

**LEGEND**

B & B BALLED & BURLAPPED  
CAL. CALIPER  
DWF. DWARF  
ESP. ESPALIRED  
G. GAL. GALLON CONTAINER  
JAP. JAPANESE  
M.T. M.T. (3 TRUNK MINIMUM)  
O.C. ON CENTER SPACING  
S.A.S. SPACE AS SHOWN  
VAR. VARIATED  
EXIST. EXISTING TREE  
STEEL BED EDGING

PLANTING PLAN IS INTENDED AS A GUIDE. PLACE PLANTS IN POSITION FOR L.A. AND/OR OWNER APPROVAL.

SEE WRITTEN PLANTING SPECIFICATIONS FOR BED PREPARATION, GUARANTEE AND OTHER INFORMATION.

SEE ENTRY DEVELOPMENT, SHEET TWO

**Sprinkler Notes**

1. ALL LANDSCAPED AREAS SHOWN ON PLAN ARE TO BE WATERED WITH AN AUTOMATIC IRRIGATION SYSTEM.
2. ALL NEW IRRIGATION COMPONENTS ARE TO BE INSTALLED PER THE CITY OF BROKEN ARROW CODE.
3. Any sprinkler/irrigation system installed within a utility easement of right-of-way shall be approved through a contract with the City of Broken Arrow.
4. Where possible, do not allow sprinkler to spray over the sidewalks.
5. The sprinkler design must be approved by the Building Inspection Dept.
6. PLUMBER TO PROVIDE & INSTALL WHERE SHOWN ON PLAN:  
a. WATER METER  
b. REDUCED PRESSURE ZONE BACKFLOW PREVENTER WITH WATER SERVICE EXTENDED AND TERMINATED WITH A GATE VALVE  
c. ELECTRICIAN TO PROVIDE:  
d. 120 VAC SERVICE AND WEATHER PROOF RECEPTACLE FOR BACKFLOW PREVENTER HEAT TAPE  
e. BACKFLOW PREVENTER IS TO BE COVERED WITH AN INSULATED BOX BOLTED TO A CONCRETE SLAB  
f. IRRIGATION CONTROLLER IS TO BE MOUNTED ON BUILDING WALL WHERE SHOWN ON PLANS.

**Sleeves**

1. SCHEDULE 40 PVC SLEEVES (FOR IRRIGATION) ARE TO BE BURIED 24" BELOW GRADE.
2. PLACE SLEEVES WHERE SHOWN ON PLANS.
3. TAPE ENDS CLOSED AND MARK LOCATIONS.

**Sod Notes**

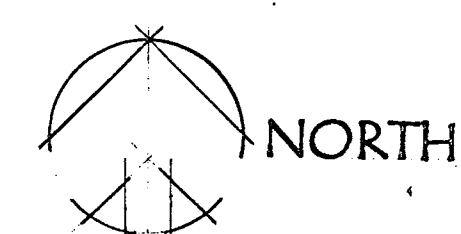
1. ALL DISTURBED AND NEW LAWN AREAS ARE TO BE SODED WITH L-93 BERMUDA.
2. SODDING IS TO INCLUDE HAND RAKING, ROLLING, AND INITIAL WATERING.

**LANDSCAPE CALCULATIONS**  
**LANDSCAPED EDGE:**  
TREES REQUIRED: 2  
TREES PROVIDED: 2  
ALL TREES TO HAVE MINIMUM CALIPER OF 2"

THE SUBMITTED LANDSCAPE PLAN IS IN COMPLIANCE W/ ARTICLE VIII, SECTION 19, OF THE CITY OF BROKEN ARROW ZONING CODE

**LANDSCAPE SITE PLAN**  
**PUD 146 DEVELOPMENT AREA THREE**  
**FOREST CREEK PATIO HOMES**

SCALE: 1" = 60'-0"

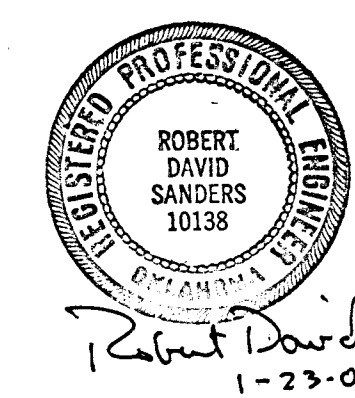


**NOTE:**  
"NO PARKING" SIGNS SHALL BE PLACED AT THE END OF EACH TURNAROUND FACILITY, INCLUDING THE ONE ADJACENT TO THE SECONDARY ACCESS POINT.

**Plant Material Key**

ABBREV.	NAME	SIZE
A	SHUMARD OAK	3" CAL., 12-14' HGT.
B	WATER OAK	2-2 1/2" CAL.
C	LOBLOLLY PINE	2" CAL., 7-9' HGT
D	EASTERN REDBUD	1 1/2"-2" CAL., 8-10' HGT.
E	LEYLAND CYPRSS	5-6' HGT.
F	CRAPENMYRTLE 'TONTON'	7-8' HT.
G	'BRIDAL WREATH' SPIREA	5 GAL.

