LITTLE MOUNTAIN ELEMENTARY DRIVEWAY

FOR

NEWBERRY COUNTY SCHOOL DISTRICT

NEWBERRY COUNTY, SOUTH CAROLINA



LOCATION MAP

SCALE: 1" = 2000'

Sheet List Table	
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C12	STORM DRAINAGE DETAILS
C13	STORM DRAINAGE DETAILS

DEVELOPMENT DATA:

MUNICIPALITY:	NEWBERRY COUNTY, SOUTH CAROLINA
SITE ADDRESS:	692 MILL ST., LITTLE MOUNTAIN, SC 29075
TMS:	697-4-1-9 (5.0 AC), 697-4-1-13 (11.89 AC), 697-4-1-7 (2.0 AC), 697-4-1-11 (0.5 AC), 697-4-1-6 (0.65 AC)
EXISTING USE:	GOVERNMENT EXEMPT IMPROVED
PROPOSED USE:	GOVERNMENT EXEMPT IMPROVED
TOTAL ACREAGE:	20.04 ACRES
ZONING:	TBD
FEMA FLOOD ZONE:	ZONE X (PANEL 45071C0410C, EFFECTIVE DATE SEPTEMBER 16, 2011)

WK DICKSON
community infrastructure consultants

OWNER/DEVELOPER:

SCHOOL DISTRICT OF NEWBERRY COUNTY
CONTACT: KENNETH RAWLS
CHIEF OPERATIONS OFFICER
3419 MAIN STREET
NEWBERRY, SC 29108
803-321-2600 (OFFICE)
KRAWLS@NEWBERRY.K12.SC.US

CIVIL ENGINEER:

WK DICKSON
CONTACT: CLAY CANNON, P.E.,
VICE PRESIDENT
1320 MAIN STREET, SUITE 400
COLUMBIA, SC 29201
803-786-4261 (OFFICE)
CCANNON@WKDICKSON.COM

DESIGNER CERTIFICATION

" I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000."

NOTICE TO CONTRACTOR

1. PRIOR TO CONSTRUCTION, DIGGING, OR EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE AREA(S) OF CONSTRUCTION, WHETHER INDICATED ON THE PLANS OR NOT. CALL "811" A MINIMUM OF 72 HOURS PRIOR TO DIGGING OR EXCAVATING. REPAIRS TO ANY UTILITY DAMAGED RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

811 Know what's below. Call before you dig

BID DRAWINGS - NOT FOR CONSTRUCTION

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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION W. K. DICKSON & COMPANY, INC. No. C00177
C.O.A.

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 22779 ... W. CANNON
8/25/2023
PROFESSIONAL SEAL

REVISION RECORD

NO.	DATE	DESCRIPTION	BY

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE: **COVER SHEET**

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER:

CS

WKD PROJ. NO.:

20230179.00.CA

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FILE PATH:Z:\Projects\Newberry Co School District\202301790CA - Little Mountain Elementary Driveway\CADD\Sheets\20230179_C_SHT_CS.dwgZ:\Projects\Newberry Co School District\202301790CA - Little Mountain Elementary Driveway\CADD\Sheets\20230179_C_SHT_CS.dwg, MJENNINGS, 8/29/2023 2:40:59 PM

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LEGEND

DEMOLITION	EXISTING	DESCRIPTION
N/A		BENCHMARK/CONTROL POINT
N/A		PROPERTY LINE
N/A		LIGHT POLE
		ASPHALT PAVEMENT
		CONCRETE SIDEWALK
N/A		GRAVEL
N/A		CONTOUR
		TREE LINE
	N/A	CLEARING LIMITS
		PINE
		OAK
		CEDAR
		FENCE LINE
		GUARD RAIL
N/A		WATER DISTRIBUTION STRUCTURES
N/A		WATER LINE
N/A		OVERHEAD ELECTRIC LINE w/ POWER POLE
N/A		SANITARY SEWER LINE w/MANHOLE
N/A		STORM DRAIN LINE w/STRUCTURE
N/A		NATURAL GAS LINE
N/A		UNDERGROUND ELECTRIC LINE
1	N/A	KEY NOTE REFERENCE

KEY NOTES

1. DEMO AND REMOVE EXISTING CONCRETE SIDEWALK
2. DEMO AND REMOVE EXISTING ASPHALT, PROVIDE SAWCUT ALONG EXISTING PAVEMENT TO REMAIN
3. EXISTING VEGETATION AND TREES TO BE REMOVED WITHIN LIMITS OF DISTURBANCE/CLEARING LIMITS UNLESS OTHERWISE NOTED
4. EXISTING FENCE TO BE REMOVED AND REPLACED AFTER GRADING IS COMPLETE
5. DEMO EXISTING CURB AND GUTTER
6. *NOT USED*
7. DEMO EXISTING GUARDRAIL
8. EXISTING LIGHT POLES TO BE REMOVED AND RELOCATED

DEMOLITION NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS TO BE DEMOLISHED AND REMOVED FROM THE SITE. THE VERIFICATION PROCESS SHALL INCLUDE VISITING AND WALKING THE SITE. ALL ITEMS REQUIRING DEMOLITION/ REMOVAL, WHETHER SHOWN ON THIS PLAN OR NOT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. LOCATIONS OF ALL UNDERGROUND UTILITY LINES ARE IN APPROXIMATE LOCATIONS BASED OFF FIELD LOCATION AND AVALIABLE GIS MAPPING. VERIFY ALL FIELD LOCATIONS PRIOR TO BEGINNING DEMOLITION AND CONSTRUCTION ACTIVITIES.
3. EXISTING UTILITIES TO BE PROTECTED DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
4. PRIOR TO COMMENCEMENT OF TREE REMOVAL THE CONTRACTOR SHALL WALK THE SITE WITH THE OWNER AND/OR OWNER'S REPRESENTATIVE TO IDENTIFY TREES AND/OR VEGETATION TO REMAIN. PROTECTION OF IDENTIFIED TREES AND/OR VEGETATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. THERE SHALL BE NO BURNING ON SITE.
6. EXISTING IMPROVEMENTS SO NOTED, ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF ACCORDING TO APPLICABLE REGULATIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REMOVAL AND/OR RELOCATION OF ALL UTILITIES (ABOVE AND BELOW GROUND LEVEL) AS NECESSARY TO ACCOMMODATE THE IMPROVEMENTS SHOWN ON THESE PLANS AND AS REQUIRED TO FACILITATE CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL SERVICES WHICH ARE INDICATED TO BE EXTENDED OR OTHERWISE REUSED.
9. ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT THAT IS INDICATED ON THESE PLANS TO BE REMOVED FROM THE PROJECT SITE SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR ACCORDING TO APPLICABLE CODES. CONTRACT TO SAWCUT CLEAN EDGES OR AT NEAREST JOINTS FOR ALL HARDSCAPE REMOVAL.
10. THE CONTRACTOR SHALL CONSULT THE OWNER REGARDING SALVAGE, ANY ITEMS NOT RETAINED BY THE OWNER SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DEMOLISH AND/OR LEGALLY DISPOSE OF.
11. EROSION AND SEDIMENT CONTROL DEVICES MUST BE IN PLACE PRIOR TO DEMOLITION.
12. IF ANY HAZARDOUS MATERIAL IS ENCOUNTERED DURING DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER/PROJECT TEAM AND APPROPRIATE AGENCIES FOR PROPER REMOVAL AND DISPOSAL.
13. DEMOLITION SHALL MEET ALL APPLICABLE STATE, LOCAL, AND FEDERAL REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPLICABLE DEMO AND DISPOSAL PERMITS.
14. CONTRACTOR SHALL GRADE DEMOLISHED AREAS TO DRAIN (PIPES, PARKING, ETC.). INCLUDE BACKFILLING AS NECESSARY TO PROMOTE POSITIVE DRAINAGE

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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W. K. DICKSON & COMPANY, INC.
No. C00177
C.O.A.

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
No. 22779
CHRISTOPHER W. CARTON
8/25/2023
PROFESSIONAL SEAL

NO.	DATE	DESCRIPTION

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FOR
NEWBERRY COUNTY SCHOOL DISTRICT

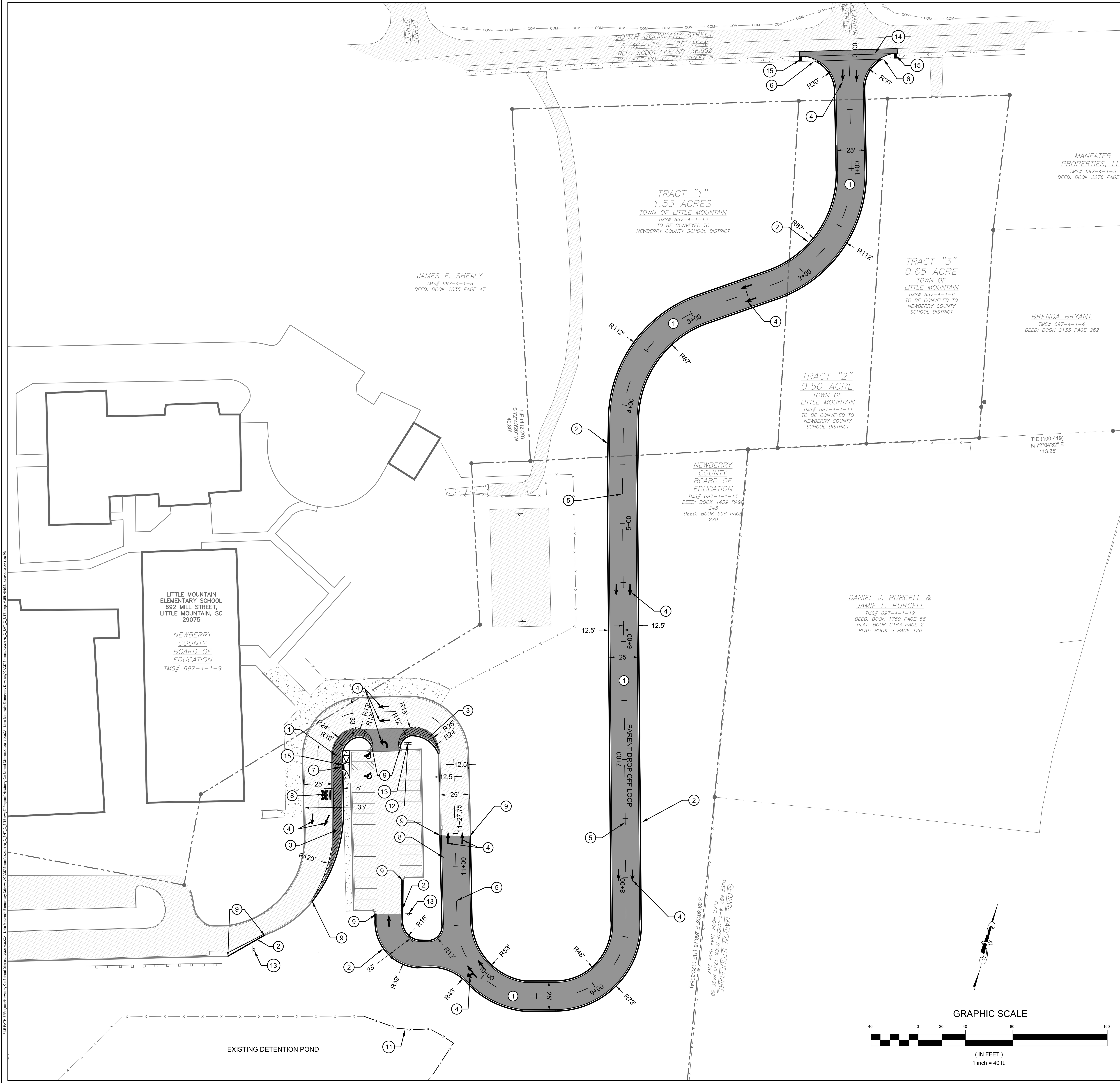
DRAWING TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER:
C1

WKD PROJ. NO.:
20230179.00.CA

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SITE NOTES:

1. ALL WORK FOR THE PROJECT SHALL CONFORM TO THE PROJECT SPECIFICATIONS FOUND IN THE PROJECT MANUAL (CONTRACT DOCUMENTS AND SPECIFICATIONS).
2. CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT AND STAKING OF THE PROPOSED SITE AND LIMITS OF WORK.
3. CONTRACTOR SHALL COORDINATE WITH OWNER ON PROPOSED LAYDOWN / MATERIAL STORAGE LOCATIONS.
4. CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION FENCING / BARRIERS TO SECURE THE WORK SITE FROM PEDESTRIAN OR VEHICULAR ACCESS DURING CONSTRUCTION.
5. ALL BUILDING DIMENSIONS ARE SHOWN FOR REFERENCE ONLY AND SHOULD BE VERIFIED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
6. ALL DIMENSIONS ARE TO EDGE OF SIDEWALK, PAVEMENT OR BUILDING UNLESS OTHERWISE NOTED.
7. SIDEWALKS, ACCESSIBLE ROUTES, ETC. SHALL COMPLY WITH AMERICAN WITH DISABILITIES ACT (ADA) AND ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.
8. VERIFY ALL LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO BEGINNING DEMOLITION AND CONSTRUCTION ACTIVITIES. IF CONDITIONS ARE DIFFERENT FROM THAT SHOWN ON THE PLANS, STOP WORK AND NOTIFY THE ENGINEER.
9. EXISTING UTILITIES TO BE PROTECTED DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		CONCRETE SIDEWALK
		ASPHALT PAVEMENT
		GRAVEL PAVEMENT
		CURB AND GUTTER
—x—x—x—x—x—	—— x —— x ——	FENCE LINE
N/A	(1)	KEY NOTE REFERENCE

KEY NOTES

1. LIGHT DUTY ASPHALT PAVEMENT
2. 18" CONCRETE CURB AND GUTTER
3. 45° STRIPED ACCESS AISLE (4" SOLID WHITE STRIPE AT 2' ON CENTER)
4. DIRECTIONAL TRAFFIC ARROW MARKING SOLID WHITE
5. 4" DASHED LINE SOLID WHITE STRIPING - 10' STRIPE WITH 30' GAP
6. 2' TAPER CURB TO EXISTING SIDEWALK
7. HANDICAP RAMP
8. "MERGE" ROADWAY MARKING
9. TIE TO EXISTING CURB AND GUTTER
10. 4" THICK CONCRETE SIDEWALK (3,000 PSI)
11. CHAIN LINK FENCING
12. STOP SIGN (R-1-1-30)
13. DO NOT ENTER SIGN
14. SOLID WHITE 8' WIDE PEDESTRIAN CROSSWALK
15. ADA DETECTABLE WARNING MAT

PAVEMENT STRIPING NOTES:

1. ALL PAVEMENT MARKINGS SHALL MEET ALL REQUIREMENTS OF THE FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SCDOT SPECIFICATIONS.
2. APPLY ALL ROADWAY STRIPING AND MARKINGS IMMEDIATELY AFTER APPLICATION OF FINAL SURFACE.

PARKING SUMMARY:

1.	EXISTING PARKING SPACES:	72
2.	EXISTING ADA SPACES:	6
	TOTAL PARKING:	78

VEHICLE STACKING SUMMARY:

DOUBLE LANE = 1,400 LF (PRIOR TO MERGE)
TOTAL DROP OFF STACKING AVAILABLE = 2,800 LF

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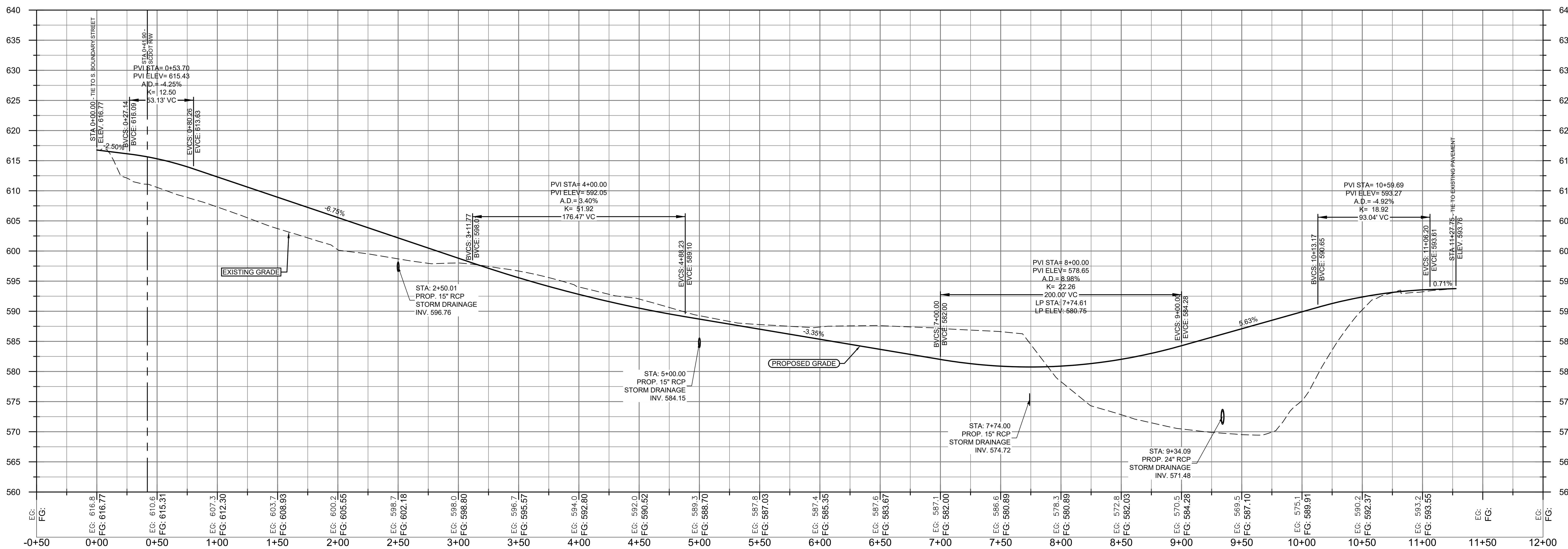
DRAWING TITLE: **SITE PLAN**

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER: C2

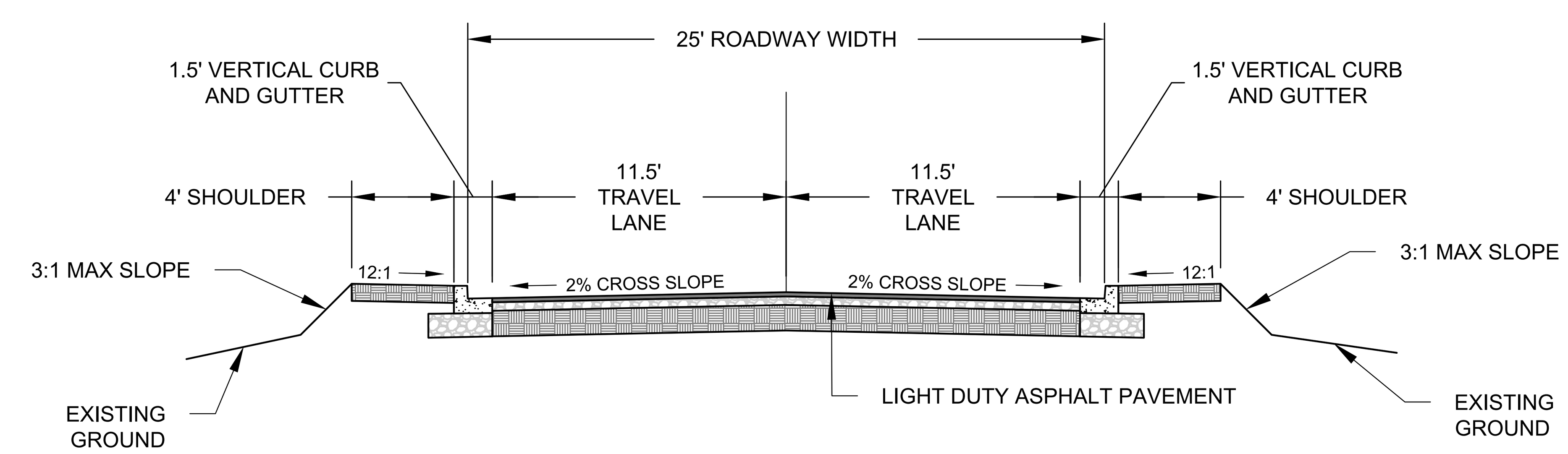
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PROFILE - DRIVEWAY
STA. 0+00 TO 12+00

SCALE: 1" = 50' HORIZONTAL
1" = 10' VERTICAL



DRIVEWAY PROFILE TYPICAL SECTION
NOT TO SCALE

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DRAWING TITLE: **DRIVEWAY PROFILE**

