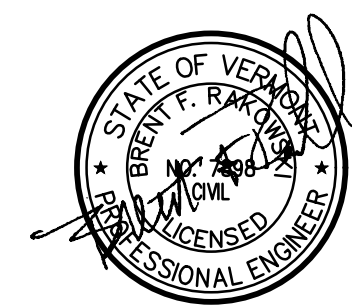
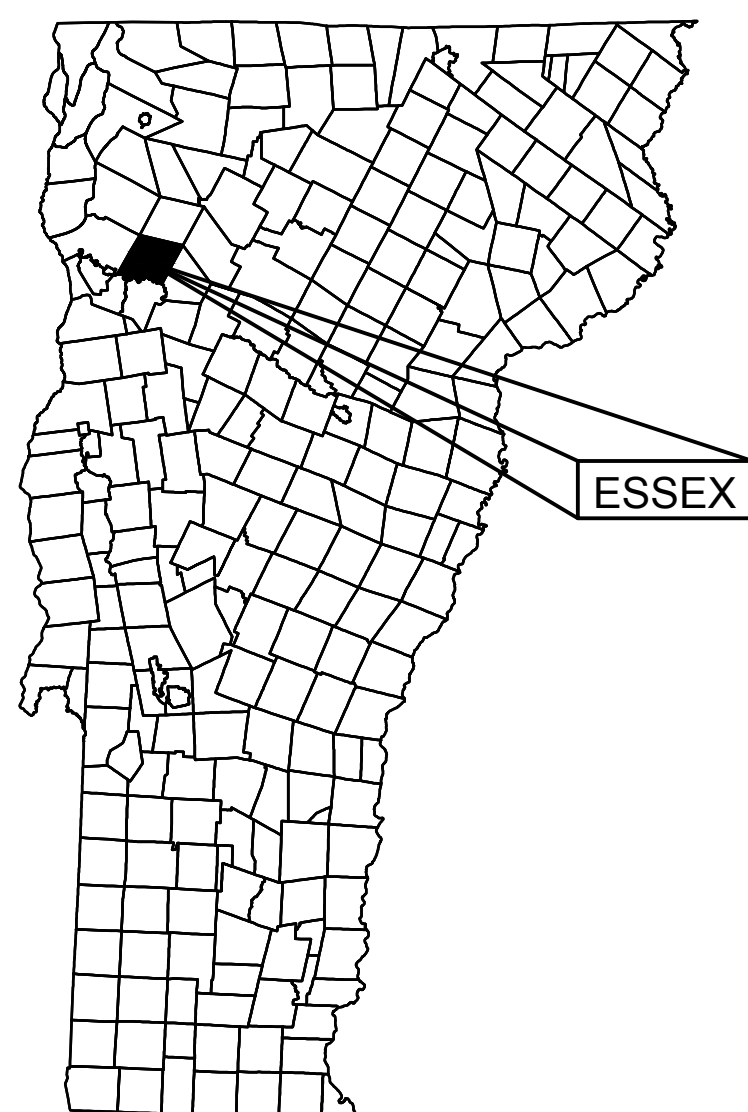


ESSEX HIGH SCHOOL

STORMWATER IMPROVEMENTS

ESSEX JUNCTION, VERMONT

2024



PERMITTING SET

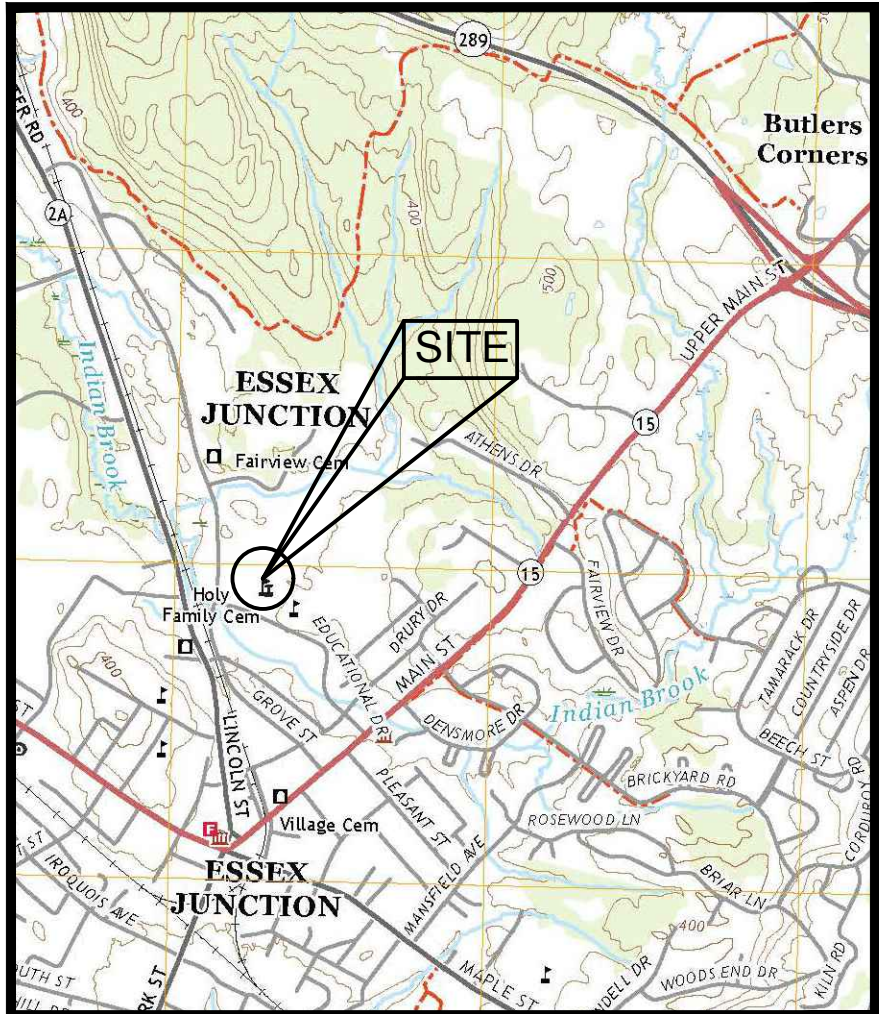


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PROJECT LOCATION MAP

GENERAL NOTES

- THESE PLANS ARE BASED ON A TOPOGRAPHIC SURVEY CONDUCTED WITH A LEICA GNSS RTK ROVER GPS UNIT ON 4/25/2024 & 4/26/2024 BY OTTER CREEK ENGINEERING, INC.
- IN THE PREPARATION OF THESE PLANS, DATA FROM THE FOLLOWING SOURCES WAS INCORPORATED:
 - GAS MAIN LOCATION BASED ON AS-BUILT PLANS PROVIDED BY VERMONT GAS COMPANY, DATED 1999.
 - PLAN TITLED "ESSEX COMMUNITY EDUCATIONAL CENTER, 2 EDUCATIONAL DRIVE, ESSEX JUNCTION, VERMONT", PREPARED BY KREBS & LANSING CONSULTING ENGINEERS, INC., COLCHESTER, VERMONT, DATED 5/4/06, REVISED 8/7/06.
 - TAX MAP PARCEL INFORMATION DOWNLOADED FROM VERMONT CENTER FOR GEOGRAPHIC INFORMATION (VGI) AND ADJUSTED BASED ON MONUMENTATION FOUND IN THE FIELD.
- ELEVATION IS BASED ON NAVD 88.
- COORDINATE SYSTEM IS BASED ON VERMONT STATE PLANE NAD 83, US SURVEY FEET.
- REFER TO LEGEND LOCATED ON THIS SHEET FOR SYMBOL DESIGNATIONS.
- ALL UNDERGROUND UTILITIES ARE SHOWN AS APPROXIMATE LOCATIONS.
- FOR CLARITY, OVERHEAD LINES ARE NOT SHOWN.
- THIS IS NOT A BOUNDARY SURVEY.

ABBREVIATIONS

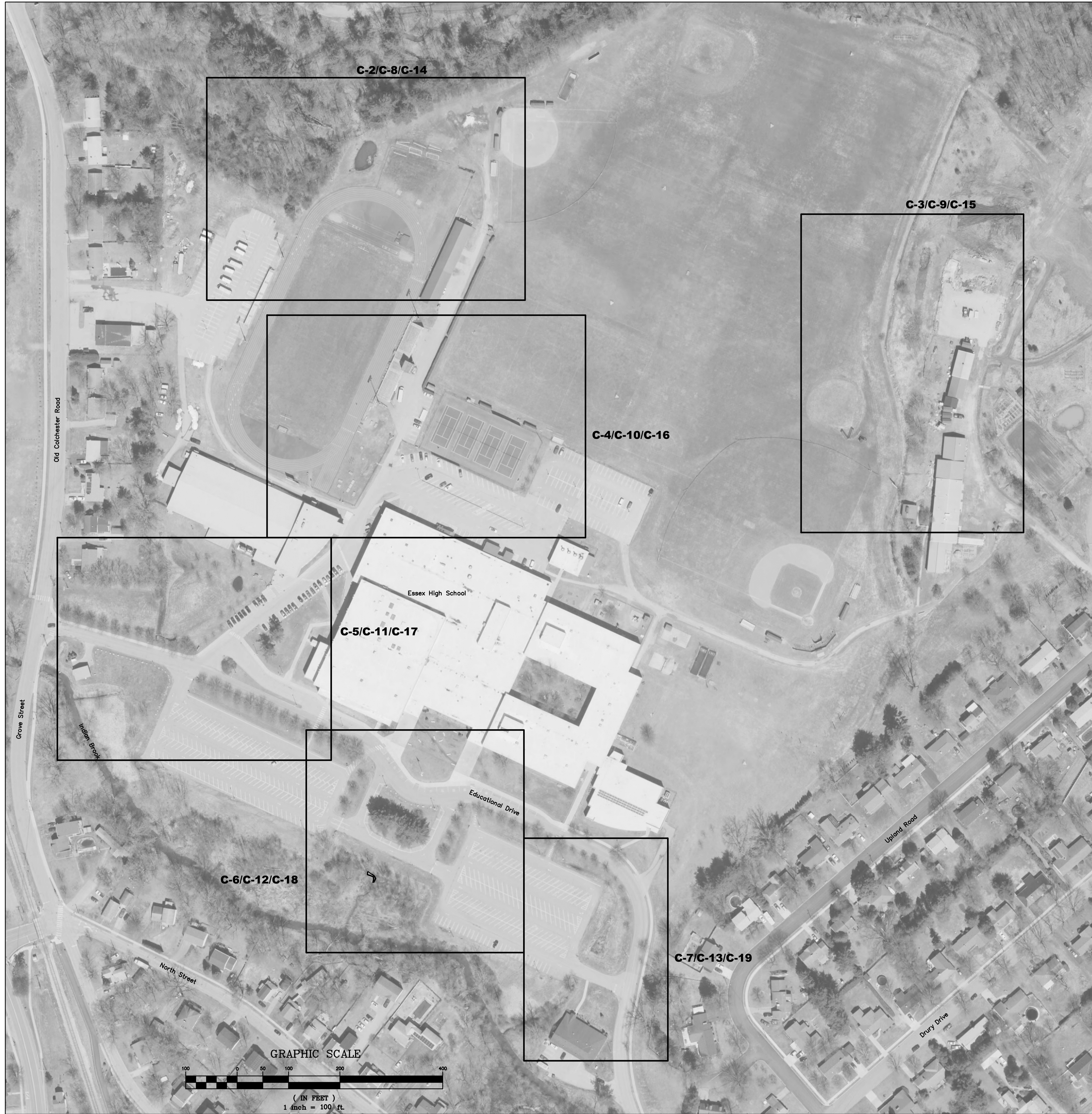
| | | | |
|------|---------------------------------|--------|--------------------------|
| CI | - CAST IRON | MH | - MANHOLE |
| CB | - CATCH BASIN | MJ | - MECHANICAL JOINT |
| CL | - CLASS | NFL | - NOT FIELD LOCATED |
| CMP | - CORRUGATED METAL PIPE | NLTD | - NO LEDGE TO DEPTH |
| CS | - CURB STOP | NTS | - NOT TO SCALE |
| DI | - DUCTILE IRON | PVC | - POLYVINYL CHLORIDE |
| DMH | - DRAIN MANHOLE | ROW | - RIGHT OF WAY |
| FL | - FLANGE | SCH | - SCHEDULE |
| FM | - FORCE MAIN | SD | - STORM DRAIN |
| FRP | - FIBERGLASS REINFORCED PLASTIC | SMH | - SEWER MANHOLE |
| GPM | - GALLONS PER MINUTE | TBM | - TEMPORARY BENCHMARK |
| GSP | - GALVANIZED SERVICE PIPE | TBA | - TO BE ABANDONED |
| GV | - GATE VALVE | TBR | - TO BE REMOVED |
| HDPE | - HIGH DENSITY POLYETHYLENE | TMH | - TELEPHONE MANHOLE |
| INV | - INVERT | WMH | - WATER MANHOLE |
| IP | - IRON PIPE/PIN | UE | - UNDERGROUND ELECTRIC |
| IPF | - IRON PIPE/PIN FOUND | U.N.O. | - UNLESS NOTED OTHERWISE |

| SHEET | TITLE | REVISION | DATE |
|-------|------------------------------|----------|------|
| I-1 | INDEX SHEET | - | - |
| C-1 | QUANTITY SHEET | - | - |
| C-2 | EXISTING AND DEMOLITION PLAN | - | - |
| C-3 | EXISTING AND DEMOLITION PLAN | - | - |
| C-4 | EXISTING AND DEMOLITION PLAN | - | - |
| C-5 | EXISTING AND DEMOLITION PLAN | - | - |
| C-6 | EXISTING AND DEMOLITION PLAN | - | - |
| C-7 | EXISTING AND DEMOLITION PLAN | - | - |
| C-8 | PROPOSED SITE PLAN | - | - |
| C-9 | PROPOSED SITE PLAN | - | - |
| C-10 | PROPOSED SITE PLAN | - | - |
| C-11 | PROPOSED SITE PLAN | - | - |
| C-12 | PROPOSED SITE PLAN | - | - |
| C-13 | PROPOSED SITE PLAN | - | - |
| C-14 | SOILS MANAGEMENT PLAN | - | - |
| C-15 | SOILS MANAGEMENT PLAN | - | - |
| C-16 | SOILS MANAGEMENT PLAN | - | - |
| C-17 | SOILS MANAGEMENT PLAN | - | - |
| C-18 | SOILS MANAGEMENT PLAN | - | - |
| C-19 | SOILS MANAGEMENT PLAN | - | - |
| C-20 | NOTES AND DETAILS | - | - |
| C-21 | NOTES AND DETAILS | - | - |
| C-22 | NOTES AND DETAILS | - | - |
| C-23 | NOTES AND DETAILS | - | - |

LEGEND

| | |
|-----|-----------------------------|
| --- | boundary line/r.o.w. |
| --- | easement |
| --- | road/parking/drive (paved) |
| --- | road/parking/drive (gravel) |
| --- | tree line/hedge row |
| --- | 1 foot contour |
| --- | 5 foot contour |
| --- | stone wall |
| --- | underground electric |
| --- | overhead utility |
| --- | underground telephone |
| --- | gas main |
| --- | storm drain |
| --- | water main |
| --- | sanitary sewer |
| --- | sewer force main |
| --- | liquid propane |
| --- | signs |
| --- | light pole |
| --- | utility pole |
| --- | guy |
| --- | gate valve |
| --- | curb stop |
| --- | hydrant |
| --- | iron pipe found |
| --- | catch basin |
| --- | sewer manhole |
| --- | deciduous tree |
| --- | coniferous tree |
| --- | shrub, bush |
| --- | traverse station |
| --- | temporary benchmark |
| --- | FINISH GRADE |
| --- | STORM DRAIN |
| --- | CATCH BASIN |
| --- | DRAIN MANHOLE |
| --- | CLEANOUT |
| --- | UNDERDRAIN |
| --- | SILT FENCE |
| --- | PROJECT DEMARCATION FENCE |

NOTE:
TEXT DENOTING EXISTING ITEMS IS SHOWN IN LOWER CASE, AND
TEXT DENOTING PROPOSED ITEMS IS UPPERCASE AND BOLD.

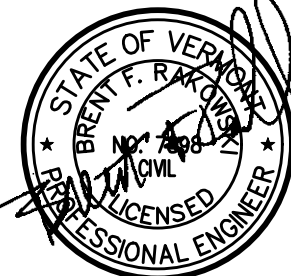


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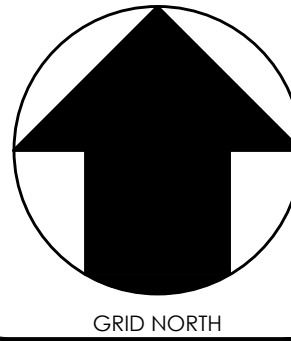
STAMP AND SIGNATURE:



DESIGN ENGINEER

THESE DRAWINGS SHALL NOT
BE ALTERED IN ANY WAY
WITHOUT THE WRITTEN
APPROVAL OF THE ENGINEER.
ANY REVISIONS SHALL BE
MADE BY THE ENGINEER AND
NOTED IN THE REVISION
BLOCK. © 2024

OTTER CREEK ENGINEERING, INC.



ESSEX HIGH SCHOOL STORMWATER IMPROVEMENTS ESSEX JUNCTION, VERMONT

PERMITTING

DATE ISSUED: 6/28/2024

REVISIONS:

DRAWN BY: HB

CHECKED BY: BFR

SCALE: 1"=100'

PROJECT NO.: 1108.014

CADD FILE: 1108-014 I-1

TITLE:

INDEX SHEET

DRAWING NO.

I-1

QUANTITY SHEET

| TOTALS | | DESCRIPTIONS | | |
|-------------|-------|--------------|--|-------------|
| GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER |
| 10 | | LS | CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS | 201.10 |
| | | | | |
| 10 | | CY | SOLID ROCK EXCAVATION | 203.16 |
| | | | | |
| 1 | | LS | MOBILIZATION / DEMOBILIZATION | 635.11 |
| | | | | |
| 1 | | LS | SPECIAL PROVISION (STORMWATER TREATMENT PRACTICES) | 900.802 |

900.802 SPECIAL PROVISION (STORMWATER IMPROVEMENTS)

DESCRIPTION: THIS WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING REQUIRED FOR THE CONSTRUCTION OF STORMWATER IMPROVEMENTS AND ALL ASSOCIATED WORK AS INDICATED ON THE DRAWINGS. THIS LIST IS NOT INTENDED TO BE ALL INCLUSIVE AND MAY NOT INCLUDE ALL ITEMS. WORK UNDER THIS ITEM INCLUDES, BUT IS NOT LIMITED TO:

- CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS,
- COMMON EXCAVATION,
- MUCK EXCAVATION,
- REMOVAL OF STRUCTURE(S)
- SUPPLY, PLACEMENT, AND COMPACTION OF BEDDING AND ENVELOPE, GRANULAR BACKFILL, EMBANKMENT AND ALL OTHER BORROW MATERIALS, UNLESS SPECIFICALLY DESCRIBED IN ANOTHER ITEM,
- HANDLING OF WATER,
- SHEETING, BRACING, AND TRENCH PROTECTION,
- DEWATERING OF EXCAVATION AND TRENCH,
- EXCAVATION, HAULING AND DISPOSAL OF SURPLUS MATERIALS,
- FURNISH AND INSTALL STONE FILL AND RIPRAP,
- ROCK BORROW
- STRUCTURE EXCAVATION,
- TRENCH EXCAVATION OF EARTH,
- EARTH BORROW,
- GRANULAR BORROW,
- BITUMINOUS CONCRETE PAVING,
- EMULSIFIED ASPHALT,
- CAST-IN-PLACE CONCRETE CURBING,
- FILTER FABRIC/GEOTEXTILE FOR UNDERDRAIN,
- GRANULAR BACKFILL FOR STRUCTURES,
- MODIFICATIONS TO EXISTING STRUCTURES AND PIPING,
- CULVERTS AND STORM DRAINS,
- DROP INLETS, CATCH BASINS, AND MANHOLES WITH CAST IRON GRATE/COVER,
- CRUSHED STONE BEDDING,
- GRAVEL WETLAND PLANTING SOIL,
- GRAVEL WETLAND PLANTINGS AND PLANTING MIX,
- PEASTONE GRAVEL
- TURF ESTABLISHMENT,
- TOPSOIL, SEED, HAY MULCH
- SOIL RESTORATION,
- PLANTINGS,
- FURNISH, INSTALL, AND MAINTAIN EROSION PREVENTION AND SEDIMENT CONTROL MEASURES.
- SYNTEEN SR18 SOIL REINFORCEMENT GEOGRID
- FURNISH AND INSTALL A COMPLETE AND FUNCTIONAL STORMTECH CHAMBER SYSTEM AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR APPROVED EQUAL, AND ALL ASSOCIATED COMPONENTS.
- FURNISH AND INSTALL A COMPLETE AND FUNCTIONAL R-TANK STORMWATER DETENTION SYSTEM AS MANUFACTURED BY ACF ENVIRONMENTAL, OR APPROVED EQUAL, AND ALL ASSOCIATED COMPONENTS.

THE WORK UNDER THIS SECTION SHALL BE PERFORMED IN ACCORDANCE WITH THIS SPECIAL PROVISION, THE DRAWINGS, MANUFACTURER'S RECOMMENDATIONS, AND THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018.

MATERIALS. MATERIALS SHALL MEET THE REQUIREMENTS VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018, UNLESS OTHERWISE SPECIFIED.

GRAVEL WETLAND PLANTING SOIL SHALL BE:

- (a) A LAYER OF ORGANIC SOIL WITH MINIMUM THICKNESS OF 8 INCHES PLACED LEVEL ACROSS THE TREATMENT PRACTICE.
- (b) PLANTING SOIL SHALL HAVE A LOW HYDRAULIC CONDUCTIVITY IN THE RANGE OF 0.1 FEET PER DAY TO 0.01 FOOT PER DAY OR WITH A SOIL TEXTURE CONFORMING TO HYDROLOGIC SOIL GROUP D.
- (c) SOIL SHALL BE FREE FROM: CLAY LUMPS, STONES, ROOTS, STICKS, STUMPS, PEAT, WEEDS, SOD, BRUSH, NOXIOUS SEEDS, OR FOREIGN MATERIALS.
- (d) UTILIZATION OF ONSITE MATERIAL IS ENCOURAGED.
- (e) SOIL AMENDMENTS ARE ACCEPTABLE ON APPROVAL BY THE ENGINEER.
- (f) WETLAND PLANTING SOIL SHALL BE TESTING IN ACCORDANCE WITH THE REFERENCED STANDARD AND AS DESCRIBED BELOW:
 1. TESTING MUST BE DONE ON THE COMBINED FINAL MIX AND ALL CONSTITUENTS.
 2. MIXES SHALL HAVE A PHOSPHORUS SATURATION RATIO (PSR) LESS THAN OR EQUAL TO 0.10.
 - A. PSR SHALL BE DETERMINED USING THE FOLLOWING PROTOCOL:
 1. SAMPLES ARE TO BE AIR DRIED AND SIEVED THROUGH 2mm PRIOR TO TESTING
 2. AIR-DRIED, SIEVED SOIL SAMPLES ARE TO THEN BE EXTRACTED WITH THE MEHLICH-3 SOLUTION (0.2 M CH₃COOH + 0.25 M NH₄NO₃ + 0.015 M NH₄F + 0.013 M HNO₃ + 0.001 M EDTA) BY SHAKING A SOIL-SOLUTION SUSPENSION FOR 5 MINUTES AT A 1:10 RATIO (SOIL MASS IN GRAMS:SOLUTION VOLUME IN mL), FOLLOWED BY FILTERING TO REMOVE PARTICLES (PORE SIZE OF 2µm IS RECOMMENDED, MAX PORE SIZE = 8µm).
 3. EXTRACTS FROM THE MEHLICH-3 PROCEDURE ARE TO BE ANALYZED FOR P, Fe, AND AI BY ICP-OES.
 4. THE PHOSPHOROUS SATURATION RATIO (PSR) IS THEN CALCULATED AS FOLLOWS:

$$PSR = \frac{\left(\frac{P_{M3}}{31}\right)}{\left(\frac{Fe_{M3}}{56}\right) + \left(\frac{Al_{M3}}{27}\right)}$$

WHERE,

- P_{M3} = MEHLICH-3 P IN mg P PER kg DRY SOIL
- Fe_{M3} = MEHLICH-3 FE IN mg Fe PER kg DRY SOIL
- Al_{M3} = MEHLICH-3 AI IN mg Al PER kg DRY SOIL

MEHLICH-3 EXTRACTIONS FOLLOW THE ABOVE PROTOCOL. (FOR MORE DETAILS, SEE WOLF AND BEEGLE 2009). OTHER SOIL TEST EXTRACTIONS, INCLUDING MODIFIED MORGAN TESTS, OXALATE EXTRACTIONS, WATER EXTRACTIONS, OR EXTRACTIONS USED TO QUANTIFY TOTAL ELEMENTS, ARE NOT ACCEPTABLE FOR THIS REQUIREMENT.

IN CASES WHERE INGREDIENT MIXING HAS NOT YET OCCURRED, INGREDIENTS CAN BE MIXED AT THE INTENDED VOLUMETRIC PROPORTIONS IN A SMALL BATCH (AT LEAST ONE QUART IN VOLUME) FOR TESTING PURPOSES. IF THIS SMALL BATCH TESTING APPROACH IS TAKEN, THE FINAL MATERIAL TO BE USED DURING INSTALLATION MUST BE RETESTED TO CONFIRM

- (a) PHOSPHOROUS TEST RESULTS SHALL BE MAINTAINED WITH PERMITTING RECORDS
- (b) PLANTING SOIL SHALL NOT CONTAIN TOXIC MATERIAL HARMFUL TO PLANT GROWTH.
- (c) SUCH AS ZERO-VALENT IRON AND/OR DRINKING WATER TREATMENT RESIDUALS (ALUM) TO ENHANCE PHOSPHORUS SORPTION AS SPECIFIED BY THE ENGINEER.

