



**- COMPLETE ONLY THE SECTIONS THAT APPLY TO YOUR APPLICATION TYPE -**

**A. SPECIAL USE PERMIT**

(ATTACH ADDITIONAL SHEETS IF NEEDED)

1) Applicable Section of the Zoning Regulations: \_\_\_\_\_

2) Describe how the proposed Special Use Permit relates to the Plan of Conservation and Development:

3) Describe how the proposed Special Use Permit will benefit the Town of East Hartford:

**B. FLOOD HAZARD ZONE – MAJOR DEVELOPMENT OR MINOR DEVELOPMENT**

1) Name of associated watercourse: Connecticut River

2) Total amount of land (in sq. ft.) to be affected within the:

a. Flood Hazard Zone: 1600 +/- sf

b. Floodway: 1500 +/- sf

c. Floodway fringe: \_\_\_\_\_

3) Enumerate methods of compliance with Sections 601.10, 601.11, and 601.12 of the Zoning Regulations:

Construction of outfall proposes few changes in grade, limited to the outlet location only. As such, there will be minimal or negligible impacts anticipated to wetlands, waters, wildlife and to the River (floodplain/floodway).

General Narrative  
Planning & Zoning Commission Application for Permit  
Riverside Drive Outfall

July, 2017

The 125 Riverside Drive site is located on the west side of Riverside Drive abutting the Connecticut River. Sites west of Riverside Drive historically were used as an oil terminal. For many years, 125 Riverside Drive has operated as a food/entertainment establishment for the public. Goodwin College Inc. purchased the property and intends to redevelop the site to support future campus expansion.

The purpose of the project is to provide for expansion of the existing storm sewer system to address existing capacity issues within the existing system, accommodate additional runoff from future development on the east side of Route 2 in this area, and to relocate the existing outfall to accommodate redevelopment of the 125 Riverside Drive property.

The proposed improvements to the site include construction of a 54" reinforced concrete storm sewer system with a 72" outfall to the Connecticut River, which will replace an existing 36" outfall to the south of the new outfall, and connect to and receive runoff from an older 36" storm sewer pipe located within Riverside Drive and also from a recently installed 36" storm pipe within Riverside Drive and Ensign Street. Upon completion, the existing 36" outfall would be abandoned.

The proposed project is limited in nature as to the extents of work. There will be few changes in grade, limited to the outlet location only. As such, there will be minimal or negligible impacts anticipated to wetlands, waters, wildlife and to the River.

Construction activities include installation of temporary erosion and sediment controls (hay bales/silt sacks/silt fence). Trees/brush will be removed as required to perform the work. Root structures are to be left intact. Trenches will be excavated, with drainage structures installed and backfilled, starting at the outfall and working up-gradient. Open trench excavation will be limited to the amount of pipe that can be installed that day. Open cut to be accomplished using excavators, bull-dozer, dump trucks (top of hill). Upon completion, in all areas other than steep slopes, 6" of topsoil will be placed and seeded. Areas within steep slopes will have 10" of clean topsoil (free of invasive plant seeds) placed as recommended in the REMA Wetland Assessment and Impact Analysis report. Other recommendations contained in this report were integrated into the design plans.

The DEEP has reviewed the plans, which have been revised to incorporate comments made by federal agencies, including the Army Corp. of Engineers, and has issued a permit for this application.

The tentative schedule is to begin construction the fall of 2017, and should be completed by the spring of 2018.

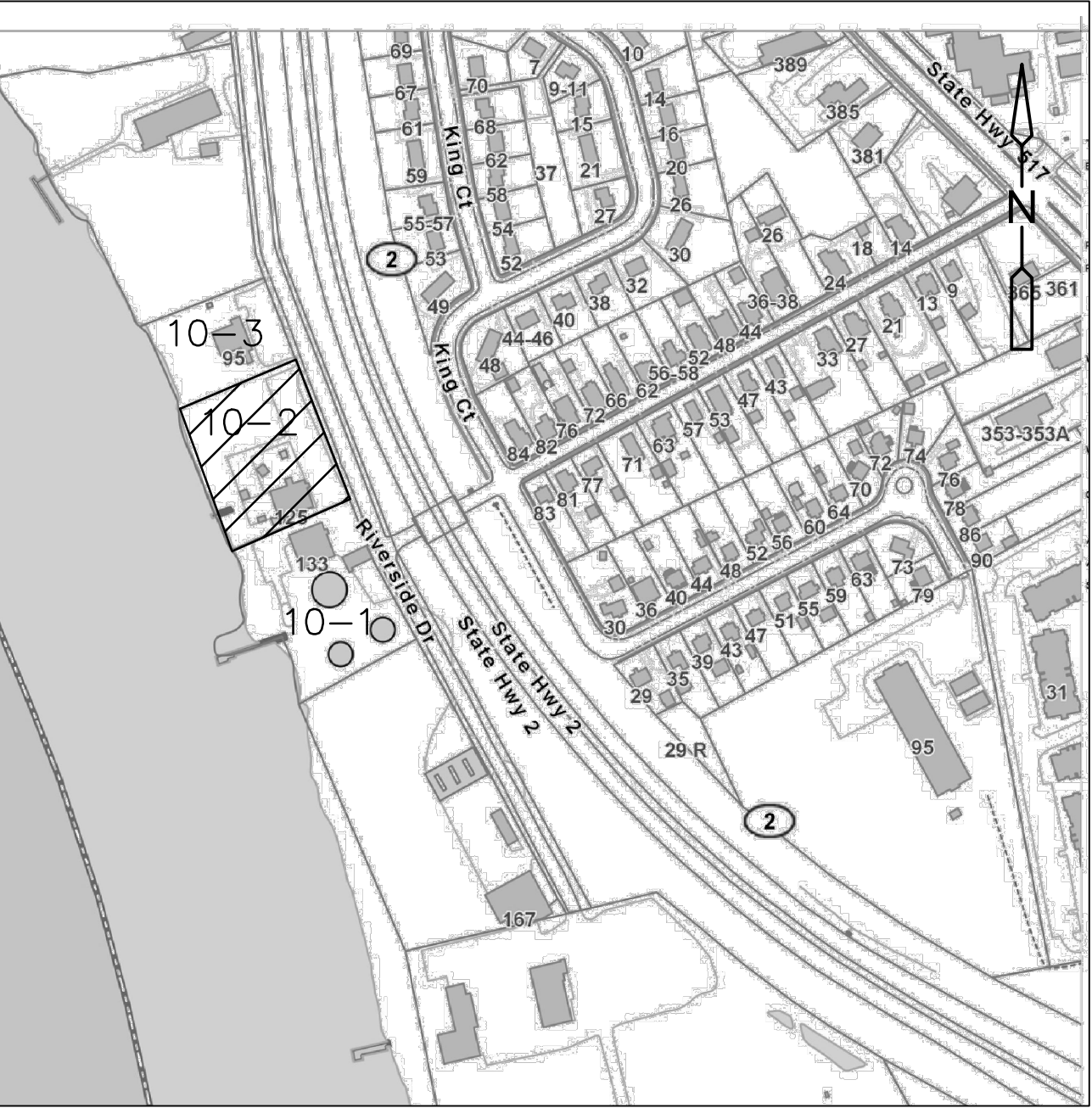


GOODWIN COLLEGE  
ONE RIVERSIDE DRIVE EAST HARTFORD, CT

RIVERSIDE DRIVE OUTFALL  
EAST HARTFORD, CT  
PROJECT NUMBER  
1885

JULY 10, 2017

PLANNING & ZONING APPLICATION



PROJECT SITE - PROPERTY OF GOODWIN COLLEGE INC	
MAP-LOT	PROPERTY ADDRESS
10-2	125 RIVERSIDE DRIVE

APPLICATION FOR:

X FLOOD HAZARD ZONE - MAJOR DEVELOPMENT

LIST OF DRAWINGS

--	COVER SHEET
GN-1	GENERAL NOTES AND LEGEND
1 OF 1	PROPERTY AND TOPOGRAPHIC SURVEY
DP-1	SITE REMOVAL PLAN
EP-1	EASEMENT PLAN
ES-1	EROSION & SEDIMENTATION CONTROL PLAN
SP-1	SITE LAYOUT PLAN
SP-2	PROFILE (STA. 0 - 1+50)
SP-3	PROFILE (STA. 1+50 - 7+22)
SP-4	OUTFALL PLAN
CD-1 - CD-3	DETAILS

ABUTTING PROPERTY OWNERS

MAP-LOT	PROPERTY ADDRESS	OWNER NAME	OWNER ADDRESS
10-1	133 RIVERSIDE DRIVE	GOODWIN COLLEGE, INC.	1 RIVERSIDE DRIVE EAST HARTFORD, CT 06118
10-3	95 RIVERSIDE DRIVE	THE HARTFORD CANOE CLUB	75 RIVERSIDE DRIVE EAST HARTFORD, CT 06118

PREPARED FOR



PREPARED BY



40 Cold Spring Road • Rocky Hill, CT 06067  
Phone 860.436.4901 • Fax 860.436.4953

INSPECTION NOTES

1. THE DEVELOPER SHALL NOTIFY THE TOWN OF EAST HARTFORD ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, STREET LINE MONUMENTATION, PROPERTY CORNER PINS, ETC., TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:30 A.M. - 4:30 P.M. AT 291-7380.
2. THE TOWN SHALL BE NOTIFIED IN WRITING AT LEAST 2 DAYS IN ADVANCE OF THE PRE-CONSTRUCTION MEETING BETWEEN THE CONTRACTOR AND THE ENGINEER.

TOWN OF EAST HARTFORD  
PLANNING & ZONING COMMISSION  
SITE PLAN CERTIFICATE  
OF APPROVAL

APPROVAL DATE \_\_\_\_\_  
EXPIRATION DATE \_\_\_\_\_

\_\_\_\_\_  
CHAIRMAN

GALEN B. SEMPREBON, P.E. #16747



LOCATION MAP



FILE PATH: H:\Projects\Goodwin College\1885 - Riverside Drive Outfall\AutoCAD\Civil\1885 General Notes.dwg PLOT DATE: 5/3/2017 PLOT TIME: 9:30:46 AM

## GENERAL NOTES

- ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED AS INDICATED IN THE CONTRACT DOCUMENTS AND SHALL COMPLY WITH THE REQUIREMENTS OF GOODWIN COLLEGE, THE TOWN OF EAST HARTFORD, AND THE CONNECTICUT DEPARTMENT OF TRANSPORTATION (CT DOT) STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 817, DATED 2016, WITH LATEST UPDATES.
- THE CONTRACTOR SHALL NOTIFY ALL LOCAL UTILITY COMPANIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES AND THE TOWN OF EAST HARTFORD FOR UTILITY LINE RELOCATIONS.
- THE CONTRACTOR SHALL MAINTAIN ONE SET OF CONTRACT DOCUMENTS ON THE PREMISES IN GOOD CONDITION AT ALL TIMES. THE SET SHALL INCLUDE ALL ADDENDA AND CHANGE ORDERS.
- THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE CONSTRUCTION MANAGER OR OWNER'S REPRESENTATIVE IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONTRACT DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION. ANY CONFLICT BETWEEN THE DRAWINGS AND THE SPECIFICATIONS SHALL BE CONFIRMED WITH THE CONSTRUCTION MANAGER OR THE OWNER'S REPRESENTATIVE PRIOR TO BIDDING.
- STATED DIMENSIONS TAKE PRECEDENCE OVER GRAPHICS. DO NOT SCALE DRAWINGS TO DETERMINE LOCATION AND/OR DIMENSIONS.
- ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY GOODWIN COLLEGE, THE ENGINEER, AND THE APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES, STRUCTURES AND OTHER SITE FEATURES NOT BEING REMOVED AND/OR ALTERED DURING CONSTRUCTION. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH EXECUTION OF THE WORK.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL REQUIRED SUBMITTALS TO THE OWNER, CONSTRUCTION MANAGER AND SITE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 15 WORKING DAYS FOR REVIEW.
- THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UTILITIES) TO THE OWNER AND TOWN AT THE END OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF VEHICLES AND PEDESTRIANS CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC MEN AS REQUIRED OR ORDERED BY THE CONSTRUCTION MANAGER, OWNER'S REPRESENTATIVE OR AS REQUIRED BY THE LOCAL GOVERNING AUTHORITIES.
- INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE LOCATIONS ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" AT 1-800-922-4455.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF SUPPORT FOR PROTECTION OF PERSONNEL DURING EXCAVATION AND BACKFILLING OPERATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO ANY WORK AND SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS INCLUDING THOSE FURNISHED BY THE SUBCONTRACTORS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY THE OWNER.
- SHOULD ANY UNCHARTED OR INCORRECTLY CHARTED, EXISTING PIPE OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER AND RESPECTIVE UTILITY COMPANY IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH THE WORK IN THIS AREA.
- DO NOT INTERRUPT EXISTING UTILITIES SERVICING ADJACENT PROPERTIES EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER.
- OSHA REGULATIONS MAKE IT UNLAWFUL TO OPERATE CRANES, BOOMS, HOISTS, ETC. WITHIN TEN (10) FEET OF ANY ELECTRIC LINE UNDER 50 KV. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS.
- THE OWNER WILL RETAIN AN INDEPENDENT TESTING LABORATORY FOR SOIL AND PAVEMENT TESTS TO BE DETERMINED BY THE OWNER AND SITE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS INCURRED DUE TO SCHEDULING ISSUES OR FOR REPEATED TESTING DUE TO IMPROPER CONSTRUCTION TECHNIQUES.
- THE SITE CONTRACTOR SHALL NOTIFY THE TOWN OF EAST HARTFORD PRIOR TO COMMENCEMENT OF PAVING WITHIN TOWN RIGHTS OF WAY AND ON-SITE DRAINAGE WORK.
- ALL NEW UTILITIES SHALL BE UNDERGROUND, AS PER TOWN SPECIFICATIONS UNLESS OTHERWISE NOTED.
- NO DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS IS GRANTED BY ALL LOCAL AND STATE GOVERNING AND REGULATORY AGENCIES.
- ALL DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PREMISES AND SHALL BE PROPERLY DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. ALL AREAS SHALL BE KEPT IN A NEAT AND ORDERLY MANNER AT ALL TIMES.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND NOTIFICATION GIVEN TO THE TOWN FOR INSPECTION AS

REQUIRED.

