PORTLAND CEMENT CONCRETE, CURBS & SIDEWALK:

1. GENERAL
   1.1: PORTLAND CEMENT CONCRETE FOR CURBS, GUTTERS, SIDEWALK, AND OTHER "FLATWORK" SHALL CONFORM TO THE PROVISIONS OF SECTION 40 AND 90 OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS, EXCEPT AS OTHERWISE MODIFIED BY THESE PLANS, SPECIFICATIONS, OR CONTRACT DOCUMENTS.

   1.2: SEE ARCHITECT'S PLANS AND CONTRACT DOCUMENTS FOR STRUCTURAL CONCRETE, OR CONCRETE FOR FOUNDATIONS, AND ADDITIONAL SPECIFICATIONS.

   1.3: IN THE EVENT OF A CONFLICT BETWEEN THE CONTRACT DOCUMENTS, THE PLANS, OR ARCHITECT'S SPECIFICATIONS, THE MORE STRINGENT SHALL PREVAIL.

2. CONCRETE
   2.1 CLASS A: CLASS A CONCRETE SHALL HAVE A MINIMUM PORTLAND CEMENT CONTENT OF 564 POUNDS PER CUBIC YARD AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS.

   2.2 CLASS B: CLASS B CONCRETE SHALL A MINIMUM PORTLAND CEMENT CONTENT OF 564 POUNDS PER CUBIC YARD AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI IN 28 DAYS.

   2.3 CLASS C: CLASS C CONCRETE SHALL HAVE A MINIMUM PORTLAND CEMENT CONTENT OF 470 POUNDS PER CUBIC YARD AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI IN 28 DAYS.

3. REINFORCING
   WHERE REINFORCED CONCRETE IS REQUIRED, REINFORCING STEEL CONFORMING TO THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS AND SHALL BE GRADE 60.

4. CONCRETE IMPROVEMENTS
   4.1: PORTLAND CEMENT CONCRETE SHALL BE CLASS B FOR CURB AND GUTTER, ADA RAMPS, AND SIDEWALKS, AND CLASS A FOR CROSS GUTTERS, DRIVEWAY APPROACHES, AND ANY OTHER CONCRETE IMPROVEMENT SUBJECT TO VEHICULAR TRAFFIC. CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 90, "PORTLAND CEMENT CONCRETE", OF THE STATE SPECIFICATIONS.

   4.2: CROSS GUTTERS AND DRIVEWAY APPROACHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH PROVISIONS OF SECTION 73, "CONCRETE CURBS AND SIDEWALKS", OF THE STATE SPECIFICATIONS. DRIVE APPROACHES SHALL NOT BE CONSTRUCTED WITHIN TEN FEET OF CURB RETURNS, AS MEASURED FROM RETURN TO EDGE OF APPROACH, UNLESS APPROVED BY THE CITY. EXPANSION JOINTS SHALL BE EITHER (A) ¼-INCH TO ½-INCH PREMOLDED EXPANSION JOINT FILLER PER SECTION 51-1.12 OF THE STATE SPECIFICATIONS, OR (B) 2-INCH DEEP SCORED JOINT (WEAKENED PLANE, EXTRUSION MACHINE ONLY).

   4.3: ALL CONCRETE IMPROVEMENTS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE STANDARD DETAILS. WHITE PIGMENTED CURING COMPOUNDS, CONFORMING TO ASTM C-309, SHALL BE APPLIED TO ALL EXPOSED SURFACES OF CONCRETE IMPROVEMENTS TO PROVIDE COMPLETE AND UNIFORM COVERAGE. CURING COMPOUND SHALL BE APPLIED WITHIN 1 HOUR OF CONCRETE FINISHING.

   4.4: EXCAVATION, GRADING AND BACKFILLING BEHIND THE CURB RETURNS, INCLUDING GRADING OF PARKWAY, SHALL BE DONE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS FOR EARTHWORK. ANY EXCAVATED MATERIAL NOT NEEDED FOR GRADING OR BACKFILL, IN THE OPINION OF THE CITY, SHALL BE REMOVED FROM THE SITE OF WORK AND DISPOSED OF AT THE EXPENSE OF THE OWNER.

