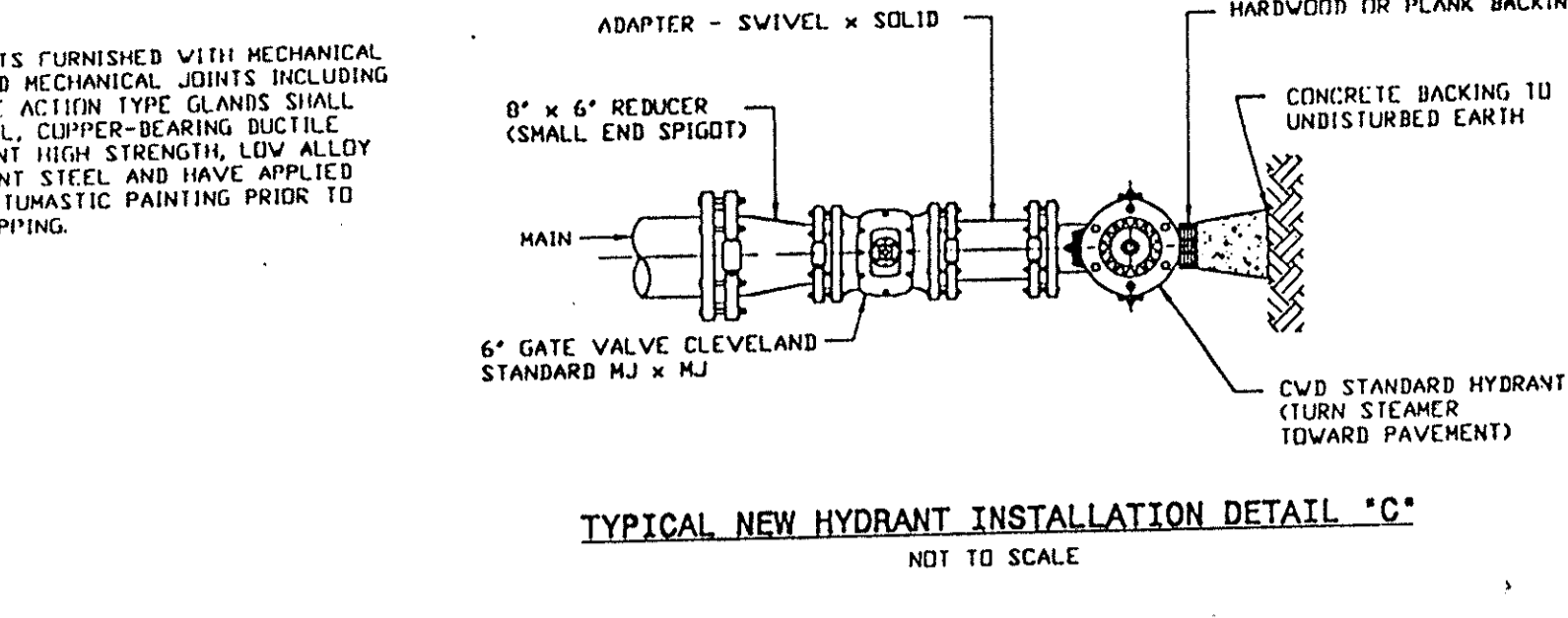
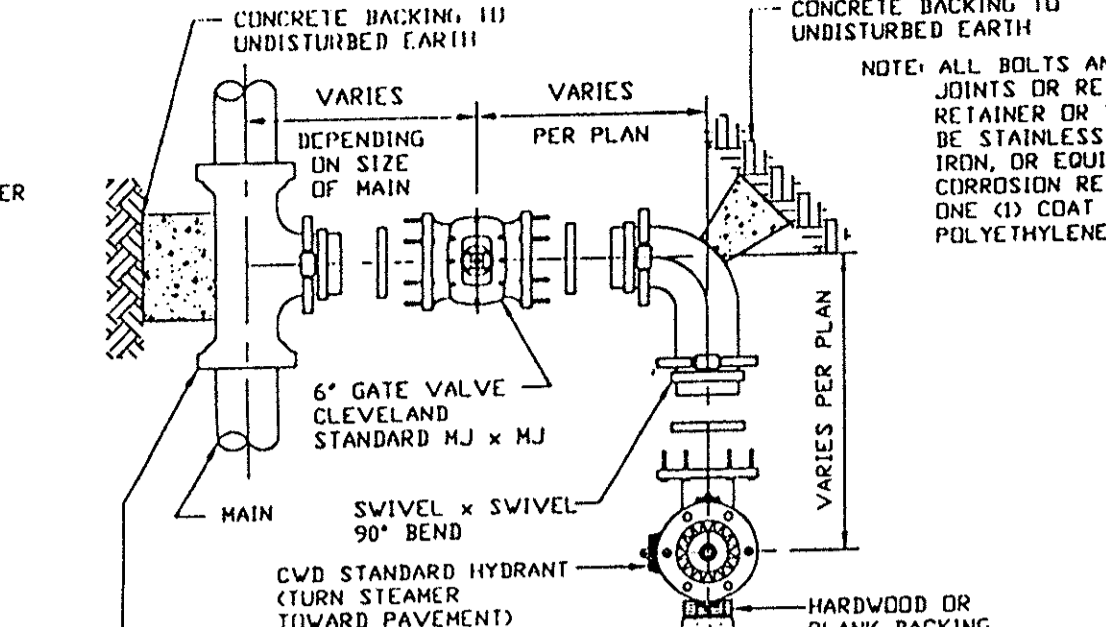
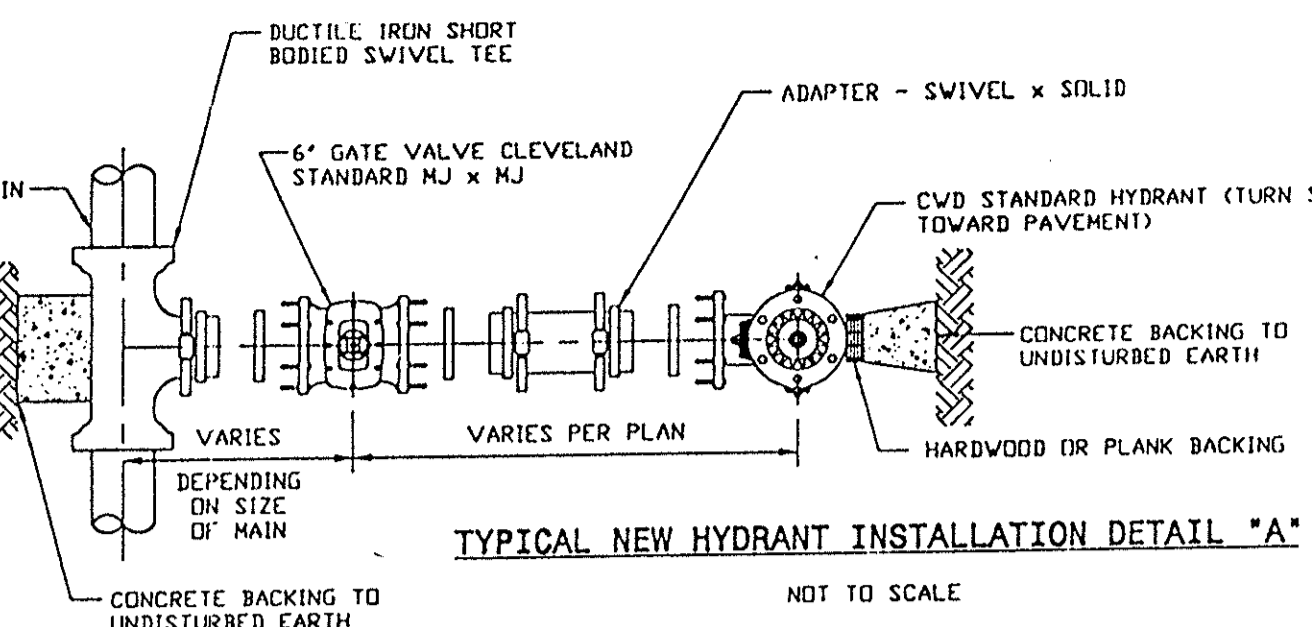


CONSTRUCTION NOTES: CLEVELAND WATER DEPARTMENT STANDARD

- WATER MAIN TO BE INSTALLED IN ACCORDANCE WITH THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE CITY OF CLEVELAND WATER DEPARTMENT. ALL PIPES SHALL BE MINIMUM CLASS 52 CEMENT LINED AND HAVE SOCKET BY PLAIN AND RUBBER GASKET. PUSH-ON JOINTS WITH RADICALLY COMPRESSED LOCKED IN PLACE. RUBBER GASKET. ALL FITTINGS SHALL HAVE BELL OR FLANGE END TO THE MECHANICAL BOLTED STUFFING BOX TYPE WITH PIPE OR FITTING PLAIN END SEALING GASKET AND BOLTED FOLLOWER GLAND. ALL JOINTS ON BENDS, TEES, CROSSES, VALVES, SPECIAL FITTINGS AND PIPE BETWEEN OFFSETS OR BENDS SHALL HAVE RETAINED MECHANICAL JOINTS. ALL VALVES AND TEES SHALL HAVE BELL JOINTS OR THE MECHANICAL BOLTED STUFFING BOX TYPE. ON HYDRANT BRANCHES, ALL JOINTS, INCLUDING THE TEE OUTLET, HYDRANT ELBOW AND BRANCH VALVE SHALL HAVE RETAINED MECHANICAL JOINTS. ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS INCLUDING THOSE USED ON THE RETAINED TYPE SHALL HAVE FIELD APPLIED, ONE (1) COAT OF BITUMASTIC PAINTING. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE ENCASED IN ACCORDANCE WITH AWWA C-105/A215-BB. CLASS 'C' METHOD 'B'. WHEN SHOWN ON THE PLANS OR DIRECTLY SPECIFIED, PIPE AND FITTINGS HAVING APPROVED BOLTS RESTRAINED, SLIP-ON JOINTS SHALL BE FURNISHED TO THE LIMITS INDICATED.
