GENERAL NOTES & SPECIFICATIONS

LAWN INSTALLATION: LAWN AREAS SHALL BE FINE GRADED TO A SMOOTH, POSITIVELY DRAINING SLOPE, REMOVING ALL STONES OVER 3/4" . AGRICULTURAL LIMESTONE SHALL BE INCORPORATED INTO THE SOIL AT A RATE OF 50 POUNDS PER 1000 SQUARE FEET. APPLY SPECIFIED SEED AT RECOMMENDED RATE. STRAW MULCH OR HYDROMULCH SHALL BE USED AS DEEMED NECESSARY BY THE LANDSCAPE CONTRACTOR AND LANDSCAPE ARCHITECT. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO ESTABLISH A FULL STAND OF GRASS AND WILL REPAIR ANY BARE SPOTS 1'- 0" SQUARE DUE TO UNEVEN SEED DISTRIBUTION, DROUGHT OR EROSION.

SOD INSTALLATION: SODDED LAWN AREAS SHALL BE FINE GRADED TO A SMOOTH, POSITIVELY DRAINING SLOPE, REMOVING ALL STONES OVER 3/4" . SOD SHALL BE HEALTHY, THICK SOD PLACED SO THAT JOINTS ARE BUTT TIGHT. STAPLE AS NECESSARY. SOD SHALL BE TRIMMED TO MATCH BED LINES SHOWN ON PLAN. STARTUP FERTILIZER SHALL BE INCORPORATED INTO THE SOIL AT THE MANUFACTURER'S RECOMMENDED RATE. ANY AREA OF SOD THAT FAILS TO ROOT, SETTLES OR DIES WILL BE REPLACE BY THE LANDSCAPE CONTRACTOR.

UTILITY LOCATION: THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY LOCATOR SERVICE AND IS RESPONSIBLE FOR ANY DAMAGE DONE TO UTILITIES.

QUANTITIES PLANT QUANTITIES ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY.
PLANTS SHALL BE INSTALLED AS SHOWN. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL QUANTITIES PRIOR TO BIDDING AND INSTALLATION.

BIDS IN ORDER TO KEEP ALL BIDS STANDARD, ALL BIDS ARE TO HAVE UNIT PRICES LISTED. THE OWNER HAS THE OPTION TO DELETE ANY PORTION OF THE CONTRACT PRIOR TO SIGNING THE CONTRACT OR BEGINNING WORK. THIS WILL BE A UNIT PRICE CONTRACT.

PLANT QUALITY ALL PLANTS SHALL BE NURSERY GROWN, HAVE A FULL HABIT OF GROWTH AS IS CHARACTERISTIC OF THAT SPECIES, AND SHALL BE FREE OF DISEASE OR INSECTS. GENERAL PLANT QUALITY SHALL BE AS SPECIFIED IN THE "USA STANDARD FOR NURSERY STOCK" (PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN). PLEASE CONTACT THE LANDSCAPE ARCHITECT IF THERE IS DIFFICULTY IN LOCATING A PARTICULAR PLANT. IF NECESSARY, A SUBSTITUTE PLANT WILL BE RECOMMENDED BY THE LANDSCAPE ARCHITECT.

PLANTING AREA PREPARATION: ENTIRE PLANTING AREA SHALL BE SCARIFIED AND CONTAIN AMENDED ON-SITE SOIL OR A SOIL MIX TO A DEPTH OF NO LESS THAN 18". (SEE PLANTING DETAIL FOR MORE INFORMATION.)

SETTING OF PLANTS THE ROOT BALL OF CONTAINER GROWN PLANTS SHALL BE SCARIFIED IN SEVERAL PLACES PRIOR TO PLANTING. PLANT SHRUBS AND TREES SO THAT AFTER INITIAL SETTLEMENT, THE TOP ROOT BALLS WILL BE EVEN WITH OR SLIGHTLY ABOVE THE ADJACENT SOIL LINE. AROUND ROOT BALLS, 1/2 OF THE ORIGINAL SOIL SHALL BE REMOVED FROM THE PLANTING HOLE AND THROUGHLY MIXED WITH THE SAME QUANTITY PEAT MOSS OR WELL ROTTED, FINE TEXTURED BARK. (ONLY IN AREAS WHERE THE EXISTING SOIL IS 100% FERTILE, LOOSE TOPSOIL (BROWN OR BLACK IN COLOR) CAN PLANTS BE PLACED DIRECTLY IN THE SOIL WITH NO AMENDMENTS). PLANTINGS NOT DONE IN THIS MANNER SHALL BE REMOVED AND PROPERLY REPLANTED.

