

### CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING

July 30, 2024

Dan Frazier
Town of Bluffton Dept. of Growth Management
20 Bridge Street
Bluffton, SC 29910

Subject: Town of Bluffton DRC Public Project Review: DP-06-24-019190

**Buckwalter Parkway Healthcare** 

Ward Edwards Project Number: 230640

We are in receipt of your Staff Report dated 07/18/2024 for Preliminary DRC review. Enclosed please find our response package addressing the provided comments as follows:

### **Enclosures:**

- 1. Site Development Plans
- 2. Landscape Plans
- 3. Compliance Calculator
- 4. Traffic Impact Analysis Report

### **Watershed Management Review**

- 1. 220 trees were entered into the compliance calculator for SWRv credit. If the area of these trees is considered "Forest Cover/Open Space" in the post-development land cover totals, they must be removed from the tree credit section. Revise accordingly.
  - The compliance calculator has been revised accordingly to not credit any trees outside the limits of disturbance or areas deemed "Forest Cover/Open Space".
- 2. Clarify if the "infiltration" BMP in the compliance calculator are the dry detention basins. Dry detention basins are considered Storage Practices per SWDM 4.11. Revise compliance calculator to reflect this.
  - The compliance calculator has been revised to reflect detention basins 1 and 3 as Bioretention-IWS BMPs. An additional BMP, Bio-retention area 4, was also added to the landplan, and some additional paving was converted to permeable pavers, to offset the loss of accounted for onsite water quality retention volume.
- 3. Provide proposed contours on the grading plan.

  Comment noted, proposed contours can be seen on the wet detention and bio-retention areas, and will be provided throughout the remaining site plan at time of MS4 stormwater submission.
- 4. Remove curb cuts from dumpster pads.
  - As discussed at the 07/24 Preliminary DRC meeting, curb cuts will remain at the dumpster pads, to direct dumpster pad runoff through flumes that discharge over vegetation, prior to entering the underground drainage structures. River rock has also been added at the end of the flumes originating from the dumpster pads.



### CIVIL ENGINEERING & LAND DEVELOPMENT CONSULTING

- Provide missing surface coverage data on sheet C002, and pond 2 spillway & dry detention basin dimension data details on sheet C602.
   Commented noted, the missing surface coverage data, pond 2 spillway, & bioretention details have been provided in the attached plan set.
- 6. Frame elevations on dry detention basins 1, 2, and 3 are higher than the top of bank.

  The BMPs and outfall boxes have since been revised to reflect proper frame elevations, all lower than the top of bank.
- 7. At time of stormwater submittal, provide a 10-year exhibit.

  A 10-YR exhibit will be provided at the time of MS4 stormwater submission.

### **Beaufort Jasper Water and Sewer Review**

 Pending submittal of the project by the engineer of record to BJWSA's Design Review Team in accordance with the Development Policy and Procedure Manual. The project has been submitted to BJWSA's Design Review Team, and approval will be provided upon receipt.

### **Fire Department Review**

1. Relocate the Fire Department Connection to provide direct access that is not obstructed by parking. The fire department connection has been relocated, seen on Sheet C701, to accommodate direct access from the rear drive aisle.

### **Planning Review - Principal**

 The Buckwalter Parkway Access Management Plan prepared for Beaufort County calls for a traffic signal to be installed at the intersection of Buckwalter Parkway and Parkside Drive, and for the access to the parkway at the Ludlow Street intersection to become a right-in/right-out access only. Coordinate with Beaufort County Engineering on timing and responsibilities with regard to these planned transportation improvements.

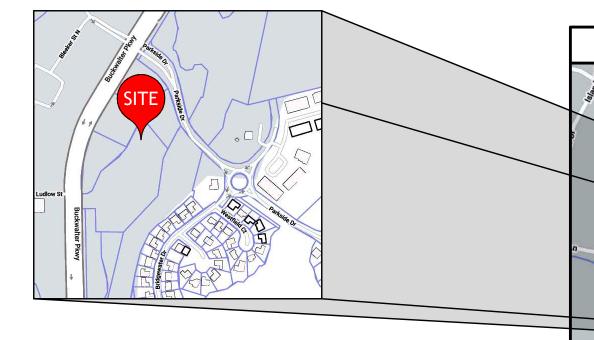
A traffic impact analysis report has been prepared for the proposed development and recently submitted to Beaufort County for review. We are awaiting additional coordination with the County as it relates to timing and responsibilities regarding the Parkside Drive intersection planned traffic signal and Ludlow intersection conversion median modifications. The proposed access the Ludlow intersection has also been revised as a right-in right-out movement to match both the TIA and current Buckwalter Access Management Plan.

If you have any questions or comments during your review, please do not hesitate to contact me at (757) 814-0824 or <a href="mailto:cobaney@wardedwards.com">cobaney@wardedwards.com</a>.

Sincerely,

**Ward Edwards Engineering** 

Conor Blaney, PE Project Manager



# Site Development Plans

for

# Buckwalter Parkway Healthcare

Usage: commercial

Town of Bluffton, South Carolina

Tax Map #: R610 022 000 1073 0000

R610 022 000 1083 0000

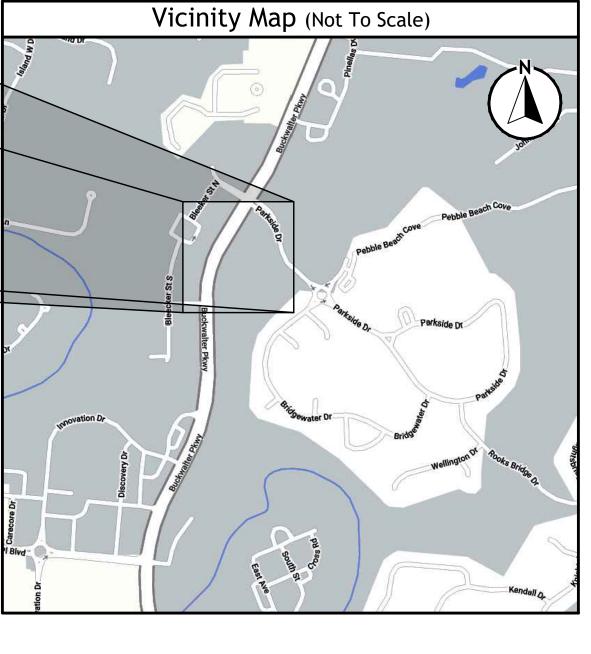
R610 022 000 1081 0000

R610 022 000 1082 0000

R610 022 000 1084 0000

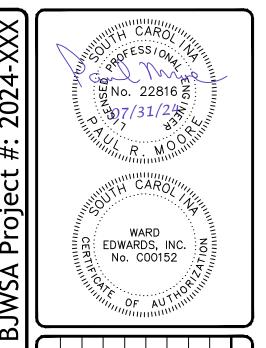
2 Parkside drive

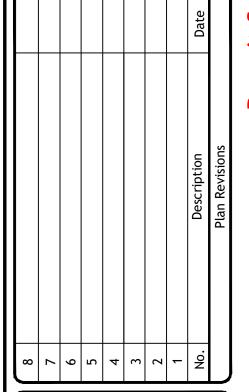
GIS coord: N32° 16' 49", W80° 54' 43"

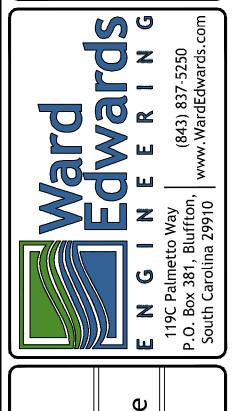


# Schedule of Drawings

Sht No. Descr		Description	
	C001	Cover Sheet	
	C002	Construction Notes	
	C003	Phasing Plan	
	C101-C102	Existing Conditions Plans	
	C201-C02	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-C605	Drainage Plans Details	
	C701	Utility Plans	
	C702-C704	Utility Details	
	C705	Utility Profiles	
	C801-C802	Intermediate & Final Erosion Control Plans	
	C803	Intermediate & Final Erosion Control Details	
	C901-C902	Paving Plans	
	C903-C904	Paving Details	
	C1001	ADA Accessible Route Plan	







Vert. Datum:	NAVD88
Horiz. Datum:	NAD83
Project #:	230640
Date:	07/31/24
Designed by:	LYJ
Checked by:	СРВ
	$\overline{}$

Not to Scale

C001



Release Schedule

Rel # Description

Released for Permitting Released for Permitting Released for Permitting Released for Permitting

Design Team

05-13-24 06-17-24 07-02-24 07-31-24

> Geotechnical Engineer: Terracon 912.629.4000

Landscape Architect:
Witmer Jones Keefer ltd.
843.757.7411

Architect:
e4h Environments for Health
888.781.8441

Land Surveyor:
Atlas Surveying, Inc.
843.645.9277

vii. Property corners, yard hydrant, light pole, discharge piping/valves

ix. Electrical power service from meter to transformer

Gate valves shown for graphical purposes only. Contractor

to place all valves at 18" from tee. see BJWSA detail G-15.

Contractor to provide 18" of separation between tapping

See construction notes sheet for BJWSA as-built survey

viii.Bypass pump

requirements

saddles for all water laterals.

### Boundary information provided by A Boundary, tree and topographic survey of lot c5 (c1-c6, a & b) woodbridge commons, dated 05/22/20, by Atlas Topographic data provided by Atlas Surveying Inc., dated 05/22/20. 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 4. Comply with "South Carolina Underground Facility Damage Prevention Act (effective June 7, 2012). Notification of Intent to excavate may be given by 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. Off-street parking for the contractor's employees and authorized visitors to the site must be provided and maintained throughout construction. 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 3. At least one driving lane on public roads shall remain open to traffic at all times. Traffic lanes will only be closed with the express written consent of the agency having jurisdiction over the roadway. Notify agency having jurisdiction at least 5 days before closing any driving lanes to traffic. Provide traffic control devices, signs and flagmen as required to ensure public safety. 9. Contractor shall coordinate demolition, clearing and construction of improvements to minimize interference with vehicular and pedestrian traffic and . All water and sewer line construction shall conform to applicable state and Beaufort Jasper Water and Sewer Authority (BJWSA) requirements, BJWSA will be responsible for inspection and approval of all water and sewer system construction and for acceptance for operation and maintenance. . 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 Notify the project engineer if conflicts with existing structures require that proposed utilities be relocated 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 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. All water mains shall be sterilized and pressure tested in accordance with BJWSA specifications. 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 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. The contractor shall cut and patch existing pavement as required for the installation of utility lines. 12. Sanitary manhole rim grades shown are approximate. Adjust rim elevations to be flush with finished grade. 13. The contractor 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 connections with the BJWSA is the responsibility of the 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 Work on South Carolina Department of Transportation Right-of-Way: Contractor shall review and comply with all conditions and special provisions contained in the SCDOT encroachment permit(s) issued for this project. Contractor to refer to the most current edition of the SCDOT standard drawings. 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. 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 Removal of pavement markings shall conform to current SCDOT standard specifications for highway construction section 609.4.1.2. All trees having a trunk diameter of 8-inches (dbh) or larger, and endangered or valued trees having a trunk diameter of 4-inches (dbh) or larger must be preserved unless specifically approved for removal in accordance with Town of Bluffton development standards ordinance and indicated on the The contractor is responsible for marking the trees designated to be preserved in accordance with the requirements contained in the Town of Bluffton Prior to commencing any clearing or construction operations on the site, the contractor shall erect tree protection barriers around each tree or group of trees designated for preservation in accordance with the details on the plans and the requirements contained in the Town of Bluffton unified 4. A tree protection zone shall be established in accordance with the provisions contained in the Town of Bluffton unified ordinance 5.3.3 for each existing tree designated for preservation. The minimum tree protection zone as defined in the ordinance is a circular area centered on the tree and having a radius of the greater of 10-ft. or one and one-half foot per inch dbh (diameter at breast height). The size or configuration of the tree protection zone may be modified only upon approval by Town of Bluffton. The area within the tree protection zone must remain open and unpaved. No change of grade will be allowed within the tree protection zone except for a 2-inch cut or 2-inch fill of topsoil, sod or mulch. Any activity within the tree protection zone is subject to approval by Town of Bluffton. The following activities are prohibited within the tree protection zone

soil, debris, oils, fuel, paints, building materials or any other materials.	<ul><li>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 jurisdiction and fire departments.</li><li>6. Selective clearing areas shall be cleared of all brush and understory growth.</li></ul>
the tree protection zone, they shall be installed by horizontal boring beneath the roots of the tree.  If and equipment to pass within the tree protection zone, approval must be obtained from Town of Bluffton. special set the roots from excessive compaction.  It is a staining all tree removal permits and for coordinating all inspections required by Town of Bluffton in connection activities during construction.	

Sequence of Construction Activities
Estimated Start Date: 05-01-25 Estimated Completion Date: 05-01-26
Items must occur in the order listed; items cannot occur concurrently unless specifically noted.
Phase 1: (Initial)  1. Receive NPDES coverage from DHEC.
2. Hold pre-construction meeting.
3. Notify DHEC EQC regional office or OCRM office 48 hours prior to beginning land-disturbing activities.
<ol> <li>Installation of construction entrance.</li> <li>Clearing &amp; grubbing only as necessary for installation of perimeter controls.</li> </ol>
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.

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.

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

If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be

. All utility pipe lines, conduits and sleeves under paved areas must be in place prior to completion of the roadway subgrade compaction.

necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.

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.

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

but in no case more than fourteen (14) days after work has ceased, except as stated below

temporary control devices shall be removed once construction is complete and the site is stabilized.

sediment basin or alternative control that provides equivalent or better treatment prior to discharge

A. Wastewater from washout of concrete, unless managed by an appropriate control.

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.

9. Notify the engineer if conflicts with existing or proposed structures require proposed utilities be relocated.

4. Exercise caution during clearing operations to avoid felling trees into designated tree protection zones.

2. Only those trees designated on the drawings for removal are to be removed as part of the site clearing operations.

C. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.

stabilization measures do not have to be initiated on that portion of the site

contractor shall daily remove mud/soil from pavement, as may be required.

sediment-laden water to appropriate traps or stable outlets.

13. Minimize soil compaction and, unless infeasible, preserve topsoil.

D. Soaps or solvents used in vehicle and equipment washing

stabilization is reached on all areas of the construction site.

Dry Utility Conduits for Electric, Telephone and Cable TV:

2. 48" Minimum bury depth for all electrical conduits.

otherwise specifically shown on the plans

construction work on the project.

5. Extend conduit beyond pavement, curb, and sidewalks

not resume for a period of 7 calendar days.

16. The following discharges from sites are prohibited:

basin, filter bag, etc.).

shall be to subgrade limits.

identification.

to walks, curbs, gutters and structures to assure positive drainage.

Temporary control of storm water drainage shall be the responsibility of the contractor. Sequencing and construction techniques shall prevent obstruction of

. Finish grading shall include the placement of topsoil over all unpaved areas not occupied by buildings or structures and fine grading around buildings, adjacent

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased,

B. Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary

I. 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,

water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the state.

these plans during construction or obtain approval of an individual plan in accordance with s.c reg. 72-300 et seq. and scr100000.

business hours, from the date of commencement of construction activities to the date that final stabilization is reached.

situation must be documented in the SWPPP and alternative BMPS must be implemented as soon as reasonably possible.

. All dry utility conduit ends shall be capped and marked with a steel rebar stake imbedded one (1) foot below ground surface.

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

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

graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If

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

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

Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert

10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and

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

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

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

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,

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.

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

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

8. Transformer pads shall be located as directed by the respective utility representative. The contractor shall be responsible for compliance with applicable code

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

mentation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the

15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment

12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will

construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.

B. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.

For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the department has approved otherwise

esponsible to ensure strict compliance with all applicable codes and regulations with regards to the installation of utilities and conduit.

1. No clearing shall occur within designated buffer zones, tree protection zones, outside of the property lines or beyond the clearing limits unless

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. The contractor shall be responsible for coordination with the respective utility representatives, prior to any conduit installation.

Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow

. 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

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). 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.

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 23. Perform as-built surveys of all detention structures and submit to DHEC or MS4 for acceptance.

19. Clean-out of detention basins that were used as sediment control structures and re-grading of detention pond bottoms; if necessary, modification of

24. Submit notice of termination (NOT) to DHEC as appropriate. • NOTE: Perform weekly site inspections during land disturbing activities and make recommendations for additional BMPs or maintenance of existing • NOTE: All pumped dewatering shall be performed using an appropriately sized pumped water filter bag.

**STANDARD ABBREVIATIONS** AVERAGE DAILY TRAFFIC BEGIN Property Owner: BASELINE BENCHMARK BOTTOM OF BANK BURIED TELEPHONE BACK OF CURB Flood Zone: RATE OF CHANGE IN SLOPE CURB AND GUTTER CABLE TELEVISION CATCH BASIN Property Zoning: CURB INLET CLEARANCE OR CENTERLINE Planned Unit Development PUD CUBIC FEET CUBIC YARD Total: 10.903 acres Drainage Area Disturbed: 6.9 acres DITCH BOTTOM INLET DESIGN HOURLY VOLUME Required Buffers: DROP INLET Front: 50 Feet Hwy Corridor Buffer DIAMETER Rear: 50 Feet PUD Buffer DUCTILE IRON PIPE SUPERELEVATION FAST OR EXTERNAL DISTANCE EXISTING GRADE LINE EL or ELEV ELEVATION ENGR EASEMENT FLARED END SECTION FINISH FLOOR ELEVATION FIRE HYDRANT FORCE MAIN FUTURE GRATE INLET H or HT HEIGHT HIGH DENSITY POLYETHYLENE HORIZONTAL 1 Cooperative Way, Hardeeville, SC 29927 HIGH POINT PO Box 100255 Columbia, SC 29202 HIGHWATER 843-987-9200 6 Snake Road, Okatie, SC 29909 HYDRANT OR HYDRAULIC INSIDE DIAMETER INVERT ELEVATION PO Box 3380, Bluffton, SC 29910 2127 Boundary ST #16, Beaufort, SC 29902 INSTALL 1 Riverwood Drive, Moncks Corner, SC 29461 LINEAR FEET LIMIT OF WORK Low Point MITRED END SECTION MEAN HIGH WATER MECHANICAL JOINT NORTH BOUND ROADWAY NORMAL CROWN NGVD NATIONAL GEODETIC VERTICAL DATU NOT IN CONTRACT OUTSIDE DIAMETER OVERHEAD POWER PAVT PAVEMENT POINT OF CURVATURE POINT OF COMPOUND CURVATURE PERFORATED PROFILE GRADE PROFILE GRADE ELEVATION PROFILE GRADE LINE POINT OF INTERSECTION POINT OF ROTATION POINT OF REVERSE CURVATURE PRECAST POINT OF VERTICAL INTERSECTION PEAK DISCHARGE OR FLOW VOLUME (CF RATE OF CHANGE IN ELEVATION R or RAD REINFORCED CONCRETE PIPE RDWY REQ OR REQUIRED RIGHT OF WAY SPEED OR SOUTH OR SLOPE SAND-ASPHALT HOT MIX SQUARE FOOT OR SILT FENCE SQUARE YARD SOUTH BOUND ROADWAY STORM SEWER SEASONAL HIGH WATER SANITARY SEWER SSMH STA SANITARY SEWER MANHOLE STATION SUBGR SUBGRADE SW or SWK SIDEWALK TOP OF CURB TEMPORARY CONSTRUCTION FASEMENT TELEPHONE TEMPERATURE OR TEMPORARY

TOP OF GRATE

TOP OF PAVEMENT

TOP OF SIDEWALK

UNDERGROUND ELECTRIC

UNDERGROUND TELEPHONE

WATER TABLE OR WEIGHT

WELDED WIRE FABRIC

TOP OF BANK

TYPICAL

UNDERDRAIN

UTILITIES

WIDTH OR WEST

WATER LINE

WATER MAIN

WATER VALVE

YARD INLET

UNDERGROUND

Permits Issued Expires Permit Permit # BJWSA Fire Marshal SCDHEC/MS4 Stormwate SCDHEC Water SCDHEC Wastewater County Driveway Encroachment Municipality Development

SCDHEC-OCRM Certification:

Project Information

Source of Title:

Existing: undeveloped

Proposed: Commercial

<u>Surface Coverage:</u>

Parking Summary:

Parking use types

Parking required:

Utility Contacts

Palmetto Electric

Dominion Energy

Century Link

Santee Cooper

Contractor Note:

Existing impervious: 1,960 sq. ft. (0.67 %)

Proposed impervious: 144,706 sq. ft. (50 %)

Open space provided: 104,078 sq. ft. (36 %)

Use type = 176 spaces

Total = 228 spaces

Accessible parking required: 7 spaces

Accessible parking provided: 14 spaces

Hargray Communications 843-815-1675

\_\_\_prepared by\_\_\_\_\_

Use type = 3.5 spaces/1,000 sq.

843-208-5512

800-251-7234

843-525-0044

843-761-8000

Contractor to obtain and become familiar with geotechnical report

Il work must conform to project technical specifications for

the technical specifications if not provided with the drawings.

Engineering. The contractor is responsible for obtaining a copy of

Buckwalter Parkway Healthcare prepared by Ward Edwards

1 Building

50,250 sq ft

Beaufort county register of deeds,

deed book 2745 page 1129

Parcel C5 llc

PO Box 1726

Site Area:

Side: 10 Feet

"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 VERT of the code of laws of SC, 1976 as amended, pursuant to regulation 72-300 et seq. (if applicable), and in accordance with the terms and conditions of scr100000."

