Site Development Plans

for

Magnolia Square

Usage: (single family / commercial)

Town of Bluffton, South Carolina

Tax Map #:

R610 039 000 0107 0000, R610 039 000 0094 0000

R610 039 000 0093 0000, R610 039 000 0095 0000

R610 039 000 0096 0000, R610 039 000 0114 0000

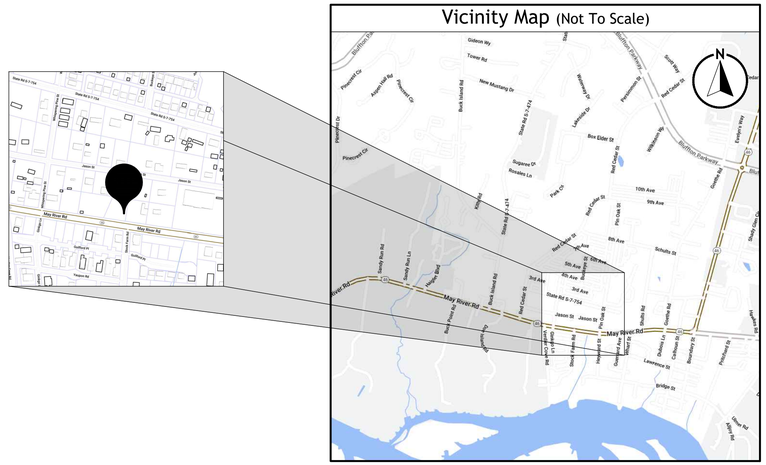
911 street address

1203 May River Rd, 1207 May River Rd

1215 May River Rd, 1217 May River Rd

15 Jason St, 19 Jason St

GIS coord: N32° 14' 15", W80° 52' 17"



Magnolia Square
BJWSA Project #: 2023-XXX

Schedule of Drawings

Sheet No.	Description
C001	Cover Sheet
C002	Construction Notes
C101	Existing Conditions Plans
C201	Initial Erosion Control Plans and Details
C301	Clearing & Demolition Plans and Details
C401	Site Layout Plans
C501	Grading Plans and Details
C601	Drainage Plans and Details
C701	Utility Plans, Profiles and Details
C801	Intermediate & Final Erosion Control Plans and Details
C901	Paving Plans, Road Profiles and Details
C1001	SCDOT Sight Distance Exhibit and SCDOT Details
C1101	ADA Accessible Route Plan

Release Schedule

Release No.	Description	Date
A.	Released for Permitting	02-03-23
B.	Released for Permitting	05-05-23
C.	Released for Permitting	08-30-23
D.	Released for Permitting	09-11-23

Design Team

Geotechnical Engineer:
GHD
843.815.0263

Landscape Architect:
Witmer Jones Keefer
843.757.7411

Architect:
Company
Phone

Land Surveyor:
Atlas Surveying, Inc.
843.645.9277

Developer:
Ed Goeas
ERB Enterprises, LLC
201 N. Union Street, Suite 410
Alexandra, VA 22314
703.684.6688
egoeas@tarrance.com

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 25124
11/29/11
WILLIAM G. POWELL, JR.

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Cover Sheet

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

Not to Scale

C001

Permit Set - NOT FOR CONSTRUCTION

General Notes:

1. Boundary information provided by (info), dated 04-14-2022, by Atlas.
2. Topographic data provided by Atlas, dated 04-14-2022.
3. Approximate location of certain existing underground utility lines and structures are shown on the plans for information only additional underground lines or structures may exist that are not shown. Call South Carolina 811 at 811 or 1-888-721-7877 between the hours of 7:00 am and 7:00 pm Monday thru Friday at least three working days before commencing construction. request underground utilities to be located and marked within and near the construction site.
4. Comply with "South Carolina underground facility damage prevention act (effective June 7, 2012). notification of intent to excavate may be given by calling the toll free number: 1-800-922-0983.
5. Protect bench marks and property monuments from damage during construction operations. replace any bench marks or monuments damaged or destroyed as a result of contractor's operations, at no cost to the owner, by a licensed surveyor in the state of South Carolina.
6. Off-street parking for the contractor's employees and authorized visitors to the site must be provided and maintained throughout construction.
7. The contractor is responsible for adhering to weight limits prescribed for all public roads when hauling equipment and materials to and from the project site. Damages to existing pavement due to the contractor's construction operations or improper transportation of materials and equipment shall be the responsibility of the contractor.
8. At least one driving lane on public roads shall remain open to traffic at all times. traffic lanes will only be closed with the express written consent of the agency having jurisdiction over the roadway. Notify agency having jurisdiction at least 5 days before closing any driving lanes to traffic. provide traffic control devices, signs and flagmen as required to ensure public safety.
9. Contractor shall coordinate demolition, clearing and construction of improvements to minimize interference with vehicular and pedestrian traffic and with operations of existing facilities.

Water and Sewer Line Construction:

1. All water and sewer line construction shall conform to applicable state and beaufort jasper water sewer authority (BJWSA) requirements, standards and specifications.
2. BJWSA will be responsible for inspection and approval of all water and sewer system construction and for acceptance for operation and maintenance.
3. All utilities shown are approximate locations. The contractor is responsible for notification of all utility owners and for field verification of both horizontal and vertical locations prior to commencing construction. any damages to existing utilities due to this construction shall be the responsibility of the contractor.
4. Notify the project engineer, if conflicts with existing structures require that proposed utilities be relocated.
5. The contractor must notify BJWSA forty-eight (48) hours prior to any construction, inspection or testing of the water distribution system.
6. Pipe, fittings, valves and appurtenances for water and sewer lines shall all be in accordance with the requirements contained in the BJWSA technical specifications.
7. Installation of water and sewer lines and appurtenances shall be in accordance with the BJWSA standard construction details and specifications.
8. Contractor shall install mechanical restraints on all bends, plugs and tees, 2" or larger, on waterlines and sanitary sewer force mains.
9. All water mains shall be sterilized and pressure tested in accordance with BJWSA specifications.
10. Separation of water mains and sewers:
    A. parallel installation: unless otherwise specifically shown in a special detail on the plans, install water mains at least 10-ft. Horizontally from any existing or proposed sanitary sewer or sanitary sewer force main, the distance being measured in a horizontal plane between the outside surfaces of the pipes.
    B. Crossings: unless otherwise specifically shown in a special detail on the plans, install water lines crossing sanitary sewers or sanitary sewer force mains to provide a minimum vertical separation of 18-inches between the outside surfaces of the pipes. This shall be the case whether the water line is above or below the sanitary sewer line. Whenever possible locate the water line above the sewer line. When a new water line crosses a new sewer line, place a full length of ductile iron pipe for water line at the crossing with pipe positioned so that the joints are as far as possible from the point of crossing. Where a new water line crosses an existing sewer line, place one full length of ductile iron pipe water line so that the joints are as far from the point of crossing as possible.
11. The contractor shall cut and patch existing pavement as required for the installation of utility lines.
12. Sanitary manhole rim grades shown are approximate. Adjust rim elevations to be flush with finished grade.
13. The contractor shall note that contract will not make any connections to the existing water or sanitary sewer systems unless expressly authorized to do so by the BJWSA. all water and sewer improvements under this contract must be constructed complete, tested, inspected and approved by the BJWSA before any authorization to connect will be given. Coordination of testing, inspection and connections with the BJWSA is the responsibility of the contractor under this contract.
14. All water mains shall be installed with thirty-six inches (36") minimum cover (from finished grade). Maximum depth shall be five feet (5'). Where water mains may conflict with other utilities, the water main crossing shall be constructed with ductile iron pipe, mechanical joint 45-deg. bends and mechanical restraints.

Work on South Carolina Department of Transportation Right-of-Way:

1. Contractor shall review and comply with all conditions and special provisions contained in the SCDOT encroachment permit(s) issued for this project.
2. Contractor to refer to the most current edition of the SCDOT standard drawings.
3. Contractor is responsible for submitting construction notification form (48 hour minimum) and coordination of all work within SCDOT rights-of-way with the local and/or district SCDOT engineering representative.
4. Contractor is responsible for preparing and submitting a traffic control plan to SCDOT for approval minimum 48 hours prior to conducting work in the right-of-way. All traffic control plans shall conform to current MUTCD and current SCDOT guidelines and specifications.
5. All signage, pavement markings, and markers shall conform to current MUTCD guidelines and current SCDOT standard specifications and drawings.
6. All paving and drainage construction shall conform to current SCDOT standard specifications and drawings.
7. All pavement markings in SCDOT right-of-way shall be thermoplastic and conform to current MUTCD guidelines and current SCDOT standard specifications and drawings.
8. Removal of pavement markings shall conform to current SCDOT standard specifications for highway construction section 609.4.1.2.

Tree Protection-Bluffton

1. All trees having a trunk diameter of 8-inches (dbh) or larger, and endangered or valued trees having a trunk diameter of 4-inches (dbh) or larger must be preserved unless specifically approved for removal in accordance with town of bluffton development standards ordinance and indicated on the plans to be removed.
2. The contractor is responsible for marking the trees designated to be preserved in accordance with the requirements contained in the town of bluffton development standards ordinance.
3. Prior to commencing any clearing or construction operations on the site, the contractor shall erect tree protection barriers around each tree or group of trees designated for preservation in accordance with the details on the plans and the requirements contained in the town of bluffton unified ordinance 5.3.3.
4. A tree protection zone shall be established in accordance with the provisions contained in the town of bluffton unified ordinance 5.3.3 for each existing tree designated for preservation. The minimum tree protection zone as defined in the ordinance is a circular area centered on the tree and having a radius of the greater of 10-ft. or one and one-half foot per inch dbh (diameter at breast height). The size or configuration of the tree protection zone may be modified only upon approval by town of bluffton.
5. The area within the tree protection zone must remain open and unpaved. no change of grade will be allowed within the tree protection zone except for a 2-inch cut or 2-inch fill of topsoil, sod or mulch. Any activity within the tree protection zone is subject to approval by town of bluffton. The following activities are prohibited within the tree protection zone:
    A. Placement or storage of any soil, debris, oils, fuel, paints, building materials or any other materials.
    B. Burning
    C. Vehicle parking
    D. Paving
    E. Trenching for utilities
6. Where utility lines must pass thru the tree protection zone, they shall be installed by horizontal boring beneath the roots of the tree.
7. Where it is necessary for machinery and equipment to pass within the tree protection zone, approval must be obtained from town of bluffton. special measures will be required to protect the roots from excessive compaction.
8. The contractor is responsible for obtaining all tree removal permits and for coordinating all inspections required by town of bluffton in connection with tree preservation and removal activities. during construction.

Site Grading and Drainage:

1. All utilities shown are approximate locations. the contractor shall be responsible for providing 72-hour notice to all respective utility companies for field verification of existing utilities prior to construction. Any damages to existing utilities due to this construction shall be the responsibility of the contractor.
2. Temporary control of storm water drainage shall be the responsibility of the contractor. Sequencing and construction techniques shall prevent obstruction of storm sewers, ponding in traffic areas or rising of water levels which would enter adjacent buildings or structures.
3. Full width of street and road rights-of-way must be cleared and graded as shown in the details on the drawings.
4. Subgrade preparation: top soil shall be removed from paved areas to a minimum depth as recommended in the project's geotechnical report. all excavation shall be to subgrade limits.
5. All utility pipe lines, conduits and sleeves under paved areas must be in place prior to completion of the roadway subgrade compaction.
6. Finish grading shall include the placement of topsoil over all unpaved areas not occupied by buildings or structures and fine grading around buildings, adjacent to walks, curbs, gutters and structures to assure positive drainage.

SCDHEC/OCRM Sediment and Erosion Control Standard Notes (Revised Dec-2012):

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 once every calendar week. 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 sediment 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. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with s.c reg. 72-300 et seq. and scr100000.
8. 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.
9. 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.
10. 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.
11. A copy of the 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.
12. 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.
13. Minimize soil compaction and, unless infeasible, preserve topsoil.
14. 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.
15. 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.).
16. 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.
    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 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.

Dry Utility Conduits for Electric, Telephone and Cable TV:

1. All dry utility conduit ends shall be capped and marked with a steel rebar stake imbedded one (1) foot below ground surface.
2. 48" Minimum bury depth for all electrical conduits.
3. Maintain minimum 12" vertical clearance when crossing water, sewer, and storm drain lines.
4. Maintain minimum 18" horizontal clearance when paralleling water, sewer and storm drain lines.
5. Extend conduit beyond pavement, curb, and sidewalks.
6. The contractor shall be responsible for coordination of the installation of all utility service connections. Refer to approved building plans for the exact location of all service connections. The contractor must install all conduits, as shown on the plans or as required by respective utility companies. The contractor shall be responsible to ensure strict compliance with all applicable codes and regulations with regards to the installation of utilities and conduit.
7. Locations shown on the plans for proposed dry utility conduits are approximate only. All dimensioning and staking should be based on economical and practical construction. The contractor shall be responsible for coordination with the respective utility representatives, prior to any conduit installation.
8. Transformer pads shall be located as directed by the respective utility representative. The contractor shall be responsible for compliance with applicable code requirements.
9. Notify the engineer if conflicts with existing or proposed structures require proposed utilities be relocated.

Site Clearing and Demolition:

1. No clearing shall occur within designated buffer zones, tree protection zones, outside of the property lines or beyond the clearing limits unless otherwise specifically shown on the plans.
2. Only those trees designated on the drawings for removal are to be removed as part of the site clearing operations.
3. The contractor shall install a continuous line of flagging or fencing along the limits of clearing prior to commencing any clearing, demolition, or construction work on the project.
4. Exercise caution during clearing operations to avoid felling trees into designated tree protection zones.
5. No burning will be allowed within 50 feet of a tree protection zone or tree drip line. contractor shall coordinate any burning operations with local jurisdiction and fire departments.
6. Selective clearing areas shall be cleared of all brush and understory growth.

Project information

Source of Title:

Beufort county register of deeds,
1203 May River Road deed book 4071 page 3288
1207 May River Road deed book 4085 page 3179
1215 May River Road deed book 4085 page 3179
1217 May River Road deed book 4085 page 3179
15 Jason Street deed book 4085 page 3179
19 Jason Street deed book 4085 page 3179

Property Owner:

Goeas Edward A III Goeas Lisa M-1203 May River Rd
Goeas Edward A III Goeas Lisa M-1207 May River Rd
Goeas Edward A III Goeas Lisa M-1215 May River Rd
Goeas Edward A III Goeas Lisa M-1217 May River Rd
Goeas Edward A III Goeas Lisa M-15 Jason St
Goeas Edward A III Goeas Lisa M-19 Jason St

Use:

existing: undeveloped
proposed: single family/commercial
13 buildings

Flood Zone:

Zone C (base flood elev: N/A)

Property Zoning:

Neighborhood General
HD Residential General

Surface Coverage:

Max impervious allowed: XX %
Min open space required: XX %
Existing impervious: XX,XXX sq. ft. (XX %)
Proposed impervious: XX,XXX sq. ft. (XX %)
Open space provided: XX,XXX sq. ft. (XX %)
Wetlands/nat. resource: XX,XXX sq. ft. (XX %)

Site Area:

Total: 3.4 acres
Disturbed: 4.0 acres

Parking Summary:

Parking use types
Use type = xx spaces/xx sq. ft.
Parking required:
Use type = xx spaces
Parking provided:
Total = xx spaces
Accessible parking required: x spaces
Accessible parking provided: x spaces

Utility Contacts:

Palmetto Electric Dominion Energy	843-208-5512 800-251-7234	1 Cooperative Way, Hardeeville, SC 29927 PO Box 100255 Columbia, SC 29202
BJWSA	843-987-9200	6 Snake Road, Okatie, SC 29909
Hargray Communications Century Link Santee Cooper	843-815-1675 843-525-0044 843-761-8000	PO Box 3380, Bluffton, SC 29910 2127 Boundary ST #16, Beaufort, SC 29902 1 Riverwood Drive, Moncks Corner, SC 29461

Contractor Note:

Contractor to obtain and become familiar with geotechnical report # 12578511-00 prepared by GHD.

All work must conform to project technical specifications for Magnolia Square prepared by Ward Edwards engineering. The contractor is responsible for obtaining a copy of the technical specifications if not provided with the drawings.

Permits

Permit	Permit #	Issued	Expires
BJWSA			
Fire Marshal			
SCDHEC/MS4 Stormwater			
SCDHEC Water			
SCDHEC Wastewater			
SCDOT Encroachment Utility			
SCDOT Encroachment Driveway			
Municipality Development			
USACE Determination			
USACE Permit			

Sequence of Construction Activities

Estimated Start Date: XX-XX-XX Estimated Completion Date: XX-XX-XX

Items must occur in the order listed; items cannot occur concurrently unless specifically noted.

Phase 1: (Initial)

1. Receive npdes coverage from dhec.
2. Hold pre-construction meeting.
3. Notify dhec eqc regional office or ocrm office 48 hours prior to beginning land-disturbing activities.
4. Installation of construction entrance.
5. Clearing & grubbing only as necessary for installation of perimeter controls.
6. Installation of perimeter controls (e.g. silt fence).
7. Install tree protection.
8. Install inlet protection.
9. Install sediment tubes.
10. Clearing & grubbing only in areas of basin.

Phases 2 & 3: (Intermediate & Final)

11. Installation of basin and installation of diversions to those structures (outlet structures must be completely installed as shown on the details before proceeding to next step: areas draining to these structures cannot be disturbed until the structures & diversions to the structures are completely installed). Install surface dewatering skimmer prior to moving to next step.
12. Clearing & grubbing of site or demolition (sediment & erosion control measures for these areas must already be installed).
13. Rough grading.
14. Installation of storm drain system and placement of inlet protection as each inlet is installed.
15. Install all required utilities and curbing.
16. FINE GRADING, PAVING, ETC.
17. Place topsoil & establish finish grades.
18. Permeable pavers shall be laid when all heavy construction is completed.
19. Clean-out of detention basins that were used as sediment control structures and re-grading of detention pond bottoms; if necessary, modification of sediment basin riser to convert to detention basin outlet structure.
20. Install permanent seeding.
21. Flush any sediment from storm sewer pipes and inlets.
22. Removal of temporary sediment & erosion control measures (including skimmer) after entire area draining to the structure is finally stabilized (the department recommends that the project owner / operator have the swppp preparer or registration equivalent approve the removal of temporary structures).
23. Perform as-built surveys of all detention structures and submit to dhec or ms4 for acceptance.
24. Submit notice of termination (not) to dhec as appropriate.

- NOTE: Perform weekly site inspections during land disturbing activities and make recommendations for additional BMPs or maintenance of existing BMPs
- NOTE: All pumped dewatering shall be performed using an appropriately sized pumped water filter bag.

SCDHEC-OCRM 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."

Paving Hatch Legend

Proposed Concrete Paving	
Proposed Pervious Concrete Paving	
Proposed Sidewalk/Concrete	
Reinforced Grass Fire Lane	
Proposed Aggregate/Stones	
Proposed Asphalt (light duty)	
Proposed Asphalt (heavy duty)	
Mill & Overlay Asphalt	
Proposed Concrete Pavers	

Clearing / Demolition Legend

Demolition	
Milling	
Tree to be Removed	
Tree Protection	

Storm Sewer/Drainage Legend

	Proposed
Drop Inlet	DI: A1
Curb Inlet (with Grate)	CI: A1
Type 16 Curb Inlet	CI: A1
Valley Gutter Inlet	VI: A1
Trench Drain	TD: A1
Weir Inlet	WI: A1
Yard Inlet	YI: A1
Junction Box	JB: A1
Cleanout	CO
Downspout	
Storm Drain	
Underdrain	
Roof Drain Collector	
Flared End Section	
Headwall	
Headwall with Wings	
Outlet Control Structure	
Ditch Centerline	
Direction of Flow	

Sanitary Sewer Legend

	Proposed
Sanitary Sewer Manhole	MH: A1
Sanitary Sewer Cleanout	CO
Sanitary Sewer Wye	
Check Valve in Manhole	
Plug Valve	
Air Release Valve	
Sewer Line	S
Force Main	F
Reuse Main	R
Service Lateral	

Water System Legend

	Proposed
Water Meter	
Water Valve	
Reducer	
Post Indicator Valve	
Fire Hydrant	
Blowoff Hydrant	
Yard Hydrant	
Fire Depart. Connection (FDC)	
Cap	
Plug	
Backflow Preventor	
Butterfly Valve	
Fittings	
Water Line	W
Service Lateral	

Grading Legend

	Proposed
Top of Pavement Elevation	TP: 22.50
Top of Walk Elevation	TW: 22.50
Top of Curb Elevation	TC: 22.50
Finish Grade	FG: 22.5
High Point	HP
Low Point	LP
Contour	19
Ditch Centerline	
Direction of Flow	

Limits of Disturbance: NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	
Topsoiling:	
Temporary Seeding:	TS
Mulching:	M
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Runoff Conveyance Measures

Vegetated Channels:	
Riprap-Lined Channels:	
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD

Sediment Control

Sediment Basin:	
Temporary Sediment Trap:	
Rock Sediment Dike:	
Rock Check Dam:	OR
Sediment Tube:	
Silt Fence:	
Reinforced Silt Fence:	
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	B
Type C - Block and Gravel Inlet Protection:	C
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS

ADA Accessible route

NOTE:
The accessible route shall comply with the current version of the ada standards for accessible design.

