

STATE	PROJECT NO.	YEAR	SHEET NO.	SHEETS
KANSAS	87 N-0349-01	2009	79	133

GENERAL NOTES

A. WORK SEQUENCE

1. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO SURVEY THE LOCATIONS OF THE TREE PROTECTION AREAS AND HAVE THEM IDENTIFIED IN THE FIELD PRIOR TO ANY SITE WORK.
2. NO SITE WORK SHALL BEGIN UNTIL ALL TREE PROTECTION AREAS ARE LOCATED IN THE FIELD AND TREE PROTECTION MEASURES ARE COMPLETE AND IN PLACE UNLESS SUCH SITE WORK IS APPROVED IN ADVANCE BY THE ENGINEER.
3. NO SITE WORK OR CONSTRUCTION ACTIVITIES MAY OCCUR OUTSIDE OF THE LIMITS OF DISTURBANCE WITHOUT THE PRIOR APPROVAL OF THE ENGINEER. TREE PROTECTION FENCES MUST REMAIN INTACT AND IN PLACE DURING SITE WORK.

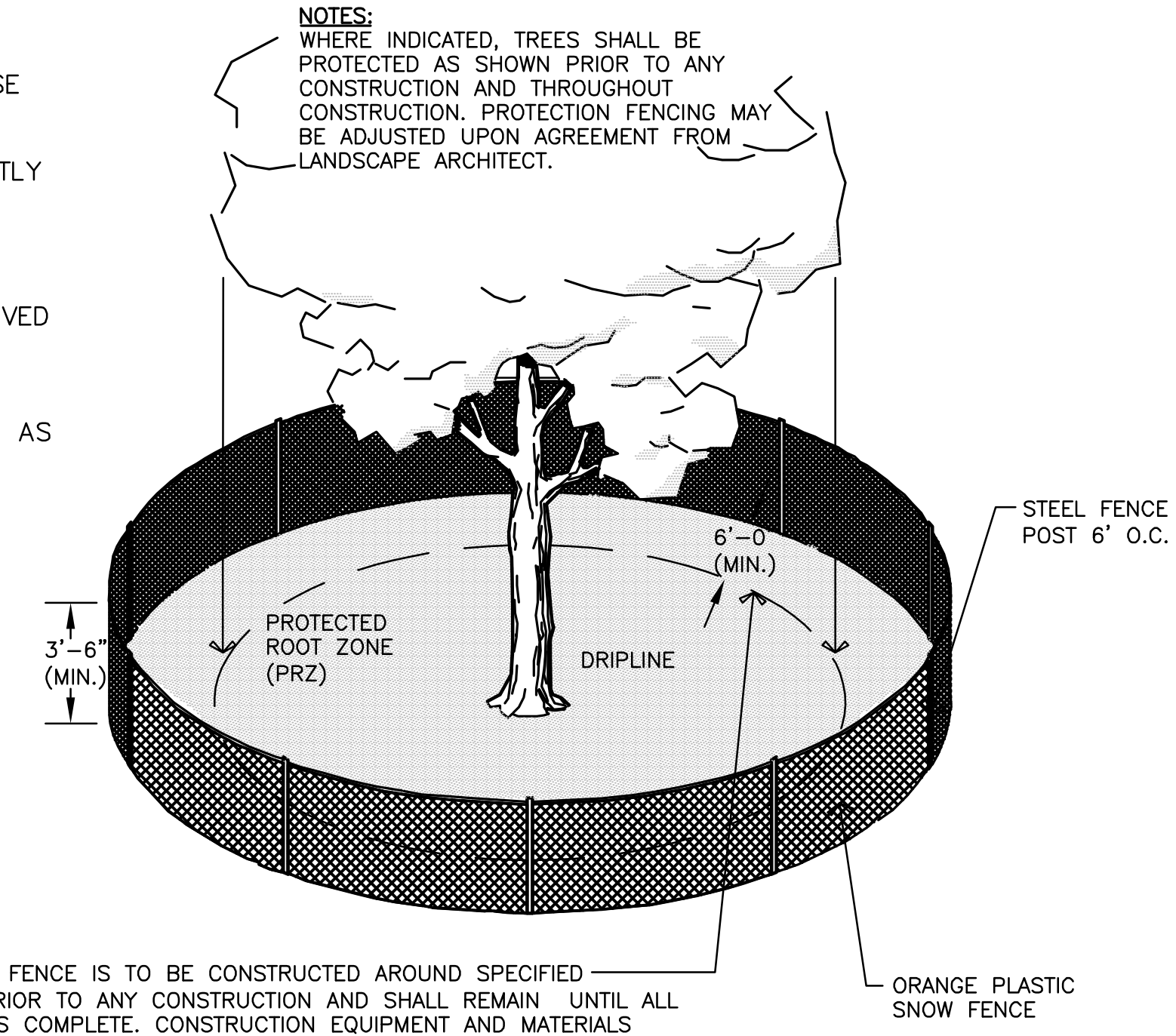
B. TREE/SHRUB TREATMENTS

1. **ROOT PROTECTION TRENCHING (ROOT PRUNING)**
ROOT PRUNING LOCATIONS ARE SHOWN ON THE PLAN. USE ROOT PRUNING MACHINE OR VIBRATORY PLOW WITH KNIFE ATTACHMENT FOR ROOT PRUNING. ALL ROOT PRUNING CUTS SHALL BE TO A DEPTH OF 14" AS SITE CONDITIONS ALLOW. PERFORM ALL ROOT PRUNING CUTS PRIOR TO INSTALLING PROTECTIVE FENCES.
2. **TREE PROTECTION FENCE**
TREE PROTECTION FENCE LOCATIONS ARE INDICATED. NO CONSTRUCTION ACTIVITIES ARE ALLOWED IN THE FENCED TREE PROTECTION AREAS INCLUDING, BUT NOT LIMITED TO, MATERIAL STORAGE, CHEMICAL STORAGE, PARKING, SOIL STOCKPILING, EQUIPMENT ACCESS OR STORAGE, OR ANY OTHER ACTIVITY.
3. **MULCH**
CHIP ALL PRUNING DEBRIS, AND SPREAD IN TREE PROTECTION AREAS. ADDITIONAL MULCH WILL BE NEEDED TO PROVIDE SPECIFIED MULCH AMOUNTS.
4. **ROOT STIMULATION/FERTILIZATION**
LIQUID FERTILIZER AND ROOT STIMULANT WILL BE APPLIED AS INDICATED. GENERALLY THE AREAS TO BE TREATED ARE WITHIN ABOUT 6 FEET OF THE ROOT PRUNING LOCATIONS. B. MIX THE FOLLOWING PRODUCTS IN A TANK WITH AGITATION CAPACITY: 1. PLANT HEALTH CARE BRAND MYCORTREE INJECTABLE WITH BIOPAK AND COLONIZE ROOT STIMULATOR. MIX ONE (1) CO-PACK (TOTAL 8 OZ.) PER 50 GALLONS OF WATER. 