   4.5: THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL THE DESIGN OF THE MIX PROPOSED FOR USE. SAID MIX DESIGN SHALL SET FORTH WEIGHTS OF CEMENT, SAND, COARSE AGGREGATE AND WATER TO BE USED TOGETHER WITH A GRADING ANALYSIS OF SAND AND COARSE AGGREGATE. THE SOURCE OF SUPPLY OF MATERIALS ENTERING INTO THE MIX SHALL ALSO BE GIVEN. THE MIX DESIGN SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACING ANY CONCRETE.

   4.6: IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, INSTALL REBAR DOWELS WHEN NEW PC CONCRETE IS SHOWN TO JOIN EXISTING PC CONCRETE.

CITY OF BAKERSFIELD STORM DRAIN NOTES

STORM DRAIN PIPE: UNLESS OTHERWISE SPECIFIED ON THESE PLANS, THE STORM DRAIN PIPE SHALL BE ONE OF THE FOLLOWING:

A. REINFORCED CONCRETE PIPE (R.C.P): REINFORCED CONCRETE PIPE SHALL BE CLASS III (ASTM C76) AND SHALL CONFORM TO THE REQUIREMENTS OF SECTION 65 OF THE STANDARD SPECIFICATIONS.

   JOINTS SHALL BE RUBBER GASKETED IN CONFORMANCE WITH THE PROVISIONS OF SECTION 651.06 OF THE STANDARD SPECIFICATIONS.

   CEMENT MORTAR JOINTS SHALL ONLY BE USED WHEN THE PIPE INVERT ELEVATION IS HIGHER THAN ONE HALF THE DRAINAGE SUMP DESIGN WATER SURFACE DEPTH ELEVATION.

   WHERE CLASS III, REINFORCED CONCRETE PIPE IS REQUIRED, THE CONTRACTOR MAY, WITH CITY APPROVAL, USE CLASS III NON-REINFORCED CONCRETE PIPE CONFORMING TO THE REQUIREMENTS OF SECTION 651.02A, "CIRCULAR REINFORCED CONCRETE PIPE:, OF THE STANDARD SPECIFICATIONS.

   CONCRETE PIPE SHALL BE LAID IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 65 OF THE STANDARD SPECIFICATIONS.

   IN ADDITION TO THE ABOVE REQUIREMENTS, ALL RUBBER GASKETED JOINT RINGS SHALL BE CHECKED WITH A GAUGE ALL THE WAY AROUND THE PIPE AFTER THE JOINT HAS BEEN ASSEMBLED TO DETERMINE THAT THE RING HAS BEEN PROPERLY LOCATED AND SEATED. IMPROPERLY MADE JOINTS SHALL BE PULLED APART AND SATISFACTORILY REMADE.

B. CAST-IN-PLACE CONCRETE PIPE: CAST-IN-PLACE MONOLITHIC CONCRETE PIPE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 63 OF THE STANDARD SPECIFICATIONS.

C. POLYVINYL CHLORIDE (P.V.C.) DRAIN PIPE POLYETHLENE (P.E.) DRAINPIPE

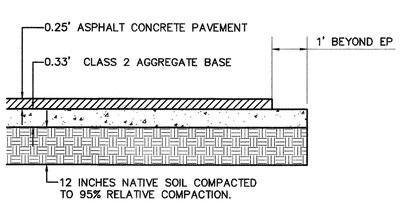
   1) SMALL DIAMETER P.V.C. PIPE SHALL BE IN ACCORDANCE WITH UNI-BELL STANDARD UNI-B-4 AND ASTM D 3034, SDR35, AND THE INTEGRAL BELL, GASKETED JOINT SHALL COMPLY WITH UNI-BELL STANDARD UNI-B-4 AND ASTM D 3212.

   2) LARGE DIAMETER P.E. PROFILE WALL PIPE SHALL CONFORM TO ASTM F 894. LARGE DIAMETER P.V.C. PIPE SHALL CONFORM TO UNI-BELL STANDARD UNI-B-9 AND ASTM F 794 AND SHALL HAVE AN INTEGRAL BELL, GASKETED JOINT, THAT CONFORMS TO ASTM D-3212 (J-M PERMA-LOC SERIES 46 GRAVITY SEWER PIPE OR APPROVED EQUAL).

