

**LAKE HAVASU CITY - DEVELOPMENT SERVICES DEPARTMENT
RESIDENTIAL CONCRETE RETAINING WALL DESIGN**

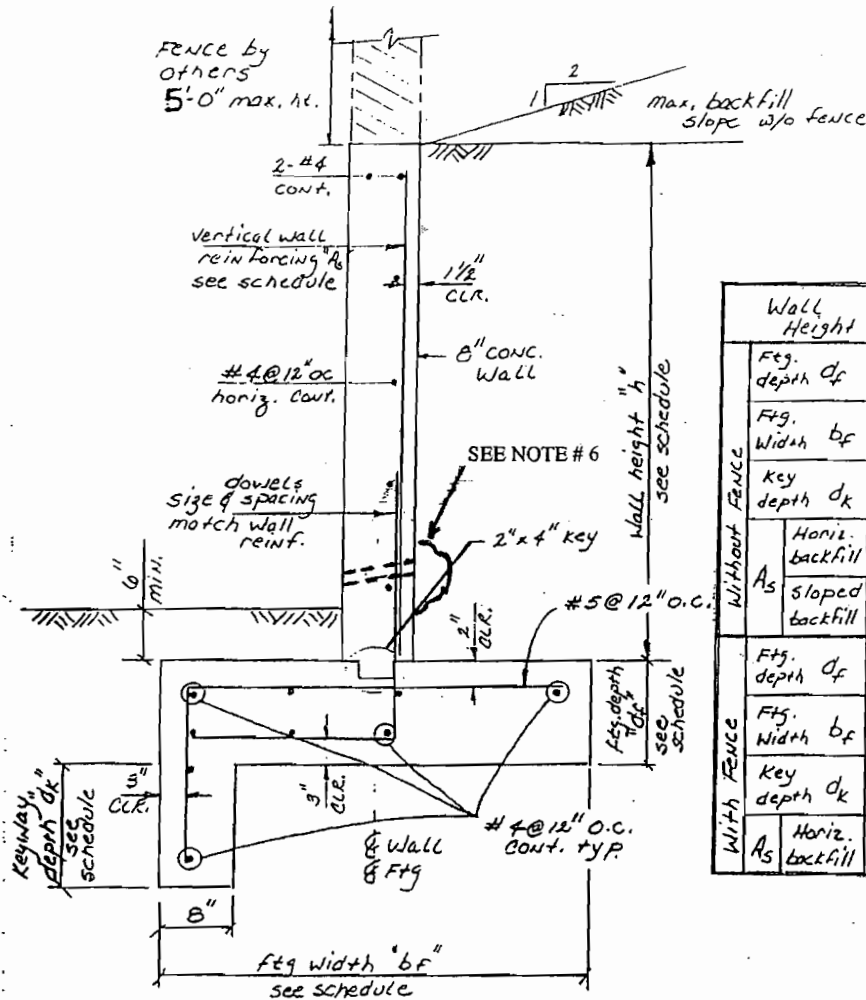
Applicant _____ Date _____

Address _____ Legal: Tract _____ Block _____ Lot _____

Retaining: Length _____ Height _____ Slope: None ___ 5:1 ___ 4:1 ___ 3:1 ___ 2:1 ___

Located in an Easement: No ___ Yes, Utility Approvals Attached ___ See the NOTES on sheet 2

SUBMIT WITH A FULLY DIMENSIONED SITE PLAN AND UTILITY APPROVALS WHEN APPLICABLE



8" Concrete Retaining Wall Schedule

Wall Height	8'-0"	7'-0"	6'-0"	5'-0"	4'-0"
Without Fence	Ftg. depth d_f	12"	12"	12"	9"
	Ftg. Width b_f	4'-0"	3'-6"	3'-0"	2'-4"
	Key depth d_k	13"	10"	8"	7"
As	Horiz. backfill	#5@12	#5@18	#4@18	#4@18
	sloped backfill	#5@8	#5@12	#5@18	#4@18
With Fence	Ftg. depth d_f	12"	12"	12"	12"
	Ftg. Width b_f	4'-6"	4'-0"	4'-0"	3'-6"
	Key depth d_k	16"	14"	14"	6"
As	Horiz. backfill	#5@12	#5@18	#4@12	#4@18

8" Concrete Retaining Wall

SYMBOL LEGEND

- h: TOP OF FOOTING TO TOP OF WALL HEIGHT
- As: SIZE AND SPACING OF WALL REINFORCING
- df: DEPTH OF FOOTING
- dk: DEPTH OF FOOTING KEY
- bf: WIDTH OF FOOTING

NOTE: SEE REVERSE SIDE FOR MATERIAL STANDARDS AND CONSTRUCTION REQUIREMENTS

NOTES

1. Concrete: Conform to ASTM C 94; Minimum compressive strength $f'c = 2500$ psi at 28 days.
2. Reinforcing: Conform to ASTM A 615, grade 40, deformed; Dowels to have standard hook, match and lap with vertical wall reinforcing; Vertical wall reinforcing to be secured in place prior to concrete placement, lap splice length to be 32 bar diameters (db).
3. Backfill Material: Clean, granular, non-expansive fines; Brace wall prior to compacting backfill adjacent to wall.
4. Bearing Soil: Class 4, 2000 psf allowable foundation pressure.
5. No surcharge loads over backfill material; Wall extensions or support fences which extend above the wall height indicated, a maximum 5 ft. is permitted if used in conjunction with a horizontal backfill.
6. Drainage: 1 inch diameter PVC weep pipe at base, 48 inches o.c., screen with 1 cubic foot of 1 inch diameter rock.
7. Key depth "dk" may be reduced 1 inch for each 1 inch increase in soil cover over footing toe. Depth of soil fill to be maintained for a distance "h" measured horizontally from wall face.
8. Grade backfill to provide positive drainage without ponding.