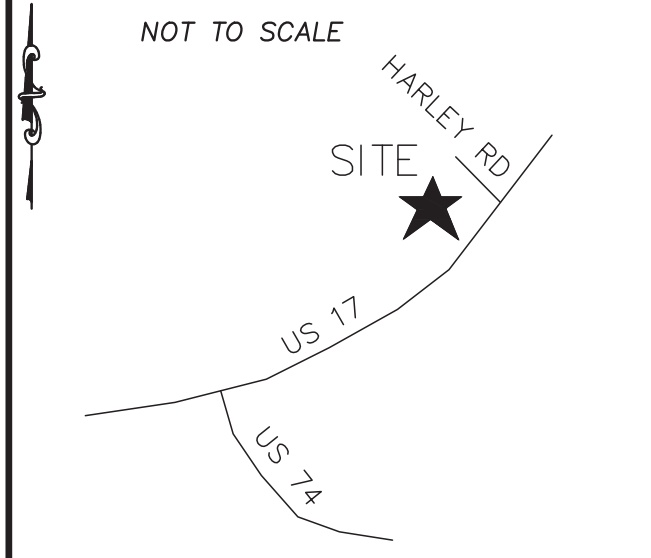


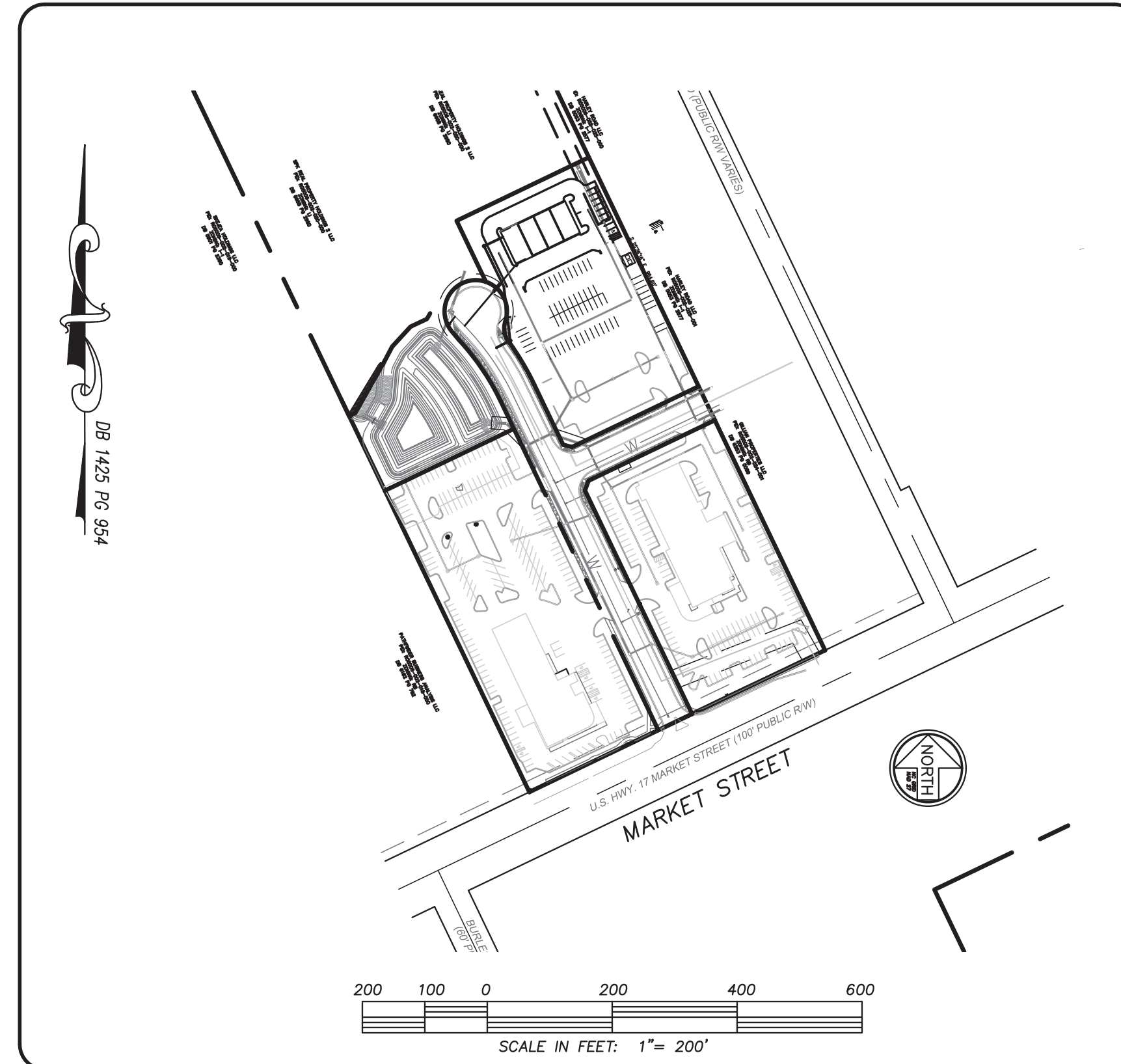
LOCATION MAP



CONSTRUCTION DRAWINGS for
COASTAL KIA
 LOCATED IN CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA

GENERAL NOTES:

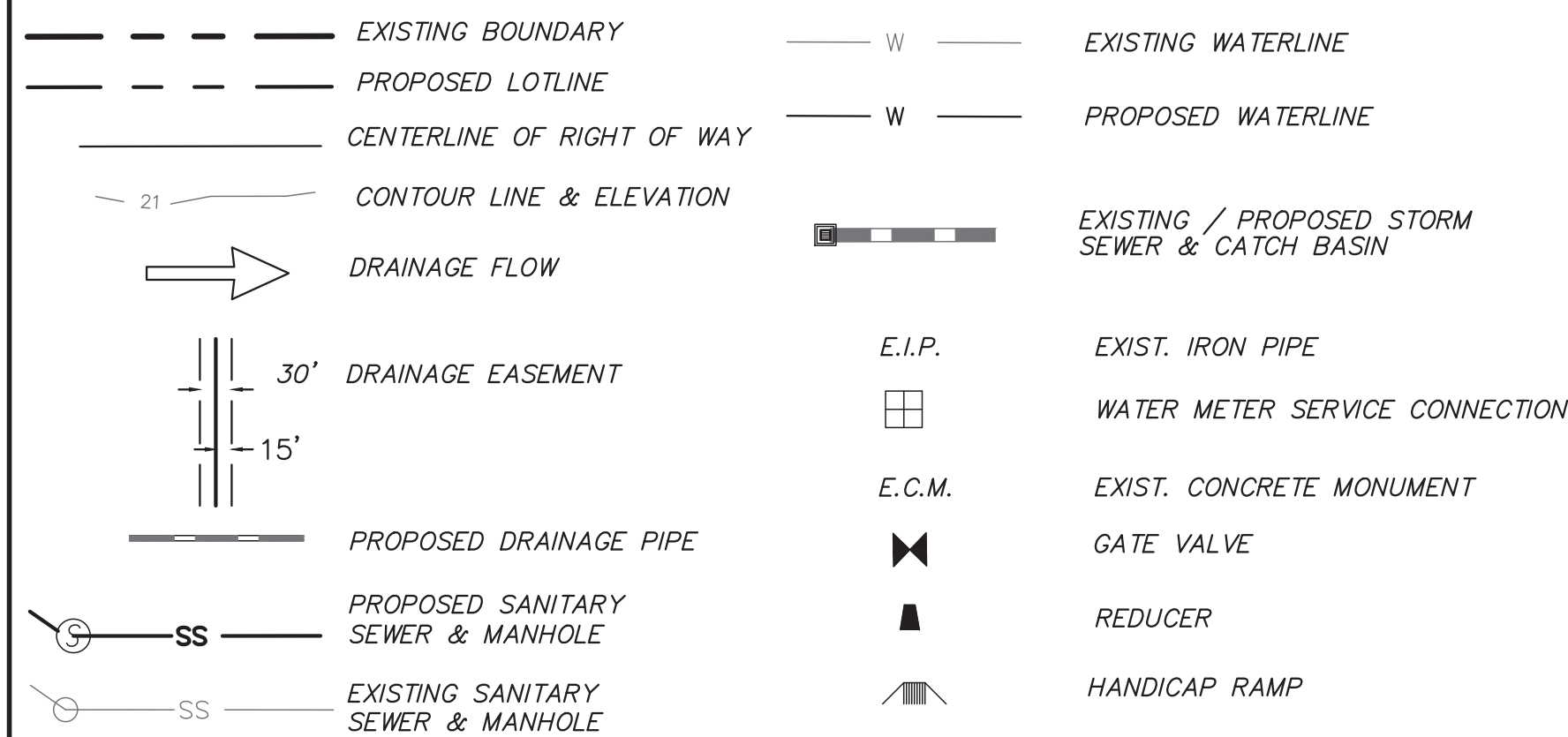
1. NEW HANOVER COUNTY PARCEL NUMBERS:
PORTION PID = R05006-002-023-000
2. TOTAL PROJECT AREA: 2.19 AC (LOT 3)
3. EXISTING ZONING DISTRICT: UJ
4. OAMA LAND CLASSIFICATION: URBAN
5. THIS SITE IS LOCATED WITHIN ZONE "X" ACCORDING TO FEMA FIRM COMMUNITY PANEL NUMBER 3720314800K, EFFECTIVE DATE 8/28/18
6. SITE ADDRESS: 152 SAVINGS STREET
7. BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED AND PROVIDED TO CSD ENGINEERING BY HANOVER DESIGN SERVICES; VERTICAL DATUM = 88
8. STORMWATER DRAINS TO SMITH CREEK, C; SW 18-74-63-1
9. LAND OWNER - SPK REAL PROPERTY HOLDINGS, LLC
6103 MARKET STREET
WILMINGTON, NC 28405



NOTES:

1. ASBUILT, BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED AND PROVIDED TO CSD ENGINEERING BY HANOVER DESIGN SERVICES.
2. THIS MAP IS NOT FOR CONVEYANCE, RECORDATION, OR SALES.
3. THIS PROPERTY IS LOCATED WITHIN ZONE "X" ACCORDING TO THE FEMA FLOOD INSURANCE RATE MAP, 3720314800K, EFFECTIVE DATE 8/28/18
4. THIS PROPERTY IS ZONED UJ
5. CFPWA WATER
6. CFPWA SEWER
7. ALL CONSTRUCTION TO CONFORM TO NEW HANOVER COUNTY STANDARDS AND APPLICABLE STATE & LOCAL CODES.
8. CONTRACTOR TO COORDINATE ANY REQUIRED TRAFFIC CONTROL WITH CITY OF WILMINGTON AND OR NCDOT.
9. CARE SHALL BE TAKEN DURING FINAL GRADING TO ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND TO RECEIVING STRUCTURES. ROOF DRAIN DOWNSPOUTS TO BE CONNECTED TO STORM DRAINAGE STUBOUTS OR DIRECTED TO STREET/PARKING AREAS.
10. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ANY RELOCATIONS, RE-ALIGNMENTS, DISCONNECTIONS OR CONNECTIONS OF EXISTING UTILITIES WITH APPLICABLE AUTHORITIES.
11. CLEARING AND GRUBBING OF SITE TO INCLUDE REMOVAL OF EXISTING CURB, ASPHALT, INLETS, AND ANY OTHER STRUCTURES INCLUDING TREES, STUMPS AND DEBRIS EXISTING ON SITE. TREES NOT REQUIRED TO BE CLEARED FOR CONSTRUCTION SHALL REMAIN UNLESS OTHERWISE DIRECTED.
12. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES AT ALL CROSSINGS PRIOR TO COMMENCING TRENCH EXCAVATION. IF ACTUAL CLEARANCES ARE LESS THAN INDICATED ON PLAN, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. ANY CONDITION DISCOVERED OR EXISTING THAT WOULD NECESSITATE A MODIFICATION OF THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
13. NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED. CALL "NC ONE-CALL" AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.
14. CONTRACTOR SHALL ADJUST ALL MANHOLES, VALVE & CURB BOXES TO FINAL GRADE UPON COMPLETION OF ALL CONSTRUCTION. ANY BOXES DAMAGED OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
15. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST AND EROSION DURING CONSTRUCTION AT HIS EXPENSE. PARKING AREAS SHALL BE WATERED TO CONTROL DUST WHEN ORDERED BY THE ENGINEER.
16. NO GEOTECHNICAL TESTING HAS BEEN PERFORMED ON SITE. NO WARRANTY IS MADE FOR SUITABILITY OF SUBGRADE, AND UNDERCUT AND ANY REQUIRED REPLACEMENT WITH SUITABLE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
17. CONTRACTOR TO ENSURE THAT PAVEMENT IS PLACED SO AS TO DRAIN POSITIVELY TO THE STREET INLETS AND CATCH BASINS. ALL FUTURE ROOF DRAIN DOWNSPOUTS TO BE DIRECTED TO THE STORM DRAINAGE STUBOUTS.
18. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS.
19. THIS PLAN IS FOR SITE GRADING, UTILITIES, SITING, AND DRAINAGE ONLY. SEE BUILDING PLANS FOR DETAILED HOOKUPS TO BUILDINGS, ETC.
20. CONTRACTOR AND BUILDER ARE RESPONSIBLE FOR COORDINATING FINISHED FLOOR ELEVATION OF ALL BUILDINGS WITH THE OWNER. ELEVATIONS GIVEN ARE MINIMUM GROUND ELEVATIONS AT THE BUILDING SITE AND DO NOT PURPORT TO BE FINISHED FLOOR. MINIMUM RECOMMENDED FF ELEVATIONS SHOWN ON PLANS.
21. AFFECTED NON-MUNICIPAL UTILITIES SHALL BE CONTACTED AND PROVIDED WITH PLANS AND OTHER PERTINENT INFORMATION, WHEN FEASIBLE, TO COORDINATE APPROPRIATE SCHEDULING AND PLACEMENT.
22. EXTREME CARE SHALL BE TAKEN TO ENSURE MINIMUM SEPARATIONS AT ALL UTILITY CROSSINGS.
23. MINIMUM SEPARATION SHALL BE MAINTAINED AS FOLLOWS:
 - a. HORIZONTAL SEPARATION OF 10 FEET BETWEEN SANITARY SEWER AND WATER MAINS AND STORM SEWER.
 - b. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND WATER OR WHERE SEWER LINE CROSSES ABOVE WATER MAIN, BOTH PIPES SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING.
 - c. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10 FEET EITHER SIDE OF CROSSING.
 - d. WHERE VERTICAL CLEARANCE IS LESS THAN 12" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING, AND BRIDGING SHALL BE INSTALLED PER APPLICABLE UTILITY AUTHORITY'S DETAILS.
 - e. IN NO CASE SHALL THERE BE LESS THAN 18" OF SEPARATION BETWEEN OUTSIDE OF WATER MAIN AND OUTSIDE OF SEWER OR STORM DRAINAGE.
 - f. MINIMUM COVER OF 36" SHALL BE PROVIDED FOR ALL BURIED WATER MAINS AND SANITARY SEWER MAINS.
24. SEE DETAIL SHEETS FOR TYPICAL UTILITIES HOOKUPS.
25. ALL SANITARY SEWER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
26. ALL WATER MAINS TO BE 8" UNLESS OTHERWISE INDICATED.
27. TWO VALVES ARE REQUIRED AT "T" INTERSECTIONS AND ONE VALVE ON THE WATER LINE TO FIRE HYDRANTS.
28. A BLOW-OFF VALVE IS REQUIRED AT THE TERMINUS OF ALL "DEAD END" WATER LINES.

LEGEND



OWNER:
 SPK REAL PROPERTY HOLDINGS, LLC
 6103 MARKET STREET
 WILMINGTON, NC 28405

INDEX TO DRAWINGS

SHEET No.	DESCRIPTION	DRAWING No.
1 OF 6	COVER SHEET	CD_COVER
2 OF 6	EXISTING BOUNDARY AND TOPOGRAPHY, ADJACENT TRAFFIC	CD_EX-COND
3 OF 6	SITE PLAN	SITE_PLAN
4 OF 6	CITY OF WILMINGTON CONSTRUCTION DETAILS	SP_DET-1
5 OF 6	CITY OF WILMINGTON CONSTRUCTION DETAILS	SP_DET-2
6 OF 6	GRADING / UTILITY PLAN/LANDSCAPE	UP
EC1 OF EC3	EROSION CONTROL PLANS	EC1
EC2 OF EC3	EROSION CONTROL PLANS	EC2
EC3 OF EC3	EROSION CONTROL PLANS	EC2



LICENSE # C-2710
 ENGINEERING
 LAND PLANNING
 COMMERCIAL / RESIDENTIAL

P.O. BOX 4041
 WILMINGTON, NC 28406
 (910) 791-4441

COVER SHEET
 COASTAL KIA

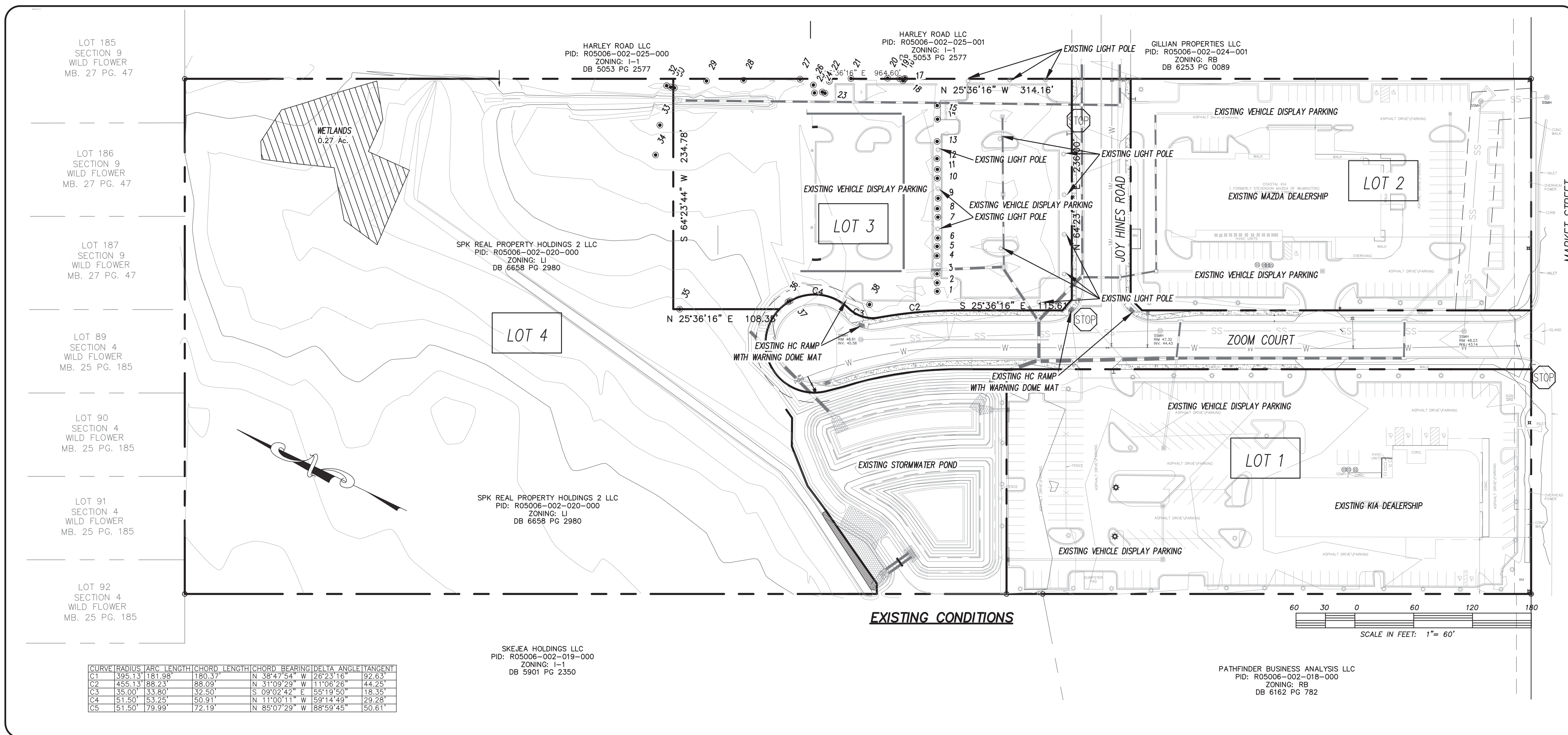
COVER SHEET FOR
 COASTAL KIA
 LOCATED IN CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA
 OWNER:
 SPK REAL PROPERTY HOLDINGS, LLC
 6103 MARKET STREET
 WILMINGTON, NC 28405

PRELIMINARY

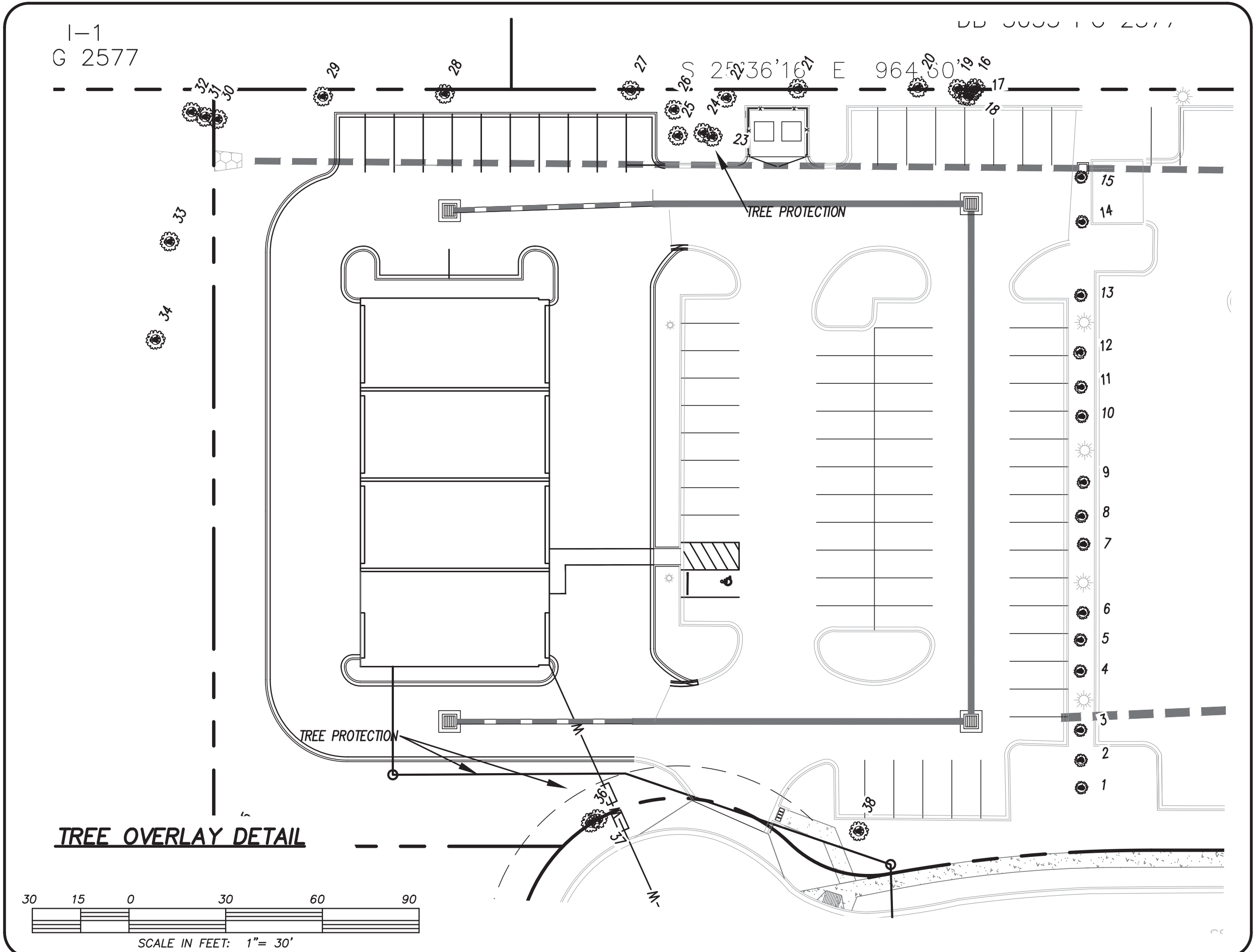
REV.	NO.	DATE	BY	REMARKS
2	28-24	2-28-24	RLW	
1	10-5-23	10-5-23	JFH	
1	11-28-19	11-28-19	MBB	
1	9-18-19	9-18-19	RLW	

