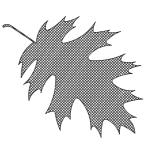


## PROPOSED HIGHWAY LANDSCAPE DEVELOPMENT PROJECT

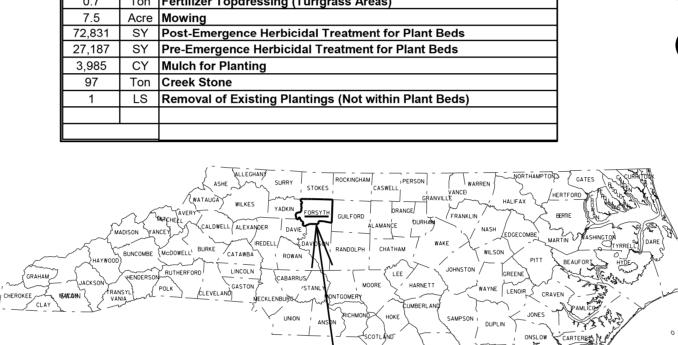


T.I.P. #	STATE PROJECT W.B.S. #	SHEET #	SHEET # TOTAL
U-2826L	34871.3.FR1 34871.3.FR2	1	15
FED. PROJ. #	DESCRIPTION		DIVISION
BRNHS-0052(45) NHS-0052(48)	US 52 FROM I-40B TO AKRON DRIVE		9

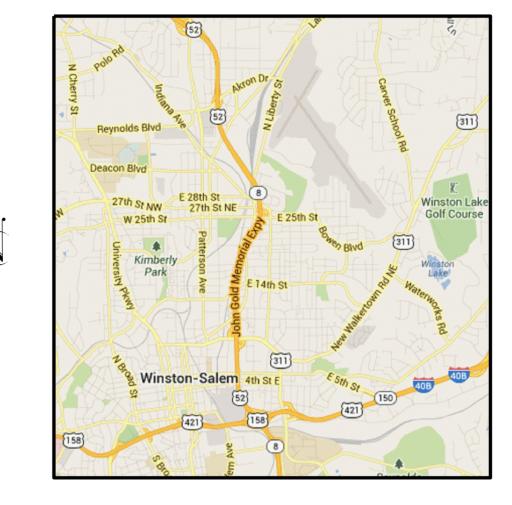
## Summary of Quantities

	Unit	Key	Botanical Name	Common Name	Furnish	ASNS	Spacing
rnament	al Tree	s					
160	EA	AAB	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched, Matched Specimens	1.2.4	As shown or grid
33	EA	СС	Cercis canadensis texensis 'Oklahoma'	Oklahoma Redbud	7-8', B&B, Standard, Well Branched	1.2.1	As shown or as staked
32	EA	СК	Cornus kousa 'Milky Way Select'	Milky Way Select Dogwood	7-8', B&B, Standard, Well Branched	1.2.1	As shown or as staked
8	EA	CV	Cornus x 'Venus' PP#16,309	Venus Dogwood	1 1/2 to 2" Cal., B&B, Single Leader, Well Branched Specimens	1.2.4	As shown
44	EA	LS	Lagerstroemia x 'Sioux'	Sioux Crape Myrtle	5-6', B&B, 3-5 Stems, Matched specimens	1.2.4	As shown
16	EA	PS	Prunus subhirtella 'Autumnalis'	Autumn Flowering Cherry	1 1/2 to 2" Cal., B&B, Single Leader, Well Branched Specimens	1.2.4	As shown
Shade Tre							
12	EA	AR	Acer rubrum 'October Glory'	October Glory Red Maple	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched	1.2.1	As shown
6	EA	ASL	Acer saccharum 'Legacy'	Legacy Sugar Maple	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched	1.2.1	As shown
17	EA	NS	Nyssa sylvatica	Black Gum	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched	1.2.1	As shown
3	EA	QA	Quercus alba	White Oak	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched	1.2.1	As shown
2	EA	QB	Quercus bicolor	Swamp White Oak	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched	1.2.1	As shown
29	EA	QM	Quercus macrocarpa	Burr Oak	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched, Matched Specimens	1.2.1	To be field staked
115	EA	QN	Quercus nuttallii	Nuttall Oak	2-2 1/2" Cal., B&B, Single Straight Trunk, Single Leader, Well Branched, <b>Matched Specimens</b>	1.2.1	As shown or 40' grid
61	EA	TD	Taxodium distichum	Bald Cypress	2 1/2-3" Cal., 10' Min. Ht., B&B, Single Straight Trunk, Single Leader, Well Branched, <b>Matched Specimens</b>	1.2.1	As shown
Shrubs							
433	EA	ARC	Abelia x 'Rose Creek'	Rose Creek Abelia	18-24", #3 Cont.	3.2.6	4' OC
717	EA	EA	Euonymus alatus 'Compactus'	Dwarf Burning Bush	21" Min., #3 Cont.	2.2.4	5' OC
6	EA	IMN	llex x 'Mary Nell'	Mary Nell Holly	5-6', B&B, Heavy, Branched to ground	3.2.6	As shown
179	EA	LCD	Loropetalum chinense 'Daruma'	Daruma Chinese Loropetalum	18-24", #3 Cont.	3.2.6	5' OC
278	EA	RR	Rosa 'Radcon' PP#15070	The Pink Knockout Rose	18-24", #3 Cont.	3.2.6	5' OC
156	EA	ТО	Thuja occidentalis 'Smaragd'	Emerald Arborvitae	6' Min., #10 Cont., Straight, Heavily Branched, Matched Specimens	3.2.6	As shown or grid
Grasses							
6,197	EA	ВС	Bouteloua curtipendula	Side Oats Grama	2 1/4" Pot, Tray of 32, Must be fully rooted into this container with full top growth and weed free	12.1.3	2' OC
1,473	EA	MC	Muhlenbergia capillaris	Pink Muhly Grass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.1.3	3' OC
208	EA	PVHM	Panicum virgatum 'Heavy Metal'	Heavy Metal Switchgrass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.1.3	4' OC
245	EA	PVN	Panicum virgatum 'Northwind'	Northwind Switchgrass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.1.3	5' OC
		PVS	Panicum virgatum	Shenandoah Switchgrass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top	12.1.3	3' OC

## Quan. Unit Description 2 EA Selective Tree Removal, 6" EA Selective Tree Removal, 10 EA Selective Tree Removal, 15' EA Selective Tree Removal. 18" 2.6 Acre Selective Undergrowth Remova







- Notes
- B SPECIAL VEGETATION REMOVAL: INCLUDES BUT IS NOT LIMITED TO, REMOVAL OF UNDERGROWTH, CLEAN UP AND REMOVAL OF TRASH AND DOWNED LIMBS. DAMAGED LIMBS, PERFORM WEED CONTROL, APPLYING POST AND PRE-EMERGENT HERBICIDES AS DIRECTED BY THE ENGINEER IN THE FIELD. SEE SPECIAL PROVISION.

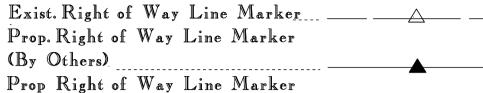
SELECTIVE UNDERGROWTH REMOVAL: SELECTIVE UNDERGROWTH REMOVAL

ACREAGE IS AN ESTIMATE ONLY; EXACT AREA TO BE IDENTIFIED BY THE

Project Location

- C SELECTIVE TREE REMOVAL: REMOVE ALL CRABAPPLES AND WHITE PINES WITHIN AREAS TO BE PLANTED (INTERCHANGES) UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD. ADDITIONAL TREES TO BE REMOVED ARE AS SHOWN OR NOTED ON THE PLANS, AND AS DIRECTED BY THE ENGINEER IN THE FIELD.
- D REMOVAL OF EXISTING PLANTINGS: REMOVE ALL EXISTING PLANTS AS SHOWN OR NOTED ON PLANS AND AS DIRECTED BY THE ENGINEER IN THE FIELD. FILL ANY DEPRESSIONS OR HOLES CREATED WITH TOPSOIL. GRADE AREA TO DRAIN AND SEED WITH APPROPRIATE SPECIES AS DIRECTED BY THE ENGINEER IN THE FIELD. LEAVE AREAS IN A SMOOTH AND MOWABLE CONDITION.
- E SELECTIVE TREE REMOVAL: REMOVE ALL TREES TO THE INSIDE OF THE RAMPS UNLESS LABELED AS 'RETAIN EX' (EXISTING) ON THE PLAN OR DIRECTED BY THE
- F PROPOSED NEW PLANT BEDS AND RENOVATED PLANT BEDS: PLANT BEDS ARE INDICATED AND LABELED ON THE PLANS. STAKE PLANT BED PERIMETERS FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK, INSTALL EROSION CONTROL DEVICES AS DIRECTED BY THE ENGINEER IN THE FIELD IF NEEDED. EXISTING PLANTS TO BE RETAINED, IF ANY, WILL BE IDENTIFIED ON THE PLANS OF BY THE ENGINEER IN THE FIELD. APPLY POST-EMERGENCE HERBICIDE AND REPEAT AS NECESSARY TO ACHIEVE A TOTAL KILL OF UNDESIRABLE VEGETATON. TAKE CARE NOT TO DAMAGE EXISTING VEGETATION TO BE RETAINED. REMOVE DEAD VEGETATIVE LAYER, TILL, AND RAKE TO SMOOTH AND LEVEL PLANT BED. IF TILLING IN THE VICINITY OF EXISTING TREES TO BE RETAINED, DO NOT ENCROACH INTO AREA BENEATH DRIPLINE. TO PREVENT PROBLEMS FROM SHREDDING OF ROOTS, SMOOTHLY CUT ANY ROOTS ONE INCH OR GREATER THAT EXTEND BEYOND THE DRIP LINE INTO TILLED AREA. PLANT AS SHOWN ON PLANS AND MULCH ENTIRE AREA.
- G PLANT BED RENOVATION: DO NOT TREAT AND/OR PREPARE BED BETWEEN AND AROUND EXTISTING TREES TO BE RETAINED. (REDBUD AND CRAPE MYRTLES LABELED 'EX' ON PLANS.) REMOVE ALL OTHER EXISTING VEGETATION, FILL HOLES WITH TOPSOIL, PLANT NÉW TREES AND MULCH. DO TREAT AND PREPÀRE AS NORMAL THE REMAINDER OF PLANT BED AT EXIT RAMP NOSE AND ON THE SLOPE ALONG NORTH LIBERTY STREET.

