# CIVIL ENGINEERING & LANDSCAPE ARCHITECTURE:

Rivers & Associates, Inc. Greenville, NC



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## PME ENGINEERING:

Dibble & Pledger, P.A. Washington, NC

222 West Main Street Washington, North Carolina 27889 p 252-924-3320

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Contact: Ron Pledger, PE rpledger@dibbleandpledger.com

# ROADWAY **ENGINEERING:**

Davenport Engineering Winston-Salem, NC

# Greenville, NC

City of Greenville

OWNER:

Find yourself in good company

PUBLIC WORKS DEPARTMENT 1500 Beaty Street Greenville, North Carolina 27834 p 252-329-4467 f 252-329-4535

Contact: Scott Godefroy, P.E., City Engineer sgodefroy@greenvillenc.gov

305 W. 4th Street Suite 2A Winston Salem, North Carolina 27115 p 336-744-1636 www.davenportworld.com

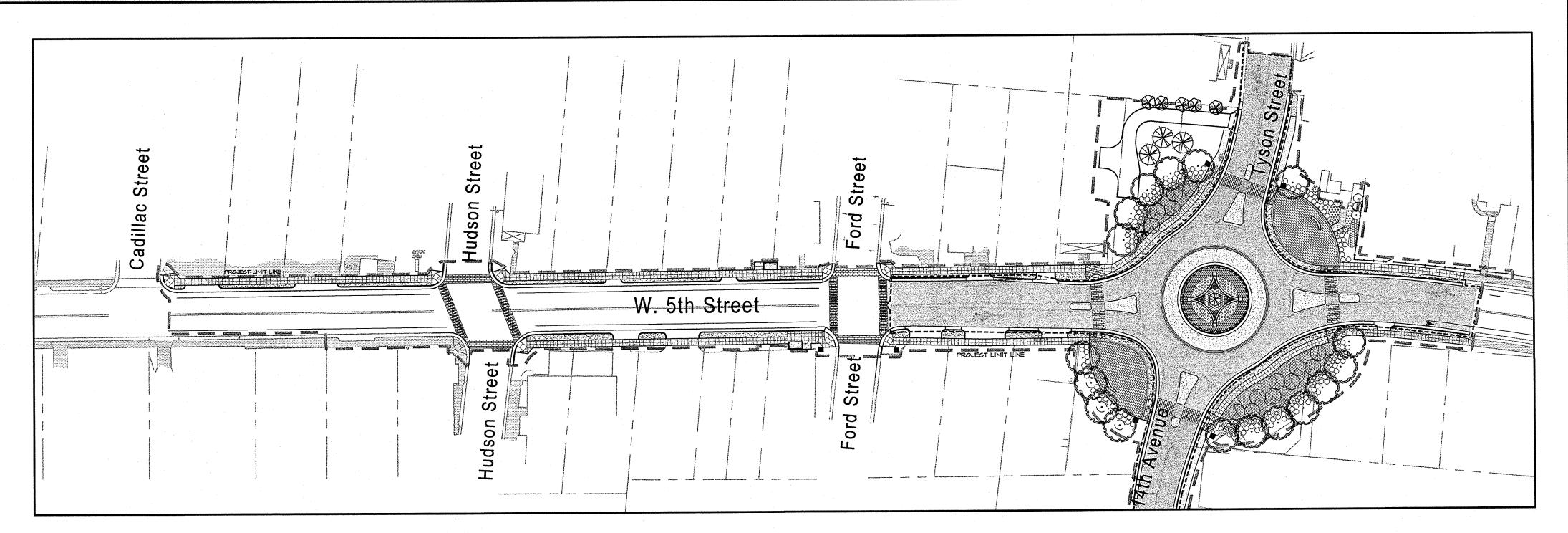
Contact: John Townsend, PE itownsend@davenportworld.com

**REVISIONS:** 

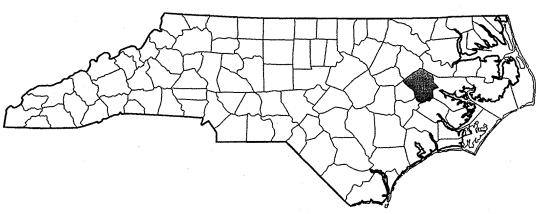
M G S M CONSTRUCTI

# West Fifth Street Gateway Streetscape

#	Title
T-1	COVER
V-1	TOPOGRAPHIC SURVEY
Civil Engin	eering Plans
C-1	OVERALL PLAN
C-2	DEMOLITION PLAN
C-3	LAYOUT & MATERIALS PLAN
C-4	UTILITY PLAN
C-5	GRADING AND PAVING PLAN
C-6	SEDIMENTATION & EROSION CONTROL
C-7	DETAILS - SITE
C-8	DETAILS - SITE
C-9	DETAILS - NEIGHBORHOOD MARKERS
_andscape	e Architecture Plans:
L-1	PLANTING PLAN & DETAILS
L-2	DETAILS - LANDSCAPE
L-3	DETAILS - LANDSCAPE
Electrical	Mechanical, and Plumbing Plans:
E-1	SITE PLAN - ELECTRICAL
E-2	ELECTRICAL ONE-LINE DIAGRAM & SCHEDULES
E-3	ELECTRICAL DETAILS
Roundabo	out Roadway Alignment Plans
RD-01	ROADWAY PLAN
TC-01	TRAFFIC CONTROL PLAN
TC-02	TRAFFIC CONTROL PLAN
TC-03	TRAFFIC CONTROL PLAN
PM-01	PAVEMENT MARKING & SIGNAGE PLAN

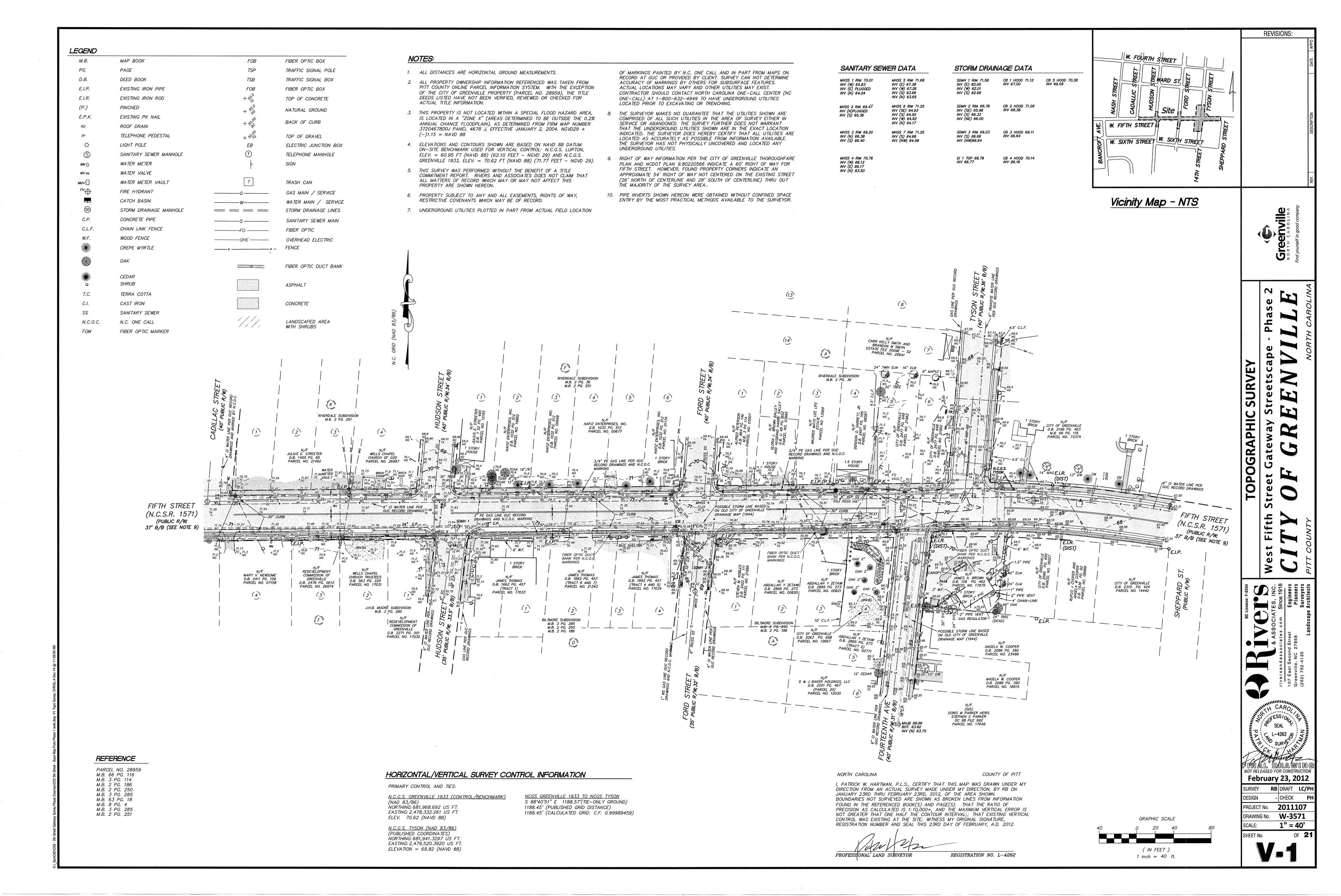


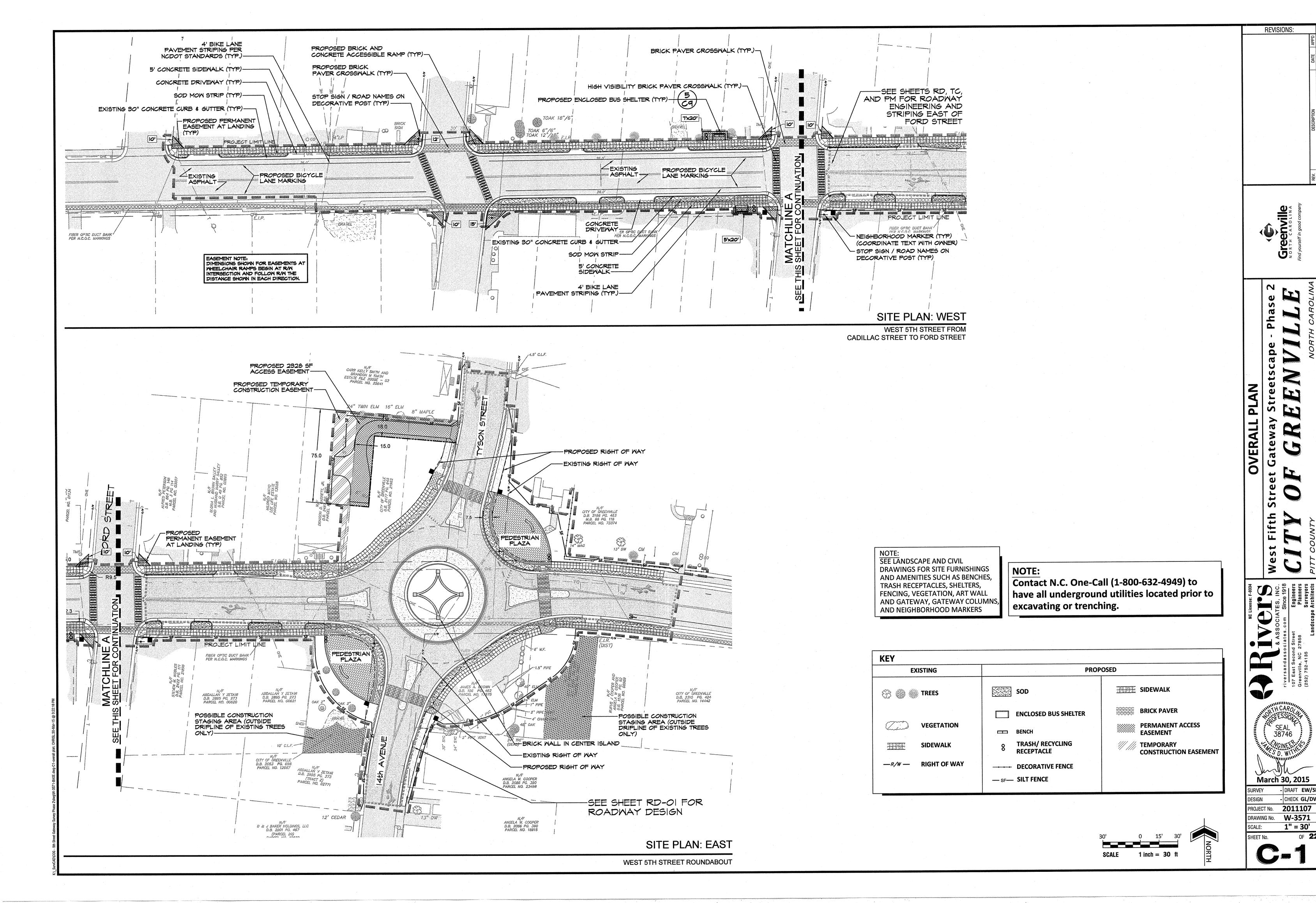
PITT COUNTY

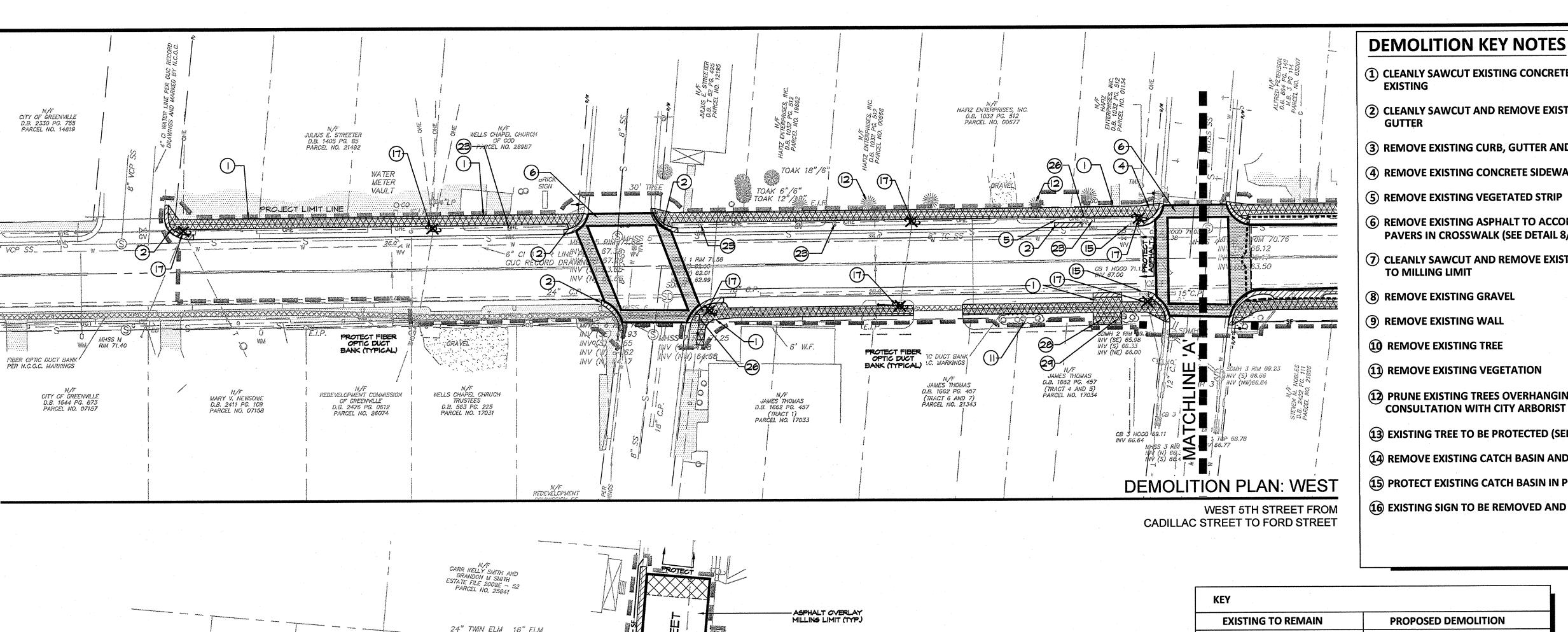


NORTH CAROLINA

2011107







-PROTECT FIBER OPTIC

N/F ABDALLAH Y ZETAW D.B. 2895 PG. 273 PARCEL NO. 00620

CITY OF GREENVILLE D.B. 2063 PG. 698 PARCEL NO. 12667

N/F D & J BAKER HOLDINGS, LLC D.B. 2201 PG. 467

ATCHLINE

## **DEMOLITION KEY NOTES**

- (1) CLEANLY SAWCUT EXISTING CONCRETE. PROTECT
- (2) CLEANLY SAWCUT AND REMOVE EXISTING CURB AND
- (3) REMOVE EXISTING CURB, GUTTER AND DRIVE APRONS
- (4) REMOVE EXISTING CONCRETE SIDEWALK
- (5) REMOVE EXISTING VEGETATED STRIP
- 6 REMOVE EXISTING ASPHALT TO ACCOMMODATE NEW PAVERS IN CROSSWALK (SEE DETAIL 8/C-7)
- CLEANLY SAWCUT AND REMOVE EXISTING ASPHALT TO MILLING LIMIT
- (8) REMOVE EXISTING GRAVEL
- (9) REMOVE EXISTING WALL
- 10 REMOVE EXISTING TREE
- (1) REMOVE EXISTING VEGETATION
- (12) PRUNE EXISTING TREES OVERHANGING R/W IN
- 13) EXISTING TREE TO BE PROTECTED (SEE DETAIL 4/C-6)
- **14) REMOVE EXISTING CATCH BASIN AND PIPE AS REQUIRED**
- (15) PROTECT EXISTING CATCH BASIN IN PLACE
- (16) EXISTING SIGN TO BE REMOVED AND RELOCATED.