DATE: 6-3-19
 HORZ. SCALE: 1" = 200'
 VERT. SCALE: N/A
 DRAWN BY: RLW
 CHECKED BY: HSR
 PROJECT NO.: 06-0092

Point #	Description	REMOVE
1	5" RIVER BIRCH	
2	5" RIVER BIRCH	
3	6" RIVER BIRCH	
4	6" RIVER BIRCH	
5	7" RIVER BIRCH	
6	5" RIVER BIRCH	
7	5" RIVER BIRCH	
8	5" RIVER BIRCH	
9	5" RIVER BIRCH	
10	7" RIVER BIRCH	
11	4" RIVER BIRCH	
12	6" RIVER BIRCH	
13	6" RIVER BIRCH	
14	6" RIVER BIRCH	
15	8" RIVER BIRCH	
16	5" MAGNOLIA	
17	6" BLACK CHERRY	
18	5" BLACK CHERRY	
19	8" BLACK CHERRY	
20	18" LOB. PINE	
21	4" MAGNOLIA	
22	17" LIVE OAK	
23	12" LIVE OAK	
24	11" LIVE OAK	
25	12" LIVE OAK	
26	6" MAGNOLIA	
27	16" RED MAPLE	
28	21" SWEETGUM	
29	14" LOB. PINE	
30	12" LOB. PINE	
31	13" LOB. PINE	
32	13" LOB. PINE	
33	12" LOB. PINE	
34	12" LOB. PINE	
35	15" SWEETGUM	
36	11" SWEETGUM	
37	8" RED MAPLE	
38	18" LOB. PINE	



CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C1	395.13	181.98	180.37	N 38°47'54" W	26°23'16"	92.63
C2	455.13	88.23	88.09	N 31°09'29" W	11°08'28"	44.25
C3	35.00	33.80	32.50	S 09°02'42" E	55°19'50"	18.35
C4	51.50	53.25	50.91	N 11°00'11" W	59°14'49"	29.28
C5	51.50	79.99	72.19	N 85°07'29" W	88°59'43"	50.61



LEGEND

- EXISTING BOUNDARY
- PROP. BUILDING
- PROPOSED CONCRETE
- EXISTING WATER
- EXISTING SEWER
- EXISTING FIRE HYDRANT
- EXISTING CONTOUR
- EXISTING STORM DRAIN

CSD ENGINEERING
 LICENSE # C-2710
 ENGINEERING
 LAND PLANNING
 COMMERCIAL / RESIDENTIAL
 P.O. BOX 4041
 WILMINGTON, NC 28406
 (910) 791-4441

EXISTING CONDITIONS
COASTAL KIA

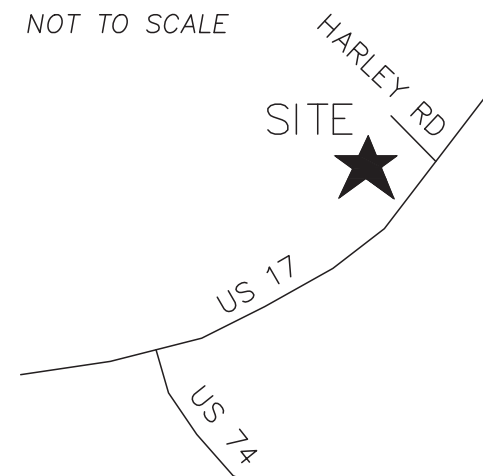
EXISTING CONDITIONS
COASTAL KIA
 LOCATED IN CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA
 OWNER:
 SPK REAL PROPERTY HOLDINGS, LLC
 6103 MARKET STREET
 WILMINGTON, NC 28405

PRELIMINARY

REV. NO.	DATE	BY	REMARKS
7	2-28-24	RLW	REVISED PER PRE-TRC COMMENTS
6	11-8-23	JFH	REVISED PER CITY COMMENTS
5	10-5-23	JFH	REVISED PER BUILDING ADDITION TO NEAR LOT
4	10-9-23	JFH	PLOTTED FOR CITY SIGNATURES
3	9-18-19	MRB	PLOTTED FOR CITY SIGNATURES
2	11-28-19	RLW	REVISIONS PER TRC, REVISED SHEET NUMBER
1	7-30-19	JSM	REVISIONS PER TRC / PLANNING COMMENTS

DATE: 6-3-19
 HORIZ. SCALE: 1" = 60'
 VERT. SCALE: N/A
 DRAWN BY: RLW
 CHECKED BY: HSR
 PROJECT NO.: 06-0092

LOCATION MAP



GENERAL NOTES:

- NEW HANOVER COUNTY PARCEL NUMBERS: PORTION PID = R05006-002-023-000
- TOTAL PROJECT AREA: 2.19 AC (LOT 3)
- EXISTING ZONING DISTRICT: LI
- CAMA LAND CLASSIFICATION: URBAN
- THIS SITE IS LOCATED WITHIN ZONE "X" ACCORDING TO FEMA FIRM COMMUNITY PANEL NUMBER 3720314800K, EFFECTIVE DATE 8/28/18
- SITE ADDRESS: 152 SAVINGS STREET
- BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED AND PROVIDED TO CSD ENGINEERING BY HANOVER DESIGN SERVICES; VERTICAL DATUM = 88
- STORMWATER DRAINS TO SMITH CREEK, C:SW 18-74-63-1
- LAND OWNER - SPK REAL PROPERTY HOLDINGS, LLC 6103 MARKET STREET WILMINGTON, NC 28405

WATER & SEWER USAGE NOTES:

CURRENT WATER USAGE - 0 GPD PROPOSED WATER USAGE - 0 GPD
 CURRENT SEWER USAGE - 0 GPD PROPOSED SEWER USAGE - 0 GPD

SITE & BUILDING DATA:

TOTAL LOT AREA = 95,291 SF (2.19 AC.)
 PROPERTY ADDRESS IS 152 SAVINGS STREET
 PID = R05006-002-023-000

PROPOSED IMPERVIOUS:
 PROPOSED BUILDING = 6,696 SF
 PROPOSED ASPHALT = 16,244 SF
 TOTAL = 22,940 SF

CONSTRUCTION TYPE OF DETAIL BUILDING: TYPE II-B
 BUILDING HEIGHT: 23' - 8"
 NUMBER OF STORIES: 2 STORY

SITE IS LOCATED WITHIN AN EXISTING PERMITTED STORMWATER DRAINAGE AREA. IMPERVIOUS AREA FOR THESE IMPROVEMENTS HAVE BEEN SUBTRACTED FROM THE FUTURE ALLOCATION IN THE PERMIT.

PERMITTED DRAINAGE AREA INCLUDES ALL OR PART OF PARCELS:
 R05006-002-027-000, R05006-002-020-000,
 R05006-002-023-000, R05006-002-026-000

	LOT 1	LOT 2	LOT 3	LOT 4	INSIDE ROW	OFFSITE	TOTAL
PARKING	83,601	51,841	65,319	-	-	-	200,761
BUILDINGS	16,212	20,234	6,696	-	-	-	43,142
STREETS	-	-	-	50,319	-	-	50,319
SIDEWALKS	2,600	1,100	200	-	11,227	-	15,127
OFFSITE	-	-	-	-	-	112,897	112,897
FUTURE	2,587	2,575	2,500	38,790	-	-	46,452
TOTAL:	105,000	75,750	74,715	38,790	61,546	112,897	468,698

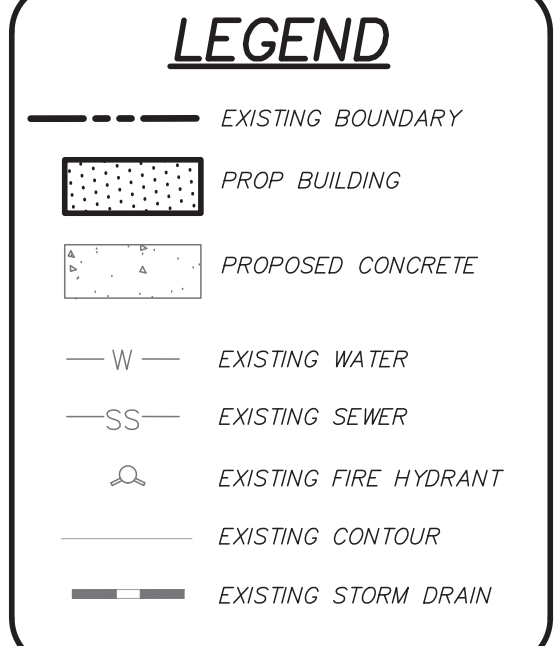
PROPOSED USE: MINOR VEHICLE REPAIR - DETAILING

SOILS ONSITE JO (JOHNSTON), SH (SEAGATE-URBAN)
 SE - SCS SOIL GROUP "A/D" PER USDA SOIL SURVEY WEBSITE
 MU - SCS SOIL GROUP "A/D" PER USDA SOIL SURVEY WEBSITE
 PROPOSED IMPERVIOUS OFFSITE: N/A

SETBACKS:
 FRONT = 35 FT
 SIDE STREET = 35 FT
 SIDE INTERIOR = 10 FT
 REAR = 20 FT

FIRE & LIFE SAFETY NOTES:

- LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE FIRE HYDRANTS OR FDC'S. A 3 FT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT.
- CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE FIRE LINE PERMIT FROM COW FIRE AND LIFE SAFETY DIVISION, 910-343-0696.
- ALL FDC LOCATIONS TO BE SHOWN ON FINAL PLAN.
- FDC MUST BE ON THE FRONT OF THE BUILDING(S) UNLESS OTHERWISE APPROVED.
- FIRE HYDRANTS TO BE INSTALLED PER CITY OF WILMINGTON ORDINANCE AND CFPWA STANDARDS.
- WATER FLOW ANALYSIS WILL BE REQUIRED TO DETERMINE THE CORRECT MAIN SIZE TO MEET FIRE FLOW DEMAND.
- NEW HYDRANTS TO BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.
- HYDRANT MUST BE WITHIN 150 FT OF THE FDC (MEASURED AS THE TRUCK DRIVES).
- FDC MUST BE WITHIN 40 FT OF FIRE APPARATUS PLACEMENT.
- IN ADDITION TO THE STANDARD COMMENTS, ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- CONTRACTOR SHALL SUBMIT A RADIO STRENGTH STUDY THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 NC FIRE CODE.



DEVELOPMENT NOTES:

- ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION. CALL U-LOCO AT 1-800-632-4949. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY UTILITIES, CURB AND GUTTER, SIDEWALK PANELS, PAVEMENT, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OR WORKMANSHIP FOUND IN THE ORIGINAL ITEM.
- SOLID WASTE DISPOSAL WILL BE TRASH DUMPSTER.
- ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE CITY OF WILMINGTON ZONING ORDINANCE & SUBDIVISION REGULATIONS.
- APPROVAL OF SITE PLAN DOES NOT CONSTITUTE APPROVAL OF PROPOSED SIGNAGE FOR THIS SITE. A SEPARATE SIGN PERMIT MUST BE OBTAINED.
- APPLICABLE STREET FRONTAGES SHALL HAVE NATURAL VEGETATIVE SCREENING MEETING CITY REQUIREMENTS.
- THE DEVELOPMENT SHALL COMPLY WITH ALL CITY TECHNICAL STANDARDS AND DEVELOPMENT REGULATIONS.

PARKING NOTES:

- DETAIL BUILDING IS NOT INTENDED FOR PUBLIC USE.
- REQUIRED PARKING FOR DETAIL BUILDING = 5
2 PLUS 1 PER EMPLOYEE
14 SPACES PROVIDED
 - HANDICAP SPACES REQUIRED = 1
HANDICAP SPACES PROVIDED = 1

TRIP ESTIMATION FOR PROPOSED DETAIL BUILDING:

LUC 840
 AM PEAK PM PEAK
 ENTER - 16 : EXIT - 13 ENTER - 16 : EXIT - 20

UTILITY NOTES:

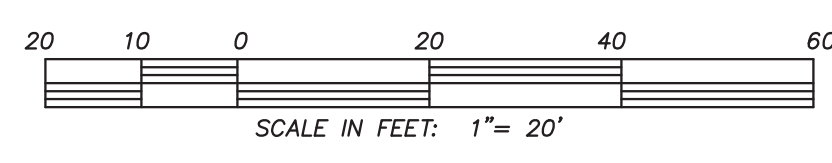
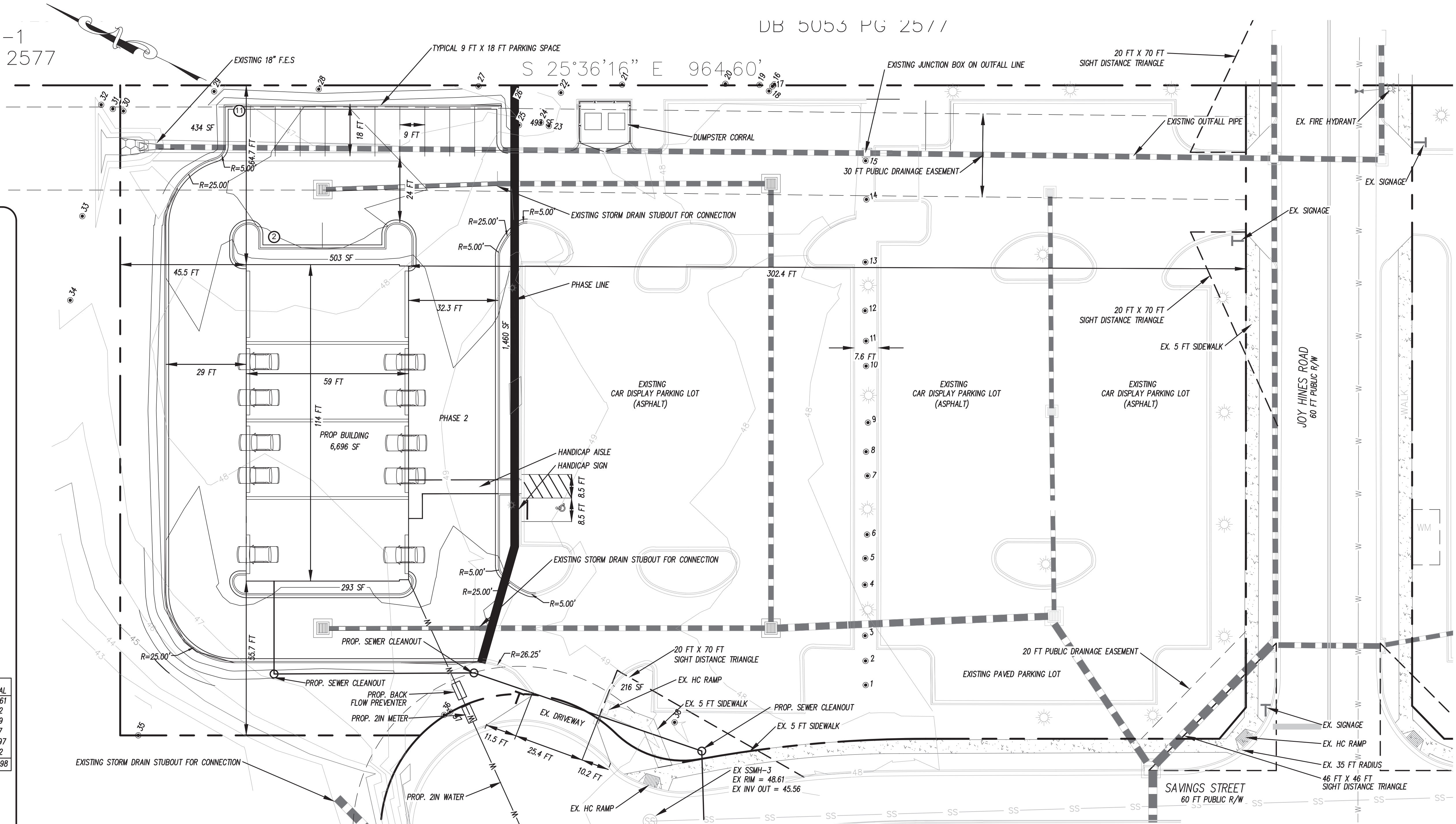
- PROJECT SHALL COMPLY WITH THE CITY OF WILMINGTON AND CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE SET AND ACTIVATED ON NEW MAINS UNTIL ALL REQUIREMENTS ARE MET. CALL 343-3910 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES WATER FOR CONSTRUCTION HE/SHE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- ALL COMMERCIAL WATER SERVICES AND ANY IRRIGATION SYSTEMS SUPPLIED BY CFPWA WATER SHALL HAVE A BACKFLOW PREVENTION DEVICE ACCEPTABLE TO THE CFPWA AND APPROVED BY USFCCOHR OR ASSE. CALL 799-6064 FOR INFORMATION.
- WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED COPPER WIRE INSTALLED THE ENTIRE LENGTH AND STRAPPED TO THE PIPES WITH DUCT TAPE. THE INSULATED WIRE IS TO BE STRIPPED TO BARE WIRE AND SECURED TO ALL VALVES AND FITTINGS. THE WIRE IS TO BE ACCESSIBLE AT ALL FIRE HYDRANTS AND WATER METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
- 36" MINIMUM COVER OVER ALL WATER MAINS.
- ANY SEPARATE CONNECTION FOR IRRIGATION SHALL COMPLY WITH CITY AND CFPWA CROSS-CONNECTION REQUIREMENTS WITH APPROVED BACKFLOW PREVENTION DEVICES.
- AT LOCATIONS WHERE WATER MAIN CROSSES UNDER SANITARY SEWER, DUCTILE IRON PIPE SHALL BE USED ALONG WITH PROVIDING 24" MINIMUM OF VERTICAL SEPARATION.
- WATER SERVICES CAN NOT BE ACTIVATED ON NEW WATER MAINS UNTIL ENGINEER'S CERTIFICATION AND APPLICANT'S CERTIFICATION HAVE BEEN PROVIDED TO NCDENR AND "FINAL APPROVAL" ISSUED.
- UNDERGROUND UTILITIES- ALL NEW UTILITIES SHALL BE INSTALLED UNDERGROUND, EXCEPT WHERE SUCH PLACEMENT IS PROHIBITED OR DEEMED IMPRACTICAL BY THE UTILITY PROVIDER. UNDERGROUND FACILITIES FOR STREET LIGHTING ALONG ALL PUBLIC STREETS ABUTTING THE SUBJECT SITE SHALL BE INSTALLED BY THE DEVELOPER.

ENVIRONMENTAL NOTES:

- NO LAND DISTURBANCE IS PERMITTED OUTSIDE THE DESIGNATED LIMITS OF DISTURBANCE FOR SITE IMPROVEMENTS OTHER THAN WHAT IS NECESSARY TO THE INTO EXISTING CONTOURS OR MEET LANDSCAPING REQUIREMENTS.

TRAFFIC ENGINEERING NOTES:

- A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO RECORDING OF THE FINAL PLAN. PLAN SHALL ADHERE TO SD 15-14.
- TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS.
- OPEN CUT NOTES:
 A. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 910-341-5899 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
 B. CONTRACTOR TO COORDINATE WITH CITY OF WILMINGTON FOR ACCEPTABLE HOURS OF CONSTRUCTION AND TRAFFIC CONTROL DURING INSTALLATION OF UTILITIES IN CITY ROADS.
 C. SUITABLE COMPACTION AND APPROVED STONE & BASE COURSES TO BE INSTALLED IN PLACE OF OPEN CUT.
 D. OPEN CUT TO BE SAW CUT.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS OF WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NDOT STANDARDS.
- IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
- TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT OF WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- ALL PARKING STALL MARKINGS AND LANE MARKINGS WITHIN THE PARKING AREA SHALL BE WHITE.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30 INCHES - 10 FT.
- ANY REQUIRED INSTALLATION OR RELOCATION OF TRAFFIC SIGNS/PAVEMENT MARKINGS IS THE RESPONSIBILITY OF THE PROJECT DEVELOPER. PLEASE COORDINATE WITH CITY TRAFFIC SIGNS AND PAVEMENT MARKINGS MANAGER/SUPERVISOR PRIOR TO INSTALLATION/RELOCATION OF ANY TRAFFIC SIGNS OR MARKINGS IN EXISTING OR PROPOSED PUBLIC ROW.
- NO PARKING SPACES, FENCES, WALLS, POSTS, LIGHTS, SHRUBS, TREES, OR OTHER TYPE OF OBSTRUCTIONS NOT SPECIFICALLY EXEMPTED SHALL BE PERMITTED IN THE SPACE BETWEEN 30 INCHES AND ABOVE GROUND AND 10 FEET ABOVE GROUND LEVEL WITHIN A TRIANGULAR SIGHT DISTANCE.
- CONTACT 811 PRIOR TO CONTACTING CITY OF WILMINGTON, TRAFFIC ENGINEERING REGARDING THE UTILITIES IN THE ROW.