PEASTONE SHALL COMPLY WITH GRADATION REQUIREMENTS OF TABLE 704.11A

GRAVEL WETLAND PLANTINGS SHALL CONSIST OF PLANT SPECIES NATIVE TO VERMONT.

PLANTING SOIL

- (d) PLANTING SOIL SHALL CONSIST OF UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) SAND TO LOAMY SAND CLASSIFICATION.
- (e) PERMEABILITY SHALL BE IN THE RANGE OF 0.5 FEET PER DAY TO 1.0 FOOT PER DAY.

- (f) SOIL SHALL BE FREE FROM: CLAY LUMPS, STONES, ROOTS, STICKS, STUMPS, PEAT, WEEDS, SOD, BRUSH, NOXIOUS SEEDS, OR FOREIGN MATERIALS.

- (g) PLANTING SOIL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

| SIEVE NO. | PERCENTAGE BY WEIGHT PASSING SQUARE MESH SIEVE |
|-----------|--|
| NO. 4 | 100 |
| NO. 10 | 95 |
| NO. 40 | 15-18 |
| NO. 200 | 3-7 |
| NO. 200 | 0-2 |

- (a) PLANTING SOIL SHALL BE TESTED AND MEET THE FOLLOWING REQUIREMENTS:

1. SOIL REACTION: PH OF 5.5 TO 6.5.
2. ORGANIC WATER 3% TO 5% BY VOLUME
3. FOR PRACTICES WITH UNDERDRAIN PIPE: AVAILABLE PHOSPHOROUS LESS THAN 0.2%

- (a) PLANTING SOIL SHALL NOT CONTAIN TOXIC MATERIAL HARMFUL TO PLANT GROWTH.

- (b) SOIL AMENDMENTS SUCH AS ZERO-VALENT IRON AND/OR DRINKING WATER TREATMENT RESIDUALS (ALUM) TO ENHANCE PHOSPHORUS SORPTION AS SPECIFIED BY THE ENGINEER.

STORMTECH CHAMBER SYSTEM AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC., AND ALL ASSOCIATED COMPONENTS.

R-TANK STORMWATER DETENTION SYSTEM AS MANUFACTURED BY ACF ENVIRONMENTAL AND ALL ASSOCIATED COMPONENTS.

SUBMITTALS: PRIOR TO DELIVERY AND CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, MATERIAL SUBMITTALS AND FABRICATION DRAWINGS IN ACCORDANCE WITH SECTION 105.

CONTRACTOR SHALL PROVIDE A COMPLETE SUBMITTAL PACKAGE TO INCLUDE ALL COMPONENTS OF THE BIOSCAPE FILTRATION SYSTEM INCLUDING, BUT NOT LIMITED TO COMPONENTS, LAYOUT, DETAILS, ELEVATIONS, AND MANUFACTURER INSTALLATION INSTRUCTIONS FOR REVIEW BY THE ENGINEER.

CONTRACTOR SHALL PROVIDE A COMPLETE SUBMITTAL PACKAGE TO INCLUDE ALL COMPONENTS OF THE ADS STORMTECH CHAMBER SYSTEM INCLUDING, BUT NOT LIMITED TO COMPONENTS, LAYOUT, DETAILS, ELEVATIONS, AND MANUFACTURER INSTALLATION INSTRUCTIONS FOR REVIEW BY THE ENGINEER.

CONTRACTOR SHALL PROVIDE A COMPLETE SUBMITTAL PACKAGE TO INCLUDE ALL COMPONENTS OF THE R-TANK STORMWATER DETENTION SYSTEM INCLUDING, BUT NOT LIMITED TO, COMPONENTS, LAYOUT, DETAILS, ELEVATIONS, AND MANUFACTURER INSTALLATION INSTRUCTIONS FOR REVIEW BY THE ENGINEER.

CONTRACTOR SHALL SUBMIT TO THE ENGINEER, GRAVEL WETLAND PLANTING SOIL MIX DESIGN, PHOSPHORUS TEST RESULTS, AND DESIGN MIX FOR GRAVEL WETLAND.

PHOSPHOROUS TEST RESULTS SHALL BE MAINTAINED WITH PERMITTING RECORDS.

CONSTRUCTION REQUIREMENTS:

GENERAL:

- (a) THE STORMWATER IMPROVEMENTS AND TREATMENT PRACTICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS AND MANUFACTURER'S RECOMMENDATIONS.
- (b) STORMWATER IMPROVEMENTS AND TREATMENT PRACTICE AREAS SHOULD BE FULLY PROTECTED BY SILT FENCE OR CONSTRUCTION FENCING DURING CONSTRUCTION TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT.
- (c) DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER THE CONTRIBUTING PEROUS DRAINAGE AREAS, AND CONTRIBUTING IMPEROUS SURFACES SHALL BE STABILIZED BEFORE RUNOFF SHALL BE PERMITTED TO ENTER THE STORMWATER IMPROVEMENTS. TEMPORARY BLOCKING OF CURB OR OTHER INLETS MAY BE NECESSARY WHILE THE STORMWATER IMPROVEMENTS IS BEING CONSTRUCTED.
- (d) CONSTRUCTION EQUIPMENT SHALL WORK FROM THE SIDES OF TREATMENT PRACTICE AREAS, WHERE POSSIBLE, TO LIMIT COMPACTION OF NATIVE SOILS.
- (e) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE UNLOADING, STORING, HAULING, AND DISTRIBUTION OF ALL MATERIALS. ALL MATERIALS THAT ARE DAMAGED, DESTROYED, OR LOST DURING AND AFTER UNLOADING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

STORAGE OF MATERIAL:

- (a) STOCKPILE MATERIAL WITHOUT INTERMIXING. PLACE, GRADE, AND SHAPE STOCKPILES TO DRAIN SURFACE WATER.
- (b) PROVIDE EROSION-CONTROL MEASURES TO PREVENT MIGRATION OF STOCKPILED MATERIAL, DISCHARGE OF SEDIMENT LADEN RUNOFF, AND AIRBORNE DUST FROM BEING TRANSPORTED OFF SITE.
- (c) DO NOT MOVE OR HANDLE MATERIALS WHEN THEY ARE WET OR FROZEN.

SUBGRADE PREPARATION FOR STORMWATER TREATMENT PRACTICES

- (a) NOTIFY THE ENGINEER WHEN EXCAVATIONS HAVE REACHED REQUIRED SUBGRADE.
- (b) IN PLACE SOILS SHALL BE SMEARED OR TAMPED SMOOTH.

FILTER FABRIC INSTALLATION

- (a) INSTALL SPECIFIED FILTER FABRIC AS DEPICTED ON THE PLANS AND IN ACCORDANCE WITH SECTION 649 OF THE REFERENCE STANDARD.

UNDERDRAIN INSTALLATION

- (a) INSTALL SPECIFIED UNDERDRAIN AS DEPICTED ON THE PLANS AND IN ACCORDANCE WITH SECTION 605 OF THE REFERENCE STANDARD.
- (b) NOTIFY ENGINEER PRIOR TO BACKFILL OF UNDERDRAIN PIPING.

GRAVEL BED

- (a) REFER TO SPECIFICATIONS FOR CRUSHED STONE REQUIREMENTS.
- (b) PLACE CRUSHED STONE MATERIAL EVENLY ACROSS WIDTH AND LENGTH OF PRACTICE TO THE DEPTH NOTED ON THE DRAWINGS.
- (c) RAKE CRUSHED STONE MATERIAL TO REMOVE RIDGES, FILL DEPRESSIONS, AND FORM A UNIFORM SURFACE.

PEASTONE GRAVEL

- (a) PLACE REQUIRED PEASTONE ON PREPARED CRUSHED STONE, EVENLY ACROSS WIDTH AND LENGTH.
- (b) RAKE PEA STONE MATERIAL TO REMOVE RIDGES, AND FILL DEPRESSIONS.

PLANTING SOIL FILLING AND GRADING

- (a) PLACE REQUIRED PLANTING SOIL IN LIFTS ON PREPARED SUBGRADE OF PEASTONE GRAVEL EVENLY ACROSS WIDTH AND LENGTH.
- (b) CONTRACTOR SHALL COMPLETE WORK IN A MANNER SO AS TO MINIMIZE COMPACTION OF CRUSHED STONE, PEASTONE GRAVEL, AND PLANTING SOIL.
- (c) PLANTING SOIL SHALL BE PLACED IN LIFTS OF 12 INCHES OR LESS. HEAVY EQUIPMENT SHALL NOT BE USED WITHIN THE GRAVEL WETLAND AREA. SOIL SHALL BE DEPOSITED FROM THE PERIMETER AND SPREAD WITH LIGHT EQUIPMENT SO AS TO MINIMIZE COMPACTION OF SOIL.
- (d) CONTINUE FILLING IN LIFTS TO GRADES, ELEVATIONS AND DIMENSIONS SHOWN ON THE DRAWINGS.
- (e) PROTECT GRAVEL WETLAND AREA FROM COMPACTION, DISTURBANCE, OR CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIALS, REMOVE SOIL MEDIA AND CONTAMINATION; REPLACE CONTAMINATED PLANTING SOIL WITH NEW MATERIAL AS DIRECTED BY ENGINEER.
- (f) INSTALL PLANTING HOLES FOR ANY TREES AND SHRUBS, INSTALL VEGETATION, AND WATER ACCORDINGLY.
- (g) INSTALL PLANT MATERIALS AS SHOWN ON PROJECT DRAWINGS, AND WATER ACCORDINGLY.

ADS STORMTECH CHAMBER SYSTEM

- (a) CONTRACTOR SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.

FOCALPOINT HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM (HPMBS)

- (a) CONTRACTOR SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF SYSTEM.
- (c) INSTALL PLANTING HOLES FOR ANY TREES AND SHRUBS, INSTALL VEGETATION, AND WATER ACCORDINGLY.
- (d) INSTALL PLANT MATERIALS AS SHOWN ON PROJECT DRAWINGS, AND WATER ACCORDINGLY.

R-TANK STORMWATER DETENTION SYSTEM

- (a) CONTRACTOR SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF SYSTEM.

SOIL RESTORATION

- (c) CONTRACTOR SHALL RESTORE SOIL QUALITY TO DISTURBED SOILS THAT WILL NOT BE COVERED BY IMPEROUS SURFACES, INCORPORATED INTO STRUCTURAL STORMWATER IMPROVEMENTS, ATHLETIC FIELDS, OR ENGINEERED STRUCTURAL FILL USING ONE OF THE OPTIONS NOTED ON THE DRAWINGS.
- (b) TESTING SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS AS NOTED ON THE DRAWINGS.
- (c) ENGINEER SHALL WITNESS ALL TESTING. TEST RESULTS SHALL BE MAINTAINED WITH PERMITTING RECORDS.

EROSION PREVENTION AND SEDIMENT CONTROL

- (b) INSTALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS.
- (b) CONTRACTOR SHALL MONITOR EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AND SHALL HAVE THE AUTHORITY TO STOP AND/OR MODIFY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL HAVE EXPERIENCE AND POSSESS THE ABILITY TO OBSERVE, EVALUATE, AND SYNTHESIZE INFORMATION, TO CONSIDER ALTERNATIVES, AND TO PROPOSE APPROPRIATE RECOMMENDATIONS IN A CLEAR, LOGICAL MANNER AS RELATED TO EROSION PREVENTION AND SEDIMENT CONTROL MEASURES.
- (c) CONTRACTOR SHALL COMPLY WITH STATE OF VERMONT LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL.
- (e) THE CONTRACTOR SHALL UTILIZE PRACTICES AND MATERIALS IN COMPLIANCE WITH THE REGULATIONS AND SECTION 653 AND ALL APPLICABLE SUBSECTIONS OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018.

BITUMINOUS CONCRETE PAVEMENT

- (d) ALL CONSTRUCTION AND MATERIALS MUST REFERENCE AND COMPLY WITH THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018 AND DETAILS AS PROVIDED BY ENGINEER.
- (b) BITUMINOUS CONCRETE PAVEMENT SHALL NOT BE PLACED BETWEEN NOVEMBER 1 AND MAY 1, UNLESS APPROVAL IS OBTAINED FROM THE ENGINEER.
- (c) THE CONTRACTOR SHALL THOROUGHLY CLEAN AND DRY THE AREAS UPON WHICH PAINTING OR DURABLE MARKINGS WILL BE PLACED WITH POWER BROOMS, WASHERS AND DRYERS AS NECESSARY TO ALLOW PROPER ADHESION.
- (d) ALL PAINTING AND DURABLE MARKINGS SHALL BE ACCURATELY PLACED AS INDICATED ON THE DRAWINGS.
- (e) THE CONTRACTOR SHALL SUBMIT SEPARATE PROJECT MIX DESIGNS ACCORDING TO THE REFERENCE STANDARDS FOR EACH PAVEMENT TYPE TO BE USED ON THE PROJECT, INCLUDING ALL CALCULATIONS, DATA AND INFORMATION NECESSARY FOR MIX EVALUATION, PLACEMENT REVIEW AND TESTING. THE CONTRACTOR SHALL SECURE THE ENGINEER'S REVIEW FOR THE MIX DESIGN A MINIMUM OF 48 HOURS PRIOR TO THE START OF PAVING OPERATIONS.

METHOD OF MEASUREMENT. THE QUANTITY OF SPECIAL PROVISION (STORMWATER IMPROVEMENTS) TO BE MEASURED FOR PAYMENT WILL BE THE NUMBER OF EACH SYSTEM INSTALLED IN THE COMPLETE AND ACCEPTED WORK.

BASIS OF PAYMENT. THE ACCEPTED QUANTITY OF SPECIAL PROVISION (STORMWATER IMPROVEMENTS) SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE PER EACH. ONE COMPLETE UNIT SHALL BE DEFINED AS THE WORK AS INDICATED AND SHOWN ON THE DRAWINGS. PAYMENT WILL BE FULL COMPENSATION FOR CONSTRUCTION OF STORMWATER IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, FURNISHING, TRANSPORTING, HANDLING, AND PLACING THE MATERIALS SPECIFIED, INCLUDING CLEARING, GRUBBING, EXCAVATION AND EARTHWORK, SITE PREPARATIONS, INSTALLATION OF PRECAST CONCRETE CATCHBASINS/MANHOLES, FRAMES, GRATES, MORTAR, BRICK, AND COMPONENTS, AND OTHER ACCESSORIES AND APPURTENANCES REQUIRED FOR A COMPLETE AND FUNCTIONING SYSTEM. TESTING THE SYSTEM, PERFORMING ANY REQUIRED EXCAVATION, BEDDING, BACKFILLING, AND SURFACE RESTORATION; AND FOR FURNISHING ALL LABOR, TOOLS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. REMOVAL AND DISPOSAL OF EXISTING PIPE WITHIN THE EXCAVATION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. PROVIDING AND MAINTAINING A DEWATERING SYSTEM TO HANDLE GROUNDWATER AND EXISTING STORM SYSTEM FLOWS, HAND DIGGING AROUND EXISTING UTILITIES, AND SUPPORTING EXISTING UTILITY POLES AS NECESSARY SHALL ALSO BE CONSIDERED INCIDENTAL. PAYMENT FOR EXCAVATION OF ROCK SHALL BE MADE UNDER ITEM 203.16, SOLID ROCK EXCAVATION.

PAYMENT WILL BE MADE AS FOLLOWS:

- (a) A PAYMENT OF 60% OF THE CONTRACT LUMP SUM PRICE WILL BE MADE WHEN THE STORMWATER IMPROVEMENTS HAVE BEEN INSTALLED BUT THE SITE HAS NOT BEEN RESTORED.
- (b) PAYMENT OF 20% OF THE CONTRACT LUMP SUM PRICE WILL BE MADE WHEN THE SITE HAS BEEN RESTORED AND STABILIZED.
 1. THE REMAINING 20% OF THE CONTRACT LUMP SUM PRICE WILL BE PAID ONCE THE IMPROVEMENTS HAVE BEEN INSPECTED AND CERTIFIED BY THE ENGINEER TO BE IN GENERAL COMPLIANCE WITH APPROVED PERMIT PLANS.

PAYMENT WILL BE MADE UNDER:

| PAY ITEM | PAY UNIT |
|---|----------|
| 900.802 SPECIAL PROVISION (STORMWATER IMPROVEMENTS) | LUMP SUM |

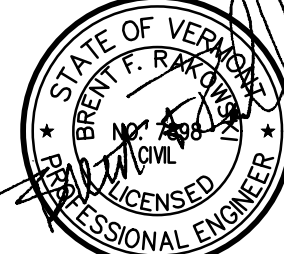


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ESSEX HIGH SCHOOL

STORMWATER IMPROVEMENTS

ESSEX JUNCTION, VERMONT

PERMITTING

DATE ISSUED: 6/28/2024

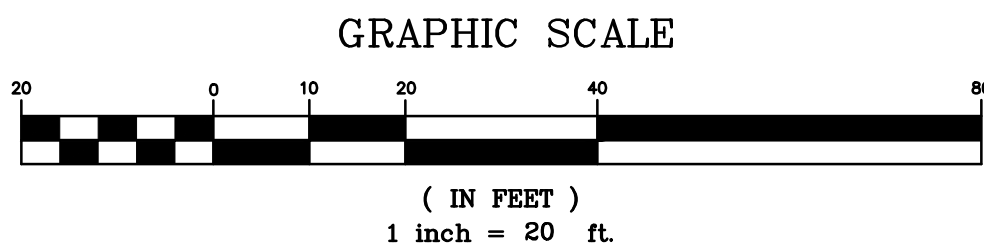
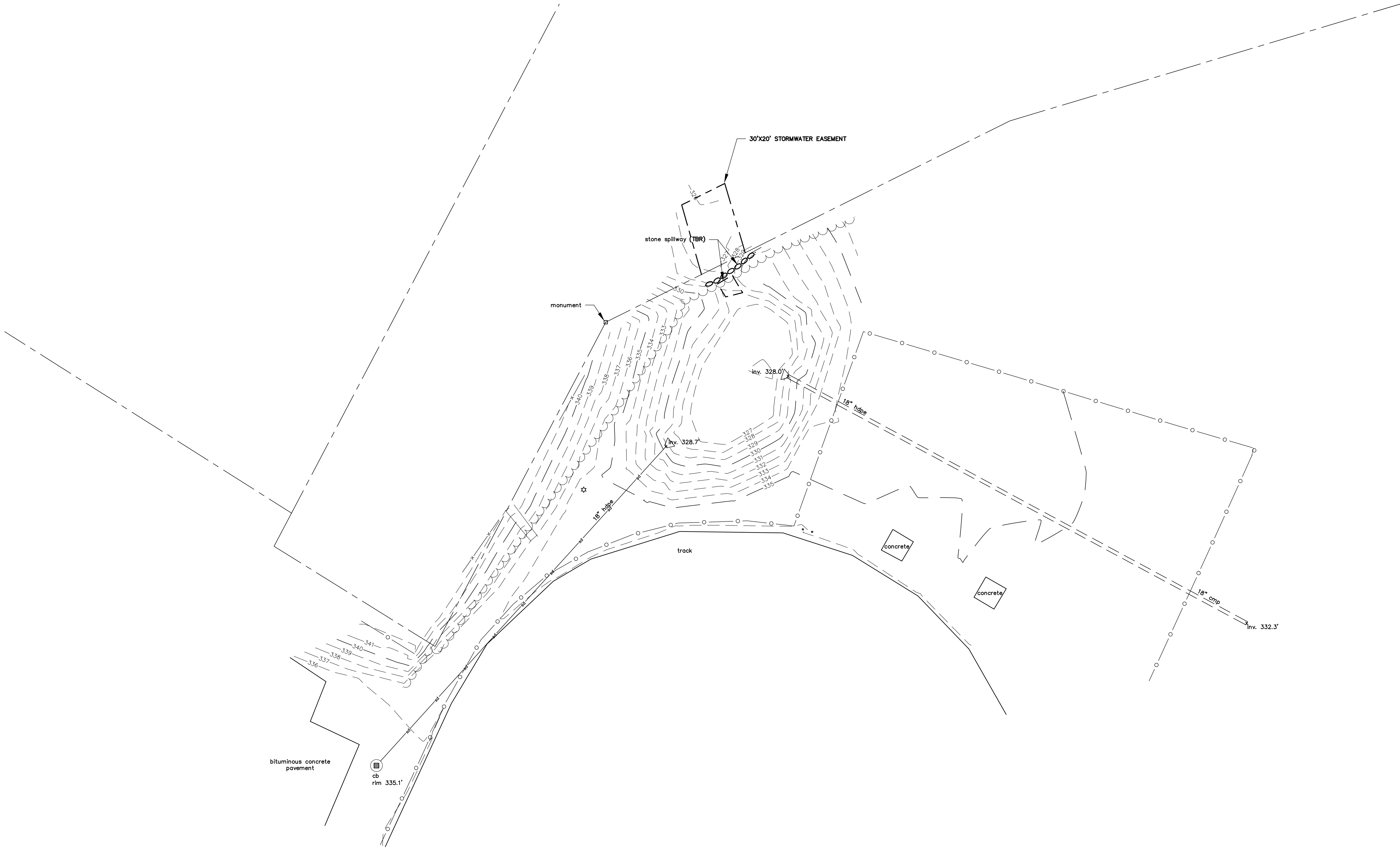
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SCALE: SHOWN
PROJECT NO.: 1108.014
CADD FILE: 1108-014a
TITLE:

QUANTITY SHEET

DRAWING NO.

C-1



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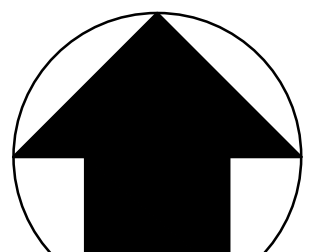
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ESSEX JUNCTION, VERMONT

PERMITTING

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SCALE: 1"=20'

PROJECT NO.: 1108.014

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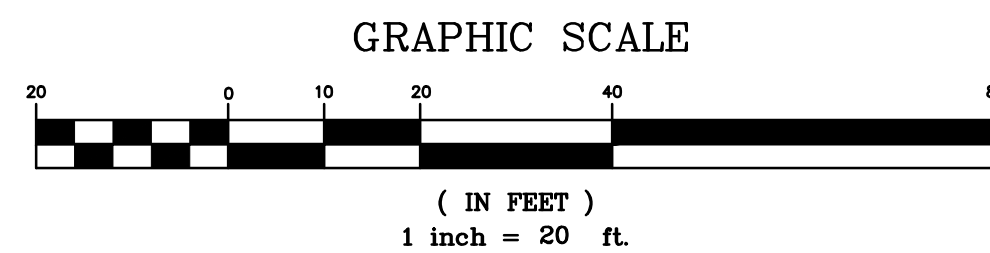
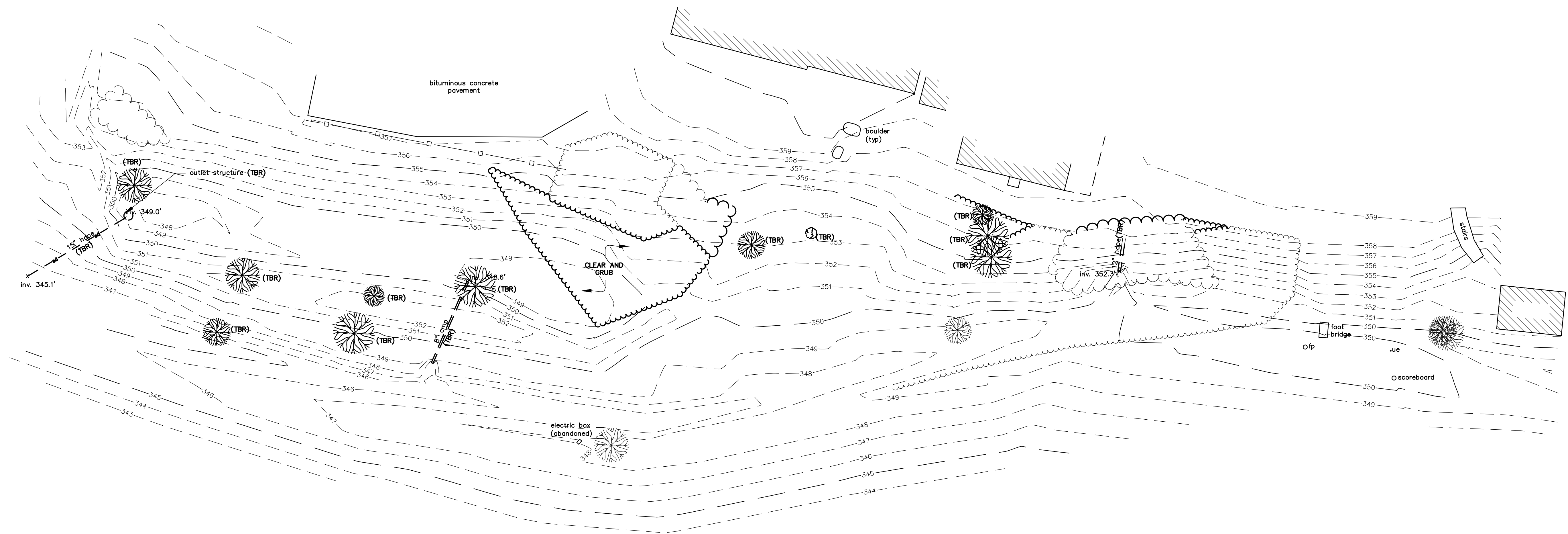
TITLE:

EXISTING AND

DEMOLITION PLAN

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C-2



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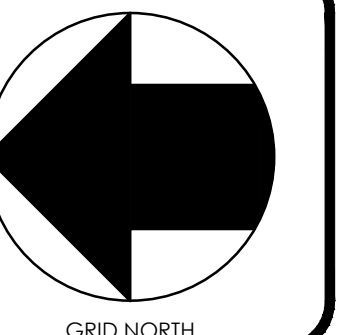
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ESSEX JUNCTION, VERMONT

