

BENEDETTO STREAM RESTORATION PROJECT

ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

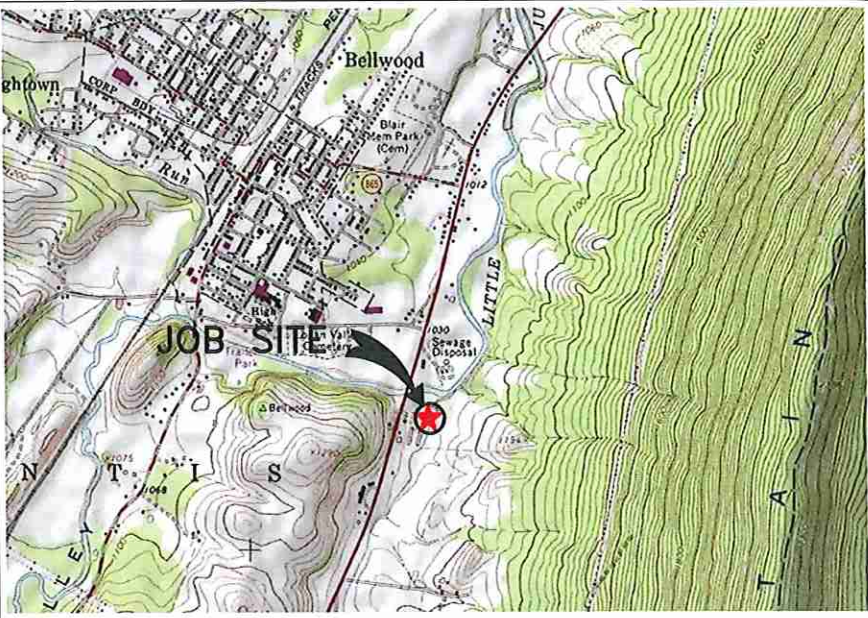
PREPARED BY:



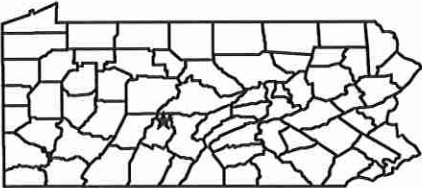
PREPARED FOR:

CHARLES BENEDETTO

454 RICOTTA LN
ALTOONA, PENNSYLVANIA 16601



PROJECT LOCATION



COUNTY: BLAIR
TOWNSHIP: ANTIS
QUAD: BELLWOOD
LATITUDE: 40.59012° N
LONGITUDE: -78.32215° W

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| | 19. EROSION AND SEDIMENT CONTROL NOTES |

- GENERAL NOTES:
1. THIS STREAM RESTORATION PLAN HAS BEEN PREPARED FOR MR. BENEDETTO FOR THE PURPOSE OF REDUCING STREAMBANK EROSION BY INSTALLING IN-STREAM STRUCTURES FOR STREAMBANK STABILIZATION.
 2. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION AND TO COMPLY WITH THE PROVISIONS OF PENNSYLVANIA ACT 187 (1996) BEFORE PERFORMING ANY EXCAVATION WORK.
 3. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO PRIVATE PROPERTY INCLUDING BUT NOT LIMITED TO FENCES AND PRIVATE ROADS RESULTING FROM ACTIVITIES ASSOCIATED WITH COMPLETING THIS PLAN. REPAIRS FOR ANY SUCH DAMAGES WILL BE MADE AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE PROPERTY OWNER.



STOP. BEFORE YOU DIG
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1-800-242-1776



COVER SHEET

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
DRAWN BY:
TML
SURVEYED BY:
TML/NW/CW

REVISIONS:

1.
2.
3.

CAD FILE:

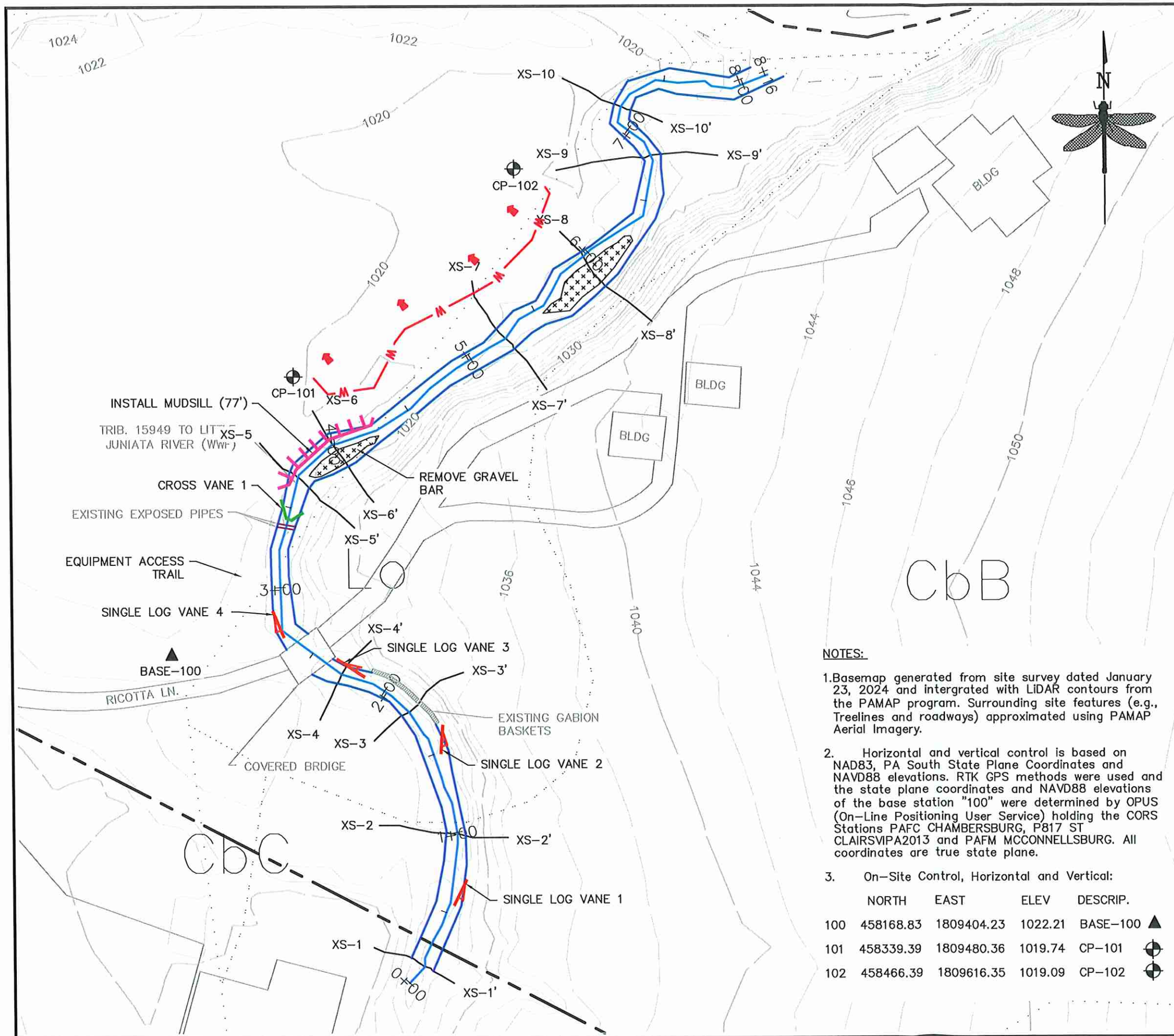
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PAGE NO:

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LEGEND

- 1300 EXISTING CONTOUR
- SOIL TYPE
- APPARENT PROPERTY LINE
- SURVEYED THALWEG
- EDGE OF WATER
- EXISTING WETLANDS
- EXISTING GRAVEL BAR
- PROPOSED MUDSILL
- PROPOSED LOG CROSS VANE
- PROPOSED SINGLE LOG VANE

NOTICE:

THE LITTLE JUNIATA RIVER IS A CLASS A – NATURALLY REPRODUCING WILD TROUT STREAM.

THERE WILL BE A WORK RESTRICTION IN PLACE FROM OCTOBER 1ST – APRIL 1ST.

NOTES:

THE EXISTING WETLAND EXTENDS WESTWARD INTO THE FIELD, THE BOUNDARY SHOWN IS NEAREST TO THE WORK AREA.

USDA – NRCS MAPPED SOILS:

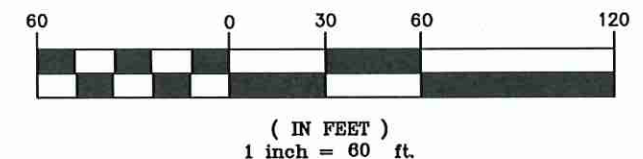
CbB Clarksburg silt loam (3–8% slopes)
CbC Clarksburg silt loam (8–15% slopes)
Lo Linden soils

NOTES:

- Basemap generated from site survey dated January 23, 2024 and integrated with LiDAR contours from the PAMAP program. Surrounding site features (e.g., Treelines and roadways) approximated using PAMAP Aerial Imagery.
- Horizontal and vertical control is based on NAD83, PA South State Plane Coordinates and NAVD88 elevations. RTK GPS methods were used and the state plane coordinates and NAVD88 elevations of the base station "100" were determined by OPUS (On-Line Positioning User Service) holding the CORS Stations PAFC CHAMBERSBURG, P817 ST CLAIRSVIPA2013 and PAFM MCCONNELLSBURG. All coordinates are true state plane.
- On-Site Control, Horizontal and Vertical:

	NORTH	EAST	ELEV	DESCRIP.	
100	458168.83	1809404.23	1022.21	BASE-100	▲
101	458339.39	1809480.36	1019.74	CP-101	⊙
102	458466.39	1809616.35	1019.09	CP-102	⊙

GRAPHIC SCALE



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PLAN VIEW

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:

DRAWN BY:

SURVEYED BY:

TML/NW/CW

REVISIONS:

8/1/2024
PER PAFM REVIEW COMMENTS

CAD FILE:

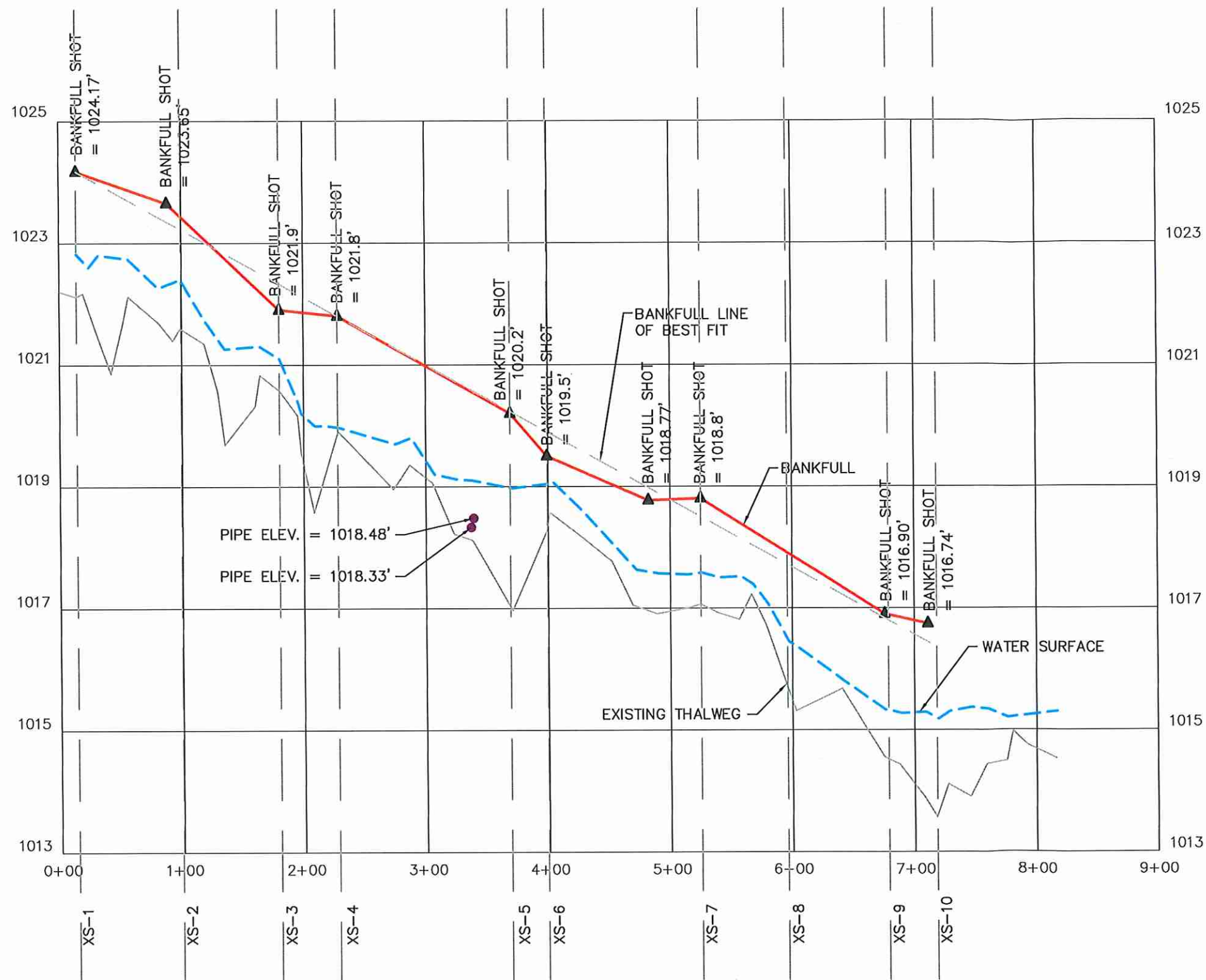
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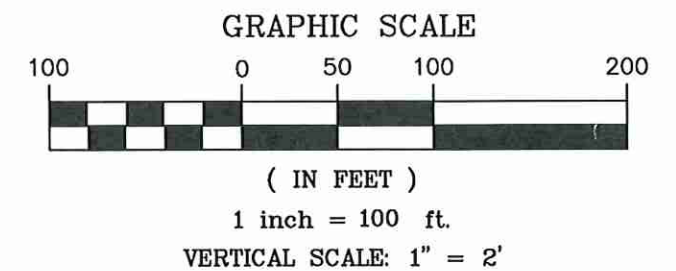
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STREAM PROFILE



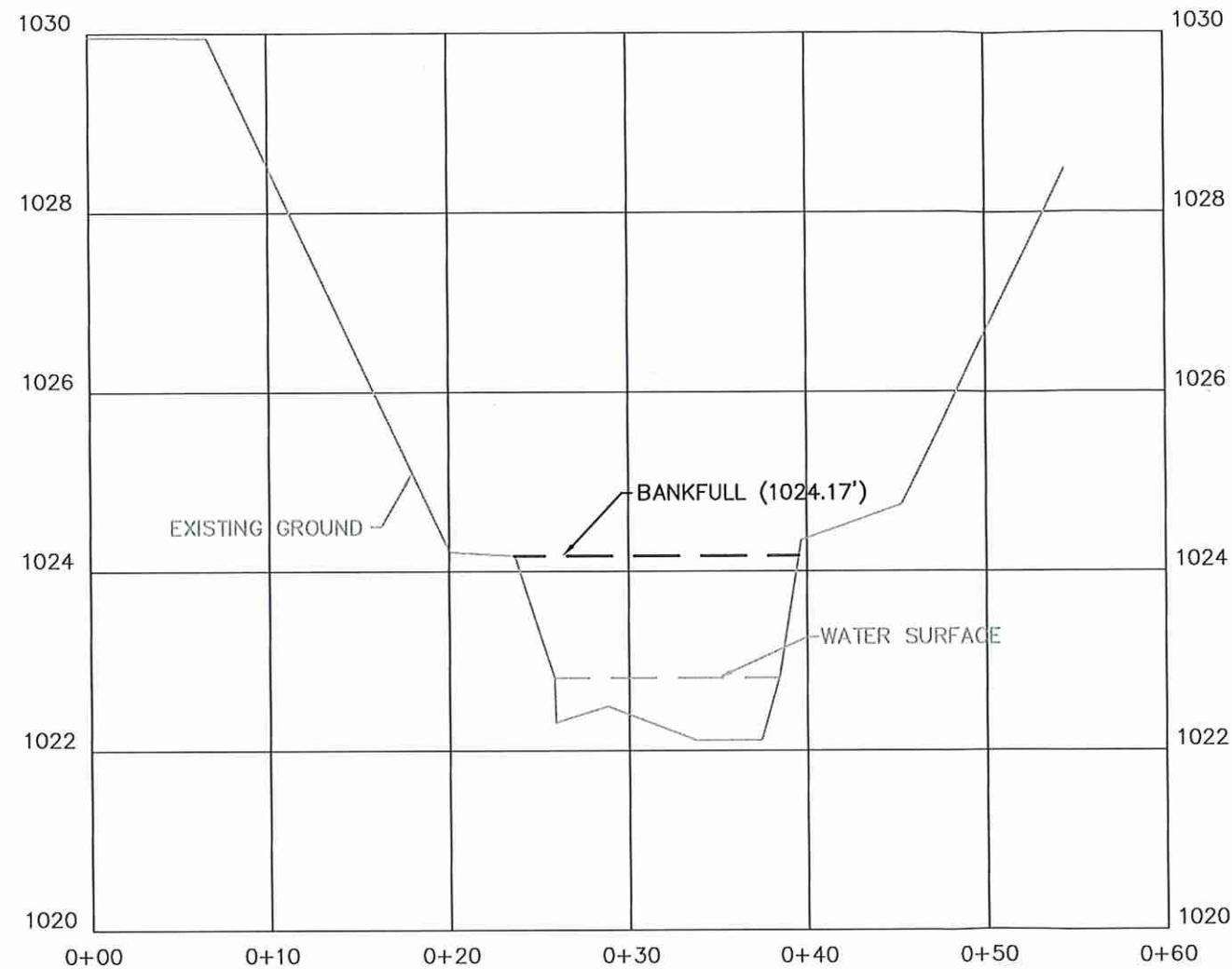


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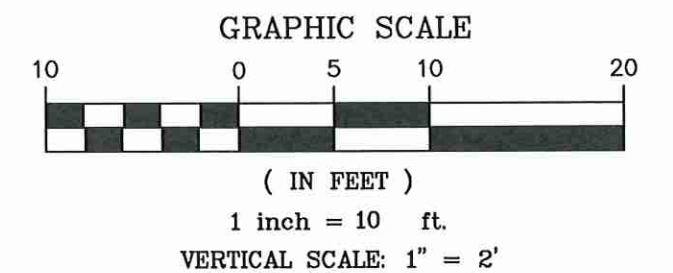
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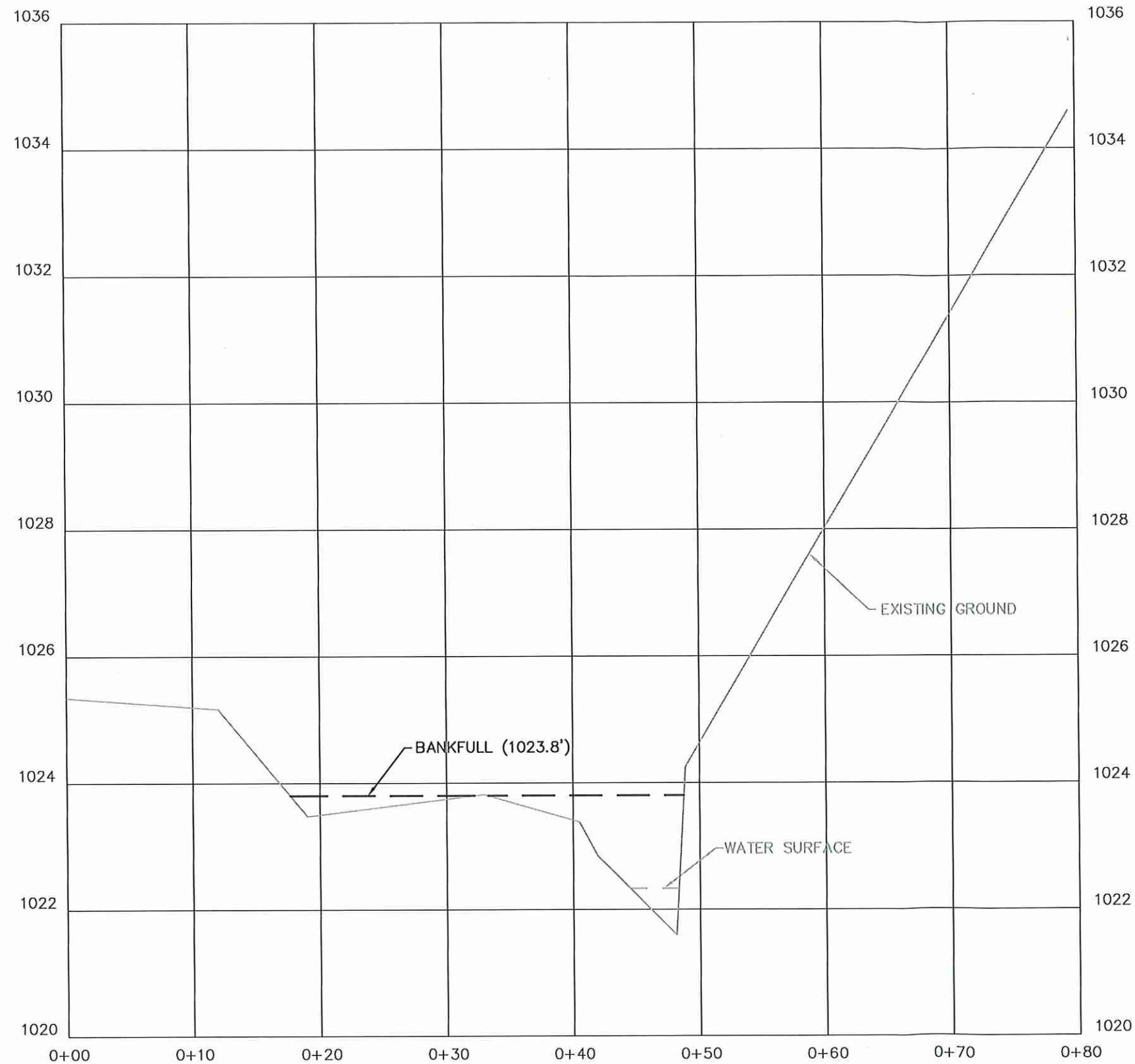
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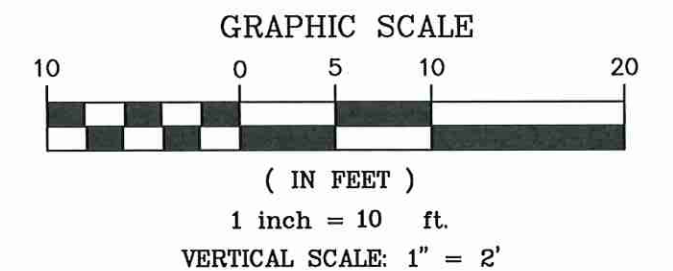
CROSS-SECTION 1
@ STA. 0+14



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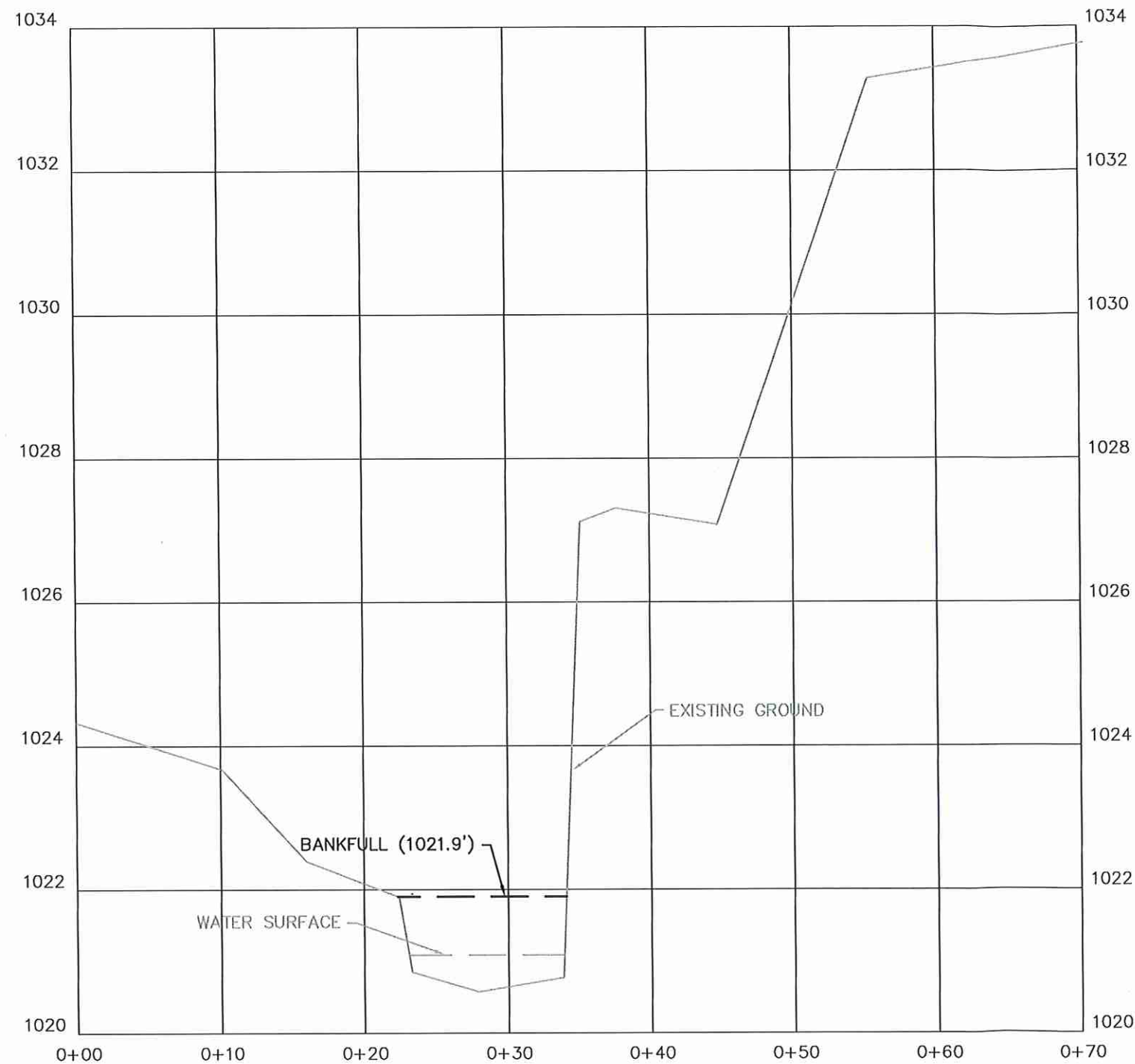


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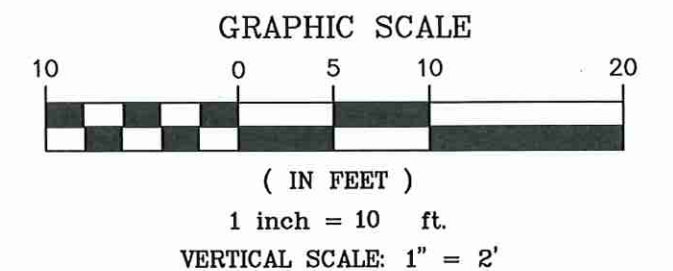



