

## Georgetown County, South Carolina

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Georgetown, SC 29442-4200  
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Website • <http://www.gtcounty.org>

### ADDENDUM #3 TO BID #20-020

BID NUMBER: 20-020

ISSUE DATE: Tuesday, May 5, 2020

OPENING DATE: Wednesday, May 13, 2020

OPENING TIME: 3:30 PM ET

Pre-Bid Site Inspection and/or Conference: [None]

**PROCUREMENT FOR: Garden City Drainage Improvements Sites 1, 5 and 8**

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This addendum will amend **Bid #20-020, Garden City Drainage Improvements Sites 1, 5 and 8** originally issued on Wednesday, April 8, 2020. This clarification is being provided to all known and registered correspondents in response to questions received. All addenda and original bid documents are also available online at: [www.gtcounty.org](http://www.gtcounty.org), select “Bid Opportunities” from the Quick Links section and “View Current Bid Solicitations.”

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**Question #1: FULL DEPTH ASPHALT PATCH:** There is no Section on the existing Bid Drawings that indicates “full depth asphalt patch”. Typically, SCDOT defines “full depth asphalt patch” at approximately 6” thick; typically includes \_\_\_\_ inches of binder and \_\_\_\_ inches of surface, or simply \_\_\_\_ inches of binder.

The only section that we can find on current bid drawings is “Asphalt Pavement in Right-of-Way Section”. Is this the section that we are supposed to quote for “full depth asphalt patch” as indicated on the roadway plan and profile drawings?

If the paragraph above is not the section that you want us to use for “full depth asphalt patch”, then please advise the thickness of binder, surface, etc. as indicated in paragraph #1.

**Response:** Full Depth Patch shall be 6" Type B Asphalt on existing compacted aggregate base course.

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**Question #2: TYPICAL DRAWING C0-01 – PAVING & GRADING NOTES – NOTE #10:** Based on our interpretation, it appears that all milling and overlay areas shown on various drawings indicate that there will not be any “tapering”. In other words, it appears that the milled and overlay areas require a neat cut at the edges to tie in to existing paving areas. If “grades are to be feathered past joints”, please define where these areas are.

**Response:** Existing asphalt shall be saw cut and paving shall tie to saw cut.

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**Question #3: STRUCTURAL FILL REQUIRED:** Reference is made to SCDOT Drawing 714-105-00. Various detail numbers 1, 3 & 4 indicate structural fill is applicable and should be installed. Note #7 indicates “if required, use structural backfill material or CLSM to prevent settlement”.

Please clarify exactly where, according to these SCDOT Details and Notes, where structural fill will be required.

Based on Details nos. 1, 3 & 4 at SCDOT drawing 714-105-00, there are notes concerning geo-textile fabric. As requested above with reference to structural fill, please identify where geo-textile fabric may be required. For example, Detail 1 shows the application, if required. Details 3 and 4 simply say “geo textile now shown”. Please clarify.

**Response:** All crossline installations will require flowable fill.

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**Question #4: O-RING VS. TONGUE & GROOVE RCP:** Reference is made to Drainage Notes #4 & #5, Typical at all sites. Since we do not have any geo-technical information with reference to water tables, please clarify where o-ring pipe needs to be used versus tongue & groove storm pipe.

**Response:** All pipe shall be AHSTO M315 Rubber Profile Gasket Pipe.

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**Question #5: BID ITEM #17 – CURB INLETS (SCDOT TYPE 9):** Drawing C4-00 indicates Type 16. Please clarify.

**Response:** Bid Item #17 should read “CURB INLETS (SCDOT TYPE 16).”

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**Question #6: BID ITEM #13:** Bid Item #13 indicates 8 LF of 15” RCP. Drawing C4-00 and C4-01 indicate 15” HDPE with cap. Please clarify.

**Response:** Bid Items #13 should read 8 LF of 15” HDPE.

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**Question #7: SITE 1 – EXISTING 18” PVC PIPE:** Based on site visit, this is not PVC pipe. Can you confirm whether this is asbestos or not?

**Response:** We do not know the exact type of pipe, contractor shall verify and carry appropriate pipe and its disposal in their bid.

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**Question #8: SITE 5 – PAVEMENT MARKINGS:** Addendum #1 only mentions markings for edge of pavement and centerlines. Drawings C4-01 through C4-03 indicate additional Stop Bars, arrows, stop details, etc. Please define what asphalt pavement markings are we to include in our bid for all sites.

**Response:** Pavements marking are inclusive of all pavement markings to include centerline, stop bars, stop details, handicapped parking, etc.

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**Question #9: SCOPE OF ASPHALT AT DRAINAGE STRUCTURES, ETC. – SITE 5:** On Drawings C3-01 and C3-02, seems to indicate that there will be “turn outs” for asphalt to drainage structures. Road Plan and Profile Drawings such as C4-01 and C4-02 do not indicate same at paving. Please clarify.

**Response:** Concrete collars shall extend to edge of asphalt/travel way.

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**Question #10: PROJECT DOCUMENT PAGE 5 OF 151 – PARA. 3 – GRANT REQUIREMENTS:** Since this is an SCDOT LPA funded project, please clarify the requirements as outlined below.

- Is this project subject to Davis Bacon wages?

Also, page 11 of 151, para. 20A, refers to Davis Bacon requirements and also highlights a web site at the end of para. 20A for actual wage rates in Georgetown County. At this time, we cannot access that web site. If Davis Bacon wage rates are required, please provide a list of Davis Bacon wage rates for Georgetown County.

- Based on our previous experience with Federally funded grants, and Davis Bacon requirements, we have been required to submit certified payroll for General Contractor, Subcontractors, etc. Please verify that this will be the requirement for this project.

**Response:** We anticipate Federal Funding and as such Davis Bacon Labor Rates shall apply to this project. Davis Bacon Labor Rates for Georgetown County can

be found at the following link:

[https://beta.sam.gov/search?index=wd&keywords=Georgetown&sort=-relevance&wdType=dbra&page=1&date\\_filter\\_index=0&inactive\\_filter\\_values=false](https://beta.sam.gov/search?index=wd&keywords=Georgetown&sort=-relevance&wdType=dbra&page=1&date_filter_index=0&inactive_filter_values=false).

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**Question #11: SITE #1 – BID ITEM #21 – WATER SERVICE RELOCATION:** Will these services require new wet taps to existing water main or tie to existing service line and relocate due to new storm drain line, catch basin obstructions, etc.?

**Response:** Contractor shall tie to existing service line since no water main relocation is required for Site 1.

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**Question #12: SITE #1 – BID ITEM #22 – SEWER FORCE MAIN RELOCATION:** Is this going to be an obstruction bypass?

**Response:** Yes - the sewer Contractor will have to do an obstruction bypass.

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**Question #13: SITE #5 – BID ITEM #51 – WATER SERVICE RELOCATIONS:** Are these new taps from new 8” waterline (Bid Item #50)? Not specified as new.

**Response:** Yes – This is a new 8” water main and will require new wet taps for the relocated line.

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**Question #14: SITE #1 – BID ITEM #23 – SANITARY SEWER RELOCATION:** According to drawings, all manhole covers on the main gravity sewer line under Waccamaw Drive are sealed with no access. Can you provide us with any information as to the depths of the main sanitary sewer line? Otherwise, how will we know that the main line is deep enough to allow the sanitary sewer relocations as indicated on the storm drain profile C4-01?

**Response:** GCWS has provided as-builts and the plans have been updated accordingly.

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**Question #15: ADDENDUM #1 – QUESTION #4 AND RESPONSE:** Response Item b indicates “the overlay thickness is minimum 2” and/or match proposed grades on the design drawings for all sites”.

It is almost impossible to determine where and how much additional asphalt/binder/surface course will be required to accomplish the final elevations as shown on the drawings versus existing elevations.

We would suggest that you provide an additional bid item for additional asphalt required above and beyond the 2” of surface course. We suggest that this “overrun” of asphalt will be priced on a per ton basis. Asphalt load tickets, etc. can be provided to prove any asphalt tonnage overrun beyond 2” thick.

**Response:** Contractor shall assume 2” surface course and document asphalt amount over the bid amount. Contractor will be compensated for additional asphalt over the bid amount based on the provided unit rate.

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**Question #16: RETAINING WALL AT AREA #5:** Based on our site visit, it appears that the new storm drain will be in conflict with the lower existing 4 x 6 whaler. Please confirm that it is the General Contractor’s responsibility to provide whatever reinforcement is required if the 4 x 6 whaler must be cut to allow new storm drain.

**Response:** Contractor is responsible for replacing and reinforcing any existing retaining walls.

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**Question #17: EXISTING IRRIGATION/LANDSCAPE:**

- Based on site visit, it appears that there could be existing irrigation at homeowner’s property. Please clarify if the General Contractor is responsible for replacing any irrigation at any location.
- Also, there are several areas that bushes, trees, etc. will be removed in order to place storm drain, etc. Please clarify whether the General Contractor is responsible for replacing these items, “in kind”. For example, there are large crepe myrtles/wax myrtles/palmettos/etc. that cannot be replaced in the same size as existing.