- ALL HYDRANT ASSEMBLIES INCLUDING VALVE, BRANCH TEE OUTLET, PIPE, ANY NECESSARY OFFSETS AND APPROVED HYDRANT SHALL BE NOMINAL SIX (6) INCH SIZE AND HAVING NATIONAL STANDARD (NPT) THREADS.
- MINIMUM DEPTH OF WATER MAIN COVER SHALL BE SIX (6) FEET BELOW ESTABLISHED GRADE EXCEPT WHERE CROSSING OVER OBSTRUCTION, WHERE MINIMUM COVER SHALL BE FIVE (5) FEET UNLESS OTHERWISE SHOWN OR NOTED.
- ALL WATER MAIN TRENCHES AND EXCAVATIONS UNDER EXISTING OR FUTURE PAVEMENT, SIDEWALKS OR DRIVES SHALL BE BACKFILLED WITH LIMESTONE SCREENING.
- PRE-URE TESTING OF WATER MAINS, WHERE THEY ARE CONNECTED TO AN EXISTING WATER MAIN TO TEST, RESULTING IN FAILURE OF TEST OR ANY DAMAGE TO EXISTING WATER MAIN FACILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PROVISIONS RELATED TO THE PUBLIC IMPROVEMENTS IN SECTION 182.84 OF THE OHIO REVISION CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OHIO UTILITIES PROTECTION SERVICE (O.U.P.S.) AT 1-800-362-2784 AND THOSE OWNERS OF UNDERGROUND UTILITIES IN THE VICINITY OF ANY WORK, REFERENCE O.U.P.S.
- THE CONTRACTOR SHALL PROVIDE THE TAPS FOR DISINFECTION BY CHLORINATION. THE DIVISION OF WATER WILL DETERMINE LOCATION AND NUMBER OF TAPS. THE CONTRACTOR SHALL PROVIDE A SIX FOOT (6') SQUARE SHEETED AND SHORED PIT AT THE LOCATION OF THE CHLORINATION TAPS.
- THE CONTRACTOR SHALL ARRANGE WITH THE DIVISION OF WATER FOR ANY TAPS FOR SERVICE CONNECTIONS AND DISINFECTION BY CHLORINATION. THE CONTRACTOR SHALL PAY THE DIVISION OF WATER BEFORE THE WORK IS PERFORMED. THE AMOUNT OF CHARGES CAN BE OBTAINED FROM THE PERMITS AND SALES SECTION OF THE DIVISION OF WATER AT 884-2444. EXT. 5201
- ALL WATER SERVICE CONNECTIONS SHALL BE LAID NOT LESS THAN SIX (6) FEET BELOW ESTABLISHED STREET GRADE AND NOT LESS THAN FIVE AND ONE-HALF (5 1/2) FEET BELOW GROUND SURFACE.
- HYDRANT INSTALLATIONS: THE CONTRACTOR IS RESPONSIBLE TO FACE ALL HYDRANT STEAMER NOZZLES TOWARD THE PAVEMENT, PRIOR TO TESTING AND CHLORINATION OF WATER MAINS.
- THE MUNICIPALITY SHALL REQUIRE THAT THE PROFESSIONAL ENGINEER TAKE ACTUAL FIELD MEASUREMENTS OF THE MAIN DURING INSTALLATION AND SHALL FURNISH THE COMMISSIONER OR HIS AUTHORIZED AGENT WITH RECORD PRINTS OF THE SAME. THE CITY OF CLEVELAND WILL REQUIRE THE DELIVERY OF SUCH RECORD (AS-BUILT) PRINTS BEFORE FINAL TESTING OF THE MAIN. THIS PRECLUDES THE USE OF THE WATER MAIN UNTIL STERILIZED AND THE WATER PRONOUNCED FIT FOR HUMAN CONSUMPTION.