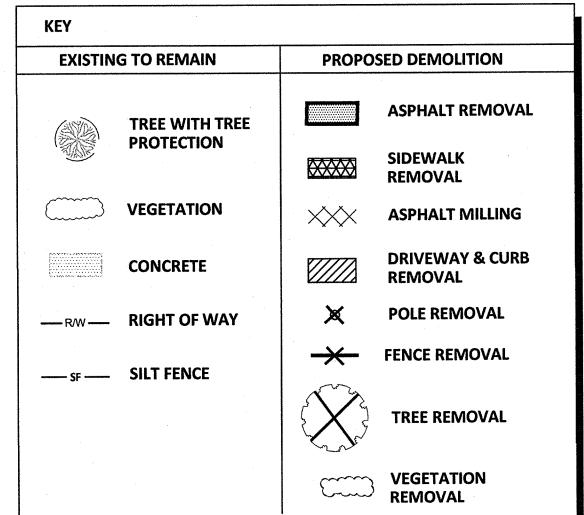
(17) COORDINATE REMOVAL /REPLACEMENT OF POWER POLE, LIGHTING, AND GUY WIRES WITH **GREENVILLE UTILITIES COMMISSION**  **REVISIONS:** 

PLAN

MOLITION

DE

- **18** ADJUST WATER VALVE
- 19 RELOCATE WATER VALVE
- **20** ADJUST CLEANOUT
- **21) ADJUST MANHOLE COVER**
- (22) REMOVE EXISTING FENCE
- 23 METER BOX TO BE ADJUSTED
- **24** RELOCATE WATER METER
- **(25) RELOCATE FIBER OPTIC VAULT**
- **26** ADJUST GAS VALVE
- (27) TRAFFIC SIGNAL BOX AND SIGNAL HEADS TO BE REMOVED, PROTECTED, AND RETURNED TO OWNER
- **(28) REMOVE EXISTING BUS SHELTER**
- (29) REMOVE EXISTING SITE FURNISHINGS



## NOTE:

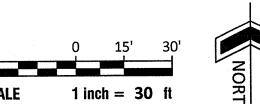
Contact N.C. One-Call (1-800-632-4949) to have all underground utilities located prior to excavating or trenching.

## **SITE PREPARATION & REMOVALS NOTES**

- 1. Contractor shall remove all trees and shrubs as indicated for removal on plans.
- 2. It is the Contractor's responsibility to locate and verify location and elevations of all existing utility lines prior to demolition and removal operations. It is the Contractor's responsibility to protect all utilities to remain during construction.
- 3. Contractor shall take whatever precautions necessary during construction to ensure that no damage is done to the existing trees to remain. This shall include but not be limited to the use of construction equipment of sizes and weights which will not injure the root systems.
- 4. Contractor shall advise the owner of any materials resulting from excavation, demolition, and other site preparation and removal tasks, which may be salvageable and reusable by the Contractor on the premises, or by the owner elsewhere.
- 5. Contractor shall coordinate his work with all state and/or municipal agencies with jurisdiction.
- 6. Contractor shall visit the site and familiarize himself with existing conditions prior to submitting his bid. Any discrepancies between actual conditions at the site and those shown on the drawings shall be brought to the attention of the owner / engineer / landscape architect immediately.
- 7. All removals shall be as shown on the drawings and/or as directed by the engineer / landscape architect and to the satisfaction of the owner.
- 8. The Contractor shall exercise care during removal operations to protect existing facilities, including pavements, utilities, structures, trees, etc. Any facilities that are to remain that are damaged shall be the responsibility of the Contractor and shall be restored at the Contractor's expense to the satisfaction of the owner.

## **EXISTING VEGETATION PRESERVATION**

- 1. Existing vegetation is to be preserved during construction indicated in the following manner: a. The location of all such plant material. b. Field markings for identification.
- 2. All plant materials to be preserved shall be protected from damage during construction by fencing or similar barrier. Tree protection devices shall be installed before any excavation or grading is initiated and shall be maintained for the duration of the construction period. The location and extent of all protection devices shall be indicated on the demolition plan.
- 3. As a minimum precaution, the contractor shall install fencing supported by steel posts adjacent to the areas where plant materials are to be protected.
- 4. Any damage incurred to existing trees shall be immediately repaired. Roots exposed and/or damaged during grading operations shall be immediately trimmed and treated and covered with topsoil.
- 5. If trees designated for preservation are damaged, the Contractor shall replace them with plant material similar in size and type as the original specimen.





38746 March 30, 2015 - DRAFT EW/SF - CHECK GL/DV PROJECT No. **2011107** W-3571 RAWING No. 1" = 30'

WEST 5TH STREET ROUNDABOUT

**DEMOLITION PLAN: EAST** 

e" CI WATER LINE PER GUC RECORD DRAWINGS

- PROTECT FIBER OPTIC

- ASPHALT OVERLAY MILLING LIMIT (TYP.)

CITY OF GREENVILLE D.B. 2315 PG. 424 PARCEL NO. 14442

CONTRACTOR TO NOTE EXIST. UNDERGROUND

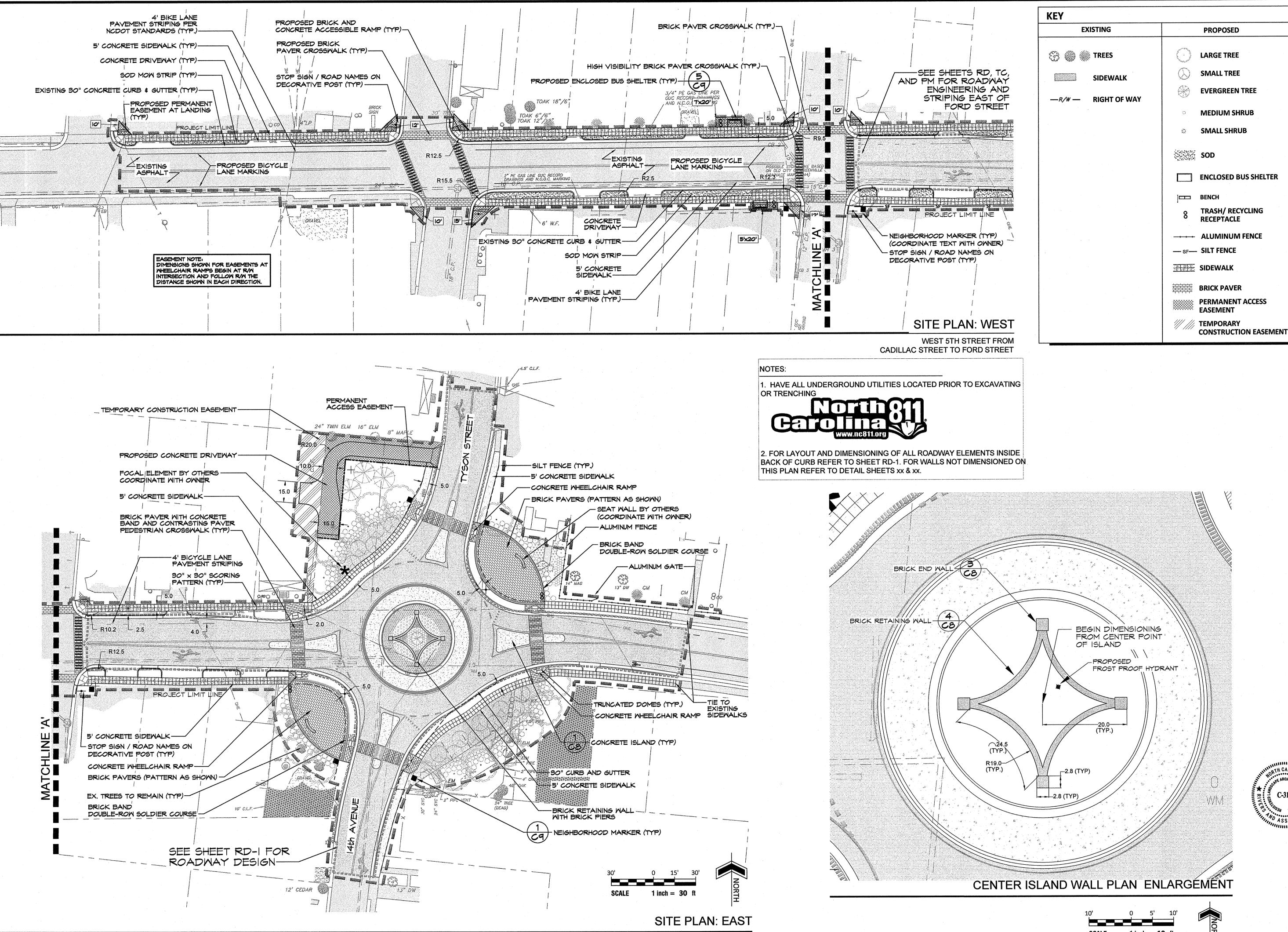
STORAGE TANK

EMOLITION OF EXIST. STRUCTURE WILL BE BY OTHERS ON THIS LOT. CONTRACTOR

TO COORDINATE WITH OWNER.

