SHC GREEN INFRASTRUCTURE

1000 Eliot Street
Detroit, MI 48207

January 9, 2020 RECORD DRAWINGS

SmithGroup Project Number: 10756.000

Sheet List Table				
Sheet Number	Sheet Title			
COVER	COVER SHEET			
C-100	SURVEY AND EXISTING CONDITIONS			
C-200	DEMOLITON, EROSION & SEDIMENT CONTROL PLAN			
C-201	SITE PREPARATION & SESC DETAILS			
C-300	LAYOUT PLAN			
C-301	BIORETENTION CROSS SECTIONS			
C-302	PAVEMENT DETAILS 1			
C-400	GRADING PLAN			
C-500	UTILITY PLAN			
C-501	UTILITY PROFILES			
C-502	UTILITY DETAILS			
L-100	PLANTING PLAN & DETAILS			
L-101	PLANTING PLAN ENLARGEMENTS & PLANT LIST			

Prepared for:

The Nature Conservancy
4219 Woodward Avenue
Suite 302
Detroit, Michigan 48201

Owner:

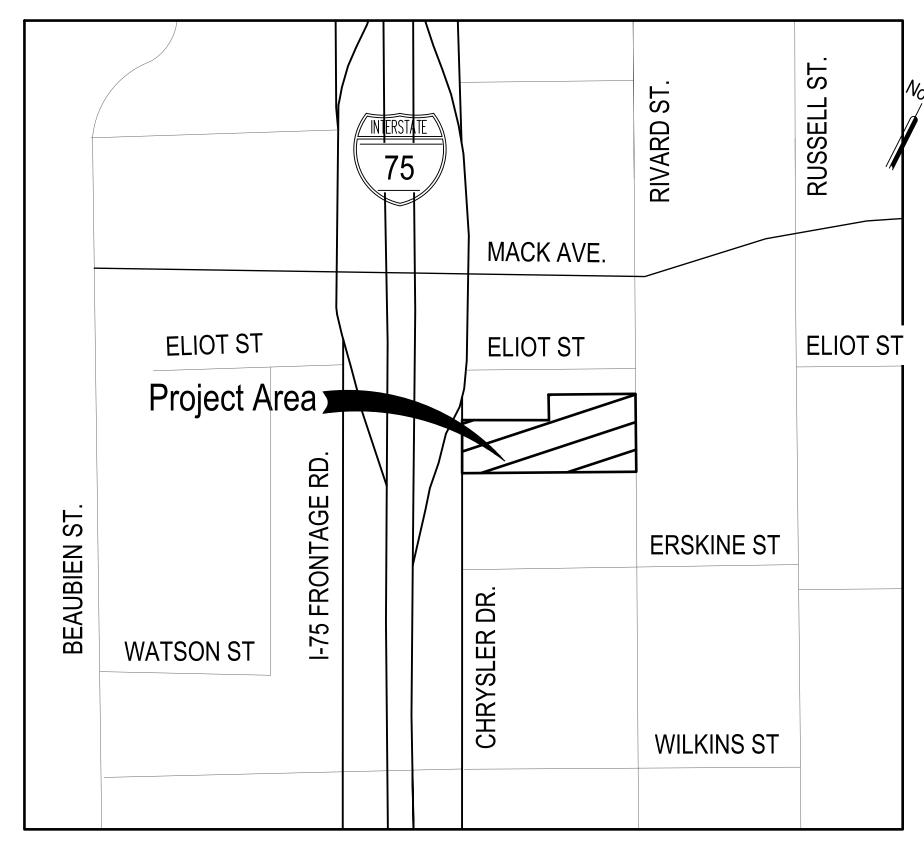
Archdiocese of Detroit 4311 Central St. Detroit, MI 48210

Prepared by:

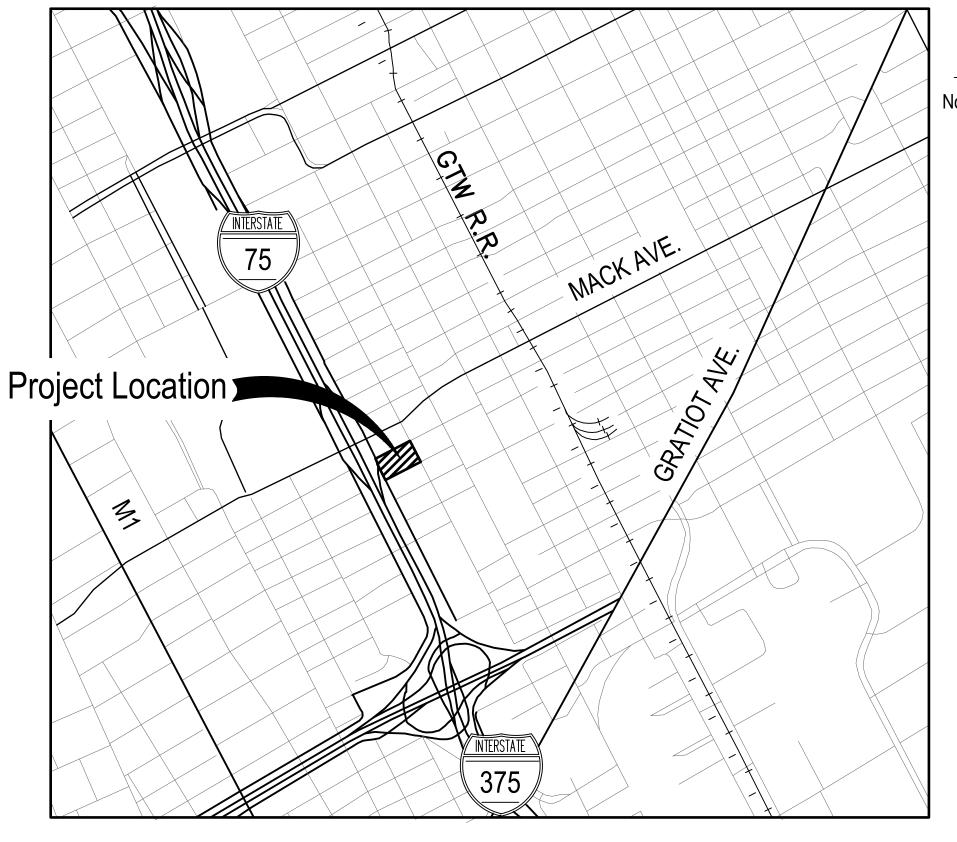
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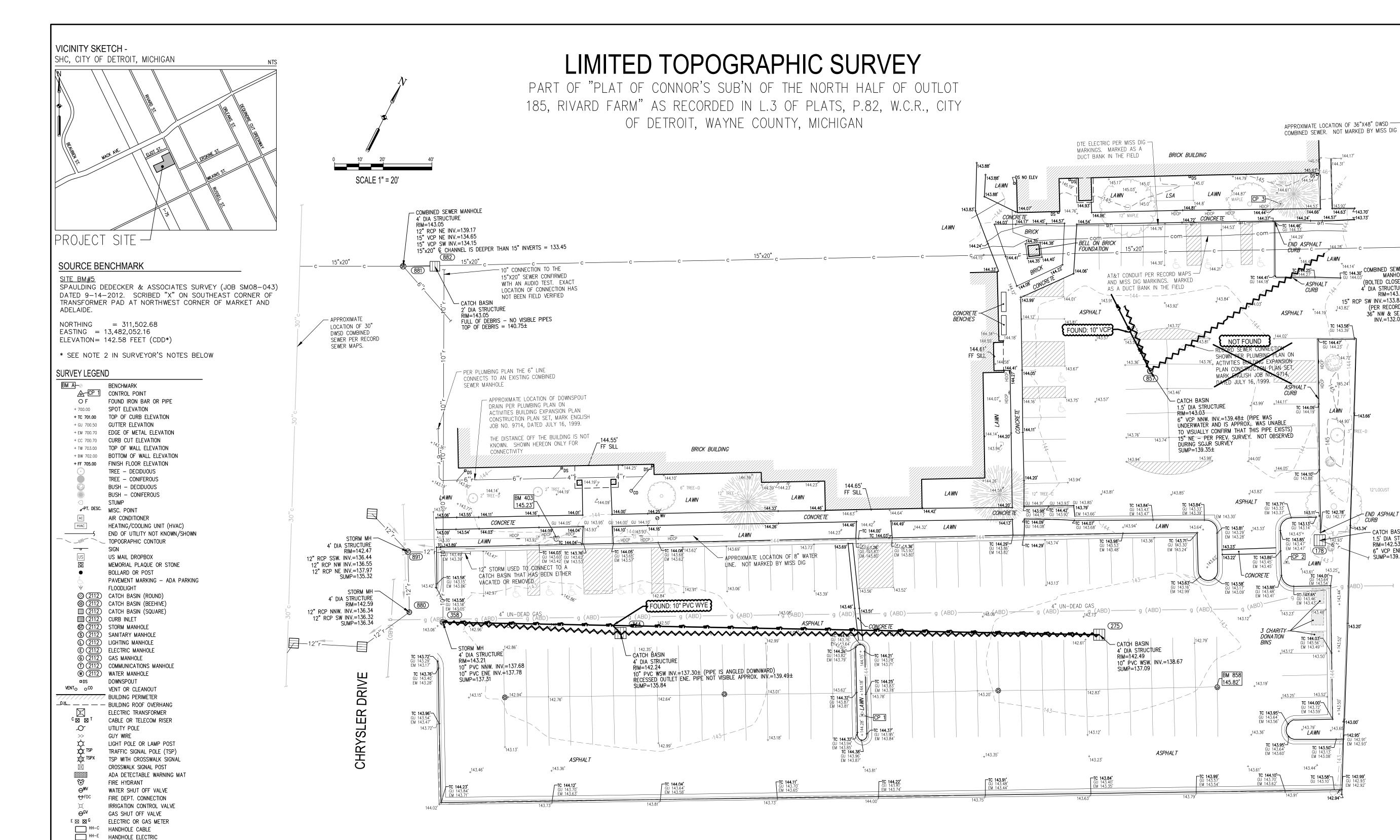


PROJECT VICINITY MAP



PROJECT LOCATION MAP

RECORD DRAWINGS HAVE BEEN PREPARED BASED ON ISSUED BULLETINS, SKETCHES, RFI RESPONSES PROVIDED TO CONTRACTOR DURING CONSTRUCTION IN ADDITION TO CONTRACTOR'S RED-LINED SET OF CONSTRUCTION DOCUMENTS. ALL ELEVATIONS AND DIMENSIONS ARE PROPOSED DESIGN ELEVATIONS AND DIMENSIONS. AN AS-BUILT SURVEY WAS NOT PERFORMED.



