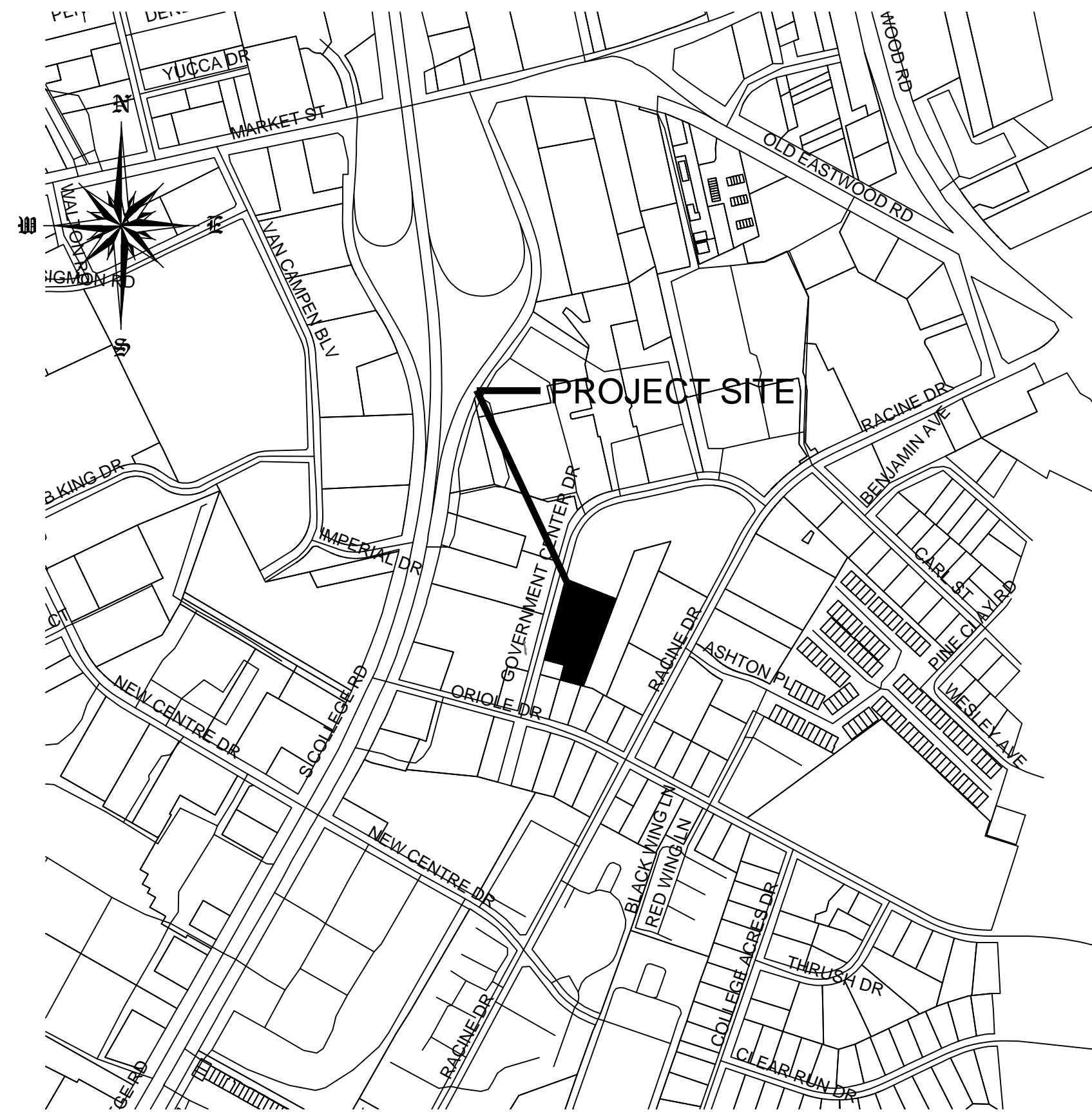


**NOTES**

1. PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING (IF REQUIRED) WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION.
2. ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS OCCUR IN THOSE AREAS.
3. NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION METHODS.
4. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS OF WAY AND FOR DRIVEWAY ARE TO BE THERMO PLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
5. ONCE STREETS ARE OPEN TO TRAFFIC, CONTACT TRAFFIC ENGINEERING REGARDING THE INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET SIGN NAMES.
6. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD STANDARDS AND BE MAINTAINED BY THE OWNER.
7. CONTACT TRAFFIC ENGINEERING AT 910-341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
8. TRAFFIC ENGINEERING TO BE NOTIFIED AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
9. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
10. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN PARKING AREAS SHALL BE WHITE. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS OF WAY FOR DRIVEWAY ARE TO BE THERMO PLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
11. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT OF WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER.
12. STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
13. TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEEL CHAIR RAMPS.
14. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET.
15. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
16. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
17. WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY DETAILS AND SPECIFICATIONS.
18. PROJECT SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
19. IF THE CONTRACTOR DESIRES CFPWA WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST SUPPLY A RPZ BACKFLOW PREVENTION DEVICE ON THE DEVELOPERS SIDE OF THE WATER METER BOX.
20. ANY IRRIGATION SYSTEM SUPPLIED BY CFPWA SHALL COMPLY WITH THE CFPWA CROSS CONNECTION REGULATIONS.
21. ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZE SENSOR.
22. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFPWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USGFCOCHR.
23. CONTRACTOR TO FILED VERIFY EXISTING WATER AND SEWER LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF CONFLICTS.
24. AN ALL WEATHER DRIVING SURFACE FOR EMERGENCY VEHICLES MUST BE MAINTAINED DURING CONSTRUCTION.
25. UNDERGROUND FIRE LINE(S) MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC ROW TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT/DIVISION OF FIRE AND LIFE SAFETY AT 910-341-0696.
26. NO OBSTRUCTIONS ARE PERMITTED IN THE SPACE BETWEEN THIRTY (30) INCHES AND TEN (TEN) FEET ABOVE THE GROUND WITHIN THE TRIANGLE SIGHT DISTANCE.
27. CONTRACTOR IS TO NOTIFY (AT A MINIMUM) THE FOLLOWING COMPANIES FOR LOCATION SERVICES:  
 ULOGO .....1-800-632-4949, 48 HOURS IN ADVANCE  
 BELL SOUTH.....1-800-392-8712 (STEVE DAYVAULT)  
 CAROLINA ONE CALL CENTER 1-800-632-4949
28. THERE SHALL BE NO ENCUMBRANCES WITHIN THE NCDOT RIGHT OF WAY.
29. 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 THE RECORDING OF THE FINAL PLAT (SD 15-14 C&W TECH STDS)
30. FIRE HYDRANTS CANNOT BE FURTHER THAN 8' FROM THE CURB.
31. PARKING AND LANDSCAPING CANNOT BLOCK FIRE HYDRANTS OF FDC'S
32. FDC'S CAN BE NO FURTHER THAN 40' FROM FIRE DEPARTMENT VEHICLE PLACEMENT
33. FDC'S CAN BE NO FURTHER THAN 150' FROM A FIRE HYDRANT
34. BICYCLE PARKING IS PROVIDED ON THE SOUTHWEST CORNER OF PROPOSED BUILDING

# CONSTRUCTION PLANS FOR NEUWIRTH ANNEX 375 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403



**VICINITY MAP**  
SCALE 1" = 600'  
**NOVEMBER, 2016**

**LIST OF DRAWINGS**

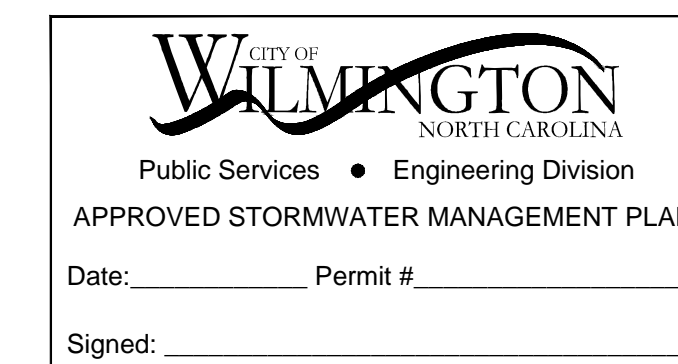
XX	COVER SHEET
CE	EXISTING SITE/TREE SURVEY
C1	SITE PLAN
C2	GRADING, DRAINAGE & EROSION CONTROL
C3	DETAILS
C4	DETAILS
L1	LANDSCAPE PLAN

R6	5/9/17	REVISED SOUTHERN DRIVEWAY
R5	3/1/17	ISSUED FOR CONSTRUCTION
R4	2/13/17	RESPONDED TO V2 TRC COMMENTS & DEQ SUBMITTAL
R3	12/16/16	RESPONDED TO TRC COMMENTS
R2	11/29/16	SUBMITTED FOR NCDEQ STORM NHC S&E, COW STORM REVIEW
R1	11/17/16	SUBMITTED FOR COW TRC REVIEW
NUMBER	DATE	REVISION

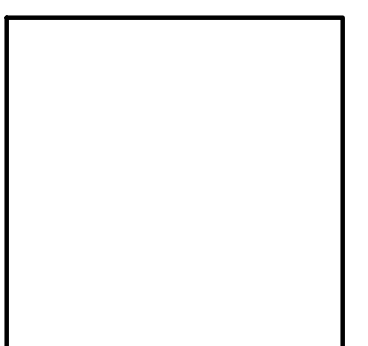
**OWNER/DEVELOPER**  
**GILLILAN PROPERTIES, LLC**  
 MR. JOHN GILLILAN  
 219 SOUTH COLLEGE ROAD  
 WILMINGTON, NC 28403  
 PO BOX 4107 (28405)  
 1-910-799-1815

**CIVIL ENGINEER**  
**JBS CONSULTING, PA**  
 BRAD SEDGWICK, PE  
 7332 COTESWORTH DRIVE  
 WILMINGTON, NC 28405  
 1-910-619-9990

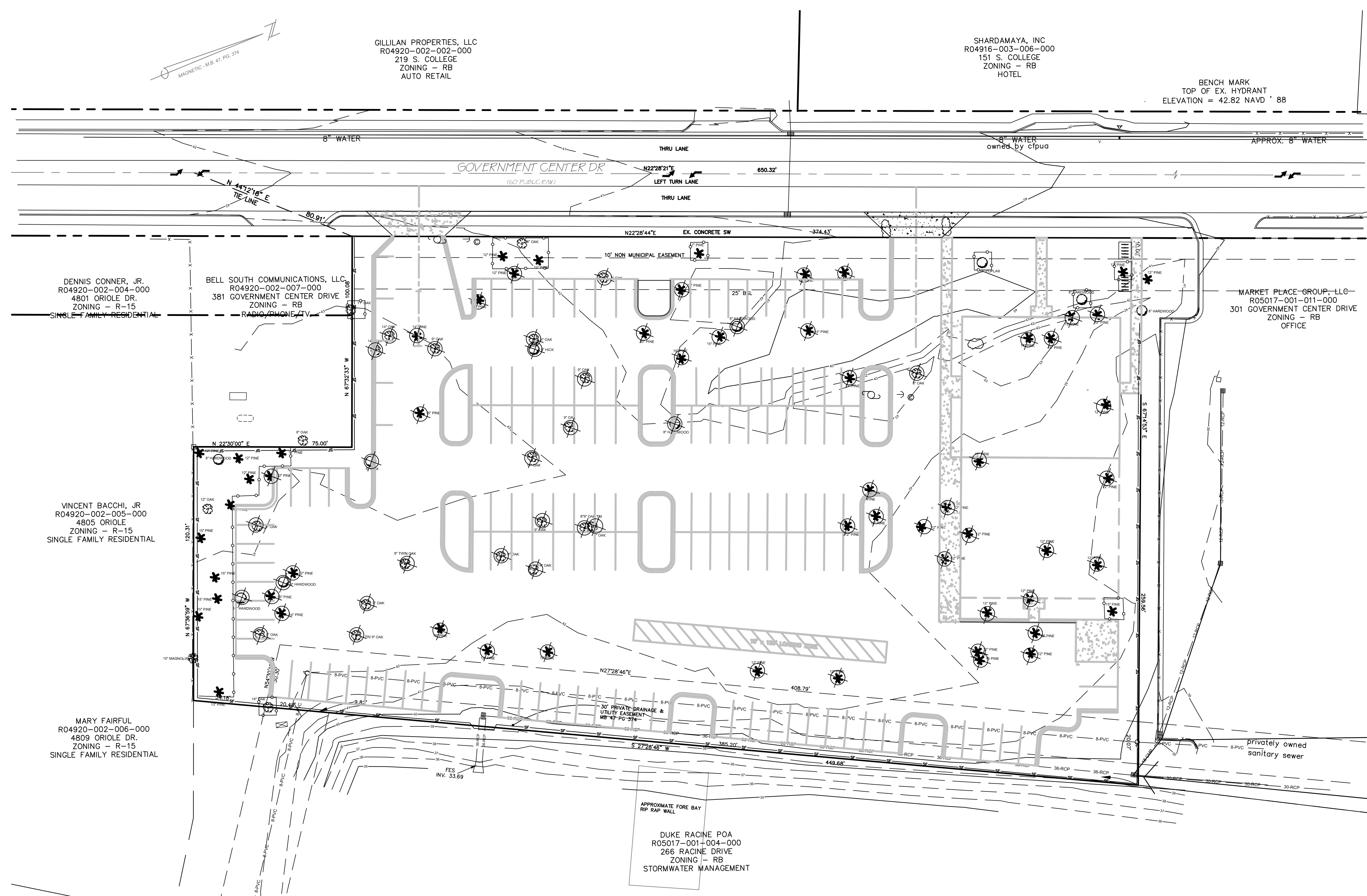
**GENERAL CONTRACTOR**  
**TMC TAYLOR**  
 MR. GREG TAYLOR  
 1406 CASTLE HAYNE ROAD  
 WILMINGTON, NC 28401  
 910-251-1181



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



REVISION	DATE	DESCRIPTION
R6	5/8/17	REVISED SOUTHERN DRIVEWAY
R5	3/1/17	ISSUED FOR CONSTRUCTION
R4	2/13/17	RESPONDED TO V2 TRC COMMENTS & DEO SUBMITTAL
R3	1/12/16	SUBMITTED FOR NDDSD STORM, NHC S&E, COW STORM REVIEW
R2	1/11/16	SUBMITTED FOR COW TRC REVIEW
R1	1/11/16	REVISION



