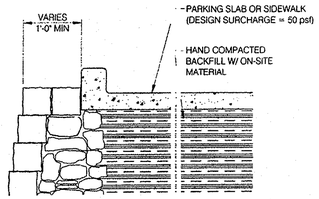
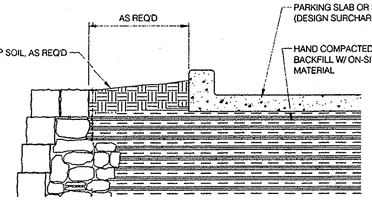
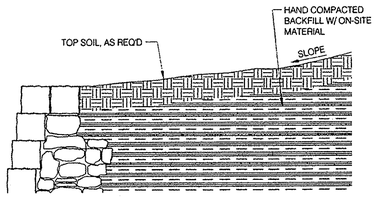


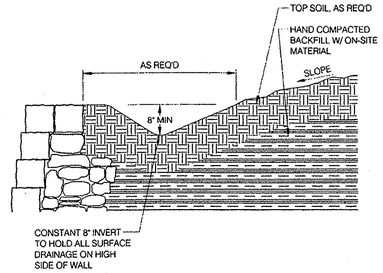
1 SRW-1 TOP OF WALL DETAIL N.T.S.



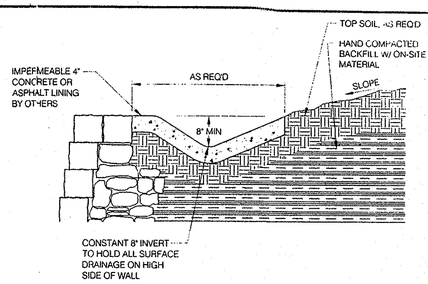
2 SRW-1 TOP OF WALL DETAIL N.T.S.



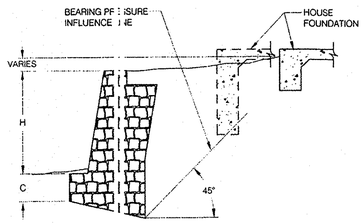
3 SRW-1 TOP OF WALL DETAIL N.T.S.



4 SRW-1 DRAINAGE SWALE DETAIL N.T.S.

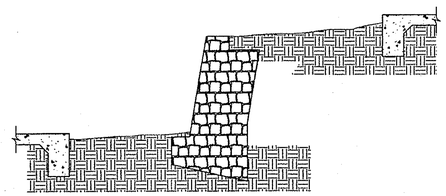


5 SRW-1 DRAINAGE SWALE DETAIL N.T.S.



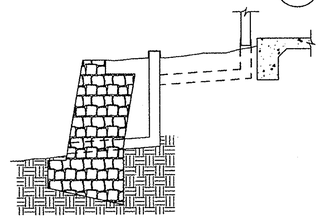
FOUNDATIONS TO BE CONSTRUCTED SHALL HAVE THE BOTTOM OF THE FOUNDATION FOOTING PLACED BELOW THE BEARING PRESSURE INFLUENCE LINE FOR THE RETAINING WALLS. PLACING THE FOOTING ABOVE THE INFLUENCE LINE WILL INCREASE SURCHARGE PRESSURE ON THE RETAINING WALL WHICH IS NOT PERMITTED, UNLESS APPROVED BY FX ENGINEERING SERVICES, INC.

6 SRW-1 TYPICAL WALL SECTION W/ ADJACENT FOUNDATION N.T.S.



NOTE: IT IS THE GENERAL CONTRACTORS RESPONSIBILITY TO ENSURE THAT POSITIVE DRAINAGE IS PROVIDED AT THE BASE OF WALL AND ABOVE THE WALL DURING THE CONSTRUCTION PHASE OF THE PROJECT. IT IS THE OWNERS RESPONSIBILITY TO ENSURE THAT THE MIMINUM SLOPE AT THE BASE OF THE WALL AND ABOVE THE WALL IS MAINTAINED DURING THE LIFETIME OF THE WALL. FAILURE TO PROPERLY MAINTAIN THE SLOPE AT THE BASE OF THE WALL AND ABOVE THE WALL MAY ALLOW EXCESSIVE WATER TO ACCUMULATE AT THE BASE OF THE WALL OR BEHIND THE WALL AND ADVERSELY AFFECT THE STABILITY OF THE RETAINING WALLS.