Paving Hatch Legend Limits of Disturbance: Proposed Concrete Paving **Erosion Prevention** Proposed Pervious Concrete Land Grading: Proposed Sidewalk/Concrete Surface Roughening: opsoiling Reinforced Grass Fire Lane emporary Seeding: Proposed Aggregate/Stones Mulching: Proposed Asphalt (light duty) ECB or TRM: Proposed Asphalt (heavy duty Mill & Overlay Asphalt ermanent Seeding: Proposed Concrete Pavers Sodding Clearing / Demolition Legend Riprap: Milling **Outlet Protection:** RIPRAP ECB or Tree to be Removed **Dust Control:** Tree Protection Polyacrylamide (PAM): Runoff Conveyance Measures Storm Sewer/Drainage Legend Vegetated Channels: Proposed 9.E 9.E Riprap-Lined Channels: ■| DI: A1 Curb Inlet (with Grate ECB OR TRM-Lined Channels: • CI: A1 Type 16 Curb Inlet ₩ VI: A1 Paved Channels: PC PC PC Vallev Gutter Inlet TD: A1 Trench Drain Pipe Slope Drains: ⊙ WI: A1 Weir Inlet ♠ YI: A1 Yard Inlet **Temporary Stream Crossing:** ∩ JB: A1 Junction Box Temporary Diversion CO Ditch or Swale: Cleanout Downspou Permanent Diversion Ditch: Storm Drain Diversion Dike or Berm \_ . \_ . \_ . \_ . Roof Drain Collector \_\_\_\_\_ Level Spreader: Flared End Section Subsurface Drain: Headwall with Wings Outlet Control Structure Ditch Centerline  $-\rightarrow --\rightarrow -\rightarrow$ Sediment Basin Direction of Flow Temporary Sediment Trap: Sanitary Sewer Legend Rock Sediment Dike:

 $\rightarrow$ TD $\rightarrow$ TD $\rightarrow$ **→-PD→-PD →** ⇒DD ⇒DB⇒  $\Rightarrow$  SSD  $\Rightarrow$  SSD  $\Rightarrow$ Sediment Control Sanitary Sewer Manhole (S) MH: A1 OR D Rock Check Dam: Sanitary Sewer Cleanout CO 0000 Sediment Tube: Sanitary Sewer Wye Check Valve in Manhole Silt Fence: Plug Valve Reinforced Silt Fence: Air Release Valve Sewer Line Type A-Fabric Inlet Protection: Force Main — F-Type A-Sediment Tube Reuse Main \_\_\_\_ R\_\_\_ Inlet Protection: Service Lateral Type B - Wire Mesh and Stone Drop Inlet Protection: Water System Legend С Type C - Block and Proposed Gravel Inlet Protection Water Meter Type D -Water Valve Rigid Inlet Filters: Type E - Surface Course Curb Inlet Filter: Post Indicator Valve Fire Hydrant Type F - Inlet Tube: Blowoff Hydrant FC Type FC - Filter Bag Curb Inlet Yard Hydrant Protection: Fire Depart. Connection (FDC) FG Type FB - Filter Bag Grate Inlet Protection: cws Concrete Washout Backflow Preventor  $\rightarrow$ Butterfly Valve ADA Accessible Route Water Line \_\_\_\_w\_ Service Lateral he accessible route shall comply with the current version Grading Legend of the ADA Standards for Accessible Design.

Proposed

⊗ TP: 22.50

⊗ TW: 22.50

⊗ TC: 22.50

⊗ FG: 22.5

 $-\rightarrow --\rightarrow -\rightarrow$ 

**─** 

⊗ HP

⊗ LP

Top of Pavement Elevation

Top of Walk Elevation

Top of Curb Elevation

Finish Grade

Ditch Centerline

Direction of Flow

High Point

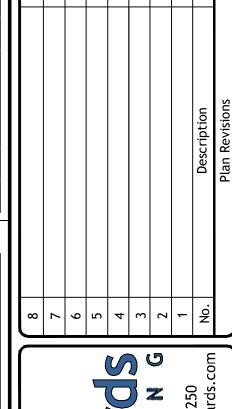
Low Point

EDWARDS, INC No. C00152

BFM

PS

SO



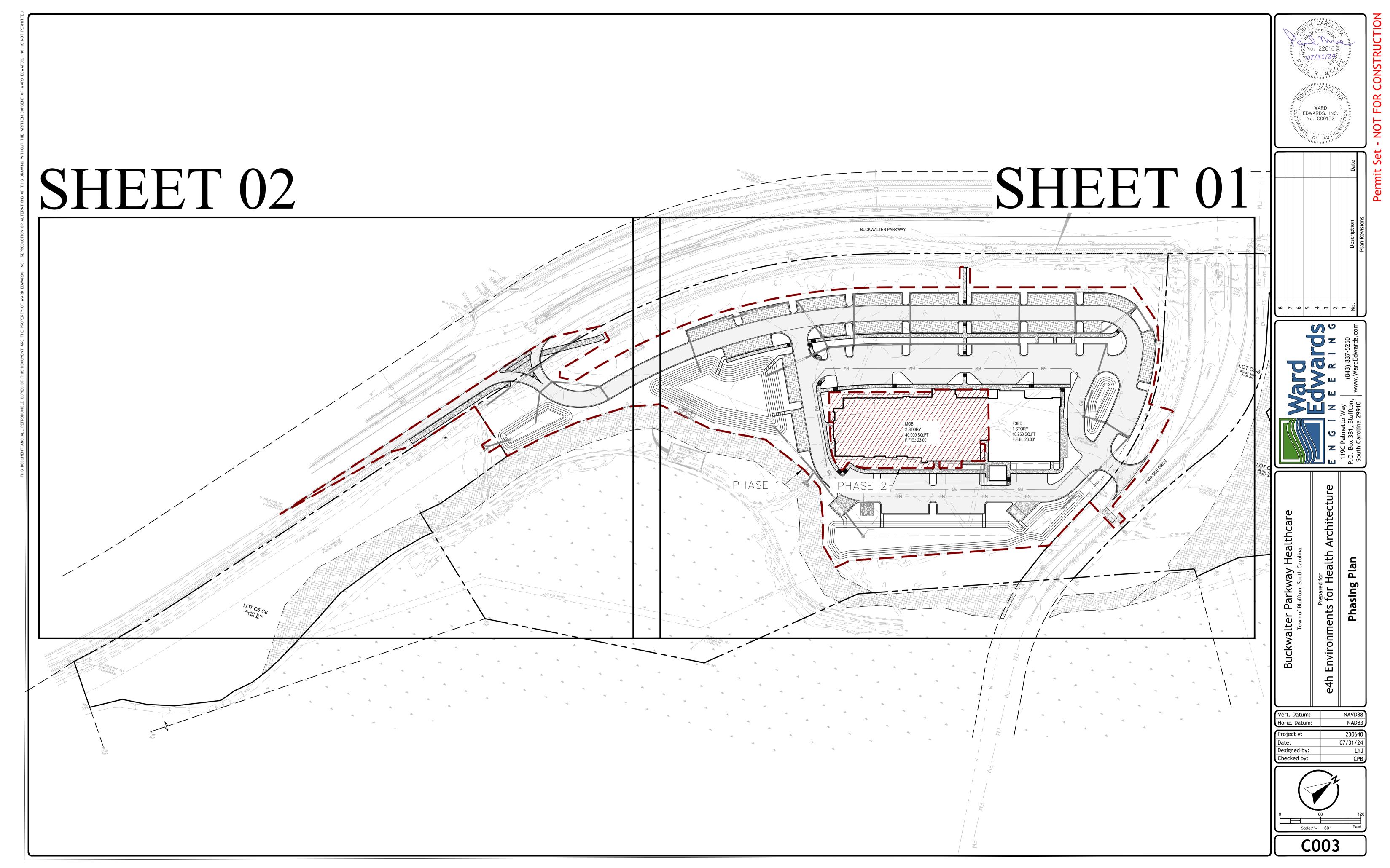


4h Environments for Health Architect	
	e4h Environments for Health Architecture

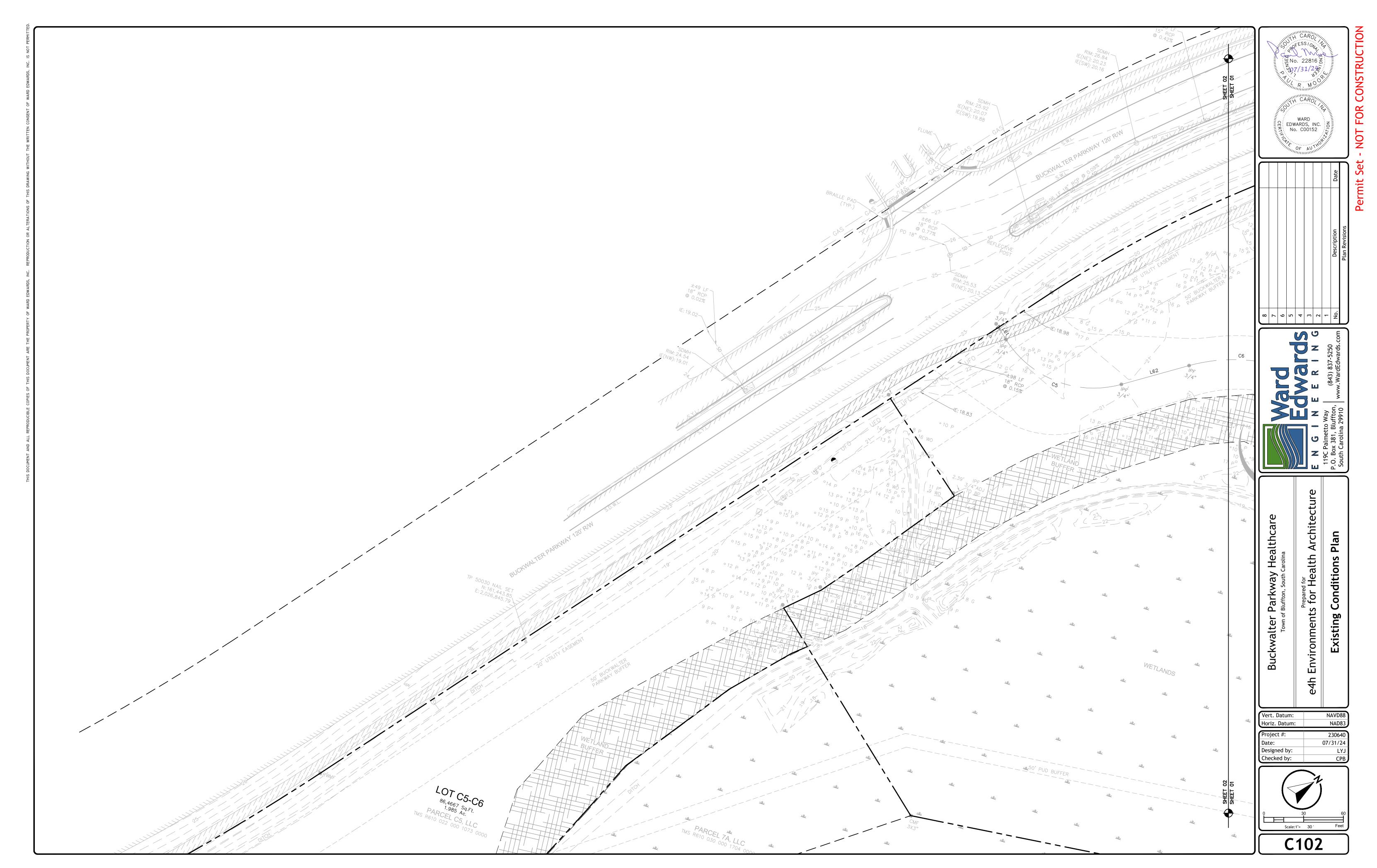
Vert. Datum: NAD83 230640 07/31/24

Not to Scale

Designed by: Checked by:











BE PROTECTED BY FENCING.

2. INSTALL TREE PROTECTION FENCE TO RADIUS INDICATED IN TABLE UNLESS OTHERWISE INDICATED ON PLANS. WARNING SIGNS TO BE MADE OF DURABLE WATERPROOF MATERIAL

. 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.

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. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.

TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. FENCING MUST REMAIN UPRIGHT AND SLACK FREE.

RADIUS OF CIRCULAR TPZ JURISDICTION FOOT PER INCH OF TRUNK DBH BEAUFORT COUNTY BEAUFORT CO. DEV. CODE 5.11.100 .5 FEET PER INCH OF TRUNK DBH OR TOWN OF BLUFFTON 10 FEET WHICHEVER IS GREATER UDO 5.3.3 FENCING AT DRIP LINE FOR ALL TOWN OF HILTON HEAD LMO 16-6-104, J-3A TREES TO BE RETAINED CITY OF BEAUFORT 0.5 FOOT PER INCH OF TRUNK DBH BEAUFORT CODE 5.3.3 FENCING AT DRIP LINE FOR ALL TREES JASPER COUNTY ZONING ORD. ART. 13.5 TO BE RETAINED FOWN OF PORT ROYAL | 1.5 FEET PER INCH OF TRUNK DBH OR PORT ROYAL CODE 5.7.70 5 FEET WHICHEVER IS GREATER

CITY OF HARDEEVILLE FENCING AT DRIP LINE FOR ALL TREES

TO BE RETAINED

DBH = TRUNK DIAMETER AT BREAST HEIGHT

# TREE PROTECTION FENCE

MZ&DO 4.8, F-3

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.
- 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
- IRRIGATE DISTURBED AREAS UNTIL SURFACE IS WET. COVER SURFACES WITH CRUSHED STONE OR GRAVEL.
- APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACES
- APPLY SPRAY-ON ADHESIVES TO MINERAL SOILS (NOT MUCK

SOILS) AS DESCRIBED IN TABLE 1.

(DC) DUST CONTROL ON DISTURBED AREAS

# SILT FENCE INSTALLATION 1.25 LB./LINEAR FT. STEEL POSTS PLAN SYMBOL —SF —SF — BACKFILL TRENCH WITH HEAVY DUTY PLASTIC TIE FOR STEEL POSTS (RESTRICT TO TOP 8-INCHES OF FABRIC) USE EITHER FLAT-BOTTOM OR V-BOTTOM TRENCH

SILT FENCE — GENERAL NOTES . 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.

Maximum sheet or overland flow path length to the silt fence shall be 100-feet. Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.

LT FENCE — POST REQUIREMENTS Silt Fence posts must be 48—inch long steel posts that meet, at a minimum,

— Composed of a high strength steel with a minimum yield strength of

Posts shall be equipped with projections to aid in fastening of filter fabric.

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

inches above the fabric shall be maintained, and a maximum height of 3 feet

Silt fence must be composed of woven geotextile filter fabric that consists of

least 85% by weight of polyolefins, polyesters, or polyamides that are formed

into a network such that the filaments or yarns retain dimensional stability

- Free of any treatment or coating which might adversely alter its physical

- Free of any defects or flaws that significantly affect its physical and/or

Use only fabric appearing on SC DOT's Qualified Products Listing (QPL),

the SC DOT Standard Specifications for Highway Construction.

Approval Sheet #34, meeting the requirements of the most current edition of

12-inches of the fabric should be placed within excavated trench and toed in

Filter Fabric shall be purchased in continuous rolls and cut to the length of

. Filter Fabric shall be installed at a minimum of 24—inches above the ground.

the following requirements:

- Composed of fibers consisting of long chain synthetic polymers of at

of 15 gauge steel, at a minimum. The metal soil stabilization plate should be

Install posts to a minimum of 24-inches. A minimum height of 1- to 2-

- Include a standard "T" section with a nominal face width of 1.38-inches

the following physical characteristics.

and a nominal "T" length of 1.48—inches.

Post spacing shall be at a maximum of 6-feet on center.

SILT FENCE — FABRIC REQUIREMENTS

- Weigh 1.25 pounds per foot (± 8%)

shall be maintained above the ground.

relative to each other;

properties after installation:

- Have a minimum width of 36-inches.

Continuous Along Tube

filtering properties; and,

the barrier to avoid joints.

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 - 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. Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top

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 cleanou

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

> SILT FENCE - INSPECTION & MAINTENANCE The key to functional silt fence is weekly inspections, routine maintenance, and

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.

FLAT-BOTTOM TRENCH DETAIL

V-SHAPED TRENCH DETAIL

COMPACTED

COMPACTED

RUNOFF

HEAVY DUTY PLASTIC TIE

18-IN. TO 24-IN.

\_\_BURY FILTER FABRIC AT LEAST 12-INCHES

South Carolina Department of

Health and Environmental Contro

SILT FENCE

standard drawing no. SC-03 Page 1 of 2

NOT TO SCALE

3. Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed whe

Remove accumulated sediment when it reaches 1/3 the height of the silt

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

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

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

CONSTRUCTION ENTRANCE - GENERAL NOTES 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.

6-INCHMIN

6 INCHES

24 FEET

100 FEET

D = 2-3 INCHES

AVERAGE STONE DIAMETER OF 2 TO 3-INCHES

WITH A 6-INCH MINIMUM DEPTH-

UNDERLYING NON-WOVEN GEOTEXTILE FABRIC

SPECIFICATION

ROCK PAD THICKNESS

ROCK PAD WIDTH

ROCK PAD LENGTH

ROCK PAD STONE SIZE

Install a non-woven geotextile fabric prior to placing any

Install a culvert pipe across the entrance when needed to provide positive drainage.

The entrance shall consist of 2—inch to 3—inch D50 stone placed at a minimum depth of 6—inches.

Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.

The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.

Divert all surface runoff and drainage from the stone pad to

a sediment trap or basin or other sediment trapping structure.

3. 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.

EDGES SHALL BE TAPERED OUT

TRACKING OF MUD ON THE EDGES

PLAN SYMBOL

South Carolina Department of

Health and Environmental Control

CONSTRUCTION ENTRANCE

tandard drawing no. SC-06 PAGE 1 of

NOT TO SCALE

TOWARDS ROAD TO PREVENT

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

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.

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

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 post-construction.

> South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE standard drawing no. SC-06 PAGE 2 of 2

GENERAL NOTES FEBRUARY 2014
DATE

### off-site discharge of sediment-laden stormwater runoff. Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch—filled sediment

SEDIMENT TUBES — GENERAL NOTES

polyethylene non-degradable material.

tubes are not permitted. The outer netting of the sediment tube should consist of seamless, high—density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density

Sediment tubes may be installed along contours, in drainage

conveyance channels, and around inlets to help prevent

Sediment tubes, when used as checks within channels, should range between 18-inches and 24-inches depending on dimensions. Diameters outside this range may be allowed where necessary when approved.

Curled excelsior wood, or natural coconut products that are rolled up to create a sediment tube are not allowed.

Sediment tubes should be staked using wooden stakes (2—inch X 2—inch) or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) at a minimum of 48—inches in length placed on 2—foot centers.

Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's recommendations should always be consulted before

The ends of adjacent sediment tubes should be overlapped 6—inches to prevent flow and sediment from passing through the field joint.

Sediment tubes should not be stacked on top of one another,

unless recommended by manufacturer.

D. Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.

12. Install stakes at a diagonal facing incoming runoff.

Sediment tubes should continue up the side slopes a minimum of 1—foot above the design flow depth of the channel.

SEDIMENT TUBES tandard drawing no. SC-05 PAGE 2 of

SEDIMENT TUBES - INSPECTION & MAINTENANCE 1. The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.

2. Regular inspections of sediment tubes shall be conducted once every calendar week and, as recommended, within 24—hours after each rainfall even that produces 1/2-inch or more of precipitation.

3. Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.

4. Remove accumulated sediment when it reaches 1/3 the height of the sediment tube.

5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.

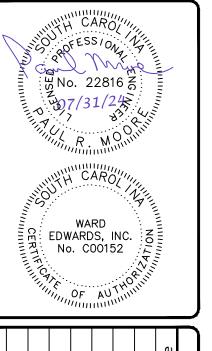
6. Large debris, trash, and leaves should be removed from in front of tubes when found.

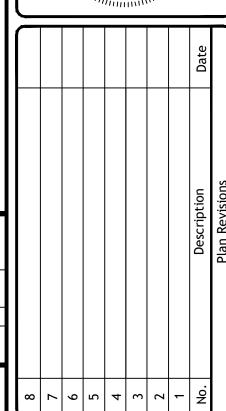
7. If erosion causes the edges to fall to a height equal to or below the height of the sediment tube, repairs should be made immediately to prevent runoff from bypassing tube.

