

MIHALY
LAND DESIGN
PLANNING + LANDSCAPE ARCHITECTURE
330 MILITARY CUTOFF RD., Suite A3
Wilmington, NC 28405 910.392.4355



Revisions
2018-07-12: Updated Engineers base per emailed CAD file.
2019-07-11: Updated per COW Engineers comments.
2020-03-02: Updated per updated calculations from Engineer.

CLIENT
ECHO FARMS, LLC
c/o MATRIX DEVELOPMENT GROUP
CN 4000 FORSGATE DRIVE
CRANBURY, NJ 08512

PROJECT
TRACT 2 - WOODLANDS @ ECHO FARMS
4114 ECHO FARMS BLVD.
WILMINGTON, NC 28412
LANDSCAPE PLAN

CONSTRUCTION DOCUMENT
REVIEW SET

Date: 1/26/2018
Phase:
Job Number: 810-01

Designed by: MLD
Drawn by: MAS
Checked by: JWM

Sheet Title:
OVERALL PLAN

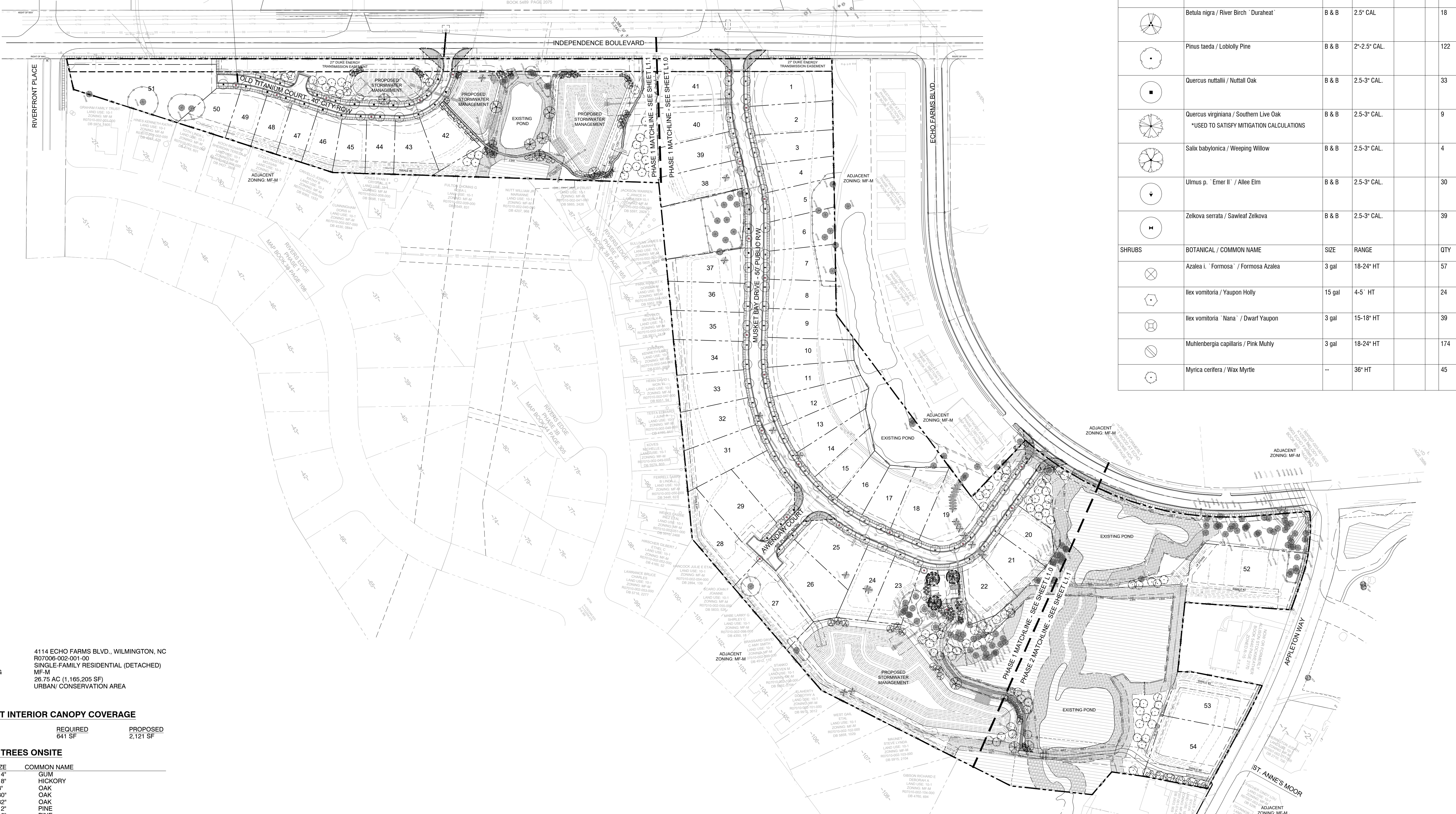
Sheet Number:

L0.0
of 4 sheets

PLANT SCHEDULE OVERALL

TREES	BOTANICAL / COMMON NAME	CONT	CAL	RANGE	QTY
	Cercis c. 'Forest Pansy'™ / Forest Pansy Redbud	25 GAL	2" CAL	6-8' HT	6
LARGE SHADE TREES	BOTANICAL / COMMON NAME	CONT	CAL	RANGE	QTY
	Betula nigra / River Birch "Duraheat"	B & B	2.5" CAL		18
	Pinus taeda / Loblolly Pine	B & B	2"-2.5" CAL		122
	Quercus nuttallii / Nuttall Oak	B & B	2.5-3" CAL		33
	Quercus virginiana / Southern Live Oak *USED TO SATISFY MITIGATION CALCULATIONS	B & B	2.5-3" CAL		9
	Salix babylonica / Weeping Willow	B & B	2.5-3" CAL		4
	Ulmus p. 'Emer II' / Allee Elm	B & B	2.5-3" CAL		30
	Zelkova serrata / Sawleaf Zelkova	B & B	2.5-3" CAL		39
SHRUBS	BOTANICAL / COMMON NAME	SIZE	RANGE	QTY	
	Azalea i. 'Formosa' / Formosa Azalea	3 gal	18-24" HT	57	
	Ilex vomitoria / Yaupon Holly	15 gal	4-5' HT	24	
	Ilex vomitoria 'Nana' / Dwarf Yaupon	3 gal	15-18" HT	39	
	Muhlenbergia capillaris / Pink Muhly	3 gal	18-24" HT	174	
	Myrica cerifera / Wax Myrtle	--	36" HT	45	

STREET LIGHT, TYPICAL FINAL LOCATION OF STREET LIGHTS AND FIXTURE SPECIFICATIONS TO BE DETERMINED BY DUKE POWER WITH APPROVAL FROM LANDSCAPE ARCHITECT



SITE DATA
ADDRESS: 4114 ECHO FARMS BLVD., WILMINGTON, NC
PARCEL ID: R07006-002-001-00
PROPOSED USE: SINGLE-FAMILY RESIDENTIAL (DETACHED)
EXISTING ZONING: MF-M
PARCEL AREA: 26.75 AC (1,165,205 SF)
CAMA LAND USE: URBAN/ CONSERVATION AREA

PARKING LOT INTERIOR CANOPY COVERAGE
(3,205 SF x 20%)
REQUIRED: 641 SF
PROPOSED: 2,121 SF

PRESERVED TREES ONSITE

QUANTITY	SIZE	COMMON NAME
1	14"	GUM
1	18"	HICKORY
2	8"	OAK
1	30"	OAK
1	32"	OAK
1	12"	PINE
2	16"	PINE
6	18"	PINE
3	20"	PINE
6	22"	PINE
2	24"	PINE
1	10"	WALNUT

