

SPECIFICATION FOR EXTERIOR WASH AREA DIVERSION SYSTEM

1. INTRODUCTION

THE WASH BAY DRAIN VALVE SYSTEM IS DESIGNED TO MANAGE AND DIVERT WATER FLOW FROM EXTERIOR (UNROOFED) WASH AREAS TO PREVENT POLLUTANTS FROM ENTERING THE STORM SEWER. THIS SYSTEM REDIRECTS WASH WATER RUNOFF TO THE SANITARY SEWER WHILE ENSURING RAINWATER DOES NOT DRAIN INTO THE SANITARY SEWER AS PER LOCAL CODES.

2. SYSTEM COMPONENTS

A. DEMAND VALVE:

- MATERIAL: BRASS
- SPECIFICATIONS: 1" DEMAND VALVE, RATED FOR 170 PSI
- FLOW CAPACITY: 12 GPM
- DRIVE LINE (1/2-INCH COPPER OR PVC PIPING FROM DEMAND VALVE TO THE DIVERSION VALVE)
- FUNCTION: SENSES WATER USAGE AND SENDS A HYDRAULIC SIGNAL TO OPEN THE DIVERTER VALVE TO DRAIN WASH RUNOFF TO THE SANITARY SEWER.

B. DIVERTER VALVE:

- MATERIAL: BRASS, STAINLESS STEEL, OR EQUIVALENT CORROSION-RESISTANT MATERIAL
- SPECIFICATIONS: 4" OR 6" HYDRAULICALLY ACTIVATED DRAIN DIVERTER VALVE (NORMALLY CLOSED)
- FUNCTION: DIVERTS WATER TO THE SANITARY SEWER WHEN ACTIVATED
- LOCATION: INSTALLED IN A RECESSED PIT

C. RECESSED PIT:

- MATERIAL: HIGH-DENSITY POLYETHYLENE VALVE PIT
- FEATURES: INCLUDES A STAINLESS-STEEL DEBRIS SCREEN FOR PARTICLES GREATER THAN 3/4" DIAMETER AND A GALVANIZED STEEL PEDESTRIAN GRATE
- CONNECTIONS: TWO GRAVITY FLOW PIPE CONNECTIONS (ONE TO THE SANITARY SEWER, ONE TO THE STORMWATER), WITH ADDITIONAL INLET PIPES POSSIBLE

D. CATCH BASIN:

- MATERIAL: PRECAST CONCRETE CLASS 1/II WITH A DESIGN STRENGTH OF 4500 PSI AT 28 DAYS WITH MONOLITHIC AT FLOOR AND FIRST STAGE OF THE WALL WITH SECTIONAL RISER TO THE REQUIRED DEPTH
- REINFORCEMENT: GRADE 60 STEEL REBAR CONFORMING TO ASTM A615
- FRAME AND GRATING: GRAY CAST IRON CONFORMING TO ASTM A48-76 CLASS 35, AASHTO H20 HEAVY-DUTY, SLIP-RESISTANT

3. DESIGN CONSIDERATIONS

- OUTDOOR USE: DESIGNED TO WITHSTAND OUTDOOR CONDITIONS
- SANITARY SEWER RUNOFF FLOW CAPACITY (MATCH TO SIZE OF SANITARY PIPE SIZE):
 - 4" DD400 211 GPM
 - 6" DD600 317 GPM
 (FLOWRATE VALUES ARE CERTIFIED FOR 20" HEAD)
- STORMWATER RUNOFF FLOW CAPACITY (SIZE OF STORMWATER PIPE SIZE @ 2% SLOPE):
 - 4" PIPE: 0.23 CFS / 105 GPM
 - 6" PIPE: 0.69 CFS / 309 GPM
 - 8" PIPE: 1.49 CFS / 667 GPM
 - 10" PIPE: 2.37 CFS / 1,064 GPM
 - 12" PIPE: 3.86 CFS / 1,733 GPM
 - 18" PIPE: 9.68 CFS / 4,344 GPM
 - 20" PIPE: 12.82 CFS / 5,754 GPM
 - 24" PIPE: 20.85 CFS / 9,358 GPM
 (FLOWRATE VALUES ARE BASED ON MANNING'S ROUGHNESS ASAE EP 260.3 PLASTIC TUBING DRAINAGE CHART AND SHOULD BE USED FOR ESTIMATING PURPOSES ONLY.)

