

FILE: H:\DWG\Streets\AshSwamp\222 ASH SWAMP CULVERT RECONSTRUCTION - 06-15-2021 VER. 2020\PH-222 ASH SWAMP Road - Drainage Design - Simplification.dwg USER: Steven Troy DATE: 6-22-2022

PROJECT NARRATIVE:
 THIS PROJECT INCLUDES REPLACEMENT OF THE EXISTING DETERIORATED DRAINAGE SYSTEM ON ASH SWAMP ROAD TO ADDRESS RECENT FLOODING OF PRIVATE PROPERTY AT #11 ASH SWAMP ROAD DUE TO A DETERIORATED AND UNDERSIZED STONE CULVERT. THE PROJECT LIMITS EXTEND FROM THE WEIR STREET INTERSECTION TO THE END OF THE EXISTING STONE CULVERT ON THE EAST SIDE OF THE DRIVEWAYS TO #11 ASH SWAMP ROAD.

DRAINAGE IMPROVEMENTS BEGIN AT THE NORTHEAST CORNER OF THE WEIR STREET / ASH SWAMP ROAD INTERSECTION WHERE THE STONE CULVERT MEETS AN EXISTING 15" CORRUGATED POLYETHYLENE PIPE (CPEP) AND 15" PVC FROM THE SOUTH SIDE OF WEIR STREET. A NEW STORM MANHOLE WILL BE INSTALLED OVER THE EXISTING CPEP AND APPROXIMATELY 150 LINEAR FEET OF NEW 18" CPEP WILL BE INSTALLED FROM THE MANHOLE TO A NEW TYPE D-C ENDWALL LOCATED ADJACENT TO THE EXISTING STONE CULVERT INLET. THE EXISTING SWALE / INTERMITTENT WATERCOURSE WILL BE RE-SHAPED IN THE VICINITY OF THE NEW ENDWALL TO DIRECT SURFACE FLOW INTO THE STRUCTURE. A BERM WILL BE CREATED ON THE WEST AND NORTH SIDE OF THE ENDWALL TO HELP DIRECT ANY OVERFLOW FROM THIS INLET BACK INTO ASH SWAMP ROAD RATHER THAN INTO THE PROPERTY AT #11 ASH SWAMP ROAD. ONCE THE NEW SYSTEM IS INSTALLED, THE EXISTING STONE CULVERT WILL BE REMOVED AND/OR PLUGGED AS SHOWN ON THE PLAN DEPENDING ON THE LOCATION.

WORK WILL BE PERFORMED DURING LOW / NO FLOW CONDITIONS IN ORDER TO FACILITATE CONSTRUCTION AND MINIMIZE NEED FOR WATER HANDLING. WEATHER FORECASTS WILL BE MONITORED AND TEMPORARY PROVISIONS MADE TO ENSURE THAT STORMWATER ENTERING THE EXISTING DRAINAGE SYSTEM IS PROPERLY CONVEYED TO THE OUTLET WITHOUT RISK OF EROSION OR DAMAGE TO IMPROVEMENTS UNDER CONSTRUCTION.

PROJECT SPECIFIC SEDIMENTATION AND EROSION CONTROL PLAN
 CONSTRUCTION ACTIVITIES OF CONCERN RELATIVE TO THE PROTECTION OF ADJACENT WETLANDS AND WATERCOURSES FROM SEDIMENTATION ARE AS FOLLOWS:

1. DEWATERING: OPEN TRENCH EXCAVATIONS WILL NEED TO BE DEWATERED AS NECESSARY FOR PROPER INSTALLATION OF THE PROPOSED PIPES. IN THESE AREAS, ALL WATER REMOVED FROM THE TRENCH SHALL BE ADEQUATELY TREATED PRIOR TO DISCHARGE USING MEASURES DESCRIBED IN SECTION 6-13 OF THE 2002 CT GUIDELINES FOR EROSION AND SEDIMENT CONTROL. THIS MAY INCLUDE A STONE SUMP AND STANDPIPE FOR PUMP INTAKE PROTECTION, AND A DIRT BAG OR PUMPING SETTLING BASIN FOR TREATMENT OF THE PUMPED WATER PRIOR TO DISCHARGE.
2. STOCKPILING: EXCAVATED MATERIAL SHALL NOT BE STOCKPILED ADJACENT TO STORM DRAIN INLETS, WETLANDS, OR WATERCOURSES. WHEN IT IS NECESSARY BASED ON THE PROPOSED METHODS OF CONSTRUCTION TO STAGE EXCAVATED MATERIAL FOR SHORT DURATIONS IN THE VICINITY OF STORM DRAIN INLETS, THESE INLETS SHALL BE PROPERLY PROTECTED AS DESCRIBED ON THE PLANS. LONGER DURATION STOCKPILING OF MATERIAL, WHEN NECESSARY, SHALL BE ONLY IN LOCATIONS APPROVED IN ADVANCE BY THE ENGINEER, AND SUCH STOCKPILES SHALL BE RINGED WITH A SEDIMENTATION CONTROL SYSTEM.
3. DISTURBED AREAS: LIMITS OF DISTURBANCE SHALL BE IN STRICT ACCORDANCE WITH THE APPROVED PLAN. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH THE FINAL SURFACE TREATMENT AS SOON AS POSSIBLE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED. DISTURBED AREAS WITH STEEP OR LONG SLOPES AND OTHER AREAS WITH SIGNIFICANT POTENTIAL FOR CAUSING SEDIMENTATION SHALL BE PROTECTED WITH TEMPORARY STRAW MULCH, WOOD CHIPS, EROSION CONTROL MATTING, OR OTHER SUITABLE MATERIALS PRIOR TO SIGNIFICANT FORECASTED RAIN STORM EVENTS TO REDUCE EROSION POTENTIAL.
4. DRAINAGE WAYS: CONSTRUCTION OF DITCHES, CHANNELS, THAT ACTIVELY CONVEY FLOW SHALL BE PERFORMED SUCH THAT THE PORTION OF DRAINAGE WAY DISTURBED DURING A GIVEN DAY IS COMPLETED WITH THE PERMANENT LINING BY DAY'S END, OR OTHERWISE AS NECESSARY TO PROVIDE FOR TEMPORARY BYPASS OF STORMWATER AND ENSURE THAT DOWNSTREAM WETLAND AREAS ARE PROTECTED FROM SEDIMENTATION AND EROSION OF THE CHANNEL.
5. CULVERTS CONVEYING WATERCOURSES: CULVERTS CONVEYING WATERCOURSES SHALL BE CONSTRUCTED IN SUCH A MANNER AS TO PROVIDE A TEMPORARY BYPASS OF THE WORK AREA THROUGH A TEMPORARY PIPE OR OTHER MEANS APPROVED BY THE ENGINEER AT THE END OF EACH WORK DAY AS REQUIRED TO CONVEY STORMWATER THROUGH THE WORK AREA AND ENSURE THAT DOWNSTREAM WETLAND AREAS ARE PROTECTED FROM SEDIMENTATION AND EROSION.
6. SEVERE WEATHER CONTINGENCY PLAN: IN ADVANCE OF A SEVERE WEATHER EVENT, ALL EROSION CONTROLS DESCRIBED ABOVE AND ELSEWHERE ON THE PLANS SHALL BE INSPECTED AND ADJUSTED AS NECESSARY.