TOTAL CALIPER INCHES = 612"
TOTAL CREDITS FOR PRESERVED TREES : (612" / 6) = 85 CREDITS

TREE MITIGATION REQUIREMENTS

QUANTITY	SIZE	COMMON NAME	% MITIGATION
1	54"	GUM	75
1	44"	PINE	50
1	40"	PINE	50
3	36"	PINE	50

54" x (2)(.75) = 81 2/3 = 27 TREES
192" x (2)(.5) = 192 2/3 = 64 TREES

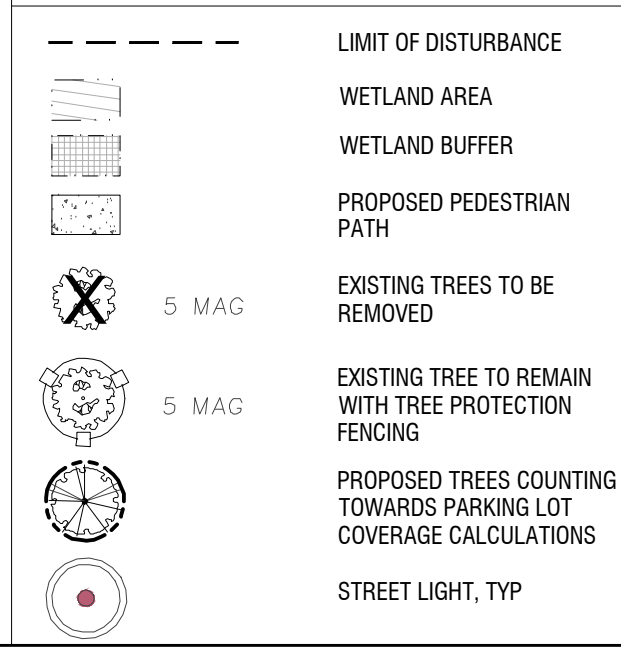
TOTAL TREES REQUIRED FOR MITIGATION: 91 TREES
TOTAL CREDITS USED TOWARDS MITIGATION CALCULATIONS: 85 CREDITS
TOTAL TREES PLANTED TO SATISFY MITIGATION: 9 TREES* (SEE PLANTING LEGEND)

OVERALL TREE REQUIREMENTS (15 TREES/DISTURBED ACRE)
REQUIRED: 20.9 ACRES DISTURBED x 15 TREES = 314 TREES REQUIRED
PROVIDED: 53 EXISTING TREES RETAINED
281 TREES PROPOSED - REFER TO PLANTING LEGEND
TOTAL: 314 TREES PROVIDED

GENERAL PLANTING NOTES

- THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FINAL GRADING, SEEDING, SOIL AMENDMENTS, ETC., AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION.
- QUANTITIES SHOWN IN PLANT LISTS ARE FOR CONVENIENCE ONLY. PLANS SHALL GOVERN.
- THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANT LOCATIONS OR INSUFFICIENT PLANT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
- ALL TREE AND SHRUB MATERIAL SPECIFIED MUST MEET STANDARD INDUSTRY SPECIFICATIONS FOR THE CONTAINER SIZE INDICATED. DOWNSIZING OR SUBSTITUTION OF PLANT MATERIAL WITHOUT PRIOR APPROVAL OF LANDSCAPE ARCHITECT WILL NOT BE ALLOWED.
- ALL LANDSCAPE AREAS SHALL BE GRADED TO A SMOOTH EVEN SURFACE PRIOR TO ANY PLANT INSTALLATION. ALL PLANT MATERIALS SHALL BE INSTALLED USING GOOD HORTICULTURAL PRACTICES IN ACCORDANCE WITH THE PLANS AND DETAILS.
- TREES SHALL NOT BE PLANTED CLOSER THAN FOUR (4) FEET FROM ANY WALKWAY OR PUBLIC SIDEWALK EXCEPT WHERE TREE WELLS OR PARKWAYS ARE PROVIDED IN THE SIDEWALK AREA. ALL TREE PLANTED WITHIN FIVE (5) FEET OF WALKS OR PUBLIC UTILITIES SHALL RECEIVE DEEP ROOT BARRIERS.
- TREE LOCATIONS SHOWN ON PLAN MAY REQUIRE ADJUSTMENT IN THE FIELD, WHENEVER FEASIBLE. TREES SHOULD BE PLANTED A MINIMUM OF TEN (10) FEET FROM ALL UNDERGROUND UTILITIES, STREETLIGHTS, HYDRANTS, AND OUT OF DRAINAGE FLOW LINES. SHOULD THIS NOT BE POSSIBLE, CONTACT THE LANDSCAPE ARCHITECT FOR DECISION ON PLACEMENT.
- ALL TREES IN TURF AREAS SHALL HAVE 12" MIN. C.I.R. CIRCUMFERENCE AROUND THE TRUNK BASE. PROVIDE 2" MIN. THK. MULCH AT BASE OF TRUNK. MATURE PLANTINGS SHALL NOT INTERFERE WITH UTILITIES AND TRAFFIC SIGHT LINES.
- ALL AREAS PLANTED WITH GROUNDCOVER SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH. PROVIDED MIN. OF 3 INCHES OF MULCH AROUND ALL VEGETATION NEAR RETENTION PONDS. ALL REMAINING AREAS SHALL BE MULCHED WITH PINESTRAW.
- PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING ANY RESURFACING/ CONSTRUCTION OF PEDESTRIAN TRAILS BEYOND THE PARKING LOT WILL BE LIMITED TO HAND EQUIPMENT AND MINIMAL DISTURBANCE PERMITTED DUE TO THE SENSITIVITY OF THE RESOURCE. CONSTRUCTION RELEASE WILL CONTAIN CONDITION REGARDING THIS IMPROVEMENT

