ATTACHMENT 5

PLAN REVIEW COMMENTS FOR DP-07-25-019862

Town of Bluffton
Department of Growth Management
20 Bridge Street P.O. Box 386 Bluffton, South Carolina 29910
Telephone 843-706-4522

Plan Type:	**Development Plan**	**Apply Date:**	**07/29/2025**
Plan Status:	**Active**	**Plan Address:**	
Case Manager:	**Dan Frazier**	**Plan PIN #:**	**R610 029 000 2487 0000**

Plan Description: **A request by Hilton Head Medical Center, LLC, for approval of a Preliminary Development Plan application. TI project consists of three (3) story 243,800 SF hospital with associated infrastructure. The property is within the Buckwalter Planned Unit Development (PUD) and consists of approximately 17.8 acres identified by the ta map numbers R610 029 000 2487 0000 and R600 029 000 2410 0000 located west of Buckwalter Parkway south of Bluffton Parkway within the Parkway Corners Initial Master Plan.**
STATUS: This application will be heard at the September 3, 2025, Development Review Committee meeting.

Technical Review

Submission #: 1 Received: 07/29/2025 Completed: 08/29/2025

Reviewing Dept.	*Complete Date*	*Reviewer*	*Status*
Fire Department Review	08/29/2025	Dan Wiltse	Revisions Required

Comments:

1. Provide detail of location and protection of oxygen tanks.
2. Provide detail of location and protection of hospital backup generators.

Planning Review - Principal	08/29/2025	Dan Frazier	Revisions Required

Comments:

1. Provide adequate landscaping to effectively screen the parking lot from the adjacent residences, Lake Point Drive, and Buckwalter Parkway.
2. A Certificate of Occupancy for the Novant Health Bluffton Medical Center will not be issued prior to the completion of all required off-site improvements, including:
a. The installation of the required Innovation Drive secondary access road and associated traffic signal upgrades at the intersection of Innovation Drive and Bluffton Parkway, and
b. the required traffic signal upgrades at the intersection of Lake Point Drive and Buckwalter Parkway.
3. A landscaped buffer at least eight (8') feet wide shall be maintained between any structure and any parking or driving area, except for loading areas and areas where drive-through facilities are utilized. (Beaufort County DSO Section 4.23.2.2.(B))
4. A minimum nine (9') by eighteen (18') foot landscaped peninsula shall be installed parallel to the parking spaces every eight (8) or fewer spaces and at the end of the parking aisle in order to separate the last space from any adjacent travel ways (Beaufort County DSO Section 4.23.2.2.(E)(1)(b)).
5. This development is subject to the standards set forth in the Buckwalter PUD Concept Plan Development Agreement, the Parkway Corners Master Plan, and the UDO Sections 5.3 and 5.10.
6. The heliport shall meet all applicable Federal Aviation Administration requirements for heliport design.

Watershed Management Review DRC	08/27/2025	Samantha Crotty	Revisions Required

Comments:

1. The Narrative states on site BMPs will include pervious pavers, infiltration, and stormwater pond. The compliance calculator shows infiltration, impervious surface disconnection, and stormwater pond. The plans show infiltration and stormwater pond. Clarify which BMPs will be used to meet SoLoCo requirements, show their location on the plans, and revise application materials accordingly.
2. Provide the required pretreatment for each infiltration BMP per SWDM 4.5.3.
3. Infiltration practices with underdrains are considered bioretention-standard. (SWDM 4.5) Revise compliance calculator, and application materials accordingly.
4. At time of stormwater permit submittal: a) provide a geotechnical report that supports the use of infiltration BMPs in EACH proposed infiltration BMP area; b) verify that Post-3 and Post-4's drainage areas are accurate on the Post-Development exhibit.

Beaufort Jasper Water and Sewer Review	08/29/2025	Matthew Michaels	Approved
Building Safety Review	08/29/2025	Marcus Noe	Approved
Planning Commission Review	08/29/2025	Dan Frazier	Approved
Planning Review - Address	08/29/2025	Ryan Coleman	Approved
Police Department Review	08/29/2025	Bill Bonhag	Approved
Transportation Department Review	07/29/2025	Mark Maxwell	Approved

Comments:
No comments

Plan Review Case Notes:

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Site Development Plans

for

Bluffton Medical Center

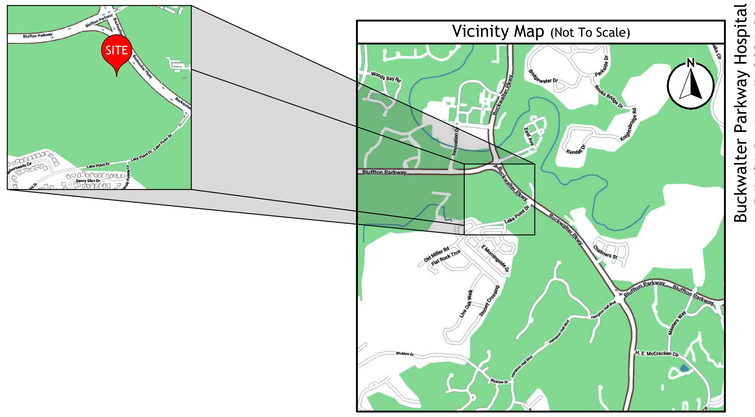
Usage: commercial

Town of Bluffton, South Carolina

Tax Map #:R610 029 000 2487 0000, R600 029 000 2410 0000

911 street address: Buckwalter Pkwy

GIS coord: N32° 15' 54", W80° 54' 48"



Buckwalter Parkway Hospital
BJWSA Project #: 2026-001

Release Schedule

Rel #	Description	Date
A.	Schematic Design Package	04-07-25
B.	Released for Permitting	07-03-25
C.	Released for Permitting	07-29-25

Schedule of Drawings

Sht No.	Description
C001	Cover Sheet
C002	Construction Notes
C003	Sheet Index
C101-C102	Existing Conditions Plans
C201-C202	Initial Erosion Control Plans
C203	Initial Erosion Control Details
C301-C302	Clearing & Demolition Plans
C401-C402	Site Layout Plans
C501-C502	Grading Plans
C601-C602	Drainage Plans
C603-C604	Drainage Plans Details
C700	Overall Utility Plan
C701-C702	Utility Plans
C703-C705	Utility Details
C706	Utility Profiles
C801-C802	Intermediate Erosion Control Plans
C803	Intermediate Erosion Control Details
C901-C902	Paving Plans
C903-C904	Paving Details
C905	Road Profiles
C1001-C1002	Final Erosion Control Plans
C1101	ADA Accessible Route Plan

Design Team

Wetland Consultant:
Newkirk Environmental
843.388.6585

Geotechnical Engineer:
Terracon
912.629.4000

Landscape Architect:
Whitmer Jones Keefer, Ltd.
843.757.7411

Architect:
McMillan Pazdan Smith Architecture
980.267.3627

Land Surveyor:
Atlas Surveying, Inc.
843.645.9277

Developer:
McMillan Pazdan Smith Architecture
Marcus Sheward / Principal
1422 South Tryon St. Suite 700 Charlotte, NC 28203
msheward@mcmillanpazdansmith.com
980.267.3627

ATTACHMENT 5

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

Permit Set - NOT FOR CONSTRUCTION

SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — JULIA R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:
COVER SHEET

SHEET NO.
C001

PROJ. NO.
024231.00

CONTACT 811 BEFORE YOU DIG — 811 — SOFT DIGGING PARTNER

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General Notes:

1. Boundary information provided by (info), dated (date), by (company).
2. Topographic data provided by (company), dated (date).
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 protect 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.

SCDES/BCM 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.

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-Beaufort County

1. All specimen trees per article 5.11.100 of the Beaufort County zoning and development standards ordinance, must be preserved unless specifically approved for removal in accordance with the Beaufort County zoning and development standards ordinance and indicated on the plans to be removed.
2. 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 article 5.11.100 of the Beaufort County zoning and development standards ordinance.
3. A tree protection zone shall be established in accordance with the provisions contained in article 5.11.100, section E of the Beaufort County zoning and development standards ordinance 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 one foot per inch dbh (diameter at breast height). The size or configuration of the tree protection zone may be modified only upon approval by the development review team.
4. 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 the zoning and development administrator. 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
5. Where utility lines must pass thru the tree protection zone, they shall be installed by horizontal boring beneath the roots of the tree.
6. Where it is necessary for machinery and equipment to pass within the tree protection zone, approval must be obtained from the zoning and development administrator. special measures will be required to protect the roots from excessive compaction.
7. The contractor is responsible for obtaining all tree-removal permits and for coordinating all inspections required by Beaufort County in connection with tree preservation and removal activities. during construction.

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

NOTES:
1. Gate valves shown for graphical purposes only. Contractor to place all valves at 18' from tee. see BJWSA detail G-15.
2. Contractor to provide 18" of separation between tapping saddles for all water laterals.
3. See construction notes sheet for BJWSA as-built survey requirements

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.

Water and Sewer Line Construction:

1. All water and sewer line construction shall conform to applicable state and Beaufort Jasper Water Sewer and 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 testified 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. Where 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 install a detectable warning 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 under this contract shall 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 connection 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.

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.

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 SCDES.
2. Hold pre-construction meeting.
3. Notify SCDES EQC regional office or BCM 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 SCDES or MS4 for acceptance.
24. Submit notice of termination (NOT) to SCDES 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.

Project Information

Source of Title:
Beaufort county register of deeds,
deed book xxxx page xxxx

Use:
Existing: Undeveloped
Proposed: Hospital
1 building
240,000 sq ft

Required Setbacks:
Rear: 33 Feet
Side: 33 Feet
Front: 50 Feet

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 %)

Parking Summary:
Parking use types
Use type = 1 space/1 medical staff
1 space/4 employees
1 space/6 patient beds
Parking required:
Total = 377 spaces
Accessible parking required: 37 spaces
Accessible parking provided: 37 spaces

Property Owner:
Hilton Head Medical Center, LLC
25 Hospital Center Blvd,
Hilton Head, SC 29926
704-316-4351
Jason.Adkins@meadowsandohly.com

Flood Zone:
"X"

Property Zoning:
Planned Unit Development PUD

Site Area:
Total: 17.8 acres
Disturbed: 14.0 acres

Required Buffers:
Front: 50 Feet Hwy Corridor Buffer
Rear: 16.5 Feet
Side: 16.5 Feet

Utility Contacts:

Palmetto Electric	843-208-5512	1 Cooperative Way, Hardeeville, SC 29927
Dominion Energy	800-251-7234	PO Box 100255 Columbia, SC 29202
BJWSA	843-987-9200	6 Snake Road, Okatie, SC 29909
Broad Creek PSD	843-785-7582	PO Box 5878, Hilton Head, SC 29938
South Island PSD	843-785-6224	PO Box 5148, Hilton Head, SC 29938
Hilton Head Island PSD	843-681-5525	PO Box 21264, Hilton Head, SC 29925
Hargray Communications	843-815-1675	PO Box 3380, Bluffton, SC 29910
Century Link	843-525-0044	2127 Boundary ST #16, Beaufort, SC 29902
Santee Cooper	843-761-8000	1 Riverwood Drive, Moncks Corner, SC 29461

Contractor Note:
Contractor to obtain and become familiar with geotechnical report #_____prepared by_____.

All work must conform to project technical specifications for (project name) 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			
Beaufort County Encroachment			
SCDES/MS4 Stormwater			
SCDES Water			
SCDES Wastewater			
Municipality Development			
USACE Determination			
CZC			
NPDES			

SCDES-BCM 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."

STANDARD ABBREVIATIONS

Ac	Acre
ADT	Average Daily Traffic
ASPH	Asphalt
BEG	Begin
BL	Baseline
BM	Benchmark
BOB	Bottom Of Bank
BOTT	Bottom
BRG	Bearing
BT	Buried Telephone
B/C	Back Of Curb
C	Rate Of Change In Slope
C & G	Curb and Gutter
CATV	Cable Television
CB	Catch Basin
CI	Curb Inlet
CL	Clearance or Centerline
CONST	Construction
CORR	Correction
CF	Cubic Feet
CY	Cubic Yard
DA	Drainage Area
DBI	Ditch Bottom Inlet
DBL	Double
DHV	Design Hourly Volume
DI	Drop Inlet
DIA or D	Diameter
DIP	Ductile Iron Pipe
DIT	Ditch
e	Superelevation
E	East Or External Distance
EGL	Existing Grade Line
EL or ELEV	Elevation
EMBK	Embankment
ENGR	Engineer
EQ	Equal
ESMT	Easement
EW	Endwall
EXIST	Existing
F & I	Furnish and Install
FES	Flared End Section
FFE	Finish Floor Elevation
FH	Fire Hydrant
FM	Force Main
FT	Foot or Feet
FUT	Future
GI	Grate Inlet
GRD	Grade
H or HT	Height
HDPE	High Density Polyethylene
HDWL	Headwall
HORIZ	Horizontal
HP	High Point
HW	Highwater
HWY	Highway
HYD	Hydrant or Hydraulic
ID	Inside Diameter
IE	Invert Elevation
IN	Inch
INSTL	Install
JB	Junction Box
LF	Linear Feet
LGTH	Length
LOW	Limit Of Work
LP	Low Point
LT	Left
MES	Mitred End Section
MH	Manhole
MHW	Mean High Water
MJ	Mechanical Joint
N	North
NBR	North Bound Roadway
NC	Normal Crown
NGVD	National Geodetic Vertical Datum
NIC	Not In Contract
OD	Outside Diameter
OH	Overhead
OHP	Overhead Power
PAVT	Pavement
PC	Point Of Curvature
PCC	Point Of Compound Curvature
PERF	Perforated
PG	Profile Grade
PGE	Profile Grade Elevation
PGL	Profile Grade Line
PI	Point Of Intersection
PL	Property L^{ine}
PR	Point Of Rotation
PRC	Point Of Reverse Curvature
PRCST	Precast
PT	Point Of Tangency
PVC	Polyvinyl Chloride
PVI	Point Of Vertical Intersection
Q	Peak Discharge or Flow Volume (CFS)
R	Rate Of Change In Elevation
R or RAD	Radius
RCP	Reinforced Concrete Pipe
RDWY	Roadway
REQ or REQD	Required
RT	Right
R/W	Right Of Way
S	Speed or South or Slope
SAHM	Sand-Asphalt Hot Mix
SAN	Sanitary
SF	Square Foot or Silt Fence
SY	Square Yard
SBR	South Bound Roadway
SD	Storm Sewer
SED	Sediment
SHW	Seasonal High Water
SS	Sanitary Sewer
SSMH	Sanitary Sewer Manhole
STA	Station
SUBGR	Subgrade
SUR	Survey
SW or SWK	Sidewalk
TC	Top Of Curb
TCE	Temporary Construction Easement
TEL	Telephone
TEMP	Temperature or Temporary
TG	Top Of Grate
TOB	Top Of Bank
TP	Top Of Pavement
TW	Top Of Sidewalk
TYP	Typical
UNDGR	Underdrain
UG	Underground
UE	Underground Electric
UT	Underground Telephone
UTIL	Utilities
VERT	Vertical
W	Width or West
WL	Water Line
WM	Water Main
WT	Water Table or Weight
WV	Water Valve
WWF	Welded Wire Fabric
YI	Yard Inlet

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

Sediment Control

Sediment Basin:	SB
Temporary Sediment Trap:	ST
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.

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

Ward Edwards ENGINEERING
119C Palmetto Way
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(843) 837-5250
www.WardEdwards.com

SEALS

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

SOUTH CAROLINA — No. 22816 — PROFESSIONAL ENGINEER — 07/29/25 — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

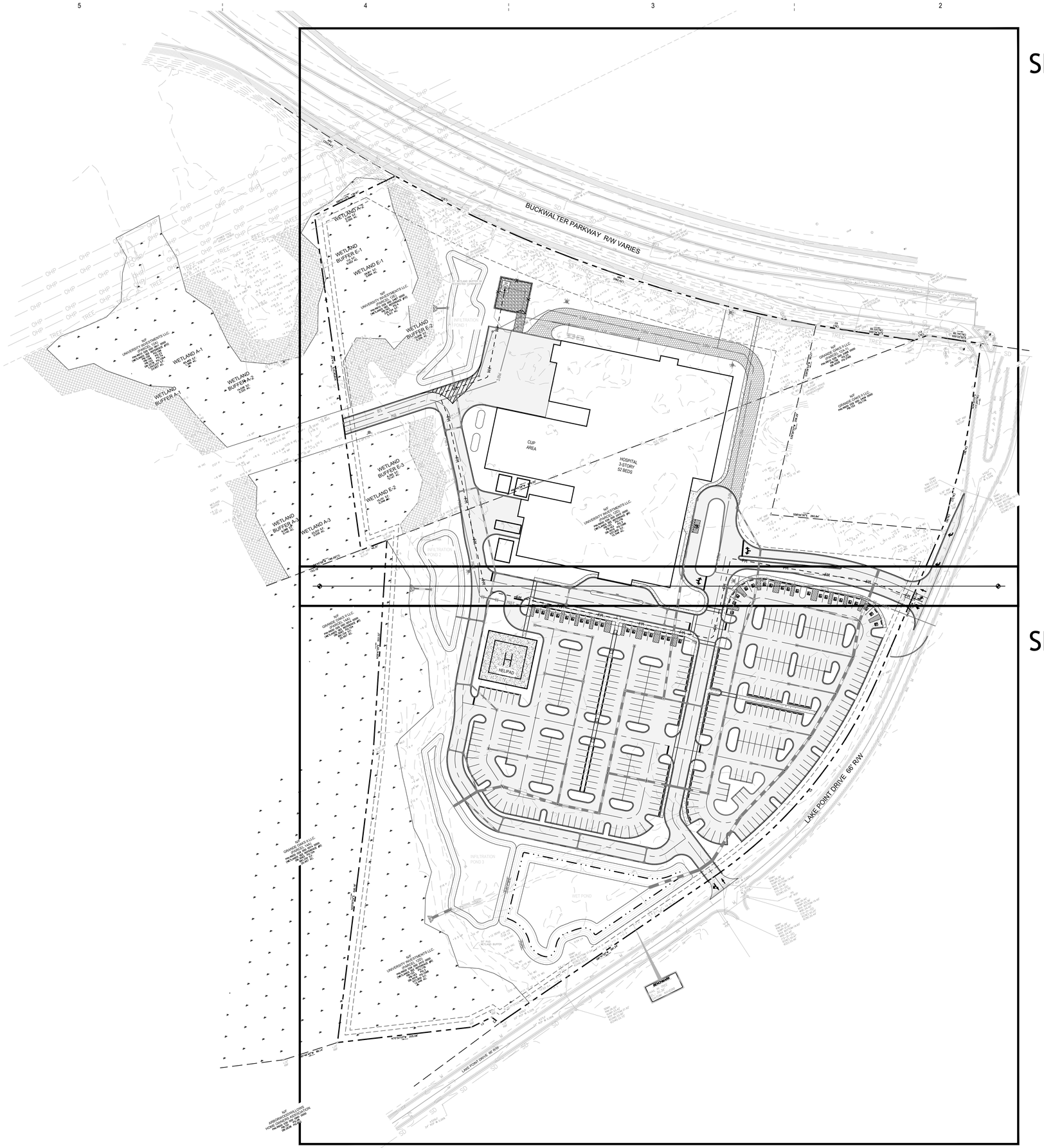
SHEET TITLE:

CONSTRUCTION NOTES

SHEET NO. C002

PROJ. NO. 024231.00

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SHEET 01

SHEET 02

0 60 120
Scale:1"= 60' Feet

ATTACHMENT 5

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WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

Sheet Index

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

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SHEET INDEX

SHEET NO. C003

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WETLAND A-2
2,194 S.F.
0.050 AC.