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 25124
09/11/23
WILLIAM G. POMEL

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
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Permit Set - NOT FOR CONSTRUCTION

Ward Edwards ENGINEER
119C Palmetto Way
P.O. Box 381, Bluffton, SC
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Construction Notes

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

Not to Scale

C002

Attachment 3

Permit Set - NOT FOR CONSTRUCTION

LEGEND

⚠	CALC POINT – CORNER NOT SET	MAP	RED MAPLE
CMF ■	CONC. MONUMENT FOUND	MAG	MAGNOLA
CMFD ■	CONC. MONUMENT FOUND DISTURBED	MIM	MIMOSA
IPF ●	IRON PIPE FOUND	P	PINE
IPFD ●	IRON PIPE FOUND DISTURBED	PA	PALMETTO
OTP ●	OPEN TOP PIPE	PEC	PECAN
PKS ○	PK NAIL SET	SB	SUGAR BERRY
RBF ●	IRON REBAR FOUND	SYC	SYCAMORE
CJB	CABLE JUNCTION BOX	WO	WATER OAK
E	ELECTRIC METER	BOC	BACK OF CURB
E	ELECTRIC MANHOLE	CNA	COULD NOT ACQUIRE
	FIRE HYDRANT	IE	INVERT ELEVATION
	GRATE INLET	PD	PIPE DIRECTION
G	GAS METER	PVC	POLYVINYL CHLORIDE PIPE
GT	GREASE TRAP	RCP	REINFORCED CONCRETE PIPE
	GUY WIRE	TOD	TOP OF DEBRIS
	HANDICAP PARKING	DYL	DOUBLE YELLOW LINE (SOLID)
	IRRIGATION CONTROL VALVE	DWS	DETECTABLE WARNING SURFACE
	JUNCTION BOX	SBA	STOP BAR
	LIGHT POLE	SWL	SINGLE WHITE LINE (SOLID)
	MAIL BOX	8	CONTOUR LINE
	POWER POLE		BOTTOM OF BANK
D	STORM DRAIN MANHOLE		CENTERLINE OF DITCH
×12.9	SPOT ELEVATION		FENCE LINE
SGN	SIGN		OVERHEAD POWER LINE
SSCO	SANITARY SEWER CLEAN OUT		TOP OF BANK
SS	SANITARY SEWER LATERAL OR STUBOUT		TREE CANOPY
S	SANITARY SEWER MANHOLE		UNDERGROUND DRAINAGE LINE
	SANITARY SEWER VALVE		UNDERGROUND ELECTRIC LINE
P	SERVICE POLE–POWER		UNDERGROUND GAS LINE
TEL	TELEPHONE JUNCTION BOX		UNDERGROUND SEWER LINE
W	WATER METER		UNDERGROUND TELEPHONE
	WATER VALVE		UNDERGROUND TV LINE
WV	WATER VALVE MARKER		UNDERGROUND WATER LINE
W	WATER WELL		BRICK
	TRASH CAN		CONCRETE
#	NUMBER OF PARKING SPACES		DETECTABLE WARNING SURFACE
BG	BLACK GUM		EDGE OF PAVEMENT
CED	CEDAR		GRAVEL
CH	CHERRY		
G	SWEET GUM		
HIC	HICKORY		
HO	HOLLY		
LO	LIVE OAK		

N/F
HENRY S. CRAM JR
(LOT-17)
TMS R610 039 000 0181 0000
DB:1065 PG:641

N/F
BTWON BROWN LLC.
(LOT-15A)
TMS R610 039 000 0106 0000
PB:157 PG:51
DB: 4053 PG: 2869

LOT 15B
TMS R610 039 000 1737 0000

N/F
TED K. & DONNA L. HUFFMAN
(LOTS-11&13)
TMS R610 039 000 106A 0000
PB:157 PG:1
DB: 994 PG:1779

N/F
BRIDIE L. FORBES REVOCABLE LIVING TRUST DATED 04/02/2021
(LOTS-7&9)
TMS R610 039 000 0117 0000
DB: 3995 PG: 1124

N/F
EDWARD A III & LISA M GOEAS
(LOT-12A)
TMS R610 039 000 0094 0000
PB:16 PG:76
DB: 4085 PG: 3179
26,250 SF
0.603 AC

N/F
EDWARD A III & LISA M GOEAS
(LOTS-14 & 16A)
TMS R610 039 000 0107 0000
PB:16 PG:76
DB: 4085 PG: 3179
27,855 SF
0.639 AC

JASON STREET 40' R/W

N/F
EDWARD A III & LISA M GOEAS
(LOT-17)&(PORTION OF LOT-19)
TMS R610 039 000 0114 0000
PB:16 PG:76
DB: 4071 PG: 3288
29,313 SF
0.673 AC

N/F
JASON MOORE
(LOT-22)
TMS R610 039 000 107C 0000
PB: 54 PG: 72
DB: 2331 PG: 2376

N/F
LANCE L. MUMFORD & ROXCY S. BENTON
(LOT-20)
TMS R610 039 000 0218 0000
PB: 54 PG: 72
DB: 1465 PG: 500

N/F
CARAMAR RENTALS & INVESTMENTS LLC.
(LOT-18A)
TMS R610 039 000 114A 0000
DB: 3443 PG: 3006

N/F
1223 MAY RIVER ROAD LLC.
(LOTS-3-10 BLOCK A PINECREST
TMS R610 039 000 0121 0000
PB: 150 PG: 43
DB: 3383 PG: 3389

N/F
TREVOR HOWARD WELLS
(PORTION OF LOT 19)&(LOT-20)
TMS R610 039 000 107B 0000
PB:16 PG:76
DB: 2056 PG: 484

N/F
EDWARD A III & LISA M GOEAS
(LOT-11)
TMS R610 039 000 0093 0000
PB:16 PG:76
DB: 4085 PG: 3179
26,250 SF
0.603 AC

N/F
EDWARD A III & LISA M GOEAS
(LOT-15)
TMS R610 039 000 0096 0000
PB:16 PG:76
DB: 4085 PG: 3179
18,972 SF
0.436 AC

N/F
EDWARD A III & LISA M GOEAS
(LOT-13)
TMS R610 039 000 0095 0000
PB:16 PG:76
DB: 4085 PG: 3179
20,820 SF
0.478 AC

BENCHMARK
NAIL IN TREE
EL.: 26.06'
DATUM: NAVD88

BENCHMARK
PKS IN SIDEWALK
EL.: 27.07'
DATUM: NAVD88

BENCHMARK
NAIL IN TREE
EL.: 26.48'
DATUM: NAVD88

MAY RIVER ROAD 66' R/W

STOCK FARM ROAD

POND

NOTES

1. THESE PARCELS APPEAR TO LIE IN FLOOD ZONE X, COMMUNITY 450251 (TOWN OF BLUFFTON), MAP NUMBER 45013C0426G.
2. CONTOURS ARE IN ONE FOOT INTERVALS. TREE SIZES SHOWN ARE IN INCHES OF DIAMETER.
3. VERTICAL DATUM IS NAVD 88.
4. BUILDING SETBACKS WILL BE PROVIDED BY THE TOWN OF BLUFFTON UPON REVIEW OF THE SITE PLAN, AND MUST BE VERIFIED PRIOR TO CONSTRUCTION.
5. HORIZONTAL DATUM IS SOUTH CAROLINA STATE PLANE GRID (NAD 83).
6. THE EXISTENCE AND LOCATION OF THE SURFACE AND SUB-SURFACE UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE RECORDS AND SURFACE VISIBLE FEATURES ALONG WITH ELECTRONIC AND ACOUSTICAL EVIDENCE AS OF MARCH 23, 2022. THE EXTENT AND LIABILITY OF THIS INFORMATION IS LIMITED TO THE STANDARDS OF CARE FOR A SPECIFIC UTILITY INVESTIGATION AS DEFINED BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) PUBLICATION 38-02. THE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES CANNOT BE DETERMINED WITHOUT EXPOSING THEM IN SOME WAY. PRIOR TO CONSTRUCTION OR EXCAVATION, IT IS REQUIRED BY LAW TO CONTACT THE STATE 811 UTILITY PROTECTION CENTER.

REFERENCES

1. A TREE & TOPOGRAPHIC SURVEY ON LOTS 11, 12, 13, 14, 15 & 16 JASON STREET, A PORTION OF BLOCK A PINECREST SUBDIVISION, TOWN OF BLUFFTON, BEAUFORT COUNTY, SOUTH CAROLINA. DATE: 01-03-2019 BY: WILLIAM J. SMITH, S.C.R.L.S. No. 26960
2. DB:3504 PG:690-697
3. DB: 3507 PG:3268-3275
4. DB:3496 PG:1864-1871
5. A CAD FILE OF MAY RIVER STREETSCAPE EASEMENTS, RECEIVED FROM WARD EDWARDS ENGINEERING ON 03-30-2022.

SURVEY DATA

TOTAL AREA:	3.43 ACRES
ERROR OF PLAT CLOSURE:	1 IN 999,999
ERROR OF FIELD CLOSURE:	1 IN 40,018.73
ANGULAR ERROR:	1" PER ANGLE POINT
ADJUSTED BY:	NO ADJUSTMENT
EQUPIMENT USED:	TOPCON PS ROBOTIC TOTAL STATION
FIELD WORK COMPLETED ON:	04-02-2022

PREPARED FOR:
CS THOMAS CONSTRUCTION
AN AS-BUILT / TREE AND TOPOGRAPHIC SURVEY OF

LOTS 11, 13, 15, 17 & 19
#'s 1203, 1207, 1215, & 1217 MAY RIVER ROAD
AND
LOTS 12A, 14 & 16A,
#'s 15 & 19 JASON STREET

LINE TABLE		
LABEL	BEARING	DISTANCE
L1	N81°30'05"W	138.80'
L2	S81°30'05"E	185.70'
L3	S81°30'05"E	175.00'
L4	N81°30'05"W	100.00'

TAX PARCEL Nos.
R610 039 000 0093 0000
R610 039 000 0094 0000
R610 039 000 0095 0000
R610 039 000 0096 0000
R610 039 000 0107 0000
R610 039 000 0114 0000

THE TOWN OF BLUFFTON
BEAUFORT COUNTY, SOUTH CAROLINA

FIELD WORK: TMH
FIELD CHECK: JWR
DRAWN BY: JHJ
PROJECT No.: BFT-22108

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 WILLIAM G. POMEL 09/11/23

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Existing Conditions Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

0 30 60
Scale:1"= 30' Feet

C101

Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	
Topsoiling:	
Temporary Seeding:	TS
Mulching:	M
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Sediment Control

Sediment Basin:	SB
Temporary Sediment Trap:	STRAW
Rock Sediment Dike:	
Rock Check Dam:	OR
Sediment Tube:	
Silt Fence:	
Reinforced Silt Fence:	
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	B
Type C - Block and Gravel Inlet Protection:	C
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS

Runoff Conveyance Measures

Vegetated Channels:	
Riprap-Lined Channels:	
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD

N/F
HENRY S. CRAM JR
(LOT-17)
TMS R610 039 000 0181 0000
DB:1065 PG:641

N/F
BTWON BROWN LLC.
(LOT-15A)
TMS R610 039 000 0106 0000
PB:157 PG:51
DB:4053 PG:2869

LOT 15B
TMS R610 039 000 1737 0000

N/F
TED K. & DONNA L. HUFFMAN
(LOTS-11&13)
TMS R610 039 000 106A 0000
PB:157 PG:1
DB: 994 PG:1779

N/F
BRIDIE L. FORBES REVOCABLE LIVING TRUST DATED 04/02/2021
(LOTS-7&9)
TMS R610 039 000 0117 0000
DB: 3995 PG:1124

N/F
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(LOT-12A)
TMS R610 039 000 0094 0000
PB:16 PG:76
DB: 4085 PG:3179
26,250 SF
0.603 AC

N/F
EDWARD A III & LISA M GOEAS
(LOT-17)&(PORTION OF LOT-19)
TMS R610 039 000 0114 0000
PB:16 PG:76
DB: 4071 PG:3288
29,313 SF
0.673 AC

N/F
JASON MOORE
(LOT-22)
TMS R610 039 000 107C 0000
PB: 54 PG:72
DB: 2331 PG: 2376

N/F
LANCE L. MUMFORD & ROXCY S. BENTON
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N/F
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(LOTS-3-10 BLOCK A PINECREST
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(LOT-11)
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(LOT-13)
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20,820 SF
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N/F
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(LOT-15)
TMS R610 039 000 0096 0000
PB:16 PG: 76
DB: 4085 PG: 3179
18,972 SF
0.436 AC

JASON STREET 40' R/W

MAY RIVER ROAD 66' R/W

MAY RIVER ROAD 66' R/W

SEDIMENT TUBES (TYP)

TYPE A INLET PROTECTION (TYP)

SILT FENCE (TYP)

NPDES LIMITS OF DISTURBANCE = 4.0 ACRES

CONSTRUCTION ENTRANCE (TYP)

USE DUST CONTROL MEASURES AND SWEEPING AS NEEDED TO KEEP SEDIMENT OFF EXISTING STREETS.

CONCRETE WASHOUT STATION

STOCK FARM ROAD

POND

BENCHMARK
NAIL IN TREE
EL.: 26.06'
DATUM: NAVD88

BENCHMARK
PKS IN SIDEWALK
EL.: 27.07'
DATUM: NAVD88

BENCHMARK
NAIL IN TREE
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LINE TABLE		
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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 WILLIAM G. POMEL 09/11/23

WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION SOUTH CAROLINA

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Permit Set - NOT FOR CONSTRUCTION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Initial Erosion Control Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

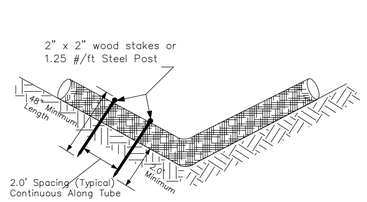
0 30 60
Scale:1"= 30' Feet

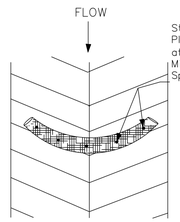
C201

Attachment 3

Permit Set - NOT FOR CONSTRUCTION

SEDIMENT TUBE INSTALLATION





SEDIMENT TUBE SPACING

SLOPE	MAX. 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

PLAN SYMBOL

South Carolina Department of Health and Environmental Control
SEDIMENT TUBES
STANDARD DRAWING NO. SC-05 PAGE 1 of 2
NOT TO SCALE FEBRUARY 2014 DATE

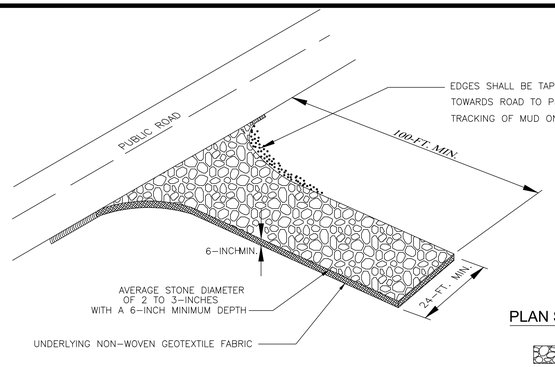
SEDIMENT TUBES – GENERAL NOTES

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. Sediment tubes should be removed after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which sediment tubes have been removed.

South Carolina Department of Health and Environmental Control
SEDIMENT TUBES
STANDARD DRAWING NO. SC-05 PAGE 2 of 2
GENERAL NOTES FEBRUARY 2014 DATE



SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2–3 INCHES

PLAN SYMBOL

South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
STANDARD DRAWING NO. SC-06 PAGE 1 of 2
NOT TO SCALE FEBRUARY 2014 DATE

CONSTRUCTION ENTRANCE – GENERAL NOTES

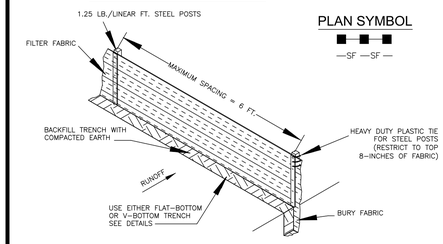
1. Stabilized construction entrances should be used at all points where traffic will egress/ingress a construction site onto a public road or any impervious surfaces, such as parking lots.
2. Install a non–woven geotextile fabric prior to placing any stone.
3. Install a culvert pipe across the entrance when needed to provide positive drainage.
4. The entrance shall consist of 2–inch to 3–inch D50 stone placed at a minimum depth of 6–inches.
5. Minimum dimensions of the entrance shall be 24–feet wide by 100–feet long, and may be modified as necessary to accommodate site constraints.
6. The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.
7. Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
8. Limestone may not be used for the stone pad.

CONSTR. ENTRANCE – INSPECTION & MAINTENANCE

1. The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of construction entrances 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. During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to be more frequent during long periods of wet weather.
4. Reshape the stone pad as necessary for drainage and runoff control.
5. Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off–site by vehicles. Frequent washing will extend the useful life of stone pad.
6. Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.
7. During maintenance activities, any broken pavement should be repaired immediately.
8. Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed, unless area will be converted to an impervious surface to serve post–construction.

South Carolina Department of Health and Environmental Control
CONSTRUCTION ENTRANCE
STANDARD DRAWING NO. SC-06 PAGE 2 of 2
GENERAL NOTES FEBRUARY 2014 DATE

SILT FENCE INSTALLATION

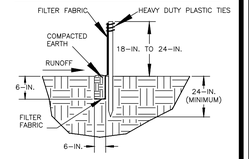


PLAN SYMBOL

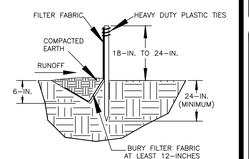
SILT FENCE – GENERAL NOTES

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.

FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



South Carolina Department of Health and Environmental Control
SILT FENCE
STANDARD DRAWING NO. SC-03 Page 1 of 2
NOT TO SCALE FEBRUARY 2014 DATE

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 on 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.

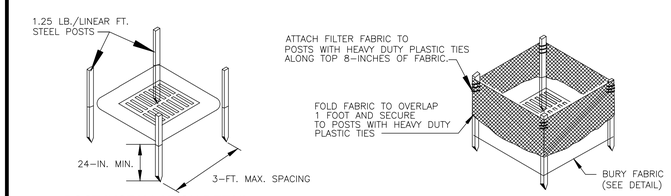
SILT FENCE – FABRIC REQUIREMENTS

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 – INSPECTION & MAINTENANCE

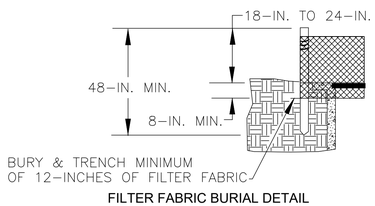
1. The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24–hours after each rainfall even that produces 1/2–inch or more of precipitation.
3. Attention to sediment accumulations along 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.

South Carolina Department of Health and Environmental Control
SILT FENCE
STANDARD DRAWING NO. SC-03 PAGE 2 of 2
GENERAL NOTES FEBRUARY 2014 DATE



POST INSTALLATION DETAIL

FILTER FABRIC INSTALLATION DETAIL



FILTER FABRIC BURIAL DETAIL

PLAN SYMBOL

South Carolina Department of Health and Environmental Control
Type A
FILTER FABIC INLET PROTECTION
STANDARD DRAWING NO. SC-07 PAGE 1 of 2
NOT TO SCALE FEBRUARY 2014 DATE

TYPE A – FILTER 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.

TYPE A – 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. 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 3–feet on center.

TYPE A – INSPECTION & MAINTENANCE

1. The key to functional inlet protection is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of 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 along the filter fabric 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 filter fabric. When a sump is installed in front of the fabric, sediment should be removed when it 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. Check for areas where stormwater runoff has eroded a channel beneath the filter fabric, or where the fabric has sagged or collapsed due to runoff overtopping the inlet protection.
7. Check for tears within the filter fabric, areas where fabric has begun to decompose, and for any other circumstance that may render the inlet protection ineffective. Removed damaged fabric and reinstall new filter fabric immediately.
8. Inlet protection structures should be removed after all 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.

South Carolina Department of Health and Environmental Control
Type A
FILTER FABIC INLET PROTECTION
STANDARD DRAWING NO. SC-07 PAGE 2 of 2
GENERAL NOTES FEBRUARY 2014 DATE

ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL./ACRE)
ANIONIC ASPHALT EMULSION	7:1*	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1*	FINE SPRAY	235
RESIN–IN–WATER EMULSION	4:1*	FINE SPRAY	300

*USE MANUFACTURER'S RECOMMENDATIONS WHEN AVAILABLE.

MAINTENANCE:
- PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.
- SUPPLEMENT SURFACE COVERING AS NEEDED.

INSTALLATION:
- APPLY ACCORDING TO APPROVED PLAN.
- MULCH DISTURBED AREAS AMD TACKIFY WITH RESINS SUCH AS ASPHALT, CURASOL OR TERRATACK ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT VEGETATION.
- IRRIGATE DISTURBED AREAS UNTIL SURFACE IS WET.
- COVER SURFACES WITH CRUSHED STONE OR GRAVEL.
- APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACES MOIST.
- APPLY SPRAY–ON ADHESIVES TO MINERAL SOILS (NOT MUCK SOILS) AS DESCRIBED IN TABLE 1.

DC DUST CONTROL ON DISTURBED AREAS

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 09/11/23 WILLIAM G. POMEL

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Ward Edwards ENGINEERING
(843) 837-5250
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

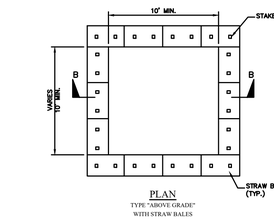
Initial Erosion Control Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

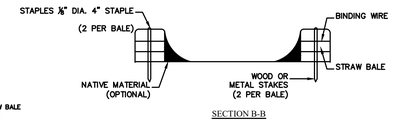
Not to Scale

C202

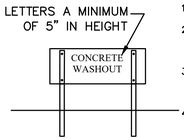
STRAW BALE BARRIER CONCRETE WASHOUT



PLAN
TYPE "ABOVE GRADE" WITH STRAW BALES



SECTION B-B



CONCRETE WASHOUT SIGN DETAIL

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.

CWS

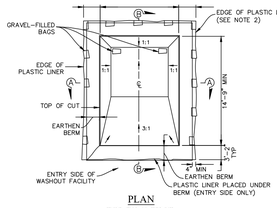
South Carolina Department of Health and Environmental Control

CONCRETE WASHOUT
STRAW BALES OR ABOVE GROUND

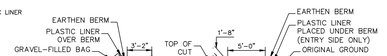
STANDARD DRAWING NO. RC-07 PAGE 1 of 1

NOT TO SCALE — DATE: FEBRUARY 2014

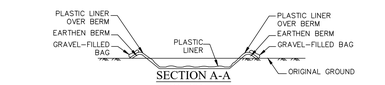
EXCAVATED PIT CONCRETE WASHOUT



PLAN
TYPE "EXCAVATED PIT"



SECTION B-B
NOT TO SCALE



SECTION A-A
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.
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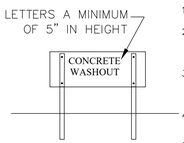
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.



