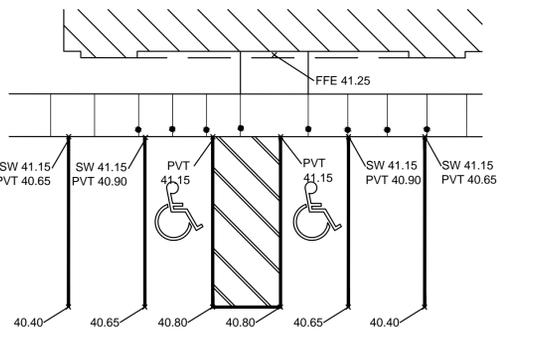


1 SITE GRADING PLAN

SCALE: 1" = 20'-0"



2 HANDICAP PARKING DETAIL

SCALE: 1" = 10'-0"

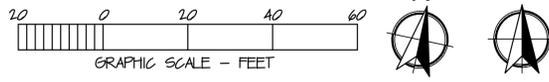
KEY NOTES:

- LIMITS OF SILT FENCE INSTALLATION. REFER TO DETAIL 4/C5.
- TEMPORARY CONSTRUCTION ENTRANCE. REFER TO DETAIL 7/C5.
- HARDWARE CLOTH AND GRAVEL INLET PROTECTION. REFER TO DETAIL 3/C5.
- 15" RCP CLASS IV STORM DRAINAGE PIPE
- TREE PROTECTION FENCING. REFER TO DETAIL 2/C5.
- GRILL BASIN. REFER TO DETAIL 7/C4. CB #1 TO BE INSTALLED SUCH THAT RIM ELEVATION PROVIDES STORAGE ABOVE GROUND ELEVATION. CB #2 TO BE INSTALLED FLUSH WITH PAVEMENT
- STORMWATER WETLAND BMP. CONTRACTOR TO INSTALL CLAY LINER PER NOTES ON SHEET C6. REFER TO DETAILS SHEET C6.
- BMP MAINTENANCE AND ACCESS EASEMENT.
- ROOF DRAIN DOWNSPOUT AND CLEANOUT. COORDINATE EXACT LOCATIONS WITH ARCHITECTURAL DRAWINGS
- RAINTANK UNDERGROUND STORMWATER STORAGE & INFILTRATION BASIN. SEE SHEET C5 FOR DESIGN AND DETAILS
- RAINTANK MAINTENANCE PORT. REFER TO DETAIL 5/C7.
- SPECIAL CB #7. REFER TO DETAIL 6/C7
- 12" RCP CLASS III STORM DRAINAGE PIPE
- STORM DRAINAGE MANHOLE. REFER TO DETAIL 9/C4
- STORM DRAINAGE MANHOLE WITH EXTENDED SUMP. REFER TO DETAIL 9/C4
- 8" HDPE STORM DRAINAGE PIPE
- TRASHGUARD TO BE PLACED OVER OUTLET PIPE. REFER TO DETAIL 7/C7
- RIPRAP OUTLET PROTECTION. REFER TO DETAIL 9/C5
- PROPOSED DRAINAGE EASEMENT

IMPERVIOUS AREAS:

- ONSITE IMPERVIOUS AREAS:
BUILDING: 7,210 SF
SIDEWALKS: 739 SF
PARKING/DRIVING AREAS: 22,717 SF
CONCRETE/ASPHALT STREETS: N/A
OTHER (DUMPSTER PAD): 280 SF
TOTAL: 30,946 SF
- IMPERVIOUS PERCENTAGE: 59.2%
- TOTAL IMPERVIOUS AREA IN STREETYARD: 160 SF
- TOTAL STREETYARD AREA PROVIDED: 7,019 SF
- IMPERVIOUS PERCENTAGE IN STREETYARD: 2.3%
- OFFSITE IMPERVIOUS AREAS:
NEW DRIVEWAY APRON: 130 SF
NEW SIDEWALK: 35 SF
TOTAL: 165 SF

CONST.



SYMBOLS LEGEND

REFER TO SURVEY FOR EXISTING CONDITION SYMBOLS LEGEND	
	NEW BUILDING CONSTRUCTION
	NEW POLE SIGN LOCATION
	NEW CONCRETE PAVING BLOCK
	EXISTING CONTOUR
	PROPOSED CONTOUR
	TEMPORARY SILT FENCE
	NEW STORM PIPE
	LIMITS OF DISTURBANCE
	CONSTRUCTION ENTRANCE
	B&G INLET PROTECTION
	SPOT ELEVATION

NEW SPOT ELEVATIONS	
LIST	ABBREVIATION
TOP OF CURB	TC
EDGE OF PAVEMENT	EP
HIGH POINT	HP
TOP OF PAVEMENT	PVT
GROUND ELEVATION	GD

GENERAL NOTES:

- REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- SITE CONDITIONS BASED UPON SURVEY SUBMITTED BY OWNER. FIELD VERIFY EXISTING CONDITIONS BY DETAILED SITE INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY THAT PROPOSED GRADES MATCH EXISTING GRADES AT ALL CONNECTION POINTS. CONTRACTOR SHALL NOTIFY ENGINEER IF A DISCREPANCY OCCURS.
- FIELD VERIFY SANITARY SEWER INVERT ELEVATION PRIOR TO ESTABLISHING FINAL FINISH FLOOR ELEVATION.
- COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.
- CONTRACTOR SHALL SEEK APPROVAL FROM ARCHITECT, ENGINEER OR OWNER'S REPRESENTATIVE AND THE CITY OF WILMINGTON PRIOR MAKING ANY CHANGES TO THE PROJECT FROM THE APPROVED PLANS.

SITE EXCAVATION REQUIREMENTS:

- A GEOTECHNICAL ANALYSIS HAS BEEN PERFORMED ON THIS SITE. REFER TO PROJECT MANUAL.
- FOLLOW GEOTECHNICAL ANALYSIS RECOMMENDATION FOR SITE EXCAVATION.
- REFER TO STRUCTURAL DRAWINGS FOR BUILDING EXCAVATION REQUIREMENTS.

GRADING NOTES

- INITIATE EROSION CONTROL SEQUENCE BEFORE BEGINNING CLEARING AND GRADING OPERATIONS.
- CLEAR AREAS TO BE GRADED OF ALL VEGETATION. PROTECT VEGETATION BEYOND GRADING LIMITS.
- STRIP TOPSOIL TO FULL DEPTH IN AREAS TO BE GRADED.
- COMPACT ALL FILL AREAS TO 95% OF MAXIMUM DENSITY, OR PER GEOTECHNICAL RECOMMENDATIONS.
- ALL AREAS ARE TO BE GRADED SO THAT NO AREAS OF STANDING WATER OCCUR.
- OPERATOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY IN RELATION TO THE PROPOSED GRADES TO ENSURE DRAINAGE IN THE DIRECTIONS INDICATED ON THE PLAN.

CONSTRUCTION SEQUENCE:

- THE INTENT OF THE CONSTRUCTION SEQUENCE IS TO PROVIDE THE CONTRACTOR WITH A GENERAL GUIDE FOR CONSTRUCTION PURPOSES. THIS SEQUENCE IS NOT INTENDED TO OUTLINE ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
- NO LAND DISTURBANCE IS PERMITTED ON SITE UNTIL A TREE PERMIT IS ISSUED IN CONJUNCTION WITH A COUNTY LAND CLEARING PERMIT, CITY GRADING AND CLEARING PERMIT, AND ANY REQUIRED STATE AND FEDERAL PERMITS.
- NO LAND DISTURBANCE IS PERMITTED IN AREAS OUTSIDE OF NECESSARY GRADING LIMITS FOR SITE IMPROVEMENTS.
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW HANOVER COUNTY EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL.
- ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY.
- IF IT IS DETERMINED DURING CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE, DESPITE PROPER IMPLEMENTATION AND MAINTENANCE, THE CONTRACTOR IS OBLIGATED TO TAKE ADDITIONAL CORRECTIVE ACTION. CONTACT OWNER'S REPRESENTATIVE AND ENGINEER WITH ANY ADDITIONAL MEASURES NEEDED.
- CONTRACTOR SHALL ESTABLISH GROUND COVER ON DISTURBED AREAS WITHIN FIFTEEN (15) WORKING DAYS FOR FLAT AREAS AND TWENTY-ONE (21) CALENDAR DAYS FOR SLOPES AFTER COMPLETION OF ANY PHASE OF GRADING.
- CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES, INCLUDING ANY SERVICES TO ADJACENT PROPERTIES, TO AVOID CONFLICT DURING INSTALLATION OF EROSION CONTROL MEASURES, STORM SEWER PIPES, UNDERGROUND UTILITY LINES AND BUILDING PADS AND FOOTERS. CONTRACTOR IS TO CALL 1-800-632-4949 FOR "NO ONE CALL" TO HAVE EXISTING UTILITIES LOCATED. IN THE EVENT THAT ACTIVE SERVICE LINES ARE LOCATED ON SITE, THE CONTRACTOR SHALL COORDINATE RE-ROUTING THESE LINES WITH THE UTILITY PROVIDER.
- CONTRACTOR TO HAVE A PROFESSIONAL LAND SURVEYOR FLAG PROPERTY LINES, EASEMENTS, TREE PROTECTION AREAS AND LIMITS OF DISTURBANCE.
- CONTRACTOR IS TO MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES.
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.
- INSTALL TEMPORARY SILT FENCE AND TREE PROTECTION FENCING AS SHOWN AND DETAILED ON PLAN. CLEAR ONLY AS NECESSARY TO INSTALL FENCING. NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING HAS BEEN INSTALLED AND APPROVED. ADDITIONALLY, PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. LAND CLEARING AND CONSTRUCTION CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION REQUIREMENTS AND METHODS PRIOR TO INSTALLATION OF ANY MEASURES.
- PERFORM CLEARING, GRUBBING AND TOPSOIL REMOVAL AS REQUIRED.
- BEGIN SITE GRADING OPERATIONS.
- INSTALL STORM SEWER PIPES AND UNDERGROUND UTILITY LINES AS SHOWN ON THE PLANS WITH EROSION CONTROL MEASURES TO ELIMINATE SILT FROM ENTERING PIPE SYSTEMS.
- CONSTRUCT BUILDING PADS AND INSTALL ABC STONE FOR ROADS AND PARKING AREAS AS SHOWN ON PLANS. INSTALL CONCRETE PADS AND SIDEWALKS AS SHOWN ON PLANS.
- CARRY OUT FINAL GRADING. RESPREAD TOPSOIL IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
- PERFORM SEEDING AND MULCHING AS REQUIRED IN ACCORDANCE WITH REQUIREMENTS SHOWN ON SHEET C5.
- ONCE ALL GROUND COVER HAS BEEN ESTABLISHED, AND OTHER CONSTRUCTION IS COMPLETE, CONTACT OWNER FOR SITE INSPECTION BEFORE REMOVING ANY TEMPORARY EROSION CONTROL MEASURES.
- ONCE SITE IS APPROVED, CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES AND BRING AREAS TO FINAL GRADES. PERFORM SEEDING AND MULCHING ON RESULTING BARE AREAS.
- REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS NEEDED FOR FINAL PAVING AT ENTRY TO SITE. INSTALL FINAL PAVING AS SHOWN ON THE PLANS.
- AFTER SITE IS COMPLETELY STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION AS REQUIRED AND ON ANY RESULTING BARE AREAS.

EROSION CONTROL NOTES

- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW HANOVER COUNTY EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL.
- ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY.
- ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY NEED TO BE INSTALLED IF DEEMED NECESSARY BY ENGINEER, OWNER, OWNER'S REPRESENTATIVE OR JURISDICTIONAL AUTHORITY.
- ESTABLISH GROUND COVER ON GRADED SLOPES AND FILLS WITHIN 21 CALENDAR DAYS AFTER COMPLETION OF ANY GRADING PHASE.
- TEMPORARY SEDIMENT CONTROL MEASURES (SILT FENCE, CONSTRUCTION ENTRANCE, ETC.) SHALL BE MAINTAINED UNTIL ALL CONTRIBUTING AREAS ARE GRADED AND STABILIZED.
- DUST CONTROL ON SITE SHALL BE MINIMIZED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS STRICTLY PROHIBITED.
- IF THE MAJORITY OF MUD OR DIRT IS NOT REMOVED FROM CONSTRUCTION TRAFFIC BY CONSTRUCTION ENTRANCES, CONTRACTOR SHALL CONSTRUCT VEHICLE WASH AREAS AT CONSTRUCTION TRAFFIC EXIT POINTS. MUD AND DIRT SHALL BE INTERCEPTED AND TRAPPED BEFORE WASH WATER IS ALLOWED TO BE DISCHARGED OFFSITE. RINSE-OFF WILL NOT BE ALLOWED OUTSIDE THE PROJECT CONSTRUCTION LIMITS.
- SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT REACHES 4-INCHES DEEP.
- MAXIMUM GRADED SLOPE SHALL NOT EXCEED 3:1.
- REFER TO SHEET C5 FOR EROSION CONTROL DETAILS.
- TOTAL DISTURBED AREA = 1.17 ACRES.
- CONTRACTOR SHALL SEEK PERMIT FOR ANY BORROW AND/OR SPOIL AREAS NOT SHOWN ON THESE PLANS.

LAND QUALITY REQUIRED NOTES:

ALL SEEDED AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED ACCORDING TO THE SPECIFICATIONS IN THE VEGETATIVE 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.

WATER QUALITY REQUIRED NOTES:

ALL SEEDED AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED ACCORDING TO THE SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, ALL SLOPES STEEP THAN 3:1 AND ALL HIGH QUALITY WATER (HOW) ZONES SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN SEVEN (7) CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITHIN FOURTEEN (14) CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.



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F-1222
www.mckimcreed.com



STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____



CRAIG A. SCHNEIDER, AIA
ARCHITECT
1736 East sunshine, Suite 417
Springfield, Missouri 65804
417.862.0558
Fax: 417.862.3265
e-mail: architect@estertyschneider.com

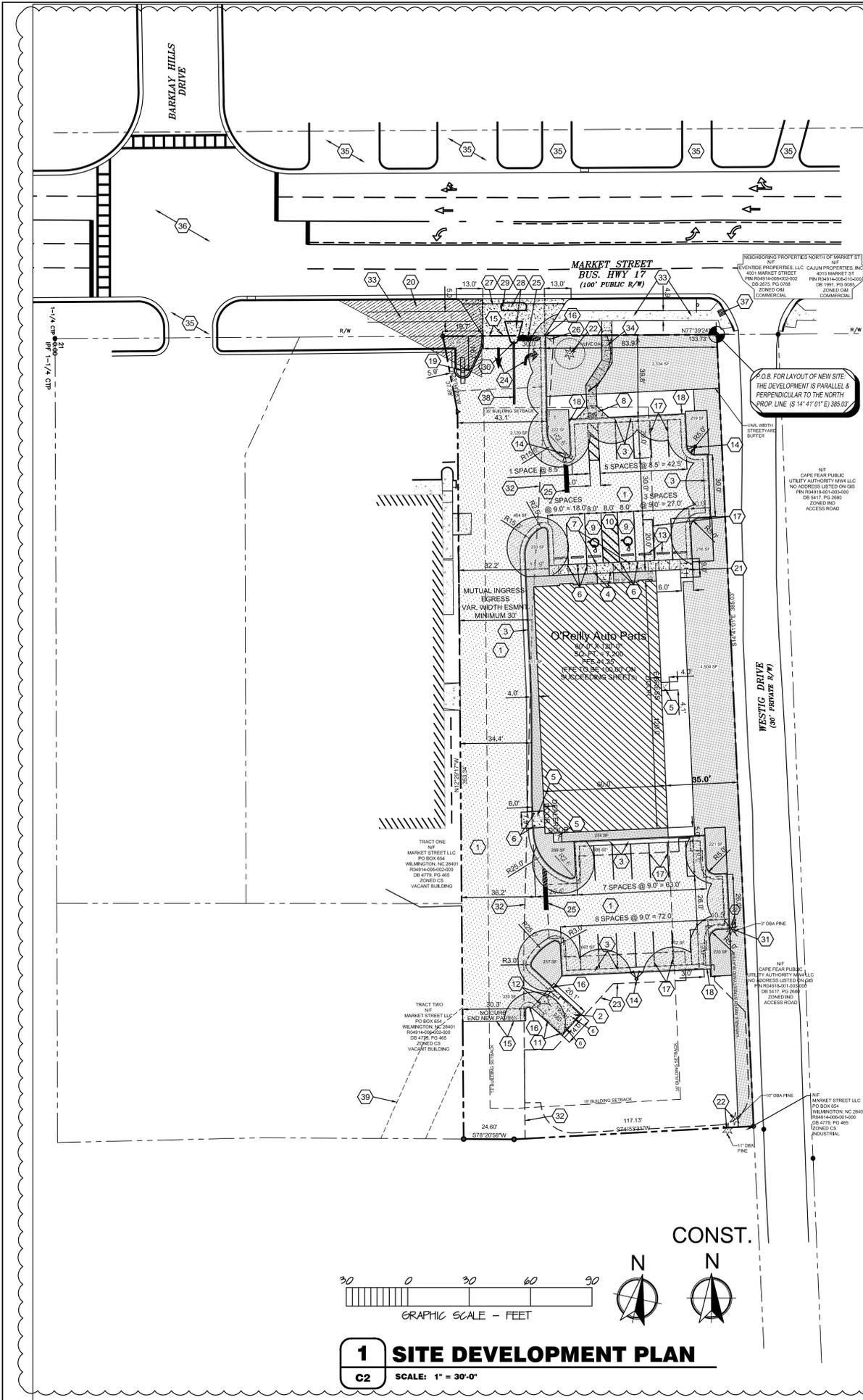
New O'Reilly Auto Parts Store:
O'REILLY AUTO PARTS
4014 MARKET STREET
WILMINGTON, NC

O'Reilly AUTO PARTS



COMM # 3168

DATE: 09-23-11
REVISION
DATE: 08-31-12
09-10-12
02-04-13



SITE DATA TABLE:

1. CURRENT PROPERTY OWNER: O'REILLY AUTOMOTIVE STORES, INC. 233 SOUTH PATTERSON SPRINGFIELD, MO 65802	20. ONSITE IMPERVIOUS CALCULATIONS BUILDING: 7,210 SF SIDEWALKS: 739 SF PARKING/DRIVEWAY AREAS: 22,717 SF CONCRETE/ASPHALT STREETS: N/A OTHER (DUMPSTER PAD): 280 SF TOTAL: 30,946 SF
2. PARCEL IDENTIFICATION NUMBERS: R04914-006-002-000	21. OFFSITE IMPERVIOUS CALCULATIONS NEW DRIVEWAY APRON: 130 SF NEW SIDEWALK: 35 SF TOTAL: 165 SF
3. BUILDING SETBACKS: REQUIRED ACTUAL FRONT 35' 114.5' CORNER 35' 35' REAR 15' 147.0' SIDE 13' 36.5'	22. LANDSCAPING CALCULATIONS STREET YARD LANDSCAPING MARKET STREET (PRIMARY STREET YARD) 134 LF - 34 LF (DRIVEWAY) x 25 (MULTIPLIER) = 2,500 SF STREET YARD PROVIDED: 2,558 SF REQUIRED PLANTINGS: 2,558 SF / 600 SF / TREE = 4.3 OR 4 CANOPY TREES 2,558 SF / 600 SF * 6 SHRUBS = 25.6 OR 26 SHRUBS PROVIDED PLANTINGS: 4 CANOPY SHADE TREES (1 EXISTING TREE SAVED) 26 SHRUBS
4. TOTAL PARCEL AREA: 52,235 SF (1.199 ACRES)	WESTIG DRIVE (SECONDARY STREET YARD) 385 LF - 37.5 LF (STREETYARD OVERLAP) x 12.5 (MULTIPLIER) = 4,344 SF STREET YARD PROVIDED: 4,504 SF REQUIRED PLANTINGS: 4,504 SF / 600 SF / TREE = 7.5 OR 8 CANOPY TREES 4,504 SF / 600 SF * 6 SHRUBS = 45.0 OR 45 SHRUBS PROVIDED PLANTINGS: 8 CANOPY SHADE TREES 45 SHRUBS
5. PARKING CALCULATIONS A. PROPOSED USE: RETAIL B. MAXIMUM PARKING ALLOWED: 1 SPACE / 200 SF 7,200 SF / 200 SF / SPACE = 36 SPACES C. MINIMUM PARKING REQUIRED: 1 SPACE / 400 SF 7,200 SF / 400 SF / SPACE = 18 SPACES D. ACCESSIBLE PARKING REQUIRED: SPACES FOR 25% OF TOTAL SPACES E. PARKING PROVIDED: 28 SPACES INCLUDING 2 ACCESSIBLE SPACES F. VAI ACCESSIBLE SPACE NOTED ON PLAN G. ADA COMPLIANCE NOTED IN KEY NOTE #10 H. BICYCLE PARKING REQUIRED: 5 SPACES FOR FIRST 25 AUTO PARKING SPACES I. BICYCLE PARKING PROVIDED: 6 BICYCLE PARKING SPACES	TOTAL STREET YARD PROVIDED: 7,019 SF TOTAL IMPERVIOUS AREA IN STREETYARD: 160 SF TOTAL IMPERVIOUS PERCENTAGE IN STREETYARD = 2.3% INTERIOR SHADING AND LANDSCAPING PARKING FACILITY AREA SHADING REQUIRED: 17.5 HT x 240 LF = 4,200 SF PARKING FACILITY AREA SHADING PROVIDED: 4,861 SF FOUNDATION LANDSCAPING BUILDING FACE ADJACENT TO PARKING AREA: 17.5 HT x 240 LF = 4,200 SF FOUNDATION LANDSCAPING PROVIDED: 4,200 SF x 12% = 504 SF FOUNDATION LANDSCAPING PROVIDED: 944 SF
6. CAMA LAND USE CLASSIFICATION: DEVELOPED	REQUIRED TREES: 15 TREES REQUIRED TO BE RETAINED OR PLANTED PER DISTURBED ACRE: 15 x 1.13 AC = 17 TREES TREES TO BE PLANTED: 24 TREES TO BE RETAINED: 2 TOTAL TREES: 26
7. BUILDING SIZE: 7,200 SF	
8. BUILDING LOT COVERAGE: 7,200 SF / 52,235 SF = 0.138 OR 13.8%	
9. NUMBER OF UNITS: 1	
10. NUMBER OF BUILDINGS: 1	
11. BUILDING HEIGHT: 17 FT	
12. NUMBER OF STORIES: 1	
13. SQUARE FOOTAGE PER FLOOR: 7,200 SF/FLOOR	
14. ON-SITE DISTURBED AREA: 1.16 ACRES	
15. OFF-SITE DISTURBED AREA: 0.01 ACRES	
16. TOTAL IMPERVIOUS AREA: 30,946 SF	
17. TOTAL IMPERVIOUS PERCENTAGE: 58.2%	
18. EXISTING IMPERVIOUS AREAS: 19,449 SF BUILDING: 4,497 SF PAVEMENT: 15,022 SF	

SITE GENERAL NOTES:

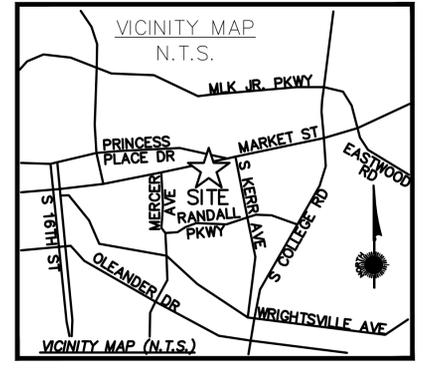
- REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- ALL SITE DIMENSIONS TO THE GUTTER LINE OF CURB, CONCRETE OR PROPERTY LINE UNLESS OTHERWISE NOTED. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND STARTING CONSTRUCTION.
- COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.
- REFER TO STRUCTURAL PLANS FOR DEVELOPMENT OF SIDEWALKS ADJACENT TO FOUNDATIONS.
- ALL CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF WILMINGTON STANDARDS, SPECIFICATIONS AND DETAILS.
- ALL PERMITS RELATING TO THIS PROJECT MUST BE OBTAINED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY LAYOUT AND CONTACT ENGINEER WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- ACCESSIBLE CURB CUT RAMP SHALL BE PROVIDED WHERE SIDEWALKS INTERSECT CURBING. ALL CURB CUT RAMP DETAILS SHALL CONFORM TO AND REFERENCE THE NC STATE ACCESSIBILITY CODE. CURB CUT RAMP WITHIN THE R/W SHALL CONFORM TO NCDOT STANDARDS AND SPECIFICATIONS.
- ALL HVAC UNITS, MECHANICAL EQUIPMENT & SATELLITE DISHES ON THIS SITE WILL BE SCREENED.
- PAINTED TRAFFIC ARROWS AND ALL SIGNS, PAVEMENT MARKINGS, ETC. SHALL CONFORM TO M.U.T.C.D. STANDARDS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE POINTS.
- GENERAL CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
- CONTRACTOR SHALL SEEK APPROVAL FROM ARCHITECT, ENGINEER OR OWNER'S REPRESENTATIVE AND THE CITY OF WILMINGTON PRIOR MAKING ANY CHANGES TO THE PROJECT FROM THE APPROVED PLANS.
- THE EXISTING BUILDING AND HARDSCAPE AREAS ON THIS SITE ARE TO BE REMOVED.
- TACTILE WARNING MATS SHALL BE INSTALLED ON ALL ACCESSIBLE RAMPS.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.

CITY OF WILMINGTON REQUIRED NOTES:

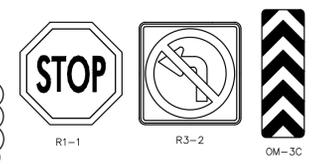
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- ONCE STREETS ARE OPEN TO TRAFFIC, CONTACT TRAFFIC ENGINEERING TO REQUEST INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN. ADD A NOTE TO CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
- ANY BROKEN OR MISSING SIDEWALK PANELS WILL BE REPLACED.
- CONTACT KAREN DIXON AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- PROJECT SHALL COMPLY WITH CITY OF WILMINGTON CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 343-3910 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES CITY WATER FOR CONSTRUCTION HE 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 ANY IRRIGATION SYSTEM SUPPLIED BY CITY WATER SHALL COMPLY WITH THE CITY'S CROSS CONNECTION CONTROL REGULATIONS. CALL 343-3910 FOR INFORMATION.
- ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CITY WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCCHCR OR ASSE.

REFER TO DETAIL NOTES:

- CONCRETE PAVING: REFER TO DETAIL 1/C3.
- ALTERNATE #1: ASPHALT PAVING REFER TO DETAIL 2/C3. REFER TO PROJECT MANUAL.
- CONCRETE PAVING: REFER TO DETAIL 1/C3.
- CONCRETE CURB: REFER TO DETAIL 3/C3.
- CONCRETE SIDEWALK ADJACENT TO BUILDING: REFER TO DETAIL 4/C3.
- CONCRETE DOOR LANDING: REFER TO DETAIL 4/C3 AND STRUCTURAL DETAILS. RAMP PAVING AS INDICATED. LANDING CAN BE POURED MONOLITHIC IF CONCRETE PAVING IS USED.
- STEEL BOLLARD: REFER TO DETAIL 6/C3. PROVIDE (2) AT TRASH PAD AND OVERHEAD DOOR, PROVIDE (9) AT SIDEWALK. REFER TO STRUCTURAL PLAN FOR LOCATION.
- HANDICAP PARKING SIGN: REFER TO DETAIL 7/C3.
- CONCRETE HC RAMP: REFER TO DETAIL 8/C4.
- HANDICAP PARKING SYMBOL: REFER TO DETAIL 5/C3.
- HANDICAP ACCESS UNLOADING ZONE: SLOPE 2% MAX. EACH WAY (ADA COMPLIANT) AND STRIPE AS SHOWN.
- SCREEN FENCE: REFER TO DETAIL 12/C3.
- SCREEN FENCE GATES: REFER TO DETAIL 11/C3.
- CONCRETE WHEEL STOP: MAXIMUM HEIGHT 4" AND DIMENSIONS PER CITY OF WILMINGTON STANDARDS. TO BE PLACED 2.5' FEET FROM END OF PARKING STALL TO FACE OF WHEEL STOP PER CITY OF WILMINGTON STANDARDS. ANCHOR TO PAVING WITH (2) 1" x 6" LONG #4 REBAR (TO SIT LEVEL WITH PAVING). REFER TO DETAIL 13/C3.
- PARKING LOT LIGHTING: REFER TO SITE ELECTRICAL PLAN FOR LOCATION AND TYPE.
- LIMITS OF NEW PAVING: MATCH EXISTING PER CITY AND OR STATE STANDARDS.
- ROLL DOWN CURB: TERMINATE AND ROLL DOWN NEW CURB WHERE INDICATED. ROLL DOWN AT 1:2.
- STRIPING: PROVIDE 4" WIDE PARKING LOT STRIPING AS SHOWN. USE HIGHWAY MARKING PAINT - WHITE (2 COATS)
- CURB CUT: SEE PLAN FOR WIDTH OF CURB OPENING. REFER TO DETAIL 8/C3.
- SIGN LOCATION: SIGN FURNISHED AND INSTALLED BY OWNER. REFER TO SITE ELECTRICAL PLAN FOR DETAILS.
- SIGHT TRIANGLE ILLUSTRATION PER CITY OF WILMINGTON STANDARD. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10'.
- BICYCLE PARKING FOR 6 BICYCLES. SEE DETAIL 9/C3.
- EXISTING LIVE OAK TREE LOCATED AT THE ENTRANCE OF THE SITE SHALL BE PRUNED IN ACCORDANCE WITH CITY OF WILMINGTON SPECIFICATIONS.
- BMP MAINTENANCE AND ACCESS EASEMENT
- TRAFFIC ARROWS PER CITY OF WILMINGTON STANDARD DETAIL 11-03. ARROWS SHALL BE PAINTED WHITE AND SHALL BE THERMOPLASTIC MATERIAL. SEE DETAIL 3/C4
- 24" WIDE STOP BAR PER CITY OF WILMINGTON STANDARD DETAIL 11-01. SEE DETAIL 2/C4
- STOP SIGN R-1-1. SEE DETAIL 4/C4 FOR INSTALLATION REQUIREMENTS.
- CONCRETE DRIVE APRON: TO BE INSTALLED PER CITY OF WILMINGTON STANDARDS SEE DETAIL 10/C3.
- 5' TALL SURFACE MOUNTED CONCRETE MONOLITHIC ISLAND PER DIMENSIONS THIS SHEET AND NCDOT DETAIL 852.01. SEE DETAIL 1/C4.
- OM-3C OBJECT MARKER. SEE DETAIL 4/C4 FOR INSTALLATION REQUIREMENTS.
- EXISTING TREE TO BE REMOVED
- CROSS-ACCESS EASEMENT
- EXISTING CONCRETE SIDEWALK
- STANDARD CONCRETE SIDEWALK REFER TO DETAIL 9/C3.
- EXISTING DRIVEWAY TO ADJACENT PROPERTIES
- EXISTING SIGNALLED INTERSECTION
- TACTILE WARNING MAT TO BE PLACED ON EXISTING ACCESSIBLE RAMP PER CITY OF WILMINGTON STANDARDS.
- PROVIDE 4" WIDE DOUBLE YELLOW STRIPING AS SHOWN. USE HIGHWAY MARKING PAINT (2 COATS)
- PROPOSED DRAINAGE EASEMENT



SIGN LEGEND:



SITE INFORMATION:

- PROPOSED LINEAR FOOTAGE OF ROADS: N/A
- PROPOSED NEW WATER TAPS: 1
- PROPOSED NEW SEWER TAPS: 1

SYMBOLS LEGEND

REFER TO SURVEY FOR EXISTING CONDITION SYMBOLS LEGEND	
	NEW BUILDING CONSTRUCTION
	AREA OF CONCRETE
	AREA OF PAVING
	NEW POLE SIGN LOCATION
	NEW CONCRETE PAVING BLOCK
	NEW LIGHT POLE LOCATION
	NEW FENCE CONSTRUCTION
	EXISTING TREE
	SIGHT TRIANGLE
	FOUNDATION PLANTINGS
	STREET YARD PLANTINGS
	INTERIOR PLANTINGS
	PARKING FACILITY SHADING

Please provide the Water and Sewer Capacity needs (current and proposed zoning) with calculations in gallons per day based on state guide lines:
 Water: 0 GPD (current use)
 Water: 225 GPD (proposed use)
 Sewer: 0 GPD (current use)
 Sewer: 225 GPD (proposed use)

STORMWATER MANAGEMENT PLAN
APPROVED
 CITY OF WILMINGTON
 ENGINEERING DEPARTMENT
 DATE _____ PERMIT # _____
 SIGNED _____

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____



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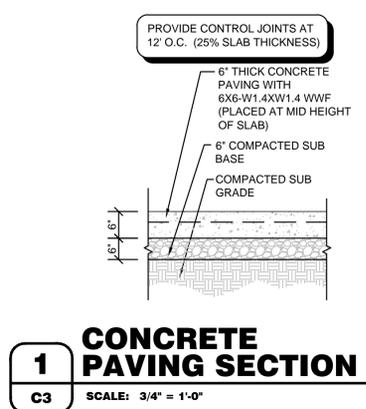


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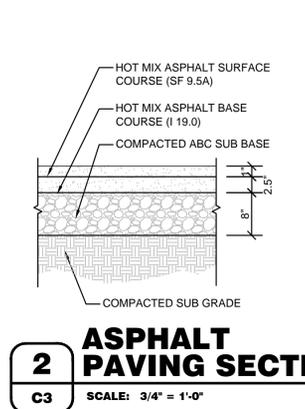
New O'Reilly Auto Parts Store:
 O'REILLY AUTO PARTS
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 WILMINGTON, NC



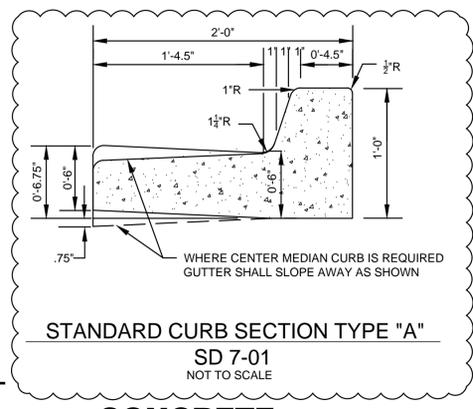
COMM # 3168
 DATE: 09-23-11
 REVISION
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 09-10-12
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1 CONCRETE PAVING SECTION
C3 SCALE: 3/4" = 1'-0"

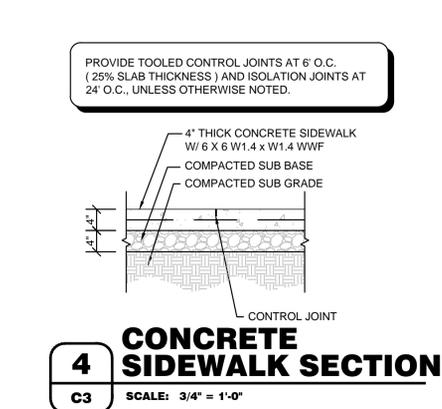


2 ASPHALT PAVING SECTION
C3 SCALE: 3/4" = 1'-0"

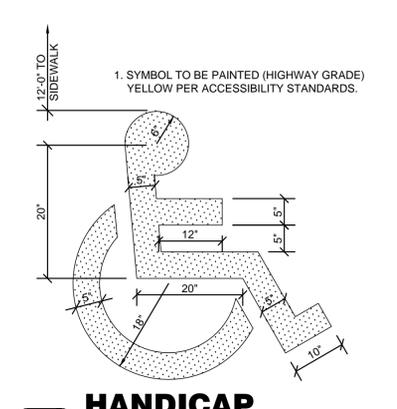


3 STANDARD CURB SECTION TYPE "A"
SD 7-01 NOT TO SCALE

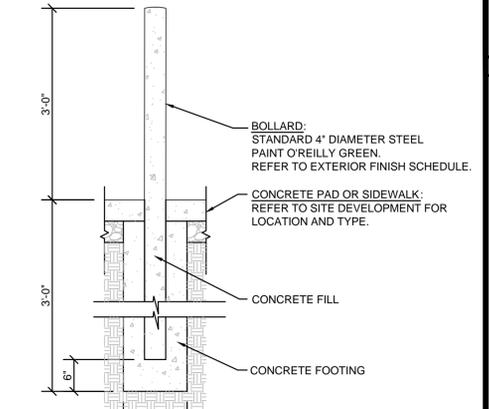
3 CONCRETE CURB SECTION
C3 SCALE: N/A



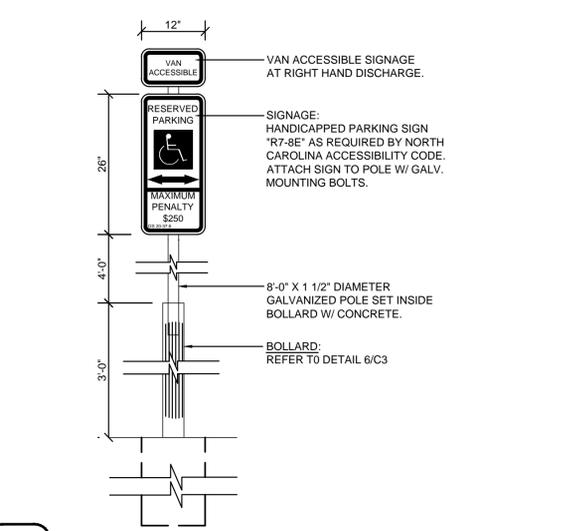
4 CONCRETE SIDEWALK SECTION
C3 SCALE: 3/4" = 1'-0"



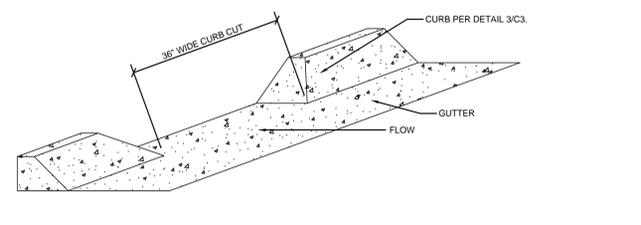
5 HANDICAP PARKING SYMBOL
C3 SCALE: 3/4" = 1'-0"