- AS PER THE CITY OF CLEVELAND WATER DEPARTMENT, IT IS STIPULATED THAT OPERATION OF ANY VALVE OR ALTERATION OF ANY PART OF THE WATER SYSTEM BY CONTRACTORS OR THEIR EMPLOYEES IS PROHIBITED. CALL MR. RICHARD KAMETZ AT 884-2342 TO HAVE THE VALVES OPERATED.
- ALL WATER SERVING CORPORATION BOXES, METER VAULTS, ETC. WILL BE INSTALLED IN GRASS AREAS.
- THE BUILDER/DEVELOPER OR AGENT IS HEREBY NOTIFIED TO FURNISH SPACE AND ACCESS FOR WATER MAIN INSTALLATION IN BASEMENT OR LOWEST LEVEL OF SAID PREMISES. PIPING AND METER INSTALLATION WILL BE PER CLEVELAND WATER DEPARTMENT STANDARDS.
- WATER FOR BUILDING PURPOSES WILL BE AVAILABLE AT FIRE HYDRANTS. PERMITS TO USE HYDRANTS WILL BE OBTAINED FROM THE PERMITS AND SALES UNIT AT 884-2444 EXT. 5201.
- WIRE FOR READMATIC INSTALLATION MUST BE RUN BY THE BUILDER/DEVELOPER. WIRE CAN BE SECURED BY CONTACTING 348-7277, EXT. 3100
- IN THOSE AREAS WHERE IT IS REQUIRED TO LOWER THE WATER MAIN TO CLEAR AN OBSTACLE AND THE COVER WILL BE GREATER THAN EIGHT FEET (8'), IT SHALL BE REQUIRED THAT BENDS BE INSTALLED TO BRING THE WATER MAIN UP TO THE STANDARD SIX FEET (6') OF COVER.
- WHEN A WATER SERVICE CONNECTION IS DISTURBED OR DISCONNECTED DURING TRENCH OR SHEETING EXCAVATION THE CONTRACTOR WILL REPLACE THE WATER CONNECTION WITH ALL NEW MATERIAL FROM THE CORPORATION SHUT-OFF TO THE CURB SHUT-OFF VALVE.
- USE SUITABLE BACKFILL MATERIAL AND COMPACT SUFFICIENTLY IN THOSE AREAS WHERE MAINS AND WATER SERVICE CONNECTIONS ARE EXPOSED.
- ALL WATER WORK REQUIRED WILL BE AT THE EXPENSE OF THE PROJECT AND SHALL CONFORM TO CLEVELAND WATER DEPARTMENT STANDARDS.
- THE INFORMATION SHOWN ON CLEVELAND WATER DEPARTMENT'S LETTER AND STRIP MAPS ARE TAKEN FROM EXISTING AVAILABLE RECORDS.
- A TWO YEAR WARRANTY ON ALL WATER SERVICE CONNECTIONS IN THE SEWER EXCAVATION AREAS WOULD BE THE RESPONSIBILITY OF THE CONTRACTOR SHOULD ANY LEAKS OR REPAIRS BE NEEDED.
- THRUST BLOCKS (CONCRETE PIERS) ARE REQUIRED BEHIND ALL TEES, HORIZONTAL BENDS, AND HYDRANT ELBOWS. THE CONTRACTOR SHALL INSTALL A CONCRETE THRUST BLOCK BEHIND ALL BRANCH SLEEVES IN WHICH THE NOMINAL TAP SIZE IS ONE-HALF OR GREATER THAN THE NOMINAL DIAMETER OF THE PIPE TO BE TAPPED. THE CONCRETE PIER SHALL BE IN PLACE AND CURED PRIOR TO THE HYDROSTATIC TESTING OF THE CONNECTING MAINS. THE CONCRETE PIER BEHIND THE TAPPING SLEEVE IS REQUIRED ON ALL CONNECTING MAINS AND SERVICE CONNECTIONS.
- CONTACT MR. RICHARD KAMETZ, SUPERVISOR OF THE INSPECTION AND ENFORCEMENT UNIT OF THIS DIVISION AT 884-2342 THREE DAYS PRIOR TO THE START OF THE PROJECT.