CONCRETE WASHOUT SIGN DETAIL

CWS

South Carolina Department of Health and Environmental Control

CONCRETE WASHOUT
EXCAVATED PIT

STANDARD DRAWING NO. RC-08 PAGE 1 of 1

NOT TO SCALE — DATE: FEBRUARY 2014

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 — WILLIAM G. POWELL — 09/11/23

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — WARD EDWARDS, INC. No. C00152

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
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7		

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Initial Erosion Control Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

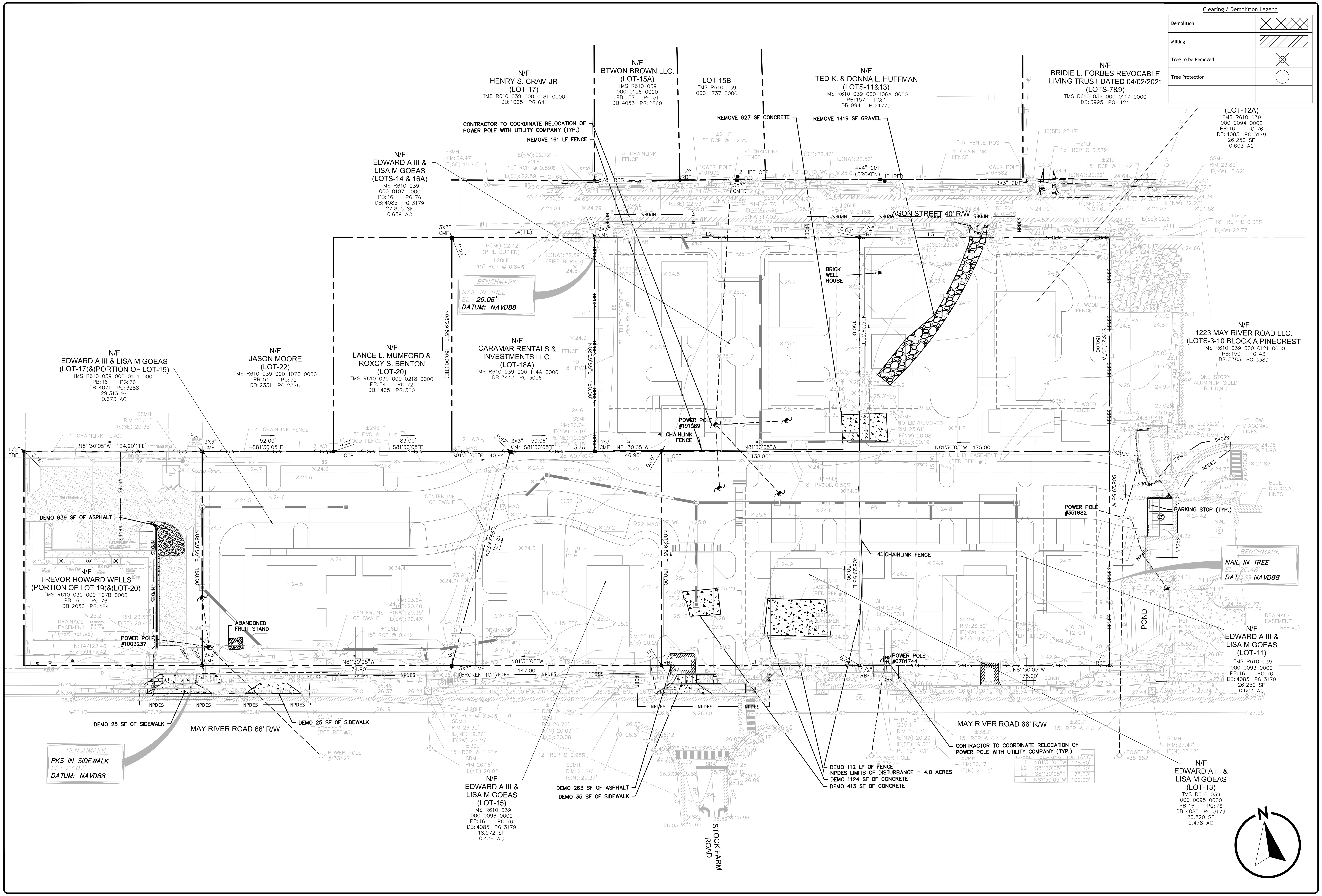
Not to Scale

C203

Permit Set - NOT FOR CONSTRUCTION

Attachment 3

Permit Set - NOT FOR CONSTRUCTION


Clearing / Demolition Legend
Demolition
Milling
Tree to be Removed
Tree Protection
N/F HENRY S. CRAM JR (LOT-17) TMS R610 039 000 0181 0000 DB:1065 PG:641
N/F BTWON BROWN LLC. (LOT-15A) TMS R610 039 000 0106 0000 PB:157 PG:51 DB:4053 PG:2869
LOT 15B TMS R610 039 000 1737 0000
N/F TED K. & DONNA L. HUFFMAN (LOTS-11&13) TMS R610 039 000 106A 0000 PB:157 PG:1 DB:994 PG:1779
N/F BRIDIE L. FORBES REVOCABLE LIVING TRUST DATED 04/02/2021 (LOTS-7&9) TMS R610 039 000 0117 0000 DB:3995 PG:1124
CONTRACTOR TO COORDINATE RELOCATION OF POWER POLE WITH UTILITY COMPANY (TYP.)
REMOVE 161 LF FENCE
REMOVE 627 SF CONCRETE
REMOVE 1419 SF GRAVEL
JASON STREET 40' R/W
N/F EDWARD A III & LISA M GOEAS (LOTS-14 & 16A) TMS R610 039 000 0107 0000 PB:16 PG:76 DB:4085 PG:3179 27,855 SF 0.639 AC
BENCHMARK NAIL IN TREE EL: 26.06' DATUM: NAVD88
BRICK WELL HOUSE
N/F 1223 MAY RIVER ROAD LLC. (LOTS-3-10 BLOCK A PINECREST TMS R610 039 000 0121 0000 PB:150 PG:43 DB:3383 PG:3389
ONE STORY ALUMINUM SIDED BUILDING
N/F EDWARD A III & LISA M GOEAS (LOT-17)&(PORTION OF LOT-19) TMS R610 039 000 0114 0000 PB:16 PG:76 DB:4071 PG:3288 29,313 SF 0.673 AC
N/F JASON MOORE (LOT-22) TMS R610 039 000 107C 0000 PB:54 PG:72 DB:2331 PG:2376
N/F LANCE L. MUMFORD & ROXCY S. BENTON (LOT-20) TMS R610 039 000 0218 0000 PB:54 PG:72 DB:1465 PG:500
N/F CARAMAR RENTALS & INVESTMENTS LLC. (LOT-18A) TMS R610 039 000 114A 0000 DB:3443 PG:3006
POWER POLE #191989
4' CHAINLINK FENCE
DEMO 639 SF OF ASPHALT
N/F TREVOR HOWARD WELLS (PORTION OF LOT 19)&(LOT-20) TMS R610 039 000 107B 0000 PB:16 PG:76 DB:2056 PG:484
ABANDONED FRUIT STAND
POWER POLE #1003237
POWER POLE #351682
PARKING STOP (TYP.)
BENCHMARK NAIL IN TREE EL: 26.48' DATUM: NAVD88
POND
N/F EDWARD A III & LISA M GOEAS (LOT-11) TMS R610 039 000 0093 0000 PB:16 PG:76 DB:4085 PG:3179 26,250 SF 0.603 AC
POWER POLE #0701744
DEMO 25 SF OF SIDEWALK
MAY RIVER ROAD 66' R/W
BENCHMARK PKS IN SIDEWALK DATUM: NAVD88
N/F EDWARD A III & LISA M GOEAS (LOT-15) TMS R610 039 000 0096 0000 PB:16 PG:76 DB:4085 PG:3179 18,972 SF 0.436 AC
DEMO 263 SF OF ASPHALT
DEMO 35 SF OF SIDEWALK
STOCK FARM ROAD
DEMO 112 LF OF FENCE
NPDES LIMITS OF DISTURBANCE = 4.0 ACRES
DEMO 1124 SF OF CONCRETE
DEMO 413 SF OF CONCRETE
N/F EDWARD A III & LISA M GOEAS (LOT-13) TMS R610 039 000 0095 0000 PB:16 PG:76 DB:4085 PG:3179 20,820 SF 0.478 AC
N

WARD EDWARDS ENGINEERING
119C Palmetto Way
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(843) 837-5250
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Plan Revisions

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Clearing & Demolition Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

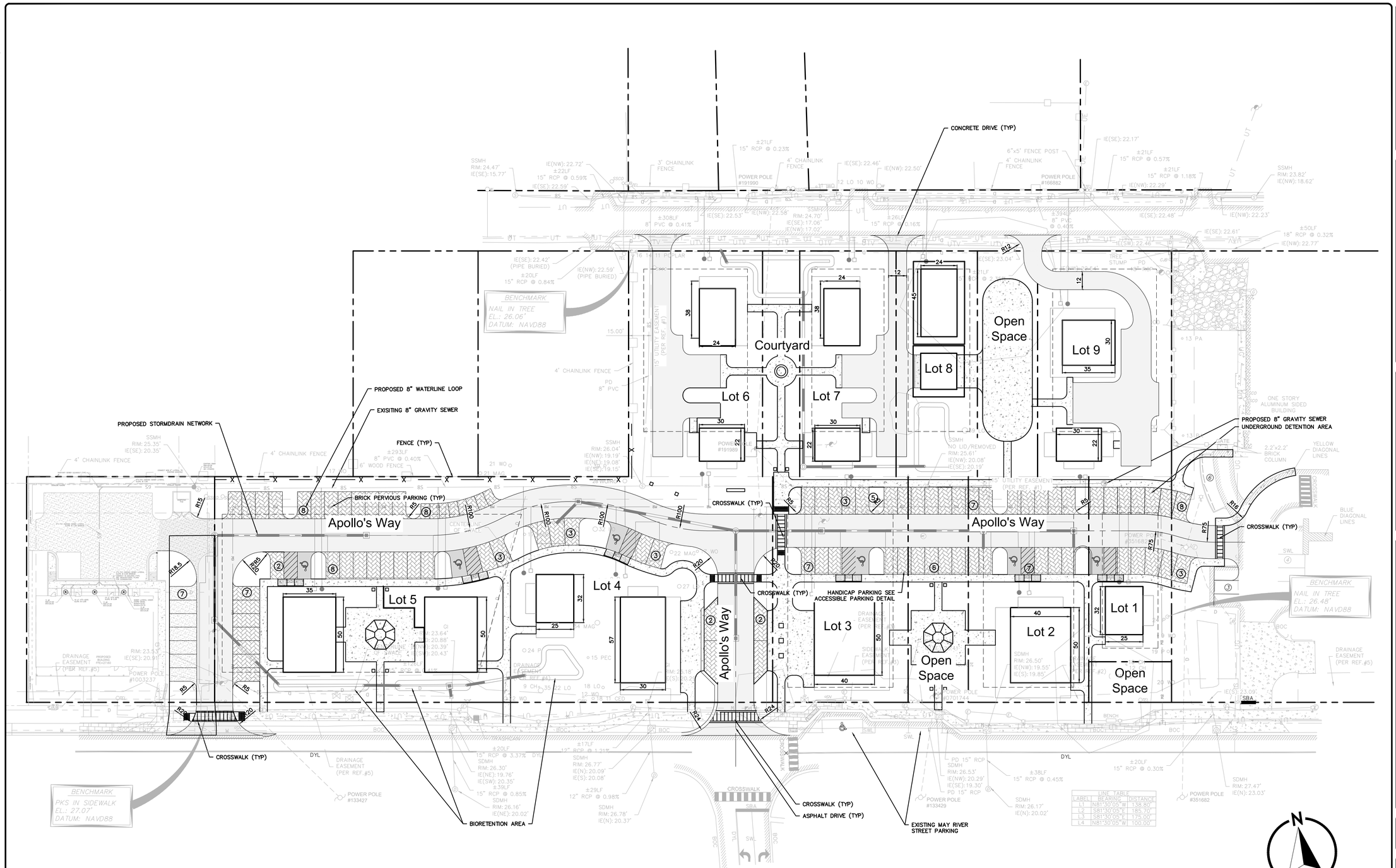
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

Scale: 1" = 30' Feet

C301

Attachment 3

Permit Set - NOT FOR CONSTRUCTION



LINE TABLE		
LABEL	BEARING	DISTANCE
L1	N81°30'05"W	136.80'
L2	S81°30'05"E	185.70'
L3	S81°30'05"E	175.00'
L4	N81°30'05"W	100.00'

No.	Description	Date
1	Plan Revisions	
2		
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7		

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 25124
09/11/23
WILLIAM G. POWELL

SOUTH CAROLINA
WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Site Layout Plan

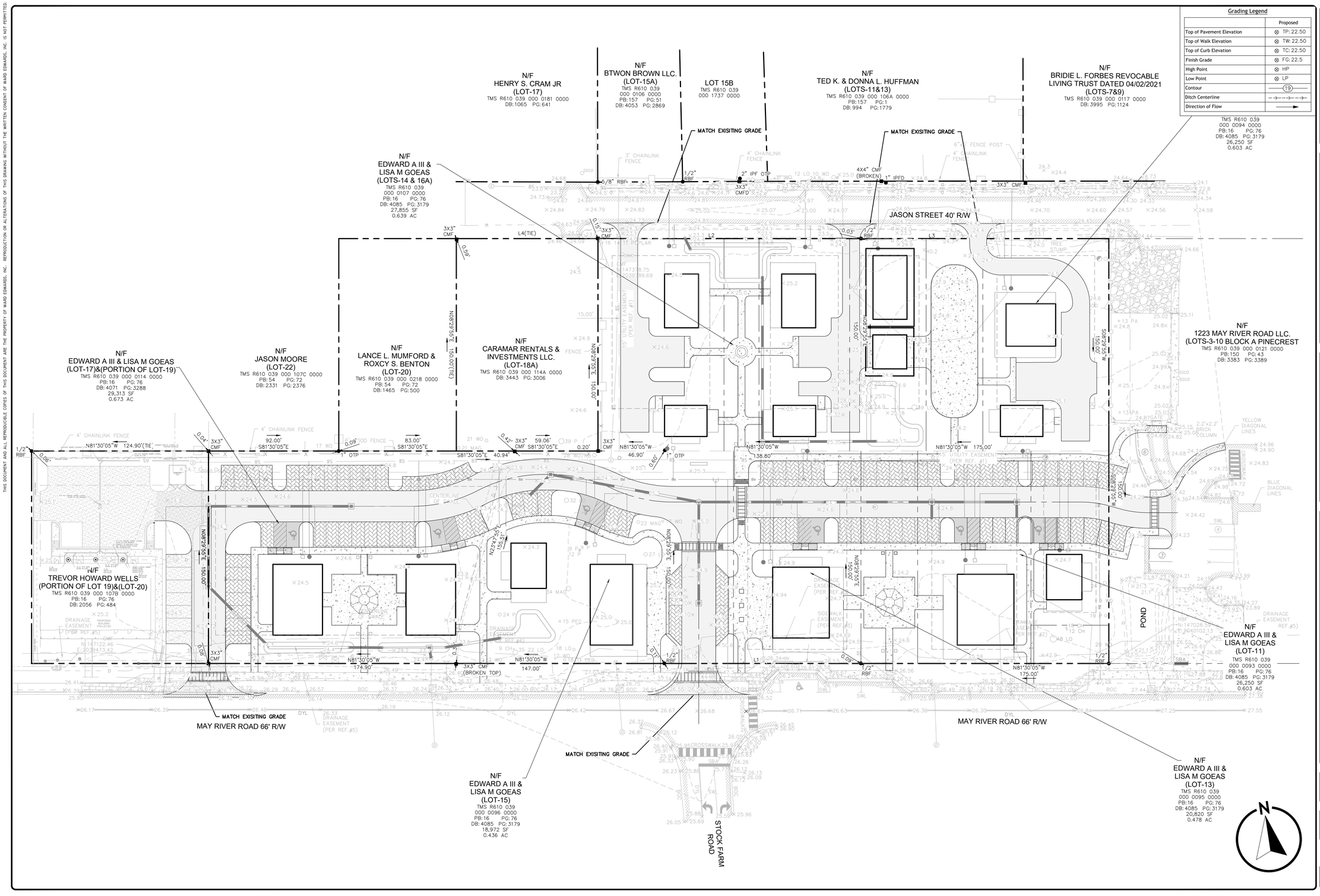
Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

0 30 60
Scale:1"= 30' Feet

C401

Permit Set - NOT FOR CONSTRUCTION



SOUTH CAROLINA PROFESSIONAL ENGINEER WILLIAM G. POMEL No. 25124 09/11/23

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Grading Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

0 30 60
Scale:1"= 30 ' Feet

C501

Attachment 3

Permit Set - NOT FOR CONSTRUCTION

THIS DOCUMENT AND ALL REPRODUCIBLE COPIES OF THIS DOCUMENT ARE THE PROPERTY OF WARD EDWARDS, INC. REPRODUCTION OR ALTERATIONS OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF WARD EDWARDS, INC. IS NOT PERMITTED.

AS-BUILT SURVEY REQUIREMENTS

Contractor is responsible for providing an as-built topographic survey of the constructed project site. the survey shall conform to scdhec and local government as-built requirements including, but not necessarily limited to the following:

The survey shall be prepared and signed by a south carolina licensed land surveyor.

A signed hard copy and autocad file shall be provided to the engineer.

Elevations shall be based upon the same vertical datum used in the engineering plans.

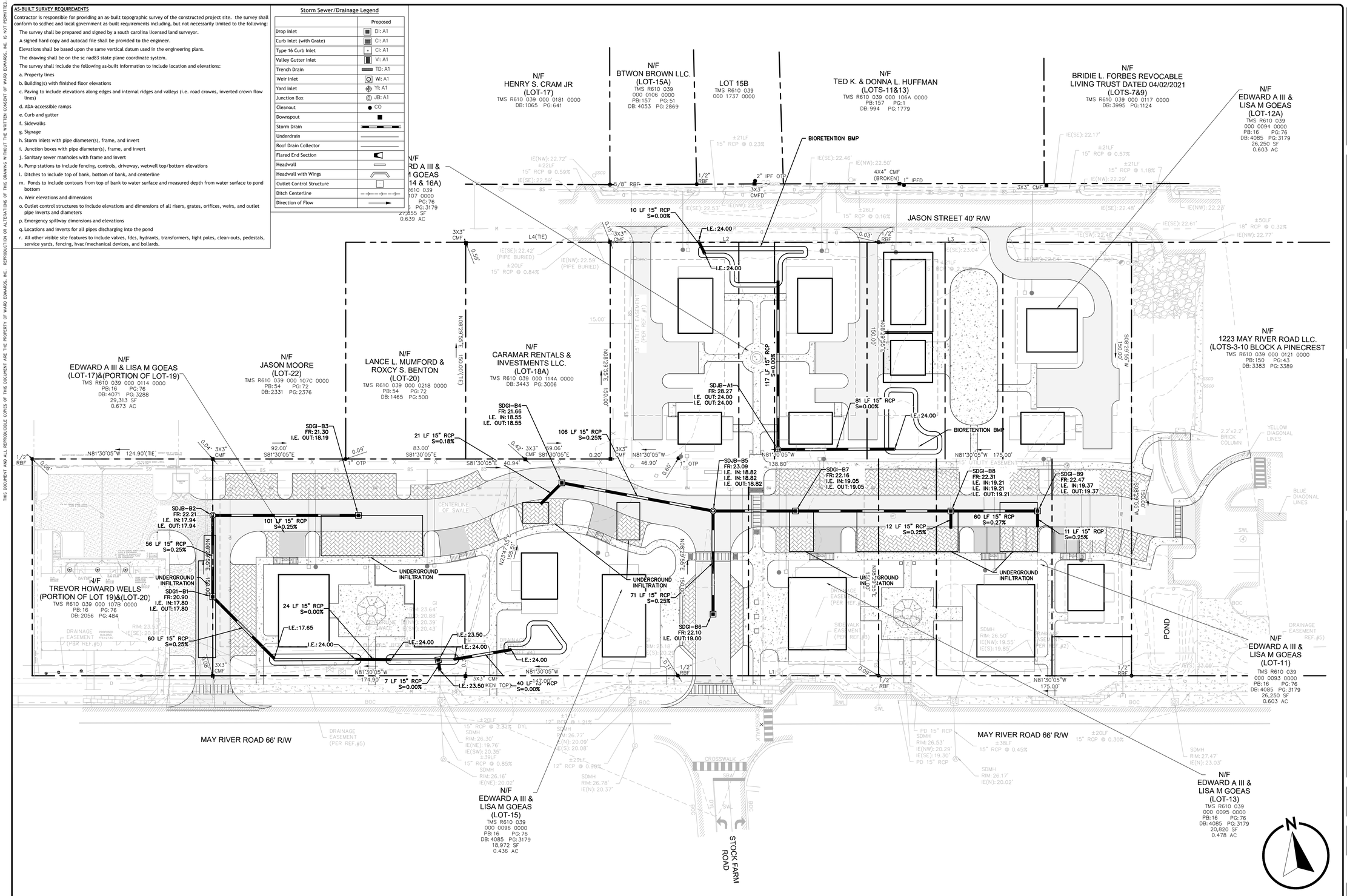
The drawing shall be on the sc nad83 state plane coordinate system.

The survey shall include the following as-built information to include location and elevations:

a. Property lines
b. Building(s) with finished floor elevations
c. Paving to include elevations along edges and internal ridges and valleys (i.e. road crowns, inverted crown flow lines)
d. ADA-accessible ramps
e. Curb and gutter
f. Sidewalks
g. Signage
h. Storm inlets with pipe diameter(s), frame, and invert
i. Junction boxes with pipe diameter(s), frame, and invert
j. Sanitary sewer manholes with frame and invert
k. Pump stations to include fencing, controls, driveway, wetwell top/bottom elevations
l. Ditches to include top of bank, bottom of bank, and centerline
m. Ponds to include contours from top of bank to water surface and measured depth from water surface to pond bottom
n. Weir elevations and dimensions
o. Outlet control structures to include elevations and dimensions of all risers, grates, orifices, weirs, and outlet pipe inverts and diameters
p. Emergency spillway dimensions and elevations
q. Locations and inverts for all pipes discharging into the pond
r. All other visible site features to include valves, fdcs, hydrants, transformers, light poles, clean-outs, pedestals, service yards, fencing, hvac/mechanical devices, and bollards.

Storm Sewer/Drainage Legend

	Proposed
Drop Inlet	▤ DI: A1
Curb Inlet (with Grate)	▥ CI: A1
Type 16 Curb Inlet	▫ CI: A1
Valley Gutter Inlet	▥ VI: A1
Trench Drain	▥ TD: A1
Weir Inlet	◎ WI: A1
Yard Inlet	⊕ YI: A1
Junction Box	Ⓓ JB: A1
Cleanout	● CO
Downspout	■
Storm Drain	▬ ▬ ▬
Underdrain	───
Roof Drain Collector	───
Flared End Section	◀
Headwall	▭
Headwall with Wings	⌓
Outlet Control Structure	▫
Ditch Centerline	—>——>——>—
Direction of Flow	──►



WILLIAM G. POWELL
No. 25124
09/11/23

WARD EDWARDS, INC.
No. C00152

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Magnolia Square
Town of Bluffton, South Carolina
Prepared for
ERB Enterprises, LLC

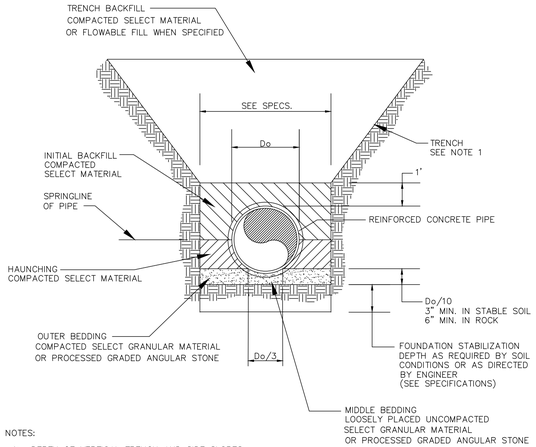
Drainage Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

0 30 60
Scale: 1"= 30' Feet

C601

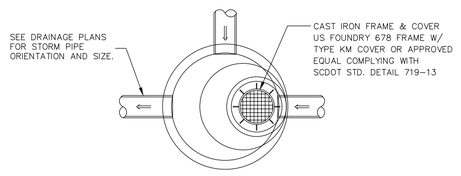


NOTES:

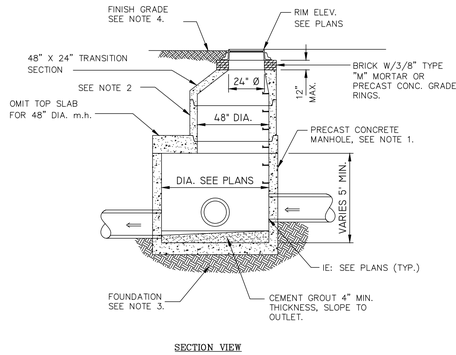
1: DEPTH OF VERTICAL TRENCH AND SIDE SLOPES OF TRENCH MAY VARY DEPENDING ON DEPTH OF EXCAVATION AND TRENCH PROTECTION SYSTEM USED. COMPLY WITH OSHA REGULATIONS (STANDARDS – 29 CFR) PART 1956 SUBPART P, EXCAVATIONS.

2. WHEN PROCESSED ANGULAR STONE IS USED FOR MIDDLE AND OUTER BEDDING, THE STONE SHALL BE COMPLETELY WRAPPED IN FILTER FABRIC TO PREVENT MIGRATION OF SURROUNDING SOILS.