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PROJECT NO.: 1108.014

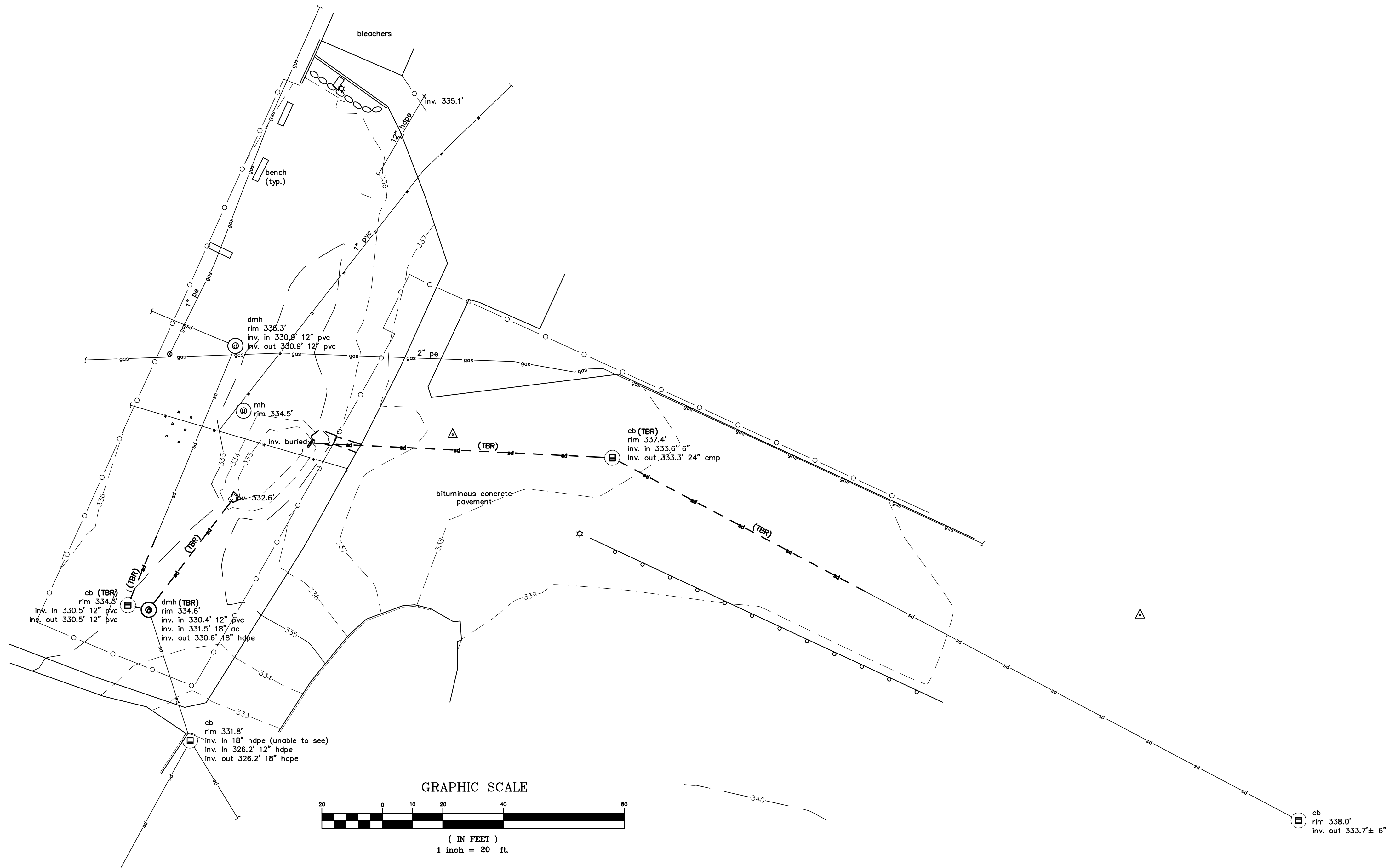
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TITLE:

EXISTING AND
DEMOLITION PLAN

DRAWING NO.

C-3



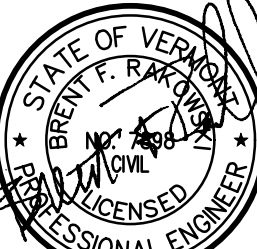
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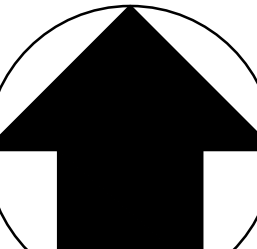
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ESSEX JUNCTION, VERMONT

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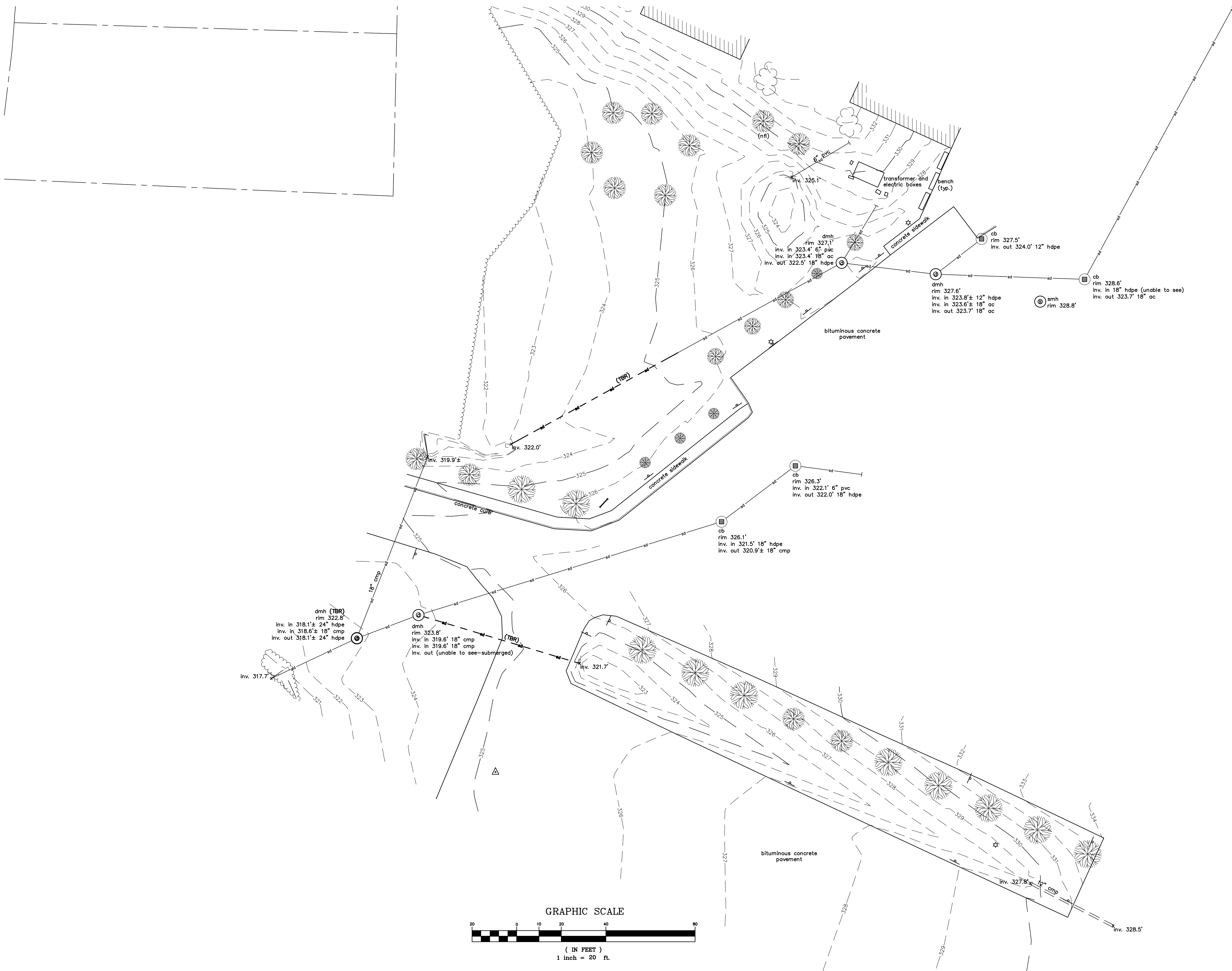
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TITLE:

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DEMOLITION PLAN

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C-4

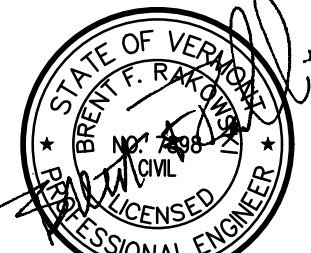


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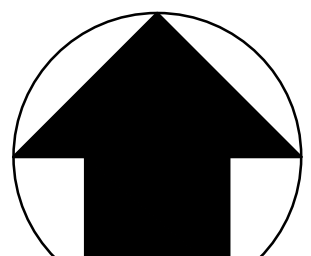
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C-5



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ESSEX JUNCTION, VERMONT

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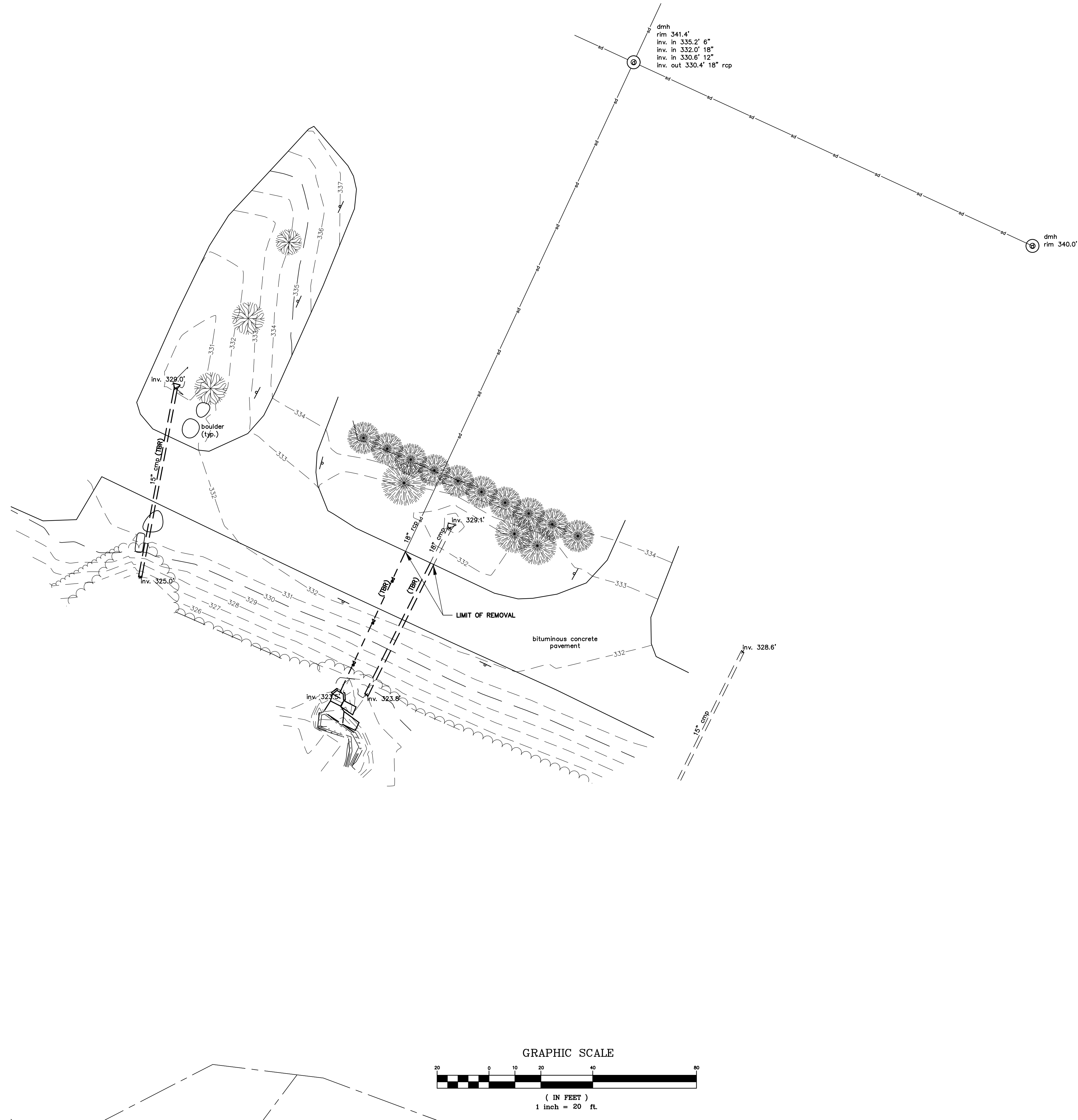
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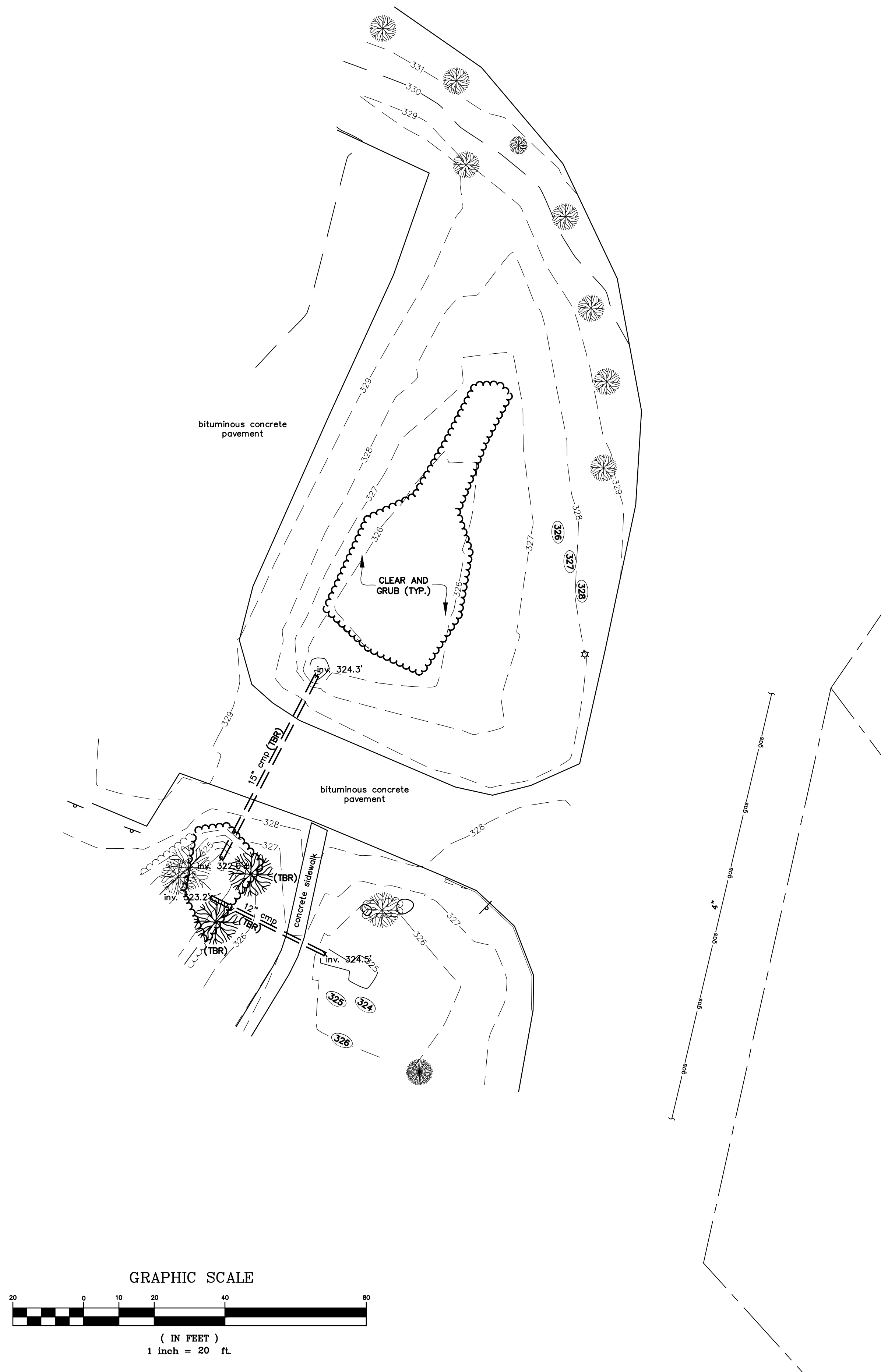
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EXISTING AND DEMOLITION PLAN

WING NO. _____

C-6





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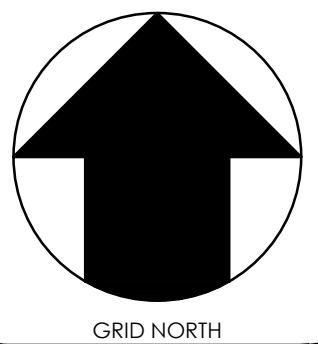
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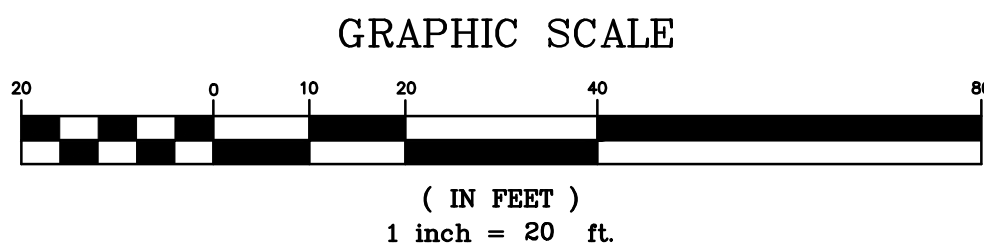
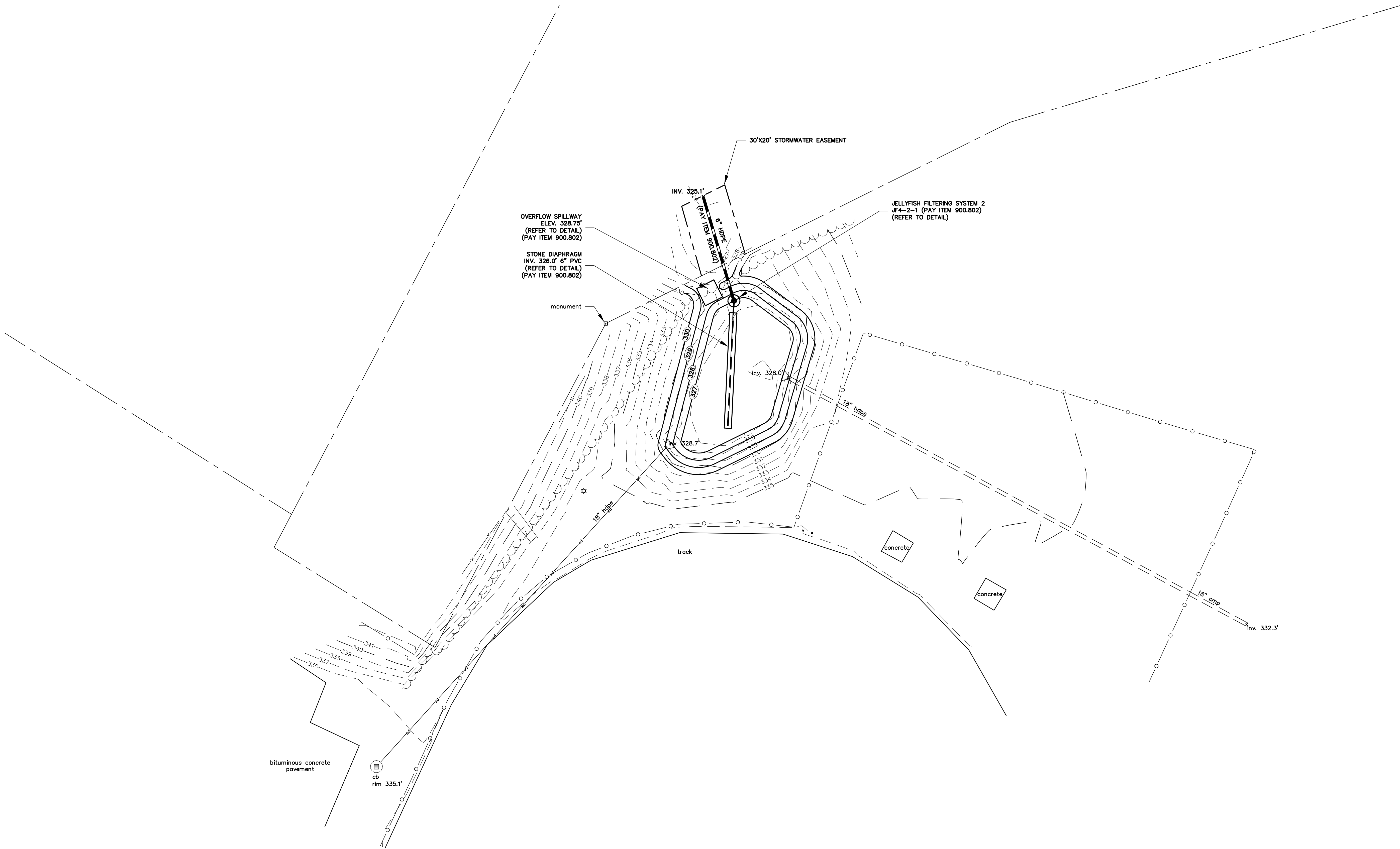
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TITLE:

EXISTING AND
DEMOLITION PLAN

DRAWING NO.

C-7



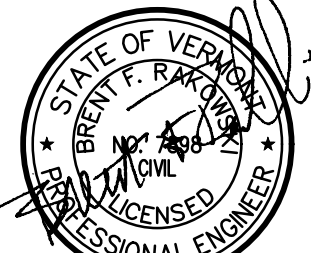
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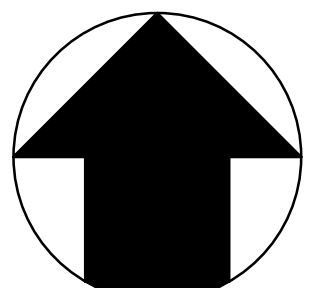
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TITLE:

PROPOSED
SITE PLAN

DRAWING NO.

C-8

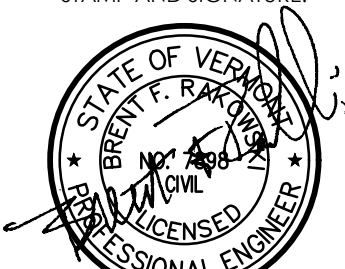


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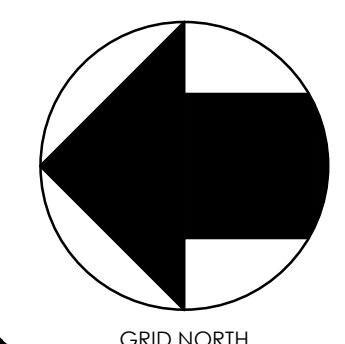
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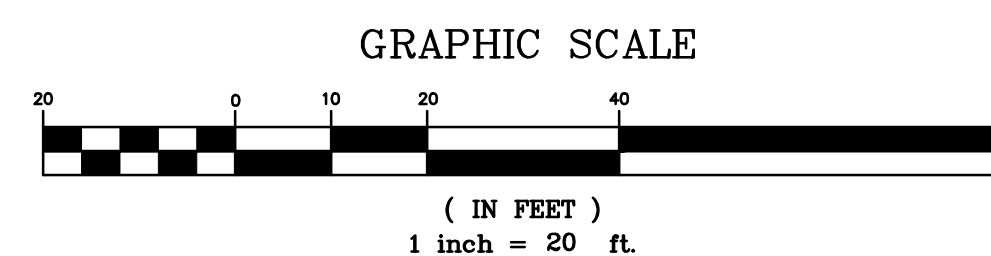
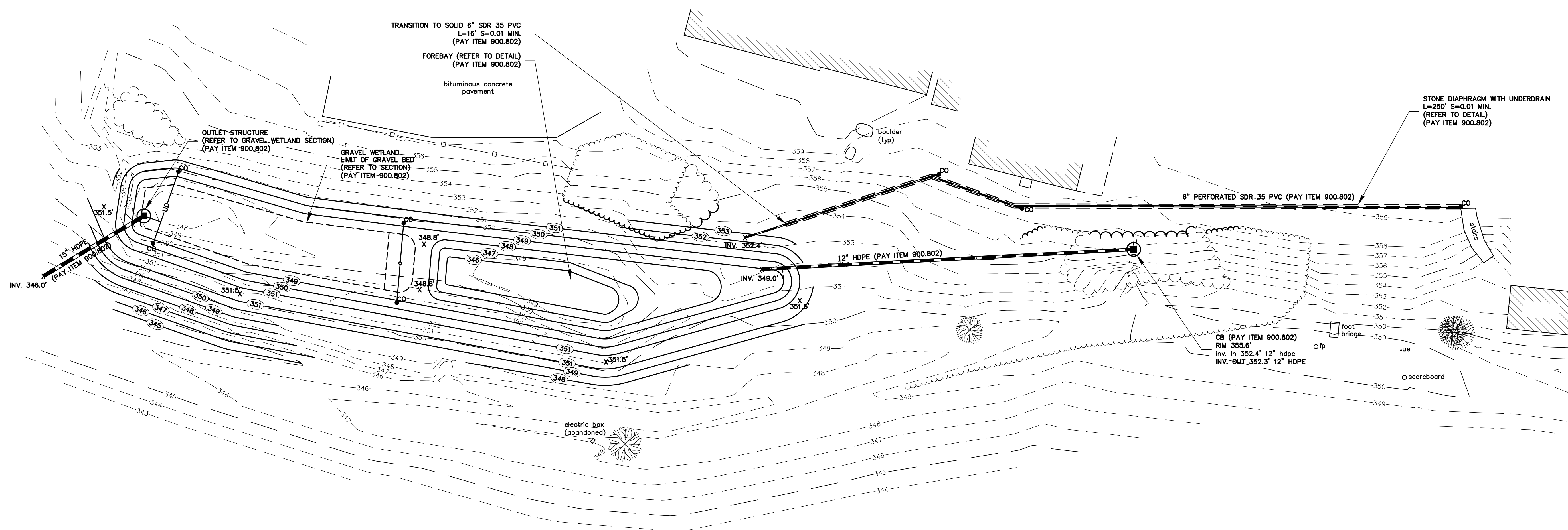
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PROJECT NO.: 1108.014
CADD FILE: 1108-014a

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DRAWING NO.