CSD ENGINEERING
 LICENSE # C-2710
 ENGINEERING
 LAND PLANNING
 COMMERCIAL / RESIDENTIAL
 P.O. BOX 4041
 WILMINGTON, NC 28406
 (910) 791-4441

SITE PLAN
 COASTAL KIA

SITE PLAN
 COASTAL KIA
 LOCATED IN CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA
 OWNER: SPK REAL PROPERTY HOLDINGS, LLC
 6103 MARKET STREET
 WILMINGTON, NC 28405

PRELIMINARY

REV. NO.	DATE	BY	REMARKS
1	2/26/24	RLW	REVISION PER PRE-TRC COMMENTS
2	11/02/23	JLF	REVISION PER CITY COMMENTS
3	11/02/23	JLF	REVISION PER BUILDING ADDITION TO REAR LOT
4	11/28/19	MBR	REVISED PER CITY SIGNATURES
5	11/22/19	RLW	REVISED PER CITY COMMENTS
6	11/22/19	RLW	REVISED PER CITY COMMENTS
7	10/29/19	RLW	REVISED PER CITY COMMENTS
8	10/29/19	RLW	REVISED PER CITY COMMENTS
9	10/29/19	RLW	REVISED PER CITY COMMENTS
10	10/29/19	RLW	REVISED PER CITY COMMENTS
11	10/29/19	RLW	REVISED PER CITY COMMENTS
12	10/29/19	RLW	REVISED PER CITY COMMENTS
13	10/29/19	RLW	REVISED PER CITY COMMENTS
14	10/29/19	RLW	REVISED PER CITY COMMENTS
15	10/29/19	RLW	REVISED PER CITY COMMENTS

DATE: 6-3-19
 HORZ. SCALE: 1" = 20'
 VERT. SCALE: N/A
 DRAWN BY: RLW
 CHECKED BY: HSR
 PROJECT NO.: 06-0092
 Sheet No. **3** of **6**

REV.	NO.	DATE	BY	REMARKS
1	1	2-28-14	RLW	
2	2	11-28-19	MB	REVISED PER PRE-TRC COMMENTS
3	3	9-18-19	RLW	PLOTTED FOR CITY SIGNATURES

DATE: 6-3-19
HORIZ. SCALE: N/A
VERT. SCALE: N/A
DRAWN BY: RLW
CHECKED BY: HSR
PROJECT NO.: 06-0092

FRONT VIEW
8' MAX.
VARIABLE AS DIRECTED BY THE ENGINEER
TREE PROTECTION AREA DO NOT ENTER
ZONA PROTECTORA PARA LOS ARBOLES PROHIBIDO ENTRAR
PLASTIC OR WIRE TIES
GRADE
ORANGE, UV RESISTANT HIGH - TENSILE STRENGTH POLY BARRICADE FABRIC (TYPICAL)

WARNING SIGN DETAIL
3'-0" x 2'-0"
28"
40"
18"
TREE PROTECTION AREA DO NOT ENTER
ZONA PROTECTORA PARA LOS ARBOLES PROHIBIDO ENTRAR

SIDE VIEW
3'-0"
28"
40"
18"
TREE PROTECTION AREA DO NOT ENTER
ZONA PROTECTORA PARA LOS ARBOLES PROHIBIDO ENTRAR

NOTES:
1. THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
2. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
3. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 100' IN PERIMETER, PROVIDE NO LESS THAN TWO SIGNS PER PROTECTION AREA.
4. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE AND SIGNS THROUGHOUT DURATION OF PROJECT.
5. TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION.
6. ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

STANDARD DETAIL
DATE: JAN, 2015
DRAWN BY: JSR
CHECKED BY: RDG, P.E.
SCALE: NOT TO SCALE
TREE PROTECTION DURING CONSTRUCTION
SHEET 2 of 2
SD 15-09

NOTE:
THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.

NOTE:
CROWN OF THE TREE IS NEEDED FOR LEAF GROWTH TO PRODUCE OXYGEN, FILTER THE AIR, REDUCE WIND AND SOFTEN NOISE. DO NOT DISFIGURE CROWN WITH INTENSIVE PRUNING.

CRZ
ORANGE SAFETY FENCE OR ORANGE SILT FENCE (TYPICAL)
DBH
3' MIN
8' MAX

NOTES:
1. PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
2. CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
3. IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR LOGGING MATTS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
4. WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
5. FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO MATERIALS OR EQUIPMENT SHALL BE STORED BENEATH TREES. DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
6. FAILING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$500/DAY. DISTURBANCE OTHER THAN THAT ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR 3 YRS FOR TREE MITIGATION.

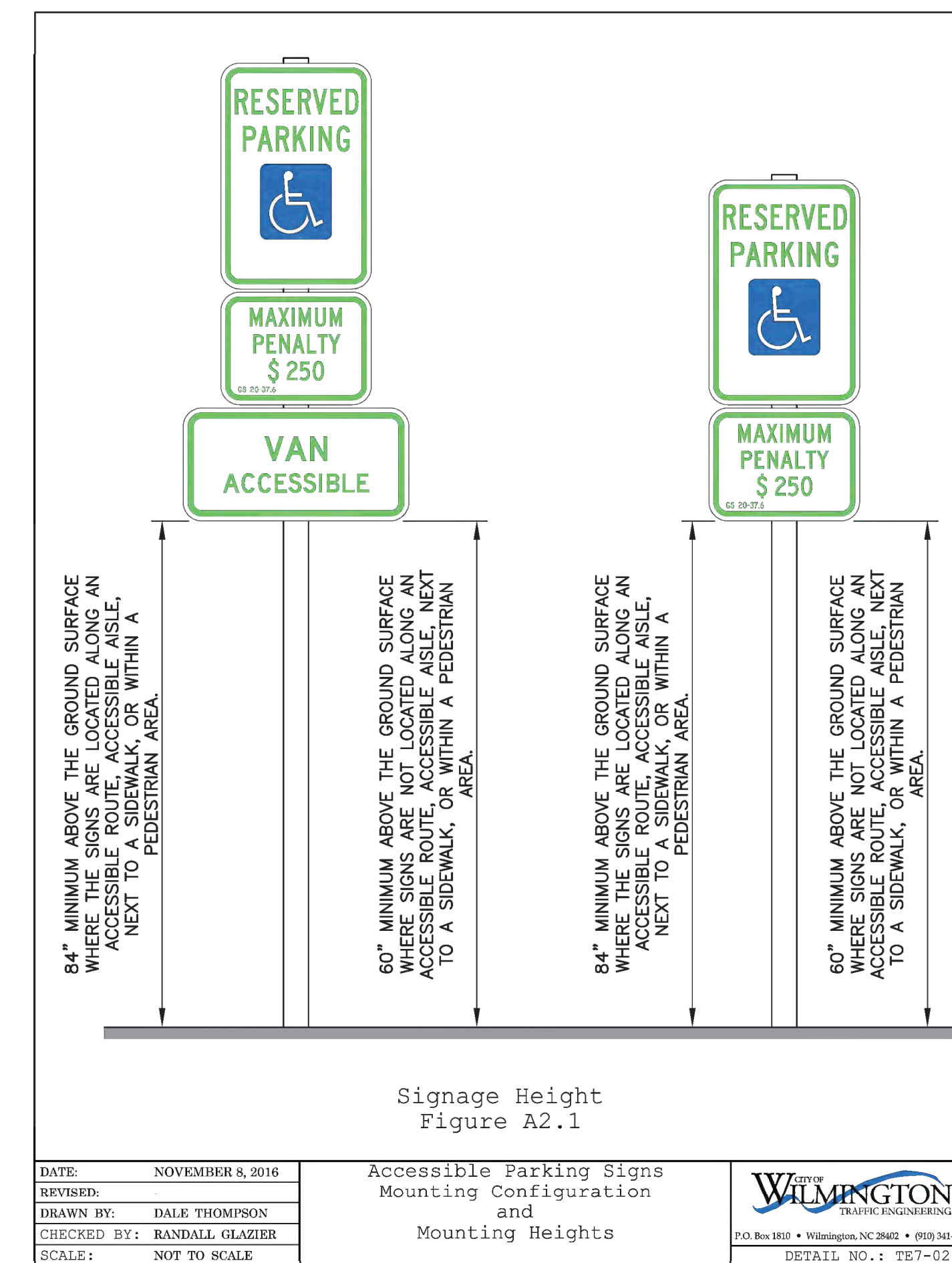
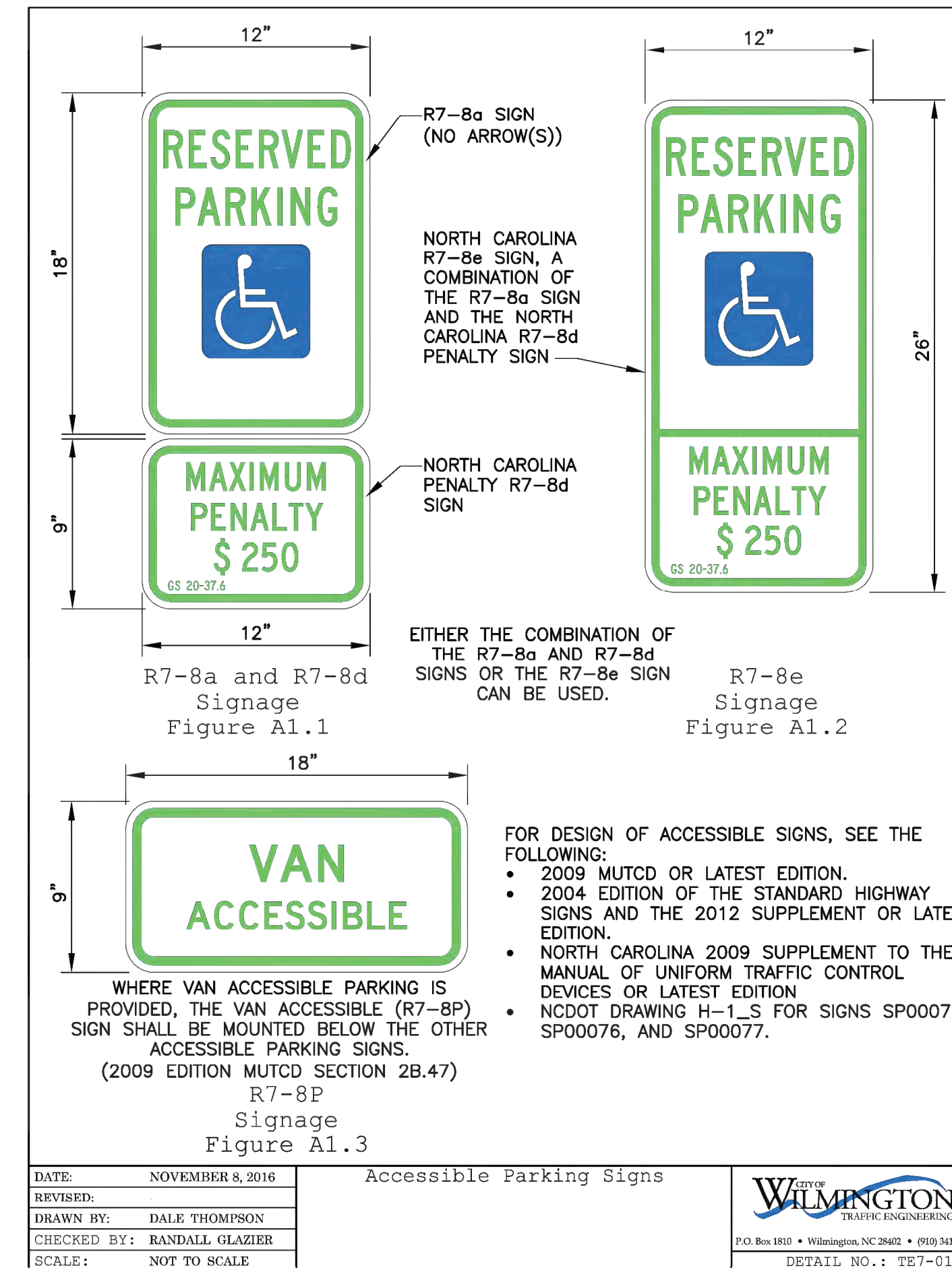
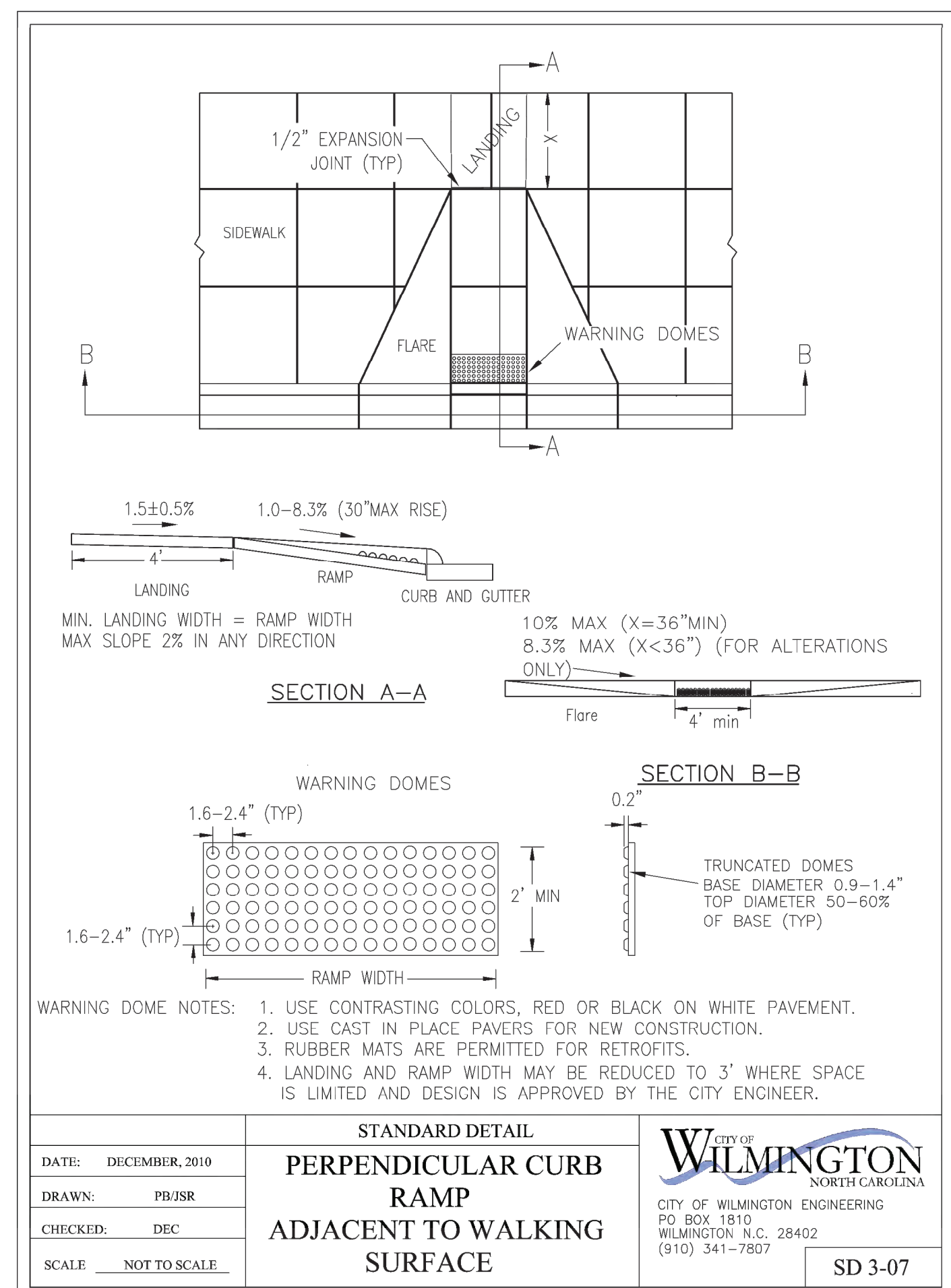
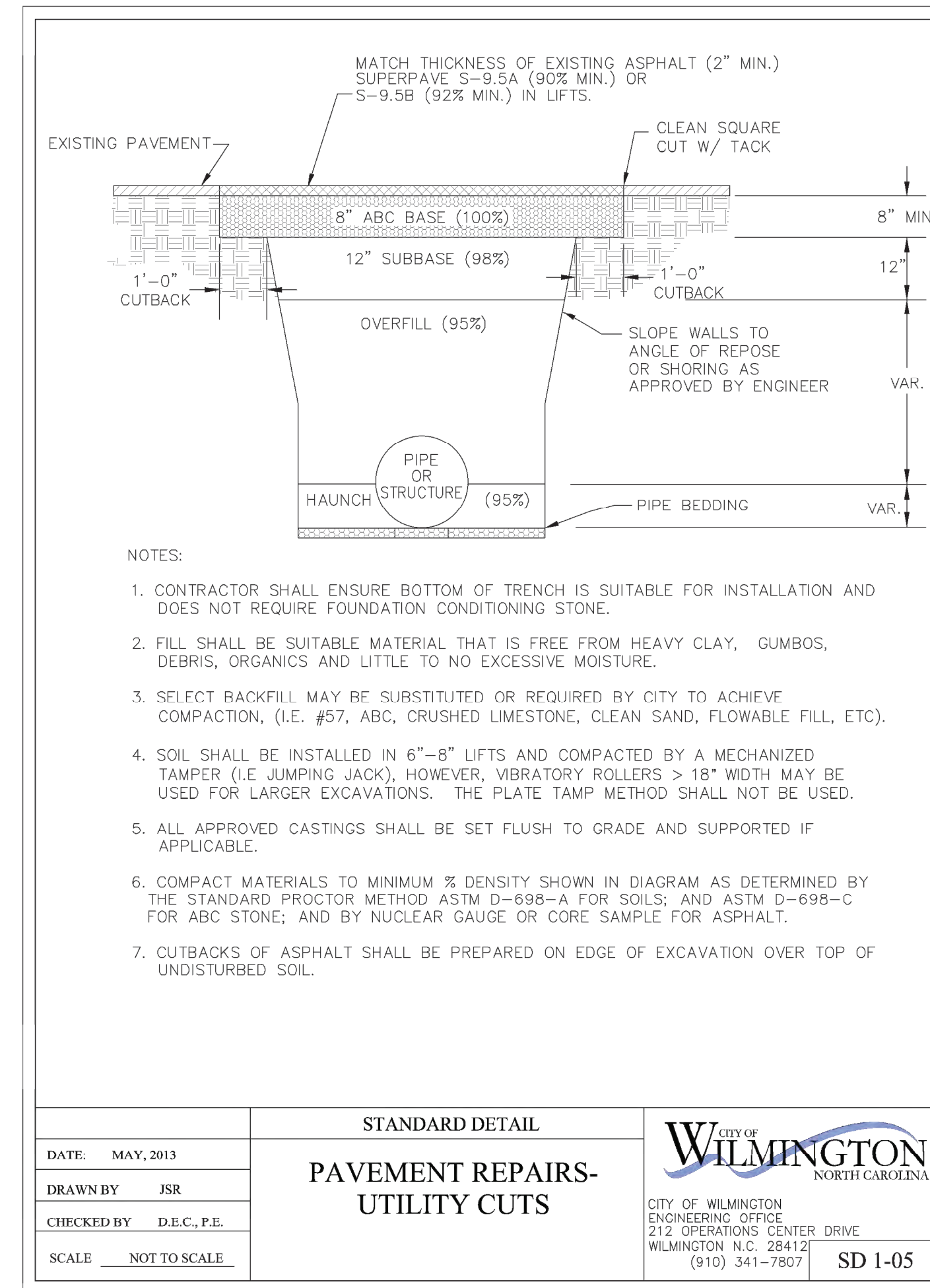
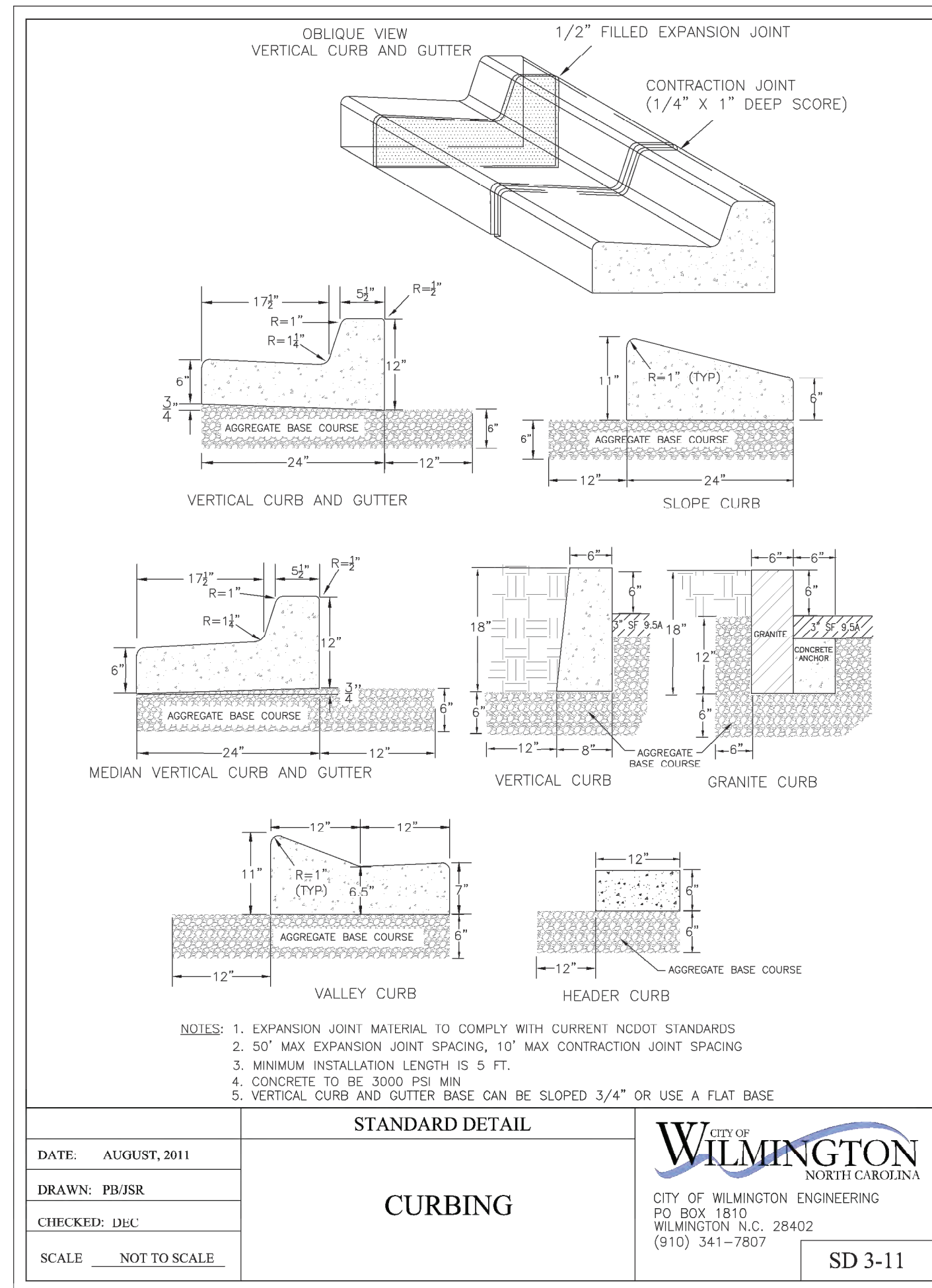
STANDARD DETAIL
DATE: JAN, 2015
DRAWN BY: JSR
CHECKED BY: RDG, P.E.
SCALE: NOT TO SCALE
TREE PROTECTION DURING CONSTRUCTION
SHEET 1 of 2
SD 15-09

SECTION A-A
FILLED EXPANSION JOINT
30'
5'
CONTROL JOINT
FILLED EXPANSION JOINT

SECTION B-B
FILLED EXPANSION JOINT
SCORE
4"
1 1/2"
1"
1/4"

NOTES:
1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
2. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAIN WITHIN A DRIVEWAY APRON) SHALL BE CLASS "A" - 3,000 PSI.
5. MINIMUM REPLACEMENT FOR REPAIRS IS A 5' X 5' PANEL.
6. 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS.
7. MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12"
8. MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1
9. MIN GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX CROSS SLOPE IS 2%. MAX LONGITUDINAL SLOPE IS 8.3%, 10% IF LIMITED BY EXISTING CONDITIONS, OR NO GREATER THAN THE SLOPE OF THE EXISTING ADJACENT ROAD.