PREPARATION OF GROUND COVER AND SEASONAL COLOR BEDS : THE EXISTING SOIL IN GROUND COVER AND SEASONAL COLOR BEDS SHALL BE THOROUGHLY CULTIVATED 6 INCHES DEEP, TO A FINE TEXTURE (NO CLODS OVER 1/2") WITH A MECHANICAL TILLER. A PLANT MIX OF 60% SCREENED SHREDDED TOPSOIL, 20% SAND, AND 20% WELL ROTTED SAWDUST OR PEAT SHALL THEN BE THOROUGHLY INCORPORATED INTO THE EXISTING SOIL WITH THE TILLER SO THAT THE SOIL MIX (6" DEEP) IS 1/2 ORIGINAL SOIL AND 1/2 PLANT MIX. ALL GROUNDCOVER AND SEASONAL COLOR BEDS SHALL RECEIVE A 2" LAYER OF FINE TEXTURED, SCREENED, PINE BARK MULCH, OR EQUAL. PLANTINGS NOT DONE IN THIS MANNER SHALL BE REMOVED AND PROPERLY REPLANTED.

FERTILIZING UPON COMPLETION OF PLANTINGS, ALL SHRUBS SHALL RECEIVE 1/6 CUP OF 16-4-8 FERTILIZER (50% OF NITROGEN SLOW RELEASE) EVENLY BROADCAST AT THE BASE OF THE PLANTS. TREES SHALL RECEIVE 1/4 CUP OF 16-4-8 FERTILIZER (50% OF NITROGEN SLOW RELEASE) PER INCH OF CALIPER. GROUND COVER BEDS SHALL BE FERTILIZED AT THE RATE OF 20 POUNDS OF 16-4-8 (50% OF NITROGEN SLOW RELEASE) PER 1000 SQUARE FEET.

STAKING OF TREES DECIDUOUS TREES, 1 1/2" IN CALIPER AND OVER, AND EVERGREEN TREES, 8' AND TALLER SHALL BE STAKED. RUBBERHOSE TO BE USED TO COVER THE WIRE AT THE POINT OF ITS CONTACT WITH THE TREE. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL WIND DAMAGE TO TREES, (PROVIDED WINDS ARE LESS THAN 60MPH) DURING THE GUARANTEE PERIOD, AND MAY STAKE OTHER TREES (FOR HIS OWN PROTECTION) AT HIS OPTION. TRANSPLANTS ALL PLANT MATERIAL TO BE TRANSPLANTED SHALL BE TRANSPLANTED ACCORDING TO GUIDELINES SET BY AAN STANDARDS. TRANSPLANTED MATERIAL WILL NOT BE GUARANTEED BY THE LANDSCAPE CONTRACTOR.

MULCHING AS SPECIFIED ON PLANTING LIST. HARDWOOD MULCH: ALL BEDS TO RECEIVE A 3" LAYER OF AGED HARDWOOD BARK MULCH (FREE OF WOOD CHIPS OR LARGE CHUNKS OF BARK). FRESH HARDWOOD BARK MULCH IS NOT RECOMMENDED TO BE USED, AS WATER RUN-OFF MAY CAUSE STAINING ON ADJACENT CONCRETE SURFACES. ALL DAMAGES INCURRED BY THE USE OF FRESH HARDWOOD MULCH SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. PINESTRAW: ALL BEDS TO RECEIVE A 4" LAYER (PRIOR TO COMPACTION) OF PINESTRAW. AFTER NATURAL COMPACTION, PINESTRAW SHOULD HAVE A DEPTH OF 2". ALL TREES LOCATED IN LAWN AREAS SHALL RECEIVE A 3' DIAMETER RING OF MULCH. MULCH IN THESE AREAS IS TO FOLLOW THE ABOVE LISTED GUIDELINES. A WEED BARRIER SHALL BE PROVIDED IN ALL BED AREAS UNDER MULCH LAYER.
GRADING ALL FINAL GRADING SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. THE RESPONSIBILITY FOR ANY ADDITIONAL GRADING (IF NEEDED) SHALL BE DETERMINED PRIOR TO BIDDING.

