

STANDARD  
CONSTRUCTION  
DETAILS

SCREENING WALL  
RETAINING WALL

REVISED - JULY 2017



DEPARTMENT OF ENGINEERING

# TABLE OF CONTENTS

## Screening Wall / Retaining Wall

GENERAL NOTES (BRICK SCREENING WALL, PIER AND COLUMN) .....	SD-R01
TYPE 6 RETAINING WALL .....	SD-R02
BRICK SCREENING WALL PLAN, ELEVATION & SECTION .....	SD-R03
FOUNDATION DETAIL SCREENING WALL .....	SD-R04
PRECAST CONCRETE WALL .....	SD-R05

# GENERAL NOTES

## BRICK SCREENING WALL

1. CONCRETE MINIMUM STRENGTH, 3600P.S.I. @ 28 DAYS.
2. REINFORCEMENT - ASTM A36.
3. MASONRY - COMPRESSIVE STRENGTH SHALL BE AS PRESCRIBED IN THE ITME 2.3.3 OF CITY OF ALLEN, SPECIAL PROVISIONS TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
4. MINIMUM WIND LOAD - 25.6 p.s.f.
5. PIER BEARING STRESSES - SEE BRICK SCREENING WALL NOTES.
6. MORTAR - TYPE "S"
7. PROVIDE CONTROL JOINTS @ 50 FEET.
8. PROVIDE EXPANSION JOINTS @ 200 FEET ON CENTER MAXIMUM.
9. PROVIDE PIER DEPTHS AT A MINIMUM 9 FEET IN CLAY OR 6 FEET MINIMUM WITH 3 FEET MINIMUM INTO ROCK.
10. ALL EXPOSED CONCRETE SHALL HAVE RUBBED FINISH SURFACE.
11. SIDEWALKS ADJACENT TO WALLS MUST BE 5 FEET MINIMUM WIDTH FROM ALL PORTIONS OF THE WALL (INCLUDING PILASTERS, COLUMN, ETC.)
12. MAXIMUM PILASTER SPACING - 10 FEET.
13. WALLS ON LINE OF SIGHT EASEMENT AT CORNERS, WILL NOT HAVE A TOP ELEVATION GREATER THAN 30" ABOVE THE NEAREST GUTTER ELEVATION.
14. THE WALL SHALL BE EIGHT FEET IN HEIGHT AS MEASURED FROM THE HIGHEST ADJACENT GRADE. THE COLOR OF THE WALL SHALL BE LIMITED TO EARTH TONE COLORS, EXCLUDING GRAY, GREEN AND WHITE. THE FINISH OF THE WALL SHALL BE CONSISTENT ON ALL SURFACES.

## PRECAST CONCRETE WALL

1. PRECAST CONCRETE WALLS SHALL NOT BE INSTALLED ADJACENT TO THOROUGHFARES, BUT BE LIMITED TO THE SIDES AND REAR OF NON-RESIDENTIAL DEVELOPMENT (AS LONG AS THOSE SIDES DO NOT FACE OR PARALLEL A PUBLIC STREET.
2. PRECAST WALLS SHALL CONFORM TO THE ELEMENTS DETAILED IN THE STANDARD CONSTRUCTION DETAILS AND EXHIBIT THE FOLLOWING AESTHETIC ELEMENTS:
  - WALL AND COLUMNS MUST BE TEXTURED AND COLORED TO HAVE THE APPEARANCE OF STONE OF CLAY-FIRED BRICK.
  - THE PANELS SHALL REST ON A CONCRETE MOW STRIP OR, IF THE DESIGN RESULTS IN A SPAN AND GAP AT THE BASE, THE GAP SHALL BE HIDDEN FROM VIEW BY VERTICAL COURSE OF BRICK OR OTHER SUCH SUITABLE CONSTRUCTION, ALLOWING FOR DRAINAGE AS APPROPRIATE, AT THE DISCRETION OF THE CITY.
  - COLUMN SPACING SHALL BE 10' C-C, MAXIMUM.