2. DOGGETT BRAND 32-7-7 XL INJECTO FEED FERTILIZER. MIX APPROXIMATELY 3.5 POUNDS OF FERTILIZER PER 50 GALLONS OF WATER. 3. WATER C. INJECT THE ABOVE MIX INTO THE GROUND TO A DEPTH OF 10-14" USING 150-200 PSI. D. DELIVER APPROXIMATELY ONE-QUART OF MIX EVERY 2.5-3.0 FEET WITHIN THE DESIGNATED TREATMENT AREA.
5. ALL WATER REQUIRED FOR LANDSCAPE OPERATIONS AND FOR ESTABLISHING LANDSCAPE ON THIS SITE WILL BE PROVIDED BY THE CONTRACTOR.
6. ALL PLANTS SHALL CONFORM TO ANSI Z60.1 FOR SIZE AND QUALITY STANDARDS. EXCEPT ORNAMENTAL TREES WILL HAVE A MINIMUM BRANCHING HEIGHT STARTING AT 3' AND SHADE TREES WILL HAVE MINIMUM BRANCHING HEIGHT OF 4'.
7. ALL LANDSCAPE PLANTS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING INITIAL ACCEPTANCE. DEAD OR DEFICIENT PLANTINGS SHALL BE ACCEPTABLY REPLACED, IN PROPER PLANTING SEASON, ONE TIME AT NO COST TO THE OWNER. SOD, AND HYDROSEED AREAS MAY BE FINAL ACCEPTED AT TIME OF COMPLETION OF ESTABLISHMENT, (SEE NOTES ABOVE), WITH NO FURTHER GUARANTEE REQUIRED.
8. THE STATION AND OFFSET FOR EACH PROPOSED PLANTING IS APPROXIMATE AS SHOWN ON THE ROADSIDE IMPROVEMENT PLAN. PLANTING MAY NEED TO BE FIELD ADJUSTED SLIGHTLY TO AVOID CONFLICT WITH EXISTING OR PROPOSED FEATURES.
9. ALL GRAVEL OR OTHER SIMILAR DEBRIS LARGER THAN 1/2 INCH IN DIAMETER SHALL BE RAKED UP AND REMOVED DURING FINAL GRADE PREPARATION.
10. WHERE OFFSITE SELECT SOIL IS NEEDED, IT SHALL BE FERTILE NATURAL TOPSOIL, TYPICAL OF THE LOCALITY, OBTAINED FROM WELL DRAINED AREAS. STOCKPILED TOPSOIL MAY BE USED. IT SHALL BE WITHOUT ADMIXTURE OF SUBSOIL OR SLAG AND SHALL BE FREE OF STONES, LUMPS, STICKS, PLANTS, OR THEIR ROOTS, TOXIC SUBSTANCES OR OTHER EXTRANEOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH OR WOULD INTERFERE WITH FUTURE MAINTENANCE. TOPSOIL PH RANGE SHALL BE 5.5 TO 7.0.

