

## GENERAL GRADING NOTES:

1. THIS IS DESIGN GRADING. ALL GRADES ABOVE THE NORMAL POOL ELEVATION SHALL BE CONTOURED SMOOTHLY WITH GENTLE ROUNDING/SHAPING OF ALL AFFECTED LAND SURFACES. ABRUPT TRANSITIONS AT THE TOP OF SLOPES WHERE PROPOSED GRADES MEET EXISTING ARE NOT ACCEPTABLE. SURVEY STAKES ARE FOR GENERAL GRADING PURPOSES ONLY. NOT ALL SLOPES ARE CONSTANT AND THEREFORE THE GRADING PLANS SHALL BE REFERRED TO FOR FINAL GRADE SHAPING. THE GRADING SHALL BE APPROVED BY MKEC'S LANDSCAPE ARCHITECT PRIOR TO THE ADDITION OF THE TOPSOIL LAYER.

2. MANY EXISTING NATURAL AREAS (TREES & PASTURE) ARE SHOWN TO BE PRESERVED & SHALL BE OFF LIMITS TO ANY TYPE OF CONSTRUCTION ACTIVITY. TEMPORARY CONSTRUCTION FENCE SHALL BE ERECTED AROUND THESE SITES PRIOR TO THE START OF ANY CONSTRUCTION. (REFER TO SHEETS 15 & 16).

3. A 6" LAYER OF TOPSOIL SHALL BE STRIPPED IN ALL AREAS OF CUT AND FILL AND REPLACED AT A 6" THICKNESS ON PROPOSED GRADING AREAS. NOTE: THE FINISHED GRADE INDICATES THE SURFACE ELEVATION AFTER THE LAYER OF TOPSOIL HAS BEEN PLACED. IN CASES WHERE GRADING IS DIRECTED UNDER TREE DRIP LINES NO TOPSOIL STRIPPING SHALL BE PERFORMED WITHIN THESE AREAS.

4. WHERE OFFSITE TOPSOIL 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 EXTRANEEOUS MATTER THAT MAY BE HARMFUL TO PLANT GROWTH OR WOULD INTERFERE WITH FUTURE MAINTENANCE. TOPSOIL pH RANGE SHALL BE 5.5 TO 7.0. TOPSOIL SHALL BE APPROVED BY MKEC'S LANDSCAPE ARCHITECT PRIOR TO PLACEMENT.

5. CONTRACTOR SHALL COORDINATE WITH MKEC ON HAUL ROAD ROUTES, IF OTHER THAN THOSE INDICATED ON THE PLANS.

## GENERAL TREE PROTECTION NOTES:

1. TREES ARE AN IMPORTANT ASSET TO THE DEVELOPER. EVERY EFFORT SHOULD BE MADE TO PRESERVE EACH AND EVERY TREE (UNLESS NOTED FOR REMOVAL) AS DIRECTED IN THESE PLANS & NOTES.

2. BEFORE ANY TYPE OF CONSTRUCTION BEGINS WITHIN THE PROJECT IMPROVEMENT AREA THE CONTRACTOR SHALL INSTALL PROTECTION FENCE AROUND ALL TREE MASSES & INDIVIDUAL TREES THAT ARE NOT NOTED FOR REMOVAL.

3. EQUIPMENT AND CONSTRUCTION MATERIALS SHALL REMAIN OUT OF AND AWAY FROM TREE DRIP LINES SO AS TO NOT COMPACT THE ROOT ZONE OR DAMAGE THE TREE. CHEMICAL SPILL DAMAGE SHALL BE PREVENTED BY FILLING GAS TANKS, CLEANING TOOLS & REPAIRING EQUIPMENT WELL OUTSIDE TREE PROTECTED ROOT ZONES. MIXING TRUCKS SHALL BE RINSED OUT OFF SITE. WHERE IT OCCURS THAT A CONSTRUCTION ROUTE OR A PROPOSED IMPROVEMENT OCCURS WITHIN A TREE'S PROTECTED ROOT ZONE, IT MAY BE NECESSARY, DEPENDENT UPON THE TYPE OF CONSTRUCTION AND EQUIPMENT USED, TO INSTALL A ROOT PROTECTION BRIDGE OR APPROVED EQUIVALENT. THIS MAY BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE LANDSCAPE ARCHITECT (REFER TO DETAIL THIS SHEET).

4. ANY TREE THAT MUST HAVE BRANCHES REMOVED SHALL BE TRIMMED WITH 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! REFER TO TREE TRIMMING DETAIL ON THIS SHEET FOR TRIMMING PROCEDURE.

