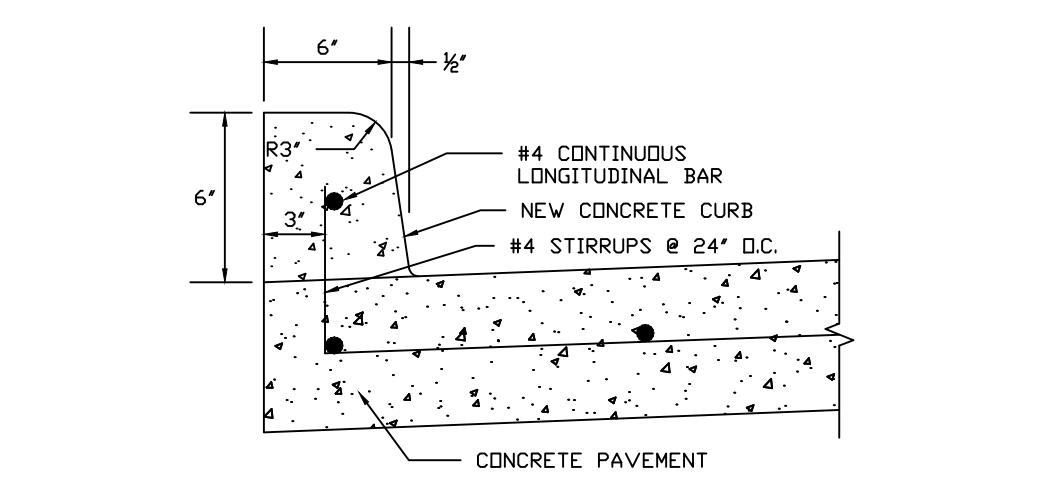
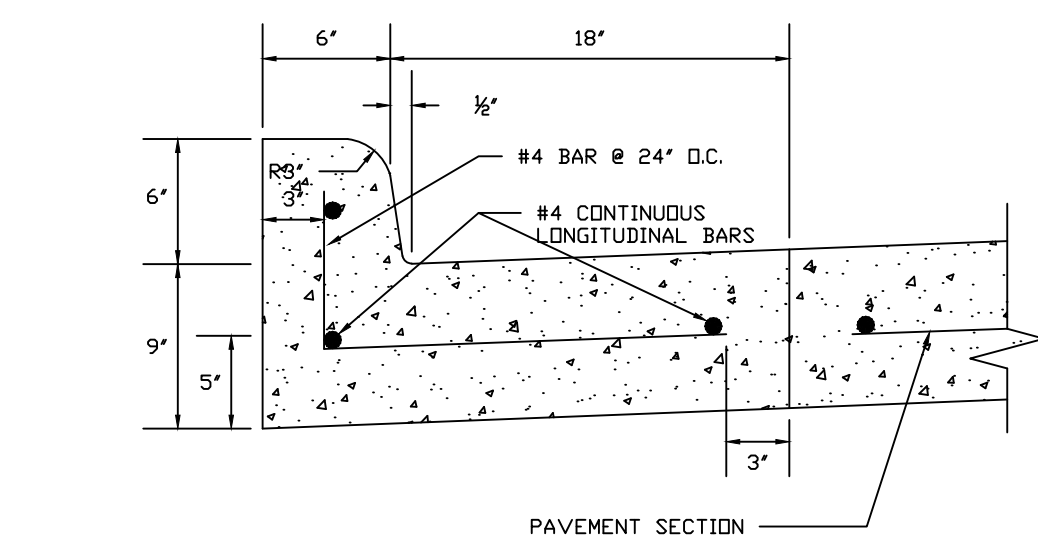


