

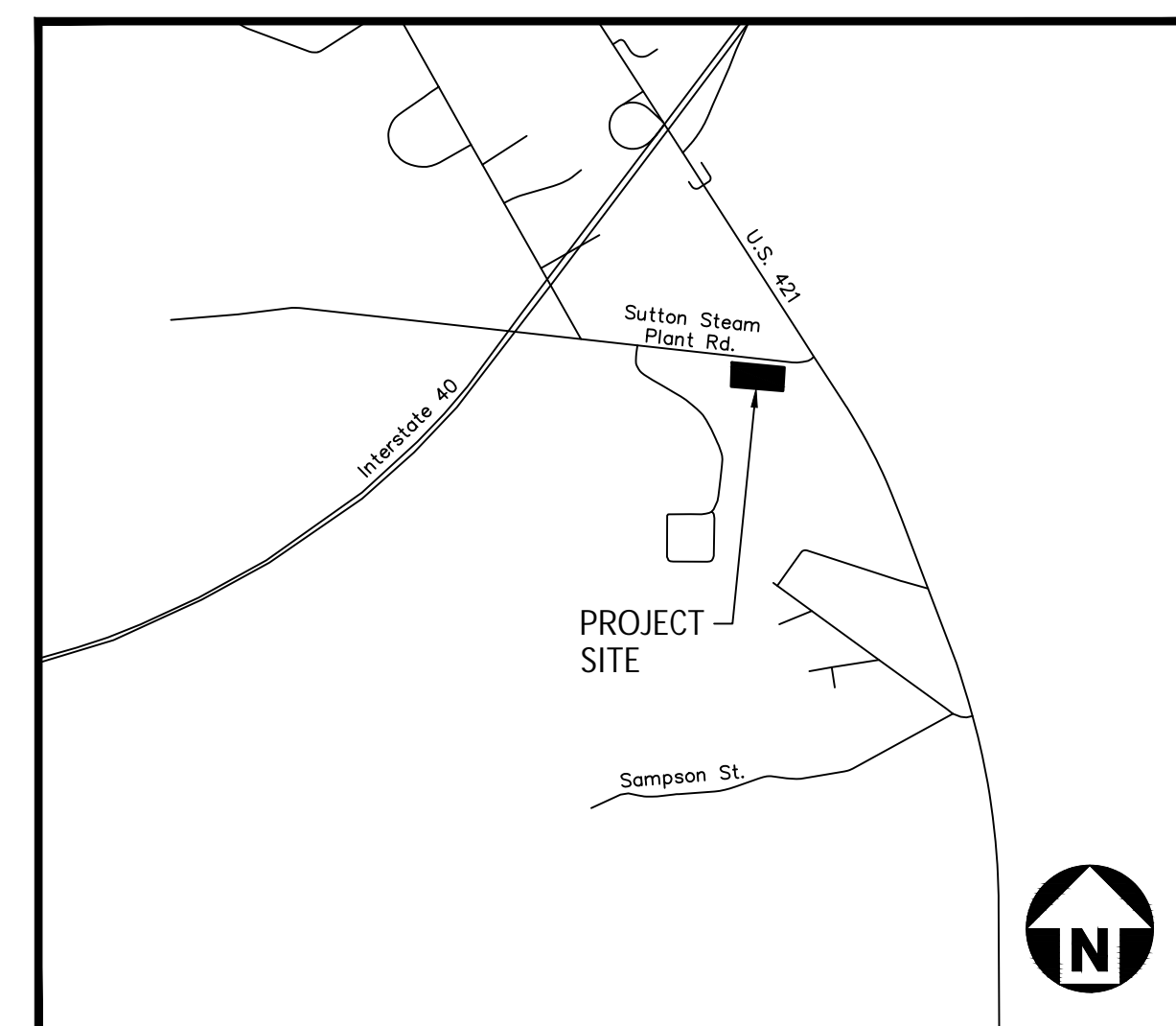
WILMINGTON CNG STATION SUTTON STEAM PLANT ROAD

SUTTON STEAM PLANT ROAD
WILMINGTON, NORTH CAROLINE, 28401

CONSTRUCTION DRAWINGS

PROJECT NUMBER: PNG-20000

DATE: DECEMBER 4, 2020



VICINITY MAP
N.T.S.

OWNER:
PIEDMONT NATURAL GAS
100 WOODRUFF INDUSTRIAL IANE
GREENVILLE, SOUTH CAROLINA 29607
CONTACT: CHRIS BYERS
EMAIL: Christopher.byers@duke-energy.com
PHONE: 864-286-7909

SHEET INDEX

- 1 COVER SHEET
- 2 EXISTING CONDITIONS
- 3 SITE PLAN
- 4 EROSION CONTROL PLAN STAGE 1
- 5 GRADING, STOREM DRAINAGE & EROSION CONTROL PLAN STAGE 2
- 6 SITE & STORM DRAINAGE DETAILS
- 7 EROSION CONTROL DETAILS
- 8 EROSION CONTROL DETAILS



Know what's below.
Call before you dig.

CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT DUKE ENERGY PROGRESS, NEW HANOVER COUNTY, AND CITY OF WILMINGTON ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

NO.	DATE	REVISION	BY	CK.	APP.



WILMINGTON CNG STATION
SUTTON STEAM PLANT ROAD
COVER SHEET

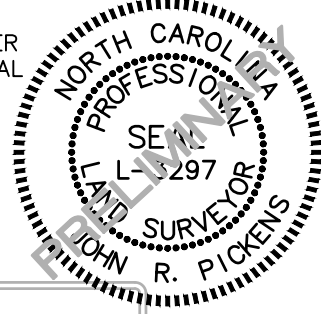
LOCATION	NEW HANOVER COUNTY, WILMINGTON, NORTH CAROLINA
SCALE	SCALE RATIO 1:1
DRAWN	DAA
CHK.	KAS
APP.	—
DATE	12/04/2020
DWG. NO.	TBD
SHEET	1 OF 8

I HEREBY CERTIFY THAT THE TOPOGRAPHIC SURVEY SHOWN
HEREON IS BASED ON AN ACTUAL FIELD SURVEY MADE UNDER
MY SUPERVISION AND ACCURATELY REPRESENTS THE PHYSICAL
FEATURES THEREON AT THE TIME OF THIS SURVEY.

