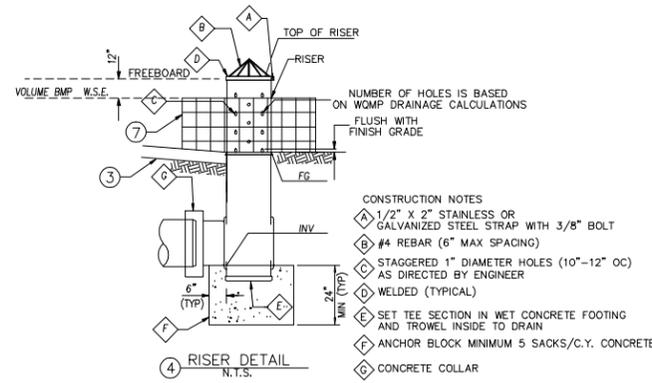
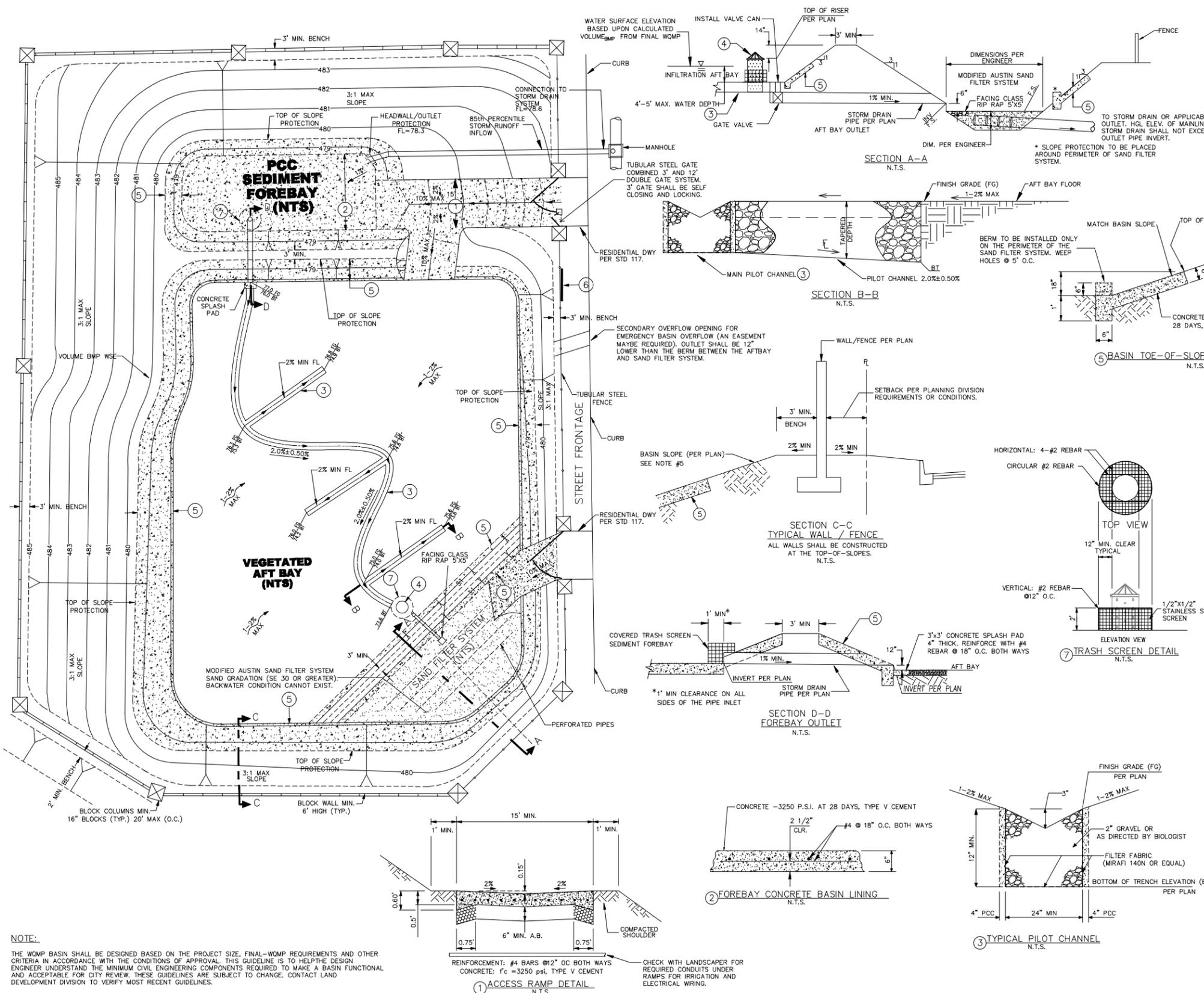


