NOTES:

1. INITIAL RAINFALL INTENSITY = 1.30 IN./HR. (10-YRS. STORM)
   INITIAL TIME OF CONCENTRATION = 20 MINUTES
   RUNOFF COEFFICIENTS: PARK=15%, LOT=35%, RESIDENTIAL=35%, PARKWAY=60%, HIGH
   DENSITY RESIDENTIAL=65%, COMMERCIAL=75%-90%, INDUSTRIAL AND PAVED AREA=90%.

2. STORM SYSTEMS SHALL HAVE A MINIMUM DESIGN USING THE CITY OF STOCKTON 10-
   YEARS RAINFALL CURVE.

3. THE ABOVE FIGURES MAY BE ADJUSTED FOR THE INDIVIDUAL DEVELOPMENTS UPON
   PRESENTATION BY THE DEVELOPER OF A DETAILED RUNOFF ANALYSIS.

4. PIPE SLOPES AS PER STANDARD DRAWING NO. 77. MANNING "N" SHALL BE 0.011 FOR PVC
   AND HDPE PIPE AND SHALL BE 0.013 FOR OTHER PIPE MATERIALS.

5. MAIN STORM TRUNKS SHALL BE 12" DIAMETER MINIMUM AND HAVE 3'-0" MINIMUM OF
   COVER FROM SUBGRADE.

6. THE SANITARY EXTENSION MUST BE LOCATED ON-SITE WITHIN 20'-0" OF THE LOCATION
   WHERE A PORTABLE SUBMERSIBLE PUMP CAN BE DROPPED INTO THE LOWEST AREA OF
   THE WET WELL. THE END OF THIS EXTENSION SHALL BE PROVIDED WITH A 4" CAMLOCK
   COUPLING AND ENDCAP.

7. THE SANITARY LINE EXTENDED INTO THE PUMP STATION SHALL BE DESIGNED TO CARRY AT
   LEAST 600 GPM WITH THE HYDRAULIC GRADE LINE BELOW GRADE.

8. AT THE LOCATION WHERE THE SUBMERSIBLE PUMP CAN BE LOWERED INTO THE LOWEST
   AREA OF THE WET WELL, A 30 AMP FUSIBLE DISCONNECT SHALL BE AT THE MOTOR
   CONTROL CENTER (MCC) WHICH OPERATES THE LOW FLOW PUMP. THIS CONNECTION
   SHALL HAVE APPROPRIATELY SIZED WIRE ENCLOSED IN CONDUIT BELOW GRADE. THE
   WIRES SHALL BE PROPERLY TERMINATED AT THE REMOTE FUSIBLE DISCONNECT AT THE
   MCC, THE WIRES SHALL NOT BE TERMINATED. INSTEAD, SUFFICIENT WIRE SHALL BE
   COILED IN THE CONTROL CUBICLE FOR THE LOW FLOW PUMP TO ALLOW THE CITY TO
   DISCONNECT THE INPLACE PUMP AND CONNECT THE FUSIBLE DISCONNECT.

9. SANITARY SEWER LINE SHALL BE EXTENDED TO ALL FUTURE STORM WATER PUMP STATIONS
   (SEE DWG. NO. 45A).
Intensity–Duration–Frequency Curve (Stockton, California)

EQUATION: \( I = (7.9659)^{x(D)}(-0.604) \)

\( I \) is in inches/hour
\( D \) is in minutes
CAST IN PLACE (C.I.P.) CONCRETE PIPE SHALL MEET THE FOLLOWING MIN. STRENGTH REQUIREMENTS:

<table>
<thead>
<tr>
<th>PIPE SIZE</th>
<th>MIN. SLOPE (N=0.013)</th>
<th>MIN. SLOPE (N=0.011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot; DIA.</td>
<td>.0020 FT/FT</td>
<td>.0014 FT/FT</td>
</tr>
<tr>
<td>15&quot; DIA.</td>
<td>.0015 FT/FT</td>
<td>.0010 FT/FT</td>
</tr>
<tr>
<td>18&quot; DIA.</td>
<td>.0012 FT/FT</td>
<td>.0009 FT/FT</td>
</tr>
<tr>
<td>24&quot; DIA.</td>
<td>.0008 FT/FT</td>
<td>.0006 FT/FT</td>
</tr>
<tr>
<td>30&quot; DIA.</td>
<td>.0006 FT/FT</td>
<td>.0001 FT/FT</td>
</tr>
</tbody>
</table>

CONCRETE SHALL BE CLASS A

NOTES:

1. CATCH BASINS SHALL BE INSTALLED AT ALL INTERSECTIONS AND AT ENDS OF ALL CUL-DE-SACs WHERE THE SLOPE AROUND THE CUL-DE-SAC IS LESS THAN 0.0035 FT/FT. SLOPE SHALL BE A MINIMUM OF .01 FT/FT ALONG THE ARC LENGTH OF CORNERS.
2. ALL CATCH BASIN LATERALS SHALL BE CONNECTED AT MAINTENANCE HOLES AND NOT DIRECTLY INTO TRUNK LINES.
3. MAXIMUM RUNS BETWEEN CATCH BASINS SHALL BE IN ACCORDANCE WITH STANDARD DRAWING NO. 76.
4. ALL STORM DRAINS TO BE DESIGNED FOR GRAVITY FLOW (MATCHING OF PIPE CROWNS — NOT INVERT ELEVATIONS).
5. RUBBER GASKETED PIPE REQUIRED WHEN LINES ARE SURCHARGED.
6. 12" THROUGH 36" PIPE SHALL BE CLASS III MIN. R.C.P.; OR NON-REINFORCED CONCRETE PIPE MEETING CAL-TRANS SPECIFICATIONS AND A "D" LOADING EQUIVALENT TO CLASS III R.C.P., 34" AND LARGER PIPE SHALL BE CLASS III R.C.P. ONLY. FOR C.I.P. PIPE, SEE NOTE NO. 7 BELOW.
7. C.I.P. PIPE ALLOWED FOR 24" AND LARGER PIPES WITH APPROVAL OF THE CITY ENGINEER.
8. FOR 12" THROUGH 15" PLASTIC PIPE, SDR 35 PVC. MEETING ASTM 3034 STANDARDS MAY BE USED.
NOTES:

1. TROUGH WITHIN M.H. TO BE FULLY ACCESSIBLE.
2. INLET PIPES NOT TO EXTEND MORE THAN 3" INTO M.H.
3. OUTLET PIPE TO BE FLUSH AND ALL EDGES SMOOTH WITH M.H. WALL.
4. CONSTRUCT PIPE STUB JOINTS, 2"–0" MINIMUM TO 12"–0" MAXIMUM FOR PVC PIPE AND 2"–0" MAXIMUM FOR RIGID PIPE FROM BASE OF M.H.
5. M.H. BOTTOM SHALL BE HYDRAULICALLY SHAPED IN THE FIELD AS DIRECTED.

TYPICAL INTERSECTION FOR TYPE 1 MAINTENANCE HOLE

CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS
SECTION A-A

NOTES:
1. ALL EXPOSED STEEL SHALL BE COATED WITH 2 COATS OF COAL TAR PITCH HEATED TO A MINIMUM OF 180°F OR GALVANIZED.
2. GRATE, FRAME AND MODIFIED SIDE INLET SHALL CONFORM TO PINKERTON A-645 FRAME WITH EITHER A-390 RIVETED OR A-390-M FABRICATED STEEL GRATE.
3. GRATE SHALL BE CHAINED TO FRAME.
4. GRATE SHALL BE DEPRESSED 1/4" BELOW GUTTER PROFILE GRADE.
5. 24" DIA. PIPE BARREL SHALL BE CLASS II R.C.P., OR CLASS 2 OR 3 NON-REINFORCED CONCRETE PIPE.
6. TOP OF CURB SHALL BE STAMPED PER DWG. NO. 201H.