WETLAND BUFFER E-1
113 S.F.
0.003 AC.

WETLAND E-1
29,811 S.F.
0.684 AC.

WETLAND BUFFER E-2
15,656 S.F.
0.359 AC.

WETLAND BUFFER E-3
6,592 S.F.
0.147 AC.

WETLAND E-2
15,151 S.F.
0.348 AC.

WETLAND A-3
23,210 S.F.
0.533 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12E)
PIN:R610 029 000 2467 0000
(WETLANDS SEE REFERENCE #10)
PB:153 PG:176
235,724 S.F.
5.411 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN:R610 029 000 2410 0000
(WETLANDS SEE REFERENCE #4)
PB:153 PG:176
PB:153 PG:1
DB:4019 PG:1098
537,200 S.F.
12.248 AC.

N/F
GRANDE OAKS II LLC.
(PARCEL 12A-1)
PIN:R610 029 000 2468 0000
PB:153 PG:176
DB:4029 PG:2168

N/F
GRANDE OAKS II LLC.
PIN:R600 029 000 2409 0000
PB:153 PG:176

BUCKWALTER PARKWAY R/W VARIES

ARC (223.64')
S89°51'37"E 176.61'
ARC (682.42')
C1(T)
C5 (TIE)
92.33'(TIE) S55°54'32"E
L13 (TIE)
82.79'(TIE) S55°13'57"E
S39°26'53"W 90.27'
S39°26'53"W 208.29'
S58°44'30"E 260.84'
N84°45'58"W 676.00'
N84°45'58"W 196.09'(T)
153.78'
N39°26'53"E 1,059.49'
35' WETLAND BUFFER IR RESTRICTED COVENANTS
20' DRAINAGE & UTILITY EASEMENT (PER PB:82 PG:167)
30' PUD WETLAND BUFFER
10' WIDE DIRT ROAD
5/8" REBAR W/CAP
5/8" REBAR W/CAP FOUND
5/8" REBAR W/CAP SET
OHP
SD
SDMH
SDWL
SWL
SSMH
SSWL
WMH
WVLV
WHYD
WMTR
TREE
BOC
EOP
EOW
EOD
SHED
GAZEBO
WOOD FENCE ENCROACHMENT
CHAIN LINK FENCE ENCROACHMENT
WIRE FENCE
SHEET 01
SHEET 02

0 30 60
Scale:1"= 30' Feet

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

SEALS

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

SOUTH CAROLINA
REGISTERED
No. 22816
07/29/25
PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE:	07/29/2025
PHASE:	01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
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C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET NO. C101

PROJ. NO. 024231.00

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N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN-R600 039 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB-3093 PG-104
891,104 S.F.
20.457 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN-R600 039 000 0410 0000
(WETLANDS SEE REFERENCE #9)
PB-153 PG-176
PB-163 PG-109
DB-4019 PG-97
1,250,900 S.F.
28.717 AC.

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN-R600 039 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB-3093 PG-104
891,104 S.F.
20.457 AC.

153.78'

N20°47'46"E 322.22'

S69°45'57"E 445.68'

N70°32'03"W 205.08'

N46°45'W 86.14'

N43°00'54"E 445.18'

S81°47'05"W 391.24'

LAKE POINT DRIVE 66' R/W

BENCHMARK
NAIL IN TREE
EL= 30.36'
DATUM: NAVD88

30' PUD WETLAND BUFFER

45' DEAD

OAK

SDMH
RIM=26.36'
SUMP=21.59'
BOX_BOT/OM=19.58'
WSE=24.46'
(12"-2)=20.75
(E/SW)=20.75

SDMH
RIM=26.40'
SUMP=22.36'
BOX_BOT/OM=19.40'
WSE=24.40'
(12"-2)=21.52'
IE(SE)=20.24'
IE(W)=20.44'

SDMH
RIM=26.28'
SUMP=21.87'
BOX_BOT/OM=19.65'
WSE=24.45'
(12"-2)=21.23'
E(NE)=20.43'
E(E)=20.65'

SDMH
RIM=26.21'
BOX_BOTTOM=21.54'
IE(SE)=22.65'
IE(NW)=22.55'

SDMH
RIM=26.20'
SUMP=23.10'
BOX BOTTOM=21.92'
IE(OW)=22.85'
IE(NW)=22.75'

42LF
12" RCP @ 0.425%

32LF
24" RCP @ 0.286%

52LF
24" RCP @ 0.286%

55LF
24" RCP @ 0.325%

32LF
24" RCP @ 0.286%

SD

OHL

BSC

1/2" REBAR

1/2" RBF

1/2" RBF

IE:22.71'(VES)

N

0 30 60
Scale:1"= 30' Feet

ATTACHMENT 5

mcmillan pazdan smith
ARCHITECTURE

CONSULTANT LOGO

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SEALS

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WARD EDWARDS, INC.
No. C00152
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 22816
07/29/25
PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

Existing Conditions Plan

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	06/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET NO. C102

PROJ. NO. 024231.00

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ATTACHMENT 5

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Runoff Conveyance Measures

Vegetated Channels:	SVC SVC SVC
Riprap-Lined Channels:	RVC RVC RVC
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

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:	
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	CWC

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — ALAN R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE:	07/29/2025
PHASE:	01 SD

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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

SHEET TITLE:

INITIAL EROSION CONTROL PLAN

SHEET NO.	PROJ. NO.
	024231.00

C201

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ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

SHEET 01
SHEET 02

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 039 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB: 3093 PG: 1041
89,104 S.F.
2.457 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN: R600 039 000 0410 0000
(WETLANDS SEE REFERENCE #9)
PB: 153 PG: 176
PB: 163 PG: 1098
DB: 3019 PG: 2
237,906 S.F.
12.348 AC.

N/F
GRANDE OAKS II LLC.
- 14A)
01 0014 0000
REFERENCE #9)
PG: 104
S.F.
AC.

N70°32'03"W 205.08'

N43°05'54"E 445.18'

N70°32'03"W 322.22'

S81°47'05"W 391.24'

N46°45'W 86.14'

DOUBLE ROW SILT FENCE NEAR WETLAND

SILT FENCE (TYP.)

ROCK CONSTRUCTION ENTRANCE

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

NPDES LIMITS OF DISTURBANCE = 14 AC

TREE PROTECTION (TYP.)

BENCHMARK
NAIL IN TREE
EL= 30.36'
DATUM: NAVD88

LAKE POINT DRIVE 66' R/W

APPROXIMATE LOCATION OF EXISTING 14" FORCEMAIN

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

APPROXIMATE LOCATION OF EXISTING HYDRANT BL0304

EXISTING CURB INLET TO BE REMOVED AND REPLACED WITH GRATE INLET

30' PUD WETLAND BUFFER

CENTERLINE OF SWALE

SDMH RIM: 26.87' SUMP: 8.87' BOX BOTTOM: 19.65' (12"-N) 3.45° (E)(E): 20.47'

SDMH RIM: 26.28' SUMP: 8.28' BOX BOTTOM: 19.40' (12"-N) 3.45° (E)(E): 20.24'

SDMH RIM: 26.36' SUMP: 21.05' BOX BOTTOM: 19.58' (12"-E) 3.45° (E)(W): 20.75'

SDMH RIM: 26.20' SUMP: 22.42' BOX BOTTOM: 21.92' (E)(W): 22.72'

Limits of Disturbance:	NPDES
Erosion Prevention	
Land Grading:	LG OR AGR
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:	
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

0 30 60
Scale:1"= 30' Feet

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

Ward Edwards ENGINEERING
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(843) 837-5250
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SEALS

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

SOUTH CAROLINA — REGISTERED No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

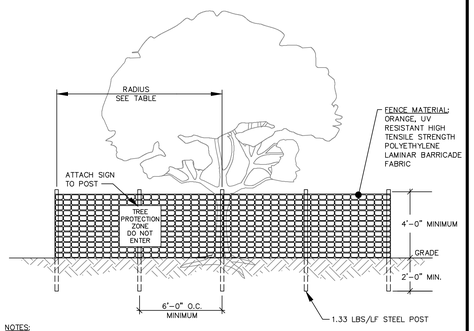
SHEET TITLE:

INITIAL EROSION CONTROL PLAN

SHEET NO. C202

PROJ. NO. 024231.00

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NOTES:
1. ALL TREES DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING.
2. INSTALL TREE PROTECTION FENCE TO RADIUS INDICATED IN TABLE UNLESS OTHERWISE INDICATED ON PLANS.
3. WARNING SIGNS TO BE MADE OF DURABLE WATERPROOF MATERIAL.
4. ALL WARNING SIGN LETTERS TO BE AT LEAST 3 INCHES HIGH, CLEARLY LEGIBLE AND SPACED A MINIMUM OF ONE EVERY 40 FT. FOR PROTECTION AREAS LESS THAN 40 FT IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER SIDE.
5. THE SIZE OF EACH WARNING SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
8. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. FENCING MUST REMAIN UPRIGHT AND SLACK FREE.

TABLE – RADIUS OF TREE PROTECTION ZONE (TPZ)	
JURISDICTION	RADIUS OF CIRCULAR TPZ
BEAUFORT COUNTY BEAUFORT CO. DEV. CODE 5.11.100	1 FOOT PER INCH OF TRUNK DBH
TOWN OF BLUFFTON UDO 5.3.3	1.5 FEET PER INCH OF TRUNK DBH OR 10 FEET WHICHEVER IS GREATER
TOWN OF HILTON HEAD LMO 16-6-104, J-3A	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED
CITY OF BEAUFORT BEAUFORT CODE 5.3.3	0.5 FOOT PER INCH OF TRUNK DBH
JASPER COUNTY ZONING ORD. ART. 13.5	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED
TOWN OF PORT ROYAL PORT ROYAL CODE 5.7.70	1.5 FEET PER INCH OF TRUNK DBH OR 5 FEET WHICHEVER IS GREATER
CITY OF HARDEEVILLE MZ&DO 4.8, F-3	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED

DBH = TRUNK DIAMETER AT BREAST HEIGHT

TREE PROTECTION FENCE

DETAIL #02915-008

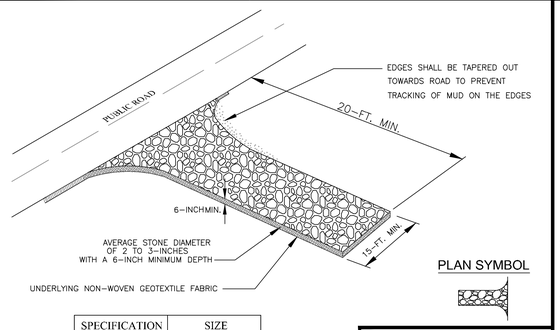
ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL./ACRE)
ANIONIC ASPHALT EMULSION	7:1*	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1*	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1*	FINE SPRAY	300

*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



PLAN SYMBOL

SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	15 FEET
ROCK PAD LENGTH	20 FEET
ROCK PAD STONE SIZE	D50 = 2-3 INCHES

South Carolina Department of Health and Environmental Control

RESIDENTIAL LOT CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06A 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 15-feet wide by 20-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.

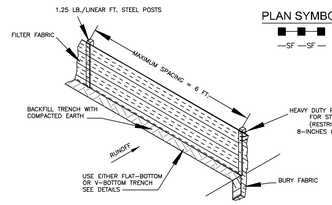
South Carolina Department of Health and Environmental Control

RESIDENTIAL LOT CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06A PAGE 2 of 2

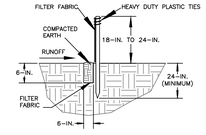
GENERAL NOTES FEBRUARY 2014 DATE

SILT FENCE INSTALLATION

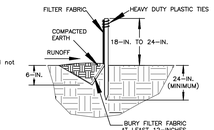


PLAN SYMBOL

FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



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.

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 along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
4. Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
5. Post spacing shall be at a maximum of 6-feet on center.

SILT FENCE – 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

ATTACHMENT 5

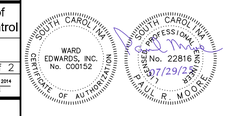
mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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P.O. Box 381, Bluffton, South Carolina 29910
(843) 837-5250
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Permit Set - NOT FOR CONSTRUCTION

SEALS



WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

INITIAL EROSION CONTROL DETAILS

SHEET NO. C203

PROJ. NO. 024231.00

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ATTACHMENT 5

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Clearing / Demolition Legend

Demolition	
Milling	
Tree to be Removed	
Tree Protection	

WETLAND A-2
2,194 S.F.
0.050 AC.

WETLAND BUFFER E-1
113 S.F.
0.003 AC.

WETLAND E-1
29,811 S.F.
0.684 AC.

WETLAND BUFFER E-2
15,656 S.F.
0.359 AC.

WETLAND BUFFER E-3
6,582 S.F.
0.151 AC.

WETLAND E-2
15,151 S.F.
0.348 AC.

WETLAND A-3
23,310 S.F.
0.535 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12E)
PIN:R610 029 000 2467 0000
(WETLANDS SEE REFERENCE #10)
PB:163 PG:4
235,724 S.F.
5.411 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN:R610 029 000 2410 0000
(WETLANDS SEE REFERENCE #10)
PB:153 PG:176
PB:163 PG:1
PB:163 PG:1098
337,900 S.F.
7.758 AC.
12.348 AC.

N/F
GRANDE OAKS II LLC.
(PARCEL 12A-1)
PIN:R610 029 000 2468 0000
PB:156 PG:53
08.4029 PG:2168

N/F
GRANDE OAKS II LLC.
PIN:R610 029 000 2409 0000
PB:153 PG:176

BUCKWALTER PARKWAY R/W VARIES

TREE PROTECTION (TYP.)

NPDES LIMITS OF DISTURBANCE = 14 AC

APPROXIMATE LOCATION OF EXISTING 14" FORCEMAIN

APPROXIMATE LOCATION OF EXISTING 16" WATERMAIN

APPROXIMATE LOCATION OF EXISTING FIRE HYDRANT BLO303 FIRE HYDRANT TO BE REMOVED AND RELOCATED

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

35' WETLAND BUFFER RESTRICTIVE COVENANTS

SHEET 01
SHEET 02

0 30 60
Scale:1"= 30' Feet

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CONSULTANT LOGO

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SEALS

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REGISTERED No. 22816 07/29/25 PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

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412 Buckwalter Pkwy, Bluffton, SC 29910

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HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

CLEARING & DEMOLITION PLAN

SHEET NO. C301

PROJ. NO. 024231.00

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SHEET 01
SHEET 02

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 039 000 0014 0000
(METLANDS SEE REFERENCE #9)
DB: 3593 PG: 104
891,103 S.F.
20.457 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN-R600 039 000 0410 0000
(METLANDS SEE REFERENCE #9)
PB: 153 PG: 176
PB: 163 PG: 3
PB: 409 PG: 1098
DB: 4374 PG: 5
DB: 4374 909 S.F.
12.148 AC.

NORTH 100' = 322.22'

N33°00'24"E 146.16'

N70°32'03"W 205.08'

S81°41'05"W 201.24'

N46°45'W 86.14'

APPROXIMATE LOCATION OF EXISTING 14" FORCEMAIN

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

APPROXIMATE LOCATION OF EXISTING HYDRANT BL0304

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

LAKE POINT DRIVE 66' R/W

NPDES LIMITS OF DISTURBANCE = 14 AC

EXISTING CURB INLET LID TO BE REMOVED AND REPLACED WITH GRATE INLET

TREE PROTECTION (TYP.)