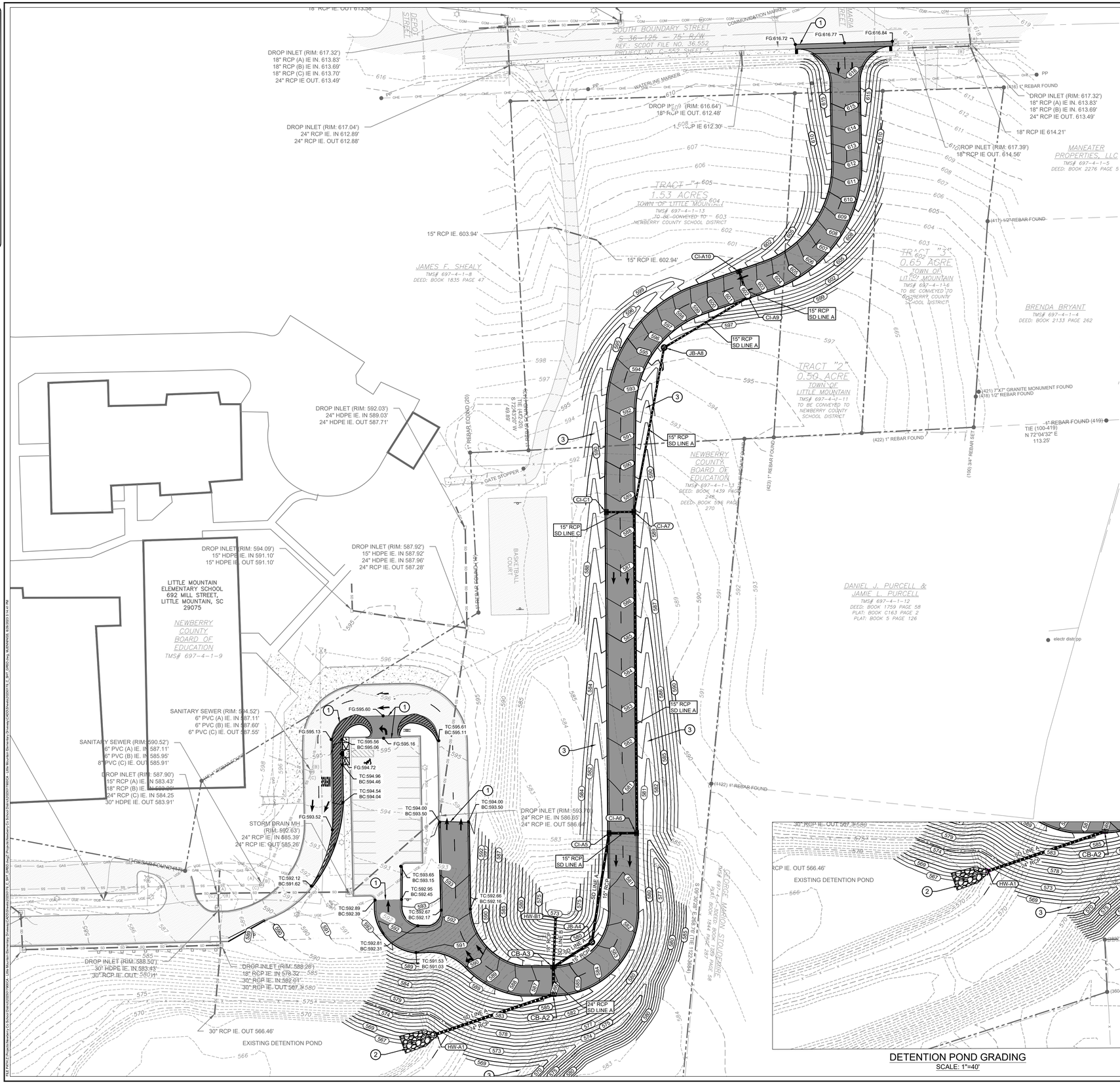
PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER:
C3

WKD PROJ. NO.:
20230179.00.CA

FILE PATH:Z:\Projects\Newberry Co School District\202301790OCA - Little Mountain Elementary Driveway\CADD\Sheets\20230179_C_SHT_ROAD_PROFILES.dwg, MJENNINGS, 8/29/2023 2:41:53 PM

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DETENTION POND GRADING
SCALE: 1"=40'

GRADING AND DRAINAGE NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ELEVATIONS PRIOR TO CONSTRUCTION. IF CONDITIONS DIFFER FROM THOSE ON THE PLANS, NOTIFY THE ENGINEER IMMEDIATELY.
2. ALL SPOT ELEVATIONS ARE TO FACE OF CURB OR EDGE OF PAVEMENT WHERE CURB IS NOT INSTALLED, UNLESS OTHERWISE NOTED. PROPOSED SPOT ELEVATIONS AND GRADES SHOWN ARE FINAL SURFACE ELEVATIONS UNLESS OTHERWISE NOTED. SPOT ELEVATIONS ARE DEFINED BY THE FOLLOWING:
   EG: EXISTING GRADE
   FG: FINISHED GRADE
   BC: BOTTOM OF CURB
   TC: TOP OF CURB
3. ALL GRASSED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE PERMANENTLY SEEDED, SEE GRASSING SPECIFICATIONS. CONTRACTOR SHALL, FOR ALL GRASSED AREAS, BE RESPONSIBLE FOR REPLACING ERODED SOIL AND GRASS SEED UNTIL AN APPROVED STAND OF GRASS IS ESTABLISHED.
4. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. VERIFY ALL FIELD CONDITIONS AND THE EXACT LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING DEMOLITION AND CONSTRUCTION. IF CONDITIONS ARE DIFFERENT FROM THAT SHOWN ON THE PLANS, STOP WORK AND NOTIFY THE ENGINEER.
5. ALL EXCAVATION FOR THIS PROJECT IS UNCLASSIFIED. WHEN EXCAVATING, REMOVE ALL MATERIALS OF WHATEVER SUBSTANCE ENCOUNTERED.
6. PROPOSED FILL SOILS SHALL BE SUITABLE MATERIAL AND FREE OF ORGANIC MATERIAL, RUBBLE, DEBRIS, AND HIGHLY PLASTIC CLAYS OR SILTS.
7. ALL FILL AREAS BELOW PAVEMENTS OR WALKS TO BE COMPACTED TO 98% PROCTOR (ASTM D698) MAXIMUM DRY DENSITY.
8. ANY UTILITIES OR FACILITIES DAMAGED DURING THE PROJECT BY THE CONTRACTOR'S PERSONNEL OR EQUIPMENT SHALL BE PROMPTLY REPAIRED AT THE CONTRACTOR'S EXPENSE. HAND DIGGING TO PROTECT UTILITIES FROM DAMAGE SHOULD BE ANTICIPATED.
9. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION TO CONTROL EROSION AND/OR OFF SITE SEDIMENTATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STABILITY OF ALL GRADED AND/OR CLEARED AREAS UNTIL PERMANENT GROUND COVER IS ESTABLISHED. ANY AREAS DAMAGED BY EROSION SHALL BE REPAIRED TO ITS ORIGINAL CONDITION AND PROTECTED FROM FURTHER EROSION AT NO ADDITIONAL COST TO THE OWNER.
10. CONTRACTOR SHALL COORDINATE THE LOCATION OF ROOF DRAIN DOWN SPOUTS WITH THE ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR CONNECTION OF ROOF DRAIN DOWN SPOUTS TO THE ROOF DRAIN COLLECTION PIPING. NO SEPARATE PAYMENT WILL BE MADE FOR THESE CONNECTIONS.
11. ALL UTILITY BOXES, MANHOLES, VALVES, METER BOXES, INLETS AND ANY OTHER UTILITY STRUCTURES SHALL BE FIELD ADJUSTED TO MATCH FINISHED GRADE.
12. STORMWATER CONVEYANCE SYSTEM SHALL BE PRIVATELY MAINTAINED. OWNER SHALL PERFORM INSPECTIONS ACCORDING TO FINAL O&M PLAN FOR THE SITE.

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		BENCHMARK/CONTROL POINT
		PROPERTY LINE
603	603	CONTOUR
	XX	SPOT ELEVATION
		TREE LINE
		PINE
		OAK
		CEDAR
x x x x x	x x	FENCE LINE
		CONCRETE SIDEWALK
		ASPHALT PAVEMENT
		CURB AND GUTTER
		LIGHT POLE
SD SD	SD LINE RCP	STORM DRAIN PIPE
SD SD	CURB INLET / JUNCTION BOX / DROP INLET	STORM DRAIN STRUCTURE
		SURFACE DRAINAGE FLOW DIRECTION
WV		WATER DISTRIBUTION STRUCTURES
W W		WATER LINE
OHE OHE		OVERHEAD ELECTRIC LINE w/ POWER POLE
SS SS		SANITARY SEWER LINE w/MANHOLE
GAS GAS		NATURAL GAS LINE
UGE UGE		UNDERGROUND ELECTRIC LINE
N/A	1	KEY NOTE REFERENCE

KEY NOTES

1. TIE TO EXISTING ASPHALT PAVEMENT
2. RIP-RAP APRON
3. GRASSED SWALE

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

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PROFESSIONAL SEAL

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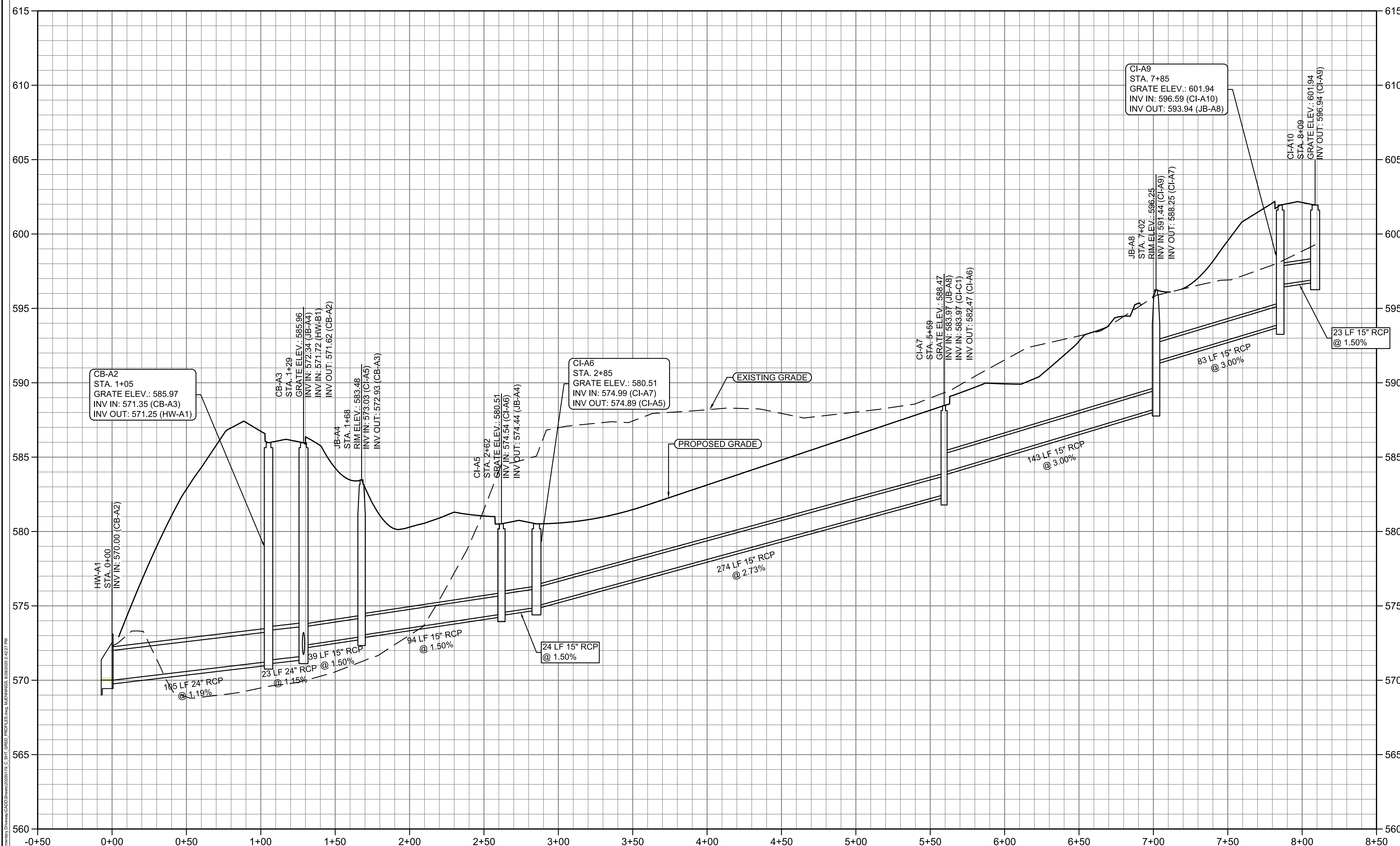
PROJECT NAME:
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FOR
NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE:
GRADING AND STORM DRAINAGE PLAN

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

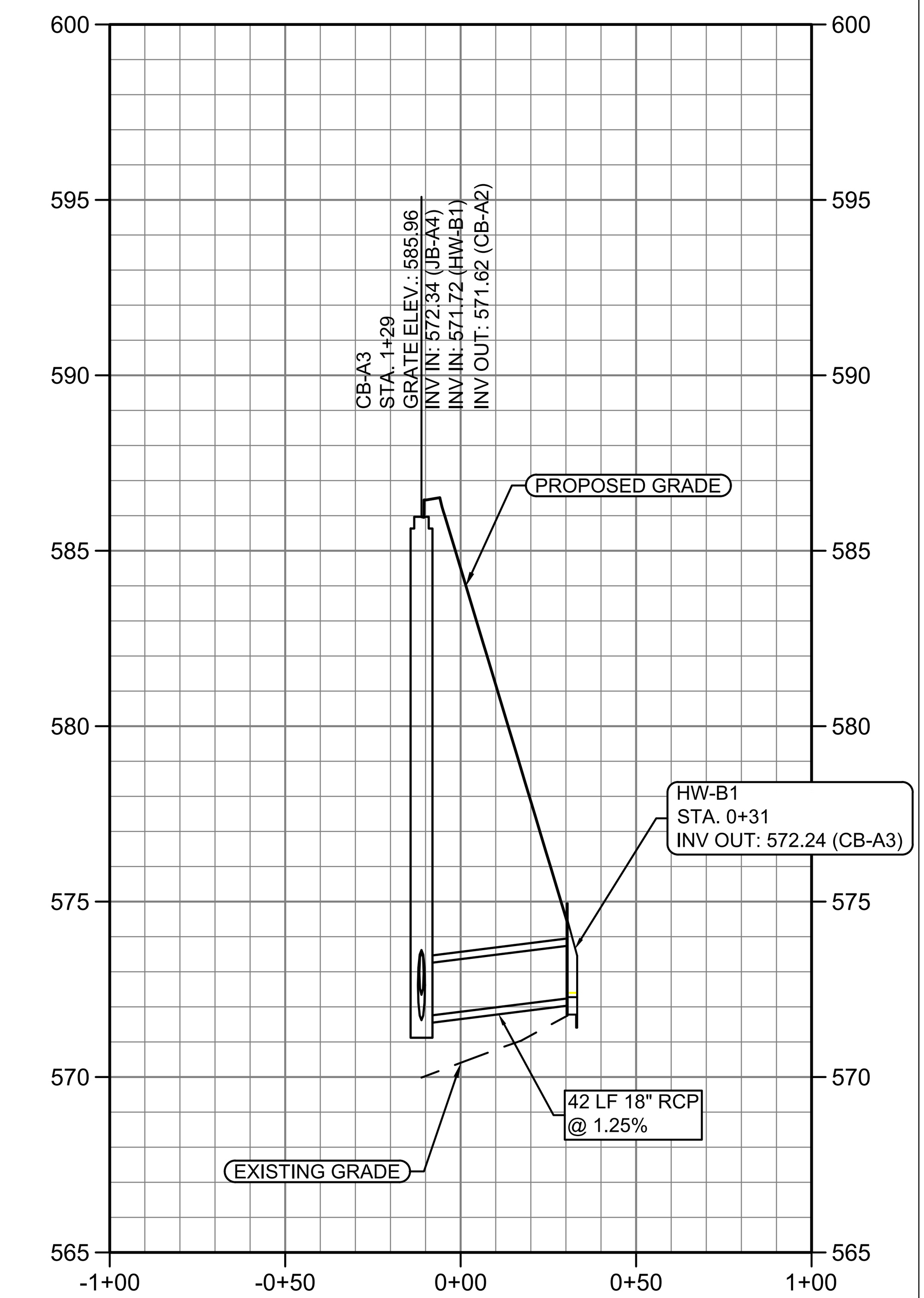
DRAWING NUMBER:
C4
WKD PROJ. NO.:
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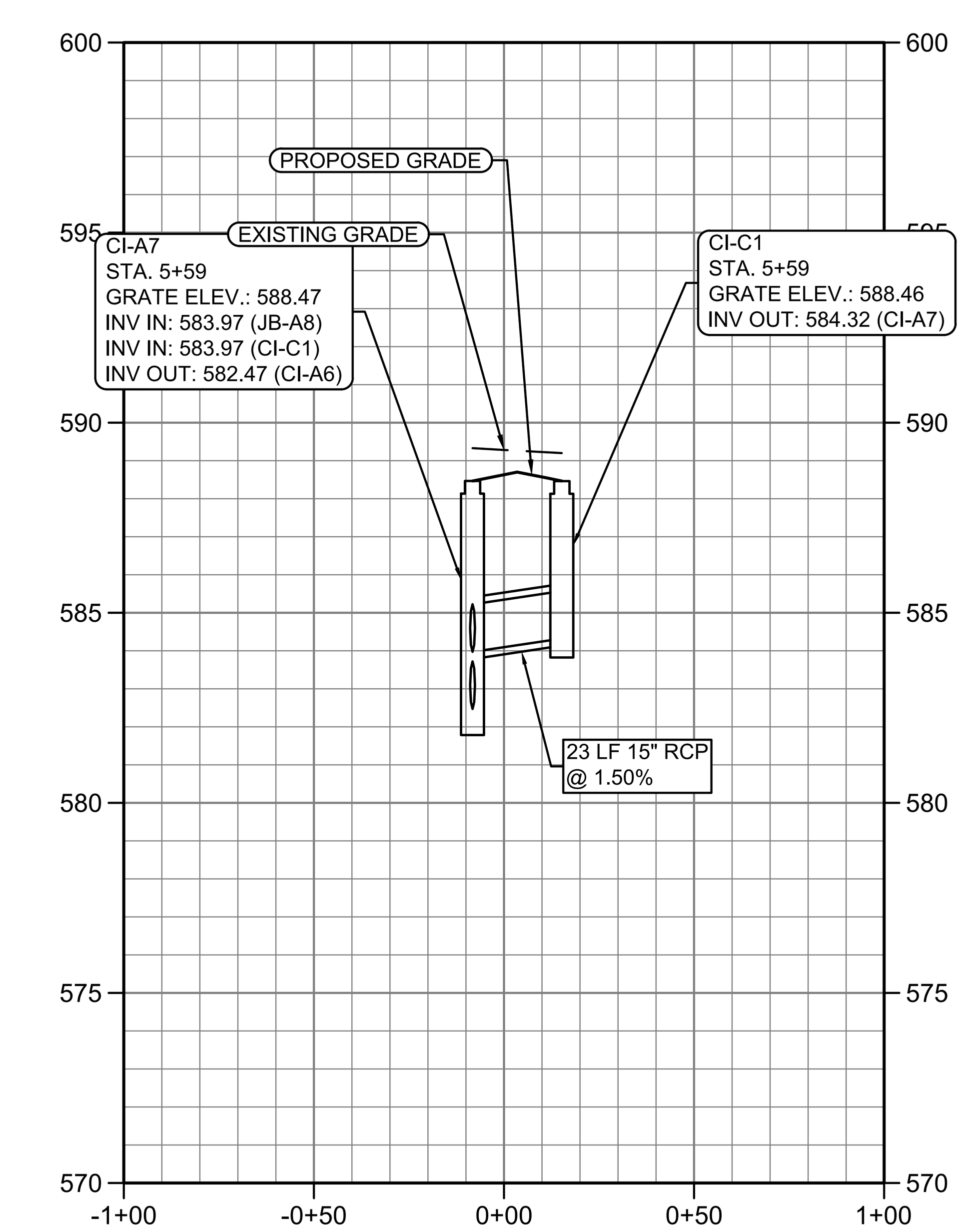
PROFILE - SD LINE A

REFER TO SHEET C4 PLAN VIEW
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



PROFILE - SD LINE B

REFER TO SHEET C4 PLAN VIEW
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL



PROFILE - SD LINE C

REFER TO SHEET C4 PLAN VIEW
SCALE: 1" = 40' HORIZONTAL
1" = 4' VERTICAL

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NO.	DATE	DESCRIPTION	BY

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE: **STORM DRAINAGE PROFILES**

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

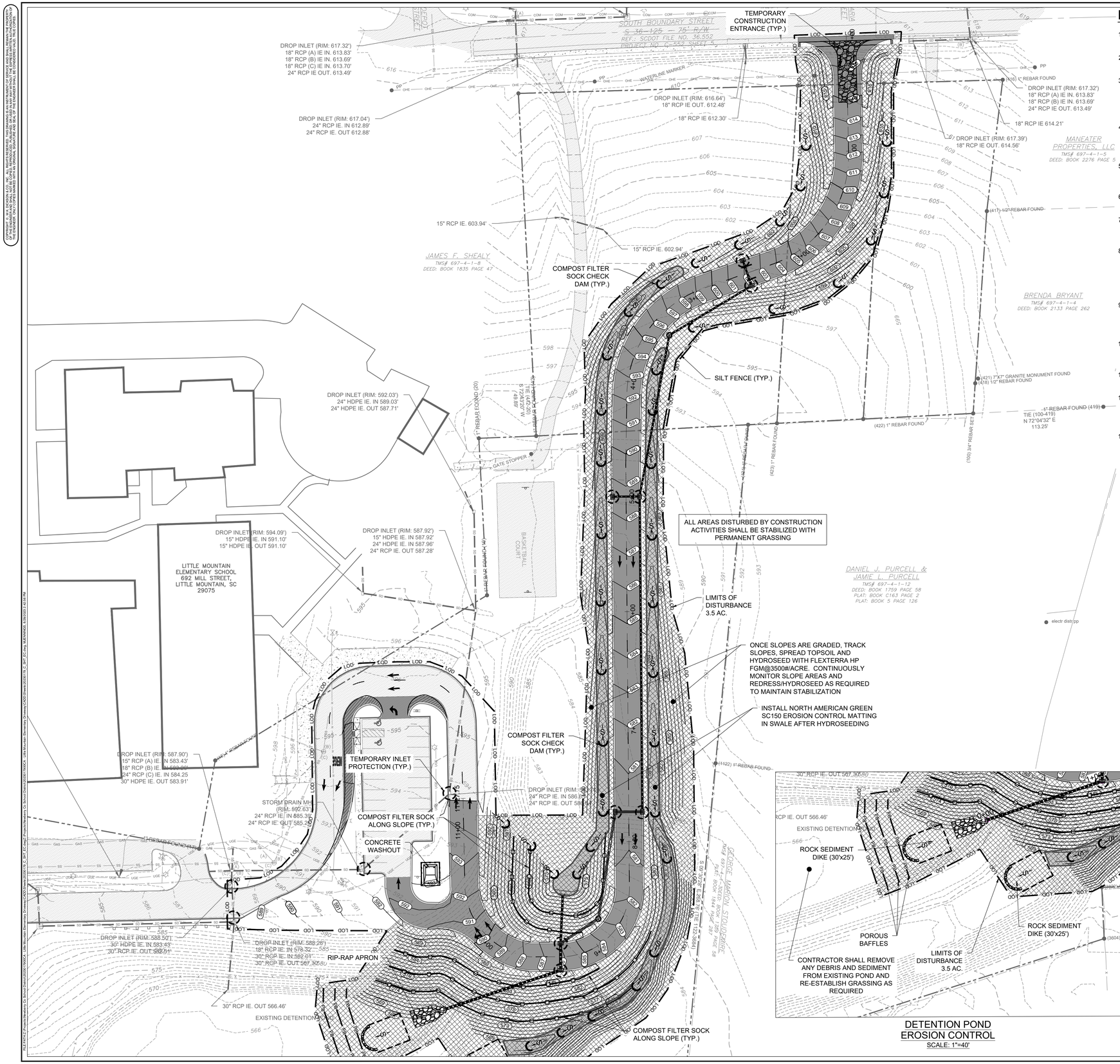
DRAWING NUMBER:

