

LANDSCAPE NOTES:

- PROTECT EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, AND OTHER ITEMS FROM DAMAGE. ALL DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER, AT NO COST TO THE DEPARTMENT. UNLESS OTHERWISE SHOWN TO BE REMOVED, BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO EXISTING TREES AND SHRUB/GROUNDCOVER PLANTINGS AND SOD WITHIN OR OUTSIDE THE LIMITS OF WORK AS IDENTIFIED ON THE DRAWINGS. THIS INCLUDES, BUT IS NOT LIMITED TO, DAMAGE CAUSED BY OPERATION OF EQUIPMENT, STOCKPILING OF MATERIALS, CARELESS LABOR, OR OTHER CONTRACTOR ACTIVITIES. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE DRIP—LINE OF EXISTING TREES OR THE SPILLING OF OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP—LINE OF EXISTING TREES.
- 2. ADJUST LANDSCAPE MATERIAL AND ASSOCIATED DEVICES IN THE FIELD TO AVOID CONFLICTS WITH ANY PROPOSED OR EXISTING TO REMAIN STRUCTURES OR REGULATORY REQUIREMENTS, INCLUDING BUT NOT LIMITED TO UTILITY STRUCTURES, DRAINAGE STRUCTURES, DITCHES, UNDERDRAINS, DITCH BLOCKS, DRAINAGE DISCHARGE PATHS, TRAFFIC SIGNAGE (SUCH AS SLIP BASE SUPPORTS, MAST ARM ASSEMBLIES, REGULATORY SIGNS, ETC.), LIMITS OF CLEAR SIGHT, CLEAR ZONES, AND LIGHTING AND THEIR APPURTENANCES. DO NOT KNOWINGLY PLACE THE PROPOSED IMPROVEMENTS IF A CONFLICT EXISTS. ANY COSTS TO REMOVE AND/OR REPAIR AND/OR RELOCATE WORK PLACED THAT HAS NOT BEEN APPROVED IN WRITING BY THE ENGINEER TO BE AT THE CONTRACTOR'S EXPENSE.
- 3. IMMEDIATELY NOTIFY THE ENGINEER OF ANY UNFORESEEN SITE CONDITIONS (OBSTRUCTIONS, COMPACTED SOIL/SUBGRADE, POOR DRAINAGE, UTILITY CONFLICTS, ETC.) PRIOR TO PROCEDING WITH LANDSCAPE INSTALLATION. THE ENGINEER WILL REVIEW PLANT RELOCATION OR OTHER ACTION PROPOSED BY THE CONTRACTOR.
- 4. ALL ON-SITE PLANT MATERIAL DELIVERIES SHALL TAKE PLACE ON MONDAY THROUGH THURSDAY ONLY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. NOTIFY THE ENGINEER A MINIMUM OF 5 BUSINESS DAYS PRIOR TO THE DELIVERY OF PLANT MATERIAL SO A REPRESENTATIVE MAY BE PRESENT TO VERIFY THAT PLANT MATERIAL MEETS PROJECT REQUIREMENTS. ALL PLANT MATERIALS ARE TO BE DELIVERED ON SITE UNDAMAGED FROM TRANSPORTATION OR DIGGING OPERATIONS. THE ENGINEER WILL REJECT ANY MATERIAL THAT HAS BEEN DAMAGED OR RENDERED UNACCEPTABLE DUE TO RELOCATION OR TRANSPORTATION FROM POINT OF ORIGIN. ALL PLANT MATERIAL SHALL BE PROTECTED FROM SUN, WIND, AND OTHER DAMAGE DURING DELIVERY, ALL PLANT MATERIALS MUST BE AVAILABLE TO BE INSPECTED BY THE ENGINEER AT TIME OF DELIVERY AND PRIOR TO PI ANTING.
- 5. ALL PLANT MATERIAL SHALL BE FLORIDA #1 MINIMUM AT THE TIME OF DELIVERY AND SHALL MAINTAIN SAID CHARACTERISTICS THROUGHOUT THE INSTALLATION PERIOD UNTIL FINAL ACCEPTANCE AS SPECIFIED IN "GRADES AND STANDARDS FOR NURSERY PLANTS", LATEST EDITION, BY DIVISION OF PLANT INDUSTRY, FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. PLANT MATERIAL SHALL ALSO CONFORM TO THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN "STANDARDS FOR NURSERY STOCK", LATEST EDITION. REFER TO THE PLANT SCHEDULE FOR DETAILED SPECIFICATIONS FOR PLANTS. MAINTENANCE SHALL INCLUDE BUT IS NOT LIMITED TO REPLACEMENT, PRUNING, WATERING, FERTILIZATION, AND PEST AND DISEASE MANAGEMENT.
- 6. SUBMITTALS AT A MINIMUM, SUPPLY THE FOLLOWING ITEMS AND SUBMIT TO THE ENGINEER FOR APPROVAL:
 - A. PLANT MATERIAL DELIVERY ADVANCE NOTIFICATION
 - B. UNFORESEEN SITE CONDITIONS
 - C. MANUFACTURER'S LABEL AND APPLICATION RATES FOR HERBICIDES, INSECTICIDES, FUNGICIDES AND PRE-EMERGENTS.
 - D. FERTILIZER ANALYSIS, MANUFACTURER'S LABEL AND APPLICATION RATES.
 - E. SAMPLES OF SHREDDED PINE BARK MULCH.
 - F. PLANT STAKING LAYOUT REVIEW ADVANCE NOTIFICATION
 - G. PALM STAKING AND GUYING KITS.
 - E. PRIOR TO PLANTING, A COLOR PHOTOGRAPH SUBMISSION FOR ALL PALMS AND FOR EACH PLANT SPECIFIED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. EACH PLANT PHOTOGRAPH APPROVED BY THE ENGINEER SHALL BE THE MINIMUM STANDARD ACCEPTED FOR EACH PLANT SPECIES. THE PLANT PHOTOGRAPH SHALL SHOW THE ENTIRE PLANT AND HAVE A LEGIBLE SCALE TO SHOW THE OVERALL HEIGHT AND SPREAD OF THE PLANT. PHOTOGRAPHS SHALL INDICATE THE GENUS, SPECIES, AND SIZE OF THE PLANT IN THE PHOTO