WATER QUALITY BASIN CIVIL DESIGN GUIDELINES



CONSTRUCTION NOTES

- Ⓐ 1/2" X 2" STAINLESS OR GALVANIZED STEEL STRAP WITH 3/8" BOLT
- Ⓑ #4 REBAR (6" MAX SPACING)
- Ⓒ STAGGERED 1" DIAMETER HOLES (10"-12" OC) AS DIRECTED BY ENGINEER
- Ⓓ WELDED (TYPICAL)
- Ⓔ SET TEE SECTION IN WET CONCRETE FOOTING AND TROWEL INSIDE TO DRAIN
- Ⓕ ANCHOR BLOCK MINIMUM 5 SACKS/C.Y. CONCRETE
- Ⓖ CONCRETE COLLAR

THIS WATER QUALITY BASIN RECEIVES RUNOFF FROM STREETS, YARDS AND OPEN SPACES. IT HAS BEEN DESIGNED TO TREAT INCIDENTAL POLLUTANTS IN RUNOFF AND IS NOT DESIGNED TO TREAT HOUSEHOLD POLLUTANTS. DUMPING IS PROHIBITED.

AUTHORIZED PERSONNEL ONLY.

MORENO VALLEY PUBLIC WORKS
 TO REPORT A PROBLEM WITH THIS FACILITY CALL 951.413.3120
 WWW.MORENO-VALLEY.CA.US

- NOTES:**
- 1.) SIGNS SHALL BE SECURELY MOUNTED ON OUTSIDE OF TUBULAR IRON FENCE, 1 FOOT BELOW THE TOP OF TUBULAR IRON FENCE. LOCATION PER DIRECTION OF CITY ENGINEER.
 - 2.) OUTSIDE DIMENSIONS SHALL BE 4' X 2'.
 - 3.) LETTERS, BORDER, AND CITY LOGO SHALL BE BLACK ON WHITE BACKGROUND.
 - 4.) TEXT HEIGHT SHALL BE 1" AND TEXT WIDTH SHALL BE 0.6". TEXT SHALL BE ALL UPPERCASE.
 - 5.) FONT STYLE SHALL BE UNIVERSAL.
 - 6.) SIGN SHOULD BE MADE OF 5052-H38 ALUMINUM ALLOY AND HAVE A THICKNESS OF 0.08".
 - 7.) MOUNTING HARDWARE SHALL BE STAINLESS STEEL BRACKETS AND MOUNTED TO THE FENCE USING SECURITY SCREWS.
 - 8.) CITY LOGO SHALL BE 3.5" IN HEIGHT BY 4" WIDE.
 - 9.) SIGN SHALL BE PROTECTED WITH AN ANTI-GRAFFITI COATING.
- PROJECT SIGN N.T.S.**