BENCHMARK
NAIL IN PIPE
EL= 30.36'
DATUM: NAVD88

30' PUD WETLAND BUFFER

Clearing / Demolition Legend

Demolition	
Milling	
Tree to be Removed	
Tree Protection	

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

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CONSULTANT LOGO

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SOUTH CAROLINA — No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

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ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

CLEARING & DEMOLITION PLAN

SHEET NO. C302

PROJ. NO. 024231.00

Scale: 1"= 30' (0, 30, 60 Feet)

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ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

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SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

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PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

SITE LAYOUT PLAN

SHEET NO. C401

PROJ. NO. 024231.00



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SHEET 01
SHEET 02

SHEET 01
SHEET 02

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 039 000 0410 0000
(WETLANDS SEE REFERENCE #9)
DB: 3093 PG: 104
891,104 S.F.
20.457 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN: R600 039 000 9410 0000
(WETLANDS SEE REFERENCE #9)
DB: 153 PG: 176
PB: 163 PG: 1098
PB: 019 PG: 2
DB: 3093 PG: 104
837,946 S.F.
12.348 AC.

HELIPAD

LAKE POINT DRIVE 66' R/W

BENCHMARK
NAIL IN TREE
EL.= 30.36'
DATUM: NAVD88

N 157201.87
E 2026417.55

N 157214.09
E 2026395.84

N 157148.06
E 2026433.82

N 157136.23
E 2026449.73

N 157122.61
E 2026468.87

N 157083.80
E 2026536.17

N 157181.29
E 2026517.06

N 157110.36
E 2026607.91

N 157070.09
E 2026669.07

N 157091.32
E 2026592.91

N 157044.81
E 2026745.84

N 157016.85
E 2026728.03

N 157028.70
E 2026607.03

N 156988.79
E 2026658.34

N 156997.97
E 2026713.26

N 157010.68
E 2026517.01

N 157056.04
E 2026389.75

N 157044.28
E 2026408.55

N 156973.08
E 2026563.85

N 156934.33
E 2026615.98

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E 2026663.35

N 156875.12
E 2026692.50

N 156993.43
E 2026427.59

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E 2026335.14

N 156956.96
E 2026352.49

N 156945.54
E 2026390.39

N 156909.02
E 2026437.96

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E 2026485.56

N 156832.93
E 2026537.10

N 156796.34
E 2026584.62

N 156773.84
E 2026613.94

N 156760.00
E 2026631.51

N 156737.83
E 2026660.79

N 156717.14
E 2026782.85

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E 2026383.98

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E 2026345.76

N 156891.66
E 2026323.57

N 156890.00
E 2026303.91

N 156840.99
E 2026364.97

N 156823.46
E 2026447.42

N 156783.62
E 2026498.64

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E 2026348.39

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E 2026599.10

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E 2026231.57

N 156751.45
E 2026201.13

N 2026775.47

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E 2026834.79

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E 2026776.50

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E 2026733.60

N 156861.22
E 2026709.99

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E 2026790.50

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E 2026696.77

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E 2026690.50

N 156929.37
E 2027043.03

N 156905.38
E 2027018.81

N 156872.63
E 2026982.88

N 156827.61
E 2026950.01

N 156788.94
E 2026902.06

N 156639.34
E 2026599.10

N 156751.05
E 2026231.57

N 156751.45
E 2026201.13

N70°32'03"W 205.08'

N70°32'03"W 391.24'

N53°05'54"E 446.18'

S81°47'05"W 391.24'

N70°32'03"W 205.08'

'46'45"W 86.14'

242.4'

322.22'

153.78'

R252'

R20'

R10'

R12'

R4.5'

R74'

24"

18"

9"

5'

12'

14'

SDMH
RIM: 26.36'
SUMP: 21.19'
BOX BOTTOM: 19.58'
W(E): 24.46'
W(W): 24.33'
I(E,SW): 20.75'

SDMH
RIM: 26.40'
SUMP: 22.36'
BOX BOTTOM: 19.40'
W(E): 24.40'
(12"): 24.23'
I(E): 20.23'
I(W): 20.44'

SDMH
RIM: 26.28'
SUMP: 21.87'
BOX BOTTOM: 19.65'
W(E): 24.45'
(12"): 24.07'
I(E): 20.46'

SDMH
RIM: 26.20'
SUMP: 22.42'
BOX BOTTOM: 21.92'
I(E,SW): 22.92'
I(W): 23.72'

525LF
24" RCP @ 0.26%

ATTACHMENT 5

mcmillan pazdan smith
ARCHITECTURE

CONSULTANT LOGO

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

Permit Set - NOT FOR CONSTRUCTION

SEALS

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

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 22816
07/29/25
JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE:	07/29/2025
PHASE:	01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

SHEET TITLE:

SITE LAYOUT PLAN

SHEET NO.

C402

PROJ. NO.
024231.00

0 30 60
Scale:1"= 30 ' Feet

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ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

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	

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

Ward Edwards ENGINEERING

119C Palmetto Way
P.O. Box 381, Bluffton,
South Carolina 29910

(843) 837-5250
www.WardEdwards.com

SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

SHEET TITLE:

GRADING PLAN

SHEET NO.: C501

PROJ. NO.: 024231.00

Scale:1"= 30' — 0, 30, 60 Feet

SHEET 01 / SHEET 02

SHEET 01 / SHEET 02

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SHEET 01
SHEET 02

INFILTRATION POND 2
BOB: 24'
TOB: 27'

N/F GRANDE OAKS II LLC. (PARCEL 14A)
PIN: R600 029 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB: 1093 PG: 104
891,104 S.F.
20.457 AC.

N/F UNIVERSITY INVESTMENTS LLC. (PARCEL 12D)
PIN: R600 029 000 0410 0000
(WETLANDS SEE REFERENCE #9)
PB: 153 PG: 176
PB: 163 PG: 1098
DB: 4018 PG: 1098
DB: 4371 PG: 300
1,234,348 S.F.
28.346 AC.

INFILTRATION POND 3
BOB: 24'
TOB: 27'

WET POND
BOB: 21'
NWL: 23'
TOB: 27'

30' PUD WETLAND BUFFER

TREE PROTECTION (TYP.)

BENCHMARK
NAIL IN TREE
ELEV: 30.56'
DATUM: NAVD88

LAKE POINT DRIVE 66' R/W

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	

0 30 60
Scale:1"= 30' Feet

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

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C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

SHEET TITLE:

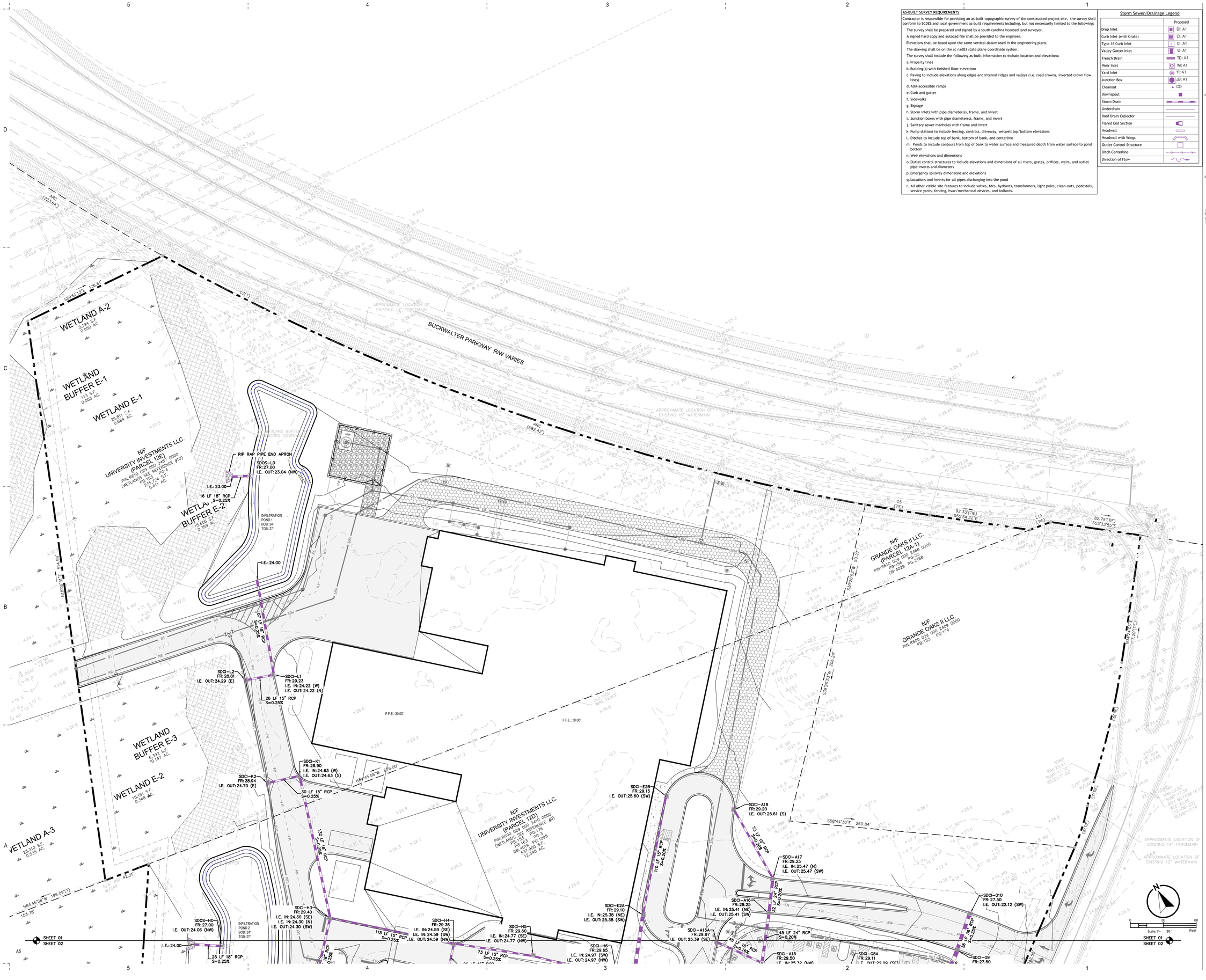
GRADING PLAN

SHEET NO.

C502

PROJ. NO. 024231.00

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AS-BUILT SURVEY REQUIREMENTS

Contractor is responsible for providing an as-built topographic survey of the constructed project site. the survey shall conform to SCDES 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	

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE:	07/29/2025
PHASE:	01 SD

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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

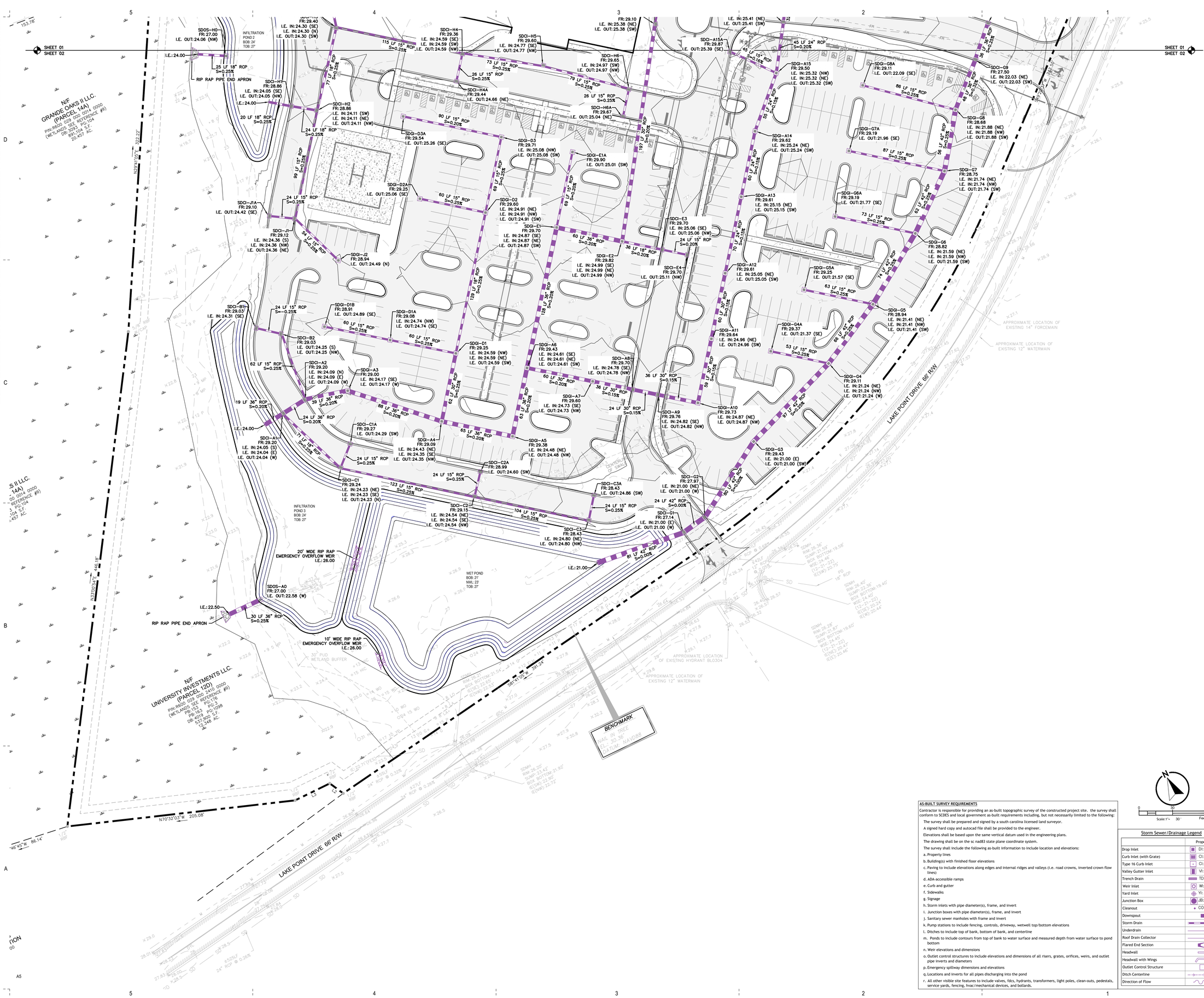
SHEET TITLE:

DRAINAGE PLAN

SHEET NO.: C601

PROJ. NO.: 024231.00

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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	

Scale: 1" = 30' (0, 30, 60 Feet)

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

Ward Edwards ENGINEERING
119C Palmetto Way
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(843) 837-5250
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SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

412 Buckwalter Pkwy, Bluffton, SC 29910

BLUFFTON HOSPITAL CAMPUS PLANNING

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

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C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

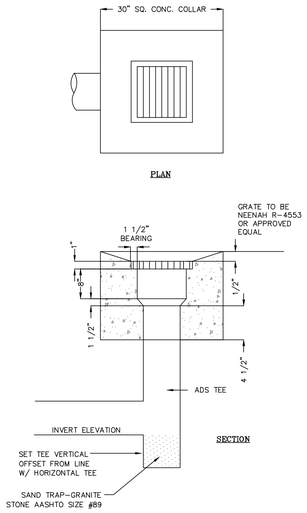
SHEET TITLE:

DRAINAGE PLAN

SHEET NO. C602

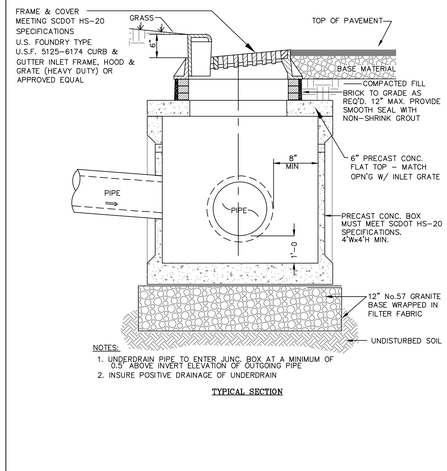
PROJ. NO. 024231.00

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YARD INLET

DETAIL 02630-020

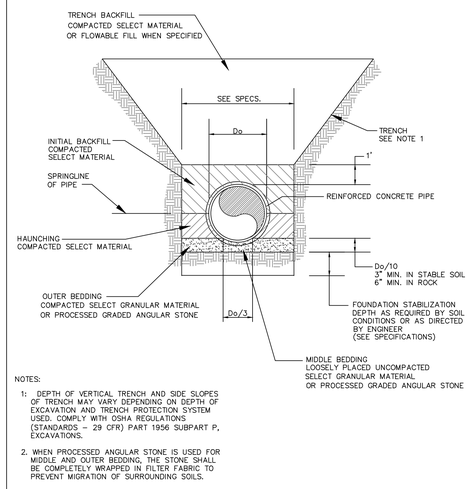


NOTES:
1. UNDERDRAIN PIPE TO ENTER JUNC. BOX AT A MINIMUM OF 0.5' ABOVE INVERT ELEVATION OF OUTGOING PIPE
2. INSURE POSITIVE DRAINAGE OF UNDERDRAIN

TYPICAL SECTION

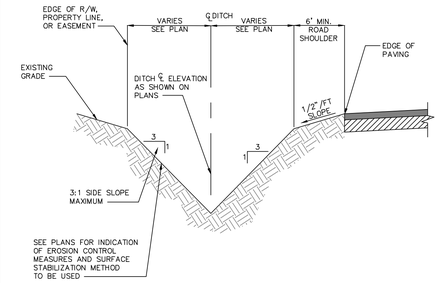
CURB INLET WITH FRAME AND COVER

DETAIL 02630-028



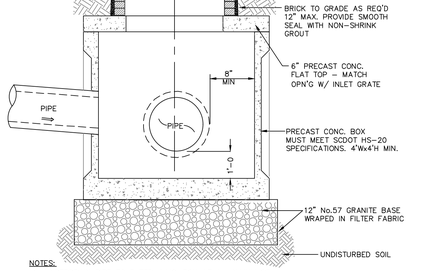
NOTES:
1: DEPTH OF VERTICAL TRENCH AND SIDE SLOPES OF TRENCH MAY VARY DEPENDING ON DEPTH OF EXCAVATION AND TRENCH PROTECTION SYSTEM USED. COMPLY WITH OSHA REGULATIONS (STANDARDS - 29 CFR) PART 1956 SUBPART P, EXCAVATIONS.
2. WHEN PROCESSED ANGULAR STONE IS USED FOR MIDDLE AND OUTER BEDDING, THE STONE SHALL BE COMPLETELY WRAPPED IN FILTER FABRIC TO PREVENT MIGRATION OF SURROUNDING SOILS.

