

Director of  
Planning and Inspections  
MEREDITH GUNS

Building Inspector  
MARTY SHAW  
CHARLES THUMAN

Code Enforcement Officer  
JORDAN BLYTHE



Assistant Director of  
Planning and Inspections  
CAMERON RAY

Senior Planner  
RYAN LANG

Zoning Administrator  
DONNA ELLIOTT

**THE TOWN OF KILL DEVIL HILLS  
NORTH CAROLINA**

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**PLANNING DEPARTMENT**

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July 18, 2023

Memorandum

To: Planning Board

From: Ryan Lang, Senior Planner 

Subject: **SITE PLAN REVIEW – 1828 N Croatan Highway in the Commercial Zone Proposed Retail Store**

Enclosed is a site plan submittal by Gary Franks of Development Services Group Inc, proposing the construction of a 4,000 square foot retail store, parking lot with 16 parking spaces, and associated site modifications. The proposed retail store is a permitted use in the Commercial Zone (N) *Retail Business*. As proposed, the business will be a paint retail store, "Sherwin Williams". Attached you will the commercial site plan application, proposed site plan, proposed building elevations and floor plan, site narrative with stormwater calculations, and willingness to serve from KDHWTP, LLC.

The applicant has addressed most of staffs initial technical review comments; however the following conditions remain to be addressed:

Planning

Site Plan

- a. Sight triangles required to be shown on site plan.
- b. Add pavement markings "arrows" displaying entrance only and exit only.

Lighting Plan:

- a. Provide Note: "All light produced on-site shall be contained within the perimeter of the site by design, orientation or shielding of the light source. Per 153.074(E)(3)"
- b. Lighting required on all side of commercial buildings, south side of building does not provide adequate lighting. Consider using wall pack lighting.
- c. Consider lowering light pole mounting heights to 15'.
- d. Provide color temperature of proposed lighting.

Landscaping:

- a. Remove "fence" from Landscaping Table.
- b. Note "Dense Vegetative Screen" for plant schedule along West property line. 45 Shrubs required for this property line.
- c. Add " Dense vegetative screens shall contain shrubs at least 30 inches high at the time of installation planted two-and-one-half feet on center. The type of shrub used needs to be capable of attaining a height of at least six feet at maturity. " to landscaping table and plant schedule.

Staff recommends that the Planning Board forward the plan to the Board of Commissioners with a favorable recommendation after the above listed conditions have been addressed.



July 05, 2023

The Town of Kill Devil Hills  
Planning Department  
102 Town Hall Dr.  
Kill Devil Hills, NC 27948

**Subject: 1828 N. Croatan Hwy – Sherwin Williams  
DSG File #: 2022.04**

Mr. Lang,

The below items are being resubmitted in response the lasted plan review comments:

- (1) Copy of the Response Letter
- (6) Copies of the Revised Site Plan
- (6) Copies of the Revised Architectural Plans
- (2) Copies of the Revised Site Narrative

Please feel free to give me a call (757-908-2372), or email me ([gfranks@dsgva.com](mailto:gfranks@dsgva.com)) if you have any questions or need any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Franks", written in a cursive style.

Gary A. Franks, P.E.

CC: Attachments

*Tech 2*



## Town of Kill Devil Hills

### Response to Comments Planning - Ryan Lang

JUL 06 2023

Planning & Inspections Department

#### 1. General

- a. A copy of the Owners Authorization form has been included with this submittal.
- b. A copy of the Willingness to Serve Letter has been included with this submittal.

#### Sheet CV-1.0

- a. The address has been added to the Cover Sheet and Title Block.
- b. The proposed land use has been revised as directed.
- c. The additional flood zone information has been added under Site Information as requested.
- d. The setbacks have been corrected on all sheets.
- e. The lot coverage has been added under Site Information.
- f. Sheet CDT-10.2 has been added to the plan set.

#### Sheet CES-3.0

- a. All existing Oak trees that can be retained are shown to be saved on the plans.
- b. The note has been revised as directed.
- c. This note has been added as directed.

#### Sheet CL-5.0

- a. The tree layer has been turned off as requested.
- b. As discussed, an official loading zone is not required since the proposed building is only 4,000sf. However, extra room is provided at the rear of the building for loading and unloading of the delivery trucks.
- c. Bearings and Distances have been added to all property lines.
- d. The sight triangles have been added to the plan as requested. — *turn on layer? Permit on both sides of entrance/exits*
- e. The note has been corrected accordingly.
- f. This note has been added as requested.
- g. The existing sidewalk is now shown on the survey as requested.
- h. As discussed, a connection to this sidewalk may be added in the future, but has not been included in this revision.
- i. As discussed, the eastern entrance has been limited to a right-in/right-out entrance to avoid congestion. *add pavement markings*
- j. This dimension has been added as requested.
- k. These dimensions have been added as requested.
- l. These dimensions have been added as requested.
- m. This information has been added to this sheet as requested.

#### Sheet LA-8.0

- a. All plantings have been updated to call for plant species on the approved drought tolerant plant list.



- b. Additional landscape screening has been added to the rear of the site to provide a buffer from the existing residential property to the west.

*add dense synthetic screen 30" sheets at photo  
2.5' on center Show fence & note type*

Sheet LT-9.0

- a. As discussed, the updated lighting plan was not available at the time of this submittal. The updated plan with the requested note will be provided under separate cover once available.
- b. As discussed, the updated lighting plan was not available at the time of this submittal. The updated plan showing the proposed building mounted lighting will be added to the photometric plan.
- c. As discussed, the updated lighting plan was not available at the time of this submittal. The updated plan with the 15' light pole mounting heights will be submitted when available.
- d. As discussed, the updated lighting plan was not available at the time of this submittal. The updated plan with the color temperature will be submitted when available.

*50  
Note  
Vegetative  
Screen  
in plant  
Schedule*

Sheet CDT-10.0

- a. A note has been added to the sign detail as requested. ✓

A-204 Proposed Exterior Elevations

- a. The proposed floor layout is now included with the plan submittal. ✓
- b. The roof overhang is now dimensioned. ✓
- c. The roof pitch is now labeled on the elevations. ✓
- d. The glazing calculations are now provided on the elevations. ✓
- e. Glazing has been added on the left elevations as required. ✓
- f. The front elevation improvements are now shown on the side view elevations. ✓

*Remove fence  
from table*

**Building Inspector – Marty Shaw**

- 1. Wheel stops are now shown in lieu of the bollards at all parking spaces.

**Public Services – Derek Dail**

Solid Waste

- 1. As discussed, a private hauler will be used for trash and recycling pick-up.

Streets/Drainage

- 1. As discussed, the eastern entrance has been limited to a right-in/right-out entrance to avoid congestion.
- 2. The underdrain and outfall structure have been removed as directed. An overflow spillway is now shown to allow water to overflow into the 4<sup>th</sup> Street right-of-way.
- 3. Perimeter grades have been added as requested.
- 4. Acknowledged. Utilities have been revised accordingly.
- 5. As discussed, the intent is to try and keep the existing gutter pan. The new entrance will slope down and tie into the existing flow line creating a valley gutter at the entrances.



6. The existing structure is now called out to be converted to a valley gutter structure and grate. The details have been added to Sheet CDT-10.2.
7. The storm sewer schedule is not included on Sheet CG-7.0.
8. The sequence of construction has been updated to include this additional direction. Additional call outs have been added to Sheet CES-3.0 indicating that the existing roadway is to be protected during construction.
9. The silt fence now shows a break where the proposed construction entrance is located.
10. Bearings and distances are now shown on the survey.
11. The sight triangles are now shown on the plan.

#### Water System

1. The existing water line is now shown along N. Croatan Hwy as requested.
2. The proposed water service connections are now shown within the N. Croatan Hwy Right-of-way as requested.
3. It is now noted that the taps will be completed by the Town as directed.
4. Make and model of the proposed backflow devices are now called out as requested.
5. Acknowledged.

#### Wastewater

1. A copy of the willingness to serve letter has been included with this submittal.
2. The proposed force main is now called out to be bored under the existing roadway.
3. As discussed, a proposed private pump station is now proposed. A proposed force main will cross under 4<sup>th</sup> Street rather than a new gravity main.
4. Acknowledged.
5. Acknowledged.
6. A profile for the proposed sanitary sewer force main is now included on Sheet CU-6.0.
7. A

#### Town Engineer – Peter Burkheimer

2. As discussed, the eastern entrance has been limited to a right-in/right-out entrance to avoid congestion.
3. As discussed, the underdrain and outfall structure have been removed as directed. An overflow spillway is now shown to allow water to overflow into the 4th Street right-of-way.
4. A note has been added to the cover Sheet as recommended.

#### Fire Marshal – John Risoldi

1. Acknowledged, a contractor is being hired to perform a test on the existing fire hydrant.
2. The fire lane markings are now shown on Sheet CL-5.0.
3. The heavy-duty pavement section supported by the geotechnical report is call out for the entirety of the site and will support the weight of the fire apparatus.

**KDHWTP, LLC  
P.O. Box 3629  
Kill Devil Hills, NC 27948  
NCUC W-1160**

Willingness to Serve

May 10, 2023

GEMCAP Development, LLC  
418 N. Marshall Street, Suite 201  
Winston-Salem NC 27101

Re: Proposed Sherwin Williams at Parcel Number 029831200 N. Croatan Highway

To whom it may concern:

The Public Utility currently has sufficient sewer capacity available and we are Willing to Serve the above referenced property with 400 gpd of sewer capacity.

This Willing to Serve Letter is conditioned on the following:

1. Completion and certification and receipt of a Bill of Sale and easement to the sewer pump station currently under construction on Dare County Parcel 029831000.
2. The owner of Dare County Parcel 029831200 posting a bond, if any, as required by the North Carolina Utilities Commission.

My best regards,

*Eddie Goodrich*

Eddie Goodrich  
Owner Manager



TOWN OF KILL DEVIL HILLS, NORTH CAROLINA  
**OWNER AUTHORIZATION**

Projects with total construction cost of \$30,000 or less do not require a licensed general contractor (NOTE: any electrical, plumbing or mechanical work necessary for the completion of the project must be performed by an appropriately licensed individual).

I, Paul Williams, GEMCAP Development, authorize Gary Franks  
(Owner) (Agent/ Contractor)

to act as my agent for N. Croatan Hwy Sherwin Williams  
(Description)

located at 1828 N. Croatan Highway  
(Address)

I understand and accept responsibility to comply with all regulations and required inspections.

I further understand and acknowledge that until a final inspection has been performed and approved and this project has received a Certificate of Occupancy/Completion (CO), no portion of this project is authorized for use or occupancy.



Signature of Owner

June 29, 2023

Date



Signature of Agent

06/29/2023

Date

1210 Progressive Dr, Suite 201

Address

757-908-2372

Telephone # (s)

**OWNER AUTHORIZATION IS REQUIRED AT INITIAL SUBMISSION**

*Please check with you Insurance Agent prior to construction. Your project may affect your flood insurance rates!*

PO Box 1719 • Kill Devil Hills, NC 27948  
252-449-5318 • 252-441-4102 (fax) • www.kdhnc.com

**WALL TYPE LEGEND**

-  EXTERIOR WALL:  
BRICK VENEER ON WOOD FRAMED W/EIFS CORNICE  
ABOVE; SEE EXTERIOR ELEVATIONS
-  WOOD STUD FRAMING - SEE GENERAL FINISH NOTES ON  
SHEET A-131
-  SOUND ATTENUATION

**GENERAL NOTES**

1. FOR REFLECTED CEILING PLAN SEE DRAWING A-121
2. FOR DOOR & WINDOW SCHEDULE SEE DRAWING A-501
3. ALL INTERIOR WALLS ARE NON-BEARING

**KEYNOTES**

- ① INSTALL SOUND ATTENUATION BATT. INSTALLATION FULL DEPTH OF WALLS FROM FLOOR TO 6" ABOVE HIGHEST CEILING AROUND RESTROOMS.
- ② OFFICE SHELVING AND COUNTERS BY THE GENERAL CONTRACTOR - REFER TO ELEVATIONS ON DRAWING A-401.
- ③ OVERHEAD ROLL-UP DOOR - REFER TO DOOR SCHEDULE
- ④ POS COUNTER SHALL BE CENTERED ON INTERIOR WINDOWS
- ⑤ ELECTRICAL METER AND PANELS - REFER TO ELECTRICAL SHEETS FOR EXACT LOCATION.
- ⑥ DOUBLE HEIGHT DRINKING FOUNTAIN. SEE 5/A-401 FOR ADA DETAIL.
- ⑦ BOLLARD - REFER TO DETAIL 8/A-503
- ⑧ LINE OF NEW OVERHEAD HANGER ROD CANOPY PROVIDED AND INSTALLED BY G.C.. PROVIDE BLOCKING AS REQUIRED PER SECTION
- ⑨ INSTALL WHITE FRP BEHIND WATER HEATER, CAN WASH AND EYE WASHING TO 8'-0" A.F.F.
- ⑩ KNOX BOX SERIES 3200 RECESSED WITH LIFT-OFF DOOR TO BE MOUNTED 4'-0" A.F.F. TO BOTTOM OF MOUNTING BOX. VERIFY REQUIREMENTS WITH LOCAL FIRE MARSHAL.
- ⑪ TACTICAL EXIT SIGN - REFER TO DETAIL 4/A-401
- ⑫ 2'-0"x 2'-0" STAINLESS STEEL UTILITY SINK.
- ⑬ EYE WASHING STATION - PROVIDE TEMPERED WATER TO EYE STATION, REFER TO PLUMBING DRAWINGS



GEMCAP DEVELOPMENT  
418 N MARSHALL STREET  
SUITE 201 WINSTON-SALEM,  
NC 27101 336-724-0153

CLIENT

DESIGN SET  
NOT FOR  
CONSTRUCTION

SEAL

COMMENTS

DATE

MARK



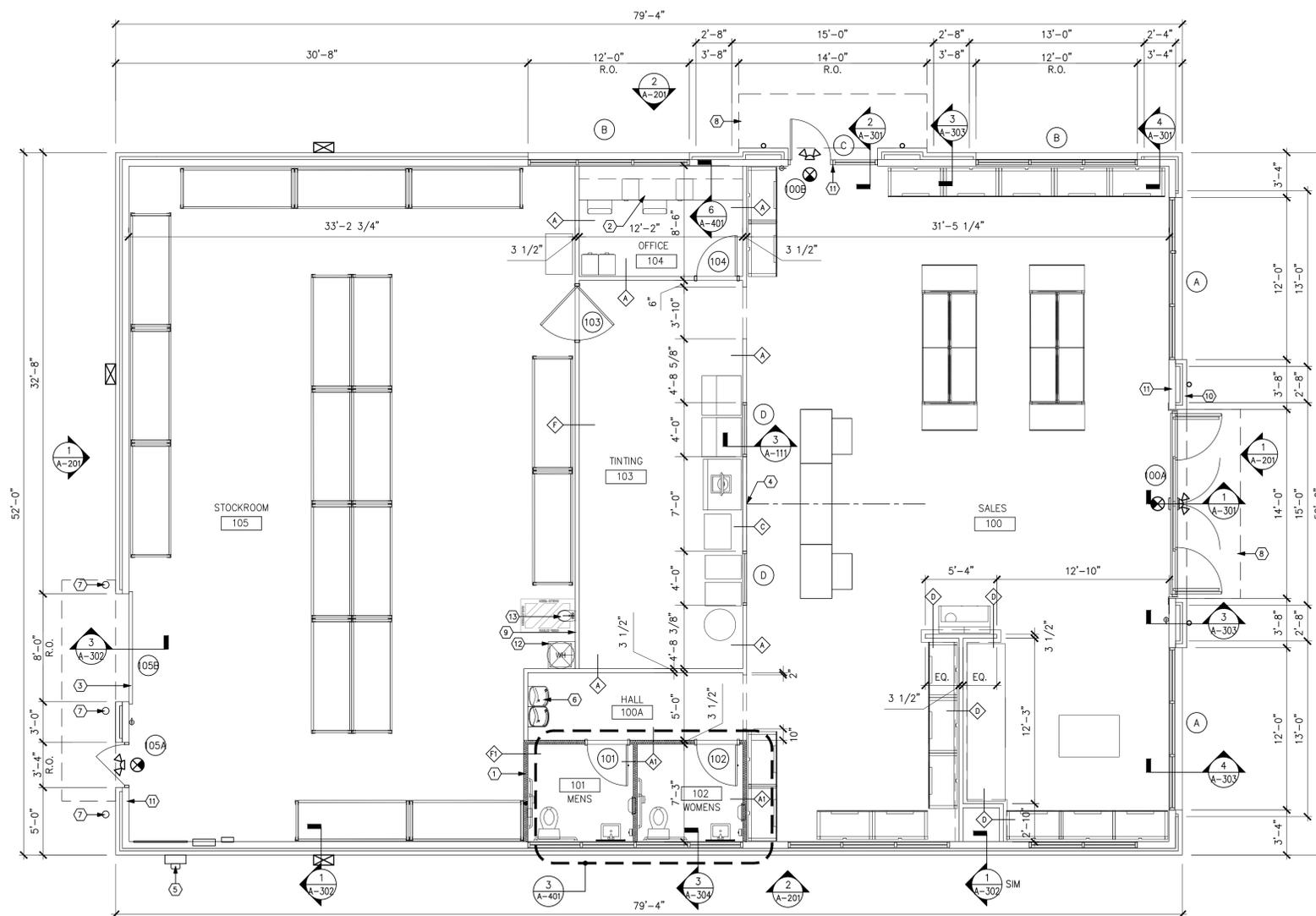
SHERWIN WILLIAMS #001 - KILL DEVIL HILLS, NC  
N. CROATAN HWY & W. 4TH ST, KILL DEVIL HILLS, NC 27565

**FLOOR PLAN**

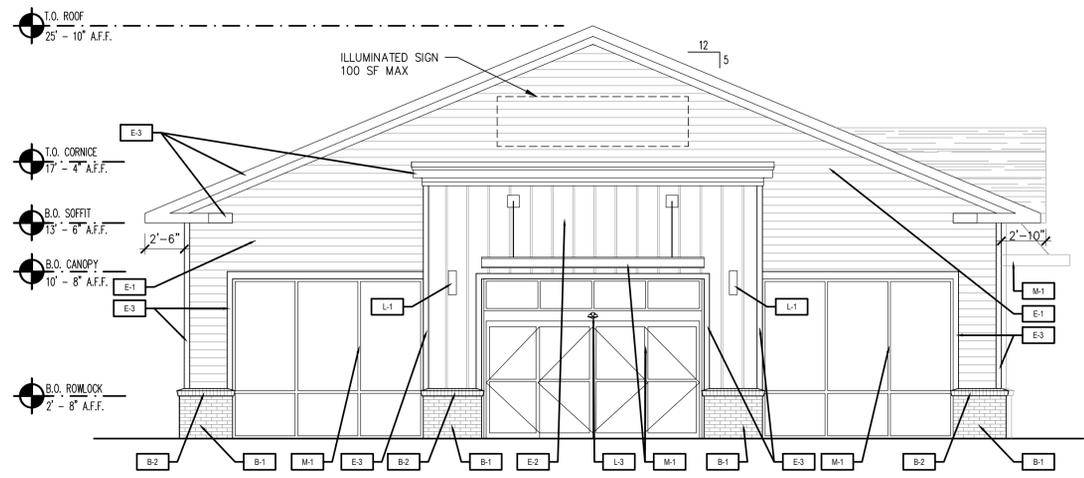
Project No.: 13480-001

Sheet No.:

**A-111**



**1 FLOOR PLAN**  
A111 SCALE: 3/16" = 1'-0"



**FACADE REQUIREMENTS:**

1. GENERAL FACADE STANDARDS: THE BUILDING IS COMPRISED OF BRICK, VERTICAL BOARD AND BATTEN AND FIBER CEMENT SIDING.
2. FRONT FACADE STANDARDS: WINDOWS AND PILASTERS ARE PROVIDED TO CREATE ARCHITECTURAL BREAKS. ALSO THE BUILDING ENTRANCES HAVE BEEN ENHANCED..
3. ROOF STANDARDS: A GABLE ROOF SPANNING THE ENTIRE WIDTH OF THE BUILDING IS PROVIDED.