TREE PROTECTION NOTES

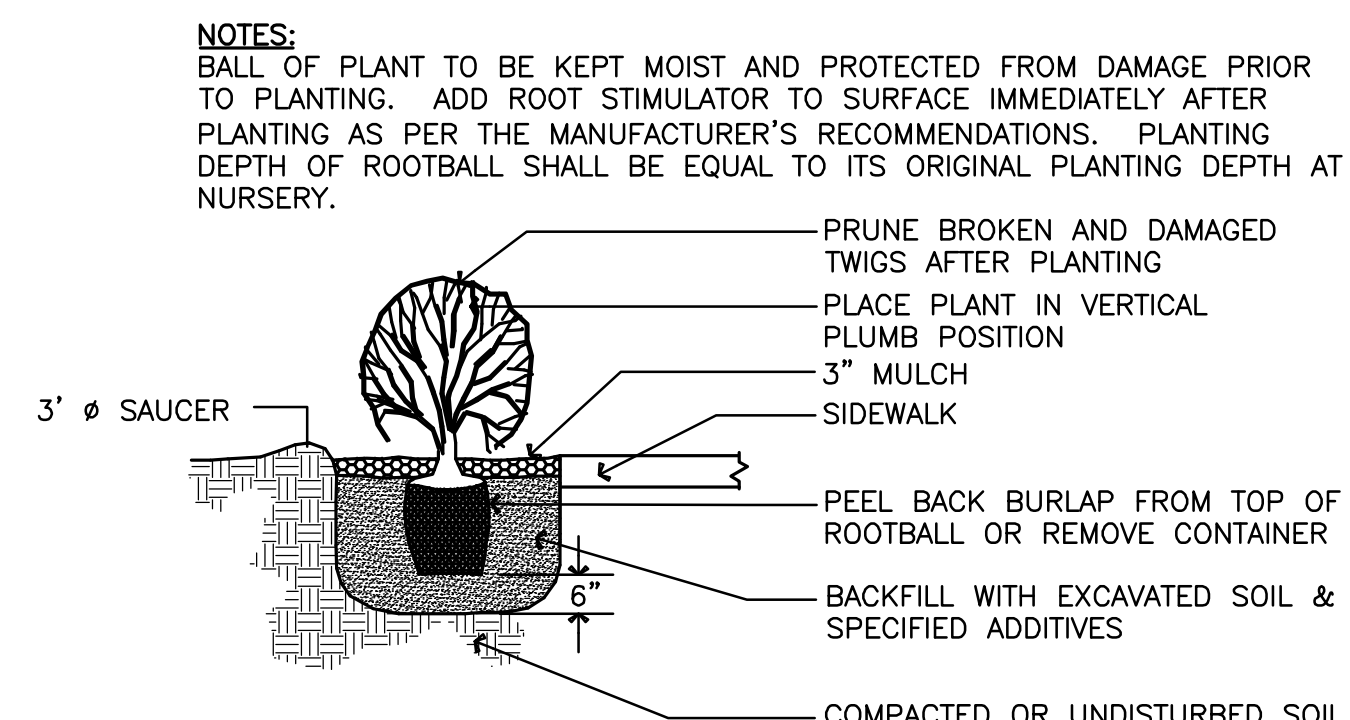
1. EXISTING TREES ARE A VERY VALUABLE ASSET TO THE OWNER. EVERY EFFORT SHOULD BE MADE TO PRESERVE EACH AND EVERY TREE (UNLESS NOTED FOR REMOVAL) AS DIRECTED IN THESE NOTES. FOLLOW TREE PRESERVATION PLANS, NOTES AND SPECIFICATIONS VERY CLOSELY. SOME CLEARING OF EXISTING UNDERSTORY PLANTS SHOULD BE EXPECTED WITHIN AREAS SO NOTED ON THE PLANS. THIS CLEARING SHALL BE DONE IN A CAREFUL MANNER SUCH THAT ROOTS OF EXISTING TREES IN THE AREA ARE NOT DISTURBED. COORDINATE CLEARING WITHIN THESE AREAS WITH MKEC LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
2. CONSTRUCTION EQUIPMENT AND STORED MATERIALS SHALL REMAIN OUT OF AREAS NOTED TO BE PRESERVED OR PROTECTED. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO A CONFINED SPACE WITHIN THE PROPOSED PAVEMENT SPACES OR THE IMMEDIATE CONSTRUCTION AREA. EQUIPMENT AND VEHICLES SHALL NOT RANDOMLY CROSS THE SITE BUT RATHER STAY ON PRE-DEFINED ROUTES/HAUL ROADS THAT THE OWNER'S REPRESENTATIVE AGREES TO. IT IS NOT THE INTENTION OF THESE REQUIREMENTS TO MAKE THE PROJECT MORE DIFFICULT, BUT RATHER TO THOUGHTFULLY PLAN HOW TO GET THE PROJECT BUILT WITHOUT DESTROYING THE AESTHETIC QUALITIES OF THE PROPERTY.