SYMBOL LEGEND

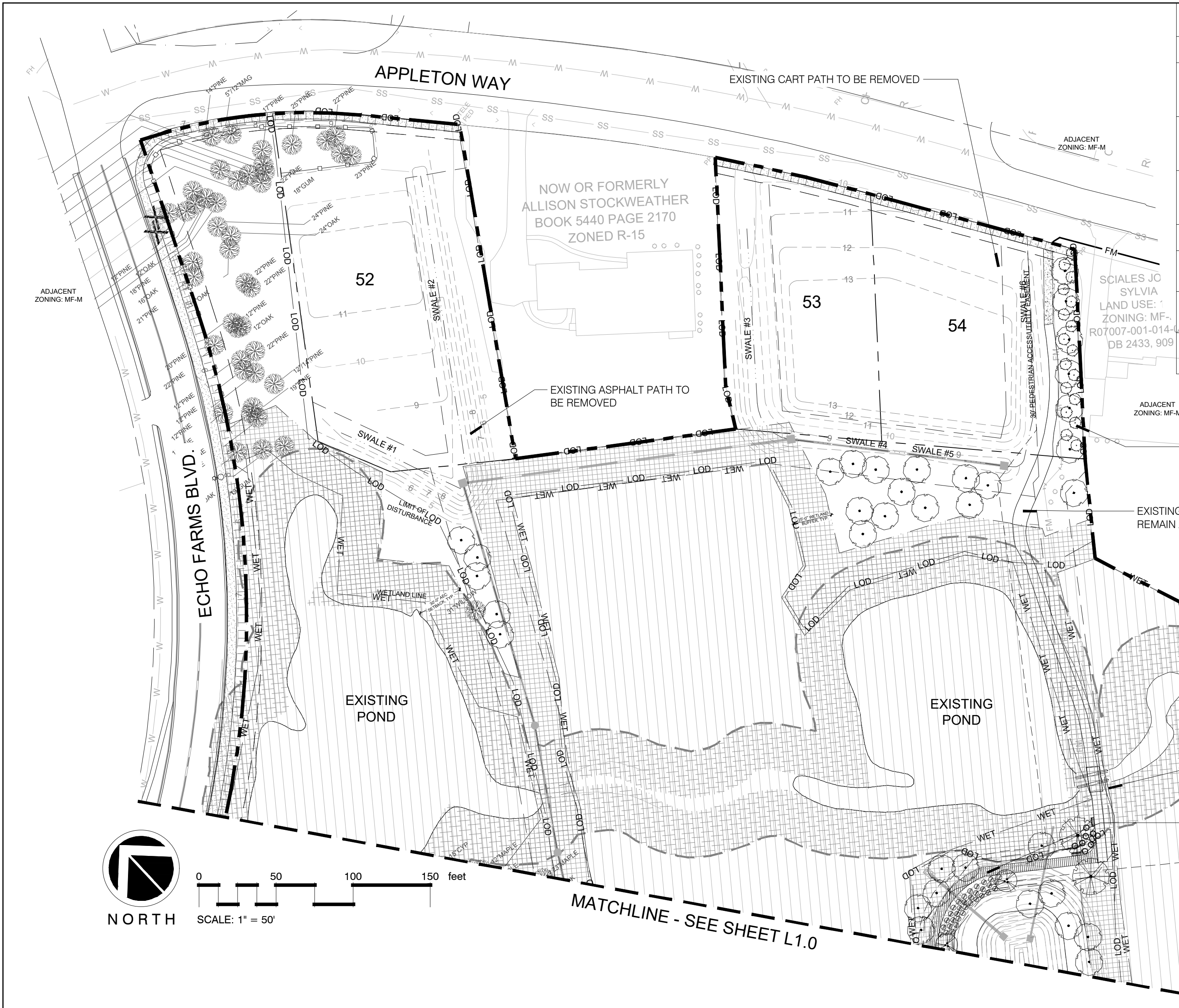


Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

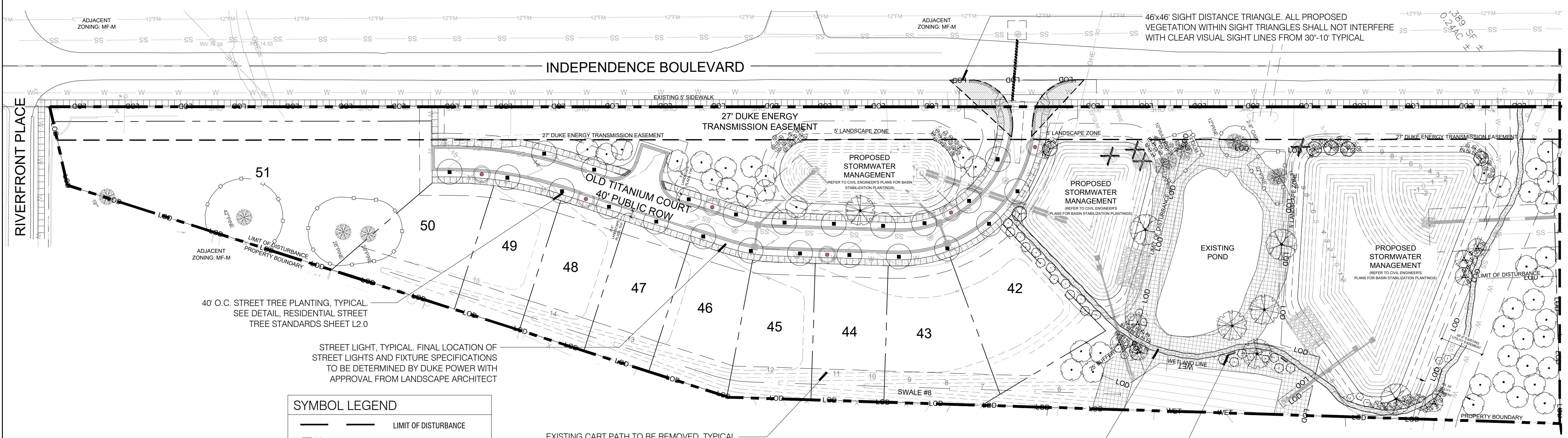
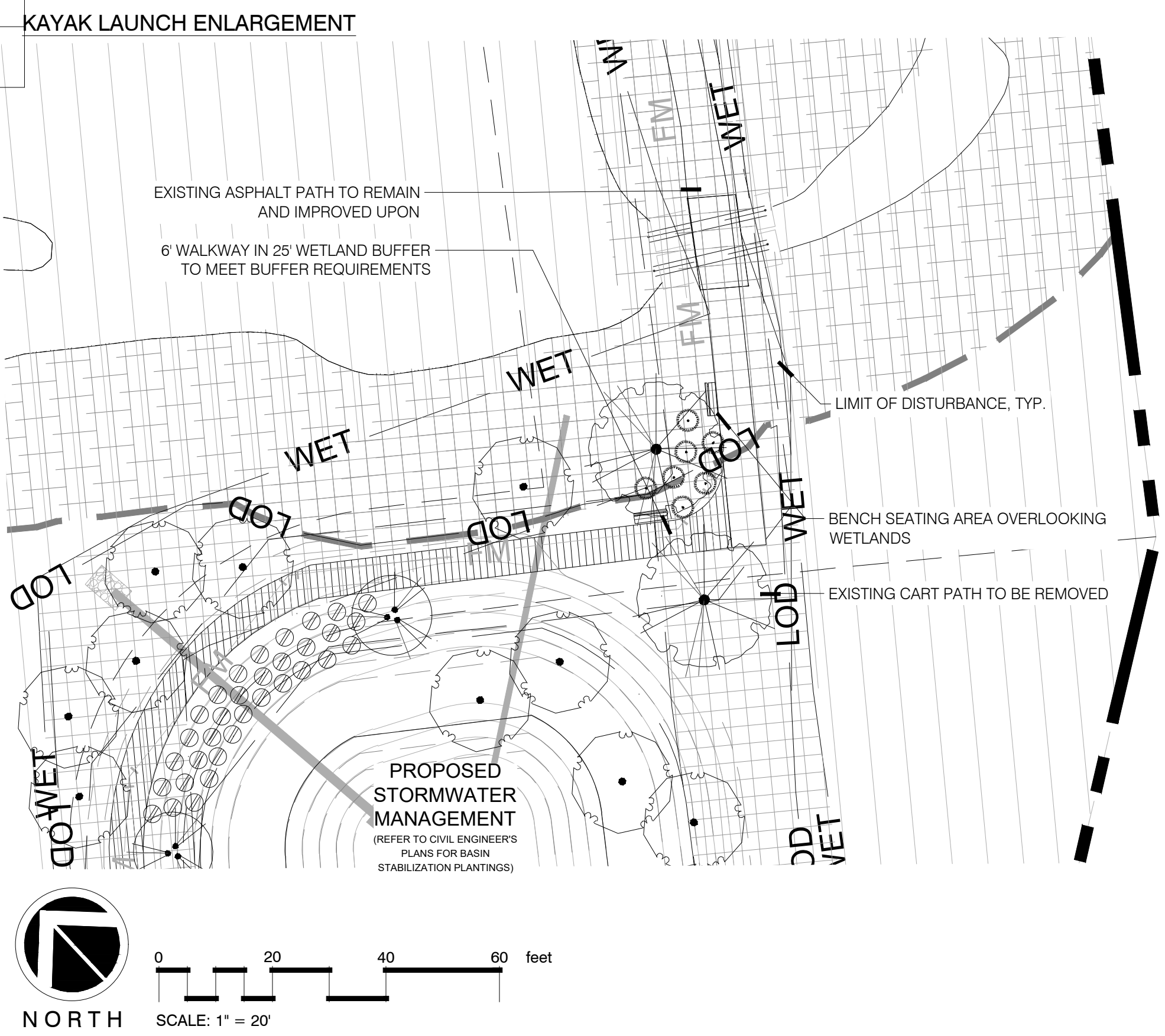
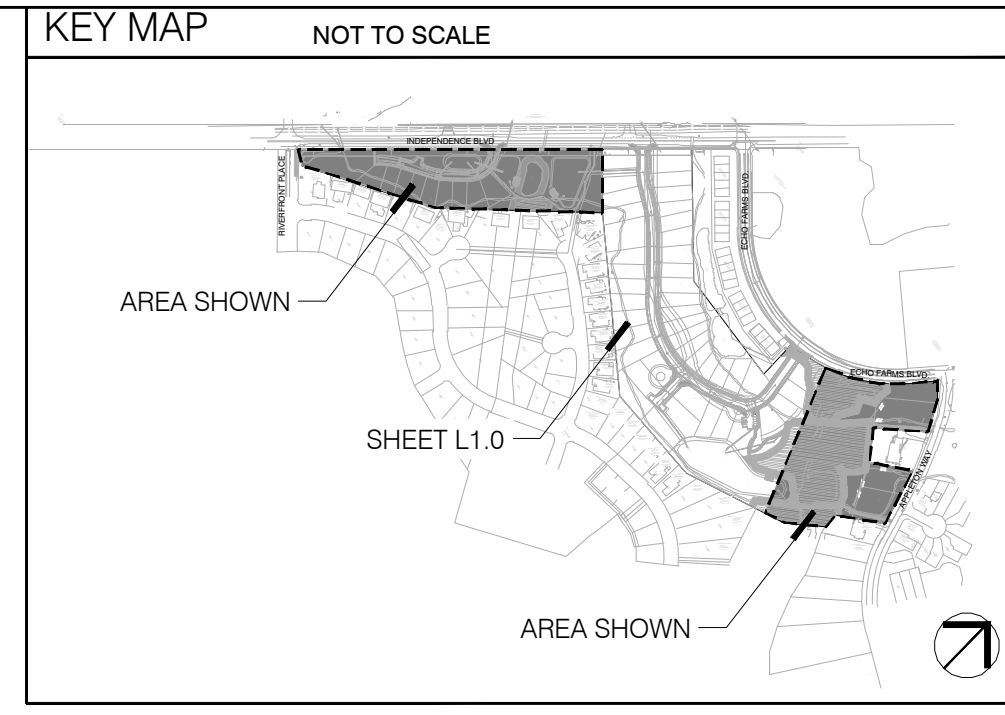
Scale: 1" = 100'

