

LEGEND

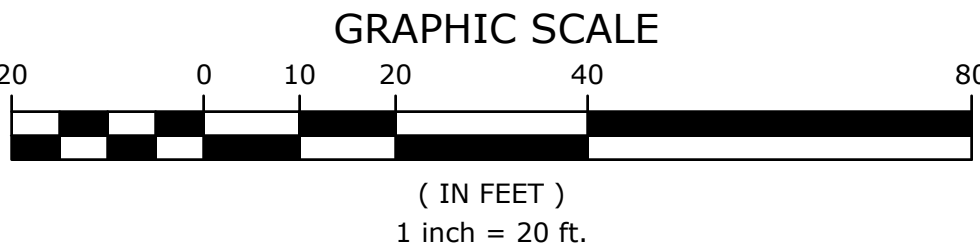
- SF — SF — SF — SEDIMENTATION CONTROL SYSTEM (SCS)
- — — — — ORDINARY HIGH WATER (OHW)
- — — — — STATE WETLANDS
- — — — — FEDERAL WETLANDS
- — — — — LIMIT OF FLOODWAY
- — — — — FEMA 100-YR FLOOD (CALCULATED)
- — — — — FEMA 500-YR FLOOD (CALCULATED)

GENERAL SITE PLAN

SCALE: 1" = 20'

FISHERIES NOTES:

1. IT IS IMPORTANT THAT PROPER EROSION AND SEDIMENTATION CONTROLS BE INSTALLED AND MAINTAINED THROUGHOUT THE DURATION OF THIS PROJECT. CARE SHOULD BE EXERCISED SO AS NOT TO INCREASE TURBIDITY LEVELS. AS A BEST MANAGEMENT PRACTICE, ANY UNCONFINED INSTREAM WORK WITHIN THE SAUGATUCK RIVER SHOULD BE RESTRICTED TO THE PERIOD FROM JUNE 1 TO SEPTEMBER 30, INCLUSIVE.



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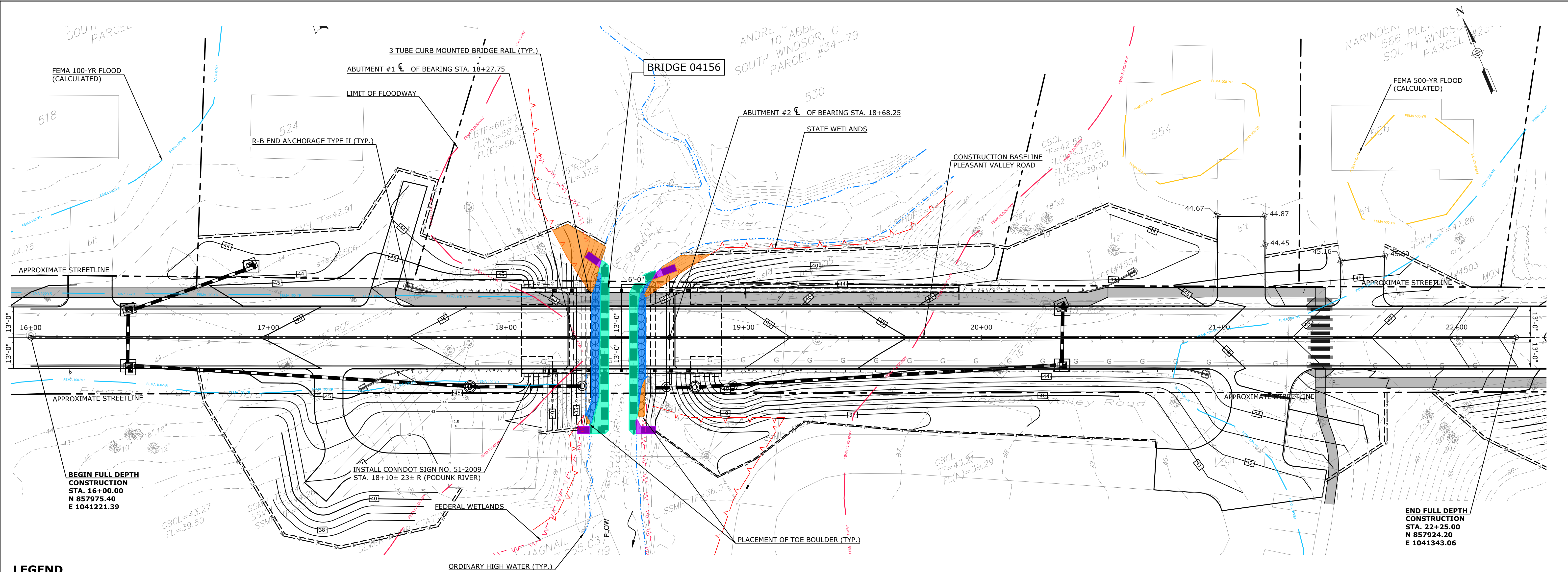
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87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PREPARED FOR
TOWN OF SOUTH WINDSOR
1540 SULLIVAN AVENUE
SOUTH WINDSOR, CT 06074

REPLACEMENT OF BRIDGE 04156
PLEASANT VALLEY ROAD OVER PODUNK RIVER
ROADWAY PLAN

D — PLEASANT VALLEY — ENV — 21119.10 —
SIZE PROJECT FILE NAME NUMBER REV. OF

SHEET
2
10



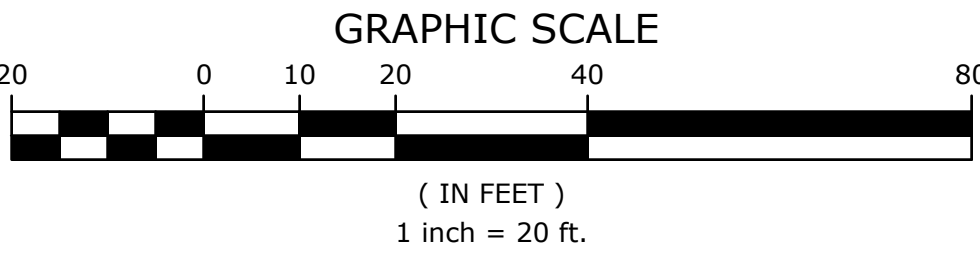
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- PERMANENT WATERCOURSE IMPACTS
- TEMPORARY WATERCOURSE IMPACTS
- PERMANENT WETLAND IMPACTS
- TEMPORARY WETLAND IMPACTS

WETLAND/WATERCOURSE IMPACT PLAN

SCALE: 1" = 20'

STATE WETLAND AND WATERCOURSE IMPACT TABLE				
	WETLAND SITE NO.	STATE WETLAND IMPACTS	WATERCOURSE IMPACTS	TOTAL
PERMANENT IMPACTS	1	440 S.F. (0.010 AC.)	345 S.F. (0.0079 AC.)	785 S.F. (0.018 AC.)
TEMPORARY IMPACTS	1	95 S.F. (0.0022 AC.)	560 S.F. (0.0129 AC.)	655 S.F. (0.0150 AC.)
TOTAL IMPACTS		535 S.F. (0.0123 AC.)	905 S.F. (0.0208 AC.)	1440 S.F. (0.033 AC.)