## PIER & COLUMN

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3600 P.S.I. @ 28 DAYS.
2. REINFORCING STEEL SHALL BE NEW BILLET STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A-615-GR.60.
3. CONCRETE FOR DRILLED PIERS SHALL BE PLACED WITHIN 8 HOURS OF DRILLING PIER HOLES.
4. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE "RECOMMENDED PRACTICE FOR ENGINEERED BRICK MASONRY" - BRICK INSTITUTE OF AMERICA.
5. USE # 9 GAUGE 1 3/4" WIDE GALVANIZED LADDER WIRE TO EXTEND HORIZONTAL IN WALL PANEL FOR EVERY COURSE.
6. SCREENING WALLS SHALL BE LOCATED AT THE PROPERTY LINE. A HOME OWNERS ASSOCIATION WILL BE ESTABLISHED AND SHALL PROVIDE MAINTENANCE FOR THE WALL.



CITY OF ALLEN  
DEPARTMENT OF ENGINEERING

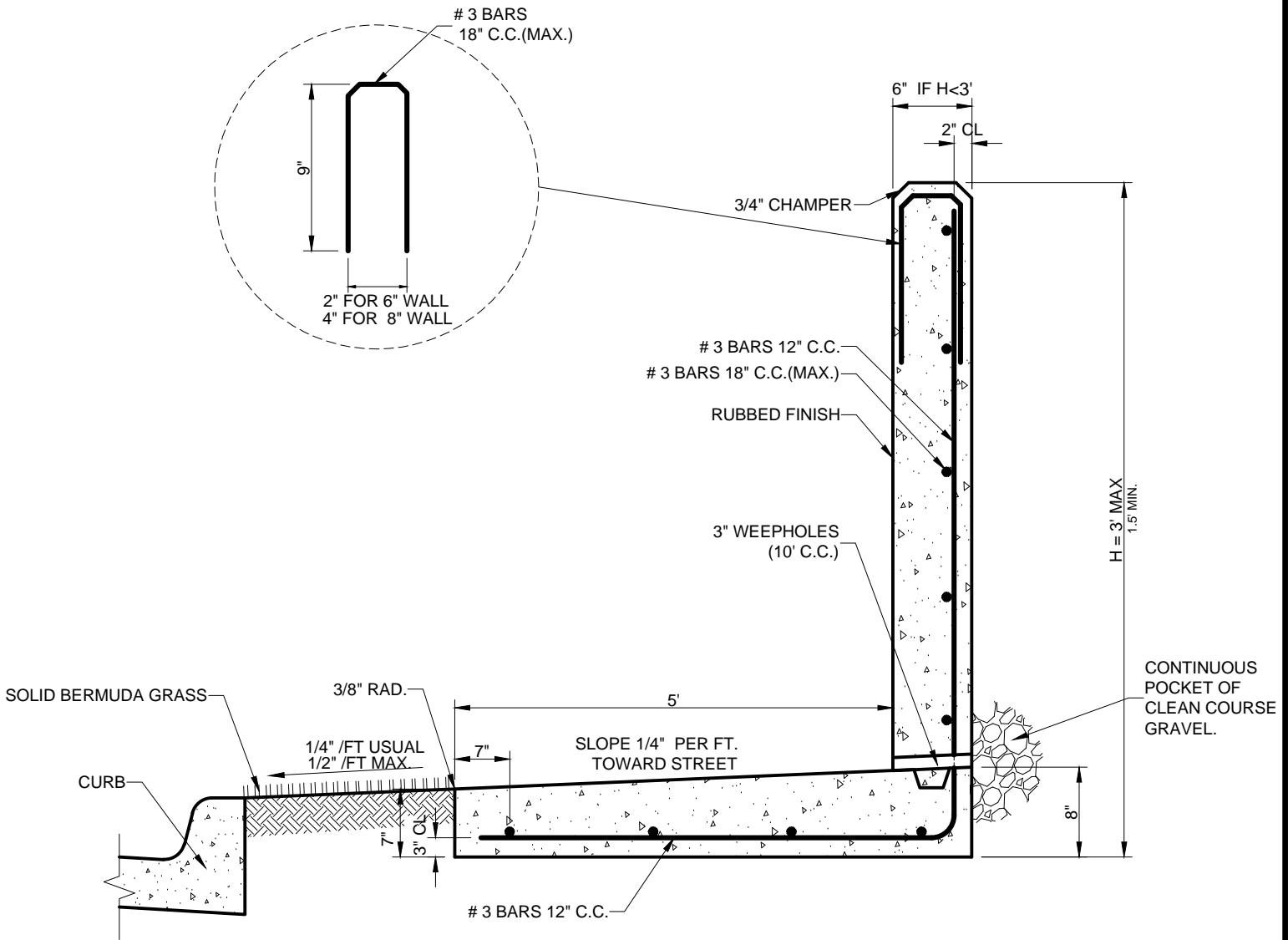
GENERAL NOTES  
(BRICK SCREENING WALLS,  
PRECAST CONCRETE WALL &  
PIER AND COLUMN)