**Response:** Yes, this will be the responsibility of the Contractor.

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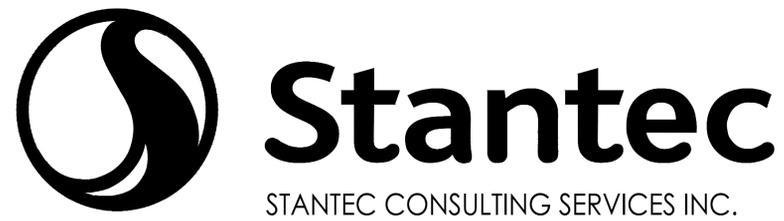
**Question #18: SCOPE OF ASPHALT MILLING/OVERLAY/NEW PAVEMENT:** As a typical example, referring to Site #5, Drwg. C2-00 through C2-02, and Drwg. Nos. C3-00 through C3-02, versus “asphalt paving drawings” C4-00 through C4-02, indicate different scopes as to the extent for new asphalt paving. The C4 drawings, basically, do not include turn outs. The turn outs are obviously more costly than the “straight line paving”. Please clarify the extent of new asphalt pavement. Not only on Site #5, but entire project.

**Response:** Sheet C4-00-C4-02 reflect all required paving.

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**REVISIONS:** See Revised Drawings from Engineers Attached.

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STANTEC CONSULTING SERVICES INC.  
 4969 CENTRE POINTE DRIVE, SUITE 200  
 NORTH CHARLESTON, SC 29417  
 TEL 843.740.7700

CLIENT: GEORGETOWN COUNTY  
 108 SCREVEN STREET  
 GEORGETOWN, SC 29442  
 TRACY JONES | 843-545-3258

# GARDEN CITY DRAINAGE IMPROVEMENTS

SITE 1  
 GEORGETOWN COUNTY,  
 SOUTH CAROLINA

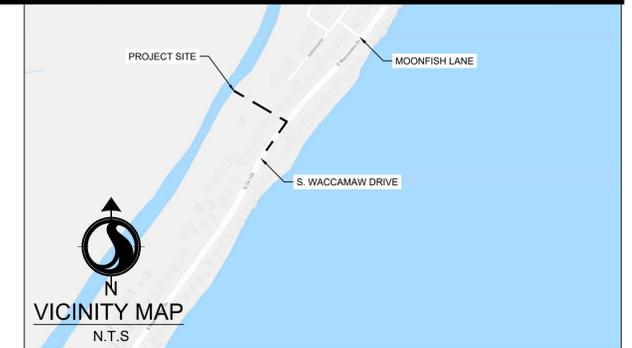


Know what's below.  
 Call before you dig.

PROJECT NUMBER: 178420927

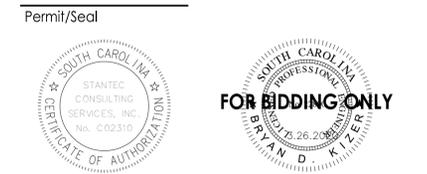


SHEET INDEX		
SHEET NO.	TITLE	REVISION
C0-00	COVER SHEET	0
C0-01	PROJECT NOTES	0
C1-00	EXISTING CONDITIONS - BY OTHERS	0
C2-00	DEMOLITION AND TREE REMOVAL PLAN	0
C3-00	TREE PROTECTION AND EROSION CONTROL PLAN	0
C3-01 to C3-02	EROSION CONTROL DETAILS	0
C4-00	GRADING AND DRAINAGE PLAN	0
C4-01	GRADING AND DRAINAGE PROFILES	0
C4-02 to C4-04	GRADING AND DRAINAGE DETAILS	0
C5-00	TRAFFIC CONTROL PLAN	0
C5-01	TRAFFIC CONTROL DETAILS	0



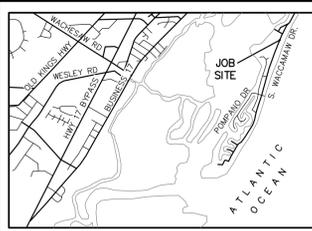
PROJECT CONTACTS			
SERVICE	MUNICIPALITY/UTILITY PROVIDER	CONTACT	PHONE
PLANNING & ZONING	GEORGETOWN COUNTY DEPARTMENT OF PLANNING	BOYD JOHNSON	(843) - 545-3158
STORMWATER	GEORGETOWN COUNTY STORMWATER DIVISION	TRACY JONES	(843) - 545-3524
WATER AND SEWER	GEORGETOWN COUNTY WATER AND SEWER DISTRICT	ERNIE FUNDERBURK	(843) - 907-1535
POWER	SANTEE COOPER	JIM POSTON	(843) - 347-3399
IRRIGATION	WACCAMAW MANAGEMENT	MIKE JACOBS	(843)-241-6234
ROAD	SCDOT	BENJI SMITH	(843)-661-4710 Ext. 201

Revision	By	Appd	YYYY.MM.DD
BID SET PER COUNTY COMMENTS FOR PERMIT REVIEW	AB TN/SC TN	BK BK SC	2020.03.26 2019.10.29 2019.09.18
Issued		By Appd	YYYY.MM.DD
File Name: C0_00_C0VER	SGC Dwn.	SGC Dgn.	BK Chkd.



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 2020.03.26 4:16:27 PM  
 ORIGINAL SHEET: ARCTD





VICINITY MAP  
(NOT TO SCALE)

- LEGEND**
- IRON PIPE FOUND
  - IRON REBAR FOUND
  - BOUNDARY POINT
  - ▲ CONTROL POINT
  - x 4.57 EXISTING ELEVATION
  - D.B. DEED BOOK
  - P.B. PLAT BOOK
  - PG. PAGE
  - ELECTRIC BOX
  - AIR CONDITIONER
  - TELEPHONE PEDESTAL
  - PUBLIC ACCESS SIGN
  - WATER VALVE
  - IRRIGATION CONTROL VALVE
  - ▲ VALVE MARKER
  - WATER METER
  - FIRE HYDRANT
  - CURB INLET MANHOLE
  - CATCH BASIN
  - SEWER CLEAN-OUT
  - SEWER MANHOLE
  - UTL- UNDERGROUND UTILITY LINE (APPROX.)
  - UGP- UNDERGROUND POWER (APPROX.)
  - W- WATER LINE (APPROX.)
  - X- FENCE
  - SS- SEWER LINE
  - OHP- OVERHEAD POWER LINE
  - FM- FORCE MAIN LINE (APPROX.)

- REFERENCE MAPS:**
- 1) "PLAT PREPARED FOR SYLVIA PRICE" BY CULLER LAND SURVEYING CO., INC. DATED JANUARY 22, 1990 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. SLD. 46, PG. 28.
  - 2) "PLAT PREPARED FOR J. MARVIN MULLIS, JR." BY CULLER LAND SURVEYING CO., INC. DATED NOVEMBER 4, 1991 AND RECORDED AT GEORGETOWN COUNTY R.O.D. SLD. 99, PG. 108.
  - 3) "PLAT PREPARED FOR DEBRA I. NEWTON AND GLENDA M. NEWTON" BY CULLER LAND SURVEYING CO., INC. DATED FEBRUARY 12, 1992 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT SLD. 97, PG. 98.
  - 4) "PLAT PREPARED FOR W. SHERWIN JACOBS & LOUIE A. JACOBS" BY CULLER LAND SURVEYING CO., INC. DATED JULY 22, 1992 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT SLD. 101, PG. 88.
  - 5) "PLAT PREPARED FOR GARY G. REYNOLDS & BARBARA P. REYNOLDS" BY CULLER LAND SURVEYING CO., INC. DATED OCTOBER 12, 1995 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT SLD. 182, PG. 3A.
  - 6) "MAP OF LOT 16 AND 16-A, BLOCK 18" BY BLANTON LAND SURVEYING, INC. DATED JULY 10, 2004 AND RECORDED AT HORRY COUNTY R.O.D. AT SLD. 526, PG. 4B.
  - 7) "ASBUILT & SUBDIVISION SURVEY OF GARDEN CITY LOTS 13 & 13A, BLOCK 18" BY THE BRIGMAN COMPANY, INCORPORATED, DATED JULY 15, 2016 AND RECORDED AT GEORGETOWN COUNTY AT SLD. 774, PG. 10.
  - 8) "REVISED MAP OF A PORTION OF GARDEN CITY" BY S.D. COX DATED AUGUST 1948 AND RECORDED AT GEORGETOWN COUNTY R.O.D. AT P.B. G, PG. 19.
  - 9) "MAP OF LOTS 13 & 14, BLOCK 18" BY S.D. COX, JR., R.L.S. DATED SEPTEMBER 7, 1949 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. G, PG. 45A.
  - 10) "REVISED MAP OF A PORTION OF GARDEN CITY" BY S.D. COX, JR. DATED AUGUST 1948 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. G, PG. 47.
  - 11) "GARDEN CITY" BY S.D. COX, JR. R.L.S. DATED APRIL 1952 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. H, PG. 82.
  - 12) "MAP OF A PORTION OF GARDEN CITY" BY SAMUEL M. HARPER, R.L.S. DATED APRIL 30, 1958 AND RECORDED AT GEORGETOWN COUNTY R.O.D. IN P.B. M, PG. 40.
  - 13) "PLAT PREPARED FOR W. RAY KISER" BY CULLER LAND SURVEYING CO., INC. DATED FEBRUARY 24, 1986 AND RECORDED AT HORRY COUNTY R.O.D. IN P.B. 6, PG. 40B.