SURVEYOR'S NOTES

HANDHOLE FIBER OPTIC HANDHOLE LIGHTING

HANDHOLE SIGNALIZATION

- UNDERGROUND ELECTRIC

- UNDERGROUND TELECOMMUNICATION

HANDHOLE TELECOM

FENCE LINE

HANDRAIL

GUARDRAIL

—— g (ABD)—— NATURAL GAS (ABANDONED)

- OVERHEAD UTLITY

- SANITARY SEWER

WATER MAIN (ABANDONED)

- HOT WATER (STEAM) LINE

- STORM SEWER

- WATER MAIN

----- PLD-ug ----- PUBLIC LIGHTING - UNDERGROUND

PLD-oh PUBLIC LIGHTING - OVERHEAD

— com —

—— ue ———

----oh------

— w ———

— h w ———

— w (ABD)—

——fiber——— FIBER OPTIC

--- ctv----- CABLE TELEVISION

— fire — FIRE SUPPRESSION

— g — NATURAL GAS

- 1. HORIZONTAL DATUM IS ACCORDING TO MICHIGAN STATE PLANE GRID COORDINATES, SOUTH ZONE (2113), GEOID 2012A, INTERNATIONAL FEET AS LINEAR UNIT OF MEASURE.
- 2. VERTICAL DATUM IS THE CITY OF DETROIT (CDD) DATUM, AS ESTABLISHED ON A SURVEY BY SPALDING DeDECKER & ASSOCIATES (JOB SM08-043), DATED 09-14-2012, WITH SOURCE BENCHMARK LISTED HEREON. TO CONVERT FROM CDD DATUM TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88):

CDD + 479.31 FEET = NAVD88

- 3. SMITHGROUP PERFORMED A TOPOGRAPHIC SURVEY UTILIZING DATA COLLECTED WITH GLOBAL POSITIONING RECEIVERS REFERENCING THE MICHIGAN CONTINUOUSLY OPERATING REFERENCE NETWORK FOR SITE CONTROL AND DATA COLLECTION. ROBOTIC TOTAL STATIONS WERE ALSO USED FOR DATA COLLECTION. DATA WAS COLLECTED IN THE FIELD ON MAY 22, 2018. THE LIMITS OF THE SURVEY WERE RESTRICTED TO THE AREAS SHOWN HEREON. PUBLIC RIGHTS-OF-WAY WERE EXCLUDED FROM THE MAPPING EFFORT.
- 4. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION REGARDING LAND BOUNDARY, EASEMENTS, RIGHTS-OF-WAY, AND OTHER INFORMATION THAT MAY AFFECT TITLE WAS GAINED FROM AVAILABLE TAX RECORDS AND/OR RECORDED LEGAL DOCUMENTS FOR ADJOINING PARCELS. A BOUNDARY SURVEY WAS NOT INCLUDED AS PART OF THE SCOPE OF SERVICES

- 5. MISS-DIG DESIGN TICKET B081380929-00B WAS ISSUED FOR THIS PROJECT. AS OF THE DATE OF THIS SURVEY THE FOLLOWING UTILITY OWNERS HAVE PROVIDED RECORD MAPS OR RESPONDED THAT THEY DO NOT HAVE ASSETS IN THE
- PROJECT AREA: AT&T (TELECOM) – DTE (GAS)– SPRINT/NEXTEL (TELECOM) - COMCAST (TELECOM) - ITC (POWER) - DTE (ELECTRIC)
- . UNDERGROUND UTILITY LOCATIONS WERE DERIVED FROM ACTUAL MEASUREMENTS ON VISIBLE UTILITIES, MISS-DIG FLAGS/MARKINGS, AND/OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS, NOR SHOULD THEY IT BE ASSUMED THAT THEY ARE THE ONLY UNDERGROUND UTILITIES IN THE AREA. MISS DIG STAKING STAKING TICKET NO. B81380908 WAS ISSUED FOR THIS PROJECT.
- 7. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED AND ARE NOT CONSIDERED A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE AND OR DEVELOPMENT OF THIS SITE.
- 8. ADDITIONAL SPOT ELEVATIONS MAY BE CONTAINED IN THE PROJECT DATABASE, AND ALTHOUGH NOT APPEARING IN THE RECORD PLAN DOCUMENT DUE TO SCALE AND VISIBILITY, WERE UTILIZED IN THE DIGITAL TERRAIN MODEL FOR CREATION OF THE ONE-FOOT CONTOURS. THE ADDITIONAL SPOT ELEVATION DATA IS AVAILABLE FOR FUTURE DESIGN ANALYSIS, BEING LOCATED ON A FROZEN LAYER WITHIN THE PROJECT DATABASE.

CERTIFICATE

charles.langolf@smithgroup.com

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH LOCAL AND STATE JURISDICTIONAL REQUIREMENTS REGULATING MAPPING STANDARDS. THE UNDERSIGNED STATES THAT PROPER FIELD PROCEDURES, INSTRUMENTATION AND ADEQUATE STAFF WERE EMPLOYED TO ACHIEVE THE RESULTS INDICATED HEREIN. SMITHGROUP, INC.

SURVEYOR CHARLES A. LANGOLF, PS 56210 PROFESSIONAL SURVEYOR STATE OF MICHIGAN

TC 144.00

LAWN

TC 143.58' GU 143.10'

3/20/19 DATE:

SHC GREEN INFRASTRUCTURE

1000 Eliot Street Detroit, MI 48207

Prepared For:

CIC 144.30 COMBINED SEWER —

15" RCP SW INV.=133.83±

4' DIA STRUCTURI

36" NW & SE €

6" VCP ENE INV.=139.55

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ISSUED FOR REV DATE ADD'L UTILITY MAPPING <u>1</u> <u>8/30/18</u> ADD'L UTILITY MAPPING 3/20/19