STANDARD CONSTRUCTION DETAILS  
SCREENING WALL/RETAINING WALL

DATE:  
SEPT 1991

REV DATE:  
MAY 2017

SHEET :  
SD-R01



Note :

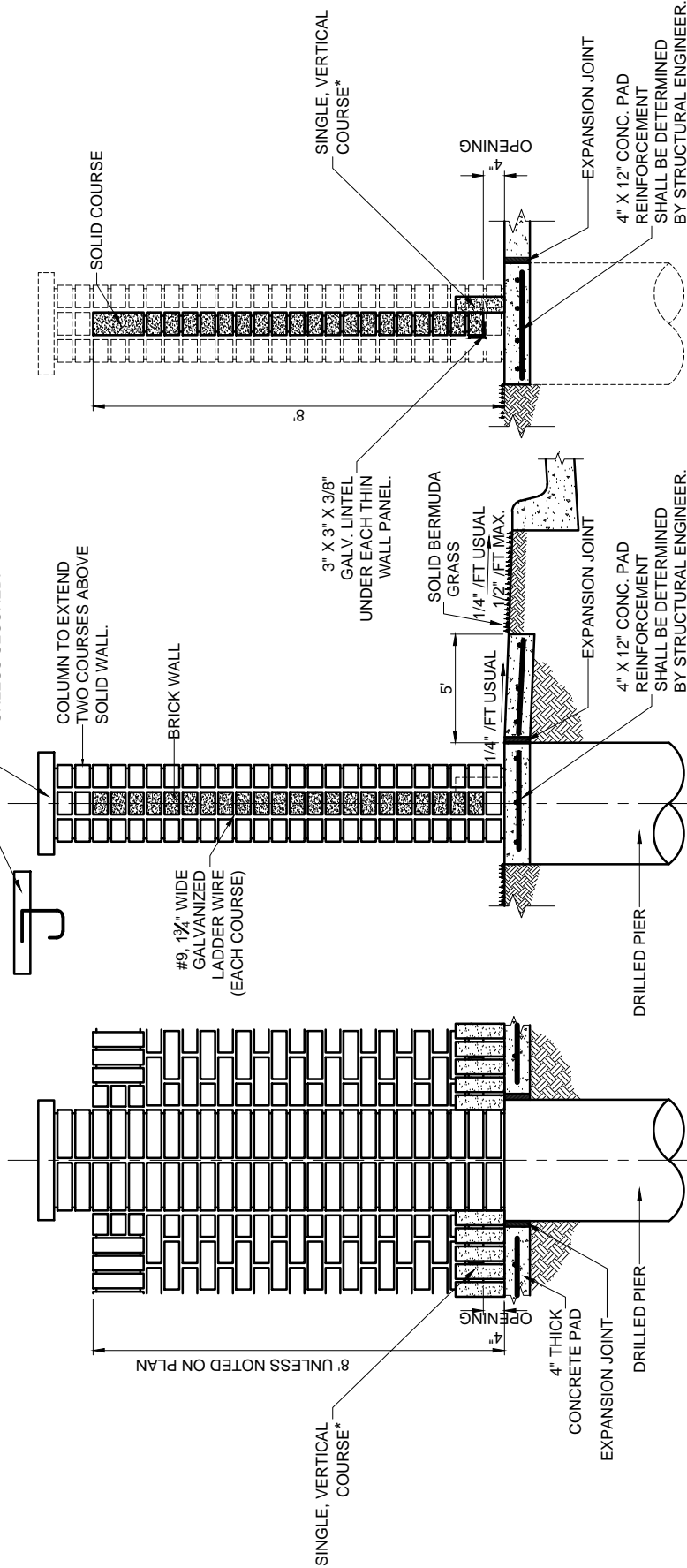
Expansion joints shall be installed on the wall to coincide with those for the sidewalk. See sidewalk (typical) detail for proposed spacing.