C5

WKD PROJ. NO.:
20230179.00.CA

FILE PATH:Z:\Projects\Newberry Co School District\202301790CA - Little Mountain Elementary Driveway\CADD\Sheets\20230179_C_SHT_GRSD_PROFILES.dwg, MJENNINGS, 8/29/2023 2:42:27 PM

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DETENTION POND EROSION CONTROL
SCALE: 1"=40'

EROSION CONTROL NOTES:

1. REFER TO SHEET C9 FOR SCDHEC STANDARD SEDIMENT AND EROSION CONTROL NOTES AND SEQUENCE OF CONSTRUCTION.
2. CONTRACTOR SHALL, FOR ALL GRASSED AREAS, BE RESPONSIBLE FOR REPLACING ERODED SOIL AND GRASS SEED UNTIL AN APPROVED STAND OF GRASS IS ESTABLISHED.
3. ALL NEWLY CONSTRUCTED SLOPES WHICH ARE STEEPER THAN OR EQUAL TO 3 TO 1, DITCHES/SWALES OR AREAS OTHERWISE INDICATED ON PLANS MUST BE STABILIZED USING HYDROSEED WITH FLEXTERRA HP FGM@3500#/ACRE OR INSTALLING NORTH AMERICAN GREEN SC150 EROSION CONTROL MAT ON SLOPES AFTER HYDROSEEDING. EQUAL PRODUCTS MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES AS MAY BE REQUIRED TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE SITE IMPROVEMENTS ARE COMPLETED.
5. ALL AREAS OUTSIDE OF THE LIMITS OF WORK WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED AT NO ADDITIONAL EXPENSE TO THE OWNER.
6. INSTALL PERMANENT VEGETATIVE COVER AND THE LONG-TERM EROSION PROTECTION MEASURES OR STRUCTURES AS SOON AS PRACTICAL IN THE DEVELOPMENT PROCESS.
7. ALL DISTURBED AREAS NOT PAVED SHALL BE GRASSED OR LANDSCAPED. USE TEMPORARY PLANT COVER, MULCHING, AND/OR STRUCTURES TO CONTROL RUNOFF AND PROTECT AREA SUBJECT TO EROSION DURING CONSTRUCTION.
8. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION TO CONTROL EROSION AND/OR OFF SITE SEDIMENTATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STABILITY OF ALL GRADED AND/OR CLEARED AREAS UNTIL PERMANENT GROUND COVER IS ESTABLISHED. ANY AREAS DAMAGED BY EROSION SHALL BE REPAIRED TO ITS ORIGINAL CONDITION AND PROTECTED FROM FURTHER EROSION AT NO ADDITIONAL COST TO THE OWNER.
9. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETED AND THE SITE STABILIZED.
10. ALL EROSION CONTROL METHODS SHALL BE IN ACCORDANCE WITH "SCDHEC STORM WATER MANAGEMENT & SEDIMENT CONTROL BMP HANDBOOK FOR LAND DISTURBANCE ACTIVITY".
11. CONTRACTORS ARE REQUIRED TO HAVE RAIN GAUGES AT THE CONSTRUCTION SITE AND THE RAIN TOTALS DOCUMENTED FOR REVIEW BY SCDHEC.
12. THE INSTALLATIONS OF UTILITIES (CABLE, ELECTRICAL, NATURAL GAS, WATER, SEWER, ETC.) ARE TO BE WITHIN THE PERMITTED LIMITS OF DISTURBANCE AND THAT INSTALLATION OUTSIDE OF THESE AREAS WILL REQUIRE A MODIFICATION TO THE PERMIT.
13. THE STABILIZATION OF CONVEYANCE CHANNELS ARE TO BE COMPLETED WITHIN 7 DAYS OF CHANNEL CONSTRUCTION (IF THERE ARE CHANNELS).

LEGEND

EXISTING	PROPOSED	DESCRIPTION
⊕		BENCHMARK/CONTROL POINT
		PROPERTY LINE
603	603	CONTOUR
XX	XX	SPOT ELEVATION
		TREE LINE
		PINE
		OAK
		CEDAR
X X X X X	X X	FENCE LINE
		CONCRETE SIDEWALK
		ASPHALT PAVEMENT
		CURB AND GUTTER
☼		LIGHT POLE
SD SD	SD LINE RCP	STORM DRAIN PIPE
SD SD	CURB INLET / JUNCTION BOX / DROP INLET	STORM DRAIN STRUCTURE
		SURFACE DRAINAGE FLOW DIRECTION
WV		WATER DISTRIBUTION STRUCTURES
W		WATER LINE
OHE OHE		OVERHEAD ELECTRIC LINE w/ POWER POLE
SS SS		SANITARY SEWER LINE w/MANHOLE
GAS GAS		NATURAL GAS LINE
UGE UGE		UNDERGROUND ELECTRIC LINE
N/A	1	KEY NOTE REFERENCE
		TEMPORARY CONSTRUCTION ENTRANCE
		HYDROSEED WITH FLEXTERRA
		HYDROSEED WITH FLEXTERRA WITH EROSION CONTROL MATTING
LOD	LOD	LIMITS OF DISTURBANCE
		COMPOST FILTER SOCK CHECK DAM
		ROCK SEDIMENT DIKE
	PB	POND POROUS BAFFLES
	SF	SILT FENCE
		COMPOST FILTER SOCK
		TEMPORARY INLET PROTECTION • INSTALL SCDHEC TYPE A INLET PROTECTION DURING CONSTRUCTION PRIOR TO PAVING • INSTALL SCDHEC TYPE E SURFACE INLET TUBES AROUND CATCH BASINS AFTER PAVING

GRAPHIC SCALE
40 0 40 80 160
(IN FEET)
1 inch = 40 ft.

WK DICKSON
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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
W. K. DICKSON & COMPANY, INC.
No. C00177
C.O.A.

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 22779
CHRISTOPHER W. CARLSON
8/25/2023
PROFESSIONAL SEAL

NO	DATE	DESCRIPTION
1	8/25/2023	PERMIT SUBMITTAL

REVISION RECORD

BID DRAWINGS - NOT FOR CONSTRUCTION

PROJECT NAME:
LITTLE MOUNTAIN ELEMENTARY DRIVEWAY
FOR
NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE:
EROSION CONTROL PLAN

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023
DRAWING NUMBER:	C6
WKD PROJ. NO.:	20230179.00.CA

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SCDHEC EROSION AND SEDIMENT CONTROL NOTES:

1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW:
   - A. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
   - B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK, WITH NO TIME PERIOD BETWEEN INSPECTIONS EXCEEDING 9 DAYS, AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE. IT IS RECOMMENDED THAT BMPS BE ASSESSED BY THE CONTRACTOR WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 1.0 INCH OR GREATER, AS WELL AS DURING THE FIRST RAIN EVENT AFTER THE INITIATION OF CONSTRUCTION ACTIVITIES, AFTER THE INSTALLATION OF BMPS. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
7. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
8. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
9. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
10. A COPY OF THE OS-SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
11. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
12. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
13. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE;
14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
15. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
   - A. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
   - B. WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
   - C. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
   - D. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK, WITH NO TIME PERIOD BETWEEN INSPECTIONS EXCEEDING 9 DAYS AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

EROSION CONTROL MAINTENANCE SCHEDULE

ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK, WITH NO TIME PERIOD BETWEEN INSPECTIONS EXCEEDING 9 DAYS, AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE. IT IS RECOMMENDED THAT BMPS BE ASSESSED BY THE CONTRACTOR WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 1.0 INCH OR GREATER, AS WELL AS DURING THE FIRST RAIN EVENT AFTER THE INITIATION OF CONSTRUCTION ACTIVITIES, AFTER THE INSTALLATION OF BMPS. CONTRACTOR TO DOCUMENT WITH SCDHEC APPROVED INSPECTION REPORTS AND LOGGED IN THE PROJECT OS-SWPPP.

CEPSCI / SWPPP INSPECTIONS

THE OWNER IS RESPONSIBLE FOR CONTRACTING A THIRD PARTY CEPSCI (SWPPP) INSPECTOR FOR THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND REPAIRS OF ALL EROSION CONTROL MEASURES, PER THE PERMIT REQUIREMENTS, FOR THE FULL DURATION OF THE PROJECT THROUGH APPROVAL OF THE NOTICE OF TERMINATION AND PROJECT CLOSEOUT.

14 DAY STABILIZATION CLAUSE

ALL DISTURBED AREAS WHICH ARE TO BE LEFT IDLE FOR A PERIOD OF 14 DAYS OR LONGER ARE TO RECEIVE TEMPORARY VEGETATION OR MULCH.

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Profile Flexterra® HP-FGM™
High Performance Flexible Growth Medium

Solutions for your Environment®

GREEN DESIGN ENGINEERING™ EARTH FRIENDLY SOLUTIONS FOR SUSTAINABLE RESULTS™

Description

Flexterra® HP-FGM™ is a fully biodegradable, High Performance-Flexible Growth Medium (HP-FGM) composed of 100% recycled and Thermally Refined™ wood fibers, crimped interlocking biodegradable fibers, micro-pore granules, naturally derived cross-linked biopolymers and water absorbents. The HP-FGM is phytosanitized, free from weed seeds, free from plastic netting, requires no curing period and upon application forms an intimate bond with the soil surface to create a continuous, porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

Recommended Applications

- Erosion control for slopes ranging from mild to severe (≤0.25H:1V)
- Rough graded slopes
- Superior performance over rolled erosion control blankets
- Enhancement of vegetation establishment
- Ideal infill material to create the GreenArmor™ System

Technical Data

Physical Properties*	Test Method	Units	Tested Value
Mass/Unit Area	ASTM D6566[1]	g/m² (oz/yd²)	≥ 390 (11.6)
Thickness	ASTM D6525[1]	mm (in)	≥ 5.6 (0.22)
Ground Cover	ASTM D6567[1]	%	≥ 99
Water Holding Capacity	ASTM D7367	%	≥ 1,700
Material Color	Observed	n/a	Green
Performance Properties*	**Test Method**	**Units**	**Tested Value**
Cover Factor[2]	Large Scale[4]	n/a	≤ 0.01
Percent Effectiveness[3]	Large Scale[4]	%	≥ 99
Cure Time	Observed	hours	0 - 2
Vegetation Establishment	ASTM D7322[1]	%	≥ 800
Functional Longevity[5]	ASTM D5338	months	≤ 18
Environmental Properties*	**Test Method**	**Units**	**Tested Value**
Ecotoxicity	EPA 2021.0	%	48-hr LC_{50} > 100%
Effluent Turbidity	Large Scale[4]	NTU	< 250
Biodegradability	ASTM D5338	n/a	Yes
Product Composition			**Typical Value**
Thermally Processed Wood Fiber[6] (within a pressurized vessel)			80 %
Wetting Agents-including high-viscosity colloidal polysaccharides, cross-linked biopolymers, and water absorbents			10 %
Crimped, Biodegradable Interlocking Fibers			5 %
Micro-Pore Granules			5 %

Packaging Data

Properties	Test Method	Units	Nominal Value
Bag Weight	Scale	kg (lb)	22.7 (50)
Bags per Pallet	Observed	#	40

UV and weather-resistant plastic bags. Pallets are weather-proof stretch wrapped with UV resistant pallet cover.

Profile Products
750 Lake Cook Road, Ste. 440
Buffalo Grove, IL 60089
800-508-8681 or +1-847-215-1144
www.profileproducts.com

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02/2017 Flexterra HP-FGM DS

Application Guide for Profile® HP-FGM™ and ET-FGM™

Profile — Solutions for your Environment®

Application / Loading Procedures

A. Strictly comply with equipment Manufacturer's installation instructions and recommendations. Use approved hydro-spraying machines with fan-type nozzle (50-degree tip) whenever possible to achieve best soil coverage. Apply from opposing directions to assure 100% soil surface coverage. Slope interruption devices or water diversion techniques are recommended according to the slope interruption limits table on the back.

B. To ensure proper application rates, measure and stake area. For maximum performance, apply in a two-step process*:

1. Apply specified prescriptive agronomic formulations along with 50% of seed with a small amount of HP-FGM™ or ET-FGM™ for visual metering.
2. Mix balance of seed and apply HP-FGM or ET-FGM at a rate of 50 pounds per 125 gallons (see mixing section on the back for details) of water over freshly seeded surfaces. See loading chart on the back and confirm loading rates with equipment manufacturer. Do not leave seeded surfaces unprotected, especially if precipitation is imminent.

C. Fill 1/3 of mechanically agitated hydroseeder with water. Turn pump on for 15 seconds and purge and pre-wet lines. Turn pump off.

D. Turn agitator on and load low density materials first (i.e. seed).**

E. Continue slowly filling tank with water while loading fiber matrix into tank.

F. Consult loading chart on the back to determine the number of bags to be added for desired area and application rate.

G. HP-FGM or ET-FGM should be completely loaded before water level reaches 75% of the top of tank.

H. Top off with water and mix until all fiber is fully broken apart and hydrated (minimum of 10 minutes — increase mixing time when applying in cold conditions). This is very important to fully activate the bonding additives and to obtain proper viscosity.

I. Add fertilizer.

J. Shut off recirculation valve to minimize potential for air entrainment within the slurry.

K. Slow down agitator and start applying with a 50-degree fan tip nozzle.

L. Spray in opposing directions for maximum soil coverage.

**Depending on site conditions, HP-FGM or ET-FGM may be applied in a one-step process where all components may be mixed together in single tank loads. Consult with Manufacturer for further details.*

***Do not add tackifiers or polymers.*

Loading Chart for Profile's HP-FGM and ET-FGM

Tank Size (gal)	# of 50-lb bales	(lb)	Displacement (gal)	2,500 lb/acre Sq ft	2,500 lb/acre Acres	3,000 lb/acre Sq ft	3,000 lb/acre Acres	3,500 lb/acre Sq ft	3,500 lb/acre Acres	4,000 lb/acre Sq ft	4,000 lb/acre Acres	4,500 lb/acre Sq ft	4,500 lb/acre Acres
250	2	100	280	1,742	0.040	1,452	0.033	1,245	0.029	1,089	0.025	968	0.022
500	4	200	560	3,485	0.080	2,904	0.067	2,489	0.057	2,178	0.050	1,936	0.044
750	6	300	840	5,227	0.120	4,356	0.100	3,734	0.086	3,267	0.075	2,904	0.067
1,000	8	400	1,120	6,970	0.160	5,808	0.133	4,978	0.114	4,356	0.100	3,872	0.089
1,500	12	600	1,680	10,454	0.240	8,712	0.200	7,467	0.171	6,534	0.150	5,808	0.133
2,000	16	800	2,240	13,939	0.320	11,616	0.267	9,957	0.229	8,712	0.200	7,744	0.178
2,500	20	1,000	2,800	17,424	0.400	14,520	0.333	12,446	0.286	10,890	0.250	9,680	0.222
3,000	24	1,200	3,360	20,909	0.480	17,424	0.400	14,935	0.343	13,068	0.300	11,616	0.267
3,500	28	1,400	3,920	24,394	0.560	20,328	0.467	17,424	0.400	15,246	0.350	13,552	0.311
4,000	32	1,600	4,480	27,878	0.640	23,232	0.533	19,913	0.457	17,424	0.400	15,488	0.356

Additional Notes:

- For hose applications, 35 lb/100 gal is recommended.
- Rough surfaces (rocky terrain, cat tracks, ripped soils, etc.) may require additional product to achieve 100% coverage.
- Be sure to allow for residual material in tank on subsequent applications.

Application Rates

Slope Condition	English	SI
≤ 4H to 1V	2500 lb/acre	2800 kg/hectare
> 4H to 1V and ≤ 3H to 1V	3000 lb/acre	3400 kg/hectare
> 3H to 1V and ≤ 2H to 1V	3500 lb/acre	3900 kg/hectare
> 2H to 1V and ≤ 1H to 1V	4000 lb/acre	4500 kg/hectare
> 1H to 1V[1]	4500 lb/acre	5100 kg/hectare
Below ECB or TRM	1500 lb/acre	1700 kg/hectare
As infill for TRM[2]	3500 lb/acre	3900 kg/hectare

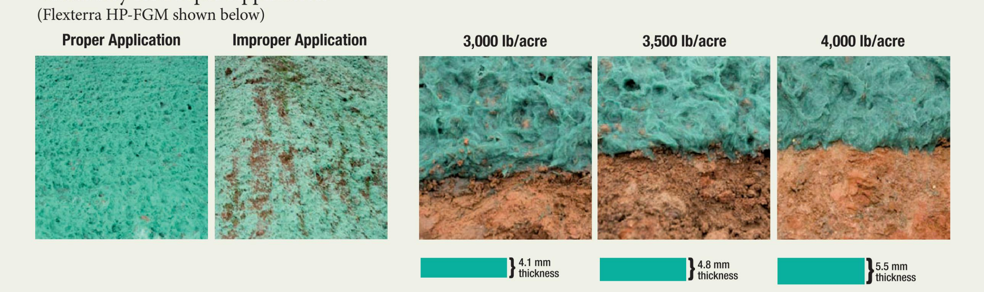
[1]HP-FGM or ET-FGM recommended for slopes greater than 1H:1V.
[2]Use only approved and tested TRMs to create the GreenArmor System.

Slope Interruption Limits*

Product Category	Length (ft)	Length (m)
HP-FGM	100	30
ET-FGM	125	38

*Listed slope interruption limits are for product applications on a 3H:1V slope. For application on steeper slopes, slope interruption lengths may need to be decreased.

Visual Key for Proper Application
(Flexterra HP-FGM shown below)



Profile — Solutions for your Environment®

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www.profileproducts.com

Flexterra® HP-FGM — CocoFlex® ET-FGM

U.S. Patent #'s: 5,942,029; 5,779,782; 5,741,832; 6,360,478; 7,752,804

ESP-01 3/13

Temporary Seeding - Upstate

Species	lbs./ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Browntop Millet (Alone)	40				■	■	■	■	■				
Browntop Millet (Mix)	10				■	■	■	■	■				
Rye Grain (Alone)	56		■	■						■	■	■	■
Rye Grain (Mix)	10		■	■						■	■	■	■
Rye Grass (Alone)	50									■	■	■	
Rye Grass (Mix)	8									■	■	■	
For Steep Slopes/Cut Slopes													
Weeping Lovegrass (Alone)	4				■	■	■	■					
Weeping Lovegrass (Mix)	2				■	■	■	■					

Permanent Seeding - Upstate

Species	Lbs/Ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bahia Grass (Alone)	40				■	■	■	■					
Bahia Grass (Mix)	30				■	■	■	■					
Bermuda Grass (hulled) (Alone)	8-12					■	■	■	■				
Bermuda Grass (hulled) (Mix)	4-6					■	■	■	■				
Fescue, Tall (KY31) Alone	40										■	■	■
Fescue, Tall (KY31) mix	20										■	■	■
Sericea Lespedeza (Scarified) Alone or Mix (inoculate with EL Innoculant	40					■	■	■	■				
Ladino Clover (mix only) Innoculate with AB Innoculant	2										■	■	■
For Steep Slopes/Cut Slopes													
Weeping Lovegrass (Alone)	4					■	■	■	■				
Weeping Lovegrass (Mix)	2					■	■	■	■				
Crownvetch (Mix) (Inoculate with Type M Innoculant	8-10			■	■	■							

SEQUENCE OF CONSTRUCTION:

1. PRE-CONSTRUCTION MEETING TO BE SCHEDULED WITH NEWBERRY COUNTY AND SCDHEC ENVIRONMENTAL INSPECTORS PRIOR TO ANY ON-SITE CONSTRUCTION.
2. ENVIRONMENTAL INSPECTOR TO RECEIVE 48 HOUR NOTICE PRIOR TO ANY CONSTRUCTION IF NOT COVERED IN THE PRE-CONSTRUCTION MEETING.
3. NOTIFY SCDHEC EQC REGIONAL EQC OFFICE 72 HOURS PRIOR TO BEGINNING LAND DISTURBANCE ACTIVITIES.
4. BEGIN PERFORMING SCDHEC SWPPP INSPECTIONS AT BEGINNING OF LAND DISTURBING ACTIVITIES AND CONTINUE UNTIL SITE IS PERMANENTLY STABILIZED.
5. CLEAR AND GRUB AREAS WITHIN INITIAL LIMITS OF DISTURBANCE TO INSTALL TEMPORARY CONSTRUCTION ENTRANCES AND TEMPORARY EROSION CONTROLS (SILT FENCE, ETC).
6. BEGIN DEMOLITION ACTIVITIES AND CLEAR AND GRUB REMAINING AREAS OF THE SITE AS INDICATED ON THE PLANS.
7. STRIP AND STOCKPILE TOPSOIL AS NOTED IN THE PLANS AND SPECIFICATIONS.
8. PERFORM ROUGH GRADING OPERATIONS, INSTALL STORM DRAINAGE IN CONJUNCTION WITH GRADING.
9. INSTALL EROSION CONTROL DEVICES AS REQUIRED OR NEEDED AS STORM DRAINAGE IS INSTALLED.
10. COMPLETE THE REMAINDER OF THE SITE IMPROVEMENTS.
11. AS PAYMENT AREAS ARE PREPARED, CHANGE OUT THE TYPE OF INLET PROTECTION AT EVERY AFFECTED INLET AS REQUIRED WHEN PAVEMENT BASE IS INSTALLED.
12. CONTINUE PERFORMING WEEKLY SCDHEC SWPPP INSPECTIONS UNTIL SITE IS PERMANENTLY STABILIZED.
13. AS SITE IMPROVEMENTS NEARS COMPLETION, BEGIN SPREADING AND GRADING OF TOPSOIL IN ALL NATURAL AREAS. BEGIN PERMANENT GRASSING, REFER TO PLANS FOR HYDROSEEDING WITH FLEXTERRA HP FGM AREAS.
14. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER AREA DRAINING TO A STRUCTURE OR OUTFALL IS COMPLETELY STABILIZED.
15. UPON COMPLETE STABILIZATION OF THE SITE, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES. ONCE REMOVED, THE RESULTING DISTURBED AREA SHALL BE PERMANENTLY STABILIZED. REMOVE SEDIMENT BUILDUP FROM THE STORMWATER CONVEYANCE SYSTEM.
16. COMPLETE FINAL INSPECTION WITH NEWBERRY COUNTY. CONTRACTOR TO ADDRESS ANY OUTSTANDING ITEMS.
17. SUBMIT CLOSEOUT PACKAGE AND NOTICE OF TERMINATION (NOT).