2. DELETE



SEAL

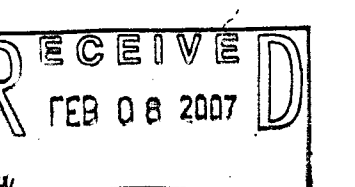


2. 1/23/07  
1. 12/7/06  
DATE: 9/22/06

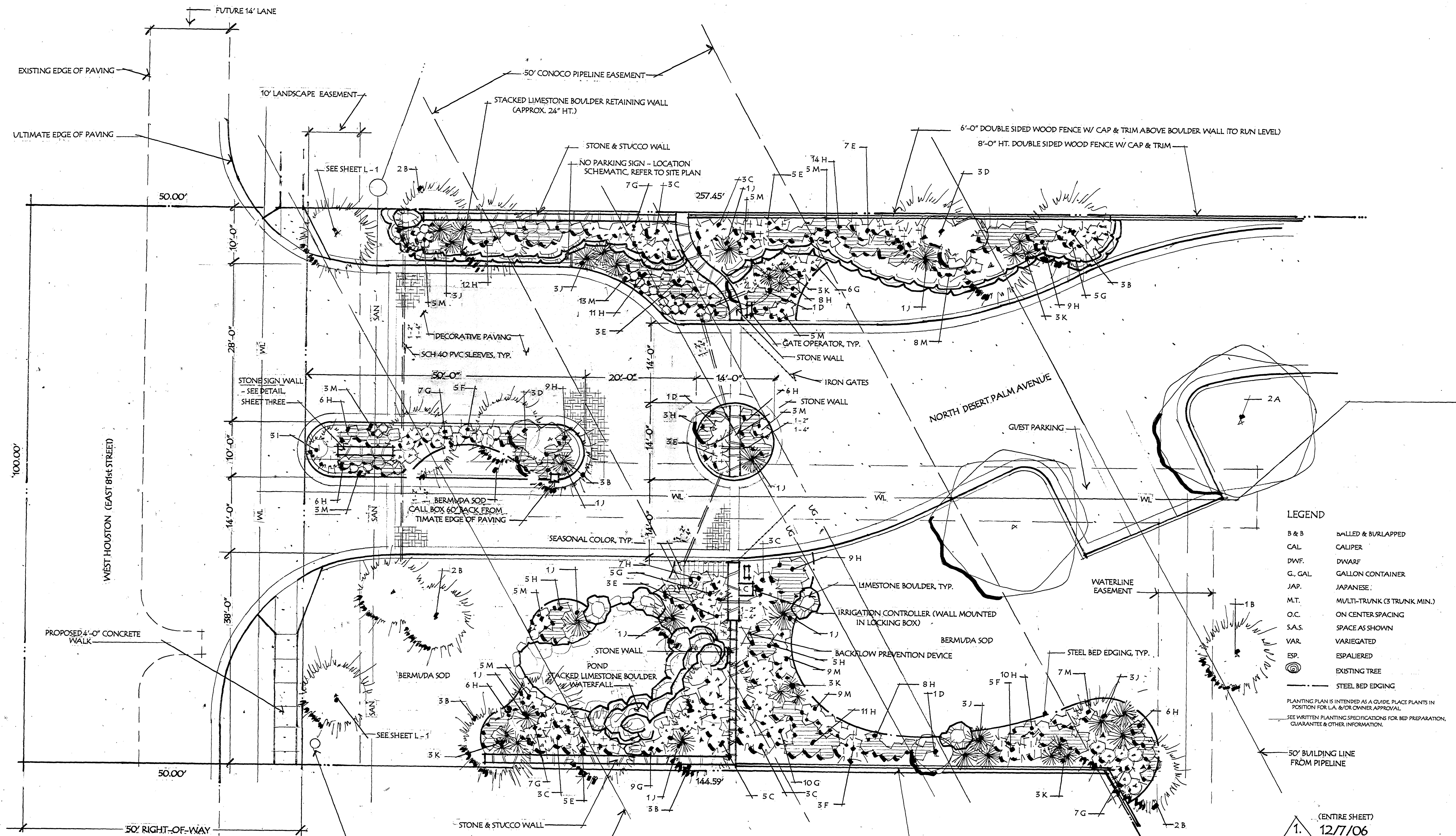
CLARE ASHBY  
ARCHITECT  
5550 SOUTH LEWIS  
SUITE 103  
TULSA, OK 74105  
INCORPORATED 918 747 2626

LANDSCAPE SITE PLAN  
**L-1**  
SHEET ONE OF FOUR

APPROVED BY *Robert David Sanders*  
DATE *9/22/06*  
BROKEN ARROW PLANNING DEPT.







# Plant Material Key

ABBREV.	NAME	SIZE
A	SHUMARD OAK	3" CAL., 12-14' HGT.
B	LOBLOLLY PINE	2" CAL., 7-9' HGT.
C	RUSSIAN LAUREL	5 GALLON, FULL
D	COMPACT BURNING BUSH	7 GALLON, FULL
E	DOMESTIC NANDINA	5 GALLON
F	COMPACT NANDINA	3 GALLON
G	'ANTHONY WATERER' SPIREA	5 GALLON
H	DWARF YAUPOON HOLLY	5 GALLON
I	'GRAY OWL' JUNIPER	3 GALLON
J	'ADAGIO' DWF. MAIDEN GRASS	3 GALLON
K	'KARL FOERSTER' FEATHER REED GRASS	3 GALLON
L	'HAMELN' DWF. FOUNTAIN GRASS	3 GALLON
M	BLACKEYED SUSAN	1 GALLON

## NOTES:

1. 'NO PARKING' SIGNS SHALL BE PLACED AT THE END OF EACH TURNAROUND FACILITY, INCLUDING THE ONE ADJACENT TO THE SECONDARY ACCESS POINT.
2. THE CITY OF BROKEN ARROW ASSUMES NO LIABILITY FOR THE DESIGN OF THIS ENTRYWAY AND CALL BOX LOCATION.

ENTRY DEVELOPMENT

PUD 146 DEVELOPMENT AREA THREE

FOREST CREEK PATIO HOMES

SCALE: 1/8" = 1'-0"

NORTH

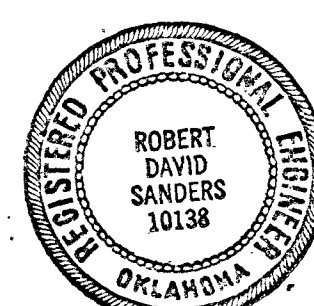
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1. 12/7/06  
DATE: 9/22/06

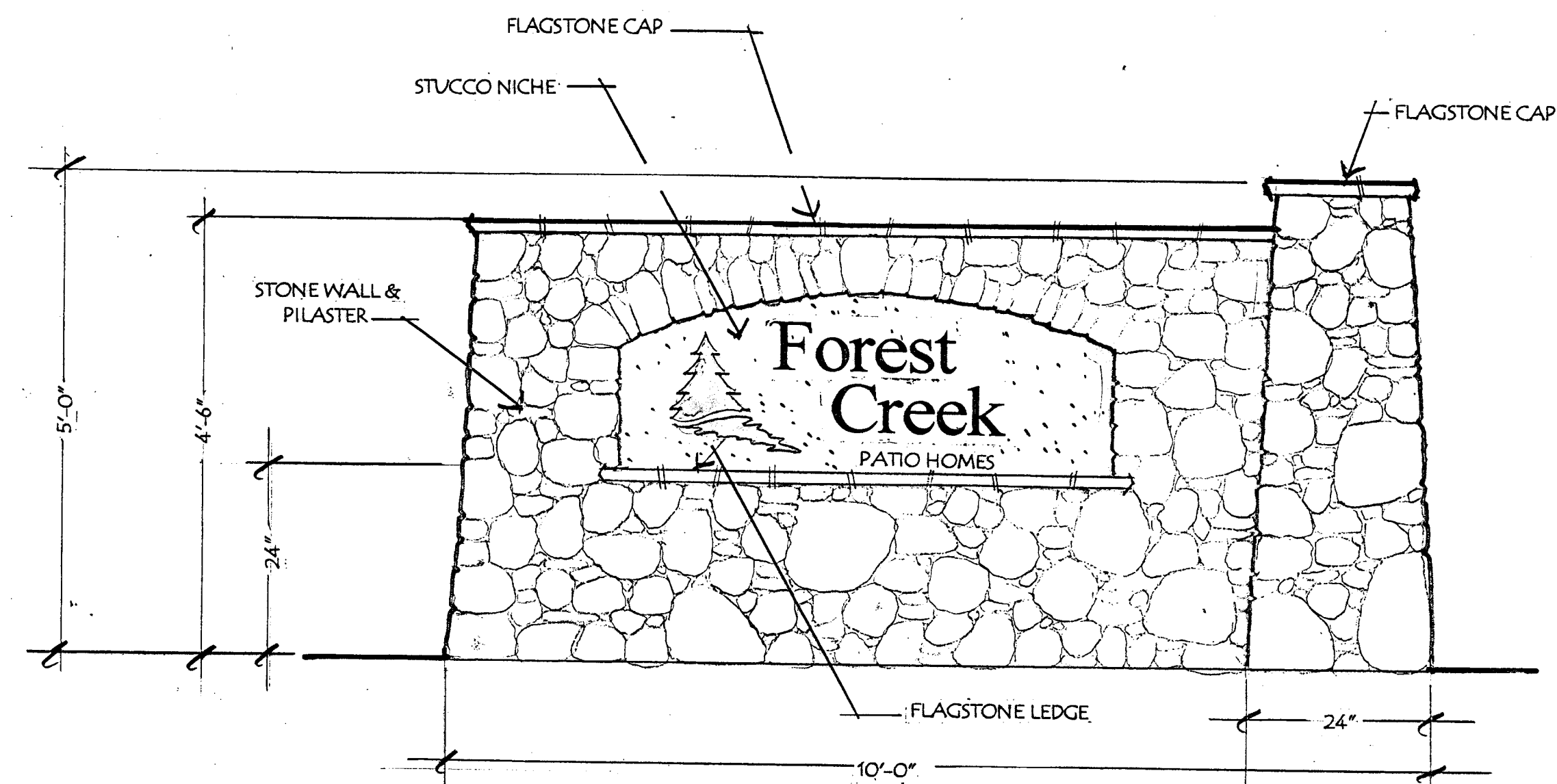
CLARE ASHBY  
A S L A  
LANDSCAPE  
ARCHITECT  
INCORPORATED  
5550 South Lewis  
SUITE 103  
TULSA, OK 74105  
918 747 2626

