

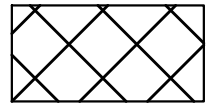
SHEET SIZE 24x36 \\sv2k8-cleap01\jobs\2020\200003\09 - DELIVERABLES\DRAWINGS\Civil Plans-Final.dwg
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SHEET SIZE 24x36 13x24x6-dwp01\y44c2020\20000300 - DELIVERABLES\DRAWINGS\Civil Plans\Final.dwg
SAVED: SARINBURSTER 2021-01-27 10:46 PLOT: 2021-01-27 11:02

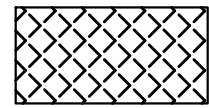
MANTUA
CENTER ROAD

MENNONITE ROAD (CH 256)
WIDTH VARIES

PLAN LEGEND



TREE REMOVAL, CLEARING AND
GRUBBING LIMITS



REMOVE DEBRIS STOCKPILES



GUARD RAIL REMOVAL FROM IN FRONT
OF NEW WALK

PLAN NOTES

- REMOVE 22 LF OF EXISTING GUARDRAIL
- RELOCATE EXISTING SIGN
- REMOVE EXISTING STORM PIPE
- LOCATED EXISTING PROPERTY PIN, LOG COORDINATES AND RESET IF IMPACTED BY CONSTRUCTION. WORK SHALL BE PERFORMED BY A STATE OF OHIO REGISTERED PROFESSIONAL SURVEYOR
- REMOVE SECTION OF FENCE AS REQUIRED FOR GRADING ALONG PROPERTY LINE
- LOCATE PROPERTY LINE AT CORNER AND INSTALL ORANGE CONSTRUCTION FENCE ON PROPERTY LINE, DO NOT DISTURB PRIVATE PROPERTY TO THE SOUTH
- LEAVE ROOTS AND STUMPS ALONG HILLSIDE TO ROAD, GRIND STUMP AT GRADE

EXISTING UTILITIES NOTE:

UNDERGROUND CABLE AND PETROLEUM LINES ARE SHOWN BASED ON SIGN LOCATIONS FOUND IN THE FIELD. MCI UNDERGROUND LINES ARE SHOWN BASED ON PHYSICAL MARKINGS FOUND AT THE NORTH AND SOUTH ENDS OF THE PROJECT AREA.

CONTRACTOR SHALL CONTACT UTILITY OWNERS PRIOR TO CONSTRUCTION TO MARK OUT FACILITIES AND PROVIDE PLANS TO UTILITIES.

UTILITY LIST

(OWNERS LIST)

OUPS TICKET NUMBER #A001500323

VERIZON- 216-570-5343

DIVERSIFIED GAS & OIL 800-683-9920

EQUITY OIL & GAS FUNDS, INC. 234-231-1004

AT&T 330 379-08358

FIRST ENERGY 800-633-4766

DOMINION ENERGY OHIO 800-362-7557

ENERVEST 1-800-300-0076

GENERAL NOTES

- UTILITIES: THE CONTRACTOR SHALL GIVE DUE NOTICE TO THE OWNERS OF ALL UTILITIES AND SHALL SEE THAT THEIR PROPERTY IS PROPERLY SUPPORTED AND PROTECTED BEFORE DISTURBING, UNDERMINING, OR INTERFERING WITH THE SAME. AND IN NO CASE SHALL THE SERVICE OF ANY SUCH UTILITY BE DISRUPTED OR INTERFERED WITH, WITHOUT WRITTEN CONSENT OF THE OWNER THEREOF, AND IN CASE OF SEWER, PIPE, CONDUIT, POLE OR OTHER PUBLIC UTILITY PROPERTY IS DAMAGED OR MUST BE MOVED OR SUPPORTED, THE REPAIR, REMOVAL OR SUPPORTING SHALL BE DONE BY THE OWNER AND THE DESIGN BUILDER SHALL PAY ALL NECESSARY EXPENSE IN CONNECTION THEREWITH.
- DAMAGES TO THE ADJACENT PROPERTY OR STRUCTURES MUST BE CAREFULLY GUARDED AGAINST, ESPECIALLY IN MAKING EXCAVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE FULL EXTENT, IF THE SAME ARE OCCASIONED THROUGH NEGLIGENCE OR FAILURE ON HIS PART, OR THAT OF ANYONE IN HIS EMPLOY, TO TAKE ALL NECESSARY OR PROPER PRECAUTIONS TO PREVENT THE SAME, AND HE SHALL ASSUME ALL RISK OF DAMAGE TO ANY PORTION OF HIS WORK.
- ALL EXISTING STRUCTURES INCLUDING PAVEMENT AS CALLED FOR TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES. ANY BURNING ON-SITE IS PROHIBITED.

EXISTING CONDITIONS NOTES

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER KARPINSKI ENGINEERING, DEMPSEY SURVEYING COMPANY NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING 811.
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY DEMPSEY SURVEYING. CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.

DEMOLITION NOTES

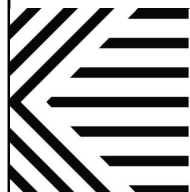
- THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR SITE DEMOLITION. IT SHOULD BE NOTED THAT ALL MANMADE FEATURES, PAVEMENT, SIGNS, POLES, CURBING, CONCRETE WALKS, UTILITIES, ETC. SHALL BE REMOVED AS NECESSARY TO CONSTRUCT WORK, UNLESS OTHERWISE NOTED TO REMAIN. THROUGHOUT THE CONSTRUCTION PROCESS, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY FIELD DISCREPANCIES FROM DATA AS SHOWN ON DESIGN PLANS. THIS INCLUDES ANY UNFORESEEN CONDITIONS, SUBSURFACE OR OTHERWISE FOR EVALUATION AND RECOMMENDATIONS. ANY CONTRADICTION BETWEEN ITEMS OF THIS PLAN/PLAN SET, OR BETWEEN THE PLANS AND ON-SITE CONDITIONS MUST BE RESOLVED BEFORE RELATED CONSTRUCTION HAS BEEN INITIATED.
- ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION AREA NOTED TO REMOVE, SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND ANY EARTH MOVING OPERATIONS. SILT FENCE SHALL BE INSTALLED AT THE LIMITS OF IMPACT AREAS ACCORDING TO THE DETAILS SHOWN ON SHEET C-04
- CONTRACTOR RESPONSIBLE FOR REPAIRS AND RESTORATION OF AREAS DISTURBED BY TRAIL EXTENSION.



SCALE: 1" = 30'-0"

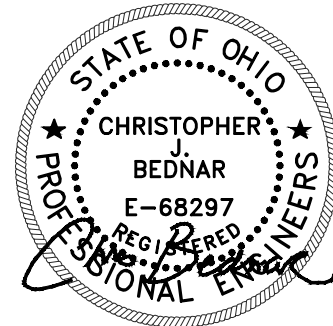
0 15' 30' 60'

FULL SIZE SHEET (22"x34")



Karpinski
ENGINEERING

3135 Euclid Ave.
Cleveland, OH 44115
216-391-3700 | karpinskieng.com



01/28/2021

PROJECT NAME

**PORTAGE PARK DISTRICT
HEADWATERS TRAIL**

CLIENT NAME



	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003

DRAWN BY: SMA

APPROVED BY: CJB

DATE: 01/28/2021

SCALE: AS NOTED

SHEET TITLE

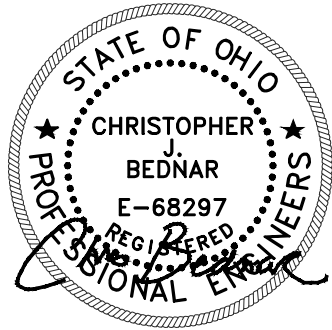
**EXISTING AND
DEMOLITION PLAN**

SHEET NUMBER

C-01



SCALE: 1" = 30'-0"
0 15' 30' 60'
FULL SIZE SHEET (22"x34")



01/28/2021

PROJECT NAME

**PORTAGE PARK DISTRICT
HEADWATERS TRAIL**

CLIENT NAME



	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003
DRAWN BY: SMA
APPROVED BY: CJB
DATE: 01/28/2021