JOHN R. PICKENS, P.L.S. L-3297

DATE

PRELIMINARY



GENERAL NOTES:

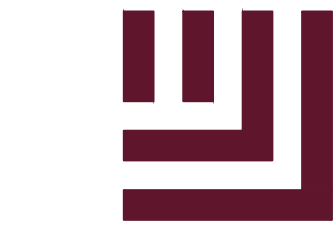
1. THIS IS A SURVEY OF AN EXISTING PARCEL(S) OF LAND. THIS IS AN EXISTING CONDITIONS SURVEY.
2. BEARINGS FOR THIS SURVEY ARE BASED ON NC GRID NAD 83(2011).
3. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES.
4. AREA BY COORDINATE GEOMETRY.
5. FLOOD NOTE: THIS PROPERTY IS PARTIALLY LOCATED IN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE "X" AS DEFINED BY F.E.M.A. F.I.R.M. COMMUNITY PANELS 3720311900K DATED 8/28/2018.
6. REFERENCES: AS SHOWN
7. UTILITY STATEMENT
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
8. THIS SURVEY PERFORMED AND MAP PREPARED WITHOUT BENEFIT OF A TITLE REPORT. THIS SURVEY SUBJECT TO ANY FACTS AND EASEMENTS WHICH MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH.
9. GRID MONUMENT QUEENSBORO WAS HELD FOR HORIZONTAL AND VERTICAL CONTROL.
10. ELEVATIONS FOR THIS SURVEY ARE BASED ON NAVD88



VICINITY MAP
NO SCALE

LEGEND

- BENCHMARK
- EXISTING IRON PIPE
- IRON PIPE SET
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- DRAINAGE INLET/YARD INLET
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC TRANSFORMER
- ELECTRIC BOX
- GUY WIRE
- LIGHT POLE
- POWER/UTILITY POLE
- SEWER MANHOLE
- GAS SERVICE METER
- GAS VALVE
- SEWER MANHOLE
- TELEPHONE BOX
- FIBER OPTIC MARKER
- FIBER OPTIC HANDHOLE
- SIGN
- BORE HOLE
- GAS LINE
- WATER LINE
- SEWER LINE
- STORM LINE
- FENCE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND FIBER OPTIC CABLE
- UNDERGROUND TELEPHONE CABLE
- OVERHEAD ELECTRIC LINE
- WOOD LINE



McADAMS

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license number: C-0293, C-187

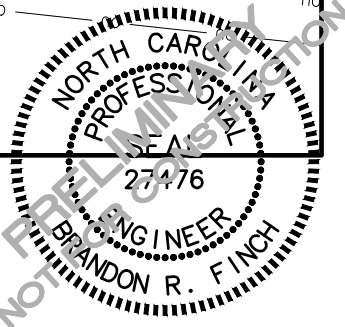
www.mcadamsco.com



WILMINGTON CNG STATION
SUTTON STEAM PLANT ROAD
EXISTING CONDITIONS PLAN

LOCATION NEW HANOVER COUNTY, WILMINGTON, NORTH CAROLINA
SCALE SCALE RATIO 1:1
DRAWN DAA CHK. KAS APP. SHEET 2 OF 8
DATE 12/04/2020 DWG. NO. TBD

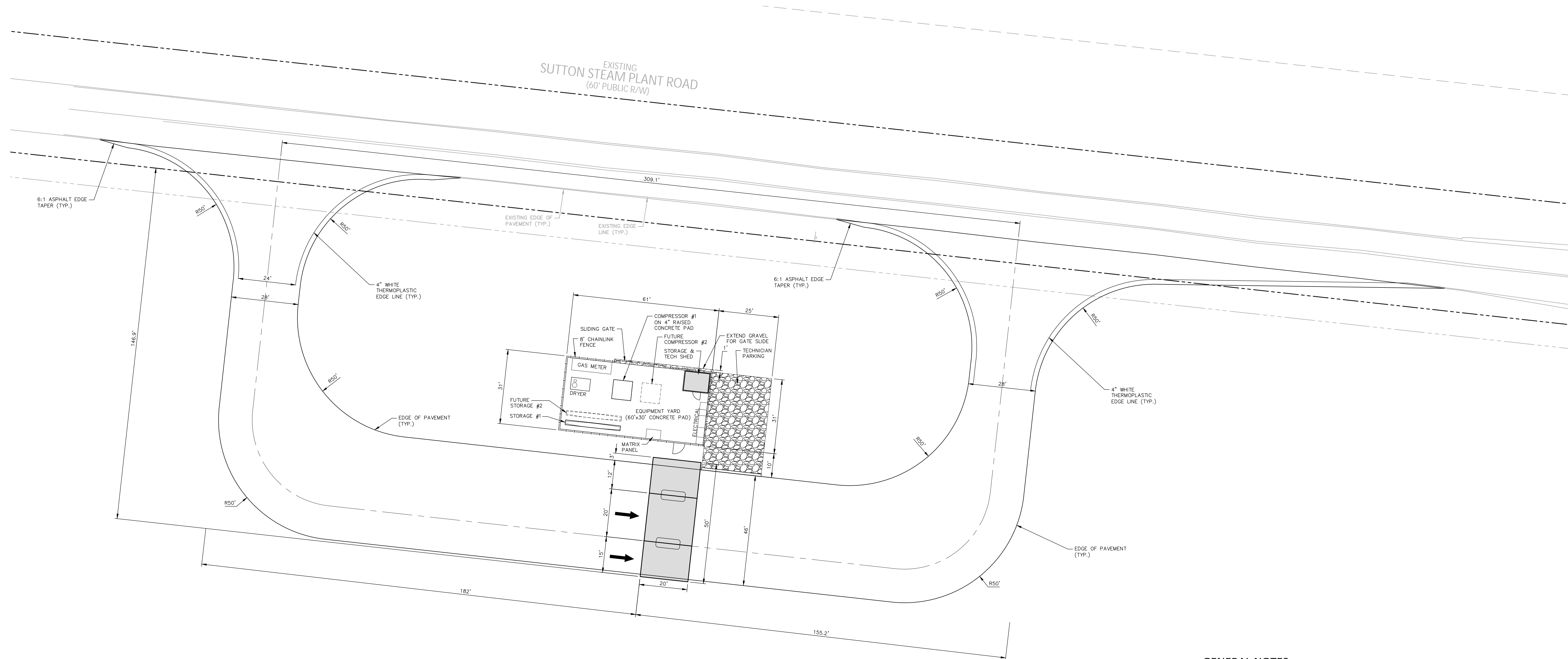
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT
DUKE ENERGY PROGRESS, NEW HANOVER COUNTY, AND CITY OF
WILMINGTON ENGINEERING DESIGN AND CONSTRUCTION STANDARDS



PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

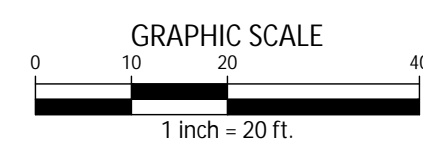
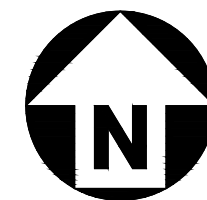
NO.	DATE	REVISION	BY	CK.	APP.

\\projects\hdm\m\ncas\pnc-2006\04-Production\Engineering\Construction Drawings\Current Drawings\PC20000-SI.dwg, 12/4/2020 8:52:03 AM, Shamer, Kik



GENERAL NOTES:

1. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
2. THERE MAY BE WETLANDS WITHIN THIS SITE. IT IS THE OWNER'S RESPONSIBILITY FOR WETLANDS JURISDICTION AND PERMIT DISTURBANCE PRIOR TO ANY GRADING ACTIVITY.