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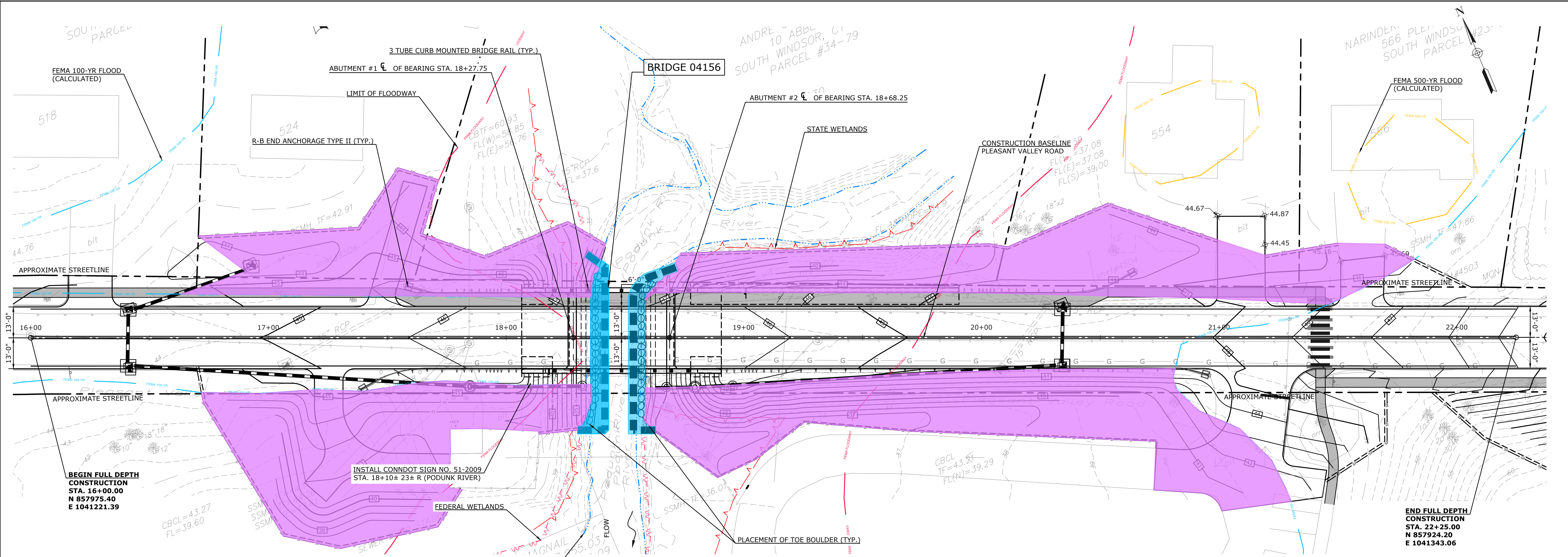
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**REPLACEMENT OF BRIDGE 04156
PLEASANT VALLEY ROAD OVER PODUNK RIVER
ROADWAY PLAN**

D	— PLEASANT VALLEY	— ENV	— 21119.10	—
SIZE	PROJECT	FILE NAME	NUMBER	REV.
				OF 10

SHEET 3

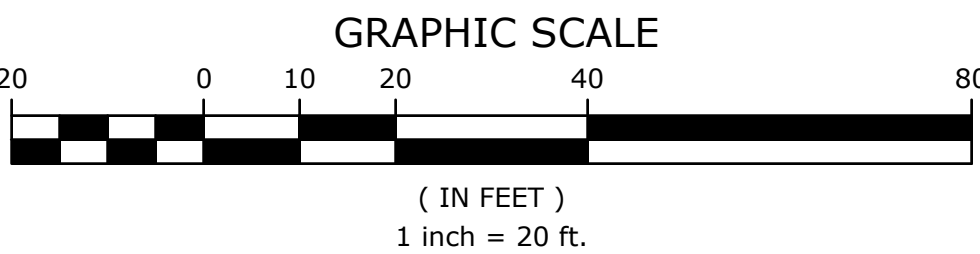


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- — — — — FEMA 500-YR FLOOD (CALCULATED)
- PERMANENT FLOOD IMPACTS
- TEMPORARY FLOOD IMPACTS

100-YEAR FLOOD IMPACT PLAN
SCALE: 1" = 20'

100-YEAR FLOODPLAIN IMPACTS CUT & FILL	
VOLUME IMPACTS	
EXCAVATION IN FLOODPLAIN	FILL IN FLOODPLAIN
16 C.Y.	64 C.Y.



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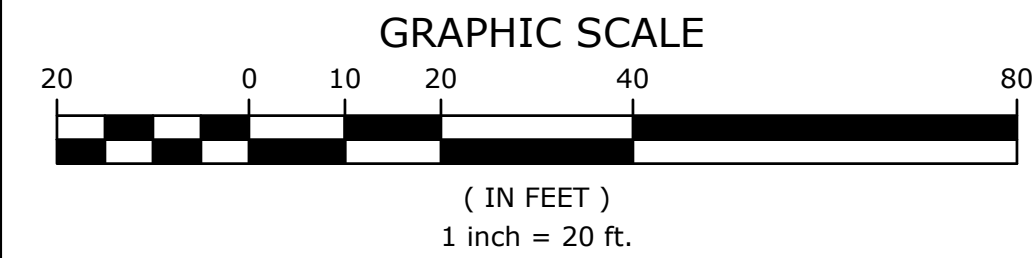
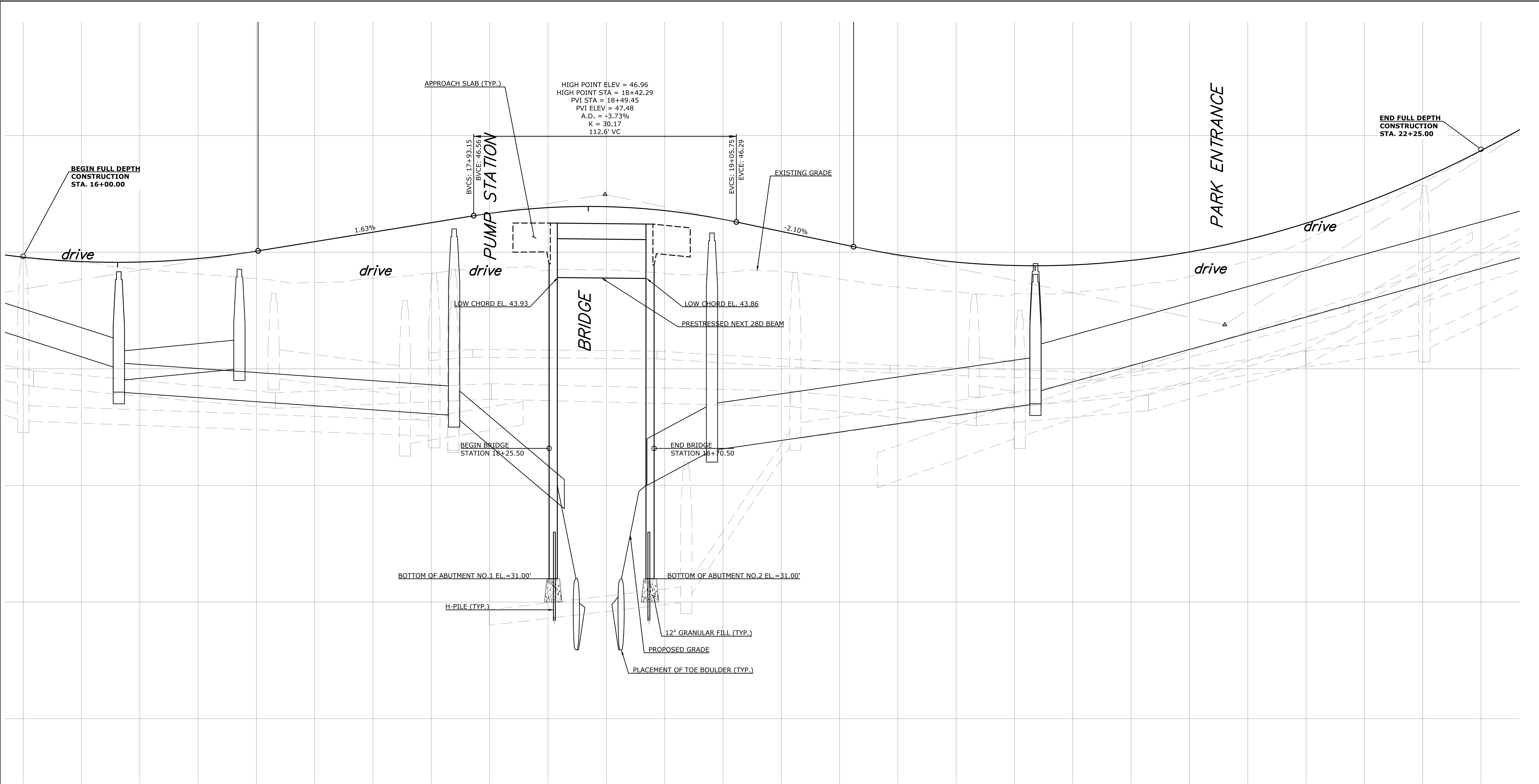
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REPLACEMENT OF BRIDGE 04156
PLEASANT VALLEY ROAD OVER PODUNK RIVER
ROADWAY PLAN