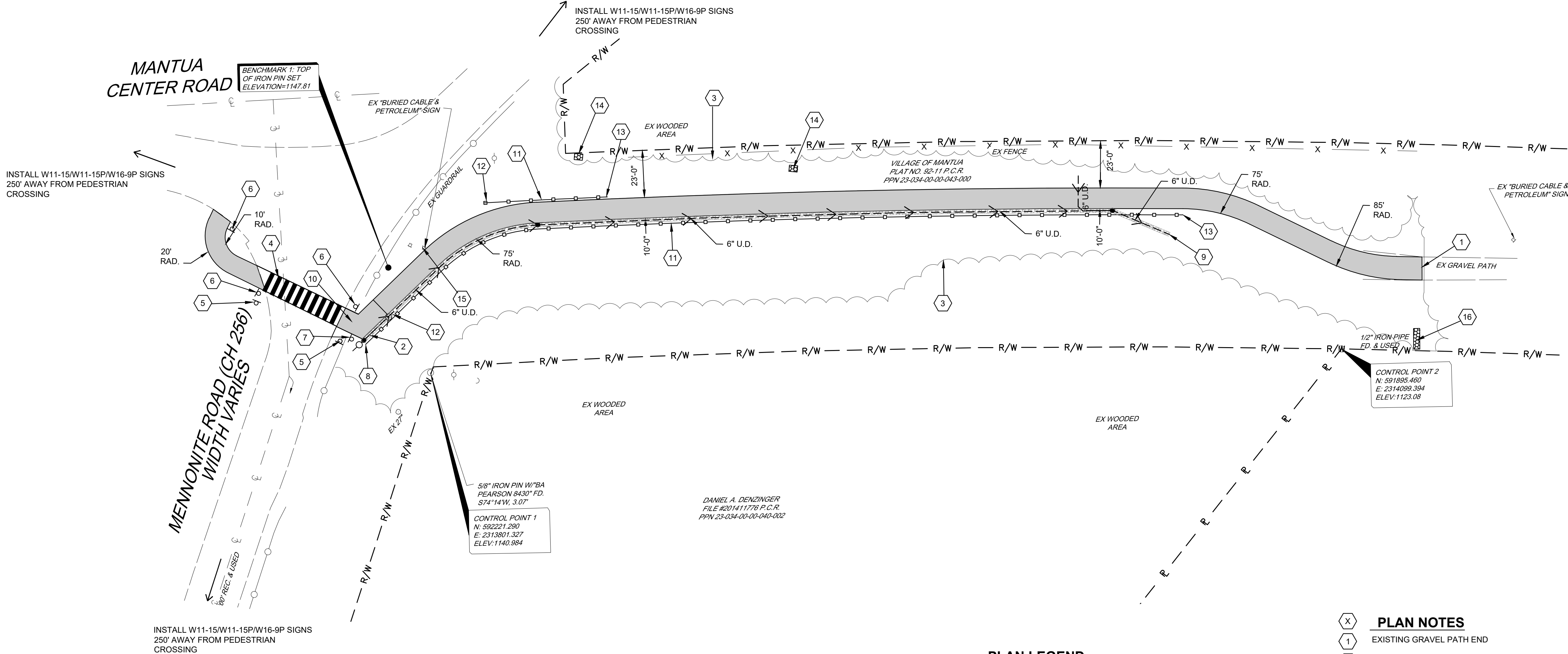
SCALE: AS NOTED

SHEET TITLE

**SITE LAYOUT
PLAN**

SHEET NUMBER

C-02



PLAN LEGEND

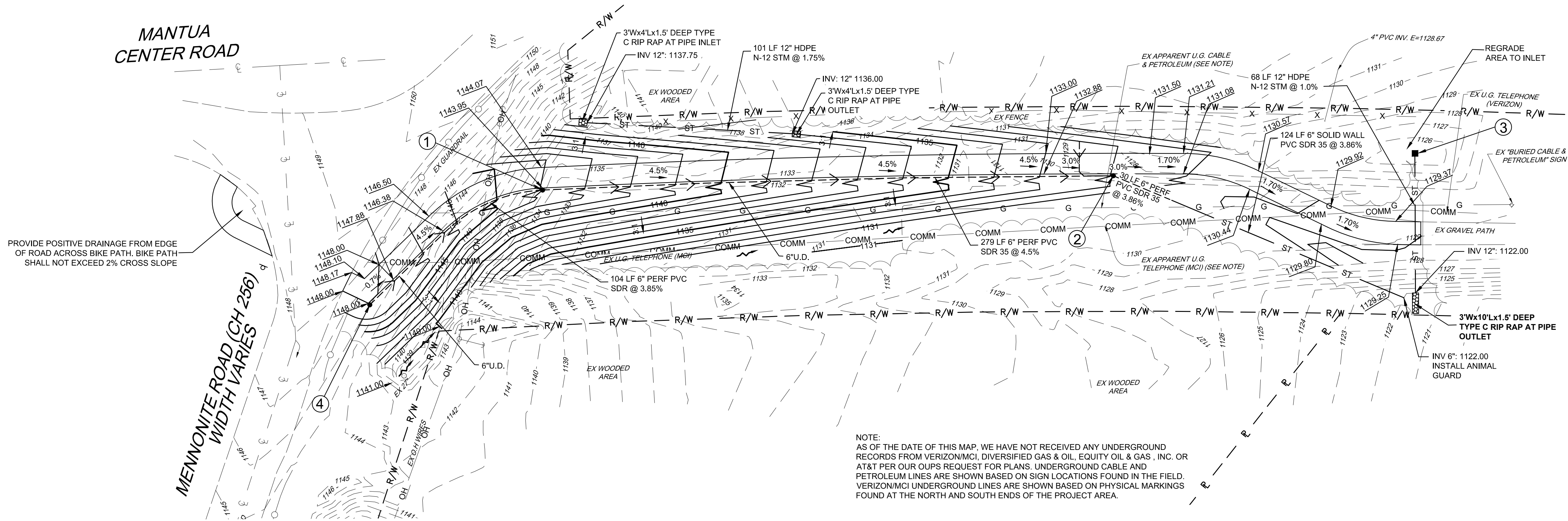
- PROPOSED ASPHALT MULTI-PURPOSE TRAIL
- PROPOSED UNDERDRAIN AND AGGREGATE

GENERAL NOTES

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER DEMPSEY SURVEYING COMPANY NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION BY CALLING 811.

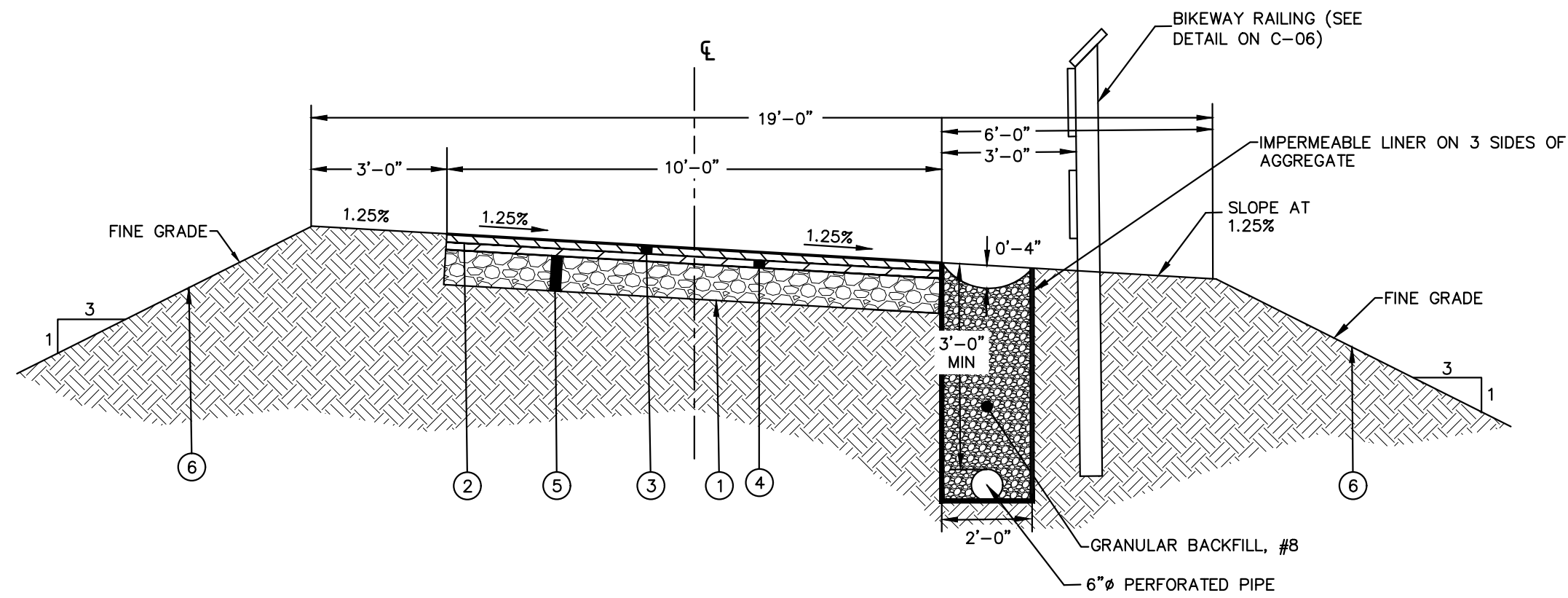
- EXISTING GRAVEL PATH END
- PROPOSED 25 LF ODOT MSG GUARDRAIL
- NEW WOODED AREA LIMITS
- LADDER CROSSWALK
- PROPOSED W11-15 AND W16-7p SIGNS
- PROPOSED R1-1 SIGN AND STOP BAR (REDUCE POST HEIGHT FOR BIKE PATH)
- PROPOSED R5-3 SIGN
- BEGIN AGGREGATE UNDERDRAIN
- END AGGREGATE UNDERDRAIN
- INSTALL 6x6" PRESSURE TREATED WOOD POST WITH REFLECTOR
- PROPOSED WOOD BIKEWAY RAILING (SEE DETAILS)
- BEGIN BIKEWAY RAILING
- END BIKEWAY RAILING
- INSTALL ROCK CHANNEL PROTECTION TPYE C 3' WIDE X 4' LONG X 18" DEEP
- RELOCATE SIGN
- INSTALL ROCK CHANNEL PROTECTION TPYE C 3' WIDE X 10' LONG X 18" DEEP