3. ANY TREE THAT MUST HAVE BRANCHES REMOVED SHALL BE TRIMMED WITH A SHARP INSTRUMENT/TOOL THAT IS INTENDED FOR SUCH OPERATIONS. CONSULT LANDSCAPE ARCHITECT PRIOR TO TRIMMING. KNOCKING BRANCHES OFF WITH A BACKHOE OR OTHER SIMILAR MACHINE IS NOT ACCEPTABLE!
4. ERECT AND MAINTAIN TEMPORARY FENCING AROUND TREE PROTECTION ZONES BEFORE STARTING SITE CLEARING. MAINTAIN FENCED AREA FREE OF WEEDS AND TRASH.
5. DO NOT STORE CONSTRUCTION MATERIALS, DEBRIS, OR EXCAVATED MATERIAL WITHIN FENCED AREAS.

6. WHERE EXCAVATION FOR NEW CONSTRUCTION IS REQUIRED, HAND CLEAR AND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS. USE NARROW-TINE SPADING FORKS, COMB SOIL TO EXPOSE ROOTS, AND CLEANLY CUT ROOTS AS CLOSE TO EXCAVATION AS POSSIBLE.
 - A. COVER EXPOSED ROOTS WITH BURLAP AND WATER REGULARLY.
 - B. TEMPORARILY SUPPORT AND PROTECT ROOTS FROM DAMAGE UNTIL THEY ARE PERMANENTLY REDIRECTED AND COVERED WITH SOIL.
 - C. BACKFILL WITH SOIL AS SOON AS POSSIBLE.
7. IN NO EVENT SHOULD THIS OCCUR BUT IN THE EVENT IT DOES, REPAIR OR REPLACE PLANTS INDICATED TO REMAIN THAT ARE DAMAGED BY CONSTRUCTION OPERATIONS, IN A MANNER APPROVED BY THE LANDSCAPE ARCHITECT.
 - A. EMPLOY AN ARBORIST, LICENSED IN THE JURISDICTION WHERE PROJECT IS LOCATED, TO SUBMIT DETAILS OF PROPOSED REPAIRS AND TO REPAIR DAMAGED TREES.
 - B. REPLACE PLANTS THAT CANNOT BE REPLACED AND RESTORED TO FULL GROWTH STATUS, AS DETERMINED BY THE LANDSCAPE ARCHITECT.