D — PLEASANT VALLEY — ENV — 21119.10 —	SHEET 4
SIZE PROJECT FILE NAME NUMBER REV. OF	10



ROADWAY PROFILE
HORIZONTAL SCALE: 1" =20'
VERTICAL SCALE: 1"=2'

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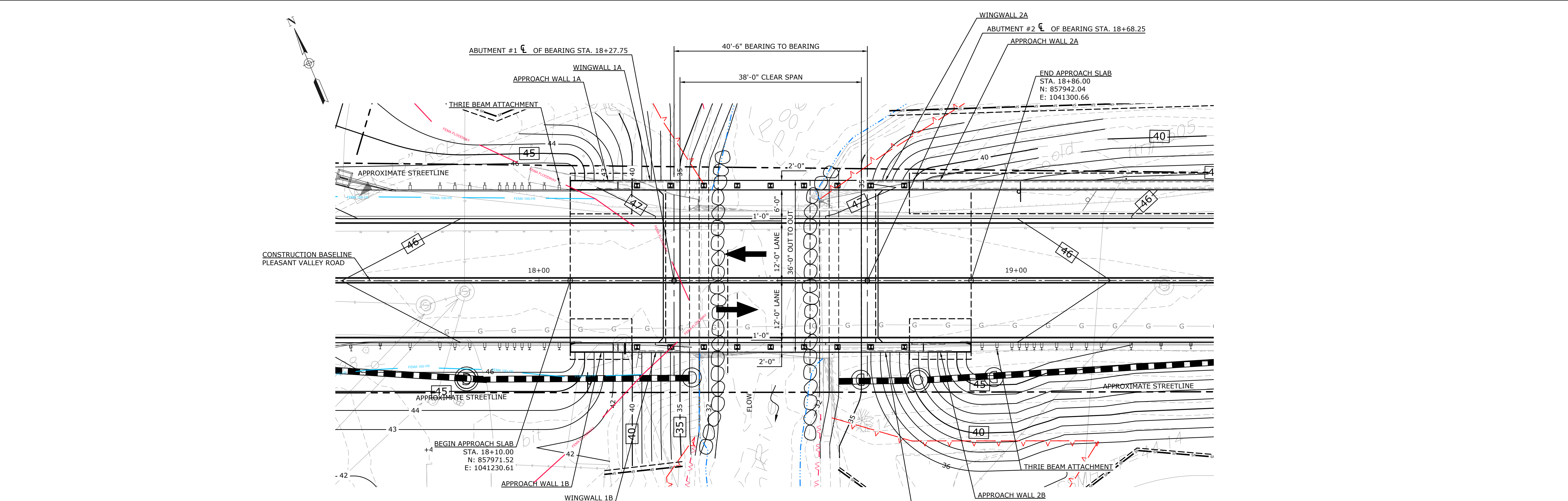


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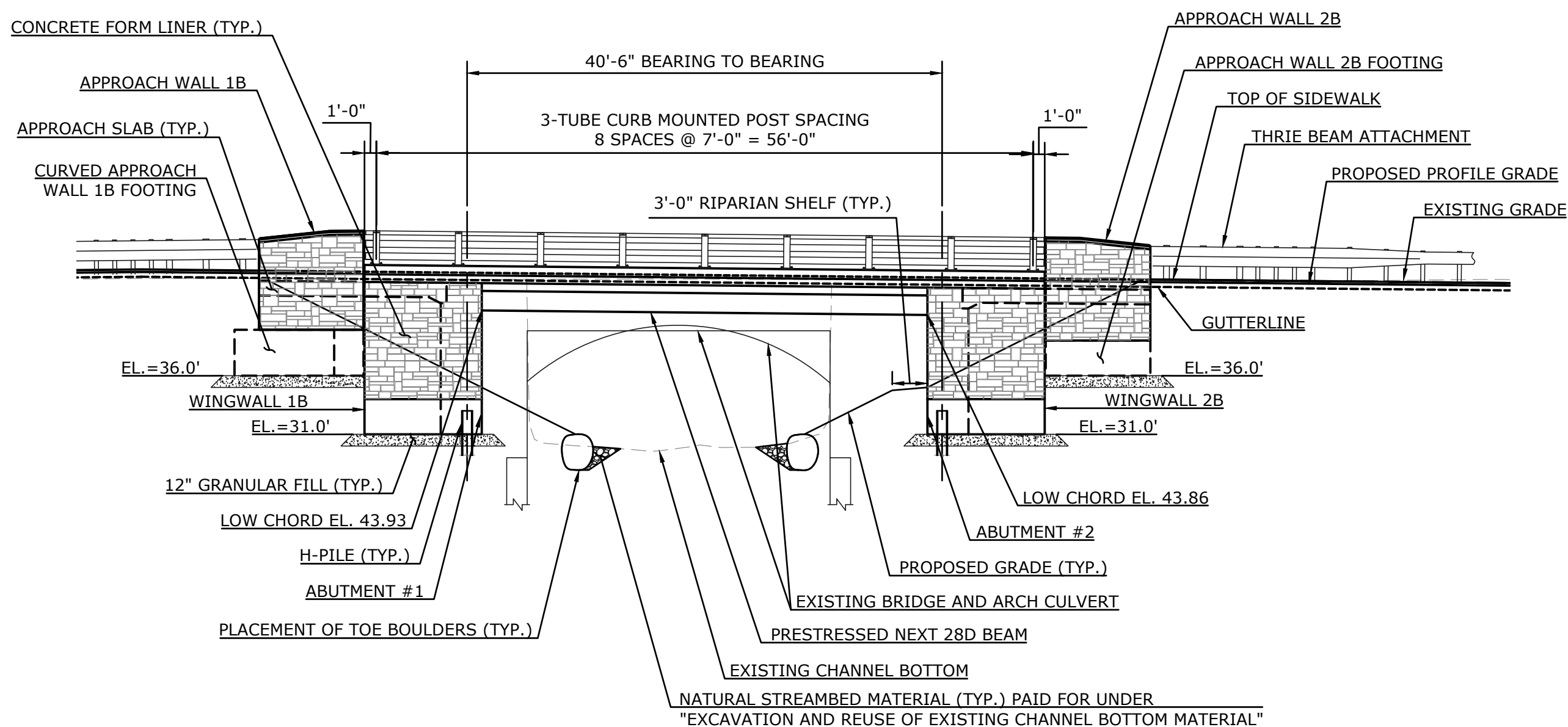
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SOUTH WINDSOR, CT 06074

REPLACEMENT OF BRIDGE 04156 PLEASANT VALLEY ROAD OVER PODUNK RIVER ROADWAY PROFILE					SHEET	5
D	SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF
				21119.10		10