ENTRY DEVELOPMENT

L-2

SHEET TWO OF FOUR

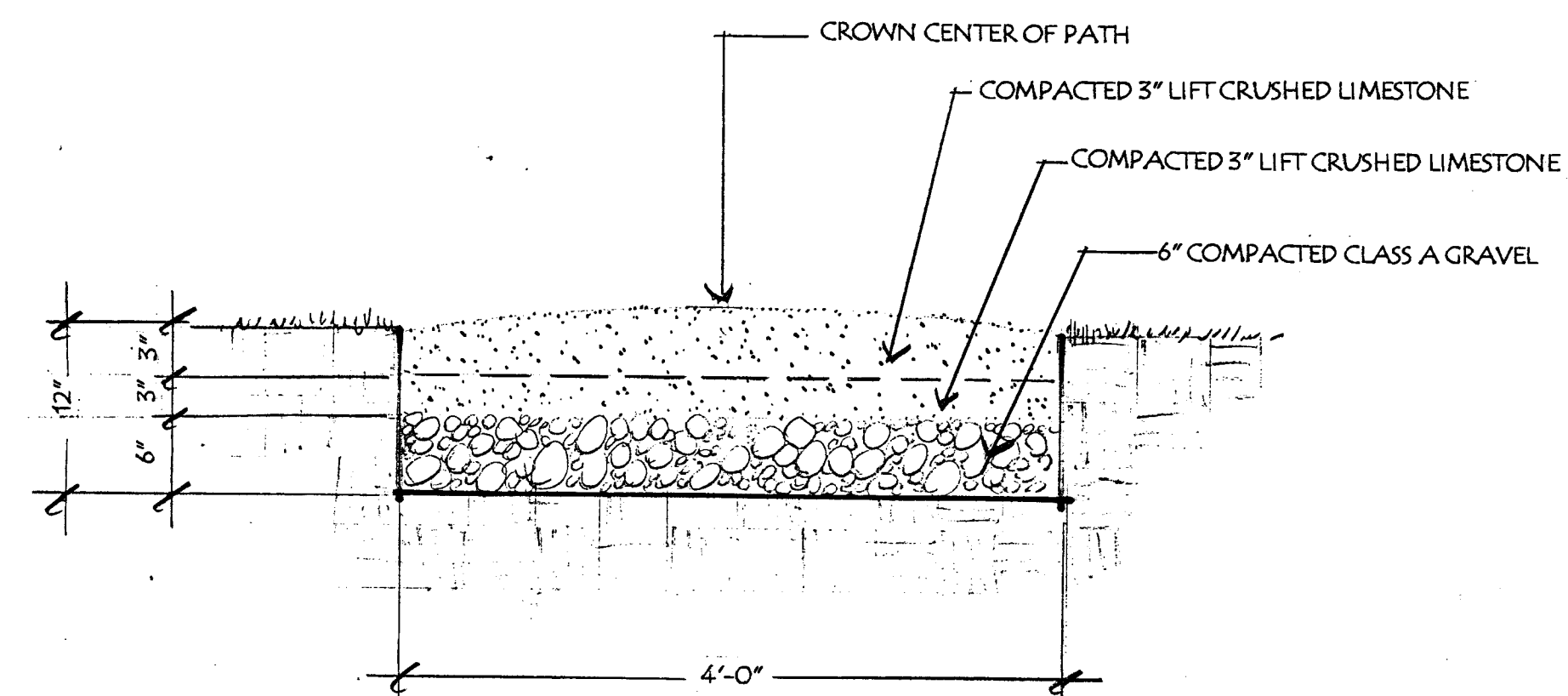




A

SIGN WALL EAST ELEVATION

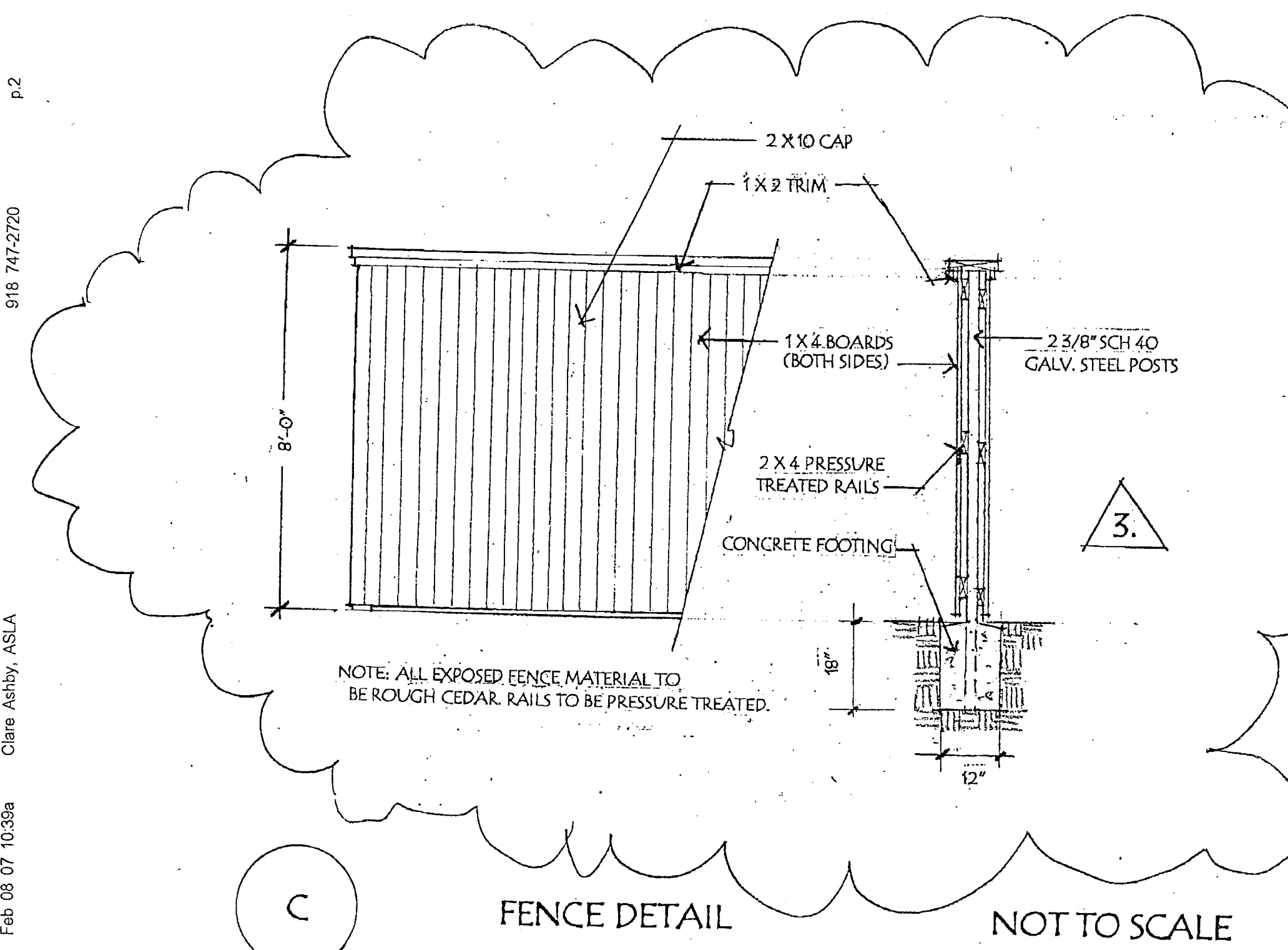
SCALE: 3/4" = 1'-0"



B

WALKING PATH SECTION

SCALE: 1" = 1'-0"