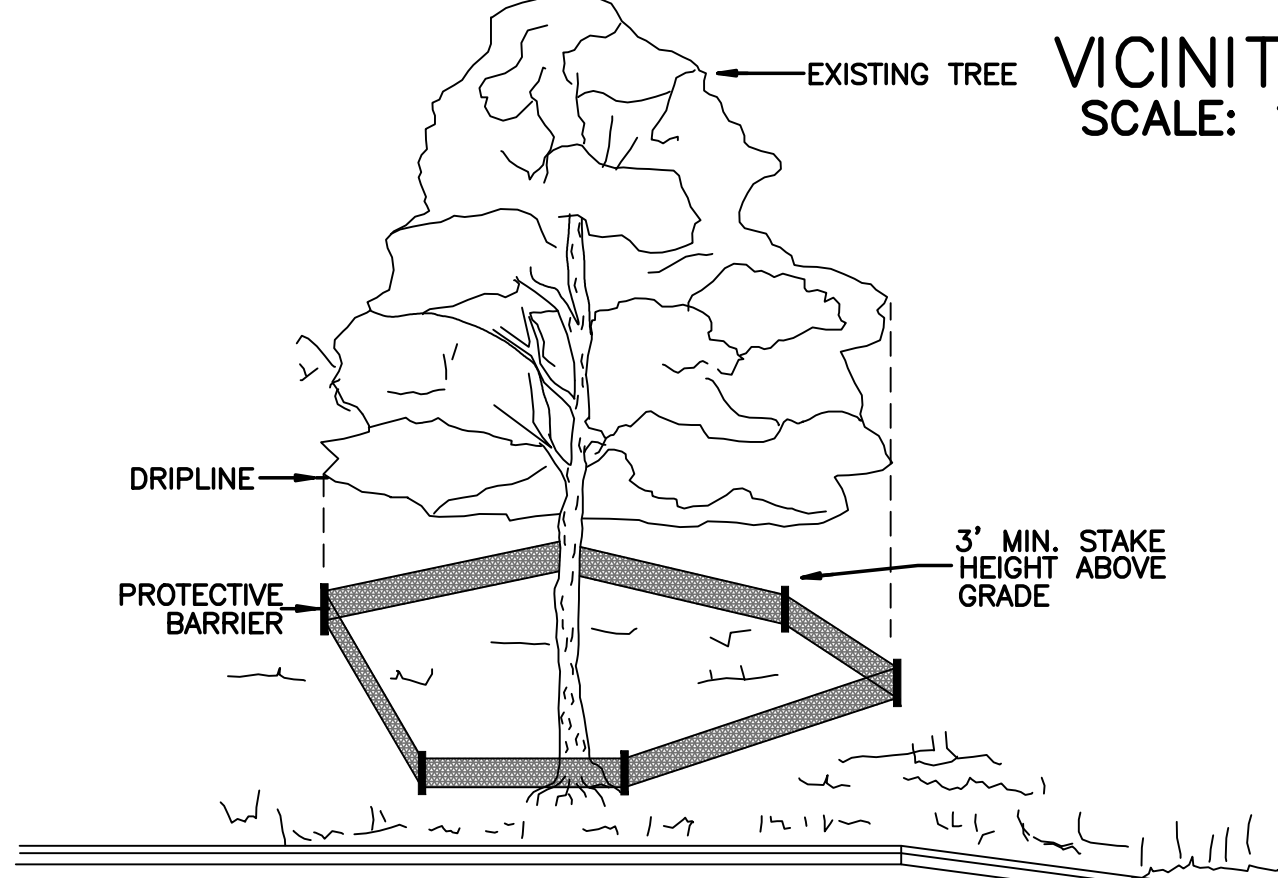
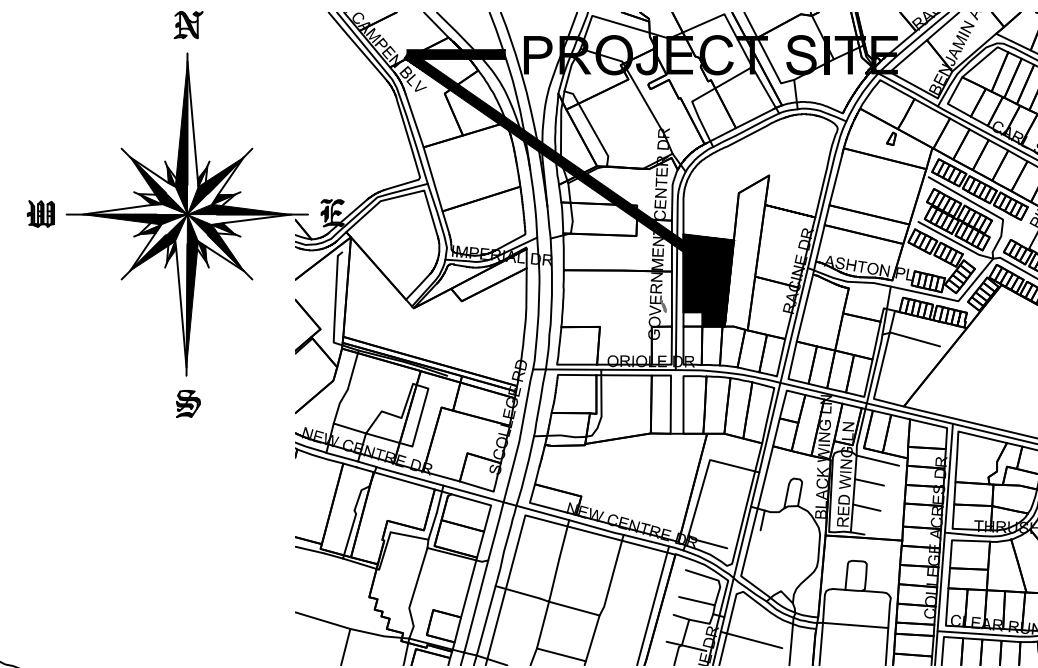
**EXISTING SITE/TREE SURVEY**  
SCALE: 1" = 30'

**LEGEND**

EX. GRAVEL	
ASPHALT PAVEMENT	
CONC. PAVEMENT	
SILT FENCE	
PROPOSED SPOT ELEVATION	41.5'
WAVE STYLE BIKE RACK 8 BIKE SPOTS EACH	
TREE PROTECTION FENCING SEE DETAIL	
TREE FOR REMOVAL	

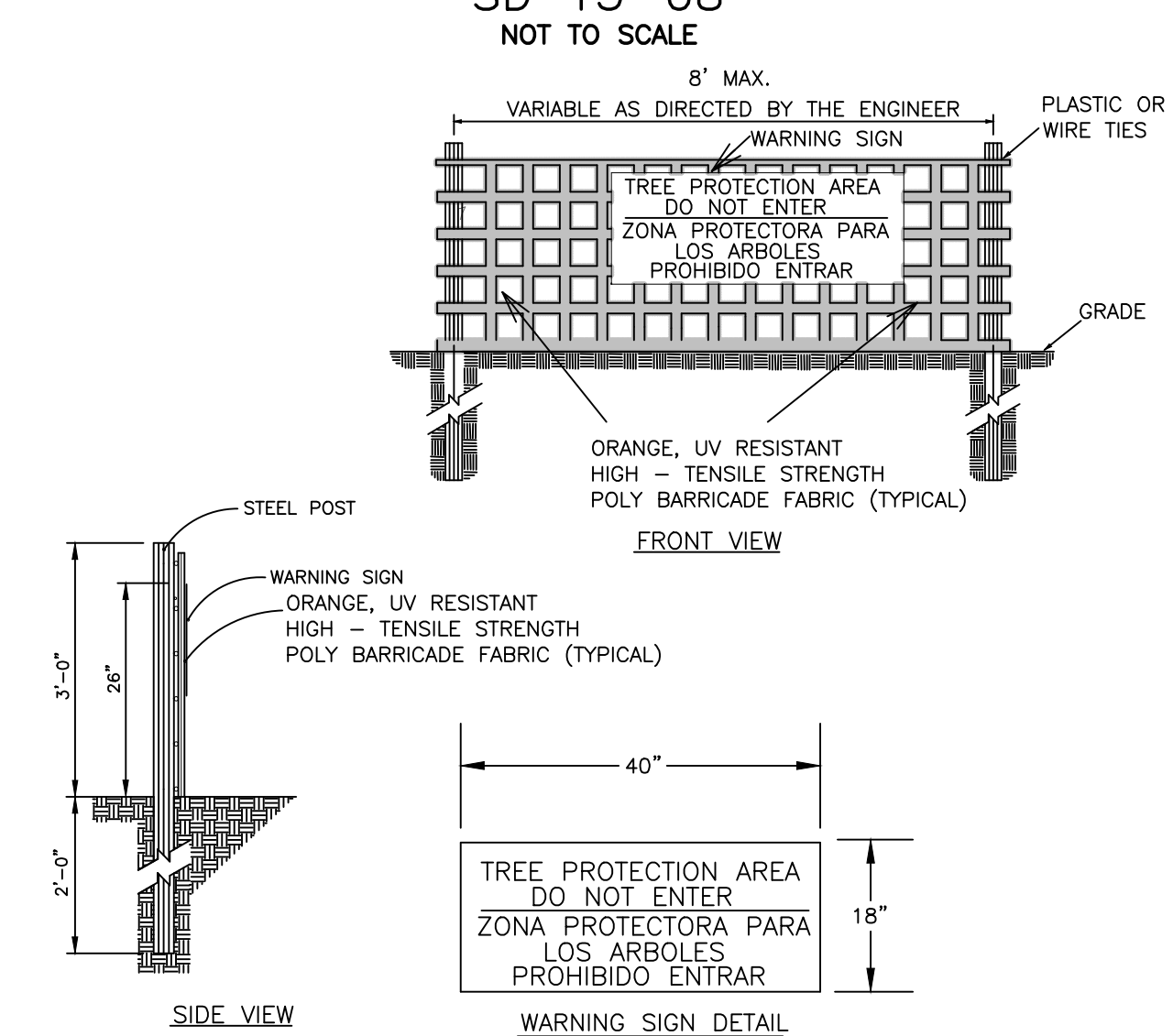


**NO WETLAND WITHIN PROJECT AREA**



TREES TO BE SAVED WILL BE CLEARLY MARKED PRIOR TO CONSTRUCTION AND A PROTECTIVE BARRIER IS TO BE INSTALLED AT THE DRIPLINE. DRIPLINE - THE AREA OF SOIL DIRECTLY BENEATH THE TREE EXTENDING OUT TO THE TIPS OF THE OUTERMOST BRANCHES. CONTRACTOR TO COMPLY WITH COW SIGN ORDINANCE FOR MARKING FENCING

**METHOD OF TREE PROTECTION DURING CONSTRUCTION**  
SD 15-08  
NOT TO SCALE



- 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\"/>

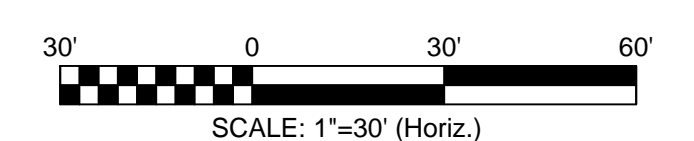
**TREE PROTECTION DURING CONSTRUCTION**  
SD 15-09  
NOT TO SCALE

**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

**Approved Construction Plan**

Name	Date
Planning	_____
Traffic	_____
Fire	_____
CFPUA	_____

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



DESIGN BY:	BDS
DRAWN BY:	BDS
CHECKED BY:	BDS
DATE:	NOVEMBER, 2016

**EXISTING SITE/TREE SURVEY**  
**NEUWIRTH ANNEX**  
375 GOVERNMENT CENTER DRIVE  
WILMINGTON, NC 28403

**GILLILAN PROPERTIES, LLC**  
**MR. JOHN GILLILAN**  
219 COLLEGE ROAD  
WILMINGTON, NC 28406  
1-910-799-1815

**JBS CONSULTING, PA**  
7332 Cotesworth Drive  
Wilmington, NC 28405  
(910) 619-9990  
License Number C-2525  
PLANNING - ENGINEERING - PROJECT MANAGEMENT



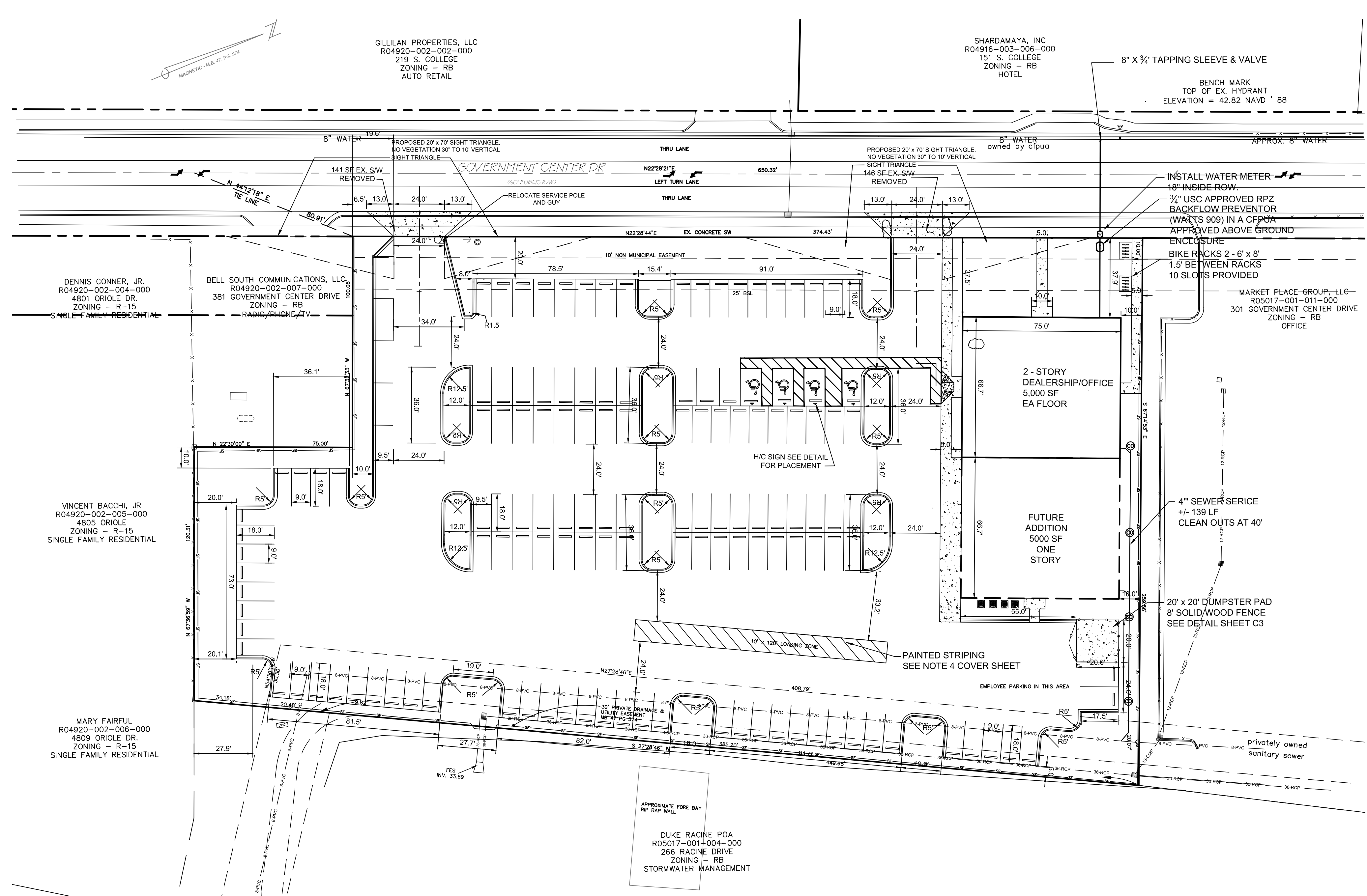
ISSUED FOR CONSTRUCTION	DATE	REVISION
R5	3/1/17	
R4	2/13/17	ISSUED FOR CONSTRUCTION
R3	12/16/16	RESPONDED TO V2 TRC COMMENTS & DEC SUBMITTAL
R2	11/29/16	RESPONDED TO TRC COMMENTS
R1	11/17/16	SUBMITTED FOR NCDOT STORM, NHC S&E, COW STORM REVIEW
R0	5/9/17	SUBMITTED FOR COW TRC REVIEW
NUMBER	DATE	REVISION