STANDARD DETAIL
DATE: OCTOBER, 2010
DRAWN: PBJ/SR
CHECKED: DEC
SCALE: NOT TO SCALE
SIDEWALK
SD 3-10



REV. NO.	DATE	REMARKS
5	2-28-24	REVISED PER PRE-TIC COMMENTS
4	10-5-23	REVISED PER BUILDING ADDITION TO REAR LOT
3	11-28-19	PLOTTED FOR CITY SIGNATURES
2	11-8-19	REVISED TO ADD OFFICIAL DETAILS
1	9-8-19	REVISED SHEET NUMBER

STREET TREE / INTERIOR PARKING

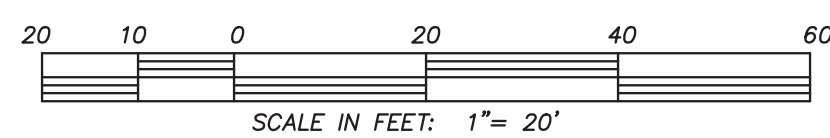
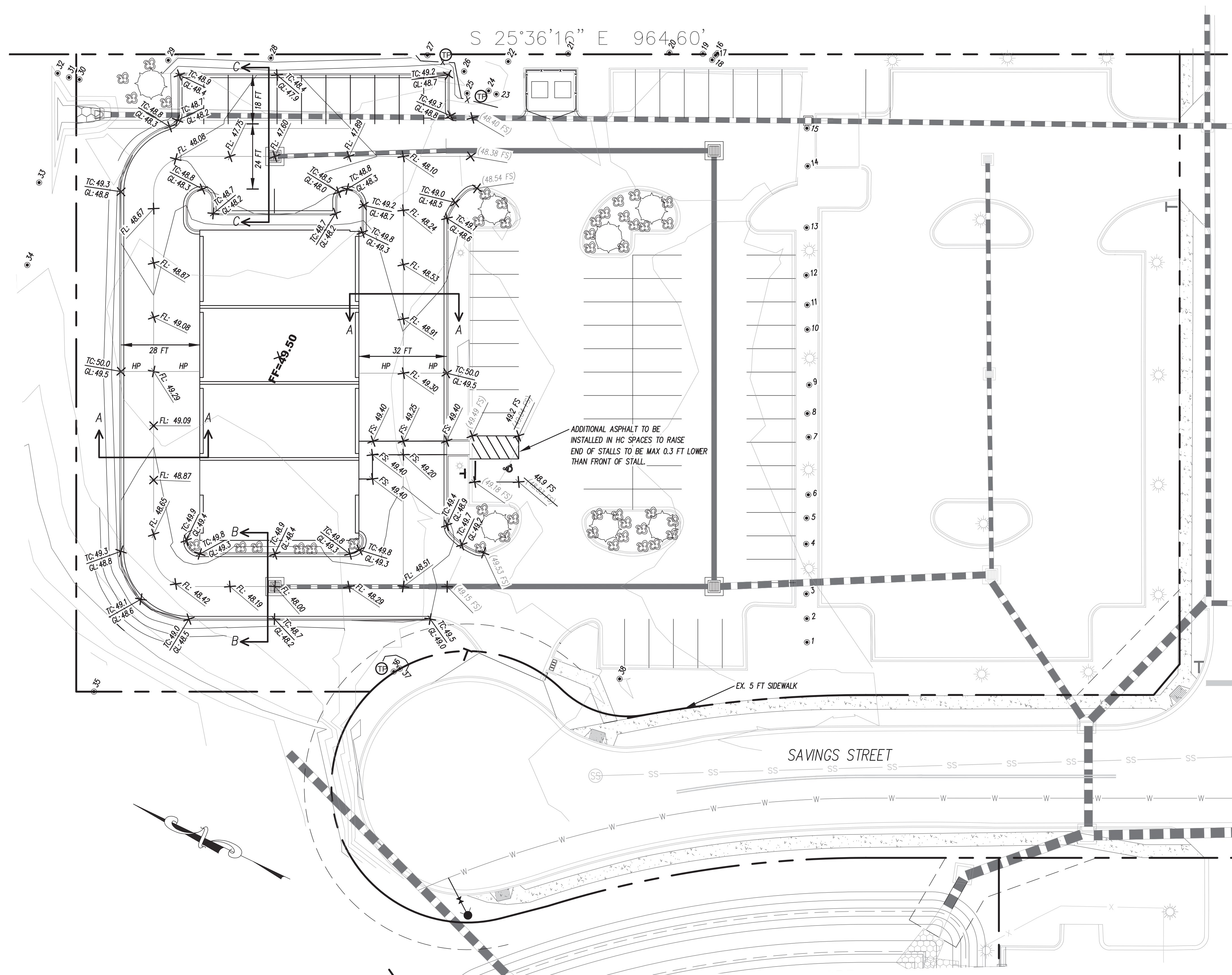
Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
7		Acer buergerianum	TRIDENT MAPLE	2" DBH	INTERIOR ISLANDS

STREET YARD SHRUBS

Quantity	Symbol	Scientific Name	Common Name	Planting Size	Planting Remarks
41		Ilex vomitoria	DWARF YAUPON HOLLY	MIN. 3 FT IN HEIGHT	INTERIOR ISLANDS

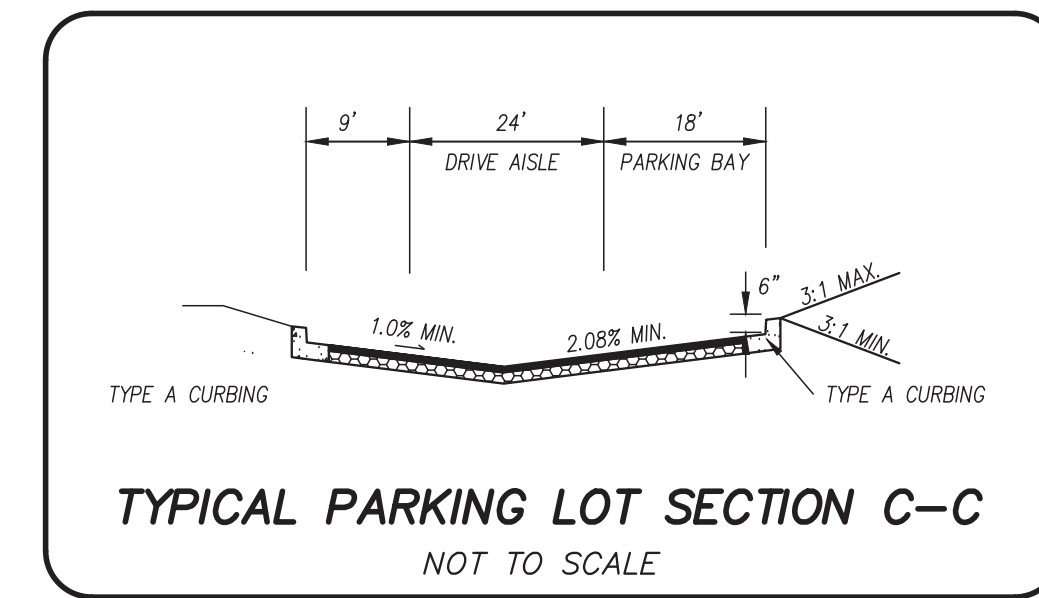
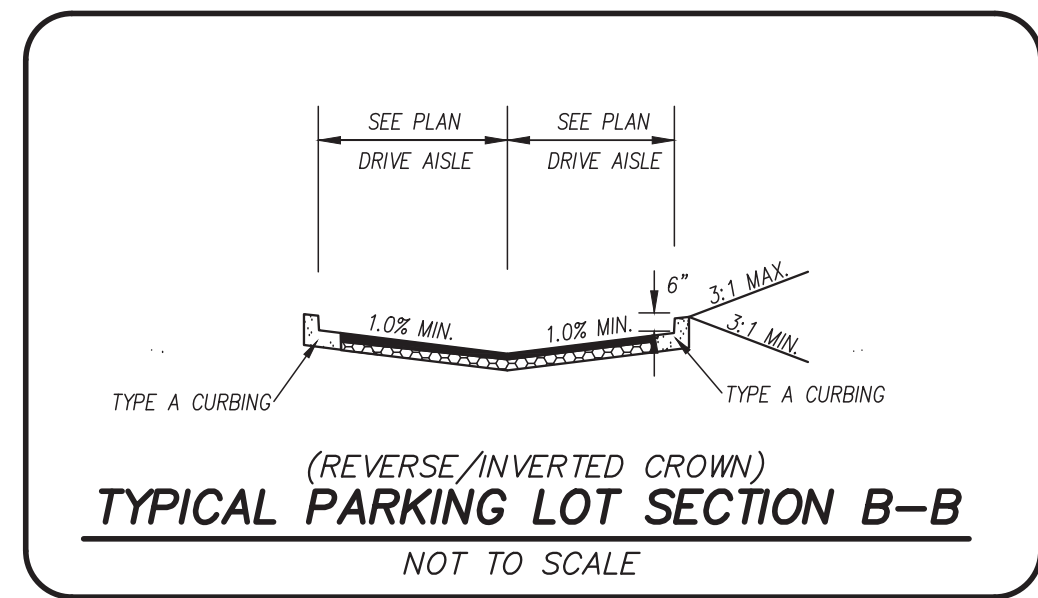
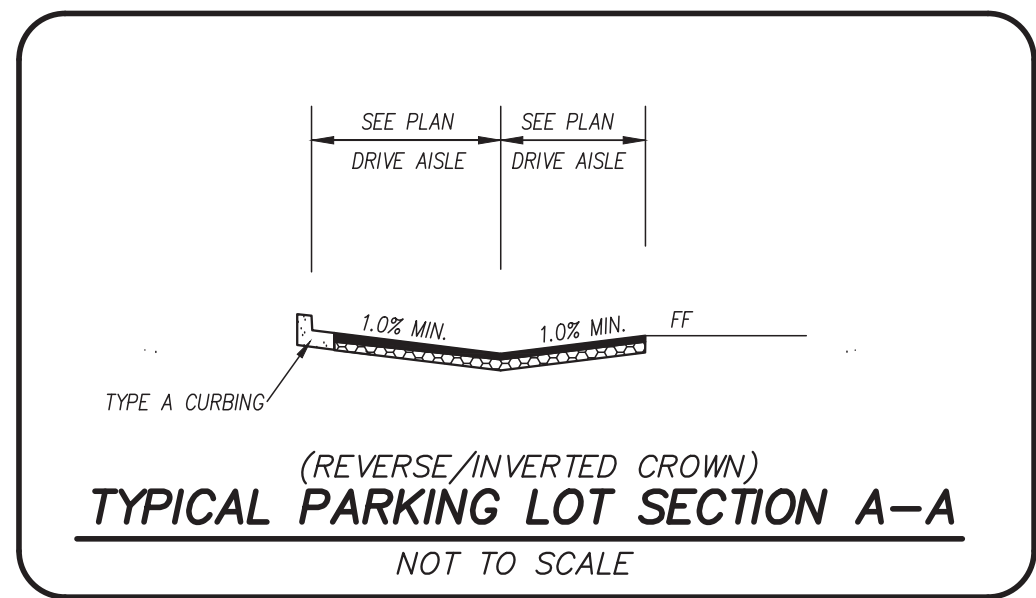
LEGEND

= TREE PROTECTION



GRADING KEY

EP	EDGE OF PAVEMENT
(14.5)	EXISTING SPOT
FS	FINISHED SURFACE
IE	INVERT ELEVATION
TC	TOP OF CURB
GL	GUTTER LINE
TG	TOP OF GRATE
BC	BACK OF CURB
FL	FLOW LINE



CSD ENGINEERING
 LICENSE # C-2710
 ENGINEERING
 LAND PLANNING
 COMMERCIAL / RESIDENTIAL
 P.O. BOX 4041
 WILMINGTON, NC 28406
 (910) 791-4441

SITE GRADING & UTILITY AND LANDSCAPE PLAN
COASTAL KIA

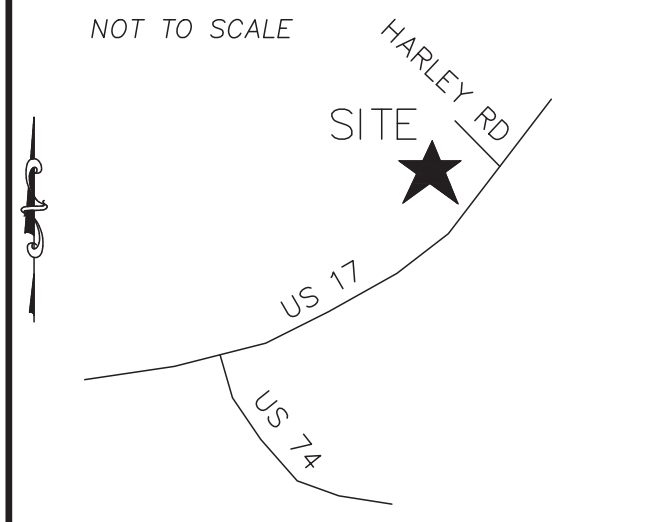
SITE GRADING & UTILITY AND LANDSCAPE PLAN
COASTAL KIA
 LOCATED IN CITY OF WILMINGTON
 NEW HANOVER COUNTY, NORTH CAROLINA
 OWNER: SPK REAL PROPERTY HOLDINGS, LLC
 6103 MARKET STREET
 WILMINGTON, NC 28405

PRELIMINARY

REV. NO.	DATE	BY	REMARKS
2	2-28-24	RLW	REVISION PER DETAIL BUILDING ADDITION
1	11-28-19	MRB	PLOTTED FOR CITY SIGNATURES

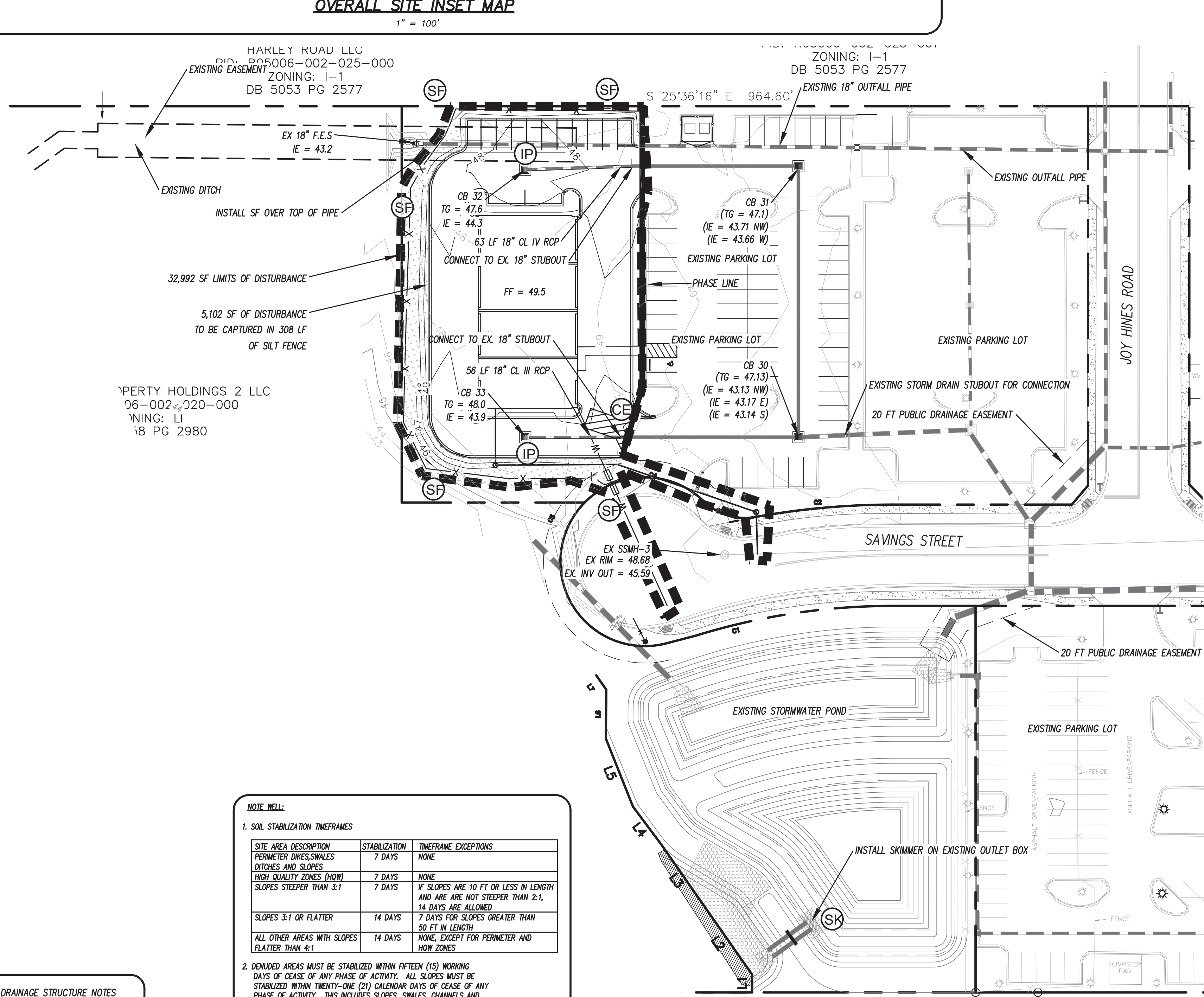
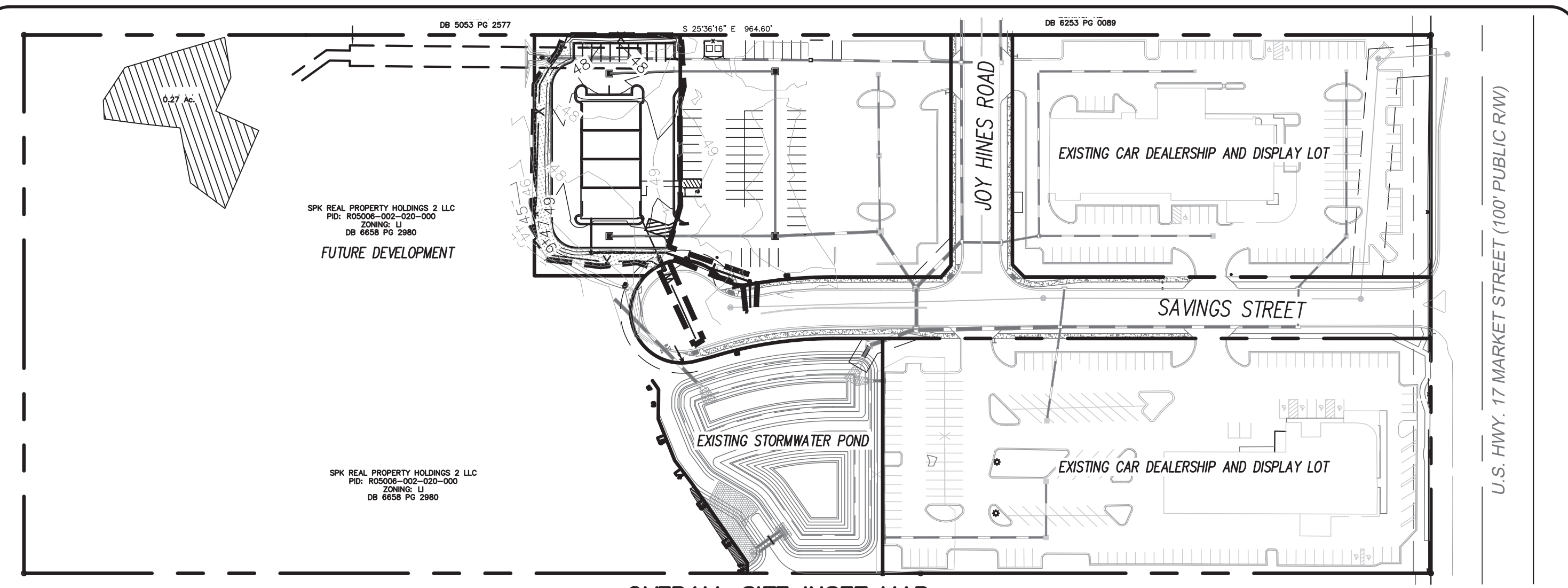
DATE: 9-20-19
 HORIZ. SCALE: 1" = 20'
 VERT. SCALE: N/A
 DRAWN BY: RLW
 CHECKED BY: HSR
 PROJECT NO.: 06-0092
 Sheet No. **6** of **6**