- UTILITY CONNECTION LOCATIONS AS DEPICTED ON THESE DRAWINGS MAY CHANGE SUBJECT TO REVIEW BY THE APPLICABLE UTILITY COMPANY.
- ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE TOWN OF EAST HARTFORD, THE APPLICABLE UTILITY COMPANY REQUIREMENTS, AND AS SPECIFIED ON THE DRAWINGS.
- ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION PRIOR TO BACKFILLING IN ACCORDANCE WITH THE APPLICABLE UTILITY COMPANY AND/OR THE REQUIREMENTS OF THE TOWN OF EAST HARTFORD.
- ALL DISTURBANCE INCURRED WITHIN THE STATE OR TOWN OF EAST HARTFORD'S RIGHT-OF-WAY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE DEPARTMENT OF TRANSPORTATION OR PUBLIC WORKS REPRESENTATIVE.
- THE CONTRACTOR SHALL VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION MANAGER OR OWNER'S REPRESENTATIVE IN THE EVENT OF ANY UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SO THAT APPROPRIATE MODIFICATIONS MAY BE MADE.
- WORK IN CLOSE PROXIMITY AND RELOCATION OF UTILITY COMPANY FACILITIES, SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY OWNER. UTILITIES WITHIN THE PROJECT LIMITS INCLUDE MDC, CNG, CL&P, AND OTHERS.
- ALL DRAINAGE PIPING SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS IV WITH RUBBER GASKET IN ACCORDANCE WITH ASTM-C-76 AND ASTM-C-443.
- THE CONTRACTOR SHALL COMPACT FILL IN 8" MAXIMUM LIFTS UNDER ALL ROADWAY AREAS.
- THE CONTRACTOR SHALL COMPACT THE PIPE BACKFILL IN 12" LIFTS ACCORDING TO THE PIPE BEDDING DETAIL. THE TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS.
- ALL UTILITIES AND PIPES SCHEDULED FOR DEMOLITION SHALL BE REMOVED UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL BE PREPARED AT ALL TIMES TO SWEEP THE SURROUNDING ROADWAYS AS REQUIRED BY THE TOWN AND/OR THE OWNER'S REPRESENTATIVE.
- LIME AND FERTILIZER FOR TURF ESTABLISHMENT SHALL CONFORM TO CTDOT FORM 817 M 13.02 AND M 13.03.

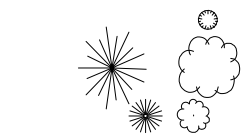
## GENERAL REMOVAL NOTES

- CONTRACTOR SHALL DEMOLISH AND REMOVE ANY AND ALL ITEMS AS REQUIRED TO CONSTRUCT WORK AT NO ADDITIONAL COST TO THE OWNER.
- DEMOLITION AND/OR ABANDONMENT OF EXISTING UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH RESPECTIVE UTILITY COMPANY'S REQUIREMENTS AND STANDARDS. CONTRACTOR SHALL COORDINATE DEMOLITION AND/OR ABANDONMENT WITH UTILITY COMPANIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROPERLY ABANDON AND/OR DEMOLISH AND REMOVE ANY AND ALL UNEXPECTED UTILITIES DISCOVERED DURING CONSTRUCTION AS APPROVED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- EXCAVATION OPERATIONS SHALL BE EXECUTED CAREFULLY AT ALL LOCATIONS ADJACENT TO EXISTING UNDERGROUND UTILITIES AND VAULTS. PROTECTION OF EXISTING UTILITIES WITHIN THE WORK LIMIT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
- ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR AS INDICATED ON THE CONTRACT DRAWINGS.
- ANY DAMAGE TO EXISTING PAVEMENT, CURBS, SIDEWALKS, STRUCTURES OR ANY OTHER APPURTENANCES SHALL BE REPLACED (IN-KIND OR BETTER) BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE. SAW-CUT DAMAGED SECTIONS BACK TO THE NEAREST JOINT WHERE APPROPRIATE AND MATCH EXISTING MATERIALS, THICKNESS, AND PATTERNS.
- CONTRACTOR SHALL SAW-CUT BITUMINOUS AND CONCRETE SURFACES AT LIMITS OF REMOVAL AS REQUIRED TO ACHIEVE A SMOOTH TRANSITION BETWEEN EXISTING SURFACES (TO REMAIN) AND NEW SURFACES. APPLY/INSTALL TACK COATS AND EXPANSION JOINTS AS REQUIRED. ANY EXISTING SURFACES DIRECTLY ADJACENT TO THE LIMIT OF REMOVAL, NOT PREVIOUSLY DAMAGED OR DETERIORATED AND DAMAGED BY CONTRACTOR SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR TO COORDINATE ALL WORK WITH OWNER AND FOLLOW SAFETY PROCEDURES RECOMMENDED IN MATERIAL SAFETY DATA SHEETS (MSDS), AS APPLICABLE.

## LEGEND (EXISTING)

(NOT ALL SYMBOLS MAY BE USED)

PROPERTY LINE	△ CONTROL POINT
EASEMENT LINE	▣ MONUMENT
CURB	○ IP IRON PIPE
EDGE OF PAVEMENT (EOP)	○ IP IN IRON PIN
TIMBER RAIL	● DRILL HOLE
TIMBER FENCE OR GUIDE RAIL	⊗ BENCHMARK
CHAIN LINK FENCE	⊕ SOIL BORING
TREE/VEGETATION LINE	⊕ SOIL PROBE
MAJOR CONTOUR	⊕ MONITORING WELL
MINOR CONTOUR	■ TEST PIT
SPOT ELEVATION	W <sub>W</sub> # WETLAND FLAG
TOP/BOTTOM OF CURB ELEVATION	▣ TYPE 'C' CATCH BASIN
STREAM OR EDGE OF WATER	▣ TYPE 'CL' CATCH BASIN
PIPES < 12"ø (SIZE & MATERIAL)	⊙ YARD DRAIN
PIPES ≥ 12"ø (SIZE & MATERIAL)	⊕ STORM DRAINAGE MANHOLE
TELEPHONE/COMMUNICATIONS	⊕ SANITARY SEWER MANHOLE
STORM DRAINAGE	⊕ ELECTRICAL MANHOLE
UNDERGROUND ELECTRIC	⊕ TELEPHONE MANHOLE
OVERHEAD ELECTRIC	⊕ WATER MANHOLE
BUCKEYE PIPELINE	○ MISCELLANEOUS MANHOLE
SANITARY SEWER	⊕ GAS VALVE
WATER	⊕ ELECTRICAL BOX
GAS	⊕ HAND HOLE
LIMIT OF INLAND WETLANDS	⊕ PAD MOUNTED TRANSFORMER
LIMIT OF 100' REGULATED UPLAND REVIEW AREA	⊕ HYDRANT
STUMP	⊕ WATER VALVE
TREES	⊕ UTILITY POLE W/ GUY WIRE
SHRUBS	☆ LP ☆ LB LIGHT POLE, LIGHT BOLLARD
	⊕ LUMINAIRE ON STANDARD
	⊕ SIGNS
	○ POST
	○ BOLLARD



## LEGEND (PROPOSED)

(NOT ALL SYMBOLS MAY BE USED)

PROPERTY LINE	⊕ SOIL BORING
EASEMENT LINE	⊕ SOIL PROBE
CURB	⊕ MONITORING WELL
EDGE OF PAVEMENT (EOP)	■ TEST PIT
METAL BEAM GUIDE RAIL	▣ TYPE 'C' CATCH BASIN
TIMBER BARRIER RAIL	▣ TYPE 'CL' CATCH BASIN
CHAIN LINK FENCE	⊙ YARD DRAIN
TREE/VEGETATION LINE	⊕ STORM DRAINAGE MANHOLE
MAJOR CONTOUR	⊕ SANITARY SEWER MANHOLE
MINOR CONTOUR	⊕ ELECTRICAL MANHOLE
SPOT ELEVATION	⊕ TELEPHONE MANHOLE
TOP/BOTTOM OF CURB ELEVATION	⊕ WATER MANHOLE
PIPES	○ MISCELLANEOUS MANHOLE
TELEPHONE/COMMUNICATIONS	⊕ GAS VALVE
STORM DRAINAGE	⊕ ELECTRICAL BOX
UNDERGROUND ELECTRIC	⊕ HAND HOLE
OVERHEAD ELECTRIC	⊕ PAD MOUNTED TRANSFORMER
SANITARY SEWER FORCE MAIN	⊕ HYDRANT
SANITARY SEWER	⊕ WATER VALVE
WATER	⊕ UTILITY POLE W/ GUY WIRE
GAS	☆ LP ☆ LB LIGHT POLE, LIGHT BOLLARD
EXISTING PIPE TO BE REMOVED	⊕ LUMINAIRE ON STANDARD
EXISTING PIPE TO BE ABANDONED	⊕ SIGNS
GEOTEXTILE SILT FENCE	○ POST
TEMPORARY SEDIMENT CONTROL	○ BOLLARD
REMOVE PAVEMENT	⊕ TREES
	⊕ SHRUBS
	⊕ GRADE TO DRAIN
	⊕ PORTABLE DUMPSTER CONTAINER

## ABBREVIATIONS

(NOT ALL ABBREVIATIONS MAY BE USED)

ABND	ABANDONED	GTD	GRADE TO DRAIN
AM	AIR MAIN	HC	HANDICAP
ACCPM	ASPHALT COATED CORRUGATED METAL PIPE	HDPE	HIGH DENSITY POLYETHYLENE
APPROX.	APPROXIMATE	HDS	HYDRODYNAMIC SEPARATOR STRUCTURE
BC	BOTTOM OF CURB	HH	HANDHOLE
BCLC	BITUMINOUS CONCRETE LIP CURB	HP	HIGH POINT
BOT	BOTTOM	HYD	HYDRANT
BIT.	BITUMINOUS	ID	INSIDE DIAMETER
BL	BASELINE	IE	INVERT ELEVATION
BM	BENCHMARK	INV	INVERT
BO	BLOW OFF	KVE	ELECTRIC CABLE
BOW	BOTTOM OF WALL	LP	LOW POINT
℄	CENTER LINE	MH	MANHOLE
C-CB	TYPE "C" CATCH BASIN	NTS	NOT TO SCALE
CL-CB	TYPE "C-L" CATCH BASIN	O.C.	ON CENTER
CI	CAST IRON	O.D.	OUTSIDE DIAMETER
CIP	CAST IRON PIPE	PB	PULL BOX
CLF	CHAIN LINK FENCE	PE	POLYETHYLENE
CMU	CONCRETE MASONRY UNIT	PL	PROPERTY LINE
C.O.	CLEAN OUT	PVMT	PAVEMENT
CONC.	CONCRETE	PCCP	PRESTRESSED CONCRETE CYLINDRICAL PIPE
CPP	CORRUGATED PLASTIC PIPE	PVC	POLYVINYL CHLORIDE
DI	DUCTILE IRON	RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE	R	RADIUS
DEG	DEGREES	RD	ROOF DRAINAGE
DIA	DIAMETER	RWL	RAIN WATER LEADER
DMH	DRAINAGE MANHOLE	S	PIPE SLOPE
DR	DRAIN LINE	SAN	SANITARY
DW	DOMESTIC WATER	SD	STORM DRAIN
ELEC	ELECTRICAL	SHT	DRAWING NO. SHEET
EL	ELEVATION	SMH	SANITARY MANHOLE
EMH	ELECTRICAL MANHOLE	SPCP	STORMWATER POLLUTION CONTROL PLAN
EOP	EDGE OF PAVEMENT	STM	STORM
EX.	EXISTING	SW	SERVICE WATER
EXIST.	EXISTING	TC	TOP OF CURB
FE	FLARED END	TEMP.	TEMPORARY
F.D.	FLOOR DRAIN	TEL.	TELEPHONE
FF	FINISHED FLOOR	TF	TOP OF FRAME
FFE	FINISHED FLOOR ELEVATION	TMH	TELEPHONE/COMMUNICATIONS MANHOLE
FLR	FLOOR	TOG	TOP OF GRATE
FRP	FIBERGLASS REINFORCED PLASTIC	TOS	TOP OF SLAB
G	GAS	TOW	TOP OF WALL
GM	GAS METER	TYP.	TYPICAL

UD	UNDERDRAIN
UKWN	UNKNOWN
VC	VITRIFIED CLAY
VIF	VERIFY IN FIELD
W	WATER
WM	WATER METER
WMH	WATER MANHOLE
WS	WATER STOP
WV	WATER VALVE
YD	YARD DRAIN

### NOTES:

THE DEVELOPER SHALL NOTIFY THE TOWN OF EAST HARTFORD ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, STREET LINE MONUMENTATION, PROPERTY CORNER PINS, ETC., TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:30 A.M. - 4:30 P.M. AT 860-291-7380.

THE TOWN SHALL BE NOTIFIED IN WRITING AT LEAST 2 DAYS IN ADVANCE OF THE PRE-CONSTRUCTION MEETING BETWEEN THE CONTRACTOR AND THE ENGINEER.

					PROJECT NO.: 1885
					DESIGNED BY: X
					DRAWN BY: X
					SHEET CHK'D BY: GBS
					CROSS CHK'D BY: X
					APPROVED BY: X
REV. NO.	DATE	DRWN	CHKD	REMARKS	DATE: MAY, 2017



ONE RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT



40 Cold Spring Road • Rocky Hill, CT 06067  
Phone 860.436.4901 • Fax 860.436.4953

RIVERSIDE DRIVE OUTFALL

125 RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

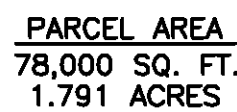
GENERAL NOTES AND LEGEND

SHEET NO.