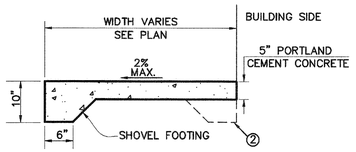
   ALL P.V.C. OR P.E. PIPE SHALL BE INSTALLED AND BEDDED IN STRICT ADHERENCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH ASTM D 2321 – LATEST EDITION FOR UNDERGROUND INSTALLATION OF FLEXIBLE THERMOPLASTIC SEWER PIPE.

   RUBBER GASKET PIPE SHALL BE USED AT ALL SYPHON LOCATIONS AND FOR ALL LOCATIONS WHERE THE PIPE FLOWLINE IS BELOW THE HYDRAULIC GRADE ELEVATION AT THE PIPE OUTLET. SUBMISSION OF RECENT TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY CERTIFYING THAT THE PIPE JOINTS MEET ASTM D 3212 (SUSTAINING 26 FEET OF HEAD FOR 10 MINUTES WITH NO VISABLE LEAKAGE) WILL BE REQUIRED PRIOR TO THE APPROVAL OF PLASTIC PIPE FOR USE IN THESE LOCATIONS.

USE OF ANY OF THE ABOVE PIPE MATERIALS SHALL FIRST BE APPROVED BY THE ENGINEER PRIOR TO BIDDING.



A/3 ASPHALT CONCRETE SECTION
N.T.S.



DETAIL NOTES:

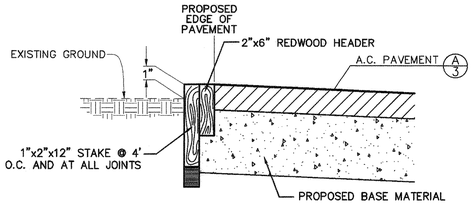
① OBTAIN 95% RELATIVE COMPACTION FOR A DEPTH OF 12" BENEATH ALL CONCRETE, PER ASTM D-1557.

② CONSTRUCT SHOVEL FOOTINGS ON BOTH SIDES OF WALK WHEN NOT ABUTTING A STRUCTURE.

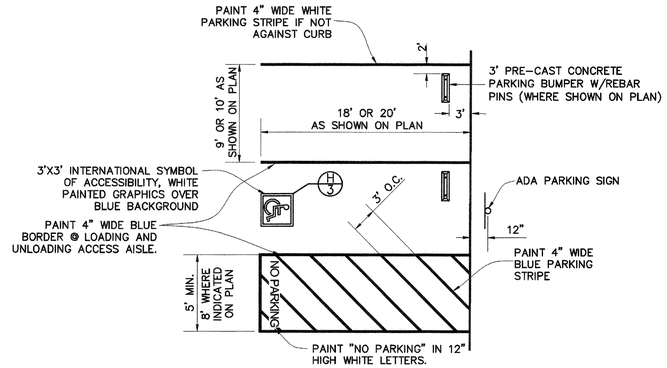
③ FLATWORK, OTHER THAN SIDEWALK, SHALL EXCLUDE SHOVEL FOOTING.

④ SHOVEL FOOTINGS MAY BE OMITTED WHEN SIDEWALK ABUTS A CURB.

B/3 PORTLAND CEMENT CONCRETE SIDEWALK
N.T.S.



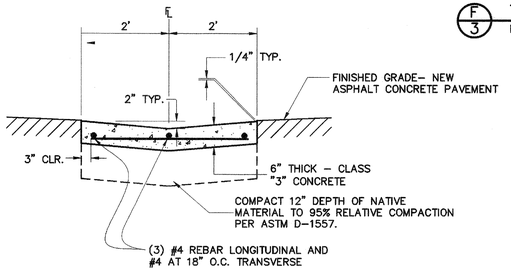
E/3 REDWOOD PAVING BOARD
N.T.S.