- WQMP BASIN BASIC DESIGN GUIDELINES:**
1. THE WATER QUALITY BASIN SHALL BE DESIGNED FOR FIRST FLUSH RUNOFF IN ACCORDANCE WITH THE CITY'S WQMP MANUAL.
 2. PROVIDE PCC ACCESS ROAD TO FOREBAY, AFT BAY AND SAND FILTER SYSTEM. MAXIMUM GRADE OF ACCESS ROAD IS 10% AND MINIMUM WIDTH IS 15'.
 3. FOREBAY SHALL BE PCC. FOREBAY ELEVATION SHALL BE 1' ABOVE AFT BAY ELEVATION.
 4. PROVIDE FOREBAY OUTLET TO AFT BAY. THE FOREBAY OUTLET PIPE SLOPE SHALL BE A MINIMUM OF 1%.
 5. SIDE-SLOPES OF THE BASIN SHALL BE 3:1 OR FLATTER.
 6. BASIN MATERIAL SHOULD BE VEGETATED EARTH.
 7. THE TOE OF THE BASIN SHALL BE PROTECTED WITH CONCRETE PER DETAIL #5. HEIGHT OF PROTECTION SHALL BE 18".
 8. ADD "FINGERS" (PILOT CHANNEL) DIRECTED AWAY FROM THE MAIN PILOT CHANNEL FOR RUNOFF DISTRIBUTION THROUGHOUT THE BASIN.
 9. THE PILOT CHANNEL MINIMUM GRADE IS 2.0%.
 10. PROVIDE SQUARE OR CIRCULAR SHAPED TRASH SCREEN AROUND INLETS AT BOTH FOREBAY AND AFT BAY. OPENINGS SHALL BE 1/2"x1/2". SEE DETAIL HEREON.
 11. THE BASIN SHOULD BE SCARIFIED 2'-3" IN DEPTH THEN ROLLED WITH A LANDSCAPE WATERBARREL TO LEVEL THE BASIN. (DO NOT COMPACT TO MORE THAN 95%)
 12. INSTALL WQMP INFORMATIONAL SIGN WITHIN PUBLIC VIEW PER DETAIL # 6.
 13. TOP OF SLOPES AT THE BOUNDARY LINES OR CONSTRUCTION WALLS SHALL BE SET BACK 3 FEET MINIMUM ON THE INSIDE OF THE LOT. DOWN SLOPES TOWARDS A WALL OR PROPERTY LINE ARE NOT ALLOWED.
 14. TUBE SPACING CONSTRUCTION AND GROUND CLEARANCES OF THE TUBULAR GATES SHALL MEET STANDARD POOL SAFETY REQUIREMENTS PER SECTION 421 OF THE C.G.C.
 15. LINE, GRADE, FUNCTIONALITY, SAND GRADATION AND FLOW TEST MUST MEET CITY REQUIREMENTS PRIOR TO LAND DEVELOPMENT DIVISION APPROVAL. SEE CITY OF MORENO VALLEY STORM WATER QUALITY BEST MANAGEMENT PRACTICE HANDBOOK FOR FURTHER REQUIREMENTS.
 16. UPON ACCEPTANCE OF THE BASIN BY THE LAND DEVELOPMENT DIVISION, THE DEVELOPER SHALL CONTACT THE ENTERPRISE SERVICES ADMINISTRATION DIVISION A FOR NOTICE TO PROCEED PRIOR TO THE INSTALLATION OF LANDSCAPING AND IRRIGATION.
 17. EMERGENCY OVER FLOW SHALL BE 1' BELOW ADJACENT PAD ELEVATION.
 18. PERIMETER BLOCK WALLS ADJACENT TO STREETS SHALL BE LOCATED INSIDE OF THE PROPERTY LINE.
 19. PERIMETER BLOCK WALLS ADJACENT TO INTERIOR SIDE YARDS SHALL BE LOCATED OUTSIDE OF THE PROPERTY LINE.
- NOTES:**
20. PRELIMINARY WQMP BASIN INFORMATION SHALL INCLUDE APPROXIMATE SIZE OF BASIN, IDENTIFY POTENTIAL POLLUTANTS, POLLUTANT(S) OF CONCERN AND RECOMMENDED METHODS OF TREATMENT (BMPs).
 21. FINAL WQMP BASIN INFORMATION SHALL INCLUDE PRECISE DIMENSIONS OF THE BASIN, DEPTH, AND VOLUME. IT SHALL ALSO INCLUDE ANY REQUIRED CALCULATIONS INCLUDING CALCULATIONS FOR PIPE AND ORIFICE SIZE. A FINAL LIST OF POLLUTANTS AND METHOD OF TREATMENT (BMPs) WILL BE IDENTIFIED.
 22. FINAL ENGINEERING PLANS SHALL SHOW ALL INFORMATION NECESSARY FOR CONSTRUCTION IN ACCORDANCE WITH GUIDELINES, CONDITIONS OF APPROVAL, CITY WQMP MANUAL (AVAILABLE ON THE CITY WEBSITE: WWW.MORENO-VALLEY.CA.US) AND OTHER CITY REQUIREMENTS.
- REVISION 07/14/10

NOTE:

THE WQMP BASIN SHALL BE DESIGNED BASED ON THE PROJECT SIZE, FINAL-WQMP REQUIREMENTS AND OTHER CRITERIA IN ACCORDANCE WITH THE CONDITIONS OF APPROVAL. THIS GUIDELINE IS TO HELP THE DESIGN ENGINEER UNDERSTAND THE MINIMUM CIVIL ENGINEERING COMPONENTS REQUIRED TO MAKE A BASIN FUNCTIONAL AND ACCEPTABLE FOR CITY REVIEW. THESE GUIDELINES ARE SUBJECT TO CHANGE. CONTACT LAND DEVELOPMENT DIVISION TO VERIFY MOST RECENT GUIDELINES.

1 ACCESS RAMP DETAIL N.T.S.

REINFORCEMENT: #4 BARS @12" OC BOTH WAYS
 CONCRETE: f'c = 3250 psi, TYPE V CEMENT

CHECK WITH LANDSCAPER FOR REQUIRED CONDUITS UNDER RAMP FOR IRRIGATION AND ELECTRICAL WIRING.