KEY PLAN

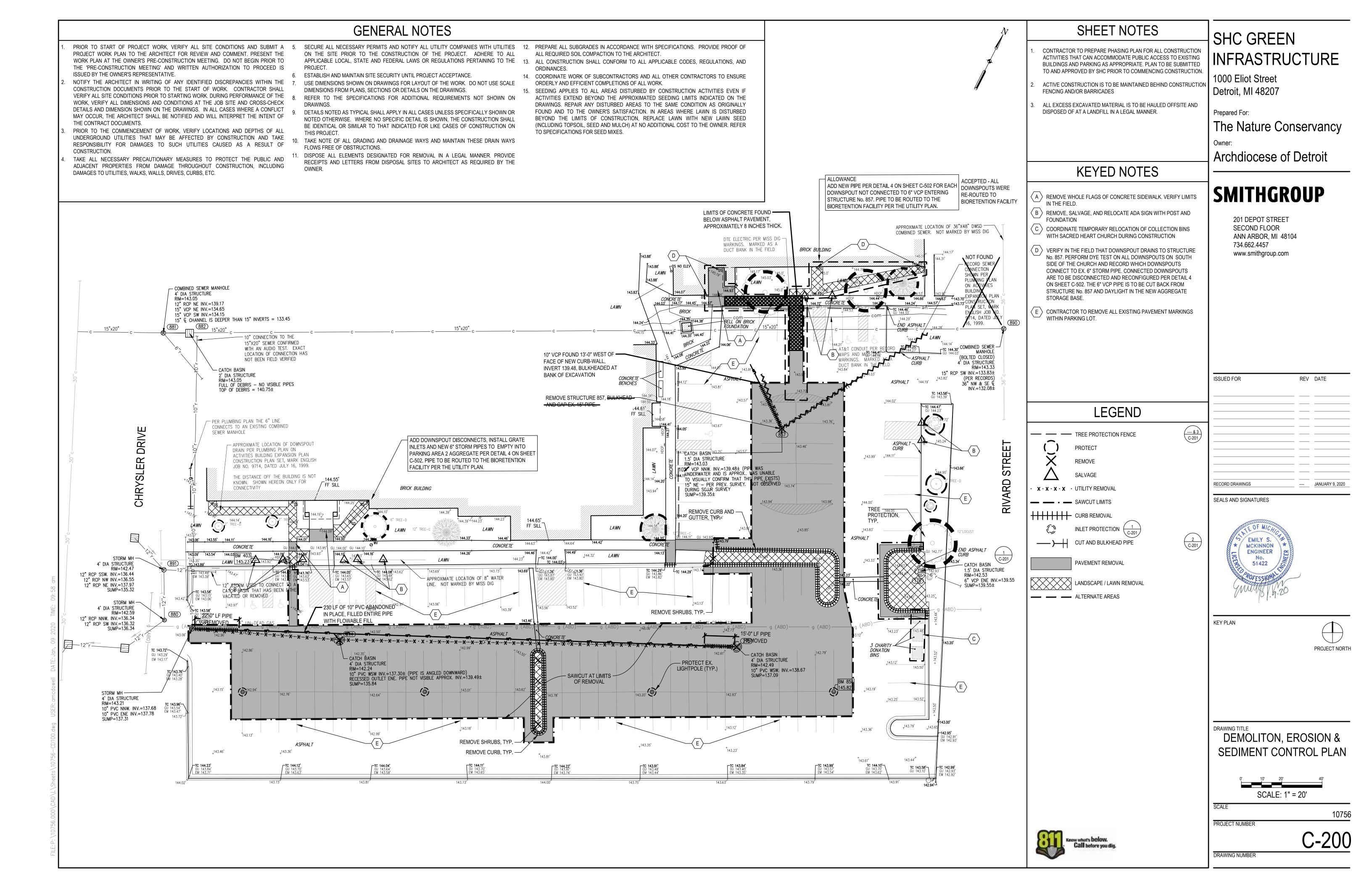
SEALS AND SIGNATURES

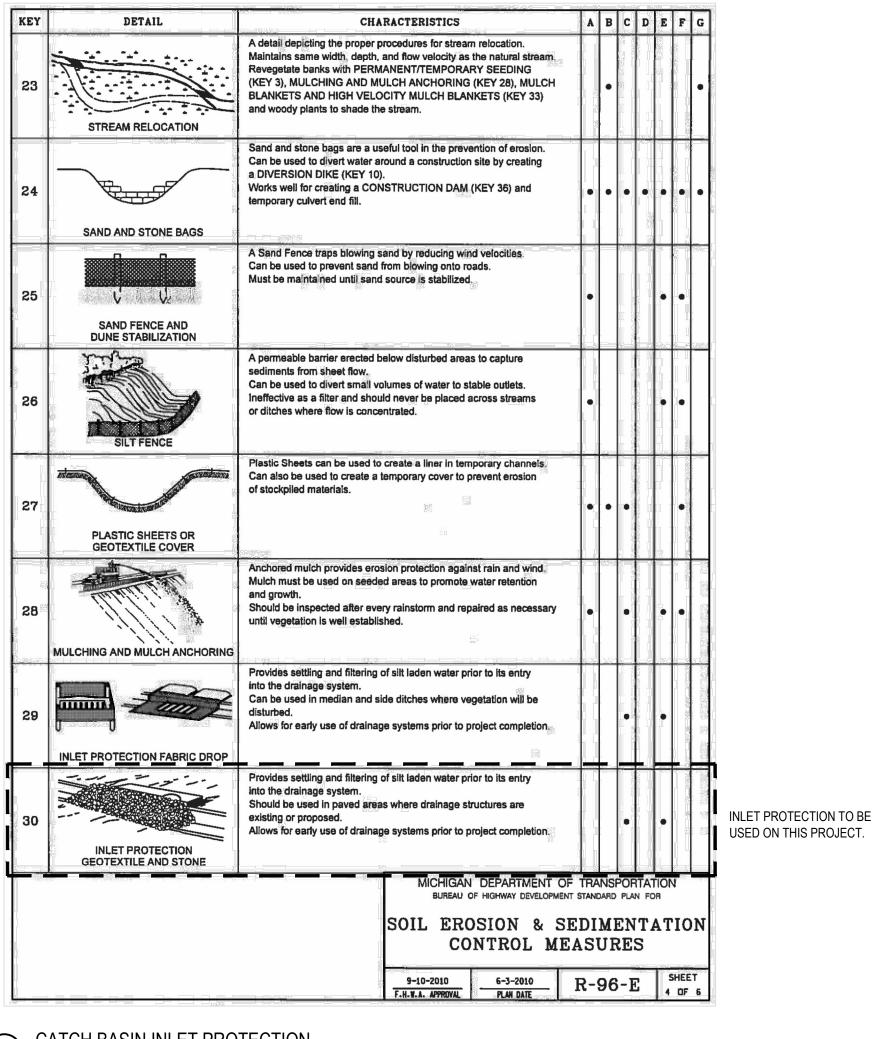


SURVEY AND EXISTING CONDITIONS

SCALE PROJECT NUMBER

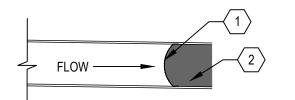
DRAWING NUMBER





1 MESH SCREEN

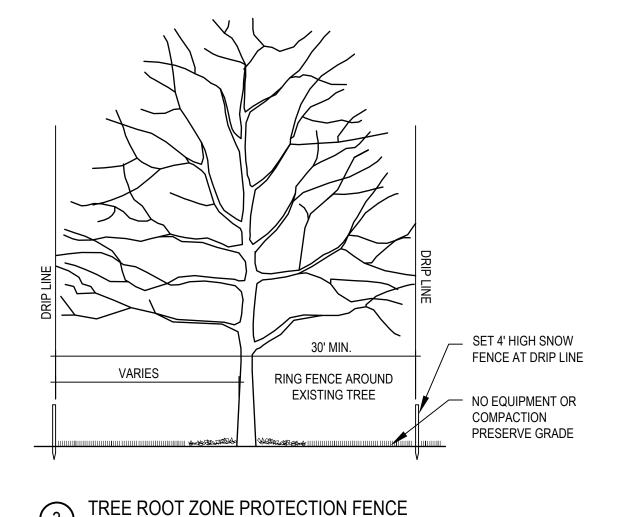
FILL FIRST 12" OF PIPE WITH LOW SHRINK HYDRAULIC GROUT AND FORM A SEAL



ELEVATION

STORM PIPE BULKHEAD

1/2" = 1'-0"



1) CATCH BASIN INLET PROTECTION

N.T.S.

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RECORD DRAWINGS		JANUARY 9, 2020