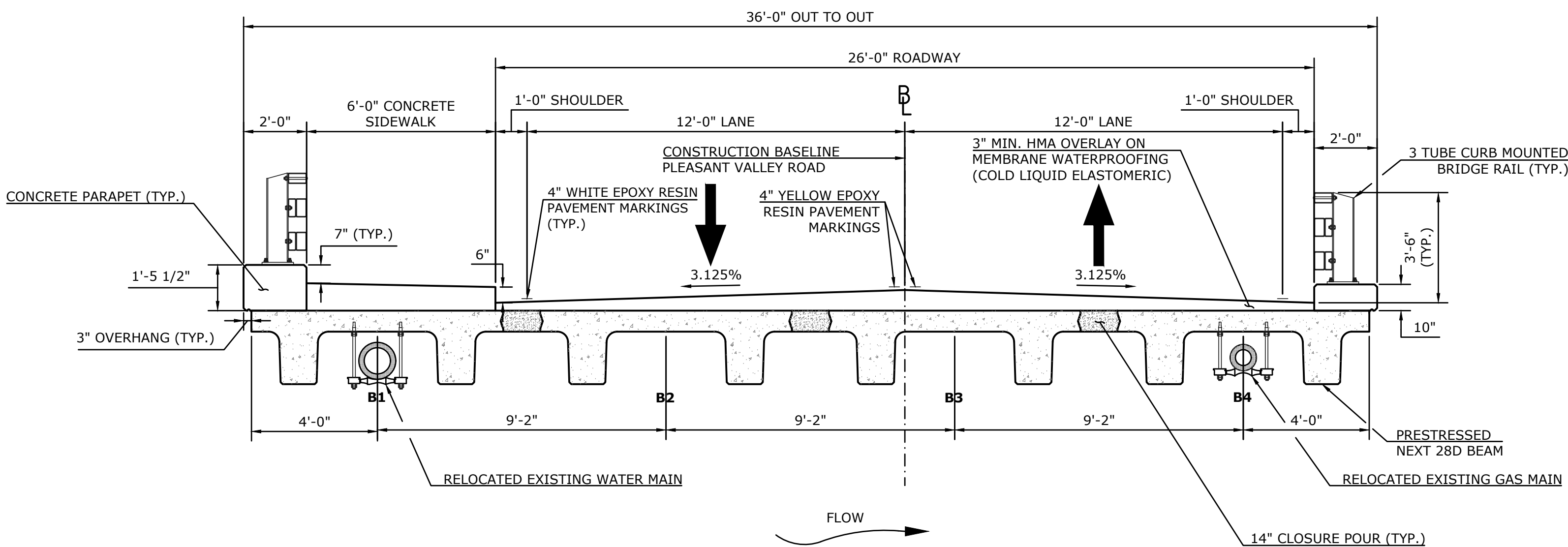
ALTERNATIVE II - STRUCTURAL PLAN

SCALE: 1" = 10'-0"



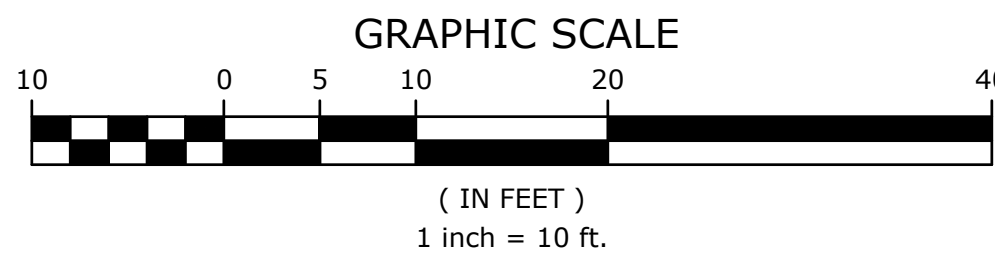
ALTERNATIVE II - STRUCTURAL ELEVATION
(LOOKING UPSTREAM)

SCALE: 1" = 10'-0"



ALTERNATIVE II - SECTION

SCALE: 1" = 3'-0"



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SOUTH WINDSOR, CT 06074

REPLACEMENT OF BRIDGE 04156
PLEASANT VALLEY ROAD OVER PODUNK RIVER
STRUCTURE PLAN, ELEVATION AND SECTION

D	PLEASANT VALLEY	ENV	21119.10	SHEET	6
SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF
					10

- 04156 SUGGESTED STAGE 1 CONSTRUCTION SEQUENCE NOTES:
1. INSTALL NECESSARY EROSION AND SEDIMENTATION CONTROLS.
 2. PERFORM NECESSARY CLEARING AND GRUBBING.
 3. COORDINATE RELOCATION OF EXISTING UTILITIES (REFER TO UTILITY RELOCATION PLANS).
 4. INSTALL TEMPORARY TRAFFIC BARRIERS AND CLOSE PLEASANT VALLEY ROAD TO TRAFFIC.
 5. INSTALL DEBRIS SHIELD (MIN. ELEVATION 37'). PAID FOR UNDER ITEM "REMOVAL OF SUPERSTRUCTURE"
 6. REMOVE EXISTING SUPERSTRUCTURE. THE CONTRACTOR SHALL PREVENT DEBRIS, TOOLS, AND/OR OTHER MATERIALS FROM ENTERING INTO OR DROPPING INTO THE WATERWAY ADJACENT TO THE STRUCTURE. ALL DEBRIS DROPPED INTO THE WATERWAY SHALL BE PROMPTLY CLEANED UP AND REMOVED FROM THE SITE AT THE SOLE EXPENSE OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE MUNICIPALITY.
 7. INSTALL TEMPORARY WATER-HANDLING-COFFERDAMS AS SHOWN AND MAINTAIN FLOW THROUGH BRIDGE 04156. THE MAXIMUM WATER-HANDLING-COFFERDAM ELEVATION SHALL BE XXX FEET WHICH SHALL PROVIDE PROTECTION FOR THE 2 YEAR STORM DISCHARGE WITH XX FEET OF FREEBOARD. THE MINIMUM WATER-HANDLING-COFFERDAM ELEVATION SHALL BE XX FEET.
 8. INSTALL DEWATERING BASIN. EFFLUENT FROM DEWATERED WORK AREA(S) SHALL NOT BE DISCHARGED DIRECTLY TO THE STREAM BUT MUST BE PROCESSED THROUGH TREATMENT STRUCTURE(S). SUCH STRUCTURE(S) SHOULD NOT BE LOCATED WITHIN THE STREAM CHANNEL OR ADJACENT WETLANDS. SEE WATER HANDLING NOTES.
 9. ANY SURFACE RUNOFF OR GROUNDWATER DISCHARGING INTO A CONFINED WORK AREA SHALL BE DIVERTED OR PUMPED OUTSIDE THE CONFINED AREAS. THE CONTRACTOR SHALL SUBMIT THE MEANS AND METHODS OF HANDLING THE DISCHARGE TO THE ENGINEER FOR APPROVAL. WORK PAID UNDER "HANDLING WATER".
 10. THE INSTALLATION, MAINTENANCE AND REMOVAL OF THE PROPOSED SETTLING BASIN SHALL BE PAID FOR UNDER ITEM "HANDLING WATER".
 11. REMOVE EXISTING WINGWALLS AND ABUTMENTS IN THEIR ENTIRETY OR A MINIMUM OF 2 FEET BELOW PROPOSED CHANNEL GRADE.
 12. INSTALL MICROPILES, ABUTMENTS AND WINGWALLS.
 13. INSTALL TOE BOULDERS, ROUNDED RIPRAP AND BACKFILL AS NOTED BELOW.

NOTE: BACKFILL WILL BE PERMITTED AT THE ABUTMENTS ONLY TO THE PROPOSED GRADE ON THE RIVERSIDE OF THE ABUTMENT. FINAL BACKFILLING SHALL NOT BEGIN UNTIL THE ABUTMENT AND DECK CONSTRUCTION IS COMPLETED AND BOTH ABUTMENTS SHALL BE BACKFILLED SIMULTANEOUSLY. NO MORE THAN 12" OF DIFFERENTIAL BACKFILL HEIGHT SHALL BE PERMITTED.

14. INSTALL APPROACH WALLS AND COMPLETE ABUTMENT AND DECK CONSTRUCTION.
15. BACKFILL AS NOTED AND COMPLETE ROUNDED RIPRAP AND EMBANKMENT GRADING.
16. REMOVE WATER-HANDLING-COFFERDAMS.
17. COMPLETE REMAINING ROADWAY WORK.
18. MAINTAIN NECESSARY EROSION AND SEDIMENTATION CONTROLS.
19. THE SEDIMENTATION CONTROL SYSTEM IS TO BE REMOVED AFTER IMPACTED AREAS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED.