EMBEDMENT DETAIL FOR REINFORCED CONCRETE PIPE



TYPICAL V-SHAPED DITCH CROSS SECTION

DETAIL 02630-024

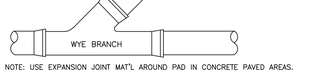


NOTES:
1. UNDERDRAIN PIPE TO ENTER JUNC. BOX AT A MINIMUM OF 0.5' ABOVE INVERT ELEVATION OF OUTGOING PIPE
2. INSURE POSITIVE DRAINAGE OF UNDERDRAIN

TYPICAL SECTION

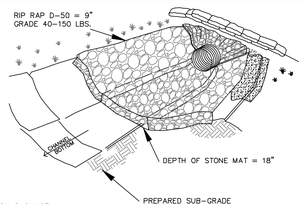
JUNCTION BOX WITH FRAME AND COVER

DETAIL 02630-030



NOTE: USE EXPANSION JOINT MAT'L AROUND PAD IN CONCRETE PAVED AREAS.

CLEANOUT DETAIL

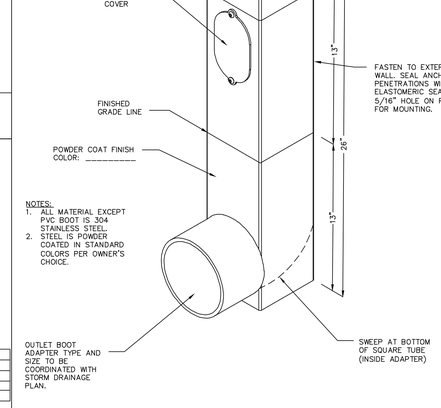


NOTES:
1. PLACE ALL RIP RAP ON 8 OUNCE NON-WOVEN FILTER CLOTH.
2. STAKING OF FILTER CLOTH PER MANUFACTURER'S SPECIFICATIONS.
3. SEE DRAINAGE SHEET FOR RIP-RAP DIMENSIONS

LOCATION	LENGTH (ft)	WIDTH (ft)
LAGOON PIPE INTERCONNECTION	12.00	14.00
BORROW PIT OUTFALL	20.00	23.00
INFILTRATION BASIN OUTFALL	20.00	23.00
STORAGE BASIN 2 OUTFALL	20.00	23.00

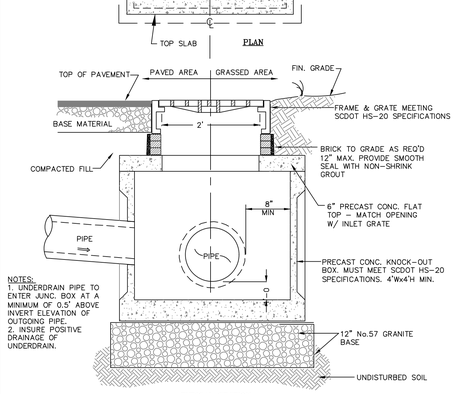
RIP RAP OUTLET STABILIZATION DETAIL

DETAIL #02370-009



NOTES:
1. ALL MATERIAL EXCEPT PVC BOOT IS 304 STAINLESS STEEL.
2. STEEL IS POWDER COATED IN STANDARD COLORS PER OWNER'S CHOICE.

GUTTER DOWNSPOUT ADAPTER

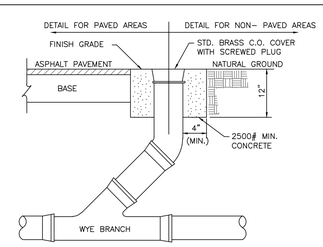


NOTES:
1. UNDERDRAIN PIPE TO ENTER JUNC. BOX AT A MINIMUM OF 0.5' ABOVE INVERT ELEVATION OF OUTGOING PIPE.
2. INSURE POSITIVE DRAINAGE OF UNDERDRAIN.

TYPICAL SECTION

GRATE INLET

DETAIL 02630-027



NOTE: USE EXPANSION JOINT MAT'L AROUND PAD IN CONCRETE PAVED AREAS.

CLEANOUT DETAIL

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE:	07/29/2025
PHASE:	01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

SHEET TITLE:

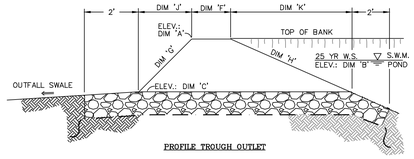
DRAINAGE DETAILS

SHEET NO.

C603

PROJ. NO. 024231.00

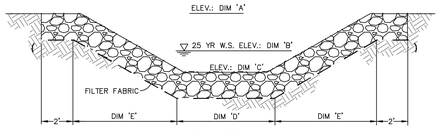
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PROFILE TROUGH OUTLET

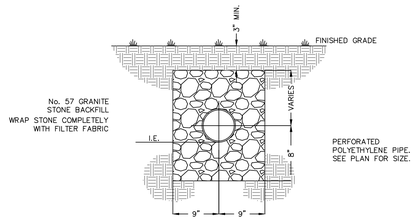
DIMENSION DATA

DIM 'A'	27.00'	TOP OF BANK
DIM 'B'	25.70'	25 YR. PEAK
DIM 'C'	26.00'	WQR ELEV.
DIM 'D'	10.00'	WIDTH
DIM 'E'	3	SLOPE RUN
DIM 'F'	10.00'	TOP WIDTH
DIM 'G'	3:1	SLOPE OUT
DIM 'H'	3:1	SLOPE IN
DIM 'J'	3	RUN OUT
DIM 'K'	3	RUN IN

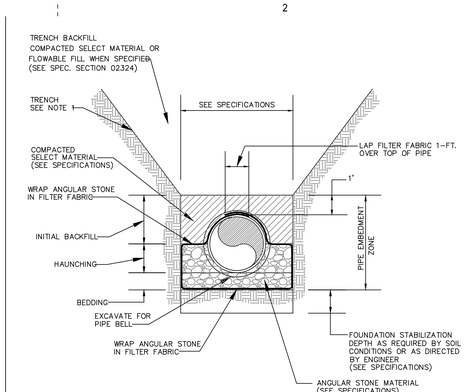


CROSS SECTION

EMERGENCY SPILLWAY - WET POND
DETAIL 02630-013



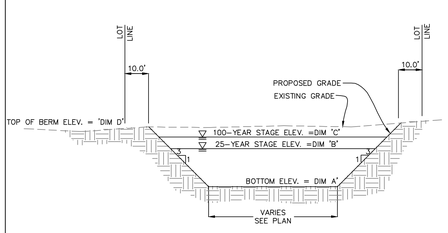
SUBGRADE DRAIN
DETAIL 02630-014



NOTE 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.

EMBEDMENT DETAIL FOR THERMOPLASTIC GRAVITY SEWERS AND DRAINS
DETAIL 02537 - XX

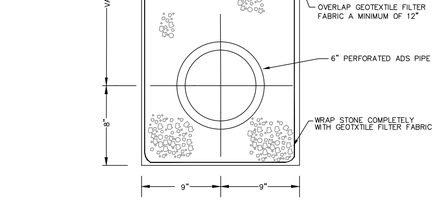
SCALE: NONE



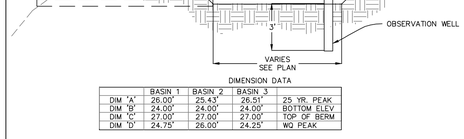
EROSION & SEDIMENT CONTROL NOTE:
1. SEE PLANS FOR INDICATION OF EROSION CONTROL MEASURES AND SURFACE STABILIZATION METHOD TO BE USED

DIMENSION TABLE	
DIM.	WET POND
A	21.00'
B	25.70'
C	26.25'
D	27.00'

WET DETENTION BASIN CROSS SECTION
DETAIL 02630-034



SUBGRADE DRAIN DETAIL
DETAIL 02630-021



DIMENSION DATA

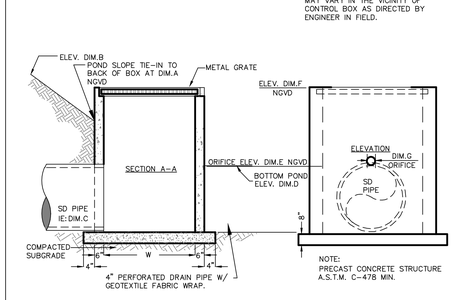
	BASIN 1	BASIN 2	BASIN 3	
DIM 'A'	26.00'	25.43'	26.51'	25 YR. PEAK
DIM 'B'	24.00'	24.00'	24.00'	BOTTOM ELEV.
DIM 'C'	27.00'	27.00'	27.00'	TOP OF BERM
DIM 'D'	24.75'	26.00'	24.25'	WQ PEAK

EMBANKMENT CONSTRUCTION NOTES:
1. ALL VEGETATION ROOTS, BRUSH, SOD, RUBBISH, DEBRIS, AND ALL OTHER UNSUITABLE MATERIALS SHALL BE STRIPPED AND REMOVED FROM THE LIMITS OF THE PROPOSED EMBANKMENT CONSTRUCTION.
2. THE MATERIAL FOR THE EMBANKMENT CONSTRUCTION SHALL CONSIST OF SAND-CLAY OR CLAYEY SAND. THE SOIL FILL SHALL BE FREE OF ORGANICS AND SENSITIVE CLAY MATERIALS.
3. THE EMBANKMENT AND BACKFILL MATERIAL SHALL BE COMPACTED TO 95%E MAXIMUM DRY DENSITY, AS DETERMINED BY THE STANDARD PROCTOR TEST. ALL FILL SHALL BE COMPACTED TO THE LINES, DEPTHS, AND GRADES AS INDICATED. EXCESS EXCAVATION OF THE EXISTING SOILS MAY BE NECESSSARY TO OBTAIN THE REQUIRED DENSITY AT THE LIMITS OF EXCAVATION.

EROSION & SEDIMENT CONTROL NOTE:
1. SEE PLANS FOR INDICATION OF EROSION CONTROL MEASURES AND SURFACE STABILIZATION METHOD TO BE USED

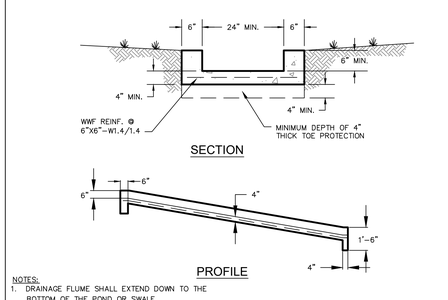
ADDITIONAL CONSTRUCTION NOTES:
1. THE OBSERVATION WELL SHOULD CONSIST OF A WELL-ANCHORED, PERFORATED 4-TO6-INCH DIAMETER PVC PIPE
2. THE OBSERVATION WELL SHOULD NOT HAVE PERFORATIONS WITHIN ONE FOOT OF THE SURFACE
3. THE OBSERVATION WELL SHOULD EXTEND VERTICALLY FROM THE BOTTOM OF THE STONE LATER UP TO THE TOP OF THE WATER QUALITY PONDING DEPTH

INFILTRATION BASIN CROSS SECTION
DETAIL 02630-033



NOTE:
TYPICAL SIDE-SLOPE OF POND MAY VARY IN THE VICINITY OF CONTROL BOX AS DIRECTED BY ENGINEER IN FIELD.

BMP OUTLET CONTROL STRUCTURE
DETAIL 02630-031



NOTES:
1. DRAINAGE FLUME SHALL EXTEND DOWN TO THE BOTTOM OF THE POND OR SWALE.
2. TO BE USED ON GRADUAL SLOPES OF 3:1 OR LESS.

CONCRETE FLUME - TYPE A

ATTACHMENT 5

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

Ward Edwards ENGINEERING
119C Palmetto Way
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(843) 837-5250
www.WardEdwards.com

SEALS

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SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

Permit Set - NOT FOR CONSTRUCTION

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

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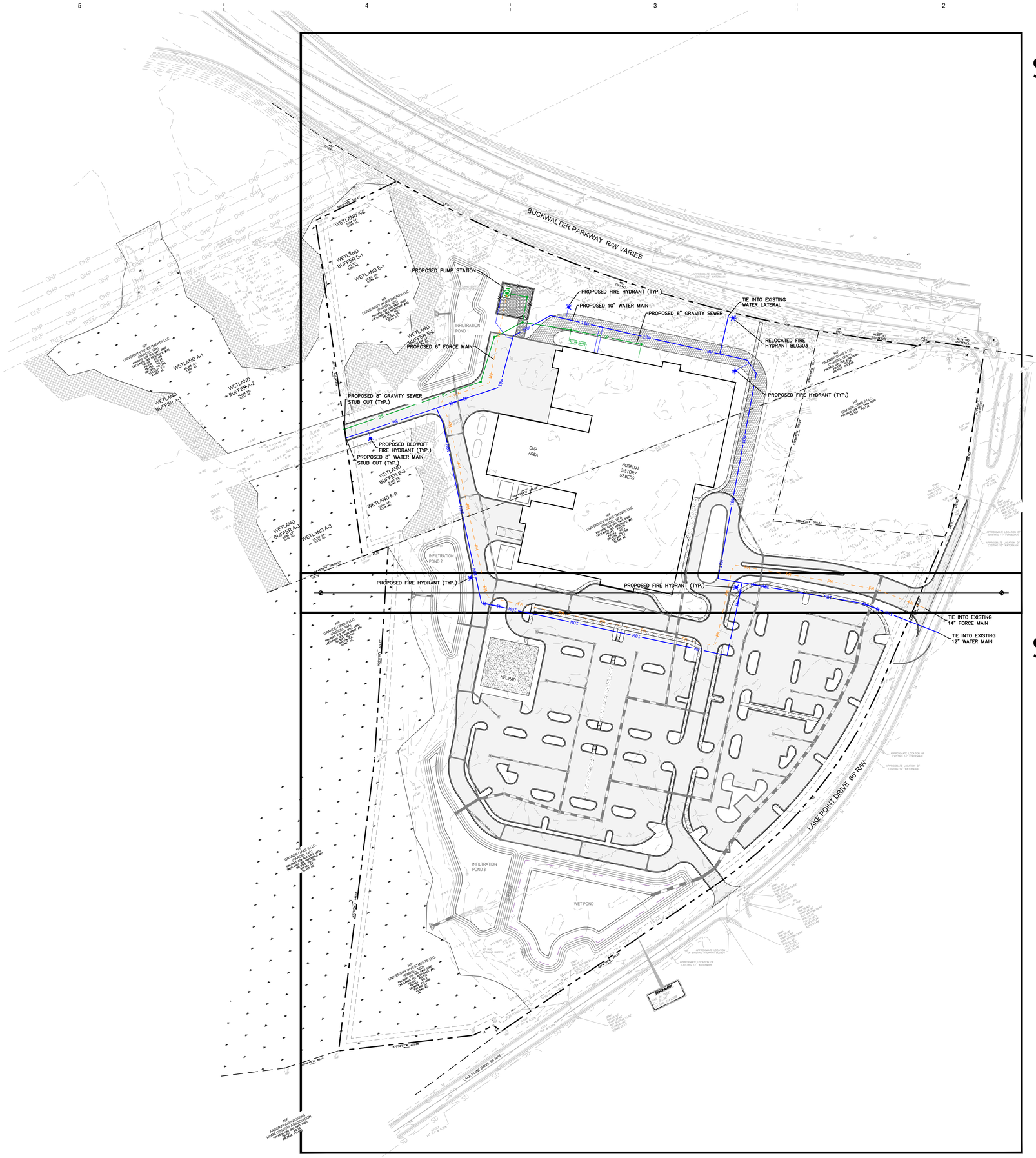
VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ
PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:
DRAINAGE DETAILS

SHEET NO. C604

PROJ. NO. 024231.00

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SHEET 01

SHEET 02

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

SHEET TITLE:

OVERALL UTILITY PLAN

SHEET NO.

C700

PROJ. NO. 024231.00

0 60 120
Scale: 1"= 60' Feet

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ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

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	
Sewer Line	S
Force Main	F
Reuse Main	R
Service Lateral	

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

Ward Edwards ENGINEERING

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SEALS

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SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

SHEET TITLE:

UTILITY PLAN

SHEET NO.: C701

PROJ. NO.: 024231.00

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SHEET 01
SHEET 02

INFILTRATION POND 2

6" 11.25° BEND
6" 45° BEND
10" 22.5° BEND
10" 45° BEND WITH MARKER
18 LF 10" DIP CL350 WL CENTERED ON CROSSING (TYP.) USE 4-45° BENDS TO LOCATE WL UNDER SD SEPARATION 1.50'

N/F GRANDE OAKS II LLC. (PARCEL 14A) PIN-R600 029 000 0014 0000 (WETLAND) SEE REFERENCE #9) DB-3093 PG-104 891,104 S.F. 20.457 AC.

N53°00'54"E 445.19'

1310 LF 6" PVC C900 DR25 SANITARY SEWER FORCEMAIN

FIRE HYDRANT ASSEMBLY #XXXXXX/TT
10"X 6" MJ SWIVEL TEE
6" G.V., BOX & COVER
7 LF 6" CL350

18 LF 10" DIP CL350 WL CENTERED ON CROSSING (TYP.) USE 4-45° BENDS TO LOCATE WL UNDER SD SEPARATION 1.50'

6" 45° BEND
10" 90° BEND WITH MARKER

10" 11.25° BEND
18 LF 10" DIP CL350 WL CENTERED ON CROSSING (TYP.) USE 4-45° BENDS TO LOCATE WL UNDER SD SEPARATION 1.50'

14"X6" TAPPING SLEEVE
6" G.V. IN BOX (TRAFFIC RATED)
6" CHECK VALVE IN MANHOLE (NOT PLUGGED IN WHEEL PATH)
6" PLUG VALVE

12"X10" TAPPING SLEEVE
10" G.V. IN BOX W/ MARKER (TRAFFIC RATED)
CONTRACTOR TO FIELD VERIFY LOCATION

APPROXIMATE LOCATION OF EXISTING 14" FORCEMAIN
APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

LAKE POINT DRIVE 66' R/W

INFILTRATION POND 3

WET POND

30' PUD WETLAND BUFFER

N/F UNIVERSITY INVESTMENTS LLC. (PARCEL 12D) PIN-R600 029 000 0410 0000 (WETLAND) SEE REFERENCE #9) PB-153 PG-179 DB-4019 PG-1098 PB-309 PG-57 12,300 S.F. 0.282 AC.