- F. DOCUMENTATION OF PROPER HARDENING OFF OF BALLED AND BURLAPPED PLANT MATERIALS, SUPPLIED BY NURSERY OF ORIGIN.
- G. A SCHEDULE OF VALUES FOR ALL LANDSCAPE MATERIALS AND INCIDENTALS SPECIFIED IN THE PLANS AND MAINTENANCE SUPPLEMENTAL SPECIFICATION 580 SHALL BE SUBMITTED PRIOR TO COMMENCEMENT OF THE WORK.
- H. A COPY OF THE LICENSES OF THE STATE LICENSED APPLICATORS OF FERTILIZERS, HERBICIDES, AND PRE-EMERGENTS.
- 7. PALM NOTES
 - THE FOLLOWING SHALL APPLY TO REGENERATED ROOT SABAL PALMS.
 - A. PALMS WILL HAVE NEW REGENERATED ROUND TIPPED ROOTS THAT HAVE EMERGED FROM THE ROOT INITIATION ZONE AND ARE WHITISH YELLOW IN COLOR WITH TAPERED ENDS.
 - B. NEW REGENERATED ROOTS ARE PRESENT ON ALL SIDES OF THE ROOTBALL.
 - C. PALMS SHALL HAVE BEEN PLACED IN CONTAINERS OR CONTAINED WITHIN PLASTIC FABRIC OR FILM MATERIAL AFTER HARVESTING AND DURING THE ROOT REGENERATION PERIOD.
 - D. PALMS WILL HAVE A MINIMUM OF THREE FULLY EXPANDING FRONDS. FRONDS SHALL MEET THE MINIMUM REQUIREMENTS TO BE CONSIDERED "EXCELLENT LEAVES" AS DEFINED BY THE GLOSSARY OF TERMS IN THE LATEST EDITION OF GRADES AND STANDARDS FOR NURSERY PLANTS PALMS & CYCADS (FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES).
- 8. PLANT SUPPLEMENTS
 - A. ALL PLANT MATERIAL AND PALMS SHALL BE FERTILIZED WITH A 3-MONTH SLOW RELEASE 8-2-12 +4 MG. ONE HUNDRED PERCENT OF N, K, AND MG SHOULD BE IN CONTROLLED RELEASE FORM AND MICRONUTRIENTS SHOULD BE IN SULFATE OR CHELATE (FE ONLY). FERTILIZER SHOULD CONTAIN 1.5%-2% MN AND FE PLUS TRACE AMOUNTS OF B (0.15%), ZN (0.15%), AND CU (0.05%).
 - B. ALL PLANT MATERIALS SHALL BE FERTILIZED AT THE TIME OF PLANTING AND 14 DAYS PRIOR TO COMPLETION OF THE PROJECT. NOTIFY THE ENGINEER IN WRITING 48 HOURS IN ADVANCE OF ALL FERTILIZER APPLICATIONS. FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS.
- 9. HERBICIDE AND INCECTICIDE
 - A. PRE-EMERGENT HERBICIDE MAY BE APPLIED TO ALL PLANTING PITS/MULCH RINGS AND MULCH BEDS PER MANUFACTURER'S RECOMMENDATIONS. PREVENT OVERSPRAY AND DAMAGE TO NEW PLANTS.
 - B. POST-EMERGENT HERBICIDE MAY BE USED DURING CONSTRUCTION TO CONTROL WEED GROWTH. APPLY PER MANUFACTURER'S RECOMMENDATIONS.
 - C. ALL PRE AND POST HERBICIDAL TREATMENTS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDATIONS AND INCLUDE A TEMPORARY TRACER DYE IDENTIFIABLE FOR A MINIMUM OF TWO (2) DAYS AFTER APPLICATION.
- 10. MULCH
 - A. ALL PLANTING AREAS AND PALM RINGS WILL USE SHREDDED PINE BARK MULCH.
 - B. MULCH SHALL BE APPLIED TO ALL PLANTING AREAS AND INDIVIDUAL PALM RINGS AT A MINIMUM WETTED DEPTH OF THREE (3) INCHES UNLESS OTHERWISE SHOWN. MINIMUM 3" DEPTH SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- 11. WEED AND LITTER CONTROL
 - A. THROUGHOUT THE DURATION OF THE PROJECT, KEEP PLANTING LOCATIONS AND PLANTING BEDS FREE OF LITTER AND UNDESIRABLE VEGETATION.

