

### Shallowford/Bonnie Way

Contract Number: T-17-011
Chattanooga Department of Transportation

#### The following is the Schedule for this project:

Request for Information: All questions for this project should be submitted to the city's purchasing department by 4:00 PM on Friday, September 20, 2019.

Addenda: All questions will be answered in addenda no later than 4:00 PM on

Tuesday, September 24, 2019.

**Bid Opening:** All Bids <u>MUST</u> be received by the city's purchasing department located at 101 East 11th Street Chattanooga, TN 37402 no later than **2:00 PM** on **Tuesday, October 1, 2019** in the Purchasing Conference Room.

#### Comment 1:

Attached you will find the stamped drawings for this project. They are the exact drawings you received previously; however, those were not stamped by the engineer.

#### Question 1:

Are there any union requirements for the project above?

#### Answer 1:

There are no union requirements for this project.

#### Question 2:

When we picked up the flash drive for the Shallowford/Bonnie Way Sidewalk, there we not any bid sheets in the bid package. Would you please see me the bid sheets.

#### Answer 2:

Please refer to page 103 of the Bid Package.

#### Below are questions / comments from the Pre-Bid Meeting:

**Question 3:** Does the existing sidewalk get replaced?

**Answer 3:** No. We are generally not replacing the existing sidewalk, only adding new sidewalk adjacent to the existing sidewalk. The project does call for pressure washing of the existing sidewalks and cleaning them up. Existing sidewalk will be replaced only be selected areas.

**Question 4:** How wide is the existing sidewalk?

**Answer 4:** Some portions of the existing sidewalk are 5 feet wide and some portions are 8 feet wide. The 5 feet portions will widen to 10 feet. The 8 feet portions will widen to 12 feet. See the section views on the plan set.

**Question 5:** Does the Brick Monument Sign have to be relocated?

**Answer 5:** We are currently checking with our city contact who deals with the neighborhood signs to see if the sign needs to be put back. So as of now we will assume that yes, it will need to be relocated. There is a line item on the bid schedule specifically for this.

**Question 6:** Will we have to add fill for where the slope falls off along Shallowford Road adjacent to the proposed sidewalk?

**Answer 6:** Only in some areas; see the areas on the plan view with proposed grades, and also the section views for the general construction methods to be used in the different areas. A geotech will be hired to test the added areas for compaction.

**Question 7:** Are we to demo the sidewalk near the bridge?

**Answer 7:** Only in those areas shown on the plan. I believe the area you're referring to is where we will be filling in the grassed verge with sidewalk as we approach the bridge to make the transition to curbside sidewalk.

**Question 8:** What type of railing (hand rail) will be used?

**Answer 8:** We will be using TDOT standard Bike/Pedestrian Safety rail which will mostly be surface mounted to the proposed sidewalk with the exception of a short section which will receive posts in footings. See sections and plan views for these areas.

**Question 9:** What type of stone will be used?

**Answer 9:** #57 Washed Stone as shown on the details/sections and it is city standard.

**Question 10:** Do we have to re-stripe Moore Road?

**Answer 10:** Yes, we are tightening up the lane widths on Moore Road and it will have to be re-striped for approximately 250 linear feet as shown on the plans. We will also also be putting in a vehicle detection camera (see utility plan) at the intersection of Moore and Shallowford, and that will save the contractor from having to lay new wire detection loops. All proposed striping and pavement markings shall be thermoplastic.

Note that we are also adding a shoulder/edgeline for the full length of the project on Shallowford, as seen on plans.

**Question 11:** Will we have to install any storm structures?

**Answer 11:** Yes, there is one conversion of an existing inlet to a junction box. And there is the installation of one new curb inlet. That is basically the extent of the storm infrastructure related work.

**Question 12:** Do the curb lines stay the same on Shallowford Road?

**Answer 12:** Yes, they do stay the same. Basically the only place where curb is being touched on Shallowford Road is for the removal of some existing curb cuts and where driveways are being replaced.

**Question 13:** When will the trees be planted?

**Answer 13:** I believe fall/winter would be most appropriate time. But it will be up to the contractor to plant the trees and make sure they stay alive. I believe there is a standard

one year warranty that the contractor will have on the trees per the specifications.

**Question 14:** What is the completion time for this project? **Answer 14:** 240 days.

**Question 15:** What is bike ramp shown on sheet 10?

**Answer 15:** This is a steel channel that bolts to the existing stairs at a fixed distance from the rail and cheek wall. You can google the part and manufacturer to obtain the specifications.

**Question 16:** How will the poles on Shallowford Road be handled? Will the contractor be responsible for moving the poles?

**Answer 16:** EPB and AT&T have been asked to move the poles. We aren't sure they will handle them in time. The have been included on the bid schedule in case needed.

**Question 17:** How do we price the issue of moving the poles at Shallowford and Airport Road since CDOT is not sure if EPB and AT&T will move them?

**Answer 17:** EPB and AT&T have been asked to move the poles. We aren't sure they will handle them in time. The have been included on the bid schedule in case needed.

**Question 18:** On google street view there appears to be some new trees in front of FED EX. How do we handle protecting the trees? How do we verify if the trees are in the Right-of-Way?

**Answer 18:** Those trees are not reflected in the survey as they are new plantings, but I can tell that they are not in the R.O.W. and they shouldn't be an issue when constructing the sidewalk. If any private property has put new plantings in the R.O.W. we will contact them and reconcile the issue ahead of construction as needed.

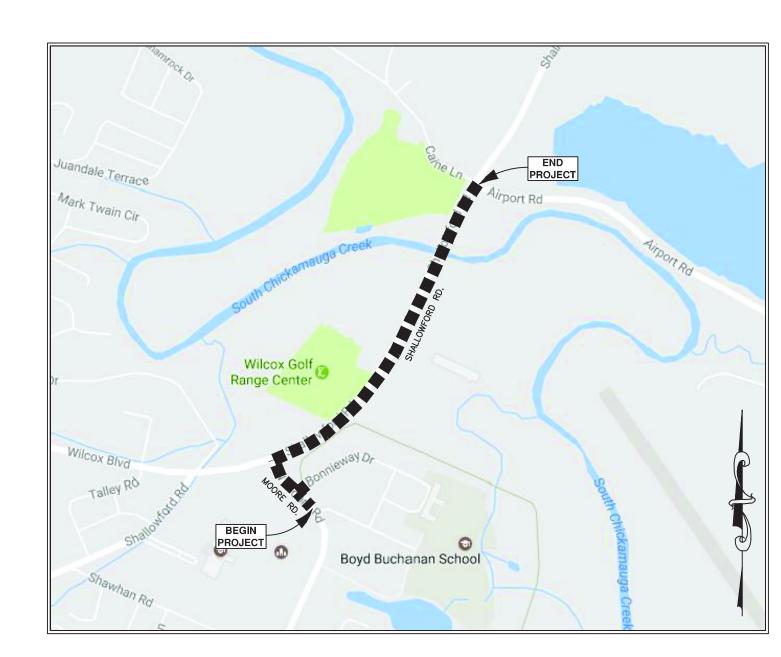
**Question 19:** Is there a CE for this project?

**Answer:** Tony Madewell, the Project Manager, will also serve as inspector and will work with a testing company to make sure the project is built properly and slope integrity remains intact.

# CITY OF CHATTANOOGA, TENNESSEE CONTRACT # 17-011-201 SHALLOWFORD ROAD GREENWAY CONNECTOR

# **DRAWING INDEX**

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# **LOCATION MAP**

# MAYOR

ANDY BERKE

# **CITY COUNCIL**

**DISTRICT 1 - CHIP HENDERSON** 

DISTRICT 2 - JERRY MITCHELL, CHAIRPERSON

DISTRICT 3 - KEN SMITH, VICE-CHAIRPERSON

DISTRICT 4 - DARRIN LEDFORD

**DISTRICT 5 - RUSSELL GILBERT** 

DISTRICT 6 - CAROL B. BERZ

DISTRICT 7 - ERSKINE OGLESBY JR

**DISTRICT 8 - ANTHONY BYRD** 

DISTRICT 9 - DEMETRUS COONROD

## DEPARTMENT OF TRANSPORATION

BLYTHE BAILEY, ADMINISTRATOR



MARK D. HEINZER, P.E.
CITY TRANSPORTATION ENGINEER
STATE LICENSE NO. 114738



SHALLOWFORD ROAD - GREENWAY CONNECTO

TITLE SHEET

DATE: 9/3/19
DRAWN: GMH
CHECKED: CHATT

REVISIONS
1
2
3
4

SHEET NUMBER: 1

2. THE COST OF REMOVAL AND DISPOSAL OF EXISTING FLEXIBLE PAVEMENT ENCOUNTERED IN THE PROGRESS OF THE WORK AND NOT COVERED IN OTHER BID ITEMS SHOWN ON PLANS, SHALL BE INCLUDED IN ITEM NO. 1, "COMMON EXCAVATION."

- 3. WHEN SPECIFIED GRADING REQUIREMENTS ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL GRADE ALL AREAS WITHIN THE LIMITS OF CONSTRUCTION, OR OTHERWISE DISTURBED BY CONSTRUCTION, TO DRAIN AND TO MATCH THE EXISTING, ADJACENT GROUND.
- 4. THE CONTRACTOR SHALL PERFORM ALL NECESSARY STRIPPING OF EXISTING TOPSOIL ON THE JOBSITE.
- 5. ON THE PROJECT, NEWLY GRADED, EARTH AREAS NOT TO BE PAVED, RIP-RAPPED, OR STABILIZED, SHALL BE SEEDED IN ACCORDANCE WITH THE CITY OR COUNTY SPECIFICATIONS. PRIOR TO SEEDING, A THREE-INCH (3") LAYER OF TOPSOIL SHALL BE PLACED ON THESE AREAS IN ACCORDANCE WITH SAID SPECIFICATIONS. ALL EXISTING ROADS OR RAMPS TO BE ABANDONED WITHIN THE RIGHT-OF-WAY SHALL BE SCARIFIED AND OBLITERATED, THEN HAVE AND SEED ADDED.
- 6. THE CONTRACTOR IS TO DISPOSE OF, AT HIS OWN EXPENSE, ALL UNSUITABLE AND/OR SURPLUS, EXCAVATED MATERIAL AS DIRECTED BY THE ENGINEER. ALL SUITABLE, EXCAVATED MATERIAL SHALL BE USED AS DIRECTED BY THE ENGINEER.
- 7. EXCAVATION ADJACENT TO EXISTING PAVEMENT SHALL BE MADE TO A NEAT

#### EROSION/POLLUTION CONTROL

- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO CONTROL EROSION AND WATER POLLUTION THROUGH THE CONSTRUCTION PERIOD. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE BEFORE EARTH MOVING OPERATIONS BEGIN. CLEARING AND GRUBBING SHALL BE HELD TO A MINIMUM WIDTH NECESSARY TO ACCOMMODATE ROADWAY SLOPES. EMBANKMENTS AND EXCAVATED AREAS SHALL BE PROMPTLY STABILIZED TO MINIMIZE EROSION. BALED STRAW EROSION CHECKS AND SILT FENCE SHALL BE USED ALONG THE TOE OF FILL SLOPES, IN DITCHES, AND IN OTHER AREAS WHERE EROSION IS A PROBLEM AND SILT-LADEN RUNOFF MAY ENTER A STREAM OR ADJACENT PROPERTY.
- 10. ANY STOCKPILED SOIL OR FILL MATERIAL SHALL BE LOCATED AND TREATED IN A MANNER TO PREVENT SILT'S ENTERING STREAMS. NO EXCAVATED MATERIAL SHALL BE DISCHARGED INTO DITCHES. THE CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED MATERIAL IN A LOCATION, APPROVED BY THE ENGINEER, ABOVE THE NORMAL HIGH WATER ELEVATION.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL EROSION CONTROL PROVISIONS AS SET FORTH IN THE BEST MANAGEMENT PRACTICES MANUAL AVAILABLE FROM THE STORMWATER MANAGEMENT DIVISION OF THE CITY OF CHATTANOOGA DEPARTMENT OF PUBLIC WORKS. REFER TO CITY ORDINANCE
- 12. WITHIN THE UNIT PRICE FOR EACH EROSION CONTROL ITEM, THE CONTRACTOR IS EXPECTED TO MAINTAIN THE EROSION CONTROL MEASURES THROUGHOUT THE LENGTH OF THE CONTRACT AS REQUIRED.
- 13. THE CONTRACTOR SHALL PROVIDE TEMPORARY EROSION AND WATER CONTROL MEASURES (SUCH AS BERMS, SEDIMENT BASINS, SLOPE DRAINS, HAY BALES, AND SILT FENCES) AS DIRECTED BY THE ENGINEER. THESE TEMPORARY MEASURES SHALL BE COORDINATED WITH THE PERMANENT EROSION CONTROL FEATURES TO ASSURE ECONOMICAL, EFFECTIVE, AND CONTINUOUS EROSION CONTROL THROUGHOUT THE PROJECT.
- FLOW OR TO CONSTRUCT COFFERDAMS. CLEAN CUT ROCK WITH FINES MAY BE USED, OR, IN THE CASE OF COFFERDAMS, STEEL SHEETING IS PERMISSIBLE. WATER OR SEDIMENT ISOLATED BY COFFERDAMS OR DISPLACED FOOTINGS SHALL BE PUMPED INTO SEDIMENT BASINS ON THE BANK OF THE STREAM. ALL COSTS OF TEMPORARY POLLUTION CONTROL SHALL BE INCLUDED IN THE LUMP SUM BID.

#### <u>DRAINAGE</u>

- 15. COSTS OF EXCAVATION FOR CURB INLETS, MANHOLES, PIPE CULVERTS, AND OTHER STRUCTURES SHALL BE INCLUDED IN THE UNIT PRICE COST OF THE ITEM.
- 16. WHEN A CULVERT (PIPE, SLAB, OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE.
- 17. THE CONTRACTOR IS REQUIRED TO CONNECT ALL EXISTING STORM DRAINAGE PIPE TO PROPOSED DRAINAGE STRUCTURES AS MAY BE REQUIRED BY FIELD ENGINEER. THE COST IS TO BE INCLUDED IN OTHER ITEMS OF CONSTRUCTION.
- 18. EXISTING DOWN SPOUT DRAINAGE THAT IS CONNECTED TO THE PRESENT STORM SEWER SYSTEM SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. THE COST IS TO BE INCLUDED IN OTHER ITEMS OF CONSTRUCTION.
- 19. THE CONTRACTOR SHALL BE REQUIRED TO BACKFILL STORM SEWERS WITH BEDDING MATERIAL ACCORDING TO THESE STANDARD DRAWINGS OR AS DIRECTED BY
- 20. REMOVAL OF EXISTING DRAINAGE STRUCTURES IN THIS CONTRACT SHALL BE CONSIDERED INCIDENTAL, THEREFORE NO SEPARATE PAYMENT SHALL BE MADE. COMPENSATION SHALL BE INCLUDED IN THE CONTRACT PRICES FOR OTHER ITEMS.
- 21. THE COST OF CONNECTING THE PROPOSED STORM SEWERS TO THE PROPOSED STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER PIPE, WHETHER CONNECTION IS TO A CATCH BASIN, CURB INLET, OR MANHOLE, OR TO ANOTHER STORM SEWER PIPE.

#### **UTILITIES**

- 22. LOCATIONS OF UTILITIES, PUBLIC AND/OR PRIVATE, ARE APPROXIMATE ONLY, AND THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD. IT IS POSSIBLE THAT SOME EXISTING FACILITIES ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL UNDERGROUND UTILITY FACILITIES LOCATED AND MARKED PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 23. UTILITY OWNERS ARE TO RESET, RELAY, OR ADJUST, AT THEIR OWN EXPENSE, POWER AND TELEPHONE LINES, POWER POLES, WATER AND GAS LINES, AND ALL OTHER FACILITIES INCLUDING METERS, VALVES, PITS, ETC., CONFLICTING WITH THE PROPOSED IMPROVEMENTS WITHIN THE EXISTING RIGHT-OF-WAY. ALL RELOCATED POLES, METERS, VALVES, ETC., ARE TO BE LOCATED BEHIND THE SIDEWALK UNLESS SHOWN OR NOTED OTHERWISE ON PLANS.
- 24. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTACTING ALL AFFECTED UTILITY OWNERS PRIOR TO SUBMITTING HIS BID SO THAT HE/SHE MAY DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS SHALL HAVE UPON THE SCHEDULING OF WORK FOR THE PROJECT. SOME UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS, WHILE SOME WORK MAY BE REQUIRED AROUND UTILITY FACILITIES THAT SHALL REMAIN IN PLACE. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY UTILITY ADJUSTMENTS.
- 25. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY OWNERS PRIOR TO INTERRUPTING ANY GAS. WATER, OR SEWER SERVICES. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY CUSTOMERS AT LEAST 24 HOURS BEFORE INTERRUPTING THE CUSTOMERS' SERVICE. WHERE INDIVIDUAL SERVICES ARE TO BE DISCONTINUED FOR MORE THAN 4 HOURS, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR PROVIDING TEMPORARY SERVICE SATISFACTORY TO THE AFFECTED CUSTOMER. THE REPAIR OR REPLACEMENT OF UTILITY COMPONENTS SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF THE UTILITY OWNER. NO SEPARATE PAYMENT SHALL BE MADE FOR THESE ACTIVITIES, AND COMPENSATION, THEREFORE, SHALL BE INCLUDED IN THE CONTRACT PRICES FOR OTHER ITEMS.
- 26. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. SHOULD SPECIAL EQUIPMENT BE REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR SHALL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FROM FURNISHING SPECIAL EQUIPMENT SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- 27. ANY EXISTING STORM SEWER DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AS RAPIDLY AS POSSIBLE AND THEN BE INSPECTED BY ITS RESPECTIVE OWNER. THE ENGINEER SHALL DETERMINE IF DAMAGE IS THE RESULT OF THE CONTRACTOR'S NEGLIGENCE OR OF AN UNAVOIDABLE CAUSE.
- 28. THE COST OF EXTENDING ALL 4" DIAMETER PVC SEWER LATERALS SHALL BE FOR COMPLETE, IN-PLACE WORK AND SHALL INCLUDE ALL INCIDENTAL COSTS. AREAS WHERE THE EXTENSIONS ARE TO OCCUR SHALL BE DETERMINED BY THE ENGINEER.
- 29. ALL CUTS AND FILLS ARE TO BE IN PLACE AND COMPACTED PRIOR TO INSTALLATION OF SANITARY SEWERS AND APPURTENANCES.
- 30. ALL SANITARY SEWER CONSTRUCTION MUST BE DONE BY A LICENSED MUNICIPAL UTILITY CONTRACTOR— CLASSIFICATION MU.
- 31. TRANSITION JOINTS ON SANITARY SEWER PIPES OF DIFFERENT MATERIALS MUST BE APPROVED BY THE JURISDICTIONAL ENGINEER AND CONSTRUCTION MUST BE DONE WITH APPROVED FITTINGS AND/OR ADAPTERS.

- SHALL SUBMIT, WITHIN TEN (10) DAYS, A CONSTRUCTION SCHEDULE. THE CITY OF CURB AND GUTTERS WHERE APPLICABLE. CHATTANOOGA'S DEPARTMENT OF TRANSPORTATION SHALL PROVIDE A WORK ZONE TRAFFIC CONTROL PLAN WITHIN FIVE (5) DAYS THEREAFTER.
- 14. NO EARTH OR OTHER ERODIBLE MATERIAL SHALL BE USED TO DIVERT STREAM 2. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN TRAFFIC AND PROVIDE TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL TRAFFIC SIGNS AND MARKINGS AS REQUIRED BY THE MUTCD AND THE CITY OF CHATTANOOGA'S DEPARTMENT OF TRANSPORTATION.
  - 3. PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE PLACED BY CONTRACTOR.
  - 4. THE CONTRACTOR SHALL MAINTAIN ALL BUSINESS, VEHICULAR, AND PEDESTRIAN ENTRANCES.