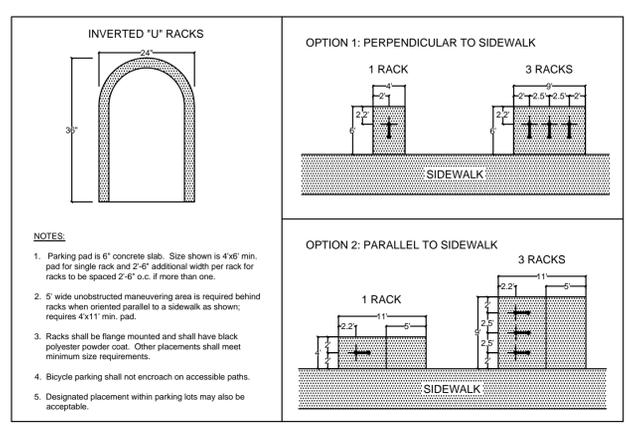
6 STEEL BOLLARD SECTION
C3 SCALE: 3/4" = 1'-0"



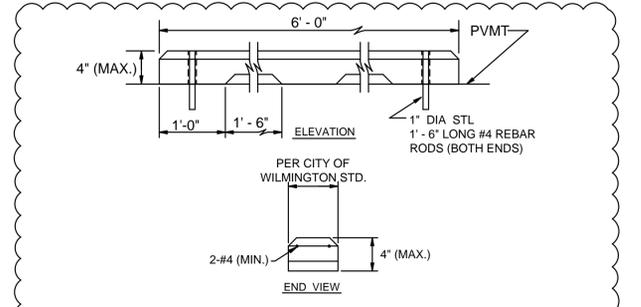
7 HANDICAP PARKING SIGN
C3 SCALE: 3/4" = 1'-0"



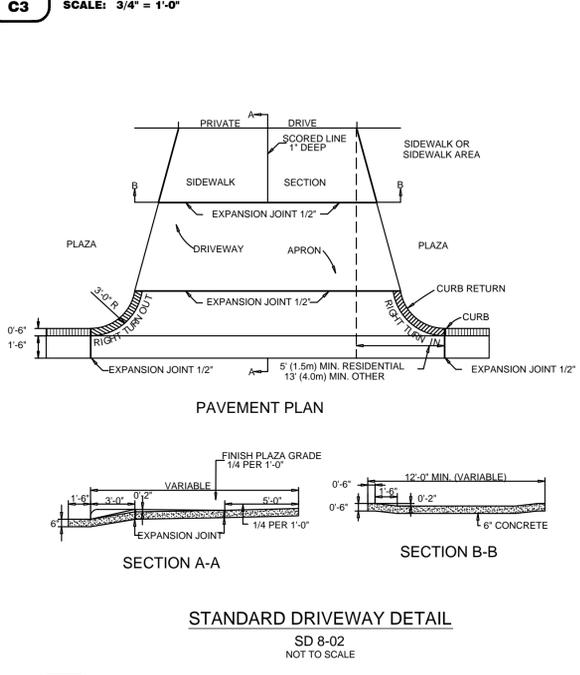
8 CURB CUT DETAIL
C3 SCALE: N/A



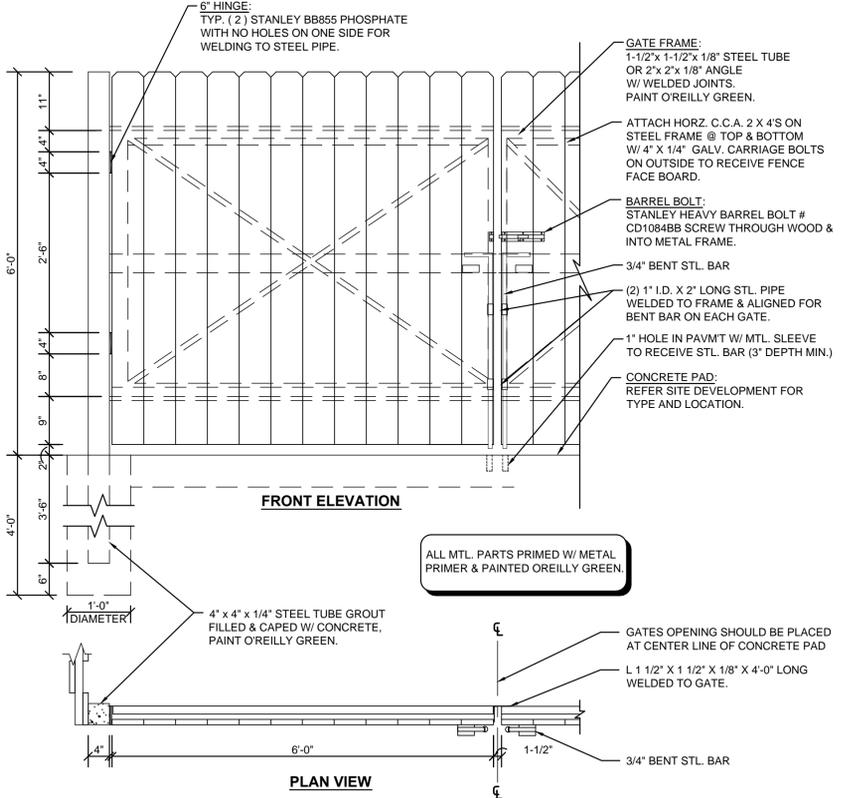
9 BICYCLE PARKING
C3 SCALE: N.T.S.



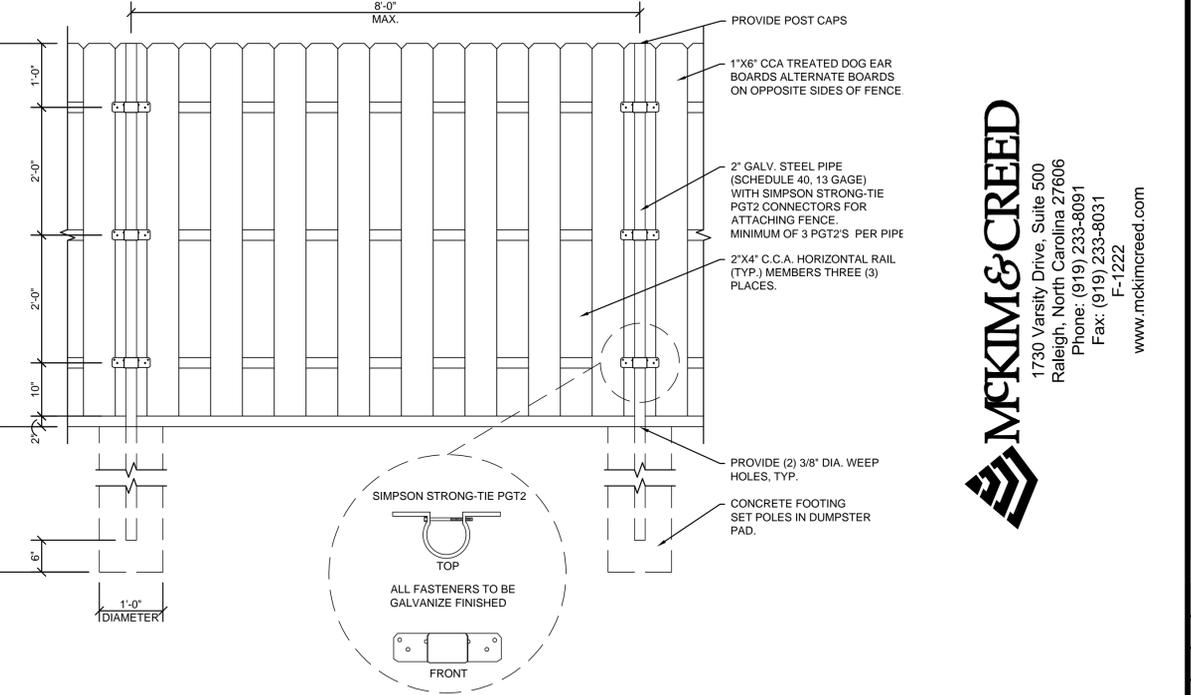
13 CONCRETE WHEELSTOP
C3 SCALE: N.T.S.



10 DRIVEWAY DETAIL
C3 SCALE: N/A



11 SCREEN FENCE GATE
C3 SCALE: 3/4" = 1'-0"



12 SCREEN FENCE
C3 SCALE: 3/4" = 1'-0"



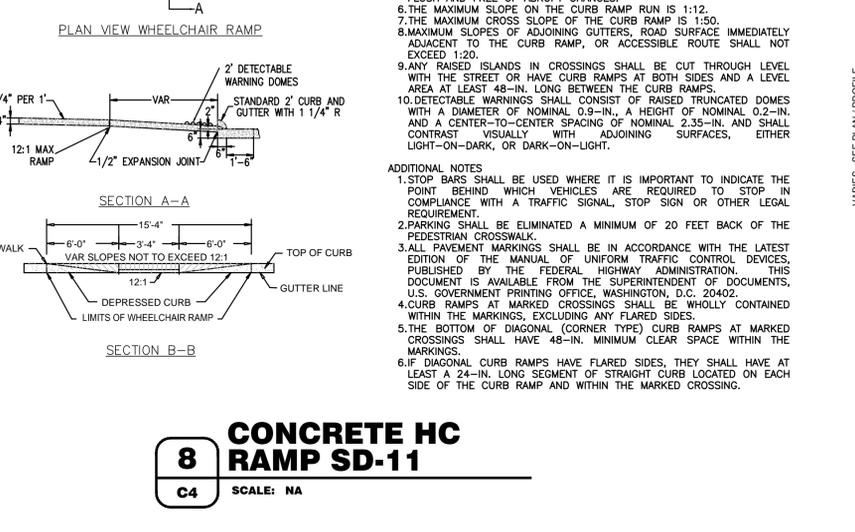
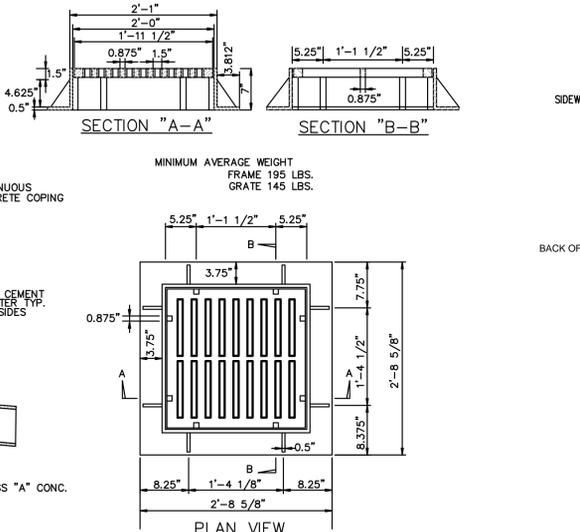
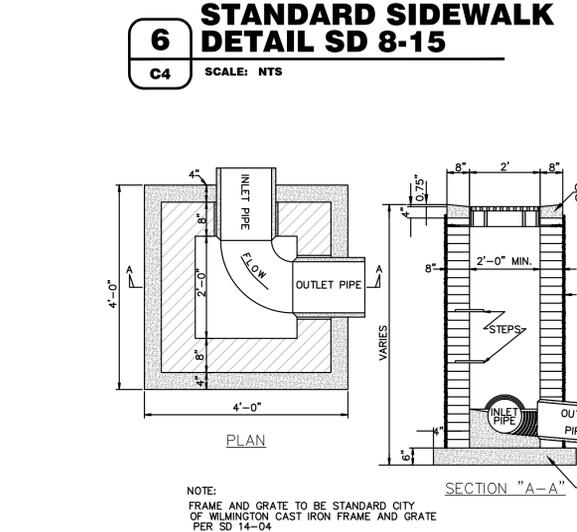
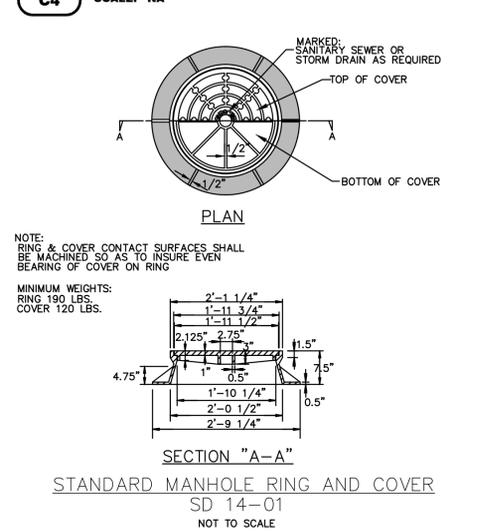
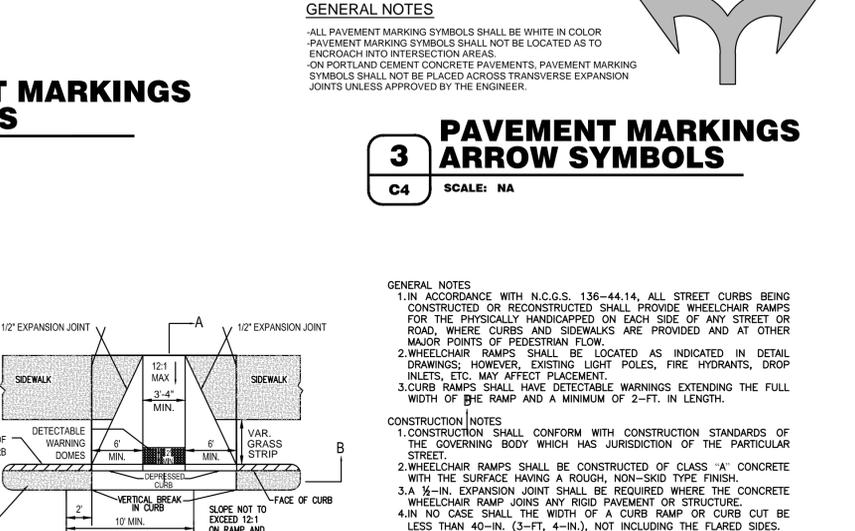
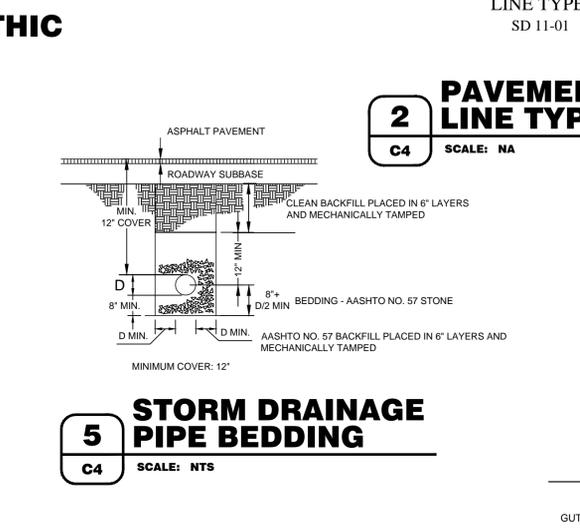
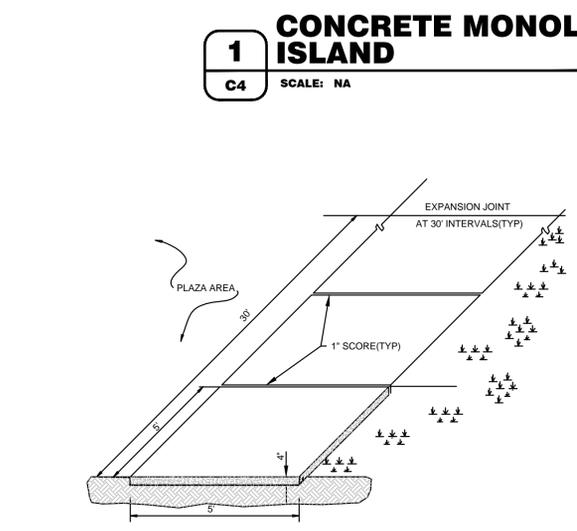
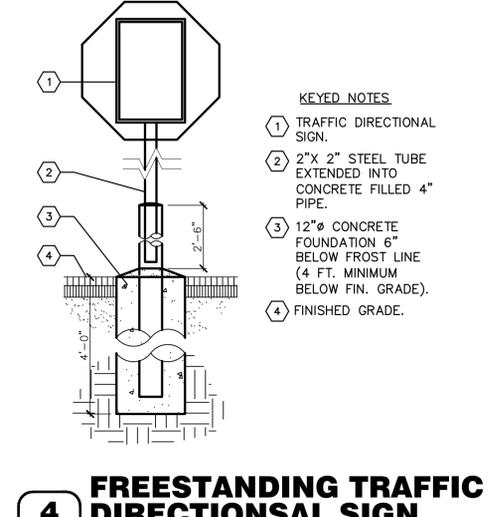
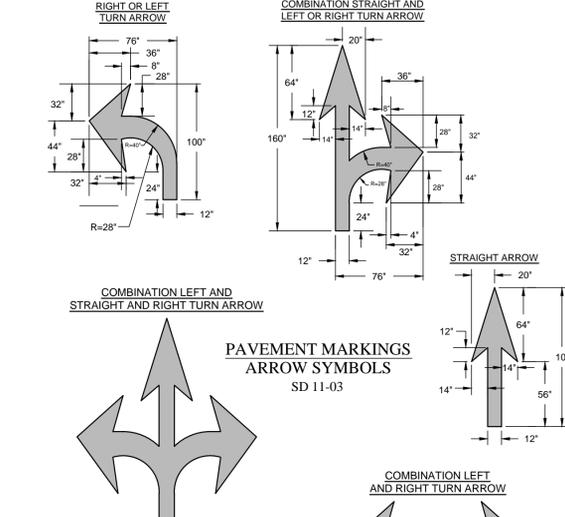
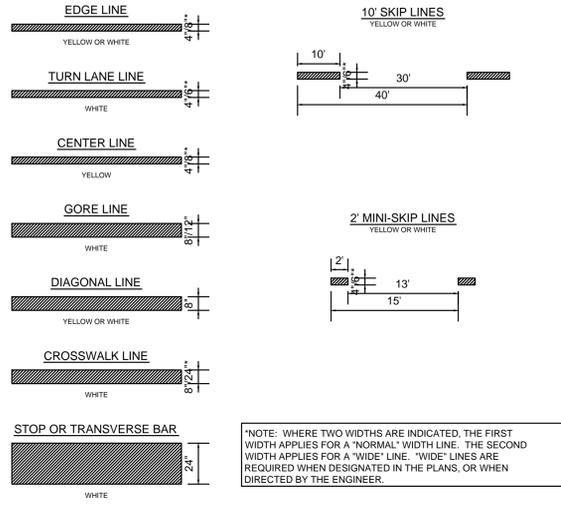
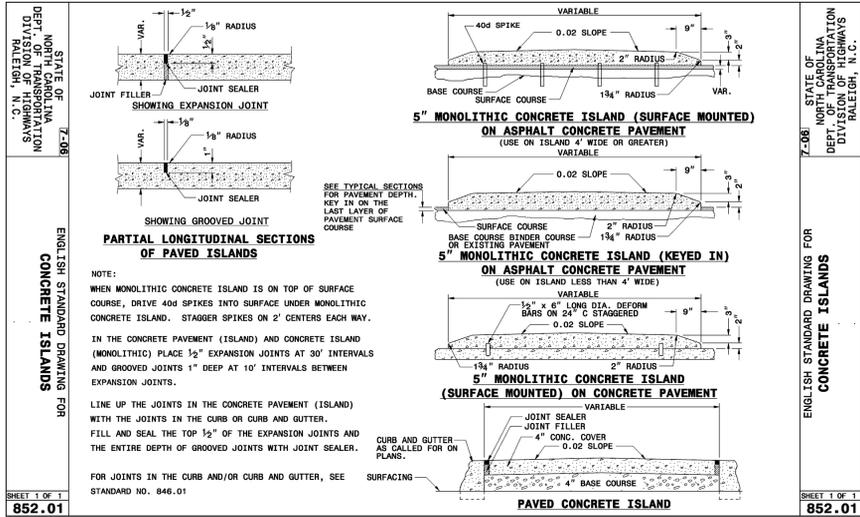
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C4 of 7