ANGELA W. COOPER D.B. 2086 PG. 390 PARGEL NO. 23498

N/F ANGELA W. COOPER D.B. 2086 PG. 390 PARCEL NO. 18915



WEST 5TH STREET ROUNDABOUT

**REVISIONS: EVERGREEN TREE** MEDIUM SHRUB **ENCLOSED BUS SHELTER** TRASH/ RECYCLING **ALUMINUM FENCE** 

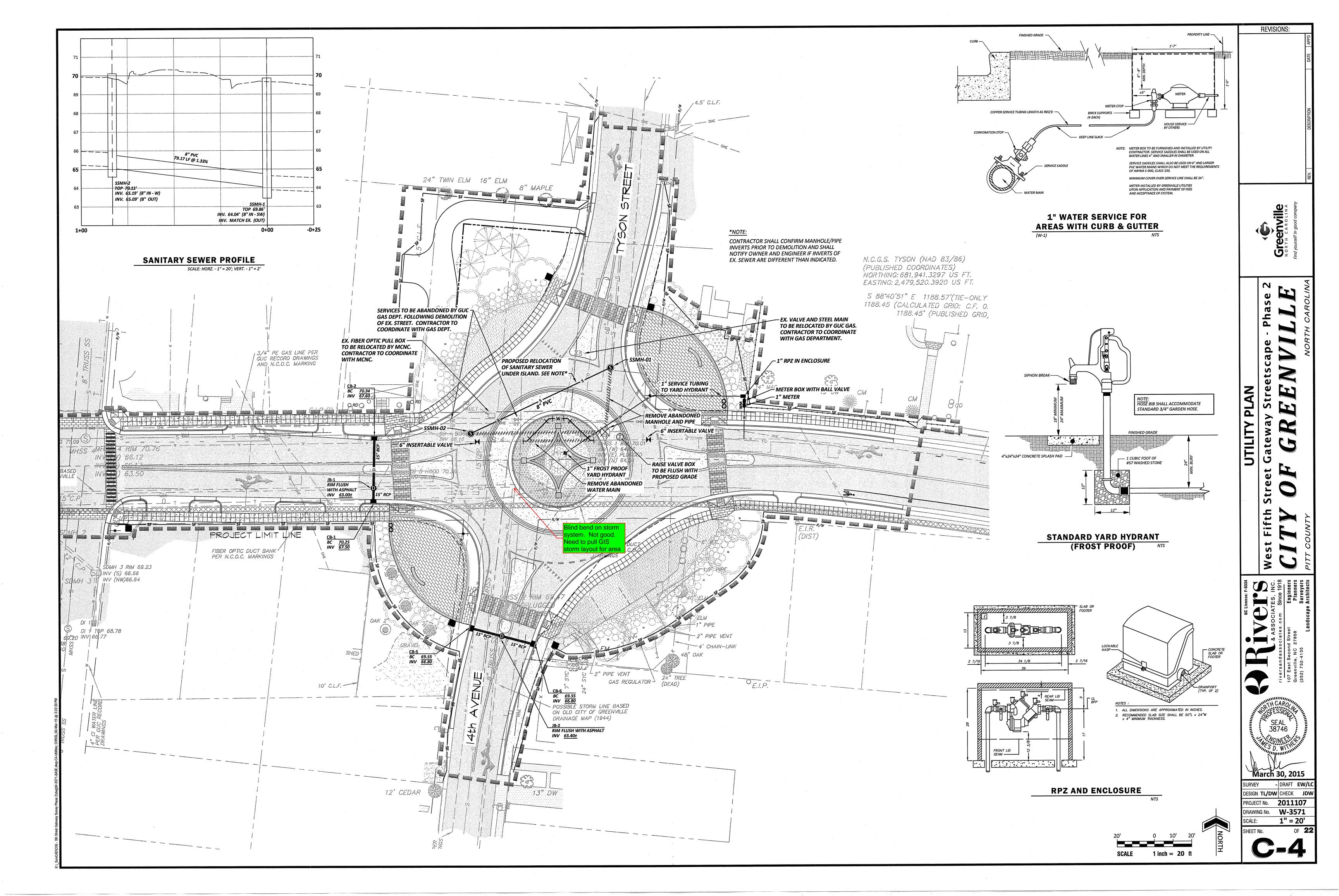
PLAN MATERIALS AND YOUT

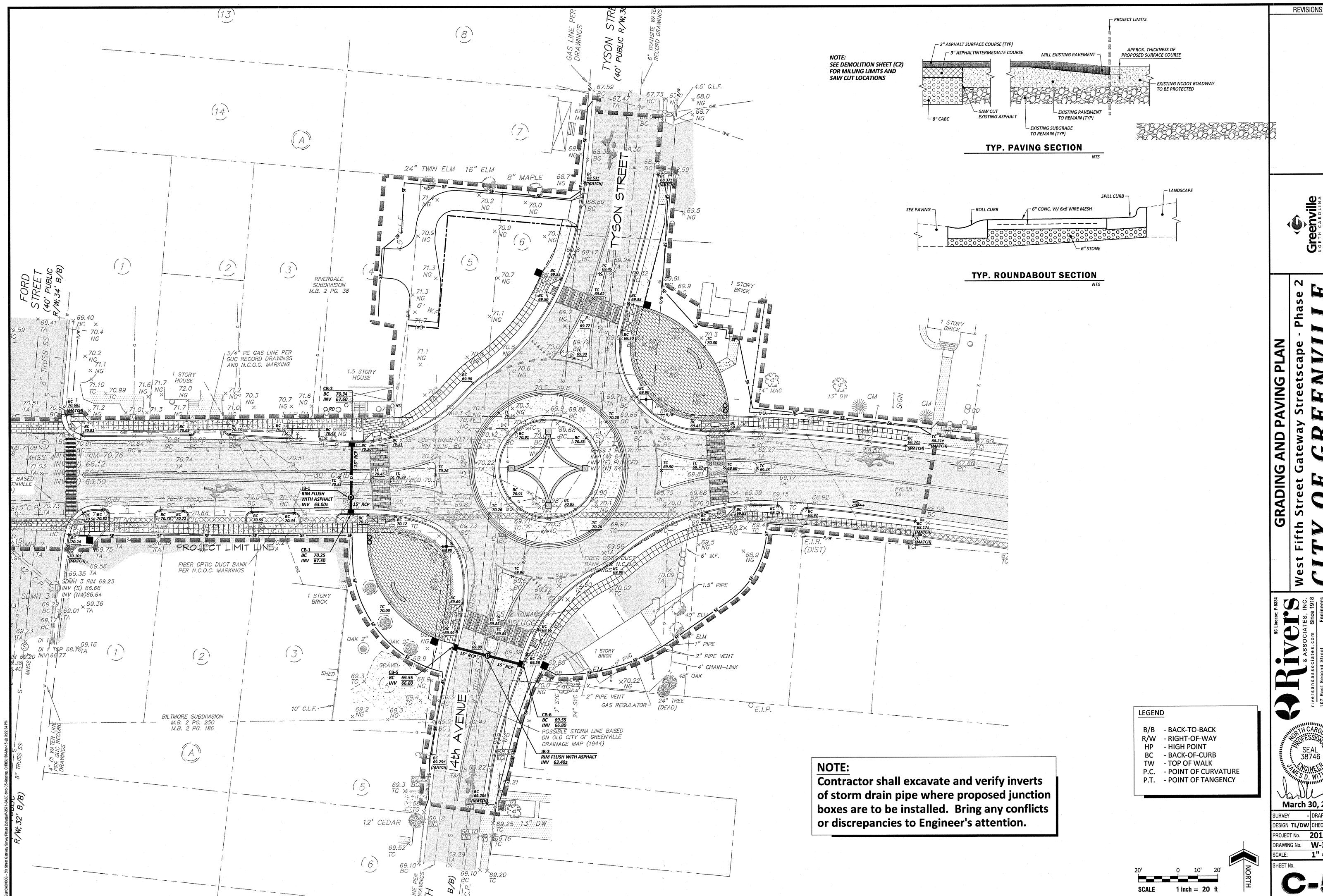


March 30, 2015

- DRAFT EW/SF DESIGN GL/SR CHECK GS PROJECT No. **2011107** DRAWING No. W-3571

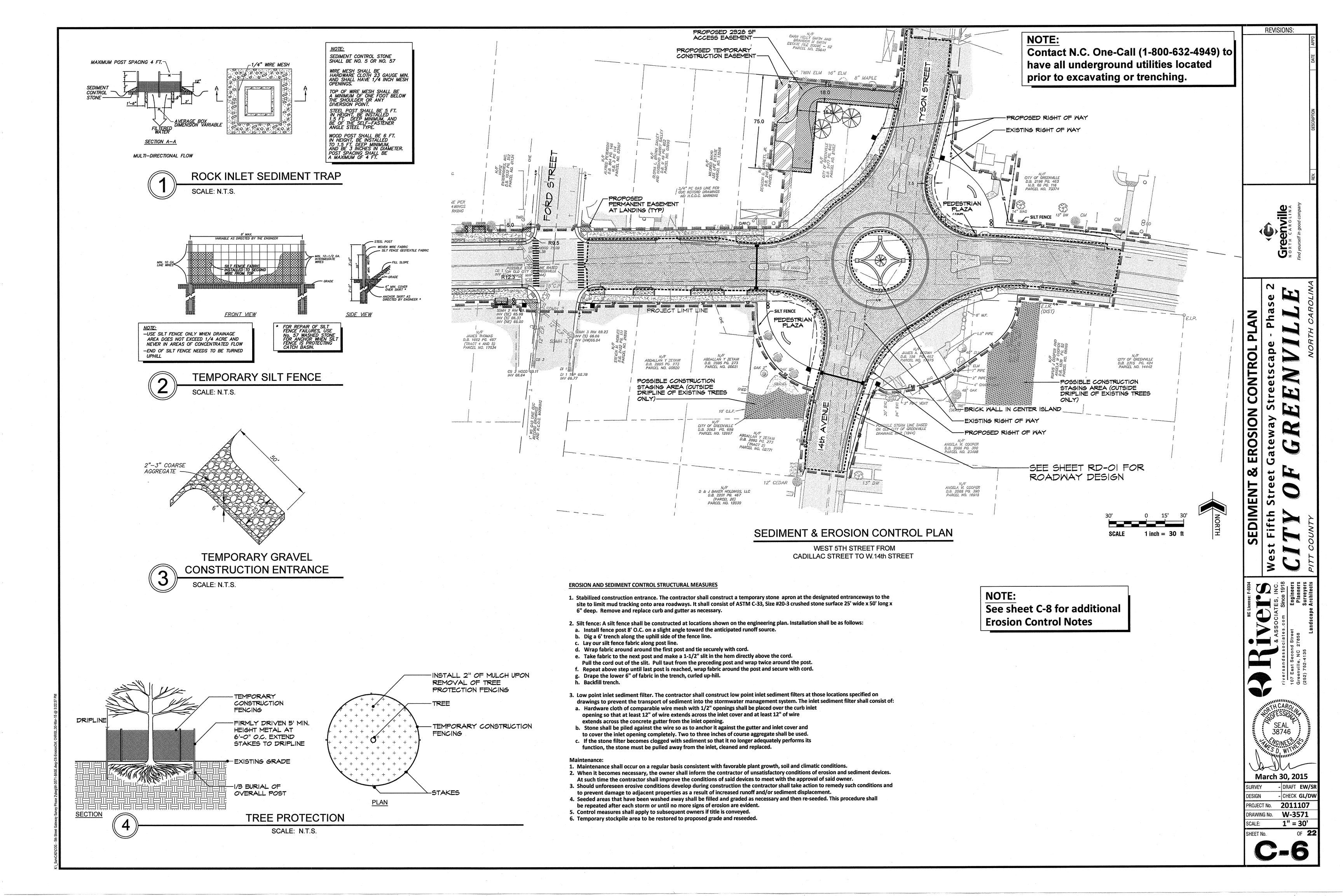
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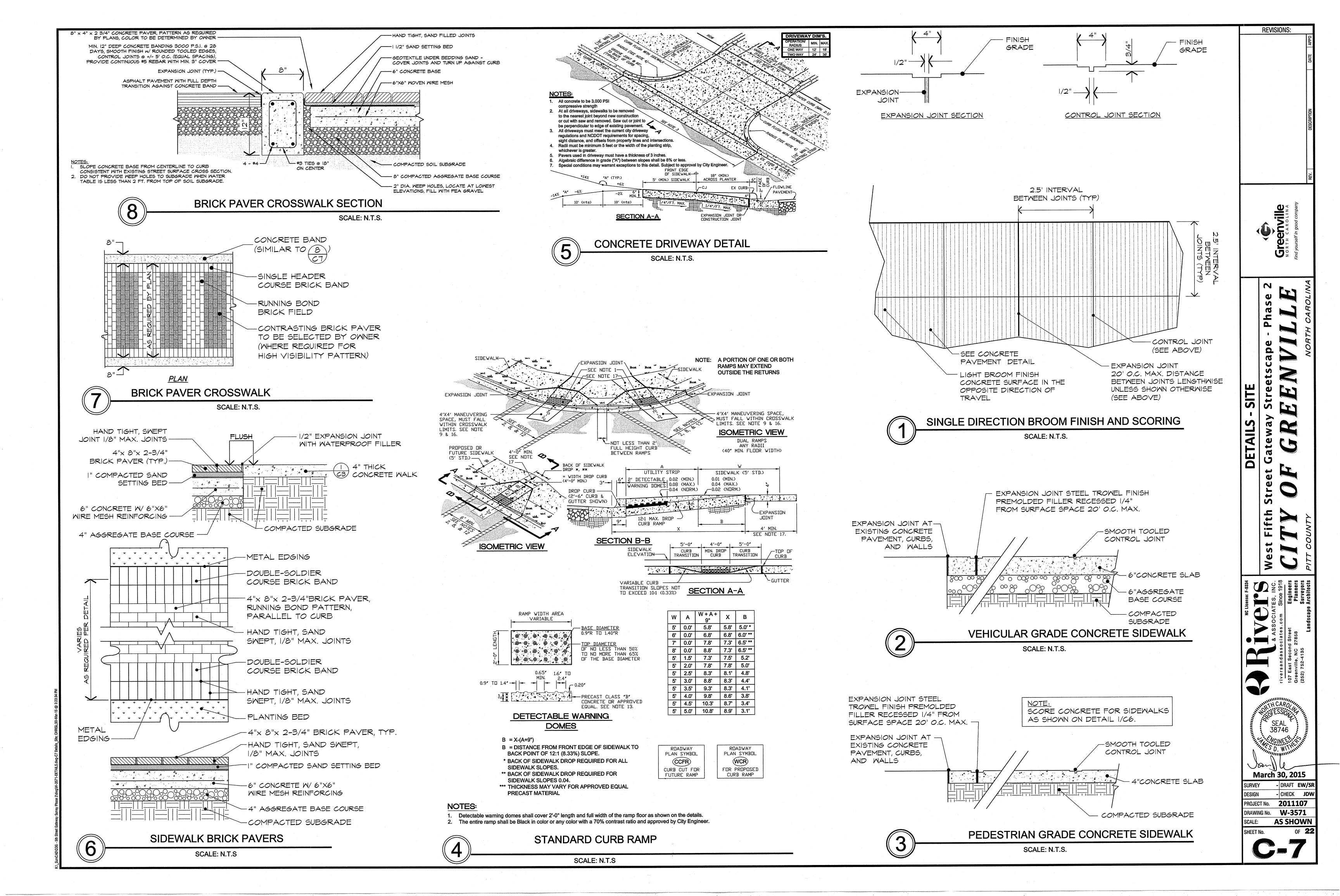




March 30, 2015

DESIGN TL/DW CHECK JDV PROJECT No. **2011107** DRAWING No. W-3571 1" = 20'





## **EROSION CONTROL NOTES**

- 1. ALL WORK WILL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES. NO LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL THE APPROPRIATE EROSION CONTOL MEASURE MAY PROCEED UNTIL MEASURES ARE INSPECTED AND APPROVED.
- FOLLOWING STRIPPING OF SITE, ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED. SILT FENCES SHALL BE PLACED ALONG PROPERTY LINES AS INDICATED ON PLANS TO PROTECT ADJACENT DEVELOPMENTS. ROCK INLET SEDIMENT TRAPS SHALL BE INSTALLED AROUND ALL DRAINAGE STURCTURES TO COLLECT SURFACE RUNOFF AND CONTROL SILTATION AND RELEASE WATER AT A GRADUAL RATE. ALL DISTURBED AREAS WILL BE GRADED. SEEDED AND MULCHED.
- ALL SHOULDERS SHALL BE SEEDED TO STABILIZE THE SOIL. SEED BED PREPARATION SHALL BE CONDUCTED ACCORDING TO NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (NCDOT). THE GROUND SURFACE SHALL BE CLEARED OF STUMPS, STONES, ROOTS, CABLES, WIRE, GRADE STAKES, AND OTHER MATERIALS THAT MIGHT HINDER PROPER GRADING, TILLAGE, SEEDING OR SUBSEQUENT MAINTENANCE OPERATIONS. GRADES ON THE AREA TO BE SEEDED SHALL BE MAINTAINED IN A TRUE AND EVEN CONDITION. MAINTENANCE SHALL INCLUDE ANY NECESSARY REPAIRS TO PREVIOUSLY GRADED AREAS. ALL GRADED AREAS SHALL BE THOROUGHLY TILLED TO A DEPTH OF AT LEAST FOUR (4) INCHES BY PLOWING, DISKING, HARROWING, OR OTHER APPROVED METHODS UNTIL THE CONDITION OF THE SOIL IS ACCEPTABLE. ON SITES WHERE SOIL CONDITIONS ARE SUCH THAT HIGH CLAY CONTENT AND EXCESSIVE COMPACTION CAUSE DIFFICULTY IN GETTING CLODS AND LUMPS EFFECTIVELY PULVERIZED, THE CONTRACTOR SHALL USE THE ROTARY TILLAGE MACHINERY UNTIL THE MIXING OF THE SOIL IS ACCEPTABLE AND NO CLODS OR CLUMPS REMAIN LARGER THAN 1 1/2 INCHES IN DIAMETER. A FIRM AND COMPACT SEED BED IS REQUIRED AND AFTER BEING GRADED. THE SEED BED SHALL BE LIGHTLY COMPACTED WITH A LAND ROLLER, SUCH AS A CULTIPACKER, BEFORE AND AFTER SEEDING. LIMESTONE SHALL BE DOLOMITIC AGRICULTURE GROUND LIMESTONE CONTAINING NOT LESS THAN 10 PERCENT MAGNESIUM OXIDE. LIME SHALL BE UNIFORMLY APPLIED AT THE RATE OF 2 TONS PER ACRE AS TESTING REQUIRES PER THE SPECIFICATIONS. IF REQUIRED PER SPECIFICATIONS, FERTILIZER SHALL BE INCORPORATED INTO THE UPPER THREE OR FOUR INCHES OF PREPARED SEED BED JUST PRIOR TO THE LAST TILLAGE OPERATION, BUT IN NO CASE SHALL IT BE APPLIED MORE THAN THREE DAYS PRIOR TO SEEDING. FERTILIZER SHALL BE USED IMMEDIATELY AFTER DELIVERY OR STORED IN A MANNER THAT WILL NOT PERMIT IT TO HARDEN OR DESTROY ITS EFFECTIVENESS.

#### PERMANENT SEEDING

<u>APPLY DOLEMATIC LIMESTONE</u> AT THE RATE OF 2 TONS PER ACRE. IF HYDRATED LIME IS USED, FOLLOW RECOMMENDATION FROM SOIL TEST. COST OF THE TEST SHALL BE BORNE BY THE CONTRACTOR.

APPLY 10-10-10 FERTILIZER OUTSIDE OF NCDOT RIGHT-OF-WAY AT A RATE OF 1,000 POUNDS PER ACRE.

APPLY 10-20-20 FERTILIZER WITHIN NCDOT RIGHT-OF-WAY AT A RATE OF 500 POUNDS PER ACRE

PROVIDE PERMANENT SEEDING IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

OUTSIDE OF NCDOT R/W (JANUARY 1 - MARCH 31)

- 20 POUNDS PER ACRE COMMON BERMUDA GRASS (UNHULLED) (APRIL 1 – JULY 31)

COMMON BERMUDA GRASS (HULLED) - 15 POUNDS PER ACRE

CENTIPEDE - 8 POUNDS PER ACRE (AUGUST 1 – DECEMBER 31)

COMMON BERMUDA GRASS (UNHULLED) - 15 POUNDS PER ACRE TALL FESCUE - 120 POUNDS PER ACRE

CENTIPEDE - 8 POUNDS PER ACRE

WITHIN NCDOT R/W

(JANUARY 1 - DECEMBER 31) FESCUE - 50 POUNDS PER ACRE

PENSACOLA BAHIAGRASS - 25 POUNDS PER ACRE - 5 POUNDS PER ACRE CENTIPEDE

## 4. GROUND STABILIZATION (PER NCG010000)

- A. SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:
- I. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOONS AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- II. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- CONDITIONS IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY: EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC
- CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE. II. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THE 7 DAY-REQUIREMENT APPLIES.
- ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT. IV. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT EXCEPT WHEN THE SLOPE IS
- V. ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE-BY-CASE BASIS.
- FOR PORTIONS OF PROJECTS WITHIN ONE MILE AND DRAINING TO TROUT WATERS AND HIGH QUALITY WATERS AS CLASSIFIED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION, STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS
- PRACTICABLE BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACT. VII. FOR PORTIONS OF PROJECTS LOCATED IN OUTSTANDING RESOURCE WATERS WATERSHEDS AS CLASSIFIED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION, STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACT.
- PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E&SC PLAN OR ADDED BY THE PERMITTING AUTHORITY.