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**WILMINGTON CNG STATION
SUTTON STEAM PLANT ROAD
SITE PLAN**

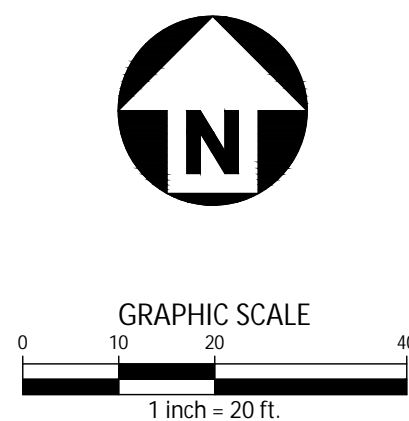
LOCATION NEW HANOVER COUNTY, WILMINGTON, NORTH CAROLINA
SCALE 1"=20'
SCALE RATIO 1:1
DRAWN DAA
CHK. KAS
APP.
DATE 12/04/2020
DWG. NO. TBD
SHEET 3 OF 8

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION					
NO.	DATE	REVISION	BY	CK.	APP.

\\A:\Projects\Wilmington\Gas\Wilmington\Production\Engineering\Construction Drawings\Current Drawings\Wilmington\EC1.dwg, 12/4/2020 8:52:15 AM, Shaver, Kirk



CONTRACTOR SHALL NOTIFY "NC811" (811) OR (1-800-632-4949) AT LEAST 3 FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NC811". REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.



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PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

NO.	DATE	REVISION	BY	CK.	APP.

EROSION CONTROL LEGEND	
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SILT FENCE OUTLET
	CHECK DAM
	SILT FENCE
	TREE PROTECTION FENCE
	LIMITS OF DISTURBANCE
	WOODED AREA
	CONSTRUCTION ENTRANCE/EXIT

GROUND STABILIZATION		
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DYES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 40 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)

CONSTRUCTION SEQUENCE -- STAGE 1:

ENFORCEMENT NOTE 1. FAILURE TO FOLLOW THIS CONSTRUCTION SEQUENCE MAY RESULT IN ENFORCEMENT ACTIONS, INCLUDING BUT NOT LIMITED TO CIVIL PENALTIES, INJUNCTIVE RELIEF, CRIMINAL PENALTIES, AND PERMIT REVOCATION. ADDITIONALLY, OFF-SITE SEDIMENTATION MAY RESULT IN RESTORATION REQUIREMENTS.

ENFORCEMENT NOTE 2. IF EXCESSIVE SEDIMENT IS LEAVING THE SITE, A REVISED SEDIMENTATION AND EROSION CONTROL PLAN MAY BE REQUIRED, WITH ASSOCIATED REQUIREMENTS FOR ADDITIONAL S&EC MEASURES.

- OBTAIN EROSION CONTROL PERMIT FROM NCDEQ-DEMLR, GRADING PERMIT FROM CITY OF WILMINGTON, AND OTHER APPLICABLE PERMITS. CONTRACTOR TO CONDUCT PRE-CONSTRUCTION MEETING. KEEP HARD-COPIES OF ALL PERMITS POSTED ON-SITE.
- NOTIFY DEQ REGIONAL OFFICE 72 HOURS PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES.
- KEEP ALL PERMITS ON SITE, EITHER IN THE INSPECTOR BOX, CONSTRUCTION OFFICE OR WITH THE CONTRACTOR.
- INSTALL CONSTRUCTION ENTRANCE, SILT FENCE AND OUTLETS, TREE PROTECTION FENCE, AND OTHER EROSION CONTROL ITEMS AS SHOWN ON THIS SHEET.
- UPON INSTALLATION OF EROSION CONTROL MEASURES DEMOLISH ITEMS AS SHOWN ON THIS SHEET.



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WILMINGTON CNG STATION
SUTTON STEAM PLANT ROAD
EROSION CONTROL PLAN STAGE 1

LOCATION	NEW HANOVER COUNTY, WILMINGTON, NORTH CAROLINA
SCALE	1"=20'
DRAWN	DAA
DATE	12/04/2020
CHK.	KAS
SCALE RATIO	1:1
DWG. NO.	TBD
APP.	
SHEET	4 OF 8

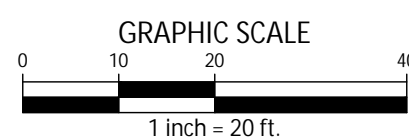
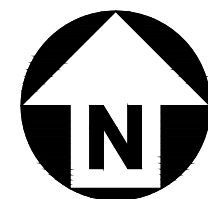
\\projects\wilmington\cng\pnc-2006004-Production\Engineering\Construction Drawings\PGC20000-GT.dwg 12/4/2020 8:52:25 AM, Shaver, KIR



Know what's below.
Call before you dig.

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GROUND STABILIZATION		
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)



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PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

NO.	DATE	REVISION	BY	CK.	APP.

GRADING, STORM DRAINAGE & EROSION CONTROL LEGEND

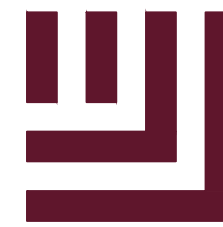
	FLARED END SECTION
	STORM SERVICE INLET
	STORM SERVICE ROOF-RAIN
	DRAINAGE FLOW ARROW
	TOP & BOTTOM CURB ELEVATIONS
	SPOT ELEVATION
	STORM DRAINAGE
	STORM SERVICE LINE
	ROOF DRAIN, 8" ADS NON-PERFORATED TUBING OR EQUAL 1.0% MIN. SLOPE 3" MIN. COVER PVC SCHEDULE 40 IN TRAFFIC AREAS
	MAJOR CONTOUR
	MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	SILT FENCE OUTLET
	CHECK DAM
	SILT FENCE
	TREE PROTECTION FENCE
	LIMITS OF DISTURBANCE
	WOODED AREA
	CONSTRUCTION ENTRANCE/EXIT

STORM DRAINAGE NOTES:

- ALL STORM DRAINAGE PIPES SHOWN SHALL BE REINFORCED CONCRETE (RCP) (MINIMUM CLASS III) UNLESS NOTED OTHERWISE. CONTRACTOR TO COORDINATE WITH THE GUTCH TO VERIFY TYPE OF BEDDING REQUIRED BASED ON SOIL CONDITIONS. CONTRACTOR TO SELECT REQUIRED CLASS OF PIPE BASED ON DEPTH OF PIPE AND BEDDING PROVIDED PER THE AMERICAN CONCRETE PIPE ASSOCIATION GUIDELINES.
- ALL STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST CITY OF WILMINGTON STANDARDS.
- ALL CONCRETE SHALL MEET A MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
- ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH INSIDE WALL.
- ALL PIPE JOINTS SHALL BE MADE WITH PREFORMED JOINT SEALER, WHICH CONFORMS TO AASHTO SPECIFICATION M-198 FOR TYPE B FLEXIBLE PLASTIC GASKETS UNLESS OTHERWISE NOTED.
- THE INTERIOR SURFACES OF ALL STORM DRAINAGE STRUCTURES SHALL BE POINTED UP AND SMOOTHED TO AN ACCEPTABLE STANDARD USING MORTAR MIXED TO MANUFACTURER'S SPECIFICATIONS.
- ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATION MATTER, WASTE CONSTRUCTION MATERIAL OR OTHER OBJECTIONABLE MATERIAL. SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING BLOWS OR PROOF ROLLING.
- MATERIALS DEEMED BY THE OWNER'S REPRESENTATIVE AS UNSUITABLE FOR BACKFILL PURPOSES SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL.
- BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE THOROUGHLY COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST. THE TOP EIGHT (8) INCHES SHALL BE COMPACTED TO 100 PERCENT STANDARD PROCTOR.
- UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO RISE IN UNBACKFILLED TRENCHES AFTER PIPE HAS BEEN PLACED.
- IF THE USE OF WAFFLE BOXES ARE ALLOWED AT THIS SITE, ALL PENETRATIONS FOR STORM DRAINAGE PIPES MUST BE MADE WITHIN THE KNOCK-OUT PORTION OF THE BOX AND NOT AT THE CORNERS WHERE THE STRUCTURAL INTEGRITY MAY BE COMPROMISED.