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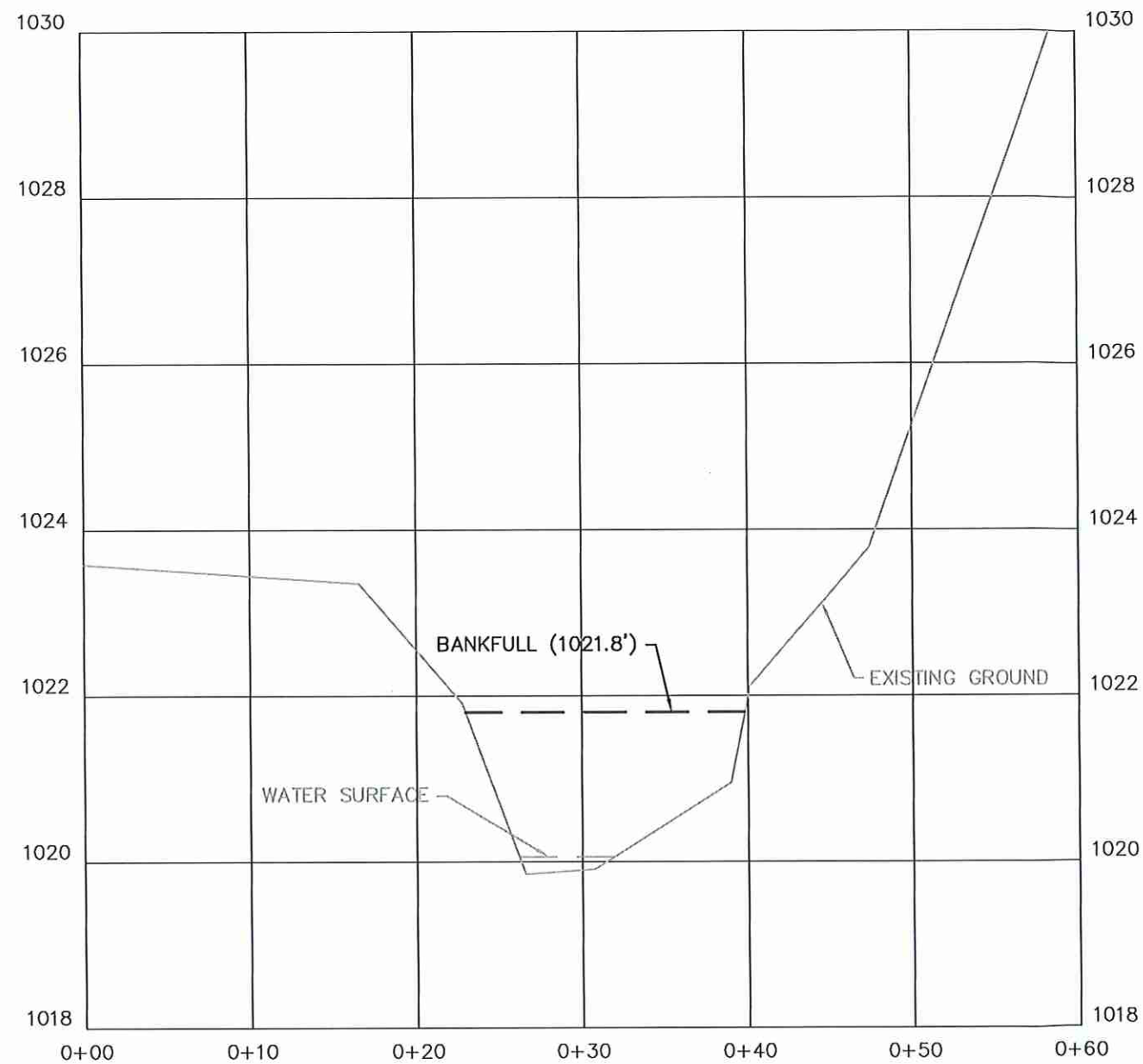
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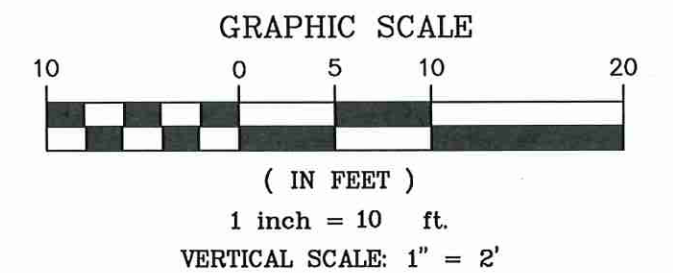
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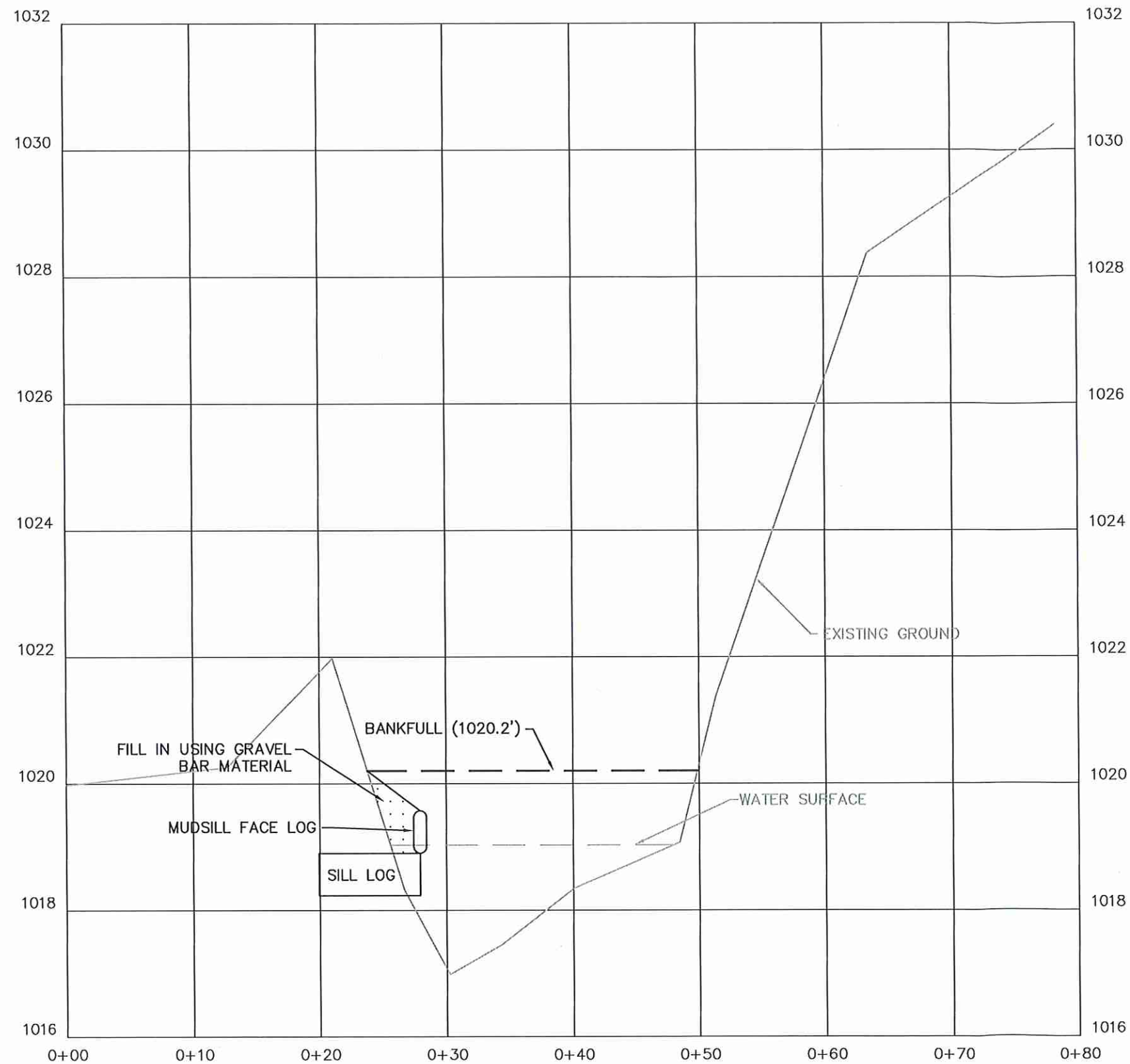
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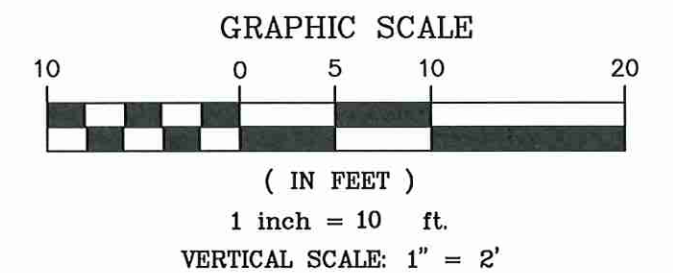
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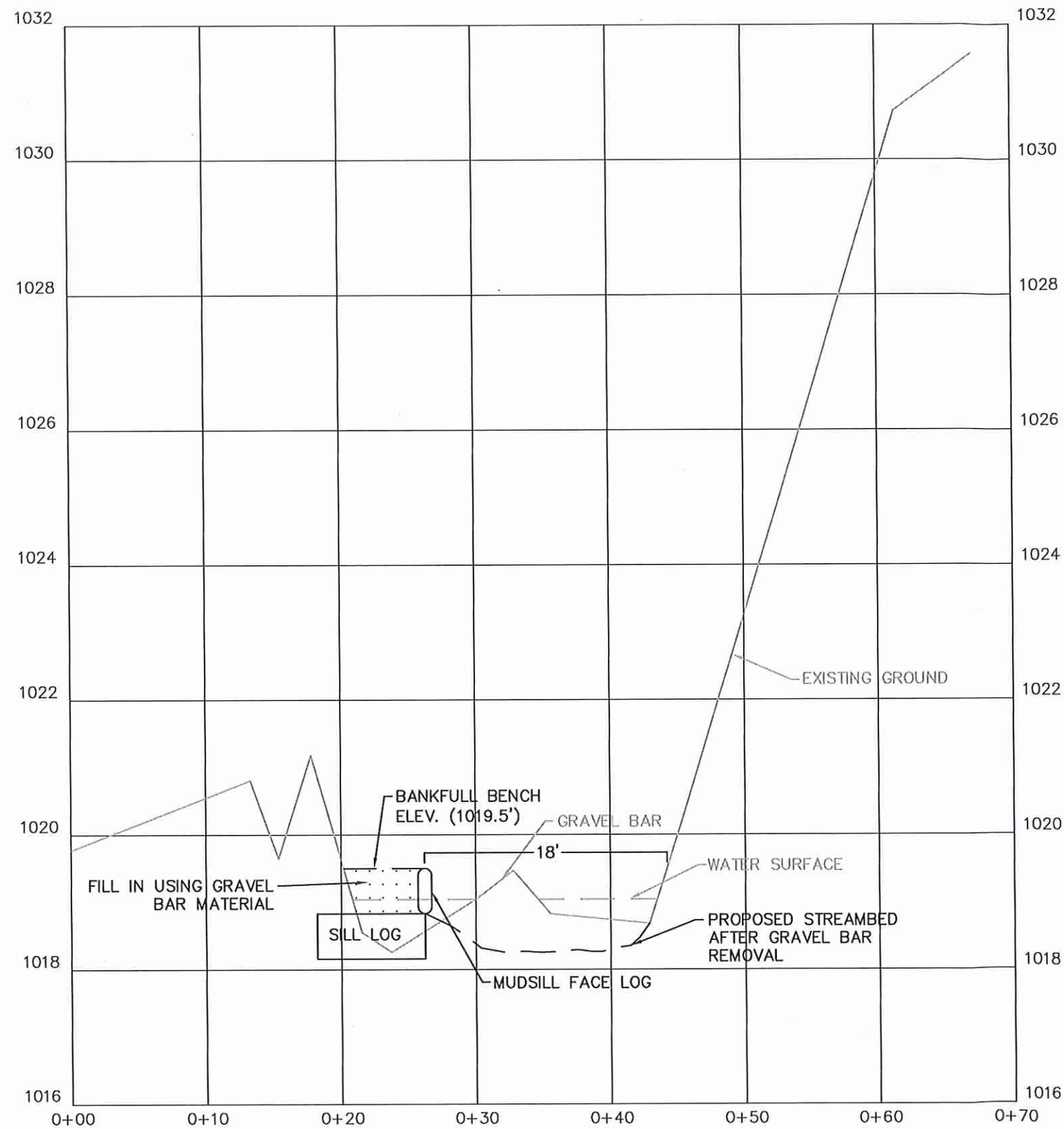
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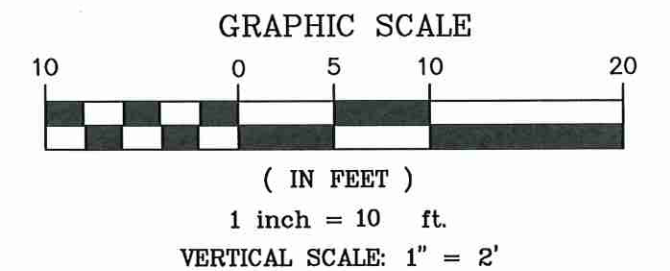
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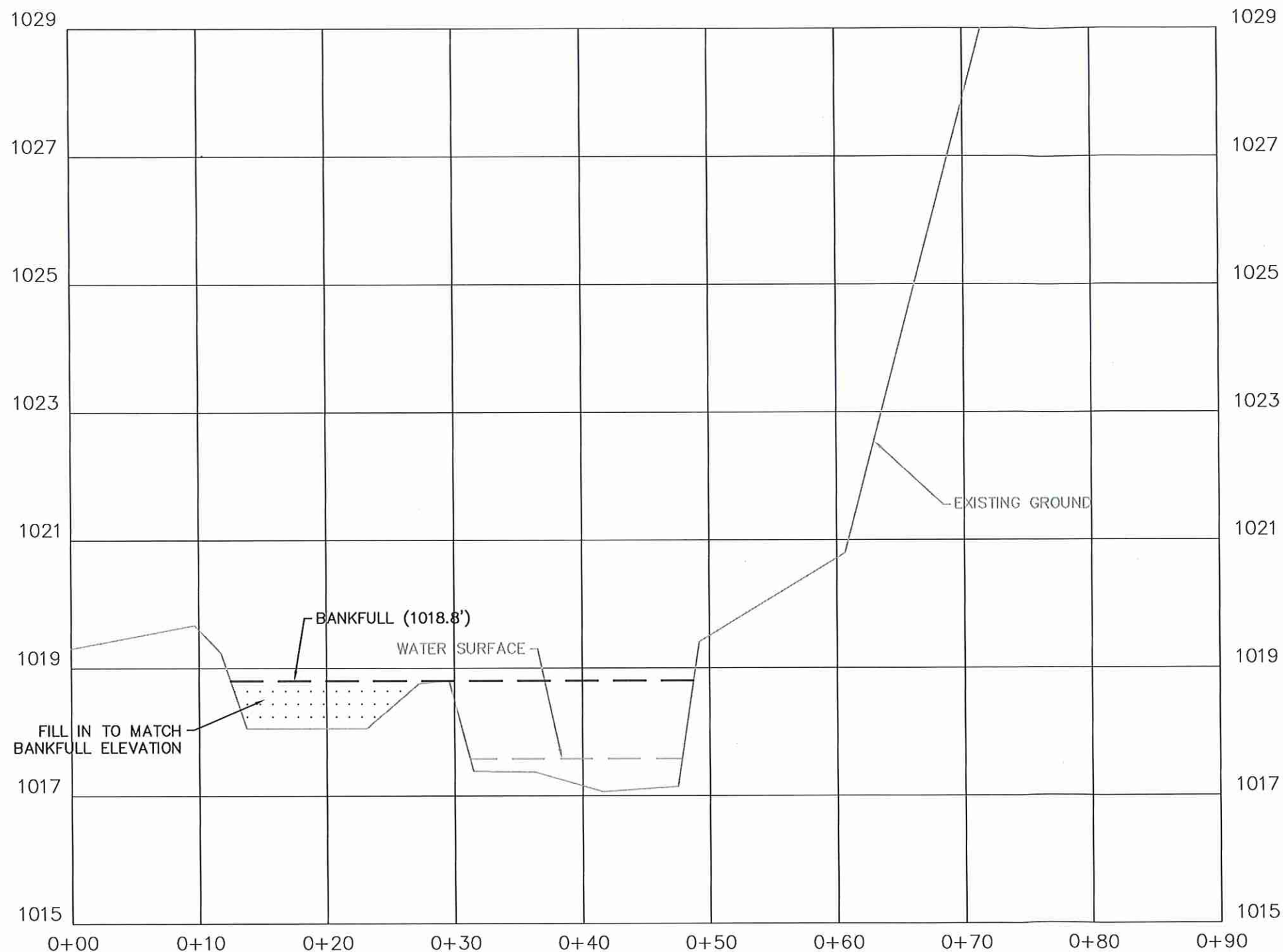
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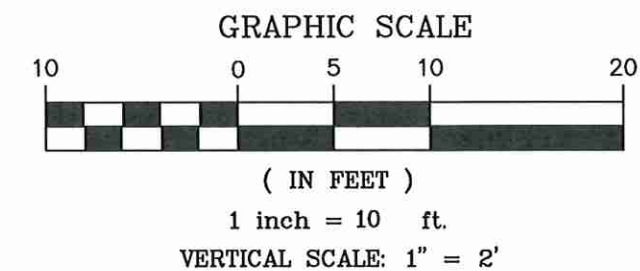
CROSS-SECTION 6
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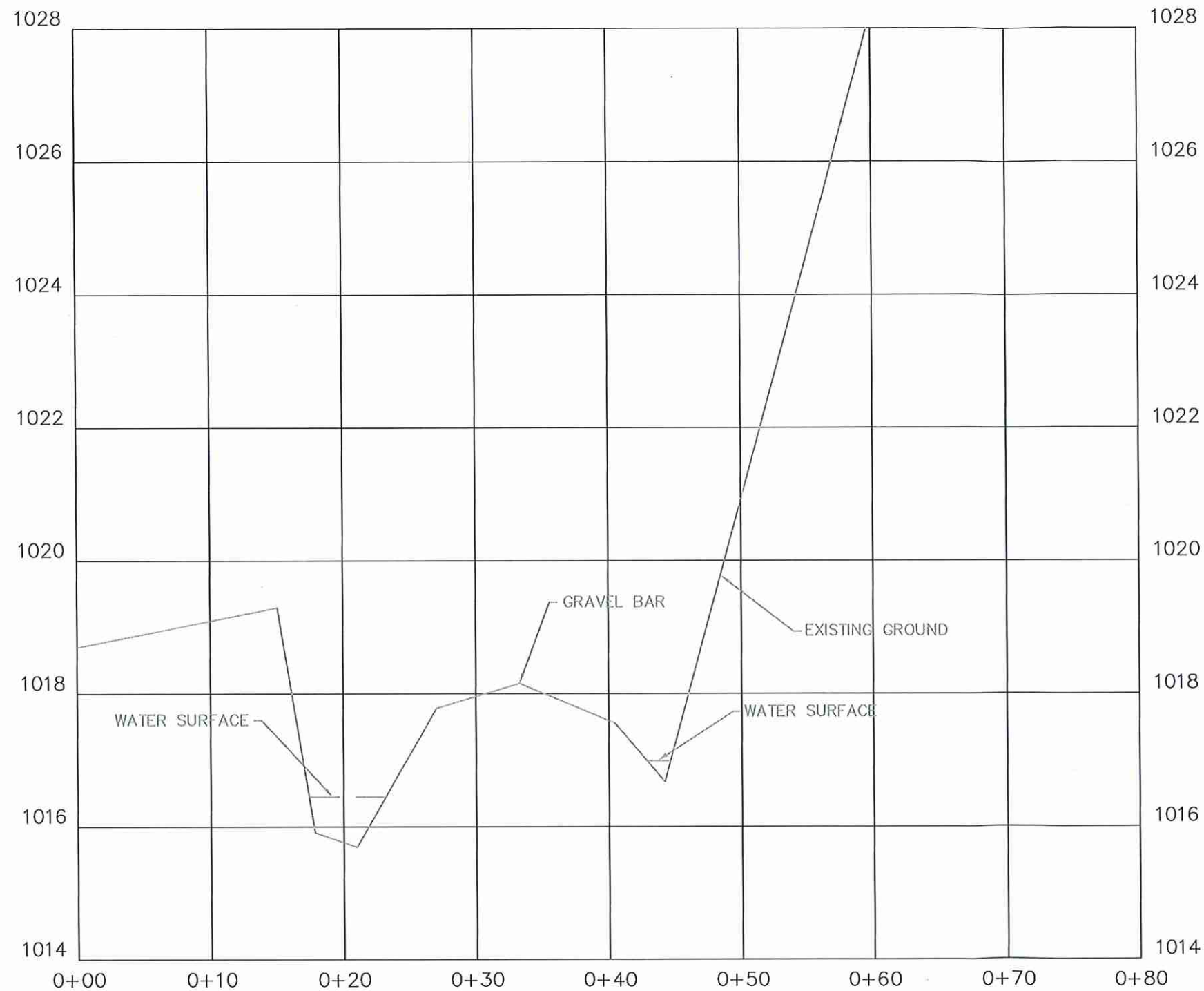


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@ STA. 5+25

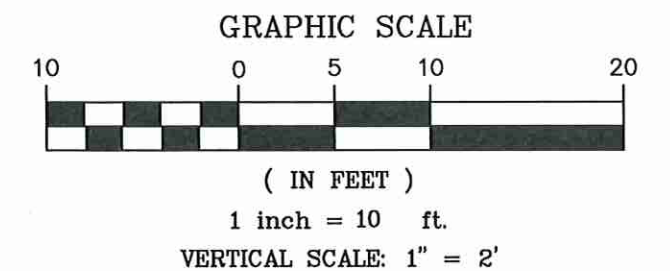




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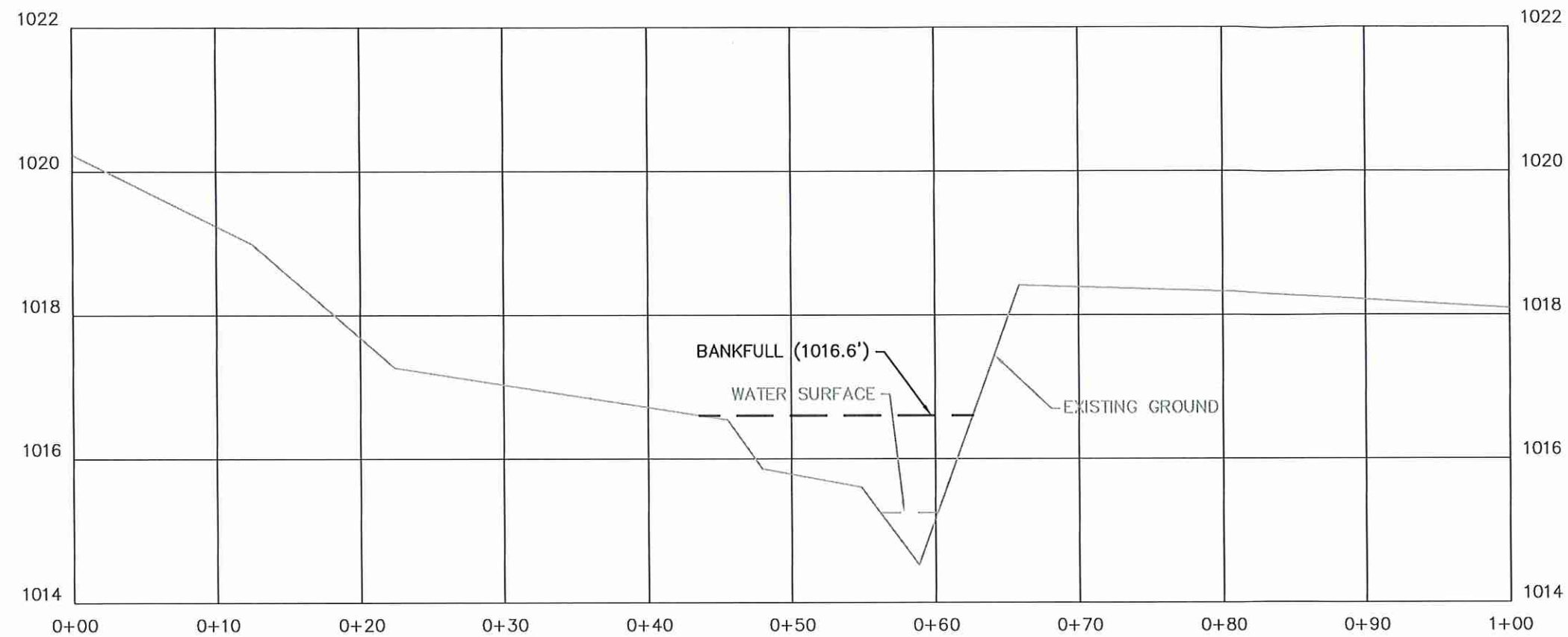
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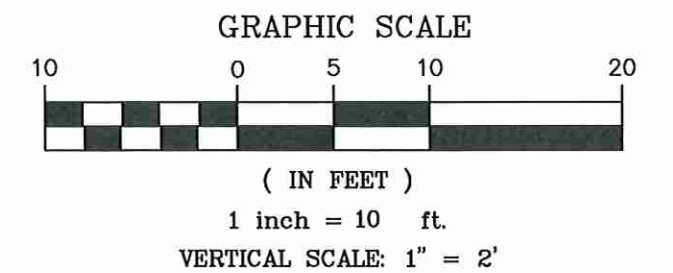
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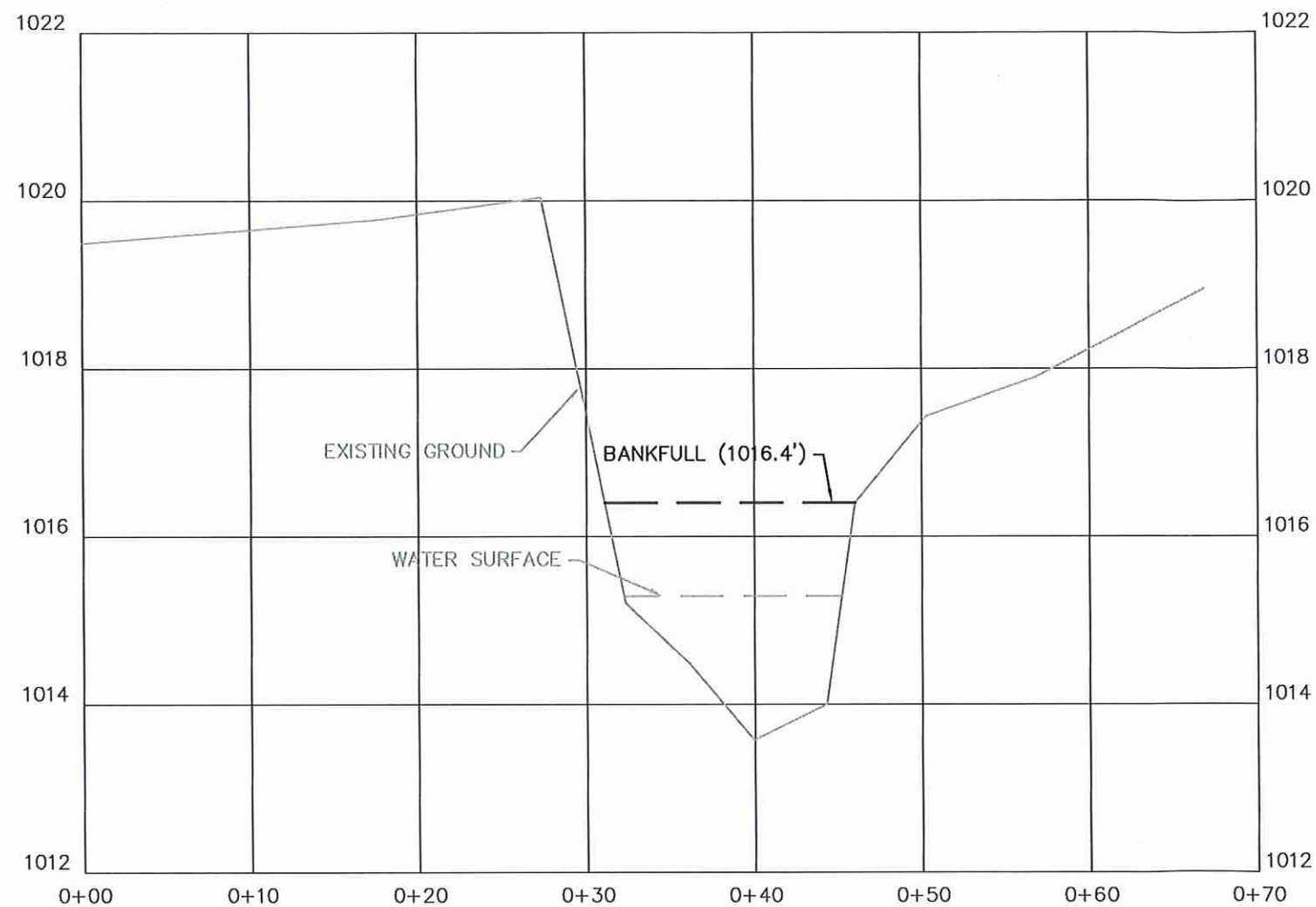
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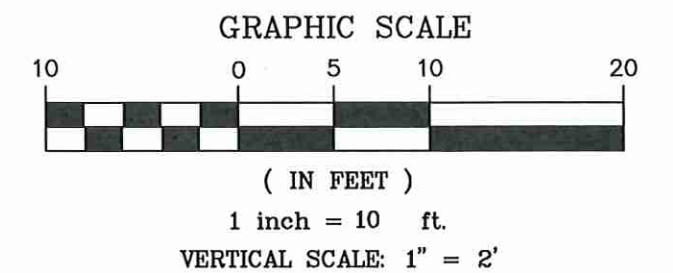
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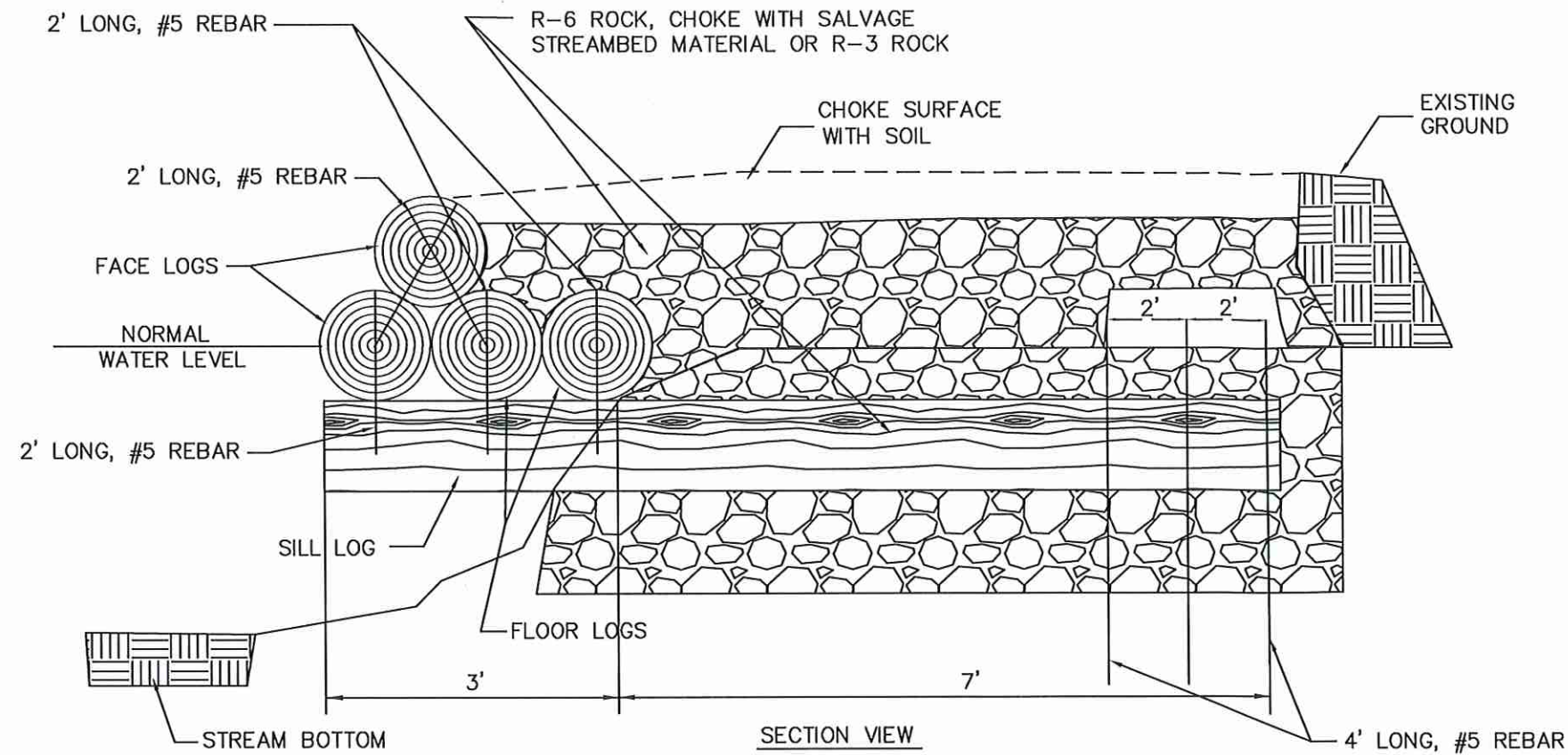
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CROSS-SECTION 10
@ STA. 7+18