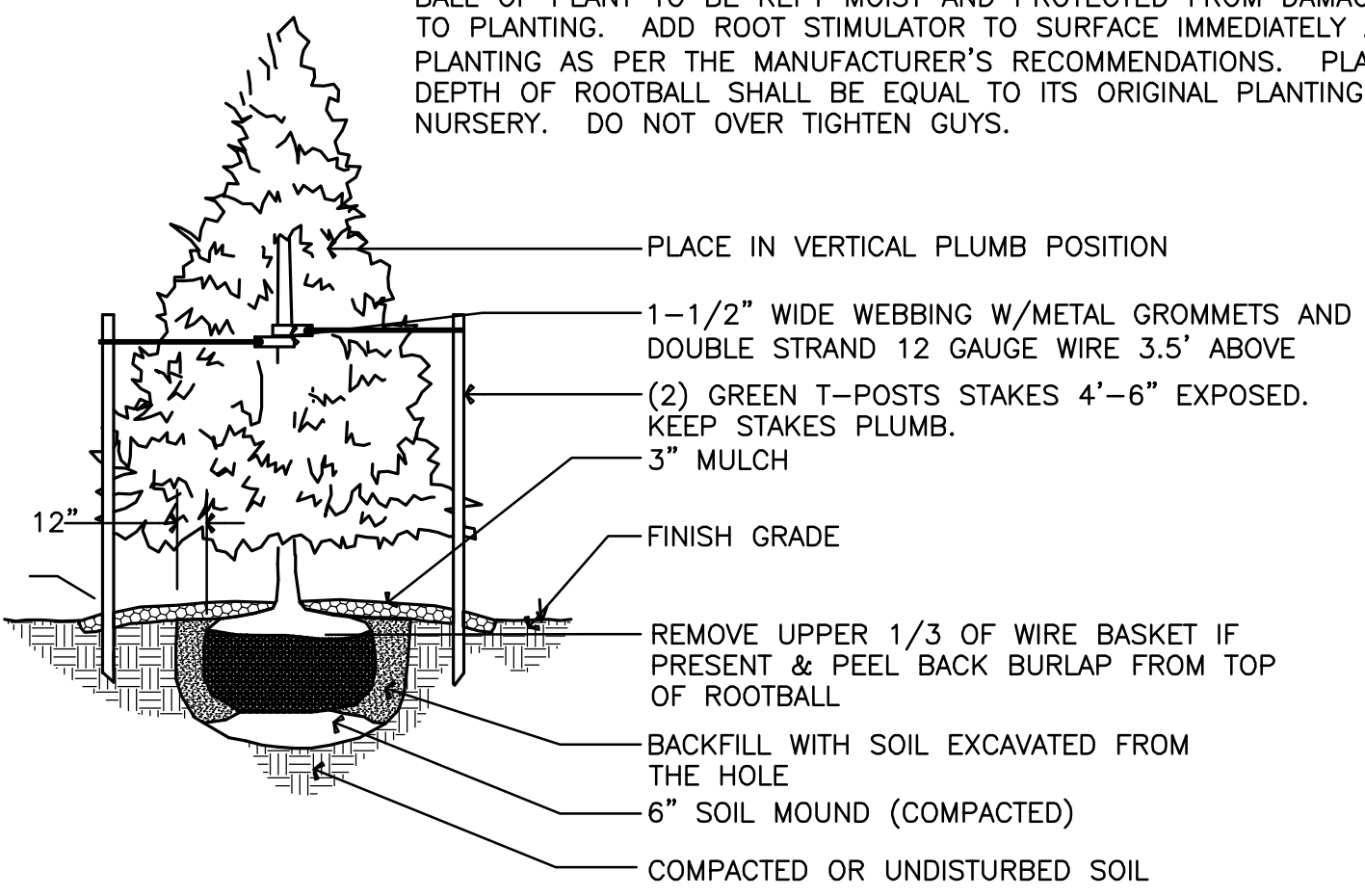
NOTES:
THE TEMPORARY FENCE IS TO BE CONSTRUCTED AROUND SPECIFIED AREAS/TREES PRIOR TO ANY CONSTRUCTION AND SHALL REMAIN UNTIL ALL CONSTRUCTION IS COMPLETE. CONSTRUCTION EQUIPMENT AND MATERIALS ARE NOT PERMITTED WITHIN THE (PRZ). THE FENCE PLACEMENT AROUND THE (PRZ) MAY ONLY BE ADJUSTED WITH PERMISSION FROM THE LANDSCAPE ARCHITECT.