FIRE HYDRANT

THE CONTRACTOR SHALL PROVIDE A PEDESTRIAN WALKWAY THAT SEPARATES AND INSULATES THE PEDESTRIAN FROM THE CONSTRUCTION SITE AND VEHICULAR TRAFFIC. WHERE POSSIBLE, THE WALKWAY SHALL BE ON THE SAME SIDE OF THE STREET AS THE CONSTRUCTION SITE. WHERE OVERHEAD DANGER EXISTS, THE CONTRACTOR SHALL PROVIDE A COVERED WALKWAY.

- NOTIFY ALL AFFECTED LOCAL AGENCIES ABOUT THE PROPOSED ROAD CLOSURE. THOSE TO BE CONTACTED SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING: FIRE DEPARTMENT, POLICE DEPARTMENT, SHERIFF'S DEPARTMENT, POST OFFICE, CITY DEPARTMENT OF TRANSPORTATION, AND THE BOARD OF EDUCATION.
- 7. CONTRACTOR SHALL MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION ON THE PREDOMINATE TRAVEL PATH.

#### <u>DRIVEWAYS</u>

- WHEN A CONCRETE CURB AND GUTTER IS BUILT, THE CONTRACTOR SHALL INSTALL A DROP CURB FOR EACH LOT AT A LOCATION CHOSEN BY THE THE PROPERTY FRONTAGE OR IS PLANNED TO BE CONSTRUCTED ACROSS THE
- 9. EXISTING, PAVED DRIVEWAYS SHALL BE REPLACED IN KIND TO THE TIE-IN POINT. EACH EXISTING, UNPAVED DRIVEWAY SHALL RECEIVE A FIVE FEET CONCRETE APRON BEHIND, AND ADJACENT TO, THE BACK CURB LINE AND THEN BE REPLACED IN KIND FROM THERE TO THE TIE-IN POINT.

#### RIGHTS-OF-WAY/EASEMENTS

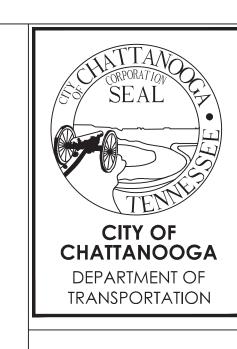
10. BEFORE CONSTRUCTION OF A CITY-OF-CHATTANOOGA PROJECT BEGINS, THE CITY SHALL ATTEMPT TO SECURE ALL RIGHTS-OF-WAY AND EASEMENTS REQUIRED FOR COMPLETION OF THE PROJECT.

#### MISCELLANEOUS

- 11. THE ENGINEER SHALL HAVE THE AUTHORITY TO DESIGNATE AND/OR LIMIT AREAS OF CONSTRUCTION.
- 12. THE OWNER MAKES NO REPRESENTATIONS ABOUT SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED WITHIN THE LIMITS OF THE PROJECT. THE CONTRACTOR SHOULD SATISFY HIMSELF BY ON-SITE INSPECTIONS, CORE DRILLINGS, OR OTHER METHODS, OF THE SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED. THE RISK OF ENCOUNTERING AND CORRECTING UNFAVORABLE SUBSURFACE CONDITIONS SHALL BE BORNE SOLELY BY THE CONTRACTOR.
- 13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL FIELD LAYOUTS, APPROVED BY THE ENGINEER, FOR THE ROADWAY AND FOR DRAINAGE STRUCTURES. ALL FINISHED GRADE ELEVATIONS AND LAYOUT SHALL BE SET USING A HUB AND TACK AND/OR PK NAILS, AS DETERMINED BY FIELD
- 14. SHOULD AN EXISTING BENCH MARK BE LOCATED ON A POWER POLE, TELEPHONE POLE, ETC., THAT IS TO BE RELOCATED DURING CONSTRUCTION, THE BENCH MARK SHALL BE RELOCATED BY A CITY OR COUNTY CREW PRIOR TO CONSTRUCTION.
- 15. ALL SALVAGEABLE MATERIAL FROM EXISTING PIPING AND STRUCTURES SHALL REMAIN PROPERTY OF THE CITY OF CHATTANOOGA OR OF HAMILTON COUNTY. SAID MATERIAL SHALL BE CLEANED AND THEN DELIVERED TO THE OWNER AT A LOCATION DESIGNATED BY THE ENGINEER.
- ALL UNSUITABLE MATERIAL, AS DETERMINED BY THE ENGINEER OR THROUGH TESTING, IS TO BE REMOVED AND REPLACED WITH SUITABLE MATERIAL. PAYMENT SHALL BE BASED ON A CUBIC YARD QUANTITY.
- 17. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AT HIS OWN EXPENSE ANY AND ALL DAMAGES THAT MAY OCCUR OUTSIDE THE LIMITS OF THIS PROJECT AS A RESULT OF CONSTRUCTION.
- UPON NOTICE OF AWARD OF A CITY OR COUNTY CONTRACT, THE CONTRACTOR 18. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EXISTING COMBINED
  - 19. ALL EXISTING DRAINAGE STRUCTURES, ABANDONED UTILITY FACILITIES, STRUCTURE FOUNDATIONS, AND SIMILAR ITEMS WITHIN THE LIMITS OF PAVING SHALL BE REMOVED TO A MINIMUM OF TWO FEET BELOW THE TOP OF SUBGRADE AND REMAINING VOIDS SHALL BE FILLED WITH COMPACTED, CRUSHED STONE TO THE TOP OF SUBGRADE. NO SEPARATE PAYMENT WILL BE MADE FOR REMOVAL OF SAID ITEMS OR FOR FURNISHING AND COMPACTING CRUSHED STONE BACKFILL, AND COMPENSATION, THEREFORE, SHALL BE INCLUDED IN THE CONTRACT PRICES FOR OTHER ITEMS.
  - 20. ALL TREES LARGER THAN 3 INCHES IN DIAMETER NEEDING TO BE REMOVED PRIOR TO THE COMPLETION OF THIS CONTRACT, SHALL BE CUT IN 3 FOOT LENGTHS AND STACKED ON THE ADJACENT PROPERTY IF THAT PROPERTY'S OWNER WISHES TO USE THE WOOD.
  - 21. THE COST OF HANDICAP RAMPS SHALL BE PAID AT THE CONTRACT UNIT PRICE FOR ITEM 16A, "CONCRETE SIDEWALK (4")", OF THE CITY'S CONTRACT SPECIFICATIONS. COST OF DROP CURBS SHALL BE PAID AT THE CONTRACT UNIT PRICE FOR ITEM 17A, "TYPE 'A' CURB AND GUTTER", OF THE CITY'S CONTRACT SPECIFICATIONS.

CHATTANOOGA TN 37402

- PRIOR TO CLOSING THE ROAD TO THROUGH TRAFFIC, THE CONTRACTOR SHALL 22. THE OWNER SHALL BE RESPONSIBLE FOR THE PAYMENT FOR TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND ORDERING APPROPRIATE TESTS AS REQUIRED BY THE INSPECTOR.
  - 23. THE CONTRACTOR SHALL REPLACE IN KIND ANY AND ALL SHRUBS, FENCES, MAILBOXES, ETC., THAT ARE REMOVED FROM, OR DAMAGED ON, SLOPE EASEMENTS. NO SEPARATE PAYMENT SHALL BE MADE.
  - 24. THE CONTRACTOR SHALL NOT BE ALLOWED TO REMOVE ANY FENCE OTHER THAN THAT NECESSARY FOR THE CONSTRUCTION OF THE NEW ROAD OR RELATED APPURTENANCES. ANY FENCE REMOVED IS TO BE REPLACED IN KIND BY THE CONTRACTOR WITH THE COSTS INCLUDED IN THE UNIT PRICE BID FOR ITEM 40, "FENCE RELOCATION", OF THE CITY'S CONTRACT SPECIFICATIONS.
- ENGINEER. A DOWNTOWN LOT SHALL BE EXEMPT WHEN A BUILDING EXISTS ACROSS 25. THE CONTRACTOR SHALL GIVE THE AFFECTED PROPERTY OWNERS ONE WEEK'S NOTICE PRIOR TO CUTTING FENCES.
  - 26. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF THE PROJECT WITHIN THIRTY (30) DAYS AFTER SUBSTANTIAL COMPLETION OF THE WORK. ("SUBSTANTIAL COMPLETION" SHALL BE DEFINED BY THE JURISDICTIONAL ENGINEER.) THE ENGINEER RESERVES THE RIGHT TO WITHHOLD THE RETAINER UNTIL RECEIVING A COMPLETE SET OF SAID DRAWINGS.
  - 27. SHOULD THERE BE A CONFLICT BETWEEN THESE GENERAL NOTES, CONTRACT DRAWINGS, AND/OR SPECIFICATIONS, THE MOST RESTRICTIVE INTERPRETATION IN FAVOR OF THE ENGINEER SHALL PREVAIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY CLARIFICATION OR INTERPRETATION OF GENERAL NOTES, CONTRACT DRAWINGS, AND/OR SPECIFICATIONS, IN ADVANCE AND IN WRITING, FROM THE ENGINEER.
  - 28. CONTRACTOR SHALL VERTICALLY PRUNE TREE ROOTS PRIOR TO ANY GRADING OR EXCAVATION WITHIN 50 FEET (15.2M) OF THE LIMIT OF THE CRITICAL ROOT ZONE, ROOT PRUNE ALL EXISTING TREES TO A DEPTH OF 24 INCHES (61CM) BELOW EXISTING GRADE. VERTICAL CUTS SHALL BE MADE WITHIN TWO FEET OF THE LIMIT OF THE GRADING OR EXCAVATION. CONTRACTOR SHALL USE A ROCK SAW, VIBRATORY PLOW, CABLE PULLER, OR SIMILAR MECHANICAL DEVICE OR A SHARPENED SHOVEL, SPADE AND HAND PRUNERS IF DONE MANUALLY. CONTRACTOR SHALL HAVE THE BLADE SHARPENED ON MECHANICAL ROOT PRUNERS BEFORE STARTING THE PROJECT. UPON COMPLETION OF THE CUT, THE CONTRACTOR WILL IMMEDIATELY BACKFILL THE CUT WITH SOIL, AVOIDING ANY AIR POCKETS.
  - 29. ALL CONCRETE SHALL BE CLASS "A" (4,000 P.S.I.) UNLESS OTHERWISE NOTED ON DRAWING OR CITY STANDARD DETAILS. (CLASS "B" CONCRETE SHALL BE 3,000 P.S.I.).
  - 30. THE CONTRACTOR SHALL PROVIDE CUT SHEETS FOR ALL STORMWATER AND/OR SANITARY SEWER INSTALLED PRIOR TO INSTALLATION.



NT NT 

NOTES

9/3/19 DRAWN: GMH CHECKED: CHATT REVISIONS



TN REGISTRATION NO. 114738 SHEET NUMBER:

UTILITY OWNER PHONE NO. CONTACT **ADDRESS** CITY STATE | ZIP CODE CITY OF CHATTANOOGA DEPARTMENT 1250 MARKET ST, STE. CHATTANOOGA | TN | 37402 TRAFFIC SIGNAL 423-643-5950 TOMMY TROTTER TRANSPORTATION TELEPHONE BELLSOUTH dba AT&T 423-266-5962 | STEVE McCORMICK | 300 E. M.L.K. BOULEVARD | CHATTANOOGA | TN | 37403 TENNESSEE AMERICAN WATER 423-771-4713 GRADY STOUT P.O. BOX 6338 CHATTANOOGA | TN | 37401 CITY OF CHATTANOOGA WASTE RESOURCES | 423-757-5026 DISPATCH 455 MOCCASIN BEND ROAD | CHATTANOOGA | TN | 37405 GAS CHATTANOOGA GAS COMPANY 423-490-4289 BENNIE KINSEY 6125 PRESERVATION DRIVE | CHATTANOOGA | TN | 37416 POWER ELECTRIC POWER BOARD 423-648-1372 | DAVID HENDERSON P.O. BOX 182255 CHATTANOOGA TN 37422 CABLE TV COMCAST CABLE TELEVISION 2030 EAST POLYMER DRIVE | CHATTANOOGA | TN | 37421 423-855-4300 GEOFF SHOOK RAILROAD (TVRM) CHATTANOOGA TN 37421 TENNESSEE VALLEY RAILROAD MUSEUM 423-605-2331 | GEORGE WALKER 4119 CROMWELL RD 1250 MARKET ST, STE. STORMWATER CITY OF CHATTANOOGA PUBLIC WORKS 423-643-6311 CHATTANOOGA TN 37402

**UTILITY OWNERS** 

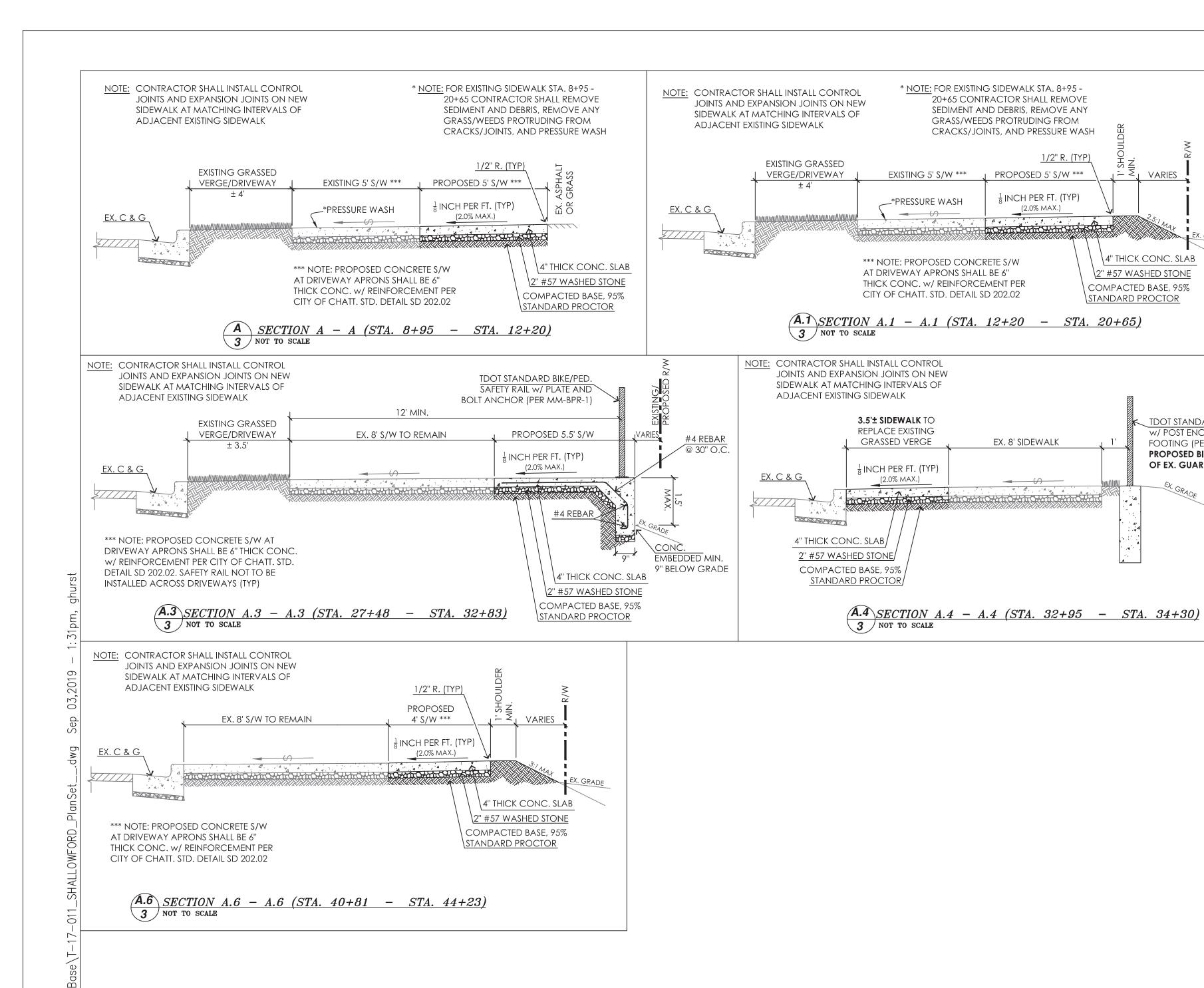
CITY OF CHATTANOOGA FIRE DEPARTMENT | 423-643-5622 | MICHAEL WRIGHT

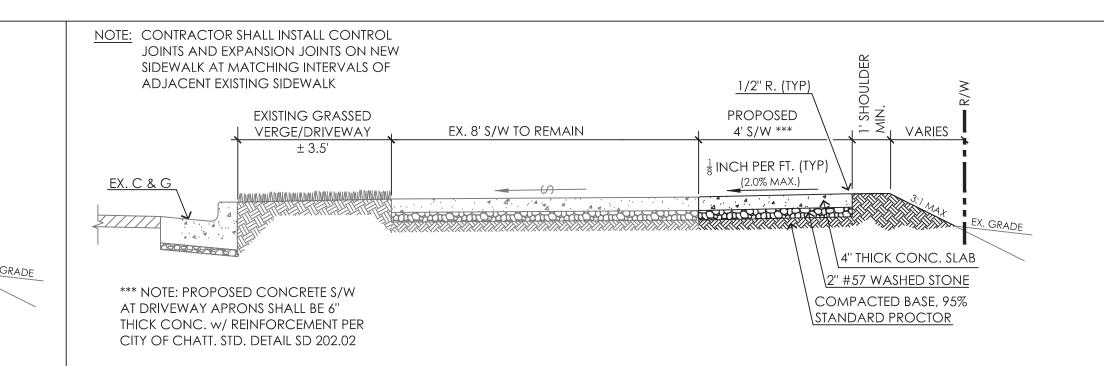
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VARIES

\4" THICK CONC. SLAB

TDOT STANDARD BIKE/PED. SAFETY RAIL

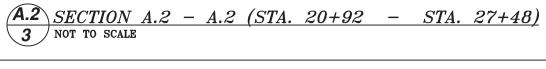
FOOTING (PER MM-BPR-1) (TERMINATE

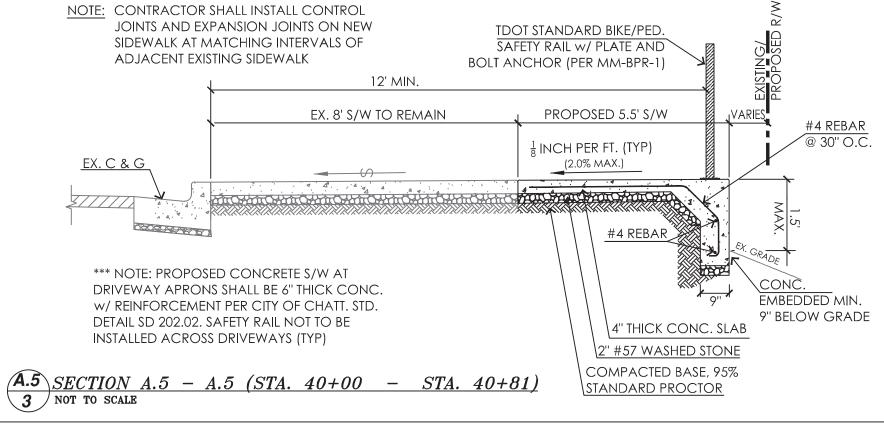
PROPOSED BIKE/PED. RAIL AT BEGINNING

W/ POST ENCASED IN CONCRETE

OF EX. GUARDRAIL AT STA. 33+40)