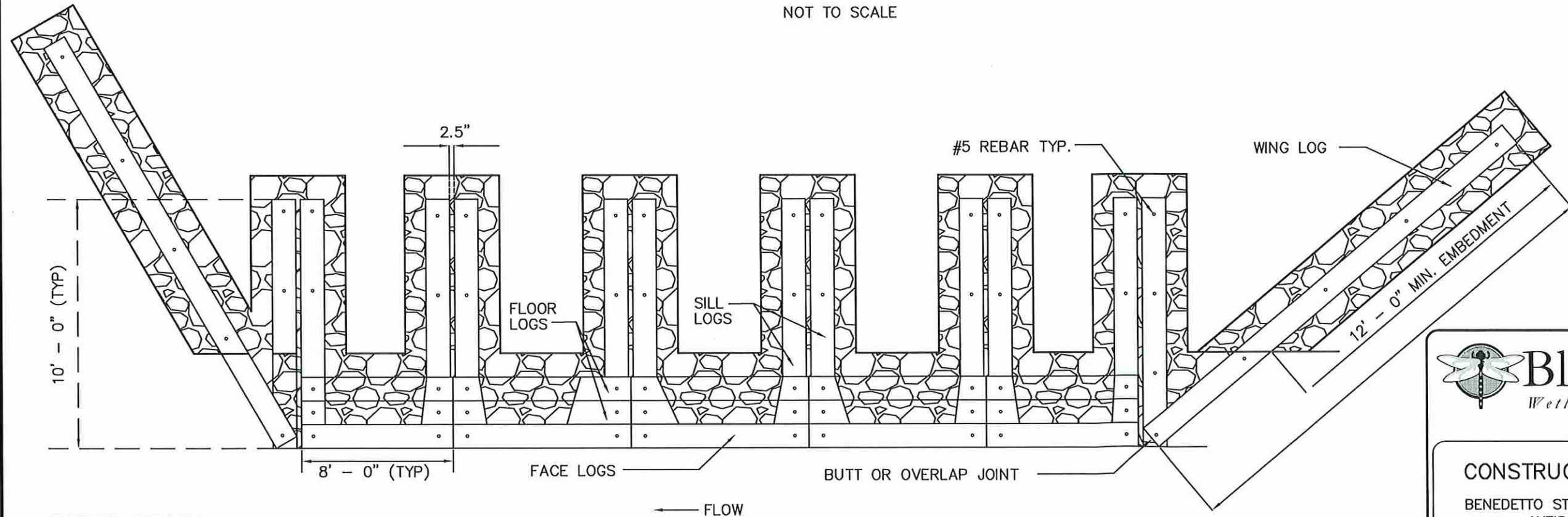


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		SURVEYED BY: T.M./NW/CW
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MODIFIED MUDSILL

NOT TO SCALE



TIMBER NOTES:

SILL LOGS = 10'
FACE LOGS = 8'
LOG DIA. = 8-12"

PLAN VIEW

NOT TO SCALE



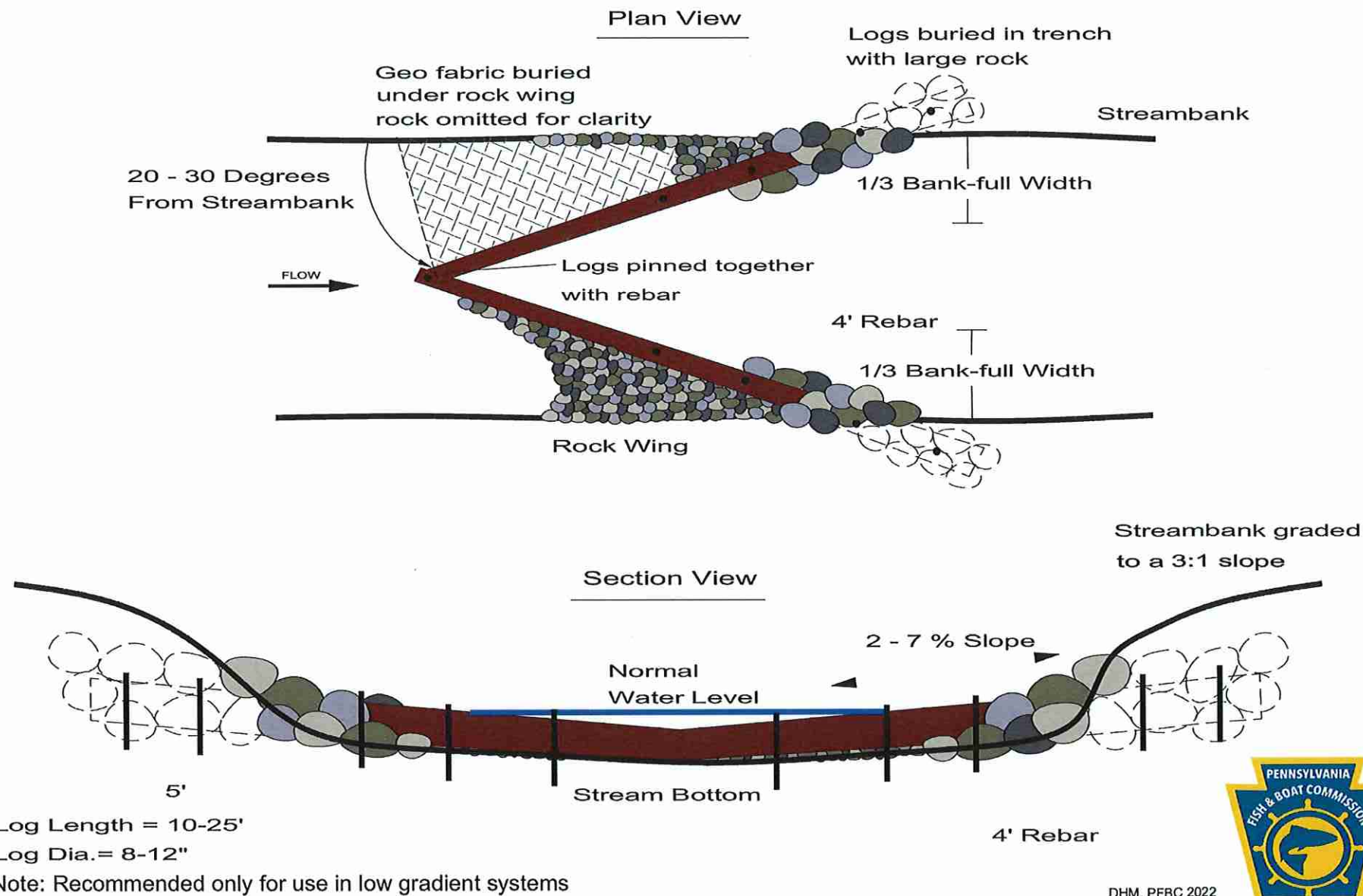
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Wetlands and Wildlife Habitat

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CONSTRUCTION DETAIL		DATE: 2/22/2024
BENEDETTO STREAM RESTORATION ANTIS TOWNSHIP BLAIR COUNTY, PENNSYLVANIA		DESIGNED BY: T.M.L. DRAWN BY: T.M.L. SURVEYED BY: T.M.L./N.M.W.
REVISIONS: - - - -	CAD FILE: Benedetto Stream Restoration.dwg PAGE NO.: 21 SHEET: 14 of 19	

LOG CROSS VANE (LOW GRADIENT STRUCTURE)



CROSS VANE LOCATION AND ELEV.

STRUCTURE	STATION	ELEVATION (THROAT)	BANKFULL
CV1	3+43	1019.0'	1020.5'

NOTE: ELEVATIONS ARE LISTED IN TRUE STATE PLANE ELEVATIONS.



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CONSTRUCTION DETAIL

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
TML

DRAWN BY:
TML

SURVEYED BY:
TML/NMW

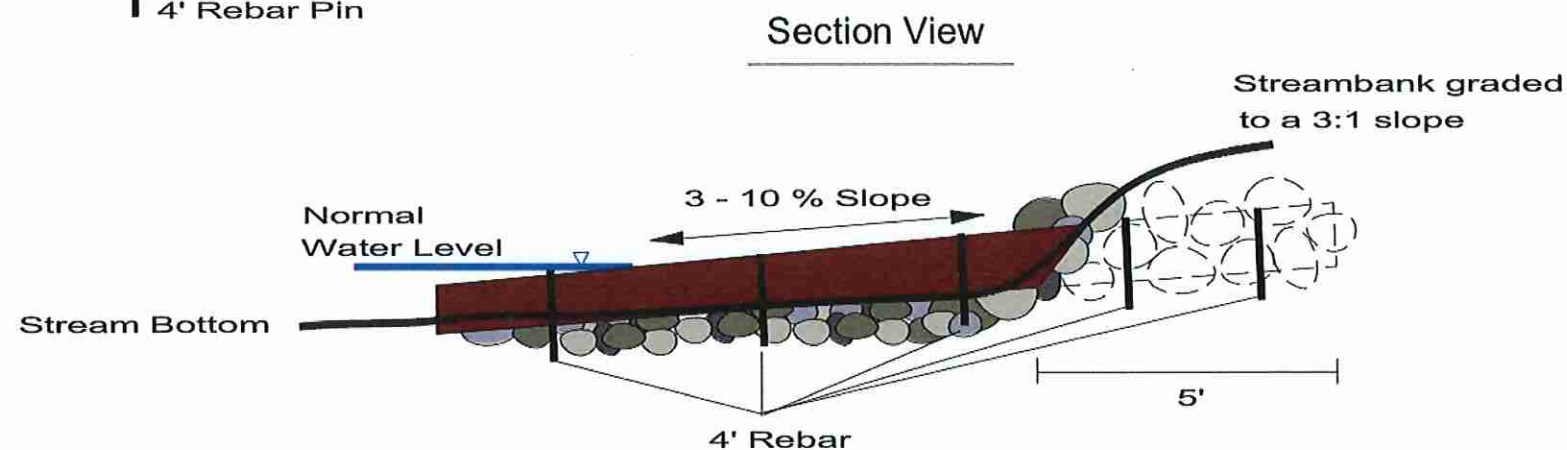
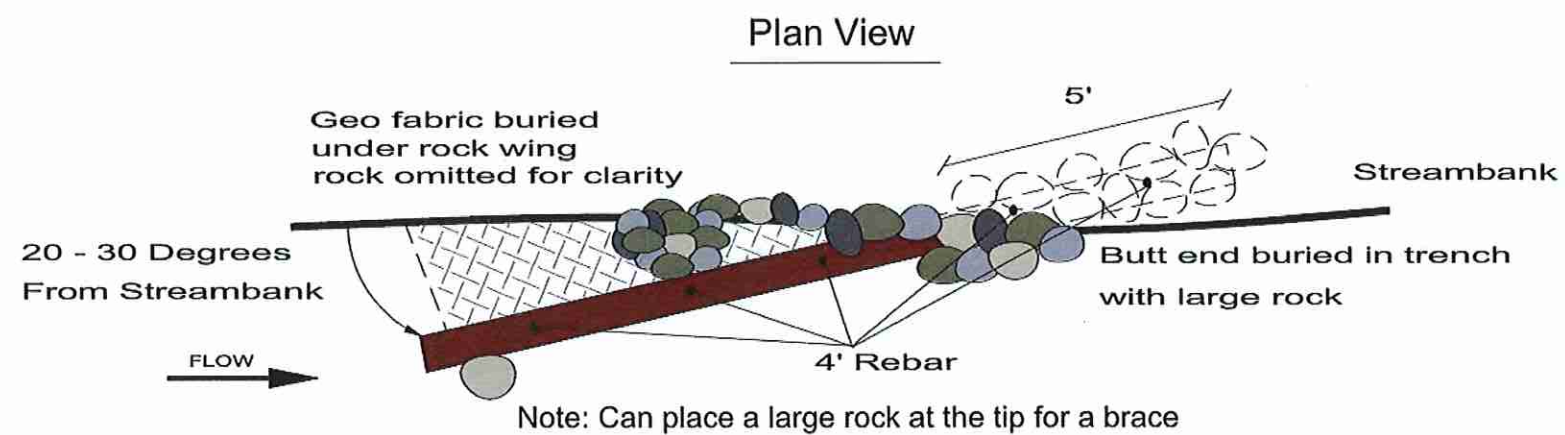
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SINGLE LOG VANE DEFLECTOR



Log Length = 15-25'
Log Dia. = 8-12"

DHM, PFBC 2022



SINGLE LOG VANES LOCATION

STRUCTURE	STATION	NORMAL WATER ELEV.	BANKFULL ELEV.
LV1	0+56	1022.74'	1023.87'
LV2	1+50	1021.28'	1022.47'
LV3	2+14	1020.0'	1021.95'
LV4	2+68	1019.74'	1021.35'

NOTE: ELEVATIONS ARE LISTED IN TRUE STATE PLANE ELEVATIONS.



CONSTRUCTION DETAIL

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
T.M.
DRAWN BY:
T.M.
SURVEYED BY:
T.M./NMW

REVISIONS:

-
-
-
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CAD FILE:

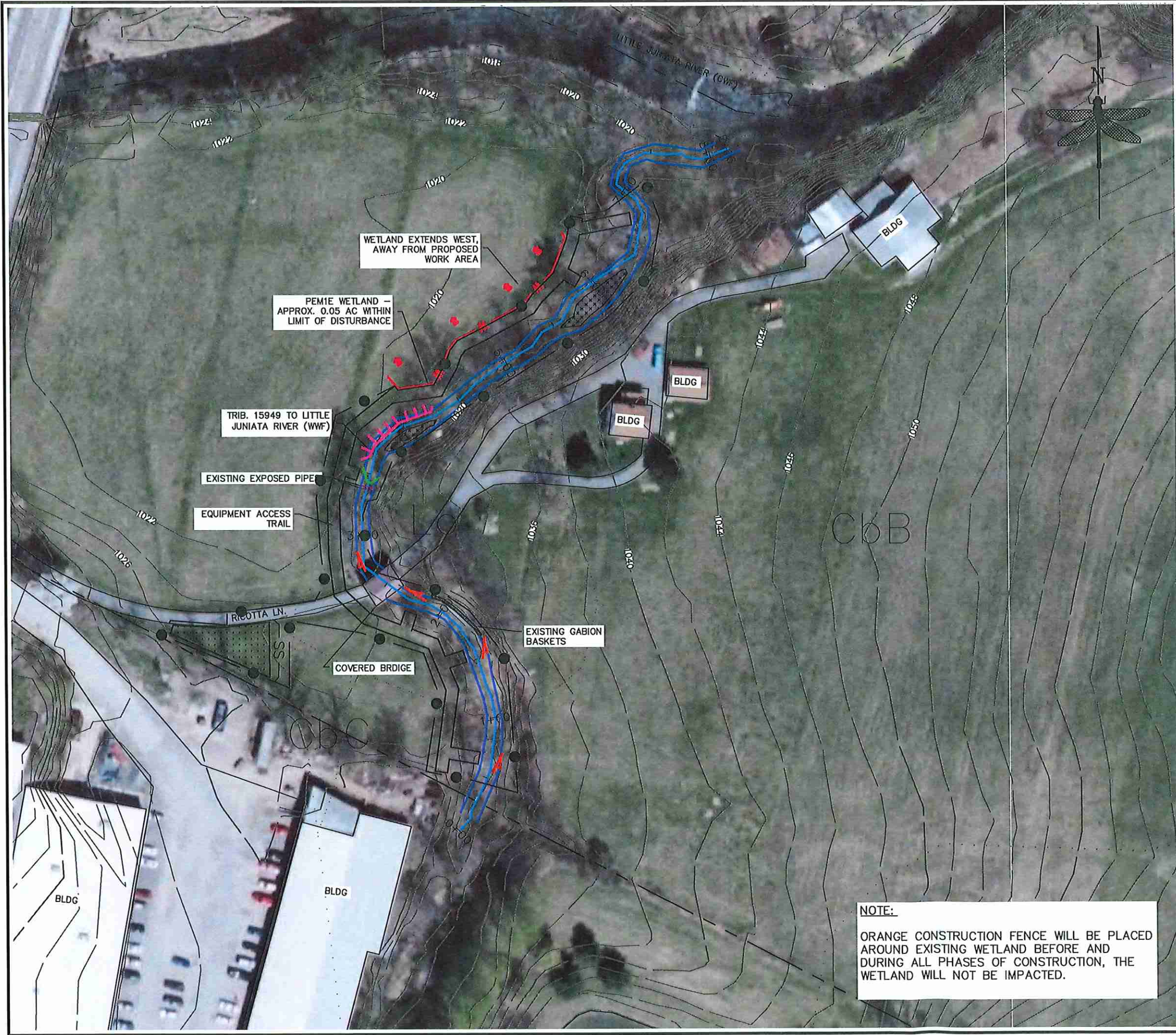
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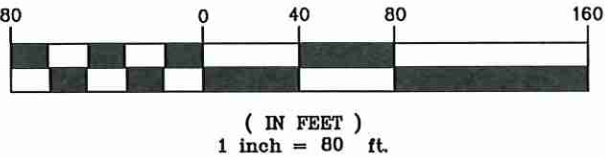
LEGEND

- 1300 — EXISTING CONTOUR
- - - - - EXISTING STREAM
- SOIL TYPE
- - - - - PROPERTY LINE
- SURVEYED THALWEG
- EDGE OF WATER
- - - - - LIMIT OF DISTURBANCE
- W — EXISTING WETLAND
- [X X X X] EXISTING GRAVEL BAR
- [.] STAGING AREA
- [/] EQUIPMENT ACCESS TRAIL
- SS — COMPOST FILTER SOCK
- [M] PROPOSED MUDSILL
- [V] PROPOSED LOG CROSS VANE
- [A] PROPOSED SINGLE LOG VANE

USDA — NRCS MAPPED SOILS:

- CbB Clarksburg silt loam (3–8% slopes)
- CbC Clarksburg silt loam (8–15% slopes)
- Lo Linden soils

GRAPHIC SCALE



NOTE:
ORANGE CONSTRUCTION FENCE WILL BE PLACED AROUND EXISTING WETLAND BEFORE AND DURING ALL PHASES OF CONSTRUCTION, THE WETLAND WILL NOT BE IMPACTED.

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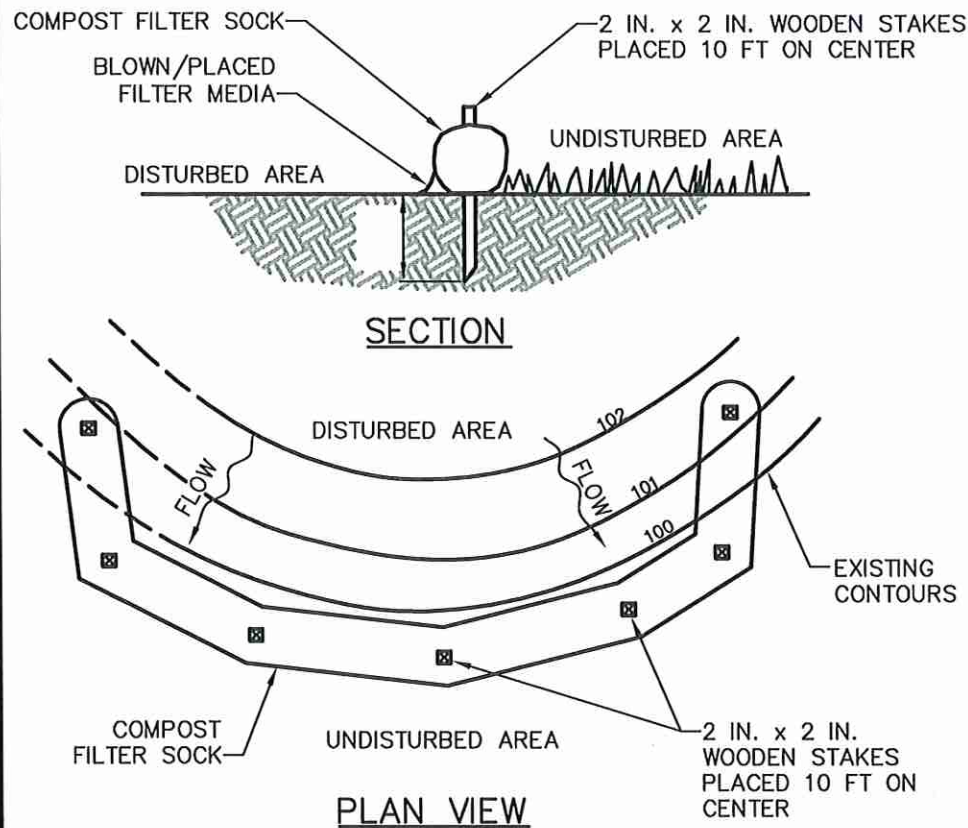
EROSION AND SEDIMENT CONTROL PLAN
BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
—
DRAWN BY:
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CRC/TML

REVISIONS:
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NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE

TWO-PLY SYSTEMS

INNER CONTAINMENT NETTING	HDPE BIAXIAL NET
	CONTINUOUSLY WOUND
	FUSION-WELDED JUNCTURES
INNER CONTAINMENT NETTING	3/4" X 3/4" MAX. APERTURE SIZE
	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)
	3/16" MAX. APERTURE SIZE
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.	