### LEGEND

- EX. GRAVEL
- ASPHALT PAVEMENT
- CONC. PAVEMENT
- PROPOSED SPOT ELEVATION  $\times$  41.5'
- WAVE STYLE BIKE RACK 8 BIKE SPOTS EACH
- TREE PROTECTION FENCING SEE DETAIL
- TREE FOR REMOVAL



**NO WETLAND WITHIN PROJECT AREA**



**SITE PLAN**  
SCALE: 1" = 30'

### TRIP REPORT

Day / Period	Total Trips	Pass-By Trips	Avg. Rate	Min. Rate	Max. Rate	Std. Dev.	Avg. Delay	% Delay	% Delay	Level	Equation	EQ
Weekday Average City Trip	233	0	32.3	15.64	79.86	15.7	58	50	50	FHRS		
Weekday AM Peak Hour of Generator	14	0	2.22	0.89	6	1.76	31	55	45	TRIP	T = 2.3000 / 2.41	0.89
Weekday PM Peak Hour of Generator	20	0	2.6	0.89	6.41	1.91	31	47	53	TRIP	T = 2.6100 / 6.10	0.75

Weekday ADT - 233 trips

AM Peak trips  
Enter - 8  
Exit - 6  
Total - 14

PM Peak trips  
Enter - 9  
Exit - 11  
Total - 20

Source: Institute of Transportation Engineers, Trip Generation Manual (9th Edition), 2012  
TRIP GENERATION 2013, TRAFFICWARE, LLC

### SITE DATA

ADDRESS ..... 375 GOVERNMENT CENTER DRIVE  
WILMINGTON, NC 28403

PARCEL ID NUMBERS ..... R05017-001-009-000

DEED BOOK & PAGE ..... D.B. 6028 PG. 68

MAP BOOK & PAGE ..... MB 47 PG. 289

ZONING ..... RB-REGIONAL BUSINESS CITY OF WILMINGTON

TOTAL LOT AREA ..... 2.3 ACRES

CAMA LAND USE CLASSIFICATION .. URBAN

SPECIAL OVERLAY DISTRICT.....NOT IS S00

PROPOSED USE.....CAR DEALERSHIP/OFFICE

NUMBER OF BUILDINGS ..... 1 PROPOSED

BUILDING SQUARE FOOTAGE..... 10,000 SF

GROSS FLOOR SPACE..... 15,000 SF

BUILDING COVERAGE..... 10,000 SF / (2.3 AC X 43560) = 10.02%

PAVEMENT/BVA CALCULATIONS FOR THE STORMWATER PERMIT

TOTAL DRAINAGE AREA (SF) 100,188 SF (2.3 ACRES)

EXISTING ON SITE 0 SF

PROPOSED

PARKING LOT 65,319 SF

BUILDING (ALL CONCRETE) 10,000 SF

SIDEWALK (ALL CONCRETE) 2,440 SF

TOTAL PROPOSED ON SITE 77,759 SF

EXISTING OFF SITE 1,872 SF S/W

SIDEWALK DEMO'D FOR DRIVES -294 SF

NEW DRIVE APRONS -1,892 SF

TOTAL OFF SITE POST PROJECT 2,470 SF - EXISTING S/W + NEW APRON

	REQUIRED	PROPOSED
MIN. LOT AREA	1 ACRE	2.29 ACRES
MIN. LOT WIDTH	100'	374'
MAX. LOT COVERAGE	40%	10.02%
FRONT BUILDING SETBACK	25'	37.5'
REAR BUILDING SETBACK	15'	80.3'
SIDE BUILDING SETBACK	0'	10.0'
MAX. BUILDING HEIGHT	35'	25'

PARKING REQUIREMENTS

REQUIRED: 15,000 SF BUILDING

MINIMUM = 1 / 500 SF = x 50% = 15

MAXIMUM 45

TOTAL PROVIDED 131 SPACES

+ 4 H/C

135 SPACES TOTAL

PARKING SPACES (EMPLOYEE) = 45 (+ Customer)

PARKING SPACES (DISPLAY) = 90

BICYCLE PARKING 10 PROVIDED.

SOLID WASTE

SOLID WASTE DISPOSAL WILL BE BY DUMPSTER. DUMPSTER PAD IS LOCATED AT THE REAR OF THE PROPOSED BUILDING. THE DUMPSTER PAD SHALL BE ENCLOSED WITH A SOLID WOODEN FENCE AS SHOWN ON THE DETAIL ON THE DETAIL SHEET.

UTILITY INFORMATION

WATER: 000 GPD (CURRENT USE)

WATER: 900 GPD (PROPOSED USE) + IRRIGATION (SEPARATE TAP) (NO IRRIGATION PLANNED AT THIS STAGE OF THE PROJECT)

SEWER: 000 GPD (CURRENT USE)

SEWER: 900 GPD (PROPOSED USE)

CALCULATIONS - ALL UNITS (5,000 SF PER UNIT @ 3) 12 EMPLOYEES/SHIFT /ONE SHIFT = 3 X 12 X 25 = 900 GALLONS PER DAY

STORMWATER CLASSIFICATION

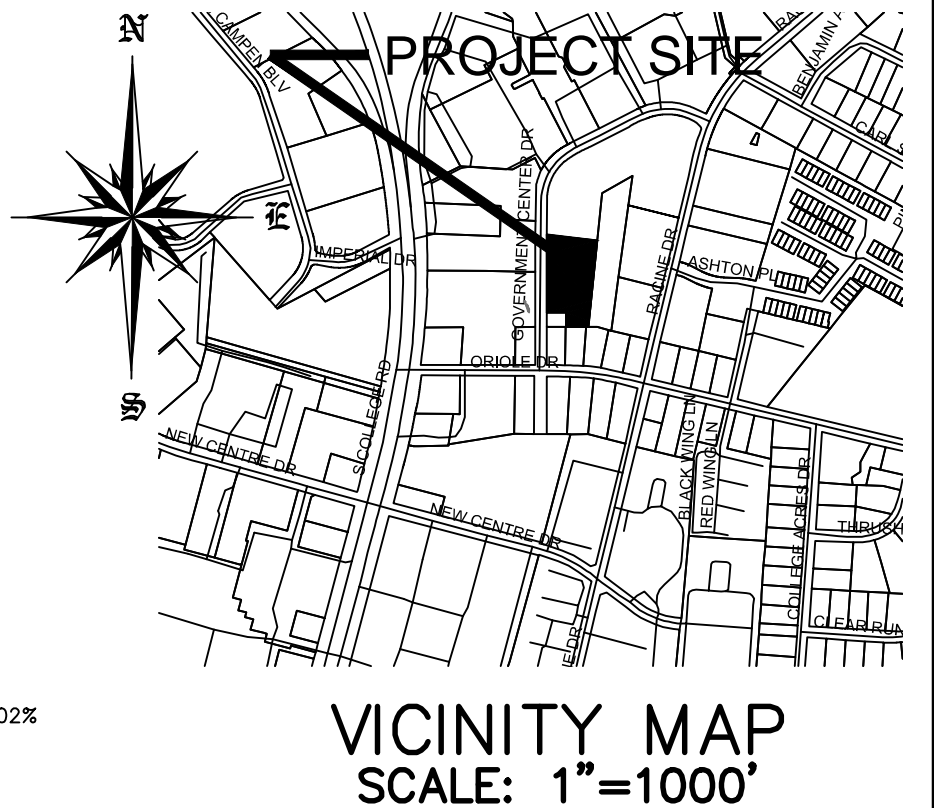
RECEIVING STREAM SPRING BRANCH

RIVER BASIN CAPE FEAR

STREAM INDEX NUMBER 18-74-653-1

WATER CLASSIFICATION "C, Sw"

LANDSCAPING REQUIREMENTS: SEE SHEET L1



**SITE PLAN**  
**NEUWRTH ANNEX**  
375 GOVERNMENT CENTER DRIVE  
WILMINGTON, NC 28403

GILLILAN PROPERTIES, LLC  
MR. JOHN GILLILAN  
219 COLLEGE ROAD  
WILMINGTON, NC 28406  
1-910-799-1815

JBS CONSULTING, PA  
7332 Cotesworth Drive  
Wilmington, NC 28405  
(910) 619-9990  
License Number C-2825

PLANNING - ENGINEERING - PROJECT MANAGEMENT

**Approved Construction Plan**

Name \_\_\_\_\_ Date \_\_\_\_\_

Planning \_\_\_\_\_

Traffic \_\_\_\_\_

Fire \_\_\_\_\_

**CITY OF WILMINGTON**  
NORTH CAROLINA

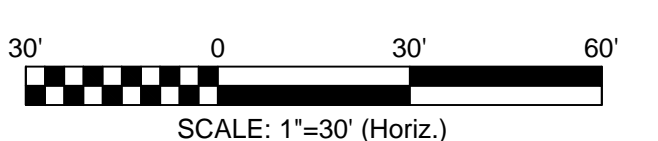
Public Services • Engineering Division

**APPROVED STORMWATER MANAGEMENT PLAN**

Date: \_\_\_\_\_ Permit # \_\_\_\_\_

Signed: \_\_\_\_\_

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.





REVISION	DATE	DESCRIPTION
R5	3/17/17	ISSUED FOR CONSTRUCTION
R4	2/13/17	RESPONDED TO V7 TRC COMMENTS & DEQ SUBMITTAL
R3	12/16/16	RESPONDED TO TRC COMMENTS
R2	11/29/16	SUBMITTED FOR NCDDEQ STORM, NHC SAE, COW STORM REVIEW
R1	11/17/16	SUBMITTED FOR COW TRC REVIEW
		REVISION

**LEGEND**

ASPHALT PAVEMENT

CONC. PAVEMENT

PROPOSED SPOT ELEVATION

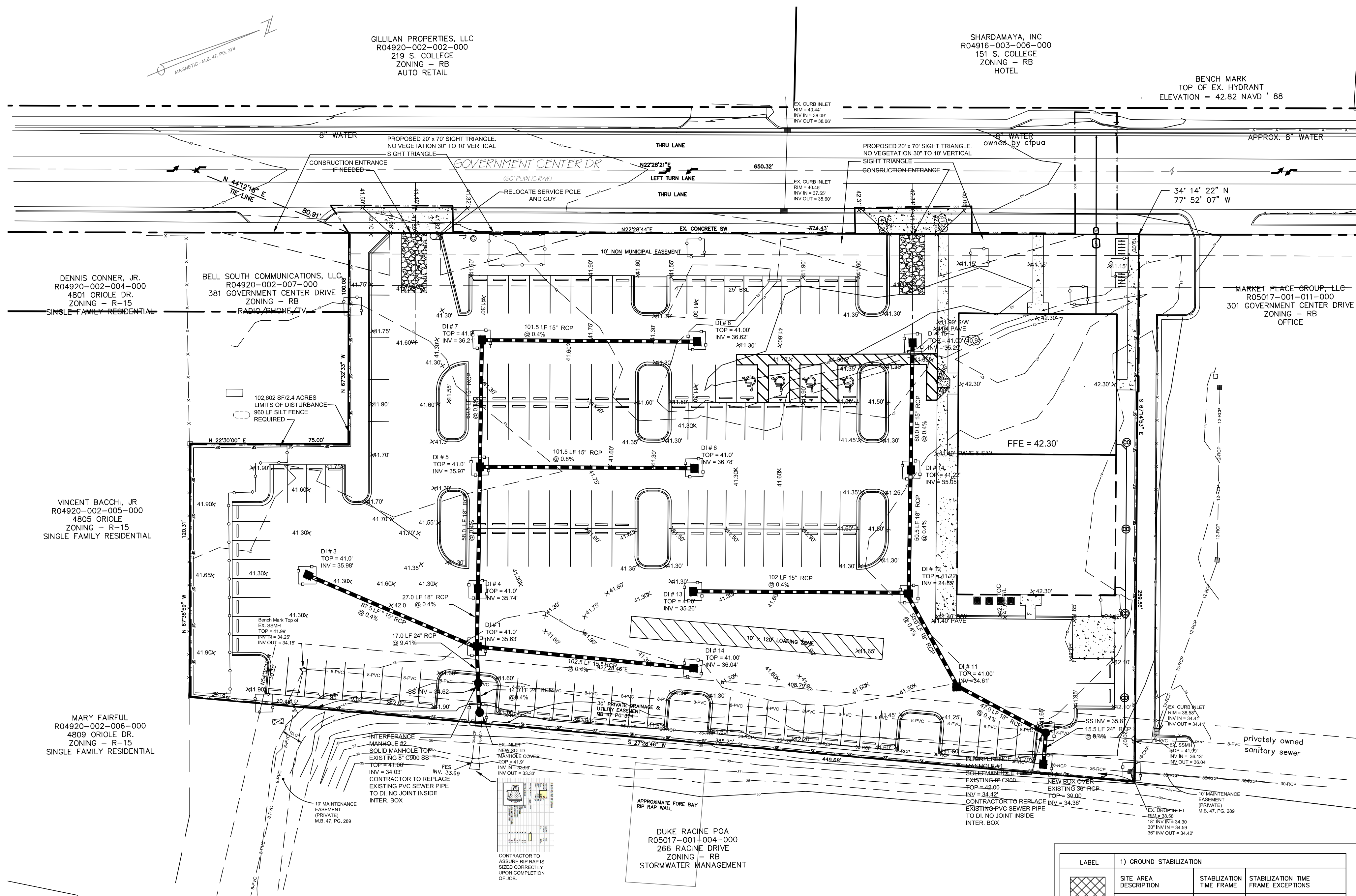
WAVE STYLE BIKE RACK  
8 BIKE SPOTS EACH