C-9





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STORMWATER IMPROVEMENTS

PERMITTING

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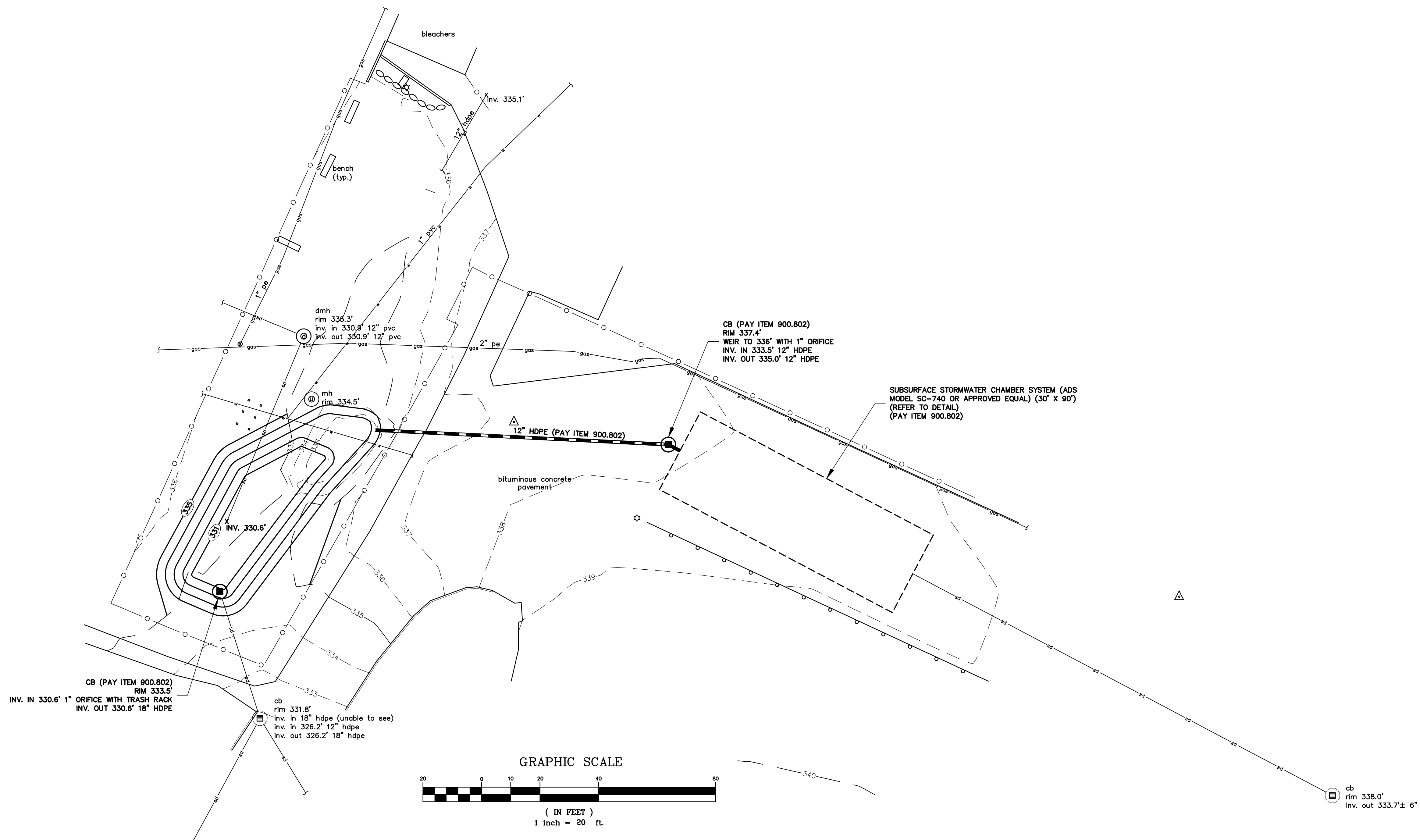
PROJECT NO.: 1108.014

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PROPOSED SITE PLAN

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C-10





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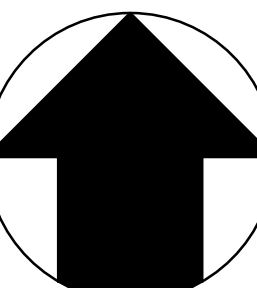
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STORMWATER IMPROVEMENTS

ESSEX JUNCTION, VERMONT

PERMITTING

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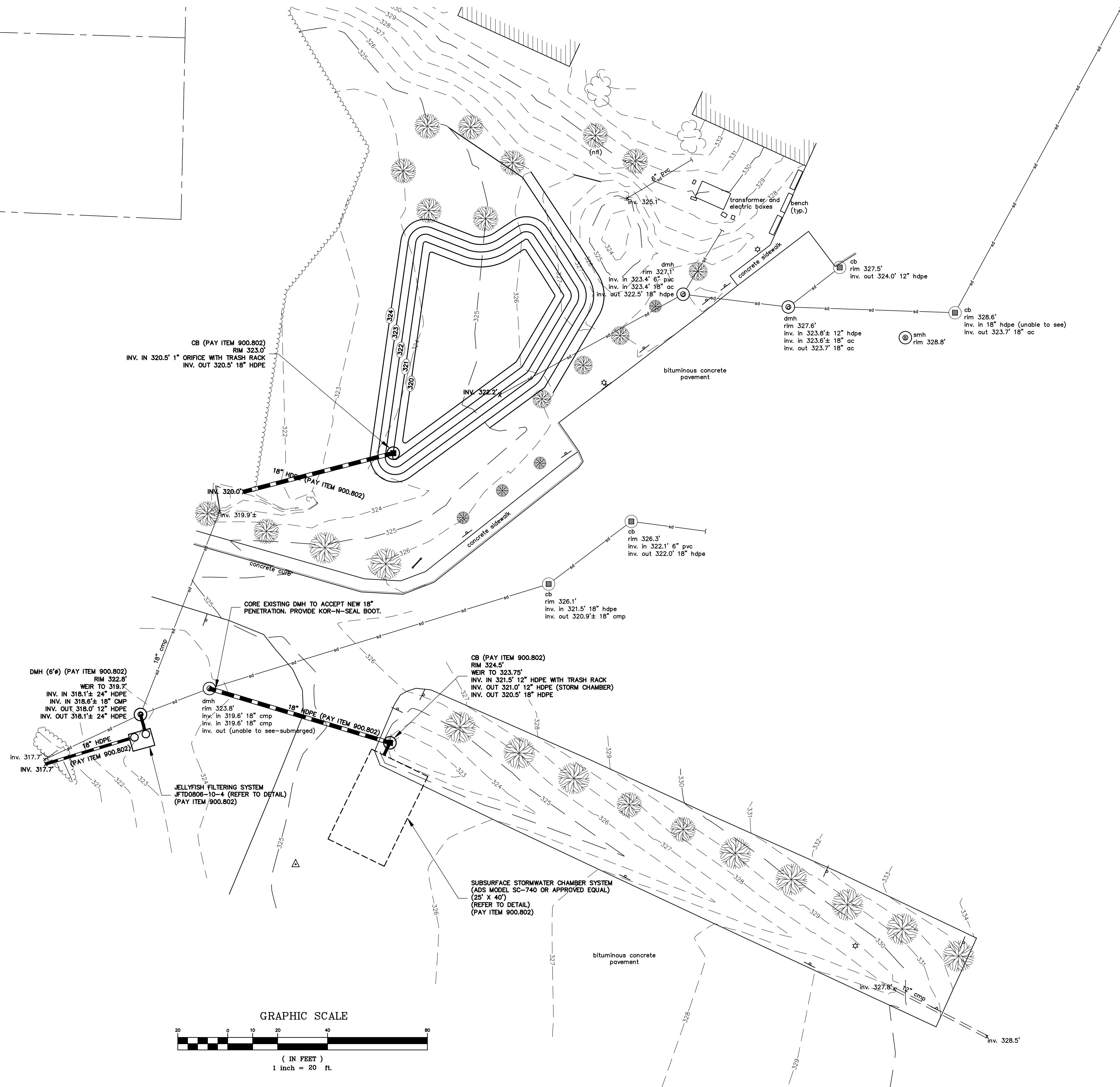
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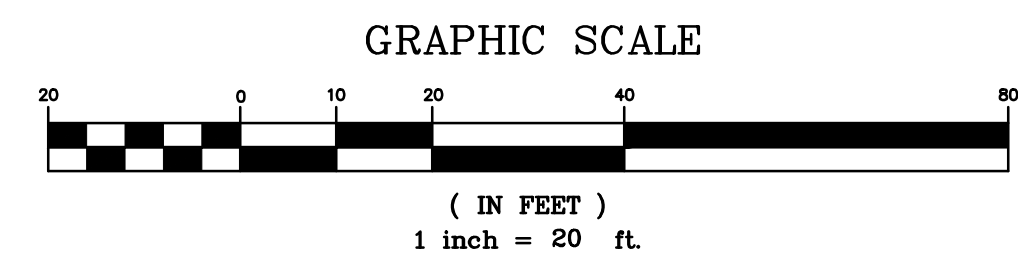
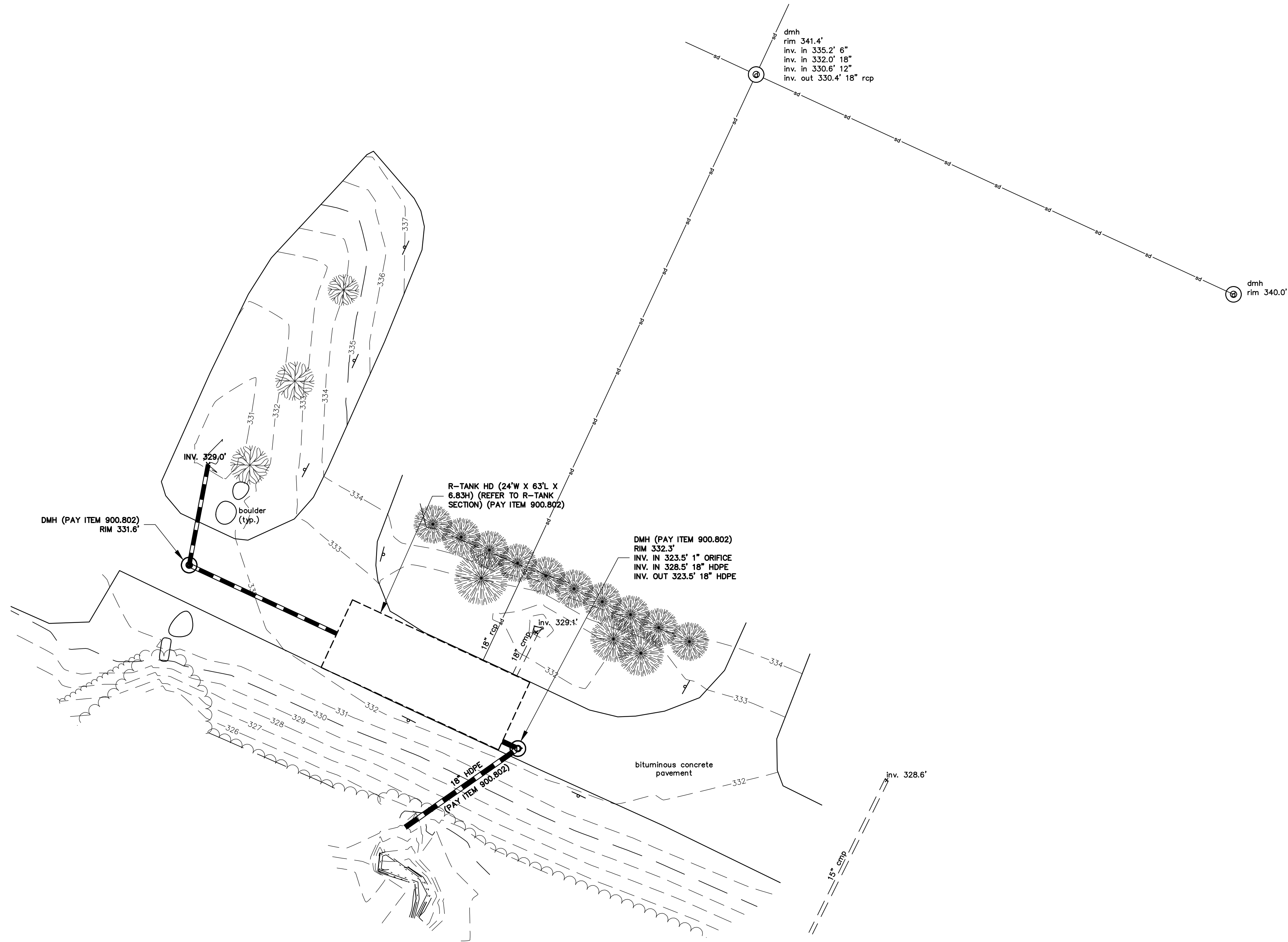
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PROPOSED
SITE PLAN

DRAWING NO.

C-11





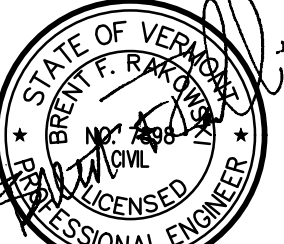
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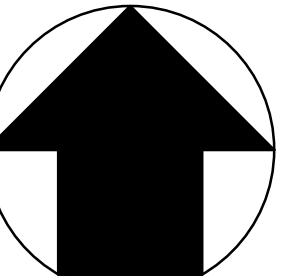
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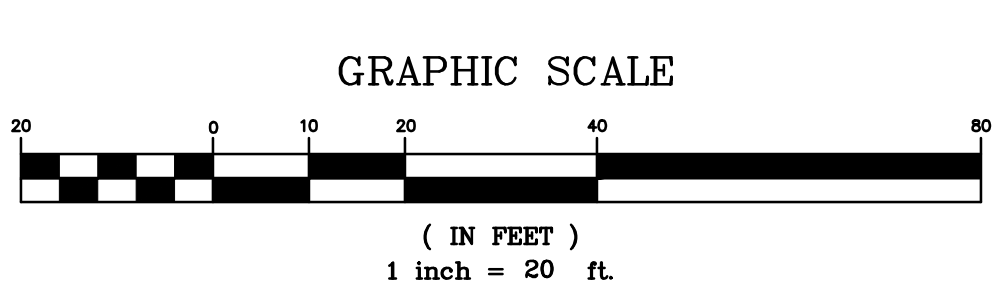
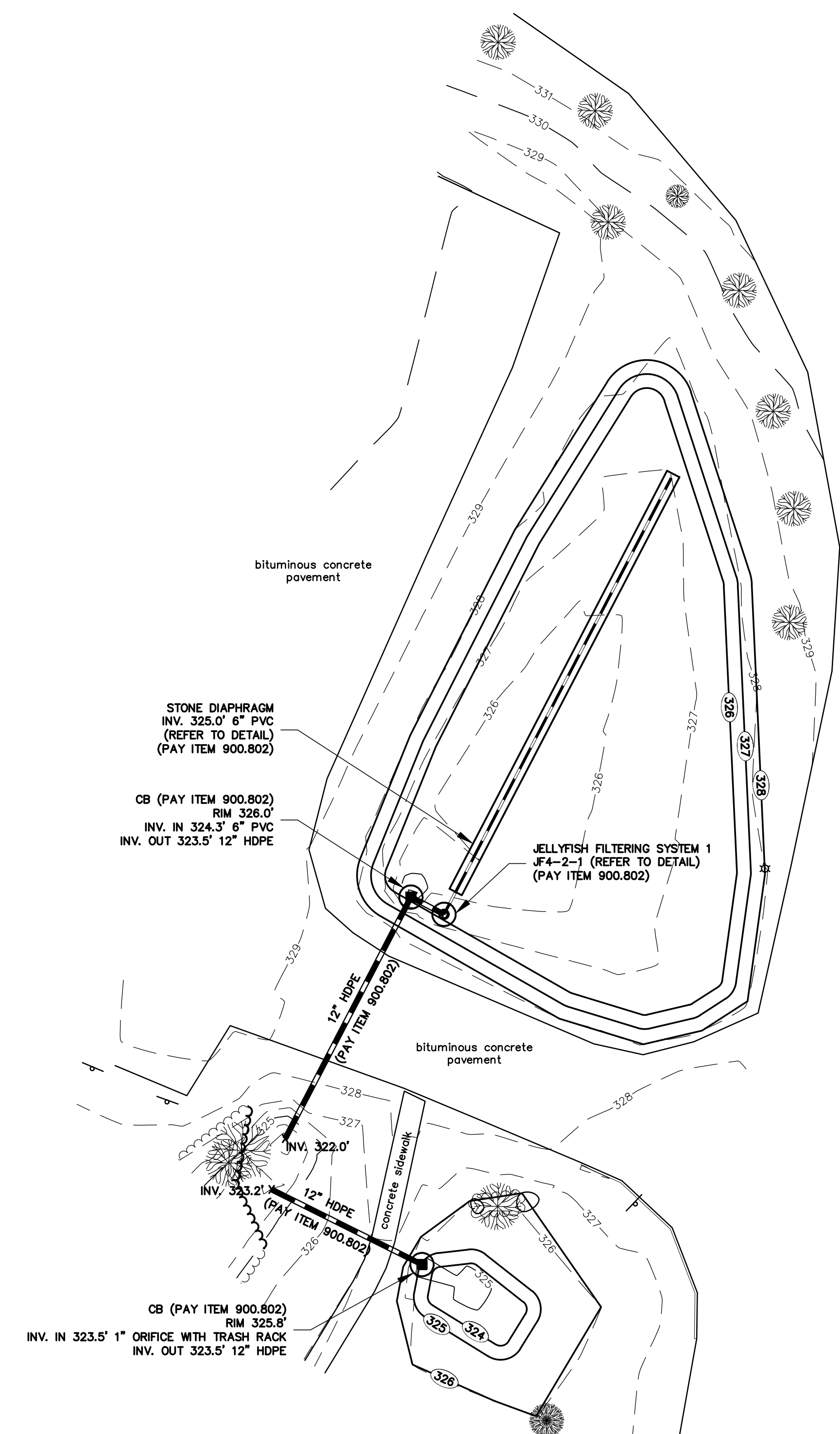
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SITE PLAN

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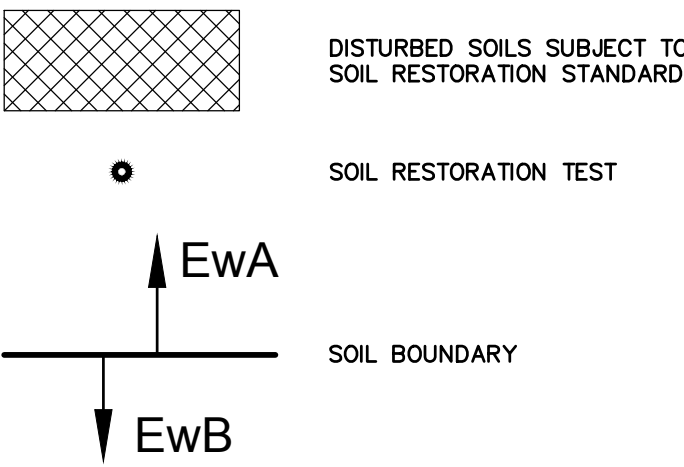
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STORMWATER IMPROVEMENTS
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| DRAWN BY: | HB |
| CHECKED BY: | BFR |
| SCALE: | 1"=20' |
| PROJECT NO.: | 1108.014 |
| CADD FILE: | 1108-014a |
| TITLE: | |
| | PROPOSED SITE PLAN |
| DRAWING NO. | C-13 |

LEGEND



SOILS LEGEND

| Soil Designation | Soil Description | Hydrologic Soil Group |
|------------------|--|-----------------------|
| An | Alluvial land | NOT RATED |
| AdA | Adams and Windsor loamy sands, 0 to 5 percent slopes | A |
| HnA | Hinesburg fine sandy loam, 0 to 3 percent slopes | A |

SOIL RESTORATION NOTES:

FOLLOWING ROUGH SITE GRADING, INSTALLATION OF UTILITIES AND INFRASTRUCTURE, AND PRIOR TO PLANTING OF VEGETATIVE COVER, CONTRACTOR SHALL RESTORE SOIL QUALITY TO DISTURBED SOILS THAT WILL NOT BE COVERED BY IMPERVIOUS SURFACES, INCORPORATED INTO STRUCTURAL STORMWATER TREATMENT PRACTICES, ATHLETIC FIELDS, OR ENGINEERED STRUCTURAL FILL USING ONE OF THE FOLLOWING METHODS. CONTRACTOR SHALL PROVIDE NOTICE TO ENGINEER/OWNER PRIOR TO CONSTRUCTION OF SELECTED METHOD.

- OPTION 1: AMEND EXISTING SITE TOPSOIL OR SUBSOIL IN PLACE.
- SCARIFY OR TILL SUBSOILS TO 4 INCHES OF DEPTH OR TO DEPTH NEEDED TO ACHIEVE A TOTAL DEPTH OF 8 INCHES OF UNCOMPACTED SOIL AFTER CALCULATED AMOUNT OF AMENDMENT IS ADDED. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
 - AMEND SOIL TO MEET ORGANIC CONTENT REQUIREMENTS:
 - PRE-APPROVED RATE: PLACE 1 INCH OF COMPOSTED MATERIAL WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 65% AND ROTOTILL INTO 3 INCHES OF SOIL, OR
 - CALCULATED RATE: PLACE CALCULATED AMOUNT OF COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AND ROTOTILL INTO DEPTH OF SOIL NEEDED TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT.
 - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.
 - WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

- OPTION 2: REMOVE AND STOCKPILE EXISTING TOPSOIL DURING GRADING.
- STOCKPILE SOIL ON SITE IN A DESIGNATED CONTROLLED AREA, AT LEAST 50 FEET FROM SURFACE WATERS, WETLANDS, FLOODPLAINS, OR OTHER CRITICAL RESOURCE AREAS.
 - SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
 - STOCKPILED TOPSOIL SHALL ALSO BE AMENDED, IF NEEDED, TO MEET THE ORGANIC CONTENT REQUIREMENTS:
 - PRE-APPROVED RATE: COMPOST SHALL BE INCORPORATED WITH AN ORGANIC MATTER CONTENT BETWEEN 40 AND 65% INTO THE TOPSOIL AT A RATIO 1:3, OR
 - CALCULATED RATE: INCORPORATE COMPOSTED MATERIAL OR APPROVED ORGANIC MATERIAL AT A CALCULATED RATE TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT.
 - REPLACE STOCKPILED TOPSOIL PRIOR TO PLANTING.
 - RAKE TO LEVEL, AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.

- OPTION 3: IMPORT TOPSOIL MIX, OR OTHER MATERIALS FOR MIXING, INCLUDING COMPOST, OF SUFFICIENT ORGANIC CONTENT AND DEPTH.
- SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
 - PLACE 4 INCHES OF IMPORTED TOPSOIL MIX ON SURFACE. THE IMPORTED TOPSOIL MIX SHALL CONTAIN 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) SOIL CLASSIFICATION SYSTEM.
 - RAKE BEDS TO SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.
 - WATER OR ROLL TO COMPACT SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

SOIL RESTORATION TESTING:

ONCE SOIL QUALITY HAS BEEN RESTORED IN ACCORDANCE WITH THE SOIL RESTORATION METHODS OUTLINED, AND PRIOR TO PLANTING THE CONTRACTOR SHALL PERFORM FIELD TESTING OF RESTORED SOIL QUALITY. TESTING SHALL BE IN THE LOCATIONS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER. A MINIMUM OF NINE TEST HOLES PER ACRE SHALL BE DUG. TESTING SHALL BE PERFORMED USING SPADE SHOVEL DRIVEN USING SOLELY BY THE WEIGHT OF THE INSPECTOR. CONTRACTOR SHALL PREPARE REPORTING FORM THAT INCLUDES THE FOLLOWING INFORMATION:

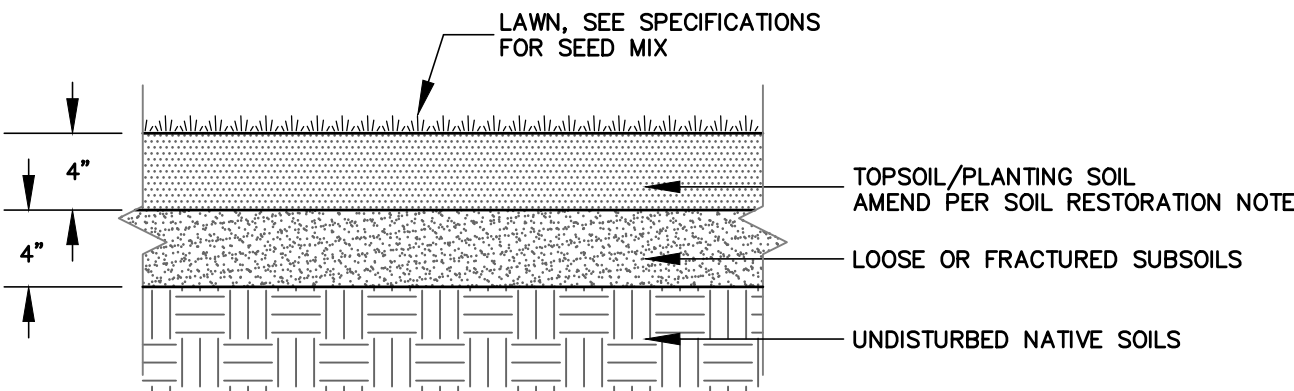
1. DATE/TIME OF TEST.
2. PERSONS PERFORMING AND WITNESSING TESTING.
3. LOCATION OF TEST.
4. OBSERVATIONS SHALL NOTE: EASE OF DRIVING SPADE (DIFFICULT, MODERATE, EASY), VERIFICATION OF SOIL AMENDMENTS, NOTE OF MATERIAL THICKNESSES, TEXTURE AND OTHER NOTABLE SOIL FEATURES.