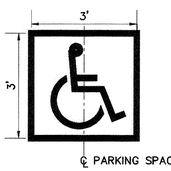
DETAIL NOTES

1. PAINT NEW PARKING STALLS, ADA PARKING STALLS, PAVEMENT MARKINGS, AND ROUTES IN ACCORDANCE WITH THE PLANS.
2. INSTALL 3.0' PRECAST BUMPER BLOCKS BY APPROVED METHOD.
3. REFER TO CAL-TRANS STANDARD DRAWING A90A FOR SPECIFICATIONS NOT COVERED BY THIS PLAN.

F/3 TYPICAL PARKING STALL
N.T.S.

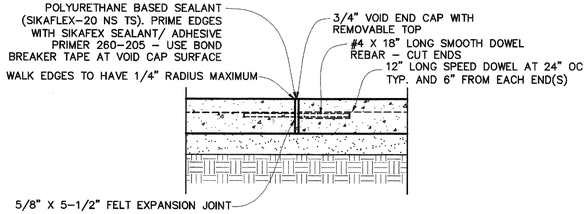


C/3 4' CONCRETE "V" GUTTER
N.T.S.



DETAIL NOTES:
1. 3'X3' SURFACE IDENTIFICATION AT ALL DISABLED PARKING STALLS
2. 3" WIDE LINES
3. SYMBOL SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE COLOR NO, 15090 IN FEDERAL STANDARD 595B [2013 CBC 11B-703.7.2.1]. SEE SITE PLAN FOR LOCATIONS.

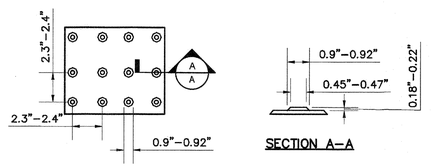
G/3 ADA PAVEMENT MARKINGS
N.T.S.



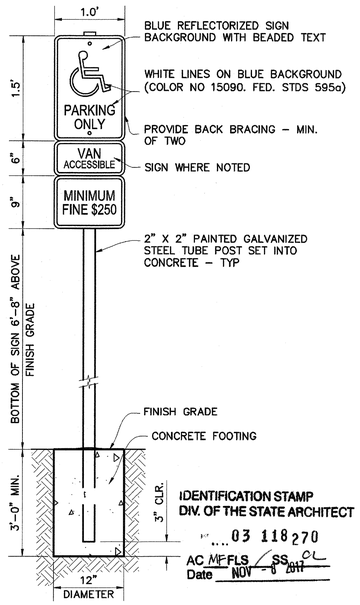
NOTES:

1. EXPANSION JOINTS SHALL BE INSTALLED AT ALL "JOINS" WITH EXISTING PORTLAND CEMENT CONCRETE, AND AT 20' INTERVALS EACH WAY.
2. DECREASE DOWELL LENGTH AS NECESSARY TO ENSURE 3-INCHES OF COVER AT END: MINIMUM 5-INCHES EMBEDMENT.

D/3 EXPANSION JOINT AT CONCRETE "JOINS"
N.T.S.



H/3 DETECTABLE WARNING SURFACE
N.T.S.



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
03 118270
AC MF FLS SS OL
Date NOV - 6 2017

I/3 ADA PARKING STALL SIGNS
N.T.S.

LAV// Pinnacle Engineering
5401 Business Park South, Suite 204, Bakersfield, CA 93309
Phone: (661) 869-0184 Fax: (661) 377-0076

MATTHEW K. VOVILLA RCE 43130 EXP. 3/31/18 — 6-14-17

REVISIONS	DATE
1 REMOVED TREE WELLS, ADDED TRUNCATED DOMES. & REVISED PARKING LAYOUT.	06/20/17
2 REVISIONS PER DSA COMMENTS	09/21/17

REGISTERED PROFESSIONAL ENGINEER MATTHEW K. VOVILLA RCE 43130 Exp. 3-31-18 CIVIL STATE OF CALIFORNIA

DETAILS & TYPICAL SECTIONS GRADING & SITE IMPROVEMENT PLAN FOR NEW PARKING LOT FREMONT ELEMENTARY SCHOOL 607 TEXAS STREET

BCSD BAKERSFIELD CITY SCHOOL DISTRICT

JOB No.:	17-776
DWG NO.:	GRADING
DATE:	06/14/2017
DRAWN BY:	ADA
CHECKED BY:	MKV
SHEET	3 OF 6 SHEETS