BACKFILL LANDSCAPE CONTRACTOR TO VERIFY ANY ADDITIONAL BACKFILL/TOPSOIL NEEDED PRIOR TO BEGINNING WORK. A UNIT PRICE FOR TOPSOIL SHALL BE INCLUDED IN ALL BID DOCUMENTS TO ALLOW FOR CIRCUMSTANCES THAT MIGHT ARISE DURING INSTALLATION.

STABILIZATION LANDSCAPE CONTRACTOR SHALL ENSURE THAT ALL PLANTINGS ARE STABILIZED WITH GROUND COVERS, MULCHES OR OTHER APPROVED MATERIALS TO PREVENT SOIL EROSION AND ALLOW RAINWATER INFILTRATION.

CLEAN UP FINAL CLEAN UP OF ANY DISTURBANCES OCCURRING AS A RESULT OF LANDSCAPE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.

INSPECTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR INSPECTION OF THE PLANT MATERIAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ALL PLANT MATERIAL WILL BE INSPECTED. PLANTS NOT CONFORMING PRECISELY TO THE PLANT LIST WILL NOT BE ACCEPTED AND SHALL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE.

LICENSES THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING ALL LICENSES NECESSARY TO COMPLETE THE WORK.

INSURANCE WITH THE SUBMITTAL OF BID DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL ALSO SUBMIT A CERTIFICATE OF INSURANCE FOR WORKMAN'S COMPENSATION AND A CONTRACTOR'S GENERAL LIABILITY. CONTRACTORS NOT PROVIDING EVIDENCE OF SUCH INSURANCE WILL BE INELIGIBLE TO RECIEVE THE CONTRACT FOR THE JOB

GUARANTEE ALL PLANT MATERIAL AND WORKMANSHIP TO BE GUARANTEED FOR ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER. PLANT REPLACEMENT TO OCCUR ONLY ONCE. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DEFECTS RESULTING FROM NEGLECT BY THE OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS BEYOND THE LANDSCAPE CONTRACTORS CONTROL WHICH RESULT FROM NATURAL CAUSES SUCH AS FLOODS, LIGHTNING, STORMS, FREEZING RAINS, OR WINDS OVER 60 MILES PER HOUR, FIRE, VANDALISM OR THEFT.

IRRIGATION UNLESS OTHERWISE SPECIFIED, IF AN AUTOMATIC IRRIGATION SYSTEM IS DESIRED OR REQUIRED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE THE SYSTEM DESIGNED AND INSTALLED.

TREE PROTECTION NOTES .

1. A ROOT PROTECTION ZONE WILL BE ESTABLISHED AROUND EACH TREE OR CLUSTER OF TREES TO BE PRESERVED AND ALONG THE STREAM BUFFERS TO MEET THE TREE PRESERVATION ORDINANCE. THE ROOT PROTECTION ZONE SHALL BE A CIRCULAR AREA DEFINED BY THE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE A DISTANCE OF ONE (1) LINEAR FOOT FOR EACH DIAMETER INCH AND AT BREAST HEIGHT (4.5') OF THE TREE. FOR EXAMPLE A TEN (10) INCH DIAMETER TREE WILL HAVE A TEN (10) FOOT RADIUS ROOT PROTECTION ZONE.

2. THE FENCING FOR THE ROOT PROTECTION ZONE AND THE STREAM BUFFERS MUST BE INSTALLED BY THE DAY OF THE PRE CONSTRUCTION MEETING. IF IT HAS NOT BEEN INSTALLED BY THIS SCHEDULED MEETING THE PRECONSTRUCTION MEETING WILL BE CANCELLED AND RESCHEDULED FOR A LATER DATE.

3. NO WORK SHALL BEGIN UNTIL TREE PROTECTION FENCING HAS BEEN INSTALLED TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED, AND REPAIRED BY THE CONTRACTOR DURING CONSTRUCTION.

4. THE TEMPORARY CONSTRUCTION FENCE SHALL BE INSTALLED AT THE DRIP LINE (OR TREE PROTECTION ZONE). TO PROTECT LOWER BRANCHES THE FENCE MUST BE OUTSIDE THE DRIP LINE.