NORTH



PLANT SCHEDULE APPLETON WAY

LARGE SHADE TREES	BOTANICAL / COMMON NAME	CONT	CAL	RANGE	QTY
	Betula nigra / River Birch 'Duraheat'	B & B	2.5" CAL		1
	Pinus taeda / Loblolly Pine	B & B	2"-2.5" CAL		35
	Quercus virginiana / Southern Live Oak	B & B	2.5-3" CAL		2
SHRUBS	BOTANICAL / COMMON NAME	SIZE	RANGE		QTY
	Azalea l. 'Formosa' / Formosa Azalea	3 gal	18-24" HT		7
	Muhlenbergia capillaris / Pink Muhly	3 gal	18-24" HT		33
	Myrica cerifera / Wax Myrtle	--	36" HT		17

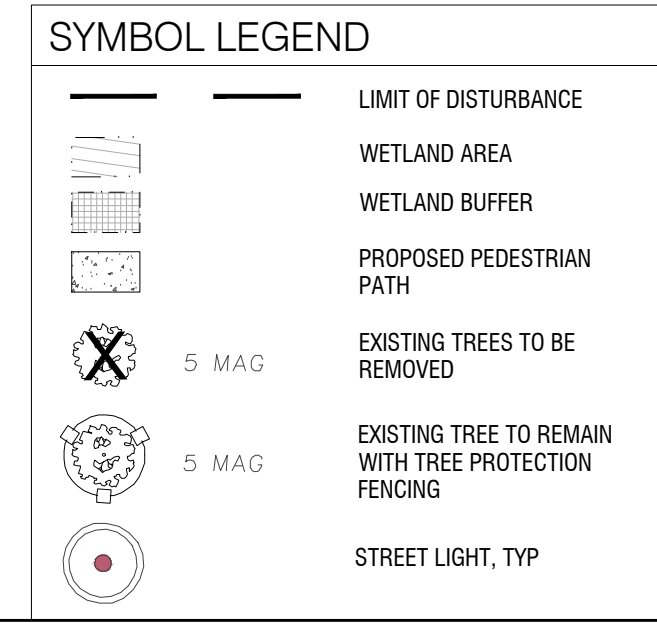


PLANT SCHEDULE INDEPENDENCE BLVD.

TREES	BOTANICAL / COMMON NAME	CONT	CAL	RANGE	QTY
	Cercis c. Forest Pansy TM / Forest Pansy Redbud	25 GAL	2" CAL	6-8' HT	6
LARGE SHADE TREES	BOTANICAL / COMMON NAME	CONT	CAL	RANGE	QTY
	Betula nigra / River Birch 'Duraheat'	B & B	2.5" CAL		7
	Pinus taeda / Loblolly Pine	B & B	2"-2.5" CAL		44
	Quercus ruttalis / Nuttall Oak	B & B	2.5-3" CAL		23
	Quercus virginiana / Southern Live Oak	B & B	2.5-3" CAL		4
	Salix babylonica / Weeping Willow	B & B	2.5-3" CAL		3
SHRUBS	BOTANICAL / COMMON NAME	SIZE	RANGE		QTY
	Ilex vomitoria / Yaupon Holly	15 gal	4-5' HT		15
	Ilex vomitoria 'Nana' / Dwarf Yaupon	3 gal	15-18" HT		39
	Muhlenbergia capillaris / Pink Muhly	3 gal	18-24" HT		121
	Myrica cerifera / Wax Myrtle	--	36" HT		19

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	



Revisions
 2018-07-12: Updated Engineers base per emailed CAD file.
 2019-07-11: Updated per COW Engineers comments.
 2020-03-02: Updated per updated calculations from Engineer.

CLIENT
ECHO FARMS, LLC
 c/o MATRIX DEVELOPMENT GROUP
 CN 4000 FORSGATE DRIVE
 CRANBURY, NJ 08512

PROJECT
TRACT 2 - WOODLANDS @ ECHO FARMS
 4114 ECHO FARMS BLVD.
 WILMINGTON, NC 28412
 LANDSCAPE PLAN

CONSTRUCTION DATE REVIEW SHEET

Date: 1/26/2018
 Phase:
 Job Number: 810-01
 Designed by: MLD
 Drawn by: MAS
 Checked by: JWM