CONSTRUCTION SEQUENCE - STAGE 2:

- FOLLOWING THE INSTALLATION OF THE PERIMETER MEASURES IN STAGE 1 THE CONTRACTOR SHALL COMMENCE WITH STAGE 2 OF CONSTRUCTION.
- GRADE SITE AND INSTALL CONCRETE STORM DRAINAGE CULVERT PIPE AND HDPE ROOF DRAINS FROM CANOPY DRAINAGE PIPE AND STRUCTURES.
- THE CONTRACTOR SHALL ADJUST THE EROSION AND SEDIMENT CONTROL MEASURES AS THE SITE IS BROUGHT TO GRADE.
- AS SITE IS BROUGHT TO FINAL GRADE STABILIZE IMMEDIATELY WITH SEED, STRAW, TACK (OR MULCH).
- PROVIDE ALL DISTURBED AREAS WITH GROUND COVER WITHIN 14 CALENDAR DAYS AFTER COMPLETION OF ANY PHASE OF CLEARING, GRUBBING OR GRADING. THE SEEDING, SEEDBED PREPARATION, MULCH AND/OR ROLLED EROSION CONTROL PRODUCT INSTALLATION MUST BE IN ACCORDANCE WITH THE SEEDING SCHEDULE PROVIDED IN THIS S&E PLAN. NOTE: SLOPES IN EXCESS OF 3H:1V SHALL BE STABILIZED WITHIN 7 DAYS AND FOR MODERATE SLOPES (SLOPES LESS THAN 3H:1V) SHALL BE STABILIZED WITHIN 14 DAYS.
- PROVIDE TEMPORARY GROUND COVER IN ACCORDANCE WITH NCDEQ SEEDING SPECIFICATIONS FOR STABILIZATION OF ALL DISTURBED AREAS.
- PROVIDE PERMANENT GROUND COVER AND REMAINING LANDSCAPING FOR ALL DISTURBED AREAS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. FINAL STABILIZATION OF THE SITE REQUIRES A 85% OVERALL COVERAGE RATE.
- SEED AND FERTILIZE ALL GRADED AREAS AND CALL NCDEQ FOR FINAL INSPECTION. ADEQUATE EROSION AND SEDIMENTATION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION IS ESTABLISHED.
- REMOVE ALL EROSION CONTROL MEASURES ONLY AFTER PERMANENT STABILIZATION AND APPROVAL FROM NCDEQ TO DO SO.



McADAMS

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WILMINGTON CNG STATION
SUTTON STEAM PLANT ROAD
GRADING, STORM DRAINAGE & EROSION CONTROL PLAN STAGE 2

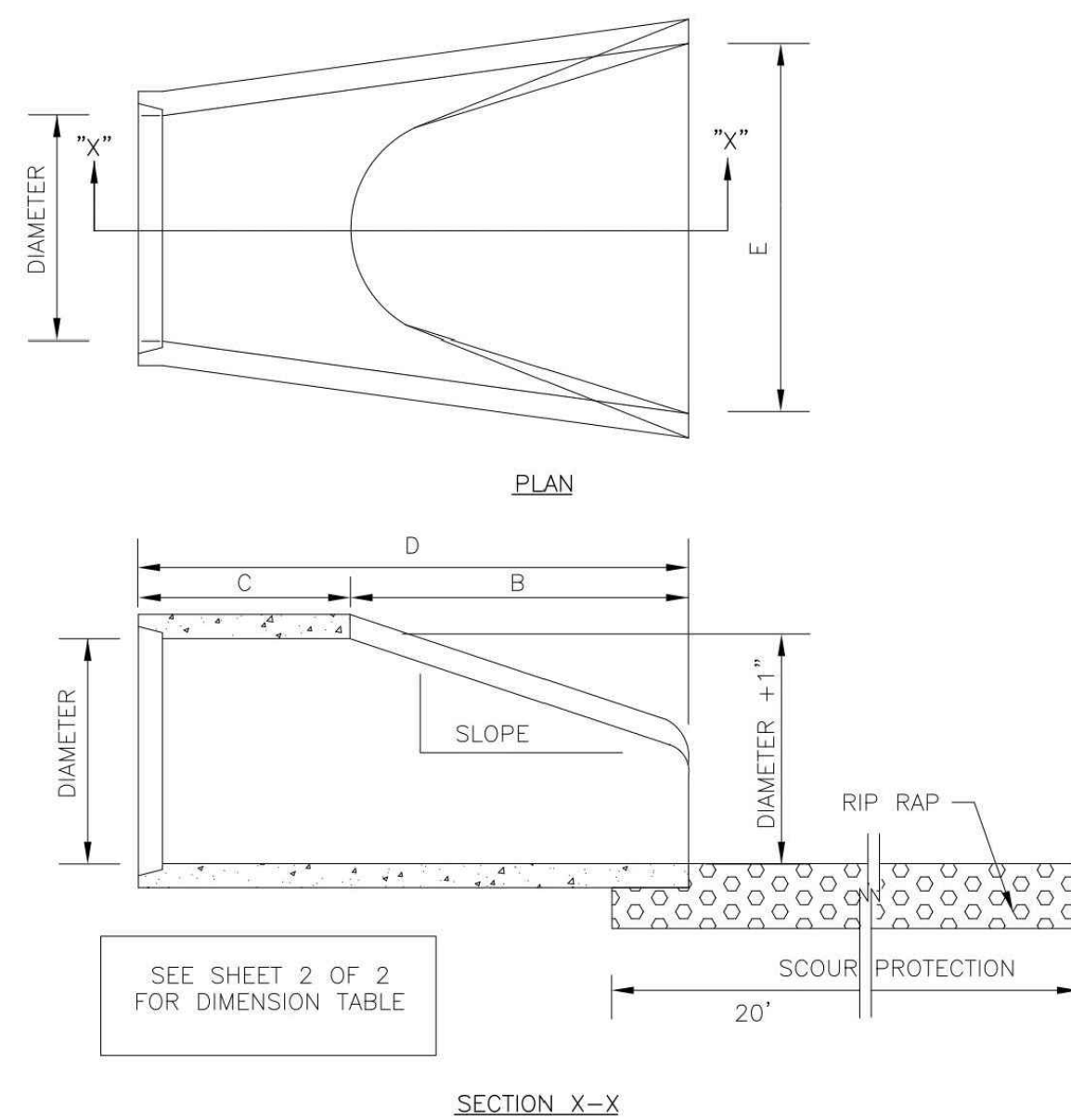
LOCATION NEW HANOVER COUNTY, WILMINGTON, NORTH CAROLINA
SCALE 1"=20'
DRAWN DAA
DATE 12/04/2020
CHK. KAS
DWG. NO. TBD
APP. _____
SHEET 5 OF 8