SEALS AND SIGNATURES



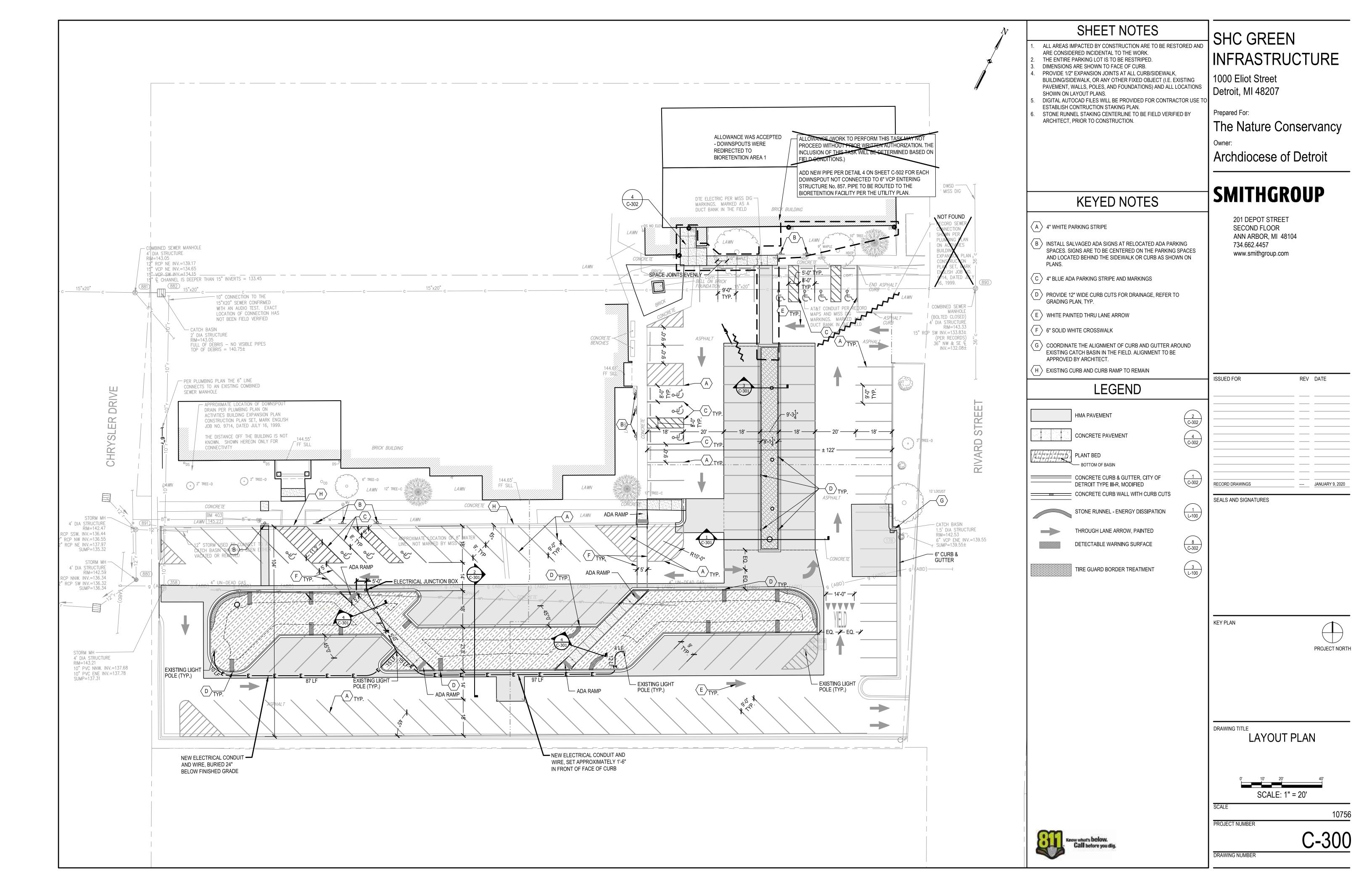
KEY PLAN

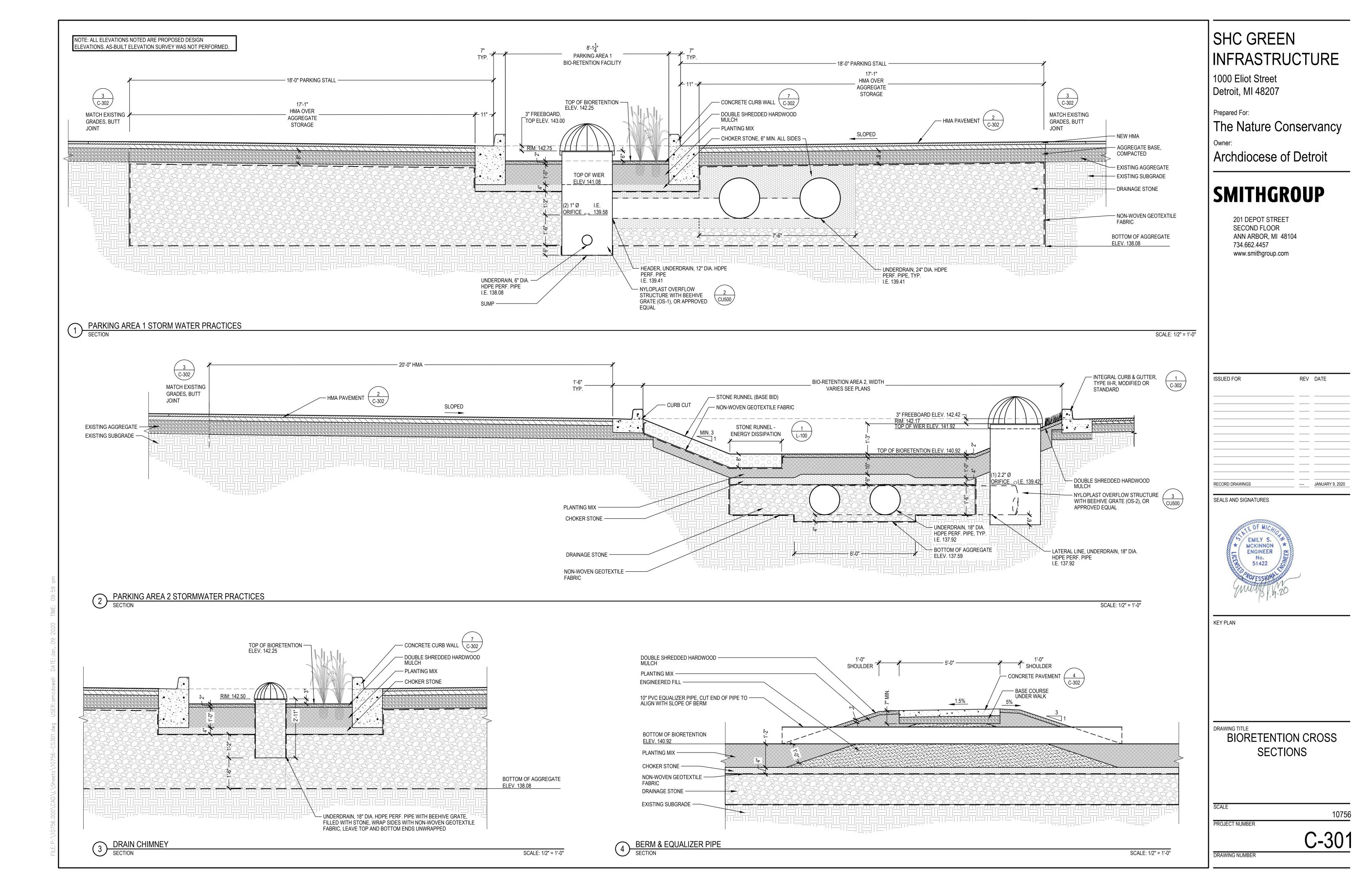
DRAWING TITLE
SITE PREPARATION & SESC
DETAILS

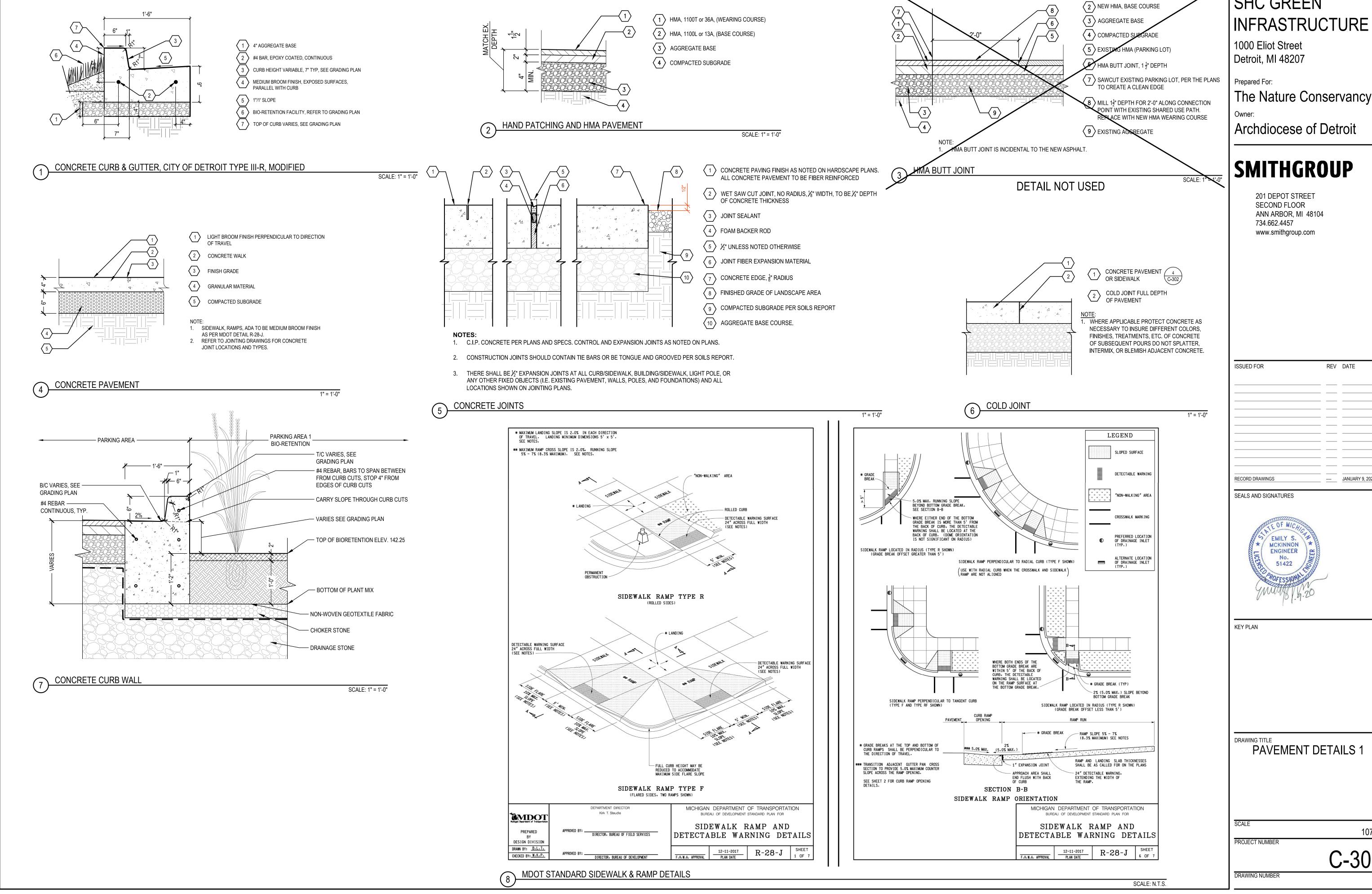
PROJECT NUMBER

DRAWING NUMBER







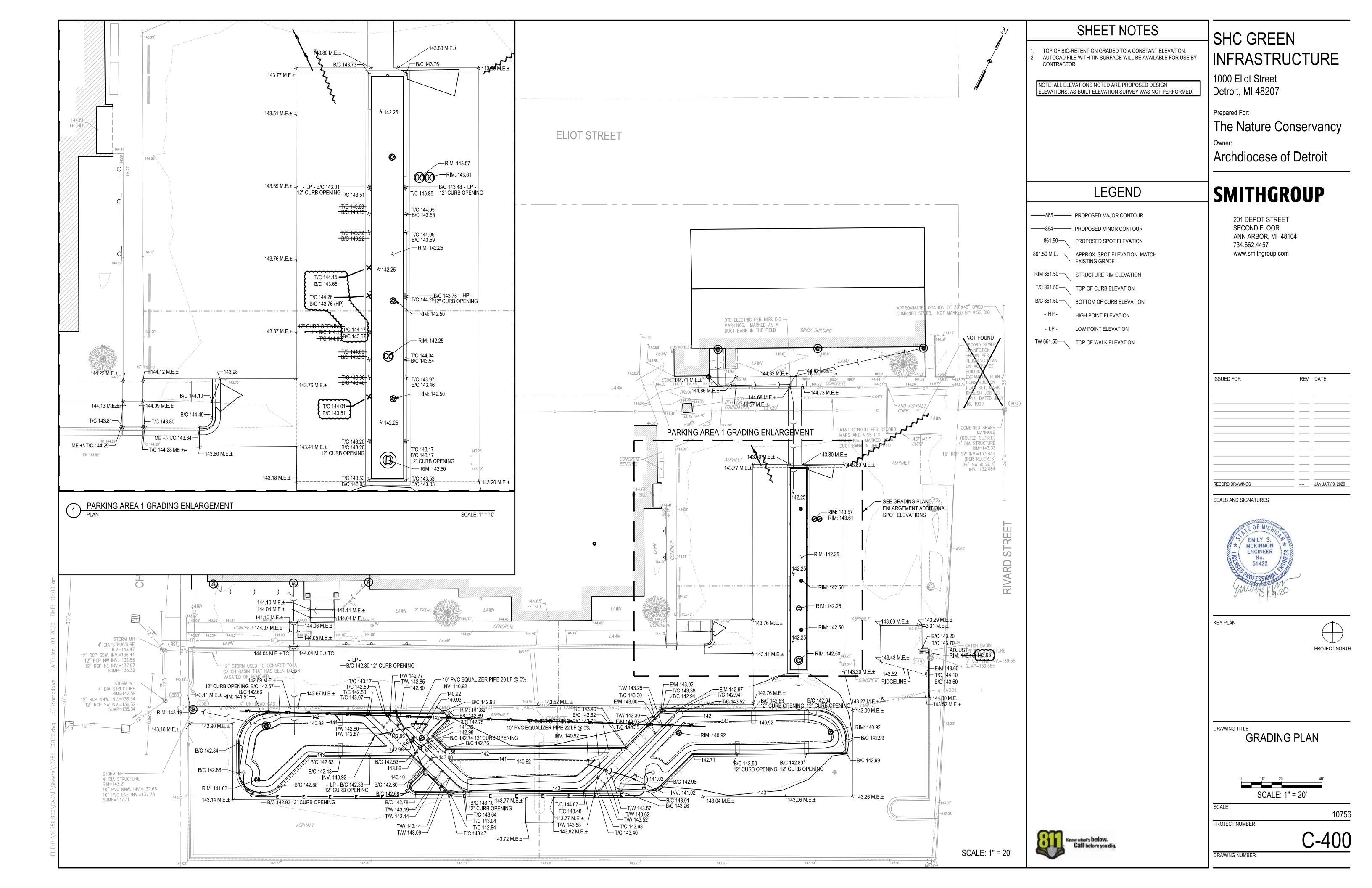


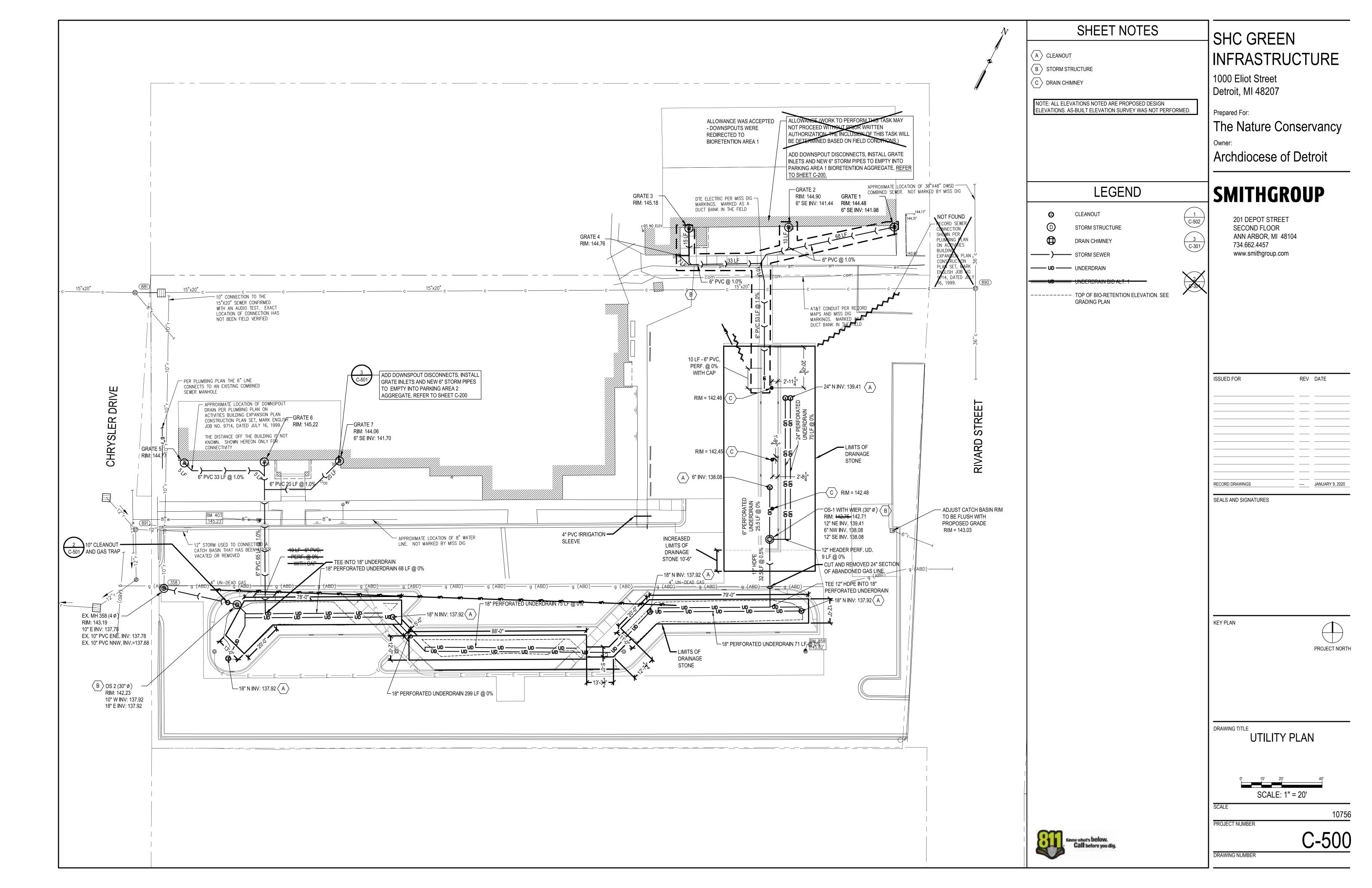
SHC GREEN

1 NEW HMA, WEARING COURSE

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____ JANUARY 9, 2020