EMBEDMENT DETAIL FOR REINFORCED CONCRETE PIPE



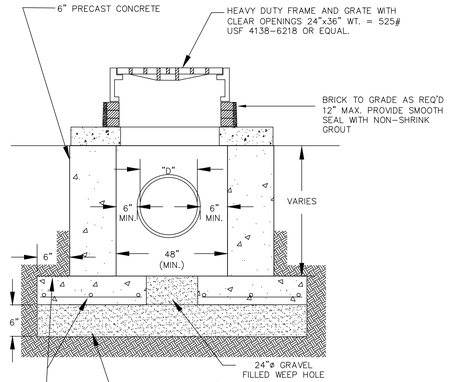
PLAN VIEW



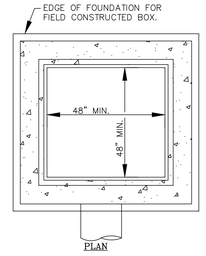
SECTION VIEW

STORM DRAIN MANHOLE

DETAIL: 02630-037



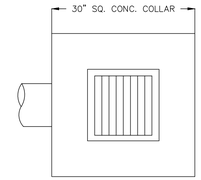
SECTION



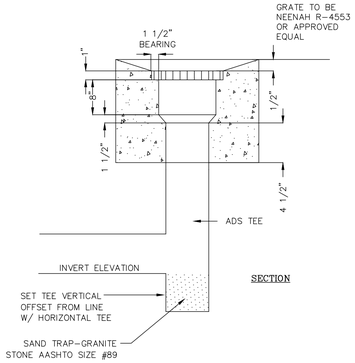
PLAN

GRATE INLET

DETAIL 02630-002



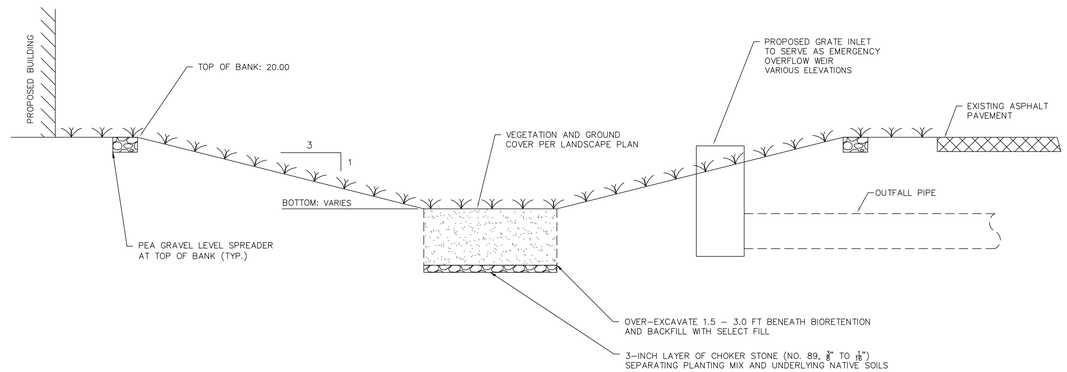
PLAN



SECTION

YARD INLET

DETAIL 02630-020



BIORETENTION CONSTRUCTION & MAINTENANCE

INSTALLATION:

THE SOILS WITHIN THE BOTTOM OF THE BIORETENTION SYSTEM SHOULD BE AN ENGINEERED MIXTURE CONSISTING OF THE FOLLOWING:
- TEXTURE: SANDY LOAM OR LOAMY SAND
- SAND CONTENT SHOULD BE 85%-88% CLEAN, WASHED SAND
- TOPSOIL CONTENT SHOULD BE 8%-12%
- ORGANIC MATTER SHOULD BE BETWEEN 3%-5%
- INFILTRATION RATE SHOULD BE BETWEEN 1 IN/HOUR – 2 IN/HOUR
- PHOSPHORUS INDEX SHOULD BE LESS THAN 30
- EXCHANGE CAPACITY SHOULD EXCEED 10 MILLEQUIVALENTS PER 100 GRAMS OF DRY WEIGHT
- pH SHOULD BETWEEN 6-8

THE MINIMUM DEPTH OF THE ENGINEERED SOIL MIXTURE SHOULD BE BASED ON THE FOLLOWING:
- 1.5-FEET FOR GRASS ONLY BIORETENTION PLANTINGS
- 3.0-FEET FOR BIORETENTION AREAS THAT UTILIZE SHRUBS
- 4.0-FEET FOR BIORETENTION THAT UTILIZE TREES

ORGANIC MATTER USED WITHIN THE BIORETENTION PLANTING AREA SHALL BE A WELL-AGED COMPOST.
VEHICLE AND FOOT TRAFFIC WITHIN THE BIORETENTION AREA IS PROHIBITED TO PREVENT COMPACTION OF SOILS.

INSPECTION & MAINTENANCE:

REGULAR INSPECTION AND MAINTENANCE IS CRITICAL TO THE EFFECTIVE OPERATION OF BIORETENTION AREAS AS DESIGNED, THE SURFACE OF THE PONDING AREA MAY BECOME CLOGGED WITH FINE SEDIMENT OVER TIME. CORE AERATION OR CULTIVATING UNVEGETATED AREAS MAY BE REQUIRED TO ENSURE ADEQUATE FILTRATION.
OTHER REQUIRED MAINTENANCE INCLUDES BUT IS NOT LIMITED TO:
- PRUNING AND WEEDING TO MAINTAIN APPEARANCE SHALL BE DONE PERIODICALLY AS NEEDED
- HARDWOOD MULCH SHALL BE REPLACED OR REPLENISHED 2 TO 3 INCHES THICK PERIODICALLY AS NEEDED
- ~~TRASH AND DEBRIS SHALL BE REMOVED PERIODICALLY AS NEEDED.~~

TYPICAL BIORETENTION CROSS SECTION

No.	Description	Date
7		
6		
5		
4		
3		
2		
1	Plan Revisions	

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119C Palmetto Way
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South Carolina 29910
(843) 837-5250
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Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Drainage Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

Not to Scale

C602

Permit Set - NOT FOR CONSTRUCTION

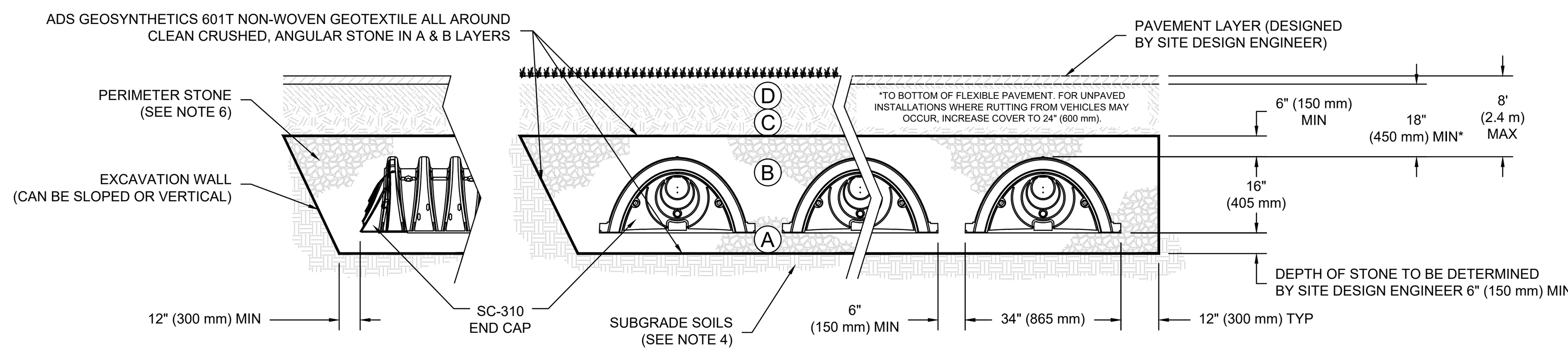
Attachment 3

Permit Set - NOT FOR CONSTRUCTION

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. [2] [3]

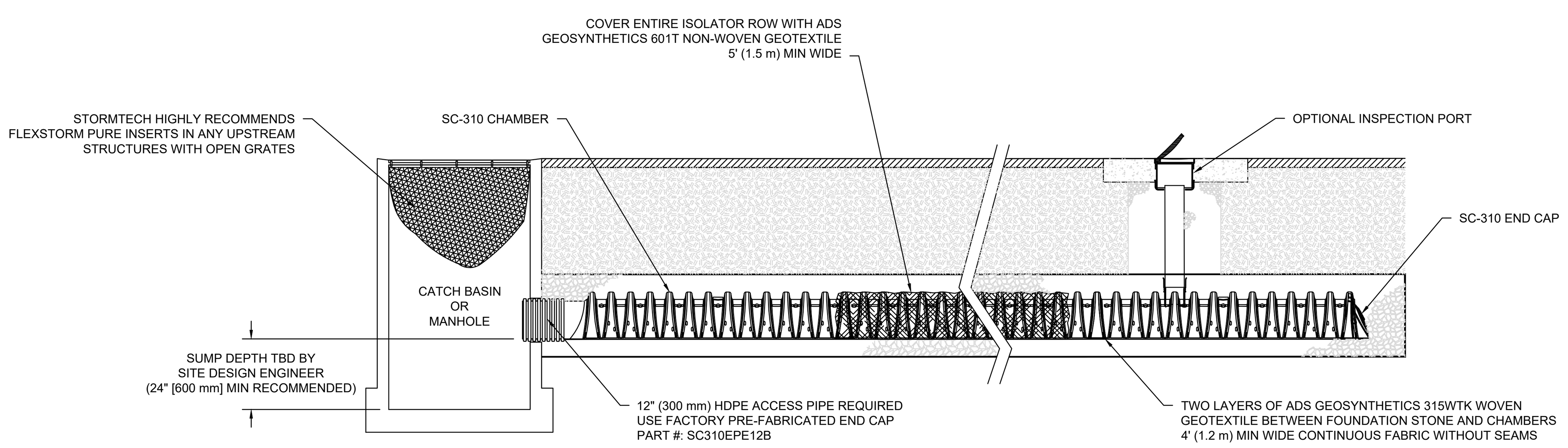
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

1. SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

SC-310 STANDARD CROSS SECTION
DATE: 11/18/14 DRAWN: JLM
PROJECT #: CHECKED: JLM
REV | DRW | CHK | DESCRIPTION
StormTech
4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473
ADS
SHEET 1 OF 1



SC-310 ISOLATOR ROW DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

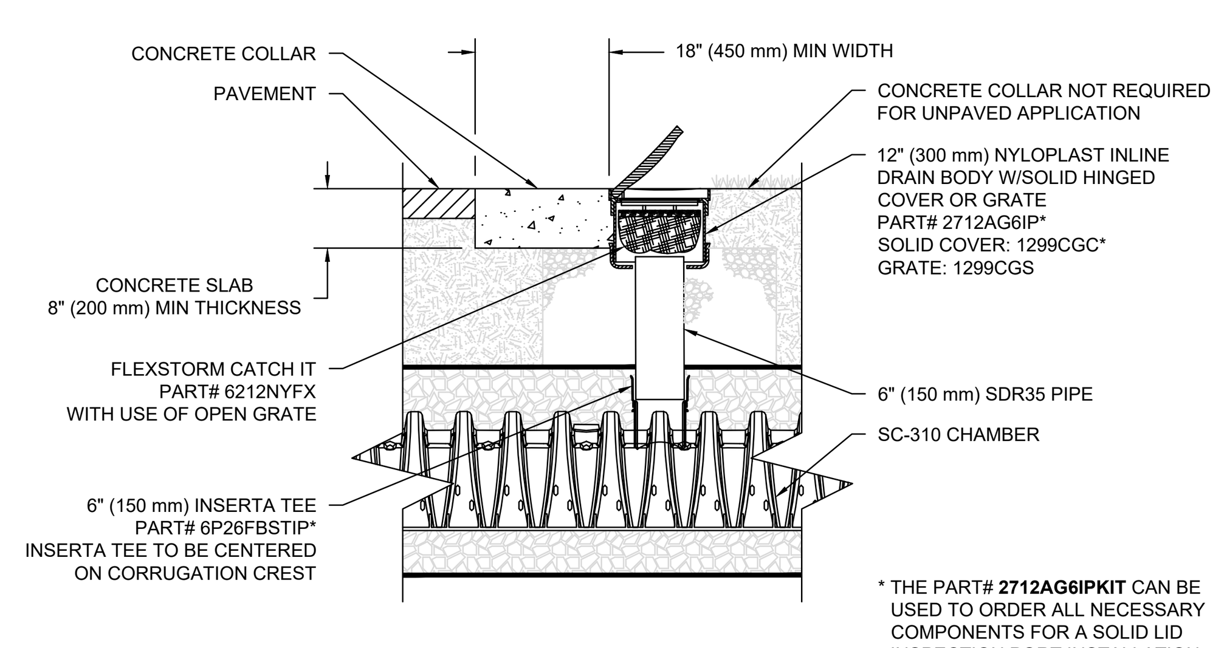
STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



* THE PART# **2712AG6IPKIT** CAN BE USED TO ORDER ALL NECESSARY COMPONENTS FOR A SOLID LID INSPECTION PORT INSTALLATION

SC-310 6" INSPECTION PORT DETAIL
NTS

ISOLATOR ROW DETAILS SC-310
DATE: 03/08/17 DRAWN: JLM
PROJECT #: CHECKED:
REV | DRW | CHK | DESCRIPTION
StormTech
4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473
ADS
SHEET 1 OF 1

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

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www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina
Prepared for
ERB Enterprises, LLC
Drainage Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

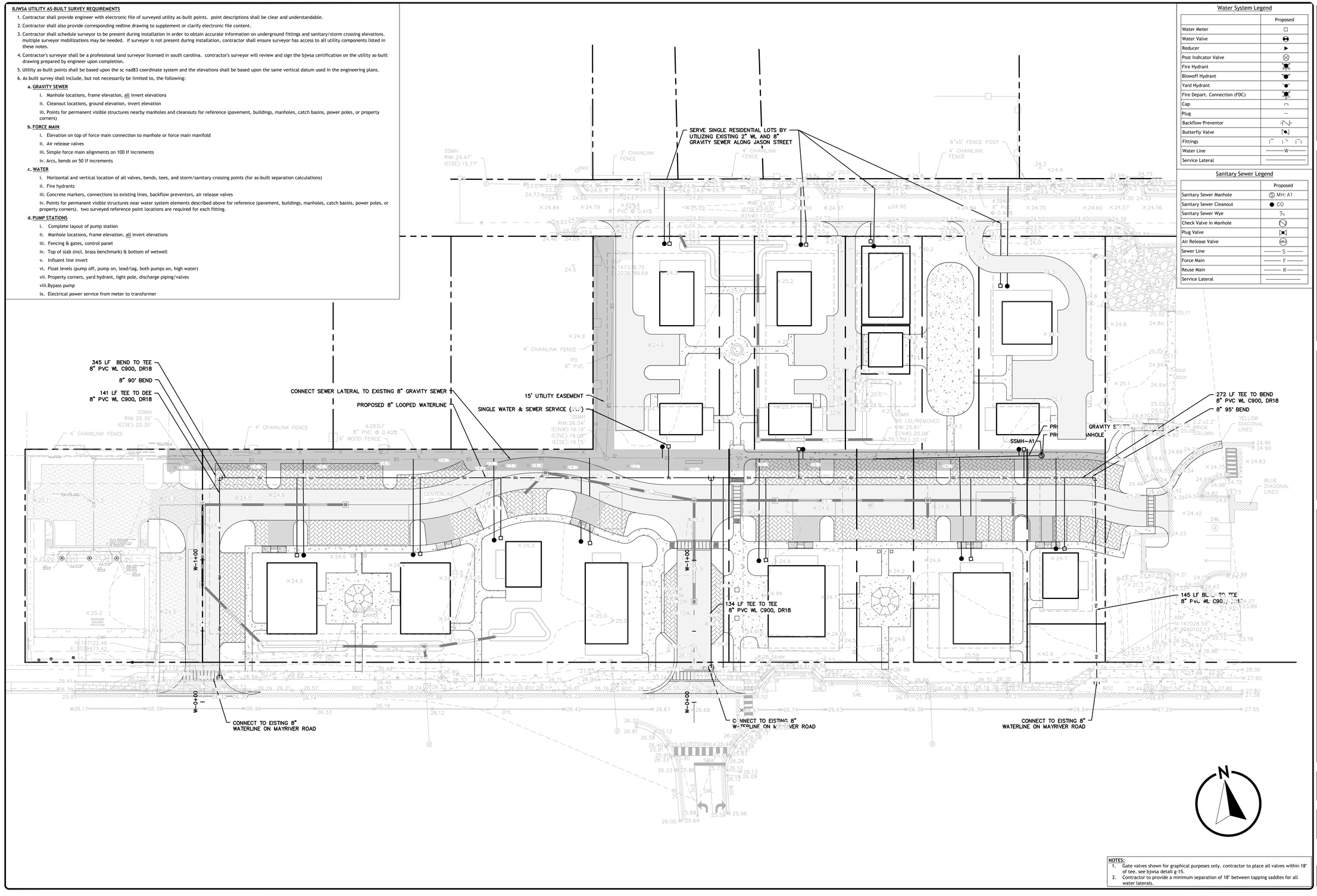
Not to Scale

C603

Attachment 3

BJWSA UTILITY AS-BUILT SURVEY REQUIREMENTS

1. Contractor shall provide engineer with electronic file of surveyed utility as-built points. point descriptions shall be clear and understandable.
2. Contractor shall also provide corresponding redline drawing to supplement or clarify electronic file content.
3. Contractor shall schedule surveyor to be present during installation in order to obtain accurate information on underground fittings and sanitary/storm crossing elevations. multiple surveyor mobilizations may be needed. if surveyor is not present during installation, contractor shall ensure surveyor has access to all utility components listed in these notes.
4. Contractor's surveyor shall be a professional land surveyor licensed in south carolina. contractor's surveyor will review and sign the bjwsa certification on the utility as-built drawing prepared by engineer upon completion.
5. Utility as-built points shall be based upon the sc nad83 coordinate system and the elevations shall be based upon the same vertical datum used in the engineering plans.
6. As built survey shall include, but not necessarily be limited to, the following:
   - **a. GRAVITY SEWER**
     - i. Manhole locations, frame elevation, all invert elevations
     - ii. Cleanout locations, ground elevation, invert elevation
     - iii. Points for permanent visible structures nearby manholes and cleanouts for reference (pavement, buildings, manholes, catch basins, power poles, or property corners)
   - **b. FORCE MAIN**
     - i. Elevation on top of force main connection to manhole or force main manifold
     - ii. Air release valves
     - iii. Simple force main alignments on 100 lf increments
     - iv. Arcs, bends on 50 lf increments
   - **c. WATER**
     - i. Horizontal and vertical location of all valves, bends, tees, and storm/sanitary crossing points (for as-built separation calculations)
     - ii. Fire hydrants
     - iii. Concrete markers, connections to existing lines, backflow preventors, air release valves
     - iv. Points for permanent visible structures near water system elements described above for reference (pavement, buildings, manholes, catch basins, power poles, or property corners). two surveyed reference point locations are required for each fitting.
   - **d. PUMP STATIONS**
     - i. Complete layout of pump station
     - ii. Manhole locations, frame elevation, all invert elevations
     - iii. Fencing & gates, control panel
     - iv. Top of slab (incl. brass benchmark) & bottom of wetwell
     - v. Influent line invert
     - vi. Float levels (pump off, pump on, lead/lag, both pumps on, high water)
     - vii. Property corners, yard hydrant, light pole, discharge piping/valves
     - viii. Bypass pump
     - ix. Electrical power service from meter to transformer



Water System Legend

	Proposed
Water Meter	□
Water Valve	
Reducer	▶
Post Indicator Valve	
Fire Hydrant	
Blowoff Hydrant	
Yard Hydrant	
Fire Depart. Connection (FDC)	
Cap	⊓
Plug	—
Backflow Preventor	
Butterfly Valve	
Fittings	
Water Line	—W—
Service Lateral	——

Sanitary Sewer Legend

	Proposed
Sanitary Sewer Manhole	Ⓢ MH: A1
Sanitary Sewer Cleanout	● CO
Sanitary Sewer Wye	
Check Valve In Manhole	
Plug Valve	
Air Release Valve	ARV
Sewer Line	—S—
Force Main	—F—
Reuse Main	—R—
Service Lateral	——

NOTES:
1. Gate valves shown for graphical purposes only. contractor to place all valves within 18" of tee. see bjwsa detail g-15.
2. Contractor to provide a minimum separation of 18" between tapping saddles for all water laterals.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 WILLIAM G. POMEL 09/11/23

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Permit Set - NOT FOR CONSTRUCTION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Utility Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

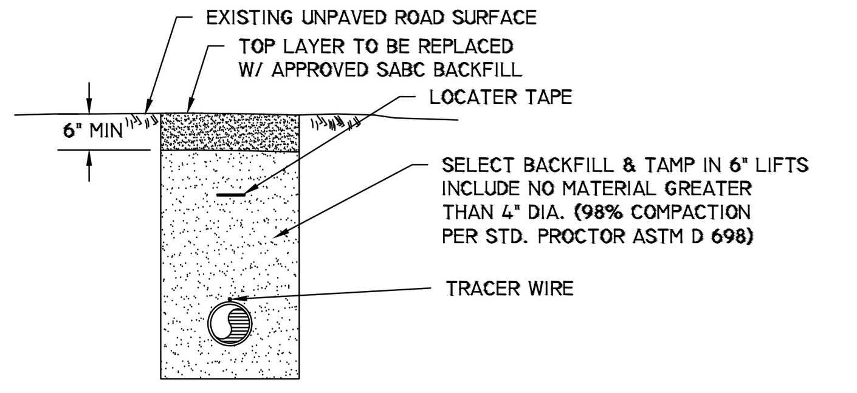
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