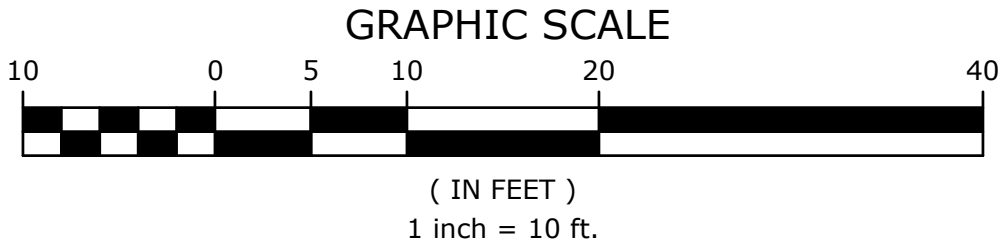
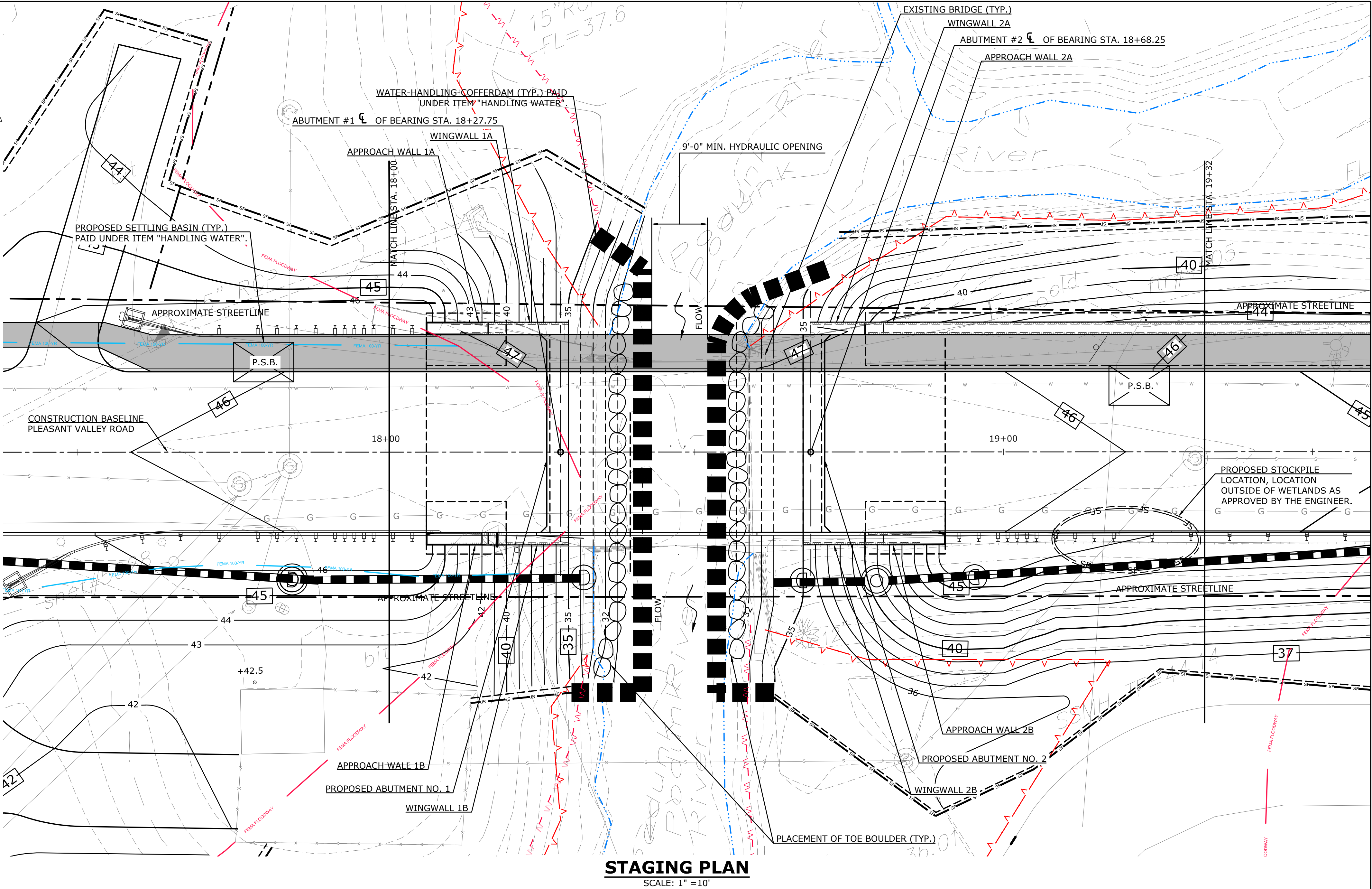
04156 TEMPORARY FACILITIES HYDRAULICS

AVERAGE DAILY FLOW	XX C.F.S.
AVERAGE SPRING FLOW	XX C.F.S.
2 YEAR FREQUENCY DISCHARGE	XX C.F.S.
TEMPORARY DESIGN DISCHARGE	XX C.F.S.
TEMPORARY DESIGN FREQUENCY	2 YEAR
TEMPORARY WATER SURFACE ELEVATION UPSTREAM	XX FT.
TEMPORARY WATER SURFACE ELEVATION DOWNSTREAM	XX FT.

TIME RESTRICTIONS:
UNCONFINED IN-STREAM: UNCONFINED IN-STREAM ACTIVITIES MUST BE LIMITED TO THE TIME PERIOD JUNE 1 THROUGH SEPTEMBER 30.
SPECIES OF SPECIAL CONCERN: CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE SPECIAL PROVISION " SECTION 1.10 - ENVIRONMENTAL COMPLIANCE".

DEEP FISHERIES:
TOE BOULDERS SHALL BE A MINIMUM OF 3'-4' DIAMETER AND ROUNDED.

- WATER HANDLING NOTES:**
1. THE CONTRACTOR SHALL MAINTAIN WATER THROUGH THE WATER-HANDLING-COFFERDAMS AS SHOWN DURING CONSTRUCTION OF BRIDGE 04156.
 2. EQUIPMENT SHALL NOT BE PERMITTED IN THE STREAM WHEN WATER-HANDLING-COFFERDAMS ARE NOT IN PLACE WITHOUT THE APPROVAL OF THE ENGINEER.
 3. PRIOR TO ANY DEWATERING, THE CONTRACTOR MUST SUBMIT TO THE ENGINEER A WRITTEN PROPOSAL FOR SPECIFIC METHODS AND DEVICES TO BE USED AND MUST OBTAIN THE ENGINEER'S WRITTEN APPROVAL OF SUCH METHODS AND DEVICES.
 4. WATER-HANDLING-COFFERDAMS SHALL CONSIST OF ANY APPROVED SYSTEM THAT THE CONTRACTOR ELECTS TO USE WHICH WILL SAFELY PROTECT THE CONSTRUCTION AREA FROM THE TEMPORARY DESIGN DISCHARGE ELEVATION, SHALL BE ABLE TO SUPPORT CONSTRUCTION ACTIVITY AND EXCAVATION, AND SHALL CONFORM TO PERMITS.