FILTREXX & JMD

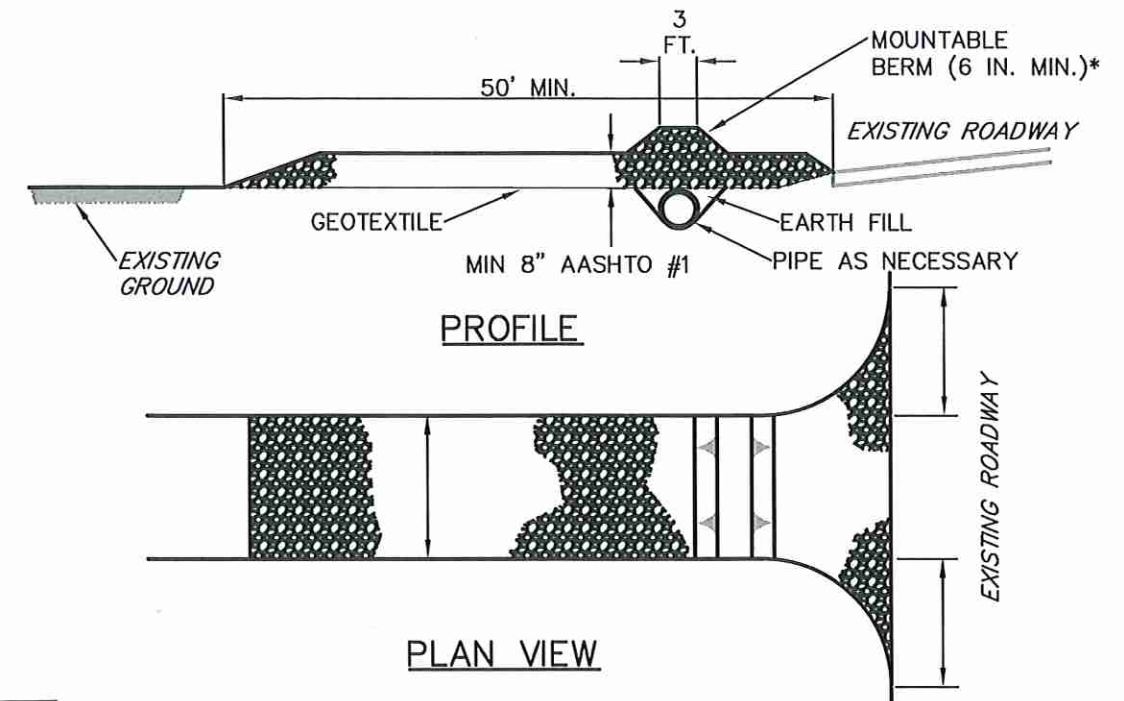
TABLE 4.2
COMPOST STANDARDS

ORGANIC CONTENT MATTER	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) Maximum

FILTREXX

TABLE 4.1
COMPOST SOCK FABRIC
MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADEABLE	PHOTO-DEGRADEABLE	BIO-DEGRADEABLE	PHOTO-DEGRADEABLE	PHOTO-DEGRADEABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	3/8"
TENSILE STRENGTH		26 psi	26 psi	44 psi	202 psi
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 hr.	23% AT 1000 hr.		100% AT 1000 hr.	100% AT 1000 hr.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE

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EROSION AND SEDIMENT CONTROL DETAILS BENEDETTO STREAM RESTORATION ANTIS TOWNSHIP BLAIR COUNTY, PENNSYLVANIA	
DATE: 2/22/2024	DESIGNED BY: TML
	DRAWN BY: TML
	SURVEYED BY: TML/NMW
REVISIONS: - - -	CAD FILE: Benedetto Stream Restoration.dwg PAGE NO.: - SHEET: 18 of 19

STANDARD EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMP'S SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY.
15. A LOG SHOWING DATES THAT E&S BMP'S WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE SAME TIME OF INSPECTION.
16. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
17. ALL SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS.
22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE.
26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
27. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION.
28. E&S BMP'S SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS THAT TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

INTENT OF CONSERVATION PROGRAM:

THE INTENT OF THIS PROGRAM IS TO PREVENT ACCELERATED EROSION OF THE EXPOSED SITE SOILS DURING THE CONSTRUCTION AND PERMANENT LIFE PERIODS OF THE PROJECT. THE PROGRAM REQUIRES RETENTION OF SEDIMENTS ON THE CONSTRUCTION SITE TO MINIMIZE THE IMPACT OF EARTH DISTURBANCE ON EXISTING STREAMS AND ADJACENT PROPERTY OWNERS. THESE OBJECTIVES WILL BE ACHIEVED BY MINIMIZING THE EXPOSURE TIME OF POTENTIALLY ERODIBLE SOILS TO RUNOFF AND INSTALLATION OF THE TEMPORARY AND PERMANENT CONSERVATION PRACTICES IN PROPER SEQUENCE WITH CONSTRUCTION. THE INTENT OF THIS PROGRAM SHOULD BE UNDERSTOOD AND IMPLEMENTED THROUGHOUT THE ENTIRE DEVELOPMENT. THE VARIOUS CONSTRUCTION TRADES SHOULD BE APPRISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNDUE DISTURBANCE OF PREPARED AND PROTECTED SURFACES.

SURFACE STABILIZATION CRITERIA:

ALL DENUDE SOIL SURFACES, INCLUDING SOIL STOCKPILES, ARE SUBJECT TO EROSION AND SHALL BE STABILIZED IMMEDIATELY EITHER AS TEMPORARILY OR PERMANENT COVER IN ACCORDANCE WITH SPECIFICATIONS BELOW. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MAY BE SEEDED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. DURING NON-GERMINATION PERIODS, MULCH SHALL BE APPLIED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. GERMINATION PERIODS SHALL BE FROM APRIL 1ST TO JUNE 15TH AND AUGUST 15TH TO OCTOBER 15TH. AT THE BEGINNING OF THE NEXT GERMINATION PERIOD, MULCHED AREAS SHALL BE LIMED, FERTILIZED AND SEEDED, WITH EITHER A TEMPORARY OR PERMANENT SEED MIXTURE, AND REMULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:

A. TEMPORARY COVER ON DISTURBED AREAS:

DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A TEMPORARY COVER. PREPARATION OF THE SURFACE, FERTILIZATION AND SEEDING WITH EITHER ANNUAL OR WINTER RYE GRASS SHALL BE DONE IN COMPLIANCE WITH PENNSYLVANIA DEP AND THE COUNTY CONSERVATION DISTRICT (CCD) STANDARD FOR "TEMPORARY COVER FOR CRITICAL AREAS." GROUND LIMESTONE SHALL BE APPLIED AT THE RATE OF 190 LBS/1,000 SF. FERTILIZER FOR TEMPORARY STABILIZATION SHALL BE APPLIED AT A RATE OF 50-50-50 PER ACRE. THE FERTILIZER AND LIMESTONE SHALL BE WORKED INTO THE SOIL TO A DEPTH OF FOUR (4) INCHES PRIOR TO SEEDING. ANNUAL RYEGRASSES SHALL BE APPLIED AT A RATE OF 1.5 LB/1,000 SF AND WINTER RYE AT A RATE OF 3.5 LBS/1,000 SF AND MULCHED WITH HAY OR STRAW AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE AND NON ASPHALTIC EMULSION, IN ACCORDANCE WITH THE CCD STANDARD FOR "MULCHING."

B. PERMANENT COVER ON DISTURBED AREAS:

ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED WITH A PERMANENT COVER. AREAS SHOULD BE SEEDED WITH A PERMANENT SEED MIXTURE AS DEFINED ABOVE. GROUND LIMESTONE SHALL BE APPLIED AT THE RATE OF 190 LBS/1000 SF OR 4 TO 6 TONS/ACRE. THE FERTILIZER AND LIMESTONE SHALL BE WORKED INTO THE SOIL TO A DEPTH OF FOUR (4) INCHES PRIOR TO SEEDING. FERTILIZER 10-20-20 FOR PERMANENT STABILIZATION MINIMUM IS 930 LBS/ACRE PER PENN STATE AGRONOMY GUIDE. PREPARATION OF THE SEEDBED, FERTILIZATION AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH APPLICABLE MCCD STANDARDS AND THE ADVICE OF THE PENNSYLVANIA STATE UNIVERSITY AGRICULTURAL EXTENSION SERVICE. NEW SEEDINGS ON FLAT AND MILD SLOPE AREAS SHALL BE MULCHED WITH STRAW AT 2 TO 3 BALES/1000 SF OR 3 TONS/ACRE. NEW SEEDINGS ON SLOPES AND WITHIN MODERATE DRAINAGE CHANNELS, SHALL BE SIMILARLY MULCHED WITH STRAW, AND RUNOFF DIVERTED FROM THE SEED BEDS UNTIL VEGETATION IS ESTABLISHED.

C. MAINTENANCE OF TEMPORARY SEDIMENTATION CONTROL STRUCTURES:

MAINTENANCE OF ALL TEMPORARY SEDIMENTATION CONTROL STRUCTURES SHALL BE IN ACCORDANCE WITH THESE PLANS. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH STORM EVENT AND ON A WEEKLY BASIS. ALL WEEKLY INSPECTION REPORTS TO BE KEPT ON SITE. ALL MAINTENANCE WORK MUST BE PERFORMED IMMEDIATELY.

SEQUENCE OF CONSTRUCTION:

- 1) ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY OF THE FOLLOWING STAGES ARE INITIATED. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.
- 2) AT LEAST 3 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PLACE A PA 1 CALL TO HAVE ALL UTILITIES MARKED OUT PRIOR TO CONSTRUCTION.
- 3) AT THE END OF EACH WORK DAY, ALL DISTURBED AREAS MUST BE STABILIZED WITH SEEDING/MULCH AND EROSION CONTROL MULCH BLANKETS FOR SLOPES STEEPER THAN 3H:1V. AREAS AT FINAL GRADE MUST BE INSPECTED AT THE END OF EACH WORK DAY THROUGHOUT CONSTRUCTION. ANY EROSION MUST BE CORRECTED IMMEDIATELY.
- 4) INSTALL TEMPORARY SEDIMENT CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLAN VIEW, AND AS NECESSARY FOR COMPLIANCE WITH CHAPTER 102.
- 5) STAGE EARTHWORK ACTIVITY TO MINIMIZE EROSION, COMPLETE UPSTREAM CONSTRUCTION AND EXCAVATION WORK PRIOR TO DOWNSTREAM WORK.
- 6) ALL WORK SHALL BE DONE DURING LOW FLOW CONDITIONS, AVOIDING PERIODS DURING OR IMMEDIATELY FOLLOWING HEAVY PRECIPITATION.
- 7) EQUIPMENT WORK WILL BE DONE FROM THE STREAMBANK, WHERE POSSIBLE.
- 8) INSTALL 3 UPSTREAM LOG VANES BEFORE BRIDGE AT LOCATIONS SHOWN ON PLANS.
- 9) INSTALL LOG VANE AND CROSS VANE LOCATED BELOW THE BRIDGE AS SHOWN ON THE PLANS.
- 10) REMOVE UPSTREAM GRAVEL BAR AND INSTALL MODIFIED MUDSILL.
- 11) REMOVE DOWNSTREAM GRAVEL BAR AND INSTALL BANKFULL BENCH AT LOCATION SHOWN ON THE PLANS.
- 12) INSTALL DUMPED ROCK PROTECTION ON RIVERBANK RIGHT AT THE 2 LOCATIONS SHOWN ON THE PLANS.
- 13) THE ONLY WORK TO TAKE PLACE IN THE WET CONDITION IS THE PLACEMENT OF THE STREAM STRUCTURES.
- 14) SEED AND STABILIZE THE WORK AREA.

EROSION AND SEDIMENT CONTROL NOTES

- 1) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSISTENT WITH CHAPTER 102 AND PADEP'S EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MOST RECENT VERSION).
- 2) THESE PLANS REFLECT THE MINIMUM E&S REQUIREMENTS BASED ON ANTICIPATED AND PROPOSED ACTIVITIES. OWNER/APPLICANT OR HIS/HER DULY-AUTHORIZED REPRESENTATIVE IS RESPONSIBLE FOR IMPLEMENTATION OF THE E&S CONTROL MEASURES CONTAINED IN THIS PLAN AND ANY OTHER PROCEDURES THAT MAY BE NECESSARY FOR COMPLIANCE WITH THE PREVAILING REGULATIONS.
- 3) GROUND DISTURBANCE ACTIVITIES SHALL BE MINIMIZED TO THE EXTENT PRACTICAL AND ALL AREAS SHALL BE STABILIZED PROMPTLY.
- 4) ALL E&S MEASURES SHALL BE INSPECTED WEEKLY, AT A MINIMUM, AND FOLLOWING ALL STORM EVENTS. DEFECTIVE, DAMAGED OR OTHERWISE INSUFFICIENT E&S MEASURES SHALL BE REPLACED WITHOUT DELAY. WEEKLY INSPECTION REPORTS SHALL BE KEPT ON SITE.
- 5) ALL TEMPORARY AND PERMANENT SOIL STABILIZATION TO BE CONDUCTED IN ACCORDANCE WITH PA DEP AND THE COUNTY CONSERVATION DISTRICT (CCD) STANDARDS.
- 6) TEMPORARY SEEDING OF ANY DISTURBED AREAS OR STOCKPILES (EXCEPT PROPERLY COVERED OR MANAGED STOCKPILES) SHALL BE CONDUCTED WITHIN 4 DAYS OF DISTURBANCE. TEMPORARY SEEDING TO CONSIST OF 40 LBS/AC ANNUAL RYEGRASS, 1 TON/AC LIME, 1,000 LBS/AC 5-5-5 FERTILIZER AND 3 TONS/AC HAY OR STRAW MULCH.
- 7) PERMANENT SEEDING SHALL BE CONDUCTED WITHIN 4 DAYS OF DISTURBANCE FOR THOSE AREAS AT FINAL GRADE.
- 8) ALL AREAS TO BE INSPECTED AND MAINTAINED UNTIL STABILIZED. E&S CONTROL MEASURES TO BE REMOVED WHEN 70 % UNIFORM VEGETATIVE COVERAGE IS ESTABLISHED.
- 9) THIS E&S PLAN IS TO BE KEPT ON-SITE AT ALL TIMES, PER GOVERNING REGULATIONS.
- 10) NO CHANGES TO THIS E&S CONTROL PLAN SHALL BE PERMITTED UNLESS AUTHORIZED AND APPROVED BY THE COUNTY CONSERVATION DISTRICT.

TEMPORARY MEASURES - COMPOST FILTER SOCK AND ROCK CONSTRUCTION ENTRANCE ARE NECESSARY AND SHALL BE INSTALLED ACCORDING TO THE E&S CONSTRUCTION DETAILS AND SHALL BE PROPERLY MAINTAINED DURING THE LIFE OF THE PROJECT.

PERMANENT MEASURES - ALL AREAS THAT ARE DISTURBED WITHIN THE LIMIT OF DISTURBANCE SHALL BE PERMANENTLY VEGETATED ACCORDING TO THE E&S CONSTRUCTION DETAILS AND PERMANENT SEEDING SPECIFICATIONS.

PERMANENT SEED MIXTURE


ALL AREAS DISTURBED DURING CONSTRUCTION AND AT FINAL GRADE SHALL BE SEEDED WITHIN FOUR DAYS OF DISTURBANCE ACCORDING TO THE FOLLOWING SPECIFICATION AND RATE:

ERNMX-104 OR APPROVED EQUIVALENT (1-800-873-3321)

50% ANNUAL RYEGRASS (*Lolium multiflorum*)

50% PERENNIAL RYEGRASS (*Lolium perenne*)

AT A RATE OF 50 LBS / ACRE.

 BluAcres • LLC <i>Wetlands and Wildlife Habitat</i> 12 BLACK STREET, WILLIAMSBURG, PA 16693 (814) 407-4736 : www.bluacres.com	
EROSION AND SEDIMENT CONTROL NOTES	
BENEDETTO STREAM RESTORATION ANTIS TOWNSHIP BLAIR COUNTY, PENNSYLVANIA	
DATE: 2/22/2024	DESIGNED BY: T.M.L.
	DRAWN BY: T.M.L.
	SURVEYED BY: T.M.L./N.M.W.
REVISIONS: - - - -	CAD FILE: Benedetto Stream Restoration.dwg PAGE NO: - SHEET: 19 of 19

BENEDETTO STREAM
RESTORATION PROJECT

ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

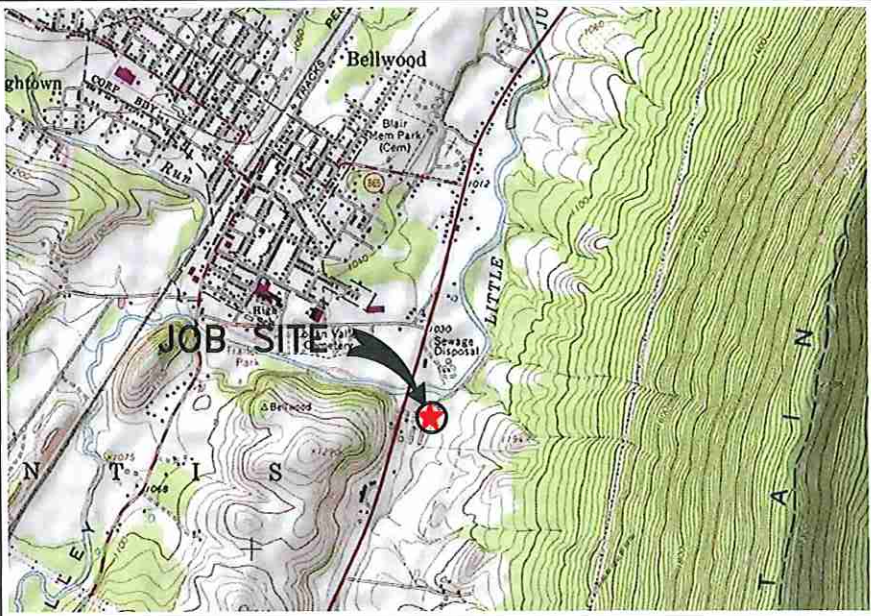
PREPARED BY:



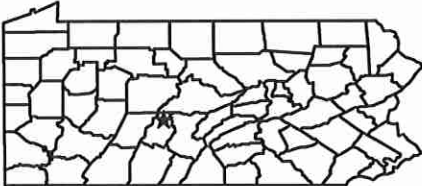
PREPARED FOR:

CHARLES BENEDETTO

454 RICOTTA LN
ALTOONA, PENNSYLVANIA 16601



PROJECT LOCATION



COUNTY: BLAIR
TOWNSHIP: ANTIS
QUAD: BELLWOOD
LATITUDE: 40.59012° N
LONGITUDE: -78.32215° W

SHEET INDEX

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| 3. PROFILE | 12. CROSS SECTION 9 |
| 4. CROSS SECTION 1 | 13. CROSS SECTION 10 |
| 5. CROSS SECTION 2 | 14. CONSTRUCTION DETAIL |
| 6. CROSS SECTION 3 | 15. CONSTRUCTION DETAIL |
| 7. CROSS SECTION 4 | 16. CONSTRUCTION DETAIL |
| 8. CROSS SECTION 5 | 17. EROSION AND SEDIMENT CONTROL PLAN |
| 9. CROSS SECTION 6 | 18. EROSION AND SEDIMENT CONTROL DETAILS |
| | 19. EROSION AND SEDIMENT CONTROL NOTES |

- GENERAL NOTES:
1. THIS STREAM RESTORATION PLAN HAS BEEN PREPARED FOR MR. BENEDETTO FOR THE PURPOSE OF REDUCING STREAMBANK EROSION BY INSTALLING IN-STREAM STRUCTURES FOR STREAMBANK STABILIZATION.
 2. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION AND TO COMPLY WITH THE PROVISIONS OF PENNSYLVANIA ACT 187 (1996) BEFORE PERFORMING ANY EXCAVATION WORK.
 3. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO PRIVATE PROPERTY INCLUDING BUT NOT LIMITED TO FENCES AND PRIVATE ROADS RESULTING FROM ACTIVITIES ASSOCIATED WITH COMPLETING THIS PLAN. REPAIRS FOR ANY SUCH DAMAGES WILL BE MADE AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE PROPERTY OWNER.



Wetlands and Wildlife Habitat

12 BLACK STREET, WILLIAMSBURG, PA 16693
(814) 407-4738 : www.bluacres.com

DATE: 2/22/2024

DESIGNED BY: TML

DRAWN BY: TML

SURVEYED BY: TML/NW/CW

COVER SHEET

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

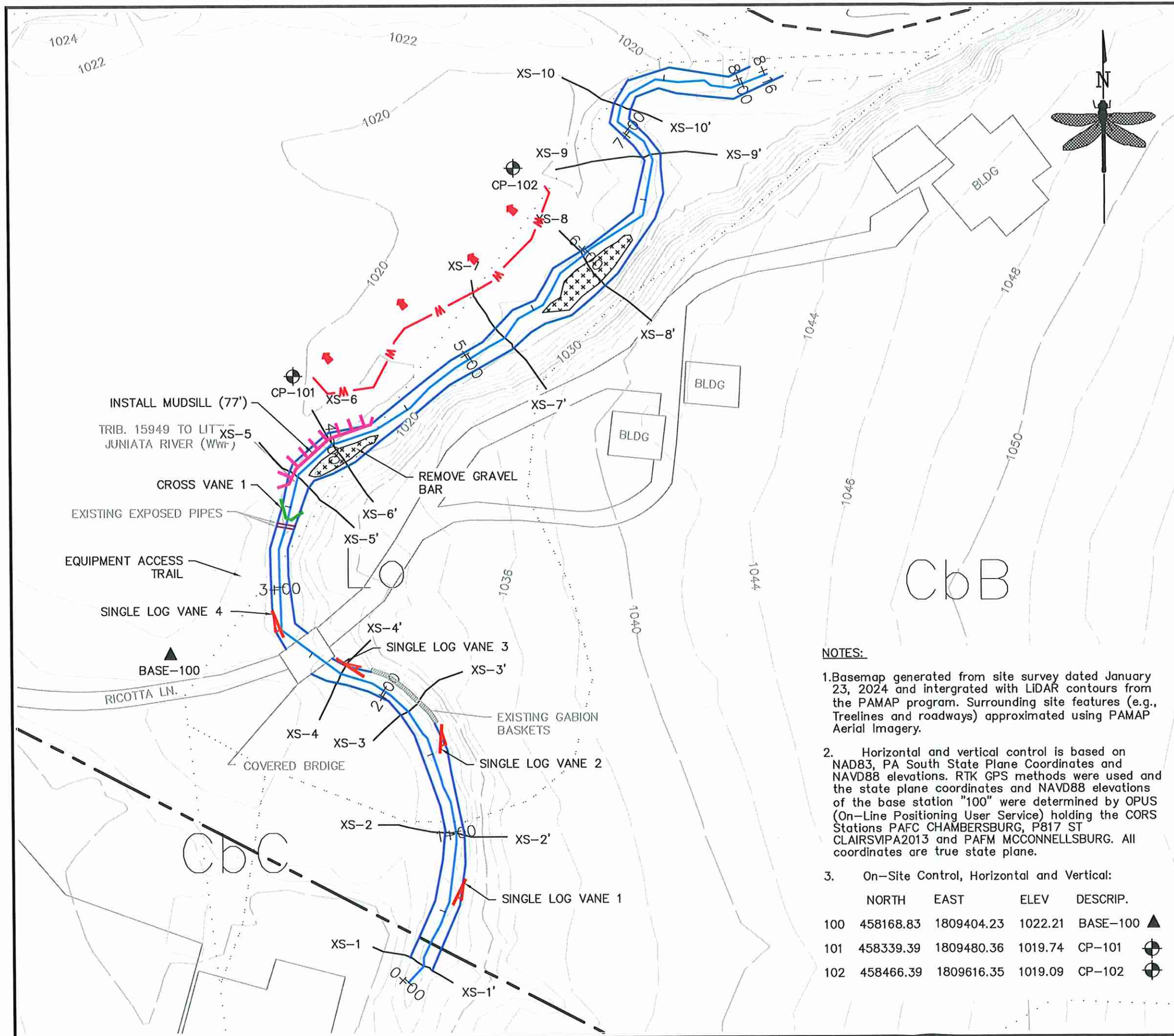
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LEGEND

- 1300 EXISTING CONTOUR
- SOIL TYPE
- APPARENT PROPERTY LINE
- SURVEYED THALWEG
- EDGE OF WATER
- EXISTING WETLANDS
- EXISTING GRAVEL BAR
- PROPOSED MUDSILL
- PROPOSED LOG CROSS VANE
- PROPOSED SINGLE LOG VANE

NOTICE:

THE LITTLE JUNIATA RIVER IS A CLASS A – NATURALLY REPRODUCING WILD TROUT STREAM.

THERE WILL BE A WORK RESTRICTION IN PLACE FROM OCTOBER 1ST – APRIL 1ST.

NOTES:

THE EXISTING WETLAND EXTENDS WESTWARD INTO THE FIELD, THE BOUNDARY SHOWN IS NEAREST TO THE WORK AREA.

USDA – NRCS MAPPED SOILS:

CbB Clarksburg silt loam (3–8% slopes)
CbC Clarksburg silt loam (8–15% slopes)
Lo Linden soils

NOTES:

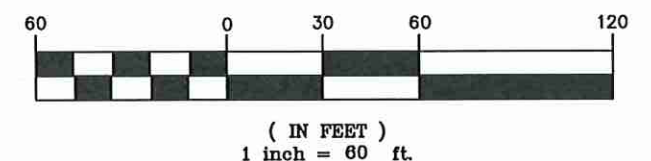
1. Basemap generated from site survey dated January 23, 2024 and integrated with LIDAR contours from the PAMAP program. Surrounding site features (e.g., Treelines and roadways) approximated using PAMAP Aerial Imagery.

2. Horizontal and vertical control is based on NAD83, PA South State Plane Coordinates and NAVD88 elevations. RTK GPS methods were used and the state plane coordinates and NAVD88 elevations of the base station "100" were determined by OPUS (On-Line Positioning User Service) holding the CORS Stations PAFC CHAMBERSBURG, P817 ST CLAIRSVIPA2013 and PAFM MCCONNELLSBURG. All coordinates are true state plane.