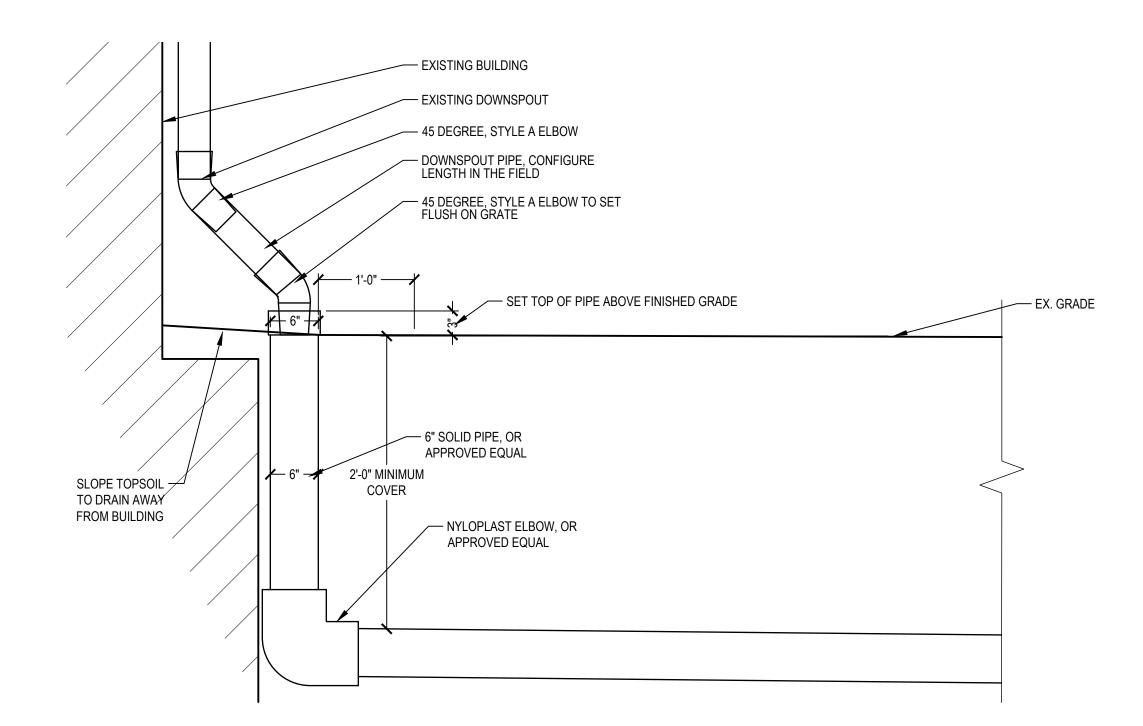




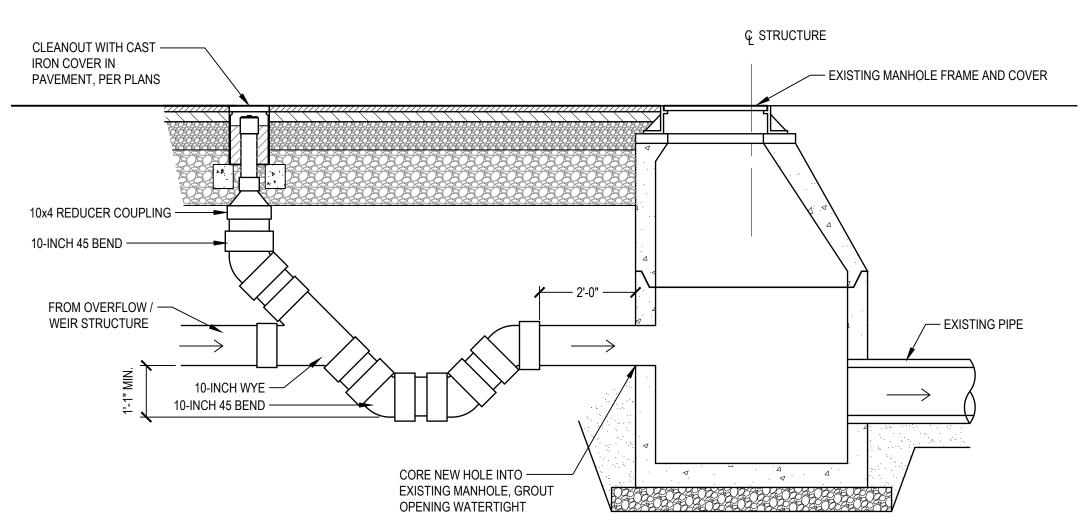
OS 2 TO EX. MH 358

HORIZ SCALE: 1" = 10'
VERT SCALE: 1" = 1'

DOWNSPOUT DISCONNECT RE-ROUTING DETAIL @ THE PARLOR



NOTE:
1. ALL TRAP MATERIALS ARE TO BE PVC



GAS TRAP DETAIL

NOTE: ALL ELEVATIONS NOTED ARE PROPOSED DESIGN ELEVATIONS. AS-BUILT ELEVATION SURVEY WAS NOT PERFORMED.