## TYPE 6 RETAINING WALL

NTS

STANDARD CONSTRUCTION DETAILS  
SCREENING WALL/RETAINING WALL

CAP TO BE SECURELY FASTENED TO COLUMN W/ ANCHOR BOLT. MORTARED PRECAST CAP NOT ACCEPTABLE W/ SOLDIER COURSE UNLESS SECURED.

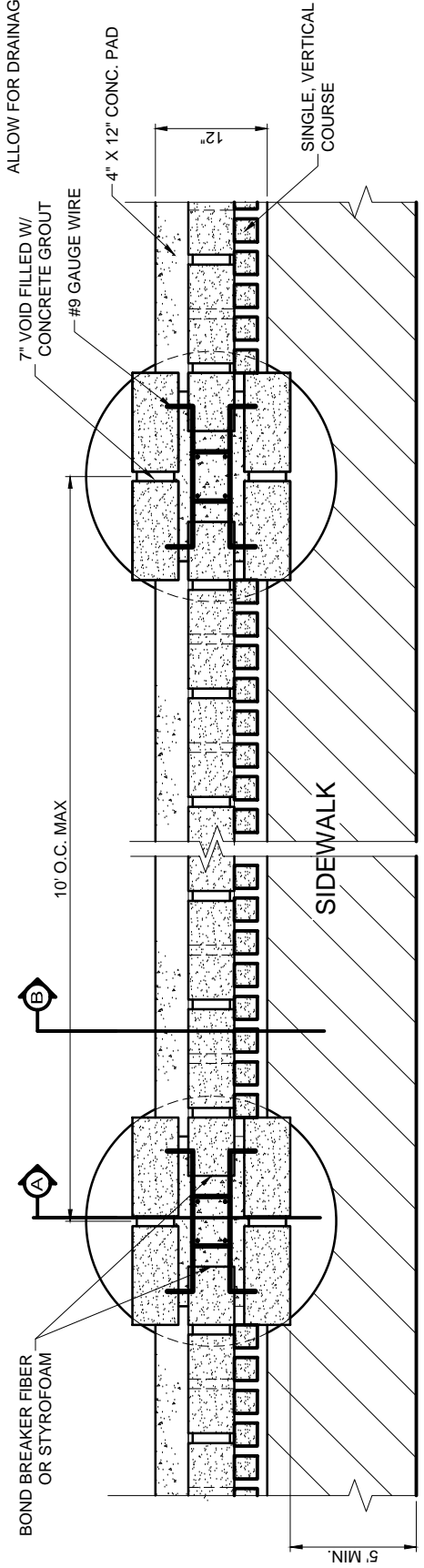


**ELEVATION**  
NTS

**SECTION A**  
NTS

**SECTION B**  
NTS

NOTE:  
\* MIN. 2-4"x4" WEEP HOLES PER THIN WALL PANEL TO ALLOW FOR DRAINAGE.