GN-1




---	SUBJECT PROPERTY/STREET LINE
---	OTHER PROPERTY/STREET LINE
---	EASEMENT LINE
Canc. Mon. Fd.	CONCRETE MONUMENT FOUND
IP Fd.	IRON PIPE/PIN MONUMENT FOUND
⚡	UTILITY POLE
—○—	OVERHEAD WIRES
□	CATCH BASIN
✴	LIGHT POLE
—X— X—	CHAIN LINK FENCE
—  —	IRON FENCE
—□—	STOCKADE FENCE
⊙	SANITARY MANHOLE
WV	WATER VALVE
—V—	SIGN
⊗	MONITOR WELL
⊕	ELECTRIC MANHOLE
Ⓣ	TELEPHONE MANHOLE
ⓓ	DRAINAGE MANHOLE
—G—	GAS MAIN
—T—	TELEPHONE
—E—	ELECTRIC
—D—	STORM DRAINAGE MAIN
—BPL—	BUCKEYE PIPELINE
---	CONTOUR
---	FLOOD ZONE LINE



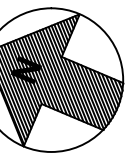
1. THIS SURVEY AND MAP WERE PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND ASSOCIATIONS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1990. IT IS A PRIVATE SURVEY CONFORMING TO THE HORIZONTAL ACCURACY CLASS A-2 AND IS INTENDED TO DEPICT DEED LINES, LINES OF OCCUPATION, EASEMENTS, ENCUMBRANCES AND ENCROACHMENTS AFFECTING THE PROPERTY. THE PROPERTY/BUILDING DETERMINATION OPINION IS BASED ON A RESURVEY, TOPOGRAPHIC ACCURACY CONFORMS TO CLASS 1-2.
2. REFERENCE IS HEREBY MADE TO THE FOLLOWING MAPS ENTITLED:  
A. "PROPERTY OF HAROLD H. RUBIN EAST HARTFORD, CONN." PREPARED BY CECIL W. BROOKS, SCALE 1"=40' AND DATED SEPT. 5, 1951. EAST HARTFORD LAND RECORDS MAP #42-15.  
B. "PROPERTY AT 125 RIVERSIDE DRIVE EAST HARTFORD, CONN." PREPARED BY GEORGE L. DAVIS, SCALE 1"=40' AND DATED MAY 1975. PLAN RECEIVED FROM THE EAST HARTFORD ENGINEERING DEPT.  
C. "TOWN OF WATSON TOWN OF EAST HARTFORD EAST HARTFORD EXPRESSWAY FROM MAIN STREET NORTHERLY TO PITKIN STREET" PREPARED BY CONNECTICUT DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS, SCALE 1"=80', DATED MARCH 29, 1979. DOT PROJECT #42-15.  
D. "PROPOSED SITE MODIFICATIONS 125 RIVERSIDE DRIVE PREPARED FOR RIVER ONE, LLC, EAST HARTFORD, CONNECTICUT" PREPARED BY OUPA ASSOCIATES, LLC, SCALE 1"=20', DATED 08/15/2007 AND REVISED LAST ON 03/3/2008. PLAN RECEIVED FROM THE EAST HARTFORD ENGINEERING DEPT.
3. A PORTION OF THIS PARCEL LIES WITHIN FLOOD ZONE AE, BASE FLOOD ELEVATIONS DETERMINED, IN ACCORDANCE WITH NATIONAL FLOOD INSURANCE FLOOD INSURANCE RATE MAP PANEL NO. 369 OF 675, HARTFORD COUNTY, CONNECTICUT, MAP REVISED SEPTEMBER 16, 2011.
4. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND NOT FROM RECORD DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT ALL UNDERGROUND UTILITIES SHOWN ARE ACCURATELY LOCATED INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
5. ELEVATIONS AND COORDINATES DEPICTED ARE BASED ON THE NAD83 CONN. CONNECTICUT COORDINATE SYSTEM, NAD83 DERIVED BY GPS METHODS.
6. ELEVATIONS DEPICTED HEREON ARE BASED ON THE NGVD 1929.
7. THIS PARCEL IS SUBJECT TO A TWO ROD WIDE SEWER EASEMENT IN FAVOR OF WILLY BROOKS SEWER SYSTEM, AS RECORDED IN VOLUME 50, PAGE 356 OF THE EAST HARTFORD LAND RECORDS.

NO.	DATE	DESCRIPTION	BY

  
JONATHAN JARBOX

PREPARED BY:	ZUVIC-CARR ASSOCIATES INC. 1090 ELM STREET, SUITE 102, ROCKY HILL, CONN. OFFICE (860)436-4901 FAX (860)436-4953		
SCALE 1"=20'	DATE APRIL 27, 2012	FILE 12-010	SHEET 1 OF 1





1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES, STRUCTURES, AND OTHER SITE FEATURES NOT BEING REMOVED AND/OR ALTERED AS PART OF THE PROJECT SCOPE. THE CONTRACTOR SHALL REPAIR OR REPLACE UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF WORK AT THE CONTRACTOR'S EXPENSE.
2. ALL STRUCTURES, SITE FEATURES, AND UTILITIES TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS.
3. EXISTING 36" PIPE TO BE ABANDONED IN PLACE WITH BULKHEADS INSTALLED WHERE SHOWN, AND AT LATER DATE WHEN 125 RIVERSIDE DRIVE IS RE-DEVELOPED, THE PIPE IS EITHER TO BE REMOVED, OR FILLED WITH FLOWABLE CONCRETE FILL.
4. STUMPS SHALL NOT BE BURIED ON SITE.
5. REMOVAL OF EXISTING SIDEWALK SHALL BE TO THE NEAREST EXPANSION/CONTRACTION JOINT OR DUMMY JOINT.

THE DEVELOPER SHALL NOTIFY THE TOWN OF EAST HARTFORD ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, STREET LINE MONUMENTATION, PROPERTY CORNER PINS, ETC., TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:30 A.M. - 4:30 P.M. AT 860-291-7380.

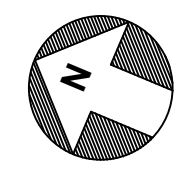
THE TOWN SHALL BE NOTIFIED IN WRITING  
AT LEAST 2 DAYS IN ADVANCE OF THE  
PRE-CONSTRUCTION MEETING BETWEEN  
THE CONTRACTOR AND THE ENGINEER.

20 0 10 20 40

SCALE: 1" = 20'

					PROJECT NO.: 1885		PREPARED FOR:	PREPARED BY:			SHEET NO.
					DESIGNED BY: GBS	 <b>GOODWIN COLLEGE</b> ONE RIVERSIDE DRIVE EAST HARTFORD, CONNECTICUT	 <b>ZUVIC-CARR AND ASSOCIATES</b> CONSULTING ENGINEERS 40 Cold Spring Road • Rocky Hill, CT 06067 Phone 860.436.4901 • Fax 860.436.4953	RIVERSIDE DRIVE OUTFALL  125 RIVERSIDE DRIVE EAST HARTFORD, CONNECTICUT	SITE REMOVAL PLAN	DP-1	
				DRAWN BY: SJH							
				SHEET CHK'D BY: GBS							
				CROSS CHK'D BY:							
				APPROVED BY:							
1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS	DATE: MAY 8, 2017						
REV. NO.	DATE	DRWN	CHKD	REMARKS							





THE TOWN SHALL BE NOTIFIED IN WRITING  
AT LEAST 2 DAYS IN ADVANCE OF THE  
PRE-CONSTRUCTION MEETING BETWEEN  
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					PROJECT NO.: 1885	 <p>GOODWIN COLLEGE</p> <p>ONE RIVERSIDE DRIVE EAST HARTFORD, CONNECTICUT</p>	 <p>ZUVIC-CARR AND ASSOCIATES CONSULTING ENGINEERS</p> <p>40 Cold Spring Road • Rocky Hill, CT 06067 Phone 860.436.4901 • Fax 860.436.4953</p>	RIVERSIDE DRIVE OUTFALL	EASEMENT PLAN	SHEET NO.  EP-1
				DESIGNED BY: GBS						
				DRAWN BY: SJH						
				SHEET CHK'D BY: GBS						
				CROSS CHK'D BY:						
1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS	APPROVED BY:					
REV. NO.	DATE	DRWN	CHKD	REMARKS	DATE: MAY 8, 2017					



EROSION AND SEDIMENTATION CONTROL PLAN

NARRATIVE

THE SUBJECT SITES ARE LOCATED AT 125 AND 133 RIVERSIDE DRIVE IN THE CITY OF EAST HARTFORD, CONNECTICUT AND CONTAIN A TOTAL OF 3.8 ACRES. THE SITES ARE OCCUPIED BY COMMERCIAL BUILDINGS, PAVEMENT, PATIOS AND SIDEWALKS. THE SITES ARE LOCATED WITHIN THE I-3 INDUSTRIAL ZONE.

THE SITES GENERALLY SLOPES IN A NORTHWESTERLY TO SOUTHEASTERLY DIRECTION DOWN TOWARDS THE CONNECTICUT RIVER. A PIPED STORMWATER COLLECTION SYSTEM BISECTS THE 125 RIVERSIDE DRIVE SITE DISCHARGING THROUGH A 36" OUTFALL TO THE CONNECTICUT RIVER.

WORK INCLUDES THE CONSTRUCTION OF A 54" STORM SEWER WHICH WILL CONNECT INTO THE EXISTING 36" STORM SEWER PIPE WITHIN 125 RIVERSIDE DRIVE AND ALSO INTO A NEW 36" PIPE INSTALLED WITHIN 133 RIVERSIDE DRIVE AT THE ENSIGN STREET INTERSECTION. THE NEW OUTFALL FOR THE 54" STORM SEWER WILL BE LOCATED APPROXIMATELY 200 FEET NORTH OF THE EXISTING OUTFALL, WHICH WILL BE ABANDONED UPON COMPLETION OF THE PROJECT.

THE ESTIMATED TOTAL AREA OF THE SITES THAT ARE EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES IS APPROXIMATELY 0.12 ACRES (5,000 SF).

CONSTRUCTION SCHEDULE

ESTIMATED START OF CONSTRUCTION IS FALL 2017. ESTIMATED COMPLETION OF CONSTRUCTION IS SPRING 2018 (FINAL STABILIZATION).

RESPONSIBLE CONTACT

THE RESPONSIBLE CONTACT PERSON FOR ASSURING THAT ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE PROPERLY INSTALLED AND MAINTAINED WILL BE DESIGNATED BY THE SITE CONTRACTOR. THE RESPONSIBLE CONTACT PERSON FOR MAINTAINING THE PERMANENT MEASURES WHEN THE PROJECT IS COMPLETE WILL BE DAN LARSON OF GOODWIN COLLEGE.

GENERAL EROSION AND SEDIMENTATION CONTROL NOTES

1. THE EROSION AND SEDIMENT CONTROLS SHOWN ON THE DRAWINGS DEPICT THE MINIMUM EROSION AND SEDIMENT CONTROL PRACTICES REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT ERODED MATERIALS FROM LEAVING THE SITE.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND APPROVED PRIOR TO THE START OF DEMOLITION AND CONSTRUCTION.
3. EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL AREAS ARE STABILIZED. IF FULL IMPLEMENTATION OF APPROVED EROSION CONTROL PLANS DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS DIRECTED BY THE ENGINEER/OWNER TO CONTROL OR TREAT THE SEDIMENT SOURCE AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL KEEP ALL PUBLIC ROADWAYS CLEAN AND CLEAR OF ALL MUD AND DEBRIS DURING CONSTRUCTION. THE CONTRACTOR SHALL IMPLEMENT MEASURES NECESSARY FOR DUST CONTROL, INCLUDING BUT NOT LIMITED TO ROADWAY SWEEPING AND WATERING.
5. APPLY TEMPORARY SEEDING OR MULCH TO AREAS WHERE ROUGH GRADING HAS BEEN COMPLETED BUT FINAL GRADING IS NOT ANTICIPATED TO BEGIN WITHIN 30 DAYS OF THE COMPLETION OF ROUGH GRADING. WHEN CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR WHEN FINAL GRADES ARE REACHED, STABILIZATION AND PROTECTION MEASURES SHALL BE IMPLEMENTED WITHIN SEVEN (7) DAYS.
6. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL CONFORM TO THE REQUIREMENTS OF THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" AS AMENDED.

INSTALLATION OF SEDIMENTATION AND EROSION CONTROL MEASURES

SILT FENCE

- A. SILT FENCE SHALL BE INSTALLED AT LOCATIONS SHOWN ON THIS PLAN AND AS DIRECTED BY THE ENGINEER.
- B. DIG A SIX INCH TRENCH ON THE UPHILL SIDE OF THE DESIGNATED FENCE LINE LOCATION.
- C. POSITION THE POST AT THE BACK OF THE TRENCH (DOWNHILL SIDE), AND INSTALL THE POST AT LEAST 1.5 FEET INTO THE GROUND.
- D. LAY THE BOTTOM SIX INCHES OF THE FABRIC INTO THE TRENCH TO PREVENT UNDERMINING BY STORM WATER RUN-OFF.
- E. BACKFILL THE TRENCH AND COMPACT.

SEDIMENT CONTROL AT CATCH BASINS

- A. PLACE SILT SACKS UNDER GRATE AT EACH CATCH BASIN AT LOCATIONS SHOWN ON DRAWINGS.

GENERAL CONSTRUCTION SEQUENCE

1. COORDINATE WORK WITH OWNER FOR OUTFALL CONSTRUCTION. WORK MUST BE COMPLETE WITHIN 2 WEEKS OF MUSSEL RELOCATION AS REQUIRED.
2. INSTALL SOIL AND EROSION CONTROL MEASURES INCLUDING BUT NOT LIMITED TO: SILT FENCE AND SILT SACKS.
3. STRIP AND STOCKPILE TOPSOIL. NO TOPSOIL SHALL BE REMOVED FROM THE SITE WITHOUT THE PERMISSION OF THE OWNER EXCEPT FOR TOPSOIL STRIPPED FROM STEEP SLOPES CONTAINING INVASIVES.
4. COMMENCE REMOVAL OF BITUMINOUS PAVEMENT, CONCRETE SIDEWALKS, CURBING, FENCES, ETC.
5. PERFORM ROUGH GRADING. EXCESS MATERIAL SHALL BE TAKEN DIRECTLY OFF-SITE, AND PROPERLY DISPOSED OF BY THE CONTRACTOR. INVASIVE PLANT SPECIES (INCLUDING MULTIFLORA ROSE, ASIATIC BITTERSWEET, AND GARLIC MUSTARD) LOCATED WITHIN 10 FEET OF ANY DISTURBED AREAS OF STEEP SLOPES LOCATED IN THE OUTLET CORRIDOR SHALL BE CONTROLLED OR ERADICATED USING THE PROTOCOLS PROMULGATED BY THE CT DEEP AND/OR THE NATURE CONSERVANCY.
6. CONTINUE EARTHWORK IN EXPEDITIOUS MANNER, AND STABILIZE. INSTALL ADDITIONAL EROSION CONTROLS AS DIRECTED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
7. COMPLETE INSTALLATION OF STORM STRUCTURES AND PIPE. PLACE 10" OF TOPSOIL THAT IS FREE FROM INVASIVE SPECIES ON THE STEEP SLOPES WITHIN THE OUTLET CORRIDOR. TOPSOIL REMOVED FROM THIS AREA SHALL NOT BE REUSED.
8. COMPLETE INSTALLATION OF GRANITE CURB, SIDEWALKS, AND RAMPS.
9. COMPLETE INSTALLATION OF BITUMINOUS CONCRETE PAVEMENT AND BITUMINOUS CURBS IN PARKING AREAS AND ACCESS DRIVES. INSTALL STRIPING AND SIGNAGE.
10. COMPLETE REPLACEMENT OF DECORATIVE FENCING.
11. PREPARE FINAL GRADE FOR AREAS DISTURBED BY CONSTRUCTION NOT RECEIVING A HARD SURFACE. PLACE 6" OF TOPSOIL ON DISTURBED AREAS OTHER THAN AREAS OF STEEP SLOPES (10") AFTER FINAL GRADING IS COMPLETED. APPLY FERTILIZER, SEED AND MULCH.
12. REMOVE EROSION CONTROLS AFTER AREAS ARE STABILIZED.