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

> South Carolina Department of Health and Environmental Control

> > GENERAL NOTES FEBRUARY 2014
> > DATE







Architect Details dfor Health for Ш

Environments Initial

Vert. Datum: NAD83 230640 07/31/24

Designed by: Checked by:

Not to Scale

# SEDIMENT TUBE INSTALLATION

Stakes Placed 2" x 2" wood stakes or at 2' 1.25 #/ft Steel Post Minimum Spacing

# SEDIMENT TUBE SPACING

SLOPE	MAX. SEDIMENT TUBE SPACING
LESS THAN 2%	150-FEET
2%	100-FEET
3%	75-FEET
4%	50-FEET
5%	40-FEET
6%	30-FEET
REATER THAN 6%	25-FEET

# PLAN SYMBOL

South Carolina Department of Health and Environmental Contro

SEDIMENT TUBES ndard drawing no. SC-05 PAGE 1 of NOT TO SCALE

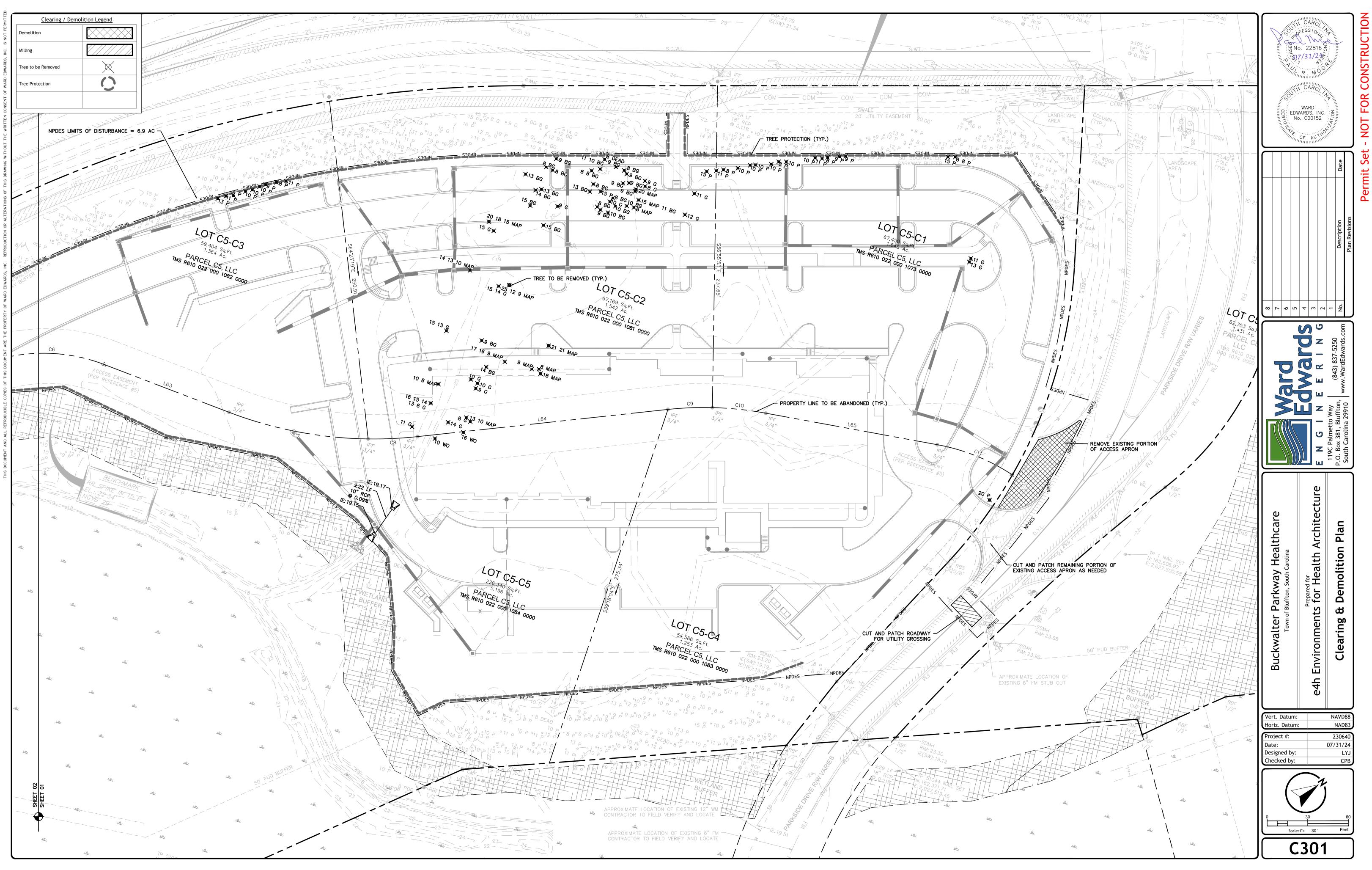
South Carolina Department of

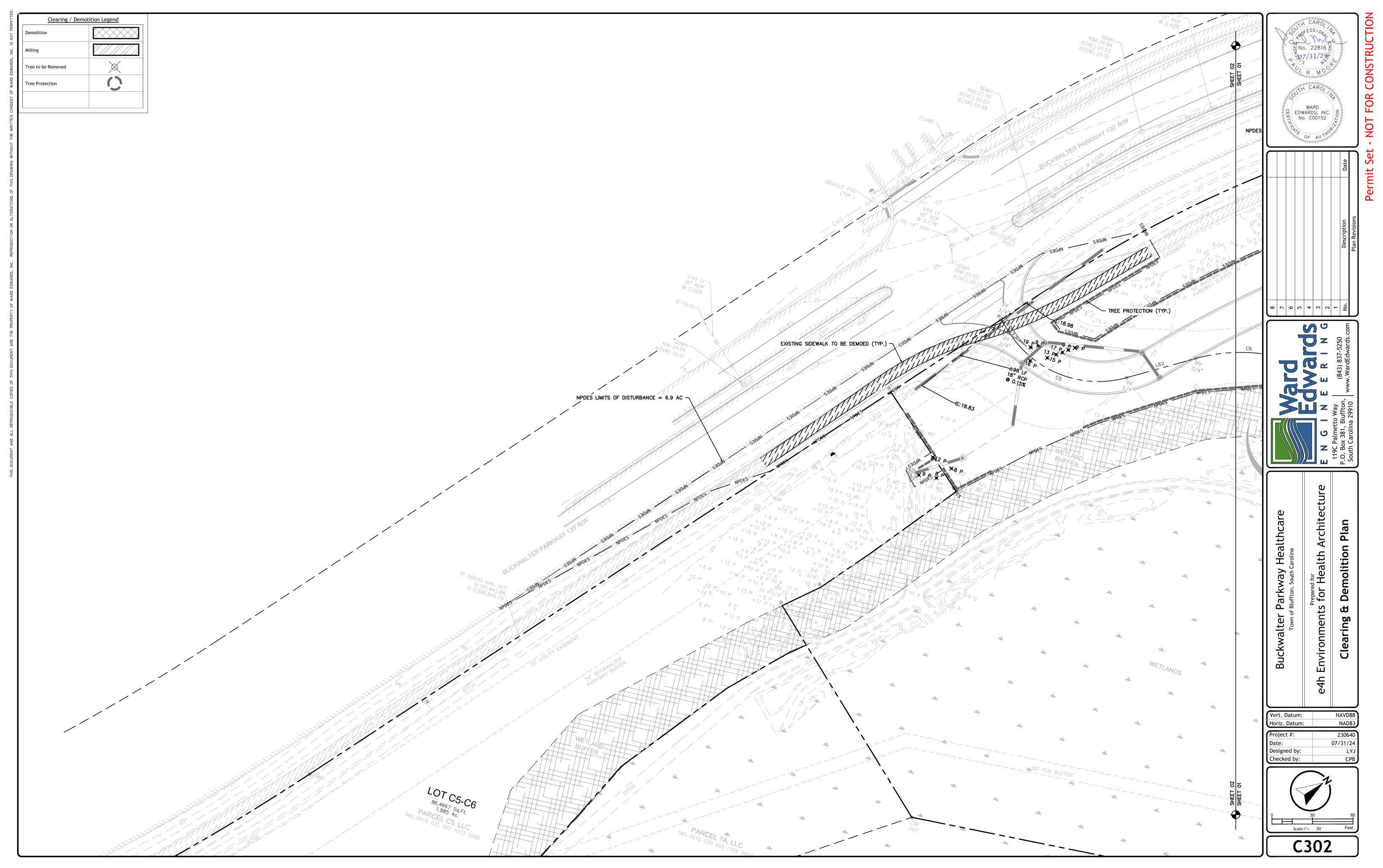
Health and Environmental Contro

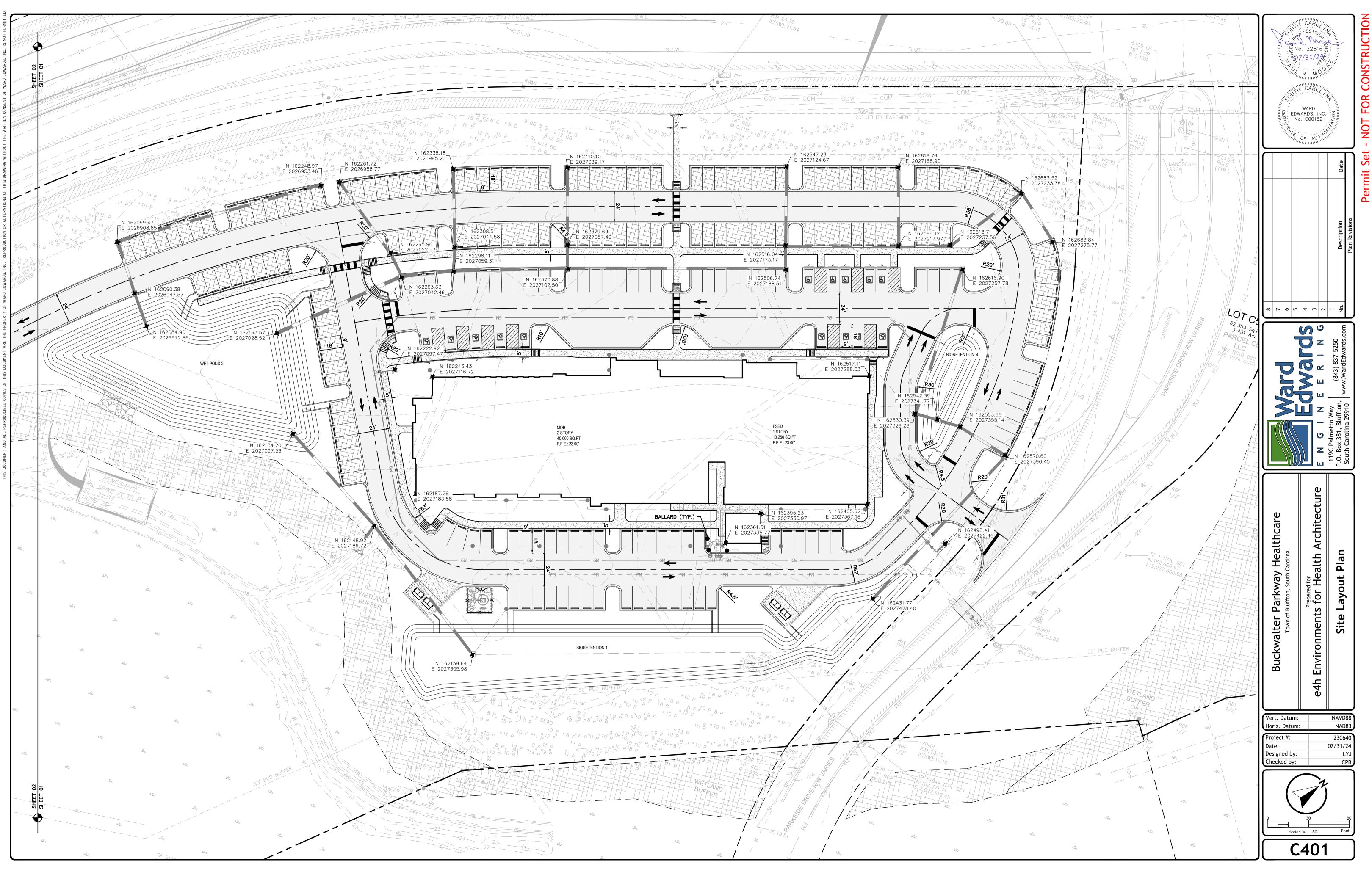
SILT FENCE

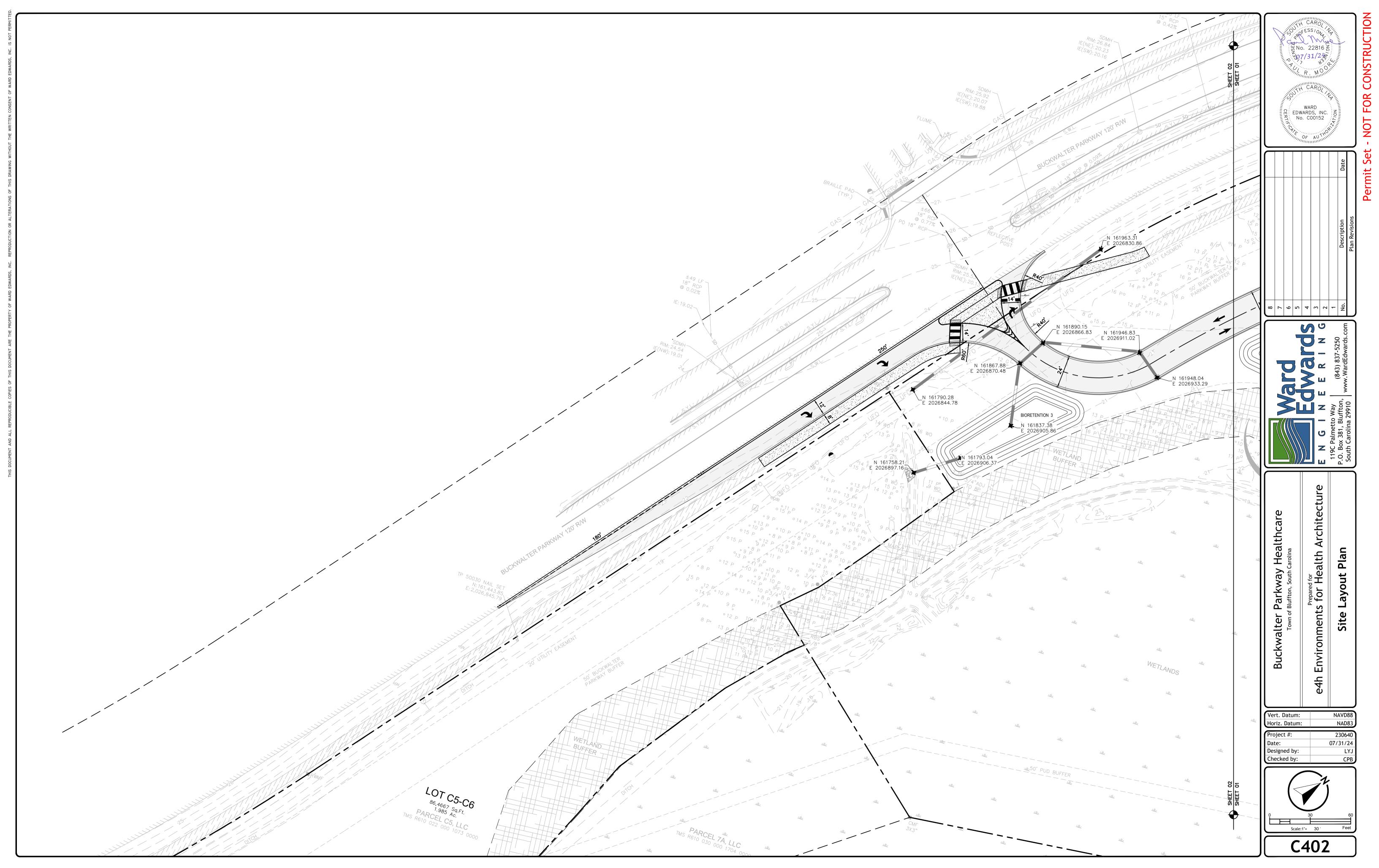
andard drawing no. SC-03 PAGE 2 of :