TREE PROTECTION FENCING  
SEE DETAIL

TREE FOR REMOVAL



**NO WETLAND WITHIN PROJECT AREA**



**GRADING, DRAINAGE & EROSION CONTROL**  
SCALE: 1" = 30'

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

- 2) BUILDING WASTES HANDLING
- NO PAINT OR LIQUID WASTES IN STREAM OF STORM DRAINS
  - DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE
  - EARTHEN MATERIALS STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE
  - CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS, OR BUFFERS.
- 3) INSPECTIONS
- SAME WEEKLY INSPECTION REQUIREMENTS
  - SAME RAIN GAUGE & INSPECTIONS AFTER 0.5" RAIN EVENT
  - INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS"
  - INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED
  - RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST
  - ELECTRONICALLY-AVAILABLE RECORDS MAY BE SUBSTITUTES UNDER CERTAIN CONDITIONS
- 4) SEDIMENT BASINS
- OUTLET STRUCTURES MUST WITHDRAW FROM BASIN SURFACES UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE
  - USE ONLY DW-2 APPROVED FLOCCULANTS

- NPDES - SPECIFIC PLAN SHEET NOTES**
1. THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000.
  2. THIS PAGE CAN BE APPROVED BY THE COUNTY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
  3. THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
  4. THE COUNTY IS NOT AUTHORIZED TO ENFORCE THIS PAGE OF THE PLANS AND IT IS NOT PART OF THE APPROVED PLANS FOR THE PURPOSES OF ENFORCEMENT ACTION UNDER THE CITY CODE.

**GRADING NOTES**

1. INITIATE EROSION CONTROL SEQUENCE BEFORE BEGINNING CLEARING, GRUBBING AND GRADING OPERATIONS.
2. CLEAR AREAS TO BE GRADED OF ALL VEGETATION. PROTECT VEGETATION BEYOND GRADING LIMITS.
3. STRIP TOPSOIL TO FULL DEPTH IN AREAS TO BE GRADED AND STOCKPILE.
4. COMPACT ALL FILL AREAS TO 95% OF MAXIMUM DENSITY.
5. ALL BANKS AND SWALE SIDE SLOPES SHALL BE GRADED WITH NO GREATER THAN 3:1 SLOPES.
6. ALL AREAS ARE TO BE GRADED SO THAT NO AREAS OF STANDING WATER OCCUR.
7. PROPOSED SPOT ELEVATIONS ARE SHOWN AT FINISHED GRADE.
8. OPERATOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY IN RELATION TO THE PROPOSED GRADES TO ENSURE DRAINAGE IN THE DIRECTIONS INDICATED ON THE PLAN.

**CONSTRUCTION SEQUENCE**

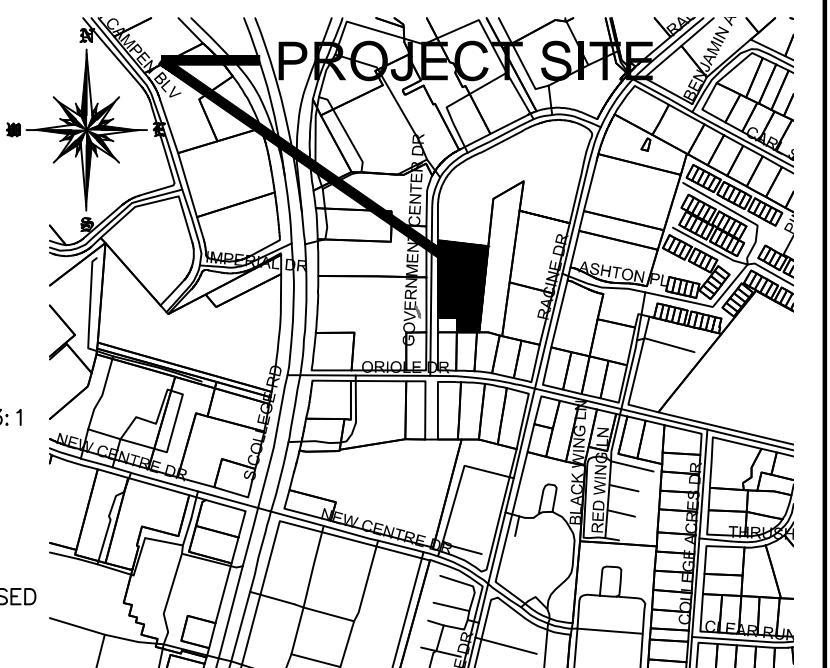
1. OBTAIN ALL NECESSARY PERMIT APPROVALS PRIOR TO ANY LAND DISTURBING ACTIVITY.
2. HOLD A PRE-CONSTRUCTION MEETING WITH THE EROSION CONTROL INSPECTOR.
3. INSTALL GRAVEL CONSTRUCTION ENTRANCE AND SILT FENCE, COMMENCE CLEARING AND ROUGH GRADING OPERATIONS.
4. ROUGH GRADE SITE AND INSTALL UNDERGROUND UTILITIES.
5. PROVIDE TEMPORARY PROTECTION MEASURES AND DEVICES AS REQUIRED UNTIL UNDERGROUND UTILITIES AND PAVEMENT SECTION IS COMPLETE AND FINAL GRADES ARE STABILIZED WITH TEMPORARY VEGETATIVE COVER.
6. STABILIZE (FERTILIZE, SEED, AND MULCH) ALL DISTURBED AREAS AS SOON AS FINAL GRADES ARE ESTABLISHED.
7. ONCE CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED, REMOVE TEMPORARY EROSION CONTROL MEASURES.

**EROSION CONTROL MAINTENANCE PLAN**

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF - PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
3. GRAVEL CONSTRUCTION ENTRANCE TO BE CLEANED WHEN SEDIMENT ACCUMULATIONS ARE VISIBLE OR SEDIMENT IS DEPOSITED ON THE ASPHALT AND STONE WILL BE PERIODICALLY TOP DRESSED WITH 2 INCHES OF #4 STONE TO MAINTAIN 6 INCH DEPTH.
4. INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT. CLEAR THE WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.
5. ALL AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

**EROSION CONTROL NOTES**

1. ANY CONSTRUCTION ACTIVITY BEYOND THE 2.4 ACRE LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO FINES.
2. CONTRACTOR SHALL REMOVE ALL TREES AND VEGETATION WITHIN ROAD RIGHT OF WAYS UNLESS OTHERWISE DESIGNATED TO REMAIN.
3. CONTRACTOR SHALL RAKE AND REMOVE ROOTS, STUMPS, VEGETATION, DEBRIS, EXISTING STRUCTURES ABOVE AND BELOW GRADE, ORGANIC MATERIAL OR ANY OTHER UNSUITABLE MATERIAL WITH IN THE LIMITS OF CONSTRUCTION.
4. CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO COORDINATE REMOVAL OF ANY UNSUITABLE SOILS.
5. CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A PROPERLY PERMITTED FACILITY.
6. THE CONTRACTOR SHALL FURNISH ANY REQUIRED BORROW MATERIALS FROM A PROPERLY PERMITTED OFF-SITE FACILITY.
7. ALL GRADED SLOPES MUST BE SEEDED AND MULCHED WITHIN 21 CALENDAR DAYS OF COMPLETION OF GRADING. STABILIZE AREAS OTHER THAN SLOPES WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS, WHICHEVER IS SHORTER.
8. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE COUNTY ENGINEERING DEPARTMENT.
9. SLOPES SHALL BE GRADED NO STEEPER THAN 3:1.
10. ADDITIONAL DEVICES MAY BE REQUIRED AS AGREED UPON BY THE FIELD INSPECTOR, ENGINEER, AND OWNER.
11. IF ACTIVE CONSTRUCTION CEASES IN ANY AREA FOR MORE THAN 15 CALENDAR DAYS, ALL DISTURBED AREAS MUST BE SEED, MULCHED, AND TACKED.



**VICINITY MAP**  
SCALE: 1"=1000'

**CITY OF WILMINGTON**  
SOUTH CAROLINA  
Public Services • Engineering Division  
APPROVED STORMWATER MANAGEMENT PLAN  
Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

**Approved Construction Plan**

Name \_\_\_\_\_ Date \_\_\_\_\_

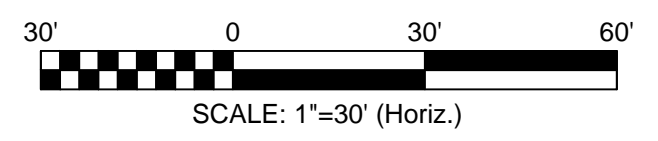
Planning \_\_\_\_\_

Traffic \_\_\_\_\_

Fire \_\_\_\_\_

CFPUA \_\_\_\_\_

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



DESIGN BY: BOS  
DRAWN BY: BOS  
CHECKED BY: BOS  
DATE: NOVEMBER, 2016

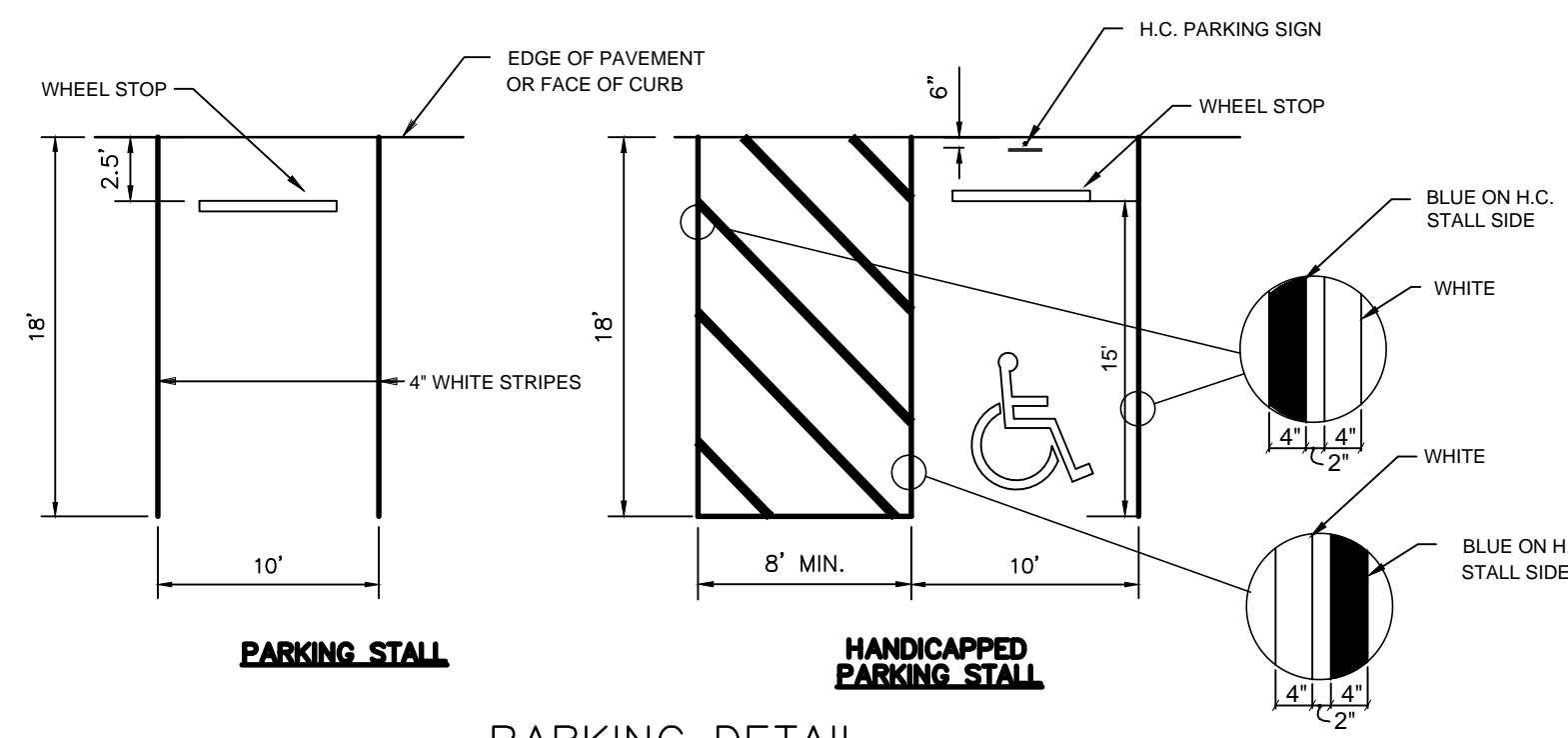
**GRADING, DRAINAGE & EROSION CONTROL**  
**NEUWIRTH ANNEX**  
375 GOVERNMENT CENTER DRIVE  
WILMINGTON, NC 28403