S81°47'05"W 391.24'

N70°32'03"W 205.08

S46°45'W 86.14'

BENCHMARK
NAIL IN TREE
EL= 30.36'
DATUM: NAVD88

APPROXIMATE LOCATION OF EXISTING HYDRANT BL0304

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

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	
Sewer Line	S
Force Main	F
Reuse Main	R
Service Lateral	

0 30 60
Scale:1"= 30 ' Feet

ATTACHMENT 5

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO
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WARD EDWARDS JOB NUMBER: 230641

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DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

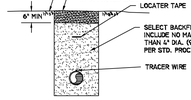
SHEET TITLE:

UTILITY PLAN

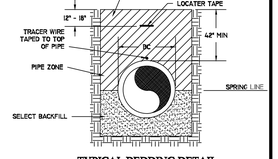
SHEET NO. C702

PROJ. NO. 024231.00

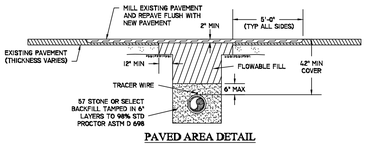
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UNPAVED ROADWAY BEDDING DETAIL



TYPICAL BEDDING DETAIL

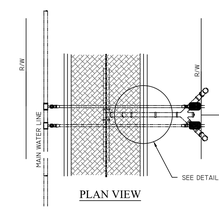


PAVED AREA DETAIL

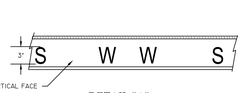
NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN.
2. MILL AND REPLACE OF ASPHALT TO EXTENTS SHOWN SHALL BE BY SCDOT CERTIFIED PAVING CONTRACTOR. MINIMUM THICKNESS OF ASPHALT REPLACEMENT SHALL BE 2 INCHES.
3. FLOWABLE FILL SHALL BE PLACED FLUSH WITH BOTTOM OF EXISTING PAVEMENT MILL. NO VOIDS OR FILL SHALL BE EVIDENT BETWEEN FLOWABLE FILL AND NEW ASPHALT PAVEMENT.
4. LANE STRIPING SHALL ONLY BE REPLACED ON NEW ASPHALT 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	

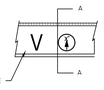
NOTES:
1. CURB MARKING SHALL BE PERPENDICULAR WITH SERVICE LOCATION.
2. CURB MARKING SHALL BE EMBOSSED INTO CURB FACE.
   A. WATER SERVICES SHALL BE DENOTED WITH A "W".
   B. SEWER SERVICES SHALL BE DENOTED WITH A "S".
   C. VALVES SHALL BE DENOTED BY A "V".
   D. BENDS SHALL BE DENOTED WITH A "B".
3. 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".



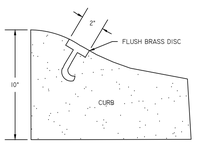
PLAN VIEW



DETAIL "A"

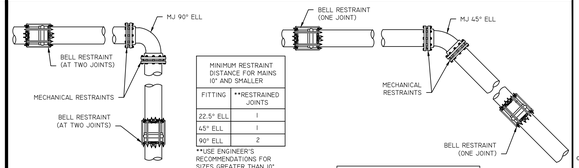


DETAIL "B"



SECTION A-A

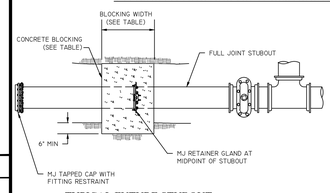
BEAUFORT-JASPER WATER & SEWER AUTHORITY		
CURB MARKING DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G-07
SCALE: N.T.S	APPROVED BY: ERS	



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

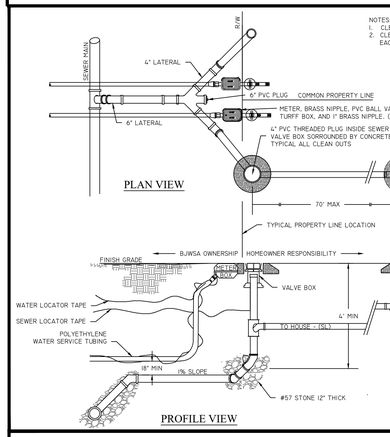


TYPICAL FUTURE STUBOUT

MINIMUM BLOCKING DIMENSIONS		
PIPE SIZE (IN)	BLOCKING BEARING AREA (FT²)	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	

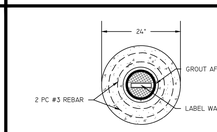


PLAN VIEW

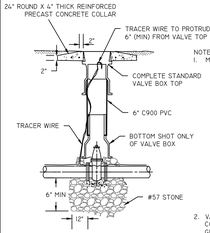
PROFILE VIEW

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

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	

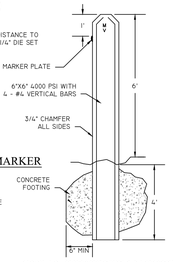


CONCRETE COLLAR



VALVE AND VALVE BOX

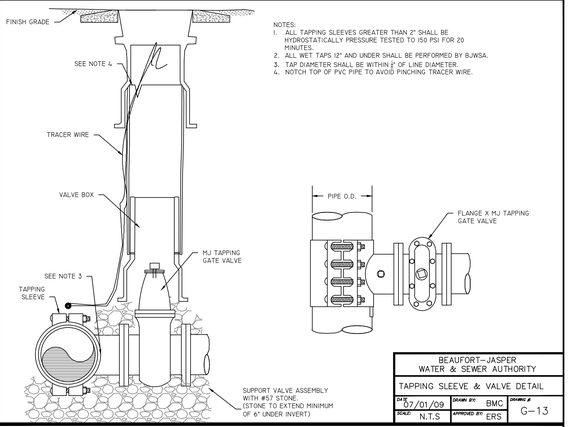
NOTES:
1. MARKERS
   A. VALVE MARKERS ARE REQUIRED FOR EACH VALVE (EXCEPT HYDRANT VALVES). PIPE LINE MARKERS ARE REQUIRED AT FITTINGS AND EACH 700' WHERE LINES RUN THROUGH AN UNDEVELOPED AREA. AR MANHOLE REQUIRES MANHOLE.
   B. MARKER PAINTING
      WATER - PAINTING NOT REQUIRED
      SEWER INFLUENT - 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 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.



URBAN CONCRETE MARKER

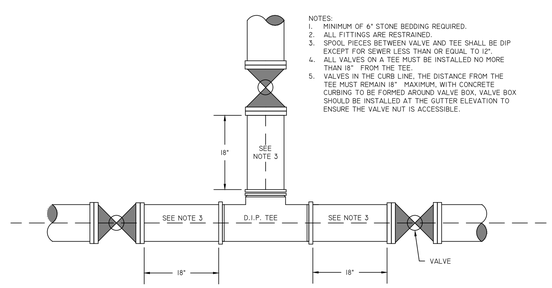
RURAL CONCRETE MARKER

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 ½" OF LINE DIAMETER.
4. NOTCH TOP OF PVC PIPE TO AVOID PINCHING TRACER WIRE.

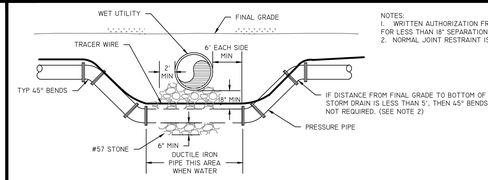
BEAUFORT-JASPER WATER & SEWER AUTHORITY		
TAPPING SLEEVE & VALVE DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: G-13
SCALE: N.T.S	APPROVED BY: ERS	



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.

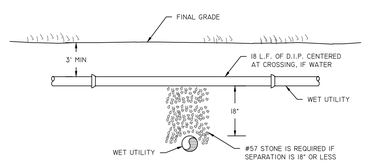
REVISED BY WARD EDWARDS 07/19/21 TO INCLUDE NOTES 4 & 5.

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	



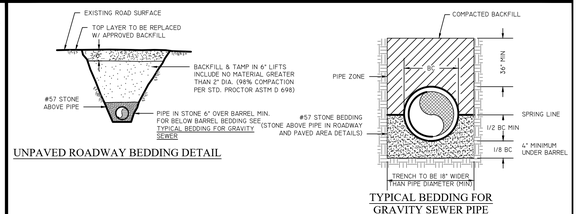
PRESSURE PIPE UNDER WET UTILITY FOR FINAL DEPTH 5' OR GREATER

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



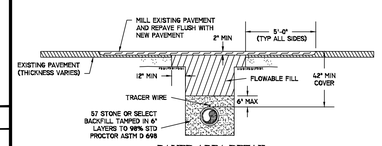
WET UTILITY CROSSING

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	



UNPAVED ROADWAY BEDDING DETAIL

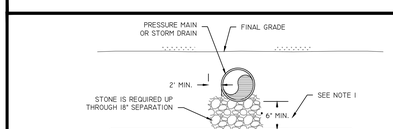
TYPICAL BEDDING FOR GRAVITY SEWER PIPE



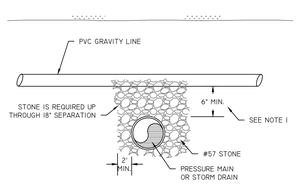
PAVED AREA DETAIL

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".
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 BE ONLY REPLACED ON NEW ASPHALT 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 DETAIL, GRAVITY PIPE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-01
SCALE: N.T.S	APPROVED BY: ERS	



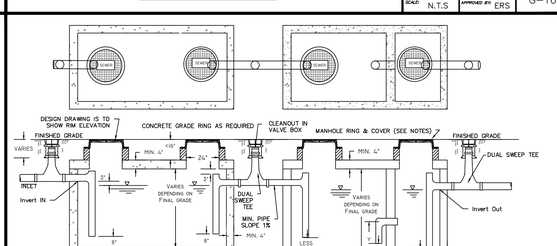
GRAVITY MAIN CROSSING UNDER STORM DRAIN / PRESSURE MAIN



GRAVITY MAIN CROSSING OVER STORM DRAIN / PRESSURE MAIN

NOTE:
1. SYSTEMS SHOULD NOT BE DESIGNED WITH LESS THAN 12" SEPARATION. IF LESS SEPARATION IS UNAVOIDABLE, WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED.

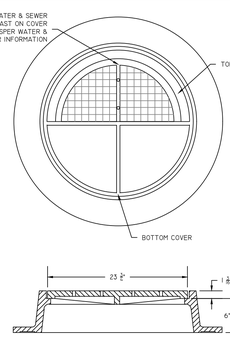
BEAUFORT-JASPER WATER & SEWER AUTHORITY		
GRAVITY MAIN CROSSING		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-03
SCALE: N.T.S	APPROVED BY: ERS	



NOTES:
1. MANHOLE RING & COVER SHALL BE GAS AND WATER TIGHT PROVIDING A 22" MINIMUM CLEAR OPENING. REFER TO MANHOLE COVER AND FRAME DETAIL.
2. VOLUME OF GREASE TRAP SHALL BE BASED UPON ULTIMATE LOADING. SIZING CALCULATIONS MUST BE APPROVED BY BJWSA. MINIMUM SIZE SHALL BE 1,000 GALLONS. REFER TO SPECIFICATIONS FOR SIZING CALCULATIONS.
3. CONCRETE GRADE RINGS SHALL BE UTILIZED TO BRING COVER TO FINISHED GRADE.
4. CHIMNEY IS TO BE LESS THAN 20".
5. GREASE TRAP SHALL BE PRECAST 5, 000 PSI ONLY.
6. CLEANOUTS SHALL BE INSTALLED WITHIN 2' OF GREASE TRAP ON BOTH THE INLET AND OUTLET.
7. MINIMUM HYDRAULIC GRADIENT OF PIPE INVERT OUT OF UPSTREAM TANK AND INVERT IN OF NEXT TANK IS 1%.
8. PIPING FROM BUILDING THROUGH GREASE TRAP DISCHARGE INTO BJWSA'S SYSTEM IS TO BE 6"
9. INSTALLATION OF TRAP INTO EXISTING SYSTEM:
   ****IF EXISTING SYSTEM IS 4" AND GREASE TRAP IS NOT MORE THAN 1,500 GALLONS, THEN 4" PIPING MAY BE USED.
   ****IF EXISTING SYSTEM IS LESS THAN 6" AND GREASE TAP IS MORE THAN 1,500 GALLONS, PIPING SHALL BE REPLACED WITH 6" FROM UP STREAM CLEANOUT THROUGH CONNECTION WITH BJWSA'S SEWER MAIN.

BEAUFORT - JASPER WATER & SEWER AUTHORITY		
GREASE TRAP IN SERIES DETAIL		
DATE: 07/01/17	DRAWN BY: TA	DRAWING #: S-04.2
SCALE: N.T.S.	APPROVED BY:	

BEAUFORT-JASPER WATER & SEWER AUTHORITY LOGO TO BE CAST ON COVER CONTACT BEAUFORT JASPER WATER & SEWER AUTHORITY FOR INFORMATION



LOGO

NOTES:
1. CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR BY SOME OTHER APPROVED METHOD UNLESS AN ALTERNATIVE SPECIFICATION IS MADE.
2. MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHOULD CONFORM TO ASTM, AASHTO, ASA, MIL, AMS OR FEDERAL SPECIFICATIONS FOR GRAY IRON OR DUCTILE IRON AS FOLLOWS: GRAY IRON-ASTM CLASS 35, DUCTILE IRON-GRADE 60-40-18.
3. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN

BEAUFORT-JASPER WATER & SEWER AUTHORITY		
MANHOLE, COVER AND FRAME		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S-05
SCALE: N.T.S	APPROVED BY: ERS	

ATTACHMENT 5

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mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — ANNA R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE:	07/29/2025
PHASE:	01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

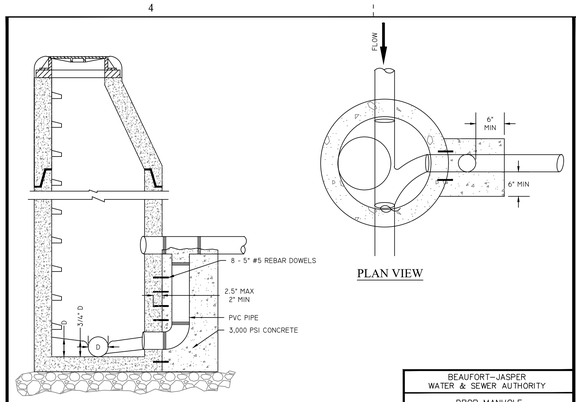
SHEET TITLE:

UTILITY DETAILS

SHEET NO. C703

PROJ. NO. 024231.00

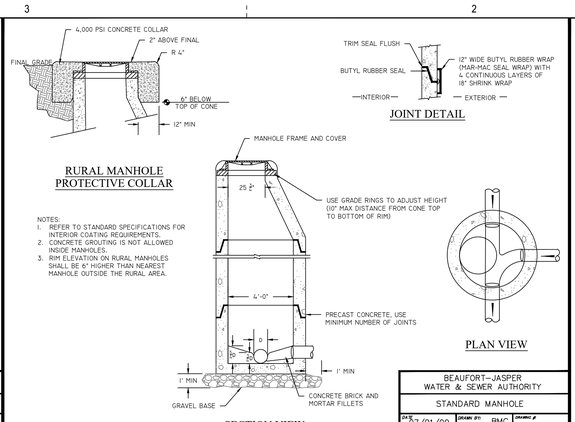
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SECTION VIEW

PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
DROP MANHOLE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–06
SCALE: N.T.S	APPROVED BY: ERS	



RURAL MANHOLE PROTECTIVE COLLAR

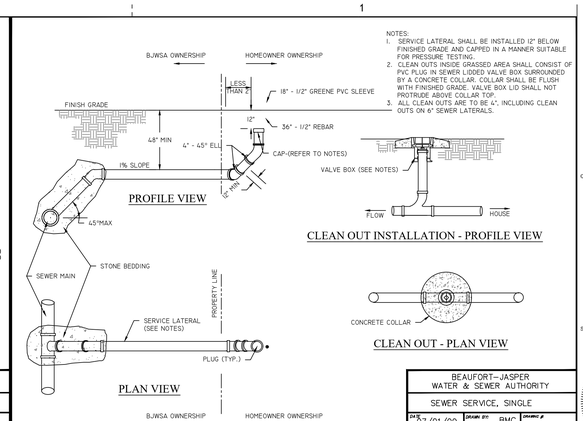
NOTES:
1. REFER TO STANDARD SPECIFICATIONS FOR INTERIOR COATING REQUIREMENTS.
2. CONCRETE GROUTING IS NOT ALLOWED INSIDE MANHOLES.
3. RIM ELEVATION ON RURAL MANHOLES SHALL BE 6" HIGHER THAN NEAREST MANHOLE OUTSIDE THE RURAL AREA.

SECTION VIEW

JOINT DETAIL

PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
STANDARD MANHOLE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–09
SCALE: N.T.S	APPROVED BY: ERS	



NOTES:
1. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
2. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP.
3. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.