C

FENCE DETAIL

NOT TO SCALE

CONSTRUCTION DETAILS

PUD 146 DEVELOPMENT AREA THREE

FOREST CREEK PATIO HOMES

DATE: 9/22/06

CLARE ASHBY  
A S L A  
LANDSCAPE  
ARCHITECT  
INCORPORATED

5550 SOUTH LEWIS  
SUITE 103  
TULSA, OK 74105  
918 747 2626

SEAL



CONSTRUCTION DETAILS

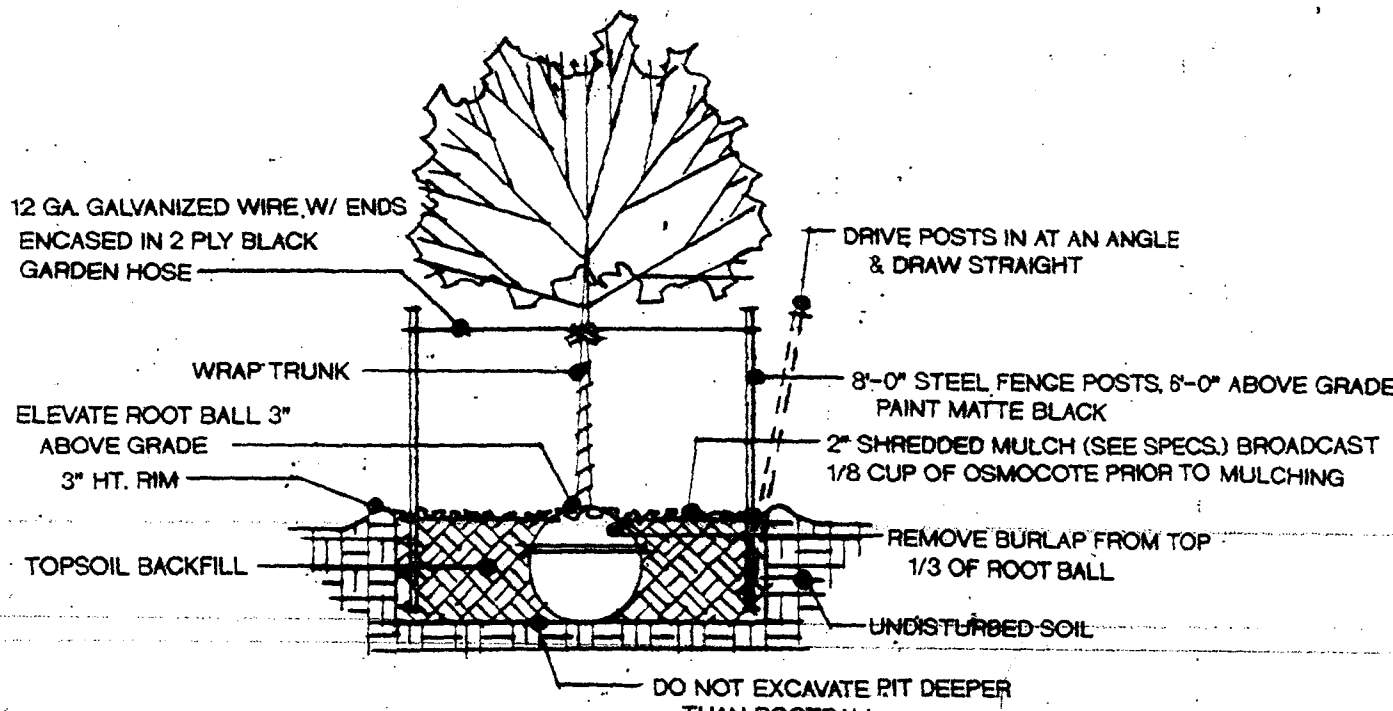
L-3

SHEET THREE OF FOUR



PLANTING SPECIFICATIONS

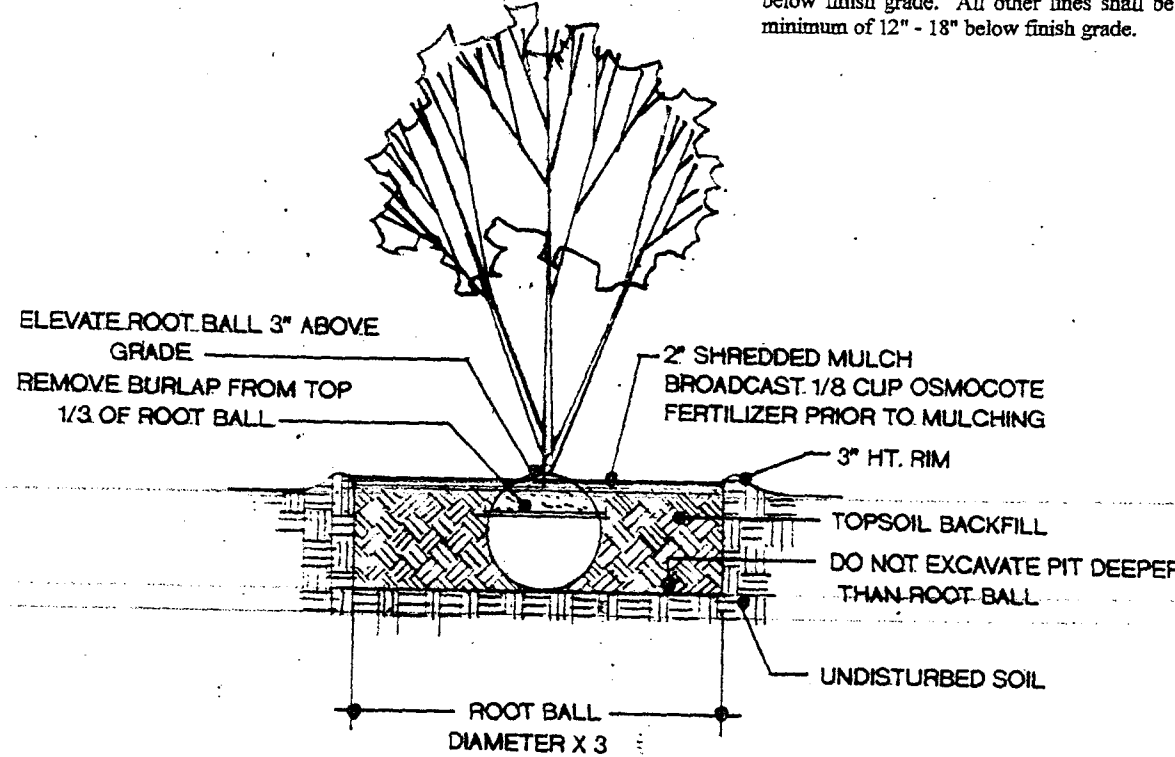
- 1.1 GENERAL CONDITIONS
- A. Report any discrepancy to the General Contractor, or Landscape Architect.
- B. Contractor to be responsible for damages to Owner's property, adjoining properties including streets, or accidents to any person or persons during the progress of work under the contract and caused by any act or omission of the Contractor.
- C. Contractor and his subcontractors to carry adequate Property Damage and Public Liability Insurance; also Workmen's Compensation and Employer's Liability Insurance in statutory amounts. Furnish Certificates of Insurance to Owner before starting work, if requested.
- D. Substitutions. It is understood that due to time of year, the specified materials may not be available. Substitutions will be considered. Contractor to notify Landscape Architect as to availability and size of proposed substitutes.
- E. Establish lines and levels necessary for the location and erection of project and for excavation, filling, and grading work. Contractor and subcontractors shall measure site to verify drawings and shall be responsible for accuracy in completed work.
- F. Contractor to determine the location of underground utilities prior to installation of work. Contractor shall be responsible for any damage resulting from failure to comply with this requirement.
- G. Job signs identifying Contractor or Subcontractor will not be allowed on the project.
- H. Keep site in an orderly manner during construction. Clean up and remove all construction debris on a daily basis.
- 2.1 PLANT MATERIALS
- A. Plant materials to be well furnished and be of the variety and size stated, or better, and shall be well-formed, sound, healthy, vigorous plants free from plant diseases and insects. Plants to be of size indicated in the latest edition of *American Standard for Nursery Stock*. All materials shall be subject to inspection and approval by the Landscape Architect and may be rejected prior to final acceptance if failing to meet the requirements established in the Drawings or Specifications.
- 2.2 BED PREPARATION AND PLANTING