SEQUENCE OF OPERATIONS – EARTHWORK OPERATIONS

PHASE I – INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES

1. ALL SEDIMENTATION AND EROSION CONTROL MEASURES, INCLUDING BUT NOT LIMITED TO SILT FENCE AND SILT SACKS SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL NOT PROCEED WITH CONSTRUCTION ACTIVITIES UNTIL THE ENGINEER HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES.
3. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB SEDIMENTATION AND EROSION CONTROL STRUCTURES.
4. ALL DISTURBED AREAS SHALL BE STABILIZED AS SOON AS PRACTICAL.

PHASE II – ROUGH GRADING

1. STRIP AND STOCKPILE EXISTING TOPSOIL. ALL STOCKPILED TOPSOIL SHALL BE SEEDED, MULCHED WITH STRAW, AND ENCLOSED BY A SILT FENCE. STUMPS SHALL BE HAULED OFFSITE TO AN APPROVED DISPOSAL FACILITY. TOPSOIL FROM SLOPES CONTAINING INVASIVES IS NOT TO BE REUSED ON SITE, AND SHALL BE REMOVED AS REQUIRED.
2. PERFORM SITE DEMOLITION AND REMOVAL OF ALL BITUMINOUS PAVEMENT AS REQUIRED.
3. ESTABLISH THE SUBGRADE FOR AREAS TO BE PAVED, SEEDED AND LANDSCAPED.

PHASE III – PIPE INSTALLATION, FINAL GRADING AND PAVING

1. INSTALL STORM STRUCTURES BEGINNING WITH OUTFALL AND WORKING UPSLOPE. INSTALL RIPRAP ON OUTLET DURING LOW TIDE AFTER INSTALLATION OF OUTLET HEADWALL.
2. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING AND UNTIL TURF IS ESTABLISHED. EROSION CONTROL MATTING SHALL BE INSTALLED ON SEEDED AREAS WHERE THE SLOPE EXCEEDS 3:1. FOR ANY EXPOSED SOIL AREAS WITHIN STEEP SLOPES, PROVIDE 10" OF TOPSOIL AND SEED WITH NEW ENGLAND ROADSIDE MATRIX UPLAND SEED MIX (i.e. NEWP, INC., AMHERST, MA) ABOVE ELEVATION 15.0 FEET, AND NEW ENGLAND ROADSIDE MATRIX WET MEADOW SEED MIX BELOW ELEVATION 15.0 FEET.
3. PAVEMENT BASE COURSES SHALL BE INSTALLED OVER AREAS TO BE PAVED AS SOON AS FINAL SUB-GRADES ARE ESTABLISHED AND UNDERGROUND UTILITIES HAVE BEEN INSTALLED.
4. CONSTRUCT PAVEMENT, PLACE TOPSOIL, FINAL SEED, AND MULCH. INSPECT THE DRAINAGE SYSTEM AND CLEAN AS NEEDED.
5. REMOVE ALL TEMPORARY EROSION CONTROL DEVICES ONLY AFTER ALL AREAS HAVE BEEN PAVED AND/OR GRASS HAS BEEN WELL ESTABLISHED AND THE SITE HAS BEEN INSPECTED AND APPROVED BY THE ENGINEER AND OWNER'S REPRESENTATIVE.

OPERATION AND MAINTENANCE OF TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

SILT FENCE

- A. ALL SILT FENCES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL. ALL DETERIORATED FABRIC AND DAMAGED POSTS SHALL BE REPLACED AND PROPERLY REPOSITIONED.
- B. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY EXCEED A HEIGHT OF ONE FOOT OR 1/2 THE HEIGHT OF THE BARRIER.

SEDIMENT CONTROL AT CATCH BASINS

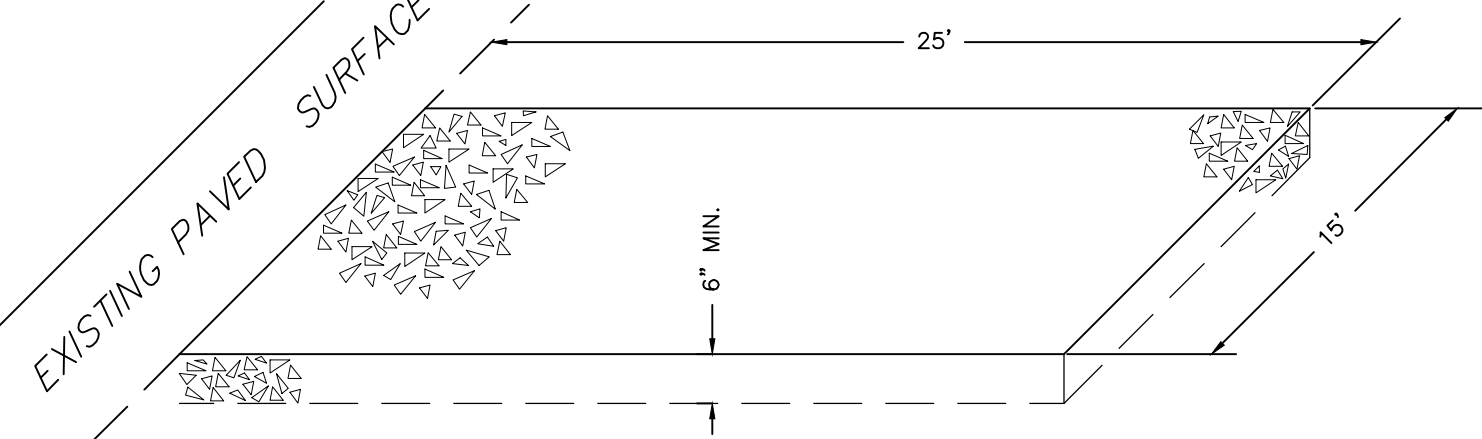
- A. INSPECT SILT SACKS WEEKLY AND AFTER EACH RAINFALL.
- B. SILT SACKS SHALL BE EMPTIED WHEN THEY HAVE COLLECTED 6" TO 12" OF SEDIMENT.

GENERAL

- A. CONTRACTOR TO KEEP WEEKLY CHECKLIST LOGS FOR INSPECTIONS OF ALL SEDIMENT AND EROSION CONTROL DEVICES AND HAVE THEM READILY AVAILABLE ON-SITE AT ALL TIMES FOR INSPECTION BY THE ENGINEER, OWNER'S REPRESENTATIVE OR CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (CT DEEP).

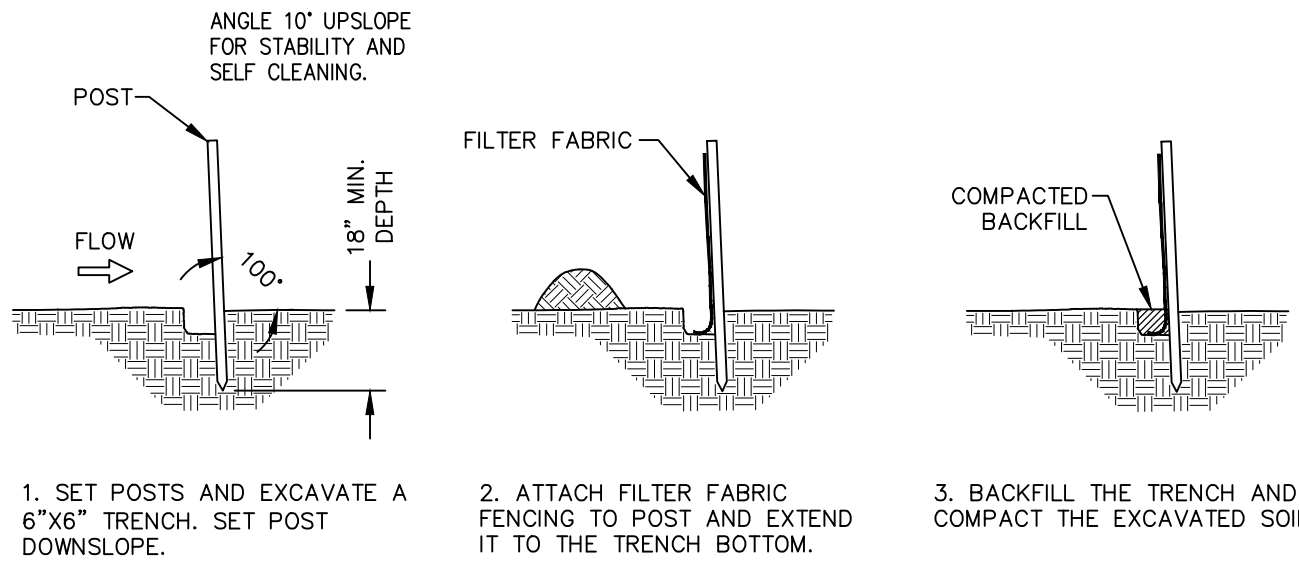
CONTINGENCY EROSION PLAN

SHOULD UNFORESEEN EROSION OR SEDIMENTATION PROBLEMS ARISE, THE DESIGN ENGINEER OF RECORD (ZUVIC, CARR AND ASSOCIATES) SHALL BE NOTIFIED IMMEDIATELY. AN INSPECTION OF THE AFFECTED AREA(S) SHALL BE PROMPTLY PERFORMED. A REMEDIAL ACTION PLAN SHALL BE FORMULATED. THE SITE CONTRACTOR SHALL THEN IMPLEMENT THE RECOMMENDED COURSE OF ACTION WHICH HAS BEEN DETERMINED BY THE ENGINEER.

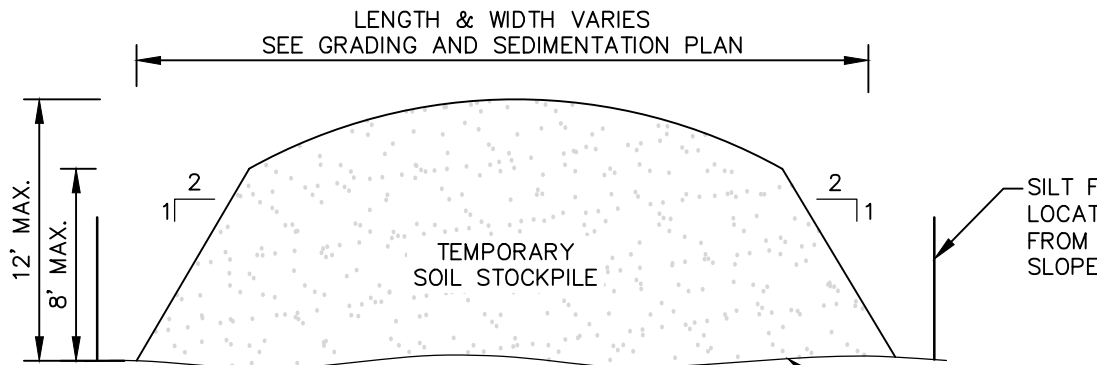


- NOTES:
1. MAINTAIN ANTI-TRACKING PAVEMENT IN GOOD CONDITION THROUGH OUT CONSTRUCTION PERIOD.
  2. ROADWAY SHALL BE SWEEPED DAILY TO REMOVE ANY MATERIAL THAT MAY BE TRACKED ONTO THE PAVEMENT.

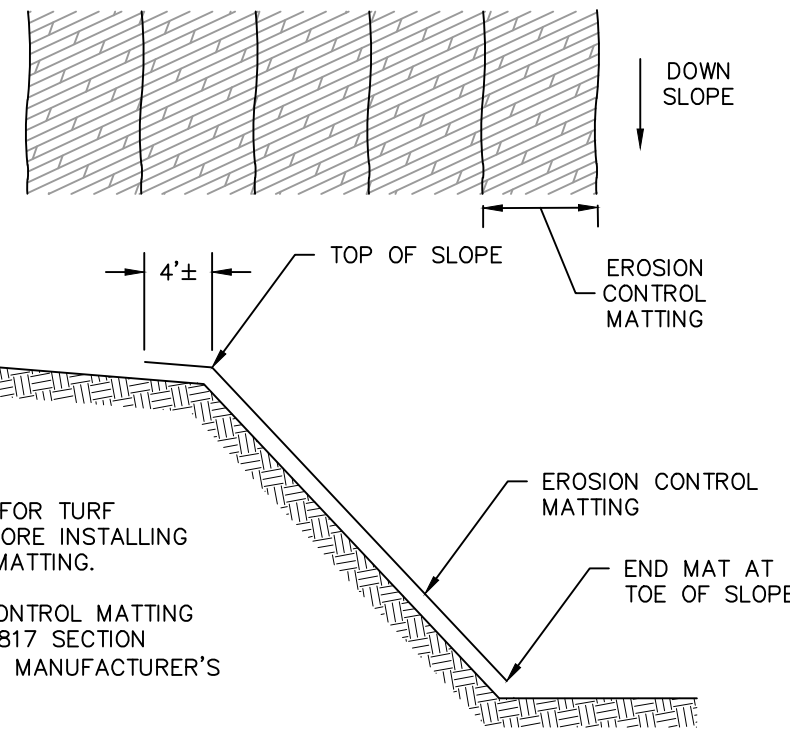
CONSTRUCTION ENTRANCE  
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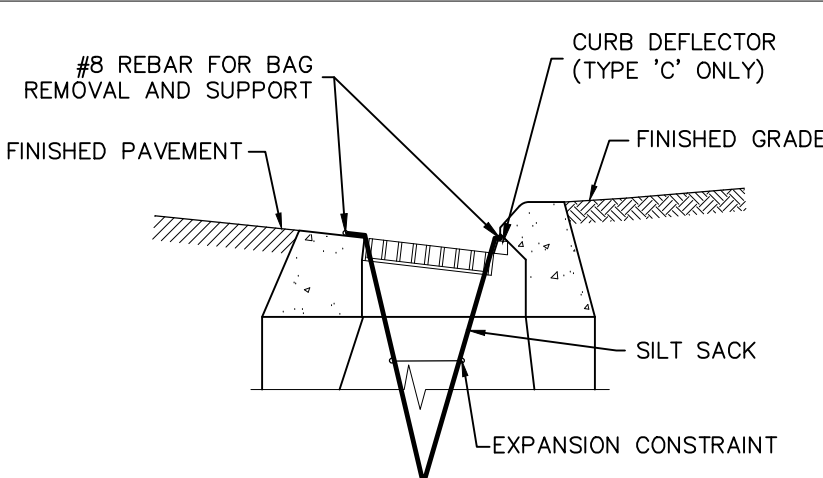
TYPICAL SILT FENCE INSTALLATION  
NOT TO SCALE



TEMPORARY SOIL STOCKPILE  
NOT TO SCALE



EROSION CONTROL MATTING  
NOT TO SCALE



- NOTES:
1. SILT SACKS MAY BE USED IN OTHER TYPES OF STORM DRAINAGE INLETS. TYPE 'C' CATCH BASIN SHOWN FOR CLARITY.