THE AREA SHOWN ON THIS PLAT IS A REPRESENTATION OF THE DEPARTMENT (SCDHEC OCRM) PERMIT AUTHORITY ON THE SUBJECT PROPERTY. CRITICAL AREAS BY THEIR NATURE ARE DYNAMIC AND SUBJECT TO CHANGE OVER TIME. BY DELINEATING THE PERMIT AUTHORITY OF SCDHEC OCRM, SCDHEC OCRM IN NO WAY WAIVES ITS RIGHT TO ASSERT PERMIT JURISDICTION AT ANY TIME IN ANY CRITICAL AREA ON THE SUBJECT PROPERTY, WHETHER SHOWN HEREON OR NOT.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
THE CRITICAL LINE SHOWN ON THIS PLAT IS VALID FOR FIVE YEARS FROM THE DATE OF THIS SIGNATURE, SUBJECT TO THE CAUTIONARY LANGUAGE ABOVE.

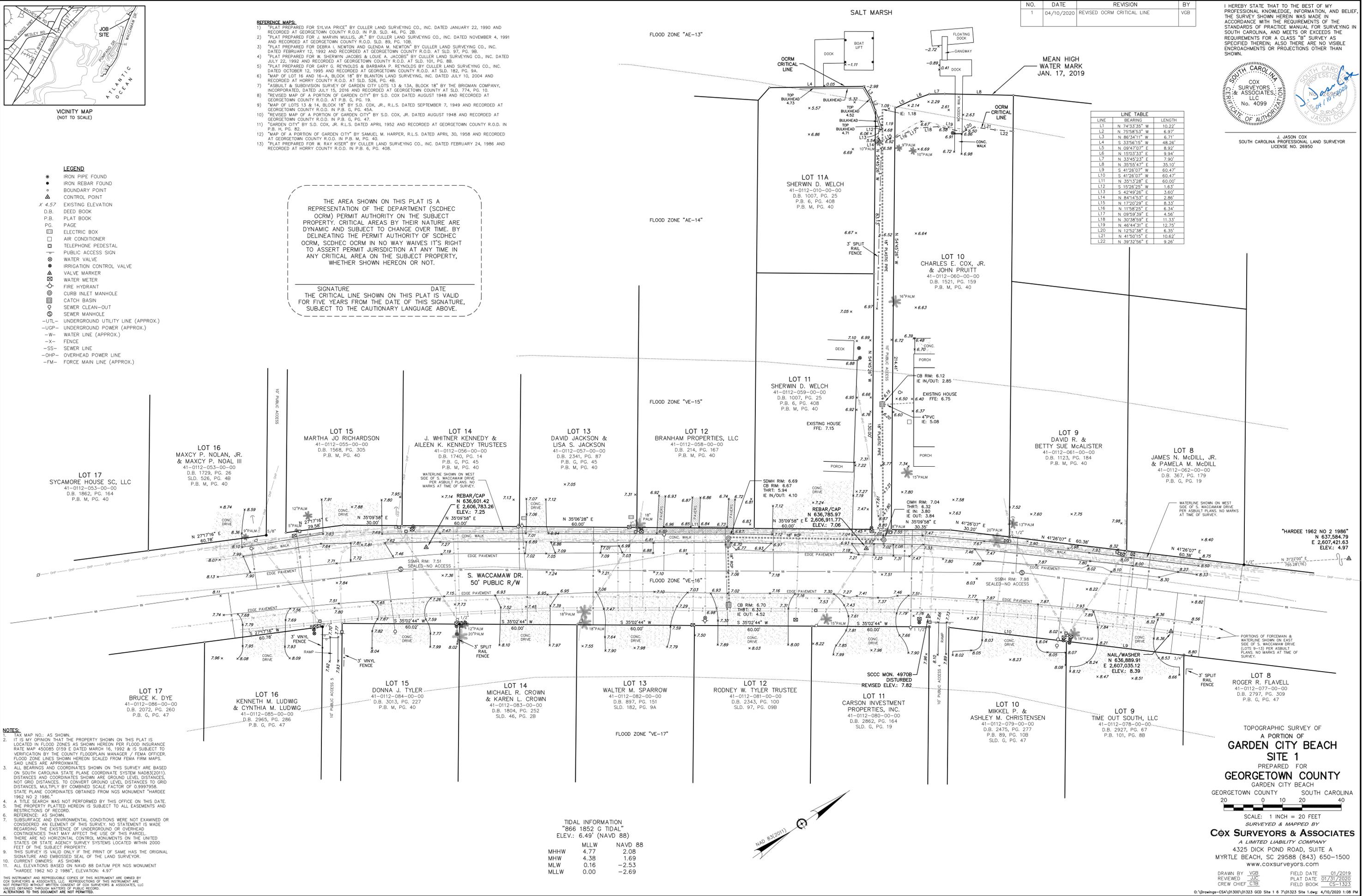
NO.	DATE	REVISION	BY
1	04/10/2020	REVISED OCRM CRITICAL LINE	VCB

I HEREBY STATE THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREIN WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE MANUAL FOR SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "B" SURVEY AS SPECIFIED THEREIN; ALSO THERE ARE NO VISIBLE ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

**J. JASON COX**  
SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR  
LICENSE NO. 26950

**LINE TABLE**

LINE	BEARING	LENGTH
L1	N 74°33'35" W	10.22'
L2	N 75°58'53" W	6.97'
L3	N 86°34'11" W	6.71'
L4	S 33°56'15" W	48.26'
L5	N 09°47'07" E	8.92'
L6	N 150°33'33" E	9.94'
L7	N 33°45'23" E	7.90'
L8	N 35°55'47" E	35.10'
L9	S 41°26'07" W	60.47'
L10	S 41°26'07" W	60.47'
L11	N 35°13'28" E	60.00'
L12	S 15°26'25" W	1.63'
L13	S 42°49'26" E	3.60'
L14	N 84°14'53" E	2.88'
L15	N 17°20'29" E	8.33'
L16	N 11°58'25" E	6.34'
L17	N 09°59'59" E	4.56'
L18	N 32°38'59" E	11.33'
L19	N 46°44'31" E	12.75'
L20	N 12°52'38" E	6.35'
L21	N 41°50'15" E	10.62'
L22	N 39°32'56" E	9.26'



- NOTES:**
1. JOB MAP NO.: AS SHOWN.
  2. IT IS MY OPINION THAT THE PROPERTY SHOWN ON THIS PLAT IS LOCATED IN FLOOD ZONES AS SHOWN HEREON PER FLOOD INSURANCE RATE MAP 45008S 0150 E DATED MARCH 16, 1992 & IS SUBJECT TO VERIFICATION BY THE COUNTY FLOODPLAIN MANAGER / FEMA OFFICER. FLOOD ZONE LINES SHOWN HEREON SCALED FROM FEMA FIRM MAPS. SAID LINES ARE APPROXIMATE.
  3. ALL BEARINGS AND COORDINATES SHOWN ON THIS SURVEY ARE BASED ON SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM NAD83(2011). DISTANCES AND COORDINATES SHOWN ARE GROUND LEVEL DISTANCES. NOT GRID DISTANCES. TO CONVERT GROUND LEVEL DISTANCES TO GRID DISTANCES, MULTIPLY BY COMBINED SCALE FACTOR OF 0.9997958. STATE PLANE COORDINATES OBTAINED FROM NGS MONUMENT "HARDEE 1962 NO 2 1986".
  4. A TITLE SEARCH WAS NOT PERFORMED BY THIS OFFICE ON THIS DATE. THE PROPERTY PLATTED HEREON IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
  5. REFERENCES, AS SHOWN.
  6. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AN ELEMENT OF THIS SURVEY. NO STATEMENT IS MADE REGARDING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTINGENCIES THAT MAY AFFECT THE USE OF THIS PARCEL.
  7. THERE ARE NO HORIZONTAL CONTROL MONUMENTS ON THE UNITED STATES OR STATE AGENCY SURVEY SYSTEMS LOCATED WITHIN 2000 FEET OF THE SUBJECT PROPERTY.
  8. THIS SURVEY IS VALID ONLY IF THE PRINT OF SAME HAS THE ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE LAND SURVEYOR.
  9. CURRENT OWNERS: AS SHOWN.
  10. ALL ELEVATIONS BASED ON NAVD 88 DATUM PER NGS MONUMENT "HARDEE 1962 NO 2 1986", ELEVATION: 4.97'
  11. THIS INSTRUMENT AND REPRODUCIBLE COPIES OF THIS INSTRUMENT ARE OWNED BY COX SURVEYORS & ASSOCIATES, LLC. REPRODUCTIONS OF THIS INSTRUMENT ARE NOT PERMITTED WITHOUT WRITTEN CONSENT OF COX SURVEYORS & ASSOCIATES, LLC UNLESS OBTAINED THROUGH MATTERS OF PUBLIC RECORD.
  12. ALTERATIONS TO THIS DOCUMENT ARE NOT PERMITTED.