- SUPPLEMENTAL SEEDING AND TOPDRESSING: MOWED TURF AREAS LOCATED TO FHE INSIDE OF THE RAMPS AND BETWEEN THE EDGE OF PAVEMENT AND THE NATURAL AREAS AND/OR PLANT BEDS. SHALL RECEIVE TOPDRESSING AND
- NATURAL AREA SEEDING: PROPOSED AREAS TO BE SEEDED ARE SHOWN ON THE APPROVED BY THE ENGINEER IN THE FIELD PRIOR TO BEGINNING WORK. THESE AREAS SHALL REQUIRE A TOTAL KILL OF EXISTING GROUND COVER PRIOR TO PREPARING SEED BED. EROSION CONTROL DEVICES, IF REQUIRED SHALL BE DETERMINED IN THE FIELD AND SHALL BE INSTALLED PRIOR TO ANY SOIL
- j EXISTING POOR TURF STAND RENOVATION TO NATIVE GRASS NO TILL / NO MULCH INSTALLATION: CONDUCT RENOVATION PROCESS DURING ACTIVE GROWING SEASON. CUT EXISTING VEGETATION TO AN APPROXIMATE THREE INCH HEIGHT WITH LINE TRIMMER. DO NOT 'SCALP' GROUND. ALLOW VEGETATION TO RECOVER AND REGROW FOR APPROXIMATELY SEVEN DAYS. SPRAY WITH POST-EMERGENCE HERBICIDE TO ACHEIVE TOTAL KILL. REPEAT IF NEEDED. (MUST HAVE TOTAL KILL OF EXISTING VEGETATION PRIOR TO INSTALLATION OF NATIVE GRASSES.) INSTALL NATIVE GRASS PLUGS. DO NOT MULCH. WATER AS NEEDED AND AS DIRECTED BY THE ENGINEER IN THE FIELD.
- k DRAINAGE SWALE RENOVATION: INSTALL APPROPRIATE EROSION CONTROL DEVICES AS DIRECTED BY THE ENGINEER IN THE FIELD PRIOR TO ANY SOIL DISTURBING ACTIVITIES, REMOVE EXISTING SEDIMENT BUILD UP AND RIP-RAP WITHIN THE SWALES. GRADE SWALES FOR POSITIVE DRAINAGE. LINE SWALES WITH CREEK STONE.
- L CREEK STONE: INSTALL APPROPRIATE EROSION CONTROL DEVICES AS DIRECTED BY THE ENGINEER IN THE FIELD PRIOR TO ANY SOIL DISTURBING ACTIVITIES. RE-GRADE AND LINE EXISTING SWALE OR CREATE SWALE AND LINE WITH CREEK STONE AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER IN THE FIELD. SEE SPECIAL PROVISIONS.
- M LOCATION OF 15 REDBUD (CC) AND 15 DOGWOOD (CK) TO BE STAKED IN THE FIELD BY THE ENGINEER.



CONVENTIONAL SYMBOLS

(By Contract) Exist. Control of Access Line Prop. Control of Access Line Property Line Easement Line Slope Stake Line Exist. Fence. Prop. Woven Wire Fence. Prop. Chain Link Fence

Exist. Road Prop. Road Guardrail\_ Survey Line Denotes Line Equality

Bridge\_\_ Railroad

County Line

City or Town Line

Woods Exist. Telephone Pole Prop. Telephone Pole

Tower Pole and Line Exist. Power Pole Prop. Power Pole

Sanitary Sewer Line Water Line Gas Line

Picnic Shelter Regeneration Reforestation -

INDEX OF L SHEETS:

1......TITLE, DESCRIPTION, NOTES AND SUMMARY OF QUANTITIES

2......PLANTING DETAILS

3-15...LANDSCAPE PLANS

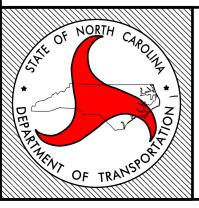
PREPARED BY: CSM

JUNE 4, 2013 PRELIMINARY DESIGN DATE:

REVISION DATE:

JULY 5, 2013 FINAL DESIGN DATE:

US 52 - WINSTON SALEM



7,551

EA STB

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

The Blues Little Bluestem

Schizachyrium scoparium 'The

growth and weed free

1/2 to 4" Pot, Tray of 18, Must be fully

rooted into this container with full top

12.1.3

2' OC

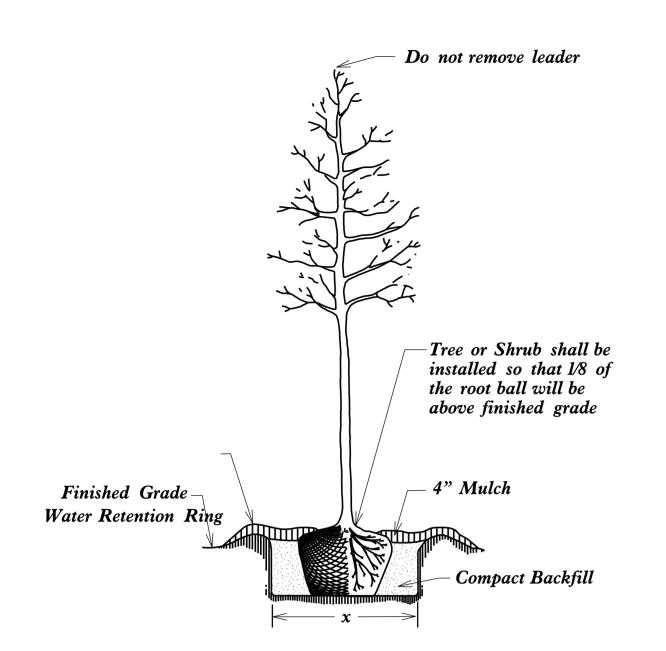
DIVISION: 9 US 52 FROM I-40 BUSINESS TO AKRON DRIVE (SR 2264) ADDRESS: 375 Silas Creek Parkway, LOCATION: IN WINSTON SALEM Winston Salem, NC 27127 TYPE OF WORK: LANDSCAPE PLANTING DIV. ENG.: PAT IVEY, PE FORSYTH COUNTY COUNTY: DIV. ROADSIDE DEPT. ENG.: TODD HIATT 2004 American Standard for Nursery Stock

2012 NCDOT STANDARD SPECIFICATIONS

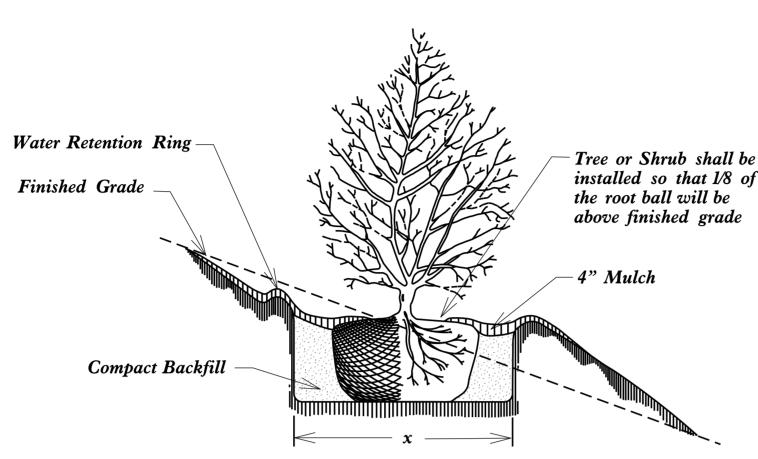
RALEIGH NC 27699

PREPARED IN THE OFFICE OF: NCDOT- ROADSIDE ENVIRONMENTAL UNIT LANDSCAPE DESIGN & DEVELOPMENT SECTION 1557 MAIL SERVICE CENTER

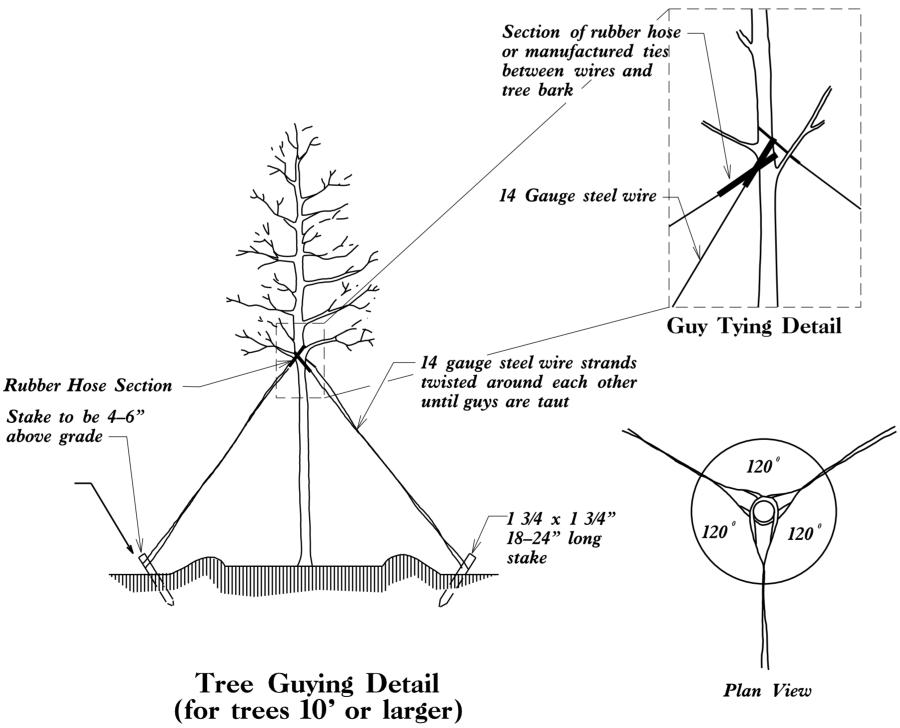
919-707-2920



Tree or Shrub Planting Detail (Level Ground)