- A. STEEL EDGING  
Ryerson Steel Edging 3/16" x 4", or as noted on plant list, should be installed as per plan according to manufacturer's specs. Finished height to be 1/2" above grade. If tree roots interfere with edging installation, cut steel to allow continuous 1/2".
- B. Grass in planting area should be totally removed as necessary to remove all roots. Replace with topsoil and soil amendments.
- C. Shrub and ground cover beds shall be loosened to a depth of four (4) inches. Composted rotted hulls shall be applied at the rate of three (3) inches thick, and worked in to the planting bed.
- D. Azalea beds should be excavated to the depth of the plant rootball. (Approximately 8" below grade.) Backfill with sphagnum peat moss to four (4) inches above the finish grade. Saturate peat moss before planting.
- E. Seasonal color beds shall be excavated to a depth of eight (8) inches and backfilled with a mix of 60% sandy loam topsoil and 40% peat moss. Apply 5 lbs. Osmocote per 100sq. ft. and work into the soil.
- F. After planting is complete and beds are raked, granular Osmocote fertilizer is to be broadcast over beds at a manufacturer's rate. Ornamental trees are to be fertilized with a surface broadcast at a rate of 1/8 cup per tree. Shade trees are to be fertilized with a surface broadcast at a rate of 1/4 cup per tree. Carefully wash off any fertilizer that may cling to leaves or foliage immediately after fertilizing.
- G. Shredded cedar, cypress, or hardwood mulch should be placed two (2) inches thick over entire planting area including tree wells. Adjust bed grades near walks and hard surfaces. Mulch should not be higher than adjoining sidewalks.
- H. After planting is completed, all cultivated areas shall be leveled, loosened, and raked, and the edges carefully trimmed so that the tree pits and beds shall present a neat appearance. Care shall be used that these bed edges conform as closely as possible with the lines shown on the planting plan.
- 3.1 FOLLOW UP AFTER COMPLETION
- A. After project is complete, Landscape Contractor is to coordinate with Owner and sprinkler contractor, if applicable, to review and set sprinkler system.
- B. During the first month following the planting installation, Landscape Contractor is to make periodic site inspections to monitor water and general maintenance. If site is not accessible due to locked gates, pens, etc., Landscape Contractor is to arrange convenient times with Owner for inspection.