NOTE: DRY STACK QUARRY BLOCK STONE PROVIDED BY: BAYER STONE, INC. - SITE: CHASE COUNTY, KS QUARRY TYPE: COTTONWOOD LIMESTONE SIZE: RANDOM SPLIT STONE, LEDGE HEIGHT: 12-24" LENGTH: MIN. 36-48", DEPTH: 36" RESERVE LARGER STONES FOR BASE COURSES. COORDINATE PLACEMENT w/ LANDSCAPE ARCHITECT

NOTE: TILT ALL STONE SLABS SLIGHTLY INWARD TOWARD THE RETAINED SURFACE

NOTE: LEDGE FOR STONE SHALL BE MIN. 8" BELOW NORMAL POOL ELEVATION, TYP.

NORMAL POOL ELEV VARIES SEE GRADING PLAN

LAKE BOTTOM FINISHED GRADE

## SHORELINE TREATMENT - (ALT. 1) DRY STACK STONE WALL

NOTE: TOP OF WALL ELEVATIONS VARY. REFER TO THE SITE GRADING PLAN FOR FINISHED TOP OF SLAB ELEVATIONS.

NOTE: USE FINE CHAT AS A LEVELING COURSE BETWEEN STONES WHERE NEEDED

FINISHED GRADE (6" MIN. TOPSOIL) SLOPE VARIES

TREVIRA SPUNBOND #120 FILTER FABRIC, COMPLETELY WRAP BACKFILL AS SHOWN

BACKFILL STONE WALL w/ CLEAN WASHED 1-1/2" CRUSHED LIMESTONE ROCK

12" MIN FATTY CLAY- LINED STONE LEDGE, TYP.

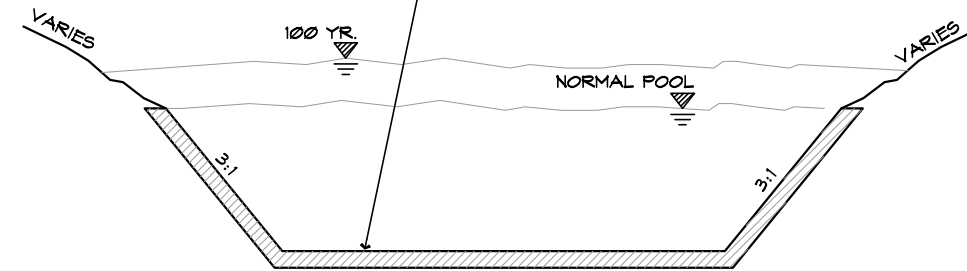
COMPACTED FILL OR UNDISTURBED SOIL

## POND NOTES:

1. SHORE PROTECTION SHALL BE PLACED IN AREAS INDICATED ON THE PLANS. THE PROTECTION SHALL EXTEND 1' ABOVE THE NORMAL POOL, AND 2' BELOW THE NORMAL POOL.

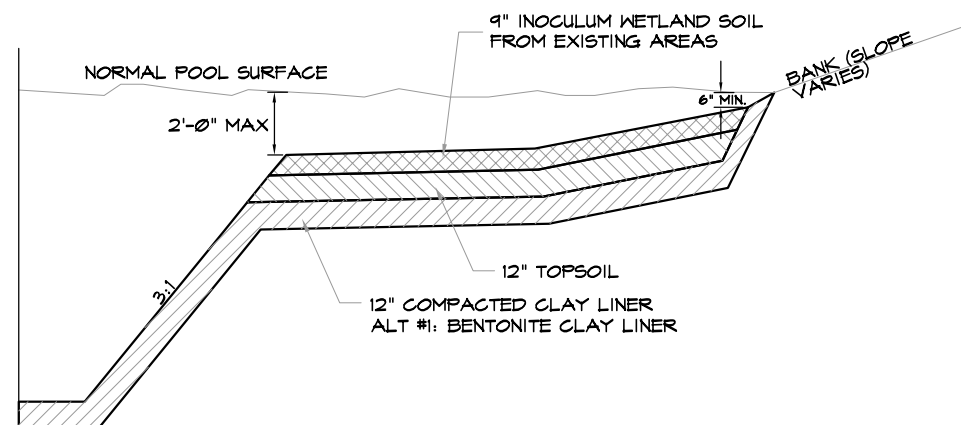
2. SHORE PROTECTION SHALL BE 18" LIGHT RIP-RAP WITH FILTER FABRIC. INSTALLATION OF THE RIP-RAP AND GROUTED STONE TOEWALL SHALL BE IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS.

OVER EXCAVATE 12" OF SOIL. PLACE IN TWO 6" LIFTS CLAY LINER (PI=30). COMPACT TO 2% ABOVE OPTIMUM ASTM D698 95% RELATIVE MAX DENSITY. ALL COST ASSOCIATED WITH THIS WORK SHALL BE SUBSIDIARY TO EARTHWORK ITEMS.