RESPONSIBLE PARTIES:
 THE DEPARTMENT OF PHYSICAL SERVICES SHALL PROVIDE A REPRESENTATIVE WHO IS RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENTATION CONTROL PLAN. THIS INCLUDES THE INSTALLATION AND MAINTENANCE OF ALL CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN.

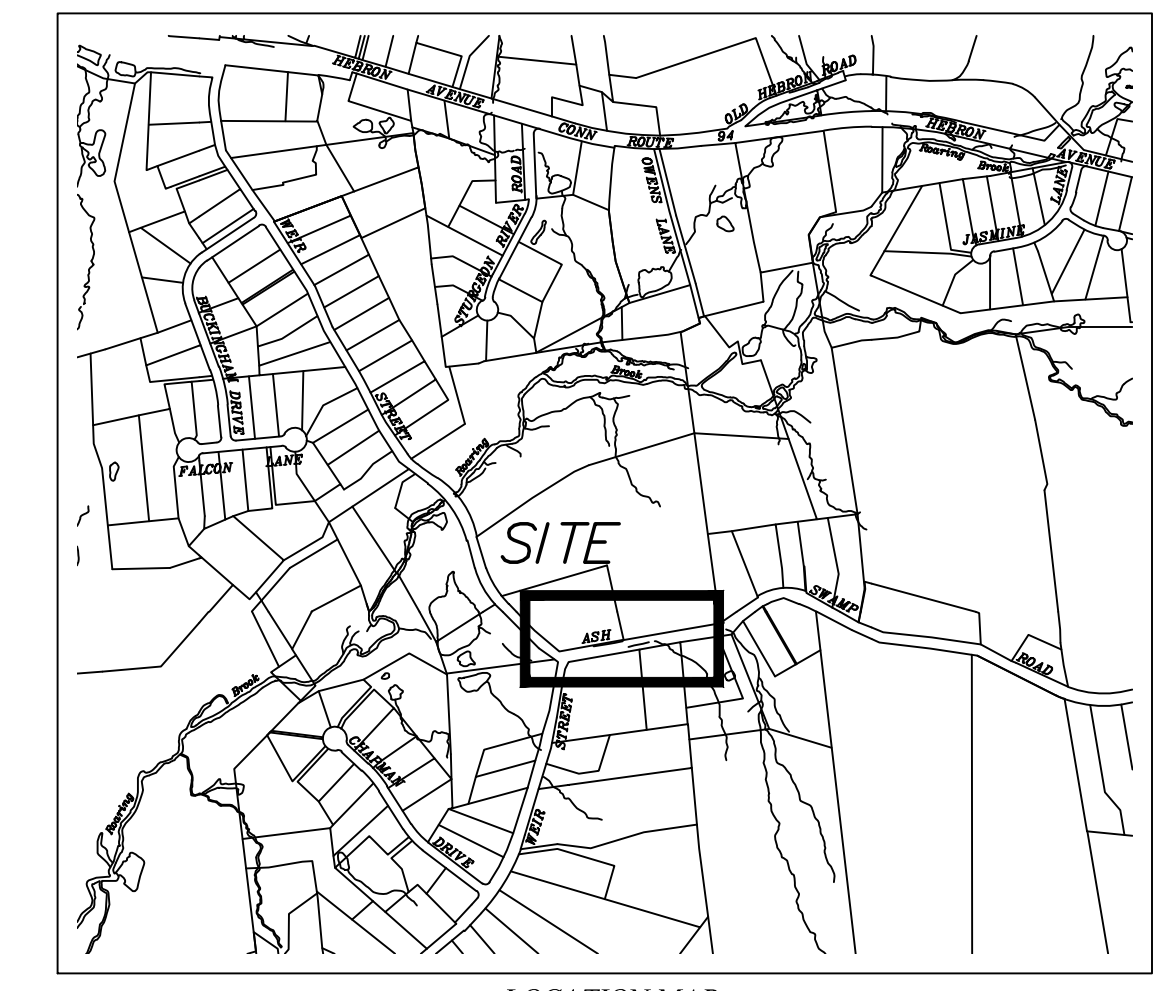
GENERAL SEDIMENTATION AND EROSION CONTROL REQUIREMENTS:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