MANTUA
CENTER ROAD



SCALE: 1" = 30'-0"
FULL SIZE SHEET (22"x34")

NOTE:
AS OF THE DATE OF THIS MAP, WE HAVE NOT RECEIVED ANY UNDERGROUND RECORDS FROM VERIZON/MCI, DIVERSIFIED GAS & OIL, EQUITY OIL & GAS, INC. OR AT&T PER OUR OUP'S REQUEST FOR PLANS. UNDERGROUND CABLE AND PETROLEUM LINES ARE SHOWN BASED ON SIGN LOCATIONS FOUND IN THE FIELD. VERIZON/MCI UNDERGROUND LINES ARE SHOWN BASED ON PHYSICAL MARKINGS FOUND AT THE NORTH AND SOUTH ENDS OF THE PROJECT AREA.



TYPICAL TRAIL SECTION WITH CONCRETE SWALE LOOKING DOWN HILL
SCALE: NONE

NOTES

- ALL THICKNESSES SHOWN ARE COMPACTED IN PLACE.
- PRIOR TO PAVING, SUBBASE IS TO BE PROOF ROLLED.
- TACK COAT TO BE APPLIED IN ACCORDANCE WITH ODOT ITEM 407 SPECIFICATIONS
- WHERE APPLICABLE, REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
- SEE LOCATION OF TRAIL SECTIONS WITH CONCRETE SWALES ON PLANS
- SLOPE ALL UNDERDRAINS AT 0.5% (MIN.) SLOPE TO NEAREST FEASIBLE CATCH BASIN, INLET BASIN, OR STORM MANHOLE.
- UNDERDRAIN TRENCH TO BE SURROUNDED BY WELL COMPACTED SOILS.

PROPOSED LEGEND

- ITEM 204 - COMPACTED SUBGRADE
- ITEM 407 - TACK COAT (AT 0.1 GAL/SY)
- ITEM 441 - 1-1/2" SURFACE COURSE ASPHALT PAVEMENT, TYPE 1, PG 64-22 (448) (NO R.A.P.)
- ITEM 441 - 1-1/2" INTERMEDIATE COURSE ASPHALT PAVEMENT, TYPE 2, PG 64-22 (448) (NO R.A.P.)
- ITEM 304 - 6" AGGREGATE BASE
- ITEM 659 - SEEDING AND MULCHING, CLASS 1

LEGEND

- 609.00 - PROPOSED TOP OF CURB ELEVATION
- 608.50 - PROPOSED BOTTOM OF CURB ELEVATION
- 609.00 - PROPOSED SPOT ELEVATION
- 608.50 - EXISTING TOP OF CURB ELEVATION
- 608.00 - EXISTING BOTTOM OF CURB ELEVATION
- 607.50 - EXISTING ELEVATION
- FLOW ARROW

PROPOSED STORM STRUCTURES

ID	TYPE	RIM	INVERT
1	CLEANOUT	-	6" SE & NW 1140.50
2	CLEANOUT	-	6" S & NW 1128.92
3	CATCH BASIN	1125.00	12" SW 1122.68
4	CLEANOUT	-	6" E 1144.50

GENERAL NOTES

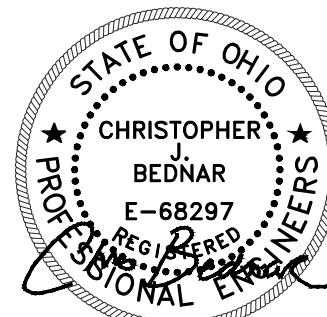
- ELEVATIONS SHOWN ARE TIED TO TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88)
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR. BENCHMARKS SHOWN ON PLAN ESTABLISHED BY OR FOUND BY DEMPSEY SURVEYING COMPANY. CONDITION OF BENCHMARK MUST BE VERIFIED PRIOR TO CONSTRUCTION.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG LEASE LINE OR PROPERTY LINES IN ALL AREAS WHERE SILT FENCE IS NOT REQUIRED.

EARTHWORK NOTES

THE CONTRACTOR SHALL INSTALL THE EMBANKMENT PER ODOT GB2: SPECIAL BENCHING AND SIDEHILL EMBANKMENT FILLS DOCUMENT. DOCUMENT CAN BE OBTAINED FROM THE FOLLOWING WEBSITE:
HTTP://WWW.DOT.STATE.OH.US/DIVISIONS/ENGINEERING/GEOTECHNICAL. SHALL NEW FILL BE BENCHED INTO THE EXISTING HILLSIDE.



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01/28/2021

PROJECT NAME

PORTAGE PARK DISTRICT
HEADWATERS TRAIL

CLIENT NAME



REV. NO.	DESCRIPTION	DATE
	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021

PROJECT NO: 2020-0003

DRAWN BY: SMA

APPROVED BY: CJB

DATE: 01/28/2021

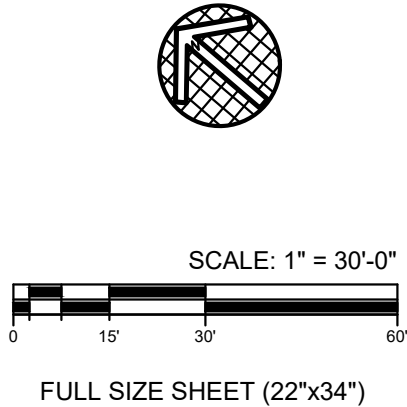
SCALE: AS NOTED

SHEET TITLE

GRADING PLAN

SHEET NUMBER

C-03



EROSION AND SEDIMENT CONTROL NOTES:

1. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT.
2. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
3. TEMPORARY VEGETATION SHALL BE USED TO PROTECT HIGH EROSION POTENTIAL OR OTHER CRITICAL AREAS EXPOSED DURING DEVELOPMENT. WHEREVER FEASIBLE, NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED.
4. THE CONTRACTOR IS TO REFER TO THIS PLAN AND THE E&S PLAN, NOTES, AND DETAILS.
5. THE SITE DISTURBED AREA IS APPROXIMATELY 0.61 AC.
6. TEMPORARY SEEDING IS SPECIFIED UNTIL CONSTRUCTION OF FINAL IMPROVEMENTS COMMENCES.
7. THE CONTRACTOR IS TO INSTALL AND MAINTAIN THE E&S CONTROLS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL THE SITE IS FULLY STABILIZED.
8. THE CONTRACTOR IS RESPONSIBLE TO REMOVE THE TEMPORARY E&S CONTROLS ONCE THE SITE IS FULLY STABILIZED.
9. CONTRACTOR IS TO MAINTAIN A LOG DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDMENTS TO THE SWPPP. PER GENERAL PERMIT REQUIREMENTS, SWP3 INSPECTION REPORTS SHALL BE KEPT ON SITE WITH THE SWP3 AND READILY ACCESSIBLE DURING NORMAL WORKING HOURS.
10. CONTRACTOR IS TO UTILIZE EXISTING PAVEMENT FOR CONSTRUCTION ENTRANCE PER THEIR MEANS AND METHODS.
11. APPLICANT SHALL MAINTAIN COMPLIANCE WITH OHIO EPA'S GENERAL STORMWATER NPDES PERMIT PROGRAMS.
12. APPLICANT SHALL MAINTAIN COMPLIANCE WITH THE VILLAGE OF MANTUA AND STATE OF OHIO'S AIR QUALITY REGULATIONS APPLICABLE IN THE MANTUA MUNICIPAL CODE AND THE OHIO ADMINISTRATIVE CODE INCLUDING, BUT NOT LIMITED TO THE ASBESTOS AND THE ANTI-NOISE LAWS.
13. ALL WASTE WILL COMPLY WITH APPLICABLE STATE OR LOCAL WASTE DISPOSAL REQUIREMENTS AND PROVISIONS FOR SANITARY WASTES AND CONSTRUCTION AND DEMOLITION DEBRIS. OPEN BURNING IS PROHIBITED.
14. ALL TRASH TO BE REMOVED ON DAILY BASIS. NO DUMPSTER REQUIRED ON PROJECT
15. CONTRACTOR SHALL PROVIDE FUEL TANKS ON TRUCKS/VEHICLES FOR REFUELING. NO SEPARATE ON-SITE FUEL CONTAINMENT/STORAGE ALLOWED



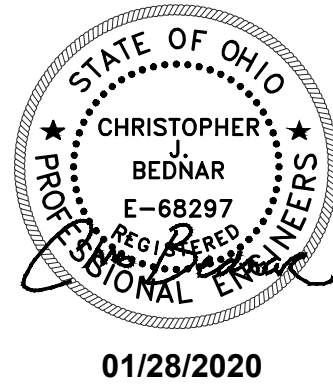
	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003
DRAWN BY: SMA
APPROVED BY: CJB
DATE: 01/28/2021
SCALE: AS NOTED
SHEET TITLE

SWPP PLAN

SHEET NUMBER

C-04



01/28/2020

PROJECT NAME

PORTAGE PARK DISTRICT
HEADWATERS TRAIL

CLIENT NAME



	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003

DRAWN BY: SMA

APPROVED BY: CJB

DATE: 01/28/2020

SCALE: NO SCALE

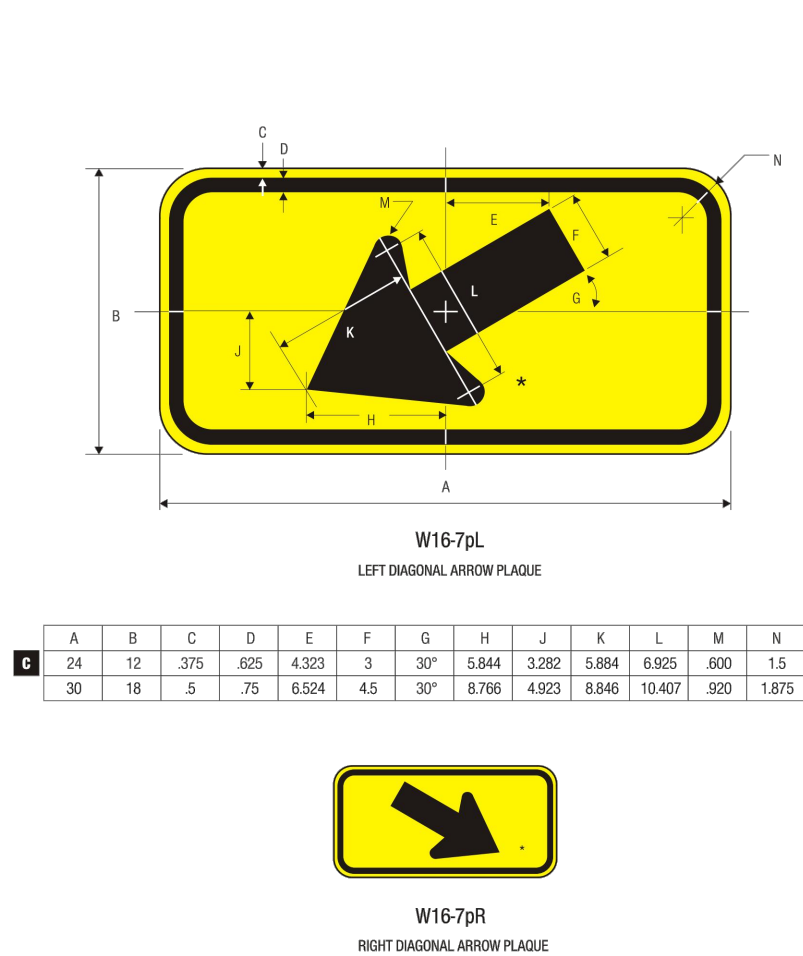
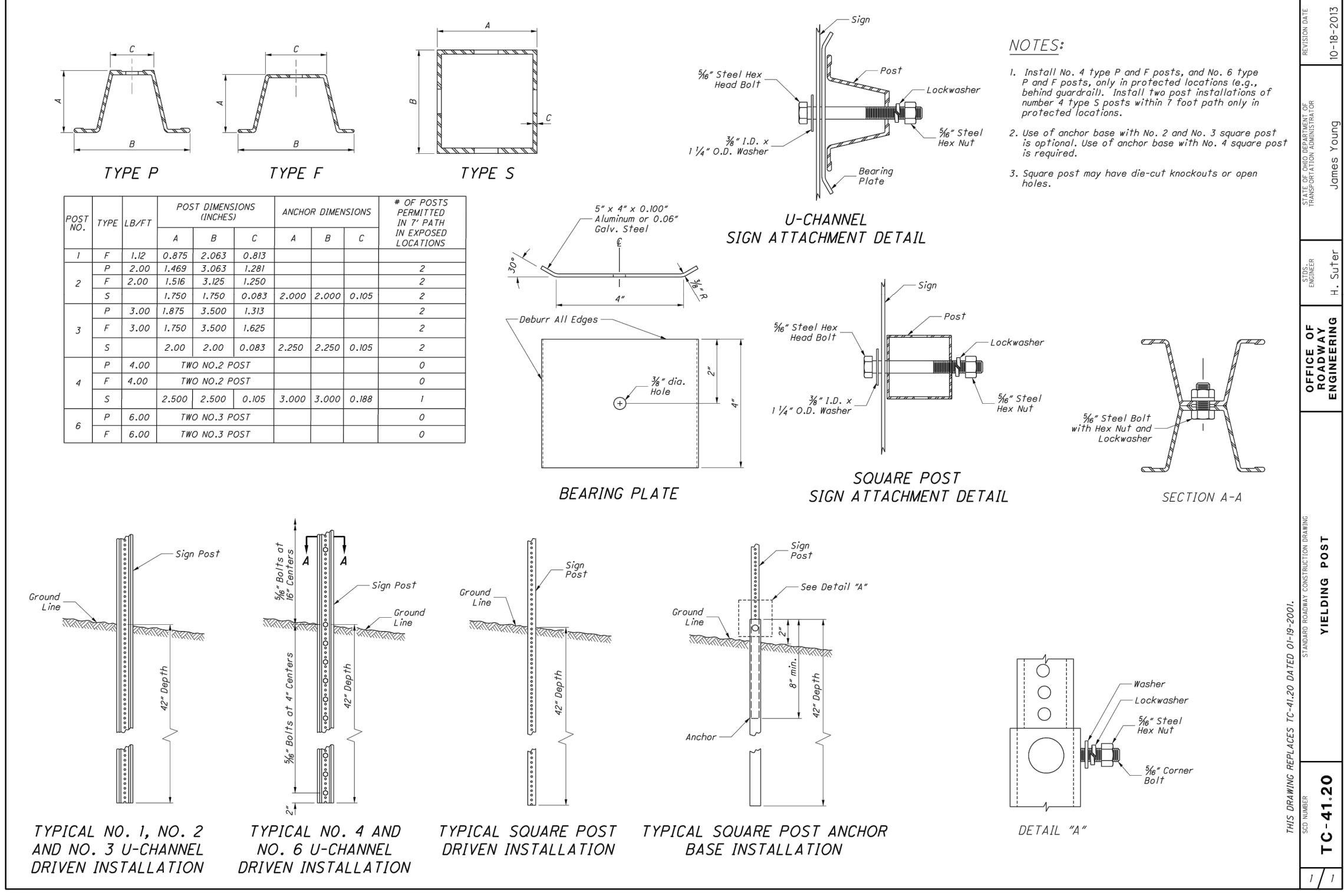
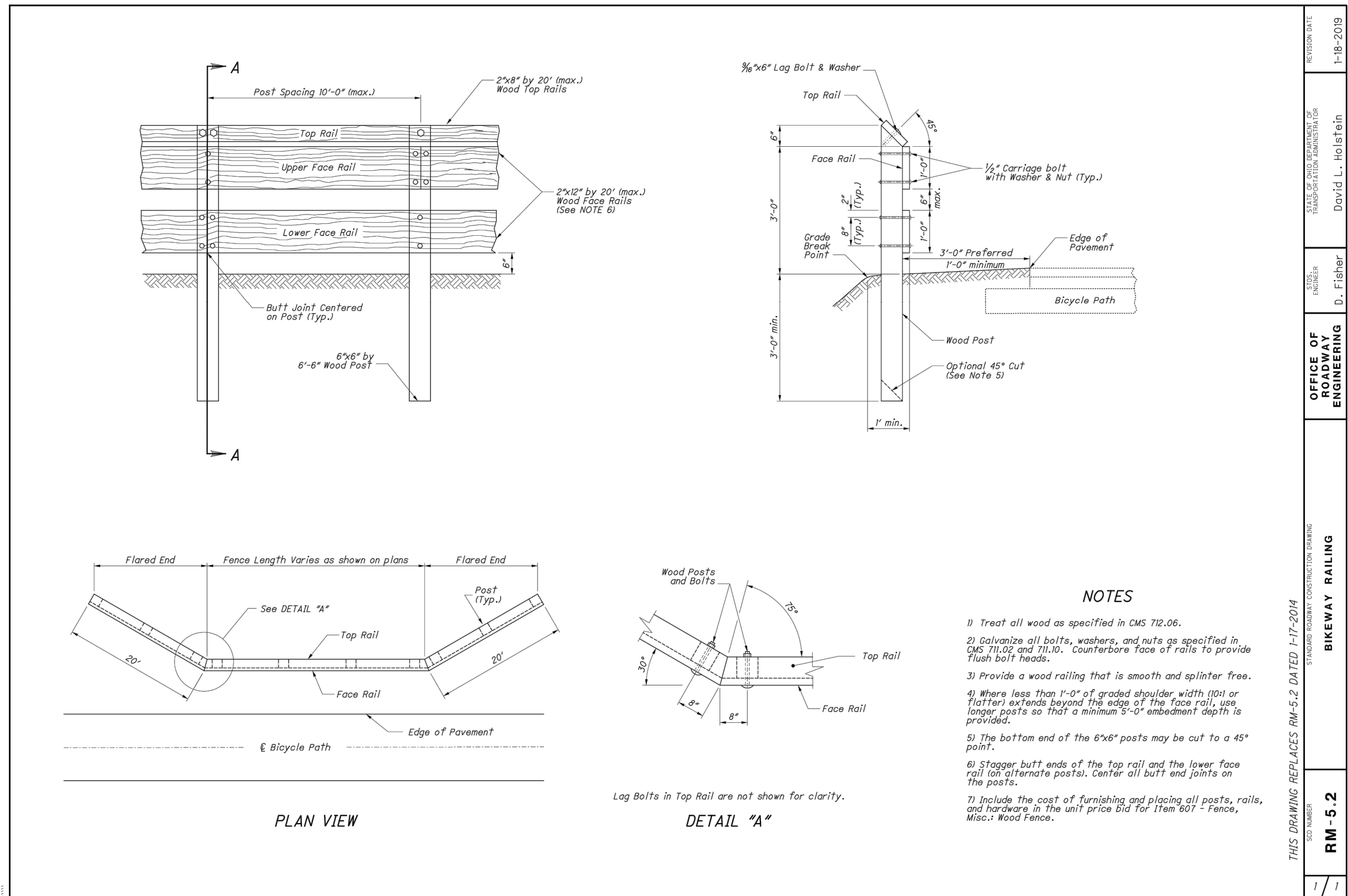
SHEET TITLE