0 30 60
Scale:1"= 30' Feet

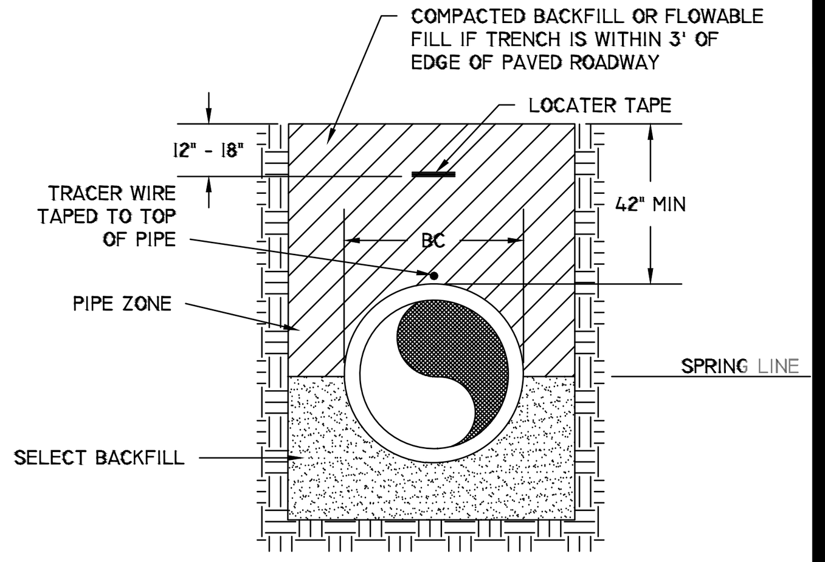
C701

Attachment 3

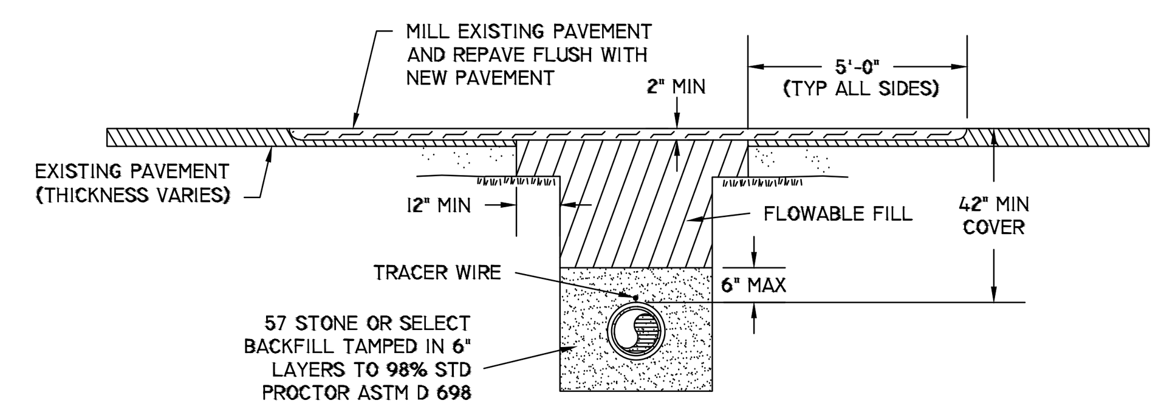
Permit Set - NOT FOR CONSTRUCTION



UNPAVED ROADWAY BEDDING DETAIL



TYPICAL BEDDING DETAIL

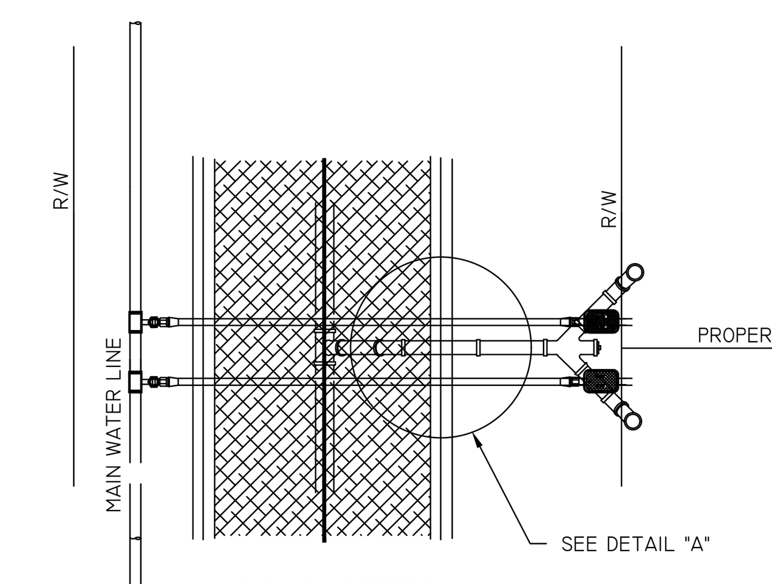


PAVED AREA DETAIL

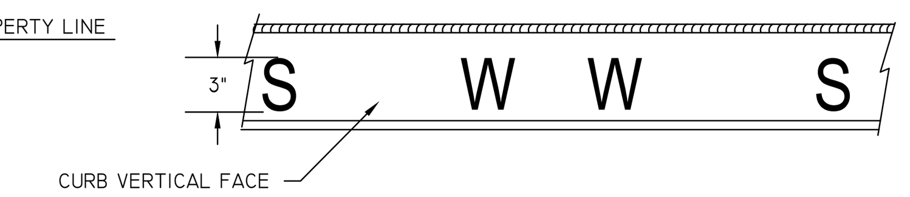
NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN.
2. MILL AND REPLACE OF ASPHALT TO EXTENTS SHOWN SHALL BE BY SCDOT CERTIFIED PAVING CONTRACTOR. MINIMUM THICKNESS OF ASPHALT REPLACEMENT SHALL BE 2 INCHES.
3. FLOWABLE FILL SHALL BE PLACED FLUSH WITH BOTTOM OF EXISTING PAVEMENT MILL. NO VOIDS OR FILL SHALL BE EVIDENT BETWEEN FLOWABLE FILL AND NEW ASPHALT PAVEMENT.
4. LANE STRIPING SHALL ONLY BE REPLACED ON NEW ASHPALT PAVEMENT AND ANY AREAS OF EXISTING ROADWAY DAMAGED BY CONSTRUCTION ACTIVITIES.
5. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON THE APPLICABLE ENCROACHMENT PERMIT.

BEAUFORT - JASPER WATER & SEWER AUTHORITY
BEDDING PRESSURE PIPE DETAIL
DATE 05/07/18 | DRAWN BY: SBF | DRAWING #: G-02
SCALE: N.T.S. | APPROVED BY: BMC

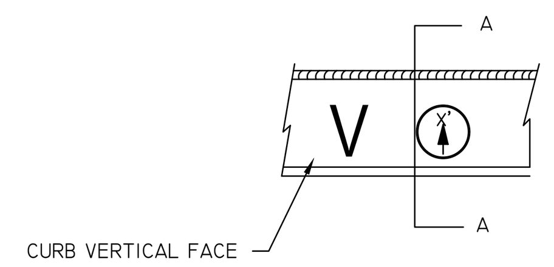
NOTES:
1. CURB MARKING SHALL BE PERPENDICULAR WITH SERVICE LOCATION.
2. CURB MARKING SHALL BE EMBOSSED INTO CURB FACE.
   A. WATER SERVICES SHALL BE DENOTED WITH A "W".
   B. SEWER SERVICES SHALL BE DENOTED WITH A "S".
   C. VALVES SHALL BE DENOTED BY A "V".
   D. BENDS SHALL BE DENOTED WITH A "B".
3. VALVE AND PIPELINE MARKERS ARE NOT REQUIRED IF A SURVEYORS 2"Ø BRASS DISK IS EMBEDDED ADJACENT TO EMBOSSED LETTER AND MARKED TO INDICATE LOCATION OF REFERENCED ITEM.
4. DISC MUST BE EMBEDDED, MAY NOT PROTRUDE PASS CONCRETE SURFACE OR EMBEDDED MORE THAN 3/8".



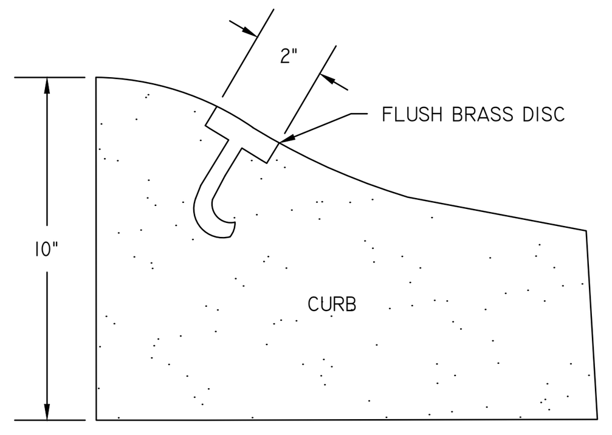
PLAN VIEW



DETAIL "A"

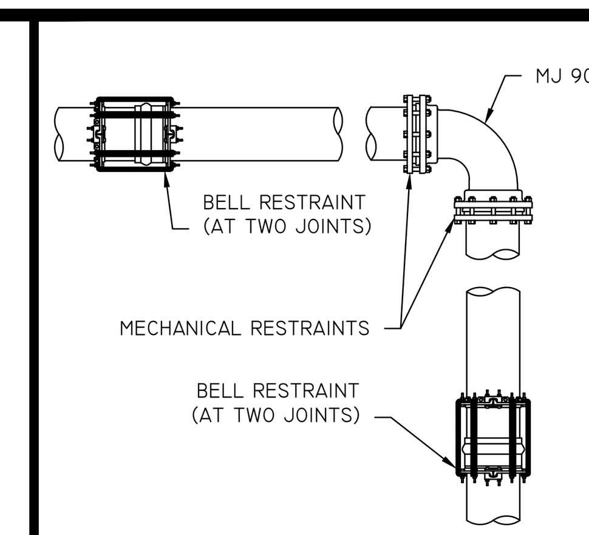


DETAIL "B"



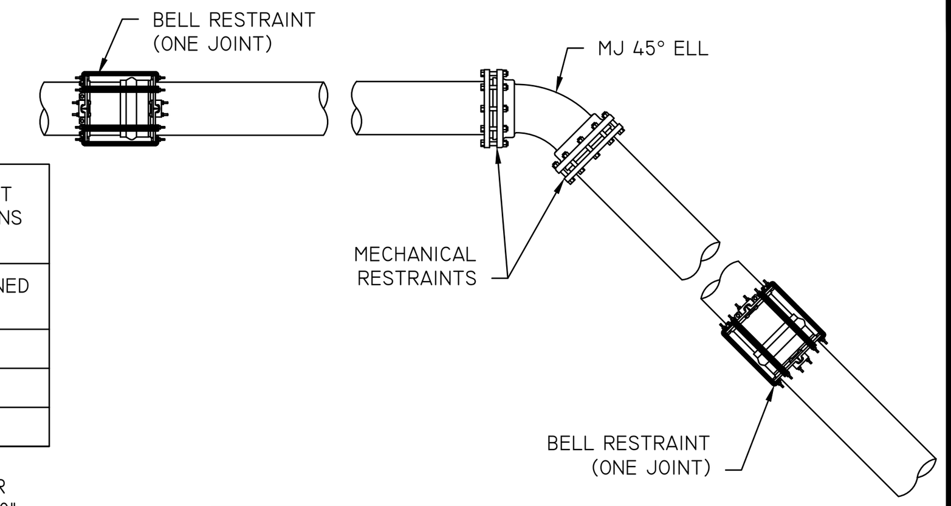
SECTION A-A

BEAUFORT-JASPER WATER & SEWER AUTHORITY
CURB MARKING DETAIL
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-07
SCALE: N.T.S | APPROVED BY: ERS

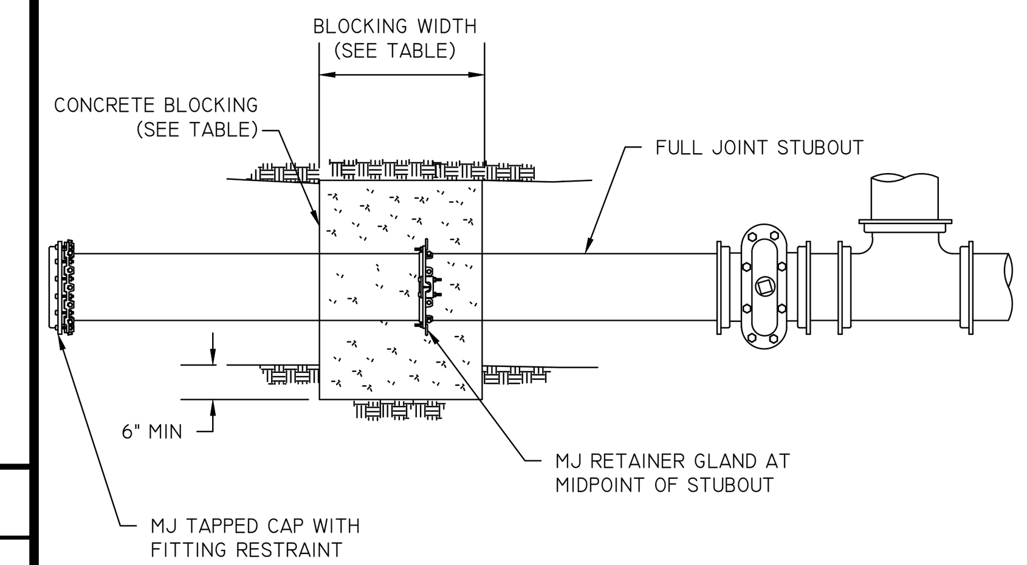


MINIMUM RESTRAINT DISTANCE FOR MAINS 10" AND SMALLER	
FITTING	**RESTRAINED JOINTS
22.5° ELL	1
45° ELL	1
90° ELL	2

**USE ENGINEER'S RECOMMENDATIONS FOR SIZES GREATER THAN 10"



TYPICAL FITTING AND JOINT RESTRAINT



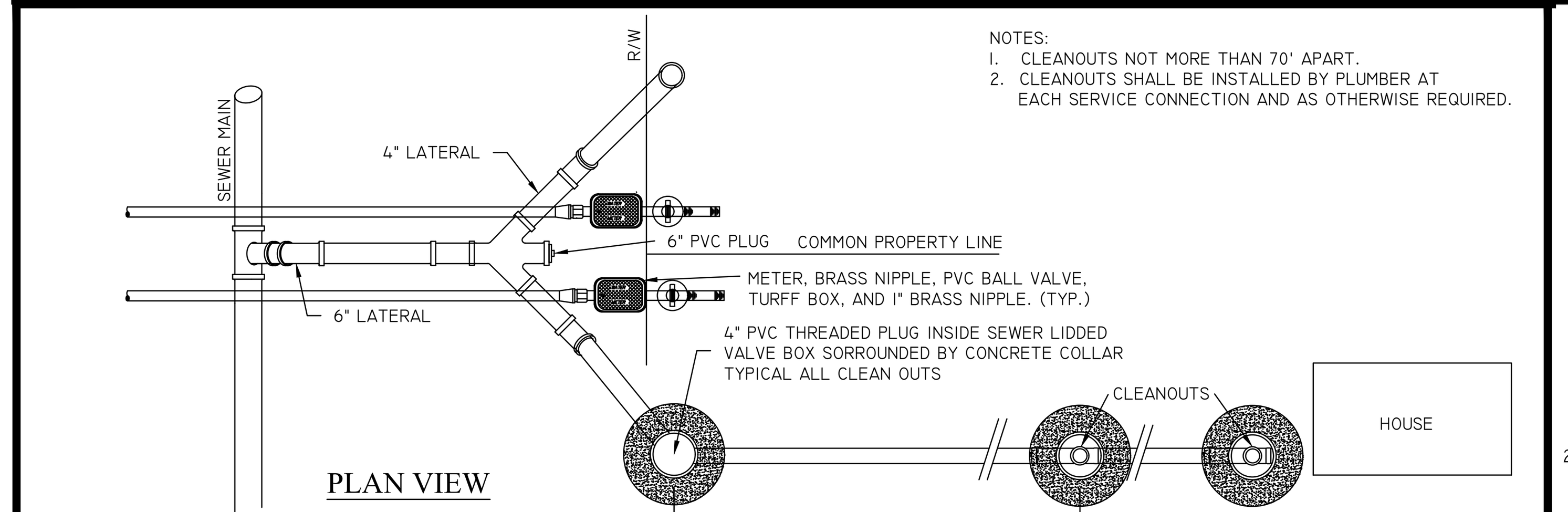
TYPICAL FUTURE STUBOUT

MINIMUM BLOCKING DIMENSIONS		
PIPE SIZE (IN)	BLOCKING BEARING AREA (FT^2)	BLOCKING WIDTH (IN)
4	2	24
6	4	24
8	7	36
10	11	36
12	15	36
OVER 12" BY THE DESIGN ENGINEER		

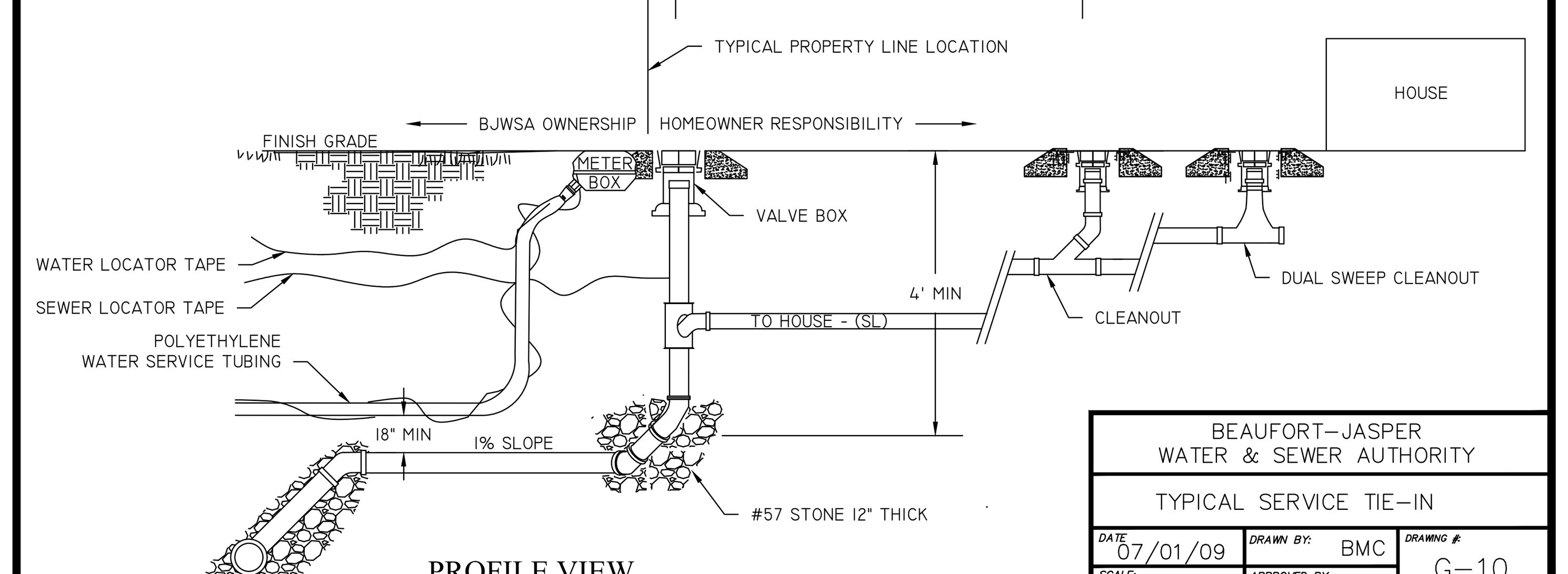
NOTE:
1. THE MINIMUM DIMENSIONS TABLE IS BASED ON AN ASSUMED SOIL BEARING OF 2000 LBS PER SQ. FT. IF BEARING VALUE FOR SOIL IS LESS THAN AREA SHOWN HEREIN SHOULD BE INCREASED ACCORDINGLY.
2. JOINT IS DEFINED TO BE A MINIMUM OF 18' IN LENGTH.

BEAUFORT-JASPER WATER & SEWER AUTHORITY
MECHANICAL RESTRAINT
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-08
SCALE: N.T.S | APPROVED BY: ERS

NOTES:
1. CLEANOUTS NOT MORE THAN 70' APART.
2. CLEANOUTS SHALL BE INSTALLED BY PLUMBER AT EACH SERVICE CONNECTION AND AS OTHERWISE REQUIRED.

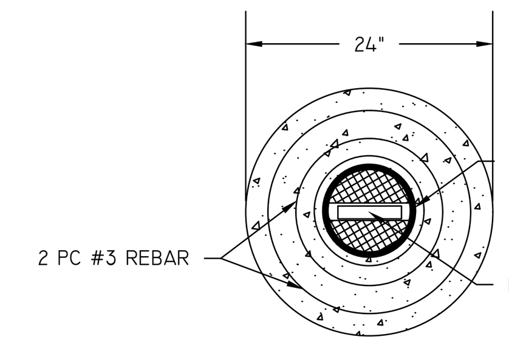


PLAN VIEW

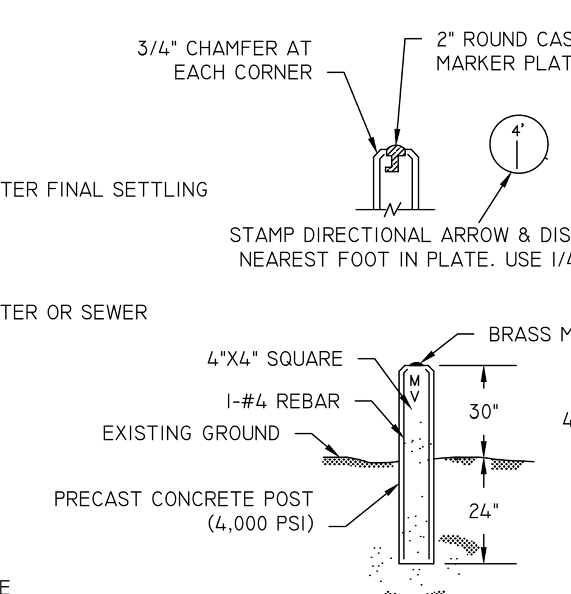


PROFILE VIEW

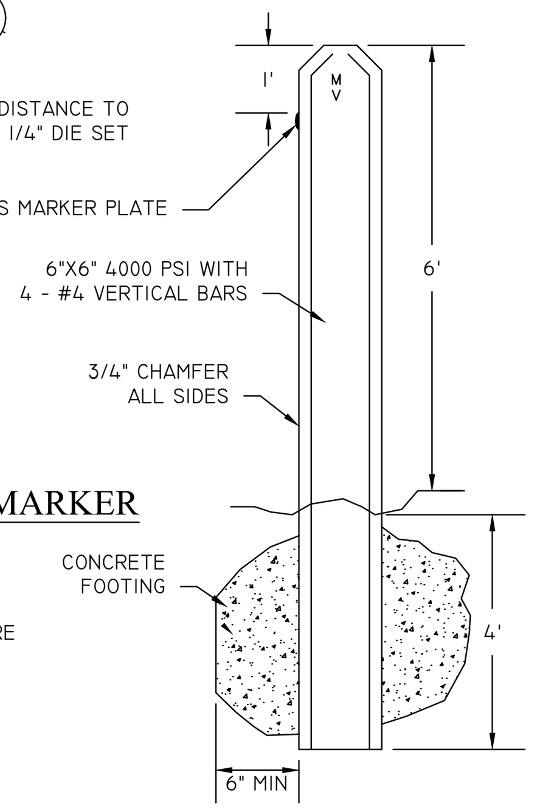
BEAUFORT-JASPER WATER & SEWER AUTHORITY
TYPICAL SERVICE TIE-IN
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-10
SCALE: N.T.S | APPROVED BY: ERS