1. STRUCTURAL DESIGN OF END SECTION SHALL CONFORM WITH THAT OF STANDARD REINFORCED CONCRETE.

PIPE DIAMETER	WALL THICKNESS	SLOPE	B	C	D	E	UNIT WEIGHT
12	2 1/4	3:1	24	49	73	24	730
15	2 1/4	3:1	27	46	73	30	910
18	2 1/2	3:1	27	46	73	36	1190
21	2 3/4	3:1	36	37	73	42	1370
24	3	3:1	42	31 1/2	73 1/2	48	1770
27	3 1/4	3:1	48	25 1/2	73 1/2	54	2130
30	3 1/2	3:1	54	19 3/4	73 3/4	60	2380
33	3 3/4	3:1	60	36	96	66	3870
36	4	3:1	63	34 3/4	97 3/4	72	5320
42	4 1/2	3:1	63	35	98	78	5920
48	5	3:1	72	26	98	84	7470
54	5 1/2	2.4:1	66	34	100	90	8810
60	6	2:1	60	39	99	96	11180
72	7	2:1	78	21	99	108	13980

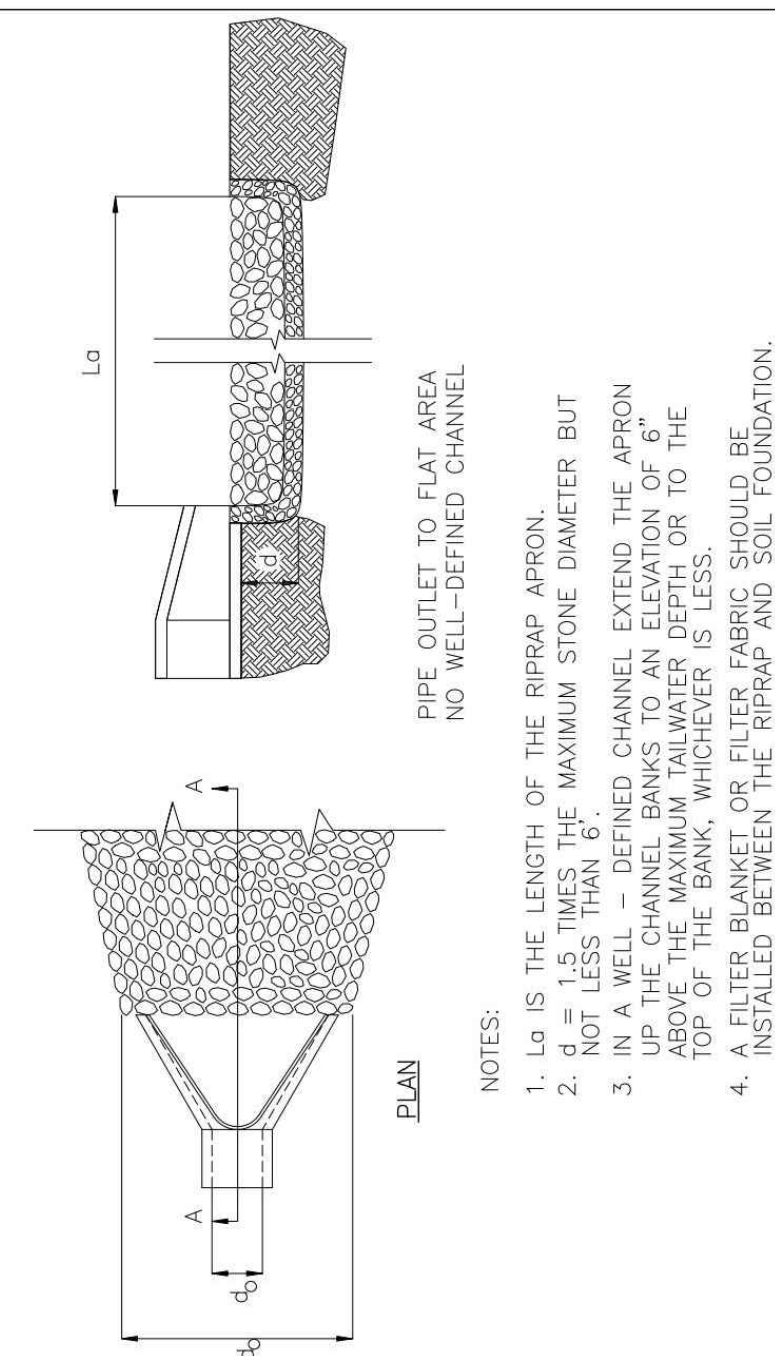
SHEET 2 OF 2

		STANDARD DETAIL		 CITY OF WILMINGTON ENGINEERING PO BOX 157 WILMINGTON, NC 28402 (910) 341-7807	
DATE: 2001		FLARED END SECTION OUTLET DIMENSION TABLE		SD I-17	
DRAWN BY: JSR/CHR					
CHECKED BY: B.P., P.E.					
SCALE: NOT TO SCALE					