**TIDAL INFORMATION**  
"866 1852 G TIDAL"  
ELEV.: 6.49' (NAVD 88)

	MLLW	NAVD 88
MHHW	4.77	2.08
MHW	4.38	1.69
MLW	0.16	-2.53
MLLW	0.00	-2.69

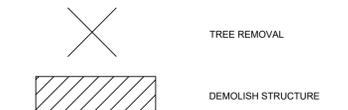
TOPOGRAPHIC SURVEY OF  
A PORTION OF  
**GARDEN CITY BEACH**  
**SITE 1**  
PREPARED FOR  
**GEORGETOWN COUNTY**  
GARDEN CITY BEACH  
GEORGETOWN COUNTY SOUTH CAROLINA  
20 0 10 20 40  
SCALE: 1 INCH = 20 FEET  
SURVEYED & MAPPED BY  
**COX SURVEYORS & ASSOCIATES**  
A LIMITED LIABILITY COMPANY  
4325 DICK POND ROAD, SUITE A  
MYRTLE BEACH, SC 29588 (843) 650-1500  
www.coxsurveyors.com  
DRAWN BY VCB FIELD DATE 01/2019  
REVIEWED JUC PLAT DATE 01/31/2020  
CREW CHIEF CCB FIELD BOOK CS-1323

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Legend



Revision	By	Appd	YYYY.MM.DD

BID SET	AB	BK	2020.03.26
PER COUNTY COMMENTS	TN/SC	BK	2019.10.29
FOR PERMIT REVIEW	TN	SC	2019.09.18

Issued	By	Appd	YYYY.MM.DD

File Name: P27_DEMO_SITE_01	SGC	SGC	BK
	Dwn.	Dgn.	Chkd.
			YYYY.MM.DD

Permit/Seal



Client/Project Logo

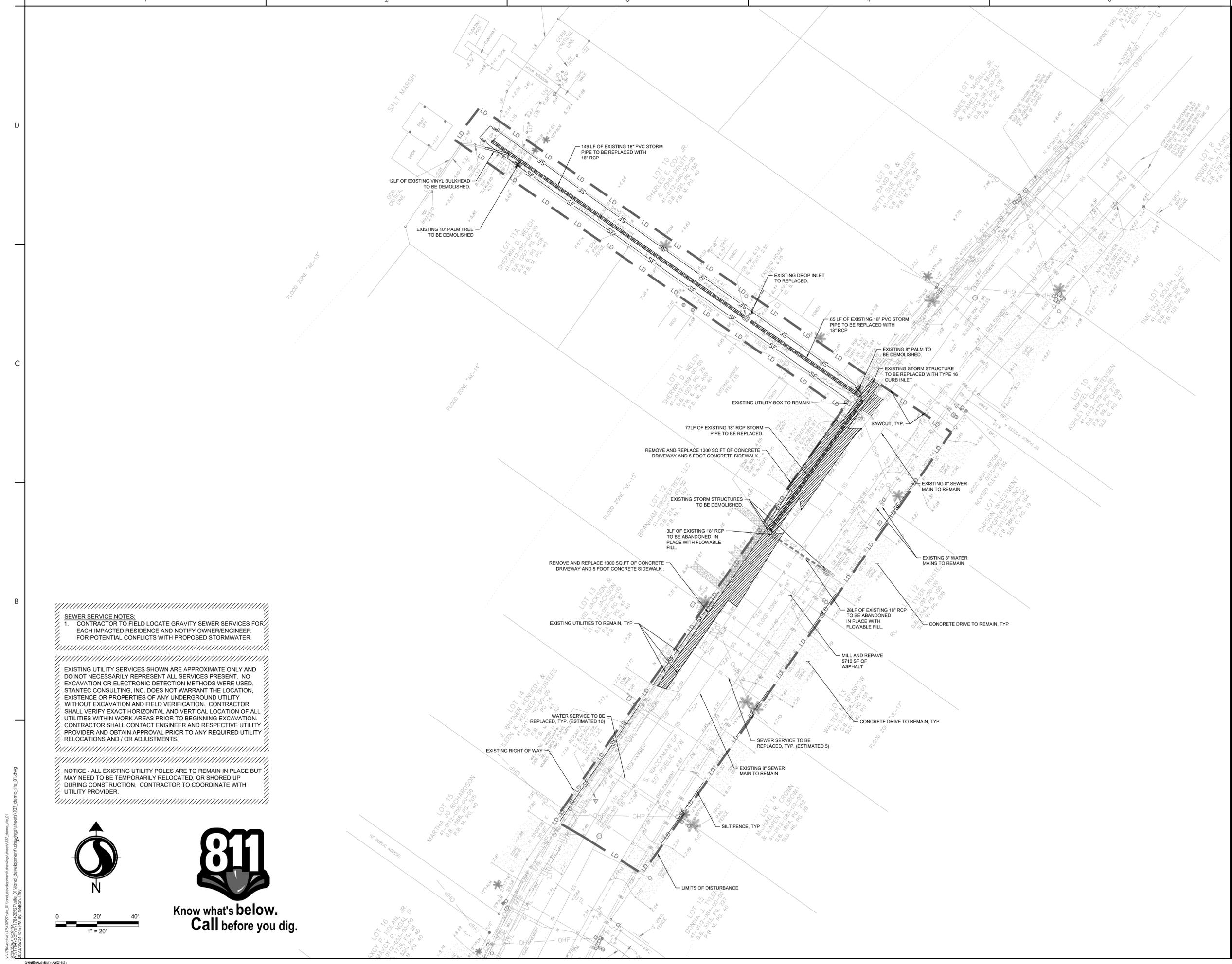
Client/Project  
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 1  
MURRELLS INLET, SOUTH CAROLINA

Title  
DEMOLITION AND TREE REMOVAL PLAN

Project No. 178420927	Scale
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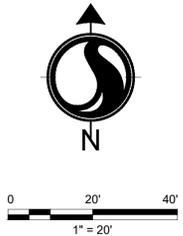
Revision Sheet 4 of 14	Drawing No. C2-00
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**SEWER SERVICE NOTES:**  
1. CONTRACTOR TO FIELD LOCATE GRAVITY SEWER SERVICES FOR EACH IMPACTED RESIDENCE AND NOTIFY OWNER/ENGINEER FOR POTENTIAL CONFLICTS WITH PROPOSED STORMWATER.

EXISTING UTILITY SERVICES SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL SERVICES PRESENT. NO EXCAVATION OR ELECTRONIC DETECTION METHODS WERE USED. STANTEC CONSULTING, INC. DOES NOT WARRANT THE LOCATION, EXISTENCE OR PROPERTIES OF ANY UNDERGROUND UTILITY WITHOUT EXCAVATION AND FIELD VERIFICATION. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES WITHIN WORK AREAS PRIOR TO BEGINNING EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.

NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.



Know what's below.  
Call before you dig.

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 178420927.dwg, D:\work\development\garden\sheet\p27\_demo\_site\_01.dwg  
 2020/03/26 4:16 PM by: Nelson, T

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Consultant

Legend

- PERMANENT STABILIZATION (SEE LANDSCAPE PLANS)
- TEMPORARY SEEDING
- MULCHING
- DUST CONTROL
- LIMITS OF DISTURBANCE
- LIMITS OF DISTURBANCE AND SILT FENCE
- LIMITS OF DISTURBANCE
- TREE PROTECTION
- SILT FENCE
- SEDIMENT TUBE
- TYPE A INLET PROTECTION
- FILTER BAG INLET PROTECTION

Revision	By	Appd	YYYY.MM.DD
BID SET PER COUNTY COMMENTS FOR PERMIT REVIEW	AB TN/SC TN SC	BK BK SC	2020.03.26 2019.10.29 2019.09.18
Issued		By Appd	YYYY.MM.DD
File Name: P27_ESC_SITE_01	SGC Dwn.	SGC Dgn.	BK Chkd. YYYY.MM.DD