4. INSTALLATION REQUIREMENTS

- COMPLIANCE: INSTALLED IN ACCORDANCE WITH LOCAL CODES AND REGULATIONS
- LOCATION: DOWNSTREAM OF THE WASH RACK PAD DRAIN, UPSTREAM OF WHERE IT CONNECTS TO THE STORM OR SANITARY SEWER
- ACCESSIBILITY: EASILY ACCESSIBLE FOR MAINTENANCE
- EXECUTION: INSTALLED BY A LICENSED PLUMBER OR CONTRACTOR

5. TESTING AND CERTIFICATION

- STANDARDS: TESTED AND CERTIFIED TO COMPLY WITH PERFORMANCE STANDARDS SET BY LOCAL REGULATORY AUTHORITIES
- CERTIFICATION: IAPMO UPC IGC234 LISTED

6. MANUFACTURER WARRANTY

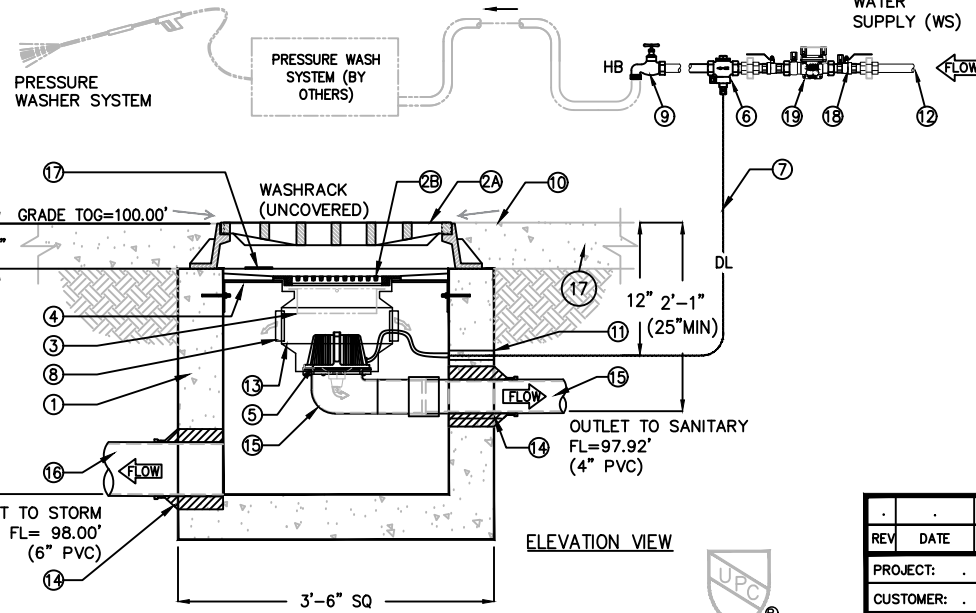
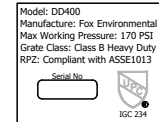
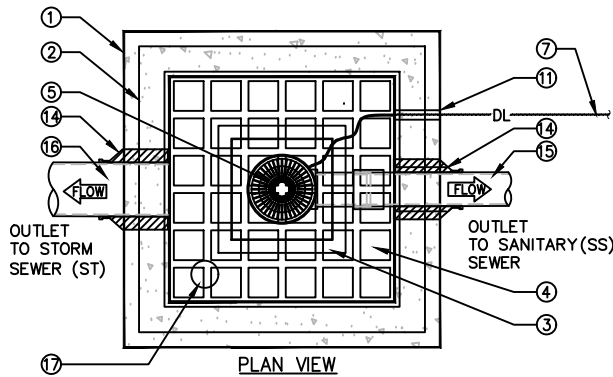
- COVERAGE: ONE-YEAR WARRANTY FROM THE INSTALLATION DATE AGAINST MATERIAL AND WORKMANSHIP DEFECTS