STATE OF NORTH CAROLINA
PROFESSIONAL ENGINEER
036348
02/04/13
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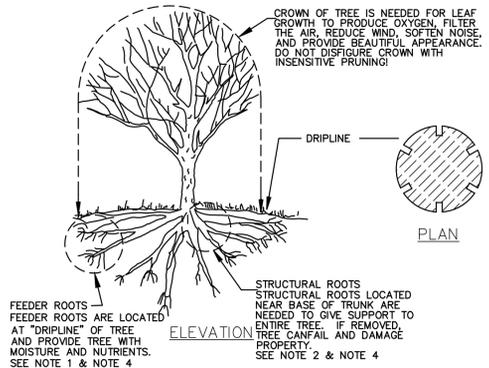
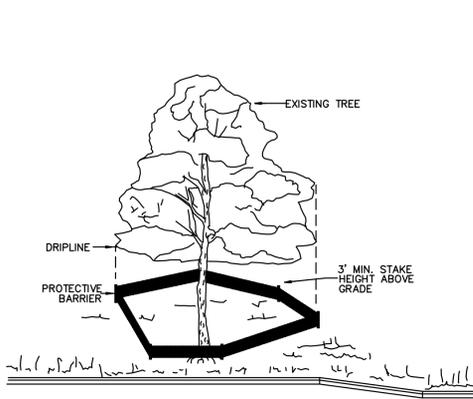
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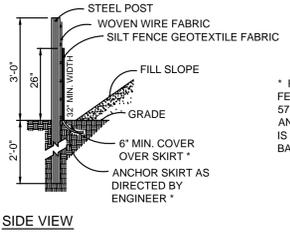
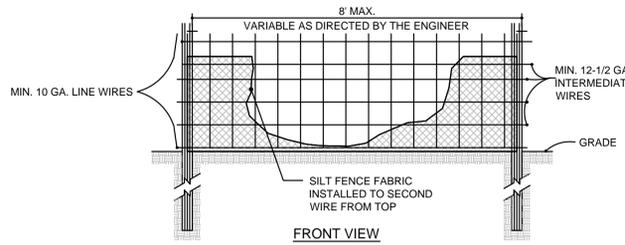
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RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

SEEDING MIXTURE
 SPECIES RATE (lb/acre)
 RYE (GRAIN) 120
 ANNUAL LESPEDEZA (KOBEN IN
 PIEDMONT & COASTAL PLAIN,
 KOREAN IN MOUNTAINS)
 OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND
 BEYOND JUNE
SEEDING DATES:
 MOUNTAINS (ABOVE 2,500): FEB. 15 - MAY 15
 (BELOW 2,500): FEB. 1 - MAY 1
 PIEDMONT: JAN. 1 - MAY 1
 COASTAL PLAIN: DEC. 1 - APR. 15
SOIL AMENDMENTS:
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND
 AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER
MULCH:
 APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT. NETTING OR A
 MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED
 AS A MULCH ANCHORING TOOL.
MAINTENANCE:
 REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH
 IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.



- TREE PROTECTION DURING CONSTRUCTION**
- DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK
 UNDER TREES. NO HEAVY MATERIALS SHALL BE STORED BENEATH TREES. RESULTS
 OF COMPACTATION CAUSE WATER AND AIR NOT TO REACH THE ROOTS AND THE TREE
 WILL DIE. THESE FEEDER ROOTS OCCUR WELL AWAY FROM THE BASE OF
 THE TREE TO THE EDGE OF THE OVERHEAD BRANCH CANOPY. DAMAGING
 THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE
 IS PROHIBITED. PROTECTIVE BARRIER SHOULD PREVENT DAMAGE FROM
 OCCURRING DURING CONSTRUCTION.
 - NO CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE
 TRUNK. THESE ARE ESSENTIAL IN SUPPORTING THE TREE AND HOLDING IT
 UPRIGHT IN HIGH WINDS. REMOVAL OF THESE ROOTS ALONG ONE SIDE IS
 OFTEN DONE BECAUSE OF A WALK, PAVING OR BUILDING WHICH IS BEING
 CONSTRUCTED.
 - AVOID CUT AND FILL WITHIN DIAMETER OF TREE CROWN DURING EXCAVATION.



- NOTE:**
- USE SILT FENCE ONLY WHEN
 DRAINAGE AREA DOES NOT EXCEED
 1/4 ACRE AND NEVER IN AREAS OF
 CONCENTRATED FLOW
 - END OF SILT FENCE NEEDS TO BE
 TURNED UPHILL.

* FOR REPAIR OF SILT
 FENCE FAILURES, USE No.
 57 WASHED STONE. FOR
 ANCHOR WHEN SILT FENCE
 IS PROTECTING CATCH
 BASIN.

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RECOMMENDATIONS FOR SUMMER

SEEDING MIXTURE
 SPECIES RATE (lb/acre)
 GERMAN MILLET 40
 IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE
 SUBSTITUTED AT A RATE OF 50 lb/acre.
SEEDING DATES:
 MOUNTAINS MAY 15 - AUG. 15
 PIEDMONT: MAY 1 - AUG. 15
 COASTAL PLAIN: APR. 15 - AUG. 15
SOIL AMENDMENTS:
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND
 AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER
MULCH:
 APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT. NETTING OR A
 MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED
 AS A MULCH ANCHORING TOOL.
MAINTENANCE:
 REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH
 IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

RECOMMENDATIONS FOR FALL

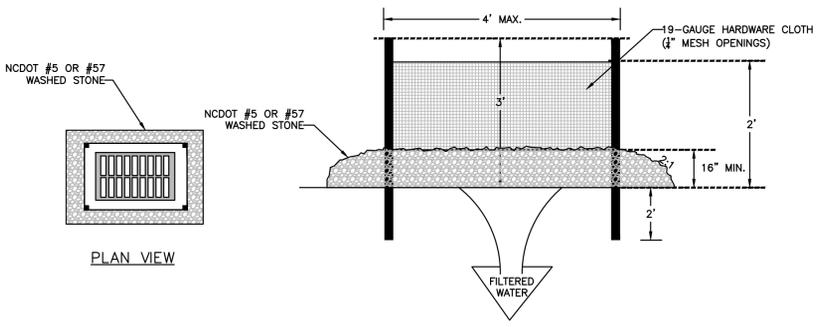
SEEDING MIXTURE
 SPECIES RATE (lb/acre)
 RYE (GRAIN) 120
SEEDING DATES:
 MOUNTAINS: AUG. 15 - DEC. 15
 COASTAL PLAIN AND PIEDMONT: AUG. 15 - DEC. 30
SOIL AMENDMENTS:
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND
 AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER
MULCH:
 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 REFERTILIZE DAMAGED AREAS IMMEDIATELY. 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 KOBEN (PIEDMONT AND COASTAL PLAIN) OR KOREAN
 (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

2 TREE PROTECTION FENCING

C5 SCALE: N/A

NOTES:

- UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
- DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE PERIMETER
 OF THE INLET, A MAXIMUM OF 4 FEET APART.
- SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE,
 AND BOTTOM. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
- PLACE CLEAN GRAVEL (NO 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.
- ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL
 GRADING ELEVATIONS.
- COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUND COVER.

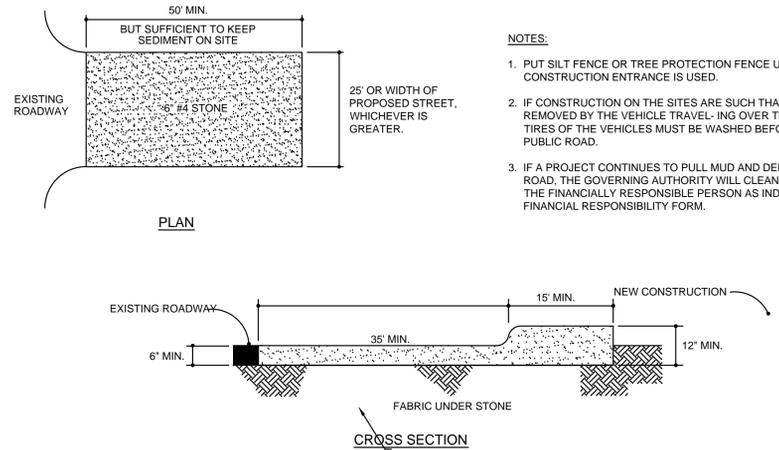


4 TEMPORARY SILT FENCE

C4 SCALE: NTS

NOTES:

- PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE
 CONSTRUCTION ENTRANCE IS USED.
- IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT
 REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE
 TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE
 PUBLIC ROAD.
- IF A PROJECT CONTINUES TO PULL MUD AND DEBRIS ON TO THE PUBLIC
 ROAD, THE GOVERNING AUTHORITY WILL CLEAN THE AREA AND INVOICE
 THE FINANCIALLY RESPONSIBLE PERSON AS INDICATED ON THE
 FINANCIAL RESPONSIBILITY FORM.



1 TEMPORARY SEEDING SCHEDULE

C5 SCALE: N/A

- CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER
 ADVERSE SOIL CONDITIONS, IF AVAILABLE.
 - RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
 - REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING
 SURFACE REASONABLY SMOOTH AND UNIFORM.
 - APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY
 AND MIX WITH SOIL (SEE BELOW*).
 - CONTINUE TILLAGE UNTIL A WELL - PULVERIZED, FIRM, REASONABLY UNIFORM
 SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
 - SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH
 SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
 - MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
 - INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS
 WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 60%
 DAMAGED REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING
 RATES.
 - CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND
 FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.
- * APPLY: AGRICULTURAL LIMESTONE - 2 TONS/ACRE OR 3 TONS/ACRE IN CLAY
 SOIL. FERTILIZER - 1000 LBS/ACRE (10-10-10)
 SUPERPHOSPHATE - 500 LBS/ACRE (20%)
 MULCH - 2 TONS/ACRE (SMALL GRAIN STRAW) ANCHOR - ASPHALT EMULSION AT
 450 GAL/ACRE

3 HARDWARE CLOTH & GRAVEL INLET PROTECTION

C5 SCALE: N/A

RECOMMENDATIONS FOR GENTLE SLOPES/LOW MAINTENANCE

SEEDING MIXTURE
 SPECIES RATE (lb/acre)
 KY TALL FESCUE 100
NURSE PLANTS:
 BETWEEN APR. 15 AND AUG. 15, ADD 10 lb/acre GERMAN MILLET OR 15 lb/acre SUDANGRASS.
 PRIOR TO APR OR AFTER AUG. 15, ADD 40 lb/acre RYE (GRAIN)
SEEDING DATES:
 COASTAL PLAIN SEPT. 30 - MAR. 15
SOIL AMENDMENTS:
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND
 AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER
MULCH:
 APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A
 MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED
 AS A MULCH ANCHORING TOOL.
MAINTENANCE:
 REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. MAY
 BE MOWED ONCE OR TWICE A YEAR, BUT MOWING IS NOT NECESSARY. RESEED,
 FERTILIZE AND MULCH DAMAGED AREAS IMMEDIATELY.

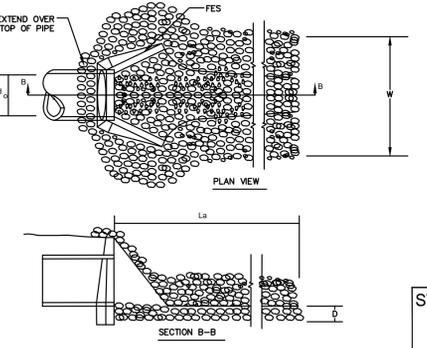
- ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION
 FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND
 WITHIN 24 HOURS OF EVERY HALF INCH RAINFALL.
- ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED
 WITH AN 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.
- SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL 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 FROM
 THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE.
- 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.
- ALL SEEDING AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY AND MULCHED ACCORDING TO
 SPECIFICATIONS IN THE VEGETATIVE 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.

8 EROSION CONTROL MAINTENANCE PLAN

C5 SCALE: NTS

7 TEMPORARY CONSTRUCTION ENTRANCE

C5 SCALE: NTS



5 SEEDBED PREPARATION

C5 SCALE: N/A

6 PERMANENT SEEDING SCHEDULE

C5 SCALE: N/A

9 RIPRAP OUTLET PROTECTION

C5 SCALE: NTS

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 SIGNED _____

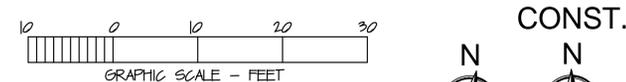
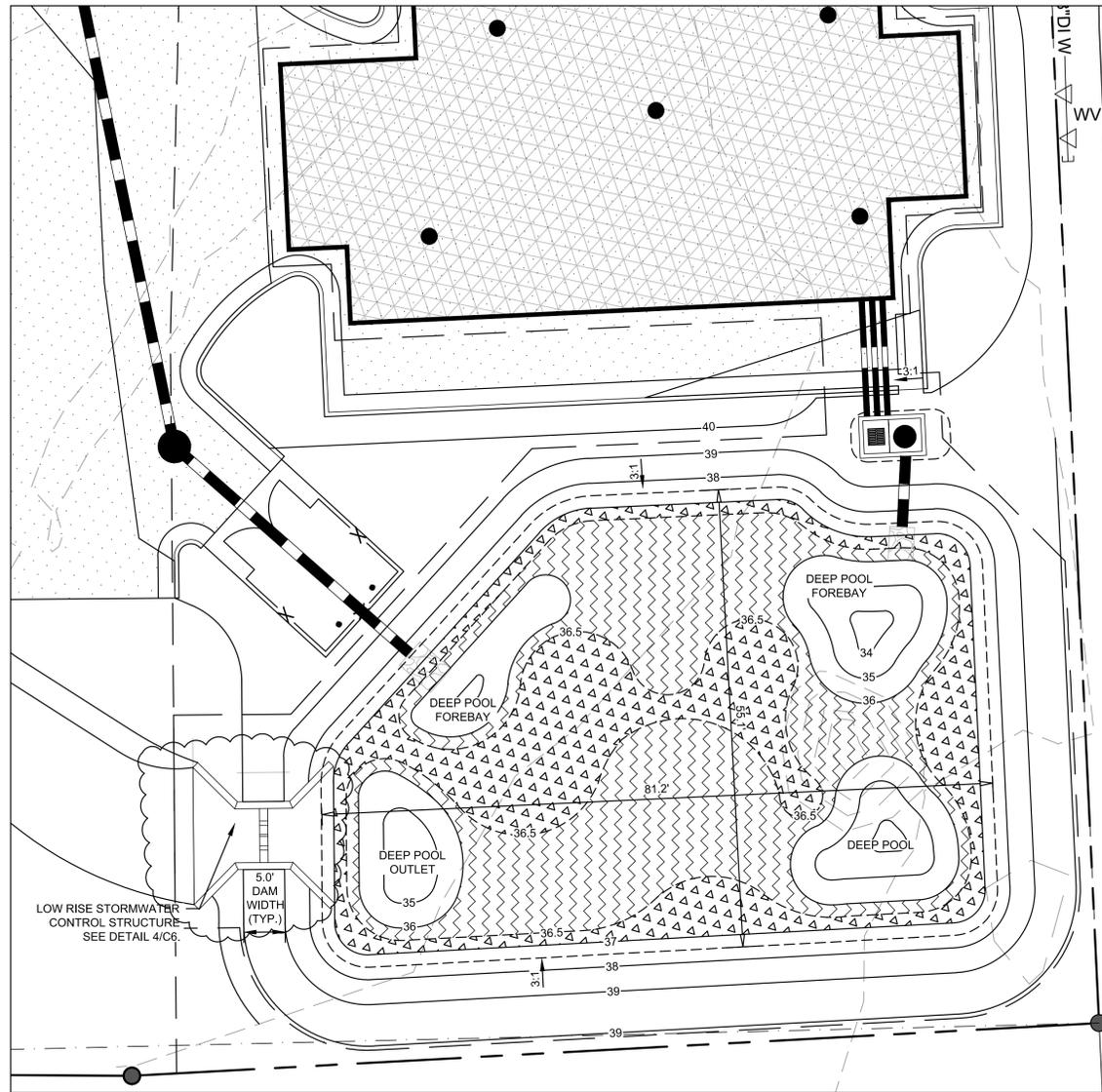
Approved Construction Plan
 Name _____ Date _____
 Planning _____
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 Fire _____

New O'Reilly Auto Parts Store:
 O'REILLY AUTO PARTS
 4014 MARKET STREET
 WILMINGTON, NC

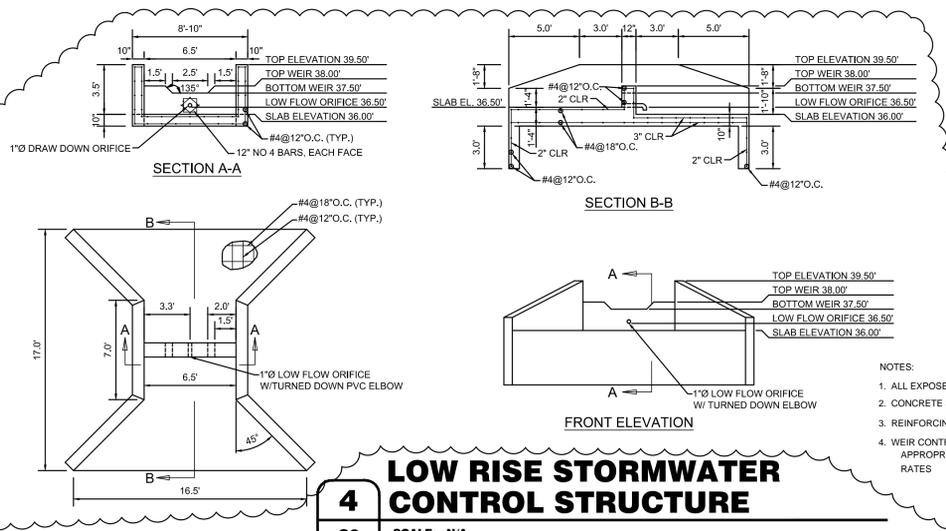
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O'Reilly
 233 SOUTH PATTERSON
 SPRINGFIELD, MISSOURI 65802
 417-882-2874 PHONE

COMM # 3168
 DATE: 09-23-11
 REVISION
 DATE: 08-31-12
 09-10-12
 02-04-13



1 STORMWATER WETLAND BASIN PLAN VIEW
C6 SCALE: 1" = 10'-0"



4 LOW RISE STORMWATER CONTROL STRUCTURE
C6 SCALE: N/A

- NOTES:
- ALL EXPOSED EDGES TO HAVE 3/4" X 3/4" CHAMFER OR AS DIRECTED
 - CONCRETE SHALL BE f'c=3000 PSI @ 28 DAYS
 - REINFORCING STEEL SHALL BE ASTM A-615 GRADE 60
 - WEIR CONTROL SECTION SHALL BE SIZED FOR APPROPRIATE CONTROL OF DISCHARGE RATES

DEEP POOL ZONE: ALLOWABLE PLANT SPECIES (ELEVATION 33.5' - 36.0')