\2" #57 WASHED STONE







CITY OF

CHATTANOOGA

DEPARTMENT OF

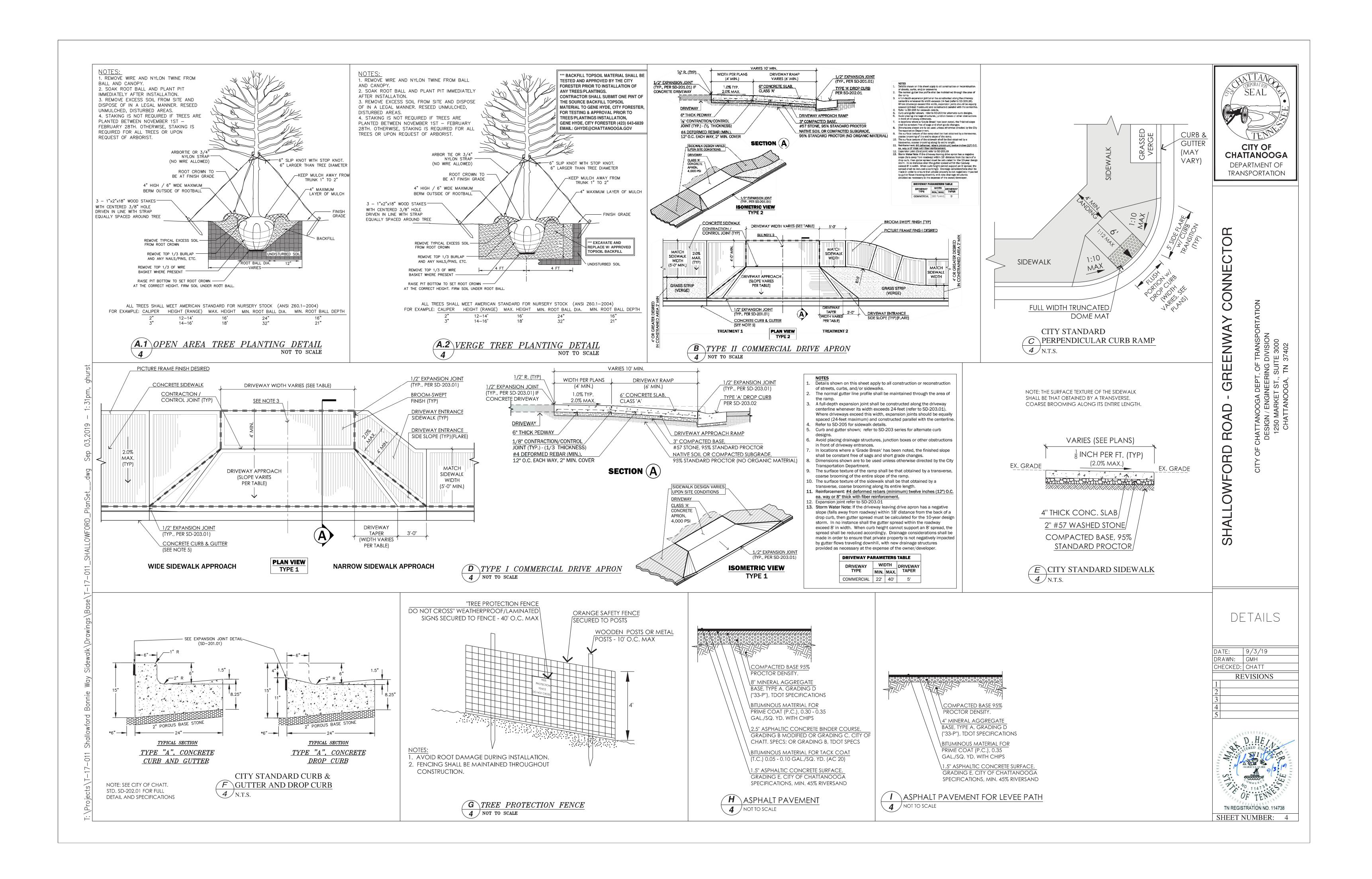
TRANSPORTATION

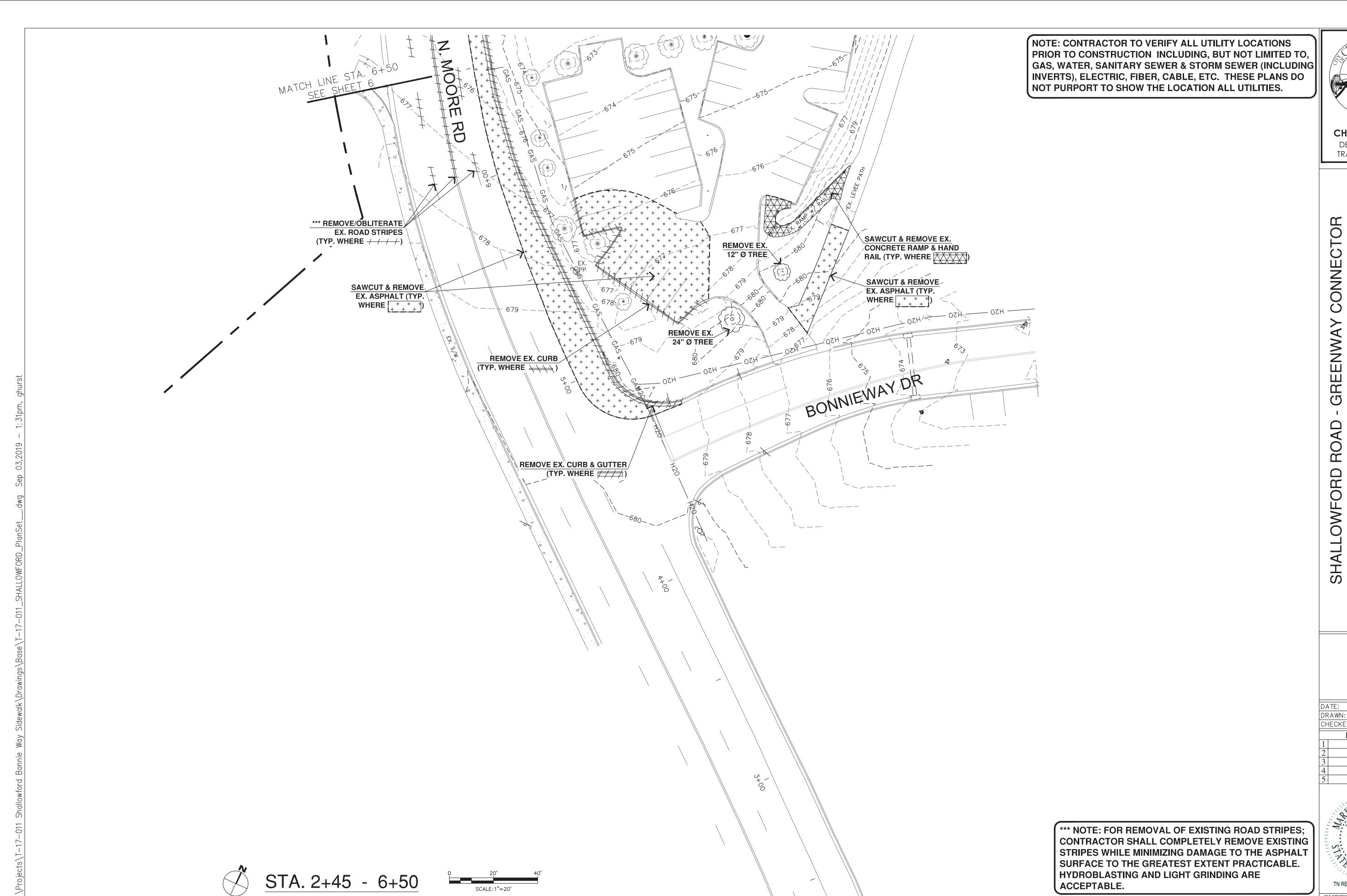
DATE: 9/3/19 DRAWN: GMH CHECKED: CHATT REVISIONS TN REGISTRATION NO. 114738 SHEET NUMBER: 3

TYPICAL

SECTIONS

SHALL



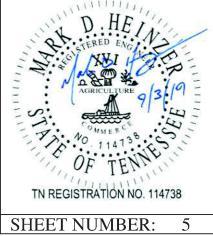


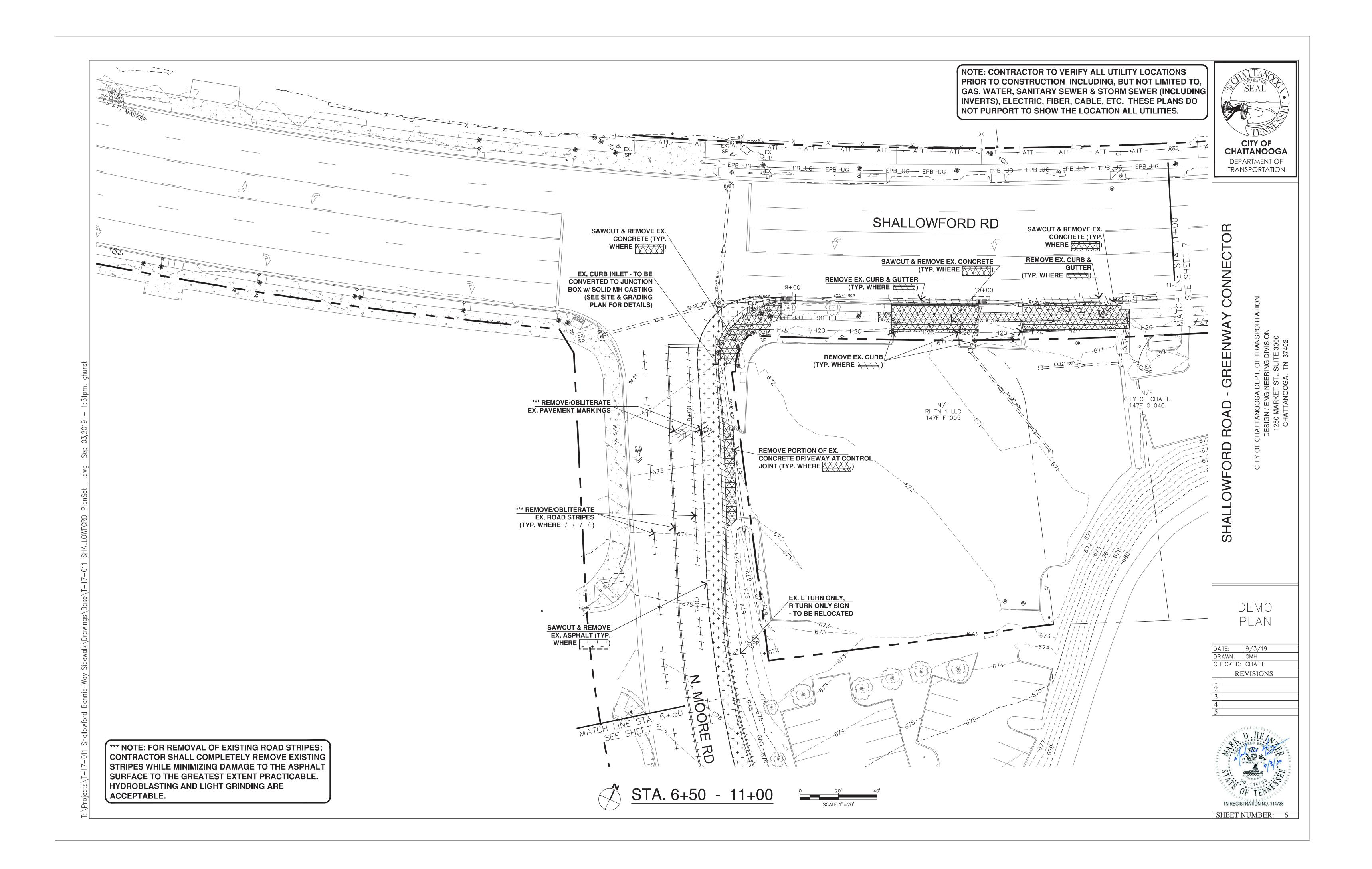
CITY OF CHATTANOOGA DEPARTMENT OF TRANSPORTATION

DEMO PLAN

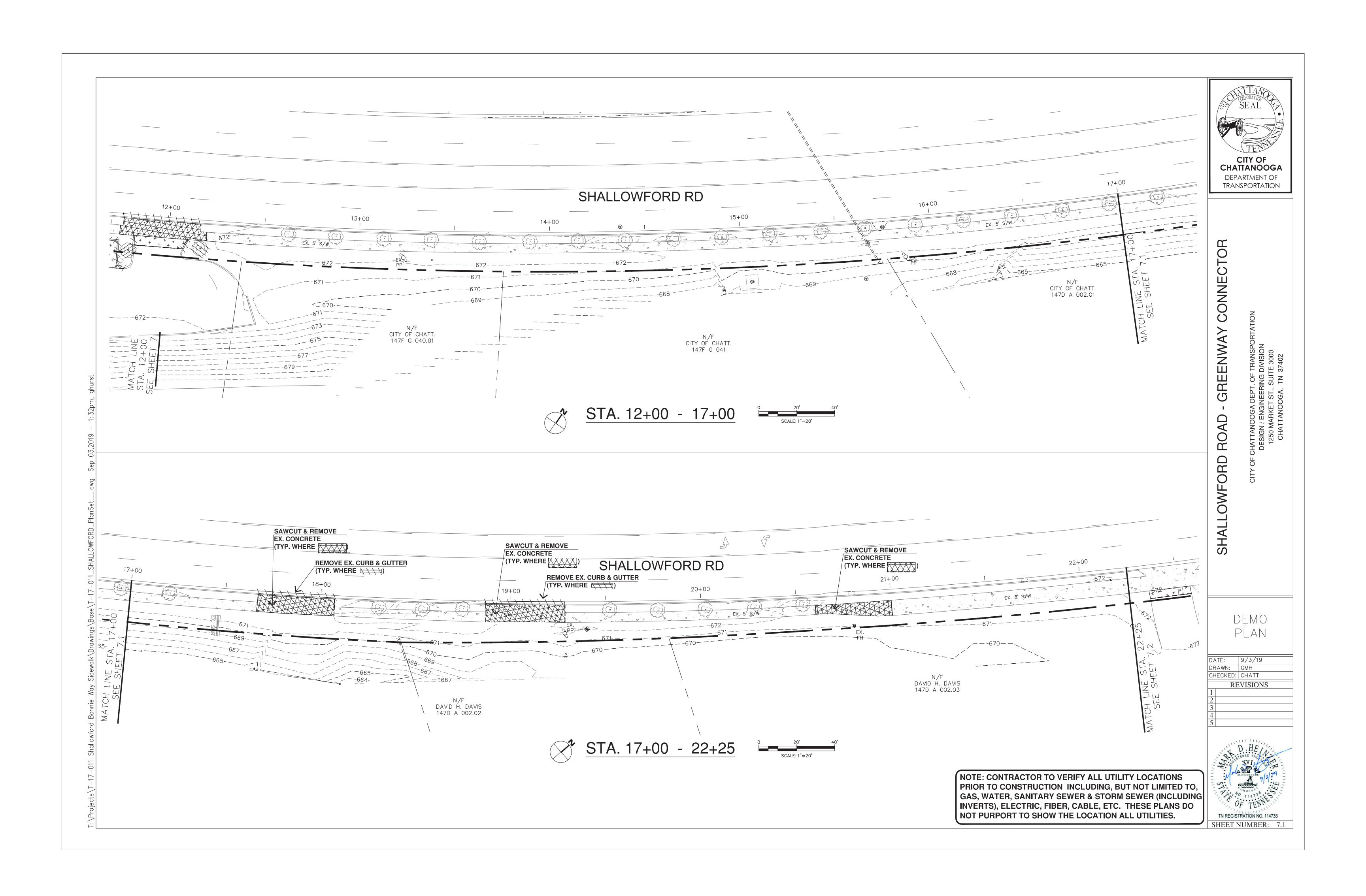
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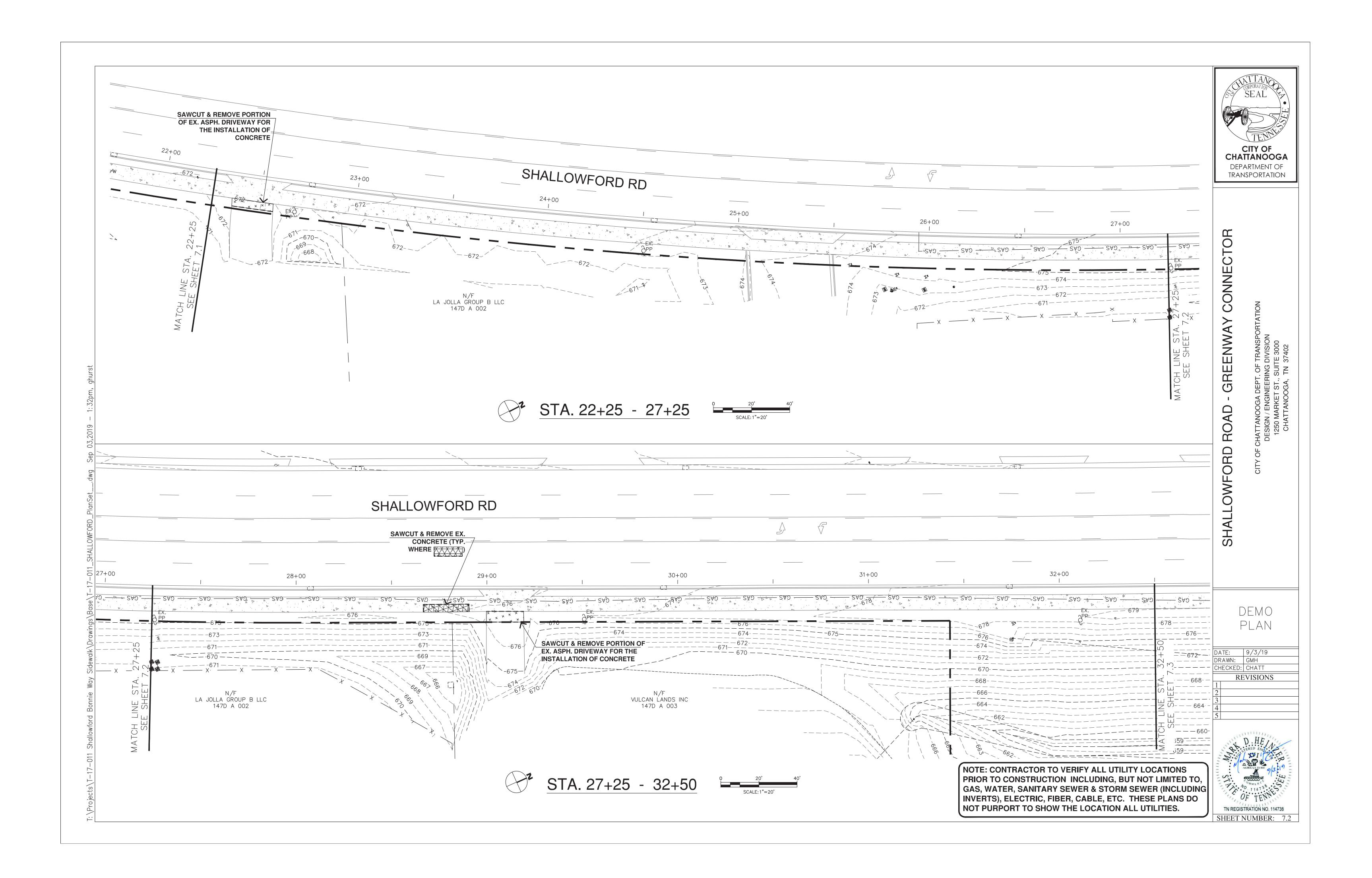
REVISIONS