## TYPICAL LAKE DETAIL

NOT TO SCALE

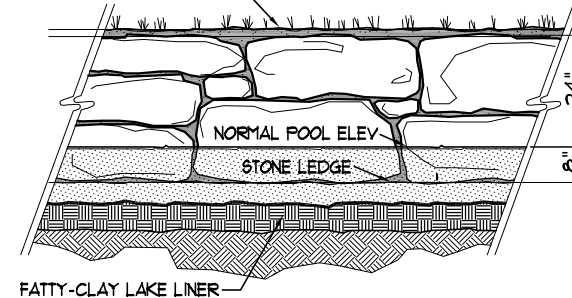


## WETLAND MITIGATION DETAIL

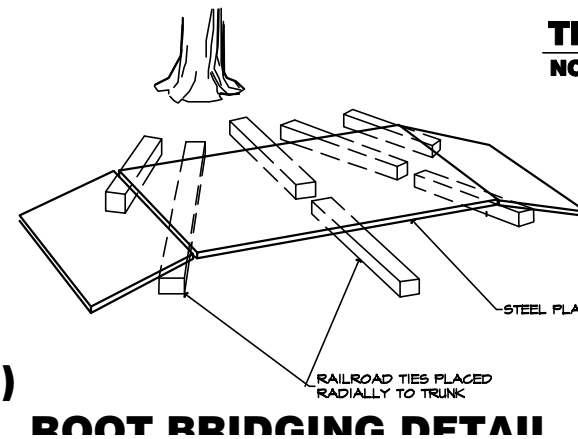
NOT TO SCALE

NOTE: THE LIFTS OF STONE PROVIDING SHORELINE TREATMENT FOR LAKE EDGES SHALL BE CONSTRUCTED IN A RANDOM PATTERN, AS SHOWN. RESERVE LARGER STONES FOR THE BASE COURSE AND INCORPORATE SMALLER STONES AS REQUIRED TO MAKE TRANSITION FOR EACH LIFT. OVERLAP STONES OFTEN TO PROVIDE AN INTERLOCKING STRUCTURAL STABILITY WITHIN THE WALL.

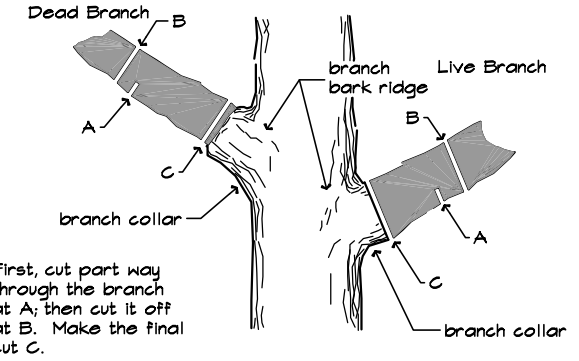
FINISHED GRADE VARIES



## SHORELINE TREATMENT - (ALT. 1) DRY STACK STONE WALL



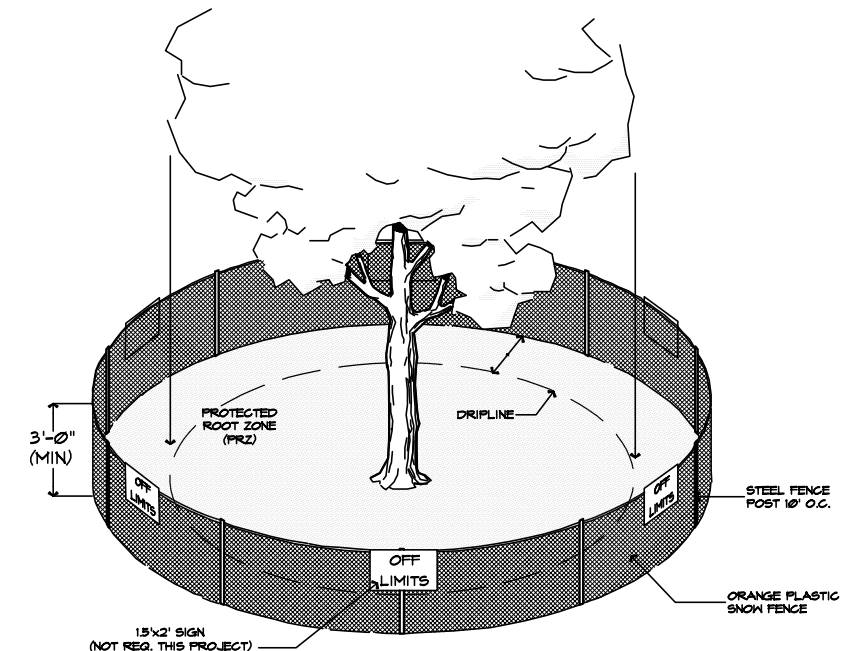
## ROOT BRIDGING DETAIL



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



NOTE: 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 OWNER'S REPRESENTATIVE.

## TEMPORARY TREE PROTECTION DETAIL

NOT TO SCALE

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

HAWTHORNE ADDITION  
PROJECT NAME  
GRADING AND TREE  
PRESERVATION NOTES & DETAILS  
SHEET TITLE

JAG DESIGN BY: DMU DRAWN BY: DRK CHECKED BY:  
JANUARY 2003 DATE: 02167 JOB NO. 2 / 46 SHEET/OF

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