



STANDARD FIRE HYDRANT DETAIL
NOT TO SCALE

REVISED 5/13/2025



PENNONI ASSOCIATES INC.
150 Ridge Road, Suite 2
Sellersville, PA 18960
T 215-257-5711 F 215-257-5766

FIRE HYDRANT
PREPARED FOR:
PERKASIE REGIONAL AUTHORITY

DESIGNED BY:	JAR
CHECKED BY:	SRT
DATE:	4/08/96
DRAWING NO.	PRA-W01 1 OF 2

MAUTHORITY CLIENTS/PERKASIEWATER DETAILS/PRA WATER DETAILS 2025 DWG
 PLOTTED: 7/19/2025 9:40:17 AM BY: TNA CARTER. PLOTSTYLE: PENNONI NCS.STB. PROJECT STATUS: ---

FIRE HYDRANT DESIGN, PURCHASE, AND INSTALLATION GENERAL NOTES:

1. DESIGN OF THE THRUST BLOCKS ARE BASED ON THE WATER TABLE BEING BELOW THE BLOCK. THE HORIZONTAL BEARING STRENGTH CHOSEN FOR DESIGN IS 2,000 PSF AND REPRESENTS A CONSERVATIVE VALUE FOR SANDY SILT SOILS. CONTACT THE AUTHORITY ENGINEER FOR A SPECIAL DESIGN IF THE WATER TABLE IS HIGHER, OR THE SOILS ARE SILT, SOFT CLAY, OR MUCK.
2. THE SOIL (ZONE OF INFLUENCE) BEHIND THE HYDRANT THRUST BLOCK IS TO REMAIN UNDISTURBED AND FREE OF OTHER UTILITIES. CONTACT PRA'S ENGINEER FOR GUIDANCE.
3. FOR PIPE BEDDING AND ENVELOPE DETAILS, REFER TO DETAIL PRA-S020. FOR TRENCH BACKFILL DETAILS, REFER TO DETAIL PRA-S021.
4. HYDRANTS SHALL MEET AWWA STANDARD C502 AND SHALL BE EITHER:
 - A. KENNEDY GUARDIAN MODEL K81D WITH STANDARD UPPER BARREL CONFIGURATION AND OPTIONAL 6" MECHANICAL JOINT INLET CONNECTION.
 - B. AMERICAN FLOW CONTROL 5-1/4 AMERICAN-DARLING B-62-B-5 TRAFFIC MODEL HYDRANT, OPEN DIRECTION IS LEFT (C.C.W.).
5. HYDRANTS SHALL BE ORDERED TO THE DEPTH OF BURY REQUIRED AT THE PROPOSED LOCATIONS BASED ON THE WATER MAIN DEPTH AND THE FINISHED GRADE ELEVATION. EXTENSIONS ARE NOT PERMITTED.
6. THE ABOVE GROUND FINISH EXTERIOR COATING SHALL BE YELLOW. CAP CHAINS ARE NOT REQUIRED.
7. THE PIPE TO THE HYDRANT SHALL BE 6" DIP WITH NO BENDS. THE HYDRANT SHALL BE INSTALLED IN THE TRUE VERTICAL POSITION. THE PUMPER NOZZLE SHALL FACE THE STREET.
8. TIE RODS SHALL BE 3/4" ASTM A307 STEEL WITH DUCT LUGS, A563 HEX OR HEAVY HEX NUTS AND F844 WASHERS. COAT ALL COMPONENTS WITH TWO COATS (8 MILS EACH, DMT) OF RUST-OLEUM C9578 SYSTEM COAL TAR EPOXY. FOLLOW MANUFACTURER'S REQUIREMENTS, INCLUDING A RECOAT TIME OF 16-25 HOURS, AND A HANDLE TIME OF 18-36 HOURS. ASTM F2329 HOT DIPPED GALVANIZED RODS AND COMPONENTS MAY BE USED IN PLACE OF COATED RODS AND COMPONENTS.
9. IF MORE THAN ONE SECTION OF PIPE IS INSTALLED BETWEEN THE HYDRANT VALVE AND THE HYDRANT, THEN ALL PIPE SLIP-ON JOINTS SHALL BE RESTRAINED WITH EBAA IRON SERIES 1700 RESTRAINT HARNESSSES. TIE RODS WILL NOT BE REQUIRED.
10. EIGHT MIL POLYETHYLENE FILM SHALL BE INSTALLED TO PROTECT COMPONENTS FROM THE CONCRETE AND TO PROTECT THE DRAIN PORTS.
11. CONCRETE SHALL BE CLASS A, 3,300 PSI. GEOTEXTILE SHALL BE PENNDOT NON-WOVEN, CLASS 4, TYPE A.

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