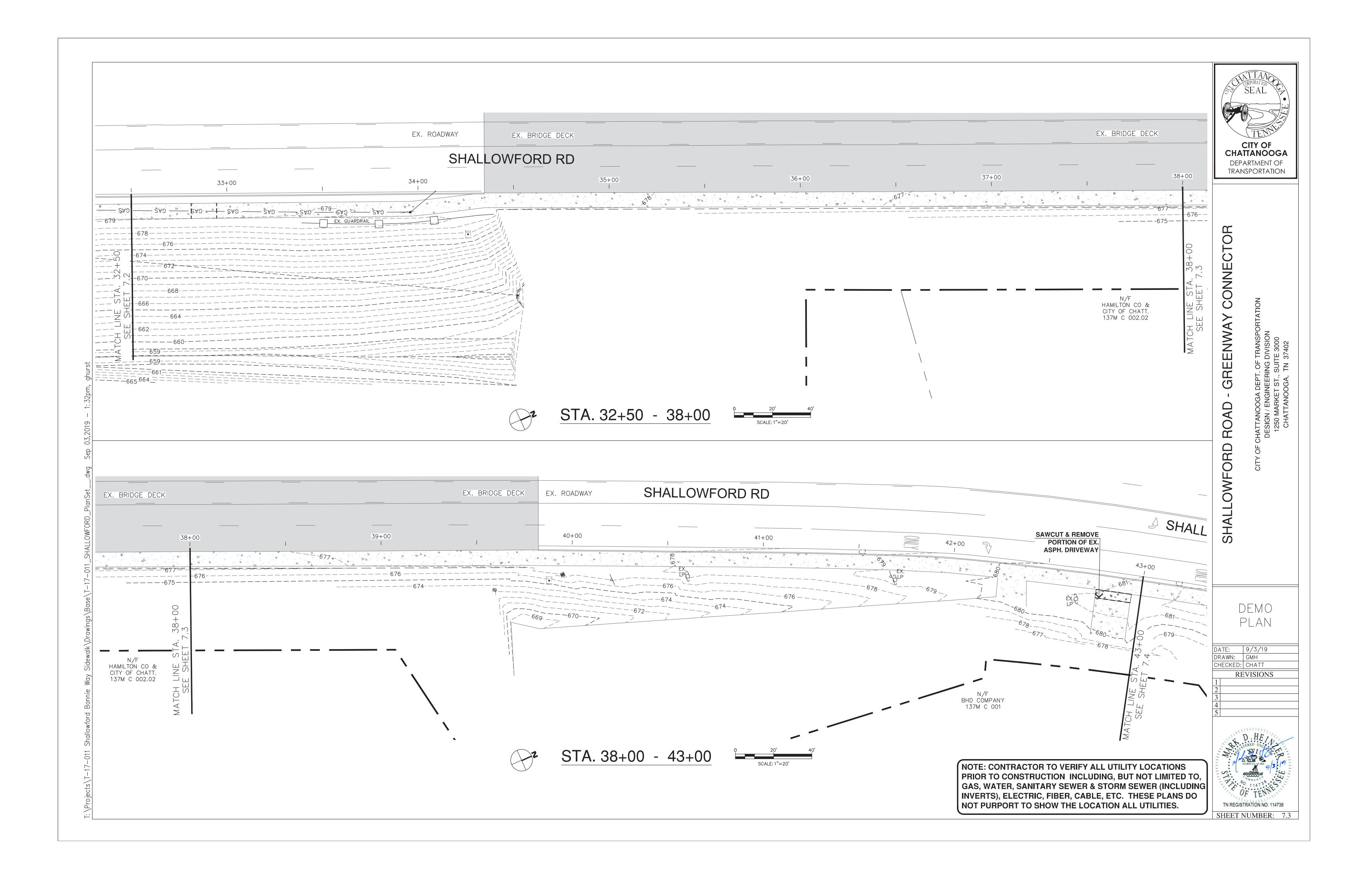


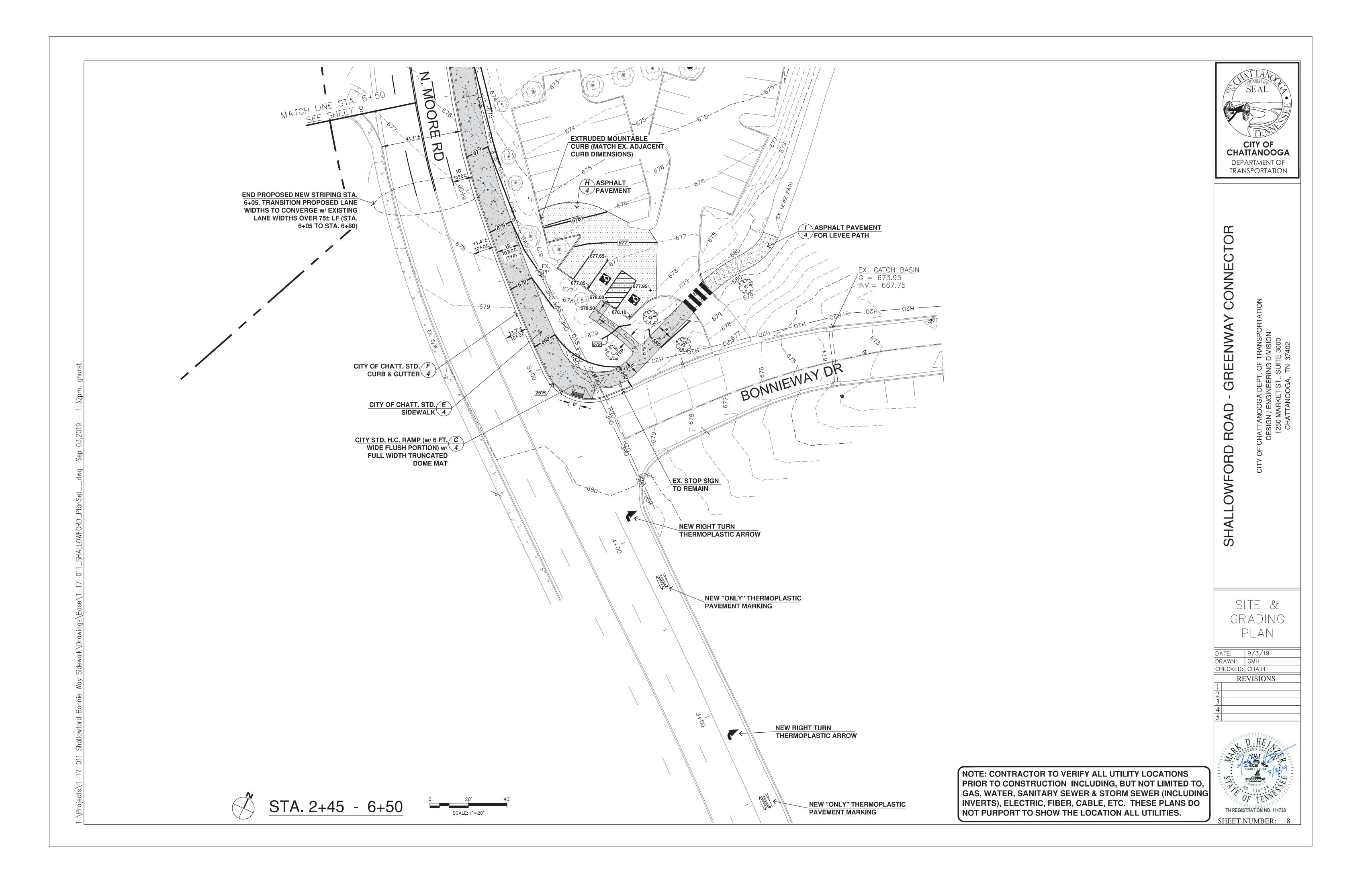


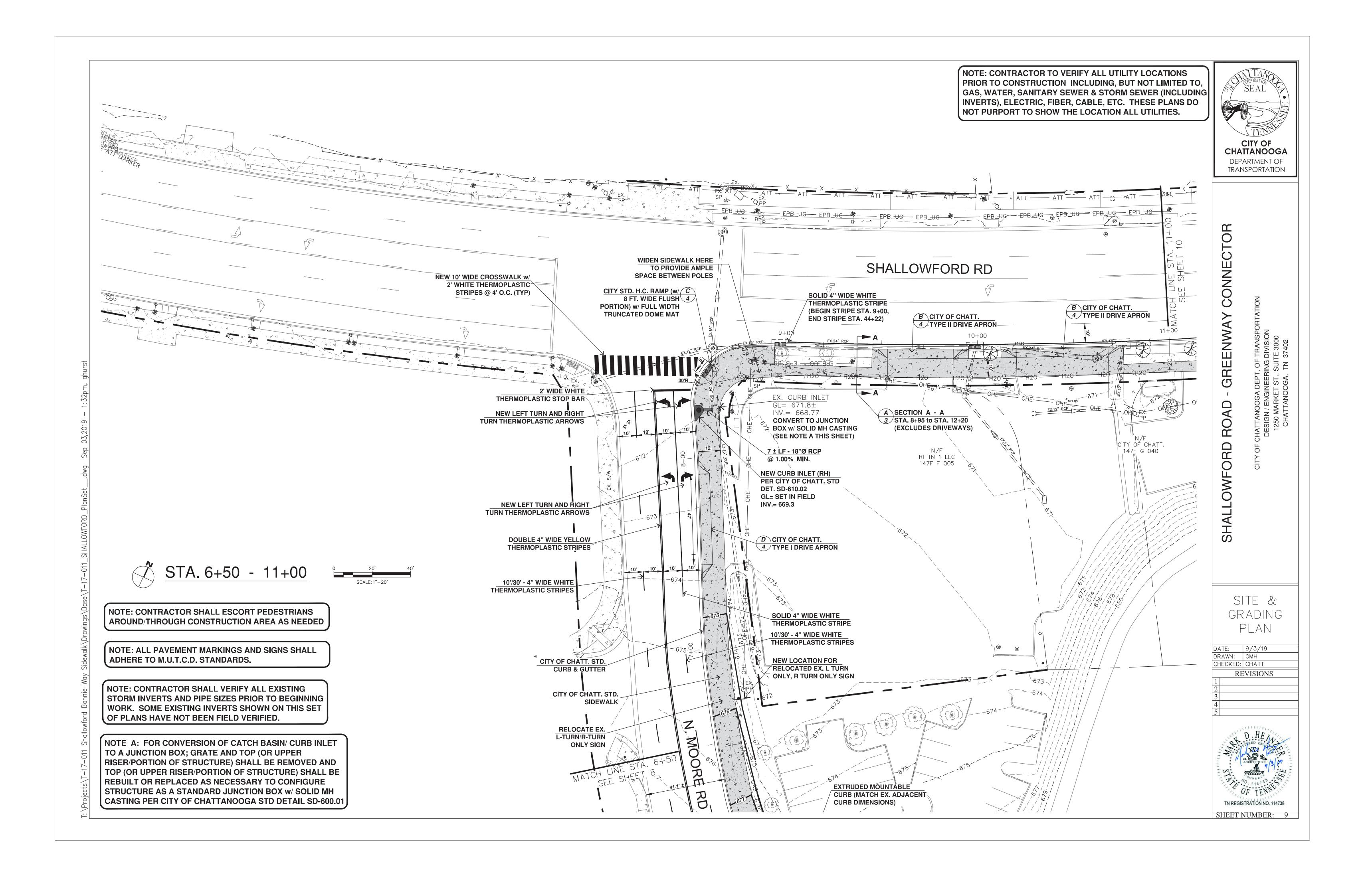
NOTE: CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, GAS, WATER, SANITARY SEWER & STORM SEWER (INCLUDING INVERTS), ELECTRIC, FIBER, CABLE, ETC. THESE PLANS DO NOT PURPORT TO SHOW THE LOCATION ALL UTILITIES. CITY OF CHATTANOOGA DEPARTMENT OF TRANSPORTATION ONNEC GREENWAY **SAWCUT & REMOVE EX.** CONCRETE (TYP. REMOVE EX. CURB & GUTTER (TYP. WHERE (TYP. WHERE) SAWCUT & REMOVE EX. CONCRETE (TYP.) REMOVE EX. TREE **SAWCUT & REMOVE REMOVE EX. CURB &** EX. ASPHALT (TYP. GUTTER ORD 12+00 \_(TYP. WHERE 💢 )\_ SHALL REMOVE EX. CURB SAWCUT & REMOVE (TYP. WHERE ////) EX. ASPHALT (TYP. SAWCUT & REMOVE EX. CONCRETE (TYP. WHERE REMOVE EX. CURB (TYP. WHERE ////) CITY OF CHATT. 147F G 040 DEMO PLAN DATE: 9/3/19
DRAWN: GMH EX. LEVEE S/W, S. CHICK. GREENWAY/ CHECKED: CHATT REVISIONS STA. 11+00 - 12+00 TN REGISTRATION NO. 114738 SHEET NUMBER: 7