SHEET 1 OF 2

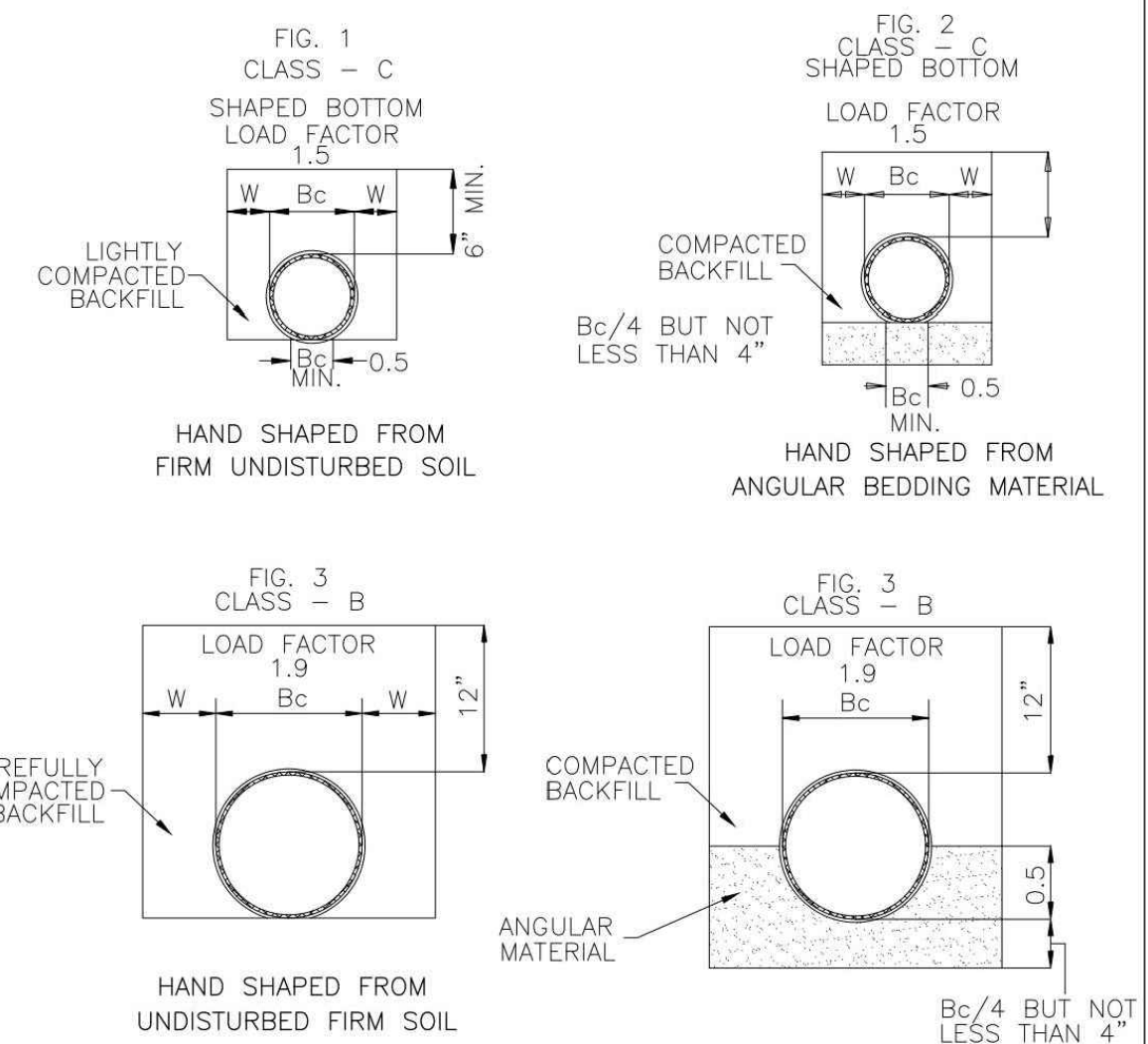
		STANDARD DETAIL		CITY OF WILMINGTON		
DATE: 2001		<div style="text-align: center;"> <h1>FLARED END SECTION OUTLET</h1> </div>		ENGINEERING OFFICE		
DRAWN BY: JSR/CMR				305 CHESTNUT STREET		
CHECKED BY: B.P., P.E.				PO. BOX 1810		
				WILMINGTON N.C. 28402		
SCALE: NOT TO SCALE				(910) 341-7807		SD 1-17




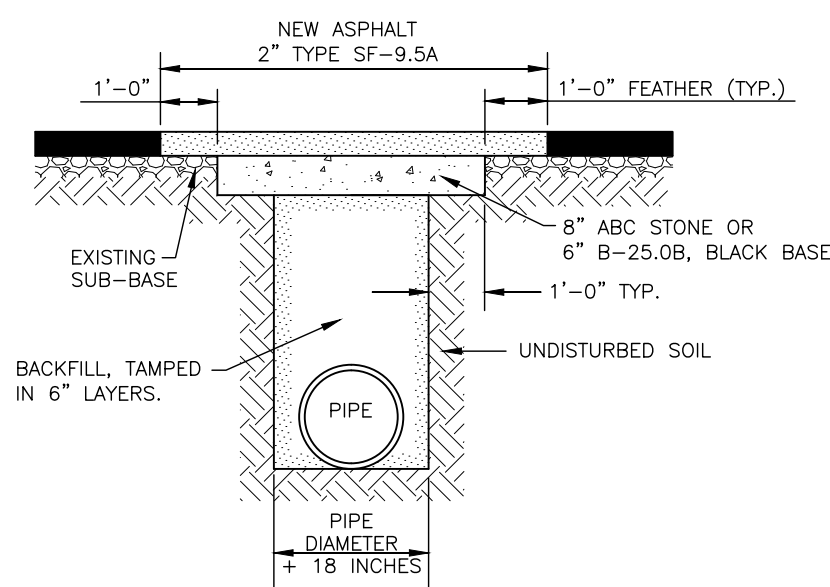
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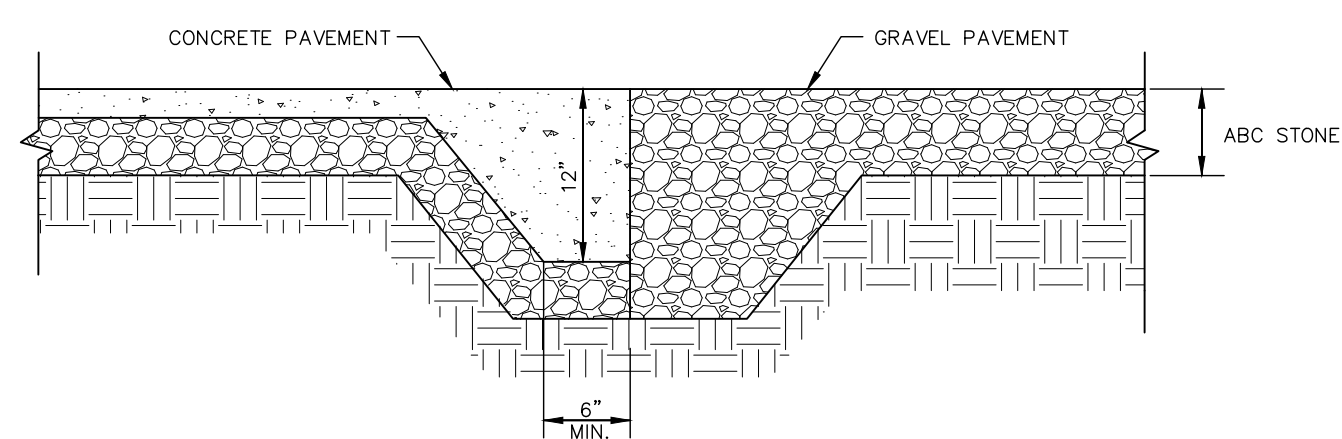
		STANDARD DETAIL		 CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807
DATE: 2001		PIPE OUTLET PROTECTION		
DRAWN BY JSR/CMR				
CHECKED BY B.P.P.E.				
SCALE NOT TO SCALE				
				SD 2-15



DATE: 2001 DRAWN BY: JSR/CMR CHECKED BY: B.P., P.E. SCALE: NOT TO SCALE		STANDARD DETAIL GUIDELINES FOR BEDDING DETAILS, STORM SEWER CLASSES (B & C)	 CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807
			SD 2-17

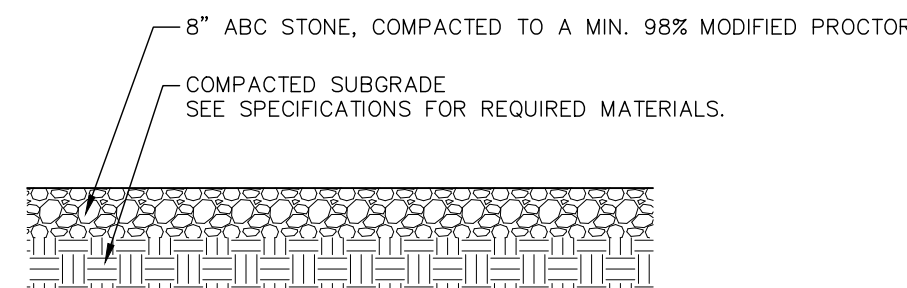


ASPHALT PAVEMENT PATCH
N.T.S.



