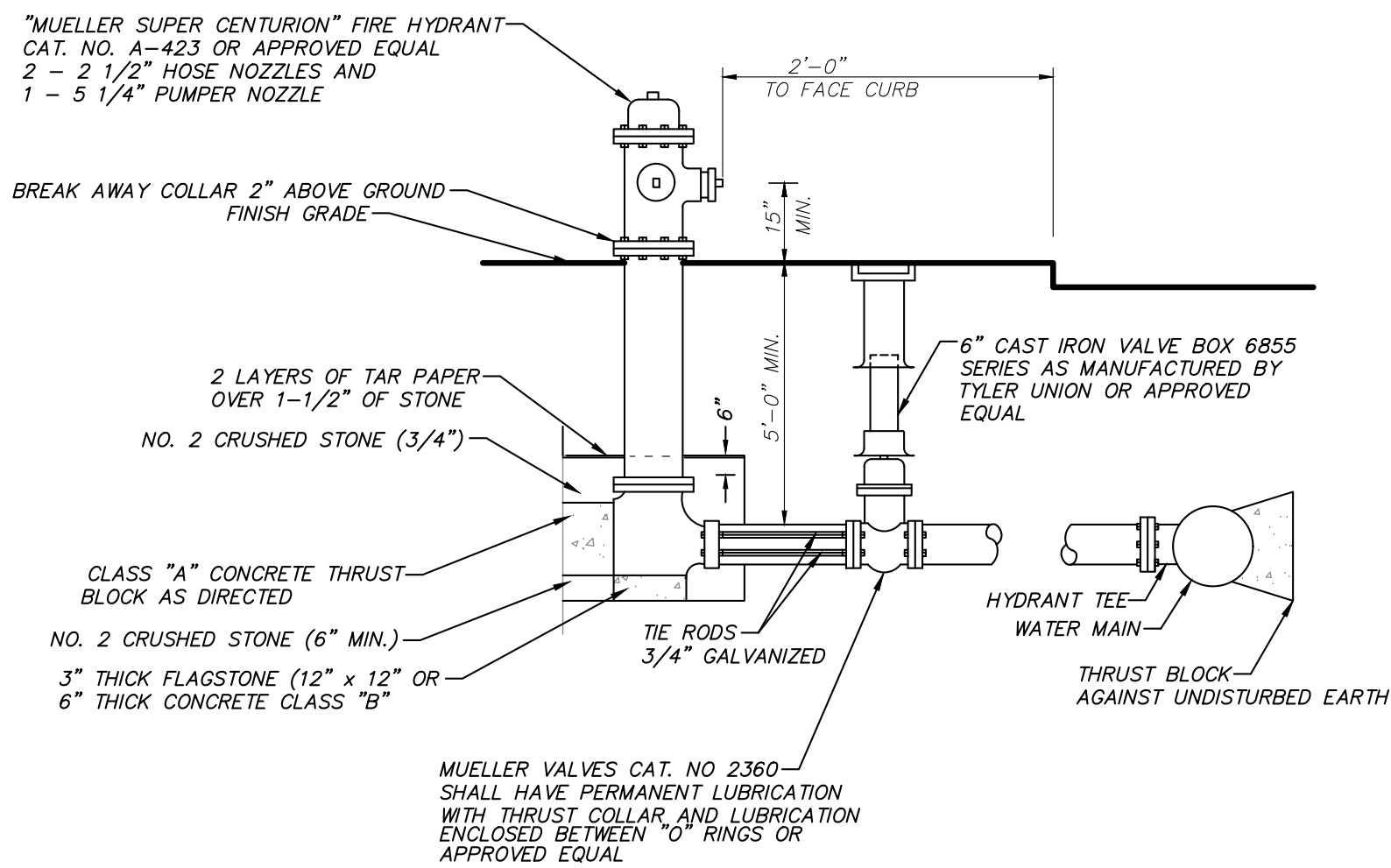


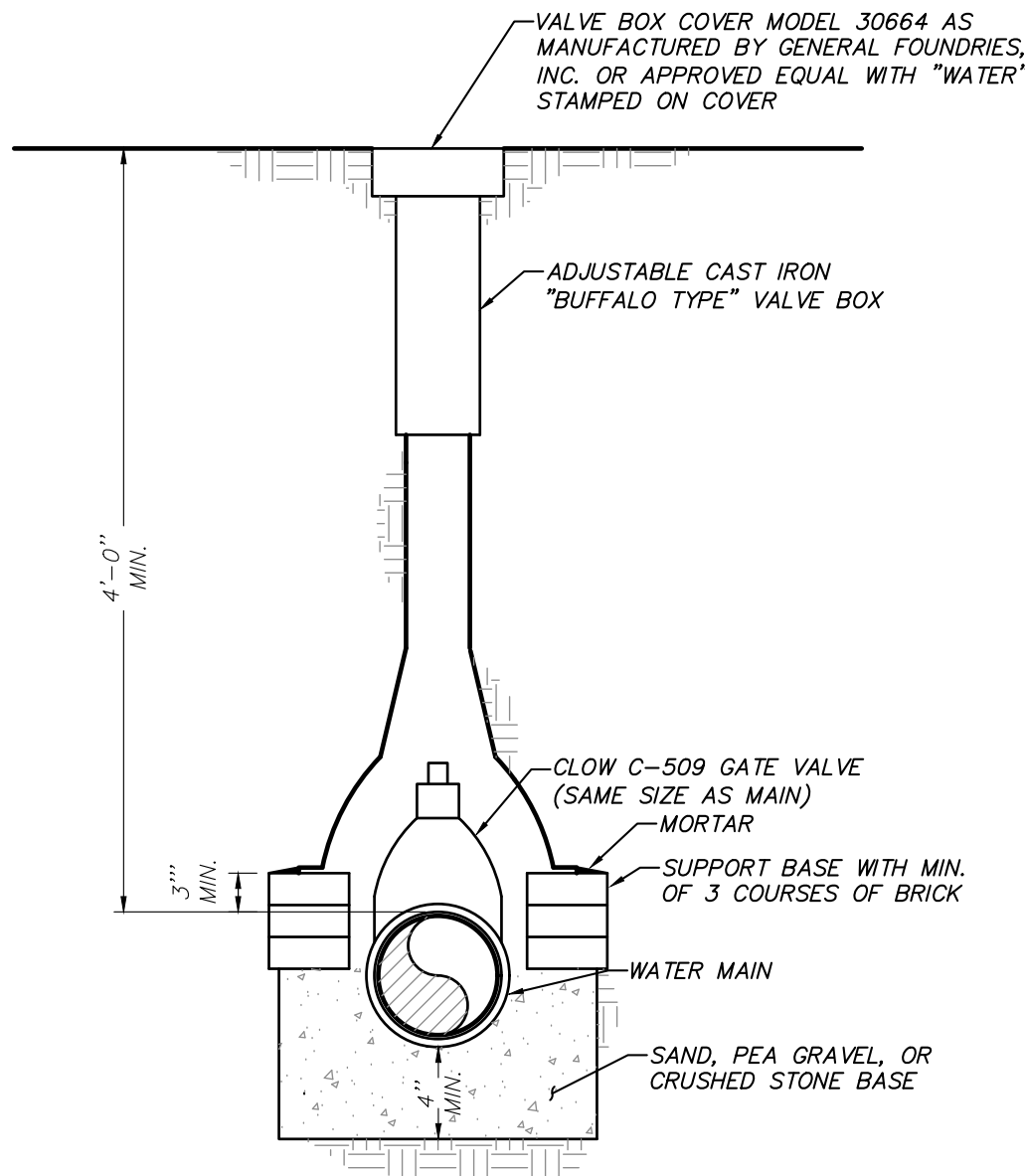
WATER MAIN TRENCH DETAIL
(N.T.S.)



HYDRANT NOTES:

1. PUMPER OUTLET SHALL FACE STREET;
2. HOSE OUTLETS SHALL BE PARALLEL TO STREET;
3. 1-1/2" STONE SHALL BE PLACED AROUND THE HYDRANT FROM THE BOTTOM OF THE TRENCH, BUT AT LEAST 6" BELOW THE BASE OF THE HYDRANT TO 6" ABOVE THE WASTE OPENING AND TO A DISTANCE OF 12" AROUND THE ELBOW.
4. IF GROUND WATER IS ENCOUNTERED WITHIN 2' OF SURFACE, THEN HYDRANT DRAINS SHOULD BE PLUGGED. WHEN THE DRAINS ARE PLUGGED, THE BARRELS MUST BE PUMPED DRY AFTER USE DURING FREEZING WEATHER. WHERE HYDRANT DRAINS ARE NOT PLUGGED, A GRAVEL POCKET OR DRY WELL SHALL BE PROVIDED UNLESS THE NATURAL SOILS WILL PROVIDE ADEQUATE DRAINAGE. HYDRANT DRAINS SHALL NOT BE CONNECTED TO OR LOCATED WITHIN 10 FEET OF SANITARY SEWERS OR STORM DRAINS.