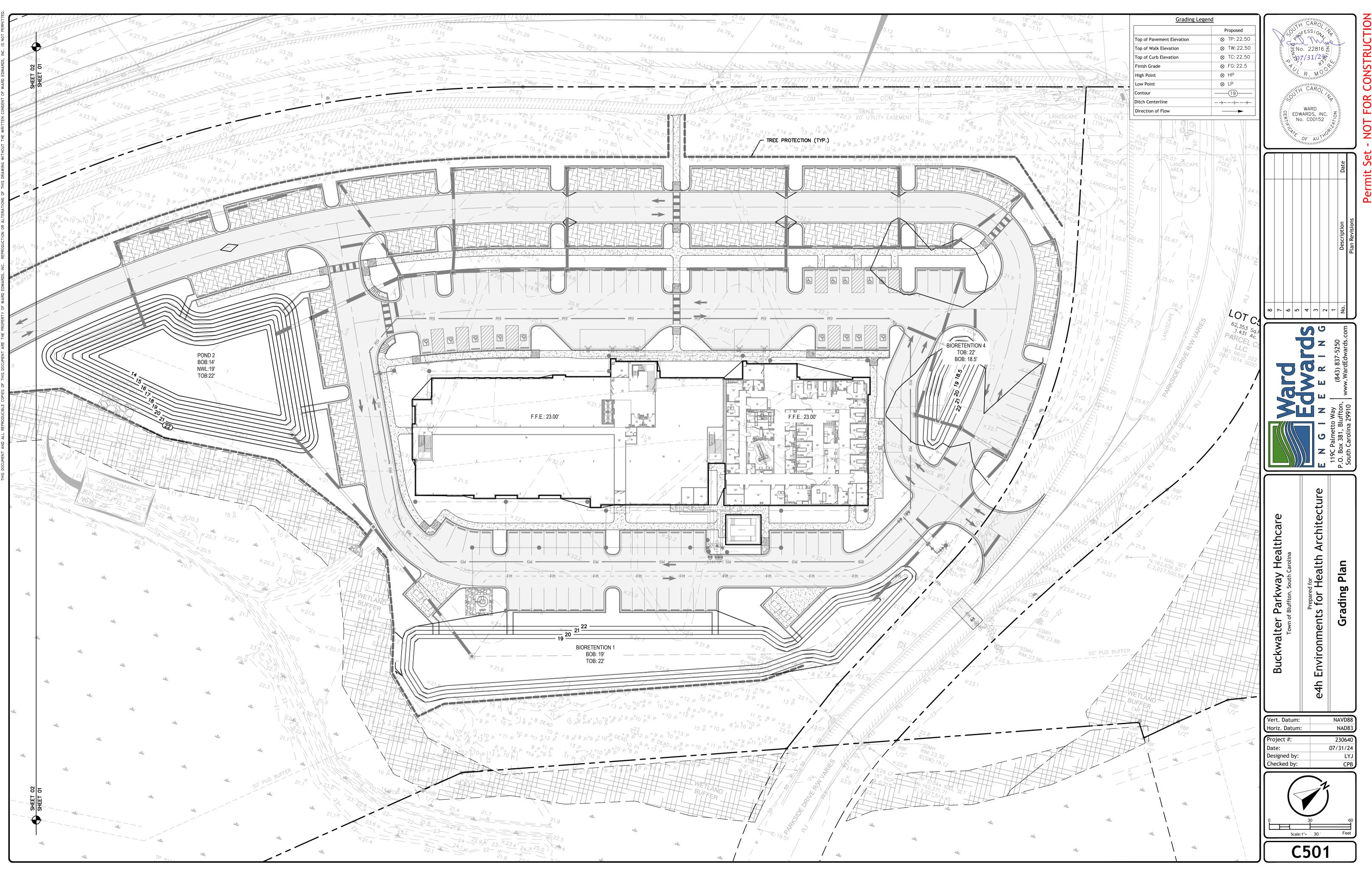
GENERAL NOTES FEBRUARY 2014
DATE

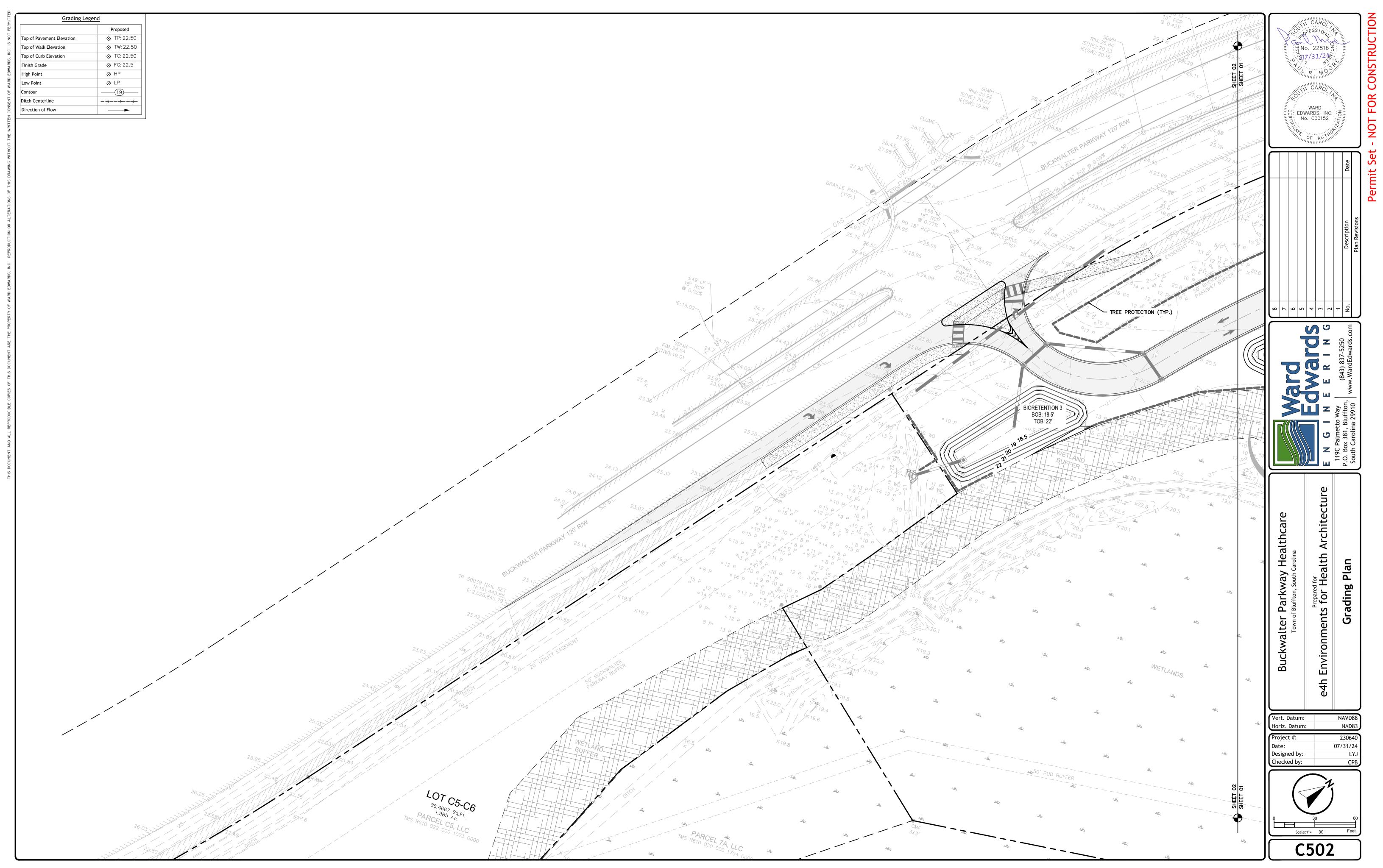


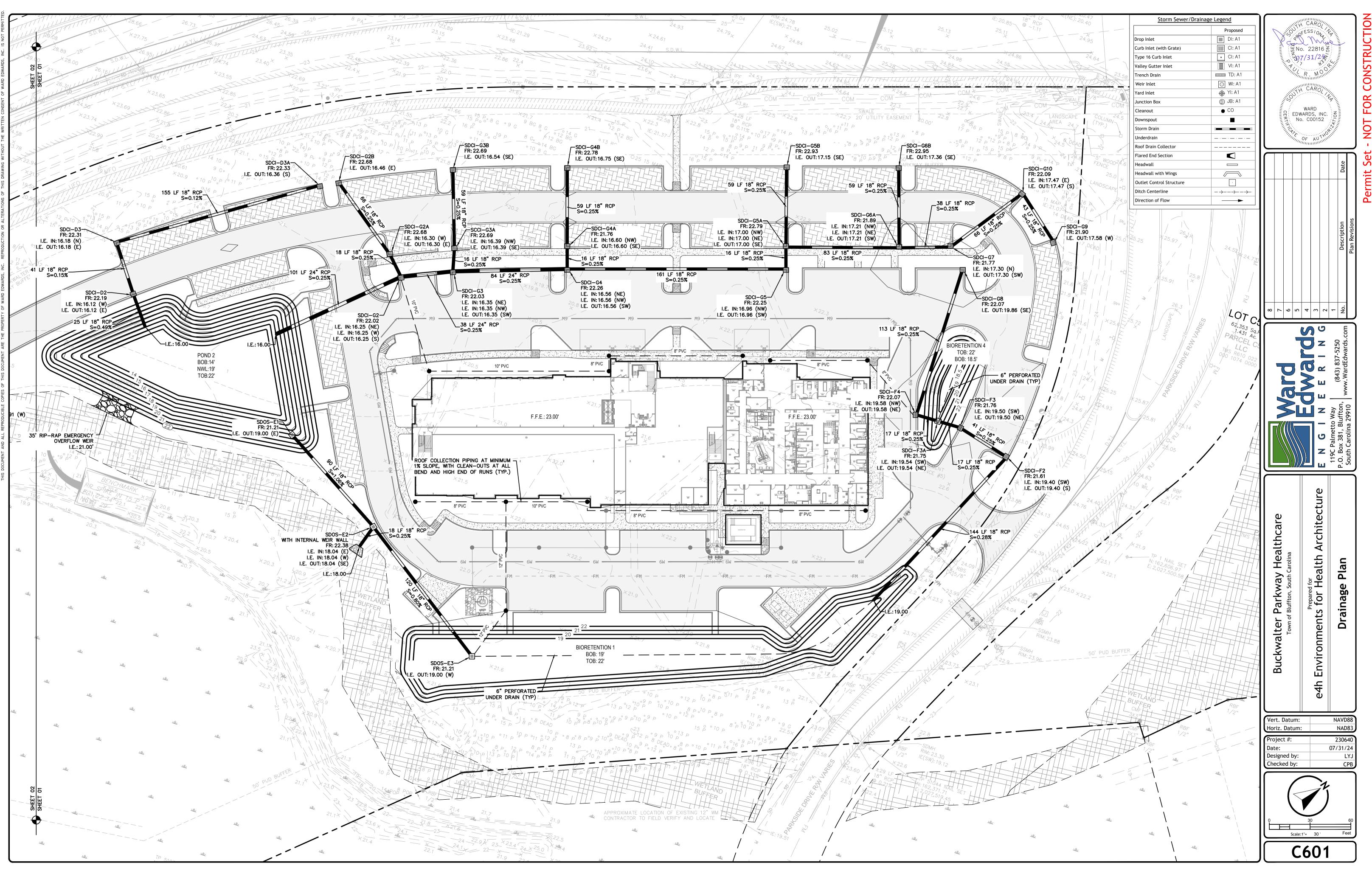




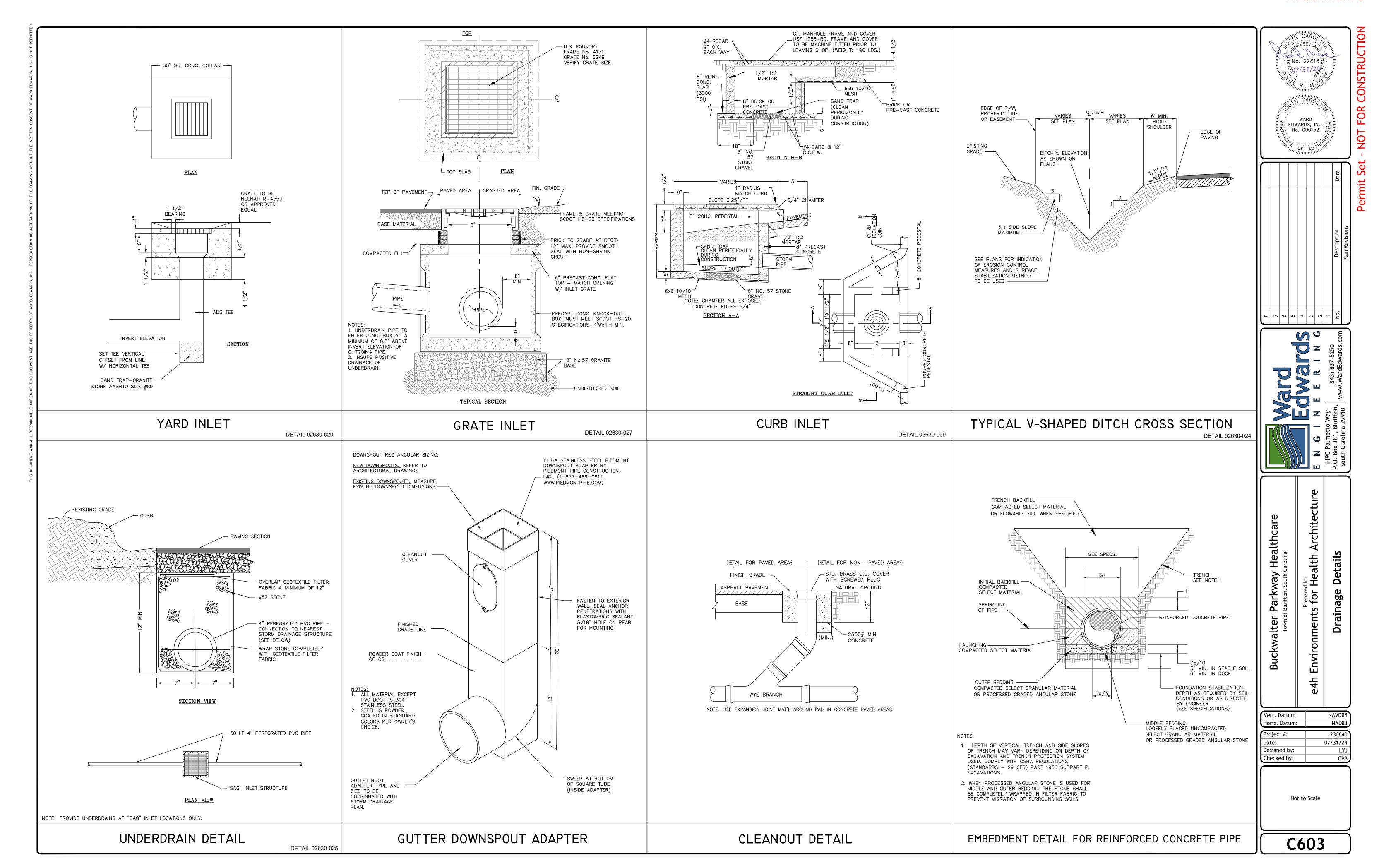


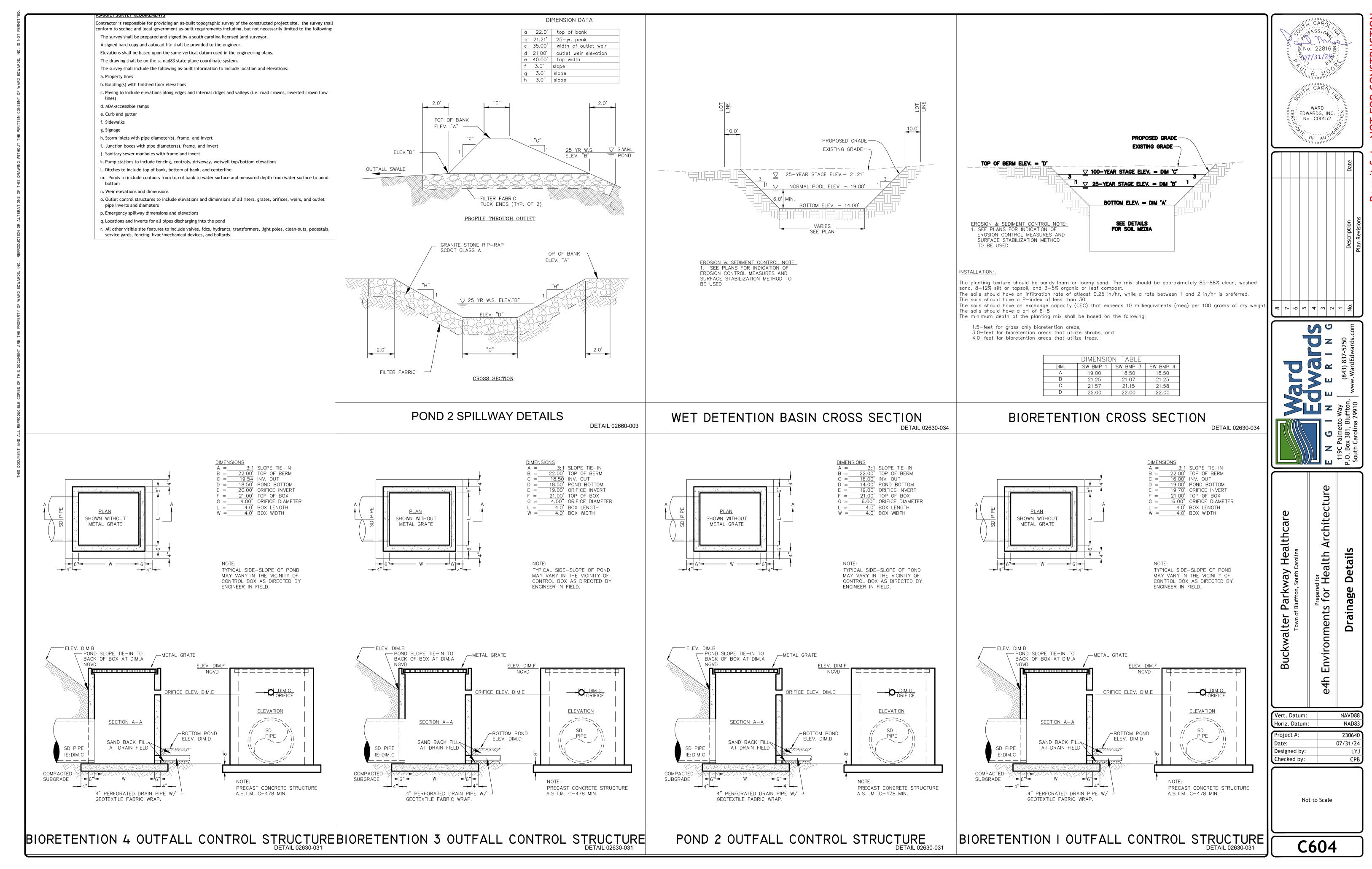


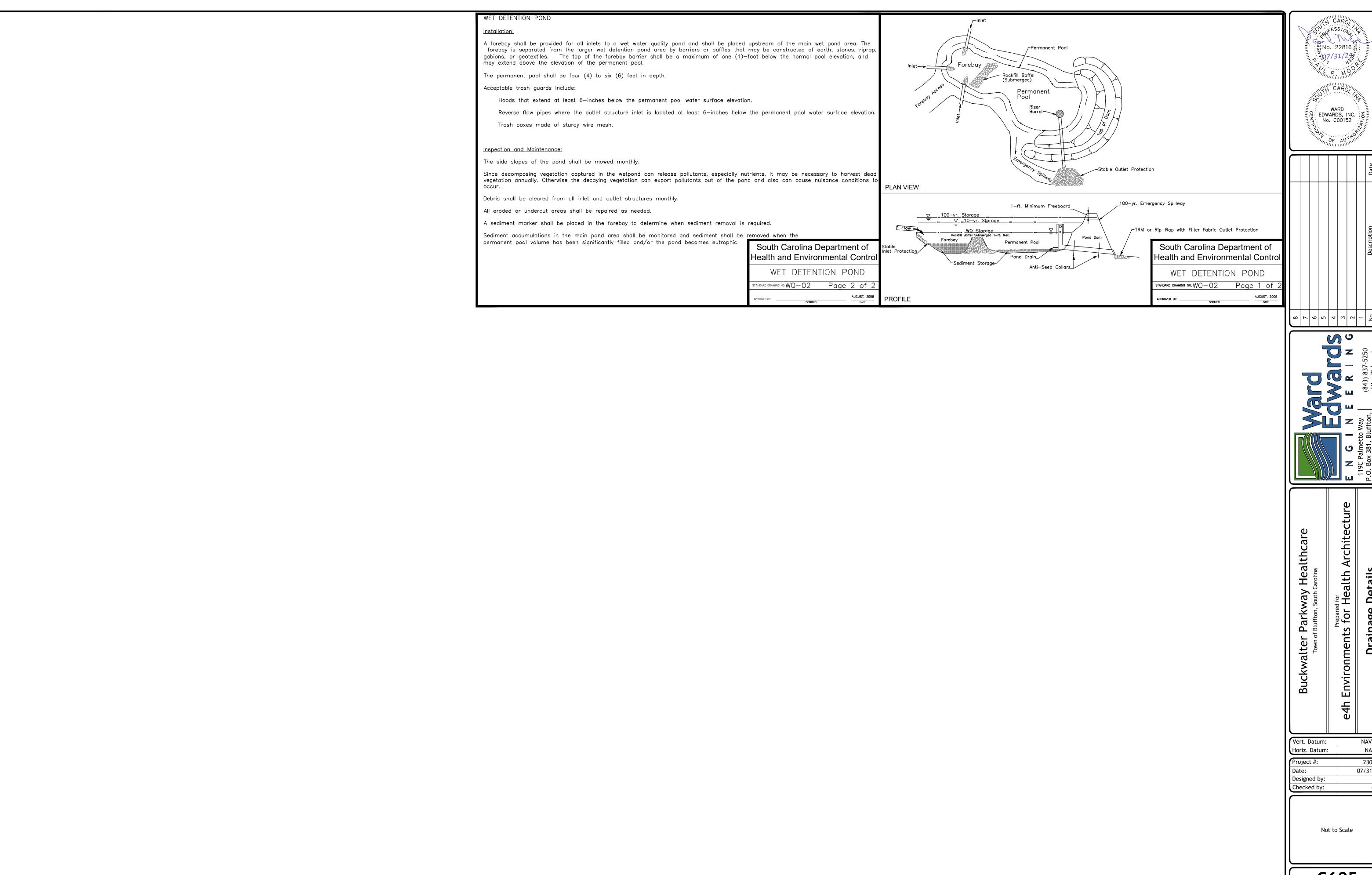








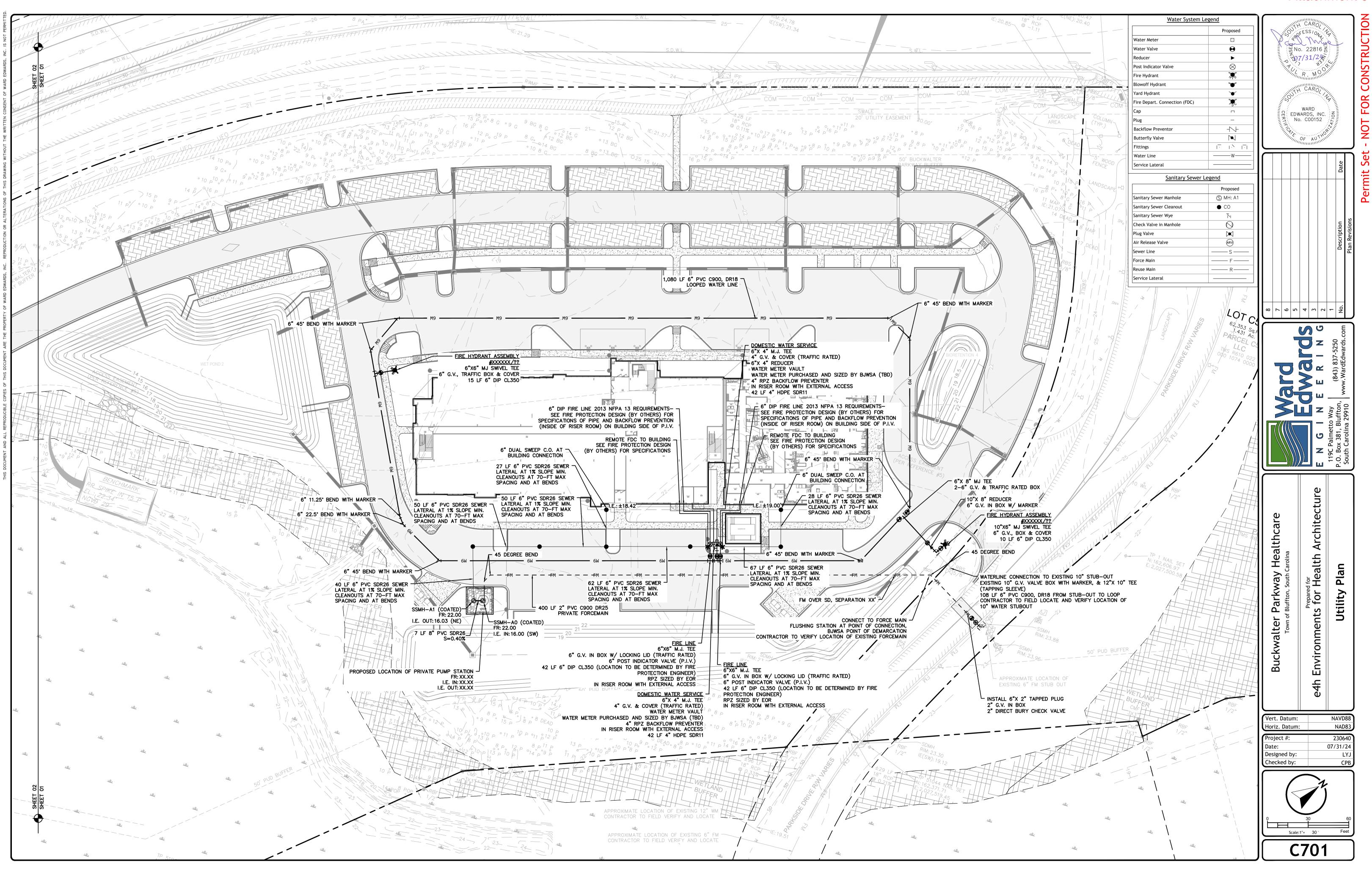


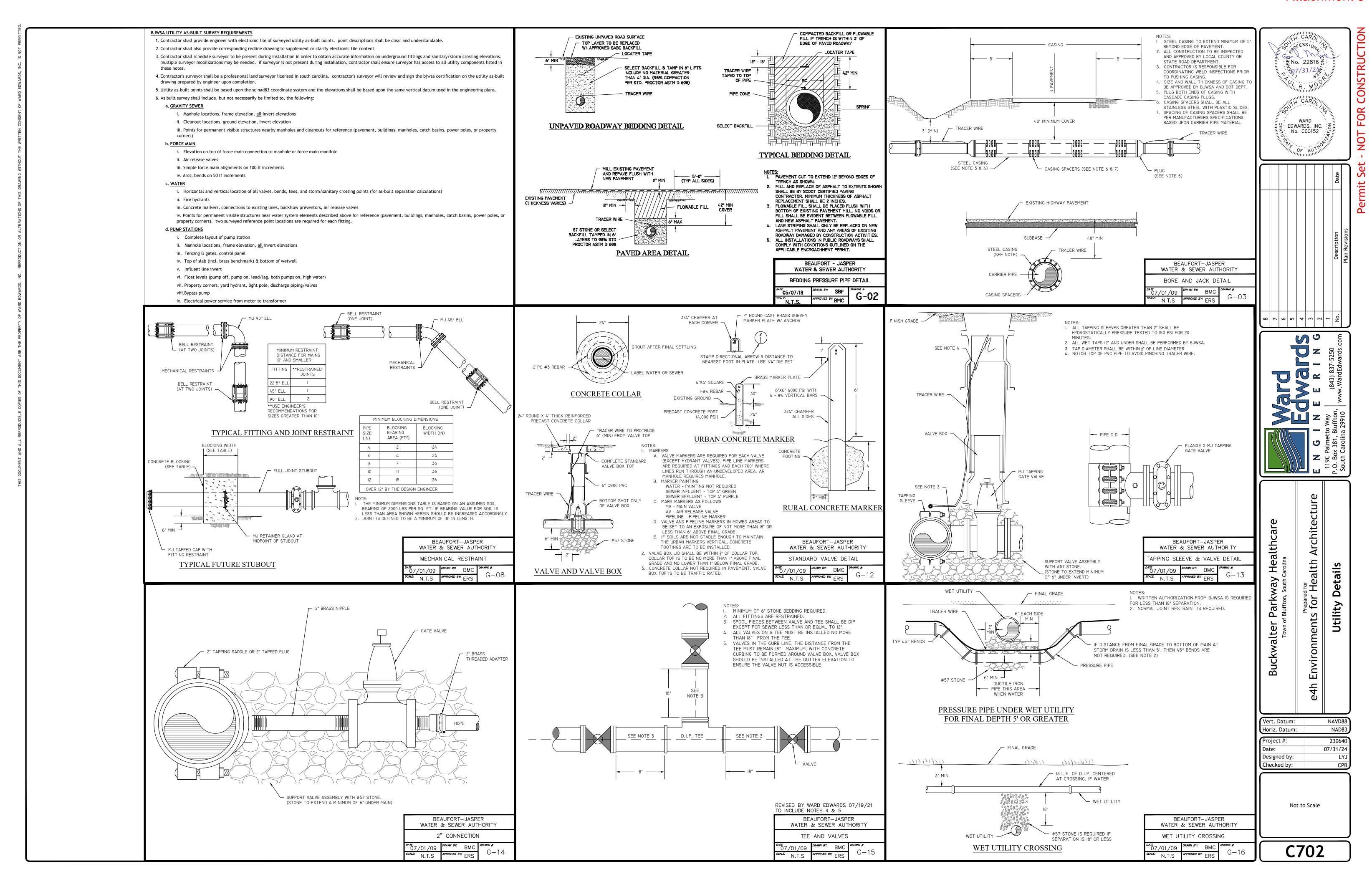


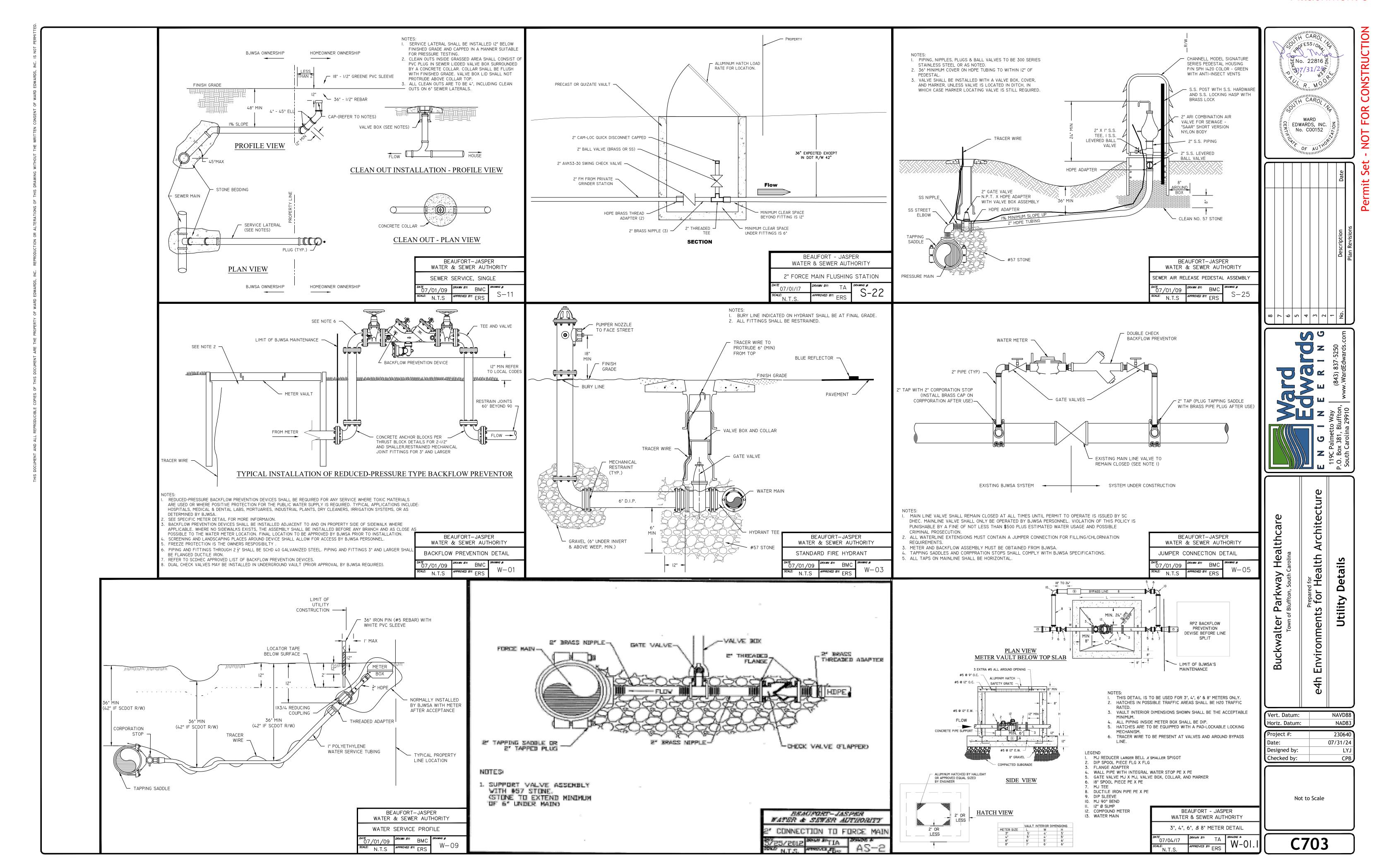
**Drainage Details** 

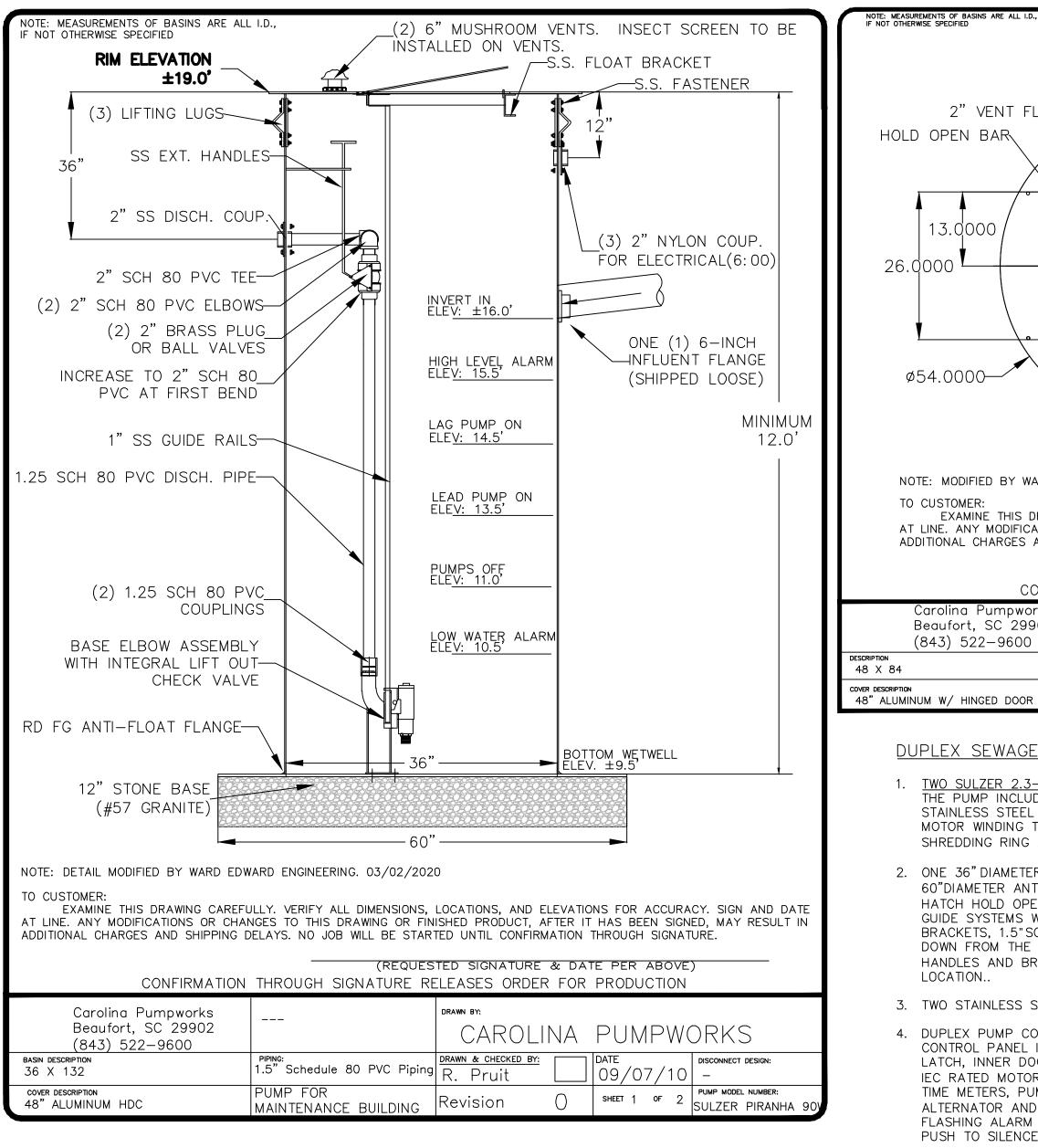
NAD83 07/31/24

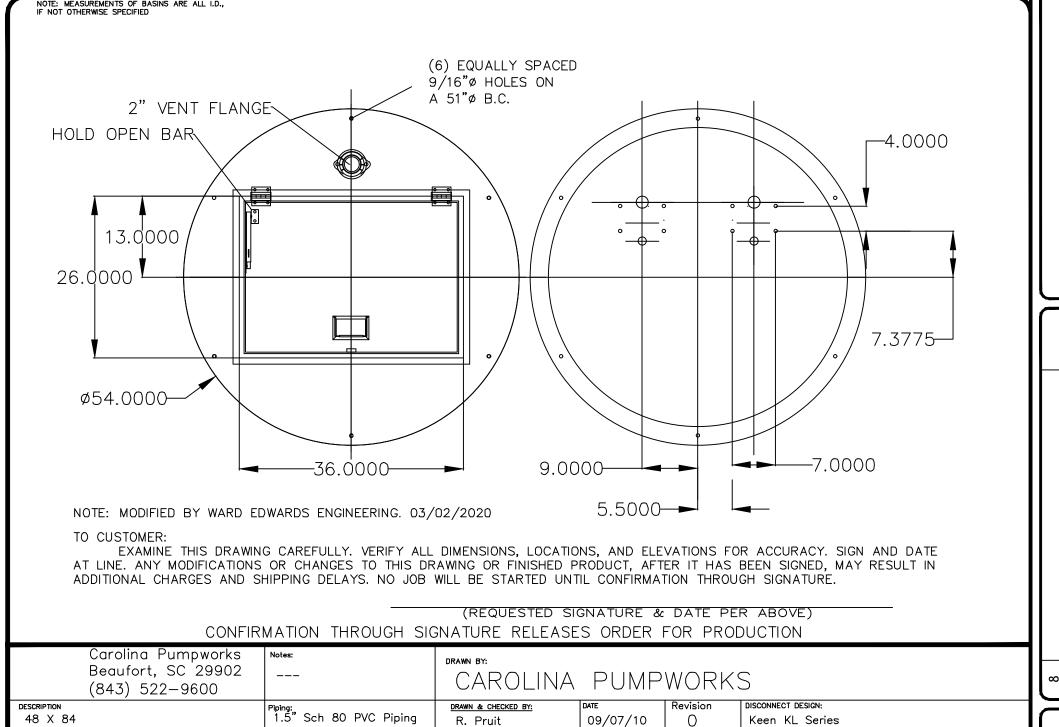
**C605** 











### DUPLEX SEWAGE GRINDER LIFT STATIONS TO INCLUDE THE FOLLOWING:

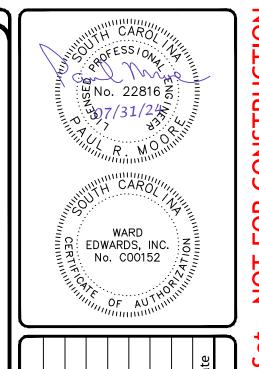
1. TWO SULZER 2.3-HORSEPOWER, 3390-RPM, 230-VOLT, SINGLE-PHASE, 60-HERTZ SUBMERSIBLE SEWAGE GRINDER PUMP. THE PUMP INCLUDES THE FOLLOWING: CAST IRON CONSTRUCTION, DUCTILE IRON RECESSED VORTEX STYLE IMPELLER, STAINLESS STEEL SHAFT, UPPER AND LOWER SILICON CARBIDE MECHANICAL SHAFT SEALS, SEAL FAILURE SENSOR, MOTOR WINDING THERMAL SENSOR, STAINLESS STEEL FASTENERS, STAINLESS STEEL LIFTING BAIL, STAINLESS STEEL SHREDDING RING AND GRINDING IMPELLER AND 40-FOOT LONG POWER/CONTROL CABLES.

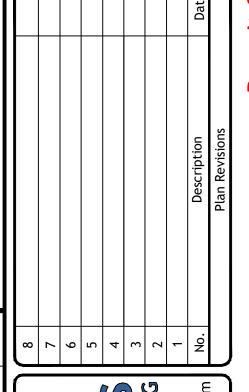
SHEET 2 OF 2

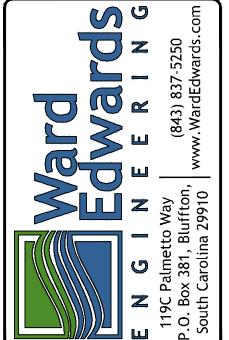
PUMP MODEL NUMBER:

Keen KG2

- 2. ONE 36" DIAMETER BY MINIMUM 138" (11.5-FOOT) DEEP DUPLEX FIBREGLASS BASIN SYSTEM INCLUDING THE FOLLOWING: 60"DIAMETER ANTI-FLOAT FLANGE, LIFTING LUGS, ALUMINIUM COVER WITH HINGED PAD-LOCKABLE ACCESS HATCH, HATCH HOLD OPEN ARM AND 2-INCH MUSHROOM VENT, STAINLESS STEEL FLOAT MOUNTING BRACKET, TWO (2) PUMP