Sheet Title:
LANDSCAPE PLAN

Sheet Number:
L1.1
 of 4 sheets

PLANT_SCHEDULE_L1

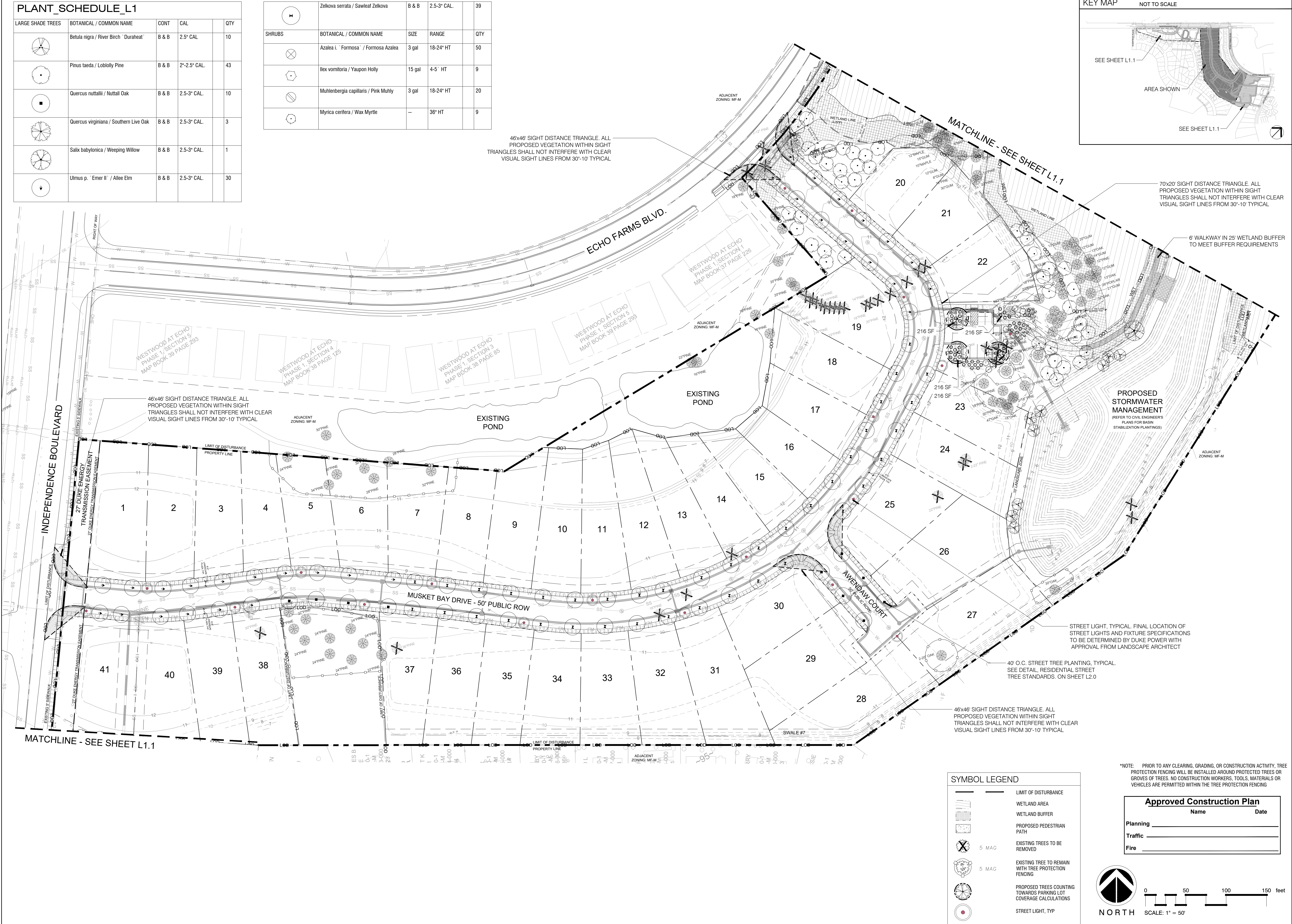
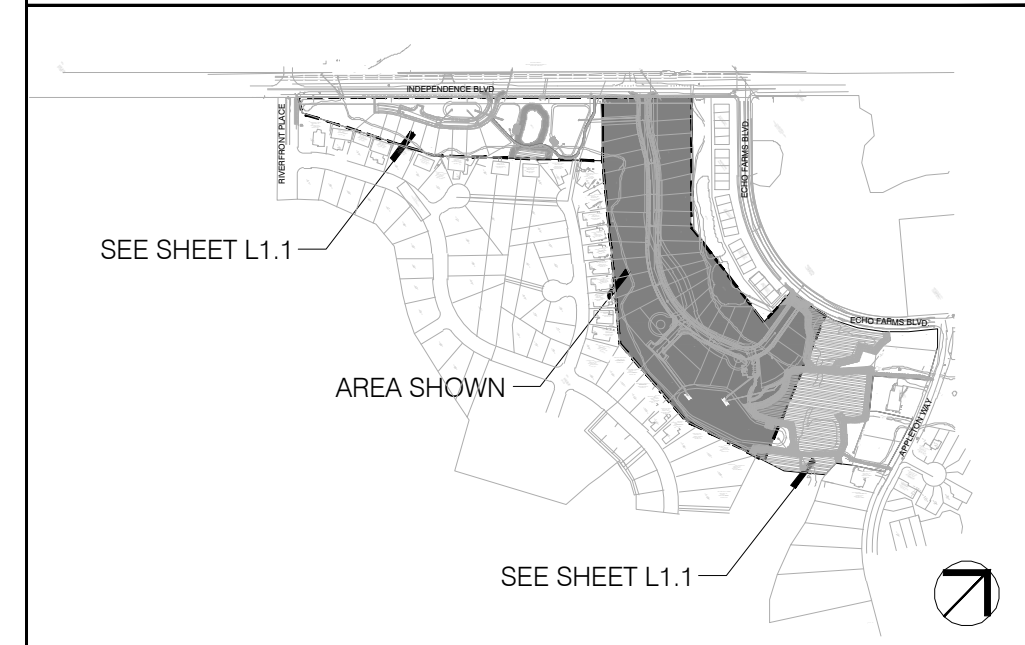
LARGE SHADE TREES	BOTANICAL / COMMON NAME	CONT	CAL	QTY
	Betula nigra / River Birch 'Duraheat'	B & B	2.5'-3" CAL.	10
	Pinus taeda / Loblolly Pine	B & B	2'-2.5" CAL.	43
	Quercus nuttallii / Nuttall Oak	B & B	2.5'-3" CAL.	10
	Quercus virginiana / Southern Live Oak	B & B	2.5'-3" CAL.	3
	Salix babylonica / Weeping Willow	B & B	2.5'-3" CAL.	1
	Ulmus p. 'Emer II' / Allees Elm	B & B	2.5'-3" CAL.	30

SHRUBS	BOTANICAL / COMMON NAME	SIZE	RANGE	QTY
	Zelkova serrata / Sawleaf Zelkova	B & B	2.5'-3" CAL.	39
	Azalea i. 'Formosa' / Formosa Azalea	3 gal	18-24" HT	50
	Ilex vomitoria / Yaupon Holly	15 gal	4-5' HT	9
	Muhlenbergia capillaris / Pink Muhly	3 gal	18-24" HT	20
	Myrica cerifera / Wax Myrtle	--	36" HT	9

46x46' SIGHT DISTANCE TRIANGLE. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10' TYPICAL

70x20' SIGHT DISTANCE TRIANGLE. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10' TYPICAL

KEY MAP NOT TO SCALE



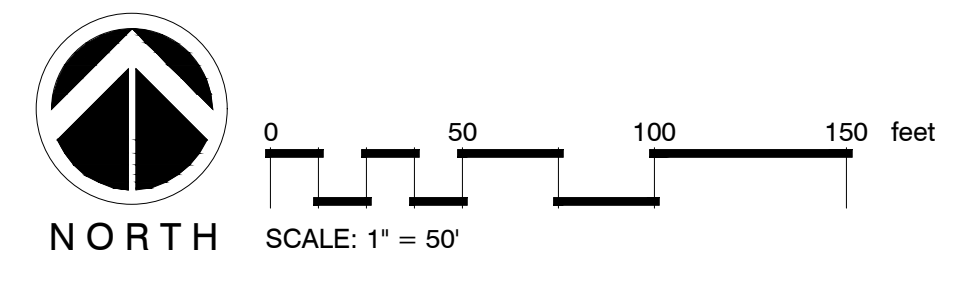
SYMBOL LEGEND

	LIMIT OF DISTURBANCE
	WETLAND AREA
	WETLAND BUFFER
	PROPOSED PEDESTRIAN PATH
	EXISTING TREES TO BE REMOVED
	EXISTING TREE TO REMAIN WITH TREE PROTECTION FENCING
	PROPOSED TREES COUNTING TOWARDS PARKING LOT COVERAGE CALCULATIONS
	STREET LIGHT, TYP

*NOTE: PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	



Revisions
 2018-07-12: Updated Engineers base per emailed CAD file.
 2019-07-11: Updated per COV Engineers comments.
 2020-03-02: Updated per updated calculations from Engineer.