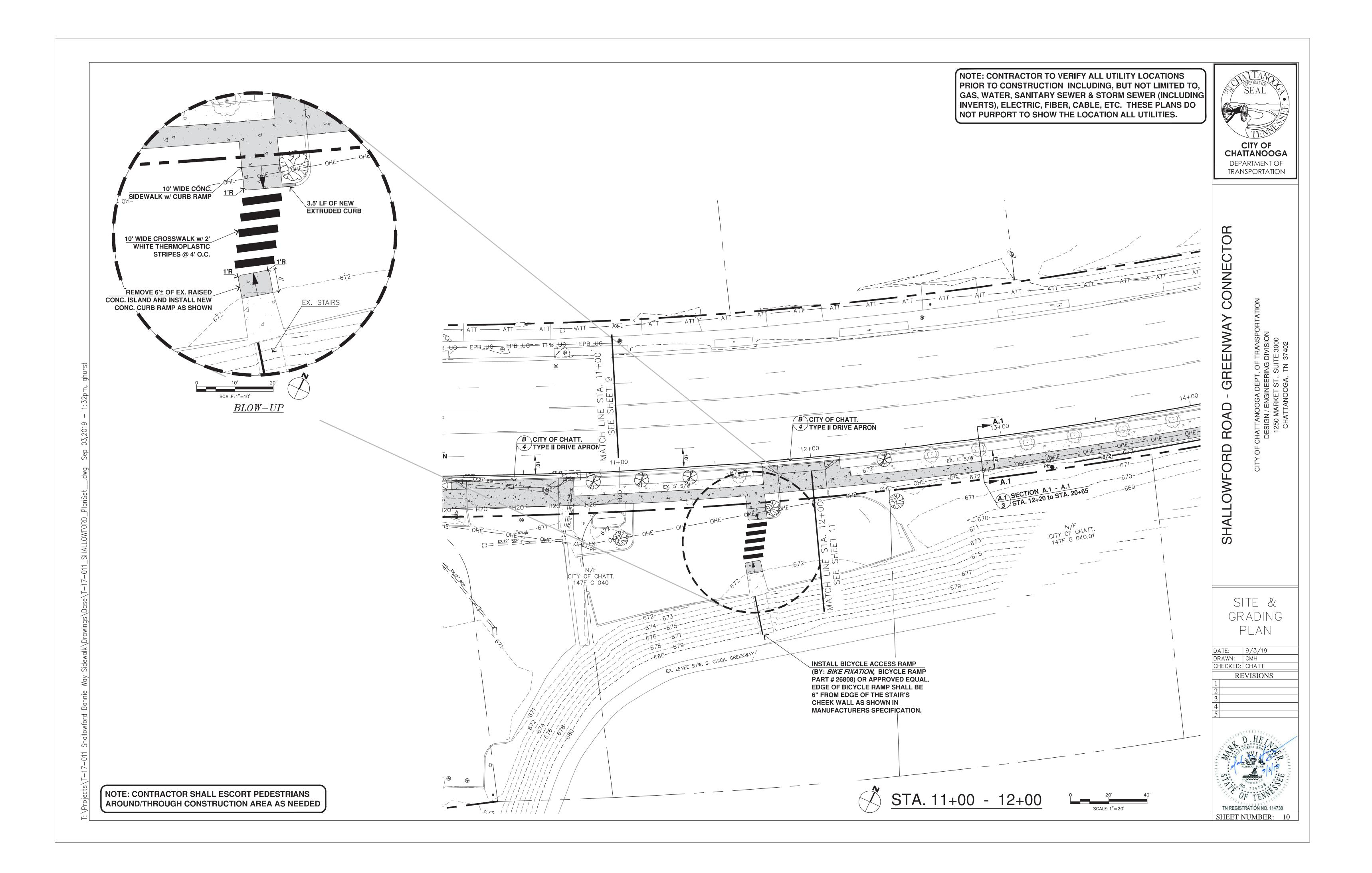


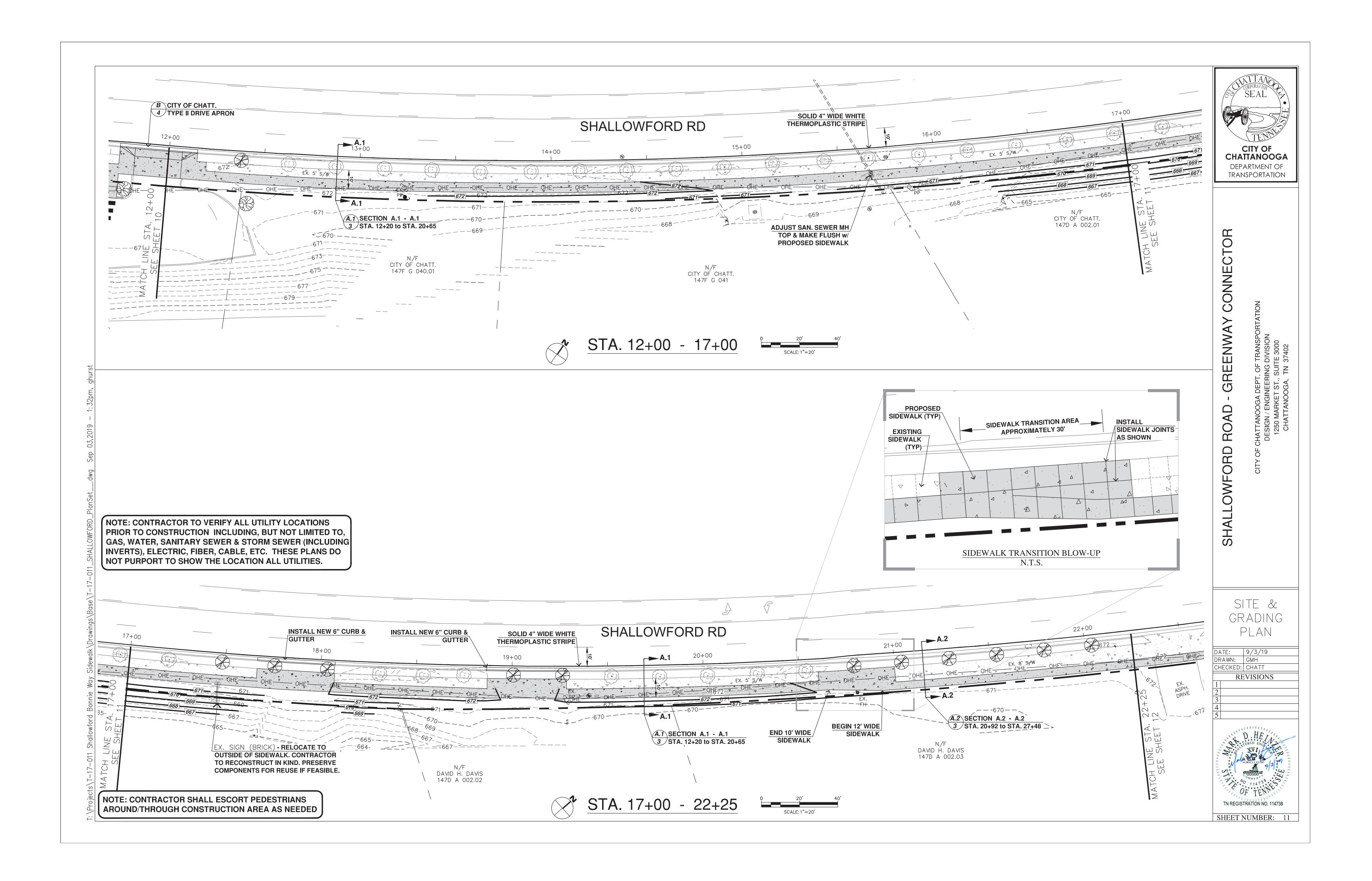


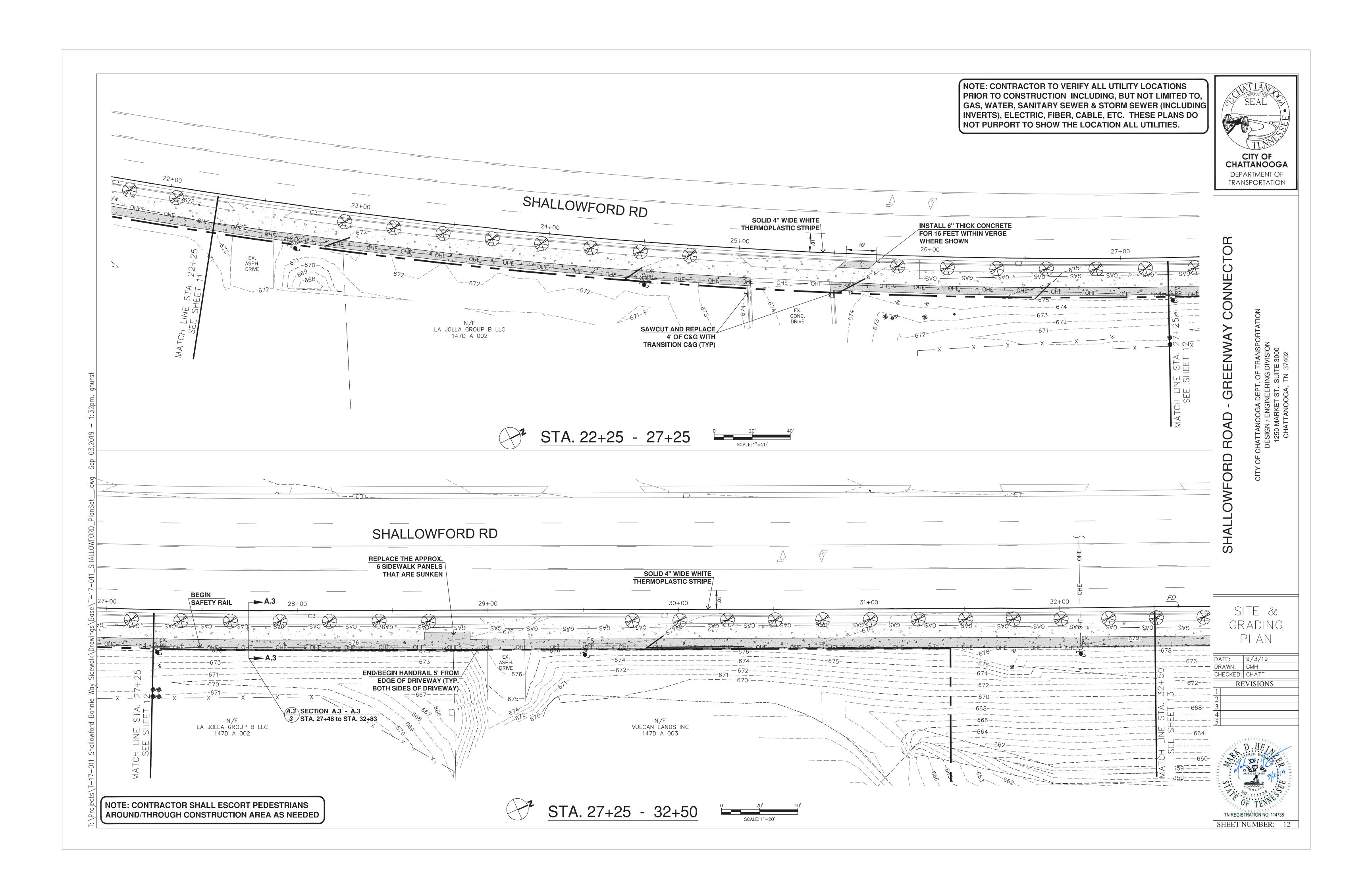


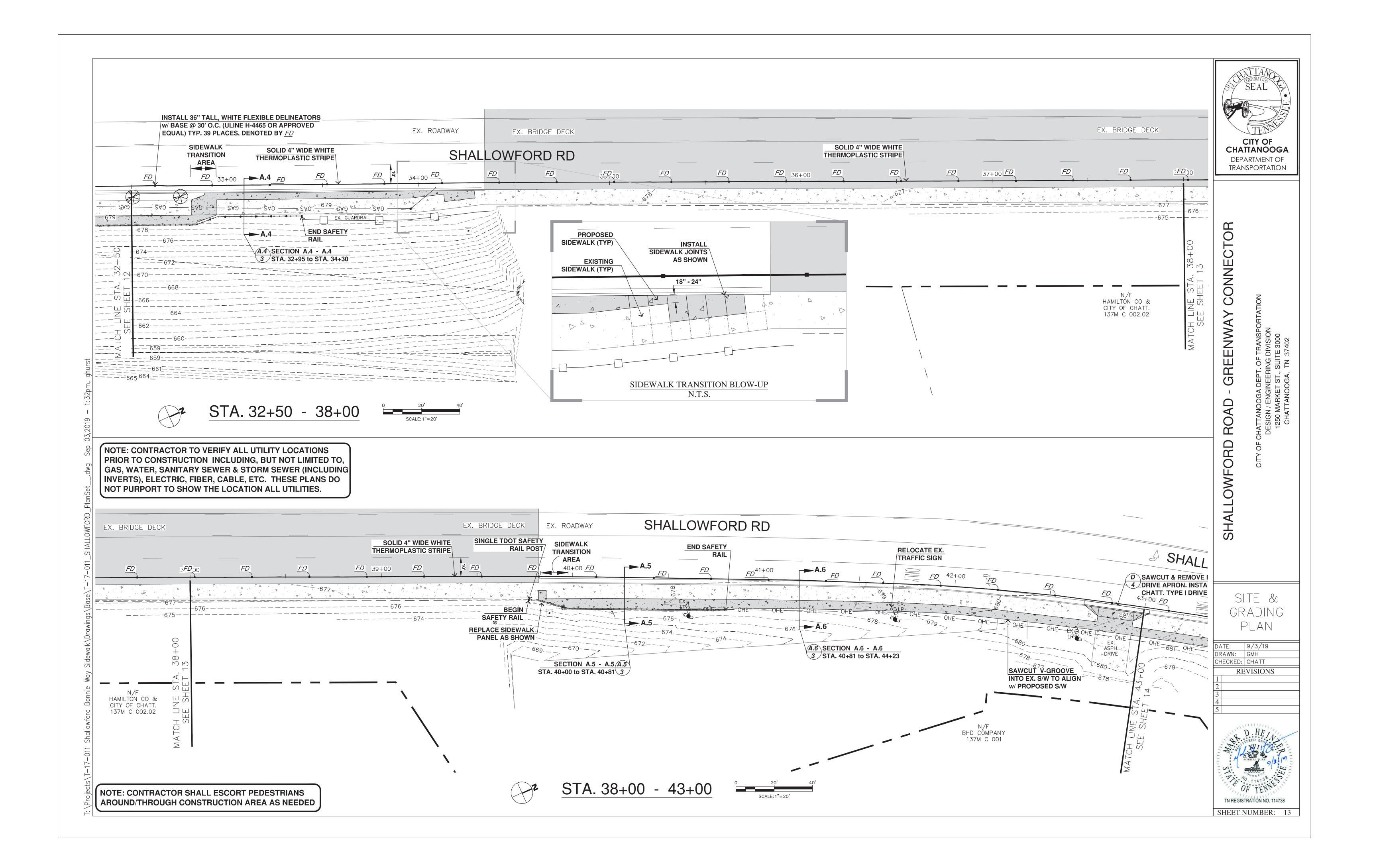


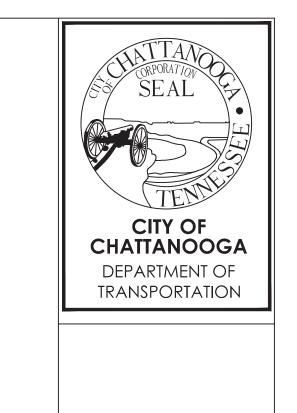












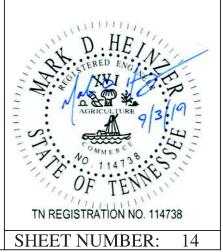
SHALLOWFORD ROAD - GREENWAY CONNECTOR

SITE & GRADING PLAN

DATE: 9/3/19
DRAWN: GMH
CHECKED: CHATT

REVISIONS

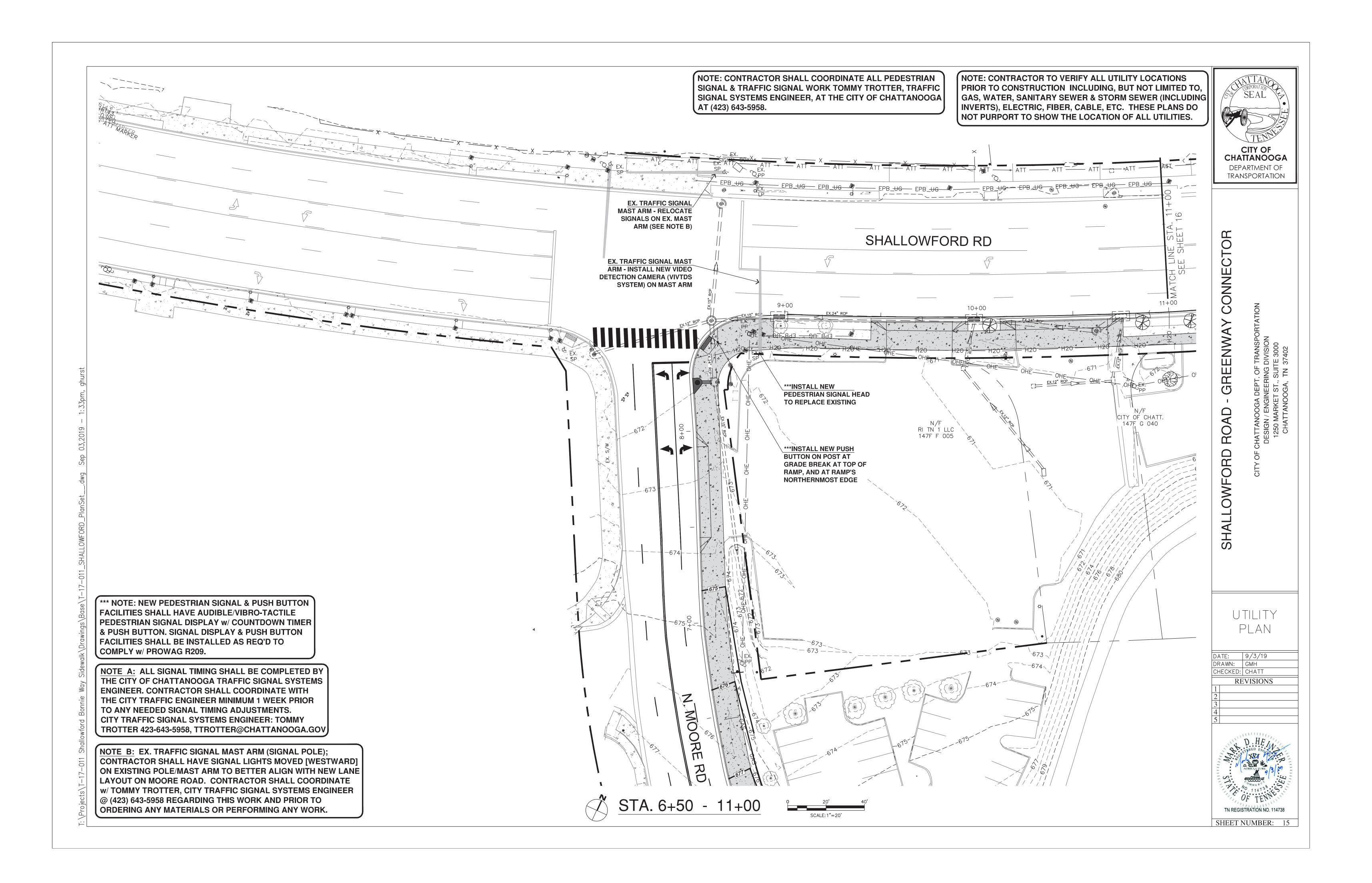
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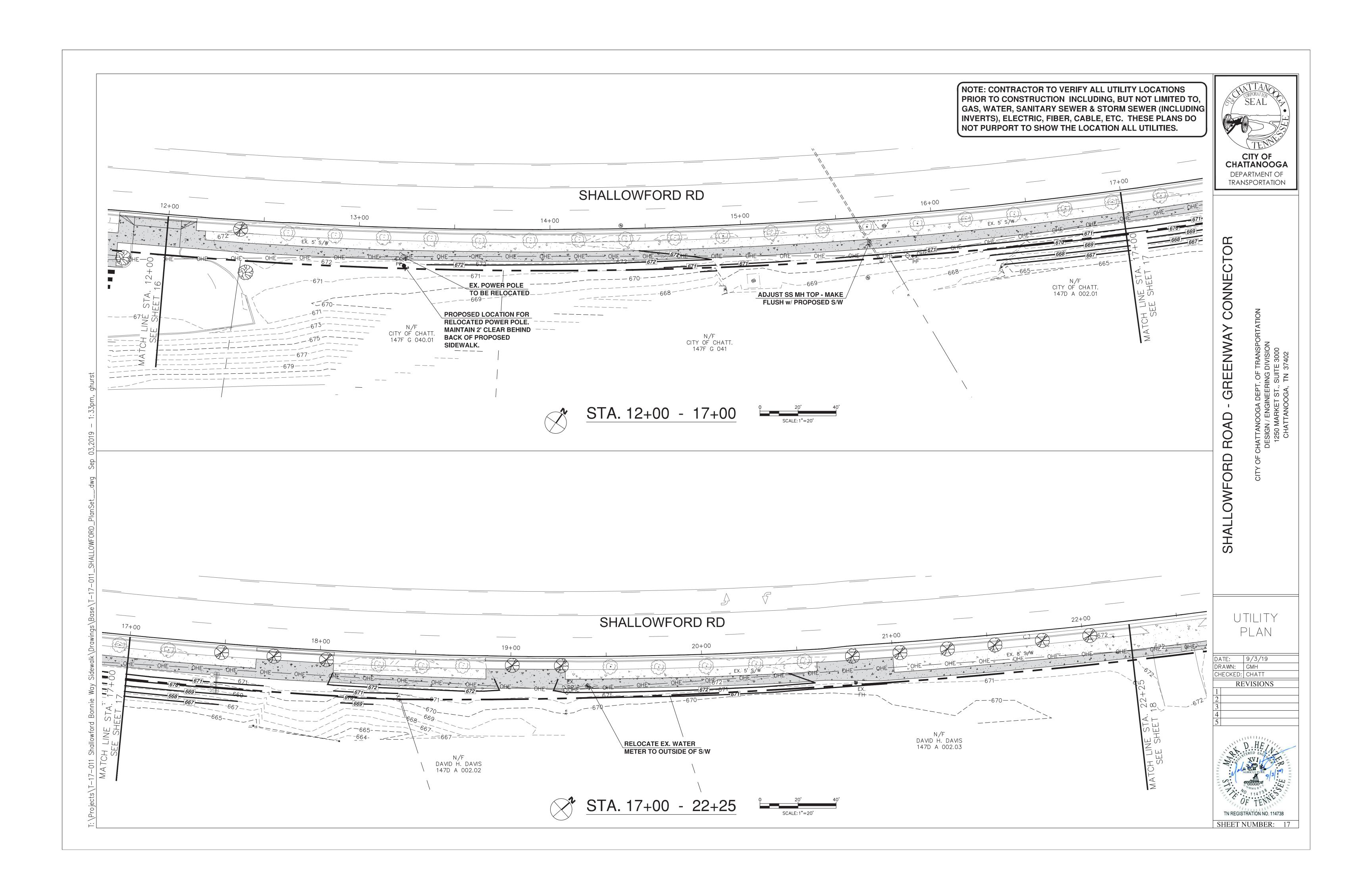


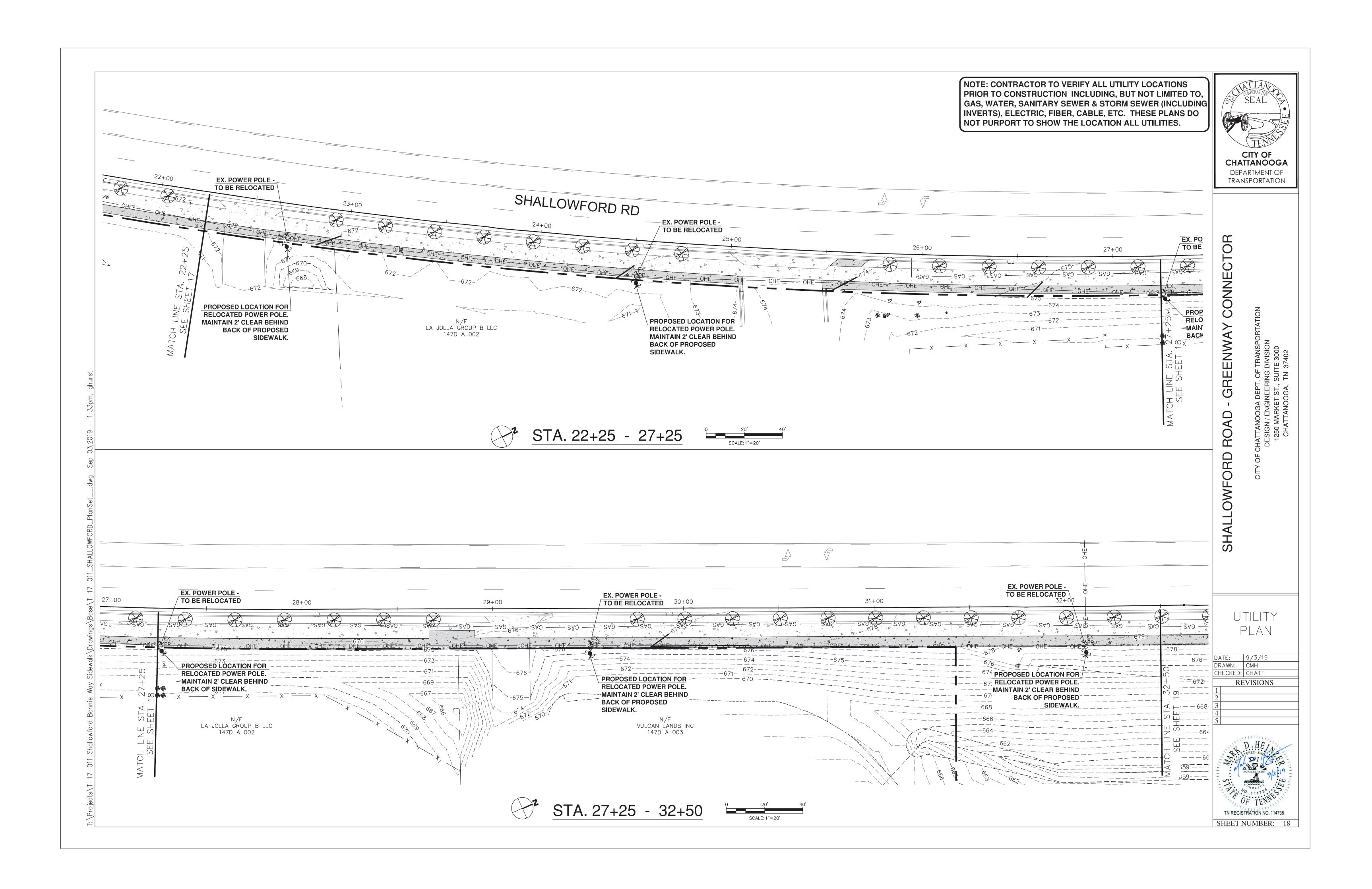
SHALLOWFORD RD

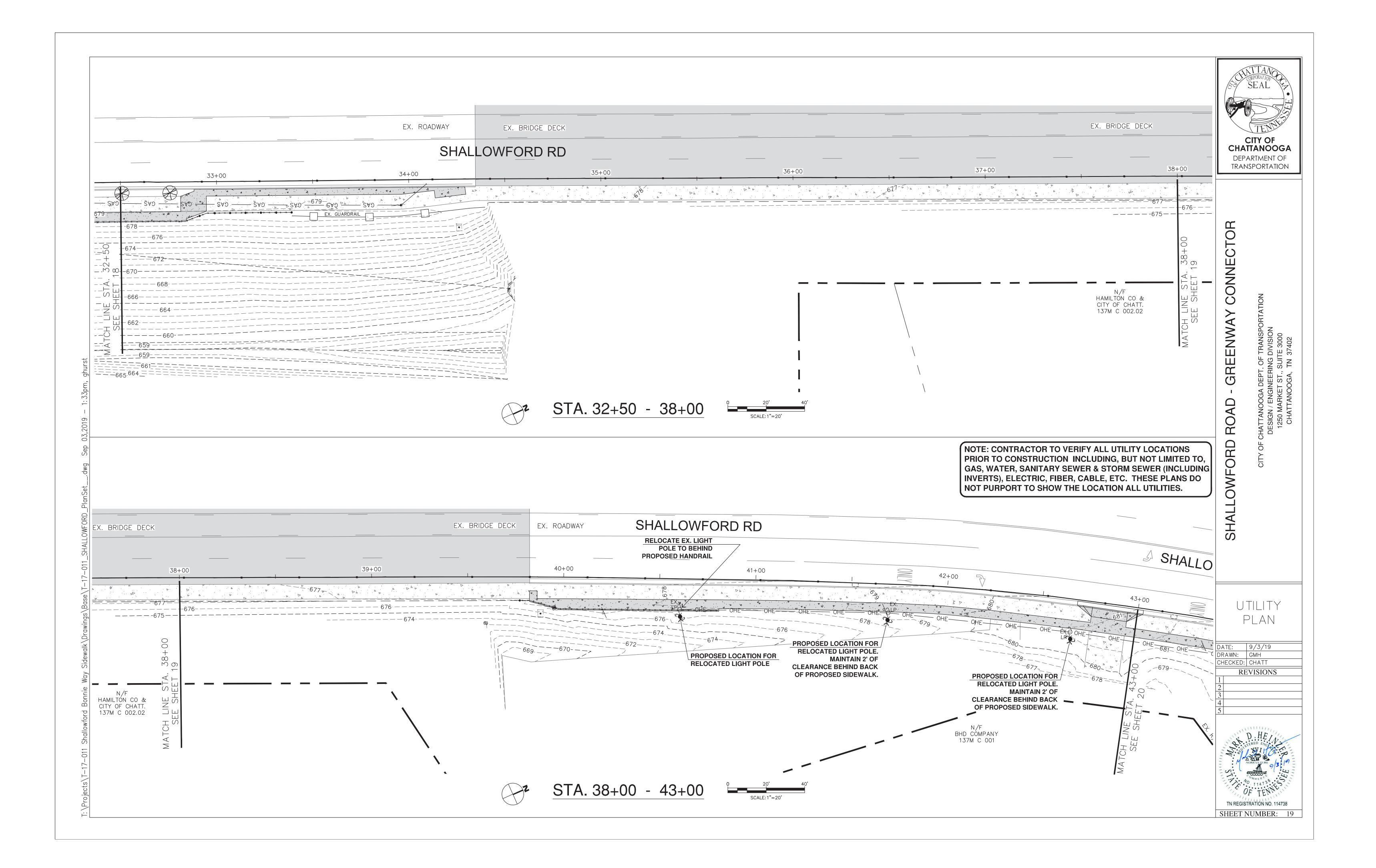
NOTE: CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, GAS, WATER, SANITARY SEWER & STORM SEWER (INCLUDING INVERTS), ELECTRIC, FIBER, CABLE, ETC. THESE PLANS DO NOT PURPORT TO SHOW THE LOCATION ALL UTILITIES.