TESTS THAT INDICATE DIFFICULTY IN DRIVING A SPADE, LACK OF SOILS AMENDMENTS, AND TEXTURES NOT CONSISTENT WITH RESTORATION PRACTICE. OPTIONS NOTED ABOVE SHALL HAVE AN ADDITIONAL TEST PERFORMED WITHIN 50 FEET OF THE TEST SHOWING "POOR" RESULTS. IF THREE CONSECUTIVE TESTS SHOWING POOR RESULTS ARE OBTAINED THE AREA TESTED SHALL BE SUBJECT TO REWORK IN ACCORDANCE WITH RESTORATION PRACTICES NOTED AND SUBSEQUENTLY RETESTED.

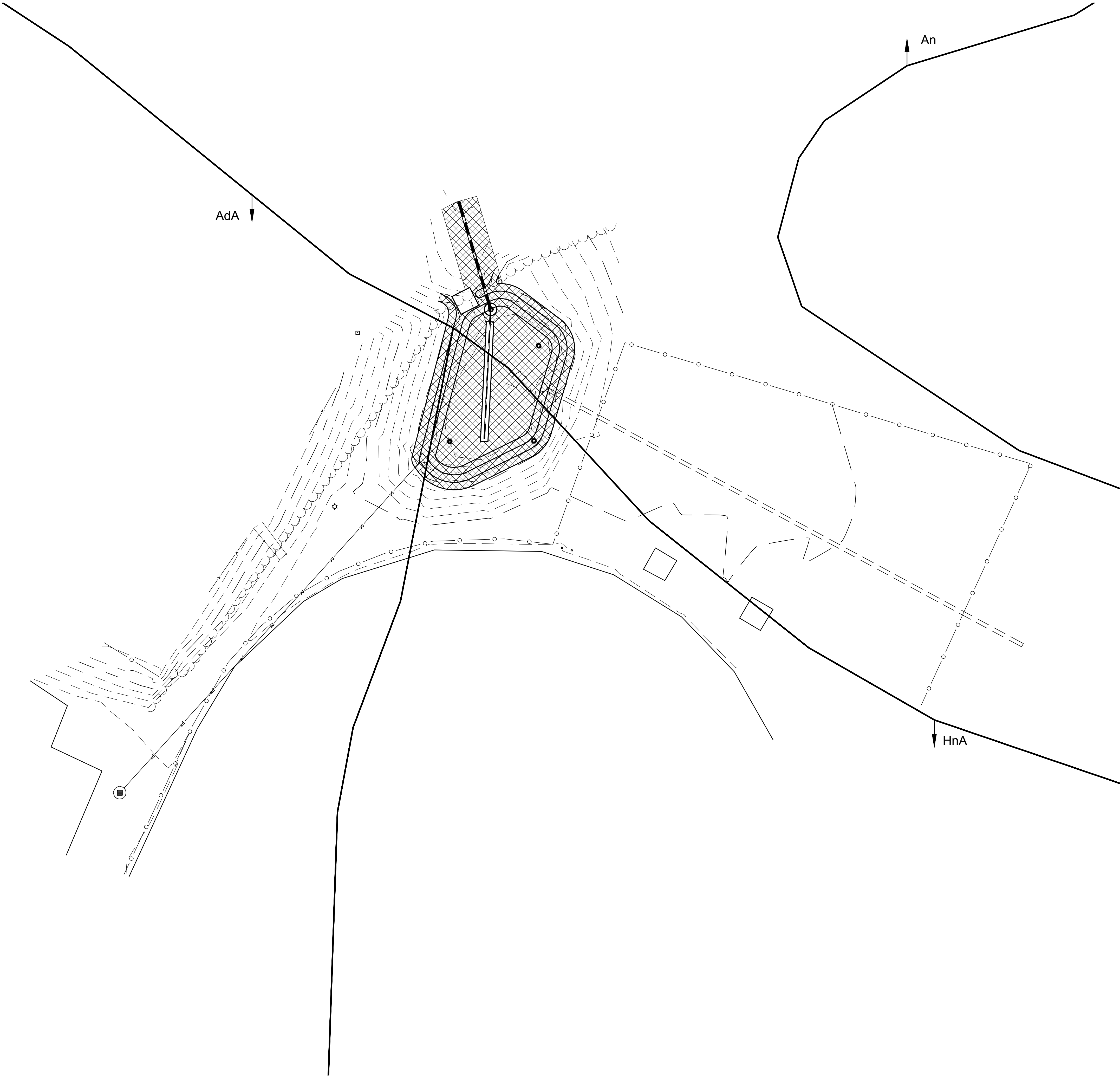
ON COMPLETION OF SUCCESSFUL TESTING, SURFACES SHALL BE PLANTED WITH SEED AND STABILIZED.

CONSTRUCTION NOTES:

1. DISTURBED SOILS BEYOND LIMITS OF STORMWATER TREATMENT PRACTICE(S) SHALL BE PLANTED WITH CONSERVATION SEED MIX, OR AS SHOWN ON LANDSCAPING PLANS.
2. AREAS DRAINING TO THE STORMWATER PRACTICE(S) SHALL BE FULLY STABILIZED BEFORE RUNOFF IS DIRECTED TO IT. CONTRIBUTING PERVIOUS AREAS SHALL HAVE A DENSE AND VIGOROUS VEGETATIVE COVER AND IMPERVIOUS AREAS MUST BE COMPLETED.



LAWN PLANTING
NOT TO SCALE



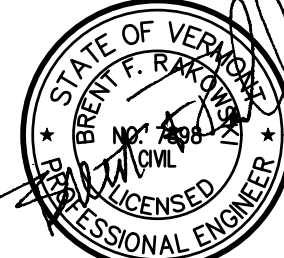
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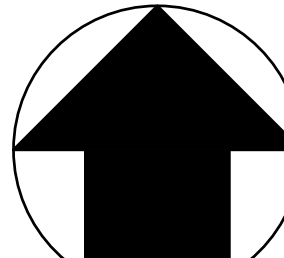
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GRID NORTH

ESSEX HIGH SCHOOL
STORMWATER IMPROVEMENTS
ESSEX JUNCTION, VERMONT

PERMITTING

DATE ISSUED: 6/28/2024

REVISIONS:

DRAWN BY: HB

CHECKED BY: BFR

SCALE: 1" = 20'

PROJECT NO.: 1108.014

CADD FILE: 1108-014

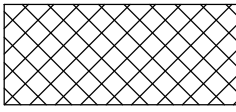
TITLE:

SOILS
MANAGEMENT
PLAN

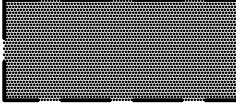
DRAWING NO.

C-14


LEGEND



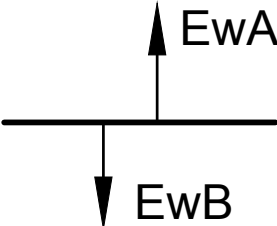
DISTURBED SOILS SUBJECT TO SOIL RESTORATION STANDARD



STORMWATER TREATMENT PRACTICE AREA (NO TESTING REQUIRED)

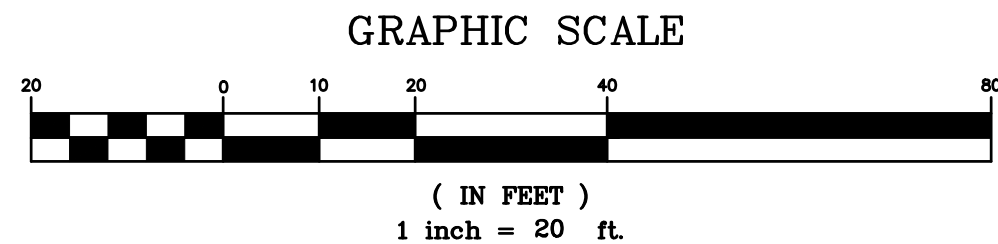
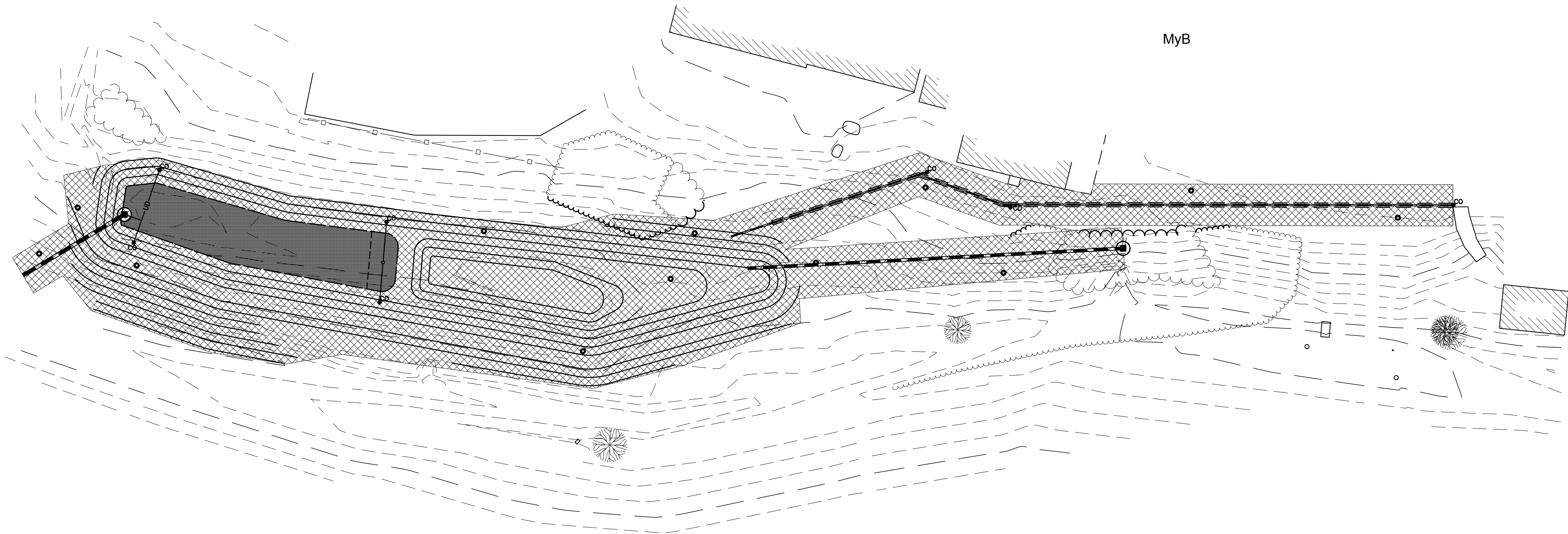


SOIL RESTORATION TEST



SOIL BOUNDARY

| SOILS LEGEND | | |
|------------------|--|-----------------------|
| Soil Designation | Soil Description | Hydrologic Soil Group |
| MyB | Munson and Raynham silt loams, 2 to 6 percent slopes | C/D |



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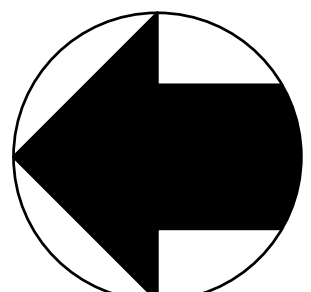
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ESSEX HIGH SCHOOL

STORMWATER IMPROVEMENTS

ESSEX JUNCTION, VERMONT

PERMITTING

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REVISIONS:

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CHECKED BY: BFR

SCALE: 1" = 20'

PROJECT NO.: 1108.014

CADD FILE: 1108-014

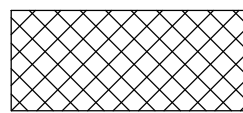
TITLE:

SOILS
MANAGEMENT
PLAN


DRAWING NO.

C-15

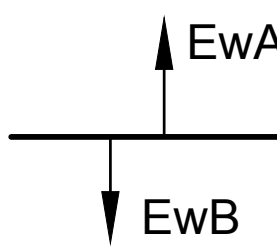
LEGEND



DISTURBED SOILS SUBJECT TO SOIL RESTORATION STANDARD

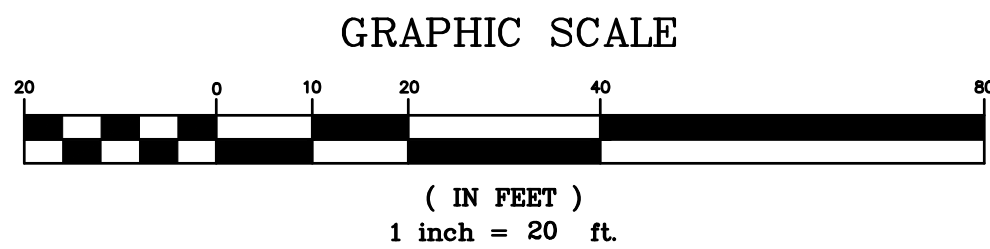
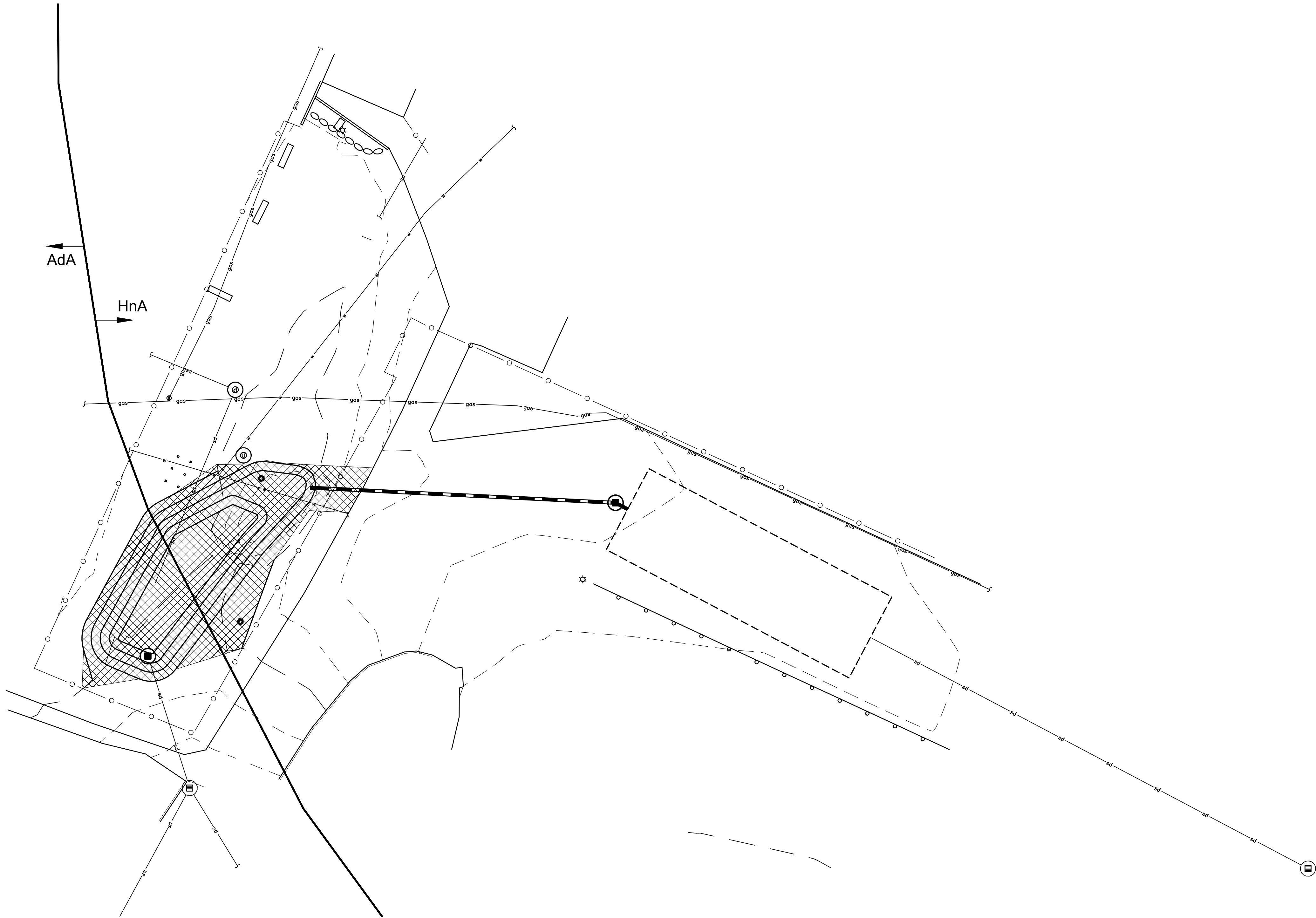


SOIL RESTORATION TEST



SOIL BOUNDARY

| SOILS LEGEND | | |
|------------------|--|-----------------------|
| Soil Designation | Soil Description | Hydrologic Soil Group |
| HnA | Hinesburg fine sandy loam, 0 to 3 percent slopes | A |
| AdA | Adams and Windsor loamy sands, 0 to 5 percent slopes | A |



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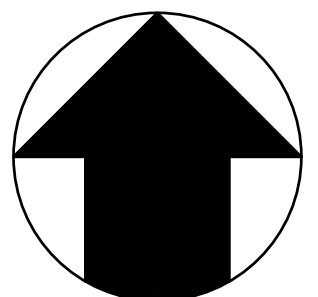
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STORMWATER IMPROVEMENTS
ESSEX JUNCTION, VERMONT

PERMITTING

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TITLE:

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MANAGEMENT
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DRAWING NO.

C-16

LEGEND

DISTURBED SOILS SUBJECT TO SOIL RESTORATION STANDARD

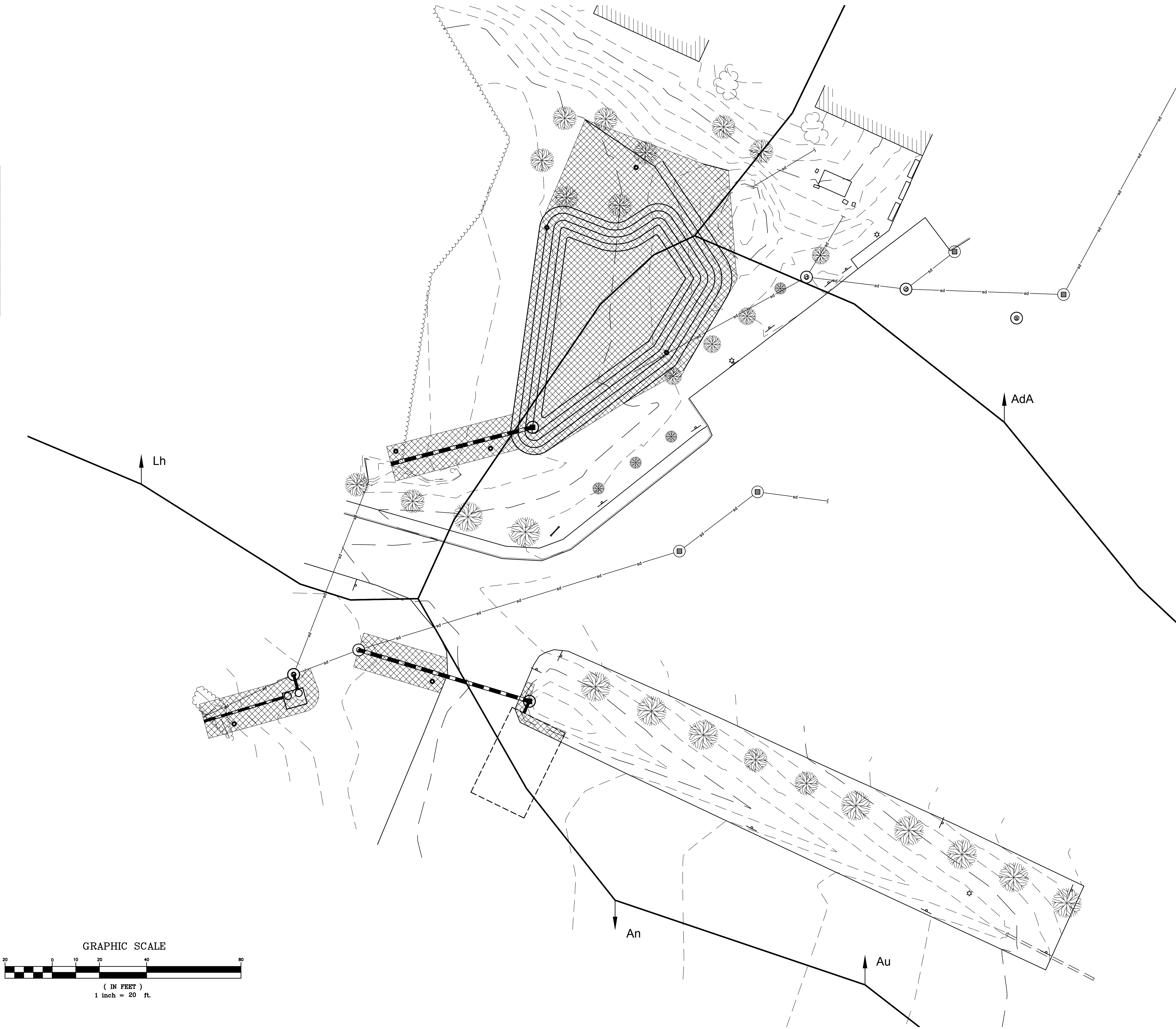
SOIL RESTORATION TEST

EwA

EwB

SOIL BOUNDARY

| SOILS LEGEND | | |
|------------------|--|-----------------------|
| Soil Designation | Soil Description | Hydrologic Soil Group |
| AdA | Adams and Windsor loamy sands, 0 to 5 percent slopes | A |
| An | Alluvial land | NOT RATED |
| Au | Au Gres fine sandy loam | A/D |
| Lh | Livingston clay | C/D |

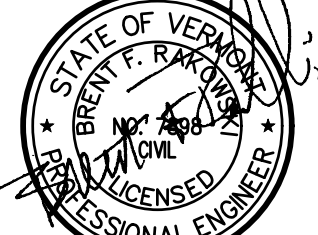


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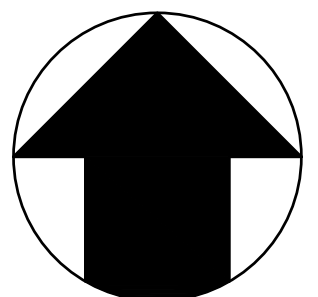
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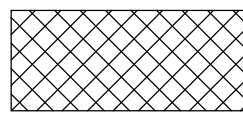
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PROJECT NO.: 1108.014
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TITLE:
SOILS
MANAGEMENT
PLAN


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C-17



LEGEND



DISTURBED SOILS SUBJECT TO SOIL RESTORATION STANDARD

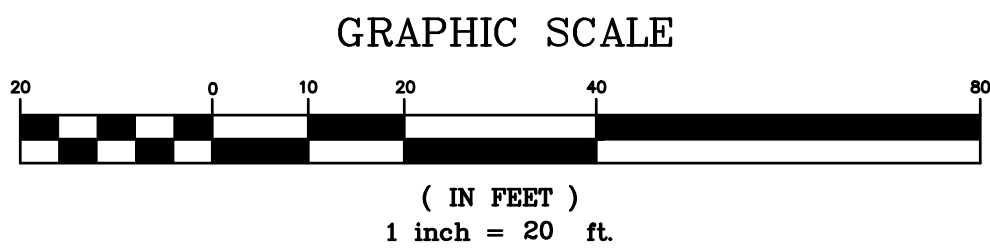
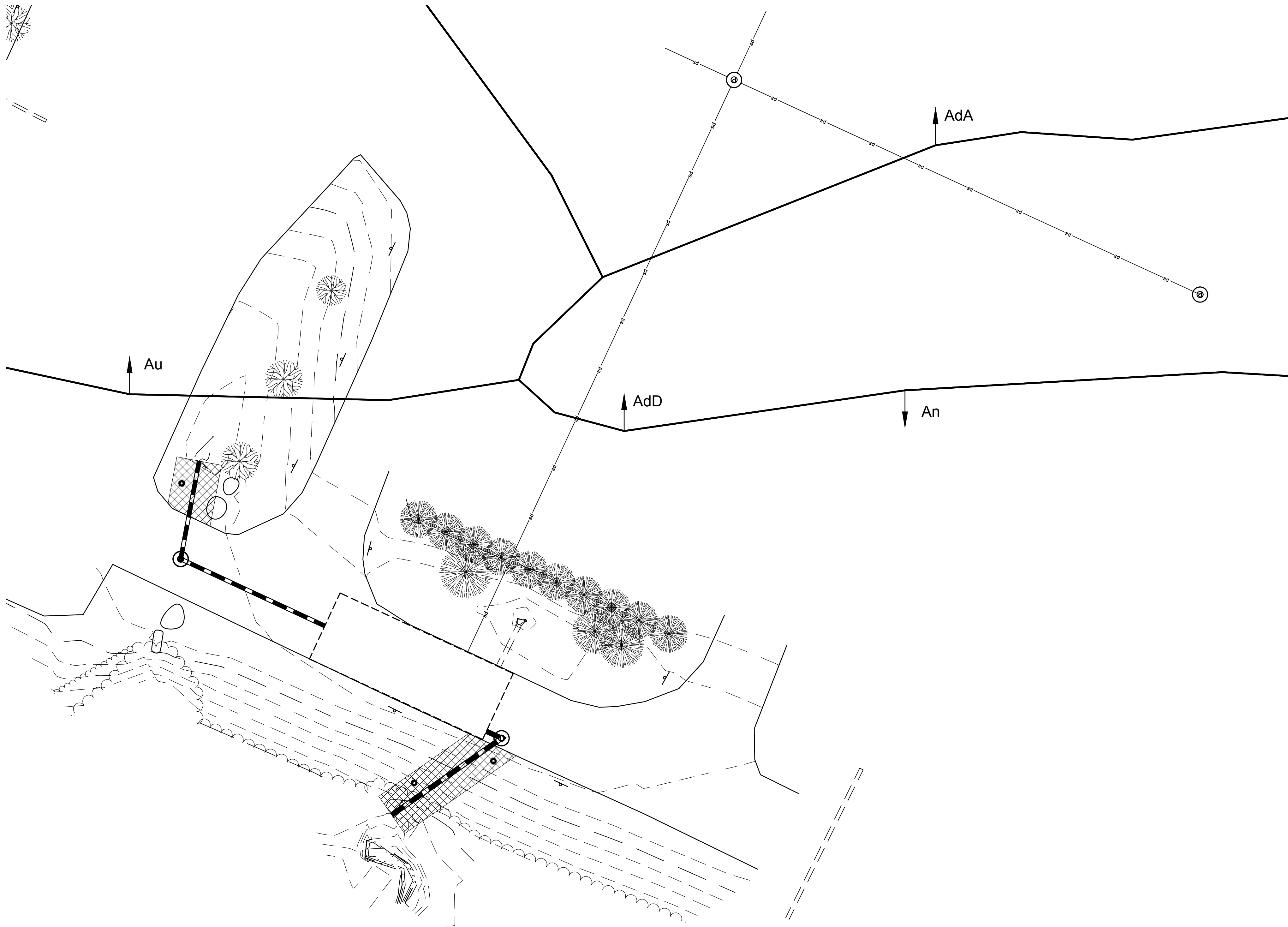