LOCATION MAP



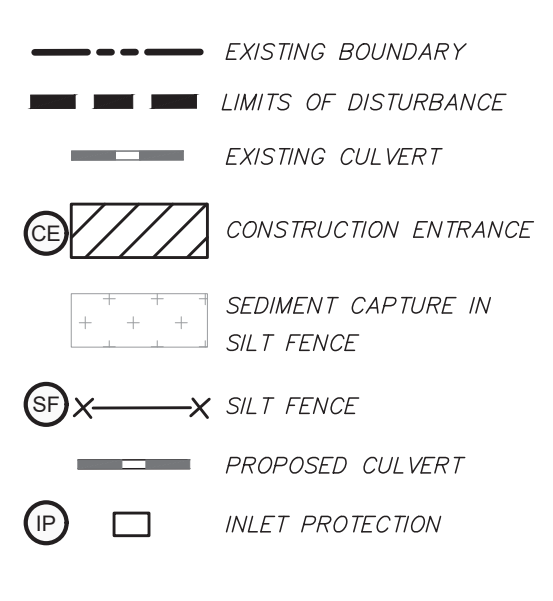
PLANNED EROSION AND SEDIMENT CONTROL PRACTICES -

- CE 1. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE**
Practice 6.06
SHALL BE INSTALLED AT THE ENTRANCES TO THE PROJECT FROM AN EXISTING ROADWAY. DRAINAGE SHOULD BE AWAY FROM THE ROAD AND EROSION WILL BE CONTROLLED WITH DOWNSLOPE PRACTICES. DURING WET WEATHER IT MAY BE NECESSARY TO WASH TRUCK TIRES AT THESE LOCATIONS.
- 2. LAND GRADING**
Practice 6.02
GRADING SHOULD BE LIMITED TO AREAS AS SHOWN ON THE PLANS. CUT AND FILL SLOPES SHALL BE 3:1 OR FLATTER EXCEPT WHERE SPECIFICALLY INDICATED. CARE SHALL BE TAKEN DURING LAND GRADING ACTIVITIES NOT TO DAMAGE EXISTING TREES THAT ARE IDENTIFIED AS "TO BE PRESERVED".
- SF 3. SEDIMENT FENCE**
Practice 6.62
SEDIMENT FENCING SHOULD BE INSTALLED AS SHOWN ON THE PLAN, TO DELINEATE AND PROTECT WETLANDS AND SPECIFIED AREAS, AND AROUND ANY TEMPORARY STOCKPILE AREAS AS NECESSARY TO PREVENT ANY GRADED INTERIOR AREAS FROM ERODING ONTO ADJACENT LANDS OR ROADWAYS, OR INTO INLETS, OR AS DIRECTED BY ENGINEER OR NEW HANOVER COUNTY EROSION CONTROL PERSONNEL.
- 4. CONSTRUCTION ROAD STABILIZATION**
Practice 6.80
UPON REACHING FINAL GRADE AND AFTER UTILITIES HAVE BEEN INSTALLED, ROADWAY/PARKING AREAS ARE TO BE STABILIZED BY PLACING SUB-BASE AS SHOWN IN THE TYPICAL STREET CROSS-SECTION DETAIL ON THE PLAN, TO REDUCE EROSION AND DUST DURING THE REMAINDER OF BUILDING CONSTRUCTION.
- SB 5. SEDIMENT BASIN**
Practice 6.61
THE SEDIMENT BASIN IS TO BE CONSTRUCTED FIRST (SEE CONSTRUCTION SCHEDULE) AND IS THE PRIMARY PRACTICE TO PREVENT SEDIMENT FROM LEAVING THE SITE. DETAILED DESIGN AND SPILLWAY CONFIGURATIONS ARE SPECIFIED IN THE DETAIL SHEET.
- SK 6. SKIMMER**
Practice 6.64
A SEDIMENTATION BASIN DEWATERING CONTROL DEVICE THAT WITHDRAWS WATER FROM THE BASIN WATER SURFACE, THUS REMOVING THE HIGHEST QUALITY WATER FOR DELIVERY TO THE UNCONTROLLED ENVIRONMENT.
- BF 7. BAFFLE**
Practice 6.65
A POROUS BARRIER INSTALLED INSIDE A TEMPORARY SEDIMENT TRAP, SKIMMER BASIN OR SEDIMENT BASIN TO REDUCE THE VELOCITY AND TURBULENCE OF WATER FLOWING THROUGH THE MEASURE AND TO FACILITATE THE SETTLING OF SEDIMENT FROM WATER BEFORE DISCHARGE.
- OP 8. OUTLET STABILIZATION**
Practice 6.41
RIPRAP APRONS WILL BE LOCATED AT THE DOWNSTREAM END OF ALL DISCHARGE PIPES TO PREVENT SCOUR.
- TP 9. TREE PROTECTION**
Practice 6.05
RESTRICT ACCESS TO TPZ WITH TALL BRIGHT PROTECTIVE FENCING ON AREAS INDICATED ON PLAN.



- ### CONSTRUCTION SCHEDULE -
1. OBTAIN APPROVAL OF PLAN AND ANY NECESSARY PERMITS, AND HOLD A PRE-CONSTRUCTION CONFERENCE PRIOR TO COMMENCING ANY WORK.
 2. FLAG WORK LIMITS AND STORM DRAIN BOXES AND SILT FENCE FOR PRELIMINARY GRADING.
 3. INSTALL GRAVEL CONSTRUCTION ENTRANCES.
 4. INSTALL SILT FENCING PRIOR TO ROUGH GRADING THE REMAINING SITE AND ANY STOCKPILING OF MATERIAL AND TOPSOIL NECESSARY.
 5. CONTRACTOR TO DIG DOWN AND EXPOSE 18" STUBOUTS, ONCE PIPES ARE EXPOSED CONTRACTOR TO PROVIDE ENGINEER WITH INVERT OF PIPE.
 6. ESTABLISH ROUGH PARKING LOT GRADES AND STABILIZE PERIMETER AREA WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR.
 7. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER ANY RAINFALL, AND REPAIRED AS NECESSARY.
 8. AFTER SITE STABILIZATION, TEMPORARY MEASURES ARE TO BE REMOVED.
- ### MAINTENANCE PLAN -
- (GENERAL NOTES, NOT ALL ITEMS ARE APPLICABLE TO THIS PROJECT)
1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY 0.5" RAINFALL.
 2. ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL PERIODICALLY TOP-DRESS WITH AND ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED, WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
 3. SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, BLOCK AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET PROTECTION AND ROCK PIPE INLET PROTECTION WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE. SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND WHITTLES, BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER RAIN EVENT.
 4. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6 FEET MAX WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL BE 8 FEET MAX, WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.
 5. SEDIMENT WILL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE DESIGN STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS OR THE ROCK IS DISLODGED. BAFFLES WILL BE REPAIRED OR REPLACED IF THEY COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED FROM BAFFLES WHEN DEPOSITS REACH HALF THE HEIGHT OF THE 1ST BAFFLE. FLOATING SKIMMERS WILL BE INSPECTED WEEKLY AND WILL BE KEPT CLEAN.
 6. ALL SEEDING AREAS WILL BE FERTILIZED, RESEED AS NECESSARY AND MULCHED ACCORDING TO THE SPECIFICATIONS IN THE VEGETATION PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES WILL BE STABILIZED WITHIN 21 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 15 WORKING DAYS.
 7. FLOODPLAINS WILL BE USED TO ADDRESS TURBIDITY ISSUES. THE PUMPS, TANKS, HOSES AND INJECTION SYSTEMS WILL BE CHECKED FOR PROBLEMS OR TURBID DISCHARGES DAILY.
- ### VEGETATIVE PLAN -
1. PERMANENT VEGETATION TO BE ESTABLISHED IN ACCORDANCE WITH "NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL", SECTION 6.11, LATEST VERSION.

LEGEND



SITE DATA:

PROPERTY AREA	95,291 SF or 2.19 AC ±
SOIL TYPE(S)	95,291 SF (2.19 AC) = So
EX. ASPHALT	48,075 SF
PROP. ASPHALT	16,244 SF
PROP. BUILDING	6,696 SF
EX. SIDEWALK	200 SF
FUTURE	2,500 SF
TOTAL	74,715 SF

SQUARE FOOTAGE OF DISTURBANCE
32,992 SF (0.76 AC)

STORMWATER DRAINAGE STRUCTURE NOTES

1. CONTRACTOR AND PRECASTER TO DETERMINE STORM BOX STRUCTURE SIZES.
2. FRAME AND GRATES TO BE NCDOT STD. 840.16 OR EQUIV.
3. RING AND COVERS TO BE NCDOT STD. 840.54 OR EQUIV.
4. PRECAST STORM STRUCTURES TO MEET HS-20-44 LOADING.

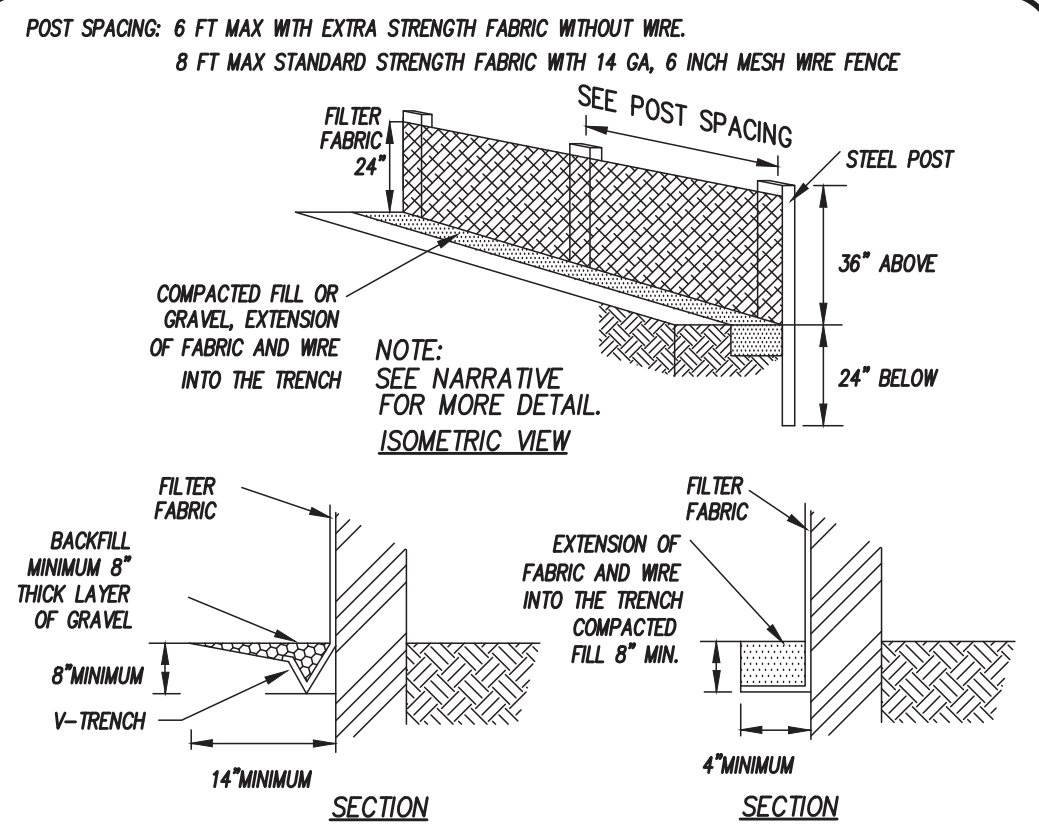
NOTE WELL:

1. SOIL STABILIZATION TIMEFRAMES

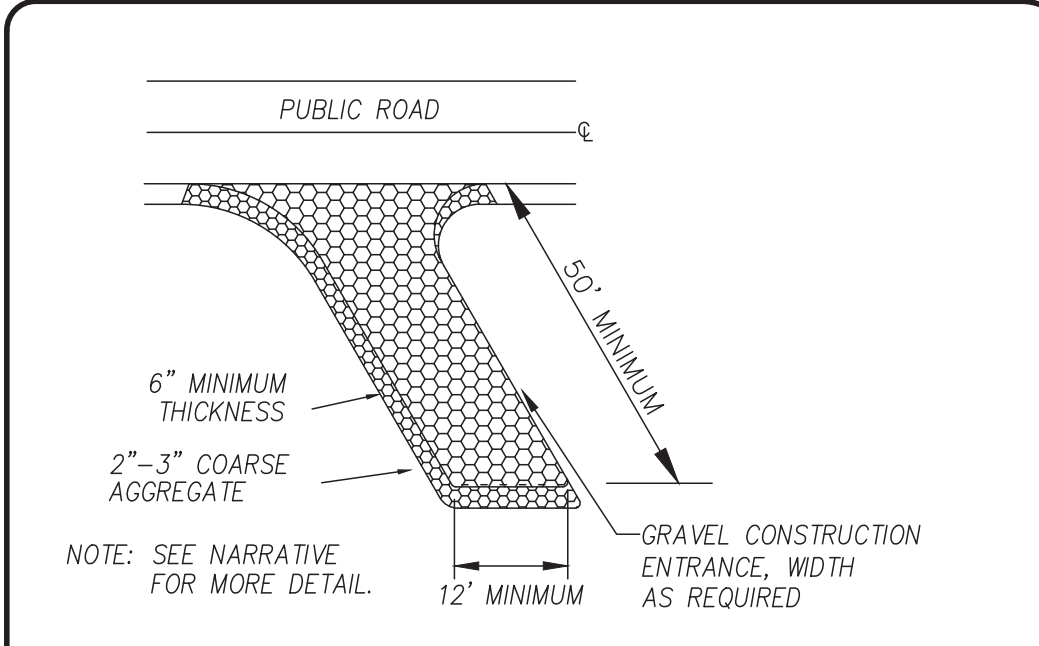
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES	7 DAYS	NONE
DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY ZONES (HOW)	7 DAYS	IF SLOPES ARE 10 FT OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 30 FT IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETER AND HOW ZONES
2. DENuded AREAS MUST BE STABILIZED WITHIN FIFTEEN (15) WORKING DAYS OF CEASE OF ANY PHASE OF ACTIVITY. ALL SLOPES MUST BE STABILIZED WITHIN TWENTY-ONE (21) CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY. THIS INCLUDES SLOPES, SWALES, CHANNELS AND STOCKPILES.
3. THIS PLAN TO BE UTILIZED AND REVISED ONLY IN CONJUNCTION WITH THE WRITTEN NARRATIVE, WHICH IS AN INTEGRAL PART OF THIS EROSION AND SEDIMENT CONTROL PLAN.
4. ALL SLOPES SHALL BE 3:1 OR FLATTER.
5. NO WETLANDS EXIST WITHIN LIMITS OF DISTURBANCE.
6. BOUNDARY, TOPOGRAPHIC AND ASBLUT SURVEY PERFORMED BY HANOVER DESIGN SERVICES.
7. ELEVATION DATUM: NAVD 88
8. DEVELOPER/HOA ARE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER SYSTEM.

TEMPORARY SEDIMENT BASIN SUMMARY:

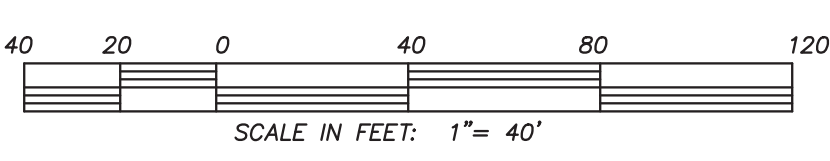
MIN. BASIN VOL. = 1,800 CF/ACRE DISTURBED AREA (10 YR. STORM)			
Q = (0.37977A)			
SA = 0.1435			
(SEDIMENT MUST BE REMOVED TWICE A YEAR)			
SEDIMENT DRAINAGE	DISTURBED MINIMUM BASIN	VOLUME	10 YR
BASIN AREA (ACRES)	AREA (ACRES)	VOLUME (CF)	FLOW AREA (SF)
1	13.37	0.76	1,368
			38,153
			38.91
			16,926
			20,920
			4 IN
			3.1 IN



SEDIMENT FENCE (SILT FENCE)
Practice 6.62
NTS



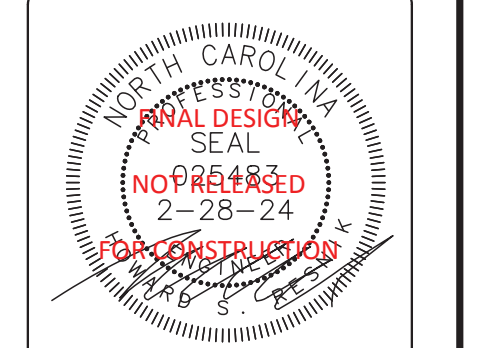
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT DETAIL
Practice 6.06
NTS



CSD ENGINEERING
LICENSE # C-2710
ENGINEERING
LAND PLANNING
COMMERCIAL / RESIDENTIAL
P.O. BOX 4041
WILMINGTON, NC 28406
(910) 791-4441

EROSION CONTROL AND STORMWATER PLAN FOR
COASTAL KIA

EROSION CONTROL AND STORMWATER PLAN for
COASTAL KIA
LOCATED IN CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA
OWNER: SPK REAL PROPERTY HOLDINGS, LLC
6103 MARKET STREET
WILMINGTON, NC 28405



REV.	DATE	BY	REMARKS
1	2-28-24	RLW	REVISION TO ADD DETAIL BUILDING
2	11-08-19	RLW	REVISION PER CIVIL ENG COMMENTS
3	9-20-19	RLW	REVISION PER CIVIL COMMENTS & ADDED ADDITIONAL PARKING

DATE: 8-1-19
HORIZ. SCALE: 1" = 40'
VERT. SCALE: N/A
DRAWN BY: RLW
CHECKED BY: HSR
PROJECT NO.: 06-0092

Sheet No. **EC1** of **EC3**

Construction Road Stabilization
Specification # 6.80 - Construction Specifications

1. Clear roadbed and parking areas of all vegetation, roots and other objectionable material.
2. Ensure that road construction follows the natural contours of the terrain if it is possible.
3. Locate parking areas on naturally flat areas if they are available. Keep grades sufficient for drainage but generally not more than 2 to 3%.
4. Provide surface drainage, and divert excess runoff to stable areas by using water bars or turnouts (References: Runoff Control Measures).
5. Keep cuts and fills at 2:1 or flatter for safety and stability and to facilitate establishment of vegetation and maintenance.
6. Spread a 6-inch course of "ABC" crushed stone evenly over the full width of the road and smooth to avoid depressions.
7. Where seepage areas or seasonally wet areas must be crossed, install subsurface drains or geotextile fabric cloth before placing the crushed stone (Practice 6.81, Subsurface Drain).
8. Vegetate all roadside ditches, cuts, fills and other disturbed areas or otherwise appropriately stabilize as soon as grading is complete (References: Surface Stabilization).
9. Provide appropriate sediment control measures to prevent off-site sedimentation.

Maintenance
Inspect construction roads and parking areas periodically for condition of surface. Topdress with new gravel as needed. Check road ditches and other seeded areas for erosion and sedimentation after runoff-producing rains. Maintain all vegetation in a healthy, vigorous condition. Sediment-producing areas should be treated immediately.

Temporary Gravel Construction Entrance/Exit
Specification # 6.06 - Construction Specifications

1. Clear the entrance and exit area of all vegetation, roots and other objectionable material and properly grade it.
2. Place the gravel to the specific grade and dimensions shown on the plans and smooth it.
3. Provide drainage to carry water to a sediment trap or other suitable outlet.
4. Use geotextile fabrics because they improve stability of the foundation in locations subject to seepage or high water table.

Maintenance
Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2-inch stone. After each rainfall, inspect any structure used to trap sediment and clean it out as necessary. Immediately remove all objectionable materials spilled, washed, or tracked onto public roadways.

Temporary Seeding
Specification # 6.10 - Specifications

Complete grading before preparing seedbeds and install all necessary erosion control practices, such as dikes, waterways and basins. Minimize steep slopes because they make seedbed preparation difficult and increase the erosion hazard. If soils become compacted during grading, loosen them to a depth of 6-8 inches using a ripper, harrow, or chisel plow.

Seedbed Preparation
Good seedbed preparation is essential to successful plant establishment. A good seedbed is well-pulverized, loose and uniform. Where hydroseeding methods are used, the surface may be left with a more irregular surface of large clods and stones.

Liming - Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1 to 1 1/2 tons/acre on coarse-textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.

Fertilizer - Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700-1000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.

Surface roughening - If recent tillage operations have resulted in a loose surface, additional roughening may not be required except to break up large clods. If rainfall causes the surface to become sealed or crust, loosen it just prior to seeding by disking, raking, harrowing, or other suitable methods. Groove or furrow slopes steeper than 3:1 on the contour before seeding (Practice 6.03, Surface Roughening).

Plant Selection
Select an appropriate species or species mixture from Table 6.10a, for seeding in late winter and early spring, Table 6.10b for summer, and Table 6.10c for fall.

Seeding
Evenly apply seed using a cyclone seeder (broadcast), drill, cultipacker seeder, or hydroseeder. Use seeding rates in Table 6.10a-6.10c. Broadcast seeding and hydroseeding are appropriate for steep slopes where equipment cannot be driven. Hand broadcasting is not recommended because of the difficulty in achieving a uniform distribution. Small grains should be planted no more than 1 inch deep, and grasses and legumes no more than 1/2 inch. Broadcast seed must be covered by raking or chain dragging, and then lightly firmed with a roller or cultipacker. Hydroseeded mixtures should include a wood fiber (cellulose) mulch.

Mulching
The use of appropriate mulch will help ensure establishment under normal conditions and is essential to seeding success under harsh site conditions (Practice 6.14, Mulching). Harsh site conditions include:
- seeding in fall for winter cover (wood fiber mulches are not considered adequate for this use);
- slopes steeper than 3:1;
- excessively hot or dry weather;
- adverse soils (shallow, rocky, or high in clay or sand); and
- areas receiving concentrated flow.

If the area to be mulched is subject to concentrated waterflow, as in channels, anchor mulch with netting (Practice 6.14, Mulching).

Permanent Seeding
Specifications # 6.11 - Specifications

Seeded Requirements
Establishment of vegetation should not be attempted on sites that are unsuitable due to inappropriate soil texture (Table 6.11a), poor drainage, concentrated overland flow, or steepness of slope until measures have been taken to correct these problems.
To maintain a good stand of vegetation, the soil must meet certain minimum requirements as a growth medium. The existing soil should have these criteria:

- Enough fine-grained (silt and clay) material to maintain adequate moisture and nutrient supply (available water capacity of at least .05 inches water to 1 inch of soil).
 - Sufficient pore space to permit root penetration.
 - Sufficient depth of soil to provide an adequate root zone. The depth to rock or impermeable layers such as hardpans should be 12 inches or more, except on slopes steeper than 2:1 where the addition of soil is not feasible.
 - A favorable pH range for plant growth, usually 6.0-6.5.
 - Freedom from large roots, branches, stones, large clods of earth, or trash of any kind. Clods and stones may be left on slopes steeper than 3:1 if they are to be hydroseeded.
- If any of the above criteria are not met--i.e., if the existing soil is too coarse, dense, shallow or acidic to foster vegetation--special amendments are required. The soil conditions described below may be beneficial or, preferably, topsoil may be applied in accordance with Practice 6.04, Topsoiling.
- Soil Conditions**
In order to improve the structure or drainage characteristics of a soil, the following material may be added. These amendments should only be necessary where soils have limitations that make them poor for plant growth or for fire turf establishment (see Chapter 3, Vegetative Considerations).

