

OTC BUILDING PERMIT



CITY OF HEMET DEPARTMENT OF LIFE SAFETY

Block Wall/Retaining Wall Pilaster- Residential to City Standards

Building Permit Requirements

All work performed shall conform to:

| | |
|---|--|
| <i>2022 California Residential Code (CRC)</i> | <i>2022 California Mechanical Code (CMC)</i> |
| <i>2022 California Plumbing Code (CPC)</i> | <i>2022 California Green Building Standard Code(CGBSC)</i> |
| <i>2022 California Electrical Code (CEC)</i> | <i>2022 California Energy Code (CEC)</i> |
| <i>2022 California Fire Code (CFC)</i> | <i>City of Hemet Municipal Code</i> |

General Information

- Permits may be obtained through one of the following:
- The Property Owner or his/her Insured California State Licensed Contractor:
- A "B" licensed general contractor.
- **Planning Approval is required prior to Permit Issuance.**
- Free-Standing Block Wall is NOT designed for all cells to be grouted (Only grout cells containing rebar).

Documents Required

- Permit Application completed and signed.
- Notarized Letter of Authorization if agent of Owner or Owner Signed Contract
- Site Plan required for all Block Wall proposals.
- Common Wall Agreement will be required if Block Wall to be built "ON" the property line.
- Right of Way Verification will be required if Block Wall to be built "Near" the Right of Way.