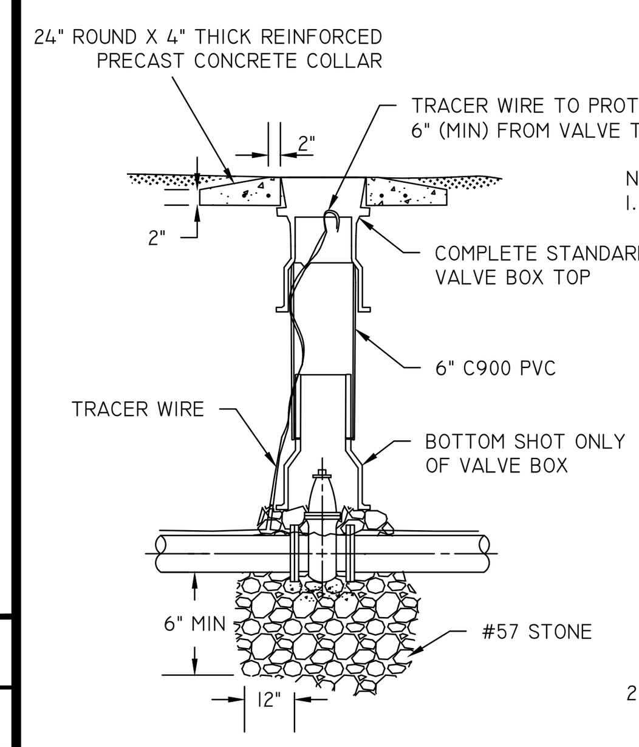
CONCRETE COLLAR



URBAN CONCRETE MARKER



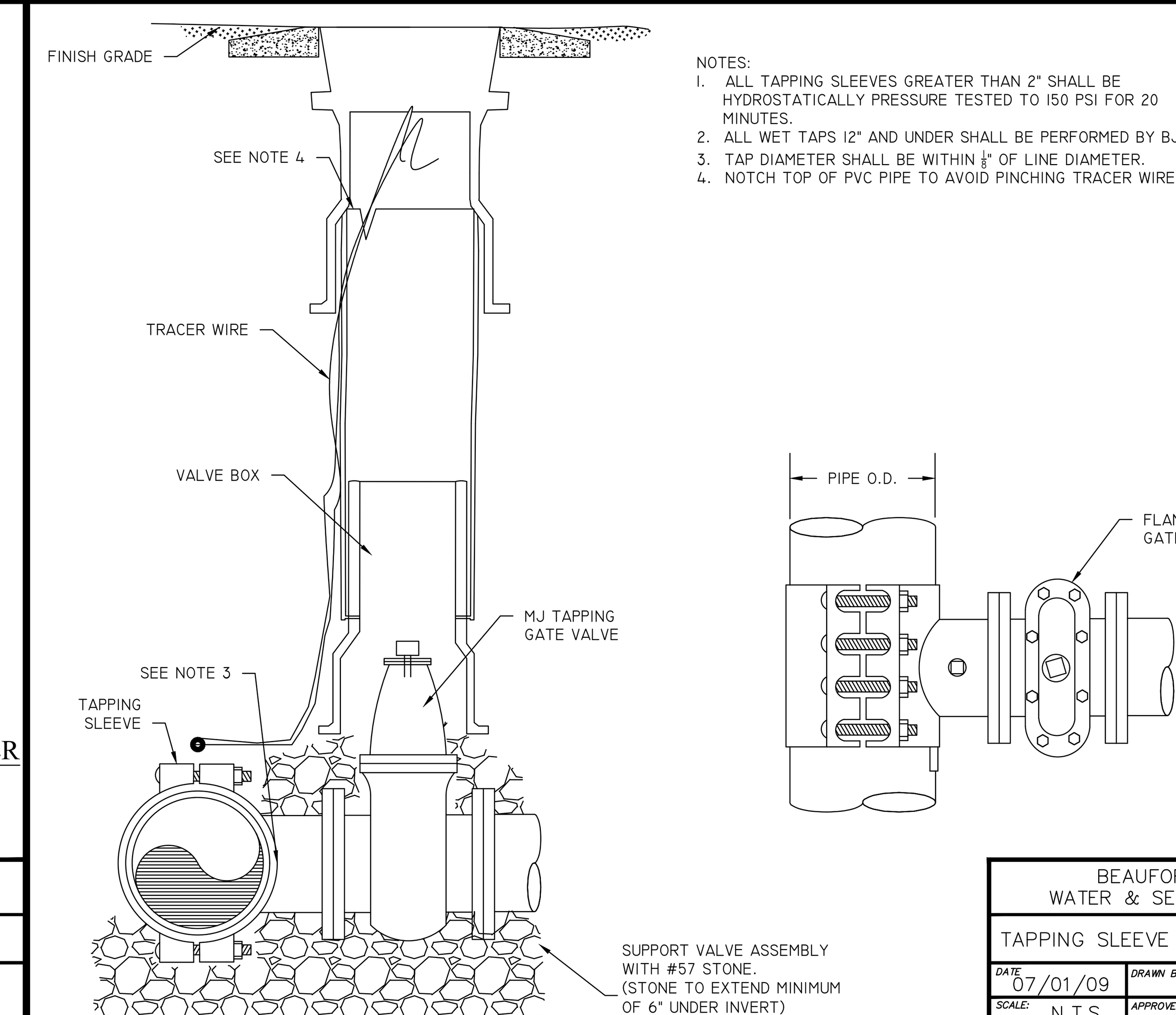
RURAL CONCRETE MARKER



VALVE AND VALVE BOX

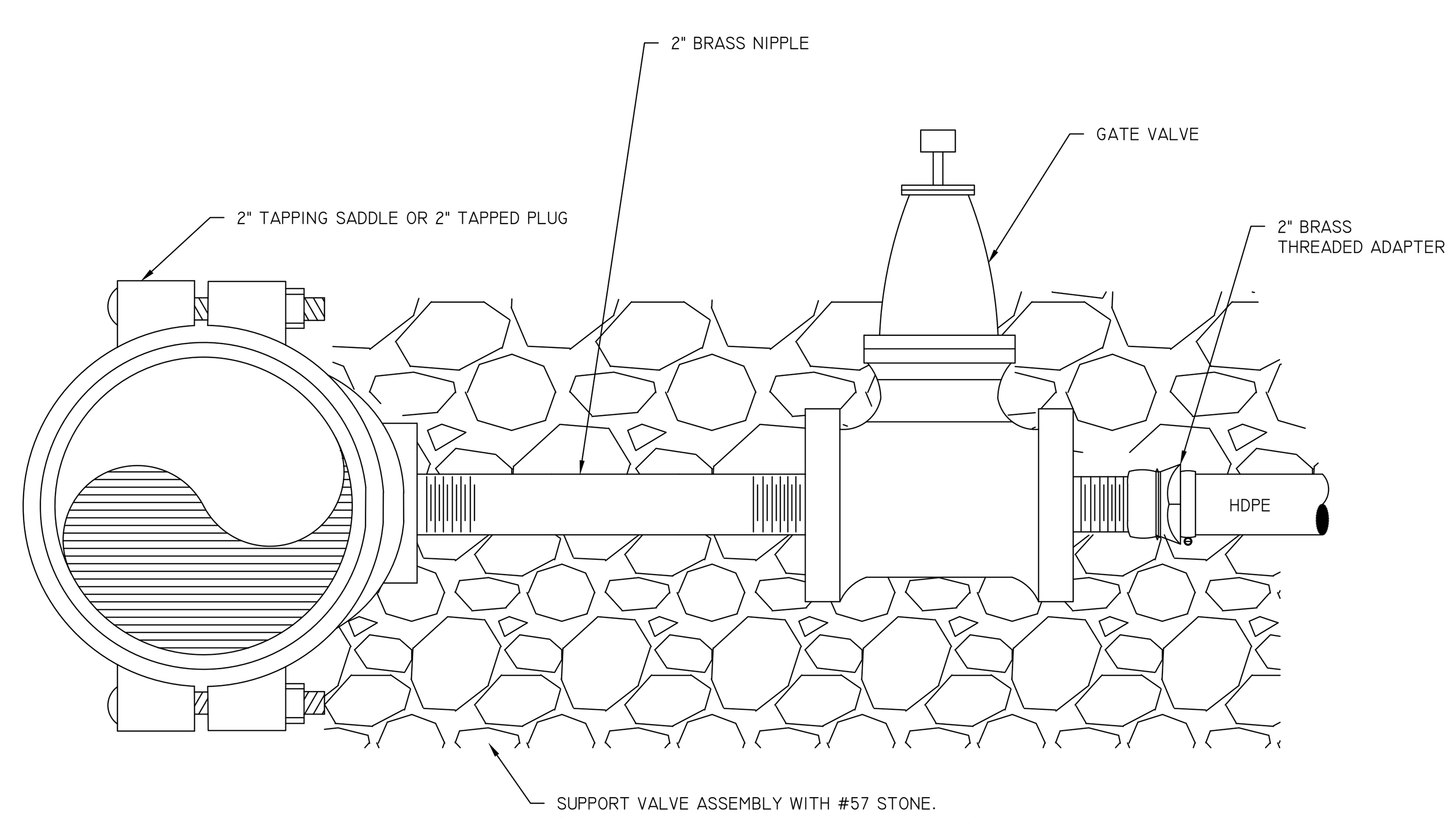
NOTES:
1. MARKERS
   A. VALVE MARKERS ARE REQUIRED FOR EACH VALVE (EXCEPT HYDRANT VALVES). PIPE LINE MARKERS ARE REQUIRED AT FITTINGS AND EACH 700' WHERE LINES RUN THROUGH AN UNDEVELOPED AREA. AR MANHOLE REQUIRES MANHOLE.
   B. MARKER PAINTING
      WATER - PAINTING NOT REQUIRED
      SEWER INFLUENT - TOP 4" GREEN
      SEWER EFFLUENT - TOP 4" PURPLE
   C. MARK MARKERS AS FOLLOWS
      MV - MAIN VALVE
      AV - AIR RELEASE VALVE
      PIPELINE - PIPELINE MARKER
   D. VALVE AND PIPELINE MARKERS IN MOWED AREAS TO BE SET TO AN EXPOSURE OF NOT MORE THAN 18" OR LESS THAN 6" ABOVE FINAL GRADE.
   E. IF SOILS ARE NOT STABLE ENOUGH TO MAINTAIN THE URBAN MARKERS VERTICAL, CONCRETE FOOTINGS ARE TO BE INSTALLED.
2. VALVE BOX LID SHALL BE WITHIN $\frac{1}{2}$" OF COLLAR TOP. COLLAR TOP IS TO BE NO MORE THAN 1" ABOVE FINAL GRADE AND NO LOWER THAN 1" BELOW FINAL GRADE.
3. CONCRETE COLLAR NOT REQUIRED IN PAVEMENT. VALVE BOX TOP IS TO BE TRAFFIC RATED.

BEAUFORT-JASPER WATER & SEWER AUTHORITY
STANDARD VALVE DETAIL
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-12
SCALE: N.T.S | APPROVED BY: ERS

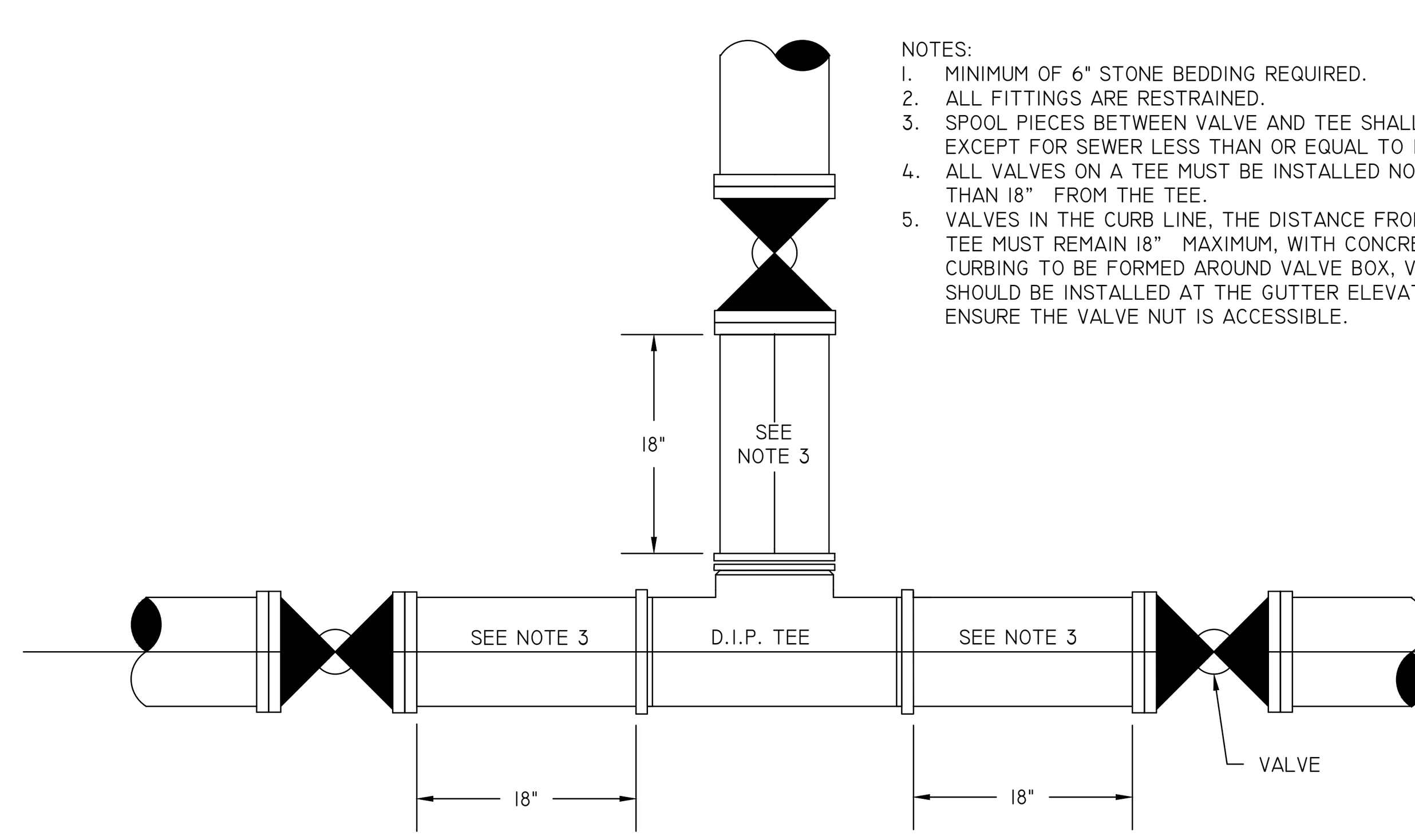


NOTES:
1. ALL TAPPING SLEEVES GREATER THAN 2" SHALL BE HYDROSTATICALLY PRESSURE TESTED TO 150 PSI FOR 20 MINUTES.
2. ALL WET TAPS 12" AND UNDER SHALL BE PERFORMED BY BJWSA.
3. TAP DIAMETER SHALL BE WITHIN $\frac{1}{8}$" OF LINE DIAMETER.
4. NOTCH TOP OF PVC PIPE TO AVOID PINCHING TRACER WIRE.

BEAUFORT-JASPER WATER & SEWER AUTHORITY
TAPPING SLEEVE & VALVE DETAIL
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-13
SCALE: N.T.S | APPROVED BY: ERS



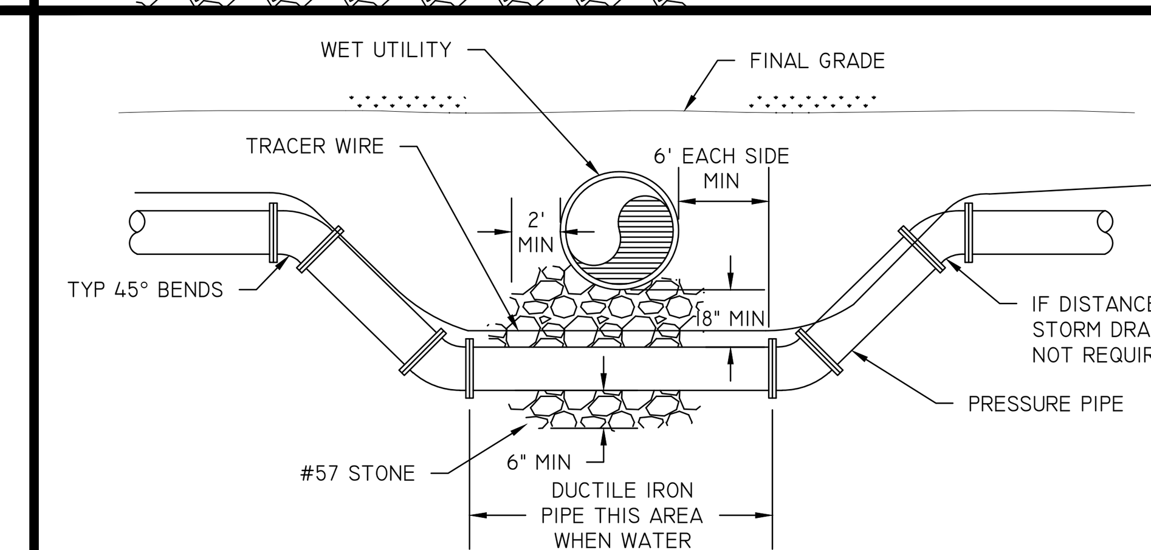
BEAUFORT-JASPER WATER & SEWER AUTHORITY
2" CONNECTION
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-14
SCALE: N.T.S | APPROVED BY: ERS



NOTES:
1. MINIMUM OF 6" STONE BEDDING REQUIRED.
2. ALL FITTINGS ARE RESTRAINED.
3. SPOOL PIECES BETWEEN VALVE AND TEE SHALL BE DIP EXCEPT FOR SEWER LESS THAN OR EQUAL TO 12".
4. ALL VALVES ON A TEE MUST BE INSTALLED NO MORE THAN 18" FROM THE TEE.
5. VALVES IN THE CURB LINE, THE DISTANCE FROM THE TEE MUST REMAIN 18" MAXIMUM, WITH CONCRETE CURBING TO BE FORMED AROUND VALVE BOX, VALVE BOX SHOULD BE INSTALLED AT THE GUTTER ELEVATION TO ENSURE THE VALVE NUT IS ACCESSIBLE.

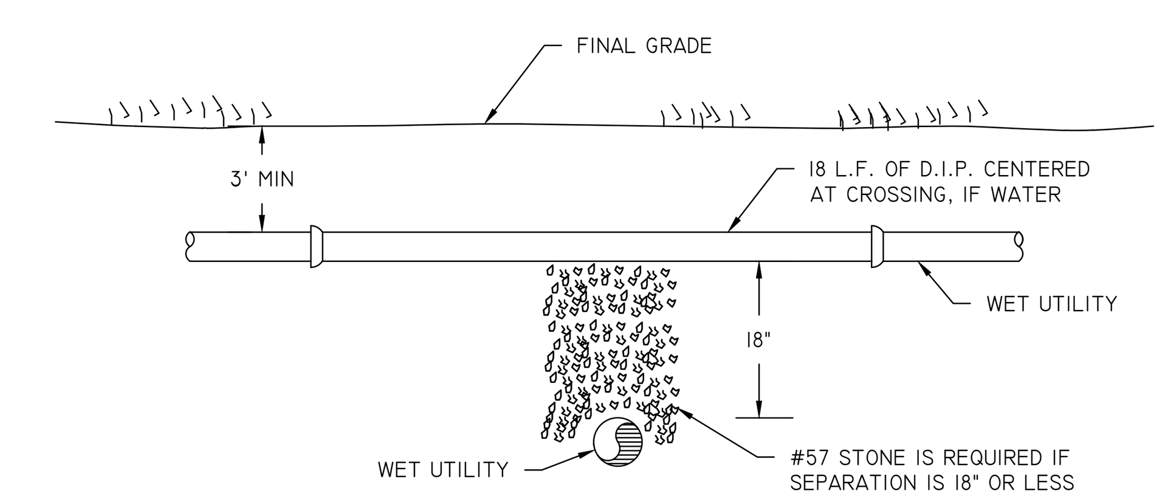
REVISED BY WARD EDWARDS 07/19/21 TO INCLUDE NOTES 4 & 5.

BEAUFORT-JASPER WATER & SEWER AUTHORITY
TEE AND VALVES
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-15
SCALE: N.T.S | APPROVED BY: ERS



PRESSURE PIPE UNDER WET UTILITY FOR FINAL DEPTH 5' OR GREATER

NOTES:
1. WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED FOR LESS THAN 18" SEPARATION.
2. NORMAL JOINT RESTRAINT IS REQUIRED.



WET UTILITY CROSSING

BEAUFORT-JASPER WATER & SEWER AUTHORITY
WET UTILITY CROSSING
DATE 07/01/09 | DRAWN BY: BMC | DRAWING #: G-16
SCALE: N.T.S | APPROVED BY: ERS

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 WILLIAM G. POWELL 09/11/23

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

No.	Description	Date
7		
6		
5		
4		
3		
2		
1		
	Plan Revisions	

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Utility Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

Not to Scale

C702

Attachment 3

Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR
Surface Roughening:	
Topsoiling:	
Temporary Seeding:	TS
Mulching:	M
ECB or TRM:	
FGM:	FGM
BFM:	BFM
Permanent Seeding:	PS
Sodding:	SO
Riprap:	
Outlet Protection:	RIPRAP / ECB or TRM
Dust Control:	DC
Polyacrylamide (PAM):	PAM

Sediment Control

Sediment Basin:	
Temporary Sediment Trap:	
Rock Sediment Dike:	
Rock Check Dam:	OR
Sediment Tube:	
Silt Fence:	
Reinforced Silt Fence:	
Type A-Fabric Inlet Protection:	A
Type A-Sediment Tube Inlet Protection:	A
Type B - Wire Mesh and Stone Drop Inlet Protection:	
Type C - Block and Gravel Inlet Protection:	
Type D - Rigid Inlet Filters:	D
Type E - Surface Course Curb Inlet Filter:	E
Type F - Inlet Tube:	F
Type FC - Filter Bag Curb Inlet Protection:	FC
Type FB - Filter Bag Grate Inlet Protection:	FG
Concrete Washout	CWS

Runoff Conveyance Measures

Vegetated Channels:	
Riprap-Lined Channels:	
ECB OR TRM-Lined Channels:	
Paved Channels:	PC PC PC
Pipe Slope Drains:	
Temporary Stream Crossing:	
Temporary Diversion Ditch or Swale:	TD TD
Permanent Diversion Ditch:	PD PD
Diversion Dike or Berm:	DD DB
Level Spreader:	
Subsurface Drain:	SSD SSD

N/F
HENRY S. CRAM JR
(LOT-17)
TMS R610 039 000 0181 0000
DB:1065 PG:641

N/F
BTWON BROWN LLC.
(LOT-15A)
TMS R610 039 000 0106 0000
PB:157 PG:51
DB:4053 PG:2869

LOT 15B
TMS R610 039 000 1737 0000

N/F
TED K. & DONNA L. HUFFMAN
(LOTS-11&13)
TMS R610 039 000 106A 0000
PB:157 PG:1
DB: 994 PG:1779

N/F
BRIDIE L. FORBES REVOCABLE LIVING TRUST DATED 04/02/2021
(LOTS-7&9)
TMS R610 039 000 0117 0000
DB: 3995 PG:1124

N/F
EDWARD A III & LISA M GOEAS
(LOT-12A)
TMS R610 039 000 0094 0000
PB:16 PG:76
DB: 4085 PG:3179
26,250 SF
0.603 AC

N/F
TMS R610 039 000 0107 0000
PB:16 PG:76
DB: 4085 PG:3179
27,855 SF
0.639 AC

JASON STREET 40' R/W

N/F
EDWARD A III & LISA M GOEAS
(LOT-17)&(PORTION OF LOT-19)
TMS R610 039 000 0114 0000
PB:16 PG:76
DB: 4071 PG:3288
29,313 SF
0.673 AC

N/F
JASON MOORE
(LOT-22)
TMS R610 039 000 107C 0000
PB:54 PG:72
DB: 2331 PG:2376

N/F
LANCE L. MUMFORD & ROXCY S. BENTON
(LOT-20)
TMS R610 039 000 0218 0000
PB:54 PG:72
DB:1465 PG:500

N/F
CARAMAR RENTALS & INVESTMENTS LLC.
(LOT-18A)
TMS R610 039 000 114A 0000
DB: 3443 PG: 3006

N/F
1223 MAY RIVER ROAD LLC.
(LOTS-3-10 BLOCK A PINECREST
TMS R610 039 000 0121 0000
PB:150 PG: 43
DB: 3383 PG: 3389

N/F
TREVOR HOWARD WELLS
(PORTION OF LOT 19)&(LOT-20)
TMS R610 039 000 1078 0000
PB:16 PG: 76
DB: 2056 PG: 484

N/F
EDWARD A III & LISA M GOEAS
(LOT-15)
TMS R610 039 000 0096 0000
PB:16 PG:76
DB:4085 PG:3179
18,972 SF
0.436 AC

N/F
EDWARD A III & LISA M GOEAS
(LOT-11)
TMS R610 039 000 0093 0000
PB:16 PG:76
DB: 4085 PG:3179
26,250 SF
0.603 AC

N/F
EDWARD A III & LISA M GOEAS
(LOT-13)
TMS R610 039 000 0095 0000
PB:16 PG:76
DB: 4085 PG:3179
20,820 SF
0.478 AC

MAY RIVER ROAD 66' R/W

MAY RIVER ROAD 66' R/W

SEDIMENT TUBES (TYP)

SILT FENCE (TYP)

NPDES LIMITS OF DISTURBANCE = 4.0 ACRES

CONSTRUCTION ENTRANCE (TYP)

USE DUST CONTROL MEASURES AND SWEEPING AS NEEDED TO KEEP SEDIMENT OFF EXISTING STREETS.