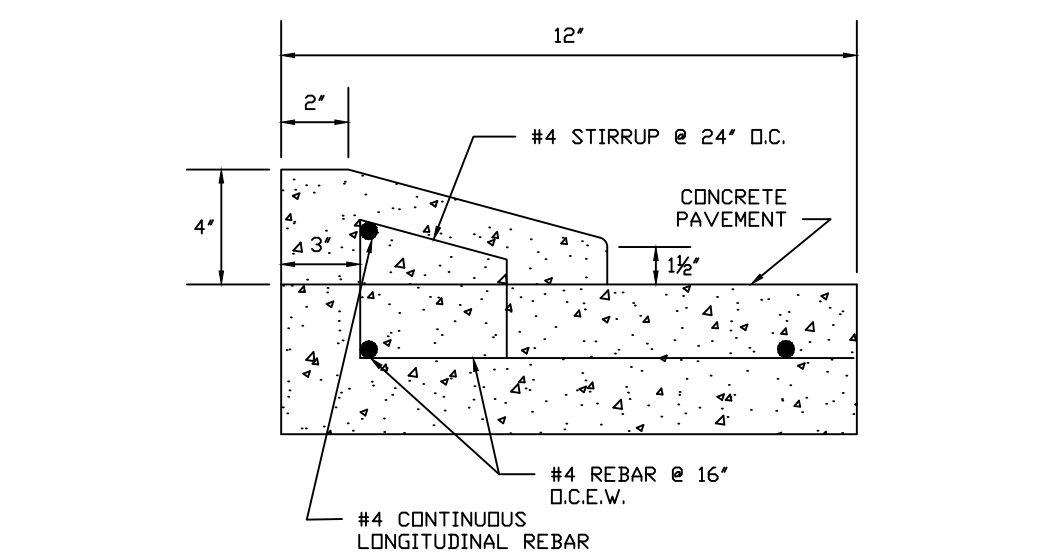
- NOTES:**
- FOR ALL SIX (6) AND SEVEN (7) INCH PAVING USE #4 REBAR ON SIXTEEN (16) INCH CENTERS EACH WAY.
 - ALL REINFORCING BAR SHALL CONFORM TO ASTM A305-A47 AND A305-501.
 - THE LOCATION OF CONSTRUCTION JOINTS, CONTROL JOINTS AND DEFORMED STRIPS MAY BE VARIED, WITH THE APPROVAL OF THE CITY OF FRIENDSWOOD, TO SUIT THE PROPOSED CONSTRUCTION METHODS OF THE CONTRACTOR. THE MAXIMUM LENGTH BETWEEN LONGITUDINAL JOINTS SHALL NOT EXCEED 15' - 0".
 - ALL PAVEMENT CROSS-SECTION SHALL EITHER BE HYPERBOLIC OR TANGENT CROWN. MINIMUM SLOPE SHALL BE ONE-QUARTER (1/4) INCH PER FOOT.