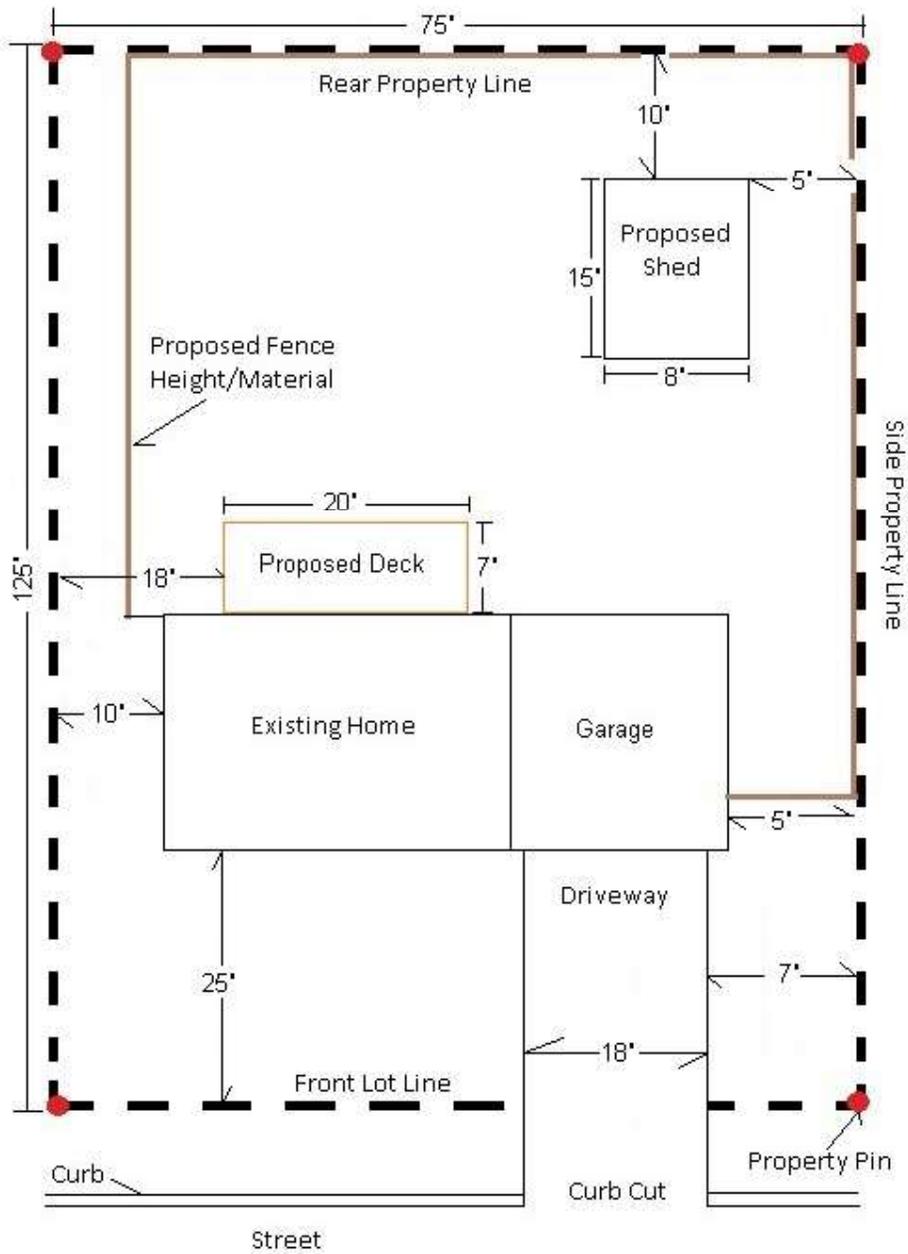
Required Inspections

Required Inspections are based on the type of Installation being done.

- Freestanding Block Wall/Retaining Wall/CMU Pilasters:
- 1st Inspection – Footings:
 - - Once the footing has been excavated, rebar in place and footing clear of any debris/foreign objects.
- 2nd Inspection – Pre-grout:
 - - ** Once the Wall/Pilaster is built to the required height, rebar and top Bond Beam is in place.
- 3rd Inspection – Final:
 - - Decorative cap is in place, site is graded, and clean of any debris/foreign materials.
 - - Installation of any Iron Rod fence to CMU Pilaster must be completed at this time.

**** Check with the Building Inspector for Bond Beam/Lift Inspections (these inspections will vary based on wall height) ****