SOIL RESTORATION TEST

SOIL BOUNDARY

| SOILS LEGEND | | |
|------------------|--|-----------------------|
| Soil Designation | Soil Description | Hydrologic Soil Group |
| An | Alluvial land | NOT RATED |
| AdA | Adams and Windsor loamy sands, 0 to 5 percent slopes | A |
| AdD | Adams and Windsor loamy sands, 12 to 30 percent slopes | A |
| Au | Au Gres fine sandy loam | A/D |



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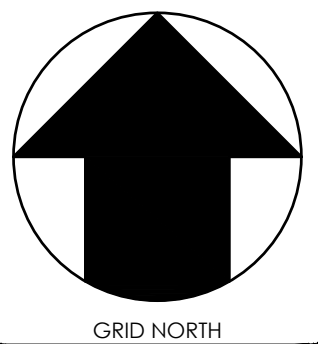
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STORMWATER IMPROVEMENTS

ESSEX JUNCTION, VERMONT

PERMITTING

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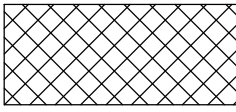
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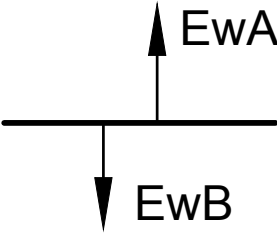
C-18

LEGEND



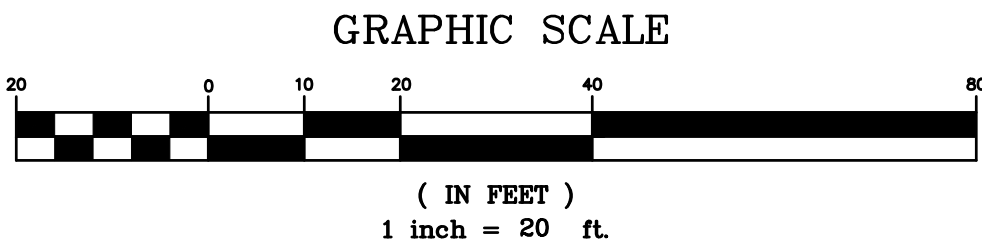
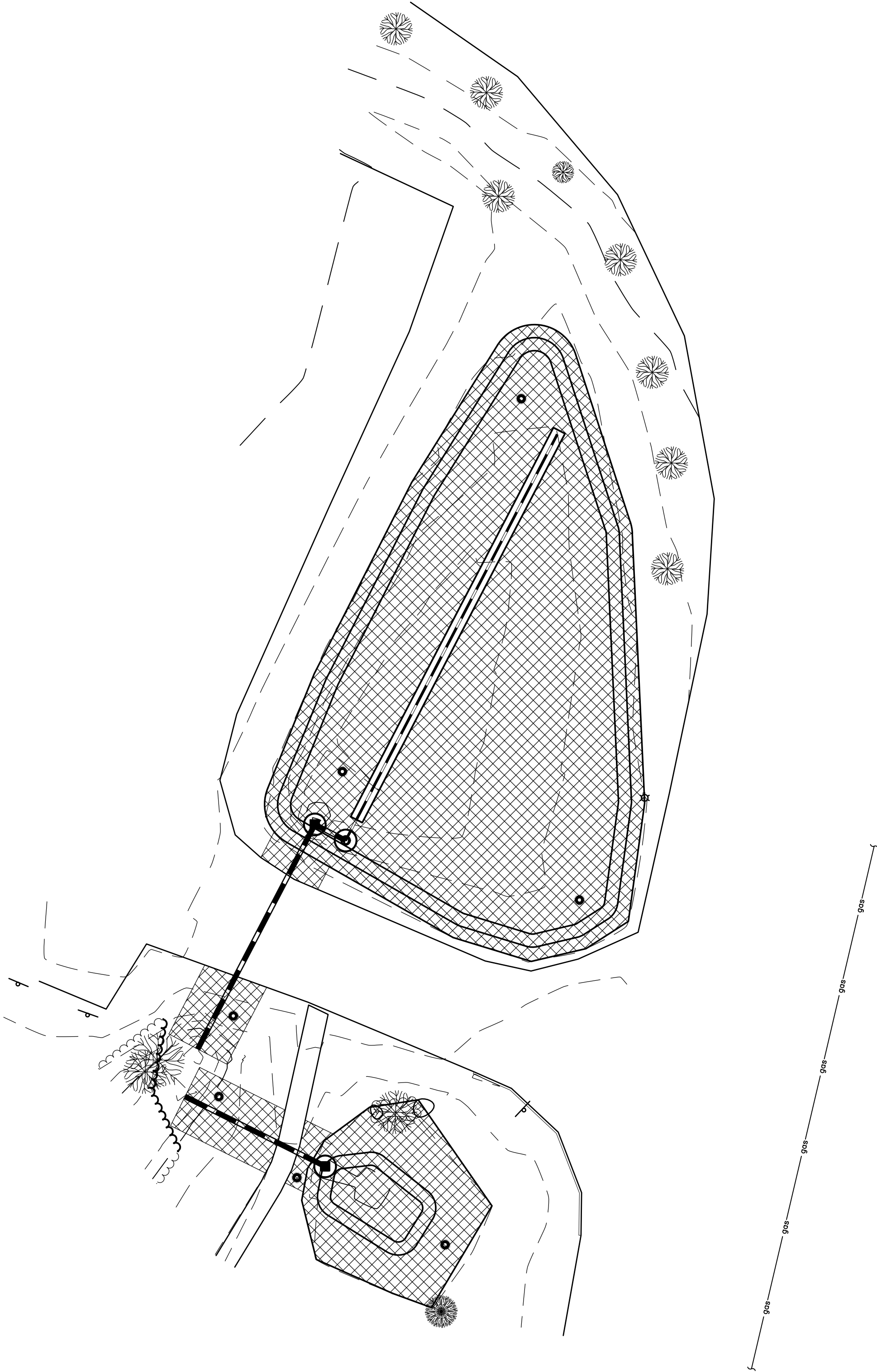
DISTURBED SOILS SUBJECT TO SOIL RESTORATION STANDARD

SOIL RESTORATION TEST



SOIL BOUNDARY

| SOILS LEGEND | | |
|------------------|--|-----------------------|
| Soil Designation | Soil Description | Hydrologic Soil Group |
| An | Alluvial land | NOT RATED |
| AdD | Adams and Windsor loamy sands, 12 to 30 percent slopes | A |



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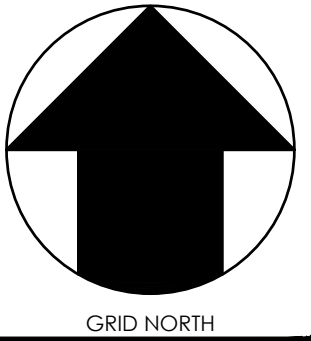
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ESSEX HIGH SCHOOL
STORMWATER IMPROVEMENTS
ESSEX JUNCTION, VERMONT

PERMITTING

DATE ISSUED: 6/28/2024

REVISIONS:

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DRAWN BY: HB

CHECKED BY: BFR

SCALE: 1" = 20'

PROJECT NO.: 1108.014

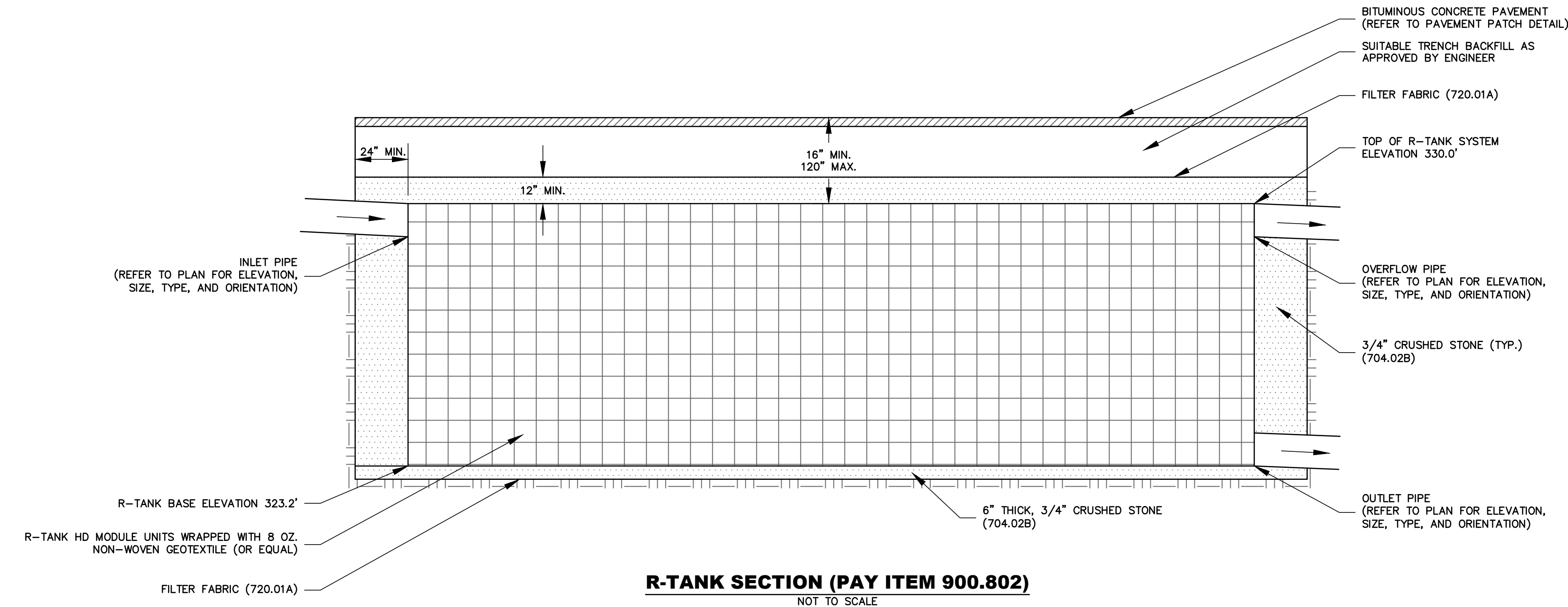
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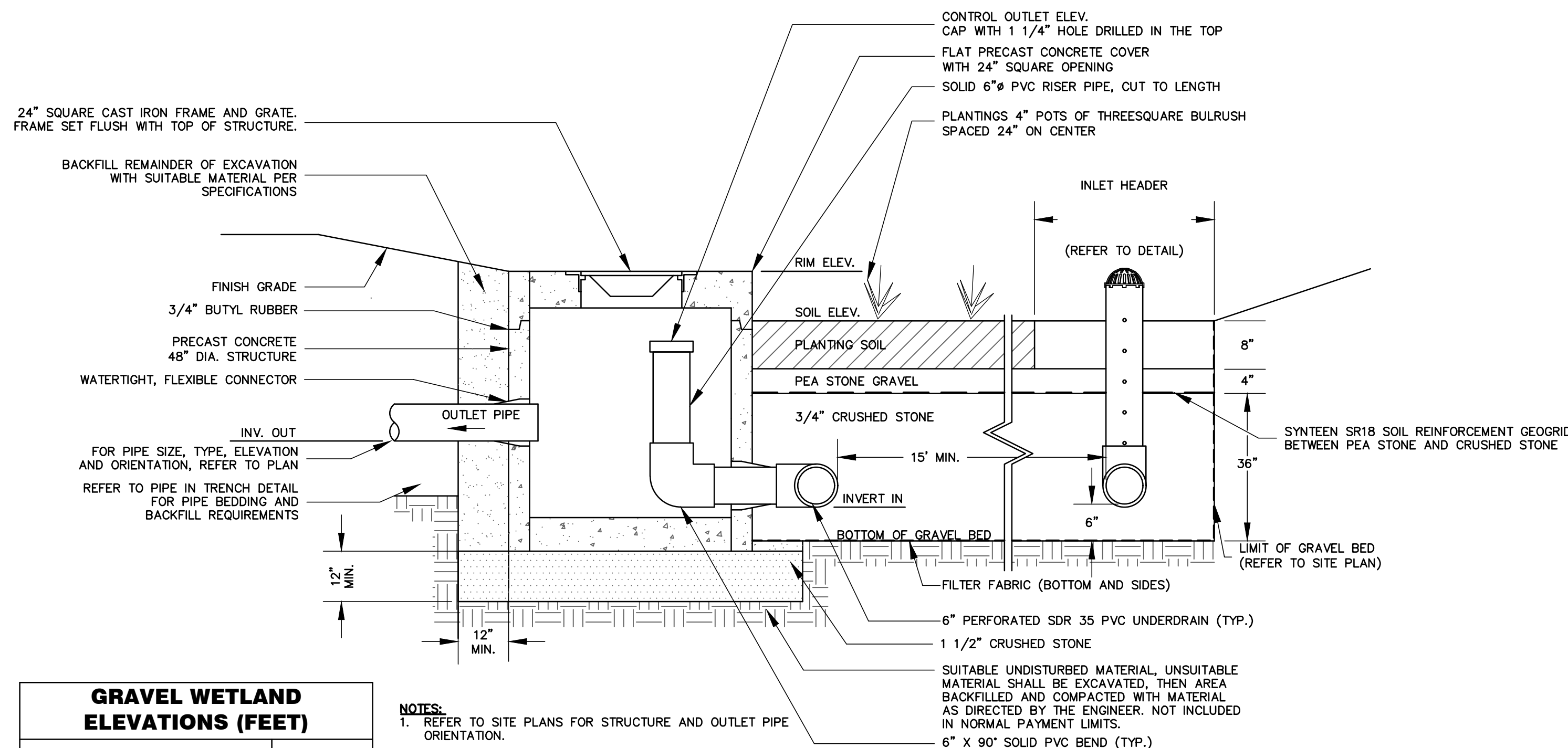
SOILS
MANAGEMENT
PLAN

DRAWING NO.

C-19

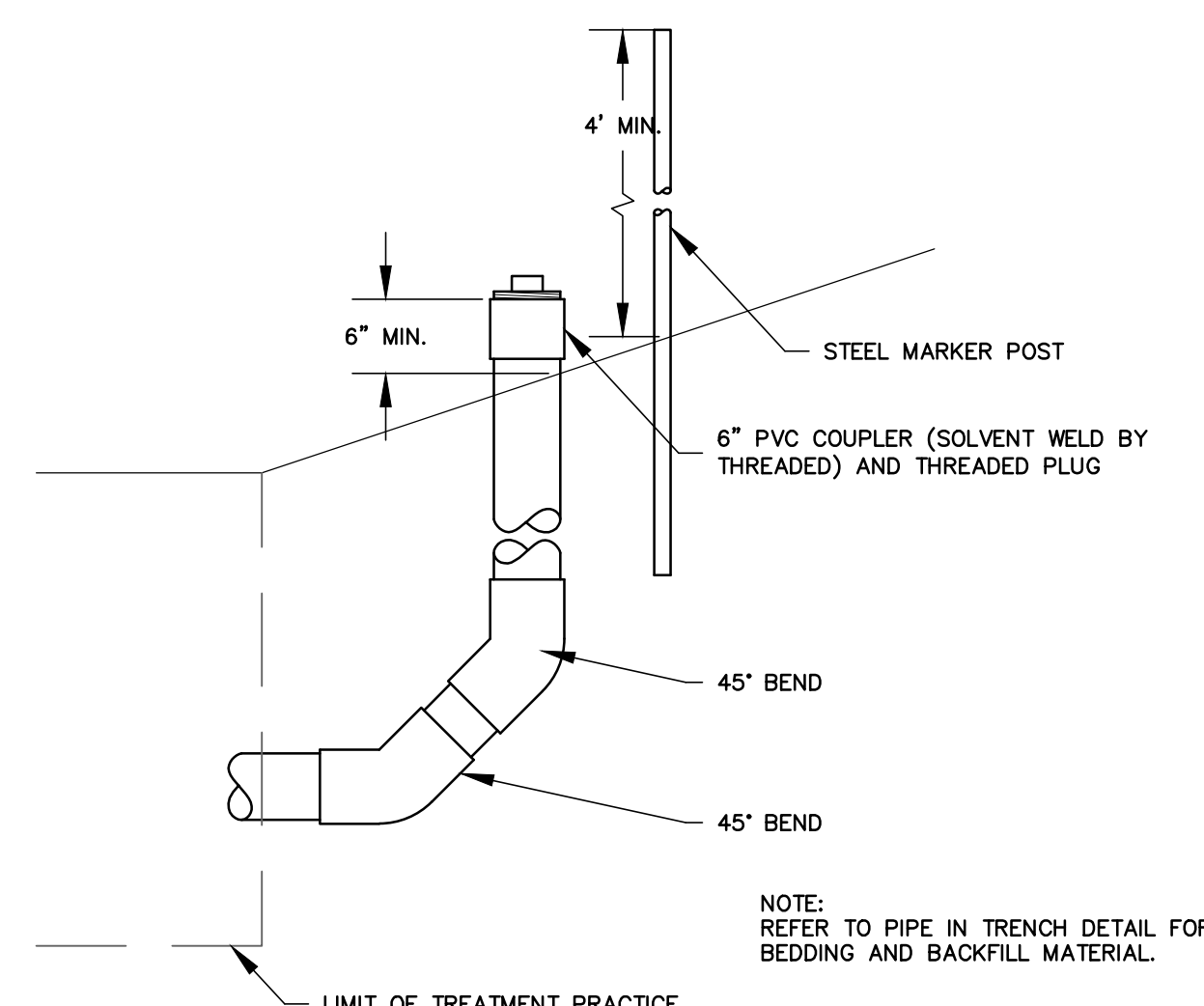
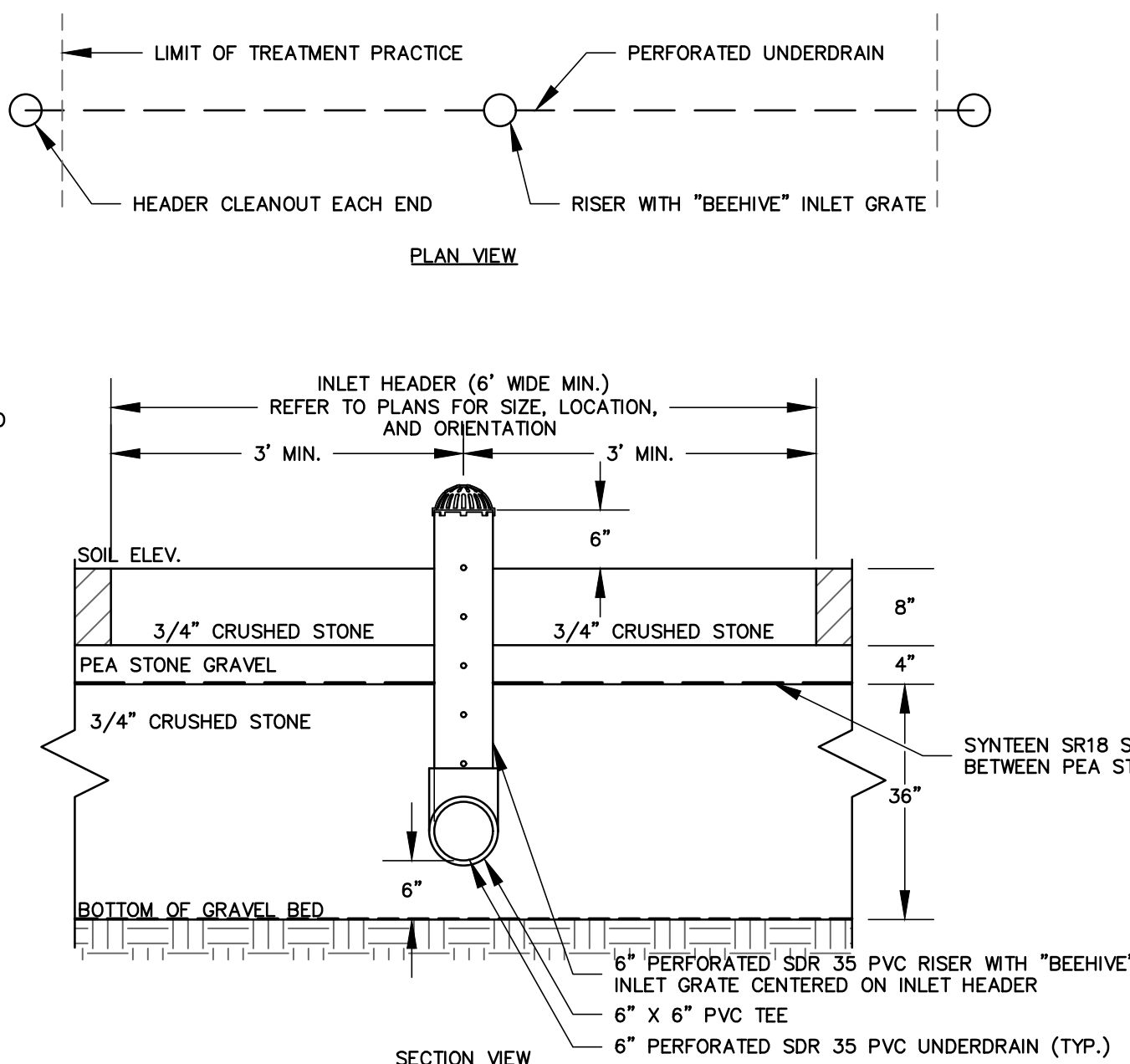


- NOTES:
1. FOR COMPLETE MODULE DATA, REFER TO MANUFACTURER R-TANK HD/MODULE SHEET.
 2. INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF HL-93 LOADING PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, CUSTOMARY U.S. UNITS, 7TH EDITION, 2014 WITH 2015 AND 2016 INTERIM REVISIONS.
 3. PRE-TREATMENT STRUCTURES NOT SHOWN.
 4. PIPE TO R-TANK MODULE CONNECTIONS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
 5. R-TANK SYSTEM SHALL BE FURNISHED WITH MAINTENANCE ROWS AND PORTS PER MANUFACTURER'S RECOMMENDATIONS.
 6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING COMPLETE R-TANK SYSTEM FOR REVIEW.



