

GENERAL INFORMATION

THE NWPX DIVERSION SYSTEM MODEL WRDV-DD600 IS A HYDRAULICALLY ACTUATED DIVERSION SYSTEM DESIGNED FOR OUTDOOR WASH AREAS AND OTHER UNCOVERED SURFACES WHERE CONTAMINATED RUNOFF MAY OCCUR. THE SYSTEM UTILIZES FOX DD600 DEMAND-DRIVEN DIVERSION TECHNOLOGY AND IS ACTIVATED FROM THE WASH POINT WITHIN THE WASH PAD AREA.

DURING WASHDOWN OPERATIONS, THE SYSTEM AUTOMATICALLY DETECTS POTABLE WATER USAGE AND DIVERTS CONTAMINATED WASH WATER TO THE APPROPRIATE TREATMENT SYSTEM.

CONTAMINATED WASH WATER IS DIRECTED TO AN OIL-WATER SEPARATOR FOR PRETREATMENT, AND THEN DISCHARGED TO A PRIVATE WASTEWATER (SANITARY) SEWER SYSTEM. THIS DIVERSION PROCESS PREVENTS POLLUTANTS GENERATED DURING WASH OPERATIONS FROM ENTERING THE STORMWATER DRAINAGE SYSTEM OR THE SURROUNDING ENVIRONMENT.

THE WRDV-DD600 DIVERSION SYSTEM IS PREFABRICATED AND PRE-PIPED AT THE FACTORY, ALLOWING FOR RAPID INSTALLATION IN THE FIELD. ALL INTERNAL PIPING, DIVERSION CONTROLS, AND MECHANICAL COMPONENTS ARE ASSEMBLED PRIOR TO SHIPMENT.

EACH SYSTEM IS FACTORY INSPECTED AND TESTED TO VERIFY PROPER HYDRAULIC OPERATION OF THE DIVERSION CONTROLS PRIOR TO DELIVERY TO THE PROJECT SITE.

SYSTEM OPERATION

DURING NORMAL STANDBY CONDITIONS, RUNOFF ENTERING THE DIVERSION BASIN FLOWS DIRECTLY TO THE STORM SEWER SYSTEM.

DURING WASHDOWN OPERATIONS, POTABLE WATER FLOW ACTIVATES THE FOX DEMAND VALVE, WHICH HYDRAULICALLY ACTUATES THE DIVERSION VALVE. ALL RUNOFF FROM THE WASH PAD IS THEN DIVERTED TO AN OIL-WATER SEPARATOR AND SUBSEQUENTLY DISCHARGED TO THE SANITARY SEWER SYSTEM.

WHEN WASH OPERATIONS STOP, THE DIVERSION VALVE AUTOMATICALLY RETURNS TO STANDBY MODE, ALLOWING RAINFALL RUNOFF TO DISCHARGE TO THE STORM SEWER SYSTEM.

SYSTEM COMPONENTS

DIVERSION BASIN

PRECAST CONCRETE BASIN WITH DUCTILE IRON FRAME AND GRATE RATED FOR H-20 TRAFFIC LOADING. THE BASIN HOUSES THE DIVERSION ASSEMBLY THAT CONTROLS ROUTING OF RUNOFF FROM THE WASH PAD.

THE DIVERSION BASIN CONTAINS:

- FOX DD600 DIVERSION VALVE
- DRAINAGE PIT FOR SEDIMENT COLLECTION
- REMOVABLE SILT BASKET FOR DEBRIS CAPTURE
- HOT-DIP GALVANIZED (HDG) SUPPORT STRUCTURE
- STAINLESS STEEL (SS304) SERVICE PLATFORM

OPERATION SEQUENCE						
DEVICE				DIVERTER VALVE (DV)		NOTES
TAG#	DESCRIPTION	TYPE	ACTION	POSITION	DRAINS TO	
HB	HOSE BIBB	FLOW	NON FLOW	CLOSED	STORM	1
			FLOW	OPEN	WASTEWATER	2
DL	DRIVE LINE	PRESSURE	NON PRESSURIZED	CLOSED	STORM	1
			PRESSURIZED	OPEN	WASTEWATER	2
NOTES:						
1. THE DIVERTER VALVE (DV) WILL PERMANENTLY "CLOSE" ONLY AFTER WASH ACTIVITY STOPS & PROGRAMMED ELAPSED. FIRST FLUSH VOLUME IS REACHED.						
2. THE DIVERTER VALVE (DV) WILL "OPEN" UPON > ½ GPM FLOW DETECTED.						