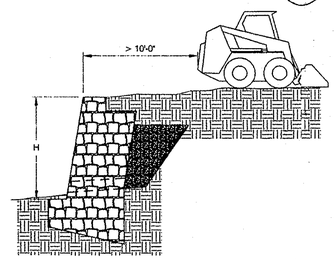
7 SRW-1 CONTRACTOR TO BUILD SLOPE OWNER TO MAINTAIN SLOPE N.T.S.



PROVIDE 4" DIA. SOLID PVC PIPE FOR DOWN SPOUT FROM BUILDINGS. COORDINATE LOCATION WITH GENERAL CONTRACTOR. TEMPORARILY CAP OFF PIPE ABOVE FINISH GRADE UNTIL GUTTERS AND DOWN SPOUTS ARE INSTALLED. IDENTIFY THESE PIPES AS "DOWNSPOUT DRAINAGE".

REFER TO SITE PLANS LOCATIONS OF DOWN SPOUT PIPES AND PIPES THROUGH RETAINING WALLS. ADDITIONAL LOCATIONS MAY BE PROVIDED BY THE BUILDER IF DESIRED.

8 SRW-1 DOWNSPOUT DRAINAGE PIPES N.T.S.



9 SRW-1 TRACTOR ABOVE WALL - MINIMUM DISTANCE N.T.S.

GENERAL NOTES

DESIGN BUILDING CODE

INTERNATIONAL BUILDING CODE, 2000 EDITION

GEOTECHNICAL REPORT

FIRM: KLEINFELDER.
REPORT NO.: 37739
DATED: DECEMBER 17, 2003

GEOTECHNICAL CRITERIA

BEARING ON NATIVE UNDISTURBED ONSITE SOILS OR COMPACTED AND TESTED SOILS

ALLOWABLE BEARING = 2000 psf
(SOME WALLS REQUIRE ADDITIONAL BEARING CAPACITY, UP TO 3000 PSF, THAT SHALL BE FIELD VERIFIED)
COEFFICIENT OF FRICTION BETWEEN BASE OF WALL AND SOIL - 0.30
ALLOWABLE BASE ADHESION RESISTANCE TO SLIDING - 500 psf

THE GEOTECHNICAL ENGINEER HAS RECOMMENDED THAT A ROTATIONAL STABILITY ANALYSIS BE PERFORMED ON THE RETAINING WALL SYSTEMS.

BACKFILL SOIL PARAMETERS;
BACKFILL SOIL - FREE DRAINING MATERIAL: HARDROCK GRAVEL, REMANUFACTURED CONCRETE GRAVEL, OR SANDSTONE GRAVEL. GRAVEL SIZE MAY VARY FROM 3/4" TO 4"
BACKFILL ANGLE OF INTERNAL FRICTION PHI = 35 deg

BASE SOIL PARAMETERS;
SOIL AT TOE - NATURAL, UNDISTURBED OR FILL SOILS
ANGLE OF INTERNAL FRICTION PHI = 25 deg

HAND COMPACTED INDICATES A PROCEDURE IN WHICH THE BACKFILL SOIL IS PLACED BEHIND THE WALL WITH A FRONT LOADER. THE SOIL IS THEN WORKED IN BY HAND, USING SHOVELS. THE USE OF VERY WET OR VERY DRY BACKFILL SOIL SHOULD BE AVOIDED. THE USE OF HEAVY EQUIPMENT WITHIN 10'-0" OF THE WALL COULD DAMAGE THE WALL AND SHOULD BE AVOIDED.

LOCATE BASE OF WALLS ON UNDISTURBED OR PROPERLY COMPACTED SOIL.

MATERIALS

CONCRETE MORTAR - A MIXTURE OF PORTLAND CEMENT AND SAND WITH MINIMUM STRENGTH OF f'c = 2500 psi AT 28 DAYS.
AVERAGE DENSITY OF MASONRY STONE WALL VARIES FROM 135 pcf TO 145 pcf.

RETAINING WALL DESIGN CONSTRAINTS

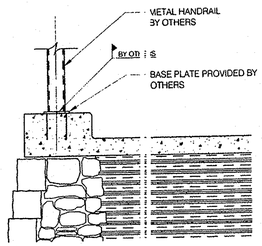
RETAINING WALLS SHALL NOT HAVE ADDITIONAL SURCHARGE PLACED ABOVE WALL. RETAINING WALLS SHALL NOT HAVE SLOPE AT BASE OR TOP OF WALL THAT EXCEED THAT WHICH IS SHOWN ON THESE PLANS.