 - D = SIX (6) INCH OR SEVEN (7) INCH. SEE PAVING CONSTRUCTION ITEMS ON THIS SHEET.
 - MINIMUM SLOPE FOR ANY MEDIAN SHALL BE ONE-HALF (1/2) INCH PER FOOT.



TYPE I - 6" CONCRETE CURB

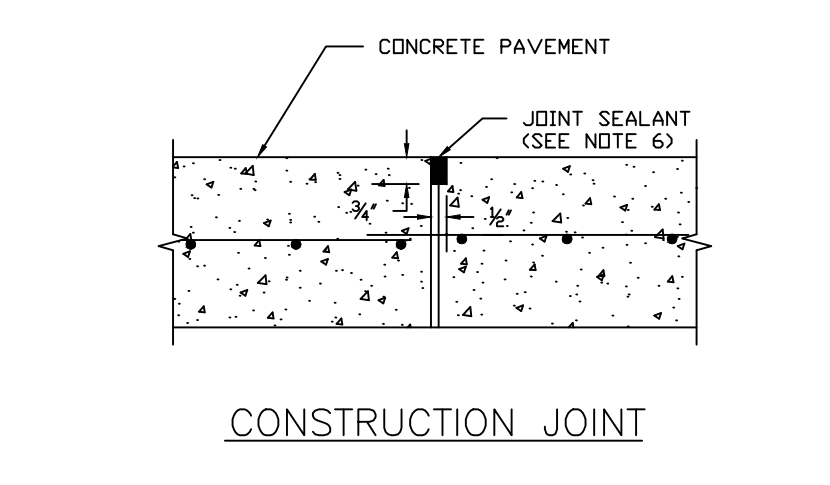


TYPE II - MONOLITHIC CONCRETE CURB AND GUTTER

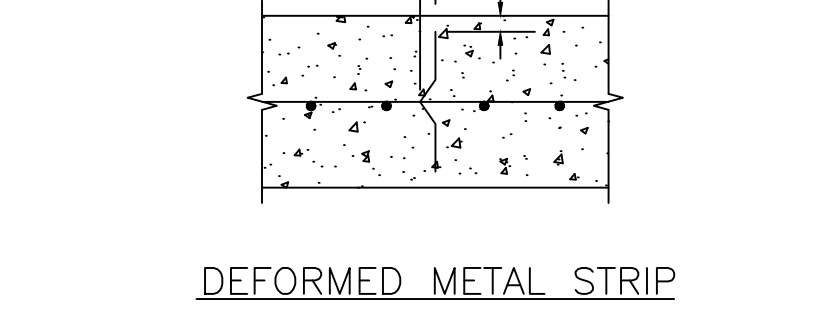


TYPE III - 4" x 12" CONCRETE CURB

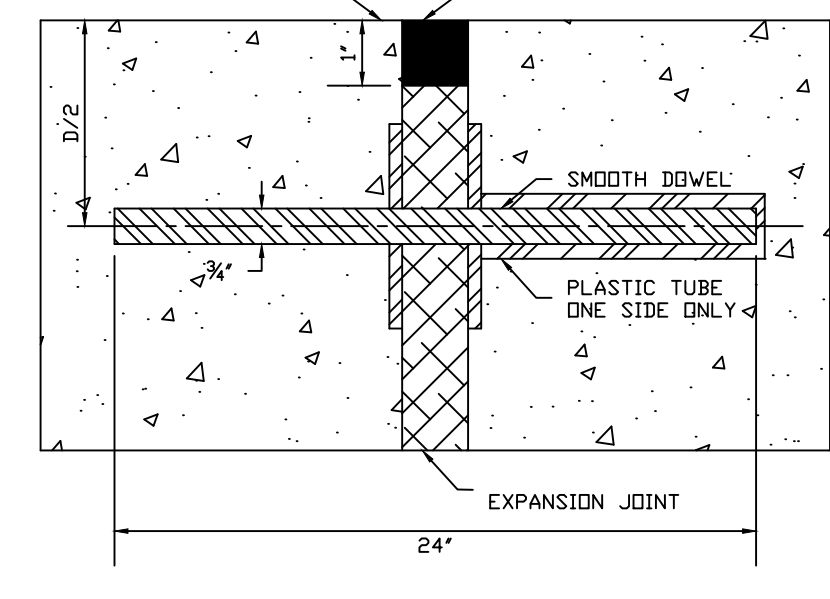
- NOTES:**
- WHEN CONCRETE CURB IS TO BE PLACED ON EXISTING CONCRETE DOWEL IN #3 DEFORMED BARS @ 36" O.C. AND SET IN SULFUR OR QUICK SETTING CEMENT.
 - MORTAR FINISH IS NOT REQUIRED WHEN CURB IS PLACED BY A MACHINE, BUT CURB SHALL STILL HAVE THE SAME OUTSIDE DIMENSIONS.