GUIDE SYSTEMS WITH CAST IRON BASE ELBOWS, STAINLESS STEEL GUIDE RAILS AND STAINLESS STEEL GUIDE RAIL BRACKETS, 1.5" SCHEDULE 80 PVC DISCHARGE PIPING WITH A COMMON 2"STAINLESS STEEL DISCHARGE HUB LOCATED 36" DOWN FROM THE TOP OF THE BASIN, 2"BALL CHECK VALVES AND 2"GATE VALVES WITH STAINLESS STEEL EXTENSION HANDLES AND BRACKETS AND ONE (1) 6" ADAPTA-FLEX INFLUENT GROMMET SHIPPED LOOSE FOR ACCURATE FIELD LOCATION..
- 3. TWO STAINLESS STEEL PUMP LIFTING CHAIN AND SHACKLE KITS
- 4. DUPLEX PUMP CONTROL PANEL SIZED FOR 2—HORSEPOWER, 208—VOLT, SINGLE PHASE, 60—HERTZ SERVICE. THE CONTROL PANEL IS HOUSED INSIDE A NEMA 4X FIBERGLASS ENCLOSURE WITH DEAD FRONT, PAD—LOCKABLE ENTRY LATCH, INNER DOOR, POWER AND GROUND TERMINAL BLOCKS, PUMP CIRCUIT BREAKERS, CONTROL CIRCUIT BREAKERS, IEC RATED MOTOR STARTERS WITH ADJUSTABLE OVERLOADS, PHASE MONITOR, LIGHTENING/SURGE PROTECTION, ELAPSED TIME METERS, PUMP RUN LIGHTS, PUMP FAULT LIGHTS, DUPLEX FLOAT SWITCH ACTIVATED PUMP CONTROLLER WITH ALTERNATOR AND AUTO/1-2/2-1 SEQUENCE SELECTOR SWITCH, HAND-OFF-AUTO SWITCHES, HIGH WATER ALARM, FLASHING ALARM LIGHT MOUNTED ON TOP OF THE CONTROL PANEL AND AN AUDIBLE ALARM BUZZER WITH EXTERNAL PUSH TO SILENCE BUTTON.
- 5. FIVE FLOATS WITH 40-FOOT CORDS AND CORD WEIGHTS





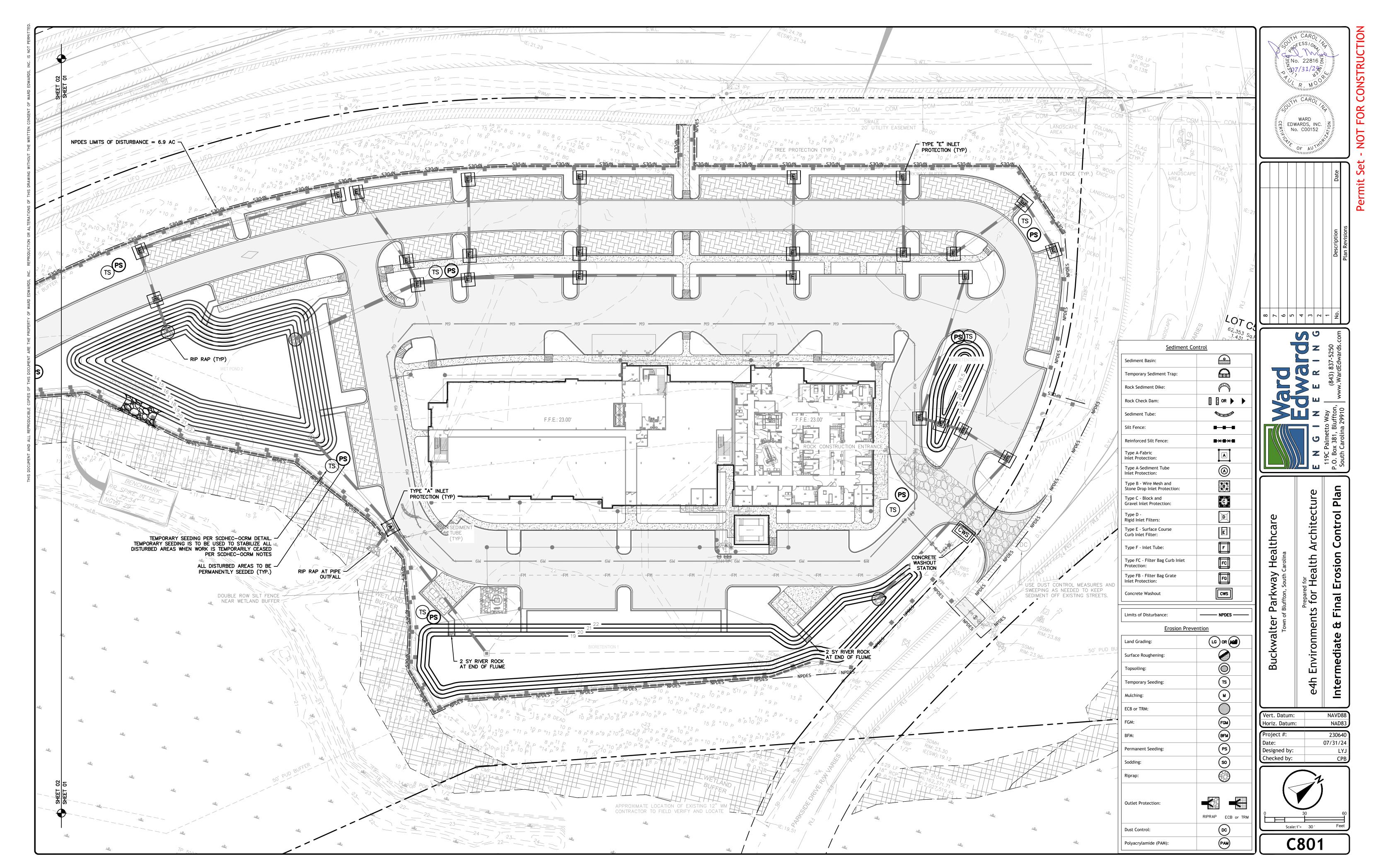


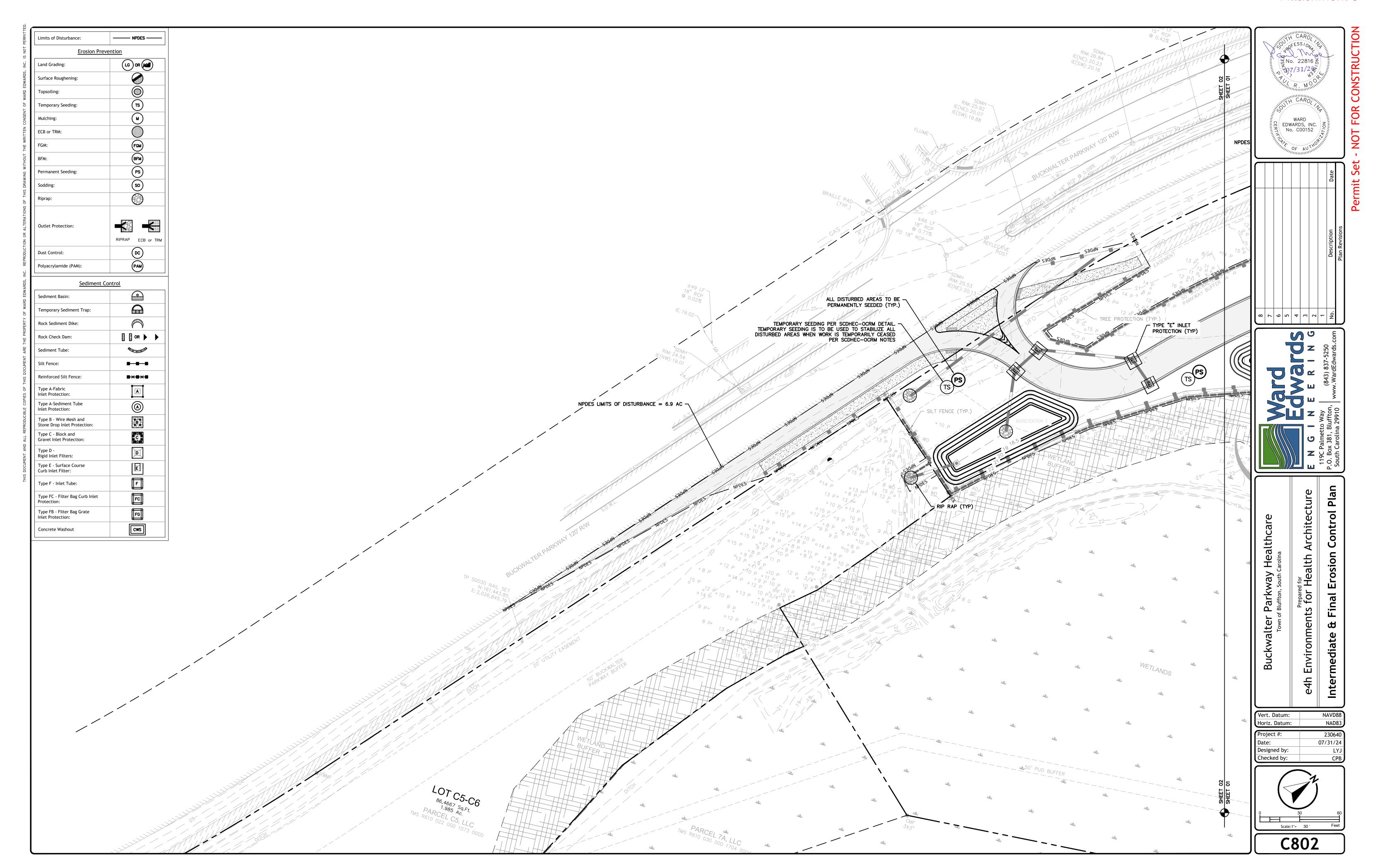
Town of Bluffton, South Carolina
Prepared for
Nyironments for Health Architecture
Utility Details

ert. Datum:	NAVD88
oriz. Datum:	NAD83
oject #:	230640
ate:	07/31/24
esigned by:	LYJ
necked by:	СРВ

Not to Scale

C704





ਲੋਂ No. 22816 ਨੂੰ

EDWARDS, INC.