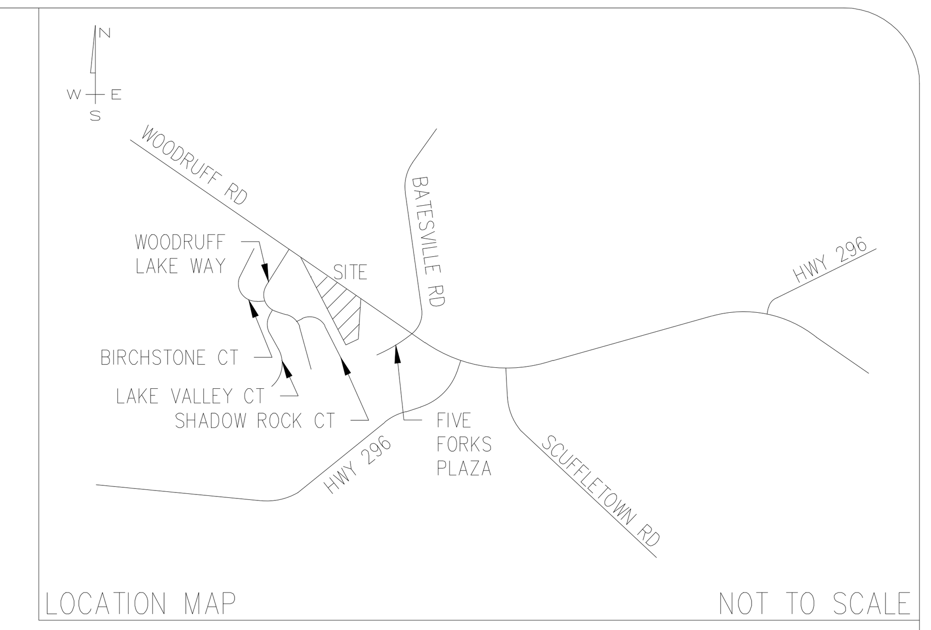
5. THE FENCING SHALL BE SUBSTANTIAL ENOUGH TO PREVENT EQUIPMENT AND MACHINERY FROM ENTERING THE PROTECTION ZONE. A MINIMUM OF FOUR FOOT (4') HIGH FENCE ON METAL POSTS WITH ORANGE PLASTIC WEB (SNOW FENCING) OR A WELDED WIRE FENCE BARRIER WITH WEB WILL BE REQUIRED. IN URBAN AREAS WITH THE PRESENCE OF HEAVY PEDESTRIAN TRAFFIC A PLYWOOD CLAD BOARDING, OR WHERE VISIBILITY MUST BE MAINTAINED A FOUR FOOT (4') HIGH FENCE CONSISTING OF ORANGE PLASTIC WEB (SNOW FENCING), ON A WOOD FRAME MADE OF TWO BY FOUR FOOT (2X4').

6. NO EQUIPMENT, VEHICLES, OR MATERIALS SHALL BE OPERATED OR STORED WITHIN THE ROOT PROTECTION ZONE. NO LOUNGING OF WORKERS IN THE AREA.

7. THE FOLLOWING IS NOT ALLOWED WITHIN THE ROOT PROTECTION ZONE:
   A. BUILDINGS OR NEW IMPERVIOUS SURFACES SUCH AS SIDEWALKS AND PAVEMENTS)
   B. GRADE CHANGES OF MORE THAN THREE INCHES (3") OR CUT AND FILL DURING OR AFTER CONSTRUCTION.
   C. UTILITY OR DRAINAGE FIELD PLACEMENT.
   D. STORING TOPSOIL

8. ALL CONSTRUCTION WASTE , INCLUDING BUT NOT LIMITED TO BUILDING MATERIAL DEBRIS, ROOFING MATERIALS , CLEANING OF CEMENT TRUCKS CHEMICAL/ ADHESIVES/SOLUTES, ETC., SHALL BE STORED OR DISPOSED OF NO CLOSER THAN FIFTY FEET (50') FROM THE TREE PROTECTION ZONE .