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SEALS AND SIGNATURES



KEY PLAN

DRAWING TITLE

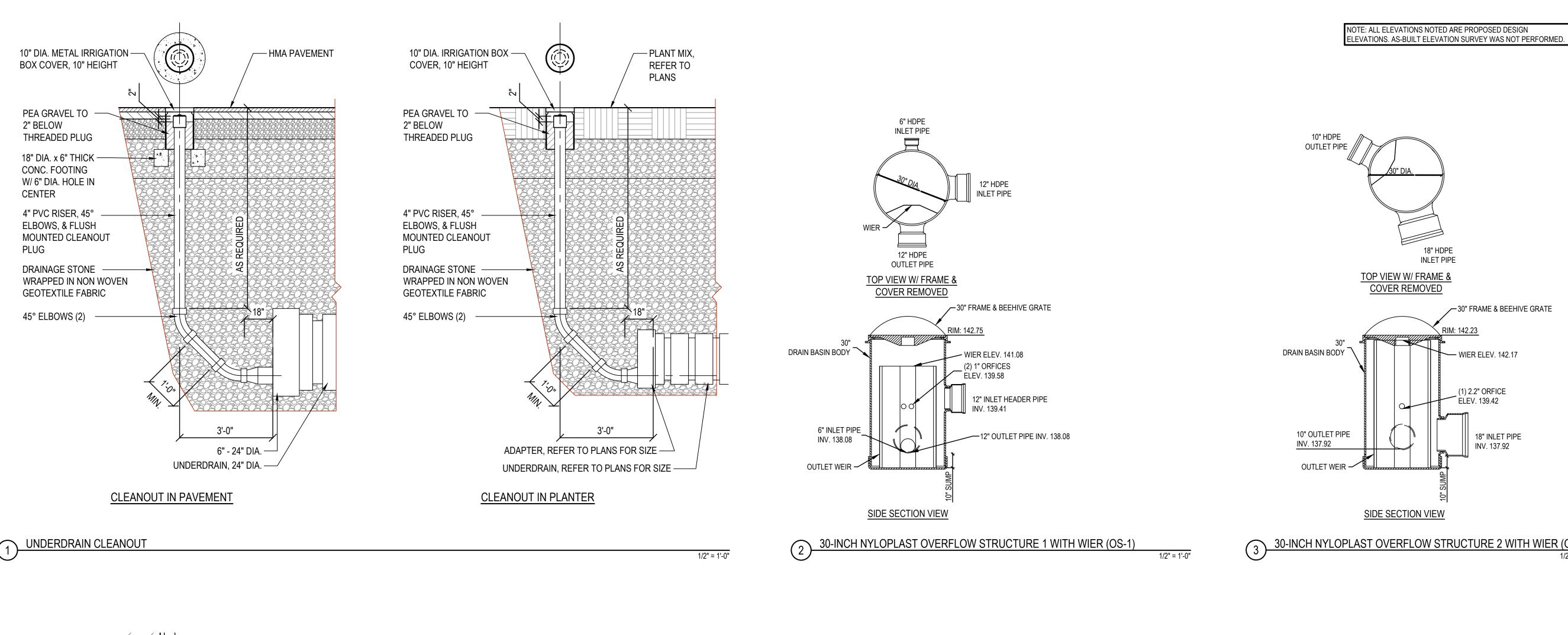
UTILITY PROFILES

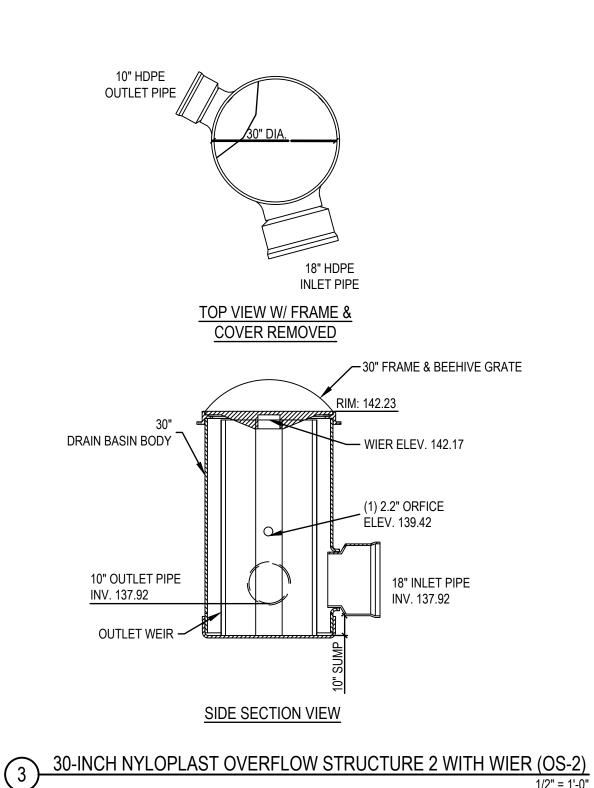
SCALE 1075
PROJECT NUMBER

C-501

DRAWING NUMBER

Know what's below. Call before you dig.







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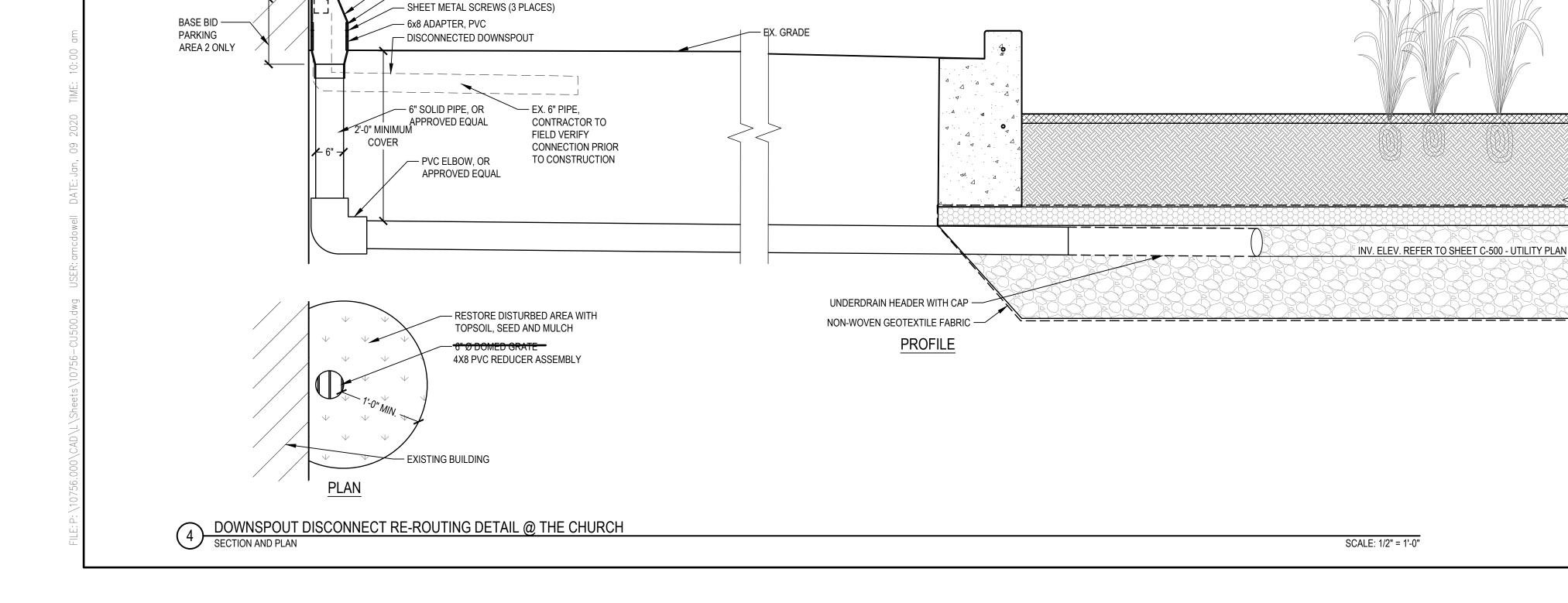