CONCRETE WASHOUT STATION

TREE PROTECTION (TYP.)

TYPE A INLET PROTECTION (TYP)

STOCK FARM ROAD

POND

TEMPORARY SEEDING PER SCHEDULE, TAIL: TEMPORARY SEEDING IS TO BE USED TO STABILIZE ALL DISTURBED AREAS WHEN WORK IS TEMPORARILY CEASED PER SCDHEC-OCRM NOTES

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 WILLIAM G. POMEL 09/11/23

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

No.	Description	Date
1	Plan Revisions	
2		
3		
4		
5		
6		
7		

Permit Set - NOT FOR CONSTRUCTION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for:
ERB Enterprises, LLC

Intermediate & Final Erosion Control Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

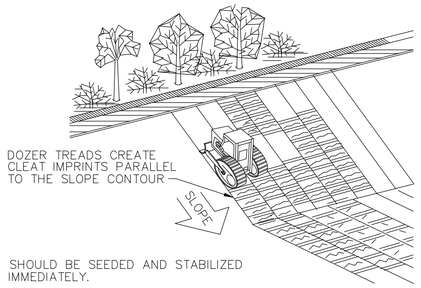
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

0 30 60
Scale:1"= 30 ' Feet

C801

Attachment 3

Permit Set - NOT FOR CONSTRUCTION



SHOULD BE SEEDED AND STABILIZED IMMEDIATELY.

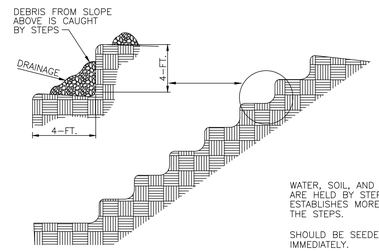
TRACKING

South Carolina Department of Health and Environmental Control

TRACKING

STANDARD DRAWING NO. EC-01 Page 1

APPROVED BY: SCDHEC — AUGUST, 2005 DATE



WATER, SOIL, AND FERTILIZER ARE HELD BY STEPS – VEGETATION ESTABLISHES MORE EASILY ON THE STEPS.

SHOULD BE SEEDED AND STABILIZED IMMEDIATELY.

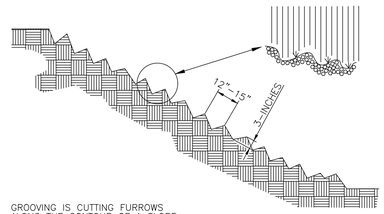
STAIR STEP GRADING

South Carolina Department of Health and Environmental Control

STAIR STEP GRADING

STANDARD DRAWING NO. EC-02 Page 1

APPROVED BY: SCDHEC — AUGUST, 2005 DATE



GROOVING IS CUTTING FURROWS ALONG THE CONTOUR OF A SLOPE. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND PROVIDE SOME COVERAGE OF LIME, FERTILIZER AND SEED.

SHOULD BE SEEDED AND STABILIZED IMMEDIATELY.

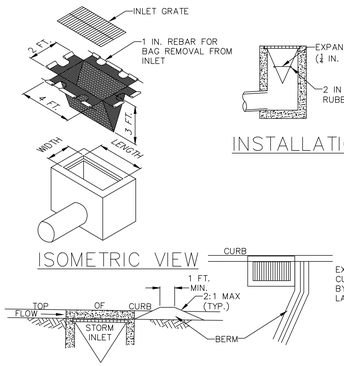
SLOPE GROOVING

South Carolina Department of Health and Environmental Control

SLOPE GROOVING

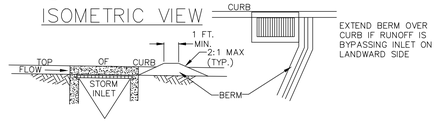
STANDARD DRAWING NO. EC-03 Page 1

APPROVED BY: SCDHEC — AUGUST, 2005 DATE



INSTALLATION DETAIL

ISOMETRIC VIEW



EXTEND BERM OVER CURB IF RUNOFF IS BYPASSING INLET ON LANDWARD SIDE

SECTION VIEW PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG GRATE INLET PROTECTION

NO SCALE

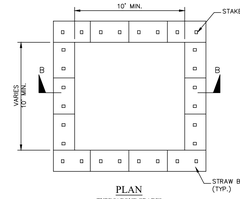
PERMANENT SEEDING – COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/AC 30 LBS/AC 40 LBS/AC												
BROWNTOP MILLET ATLANTIC COASTAL PANICGRASS	10 LBS/AC 15 LBS/AC PLS												
BROWNTOP MILLET SWITCHGRASS (ALAMO) LITTLE BLUESTEM SERICEA LESPEDEZA	10 LBS/AC 8 LBS/AC PLS 4 LBS/AC 20 LBS/AC												
BROWNTOP MILLET WEEPING LOVEGRASS	10 LBS/AC 8 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/AC 40 LBS/AC												
RYE, GRAIN BAHIAGRASS CLOVER, CRIMSON (ANNUAL)	10 LBS/AC 40 LBS/AC 5 LBS/AC												
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/AC 30 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/AC 10 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BERMUDA, COMMON KOBE LESPEDEZA (ANNUAL)	10 LBS/AC 12 LBS/AC 10 LBS/AC												
BROWNTOP MILLET BAHIAGRASS BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/AC 20 LBS/AC 6 LBS/AC 40 LBS/AC												
BROWNTOP MILLET SWITCHGRASS LITTLE BLUESTEM INDIANGRASS	10 LBS/AC 8 LBS/AC PLS 3 LBS/AC PLS 3 LBS/AC PLS												

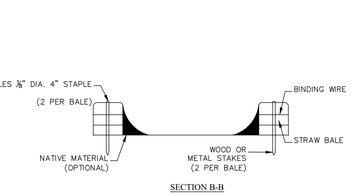
PS PERMANENT SEEDING - COASTAL

DETAIL 02370-010

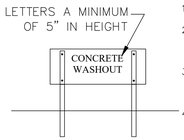
STRAW BALE BARRIER CONCRETE WASHOUT



PLAN
TYPE "ABOVE GRADE" WITH STRAW BALES



SECTION B-B



CONCRETE WASHOUT SIGN DETAIL

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.

CWS

South Carolina Department of Health and Environmental Control

CONCRETE WASHOUT

STRAW BALES OR ABOVE GROUND

STANDARD DRAWING NO. RC-07 PAGE 1 of 1

NOT TO SCALE — FEBRUARY 2014 DATE

TEMPORARY SEEDING – COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	40 LBS/AC												
RYE, GRAIN	56 LBS/AC												
RYEGRASS	50 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET OR JAPANESE MILLET	40 LBS/AC												
RYE, GRAIN OR OATS	56 LBS/AC 75 LBS/AC												
RYEGRASS	50 LBS/AC												

TS TEMPORARY SEEDING - COASTAL

DETAIL 02370-011

No.	Description	Date
1	Plan Revisions	
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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 25124 WILLIAM G. POMEL 09/11/23

SOUTH CAROLINA WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

Ward Edwards ENGINEERING
119C Palmetto Way
P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
www.WardEdwards.com

Magnolia Square
Town of Bluffton, South Carolina

Prepared for
ERB Enterprises, LLC

Intermediate Erosion Control Details

Vert. Datum:	NAVD88
Horiz. Datum:	SC83IF
Surveyed by:	JWR
Surveyor's PLS:	28139

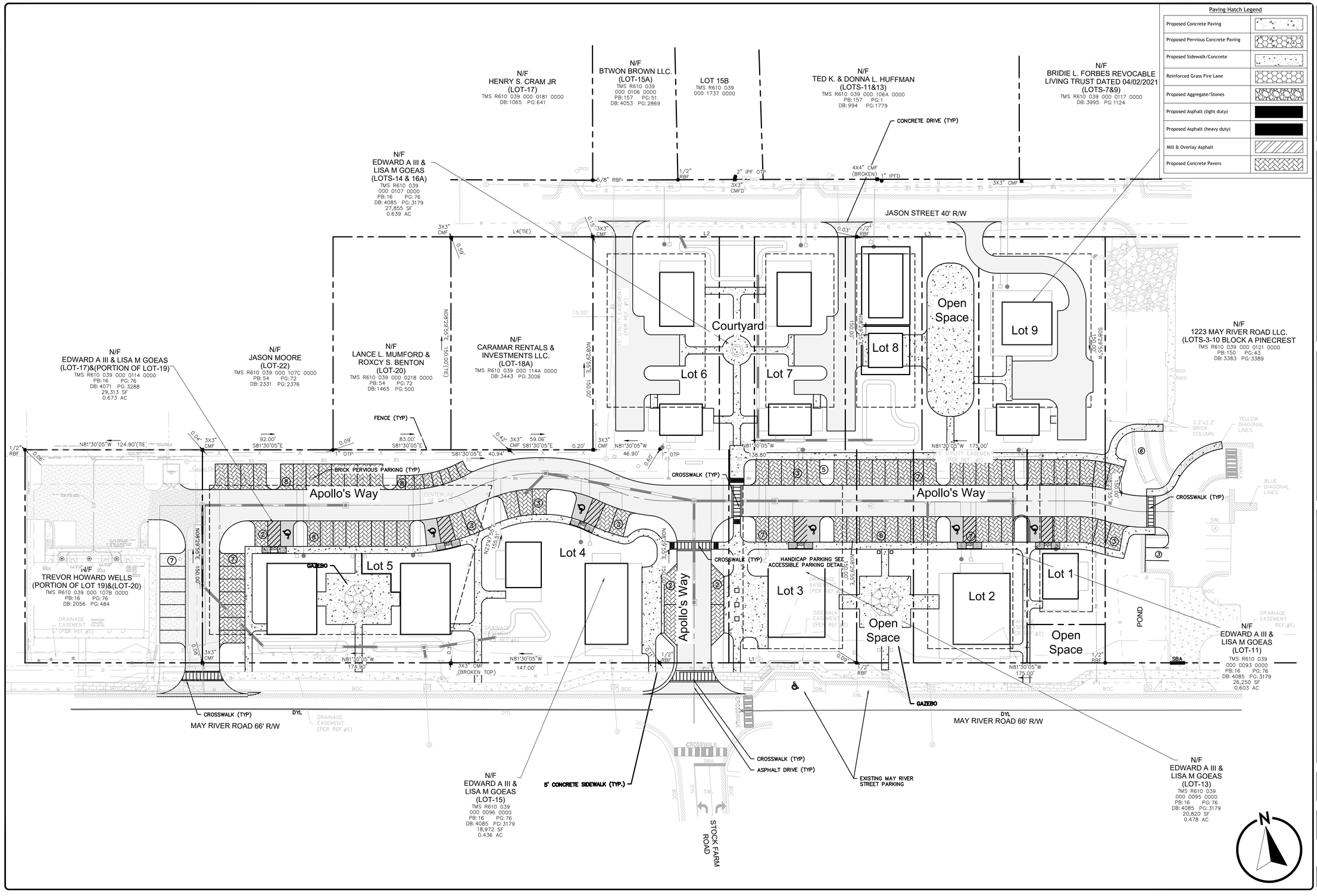
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

Not to Scale

C802

Attachment 3

Permit Set - NOT FOR CONSTRUCTION



Paving Hatch Legend

Proposed Concrete Paving	
Proposed Pervious Concrete Paving	
Proposed Sidewalk/Concrete	
Reinforced Grass Fire Lane	
Proposed Aggregate/Stones	
Proposed Asphalt (light duty)	
Proposed Asphalt (heavy duty)	
Mill & Overlay Asphalt	
Proposed Concrete Pavers	

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 25124
09/11/23
WILLIAM G. POMEL

SOUTH CAROLINA
WARD EDWARDS, INC.
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CERTIFICATE OF AUTHORIZATION

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Paving Plan

Vert. Datum:	NAVD88
Horiz. Datum:	SC831F
Surveyed by:	JWR
Surveyor's PLS:	28139

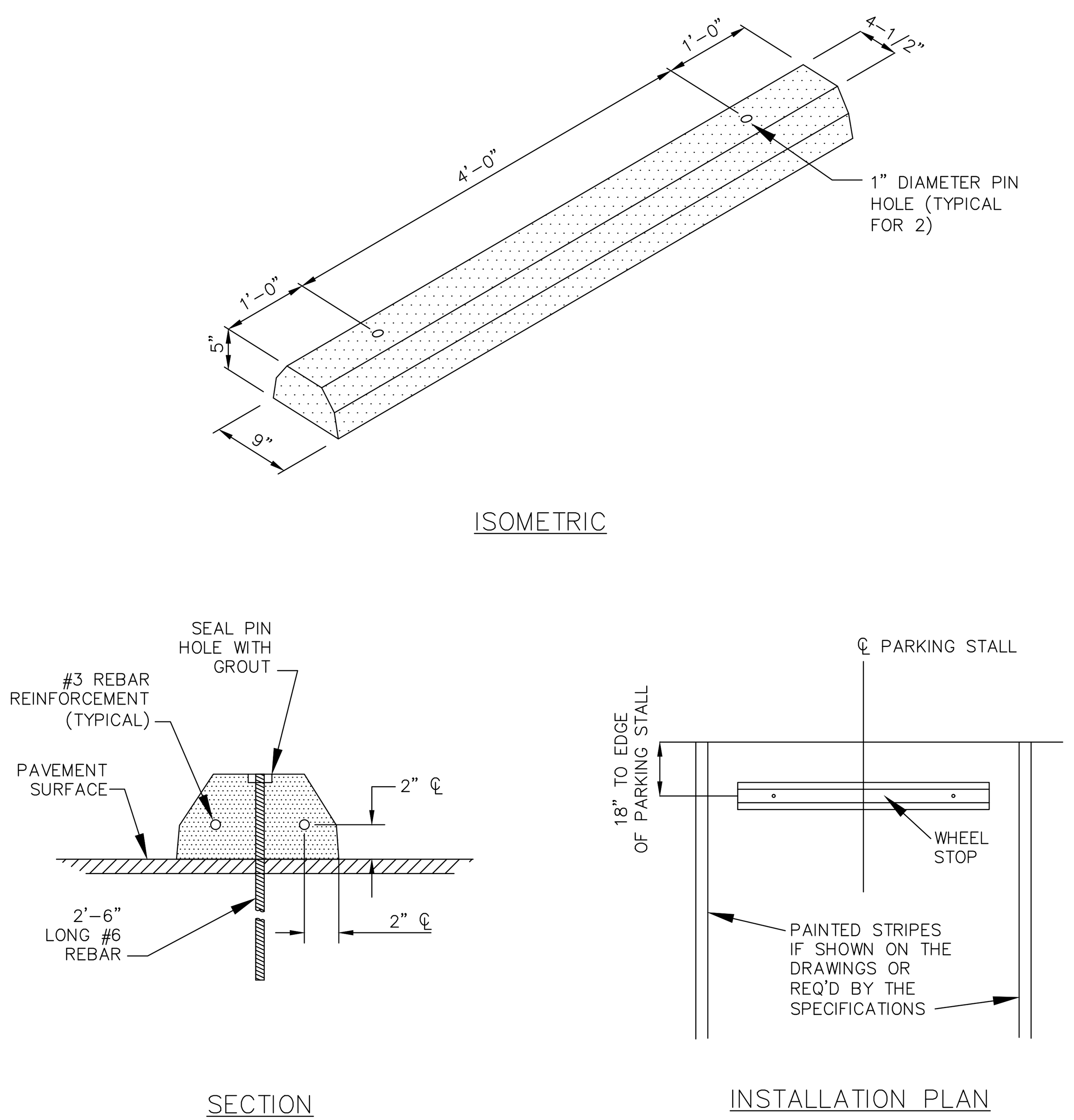
Project #:	210147
Date:	09/11/23
Designed by:	EBU
Checked by:	WGP

0 30 60
Scale:1"= 30 ' Feet

C901

Attachment 3

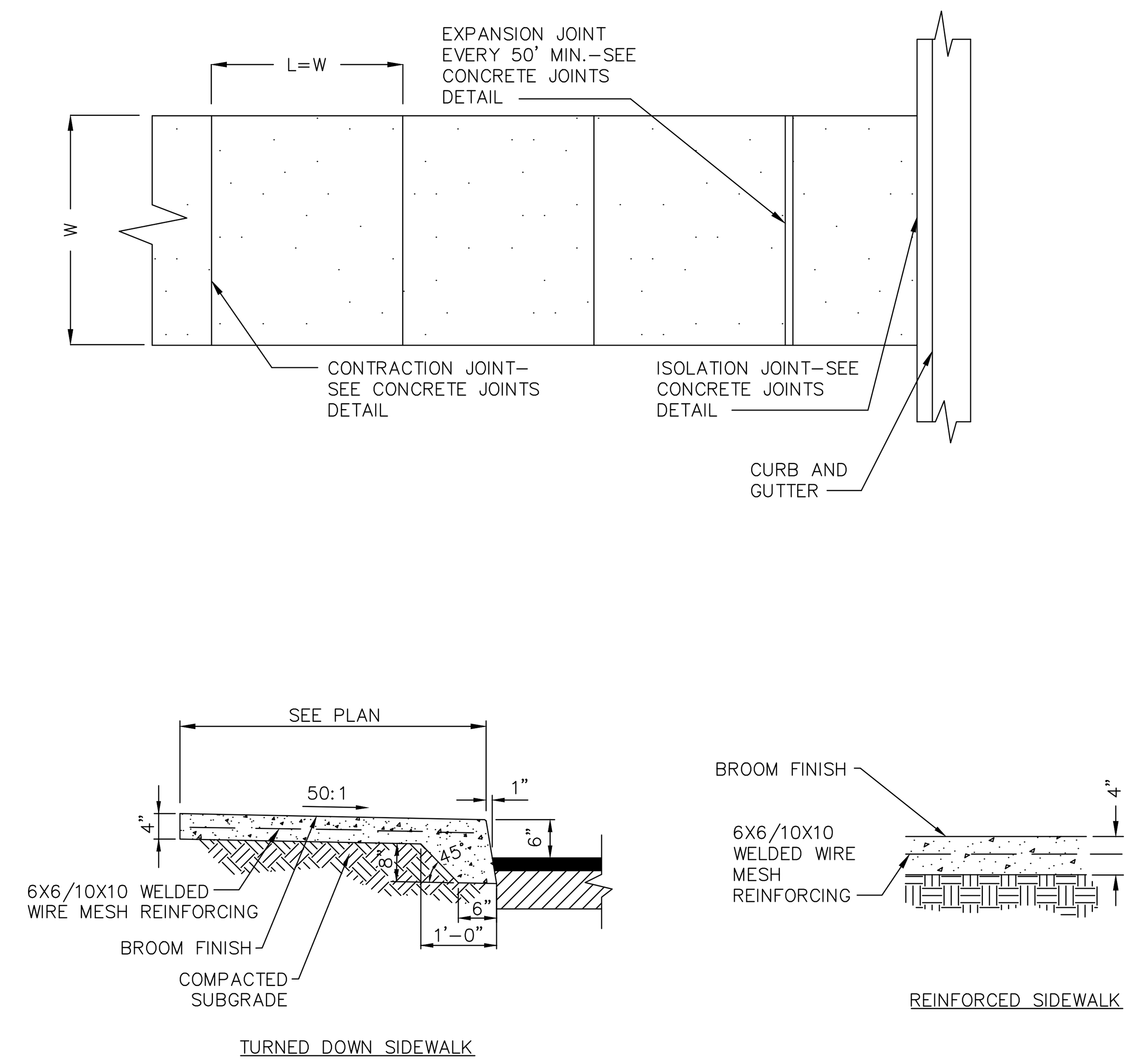
Permit Set - NOT FOR CONSTRUCTION



NOTES:

1. WHEEL STOPS SHALL BE STEEL REINFORCED PRECAST UNITS CONSISTING OF SCDOT CLASS 3000 CONCRETE, MINIMUM. ALTERNATE MATERIAL COMPOSITION MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
2. WHEEL STOPS SHALL BE INSTALLED PERPENDICULAR TO PARKING STALL AND SHALL BE PLACED A MINIMUM OF 18" FROM END OF PARKING STALL OR OBSTRUCTION.
3. ANCHORING PINS SHALL BE DRIVEN FLUSH TO THE TOP OF THE WHEEL STOP AND PIN HOLES SHALL BE GROUTED UPON INSTALLATION.

PRECAST CONCRETE WHEEL STOP

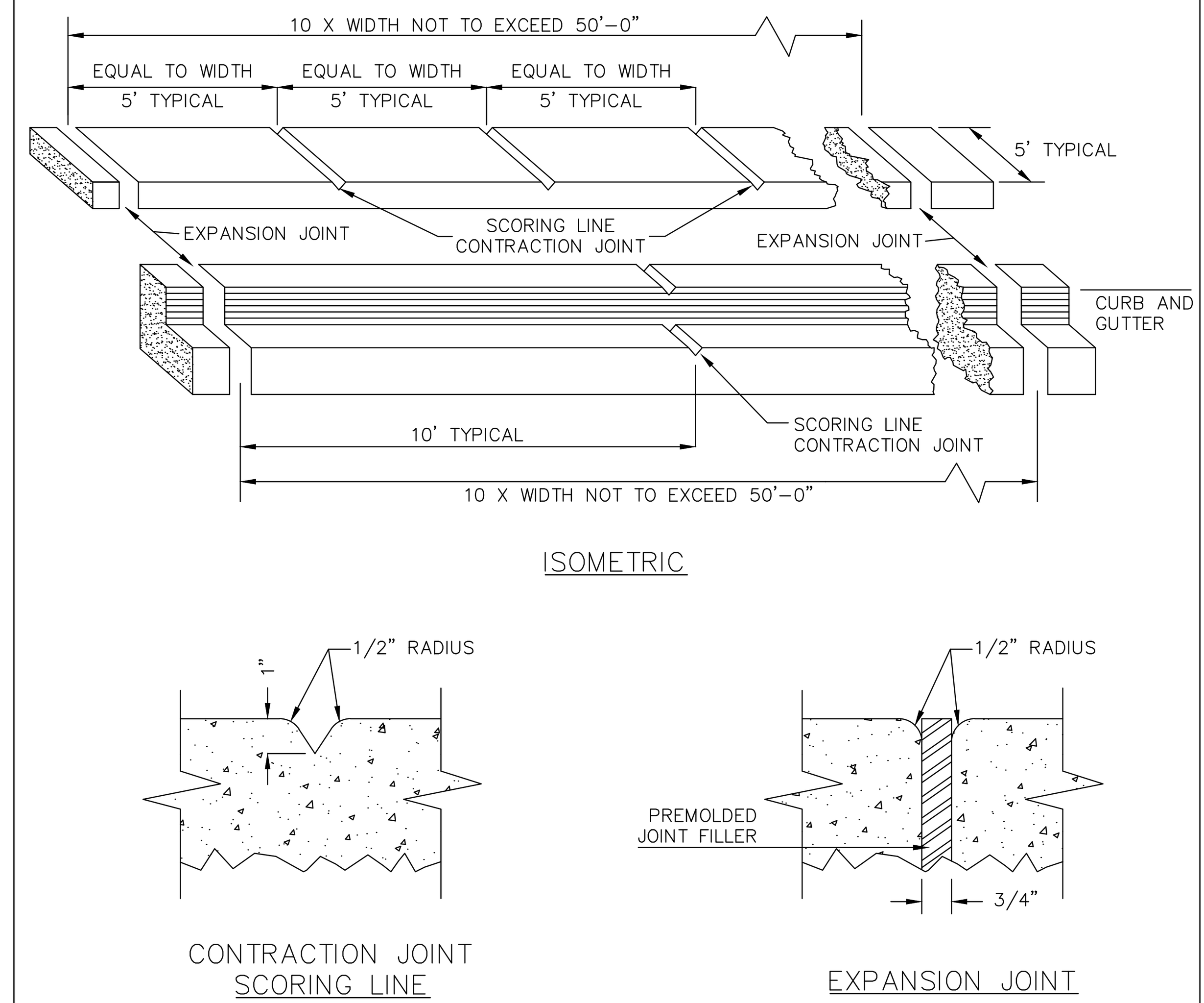


NOTES:

1. W = VARIES, REFER TO STAKING PLAN FILL IN BASED ON SITE PLAN
2. L = WIDTH OF PAVING UNLESS OTHERWISE INDICATED ON PLAN.
3. SLOPE = AS INDICATED ON GRADING PLAN, NOT TO EXCEED 2% CROSS OF 8.33% LONGITUDINAL
4. ALL CONCRETE SHALL BE CLASS A 3000 PSI
5. FINISH BROOM WITH HAND TOOLED JOINTS AND EDGES.