TREE PROTECTION DETAIL
NOT TO SCALE

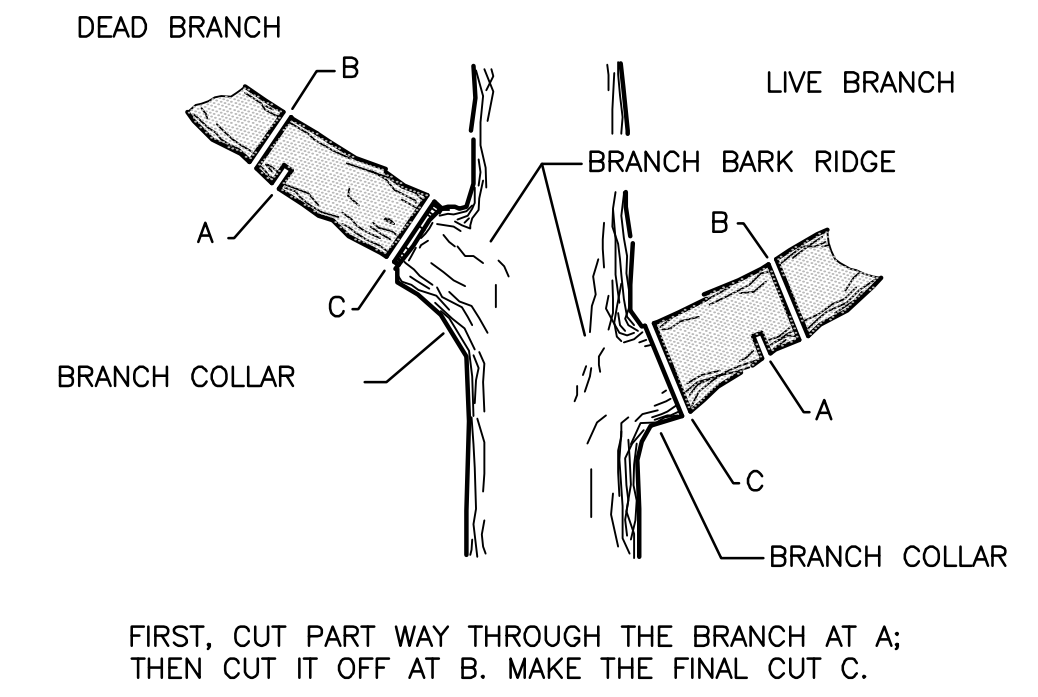


SHRUB PLANTING DETAIL
NOT TO SCALE

NOTES:
BALL OF PLANT TO BE KEPT MOIST AND PROTECTED FROM DAMAGE PRIOR TO PLANTING. ADD ROOT STIMULATOR TO SURFACE IMMEDIATELY AFTER PLANTING AS PER THE MANUFACTURER'S RECOMMENDATIONS. PLANTING DEPTH OF ROOTBALL SHALL BE EQUAL TO ITS ORIGINAL PLANTING DEPTH AT NURSERY. DO NOT OVER TIGHTEN GUYS.