**PLAN**  
NTS



**BRICK OR STONE SCREENING WALL  
PLAN, ELEVATION & SECTION**

STANDARD CONSTRUCTION DETAILS  
SCREENING WALL/RETAINING WALL

DATE:  
SEPT 1991

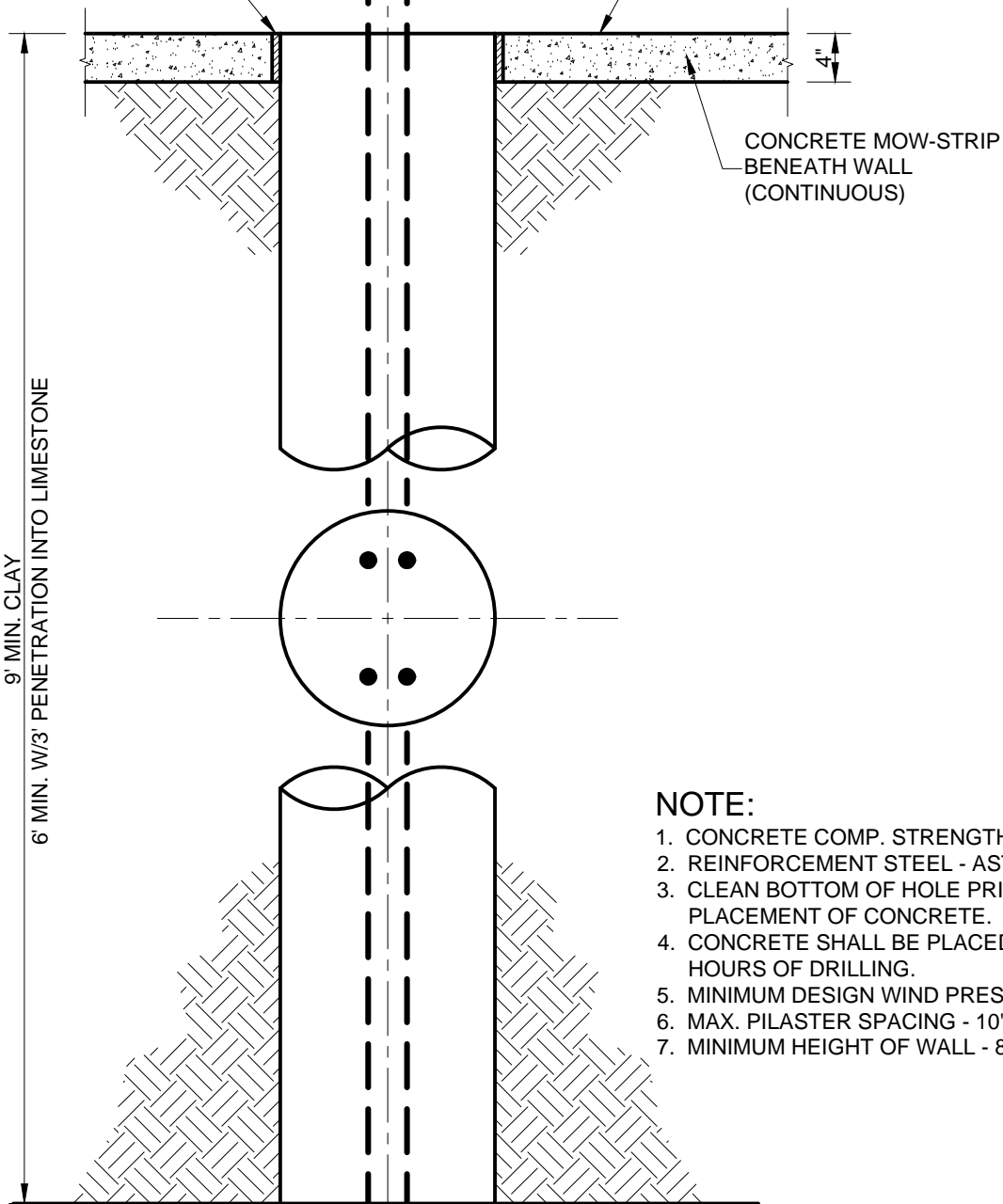
REV DATE:  
MAY 2017

SHEET :  
SD-R03

REINFORCEMENT AS  
DETERMINED BY  
STRUCTURAL ENGINEER  
(P.E. IN TEXAS)

EXPANSION JOINT

TOP OF GROUND



CONCRETE MOW-STRIP  
BENEATH WALL  
(CONTINUOUS)