BID DRAWINGS - NOT FOR CONSTRUCTION

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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
W. K. DICKSON & COMPANY, INC.
No. C00177
C.O.A.

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 22779
8/25/2023
PROFESSIONAL SEAL

REVISION RECORD

NO.	DATE	DESCRIPTION	BY

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

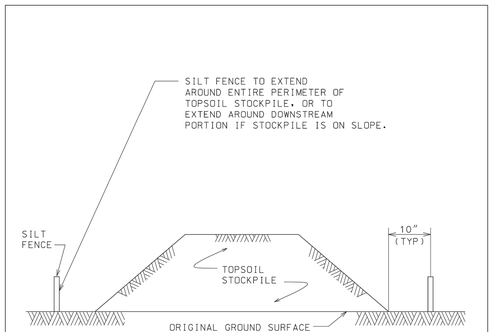
DRAWING TITLE: **EROSION CONTROL DETAILS**

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER: C7

WKD PROJ. NO.: 20230179.00.CA

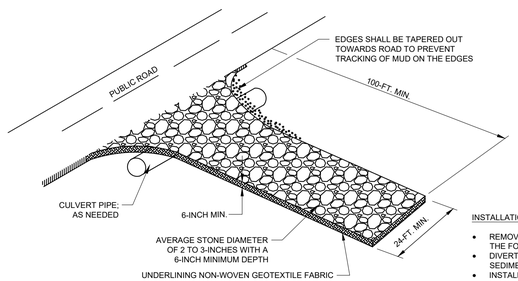
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NOTES:

1. AN ON-SITE DRAINAGE SWALE SHALL BE LOCATED BETWEEN THE TOPSOIL STOCKPILE AND OFF-SITE PROPERTY.
2. REFERENCE IS MADE TO THE SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
3. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITH BURLAP MATTING OR SEEDED WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
4. INSPECTION OF SILT FENCES SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF ½". REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. SEDIMENT TRAPPED BY THE FENCES SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
6. SILT FENCES SHALL BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN ELIMINATED AND SHALL BE REMOVED ONLY WHEN DIRECTED BY THE CITY.

TOPSOIL STOCKPILE
NOT TO SCALE



NOTES:

1. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.
2. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.

WHEN AND WHERE TO USE IT

STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD.

IMPORTANT CONSIDERATIONS

- IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFFSITE.
- WASHDOWN FACILITIES SHALL BE REQUIRED AS DIRECTED BY SCDHEC AS NEEDED.
- WASHDOWN AREAS IN GENERAL MUST BE ESTABLISHED WITH CRUSHED GRAVEL AND DRAIN INTO A SEDIMENT TRAP OR SEDIMENT BASIN.
- CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY VEHICLES.

INSTALLATION:

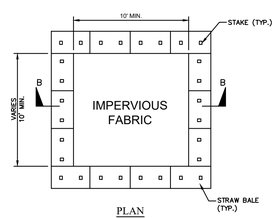
- REMOVE ALL VEGETATION AND ANY OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.
- DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM STONES TO A SEDIMENT TRAP OR BASIN.
- INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE.
- INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.
- THE ENTRANCE SHALL CONSIST OF 1-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES. MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24-FEET WIDE BY 100-FEET LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS.
- THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING OF MUD AT THE EDGE OF THE ENTRANCE.

INSPECTION AND MAINTENANCE:

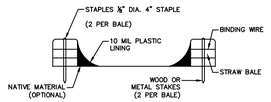
- INSPECT AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK, WITH NO TIME PERIOD BETWEEN INSPECTIONS EXCEEDING 9 DAYS AND WITHIN 24-HOURS AFTER EACH STORM THAT PRODUCES 1 -INCH OR MORE OF RAIN.
- CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY.
- MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS.
- RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
- WASH OR REPLACE STONES AS NEEDED AND AS DIRECTED BY THE INSPECTOR. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF-SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE.
- IMMEDIATELY REMOVING MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING.
- FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.
- REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE

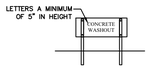
STRAW BALE BARRIER CONCRETE WASHOUT



PLAN
NOT TO SCALE
TYPE "ABOVE GRADE" WITH STRAW BALES

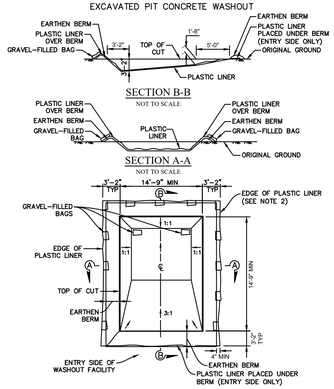


SECTION B-B
NOT TO SCALE



CONCRETE WASHOUT SIGN DETAIL
NOT TO SCALE

EXCAVATED PIT CONCRETE WASHOUT



TEMPORARY CONCRETE WASHOUT
NOT TO SCALE

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

CONCRETE WASHOUT AREA
NOT TO SCALE

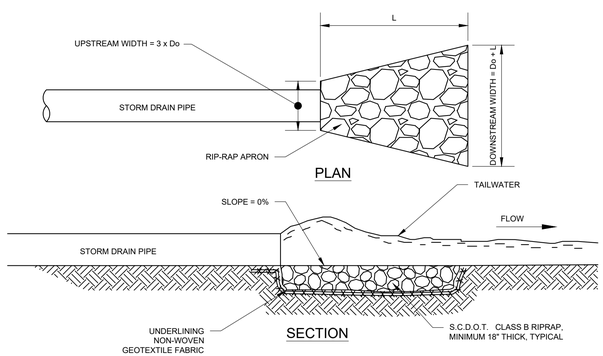
RIP-RAP SCHEDULE						
PIPE DIA. (IN)	UPSTREAM WIDTH (FT)	LENGTH (FT)	DOWNSTREAM WIDTH (FT)	AREA (SY)	DEPTH (IN)	CLASS
15"	4	8	9	6	18	B
18"	5	12	14	12	18	B
24"	6	18	20	26	18	B
30"	8	22	25	39	18	B
36"	9	28	31	62	18	B
42"	11	32	36	82	18	B
48"	12	38	42	114	18	B
54"	14	42	47	140	18	B

NOTE: RIPRAP APRON SIZING PER SCDHEC BMP MANUAL.

1. ENSURE THAT THE SUBGRADE FOR THE FILTER AND RIPRAP FOLLOWS THE REQUIRED LINES AND GRADES SHOWN IN THE PLAN. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS SHOWN ON THE PLANS.
3. FILTER CLOTH, WHEN USED, MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OF FILTER CLOTH OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP A MINIMUM OF 1 FT. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE FILTER CLOTH.
4. RIPRAP MAY BE PLACED BY EQUIPMENT, BUT TAKE CARE TO AVOID DAMAGING THE FILTER.
5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER.
6. RIPRAP MAY BE FIELD STONE OR ROUGH QUARRY STONE. IT SHOULD BE HARD, ANGULAR, HIGHLY WEATHER-RESISTANT AND WELL GRADED.
7. CONSTRUCT THE APRON GRADE AS SHOWN ON PLAN WITH NO OVER FALL AT THE END. MAKE THE TOP OF THE RIPRAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT.
8. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH.
9. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION.

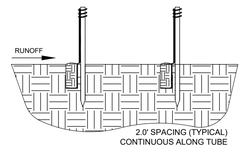
MAINTENANCE

RIPRAP OUTLET STRUCTURES SHALL BE INSPECTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK, WITH NO TIME PERIOD BETWEEN INSPECTIONS EXCEEDING 9 DAYS AND WITHIN 24-HOURS AFTER EACH STORM THAT PRODUCES 1 -INCH OR MORE OF RAIN TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

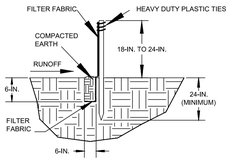


RIP-RAP OUTLET PROTECTION
NOT TO SCALE

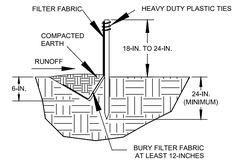
DOUBLE ROW SILT FENCE DETAIL



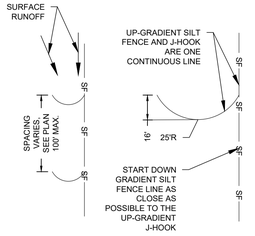
FLAT-BOTTOM TRENCH DETAIL



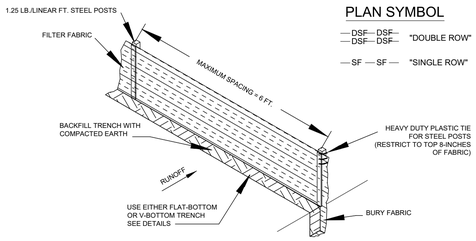
V-SHAPED TRENCH DETAIL



SILT FENCE J-HOOK



SILT FENCE INSTALLATION



PLAN SYMBOL

— DSF — DSF —
— DSF — DSF — "DOUBLE ROW"

— SF — SF — "SINGLE ROW"

SILT FENCE - POST REQUIREMENTS

1. SILT FENCE POSTS MUST BE 48-INCH LONG STEEL POSTS THAT MEET, AT A MINIMUM, THE FOLLOWING PHYSICAL CHARACTERISTICS.
   - COMPOSED OF A HIGH STRENGTH STEEL WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
   - INCLUDE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND A NOMINAL "T" LENGTH OF 1.48-INCHES.
   - WEIGH 1.25 POUNDS PER FOOT (± 8%)
2. POSTS SHALL BE EQUIPPED WITH PROJECTIONS TO AID IN FASTENING OF FILTER FABRIC.
3. STEEL POSTS MAY NEED TO HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM WHEN INSTALLED ALONG STEEP SLOPES OR INSTALLED IN LOOSE SOILS. THE PLATE SHOULD HAVE A MINIMUM CROSS SECTION OF 17-SQUARE INCHES AND BE COMPOSED OF 15 GAUGE STEEL, AT A MINIMUM. THE METAL SOIL STABILIZATION PLATE SHOULD BE COMPLETELY BURIED.
4. INSTALL POSTS TO A MINIMUM OF 24-INCHES. A MINIMUM HEIGHT OF 1- TO 2- INCHES ABOVE THE FABRIC SHALL BE MAINTAINED, AND A MAXIMUM HEIGHT OF 3 FEET SHALL BE MAINTAINED ABOVE THE GROUND.
5. POST SPACING SHALL BE AT A MAXIMUM OF 6-FEET ON CENTER.

SILT FENCE - INSPECTION & MAINTENANCE

1. THE KEY TO FUNCTIONAL SILT FENCE IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
2. REGULAR INSPECTIONS OF SILT FENCE SHALL BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK, WITH NO TIME PERIOD BETWEEN INSPECTIONS EXCEEDING 9 DAYS AND WITHIN 24-HOURS AFTER EACH STORM THAT PRODUCES 1 -INCH OR MORE OF RAIN.
3. ATTENTION TO SEDIMENT ACCUMULATIONS ALONG THE SILT FENCE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY.
4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SILT FENCE.
5. REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.
6. CHECK FOR AREAS WHERE STORMWATER RUNOFF HAS ERODED A CHANNEL BENEATH THE SILT FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED DUE TO RUNOFF OVERTOPPING THE SILT FENCE. INSTALL CHECKS/TIE-BACKS AND/OR REINSTALL SILT FENCE, AS NECESSARY.
7. CHECK FOR TEARS WITHIN THE SILT FENCE, AREAS WHERE SILT FENCE HAS BEGUN TO DECOMPOSE, AND FOR ANY OTHER CIRCUMSTANCE THAT MAY RENDER THE SILT FENCE INEFFECTIVE. REMOVED DAMAGED SILT FENCE AND REINSTALL NEW SILT FENCE IMMEDIATELY.
8. SILT FENCE SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED AND ONCE IT IS REMOVED, THE RESULTING DISTURBED AREA SHALL BE PERMANENTLY STABILIZED.

SILT FENCE - FABRIC REQUIREMENTS

1. SILT FENCE MUST BE COMPOSED OF WOVEN GEOTEXTILE FILTER FABRIC THAT CONSISTS OF THE FOLLOWING REQUIREMENTS:
   - COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, POLYESTERS, OR POLYAMIDES THAT ARE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER;
   - FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION;
   - FREE OF ANY DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES; AND,
   - HAVE A MINIMUM WIDTH OF 36-INCHES.
2. USE ONLY FABRIC APPEARING ON SC DOT'S QUALIFIED PRODUCTS LISTING (QPL), APPROVAL SHEET #34, MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SC DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
3. 12-INCHES OF THE FABRIC SHOULD BE PLACED WITHIN EXCAVATED TRENCH AND TOED IN WHEN THE TRENCH IS BACKFILLED.
4. FILTER FABRIC SHALL BE PURCHASED IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS.
5. FILTER FABRIC SHALL BE INSTALLED AT A MINIMUM OF 24-INCHES ABOVE THE GROUND.

SILT FENCE - GENERAL NOTES

1. DO NOT PLACE SILT FENCE ACROSS CHANNELS OR IN OTHER AREAS SUBJECT TO CONCENTRATED FLOWS. SILT FENCE SHOULD NOT BE USED AS A VELOCITY CONTROL BMP. CONCENTRATED FLOWS ARE ANY FLOWS GREATER THAN 0.5 CFS.
2. MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE SILT FENCE SHALL BE 100-FEET.
3. MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO THE FENCE LINE) SHALL BE 2:1.
4. SILT FENCE JOINTS, WHEN NECESSARY, SHALL BE COMPLETED BY ONE OF THE FOLLOWING OPTIONS:
   - WRAP EACH FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 1-FOOT MINIMUM OVERLAP;
   - OVERLAP SILT FENCE BY INSTALLING 3-FEET PASSED THE SUPPORT POST TO WHICH THE NEW SILT FENCE ROLL IS ATTACHED. ATTACH OLD ROLL TO NEW ROLL WITH HEAVY-DUTY PLASTIC TIES; OR,
   - OVERLAP ENTIRE WIDTH OF EACH SILT FENCE ROLL FROM ONE SUPPORT POST TO THE NEXT SUPPORT POST.
5. ATTACH FILTER FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED WITHIN THE TOP 8-INCHES OF THE FABRIC.
6. INSTALL THE SILT FENCE PERPENDICULAR TO THE DIRECTION OF THE STORMWATER FLOW AND PLACE THE SILT FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND CLEANOUT.
7. INSTALL SILT FENCE CHECKS (TIE-BACKS) EVERY 50-100 FEET, DEPENDENT ON SLOPE, ALONG SILT FENCE THAT IS INSTALLED WITH SLOPE AND WHERE CONCENTRATED FLOWS ARE EXPECTED OR ARE DOCUMENTED ALONG THE PROPOSED/INSTALLED SILT FENCE.

SILT FENCE
NOT TO SCALE

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C.O.A.



PROFESSIONAL SEAL

NO.	DATE	DESCRIPTION

REVISION RECORD

BID DRAWINGS - NOT FOR CONSTRUCTION

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE: **EROSION CONTROL DETAILS**

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER:

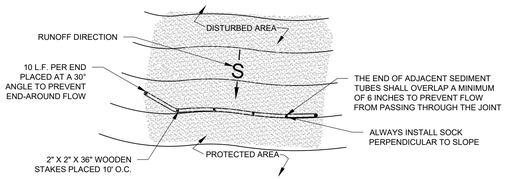
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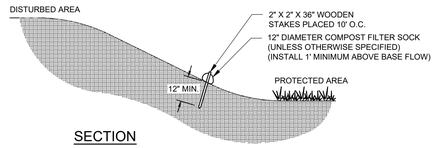
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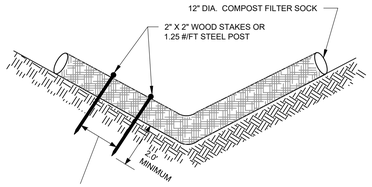


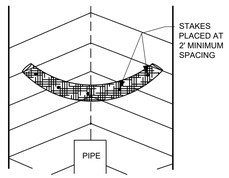
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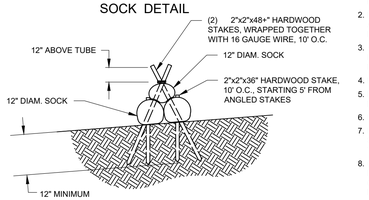
SECTION

COMPOST FILTER SOCK SLOPE INSTALLATION DETAIL





COMPOST FILTER SOCK DETAIL



COMPOST FILTER SOCK CHECK DAM DETAIL

SEDIMENT TUBES - GENERAL NOTES

1. SEDIMENT TUBES MAY BE INSTALLED ALONG CONTOURS, IN DRAINAGE CONVEYANCE CHANNELS, AND AROUND INLETS TO HELP PREVENT OFF-SITE DISCHARGE OF SEDIMENT-LADEN STORMWATER RUNOFF.
2. SEDIMENT TUBES ARE ELONGATED TUBES OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBER, OR HARDWOOD MULCH. STRAW, PINE NEEDLE, AND LEAF MULCH-FILLED SEDIMENT TUBES ARE NOT PERMITTED.
3. THE OUTER NETTING OF THE SEDIMENT TUBE SHOULD CONSIST OF SEAMLESS, HIGH-DENSITY POLYETHYLENE PHOTODEGRADABLE MATERIALS TREATED WITH ULTRAVIOLET STABILIZERS OR A SEAMLESS, HIGH-DENSITY POLYETHYLENE NON-DEGRADABLE MATERIAL.
4. SEDIMENT TUBES, WHEN USED AS CHECKS WITHIN CHANNELS, SHOULD RANGE BETWEEN 18-INCHES AND 24-INCHES DEPENDING ON CHANNEL DIMENSIONS. DIAMETERS OUTSIDE THIS RANGE MAY BE ALLOWED WHERE NECESSARY WHEN APPROVED.
5. CURLED EXCELSIOR WOOD, OR NATURAL COCONUT PRODUCTS THAT ARE ROLLED UP TO CREATE A SEDIMENT TUBE ARE NOT ALLOWED.
6. SEDIMENT TUBES SHOULD BE STAKED USING WOODEN STAKES (2-INCH X 2-INCH) OR STEEL POSTS (STANDARD "U" OR "T" SECTIONS WITH A MINIMUM WEIGHT OF 1.25 POUNDS PER FOOT) AT A MINIMUM OF 48-INCHES IN LENGTH PLACED ON 2-FOOT CENTERS.
7. INSTALL ALL SEDIMENT TUBES TO ENSURE THAT NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE TUBE. MANUFACTURER'S RECOMMENDATIONS SHOULD ALWAYS BE CONSULTED BEFORE INSTALLATION.
8. THE ENDS OF ADJACENT SEDIMENT TUBES SHOULD BE OVERLAPPED 6-INCHES TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT.
9. SEDIMENT TUBES SHOULD NOT BE STACKED ON TOP OF ONE ANOTHER, UNLESS RECOMMENDED BY MANUFACTURER.
10. EACH SEDIMENT TUBE SHOULD BE INSTALLED IN A TRENCH WITH A DEPTH EQUAL TO 1/5 THE DIAMETER OF THE SEDIMENT TUBE.
11. SEDIMENT TUBES SHOULD CONTINUE UP THE SIDE SLOPES A MINIMUM OF 1-FOOT ABOVE THE DESIGN FLOW DEPTH OF THE CHANNEL.
12. INSTALL STAKES AT A DIAGONAL FACING INCOMING RUNOFF.

SEDIMENT TUBES - INSPECTION & MAINTENANCE

1. THE KEY TO FUNCTIONAL SEDIMENT TUBES IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
2. REGULAR INSPECTIONS OF SEDIMENT TUBES SHALL BE CONDUCTED ONCE EVERY CALENDAR WEEK AND, AS RECOMMENDED, WITHIN 24-HOURS AFTER EACH RAINFALL EVEN THAT PRODUCES 1/2-INCH OR MORE OF PRECIPITATION.
3. ATTENTION TO SEDIMENT ACCUMULATIONS IN FRONT OF THE SEDIMENT TUBE IS EXTREMELY IMPORTANT. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN NECESSARY.
4. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT OF THE SEDIMENT TUBE.
5. REMOVED SEDIMENT SHALL BE PLACED IN STOCKPILE STORAGE AREAS OR SPREAD THINLY ACROSS DISTURBED AREA. STABILIZE THE REMOVED SEDIMENT AFTER IT IS RELOCATED.
6. LARGE DEBRIS, TRASH, AND LEAVES SHOULD BE REMOVED FROM IN FRONT OF TUBES WHEN FOUND.
7. IF EROSION CAUSES THE EDGES TO FALL TO A HEIGHT EQUAL TO OR BELOW THE HEIGHT OF THE SEDIMENT TUBE, REPAIRS SHOULD BE MADE IMMEDIATELY TO PREVENT RUNOFF FROM BYPASSING TUBE.
8. ONCE FINAL STABILIZATION IS ACHIEVED, AS DETERMINED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE STAKES, CUT MESH FOR COMPOST FILTER SOCK AND SPREAD MULCH ON THE SURROUNDING GROUND. IF A NON-BIODEGRADABLE MESH IS USED, THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF THE MESH.