**GILLILAN PROPERTIES, LLC**  
MR. JOHN GILLILAN  
219 COLLEGE ROAD  
WILMINGTON, NC 28406  
1-910-799-1815

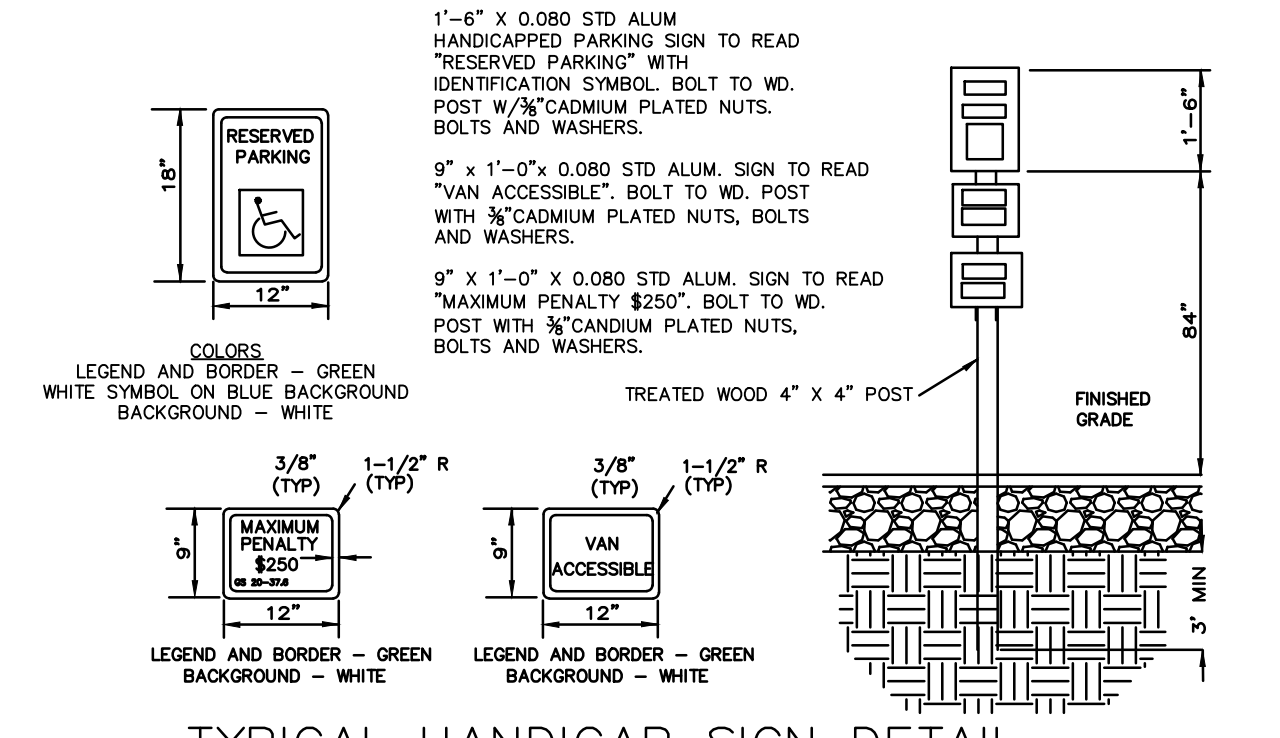
**JBS CONSULTING, PA**  
7332 Coatesworth Drive  
Wilmington, NC 28405  
(910) 619-9990  
License Number C-2525  
PLANNING - ENGINEERING - PROJECT MANAGEMENT

SHEET **C2** of 7  
JOB NO. 110-001

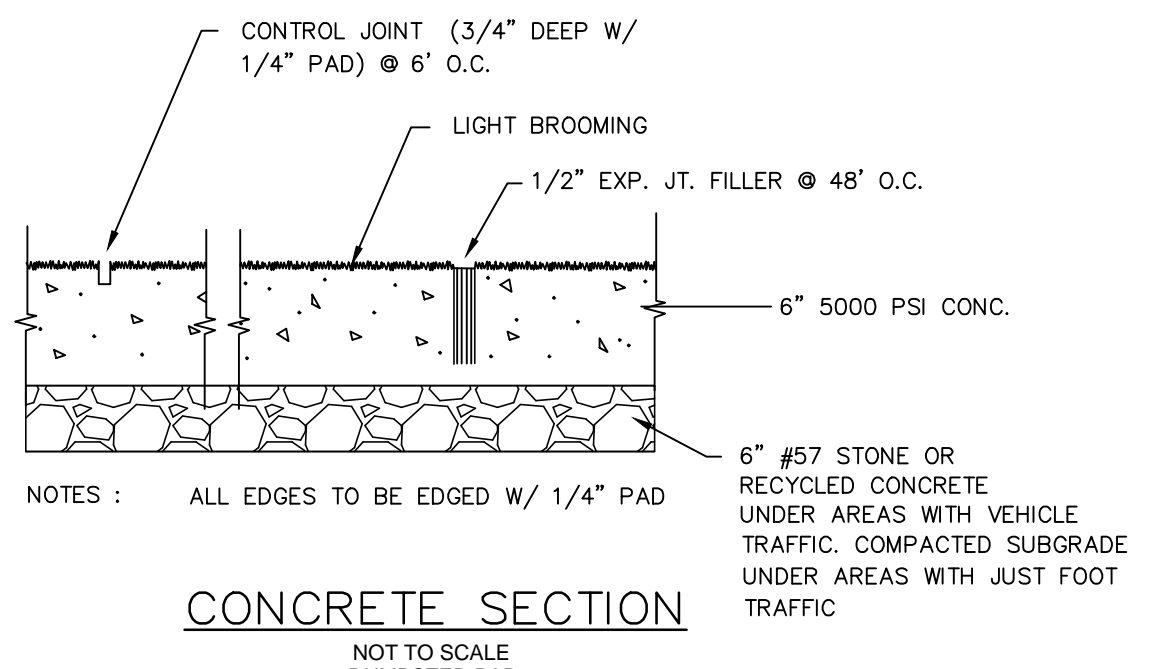




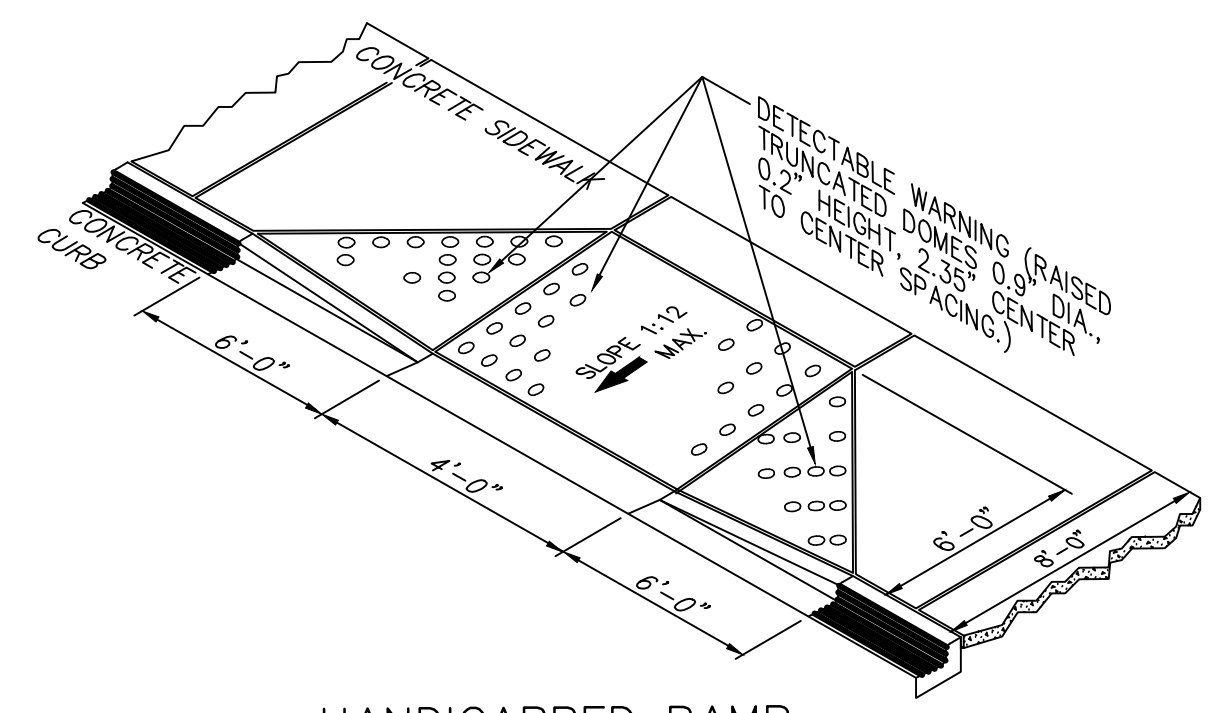
PARKING DETAIL  
NOT TO SCALE



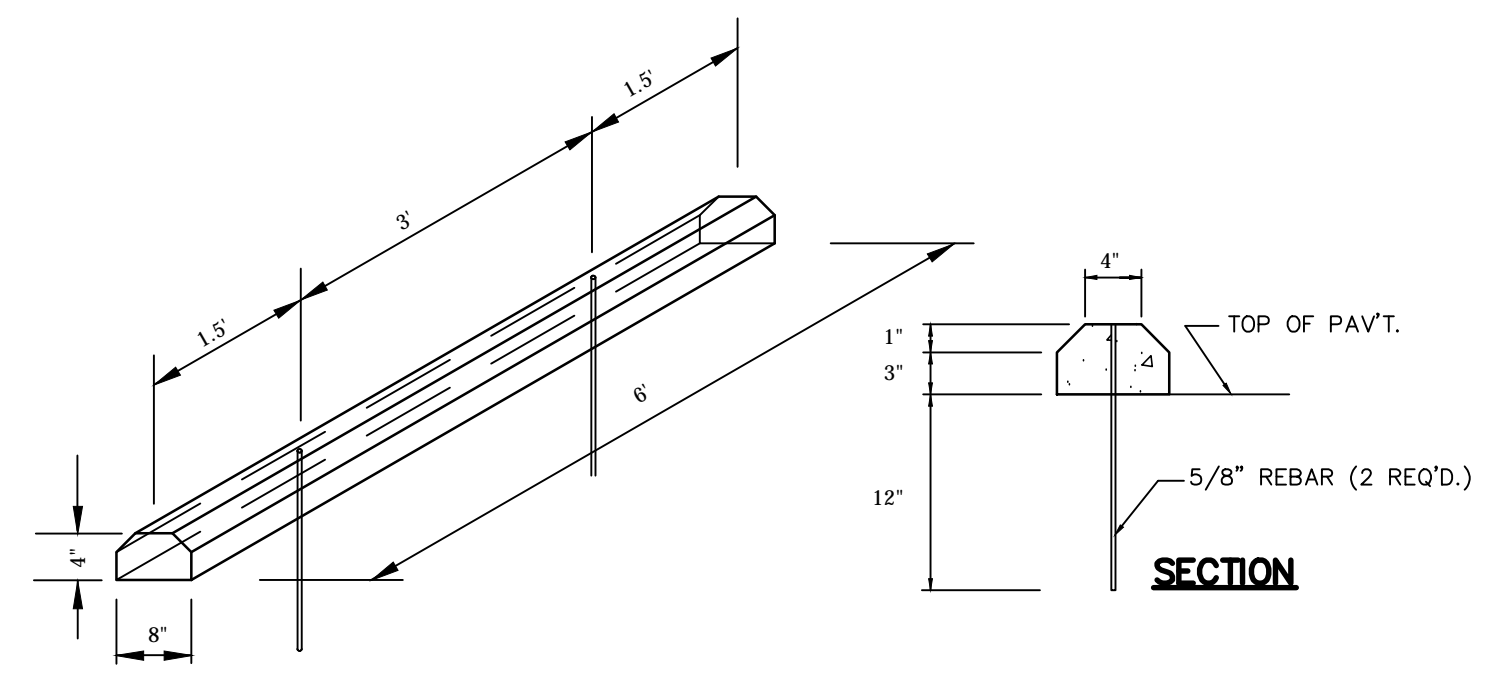
TYPICAL HANDICAP SIGN DETAIL



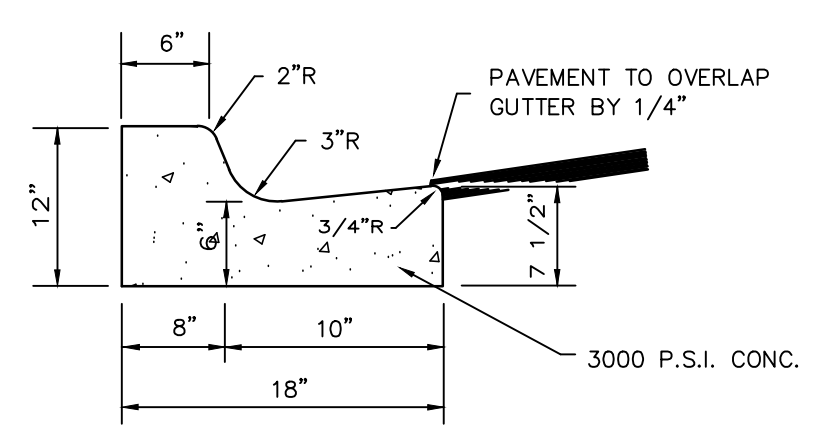
CONCRETE SECTION  
NOT TO SCALE  
DUMPSTER PAD



HANDICAPPED RAMP  
NOT TO SCALE

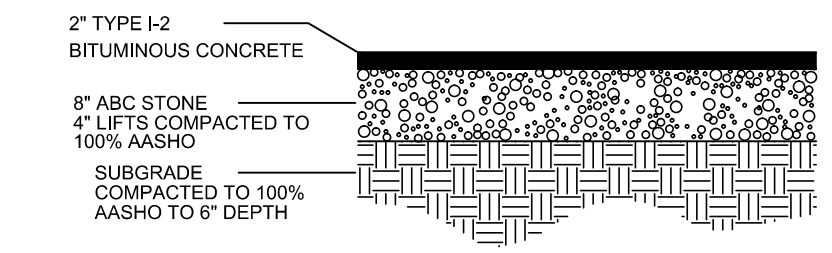


WHEEL STOP DETAIL  
NOT TO SCALE

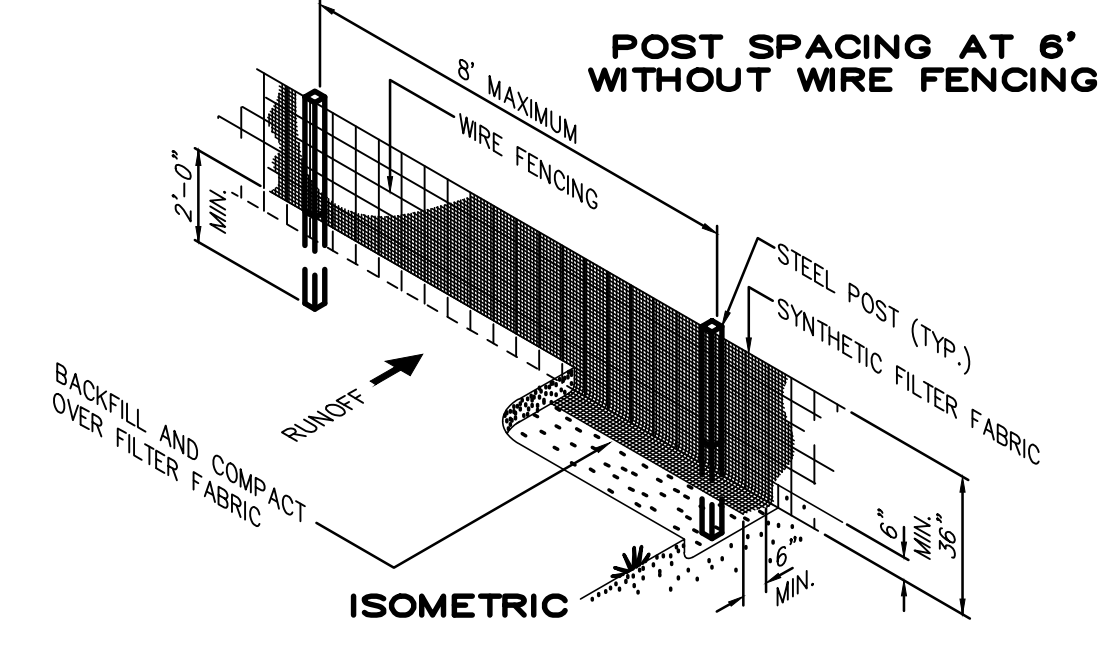


NOTE: WHEN USED ON THE HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6" UNLESS OTHERWISE SHOWN.