DETAILS

SHEET NUMBER

C-06

FULL SIZE SHEET (22"x34")



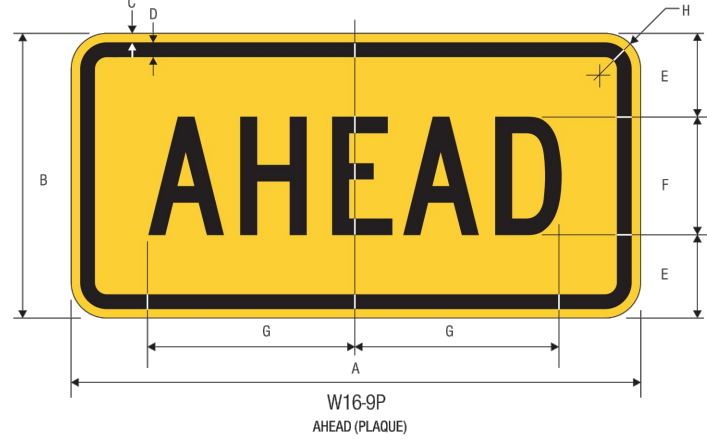
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BACKGROUND - YELLOW (RETROREFLECTIVE)

2-126



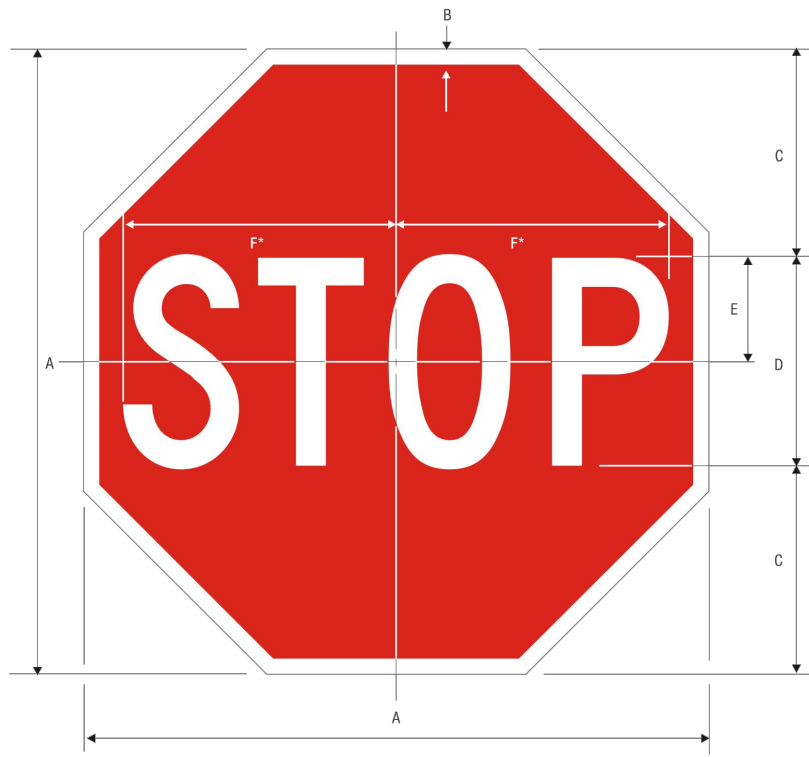
COLORS: LEGEND - BLACK
BACKGROUND - WHITE (RETROREFLECTIVE)

1-78



A	B	C	D	E	F	G	H
24	12	375	625	3.5	5.0	8.714	1.5
30	18	.5	.75	5.5	7.0	12.261	1.675
36	24	.625	.875	8	8.0	13.844	2.25
48	36	.75	1.25	13	10.0	17.428	3