CONSTRUCTION JOINT

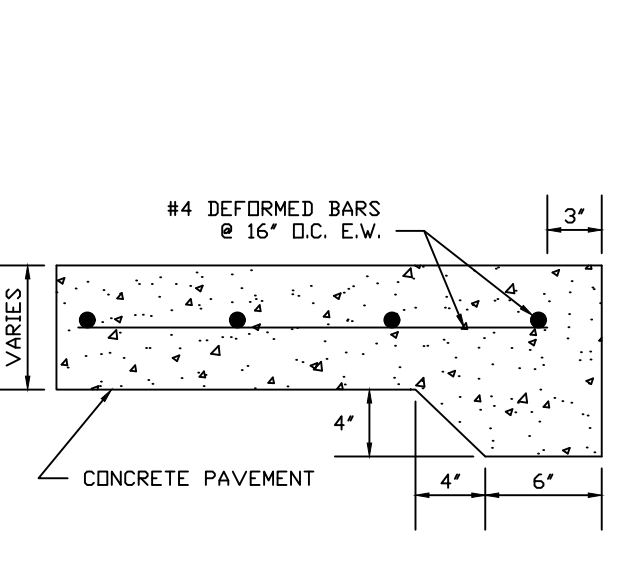


DEFORMED METAL STRIP

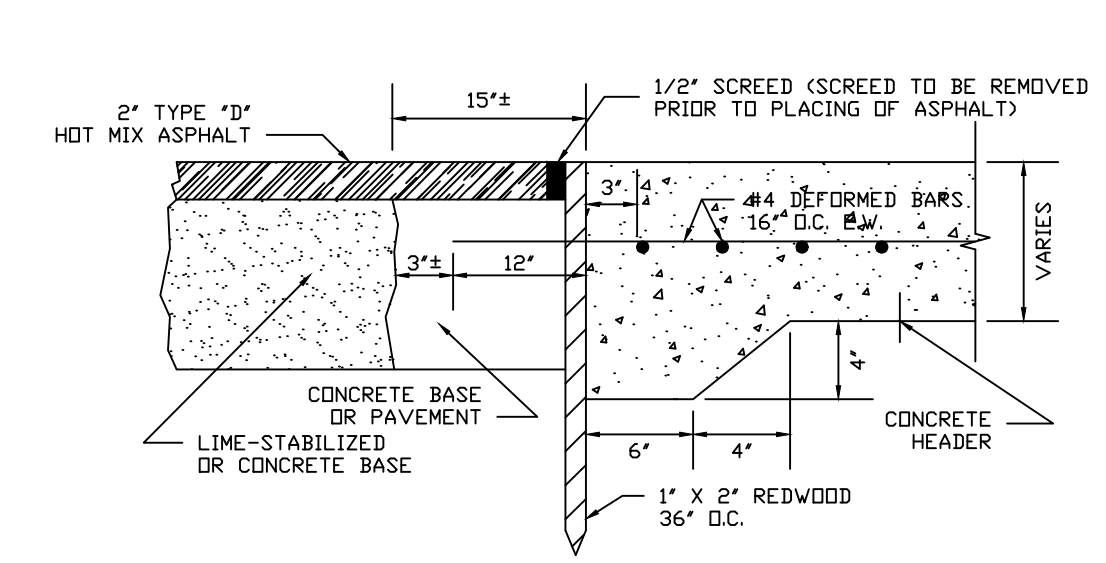


DOWEL EXPANSION JOINT

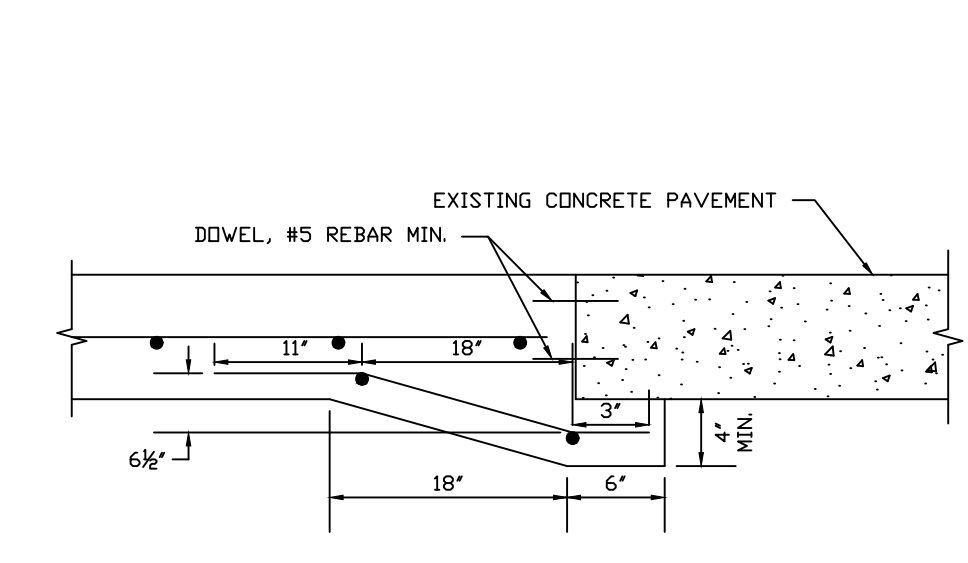
- NOTES:**
- CANTILEVER TYPE CAST MALLEABLE IRON LOAD TRANSMISSION UNIT-STABILIZED MODEL 3-27 OR EQUAL OR 25" O.C. ARE ACCEPTABLE ALTERNATIVES.
 - EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED A MINIMUM OF 40'-0" APART. MATCH TO EXPANSION JOINTS IN PAVING PANELS.
 - STAKES FOR TRANSVERSE JOINTS SHALL NOT BE PLACED CLOSER THAN 6" TO A LONGITUDINAL JOINT. THE TOP OF STAKE SHALL NOT BE LESS THAN 1/4" BELOW THE FINISH SURFACE.
 - LOCATION OF CONSTRUCTION JOINTS AND DEFORMED STRIPS MAY BE VARIED WITH THE APPROVAL OF THE CITY, TO SUIT PROPOSED CONSTRUCTION OF THE CONTRACTOR.
 - CONTROL JOINTS SHALL BE SPACED AT A MAXIMUM OF 15'-0".
 - JOINTS AND SEALANTS SHALL ADHERE TO CITY OF FRIENDSWOOD TECHNICAL SPECIFICATION 02840 - CONCRETE PAVING JOINTS.