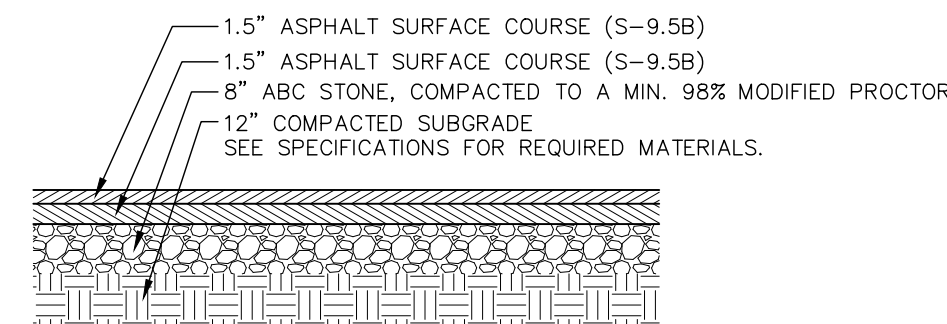
CONCRETE TO GRAVEL PAVEMENT TRANSITION
N.T.S.

NOTE:
THE CONTRACTOR SHALL VERIFY PAVEMENT DESIGN WITH THE GEOTECHNICAL
ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.



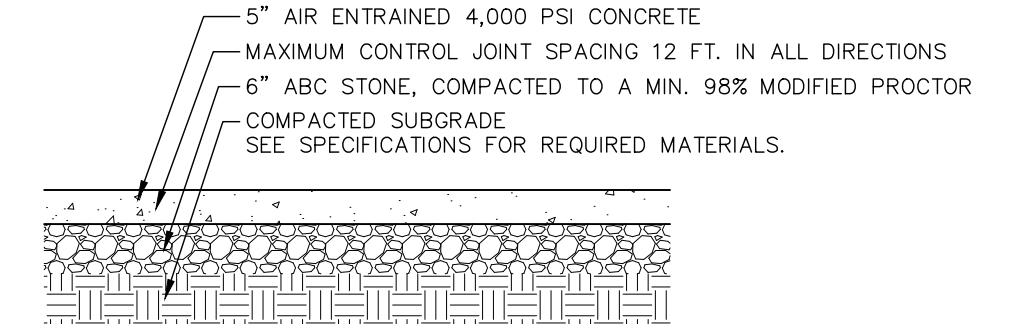
GRAVEL
PAVEMENT DETAIL
N.T.S.

NOTE:
THE CONTRACTOR SHALL VERIFY PAVEMENT DESIGN WITH THE GEOTECHNICAL
ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.



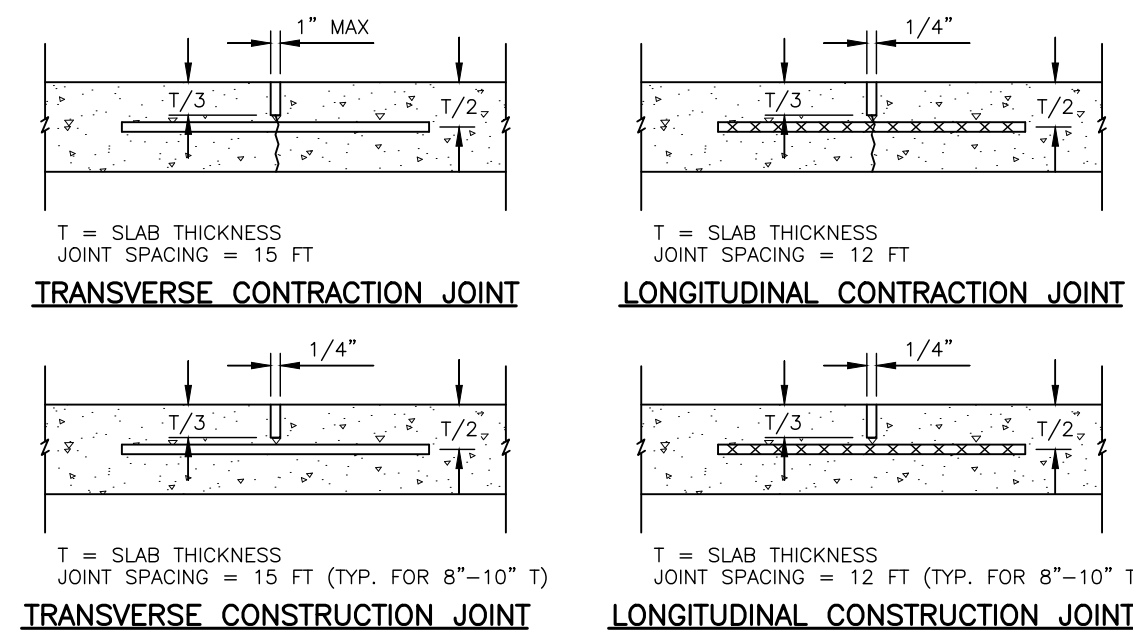
HEAVY-DUTY ASPHALT
PAVEMENT DETAIL
N.T.S.

NOTE:
THE CONTRACTOR SHALL VERIFY PAVEMENT DESIGN WITH THE GEOTECHNICAL
ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