COMMON NAME	BOTANICAL NAME	DEPTH RANGE (INCHES BELOW NORMAL POOL)	SPACING (O.C., FT)	QUANTITY	PERCENTAGE	SIZE
SPATTERDOCK	NUPHAR POLYSPALMUM	0-18	5	25	33%	2 IN PLUG (MIN)
FRAGRANT WHITE LILY	NYMPHAEA LUTEA	6-18	5	25	33%	2 IN PLUG (MIN)
AMERICAN LOTUS	NELUMBO LUTEA	6-18	5	25	33%	2 IN PLUG (MIN)

SHALLOW WATER ZONE: ALLOWABLE PLANT SPECIES (ELEVATION 36.0' - 36.5')

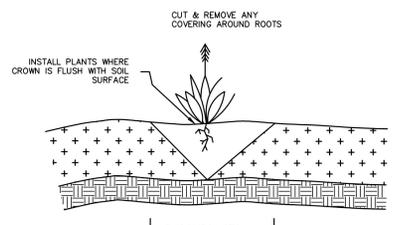
COMMON NAME	BOTANICAL NAME	DEPTH RANGE (INCHES BELOW NORMAL POOL)	SPACING (O.C., FT)	QUANTITY	PERCENTAGE	SIZE
ARROW ARUM	PELTANDRA VIRGINICA	0-6	2.0	40	10%	PINT
PICKERELWEED	PONTEDERIA CORDATA	0-6	2.0	40	10%	2 IN PLUG (MIN)
DUCK POTATO	SAGITTARIA LATIFOLIA	0-6	2.0	40	10%	BARE ROOT
SOFTSTEM BULRUSH	SCHONOROLECTUS TABERNAEMONTANI	0-6	2.0	40	10%	2 IN PLUG (MIN)
SWEETFLAG	ACORUS CALAMUS	0-6	2.0	40	10%	BARE ROOT
THREE WAY SEDGE	DULICHUM ARUNDINACEUM	0-6	2.0	40	10%	BARE ROOT
SPIKERUSH	ELEOCHARIS OBTUSA	0-6	2.0	40	10%	2 IN PLUG (MIN)
SOUTHERN BLUE FLAG IRIS	IRIS VIRGINICA	0-6	2.0	40	10%	2 IN PLUG (MIN)
LIZARD'S TAIL	SAURURUS CERNUJUS	0-6	2.0	40	10%	3 IN PLUG (MIN)
SOFT RUSH	JUNCUS EFFUSUS	0-6	2.0	40	10%	2 IN PLUG (MIN)

SHALLOW LAND ZONE: ALLOWABLE PLANT SPECIES (ELEVATION 36.5' - 37.5')

COMMON NAME	BOTANICAL NAME	DEPTH RANGE (INCHES ABOVE NORMAL POOL)	SPACING (O.C., FT)	QUANTITY	PERCENTAGE	SIZE
SWAMP MILKWEED	ASCLEPIAS INCARNATA	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
FRINGED SEDGE	CAREX CRINITA	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
GREAT BLADDER SEDGE	CAREX INTUMESCENS	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
HOP SEDGE	CAREX LUPULINA	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
SHALLOW SEDGE	CAREX LURIDA	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
SCARLET ROSE MALLOW	HIBISCUS COCCINEUS	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
ROSE MALLOW	HIBISCUS MOSCHEUTOS	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
SPIDER LILY	HYMENOCALLIS EULAE	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
SWAMP LILY	CRINUM ERUBESCENS	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
CARDINAL FLOWER	LOBELIA CARDINALIS	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
SWAMP SUNFLOWER	HELIANTHUS ANGLUSTIOLUS	0-12	2.0	25	8.3%	2 IN PLUG (MIN)
CREeping BLUEBERRY	VACCINIUM CRASSIFOLIUM	0-12	6.0	5	1.7%	1 GAL (MIN)
SWEETSPIRE	ITEA VIRGINICA	0-12	4.0	5	1.7%	1 GAL (MIN)
RED CHOKEBERRY	ARONIA ARBUTIFOLIA	0-12	5.0	5	1.7%	1 GAL (MIN)
COMMON BUTTOMBUSH	CEPHALANTHUS OCCIDENTALIS	0-12	6.0	5	1.7%	1 GAL (MIN)
WINTERBERRY	ILEX VERTICILLATA	0-12	10.0	5	1.7%	1 GAL (MIN)

2 STORMWATER WETLAND PLANTING SCHEDULE AND NOTES
C6 SCALE: N/A

- PLANTING PLAN LEGEND:**
- DEEP POOL (6" BELOW - 30" BELOW)
 - SHALLOW WATER (NORMAL POOL - 6" BELOW)
 - SHALLOW LAND (NORMAL POOL - 12" ABOVE)



3 PLANTING DETAIL
C6 SCALE: NTS

GENERAL PLANTING NOTES:

- AVOID COMPACTING TOPSOIL TO PROMOTE HEALTHY ENVIRONMENTAL CONDITIONS FOR THE PLANTS.
- PLANTS OF THE SAME SPECIES SHOULD BE PLANTED IN CLUSTERS, THESE CLUSTERS SHOULD CONTAIN MIN. 4-6 PLANTS OF THAT SPECIES.
- ALL PLANTS SHOULD BE PLANTED IN THE INDICATED RANGE TO ENSURE SURVIVAL.
- AVOID PLANTING INDIVIDUAL SPECIES IN LARGE GROUPS BY SPACING CLUSTERS A MIN. OF 5' APART.
- SHALLOW WATER AND SHALLOW LAND AREAS TO BE PLANTED WITH BARE ROOT, PLUGS, OR CONTAINER LIVE PLANTINGS AS SPECIFIED.
- EXCAVATE A HOLE TWICE THE DIAMETER OF ROOT BALL AND EQUAL TO THE ROOT DEPTH OF THE INDIVIDUAL PLANT. PLACE PLANT IN HOLE WITH CROWN FLUSH WITH SOIL SURFACE. BACKFILL WITH TOPSOIL AND LIGHTLY PLANT.
- BEGIN PLANTING DURING LOCAL GROWING SEASON IN ORDER TO ENSURE THAT PLANTS HAVE ADEQUATE TIME TO ESTABLISH BEFORE WINTER MONTHS.
- OBTAIN PLANTS FROM: COASTAL PLAIN CONSERVATION NURSERY (252-482-5707), MELLOW MARSH FARMS (919-742-1200), CURE NURSERY (919-542-6186) OR ENGINEER APPROVED SUBSTITUTE.

SHALLOW WATER PLANTING NOTES:

- 70% OF SOFT STEM BULRUSH SHOULD BE PLANTED WITHIN 3-4 INCHES BELOW NORMAL POOL.
- 70% OF PICKERELWEED AND 70% OF ARROW ARUM SHOULD BE PLANTED WITHIN 5-6 INCHES BELOW NORMAL POOL.
- SEDGES SHOULD BE PLANTED WITHIN 0-2 INCHES BELOW NORMAL POOL.
- 70% OF SWEETFLAG, 70% OF LIZARDS TAIL, AND 70% OF SOUTHERN BLUE FLAG IRIS SHOULD BE PLANTED IN THE 2-3 INCHES BELOW NORMAL POOL.
- 70% OF SOFT RUSH SHOULD BE PLANTED AT THE NORMAL POOL ELEVATION.

SHALLOW LAND PLANTING NOTES:

- PLANTS IN THIS GROUP SHOULD NOT BE PLANTED IN AREAS THAT ARE INUNDED FOR EXTENDED PERIODS.
- 70% OF CARDINAL FLOWER AND 70% OF BLUE LOBELIA SHOULD BE PLANTED WITHIN 0-1 INCH OF THE NORMAL POOL ELEVATION.

DEEP POOL PLANTING NOTES:

- ENSURE ALL PLANTS ARE PLACED IN WATER NO DEEPER THAN 24 INCHES BELOW NORMAL POOL.

GRADING PLAN NOTES:

- WETLAND MUST BE STABILIZED WITHIN 14 DAYS OF CONSTRUCTION
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING AND PROTECTION OF EXISTING ABOVE AND BELOW GROUND UTILITIES AND STRUCTURES. ANY AND ALL MAINS OR INDIVIDUAL SERVICES LINES PRESENTLY IN SERVICE WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AT NO ADDITIONAL EXPENSE TO THE UTILITY OWNER.
- CONTRACTOR SHALL KEEP ALL PARKING AREAS AND STREETS ADJACENT TO THE CONSTRUCTION SITE CLEAN AND OPEN AT ALL TIMES DURING CONSTRUCTION.
- ALL SHALLOW WATER AND SHALLOW LAND AREAS WITHIN THE WETLAND CELL SHALL BE TOP DRESSED WITH A MINIMUM OF 12 IN OF TOPSOIL.
- ALL ITEMS WHICH ARE SHOWN FOR REMOVAL SHALL BE REMOVED FROM THE CONSTRUCTION SITE AND LEGALLY DISPOSED OF OFF SITE.
- ALL CONSTRUCTION TO BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF JACKSONVILLE STANDARDS, SPECIFICATIONS AND DETAILS; UNLESS OTHERWISE INDICATED ON PLANS.
- CONTRACTOR SHALL AT ALL TIMES MAINTAIN ADEQUATE SAFETY MEASURES, ACTIVITIES, AND BARRICADES FOR THE PROTECTION OF ALL PERSONS ON OR ABOUT THE LOCATION OF THE SITE.
- GRADE TO ELEVATIONS AND DIMENSIONS SHOWN ON DRAWINGS. ELEVATIONAL GRADING TOLERANCE IS ±0.1 FT.
- NO GRADING IS TO OCCUR IN THE DEEP POOL AREAS BEYOND THE SPECIFIED GRADING LIMITS.

TOPSOIL SPECIFICATION:

- TOPSOIL TO BE ADDED TO TOP OF WETLAND SHELF IS TO MEET CRITERIA SPECIFIED BELOW.
- TOPSOIL SHALL BE WELL MIXED, FREE OF TRASH AND DEBRIS, UNCOMPACTED, AND VOID OF LARGE STONES (>2 INCHES) AND WOODY MATERIAL (>3 INCHES).
- TOPSOIL SHALL MEET THE FOLLOWING SPECIFICATIONS:
SOIL TYPE: CLAY < 60%, SAND < 80%, SILT < 80%
ORGANIC CONTENT: 5-8%
P-H: 20-50
PH: 6.0-7.0
- IN THE EVENT THAT SELECTED TOPSOIL DOES NOT MEET SPECIFICATION LISTED ABOVE, SOIL CAN BE AMENDED BY ADDITION OF APPROPRIATE MATERIALS (MASON SAND OR MATURE COMPOST, OR LIME).
- UPON PLACEMENT OF TOPSOIL, AREA SHOULD BE LIGHTLY COMPACTED TO ENSURE STABILIZATION OF MATERIAL.
- EXCESSIVE TRAFFICKING OF EQUIPMENT OVER WETLAND PLANTING AREAS SHOULD BE AVOIDED.
- MINIMUM DEPTH OF TOPSOIL SHOULD BE 12 INCHES.

EARTHWORK SPECIFICATIONS

- GRADE TO ELEVATIONS AND DIMENSIONS SHOWN ON DRAWINGS. GRADED ELEVATIONAL TOLERANCE SHALL BE ±0.1 FT.
- TOPSOIL MATERIAL SHALL BE APPROVED BY ENGINEER PRIOR TO USE BASED ON SOIL PROPERTY TEST SUBMITTALS THAT INCLUDE STANDARD TEST METHOD FOR PARTICLE-SIZE ANALYSIS (ASTM D422), PARTICLE SIZE ANALYSIS OF SOILS (AASHTO T88), AND NCGA SOIL ANALYSIS.
- INSTALL FINAL COVER IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS WHERE APPLICABLE.

CLAY LINER SPECIFICATION:

IN ORDER TO HELP SUSTAIN THE PERMANENT POOL AND TO PREVENT WATER FROM INFILTRATING TOO QUICKLY INTO THE UNDERLYING SOIL, THE CONTRACTOR SHALL INSTALL A 6" THICK CLAY LINER ON THE BOTTOM OF THE STORMWATER WETLAND AREA UP TO ELEVATION 36.50. THE LINER CAN BE ACCOMPLISHED BY BLENDING EXISTING SITE SOILS WITH CLAY TO ACHIEVE A LOW PERMEABILITY MIXTURE OR BY INSTALLING A GEOSYNTHETIC LINER MADE OF A BENTONITE CL. IF THE CONTRACTOR CHOOSES TO BLEND THE EXISTING SITE SOILS WITH CLAY, THE ONSITE GEOTECHNICAL ENGINEER SHALL DETERMINE THE AMOUNT OF CLAY TO ADD, THE DEGREE OF COMPACTION, AND WILL OVERSEE THE INSTALLATION OF THE CLAY LINER. THE MAXIMUM PERMEABILITY RATE FOR THE LINER SHALL BE 0.72 CM/DAY. THE PROPOSED MATERIAL FOR THIS LINER SHALL BE TESTED BY THE ONSITE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THE RESULTS OF THIS TESTING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR REVIEW PRIOR TO PLACEMENT. UPON COMPLETION OF LINER INSTALLATION, A LAYER OF TOPSOIL MAY BE ADDED OVER THE LINER TO PROVIDE A HEALTHY MEDIA FOR VEGETATION GROWTH.

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Fax: (919) 233-8031
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www.mckimcreed.com



Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

STORMWATER MANAGEMENT PLAN APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____

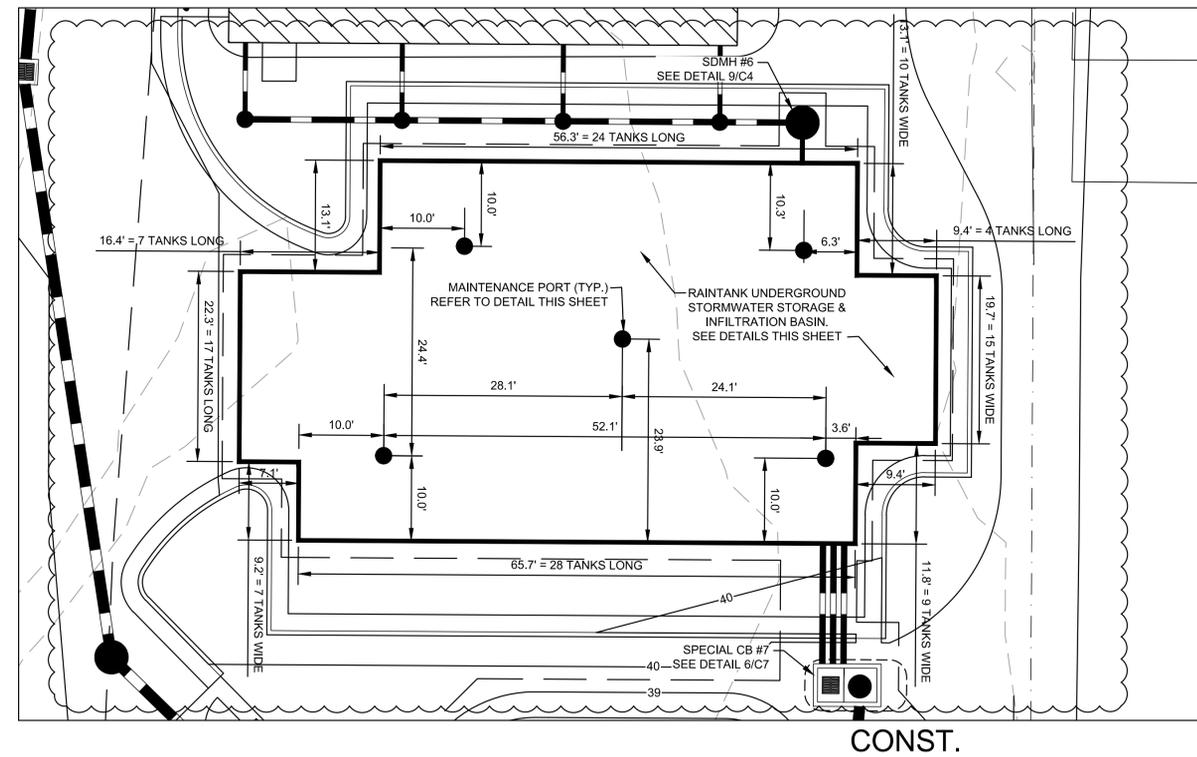


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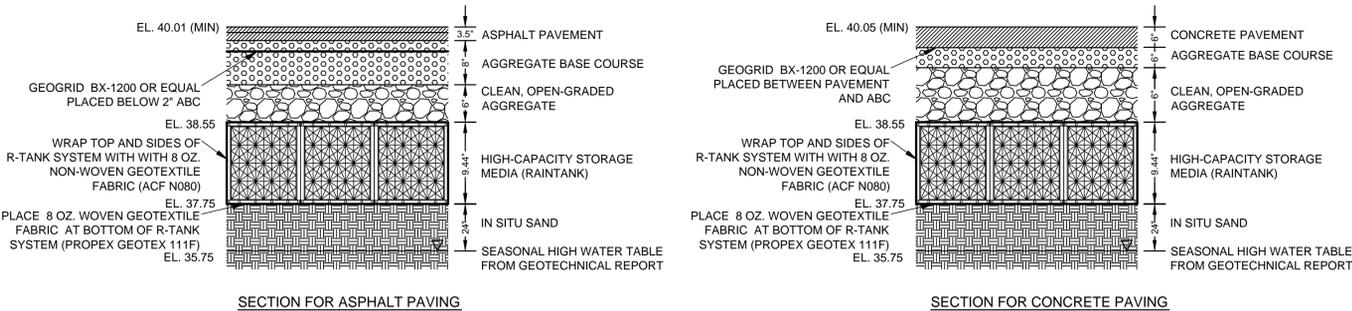
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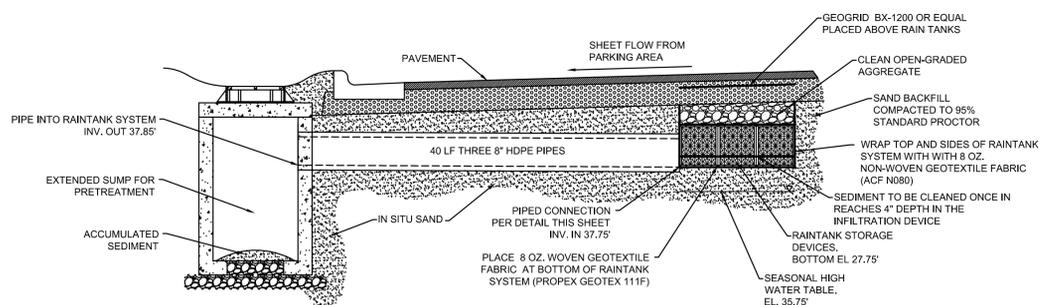
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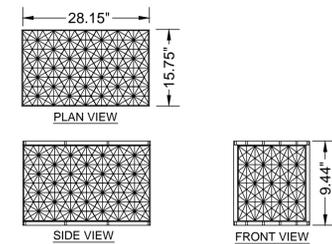
1 UNDERGROUND INFILTRATION BASIN PLAN VIEW
C7 SCALE: 1" = 10'-0"