12. PLANTING SOIL SHALL BE AS FOLLOWS:

1/4 COMPOSTED BARK

A. MIXTURE FOR TREES AND SHRUBS SHALL CONSISTS OF 1/3 "BLENDED SOIL", 1/3 COARSE SAND, AND 1/3 EXISTING SOIL, THOROUGHLY MIXED

"BLENDED SOIL" SHALL CONSIST OF:
1/3 MUSHROOM COMPOST OR PEAT
1/4 COMPOSTED COW MANURE

B. MIXTURE FOR PALMS SHALL BE 50 PERCENT COARSE SAND AND 50 PERCENT EXISTING SOIL. DO NOT USE "BLENDED SOIL". MIX THOROUGHLY WITH EXISTING SOIL.

REFER TO LANDSCAPE DETAILS FOR MINIMUM PLANTING PIT DIMENSIONS.

13. PREFERRED PLANT MATERIAL SETBACKS (TO CENTER OF PLANT):

10 FT FROM OVERHEAD UTILITIES TO PALMS 5 FT FROM UNDERGROUND UTILITIES TO PALMS 10 FT FROM SIGN POLES TO PALMS

ABBREVIATIONS:

CAL = CALIPER
CONT= CONTAINER
CT = CLEAR TRUNK
FG = FIELD GROWN
GAL = GALLON
HT = HEIGHT
MAX = MAXIMUM
MIN = MINIMUM

OC = ON CENTER SPR = SPREAD TYP = TYPICAL

DATE DESCRIPTION DATE DESCRIPTION

PRELIMINARY

AECOM TECHNICAL SERVICES, Inc.