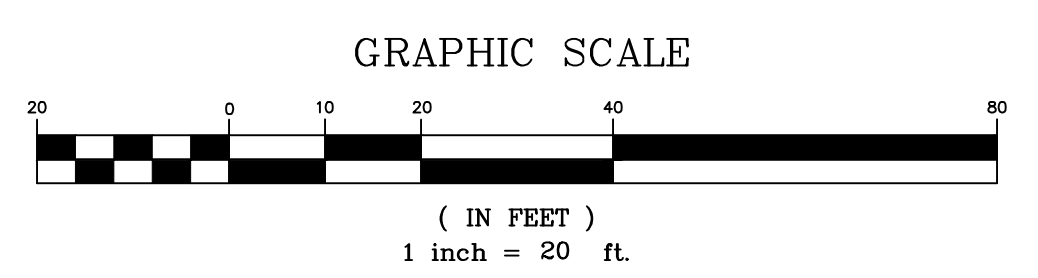
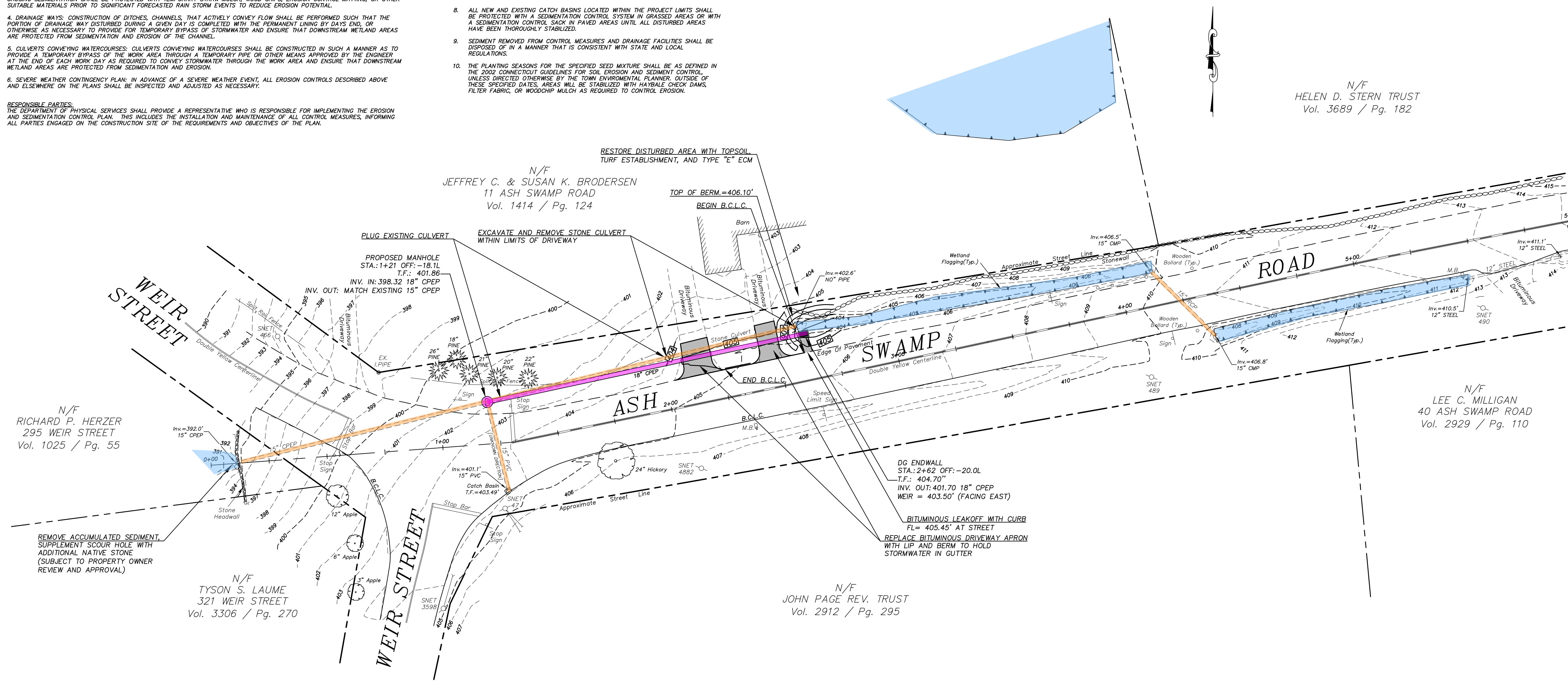
IN GENERAL, ALL ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE DEPARTMENT OF PHYSICAL SERVICES SHALL LIMIT, INsofar AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS, AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES AND WATERBODIES, AND TO PREVENT, INsofar AS POSSIBLE, EROSION ON THE SITE.

CONSTRUCTION METHODS, IN GENERAL, SHALL BE IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" (2002) BY THE STATE OF CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.

1. ALL CONTROL MEASURES SHALL BE INSTALLED AS NOTED ABOVE AND AS SHOWN ON THE PLANS.
2. ALL CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK, INCLUDING PRE-CONSTRUCTION CLEARING AND GRUBBING.
3. ALL CONTROL MEASURES SHALL BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL DISTURBED AREAS HAVE BEEN THOROUGHLY STABILIZED.
4. NO CONTROL MEASURES SHALL BE REMOVED WITHOUT APPROVAL FROM THE ENGINEER.
5. ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE ENGINEER.
6. THE LIMITS OF CLEARING, GRADING AND DISTURBANCE, AS SHOWN ON THE PLAN(S), SHALL BE KEPT TO A MINIMUM WITHIN THE APPROVED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE THE LIMITS OF CLEARING SHALL REMAIN TOTALLY UNDISTURBED.
7. ANY CONTROL MEASURES RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT IMMEDIATELY REMOVED, AND ALL DAMAGED CONTROL MEASURES SHALL BE REMOVED AND REPLACED.
8. ALL NEW AND EXISTING CATCH BASINS LOCATED WITHIN THE PROJECT LIMITS SHALL BE PROTECTED WITH A SEDIMENTATION CONTROL SYSTEM IN GRASSED AREAS OR WITH A SEDIMENTATION CONTROL SACK IN PAVED AREAS UNTIL ALL DISTURBED AREAS HAVE BEEN THOROUGHLY STABILIZED.
9. SEDIMENT REMOVED FROM CONTROL MEASURES AND DRAINAGE FACILITIES SHALL BE DISPOSED OF IN A MANNER THAT IS CONSISTENT WITH STATE AND LOCAL REGULATIONS.
10. THE PLANTING SEASONS FOR THE SPECIFIED SEED MIXTURE SHALL BE AS DEFINED IN THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, UNLESS DIRECTED OTHERWISE BY THE TOWN ENVIRONMENTAL PLANNER. OUTSIDE OF THESE SPECIFIED DATES, AREAS WILL BE STABILIZED WITH HAYBALE CHECK DAMS, FILTER FABRIC, OR WOODCHIP MULCH AS REQUIRED TO CONTROL EROSION.