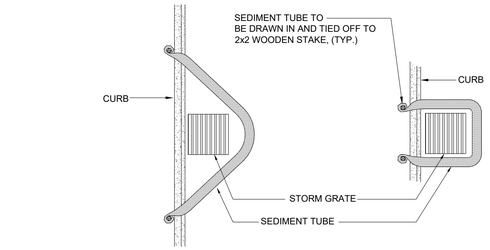
COMPOST FILTER SOCK

NOT TO SCALE

SLOPE	MAXIMUM SEDIMENT TUBE SPACING
LESS THAN 2%	150 FEET
2%	100 FEET
3%	75 FEET
4%	50 FEET
5%	40 FEET
6%	30 FEET
GREATER THAN 6%	25 FEET

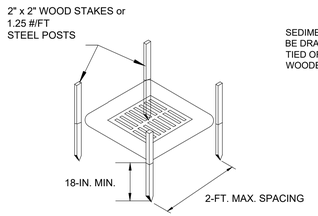
COMPOST FILTER SOCK DETAIL NOTES:

A. RANGE OF PH IS 5.0-8.0 IN ACCORDANCE WITH TMECC 04.11-A, "ELECTROMETRIC PH DETERMINATIONS FOR COMPOST"
B. PARTICLE SIZE - 99% PASSING A 2 IN (50MM) SIEVE WITH A RANGE OF 30%-50% PASSING A 3/8 IN (9.5MM) SIEVE, IN ACCORDANCE WITH TMECC 02.02-B, "SAMPLE SIEVING FOR AGGREGATE SIZE CLASSIFICATION". (NOTE- IN THE FIELD, PRODUCT COMMONLY IS BETWEEN ½ IN [12.5MM] AND 2 IN [50MM] PARTICLE SIZE.)
C. MESH OPENING SIZE SHALL BE BETWEEN 1/8" AND 3/8".
D. MOISTURE CONTENT OF LESS THAN 60% IN ACCORDANCE WITH STANDARDIZED TEST METHODS FOR MOISTURE DETERMINATION.
E. MATERIAL SHALL BE RELATIVELY FREE (<1% BY DRY WEIGHT) OF INERT OR FOREIGN MAN MADE MATERIALS.
F. A SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO BEING USED AND MUST COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
G. EXAMPLES OF MEDIA THAT MAY BE USED INCLUDE UNTREATED AND NON-PAINTED WOOD PALLETS, AND CLEAN LAND CLEARING DEBRIS OR TREE CHIPS PROVIDED THEY MEET THE CRITERIA SHOWN ABOVE.
H. COMPOST FILTER SOCK SHALL BE FILTREXX COMPOST FILTER SOCK, OR APPROVED EQUAL.

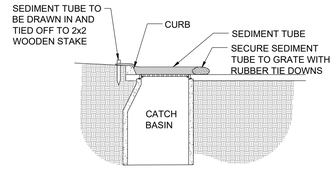


CURBSIDE OPTION "A" PLAN

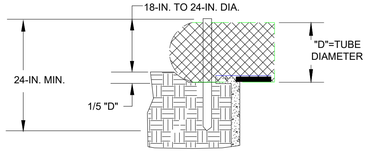
CURBSIDE OPTION "B" PLAN



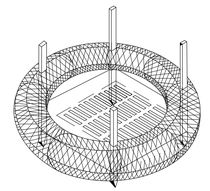
POST INSTALLATION DETAIL



CURBSIDE SECTION



SEDIMENT TUBE BURIAL DETAIL



SEDIMENT TUBE INSTALLATION DETAIL

TYPE A - SEDIMENT TUBE INLET PROTECTION

GENERAL NOTES

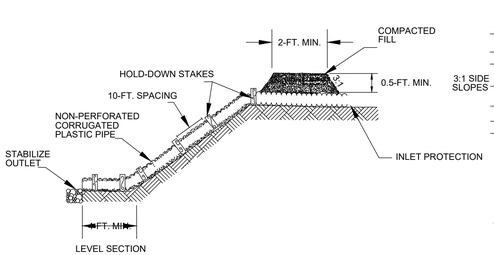
1. Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled sediment tubes are not permitted.
2. The outer netting of the sediment tube should consist of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable material.
3. Sediment tube diameters shall range from 18-inches to 24-inches. Sediment tunes with smaller diameters are prohibited when used as inlet protection.
4. Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed.
5. Sediment tubes should be staked using wooden oak stakes (2-inch X 2-inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) at a minimum of 48-inches in length placed on 2-foot centers.
6. Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufactuer's recommendations should always be consulted before installation.
7. The ends of adjacent sediment tubes should be overlapped 6-inches to prevent flow and sediment from passing through the field joint.
8. Sediment tubes should not be stacked on top of one another.
9. Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.
10. Install stakes at a diagonal facing incoming runoff.

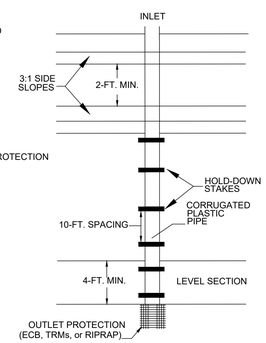
INSPECTION & MAINTENANCE

1. The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of sediment tube inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the sediment tube. When a sump is installed in front of the inlet protection, sediment shall be removed when if fills approximately 1/3 the depth of the sump.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Large debris, trash, and leaves should be removed from in front of tubes when found.
7. Inlet protection structures should be removed after the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.

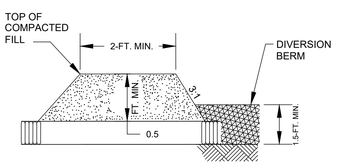
SEDIMENT TUBE INLET PROTECTION

NOT TO SCALE





PLAN VIEW



TYPICAL PIPE SLOPE DRAIN LAYOUT

PIPE SLOPE DRAIN

When and Where to Use It

Pipe slope drains are used when it is necessary for water to flow down a slope without causing erosion, especially before a slope has been stabilized or before permanent drainage structures are installed.

Installation:

Typical pipe slope drains are made of non-perforated corrugated plastic pipe.

Slope drain sections should be securely fastened together, have gasket watertight fittings, and be securely anchored into the soil.

Diversion berms or dikes should direct runoff to slope drains. The minimum depth of these dikes or berms should be 1.5-feet. The height of the berm around the pipe inlet should be a minimum of 1.5-feet high and at least 0.5-feet higher than the top of the pipe. The berm at the pipe inlet shall be compacted around the pipe. The area around the inlet shall be properly stabilized with ECBs, TRMs, riprap or other applicable stabilization techniques.

The area below the outlet must be properly stabilized with ECBs, TRMs, riprap or other applicable stabilization technique.

If the pipe slope drain is conveying sediment-laden water, direct all flows into the sediment trapping facility.

Permanent slope drains should be buried beneath the soil surface a minimum 1.5-feet.

Inspection and Maintenance:

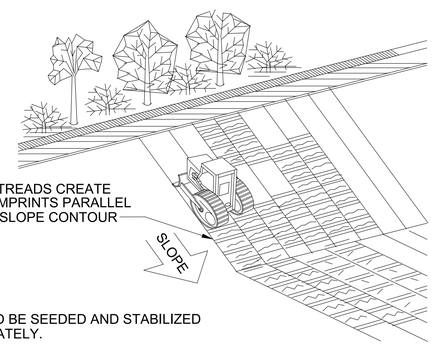
Inspect pipe slope drain inlet and outlet points every seven (7) calendar days and within 24-hours after each rainfall event that produces ½-inches or more of precipitation.

The inlet should be free from undercutting, and no water should be going around the point of entry. If there are problems, the headwall should be reinforced with compacted earth or sandbags. The outlet point should be free of erosion and installed with appropriate outlet protection.

All temporary pipe slope drains should be removed within 30 days after final site stabilization is achieved or after the temporary BMP is no longer needed. Disturbed soil areas resulting from removal should be permanently stabilized.

PIPE SLOPE DRAIN

NOT TO SCALE



TRACKING

South Carolina Department of Health and Environmental Control

TRACKING

STANDARD DRAWING NO. EC-01 Page 1

APPROVED BY: SCDHEC — DATE: AUGUST, 2005

BID DRAWINGS - NOT FOR CONSTRUCTION

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1320 MAIN STREET
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C.O.A.



PROFESSIONAL SEAL

NO.	DATE	DESCRIPTION

REVISION RECORD

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE: EROSION CONTROL DETAILS

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

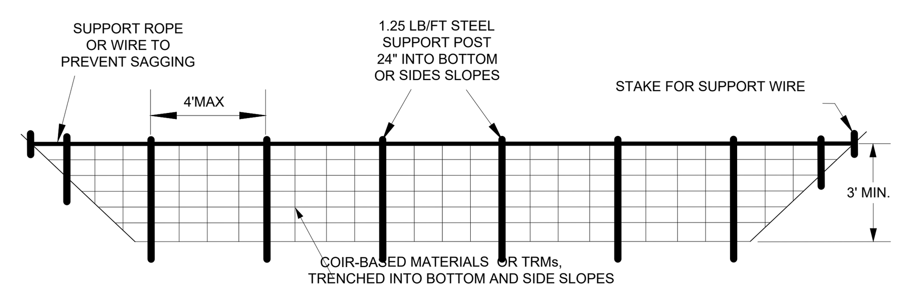
DRAWING NUMBER: C9

WKD PROJ. NO.: 20230179.00.CA

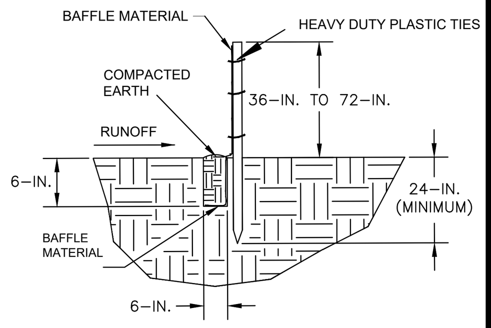
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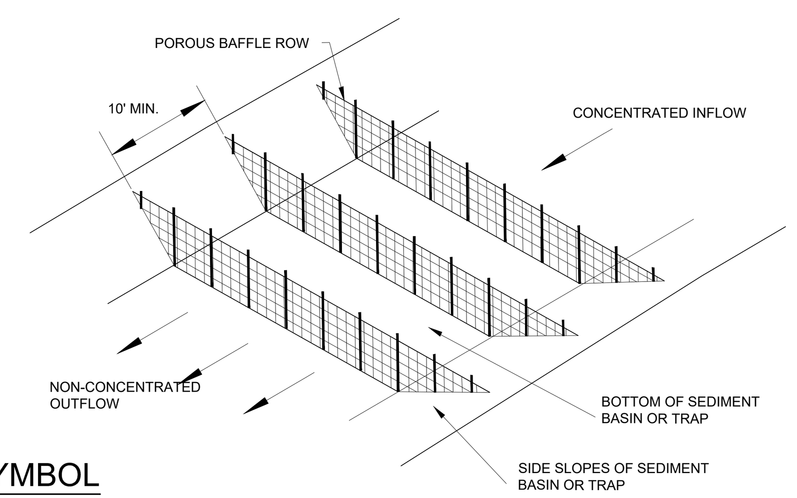
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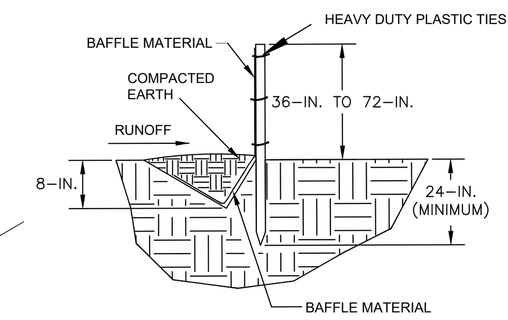
CROSS SECTION VIEW



FLAT-BOTTOM TRENCH DETAIL

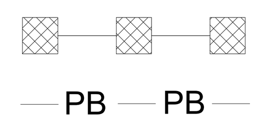


PERSPECTIVE VIEW



V-SHAPED TRENCH DETAIL

PLAN SYMBOL

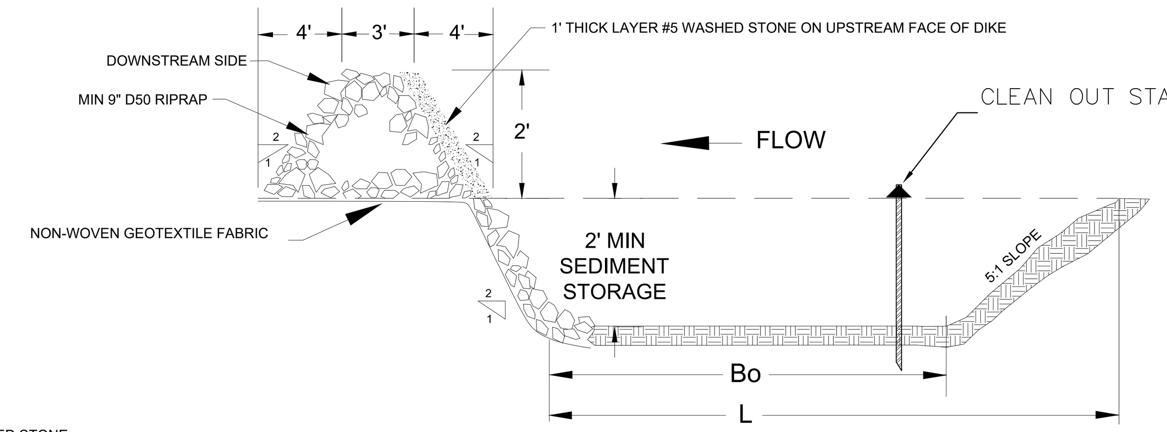


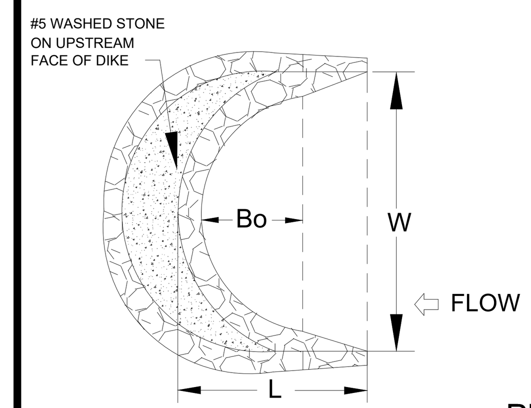
South Carolina Department of Health and Environmental Control

POROUS BAFFLES

STANDARD DRAWING NO. SC–13 PAGE 1 of 2

NOT TO SCALE — FEBRUARY 2014 DATE



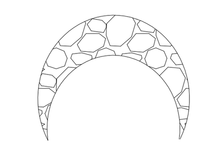


TYPICAL ROCK DIKE DIMENSIONS

W	L	Bo	MAX. DRAINAGE (ACRES)	TOTAL STORAGE VOL. (CU. FT.)	SEDIMENT STORAGE VOLUME (CU. FT.)
15'	17.5'	3.5'	0.5	1259	283
20'	20.0'	6.0'	1.0	1946	529
25'	22.5'	8.5'	1.5	2790	855
30'	25.0'	11.0'	2.0	3790	1257

MAXIMUM 2-ACRE DRAINAGE AREA TO DIKE

PLAN SYMBOL



South Carolina Department of Health and Environmental Control

ROCK SEDIMENT DIKE

STANDARD DRAWING NO. SC-12 PAGE 1 of 2

NOT TO SCALE — FEBRUARY 2014 DATE

BAFFLES – POST REQUIREMENTS

1. Porous baffle posts must be 60-inch to 96-inch long steel posts that meet, at a minimum, the following physical characteristics.
   - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
   - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
   - Weigh 1.25 pounds per foot (± 8%)
2. Posts shall be equipped with projections to aid in fastening of baffle material.
3. Install posts to a minimum of 24-inches. A minimum height of 1- to 2- inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
4. Post spacing shall be at a maximum of 4-feet on center.

BAFFLES – MATERIAL REQUIREMENTS

1. Baffle material must be composed of coir-based materials or Turf Reinforcement Matting (TRM) that consists of the following requirements:
   - Have a light penetration (% openings) between 10-35%;
   - Free of loose straw material;
   - Have a minimum tensile strength of 145 lb/ft; and,
   - Have a minimum width of 48-inches.
2. 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled or baffle material may be stapled into ground by using 12-inch staples with a maximum spacing of 12-inches.
3. Baffle material shall be purchased in continuous rolls and cut to the width of the sediment basin or trap to avoid joints.

BAFFLES – GENERAL NOTES

1. Attach baffle to the steel posts using heavy-duty plastic ties that are evenly spaced along the above ground portion of each post.
2. Install the baffle rows perpendicular to the direction of the stormwater flow and place each baffle the proper distance from inlet and outlets to allow access for maintenance and clean-out.

BAFFLES – INSPECTION & MAINTENANCE

1. The key to functional porous baffles is weekly inspection, routine maintenance, and regular sediment removal.
2. Regular inspections of porous baffles shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations along each row of baffles is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the baffle row or when it reaches the clean-out height of the sediment basin or trap, whichever is reached first.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Check for areas where stormwater runoff has eroded a channel beneath each row of baffles, or where the baffle has sagged or collapsed due to runoff overtopping the baffle.
7. Check for tears/rips within the baffles, areas where the baffle has begun to decompose, and for any other circumstance that may render the baffle ineffective. Removed damaged baffles and reinstall new baffles immediately.
8. Porous baffles should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control

POROUS BAFFLES

STANDARD DRAWING NO. SC–13 PAGE 2 of 2

GENERAL NOTES — FEBRUARY 2014 DATE

ROCK SEDIMENT DIKE - GENERAL NOTES

1. Rock sediment dikes should not be placed in Waters of the State or USGS blue-line streams (unless approved by Federal Authorities).
2. A non-woven geotextile fabric shall be installed over the soil surface where the rock sediment dike is to be placed.
3. The body of a rock sediment dike shall be composed of 9-inch D50 riprap at a minimum.
4. The upstream face of the rock sediment dike shall be composed of a 1-foot thick layer of 3/4-inch to 1-inch D50 washed stone placed at a slope of 2H:1V.
5. Rock sediment dikes shall have a minimum top flow length of 3-feet (2-foot flow length through the riprap and 1-foot flow length through the washed stone).
6. The rock must be placed by hand or mechanical placement (no dumping of rock to form the sediment dike) to achieve proper dimensions.
7. A sediment sump shall be located on the upstream side of the structure to provide sediment storage. The upstream side of the sump shall have a slope of 5H:1V to inhibit erosion of the sediment storage area. The minimum depth of the sump shall be 2-feet.
8. Mark the sediment clean-out level of the sediment dike with a stake in the field.
9. Seed and mulch all disturbed areas.

ROCK SEDIMENT DIKE - INSPECTION AND MAINTENANCE

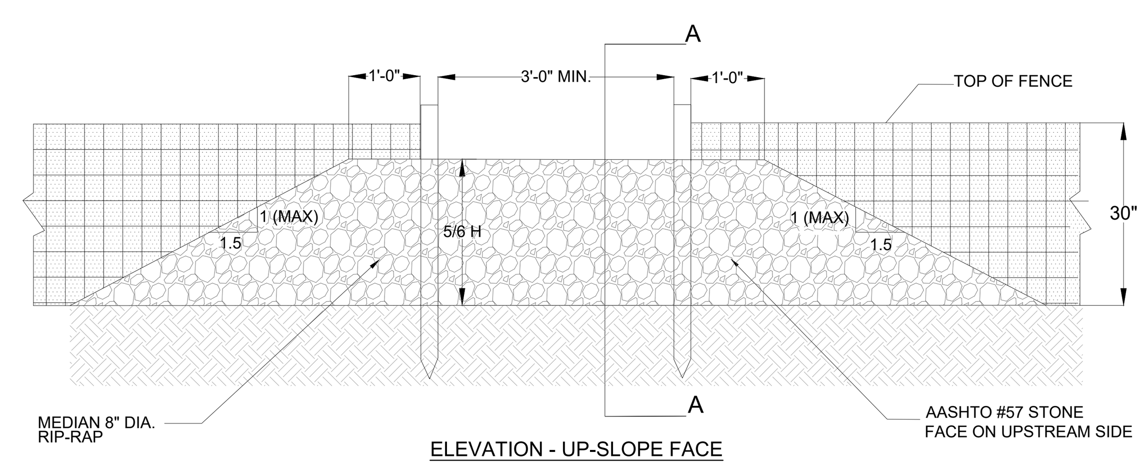
1. The key to a functional rock sediment dike is weekly inspection, routine maintenance and regular sediment removal.
2. Attention to sediment accumulations within the rock sediment dike is extremely important. Accumulated sediment deposition should be continually monitored in the trap and removed when necessary.
3. Remove accumulated sediment when it reaches 50% of the designed sediment storage volume as marked by the clean-out stake.
4. Removed sediment from the rock sediment dike shall be placed in stockpile storage areas or spread thinly across the disturbed area. Stabilize the removed sediment after it is relocated.
5. Regular inspections of rock sediment dikes should be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces ½-inch or more of precipitation.
6. All rock sediment dikes should be removed within 30 days after final stabilization is achieved. Dispose of all construction materials appropriately. Disturbed area resulting from removal shall be permanently stabilized.

South Carolina Department of Health and Environmental Control

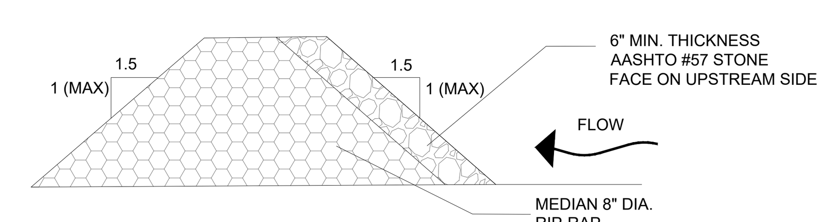
ROCK SEDIMENT DIKE

STANDARD DRAWING NO. SC-12 PAGE 2 of 2

GENERAL NOTES — FEBRUARY 2014 DATE



ELEVATION - UP-SLOPE FACE



SECTION A-A

NOTES:

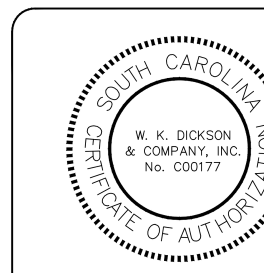
1. WASHED STONE (#57) TO BE REMOVED AND REPLACED ONCE IT BECOMES CLOGGED WITH SEDIMENT.
2. SEDIMENT TO BE REMOVED WHEN ACCUMULATIONS REACH 1/3 HEIGHT OF SILT FENCE.
3. THE KEY TO FUNCTIONAL ROCK OUTLETS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR SEDIMENT REMOVAL.
4. ROCK OUTLETS SHALL BE PLACED AS NOTED ON THE PLANS OR AS REQUIRED AT LOW POINTS ALONG SILT FENCE.