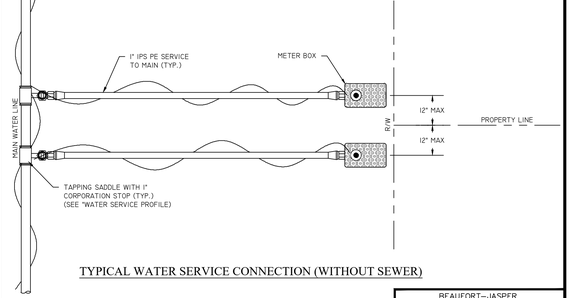
PROFILE VIEW

CLEAN OUT INSTALLATION - PROFILE VIEW

PLAN VIEW

CLEAN OUT - PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
SEWER SERVICE, SINGLE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–11
SCALE: N.T.S	APPROVED BY: ERS	



TITLE DETAIL

NOTES:
1. SET TOPS OF MANHOLES FLUSH WITH FINAL GRADE UNLESS NOTED OTHERWISE.
2. REFER TO SPECIFICATIONS FOR REQUIRED MANHOLE DIAMETER.
3. CHECK VALVE SHALL BE INSTALLED AS NEAR TIE-IN TO F.M. AS POSSIBLE.

SEWER CHECK VALVE IN MANHOLE

NOT TO SCALE

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
SEWER CHECK VALVE		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: S–24
SCALE: N.T.S	APPROVED BY: ERS	

TYPICAL INSTALLATION OF REDUCED-PRESSURE TYPE BACKFLOW PREVENTOR

NOTES:
1. REDUCED-PRESSURE BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED FOR ANY SERVICE WHERE TOXIC MATERIALS ARE USED OR WHERE POSITIVE PROTECTION FOR THE PUBLIC WATER SUPPLY IS REQUIRED. TYPICAL APPLICATIONS INCLUDE: HOSPITALS, MEDICAL & DENTAL LABS, MORTUARIES, INDUSTRIAL PLANTS, DRY CLEANERS, IRRIGATION SYSTEMS, OR AS DETERMINED BY BJWSA.
2. SEE SPECIFIC METER DETAIL FOR MORE INFORMAION.
3. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ADJACENT TO AND ON PROPERTY SIDE OF SIDEWALK WHERE APPLICABLE. WHERE NO SIDEWALKS EXISTS, THE ASSEMBLY SHALL BE INSTALLED BEFORE ANY BRANCH AND AS CLOSE AS POSSIBLE TO THE WATER METER LOCATION. FINAL LOCATION TO BE APPROVED BY BJWSA PRIOR TO INSTALLATION.
4. SCREENING AND LANDSCAPING PLACES AROUND DEVICE SHALL ALLOW FOR ACCESS BY BJWSA PERSONNEL.
5. FREEZE PROTECTION IS THE OWNERS RESPOSIBILITY .
6. PIPING AND FITTINGS THROUGH 2 ½" SHALL BE SCHD 40 GALVANIZED STEEL. PIPING AND FITTINGS 3" AND LARGER SHALL BE FLANGED DUCTILE IRON.
7. REFER TO SCDHEC APPROVED LIST OF BACKFLOW PREVENTION DEVICES.
8. DUAL CHECK VALVES MAY BE INSTALLED IN UNDERGROUND VAULT (PRIOR APPROVAL BY BJWSA REQUIRED).

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
BACKFLOW PREVENTION DETAIL		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W–01
SCALE: N.T.S	APPROVED BY: ERS	

NOTES:
1. BURY LINE INDICATED ON HYDRANT SHALL BE AT FINAL GRADE.
2. ALL FITTINGS SHALL BE RESTRAINED.

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
STANDARD FIRE HYDRANT		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W–03
SCALE: N.T.S	APPROVED BY: ERS	

NOTES:
1. WATER SERVICES SHALL BE INSTALLED TO COMMON PROPERTY LINES, WHERE POSSIBLE.
2. ALL SERVICE PIPING SHALL BE WRAPPED WITH TRACER WIRE AND TERMINATED WITHIN METER BOX.
3. INSTALL LOCATOR TAPE 1' BELOW SURFACE ABOVE SERVICE LINE.

TYPICAL WATER SERVICE CONNECTION (WITHOUT SEWER)

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
WATER SERVICE PLAN VIEW		
DATE: 07/01/09	DRAWN BY: BMC	DRAWING #: W–08
SCALE: N.T.S	APPROVED BY: ERS	

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — REGISTERED — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

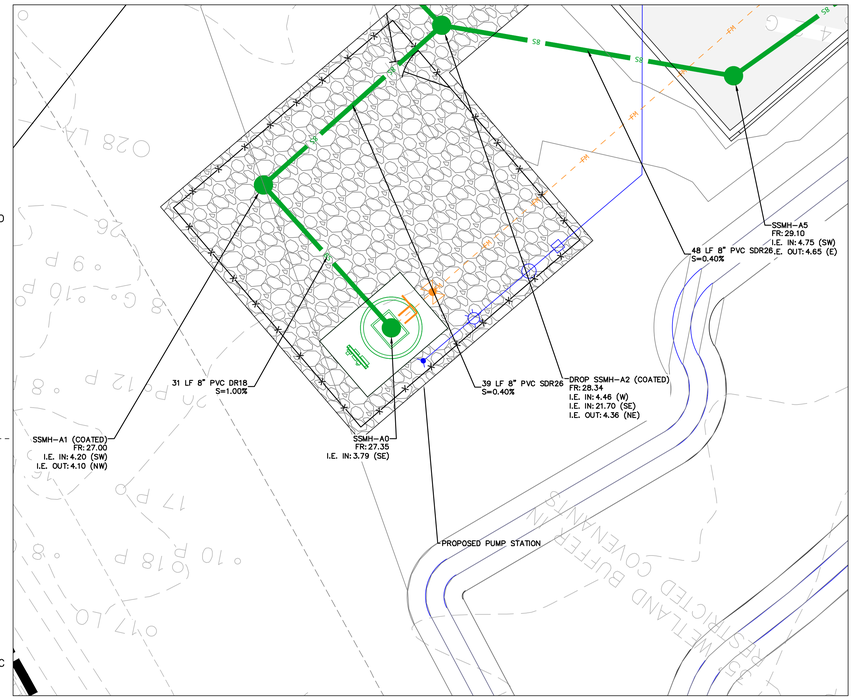
SHEET TITLE:

UTILITY DETAILS

SHEET NO. C704

PROJ. NO. 024231.00

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WET WELL DESIGN SCHEDULE

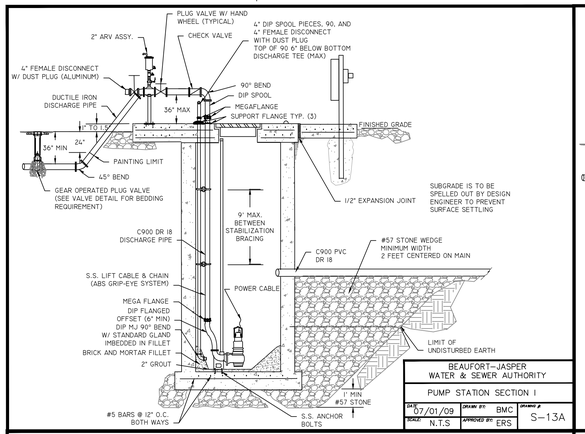
DESCRIPTION	ELEVATIONS (FT)
TOP ELEV.	29.00'
INFLUENT ELEV.	4.00'
H.W. ALARM ELEV.	3.50'
START LAG PUMP	2.50'
START LEAD PUMP	1.50'
L.W.L.–STOPS PUMPS	−0.50'
L.W. ALARM ELEV.	−1.50'
BOTTOM ELEV.	−6.25'
WET WELL DIA.	10'

PIPE AND VALVE SCHEDULE

DESCRIPTION	SIZE
DISCHARGE PIPE	6"
PLUG VALVE	6"
CHECK VALVE	6"
45 DEG. BEND	6"

PUMP DESIGN SCHEDULE

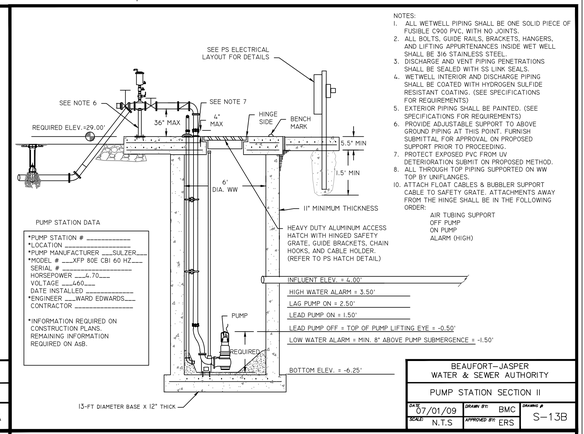
DESCRIPTION	PUMP
SELECTED PUMP	XFP 101G CB1 60HZ
T-D-H (FT)	136
PUMP CAP.(GPM)	270
RPM	3,560
PHASE	2
VOLTAGE	460 V (VOLTAGE TO BE CONFIRMED W/DOMINION)
MIN. HP	24.8 HP
MOTOR MODEL	PE 185/2



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PUMP STATION SECTION I

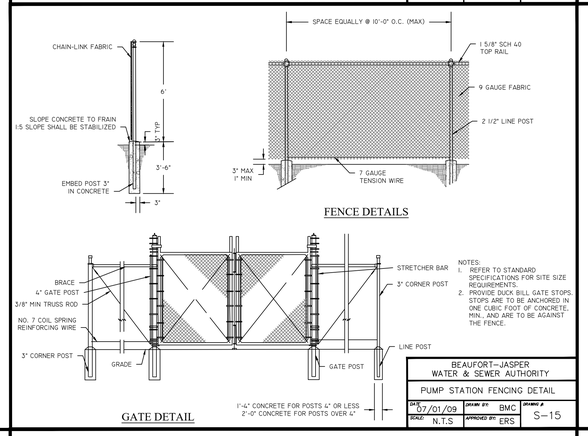
DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–13A
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PUMP STATION SECTION II

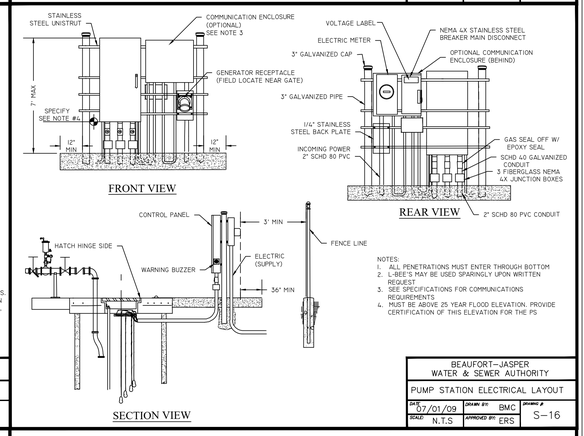
DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–13B
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PUMP STATION FENCING DETAIL

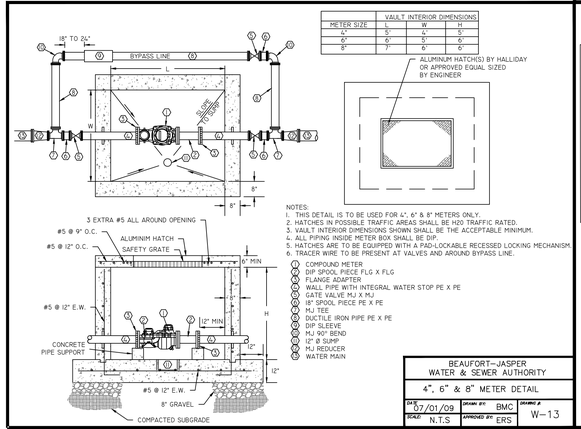
DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–15
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PUMP STATION ELECTRICAL LAYOUT

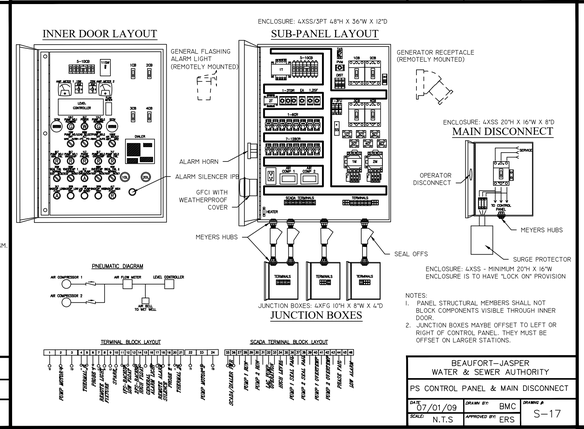
DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–16
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

4", 6" & 8" METER DETAIL

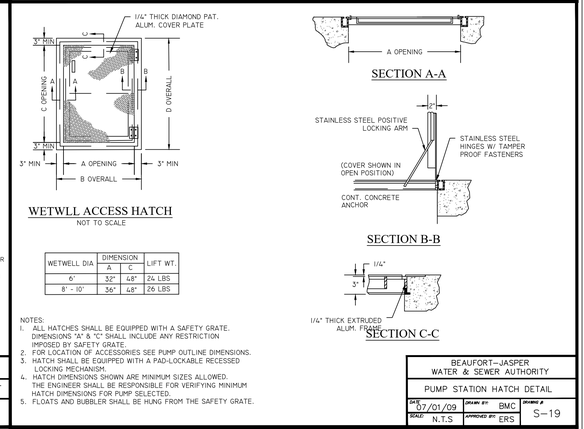
DATE 07/01/09 | DRAWN BY: BMC | DRAWING # W–13
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PS CONTROL PANEL & MAIN DISCONNECT

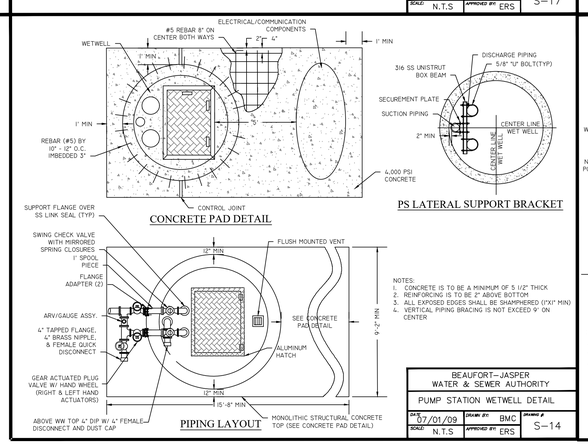
DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–17
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PUMP STATION HATCH DETAIL

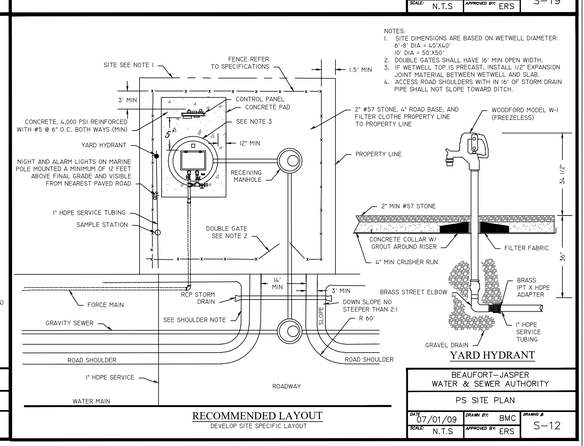
DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–19
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PUMP STATION WETWELL DETAIL

DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–14
SCALE: N.T.S | APPROVED BY: ERS



BEAUFORT–JASPER WATER & SEWER AUTHORITY

PS SITE PLAN

DATE 07/01/09 | DRAWN BY: BMC | DRAWING # S–12
SCALE: N.T.S | APPROVED BY: ERS

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT/LOCO

Ward Edwards ENGINEERING
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SEALS

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

SOUTH CAROLINA — No. 22816 — 07/29/25 — REGISTERED PROFESSIONAL ENGINEER — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

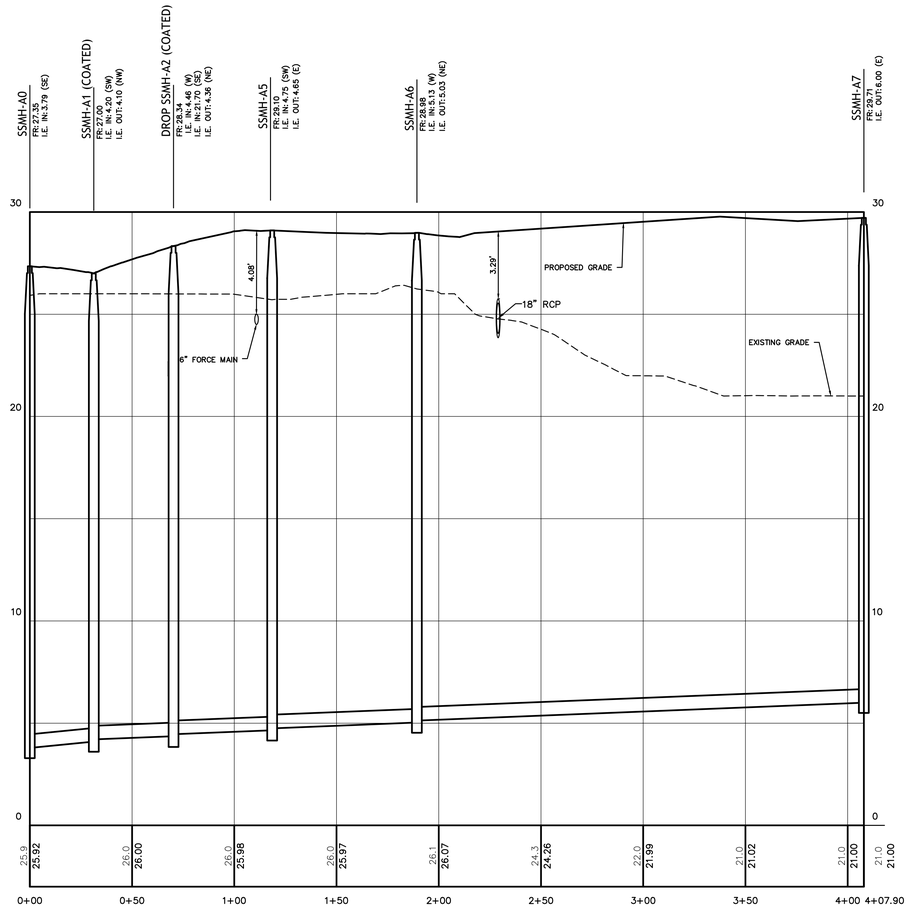
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HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ
PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:
UTILITY DETAILS