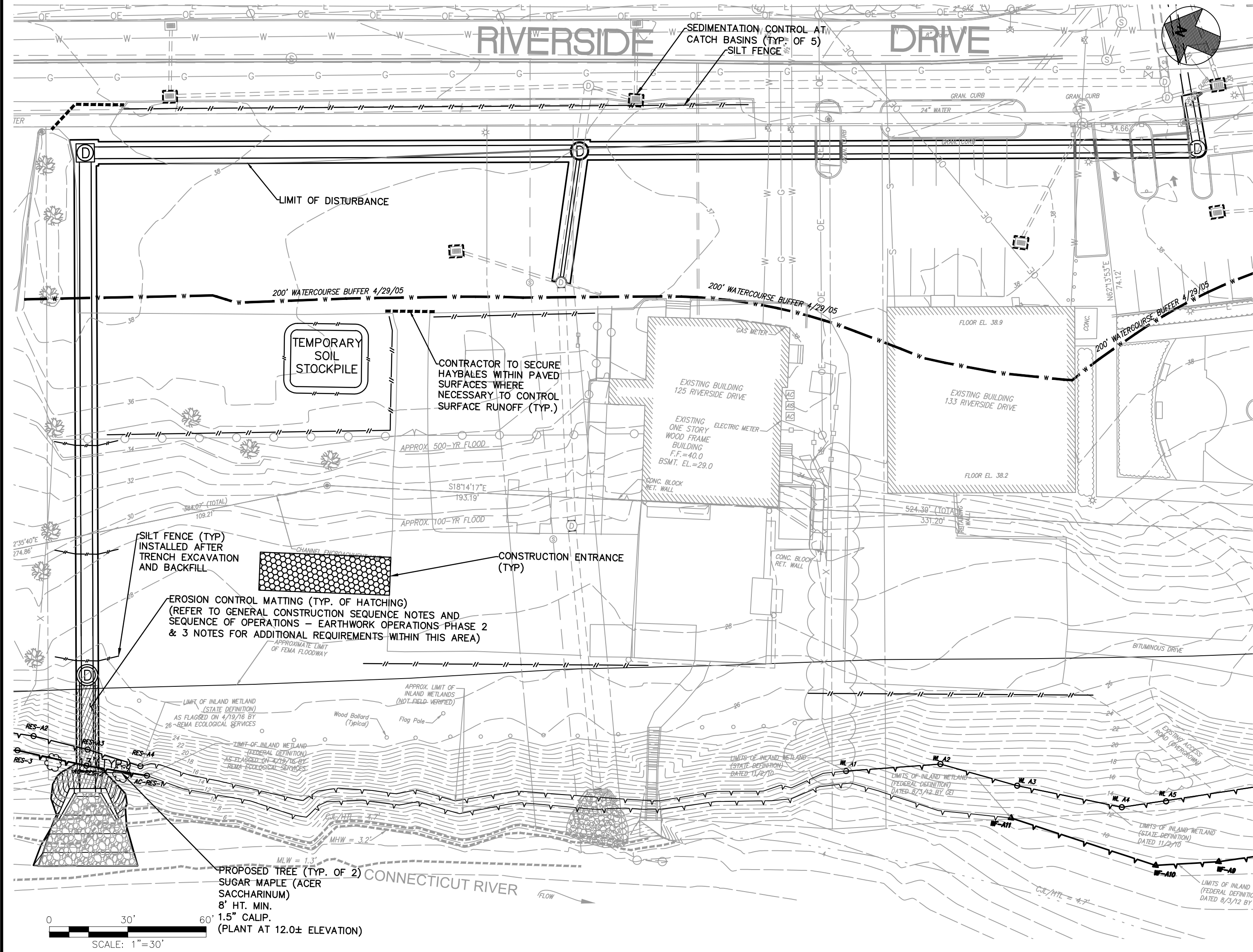
SEDIMENT CONTROL AT CATCH BASIN  
NOT TO SCALE

NOTES:

THE DEVELOPER SHALL NOTIFY THE TOWN OF EAST HARTFORD ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, STREET LINE MONUMENTATION, PROPERTY CORNER PINS, ETC., TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:30 A.M. - 4:30 P.M. AT 860-291-7380.

THE TOWN SHALL BE NOTIFIED IN WRITING AT LEAST 2 DAYS IN ADVANCE OF THE PRE-CONSTRUCTION MEETING BETWEEN THE CONTRACTOR AND THE ENGINEER.

NOT FOR CONSTRUCTION



					PROJECT NO.: 1885
					DESIGNED BY: GBS
					DRAWN BY: SJH
					SHEET CHK'D BY: GBS
					CROSS CHK'D BY:
					APPROVED BY:
					DATE: MAY 8, 2017
1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS	
REV. NO.	DATE	DRWN	CHKD	REMARKS	

PREPARED FOR:

**GOODWIN COLLEGE**

ONE RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

PREPARED BY:

**ZUVIC • CARR AND ASSOCIATES**  
CONSULTING ENGINEERS

40 Cold Spring Road • Rocky Hill, CT 06067  
Phone 860.436.4901 • Fax 860.436.4953

RIVERSIDE DRIVE OUTFALL

125 RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

EROSION & SEDIMENTATION  
CONTROL PLAN

SHEET NO.

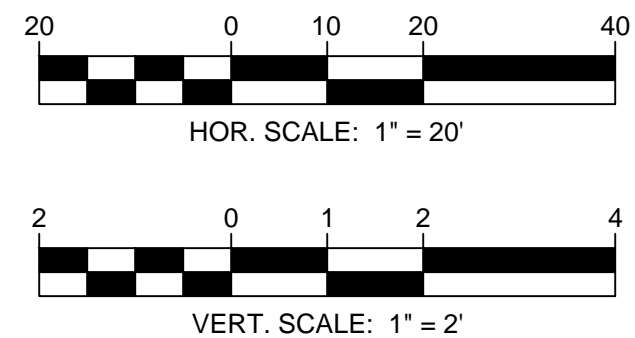
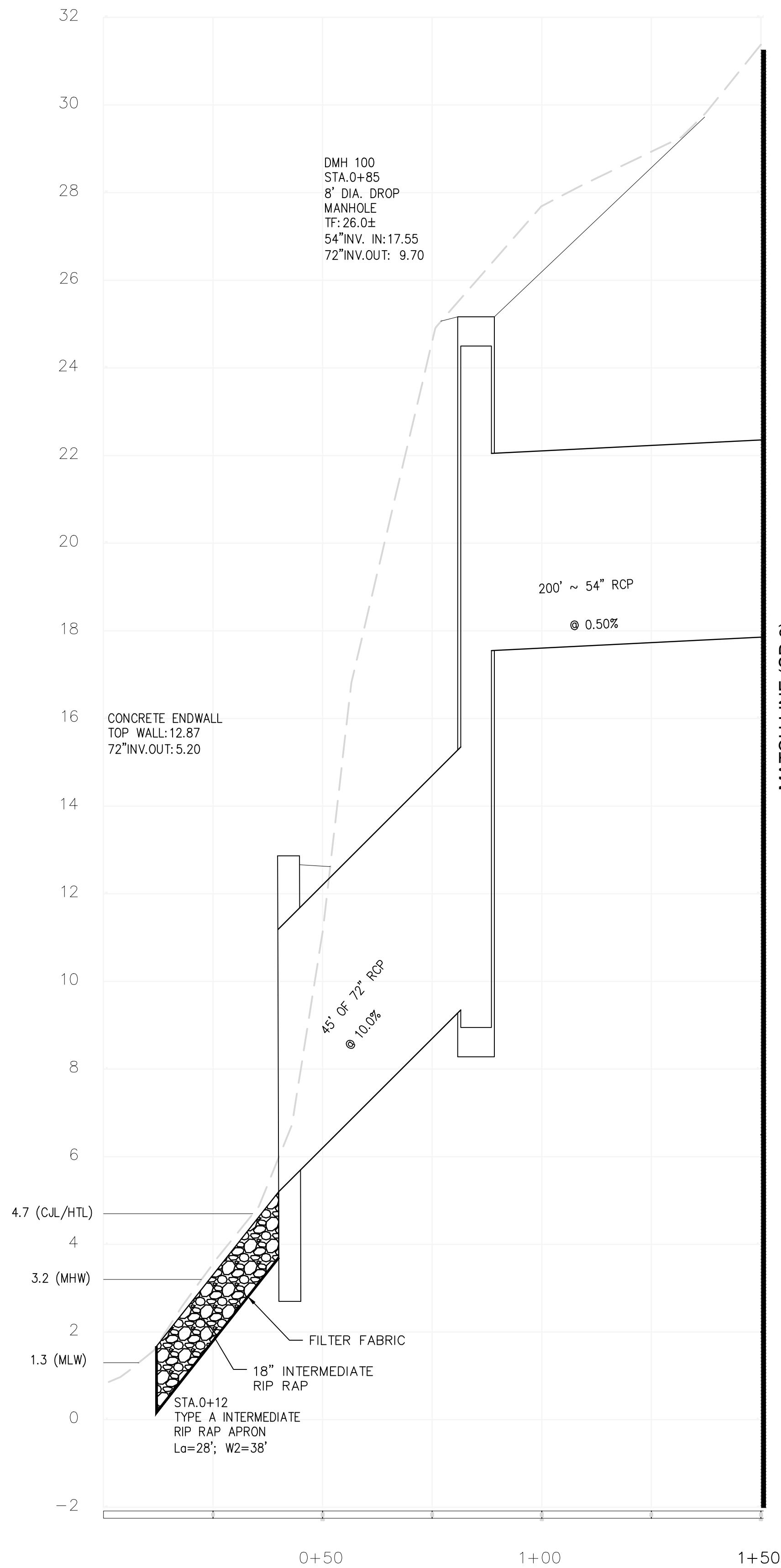
ES-1



						PROJECT NO.: 1885	 <p>PREPARED FOR: <b>GOODWIN COLLEGE</b> ONE RIVERSIDE DRIVE EAST HARTFORD, CONNECTICUT</p>	 <p>PREPARED BY: <b>ZUVIC • CARR AND ASSOCIATES</b> CONSULTING ENGINEERS</p> <p>40 Cold Spring Road • Rocky Hill, CT 06067 Phone 860.436.4901 • Fax 860.436.4953</p>	RIVERSIDE DRIVE OUTFALL	125 RIVERSIDE DRIVE EAST HARTFORD, CONNECTICUT	SITE LAYOUT PLAN	SHEET NO. <b>SP-1</b>
					DESIGNED BY: GBS							
					DRAWN BY: SJH							
					SHEET CHK'D BY: GBS							
					CROSS CHK'D BY:							
	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS								
REV. NO.	DATE	DRWN	CHKD	REMARKS		APPROVED BY:						
						DATE: MAY 8, 2017						



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NOT FOR CONSTRUCTION

**NOTES:**  
THE DEVELOPER SHALL NOTIFY THE TOWN OF EAST HARTFORD ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, STREET LINE MONUMENTATION, PROPERTY CORNER PINS, ETC., TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:30 A.M. - 4:30 P.M. AT 860-291-7380.

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1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS
REV. NO.	DATE	DRWN	CHKD	REMARKS

PROJECT NO.:	1885
DESIGNED BY:	GBS
DRAWN BY:	SJH
SHEET CHK'D BY:	GBS
CROSS CHK'D BY:	X
APPROVED BY:	X
DATE:	MAY 8, 2017

PREPARED FOR:



ONE RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

PREPARED BY:



40 Cold Spring Road • Rocky Hill, CT 06067  
Phone 860.436.4901 • Fax 860.436.4953

RIVERSIDE DRIVE OUTFALL

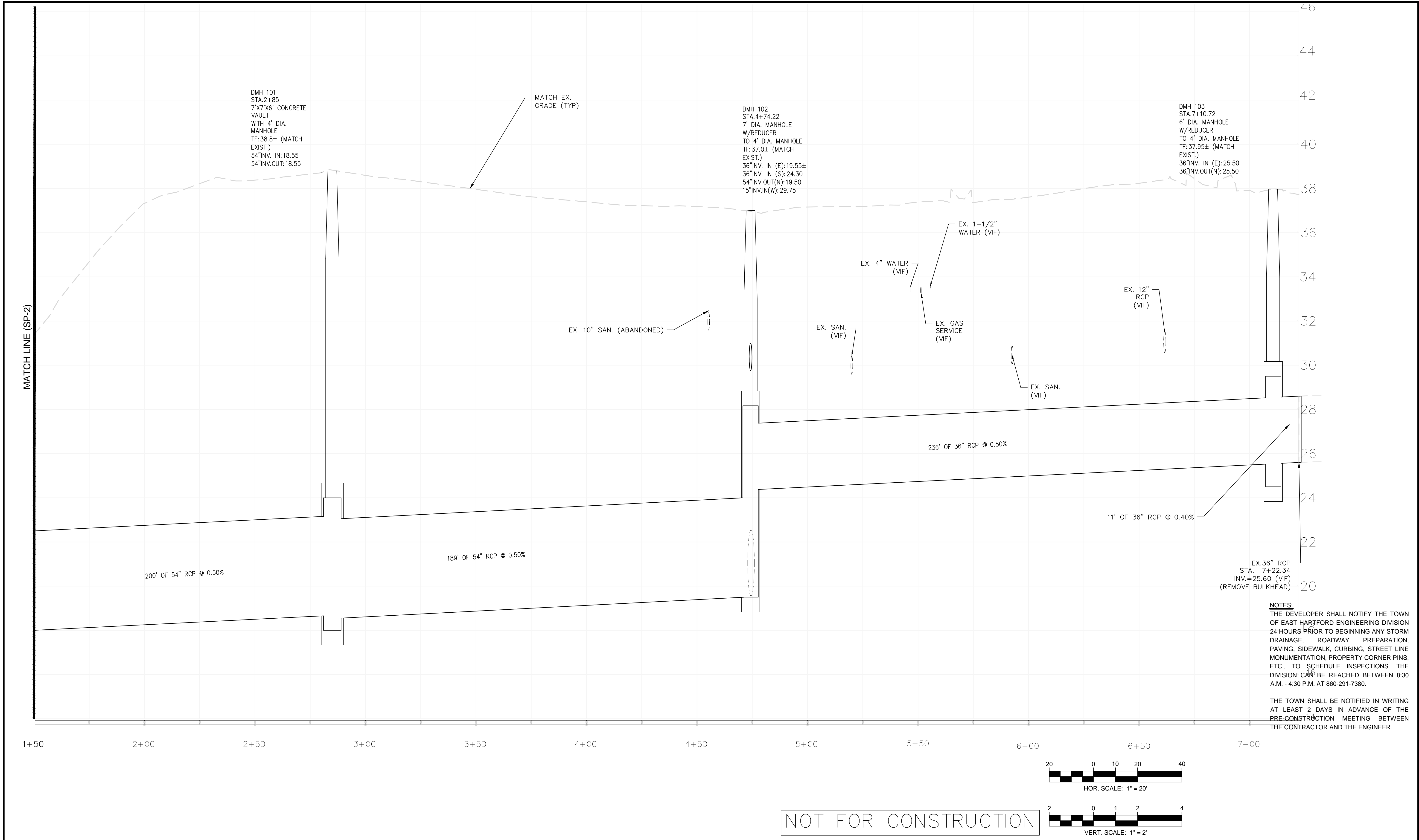
125 RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

PROFILE  
(STA. 0+00 - 1+50)

SHEET NO.