FENCES: RETAINING WALLS SHALL NOT HAVE SOLID FENCES, SUCH AS WOOD PRIVACY FENCES, PLACED IN THE TOP OF THE RETAINING WALL AS THE SOLID FENCE CREATES WIND LOAD ON THE RETAINING WALL WHICH WAS NOT ANTICIPATED IN THE DESIGN OF THE WALLS.

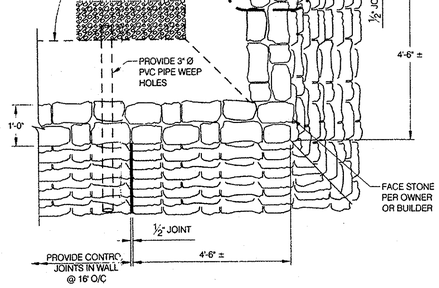
OPEN FENCES SUCH AS CHAIN LINK, WROUGHT IRON, OR TUBULAR STEEL FENCES MAY BE PLACED IN THE TOP OF THE WALL PER DETAIL 15/SRW-1. IT IS THE RESPONSIBILITY OF THE FENCE/HANDRAIL SUPPLIER TO PROVIDE A FENCE DESIGN THAT MEETS THE REQUIREMENTS OF THE LOCAL BUILDING CODE.

CONSTRUCTION REVIEWS

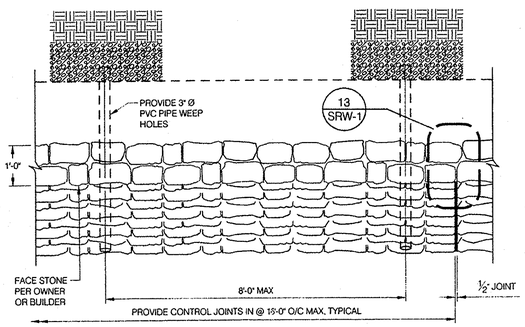
FX ENGINEERING SERVICES, INC. SHALL BE CALLED FOR CONSTRUCTION REVIEW OF MASONRY WALL.



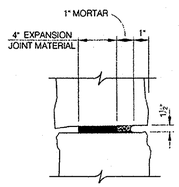
10 SRW-1 WALL SECTION W/ HANDRAIL POST N.T.S.



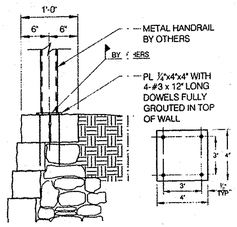
11 SRW-1 TYPICAL PLAN VIEW AT CORNERS N.T.S.



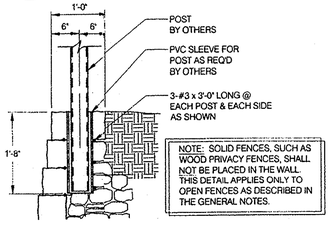
12 SRW-1 TYPICAL PLAN VIEW AT BASE N.T.S.



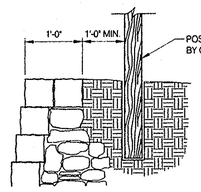
13 SRW-1 VERTICAL CONTROL JOINT DETAIL N.T.S.



14 SRW-1 WALL SECTION W/ HANDRAIL POST CONTRACTOR OPTION N.T.S.



15 SRW-1 WALL SECTION W/ HANDRAIL POST OR FENCE POST CONTRACTOR OPTION N.T.S.



16 SRW-1 WALL SECTION W/ ADJACENT FENCE POST CONTRACTOR OPTION N.T.S.

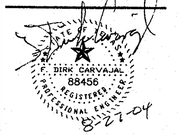
RECORD DRAWING
THIS RECORD DRAWING HEREIN REFLECTS TO THE BEST OF THE DESIGN ENGINEER'S KNOWLEDGE, THE APPROXIMATE LOCATION OF THE CONSTRUCTED WORK USING INFORMATION AS PROVIDED BY THE CONTRACTORS AND SURVEYED GRADES.

FX ENGINEERING SERVICES, INC.
P.O. Box 213
Bedford, Texas 76095
Ph. 817.715.0716

Contractor

ENGINEERED RETAINING WALL SYSTEMS, INC.
EULESS, TEXAS

ROCKWALL COMMONS
ROCKWALL, TEXAS



Revisions

#	ISSUE	DATE

Sheet Information

Date	8/27/04
FX Job #	0122
Scale	AS NOTED
Drawn	RKR
Approved	FDC

Sheet Title

TYPICAL DETAILS & NOTES

Sheet #

SRW-1

ISSUE for CONSTRUCTION