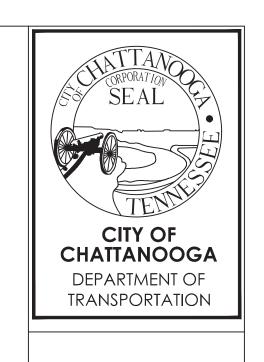
NOTE: CONTRACTOR SHALL ESCORT PEDESTRIANS AROUND/THROUGH CONSTRUCTION AREA AS NEEDED









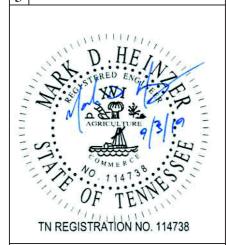


SHALLOWFORD ROAD - GREENWAY CONNECTOR

UTILITY PLAN

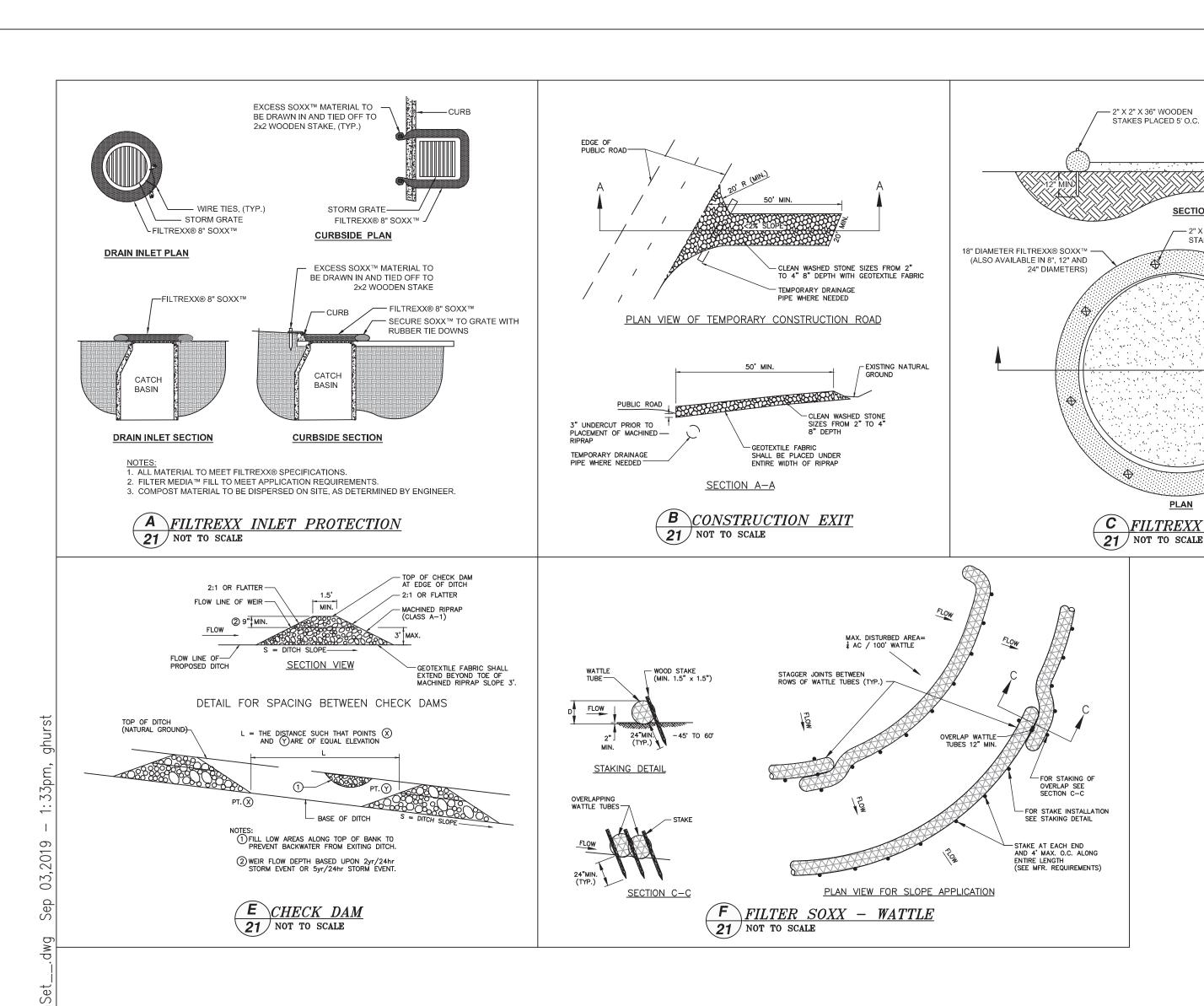
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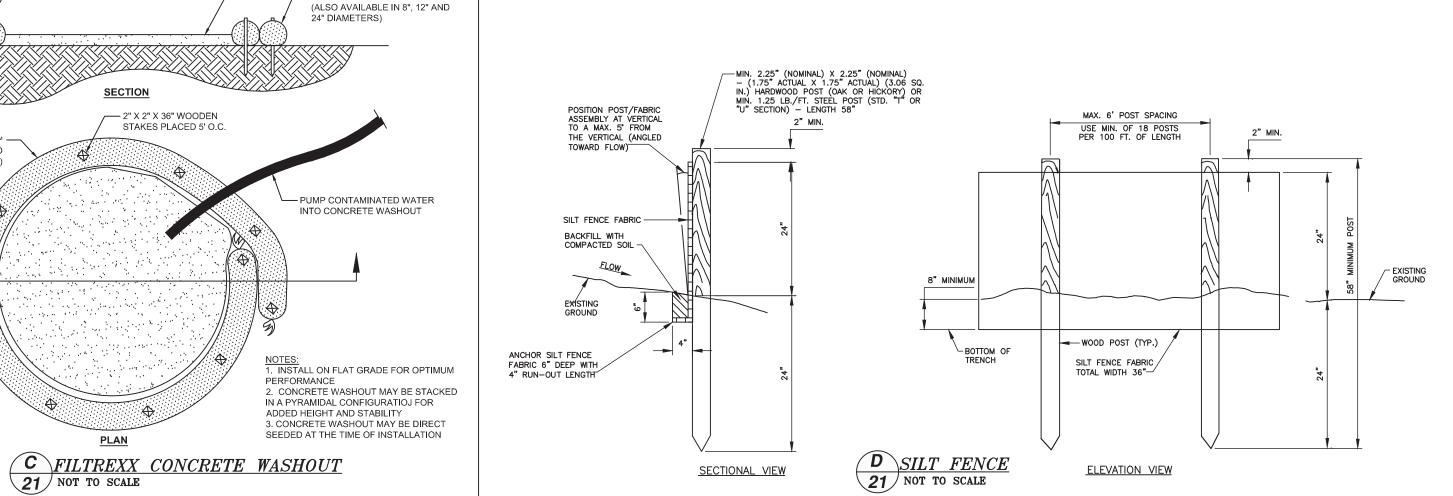
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SHEET NUMBER: 20

NOTE: CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, GAS, WATER, SANITARY SEWER & STORM SEWER (INCLUDING INVERTS), ELECTRIC, FIBER, CABLE, ETC. THESE PLANS DO NOT PURPORT TO SHOW THE LOCATION ALL UTILITIES.





MAXIMUM DEPTH OF CONTAMINATED WATER

IS 50% OF CONCRETE WASHOUT HEIGHT



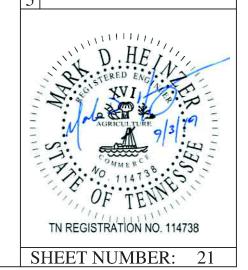
CITY OF

CHATTANOOGA

30

SHALLOWFOF EROSION CONTROL DETAILS

DATE: 9/3/19
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#### DISTURBED AREA

(6) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

(7) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE/DURING A PRECIPITATION EVENT.

(8) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFFSITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE NEGOTIATED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

(9) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE

PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES. (10) THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER DISCHARGED SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.

(11) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT NATURAL RESOURCES AND WATER QUALITY SHALL BE MAINTAINED THROUGHOUT THE (48) CONTRACTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG NATURAL RESOURCES IN CLEARED WASH DOWN CAREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS, WETLANDS OR OTHER NATURAL FEATURES IN PROPER SETTING ACCORDANCE WITH TDOT STANDARDS. EPSC MEASURES SHALL BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(12) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.

(13) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.

(14) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM

NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING. (15) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CULVERT CROSSINGS SHALL BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES SHALL BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK SHALL BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS SHALL BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO PREEXISTING ELEVATIONS. ALL TEMPORARY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (E.G. BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

(16) HEAVY EQUIPMENT WORKING IN WETLANDS WITH PERMITTED TEMPORARY IMPACTS SHALL BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE AND COMPACTION UNLESS SPECIFICALLY ADDRESSED IN THE CONSTRUCTION PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT SHALL BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.

(17) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.

(18) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.

#### EROSION PREVENTION

(32) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.

(33) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

(34) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN.

(35) TEMPORARY STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 14 CALENDAR DAYS. PERMANENT STABILIZATION MEASURES IN DISTURBED AREAS SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY PHASE OF CONSTRUCTION.

(36) STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT.

(37) PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.

(38) TEMPORARY OR PERMANENT STABILIZATION MUST BE FREE OF FINES (SILT AND CLAY SIZED PARTICLES). UNPACKED GRAVEL CONTAINING FINES OR CRUSHER-RUN WILL NOT BE CONSIDERED SUFFICIENT

(39) DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED.

#### **PERMITS, PLANS & RECORDS**

(40) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE ENGINEER PRIOR TO THE USE OF THE PERMITTED AREA(S).

(41) ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE ENGINEER SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

(42) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENGINEER SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ENGINEER SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(43) THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

(44) ALL WATER QUALITY PERMITS SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BRIEF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

#### GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

(46) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.

(47) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.

(48) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL

(49) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.

(50) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

(51) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.

(52) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.

(53) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

(54) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

(55) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.

(56) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.

(57) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S), CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

#### SUPPORT ACTIVITIES

(58) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

#### STREAMS, WETLANDS & BUFFER ZONES

(59) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION.



OAD - GREENWAY CONNECT
TTANOOGA DEPT. OF TRANSPORTATION

EROSION CONTROL DETAILS

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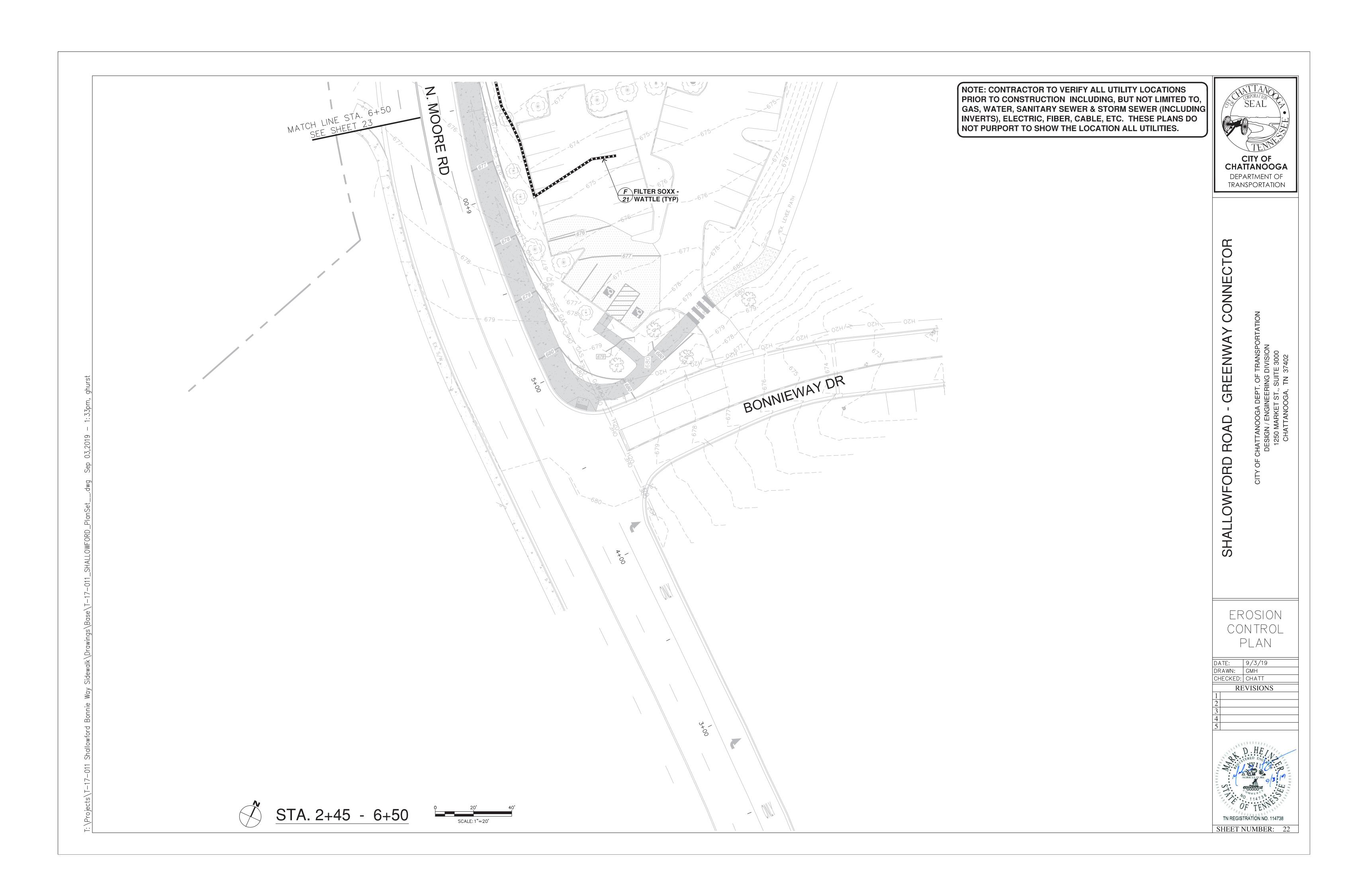