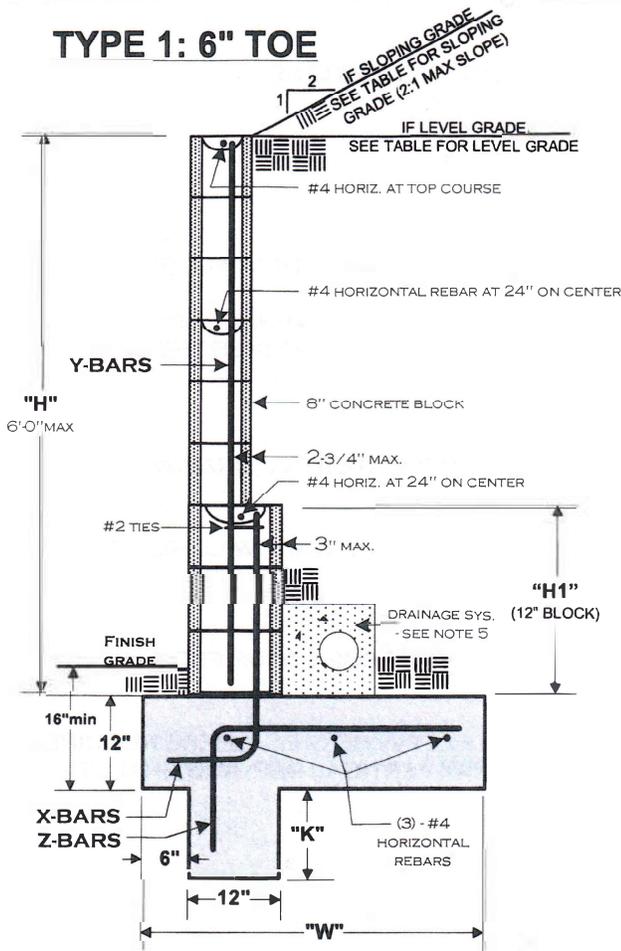
Sample Site Plan



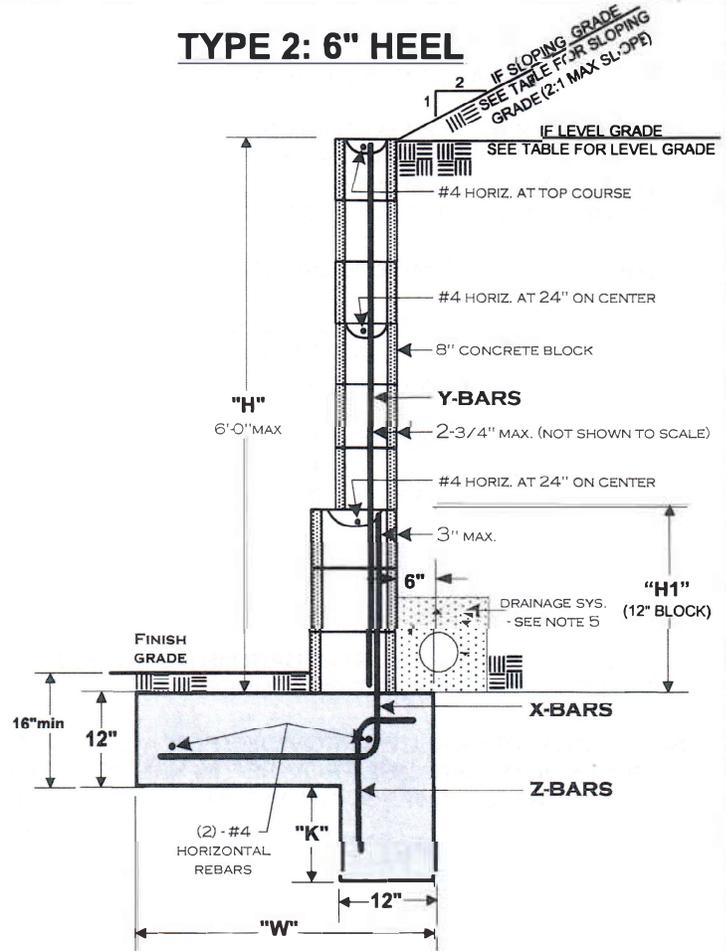
SCOPE OF WORK: _____

OWNER: _____
 ADDRESS _____
 PHONE: _____

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 | ZBARS | "K" (KEY DEPTH) |
| SLOPING GRADE AT TOP OF WALL (2:1 MAX) | 5'- 1" to 6'- 0" | 24" | 69" | #4 @ 16" | #4 @ 32" | #4 @ 11" | 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" |
| | Up to 3'- 0" | N/R | 18" | #4 @ 32" | #4 @ 32" | #4 @ 32" | 8" |
| LEVEL GRADE AT TOP OF WALL | 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" |
| | 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 | ZBARS | "K" (KEY DEPTH) |
| SLOPING GRADE AT TOP OF WALL (2:1 MAX) | 5'- 1" to 6'- 0" | 24" | 39" | #4 @ 16" | #4 @ 32" | #4 @ 12" | 28" |
| | 4'- 1" to 5'- 0" | N/R | 29" | #4 @ 16" | #4 @ 16" | #4 @ 12" | 22" |
| | 3'- 1" to 4'- 0" | N/R | 24" | #4 @ 32" | #4 @ 32" | #4 @ 32" | 15" |
| | Up to 3'- 0" | N/R | 18" | #4 @ 32" | #4 @ 32" | #4 @ 32" | 8" |
| LEVEL GRADE AT TOP OF WALL | 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" |
| | 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

DISCLAIMER:

ALTERNATE RETAINING WALL DESIGNS MAY BE POSSIBLE WHEN PROVIDED WITH AN ENGINEERED ANALYSIS. USE OF THIS STANDARD DESIGN IS AT THE USER'S RISK AND CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS.

| | | |
|---|--|-------------|
| WESTERN RIVERSIDE COUNTY CODE UNIFORMITY PROGRAM | | |
| | CITY OF HEMET BUILDING & SAFETY | |
| RETAINING WALLS | | |
| (951) 765-2475 | | |
| REVISED 7/2023 | RETWALLFINAL.VSD | PAGE 1 OF 2 |

GENERAL NOTES:

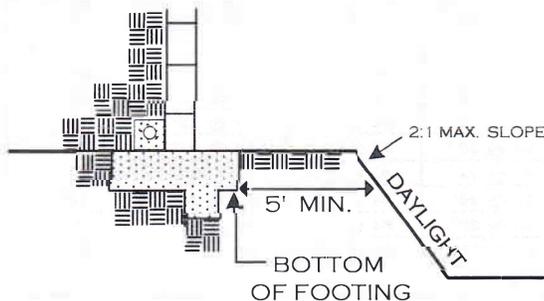
- 1) ALL WORK SHALL CONFORM TO THE ADOPTED CODES AND ZONING REGULATIONS.
- 2) CONCRETE BLOCK MASONRY SHALL COMPLY WITH THE FOLLOWING:
 - A. CONCRETE MASONRY SHALL CONFORM TO ASTM C-90, GRADE - N.
 - B. MORTAR: TYPE M OR S.
 - C. GROUT ALL CELLS W/2000 PSI PORTLAND CEMENT GROUT.
- 3) THE ULTIMATE COMPRESSIVE STRENGTH REQUIRED FOR FOUNDATION CONCRETE SHALL BE 2500 PSI.
- 4) ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE ASTM A615-40 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:
PROVIDE 1CF/FT OF CLEAN COARSE GRAVEL WITH 4" DIAMETER PERFORATED PVC DRAINAGE PIPE WITH 1% GRADIENT TO DRAIN - OR OMIT HEAD JOINTS IN FIRST COURSE.
- 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.