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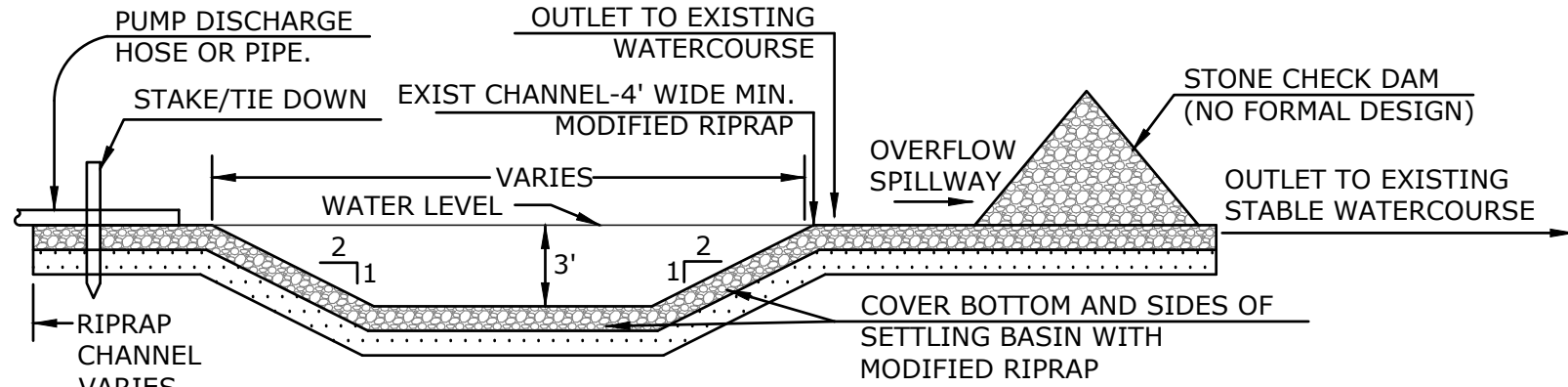
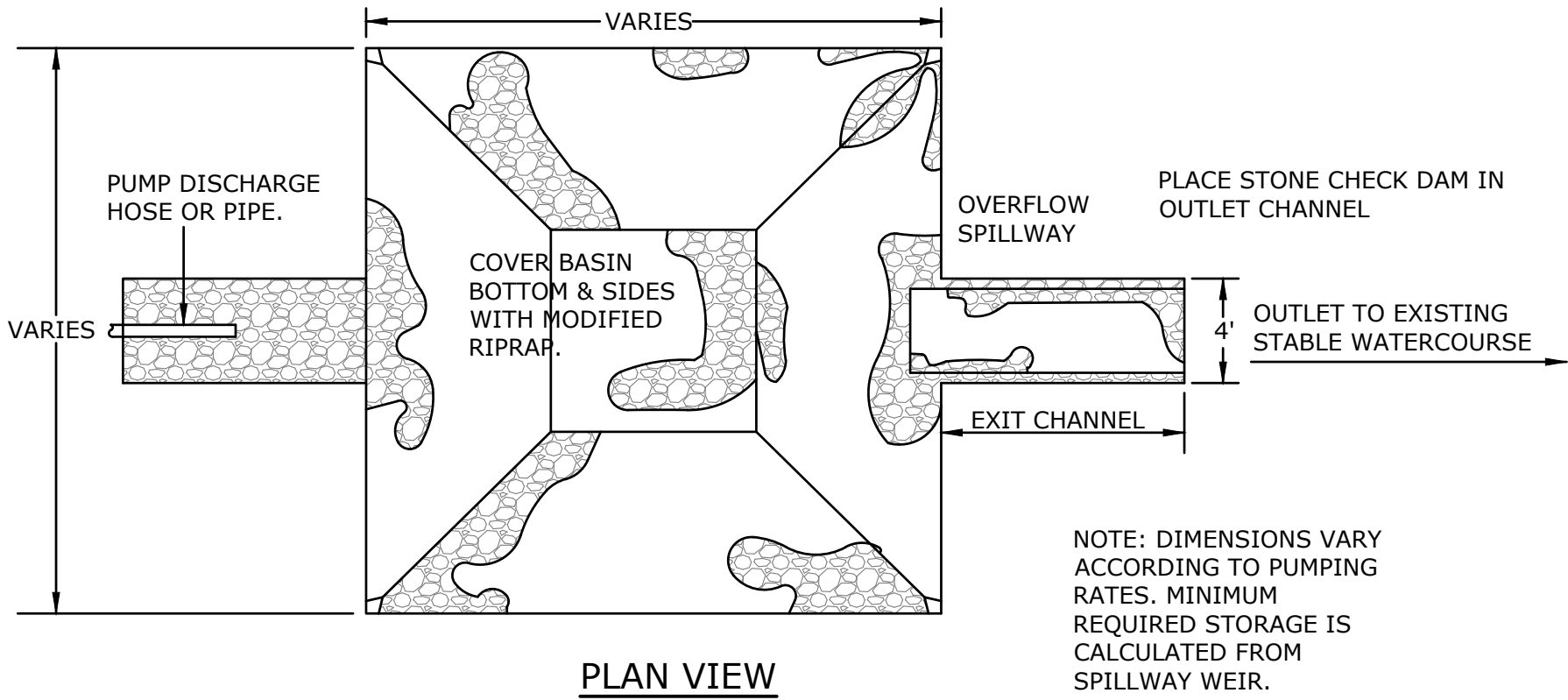
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REPLACEMENT OF BRIDGE 04156
PLEASANT VALLEY ROAD OVER PODUNK RIVER
HANDLING WATER PLAN

D	SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF	SHEET	7
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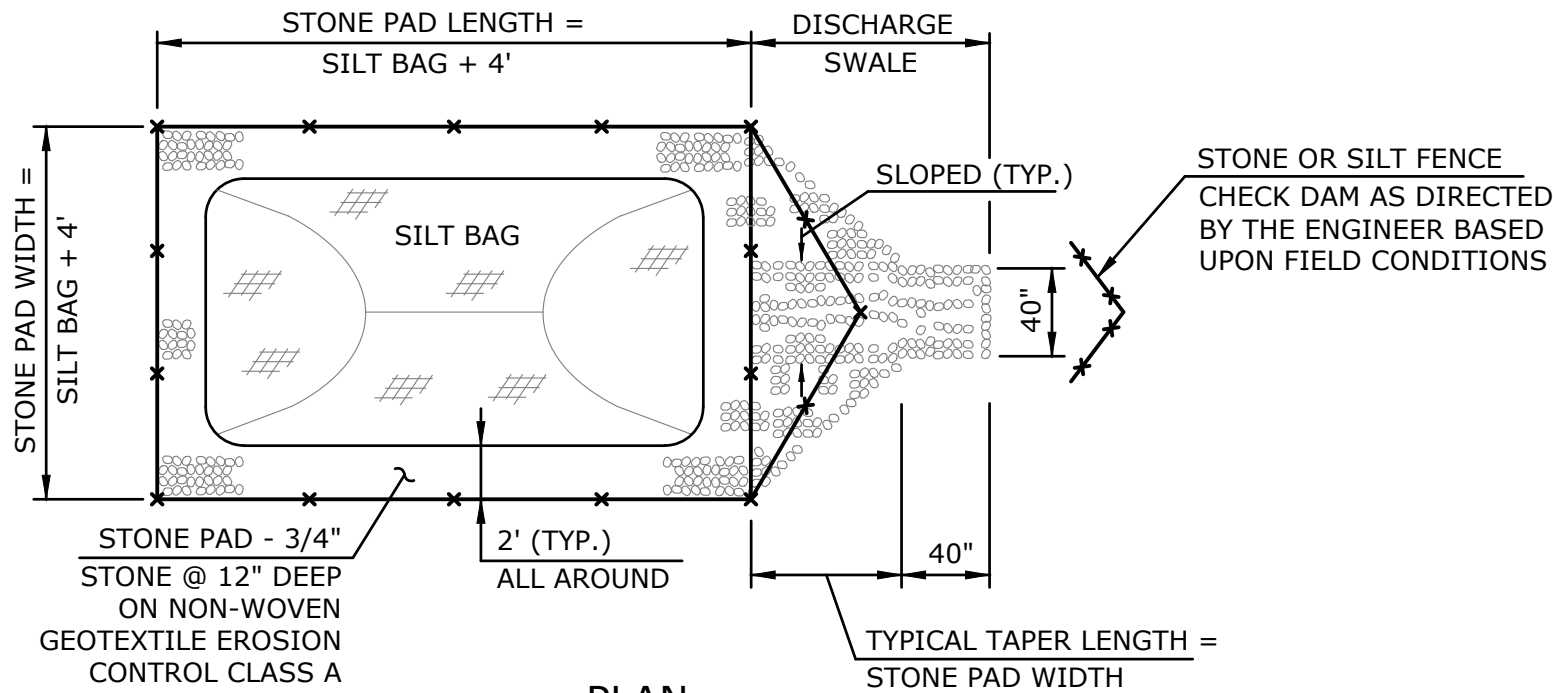
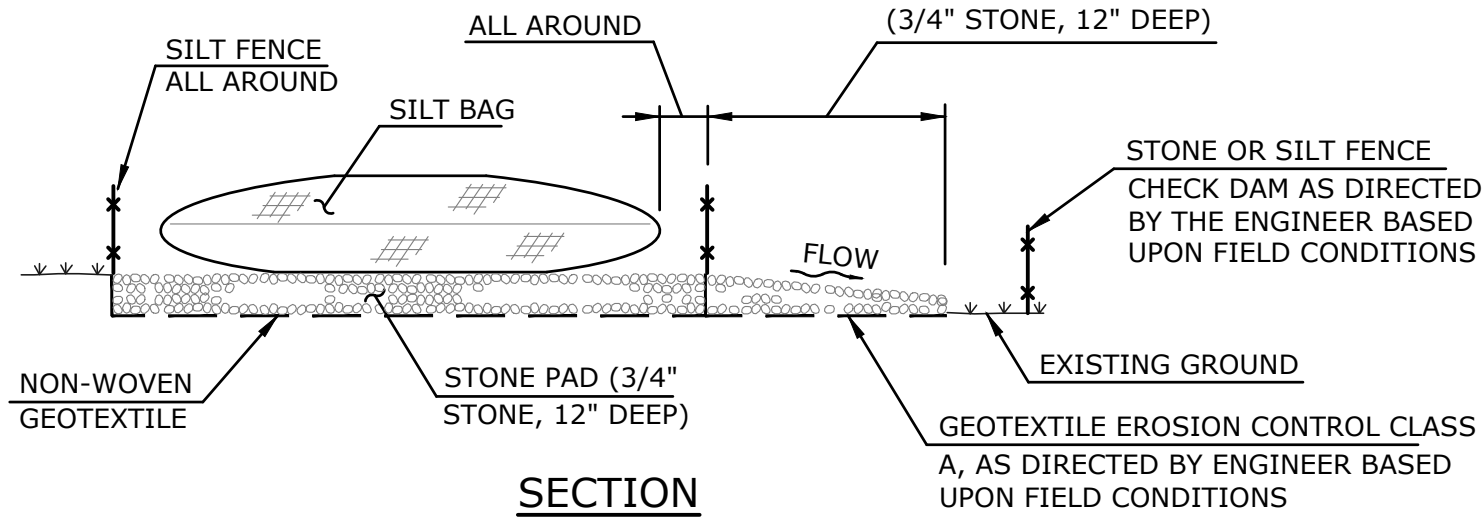