Permit/Seal

**FOR BIDDING ONLY**

Client/Project Logo

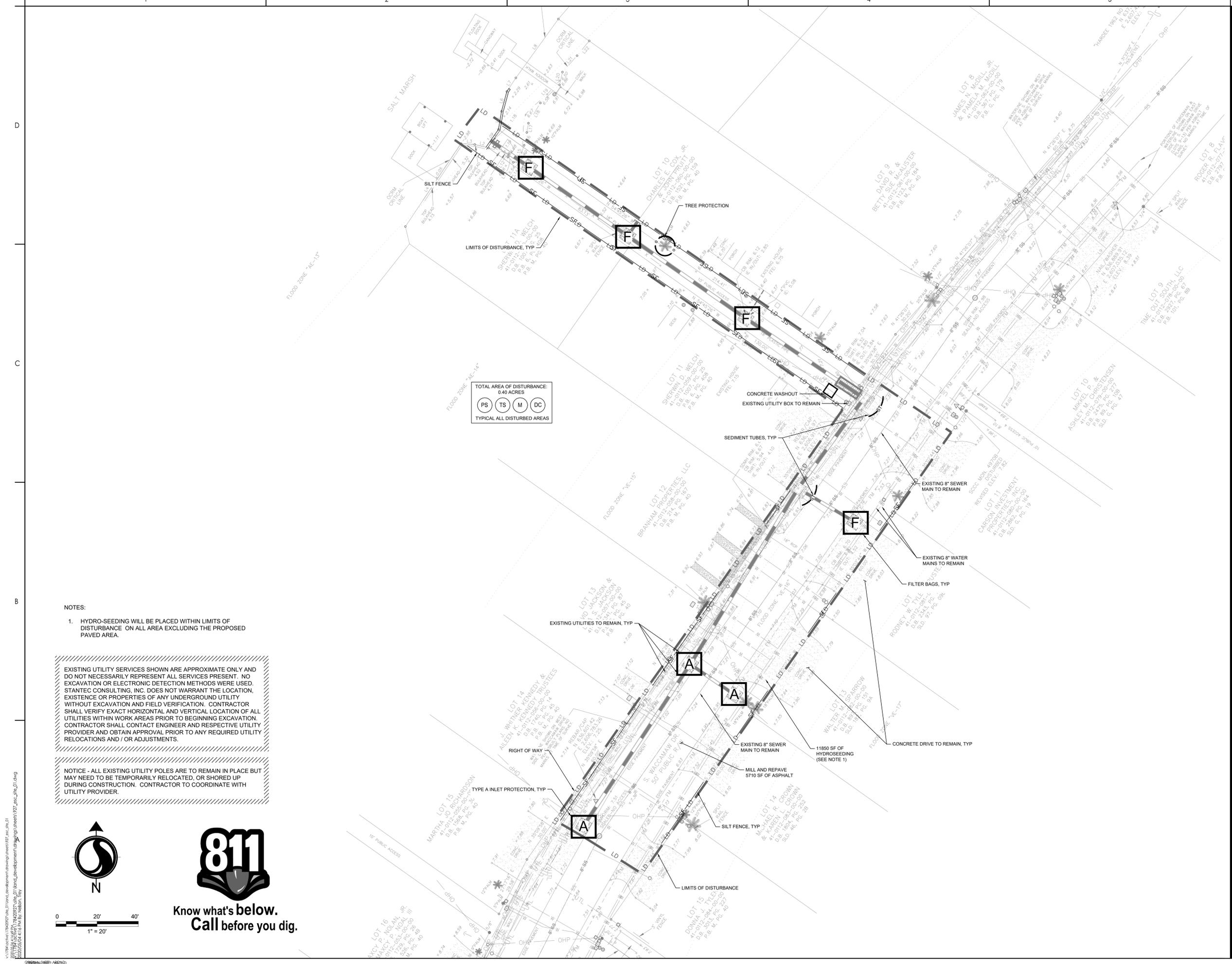
Client/Project  
**GEORGETOWN COUNTY**

**GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 1**

MURRELLS INLET, SOUTH CAROLINA

Title  
TREE PROTECTION AND EROSION CONTROL PLAN

Project No. 178420927	Scale
Revision Sheet	Drawing No. 5 of 14 C3-00



NOTES:

- HYDRO-SEEDING WILL BE PLACED WITHIN LIMITS OF DISTURBANCE ON ALL AREA EXCLUDING THE PROPOSED PAVED AREA.

EXISTING UTILITY SERVICES SHOWN ARE APPROXIMATE ONLY AND DO NOT NECESSARILY REPRESENT ALL SERVICES PRESENT. NO EXCAVATION OR ELECTRONIC DETECTION METHODS WERE USED. STANTEC CONSULTING, INC. DOES NOT WARRANT THE LOCATION, EXISTENCE OR PROPERTIES OF ANY UNDERGROUND UTILITY WITHOUT EXCAVATION AND FIELD VERIFICATION. CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES WITHIN WORK AREAS PRIOR TO BEGINNING EXCAVATION. CONTRACTOR SHALL CONTACT ENGINEER AND RESPECTIVE UTILITY PROVIDER AND OBTAIN APPROVAL PRIOR TO ANY REQUIRED UTILITY RELOCATIONS AND / OR ADJUSTMENTS.

NOTICE - ALL EXISTING UTILITY POLES ARE TO REMAIN IN PLACE BUT MAY NEED TO BE TEMPORARILY RELOCATED, OR SHORED UP DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.

**Know what's below.  
Call before you dig.**

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 2020/03/26 4:16 PM by Nelson, Tiley





Legend

- LD LIMITS OF DISTURBANCE
- 15 EXISTING CONTOURS
- 2B PROPOSED CONTOUR
- SF SILT FENCE
- DSF DOUBLE ROW SILT FENCE
- MILL AND OVERLAY
- DRAINAGE FLOW ARROW
- SPOT ELEVATION

- FG - FINISHED GRADE ELEVATION
- CB - CATCH BASIN (SCDOT STANDARD DETAIL 719-110-01)
- JB - JUNCTION BOX (SCDOT STANDARD DETAIL 719-110-02)

Revision	By	Appd	YYYY.MM.DD

BID SET	AB	BK	2020.03.26
PER COUNTY COMMENTS	TN/SC	BK	2019.10.29
FOR PERMIT REVIEW	TN	SC	2019.09.18

Issued	By	Appd	YYYY.MM.DD

File Name: P27_GRADING_SITE_01	SGC	SGC	BK
	Dwn.	Dgrn.	Chkd.
			YYYY.MM.DD

Permit/Seal



Client/Project Logo

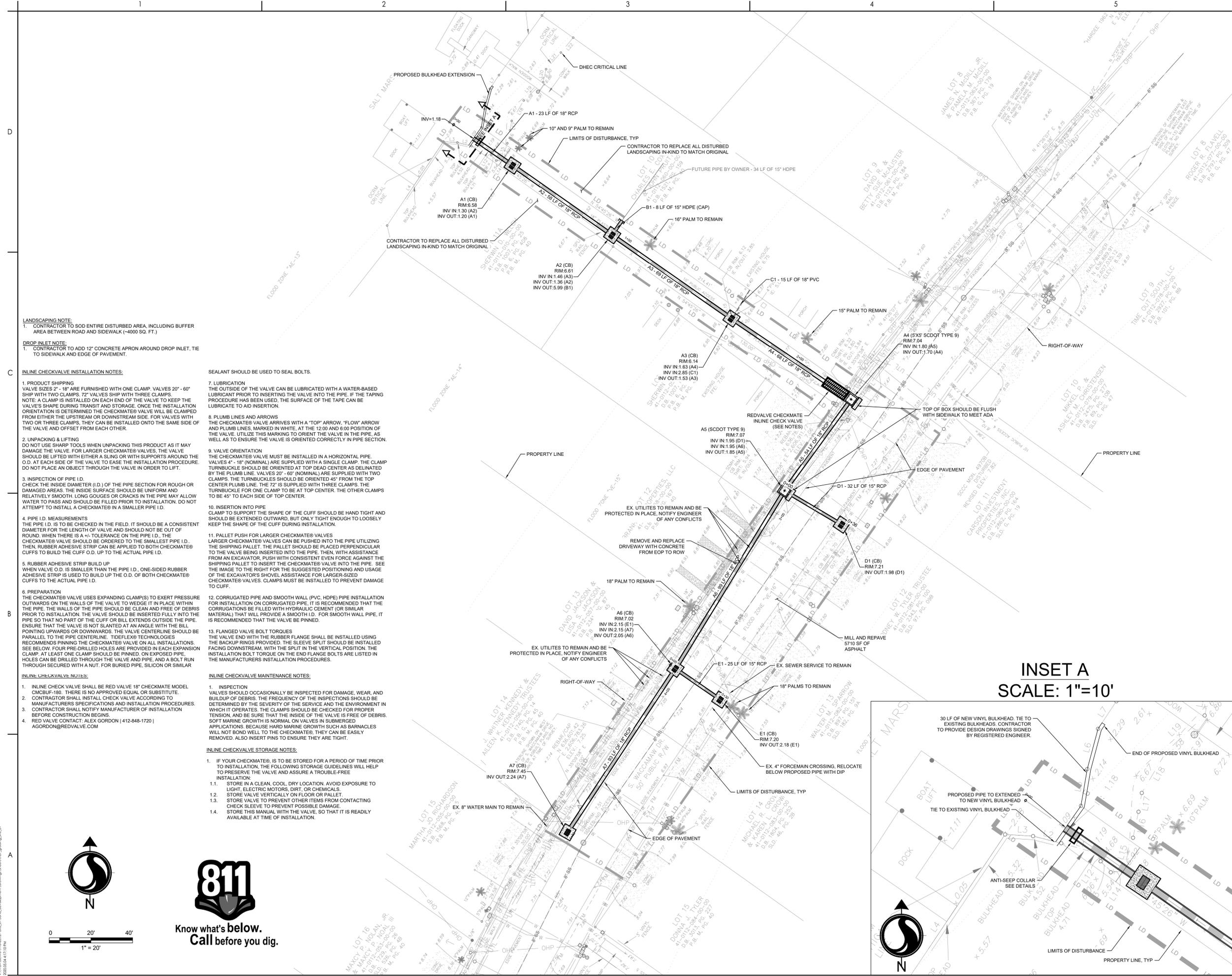
Client/Project  
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 1  
MURRELLS INLET, SOUTH CAROLINA