## 5. SELF INSPECTION AND REPORTING REQUIREMENTS (PER NCG010000)

MINIMUM SELF INSPECTION AND REPORTING REQUIREMENTS ARE AS FOLLOWS UNLESS OTHERWISE APPROVED IN WRITING BY THE DIVISION OF WATER QUALITY.

- A. A RAIN GAUGE SHALL BE MAINTAINED IN GOOD WORKING ORDER ON THE SITE UNLESS ANOTHER RAIN MONITORING DEVICE HAS BEEN APPROVED BY THE PERMITTING AUTHORITY.
- B. A WRITTEN RECORD OF THE DAILY RAINFALL AMOUNTS SHALL BE RETAINED AND ALL RECORDS SHALL BE MADE AVAILABLE TO DWQ OR
- AUTHORIZED AGENT UPON REQUEST (NOTE: IF NO RAINFALL OCCURRED, THE PERMITTEE MUST RECORD "ZERO"). EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. INSPECTION RECORDS MUST BE MAINTAINED FOR EACH INSPECTION EVENT AND FOR EACH MEASURE. AT A MINIMUM, INSPECTION OF
- MEASURES MUST OCCUR AT THE FREQUENCY INDICATED BELOW: I. ALL FROSION AND SEDIMENTATION CONTROL MEASURES MUST BE INSPECTED BY OR LINDER THE DIRECTION OF THE PERMITTEE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS, AND II. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED BY OR UNDER THE DIRECTION OF THE PERMITTEE WITHIN
- 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.50 INCHES OF RAIN PER 24 HOUR PERIOD. III. TIMES WHEN A DETERMINATION THAT ADVERSE WEATHER CONDITIONS PREVENTED INSPECTIONS SHOULD BE DOCUMENTED ON
- ONCE LAND DISTURBANCE HAS BEGUN ON THE SITE, STORMWATER RUNOFF DISCHARGE OUTFALLS SHALL BE INSPECTED BY OBSERVATION FOR EROSION, SEDIMENTATION AND OTHER STORMWATER DISCHARGE CHARACTERISTICS SUCH AS CLARITY, FLOATING
- HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.50 INCHES OF RAIN PER 24 HOUR PERIOD. INSPECTIONS ARE ONLY REQUIRED TO BE MADE DURING NORMAL BUSINESS HOURS. WHEN ADVERSE WEATHER CONDITIONS WOULD CAUSE THE SAFETY OF THE INSPECTION PERSONNEL TO BE IN JEOPARDY, THE INSPECTION CAN BE DELAYED UNTIL IT IS DEEMED SAFE TO PERFORM THESE DUTIES. IF THE INSPECTION CANNOT BE DONE ON THAT DAY, IT MUST BE COMPLETED ON THE FOLLOWING BUSINESS
- TWENTY-FOUR HOUR REPORTING FOR VISIBLE SEDIMENT DEPOSITION
- I. THE PERMITTEE SHALL REPORT TO THE DIVISION OF WATER QUALITY CENTRAL OFFICE OR THE APPROPRIATE REGIONAL OFFICE ANY VISIBLE SEDIMENT BEING DEPOSITED IN ANY STREAM OR WETLAND OR ANY NONCOMPLIANCE WHICH MAY ENDANGER HEALTH OR ORALLY OR ELECTRONICALLY WITHIN 24 HOURS FROM THE TIME THE PERMITTEE BECAME AWARE OF THE CIRCUMSTANCES. VISIBLE DISCOLORATION OR SUSPENDED SOLIDS IN THE EFFLUENT SHOULD BE RECORDED ON THE INSPECTION RECORD AS PROVIDED
- II. A WRITTEN SUBMISSION SHALL BE PROVIDED TO THE APPROPRIATE REGIONAL OFFICE OF THE DWQ WITHIN 5 DAYS OF THE TIME THE PERMITTEE BECOMES AWARE OF THE CIRCUMSTANCES. THE WRITTEN SUBMISSION SHALL CONTAIN A DESCRIPTION OF THE SEDIMENT DEPOSITION AND ACTIONS TAKEN TO ADDRESS THE CAUSE OF THE DEPOSITION. THE DIVISION OF WATER QUALITY STAFF MAY WAIVE THE REQUIREMENT FOR A WRITTEN REPORT ON A CASE-BY-CASE BASIS.
- RECORDS OF INSPECTIONS MADE DURING THE PREVIOUS 30 DAYS SHALL REMAIN ON THE SITE AND AVAILABLE FOR AGENCY INSPECTORS AT ALL TIMES DURING NORMAL WORKING HOURS, UNLESS THE PERMITTING AUTHORITY PROVIDES A SITE-SPECIFIC EXEMPTION BASED ON UNIQUE SITE CONDITIONS THAT MAKE THIS REQUIREMENT NOT PRACTICAL. OLDER RECORDS MUST BE MAINTAINED FOR A PERIOD OF ONE YEAR AFTER PROJECT COMPLETION AND MADE AVAILABLE UPON REQUEST. THE RECORDS MUST PROVIDE THE DETAILS OF EACH INSPECTION INCLUDING OBSERVATIONS, AND ACTIONS TAKEN IN ACCORDANCE WITH THIS PERMIT. THE PERMITTEE SHALL RECORD TH REQUIRED RAINFALL AND MONITORING ORSERVATIONS ON THE "INSPECTION RECORD FOR ACTIVITIES UNDER STORMWATER GENERA PERMIT NCG010000" FORM PROVIDED BY THE DIVISION OR A SIMILAR INSPECTION FORM THAT IS INCLUSIVE OF ALL OF THE ELEMENTS CONTAINED IN THE DIVISION'S FORM. ELECTRONIC STORAGE OF RECORDS WILL BE ALLOWED IF APPROVED BY THE PERMITTING AUTHORITY.

## **EROSION CONTROL NOTES (CONT.)**

- H. INSPECTION RECORDS MUST INCLUDE, AT A MINIMUM, THE FOLLOWING:
- I. CONTROL MEASURE INSPECTIONS: INSPECTION RECORDS MUST INCLUDE AT A MINIMUM: IDENTIFICATION OF THE MEASURES INSPECTED.
- DATE AND TIME OF THE INSPECTION,
- NAME OF THE PERSON PERFORMING THE INSPECTION,
- 4. INDICATION OF WHETHER THE MEASURES WERE OPERATING PROPERLY, 5. DESCRIPTION OF MAINTENANCE NEEDS FOR THE MEASURE,
- 6. CORRECTIVE ACTIONS TAKEN AND
- 7. DATE OF ACTIONS TAKEN. II. STORMWATER DISCHARGE INSPECTIONS: INSPECTION RECORDS MUST INCLUDE AT A MINIMUM:
- IDENTIFICATION OF THE DISCHARGE OUTFALL INSPECTED.
- 2. DATE AND TIME OF THE INSPECTION,
- 3. NAME OF THE PERSON PERFORMING THE INSPECTION, 4. EVIDENCE OF INDICATORS OF STORMWATER POLLUTION SUCH AS OIL SHEEN, FLOATING OR SUSPENDED SOLIDS OR
- DISCOLORATION. INDICATION OF VISIBLE SEDIMENT LEAVING THE SITE,
- 6. ACTIONS TAKEN TO CORRECT/PREVENT SEDIMENTATION AND
- 7. DATE OF ACTIONS TAKEN. III. VISIBLE SEDIMENTATION FOUND OUTSIDE THE SITE LIMITS: INSPECTION RECORDS MUST INCLUDE:
- 1. AN EXPLANATION AS TO THE ACTIONS TAKEN TO CONTROL FUTURE RELEASES, 2. ACTIONS TAKEN TO CLEAN UP OR STABILIZE THE SEDIMENT THAT HAS LEFT THE SITE LIMITS AND
- 3. THE DATE OF ACTIONS TAKEN. IV. VISIBLE SEDIMENTATION FOUND IN STREAMS OR WETLANDS: ALL INSPECTIONS SHOULD INCLUDE EVALUATION OF STREAMS OR
- WETLANDS ONSITE OR OFFSITE (WHERE ACCESSIBLE) TO DETERMINE IF VISIBLE SEDIMENTATION HAS OCCURRED. VISIBLE STREAM TURBIDITY - IF THE DISCHARGE FROM A SITE RESULTS IN VISIBLE STREAM TURBIDITY, INSPECTION RECORDS MUST RECORD THAT EVIDENCE AND ACTIONS TAKEN TO REDUCE SEDIMENT CONTRIBUTIONS. SITES DISCHARGING TO STREAMS NAMED ON THE STATE'S 303(D) LIST AS IMPAIRED FOR SEDIMENT-RELATED CAUSES MAY BE REQUIRED TO PERFORM ADDITIONAL MONITORING, INSPECTIONS OR APPLICATION OF MORE-STRINGENT MANAGEMENT PRACTICES IF IT IS DETERMINED THAT THE ADDITIONAL REQUIREMENTS ARE NEEDED TO ASSURE COMPLIANCE WITH THE FEDERAL OR STATE IMPAIRED-WATERS CONDITIONS. IF A DISCHARGE COVERED BY THIS PERMIT ENTERS A STREAM SEGMENT THAT IS LISTED ON THE IMPAIRED STREAM LIST FOR SEDIMENT-RELATED CAUSES, AND A TOTAL MAXIMUM DAILY LOAD (TMDL) HAS BEEN PREPARED FOR THOSE POLLUTANTS, THE PERMITTEE MUST IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE SITE IS CONSISTENT WITH THE ASSUMPTIONS AND MEETS THE REQUIREMENTS OF THE APPROVED TDML. THE DWQ 303(D) LIST CAN BE FOUND AT:
- HTTP://H20.ENR.STATE.NC.ES/TMDL/GENERAL 303D.HTM IN THE EVENT OF A CONFLICT BETWEEN THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT, THE SUBMITTED PLAN AND/OR THE CONTRACT SPECIFICATIONS, THE MORE RESTRICTIVE REQUIREMENT SHALL PREVAIL. THE LAND-DISTURBING ACTIVITY SHALL BE CONDUCTED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
- 7. THE LATEST APPROVED EROSION AND SEDIMENTATION CONTROL PLAN WILL BE USED DURING PERIODIC UNANNOUNCED INSPECTIONS TO DETERMINE COMPLIANCE AND A COPY OF THE PLAN MUST BE ON FILE AT THE JOB SITE. IF IT IS DETERMINED THAT THE IMPLEMENTED PLAN IS INADEQUATE, THIS OFFICE MAY REQUIRE THE INSTALLATION OF ADDITIONAL MEASURES AND/OR THAT THE PLAN BE REVISED TO COMPLY WITH STATE LAW
- 8. THE CERTIFICATE OF PLAN APPROVAL MUST BE POSTED AT THE PRIMARY ENTRANCE TO THE JOB SITE AND REMAINUNTIL THE SITE IS PERMANENTLY STABILIZED
- 9. A BUFFER ZONE, SUFFICIENT TO RESTRAIN VISIBLE SEDIMENTATION WITHIN THE FIRST 25% OF THE WIDTH CLOSEST TO THE LAND DISTURBANCE, MUST BE PROVIDED AND MAINTAINED BETWEEN THE LAND-DISTURBING ACTIVITY AND ANY ADJACENT PROPERTY OR
- WATERCOURSE. 10. IN ORDER TO COMPLY WITH THE INTENT OF THE ACT, THE SCHEDULING OF THE LAND-DISTURBING ACTIVITIES IS TO BE SUCH THAT BOTH THE
- AREA OF EXPOSURE AND THE TIME BETWEEN LAND DISTURBANCE AND PROVIDING GROUND COVER IS MINIMIZED. 11. UNLESS A TEMPORARY, MANUFACTURED, LINING MATERIAL HAS BEEN SPECIFIED, A CLEAN STRAW MULCH MUST BE APPLIED, AT A MINIMUM
- RATE OF 2 TONS/ACRE, TO ALL SEEDED AREAS. THE MULCH MUST COVER AT LEAST 75% OF THE SEEDED AREA AFTER IT IS EITHER TACKED WITH AN ACCEPTABLE TACKING MATERIAL, OR CRIMPED IN PLACE.
- 12. ADEQUATE AND APPROPRIATE MEASURES MUST BE PROPERLY INSTALLED DOWNSTREAM, WITHIN THE LIMITS OF DISTURBANCE, OF ANY LAND-DISTURBING ACTIVITY TO PREVENT SEDIMENT FROM LEAVING THE LIMITS OF DISTURBANCE, ENTERING EXISTING DRAINAGE SYSTEMS, IMPACTING AN ON-SITE NATURAL WATERCOURSE OR ADJOINING PROPERTY.
- 13. SILT FENCES, INCLUDING OUTLET SECTIONS, ARE NOT APPROPRIATE FOR AREAS OF CONCENTRATED FLOW SUCH AS SWALES OR DITCHES. PROVIDE ADEQUATE AND APPROPRIATE MEASURES FOR ALL CONSTRUCTION WITHIN AREAS OF CONCENTRATED FLOW.
- 14. ALL SLOPES AFFECTED DURING THE INSTALLATION/CLEANUP PROCESS MUST BE PROVIDED ON A GRADE THAT CAN BE RETAINED BY **VEGETATIVE OR OTHER APPROPRIATE COVER.**
- 15. AT ANY GIVEN TIME WITHIN THE PROJECT AREA, THE MAXIMUM AFFECTED, EXPOSED AND "UNRESTORED" AREA IS LIMITED TO THE LESSER OF 2 (TWO) ACRES OR THE EFFECTIVE LENGTH ALONG ANY GIVEN ROAD SECTION LIMITED TO THE LESSER OF 2 (TWO) ACRES OR THE EFFECTIVE LENGTH ALONG ANY GIVEN ROAD SECTION (APPROXIMATELY 2 MILES). A ROAD SECTION BEING DEFINED AS A CONTINUOUS SECTION OF ROAD HAVING THE SAME SR NUMBER OR ROAD NAME.
- 16. INSTALL SILT FENCE OVER AND AROUND THE TOP OF EXISTING PIPES AND INLETS AT DISTURBED AREAS.
- 17. ALL DISTURBED AREAS SHALL BE GRADED TO MINIMIZE RUNOFF.