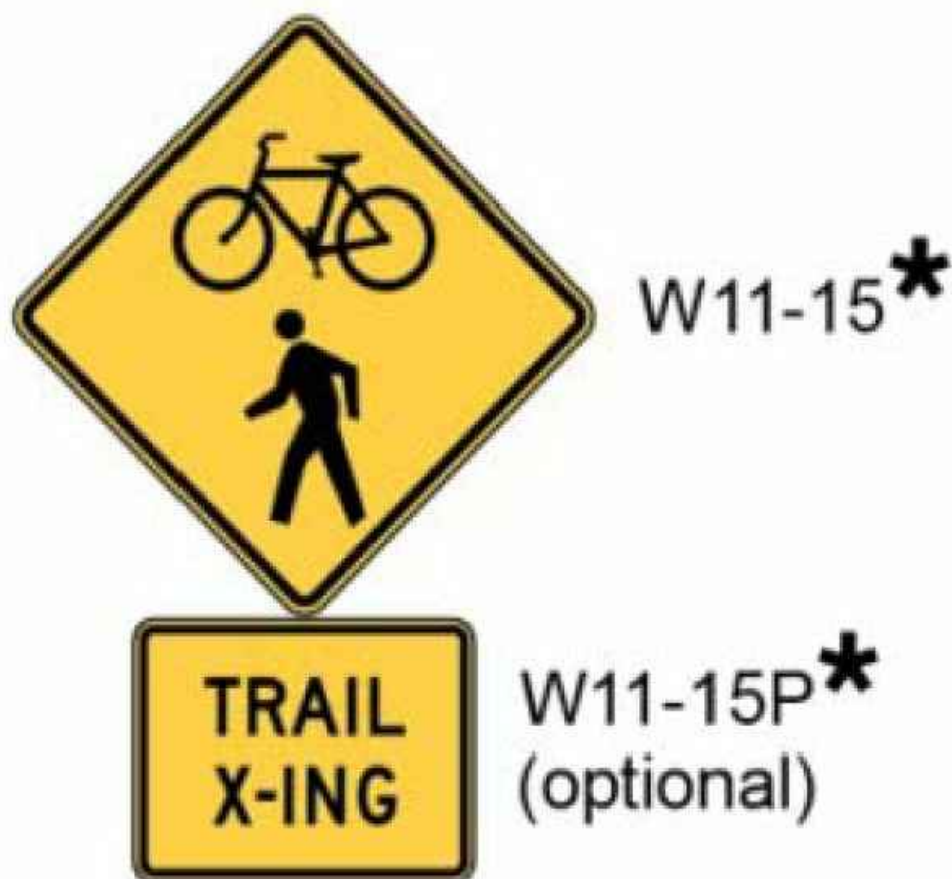
W16-SP
Revised 3/1/2012

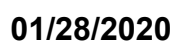


A	B	C	D	E	F
18	375	6	6.0	3	7.75
24	625	8	8.0	4	10
30	75	10	10.0	5	12.5
36	875	12	12.0	6	15
48	1.25	16	16.0	8	20

COLORS: LEGEND - WHITE (RETROREFLECTIVE)
BACKGROUND - RED (RETROREFLECTIVE)

1-1





PORTAGE PARK DISTRICT
HEADWATERS TRAIL



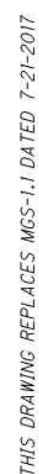
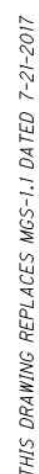
PROJECT NO: 2020-0003
DRAWN BY: SMA
APPROVED BY: CJB
DATE: 01/28/2020

DETAILS

SHEET NUMBER

C-07

FULL SIZE SHEET (22"x34")



1. THE CONTRACTOR IS TO REFER TO THIS PLAN AND THE E&S PLAN, NOTES, AND DETAILS.
2. CONTRACTOR IS RESPONSIBLE TO MAINTAIN LAWN AND AND STORM WATER CONTROLS UNTIL SUBSTANTIAL COMPLETION OF THE PROJECT. PERIODIC INSPECTIONS ARE REQUIRED PER THE EPA GENERAL PERMIT OHC000005. GENERAL PERMIT TO BE OBTAINED BY CM. CONTRACTOR IS REQUIRED TO KEEP COPY OF PERMIT ON-SITE AND CONFORM WITH PERMIT REQUIREMENTS.
3. THE CONTRACTOR IS TO INSTALL AND MAINTAIN THE E&S CONTROLS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL THE SITE IS FULLY STABILIZED.
4. THE CONTRACTOR IS RESPONSIBLE TO REMOVE THE TEMPORARY E&S CONTROLS ONCE THE SITE IS FULLY STABILIZED.
5. CONTRACTOR IS TO MAINTAIN, ON-SITE AT ALL TIMES, LOGS DOCUMENTING GRADING AND STABILIZATION ACTIVITIES AS WELL AS AMENDMENTS TO THE SWP3. AS REQUIRED BY THE GENERAL PERMIT.
6. DUMPSTERS, WASTE DISPOSAL AREA'S AND OTHER AREAS DESIGNATED UNDER NON-SEDIMENT POLLUTANT CONTROLS WILL BE LOCATED ON-SITE DURING CONSTRUCTION BY CM.
7. INCIDENTAL WORK BEYOND APPROXIMATE CONSTRUCTION LIMIT LINE IS TO BE INCLUDED IN BASE BID.
8. CONTRACTOR IS TO PREVENT DUST AND DEBRIS FROM BEING TRACKED OR BLOWN ONTO MENNONITE ROAD OR SURROUNDING PROPERTIES BY USE OF REGULAR SWEEPING, TIRE WASHING, DUST CONTROL METHODS, ETC. EQUIPMENT (POWER BROOM, WATER TRUCK, ETC.) ARE TO REMAIN ON-SITE AS REQUIRED, TO ACCOMMODATE DUST AND DEBRIS. CONTRACTOR IS TO UTILIZE TIRE WASHING STATION DURING CONSTRUCTION ACTIVITIES, IF NEEDED, TO PREVENT DEBRIS FROM REACHING ADJACENT STREETS.
9. IF CONTRACTOR IS NOTIFIED BY POLICE, PORTAGE PARK DISTRICT OFFICIALS, OR PORTAGE SOIL AND WATER CONSERVATION DISTRICT PERSONNEL OF ANY SIGNIFICANT VIOLATION OF EPA GENERAL PERMIT AND/OR SWPPP PLANS AND INFORMATION, ALL CONSTRUCTION ON-SITE IS TO CEASE UNTIL PROBLEM(S) ARE RECTIFIED & DEEMED ACCEPTABLE.