CLIENT
ECHO FARMS, LLC
 c/o MATRIX DEVELOPMENT GROUP
 CN 4000 FORSGATE DRIVE
 CRANBURY, NJ 08512

PROJECT
TRACT 2 - WOODLANDS @ ECHO FARMS
 4114 ECHO FARMS BLVD.
 WILMINGTON, NC 28412
 LANDSCAPE PLAN

CONSTRUCTION DOCUMENT REVIEW SET

Date: 1/26/2018
 Phase:
 Job Number: 810-01

Designed by: MLD
 Drawn by: MAS
 Checked by: JWM

Sheet Title:
LANDSCAPE PLAN

Sheet Number:
L1.0
 of 4 sheets

CLUSTER SHRUBS FOR LOW MAINTENANCE

CANOPY TREE FOR A FOCAL POINT
WEeping WILLOW, LIVE OAK

CLUSTER TREES TO ALLOW MAINTENANCE EQUIPMENT ACCESSIBILITY

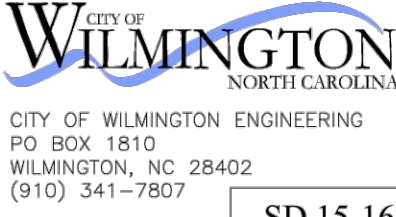
SEED OR SOD SIDESLOPES

LANDSCAPE STRIP VARIES ACCORDING TO SIZE OF POND SEE PART D & G OF CHAPTER VI

VEGETATION MUST BE EVENLY DISTRIBUTED AT APPROXIMATELY 100' INTERVALS AROUND POND

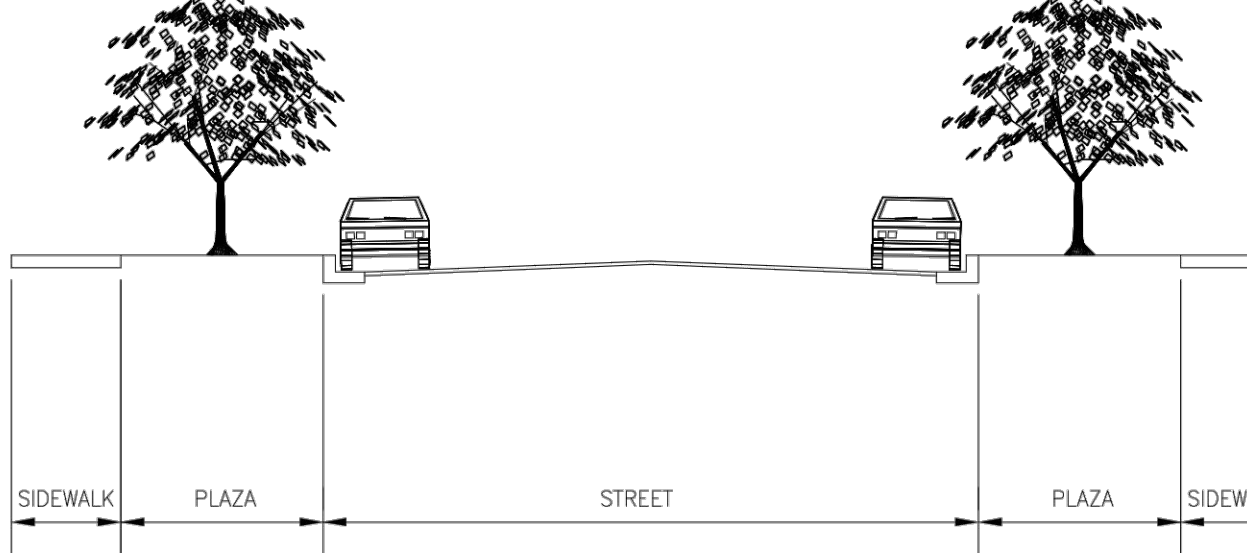
Notes:

- If possible, locate pond where vegetation exists.
- Suggest minimal clearing to conserve visual quality of site and minimize the additional of tree planting. An irregular shape provides a more natural appearance.
- Landscape strip shall be a maximum slope of 7:1 in order to plant vegetation.
- Provide a minimum of 3 inches of mulch around all vegetation.

DATE: JULY 2003	STANDARD DETAIL	 <p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>
DRAWN BY JSR	TYPICAL STORM WATER FACILITY LANDSCAPING PLAN	
CHECKED BY B.P., P.E.		
SCALE NOT TO SCALE	SD 15-16	

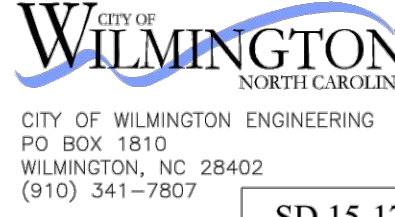
RESIDENTIAL STREET TREE STANDARDS

- Street trees shall be installed along residential streets after all driveways have been installed.
- The developer shall notify Landscape Designer prior to installation to ensure proper tree selection and spacing.
- Each tree shall be a minimum of two (2) caliper inches.
- Phasing of a project shall be permitted, however, Street Trees on the same block shall be planted at the same time to avoid size irregularities.
- Trees within the same block shall be the same species.



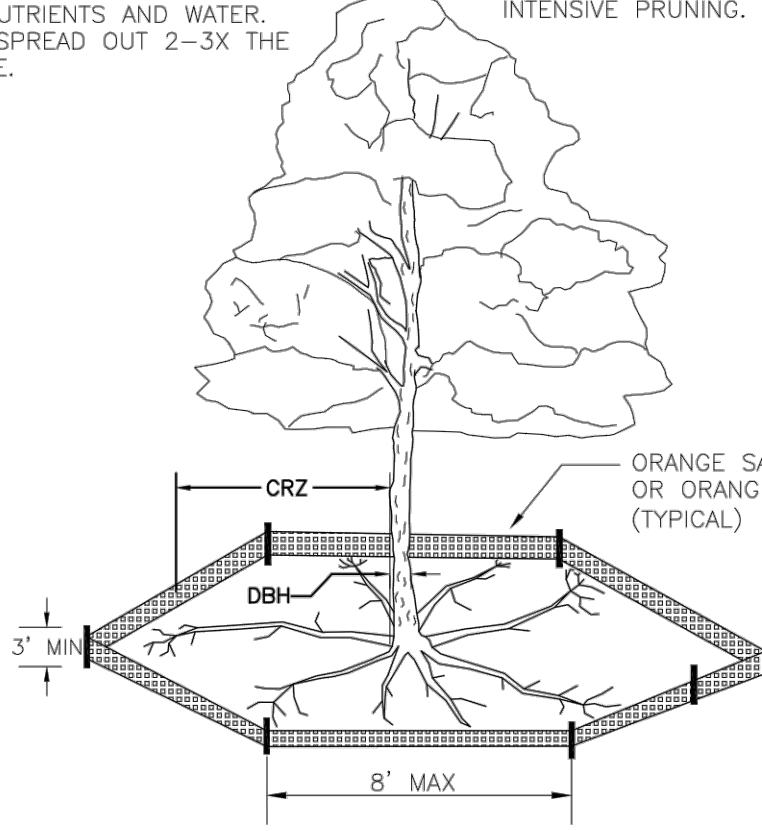
RECOMMENDED STREET TREE SPACING ACCORDING TO PLAZA WIDTHS

4'-6'	6'-8'	GREATER THAN 8'
ex. CREPE MYRTLE HOLLY	ex. JAPANESE MAPLE ZELKOVA	ex. DARLINGTON OAK RED MAPLE
25'-30' SPACING	35'-40' SPACING	50' SPACING