TREE PLANTING DETAIL  
(FOR TREES IN EXCESS OF 2" CALIPER)

NOT TO SCALE

- 3.2 PAYMENT REQUESTS
- A. After completion, or from time to time as needed, Landscape Contractor shall submit itemized invoices to Landscape Architect for approval. Landscape Architect to inspect and verify within three working days of receipt.
- 4.1 GUARANTEE (PLANT MATERIALS)
- A. All trees, shrubs, and ground covers shall be guaranteed for a twelve (12) month period after completion and acceptance. The Landscape Contractor shall replace all dead materials and all materials not in vigorous, thriving condition, as soon as weather permits and on notification by the Landscape Architect or Owner. Plants, including trees, which have partially died so that shape, size, or symmetry has been damaged, shall be considered subject to replacement. In such cases, the opinion of the Landscape Architect shall be final.
- B. Plants used for replacement shall be of the same kind and size as those originally planned, and shall be planted as originally specified. All work, including materials, labor, and equipment used in replacements, shall be at no cost to the Owner. Any damage, including ruts in lawn or bed areas, incurred in making replacements shall be immediately repaired.
- C. The Owner agrees that for the guarantee to be effective, he/she will water plants at least twice a week during dry periods (or as otherwise recommended by Landscape Contractor) and weed the beds twice a month after final acceptance.
- D. The twelve (12) month guarantee shall be applicable to any growing conditions through which established plants of like kind could be expected to survive. The guarantee would not apply to instances beyond control such as tornadoes, malicious injury or negligence.
- 5.1 SODDING SPECIFICATIONS
- A. Topsoil in sod areas shall be at least four (4) inches in depth and grades shall be brought to within 1/10 of a foot by General Contractor, unless otherwise noted on plan.
- B. Landscape Contractor to hand grade area as necessary to provide an even surface. At curbs, sidewalks, or drives Landscape Contractor to adjust to be two (2) inches below finish grade to allow for thickness of sod.
- C. Fertilize lawn area with 10-20-10 fertilizer at manufacturer's recommended rates. Do not fertilize Fescue sod between June 15 and Sept. 15.
- D. Sod to be Bermuda, *Cynodon dactylon* 'U-3', or Fescue blend as noted on plans.
- E. Lay sod with tight, staggered joints with no spaces between strips. Lay sod on slopes or berms with strips parallel to contours.
- F. Tamp and roll sod thoroughly and water with a fine spray immediately after final rolling. Stake sod on slopes over 4:1 with wood stakes.
- G. Landscape Contractor shall keep areas watered and mowed until acceptance.
- H. Landscape Contractor shall broom off and hose all adjacent hard surface area. All debris and leftover material shall be removed.
- I. Landscape Contractor is to protect sodded area with hardscapes or other suitable methods to discourage possible damage. It is understood that some damage to sod may occur prior to final acceptance. Landscape Contractor is to repair damaged areas until final acceptance.
- 5.2 GUARANTEE/FINAL ACCEPTANCE (LAWN)
- A. Sodded areas shall be guaranteed to be uniform, weed, pest and disease free at time of acceptance.
- B. Landscape Contractor shall notify General Contractor when all sodding operations are complete. Upon inspection, the General contractor will accept the lawn areas and will assume all maintenance duties.

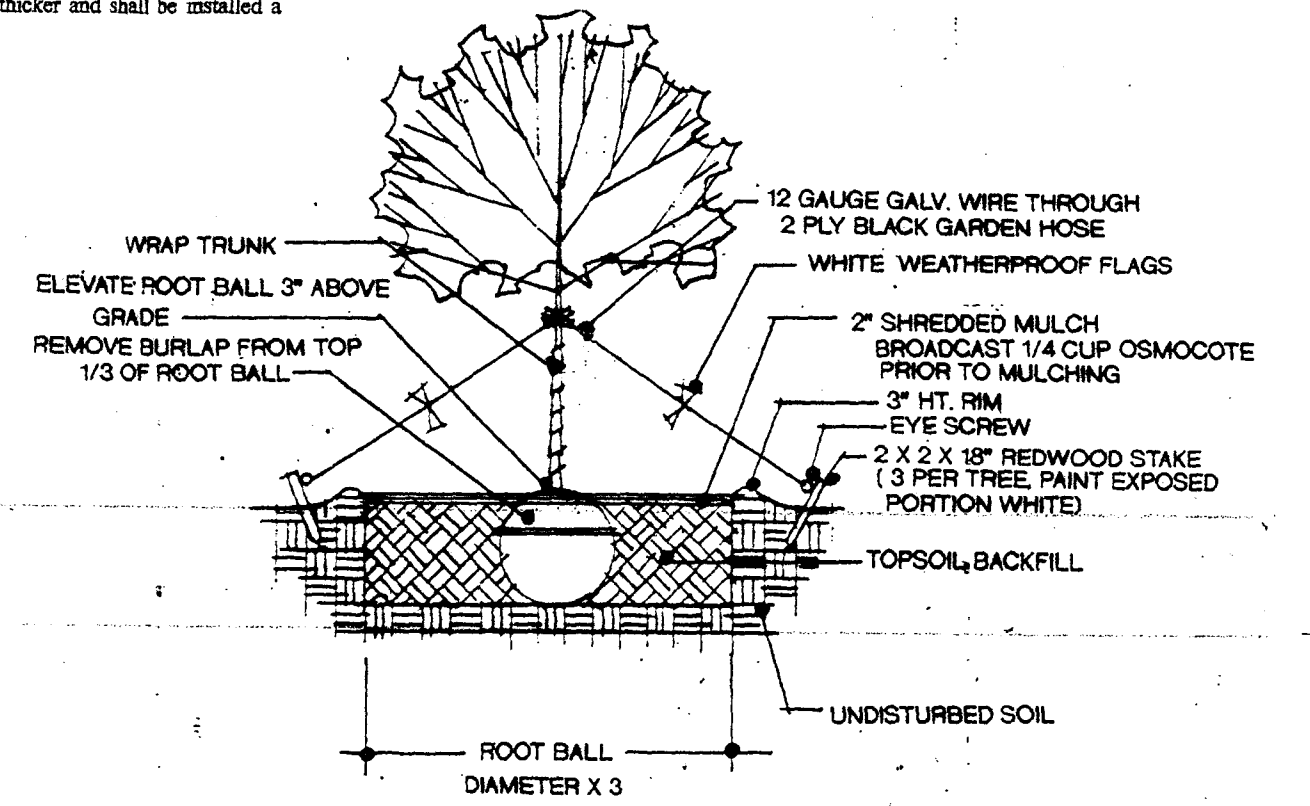


TREE PLANTING DETAIL  
(FOR TREES LESS THAN 2" CALIPER)