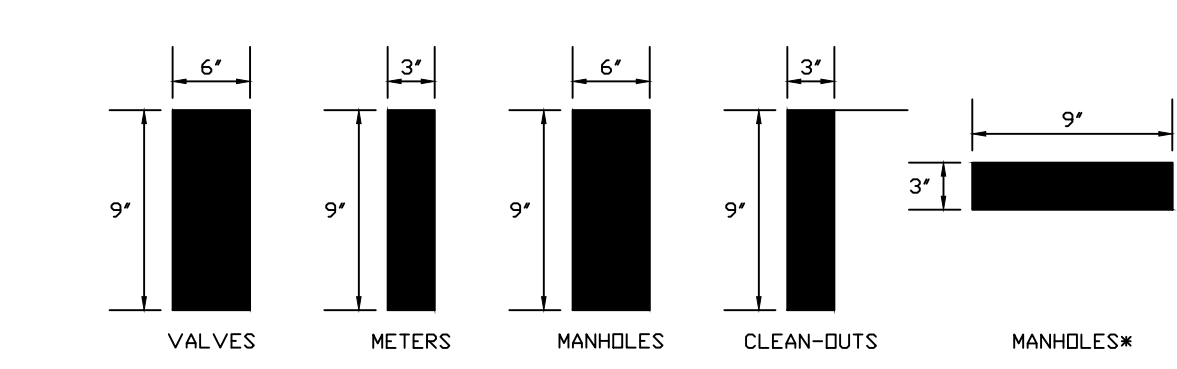
CONCRETE PAVING HEADER



**ASPHALT PAVING HEADER
PAVING HEADERS**

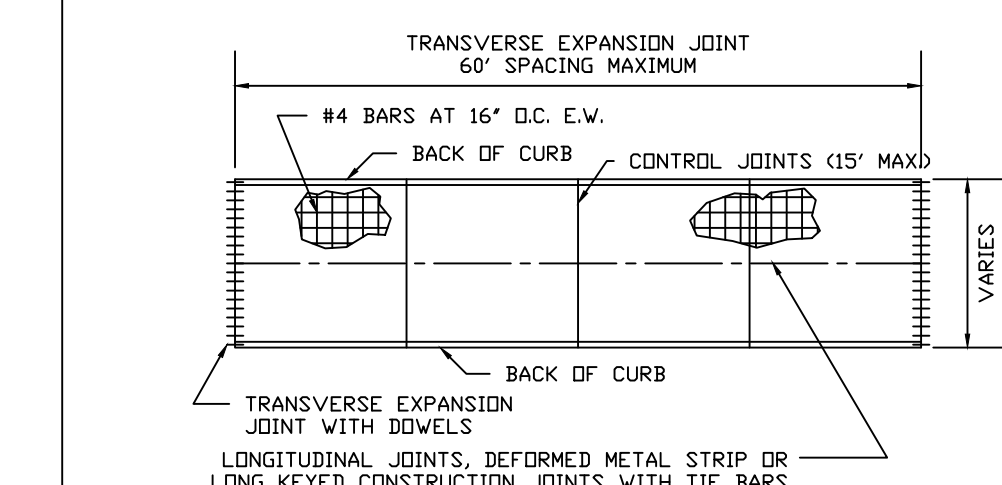


UNDERCUT DETAIL

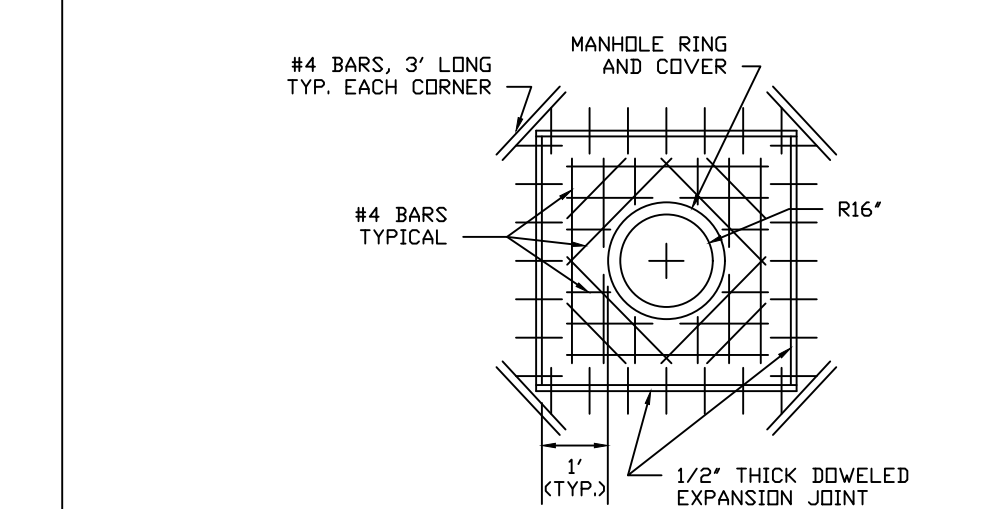


**WATER LINES SANITARY SEWER STORM SEWER
UTILITY MARKINGS**

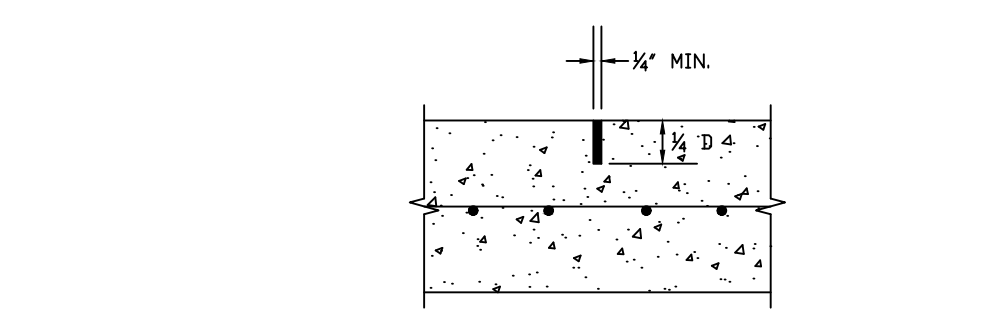
- NOTES:**
- SAW CUT CURB OR EDGE AND APPLY APPROPRIATE MARKING AS LISTED BELOW.
 - WATER VALVE MARKING SHALL BE 6" X 9" IN SIZE MARKED IN BLUE PAINT ON CURB OR EDGE OF STREET.
 - WATER METER MARKING SHALL BE 3" X 9" IN SIZE MARKED IN BLUE PAINT ON CURB OR EDGE OF STREET.
 - SANITARY SEWER MANHOLE MARKING SHALL BE 6" X 9" IN SIZE MARKED IN GREEN PAINT ON CURB OR EDGE OF STREET.
 - SANITARY SEWER CLEAN-OUT MARKING SHALL BE 3" X 9" IN SIZE AND MARKED IN GREEN PAINT ON CURB OR EDGE OF STREET.
 - STORM SEWER MANHOLE MARKING SHALL BE 9" X 3" IN SIZE AND MARKED IN BLACK PAINT. *ONLY STORM SEWER MANHOLES SHALL BE MARKED NOT, INLETS.