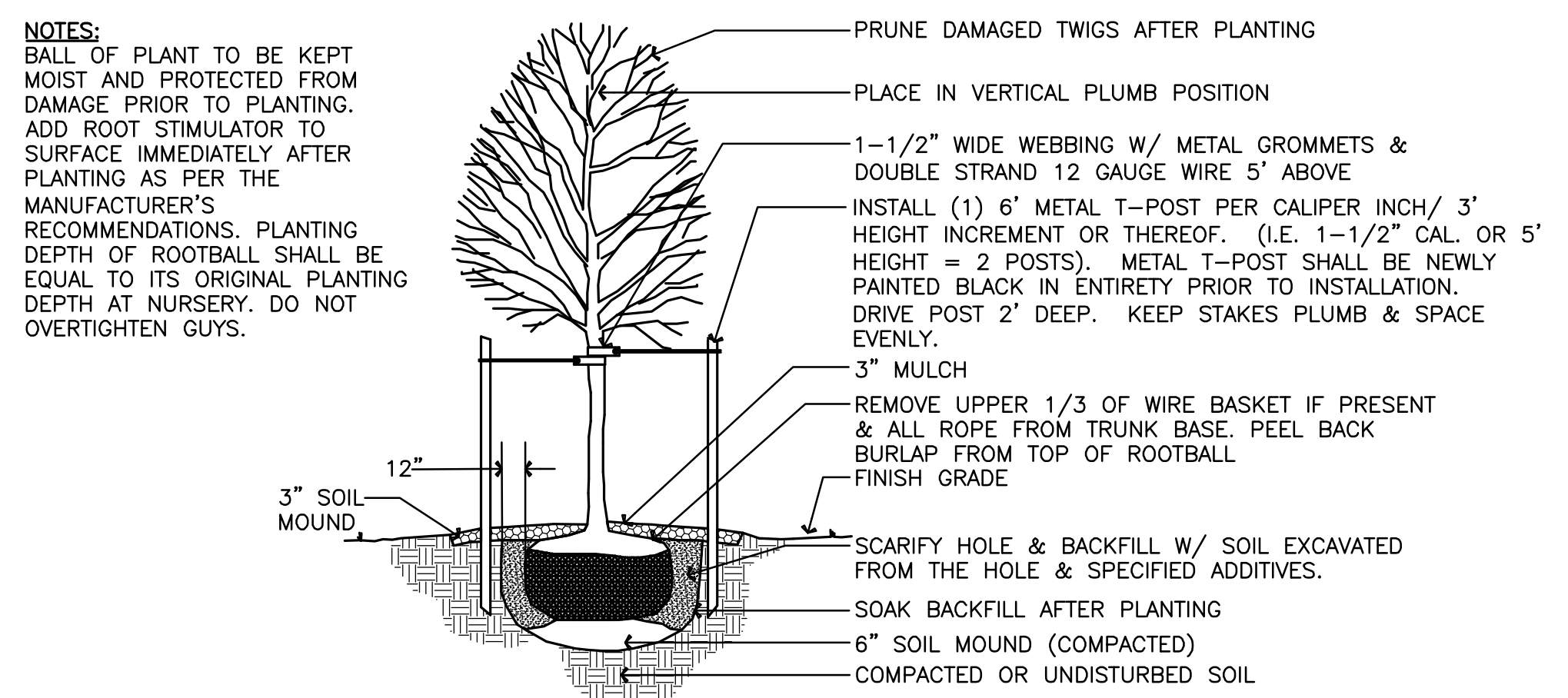


EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



FIRST, CUT PART WAY THROUGH THE BRANCH AT A; THEN CUT IT OFF AT B. MAKE THE FINAL CUT C.

TREE TRIMMING DETAIL
NOT TO SCALE



DECIDUOUS TREE PLANTING UPRIGHT STAKES DETAIL
NOT TO SCALE

MKEC
ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

17th STREET
FROM GROVE TO HILLSIDE

ROADSIDE IMPROVEMENT DETAILS
SHEET TITLE
87 N-0349-01
PROJECT NUMBER

JRA
DESIGN BY
JSB
DRAWN BY
JRA
CHECKED BY

ISSUED
May 28, 2009

SHEET NO.
79 of 133

PLOTTED: Thursday, May 28, 2009 @ 10:46AM

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