CONCRETE SIDEWALK

DETAIL 03300-006

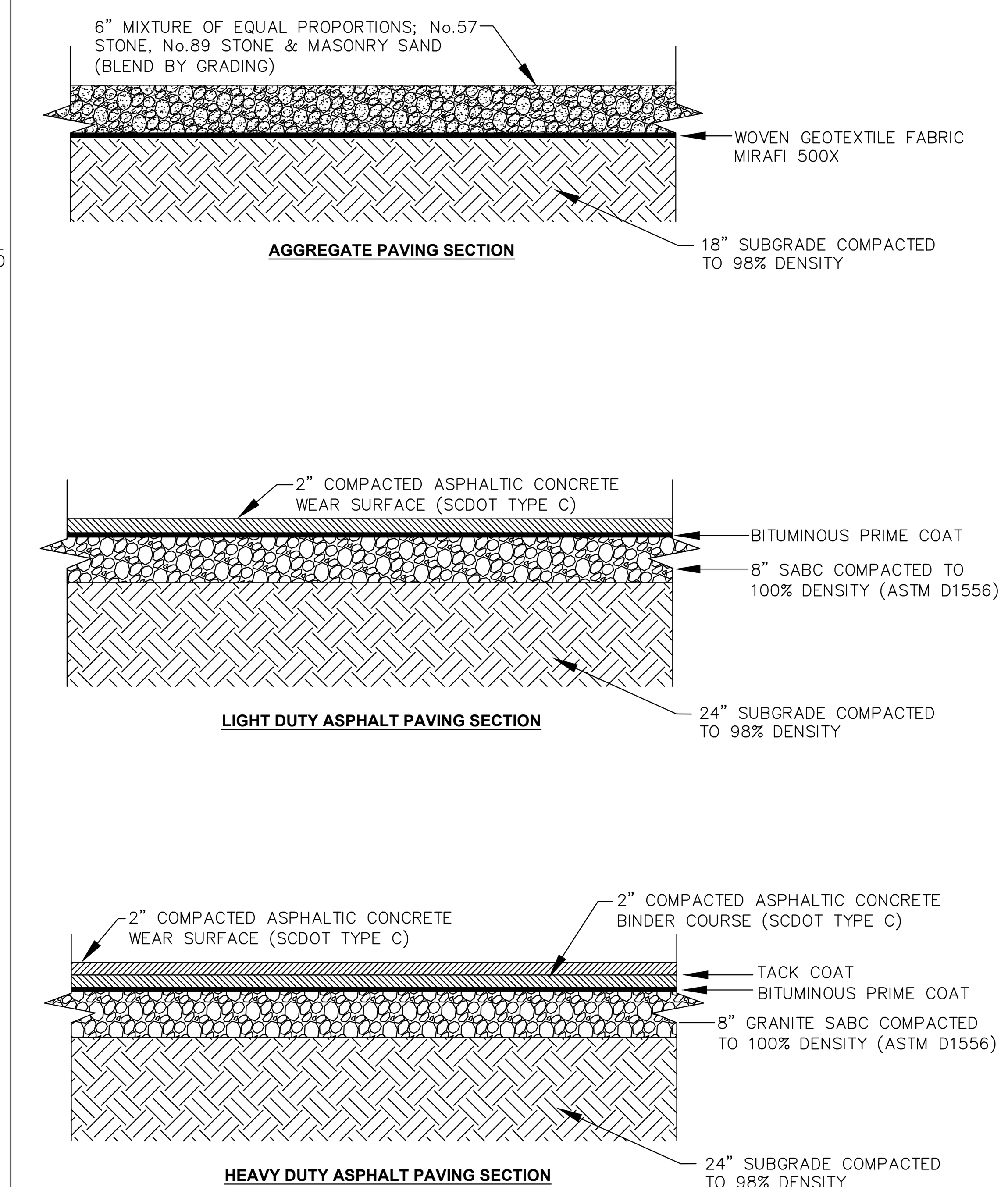


NOTES:

1. EXPANSION JOINTS, 3/4 INCH THICK, SHALL BE PLACED IN THE SIDEWALK AND CURBING AT THE POINT OF CURVATURE (PC) AND POINT OF TANGENCY (PT) OF ALL CURVES, AT THE OUTER EDGES OF DRIVEWAYS, AND AT UNIFORM INTERVALS AS SHOWN. EXPANSION JOINTS SHALL MEET SCDOT SPECIFICATION SECTION 702.2.2.1.
2. TRANSVERSE SCORING LINES (CONTRACTION JOINTS) IN THE SIDEWALK SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM INTERVALS EQUAL TO THE WIDTH OF THE WALK AS SHOWN.
3. LONGITUDINAL SCORING LINES WILL BE REQUIRED IN WALKS WIDER THAN 5 FEET OR AS DIRECTED BY THE ENGINEER.
4. TRANSVERSE CONTRACTION JOINTS IN THE CURBING SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM 10' INTERVALS.
5. TRANSVERSE AND LONGITUDINAL SCORING LINES SHALL BE A DEPTH OF 1" AND NOT LESS THAN 1/4 INCH OR MORE THAN 1/2 INCH IN WIDTH. THE CORNERS OF THE SCORING LINES SHALL HAVE A 1/2 INCH MINIMUM RADII.
6. JOINTS IN THE CURB AND GUTTER SHALL ALIGN WITH CORRESPONDING JOINTS IN THE SIDEWALK.

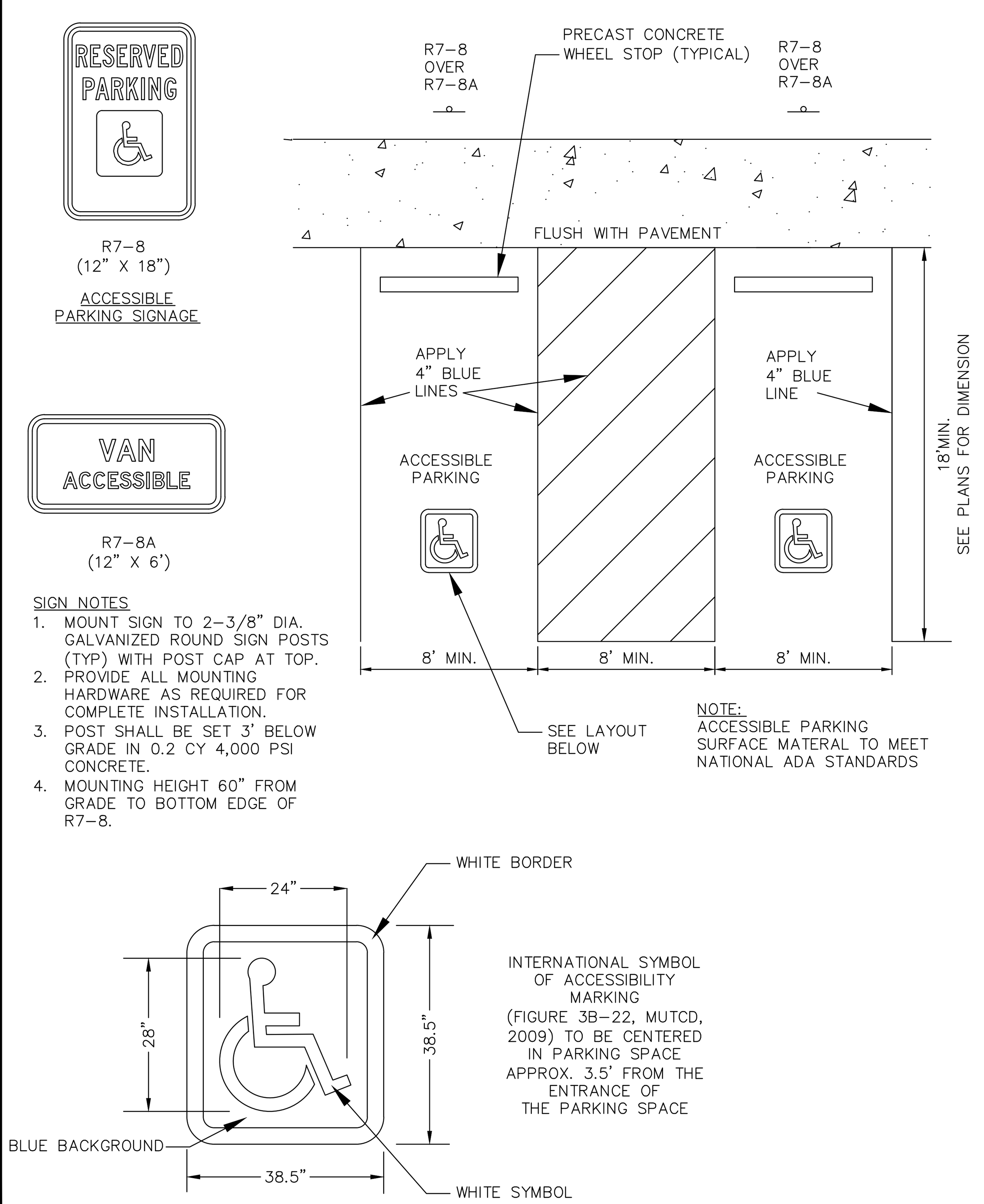
EXPANSION JOINTS AND SCORING LINES

DETAIL 03300-007A



TYPICAL PAVING SECTIONS

DETAIL 02740-016

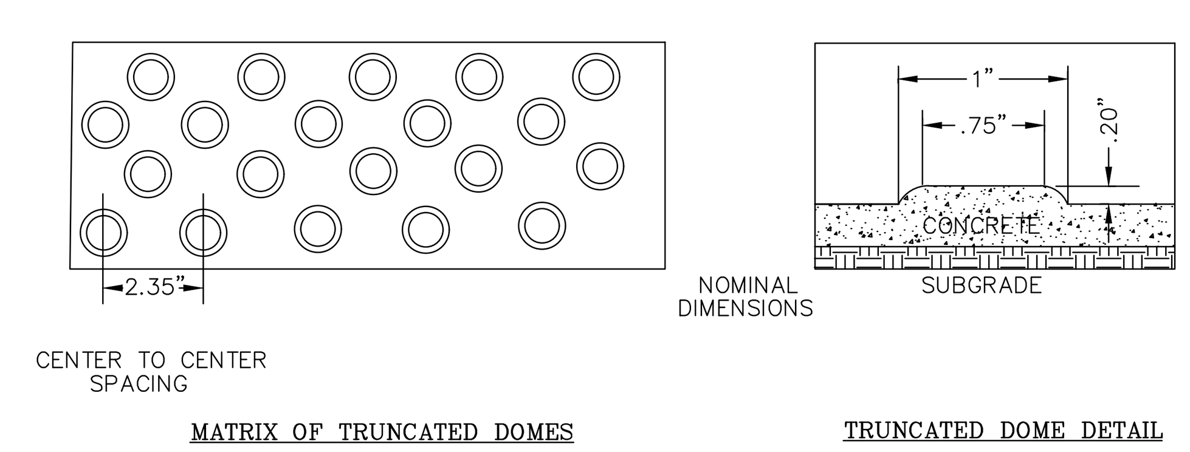


SIGN NOTES

1. MOUNT SIGN TO 2-3/8" DIA. GALVANIZED ROUND SIGN POSTS (TYP) WITH POST CAP AT TOP.
2. PROVIDE ALL MOUNTING HARDWARE AS REQUIRED FOR COMPLETE INSTALLATION.
3. POST SHALL BE SET 3' BELOW GRADE IN 0.2 CY 4,000 PSI CONCRETE.
4. MOUNTING HEIGHT 60" FROM GRADE TO BOTTOM EDGE OF R7-8.

NOTE:
ACCESSIBLE PARKING SURFACE MATERAL TO MEET NATIONAL ADA STANDARDS

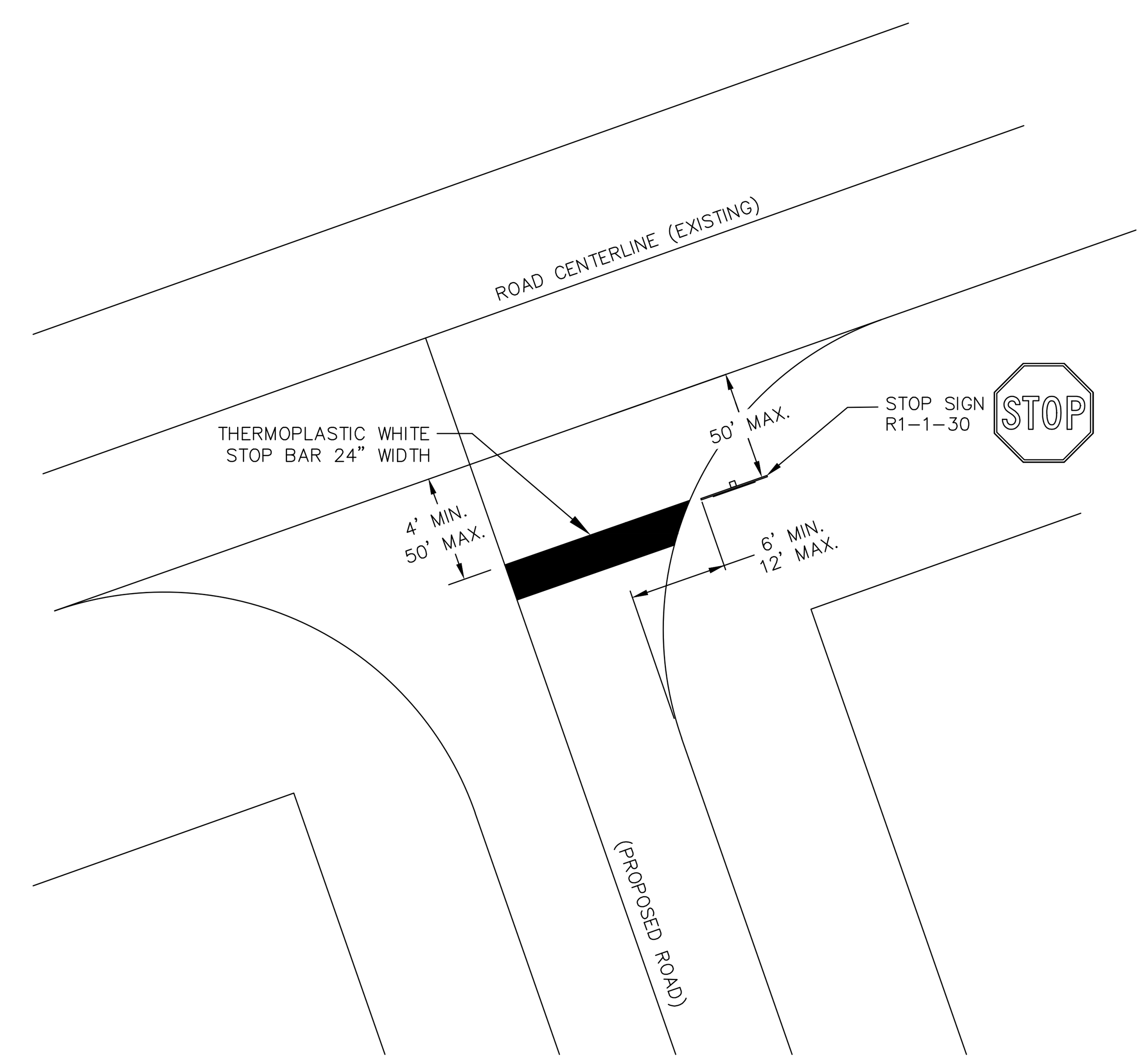
ACCESSIBLE PARKING DETAIL



NOTE: Detectable Warning Pavement shall be constructed where shown on the plans as a cost in place colored concrete system, and shall meet the nominal dimensional and color contrast requirements of Section 4.29.2 of Title III of the Americans With Disabilities Act. The color of the detectable warning pavement shall be selected by the Architect. The concrete surface shall be broom—finished for increased slip—resistance.

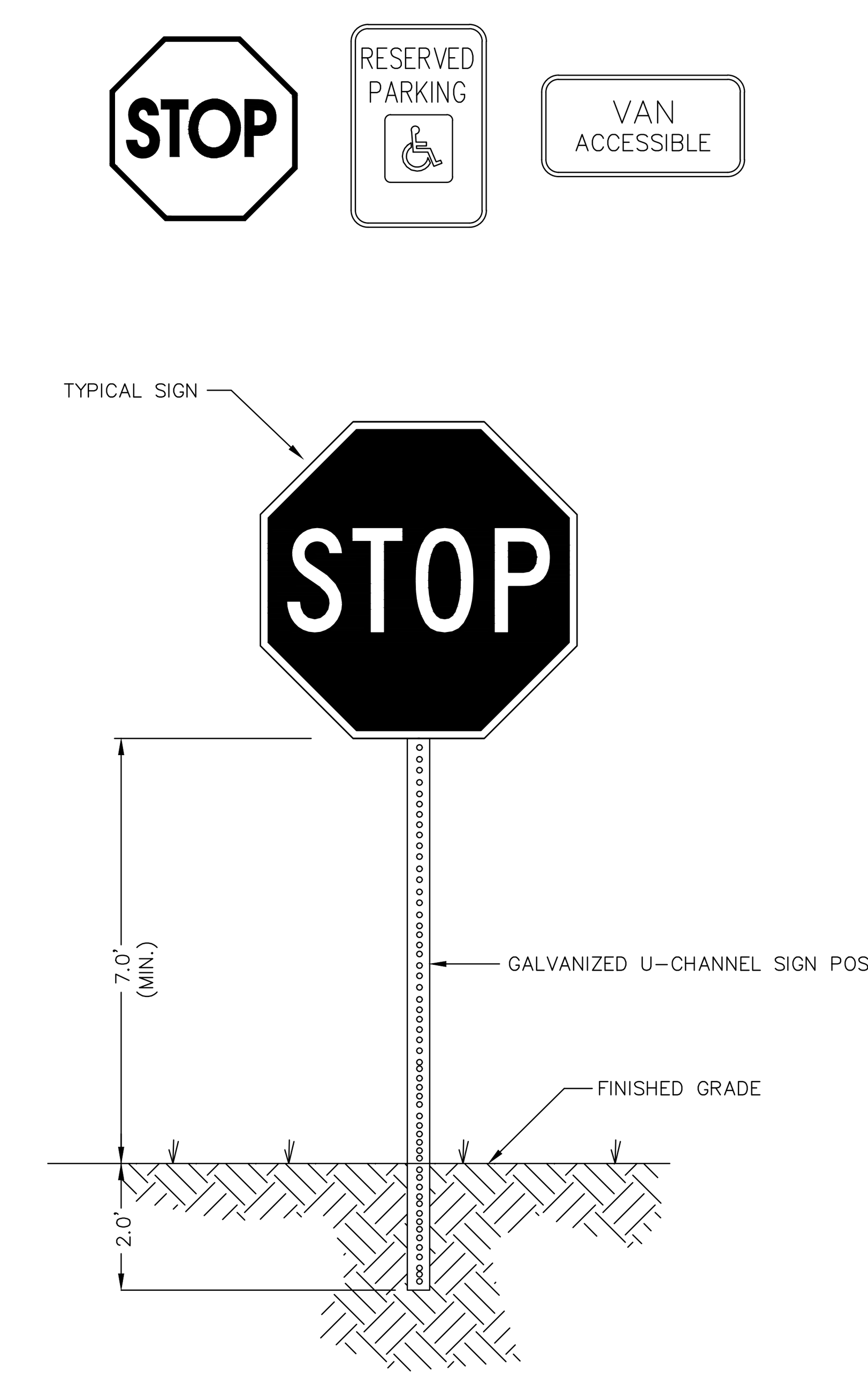
DETECTABLE WARNING PAVEMENT

DETAIL 02740-012



TYPICAL STOP SIGN & STOP BAR STRIPING AT INTERSECTION

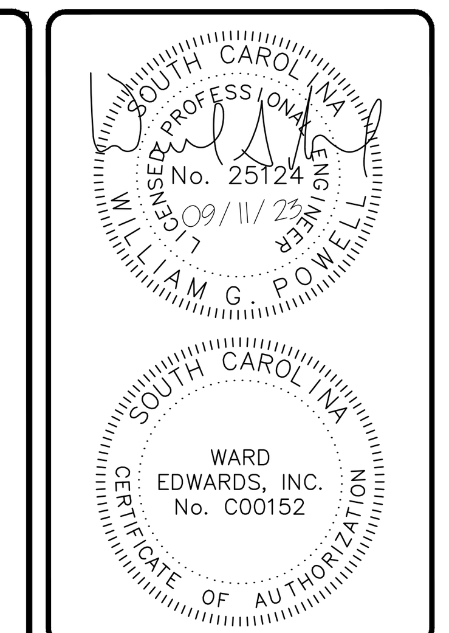
DETAIL #02740-018



NOTE:
ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (LATEST EDITION) AND THE DEPARTMENT OF TRANSPORTATION STANDARDS AT THE LOCATIONS SHOWN ON THE PLANS.

TYPICAL SIGNAGE

DETAIL #02890-002A



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Horiz. Datum:	SC83IF
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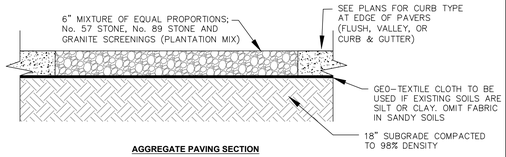
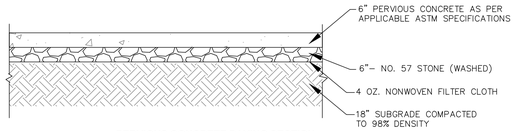
Not to Scale

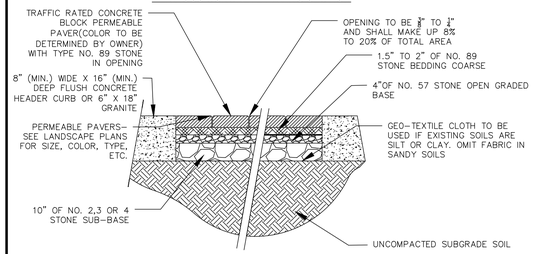
C902



AGGREGATE PAVING SECTION



PERVIOUS CONCRETE PAVING SECTION



PERMEABLE CONCRETE PAVERS

NOTE:
1. INSTALL PER THE "LOW IMPACT DEVELOPMENT IN COASTAL SOUTH CAROLINA GUIDE" AND PER ICPI SPECIFICATIONS.

PERMEABLE PAVING DETAILS

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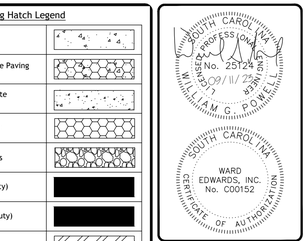

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Scale:1"= 1' Feet

C903

Permit Set - NOT FOR CONSTRUCTION