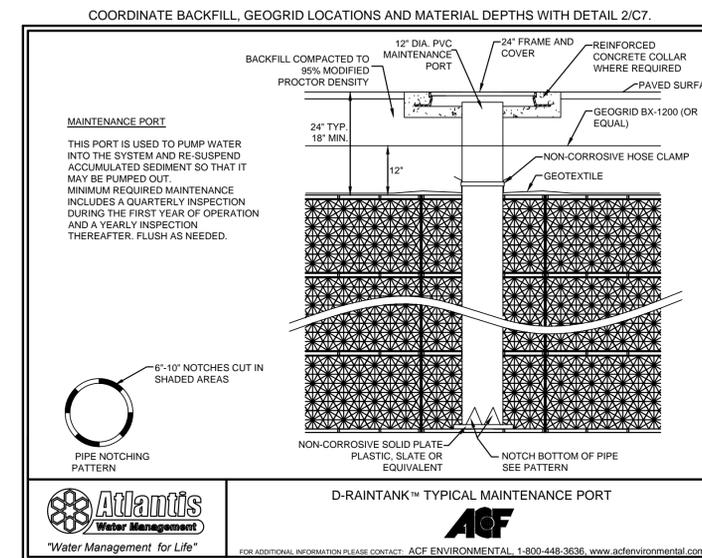
2 STORMWATER STORAGE BED SECTION
C7 SCALE: NTS



3 PIPE CONNECTION DETAIL
C7 SCALE: NTS



4 R-TANK STORMWATER STORAGE BED MEDIA
C7 SCALE: NTS



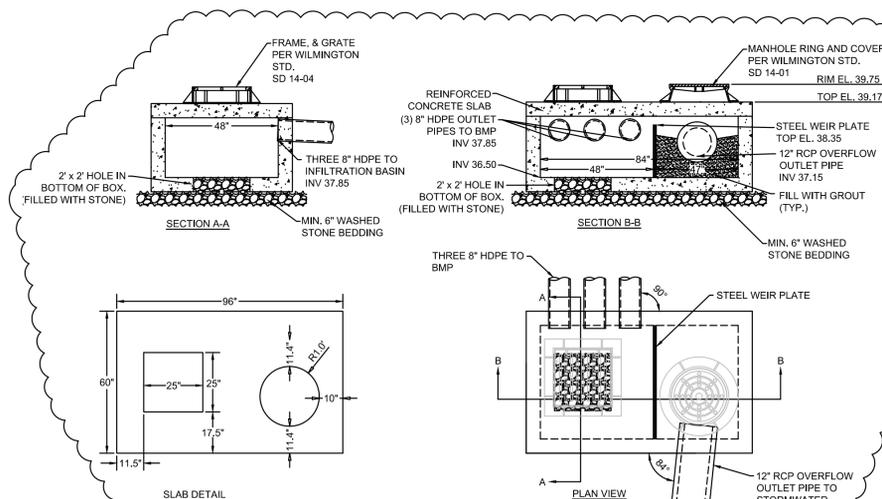
5 R-TANK MAINTENANCE PORT
C7 SCALE: NTS



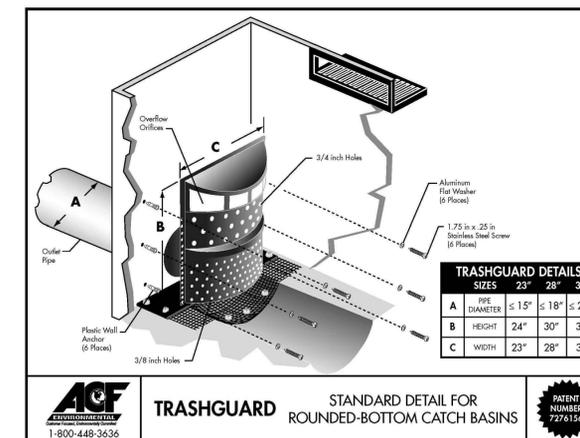
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STORMWATER MANAGEMENT PLAN
APPROVED
CITY OF WILMINGTON
ENGINEERING DEPARTMENT
DATE _____ PERMIT # _____
SIGNED _____



6 SPECIAL CB #7 DETAIL
C7 SCALE: NTS



7 TRASHGUARD DETAIL
C7 SCALE: NTS

8 INFILTRATION BASIN AND PRETREATMENT SECTION
C7 SCALE: 1" = 3'-0"



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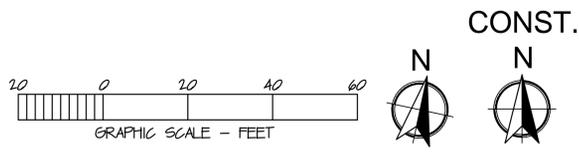
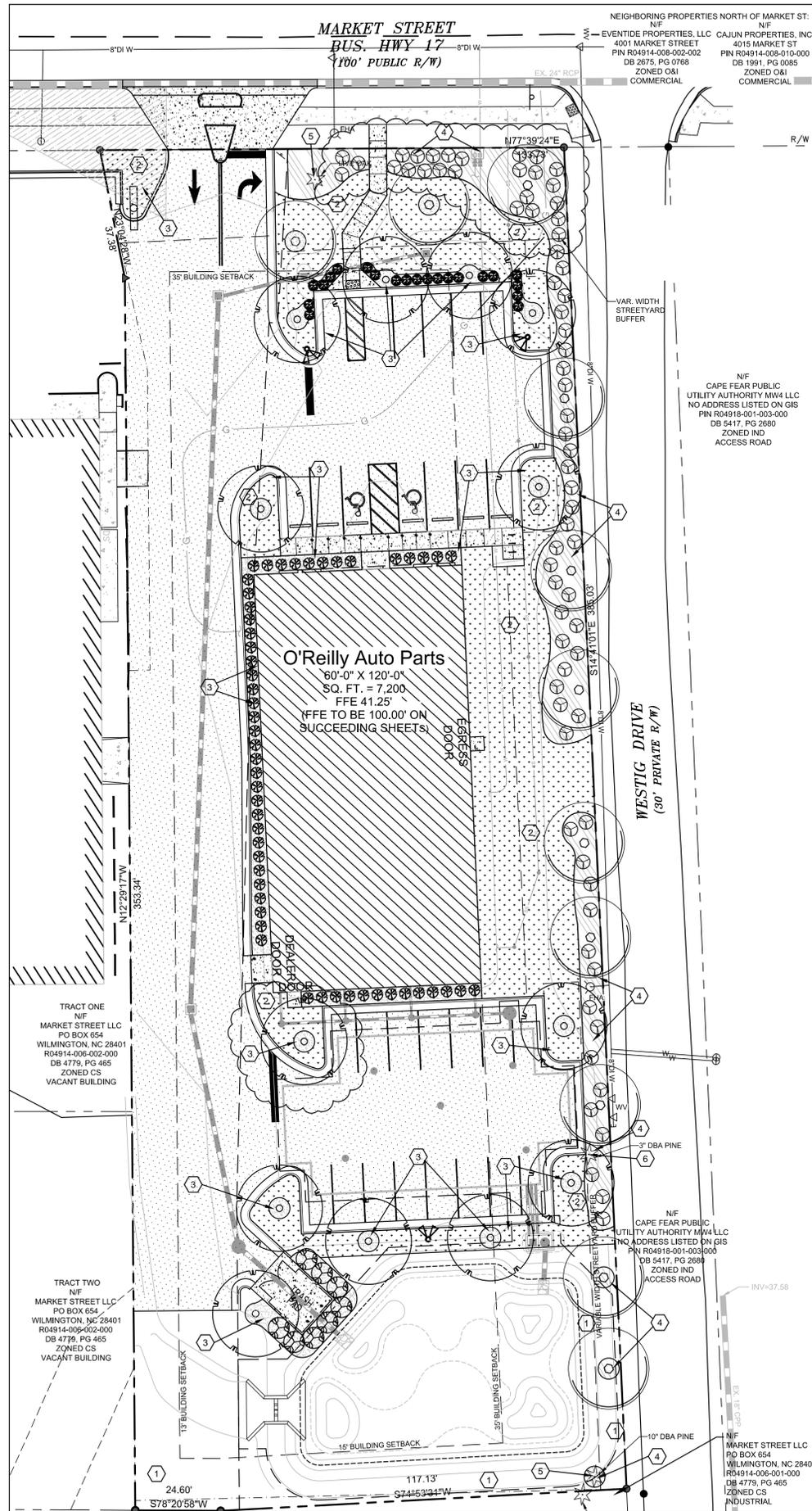
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1 LANDSCAPE PLAN

L1 SCALE: 1" = 20'-0"

KEY NOTES:

- 1 HYDRO MULCH/ SEED AND STRAW: (UNLESS NOTED OTHERWISE) ALL AREAS DISTURBED BY CONSTRUCTION ARE FIRST TO BE FINE GRADED AND THEN FOLLOWED BY HYDRO MULCH OR SEED AND STRAW OVER MIN. 4" TOPSOIL STOCKPILED FROM SITE OR HAULED IN AS REQUIRED.
- 2 AREA OF SOD: REFER TO DETAIL 1/L2.
- 3 AREA TO RECEIVE GRAVEL. REFER TO DETAIL 2/L2
- 4 AREA TO RECEIVE 3" CYPRESS MULCH. REFER TO DETAIL 5/L2.
- 5 EXISTING TREE TO BE SAVED. EXISTING LIVE OAK TREE LOCATED AT THE ENTRANCE OF THE SITE SHALL BE PRUNED IN ACCORDANCE WITH CITY OF WILMINGTON SPECIFICATIONS.
- 6 EXISTING TREE TO BE REMOVED

LANDSCAPE CALCULATIONS:

STREET YARD LANDSCAPING

MARKET STREET (PRIMARY STREET YARD)
 134 LF - 34 LF (DRIVEWAY) x 25 (MULTIPLIER) = 2,500 SF
 STREET YARD PROVIDED: 2,500 SF
 REQUIRED PLANTINGS:
 2,558 SF/ 600 SF / TREE = 4.3 OR 4 CANOPY TREES
 2,558 SF/ 600 SF * 6 SHRUBS = 25.6 OR 26 SHRUBS
 PROVIDED PLANTINGS:
 4 CANOPY/SHADE TREES (1 EXISTING TREE SAVED)
 26 SHRUBS

WESTING DRIVE (SECONDARY STREET YARD)
 385 LF - 37.5 LF (STREETYARD OVERLAP) x 12.5 (MULTIPLIER) = 4,344 SF
 STREET YARD PROVIDED: 4,344 SF
 REQUIRED PLANTINGS:
 4,504 SF/ 600 SF / TREE = 7.5 OR 8 CANOPY TREES
 4,504 SF/ 600 SF * 6 SHRUBS = 45.0 OR 45 SHRUBS
 PROVIDED PLANTINGS:
 8 CANOPY/SHADE TREES
 45 SHRUBS

TOTAL STREET YARD PROVIDED: 7,019 SF
 TOTAL IMPERVIOUS AREA IN STREETYARD: 160 SF
 TOTAL IMPERVIOUS PERCENTAGE IN STREETYARD = 2.3%

INTERIOR SHADING AND LANDSCAPING

PARKING FACILITY AREA SHADING REQUIRED: 22,717 SF x 20% = 4,543 SF
 PARKING FACILITY AREA SHADING PROVIDED: 4,861 SF

FOUNDATION LANDSCAPING

BUILDING FACE ADJACENT TO PARKING AREA: 17.5' HT x 240 LF = 4,200 SF
 FOUNDATION LANDSCAPING REQUIRED: 4,200 SF x 12% = 504 SF
 FOUNDATION LANDSCAPING PROVIDED: 944 SF

REQUIRED TREES:

15 TREES REQUIRED TO BE RETAINED OR PLANTED PER DISTURBED ACRE:
 15 x 1.13 AC = 17 TREES

TREES TO BE PLANTED: 24
 TREES TO BE RETAINED: 2
 TOTAL TREES: 26

PLANTING SCHEDULE								
REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS. ALL PLANTINGS MAY BE SUBSTITUTED DUE TO REGION OR LOCAL REQUIREMENTS IF NECESSARY								
MARK	COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE @ PLANTING	DETAIL	TYPE	SIZE	SHADING AREA
○	TULIP POPLAR 'ARNOLD'	LIRIODENDRON TULIPIFERA 'ARNOLD'	11	2" CALIPER MIN.	3/L2	CANOPY TREE	LARGE	707 SF
○	LACE BARK ELM 'DRAKE'	ULMUS PARVIFOLIA 'DRAKE'	13	2" CALIPER MIN.	3/L2	CANOPY TREE	LARGE	707 SF
○	WAX LEAF LIGUSTRUM	LIGUSTRUM JAPONICUM 'HOWARDII'	8	10 GALLON	4/L2	SHRUB	MED.	N/A
○	CHINESE WITCHHAZEL	LOROPETALUM CHINENSE 'RUBY'	71	3 GALLON	4/L2	SHRUB	SMALL	N/A
○	CHINESE HOLLY	ILEX CORNUTA 'CARISSA'	21	3' TALL (MIN.)	4/L2	SHRUB	SMALL	N/A
○	'EDWARD GOUCHER' ABELIA	ABELIA GRANDIFLORA 'EDWARD GOUCHER'	53	3 GALLON	4/L2	SHRUB	SMALL	N/A

LANDSCAPE SYMBOLS LEGEND

REFER TO SURVEY FOR EXISTING CONDITION SYMBOLS LEGEND

	NEW BUILDING CONSTRUCTION
	AREA OF CONCRETE
	AREA OF PAVING
	AREA OF GRAVEL
	AREA OF MULCH
	AREA OF SOD LAWN AREA WHICH EXCEEDS 25% SLOPE TO BE PROVIDED WITH SOD. REFER TO GRADING PLAN
	NEW POLE SIGN LOCATION
	NEW CONCRETE PAVING BLOCK
	NEW LIGHT POLE LOCATION
	NEW FENCE CONSTRUCTION

GENERAL NOTES:

1. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
2. SITE CONDITIONS BASED UPON SURVEY PROVIDED BY OWNER. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING CONSTRUCTION.
3. REFER TO CIVIL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
4. ALL PLANTING TYPES SHALL COMPLY WITH LOCAL GOVERNING CODES AND REGULATIONS. CONFORM TO REQUIREMENTS OF PLANT LIST AND TO THE AMERICAN ASSOCIATION OF NURSERYMEN 'AMERICAN STANDARD OF NURSERY STOCK' AND 'HORTICULTURAL STANDARDS' AS TO SPECIES, AGE, SIZE, AND PLANTING RECOMMENDATIONS.
5. NO MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT THE ARCHITECT'S PRIOR WRITTEN APPROVAL. ALTERNATE MATERIALS OF SIMILAR SIZE AND CHARACTER MAY BE CONSIDERED IF SPECIFIED PLANT MATERIALS CANNOT BE OBTAINED.
6. PLANT LOCATIONS ARE APPROXIMATE. ADJUST AS NECESSARY TO AVOID CONFLICTS.
7. QUANTITIES OF MATERIALS SHOWN ON LANDSCAPING PLAN TAKE PRECEDENCE OVER QUANTITIES SHOWN ON PLANTING SCHEDULE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES ON LANDSCAPING PLAN.
8. PROVIDE 4" TOPSOIL AT ALL SOD, SEED AND PLANTING AREAS. GRADE SHALL BE ADJUSTED FOR SOD THICKNESS. REFER TO CIVIL SITE GRADING PLAN FOR SLOPE REQUIREMENTS.
9. WHEN CLAY SOIL IS ENCOUNTERED IN THE ESTABLISHMENT OF THE LAWN OR THE INSTALLATION OF PLANT MATERIAL IT SHALL BE IMPROVED IN ACCORDANCE WITH STANDARD TRADE PRACTICE.
10. REESTABLISH TURF IN AREAS DISTURBED BY GRADING OR UTILITY TRENCHING IN THE RIGHT-OF-WAY.
11. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.
12. ALL EXISTING VEGETATION NOTED TO BE REMOVED, WITH THE EXCEPTION OF TREES TO BE PROTECTED, SHALL BE REMOVED PRIOR TO INSTALLATION OF NEW PLANT MATERIAL.
13. ANY AREAS NOT INDICATED TO HAVE HARDSCAPE, PLANTING, OR MULCH SHALL BE SODDED OR SEEDED.
14. LANDSCAPE CONTRACTOR SHALL LOCATE PLANTS AND PLANTING BEDS BY USING SCALED DIMENSIONS FROM STREET, PROPERTY LINES, BUILDING, ETC.
15. ALL PLANTS SHALL MEET OR EXCEED THE MINIMUM STANDARDS SET BY THE USDA STANDARD FOR NURSERY STOCK SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., WASHINGTON, D.C.
16. LANDSCAPE CONTRACTOR SHALL AMEND PROPOSED PLANT BEDS AND PLANT PITS WITH SOIL CONDITIONS. SOIL CONDITIONS SHALL BE APPLICABLE TO THE GEOGRAPHIC AREA AND COMPLY WITH THE MANUFACTURER'S SPECIFICATIONS.
17. LANDSCAPE CONTRACTOR SHALL LIMIT DISTURBANCE WITHIN THE DRIP LINE OF EXISTING TREES TO REMAIN, AS NOTED. NO TEMPORARY OR PERMANENT STORAGE OF VEHICLES, EQUIPMENT, MACHINERY, OR ITEMS ASSOCIATED WITH CONSTRUCTION IS PERMITTED WITHIN THIS AREA. THESE AREAS ARE INDICATED AS 'TREE PROTECTION AREA'.
18. ALL PLANT BEDS AND SEED LINE LOCATIONS SHALL BE STAKED IN THE FIELD BY THE PROJECT LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO PLANT INSTALLATION.
19. ALL SINGLE TREES SHALL HAVE 6" DIAMETER MULCH RING CENTERED AROUND TRUNK AS INDICATED ON PLAN. GROUPINGS OF TREES AND SHRUBS SHALL HAVE MULCH BED AS WELL.
20. LANDSCAPE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO PLANTING OPERATIONS TO VERIFY EXISTENCE OF ANY UTILITY CONFLICTS.
21. LANDSCAPE CONTRACTOR SHALL APPLY PRE-EMERGENT HERBICIDE TO ALL PLANTING BEDS PER MANUFACTURER'S SPECIFICATIONS.
22. ALL DISTURBED AREAS AS WELL AS PLANTING ISLANDS, NOT INCLUDING MULCHED AREAS, SHALL BE SEEDED PER THE SEEDING SCHEDULE LOCATED ON SHEET C4.
23. CONTRACTOR SHALL SEEK APPROVAL FROM ARCHITECT, ENGINEER OR OWNER'S REPRESENTATIVE AND THE CITY OF WILMINGTON PRIOR MAKING ANY CHANGES TO THE PROJECT FROM THE APPROVED PLANS.