CONT. OPEN-BOTTOM

BRICK VENEER -

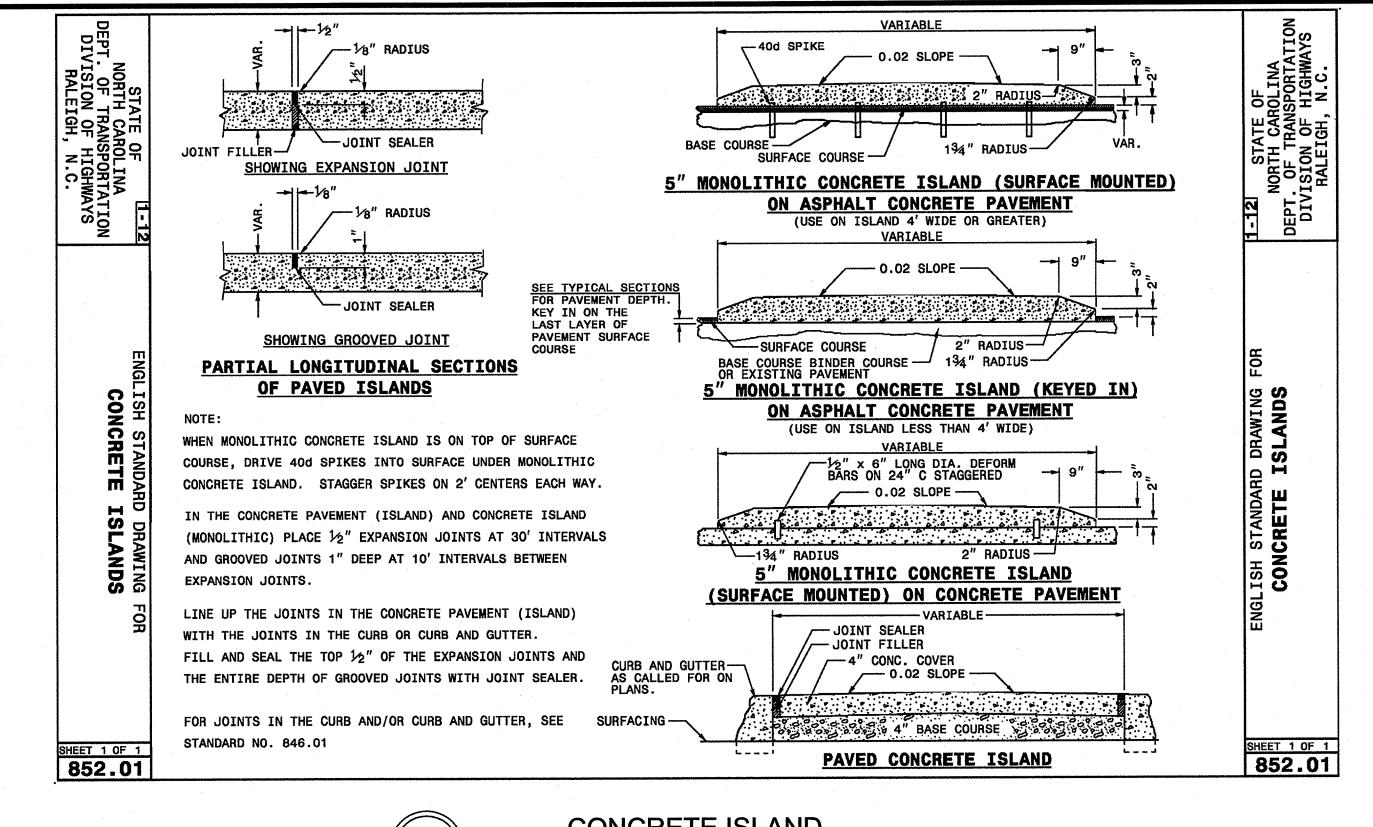
PLANTING BED -

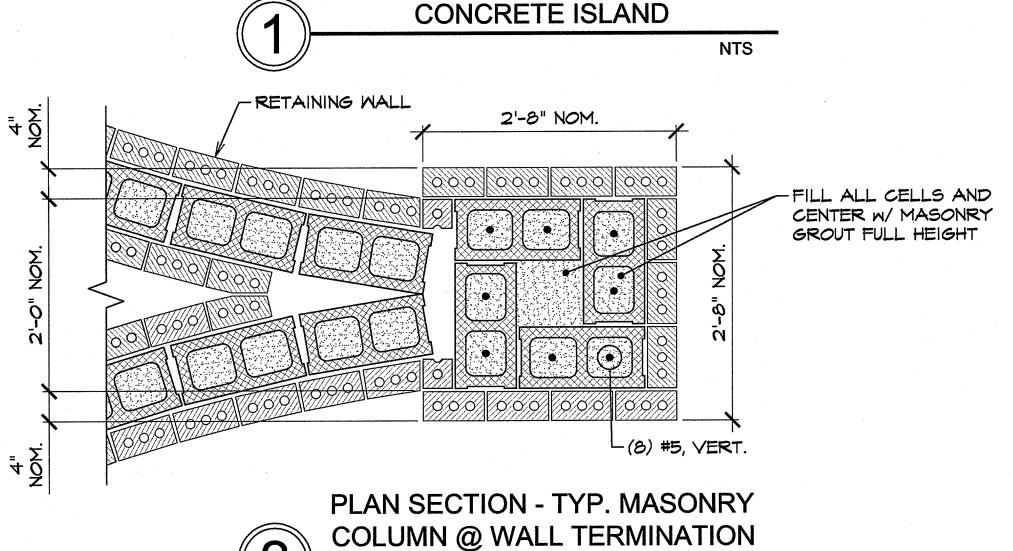
BOND BEAM w/ (2)

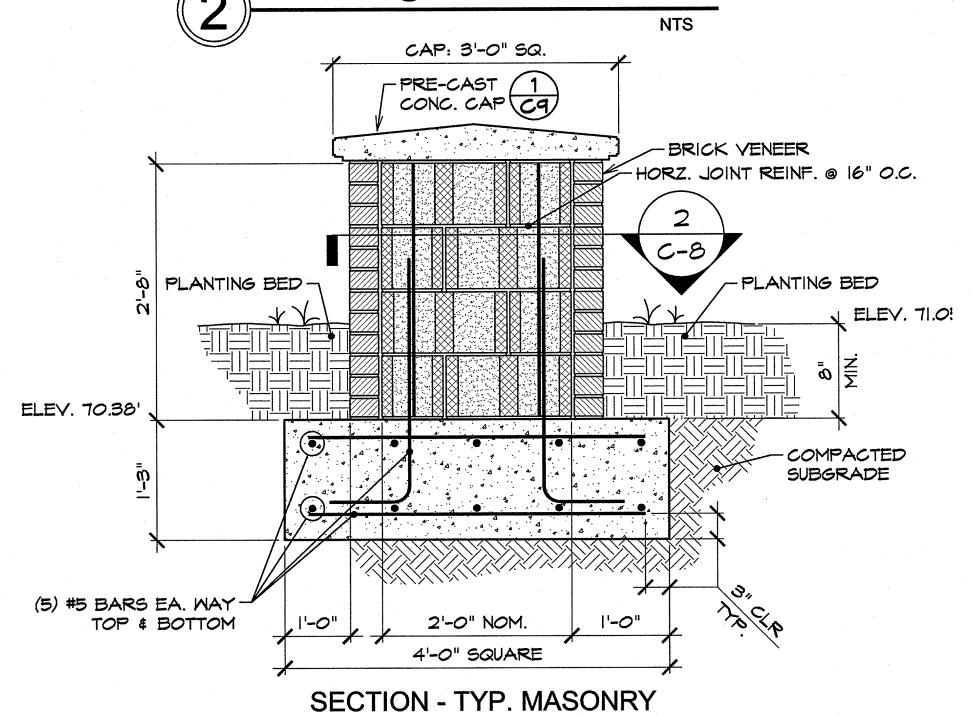
#4, CONT. FILL W/

MASONRY GROUT

- 18. INSTALL SILT FENCE AROUND SPOIL PILES AND ALONG TRENCHES TO MINIMIZE SEDIMENT FROM ENTERING ROADSIDE DITCHES AND EXISTING
- 19. PROVIDE EROSION CONTROL MEASURES AROUND STOCK/WASTE PILES AND STAGING AREAS AS NEEDED OR AS DIRECTED BY ENGINEER. 20. PROTECT STORM PIPE INLETS FROM SEDIMENT RUNOFF FROM LAND DISTURBING ACTIVITIES WITH SILT FENCE, STONE CHECK DAM, OR ABC
- FILTER AS APPROPRIATE FOR SITE CONDITIONS. 21. REPLACE DISTURBED STORM PIPE OUTLET PROTECTION WITH EQUAL OR GREATER AMOUNT OF RIP-RAP WITHIN 15 DAYS OF DISTURBANCE OR AS REQUIRED BY NCDENR-DWO
- 22. WHERE THE AREA AROUND AN OUTLET IS DISTURBED AND NO OUTLET PROTECTION EXISTS, CLASS "1" RIP-RAP SHALL BE PLACED AROUND PIPE OUTLET AS DIRECTED BY THE ENGINEER.
- 23. PROVIDE EROSION CONTROL MATTING WHERE INDICATED UNLESS DIRECTED OTHERWISE BY THE ENGINEER 24. PROVIDE PERMANENT SEEDING IN ACCORDANCE WITH THE SEEDING SCHEDULE.
- 25. REPORT EROSION CONTROL DEFICIENCIES TO THE ENGINEER IMMEDIATELY.
- 26. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL ALL
- SEEDING IS ESTABLISHED AND CONSTRUCTION AREAS HAVE BEEN STABILIZED 27. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. WHEN INSPECTION REVEALS THE TRAP TO BE REDUCED TO 50% OF DESIGN CAPACITY OR THE DEVICE TO BE DEFICIENT IN ITS INTENDED PURPOSE SUCH AS FABRIC DETERIORATION FOR SILT FENCES THE CONTRACTOR SHALL RESTORE THE DEVICE TO ITS ORIGINAL CONDITION. FAILURE TO KEEP ALL EROSION CONTROL DEVICES IN PROPER WORKING ORDER MAY RESULT IN A STOP WORK ORDER OR CIVIL PENALTIES UP TO \$5,000.00 PER DAY OF VIOLATION.







COLUMN @ WALL TERMINATION

March 30, 2015 PROJECT No. **2011107** 

SIT

DETAIL

W-3571 DRAWING No. **AS SHOWN** 

- DRAFT EW/S

- CHECK JD

**REVISIONS:** 

**CENTER ISLAND BRICK WALL - SECTION** 

2'-6"

PLANTING BED

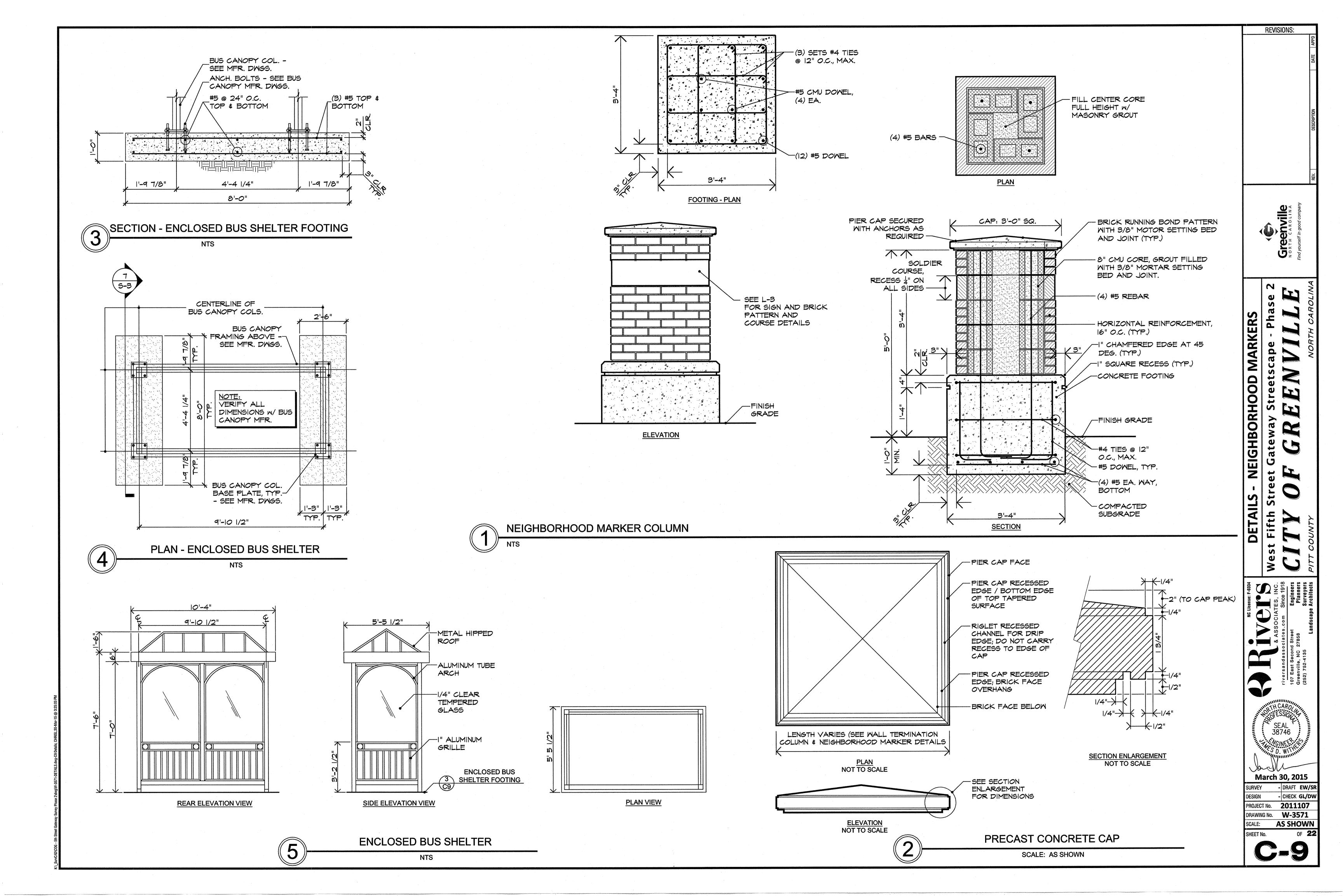
-#5 DOWEL @ 48" O.C.

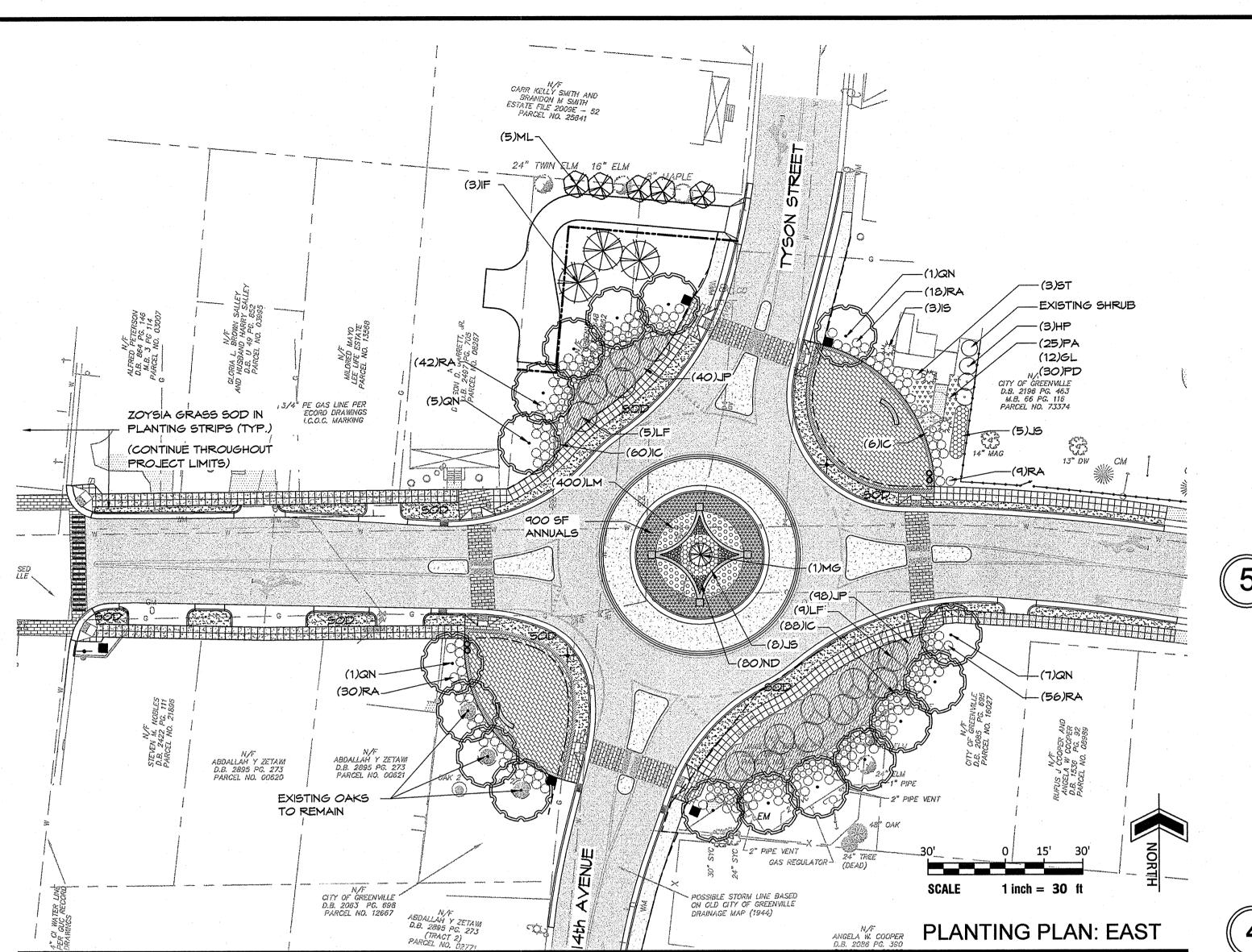
(3) #5, CONT.

