

**NOTES:**

1. WHERE THE BASIN IS TO BE CONSTRUCTED WITHIN THE LIMITS OF EXISTING OR PROPOSED SIDEWALK OR IS CONTIGUOUS TO SUCH SIDEWALK, THE TOP SLAB OF THE BASIN MAY BE POURED EITHER MONOLITHIC WITH THE SIDEWALK OR SEPARATELY, USING THE SAME CLASS OF CONCRETE AS IN THE BASIN. WHEN POURED MONOLITHICALLY, THE SIDEWALK SHALL BE PROVIDED WITH A WEAKENED PLANE OR A 1-INCH DEEP SAWCUT CONTINUOUSLY AROUND THE EXTERNAL PERIMETER OF THE CATCH BASIN WALLS, INCLUDING ACROSS THE FULL WIDTH OF THE SIDEWALK, SURFACE OF ALL EXPOSED CONCRETE SHALL CONFORM IN SLOPE, GRADE, COLOR, FINISH, AND SCORING TO EXISTING OR PROPOSED CURB AND WALK ADJACENT TO THE BASIN.
2. ALL CURVED CONCRETE SURFACES SHALL BE FORMED BY CURVED FORMS, AND SHALL NOT BE SHAPED BY PLASTERING.
3. FLOOR OF BASIN SHALL BE GIVEN A STEEL TROWEL FINISH FLOOR OF GRATING PORTION SHALL HAVE A LONGITUDINAL AND LATERAL SLOPE OF 1:12 MINIMUM AND 1:3 MAXIMUM, EXCEPT WHERE THE GUTTER GRADE EXCEEDS 8 PERCENT, IN WHICH CASE THE LONGITUDINAL SLOPE OF THE FLOOR SHALL BE THE SAME AS THE GUTTER GRADE SLOPE FLOOR FROM ALL DIRECTIONS TO THE OUTLET.
4. DIMENSIONS:
  - V = THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE CURB AND THE INVERT OF THE CATCH BASIN AT THE OUTLET = 4.5 FEET OR AS NOTED ON THE PROJECT PLANS.
  - V<sub>i</sub> = THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE CURB AND THE INVERT OF THE INLET. NOTED ON THE PROJECT PLANS.
  - H = NOTED ON THE PROJECT PLANS.
  - W = 7 FEET UNLESS OTHERWISE NOTED ON THE PROJECT PLANS.
  - W<sub>o</sub> = 2 FEET 11<sup>3</sup>/<sub>8</sub> INCHES FOR ONE GRATING; ADD 3 FEET 5<sup>3</sup>/<sub>8</sub> INCHES FOR EACH ADDITIONAL GRATING. ONE GRATING IS REQUIRED UNLESS OTHERWISE SHOWN ON THE PROJECT PLANS.
  - A = THE ANGLE, IN DEGREES, INTERCEPTED BY THE CENTERLINE OF THE CONNECTOR PIPE AND THE CATCH BASIN WALL TO WHICH THE CONNECTOR PIPE IS ATTACHED.
5. PLACE CONNECTOR PIPES AS INDICATED ON THE PROJECT PLANS UNLESS OTHERWISE SPECIFIED, THE CONNECTOR PIPE SHALL BE LOCATED AT THE DOWNSTREAM END OF THE BASIN WHERE THE CONNECTOR PIPE IS SHOWN AT A CORNER, THE CENTERLINE OF THE PIPE SHALL INTERSECT THE INSIDE CORNER OF THE BASIN. THE PIPE MAY BE CUT AND TRIMMED AT A SKEW NECESSARY TO INSURE MINIMUM 3-INCH PIPE EMBEDMENT, ALL AROUND, WITHIN THE CATCH BASIN WALL, AND 3-INCH RADIUS OF ROUNDING OF STRUCTURE CONCRETE, ALL AROUND, ADJACENT TO PIPE ENDS. A MONOLITHIC CATCH BASIN CONNECTION SHALL BE USED TO JOIN THE CONNECTOR PIPE TO THE CATCH BASIN WHENEVER ANGLE "A" IS LESS THAN 70 DEGREES OR GREATER THAN 110 DEGREES, OR WHENEVER THE CONNECTOR PIPE IS LOCATED IN A CORNER. THE OPTIONAL USE OF MONOLITHIC CATCH BASIN CONNECTION IN ANY CASE IS PERMITTED. MONOLITHIC CATCH BASIN CONNECTIONS MAY BE CONSTRUCTED TO AVOID CUTTING STANDARD LENGTHS OF PIPE.
6. STEPS SHALL BE LOCATED AS SHOWN. IF THE CONNECTOR PIPE INTERFERES WITH THE STEPS, THEY SHALL BE LOCATED ON THE FRONT WALL AT THE CENTERLINE OF THE DOWNSTREAM GRATING. STEPS SHALL BE SPACED 12 INCHES APART. THE TOP STEP SHALL BE 7 INCHES BELOW THE TOP OF THE GRATING AND PROJECT 2<sup>1</sup>/<sub>2</sub> INCHES. ALL OTHER STEPS SHALL PROJECT 5 INCHES.
7. CONCRETE SHALL BE CLASS 560-C-3250 WITH A MAXIMUM SLUMP OF 5", FC'=3250 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE NOTED ON THE CONTRACT PLANS, REINFORCING STEEL IF REQUIRED SHALL BE DEFORMED REBARS WITH F<sub>y</sub> EXCEEDING 60,000 PSI, ASTM A615 AND ASTM A706, GRADE 60. PLACING OF REINFORCEMENT AND SPLICING LENGTHS SHALL CONFORM TO ACI CODES 318-13.
8. DOWELS ARE REQUIRED AT EACH CORNER AND AT 7 FEET ON CENTER (MAXIMUM) ALONG THE BACKWALL.
9. THE FOLLOWING STANDARD PLANS ARE INCORPORATED HEREIN:
  - D-10 MONOLITHIC CATCH BASIN CONNECTION
  - D-11 CATCH BASIN REINFORCEMENT
  - D-12 CATCH BASIN FACE PLATE ASSEMBLY AND PROTECTION BAR
  - D-13 FRAME AND GRATING FOR CATCH BASINS
  - D-16 STEEL STEP

**THE PORT OF LONG BEACH** ENGINEERING DIVISION

| REVISIONS             |      | CATCH BASIN NO. 2 CURB OPENING<br>WITH GRATING(S) TYPE | STANDARD PLAN |
|-----------------------|------|--|---------------|
| NO.                   | DATE |  | D-2           |
| ①                     |      |  |               |
| ②                     |      |  |               |
| ③                     |      |  |               |
| APPROVED BY: _____    |      | R.E. NO.: _____  | DATE: _____   |
| CHIEF HARBOR ENGINEER |      |  | 2 OF 2        |