Peat - Appropriate types are sphagnum moss peat, hibernian moss peat, reedsedge peat, or peat humus, all from fresh-water sources. Peat should be stored and conditioned in storage piles for at least 6 months after excavation. Sand-clean and free of toxic materials. Vermiculite-horticultural grade and free of toxic substances. Rotted manure--stable or cattle manure not containing undue amounts of straw or other bedding materials. Thoroughly rotted sawdust-- free of stones and debris. Add 6 lb. Of nitrogen to each cubic yard.

Sludge - Treated sewage and industrial sludges are available in various forms; these should be used only in accordance with local, State and Federal regulations.

Species Selection
Use the key to Permanent Seeding Mixtures (Table 6.11b) to select the most appropriate seeding mixture based on the general site and maintenance factors. A listing of species, including scientific names and characteristics, is given in Appendix 8.02.

Seedbed Preparation
Initial necessary mechanical erosion and sedimentation control practices before seeding, and complete grading according to the approved plan. Lime and fertilizer needs should be determined by soil tests. Soil testing is performed free of charge by the North Carolina Department of Agriculture soil testing laboratory. Directions, sample cartons, and information sheets are available through county agricultural extension offices or from NCDA. Because the NCDA soil testing lab requires 1-6 weeks for sample turn-around, sampling must be planned well in advance of final grading. Testing is also done by commercial laboratories.

When soil test are not available, follow rates suggested on the individual specification sheet for the seeding mix chosen (Tables 6.11c through 6.11v). Applications rates usually fall into the following ranges:
- Ground agricultural limestone
 Light-textured, sandy soils: 1-1 1/2 tons/acre
 Heavy textured, clayey soils: 2-3 tons/acre
- Fertilizer:
 Grosses 800-1200 lb/acre of 10-10-10 (or the equivalent)
 Gross-legume mixtures: 800-1200 lb/acre of 5-10-10 (or the equivalent)
Apply lime and fertilizer evenly and incorporate into the top 4-6 inches of soil by disking or other suitable means. Operate machinery on the contour. When using a hydroseeder, apply lime and fertilizer to a rough, loose surface.

Roughen surfaces according to Practice 6.03, Surface Roughening. Complete seedbed preparation by breaking up large clods and raking into a smooth, uniform surface (slope less than 3:1) fill or level depressions that can collect water. Broadcast seed into a freshly loosened seedbed that has not been seeded by rainfall.

Table 6.11s - Seeding No. 40P for: Well-Drained Sandy Loams to Dry Sands, Coastal Plain; Low to Medium-Care Loams Seeding mixture
Species - Centipedegrass - Rate - 10-20 lb/acre (seed) or 33 bu/acre (sprigs)
Seeding dates - Mar. - June. (Sprigging can be done through July where water is available for irrigation.)
Soil amendments - Apply lime and fertilizer according to soil test, or apply 300 lb/acre 10-10-10.
Sprigging - Plant sprigs in furrows with a tractor-drawn transplanter, or broadcast by hand.
Furrows should be 4-6 inches deep and 2ft apart. Place sprigs about 2 ft. apart in the row with one end at or above ground level (Figure 6.11d).
Broadcast at rates shown above, and press sprigs into the top 1 1/2 inches of soil with a disk set straight so that sprigs are not brought back toward the surface.

Mulch - Do not mulch
Maintenance - Fertilize very sparingly-- 20 lb/acre nitrogen in spring with no phosphorus. Centipedegrass cannot tolerate high pH or excess fertilizer.
Table 6.11t - Seeding No. 50P for: Well-Drained Sandy Loams to Dry Sands; Low Seeding mixture
Species Rate (lb/acre)
Panicum Bahiagrass 50
Sericoc lespedeza 30
Common Bermudagrass 10
German millet 10

Seeding notes
1. Where a neat appearance is desired, omit sericea
2. Use common Bermudagrass only on isolated sites where it cannot become a pest.
Bermudagrass may be replaced with 5 lb/acre centipedegrass.
Seeding dates - Apr. 1 - July 15
Soil amendments - Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agricultural limestone and 500 lb/acre 10-10-10 fertilizer.
Mulch
Apply 4,000 lb/acre grain straw or equivalent cover of another suitable mulch. Anchor by tacking with asphalt, ravel or netting or by crimping with a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.
Maintenance - Refer to the following Apr. with 50 lb/acre nitrogen. Repeat on growth requires. May be mowed only once a year. Where a neat appearance is desired, omit sericea and now as often as needed.

Table 6.11v - Seeding No. 70P for: Grass-lined Channels; Coastal Plain Seeding Mixture
Species - Common Bermudagrass - Rate - 40-80 (1/2 lb./A, 2/0 R.)
Seeding dates - Coastal Plain: Apr. - July
Soil amendments - Apply lime and fertilizer according to soil tests, or apply 3,000 lb/acre ground agricultural limestone and 500 lb/acre 10-10-10 fertilizer.
Mulch - Use jute, excelsior matting, or other effective channel lining material to cover the bottom of channels and ditches. The lining should extend above the highest calculated depth of flow. On channel side slopes above this height, and in drainages not requiring temporary linings, apply 4,000 lb/acre grain straw and anchor straw by stapling netting over the top.
Mulch and anchoring materials must be allowed to wash down slopes where they can clog drainage devices.
Maintenance - A minimum of 3 weeks is required for establishment. Inspect and repair mulch frequently. Refer to the following Apr. with 50 lb/acre

Refer to Appendix 8.02 for botanical names

Land Grading
Specification # 6.02 - Construction Specifications

1. Construct and maintain all erosion and sedimentation control practices and measures in accordance with the approved sedimentation control plan and construction schedule.
2. Remove good topsoil from areas to be graded and filled, and preserve it for use in finishing the grading of all critical areas.
3. Scarify areas to be topsoiled to a minimum depth of 2 inches before placing topsoil (Practice 6.04, Topsoiling).

4. Clear and grub areas to be filled to remove trees, vegetation, roots, or other objectionable material that would affect the planned stability of the fill.
5. Ensure that fill material is free of brush, rubbish, rocks, logs, stumps, building debris, and other materials inappropriate for constructing stable fills.
6. Place all fill in layers not to exceed 9 inches in thickness, and compact the layers as required to reduce erosion, slippage, settlement, or other related problems.
7. Do not incorporate frozen material or soft, muddy, or highly compressible materials into fill slopes.
8. Do not place fill on a frozen foundation, due to possible subsidence and slippage.
9. Keep diversions and other water conveyance measures free of sediment during all phases of development.
10. Handle seeps or springs encountered during construction in accordance with approved methods (Practice 6.81, Subsurface Drain).
11. Permanently stabilize all graded areas immediately after final grading is completed on each area in the grading plan. Apply temporary stabilization measures on all graded areas when work is to be interrupted or delayed for 30 working days or longer.
12. Ensure that topsoil stockpiles, borrow areas, and spoil areas are adequately protected from erosion with temporary and final stabilization measures, including sediment fencing and temporary seeding as necessary.

Maintenance
Periodically check all graded areas and the supporting erosion and sedimentation control practices, especially after heavy rainfalls. Promptly remove all sediment from diversions and other water-disposal practices. If washouts or breaks occur, repair them immediately. Prompt maintenance of small eroded areas before they become significant gullies is an essential part of an effective erosion and sedimentation control plan.

Temporary Seeding (continued)

Table 6.10a - Temporary Seeding Recommendation for Late Winter and Early Spring Seeding mixture
Species - Rye (grass), Annual lespedeza (Kobe in Piedmont and Coastal Plain Rate (lb/acre) - 120
Onit annual lespedeza when duration of temporary cover is not to extend beyond June
Seeding dates - 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 - Refer to the following Apr. if growth is not fully adequate. Reseed, refer to the following Apr. if growth is not fully adequate. Reseed, refer to the following Apr. if growth is not fully adequate.

Table 6.10b - Temporary Seeding Recommendations for Summer Seeding mixture
Species - German millet
Rate (lb/acre) - 40
Seeding dates - 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 - Repair and refer to the following Apr. if growth is not fully adequate. Topdress with 50 lb/acre of nitrogen in March, if it is necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain)

Table 6.10c - Temporary Seeding Recommendation for Fall Seeding mixture
Species - Rye (grass)
Rate (lb/acre) - 120
Seeding dates - 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 refer to the following Apr. if growth is not fully adequate. Topdress with 50 lb/acre of nitrogen in March, if it is necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain)

Outlet Stabilization Structure
Specification # 6.41 - Construction Specifications

1. Ensure that the subgrade for the filter and riprap follows the required lines and grades shown in the plan. Compact any fill required in the subgrade to the density of the surrounding undisturbed material. Low areas in the subgrade on undisturbed soil may also be filled by increasing the riprap thickness.
2. The riprap and gravel filter must conform to the specified grading limits shown on the plans.
3. Filter cloth, when used, must meet design requirements and be properly protected from punching or tearing during installation. Repair any damage by removing the riprap and placing another piece of filter cloth over the damaged area. All connecting joints should overlap a minimum of 1 ft. If the damage is extensive, replace the entire filter cloth.
4. Riprap may be placed by equipment, but take care to avoid damaging the filter.
5. The minimum thickness of the riprap should be 1.5 times the maximum stone diameter.
6. Riprap may be field stone or rough quarry stone. It should be hard, angular, highly weather-resistant and well graded.
7. Construct the apron on zero grade with no overfall at the end. Make the top of the riprap at the downstream level with the receiving area or slightly below it.
8. Ensure that the apron is properly aligned with the receiving stream and preferably straight throughout its length. If a curve is needed to fit site conditions, place it in the upper section of the apron.
9. Immediately after construction, stabilize all disturbed areas with vegetation (Practice 6.10, Temporary Seeding, and 6.11, Permanent Seeding).
10. Maintenance
Inspect riprap outlet structures after heavy rains to see if any erosion around or below the riprap has taken place or if stones have been dislodged. Immediately make all needed repairs to prevent further damage.

Sediment Fence (Silt Fence)
Specification # 6.62 - Construction Specifications

MATERIALS
1. Use a synthetic filter fabric or a previous sheet of polypropylene, nylon, polyester, or polyethylene yarn, which is certified by the manufacturer or supplier as conforming to the requirements shown in Table 6.62b. Synthetic filter fabric should contain ultraviolet ray inhibitors and stabilizers to provide a minimum life of 6 months of expected usable construction life at a temperature range of 0 to 120 F.
2. Ensure that posts for sediment fences are 1.33 lb/linear ft steel with a minimum length of 4 ft. Make sure that steel post have grooves to facilitate fastening the fabric.
3. For reinforcement of standard strength filter fabric, use wire fence with a minimum 1/4 gauge and a maximum mesh spacing of 6 inches.

Table 6.62b
Specifications For Sediment Fence Fabric
Physical Property Requirements
Filtering Efficiency - 85% (min)
Tensile Strength of Standard Strength - 30 lb/in (min)
Extra Strength - 50 lb/in (min)
Slurry Flow Rate - 0.3 gal/sq ft/min (min)

1. Construct the sediment barrier of standard strength or extra strength synthetic filter fabric.
2. Ensure that the height of the sediment fence does not exceed 18 inches above the ground surface. (Higher fences may impound volumes of water sufficient to cause failure of the structure.)
3. Construct the filter fabric from a continuous roll out to the length of the barrier to avoid joints. When joints are necessary, securely fasten the filter cloth only at a support post with overlap to the next post.
4. Support standard strength filter fabric by wire mesh fastened securely to the up slope side of the posts using heavy duty wire staples at least 1 inch long, or tie wires. Extend the wire mesh support to the bottom of the trench.
5. When a wire mesh support fence is used, space posts a maximum of 8 ft apart. Support posts should be driven securely into the ground to a minimum of 18 inches.
6. Extra strength filter fabric with 6ft post spacing does not require wire mesh support fence. Staple or wire the filter fabric directly to posts.
7. Excavate a trench approximately 4 inches wide and 8 inches deep along the proposed line of posts and upslope from the barrier (figure 6.62a).
8. Backfill the trench with compacted soil or gravel placed over the filter fabric.
9. Do not attach filter fabric to existing trees.

Maintenance
Inspect sediment fences at least once a week and after each rainfall. Make any required repairs immediately.
Should the fabric of a sediment fence collapse, tear, decompose or become ineffective, replace it promptly. Replace backup every 60 days.
Remove sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the fence. Take care not to allow undermining the fence during cleanup.
Remove all fencing materials and unstable sediment deposits and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized.

Skimmer Sediment Basin
Specification # 6.64,7 - Construction Specifications

1. Clear, grub, and strip the area under the embankment of all vegetation and roof that remove all surface soil containing high amounts of organic matter and sludge. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the fence. Take care not to allow undermining the fence during cleanup.
2. Ensure that all material for the embankment is free of roots, woody vegetation, organic matter, and other objectionable material. Place the fill in lifts to a depth of 6 inches and machine compact it. Over fill the embankment 6 inches to allow for settlement.
3. Place the basin to the specified dimensions. Prevent the skimming device from getting into the mud by excavating a shallow pit under the skimmer or providing a low support under the skimmer of stone or timber.
4. Place the barrel (typically 4-inch Schedule 40 PVC pipe) on a firm, smooth foundation of imbricated soil. Do not use previous material such as sand, gravel, or crushed stone as backfill around the pipe. Place the fill material around the pipe in 4-inch layers and compact it under and around the pipe to at least the same density as the adjacent embankment. Care must be taken not to raise the pipe from the firm contact with its foundation when compacting under and around the pipe.
5. Place a minimum depth of 2 feet of compacted backfill over the pipe spillway before crossing it with construction equipment. In no case should the pipe be installed by cutting a trench through the dam after the embankment is complete.
6. Assemble the skimmer following the manufacturers instructions, or as designed.
7. Lay the assembled skimmer on the bottom of the basin with the flexible part of the skirt at the same pipe from the flexible part to the barrel pipe and position the skimmer over the excavated pit or support. Be sure to attach the pipe to the skimmer. Tighten the bolts of the basin. This will be used to pull the skimmer to the side for maintenance.

8. Earthen spillways - Install the spillway in undisturbed soil to the greatest extent possible. The placement of planned vegetation, grass, design width, and entrance and exit channel slopes are critical to the successful operation of the spillway. The spillway should be lined with nonerodible plastic or impermeable geotextile fabric. The fabric must be wide and long enough to cover the bottom and sides and extend onto the top of the dam for anchoring in a trench. The edges may be secured with 2-inch staples or pins. The fabric must be heavy enough to hold the slope and not erode. The fabric must be one piece, not joined or spliced otherwise water can get under the fabric. If the length of the fabric is shorter than the entire length of the spillway, multiple sections, spanning the complete width, may be used. The upper section(s) should overlap the lower section(s) so that water cannot get under the fabric. Secure the upper edge and sides of the fabric in a trench with staples or pins. (Adapted from "A Manual for Designing, Installing and Maintaining Skimmer Sediment Basins," February, 1999, U. M. Faircloth & Son.)

9. Inlets - Discharge water into the basin in a manner to prevent erosion. Use temporary side drains or diversions with outlet protection to divert sediment-laden water to the upper end of the pool area to improve basin trap efficiency.

10. Erosion control - Construct the structure so that the disturbed area is minimized. Direct surface water away from large areas. Complete the embankment before the area is cleared. Stabilize the emergency spillway embankment and all other disturbed areas above the crest of the principal spillway immediately after construction (References: Surface Stabilization).

Inspect skimmer sediment basins at least weekly and after each significant rainfall (inch or greater) rated event and repair immediately. Remove sediment and restore the basin to its original dimensions when sediment accumulates to one-half the height of the basin. Check the skimmer on one side so that the sediment underneath it can be excavated. Excavate the sediment from the entire basin not just around the skimmer or first one. Make sure vegetation growing in the bottom of the basin does not hold down the skimmer.

If the skimmer is clogged with trash and there is water in the basin, usually during the first rain after a storm, the skimmer may be removed and the debris and restore flow. If this does not work, pull the skimmer over to the side of the basin and remove the debris. Also check the orifice near the skimmer to see if it is clogged; if so remove the debris.

If the skimmer arm or barrel pipe is clogged, the orifice can be removed and the obstruction cleared with a plumber's snake or by flushing with water. Be sure and replace the orifice before repositioning the skimmer.

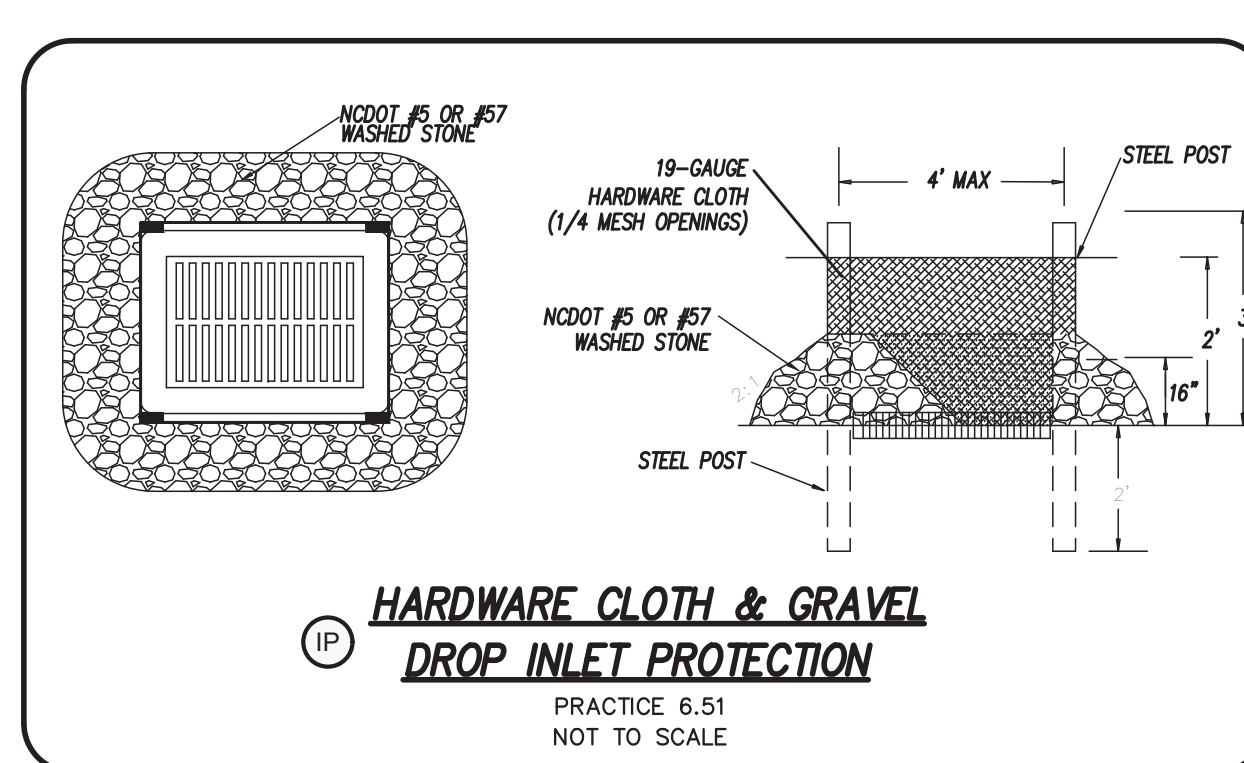
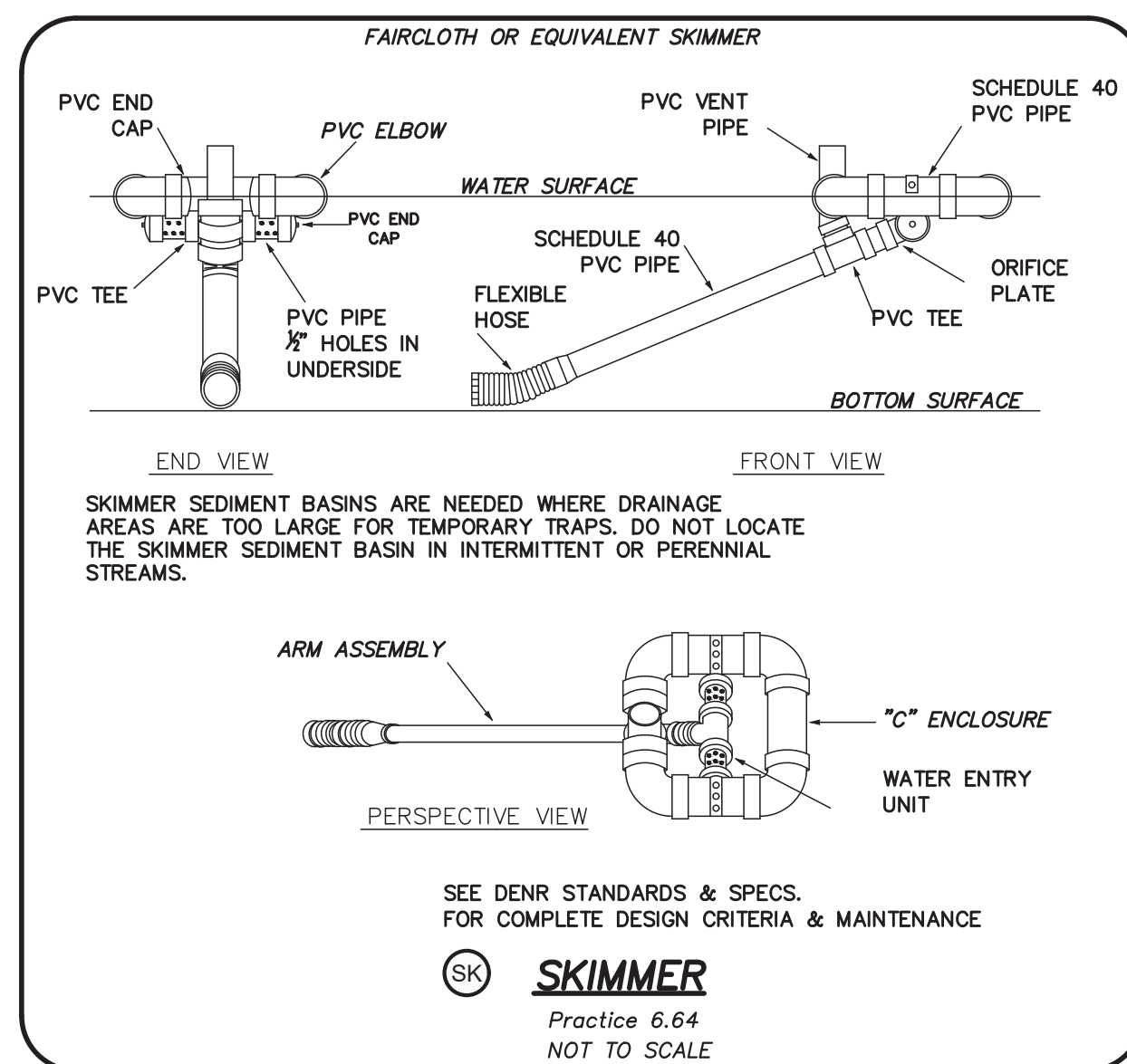
Check the fabric lined spillway for damage and make any required repairs with care that spans the full width of the spillway. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for slippage and settlement. Make all necessary repairs immediately. Remove all trash and other debris from the skimmer and pool areas.