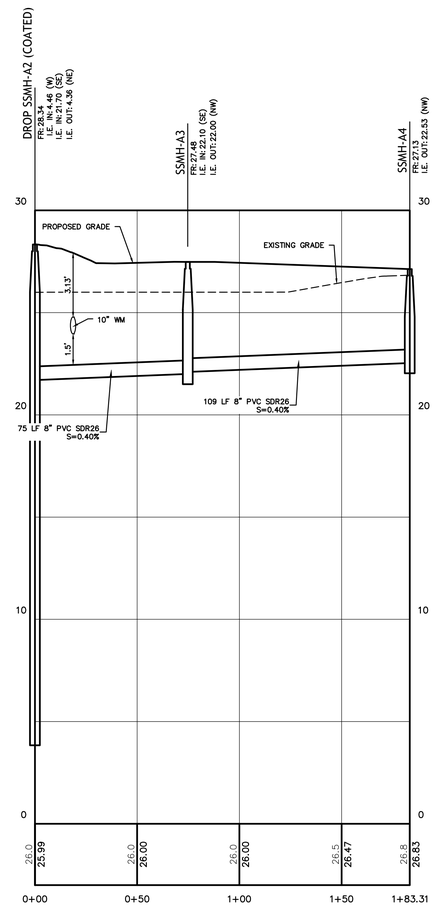
SHEET NO. C705
PROJ. NO. 024231.00

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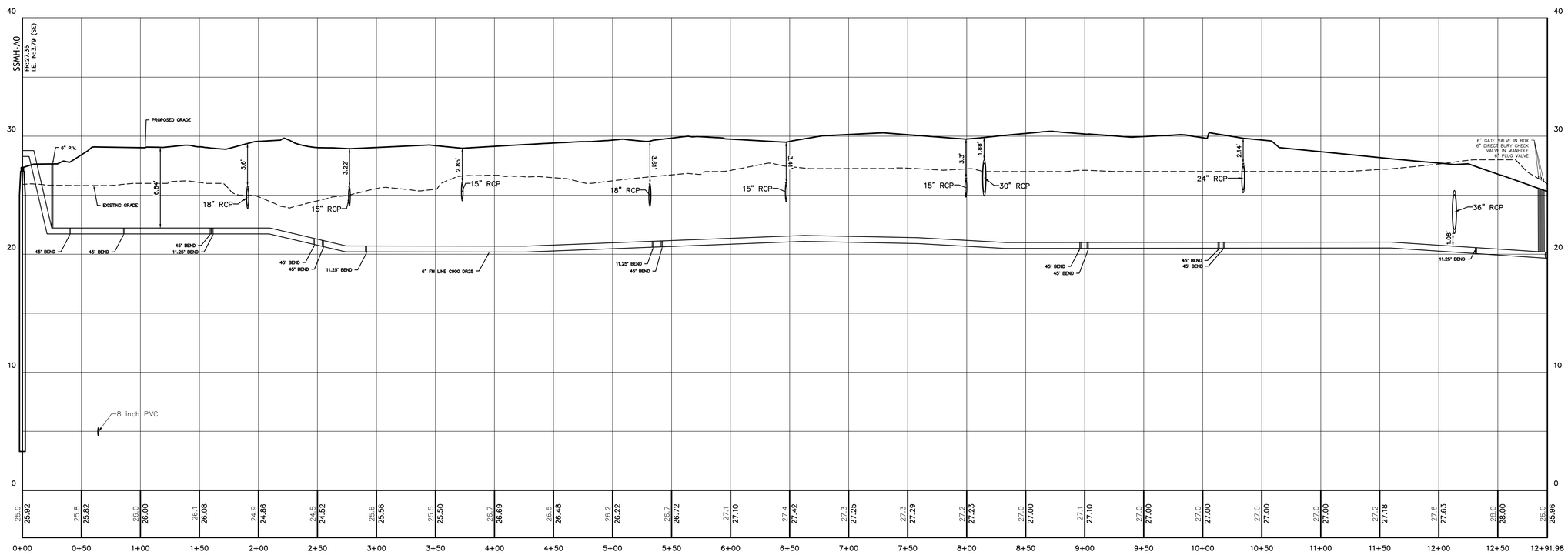
Sanitary Sewer Profile A0-A7

Scale: 1" = 30' Horiz
1" = 3' Vert



Sanitary Sewer Profile A2-A4

Scale: 1" = 30' Horiz
1" = 3' Vert



Sanitary Sewer Forcemain Profile

Scale: 1" = 40' Horiz
1" = 4' Vert

ATTACHMENT 5

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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(843) 837-5250
www.WardEdwards.com

Permit Set - NOT FOR CONSTRUCTION

SEALS



WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

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HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

SANITARY SEWER PROFILES

SHEET NO. C706

PROJ. NO. 024231.00

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ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

BUCKWALTER PARKWAY R/W VARIES

WETLAND A-2
2,194 S.F.
0.050 AC.

WETLAND BUFFER E-1
113 S.F.
0.003 AC.

WETLAND E-1
29,811 S.F.
0.684 AC.

WETLAND BUFFER E-2
15,656 S.F.
0.359 AC.

WETLAND BUFFER E-3
6,582 S.F.
0.147 AC.

WETLAND E-2
15,151 S.F.
0.348 AC.

WETLAND A-3
23,310 S.F.
0.535 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12E)
PIN:R610 029 000 2467 0000
(WETLANDS SEE REFERENCE #10)
PB:163 PG:4
235,724 S.F.
5.411 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN:R610 029 000 2410 0000
(WETLANDS SEE REFERENCE #9)
PB:153 PG:76
PB:163 PG:1
PB:4019 PG:1098
537,900 S.F.
12.348 AC.

N/F
GRANDE OAKS II LLC.
(PARCEL 12A-1)
PIN:R610 029 000 2468 0000
PB:156 PG:153
DB:4029 PG:2168

N/F
GRANDE OAKS II LLC.
PIN:R600 029 000 2409 0000
PB:153 PG:176

TEMPORARY SEEDING PER SCDHEC-OCRM DETAIL.
TEMPORARY SEEDING IS TO BE USED TO STABILIZE ALL DISTURBED AREAS WHEN WORK IS TEMPORARILY CEASED PER SCDHEC-OCRM NOTES

NPDES LIMITS OF DISTURBANCE = 14 AC

5 CY RIP RAP

FILTER BAG CURB INLET PROTECTION (TYP)

FILTER BAG GRATE INLET PROTECTION (TYP)

DOUBLE ROW SILT FENCE NEAR WETLAND

SILT FENCE (TYP.)

TREE PROTECTION (TYP.)

APPROXIMATE LOCATION OF EXISTING 14" FORCEMAIN

APPROXIMATE LOCATION OF EXISTING 16" WATERMAIN

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

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

SHEET 01
SHEET 02

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:	
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:	PVC PCPC PVC
Riprap-Lined Channels:	RPV RPC RPC
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 DD
Level Spreader:	
Subsurface Drain:	SSD SSD

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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South Carolina 29910
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SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

SHEET TITLE:

INTERMEDIATE EROSION CONTROL PLAN

SHEET NO. C801

PROJ. NO. 024231.00

Scale: 1" = 30' (0, 30, 60 Feet)

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ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

SHEET 01
SHEET 02

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 029 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB: 3983 PG: 104
891,104 S.F.
20.457 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN: R600 029 000 2410 0000
(WETLANDS SEE REFERENCE #9)
PB: 152 PG: 179
PB: 183 PG: 1098
DB: 4019 PG: 1098
637,900 S.F.
14.646 AC.

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 029 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB: 3983 PG: 104
891,104 S.F.
20.457 AC.

TEMPORARY SEEDING PER SCDHEC-OCRM DETAIL
TEMPORARY SEEDING IS TO BE USED TO STABILIZE ALL DISTURBED AREAS WHEN WORK IS TEMPORARILY CEASED PER SCDHEC-OCRM NOTES

5 CY RIP RAP

DOUBLE ROW SILT FENCE NEAR WETLAND

FILTER BAG CURB INLET PROTECTION (TYP)

FILTER BAG GRATE INLET PROTECTION (TYP)

NPDES LIMITS OF DISTURBANCE = 14 AC

ROCK CONSTRUCTION ENTRANCE

CONCRETE WASHOUT STATION

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

SILT FENCE (TYP.)

TREE PROTECTION (TYP.)

APPROXIMATE LOCATION OF EXISTING 14" FORCEMAIN

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

APPROXIMATE LOCATION OF EXISTING HYDRANT BL0304

BENCHMARK
NAIL IN TREE
ELEV. 30.35'
DATUM: NAVD88

LAKE POINT DRIVE 66' R/W

INFILTRATION POND 2

INFILTRATION POND 3

WET POND

30" PUD

Limits of Disturbance:	NPDES

Erosion Prevention

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

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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SOUTH CAROLINA — REGISTERED No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

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ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

SHEET TITLE:

INTERMEDIATE EROSION CONTROL PLAN

SHEET NO.

C802

PROJ. NO. 024231.00

0 30 60
Scale:1"= 30' Feet

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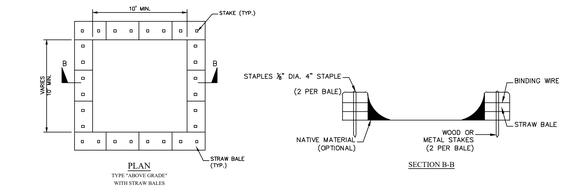
TEMPORARY SEEDING – COASTAL

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

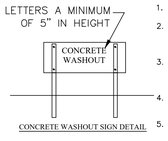
DETAIL 02370-011

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

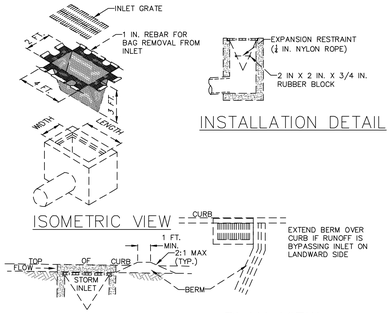
CONCRETE WASHOUT
STRAW BALES OR ABOVE GROUND

STANDARD DRAWING NO. RC-07 PAGE 1 of 1

NOT TO SCALE — FEBRUARY 2014 DATE

FILTER BAG GRATE INLET PROTECTION

NO SCALE



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.

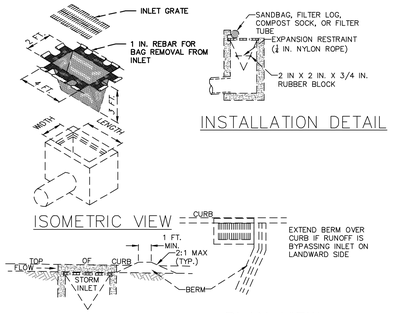
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 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 CURB INLET PROTECTION

NO SCALE



NOTES:

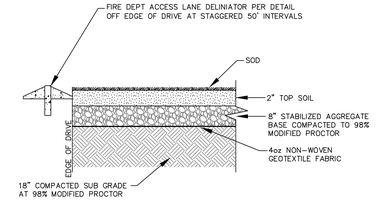
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

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

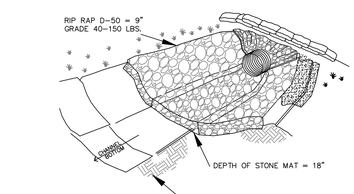
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 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.

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



REINFORCED GRASS FIRE LANE



NOTES:

1. PLACE ALL RIP RAP ON 8 OUNCE NON-WOVEN FILTER CLOTH.
2. STAKING OF FILTER CLOTH PER MANUFACTURER'S SPECIFICATIONS.
3. LENGTH OF OUTLET STABILIZATION = 8 TIMES PIPE DIA.
   TOP WIDTH OF OUTLET STABILIZATION = 3 TIMES PIPE DIA.
   BOTTOM WIDTH OF OUTLET STABILIZATION = 6 TIMES PIPE DIA.

RIP RAP OUTLET STABILIZATION DETAIL

DETAIL #02370-009

ATTACHMENT 5

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

Permit Set - NOT FOR CONSTRUCTION

SEALS



WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

INTERMEDIATE EROSION CONTROL DETAILS

SHEET NO. C803

PROJ. NO. 024231.00

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ATTACHMENT 5

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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	

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

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PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

PAVING PLAN

SHEET NO. C901

PROJ. NO. 024231.00

WETLAND A-2 2,194 S.F. 0.050 AC.
WETLAND BUFFER E-1 113 S.F. 0.003 AC.
WETLAND E-1 29,811 S.F. 0.684 AC.
WETLAND BUFFER E-2 15,656 S.F. 0.359 AC.
WETLAND BUFFER E-3 6,392 S.F. 0.147 AC.
WETLAND E-2 15,151 S.F. 0.348 AC.
WETLAND A-3 23,316 S.F. 0.535 AC.

N/F UNIVERSITY INVESTMENTS LLC. (PARCEL 12E) PIN:R610 029 000 2467 0000 (WETLANDS SEE REFERENCE #10) PB:163 PG:1 287,724 S.F. 235,174 S.F. 5.401 AC.

N/F UNIVERSITY INVESTMENTS LLC. (PARCEL 12D) PIN:R610 029 000 2415 0000 (WETLANDS SEE REFERENCE #9) PB:163 PG:176 PB:1019 PG:1098 DB:4019 PG:1 537,900 S.F. 12.348 AC.

N/F GRANDE OAKS II LLC. (PARCEL 12A-1) PIN:R610 029 000 2468 0000 PB:153 PG:153 DB:4028 PG:2768

N/F GRANDE OAKS II LLC. PIN:R600 029 000 2509 0000 PB:153 PG:176

BUCKWALTER PARKWAY R/W VARIES

AGGREGATE PAVING (TYP.)

REINFORCED GRASS FIRE LANE WITH MARKERS

12" FLUSH HEADER CURB

LIGHT DUTY ASPHALT PAVEMENT (TYP.)

STANDARD 18" CURB AND GUTTER

50' WETLAND BUFFER PER RESTRICTIVE COVENANTS

INFILTRATION BASIN 1

INFILTRATION BASIN 2

S58°44'30"E 260.84'

S39°26'53"W 206.29'

S39°26'53"W 80.27'

N58°45'58"W 676.00'

N58°45'58"W 196.09'(T)

N58°51'17"E 176.61'

ARC (223.64')

ARC (682.42')

SHEET 01
SHEET 02

SHEET 01
SHEET 02

0 30 60
Scale:1"= 30' Feet

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SHEET 01
SHEET 02

SHEET 01
SHEET 02

STANDARD 18" CURB AND GUTTER

HANDICAP PARKING SEE ACCESSIBLE PARKING DETAIL

CONCRETE PAVEMENT (TYP.)

LIGHT DUTY ASPHALT PAVEMENT (TYP.)

LAKE POINT DRIVE 66' R/W

BENCHMARK
NAIL IN TREE
EL.: 30.36'
DATUM: NAVD88

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 039 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB: 3993 PG: 104
DB: 104 S.F.
891,104 S.F.
20.457 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN: R600 039 000 2410 0000
(WETLANDS SEE REFERENCE #9)
PB: 153 PG: 176
PB: 16-3 PG: 1
PB: 2015 PG: 1098
DB: 3500 S.F.
537,448 S.F.
12.448 AC.

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 039 000 0014 0000
(WETLANDS SEE REFERENCE #9)
DB: 3993 PG: 104
104 S.F.
457 AC.

INFILTRATION POND 2

INFILTRATION POND 3

WETPOND

30' PUD WETLAND BUFFER

CENTERLINE OF SWALE

N70°32'03"W 205.08'

S81°41'05"W 397.24'

N13°05'24"E 445.91'

S46°45'W 86.14'

±529 L.F. 24" RCP @ 0.28%

±271 L.F. 24" RCP @ 0.32%

±271 L.F. 24" RCP @ 0.28%

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	

0 30 60
Scale:1"= 30 ' Feet

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	-
PROJECT ARCHITECT:	-
DRAWN BY:	-

SHEET TITLE:

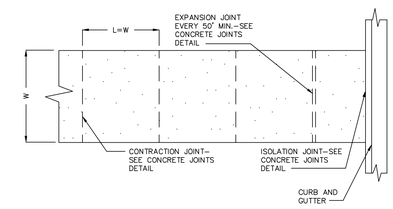
PAVING PLAN

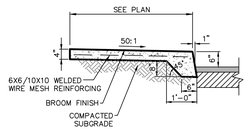
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C902

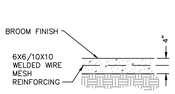
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TURNED DOWN SIDEWALK

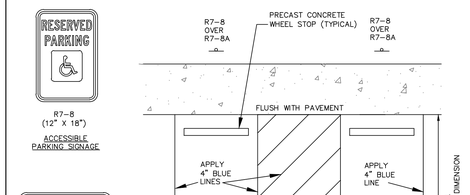


REINFORCED SIDEWALK

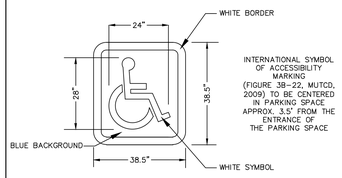
NOTES:
1. W = VARIES, REFER TO STAKING PLAN FILL IN BASED ON SITE PLAN
2. L = WIDTH OF PAVING UNLESS OTHERWISE INDICATED ON PLAN.
3. SLOPE = AS INDICATED ON GRADING PLAN, NOT TO EXCEED 2% CROSS OF 8.33% LONGITUDINAL
4. ALL CONCRETE SHALL BE CLASS A 3000 PSI
5. FINISH BROOM WITH HAND TOOLED JOINTS AND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

CONCRETE SIDEWALK

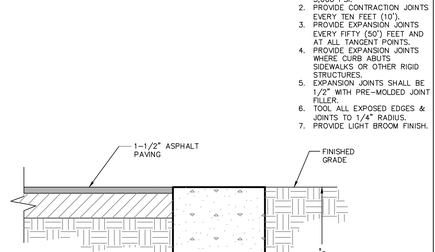
DETAIL 03300-006



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.