LANDSCAPING INSTALLATION NOTES:

ALL LANDSCAPING SHALL BE OF NURSERY STOCK QUALITY AND SHALL BE INSTALLED IN A SOUND WORKMANLIKE MANNER AND ACCORDING TO ACCEPTED GOOD PLANTING PROCEDURES. ALL LANDSCAPING SHALL BE ADAPTIBLE TO CLIMATE CONDITIONS OF THE AREA, AND CONSIDERATION SHALL BE GIVEN TO NOT PLANTING LARGE TREES NEAR UTILITIES. ALL LANDSCAPING SHALL BE MAINTAINED IN GOOD CONDITION AND IN ACCORDANCE WITH ALL PROVISIONS OF THIS ORDINANCE AS FOLLOWS:

1. ALL LANDSCAPING SHALL PRESENT AT ALL TIMES, A HEALTHY, NEAT, CLEAN, ORDERLY, DISEASE-FREE AND PEST-FREE APPEARANCE.
2. ALL LANDSCAPING SOIL AND FILL SHALL BE FREE FROM WEEDS, REFUSE, AND DEBRIS AT ALL TIMES.
3. ANY DEAD PLANT MATERIAL OR MATERIAL WHICH FAILS TO SHOW HEALTHY GROWTH MUST BE REMOVED WITHIN THIRTY (30) DAYS.
4. REPLACEMENT OF REMOVED PLANT MATERIAL MUST TAKE PLACE WITHIN (90) DAYS OF REMOVAL OR NOTIFICATION BY THE JURISDICTIONAL AGENCY, WHICHEVER OCCURS FIRST.
5. ANY REPLACEMENT PLANT MATERIAL MUST MEET THE SIZE AND OTHER CHARACTERISTICS OF NEWLY PLANTED MATERIAL THAT IT WOULD BE REPLACING.
6. MAINTENANCE OF ALL LANDSCAPING IS THE RESPONSIBILITY OF THE OWNERS, JOINTLY AND SEPARATELY.
7. TREES AND LARGE SHRUBS SHALL BE ADEQUATELY SUPPORTED, AS NECESSARY, USING STAKES AND GUYS. SUCH SUPPORTS SHALL BE DESIGNED SO AS TO PROTECT TREES AND SHRUBS FROM INJURY. TREES AND SHRUBS SHALL BE FASTENED TO THE SUPPORT WITH AN ACCEPTABLE COMMERCIAL TREE TIE OF PLASTIC OR HOSE COVERED WIRE.
8. ANY LANDSCAPED AREA REQUIRED SHALL NOT BE ENCLOSED UPON BY ANY TYPE OF VEHICLE. ALL LANDSCAPED AREAS MUST BE PROTECTED BY AN ENCROACHMENT BARRIER. A VEHICLE MAY OVERHANG A LANDSCAPED AREA PROVIDED THAT A MINIMUM DISTANCE OF THREE (3) FEET SEPARATES THE VEHICLE AND ANY NEW PLANTING.

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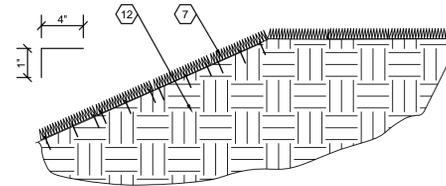


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New O'Reilly Auto Parts Store:
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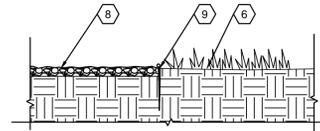
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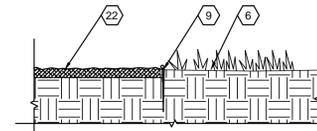
1 SODDING WITH PINS

L2 SCALE: 3/4" = 1'-0"



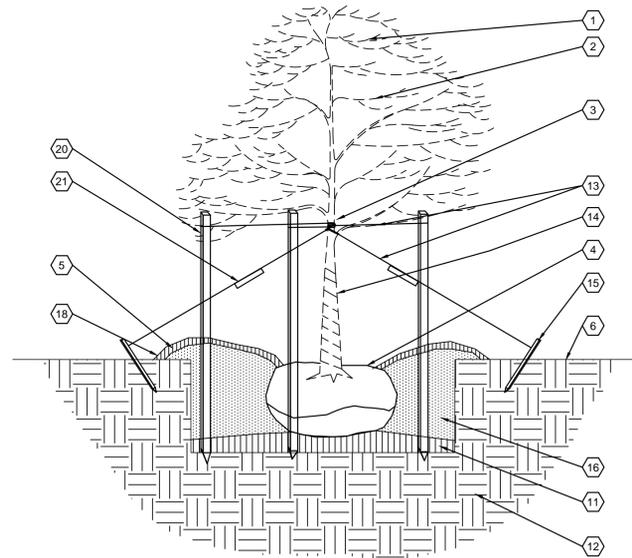
2 GRAVEL LANDSCAPE FABRIC

L2 SCALE: 3/4" = 1'-0"



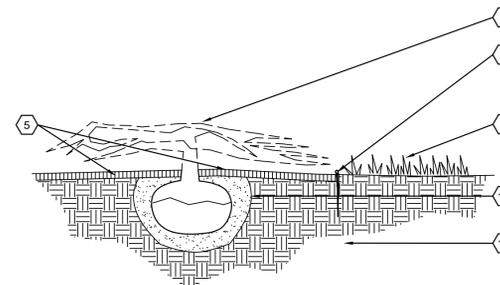
5 MULCH LANDSCAPE FABRIC

L2 SCALE: 3/4" = 1'-0"



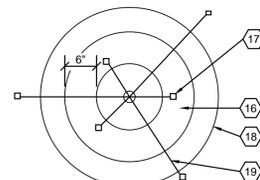
3 LARGE DECIDUOUS TREE PLANTING

L2 SCALE: 3/4" = 1'-0"



4 SMALL SHRUB PLANTING

L2 SCALE: 3/4" = 1'-0"



GENERAL NOTES:

- A. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- B. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.

KEY NOTES:

- 1 PLANTING: REFER TO PLANTING SCHEDULE FOR TYPE
- 2 SET TREE LEVEL AND PLUM. STRAIGHTEN AFTER SETTLEMENT IF NEEDED.
- 3 ENCASE WIRE AROUND TRUNK IN BLACK RUBBER. MOVE UP ABOVE EQUAL TO 1/2 TO 1/3 OF THE HEIGHT OF TREE.
- 4 SET TREE WITH TOP 1/3 OF ROOT ABOVE FINISH GRADE.
- 5 REFER TO LANDSCAPE PLAN FOR GROUND COVER TYPE AND LOCATIONS. PROVIDE 3" DEEP 5/8" CREEK GRAVEL OVER BLACK VISQUEEN VAPOR BARRIER OR 3" SHREDDED CYPRESS MULCH OVER BLACK VISQUEEN VAPOR BARRIER.
- 6 LAWN
- 7 REFER TO SITE GRADING PLAN FOR SLOPE. PLACE THREE PINS EVERY 2'-0". SPACING EQUALLY. SOD SHALL BE COMPOSED OF TWO VARIETIES MINIMUM OF FESCUE GRASS.
- 8 3" DEEP, 5/8" CREEK GRAVEL OVER BLACK VISQUEEN VAPOR BARRIER.
- 9 4" BLACK POLY VINYL EDGING
- 10 PREFERRED SOIL
- 11 COMPACTED PLANTING
- 12 SUB GRADE
- 13 TWO STRANDS OF WIRE
- 14 TRUNK WRAP
- 15 2" X 2" X 10" WOOD STAKES BURY BELOW FINISH GRADE
- 16 PREPARED PLANTING MIXTURE.
- 17 TREES 6'-0" IN HEIGHT OR LESS SHALL BE STAKED
- 18 EXTENTS OF PLANTING BERM TO HOLD WATER
- 19 TREES TALLER THAN 3'-0" MUST BE TIED.
- 20 2" X 4" STAKE - OR - METAL FENCE POST
- 21 1" X 4" X 10" WHITE WOOD FLAG
- 22 3" SHREDDED CYPRESS MULCH OVER BLACK VISQUEEN VAPOR BARRIER.



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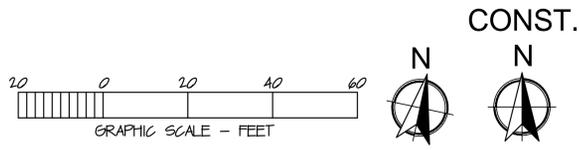
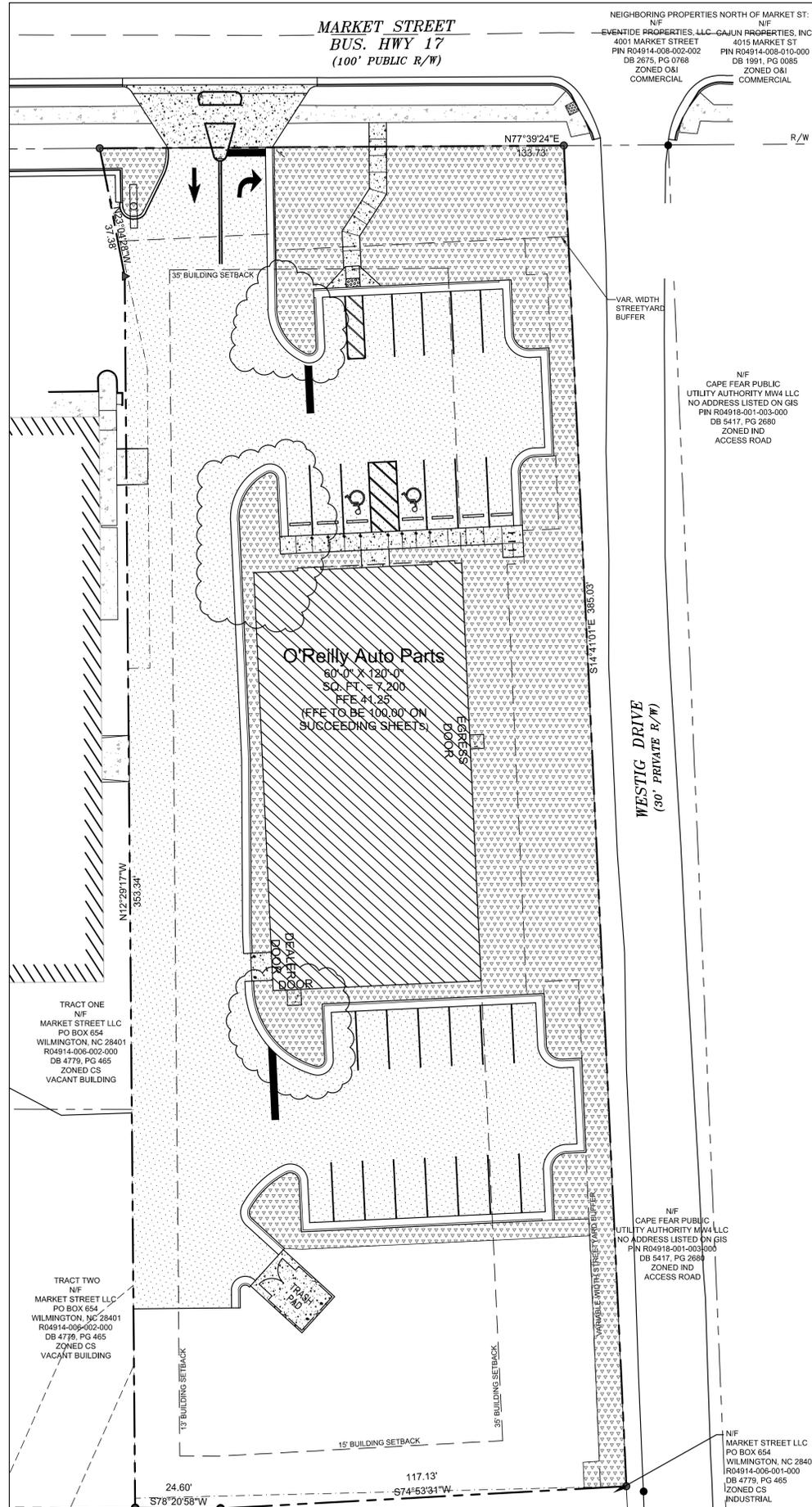
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1 IRRIGATION COVERAGE PLAN
L3 SCALE: 1" = 20'-0"

LANDSCAPE SYMBOLS LEGEND

REFER TO SURVEY FOR EXISTING CONDITION SYMBOLS LEGEND

	NEW BUILDING CONSTRUCTION
	AREA OF CONCRETE
	AREA OF PAVING
	AREA OF DESIRED IRRIGATION COVERAGE
	NEW POLE SIGN LOCATION
	NEW CONCRETE PAVING BLOCK
	NEW LIGHT POLE LOCATION
	NEW FENCE CONSTRUCTION

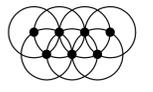
REFER TO LANDSCAPE PLAN FOR PLANTINGS

GENERAL NOTES:

- A. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- B. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.

COVERAGE DETAIL:

- 1. IRRIGATION HEAD SHALL BE PLACED TO PROVIDE 100% OVERLAP HEAD-TO-HEAD COVERAGE.



- 2. A RAIN SENSOR AND ANTI-FREEZE ASSEMBLY SHALL BE INSTALLED ON IRRIGATION SYSTEM.
- 3. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE AND OPERABLE SYSTEM FOR THE IRRIGATION OF ALL LANDSCAPE PLANTING(S) AND DESIRED COVERAGE AREAS ON SITE.
- 4. THE IRRIGATION CONTRACTOR IS FULLY RESPONSIBLE FOR THE WORK UNTIL OWNER GIVES FINAL ACCEPTANCE.
- 5. NO WATER TO BE SPRAYED ON SIDEWALK, PARKING LOT, ROAD OR ADJACENT PROPERTY. ADJUST ARC AND RADIUS OF REQUIRED SPRINKLERS AS NEEDED.
- 6. ALL CIRCUIT PIPE IS TO BE CLASS 160 PVC OR HIGHER GRADE.
- 7. ALL MAIN FITTINGS SHALL BE REINFORCED WITH 2000PSI POURED CONCRETE THRUST BLOCKS.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE REQUIRED SYSTEM IN COMPLETE ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, AND LAWS. ANY MODIFICATION MADE AFTER INSTALLATION TO CONFORM WITH SAID CODES, LAWS AND ORDINANCES SHALL BE PERFORMED AT CONTRACTORS EXPENSE AT NO ADDITIONAL COST TO O'REILLY.



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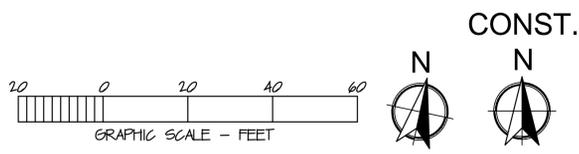
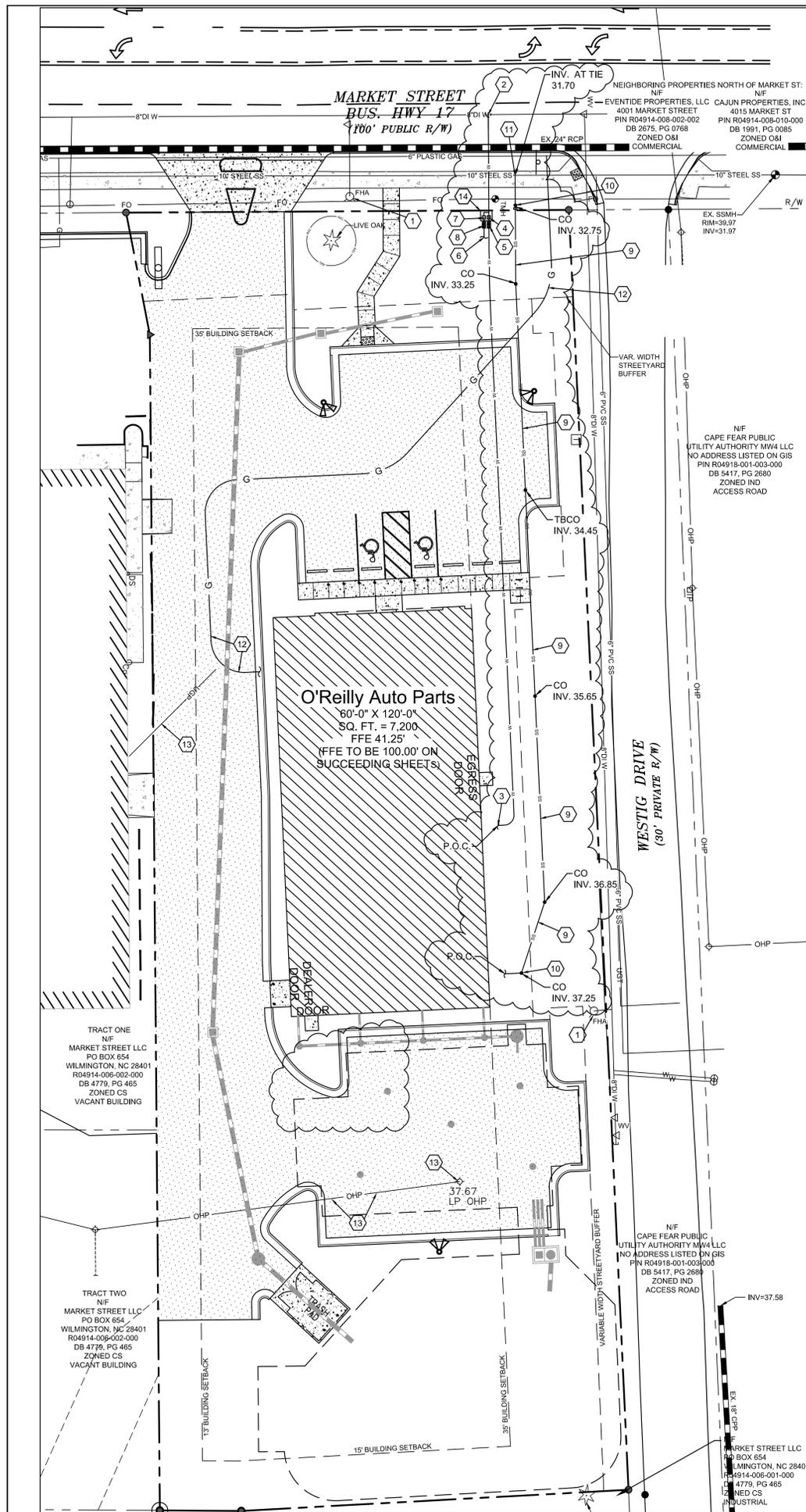
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1 SITE UTILITY PLAN
SU1 SCALE: 1" = 20'-0"

KEY NOTES:

- 1 PROTECT EXISTING FIRE HYDRANT TO REMAIN.
- 2 2" TAP AND SADDLE FOR WATER SERVICE. TAP TO BE MADE PER CAPE FEAR PUBLIC UTILITY AUTHORITY SPECIFICATIONS. SEE DETAIL SHEET WSD-1.
- 3 NEW 1" DOMESTIC WATER SERVICE CONNECTION. CONTRACTOR TO COORDINATE EXACT BUILDING TIE IN LOCATION WITH ARCHITECTURAL DRAWINGS.
- 4 NEW 1" WATER METER FOR DOMESTIC SERVICE. CONTRACTOR TO COORDINATE INSTALLATION WITH THE CAPE FEAR PUBLIC UTILITY AUTHORITY.
- 5 NEW 1" DOUBLE CHECK VALVE ASSEMBLY (DCVA) FOR DOMESTIC SERVICE. DCVA TO BE IN ABOVE-GROUND INSULATED ENCLOSURE. REFER TO DETAIL SHEET WSD-1.
- 6 NEW 1" IRRIGATION WATER SERVICE TO BE CAPPED AND PLUGGED.
- 7 NEW 1" WATER METER FOR IRRIGATION SERVICE. CONTRACTOR TO COORDINATE INSTALLATION WITH THE CAPE FEAR PUBLIC UTILITY AUTHORITY.
- 8 NEW 1" REDUCED PRESSURE ASSEMBLY (RPA) FOR IRRIGATION SERVICE. RPA TO BE IN ABOVE-GROUND INSULATED ENCLOSURE REFER TO DETAIL SHEET WSD-1.
- 9 NEW 4" SCH 40 PVC SANITARY SEWER PIPE. CONTRACTOR TO COORDINATE EXACT BUILDING TIE IN LOCATION WITH ARCHITECTURAL DRAWINGS. SEE DETAIL SHEET SSD-2.
- 10 SANITARY SEWER CLEANOUT TO BE LOCATED 18" INSIDE OF R/W. SAMPLING STATION TO BE INSTALLED BEHIND CLEANOUT. REFER TO CAPE FEAR PUBLIC UTILITY AUTHORITY DETAIL SHEETS SSD-2 AND WSD-2.
- 11 NEW SANITARY SEWER SERVICE TIE INTO EXISTING 10" STEEL SANITARY SEWER PIPE. REFER TO CAPE FEAR PUBLIC UTILITY AUTHORITY DETAIL SHEET SSD-2 FOR INSTALLATION REQUIREMENTS. CONTRACTOR TO VERIFY DEPTH OF EXISTING SANITARY SEWER PIPE AND CONTACT THE ENGINEER WITH ANY DISCREPANCIES.
- 12 NEW GAS SERVICE TO BUILDING. CONTRACTOR TO COORDINATE SERVICE INSTALLATION WITH PIEDMONT NATURAL GAS.
- 13 CONTRACTOR TO COORDINATE WITH DUKE ENERGY FOR RELOCATION OF EXISTING POWER LINES AND POLES.
- 14 METER BOX TO HOUSE METERS FOR BOTH IRRIGATION AND DOMESTIC WATER SERVICE. COORDINATE INSTALLATION WITH CAPE FEAR PUBLIC UTILITY AUTHORITY.