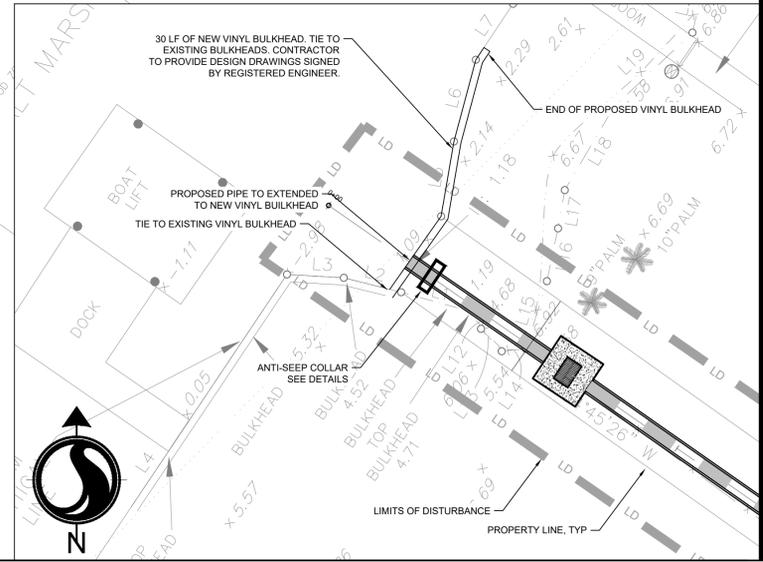
Title  
GRADING AND DRAINAGE PLAN

Project No. 178420927	Scale
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Revision Sheet	Drawing No.
8 of 14	C4-00



INSET A  
SCALE: 1"=10'



**LANDSCAPING NOTE:**  
1. CONTRACTOR TO SOE ENTIRE DISTURBED AREA, INCLUDING BUFFER AREA BETWEEN ROAD AND SIDEWALK (~4000 SQ. FT.)

**DROP INLET NOTE:**  
1. CONTRACTOR TO ADD 12" CONCRETE APRON AROUND DROP INLET, TIE TO SIDEWALK AND EDGE OF PAVEMENT.

**INLINE CHECKVALVE INSTALLATION NOTES:**

- PRODUCT SHIPPING  
VALVE SIZES 2" - 18" ARE FURNISHED WITH ONE CLAMP. VALVES 20" - 60" SHIP WITH TWO CLAMPS. 72" VALVES SHIP WITH THREE CLAMPS. NOTE: A CLAMP IS INSTALLED ON EACH END OF THE VALVE TO KEEP THE VALVE'S SHAPE DURING TRANSPORT AND STORAGE. ONCE THE INSTALLATION ORIENTATION IS DETERMINED THE CHECKMATE® VALVE WILL BE CLAMPED FROM EITHER THE UPSTREAM OR DOWNSTREAM SIDE. FOR VALVES WITH TWO OR THREE CLAMPS, THEY CAN BE INSTALLED ONTO THE SAME SIDE OF THE VALVE AND OFFSET FROM EACH OTHER.
- UNPACKING & LIFTING  
DO NOT USE SHARP TOOLS WHEN UNPACKING THIS PRODUCT AS IT MAY DAMAGE THE VALVE. FOR LARGER CHECKMATE® VALVES, THE VALVE SHOULD BE LIFTED WITH EITHER A SLING OR WITH SUPPORTS AROUND THE I.D. AT EACH SIDE OF THE VALVE TO EASE THE INSTALLATION PROCEDURE. DO NOT PLACE AN OBJECT THROUGH THE VALVE IN ORDER TO LIFT.
- INSPECTION OF PIPE I.D.  
CHECK THE INSIDE DIAMETER (I.D.) OF THE PIPE SECTION FOR ROUGH OR DAMAGED AREAS. THE INSIDE SURFACE SHOULD BE UNIFORM AND RELATIVELY SMOOTH. LONG GOUGES OR CRACKS IN THE PIPE MAY ALLOW WATER TO PASS AND SHOULD BE FILLED PRIOR TO INSTALLATION. DO NOT ATTEMPT TO INSTALL A CHECKMATE® IN A SMALLER PIPE I.D.
- PIPE I.D. MEASUREMENTS  
THE PIPE I.D. IS TO BE CHECKED IN THE FIELD. IT SHOULD BE A CONSISTENT DIAMETER FOR THE LENGTH OF VALVE AND SHOULD NOT BE OUT OF ROUND. WHEN THERE IS A +/- TOLERANCE ON THE PIPE I.D., THE CHECKMATE® VALVE SHOULD BE ORDERED TO THE SMALLEST PIPE I.D. THEN, RUBBER ADHESIVE STRIP CAN BE APPLIED TO BOTH CHECKMATE® CUFFS TO BUILD THE CUFF O.D. UP TO THE ACTUAL PIPE I.D.
- RUBBER ADHESIVE STRIP BUILD UP  
WHEN VALVE O.D. IS SMALLER THAN THE PIPE I.D., ONE-SIDED RUBBER ADHESIVE STRIP IS USED TO BUILD UP THE O.D. OF BOTH CHECKMATE® CUFFS TO THE ACTUAL PIPE I.D.
- PREPARATION  
THE CHECKMATE® VALVE USES EXPANDING CLAMP(S) TO EXERT PRESSURE OUTWARDS ON THE WALLS OF THE VALVE TO WEDGE IT IN PLACE WITHIN THE PIPE. THE WALLS OF THE PIPE SHOULD BE CLEAN AND FREE OF DEBRIS PRIOR TO INSTALLATION. THE VALVE SHOULD BE INSERTED FULLY INTO THE PIPE SO THAT NO PART OF THE CUFF OR BILL EXTENDS OUTSIDE THE PIPE. ENSURE THAT THE VALVE IS NOT SLANTED AT AN ANGLE WITH THE BILL POINTING UPWARDS OR DOWNWARDS. THE VALVE CENTERLINE SHOULD BE PARALLEL TO THE PIPE CENTERLINE. TIDEFLEX® TECHNOLOGIES RECOMMENDS PINNING THE CHECKMATE® VALVE ON ALL INSTALLATIONS. SEE BELOW FOR PRE-DRILLED HOLES ARE PROVIDED IN EACH EXPANSION CLAMP. AT LEAST ONE CLAMP SHOULD BE PINNED. ON EXPOSED PIPE, HOLES CAN BE DRILLED THROUGH THE VALVE AND PIPE, AND A BOLT RUN THROUGH SECURED WITH A NUT, FOR BURIED PIPE, SILICON OR SIMILAR SEALANT SHOULD BE USED TO SEAL BOLTS.

**7. LUBRICATION**  
THE OUTSIDE OF THE VALVE CAN BE LUBRICATED WITH A WATER-BASED LUBRICANT PRIOR TO INSERTING THE VALVE INTO THE PIPE. IF THE TAPING PROCEDURE HAS BEEN USED, THE SURFACE OF THE TAPE CAN BE LUBRICATED TO AID INSERTION.

**8. PLUMB LINES AND ARROWS**  
THE CHECKMATE® VALVE ARRIVES WITH A "TOP" ARROW, "FLOW" ARROW AND PLUMB LINES, MARKED IN WHITE, AT THE 12:00 AND 6:00 POSITION OF THE VALVE. UTILIZE THIS MARKING TO ORIENT THE VALVE IN THE PIPE, AS WELL AS TO ENSURE THE VALVE IS ORIENTED CORRECTLY IN PIPE SECTION.

**9. VALVE ORIENTATION**  
THE CHECKMATE® VALVE MUST BE INSTALLED IN A HORIZONTAL PIPE. VALVES 4" - 18" (NOMINAL) ARE SUPPLIED WITH A SINGLE CLAMP. THE CLAMP TURNBUCKLES SHOULD BE ORIENTED AT TOP DEAD CENTER AS DELIMITED BY THE PLUMB LINE. VALVES 20" - 60" (NOMINAL) ARE SUPPLIED WITH TWO CLAMPS. THE TURNBUCKLES SHOULD BE ORIENTED 45° FROM THE TOP CENTER PLUMB LINE. THE 72" IS SUPPLIED WITH THREE CLAMPS. THE TURNBUCKLE FOR ONE CLAMP TO BE AT TOP CENTER. THE OTHER CLAMPS TO BE 45° TO EACH SIDE OF TOP CENTER.