SILT FENCE ROCK OUTLET

NOT TO SCALE

BID DRAWINGS - NOT FOR CONSTRUCTION

WK DICKSON
community infrastructure consultants
1320 MAIN STREET
SUITE 400
COLUMBIA, SC 29201
(t)803-786-4261
WWW.WKDICKSON.COM



C.O.A.



PROFESSIONAL SEAL

REVISION RECORD

NO.	DATE	DESCRIPTION	BY

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE: **EROSION CONTROL DETAILS**

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

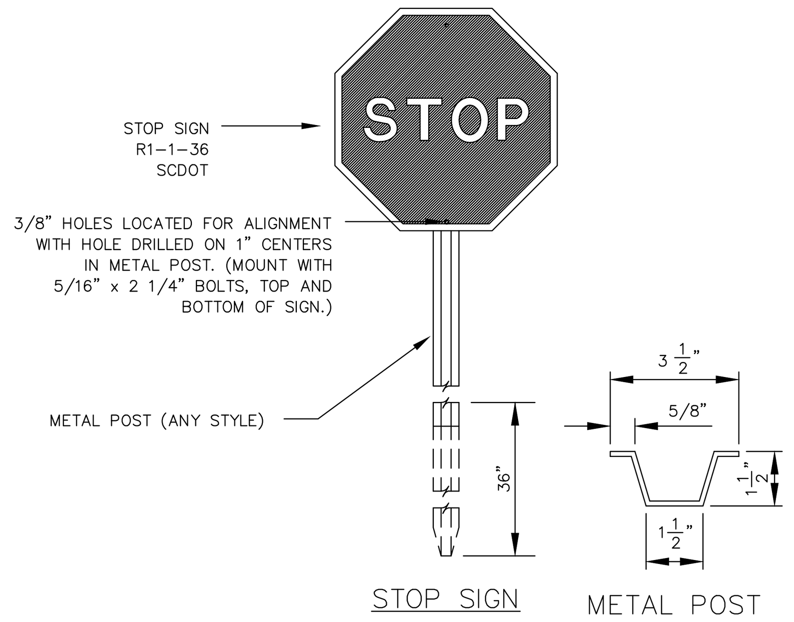
DRAWING NUMBER:

C10

WKD PROJ. NO.:

20230179.00.CA

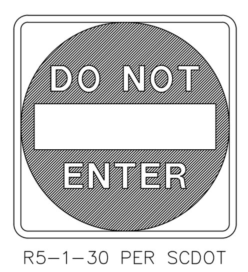
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NOTES:

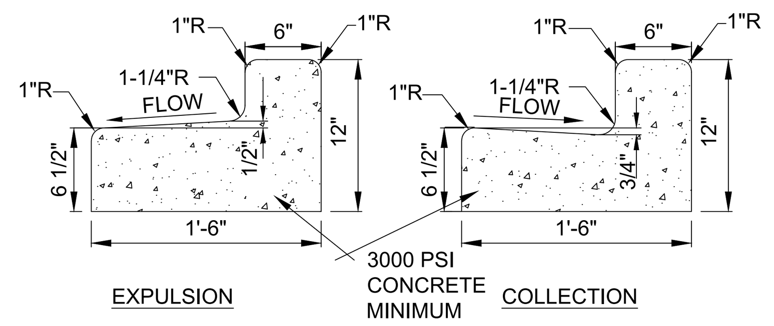
1. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS, AND SCREWS MUST BE RUSTPROOF. (POST MAY BE ANY STYLE.)
2. CONCRETE FOR FOOTING SHALL BE OF PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 psi.
3. SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE SYMBOL, MESSAGE, AND BORDERS APPLIED TO A SHEET ALUMINUM BACKING (0.80 IN THICKNESS).
4. MESSAGE LETTERING SHALL BE UPPERCASE (WHITE, SERIES B) IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

STOP SIGN
NOT TO SCALE



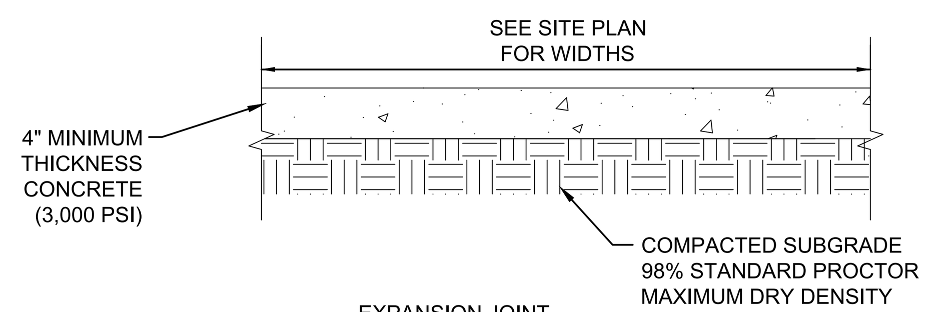
NOTE:
USE SAME SIGN POST STYLE AS USED FOR STOP SIGN.

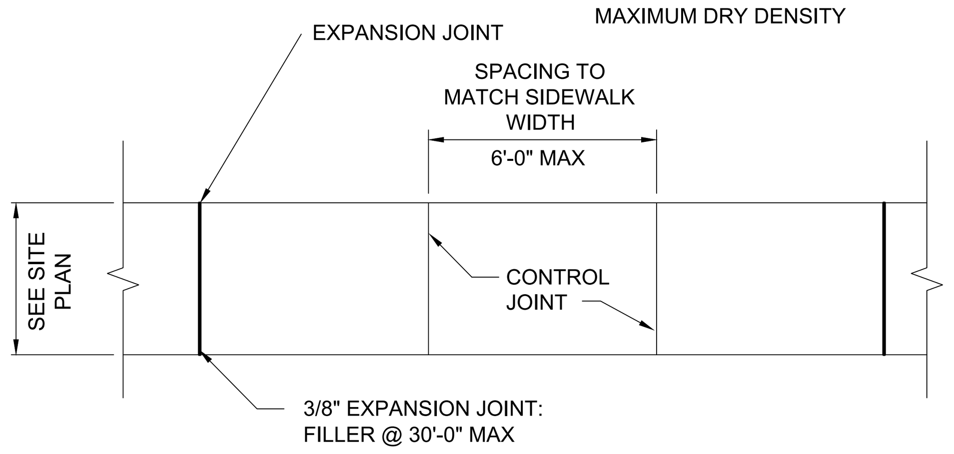
DO NOT ENTER ROAD SIGN
NOT TO SCALE



NOTE: CONSTRUCTION JOINTS SHALL BE SPACED EVERY 8 TO 10 FEET

BARRIER CURB AND GUTTER
NOT TO SCALE

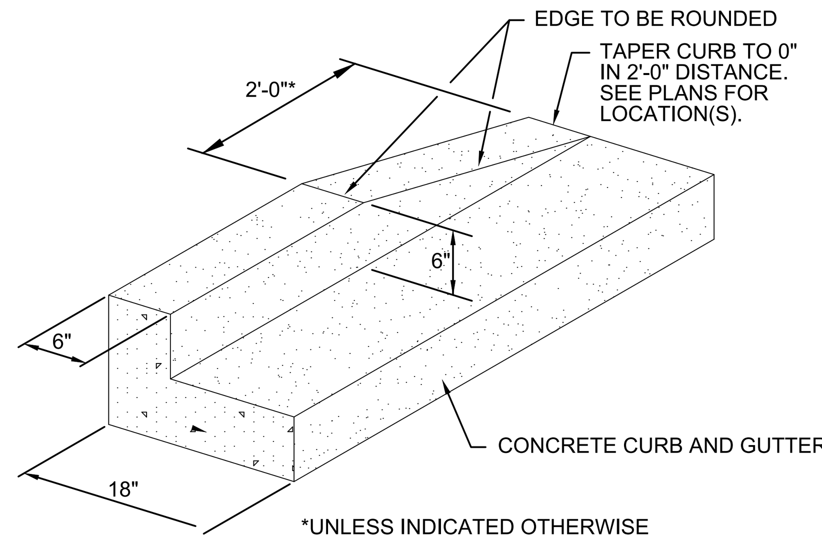




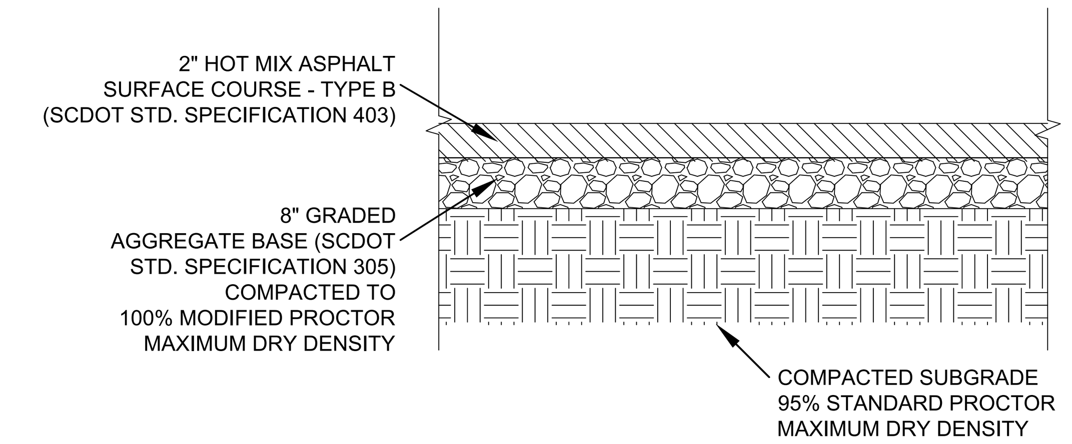
NOTES:

1. MINIMUM THICKNESS = 4".
2. PROVIDE EXPANSION JOINTS @ INTERSECTIONS OF WALKS AND WHERE WALK ABUTTS OTHER STRUCTURES.
3. 3000 PSI MINIMUM CONCRETE FOR 28 DAY STRENGTH.
4. SIDEWALKS TO HAVE BROOM FINISH.
5. ALL JOINTS AND EDGES TO BE TOOLED.
6. CONTROL JOINTS TO BE TOOLED TO A MINIMUM DEPTH OF 1".

CONCRETE SIDEWALK
NOT TO SCALE



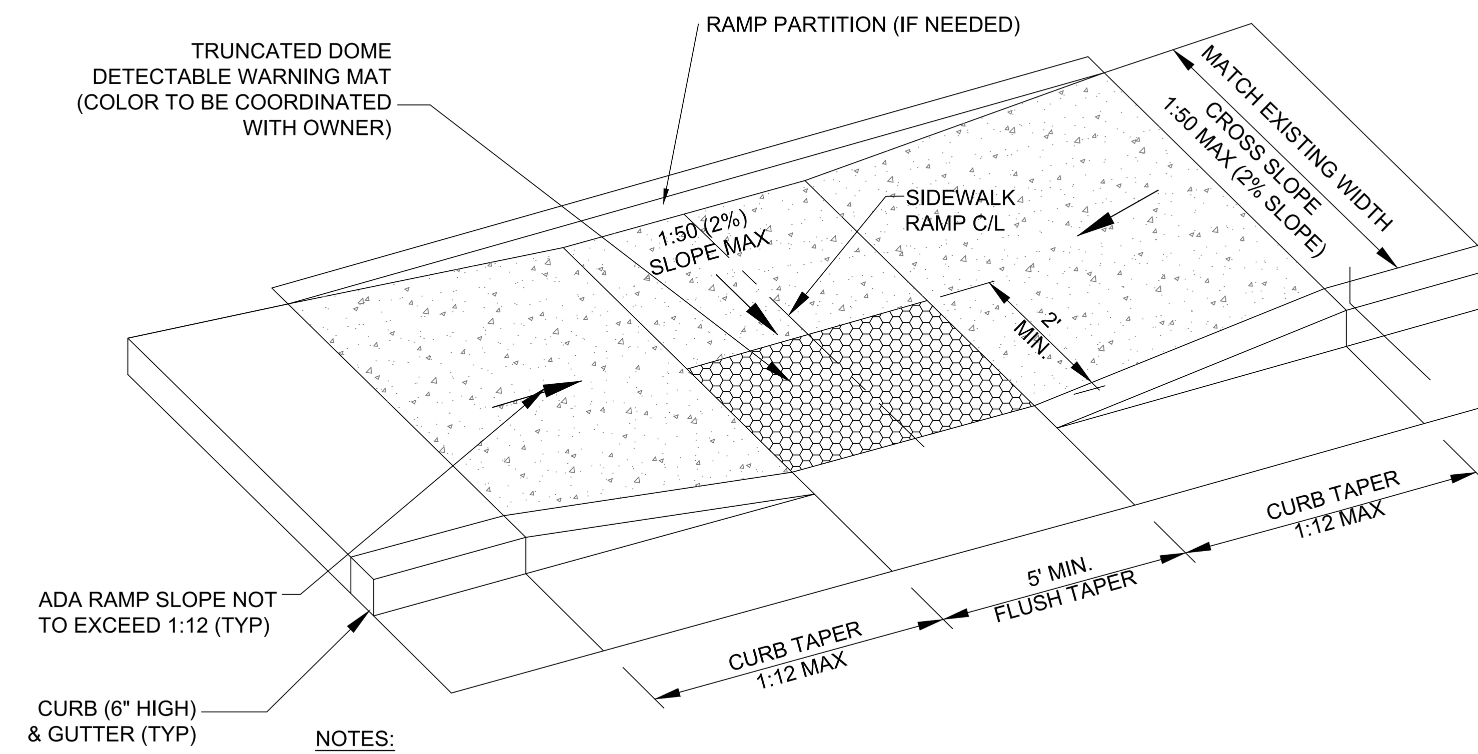
TAPERED CURB
NOT TO SCALE



NOTES:

1. ASPHALT THICKNESS NOTED SHALL BE THE FINAL COMPACTED MATERIAL THICKNESS.
2. ASPHALT AND BASE COURSE PREPARED AND INSTALLED ACCORDING TO SCDOT STANDARD SPECIFICATIONS, LATEST EDITION.

LIGHT DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



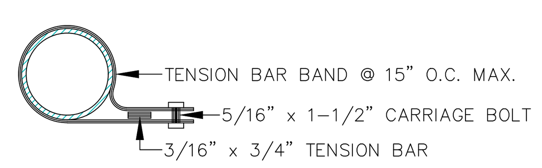
NOTES:

1. CONSTRUCTION OF ACCESSIBLE CURB RAMP SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.
2. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS TO STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20 (5%).
3. CURB RAMP SHALL HAVE A DETECTABLE WARNING MAT THAT CONFORMS TO ADA STANDARDS FOR ACCESSIBLE DESIGN SECTION 4.29.2 AND EXTENDS THE FULL WIDTH OF CURB RAMP.

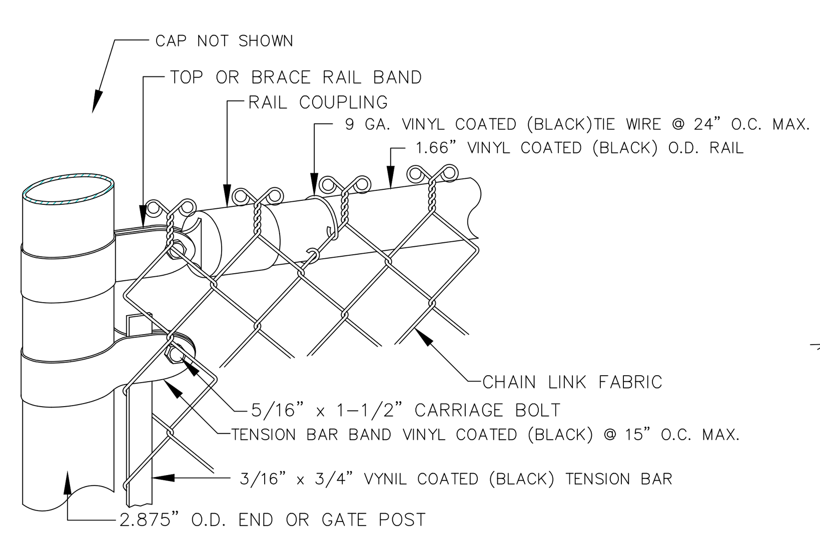
ADA CURB RAMP
NOT TO SCALE

FENCE POST FOOTING CHART

TYPE	4' HT.	5'-8' HT.	10' HT.	> 10' < 20' HT.	20' HT. OR HIGHER
POST FOOTING SIZE FOR TERMINAL/ CORNER POSTS	12" W 30" D	12" W 36" D	18" W 36" D	18" W 48" D	24" W 60" D
POST FOOTING SIZE FOR LINE POSTS	12" W 24" D	12" W 36" D	18" W 36" D	18" W 48" D	24" W 48" D



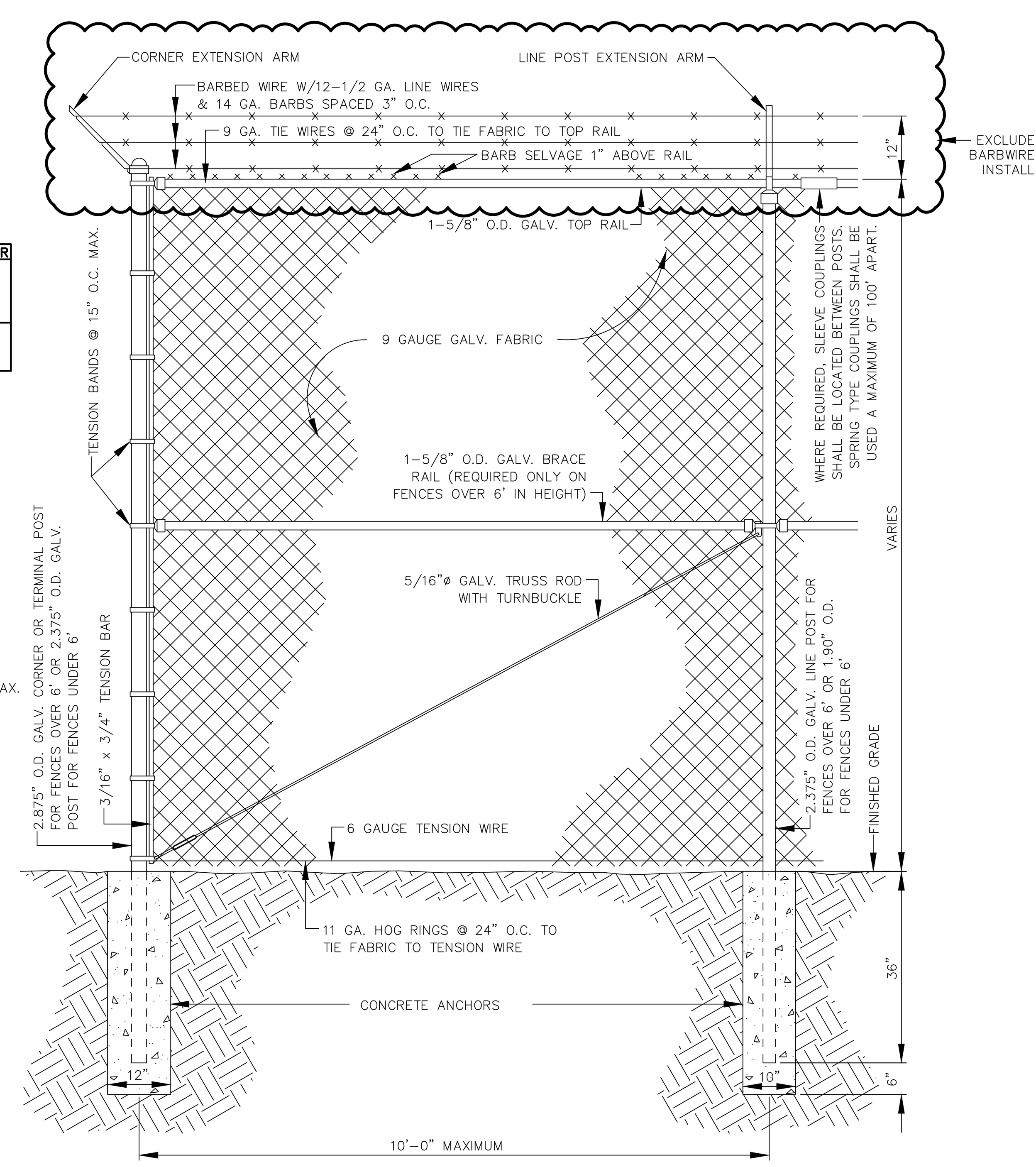
TOP VIEW



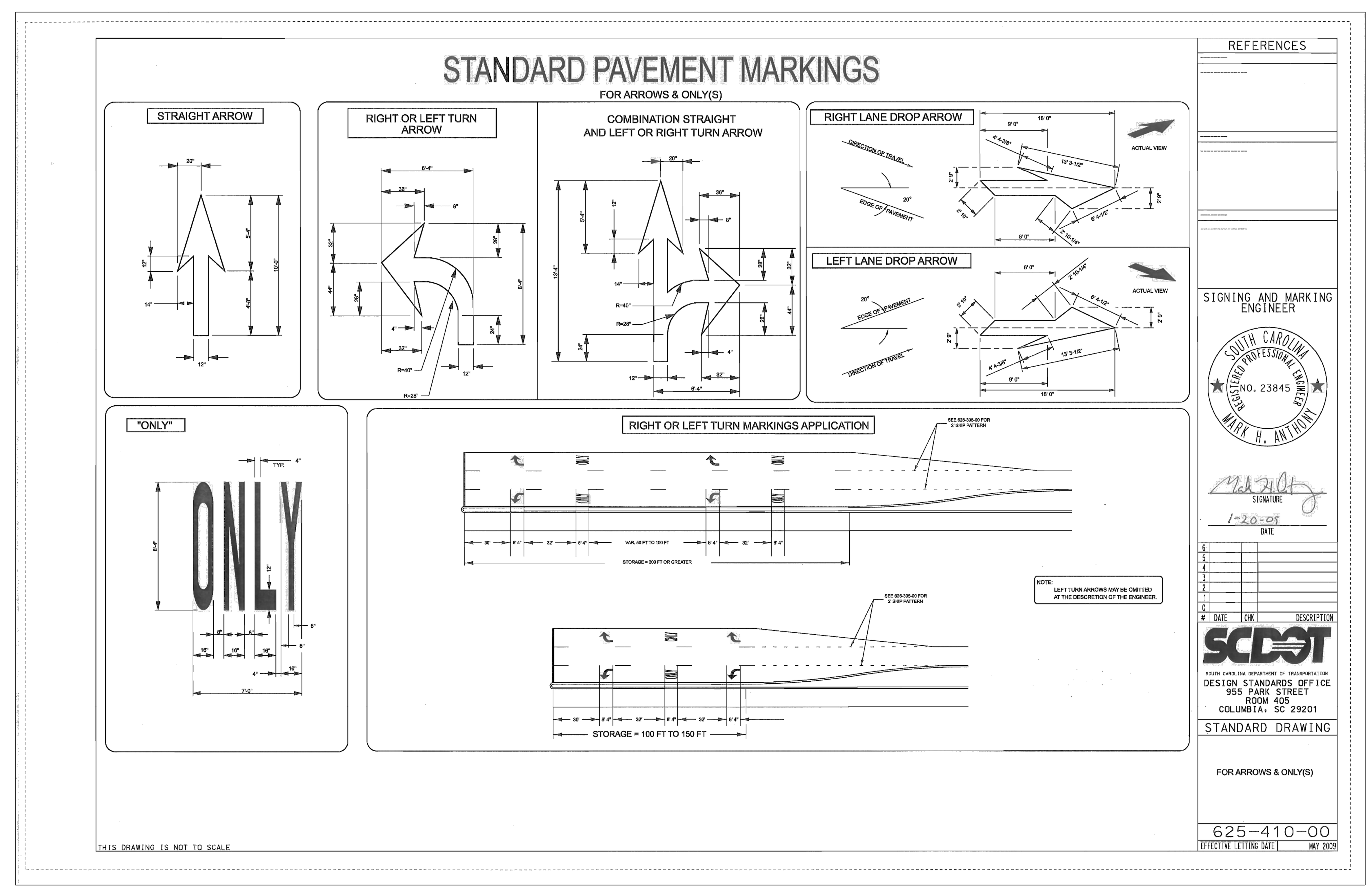
SIDE ELEVATION

*NOTE: ALL FENCING MATERIAL MUST BE VINYL COATED (BLACK)