**EXTERIOR MATERIAL:**

MASONRY		
B-1	TYPE: MANUFACTURER: TRAD. BRICK WITH 3/8" JOINT COLOR: PALMETTO BRICK GROUT: .75 GREYSTONE LIGHT GRAY	
B-2	TYPE: MANUFACTURER: ROWLOCK BRICK COLOR: PALMETTO BRICK GROUT: .75 GREYSTONE LIGHT GRAY	
EXTERIOR SIDING		
E-1	TYPE: MANUFACTURER: FIBER CEMENT SIDING COLOR: JAMES HARDIE TO MATCH SW 6141 SOFTER TAN	
E-2	TYPE: MANUFACTURER: FIBER CEMENT SIDING COLOR: JAMES HARDIE TO MATCH SW 6143 BASKET BEIGE	
E-3	TYPE: MANUFACTURER: FIBER CEMENT SIDING COLOR: JAMES HARDIE TO MATCH SW 7005 PURE WHITE	
METAL		
M-1	TYPE: MANUFACTURER: EXTERIOR CANOPY/STOREFRONT COLOR/FINISH: PRE CLAD OR EQUAL ANODIZED BRONZE	
LIGHTING		
L-1	TYPE: UP DOWN LIGHTING WITH BRONZE FINISH	
L-2	TYPE: EXTERIOR WALL PACK	
L-3	TYPE: EXTERIOR EMERGENCY LIGHTING	

**Larson Design Group**  
1000 COMMERCE PARK DRIVE  
SUITE 201  
WILLIAMSPORT, PA 17701  
(877) 323-6603

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418 N MARSHALL STREET  
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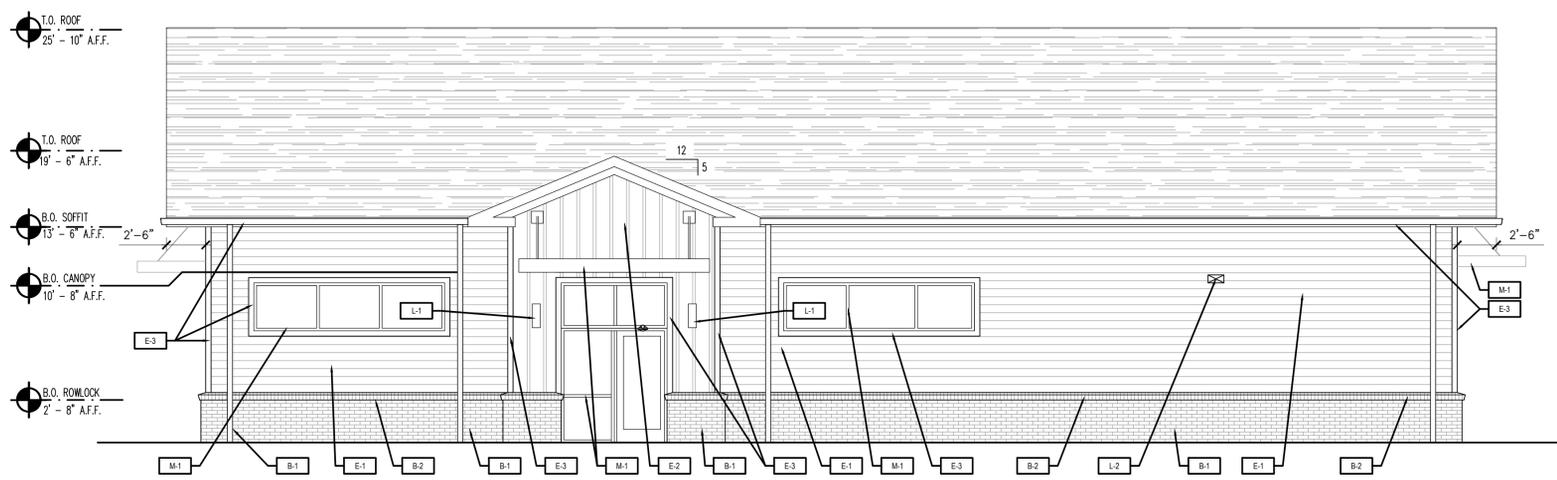
COMMENTS

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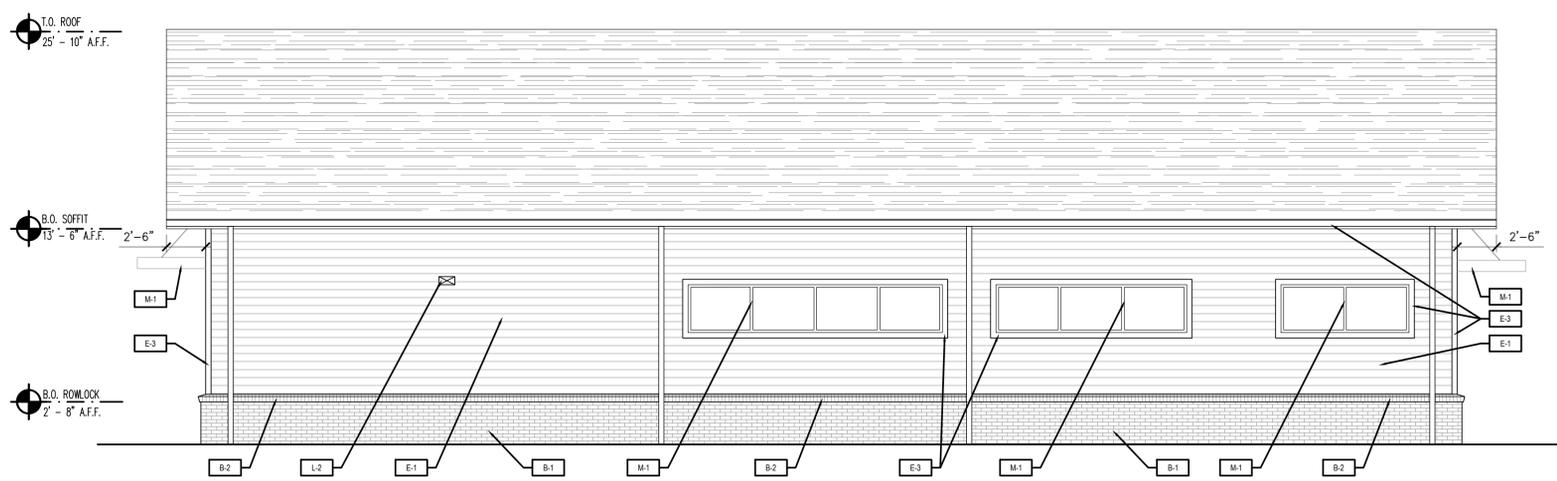
**1 FRONT ELEVATION (CROATAN HWY)**  
A-201 SCALE: 3/16" = 1'-0"

AREA (S.F.)	GLAZING (S.F.)	FACADE %
1020 S.F.	380 S.F.	37%



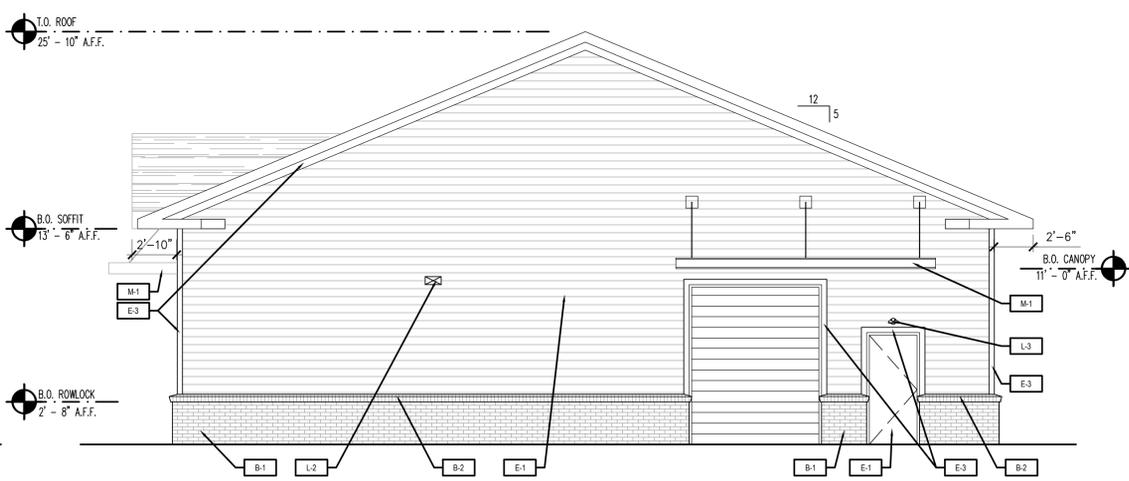
**2 RIGHT ELEVATION (4TH STREET)**  
A-201 SCALE: 3/16" = 1'-0"

AREA (S.F.)	GLAZING (S.F.)	FACADE %
1097 S.F.	139 S.F.	12%



**3 LEFT ELEVATION**  
A-201 SCALE: 3/16" = 1'-0"

AREA (S.F.)	GLAZING (S.F.)	FACADE %
1065 S.F.	108 S.F.	10%



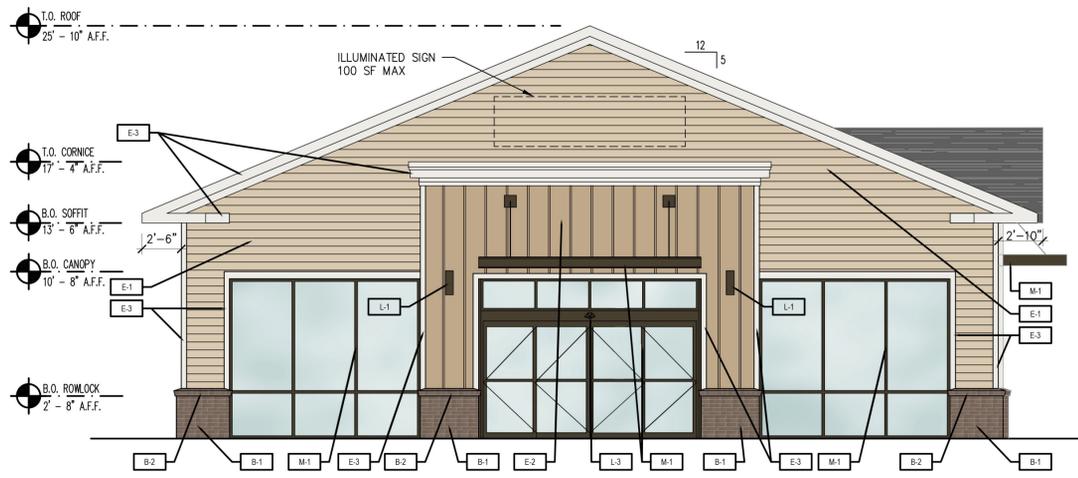
**4 REAR ELEVATION**  
A-201 SCALE: 3/16" = 1'-0"

SHERWIN WILLIAMS #001 - KILL DEVIL HILLS, NC  
N. CROATAN HWY & W. 4TH ST, KILL DEVIL HILLS, NC 27565

**EXTERIOR ELEVATIONS**

Project No.: 13480-001  
Sheet No.: **A-201**

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**1 FRONT ELEVATION (CROATAN HWY)**  
A-202 SCALE: 3/16" = 1'-0"

AREA (S.F.)	GLAZING (S.F.)	FACADE %
1020 S.F.	380 S.F.	37%

**FACADE REQUIREMENTS:**

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2. FRONT FACADE STANDARDS: WINDOWS AND PILASTERS ARE PROVIDED TO CREATE ARCHITECTURAL BREAKS. ALSO THE BUILDING ENTRANCES HAVE BEEN ENHANCED..
3. ROOF STANDARDS: A GABLE ROOF SPANNING THE ENTIRE WIDTH OF THE BUILDING IS PROVIDED.

**EXTERIOR MATERIAL:**

MASONRY		
B-1	TYPE: MANUFACTURER: COLOR: GROUT:	TRAD. BRICK WITH 3/8" JOINT PALMETTO BRICK .75 GREYSTONE LIGHT GRAY
B-2	TYPE: MANUFACTURER: COLOR: GROUT:	ROWLOCK BRICK PALMETTO BRICK .75 GREYSTONE LIGHT GRAY
EXTERIOR SIDING		
E-1	TYPE: MANUFACTURER: COLOR:	FIBER CEMENT SIDING JAMES HARDIE TO MATCH SW 6141 SOFTER TAN
E-2	TYPE: MANUFACTURER: COLOR:	FIBER CEMENT SIDING JAMES HARDIE TO MATCH SW 6143 BASKET BEIGE
E-3	TYPE: MANUFACTURER: COLOR:	FIBER CEMENT SIDING JAMES HARDIE TO MATCH SW 7005 PURE WHITE
METAL		
M-1	TYPE: MANUFACTURER: COLOR/FINISH:	EXTERIOR CANOPY/STOREFRONT PRE CLAD OR EQUAL ANODIZED BRONZE
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**2 RIGHT ELEVATION (4TH STREET)**  
A-202 SCALE: 3/16" = 1'-0"

AREA (S.F.)	GLAZING (S.F.)	FACADE %
1097 S.F.	139 S.F.	12%



**3 LEFT ELEVATION**  
A-202 SCALE: 3/16" = 1'-0"

AREA (S.F.)	GLAZING (S.F.)	FACADE %
1065 S.F.	108 S.F.	10%

**4 REAR ELEVATION**  
A-202 SCALE: 3/16" = 1'-0"

SHERWIN WILLIAMS #001 - KILL DEVIL HILLS, NC  
N. CROATAN HWY & W. 4TH ST, KILL DEVIL HILLS, NC 27565

**EXTERIOR ELEVATIONS COLORED**

Project No.: 13480-001

Sheet No.:

**A-202**

# SITE DEVELOPMENT PLAN for N. CROATAN HIGHWAY SHERWIN WILLIAMS 1828 N. CROATAN HIGHWAY N. CROATAN HWY & 4TH STREET KILL DEVIL HILLS, NC 27948



**VICINITY MAP**  
NTS

**BEFORE YOU DIG, TO MISS UTILITIES  
CALL 'MISS UTILITY' OF NORTH CAROLINA.  
TOLL FREE 811**

**ALL REFERENCES TO THE LOCAL  
MUNICIPALITY SHALL MEAN THE TOWN OF  
KILL DEVIL HILLS.**

## ADEQUATE PUBLIC FACILITIES

### STORM WATER MANAGEMENT AND WATER QUALITY IMPACTS: STORM WATER MANAGEMENT

THE TOPOGRAPHY FOR THIS SITE GENERALLY FALLS FROM THE SOUTH TO NORTH TOWARD THE 4TH STREET RIGHT-OF-WAY. BASED UPON USDA WEB SOIL SURVEY INFORMATION AND GEOTECHNICAL REPORT, THE EXISTING SOILS ARE CLASSIFIED AS POORLY GRADED SAND. THE DEVELOPMENT WILL RESULT IN APPROXIMATELY 0.72 AC. OF LAND DISTURBANCE.

A PROPOSED INFILTRATION BASIN WILL BE LOCATED TOWARD THE REAR OF THE PARCEL. THIS BASIN HAS BEEN SIZED TO HOLD THE ENTIRETY OF THE 4.3IN. STORM EVENT WITHOUT DISCHARGING INTO THE PUBLIC INFRASTRUCTURE. AN OUTLET CONTROL STRUCTURE IS ALSO PROVIDED FOR THE INFILTRATION BASIN AND WILL ALLOW WATER TO LEAVE THE BASIN DURING LARGER STORM EVENTS. THE PROPOSED ON-SITE IMPROVEMENTS HAVE BEEN DESIGNED TO ENSURE THAT THE DEVELOPMENT WILL RESULT IN A NET REDUCTION IN THE PEAK FLOWS FROM THE EXISTING CONDITIONS.

THE SCS TR-55 METHOD WAS USED IN CALCULATING PRE AND POST DEVELOPMENT FLOW RATES. DUE TO THE SMALL SCALE OF THE DRAINAGE AREAS AND TIME OF CONCENTRATION FLOW PATHS IT WAS DETERMINED THAT A MINIMUM OF 5 MINUTES WOULD BE USED FOR ALL CALCULATIONS. TABLE 1.0 BELOW PROVIDES A SUMMARY OF THE PRE AND POST DEVELOPMENT RUNOFF RATES FOR THE 2, 10YR(2HR), 10YR(24HR), AND 25 YR STORMS. THE ENTIRETY OF THE 2YR (24HR) AND 10YR(2HR) STORM EVENTS WILL BE RETAINED ON-SITE WITHIN THE PROPOSED INFILTRATION TRENCH. MORE DETAILS STORMWATER CALCULATIONS FOR EACH DRAINAGE AREA ARE INCLUDED IN APPENDIX D OF THIS DOCUMENTS.

Site Condition	DA-A			
	Storm Event (cfs)			
	2yr	10yr(2hr)	10yr(24hr)	25yr
Pre-Development	1.83	2.38	3.25	3.85
Post-Development	0.00	0.00	0.51	1.20

### SANITARY SEWER DEMANDS:

THE TOTAL AVERAGE PROPOSED SANITARY SEWER DEMAND IS 400 GPD OR 0.74 GPM. THESE CALCULATIONS ARE AS FOLLOWS:

#### RETAIL

100 GAL/1,000SF = 100 X 4 = 400 GPD  
400 GPD. / 540 MIN. = 0.74 GPM AVERAGE

### WATER METER SIZING:

PER INTERNATIONAL PLUMBING CODE THE PROPOSED BUILDING HAS A TOTAL OF 35.5 WSFU. THIS EQUATES TO A PEAK FLOW OF 25 GPM. BASED ON THIS PEAK FLOWRATE A 3/4" METER IS PROPOSED WITH THIS DEVELOPMENT.

### FIRE FLOW:

BASED ON THE ISO FIRE FLOW COMPUTATIONS THE PROPOSED BUILDING REQUIRES A FIRE FLOW RATE OF 950 GPM. HOWEVER THE MINIMUM REQUIREMENT FOR COMMERCIAL DEVELOPMENT IS 1,500 GPM.

### REFUSE COLLECTION:

PRIVATE CONTRACTOR, A PRIVATE DUMPSTER WILL BE LOCATED ON-SITE

## SITE INFORMATION

<p><b>OWNER:</b> MIDTOWN DEV CORP 3200 PACIFIC AVE., STE 100 VIRGINIA BEACH, VA 23451</p> <p><b>DEVELOPER:</b> GEMCAP DEVELOPMENT 418 N. MARSHALL STREET, SUITE 201 WINSTON SALEM, NC 27101 CONTACT: BRIAN MOORE PH#: 336-724-0153</p> <p><b>DESIGNER:</b> DEVELOPMENT SERVICES GROUP 1210 PROGRESSIVE DR., SUITE 201 CHESAPEAKE, VIRGINIA 23320 CONTACT: GARY FRANKS PH# 757-908-2372</p> <p><b>LOCATION:</b> SW CORNER OF N. CROATAN HIGHWAY AND W. 4TH STREET IN KILL DEVIL HILLS, NC</p> <p><b>CURRENT ZONING:</b> C - COMMERCIAL</p> <p><b>PARCEL #:</b> 029831200</p> <p><b>PIN #:</b> 988406289382</p> <p><b>TAX DISTRICT:</b> KILL DEVIL HILLS</p> <p><b>SUBDIVISION:</b> WRIGHT'S SHORES</p>	<p><b>ADJACENT ZONING:</b> NORTH R/W (4TH STREET), C-COMMERCIAL EAST C-COMMERCIAL WEST RL-RESIDENTIAL SOUTH C-COMMERCIAL</p> <p><b>EXISTING LAND USE:</b> THE AFFECTED PROPERTY IS CURRENTLY UNDEVELOPED</p> <p><b>PROPOSED LAND USE:</b> COMMERCIAL - RETAIL BUSINESS (N)</p> <p><b>SOIL TYPE:</b> PER THE USDA WEB SOIL SURVEY THE SOILS ARE CLASSIFIED AS COROLLA FINE SAND AND DUCKSTON FINE SAND.</p> <p><b>FLOOD INFORMATION:</b> THE PROPERTY IS LOCATED WITHIN FLOOD ZONE X, PER FEMA MAP PANEL NO. 3720988400K EFFECTIVE JUNE 19, 2020.</p> <p>REGULATORY FLOOD PROTECTION ELEVATION (RFPE) IN SHADED X AND X ZONES WEST OF NC12, THE RFPE IS 8' NAVD 1988 OR THE NATURAL GRADE ELEVATION IF THE NATURAL GRADE ELEVATION IS GREATER THAN 8' NAVD 1988. ALL ELEVATIONS REFERENCED TO NAVD 1988.</p> <p><b>BUILDING HEIGHT:</b> 25' FEET± (1 STORY BUILDING)</p> <p><b>PROPOSED BUILDING AREA:</b> 4,000 SF</p> <p><b>PROPOSED PARCEL AREA:</b> 31,228 SF± OR 0.72 ACRES ±</p> <p><b>DISTURBED AREA:</b> 32,028 SF± OR 0.74 ACRES ±</p> <p><b>TOTAL LOT COVERAGE:</b> 13,313 SF± (43% ±)</p>
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## SITE TABULATIONS

<p><b>EXISTING CONDITIONS:</b></p> <table border="1"> <thead> <tr> <th>ITEM:</th> <th>AREA (SF)</th> <th>% USE</th> </tr> </thead> <tbody> <tr> <td>IMPERVIOUS BUILDING</td> <td>0</td> <td>0.0%</td> </tr> <tr> <td>CONCRETE</td> <td>0</td> <td>0.0%</td> </tr> <tr> <td>ASPHALT</td> <td>0</td> <td>0.0%</td> </tr> <tr> <td>GRAVEL</td> <td>0</td> <td>0.0%</td> </tr> <tr> <td><b>SUB-TOTAL</b></td> <td><b>0</b></td> <td><b>0.0%</b></td> </tr> <tr> <td>PERVIOUS OPEN SPACE</td> <td>32,028</td> <td>100.0%</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>32,028</b></td> <td><b>100.0%</b></td> </tr> </tbody> </table> <p><b>BUILDING SETBACKS:</b></p> <table border="1"> <thead> <tr> <th></th> <th>FRONT</th> <th>REAR</th> <th>SIDE(NORTH) SIDE</th> <th>15'</th> <th>10'</th> </tr> </thead> <tbody> <tr> <td>FRONT</td> <td>30'</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>REAR</td> <td></td> <td>10'</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>PARKING REQUIREMENTS:</b></p> <table border="1"> <thead> <tr> <th>HANDICAP SPACES</th> <th>1/1</th> <th>PARKING SPACES</th> <th>20</th> <th>REQUIRED (1/200SF)</th> <th>20</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	ITEM:	AREA (SF)	% USE	IMPERVIOUS BUILDING	0	0.0%	CONCRETE	0	0.0%	ASPHALT	0	0.0%	GRAVEL	0	0.0%	<b>SUB-TOTAL</b>	<b>0</b>	<b>0.0%</b>	PERVIOUS OPEN SPACE	32,028	100.0%	<b>TOTAL</b>	<b>32,028</b>	<b>100.0%</b>		FRONT	REAR	SIDE(NORTH) SIDE	15'	10'	FRONT	30'					REAR		10'				HANDICAP SPACES	1/1	PARKING SPACES	20	REQUIRED (1/200SF)	20							<p><b>PROPOSED CONDITIONS:</b></p> <table border="1"> <thead> <tr> <th>ITEM:</th> <th>AREA (SF)</th> <th>% USE</th> </tr> </thead> <tbody> <tr> <td>IMPERVIOUS BUILDING</td> <td>4,000</td> <td>12.5%</td> </tr> <tr> <td>CONCRETE</td> <td>7,280</td> <td>22.7%</td> </tr> <tr> <td>ASPHALT</td> <td>7,435</td> <td>23.2%</td> </tr> <tr> <td>GRAVEL</td> <td>0</td> <td>0.0%</td> </tr> <tr> <td><b>SUB-TOTAL</b></td> <td><b>18,715</b></td> <td><b>58.4%</b></td> </tr> <tr> <td>PERVIOUS PERVIOUS CONCRETE</td> <td>0</td> <td>0.0%</td> </tr> <tr> <td>OPEN SPACE</td> <td>13,313</td> <td>41.6%</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>32,028</b></td> <td><b>100.0%</b></td> </tr> </tbody> </table>	ITEM:	AREA (SF)	% USE	IMPERVIOUS BUILDING	4,000	12.5%	CONCRETE	7,280	22.7%	ASPHALT	7,435	23.2%	GRAVEL	0	0.0%	<b>SUB-TOTAL</b>	<b>18,715</b>	<b>58.4%</b>	PERVIOUS PERVIOUS CONCRETE	0	0.0%	OPEN SPACE	13,313	41.6%	<b>TOTAL</b>	<b>32,028</b>	<b>100.0%</b>
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SHEET INDEX	
SHEET	DESCRIPTION
CV-1.0	COVER SHEET AND INDEX
CX-2.0	EXISTING CONDITIONS
CES-3.0	E&S CONTRAOL & DEMOLITION PLAN
CL-5.0	LAYOUT PLAN
CU-6.0	UTILITY PLAN
CG-7.0	GRADING AND PHASE II E&S PLAN
CG-7.1	EXISTING DRAINAGE AREA PLAN
CG-7.2	PROPOSED DRAINAGE AREA PLAN
LA-8.0	LANDSCAPE PLAN
LT-9.0	LIGHTING PLAN
CDT-10.0	MISC NOTES & DETAILS
CDT-10.1	MISC NOTES & DETAILS
CDT-10.2	MISC NOTES & DETAILS

REV.	DESCRIPTION	DATE
1	REVISED PER TOWN COMMENTS	07/05/23
2		
3		
4		
5		
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8		
9		
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11		



DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVIA.COM  
WWW.DSGINCORPORATED.COM



PROJECT NAME/LOCATION ID <b>KDH SHERWIN WILLIAMS</b>	SHEET TITLE <b>COVER SHEET AND INDEX</b>	PROJECT LOCATION <b>1828 N. CROATAN HWY KILL DEVIL HILLS, NC</b>	PARCEL # <b>029831200</b>
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CV-1.0

CONCEPT PLAN

FILE NAME: C:\Users\gfrank\Documents\Projects\Kill Devil Hills\Kill Devil Hills\CV-1.0\CV-1.0.dwg PLOTTED: Wednesday, July 05, 2023 11:42am

**GENERAL SURVEY NOTES:**

- THIS SURVEY WAS PRODUCED BY TSC SURVEYING, PLLC, FOR DEVELOPMENT SERVICES GROUP INC.
- THIS SURVEY WAS BASED ON A COMMITMENT OF TITLE PROVIDED BY INVESTORS TITLE INSURANCE COMPANY. SAID STATUS OF TITLE HAVING THE FOLLOWING FILE AND DATE INFORMATION:  
ORDER (COMMITMENT) NUMBER: 202310023CA  
EFFECTIVE DATE: 01/04/2023, AT 5:00PM
- THE BOUNDARY LINES SHOWN ARE BASED ON A CURRENT FIELD BOUNDARY SURVEY.
- THIS SURVEY IS NOT INTENDED TO SHOW ALL UNDERGROUND UTILITY FEATURES. IT IS THE RESPONSIBILITY OF THE OWNER OR CONTRACTOR TO CONTACT MISS UTILITY BEFORE ANY EXCAVATION OR OTHER EARTH MOVING WORK.