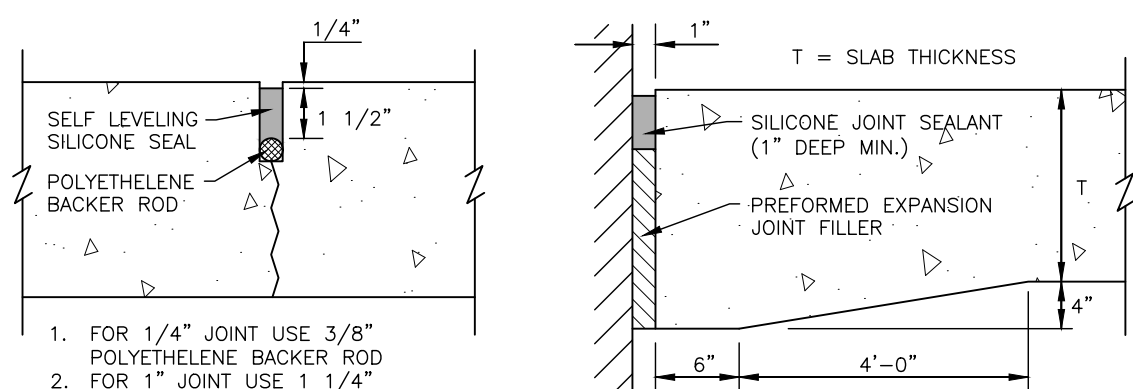


CONCRETE
PAVEMENT DETAIL

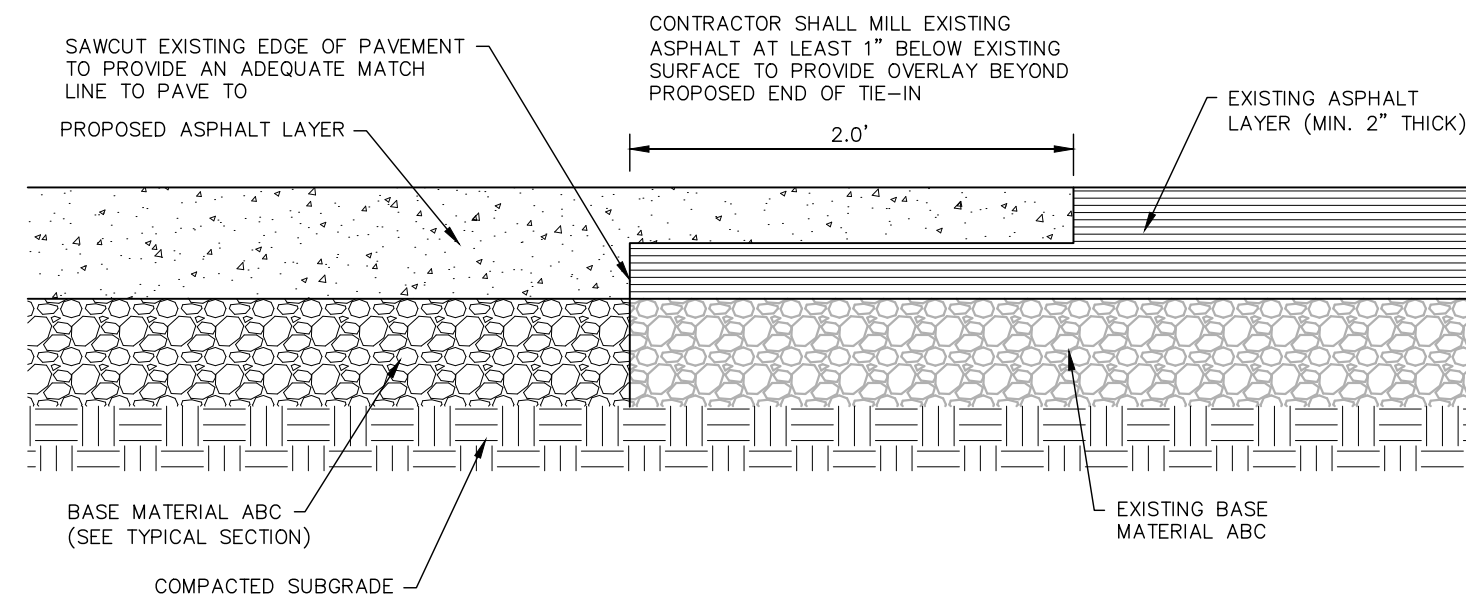
N.T.S.



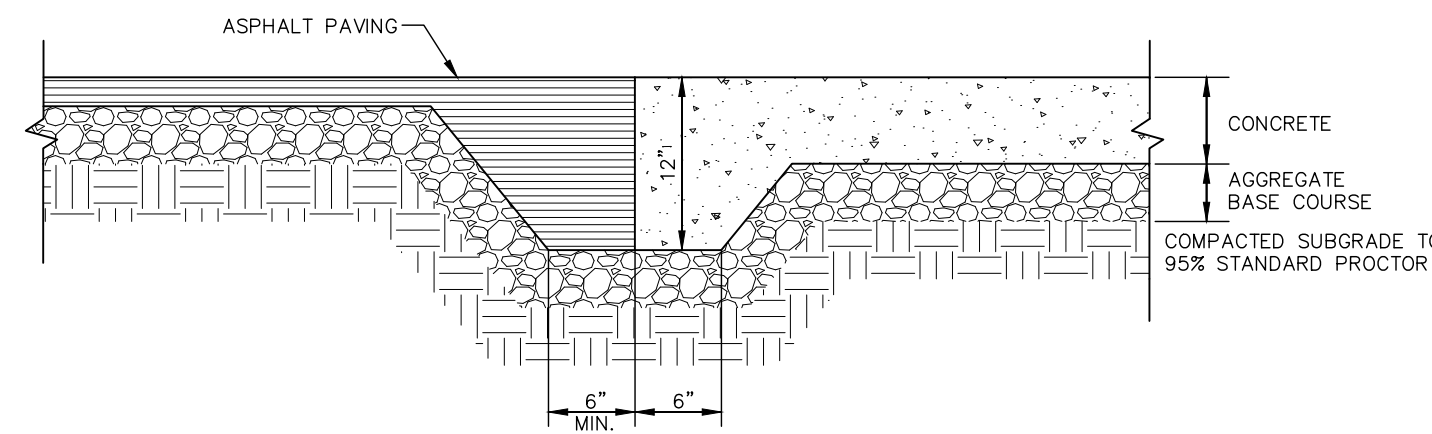
1. LONGITUDINAL JOINTS ARE TIED (DEFORMED BARS)
2. TRANSVERSE JOINTS ARE DOWELED (SMOOTH BARS)
3. ISOLATION JOINTS (EXPANSION) AT OBSTACLES WITHIN PAVEMENT.
4. DOWELS FOR $T = 8"-10"$ USE 1.25" DOWEL
5. DOWELS FOR $T > 10"$ USE 1.50" DOWEL
6. DOWELS SHALL BE EPOXY COATED 18" LONG, SPACED 12" O.C.
7. TIE BARS SHALL BE #5 REINFORCING BARS 30" LONG, SPACED 30" O.C.
IN ACCORDANCE WITH AASHTO M31



CONCRETE PAVEMENT JOINT DETAILS
N.T.S.



TYPICAL ASPHALT KEY-IN DETAIL
N.T.S.

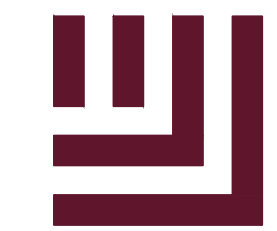


ASPHALT TO CONCRETE PAVEMENT TRANSITION
N.T.S.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT DUKE ENERGY PROGRESS, NEW HANOVER COUNTY, AND CITY OF WILMINGTON ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION

NO.	DATE	REVISION	BY	CK. APP



McADAMS

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www.mcadamsco.com



WILMINGTON CNG STATION
SUTTON STEAM PLANT ROAD
SITE & STORM DRAINAGE DETAILS

LOCATION	NEW HANOVER COUNTY, WILMINGTON, NORTH CAROLINA		
SCALE	N.T.S.	SCALE RATIO	1:1
DRAWN	DAA	CHK. KAS	APP. <u> </u>
DATE	12/04/2020	DWG. NO. TBD	SHEET 6 OF 8