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:

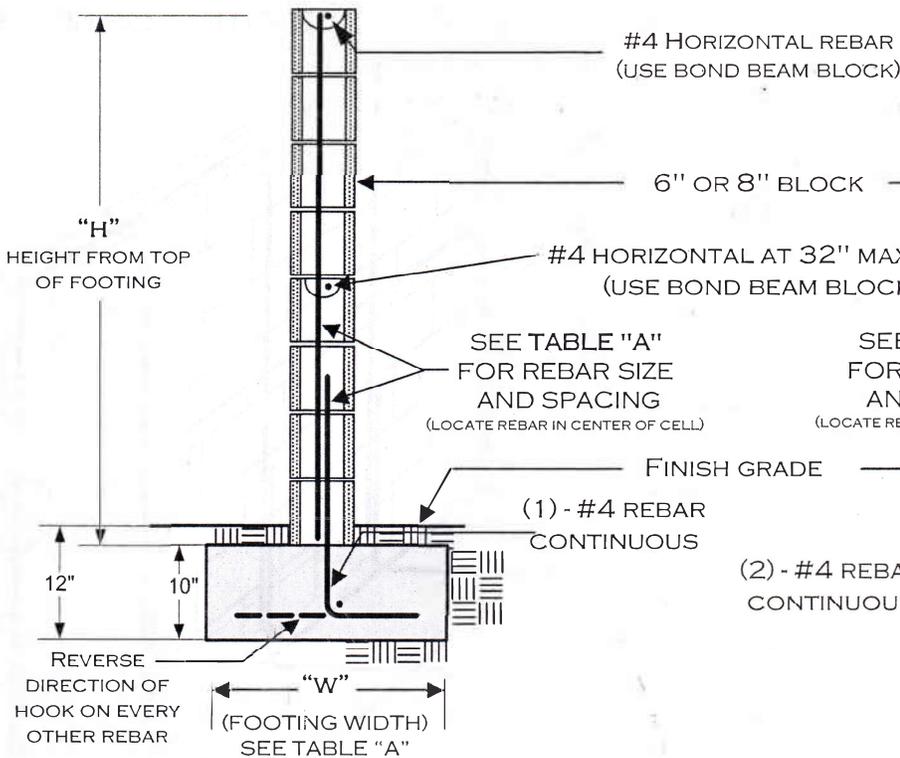
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|--|--------|
| ACTIVE SOIL PRESSURE (PSF) | |
| LEVEL BACKFILL | = 30 |
| SLOPING (2:1 MAX) | = 43 |
| PASSIVE SOIL BEARING (PSF) | = 150 |
| COEFFICIENT OF FRICTION | = 0.25 |
| ALLOWABLE SOIL BEARING PRESSURE (PSF) | = 1500 |
| (NO INCREASES TAKEN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

DISCLAIMER:

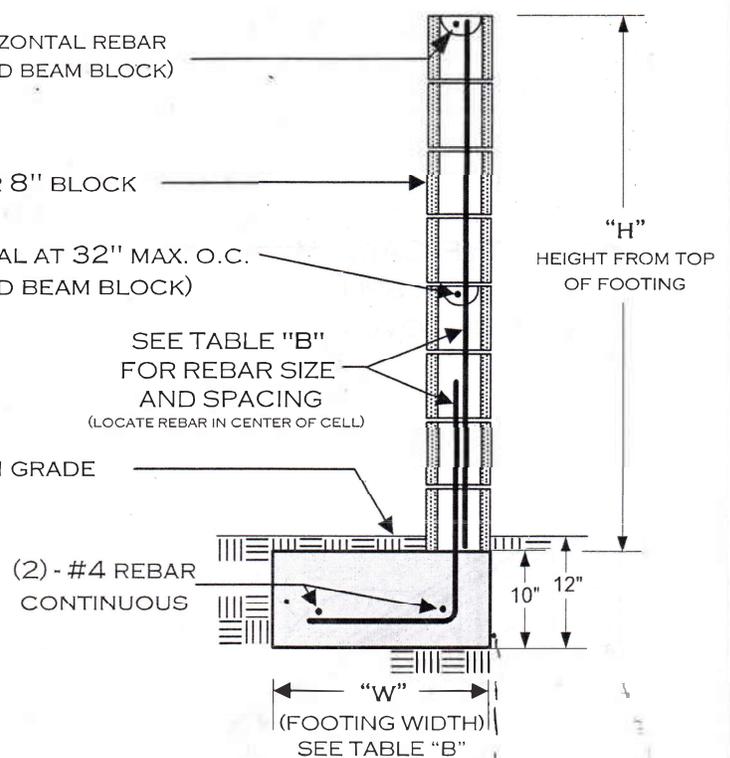
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FOOTING OPTION "A"