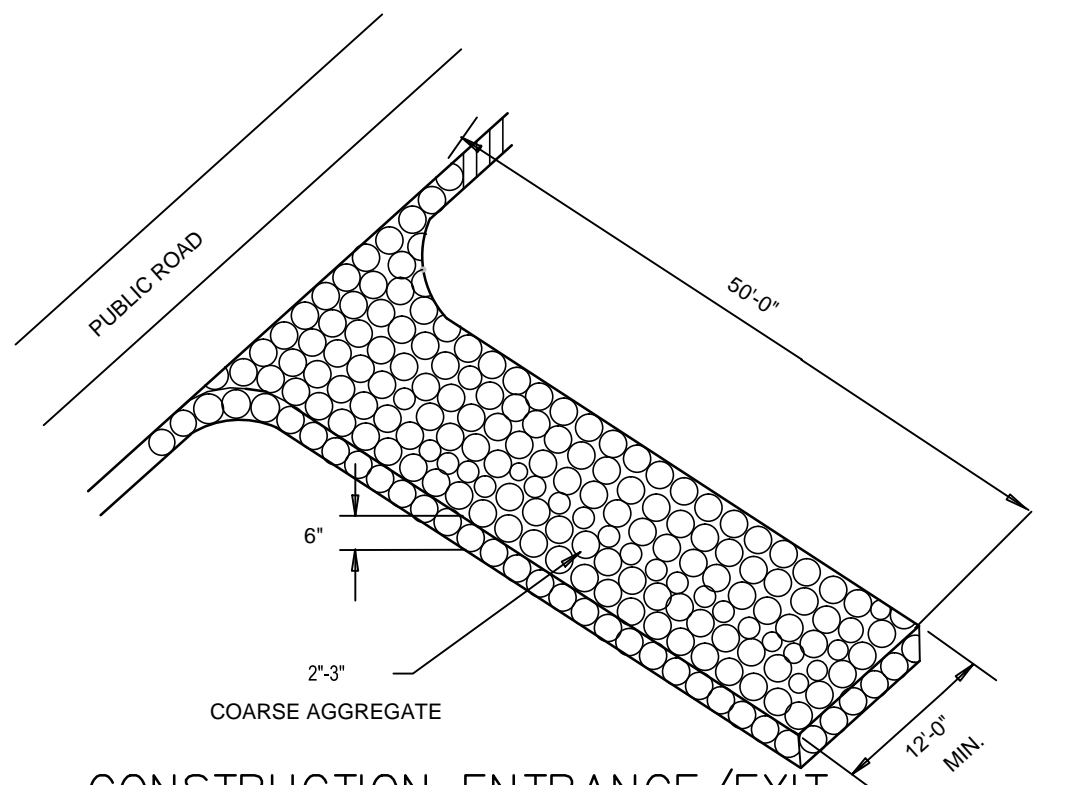
18" CURB AND GUTTER DETAIL  
NOT TO SCALE



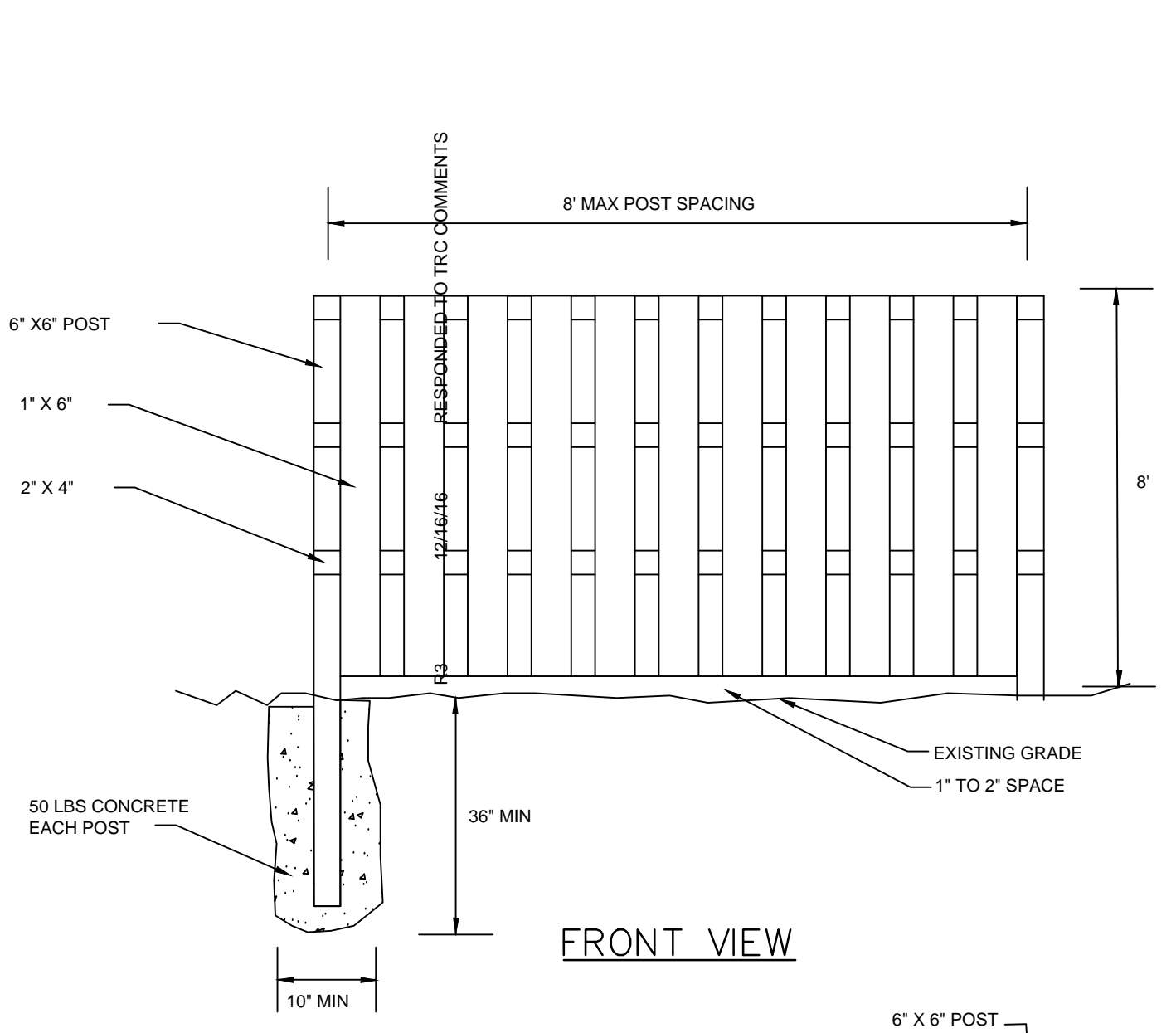
ASPHALT PAVEMENT SECTION  
NOT TO SCALE



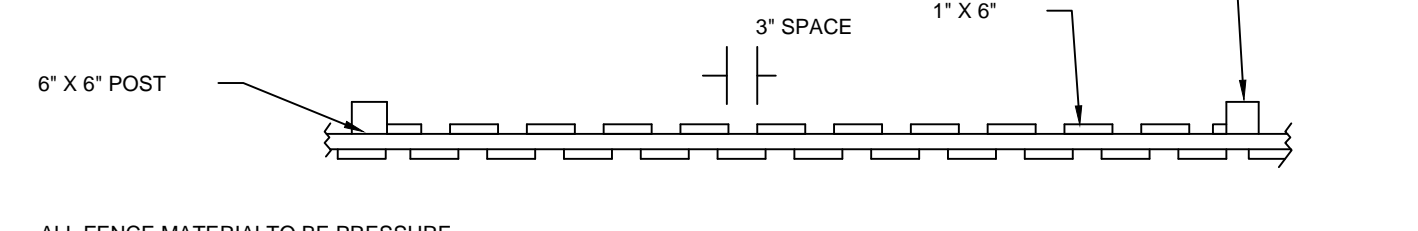
SILT FENCE DETAIL  
NOT TO SCALE



CONSTRUCTION ENTRANCE/EXIT  
NOT TO SCALE

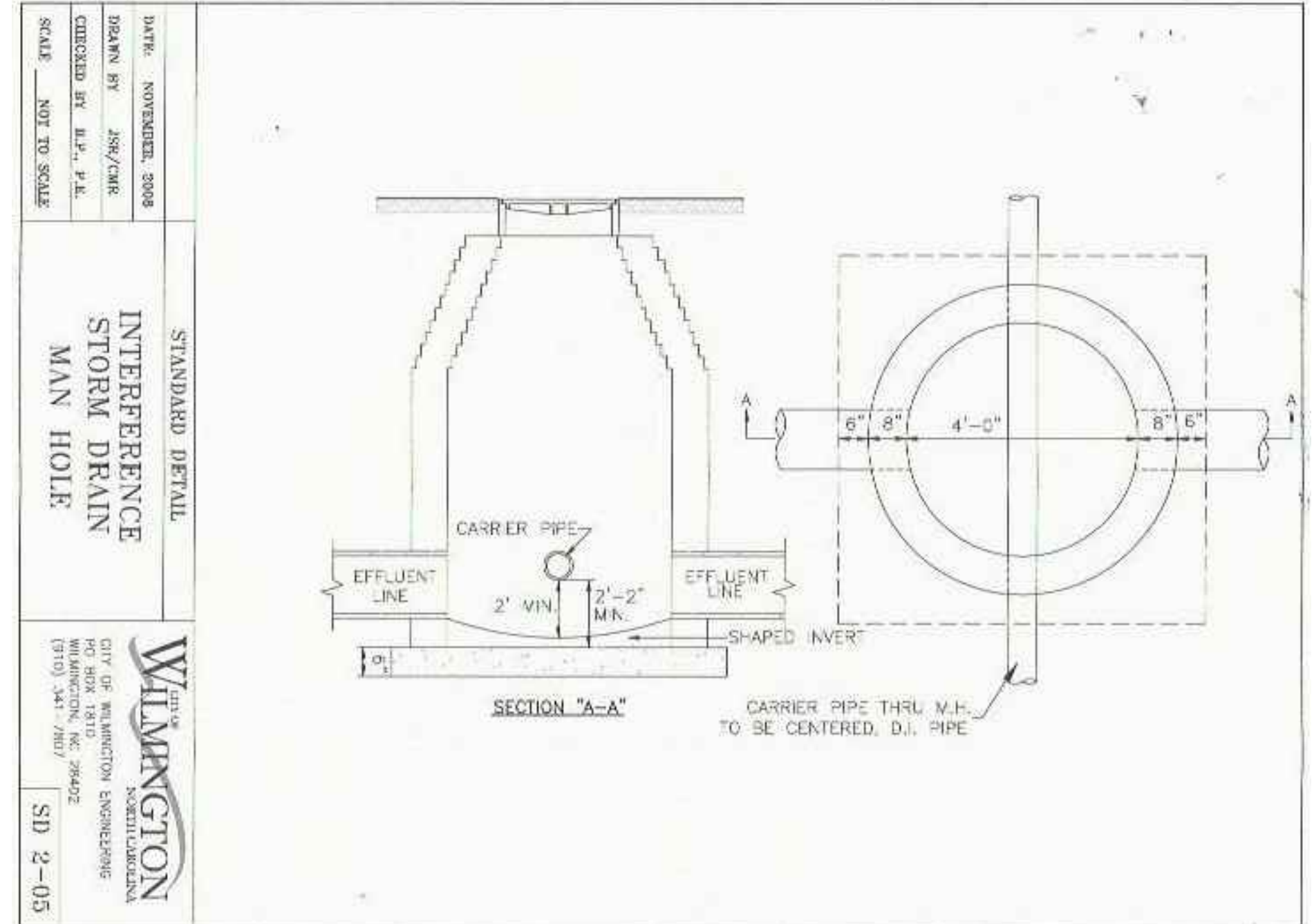


FRONT VIEW



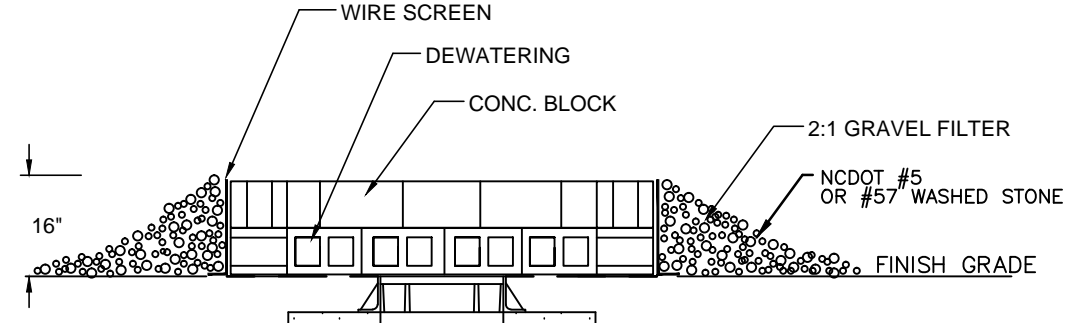
TOP VIEW

SHADOW BOX FENCE DETAIL  
N.T.S.

