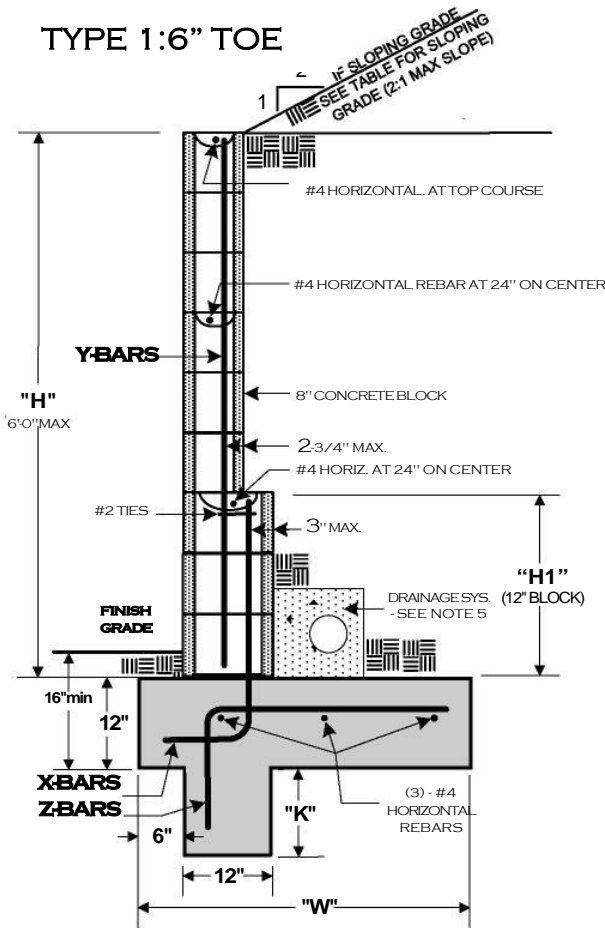
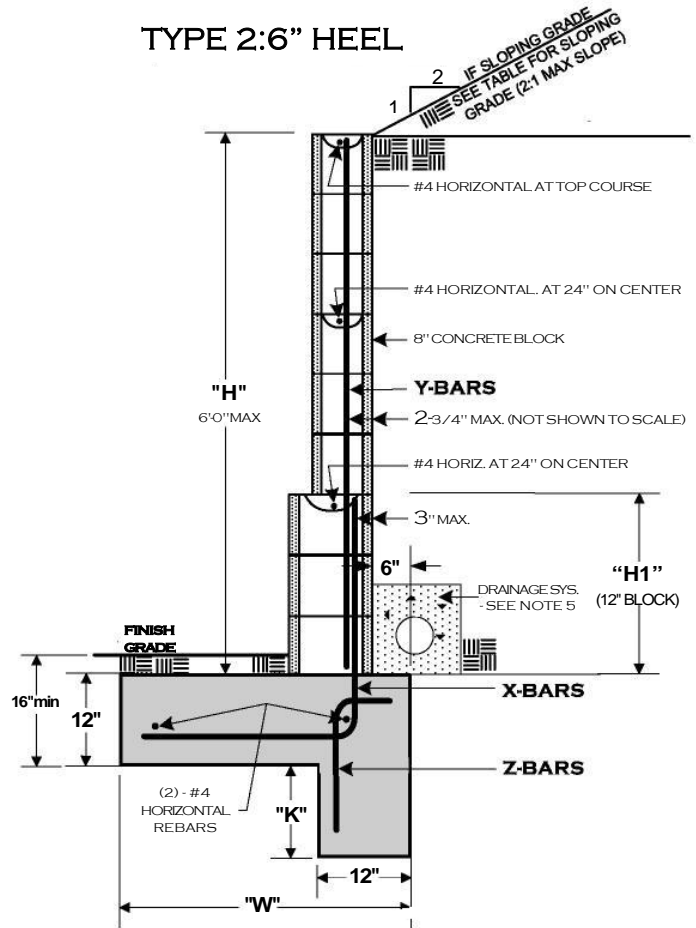