150 North Orange Avenue Suite 200 Orlando, FL. 32801 Goran Duvnjak, P.E. No. 84141 STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

 ROAD NO.
 COUNTY
 CIP #
 FINANCIAL PROJECT ID

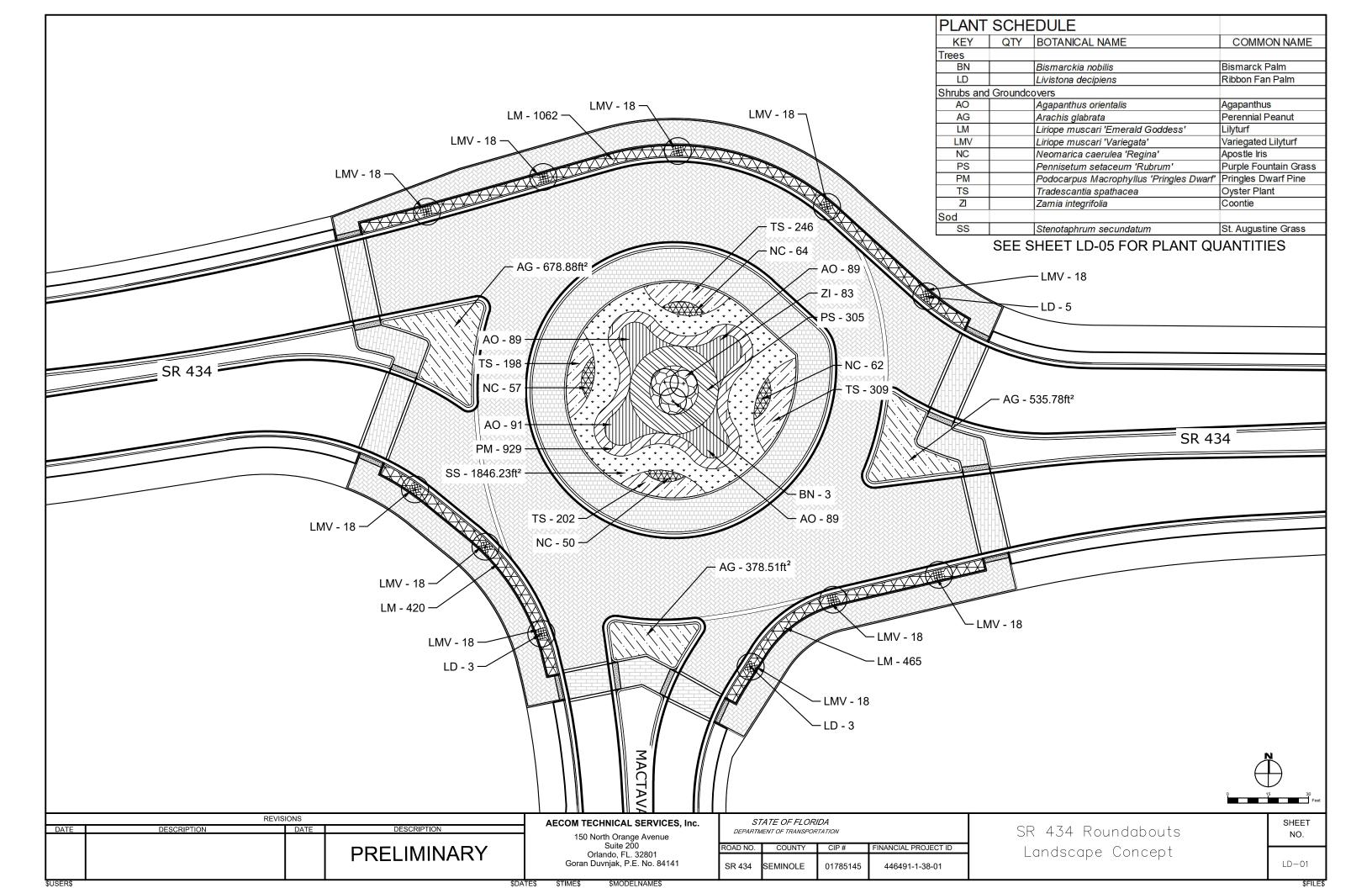
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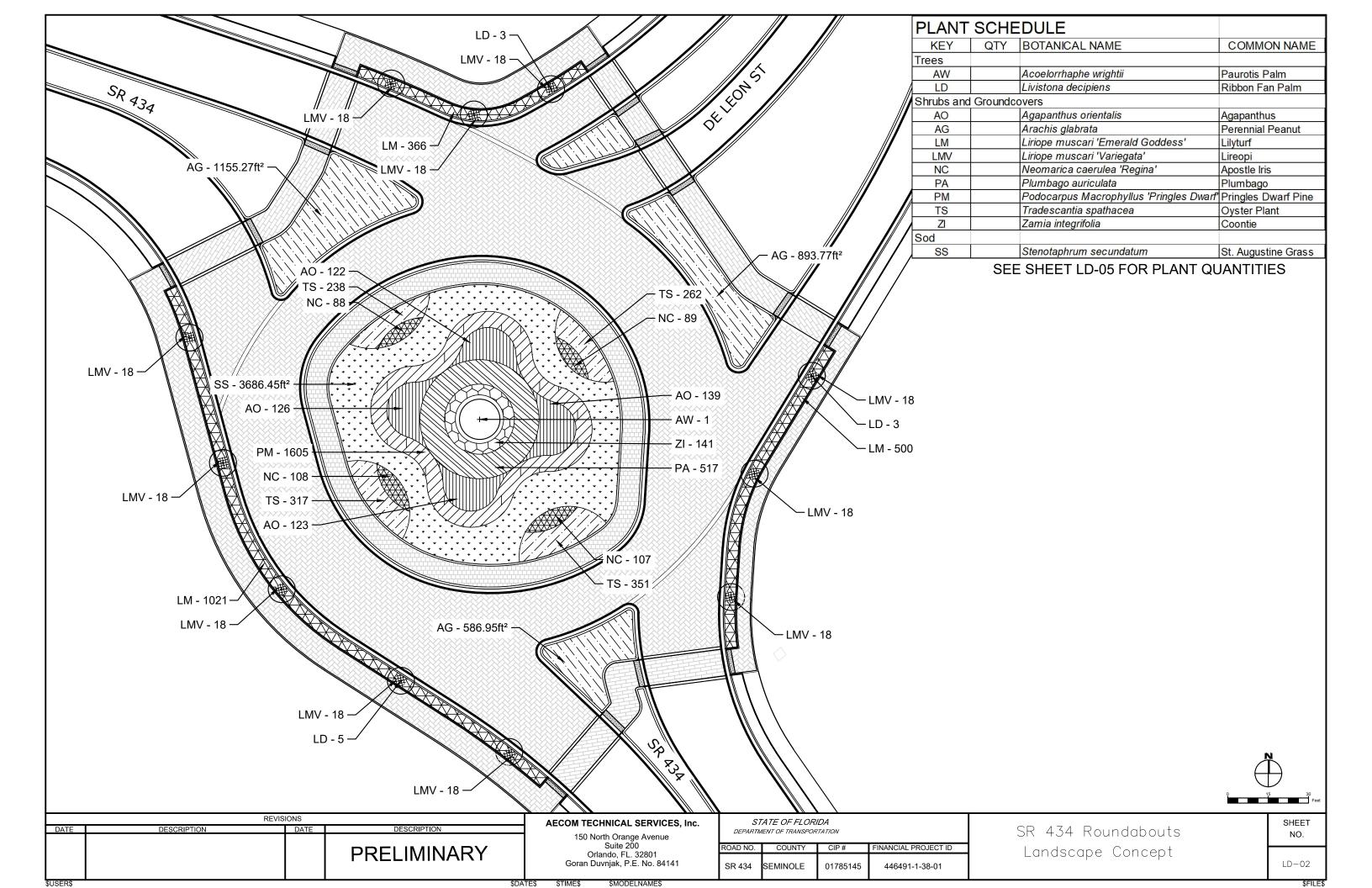
SR 434 Roundabouts Landscape Concept SHEET NO.