CHESAPEAKE BAY PRESERVATION AREA

**ABBREVIATIONS**

CBPA: RPA	APPROX	APPROXIMATELY
CBPA: RMA	BLDG	BUILDING
	CONC	CONCRETE
	D.B.	DEED BOOK
	GPIN	GEOREFERENCED PARCEL IDENTIFICATION NUMBER
	HARN	HIGH ACCURACY REFERENCE NETWORK
	INST.	INSTRUMENT
	INV	INVERT
	M.B.	MAP BOOK
	NF	NAIL FOUND
	PG.	PAGE
	PIN	PARCEL IDENTIFICATION NUMBER
	S.F.	SQUARE FEET

**PIN FLAGS**

- BP# PIN FLAG: BLUE
- RP# PIN FLAG: RED
- OP# PIN FLAG: ORANGE
- YP# PIN FLAG: YELLOW

**LINES**

- BUILDING: OVERHANG
- BUILDING: WALLS
- CONTOUR (1 FOOT INTERVALS)
- DITCH: CENTERLINE
- DITCH: TOP OF BANK
- DITCH: TOE OF SLOPE
- FLOOD ZONE LINE
- LANDSCAPING: EDGE
- PAVEMENT: ASPHALT EDGE
- PAVEMENT: GRAVEL
- VEGETATION: DRIPLINE

**GRADE LEGEND**

- CENTERLINE
- FACE OF CURB
- FLOWLINE
- TOP OF BANK
- TOP OF CURB
- TOE OF SLOPE

**COMMUNICATIONS**

- CMH# COMMUNICATIONS: HAND HOLE
- CPED# COMMUNICATIONS: PEDESTAL
- CMH# COMMUNICATIONS: MANHOLE
- COMMUNICATIONS: UNDERGROUND

**CONTROL**

- TP# CONTROL: TRAVERSE POINT
- TBM CONTROL: TEMPORARY BENCHMARK

**FENCES**

- SF FENCE: SILT FENCE
- X FENCE: VINYL
- W FENCE: WOODEN
- M FENCE: METAL

**GAS**

- GM# GAS: METER
- GV# GAS: VALVE
- GP# GAS: UNDERGROUND PIPES

**POWER**

- LP# POWER: LIGHT POLE
- LP# POWER: CONDUIT
- LP# POWER: LIGHT POLE: SINGLE ARM
- LP# POWER: LIGHT POLE: SINGLE BOX
- EP# POWER: TRANSFORMER
- EP# POWER: ELECTRIC PEDESTAL
- EP# POWER: GUY WIRE
- UP# POWER: UTILITY POLE
- UP# POWER: UTILITY POLE WITH LIGHT
- EH# POWER: ELECTRIC HANDHOLE
- EH# POWER: OVERHEAD LINES
- EH# POWER: UNDERGROUND

**PROPERTY**

- DHF# PROPERTY: DRILL HOLE FOUND
- DHS# PROPERTY: DRILL HOLE SET
- IRF# PROPERTY: IRON ROD FOUND
- IRS# PROPERTY: IRON ROD SET
- NF# PROPERTY: NAIL FOUND
- IPF# PROPERTY: IRON PIPE FOUND
- PPF# PROPERTY: PINCHED PIPE FOUND
- VDH# PROPERTY: VDOT MONUMENT
- PROPERTY: BOUNDARY
- PROPERTY: ADJACENT BOUNDARY
- PROPERTY: EASEMENT

**SANITARY**

- SSMH# SANITARY: MANHOLE
- CO# SANITARY: CLEANOUT
- SA# SANITARY: PIPES
- SM# SANITARY: FORCE MAIN

**SITE**

- SIGN
- BOLLARD

**STORM**

- SDMH# STORM: MANHOLE
- CDI# STORM: CURB DROP INLET
- CB# STORM: CATCH BASIN
- RD# STORM: ROOF DRAIN
- STORM: PIPES

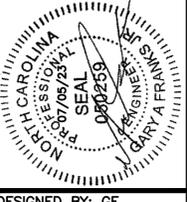
**TRAFFIC**

- TRH# TRAFFIC: BOX
- TRPD# TRAFFIC: PEDESTAL
- TRM# TRAFFIC: MANHOLE

**WATER**

- WV# WATER: VALVE
- WM# WATER: METER
- IRR# WATER: IRRIGATION
- FH# WATER: FIRE HYDRANT
- SPIGOT WATER: SPIGOT
- FDC# WATER: FIRE DEPARTMENT CONNECTION
- PV# WATER: POST INDICATOR VALVE
- WATER: UNDERGROUND PIPES

REV.	DESCRIPTION	DATE
1	REVISED PER TOWN COMMENTS	07/05/23



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PROJECT NAME/LOCATION ID  
KDH SHERWIN WILLIAMS

SHEET TITLE  
EXISTING CONDITIONS

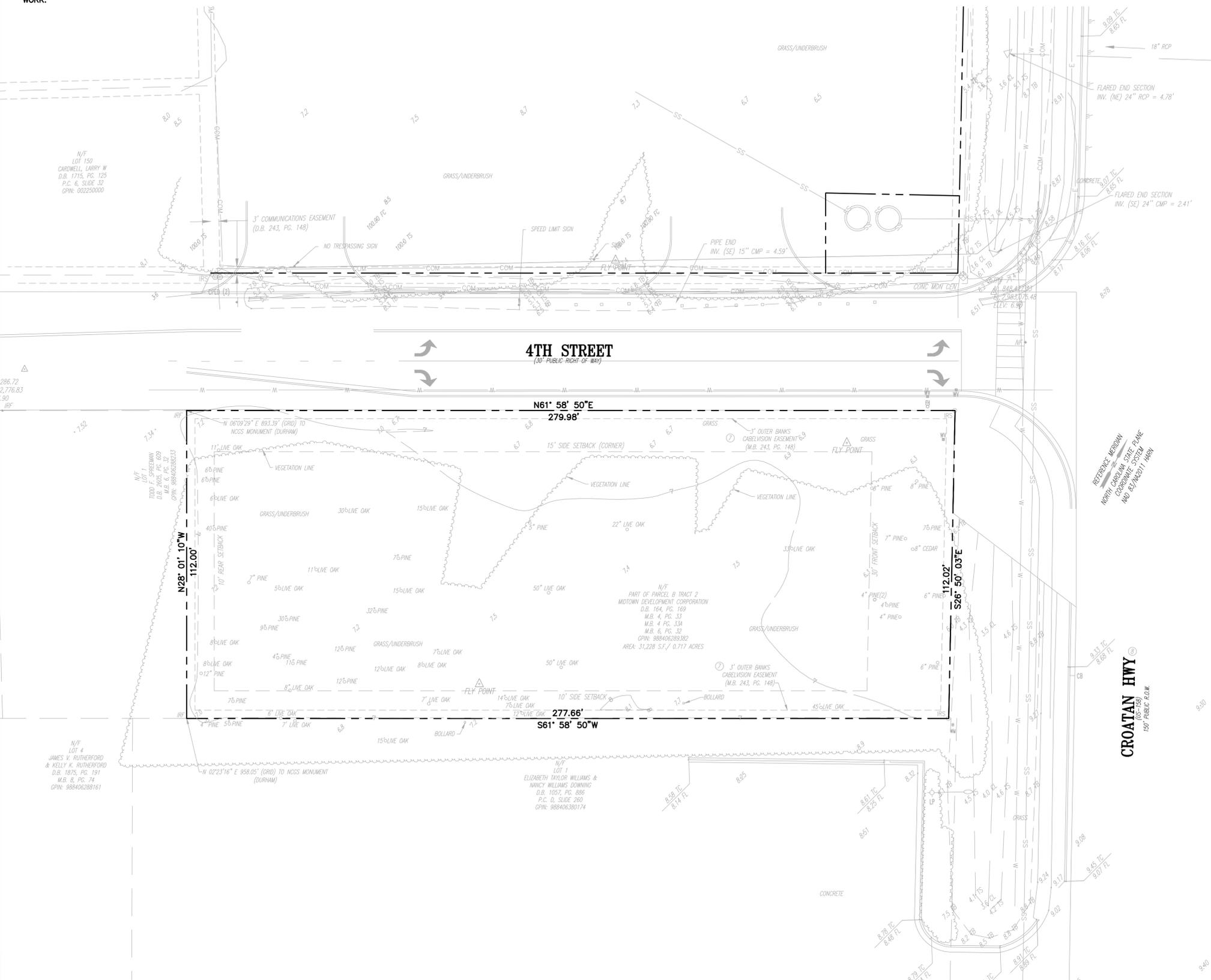
PROJECT LOCATION  
1828 N. CROATAN HWY  
KILL DEVIL HILLS, NC

PARCEL #  
029831200

CONCEPT PLAN

CX-2.0

SCALE: 1"=20'



**DRAWING SCALE**  
20 0 20 40  
SCALE: 1"=20'

FILE NAME: P:\2022-demarc\2022.04-4th Street and Croatan Hwy\Card\Croatan Hwy - KDH NC 02-CX-2.0 Existing Conditions.dwg LAYOUT NAME: E:skat. Condition PLOTTED: Wednesday, July 05, 2023 11:43am

**EROSION CONTROL LEGEND:**

- (CE)** CONSTRUCTION ENTRANCE (STD: HB432)
- (IP)** INLET PROTECTION
- (SF)** SILT FENCE (STD: HS401)
- (TP)** TREE PROTECTION FENCING
- (LOD)** LIMITS OF DISTURBANCE

FOR CONSTRUCTION DETAILS AND SPECIFICATIONS REFER TO THE "NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL"

**DEMOLITION LEGEND:**

- (RM)** REMOVE
- (RL)** RELOCATE
- (SC)** SAWCUT AND REMOVE
- (ER)** ERADICATE
- REMOVE EXISTING BUILDING
- CLEAR EXISTING GRASS/BRUSH
- REMOVE EXISTING GRAVEL
- REMOVE EXISTING CONCRETE

**CONSTRUCTION SEQUENCING:**

1. OBTAIN ALL NECESSARY TOWN OF KILL DEVIL HILLS AND STATE PERMITS. A LAND DISTURBANCE PERMIT IS REQUIRED PRIOR TO ANY GRADING OR LAND CLEARING.
2. SCHEDULE AN ONSITE PRE-CONSTRUCTION CONFERENCE 48 HOURS PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITY.
3. INSTALL CONSTRUCTION FENCES AND TEMPORARY TRAFFIC AND PEDESTRIAN CONTROL DEVICES.
4. PREPARE TEMPORARY PARKING AND STORAGE AREAS.
5. INSTALL SILT FENCE ON THE SITE AS SHOWN WITHIN THE CONSTRUCTION LIMITS.
6. A CERTIFICATION OF COMPLIANCE IS REQUIRED FROM THE TOWN INSPECTOR PRIOR TO ANY LAND DISTURBANCE.
7. DEMO EXISTING STRUCTURES, PAVEMENT AND SPECIFIED UTILITIES. EXISTING CURB ALONG 4TH STREET SHALL ONLY BE REMOVED AS NEEDED TO INSTALL THE PROPOSED CONSTRUCTION ENTRANCE. EXISTING GUTTER SHOULD REMAIN IN PLACE THROUGHOUT CONSTRUCTION UNTIL THE DRIVEWAYS ARE READY TO BE FORMED AND POURED. SILT FENCE SHALL BE MOVED BACK TO THE PROPERTY LINE IN THE AREAS WHERE CURING IS TO REMAIN IN PLACE UNTIL THE DRIVEWAYS ARE READY TO BE CONSTRUCTED.
8. UNDERCUT EXISTING POOR SOILS AS INDICATED IN THE GEOTECHNICAL REPORT.
9. BEGIN GRADING SITE.
10. BEGIN CONSTRUCTION OF UTILITIES.
11. BEGIN SUB-GRADE PREPARATION AND CONSTRUCTION OF STRUCTURES.
12. INSTALL TEMPORARY SEEDING
13. BEGIN INSTALLATION OF ON-SITE CURB, GUTTER AND PAVING.
14. COMPLETE PERMANENT STABILIZATION ON AREAS WHERE CONSTRUCTION HAS COMPLETED.
15. COMPLETE FINAL GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
16. OBTAIN CONCURRENCE FROM THE OWNER AND THE TOWN THAT THE SITE HAS BEEN FULLY STABILIZED.
17. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.
18. ONCE THE SITE IS COMPLETE AND STABILIZED WITH THE ESTABLISHMENT OF PERMANENT GROUND COVER, THE PERMITTEES SHALL VISIT DEQ.NC.GOV/NCG01 TO SUBMIT AN ELECTRONIC NOTICE OF TERMINATION (E-NOT).

**EROSION AND SEDIMENT CONTROL NOTES:**

1. CONTRACTOR MAY COMPLETE CONSTRUCTION RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMP'S HAVE BEEN COMPLETELY INSTALLED.
2. THE ACTUAL SCHEDULE FOR IMPLEMENTING POLLUTANT CONTROL MEASURES WILL DETERMINED BY THE PROJECT CONSTRUCTION PROGRESS AND RECORDED BY THE GENERAL CONTRACTOR ON THESE PLANS.
3. CONTRACTOR SHALL INSPECT THE EROSION AND SEDIMENT CONTROL BMP'S AT LEAST ONCE WEEKLY OR AFTER EVERY 1/2" RAINFALL PER STATE AND LOCAL STANDARDS

**EXISTING UTILITY NOTE:**

THIS PLAN DOES NOT GUARANTEE THE EXISTENCE, NON-EXISTENCE, SIZE TYPE, LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO DEVELOPMENT SERVICES GROUP AT 757-908-2372.

**DEMOLITION NOTES:**

1. THE LOCATION OF THE UTILITIES SHOWN HAVE BEEN DETERMINED BY INFORMATION GATHERED AND SHALL NOT BE USED AS EXACT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO VERIFY EXACT LOCATIONS PRIOR TO DEMOLITION.
2. THE CONTRACTOR SHALL COORDINATE WITH THE PROPER UTILITY COMPANIES FOR REMOVAL AND RELOCATIONS OF THE RESPECTIVE UTILITY. THE CONTRACTOR SHALL VERIFY ANY WORK THAT MAY BE DONE BY THE UTILITY COMPANIES.
3. CONTRACTOR SHALL PROTECT ANY PUBLIC STREET WITH BEST MANAGEMENT PRACTICES.
4. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING STRUCTURES, PAVEMENT, AND VEGETATION THAT IS NOT TO BE DISTURBED AND IS RESPONSIBLE FOR ANY DAMAGES TO THEM.
5. THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL MATERIALS RESULTING FROM OPERATION ACCORDING TO GOVERNING AUTHORITIES AND SHALL OBTAIN THE PROPER PERMITS REQUIRED FOR DISPOSAL AND DEMOLITION.
6. THE CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION AND AVOID ANY PROPERTY DAMAGE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO DEMOLITION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SERVICES TO ANY NECESSARY UTILITIES DURING CONSTRUCTION.
9. FOR ALL ITEMS NOTED TO BE REMOVED, REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS, BUT ALSO REMOVE ALL UNDERGROUND ELEMENTS AS WELL INCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, GRAVEL FILLS, TREE ROOTS, PIPES, TANKS, ETC.
10. BACKFILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK MEETING THE REQUIREMENTS FOR FILL OUTLINED IN THE GEOTECHNICAL INVESTIGATION REPORT FOR THIS SITE.
11. ASBESTOS AND ANY OTHER HAZARDOUS MATERIAL, SHALL PROPERLY PERMITTED AND REMOVED BY THE CONTRACTOR. CONTRACTOR SHALL SECURE ALL PERMITS FOR DEMOLITION AND REMOVAL OF MATERIALS FROM THE SITE.
12. LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE PLANS. ANY DAMAGE INCURRED TO ANY SURROUNDING AREAS SHALL BE REPAIRED/ REPLACED AT THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROTECT EXISTING ADJACENT STRUCTURES, PAVEMENT, UTILITIES, LANDSCAPE, ETC. FROM DAMAGE DURING CONSTRUCTION.
13. DEMOLITION AND REMOVAL OF UNDERGROUND STORAGE TANKS, FUELING DISPENSERS, AND FUELING RELATED APPURTENANCES SUCH AS SUPPLY LINES SHALL BE REMOVED AND DISPOSED OF PER LOCAL, STATE, AND FEDERAL REQUIREMENTS. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF SUPPLY LINES AND APPURTENANCES AND REMOVE PER REQUIREMENTS. CONTRACTOR SHALL SECURE ALL PERMITS FOR DEMOLITION AND REMOVAL OF MATERIALS FROM THE SITE.
14. CONTRACTOR SHALL ENSURE THAT SERVICES TO ALL UTILITIES TO BE REMOVED HAS BEEN DISCONTINUED AND SHUT OFF. ALL UTILITY LINES SHALL BE CAPPED PER UTILITY COMPANY STANDARDS.
15. THE DISMANTLEMENT OF ANY WATER UTILITIES AND OR METER BOXES SHALL BE DONE BY THE CONTRACTOR.
16. WHEREVER DEMOLITION WORK IS BEING PERFORMED, THE CONTRACTOR SHALL MEET ALL CODES AND REQUIREMENTS FOR PROVIDING WARNINGS AND BARRIERS TO PROTECT THE PERSONNEL. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO EXISTING SURFACES.
17. CONCRETE WALK, DRIVEWAYS, CURBS AND PAVEMENT TO BE DEMOLISHED SHALL BE SAW CUT ALONG PERPENDICULAR OR RADIAL TO THE EDGES OF CONCRETE OR PAVEMENT. ALL CONCRETE REMOVED IN THE CITY RIGHT-OF-WAY SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.
18. ALL CONSTRUCTION TRAFFIC SHALL ENTER & EXIT THE SITES AT THE STONE CONSTRUCTION ENTRANCE AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.
19. DEMOLITION DEBRIS TO BE DISPOSED OF OFF-SITE AT SITE PROCURED BY CONSTRUCTION/DEMOLITION CONTRACTOR.
20. ANY DISTURBED AREAS OF THE SITE TO BE GRADED TO DRAIN TO EXISTING/PROPOSED STORM INLETS AND SODDED.

**E&S CONTROL NARRATIVE:**

**PROJECT DESCRIPTION:**  
SITE IS LOCATED ON THE SOUTHWEST CORNER OF N. CROATAN HWY AND 4TH STREET IN KILL DEVIL HILLS, NC. THE PROPOSED DEVELOPMENT WILL INCLUDE THE CLEARING OF THE EXISTING SITE AND CONSTRUCTION OF A NEW 4,000SF RETAIL BUILDING AND PARKING LOT. THE PROPOSED IMPROVEMENTS WILL RESULT IN APPROXIMATELY 0.74 ACRES OF LAND DISTURBANCE.

**EXISTING SITE CONDITIONS:**  
THE SITE CURRENTLY UNDEVELOPED

**ADJACENT AREAS:**  
THE PARCEL IS ADJACENT TO COMMERCIAL ZONED PROPERTIES TO THE NORTH, SOUTH, AND EAST. THE PARCEL THE WEST IS CURRENTLY ZONED RESIDENTIAL.

**OFF-SITE AREAS:**  
NO OFF-SITE IMPROVEMENTS ARE PROPOSED.

**SOILS:**  
PER USDA WEB SOIL SURVEY THE SOILS ARE CLASSIFIED AS COROLLA FINE SAND AND DUCKSTON FINE SAND.

**CRITICAL AREA:**  
DUE TO THE EXISTING SITE TOPOGRAPHY ONSITE COLLECTION OF RUNOFF, THERE SHALL BE NO EXPECTED SIGNIFICANT EROSION PROBLEMS, BUT THE CONTRACTOR SHALL USE CAUTION INGRESS/EGRESS FROM SITE DUE TO THE SOILS HAVING MEDIUM TO HIGH MOISTURE CONTENT. CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING ALL LAND DISTURBANCE.