APPLICATIONS

- MAINTENANCE WASHDOWN & GARAGES
- HANGAR FACILITIES
- FIRE STATIONS & TRANSPORTATION WASHDOWN FACILITIES
- CARWASHES
- STORMWATER RUNOFF
- SERVICE STATION FUEL DEPOTS
- MANUFACTURING FACILITY EFFLUENT WATER
- REMEDIATION WATER CLEANUP
- GENERAL INDUSTRY
- EQUIPMENT RENTAL & MANUFACTURING
- DUMPSTER & TRASH COMPACTOR AREAS

CONDUIT/WIRE/PIPE LEGEND

MARK	DESCRIPTION	ELECT	WIRE SIZE	CONDUIT SIZE
SAN	SANITARY SEWER	—	—	3/4"
STM	STORM SEWER	—	—	1/2"
DR	DIVERTER FLOAT SWITCH	—	—	3/4"
DL	DIVERTER DRIVE LINE	—	—	1/2"
WS	WATER SUPPLY LINE	—	—	1"

SPECIFICATIONS

CONCRETE

CONCRETE SHALL BE CLASS 1/II WITH A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS. THE UNIT SHALL BE OF MONOLITHIC CONSTRUCTION AT THE FLOOR AND FIRST-STAGE WALLS, WITH SECTIONAL RISERS PROVIDED AS REQUIRED TO ACHIEVE THE SPECIFIED DEPTH.

REINFORCEMENT

REINFORCEMENT SHALL CONSIST OF GRADE 60 STEEL REINFORCING BAR CONFORMING TO ASTM A615, PLACED ON REQUIRED CENTERS, OR APPROVED EQUAL.

COVERS & GRATE

MANHOLE FRAMES, COVERS, OR GRATES SHALL BE MANUFACTURED OF DUCTILE IRON CONFORMING TO ASTM A536, AASHTO M306, AND AASHTO M105. GRATING SHALL BE RATED FOR H-20 TRAFFIC LOADING.

ENGINEERING DATA

THE UNIT SHALL BE STRUCTURALLY AND HYDRAULICALLY ENGINEERED IN ACCORDANCE WITH UPC AND ACI BUILDING CODES. THE MANUFACTURER SHALL ENSURE THAT THE VALVE VAULT & DIVERSION BASIN ASSEMBLY DESIGN ACCOUNTS FOR BUOYANCY AND FLOTATION PREVENTION UNDER HIGH GROUNDWATER CONDITIONS.

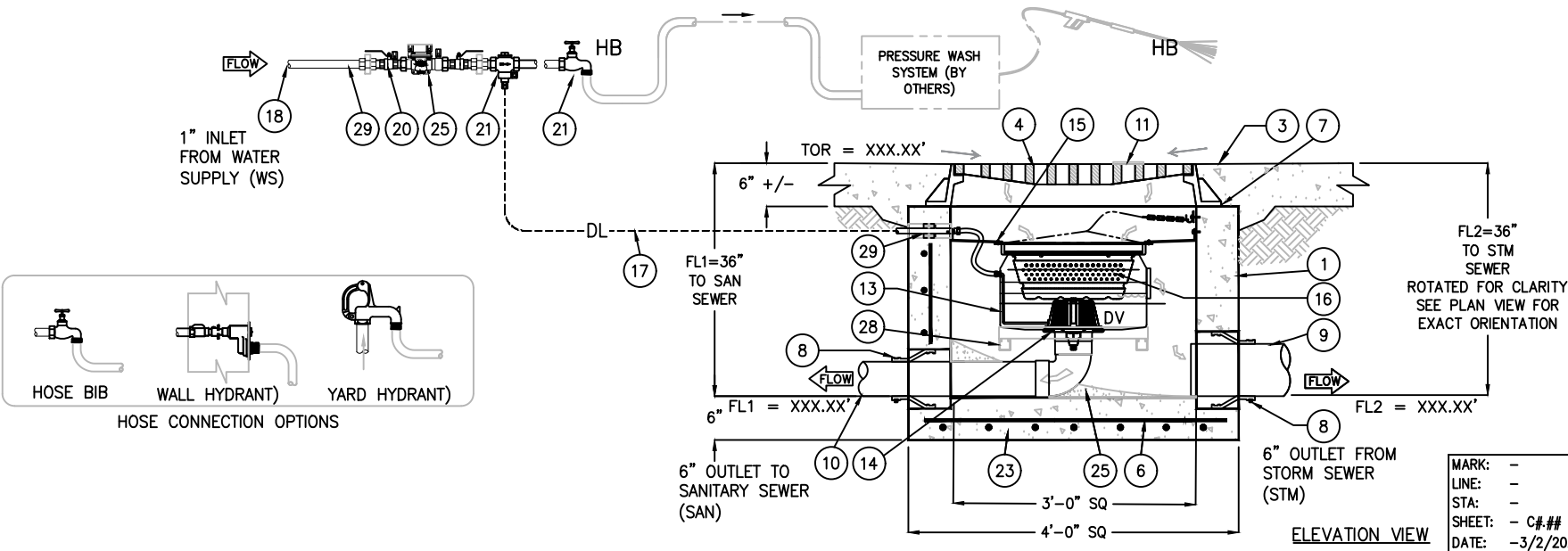
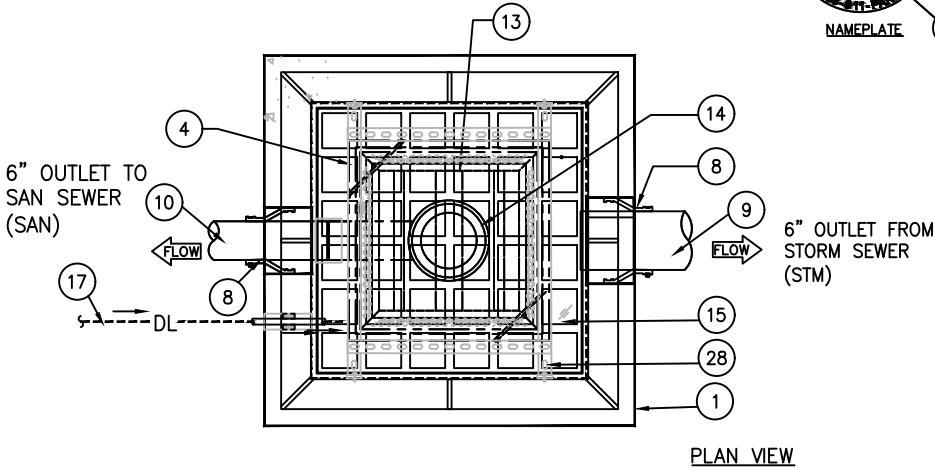
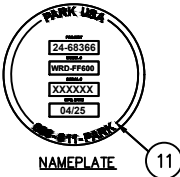
FIELD EXCAVATION AND SUBGRADE PREPARATION SHALL BE COMPLETED PRIOR TO DELIVERY OF THE UNIT. ALL DIMENSIONS SHALL CONFORM TO THE APPROVED DRAWINGS.