KEY PLAN

UTILITY DETAILS

PROJECT NUMBER

DRAWING NUMBER



NOTES:

ADD DOWNSPOUT DISCONNECTS,

REFER TO SHEET C-500 - UTILITY PLAN

CUT AND CAP EXISTING DRAIN PIPES FLUSH WITH GRADE

INSTALL GRATE INLETS AND NEW 6" STORM PIPES TO EMPTY INTO DRAINAGE AGGREGATE FOR PARKING AREAS 1 & 2.

4X8 PVC REDUCER IS SCREWED TO 8" PVC PIPE GOING TO BASIN TO ALLOW FOR REMOVAL OF REDUCER FOR CLEANING

— EXISTING BUILDING

- 4" PVC COUPLING

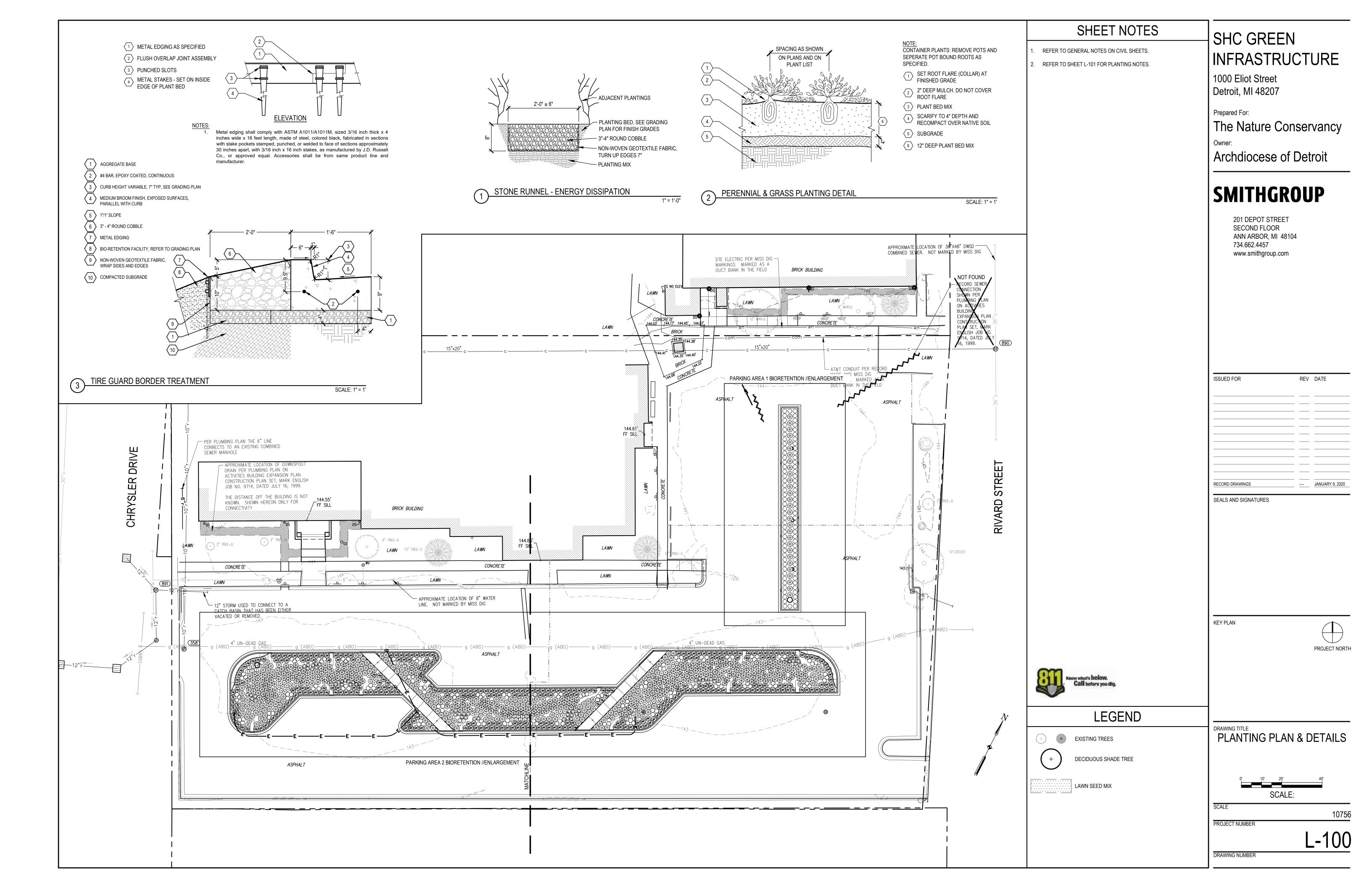
- 8" PVC PIPE

- REMOVE EXISTING UNDERGROUND

- 4X8 PVC REDUCER ASSEMBLY

DOWNSPOUT DISCONNECTION TO DISCHARGE

ABOVE GRADE INTO PROPOSED YARD INLET

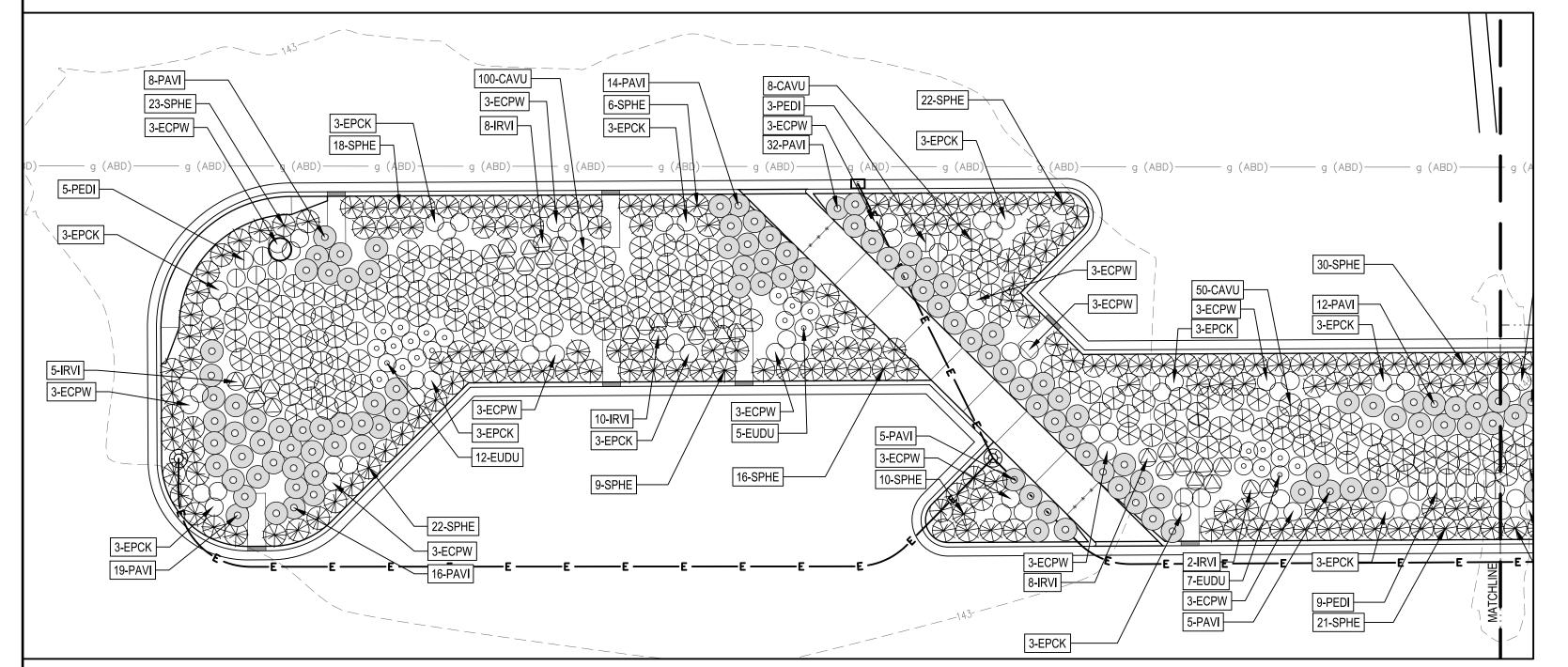


URBAN-TOLERANT BIORETENTION PERENNIALS & GRASSES Size Spacing (in) **Botanical Name Common Name** Notes **⊗ CAVU** *Carex vulpinoidea* 30" O.C. Full, well rooted Brown Fox Sedge SP-4 ○ **ECPK** *Echinacea purpurea 'Pow Wow Wild Berry'* 24" O.C. Pow Wow Wild Berry Coneflower Full, well rooted #1 cont. ○ **ECPW** *Echinacea purpurea 'White Swan'* 24" O.C. White Swan Purple Coneflower #1 cont. Full, well rooted © **EUDU** Eutrochium dubium 'Little Joe' Little Joe coastal plain joe pye weed #1 cont. 24" O.C. Full, well rooted IRVI | Iris virginica (may substitute I. versicolor) Northern blue flag iris #1 cont. 24" O.C. Full, well rooted PAVI Panicum virgatum 'Cape Breeze' 30" O.C. Full, well rooted Switchgrass #1 cont. PEDI Penstemon digitalis 'Husker Red' Foxglove beardtongue 24" O.C. Full, well rooted #1 cont. O RUFU Rudbeckia fulgida 'Goldsturm' Full, well rooted Black-eyed Susan #1 cont. 24" O.C.