Tree or Shrub Planting Detail (Sloping Ground)

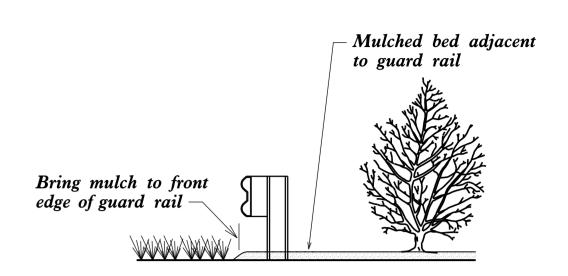


Compact Backfill Scarify to a minimum depth of 5

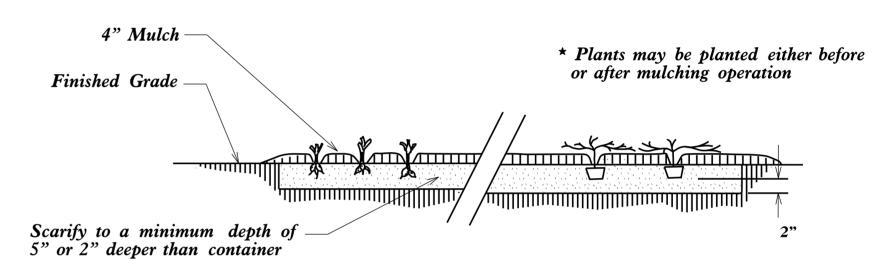
Water Retention Ring

Finished Grade

**Bed Planting Detail** 



Plant Bed /Guard Rail Detail



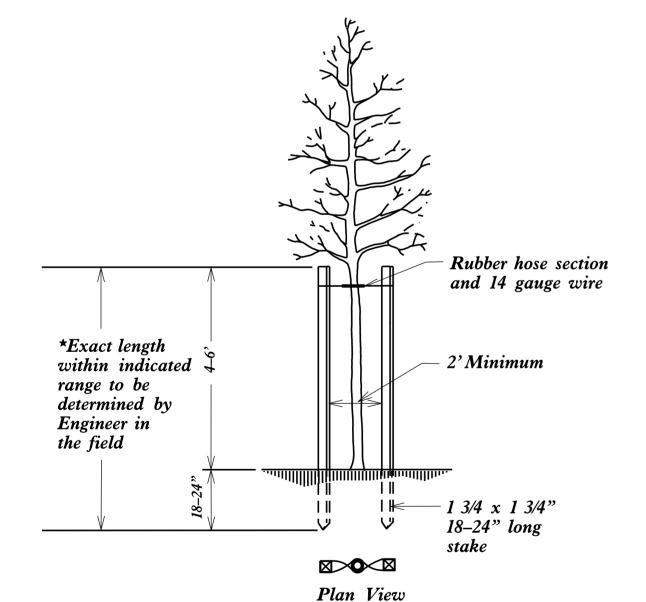
Tree, Shrub or grass shall be installed so that 1/8 of

the root ball will be

4" Mulch

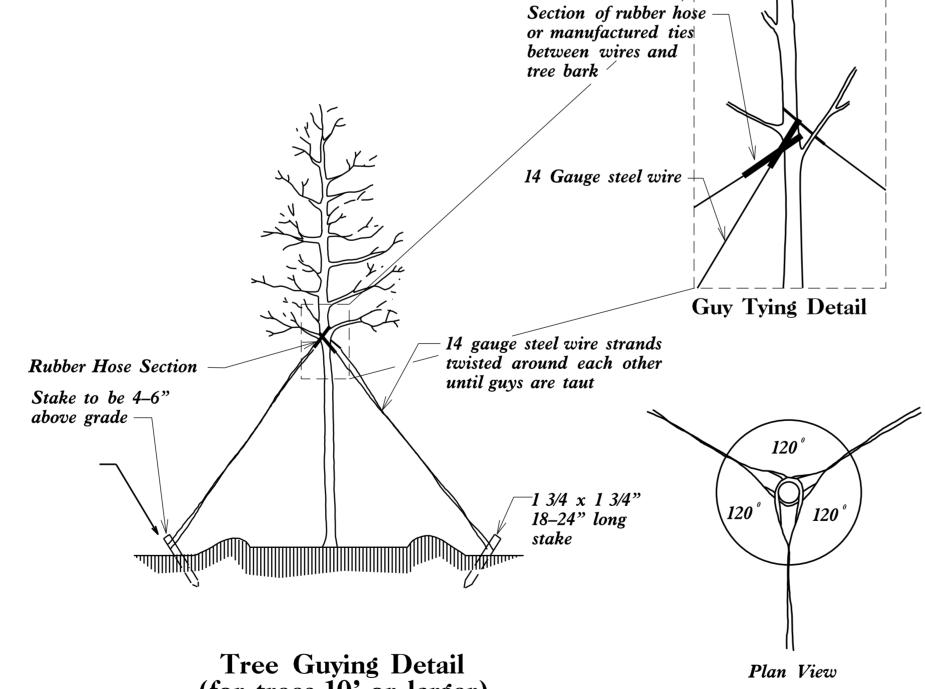
above finished grade

Ground Cover Planting Detail



Staking Detail (for trees 6' to 10')

\* Utilize staking detail only if requested by the Engineer.



Notes:

Schedule for Plant Hole Size: X = 2 times the diameter of the container

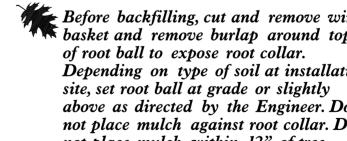
or the root ball diameter

Fertilizer shall be applied at time of planting.
Fertilizer shall be a slow release pellet or tablet.
Formulation shall be approved by the engineer in the field. Rates shall be per manufacturer's recommendations and approved by the engineer in the field. Thouroughly mix with topsoil, backfill or scarified soil.

Before backfilling, cut and remove wire basket and remove burlap around top of root ball to expose root collar. Depending on type of soil at installation site, set root ball at grade or slightly above as directed by the Engineer. Do not place mulch against root collar. Do not place mulch within 12" of tree trunk or 6" of shrub trunk.

Staking and guying shall be at the direction of the enginner in the field.

When mulched bed is adjacent to guard rail run mulch to front edge of guard rail – see detail



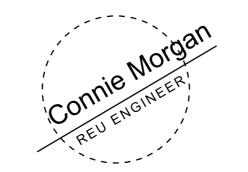
LANDSCAPE DESIGN & DEVELOPMENT 1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557 PH: 919-707-2920 FAX: 919-715-2554

http://www.ncdot.org/doh/operations/dp chief eng/roadside/

NCDOT - ROADSIDE ENVIRONMENTAL UNIT

U-2826 A AND B; US 52 FROM I-40 BUSINESS TO SR 2264 (AKRON DRIVE) IN **WINSTON SALEM** 

\* Utilize guying detail only if requested by the Engineer.



LANDSCAPE DEVELOPMENT

Planting details

PRELIMINARY DESIGN DATE : FINAL DESIGN DATE

JULY 5, 2013 JUNE 4, 2013 PROJECT:

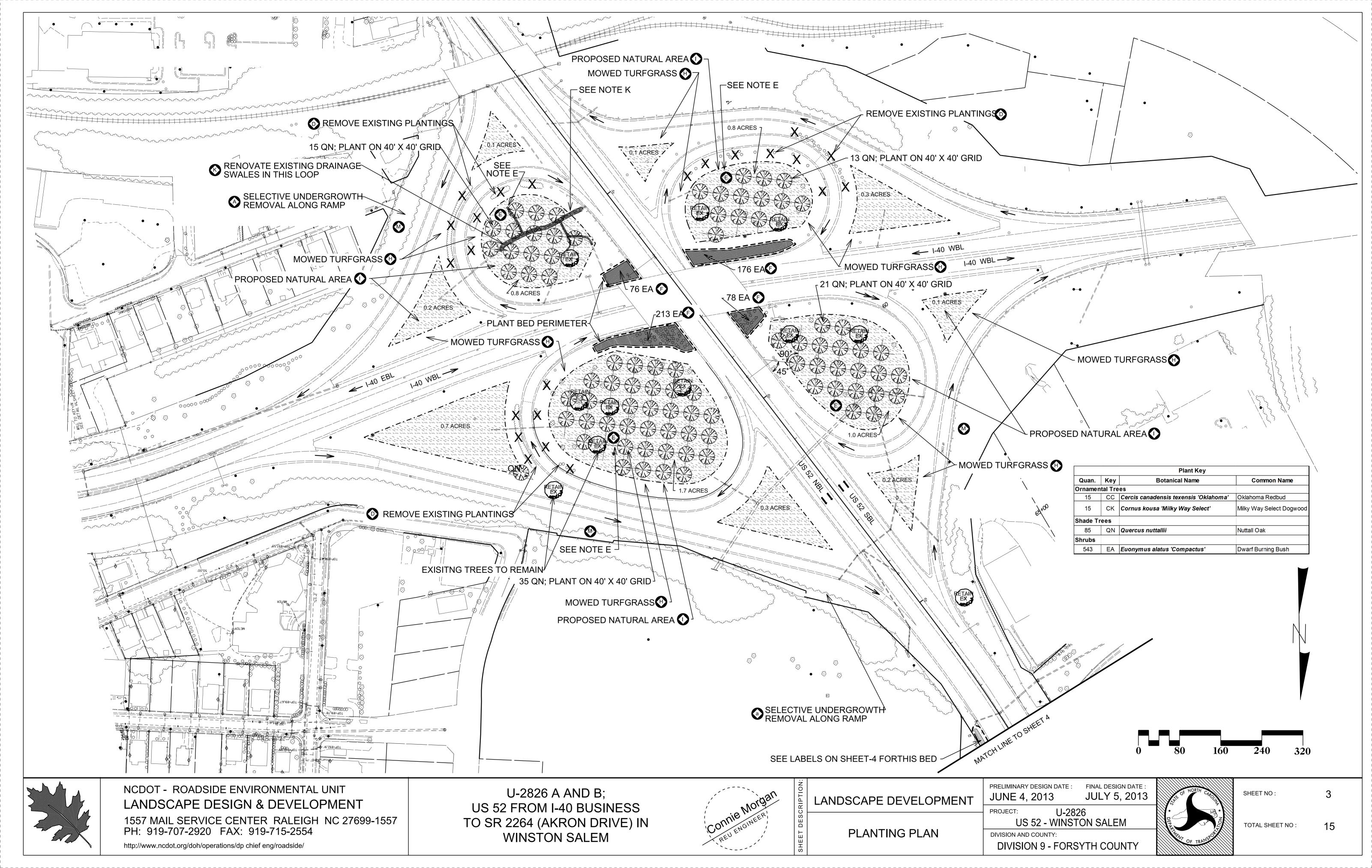
**DIVISION 9 - FORSYTH COUNTY** 

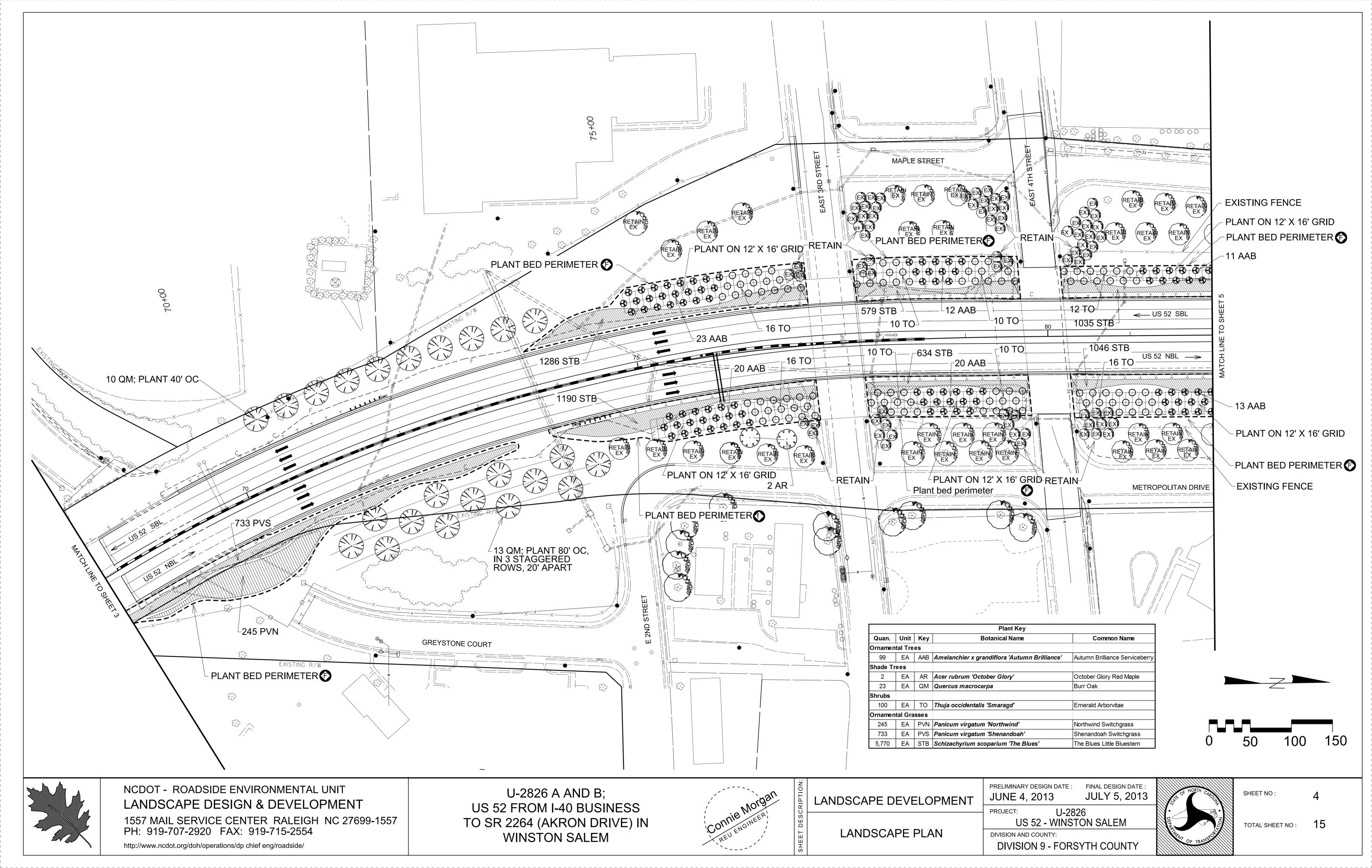
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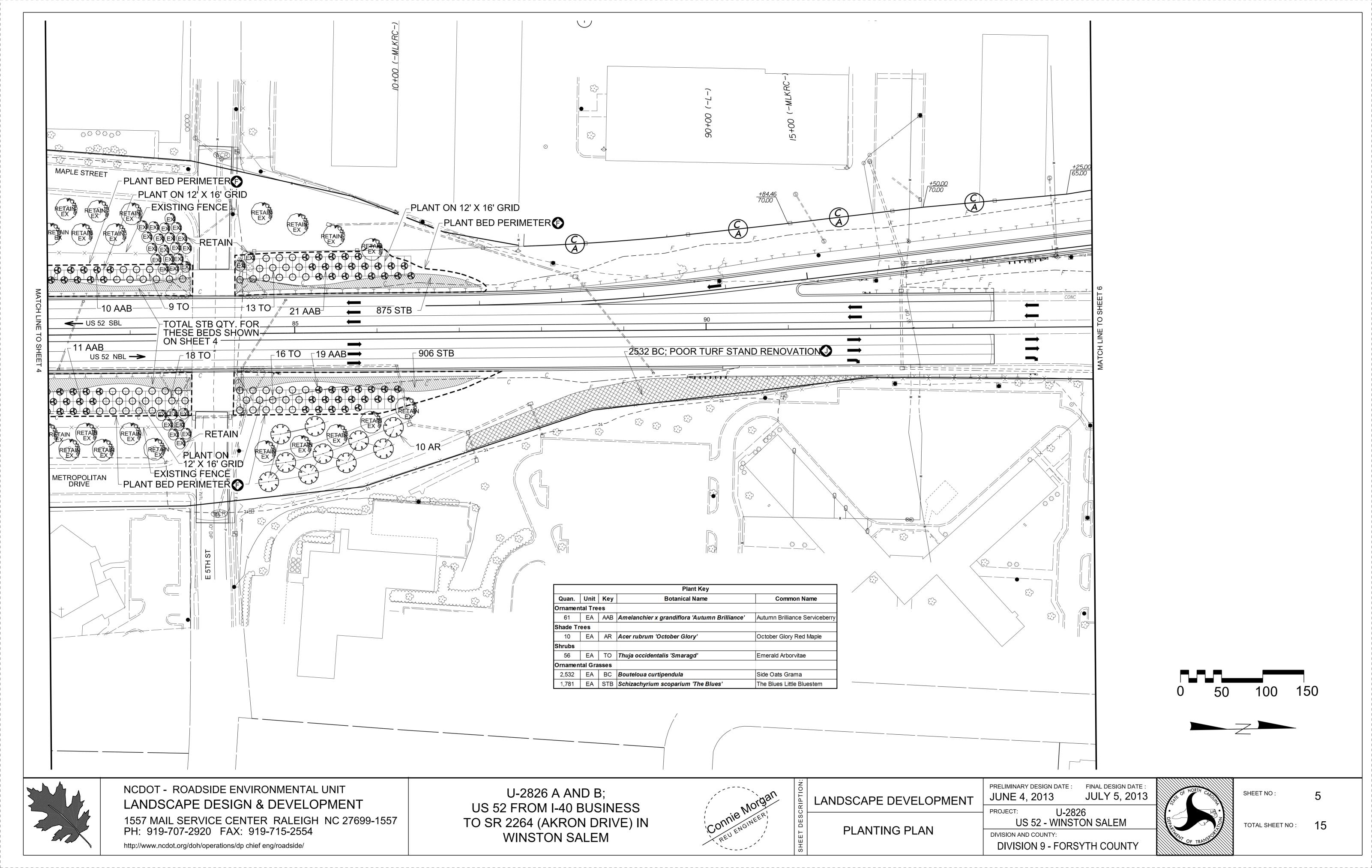
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