TYPE III PUMPING SETTLING BASIN

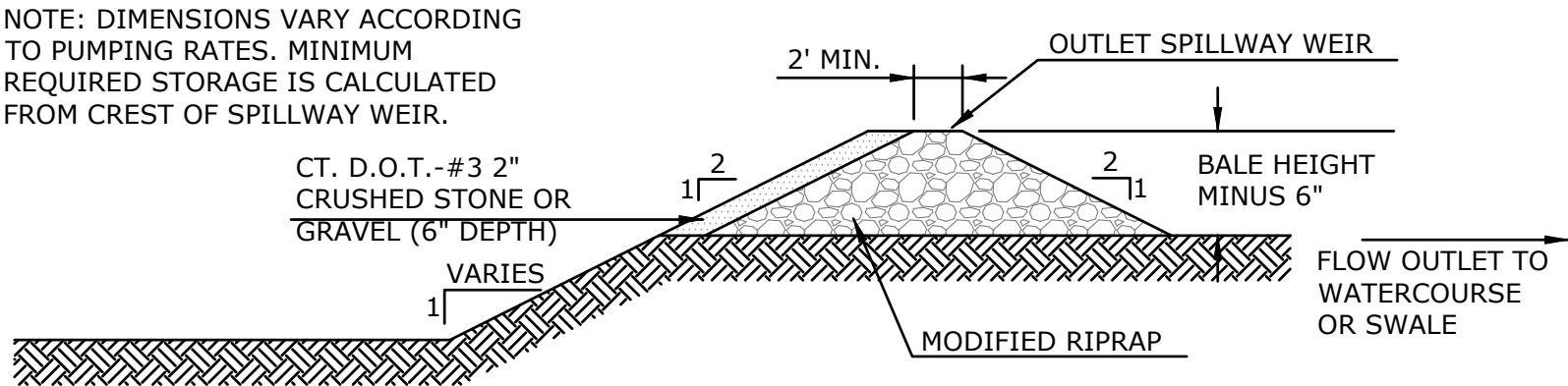
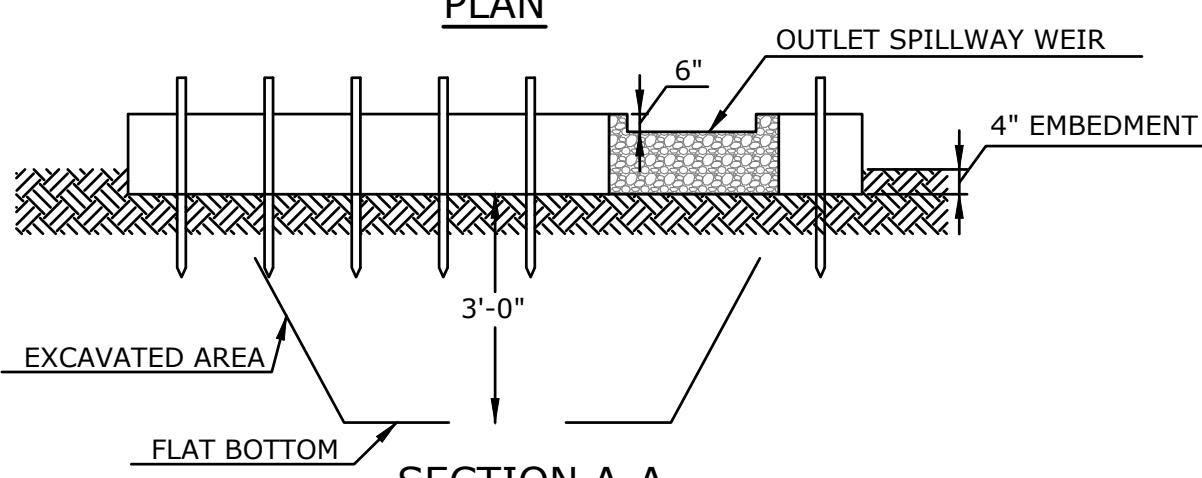
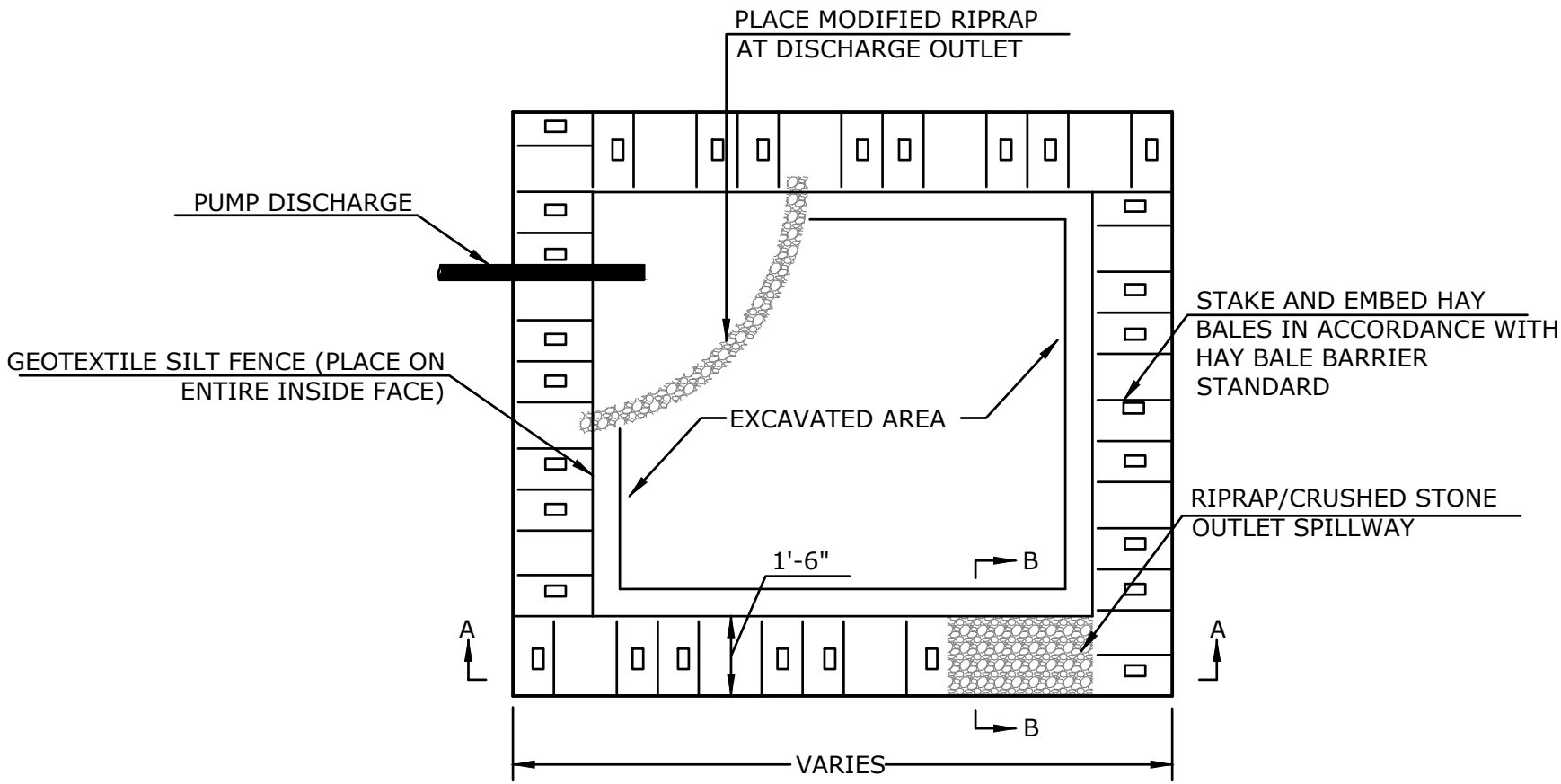
N.T.S.