DATE: 2006	STANDARD DETAIL	 <p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>
DRAWN BY JSR	RESIDENTIAL STREET TREE STANDARDS	
CHECKED BY B.P., P.E.		
SCALE NOT TO SCALE	SD 15-17	

NOTE: THE CRITICAL ROOT ZONE (CRZ) OF A TREE IS WHERE THE MAJORITY OF A TREE'S ROOTS LAY. 85% OF MOST TREE ROOTS ARE FOUND IN THE TOP 24" OF THE SOIL AND SUPPLY THE MAJORITY OF NUTRIENTS AND WATER. GENERALLY, ROOTS SPREAD OUT 2-3X THE HEIGHT OF THE TREE.

NOTE: CROWN OF THE TREE IS NEEDED FOR LEAF GROWTH TO PRODUCE OXYGEN, FILTER THE AIR, REDUCE WIND AND SOFTEN NOISE. DO NOT DISFIGURE CROWN WITH INTENSIVE PRUNING.



CRZ

DBH

ORANGE SAFETY FENCE OR ORANGE SILT FENCE (TYPICAL)

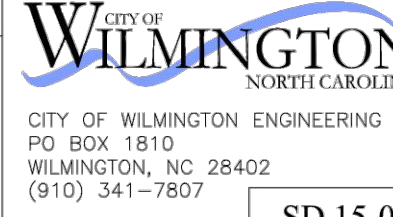
8" MAX

3'-0"

2'-0"

NOTES:

- PROTECT CRITICAL ROOT ZONE (CRZ) OF TREES PRIOR TO CONSTRUCTION. CLEARLY MARK THE TREES AND ERECT A PROTECTIVE BARRIER AT THE CRZ. BARRIER SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.
- CRZ RADIUS IS 1 FT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH).
- IF CONSTRUCTION OCCURS WITHIN THE CRZ, AT LEAST 12" OF MULCH AND/OR LOGGING MATS SHALL BE PLACED WHERE MACHINERY MANEUVERS TO REDUCE SOIL COMPACTION IN THIS ZONE.
- WHERE SIDEWALKS AND PATHWAYS PASS WITHIN CRZ, EXTRA CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ROOTS. ALTERNATE CONSTRUCTION METHODS, SUCH AS A REINFORCED SIDEWALK, SHALL BE IMPLEMENTED AS NECESSARY.
- FOR ALL TREES, CUTTING OF LARGE STRUCTURAL ROOTS LOCATED NEAR THE BASE OF THE TRUNK IS PROHIBITED. DO NOT COMPACT SOIL BENEATH TREES. NO VEHICLE SHALL BE ALLOWED TO PARK UNDER TREES. NO MATERIALS OR EQUIPMENT SHALL BE STORED BENEATH TREES. DAMAGING THE BARK WITH LAWNMOWERS, CONSTRUCTION EQUIPMENT, OR ANYTHING ELSE IS PROHIBITED. CONTRACTOR SHALL REPAIR DAMAGE TO TREES.
- FAILING TO INSTALL OR MAINTAIN PROTECTION MEASURES SHALL RESULT IN A STOP WORK ORDER AND FINE OF \$500/DAY. DISTURBANCE OTHER THAN THAT ALLOWED ON THE APPROVED PLAN WILL REQUIRE OWNER TO POST A LETTER OF CREDIT FOR 3 YRS FOR TREE MITIGATION.

DATE: JAN, 2015	STANDARD DETAIL	 <p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>
DRAWN BY JSR	TREE PROTECTION DURING CONSTRUCTION	
CHECKED BY RDG, P.E.	SHEET 1 of 2	
SCALE NOT TO SCALE	SD 15-09	

8" MAX.

VARIABLE AS DIRECTED BY THE ENGINEER

PLASTIC OR WIRE TIES

TREE PROTECTION AREA DO NOT ENTER
ZONA PROTECTORA PARA LOS ARBOLES PROHIBIDO ENTRAR

ORANGE, UV RESISTANT HIGH TENSILE STRENGTH POLY BARRICADE FABRIC (TYPICAL)

FRONT VIEW

STEEL POST

WARNING SIGN

ORANGE, UV RESISTANT HIGH TENSILE STRENGTH POLY BARRICADE FABRIC (TYPICAL)

GRADE

3'-0"

2'-0"

40"

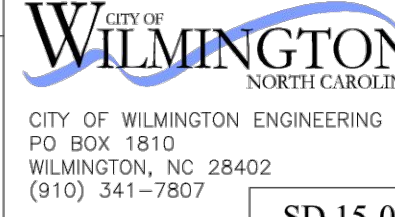
18"

TREE PROTECTION AREA DO NOT ENTER
ZONA PROTECTORA PARA LOS ARBOLES PROHIBIDO ENTRAR

WARNING SIGN DETAIL

NOTES:

- THE TREE PROTECTION FENCING SHALL NOT BE VIOLATED FOR THE ENTIRE DURATION OF THE PROJECT WITHOUT APPROVAL FROM URBAN FORESTRY STAFF.
- WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL. LETTERS TO BE 3" HIGH, MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
- SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER. FOR TREE PROTECTION AREAS LESS THAN 100' IN PERIMETER, PROVIDE NO LESS THAN TWO SIGNS PER PROTECTION AREA.
- ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC. MAINTAIN TREE PROTECTION FENCE AND SIGNS THROUGHOUT DURATION OF PROJECT.
- TREE PROTECTION FENCING AND SIGNAGE SHALL BE REMOVED AFTER CONSTRUCTION.
- ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF WILMINGTON, BASED ON ACTUAL FIELD CONDITIONS.

DATE: JAN, 2015	STANDARD DETAIL	 <p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>
DRAWN BY JSR	TREE PROTECTION DURING CONSTRUCTION	
CHECKED BY RDG, P.E.	SHEET 2 of 2	
SCALE NOT TO SCALE	SD 15-09	

NO. 508 FITTER WELDED TO POST

FINAL SAME FINISH AS POST

ABSO (LEXAN) 16 1/2" X 27" TYPE III REFRACTOR 1/4" WALL

150 WATT 115 VOLT (HPS) BALLAST HOUSING IN HEAD OF POST

(1) 120V-20A DUPLEX RECEPTACLE ON HEAD OF POST

4" DIA. .125 WALL 6061-T6 STRUCTURAL GRADE ALUMINUM 4212 FP BLACK FINISH

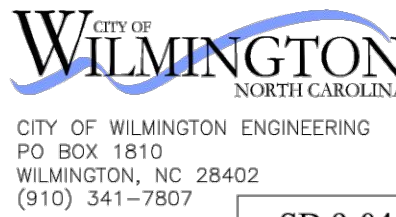
1/4" WALL ACCESS DOOR 3/4" THICK BASE WITH 4 ANCHOR BOLTS BOLT SIZE PER MAN. SPEC. (GALV.)