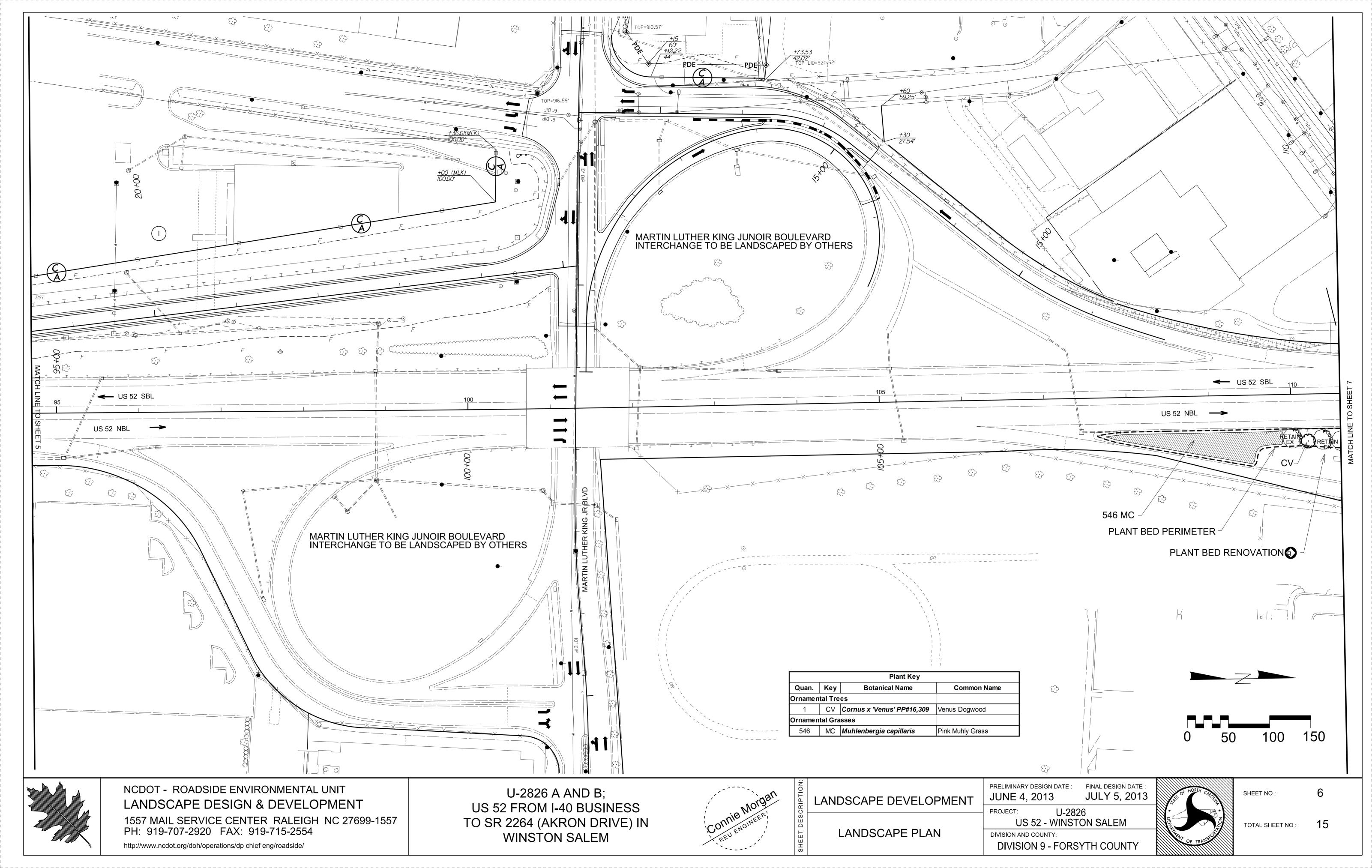
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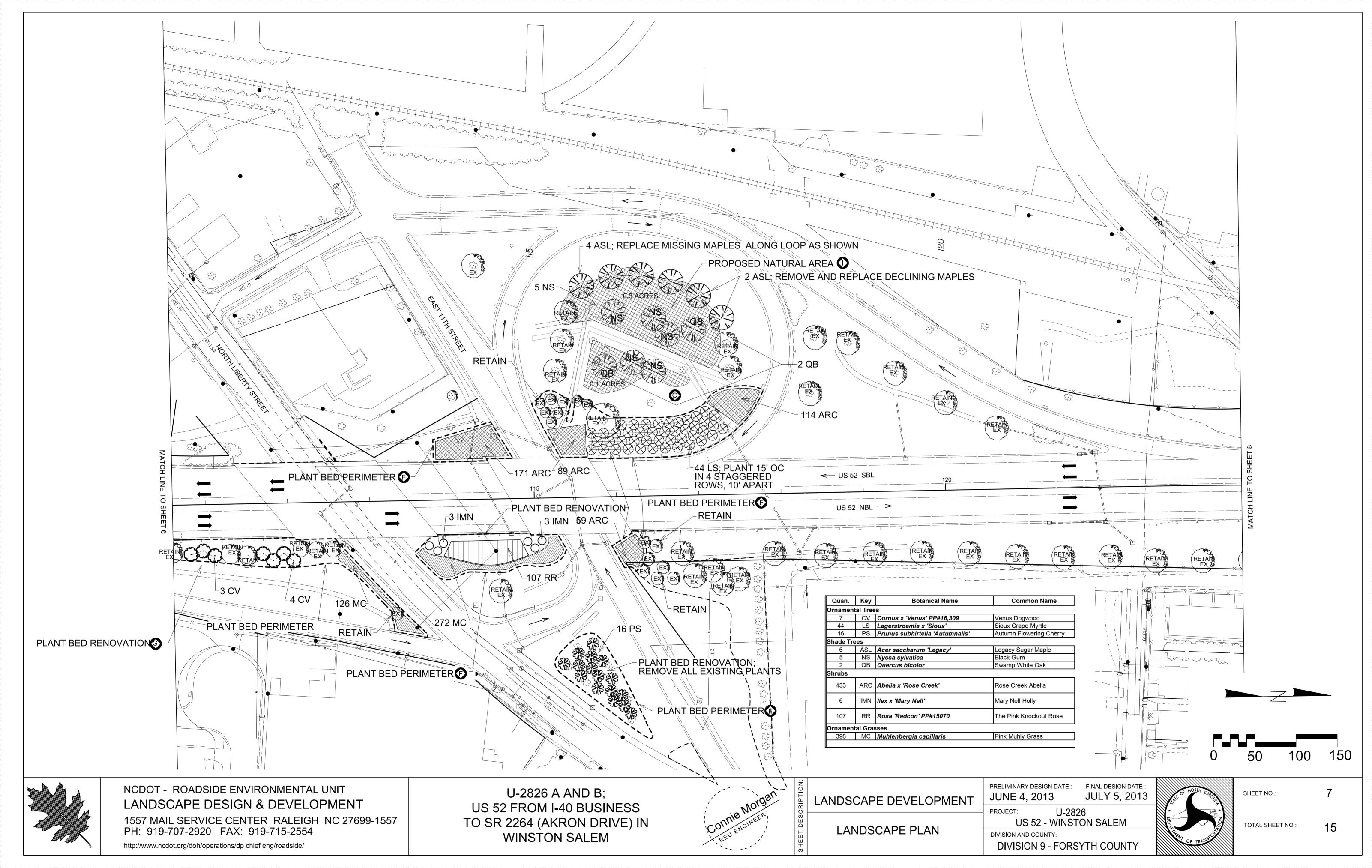
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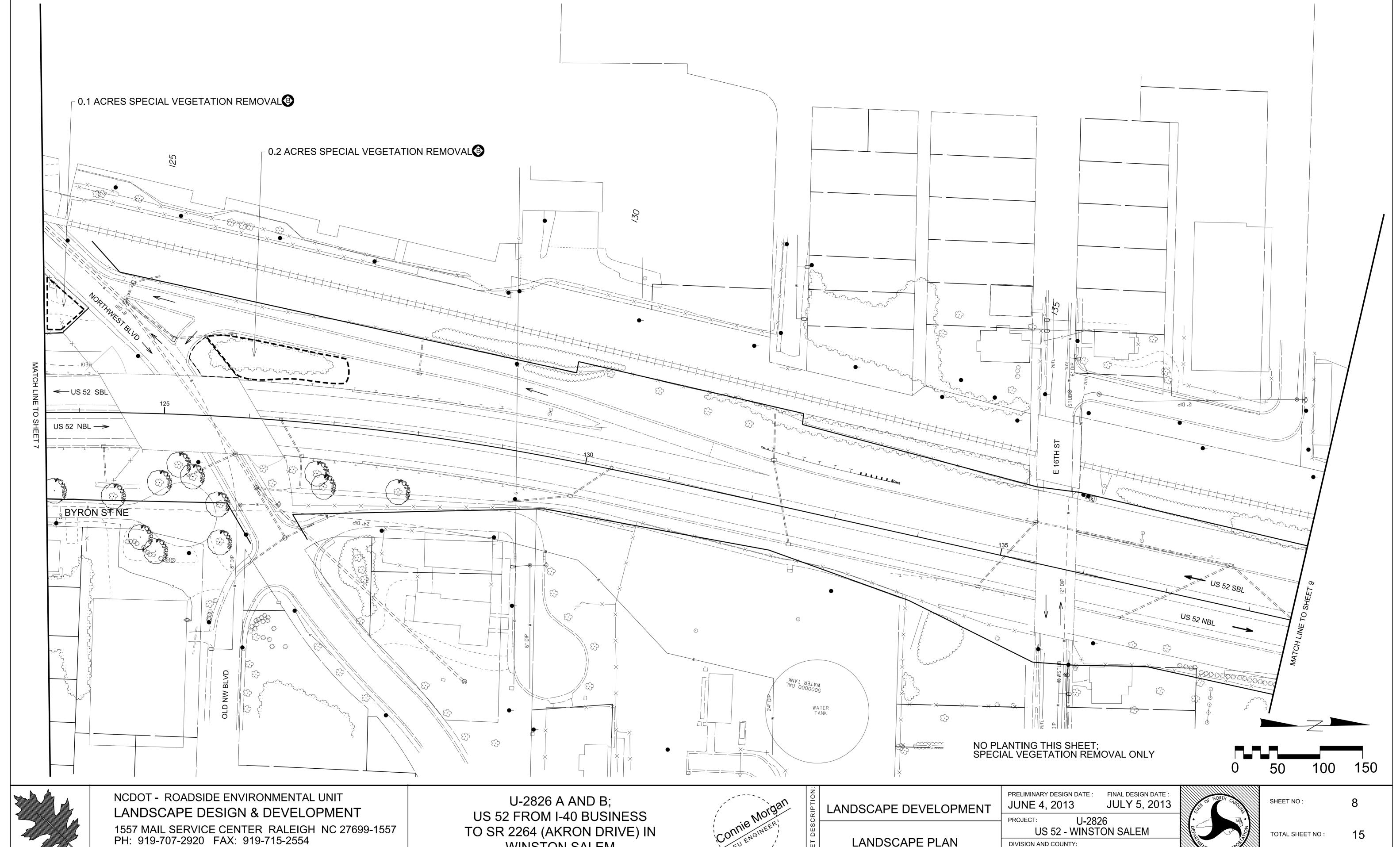