SP-2

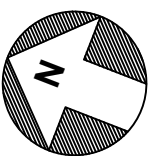
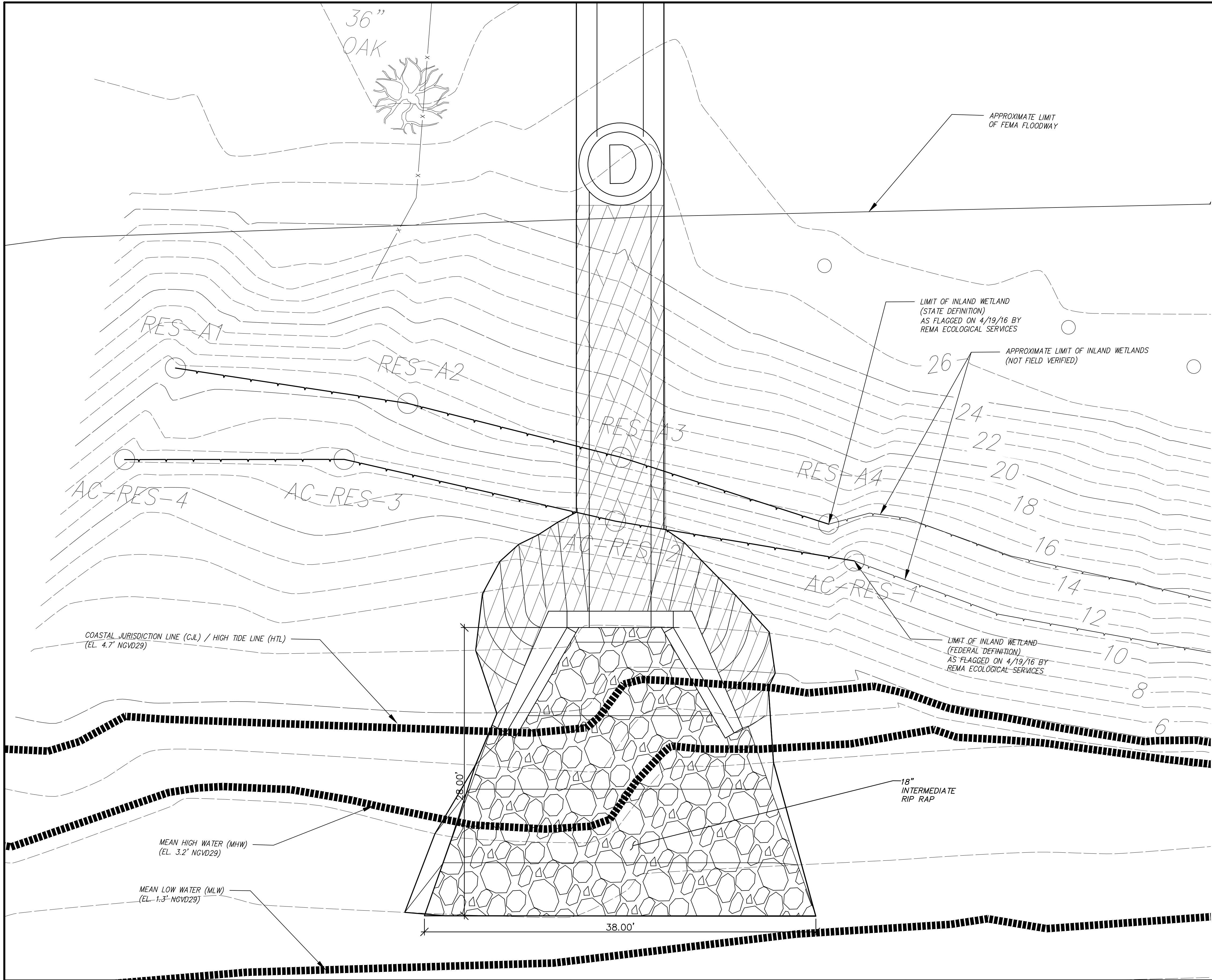
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					PROJECT NO.: 1885	 <b>GOODWIN COLLEGE</b> ONE RIVERSIDE DRIVE EAST HARTFORD, CONNECTICUT	 <b>ZUVIC-CARR AND ASSOCIATES</b> CONSULTING ENGINEERS 40 Cold Spring Road • Rocky Hill, CT 06067 Phone 860.436.4901 • Fax 860.436.4953	<b>RIVERSIDE DRIVE OUTFALL</b>  125 RIVERSIDE DRIVE EAST HARTFORD, CONNECTICUT	<b>PROFILE</b> (STA. 1+50 - 7+22)	<b>SP-3</b>				
					DESIGNED BY: GBS									
					DRAWN BY: SJH									
					SHEET CHK'D BY: GBS									
					CROSS CHK'D BY: X									
1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS	APPROVED BY: X									
REV. NO.	DATE	DRWN	CHKD	REMARKS	DATE: MAY 8, 2017									

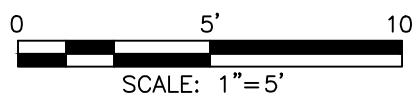


FILE PATH: H:\Projects\Goodwin College\1885 - Riverside Drive Outfall\AutoCAD\1885 - Outfall Plan.dwg PLOT DATE: 8/6/2017 PLOT TIME: 5:50:04 PM



**NOTES:**  
THE DEVELOPER SHALL NOTIFY THE TOWN OF EAST HARTFORD ENGINEERING DIVISION 24 HOURS PRIOR TO BEGINNING ANY STORM DRAINAGE, ROADWAY PREPARATION, PAVING, SIDEWALK, CURBING, STREET LINE MONUMENTATION, PROPERTY CORNER PINS, ETC., TO SCHEDULE INSPECTIONS. THE DIVISION CAN BE REACHED BETWEEN 8:30 A.M. - 4:30 P.M. AT 860-291-7380.

THE TOWN SHALL BE NOTIFIED IN WRITING AT LEAST 2 DAYS IN ADVANCE OF THE PRE-CONSTRUCTION MEETING BETWEEN THE CONTRACTOR AND THE ENGINEER.



1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS
REV. NO.	DATE	DRWN	CHKD	REMARKS

PROJECT NO.: 1885  
DESIGNED BY: GBS  
DRAWN BY: KMI  
SHEET CHK'D BY: GBS  
CROSS CHK'D BY: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_  
DATE: MAY 8, 2017

PREPARED FOR:



ONE RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

PREPARED BY:



40 Cold Spring Road • Rocky Hill, CT 06067  
Phone 860.436.4901 • Fax 860.436.4953

RIVERSIDE DRIVE OUTFALL

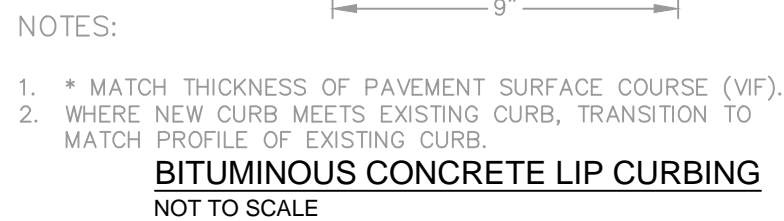
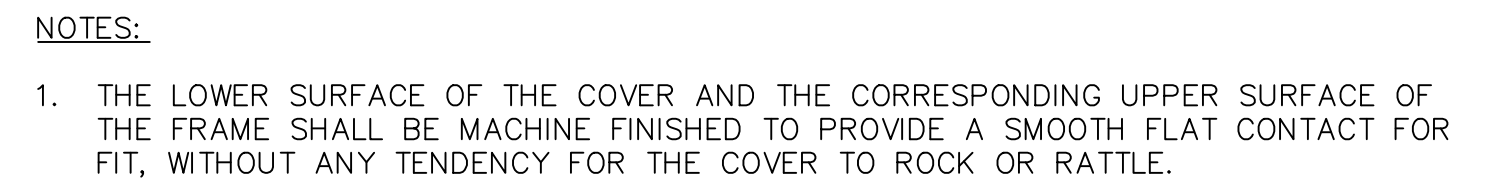
125 RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

OUTFALL  
PLAN

SHEET NO.


SP-4





					PROJECT NO.: <u>1885</u>
					DESIGNED BY: <u>X</u>
					DRAWN BY: <u>KMI</u>
					SHEET CHK'D BY: <u>GBS</u>
1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS	CROSS CHK'D BY: <u>X</u>
REV. NO.	DATE	DRWN	CHKD	REMARKS	APPROVED BY: <u>X</u>
					DATE: <u>MAY 8, 2017</u>

PREPARED FOR:

 **GOODWIN  
COLLEGE**

ONE RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

PREPARED BY:

 **ZUVIC-CARR**  
**AND ASSOCIATES**  
**CONSULTING ENGINEERS**

40 Cold Spring Road • Rocky Hill, CT 06067  
Phone 860.436.4901 • Fax 860.436.4953

RIVERSIDE DRIVE OUTFALL

125 RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

## DETAILS

SHEET NO.

**CD-1**

FILE PATH: H:\Projects\Goodwin College\1885 - Riverside Drive Outfall\AutoCAD\CI\1885 Details.dwg PLOT DATE: 6/6/2017 PLOT TIME: 5:50:47 PM