No. C00152

TYPE A - FILTER FABRIC REQUIREMENTS . 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 filaments or yarns retain dimensional stability relative to each

- 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
- 3. 12-inches of the fabric should be placed within excavated trench and
- 4. Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.

toed in when the trench is backfilled.

- 5. Filter Fabric shall be installed at a minimum of 24—inches above the
- TYPE A POST REQUIREMENTS . 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 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
- 3. Install posts to a minimum of 24—inches. A minimum height of 1— to 2— inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
- 4. Post spacing shall be at a maximum of 3—feet on center.

TYPE A - INSPECTION & MAINTENANCE 1. The key to functional inlet protection is weekly inspections, routine

maintenance, and regular sediment removal.

- 2. Regular inspections of inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2—inch or more of precipitation.
- 3. Attention to sediment accumulations along the filter fabric is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- 4. Remove accumulated sediment when it reaches 1/3 the height of the filter fabric. When a sump is installed in front of the fabric, sediment should be removed when it fills approximately 1/3 the depth of the
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Check for areas where stormwater runoff has eroded a channel beneath the filter fabric, or where the fabric has sagged or collapsed due to runoff overtopping the inlet protection.
- 7. Check for tears within the filter fabric, areas where fabric has begun to decompose, and for any other circumstance that may render the inlet protection ineffective. Removed damaged fabric and reinstall new
- 8. Inlet protection structures should be removed after all the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas

### South Carolina Department of Health and Environmental Control

Type A
FILTER FABIC INLET PROTECTION
STANDARD DRAWING NO. $SC-07$ PAGE 2 of 2
GENERAL NOTES FEBRUARY 2014

TYPE F - INLET TUBES INLET PROTECTION

1. Inlets tubes should be composed of compacted geotextiles, curled excelsior wood, natural coconut fibers, a hardwood or a mix of these materials enclosed by a flexible

2. Inlets tubes should utilize an outer netting that consists of seamless, high—density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density polyethylene non-degradable material. Curled wood excelsion fiber, or natural coconut fiber rolled erosion control products

up to create an inlet tube device are not allowed.

3. Do not use straw, straw fiber, straw bales, pine needles, or leaf mulch as fill material within inlet tubes.

4. Weighted inlet tubes must be capable of staying in place without external stabilization measures and may have a weighted inner core or other weighted mechanism to keep

5. Install weighted tubes lying flat on the ground, with no gaps between the underlying surface and the inlet tube. Do not

inlet tubes. Do not completely block inlet with tube.

may be placed between the tube and the inlet.

- 6. Non-weighted inlet tubes require staking or other stabilization methods to keep them safely in place.
- into inlet unobstructed. 8. To avoid possible flooding, two or three concrete cinder blocks

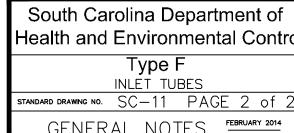
7. Overflow or overtopping of inlet tubes must be allowed to flow

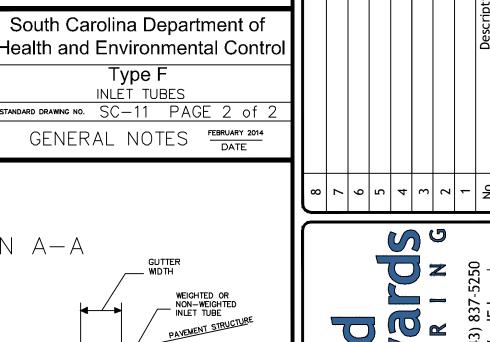
### INSPECTION AND MAINTENANCE

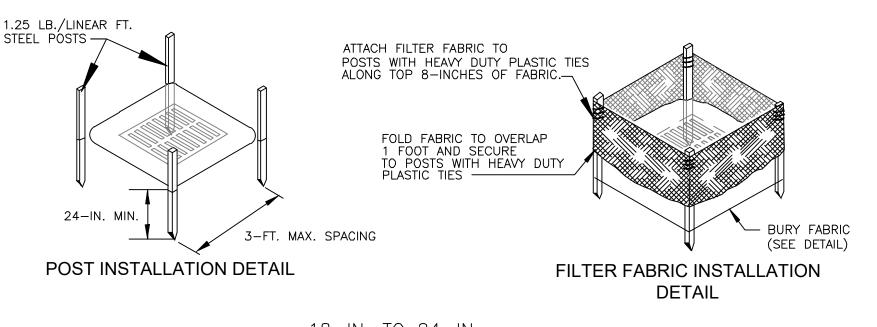
- 1. The key to functional inlet protection is weekly inspection, routine maintenance, and regular sediment removal.
- 2. Regular inspections of all inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
- 3. Attention to sediment accumulations in front of the inlet protection 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 blocks. If a sump is used, sediment should be removed when it fills approximately 1/3 the depth of the hole.
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Large debris, trash, and leaves should be removed from in
- 7. Replace inlet tube when damaged or as recommended by manufacturer's specifications.

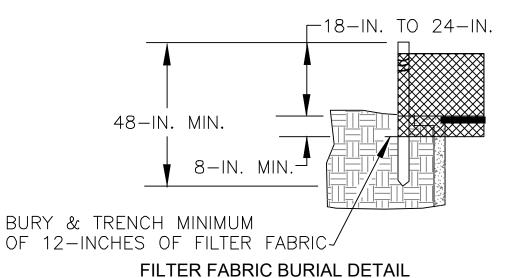
front of tubes when found.

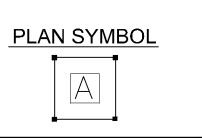
8. Inlet protection structures should be removed after the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare areas immediately.





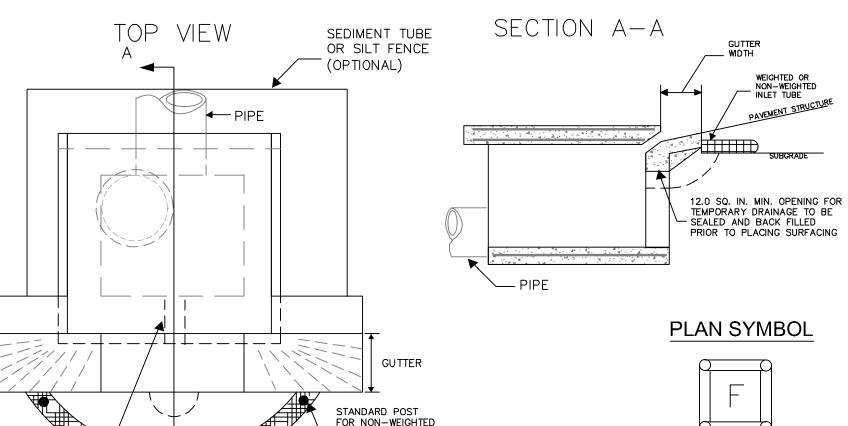






South Carolina Department of Health and Environmental Control Type A

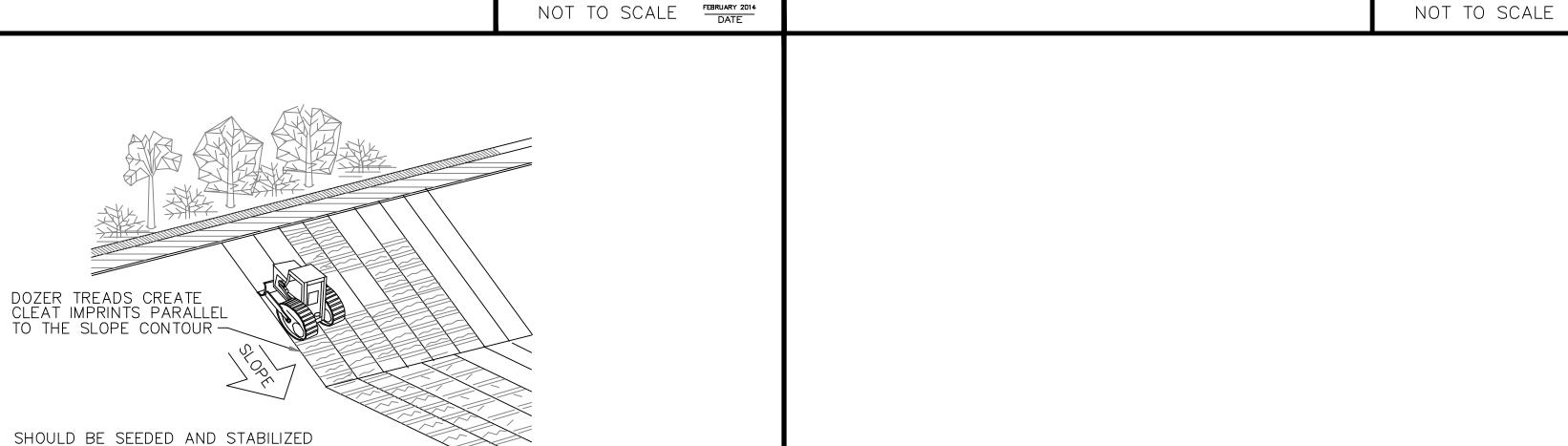
FILTER FABIC INLET PROTECTION ndard drawing no. SC-07 PAGE 1 of 2



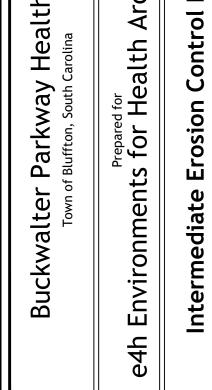
WEIGHTED OR

NON-WEIGHTED

South Carolina Department of Health and Environmental Contro Type F INLET TUBES randard drawing no. SC-11 PAGE 1 of :



12.0 SQ. IN. WEEP HOLE



Architecture

Details

AVD88	
NAD83	
30640	
31/24	
LYJ	
ect #: 230640 e: 07/31/24	

Not to Scale

**C803** 

TEMPORARY SEEDING - COASTAL

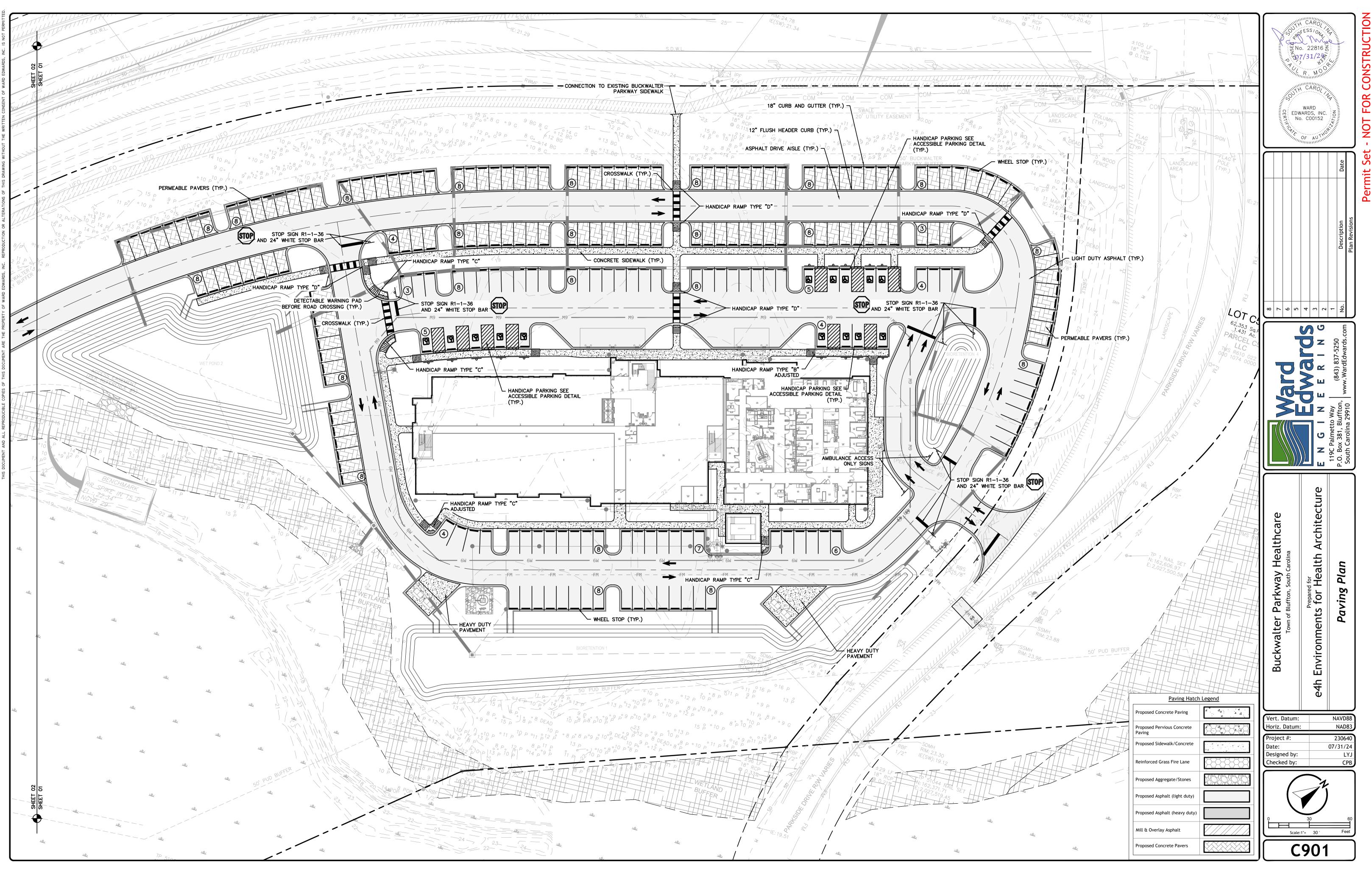
DETAIL 02370-017

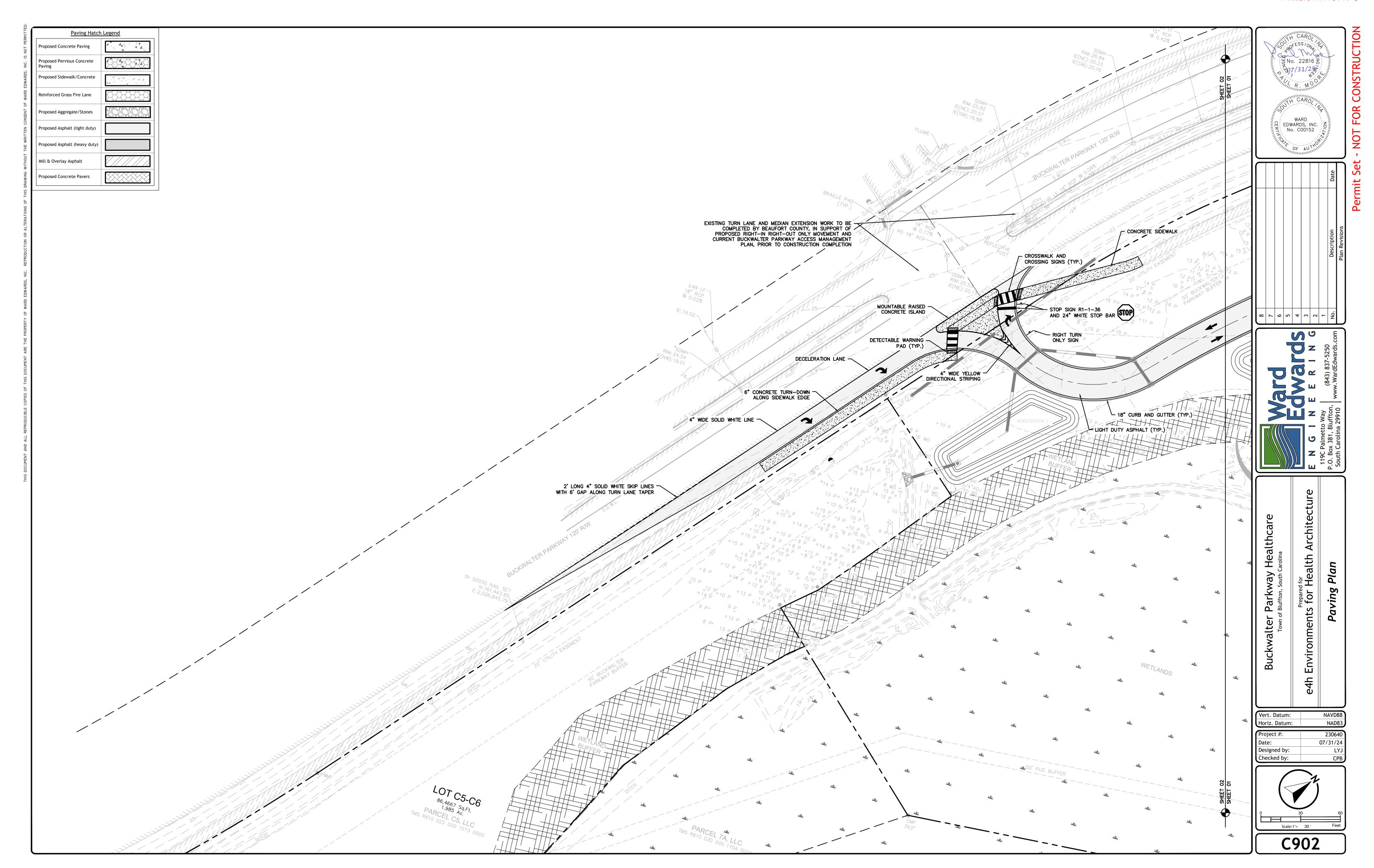
**TRACKING** 

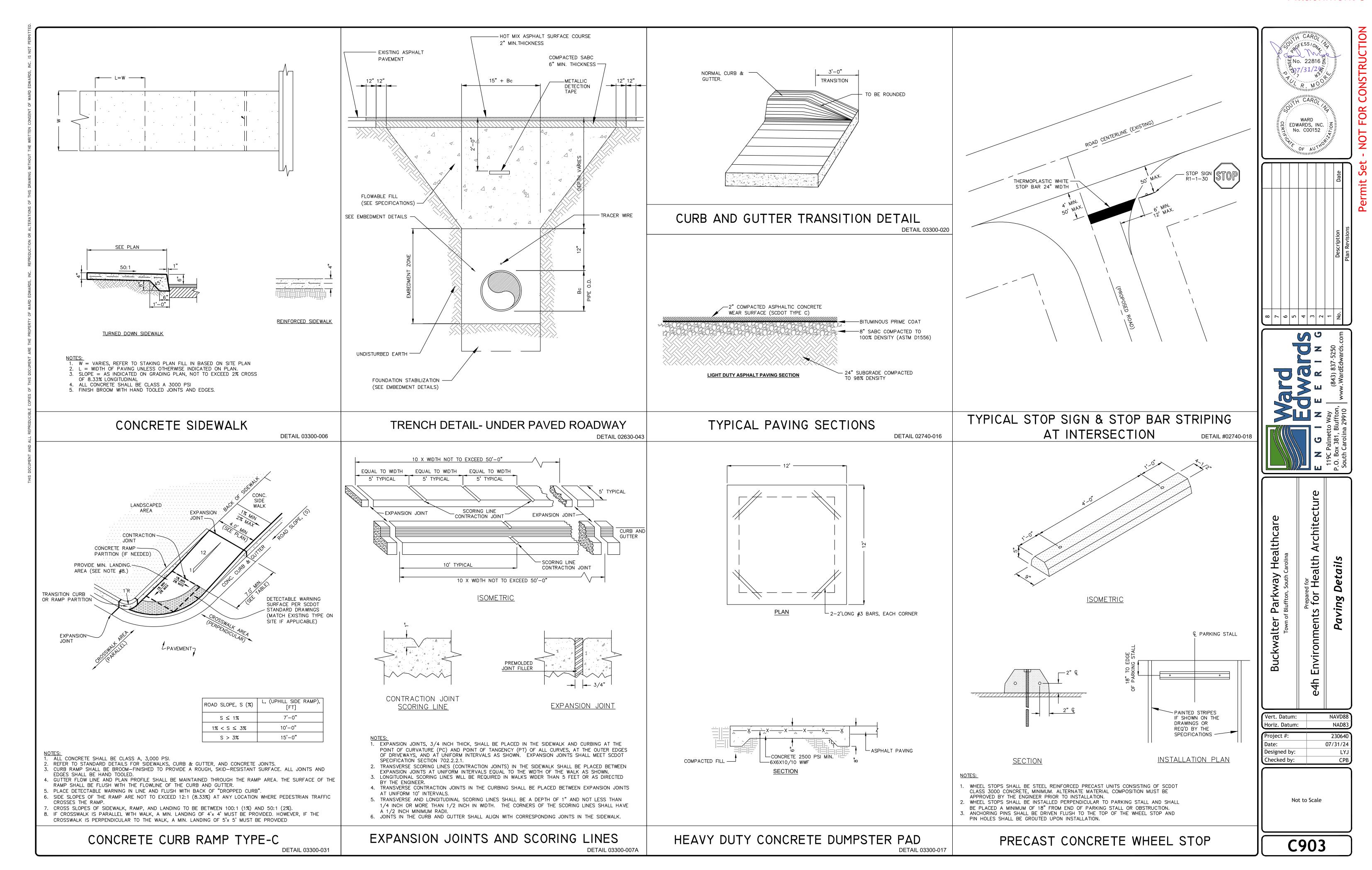
IMMEDIATELY.