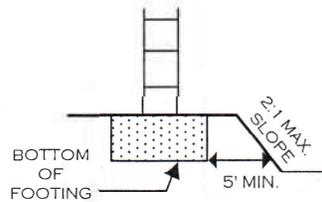


FOOTING OPTION "B"



| "H" | "W" | VERTICAL REINFORCEMENT |
|-----|-----|------------------------|
| 3' | 17" | #4 @ 48" O.C. |
| 4' | 20" | #4 @ 48" O.C. |
| 5' | 23" | #4 @ 48" O.C. |
| 6' | 29" | #4 @ 24" O.C. |

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



| "H" | "W" | VERTICAL REINFORCEMENT |
|-----|-----|------------------------|
| 3' | 19" | #4 @ 48" O.C. |
| 4' | 22" | #4 @ 48" O.C. |
| 5' | 29" | #4 @ 48" O.C. |
| 6' | 34" | #4 @ 24" O.C. |

NOTES:

- 1) THIS DESIGN DOES **NOT** ALLOW GRADE DIFFERENTIALS OF MORE THAN 6" ON OPPOSING SIDES OF THE WALL. THIS IS **NOT** A RETAINING WALL.
- 2) FENCE HEIGHTS ARE REGULATED — CONSULT ZONING REGULATIONS BEFORE BEGINNING CONSTRUCTION.
- 3) NO WATER COURSE OR NATURAL DRAINAGE SHALL BE OBSTRUCTED.
- 4) GROUT **ONLY** THE CELLS CONTAINING REBAR. THIS WALL IS **NOT** DESIGNED FOR ALL CELLS TO BE GROUTED.
- 5) ALL REBAR TO BE ASTM SPEC. A615, GRADE 40 MINIMUM.
- 6) ALL REBAR LAP SPLICES TO BE 24" MINIMUM.
- 7) ALL MASONRY UNITS TO BE ASTM C-90 GRADE N.
- 8) REBAR TO BE CENTERED IN MASONRY CELLS.

SEE PAGE 2 FOR ADDITIONAL INFORMATION

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CHECK WITH THE BUILDING DEPARTMENT TO VERIFY IF A BUILDING PERMIT IS REQUIRED.

WHEN A PERMIT IS REQUIRED, THE FOLLOWING INSPECTIONS ARE REQUIRED:

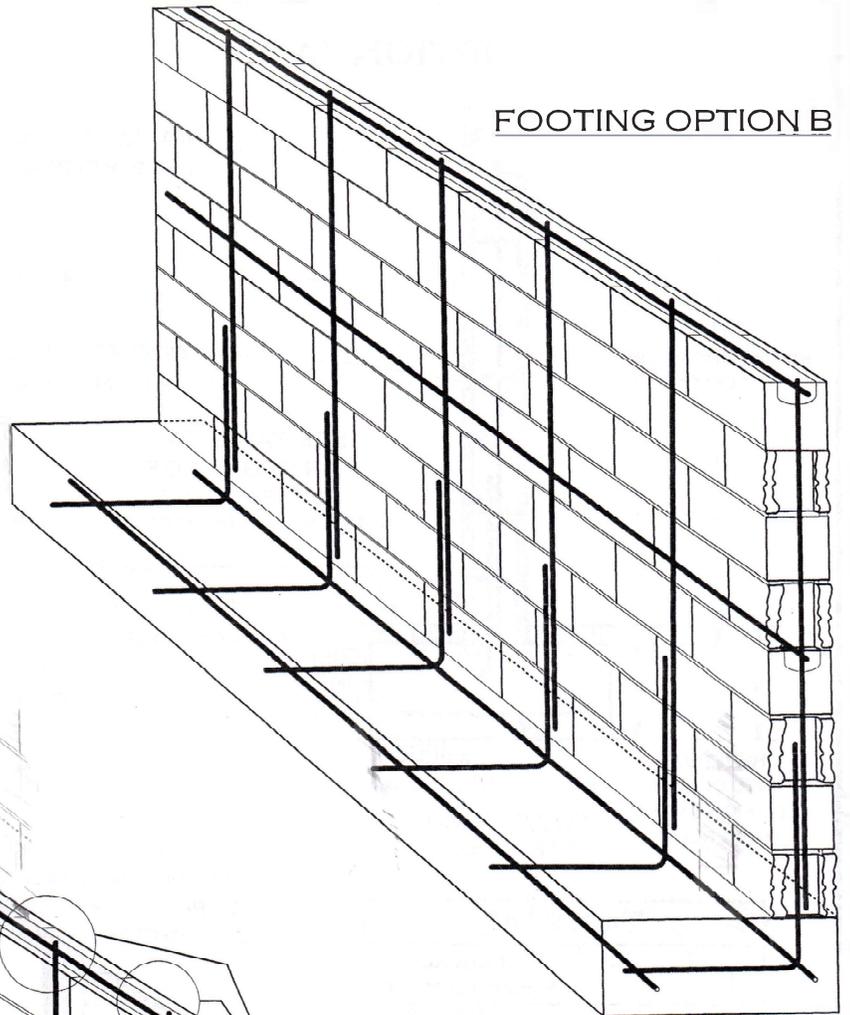
- 1) **FOOTING**; EXCAVATION TRENCH CLEAN WITH STEEL IN PLACE AND SUPPORTED 3" ABOVE AND AWAY FROM THE SURROUNDING EARTH/DIRT.
- 2) **REBAR/PRE-GROUT**; BOND BEAM REBAR AND VERTICAL REBAR IN PLACE - INSPECTION PRIOR TO PLACING GROUT.
- 3) **FINAL**; AFTER GROUT IS PLACED - PRIOR TO ANY DECORATIVE CAP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

| WESTERN RIVERSIDE COUNTY CODE UNIFORMITY PROGRAM | |
|--|--|
| | CITY OF HEMET BUILDING DEPARTMENT |
| | FREESTANDING BLOCK WALL |
| (951) 765-2475 | 445 E FLORIDA AVE HEMET CA 92543 |
| INSPECTIONS: (951) 765-2428 | REVISED 7/2023 |
| | PAGE 1 OF 2 |