TYPE 1: 6" TOE



TYPE 2: 6" HEEL



TYPE 1: 6" TOE

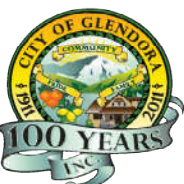
GRADE CONDITION	"H" (WALL HEIGHT)	"H1" (12" BLOCK)	"W" (FOOTING WIDTH)	X BARS	Y BARS	Z BARS	"K" (KEY DEPTH)
SLOPING GRADE	5'- 1" to 6'- 0"	24"	69"	#4 @ 16"	#4 @ 32"	#4 @ 12"	30"
	4'- 1" to 5'- 0"	N/R	48"	#4 @ 16"	#4 @ 16"	#4 @ 12"	25"
	3'- 1" to 4'- 0"	N/R	30"	#4 @ 32"	#4 @ 32"	#4 @ 32"	16"
AT TOP OF WALL (2:1 MAX)	Up to 3'- 0"	N/R	18"	#4 @ 32"	#4 @ 32"	#4 @ 32"	8"
	5'- 1" to 6'- 0"	24"	45"	#4 @ 24"	#4 @ 32"	#4 @ 24"	8"
	4'- 1" to 5'- 0"	N/R	36"	#4 @ 24"	#4 @ 24"	#4 @ 24"	7"
LEVEL GRADE	3'- 1" to 4'- 0"	N/R	24"	#4 @ 32"	#4 @ 32"	#4 @ 32"	5"
	Up to 3'- 0"	N/R	21"	#4 @ 32"	#4 @ 32"	#4 @ 32"	N/R

TYPE 2: 6" HEEL

GRADE CONDITION	"H" (WALL HEIGHT)	"H1" (12" BLOCK)	"W" (FOOTING WIDTH)	X BARS	Y BARS	Z BARS	"K" (KEY DEPTH)
SLOPING GRADE	5'- 1" to 6'- 0"	24"	39"	#4 @ 16"	#4 @ 12"	#4 @ 12"	28"
	4'- 1" to 5'- 0"	N/R	29"	#4 @ 16"	#4 @ 12"	#4 @ 12"	22"
	3'- 1" to 4'- 0"	N/R	24"	#4 @ 32"	#4 @ 32"	#4 @ 32"	15"
AT TOP OF WALL (2:1 MAX)	Up to 3'- 0"	N/R	18"	#4 @ 32"	#4 @ 32"	#4 @ 32"	8"
	5'- 1" to 6'- 0"	24"	33"	#4 @ 24"	#4 @ 32"	#4 @ 24"	18"
	4'- 1" to 5'- 0"	N/R	26"	#4 @ 24"	#4 @ 24"	#4 @ 24"	13"
LEVEL GRADE	3'- 1" to 4'- 0"	N/R	20"	#4 @ 32"	#4 @ 32"	#4 @ 32"	7"
	Up to 3'- 0"	N/R	20"	#4 @ 32"	#4 @ 32"	#4 @ 32"	N/R

N/R = NOT REQUIRED

*SEE PAGE 2 FOR ADDITIONAL INFORMATION



CITY OF GLENDORA BUILDING AND SAFETY DIVISION

RETAINING WALLS STANDARD PLAN

* ALTERNATE RETAINING WALL DESIGNS MAY BE SUBMITTED WITH AN ENGINEERING ANALYSIS. EXISTING SOIL CONDITIONS MAY REQUIRE A SEPARATE ANALYSIS.

USE OF THIS STANDARD IS THE RESPONSIBILITY OF THE USER. THE STANDARD CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS.

(626) 914-8222

116 E. FOOTHILL BLVD., GLENDORA, CA 91741

FAX (626) 914-9053

8/16/2011

RETWALLFINAL.VSD

PAGE 1 OF 2

GENERAL NOTES:

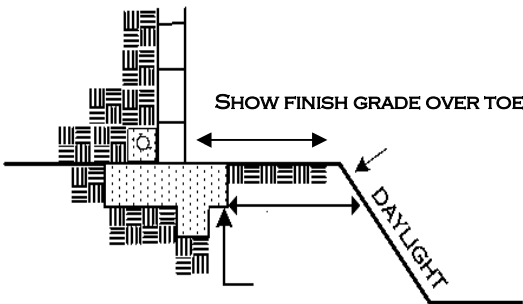
- 1) ALL WORK SHALL CONFORM TO THE ADOPTED CODES AND ZONING REGULATIONS.
- 2) CONCRETE BLOCK MASONRY SHALL COMPLY WITH THE FOLLOWING:
 - A. CONCRETE MASONRY SHALL CONFORM TO ASTM C-90, GRADE – N.
 - B. MORTAR: TYPE M OR S.
 - C. GROUT ALL CELLS W/2000 PSI PORTLAND CEMENT GROUT. SITE-MIXED GROUT IS NOT ALLOWED.
- 3) THE ULTIMATE COMPRESSIVE STRENGTH REQUIRED FOR FOUNDATION CONCRETE SHALL BE 2500 PSI AND 3250 PSI FOR STRUCTURAL CONCRETE.
- 4) ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE 60 AND OVERLAP SPLICES SHALL BE 40 BAR DIAMETERS MINIMUM. ALL REBAR HOOKS SHALL BE A MINIMUM OF 12 TIMES THE REBAR DIAMETER (12BD) IN LENGTH.
- 5) PROVIDE RETAINING WALL DRAINAGE SYSTEM AS FOLLOWS:
 - A. PROVIDE 1CF/FT OF CLEAN COARSE GRAVEL AT BASE OF WALL WITH 4" DIAMETER PERFORATED PVC DRAINAGE PIPE WITH 1% GRADIENT TO DRAIN.
- 6) OPTIONAL: INSTALLATION OF A MOISTURE BARRIER ON THE FILL SIDE OF THE WALL WILL HELP TO PREVENT MOISTURE FROM PENETRATING THE VISIBLE SIDE OF THE WALL, RESULTING IN DISCOLORATION.
- 7) THIS RETAINING WALL STANDARD IS **NOT** DESIGNED TO SUPPORT SURCHARGE LOADS FROM MOTOR VEHICLES OR OTHER STRUCTURES.
- 8) CLEANOUTS SHALL BE PROVIDED FOR ALL GROUT POURS OVER 5 FEET IN HEIGHT. WHERE REQUIRED, CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE AT EVERY VERTICAL BAR AND SHALL BE SEALED AFTER INSPECTION AND BEFORE GROUTING.
- 9) **AN ENGINEERED GRADING PLAN IS REQUIRED WHEN CONSTRUCTION OF THE WALL INVOLVES MOVING MORE THAN 50 CUBIC YARDS OF EARTH. (NOT INCLUDING FOOTING EXCAVATION)**

REQUIRED INSPECTIONS:

- 1) **FOOTING:**
EXCAVATION TRENCH CLEAN WITH STEEL IN PLACE AND SUPPORTED 3" ABOVE AND AWAY FROM THE SURROUNDING EARTH/DIRT.
- 2) **REBAR/PRE-GROUT AND DRAINAGE SYSTEM:**
BOND BEAM REBAR AND VERTICAL REBAR IN PLACE - INSPECTION PRIOR TO PLACING GROUT. DRAINAGE SYSTEM COMPLETE.
- 3) **FINAL:**
AFTER GROUT IS PLACED AND BACKFILL COMPLETED - PRIOR TO ANY DECORATIVE CAP PLACEMENT

SETBACK FROM TOP OF SLOPE:

ALL FOOTINGS ADJACENT TO SLOPES TO BE AT LEAST 5' TO DAYLIGHT AS SHOWN BELOW



DESIGN PARAMETERS:

ACTIVE SOIL PRESSURE (PSF)	
LEVEL BACKFILL	= 30
SLOPING (2:1 MAX)	= 43
PASSIVE SOIL BEARING (PSF)	= 150
COEFFICIENT OF FRICTION	= 0.25
ALLOWABLE SOIL BEARING PRESSURE (PSF)	= 1500
(NO INCREASES TAKEN FOR DEPTH OR WIDTH OF FOOTING)	

*** ALTERNATE RETAINING WALL DESIGNS MAY BE SUBMITTED WITH AN ENGINEERING ANALYSIS. EXISTING SOIL CONDITIONS MAY REQUIRE A SEPARATE ANALYSIS. USE OF THIS STANDARD IS THE RESPONSIBILITY OF THE USER. THE STANDARD CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS.**

INITIAL _____ I HAVE PERMISSION FROM MY NEIGHBOR(S) FOR A PORTION OF THE WALL AND/OR FOOTINGS TO ENCRANCH ON THEIR PROPERTY

INITIAL _____ NO PORTION OF THE WALL AND/OR FOOTINGS WILL ENCRANCH ON ADJACENT PROPERTY

SITE PLAN — INCLUDE ALL OF THE FOLLOWING INFORMATION:

- LOT DIMENSIONS/AREA
- EASEMENTS
- DRAINAGE FLOW
- LOCATION AND SIZES OF EXISTING AND PROPOSED STRUCTURES
- SETBACKS FROM EXISTING AND PROPOSED STRUCTURES
- FLOOR AREA/LOT COVERAGE CALCULATIONS: MAXIMUM 35 PERCENT FLOOR AREA ALLOWED IN NON-HILLSIDE ZONES
CONTACT THE PLANNING DEPARTMENT FOR LOT COVERAGE REQUIREMENTS IN HILLSIDE AREA
- TOPOGRAPHIC INFORMATION (HILLSIDE AREAS ONLY AS REQUIRED BY PLANNING)
- COVERED PARKING AREAS SUCH AS GARAGES AND CARPORTS