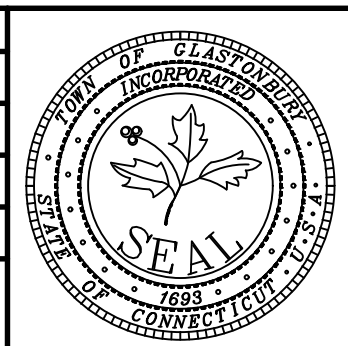
LOCATION MAP
 SCALE: 1" = 100'



SHEETS 1-2 DESIGNED BY:
 GLASTONBURY ENGINEERING DIVISION
 PER: DANIEL A. PENNINGTON P.E.
 LICENCE NO. 20101

Certified to be substantially correct
 DANIEL A. PENNINGTON P.E. Reg. No. 20101

DRAWING ISSUE STATUS		SCALE: AS SHOWN	DATE:
		DRAWN BY: S.Troy	3-7-2022
		CHECKED BY: S.M.B.	---
		APPROVED BY: D.A.P.	---
2.	CONSERVATION COMMISSION COMMENTS	6-22-2022	ST. FILE:
1.	CONSERVATION COMMISSION COMMENTS	6-9-2022	
NO.	DESCRIPTION	DATE	



PLANS DEPICTING
 PROPOSED DRAINAGE
 FOR
 ASH SWAMP ROAD
 GLASTONBURY, CONNECTICUT

SHEET NO.
 1
 OF 3

NOTES:

- PRIVATE RESIDENTIAL DRIVEWAYS SHALL NOT EXCEED 12 FEET IN WIDTH AND PUBLIC OR COMMERCIAL DRIVEWAYS SHALL NOT EXCEED 30 FEET IN WIDTH UNLESS PRIOR APPROVAL IS GIVEN BY THE TOWN MANAGER. MAXIMUM CURB CUT DIMENSION MAY EXCEED THIS BY UP TO 6 FEET TO ALLOW FOR A 3 FOOT RADIUS AT THE INTERSECTION WITH THE PUBLIC STREET.
- DRIVEWAYS SHALL NOT BE CONSTRUCTED WITHIN 20 FEET OF AN INTERSECTION OR 4 FEET OF A CROSS WALK.
- NO TWO DRIVEWAYS SHALL BE CONSTRUCTED CLOSER THAN 8 FEET APART WHEN MEASURED AT THE GUTTER LINE OF THE STREET.
- WHERE DRIVEWAYS CROSS EXISTING ROADSIDE DITCHES OR WATERCOURSES, CULVERTS SHALL BE INSTALLED PER SECTION 17-159 OF THE TOWN ORDINANCE.
- IF CONCRETE SIDEWALKS ARE CALLED FOR THIS AREA SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SIDEWALK DETAIL.
- A ~~BITUMINOUS~~ CONCRETE DRIVEWAY APRON SHALL BE INSTALLED UP TO THE STREET LINE FOR UNPAVED DRIVEWAYS. A 12" MINIMUM BITUMINOUS CONCRETE APRON SHALL BE INSTALLED WHEN DRIVEWAYS ARE INSTALLED USING CONCRETE OR PAVERS.

TYPICAL DRIVEWAY CROSS SECTION

MAXIMUM DRIVEWAY WIDTH
12'-0" RESIDENTIAL
30'-0" PUBLIC OR COMMERCIAL

BITUMINOUS CONCRETE HMA 50.375" SURFACE COURSE

2" RESIDENTIAL
3" COMMERCIAL

PROCESSED STONE BASE PLACED IN TWO COURSES

1 1/2" LIP

STREET PAVEMENT

GUTTER LINE

OR AS DIRECTED

4'-0" (MIN.)

SIDEWALK AREA

SEE NOTE 5

1'-0" (TYP.)

STREET LINE

GRADE AS SHOWN ON PLANS OR AS DIRECTED

PROCESSED STONE BASE COURSE

VERTICAL CURVES HAVING A LENGTH OF AT LEAST 10 FEET SHOULD BE USED TO CONNECT TANGENTS.

BITUMINOUS CONCRETE DRIVEWAY

SECTION ALONG DRIVEWAY CENTER LINE

SCALE: NONE
DRAWN BY: SR
CHECKED BY: SMB
APPROVED BY: DAP
LAST REVISED: 3/28/2017

TOWN OF GLASTONBURY
DEPARTMENT OF PHYSICAL SERVICES
ENGINEERING DIVISION

BITUMINOUS CONCRETE DRIVEWAY

PLATE NO. 8

NOTES:

- ALL CATCH BASINS SHALL CONFORM TO CONDOT STANDARD DETAIL SHEETS HW-507.1 AND HW-507.04 EXCEPT AS OTHERWISE NOTED ON THIS DETAIL. DOUBLE GRATE CATCH BASINS SHALL CONFORM TO CONDOT STANDARD SHEETS HW-507.05 AND HW-507.06.
- PRECAST CATCH BASIN TOPS MUST BE PROPERLY ALIGNED AS SHOWN AND SHALL CONFORM TO CONDOT STANDARD DETAIL SHEETS HW-507.07. CARE CDD CATCH BASIN TOPS SHALL HAVE AN OPEN THROAT.
- ALL FRAMES AND GRATES SHALL BE GALVANIZED. FOR DETAILS OF FRAMES AND GRATES, SEE CONDOT STANDARD DETAIL SHEET HW-507.08.
- WHEN TYPE 'C' CATCH BASINS ARE CONSTRUCTED IN PAVEMENT, THE NORMAL GUTTER OF THE ROADWAY SHALL BE VARIED TO PROVIDE AN ADDITIONAL 2-INCH DEPRESSED GUTTER AT THE CATCH BASIN.
- WALL THICKNESS TO BE 12 INCHES WHEN HEIGHT OF STRUCTURE EXCEEDS 10 FEET FROM TOP OF FRAME TO BOTTOM OF BASE. THICKER WALLS APPLY ONLY TO PORTION OF STRUCTURE BELOW 10' DEEP.
- PRECAST RISER SECTIONS SHALL NEVER HAVE CORNER PIPE ENTRIES. WHEN PIPE ALIGNMENT CANNOT BE CHANGED, A ROUND STRUCTURE SHALL BE USED PER CONDOT DETAIL HW-507.04.
- CATCH BASINS LEFT ABOVE THE FINISHED GUTTER GRADE FOR THE WINTER MUST BE PROPERLY SHIMMED FOR FLOWING AS SHOWN IN PLATE 4.
- MORTAR MIX SHALL NOT CONTAIN LIME.
- ENDS OF PIPE SHALL BE SAWCUT FLUSH WITH INSIDE WALLS.
- IF CONCRETE MASONRY UNITS ARE USED THE FOLLOWING ADDITIONAL REQUIREMENTS SHALL BE MET:
 - MAXIMUM CORBEL SHALL NOT EXCEED 2 INCHES
 - WHERE NECESSARY, BLOCKS MAY BE CUT OR CONCRETE BRICK USED (NO RED BRICK PERMITTED)
 - CORNERS SHALL BE SQUARE, COURSES LEVEL, AND JOINTS PROPERLY STAGGERED
 - VOIDS IN EXTERIOR WALLS SHALL BE GROUTED, AND CORBELS SHALL BE WEDGED.