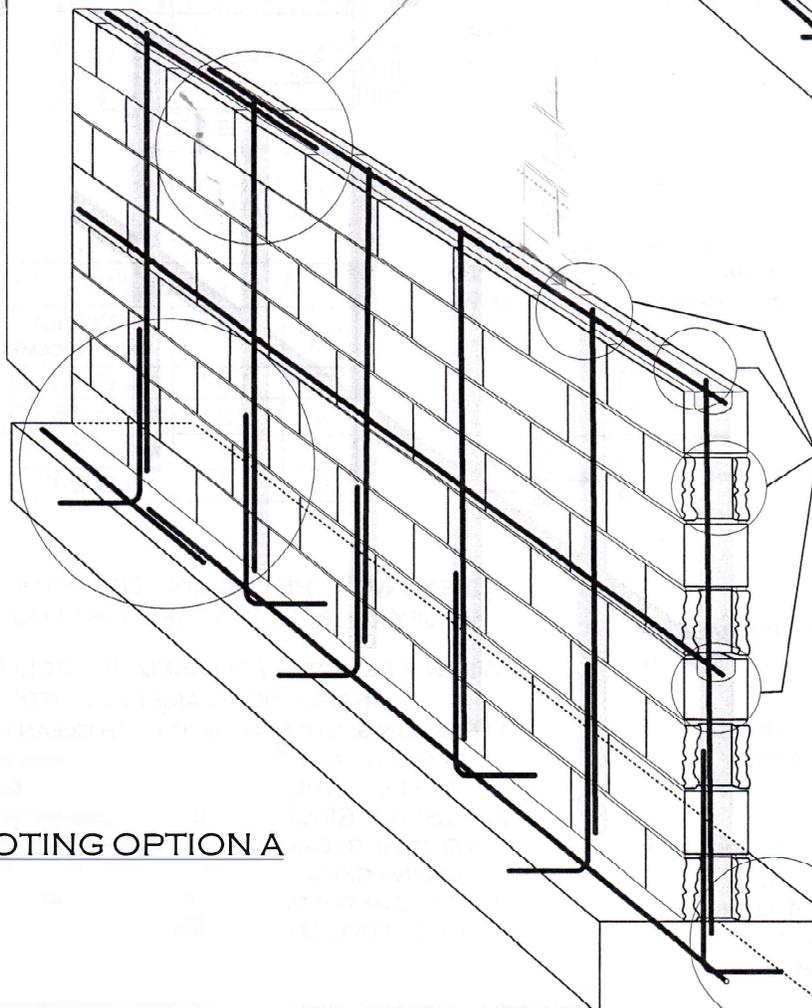
**REBAR PLACEMENT
ILLUSTRATION**

FOOTING OPTION B

(TYPICAL)
ALL REBAR SPLICES
24" MIN. OVERLAP



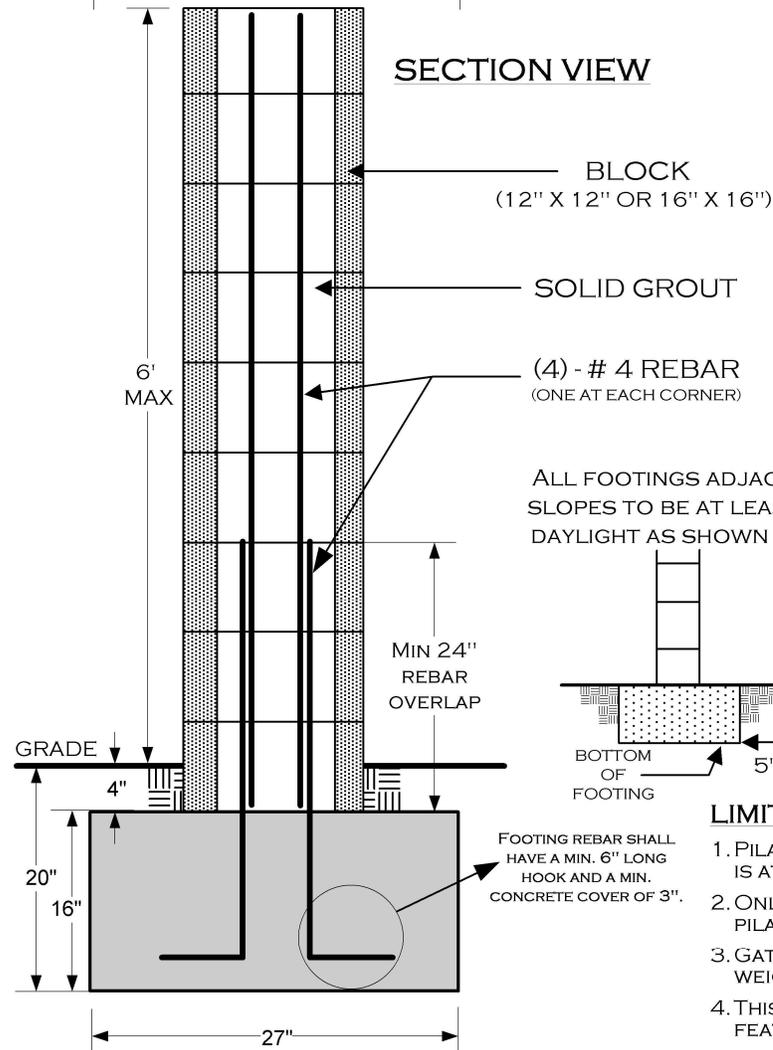
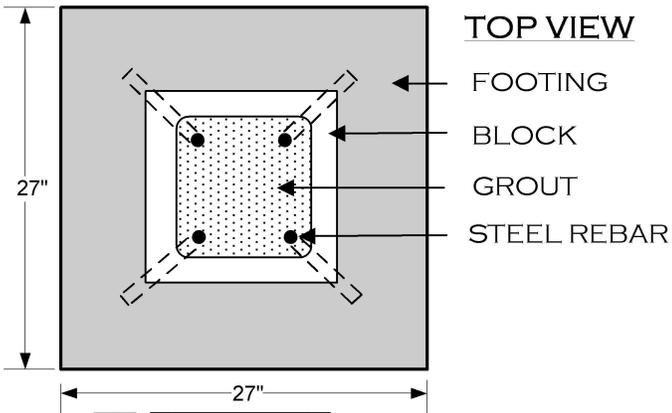
FOOTING OPTION A