9. AVOID CHANGING WATER DRAINAGE PATTERNS NEAR THE TREE PROTECTION ZONE.



CAUTION

811 Know what's below. Call before you dig.

THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

GRAPHIC SCALE

40 0 20 40 80 160

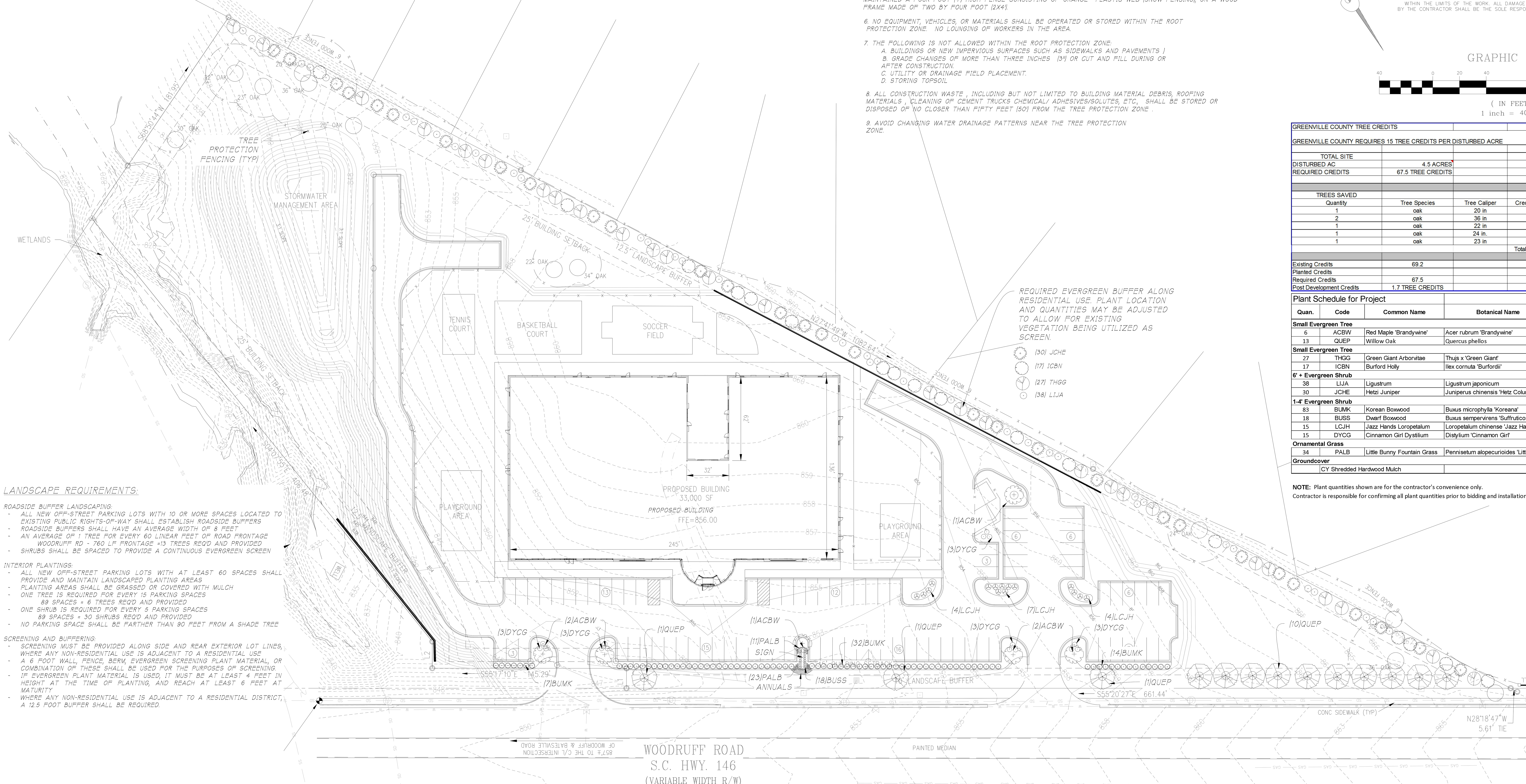
(IN FEET)
1 inch = 40 ft.

GREENVILLE COUNTY TREE CREDITS				
GREENVILLE COUNTY REQUIRES 15 TREE CREDITS PER DISTURBED ACRE				
TOTAL SITE				
DISTURBED AC	4.5 ACRES			
REQUIRED CREDITS	67.5 TREE CREDITS			
TREES SAVED				
Quantity	Tree Species	Tree Caliper	Credit Units	Credits
1	oak	20 in	4	4
2	oak	36 in	22	44
1	oak	22 in	5.2	5.2
1	oak	24 in.	9.3	9.3
1	oak	23 in	6.7	6.7
			Total Credits	69.2
Existing Credits	69.2			
Planted Credits				
Required Credits	67.5			
Post Development Credits	1.7 TREE CREDITS			