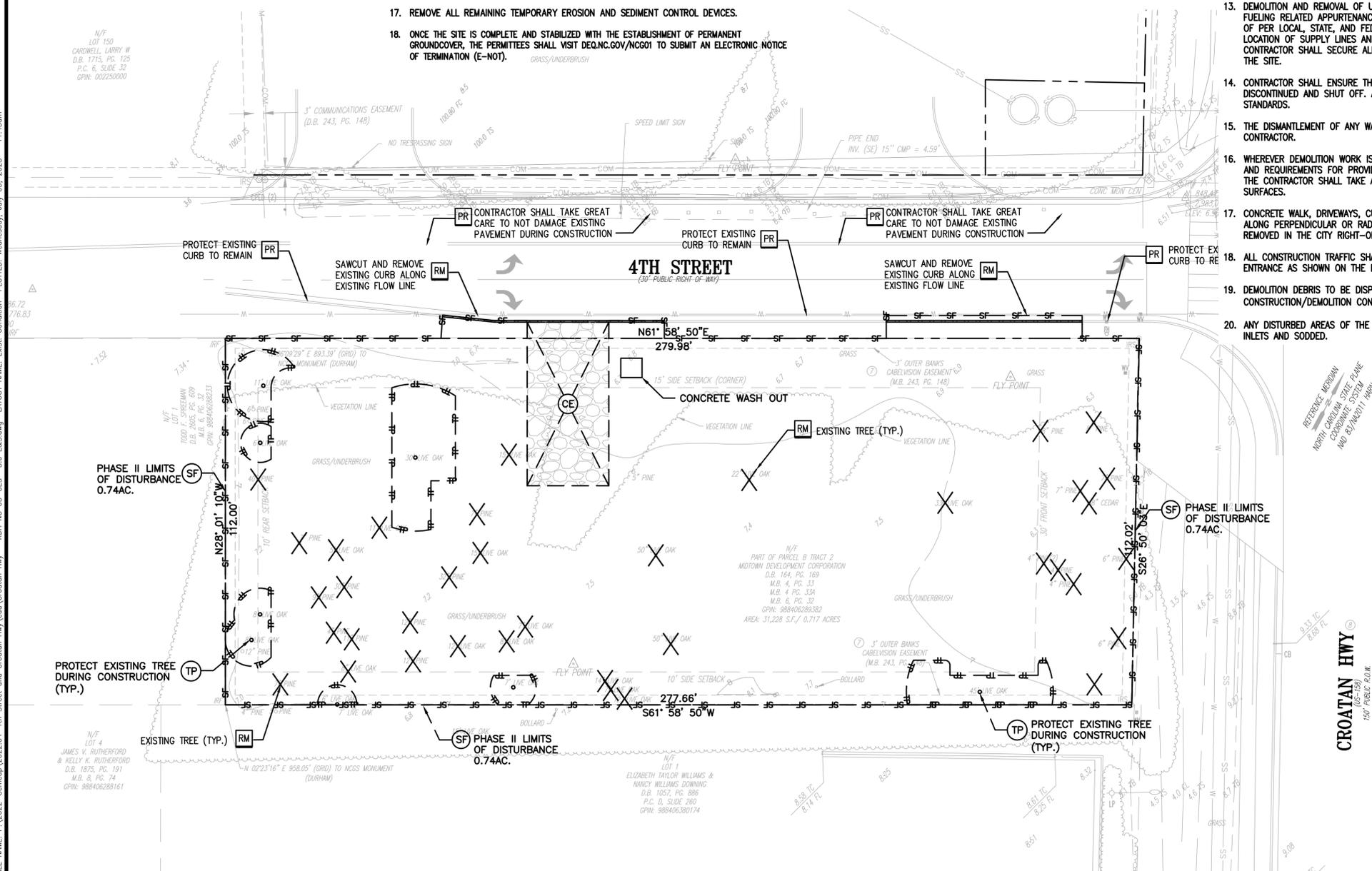
**EROSION AND SEDIMENT CONTROL:**  
THE EROSION AND SEDIMENT CONTROL MEASURES WILL CONSIST OF UTILIZING A TEMPORARY CONSTRUCTION ENTRANCE, SILT FENCE, INLET PROTECTION, AS WELL AS TEMPORARY AND PERMANENT SEEDING. ALL STORMWATER DRAINAGE STRUCTURES IMPACTED BY THIS LAND DISTURBANCE ARE SHOWN ON THE SITE PLANS.

**PERMANENT STABILIZATION:**  
POST CONSTRUCTION STABILIZATION WILL CONSIST OF PERIMETER CURB AND GUTTER TO DIRECT IMPERVIOUS SURFACE RUNOFF AND ALL DISTURBED GREEN AREAS SHALL BE PERMANENTLY SEEDED OR SODDED TO PREVENT SOIL EROSION.

**STORMWATER RUNOFF CONSIDERATIONS:**  
THE STORMWATER RUNOFF WILL MATCH THE EXISTING CONDITIONS AND SHEET FLOW OFFSITE AND INTO THE EXISTING RIGHT-OF-WAY. THE PROPOSED REDEVELOPMENT WILL RESULT IN AN INCREASE IN IMPERVIOUS AREA AND THEREFORE AN ON-SITE STORMWATER INFILTRATION BASIN IS PROPOSED AT THE REAR OF THE PROPERTY. CALCULATIONS FOR THE SIZING OF PROPOSED STORMWATER INFRASTRUCTURE ARE PROVIDED IN THE SITE NARRATIVE

**MAINTENANCE:**  
CONTRACTOR SHALL MAINTAIN AT ALL TIMES ALL EROSION AND SEDIMENT CONTROL MEASURES PER CITY OF WILSON REQUIREMENTS SET FORTH IN THE EROSION AND SEDIMENT CONTROL NOTES LISTED ON THIS SHEET. THE FOLLOWING MEASURES ARE INCLUDED WITHIN THIS SITE DEVELOPMENT PLAN:

- CONSTRUCTION ENTRANCE**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REMOVING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT.
  2. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
  3. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
- SILT FENCE**
1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
  2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING.
  3. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
  4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER/SILT FENCE OR OTHER BMP.
  5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
- STORM DRAIN INLET PROTECTION**
1. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
  2. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
  3. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



DATE	07/05/23
DESCRIPTION	
REVISED PER TOWN COMMENTS	
REV.	1 2 3 4 5 6 7 8 9 10 11

DESIGNED BY: GF  
 DRAWN BY: GF  
 REVIEWED BY:

DSG INC. USA, PLLC  
 1210 PROGRESSIVE DR.  
 CHESAPEAKE VA, 23320  
 PH#: 757-472-2719  
 EMAIL: GFRANKS@DSGVA.COM  
 WWW: DSGINCORPORATED.COM

PROJECT NAME/LOCATION ID	KDH SHERWIN WILLIAMS
SHEET TITLE	E&S CONTROL & DEMOLITION PLAN
PROJECT LOCATION	1828 N. CROATAN HWY KILL DEVIL HILLS, NC
PARCEL #	029831200

**CES-3.0**  
CONCEPT PLAN

GRAPHIC SCALE  
 20 10 0 20 40  
 scale SCALE 1"=20' feet

FILE NAME: P:\2022-demarc\2022\_04-4th Street and Crotan Hwy\4th Crotan Hwy\4th Crotan Hwy - RDH - NC 03-03-03-3.0 E&S.dwg LAYOUT NAME: Ext. Condition PLOTTED: Wednesday, July 05, 2023 11:43am

6.06

**TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT**

**Definition** A gravelled area or pad located at points where vehicles enter and leave a construction site.

**Purpose** To provide a buffer area where vehicles can drop their mud and sediment to avoid transporting it onto public roads, to control erosion from surface runoff, and to help control dust.

**Conditions Where Practice Applies** Whenever traffic will be leaving a construction site and moving directly onto a public road or other paved off-site area. Construction plans should limit traffic to properly constructed entrances.

**Design Criteria**  
**Aggregate Size**—Use 2-3 inch washed stone.  
**Dimensions of gravel pad**—  
 Thickness: 6 inches minimum  
 Width: 12-foot minimum or full width at all points of the vehicular entrance and exit area, whichever is greater  
 Length: 50-foot minimum  
**Location**—Locate construction entrances and exits to limit sediment from leaving the site and to provide for maximum utility by all construction vehicles (Figure 6.06a). Avoid steep grades, and entrances at curves in public roads.

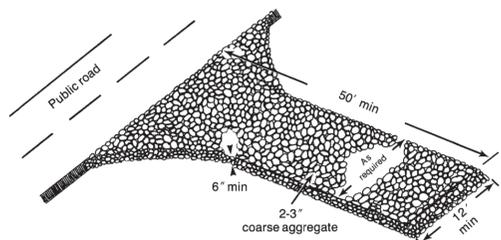


Figure 6.06a Gravel entrance/exit keeps sediment from leaving the construction site (modified from Va SWCC).

6.06.1

6.05

**TREE PROTECTION**

**Definition** Practices to preserve and protect desirable trees from damage during project development.

**Purpose** To preserve and protect trees that have present or future value for their use in protection from erosion, for their landscape and aesthetic value, or for other environmental benefits.



Figure 6.05a Tree protection zone. A protected zone preserves roots and soil and keeps branches clear of contact with construction equipment and materials.

**Conditions Where Practice Applies** On development sites containing trees or stands of trees.

**Planning Considerations** Conserving the right trees can reap rewards for developers, homeowners, and communities. Healthy trees enhance property values and community development by providing shade, wildlife habitat, and beauty. Sickly, stressed trees reduce property values, discourage potential buyers and detract from a community. Post-construction maintenance and removal of trees is difficult and expensive. Replacing trees after construction can also be costly and time consuming.

Rev. 5/08

6.05.1

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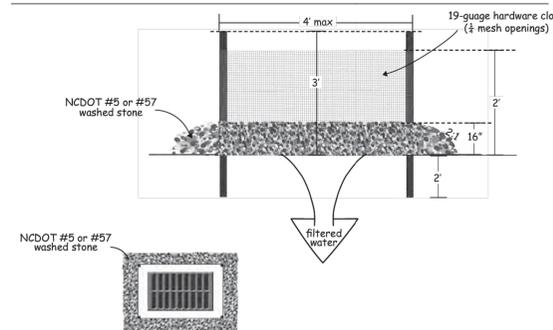


Figure 6.51a Hardware cloth and gravel inlet protection

- Construction Specifications**
1. Uniformly grade a shallow depression approaching the inlet.
  2. Drive 5-foot steel posts 2 feet into the ground surrounding the inlet. Space posts evenly around the perimeter of the inlet, a maximum of 4 feet apart.
  3. Surround the posts with wire mesh hardware cloth. Secure the wire mesh to the steel posts at the top, middle, and bottom. Placing a 2-foot flap of the wire mesh under the gravel for anchoring is recommended.
  4. Place clean gravel (NC DOT #5 or #57 stone) on a 2:1 slope with a height of 16 inches around the wire, and smooth to an even grade.
  5. Once the contributing drainage area has been stabilized, remove accumulated sediment, and establish final grading elevations.
  6. Compact the area properly and stabilize it with groundcover.

**Maintenance** Inspect inlets at least weekly and after each significant (1/2 inch or greater) rainfall event. Clear the mesh wire of any debris or other objects to provide adequate flow for subsequent rains. Take care not to damage or undercut the wire mesh during sediment removal. Replace stone as needed.

- References**
- Inlet Protection
  - 6.52, Block and Gravel Inlet Protection
  - 6.54, Rock Doughnut Inlet Protection
- North Carolina Department of Transportation  
Standard Specifications for Roads and Structures

6.51.2

Rev. 6/06

DATE	07/05/23
DESCRIPTION	REVISED PER TOWN COMMENTS
REV.	1 2 3 4 5 6 7 8 9 10 11

DESIGNED BY: GF  
 DRAWN BY: GF  
 REVIEWED BY:  
 DSG INC. USA, PLLC  
 1210 PROGRESSIVE DR.  
 CHESAPEAKE VA, 23320  
 PH#: 757-472-2719  
 EMAIL: GFRANKS@DSGVA.COM  
 WWW. DSGINCORPORATED.COM



PROJECT NAME/LOCATION ID  
**KDH SHERWIN WILLIAMS**  
 SHEET TITLE  
**E&S CONTROL DETAILS**  
 PROJECT LOCATION  
 1828 N. CROATAN HWY  
 KILL DEVIL HILLS, NC  
 PARCEL #  
 029831200

**CES-3.1**  
 CONCEPT PLAN

6

**Table 6.10c Temporary Seeding Recommendations for Fall**

Species	Rate (lb/acre)
Rye (grain)	120

**Seeding dates**  
 Mountains—Aug. 15 - Dec. 15  
 Coastal Plain and Piedmont—Aug. 15 - Dec. 30

**Soil amendments**  
 Follow soil tests or apply 2,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.

**Mulch**  
 Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

**Maintenance**  
 Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extent temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) lespedeza in late February or early March.

6.10.6

**Table 6.10b Temporary Seeding Recommendations for Summer**

Species	Rate (lb/acre)
German millet	40

In the Piedmont and Mountains, a small-stemmed Sudangrass may be substituted at a rate of 50 lb/acre.

**Seeding dates**  
 Mountains—May 15 - Aug. 15  
 Piedmont—May 1 - Aug. 15  
 Coastal Plain—Apr. 15 - Aug. 15

**Soil amendments**  
 Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

**Mulch**  
 Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

**Maintenance**  
 Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

6.10.5

6

**Table 6.10a Temporary Seeding Recommendations for Late Winter and Early Spring**

Species	Rate (lb/acre)
Rye (grain)	120
Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains)	50

Omit annual lespedeza when duration of temporary cover is not to extend beyond June.

**Seeding dates**  
 Mountains—Above 2500 feet: Feb. 15 - May 15  
 Below 2500 feet: Feb. 1 - May 1  
 Piedmont—Jan. 1 - May 1  
 Coastal Plain—Dec. 1 - Apr. 15

**Soil amendments**  
 Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10-10-10 fertilizer.

**Mulch**  
 Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

**Maintenance**  
 Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

6.10.4

FILE NAME: P:\2022-Remcap\2022\_04-4th Street and Croatan Hwy\Coord\Croatan Hwy - RDH NC 04-CES-3.1 E&S.dwg LAYOUT NAME: COVER SHEET PLOTTED: Wednesday, July 05, 2023 11:43am

**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT**

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

**SECTION E: GROUND STABILIZATION**

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

**GROUND STABILIZATION SPECIFICATION**

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Rolled erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Rolled erosion control products with grass seed</li> </ul>

**POLYACRYLAMIDES (PAMS) AND FLOCCULANTS**

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

**LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

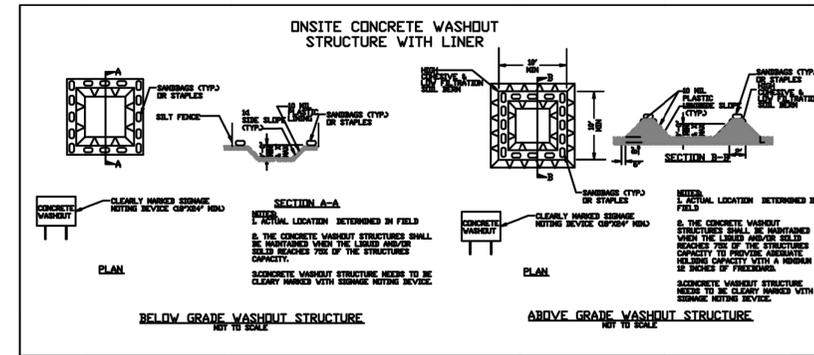
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

**PORTABLE TOILETS**

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

**EARTHEN STOCKPILE MANAGEMENT**

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



**CONCRETE WASHOUTS**

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

**HERBICIDES, PESTICIDES AND RODENTICIDES**

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

**HAZARDOUS AND TOXIC WASTE**

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

DATE: 07/05/23

DESCRIPTION: REVISED PER TOWN COMMENTS

REV. 1 2 3 4 5 6 7 8 9 10 11

DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
WWW: DSGINCORPORATED.COM

PROJECT NAME/LOCATION ID: KDH SHERWIN WILLIAMS  
SHEET TITLE: E&S CONTROL DETAILS  
PARCEL #: 029831200  
PROJECT LOCATION: 1828 N. CROATAN HWY  
KILL DEVIL HILLS, NC

CES-3.2  
CONCEPT PLAN

FILE NAME: P:\2022-Remcap\2022-04-4th Street and Croatan Hwy\Card\Croatan Hwy - RDH NC 05-CES-3.2 E&S.dwg LAYOUT NAME: COVER SHEET PLOTTED: Wednesday, July 05, 2023 - 11:43am



**SITE INFORMATION**

**OWNER:** MIDTOWN DEV CORP  
3200 PACIFIC AVE., STE 100  
VIRGINIA BEACH, VA 23451

**DEVELOPER:** GEMCAP DEVELOPMENT  
418 N. MARSHALL STREET, SUITE 201  
WINSTON SALEM, NC 27101  
CONTACT: BRIAN MOORE  
PH#: 336-724-0153

**DESIGNER:** DEVELOPMENT SERVICES GROUP  
1210 PROGRESSIVE DR., SUITE 101  
CHESAPEAKE, VIRGINIA 23320  
CONTACT: GARY FRANKS  
PH#: 757-908-2372

**LOCATION:** SW CORNER OF N. CROATAN HIGHWAY AND W. 4TH STREET IN KILL DEVIL HILLS, NC

**CURRENT ZONING:** C - COMMERCIAL

**PARCEL #:** 029831200

**PIN #:** 988406289382

**TAX DISTRICT:** KILL DEVIL HILLS

**SUBDIVISION:** WRIGHT'S SHORES

**ADJACENT ZONING:** NORTH R/W (4TH STREET), C-COMMERCIAL  
EAST C-COMMERCIAL  
WEST RL-RESIDENTIAL  
SOUTH C-COMMERCIAL

**EXISTING LAND USE:** THE AFFECTED PROPERTY IS CURRENTLY UNDEVELOPED

**PROPOSED LAND USE:** COMMERCIAL - RETAIL BUSINESS (N)

**SOIL TYPE:** PER THE USDA WEB SOIL SURVEY THE SOILS ARE CLASSIFIED AS COROLLA FINE SAND AND DUCKSTON FINE SAND.

**FLOOD INFORMATION:** THE PROPERTY IS LOCATED WITHIN FLOOD ZONE X, PER FEMA MAP PANEL NO. 3720988400K EFFECTIVE JUNE 19, 2020.

**REGULATORY FLOOD PROTECTION ELEVATION (RFPE) IN SHADED X AND X ZONES WEST OF NC12, THE RFPE IS 8' NAVD 1988 OR THE NATURAL GRADE ELEVATION IF THE NATURAL GRADE ELEVATION IS GREATER THAN 8' NAVD 1988. ALL ELEVATIONS REFERENCED TO NAVD 1988.**

**BUILDING HEIGHT:** 25' FEET± (1 STORY BUILDING)

**PROPOSED BUILDING AREA:** 4,000 SF

**PROPOSED PARCEL AREA:** 31,228 SF± OR 0.72 ACRES ±

**DISTURBED AREA:** 32,028 SF± OR 0.74 ACRES ±

**TOTAL LOT COVERAGE:** 13,313 SF± (43% ±)

**SITE TABULATIONS**

EXISTING CONDITIONS:			PROPOSED CONDITIONS:		
ITEM:	AREA (SF)	% USE	ITEM:	AREA (SF)	% USE
IMPERVIOUS BUILDING	0	0.0%	IMPERVIOUS BUILDING	4,000	12.5%
CONCRETE	0	0.0%	CONCRETE	7,280	22.7%
ASPHALT	0	0.0%	ASPHALT	7,435	23.2%
GRAVEL	0	0.0%	GRAVEL	0	0.0%
<b>SUB-TOTAL</b>	<b>0</b>	<b>0.0%</b>	<b>SUB-TOTAL</b>	<b>18,715</b>	<b>58.4%</b>
PERVIOUS OPEN SPACE	32,028	100.0%	PERVIOUS CONCRETE	0	0.0%
<b>TOTAL</b>	<b>32,028</b>	<b>100.0%</b>	OPEN SPACE	13,313	41.6%
			<b>TOTAL</b>	<b>32,028</b>	<b>100.0%</b>

BUILDING SETBACKS:			
FRONT	30'	SIDE(NORTH)	15'
REAR	10'	SIDE	10'

PARKING REQUIREMENTS:			
HANDICAP SPACES	1/1	PARKING SPACES	20
		REQUIRED (1/200SF)	20
		PROPOSED	20

**LAYOUT GENERAL NOTES:**

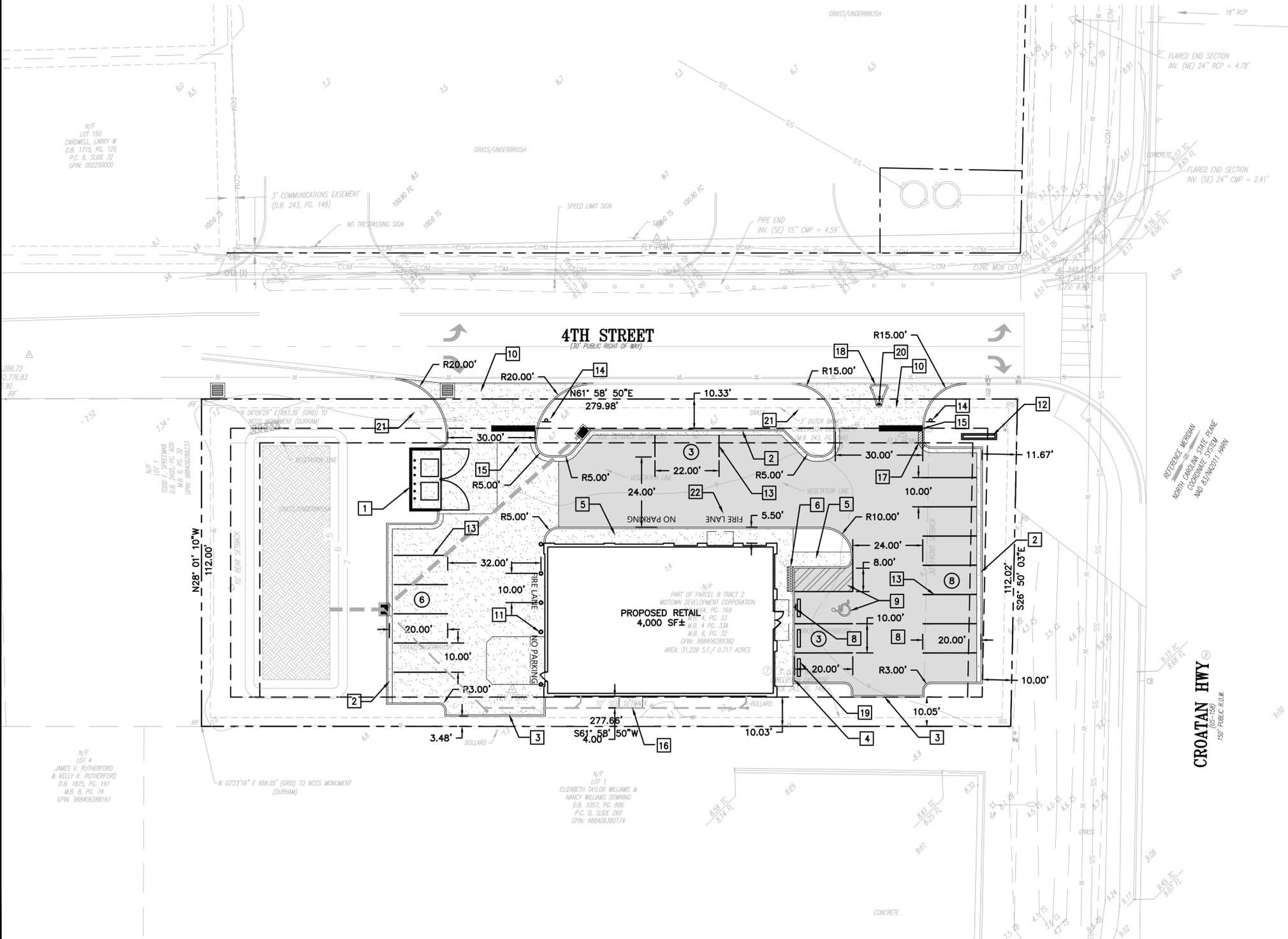
- BUILDING DIMENSIONS** - CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR ALL BUILDING DETAILS AND DIMENSIONS.
- CONSTRUCTION STAKEOUT** - ALL CONSTRUCTION STAKEOUT SHALL BE PERFORMED BY A SURVEYOR LICENSED IN THE STATE OF NORTH CAROLINA.
- PRIVATE UTILITY COORDINATION** - CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REMOVAL/RELOCATING OF ANY PRIVATE UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
- CONSTRUCTION MATERIALS AND METHODS** - ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO CITY STANDARDS
- EXCAVATED MATERIAL** SHALL BE DISPOSED OF IN A LAWFUL MANNER.
- LOCATION OF EXISTING UTILITIES** - LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO DEVELOPMENT SERVICES GROUP AT 757-908-2372.
- HVAC** - ALL HVAC AND OTHER EQUIPMENT WILL BE SCREENED AS TO NOT BE VISIBLE FROM ANY RIGHT-OF-WAY. SEE ARCHITECTURAL PLANS FOR DETAILS
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING AND AS-BUILT SURVEY INFORMATION NEEDED FOR PROJECT CLOSE OUT.