12'-0"

20"

17"

MANUFACTURED BY STERNBERG LANTERNS PROVIDED BY THE CITY OF WILMINGTON

DATE: 2001	STANDARD DETAIL	 <p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>
DRAWN BY JSR, CMR	TYPICAL STREET LAMP	
CHECKED BY B.P., P.E.		
SCALE NOT TO SCALE	SD 9-04	

NOTE: PRIMARY CONDUCTORS & CONDUIT TO BE SIZED BY ELECTRICIAN

12 CONDUCTORS BUSS # 11EB/K/J FUSE HOLDER WITH 5 AMP FUSE

3/4" CHAMFER

SIDEWALK

CIRCUIT TO AND FROM ADJACENT POLE OR SOURCE

12 JUMPER TO ROD

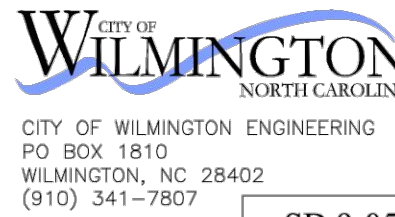
STUB OUT FOR FUTURE USE

CIRCUIT TO AND FROM ADJACENT POLE OR SOURCE

CONCRETE BASE AND ANCHOR BOLTS AS RECOMMENDED BY MANUFACTURER (24" DIA X 48" DEEP MIN)

5/8" DIA. X 8' GROUND ROD

NOTE: CAP ALL CONDUCTORS WITH SILICONE SEALANT FILLED WIRE ENDS. LEAVE 24" MIN CONDUCTOR TAILS AT EACH BASE

DATE: 2001	STANDARD DETAIL	 <p>CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>
DRAWN BY JSR, CMR	TYPICAL STREET BASE AND ELECTRIC DETAIL	
CHECKED BY B.P., P.E.		
SCALE NOT TO SCALE	SD 9-05	

EDGE OF PLANTING AREA

3'-0"

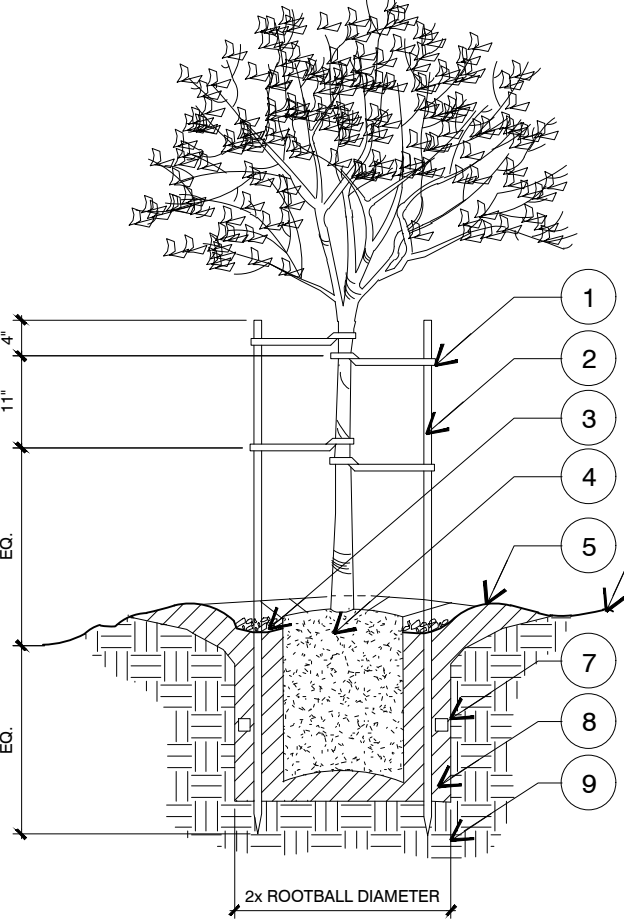
1

LEGEND

- GROUND COVER OR SHRUB PLANTING LOCATION

NOTE: D - AS NOTED ON PLANTING SCHEDULE

1 TYPICAL PLANTING SPACING



PREVAILING WIND

SECTION VIEW N.T.S.

LEGEND

- 24" CORDED BLACK RUBBER TREE TIE. LOOP AT TRUNK AND NAIL TO STAKE
- 2 1/2" DIA. x 12' LONG TREATED LODGEPOLE PINE STAKE
- 3" LAYER OF MULCH
- ROOT BALL
- 3" WATER BASIN
- FINISH GRADE
- FERTILIZER TABLET
- TOPSOIL & NATIVE BACKFILL MIXTURE
- NATIVE SUBGRADE

NOTES:

- SCARIFY ROOT BALLS OF PLANTS WITH CIRCLING ROOTS.
- HEAVILY ROOT BOUND SHRUBS WILL NOT BE ACCEPTED

LEGEND

- SHRUB
- 3" LAYER OF MULCH
- 3" WATER BASIN
- FINISH GRADE
- TOPSOIL & NATIVE BACKFILL MIXTURE
- SCARIFY EDGE OF PIT
- FERTILIZER TABLETS - REFER TO SCHEDULE FOR QUANTITY
- ROOT BALL
- NATIVE SUBGRADE

NOTES:

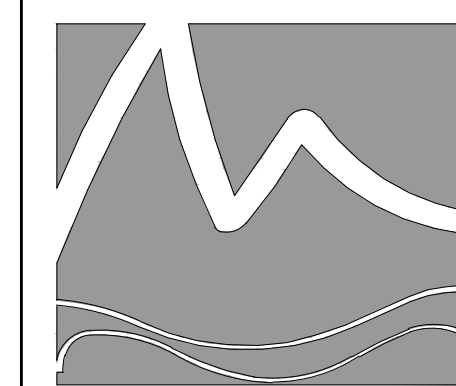
- SCARIFY ROOT BALLS OF PLANTS WITH CIRCLING ROOTS.
- HEAVILY ROOT BOUND SHRUBS WILL NOT BE ACCEPTED

1 1/2 x ROOT BALL DEPTH

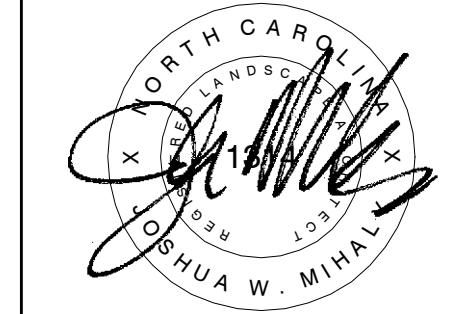
2 x ROOT BALL DIAMETER

2 TYPICAL SHRUB PLANTING

3 TYPICAL TREE STAKING



MIHALY LAND DESIGN
PLANNING + LANDSCAPE ARCHITECTURE
330 MILITARY CUTOFF RD., Suite A3
Wilmington, NC 28405 910.392.4355



Revisions
2018-07-12: Updated Engineers base per emailed CAD file.
2019-07-11: Updated per COV Engineers comments.
2020-03-02: Updated per updated calculations from Engineer.

CLIENT
ECHO FARMS, LLC
c/o MATRIX DEVELOPMENT GROUP
CN 4000 FORSGATE DRIVE
CRANBURY, NJ 08512

PROJECT
TRACT 2 - WOODLANDS @ ECHO FARMS
4114 ECHO FARMS BLVD.
WILMINGTON, NC 28412
LANDSCAPE PLAN

CONSTRUCTION DOCUMENT REVIEW SET

Date: 1/26/2018
Phase:
Job Number: 810-01
Designed by: MLD
Drawn by: MAS
Checked by: JWM
Sheet Title: DETAILS

Sheet Number:
L2.0
of 4 sheets