Plant Schedule for Project

Quan.	Code	Common Name	Botanical Name	Size	Notes
Small Evergreen Tree					
6	ACBW	Red Maple 'Brandywine'	Acer rubrum 'Brandywine'	2" Cal	
13	QUEP	Willow Oak	Quercus phellos	2" Cal	
Small Evergreen Tree					
27	THGG	Green Giant Arborvitae	Thujs x 'Green Giant'	4' Ht min	
17	ICBN	Burford Holly	Ilex cornuta 'Burfordii'	4' Ht min	
6' + Evergreen Shrub					
38	LIJA	Ligustrum	Ligustrum japonicum	4' Ht min	
30	JCHE	Hetzi Juniper	Juniperus chinensis 'Hetz Columnaris'	4' Ht min	
1-4' Evergreen Shrub					
83	BUMK	Korean Boxwood	Buxus microphylla 'Koreana'	3 Gal	
18	BUSS	Dwarf Boxwood	Buxus sempervirens 'Suffruticosa'	3 Gal	
15	LCJH	Jazz Hands Loropetalum	Loropetalum chinense 'Jazz Hands"	3 Gal	
15	DYCG	Cinnamon Girl Dystilium	Distylium 'Cinnamon Girl'	3 Gal	
Ornamental Grass					
34	PALB	Little Bunny Fountain Grass	Pennisetum alopecurioides 'Little Bunny'	3 Gal	
Groundcover					
	CY Shredded Hardwood Mulch				

NOTE: Plant quantities shown are for the contractor's convenience only.
Contractor is responsible for confirming all plant quantities prior to bidding and installation.



LANDSCAPE REQUIREMENTS:

ROADSIDE BUFFER LANDSCAPING:
- ALL NEW OFF-STREET PARKING LOTS WITH 10 OR MORE SPACES LOCATED TO EXISTING PUBLIC RIGHTS-OF-WAY SHALL ESTABLISH ROADSIDE BUFFERS
- ROADSIDE BUFFERS SHALL HAVE AN AVERAGE WIDTH OF 8 FEET
- AN AVERAGE OF 1 TREE FOR EVERY 60 LINEAR FEET OF ROAD FRONTAGE
  WOODRUFF RD - 760 LF FRONTAGE =13 TREES REQ'D AND PROVIDED
- SHRUBS SHALL BE SPACED TO PROVIDE A CONTINUOUS EVERGREEN SCREEN

INTERIOR PLANTINGS:
- ALL NEW OFF-STREET PARKING LOTS WITH AT LEAST 60 SPACES SHALL PROVIDE AND MAINTAIN LANDSCAPED PLANTING AREAS
- PLANTING AREAS SHALL BE GRASSED OR COVERED WITH MULCH
- ONE TREE IS REQUIRED FOR EVERY 15 PARKING SPACES
  89 SPACES = 6 TREES REQ'D AND PROVIDED
- ONE SHRUB IS REQUIRED FOR EVERY 5 PARKING SPACES
  89 SPACES = 30 SHRUBS REQ'D AND PROVIDED
- NO PARKING SPACE SHALL BE FARTHER THAN 90 FEET FROM A SHADE TREE

SCREENING AND BUFFERING:
- SCREENING MUST BE PROVIDED ALONG SIDE AND REAR EXTERIOR LOT LINES, WHERE ANY NON-RESIDENTIAL USE IS ADJACENT TO A RESIDENTIAL USE
- A 6 FOOT WALL, FENCE, BERM, EVERGREEN SCREENING PLANT MATERIAL, OR COMBINATION OF THESE SHALL BE USED FOR THE PURPOSES OF SCREENING.
- IF EVERGREEN PLANT MATERIAL IS USED, IT MUST BE AT LEAST 4 FEET IN HEIGHT AT THE TIME OF PLANTING, AND REACH AT LEAST 6 FEET AT MATURITY
- WHERE ANY NON-RESIDENTIAL USE IS ADJACENT TO A RESIDENTIAL DISTRICT, A 12.5 FOOT BUFFER SHALL BE REQUIRED.

SITE DESIGN, INC.
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GREENVILLE, SC 29601
PH: (864)271-0496
FAX: (864)271-0402

NO.	DATE
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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION SITE DESIGN INC. No. C00122

State of South Carolina REGISTERED LANDSCAPE ARCHITECT No. 552 ALISON G. BRANDT

S.C. REG NO 12314

CHILDRENS LEARNING ADVENTURE

GREENVILLE COUNTY
SOUTH CAROLINA

2536 WOODRUFF RD
SIMPSONVILLE, SC

HORZ. SCALE:	1" = 50'
VERT. SCALE:	N/A
DESIGNED BY:	NGR
DRAWN BY:	NGR
CHECKED BY:	AGB
DATE:	10/01/2016

S160501 LANDSCAPE

CODE COMPLIANT LANDSCAPE PLAN

SHEET 3 OF 7

L100