PRECAST TOP (TYPE "C-L" SHOWN)

NORMAL FINISHED GRADING TO BE VARIED ADJACENT TO CATCH BASIN AS DIRECTED, SEE NOTE 4

WHEN THIS DIMENSION EXCEEDS 10' CATCH BASIN WILL BE CLASSIFIED AS CATCH BASIN TYPE "C" OR "C-L", OVER 10' DEEP

8" SPACER AS REQUIRED

1'-6" REDUCER

RISER

2'-8 1/2"

4'-0"

2' MIN. SUMP

8" TYPICAL, SEE NOTE 5

FLOW LINE

3'-0"

SECTION A-A

SECTION B-B

8" THICK BASE OF 3/4" CRUSHED STONE

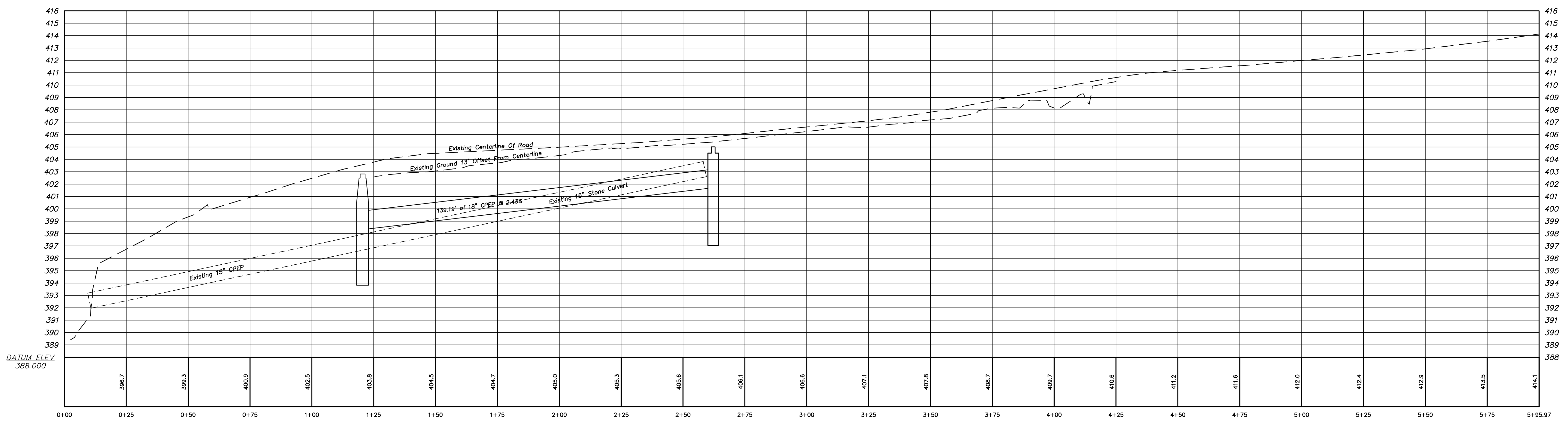
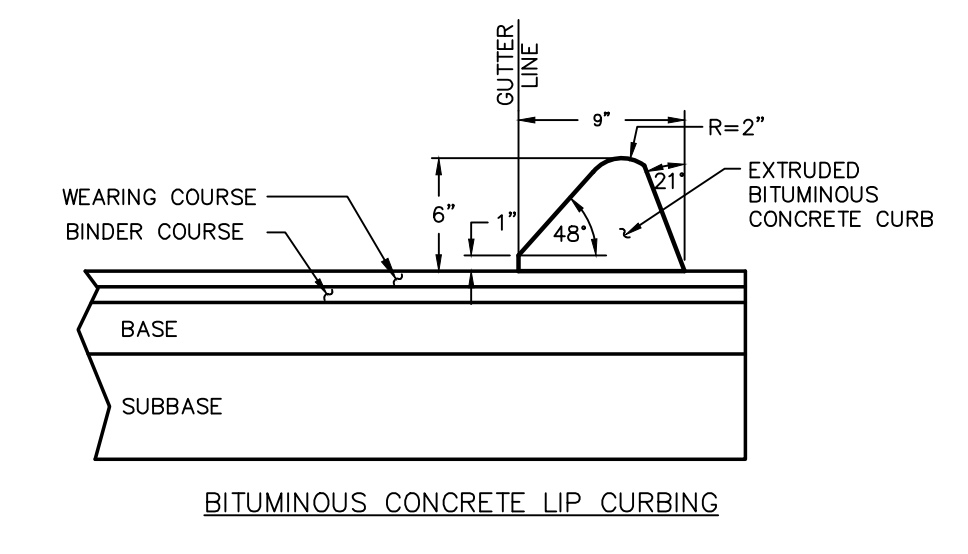
4'-4"