7. SYSTEM ASSEMBLY

- FACTORY ASSEMBLED AND PRETESTED: ENSURING STRUCTURAL AND HYDRAULIC INTEGRITY
- COMPLIANCE: CONFORMS TO UPC AND ACI BUILDING CODES
- BUOYANCY PREVENTION: DESIGN ACCOUNTS FOR PREVENTION OF BUOYANCY EFFECTS

8. FIELD EXCAVATION AND PREPARATION

- REQUIREMENTS: COMPLETED PRIOR TO DELIVERY OF THE UNIT
- GUIDELINES: USE DIMENSIONAL DATA AS SHOWN IN THE DESIGN SPECIFICATIONS



WASH BAY DRAIN DIVERTER SYSTEM SCHEDULE									
SYMBOL	DESCRIPTION	PROVIDE THE FOLLOWING SIZE BRANCH						REMARKS	SPECIFICATION
		CW	HW	SAN	STM	VENT	DRIVE		
WDFX-1	WASH BAY DRAIN DIVERTER VALVE	1"	-	4"	4"	-	1/2"	3" FOR DRIVE LINE FROM DEMAND VALVE TO DIVERTER VALVE	FOX DIVERSION VALVE BY NWPX PARK MODEL DSB-C-3030-WRK-DD3-04 DEMAND DRIVEN DIVERSION SYSTEM, CONSISTING OF 30"x30"x30" DEEP ID INLET BASIN, PRECAST CONCRETE CONSTRUCTION, 30" SQ CAST IRON FRAME & GRATE (TRAFFIC RATED), SKIMMER BASKET, HYDRO-ACTUATED DIVERTER VALVE, 4" STORM & 4" SANITARY DISCHARGE SLEEVES, 3" ACTUATOR PIPING CONNECTION, AND 1" DEMAND VALVE *UPC LISTED* IAPMO IGC 234 2016 FILE NUMBER 10153

KEYED NOTES		
MRK	QTY	DESCRIPTION
1	1	TYPE-A 30"x30" INLET BASIN
2A	1	30"x30" TYPE-A CAST IRON FRAME & GRATE, HEAVY DUTY AASHTO H-20 RATED
2B	1	GALVANIZED STEEL BAR GRATE, MEDIUM DUTY
3	1	SOLIDS SCREEN BASKET
4	1	DIVERSION VALVE TRAY
5	1	HYDRAULIC DIVERSION VALVE
6	1	DEMAND VALVE
7	1	3" DRIVE LINE
8	1	STORMWATER OVERFLOW
9	1	HOSE CONNECTION OPTIONS HB - 3/4" HOSE BIB (LEAD-FREE BRASS) GH - 1" GROUND HYDRANT IN CAST IRON BOX, FREEZE PROOF KEY (LEAD-FREE BRASS) YH - 1" YARD HYDRANT, FREEZE PROOF (LEAD-FREE BRASS)
10	1	CONCRETE APRON (BY OTHERS)
11	1	3/4" FULL COUPLING CONNECTION FOR DRIVE LINE
12	-	COLDWATER SUPPLY, (WS)
13	1	1" DEMAND VALVE (LEAD-FREE BRASS)
14	2	1" SHUT OFF VALVE (LEAD-FREE BRASS)
15	1	OUTLET TO SANITARY SEWER
16	1	OUTLET TO STORM SEWER
17	1	NAMEPLATE INDICATING: PROJECT NAME MODEL: WDFX-DD400 ORDER: MFG DATE: MFG BY: 888-611-PARK WWW.PARKUSA.COM
18	1	1" SHUT OFF VALVE (LEAD-FREE BRASS)
19	1	RPZ BACKFLOW PREVENTER, 1"

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REV	DATE	BY	DESCRIPTION
PROJECT: .			
CUSTOMER: .			
ENGINEER: .			
ORDER #:		PROJ #:	
DATE:		LOCATION:	
WASH BAY DIVERTER SYSTEM MODEL DSB-C-3030-WRK-DD3-04			
PM JH	PC ER	DRN CE	ENG CE
DATE 12/2025		DWG. NO. DSB-C-3030-WRK-DD3-04	
			REV. A