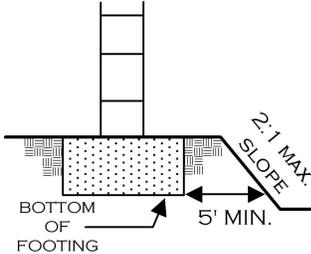
(TYPICAL)
ONLY CELLS AND BOND BEAM
COURSES WITH REBAR TO BE
GROUTED
(DO NOT SOLID GROUT ENTIRE WALL - USE
GROUT STOP MESH AS APPROPRIATE)

(TYPICAL)
ALL REBAR SHALL HAVE A
MINIMUM OF 3" CONCRETE
COVER AT FOOTINGS

| | |
|---|----------------------------------|
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| INSPECTIONS: (951) 765-2428 | REVISED 7/2023 |
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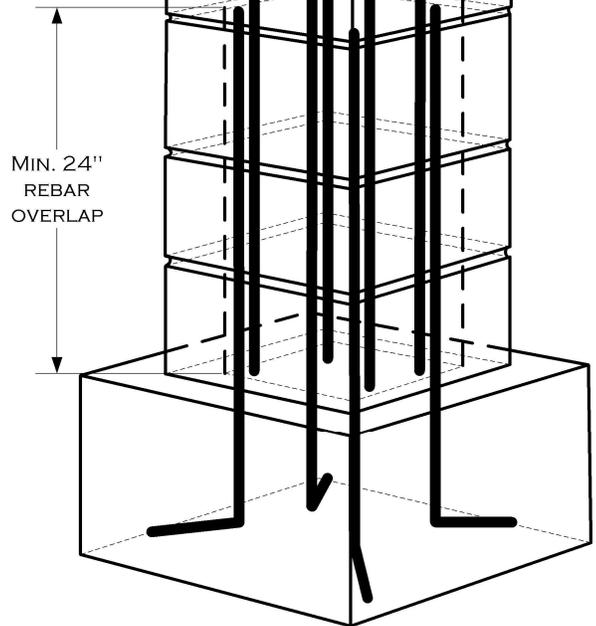


ALL FOOTINGS ADJACENT TO SLOPES TO BE AT LEAST 5' TO DAYLIGHT AS SHOWN BELOW.



FOOTING REBAR SHALL HAVE A MIN. 6" LONG HOOK AND A MIN. CONCRETE COVER OF 3".

REBAR PLACEMENT ILLUSTRATION



LIMITATIONS:

1. PILASTER SPACING SHALL NOT EXCEED 20 FT. WHEN OTHER INFILL FENCING IS ATTACHED.
2. ONLY OPEN TYPE FENCING (SUCH AS WROUGHT IRON) MAY BE ATTACHED TO PILASTERS. SOLID TYPE FENCING MAY NOT BE ATTACHED TO PILASTER.
3. GATES AND DOORS ATTACHED TO PILASTER ARE LIMITED TO 200# MAX. WEIGHT AND 4 FT. MAX. WIDTH PER PILASTER.
4. THIS PILASTER DESIGN IS INTENDED TO BE USED ONLY AS A FENCING FEATURE AND IS NOT INTENDED TO SUPPORT ANY OTHER LOADS .
5. FENCE HEIGHTS ARE REGULATED – CONSULT ZONING REGULATIONS BEFORE BEGINNING CONSTRUCTION.
6. INSTALLATION OF ELECTRIC CIRCUITS, CONDUITS, OR LIGHTING FIXTURES REQUIRE ELECTRICAL PERMITS AND INSPECTION.
7. FOOTINGS TO BE PLACED IN UNDISTURBED SOIL OR PROPERLY COMPACTED AND ENGINEERED FILL.
8. FOR DESIGN PARAMETERS, SEE FREESTANDING BLOCK WALL STANDARD.

CHECK WITH THE BUILDING DEPARTMENT TO VERIFY IF A BUILDING PERMIT IS REQUIRED.

WHEN A BUILDING PERMIT IS REQUIRED, THE FOLLOWING INSPECTIONS ARE ALSO REQUIRED:

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

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|  | CITY OF HEMET BUILDING & SAFETY | |
| MASONRY PILASTER | | |
| PHONE (951) 765-2475 | | |
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