NOT TO SCALE

IRRIGATION SPECIFICATIONS

- 1.1 SCOPE
- Design, furnish, install and guarantee the complete underground irrigation system as required based on the planting plan and specified herein, including all labor, materials, equipment, apparatus, inspections, fees, permits, services for testing, adjusting, re-testing and re-adjusting as required to place the system in approved operating condition and maintain proper adjustment throughout guarantee period.
- 1.2 STANDARDS
- A. Acceptable Manufacturers:
1. Controllers: Rainbird ESP LX, ESP modular or approved equal
2. *Rainbird heads:*  
a. Large heads: Rainbird 5000 Plus series  
b. Medium heads: Rainbird 3500 series
3. *Spray Heads:* Rainbird 1800/193 series
4. *Remote Controlled Valves:* Rainbird or approved equal. Provide a threaded, (not glued) flow control.
- B. All and work materials shall be in full compliance with local and state plumbing codes.
- C. Requirements for materials and equipment are considered as minimum.
- D. Installer Qualifications: Have satisfactorily installed acceptable underground sprinkler systems on at least three other projects of comparable size and complexity.
- E. Contractor and his sub-contractors to carry adequate Property Damage & Public Liability Insurance. Workmen's Compensation and Employer's Liability Insurance, in statutory amounts. Furnish Certificate of Insurance to Owner upon request.
- 1.3 SUBSTITUTIONS
- A. Materials are specified by brand names to establish a standard of quality. Landscape Architect will consider substitutions provided the following procedures are followed:
1. Contractor shall submit for approval by Landscape Architect, satisfactory evidence as to kind and quality of materials, name of manufacturer, performance capacity and other pertinent information. If installed without approval, substituted materials and equipment may be subject to rejection.
- 1.4 COORDINATION
- A. Where required, sprinkler system shall be installed in coordination with those doing the grading, plant material and lawn installation.
- B. Sleeves under paving may or may not be done by others. The sprinkler contractor shall be responsible to contact the general contractor or Owner's representative to determine whether or not such work has been contracted for or installed. Sprinkler contractor shall indicate whether such work is or is not included in his proposal.
- 1.5 JOB CONDITIONS
- A. The Contractor shall determine the location of underground utilities and lines before installation of the irrigation system. The Contractor shall be responsible for any damage resulting from failure to comply with this requirement.
- B. The Contractor shall examine the site and observe the conditions under which the work will be performed, and notify the Landscape Architect and/or Owner of unsatisfactory conditions. Do not proceed with the work until satisfactory conditions are corrected.
- C. The Contractor shall take appropriate measures to prevent damage to existing plant material and shall be responsible to adequately repair any planting area, including mulch, disturbed during irrigation installation. The Contractor shall be responsible for replacement of dead or damaged plant material resulting from breakage; exposure of root ball to freeze, heat or drought; or other negligence.
- 2.1 WATER SOURCE
- Contractor investigate, propose, and procure appropriate water source for irrigation as per City Code, and Water and Sewer Department requirements. Cost for procuring active water source shall be listed as a separate bid item and will be reimbursed by the Owner.
- 2.2 BACK FLOW PREVENTION DEVICE
- A. Install back flow prevention device as required by local plumbing code.
- B. Pro thermosatic heat cable. (Electrical source by others)
- C. Insulated enclosure
- 2.3 WIRE
- All low voltage wire to be of UF-UL, and sized as required. All splices shall be made using watertight splice connectors. Tape wire to underside of sprinkler lines where possible. Install wire and slack to allow for thermal underside contraction and expansion.
- 2.4 PIPING
- Main pressure lines shall be Schedule 40 PVC, and shall be installed a minimum of 20" - 24" below finish grade. All other lines shall be Class 200 or thicker and shall be installed a minimum of 12" - 18" below finish grade.

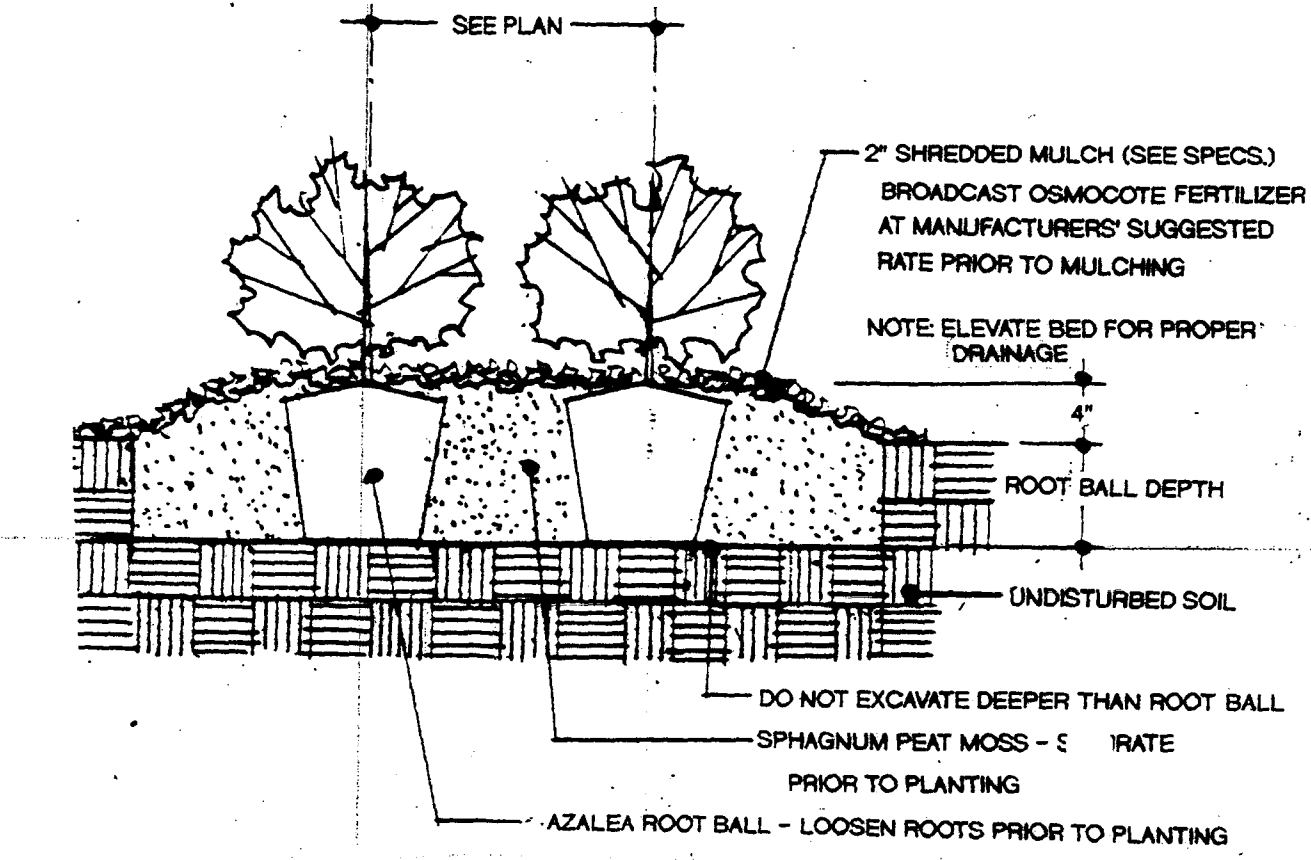


TREE PLANTING DETAIL  
(MULTI-TRUNK TREES)