1. PRE-CONSTRUCTION MEETING.
2. ESTABLISH CONSTRUCTION OFFICE ON SITE. ESTABLISH TEMPORARY UTILITIES AS NEEDED. ALL TEMPORARY UTILITY SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. STAKEOUT LIMITS OF DISTURBANCE.
4. INSTALL INLET PROTECTION (DANDY BAGS OR APPROVED EQUAL) FOR ANY GRATED STORM STRUCTURES.
5. INSTALL SILT FENCE AROUND PERIMETER OF ENTIRE SITE EXCEPT AT MAN GATES AND VEHICLE CONSTRUCTION ENTRANCES / GATES.
6. CONSTRUCT SEDIMENT BASIN AND TEMPORARY OUTLET STRUCTURE BEFORE ANY OTHER EARTHWORK ACTIVITY. PROVIDE TEMPORARY SEEDING OF THE SEDIMENT BASIN AND ADJOINING BARE AREAS NOT BEING WORKED.
7. INSTALL DIVERSION BERMS EARLY IN CONSTRUCTION TO ENSURE SITE STORMWATER RUNOFF ENTERS THE SEDIMENT BASIN.
8. REMOVE SOIL AS NEEDED AND CONSTRUCT TEMPORARY GRAVEL CONSTRUCTION ROAD AROUND ENTIRE BUILDING AS SHOWN. GRAVEL ROAD IS TO BE CONSTRUCTED OVER A WELL COMPACTED SUBGRADE (ODOT ITEM 204) AND CONSIST OF GEOTEXTILE FABRIC (ODOT ITEM 712.09, ITEM D), 9" THICK LAYER OF (AASHTO M 43) NO. 1's & NO. 2's, AND CHIEFED OFF WITH 6" ODOT 57 CRUSHED STONE. PORTIONS OF THIS GRAVEL ROAD WILL SERVE AS A CONSTRUCTION ENTRANCES WHERE GATES ARE NOT POWER BROOM AND CLEAN ADJACENT ROADWAYS ON A DAILY BASIS AND AS REQUIRED. REMOVE ALL DEBRIS FROM SITE. TEMPORARY CONSTRUCTION DRIVE IS TO BE REMOVED NEAR SUBSTANTIAL COMPLETION AND REPLACED WITH TOPSOIL & SEED OR WALKS & DRIVES AS SHOWN ON SITE PLAN.
7. CONSTRUCTION MANAGER TO ANNOTATE LOCATION OF TEMPORARY FACILITIES (WORK TRAILERS, SANITARY FACILITIES, CONTRACTOR PARKING, STORAGE AREAS, LAYDOWN AREAS, ETC.) ON THE APPROVED PLAN SET AND LOG THE CHANGES.
8. MAINTAIN TEMPORARY CONTROLS UNTIL REMOVAL IS WARRANTED DUE TO PROGRESSION OF WORK AND STABILIZATION OF SITE
9. BEGIN EARTHWORK OPERATIONS. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE OWNER OF LOCATION AND EROSION SEDIMENTATION CONTROL MEASURES IMPLEMENTED AT BORROW OR SPOIL SITE OF IMPORT/EXPORT MATERIAL.
10. STORM SEWER AND UTILITY LINE CONSTRUCTION MAY BEGIN IMMEDIATELY FOLLOWING ESTABLISHMENT OF GRADE AND PERMISSION OF THE OWNER/CM
11. STABILIZE ALL UTILITY TRENCHES AT THE END OF EACH WORKDAY BY MEANS OF GRAVEL BACKFILL TO SURFACE, RE-PAVING OR MULCHING.
12. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, PERMANENT SEED AND MULCHING IMMEDIATELY UPON REACHING FINAL GRADE.
13. INSTALL PAVEMENT BASE, WALK, AND PAVEMENT.
14. COMPLETE SITE WORK, FINAL LANDSCAPING AND CLEANUP.
15. RESEED AND REDRESS ANY AREAS THAT MAY REQUIRE ATTENTION IMMEDIATELY.
16. ALL EROSION MEASURES SHALL REMAIN IN PLACE UNTIL THE SITE IS STABILIZED. ALL AREAS OF VEGETATIVE SURFACE STABILIZATION, WHETHER TEMPORARY OR PERMANENT, SHALL BE CONSIDERED TO BE IN PLACE AND FUNCTIONAL WHEN THE REQUIRED UNIFORM RATE OF COVERAGE (80%) IS OBTAINED.
17. ONCE SEEDING IS ESTABLISHED CONVERT TEMPORARY SEDIMENT TO PERMANENT OUTLET STRUCTURE.
18. IF FOR ANY REASON THE PROJECT IS SUSPENDED, THE CONTRACTOR SHALL ENSURE THAT ALL INSTALLED EROSION MEASURES ARE FUNCTIONING AND PROPERLY MAINTAINED DURING THIS PERIOD, AND THAT ALL DISTURBED SOILS ARE SEEDED AND MULCHED WITH TEMPORARY SEED MIXTURE UNTIL FINAL SEEDING. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO MAINTAIN LAWN UNTIL SUBSTANTIAL COMPLETION.
19. REPLACE APRON AND SIDEWALK AT THE CONSTRUCTION ENTRANCE.

MAINTENANCE/INSPECTION PROCEDURES

1. ALL CONTROLS ARE TO BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN ONE-HALF INCH OF RAIN PER 24 HOUR PERIOD. THE INSPECTION PERIOD MAY BE REDUCED TO AT LEAST ONCE EVERY MONTH IF THE ENTIRE SITE IS TEMPORARILY STABILIZED OR RUNOFF IS UNLIKELY. ONCE A DEFINABLE AREA HAS BEEN FINALLY STABILIZED NO FURTHER INSPECTION REQUIREMENTS APPLY TO THAT PORTION OF THE SITE.
2. A CHECKLIST MUST BE COMPLETED AND SIGNED BY A QUALIFIED INSPECTION PERSONNEL AND INCLUDE THE FOLLOWING:
 - INSPECTION DATE
 - NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION
 - WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION OR COMMENCEMENT OF CONSTRUCTION ACTIVITY (INCLUDE ANY STORM ACTIVITY - DURATION, INTENSITY, DISCHARGES)
 - LOCATION OF ANY SEDIMENT OR OTHER POLLUTANT DISCHARGES FROM THE SITE
 - LOCATION OF BMPs THAT NEED TO BE INSTALLED AND/OR MAINTAINED
 - LOCATION OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE
 - CHECK FOR ANY EVIDENCE OF POLLUTANTS FROM STORED MATERIALS ENTERING THE DRAINAGE SYSTEM
 - CORRECTIVE ACTION (INSTALLATION, REPAIRS, MODIFICATIONS TO SWPPCAP, AND IMPLEMENTATION DATES)
 - A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR. THE SITE SUPERINTENDENT WILL SELECT INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
 - COPIES OF THE REPORT ARE TO BE SENT TO THE OWNER, COUNTY ENGINEER & LOCAL SOIL & WATER CONSERVATION DISTRICT

- A. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE
- B. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. REPAIRS ARE TO BE MADE PROMPTLY.
- C. IF APPLICABLE, THE SEDIMENT BASIN WILL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 40 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.
- D. IF APPLICABLE, DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
- E. TEMPORARY AND PERMANENT SEEDING AND PLANTINGS WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

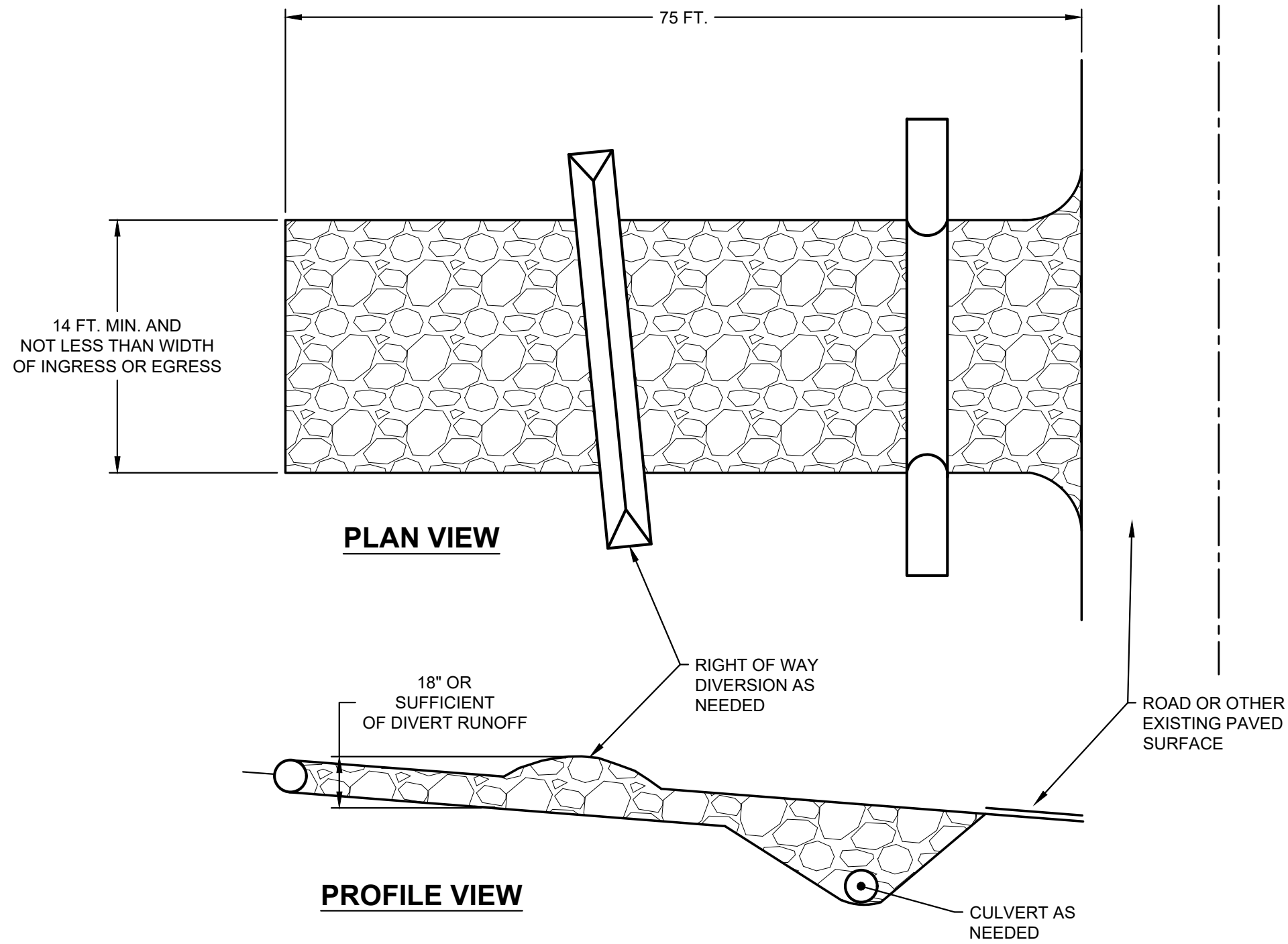
THE CONTRACTOR'S REGISTERED SURVEYOR SHALL CONTACT THE ENGINEER OF RECORD TO OBTAIN A COPY OF THE AUTOCAD FILE FOR CONSTRUCTION STAKING.