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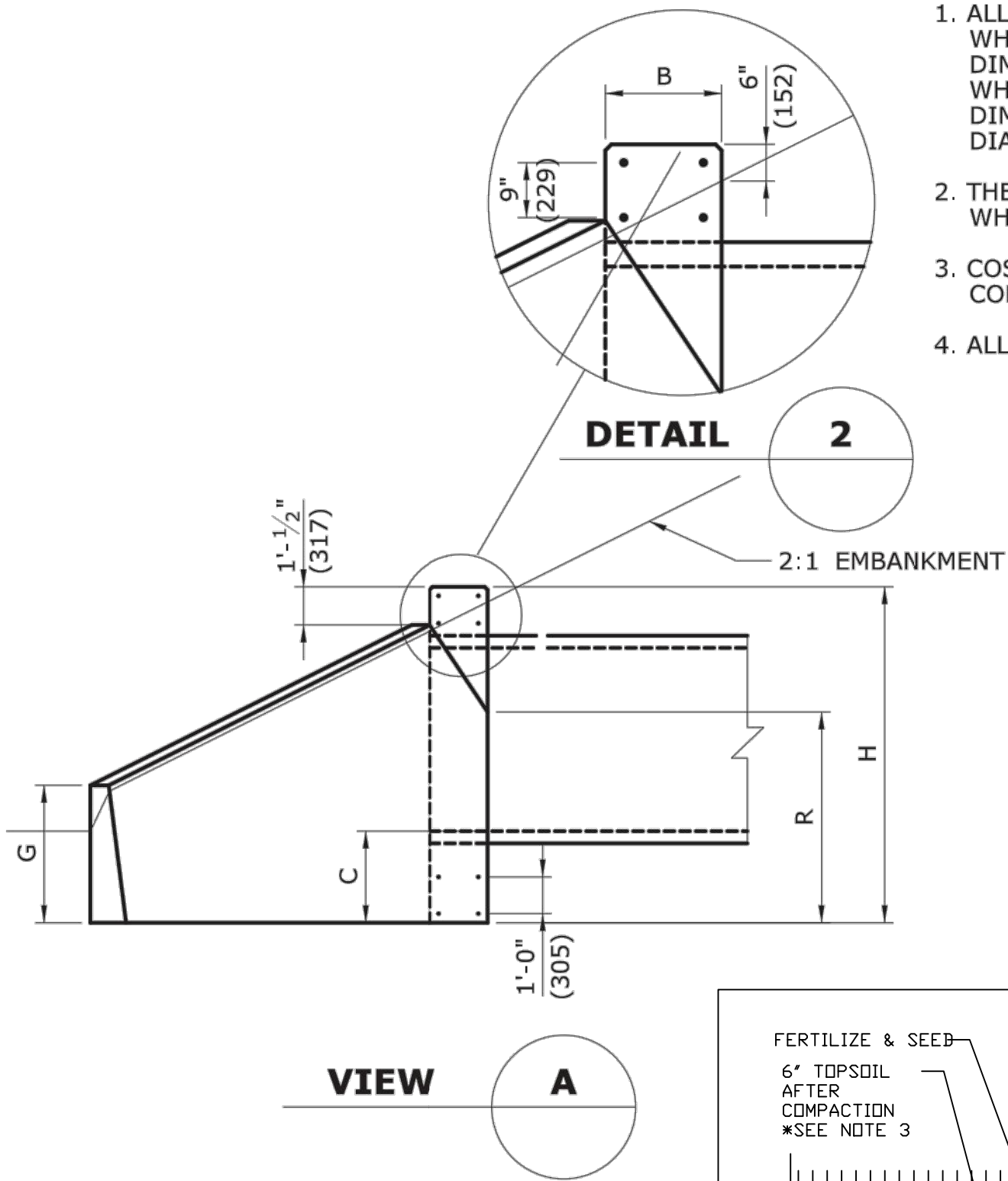
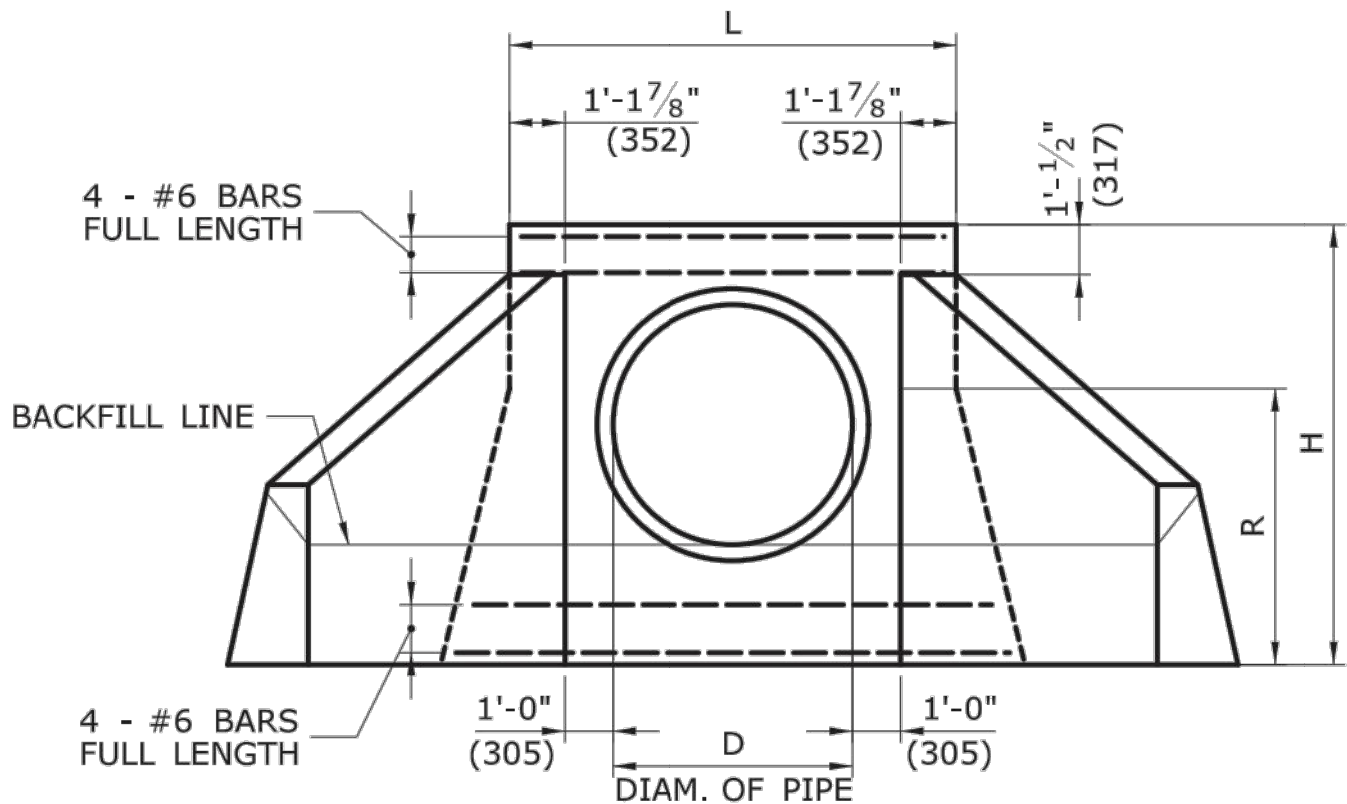
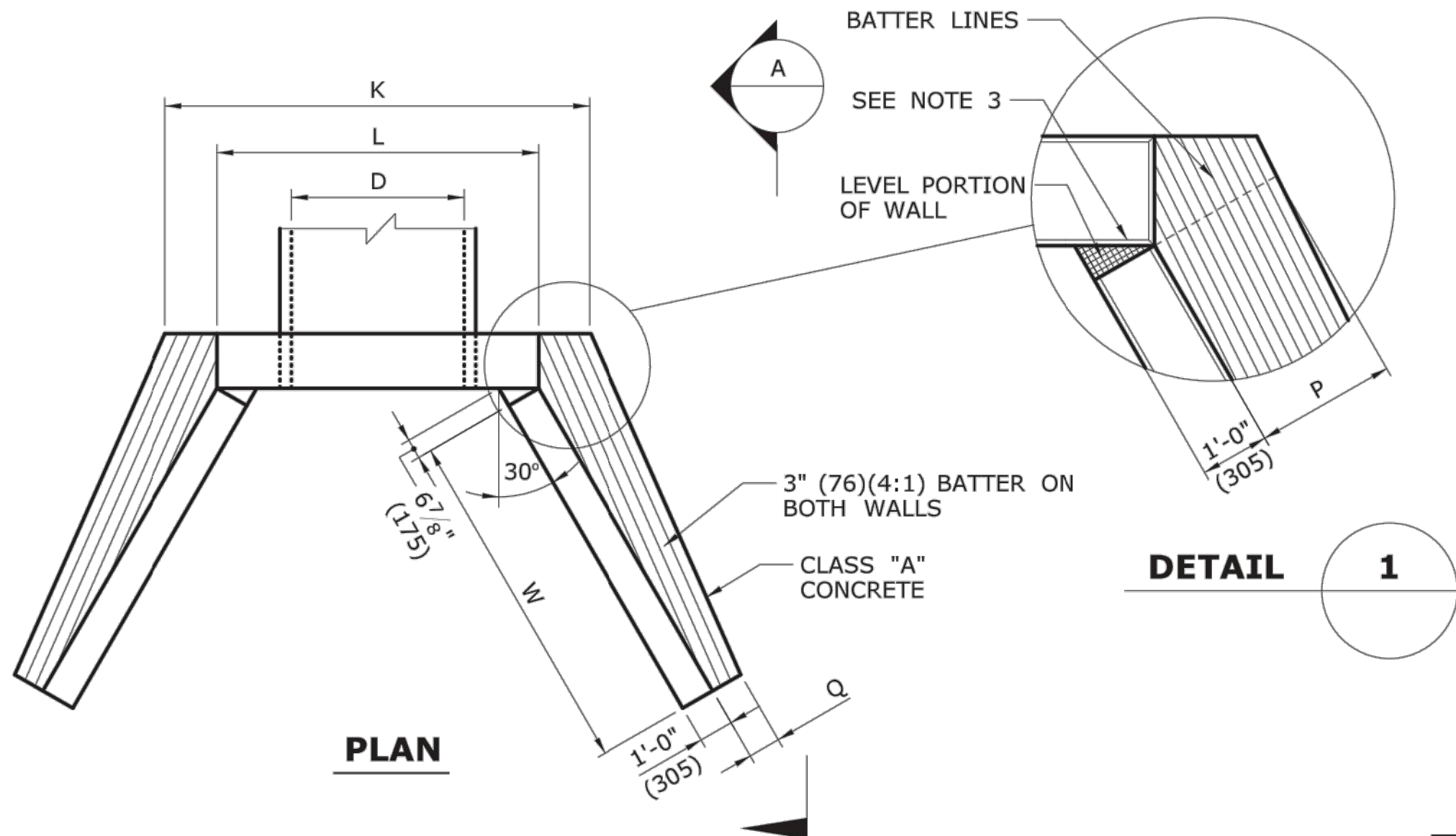
H = TOTAL HEIGHT OF ENDWALL  
B = BASE  
D = INSIDE DIAMETER OF PIPE  
S = HEIGHT OF SLOPE ABOVE FLOW LINE  
AT FACE OF WALL = D+2"(51) MIN.  
L = LENGTH OF WALL = 3S+D  
ALL EDGES OF EXPOSED SURFACES SHALL BE  
CHAMFERED APPROXIMATELY ONE INCH (25mm).

DIMENSIONS AND QUANTITIES FOR ONE WING TYPE ENDWALL

D	B	C	G	H	K	L	P	Q	R	W	VOL.
INS.	FT.&IN.	FT.&IN.	FT.&IN.	FT.&IN.	FT.&IN.	FT.&IN.	FT.&IN.	FT.&IN.	FT.&IN.	FT.&IN.	CU.YDS
72"	1'-7"	2'-6"	3'-9"	10'-2"	13'-10 $\frac{3}{4}$ "	10'-3 $\frac{3}{8}$ "	2'-3 $\frac{3}{8}$ "	0'-11 $\frac{1}{4}$ "	6'-9"	12'-5"	16.3

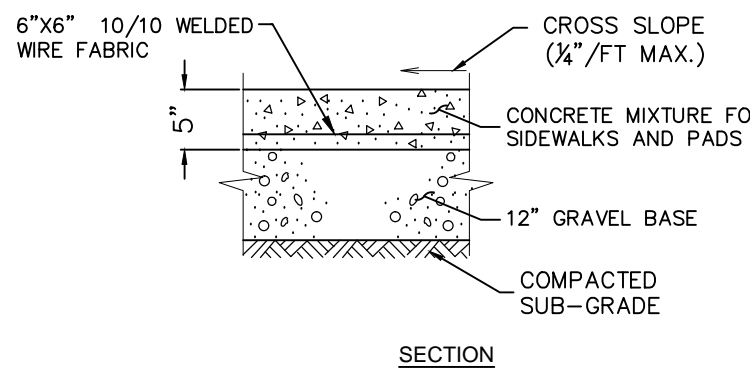
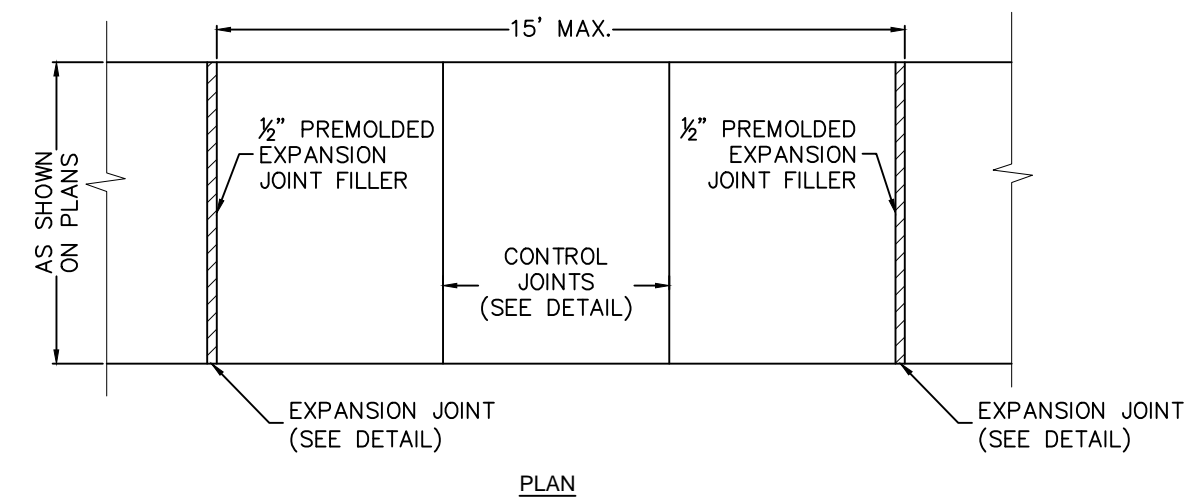
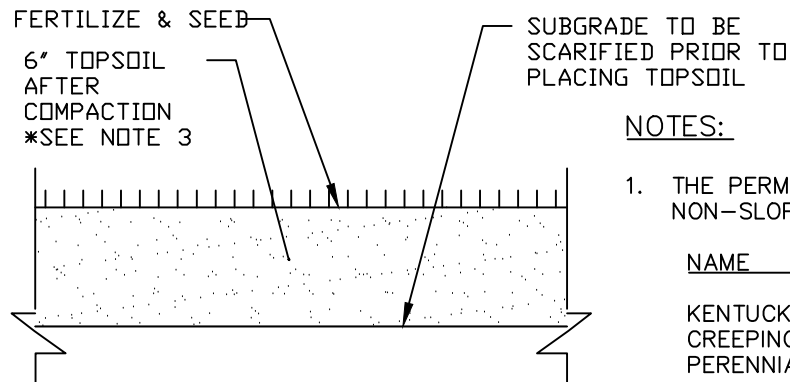
GENERAL NOTES:

- ALL CONSTRUCTION DIMENSIONS ARE NOMINAL. WHEN ONE ENDWALL IS USED FOR TWO PIPES, THE DIMENSIONS OF THE ENDWALL SHALL CONFORM TO THAT WHICH IS REQUIRED FOR THE LARGER PIPE, EXCEPT THE DIMENSION "L" SHALL BE INCREASED BY THE OUTSIDE DIAMETER OF THE SMALLER PIPE PLUS ONE FOOT.
- THESE ENDWALLS SHALL ONLY BE USED AT LOCATIONS WHERE THEY ARE OUTSIDE THE DESIGN CLEAR ZONE.
- COST OF REINFORCING BARS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CLASS "A" CONCRETE.
- ALL REINFORCING BARS SHALL HAVE 3" (76) COVER MIN.