9" MIN. CLAY  
6" MIN. W/3 PENETRATION INTO LIMESTONE

**NOTE:**

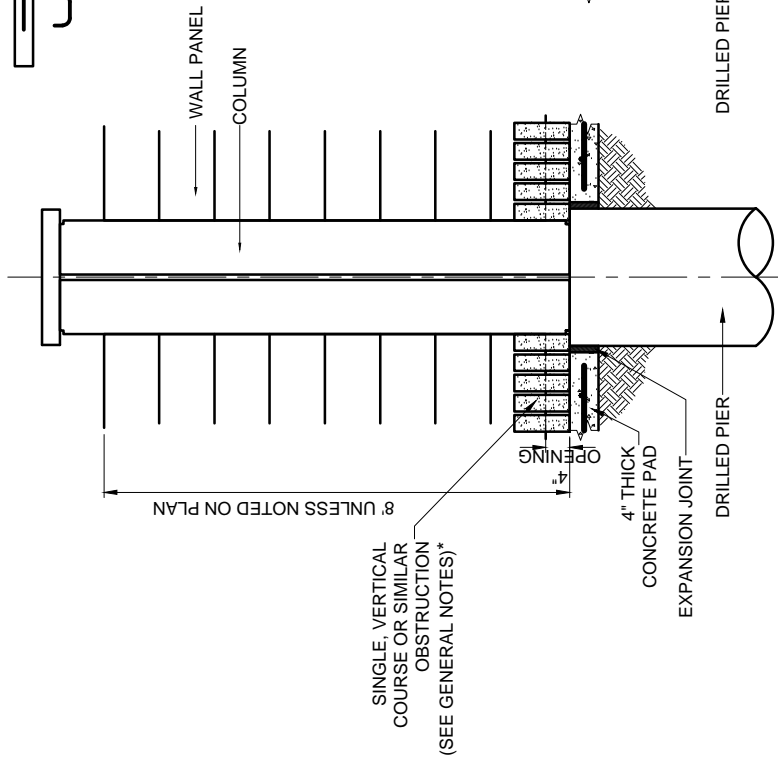
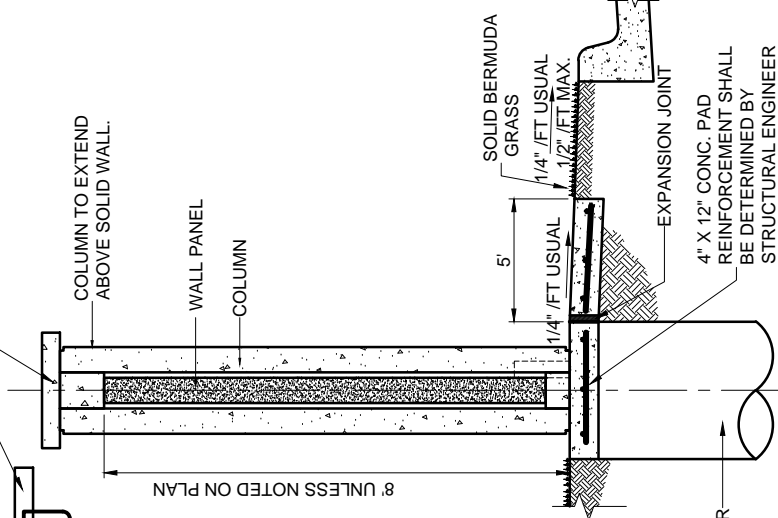
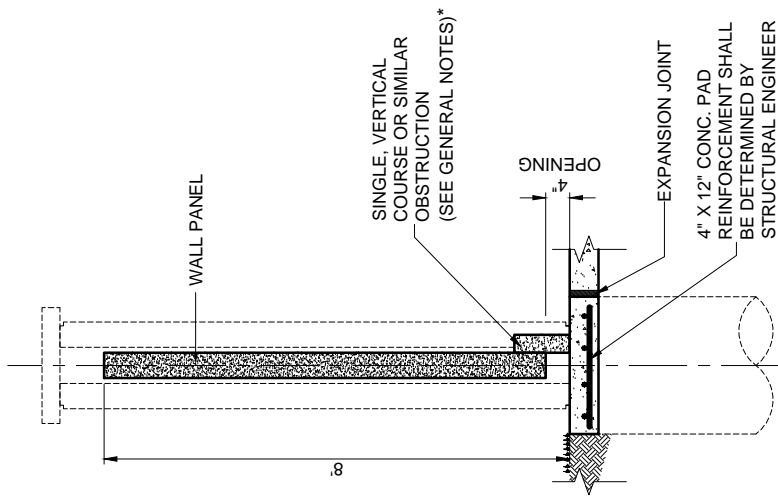
1. CONCRETE COMP. STRENGTH - 3600 P.S.I. (MIN.)
2. REINFORCEMENT STEEL - ASTM A615 - GR 60.
3. CLEAN BOTTOM OF HOLE PRIOR TO PLACEMENT OF CONCRETE.
4. CONCRETE SHALL BE PLACED WITHIN 8 HOURS OF DRILLING.
5. MINIMUM DESIGN WIND PRESSURE - 25.6 LB/SF.
6. MAX. PILASTER SPACING - 10'-0".
7. MINIMUM HEIGHT OF WALL - 8'-0".