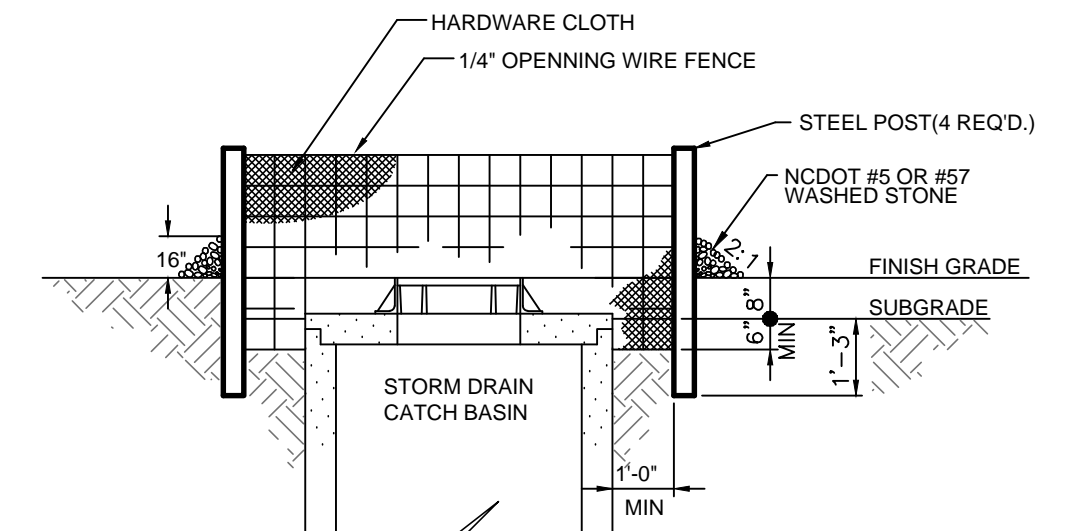


SECTION "A-A"

CARRIER PIPE THRU M.H. TO BE CENTERED, D.I. PIPE



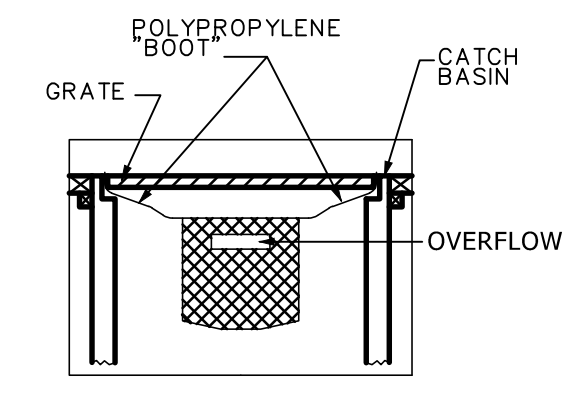
BLOCK AND GRAVEL



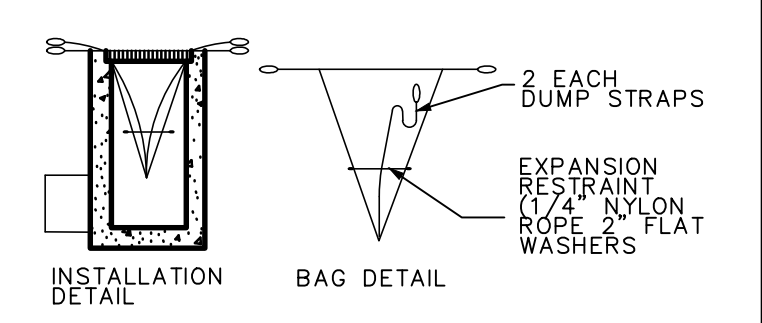
WIRE AND ROCK

NOTE: USE BLOCK AND GRAVEL INLET PROTECTION IN AREAS WHERE SILT FENCE INLET PROTECTION CAN NOT BE INSTALLED. MAINTENANCE FOR WIRE AND ROCK INLET PROTECTION IS REQUIRED WHEN IT IS 1/2 FULL OR NO LONGER DRAINS.

INLET SEDIMENTATION CONTROL  
NOT TO SCALE



TEMPORARY INLET SEDIMENT FILTER



DUMP STRAP and SILT SACK

NOTE: TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED PATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO STREAMGUARD AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (706-767-0447) OR SILT SACK AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC. (800-448-3636). CLEAN FILTER AS NEEDED. SILT SACK MAINTENANCE IS EVERY WEEK AND AFTER EVERY RAIN EVENT.

SILT SACK DETAIL  
NTS

**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division  
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Signed: \_\_\_\_\_

**Approved Construction Plan**  
Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Planning: \_\_\_\_\_  
Traffic: \_\_\_\_\_  
Fire: \_\_\_\_\_  
CFPUA: \_\_\_\_\_

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

NO.	REVISION	DATE
R5	ISSUED FOR CONSTRUCTION	3/1/17
R4	RESPONDED TO V2 TRC COMMENTS & DEO SUBMITTAL	2/13/17
R3	RESPONDED TO TRC COMMENTS	12/16/16
R2	SUBMITTED FOR NODDED STORM, NHC S&E, COW STORM REVIEW	11/29/16
R1	SUBMITTED FOR COW TRC REVIEW	11/17/16
	NUMBER	DATE

DATE: NOVEMBER, 2016  
DRAWN BY: JMS/TKR  
CHECKED BY: J.H. P.H.  
SCALE: NOT TO SCALE  
PROJECT: SD 2-05

**WILMINGTON**  
NORTH CAROLINA  
ENGINEERING

INTERFERENCE BOX #1 INVERT IN = 34.61 INVERT OUT = 34.42 INVERT OF SHAPED INVERT = 32.52
INTERFERENCE BOX #2 INVERT IN = 34.63 INVERT OUT = 33.96 INVERT OF SHAPED INVERT = 31.40