ADDITIONAL NOTES FOR WORK IN THE NORTH HILLS WATER DISTRICT

- NH1. GENERAL**
ALL WATER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE CITY OF CLEVELAND, DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER, 1201 L. LESDE AVENUE, CLEVELAND, OHIO 44113, AND THE NORTH HILLS WATER DISTRICT ("N.H.W.D."). ALL PERMITS AND FEES CHARGED BY THE N.H.W.D. SHALL BE PAID TO THE DISTRICT PRIOR TO THE COMMENCEMENT OF ANY WATER WORK UNDER THIS CONTRACT.
- NH2. HYDRANTS**
ALL HYDRANTS SHALL BE OF THE "BREAKAWAY" TYPE, KENNEDY KAT1 AS PER THE CITY OF CLEVELAND'S STANDARDS. HYDRANTS SHALL BE SUPPLIED WITH 1/2" O.D. STANDARD THREADED ONE (1) 1/2" STEAMER NOZZLE, TWO HOSE NOZZLES, PER THE N.H.W.D. STANDARDS. A SIX INCH HYDRANT ASSEMBLY SHALL INCLUDE THE TEE OR REDUCER AS APPLICABLE, VALVE BOX, PIPE, AND A STANDARD 8" HYDRANT SET TO THE PROPER GRADE. THE THROGGS ON ALL NOZZLE CAPS SHALL BE GREASED BY THE CONTRACTOR PRIOR TO HYDRO-STATIC TEST OF THE SYSTEM.
- NH3. WATER MAIN**
THE CONTRACTOR SHALL SUPPLY PROOF TO THE N.H.W.D. ENGINEER OF HAVING MADE PAYMENT TO THE CITY OF CLEVELAND WATER DEPARTMENT FOR ANY AND ALL TESTING, CHLORINATION, AND TAPPING INTO THE WATER MAIN AND APPURTENANCES. ALL WATER MAINS CONSTRUCTED IN CIRCULATION MAINS AREAS OR IN NON-DEDICATED STREETS OR PRIVATE WAYS SHALL BE COMPLETELY WRAPPED IN POLYETHYLENE PER N.H.W.D. STAP 74000.
- NH4. TESTING AND INSPECTION**
ALL WATER NECESSARY FOR THE SATISFACTORY COMPLETION OF ALL CLASSES OF WORK SHALL BE FURNISHED BY THE CONTRACTOR AT HIS EXPENSE. THE N.H.W.D. ENGINEER SHALL BE NOTIFIED AT LEAST 72 HOURS BEFORE ANY SUCH WORK IS DONE ON THE WATER MAIN SO THAT HE OR HIS AUTHORIZED REPRESENTATIVE MAY BE PRESENT. ANY OF THE AFORESAID NOT COMPLIED WITH, OR DONE IN THE ABSENCE OF THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE WILL NOT BE ACCEPTED AND SHALL BE RETESTED AT THE CONTRACTOR'S EXPENSE.
A 72 HOUR NOTICE SHALL BE GIVEN BY THE CONTRACTOR TO THE OFFICE OF THE CITY OF CLEVELAND, DIVISION OF WATER AND THE N.H.W.D. ENGINEER IN ADVANCE OF THE START OF ACTUAL CONSTRUCTION WORK, WHETHER INITIAL OR AFTER CESSATION OF WORK DUE TO ANY CAUSE. ALL EXPENSES CONNECTED WITH THE IMPROVEMENT OF THE WATER MAIN BY THE CITY OF CLEVELAND OR THE N.H.W.D. SHALL BE BORNE BY THE DEVELOPER OF THE CONSTRUCTION.
- NH5. ITEM 11 ABOVE IS HEREBY AMENDED IN THAT THE N.H.W.D. ENGINEER OR HIS AUTHORIZED REPRESENTATIVE WILL TAKE FIELD MEASUREMENTS OF THE MAIN DURING INSTALLATION AND SHALL PREPARE AND FURNISH RECORD MEASUREMENTS TO THE CITY OF CLEVELAND.**



NOTE: IN LIEU OF SWIVEL BRANCH TEES AND ADAPTERS CONTRACTORS MAY FURNISH HYDRANT BRANCHES HAVING RETAINED MECHANICAL JOINTS INCLUDING HYDRANT SHOE. ALL MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINT. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C-105/A215-BB CLASS 'C' METHOD 'B'.

NOTE: ALL BOLTS AND NUTS FURNISHED WITH MECHANICAL JOINTS OR RETAINED MECHANICAL JOINTS INCLUDING HYDRANT SHOE. ALL MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINT. ALL MECHANICAL JOINTS SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C-105/A215-BB CLASS 'C' METHOD 'B'.

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