FLOWLINE INFORMATION

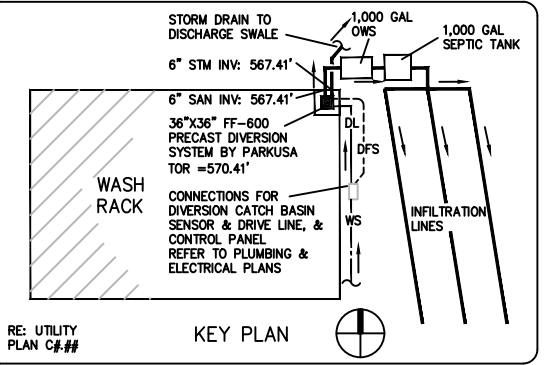
FL1 — THE MINIMUM WASTEWATER SEWER OUTLET FLOWLINE DEPTH IS 36" (TOR-FL).

FL2 — THE MINIMUM STORM OUTLET FLOWLINE DEPTH IS 36" (TOR-FL).

PIPE SIZES, ORIENTATIONS & ELEVATIONS TO BE CONFIRMED PRIOR TO PRODUCTION (TYP)



KEYED NOTES		
MARK	QTY	DESCRIPTION
1	1	DIVERSION BASIN, 36"x36" ID PRECAST CONCRETE
2	1	NOT USED
3	—	CONCRETE APRON (BY OTHERS)
4	1	FRAME & GRATE, 36"x36" DUCTILE IRON, ADA & TRAFFIC RATED
5	1	NOT USED
6	—	STEEL REINFORCEMENT
7	—	SEALED WATER-TIGHT W/ RAM-NEK SEALANT
8	2	RESILIENT RUBBER PIPE CONNECTIONS
9	1	6" DISCHARGE TO STORM SEWER (STM)
10	1	6" DISCHARGE TO SANITARY SEWER (SAN)
11	1	NAMEPLATE INDICATING: MFG: ParkUSA 888-611-PARK www.ParkUSA.com MODEL: WRDV-DD600 DATE MANUFACTURED
12	—	FLOW SWITCH FOR PROCESS WATER (AUX)
13	1	DIVERSION VALVE PIT (HDPE)
14	1	DIVERSION VALVE, DV (LEAD-FREE BRASS)
15	1	PLATFORM, SS304 STAINLESS STEEL
16	1	SILT SCREEN (HDPE) w/ RETRIEVAL CHAIN
17	1	1/2" DRIVELINE (PVC OR COPPER)
18	1	COLDWATER SUPPLY, (WS)
19	1	1" DEMAND VALVE (LEAD-FREE BRASS)
20	1	1" SHUT OFF VALVE (LEAD-FREE BRASS)
21	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)
22	1	NOT USED
23	1	MONOLITHIC BOTTOM
24	1	RPZ BACKFLOW PREVENTER, 1"
25	1	FACTORY GROUTED INVERT
26	1	NOT USED
27	1	NOT USED
28	1	PIT SUPPORT STRUCTURE, HDG STEEL
29	1	1/2" PIPE CONNECTION W/ PVC SLEEVE & LINKSEAL GASKET



A	2/2/26	CE	ORIGINAL SUBMITTAL	
REV	DATE	BY	DESCRIPTION	
PROJECT: .				
CUSTOMER: .				
ENGINEER: .				
ORDER #:		PROJ #:		
DATE:		LOCATION:		
				
WASHRACK DIVERSION VALVE ASSEMBLY MODEL DSB-C-3636-WRK-DD3-06				
PM	PC	DRN	ENG	REV.
	MH	ER	CE	
DATE 02/2026		DSB-C-3636-WRK-DD3-06		