**HATCH LEGEND**

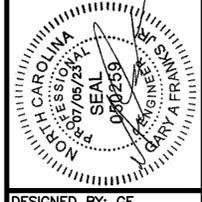
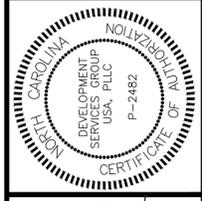
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE

**LAYOUT PLAN LEGEND**

- DUMPSTER ENCLOSURE. SEE ARCH PLANS FOR DETAILS.
- 24" VERTICAL FACE CONCRETE CURB AND GUTTER SEE SHEET CDT-10.0 FOR DETAILS.
- 6" CONCRETE CURB. SEE DETAIL ON SHEET CDT-10.0
- 6" CONCRETE CURB FLUSH WITH PAVEMENT
- CONCRETE SIDEWALK, SEE DETAIL SHEET CDT-10.0 FOR DETAILS.
- DETECTABLE WARNING SURFACE, SEE SHEET CDT-10.1 FOR DETAILS.
- ADA ACCESSIBLE SIDEWALK RAMP. SEE SHEET CDT-10.1 FOR DETAILS.
- VAN ACCESSIBLE "ADA" SIGN. SEE SHEET CDT-10.0 FOR DETAILS.
- VAN ACCESSIBLE "ADA" PAVEMENT MARKINGS. SEE DETAIL SHEET CDT-10.0.
- CONCRETE COMMERCIAL ENTRANCE
- CONCRETE BOLLARD (TYP.) SEE SHEET CDT-10.0 FOR DETAILS.
- PROPOSED SIGN. ACTUAL SIGN SIZE AND PLACEMENT WILL BE PERMITTED SEPARATELY. SIGN PLACEMENT SHALL NOT IMPACT EXISTING VEGETATION
- 4" PARKING PAINT STRIPE (WHITE) (TYP.)
- PROPOSED 30" STOP SIGN
- 24" STOP BAR (WHITE)
- CONCRETE HVAC PAD
- REVERSE GUTTER PAN
- MOUNTABLE CONCRETE ISLAND
- CONCRETE WHEEL STOP (TYP.)
- "NO LEFT TURN" SIGN
- 10'X20' SIGHT DISTANCE TRIANGLE
- FIRE LANE PAVEMENT MARKINGS (TYP.)



REV.	DESCRIPTION	DATE
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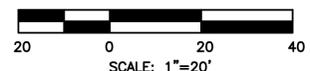
DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
WWW.DSGINCORPORATED.COM



Know what's below.  
Call before you dig.

**DRAWING SCALE**



PROJECT NAME/LOCATION ID: KDH SHERWIN WILLIAMS

SHEET TITLE: LAYOUT PLAN

PROJECT LOCATION: 1828 N. CROATAN HWY KILL DEVIL HILLS, NC

PARCEL # 029831200

**CL-5.0**

CONCEPT PLAN

FILE NAME: P:\2022-gemcap\2022\_04-4th Street and Croatan Hwy\Gemcap\Croatan Hwy - RDH NC 07-01-5.0 Layout.dwg LAYOUT NAME: Layout PLOTTED: Wednesday, July 05, 2023 11:44am

**SANITARY SEWER SCHEDULE:**

- S-1** SANITARY SEWER CLEANOUT  
RIM=8.90  
INV=5.90  
S-1 TO S-2 10' OF SCH40 4" PVC PIPE @ 0.5% SLOPE
- S-2** PROPOSED PRIVATE PUMP STATION  
RIM=8.35  
INV=5.80  
S-2 TO S-3 59' OF SCH40 4" PVC PIPE @ 0.5% SLOPE
- S-3** PROPOSED PRIVATE PUMP STATION  
RIM=8.35  
INV=5.50  
S-3 TO S-4 39' OF SCH40 4" PVC PIPE @ 0.5% SLOPE
- S-4** PROPOSED PRIVATE PUMP STATION  
RIM=8.35  
INV=5.30  
S-4 TO S-5 78' OF SCH80 2" PVC FORCE MAIN
- S-5** TIE TO EXISTING SAN. SEWER MANHOLE  
RIM=8.50  
INV=3.00

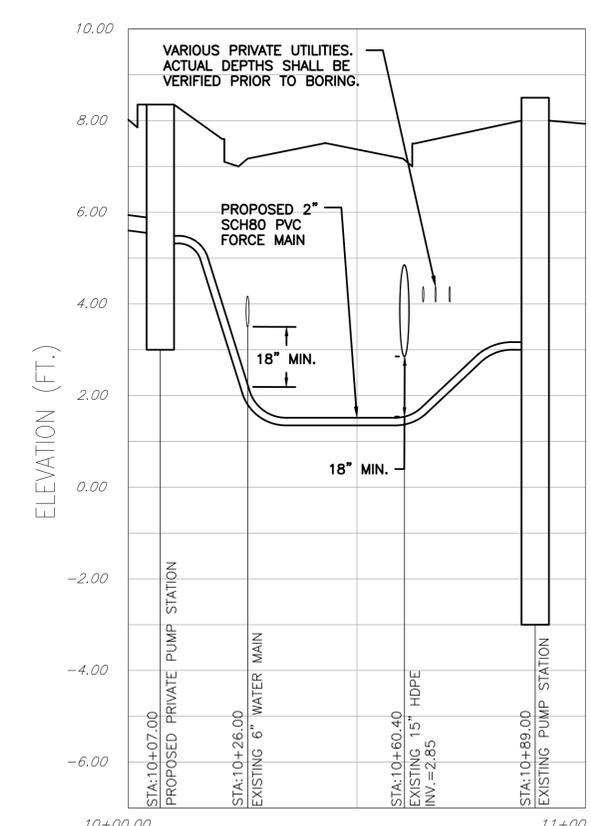
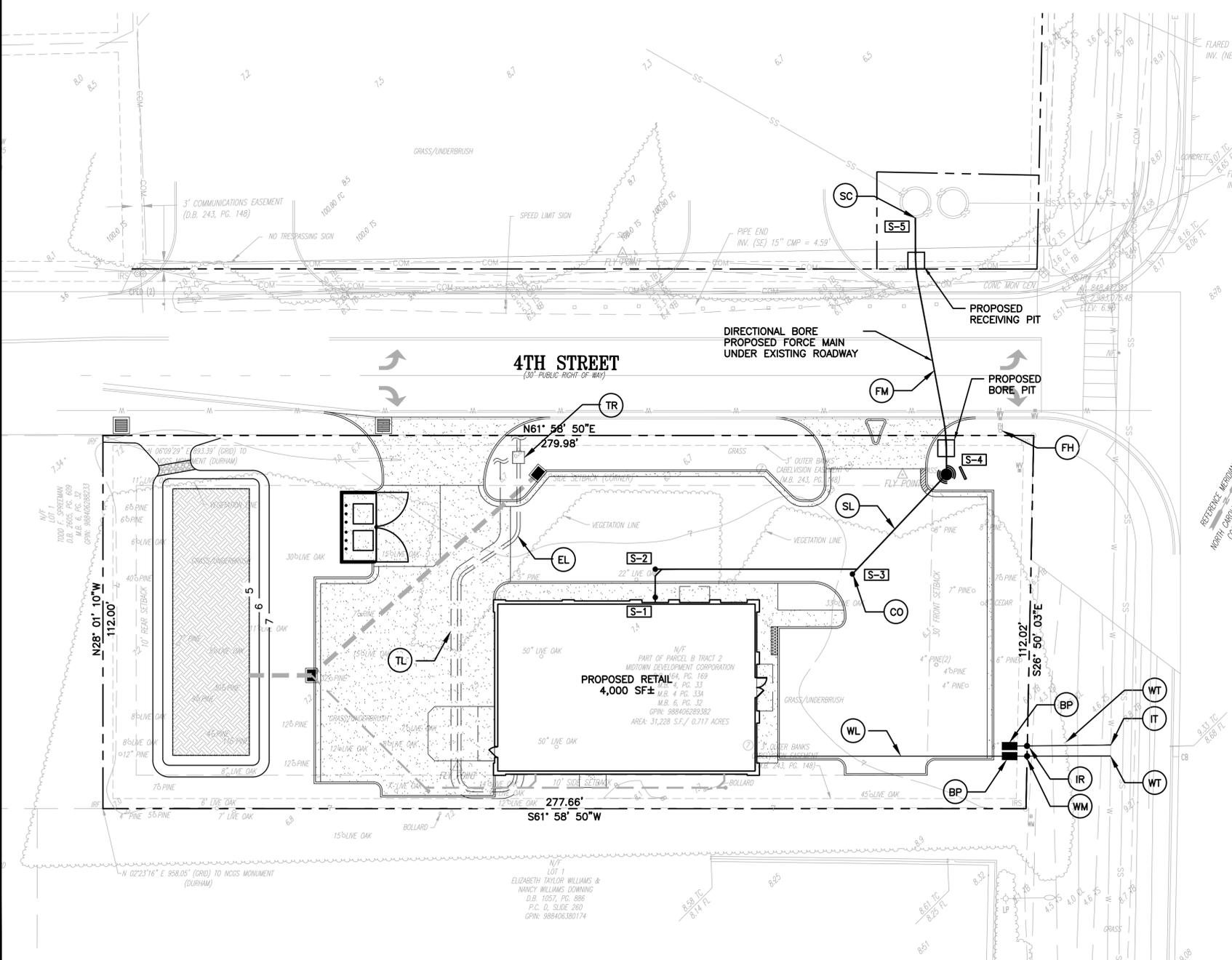
**UTILITY LEGEND:**

- WT** TIE TO EXISTING WATER MAIN WITH 1" CORPORATION STOP AND 1" GATE VALVE. INSTALL PROPOSED 1" PVC SERVICE LINE TO PROPOSED 3/4" DOMESTIC WATER METER. (INSTALLATION BY TOWN)
- WM** INSTALL NEW 3/4" WATER METER AND METER BOX.
- WL** PROPOSED 1" PVC WATER SERVICE LINE
- SL** PROPOSED 4" PVC (SCH40 PVC) SANITARY SEWER LATERAL
- CO** PROPOSED SANITARY CLEANOUT, TYP.
- SC** CONNECT TO EXISTING SANITARY SEWER PUMP STATION.
- EL** PROPOSED UNDERGROUND ELECTRICAL CONDUIT. COORDINATE WITH POWER COMPANY FOR ACTUAL LOCATION OF SERVICE TO BUILDING.
- TR** APPROXIMATE LOCATION OF PROPOSED ELECTRICAL TRANSFORMER. COORDINATE WITH POWER COMPANY FOR ACTUAL LOCATION OF SERVICE TO BUILDING.
- TL** PROPOSED TELEPHONE SERVICE. PROVIDE TWO CONDUIT LINES FOR PHONE AND INTERNET. COORDINATE WITH TELEPHONE COMPANY FOR ACTUAL SERVICE LOCATION.
- IR** PROPOSED 3/4" IRRIGATION METER AND METER BOX.
- IT** TAP EXISTING WATER MAIN WITH 3/4" CORPORATION STOP. INSTALL 1" PVC SERVICE LINE TO METER. (INSTALLATION BY TOWN)
- BP** AMES 4000BM3 (OR APPROVED EQUAL) RPZ DEVICE WITH HOTBOX. CONTRACTOR TO PROVIDE CONDUIT FOR AND ELECTRICAL CONNECTION FOR HEATING ELEMENT.
- FH** LOCATION OF EXISTING FIRE HYDRANT WITHIN 400' OF PROPOSED BUILDING.
- PS** PROPOSED PRIVATE GRINDER PUMP STATION AND CONTROL BOX. CONTRACTOR TO PROVIDE CONDUIT FOR ELECTRICAL CONNECTION.
- FM** PROPOSED SCH80 2" PVC SANITARY SEWER FORCE MAIN

**UTILITY NOTES:**

1. **UNDERGROUND INSTALLATION** - ALL PROPOSED UTILITIES ARE TO BE INSTALLED UNDERGROUND INCLUDING ELECTRIC TELEPHONE AND CATV.
2. **CONTRACTOR MUST NOTIFY PUBLIC UTILITIES** - DISRUPTION TO SERVICE CONSTRUCTION REPRESENTATIVE SEVEN (7) CALENDAR DAYS PRIOR TO ANY NIGHT TIME SHUTDOWN OF THE WATER LINE.
3. **LOCATION OF EXISTING UTILITIES** - LOCATION, ALIGNMENT OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES, WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM WHATEVER TEST EXCAVATIONS OR OTHER INVESTIGATIONS ARE NECESSARY TO VERIFY LOCATIONS AND CLEARANCES AND SHALL REPORT IMMEDIATELY ANY DISCREPANCIES TO DEVELOPMENT SERVICES GROUP AT 757-908-2372.
4. **UTILITY VERIFICATION** - CONTRACTOR SHALL VERIFY THE LOCATION AND INVERTS OF ALL UTILITIES BEFORE INSTALLATION. IF THE LOCATION OR INVERT OF ANY UTILITY DIFFERS FROM THE SITE PLAN, THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES GROUP (757-908-2372) BEFORE PROCEEDING WITH INSTALLATION.
5. ALL THRUST BLOCKING SHALL BE PER THE VERTICAL AND HORIZONTAL THRUST BLOCKING DETAILS.
6. ALL TRENCHING AND BEDDING SHALL BE PER THE UTILITY TRENCH AND BEDDING DETAIL.
7. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLAN FOR ALL BUILDING UTILITY TIE INS.
8. AS-BUILT SURVEY AND OTHER CLOSE OUT DOCUMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

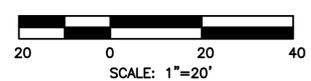
FILE NAME: P:\2022-demarc\2022.04-4th Street and Croatan Hwy\Card\Croatan Hwy - RDH NC 08-01-20 Utilities.dwg LAYOUT NAME: Utilities PLOTTED: Wednesday, July 05, 2023 - 11:44am



**FORCE MAIN PROFILE**

VERT. SCALE 1"=2'  
HORZ. SCALE 1"=20'

**DRAWING SCALE**



DATE	07/05/23								
REV.	1	2	3	4	5	6	7	8	9
DESCRIPTION									
REVISED PER TOWN COMMENTS									

DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
WWW.DSGINCORPORATED.COM

PROJECT NAME/LOCATION ID <b>KDH SHERWIN WILLIAMS</b>	PARCEL # 029831200
SHEET TITLE <b>UTILITY PLAN</b>	
PROJECT LOCATION 1828 N. CROATAN HWY KILL DEVIL HILLS, NC	

**CU-6.0**

CONCEPT PLAN

FILE NAME: P:\2022-demarc\2022.04-4th Street and Croatan Hwy\4th Street and Croatan Hwy\4th Street and Croatan Hwy.dwg LAYOUT NAME: Grading and Drainage.dwg DATE: Wednesday, July 05, 2023 11:44am

### STORM SEWER LEGEND DA-A

- [A-1]** PROPOSED CURB INLET  
RIM=7.60  
INV=5.30
- [A-1] TO [A-2]** 90' OF 15" CLASS IV RCP @ 0.3%
- [A-2]** PROPOSED CURB INLET  
RIM=7.50  
INV=5.10
- [A-2] TO [A-3]** 19' OF 15" HDPE @ 0.3%

### INFILTRATION BASIN MAINTENANCE NOTES:

1. THE DRAINAGE AREA SHALL BE CAREFULLY MANAGED TO REDUCE THE SEDIMENT LOAD TO THE INFILTRATION BASIN.
2. NO PORTION OF THE INFILTRATION BASIN SHALL BE FERTILIZED AFTER INITIAL FERTILIZATION THAT IS REQUIRED TO ESTABLISH VEGETATION. LIME MAY BE ALLOWED IF VEGETATION IS PLANTED ON THE SURFACE OF THE INFILTRATION SYSTEM AND SOIL TESTS SHOW THAT IT IS NEEDED.
3. THE OWNER IS TO ENSURE THE VEGETATION IN AND AROUND THE BASIN IS MAINTAINED AT A HEIGHT OF FOUR TO SIX INCHES.
4. AFTER THE INFILTRATION BASIN IS ESTABLISHED, THE OWNER IS RESPONSIBLE FOR INSPECTING IT ONCE A QUARTER AND WITHIN 24 HOURS AFTER EVERY STORM EVENT GREATER THAN 1.5 INCHES. RECORDS OF OPERATION AND MAINTENANCE MUST BE KEPT IN A KNOWN LOCATIONS AND SHALL BE AVAILABLE UPON REQUEST.
5. THE OWNER IS RESPONSIBLE FOR ENSURING THAT INSPECTION ACTIVITIES ARE PERFORMED IN ACCORDANCE WITH TABLE 2 OF THE NCDCEQ STORMWATER DESIGN MANUAL CHAPTER C-1 INFILTRATION SYSTEMS. THE OWNER SHALL ENSURE THAT ANY PROBLEMS THAT ARE FOUND MUST BE REPAIRED IMMEDIATELY.

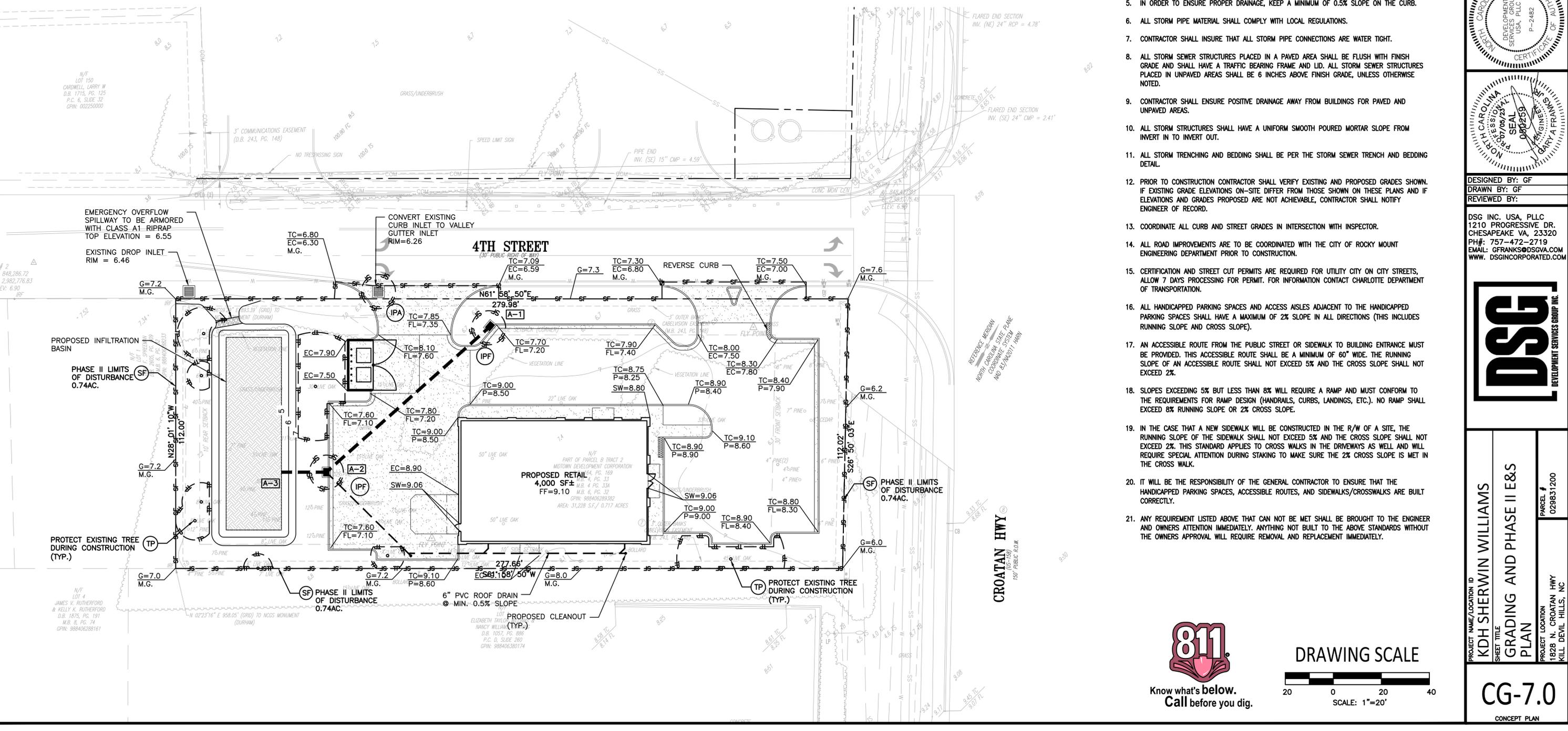
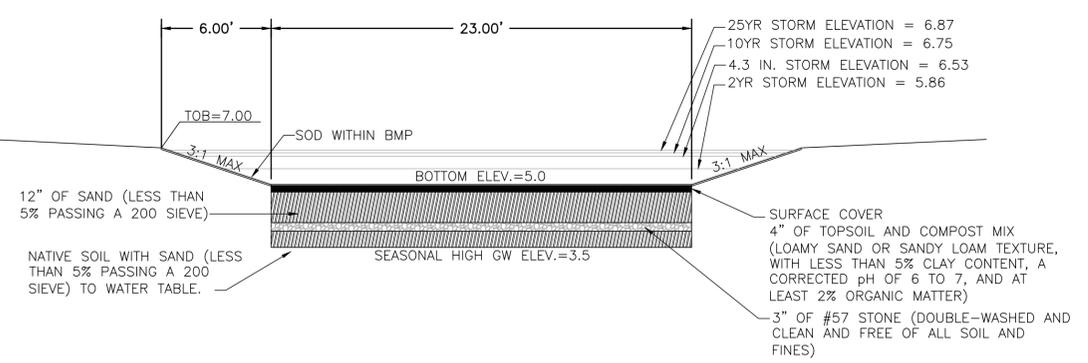
### LEGEND OF GRADE NOTATIONS:

- TC = TOP OF CURB
- FL = FLOW LINE OF GUTTER
- P = ASPHALT OR CONCRETE PAVEMENT SURFACE
- SW = SIDEWALK SURFACE
- G = GROUND SURFACE
- M.G. = MATCH EXISTING GRADE
- H.P. = HIGH POINT OF GRADED SURFACE
- W.D. = WIPE TOP OF CURB DOWN TO MATCH EXISTING

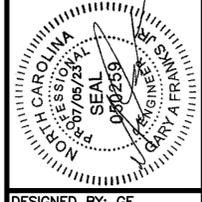
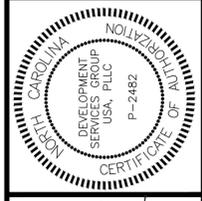
### DRAINAGE NOTES:

1. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
2. HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINAGE PIPE INSTALLED WITHIN EXISTING OR PROPOSED PUBLIC STREET RIGHT-OF-WAY MUST BE APPROVED BY THE CITY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED. BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL WITHIN THE PUBLIC STREET RIGHT-OF-WAY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL NECESSARY INSPECTIONS.
3. CURB AND GUTTER SHOWN ON PLANS ALONG PUBLIC STREETS MAY BE ADJUSTED BASED UPON FIELD STAKING BY CITY ENGINEERING. ASSOCIATED STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED UPON FIELD CONDITIONS.
4. SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
5. IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
6. ALL STORM PIPE MATERIAL SHALL COMPLY WITH LOCAL REGULATIONS.
7. CONTRACTOR SHALL INSURE THAT ALL STORM PIPE CONNECTIONS ARE WATER TIGHT.
8. ALL STORM SEWER STRUCTURES PLACED IN A PAVED AREA SHALL BE FLUSH WITH FINISH GRADE AND SHALL HAVE A TRAFFIC BEARING FRAME AND LID. ALL STORM SEWER STRUCTURES PLACED IN UNPAVED AREAS SHALL BE 6 INCHES ABOVE FINISH GRADE, UNLESS OTHERWISE NOTED.
9. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR PAVED AND UNPAVED AREAS.
10. ALL STORM STRUCTURES SHALL HAVE A UNIFORM SMOOTH POURED MORTAR SLOPE FROM INVERT IN TO INVERT OUT.
11. ALL STORM TRENCHING AND BEDDING SHALL BE PER THE STORM SEWER TRENCH AND BEDDING DETAIL.
12. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY EXISTING AND PROPOSED GRADES SHOWN. IF EXISTING GRADE ELEVATIONS ON-SITE DIFFER FROM THOSE SHOWN ON THESE PLANS AND IF ELEVATIONS AND GRADES PROPOSED ARE NOT ACHIEVABLE, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD.
13. COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
14. ALL ROAD IMPROVEMENTS ARE TO BE COORDINATED WITH THE CITY OF ROCKY MOUNT ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
15. CERTIFICATION AND STREET CUT PERMITS ARE REQUIRED FOR UTILITY CITY ON CITY STREETS, ALLOW 7 DAYS PROCESSING FOR PERMIT. FOR INFORMATION CONTACT CHARLOTTE DEPARTMENT OF TRANSPORTATION.
16. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAPPED PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
17. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO BUILDING ENTRANCE MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
18. SLOPES EXCEEDING 5% BUT LESS THAN 8% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS, ETC.). NO RAMP SHALL EXCEED 8% RUNNING SLOPE OR 2% CROSS SLOPE.
19. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE R/W OF A SITE, THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAYS AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
20. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAPPED PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE BUILT CORRECTLY.
21. ANY REQUIREMENT LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER AND OWNERS ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WITHOUT THE OWNERS APPROVAL WILL REQUIRE REMOVAL AND REPLACEMENT IMMEDIATELY.

### INFILTRATION BASIN DETAIL



REV.	DESCRIPTION	DATE
1	REVISED PER TOWN COMMENTS	07/05/23
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DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
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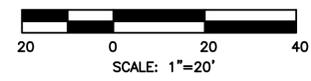


PROJECT NAME/LOCATION ID	KDH SHERWIN WILLIAMS
SHEET TITLE	GRADING AND PHASE II E&S PLAN
PROJECT LOCATION	1828 N. CROATAN HWY KILL DEVIL HILLS, NC
PARCEL #	029831200
<b>CG-7.0</b>	
CONCEPT PLAN	

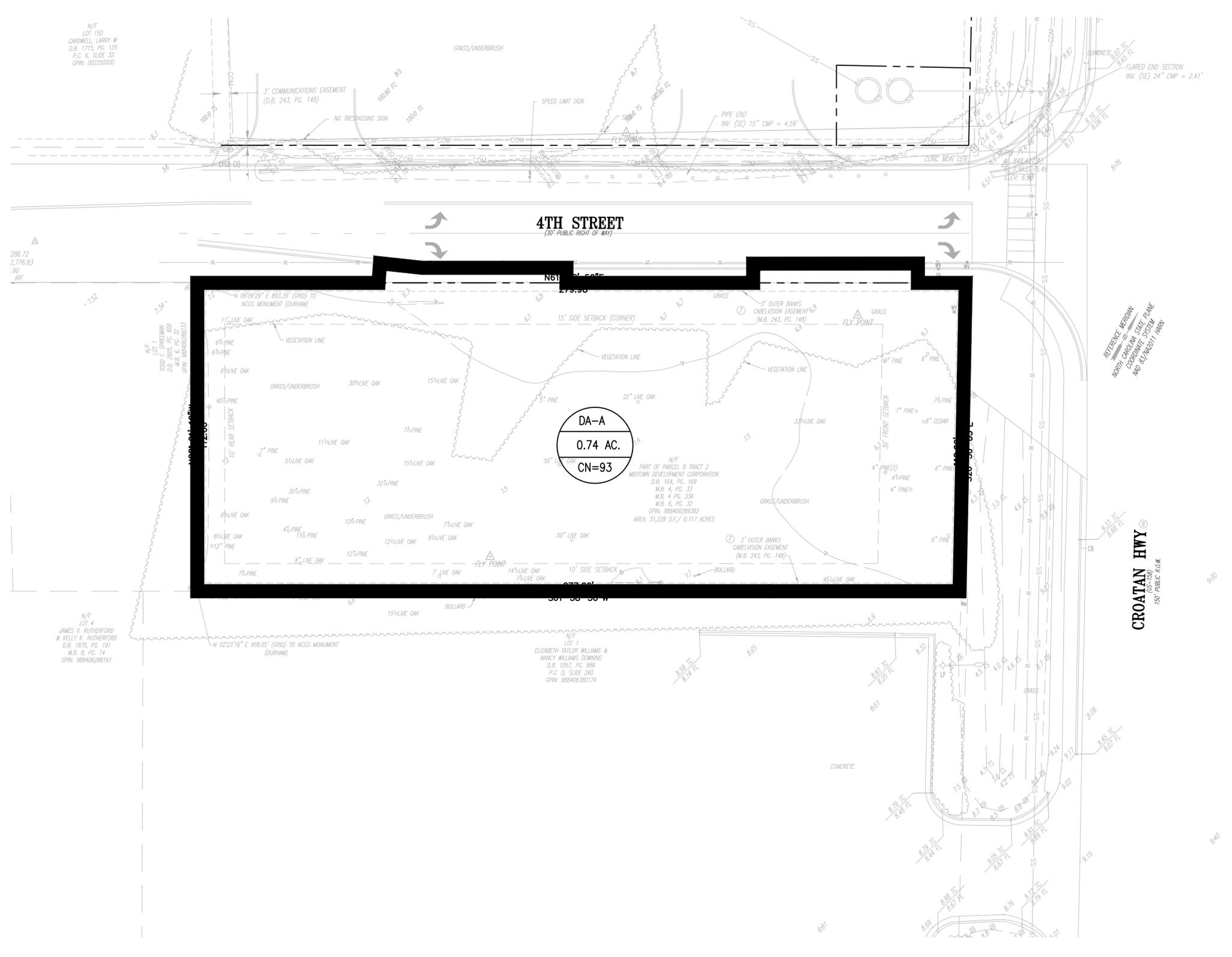


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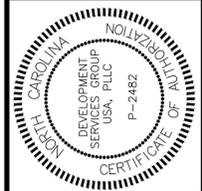
DRAWING SCALE



FILE NAME: P:\2022-dmcap\2022.04-4th Street and Croatan Hwy\Cad\Croatan Hwy - KDH NC 11-05-21 Existing Drainage Areas.dwg LAYOUT NAME: Exst. Condition PLOTTED: Wednesday, July 05, 2023 - 11:46am



REV.	DESCRIPTION	DATE
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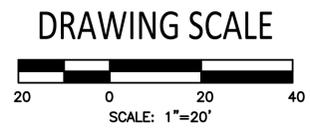


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DSG INC. USA, PLLC  
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CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
WWW.DSGINCORPORATED.COM

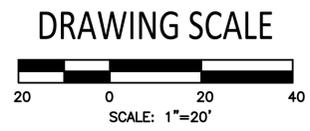
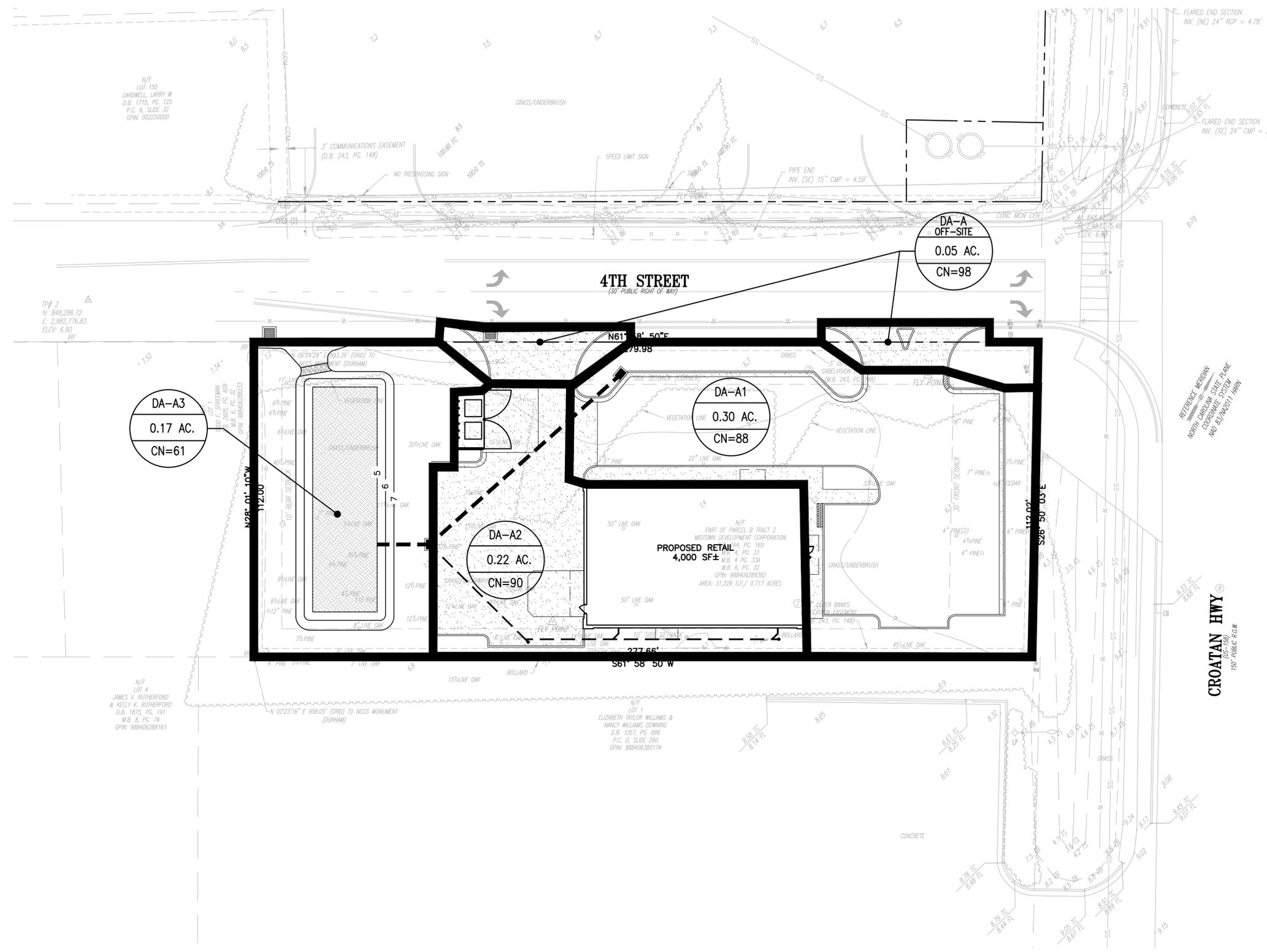


PROJECT NAME/LOCATION ID	KDH SHERWIN WILLIAMS
SHEET TITLE	EXISTING DRAINAGE AREAS
PROJECT LOCATION	1828 N. CROATAN HWY KILL DEVIL HILLS, NC
PARCEL #	029831200

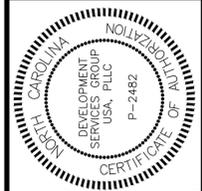


CG-7.1  
CONCEPT PLAN

FILE NAME: P:\2022-dmrcap\2022.04-4th Street and Croatan Hwy\Cad\Croatan Hwy - RDH NC 12-06-22 Proposed Drainage Areas.dwg LAYOUT NAME: Ext. Condition PLOTTED: Wednesday, July 05, 2023 - 11:44am



REV.	DESCRIPTION	DATE
1	REVISED PER TOWN COMMENTS	07/05/23
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DESIGNED BY: GF  
 DRAWN BY: GF  
 REVIEWED BY:

DSG INC. USA, PLLC  
 1210 PROGRESSIVE DR.  
 CHESAPEAKE VA, 23320  
 PH#: 757-472-2719  
 EMAIL: GFRANKS@DSGVA.COM  
 WWW: DSGINCORPORATED.COM

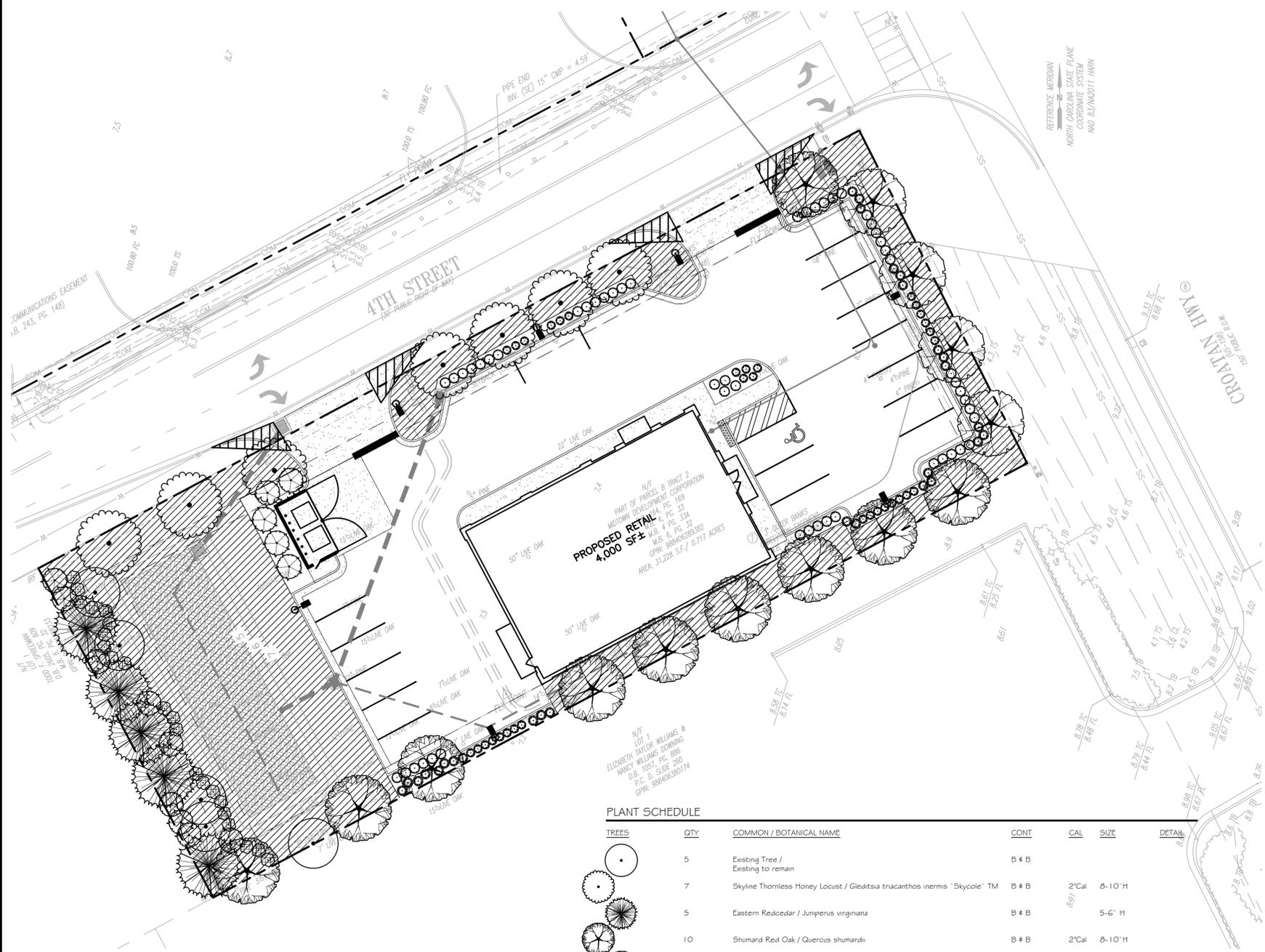


PROJECT NAME/LOCATION ID <b>KDH SHERWIN WILLIAMS</b>
SHEET TITLE <b>PROPOSED DRAINAGE AREAS</b>
PROJECT LOCATION 1828 N. CROATAN HWY KILL DEVIL HILLS, NC
PARCEL # 029831200

**CG-7.2**  
 CONCEPT PLAN



LandArch Studio, L.L.C.  
 G. I. Joseph Vaughn  
 480 Cloud View Ct  
 Prosper, TX 75078  
 t 972-827-5677



**PLANT SCHEDULE**

TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE	DETAIL
	5	Existing Tree / Existing to remain	B & B			
	7	Skyline Thornless Honey Locust / Gleditsia tricanthos inermis 'Skycole'™	B & B	2'Cal	8-10'H	
	5	Eastern Redcedar / Juniperus virginiana	B & B		5-6' H	
	10	Shumard Red Oak / Quercus shumardi	B & B	2'Cal	8-10'H	
	4	Lacebark Elm / Ulmus parvifolia	B & B	3'Cal	12-15' H	

SHRUBS	QTY	COMMON / BOTANICAL NAME	MIN. HEIGHT
	33	Crimson Pygmy Japanese Barberry / Berberis thunbergii 'Crimson Pygmy'	24"
	26	Weeping Lovegrass / Eragrostis curvula	24"
	52	Yaupon Holly / Ilex vomitoria	24"
	14	Blue Point Juniper / Juniperus chinensis 'Blue Point'	7 gal
	22	Japanese Pittosporum / Pittosporum tobira	5 gal

**PLANT SCHEDULE WEST PROPERTY LINE**

TREES	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
	4	Existing Tree / Existing to remain	B & B		
	5	Eastern Redcedar / Juniperus virginiana	B & B		5-6' H
	1	Shumard Red Oak / Quercus shumardi	B & B	2'Cal	8-10'H

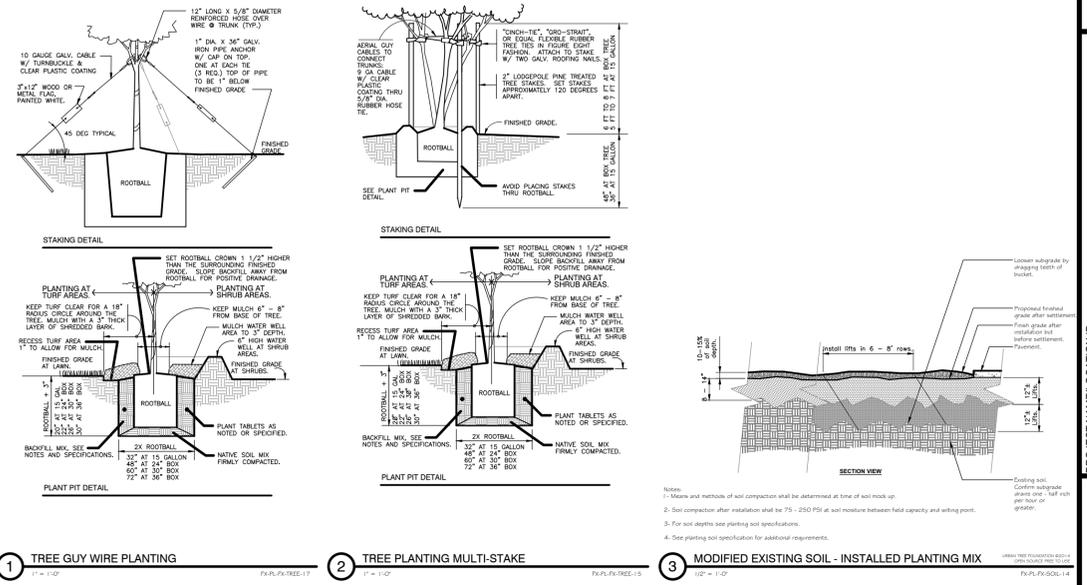
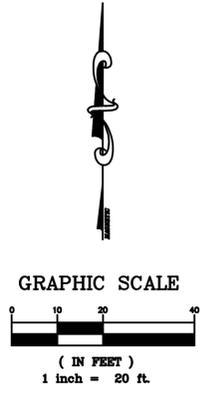
SHRUBS	QTY	COMMON / BOTANICAL NAME	MIN. HEIGHT
	9	Blue Point Juniper / Juniperus chinensis 'Blue Point'	7 gal
	22	Japanese Pittosporum / Pittosporum tobira	5 gal