DIAMETER OF PIER AS  
DETERMINED BY  
STRUCTURAL ENGINEER  
(P.E. IN TEXAS)

**FOUNDATION DETAIL**

SCALE: NTS

CAP TO BE SECURELY FASTENED TO COLUMN W/ ANCHOR BOLT. MORTARED PRECAST CAP NOT ACCEPTABLE W/ SOLDIER COURSE UNLESS SECURED.

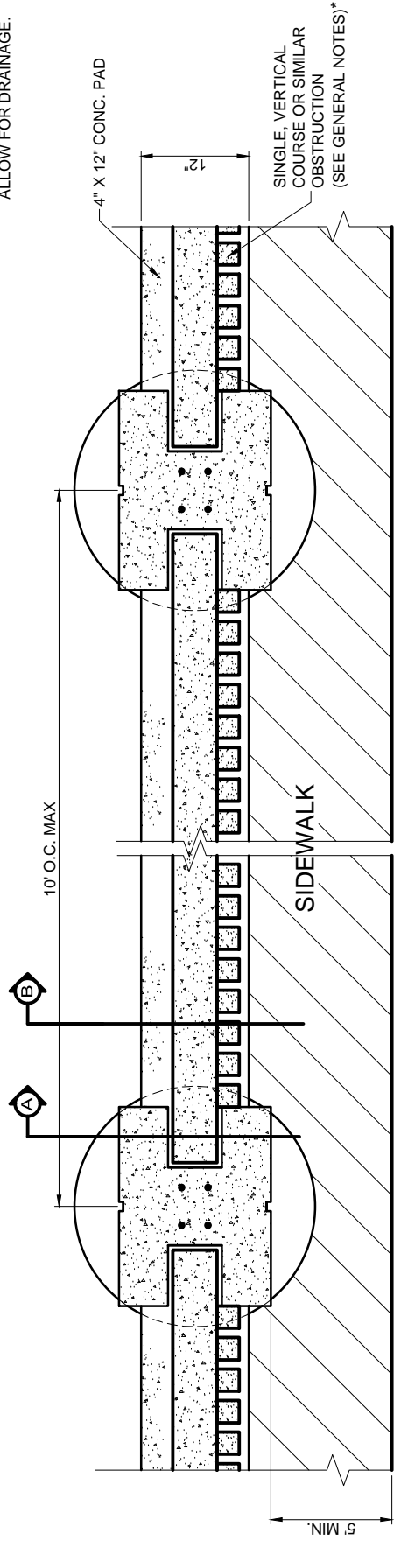


NOTE:  
\* MIN. 2" X 4" WEEP HOLES PER THIN WALL PANEL TO ALLOW FOR DRAINAGE.

**SECTION B**  
NTS

**SECTION A**  
NTS

**ELEVATION**  
NTS



**PLAN**  
NTS



**PRECAST CONCRETE WALL  
PLAN, ELEVATION & SECTION**

STANDARD CONSTRUCTION DETAILS  
SCREENING WALL/RETAINING WALL

DATE:  
MAY 2012

REV DATE:  
MAY 2017

SHEET :  
SD-R05