#1 cont.

Prairie Dropseed

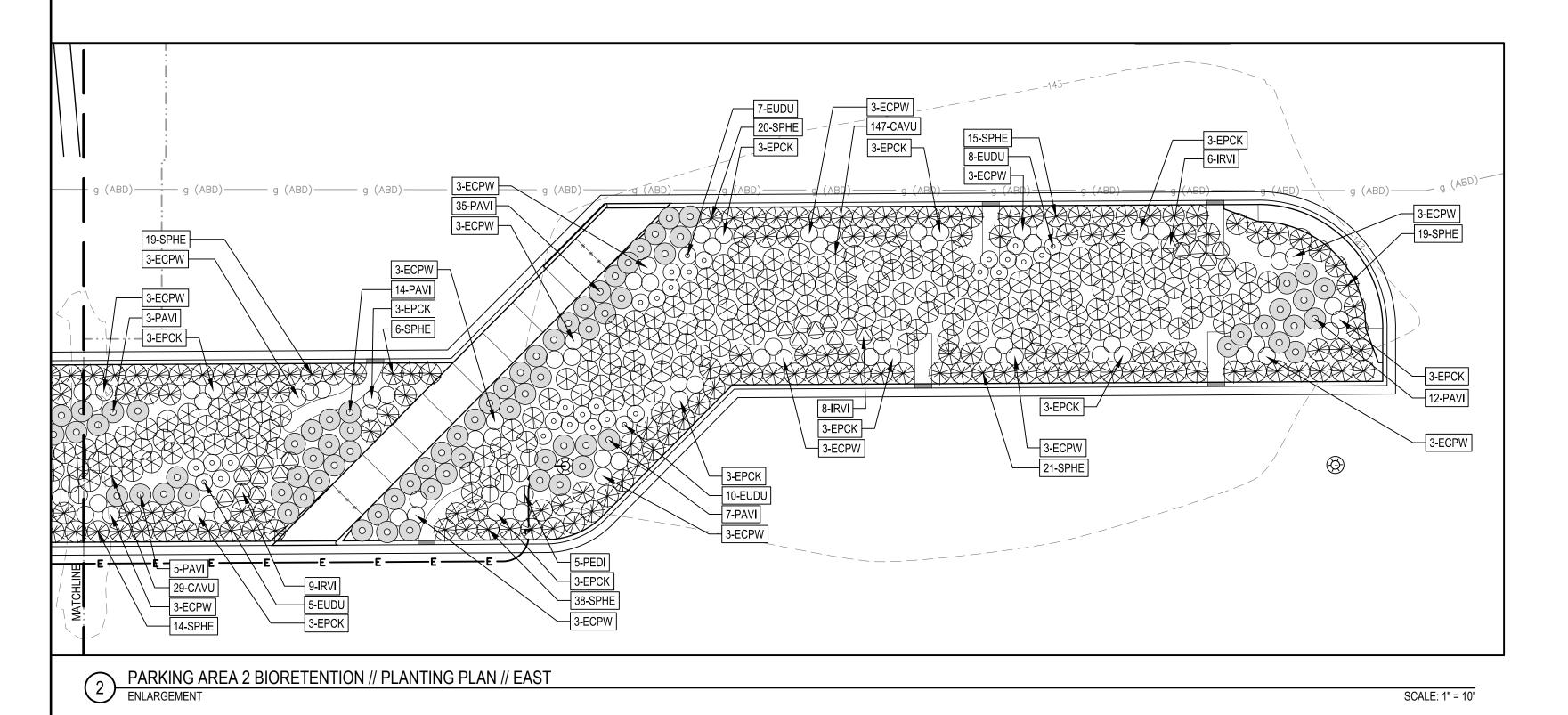
SPHE Sporobolus heterolepis



30" O.C.

Full, well rooted

PARKING AREA 2 BIORETENTION // PLANTING PLAN // WEST ENLARGEMENT SCALE: 1" = 10'



SHEET NOTES

- REFER TO GENERAL NOTES ON CIVIL SHEETS.
- THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK. CONTACT "811" UNDERGROUND UTILITIES LOCATION CENTER PRIOR TO INSTALLATION OF PLANT MATERIAL AND IRRIGATION SYSTEM.
- NO PLANT SHALL BE INSTALLED BEFORE PLANTING MIX PLACEMENT AND FINISH GRADING HAVE BEEN REVIEWED AND APPROVED BY ARCHITECT.
- PLACE TOPSOIL IN LAWN AREAS. PLACE PLANTING MIX IN BIORETENTION FACILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE PLANS. INDEPENDENT OF NUMERIC QUANTITIES ON DRAWINGS OR IN THE PLANT SCHEDULE, DETERMINE THE PLANT MATERIAL QUANTITIES REQUIRED BY THE PLANS. SPACE PLANT MATERIALS AS SHOWN ON PLANS AND INDICATED IN PLANT SCHEDULE. PLANT MATERIALS SHALL CONFORM TO PLANT SCHEDULES AND SIZES SHALL BE THE MINIMUM INDICATED ON THE PLANT SCHEDULE OR LARGER. INSTALLATION OF LARGER PLANTS AT NO ADDITIONAL COST TO OWNER. ALL MEASUREMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ANLA "STANDARDS FOR NURSERY
- PRIOR TO INSTALLATION, DEMARCATE LAYOUT OF ALL PLANTING BEDS AND SEED AREAS FOR REVIEW AND APPROVAL BY ARCHITECT. INCLUDE PERENNIAL GROUPINGS BY SPECIES FOR INTERNAL BED LAYOUTS, FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. THE ARCHITECT WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAY MAKE MINOR ADJUSTMENTS AS NECESSARY. SUCH ADJUSTMENTS WILL BE AT NO ADDITIONAL COST TO THE OWNER.
- THE ARCHITECT SHALL REVIEW THE PLACEMENT OF PLANT MATERIAL AFTER INSTALLATION, AND RESERVES THE RIGHT TO ADJUST LAYOUT TO ACCOMMODATE SITE CONDITIONS AND DESIGN INTENT AT NO ADDITIONAL COST TO OWNER.
- ALL LAWN AREAS SHALL BE SEED. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ALL AREAS IMPACTED BY CONSTRUCTION ACTIVITIES. PROVIDE MINIMUM 4" PRE-APPROVED OFF-SITE TOPSOIL FOR LAWN AREAS.
- REFER TO CIVIL DRAWINGS FOR LIMITS OF EROSION CONTROL MEASURES.
- PROVIDE A COMPLETE AS-BUILT SET OF DRAWINGS FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES, MEETING THE REQUIREMENTS IDENTIFIED IN THE SPECIFICATIONS.
- MINIMIZE CULTIVATION WITHIN THE DRIPLINES OF EXISTING TREES. PREPARE SOIL FOR SEEDING BY MINIMIZING DISTURBANCE TO 4-INCH DEPTH. HAND CULTIVATE WHEN ENCOUNTERING ROOTS. NO HEAVY EQUIPMENT ALLOWED WITHIN DRIPLINE OF EXISTING TREES.
- 2. MULCH PLANTING BEDS PER SPECIFICATIONS.
- 3. LEGALLY DISPOSE OF DEBRIS ASSOCIATED WITH PLANTING OFF-SITE.

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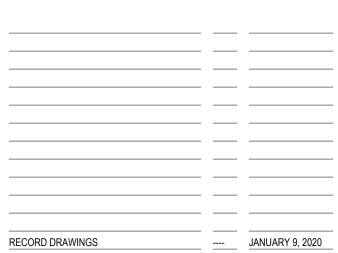
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REV DATE

SEALS AND SIGNATURES

ISSUED FOR

KEY PLAN





LEGEND



EXISTING TREES

DECIDUOUS SHADE TREE



LAWN SEED MIX

PLANTING PLAN **ENLARGEMENTS & PLANT**

SCALE: SCALE

PROJECT NUMBER L-101

DRAWING NUMBER

PARKING AREA 1 BIORETENTION // PLANTING PLAN

ENLARGEMENT SCALE: 1" = 10'

29-PAVI