FENCE CONNECTIONS
NO SCALE



CHAIN LINK FENCING
NOT TO SCALE



STANDARD PAVEMENT MARKINGS
NOT TO SCALE

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community infrastructure consultants
1320 MAIN STREET
SUITE 400
COLUMBIA, SC 29201
(t)803-786-4261
WWW.WKDICKSON.COM

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION W. K. DICKSON & COMPANY, INC. No. C00177
C.O.A.

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 22779
8/25/2023
PROFESSIONAL SEAL

REVISION RECORD

NO.	DATE	DESCRIPTION	BY

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE: SITE DETAILS

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER:
C11

WKD PROJ. NO.:
20230179.00.CA

FILE PATH:Z:\Projects\Newberry Co School District\202301790CA - Little Mountain Elementary Driveway\CADD\Sheets\20230179_C_SHT_SITE_DETAILS.dwgZ:\Projects\Newberry Co School District\202301790CA - Little Mountain Elementary Driveway\CADD\Sheets\20230179_C_SHT_SITE_DETAILS.dwg, MJENNINGS, 8/30/2023 8:50:47 AM

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REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS
SC-M-714
EDM 24
INSTRUCTIONAL BULLETIN 2010-1
QUALIFIED PRODUCT LISTS 14, 69

RELATED DRAWINGS & KEYWORDS
714-005-00
714-110-00
714-205-00

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 21242 JAMES W. KENDALL, JR.

SIGNATURE
10/22/2015
DATE

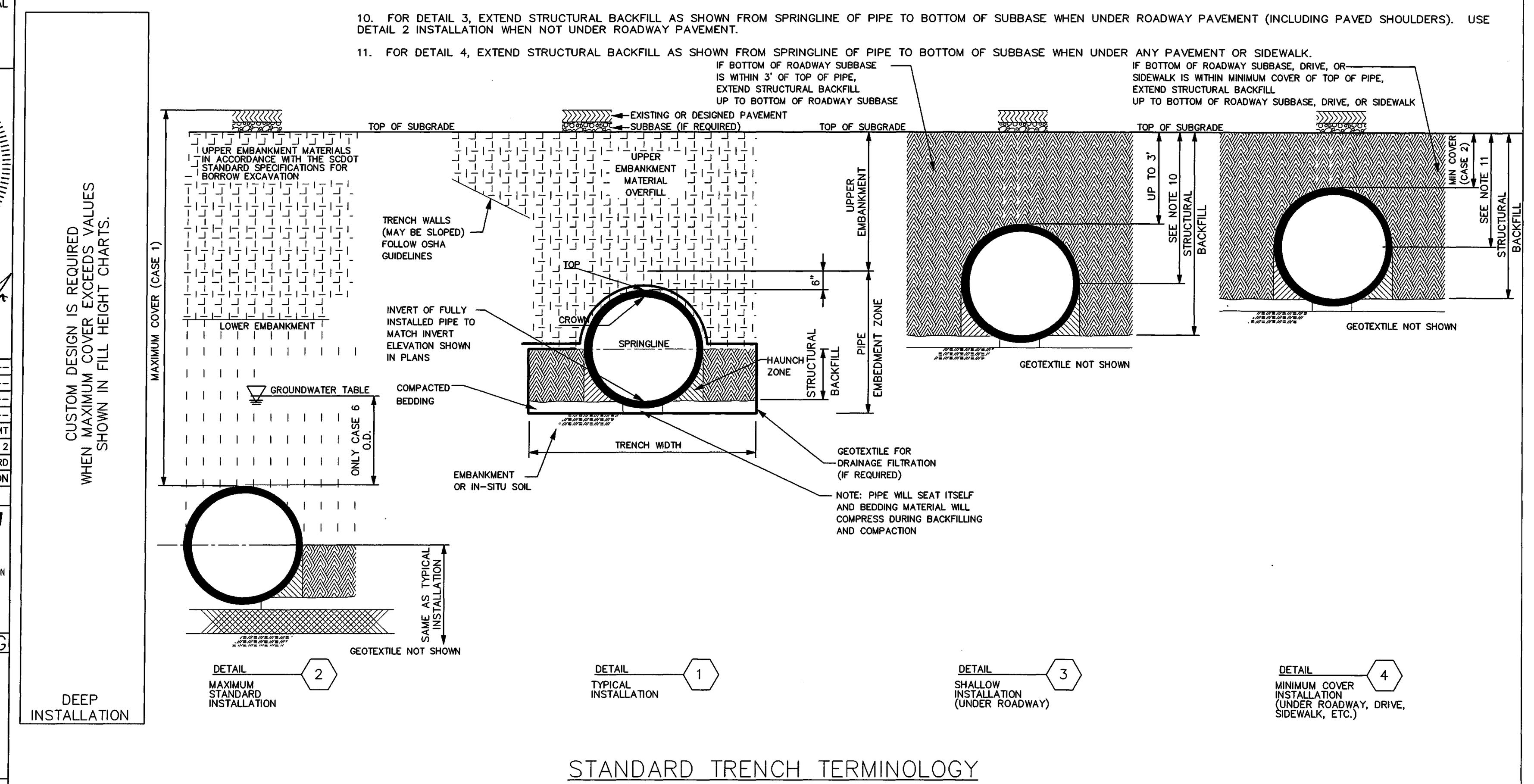
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6	---	---	---
5	---	---	---
4	---	---	---
3	---	---	---
2	1/2016	DSO	DET3,4 UNDER PVMT
1	7/2009	DSO	NOTE 2
0	3/2008	DSO	NEW STANDARD

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING
PIPE CULVERTS RIGID PIPE COMPLETED TRENCH (STANDARD FOUNDATION)
714-105-00
EFFECTIVE LETTING DATE JAN, 2016
THIS DRAWING IS NOT TO SCALE

NOTES:

1. USE MATERIALS AND METHODS OF CONSTRUCTION FOR PERMANENT PIPE IN CONFORMANCE WITH SCDOT SUPPLEMENTAL SPECIFICATION SC-M-714.
2. SEE SHEET 714-205-XX FOR RCP FILL HEIGHT TABLES.
3. WHEN CONNECTING DISSIMILAR PIPE, USE DRAINAGE STRUCTURE OR DESIGN INTERFACE. DO NOT MIX PIPE TYPE, CLASS, OR DETAILS WITHIN A SINGLE RUN OF PIPE BETWEEN DRAINAGE STRUCTURES. SEE QUALIFIED PRODUCT LIST 14 FOR PRECAST REINFORCED CONCRETE DRAINAGE STRUCTURES.
4. USE AT LEAST THE MINIMUM CLASS OR GAGE REQUIRED TO CARRY THE FILL HEIGHT AS SPECIFIED IN THE STANDARD DRAWING FILL HEIGHT TABLES. WHEN PIPE CLASS IS SPECIFIED IN THE PLANS, CONFIRM THAT THE SPECIFIED CLASS CAN CARRY THE INSTALLED MAXIMUM COVER BEFORE BACKFILLING THE PIPE. IF INSTALLED GRADES VARY FROM THOSE SHOWN IN THE PLANS, CONFIRM THAT PIPE CLASS IS SUFFICIENT TO CARRY THE INSTALLED FILL HEIGHTS. DO NOT REDUCE THE PIPE CLASS BELOW THE CLASS SHOWN IN THE PLANS UNLESS DIRECTED BY THE ENGINEER.
5. USE RIPRAP, BEVELED ENDS, REINFORCED CONCRETE SLAB, WINGWALLS, OR END TREATMENT AS DESCRIBED IN THE PLANS, SCDOT SUPPLEMENTAL SPECIFICATION SC-M-714, OR SCDOT STANDARD DRAWINGS.
6. PIPE EMBEDMENT ZONE BACKFILL MUST MEET OR EXCEED THE MINIMUM MATERIAL AND COMPACTION REQUIREMENTS OF THE ROADWAY EMBANKMENT FOR THE SPECIFIED BURIAL DEPTH WITHOUT DAMAGING THE PIPE.
7. FOR SHALLOW INSTALLATIONS (PAVEMENT ON MINIMUM COVER), INSTALL PIPE EMBEDMENT ZONE MATERIAL TO PREVENT SETTLEMENT AROUND THE PIPE. IF REQUIRED, USE STRUCTURAL BACKFILL MATERIAL OR CLSM TO PREVENT THIS SETTLEMENT.
8. USE THIS INSTALLATION ONLY IN LOCATIONS ABOVE GROUNDWATER TABLE. USE THIS INSTALLATION IN LOCATIONS WHERE PIPE SYSTEM IS NOT SUBJECTED TO PRESSURE HEAD.
9. FOR DETAILS 1 & 2, INSTALL STRUCTURAL BACKFILL AS SHOWN, AND USE BORROW EXCAVATION REQUIREMENTS FOR SOIL ABOVE PIPE EMBEDMENT ZONE.
10. FOR DETAIL 3, EXTEND STRUCTURAL BACKFILL AS SHOWN FROM SPRINGLINE OF PIPE TO BOTTOM OF SUBBASE WHEN UNDER ROADWAY PAVEMENT (INCLUDING PAVED SHOULDERS). USE DETAIL 2 INSTALLATION WHEN NOT UNDER ROADWAY PAVEMENT.
11. FOR DETAIL 4, EXTEND STRUCTURAL BACKFILL AS SHOWN FROM SPRINGLINE OF PIPE TO BOTTOM OF SUBBASE WHEN UNDER ANY PAVEMENT OR SIDEWALK.



STANDARD TRENCH TERMINOLOGY
(COMPLETED RIGID PIPE INSTALLATION)

REFERENCES

NATIONAL DOCUMENTS
AASHTO M32, M55, M170, M198, M221, M225, M295, M302, M315, T96, T104, ASTM A706

SCDOT DOCUMENTS
SCDOT SUPPLEMENTAL TECHNICAL SPECIFICATION SC-M-714
ENGINEERING DIRECTIVE MEMO 24
INSTRUCTIONAL BULLETIN 2010-01
QUALIFIED PRODUCT LIST 60, 69
SCDOT TO ACPA (MARCH 14, 2012 LETTER)

RELATED DRAWINGS & KEYWORDS
714-005-00
714-105-00
714-110-00
714-205-02
714-990-MO

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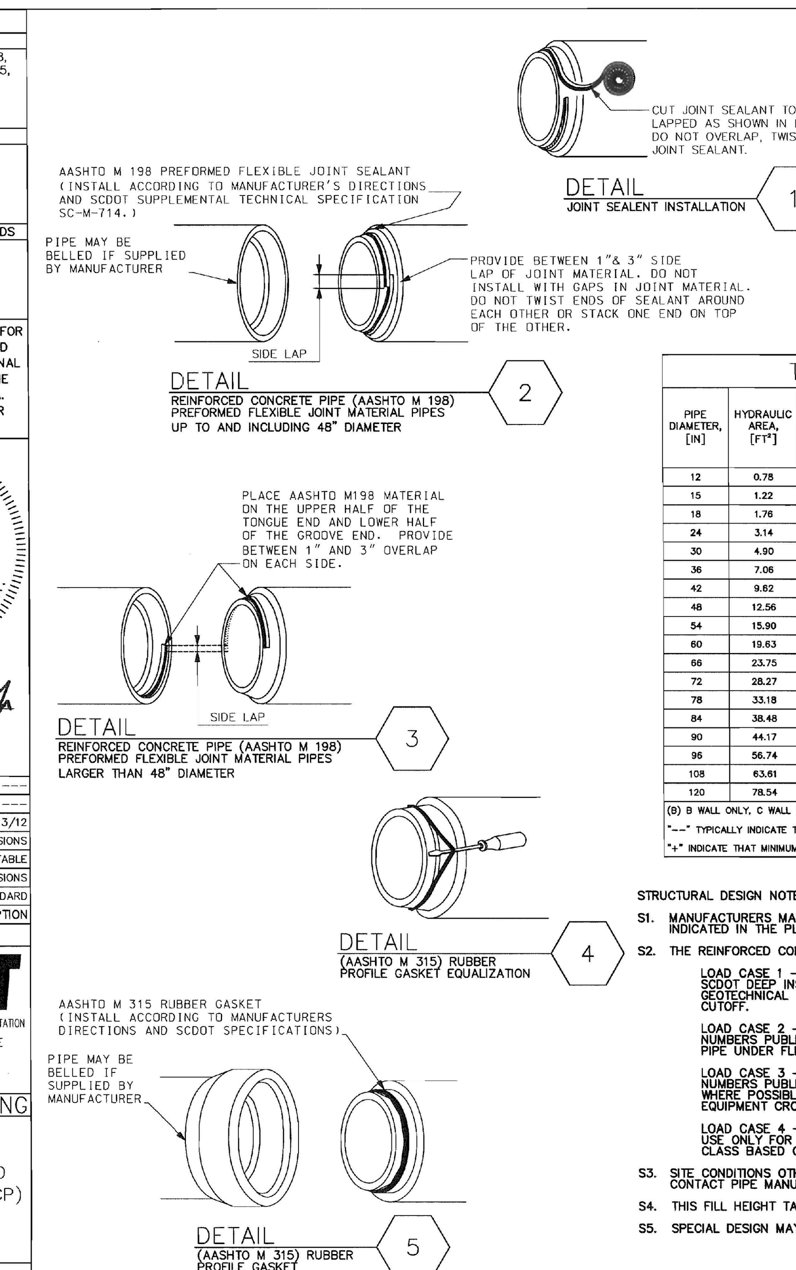
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 21242 JAMES W. KENDALL, JR.

SIGNATURE
9-26-12
DATE

#	DATE	CHK	DESCRIPTION
6	---	---	---
5	---	---	---
4	8/2012	DSO	SCDOT LETTER 3/12
3	3/2010	JBH	GENERAL REVISIONS
2	3/2009	HJC	COMPLETE TABLE
1	7/2008	HJC	GENERAL REVISIONS
0	3/2008	DSO	NEW STANDARD

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING
PIPE CULVERTS SMOOTH WALL (RIGID REINFORCED CONCRETE PIPE (RCP) DETAILS & FILL HEIGHT)
714-205-01
EFFECTIVE LETTING DATE JANUARY, 2013



NOTES:

1. SEE SHEET 714-005-00, 714-020-00, 714-105-00, & 714-120-00 FOR GENERAL NOTES, AND TRENCH INSTALLATION REQUIREMENTS.
2. USE ONLY PIPE CLASSES LISTED IN TABLES 714-205A & 714-205B.
3. USE B WALL PIPE FOR SIZES AND CLASSES INDICATED IN TABLES 714-205A & 714-205B. C WALL PIPE MAY BE SUBSTITUTED FOR B WALL PIPE ONLY FOR SIZES AND CLASSES INDICATED IN TABLES 714-205A & 714-205B.
4. USE PIPE AND JOINT MATERIAL FROM A MANUFACTURER COMBINATION SHOWN ON QUALIFIED PRODUCT LIST 69.
5. WHEN DEFORMED BILLET STEEL REBAR IS USED FOR CUSTOM PIPE, OBTAIN REBAR FROM A MANUFACTURER LISTED ON SCDOT QUALIFIED PRODUCT LIST 60. FOLLOW INSTRUCTIONAL BULLETIN 2010-01 AND ENGINEER OF RECORD RECOMMENDATIONS TO DETERMINE LOADING FOR CUSTOM PIPE.
6. SEE 714-990-MO FOR RESIDENTIAL DRIVEWAY INSTALLATION FOR MAINTENANCE APPLICATIONS.

PAY ITEMS:
7143xxx (__)"SMOOTH WALL PIPE..................L.F.
xxxxxxx (__)"PIPE ADDITIONAL FOUNDATION WORK....L.F.
7141xxx (__)"RC PIPE CUL-CLASS(____)..........L.F.
7141xxx (__)"RC PIPE-CL(_) AASHTO M315JNT.......L.F.
(__) = (DIAMETER)
(____) = (CLASS ROMAN #)
(_) = (CLASS #)

TABLE 714-205A: REINFORCED CONCRETE PIPE FILL HEIGHT TABLE

PIPE DIAMETER, [IN]	HYDRAULIC AREA, [FT²]	MANNING'S ROUGHNESS COEFFICIENT, [n]	ESTIMATED MINIMUM TRENCH WIDTH, [IN]	CASE 1: MAXIMUM COVER HIGHWAY VEHICLE LOADING, [FT]			CASE 2: MINIMUM COVER HIGHWAY VEHICLE LOADING, [FT]			CASE 3: MINIMUM COVER FOR CONSTRUCTION VEHICLE [FT] (AASHTO 27.5.4.4)			CASE 4: UNIVERSAL DRIVEWAY MINIMUM COVER [FT] NOT FOR USE IN ROADWAY			CASE 6: MAXIMUM COVER WITH INVERT AT 2 X O.D. BELOW GROUNDWATER, [FT]		
				CLASS III	CLASS IV	CLASS V	CLASS III	CLASS IV	CLASS V	CLASS III	CLASS IV	CLASS V	CLASS III	CLASS IV	CLASS V	CLASS III	CLASS IV	CLASS V
12	0.78	SEE MFG	42	16	25	30	1.75	1.00+	1.00+	3	3	3	1.75	1.00	0.50	--	20	30
15	1.22	SEE MFG	45	16	25	30	1.50	1.00+	1.00+	3	3	3	1.50	1.00	0	13	21	30
18	1.76	0.012	49	16	25	30	1.50	1.00+	1.00+	3	3	3	1.50	0.75	0	13	21	30
24	3.14	0.012	60	16	25	30	1.00	1.00+	1.00+	3	3	3	1.00	0	0	13	21	30
30	4.90	0.012	70	16	25	30	1.00	1.00+	1.00+	3	3	3	1.00	0	0	13	21	30
36	7.06	0.012	81	16 (B)	25 (B)	30	1.00+ (B)	1.00+ (B)	1.00+	3 (B)	3 (B)	3	0 (B)	0 (B)	0	--	12 (B)	25
42	9.62	0.012	91	16 (B)	25 (B)	30	1.00+ (B)	1.00+ (B)	1.00+	3 (B)	3 (B)	3	0 (B)	0 (B)	0	--	14 (B)	27
48	12.56	0.012	102	16	25	30	1.00+	1.00+	1.00+	3	3	3	0	0	0	--	16	26
54	15.90	0.012	112	16	25	30	1.00+	1.00+	1.00+	3	3	3	0	0	0	10	17	26
60	19.63	0.012	123	15	25	30	1.00+	1.00+	1.00+	3	3	3	0	0	0	10	16	25
66	23.75	0.012	133	15	25	30	1.00+	1.00+	1.00+	3	3	3	0	0	0	12	15	25
72	28.27	0.012	144	15	24	30	1.00+	1.00+	1.00+	3	3	3	0	0	0	12	18	23
78	33.18	0.012	154	15	24	--	1.00+	1.00+	--	3	3	--	0	0	--	12	17	--
84	38.48	0.012	165	15	24	--	1.00+	1.00+	--	3	3	--	0	0	--	12	17	--
90	44.17	0.012	175	15	--	--	1.00+	--	--	3	--	--	0	--	--	13	--	--
96	56.74	0.012	186	14	--	--	1.00+	--	--	3	--	--	0	--	--	13	--	--
108	63.61	0.012	207	14	--	--	1.00+	--	--	3	--	--	0	--	--	13	--	--
120	78.54	0.012	228	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

(B) B WALL ONLY, C WALL IS NOT ALLOWED FOR THIS DIAMETER AND CLASS.
"--" TYPICALLY INDICATE THAT PIPE SIZE IS NOT AVAILABLE OR IS NOT RECOMMENDED FOR THIS CONDITION.
"+" INDICATE THAT MINIMUM COVER MAY BE REDUCED TO 0.75' FOR SPECIFIED CLASS WHEN PIPE IS INSTALLED UNDER RIGID PAVEMENT.