Freezing weather can result in ice forming in the basin. Some special precautions should be taken in the winter to prevent the skimmer from plugging with ice.

Hardware Cloth & Gravel Inlet Protection
Specification # 6.51 - Construction Specifications

1. Uniformly grade a shallow depression approaching the inlet.
2. Drive 5 FT steel post 2 FT into the ground surrounding the inlet. Space post evenly around the perimeter of the inlet, a maximum of 4 FT apart.
3. Surround the posts with wire mesh hardware cloth. Secure the mesh to steel posts at the top, middle, and bottom. Placing a 2 FT 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 ground cover.

Maintenance
Inspect inlets at least weekly and after each significant (0.5 in or greater) rainfall event. Clear the mesh wire of any debris or other objects that provide adequate flow for subsequent rains. Take care not to damage or undercut the wire mesh during sediment removal. Replace stone as needed.



CSD ENGINEERING
LICENSE # C-2710
ENGINEERING
LAND PLANNING
COMMERCIAL / RESIDENTIAL
P.O. BOX 4041
WILMINGTON, NC 28406
(910) 791-4441

EROSION CONTROL AND STORMWATER PLAN FOR
COASTAL KIA
OWNER: SPK REAL PROPERTY HOLDINGS, LLC
6103 MARKET STREET
WILMINGTON, NC 28405

EROSION CONTROL AND STORMWATER PLAN for
COASTAL KIA
LOCATED IN CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA
FOR THE CAROLINA SEAL
025483
2-28-24
NOT RECALCULATED
FOR THE CAROLINA SEAL
025483
2-28-24
FOR THE CAROLINA SEAL

REV. NO.	DATE	BY	REMARKS
1	2-28-24	RLW	REVISED TO ADD METAL BUILDING
	8-1-19		

DATE: 8-1-19
HORZ. SCALE: AS SHOWN
VERT. SCALE: N/A
DRAWN BY: RLW
CHECKED BY: HSR
PROJECT NO.: 06-0092

Sheet No. **EC2** of **EC3**

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCGO1 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 NCGO1 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 (HOW) 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 2:1 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 HOW 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 HOW ZONES -10 DAYS FOR FALLS LAKE WATERSHED UNLESS THERE IS ZERO SLOPE

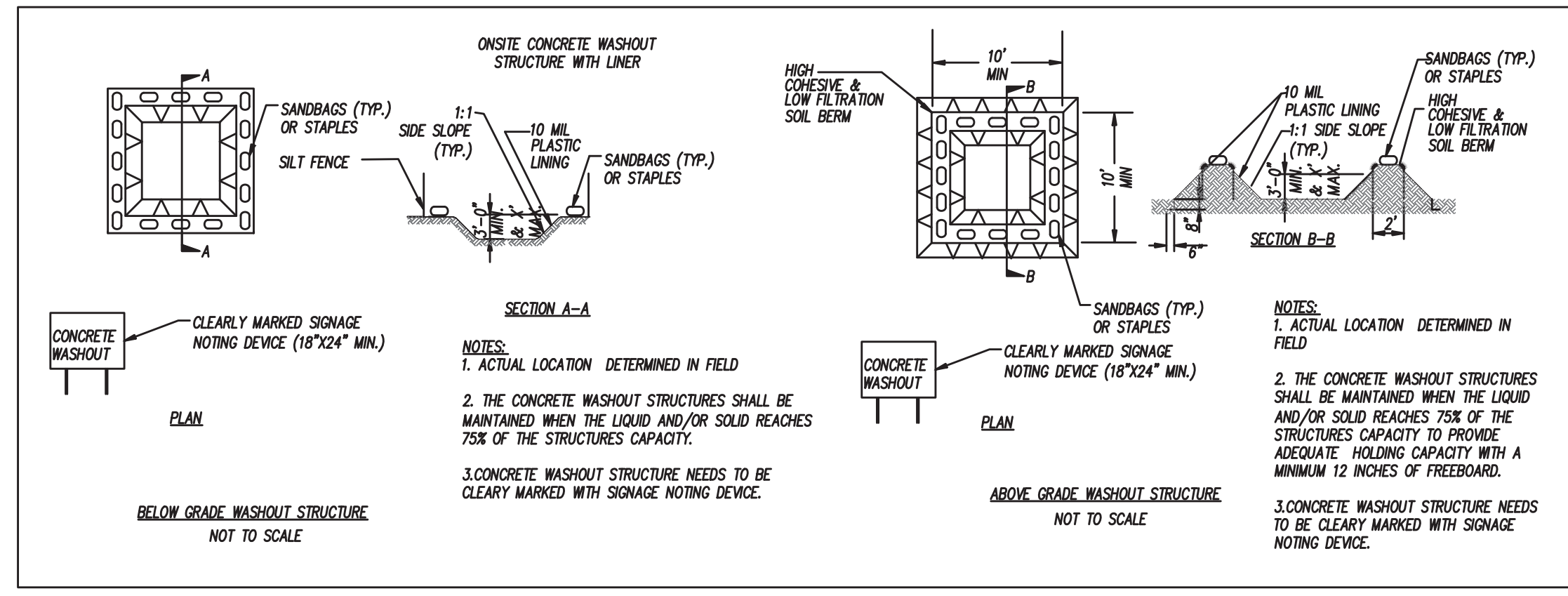
NOTE: AFTER THE PERMANENT CESSATION OF CONSTRUCTION ACTIVITIES, ANY AREAS WITH TEMPORARY GROUND STABILIZATION SHALL BE CONVERTED TO PERMANENT GROUND STABILIZATION AS SOON AS PRACTICABLE BUT IN NO CASE LONGER THAN 90 CALENDAR DAYS AFTER THE LAST LAND DISTURBING ACTIVITY. TEMPORARY GROUND STABILIZATION 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 DISCLOSE THE SOIL. USE ONE OF THE TECHNIQUES IN THE TABLE BELOW:

TEMPORARY STABILIZATION	PERMANENT STABILIZATION
<ul style="list-style-type: none"> TEMPORARY GRASS SEED COVERED WITH STRAW OR OTHER MULCHES AND TACKIFIERS HYDROSEEDING ROLLED EROSION CONTROL PRODUCTS WITH OR WITHOUT TEMPORARY GRASS SEED APPROPRIATELY APPLIED STRAW OR OTHER MULCH PLASTIC SHEETING 	<ul style="list-style-type: none"> PERMANENT GRASS SEED COVERED WITH STRAW OR OTHER MULCHES AND TACKIFIERS GEOTEXTILE FABRICS SUCH AS PERMANENT SOIL REINFORCEMENT MATING HYDROSEEDING SHRUBS OR OTHER PERMANENT PLANTINGS COVERED WITH MULCH UNIFORM AND EVENLY DISTRIBUTED GROUND COVER SUFFICIENT TO RESTRAIN EROSION STRUCTURAL METHODS SUCH AS CONCRETE, ASPHALT OR RETAINING WALLS ROLLED EROSION CONTROL PRODUCTS WITH GRASS SEED

POLYMEREMULSIONS (PMES) AND FLOCCULANTS
 1. SELECT FLOCCULANTS THAT ARE APPROPRIATE FOR THE SOILS BEING EXPOSED DURING CONSTRUCTION, SELECTING FROM THE NC DWR LIST OF APPROVED PMES/FLOCCULANTS.
 2. APPLY FLOCCULANTS AT OR BEFORE THE INLETS TO EROSION AND SEDIMENT CONTROL MEASURES.
 3. APPLY FLOCCULANTS AT THE CONCENTRATIONS SPECIFIED IN THE NC DWR LIST OF APPROVED PMES/FLOCCULANTS AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 4. PROVIDE PONDING AREA FOR CONTAINMENT OF TREATED STORMWATER BEFORE DISCHARGING OFFSITE.
 5. STORE FLOCCULANTS IN LEAK-PROOF CONTAINERS THAT ARE KEPT UNDER STORM-RESISTANT COVER OR SURROUNDED BY SECONDARY CONTAINMENT STRUCTURES.

EARTHEN STOCKPILE MANAGEMENT
 1. 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.
 2. PROTECT STOCKPILE WITH SILT FENCE INSTALLED ALONG TOE OF SLOPE WITH A MINIMUM OFFSET OF FIVE FEET FROM THE TOE OF STOCKPILE.
 3. PROVIDE STABLE STONE ACCESS POINT WHEN FEASIBLE.
 4. 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.



- EQUIPMENT AND VEHICLE MAINTENANCE**
1. MAINTAIN VEHICLES AND EQUIPMENT TO PREVENT DISCHARGE OF FLUIDS.
 2. PROVIDE DRIP PANS UNDER ANY STORED EQUIPMENT.
 3. IDENTIFY LEAKS AND REPAIR AS SOON AS FEASIBLE, OR REMOVE LEAKING EQUIPMENT FROM THE PROJECT.
 4. COLLECT ALL SPENT FLUIDS, STORE IN SEPARATE CONTAINERS AND PROPERLY DISPOSE AS HAZARDOUS WASTE (RECYCLE WHEN POSSIBLE).
 5. REMOVE LEAKING VEHICLES AND CONSTRUCTION EQUIPMENT FROM SERVICE UNTIL THE PROBLEM HAS BEEN CORRECTED.
 6. BRING USED FUELS, LUBRICANTS, COOLANTS, HYDRAULIC FLUIDS AND OTHER PETROLEUM PRODUCTS TO A RECYCLING OR DISPOSAL CENTER THAT HANDLES THESE MATERIALS.

- CONCRETE WASHOUTS**
1. DO NOT DISCHARGE CONCRETE OR CEMENT SLURRY FROM THE SITE.
 2. DISPOSE OF, OR RECYCLE SETTLED, HARDENED CONCRETE RESIDUE IN ACCORDANCE WITH LOCAL AND STATE SOLID WASTE REGULATIONS AND AT AN APPROVED FACILITY.
 3. 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.
 4. 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.
 5. DO NOT USE CONCRETE WASHOUTS FOR DENEWATERING 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.
 6. 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.
 7. 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.
 8. 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.
 9. 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.
 10. 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**
1. STORE AND APPLY HERBICIDES, PESTICIDES AND RODENTICIDES IN ACCORDANCE WITH LABEL RESTRICTIONS.
 2. 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.
 3. 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.
 4. DO NOT STOCKPILE THESE MATERIALS ON-SITE.

- HAZARDOUS AND TOXIC WASTE**
1. CREATE DESIGNATED HAZARDOUS WASTE COLLECTION AREAS ON-SITE.
 2. PLACE HAZARDOUS WASTE CONTAINERS UNDER COVER OR IN SECONDARY CONTAINMENT.
 3. DO NOT STORE HAZARDOUS CHEMICALS, DRUMS OR BAGGED MATERIALS DIRECTLY ON THE GROUND.

PORTABLE TOILETS

1. INSTALL PORTABLE TOILETS ON LEVEL GROUND, AT LEAST 50 FEET AWAY FROM STORM DRAINS, STREAMS OR WETLANDS UNLESS THERE IS NO ALTERNATE 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.
2. PROVIDE STAKING OR ANCHORING OF PORTABLE TOILETS DURING PERIODS OF HIGH WINDS OR IN HIGH FOOT TRAFFIC AREAS.
3. 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.

NCGO1 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORD KEEPING AND REPORTING

SECTION A: SELF-INSPECTION
 SELF-INSPECTIONS ARE REQUIRED DURING NORMAL BUSINESS HOURS IN ACCORDANCE WITH THE TABLE BELOW. WHEN ADVERSE WEATHER OR SITE CONDITIONS WOULD CAUSE THE SAFETY OF THE INSPECTION PERSONNEL TO BE IN JEOPARDY, THE INSPECTION MAY BE DELAYED UNTIL THE NEXT BUSINESS DAY ON WHICH IT IS SAFE TO PERFORM THE INSPECTION. IN ADDITION, WHEN A STORM EVENT OF EQUAL TO OR GREATER THAN 1.0 INCH OCCURS OUTSIDE OF NORMAL BUSINESS HOURS, THE SELF-INSPECTION SHALL BE PERFORMED UPON THE COMMENCEMENT OF THE NEXT BUSINESS DAY. ANY TIME WHEN INSPECTIONS WERE DELAYED SHALL BE NOTED IN THE INSPECTION REPORT.

INSPECT	FREQUENCY (DURING NORMAL BUSINESS HOURS)	INSPECTION RECORDS MUST INCLUDE:
(1) RAIN GAUGE MAINTAINED IN GOOD WORKING ORDER	DAILY	DAILY RAIN AMOUNTS IF NO DAILY RAIN GAUGE OBSERVATION ARE MADE DURING WEEKEND OR HOLIDAY PERIODS, AND NO INDIVIDUAL-DAY RAINFALL INFORMATION IS AVAILABLE, RECORD THE CUMULATIVE RAIN MEASUREMENT FOR THIS UN-ATTENDED DAYS (AND THIS WILL DETERMINE IF A SITE INSPECTION IS NEEDED). DAYS ON WHICH NO RAINFALL OCCURRED SHALL BE RECORDED AS 'ZERO'. THE PERMITTEE MAY USE ANOTHER RAIN MONITORING DEVICE APPROVED BY THE DIVISION.
(2) EASC MEASURES	AT LEAST ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT \geq 1.0 INCH IN 24 HOURS	1. IDENTIFICATION OF THE MEASURES INSPECTED. 2. DATE AND TIME OF THE INSPECTION 3. NAME OF THE PERSON PERFORMING THE INSPECTION 4. INDICATION OF WHETHER THE MEASURES WERE OPERATING PROPERLY 5. DESCRIPTION OF MAINTENANCE NEEDS FOR THE MEASURE 6. DESCRIPTION/DATE AND DATE OF CORRECTIVE ACTIONS TAKEN.
(3) STORMWATER DISCHARGE OUTFALLS (SOQS)	AT LEAST ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT \geq 1.0 INCH IN 24 HOURS	1. IDENTIFICATION OF THE MEASURES INSPECTED. 2. DATE AND TIME OF THE INSPECTION 3. NAME OF THE PERSON PERFORMING THE INSPECTION 4. INDICATION OF WHETHER THE MEASURES WERE OPERATING PROPERLY 5. DESCRIPTION OF MAINTENANCE NEEDS FOR THE MEASURE 6. DESCRIPTION/DATE AND DATE OF CORRECTIVE ACTIONS TAKEN.
(4) PERIMETER OF SITE	AT LEAST ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT \geq 1.0 INCH IN 24 HOURS	IF VISIBLE SEDIMENTATION IS FOUND OUTSIDE SITE LIMITS, THEN A RECORD OF THE FOLLOWING SHALL BE MADE: 1. ACTIONS TAKEN TO CLEAN UP OR STABILIZE THE SEDIMENT THAT HAS LEFT THE SITE LIMITS. 2. DESCRIPTION, EVIDENCE AND DATE OF CORRECTIVE ACTIONS TAKEN, AND 3. AN EXPLANATION AS TO THE ACTIONS TAKEN TO CONTROL FUTURE RELEASES.
(5) STREAMS OR WETLANDS ON-SITE OR OFFSITE (WHERE ACCESSIBLE)	AT LEAST ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAIN EVENT \geq 1.0 INCH IN 24 HOURS	IF THE STREAM OR WETLANDS HAS INCREASED VISIBLE SEDIMENTATION OR A STREAM HAS VISIBLE INCREASED TURBIDITY FROM THE CONSTRUCTION ACTIVITY, THEN A REPORT OF THE FOLLOWING SHALL BE MADE: 1. DESCRIPTION, EVIDENCE AND DATE OF CORRECTIVE ACTIONS TAKEN, AND 2. RECORDS OF THE REQUIRED REPORTS TO THE APPROPRIATE DIVISION REGIONAL OFFICER PER PART III, SECTION C, ITEM (2)(A) OF THIS PERMIT.
(6) GROUND STABILIZATION MEASURES	AFTER EACH PHASE OF GRADING	1. THE PHASE OF GRADING (INSTALLATION OF PERIMETER EASC MEASURES, CLEARING AND GRUBBING, INSTALLATION OF STORM DRAINAGE FACILITIES, COMPLETION OF ALL LAND-DISTURBING ACTIVITY, CONSTRUCTION OR REDEVELOPMENT, PERMANENT GROUND COVER). 2. DOCUMENTATION THAT THE REQUIRED GROUND STABILIZATION MEASURES HAVE BEEN PROVIDED WITHIN THE REQUIRED TIME FRAME OR AN ASSURANCE THAT THEY WILL BE PROVIDED AS SOON AS POSSIBLE.

NOTE: THE RAIN INSPECTION RESETS THE REQUIRED 7 CALENDAR DAY INSPECTION REQUIREMENT.

PART III SELF-INSPECTION, RECORD KEEPING AND REPORTING

SECTION B: RECORD KEEPING
 1. EASC PLAN DOCUMENTATION
 THE APPROVED EASC PLAN AS WELL AS ANY APPROVED DEMOTION SHALL BE KEPT ON THE SITE. THE APPROVED EASC PLAN MUST BE KEPT UP-TO-DATE THROUGHOUT THE LIFE OF THE PROJECT. THE FOLLOWING ITEMS PERTAINING TO THE EASC PLAN SHALL BE KEPT ON SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES DURING NORMAL BUSINESS HOURS.

ITEM TO DOCUMENT	DOCUMENTATION REQUIREMENTS
(A) EACH EASC MEASURE HAS BEEN INSTALLED AND DOES NOT SIGNIFICANTLY DEVIATE FROM THE LOCATIONS, DIMENSION AND RELATIVE ELEVATIONS SHOWN ON THE APPROVED EASC PLAN.	INITIAL AND DATE EACH EASC MEASURE ON A COPY OF THE APPROVED EASC PLAN OR COMPLETE, DATE AND SIGN AN INSPECTION REPORT THAT LISTS EACH EASC MEASURE SHOWN ON THE APPROVED EASC PLAN. THIS DOCUMENTATION IS REQUIRED UPON THE INITIAL INSTALLATION OF THE EASC MEASURES OR IF THE EASC MEASURES ARE MODIFIED AFTER INITIAL INSTALLATION.
(B) A PHASE OF GRADING HAS BEEN COMPLETED.	INITIAL AND DATE A COPY OF THE APPROVED EASC PLAN OR COMPLETE, DATE AND SIGN AN INSPECTION REPORT TO INDICATE COMPLETION OF THE CONSTRUCTION PHASE.
(C) GROUND COVER IS LOCATED AND INSTALLED IN ACCORDANCE WITH THE APPROVED EASC PLAN.	INITIAL AND DATE A COPY OF THE APPROVED EASC PLAN OR COMPLETE, DATE AND SIGN AN INSPECTION REPORT TO INDICATE COMPLIANCE WITH APPROVED GROUND COVER SPECIFICATIONS.
(D) THE MAINTENANCE AND REPAIR REQUIREMENTS FOR ALL EASC MEASURES HAVE BEEN PERFORMED.	COMPLETE, DATE AND SIGN AN INSPECTION FORM
(E) CORRECTIVE ACTIONS HAVE BEEN TAKEN TO EASC MEASURES.	INITIAL AND DATE A COPY OF THE APPROVED EASC PLAN OR COMPLETE, DATE AND SIGN AN INSPECTION REPORT TO INDICATE THE COMPLETION OF THE CORRECTIVE ACTION.

2. ADDITIONAL DOCUMENTATION TO BE KEPT ON SITE
 IN ADDITION TO THE EASC PLAN DOCUMENTS ABOVE, THE FOLLOWING ITEMS SHALL BE KEPT ON THE SITE AND AVAILABLE FOR INSPECTIONS AT ALL TIMES DURING NORMAL BUSINESS HOURS, UNLESS THE DIVISION PROVIDES A SITE-SPECIFIC EXEMPTION BASED ON UNIQUE SITE CONDITIONS THAT MAKE THIS REQUIREMENT NOT PRACTICAL:
 (A) THIS GENERAL PERMIT AS WELL AS THE CERTIFICATE OF COVERAGE, AFTER IT IS RECEIVED.
 (B) RECORDS OF INSPECTIONS MADE DURING THE PREVIOUS TWELVE MONTHS. THE PERMITTEE SHALL RECORD THE REQUIRED OBSERVATIONS ON THE INSPECTION REPORT FORM PROVIDED BY THE DIVISION OR A SIMILAR INSPECTION FORM THAT INCLUDES ALL THE REQUIRED ELEMENTS. USE OF ELECTRONICALLY-AVAILABLE RECORDS IN LIEU OF THE REQUIRED PAPER COPIES WILL BE ALLOWED IF SHOWN TO PROVIDE EQUAL ACCESS AND UTILITY AS THE HARD-COPY RECORDS.

3. DOCUMENTATION TO BE RETAINED FOR THREE YEARS ALL DATA USED TO COMPLETE THE E-NOI AND ALL INSPECTION RECORDS SHALL BE MAINTAINED FOR A PERIOD OF THREE YEARS AFTER PROJECT COMPLETION AND MADE AVAILABLE UPON REQUEST. (40 CFR 122.41)

NCGO1 SELF-INSPECTION, RECORD KEEPING AND REPORTING EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORD KEEPING AND REPORTING

SECTION C: REPORTING
 1. OCCURRENCES THAT MUST BE REPORTED
 PERMITTEES SHALL REPORT THE FOLLOWING OCCURRENCES:
 (A) VISIBLE SEDIMENT DEPOSITION IN A STREAM OR WETLAND.
 (B) OIL SPILLS IF:
 • THEY ARE 25 GALLONS OR MORE.
 • THEY ARE LESS THAN 25 GALLONS BUT CANNOT BE CLEANED UP WITHIN 24 HOURS.
 • THEY CAUSE SHEEN ON SURFACE WATERS (REGARDLESS OF VOLUME), OR
 • THEY ARE WITHIN 100 FEET OF SURFACE WATERS (REGARDLESS OF VOLUME).
 (C) RELEASES OF HAZARDOUS SUBSTANCES IN EXCESS OF REPORTABLE QUANTITIES UNDER SECTION 311 OF THE CLEAN WATER ACT (REF: 40 CFR 110.3 AND 40 CFR 117.3) OR SECTION 102 OF CERCLA (REF: 40 CFR 302.4) OR C.S. 143-215.85.
 (D) ANTICIPATED BYPASSES AND UNANTICIPATED BYPASSES.
 (E) NONCOMPLIANCE WITH THE CONDITIONS OF THIS PERMIT THAT MAY ENDANGER HEALTH OR THE ENVIRONMENT.