HYDRANT DETAIL
(N.T.S.)



WATER MAIN GATE VALVE DETAIL
(N.T.S.)

DUCTILE IRON PIPE WATER MAIN NOTES:

1. All water mains shall be class 52 cement lined tyton joint ductile iron pipe, push on (rubber gasket) type and installed with 2 bronze wedges for continuous electrical conductivity per joint. All pipe and appurtenances shall be in accordance with the latest edition of AWWA/ANSI standard C900, C150/A21.50, C151/A21.51, C110/A21.10 and C104/A21.4.
2. All water main fittings shall be Class 350 ductile iron mechanical joints with "Field Lok 350" restrained joint gaskets (as manufactured by U.S. Pipe Foundry Co., or approved equal) in accordance with the latest AWWA/ANSI standard C111/A21.11.
3. All water mains and appurtenances shall be installed in accordance with the latest edition of AWWA C900.
4. Gate valves shall be "CLOW" or approved equal, iron body, non-rising stem conventional packing, resilient seated, mechanical joint with restrained joint gaskets, pressure class 50, opening shall be left (CCW) and operation shall be by 2" square wrench nut.
5. Every pipe joint and every fitting shall be secured with "Field Lok 350" restrained joint gaskets (as manufactured by U.S. Pipe Foundry Co., or approved equal) unless otherwise authorized by the Design Engineer, and with prior approval.
6. All water mains and appurtenances (including water service lines up to the curb stop) shall be pressure tested and leakage tested to the satisfaction of the Design Engineer. This shall be done in accordance with the latest edition of AWWA Standard C651, except for section 4.4.2 "the lab test method" will not be allowed.
7. All water mains and appurtenances shall be flushed, disinfected, and tested to the satisfaction of the Design Engineer. This shall be done in accordance with the latest edition of AWWA Standard C651, except for section 4.4.2 "the lab test method" will not be allowed.
8. Water mains shall be laid at least 10 feet horizontally from any existing or proposed sanitary or storm sewer main. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, the Design Engineer may allow deviation with prior approval on a case-by-case basis. If supported by data from the Design Engineer prior to the installation of the water line.
9. Water mains crossing sanitary or storm sewer mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. The vertical separation also applies to water service connections. In cases where it is not practical to maintain a 10 foot separation, the Design Engineer may allow deviation with prior approval on a case-by-case basis. If supported by data from the Design Engineer prior to the installation of the water line.
10. The Design Engineer and City of Middletown shall be notified forty eight (48) hours before construction is started.
11. The water mains shall not be placed into service until a certificate of construction compliance has been submitted to and accepted by the Orange County Department of Health.
12. The City of Middletown must be notified forty eight (48) hours prior to pressure testing the water main improvements.
13. Deflection of joints on water main shall not exceed 50% of the maximum deflection recommended by the manufacturer, or as ordered by the Design Engineer.
14. Exact location of all fittings shall be approved in the field by the Design Engineer.
15. The Design Engineer shall inspect all thrust blocks and sewer/drainage crossings prior to backfill.
16. The contractor shall notify the Design Engineer every day that water main construction shall occur.

NOTE:

For sewer and domestic water information, see plan set approved by Putnam County Department of Health.

8	9-16-20	RE-ISSUED FOR CONSTRUCTION	ERA
7	8-26-20	ISSUED FOR CONSTRUCTION	MEU
6	6-30-20	REVISED FOR FINAL PERMITTING	JLL
5	6-15-20	REVISED PER NYCDEP SUBMISSION	EJP
4	6-10-20	TOWN BOARD SUBMISSION	JLL
3	4-17-20	RESUBMISSION TO TOWN BOARD	JLL
2	3-21-20	RESUBMISSION TO PLANNING BOARD	AT
1	2-3-20	RESUBMISSION TO PLANNING BOARD	CZ
NO.	DATE	REVISION	BY
<div><div><div>ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.</div></div><div>3 Garrett Place Carmel, NY 10512 (845) 225-9690 (845) 225-9717 fax www.insite-eng.com</div></div>			
PROJECT: RESTAURANT DEPOT			
U.S. ROUTE 8, TOWN OF SOUTHEAST, PUTNAM COUNTY, NEW YORK			
DRAWING: DETAILS			
PROJECT NUMBER	20174.100	PROJECT MANAGER	J.J.C.
DATE	12-23-19	DRAWN BY	J.F.R.
SCALE	AS NOTED	CHECKED BY	J.L.L.
DRAWING NO.	D-4		
SHEET	15		