PAVING PANEL



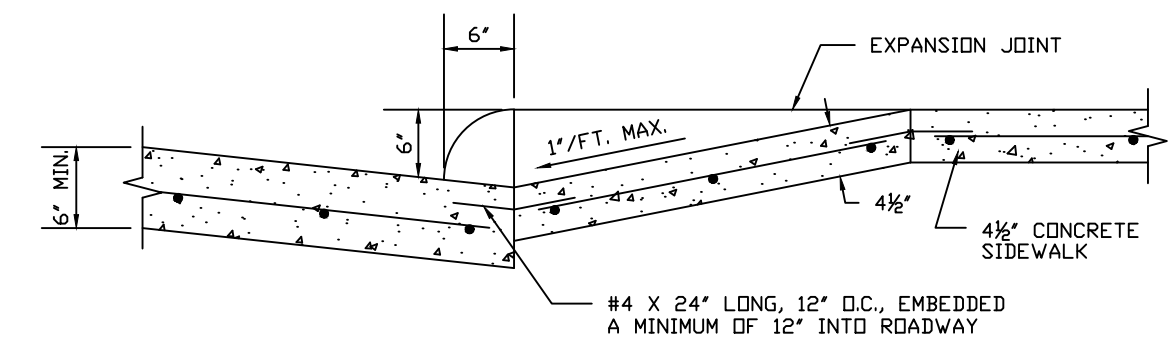
MANHOLE BLOCKOUT



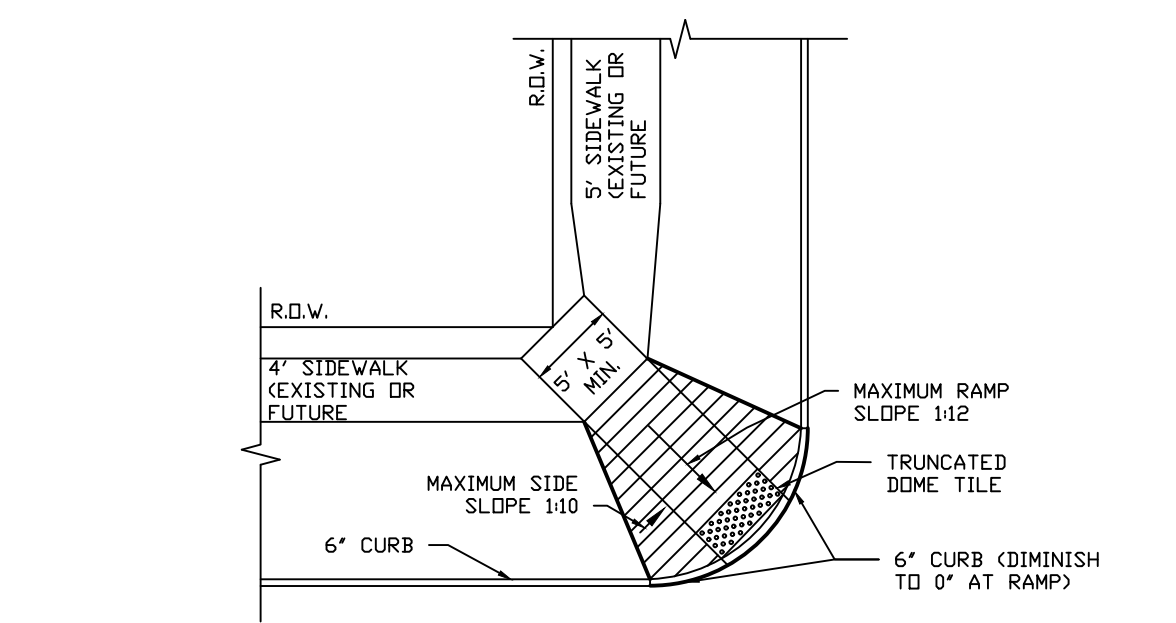
CONTRACTION JOINT

- NOTES:**
- D = DEPTH OF CONCRETE.
 - SAW-CUT CONTRACTION JOINT TO DIMENSIONS SHOWN.