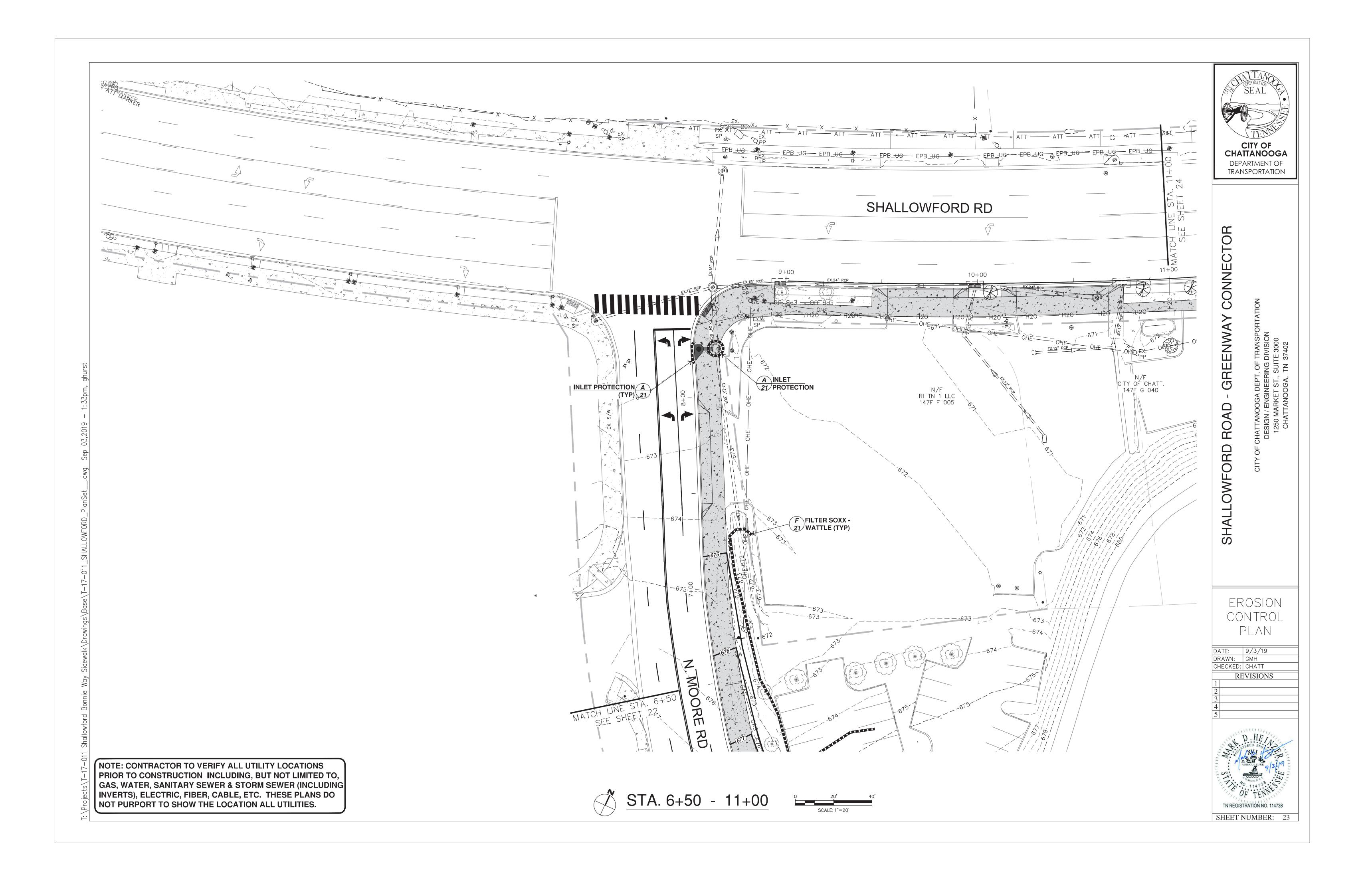
TN REGISTRATION NO. 114738

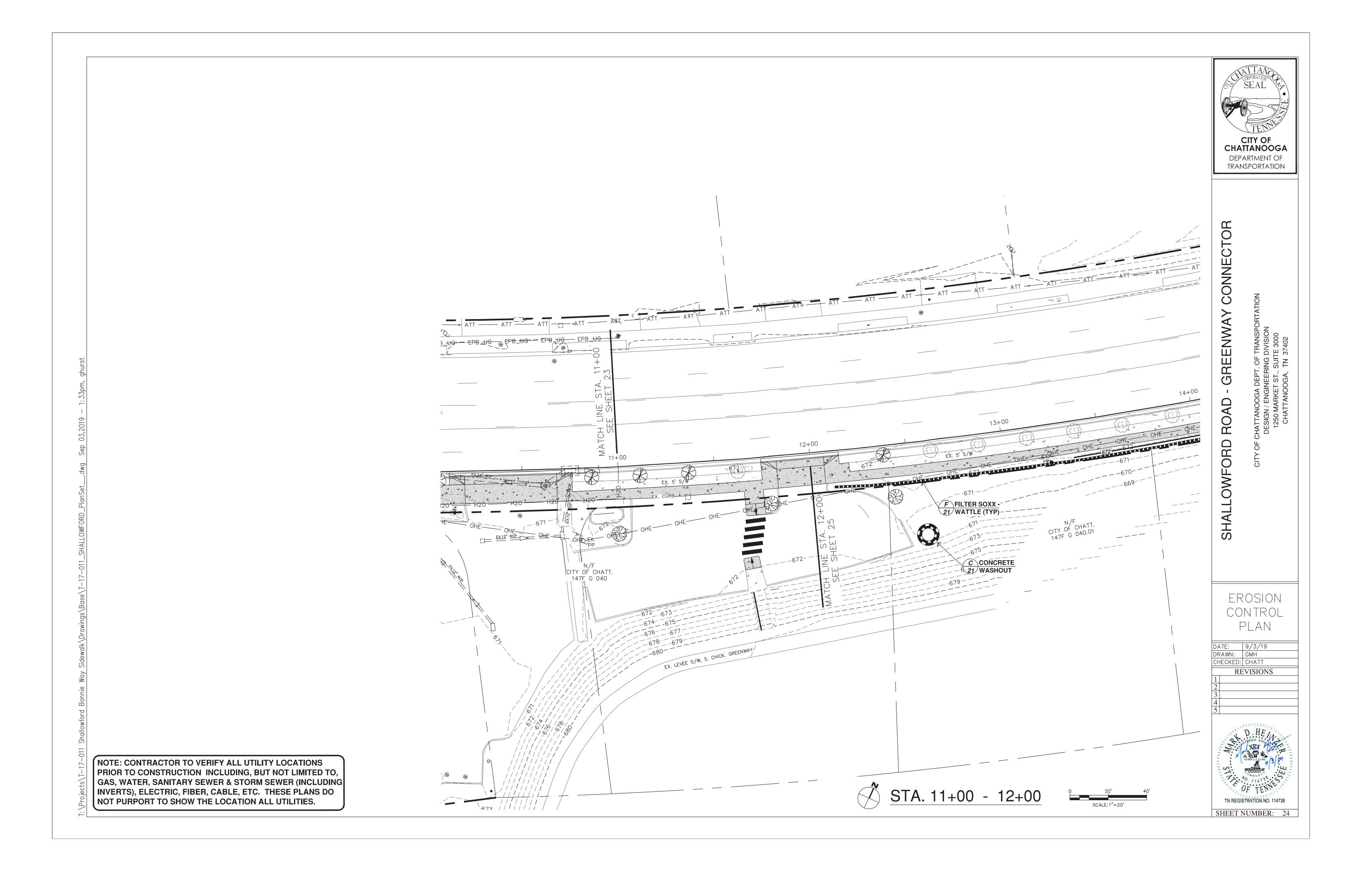
SHEET NUMBER: 21

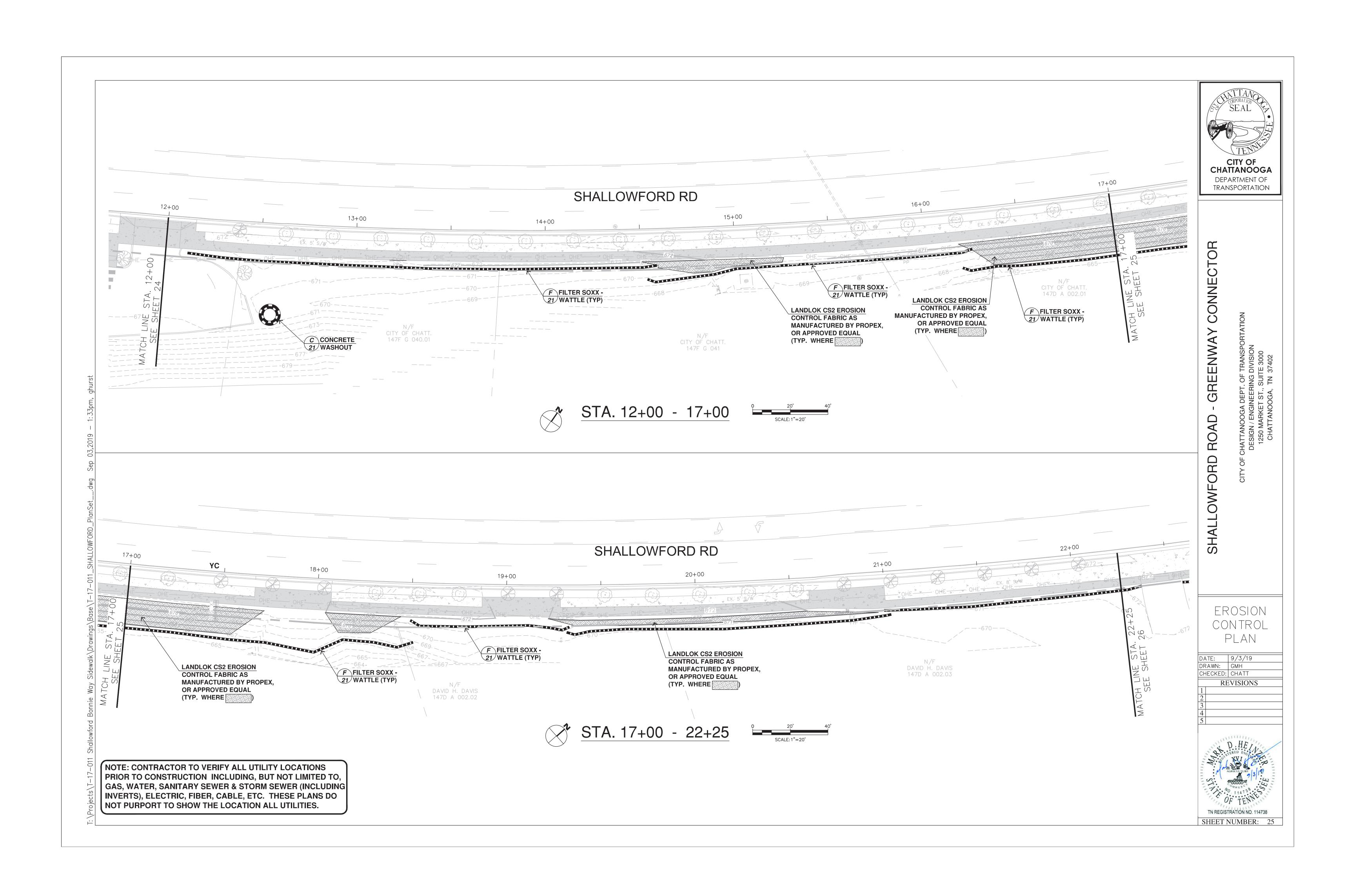
OWFORD ROAD

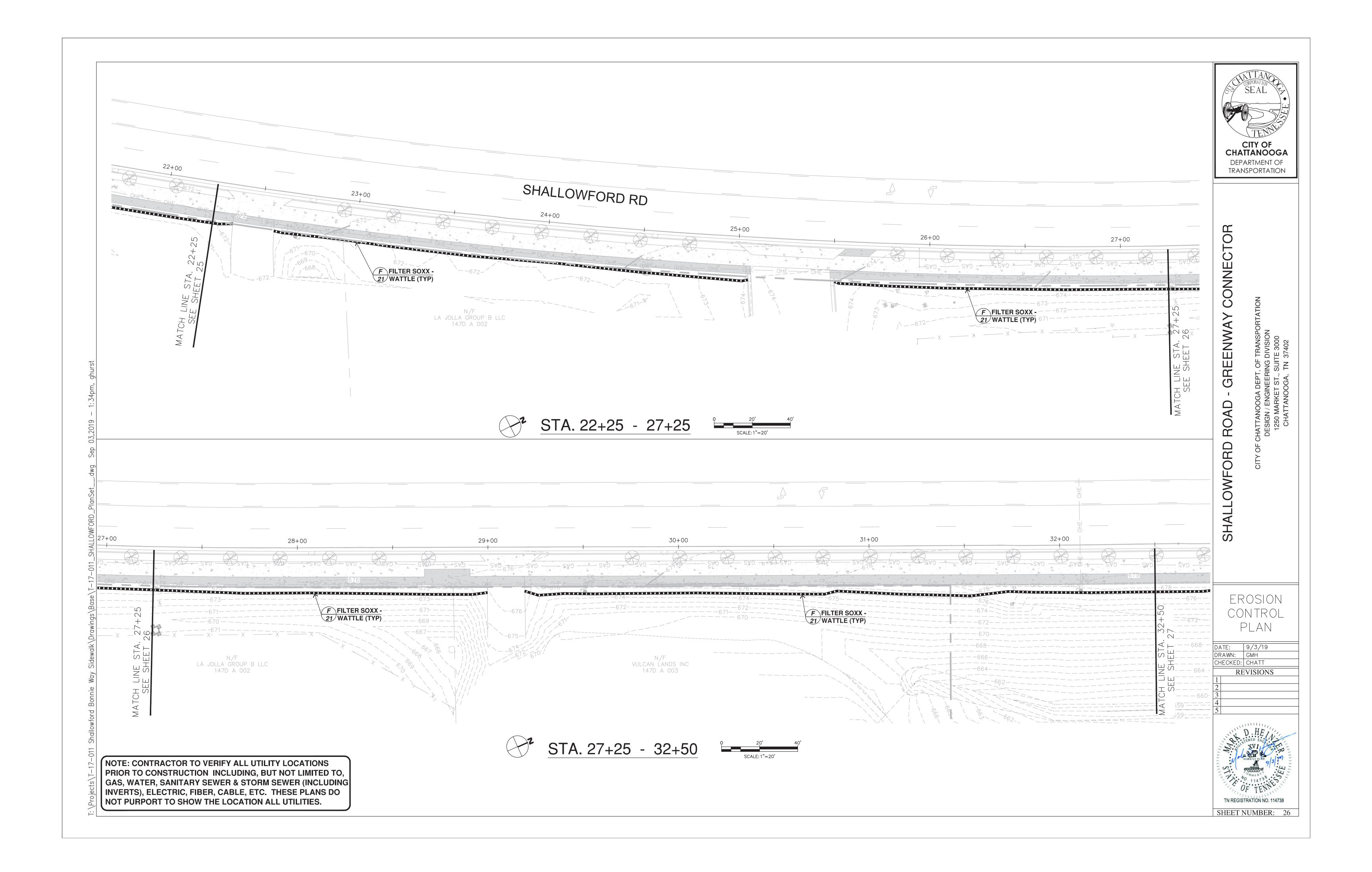
SHALLOWF

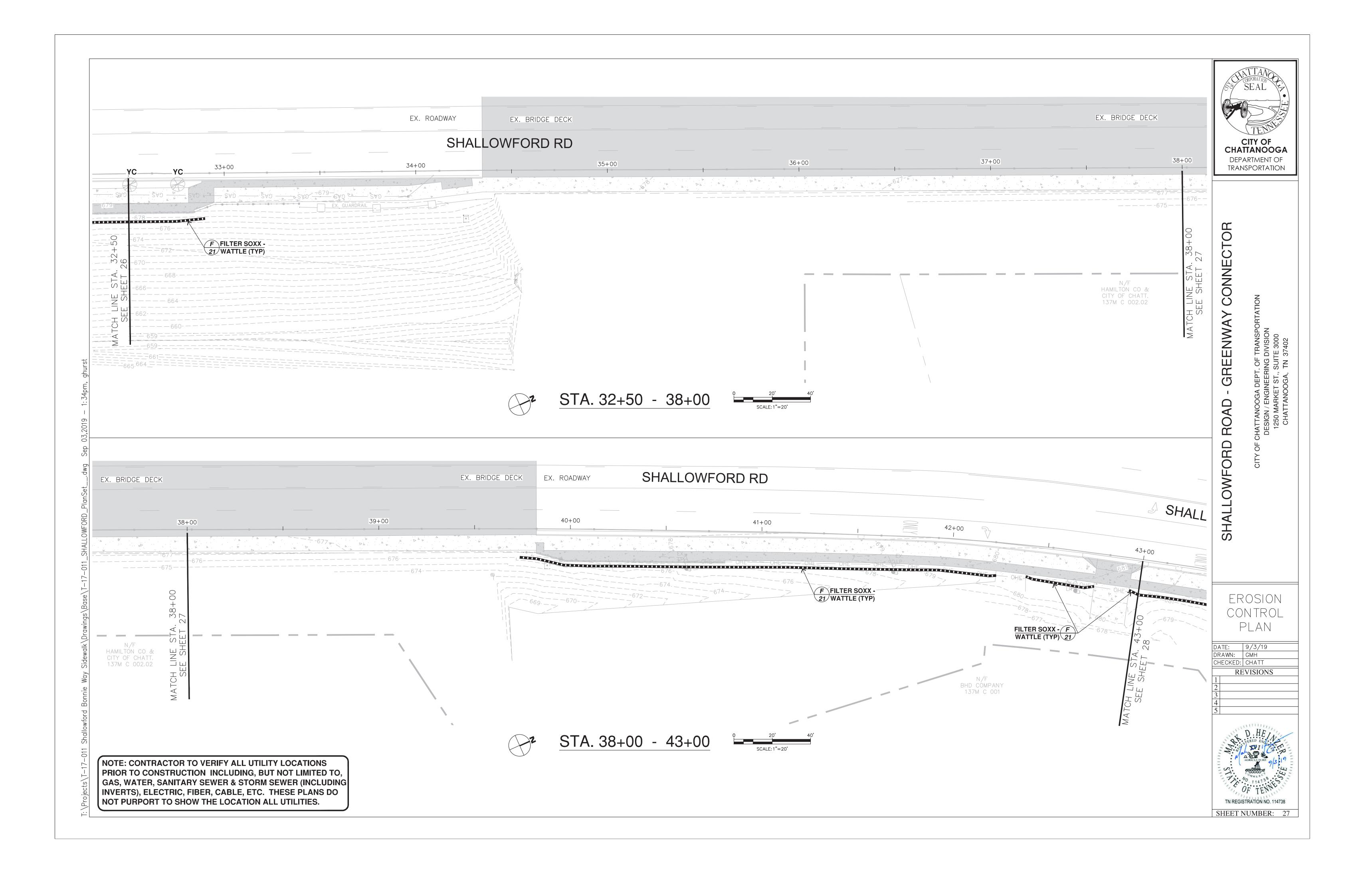


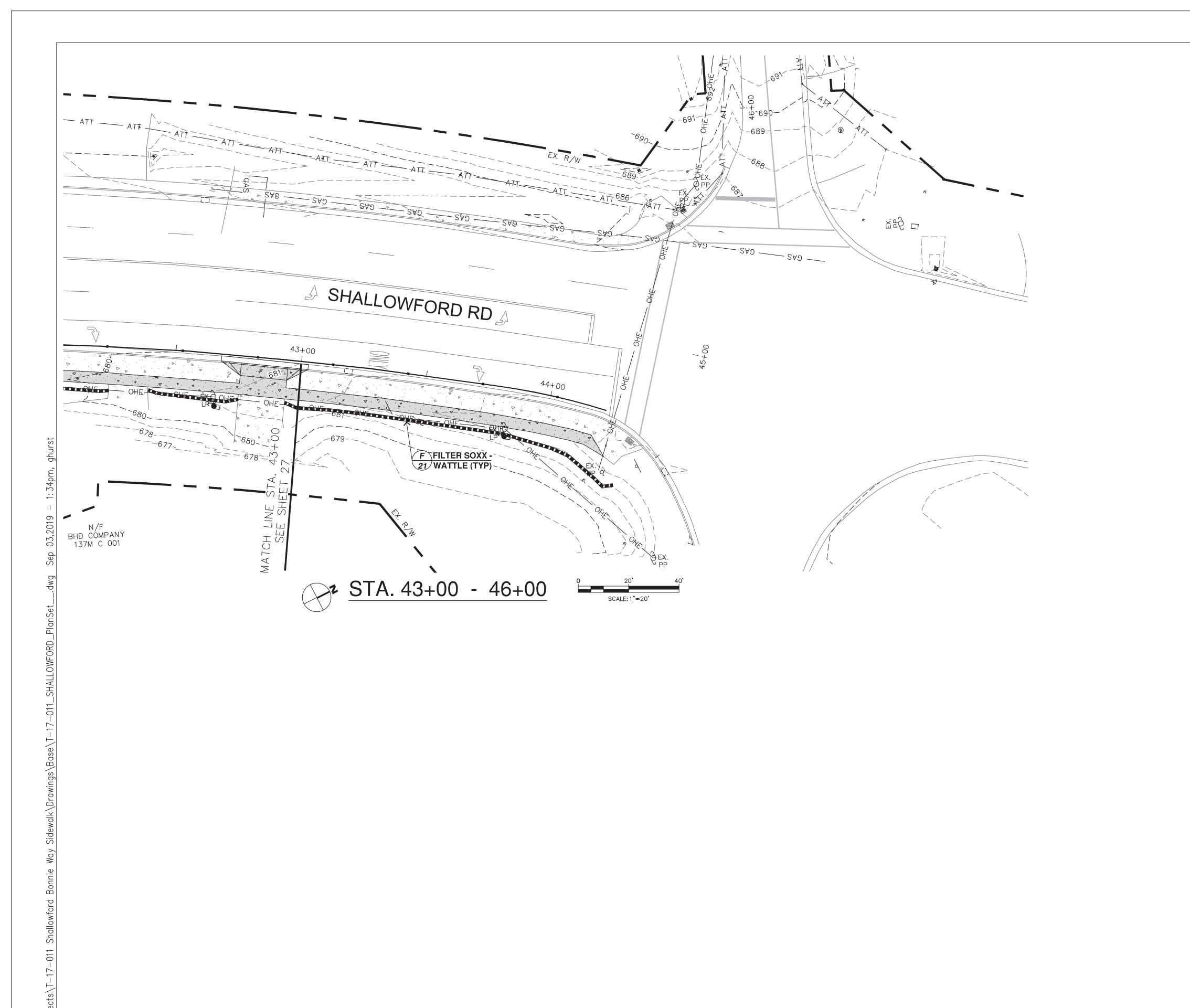




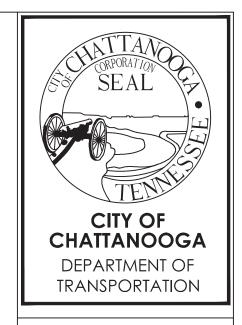








NOTE: CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, GAS, WATER, SANITARY SEWER & STORM SEWER (INCLUDING INVERTS), ELECTRIC, FIBER, CABLE, ETC. THESE PLANS DO NOT PURPORT TO SHOW THE LOCATION ALL UTILITIES.