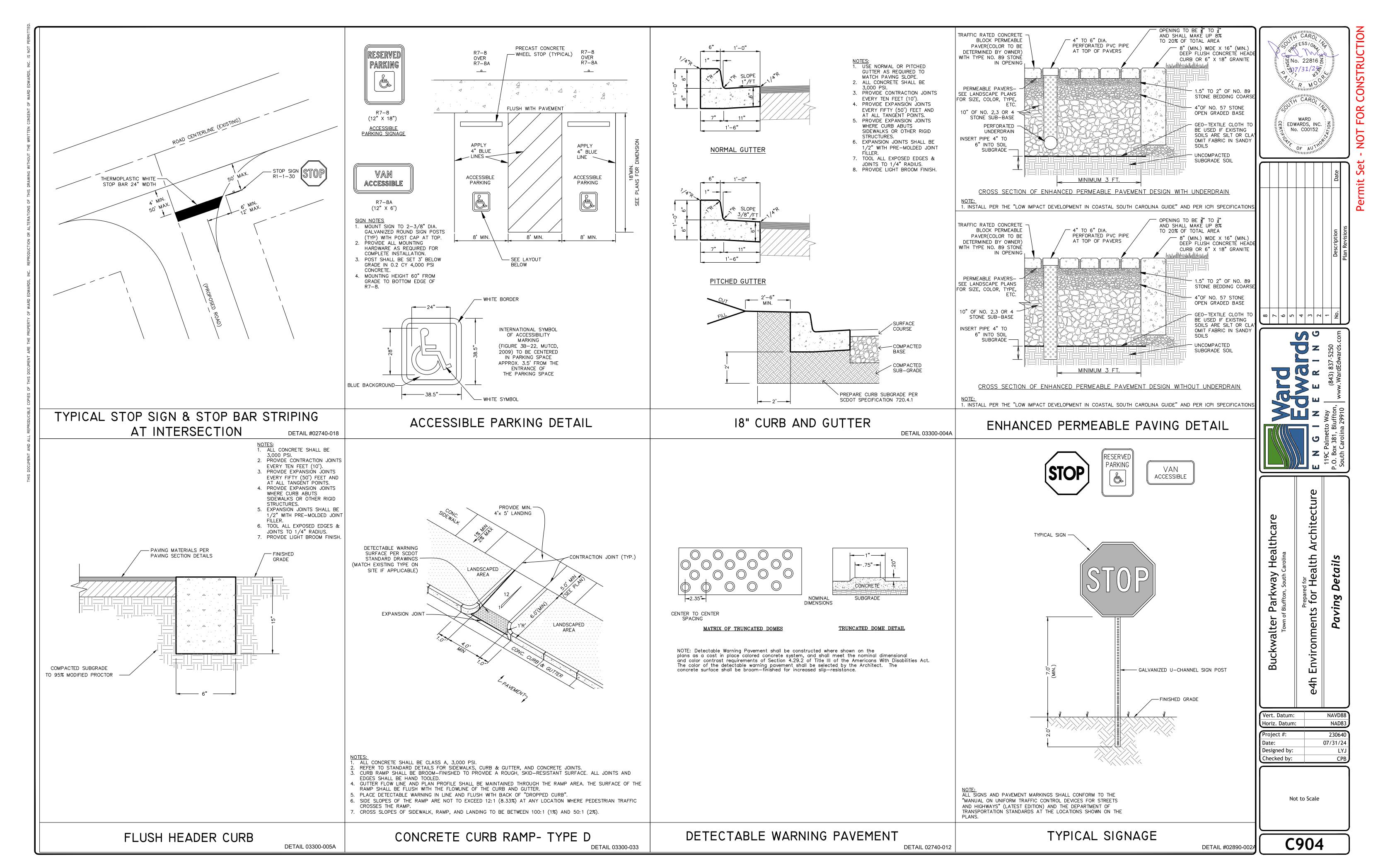
South Carolina Department of Health and Environmental Contro

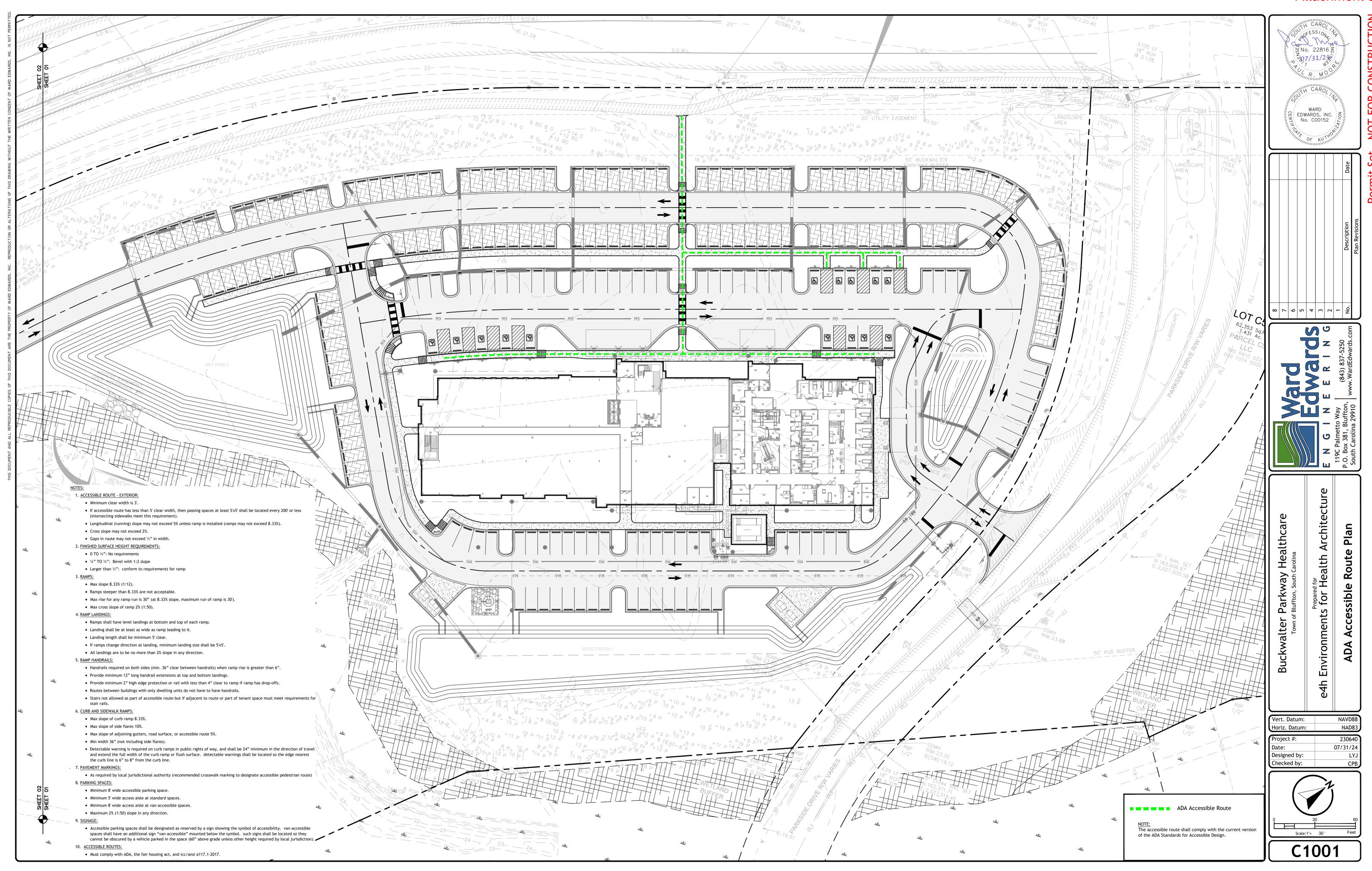
TRACKING standard drawing no. EC-01 Page 1











- 2. REFER TO ENGINEERING PLANS FOR LAYOUT AND LOCATION OF UTILITIES AND ROADS
- ALL SURVEY AND SITE INFORMATION WERE COMPILED FROM A VARIETY OF SOURCES AT VARIOUS TIMES. SITE INFORMATION MUST BE FIELD VERIFIED BEFORE CONSTRUCTION BEGINS. REPORT ANY DISCREPANCIES TO THE OWNER OR OWNER'S 1.4. TOPSOIL PH SHALL BE BETWEEN FIVE (5) AND SEVEN (7). REPRESENTATIVE.
- IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES.
- 5. THE REQUIREMENTS OF THE SPECIFICATIONS, DRAWINGS, GENERAL REQUIREMENTS, AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING FOR ALL CONTRACTORS AND TRADES.
- 6. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL (COLOR) SETS OF THE CONTRACT DOCUMENTS FOR HIS EMPLOYEES USE MUNICIPALITY OFFICIALS FOR INSPECTIONS.
- ALL CONTRACTORS AND ALL TRADES ARE RESPONSIBLE FOR OBTAINING THE CORRECT PERMITS AND INSPECTIONS PRIOR TO CONSTRUCTION AS REQUIRED BY LOCAL PLANNING, ZONING, BUILDING CODE AND OTHER TOWN AUTHORITIES.
- 8. W.J.K. LTD., THE OWNER AND / OR THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED OF ANY SITE CONDITIONS WHICH MAY NECESSITATE MODIFICATION TO THE PLAN. THE OWNER OR OWNER'S REPRESENTATIVE SHALL MAKE 'INFIELD MODIFICATIONS,' IF NECESSARY.
- 9. CONTRACTOR SHALL PROVIDE AND FURNISH ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR ALL CONSTRUCTION, PROTECTION, MAINTENANCE AND RELATED ITEMS TO COMPLETE WORK INDICATED ON THE DRAWINGS.
- 10. BEFORE COMMENCING ANY WORK CONTRACTOR SHALL ASCERTAIN THE LOCATION OF ALL UTILITIES, SUB-SURFACE DRAINAGE, AND UNDERGROUND CONSTRUCTION SO THAT PROPER PRECAUTIONS MAY BE TAKEN NOT TO DISTURB ANY SUB-SURFACE IMPROVEMENTS. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS IN BRINGING EQUIPMENT ON TO AND OFF OF THE SITE, PROTECTING WALKS, PAVING, STEPS AND OTHER EXISTING CONSTRICTION ON THE SITE, CONTACTS SHALL BE MADE BY CONTRACTOR WITH PROPER AUTHORITIES BEFORE AND DURING THIS WORK SO AS TO COMPLY WITH ALL REGULATIONS AND ORDINANCES.
- 11. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES AND CONFIRM / DETERMINE UTILITY ELEVATIONS PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE AND MAKE REPAIRS, AT THEIR OWN EXPENSE, THAT MAY OCCUR TO EXISTING UTILITIES IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL CODES.
- 12. CONTRACTOR SHALL VERIFY ALL EXISTING TREE CONDITIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO THEIR REMOVAL.
- 13. CONTRACTOR SHALL PROTECT AND INSTALL TREE PROTECTION FENCE AROUND THE DRIP LINE OF ALL TREES, NATURAL AREAS AND EXISTING VEGETATION TO REMAIN. TREE PROTECTION LOCATION SHALL BE APPROVED BY LANDSCAPE
- 14. ALL CONSTRUCTION FOR ALL TRADES SHALL CONFORM TO OR EXCEED THE PRODUCT MANUFACTURER'S RECOMMENDATIONS, REGULATIONS OF BEAUFORT COUNTY AND THE AMERICANS WITH DISABILITIES ACT, AND / OR OTHER APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND ANY OTHER GOVERNING AUTHORITIES.
- 15. CONTRACTOR ACCESS FOR CONSTRUCTION AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL PROTECT THE GENERAL PUBLIC FROM CONSTRUCTION AREAS DURING CONSTRUCTION.
- 17. THE OWNER MAY REQUIRE FLAG MEN TO BE AVAILABLE DURING THE CONSTRUCTION PROCESS.

ARCHITECT PRIOR TO CONSTRUCTION.

18. ANY DEVIATIONS FROM THESE PLANS MUST BE SPECIFICALLY APPROVED BY W.J.K. LTD., AND THE OWNER OR OWNER'S REPRESENTATIVE.

### **SOIL AMENDMENT NOTES:**

- TOPSOIL SHALL CONSIST OF THE NATURAL LOAM, SANDY LOAM, SILT LOAM, OR CLAY LOAM HUMUS BEARING SOILS, 1. ADAPTED TO THE SUSTENANCE OF PLANT LIFE, WITH THE FOLLOWING TEXTURE:
- 1.1. ORGANIC MATERIAL TWO (2) TO TWENTY (20) PERCENT BY MASS
- 1.2. SAND CONTENT TWENTY (20) TO SIXTY (60) PERCENT BY MASS 1.3. CLAY-SILT CONTENT – THIRTY FIVE (35) TO SEVENTY (70) PERCENT BY MASS.
- 2. TOPSOIL SHALL BE OF UNIFORM QUALITY AND FREE FROM FOREIGN MATERIAL SUCH HARD CLODS, SOD, STIFF CLAY, HARD PAN, STONES LARGER THAN ONE (1) INCH DIAMETER, LIME CEMENT, ASHES, SLAG, CONCRETE, TAR RESIDUES, TARRED PAPER, 3. ALL AREAS IN WHICH EARTHWORK SHALL BE SUSPENDED FOR MORE THAN TWO (2) WEEKS SHALL BE GRASSED WITH BOARDS, CHIPS, STICKS, OR OTHER UNDESIRABLE MATERIALS. IT SHALL ALSO BE REASONABLY FREE FROM WEEDS AND OBJECTIONABLE PLANT MATERIAL.
- 3. AFTER ALL DEMOLITION, CLEARING AND DISPOSAL IS COMPLETED, THE CONTRACTOR SHALL STRIP FROM THE TOP OF THE EXISTING GROUND ALL TOPSOIL IN ALL AREAS TO BE GRADED.
- ON THE PROJECT TO ASSURE THAT ALL WORK IS PROPERLY COORDINATED AND FOR REVIEWS BY COUNTY AND / OR 4. PRIOR TO STOCKPILING OF TOPSOIL, TOPSOIL SHALL BE SCREENED WITH A ONE HALF (1/2) INCH SIZE SIEVE. STOCKPILE TOPSOIL IN DESIGNATED OR APPROVED LOCATIONS WITH PROPER DRAINAGE AND WHERE IT WILL NOT INTERFERE WITH THE WORK. AFTER TOPSOIL HAS BEEN STOCKPILED, CONTRACTOR SHALL QUANTIFY THE AMOUNTS AT NO ADDITIONAL COST TO 5. SEED SHALL BE AT A RATE OF 10 POUNDS PER ACRE. THE OWNER. QUANTITIES SHALL BE GIVEN TO THE ARCHITECT, OWNER AND SITE DESIGN PROFESSIONAL.
  - 5. IF AMOUNT OF SCREENED TOPSOIL STOCKPILED FROM STRIPING OPERATIONS IS INSUFFICIENT TO PROVIDE THE NECESSARY AMOUNTS (4" MINIMUM DEPTH), IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN (FROM OFF-SITE SOURCE) THE NECESSARY AMOUNT OF SCREENED TOPSOIL TO COMPLETE THE PROJECT.
  - 6. Screened topsoil shall be distributed with a minimum depth of four (4) inches to all graded areas (not OWNER'S REPRESENTATIVE. GROUND SHALL BE SCARIFIED BEFORE PLACING TOPSOIL. AREAS WHERE SCREENED TOPSOIL IS DISTRIBUTED SHALL BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATION (SEASON DEPENDENT) OR TEMPORARY MULCH WITHIN FOURTEEN (14) CALENDAR DAYS OF DISTRIBUTION.

### PLANTING NOTES:

- CONTRACTOR IS RESPONSIBLE FOR INSPECTION OF EXISTING CONDITIONS, INCLUDING UTILITIES, AND PROMPTLY REPORTING ANY DISCREPANCIES OR CONFLICTS WITH PLANTING AREAS. REPORT INFORMATION TO OWNER, OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE AND MAKE REPAIRS THAT MAY OCCUR TO EXISTING UTILITIES IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL CODES.
- LANDSCAPE PLANTING AND / OR MULCHED AREAS TO BE FINE GRADED, HAND RAKED SMOOTH AND FREE OF DEBRIS.
- CONTRACTOR TO PERFORM SOIL TESTS AS NECESSARY TO ASSURE PLANT HEALTH AND GROWTH.
- MULCH ALL PLANTING BEDS TO A MIN. 3" DEPTH WITH MULCH SPECIFIED IN PLANT SCHEDULE.
- 6. CONTRACTOR VERIFIES THAT ALL PLANT MATERIAL IS DETERMINED AVAILABLE AS SPECIFIED WHEN BID / PROPOSAL IS
- 7. PLANT SCHEDULE WAS PREPARED FOR ESTIMATING PURPOSES ONLY. CONTRACTOR SHALL MAKE OWN QUANTITY TAKEOFFS USING DRAWINGS TO DETERMINE QUANTITIES TO HIS SATISFACTION, REPORTING PROMPTLY ANY DISCREPANCIES WHICH MAY AFFECT BIDDING.
- 8. GALLON SIZES ARE FOR PRICING PURPOSES ONLY. PLANT MUST MEET HEIGHTS AND WIDTHS SPECIFIED IN PLANT SCHEDULE.
- 9. ROOT TYPE MAY BE FREELY SUBSTITUTED IN CASE OF BALLED AND BURLAPPED OR CONTAINER GROWN, OTHER SPECIFICATIONS REMAINING UNCHANGED, EXCEPT IN THE CASE OF CONTAINER GROWN SPECIMEN TREES AS INDICATED IN THE TREE PLANTING SCHEDULE.
- 10. ANY SIGNIFICANT ROOTS ENCOUNTERED 2" DIA. AND LARGER SHALL BE DUG OUT BY HAND AND CLEANLY CUT BACK IN THE FOOTING / FOUNDATION AREA TO PROMOTE ROOT RE-GROWTH AND HELP PREVENT ROOT DIEBACK.
- 11. ALL PLANT MATERIAL (EXCEPT SEASONAL COLOR) SHALL BE GUARANTEED AND REPLACED AS NECESSARY BY THE 3. LANDSCAPE CONTRACTOR TO FIELD VERIFY ALL COMPONENT LOCATIONS TO ENSURE APPROPRIATE COVERAGE. CONTRACTOR FOR ONE YEAR.
- 12. ALL SEASONAL COLOR SHALL BE GUARANTEED AND REPLACED AS NECESSARY BY THE CONTRACTOR FOR THREE MONTH TIME FRAMES.

## **TURF AND GRASSING NOTES:**

- GRASS SEED: PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION ESTABLISHED BY OFFICIAL SEED ANALYSIS OF NORTH AMERICA. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES, PROPORTIONS AND MINIMUM PERCENTAGES OF PURITY, GERMINATION, AND MAXIMUM PERCENTAGE OF WEED SEED, AS SPECIFIED SEED MANUFACTURER.
- 2. SOD SHALL BE STRONGLY ROOTED AND FREE OF PERNICIOUS WEEDS. ALL NETTING SHALL BE REMOVED FROM SOD BEFORE IT IS LAID.
- TEMPORARY GRASS.
- 4. AFTER TOPSOIL HAS BEEN INSTALLED, AND BEFORE ANY SOD IS LAID, CORRECT ALL SOFT SPOTS AND IRREGULARITIES IN GRADE. THE SOD SHALL BE BE LAID BY BUTTING THE ENDS AND SIDES UP EVENLY AND STAGGERING THE ROLLS OF SOD. CONTRACTOR SHALL NOT OVERLAP SOD. AS SOON AS THE SOD IS LAID OR AS IT IS BEING LAID ROLL OVER WITH A LIGHT ROLLER, MAKING CERTAIN THAT ALL OF THE SOD IS IN CONTACT WITH THE SOIL. THE COMPLETED SODDED AREAS SHALL BE TRUE TO FINISH GRADE, EVEN AND FIRM AT ALL POINTS.
- 6. THIRTY DAYS AFTER LAST SEEDING/SODDING OPERATION, APPLY 1 POUND OF TYPE A NITROGEN FERTILIZER PER ACRE OF LAWN AREAS AND IMMEDIATELY WATER.
- 7. UPON COMPLETION OF PLANTINGS ALL EXCESS SOIL STONES AND DEBRIS WHICH HAS NOT PREVIOUSLY BEEN CLEANED UP SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- INCLUDING BUILDING, PAVED, SYNTHETIC TURF, PERVIOUS PAVEMENT, ETC.) AND / OR AS DIRECTED BY THE OWNER OR 8. ALL LAWN AREAS THAT DO NOT SHOW SATISFACTORY GROWTH WITHIN (18) DAYS AFTER PLANTING SHALL BE RE-PLANTED AND RE-FERTILISZED AS SPECIFIED UNTIL A SATISFACTORY LAWN IS ESTABLISHED. THE LAWN SHALL BE CONSIDERED ESTABLISHED WHEN ITS REASONABLY FREE FROM WEED. GREEN IN APPEARANCE AND THE SPECIFIED GRASS IS VIGOROUS AND GROWING WELL ON EACH SQ. FT. OF LAWN AREA.
  - 9. LAWN SHALL BE PROTECTED AND MAINTAINED BY WATERING, MOWING, AND REPLANTING, OVERSEEING, AS NECESSARY FOR AS LONG AS IS NECESSARY TO ESTABLISH A UNIFORM STAND, SCATTERED BARE SPOTS, NONE OF WHICH IS LARGER THAN ONE SQ. FT., WILL BE ALLOWED UP TO MAXIMUM OF THREE PERCENT OF ANY LAWN AREA. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ANY EROSIONAL DAMAGE TO THE LAWN AREA. FULL COVERAGE IS REQUIRED IN SIXTY DAYS.
  - 10. MAINTENANCE OF GRASSED AREAS SHALL CONSIST OF MOWING, WATERING AND FERTILIZING. ALL GRASSED AREAS SHALL BE MAINTAINED AT A HEIGHT NOT TO EXCEED 6" ABOVE FINISHED GRADE.
  - 11. It shall be the contractor's responsibility to maintain all grassed areas until acceptance by owner at end OF PROJECT. LAWN MAINTENANCE SHALL OCCUR AT A MINIMUM OF ONCE PER SEVEN CALENDAR DAYS.
  - 12. FINAL SEEDING AND SOD AREAS / SQUARE FOOTAGES TO BE PAINTED IN FIELD AND APPROVED AND ADJUSTED IN FIELD BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
  - 13. SEEDING SHALL TAKE PLACE IMMEDIATELY AFTER FINE GRADING. MAINTAIN SEEDED LAWN UNTIL COMPLETION AND ACCEPTANCE OF ENTIRE PROJECT.
  - 14. SEEDING BED SHALL HAVE TOPSOIL LOOSEN TO A DEPTH OF 4". REMOVE STONE OVER 1" IN ANY DIMENSION, ROOTS, RUBBISH, AND EXTRANEOUS MATTER.