PUMPING SETTLING BASIN NOTES:

1. LOCATION AS DIRECTED BY ENGINEER. REMOVE WHEN PUMPING IS COMPLETED.
2. PUMP DISCHARGE PAD HALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST THE GENERAL WORK.
3. STORAGE VOLUME BASED UPON PUMP DISCHARGE, LARGER PAD DIMENSIONS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. (MINIMUM REQUIRED STORAGE, CUBIC FEET) = 16 x (PUMP DISCHARGE RATE, GPM)
4. TYPE II PUMPING SETTLING BASIN TO BE USED WHEN THE EXPECTED DURATION OF USE IS LESS THAN 3 MONTHS. TYPE III PUMPING SETTLING BASIN TO BE USED WHEN THE EXPECTED DURATION OF USE IS LONGER THAN 3 MONTHS.
5. SETTLING BASIN AND EXIT CHANNEL TO BE BACKFILLED AT COMPLETION OF WORK. AREA SHALL BE GRADED AND STABILIZED ACCORDING TO PLANS OR AS DIRECTED BY THE ENGINEER.

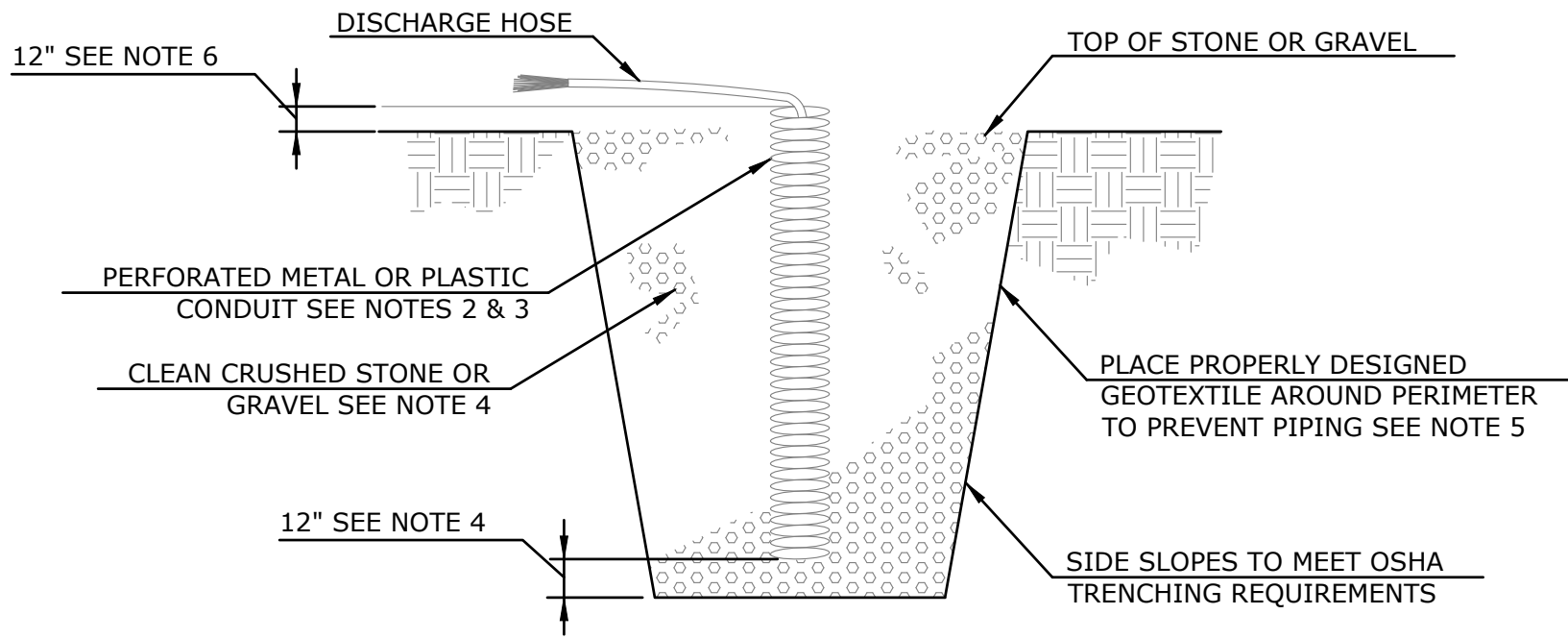


SILT BAG INSTALLATION



TYPE II PUMPING SETTLING BASIN

N.T.S.



REFER TO PAGE 5-13-3 "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL".

NOTE:

1. OVERALL SUMP PIT DIMENSIONS SHALL BE COMPATIBLE WITH ANTICIPATED SEEPAGE RATES AND PUMP SIZE TO BE USED.
2. THE STANDPIPE DIAMETER AND NUMBER OF PERFORATIONS SHALL BE COMPATIBLE WITH THE PUMP SIZE BEING USED.
3. PERFORATIONS IN THE STANDPIPE SHALL BE EITHER CIRCULAR OR SLOTS. PERFORATION SIZE SHALL NOT EXCEED 1/2" IN DIAMETER.
4. CRUSHED STONE OR GRAVEL SHALL BE NO SMALLER THAN CT DOT #8 SIZE NOR LARGER THAN CT DOT #3 SIZE. CRUSHED STONE SHALL EXTEND A MINIMUM OF 12" BELOW THE BOTTOM OF THE STANDPIPE.
5. IF EXCESSIVE MOVEMENT OF FINE SOIL PARTICLES FROM THE SURROUNDING EXISTING SOILS IS ANTICIPATED, A PROPERLY DESIGNED GEOTEXTILE SHALL BE PLACED BETWEEN THE EXISTING SOILS AND THE CRUSHED STONE OR GRAVEL BACKFILL.
6. THE STANDPIPE SHALL EXTEND A MINIMUM OF 12" ABOVE THE SURROUNDING GROUND.

PUMP INTAKE

TYPICAL SECTION OF SUMP PIT

N.T.S.

GENERAL

EFFLUENT FROM DEWATERED WORK AREA(S) SHOULD NOT BE DISCHARGED DIRECTLY TO THE STREAM BUT BE PROCESSED THROUGH TREATMENT STRUCTURE(S). SUCH STRUCTURES SHOULD NOT BE LOCATED WITHIN THE STREAM CHANNEL OR ADJACENT WETLANDS.

THE PROJECT SHOULD NOT BE CONDUCTED IN A MANNER WHICH IMPEDES STREAM FLOW.

UNCONFINED IN-STREAM ACTIVITIES SHOULD BE LIMITED TO THE TIME PERIOD JUNE 1 THROUGH SEPTEMBER 30.

COFFERDAM NOTES

1. A CONSTRUCTION SEQUENCING PLAN AND A WATER HANDLING PLAN INCLUDING A CONTINGENCY PLAN FOR FLOOD EVENTS MUST BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION IN A WATERWAY.

2. TEMPORARY COFFERDAM AND PUMPING NOT PAID SEPARATELY. COST TO BE INCLUDED IN THE PAY ITEM "COFFERDAM AND DEWATERING".

3. WATER HANDLING PLAN IS EXAMPLE ONLY.

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REPLACEMENT OF BRIDGE 04156 PLEASANT VALLEY ROAD OVER PODUNK RIVER HANDLING WATER DETAILS

D	SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF	SHEET	9
								10