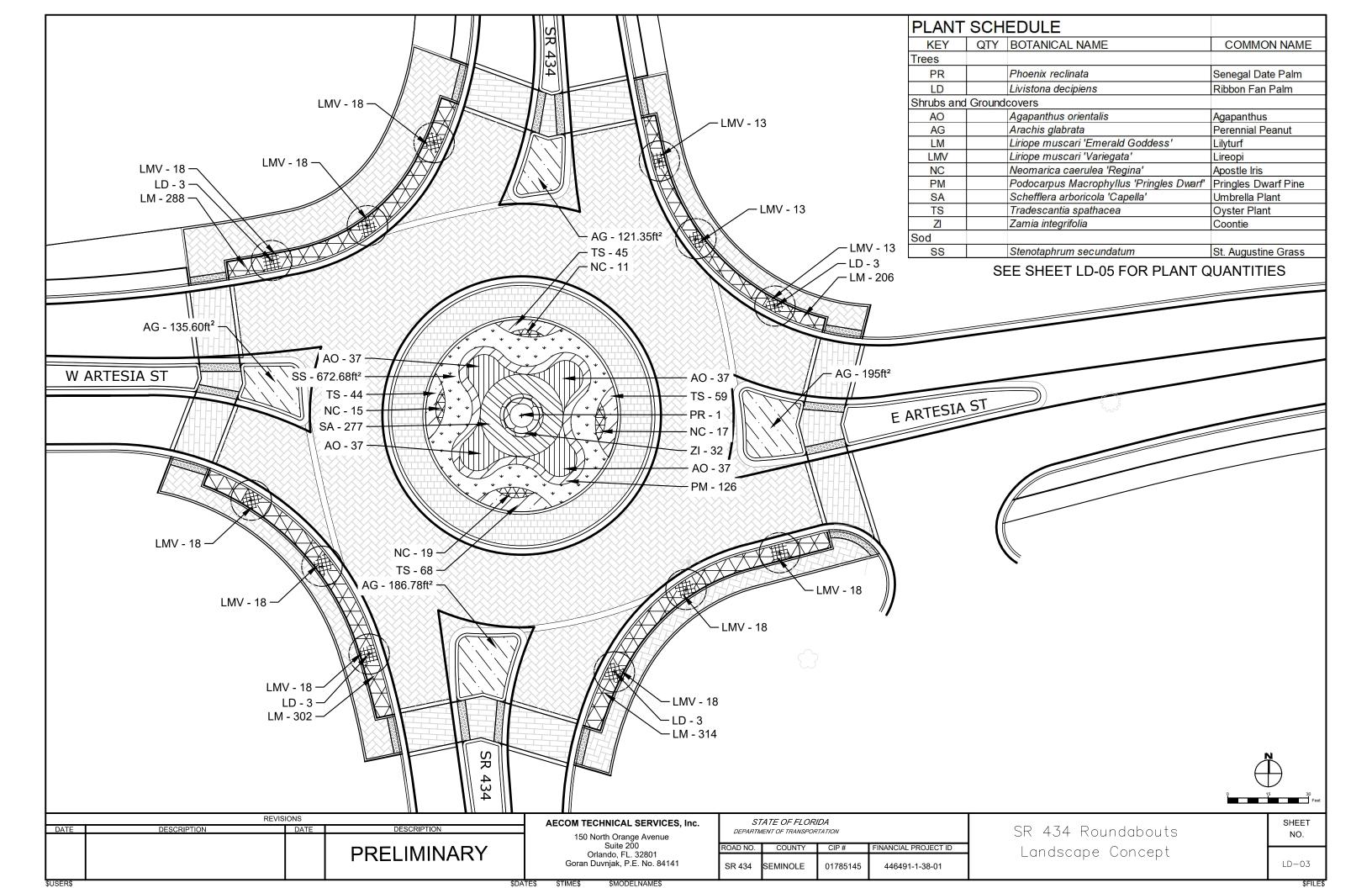
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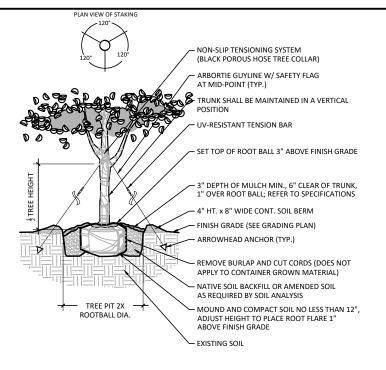
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- 1) ARBORGUY STAKING COMPONENTS MANUF. BY ARBORBRACE STAKING SYSTEMS INC., OR APPROVED EQUAL
- 2) FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER OR OWNER'S REP., AS
- 3) CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION
- 4) ALL TREES AND PALMS SHALL BE INSTALLED PER FDOT STANDARD PLANS 580-001, LATEST EDITION.