STRUCTURAL DESIGN NOTES:

S1. MANUFACTURERS MAY SUBSTITUTE HIGHER CLASS PIPE THAN SPECIFIED IN THE PLANS, HOWEVER, INSTALLATION DEPTH SHALL NOT EXCEED THAT SHOWN FOR THE PIPE INDICATED IN THE PLANS UNLESS APPROVED BY THE ENGINEER OF RECORD. NO ADDITIONAL PAYMENT WILL BE MADE FOR HIGHER CLASS SUBSTITUTION.

S2. THE REINFORCED CONCRETE PIPE FILL HEIGHT TABLE IS BASED ON THE FOLLOWING CRITERIA:

LOAD CASE 1 – TYPICAL STANDARD INSTALLATION:
SCDOT DEEP INSTALLATION = 30'. FOR ALL INSTALLATIONS BEYOND 30', EMBANKMENT SETTLEMENT MAY CONTROL DESIGN. CONSULT WITH PIPE MANUFACTURERS AND GEOTECHNICAL ENGINEERS BEFORE USING DEEPER THAN 30'. NUMBERS PUBLISHED ARE BASED ON AASHTO LRFD INDIRECT DESIGN OR SCDOT DEEP INSTALLATION CUTOFF.

LOAD CASE 2 – TYPICAL MINIMUM COVER INSTALLATION:
NUMBERS PUBLISHED ARE BASED ON AASHTO LRFD INDIRECT DESIGN CALCULATIONS OR AASHTO LRFD TABLE 12.6.6.3-1 FOR CLASS SPECIFIED OF REINFORCED CONCRETE PIPE UNDER FLEXIBLE PAVEMENT.

LOAD CASE 3 – TYPICAL MINIMUM COVER FOR CONSTRUCTION VEHICLE EQUIP,ENT LOADING:
NUMBERS PUBLISHED ARE BASED ON AASHTO LRFD SECTION 27.5.4.4 FOR REINFORCED CONCRETE PIPE. AVOID DRIVING CONSTRUCTION VEHICLES OVER INSTALLED PIPE WHERE POSSIBLE. EXTEND CONSTRUCTION FILL HEIGHT BEYOND SIDES OF PIPE BY THE LARGER OF 3 FEET OR ONE PIPE DIAMETER. PERIODICALLY CHANGE LOCATION OF EQUIPMENT CROSSING OVER PIPE IN ORDER TO MINIMIZE CHANCE OF LATERAL DISPLACEMENT.

LOAD CASE 4 – UNIVERSAL DRIVEWAY MINIMUM COVER:
USE ONLY FOR DRIVEWAY APPLICATIONS. NUMBERS PUBLISHED ARE BASED ON CAPACITY OF PIPE USING AASHTO LRFD INDIRECT DESIGN AT 0' COVER. CHOOSE PIPE CLASS BASED ON LOADING OF VEHICLES USING DRIVEWAY.

S3. SITE CONDITIONS OTHER THAN TYPICAL INSTALLATION MAY ALSO REQUIRE SPECIAL DESIGNED PIPE. FOR THESE CONDITIONS, OTHER PIPE TYPES MAY BE MORE APPROPRIATE. CONTACT PIPE MANUFACTURER BEFORE SPECIFYING THIS PIPE TYPE FOR CUSTOM INSTALLATIONS.

S4. THIS FILL HEIGHT TABLE IS FOR USE IN ROADWAY APPLICATIONS ONLY AND SHOULD NOT BE USED FOR ANY OTHER TRANSPORTATION FACILITY.

S5. SPECIAL DESIGN MAY BE REQUIRED FOR INSTALLATIONS OUTSIDE OF SCDOT RIGHT OF WAY – SEE RIGHT OF WAY/UTILITY/MUNICIPAL AGREEMENT FOR THESE INSTALLATIONS.

REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS
SCDOT SUPPLEMENTAL TECHNICAL SPECIFICATION SC-M-714
ENGINEERING DIRECTIVE MEMORANDUM 24
INSTRUCTIONAL BULLETIN 2010-01

RELATED DRAWINGS & KEYWORDS
714-105-00
714-110-00
714-505-00
714-010-00

PRECONSTRUCTION SUPPORT ENGINEER

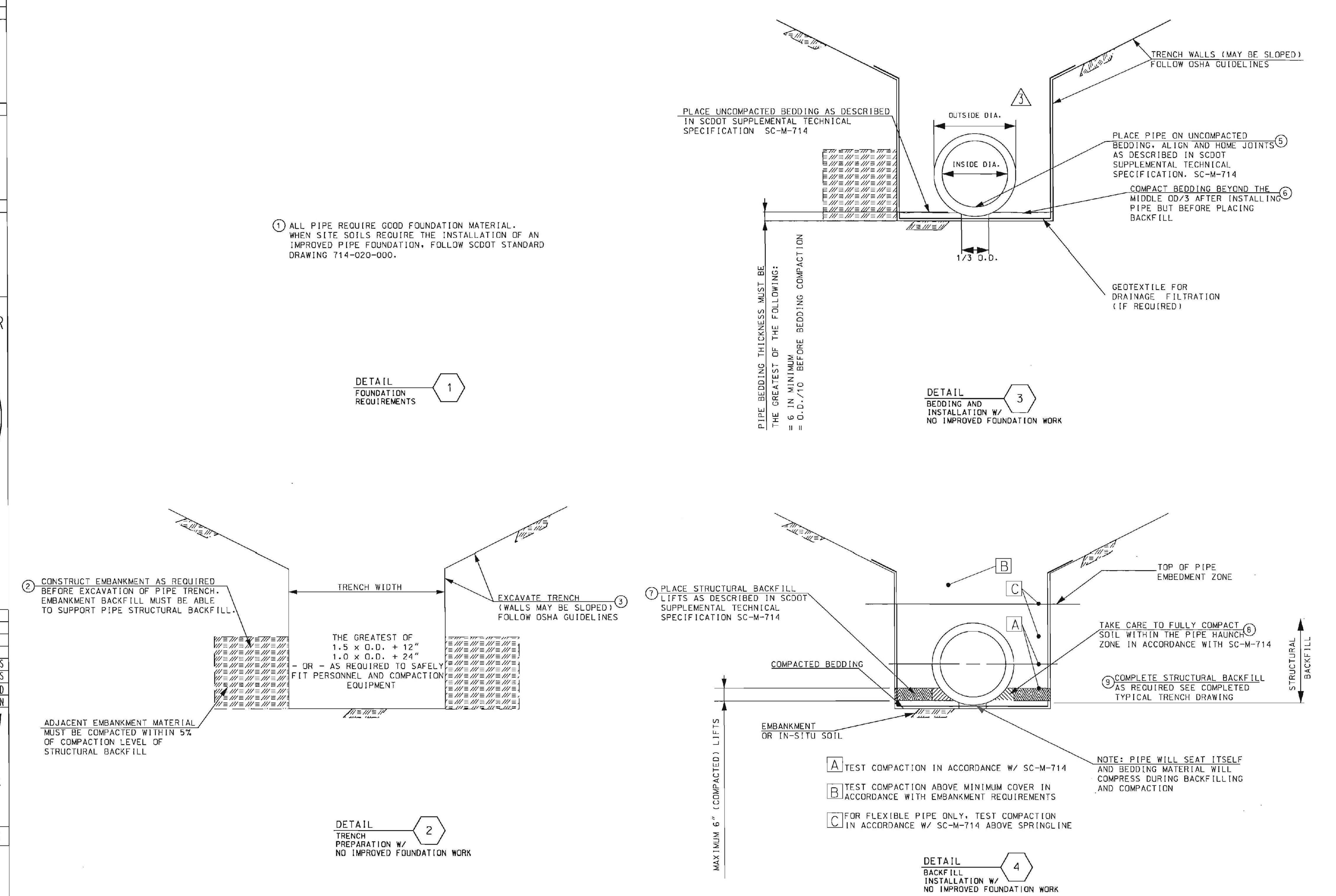
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EARGLE, II

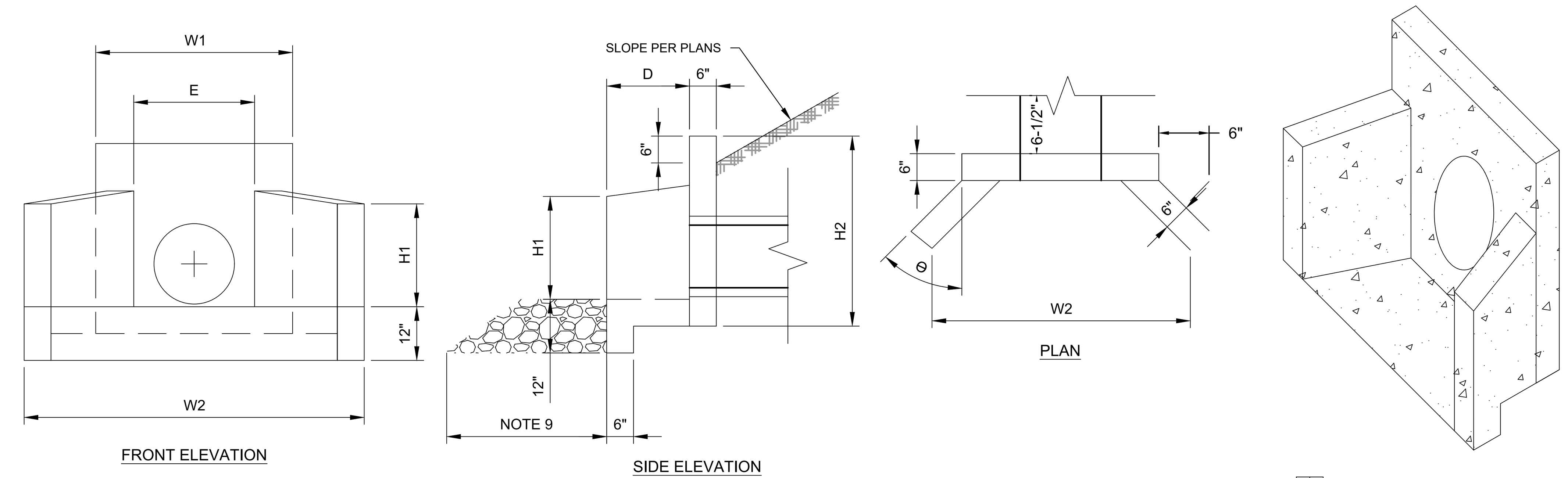
SIGNATURE
APRIL 30, 2010
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3	3/2010	JBH	DET3 OD
2	3/2009	HJC	DET4 COMPACTION NOTES
1	7/2008	HJC	GENERAL REVISIONS
0	3/2008	DSO	NEW STANDARD

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

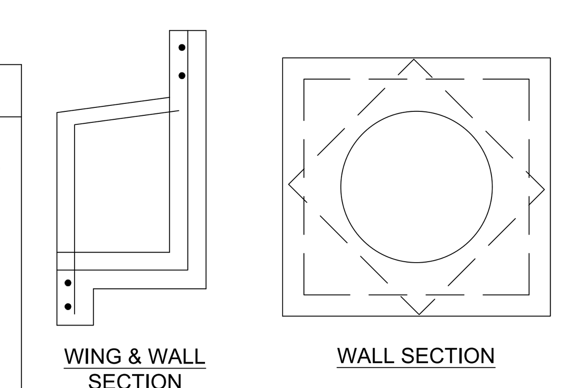
STANDARD DRAWING
PIPE CULVERTS (PIPE TRENCH TYPICAL PREPARATION)
714-005-00
EFFECTIVE LETTING DATE JANUARY 2011
THIS DRAWING IS NOT TO SCALE



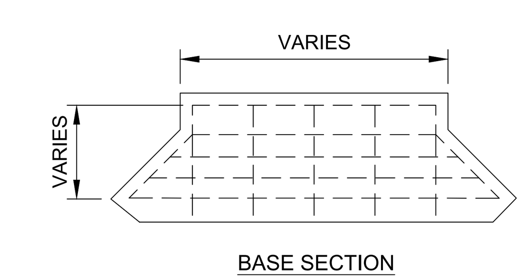


HEADWALL DIMENSIONS FOR CONCRETE PIPE

PIPE SIZE ID	REINF.	W1	W2	H1	H2	H3	D	E	WT	Θ	S.F. BASE AREA
12", 15"	#4	3'-2"	5'-5"	1'-3"	3'-1"	12"	1'-3"	1'-9"	1,600	40°	8.3
18"	#4	3'-8"	6'-1"	1'-9"	3'-8"	12"	1'-6"	2'-3"	2,100	45°	9.9
21", 24"	#5	4'-3"	7'-2"	2'-0"	4'-3"	12"	1'-10"	2'-9'	2,850	45°	13.5
27", 30"	#5	4'-8"	8'-4"	2'-4"	4'-9'	12"	2'-2"	3'-3"	3,700	45°	17.7
36"	#6	5'-8"	10'-10"	3'-3"	5'-9"	12"	2'-11"	4'-4"	5,600	45°	28
42", 48"	#6	6'-7"	12'-6"	3'-8"	6'-8"	14"	3'-4"	5'-3"	7,500	45°	35
54", 60"	#6	8'-9"	13'-4"	4'-5"	8'-6"	14"	3'-4"	7'-6"	10,000	50°	41
66", 72"	#6	8'-9"	13'-4"	4'-5"	8'-6"	26"	3'-4"	7'-6"	10,000	50°	41



NOTES:
1. ALL CONCRETE TO BE 4000 PSI MINIMUM.
2. REINFORCEMENT STEEL SHALL MEET ASTM 615 GRADE 60 WITH 2" MINIMUM CLEARANCE.
3. CHAMFER ALL EXPOSED EDGES 3/4".
4. PRECAST HEADWALL UNIT SHALL BE CAREFULLY POSITIONED ON THE PREPARED FOUNDATION AND PIPE INSERTED INTO HEADWALL OR HEADWALL SLID OVER PIPE AND CHECKED FOR ALIGNMENT.
5. PIPE SHALL BE GROUTED IN HEADWALL WITH CEMENTITIOUS MATERIAL BY CONTRACTOR, BONDING AGENT MAY BE USED IF REQUIRED.
6. CARE SHALL BE TAKEN DURING HANDLING, BACKFILLING AND COMPACTION TO PREVENT DAMAGE AND MAINTAIN ALIGNMENT. MINOR DAMAGE TO THE UNIT MAY BE REPAIRED BY CONTRACTOR WHEN PERMITTED BY ENGINEER.
7. ALL DIMENSIONS ARE NOMINAL.
8. REINFORCEMENT VARIES WITH SIZE OF UNIT.
9. PROVIDE 6x PIPE DIAMETER (MIN) OF RIP-RAP LINED DITCH.



PRECAST CONCRETE HEADWALL (HW)
NOT TO SCALE

BID DRAWINGS - NOT FOR CONSTRUCTION

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(t)803-786-4261
WWW.WKDICKSON.COM

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION W. K. DICKSON & COMPANY, INC. No. C00177
C.O.A.

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 22779
8/25/2023
PROFESSIONAL SEAL

REVISION RECORD

NO.	DATE	DESCRIPTION	BY

PROJECT NAME: LITTLE MOUNTAIN ELEMENTARY DRIVEWAY FOR NEWBERRY COUNTY SCHOOL DISTRICT

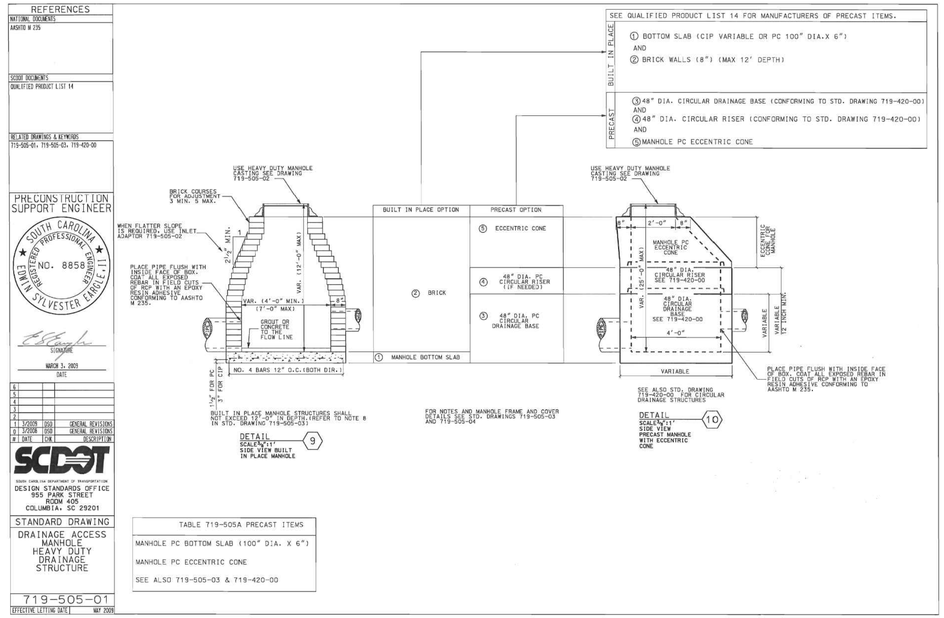
DRAWING TITLE: **STORM DRAINAGE DETAILS**

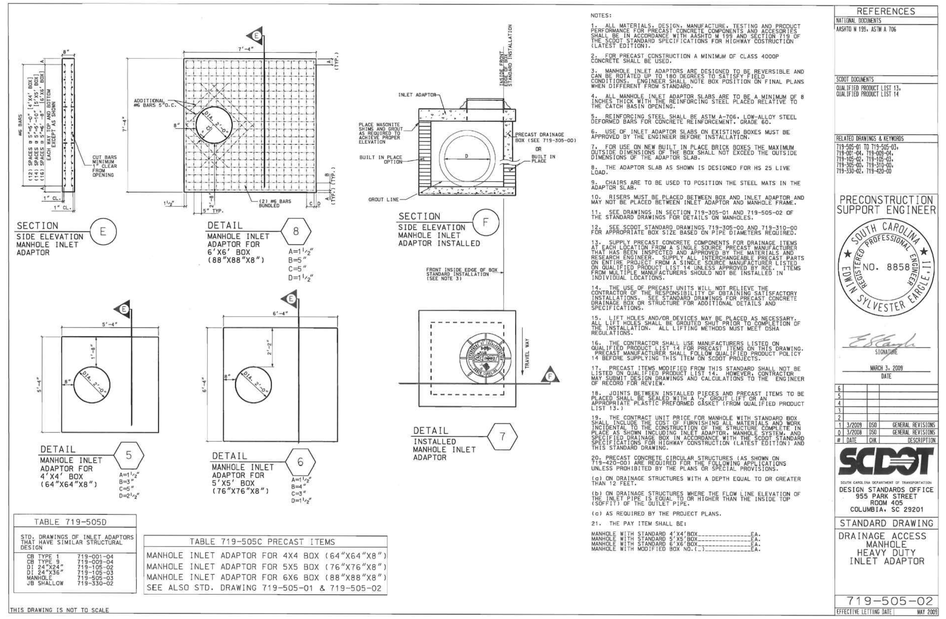
PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

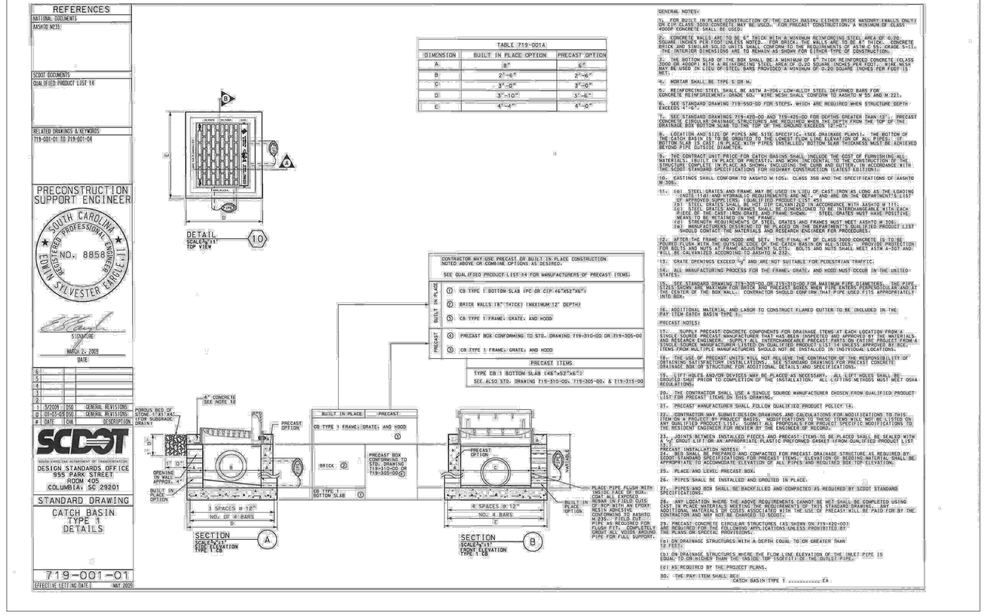
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C.O.A.

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
No. 22779
JASON W. CRAIG
8/25/2023
PROFESSIONAL SEAL

REVISION RECORD

NO.	DATE	DESCRIPTION	BY

PROJECT NAME:
LITTLE MOUNTAIN ELEMENTARY DRIVEWAY
FOR
NEWBERRY COUNTY SCHOOL DISTRICT

DRAWING TITLE:
STORM DRAINAGE DETAILS

PROJ. MGR.:	CWC
DESIGN BY:	MDJ
DRAWN BY:	MDJ
PROJ. DATE:	AUG 2023

DRAWING NUMBER:
C13
WKD PROJ. NO.:
20230179.00.CA