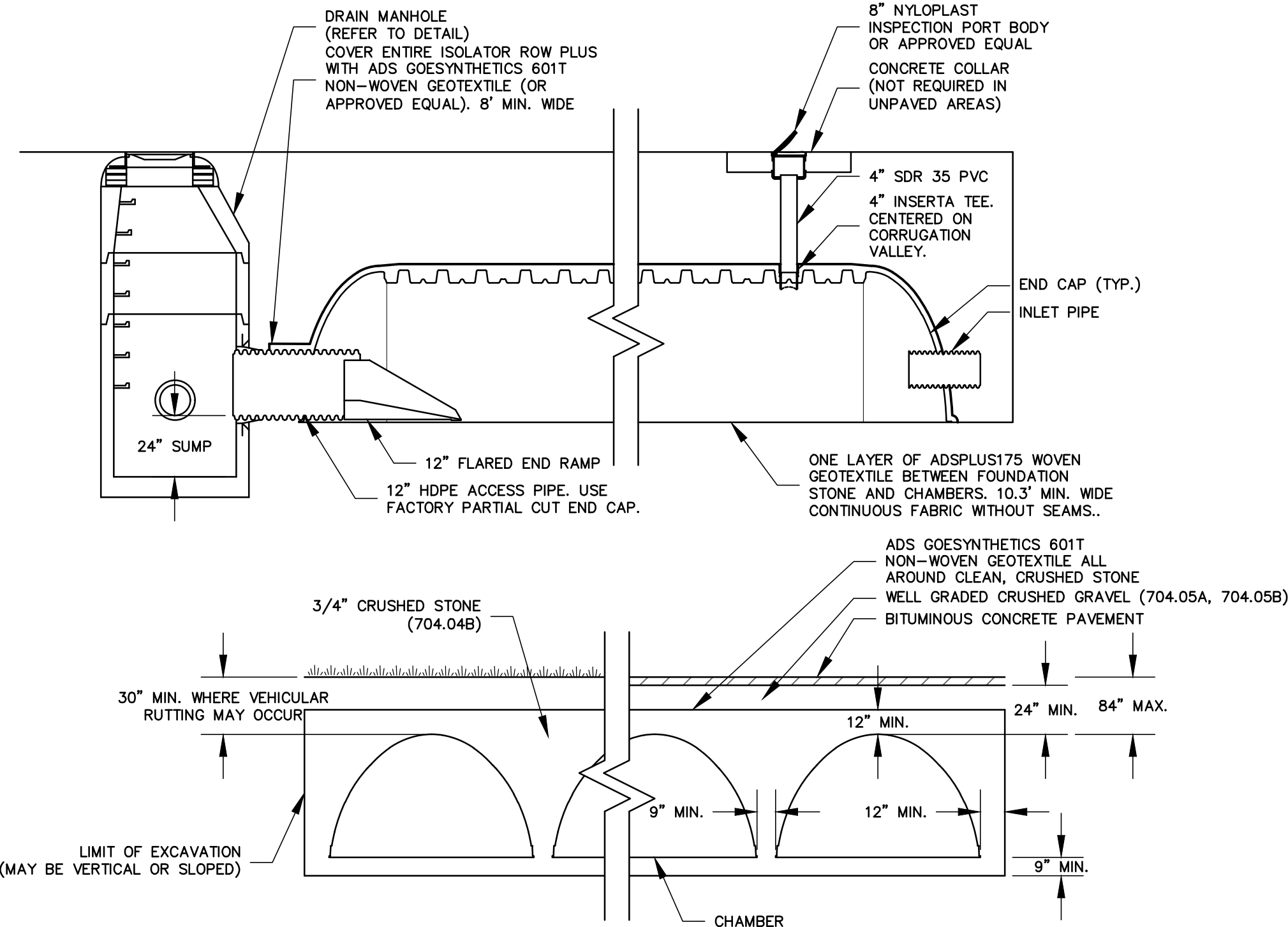
- NOTES:
1. REFER TO SITE PLANS FOR STRUCTURE AND OUTLET PIPE ORIENTATION.
 2. PARING OF INTERIOR JOINTS SHALL NOT BE ACCEPTED, WITH THE EXCEPTION OF LIFT HOLES.

| GRAVEL WETLAND ELEVATIONS (FEET) | |
|----------------------------------|-------|
| RIM ELEVATION | 350.0 |
| SOIL ELEVATION | 348.5 |
| INVERT OUT | 347.0 |
| INVERT IN | 344.5 |
| CONTROL OUTLET ELEVATION | 347.5 |



JELLYFISH FILTERING SYSTEM NOTES (PAY ITEM 900.802)

1. CONTRACTOR SHALL CONFIRM WITH MANUFACTURER THE CURRENT MODEL AND SPECIFICATIONS.
2. AS A PROPRIETARY PRODUCT, MANUFACTURERS CURRENT MODEL AND SPECIFICATIONS SUPERCEDE THE INFORMATION SHOWN IN THIS DETAIL.



SUBSURFACE STORMWATER CHAMBER SYSTEM DETAIL (PAY ITEM 900.802)

- NOTES:
1. REFER TO PLAN FOR CHAMBER SYSTEM AND END CAP MODEL NUMBER.
 2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING CHAMBER SYSTEM FOR REVIEW.
 3. INSTALLATION SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS.
 4. END CAP AND FITTINGS PER MANUFACTURER'S RECOMMENDATIONS, SIZED TO ACCOMMODATE INLET PIPE. REFER TO PLAN FOR PIPE SIZE.



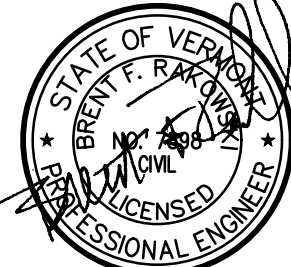
OTTER CREEK
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ESSEX HIGH SCHOOL

STORMWATER IMPROVEMENTS

ESSEX JUNCTION, VERMONT

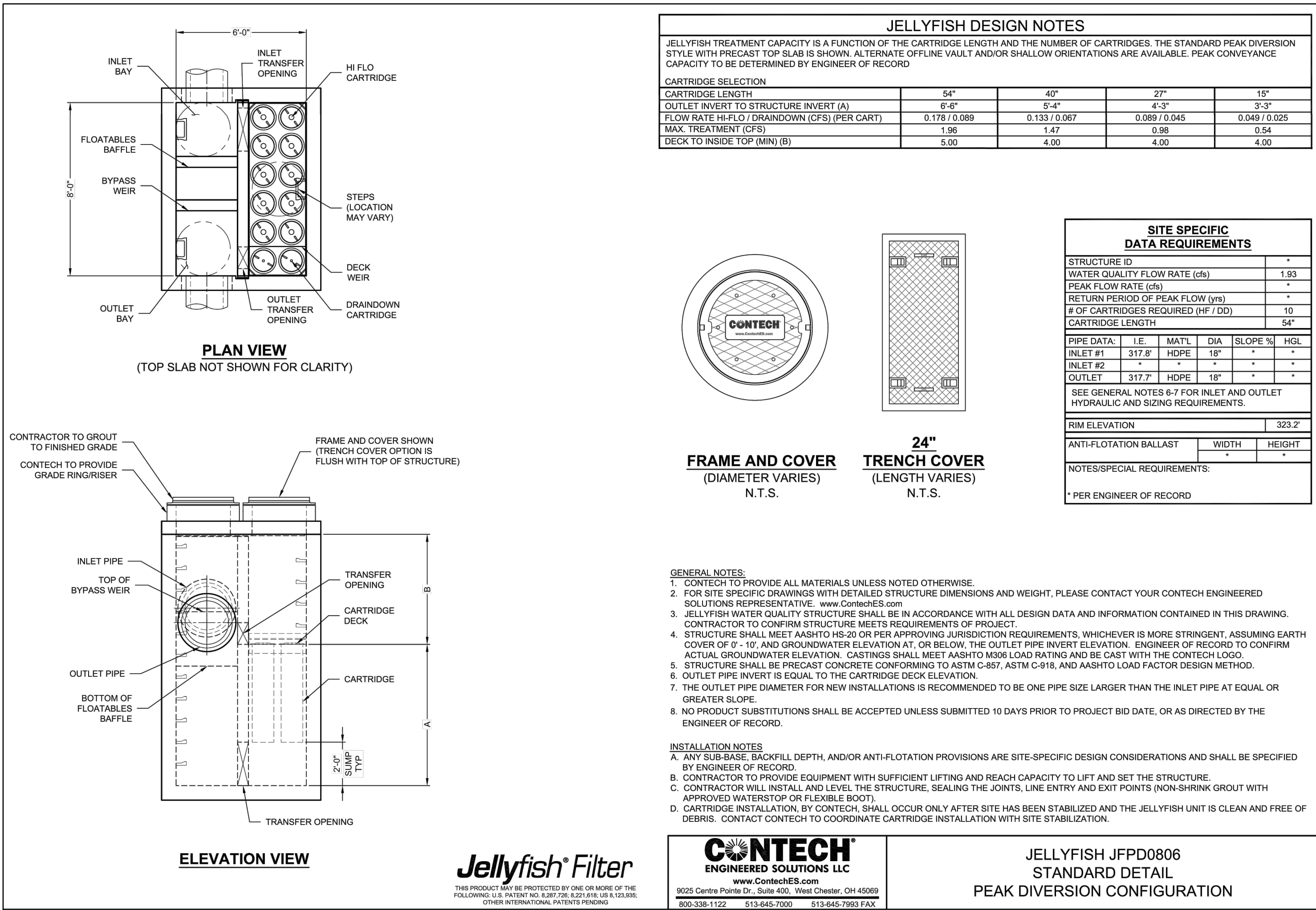
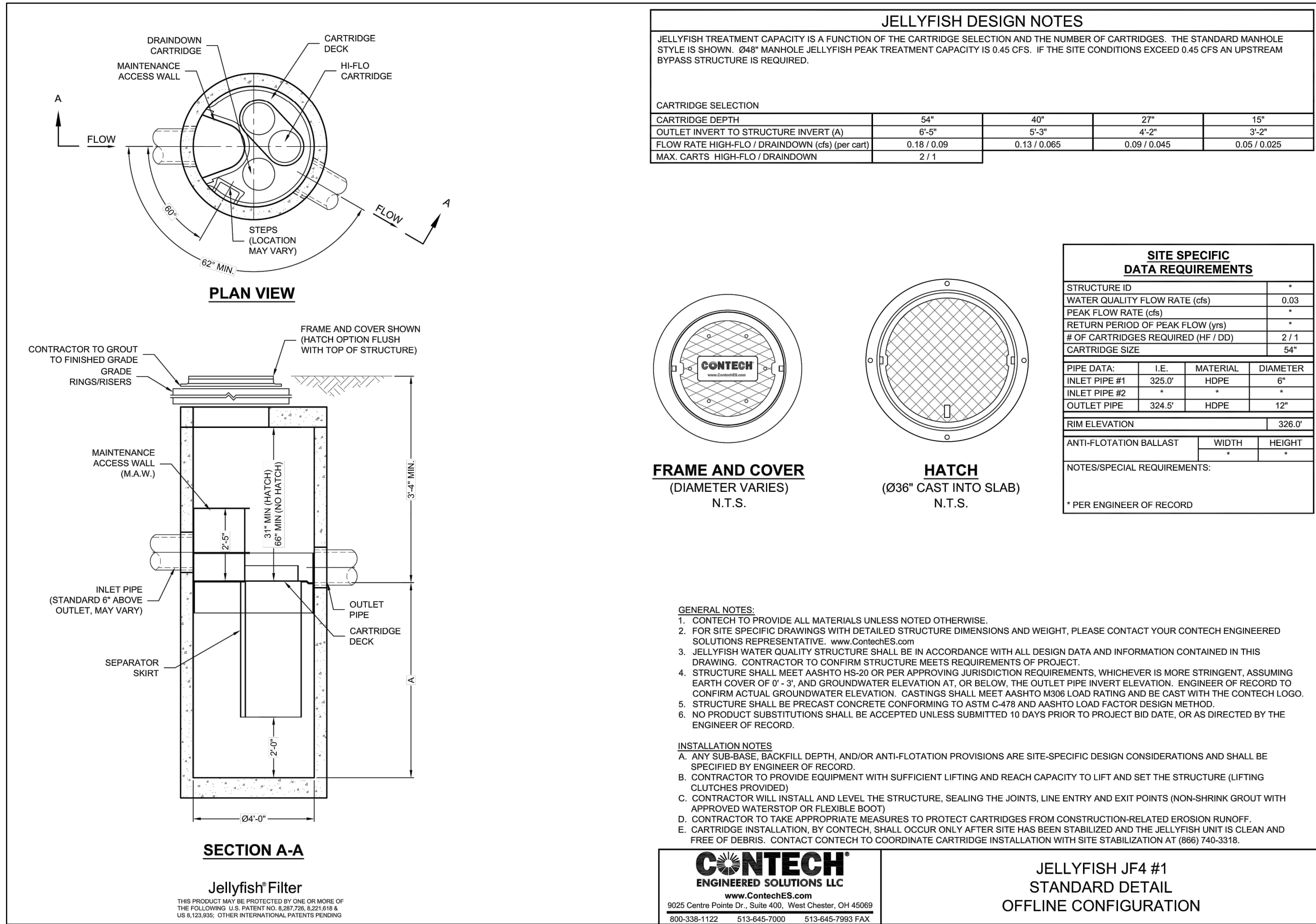
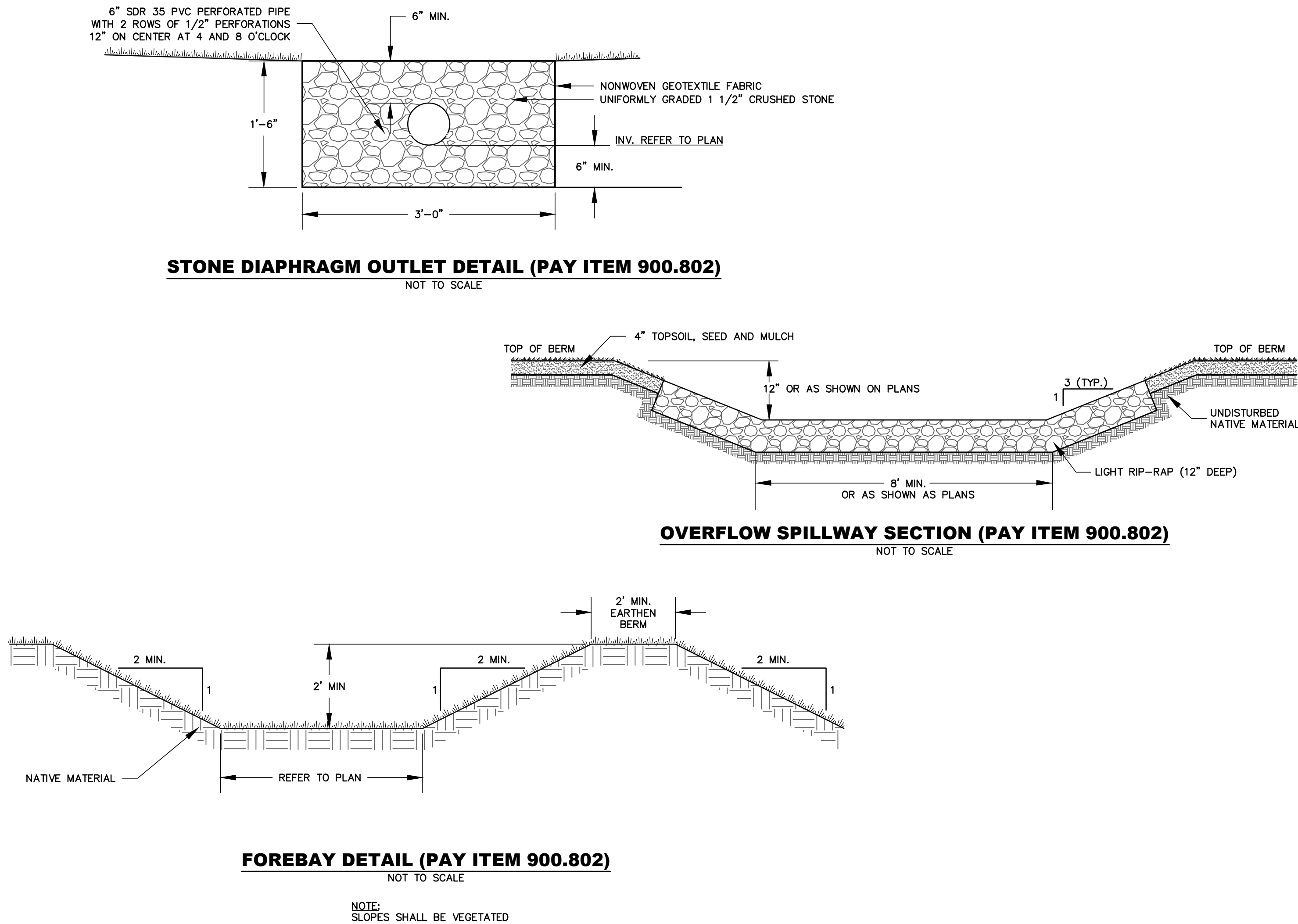
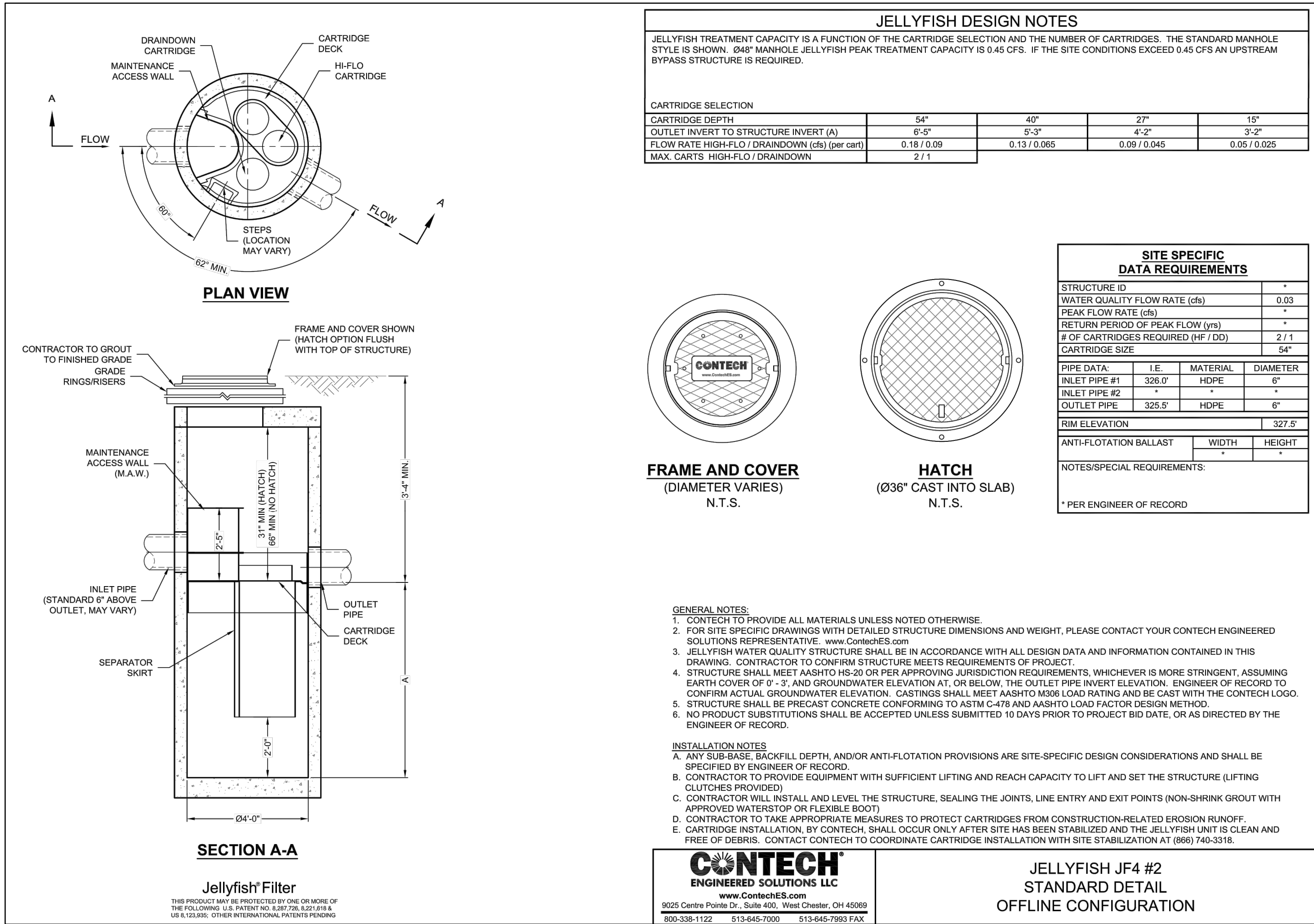
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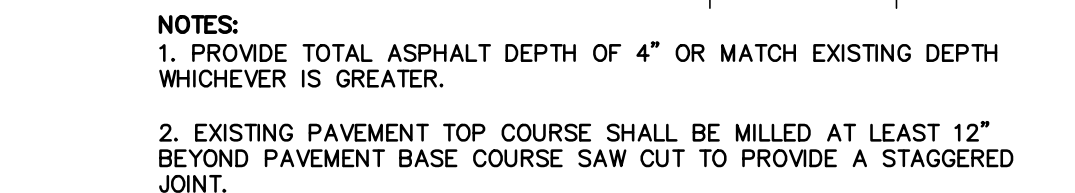
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| CHECKED BY: | BFR |
| SCALE: | SHOWN |
| PROJECT NO.: | 1108.014 |
| CADD FILE: | 1108-014a |
| TITLE: | |

NOTES AND
DETAILS

DRAWING NO.

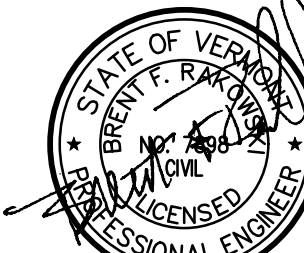
C-20






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ESSEX HIGH SCHOOL

PERMITTING

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PROJECT NO.: 1108.014

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TITLE:

NOTES AND
DETAILS

DRAWING NO.

C-22

SAFETY AND PROTECTION NOTES (INCIDENTAL TO PAY ITEM 635.11)

1. CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL WORK SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE, INJURY OR LOSS TO:

A. ALL EMPLOYEES ON THE WORK SITE AND OTHER PERSONS WHO MAY BE AFFECTED.

B. THE WORK SITE AND ALL THE MATERIALS AND EQUIPMENT TO BE INCORPORATED WHETHER IN STORAGE ON OR OFF THE SITE.

C. OTHER PROPERTY AT THE SITE OR ADJACENT, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAYS, STRUCTURES AND UTILITIES NOT DESIGNATED FOR REMOVAL, RELOCATION, OR REPLACEMENT IN THE COURSE OF CONSTRUCTION.

2. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS (INCLUDING O.S.H.A. REGULATIONS) OF ANY PUBLIC BODY HAVING JURISDICTION OVER THE SAFETY OF PERSONS OR PROPERTY.

3. THE CONTRACTOR SHALL NOTIFY OWNERS OF ADJACENT PROPERTY AND UTILITIES WHEN EXECUTION OF THE WORK WILL AFFECT THEM.

4. THE CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR THE SAFETY AND PROTECTION OF THE WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL THE WORK IS COMPLETED.

5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. IF PIPELINE DAMAGES OCCUR WHICH RESULTS IN A GAS RELEASE, CONTRACTOR IS REQUIRED BY LAW TO CALL 911.

6. CONTRACTOR SHALL COORDINATE WITH DIG-SAFE (888)-344-7233 OR WWW.DIGSAFE.COM A MINIMUM OF 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION.

7. AT THE CLOSE OF EACH WORK DAY, THE CONTRACTOR SHALL BACKFILL OR ADEQUATELY BARRICADE ALL OPEN TRENCHES.

EROSION CONTROL NOTES: (PAY ITEM 900.802)

1. THE PROJECT IS NOT REQUIRED TO OBTAIN COVERAGE UNDER THE STATE OF VERMONT'S CONSTRUCTION GENERAL PERMIT (3-9020).

2. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF VERMONT WATER QUALITY STANDARDS. ANY FINES ASSESSED BY REGULATORY AGENCIES FOR THE NONCOMPLIANCE WITH STATE WATER QUALITY STANDARDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE PERSONNEL REQUIRED TO INSPECT AND MAINTAIN EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) FOR THIS PROJECT.

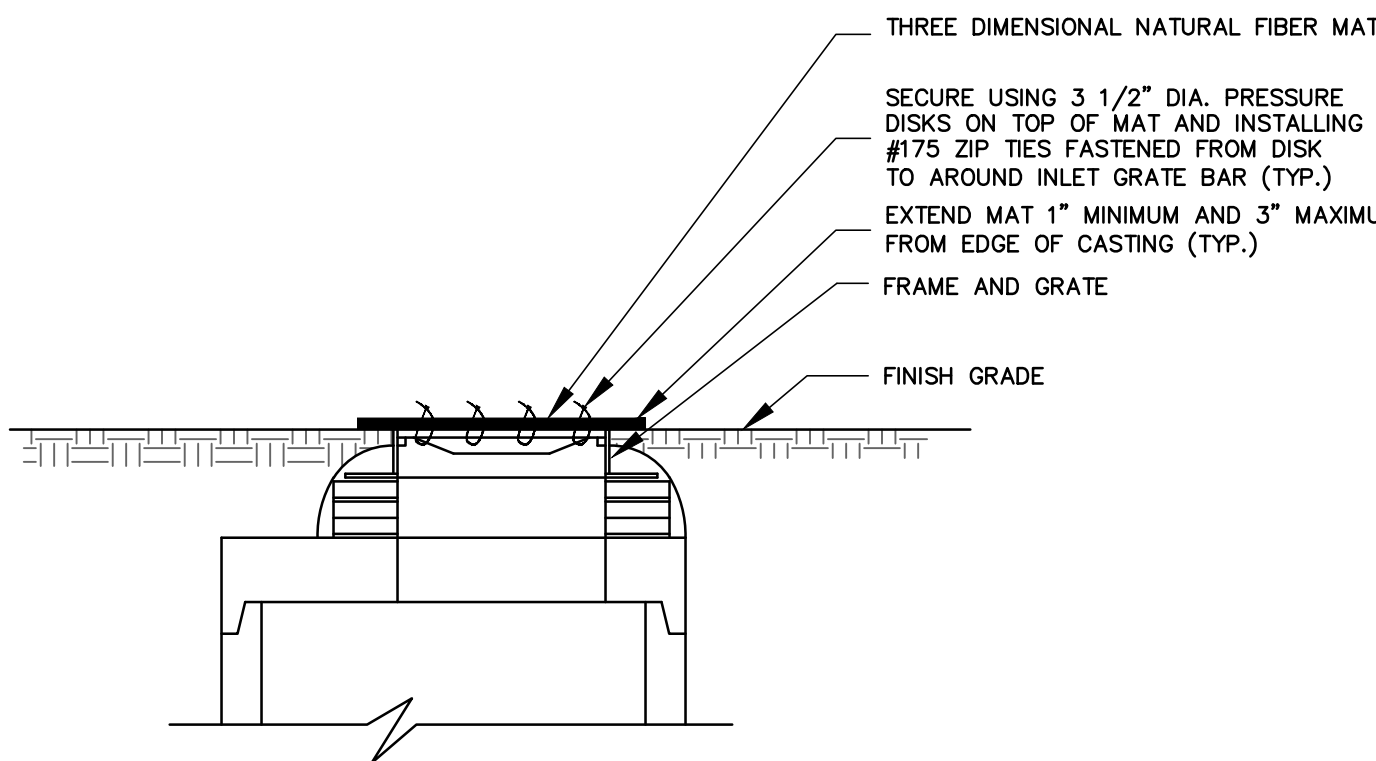
3. THE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS DO NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE, EVALUATE AND CONSIDER ALTERNATIVES AND TO PROPOSE APPROPRIATE RECOMMENDATIONS IN ORDER TO LIMIT POTENTIAL WATER QUALITY IMPACTS.