SCALE: NONE
DRAWN BY: SR
CHECKED BY: SMB
APPROVED BY: DAP
LAST REVISED: 9/1/2016

TOWN OF GLASTONBURY
DEPARTMENT OF PHYSICAL SERVICES
ENGINEERING DIVISION

CATCH BASIN

PLATE NO. 21

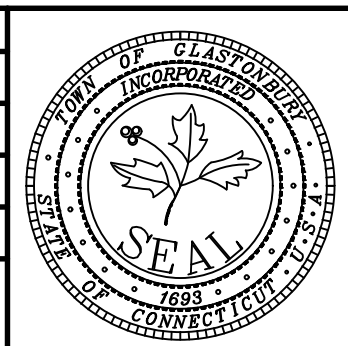


PROFILE:
HORIZONTAL - 1"=20'
VERTICAL - 1"=4'

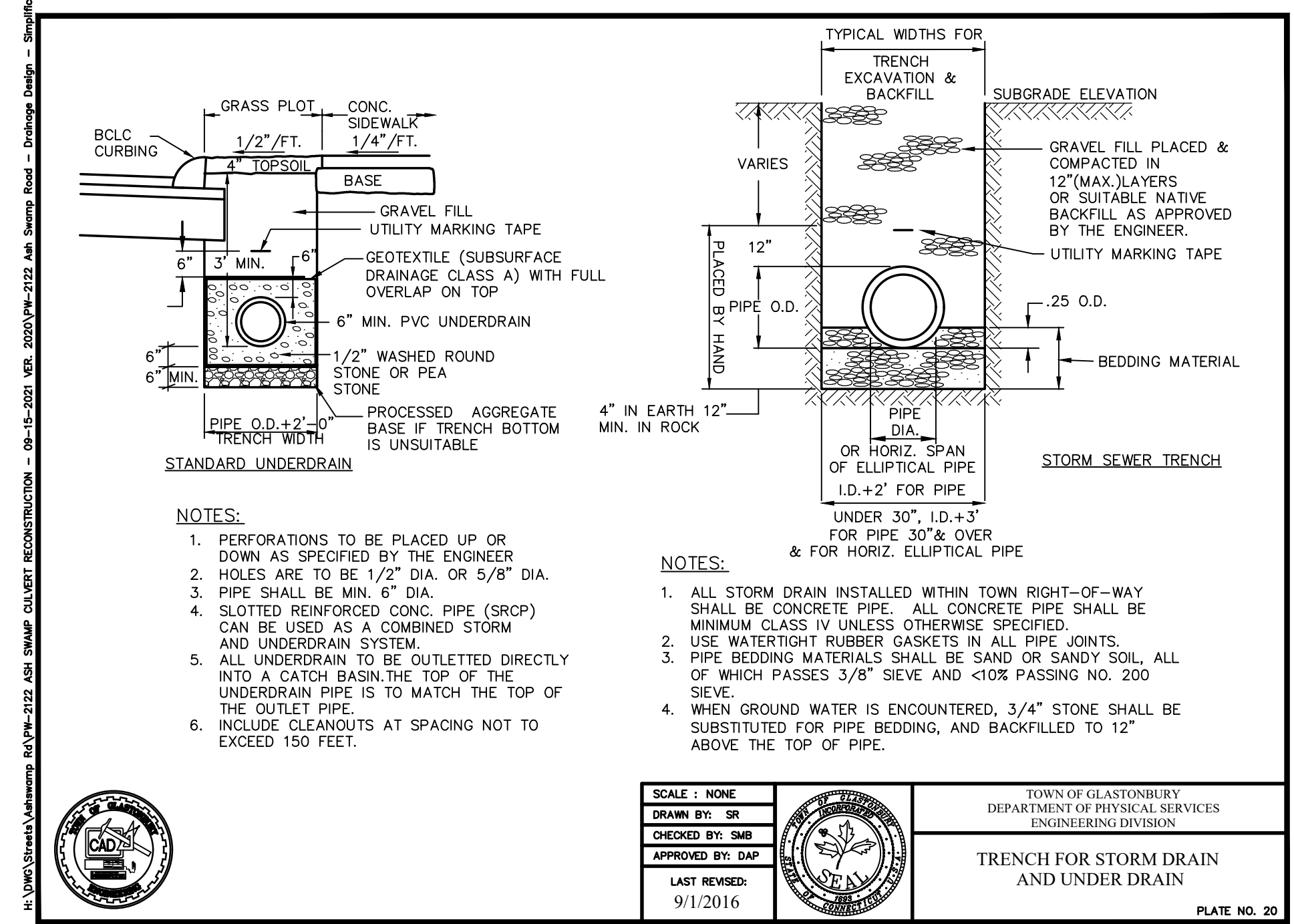
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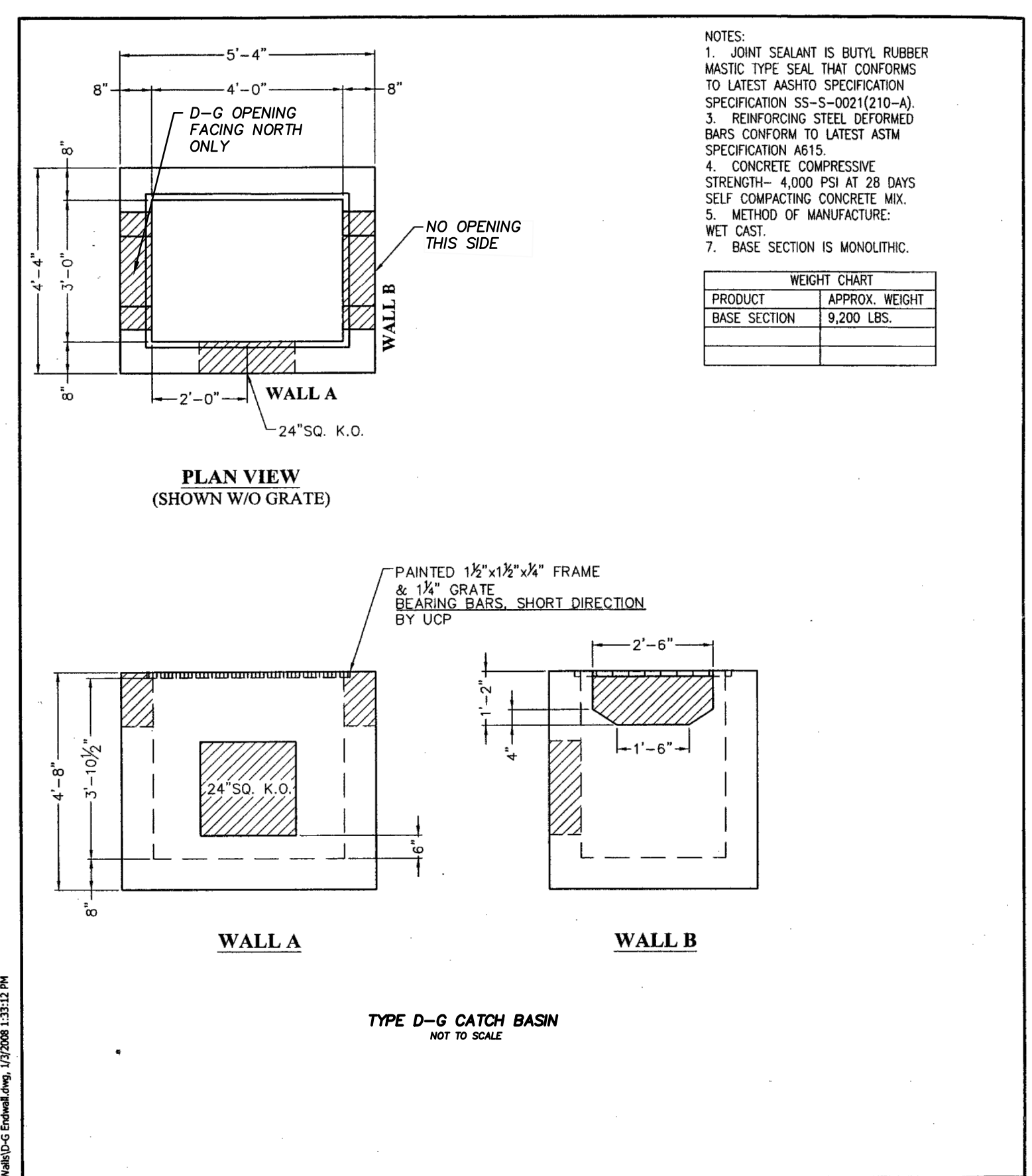
PROFILE DEPICTING
PROPOSED DRAINAGE
FOR
ASH SWAMP ROAD
GLASTONBURY, CONNECTICUT