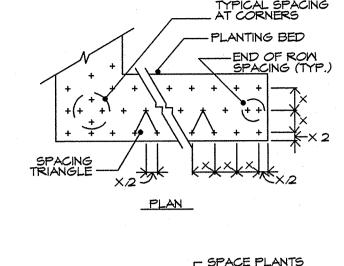
8" CMU - FILL ALL CELLS FULL

HORIZ. JOINT REINF. @ 16" O.C. MAX.

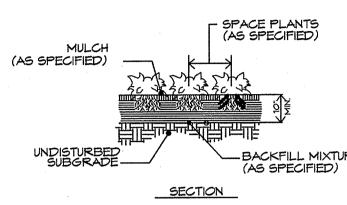
HEIGHT W/ MASONRY GROUT



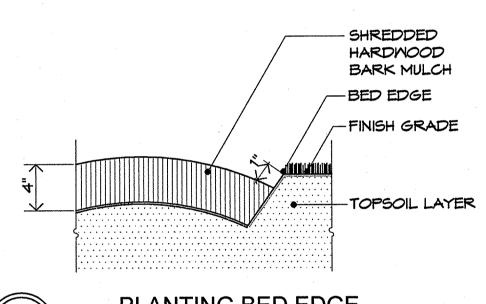




PLANTING SCHEDULE







PLANTING BED EDGE
SCALE: N.T.S.

## PLANTING NOTES

The Contractor shall furnish plant material shown on the drawings, as specified and as indicated on the plant list. The Owner or his authorized representative shall be notified prior to the beginning of planting operations.

STANDARDS: All plants shall be in accordance with the American Standard For Nursery Stock, latest edition, published by the American Association of Nurserymen, Inc. with regard to sizing and description.

QUALITY: All plants shall be nursery grown and hardy under climatic conditions similar to those in the locality of the project. All plants shall be typical of their species or variety and shall have a normal habit of growth. They shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They should be free of disease and insect pests, eggs or larvae. They shall have healthy, well-developed root system.

SUBSTITUTIONS: When plants of a specified kind or size are not available within a reasonable distance, the contractor may make substitutions upon request, if approved by the Owner. Proposal for substitution of plant material shall be submitted at least 10 days prior to the final bid date for consideration.

SIZE: All plants shall conform to all measurements specified on the plant list unless otherwise authorized in writing by the Owner.

PRUNING: Each tree and shrub shall be pruned in accordance with American Association of Nurserymen, Inc. standards to preserve the natural character of the plant. All dead wood or suckers and all broken or badly bruised branches shall be removed.

ROOT SYSTEMS: Balled & burlapped plants shall be dug with firm natural balls of earth of diameter and depth to include most of the fibrous roots. Container grown stock shall have been grown in a container long enough for the root system to have developed sufficiently to hold its soil together firm and whole. No plants shall be loose in container or ball.

PROTECTION: Root balls trunks, branches and foliage of plants shall be adequately protected at all times from sun and drying wind or frost. Plants with broken root balls or excessive damage to the crown shall be replaced, in kind, prior to installation.

MULCH: Immediately following plant installations all tree and shrub planting pits shall be covered with four (4") layer of triple shredded hardwood mulch (non-dyed). The limits of this mulch for deciduous trees and single evergreen trees shall be the area of the pit; for evergreen tree clusters or shrub masses; a mulched bed shall be created.

ANTI-DESICCANT SPRAY: Trees and when planted in leaf shall be treated with anti-desiccant such as "Wilt-Proof".

PLANTING MIX: Before backfilling, the topsoil back fill mixture shall be prepared and mixed to the following proportions:

Deciduous plants - two parts by volume of topsoil, one part organic compost and five pounds bone meal per cubic yard.

Evergreen Plants - three parts by volume of topsoil and one part organic

compost.

Fertilizer - to the above mixtures, add three pounds of specified commercial fertilizer for trees up to three (3") inches in caliper and one pound per inch of caliper for larger trees. Shrubs shall be fertilized with six (6) ounces of fertilizer for shrubs four (4'-0") feet and over.

STAKING & GUYING: Trees shall be staked and guyed as is detailed on the drawings and according to accepted industry practice.

LAYOUT: The contractor shall layout with identifiable stakes, the location of all plants and the the arrangement and outlines of planting beds as indicated on the drawings. Prior to any excavation of plant pits or preparation of plant beds, the Owner shall approve the layout of planting. All planting shall be at the locations indicated on the drawings. The Contractor shall be responsible for planting at the correct grades, alignment and layout of planting beds. Minor adjustments to tree locations may be necessary due to field conditions and final grading. The Contractor shall notify the Owner if major adjustments are anticipated.

ADVERSE CONDITIONS: The contractor shall notify the Owner in writing of any soil or drainage conditions which the Contractor considers detrimental to plant growth. The documented conditions shall include a proposal for correcting the situation, including any change in cost, for review and acceptance by the Owner.

QUANTITY: The quantity of plants in the Plant Schedule is for general reference only. The Contractor shall obtain quantities for pricing by compiling numbers from the plants illustrated on the drawings. Should there be a discrepancy between the drawings and the plant schedule, the quantities illustrated on the drawings shall take precedence.

GUARANTEE: The Contractor shall guarantee all plant material for a full year from the date of initial acceptance. It is the Contractors responsibility to monitor the project during the guarantee period and notify the Owner in writing if problems are occurring or situations developed that appear detrimental to the plant material. Any plant material that is 25% dead or more shall be considered dead and must be replaced at no charge to the Owner. A tree is considered dead when the main leader has died back or there is 25% of the crown dead.

## LANDSCAPE PLANTING MAINTENANCE SERVICE:

WEST 5TH STREET ROUNDABOUT

Trees, Shrubs, Groundcover, Perennial Flowers, and Mulch Areas shall be maintained by skilled employees of the Landscape Contractor immediately following plant installation for each area and shall continue until plants are acceptably healthy and well established, but not for less than a period of 12-Months from receipt of Certificate of Substantial Completion.

Maintenance shall consist of pruning, watering, cultivating, weeding, edging, mulching, tightening and repairing guys and stakes, resetting plants to proper grades or upright position, restoring of the planting saucer, furnishing and applying such sprays or other materials as necessary to keep plantings free of insects and diseases, and other horticultural operations necessary for proper growth and appearance and in vigorous condition at end of Maintenance Service Period.

Contractor shall irrigate as required to maintain vigorous and healthy plant growth. Overwatering or flooding shall not be allowed. The contractor shall monitor, adjust, and use irrigation facilities, if available, and furnish any additional material, equipment, or water to ensure adequate irrigation. Root balls of all trees and large shrubs shall be spot watered using handheld hoses during the first four months after planting, as required to ensure adequate water within the root ball.

During periods of restricted water usage, all governmental regulations (permanent and temporary) shall be followed. The contractor may have to transport water from ponds or other sources, at no additional expense to the owner when irrigation systems are unavailable.

Plants that are 25% dead or more shall be considered dead and must be replaced on a quarterly basis at minimum during the Maintenance Service Period.

At the end of the 12-Month Maintenance Service Period the contractor shall remulch all beds to an overall depth of 4" and remove guy wires and stakes.

The Contractor shall meet quarterly with the Owner on-site throughout the Maintenance Service Period. Prior to this

meeting the Contractor shall submit a quarterly maintenance worksheet to the Owner stating work performed during that quarter, or if none has been required, a notation to that effect.

During the Maintenance Service Period the Contractor shall notify the Owner in writing of physical damage to planting not caused by Contractor stating nature and location of damage. Upon receipt of notice, Owner may order the Contractor to correct damage at Owner's expense or exclude damaged work from Maintenance Service and correct damage by other means.

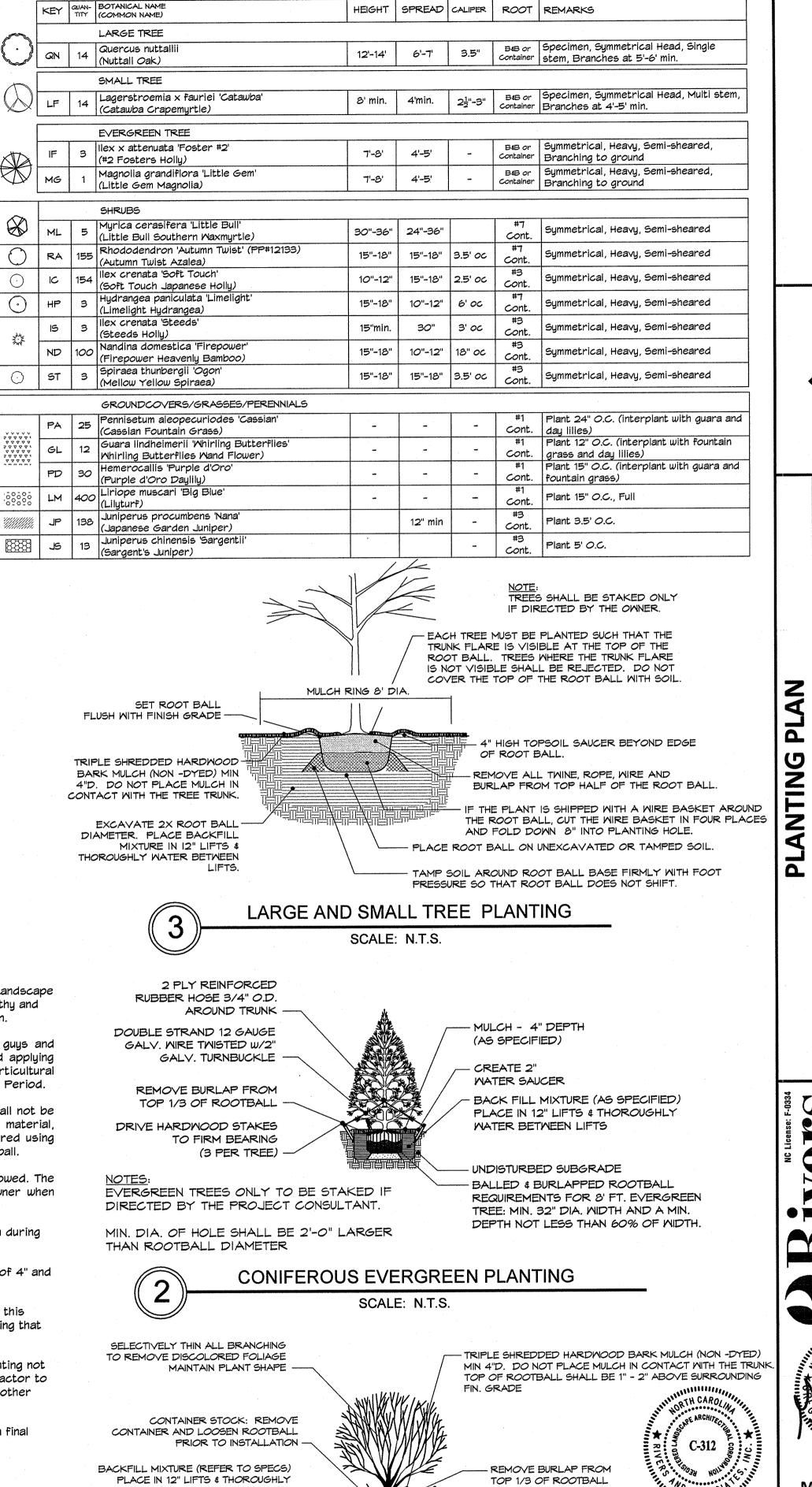
Upon completion of the Maintenance Service Period the Contractor shall notify the Owner in writing and request a final inspection.

Contractor shall correct deficiencies as a result of final inspection.

Contractor shall be notified in writing by the Owner of final approval.

Upon final approval the Owner shall assume maintenance.

Payment of Maintenance Services will be divided evenly into quarterly payments based upon the lump sum Maintenance Service fee and distributed on a quarterly basis following the Contractor's on-site meeting with the Owner, the Owner's receipt of a quarterly maintenance worksheet, and the Owner's receipt of an invoice from the Contractor. If the Maintenance Services are not performed in an acceptable manner, payment will be withheld until work is acceptably completed.



WATER BETWEEN LIFTS -

ROOT BALL DOES NOT SHIFT.

EXCAVATE 2X ROOT BALL DIAMETER.

THOROUGHLY WATER BETWEEN LIFTS ...

PLACE BACKFILL MIXTURE IN 12" LIFTS &

TAMP SOIL AROUND ROOT BALL BASE

FIRMLY WITH FOOT PRESSURE SO THAT

**REVISIONS:** 

Green NORTH

H CARO

March 30, 2015

DESIGN GL/SR CHECK

PROJECT No. **2011107** 

RAWING No. **W-3571** 

SURVEY

CREATE 3" WATER SAUCER FOR INDIVIDUALLY

MASS PLANTING

UNDISTURBED

SUBGRADE

SHRUB PLANTING

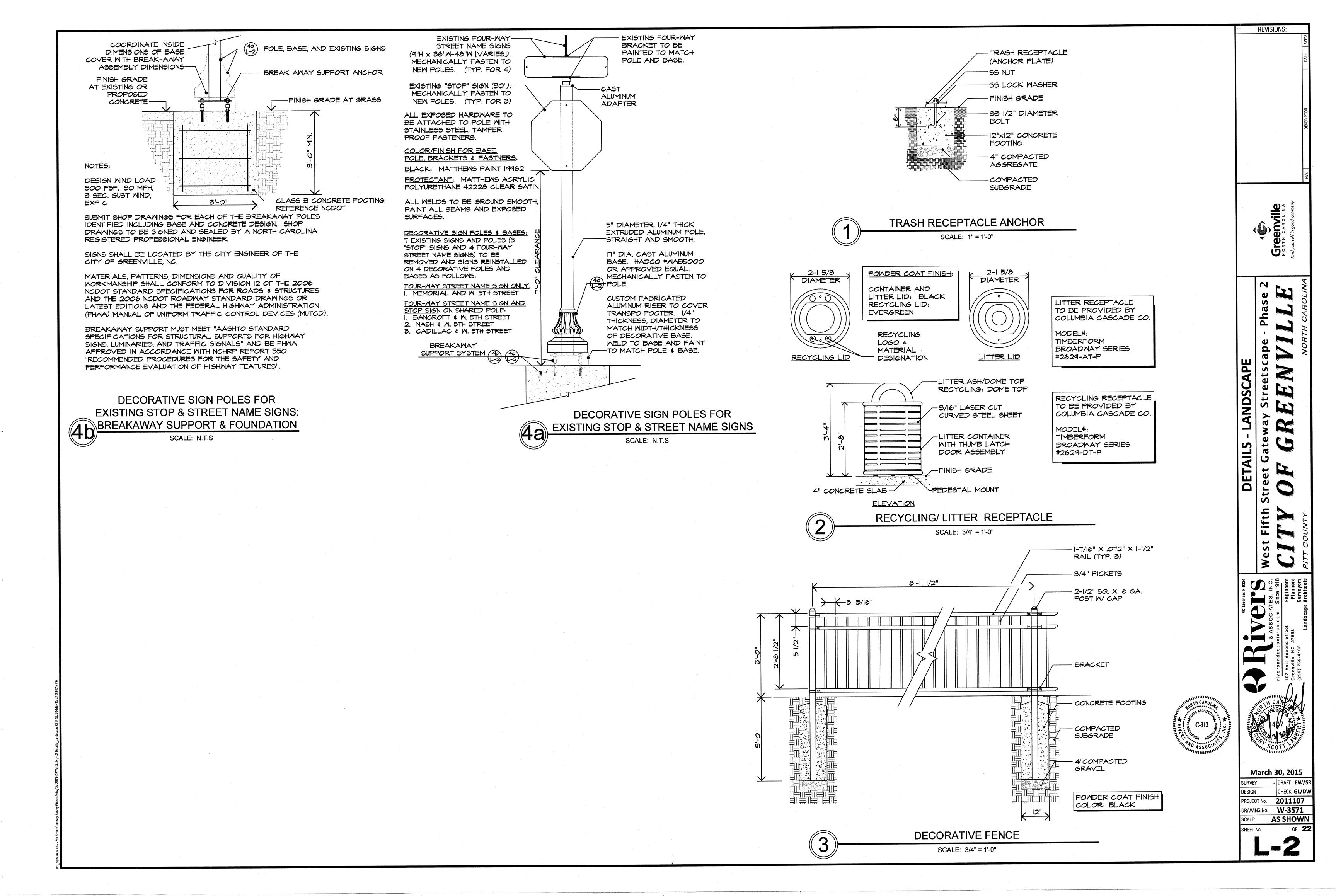
SCALE: N.T.S.