TREE DETAIL **SECTION**

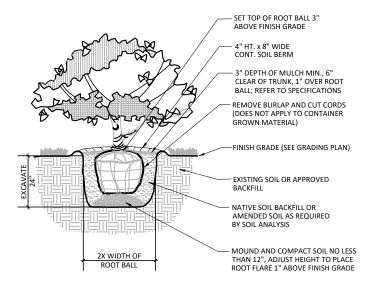
- NOTES:

 1) ALL SHRUBS AND GROUNDCOVER MASSES TO USE TRIANGULAR SPACING EXCEPT WHERE NOTED.
- ALL SINGUS AND GROUDLOVER MISSES IO USE TRANSOLAR SPACING EXCEPT WHERE NOTED.

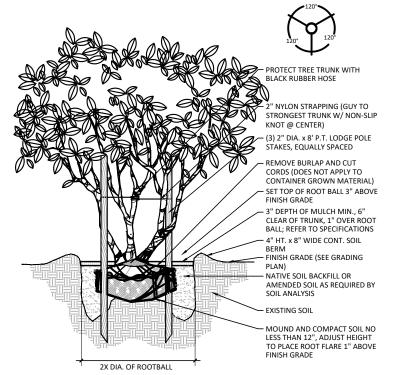
 REFER TO PLANT SCHEDULE FOR INDIVIDUAL PLANT SPACING.

 PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND THE ROOT BALL IN 6" LIFTS TO BRACE SHRUB.

 DO NOT OVER COMPACT. WHEN PLANTING HOLE HAS BEEN BACKFILLED, POUR WATER AROUND
 THE ROOT BALL TO SETTLE THE SOIL.
- 3) CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS/BEDS PRIOR TO INSTALLATION.
- 4) ALL TREES AND PALMS SHALL BE INSTALLED PER FDOT STANDARD PLANS 580-001, LATEST EDITION.





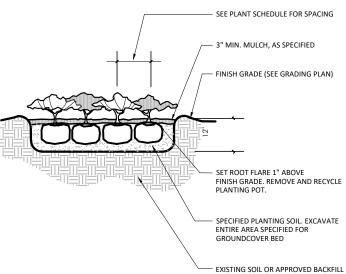


- $\frac{\text{NOTES:}}{\text{1)}} \quad \text{FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER OR OWNER'S REP., AS}$
- 2) CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION
- 3) ALL TREES AND PALMS SHALL BE INSTALLED PER FDOT STANDARD PLANS 580-001, LATEST EDITION.

TREE DETAIL **SECTION**

- NOTES:

 1) ALL GROUNDCOVER MASS PLANTINGS SHALL USE TRIANGLULAR SPACING EXCEPT WHERE NOTED.
- REFER TO PLANT SCHEDULE FOR INDIVIDUAL PLANT SPACING.
 CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS/BEDS PRIOR TO INSTALLATION.
- WHEN GROUNDCOVER AND SHRUBS ARE USED IN MASS, PREPARE ENTIRE BED TO RECEIVE PLANTING SOIL AND PLANT MATERIALS AS SPECIFIED.
- 4) ALL TREES AND PALMS SHALL BE INSTALLED PER FDOT STANDARD PLANS 580-001, LATEST EDITION.





PLAN VIEW OF STAKING

BASE OF LEAF BUD

TREE PIT 2X

ROOTBALL DIA

BUD SHALL BE PERPENDICULAR TO GROUND PLANE.

PALM DETAIL

SECTION

PROVIDE 12" MIN. SPACING BETWEEN

₹" O.C. SPACING OF

SHRUBS/GROUNDCOVER

12" MIN. SETBACK FOR SHRUBS

REDLINE

AND GROUNDCOVER FROM EDGE OF PAVEMENT OR BEDLINE

4) STRAIGHT TRUNKS ONLY. NO SCARRED OR BLACKENED TRUNKS.

NOTES:

1) FINAL STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER OR OWNER'S REP., AS

APPLICABLE.
2) CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION.

5) ALL TREES AND PALMS SHALL BE INSTALLED PER FDOT STANDARD PLANS 580-001, LATEST EDITION.

ALL GROUNDCOVER MASS PLANTINGS SHALL USE TRIANGLULAR SPACING EXCEPT WHERE NOTED.
REFER TO PLANT SCHEDULE FOR INDIVIDUAL PLANT SPACING.