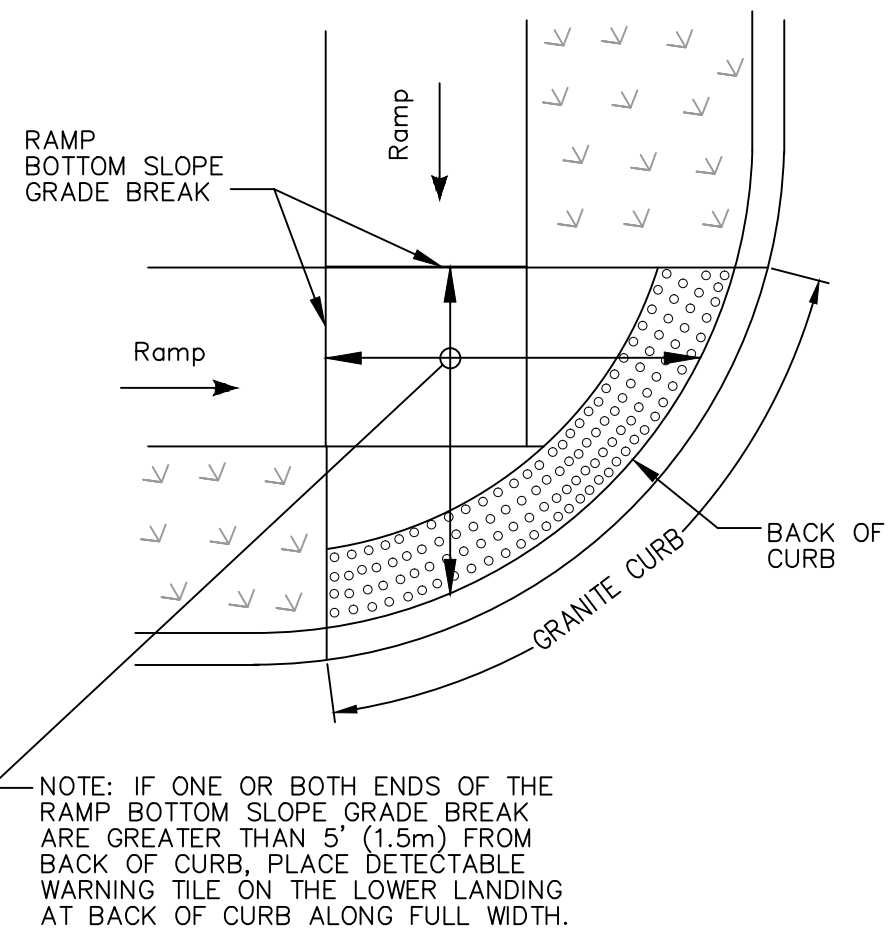
STANDARD WING TYPE ENDWALL

REINFORCEMENT SHALL BE USED FOR 48" (1219) DIA. PIPE AND UP



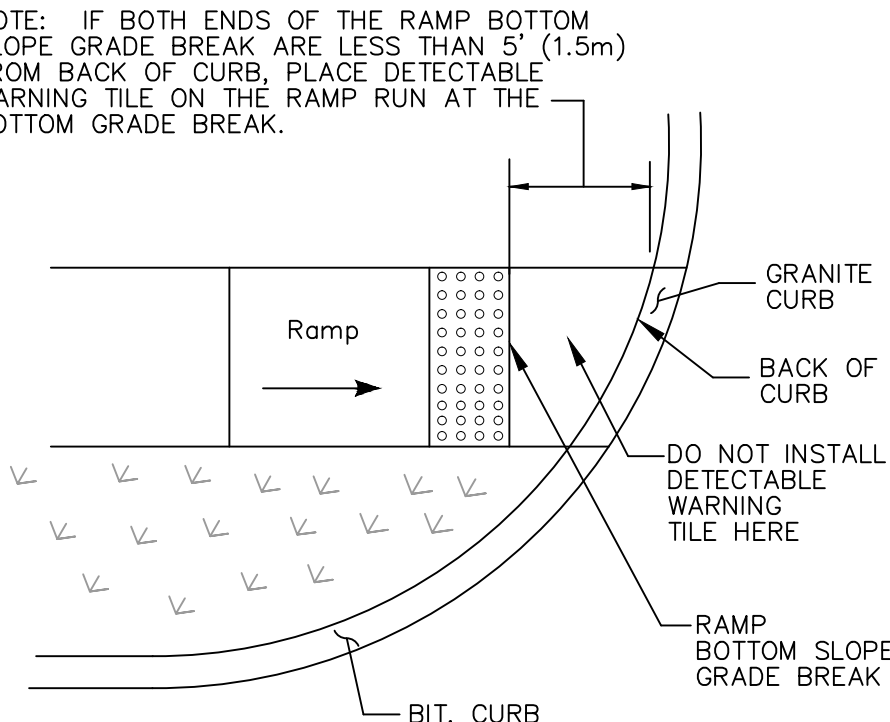
CONCRETE SIDEWALK

NOT TO SCALE



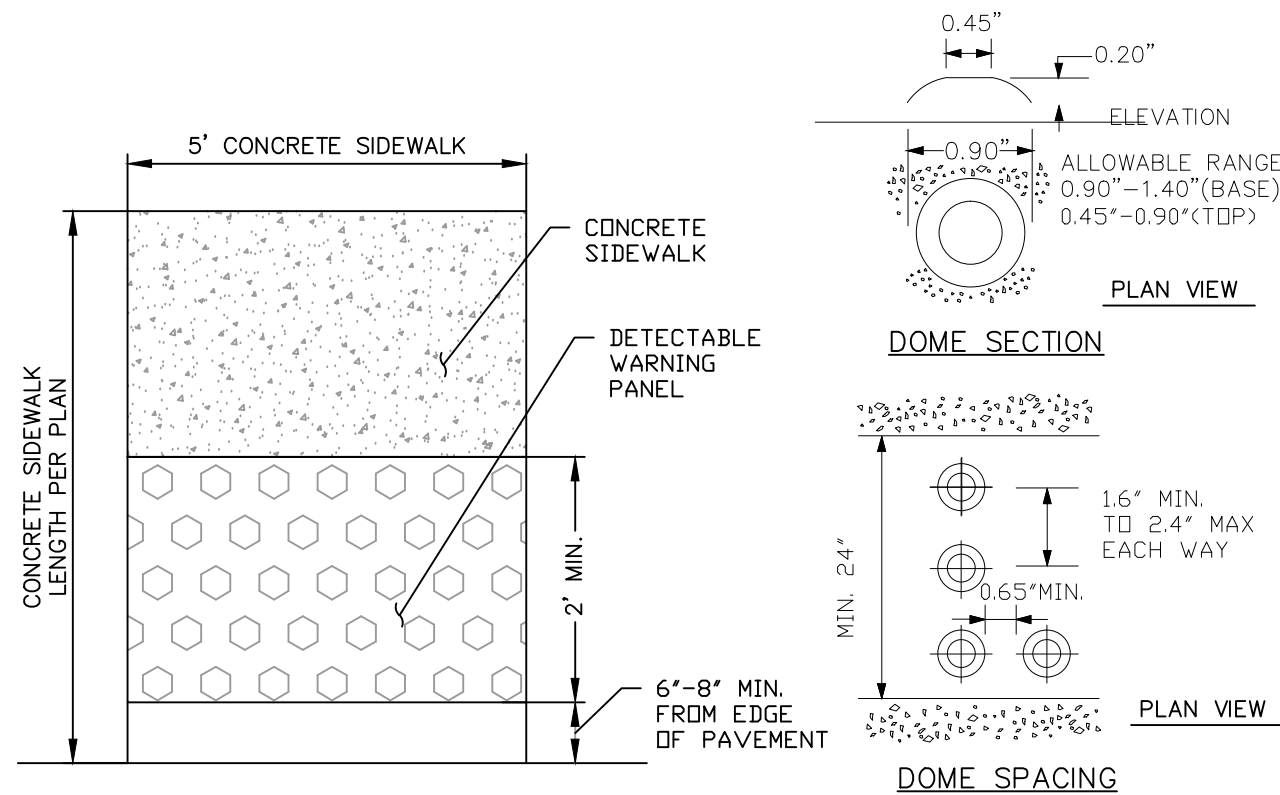
DETECTABLE WARNING PLACEMENT DETAIL 1

NOT TO SCALE



DETECTABLE WARNING PLACEMENT DETAIL 2

NOT TO SCALE



DETECTABLE WARNING PANEL

NOT TO SCALE

NOTES:

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1	6-7-17	KMI	GBS	ADDRESS TOWN STAFF COMMENTS

PROJECT NO.:	1885
DESIGNED BY:	X
DRAWN BY:	KMI
SHEET CHK'D BY:	GBS
CROSS CHK'D BY:	X
APPROVED BY:	X
DATE:	MAY 8, 2017



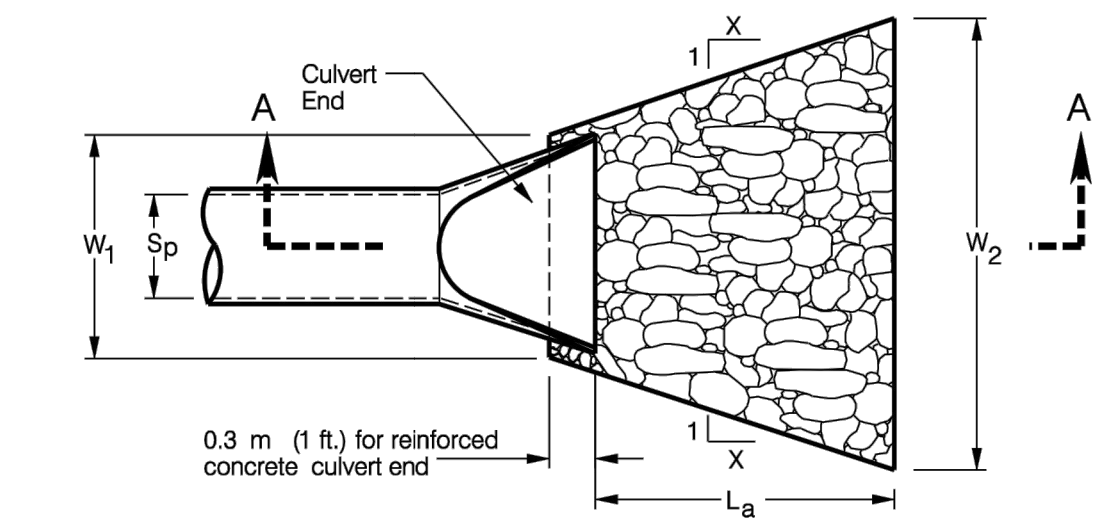
RIVERSIDE DRIVE OUTFALL  
125 RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

DETAILS

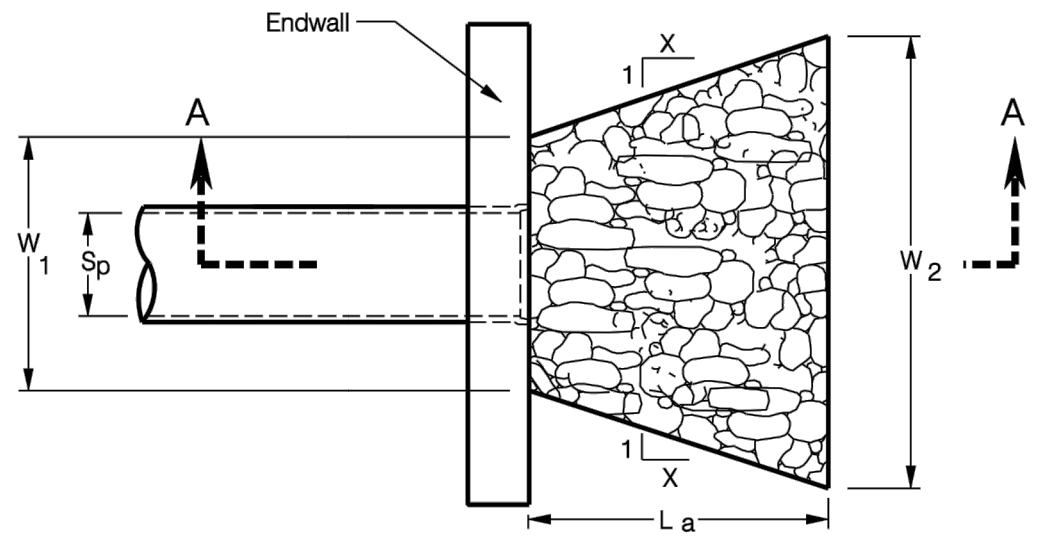
SHEET NO.

CD-2

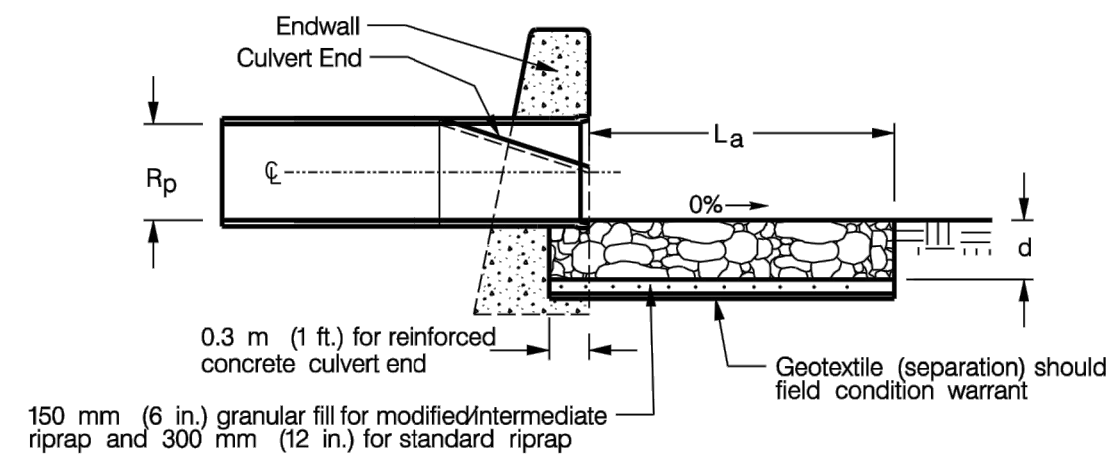




CULVERT END PLAN VIEW



ENDWALL PLAN VIEW



SECTION A-A  
CULVERT END AND ENDWALL

TYPE A AND B RIPRAP APRON  
NOT TO SCALE

LEGEND

$S_p = \begin{cases} \text{Max. inside pipe span (non-circular sections)} \\ \text{Inside pipe diameter (circular sections)} \end{cases}$

$R_p = \begin{cases} \text{Max. inside pipe rise (non-circular sections)} \\ \text{Inside pipe diameter (circular sections)} \end{cases}$

$L_a = \text{Length of riprap apron measured from the end of culvert end section or face of endwall}$

$d = \begin{cases} 300 \text{ mm (12 in.) Modified Riprap} \\ 450 \text{ mm (18 in.) Intermediate Riprap} \\ 900 \text{ mm (36 in.) Standard Riprap} \end{cases}$

	X	W <sub>1</sub>	W <sub>2</sub>
Type A Riprap Apron	3	3S <sub>p</sub>	3S <sub>p</sub> +0.7 L <sub>a</sub>
Type B Riprap Apron	5	3S <sub>p</sub>	3S <sub>p</sub> +0.4 L <sub>a</sub>

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REV. NO.	DATE	DRWN	CHKD	REMARKS

PROJECT NO.:	1885
DESIGNED BY:	X
DRAWN BY:	KMI
SHEET CHK'D BY:	GBS
CROSS CHK'D BY:	X
APPROVED BY:	X
DATE:	MAY 8, 2017

PREPARED FOR:

**GOODWIN COLLEGE**

ONE RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

PREPARED BY:

**ZUVIC-CARR AND ASSOCIATES**  
CONSULTING ENGINEERS

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RIVERSIDE DRIVE OUTFALL

125 RIVERSIDE DRIVE  
EAST HARTFORD, CONNECTICUT

DETAILS

SHEET NO.  
**CD-3**