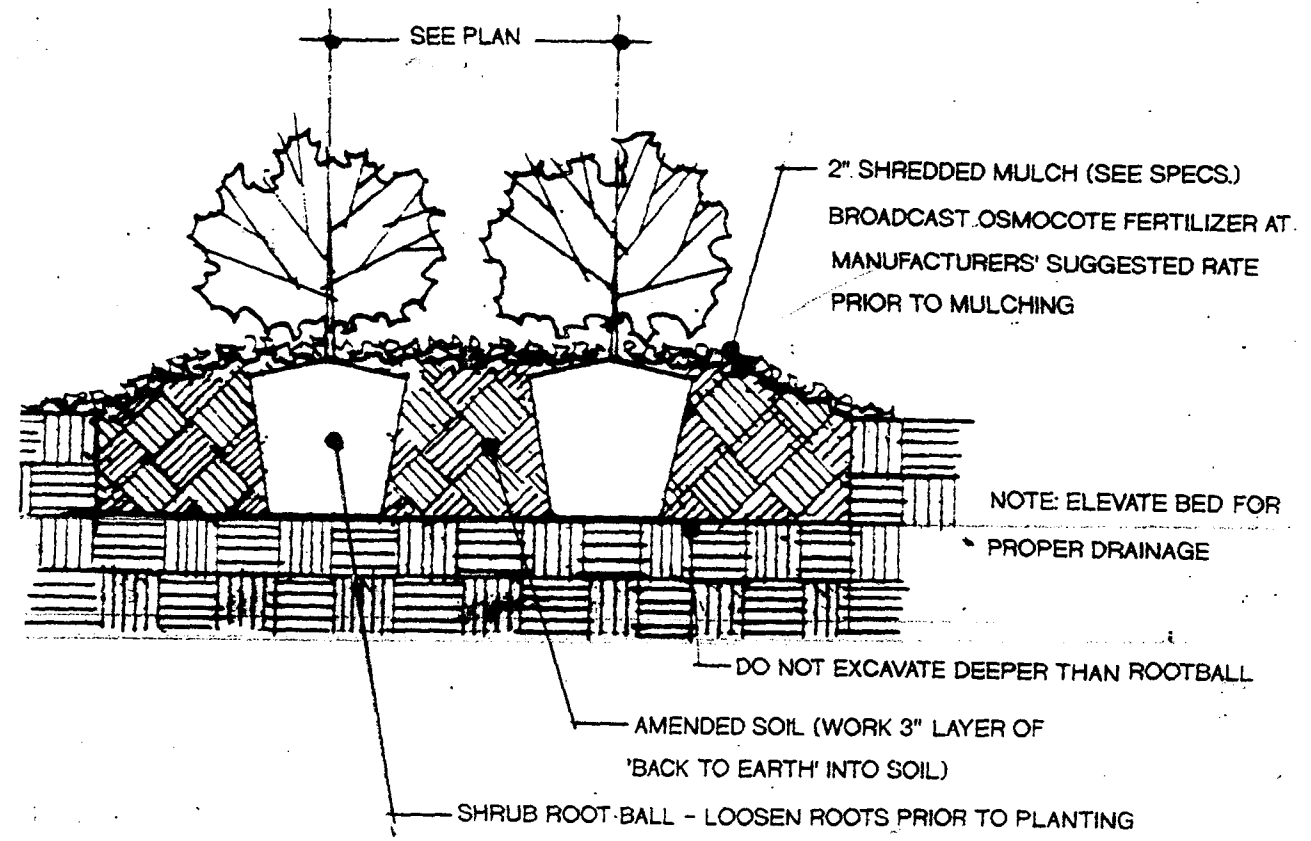
NOT TO SCALE

GENERAL CONDITIONS

- 2.5 LAWN SPRAY HEADS
- Lawn spray heads shall be installed on flexible PVC risers and shall be installed one inch above grade in new lawn areas receiving sod. Install lawn heads at grade in existing lawn areas or areas to be hydro-mulched or seeded. Lawn heads are to be on separate zones from shrub zones.
- 2.6 SHRUB SPRAY HEADS
- Shrub spray heads, other than pop-up types, shall be installed on 1/2" diameter copper risers. Verify riser heights with Landscape Architect. Shrub heads are to be on separate zones from lawn zones. Where shrub or lawn heads are likely to spray water on residences or building, use bubbler heads. Overspray on wood windows, dwellings, etc. is not allowed.
- 2.7 ADDITIONAL REQUIRED EQUIPMENT
- A. Rain sensor  
B. Freeze sensor  
C. Pressurized line to auto-fill device (where applicable on new swimming pools)
- 2.8 DRIP IRRIGATION (Where noted on Plan)
- A. For pots, vegetable or rose gardens. Include all sleeves, caps, tubing, emitters, stakes, etc.  
B. Place drip zones on separate zone.
- 2.9 INSTALLATION
- A. Drain valves shall be installed on downlines of each station so as to allow for complete drainage of water from all downlines.
- B. Trenching: Where possible do not trench across or within the drip line (root zone) of existing trees. When root zone trenching is absolutely necessary, consult with Landscape Architect as to best trenching route.
- C. All Lines shall be flushed with water until water runs clean before attaching nozzles.
- D. Backfilling: The backfilling material shall not contain any hard objects such as bricks, rocks, etc. All trenches shall be water filled and tamped to prevent settling. Trenches shall be left level with finish grade. After backfilling and watering-in, the soil around all heads shall be tamped hard and all heads left plumb.
- E. Valve boxes shall be flush with finish grade and placed 12" from and parallel to curbs and sidewalks. Grouped valves shall be equally spaced.
- 3.0 CLEANUP
- After completion of the installation, the Contractor shall remove from the site all leftover material. During the course of work, the Contractor shall keep job site clean and as free of debris as possible.
- 3.1 GUARANTEE
- A. The Contractor shall guarantee 100% coverage. The lawn shall be on separate stations from the shrub beds.
- B. The Contractor shall guarantee trenches from future settlement and shall be responsible to repair any grading damaged in repairing a trench.
- C. All materials, equipment, and installation shall be fully guaranteed for a period of one year from the date of final acceptance. Adjustments for proper operation shall be accomplished by the Contractor at no cost throughout the guarantee period. Need for adjustment will be at the discretion of the Owner.
- 3.2 FINAL ACCEPTANCE
- A. Upon completion of all work, test and demonstrate to the Landscape Architect and/or Owner the satisfactory operation of the sprinkler system.
- B. Instruct the Owner or designated personnel in the operation of the system. Upon acceptance, the Owner will be operation of the system.
- C. Submit to Owner "As Built" drawing showing pipe locations and sizes, valves, sprinkler heads, and controller(s) as actually installed in field. "As Built" drawing is required before final payment is made.



AZALEA PLANTING DETAIL NOT TO SCALE



SHRUB PLANTING DETAIL NOT TO SCALE

NOTES:

1. STAKE TREES ONLY IF PLANTED IN AN OPEN, UNPROTECTED LOCATION, OR IF TREE REPEATEDLY LEANS OUT OF PLUMB.
2. WRAP ALL RED MAPLES & ANY JAPANESE MAPLE THAT IS PLANTED IN SUN.
3. STAKES & WRAP TO BE REMOVED AFTER 1 YEAR.

LANDSCAPE SPECIFICATIONS

PUD 146 DEVELOPMENT AREA THREE

FOREST CREEK PATIO HOMES

DATE: 9/22/06

CLARE ASHBY  
A S L A  
LANDSCAPE  
ARCHITECT  
INCORPORATED

5550 South Lewis  
SUITE 103  
TULSA, OK 74105  
918 747 2626

SEAL



LANDSCAPE SPECIFICATIONS  
L - 4  
SHEET FOUR OF FOUR