3. On-Site Control, Horizontal and Vertical:

	NORTH	EAST	ELEV	DESCRIP.	
100	458168.83	1809404.23	1022.21	BASE-100	▲
101	458339.39	1809480.36	1019.74	CP-101	⊙
102	458466.39	1809616.35	1019.09	CP-102	⊙

GRAPHIC SCALE



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PLAN VIEW

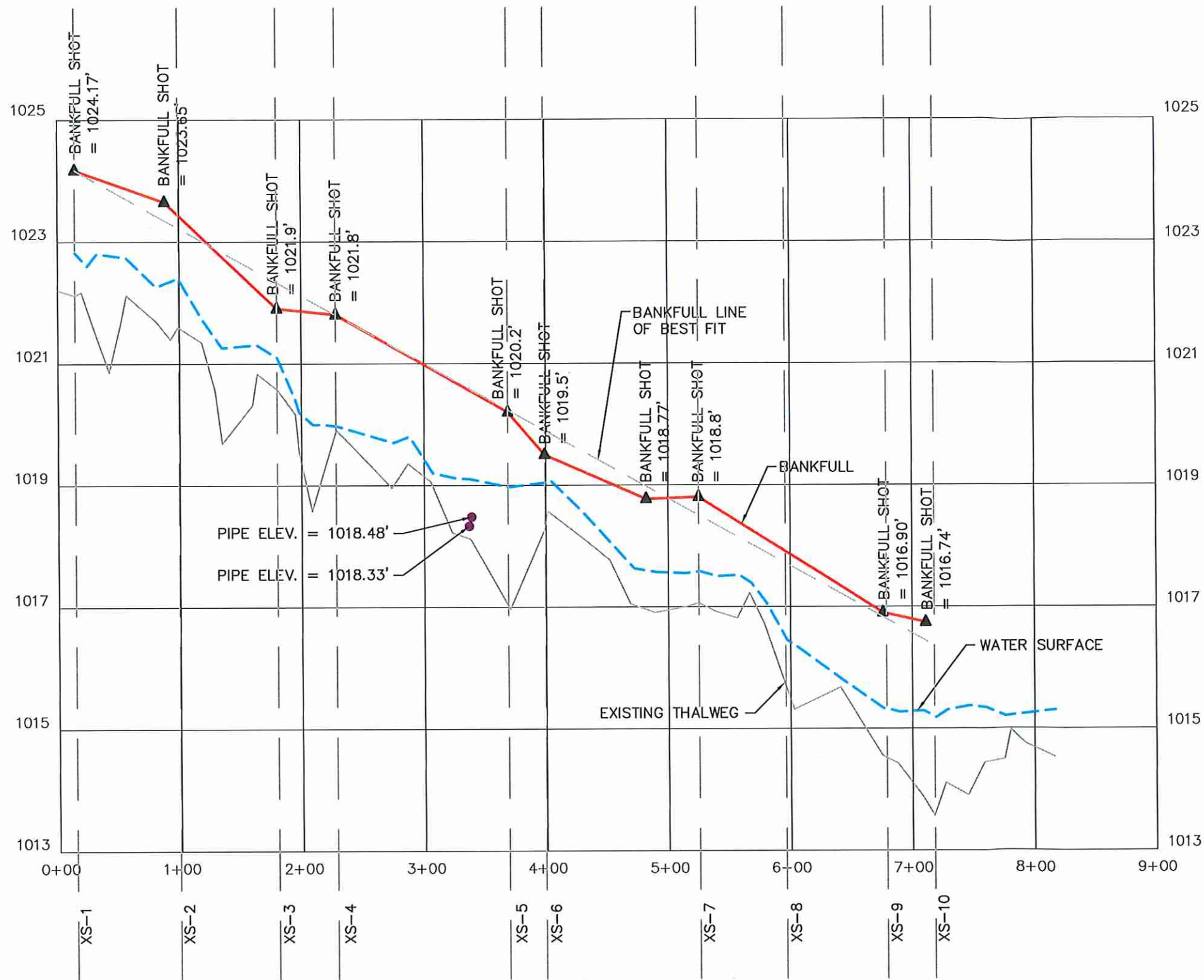
BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

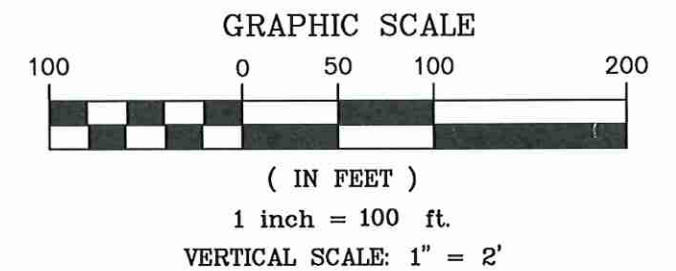
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DRAWN BY:
TML
SURVEYED BY:
TML/NW/CW


REVISIONS:
5/1/2024
PER PAFM REVIEW COMMENTS

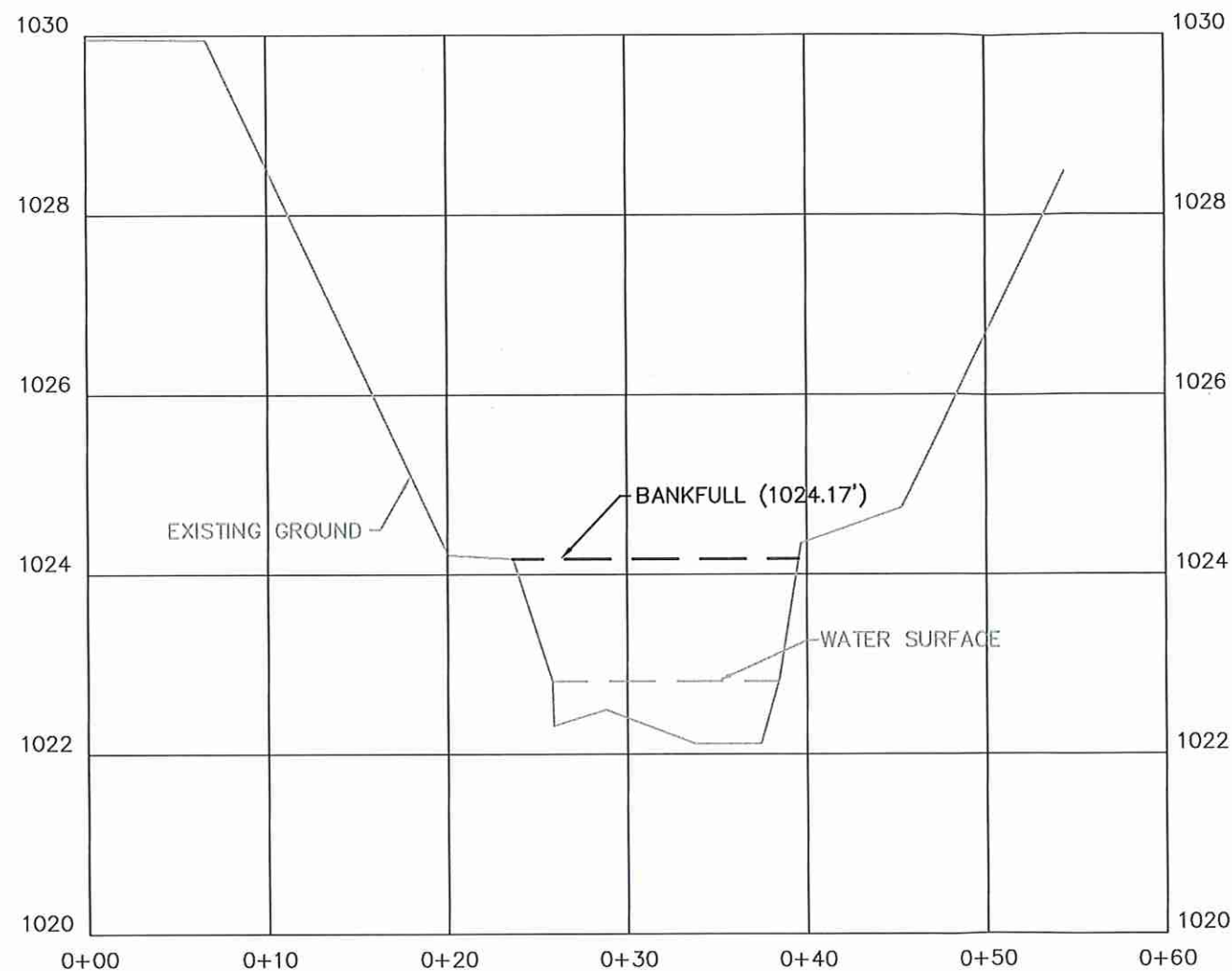
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Benedetto Stream Restoration.dwg
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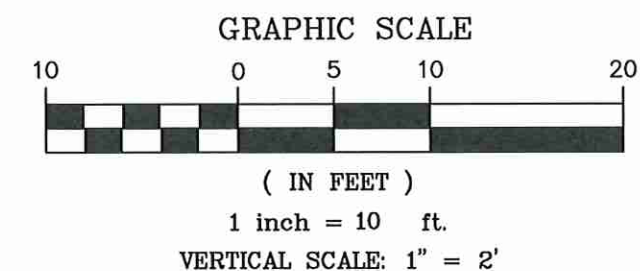
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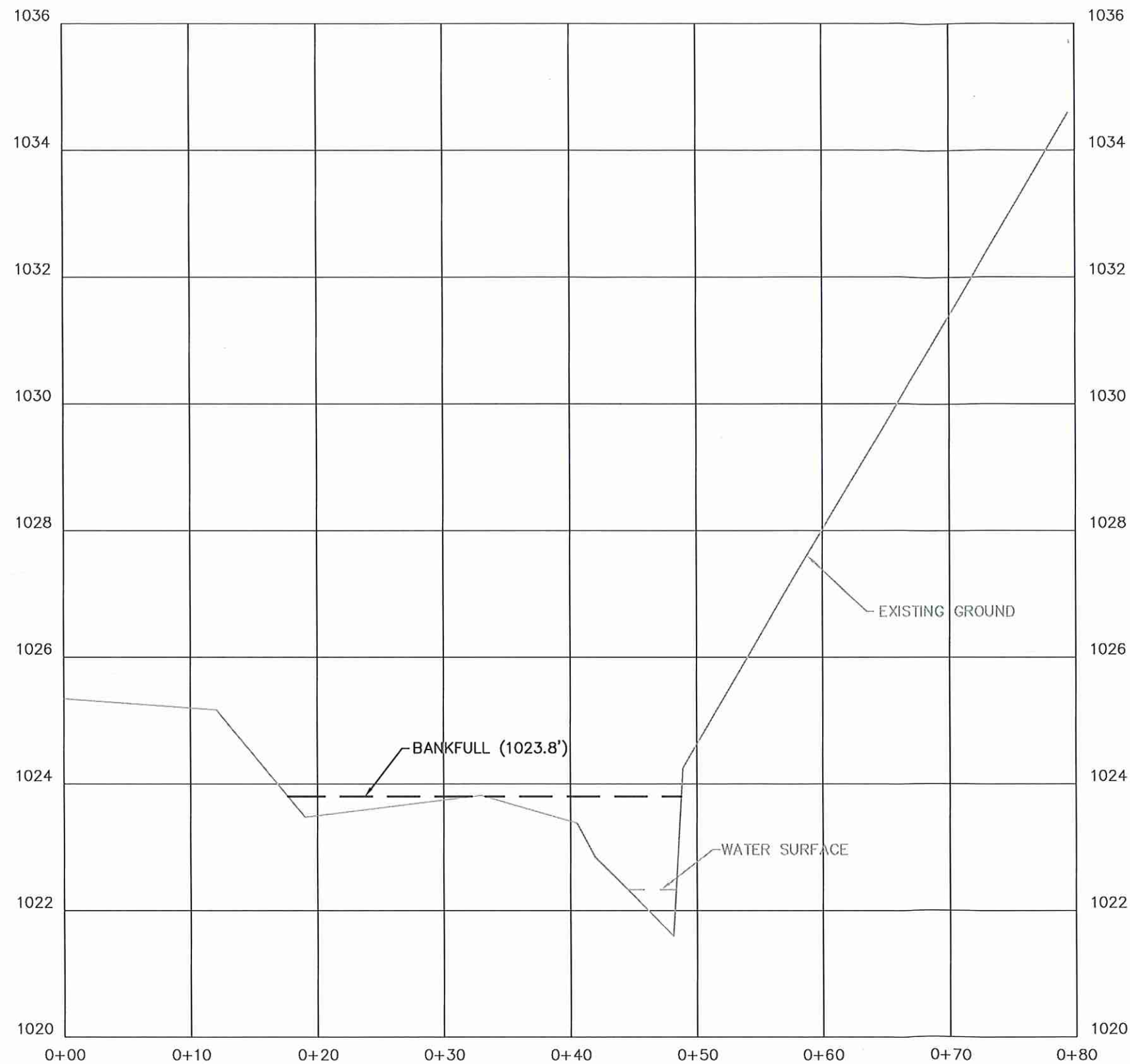
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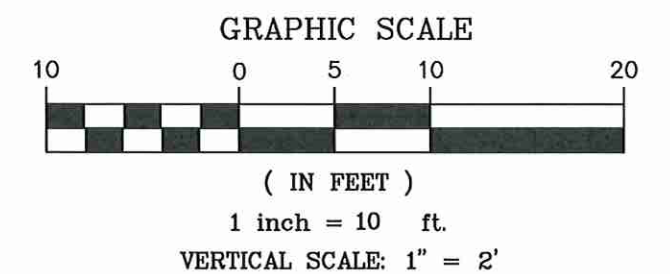
CROSS-SECTION 1
@ STA. 0+14




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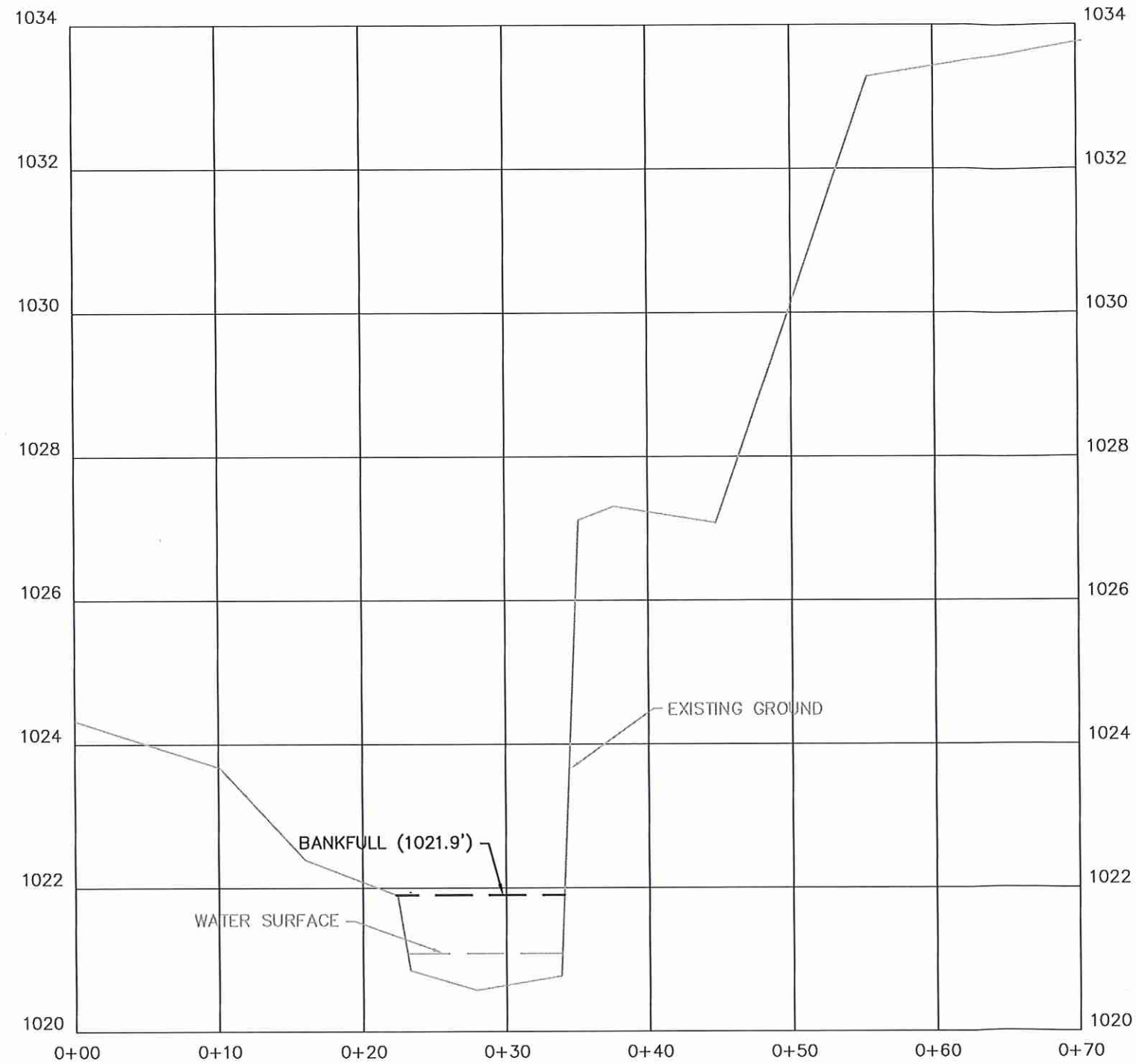
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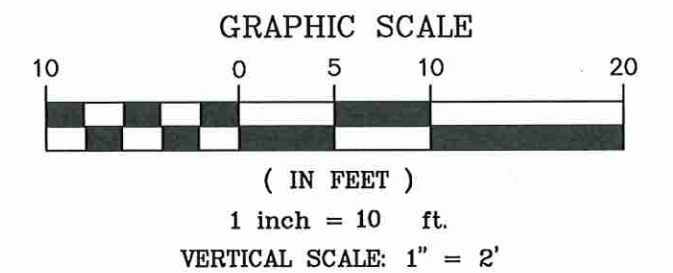



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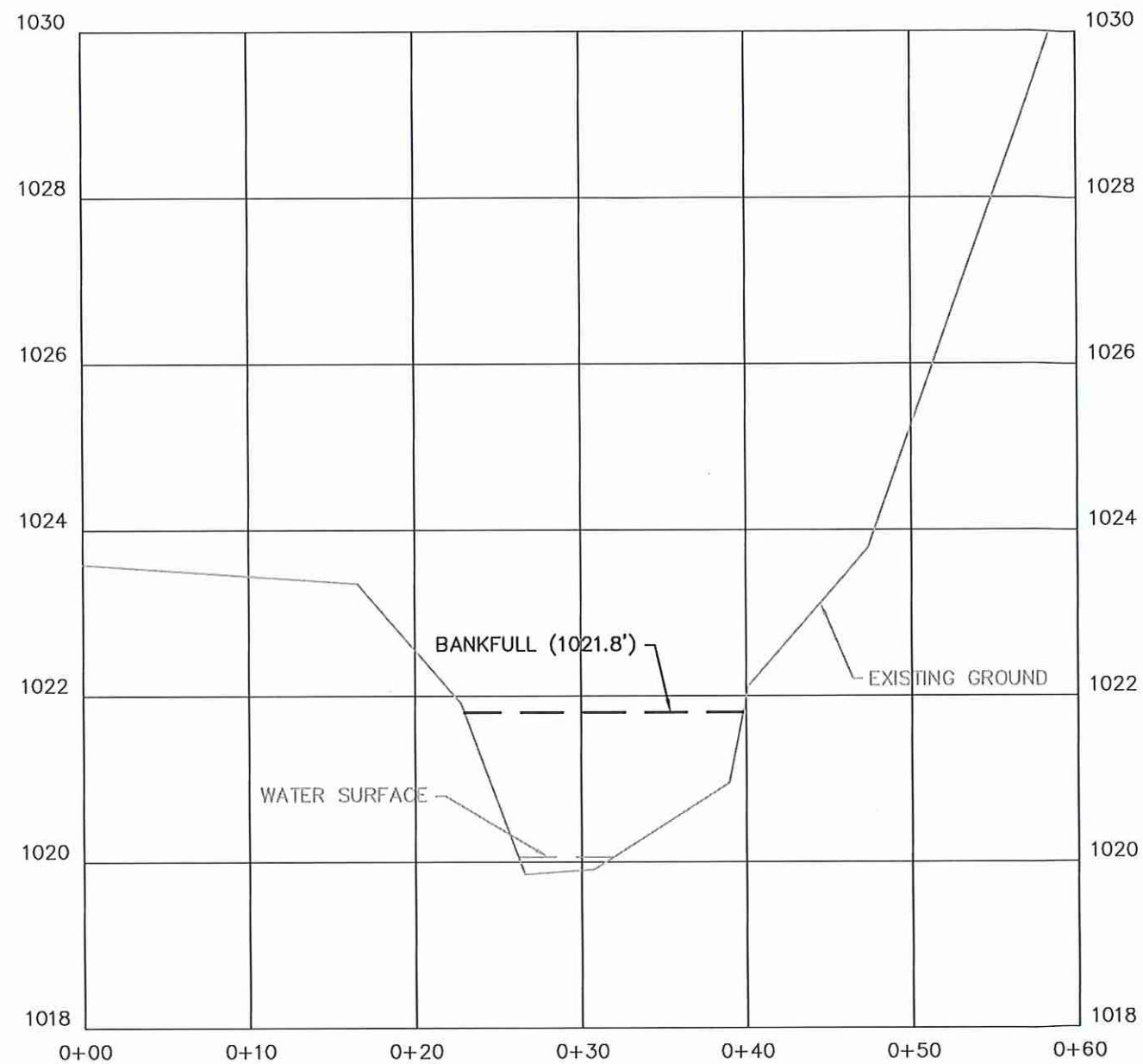
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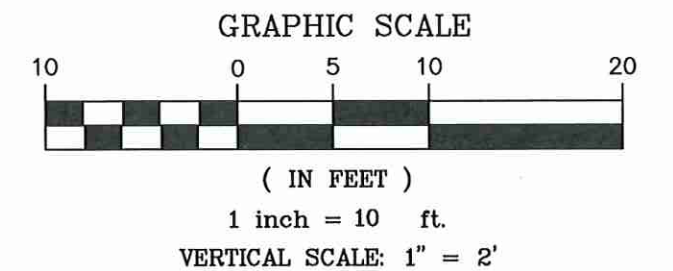
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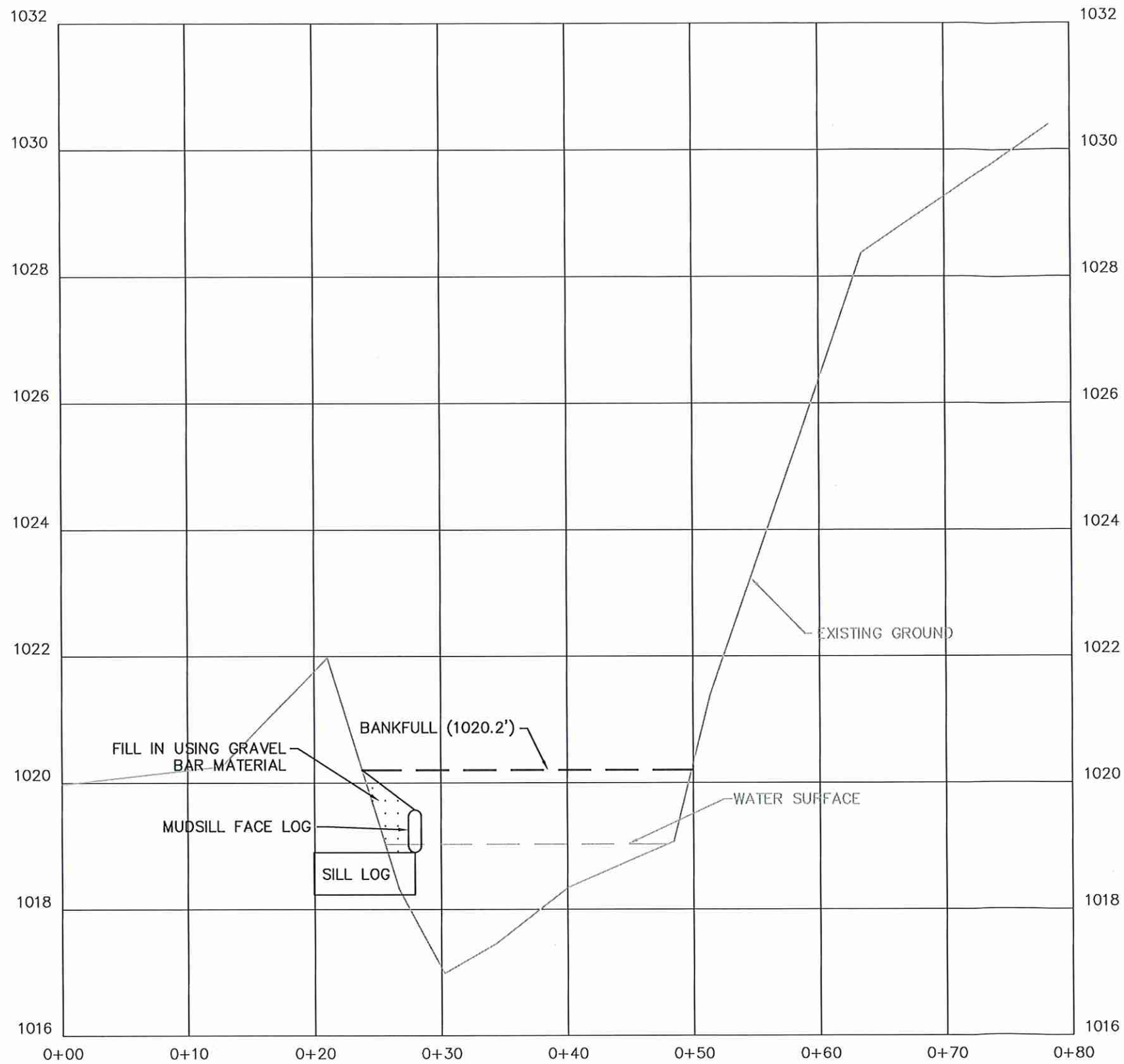
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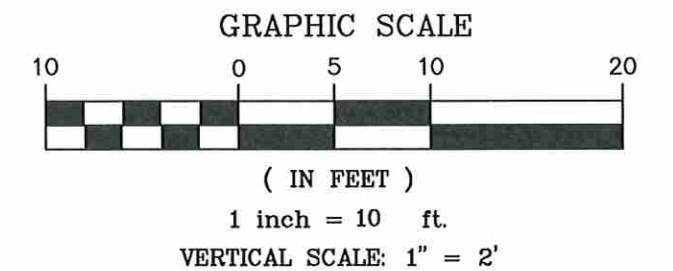
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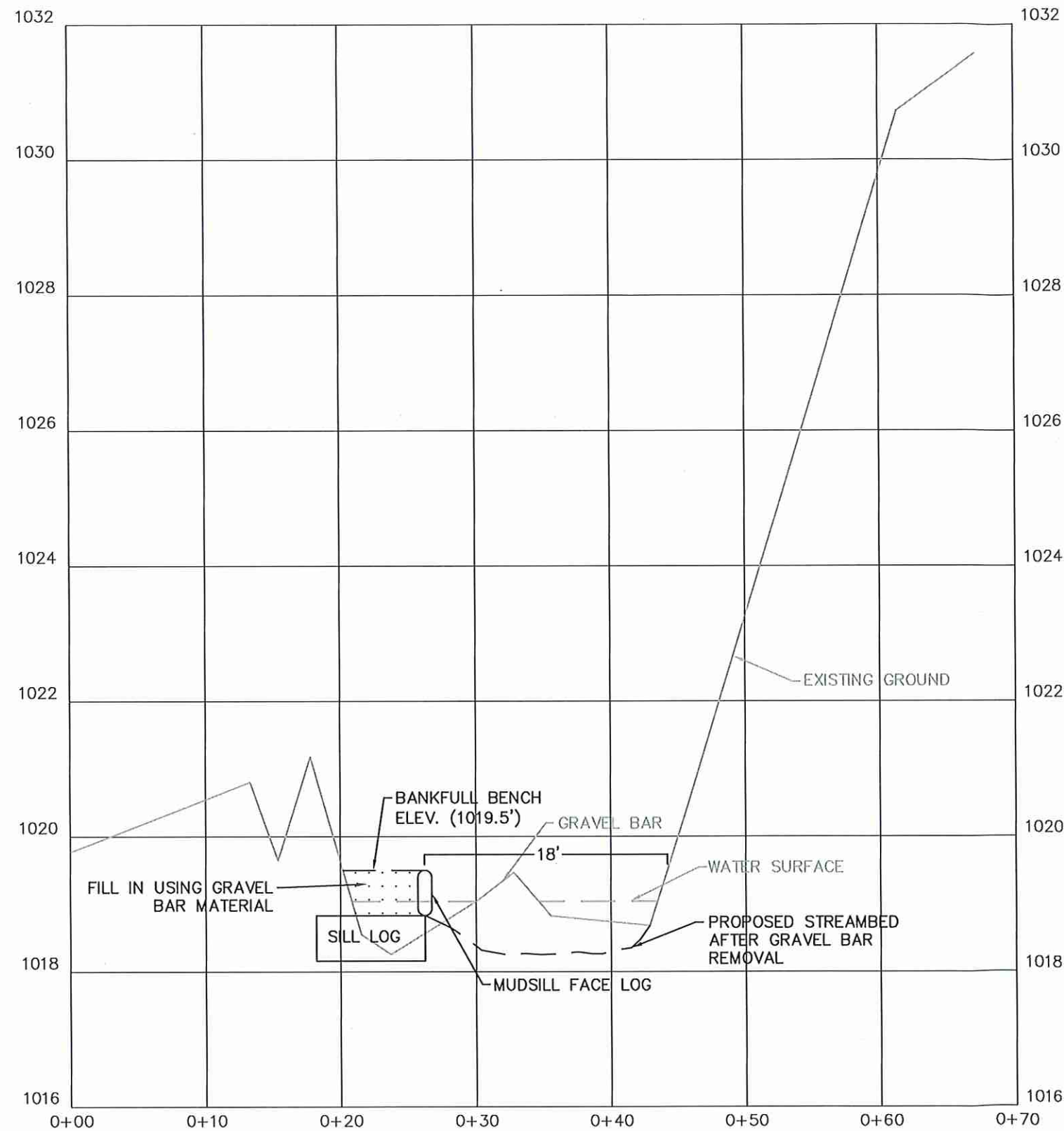