DESIGN BY: BDS  
DRAWN BY: BDS  
CHECKED BY: BDS  
DATE: NOVEMBER, 2016

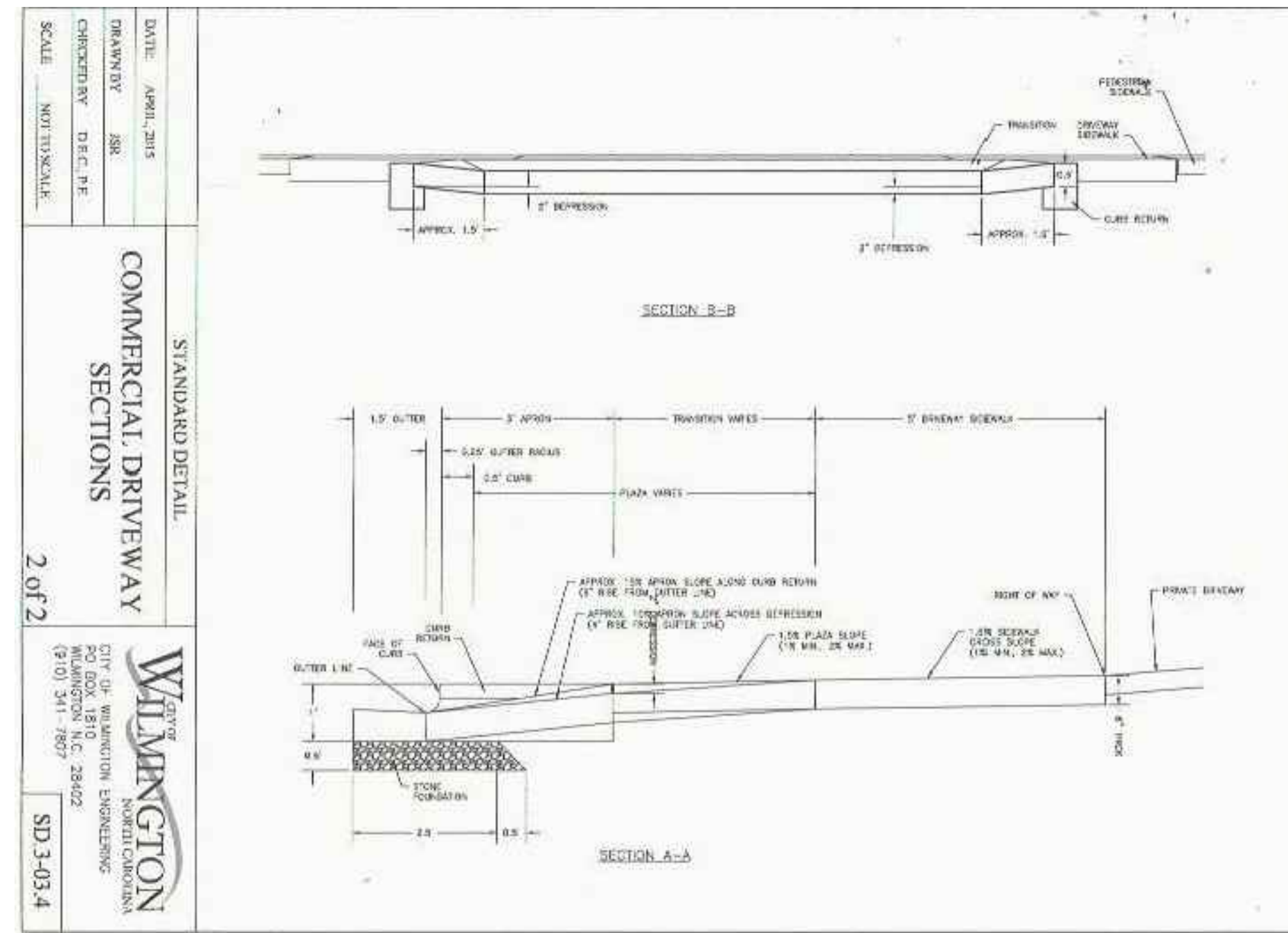
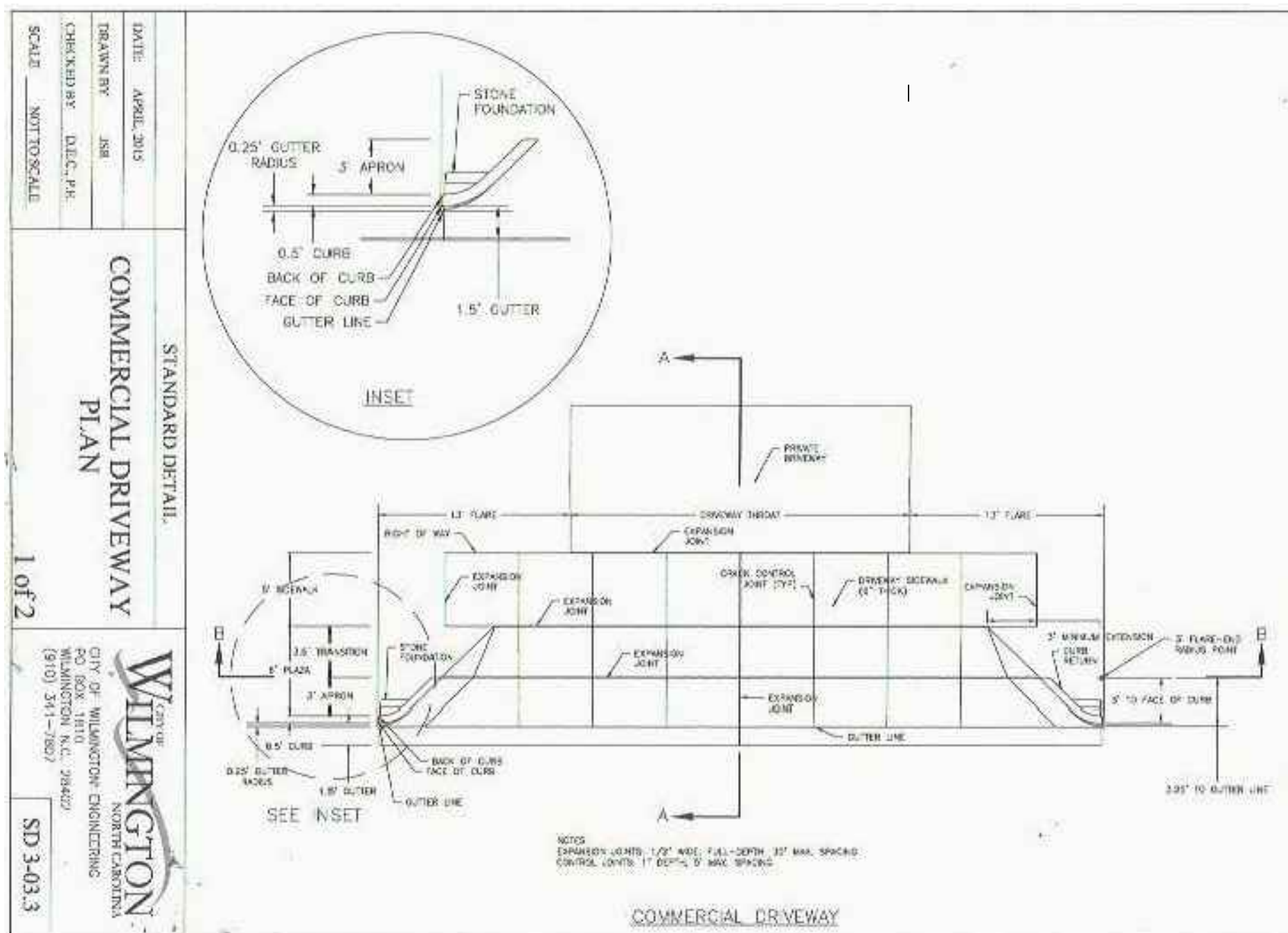
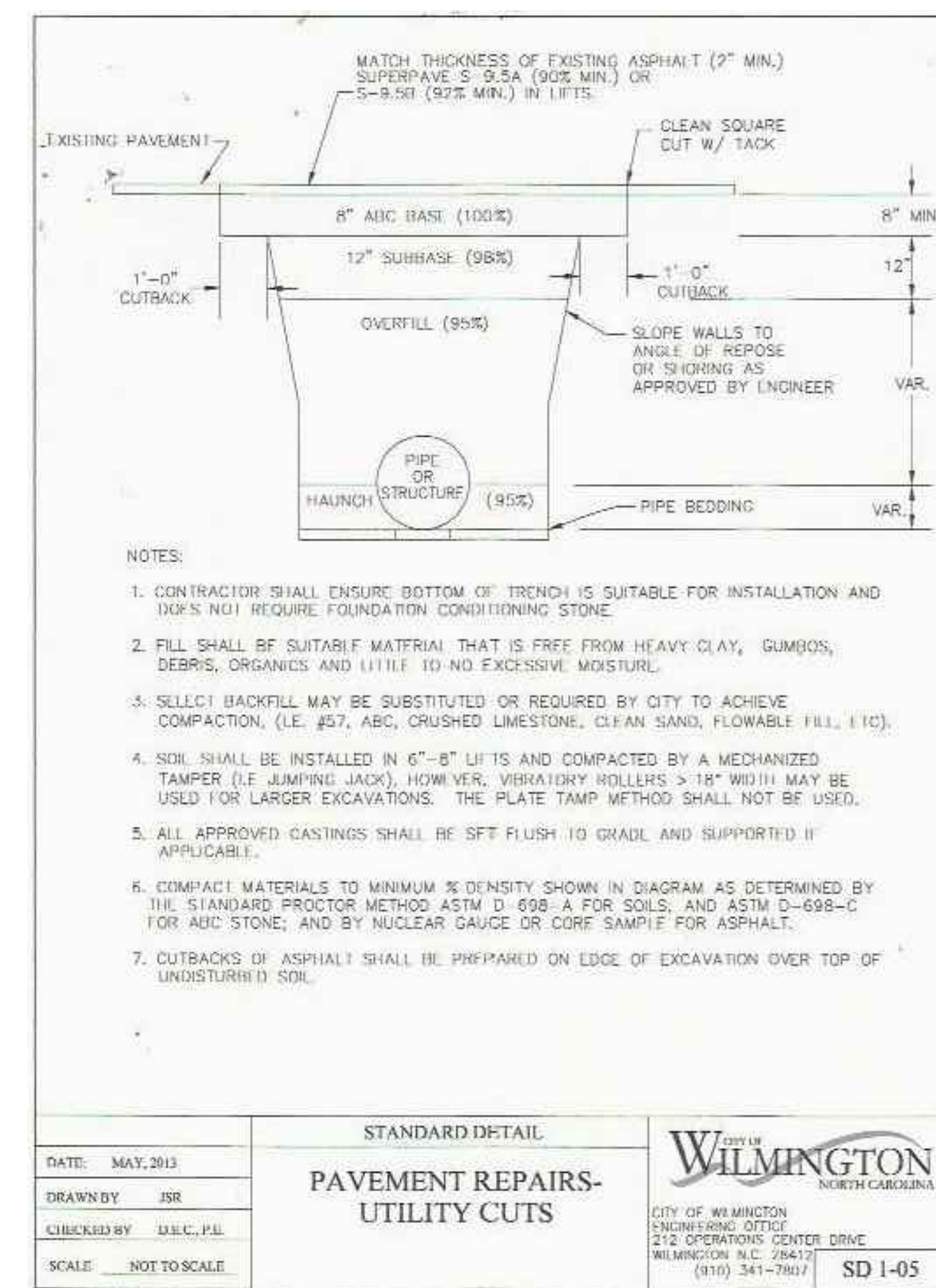
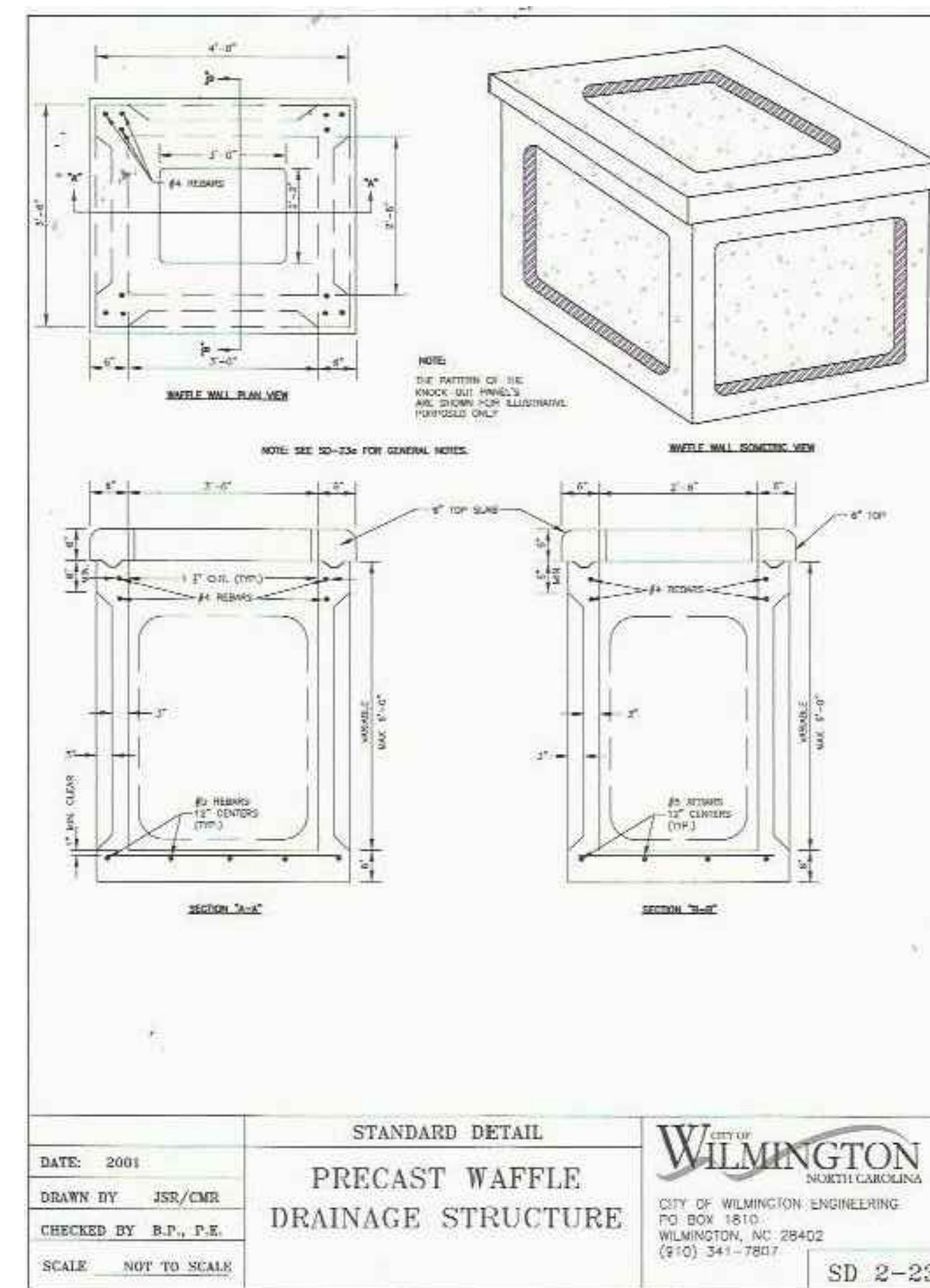
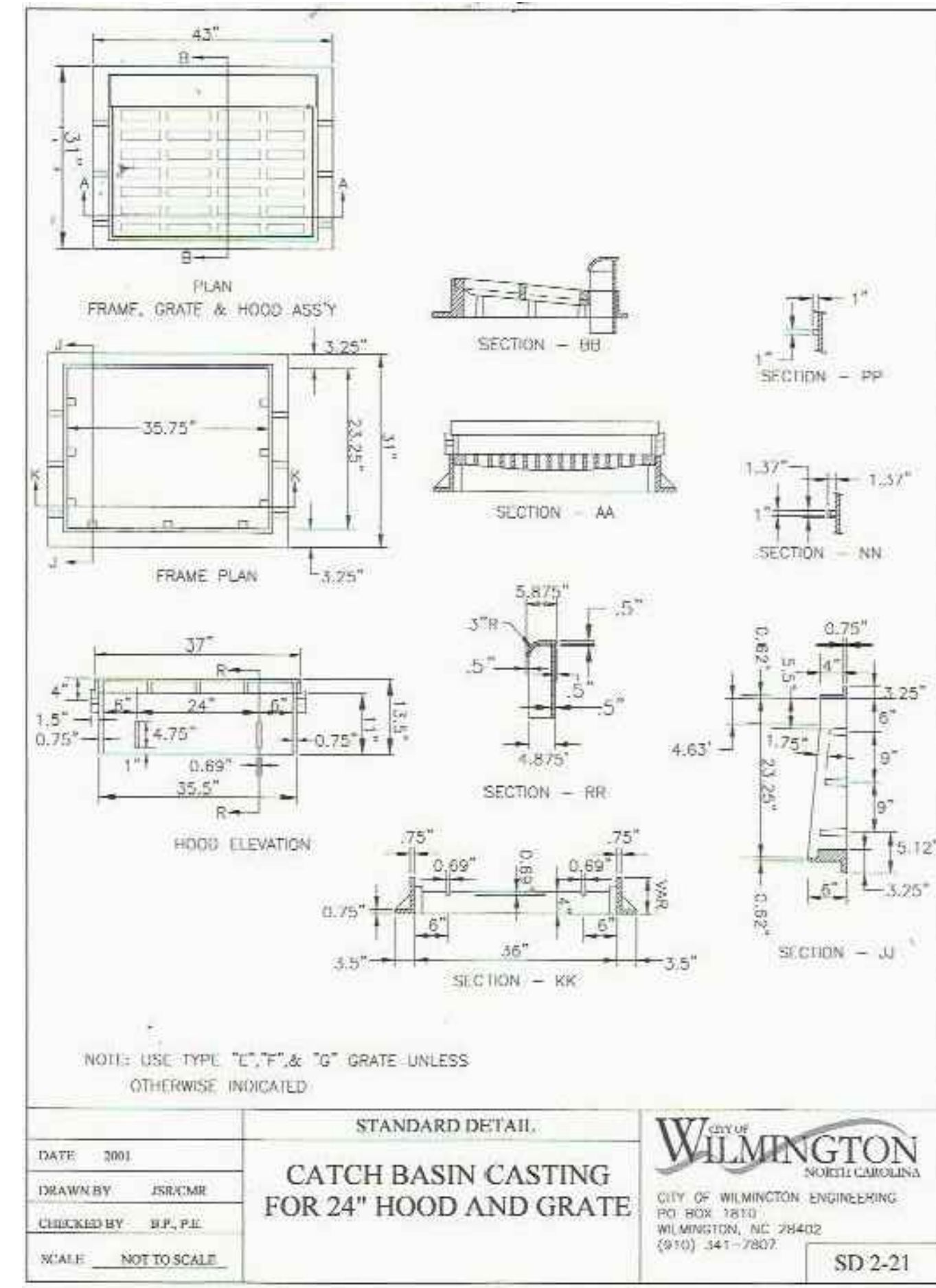
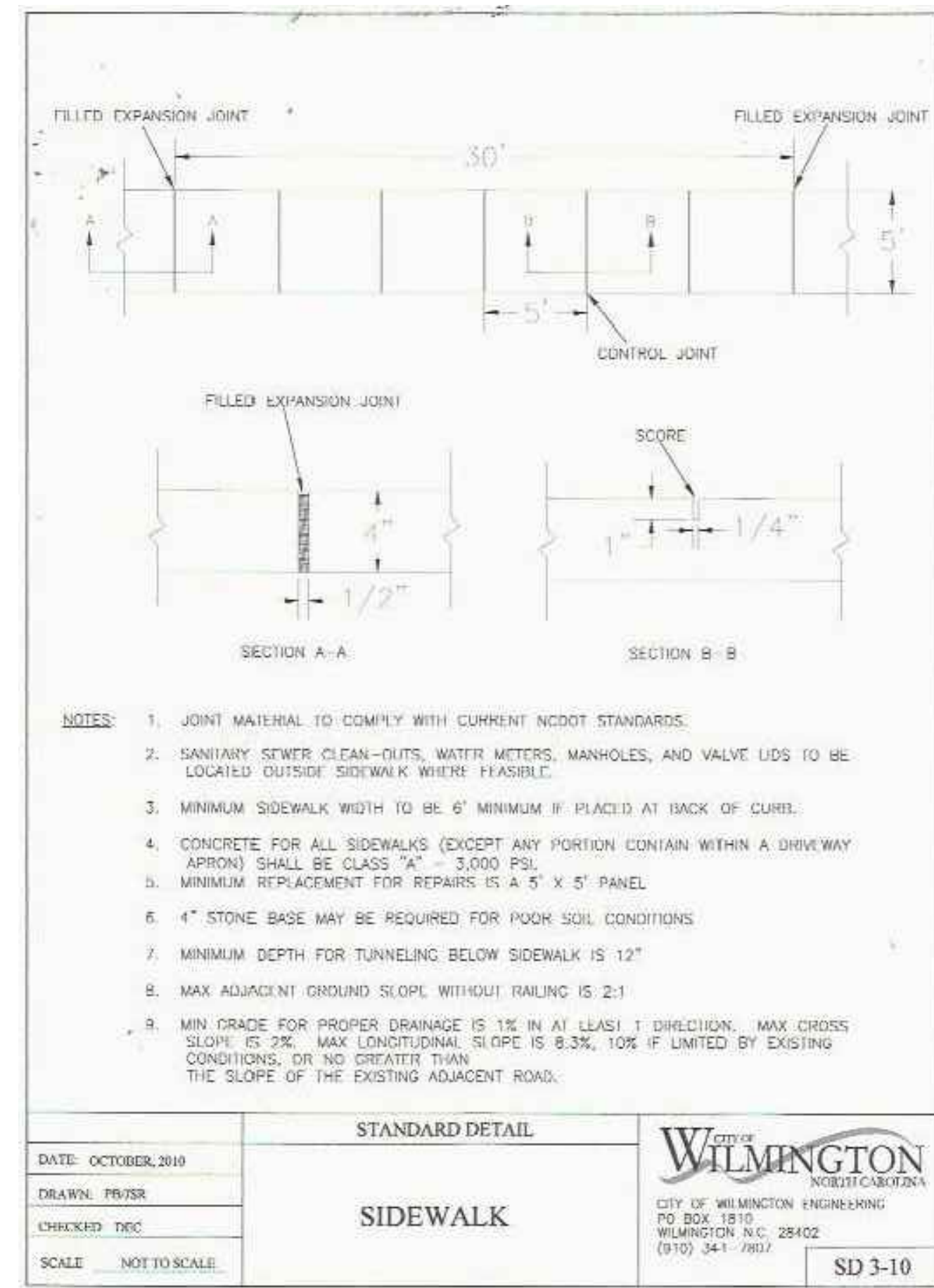
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PLANNING - ENGINEERING - PROJECT MANAGEMENT

SHEET  
**C3**  
JOB NO. 110-001





NO.	REVISION	DATE
R5	ISSUED FOR CONSTRUCTION	3/1/17
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R3	RESPONDED TO TRC COMMENTS	12/16/16
R2	SUBMITTED FOR NCEQ STORM, NHC S&E, COW STORM REVIEW	11/29/16
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**CITY OF WILMINGTON**  
NORTH CAROLINA  
Public Services • Engineering Division  
**APPROVED STORMWATER MANAGEMENT PLAN**

Date: \_\_\_\_\_ Permit # \_\_\_\_\_  
Signed: \_\_\_\_\_

**Approved Construction Plan**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Planning \_\_\_\_\_  
Traffic \_\_\_\_\_  
Fire \_\_\_\_\_  
CFPUA \_\_\_\_\_

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SHEET  
**C4**  
JOB NO. 110-001