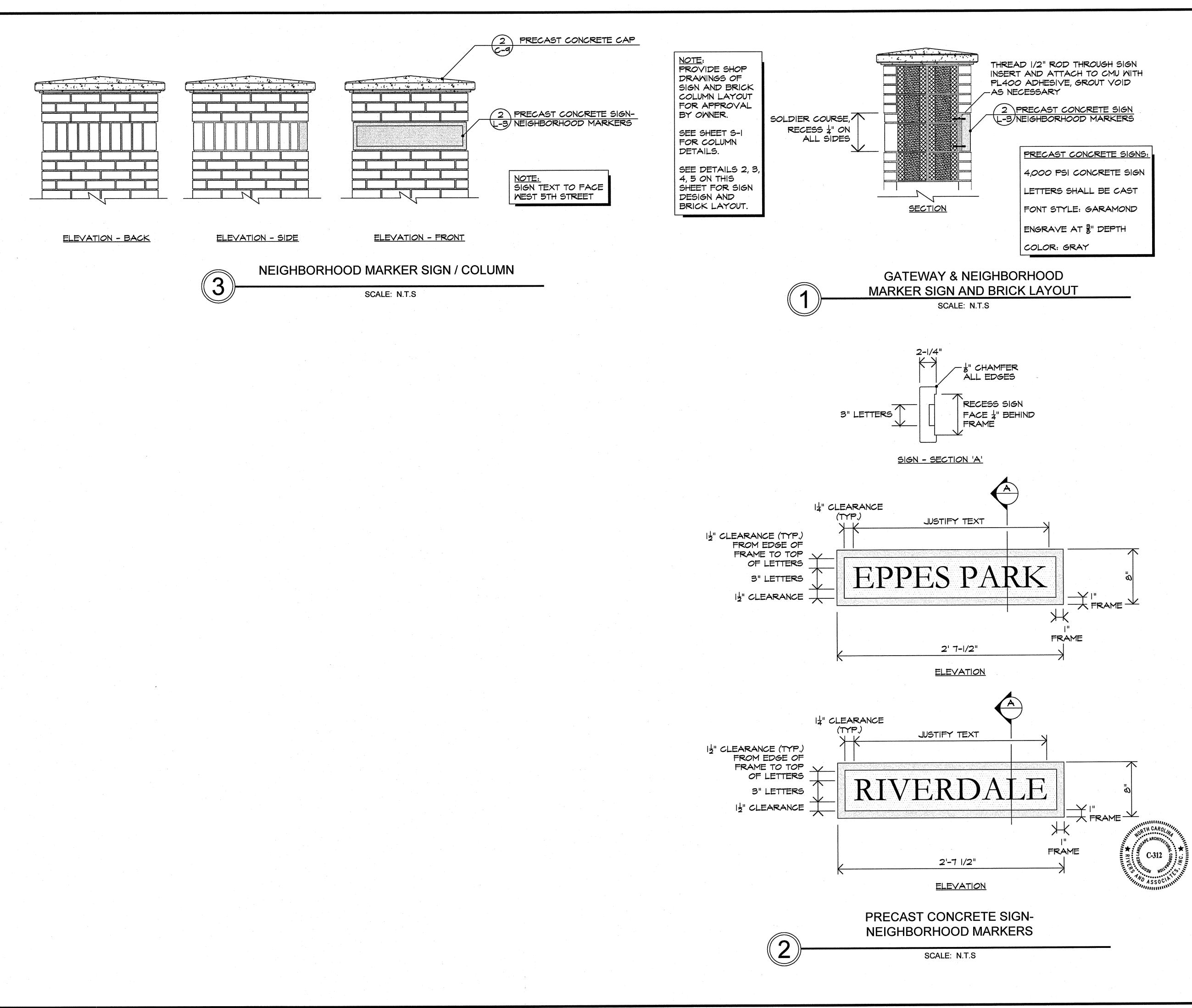
PLANTED SHRUBS, CREATE MULCHED BEDS FOR

- DRAFT EW/SR

**AS SHOWN** 

OF **22** 





DESCRIPTION

**REVISIONS:** 

Greenville
NORTH CAROLINA
Find yourself in good company

Ipe - Phase 2

VILLE

Findy

DETAILS - LANDSCAPE
th Street Gateway Streetscape - F

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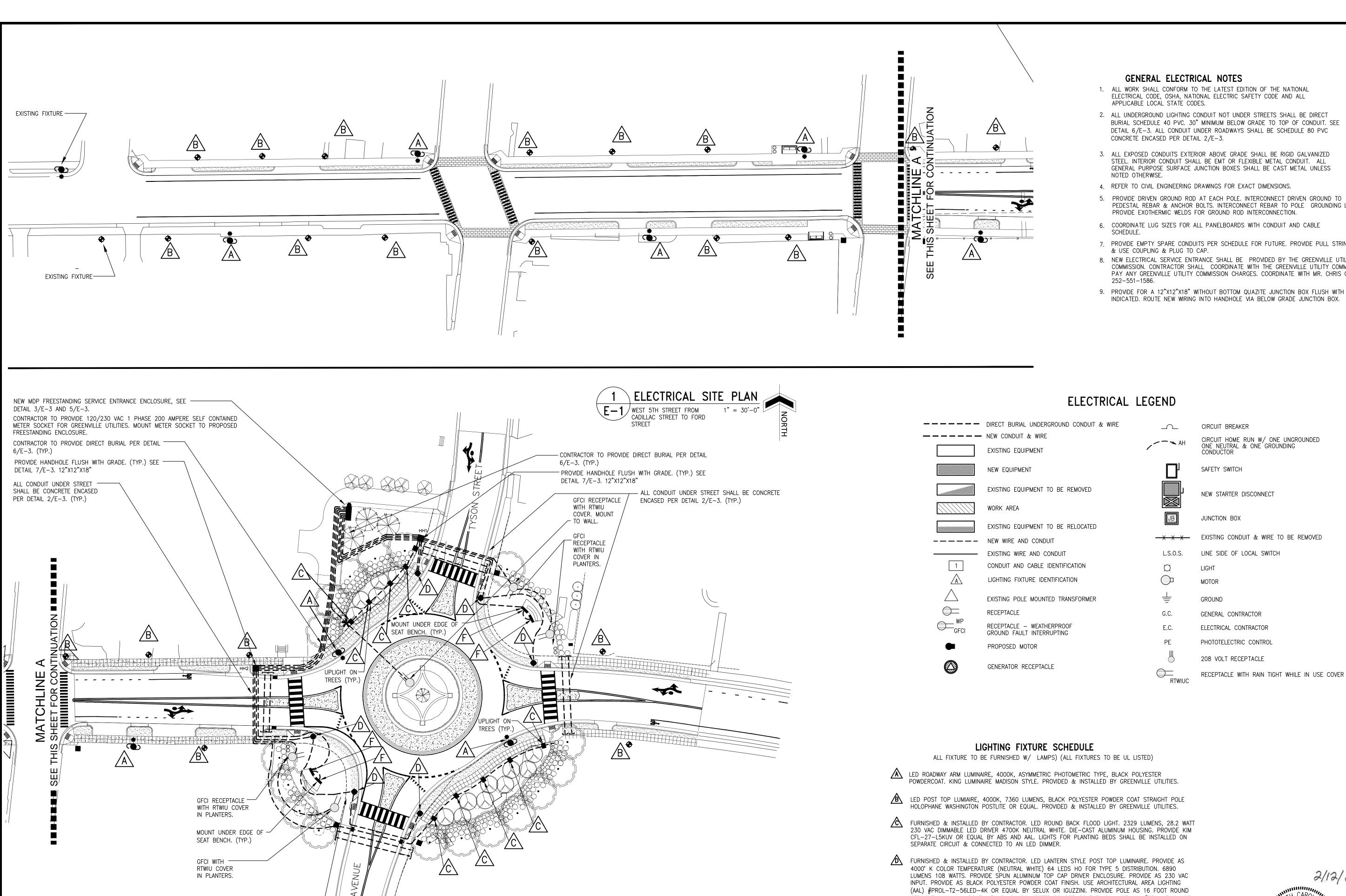
107 East Second Street Engineers
Greenville, NC 27858 Planners

CAROLANDSCA MATERIAL STATES AND SCALE AND SCAL

March 30, 2015

SURVEY - DRAFT EW/SF
DESIGN - CHECK GL/DW
PROJECT No. 2011107
DRAWING No. W-3571
SCALE: AS SHOWN

SHEET No. OF



ELECTRICAL SITE PLAN

 $\mathbf{E} - \mathbf{1}$  west 5th street roundabout 1" = 30'-0"

AREA LIGHT IN

PLAZA (TYP.)

2. ALL UNDERGROUND LIGHTING CONDUIT NOT UNDER STREETS SHALL BE DIRECT BURIAL SCHEDULE 40 PVC. 30" MINIMUM BELOW GRADE TO TOP OF CONDUIT. SEE DETAIL 6/E-3. ALL CONDUIT UNDER ROADWAYS SHALL BE SCHEDULE 80 PVC

3. ALL EXPOSED CONDUITS EXTERIOR ABOVE GRADE SHALL BE RIGID GALVANIZED STEEL. INTERIOR CONDUIT SHALL BE EMT OR FLEXIBLE METAL CONDUIT. ALL GENERAL PURPOSE SURFACE JUNCTION BOXES SHALL BE CAST METAL UNLESS

PROVIDE DRIVEN GROUND ROD AT EACH POLE. INTERCONNECT DRIVEN GROUND TO PEDESTAL REBAR & ANCHOR BOLTS. INTERCONNECT REBAR TO POLE GROUNDING LUG.

7. PROVIDE EMPTY SPARE CONDUITS PER SCHEDULE FOR FUTURE. PROVIDE PULL STRING

8. NEW ELECTRICAL SERVICE ENTRANCE SHALL BE PROVIDED BY THE GREENVILLE UTILITY COMMISSION. CONTRACTOR SHALL COORDINATE WITH THE GREENVILLE UTILITY COMMISSION & PAY ANY GREENVILLE UTILITY COMMISSION CHARGES. COORDINATE WITH MR. CHRIS COREY AT

9. PROVIDE FOR A 12"X12"X18" WITHOUT BOTTOM QUAZITE JUNCTION BOX FLUSH WITH GRADE AS

CIRCUIT HOME RUN W/ ONE UNGROUNDED -X X X EXISTING CONDUIT & WIRE TO BE REMOVED

STRAIGHT ALUMINUM POLE WITH BLACK POLYESTER POWDER COAT FINISH. USE AAL #PR4-4R12-125 OR EQUAL BY SELUX OR IGUZZINI.

FURNISHED & INSTALLED BY CONTRACTOR. LINEAR LED WALL WASHER & WALL GRAZER. SOLID ALUMINUM EXTRUSION IP66 RATED FOR USE IN WET LOCATIONS. ARCHITECTURAL CLASS ANODIZING. COOL BEAM NO HEAT OR UV GENERATED FROM LIGHT SOURCE. 59 INCH OVERALL LENGTH. CLEAR MATT COLOR 4000K DIMMABLE 120 VAC. WITH ADJUSTABLE MOUNTING BRACKET. USE GVA LIGHTING STR9 1500 CM 2.5W 4000K WB 120 VAC OR EQUAL BY H.E. WILLIAMS OR SELUX. LIGHTS SHALL BE INSTALLED ON SEPARATE CIRCUIT & CONNECTED TO AN LED DIMMER.



DRAWING No. **W-3571** SCALE: AS SHOWN

DESIGN BY: DIBBLE & PLEDGER, P.A. 222 WEST MAIN STREET, WASHINGTON N.C. 27889 PHONE : (252) 946-3320 FAX: (252) 946-5160

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REVISIONS:

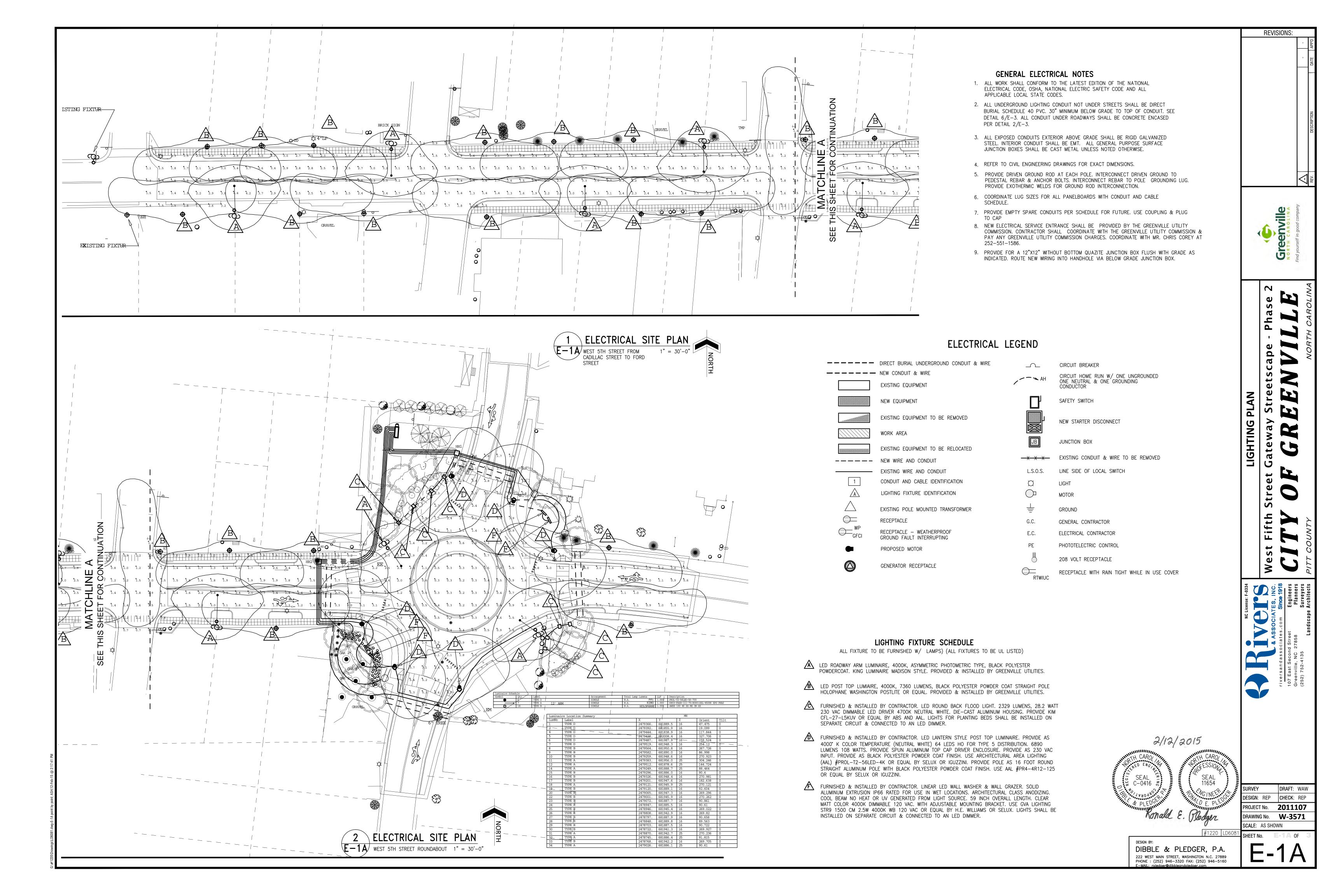
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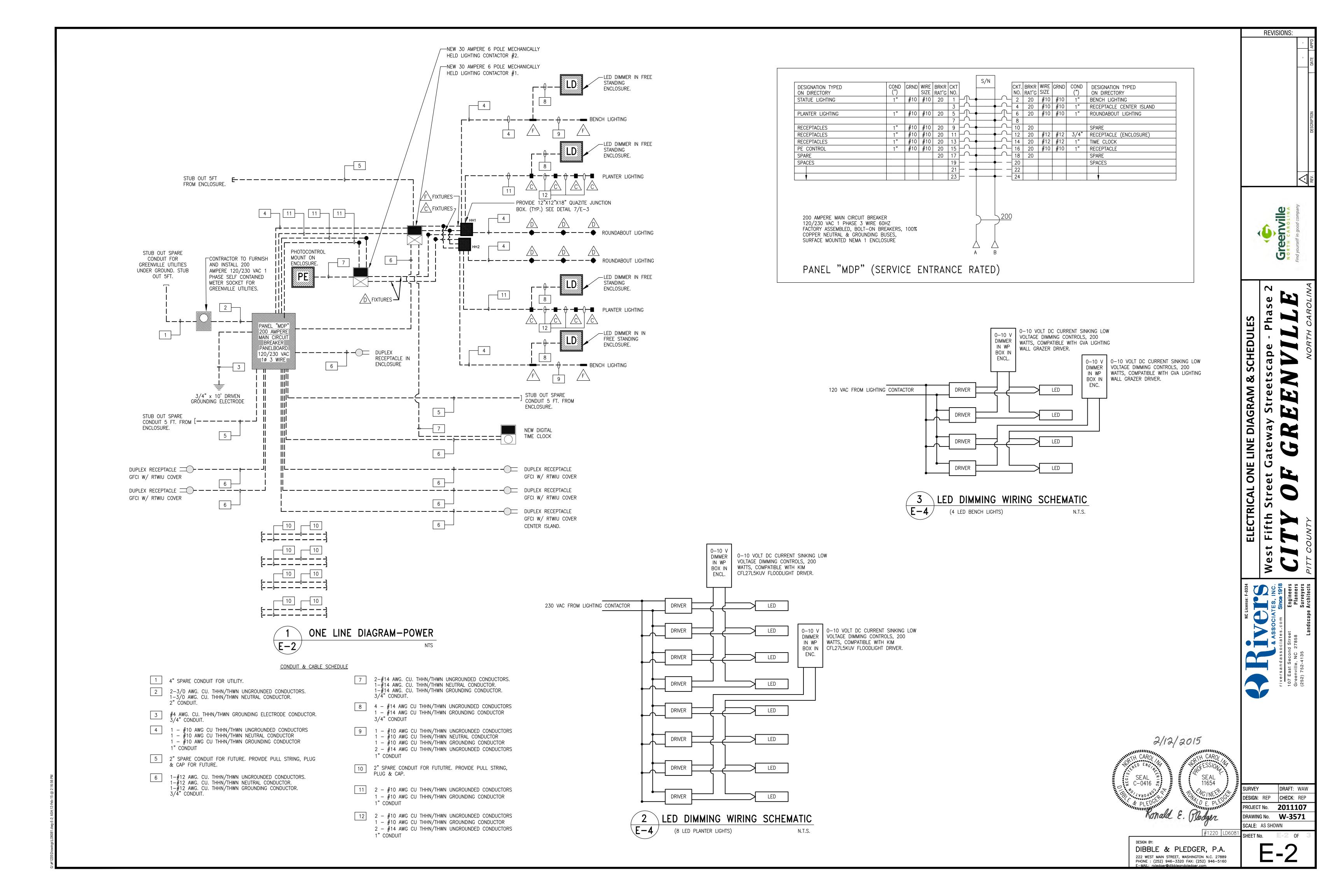
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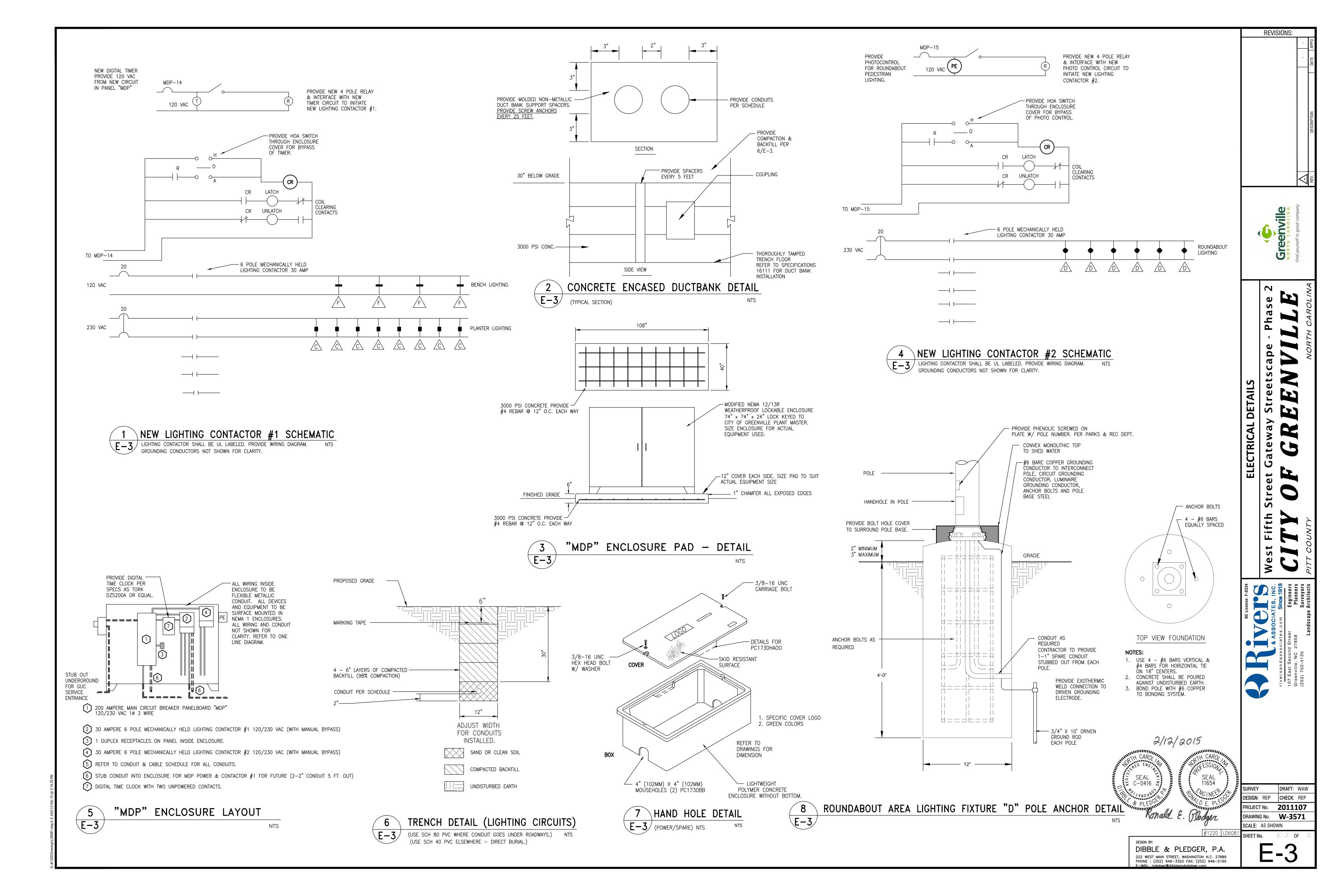
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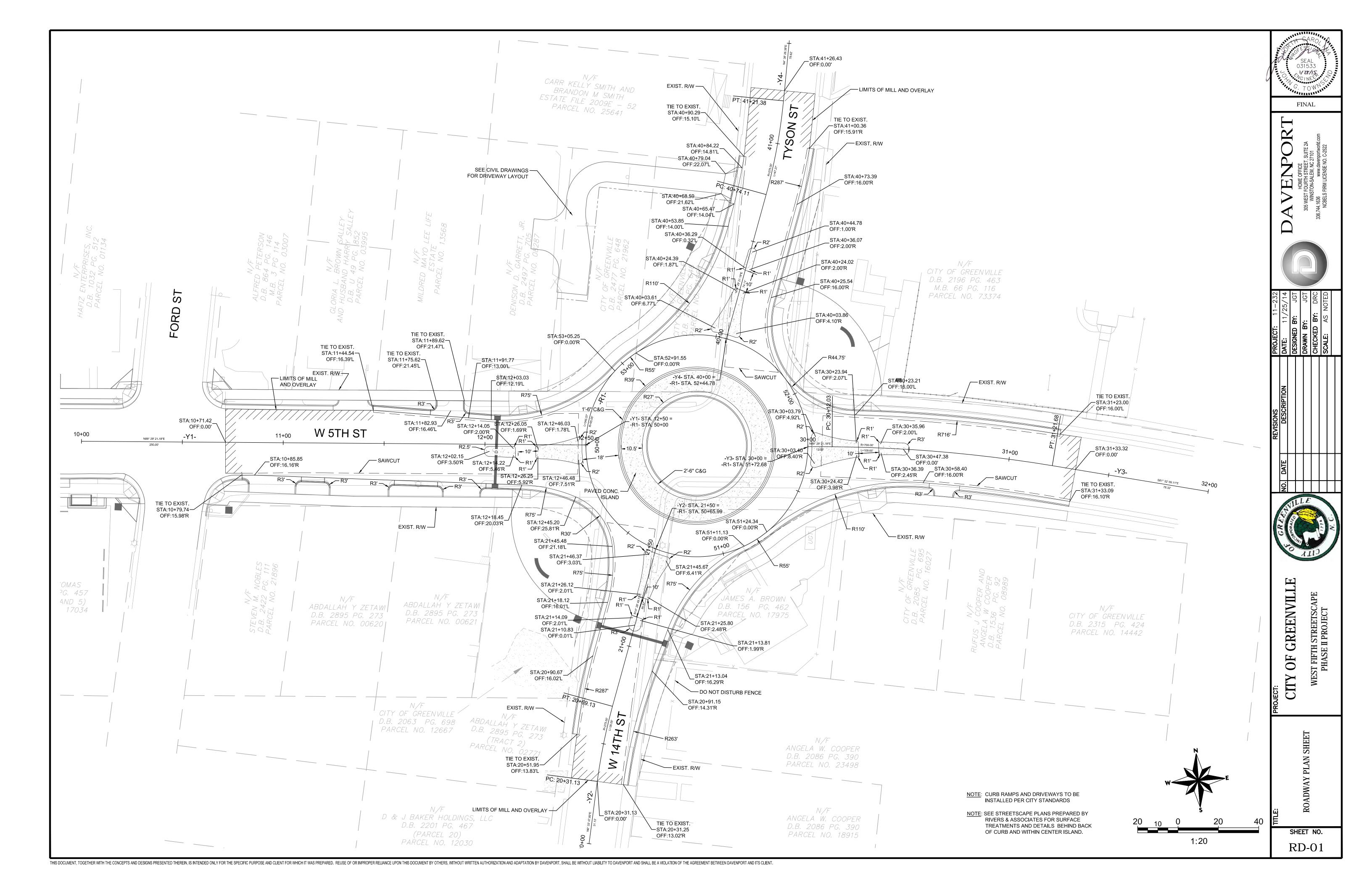
DRAFT: WAW DESIGN: REP | CHECK: REP

PROJECT No. **2011107** 









CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER OR

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER OR NCDOT.

#### PROJECT NOTES

A. DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

#### LANE AND SHOULDER CLOSURE REQUIREMENTS

- B. REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.
- C. WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- D. WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- E. WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIL WITH THE CLOSED TRAVEL LANE.
- F. DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY,
  RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR
  BAPPIED

### PAVEMENT EDGE DROP OFF REQUIREMENTS

G. BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER.

H. DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING UNEVEN LANES, SIGNS (W8-11) 350 FEET IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

## SIGNING

- I. INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- J. ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- K. INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 100 ft IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

#### TRAFFIC BARRIER

L. INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS,
REMOVE/RESET TEMPORARY BARRIER UNLESS OTHERWISE STATED IN THE TRAFFIC
CONTROL PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE
ENGINEER.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH)
TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY
BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

M. PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED IMPACT ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:

POSTED SPEED LIMIT	MINIMUM OFFS	
40 OR LESS	15 FT	
45-50	20 FT	
55	25 FT	
60 MPH or HIGHER	30 FT	

#### TRAFFIC PATTERN ALTERATIONS

N. NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### TRAFFIC CONTROL DEVICES

- O. SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- P. PLACE TYPE III BARRICADES, WITH ROAD CLOSED SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- Q. PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.
- R. ONLY UNIFORMED POLICE OFFICERS SHALL DIRECT TRAFFIC THROUGH SIGNALIZED INTERSECTIONS. THE TRAFFIC SIGNAL MAY BE PUT INTO FLASHING OPERATION OR MAY REMAIL IN NORMAL OPERATION AT THE DISCRETION OF THE OFFICER.

OFFICERS SHALL BE PROPERLY ATTIRED AND SHALL DIRECT TRAFFIC WITH HAND MOTIONS.
FLASHLIGHTS WITH RED CONES SHOULD BE USED AT NIGHT. OFFICERS MAY ALSO USE A
WHISTLE TO SIGNAL WHEN THEY ARE CHANGING THE DIRECTION OT THE RIGHT OF WAY.

### PAVEMENT MARKING AND MARKERS

S. INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME MARKING MARKER
ALL THERMO NONE

T. INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME MARKING MARKER
ALL PAINT NONE

- U. PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- V. TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- W. REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

### TEMPORARY/FINAL SIGNS

X. NOTIFY THE ENGINEER TWO (2) MONTHS BEFORE A TRAFFIC SIGNAL INSTALLATION BY OTHERS IS REQUIRED.

#### MISCELLANEOUS

Y. IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) AND RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

### PHASING NOTES

PHASE 1 (SEE SHEETS TC-02 AND TC-03 FOR DETAIL)

CLOSE THE INTERSECTION OF W 5TH STREET AND TYSON STREET/W 14TH STREET AND INSTALL DETOUR SIGNING IN ACCORDANCE WITH THE PLANS.

- CONSTRUCT ASPHALT PAVEMENT, CURB & GUTTER, SIDEWALK, ETC. IN ACCORDANCE WITH THE PLANS.

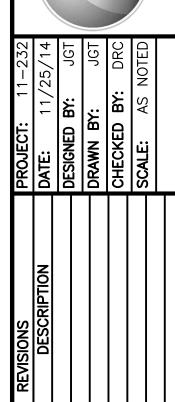


FINAL

AVENDOR

HOME OFFICE
305 WEST FOURTH STREET, SUITE 2A
WINSTON-SALEM, NC 27101







OF GREENVILLI FIFTH STREETSCAPE

CITY OF GREE

TRAFFIC CONTROL PLAN

SHEET NO.
TC-01