DESCRIPTION

A CONSTRUCTION ENTRANCE IS A STABILIZED PAD OF STONE UNDERLAIN WITH A GEOTEXTILE AND IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC. LOCATED AT POINTS OF INGRESS/EGRESS, THE PRACTICE IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC.

SPECIFICATIONS FOR CONSTRUCTION ENTRANCE



1. STONE SIZE - # 2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS).
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

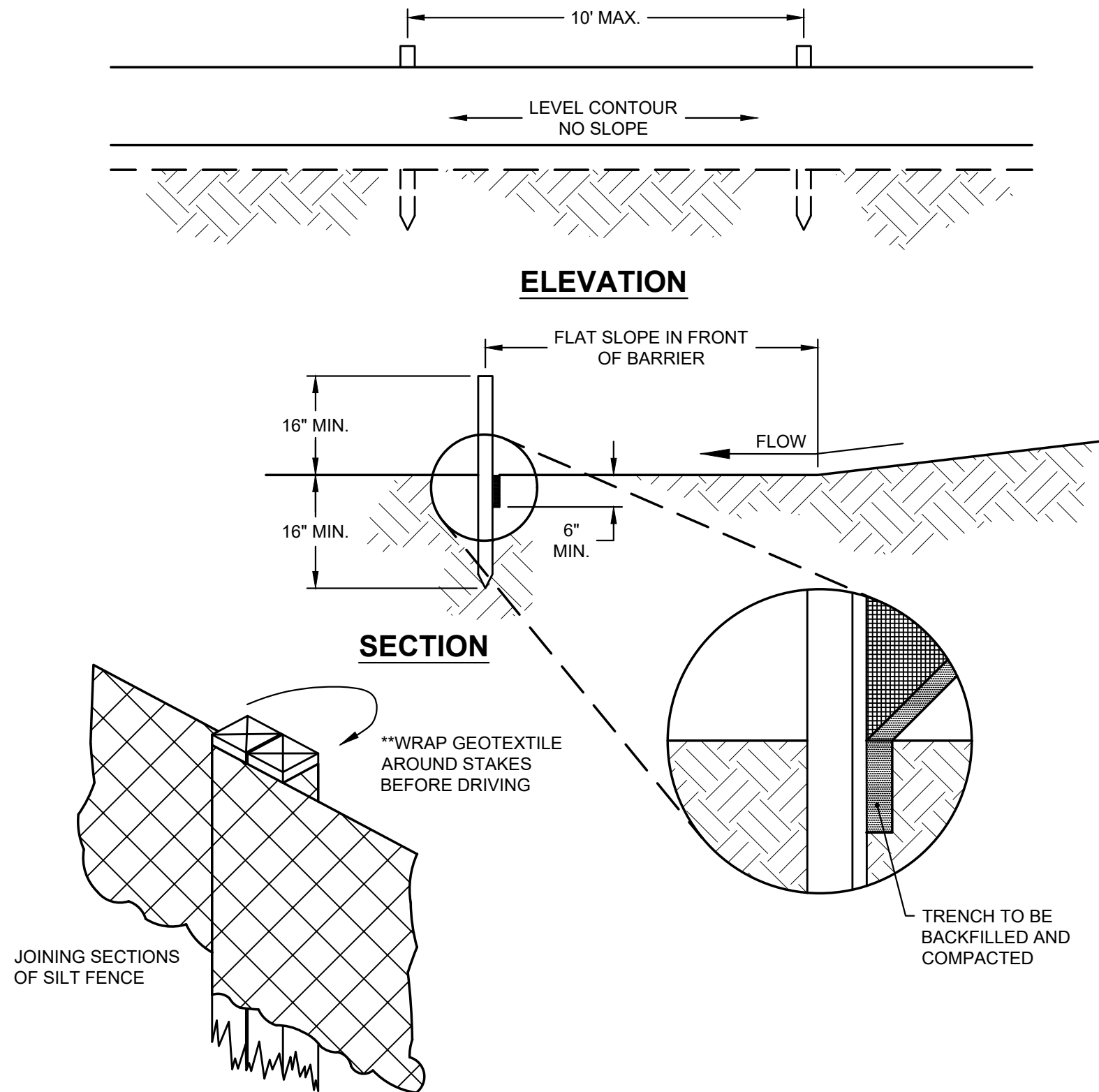
GEOTEXTILE SPECIFICATIONS FOR CONSTRUCTION ENTRANCES	
MINIMUM TENSILE STRENGTH	200 LBS.
MINIMUM PUNCTURE STRENGTH	80 PSI
MINIMUM TEAR STRENGTH	50 LBS
MINIMUM BURST STRENGTH	320 PSI
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS < 0.6MM
PERMITTIVITY	1×10^{-3} CM/SEC

7. TIMING - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
8. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
9. WASHOUT - A WASHOUT BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
10. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
11. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT GET MUD AND LEAVE THE CONSTRUCTION SITE SHALL BE DIRECTED TO A WASHOUT AREA.
12. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

DESCRIPTION

SILT FENCE IS A SEDIMENT-TRAPPING PRACTICE UTILIZING A GEOTEXTILE FENCE, TOPOGRAPHY AND SOMETIMES VEGETATION TO CAUSE SEDIMENT DEPOSITION. SILT FENCE REDUCES RUNOFF'S ABILITY TO TRANSPORT SEDIMENT BY PONDING RUNOFF AND DISSIPATING SMALL RILLS OR CONCENTRATED FLOW INTO UNIFORM SHEET FLOW. SILT FENCE IS USED TO PREVENT SEDIMENT-LADEN SHEET RUNOFF FROM ENTERING INTO DOWNSTREAM CREEKS AND SEWER SYSTEMS.

SPECIFICATIONS FOR SILT FENCE



2. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
3. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
4. ENDS OF THE SILT FENCE SHOULD BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
5. THE FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
6. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
7. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
8. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATE UNIFORM TRENCH DEPTH.
9. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
10. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO GROUND, (SEE DETAIL).
11. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.
12. • SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE SILT FENCE.
13. • SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
14. THE LOCATION OF THE EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

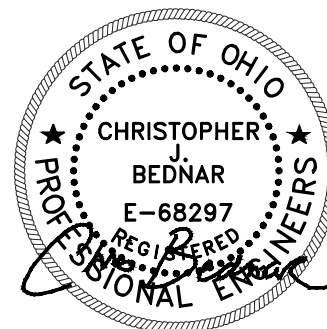
CRITERIA FOR SILT FENCE MATERIALS:

1. FENCE POST - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POST WILL BE 2-BY-2, L-NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS, AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SILT FENCE FABRIC - SEE CHART BELOW.

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LBS (535 N)	ASTM D 4632
MAXIMUM ELONGATION AT 60 LBS	50 %	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS (220 N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS (180 N)	ASTM D 4533
APPARENT OPENING SIZE	≤ 0.84 mm	ASTM D 4751
MINIMUM PERMITTIVITY	1 x 10 ⁻² SEC. ⁻¹	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70%	ASTM D 4355



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01/28/2020

PROJECT NAME

PORTAGE PARK DISTRICT
HEADWATERS TRAIL

CLIENT NAME



	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021
REV. NO.	DESCRIPTION	DATE

PROJECT NO: 2020-0003

DRAWN BY: SMA

APPROVED BY: CJR

DATE: 01/20/2020

SCALE: NO SCALE

SWPPP DETAILS

SHEET NUMBER

C-10

FULL SIZE SHEET (22"x34")



PROJECT NAME

PROJECT NAME

PROJECT NAME

CLIENT NAME



PROJECT NAME

PROJECT NAME

	ISSUE FOR BID	1/28/2021
	100% OWNER REVIEW	1/22/2021
REV. NO.	DESCRIPTION	DATE

SWPPP DETAILS

SHEET NUMBER

C-11

FULL SIZE SHEET (22"x34")