SHALLOWFORD ROAD - GREENWAY CONNECTOR

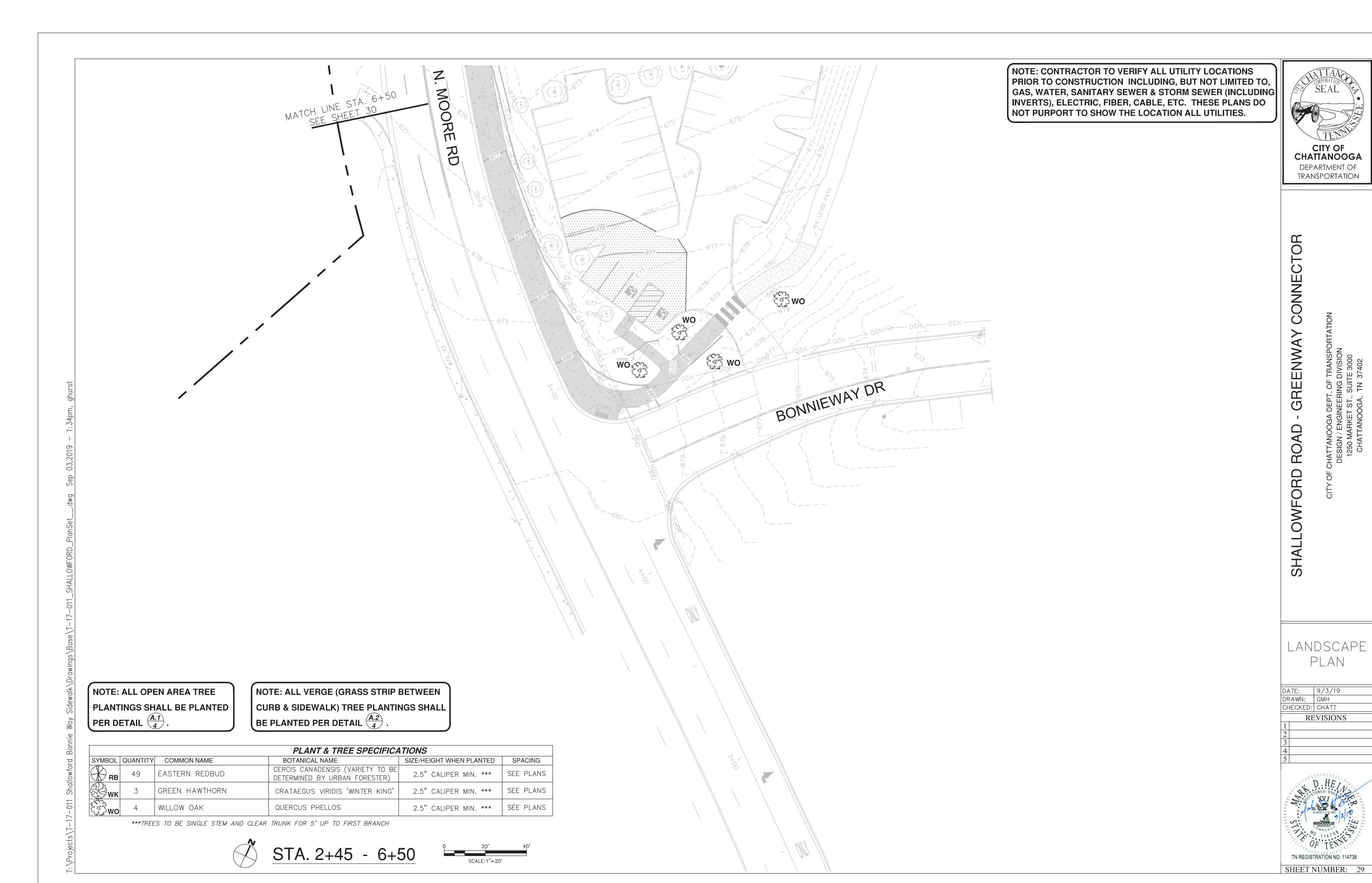
EROSION CONTROL PLAN

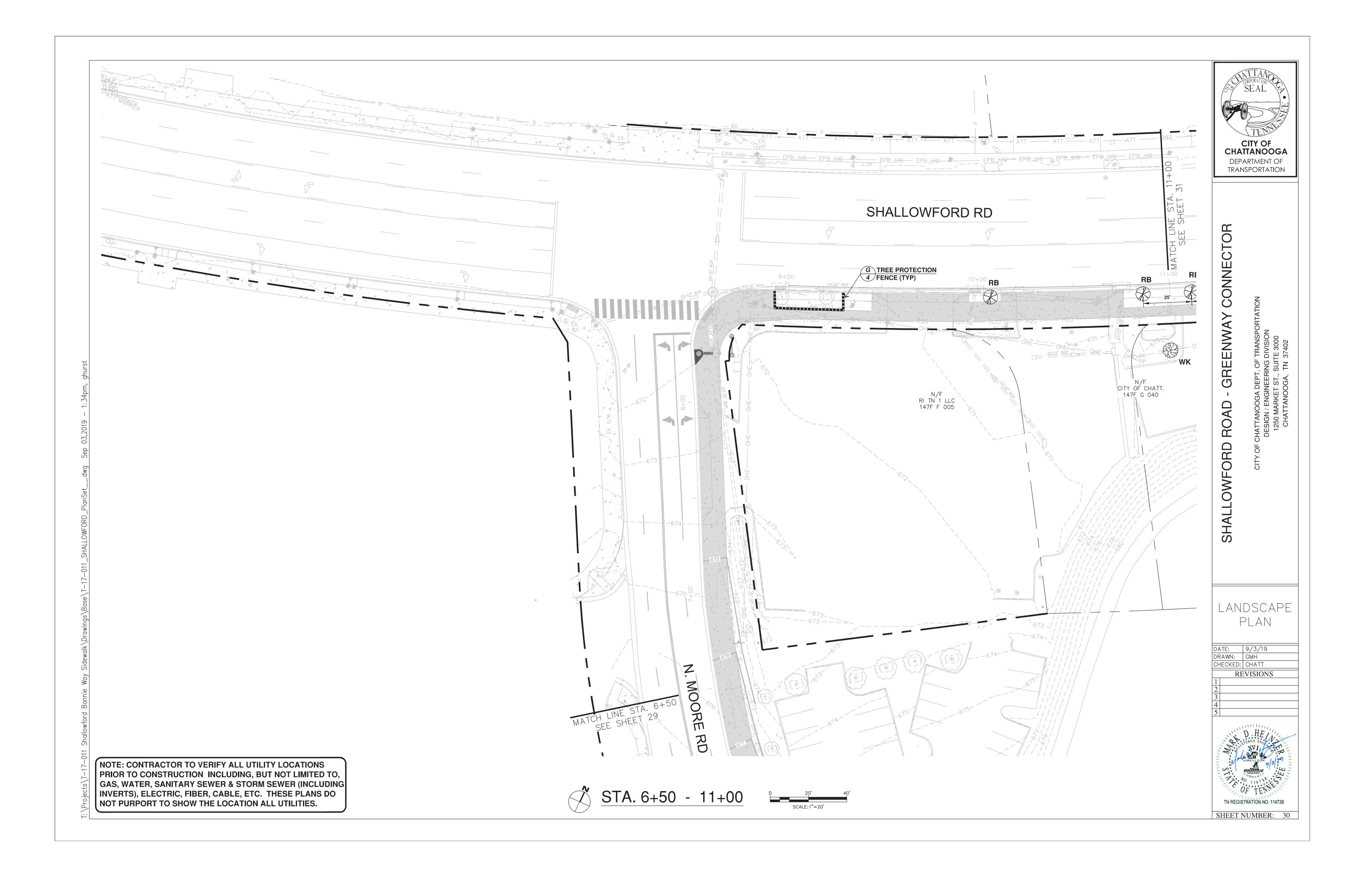
DATE:	9/3/19
DRAWN:	GMH
CHECKED:	CHATT
DEVISIONS	

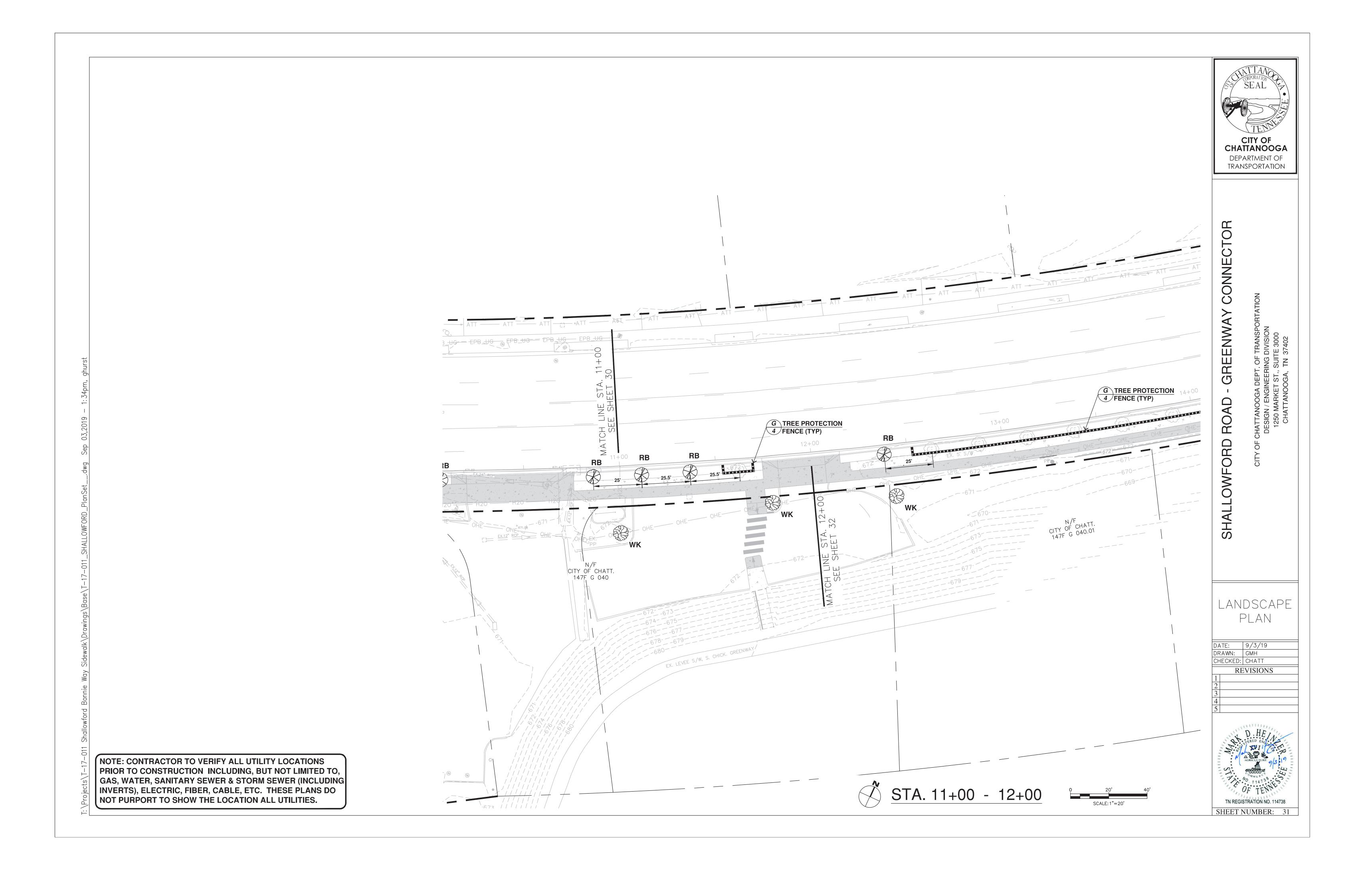
REVISIONS

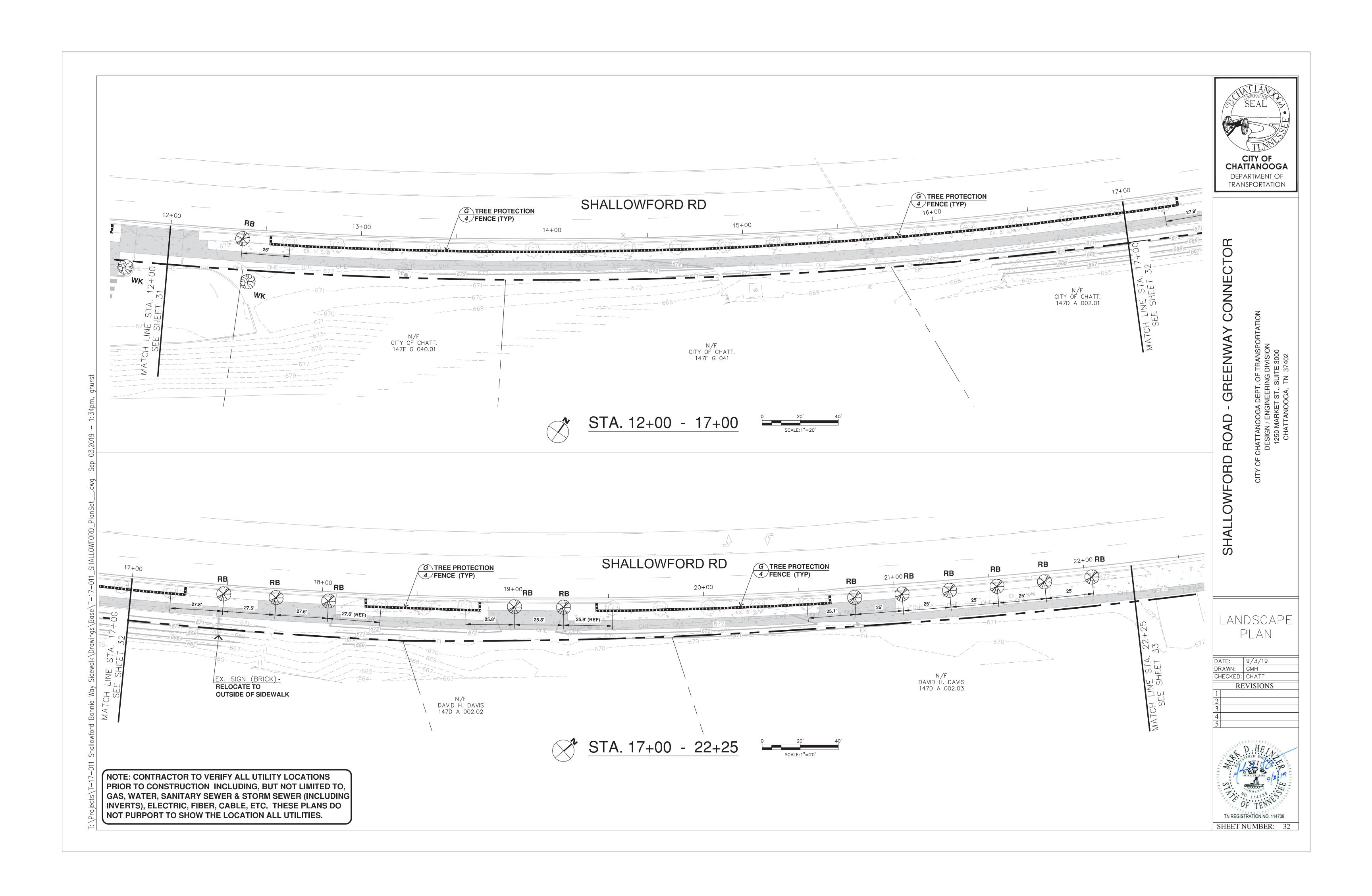


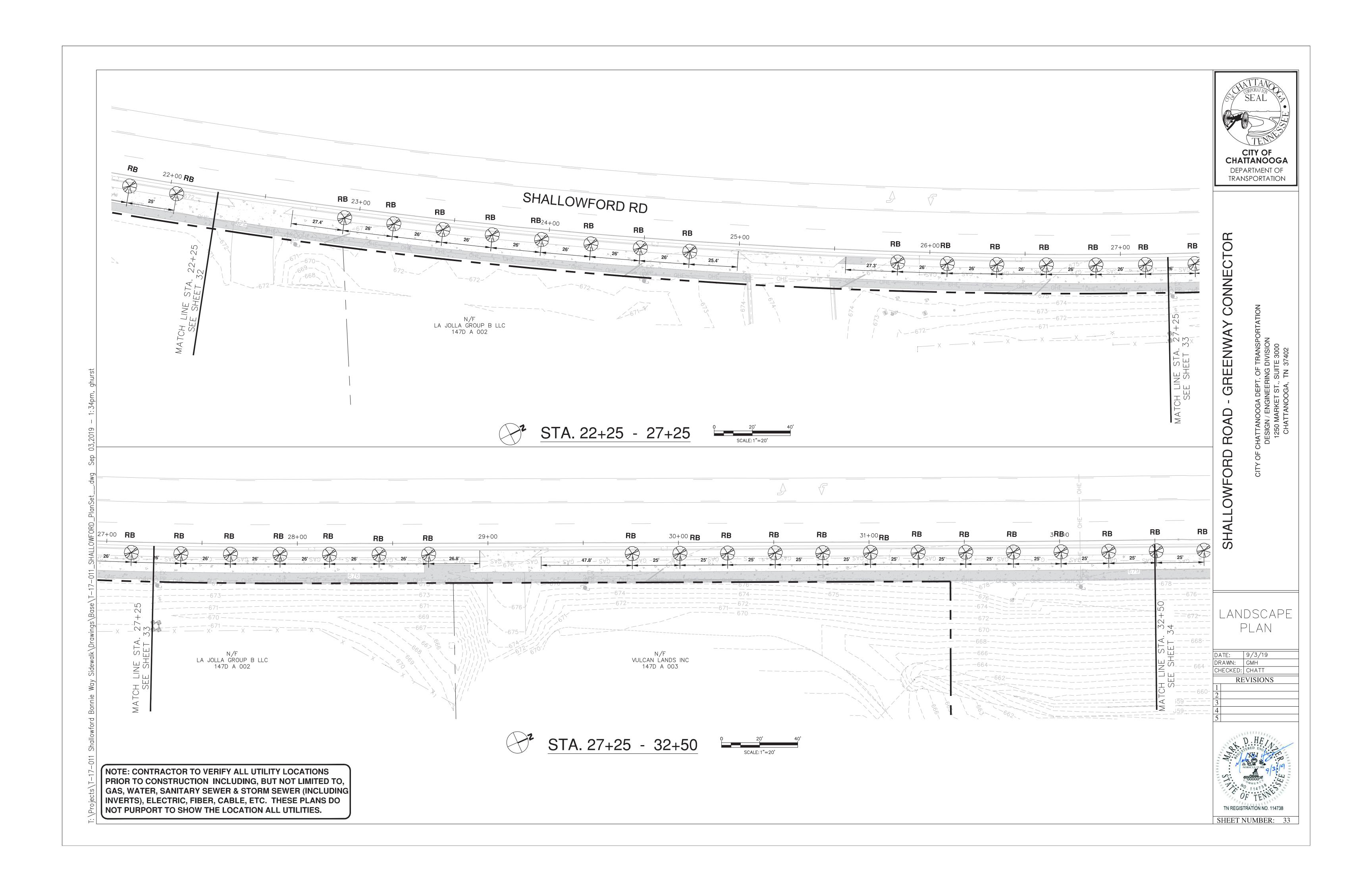
SHEET NUMBER: 28



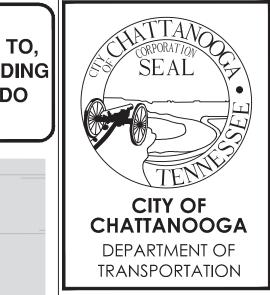








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SHALLOWFORD ROAD - GREENWAY CONNECTO

LANDSCAPE PLAN

DATE:	9/3/19	
DRAWN:	GMH	
CHECKED:	CHATT	
REVISIONS		
1		
2		



SHEET NUMBER: 34