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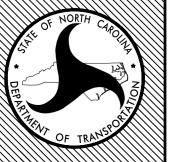
TO SR 2264 (AKRON DRIVE) IN WINSTON SALEM

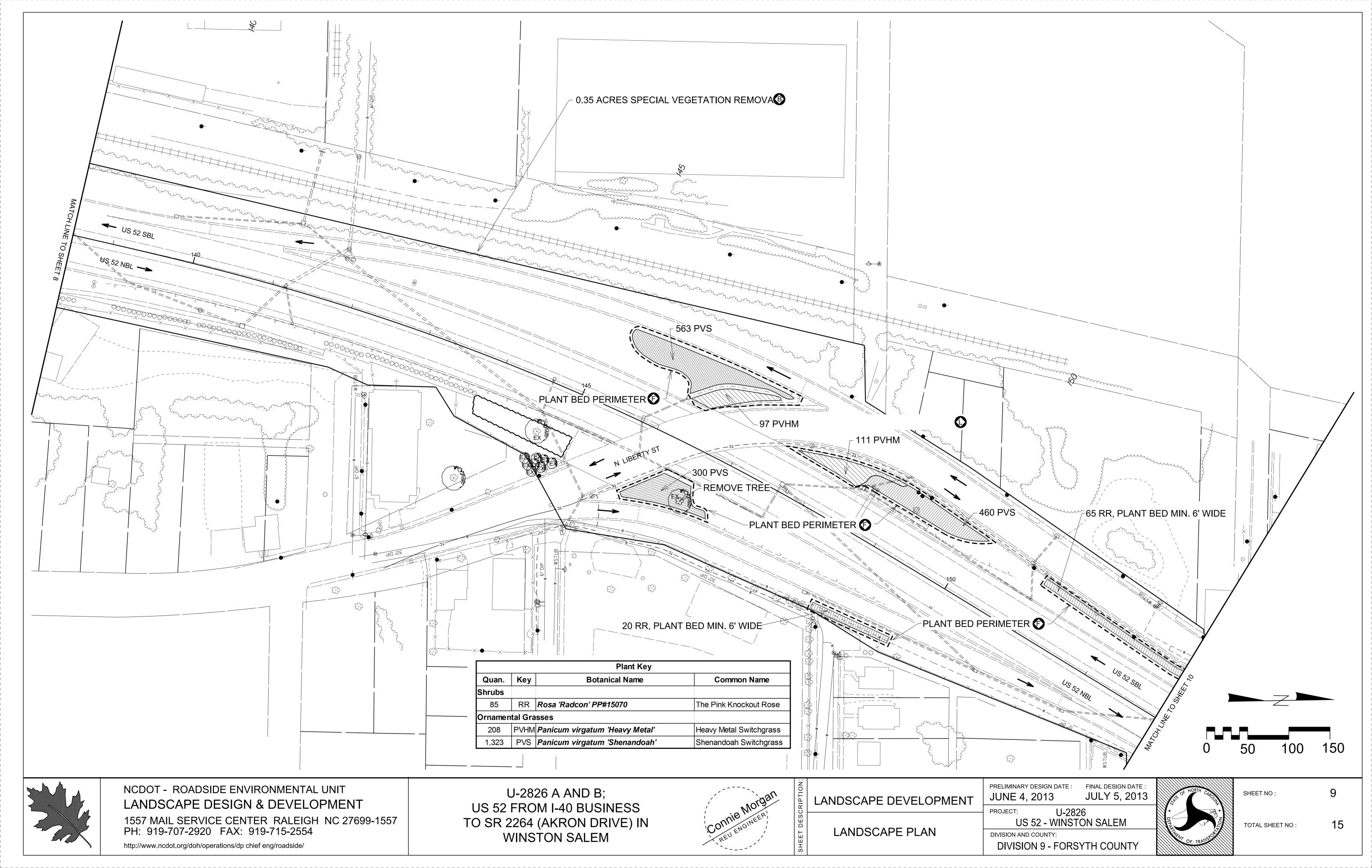


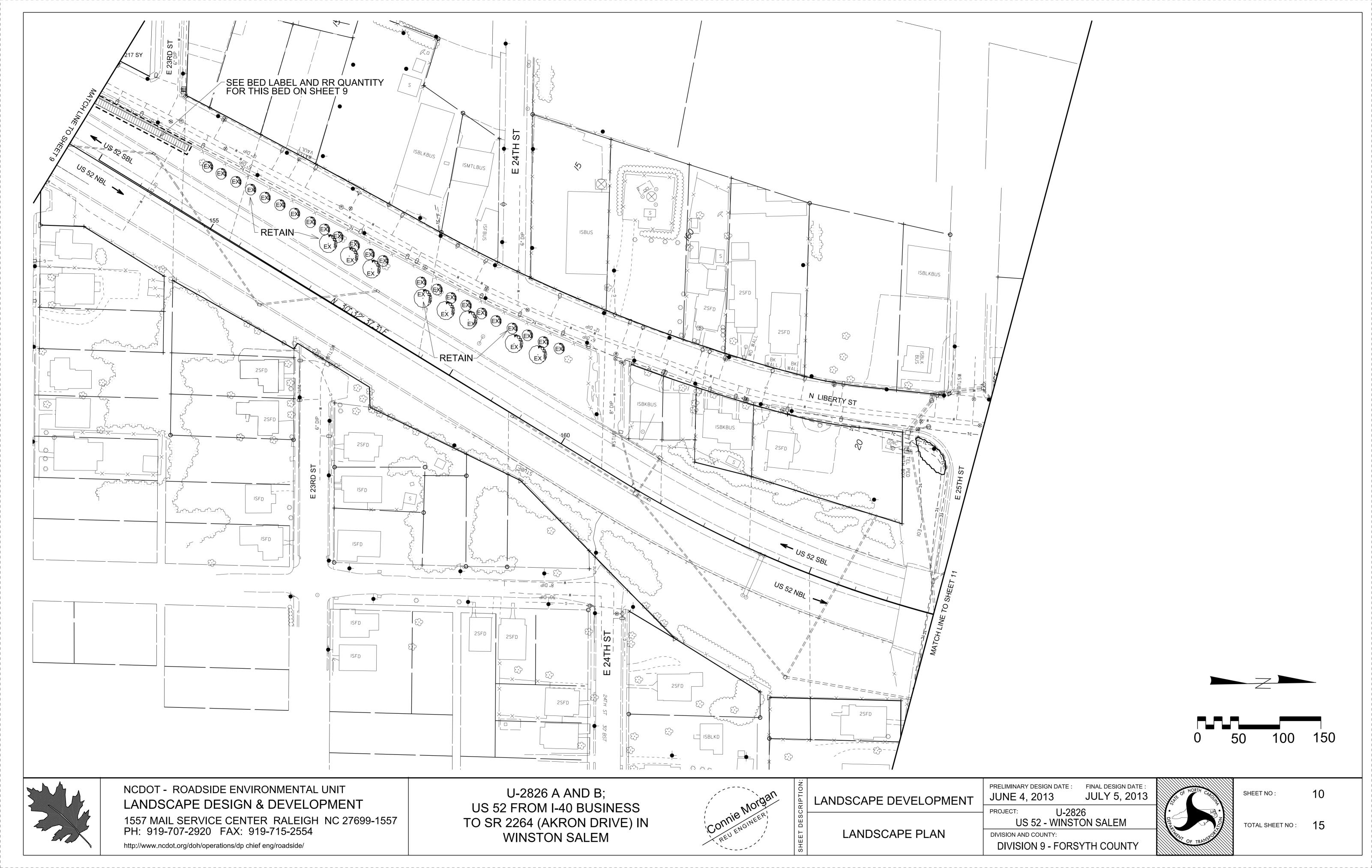
LANDSCAPE PLAN

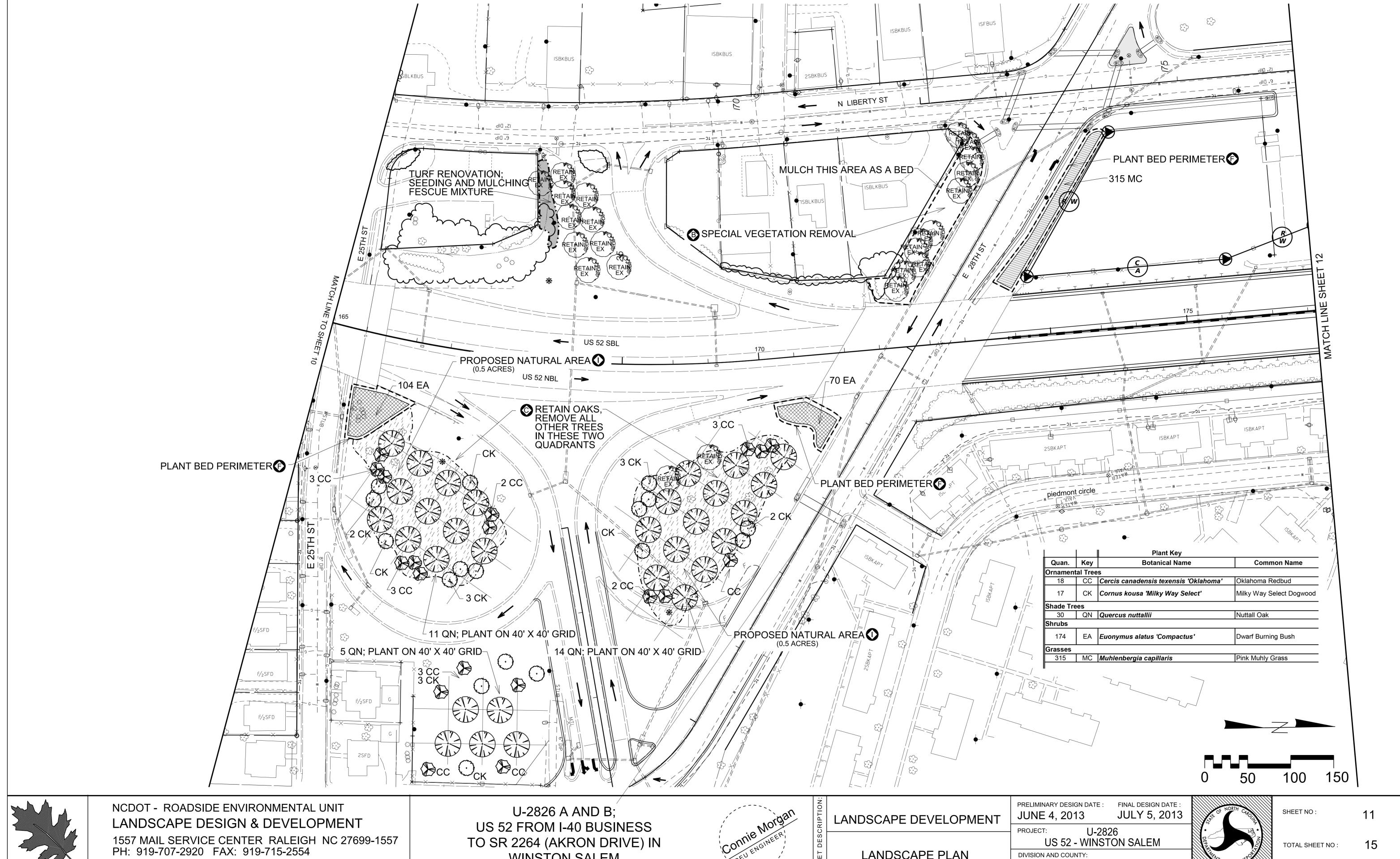
U-2826 US 52 - WINSTON SALEM DIVISION AND COUNTY:

**DIVISION 9 - FORSYTH COUNTY** 





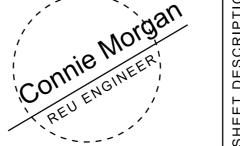






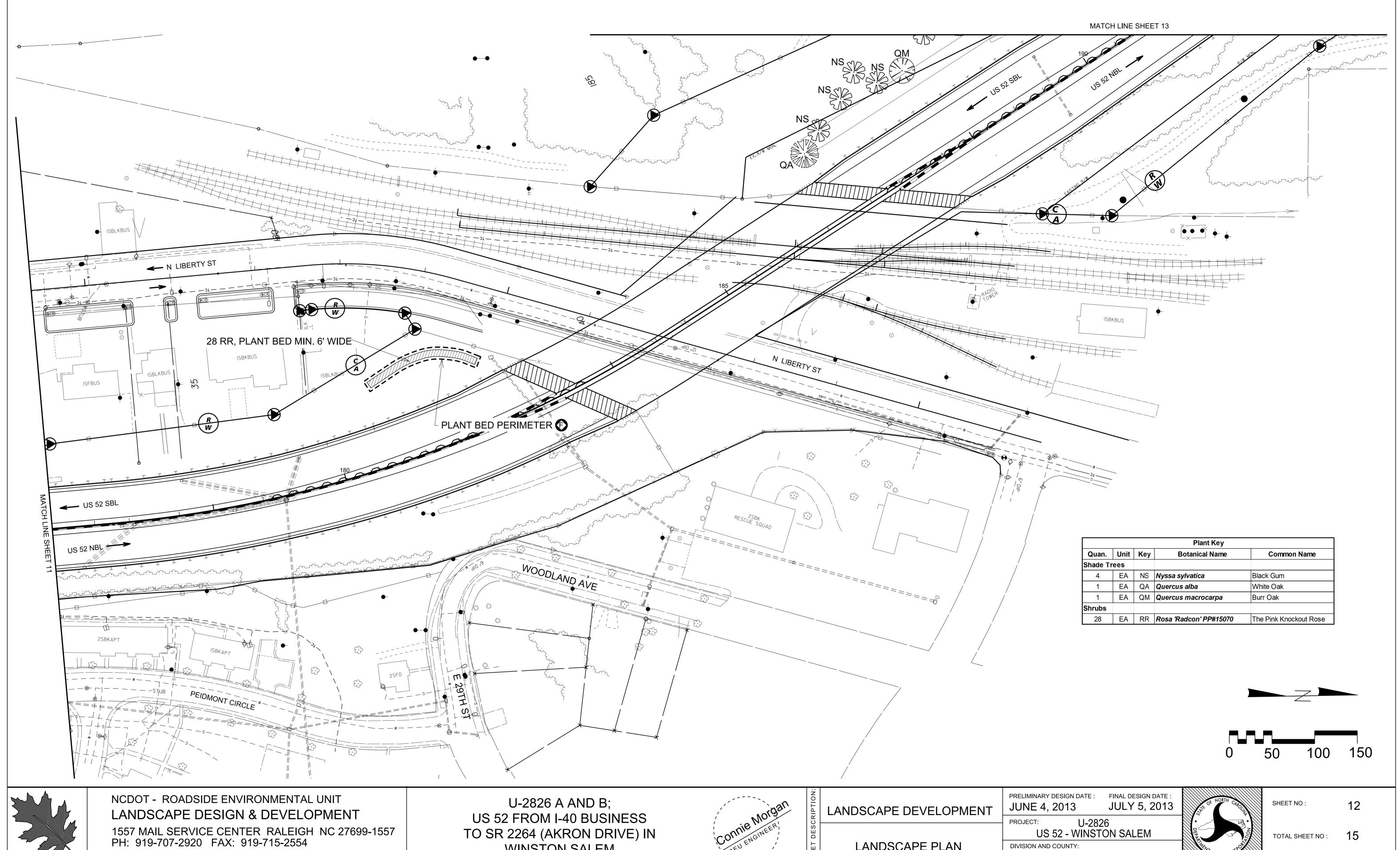
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WINSTON SALEM



LANDSCAPE PLAN

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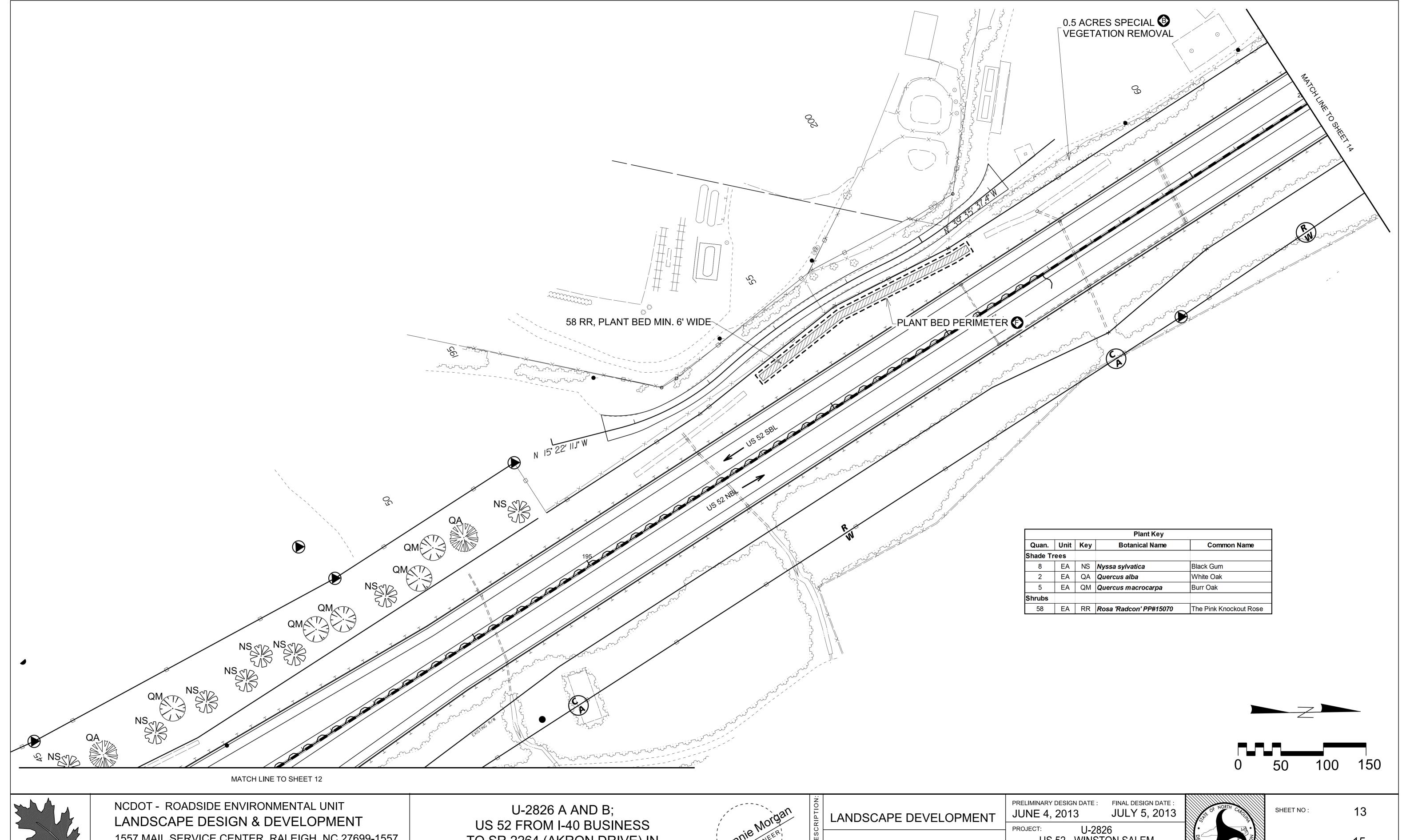
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LANDSCAPE PLAN