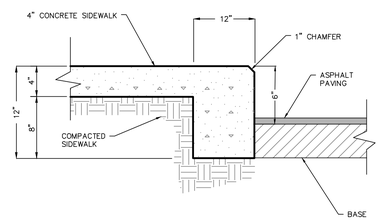


ACCESSIBLE PARKING DETAIL



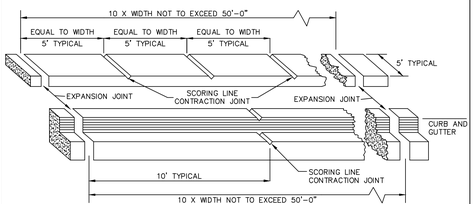
FLUSH HEADER CURB

DETAIL 03300-005

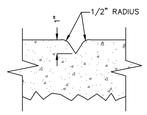


6" VERTICAL TURNED-DOWN CURB

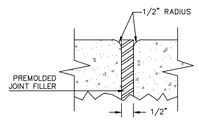
DETAIL 03300-003



ISOMETRIC



CONTRACTION JOINT
SCORING LINE

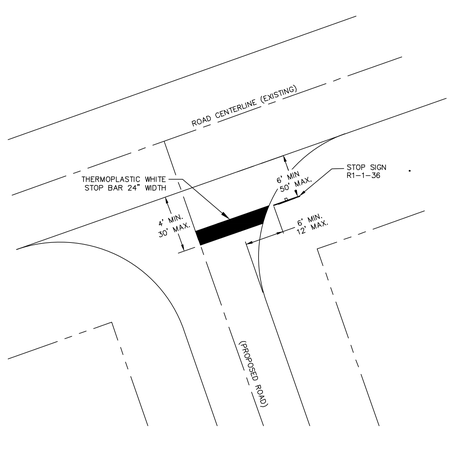


EXPANSION JOINT

NOTES:
1. EXPANSION JOINTS, 1/2 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

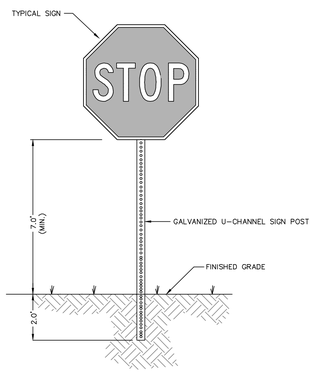
DETAIL 03300-007A



TYPICAL STOP SIGN & STOP BAR STRIPING AT INTERSECTION

DETAIL #02740-018

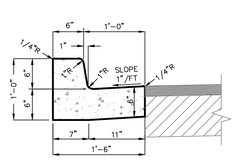




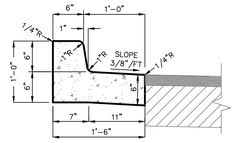
NOTE:
– ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (LATEST EDITION) AND THE DEPARTMENT OF TRANSPORTATION STANDARDS AT THE LOCATIONS SHOWN ON THE PLANS.
– BOTTOM OF ALL SIGNAGE TO BE AT 7' ABOVE GRADE, SIGN POSTS TO REMAIN AT LEAST 2' AWAY FROM EDGE OF SIDEWALKS

TYPICAL SIGNAGE

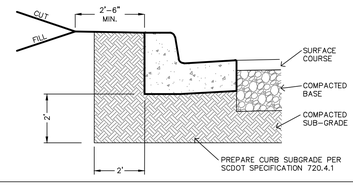
DETAIL #02890-002A



NORMAL GUTTER

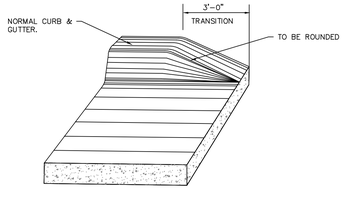


PITCHED GUTTER



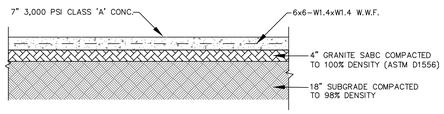
I8" CURB AND GUTTER

DETAIL 03300-004A



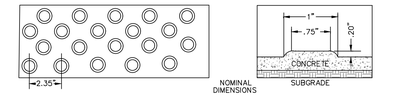
CURB AND GUTTER TRANSITION DETAIL

DETAIL 03300-020



HEAVY DUTY CONCRETE PAVING SECTION

DETAIL #03300-034



MATRIX OF TRUNCATED DOMES

TRUNCATED DOME DETAIL

NOTE: Detectable Warning Pavement shall be constructed where shown on the plans as a cast 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.
COORDINATE COLOR SELECTION WITH ARCHITECT

DETECTABLE WARNING PAVEMENT

DETAIL 02740-012

NOTES:
1. USE NORMAL OR PITCHED GUTTER AS REQUIRED TO MATCH PAVING SLOPE.
2. ALL CONCRETE SHALL BE 3,000 PSI.
3. PROVIDE CONTRACTION JOINTS EVERY TEN FEET (10').
4. PROVIDE EXPANSION JOINTS EVERY FIFTY (50') FEET AND AT ALL TANGENT POINTS.
5. PROVIDE EXPANSION JOINTS WHERE CURB ABUTS SIDEWALKS OR OTHER RIGID STRUCTURES.
6. EXPANSION JOINTS SHALL BE 1/2" WITH PRE-MOLDED JOINT FILLER.
7. TOOL ALL EXPOSED EDGES & JOINTS TO 1/4" RADIUS.
8. PROVIDE LIGHT BROOM FINISH.

ATTACHMENT 5

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

Permit Set - NOT FOR CONSTRUCTION

SEALS

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

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 07/29/25 ALAN R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
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VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ
PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

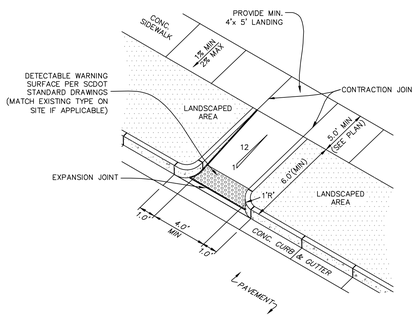
SHEET TITLE:

PAVING DETAILS

SHEET NO. C903

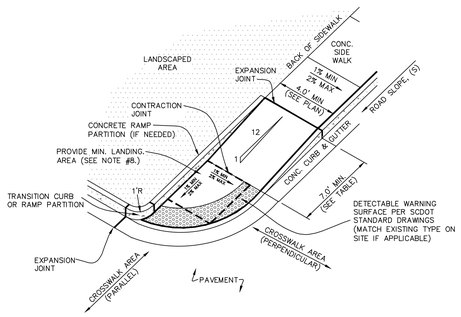
PROJ. NO. 024231.00

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NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

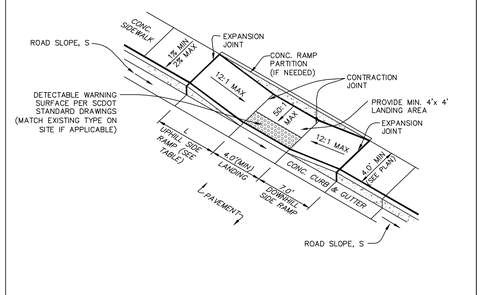
CONCRETE CURB RAMP- TYPE D
DETAIL 03300-033



ROAD SLOPE, S (%)	L, (UPHILL SIDE RAMP), [FT]
S ≤ 1%	7'-0"
1% < S ≤ 3%	10'-0"
S > 3%	15'-0"

NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).
8. IF CROSSWALK IS PARALLEL WITH WALK, A MIN. LANDING OF 4'x 4' MUST BE PROVIDED. HOWEVER, IF THE CROSSWALK IS PERPENDICULAR TO THE WALK, A MIN. LANDING OF 5'x 5' MUST BE PROVIDED

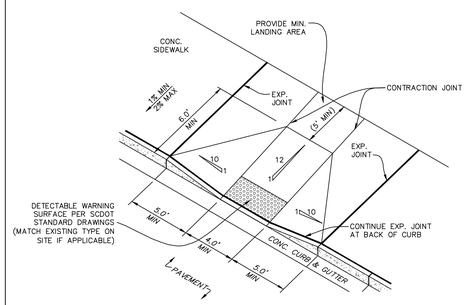
CONCRETE CURB RAMP TYPE-C
DETAIL 03300-031



ROAD SLOPE, S (%)	L, (UPHILL SIDE RAMP), [FT]
S ≤ 1%	7'-0"
1% < S ≤ 3%	10'-0"
S > 3%	15'-0"

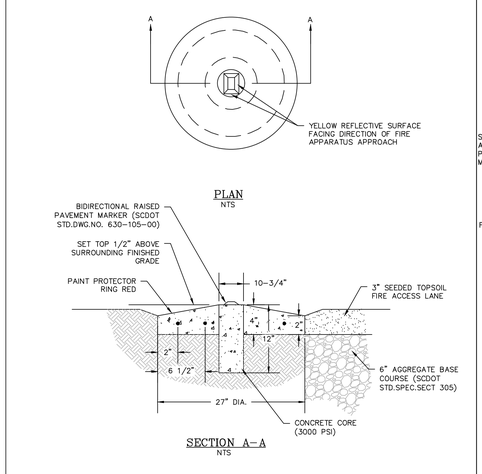
NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

CONCRETE CURB RAMP TYPE-B
DETAIL 03300-029A



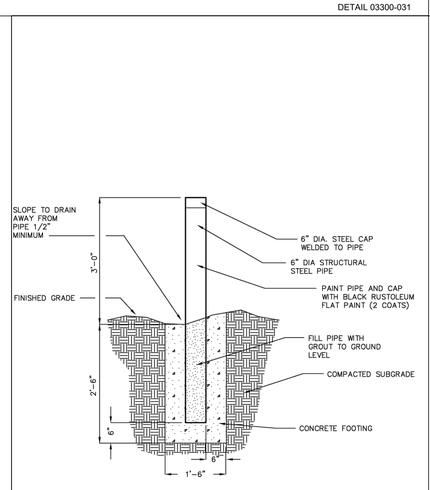
NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM-FINISHED TO PROVIDE A ROUGH, SKID-RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

CONCRETE CURB RAMP-TYPE A
DETAIL 03300-028

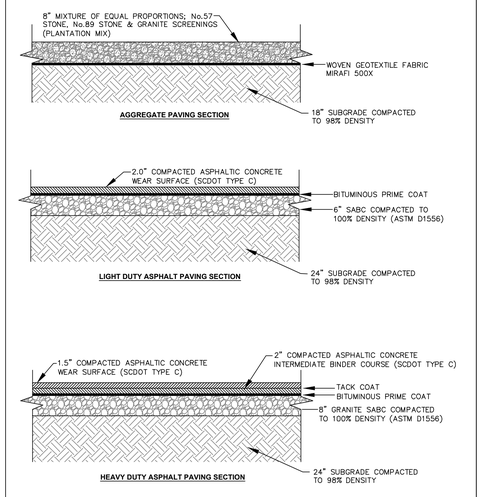


1. PRECAST CONCRETE PROCTOR RINGS SHALL BE INSTALLED WITH CONCRETE CORE IN UNPAVED NON-TRAFFIC AREAS ALONG FIRE LANE AND SHALL NOT CREATE A HINDRANCE TO FUTURE MOWING OPERATIONS.
2. CONCRETE PROTECTOR RING SHALL BE CONSTRUCTED OF 2500 PSI PRECAST REINFORCED CONCRETE.
3. BIDIRECTIONAL RAISED PAVEMENT MARKER SHALL BE ATTACHED TO CONCRETE CORE WITH ADHESIVE MATERIAL.

FIRE DEPT ACCESS LANE DELINEATOR

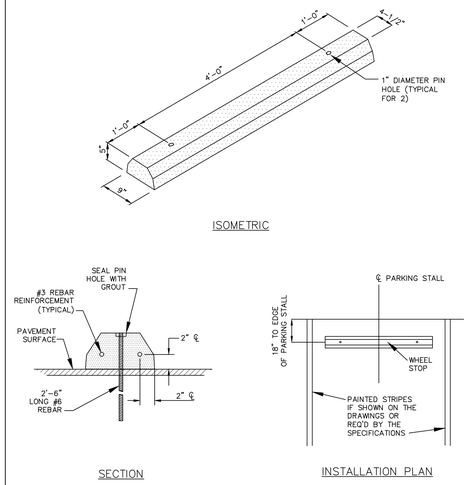


STEEL BOLLARD
DETAIL 02820-005



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

TYPICAL PAVING SECTIONS
DETAIL 02740-016



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

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

SEALS

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

SOUTH CAROLINA — PROFESSIONAL ENGINEER — No. 22816 — 07/29/25 — JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

ISSUE DATE: 07/29/2025
PHASE: 01 SD

SHEET ISSUE:

NO.	DATE	DESCRIPTION
A	04/07/2025	SCHEMATIC DESIGN PACKAGE
B	07/03/2025	RELEASED FOR PERMITTING
C	07/29/2025	RELEASED FOR PERMITTING

VERT. DATUM: NAVD88
HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:
PAVING DETAILS

SHEET NO. C904

PROJ. NO. 024231.00

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ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION



Limits of Disturbance:	NPDES

Erosion Prevention

Land Grading:	LG OR MM
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:	
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:	PVC PVM PVN
Riprap-Lined Channels:	RPV RPM RPN
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

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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

SEALS

WARD EDWARDS, INC. No. C00152 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 07/29/25 JAMES R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

BLUFFTON HOSPITAL CAMPUS PLANNING

412 Buckwalter Pkwy, Bluffton, SC 29910

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VERT. DATUM:	NAVD88
HORIZ. DATUM:	NAD83
ENGINEER:	PRM
DESIGNER:	LYJ
PRINCIPAL IN CHARGE:	.
PROJECT ARCHITECT:	.
DRAWN BY:	.

SHEET TITLE:

FINAL EROSION CONTROL PLAN

SHEET NO. C1001

PROJ. NO. 024231.00

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SHEET 01
SHEET 02

N/F
GRANDE OAKS II LLC.
(PARCEL 14A)
PIN: R600 029 000 0410 0000
(WETLANDS SEE REFERENCE #9)
DB: 4003 PG: 104
891,104 S.F.
20.457 AC.

N/F
UNIVERSITY INVESTMENTS LLC.
(PARCEL 12D)
PIN: R600 029 000 0410 0000
(WETLANDS SEE REFERENCE #9)
PB: 153 PG: 176
PB: 419 PG: 7
DB: 4003 PG: 1098
DB: 4017 PG: 57
1,230,300 S.F.
28.577 AC.

TEMPORARY SEEDING PER SCDHEC-OCRM DETAIL
TEMPORARY SEEDING IS TO BE USED TO STABILIZE ALL DISTURBED AREAS WHEN WORK IS TEMPORARILY CEASED PER SCDHEC-OCRM NOTES

ALL DISTURBED AREAS TO BE PERMANENTLY SEEDED (TYP.)

DOUBLE ROW SILT FENCE NEAR WETLAND

5 CY RIP RAP

FILTER BAG GRATE INLET PROTECTION (TYP)

FILTER BAG CURB INLET PROTECTION (TYP)

ROCK CONSTRUCTION ENTRANCE

CONCRETE WASHOUT STATION

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

SILT FENCE (TYP.)

APPROXIMATE LOCATION OF EXISTING 14" FORCEMAIN

APPROXIMATE LOCATION OF EXISTING 12" WATERMAIN

NPDES LIMITS OF DISTURBANCE = 14 AC

LAKE POINT DRIVE 66' R/W

INFILTRATION POND 2

INFILTRATION POND 3

WETPOND

BENCHMARK
NAIL IN TREE
EL= 30.36'
DATUM: NAVD88

N70°32'03"W 205.08

N43°00'54"E 445.19'

N46°45'W 86.14'

S81°47'05"W 391.24'

N20°41'40"E 322.22'

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:	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:	NVC NSC NDC
Riprap-Lined Channels:	NVC NSC NDC
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

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

Scale: 1" = 30' (0, 30, 60 Feet)

FINAL EROSION CONTROL NOTE
Contractor shall remove all initial and intermediate erosion and sediment control measures after construction is complete and all final measures have been successfully installed and stabilized.

ATTACHMENT 5

Permit Set - NOT FOR CONSTRUCTION

mcmillan pazdan smith ARCHITECTURE

CONSULTANT LOGO

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SEALS

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SOUTH CAROLINA — REGISTERED No. 22816 — 07/29/25 — PAUL R. MOORE

WARD EDWARDS JOB NUMBER: 230641

NOVANT HEALTH

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HORIZ. DATUM: NAD83
ENGINEER: PRM
DESIGNER: LYJ

PRINCIPAL IN CHARGE: .
PROJECT ARCHITECT: .
DRAWN BY: .

SHEET TITLE:

FINAL EROSION CONTROL PLAN

SHEET NO. C1002

PROJ. NO. 024231.00