**10. INSERTION INTO PIPE**  
CLAMP TO SUPPORT THE SHAPE OF THE CUFF SHOULD BE HAND TIGHT AND SHOULD BE EXTENDED OUTWARD, BUT ONLY TIGHT ENOUGH TO LOOSELY KEEP THE SHAPE OF THE CUFF DURING INSTALLATION.

**11. PALLET PUSH FOR LARGER CHECKMATE® VALVES**  
LARGER CHECKMATE® VALVES CAN BE PUSHED INTO THE PIPE UTILIZING THE SHIPPING PALLET. THE PALLET SHOULD BE PLACED PERPENDICULAR TO THE VALVE BEING INSERTED INTO THE PIPE. THEN, WITH ASSISTANCE FROM AN EXCAVATOR, PUSH WITH CONSISTENT EVEN FORCE AGAINST THE SHIPPING PALLET TO INSERT THE CHECKMATE® VALVE INTO THE PIPE. SEE THE IMAGE TO THE RIGHT FOR THE SUGGESTED POSITIONING AND USAGE OF THE EXCAVATOR'S SHOVEL ASSISTANCE FOR LARGER-SIZED CHECKMATE® VALVES. CLAMPS MUST BE INSTALLED TO PREVENT DAMAGE TO CUFF.

**12. CORRUGATED PIPE AND SMOOTH WALL (PVC, HDPE) PIPE INSTALLATION**  
FOR INSTALLATION ON CORRUGATED PIPE, IT IS RECOMMENDED THAT THE CORRUGATIONS BE FILLED WITH HYDRAULIC CEMENT (OR SIMILAR MATERIAL) THAT WILL PROVIDE A SMOOTH I.D. FOR SMOOTH WALL PIPE, IT IS RECOMMENDED THAT THE VALVE BE PINNED.

**13. FLANGED VALVE BOLT TORQUES**  
THE VALVE END WITH THE RUBBER FLANGE SHALL BE INSTALLED USING THE BACKUP RINGS PROVIDED. THE SLEEVE SPLIT SHOULD BE INSTALLED FACING DOWNSTREAM, WITH THE SPLIT IN THE VERTICAL POSITION. THE INSTALLATION BOLT TORQUE ON THE END FLANGE BOLTS ARE LISTED IN THE MANUFACTURER'S INSTALLATION PROCEDURES.

**14. INSPECTION**  
VALVES SHOULD OCCASIONALLY BE INSPECTED FOR DAMAGE, WEAR, AND BUILDUP OF DEBRIS. THE FREQUENCY OF THE INSPECTIONS SHOULD BE DETERMINED BY THE SEVERITY OF THE SERVICE AND THE ENVIRONMENT IN WHICH IT OPERATES. THE CLAMPS SHOULD BE CHECKED FOR PROPER TENSION, AND BE SURE THAT THE INSIDE OF THE VALVE IS FREE OF DEBRIS. SOFT MARINE GROWTH IS NORMAL ON VALVES IN SUBMERGED APPLICATIONS. BECAUSE HARD MARINE GROWTH SUCH AS BARNACLES WILL NOT BOND WELL TO THE CHECKMATE®, THEY CAN BE EASILY REMOVED. ALSO INSERT PINS TO ENSURE THEY ARE TIGHT.

**INLINE CHECKVALVE MAINTENANCE NOTES:**

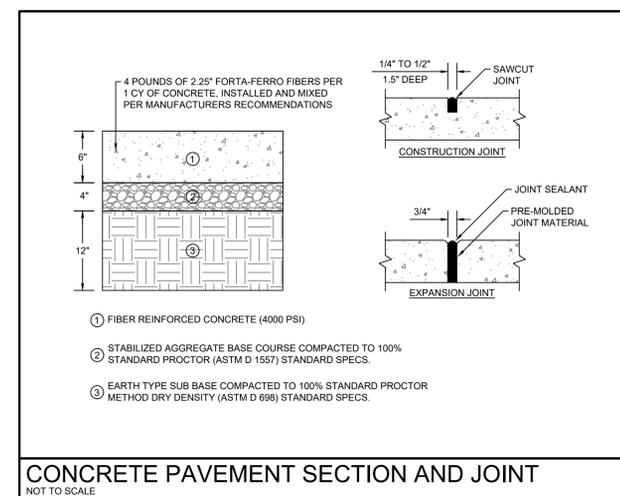
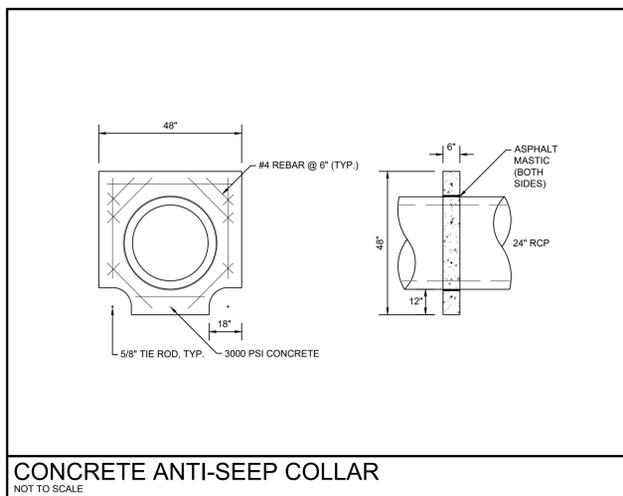
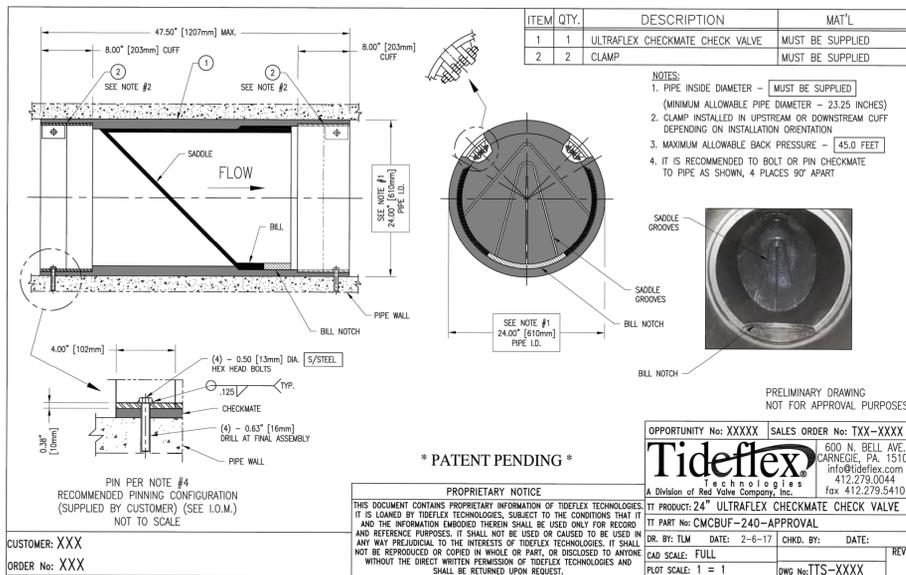
- INSPECTION  
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**INLINE CHECKVALVE STORAGE NOTES:**

- IF YOUR CHECKMATE®, IS TO BE STORED FOR A PERIOD OF TIME PRIOR TO INSTALLATION, THE FOLLOWING STORAGE GUIDELINES WILL HELP TO PRESERVE THE VALVE AND ASSURE A TROUBLE-FREE INSTALLATION.
  - STORE IN A CLEAN, COOL, DRY LOCATION, AVOID EXPOSURE TO LIGHT, ELECTRIC MOTORS, DIRT, OR CHEMICALS.
  - STORE VALVE VERTICALLY ON FLOOR OR PALLET.
  - STORE VALVE TO PREVENT OTHER ITEMS FROM CONTACTING CHECK SLEEVE TO PREVENT POSSIBLE DAMAGE.
  - STORE THIS MANUAL WITH THE VALVE, SO THAT IT IS READILY AVAILABLE AT TIME OF INSTALLATION.