CROSS-SECTION 5
@ STA. 3+69

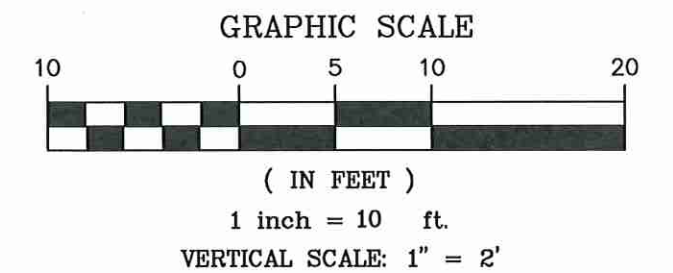


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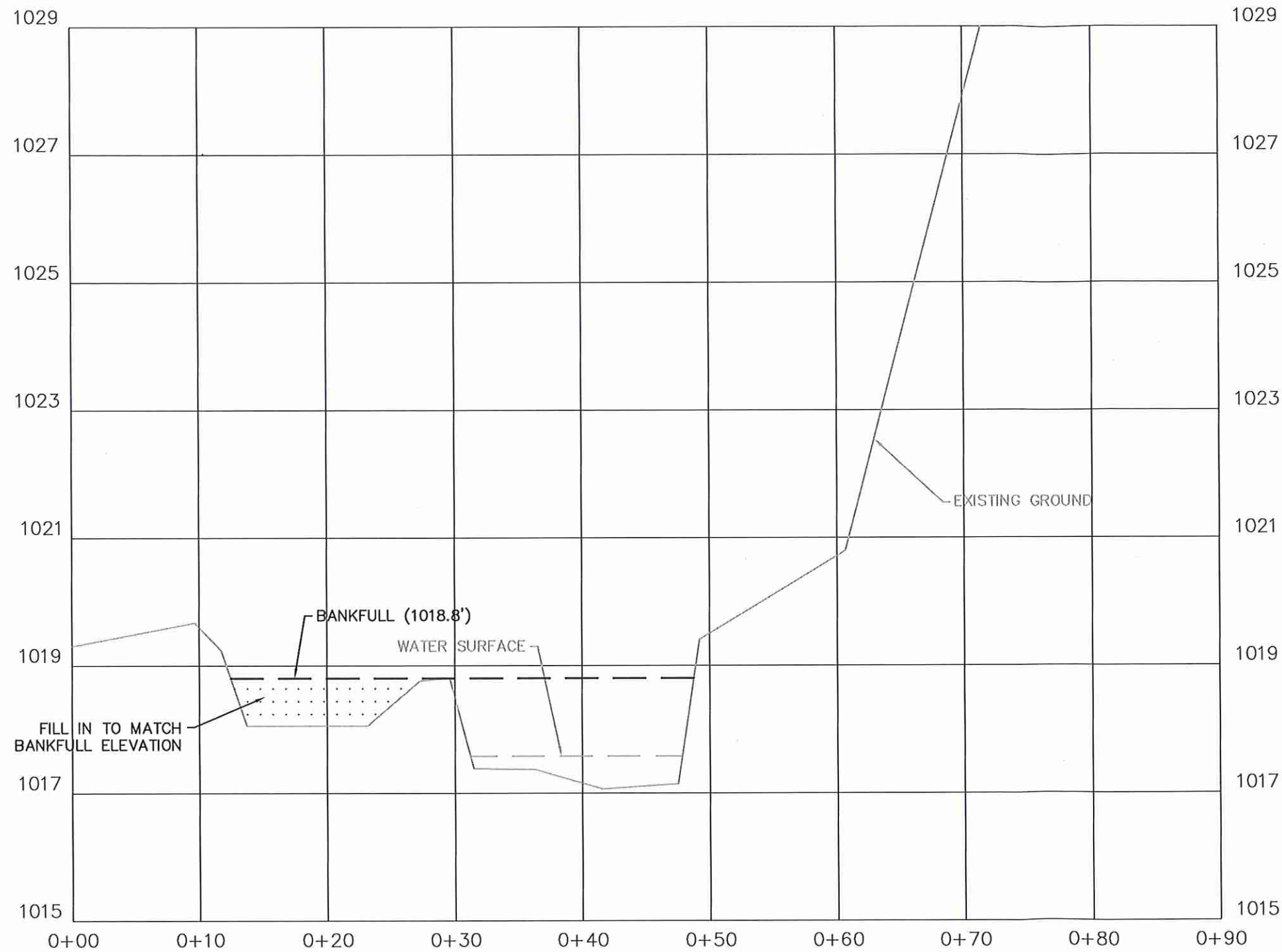
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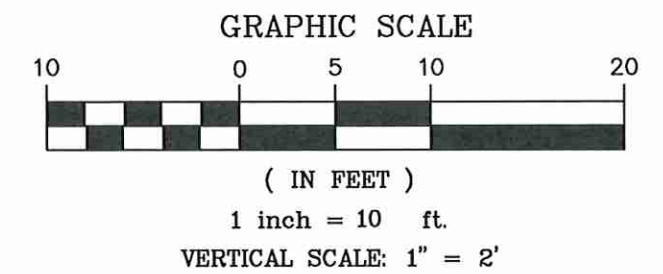
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@ STA. 3+99




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		DESIGNED BY: T.M.L.
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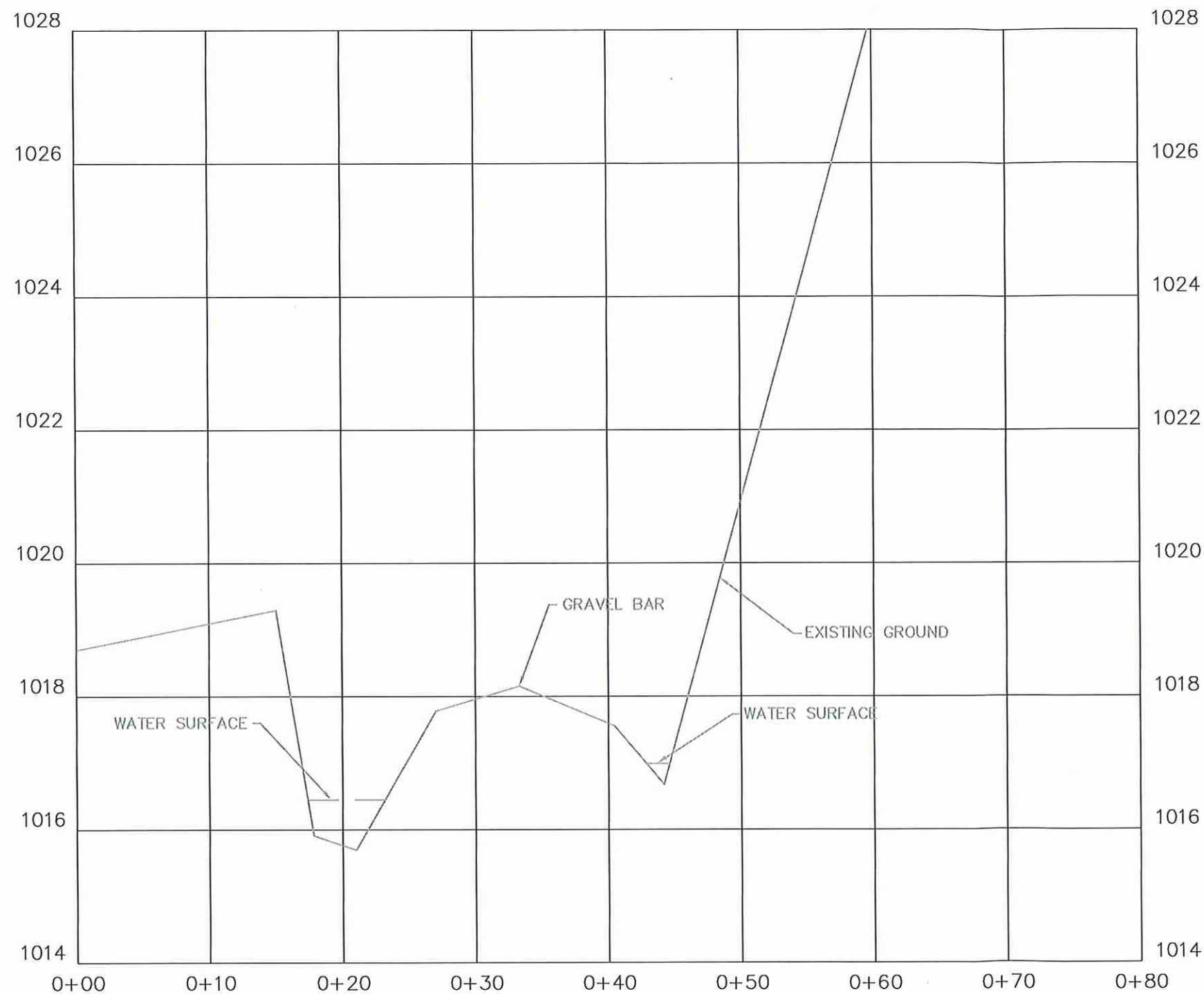
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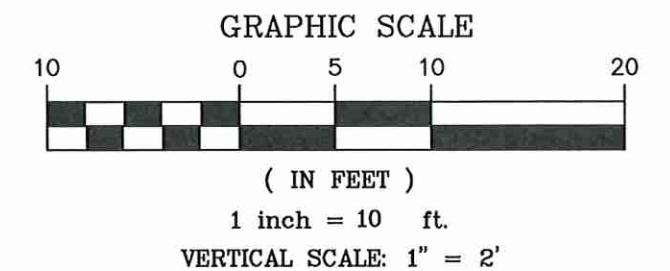



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CROSS-SECTION 7 BENEDETTO STREAM RESTORATION ANTIS TOWNSHIP BLAIR COUNTY, PENNSYLVANIA		DATE: 2/22/2024
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CROSS-SECTION 8
@ STA. 5+96



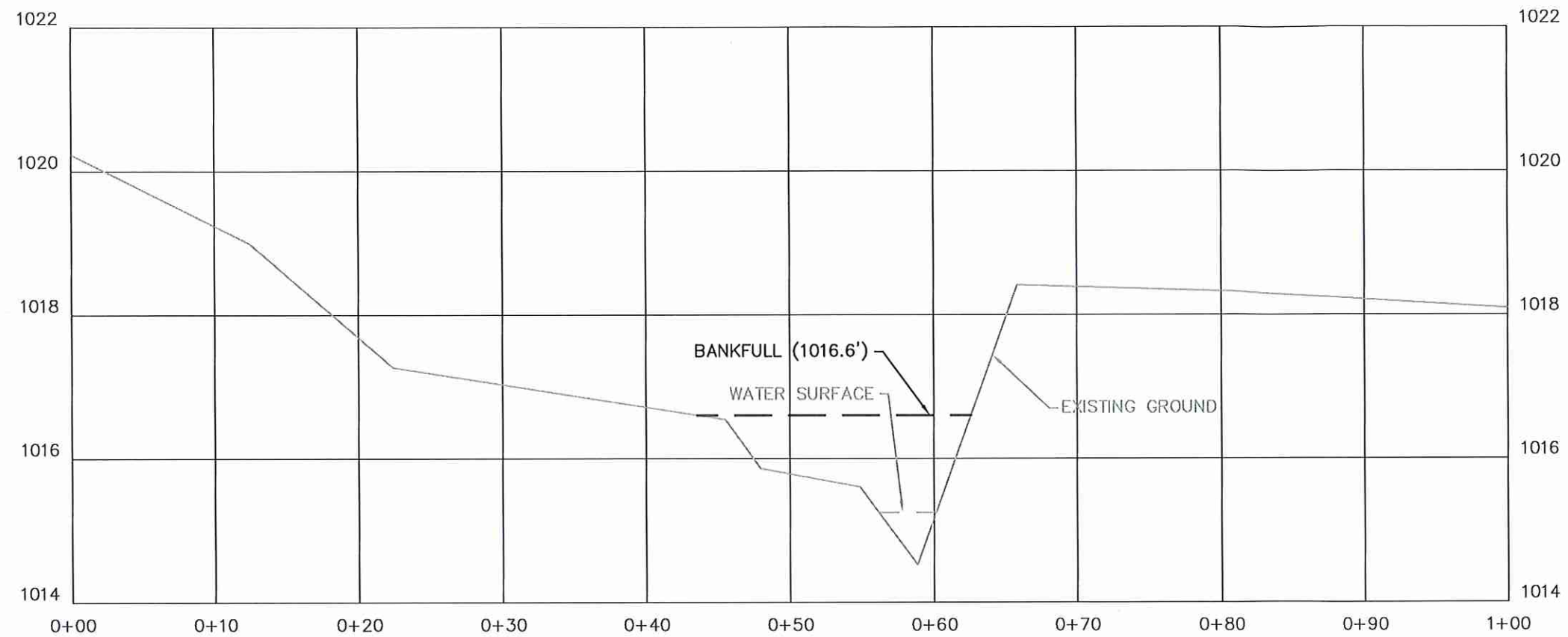


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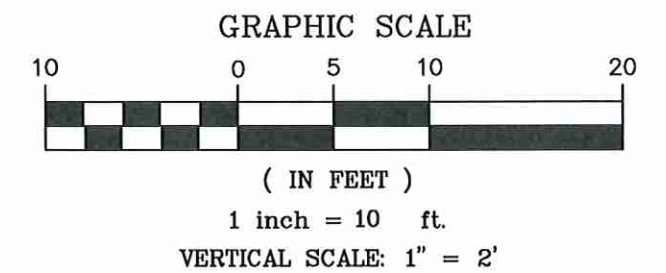
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REVISIONS: — — — —	PAGE NO: 18	SHEET: 11 of 19



CROSS-SECTION 9
@ STA. 6+79



CROSS-SECTION 9

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:

DRAWN BY:

SURVEYED BY:

TML/NW/CW

REVISIONS:

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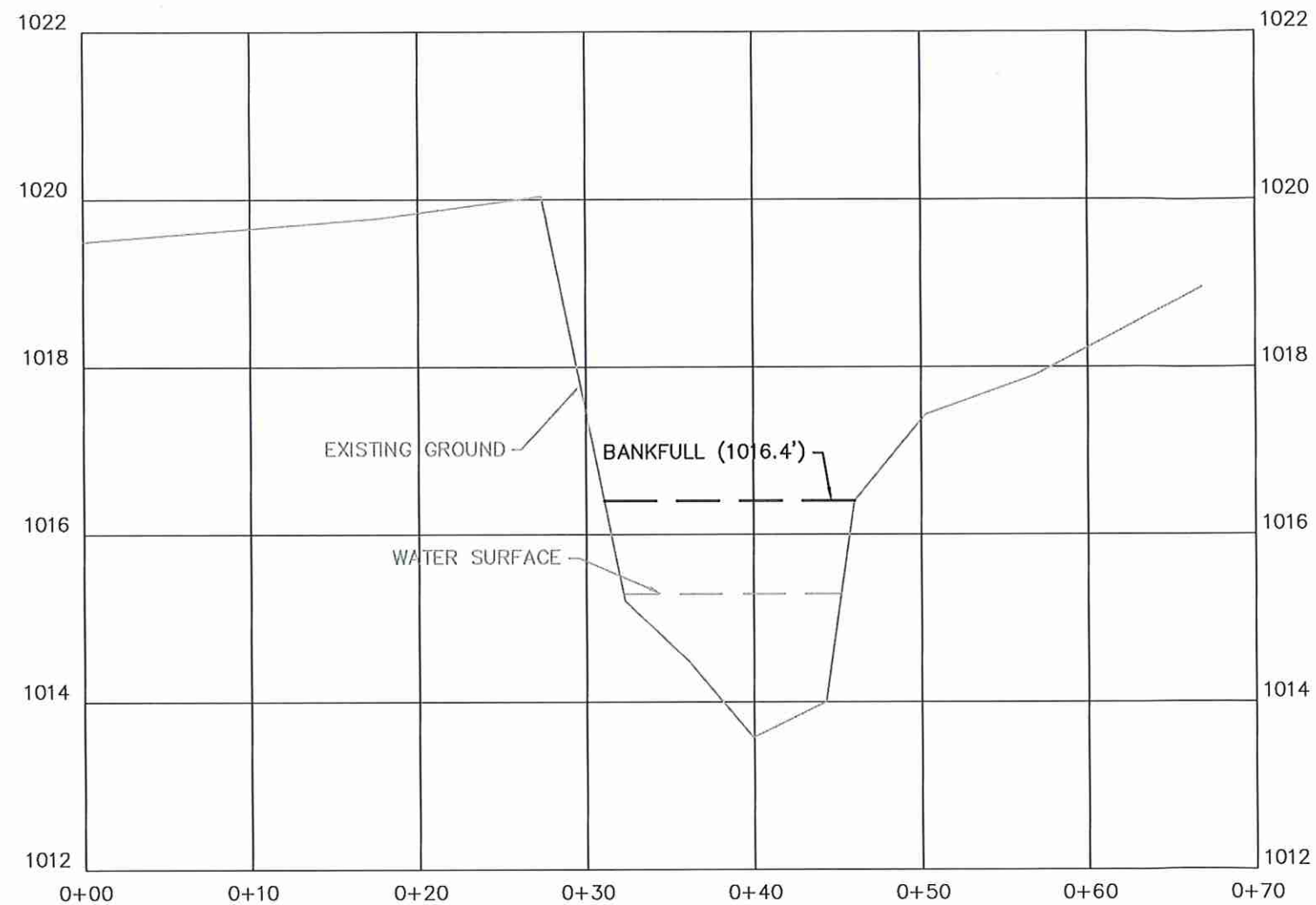
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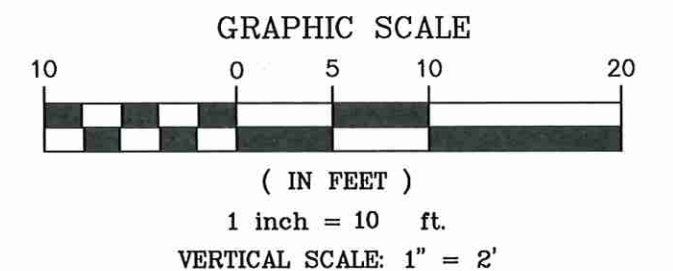
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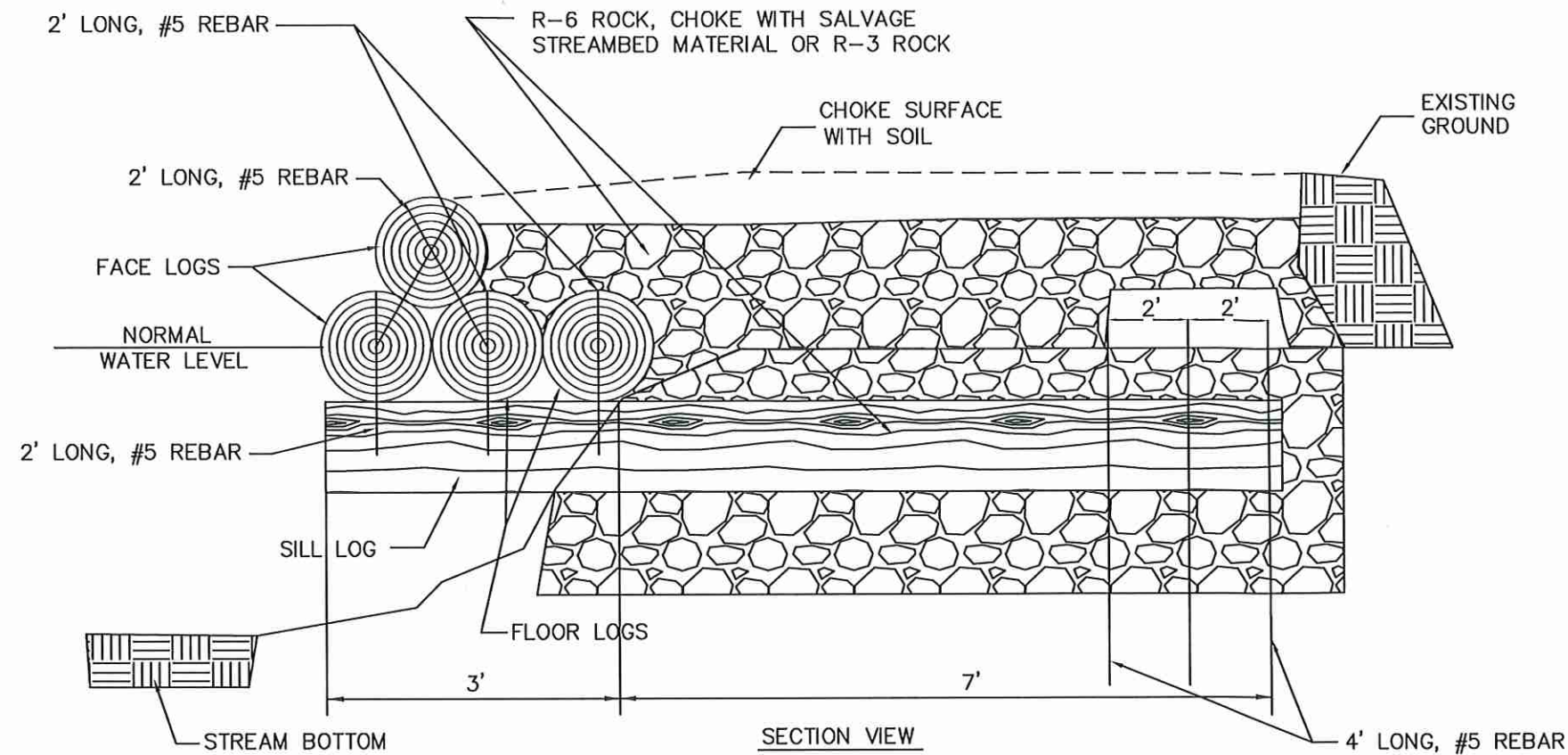
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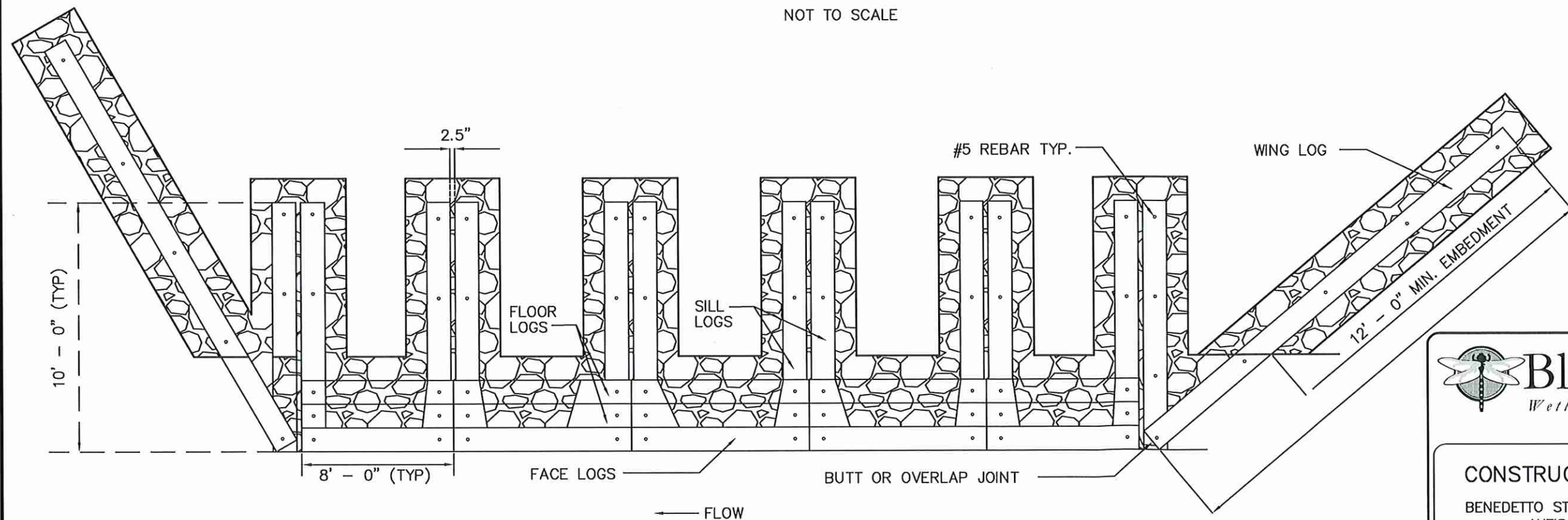
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REVISIONS: - - - - -	CAD FILE: Benedetto Stream Restoration.dwg PAGE NO: 20	SHEET: 13 of 19




MODIFIED MUDSILL
NOT TO SCALE



TIMBER NOTES:

SILL LOGS = 10'
FACE LOGS = 8'
LOG DIA. = 8-12"

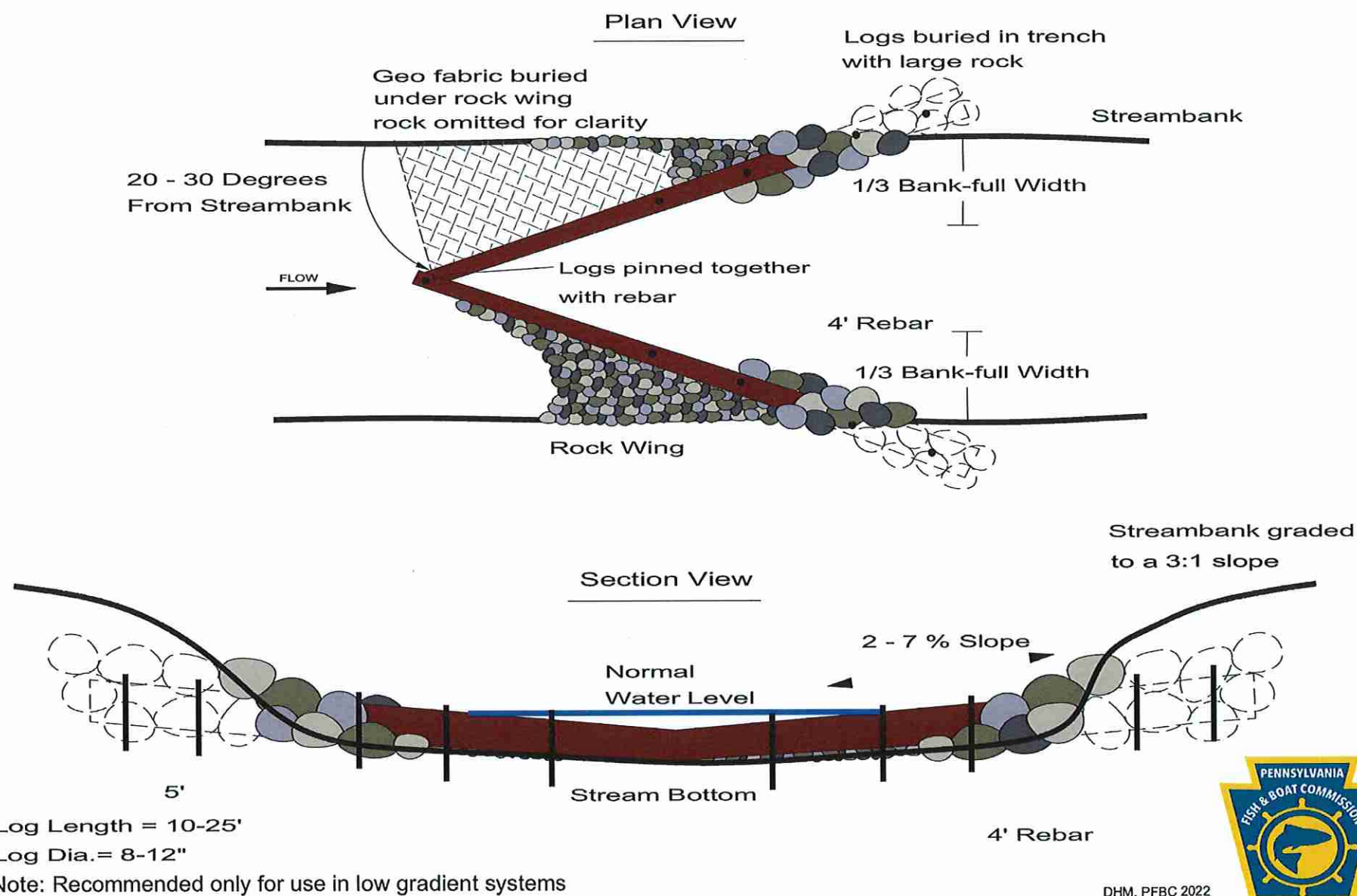
PLAN VIEW
NOT TO SCALE



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<p>CONSTRUCTION DETAIL</p> <p>BENEDETTO STREAM RESTORATION ANTIS TOWNSHIP BLAIR COUNTY, PENNSYLVANIA</p>		<p>DATE: 2/22/2024</p>										
<p>DESIGNED BY: T.M.L.</p> <p>DRAWN BY: T.M.L.</p> <p>SURVEYED BY: T.M.L./N.M.W.</p>		<p>CAD FILE: Benedetto Stream Restoration.dwg</p>										
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LOG CROSS VANE (LOW GRADIENT STRUCTURE)



CROSS VANE LOCATION AND ELEV.