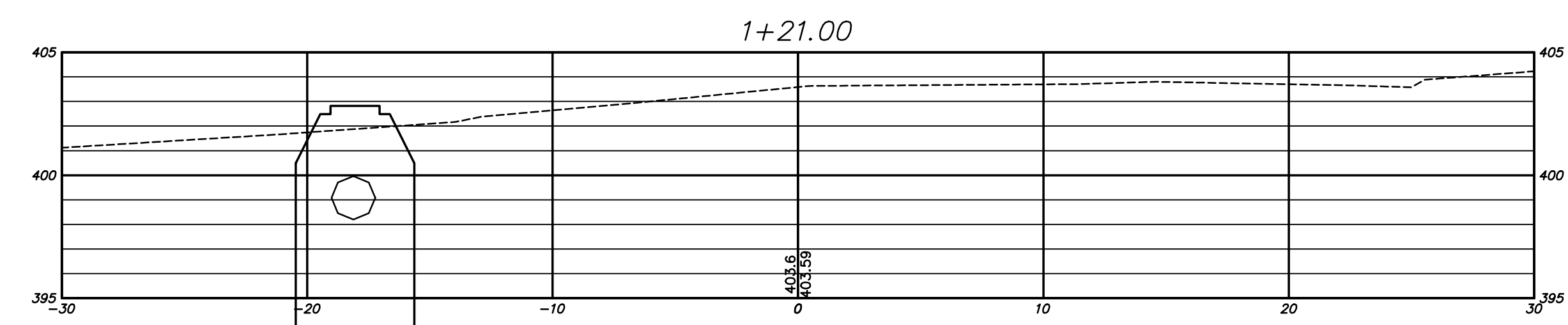
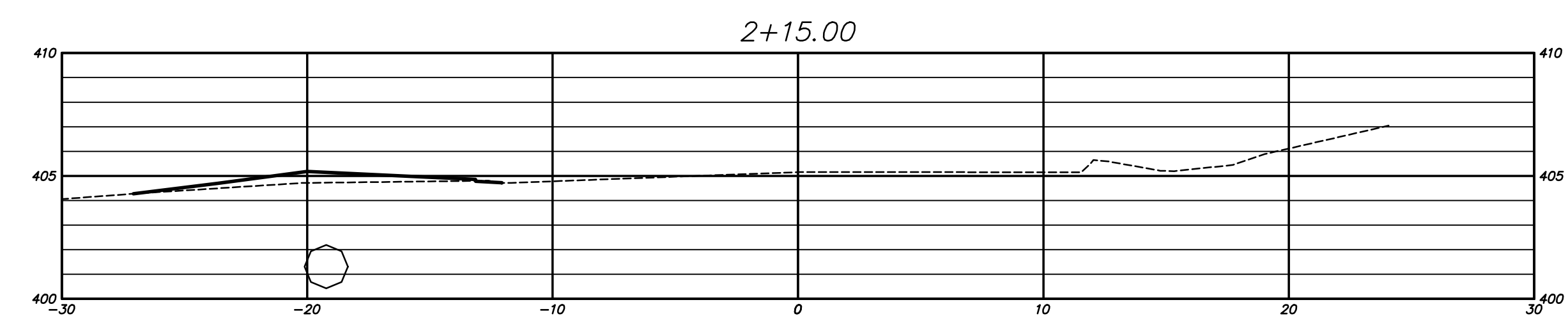
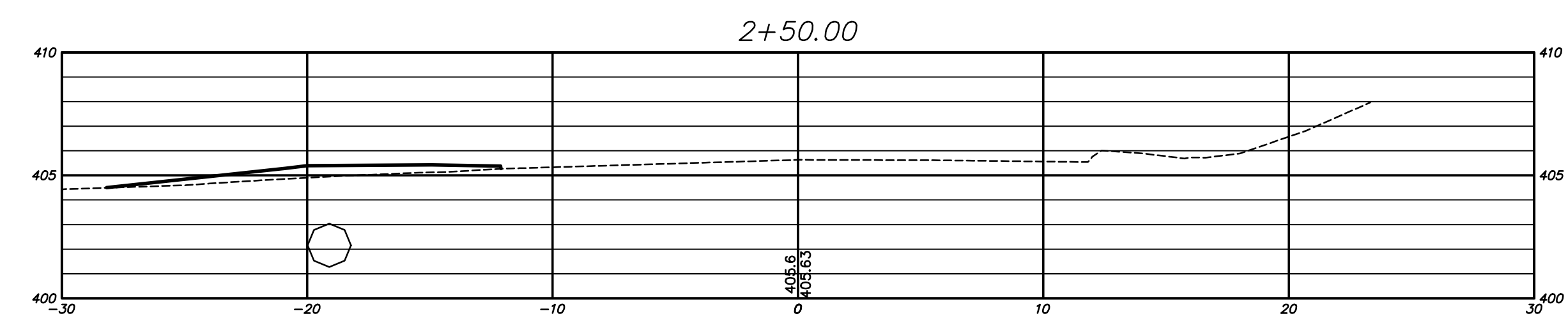
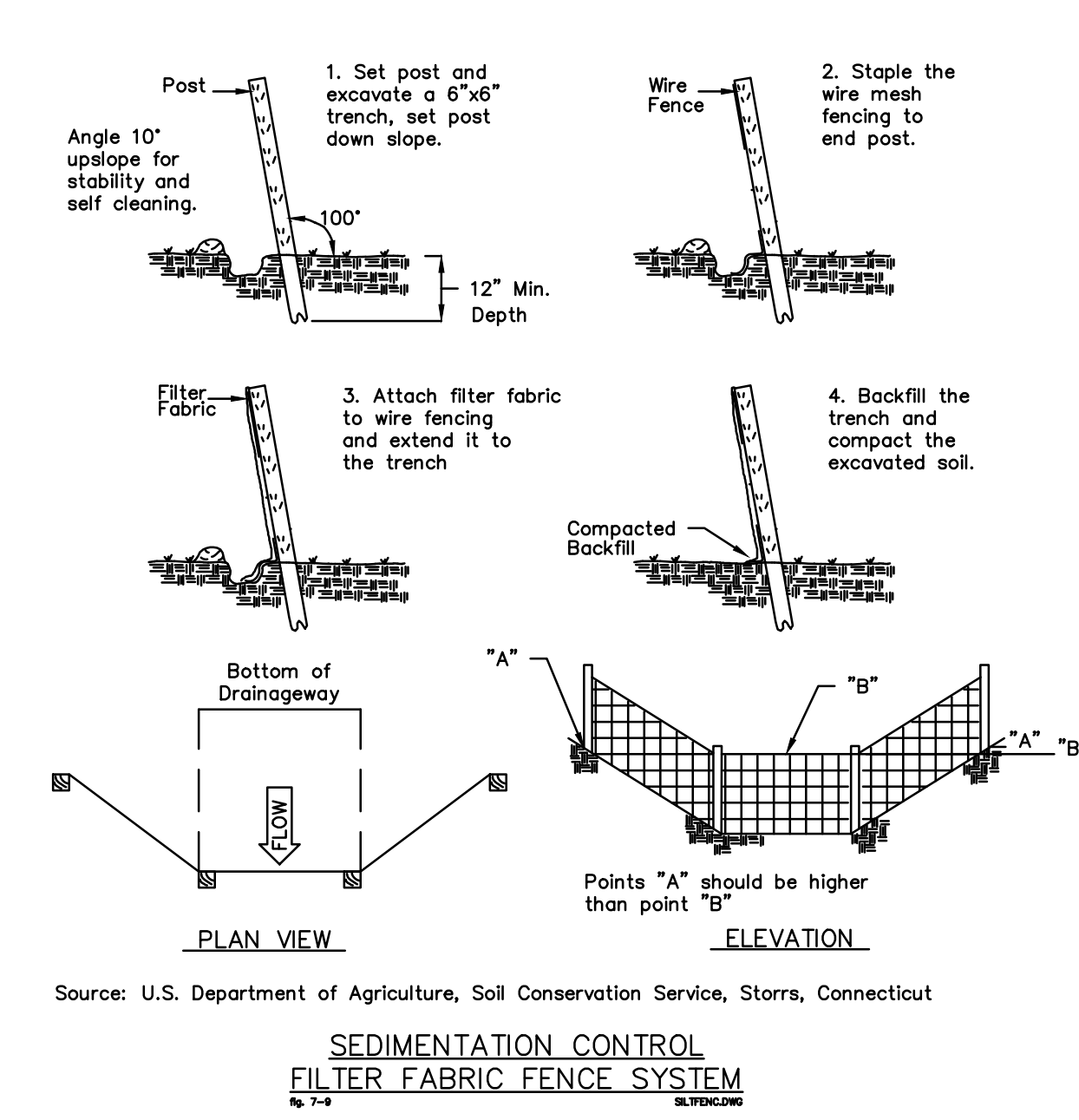
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 LAST REVISED: 9/1/2016

TOWN OF GLASTONBURY
 DEPARTMENT OF PHYSICAL SERVICES
 ENGINEERING DIVISION

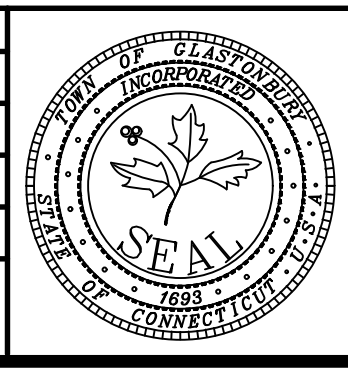
TRENCH FOR STORM DRAIN AND UNDER DRAIN
 PLATE NO. 20



UNITED CONCRETE PRODUCTS, Inc.		TYPE D-G PRECAST HEADWALL	
CUSTOMER	SCALE: NONE	DATE	10/04/08
JOB	173 CHURCH STREET YALESVILLE, CT 06492	DRW	DH
LOCATION	TEL: (203)-269-3119 FAX: (203)-265-4941	CHK	JLT
			SK-1



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SECTIONS DEPICTING
 PROPOSED DRAINAGE
 FOR
 ASH SWAMP ROAD
 GLASTONBURY, CONNECTICUT