SHRUBS AND GROUNDCOVERS ADJACENT TO STRAIGHT EDGES SHALL BE TRIANGULAR - SPACED IN ROWS PARALLEL TO THE STRAIGHT EDGE.

- SHRUBS AND GROUNDCOVERS ADJACENT TO CURVED EDGES SHALL BE PLANTED IN ROWS PARALLEL TO THE CURVED EDGE.
- ALL TREES AND PALMS SHALL BE INSTALLED PER FDOT STANDARD PLANS 580-001, LATEST EDITION.



REVISIONS **PRELIMINARY**

TREE DETAIL

AECOM TECHNICAL SERVICES, Inc.

150 North Orange Avenue Suite 200 Orlando, FL. 32801 Goran Duvnjak, P.E. No. 84141

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SR 434 Roundabouts Landscape Concept

SHEET NO.

LD - 04

LEAF BUD TO BE CROPPED/HURRICANE CUT

OR PLATED CARBON STEEL BANDS W/
TENSIONING AND LOCKING SCREW/CLAMP TO

PREATTACHED PROTECTIVE PADDING/BURLAP

AND STAPLE GUIDES FOR BANDING; PRE-NOTCHED TO ACCEPT SUPPORT BRACES;

(3) EQUALLY SPACED 2" x 4" x 8' P.T. WOOD SUPPORT BRACES SECURED IN NOTCHES OF

BATTENS, W/ SAFETY FLAG AT MIDPOINT OF

NATIVE SOIL BACKFILL OR AMENDED SOIL AS

PLANTING BALL, REMOVE BURLAP AND CUT CORDS

MOUND AND COMPACT SOIL NO LESS THAN 12", ADJUST HEIGHT TO PLACE ROOT FLARE

EDGE OF PAVEMENT / BEDLINE

PLAN VIEW ENLARGEMENT

PLAN VIEW

· 3" DEPTH OF MULCH MIN., 6" CLEAR OF TRUNK, 1" OVER ROOT BALL, REFER TO

- (3) 2" x 4" x 24" P.T. GROUND STAKES

- 4" HT. x 8" WIDE CONT. SOIL BERM

REQUIRED BY SOIL ANALYSIS

1" ABOVE FINISH GRADE

SPECIFICATIONS (TYP.)

(3) 2" x 4" x 12" P.T. WOOD BATTENS W/

BY ARBORGUY (OR APPROVED EQUAL), INSTALL PER MANUF. SPECS

PRIOR TO DELIVERY/INSTALLATION

SECURE BATTENS

PLANT SCHEDULE							
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS		
Trees							
BN	3	Bismarckia nobilis	Bismarck Palm		Single Stemmed		
AW	1	Acoelorrhaphe wrightii	Paurotis Palm		Multi Stemmed		
PR	1	Phoenix reclinata	Senegal Date Palm		Single Stemmed		
LD	34	Livistona decipiens	Ribbon Fan Palm		7' Clearance		
Shrubs and Groundcovers							
AO	1022	Agapanthus orientalis	Agapanthus		18" O.C.		
AG	5169	Arachis glabrata	Perennial Peanut	Sq Ft	Ground Cover		
LM	4950	Liriope muscari 'Emerald Goddess'	Lilyturf		12" O.C.		
LMV	600	Liriope muscari 'Variegata'	Lireopi		12" O.C.		
NC	728	Neomarica caerulea 'Regina'	Apostle Iris		12" O.C.		
PM	1107	Podocarpus Macrophyllus 'Pringles Dwarf'	Pringles Dwarf Pine		12" O.C.		
PS	305	Pennisetum setaceum 'Rubrum'	Purple Fountain Grass		18" O.C.		
PA	517	Plumbago auriculata	Plumbago		18" O.C.		
SA	124	Schefflera arboricola 'Capella'	Umbrella Plant		18" O.C.		
TS	2344	Tradescantia spathacea	Oyster Plant		12" O.C.		
ZI	259	Zamia integrifolia	Coontie		18" O.C.		
Sod							
SS	6205	Stenotaphrum secundatum	St. Augustine Grass	Sq Ft	Turf		

REVISIONS						
DATE	DESCRIPTION	DATE	DESCRIPTION			
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