STRUCTURE	STATION	ELEVATION (THROAT)	BANKFULL
CV1	3+43	1019.0'	1020.5'

NOTE: ELEVATIONS ARE LISTED IN TRUE STATE PLANE ELEVATIONS.



CONSTRUCTION DETAIL

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
TML
DRAWN BY:
TML
SURVEYED BY:
TML/NMW

REVISIONS:

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CAD FILE:

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PAGE NO:

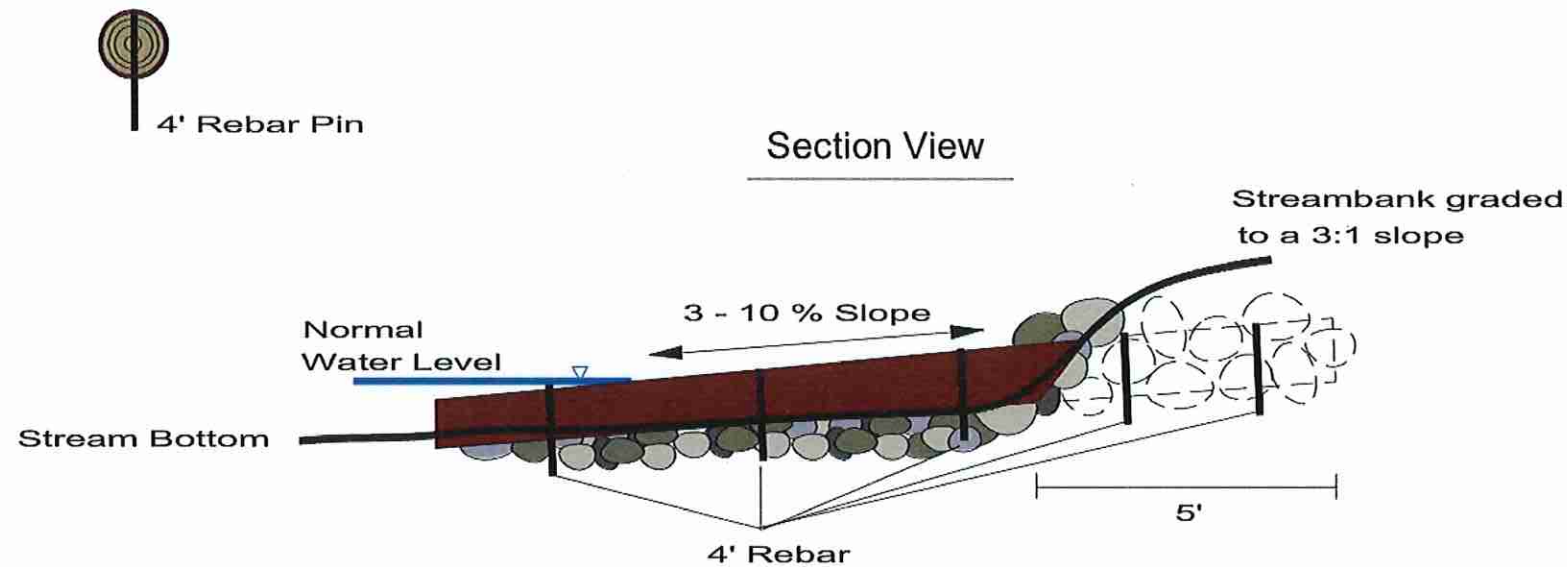
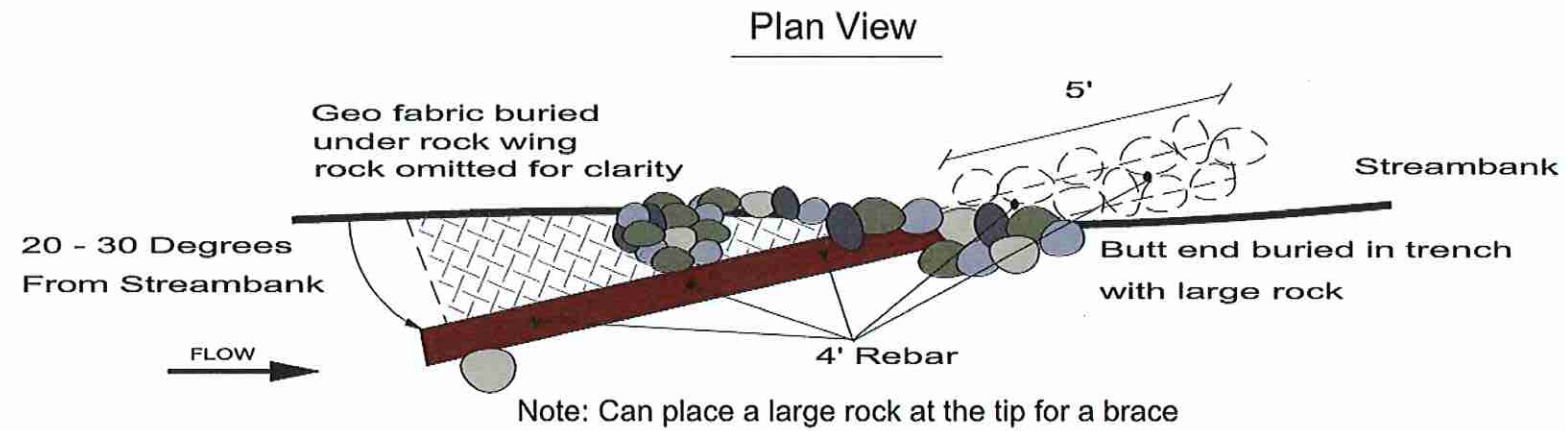
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SINGLE LOG VANE DEFLECTOR



Log Length = 15-25'
Log Dia. = 8-12"

DHM, PFBC 2022



SINGLE LOG VANES LOCATION

STRUCTURE	STATION	NORMAL WATER ELEV.	BANKFULL ELEV.
LV1	0+56	1022.74'	1023.87'
LV2	1+50	1021.28'	1022.47'
LV3	2+14	1020.0'	1021.95'
LV4	2+68	1019.74'	1021.35'

NOTE: ELEVATIONS ARE LISTED IN TRUE STATE PLANE ELEVATIONS.



CONSTRUCTION DETAIL

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
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TML
SURVEYED BY:
TML/NMW

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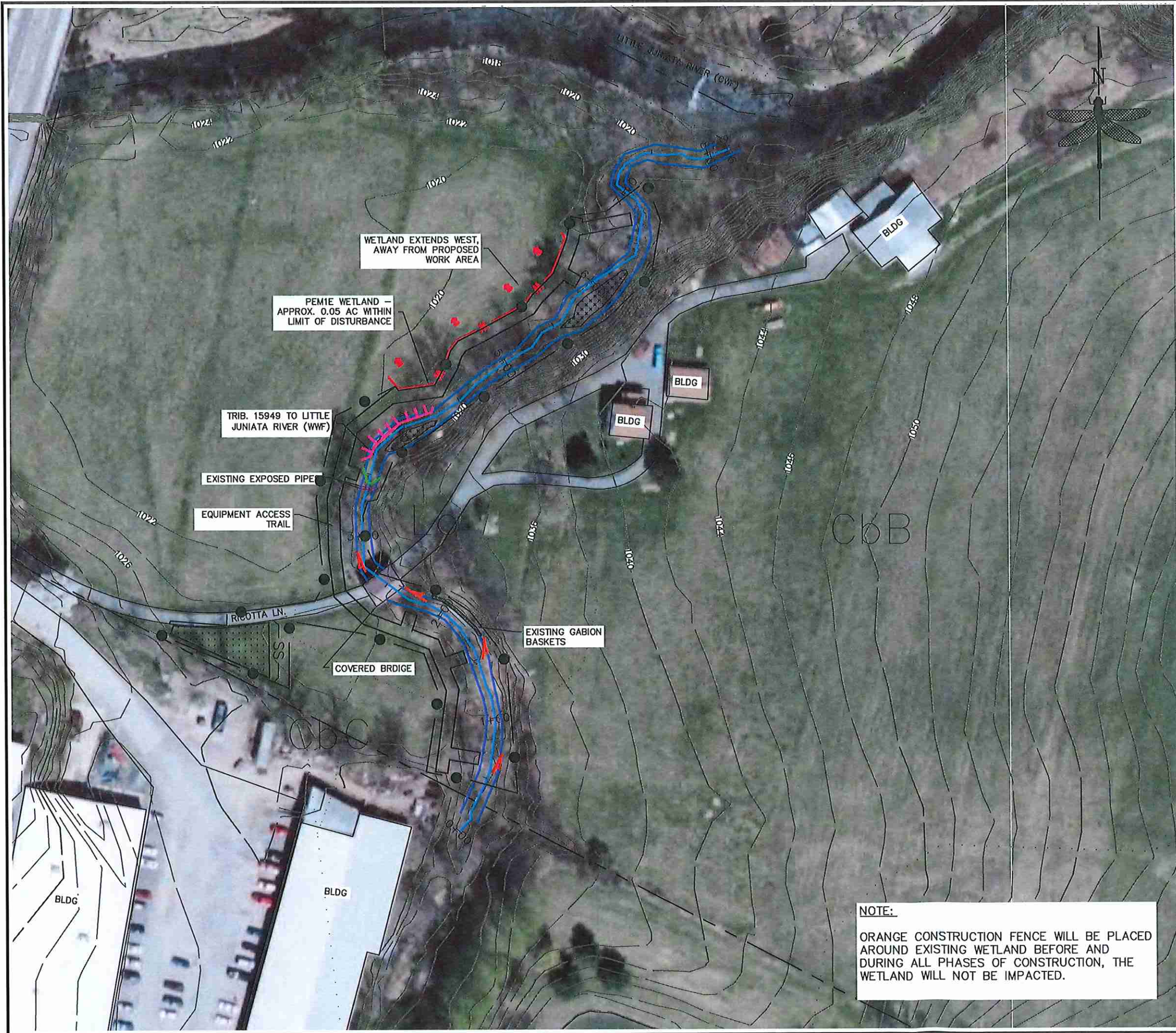
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LEGEND

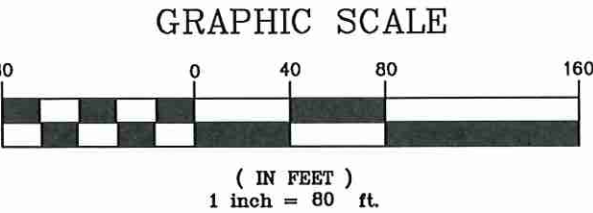
- 1300— EXISTING CONTOUR
- - - - EXISTING STREAM
- SOIL TYPE
- - - - PROPERTY LINE
- SURVEYED THALWEG
- EDGE OF WATER
- LIMIT OF DISTURBANCE
- W — EXISTING WETLAND
- [Cross-hatched] EXISTING GRAVEL BAR
- [Dotted] STAGING AREA
- [Hatched] EQUIPMENT ACCESS TRAIL
- SS — COMPOST FILTER SOCK
- [Pink zigzag] PROPOSED MUDDSILL
- [Green V-shape] PROPOSED LOG CROSS VANE
- [Red A-shape] PROPOSED SINGLE LOG VANE

USDA – NRCS MAPPED SOILS:

CbB Clarksburg silt loam (3–8% slopes)

CbC Clarksburg silt loam (8–15% slopes)

Lo Linden soils



NOTE:

ORANGE CONSTRUCTION FENCE WILL BE PLACED AROUND EXISTING WETLAND BEFORE AND DURING ALL PHASES OF CONSTRUCTION, THE WETLAND WILL NOT BE IMPACTED.

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EROSION AND SEDIMENT CONTROL PLAN

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE: 2/22/2024

DESIGNED BY: —

DRAWN BY: CRC/TML

SURVEYED BY: CRC/TML

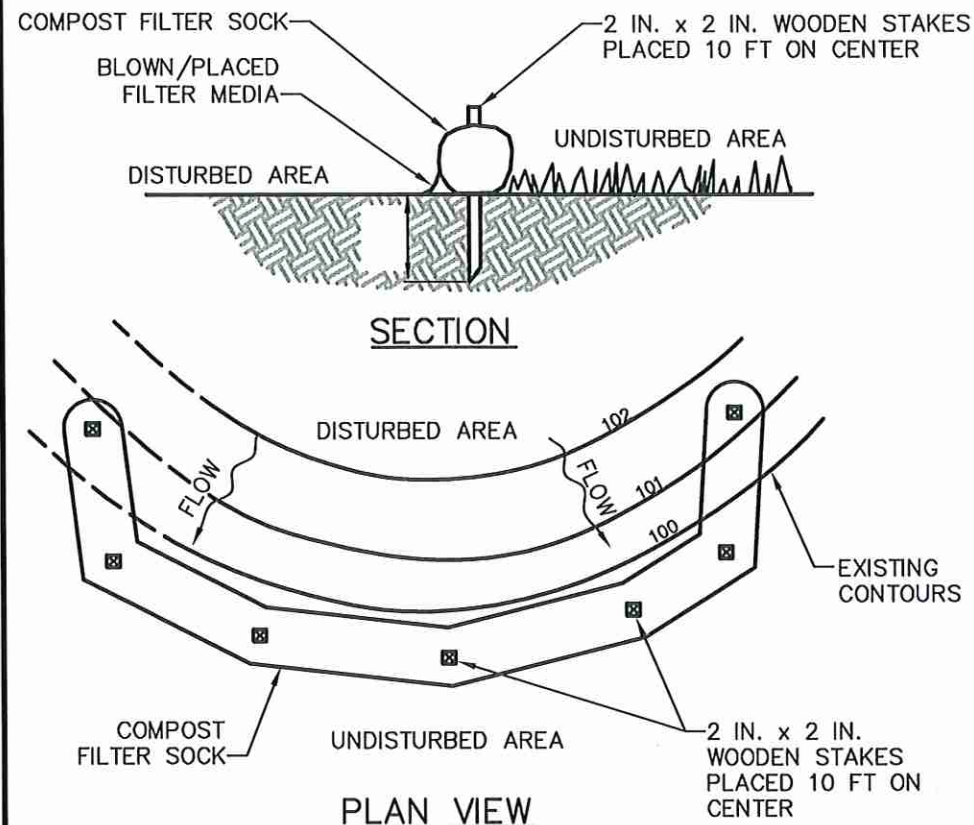
REVISIONS:

NO.	DATE	DESCRIPTION
1	2/22/2024	PER PACEP REVIEW COMMENTS

CAD FILE: Benedetto Stream Restoration.dwg

PAGE NO: —

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NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE

TWO-PLY SYSTEMS

INNER CONTAINMENT NETTING	HDPE BIAXIAL NET
	CONTINUOUSLY WOUND
	FUSION-WELDED JUNCTURES
INNER CONTAINMENT NETTING	3/4" X 3/4" MAX. APERTURE SIZE
	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)
	3/16" MAX. APERTURE SIZE

SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.

FILTREXX & JMD

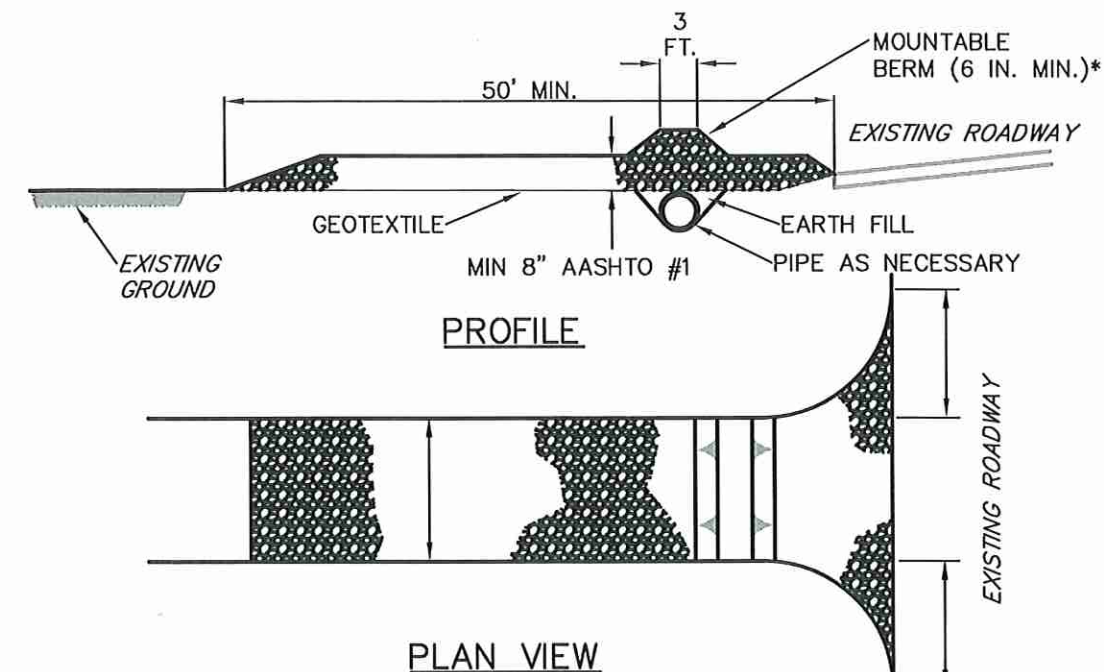
TABLE 4.2
COMPOST STANDARDS

ORGANIC CONTENT MATTER	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) Maximum

FILTREXX

TABLE 4.1
COMPOST SOCK FABRIC
MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADEABLE	PHOTO-DEGRADEABLE	BIO-DEGRADEABLE	PHOTO-DEGRADEABLE	PHOTO-DEGRADEABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	3/8"
TENSILE STRENGTH		26 psi	26 psi	44 psi	202 psi
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 hr.	23% AT 1000 hr.		100% AT 1000 hr.	100% AT 1000 hr.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.


RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE

 BluAcres LLC <i>Wetlands and Wildlife Habitat</i> 12 BLACK STREET, WILLIAMSBURG, PA 16693 (814) 407-4738 : www.bluacres.com	
EROSION AND SEDIMENT CONTROL DETAILS BENEDETTO STREAM RESTORATION ANTIS TOWNSHIP BLAIR COUNTY, PENNSYLVANIA	
DATE: 2/22/2024	DESIGNED BY: TML
DRAWN BY: TML	SURVEYED BY: TML/NMW
REVISIONS: - - - -	CAD FILE: Benedetto Stream Restoration.dwg PAGE NO: - SHEET: 18 of 19

STANDARD EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS , THE LANDOWNER, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMP'S SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL COSERVATION DISTRICT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMNT BMP'S SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY.
15. A LOG SHOWNG DATES THAT E&S BMP'S WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE SAME TIME OF INSPECTION.
16. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
17. ALL SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS.
22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE.
26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
27. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION.
28. E&S BMP'S SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS THAT TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

- INTENT OF CONSERVATION PROGRAM:
THE INTENT OF THIS PROGRAM IS TO PREVENT ACCELERATED EROSION OF THE EXPOSED SITE SOILS DURING THE CONSTRUCTION AND PERMANENT LIFE PERIODS OF THE PROJECT. THE PROGRAM REQUIRES RETENTION OF SEDIMENTS ON THE CONSTRUCTION SITE TO MINIMIZE THE IMPACT OF EARTH DISTURBANCE ON EXISTING STREAMS AND ADJACENT PROPERTY OWNERS. THESE OBJECTIVES WILL BE ACHIEVED BY MINIMIZING THE EXPOSURE TIME OF POTENTIALLY ERODIBLE SOILS TO RUNOFF AND INSTALLATION OF THE TEMPORARY AND PERMANENT CONSERVATION PRACTICES IN PROPER SEQUENCE WITH CONSTRUCTION. THE INTENT OF THIS PROGRAM SHOULD BE UNDERSTOOD AND IMPLEMENTED THROUGHOUT THE ENTIRE DEVELOPMENT. THE VARIOUS CONSTRUCTION TRADES SHOULD BE APPRISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNDUE DISTURBANCE OF PREPARED AND PROTECTED SURFACES.
- SURFACE STABILIZATION CRITERIA:
ALL DENUDED SOIL SURFACES, INCLUDING SOIL STOCKPILES, ARE SUBJECT TO EROSION AND SHALL BE STABILIZED IMMEDIATELY EITHER AS TEMPORARILY OR PERMANENT COVER IN ACCORDANCE WITH SPECIFICATIONS BELOW. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MAY BE SEEDDED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE SEEDDED WITH A PERMANENT SEED MIXTURE AND MULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. DURING NON-GERMINATION PERIODS, MULCH SHALL BE APPLIED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. GERMINATION PERIODS SHALL BE FROM APRIL 1ST TO JUNE 15TH AND AUGUST 15TH TO OCTOBER 15TH. AT THE BEGINNING OF THE NEXT GERMINATION PERIOD, MULCHED AREAS SHALL BE LIMED, FERTILIZED AND SEEDDED, WITH EITHER A TEMPORARY OR PERMANENT SEED MIXTURE, AND REMULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
- A. TEMPORARY COVER ON DISTURBED AREAS:
DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDDED AND MULCHED WITH A TEMPORARY COVER. PREPARATION OF THE SURFACE, FERTILIZATION AND SEEDING WITH EITHER ANNUAL OR WINTER RYE GRASS SHALL BE DONE IN COMPLIANCE WITH PENNSYLVANIA DEP AND THE COUNTY CONSERVATION DISTRICT (CCD) STANDARD FOR "TEMPORARY COVER FOR CRITICAL AREAS." GROUND LIMESTONE SHALL BE APPLIED AT THE RATE OF 190 LBS/1,000 SF. FERTILIZER FOR TEMPORARY STABILIZATION SHALL BE APPLIED AT A RATE OF 50-50-50 PER ACRE. THE FERTILIZER AND LIMESTONE SHALL BE WORKED INTO THE SOIL TO A DEPTH OF FOUR (4) INCHES PRIOR TO SEEDING. ANNUAL RYEGRASSES SHALL BE APPLIED AT A RATE OF 1.5 LB/1,000 SF AND WINTER RYE AT A RATE OF 3.5 LBS/1,000 SF AND MULCHED WITH HAY OR STRAW AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE AND NON ASPHALTIC EMULSION, IN ACCORDANCE WITH THE CCD STANDARD FOR "MULCHING."
- B. PERMANENT COVER ON DISTURBED AREAS:
ALL DISTURBED AREAS MUST BE SEEDDED AND MULCHED WITH A PERMANENT COVER. AREAS SHOULD BE SEEDDED WITH A PERMANENT SEED MIXTURE AS DEFINED ABOVE. GROUND LIMESTONE SHALL BE APPLIED AT THE RATE OF 190 LBS/1000 SF OR 4 TO 6 TONS/ACRE. THE FERTILIZER AND LIMESTONE SHALL BE WORKED INTO THE SOIL TO A DEPTH OF FOUR (4) INCHES PRIOR TO SEEDING. FERTILIZER 10-20-20 FOR PERMANENT STABILIZATION MINIMUM IS 930 LBS/ACRE PER PENN STATE AGRONOMY GUIDE. PREPARATION OF THE SEEDBED, FERTILIZATION AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH APPLICABLE MCCD STANDARDS AND THE ADVICE OF THE PENNSYLVANIA STATE UNIVERSITY AGRICULTURAL EXTENSION SERVICE. NEW SEEDINGS ON FLAT AND MILD SLOPE AREAS SHALL BE MULCHED WITH STRAW AT 2 TO 3 BALES/1000 SF OR 3 TONS/ACRE. NEW SEEDINGS ON SLOPES AND WITHIN MODERATE DRAINAGE CHANNELS, SHALL BE SIMILARLY MULCHED WITH STRAW, AND RUNOFF DIVERTED FROM THE SEED BEDS UNTIL VEGETATION IS ESTABLISHED.
- C. MAINTENANCE OF TEMPORARY SEDIMENTATION CONTROL STRUCTURES:
MAINTENANCE OF ALL TEMPORARY SEDIMENTATION CONTROL STRUCTURES SHALL BE IN ACCORDANCE WITH THESE PLANS. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH STORM EVENT AND ON A WEEKLY BASIS, ALL WEEKLY INSPECTION REPORTS TO BE KEPT ON SITE. ALL MAINTENANCE WORK MUST BE PERFORMED IMMEDIATELY.
- SEQUENCE OF CONSTRUCTION:
- 1) ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY OF THE FOLLOWING STAGES ARE INITIATED. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.
 - 2) AT LEAST 3 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PLACE A PA 1 CALL TO HAVE ALL UTILITIES MARKED OUT PRIOR TO CONSTRUCTION.
 - 3) AT THE END OF EACH WORK DAY, ALL DISTURBED AREAS MUST BE STABILIZED WITH SEEDING/MULCH AND EROSION CONTROL MULCH BLANKETS FOR SLOPES STEEPER THAN 3H:1V. AREAS AT FINAL GRADE MUST BE INSPECTED AT THE END OF EACH WORK DAY THROUGHOUT CONSTRUCTION. ANY EROSION MUST BE CORRECTED IMMEDIATELY.
 - 4) INSTALL TEMPORARY SEDIMENT CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLAN VIEW, AND AS NECESSARY FOR COMPLIANCE WITH CHAPTER 102.
 - 5) STAGE EARTHWORK ACTIVITY TO MINIMIZE EROSION, COMPLETE UPSTREAM CONSTRUCTION AND EXCAVATION WORK PRIOR TO DOWNSTREAM WORK.
 - 6) ALL WORK SHALL BE DONE DURING LOW FLOW CONDITIONS, AVOIDING PERIODS DURING OR IMMEDIATELY FOLLOWING HEAVY PRECIPITATION.
 - 7) EQUIPMENT WORK WILL BE DONE FROM THE STREAMBANK, WHERE POSSIBLE.
 - 8) INSTALL 3 UPSTREAM LOG VANES BEFORE BRIDGE AT LOCATIONS SHOWN ON PLANS.
 - 9) INSTALL LOG VANE AND CROSS VANE LOCATED BELOW THE BRIDGE AS SHOWN ON THE PLANS.
 - 10) REMOVE UPSTREAM GRAVEL BAR AND INSTALL MODIFIED MUDSILL.
 - 11) REMOVE DOWNSTREAM GRAVEL BAR AND INSTALL BANKFULL BENCH AT LOCATION SHOWN ON THE PLANS.
 - 12) INSTALL DUMPED ROCK PROTECTION ON RIVERBANK RIGHT AT THE 2 LOCATIONS SHOWN ON THE PLANS.
 - 13) THE ONLY WORK TO TAKE PLACE IN THE WET CONDITION IS THE PLACEMENT OF THE STREAM STRUCTURES.
 - 14) SEED AND STABILIZE THE WORK AREA.