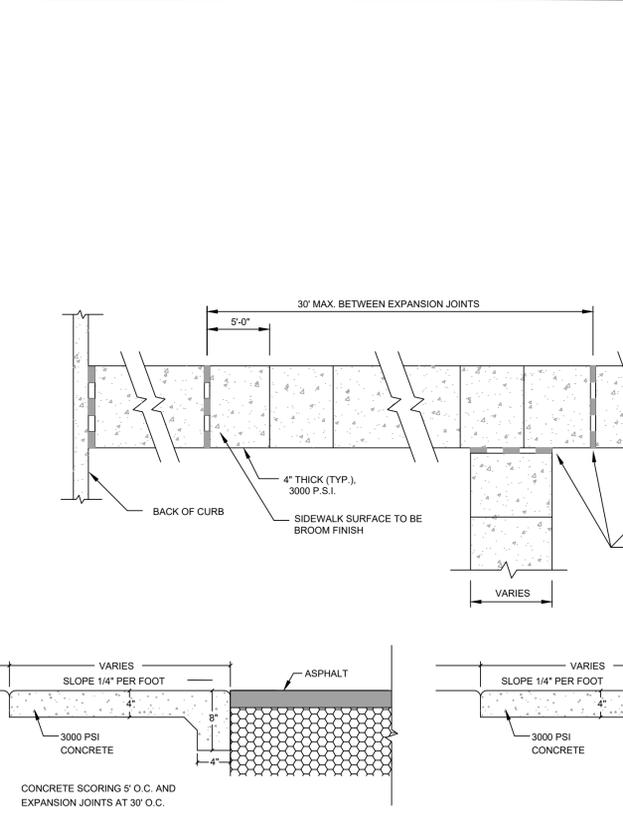




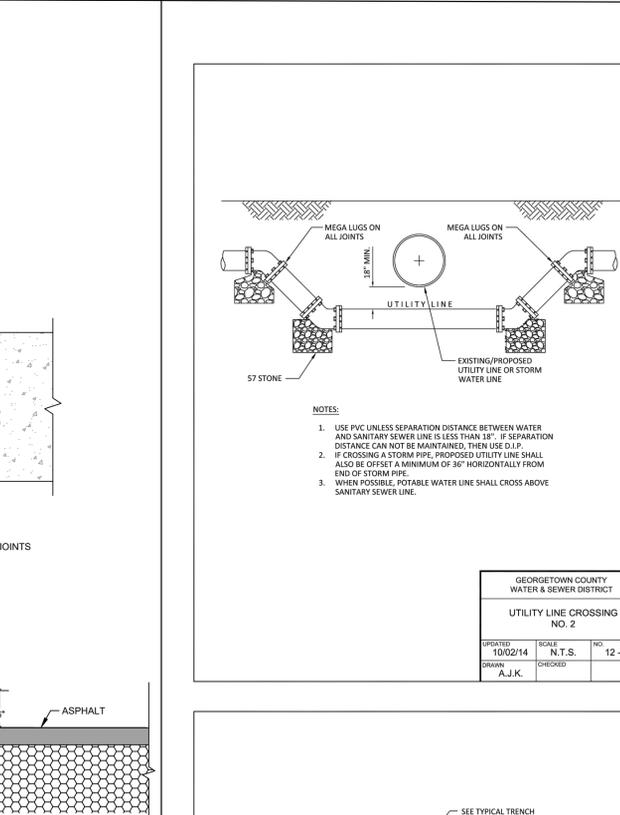


CONCRETE ANTI-SEEP COLLAR  
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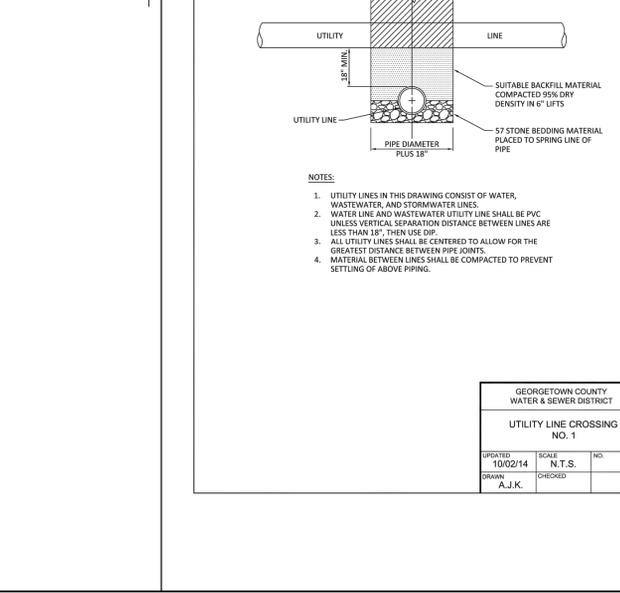
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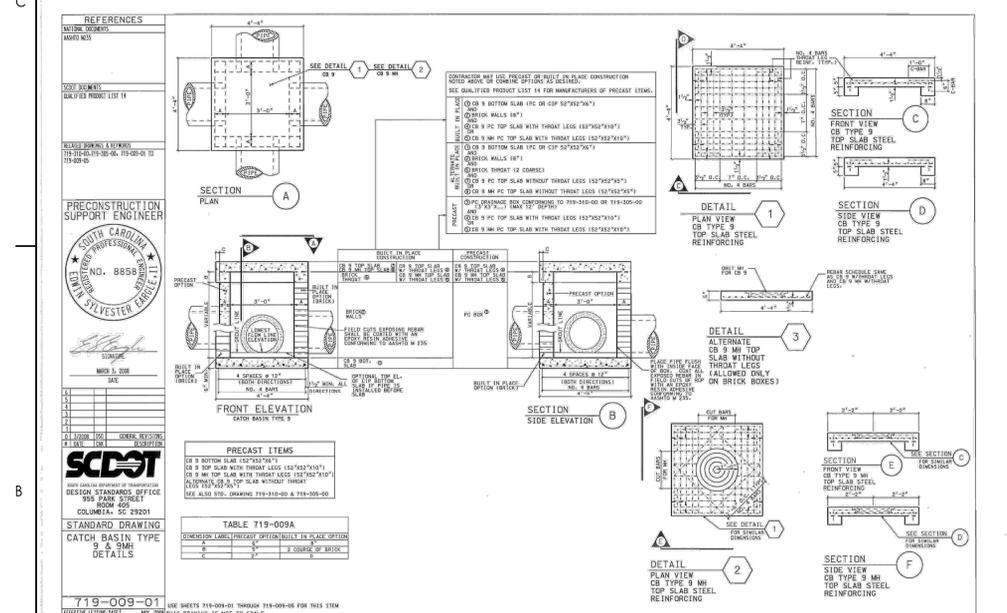
CONCRETE SIDEWALK  
N.T.S.



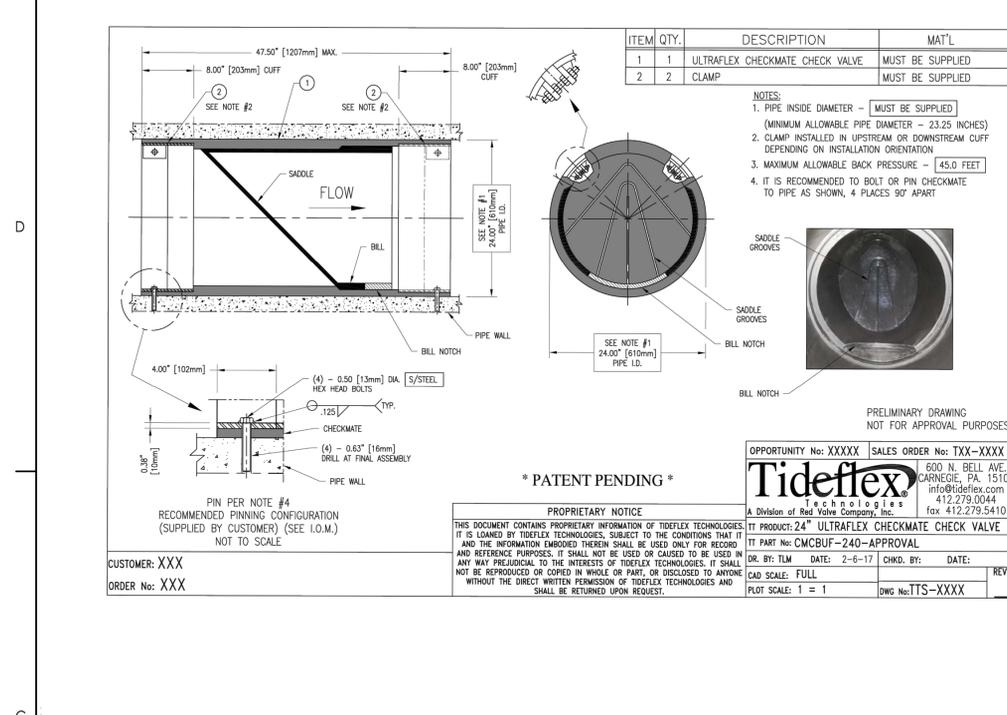
UTILITY LINE CROSSING  
NO. 2



UTILITY LINE CROSSING  
NO. 1



CATCH BASIN TYPE 9 & 10  
DETAILS



CATCH BASIN TYPE 9 & 10  
DETAILS

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Client/Project Logo

Client/Project  
GEORGETOWN COUNTY

GARDEN CITY DRAINAGE IMPROVEMENTS  
SITE 1  
MURRELLS INLET, SOUTH CAROLINA

Title  
GRADING AND DRAINAGE DETAILS

Project No. 178420927

Revision Sheet 12 of 14

Drawing No. C4-04