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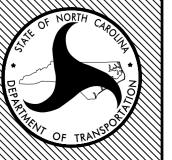


LANDSCAPE PLAN

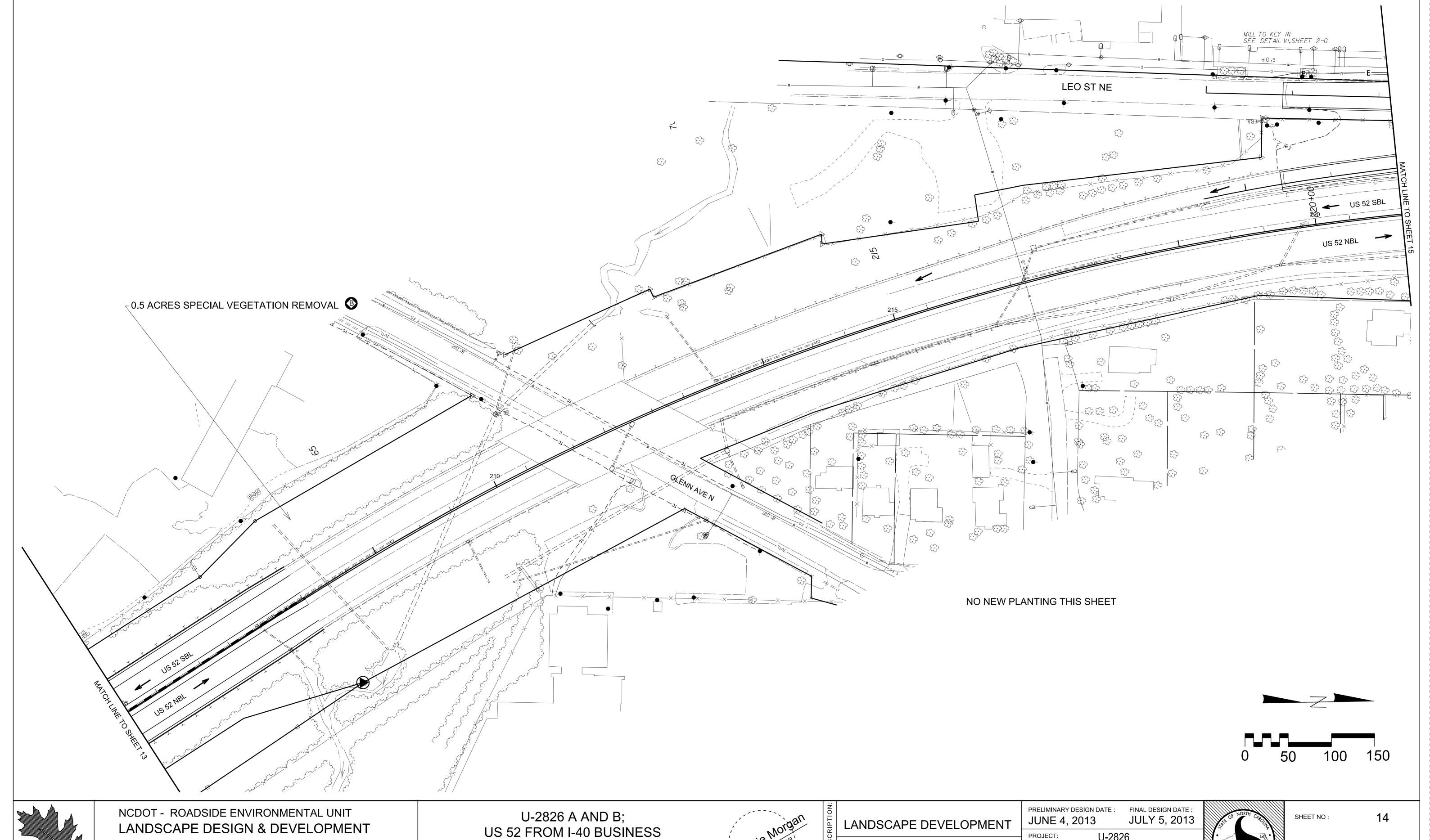
U-2826 US 52 - WINSTON SALEM

DIVISION AND COUNTY:

**DIVISION 9 - FORSYTH COUNTY** 



TOTAL SHEET NO:





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TO SR 2264 (AKRON DRIVE) IN WINSTON SALEM



U-2826 US 52 - WINSTON SALEM

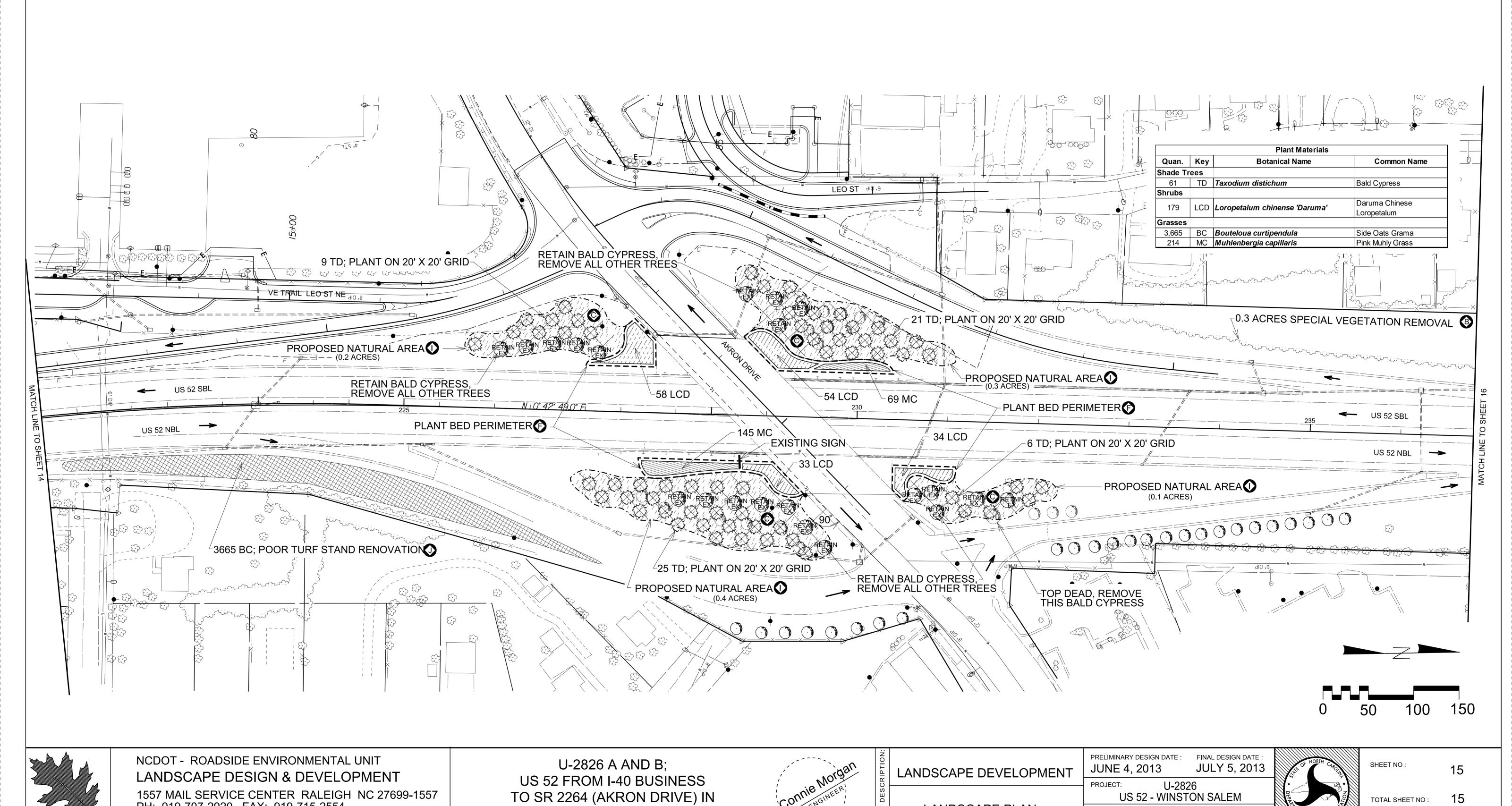
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LANDSCAPE PLAN



WINSTON SALEM

LANDSCAPE PLAN

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