EROSION AND SEDIMENT CONTROL NOTES

- 1) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSISTENT WITH CHAPTER 102 AND PADEP'S EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MOST RECENT VERSION).
 - 2) THESE PLANS REFLECT THE MINIMUM E&S REQUIREMENTS BASED ON ANTICIPATED AND PROPOSED ACTIVITIES. OWNER/APPLICANT OR HIS/HER DULY-AUTHORIZED REPRESENTATIVE IS RESPONSIBLE FOR IMPLEMENTATION OF THE E&S CONTROL MEASURES CONTAINED IN THIS PLAN AND ANY OTHER PROCEDURES THAT MAY BE NECESSARY FOR COMPLIANCE WITH THE PREVAILING REGULATIONS.
 - 3) GROUND DISTURBANCE ACTIVITIES SHALL BE MINIMIZED TO THE EXTENT PRACTICAL AND ALL AREAS SHALL BE STABILIZED PROMPTLY.
 - 4) ALL E&S MEASURES SHALL BE INSPECTED WEEKLY, AT A MINIMUM, AND FOLLOWING ALL STORM EVENTS. DEFECTIVE, DAMAGED OR OTHERWISE INSUFFICIENT E&S MEASURES SHALL BE REPLACED WITHOUT DELAY. WEEKLY INSPECTION REPORTS SHALL BE KEPT ON SITE.
 - 5) ALL TEMPORARY AND PERMANENT SOIL STABILIZATION TO BE CONDUCTED IN ACCORDANCE WITH PA DEP AND THE COUNTY CONSERVATION DISTRICT (CCD) STANDARDS.
 - 6) TEMPORARY SEEDING OF ANY DISTURBED AREAS OR STOCKPILES (EXCEPT PROPERLY COVERED OR MANAGED STOCKPILES) SHALL BE CONDUCTED WITHIN 4 DAYS OF DISTURBANCE. TEMPORARY SEEDING TO CONSIST OF 40 LBS/AC ANNUAL RYEGRASS, 1 TON/AC LIME, 1,000 LBS/AC 5-5-5 FERTILIZER AND 3 TONS/AC HAY OR STRAW MULCH.
 - 7) PERMANENT SEEDING SHALL BE CONDUCTED WITHIN 4 DAYS OF DISTURBANCE FOR THOSE AREAS AT FINAL GRADE.
 - 8) ALL AREAS TO BE INSPECTED AND MAINTAINED UNTIL STABILIZED. E&S CONTROL MEASURES TO BE REMOVED WHEN 70 % UNIFORM VEGETATIVE COVERAGE IS ESTABLISHED.
 - 9) THIS E&S PLAN IS TO BE KEPT ON-SITE AT ALL TIMES, PER GOVERNING REGULATIONS.
 - 10) NO CHANGES TO THIS E&S CONTROL PLAN SHALL BE PERMITTED UNLESS AUTHORIZED AND APPROVED BY THE COUNTY CONSERVATION DISTRICT.
- TEMPORARY MEASURES – COMPOST FILTER SOCK AND ROCK CONSTRUCTION ENTRANCE ARE NECESSARY AND SHALL BE INSTALLED ACCORDING TO THE E&S CONSTRUCTION DETAILS AND SHALL BE PROPERLY MAINTAINED DURING THE LIFE OF THE PROJECT.
- PERMANENT MEASURES – ALL AREAS THAT ARE DISTURBED WITHIN THE LIMIT OF DISTURBANCE SHALL BE PERMANENTLY VEGETATED ACCORDING TO THE E&S CONSTRUCTION DETAILS AND PERMANENT SEEDING SPECIFICATIONS.

PERMANENT SEED MIXTURE

- ALL AREAS DISTURBED DURING CONSTRUCTION AND AT FINAL GRADE SHALL BE SEEDDED WITHIN FOUR DAYS OF DISTURBANCE ACCORDING TO THE FOLLOWING SPECIFICATION AND RATE:
- ERNMX-104 OR APPROVED EQUIVALENT (1-800-873-3321)
- 50% ANNUAL RYEGRASS (*Lolium multiflorum*)
- 50% PERENNIAL RYEGRASS (*Lolium perenne*)
- AT A RATE OF 50 LBS / ACRE.



BluAcres • LLC
Wetlands and Wildlife Habitat

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**EROSION AND SEDIMENT
CONTROL NOTES**
BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
T.M.L.
DRAWN BY:
T.M.L.
SURVEYED BY:
T.M.L./NMW

REVISIONS:

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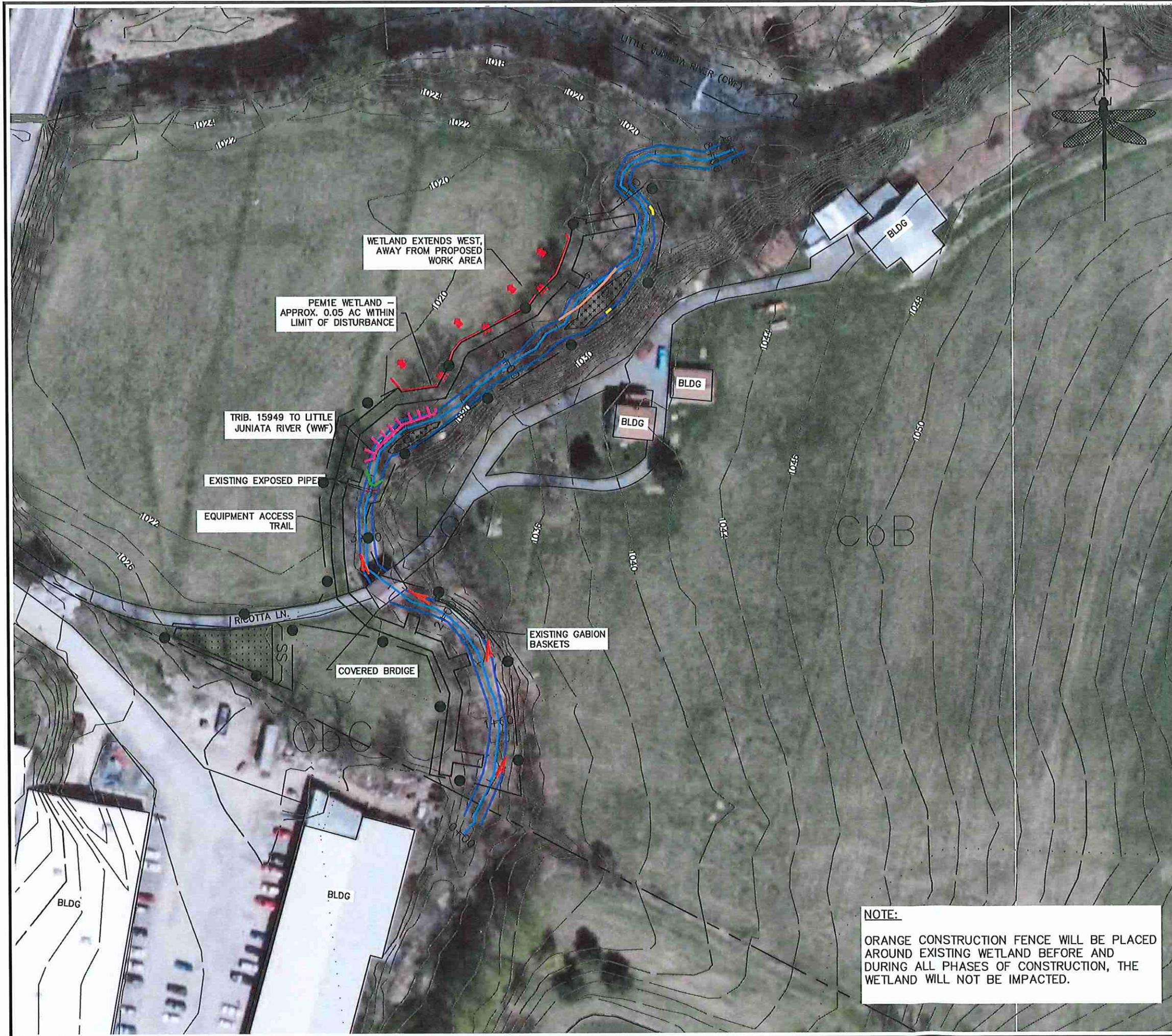
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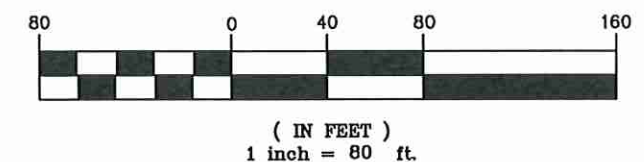
LEGEND

- 1300 — EXISTING CONTOUR
- - - - - EXISTING STREAM
- SOIL TYPE
- - - - - PROPERTY LINE
- SURVEYED THALWEG
- EDGE OF WATER
- LIMIT OF DISTURBANCE
- W — EXISTING WETLAND
- EXISTING GRAVEL BAR
- STAGING AREA
- EQUIPMENT ACCESS TRAIL
- SS — COMPOST FILTER SOCK
- PROPOSED MUDSILL
- PROPOSED LOG CROSS VANE
- PROPOSED SINGLE LOG VANE
- PROPOSED BANKFULL BENCH
- DUMPED ROCK PROTECTION

USDA — NRCS MAPPED SOILS:

- CbB Clarksburg silt loam (3–8% slopes)
- CbC Clarksburg silt loam (8–15% slopes)
- Lo Linden soils

GRAPHIC SCALE



NOTE:

ORANGE CONSTRUCTION FENCE WILL BE PLACED AROUND EXISTING WETLAND BEFORE AND DURING ALL PHASES OF CONSTRUCTION, THE WETLAND WILL NOT BE IMPACTED.



BluAcres • LLC
Wetlands and Wildlife Habitat

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EROSION AND SEDIMENT CONTROL PLAN

BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:

DRAWN BY:
CRC/TML

SURVEYED BY:
CRC/TML

REVISIONS:

8/1/2024
PER PACOP REVIEW COMMENTS

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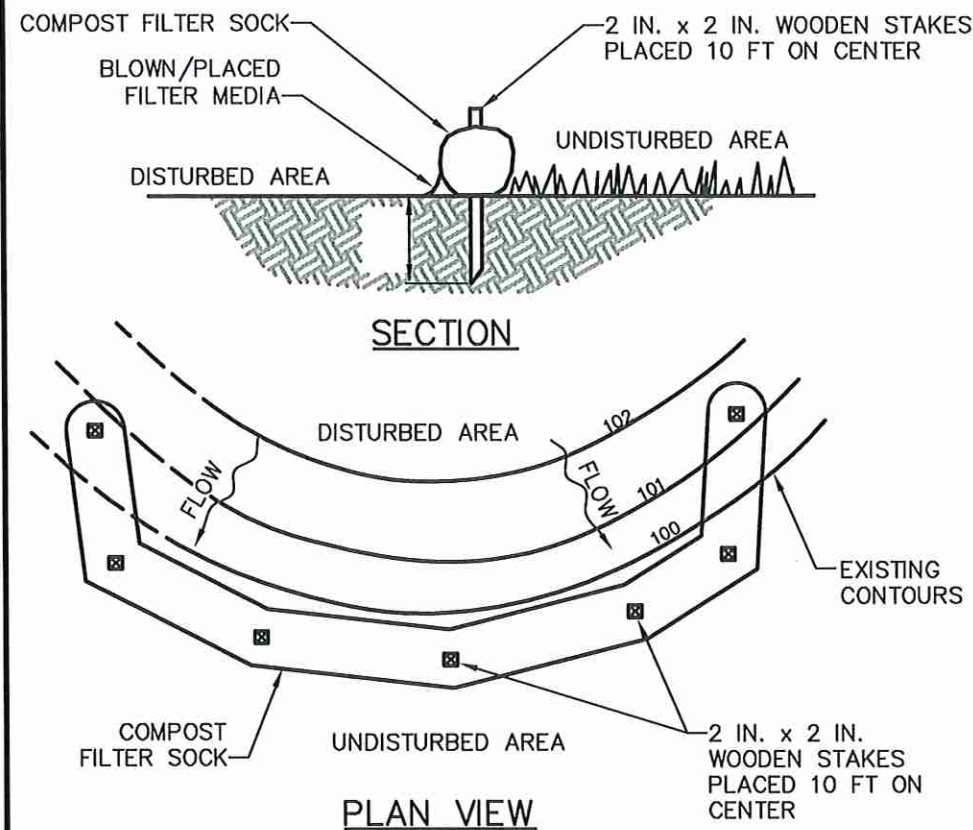
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NOTES:
SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE

TWO-PLY SYSTEMS

INNER CONTAINMENT NETTING	HDPE BIAXIAL NET
	CONTINUOUSLY WOUND
	FUSION-WELDED JUNCTURES
INNER CONTAINMENT NETTING	3/4" X 3/4" MAX. APERTURE SIZE
	COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON-WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH)
	3/16" MAX. APERTURE SIZE

SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.

FILTREXX & JMD

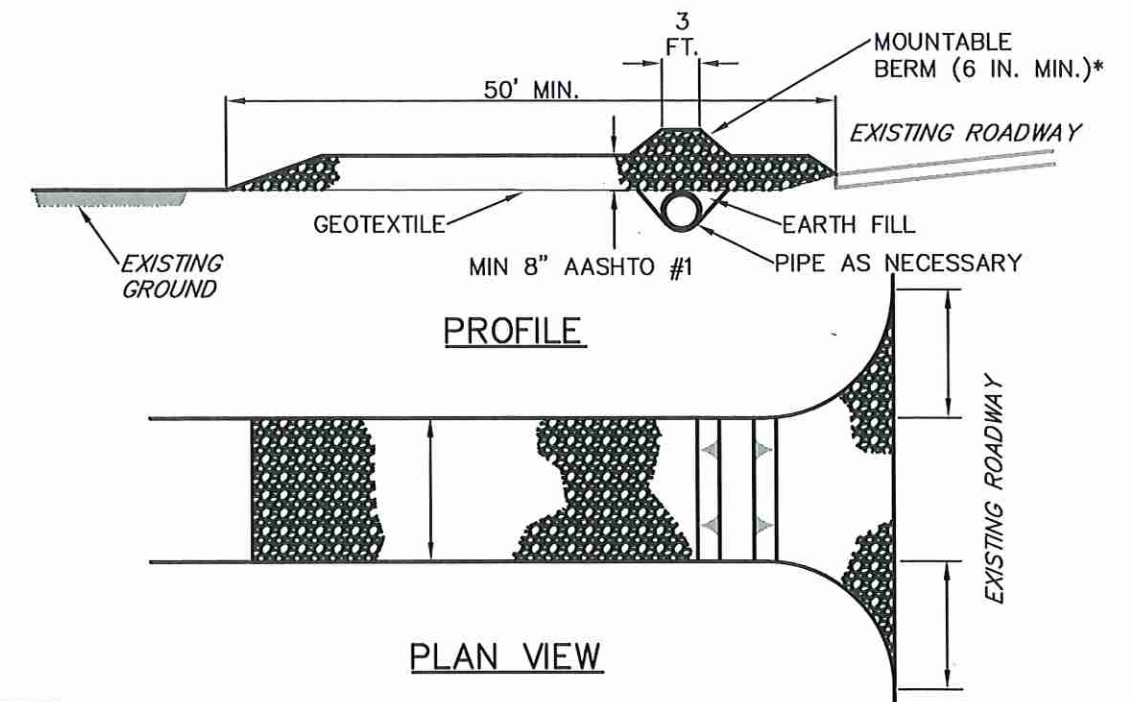
TABLE 4.2
COMPOST STANDARDS

ORGANIC CONTENT MATTER	25% - 100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) Maximum

FILTREXX

TABLE 4.1
COMPOST SOCK FABRIC
MINIMUM SPECIFICATIONS

MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	MULTI-FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI-FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE	BIO-DEGRADABLE	PHOTO-DEGRADABLE	PHOTO-DEGRADABLE
SOCK DIAMETERS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	3/8"
TENSILE STRENGTH		26 psi	26 psi	44 psi	202 psi
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G-155)	23% AT 1000 hr.	23% AT 1000 hr.		100% AT 1000 hr.	100% AT 1000 hr.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEARS



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1 ROCK CONSTRUCTION ENTRANCE

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STANDARD EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS , THE LANDOWNER, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMP'S SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL COSERVATION DISTRICT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMNT BMP's SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP's AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY.
15. A LOG SHOWING DATES THAT E&S BMP's WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE SAME TIME OF INSPECTION.
16. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
17. ALL SEDIMENT REMOVED FROM BMP's SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
18. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.
20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
21. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS.
22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE.
26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
27. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION.
28. E&S BMP's SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS THAT TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

- INTENT OF CONSERVATION PROGRAM:
THE INTENT OF THIS PROGRAM IS TO PREVENT ACCELERATED EROSION OF THE EXPOSED SITE SOILS DURING THE CONSTRUCTION AND PERMANENT LIFE PERIODS OF THE PROJECT. THE PROGRAM REQUIRES RETENTION OF SEDIMENTS ON THE CONSTRUCTION SITE TO MINIMIZE THE IMPACT OF EARTH DISTURBANCE ON EXISTING STREAMS AND ADJACENT PROPERTY OWNERS. THESE OBJECTIVES WILL BE ACHIEVED BY MINIMIZING THE EXPOSURE TIME OF POTENTIALLY ERODIBLE SOILS TO RUNOFF AND INSTALLATION OF THE TEMPORARY AND PERMANENT CONSERVATION PRACTICES IN PROPER SEQUENCE WITH CONSTRUCTION. THE INTENT OF THIS PROGRAM SHOULD BE UNDERSTOOD AND IMPLEMENTED THROUGHOUT THE ENTIRE DEVELOPMENT. THE VARIOUS CONSTRUCTION TRADES SHOULD BE APPRISED OF THIS PROGRAM AND DIRECTED TO PREVENT UNDUE DISTURBANCE OF PREPARED AND PROTECTED SURFACES.
- SURFACE STABILIZATION CRITERIA:
ALL DENUDED SOIL SURFACES, INCLUDING SOIL STOCKPILES, ARE SUBJECT TO EROSION AND SHALL BE STABILIZED IMMEDIATELY EITHER AS TEMPORARILY OR PERMANENT COVER IN ACCORDANCE WITH SPECIFICATIONS BELOW. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MAY BE SEEDED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. DURING NON-GERMINATION PERIODS, MULCH SHALL BE APPLIED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. GERMINATION PERIODS SHALL BE FROM APRIL 1ST TO JUNE 15TH AND AUGUST 15TH TO OCTOBER 15TH. AT THE BEGINNING OF THE NEXT GERMINATION PERIOD, MULCHED AREAS SHALL BE LIMED, FERTILIZED AND SEEDED, WITH EITHER A TEMPORARY OR PERMANENT SEED MIXTURE, AND REMULCHED AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE. ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
- A. TEMPORARY COVER ON DISTURBED AREAS:
DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE SEEDED AND MULCHED WITH A TEMPORARY COVER. PREPARATION OF THE SURFACE, FERTILIZATION AND SEEDING WITH EITHER ANNUAL OR WINTER RYE GRASS SHALL BE DONE IN COMPLIANCE WITH PENNSYLVANIA DEP AND THE COUNTY CONSERVATION DISTRICT (CCD) STANDARD FOR "TEMPORARY COVER FOR CRITICAL AREAS." GROUND LIMESTONE SHALL BE APPLIED AT THE RATE OF 190 LBS/1,000 SF. FERTILIZER FOR TEMPORARY STABILIZATION SHALL BE APPLIED AT A RATE OF 50-50-50 PER ACRE. THE FERTILIZER AND LIMESTONE SHALL BE WORKED INTO THE SOIL TO A DEPTH OF FOUR (4) INCHES PRIOR TO SEEDING. ANNUAL RYEGRASSES SHALL BE APPLIED AT A RATE OF 1.5 LB/1,000 SF AND WINTER RYE AT A RATE OF 3.5 LBS/1,000 SF AND MULCHED WITH HAY OR STRAW AT A RATE OF 2-3 BALES/1000 SF OR 3 TONS/ACRE AND NON ASPHALTIC EMULSION, IN ACCORDANCE WITH THE CCD STANDARD FOR "MULCHING."
- B. PERMANENT COVER ON DISTURBED AREAS:
ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED WITH A PERMANENT COVER. AREAS SHOULD BE SEEDED WITH A PERMANENT SEED MIXTURE AS DEFINED ABOVE. GROUND LIMESTONE SHALL BE APPLIED AT THE RATE OF 190 LBS/1000 SF OR 4 TO 6 TONS/ACRE. THE FERTILIZER AND LIMESTONE SHALL BE WORKED INTO THE SOIL TO A DEPTH OF FOUR (4) INCHES PRIOR TO SEEDING. FERTILIZER 10-20-20 FOR PERMANENT STABILIZATION MINIMUM IS 930 LBS/ACRE PER PENN STATE AGRONOMY GUIDE. PREPARATION OF THE SEEDBED, FERTILIZATION AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH APPLICABLE MCCD STANDARDS AND THE ADVICE OF THE PENNSYLVANIA STATE UNIVERSITY AGRICULTURAL EXTENSION SERVICE. NEW SEEDINGS ON FLAT AND MILD SLOPE AREAS SHALL BE MULCHED WITH STRAW AT 2 TO 3 BALES/1000 SF OR 3 TONS/ACRE. NEW SEEDINGS ON SLOPES AND WITHIN MODERATE DRAINAGE CHANNELS, SHALL BE SIMILARLY MULCHED WITH STRAW, AND RUNOFF DIVERTED FROM THE SEED BEDS UNTIL VEGETATION IS ESTABLISHED.
- C. MAINTENANCE OF TEMPORARY SEDIMENTATION CONTROL STRUCTURES:
MAINTENANCE OF ALL TEMPORARY SEDIMENTATION CONTROL STRUCTURES SHALL BE IN ACCORDANCE WITH THESE PLANS. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH STORM EVENT AND ON A WEEKLY BASIS, ALL WEEKLY INSPECTION REPORTS TO BE KEPT ON SITE. ALL MAINTENANCE WORK MUST BE PERFORMED IMMEDIATELY.
- SEQUENCE OF CONSTRUCTION:
- 1) ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY OF THE FOLLOWING STAGES ARE INITIATED. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO ONLY THOSE AREAS DESCRIBED IN EACH STAGE.
- 2) AT LEAST 3 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PLACE A PA 1 CALL TO HAVE ALL UTILITIES MARKED OUT PRIOR TO CONSTRUCTION.
- 3) AT THE END OF EACH WORK DAY, ALL DISTURBED AREAS MUST BE STABILIZED WITH SEEDING/MULCH AND EROSION CONTROL MULCH BLANKETS FOR SLOPES STEEPER THAN 3H:1V. AREAS AT FINAL GRADE MUST BE INSPECTED AT THE END OF EACH WORK DAY THROUGHOUT CONSTRUCTION. ANY EROSION MUST BE CORRECTED IMMEDIATELY.
- 4) INSTALL TEMPORARY SEDIMENT CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLAN VIEW, AND AS NECESSARY FOR COMPLIANCE WITH CHAPTER 102.
- 5) STAGE EARTHWORK ACTIVITY TO MINIMIZE EROSION, COMPLETE UPSTREAM CONSTRUCTION AND EXCAVATION WORK PRIOR TO DOWNSTREAM WORK.
- 6) ALL WORK SHALL BE DONE DURING LOW FLOW CONDITIONS, AVOIDING PERIODS DURING OR IMMEDIATELY FOLLOWING HEAVY PRECIPITATION.
- 7) EQUIPMENT WORK WILL BE DONE FROM THE STREAMBANK, WHERE POSSIBLE.
- 8) INSTALL 3 UPSTREAM LOG VANES BEFORE BRIDGE AT LOCATIONS SHOWN ON PLANS.
- 9) INSTALL LOG VANE AND CROSS VANE LOCATED BELOW THE BRIDGE AS SHOWN ON THE PLANS.
- 10) REMOVE UPSTREAM GRAVEL BAR AND INSTALL MODIFIED MUDSILL.
- 11) REMOVE DOWNSTREAM GRAVEL BAR AND INSTALL BANKFULL BENCH AT LOCATION SHOWN ON THE PLANS.
- 12) INSTALL DUMPED ROCK PROTECTION ON RIVERBANK RIGHT AT THE 2 LOCATIONS SHOWN ON THE PLANS.
- 13) THE ONLY WORK TO TAKE PLACE IN THE WET CONDITION IS THE PLACEMENT OF THE STREAM STRUCTURES.
- 14) SEED AND STABILIZE THE WORK AREA.

EROSION AND SEDIMENT CONTROL NOTES

- 1) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSISTENT WITH CHAPTER 102 AND PADEP'S EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MOST RECENT VERSION).
- 2) THESE PLANS REFLECT THE MINIMUM E&S REQUIREMENTS BASED ON ANTICIPATED AND PROPOSED ACTIVITIES. OWNER/APPLICANT OR HIS/HER DULY-AUTHORIZED REPRESENTATIVE IS RESPONSIBLE FOR IMPLEMENTATION OF THE E&S CONTROL MEASURES CONTAINED IN THIS PLAN AND ANY OTHER PROCEDURES THAT MAY BE NECESSARY FOR COMPLIANCE WITH THE PREVAILING REGULATIONS.
- 3) GROUND DISTURBANCE ACTIVITIES SHALL BE MINIMIZED TO THE EXTENT PRACTICAL AND ALL AREAS SHALL BE STABILIZED PROMPTLY.
- 4) ALL E&S MEASURES SHALL BE INSPECTED WEEKLY, AT A MINIMUM, AND FOLLOWING ALL STORM EVENTS. DEFECTIVE, DAMAGED OR OTHERWISE INSUFFICIENT E&S MEASURES SHALL BE REPLACED WITHOUT DELAY. WEEKLY INSPECTION REPORTS SHALL BE KEPT ON SITE.
- 5) ALL TEMPORARY AND PERMANENT SOIL STABILIZATION TO BE CONDUCTED IN ACCORDANCE WITH PA DEP AND THE COUNTY CONSERVATION DISTRICT (CCD) STANDARDS.
- 6) TEMPORARY SEEDING OF ANY DISTURBED AREAS OR STOCKPILES (EXCEPT PROPERLY COVERED OR MANAGED STOCKPILES) SHALL BE CONDUCTED WITHIN 4 DAYS OF DISTURBANCE. TEMPORARY SEEDING TO CONSIST OF 40 LBS/AC ANNUAL RYEGRASS, 1 TON/AC LIME, 1,000 LBS/AC 5-5-5 FERTILIZER AND 3 TONS/AC HAY OR STRAW MULCH.
- 7) PERMANENT SEEDING SHALL BE CONDUCTED WITHIN 4 DAYS OF DISTURBANCE FOR THOSE AREAS AT FINAL GRADE.
- 8) ALL AREAS TO BE INSPECTED AND MAINTAINED UNTIL STABILIZED. E&S CONTROL MEASURES TO BE REMOVED WHEN 70 % UNIFORM VEGETATIVE COVERAGE IS ESTABLISHED.
- 9) THIS E&S PLAN IS TO BE KEPT ON-SITE AT ALL TIMES, PER GOVERNING REGULATIONS.
- 10) NO CHANGES TO THIS E&S CONTROL PLAN SHALL BE PERMITTED UNLESS AUTHORIZED AND APPROVED BY THE COUNTY CONSERVATION DISTRICT.

TEMPORARY MEASURES – COMPOST FILTER SOCK AND ROCK CONSTRUCTION ENTRANCE ARE NECESSARY AND SHALL BE INSTALLED ACCORDING TO THE E&S CONSTRUCTION DETAILS AND SHALL BE PROPERLY MAINTAINED DURING THE LIFE OF THE PROJECT.

PERMANENT MEASURES – ALL AREAS THAT ARE DISTURBED WITHIN THE LIMIT OF DISTURBANCE SHALL BE PERMANENTLY VEGETATED ACCORDING TO THE E&S CONSTRUCTION DETAILS AND PERMANENT SEEDING SPECIFICATIONS.

PERMANENT SEED MIXTURE

ALL AREAS DISTURBED DURING CONSTRUCTION AND AT FINAL GRADE SHALL BE SEEDED WITHIN FOUR DAYS OF DISTURBANCE ACCORDING TO THE FOLLOWING SPECIFICATION AND RATE:

ERNMX-104 OR APPROVED EQUIVALENT (1-800-873-3321)

50% ANNUAL RYEGRASS (*Lolium multiflorum*)

50% PERENNIAL RYEGRASS (*Lolium perenne*)

AT A RATE OF 50 LBS / ACRE.



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EROSION AND SEDIMENT
CONTROL NOTES
BENEDETTO STREAM RESTORATION
ANTIS TOWNSHIP
BLAIR COUNTY, PENNSYLVANIA

DATE:
2/22/2024

DESIGNED BY:
TML

DRAWN BY:
TML

SURVEYED BY:
TML/NMW

REVISIONS:

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