**GENERAL LANDSCAPE NOTES:**

- CONTRACTORS SHALL HAVE UNDERGROUND UTILITIES LOCATED, LEGIBLY MARKED, AND SHALL REPAIR ANY AND ALL DAMAGE WHICH MAY OCCUR AS A RESULT OF LANDSCAPE INSTALLATION. UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATED, AND SHOULD BE VERIFIED ON THE CIVIL UTILITY PLAN AND IN THE FIELD.
- UNDER NO CIRCUMSTANCES WILL LANDSCAPE WORK BE APPROVED FOR PAYMENT IF PLANT SIZE AND GENERAL HEALTH ARE NOT AS REQUIRED ON PLAN.
- ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED ON PLANT LIST.
- ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS AS SPECIFIED. LARGE CANOPY STREET TREES AND THOSE TREES LOCATED NEAR GROUND SIGNAGE SHALL BE LIMBED UP TO A HEIGHT OF 6' ABOVE GRADE TO ENSURE SAFE SIGHT LINES ARE ACHIEVED FOR VEHICULAR NAVIGATION TO AND FROM THE SITE.
- ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AND THE OWNER BEFORE, DURING AND AFTER INSTALLATION.
- THE LANDSCAPE ARCHITECT MUST APPROVE ANY ALTERATIONS OR REVISIONS TO THE LANDSCAPE PLAN.
- THE LANDSCAPE ARCHITECT MUST APPROVE THE STAKED LOCATION OF ALL PLANT MATERIAL BEFORE INSTALLATION.
- THE CONTRACTOR SHALL PROTECT EXISTING FEATURES ON SITE.
- ALL PLANTING AREAS, AND UNPAVED AREAS ON SITE NOT SPECIFIED FOR BED AREAS, MUST BE COMPLETELY SODDED, SEEDED, OR HYDROSEEDED. ANY PERMEABLE AREAS (ON SITE, OFF SITE, OR IN RIGHT-OF-WAY, DAMAGED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND SODDED, SEEDED OR HYDROSEEDED. ALL SLOPES THAT EXCEED 3:1 SHALL BE TREATED WITH SOD UNLESS SPECIFIED OTHERWISE ON PLAN.
- ALL BEDS AREAS SHALL BE PREPARED FOR PLANTING BY REMOVING GRASS AND WEEDS FROM THE AREA, ROTO TILLING TO A MINIMUM DEPTH OF 6", AND MIXING BED AMENDMENT INTO THE PREPARED BED AREA TO A DEPTH OF 4". AMOUNT AND TYPE OF AMENDMENT TO BE LOCALLY SOURCED BED MIX AND/OR COMPOST FREE OF DEBRIS, ROOTS, AND SEED.
- ALL BED AREAS SHALL RECEIVE A MINIMUM 2" SHREDDED HARDWOOD MULCH OVER WEED BARRIER FABRIC UNLESS SPECIFIED ON PLAN DIFFERENTLY. BED AREAS ADJACENT TO TURF GRASS LAWN AREAS SHALL BE SEPARATED FROM THE LAWN WITH LANDSCAPE EDGING.
- THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THESE PLANS, BEFORE PRICING THE WORK.
- THE LANDSCAPE CONTRACTOR SHALL FULLY MAINTAIN ALL PLANTING (INCLUDING BUT NOT LIMITED TO WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF PLANTING AREAS AND LAWNS FOR 90 DAYS AFTER SUBSTANTIAL COMPLETION.
- THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR ONE (1) YEAR BEGINNING AT THE DATE OF SUBSTANTIAL COMPLETION. THE LANDSCAPE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE THE END OF THE GUARANTEE PERIOD (AS PER DIRECTION OF THE OWNER).
- ANY PLANT MATERIAL WHICH DIES, TURNS BROWN OR DEFOOLIATES (PRIOR TO TOTAL ACCEPTANCE OF WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
- STANDARDS SET FORTH IN 'AMERICAN STANDARD FOR NURSERY STOCK' REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUMS QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FINISHED GRADING ALL LANDSCAPE PARKING ISLANDS, FINISHED GRADE IN ISLANDS IS TO BE CROWNED APPROXIMATELY 1/2" - 1" ABOVE THE TOP OF CURB. SOIL IN ISLANDS IS TO BE FREE OF UNSUITABLE MATERIAL AND DEBRIS I.E. GRAVEL OR ASPHALT.
- IF CONTRACTOR IS UNABLE TO DIG PLANT FITS TO A DEPTH THAT WILL PROVIDE THE AREA OF SOIL AROUND THE ROOT BALL DUE TO ROCK, CONTACT ARCHITECT, CIVIL ENGINEER, AND CITY HORTICULTURIST IMMEDIATELY.
- THE TOP EDGE OF ALL LANDSCAPE EDGING SHALL BE A MINIMUM OF 5" BELOW FINISHED FLOOR ELEVATION.
- THE LANDSCAPE CONTRACTOR SHALL PROVIDE AND INSTALL SITE IRRIGATION SYSTEM AFTER DESIGN IS SUBMITTED FOR APPROVAL.

**CITY REQUIREMENTS:**

	REQ.	PROV.
<b>PARKING LOT</b>	IF MORE THAN 40 PARKING SPACES ARE PROVIDED, LANDSCAPING OF 10% OF THE TOTAL PARKING AREAS, INCLUDING AISLES, SHALL BE REQUIRED. THIS LANDSCAPING SHALL BE ESTABLISHED WITHIN THE INTERIOR OF THE PARKING LOT.  THE INTERIOR LANDSCAPED AREAS SHALL BE LOCATED IN A MANNER THAT: A. ASSISTS AND HELPS TO CONTROL THE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC; B. PROVIDES VISUAL RELIEF FROM A LARGE EXPANSE OF PAVING; C. PRESERVES EXISTING TREES, WHERE POSSIBLE; AND D. SCREENS LOADING AND SERVICE AREAS.  A LANDSCAPED AISLE SHALL BE PROVIDED AT THE END OF EACH PARKING ROW ADJACENT TO THE TRAVEL LANE SERVING THE PARKING AISLE.  IN ORDER TO ENCOURAGE THE REQUIRED LANDSCAPED AREAS TO BE PROPERLY DISPERSED, NO REQUIRED LANDSCAPE AREA SHALL BE LARGER THAN 350 SQUARE FEET UNLESS A LARGER AREA IS NECESSARY TO SAVE OR PROTECT EXISTING VEGETATION.  INTERIOR LANDSCAPED AREAS SHALL CONTAIN A MINIMUM OF 75 SQUARE FEET. WITHIN THESE LANDSCAPED AREAS THERE SHALL BE A MINIMUM OF ONE SMALL TREE PER TEN PARKING SPACES IN ADDITION TO OTHER PLANT MATERIALS AND GROUND COVER. SEE DIVISION (L) OF THIS SECTION AND APPENDIX A OF THIS CHAPTER.  REQUIRED PERIMETER LANDSCAPE AREAS SHALL NOT BE USED IN THE CALCULATION OF REQUIRED INTERIOR LANDSCAPE AREAS.	N/A
<b>PERIMETER LANDSCAPING</b>	A PERIMETER LANDSCAPE AREA, WITH A MINIMUM DEPTH OF FIVE FEET, SHALL BE REQUIRED ALONG PROPERTY LINES ALONG PROPERTY LINES ABUTTING ANY STREET, THE MINIMUM DEPTH SHALL BE TEN FEET. DRIVEWAYS, SIDEWALKS AND SIMILAR FACILITIES MAY TRAVERSE PERIMETER LANDSCAPED AREAS.  WHERE ABUTTING SINGLE-FAMILY DWELLINGS OR DUPLEXES WITH LESS THAN 6,000 SQUARE FEET OF LOT COVERAGE TO THE REAR OR TO THE SIDE, SUCH PROPERTY LINE SHALL HAVE A WALL CONSTRUCTED OF WOOD, MASONRY WALL, VINYL OR COMPOSITE MATERIALS OR A VEGETATIVE BUFFER SIX FEET IN HEIGHT ALONG THE PROPERTY LINE. ALONG PROPERTY LINES ABUTTING SINGLE-FAMILY OR DUPLEX DWELLINGS WITH LESS THAN 6,000 SQUARE FEET OF LOT COVERAGE A FENCE OR DENSE VEGETATIVE SCREEN SHALL BE PROVIDED.  ALONG PROPERTY LINES NOT ABUTTING SINGLE-FAMILY OR DUPLEX DWELLINGS WITH LESS THAN 6,000 SQUARE FEET OF LOT COVERAGE, THE LANDSCAPE PLAN SHALL INDICATE AT LEAST ONE TREE FOR EACH 30 LINEAR FEET OF LANDSCAPE AREA AND ONE SHRUB FOR EACH TEN FEET OF LANDSCAPE AREA. FOR NEW CONSTRUCTION OR SUBSTANTIAL IMPROVEMENTS IN THE COMMERCIAL ZONE, THE LANDSCAPE PLAN SHALL INDICATE AT LEAST ONE TREE AND ONE SHRUB FOR EACH TEN LINEAR FEET OF LANDSCAPE AREA ALONG THE FRONT PROPERTY LINE.  4TH STREET: 279.97 LF - 60 LF DRIVE / 30 LF = 8 TREES 279.97 LF - 60 LF DRIVE / 10 LF = 22 SHRUBS CROATAN HWY: 112 LF / 30 LF = 4 TREES 112 LF / 10 LF = 12 SHRUBS SOUTH PL: 277.66 LF / 30 LF = 10 TREES 277.66 LF / 10 LF = 28 SHRUBS  ALL DUMPSTERS SHALL BE SCREENED ON THREE SIDES BY A FENCE. THE SCREENING SHALL EXCEED THE HEIGHT OF THE INTENDED CONTAINER BY 12 INCHES.	PROV  PROV  PROV  PROV  PROV  PROV
<b>LANDSCAPE AT DRIVEWAYS AND INTERSECTIONS</b>	A MINIMUM SIGHT TRIANGLE SHALL BE MAINTAINED AT ALL DRIVEWAYS AND STREET INTERSECTIONS. THE MINIMUM SIGHT TRIANGLE FOR DRIVEWAYS SHALL BE 10 FEET BY 20 FEET ON EACH SIDE OF THE DRIVEWAY.	PROV



DATE	DESCRIPTION
07-05-23	REV 10
	REV 9
	REV 8
	REV 7
	REV 6
	REV 5
	REV 4
	REV 3
	REV 2
	REV 1

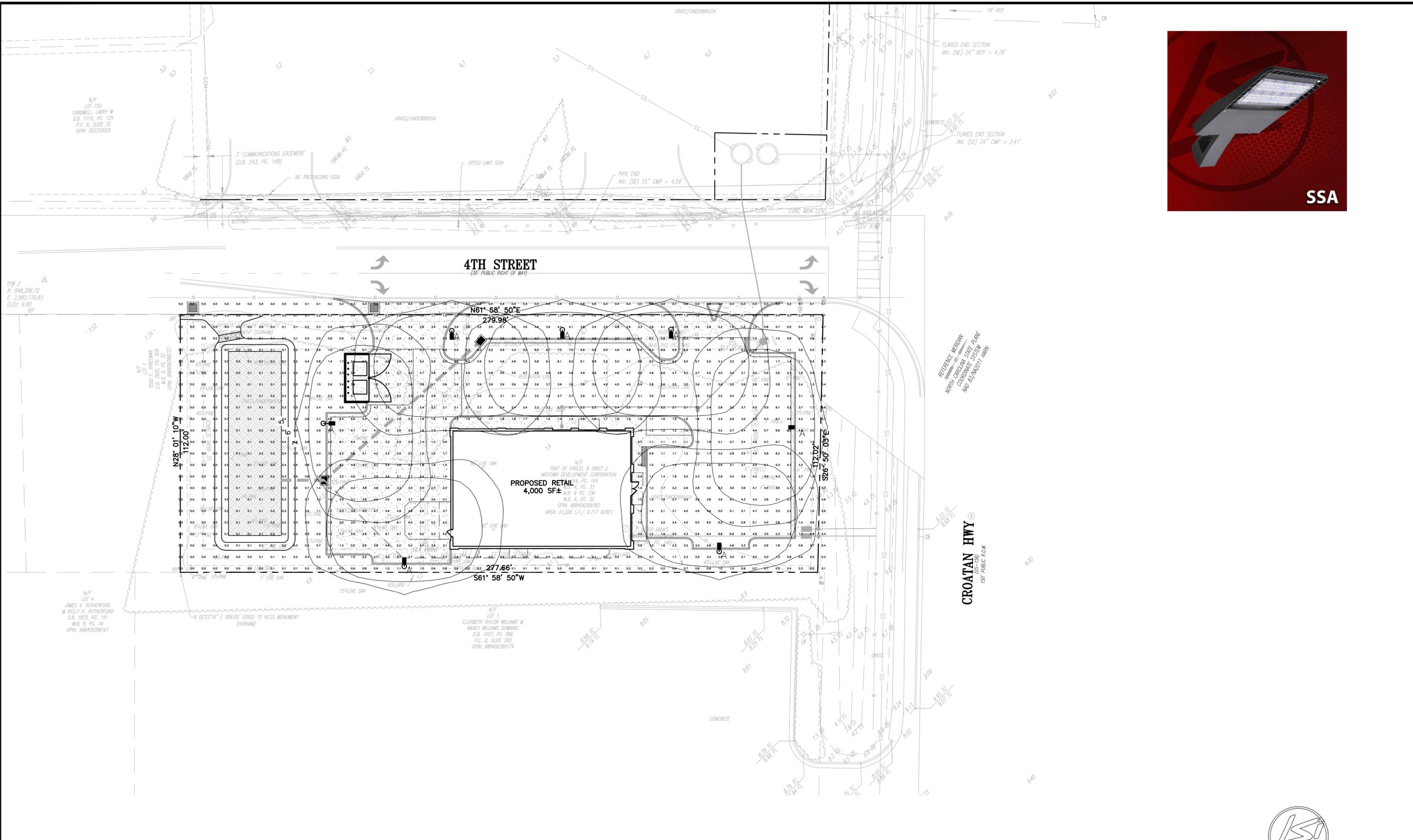


DESIGNED BY: GJV  
 DRAWN BY: GJV  
 REVIEWED BY:  
 DEVELOPMENT SERVICES GROUP INC.  
 1210 PROGRESSIVE DR.  
 CHESAPEAKE VA, 23320  
 PH#: 757-908-2372  
 EMAIL: GFRANKS@DSGVA.COM  
 WWW.DSGINCORPORATED.COM



PROJECT NAME/LOCATION ID: KDH SHERWIN WILLIAMS  
 SHEET TITLE: LANDSCAPE PLAN  
 PROJECT LOCATION: N. CROATAN HWY AND W. 4TH ST., KILL DEVIL HILLS, NC  
 PARCEL #: 029831200  
 LA-8.0

FILE NAME: P:\2022-Remcap\2022-04-4th Street and Croatan Hwy\Cad\Croatan Hwy - RDH NC 14-1-9.0 Lighting Plan.dwg LAYOUT NAME: Utilities PLOTTED: Wednesday, July 05, 2023 - 11:44am



SSA

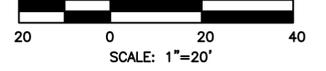
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INSIDE CURB	Illuminance	Fc	3.72	7.0	0.9	4.13	7.78

Luminaire Schedule										
Symbol	Qty	Label	Arrangement	Description	Mounting Height	LLD	LLF	Arr. Lum. Lumens	Arr. Watts	
	7	A	Single	SSA-LED-18L-ACR-FT-50-UNV-IHS-SINGLE	20'	1.000	0.940	10579	121	



10000 ALLIANCE RD. CINCINNATI, OHIO 45244, USA  
(513) 793-3200 • FAX (513) 793-6023

DRAWING SCALE



REV.	DESCRIPTION	DATE
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2		
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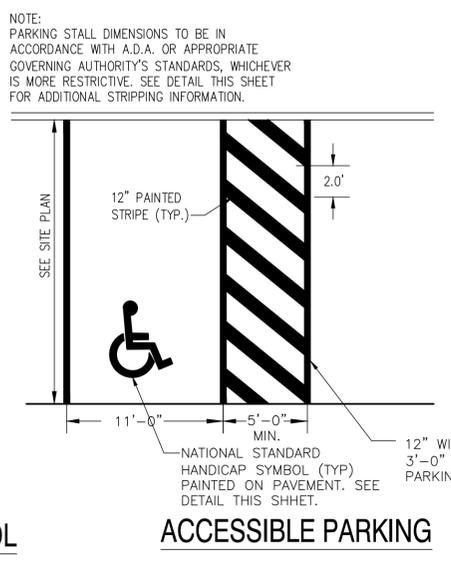
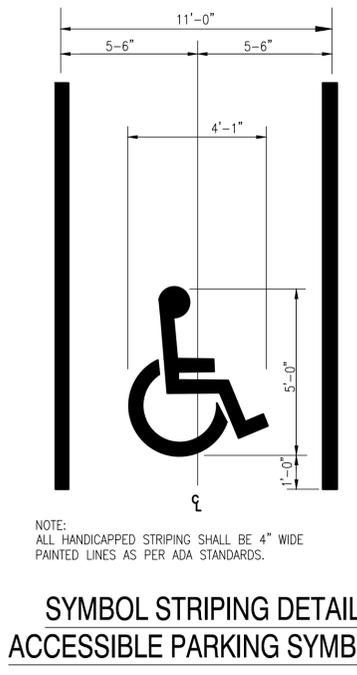
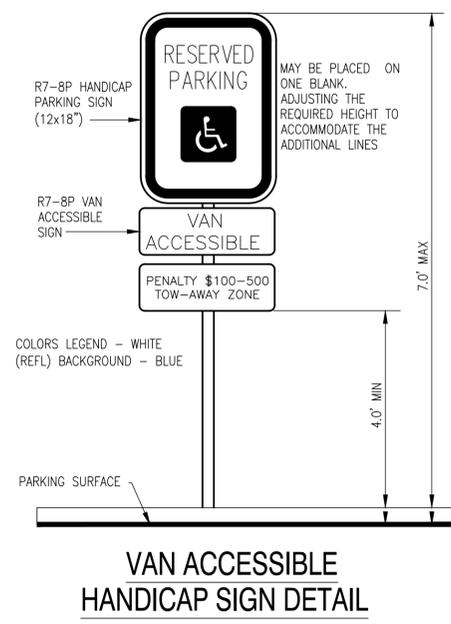
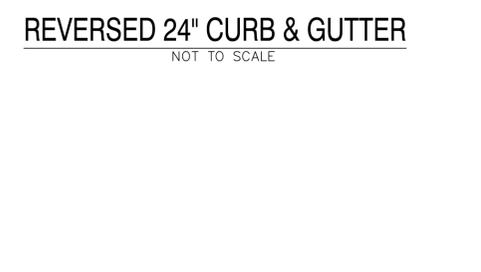
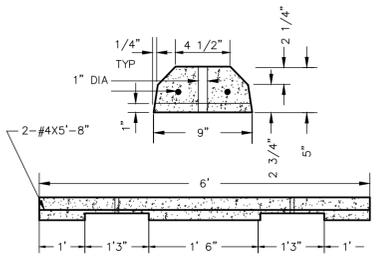
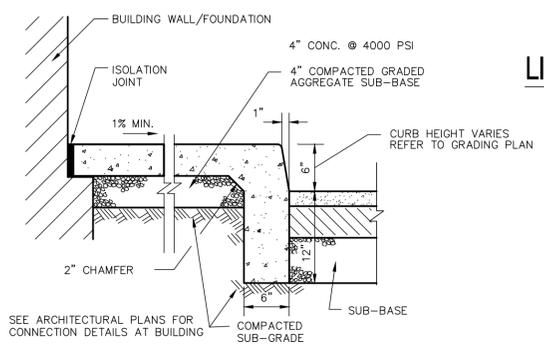
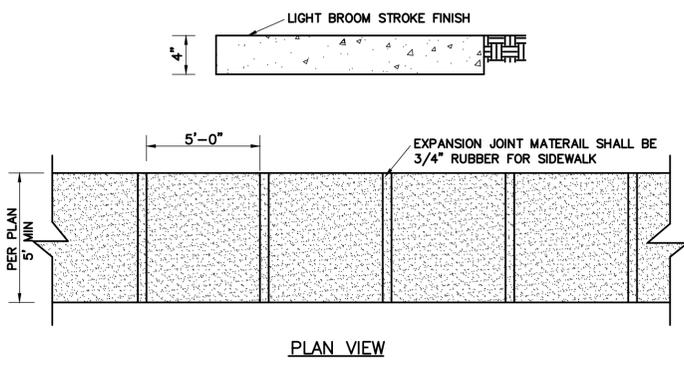
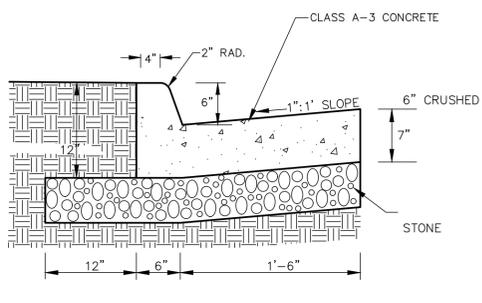
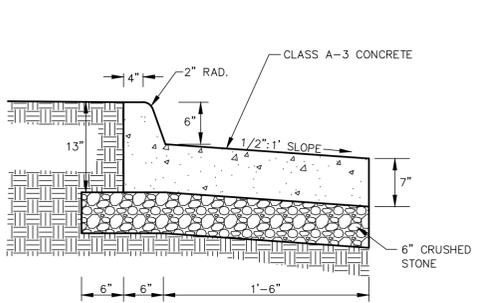
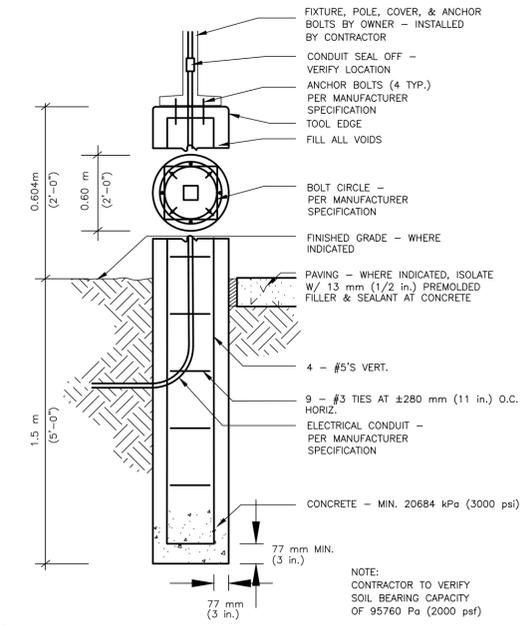
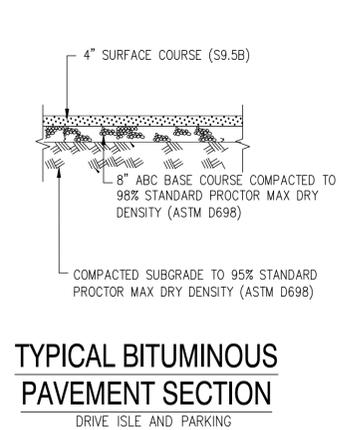
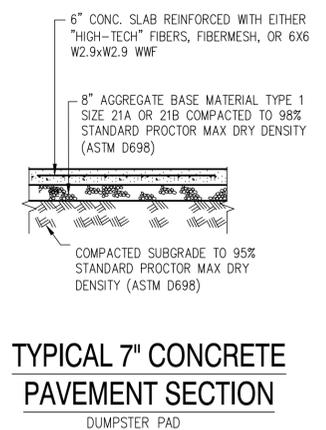
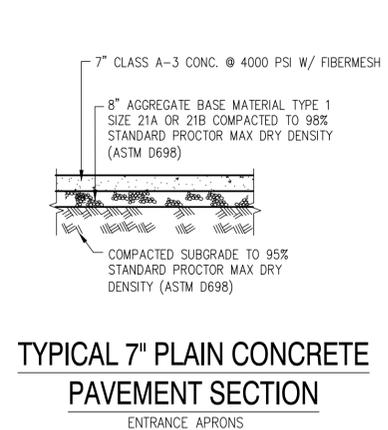
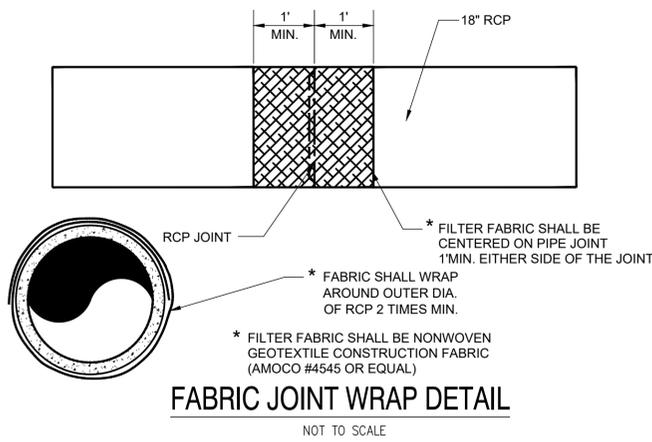
DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
WWW.DSGINCORPORATED.COM