PAVEMENT JOINTS



SIDEWALK & WHEELCHAIR RAMP SECTION



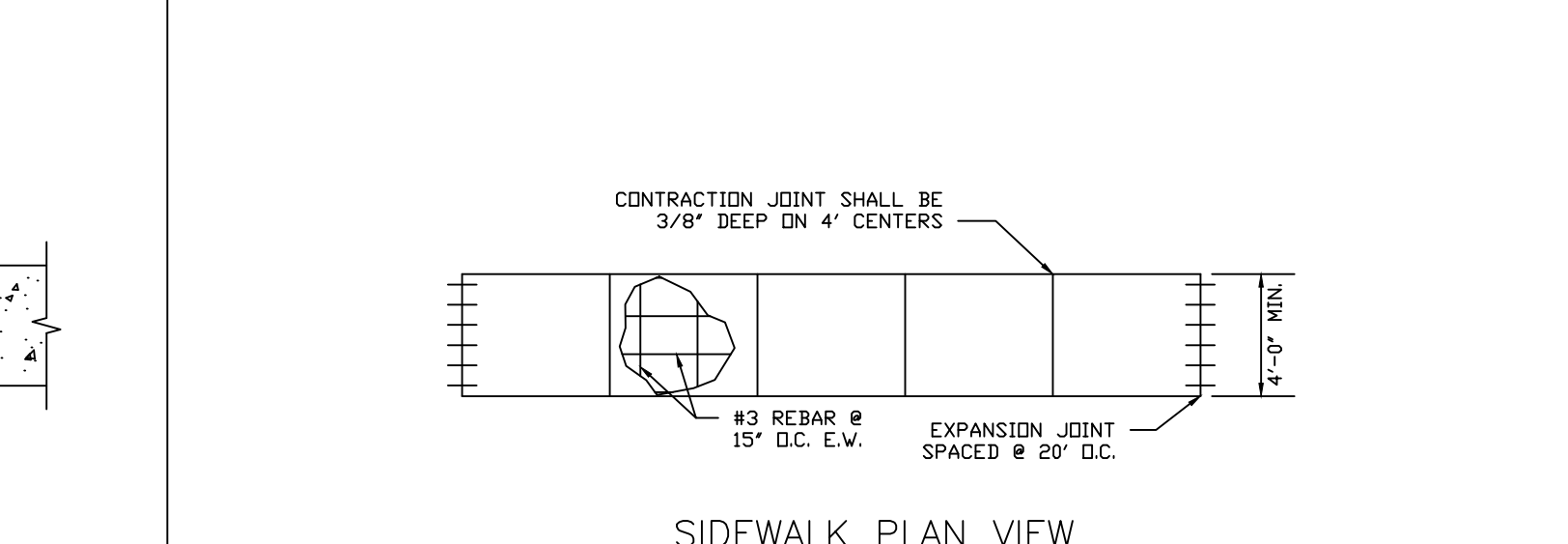
WHEELCHAIR RAMP - PLAN VIEW

- NOTES:**
- RAMP SHALL MEET ADA (AMERICANS WITH DISABILITIES ACT) AND TABA (TEXAS ARCHITECTURAL BARRIERS ACT).
 - FINISHED SURFACE OF WHEELCHAIR RAMP AND SIDE SLOPE SHALL BE GROOVED LATERALLY WITH 1/2" WIDE BY 1/2" DEEP GROOVES, SPACED AT 2 1/2" O.C. WITH BLACK BROOM FINISH. CONTRACTOR SHALL MAKE ADJUSTMENTS TO RAMPS TO FIT LOCAL CONDITION.
 - ALL CUTOITS MUST HAVE BARRICADES INSTALLED UNTIL WHEELCHAIR RAMPS ARE COMPLETED.
 - MINIMUM CLEARANCE (WIDTH) OF RAMP SHALL BE THIRTY-SIX (36) INCHES.
 - FINISH SURFACES OF RAMP AND SIDE SLOPE SHALL BE TREATED WITH COLOR SO THAT THE SURFACES ARE IN CONTRAST WITH SURFACE COLOR OF ADJACENT SIDEWALKS AND STREETS.
 - CONTRAST COLOR OF WHEELCHAIR RAMPS AND SIDE SLOPES SHALL BE BLACK DYE PER CITY OF FRIENDSWOOD TECHNICAL SPECIFICATIONS.

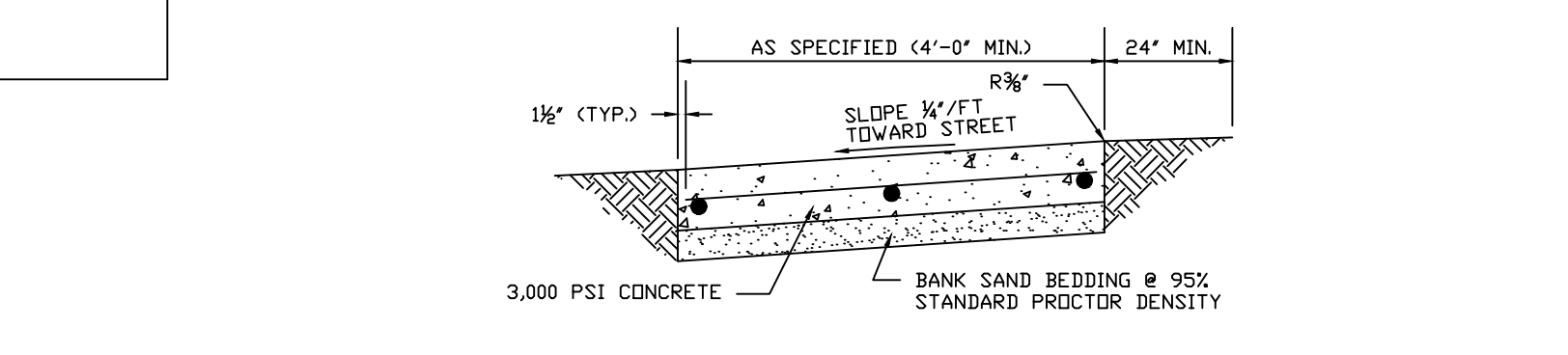
SIDEWALKS AND WHEELCHAIR RAMPS

PAVING CONSTRUCTION NOTES:

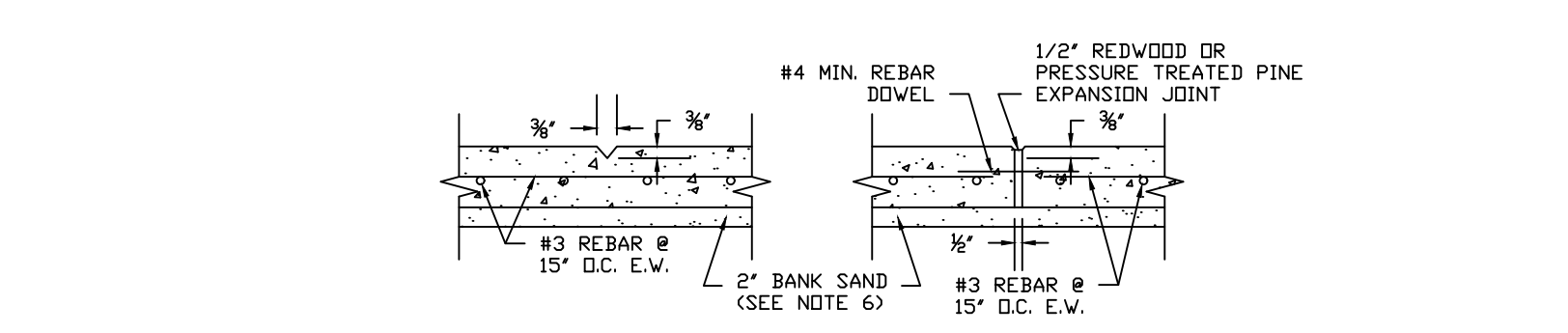
- PAVEMENT AND SUBGRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF FRIENDSWOOD STANDARD DETAILS AND TECHNICAL SPECIFICATIONS, LATEST REVISION.
- CONTRACTOR SHALL NOTIFY THE CITY OF FRIENDSWOOD PROJECT MANAGER AT (281) 996-3380 A MINIMUM OF TWENTY-FOUR (24) HOURS PRIOR TO ALL LIME AND PAVING OPERATIONS.
- ALL TURN-OUTS SHALL HAVE A TWENTY-FIVE (25) FOOT RADIUS AT THE BACK OF CURB UNLESS OTHERWISE NOTED.
- GUIDELINES SET FORTH IN THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (TMUTCD), LATEST EDITION, SHALL BE OBSERVED.
- ALL FILL IN EXISTING RIGHTS-OF-WAY, INCLUDING BACKDRESSING BEHIND THE CURB, SHALL BE PLACED IN A MAXIMUM LOOSE LIFTS OF TWELVE (12) INCHES OR LESS AND COMPACTED TO A NINETY-FIVE PERCENT (95%) STANDARD PROCTOR DENSITY WITH A MOISTURE CONTENT THREE PERCENT (3%) ± ONE PERCENT (1%) OF OPTIMUM MOISTURE.
- MINIMUM PAVEMENT REINFORCEMENT REQUIREMENT SHALL BE GRADE 60, NO. 4 REBAR, SPACED AS SIXTEEN (16) INCHES ON CENTER, EACH WAY.
- ALL RESIDENTIAL OR COLLECTOR PAVEMENT TO BE A MINIMUM OF SIX (6) INCHES THICK REINFORCED CONCRETE, UNLESS OTHERWISE NOTED.
 - MINIMUM CONCRETE SLAB THICKNESS SHALL BE SIX (6) INCHES.
 - MINIMUM STABILIZED SUBGRADE THICKNESS SHALL BE SIX (6) INCHES.
- FOR PAVEMENT WIDTHS LESS THAN OR EQUAL TO TWENTY-EIGHT (28) FEET BACK OF CURB TO BACK OF CURB:
 - MINIMUM CONCRETE SLAB THICKNESS SHALL BE SIX (6) INCHES.
 - MINIMUM STABILIZED SUBGRADE THICKNESS SHALL BE SIX (6) INCHES.
- FOR PAVEMENT WIDTHS GREATER THAN TWENTY-EIGHT (28) FEET FROM BACK OF CURB TO BACK OF CURB AND MAJOR ARTERIAL THOROUGHFARES:
 - MINIMUM CONCRETE SLAB THICKNESS SHALL BE SEVEN (7) INCHES.
 - MINIMUM STABILIZED SUBGRADE THICKNESS SHALL BE EIGHT (8) INCHES.



SIDEWALK PLAN VIEW



SIDEWALK SECTION



**CONTRACTION JOINT EXPANSION JOINT
SIDEWALK JOINTS**

- NOTES:**
- ALL EDGES SHALL BE ROUNDED WITH 3/8" RADIUS.
 - CONTRACTION JOINTS SHALL BE PLACED AT 4'-0" INTERVALS.
 - CONTRACTION JOINTS SHALL BE 3/8" DEEP AND HAVE TROWEL EDGE.
 - 1/2" EXPANSION JOINT MATERIAL REQUIRED WHERE SIDEWALKS ADJUT BUILDINGS, CURBS, DRIVEWAYS, OR EXISTING SIDEWALKS.
 - EXPANSION JOINTS SHALL BE PLACED AT 20'-0" INTERVALS.
 - 2" INCH CLEAN BANK SAND SHALL BE TAMPED TO 95% STANDARD PROCTOR.
 - WHERE NEW SIDEWALK IS PLACED AGAINST EXISTING SIDEWALK, SAW CUT EXISTING SIDEWALK TO AN EVEN STRAIGHT LINE PRIOR TO INSTALLATION OF THE NEW SIDEWALK. INSTALL #4 REBAR DOWEL INTO EXISTING SIDEWALK.

**PAVING
STANDARD DETAILS**

FILE NAME: PSD - 2019.DWG
DATE APPROVED: JULY 1, 2017
SCALE: NTS REVISED DATE: OCTOBER 2019



**DEPARTMENT OF
ENGINEERING
& PROJECTS**

PROJECT NUMBER: DATE SUBMITTED: SHEET:
XX OF XX