2. REPORTING TIMEFRAMES AND OTHER REQUIREMENTS
 AFTER A PERMITTEE BECOMES AWARE OF AN OCCURRENCE THAT MUST BE REPORTED, HE SHALL CONTACT THE APPROPRIATE DIVISION REGIONAL OFFICE WITHIN THE TIMEFRAMES AND IN ACCORDANCE WITH THE OTHER REQUIREMENTS LISTED BELOW. OCCURRENCES OUTSIDE NORMAL BUSINESS HOURS MAY ALSO BE REPORTED TO THE DEPARTMENT'S ENVIRONMENTAL EMERGENCY CENTER PERSONNEL AT (800) 858-0368.

OCCURRENCE	REPORTING TIME FRAMES (AFTER DISCOVERY) AND OTHER REQUIREMENTS.
(A) VISIBLE SEDIMENT DEPOSITION IN A STREAM OR WETLAND	WITHIN 24 HOURS, AN ORAL OR ELECTRONIC NOTIFICATION WITHIN 7 CALENDAR DAYS, A REPORT THAT CONTAINS A DESCRIPTION OF THE SEDIMENT AND ACTIONS TAKEN TO ADDRESS THE CAUSE OF THE DEPOSITION. DIVISION STAFF MAY WAIVE THE REQUIREMENT FOR A WRITTEN REPORT ON A CASE-BY- CASE BASIS. IF THE STREAM IS NAMED ON THE NC 303(D) LIST AS IMPAIRED FOR SEDIMENT-RELATED CAUSES, THE PERMITTEE MAY BE REQUIRED TO PERFORM ADDITIONAL MONITORING, INSPECTIONS OR APPLY MORE STRINGENT PRACTICES IF STAFF DETERMINE THAT ADDITIONAL REQUIREMENTS ARE NEEDED TO ASSURE COMPLIANCE WITH THE FEDERAL OR STATE IMPAIRED-WATERS CONDITIONS.
(B) OIL SPILLS AND RELEASE OF HAZARDOUS SUBSTANCES PER ITEM 1(B)-(C) ABOVE	WITHIN 24 HOURS, AN ORAL OR ELECTRONIC NOTIFICATION THE NOTIFICATION SHALL INCLUDE INFORMATION ABOUT THE DATE, TIME, NATURE, VOLUME AND LOCATION OF THE SPILL OR RELEASE.
(C) ANTICIPATED BYPASSES (40 CFR 122.41)(6)(5)	WITHIN 24 HOURS, AN ORAL OR ELECTRONIC NOTIFICATION WITHIN 7 CALENDAR DAYS, A REPORT THAT INCLUDES AND EVALUATION OF THE QUALITY AND EFFECT OF THE BYPASS.
(E) NONCOMPLIANCE WITH THE CONDITIONS OF THIS PERMIT THAT MAY ENDANGER HEALTH OR THE ENVIRONMENT (40 CFR 122.41)(7)	WITHIN 24 HOURS, AN ORAL OR ELECTRONIC NOTIFICATION WITHIN 7 CALENDAR DAYS, A REPORT THAT CONTAINS A DESCRIPTION OF THE NONCOMPLIANCE AND ITS CAUSES, THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATE AND TIME, AND IF THE NONCOMPLIANCE HAS NOT BEEN CORRECTED, THE ANTICIPATED TIME NONCOMPLIANCE IS EXPECTED TO CONTINUE, AND STEPS TAKEN OR PLANNED TO REDUCE, ELIMINATE, AND PREVENT REOCCURRENCE OF THE NONCOMPLIANCE. (40 CFR 122.10 (1)(6)). DIVISION STAFF MAY WAIVE THE REQUIREMENT FOR A WRITTEN REPORT ON A CASE-BY-CASE BASIS.

PART III SELF-INSPECTION, RECORD KEEPING AND REPORTING

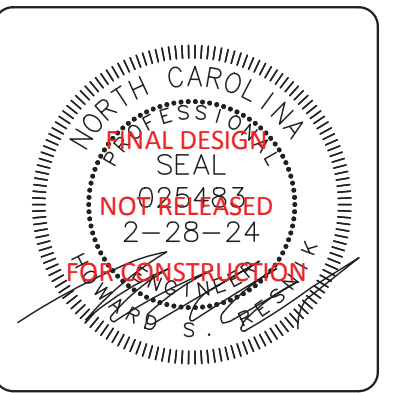
SECTION D: DRAINAGE BASINS
 SEDIMENT BASINS AND TRAPS THAT RECEIVE RUNOFF FROM DRAINAGE AREAS OF ONE ACRE OR MORE SHALL USE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE WHERE THESE DEVICES NEED TO BE DRAWN DOWN FOR MAINTENANCE OR CLOSE OUT UNLESS THIS IS INFEASIBLE. THE CIRCUMSTANCES IN WHICH IT IS NOT FEASIBLE TO WITHDRAW WATER FROM THE SURFACE SHALL BE RARE (FOR EXAMPLE, TIMES WITH EXTENDED COLD WEATHER). NON-SURFACE WITHDRAWALS FROM SEDIMENT BASINS SHALL BE ALLOWED ONLY WHEN ALL OF THE FOLLOWING CRITERIA HAVE BEEN MET:

- (A) THE EASC PLAN AUTHORITY HAS BEEN PROVIDED WITH DOCUMENTATION OF THE NON-SURFACE WITHDRAWAL AND THE SPECIFIC TIME PERIODS OR CONDITIONS IN WHICH IT WILL OCCUR. THE NON-SURFACE WITHDRAWAL SHALL NOT COMMENCE UNTIL THE EASC PLAN AUTHORITY HAS APPROVED THESE ITEMS.
- (B) THE NON-SURFACE WITHDRAWAL HAS BEEN REPORTED AS AN ANTICIPATED BYPASS IN ACCORDANCE WITH PART II, SECTION C, ITEM (2)(C) AND (D) OF THIS PERMIT.
- (C) DENEWATERING DISCHARGES ARE TREATED WITH CONTROLS TO MINIMIZE DISCHARGES OF POLLUTANTS FROM STORMWATER THAT IS REMOVED FROM THE SEDIMENT BASIN. EXAMPLES OF APPROPRIATE CONTROLS INCLUDE:
PROPERLY SITED, DESIGNED AND MAINTAINED DENEWATERING TANKS, WEIR TANKS, AND FILTRATION SYSTEMS.
- (D) VEGETATED UPLAND AREAS OF THE SITES OR A PROPERLY DESIGNED STONE PAD IS USED TO THE EXTENT FEASIBLE AT THE OUTLET OF THE DENEWATERING TREATMENT DEVICES DESCRIBED IN ITEM (C) ABOVE.
- (E) VELOCITY DISSIPATION DEVICES SUCH AS CHECK DAMS, SEDIMENT TRAPS, AND RIPRAP ARE PROVIDED AT THE DISCHARGE POINTS OF ALL DENEWATERING DEVICES, AND
- (F) SEDIMENT REMOVED FROM THE DENEWATERING TREATMENT DEVICES DESCRIBED IN ITEM (C) ABOVE IS DISPOSED OF IN A MANNER THAT DOES NOT CAUSE DEPOSITION OF SEDIMENT INTO WATERS OF THE UNITED STATES.

CSD ENGINEERING
 LICENSE # C-2710
 ENGINEERING
 LAND PLANNING
 COMMERCIAL / RESIDENTIAL
 P.O. BOX 4041
 WILMINGTON, NC 28406
 (910) 791-4441

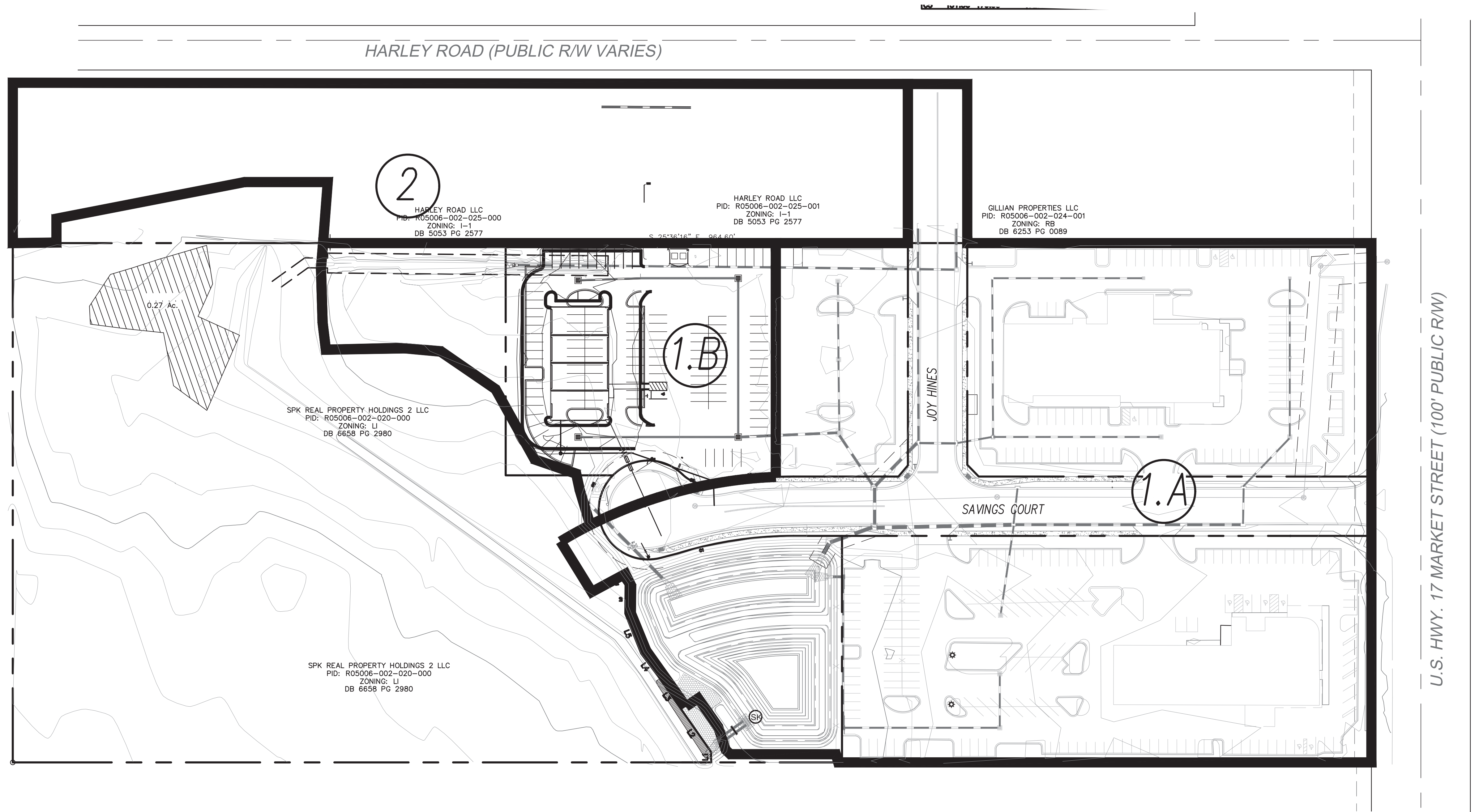
EROSION CONTROL AND STORMWATER PLAN FOR
COASTAL KIA

OWNER:
 SPK REAL PROPERTY HOLDINGS, LLC
 6103 MARKET STREET
 WILMINGTON, NC 28405



REV. NO.	DATE	BY	REMARKS
1	2-28-24	RLW	REVISION TO ADD METAL BUILDING

DATE: 8-1-19
 HORZ SCALE: AS SHOWN
 VERT SCALE: N/A
 DRAWN BY: RLW
 CHECKED BY: HSR
 PROJECT NO.: 06-0092
 Sheet No. **EC3** of **EC3**

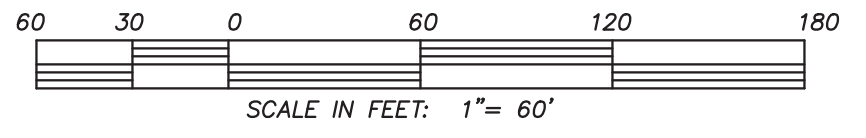


U.S. HWY. 17 MARKET STREET (100' PUBLIC R/W)

LEGEND

- EXISTING BOUNDARY
- CONTOUR LINE & ELEVATION
- DRAINAGE AREA
- WETLANDS

DRAINAGE AREA TO POND	
DRAINAGE AREA	ACREAGE (AC)
1.A	361,743 SF (8.30 AC)
1.B	87,899 SF (2.02 AC)
TOTAL	449,642 SF (10.32 AC)
2	132,820 SF (3.05 AC)
TOTAL AREA	582,462 SF (13.37 AC)



CSD ENGINEERING

LICENSE # C-2710
ENGINEERING
LAND PLANNING
COMMERCIAL / RESIDENTIAL

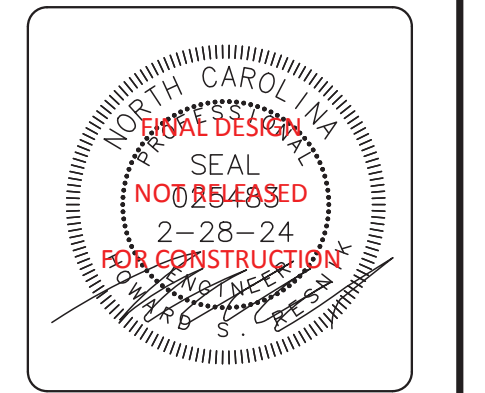
P.O. BOX 4041
WILMINGTON, NC 28406
(910) 791-4441

DRAINAGE AREAS FOR COASTAL KIA

This plan was prepared by CSD ENGINEERING, Inc. as an engineering service. The user of this document or reliance on the information contained herein is at the user's sole risk. CSD ENGINEERING, Inc. does not warrant the accuracy or completeness of the information provided herein. The user shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities.

EROSION CONTROL AND STORMWATER PLAN for
COASTAL KIA
LOCATED IN CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER:
SPK REAL PROPERTY HOLDINGS, LLC
6103 MARKET STREET
WILMINGTON, NC 28405



REV. NO.	DATE	BY	REMARKS
2	2-28-24	RLW	ADDED DETAIL BUILDING
1	9-20-19	RLW	REVISED AREA 1.B LINE PER ADDITIONAL PARKING

DATE: 6-3-19
HORIZ. SCALE: 1" = 60'
VERT. SCALE: N/A

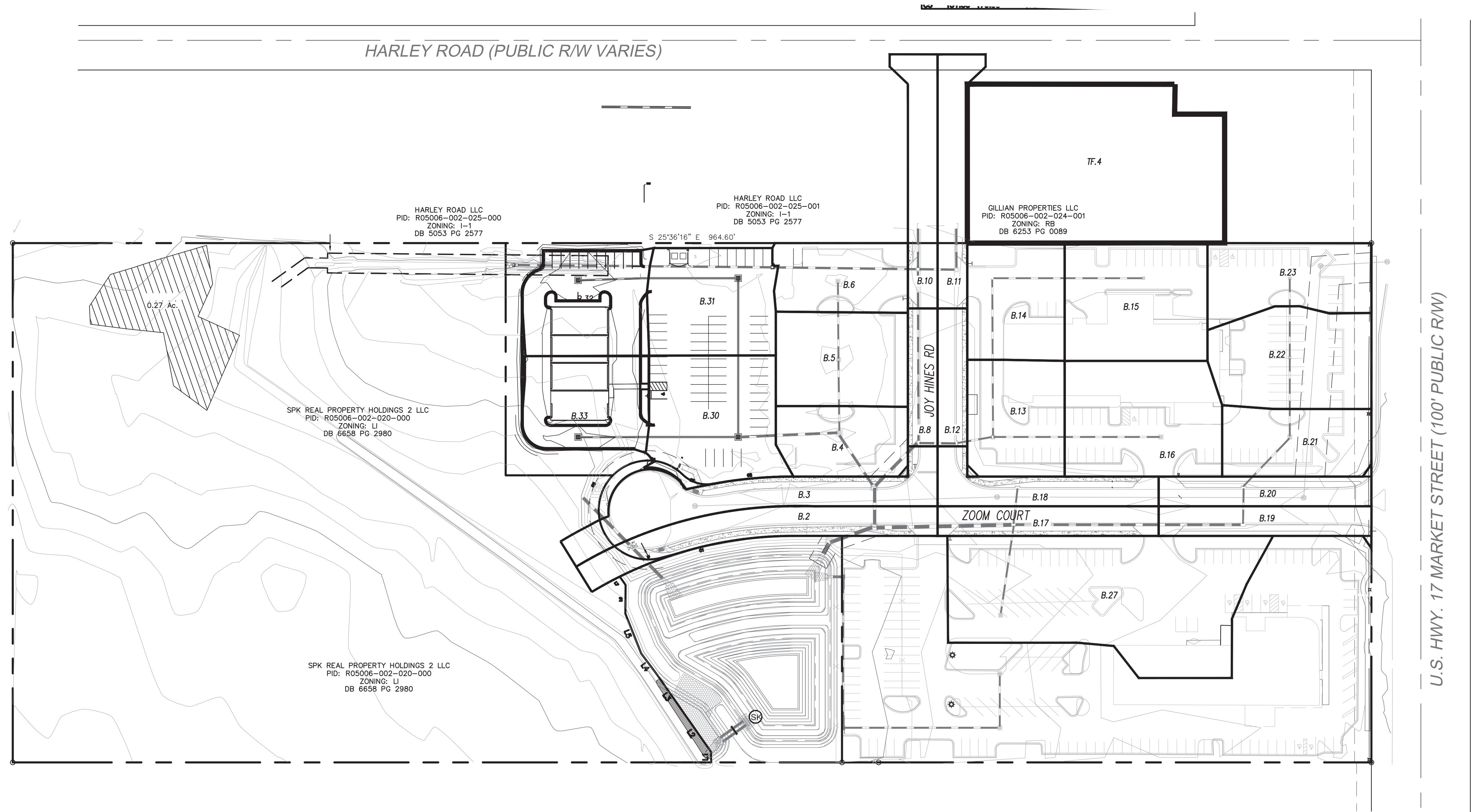
DRAWN BY: RLW
CHECKED BY: HSR

PROJECT NO.: 06-0092

Sheet No. **DA1** of **DA2**

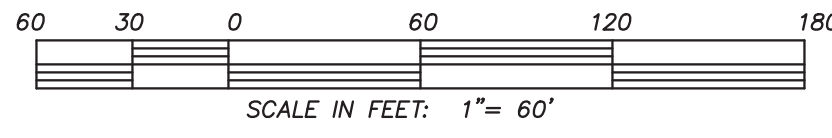


INLET	ACREAGE
B.1	OUTLET
B.2	0.25
B.3	0.29
B.4	0.21
B.5	0.29
B.6	0.22
B.7	JB
B.8	0.10
B.9	0.13
B.10	0.19
B.11	0.19
B.12	0.10
B.13	0.27
B.14	0.27
B.15	0.39
B.16	0.42
B.17	0.15
B.18	0.17
B.19	0.15
B.20	0.15
B.21	0.24
B.22	0.36
B.23	0.27
B.27	0.83
B.30	0.38
B.31	0.32
B.32	0.30
B.33	0.27
TF.4	0.92



LEGEND

- EXISTING BOUNDARY
- CONTOUR LINE & ELEVATION
- DRAINAGE AREA
- WETLANDS



CSD ENGINEERING

LICENSE # C-2710
ENGINEERING
LAND PLANNING
COMMERCIAL / RESIDENTIAL

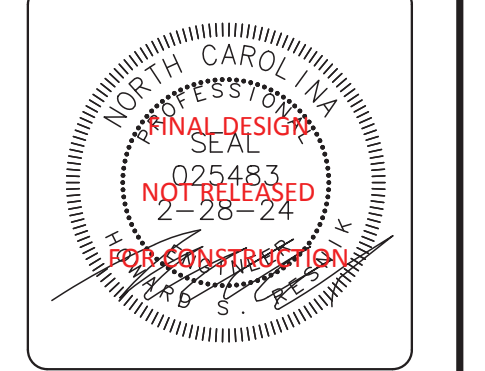
P.O. BOX 4041
WILMINGTON, NC 28406
(910) 791-4441

INLET DRAINAGE AREAS FOR COASTAL KIA

This plan was prepared by CSD Engineering, Inc. as an engineering service. It is not to be construed as a warranty, representation, or contract. The user of this plan shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The user shall indemnify and hold CSD Engineering, Inc. harmless from all claims, damages, and expenses, including reasonable attorneys' fees, arising out of or from the use of this plan.

EROSION CONTROL AND STORMWATER PLAN for
COASTAL KIA
LOCATED IN CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER:
SPK REAL PROPERTY HOLDINGS, LLC
6103 MARKET STREET
WILMINGTON, NC 28405



REV. NO.	DATE	BY	REMARKS
3	2-28-24	RLW	ADDED DETAIL BUILDING
2	11-8-19	RLW	REVISED DA FOR CB 33
1	9-20-19	RLW	ADDED ADDITIONAL PARKING, REVISED DA INLETS

DATE: 6-3-19
HORIZ. SCALE: 1" = 60'
VERT. SCALE: N/A
DRAWN BY: RLW
CHECKED BY: HSR
PROJECT NO.: 06-0092

Sheet No. **DA2** of **DA2**

AUTOTURN
COASTAL KIA

AUTOTURN EXHIBIT
COASTAL KIA
LOCATED IN CITY OF WILMINGTON
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER:
SPK REAL PROPERTY HOLDINGS, LLC
6103 MARKET STREET
WILMINGTON, NC 28405

PRELIMINARY

REV. NO.	REMARKS	BY	DATE

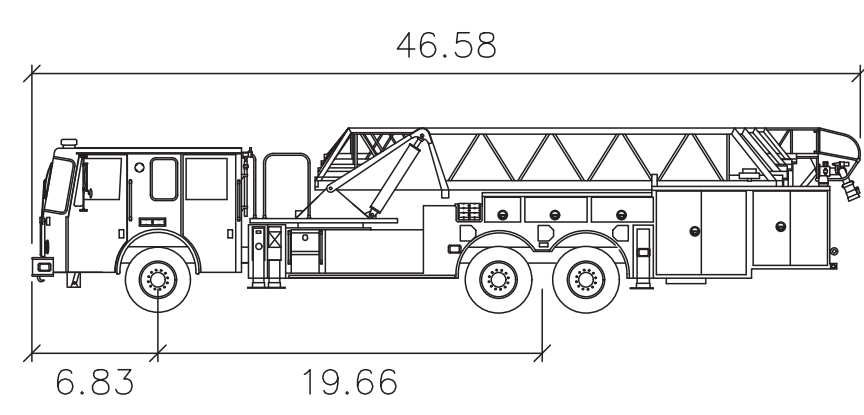
DATE: 2-28-24
HORIZ. SCALE: 1" = 20'
VERT. SCALE: N/A
DRAWN BY: RLW
CHECKED BY: HSR
PROJECT NO.: 06-0092

Sheet No. **1** of **1**

-1
2577

DB 5053 PG 2577

S 25°36'16" E 964.60'



COW_Fire-Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