### IRRIGATION NOTES:

- CONTRACTOR TO SUPPLY AUTOMATIC IRRIGATION SYSTEM, COMPLETE AND INSTALLED. SYSTEM TO INCLUDE ALL VALVES, PIPES, HEADS, FITTINGS, BACK FLOW CONTROLLER, AND IRRIGATION METER AND TO PROVIDE 100% COVERAGE FOR ALL NEW PLANTINGS. DRIP IRRIGATION TO BE USED FOR ALL PLANTINGS, EXCEPT LAWNS.
- NO IRRIGATION COMPONENTS SHALL BE CLOSER THAN 12" TO ANY EDGE OF PAVEMENT OR CURB AND GUTTER. IRRIGATION SHALL NOT SPRAY BEYOND LANDSCAPED AREAS, OR INTO ANY UNDISTURBED BUFFERS. NO OVER SPRAY SHALL BE PERMITTED ONTO ADJACENT PROPERTIES OR PEDESTRIAN SIDEWALK AREAS
- 4. LANDSCAPE CONTRACTOR SHALL LOCATE WATER SOURCE AND PROVIDE POWER TO CONTROLLER.
- 5. CONTROLLER LOCATION TO BE SPECIFIED BY OWNERS REPRESENTATIVE IN FIELD PRIOR TO CONSTRUCTION.
- 6. ALL DRIP TUBING SHALL BE COVERED WITH MIN. 3" OF MULCH.
- 7. ALL DRIP AND SPRAY ZONES SHALL BE SEPARATE.
- 8. CONTRACTOR SHALL SUBMIT FINAL IRRIGATION PLANS TO OWNER'S REPRESENTATIVE AND ALL REVIEWING BODIES / AGENCIES FOR FINAL APPROVAL PRIOR TO INSTALLATION.

# Attachment 5

**SHEET INDEX** 

**COVER SHEET** 

REFERENCE PLAN

PLANTING PLAN - 01 PLANTING PLAN - 02 L501 -

PLANT SCHEDULE AND DETAILS

**JULY 30, 2024** 

# PROJECT TEAM

LANDSCAPE ARCHITECT

WITMER JONES KEEFER BLUFFTON, SC

(843) 757.7411

**SURVEYING** ALL TOPOGRAPHY, EXISTING TREES, SITE

BOUNDARY, SITE SURVEY DATA, ETC. WERE TAKEN FROM DIGITAL FILES PROVIDED BY:

ATLAS SURVEYING INC. RIDGELAND, SC. (843) 645.9277

**ARCHITECTURE** ALL ARCHITECTURAL

INFORMATION WAS TAKEN FROM DIGITAL FILES PROVIDED BY:

34H ARCHITECTURE NORTH CHARLESTON, SC. (888) 781.8441

**ENGINEERING** ALL CIVIL ENGINEERING INFORMATION WAS

TAKEN FROM DIGITAL FILES PROVIDED BY:

WARD EDWARDS ENGINEERING BLUFFTON, SC. (843) 837.5250



© 2023 WJK LTD. DESIGN CONCEPTS, DRAWING, SHEETS LOGOS, SPECIFICATIONS, DETAILS

WRITTEN MATERIAL SHALL NOT BE USED OR REPRODUCED IN WHOLE OR IN PART IN ANY FORM WITHOUT PRIOR WRITTEN CONSENT OF WJK LTD. THIS SHEET TO SCALE AT: 30"X42"

SITE

JUL 30, 2024 PROJECT NO.: 24067-01 DRAWN BY: CHECKED BY:

> FINAL SUBMITTAL PLAN, NOT FOR CONSTRUCTION

REVISIONS:

DRAWING TITLE

**COVER SHEET AND** PROJECT NOTES

DRAWING NUMBER

\*\*\*\*CAUTION\*\*\*\* UTILITY PROTECTION CENTER

A ONE-CALL SYSTEM FOR COMMUNITY AND JOB SAFETY



© 2023 WJK LTD.

DESIGN CONCEPTS, DRAWING, SHEETS, LOGOS, SPECIFICATIONS, DETAILS, WRITTEN MATERIAL SHALL NOT BE USED OR REPRODUCED IN WHOLE OR IN PART IN ANY FORM WITHOUT PRIOR WRITTEN CONSENT OF WJK LTD. THIS SHEET TO SCALE AT: 30"X42"

FINAL SUBMITTAL PLAN, NOT FOR CONSTRUCTION

> DRAWING TITLE REFERENCE PLAN

DRAWING NUMBER



The Ltd. of Control © 2023 WJK LTD.

OR REPRODUCED IN WHOLE OR IN PART N ANY FORM WITHOUT PRIOR WRITTEN CONSENT OF WJK LTD. THIS SHEET TO SCALE AT: 30"X42"

FINAL SUBMITTAL PLAN, NOT FOR CONSTRUCTION

DRAWING TITLE
PLANTING PLAN - 01

DRAWING NUMBER

	PLANTING DETAILS			
CALL- OUT	DESCRIPTION	DETAIL		
14.1	TREE PLANTING	X/L50X		
14.2	PALM TREE PLANTING	X/L50X		
14.3	SHRUB PLANTING	X/L50X		
14.4	GROUND COVER PLANTING	X/L50X		

The Ltd. of Constant

© 2023 WJK LTD. or reproduced in whole or in part I ANY FORM WITHOUT PRIOR WRITTEN

CONSENT OF WJK LTD. THIS SHEET TO SCALE AT: 30"X42"

PROJECT NO.:

FINAL SUBMITTAL PLAN, NOT FOR CONSTRUCTION

REVISIONS:

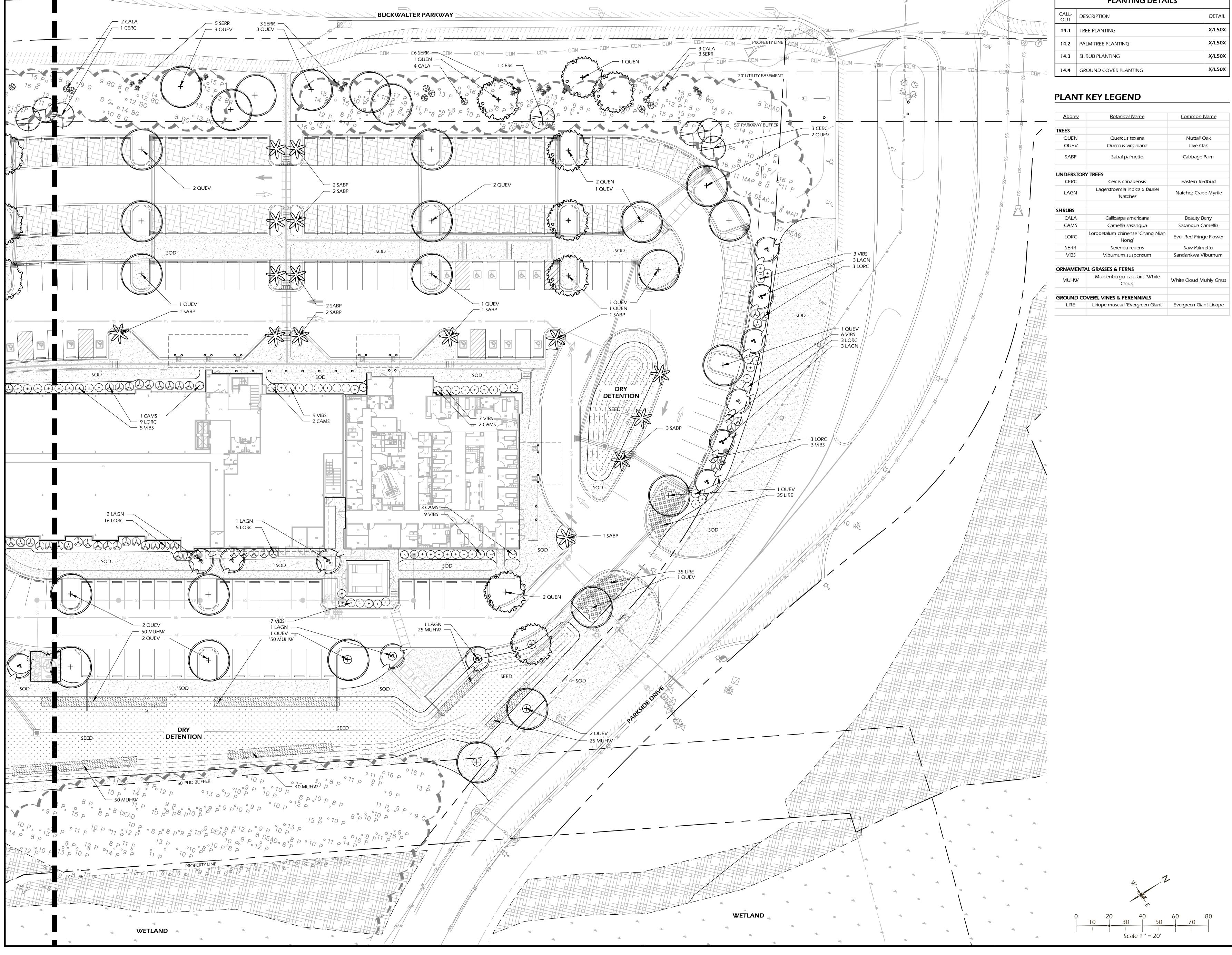
CHECKED BY:

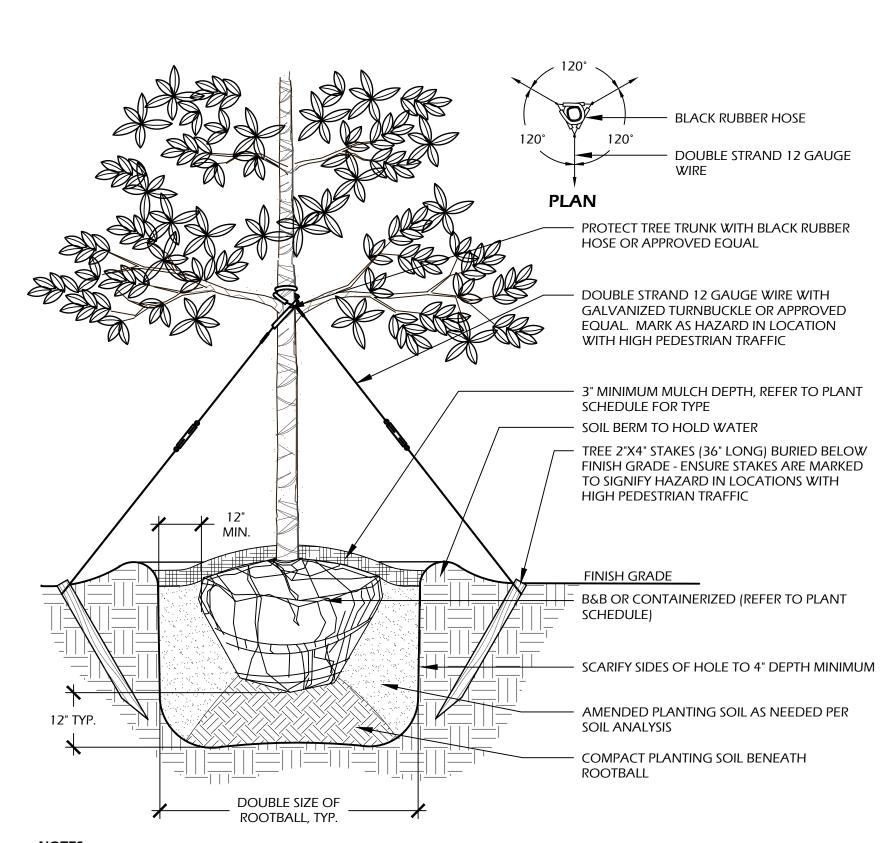
**DRAWING TITLE** 

**PLANTING PLAN - 02** 

DRAWING NUMBER

L501

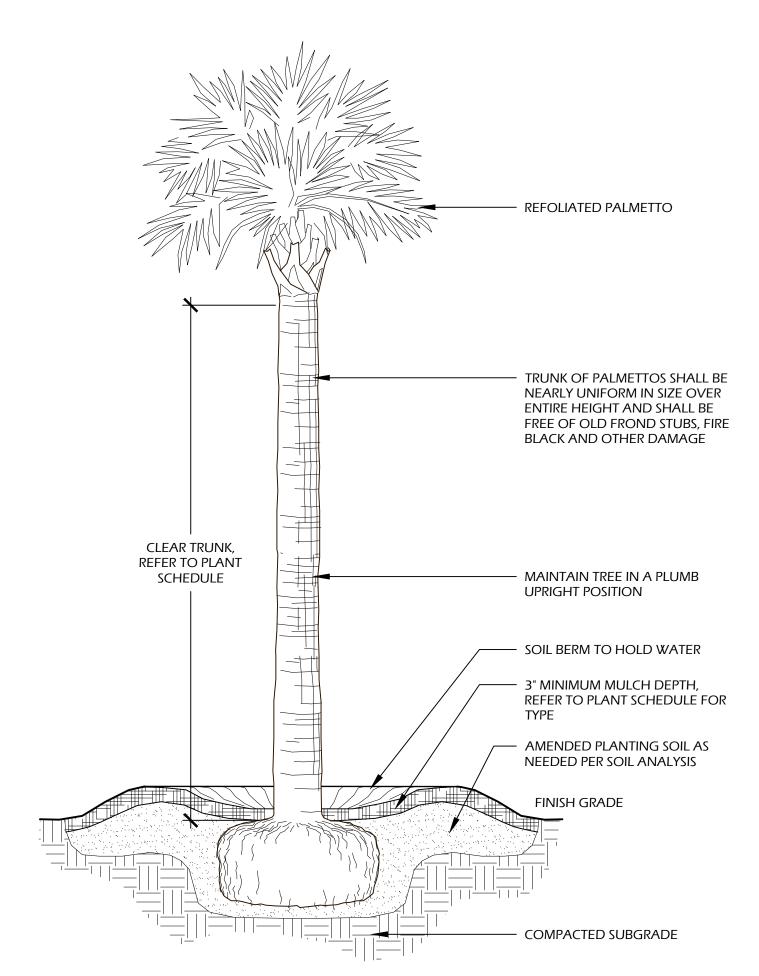




1. TREE STAKING OPTIONAL, HOWEVER, LANDSCAPE CONTRACTOR RESPONSIBLE FOR MAINTAINING TREES IN AN UPRIGHT (90 DEGREE/ PERPENDICULAR) POSITION FOR 1 YEAR AFTER PLANTING IS COMPLETE OR UNTIL TREE ROOT SYSTEM IS FULLY ESTABLISHED AND STURDY. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER'S REPRESENTATIVE.

2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION. 3. IN SEMI-IMPERVIOUS SOIL CONDITIONS, ROOTBALL ELEVATION SHALL BE 2" ABOVE FINISH GRADE. COORDINATE WITH OWNER'S

REPRESENTATIVE PRIOR TO SETTING ROOTBALL ELEVATIONS.



1. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER OR OWNER'S REPRESENTATIVE, 2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION. 3. SABAL PALMETTOS SHALL BE REFOLIATED, PROTECT CABBAGE HEAD FROM DAMAGE.

PALM TREE PLANTING

PLANT SCHEDULE:

Quantity	Abbrev	<u>Botanical Name</u>	<u>Common Name</u>	Height	Spread	Container	Cal./Spacing	<u>Notes</u>
TREES								
19	QUEN	Quercus texana	Nuttall Oak	14'-16'	6'-8'	Cont.	4"	Full
47	QUEV	Quercus virginiana	Live Oak	14'-16'	6'-8'	Cont.	4"	Full
17	SABP	Sabal palmetto	Cabbage Palm	12'-16'	-	Cont.	-	Refoliated, full clear trunk, refer to plan for heights
UNDERSTOR'	Y TREES							
12	CERC	Cercis canadensis	Eastern Redbud	8'-10'	6'-8'	30 gal.	-	Full
12	LAGN	Lagerstroemia indica x fauriei 'Natchez'	Natchez Crape Myrtle	10'-12'	5'-6'	45 gal.	=	Full
SHRUBS								
28	CALA	Callicarpa americana	Beauty Berry	24"-30"	24"-30"	7 gal.	_	Full
9	CAMS	Camellia sasanqua	Sasanqua Camellia	3'-4'	2'-3'	15 gal.	-	Full
49	LORC	Loropetalum chinense 'Chang Nian Hong'	Ever Red Fringe Flower	30"-36"	24"-30"	7 gal.	-	Full
33	SERR	Serenoa repens	Saw Palmetto	24"-30"	24"-30"	15 gal.	-	Full
65	VIBS	Viburnum suspensum	Sandankwa Viburnum	30"-36"	24"-30"	7 gal.	-	Full
ORNAMENT/	AL GRASSES &	FERNS						
240	MUHW	Muhlenbergia capillaris 'White Cloud'	White Cloud Muhly Grass	14"-16"	10"-16"	1 gal.	30" O.C.	Full
GPOLIND CC	VEDS VINIES	& PERENNIALS						
100	LIRE	Liriope muscari 'Evergreen Giant'	Evergreen Giant Liriope	12"-16"	8"-12"	1 gal.	24" O.C.	Full
100	LIKE	Linope muscan Evergreen diant	Lvergreen diant Linope	12 -10	0-12	i gai.	24 O.C.	I UII
SOD & MULC	H							
46,000	SOD-SF	-	Empire Zoysia Sod	-	-	-	-	_
26,100	SEED-SF	-	Coastal Showy Rain Garden Seed Mix	-	-	-	-	Roundstone Native Seed Co. (1oz/50 SF)
60,000	MULCH-SF	Pine Straw - all disturbed areas	Pine Straw	-	_	-	-	_

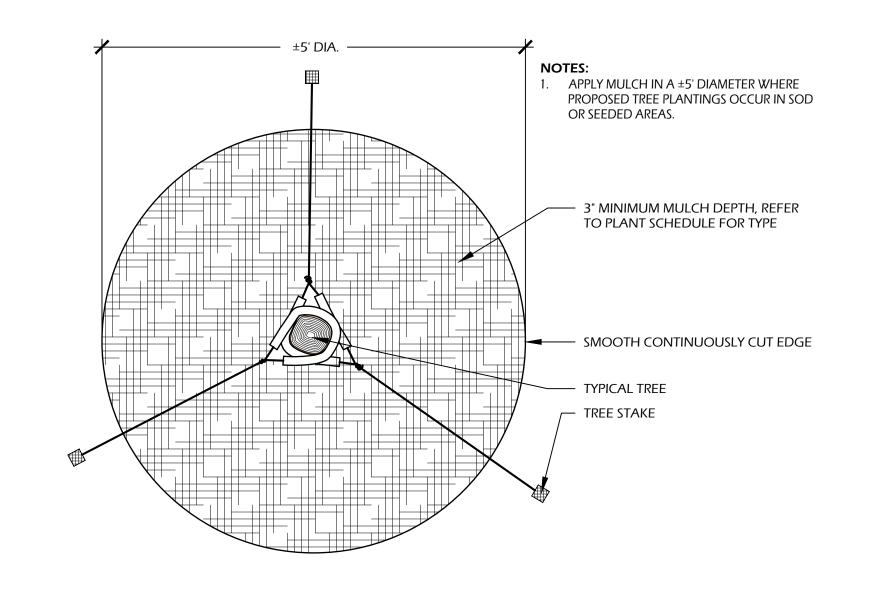
3" MINIMUM MULCH DEPTH, REFER TO PLANT SCHEDULE FOR - SOIL BERM TO HOLD WATER --- FINISH GRADE - B&B OR CONTAINERIZED (SEE PLANTING SCHEDULE, THIS SHEET) - AMENDED PLANTING SOIL AS NEEDED PER SOIL ANALYSIS DOUBLE SIZE OF ROOTBALL, TYP.

1. WHEN GROUNDCOVERS AND SHRUBS ARE USED IS MASSES, ENTIRE BED TO BE EXCAVATED TO RECEIVE PLANTING SOIL AND 2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

3. IN SEMI-IMPERVIOUS SOIL CONDITIONS, ROOTBALL ELEVATION SHALL BE ±2" ABOVE FINISH GRADE. COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO SETTING ROOTBALL ELEVATIONS.

- SPECIFIED O.C. SPACING TYPICAL EDGE OF PLANT BED 1/2 OF SPECIFIED O.C. —— ATYPICAL SPACING IN ----- SPECIFIED O.C. SPACING CURVILINEAR PLANT BEDS. EXCAVATE ENTIRE BED SPECIFIED FOR OUTSIDE ROW TO FOLLOW CURVE AS SHOWN ON PLAN GROUNDCOVER PLANTING TO A DEPTH OF 12"

4 L502 GROUND COVER PLANTING
SCALE: N.T.S.



Jones.

© 2023 WJK LTD. Design concepts, drawing, sheets, logos, specifications, details, written material shall not be used or reproduced in whole or in part in any form without prior written CONSENT OF WJK LTD. THIS SHEET TO SCALE AT: 30"X42"

SITE

JUL 30, 2024 PROJECT NO.: 24067-01 DRAWN BY: CK/SD CHECKED BY:

FINAL SUBMITTAL PLAN, NOT FOR CONSTRUCTION

REVISIONS:

**DRAWING TITLE** PLANT SCHEDULE AND DETAILS

DRAWING NUMBER