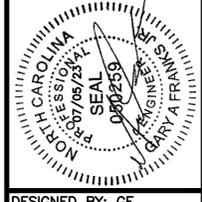
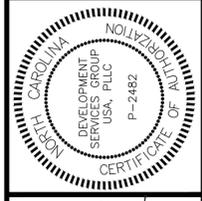
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KDH SHERWIN WILLIAMS  
SHEET TITLE  
LIGHTING PLAN  
PROJECT LOCATION  
1828 N. CROATAN HWY  
KILL DEVIL HILLS, NC  
PARCEL #  
029831200

LT-9.0  
CONCEPT PLAN



- NOTE:
- CONCRETE MUST BE A MINIMUM 4,000 PSI COMPRESSIVE STRENGTH WITH FIBER MESH.
  - PROVIDE PLASTIC BOLLARD COVER. COVER TO BE IDEALSHIELD (OR APPROVED EQUAL) 1/8" THICK, BROWN (PQ-440C), 6" PIPE FIT, DOME TOP, 48" TALL.
  - DESIGN PARAMETERS:  
- 20 MPH  
- 5,000 LB VEHICLE
  - USE SONOTUBE IN SANDY OR OTHER SOILS THAT MIGHT CAVE IN.
  - INCREASE DEPTH OF CAISSON BELOW PIPE TO MEET LOCAL JURISDICTION MIN. FROST DEPTH REQUIREMENT. PIPE CAN STAY AT 39" BELOW PAVEMENT.
  - IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY NO UTILITY CONFLICTS EXIST WHERE BOLLARDS ARE TO BE INSTALLED, PRIOR TO INSTALLATION.

REV.	REVISED PER TOWN COMMENTS	DESCRIPTION	DATE
1			07/05/23
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DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
WWW.DSGINCORPORATED.COM



PROJECT NAME/LOCATION ID  
KDH SHERWIN WILLIAMS

SHEET TITLE  
MISC NOTES & DETAILS

PROJECT LOCATION  
1828 N. CROATAN HWY  
KILL DEVIL HILLS, NC

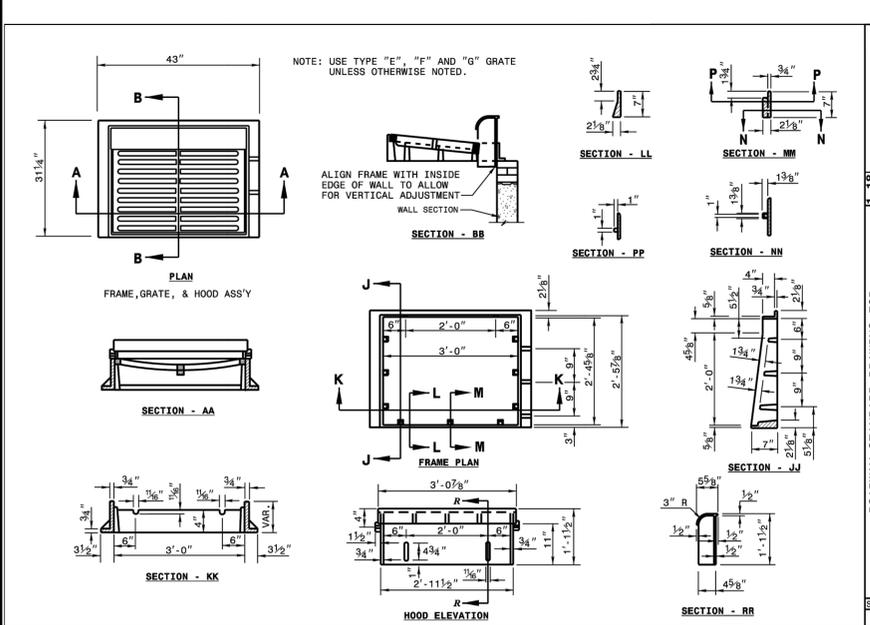
PARCEL #  
029831200

CDT-10.0

CONCEPT PLAN

FILE NAME: P:\2022-Remcap\2022-04-4th Street and Croatan Hwy\Card\Croatan Hwy - RDH NC 15-001-10.0 Notes & Details.dwg LAYOUT NAME: COVER SHEET PLOTTED: Wednesday, July 05, 2023 11:44am

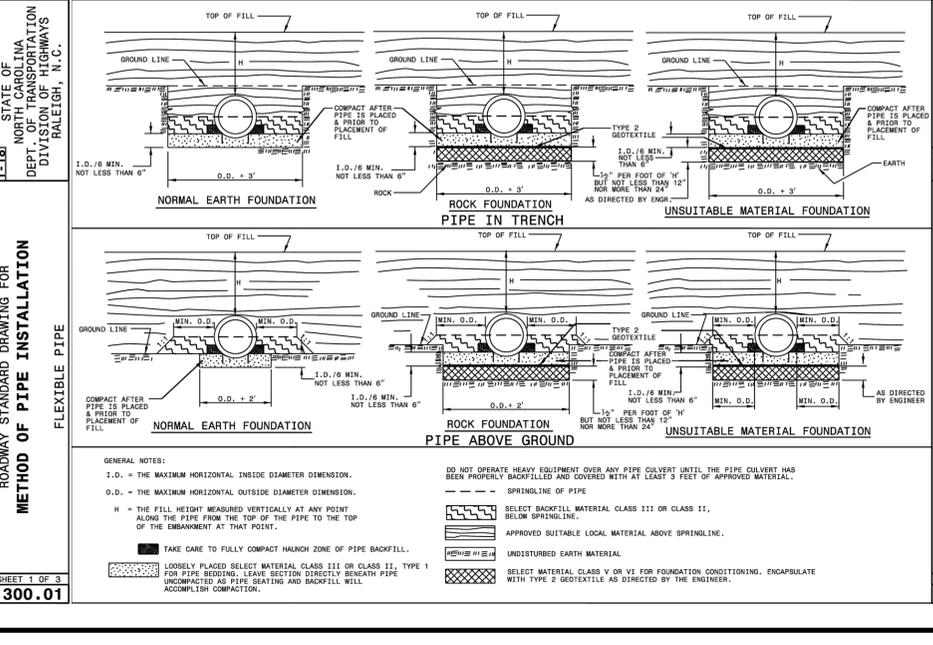
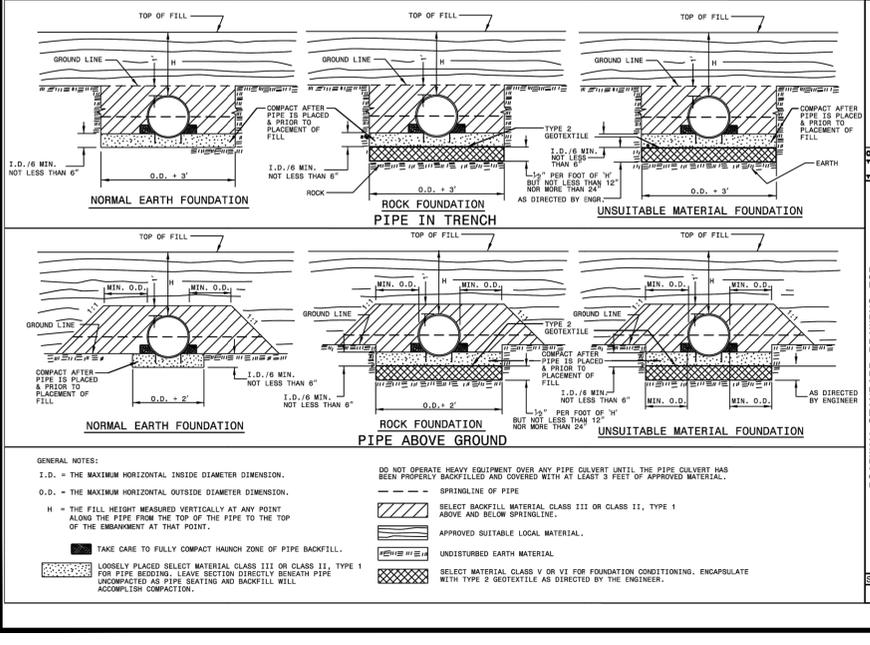
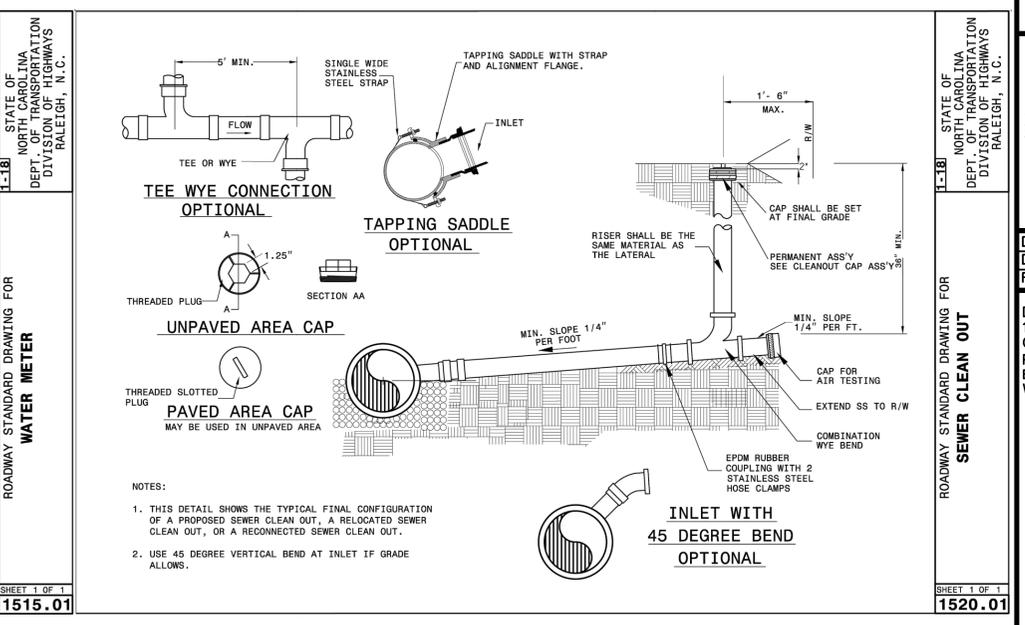
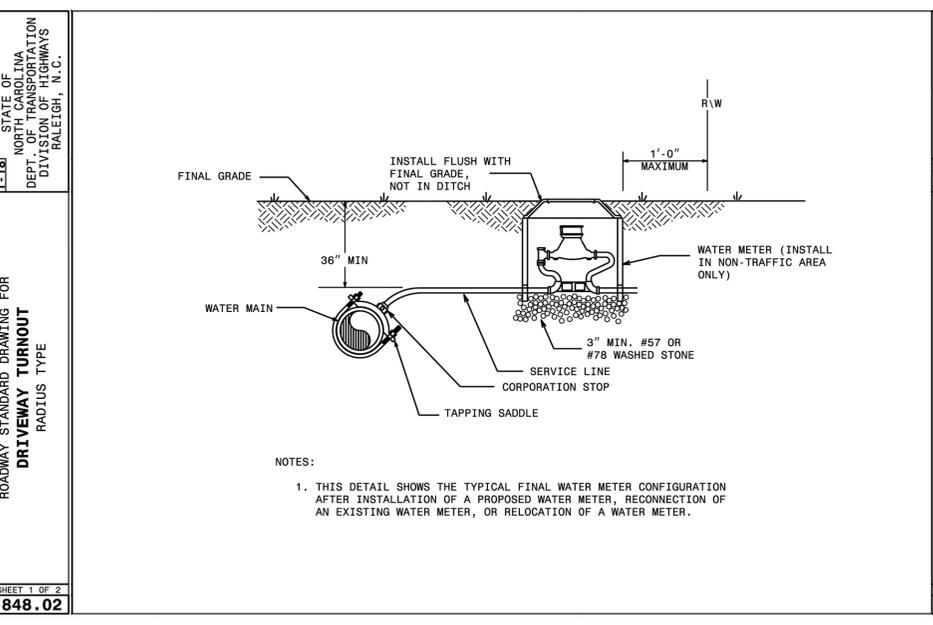
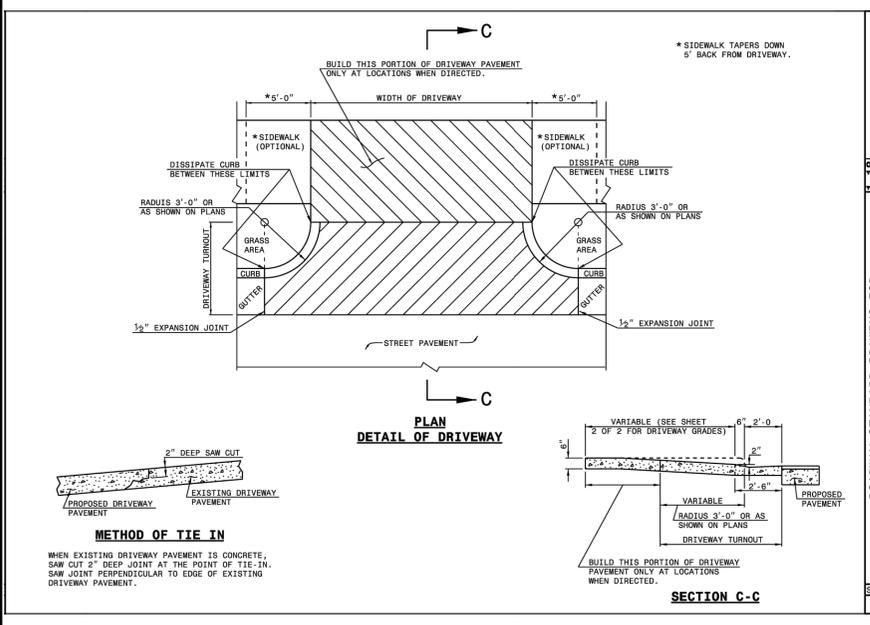
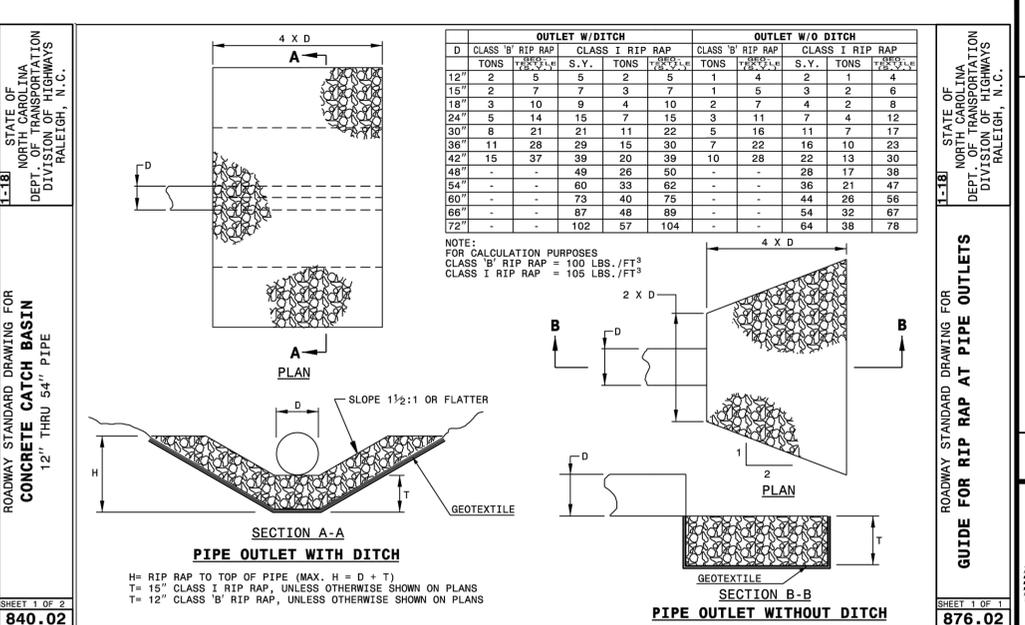
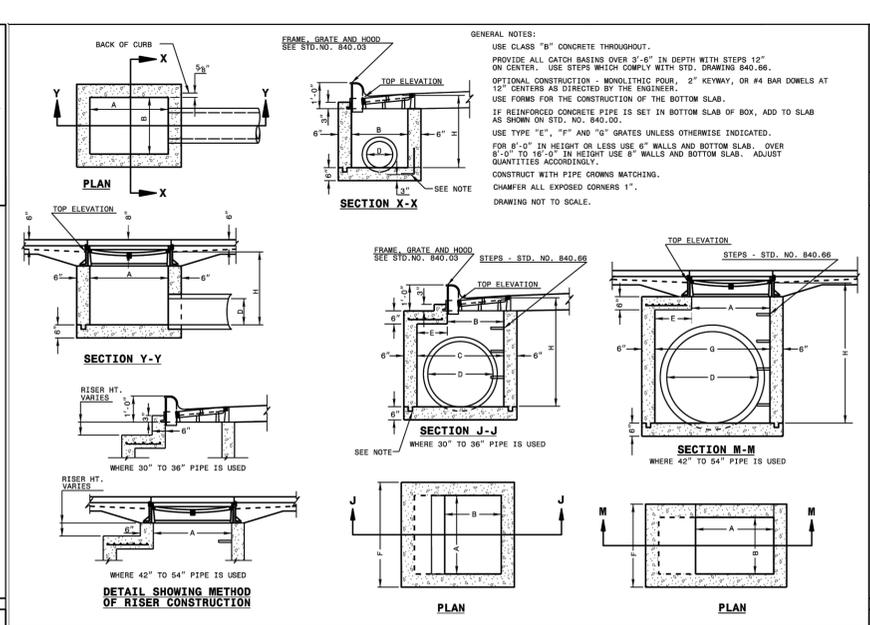
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STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR FRAME, GRATE, AND HOOD FOR USE ON STANDARD CATCH BASIN

SHEET 1 OF 2  
840.03



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR METHOD OF PIPE INSTALLATION FILL HEIGHT TABLES

SHEET 3 OF 3  
300.01

Diameter (inches)	Minimum cover (inches)	Round Corrugated Steel Pipe 2 2/3 x 1/2 corrugation **				Round Corrugated Aluminum Pipe 2 2/3 x 1/2 corrugation **				
		(Ga) 16	18	24	30	(Ga) 16	18	24	30	
12	12	204	230	12	10	8	123	151	281	344
15	12	162	204	12	10	8	98	123	174	224
18	12	135	169	239	12	10	81	102	144	187
21	12	115	145	204	12	10	69	87	123	160
24	12	100	126	178	12	10	60	76	108	139
27	12	79	100	142	12	10	47	67	96	123
30	12	65	83	117	12	10	40	60	85	111
36	12	55	70	100	12	10	30	52	72	93
42	12	48	61	87	12	10	24	44	60	78
48	12	42	54	77	12	10	20	38	52	68
54	12	38	49	70	12	10	18	34	48	60
60	12	34	44	63	12	10	16	31	44	57
66	12	31	40	58	12	10	14	29	41	54
72	12	28	37	53	12	10	12	27	38	51
78	12	26	35	49	12	10	11	26	36	49
84	12	24	33	46	12	10	10	25	35	47

NOTE: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

\*\* FOR DIFFERENT CORRUGATIONS AND ARCH PIPES REFER TO ROADWAY DESIGN MANUAL OR MANUFACTURERS SPECIFICATION.

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS:  
CSP - AASHTO M38  
CAAP - AASHTO M196  
HOPE - AASHTO M284  
PVC - ASTM F449 or AASHTO M304

NOTE: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

DATE: 07/05/23

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

DESIGNED BY: GF  
DRAWN BY: GF  
REVIEWED BY:

DSG INC. USA, PLLC  
1210 PROGRESSIVE DR.  
CHESAPEAKE VA, 23320  
PH#: 757-472-2719  
EMAIL: GFRANKS@DSGVA.COM  
WWW.DSGINCORPORATED.COM

PROJECT NAME/LOCATION ID: KDH SHERWIN WILLIAMS  
SHEET TITLE: MISC. NOTES AND DETAILS  
PROJECT LOCATION: 1828 N. CROATAN HWY KILL DEVIL HILLS, NC

PARCEL # 029831200

CDT-10.1  
CONCEPT PLAN