SYMBOLS LEGEND

REFER TO SURVEY FOR EXISTING CONDITION SYMBOLS LEGEND	
	NEW BUILDING CONSTRUCTION
	AREA OF CONCRETE
	AREA OF PAVING
	NEW POLE SIGN LOCATION
	NEW CONCRETE PAVING BLOCK
	NEW LIGHT POLE LOCATION
	NEW FENCE CONSTRUCTION

EXISTING CONDITIONS NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND IDENTIFY ALL EXISTING UTILITIES PRIOR TO SUBMITTING A BID. NO EXTRAS WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS.
2. EXISTING UTILITIES ARE INDICATED ON THE DRAWINGS ONLY TO THE EXTENT THAT SUCH INFORMATION HAS BEEN MADE AVAILABLE TO THE ENGINEER IN PREPARING THE DRAWINGS. THERE IS NO GUARANTEE AS TO THE ACCURACY AND COMPLETENESS OF SUCH INFORMATION, AND ALL RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS THEREOF IS EXPRESSLY DISCLAIMED.
3. ANY DELAY, ADDITIONAL WORK, FEES OR EXTRA COSTS TO THE CONTRACTOR CAUSED BY OR RESULTING FROM DAMAGE OR MODIFICATION OF EXISTING UTILITIES BY THE CONTRACTOR OR EFFECTED UTILITY COMPANY SHALL NOT CONSTITUTE A CLAIM FOR EXTRA WORK, ADDITIONAL PAYMENT OR DAMAGES.

GENERAL UTILITY NOTES:

1. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
2. ALL WATER & SEWER LINES SHALL BE INSTALLED WITH A MINIMUM OF 3 FEET OF COVER.
3. MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN UTILITIES.
4. VERIFY ALL ILLUSTRATED UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF CONFLICTS ARE ENCOUNTERED.
5. CONTRACTOR SHALL COORDINATE UTILITY RELOCATION OR ABANDONMENT WITH LOCAL UTILITY COMPANIES AS REQUIRED.
6. UTILITIES WILL NOT ENCRUSH UPON PROTECTED AREAS OR RUN PARALLEL THROUGH ANY REQUIRED BUFFER.
7. WATER & SEWER SHALL BE AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS. WHERE LOCAL CONDITIONS PREVENT A SEPARATION OF 10 FEET, THE WATER MAIN MAY BE LAID CLOSER PROVIDED THAT THE ELEVATIONS OF THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER WITH A HORIZONTAL SEPARATION OF AT LEAST 3 FEET.
8. ALL PIPE LENGTHS AND SLOPES AS INDICATED ON THE DRAWINGS ARE TO BE CONSIDERED AS GUIDELINES. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS SHALL BE COMPENSATED BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL ALL STORM LINES FROM STRUCTURE TO STRUCTURE.
9. ALL PIPE SHALL SLOPE IN A POSITIVE DIRECTION.
10. ALL TRENCHES SHALL BE CUT TO THE APPROPRIATE DEPTHS WITH THE BOTTOM OF THE TRENCHES ALSO SLOPED IN THE DIRECTION OF THE DRAINAGE FLOW.
11. TRENCHES ARE TO BE BACKFILLED IN 6" LIFTS WITH A GRANULAR SOIL MIX. USE EXISTING MATERIAL WHERE APPROPRIATE AND MIX IN BORROW AS NEEDED. BACKFILL SUBDRAINS WITH AN AGGREGATE MIX. TAMP AND COMPACT TRENCHES TO AVOID UNWANTED SETTLEMENT.
12. ALL GRADES AND INVERTS SHALL REFERENCE THE PROJECT BENCH MARK. IF BENCHMARK IS NOT AVAILABLE THE FINISH FLOOR SHALL BECOME THE REFERENCE POINT. NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO STARTING CONSTRUCTION.
13. ALL CONSTRUCTION TO CONFORM TO SITE PLAN APPROVED BY THE CAPE FEAR PUBLIC UTILITY AUTHORITY.
14. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS OF UTILITY TIE-INS.
15. ALL NEW UTILITY LINES ARE TO BE INSTALLED UNDERGROUND.
16. ALL VALVE BOXES & COVERS, SHALL MEET ASTM A48, GRADE 35B IRON REQUIREMENTS.
17. SLOPES SHALL NOT BE GREATER THAN 3:1 WHERE UNDERGROUND ELECTRIC UTILITIES LINES ARE PROPOSED.
18. CONTRACTOR SHALL SEEK APPROVAL FROM ARCHITECT, ENGINEER OR OWNER'S REPRESENTATIVE AND THE CITY OF WILMINGTON PRIOR MAKING ANY CHANGES TO THE PROJECT FROM THE APPROVED PLANS.

SANITARY SEWER NOTES:

1. SEWER LINES TO BE INSTALLED PER THE CAPE FEAR PUBLIC UTILITY AUTHORITY'S STANDARDS AND SPECIFICATIONS.
2. ALL SEWER PIPES TO BE SCH 40 PVC.
3. ALL SEWER LINE INSTALLATION TO BE OF CONTINUOUS MATERIAL BETWEEN CLEANOUTS.
4. SEWER SERVICES LOCATED OUTSIDE OF PUBLIC EASEMENTS SHALL BE PRIVATELY MAINTAINED.
5. ALL CLEANOUTS SHALL BE FLUSH WITH FINISHED GRADE.
6. CONTRACTOR TO LOCATE LATERAL TIE-INS PER PLUMBING PLANS.
7. PLACE CLEANOUTS ON SANITARY SEWER RUN PER PLUMBING CODE REQUIREMENTS.
8. CONTRACTOR TO PROVIDE RECORD DRAWINGS TO OWNER.
9. SEWER LINES SHALL BE 18" ABOVE OR 10' HORIZONTAL SEPARATION FROM WATER LINES AND OTHER UTILITIES. THERE SHALL BE 24" VERTICAL SEPARATION FROM STORM SEWER LINES.

WATER DISTRIBUTION NOTES:

1. WATER LINES TO BE INSTALLED PER THE CAPE FEAR PUBLIC UTILITY AUTHORITY'S STANDARDS AND SPECIFICATIONS.
2. WATER SERVICE TO ADJACENT PROPERTIES SHALL BE MAINTAINED AND REMAIN UNINTERRUPTED FOR THE DURATION OF THE PROJECT'S CONSTRUCTION.
3. CONTRACTOR TO LOCATE BUILDING TIE-INS PER PLUMBING PLANS.
4. WATER METERS TO BE INSTALLED BY THE CAPE FEAR PUBLIC UTILITY AUTHORITY. CONTRACTOR TO COORDINATE INSTALLATION WITH THE CITY.
5. RPAS SHALL BE INSTALLED BY THE CONTRACTOR AS APPROVED BY THE CAPE FEAR PUBLIC UTILITY AUTHORITY. ASSEMBLIES TO BE INSTALLED IN ABOVE GROUND ENCLOSURES SHALL MEET ALL ASSE 1060 R-VALUE REQUIREMENTS.
6. ALL WATER SERVICE LINES SHALL HAVE A MINIMUM OF 3" OF COVER AS MEASURED FROM FINISHED GRADE AT THE LOCATION WHERE INSTALLED.
7. WATER LINES SHALL BE 18" ABOVE OR 10' HORIZONTAL SEPARATION FROM SANITARY SEWER LINES OR OTHER UTILITIES. THERE SHALL BE 24" VERTICAL SEPARATION FROM STORM SEWER LINES.



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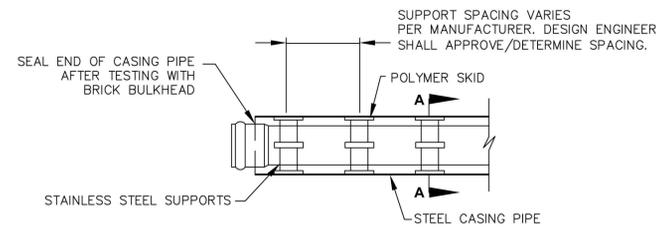


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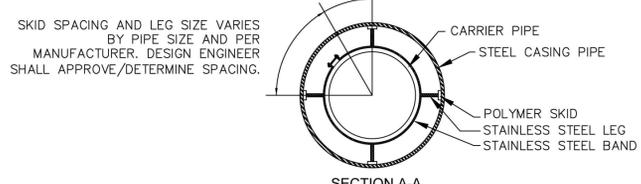
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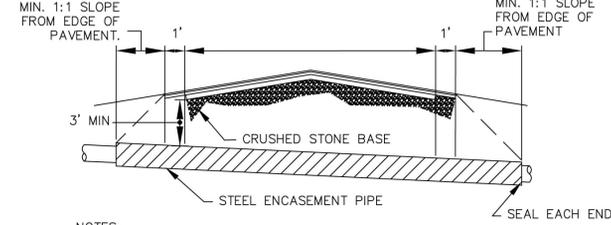


NOTE: PIPE SUPPORT TO BE PLACED TO PROVIDE PROPER SUPPORT, ALIGNMENT, AND GRADE AS SPECIFIED. CONTINUOUS SUPPORTS MAY BE USED AS ALTERNATIVE. OIL, GREASE, OR PETROLEUM PRODUCT MAY NOT BE USED AS LUBRICANT.



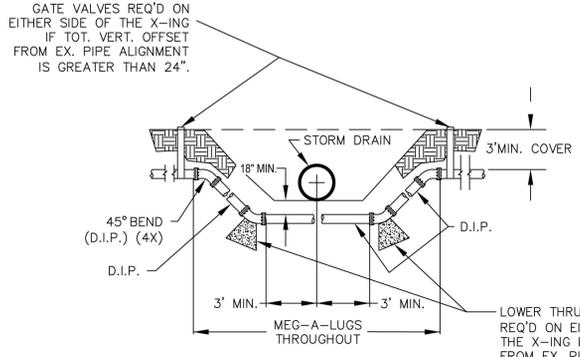
SECTION A-A
NOT TO SCALE
PIPE CASING SUPPORT DETAIL
NOT TO SCALE

NOTE: PAVEMENT WIDTH AND LOCATION IN R/W VARIES. SEE PLAN FOR INDIVIDUAL LOCATION.



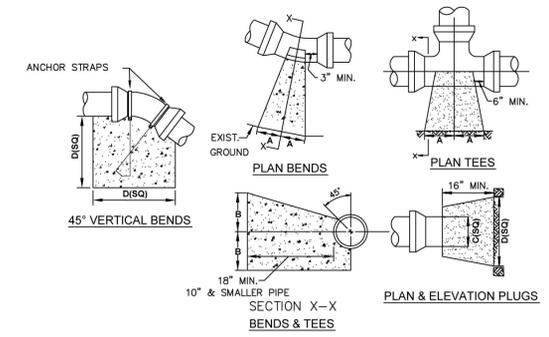
NOTES:
1. CASING WILL BE INSTALLED AT LINE AND GRADE SHOWN ON INDIVIDUAL PROFILE FOR EACH CROSSING. BORING/JACKING TO LINE AND GRADE IS REQUIRED.
2. TRACER WIRE SHALL BE CONTINUED THROUGH CASING

TYPICAL BORING/JACKING DETAIL
NOT TO SCALE



NOTE: USE D.I.P. (CL50 OR BETTER)

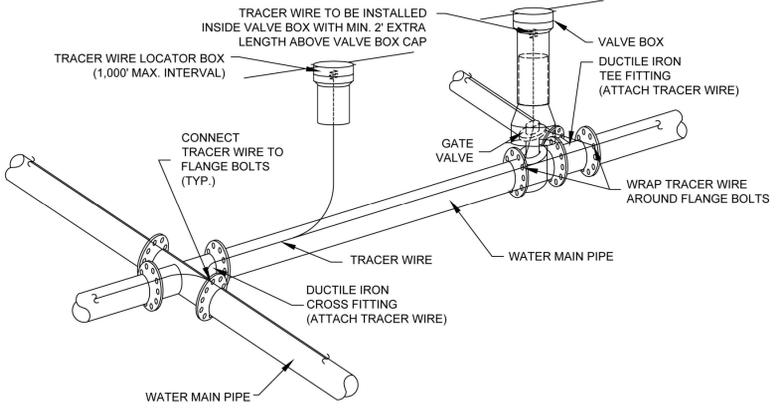
WATER MAIN DITCH & STORM DRAIN CROSSING
NOT TO SCALE



SIZE	90° BENDS		45° BENDS		22 1/2° BENDS		TEES/PLUGS		45° VERT. BENDS
	A	B	A	B	A	B	A	B	
3"	8"	6"	5"	6"	3"	7"	6"	8"	27"
4"	8"	9"	5"	8"	3"	11"	6"	9"	28"
6"	14"	11"	9"	9"	8"	8"	12"	9"	36"
8"	16"	16"	12"	12"	10"	13"	14"	13"	42"
10"	18"	22"	15"	14"	14"	16"	18"	15"	50"
12"	20"	28"	18"	17"	16"	16"	22"	18"	62"
14"	26"	29"	21"	19"	18"	18"	26"	20"	72"
16"	33"	29"	25"	21"	20"	21"	32"	21"	83"
18"	40"	30"	28"	24"	22"	23"	36"	24"	88"

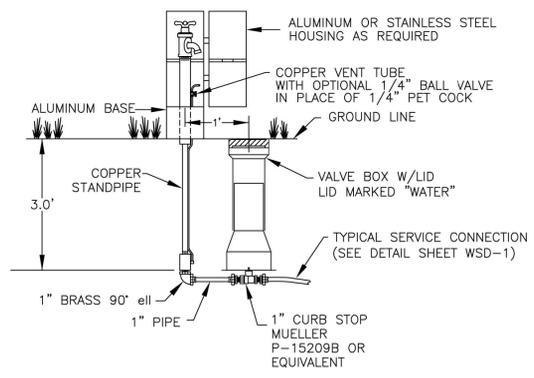
NOTES:
1. BASED ON 160 PSI TEST PRESSURE AND 2000 PSF SOIL BEARING CAPACITY.
2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
3. USE MEG-A-LUG (PREFERRED) IN LIEU OF BLOCKING AND RODDING.

THRUST BLOCK DETAIL
NOT TO SCALE

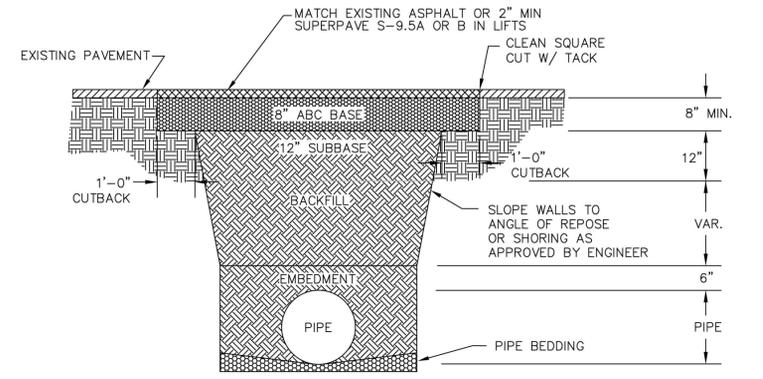


NOTES:
1. TRACER WIRE SHALL BE #10 COPPER SOLID CORE COPPER WIRE WITH GAS AND OIL RESISTANT INSULATION
2. WIRE SHALL BE STRAPPED TO ALL PVC WATER MAIN PIPING WITH DUCT TAPE AT 12-FT. INTERVALS.
3. SECURE WIRE TO ALL TEE AND CROSS FITTINGS.
4. ALL WIRE SPLICES SHALL HAVE WATER PROOF WIRE CONNECTIONS.

TRACER WIRE DETAIL

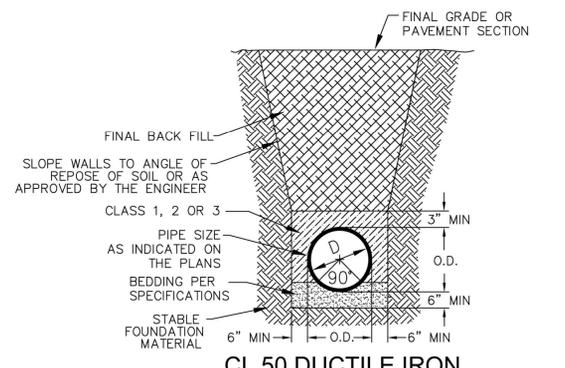


SAMPLING STATION
NOT TO SCALE



NOTES:
1. BACKFILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBOS, DEBRIS, ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE.
2. SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION, (I.E. #57, ABC, CRUSHED LIMESTONE, CLEAN SAND, FLOWABLE FILL, ETC).
3. 8-INCH OF ABC BASE MATERIAL SHALL BE USED ON CITY STREETS.
4. BACKFILL AND BASE MATERIALS SHALL BE COMPACTED 12" MINIMUM LIFTS
5. SOIL SHALL BE COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
6. ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE.
7. ABC BASE AND SUBBASE COMPACTED TO 98% AND BACKFILL AND EMBEDMENT COMPACTED TO 90% AS DETERMINED BY THE MODIFIED PROCTOR AASHTO METHOD T-99.
8. 1-FOOT CUTBACKS OF ASPHALT SHALL BE PREPARED ON UNDISTURBED SOIL. MINIMUM ASPHALT DENSITY IS 90%.

PAVEMENT REPAIR WHERE PIPE INSTALLED
(FOR PRIVATE ROADS AND PAVED AREAS; CONTRACTOR TO MEET MIN. REQUIREMENTS AS DEFINED BY RIGHT-OF-WAY OWNER FOR PUBLIC ROAD REPAIRS)
NOT TO SCALE



CL 50 DUCTILE IRON DR 18 PVC PIPE TRENCH DETAIL
NOT TO SCALE

GENERAL NOTES:
1. NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
3. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
4. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
5. THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN & STOCKPILE AREAS (TO ARRANGE AND ENSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPWA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

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REV:	DESCRIPTION:	DATE:

O'Reilly Auto Parts - Wilmington #1
CFPUA WATER DISTRIBUTION SYSTEM

STANDARD DETAILS

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

DATE: 1/9/12
SCALE: N/A
DRAWN BY: CFPWA
CHECKED BY: CFPWA
PROJECT NO.:
SHEET NO: WSD-2