4. EROSION CONTROL MEASURES SHALL BE MONITORED AND MAINTAINED THROUGHOUT CONSTRUCTION AND REMOVED AFTER PROJECT AREA AND DRAINAGE COURSES ARE FULLY ESTABLISHED AND STABLE.

5. ALL DISTURBED AREAS NOT UNDER ACTIVE CONSTRUCTION SHALL BE STABILIZED BY ROUGH GRADING TO MINIMIZE SLOPES AND MULCHED. FOLLOWING FINAL GRADING OF ANY PORTION OF THE SITE, CONTRACTOR SHALL LOAM, SEED AND MULCH WITHIN ONE WEEK.

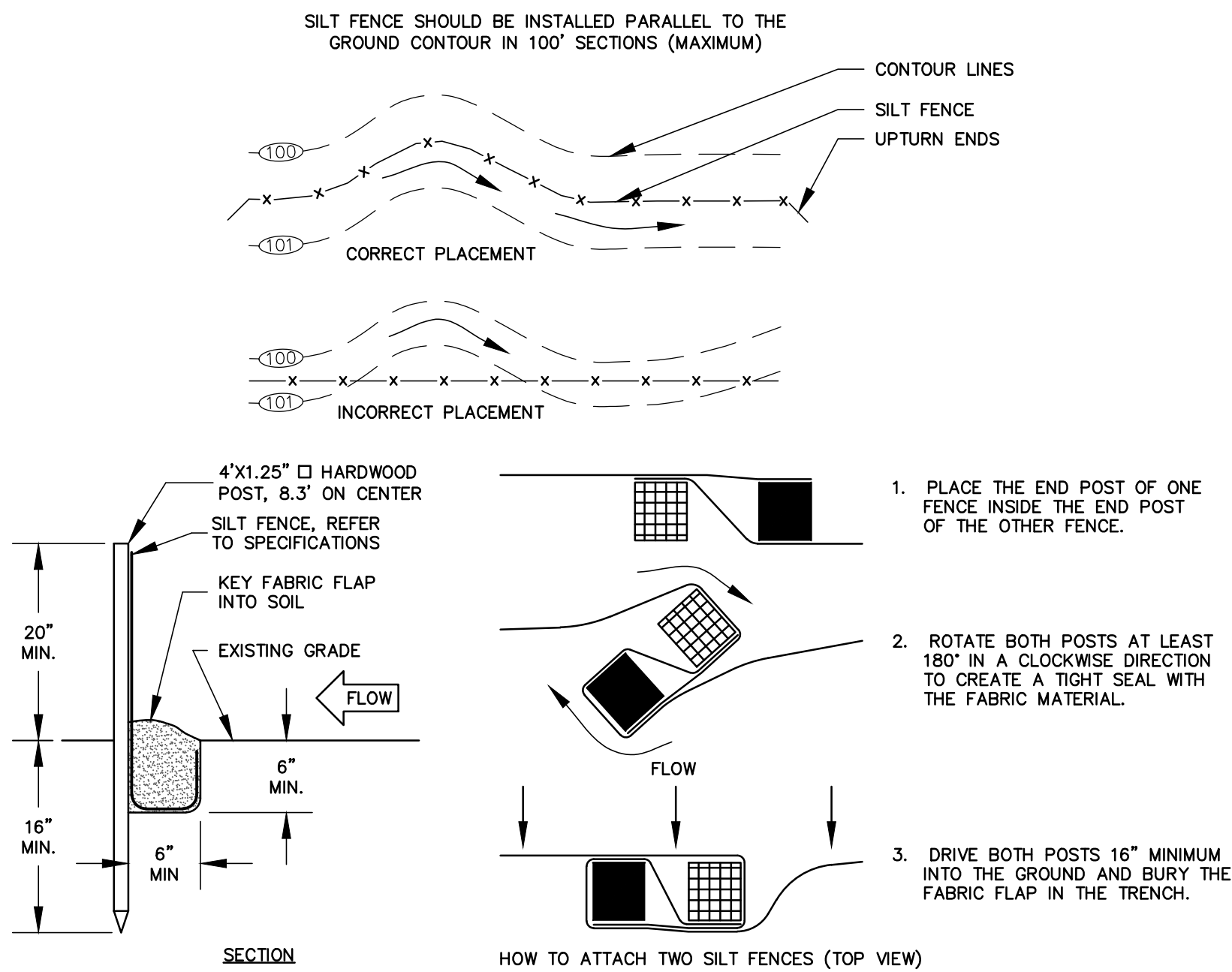
6. REFER TO SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL INFORMATION.

7. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL CATCH BASINS WITHIN 100 FEET DOWN GRADIENT OF THE ACTIVELY WORKED CONSTRUCTION AREA. INLET PROTECTION BEST MANAGEMENT PRACTICES SHALL BE INSTALLED PRIOR TO THE START OF WORK AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



TEMPORARY CATCH BASIN INLET FILTER DETAIL (PAY ITEM 900.802)

NOT TO SCALE



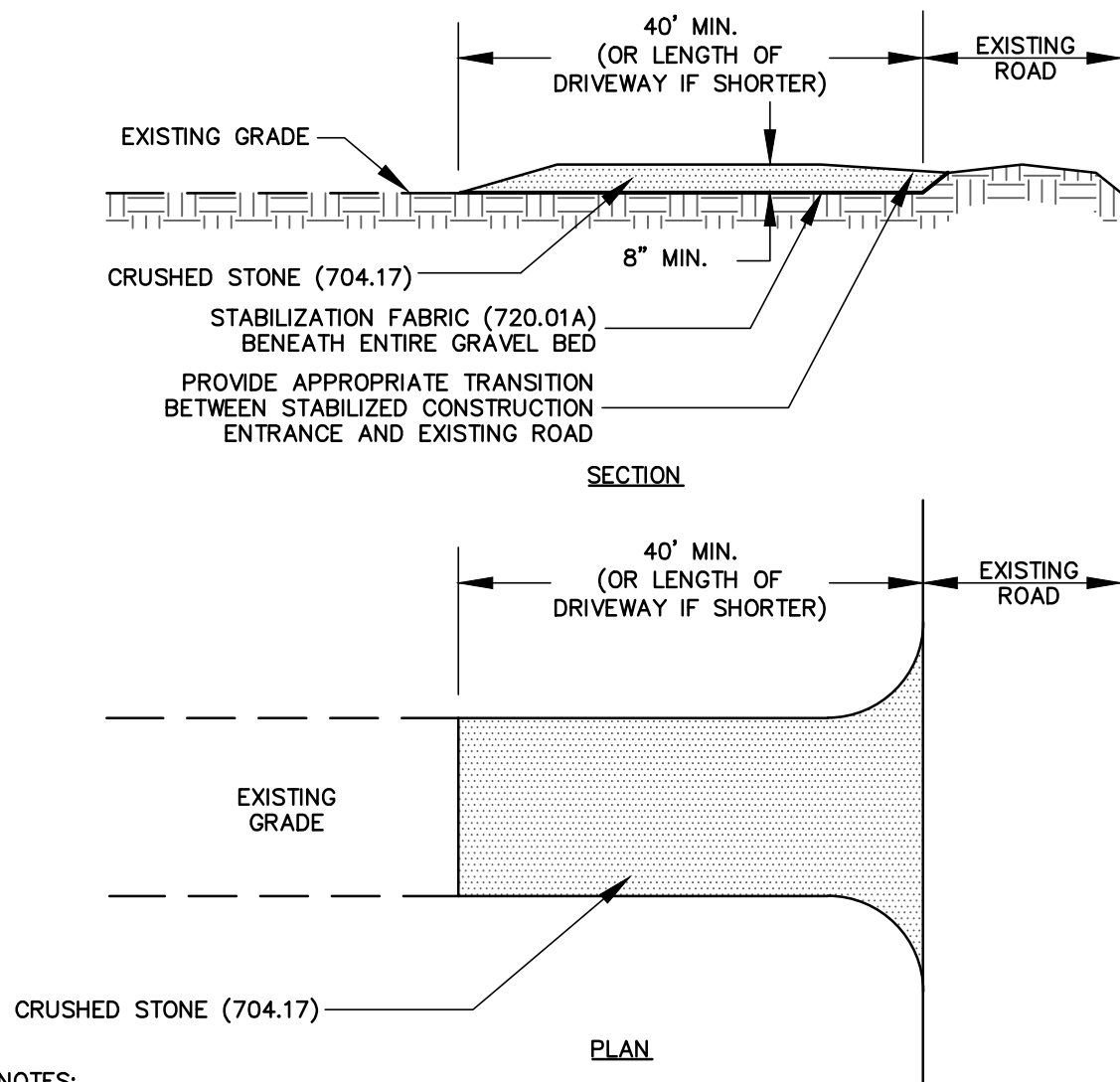
SILT FENCE DETAIL (PAY ITEM 900.802)

NOT TO SCALE

NOTES:

1. SILT FENCE SHALL BE INSTALLED AT THE DOWNHILL SIDE OF CONSTRUCTION ACTIVITIES BEFORE UPSLOPE LAND DISTURBANCE BEGINS.

2. REFER TO TECHNICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.



NOTES:

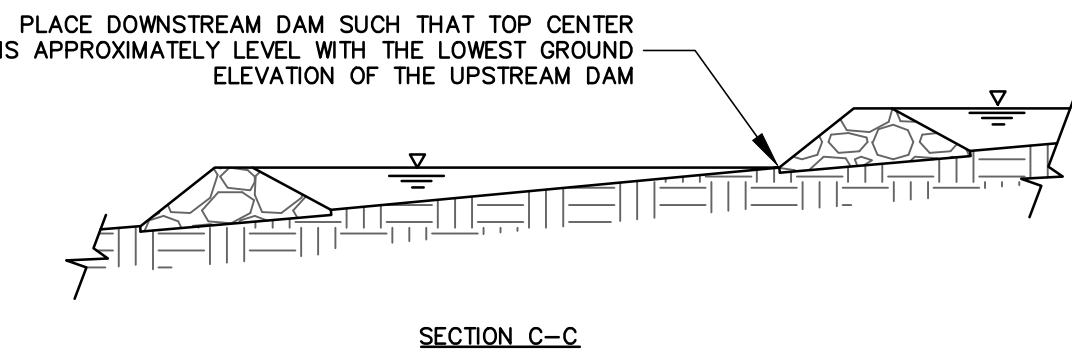
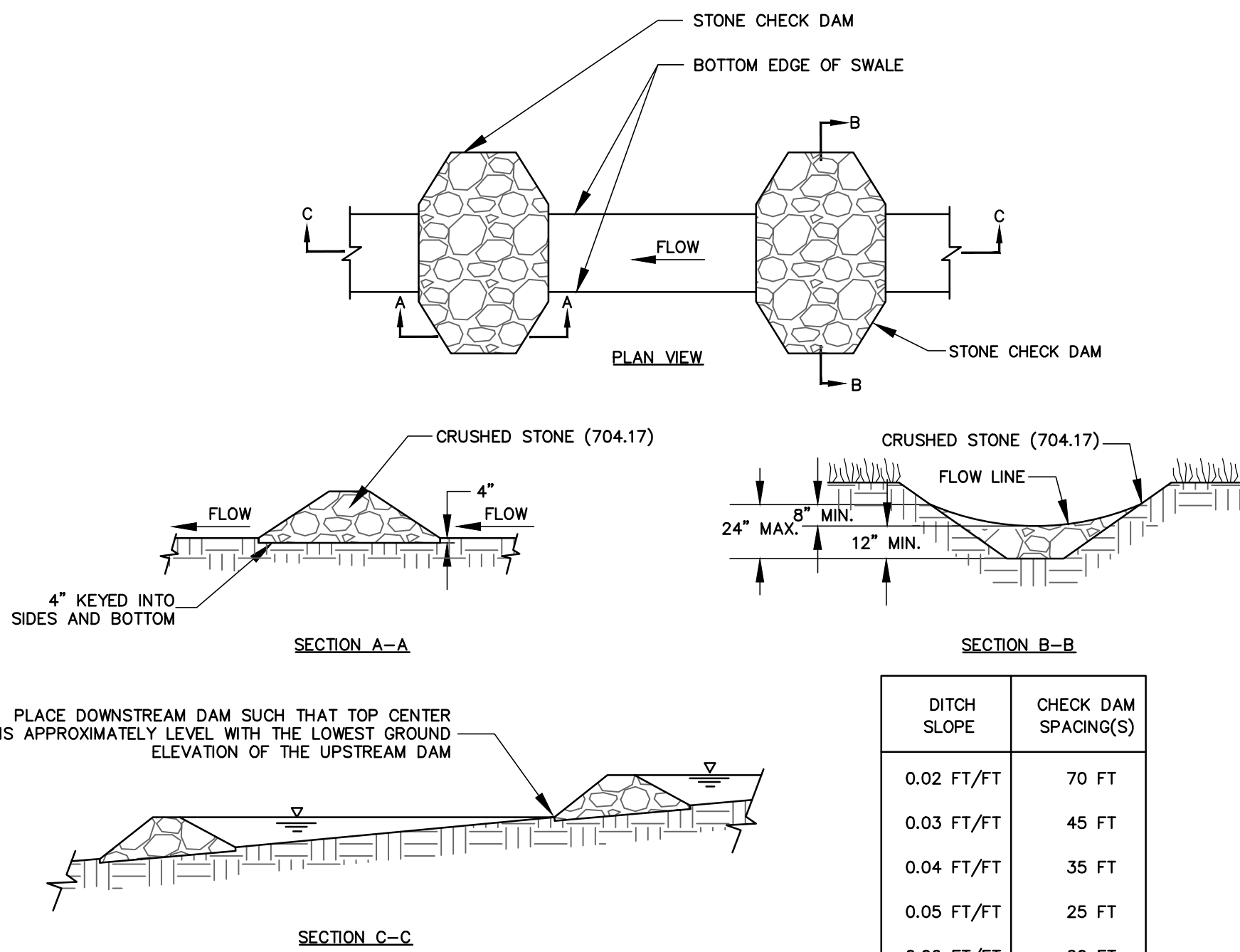
1. WIDTH SHALL BE 12 FEET MINIMUM.

2. VEHICLE WASHING: WHEN NECESSARY, WHEELS AND TIRES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.

3. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE (PAY ITEM 900.802)

NOT TO SCALE



| DITCH SLOPE | CHECK DAM SPACING(S) |
|-------------|----------------------|
| 0.02 FT/FT | 70 FT |
| 0.03 FT/FT | 45 FT |
| 0.04 FT/FT | 35 FT |
| 0.05 FT/FT | 25 FT |
| 0.06 FT/FT | 20 FT |

DO NOT USE CHECK DAMS BELOW 2% OR ABOVE 6% DITCH GRADES

STONE CHECK DAM DETAIL (PAY ITEM 900.802)

NOT TO SCALE



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ESSEX HIGH SCHOOL

STORMWATER IMPROVEMENTS

ESSEX JUNCTION, VERMONT

PERMITTING

DATE ISSUED: 6/28/2024

REVISIONS:

DRAWN BY: HB

CHECKED BY: BFR

SCALE: SHOWN

PROJECT NO.: 1108.014

CADD FILE: 1108-014a

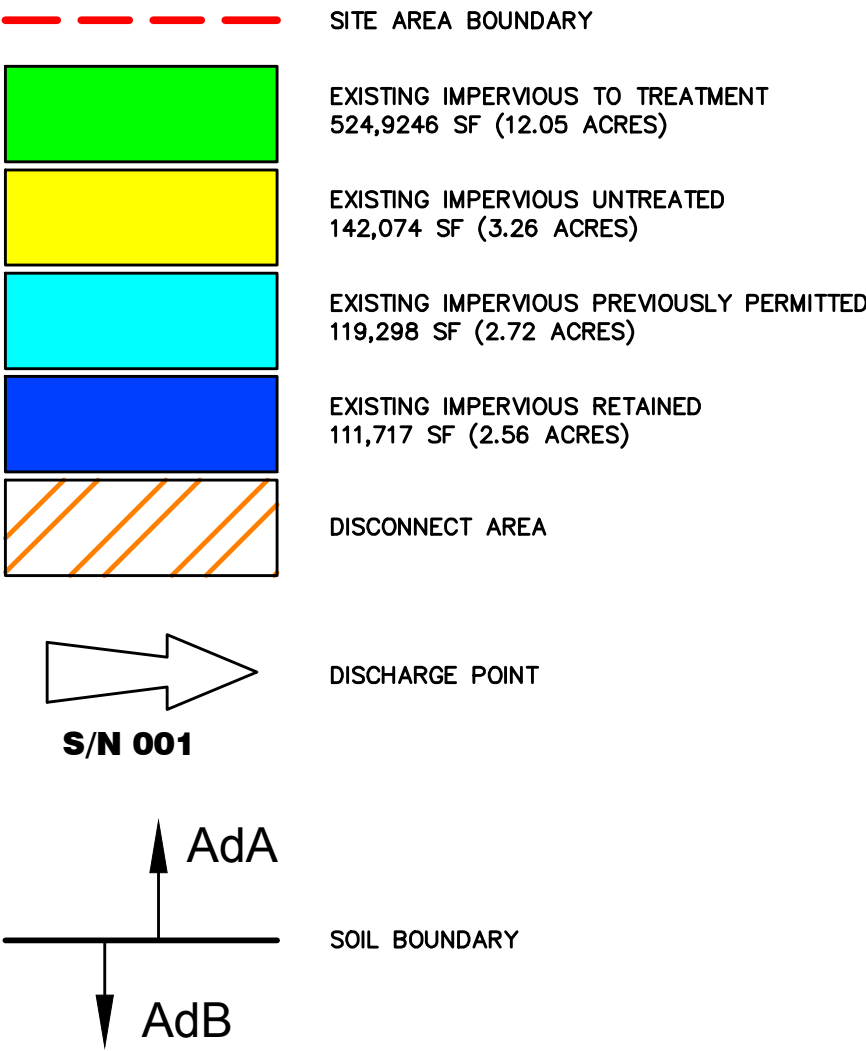
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DRAWING NO.

C-23

LEGEND



SOILS LEGEND

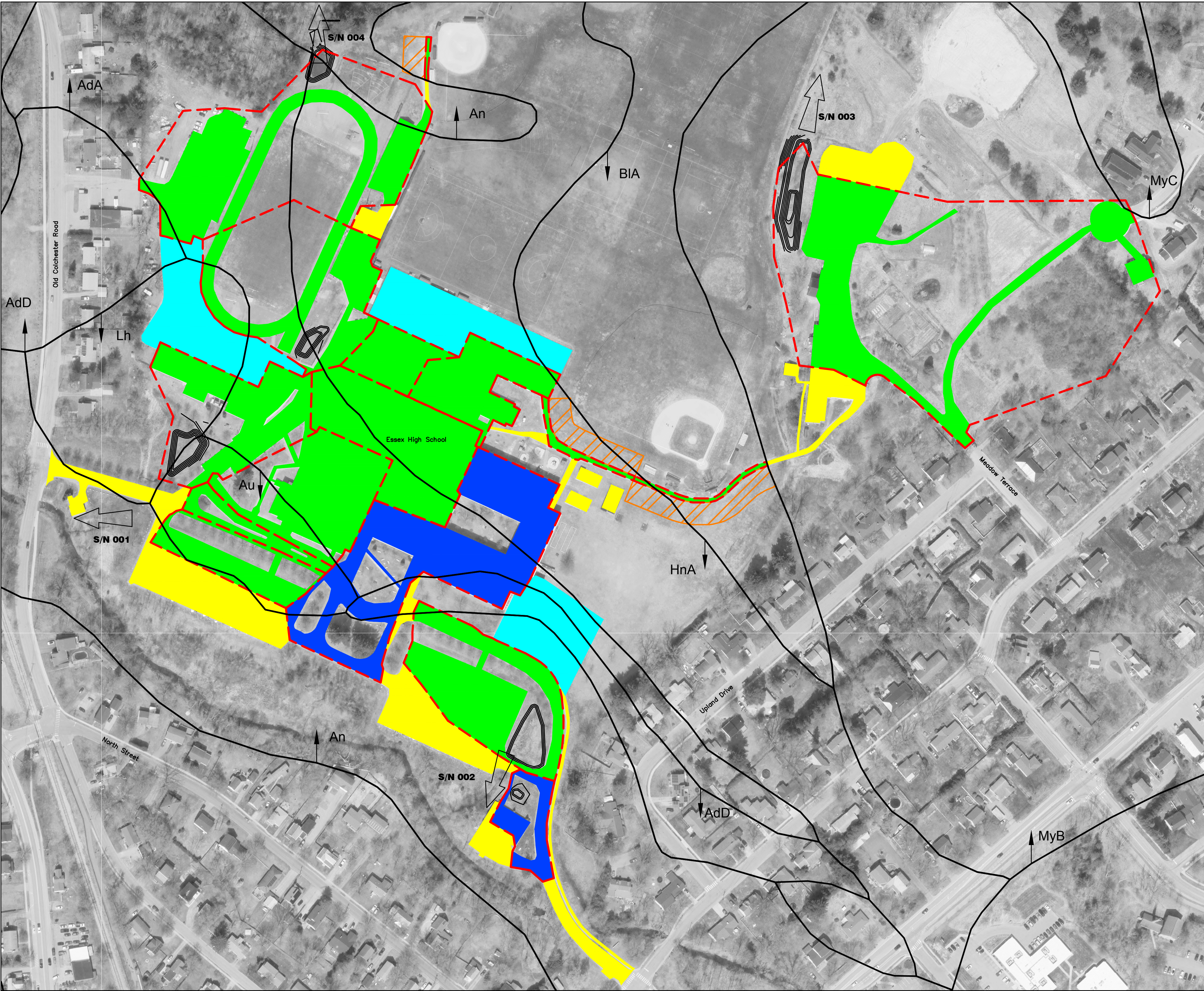
| Soil Designation | Soil Description | Hydrologic Soil Group |
|------------------|--|-----------------------|
| An | Alluvial land | NOT RATED |
| AdA | Adams and Windsor loamy sands, 0 to 5 percent slopes | A |
| AdD | Adams and Windsor loamy sands, 12 to 30 percent slopes | A |
| Au | Au Gres fine sandy loam | A/D |
| BIA | Belgrade and Eldridge soils, 0 to 3 percent slopes | B/D |
| HnA | Hinesburg fine sandy loam, 0 to 3 percent slopes | A |
| Lh | Livingston clay | C/D |
| MyB | Munson and Raynham silt loams, 2 to 6 percent slopes | C/D |
| MyC | Munson and Raynham silt loams, 6 to 12 percent slopes | C/D |

NOTES:

1. STORMWATER RUNOFF FROM THE PROJECT SITE IS MANAGED USING STORMWATER TREATMENT PRACTICES WHICH REQUIRES ROUTINE INSPECTION AND MAINTENANCE. THE INSPECTION AND MAINTENANCE BELOW IS INTENDED TO PROVIDE GUIDANCE TO PERSONNEL ON SPECIFIC ITEMS REQUIRING REVIEW AND AS AN INDICATOR OF MORE SUBSTANTIVE MAINTENANCE/REPAIR ISSUES.
2. REFER TO STORMWATER PERMIT AUTHORIZATION FOR ADDITIONAL INSPECTION AND REPORTING REQUIREMENTS.
3. DISCONNECTION AREAS SHALL REMAIN FULLY VEGETATED AND BE PROTECTED TO ENSURE THAT NO FUTURE DEVELOPMENT, DISTURBANCE, OR CLEARING MAY OCCUR WITHIN THE AREA.

JELLYFISH FILTERS

| MAINTENANCE ITEM | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|--|---------------------------------|----------|
| 1. VISUAL INSPECTION (ANNUALLY) | | |
| BACKWASH POOL FREE OF STANDING WATER | | |
| DECK FREE OF SEDIMENT | | |
| *STANDING WATER INDICATES FILTERS REQUIRE MAINTENANCE | | |
| 2. MAINTENANCE INSPECTION (ANNUALLY) | | |
| REMOVE FILTER CARTRIDGES, CLEAN OR REPLACE AS NEEDED | | |
| RINSE CARTRIDGE DECK | | |
| REMOVE WATER, SEDIMENT AND OTHER POLLUTANTS FROM SUMP | | |
| REINSTALL CARTRIDGES | | |
| *REFER TO JELLYFISH OWNERS MANUAL FOR ADDITIONAL DETAILS | | |



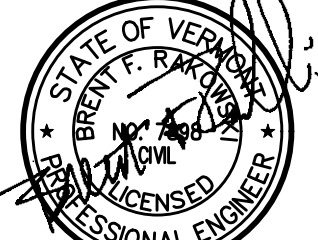
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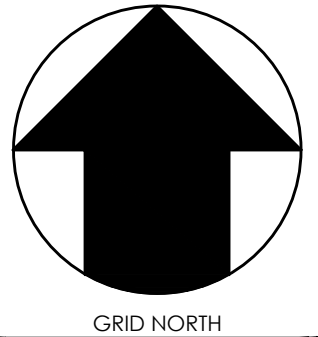
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ESSEX HIGH SCHOOL
STORMWATER IMPROVEMENTS
ESSEX JUNCTION, VERMONT

PERMITTING

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REVISIONS:

DRAWN BY: HB
CHECKED BY: BFR
SCALE: 1" = 120'
PROJECT NO.: 1108.014
CADD FILE: 1108-014A

TITLE:
STORMWATER
PLAN

DRAWING NO.

SW-1