

# GENERAL NOTES

## WATERWORK NOTES

CALC. BY:	LAK - 535 - 0.42	OHIO	183 225
DATE:		FHWA	
CHKD. BY:	HIGH STREET / WATER STREET	REGION 5	
DATE:			

### SCOPE OF WORK

THE WORK CONTEMPLATED UNDER THIS CONTRACT COMPRISES THE FURNISHING AND INSTALLING COMPLETE WITH VALVES, FIRE HYDRANTS AND OTHER APPURTENANCES, THE PERMANENT RELOCATION OF A 12" DUCTILE IRON PIPE WATER MAIN AND PERFORMING OTHER INCIDENTAL WORK NECESSARY TO ABANDON EXISTING WATER FACILITIES. THE EXISTING WATER MAIN AND FACILITIES SHALL NOT BE ABANDONED UNTIL THE RELOCATED WATER MAIN, SERVICE BRANCHES, FIRE HYDRANTS AND OTHER APPURTENANCES HAVE BEEN INSTALLED, TESTED, CHLORINATED AND ACCEPTED BY THE VILLAGE OF FAIRPORT HARBOR BOARD OF PUBLIC AFFAIRS.

THE CONTRACTOR SHALL DO ALL THE WORK AND FURNISH ALL THE LABOR AND MATERIAL NECESSARY FOR THE FINAL COMPLETION OF THIS CONTRACT IN THE MANNER AND UNDER THE CONDITION HEREIN SPECIFIED AND PROVIDED AND IN ACCORDANCE WITH THE CONTRACT DRAWINGS.

### DEFINITIONS

WHENEVER IN THESE SPECIFICATIONS OR IN ANY DOCUMENTS OR INSTRUCTIONS IN CONSTRUCTION WHERE THESE SPECIFICATIONS GOVERN, THE FOLLOWING TERMS ARE USED, OR PRONOUNS IN PLACE OF THEM, THE INTENT AND MEANING SHALL BE INTERPRETED AS FOLLOWS:

#### THE STATE

THE STATE IS THE STATE OF OHIO ACTING THROUGH ITS AUTHORIZED REPRESENTATIVE.

#### ENGINEER

THE ENGINEER IS THE DISTRICT DEPUTY OR DISTRICT ENGINEER, THE DISTRICT MAINTENANCE ENGINEER, OR THE PROJECT ENGINEER ASSIGNED TO ADMINISTER THE CONTRACT.

#### THE VILLAGE

THE VILLAGE IS THE VILLAGE OF FAIRPORT HARBOR, THE FAIRPORT HARBOR WATER DEPARTMENT, OR THE BOARD OF PUBLIC AFFAIRS OF THE VILLAGE OF FAIRPORT HARBOR.

### STATUS OF VILLAGE INSPECTION

INSPECTORS AS DESIGNATED BY THE VILLAGE SHALL BE AUTHORIZED TO INSPECT ALL WORK DONE AND MATERIALS FURNISHED. SUCH INSPECTION MAY EXTEND TO ALL OR ANY PART OF THE WATERWORK, AND TO THE PREPARATION OR MANUFACTURE OF THE WATERWORK, AND TO THE PREPARATION OR MANUFACTURE OF THE MATERIALS TO BE USED IN THE WATERWORKS. THE INSPECTOR AS DESIGNATED BY THE VILLAGE SHALL MAKE WORK INSTRUCTIONS THROUGH THE PROJECT ENGINEER.

### SPECIFICATIONS

THE STANDARD CONSTRUCTION AND MATERIALS SPECIFICATIONS OF THE LAKE COUNTY REGIONAL SEWER DISTRICT NO. 1, DATED FEBRUARY 15, 1983 SHALL GOVERN ALL WATERWORK ON THIS PROJECT EXCEPT AS SPECIFICALLY MODIFIED HEREIN.

### ACCESS TO WORK AND PLACE OF MANUFACTURE

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE VILLAGE, AT LEAST SEVEN (7) DAYS PREVIOUS TO THE COMMENCEMENT OF THE MANUFACTURE OF ANY MATERIALS OF THE TIME AND PLACE WHERE THE MANUFACTURER IS TO COMMENCE, IN ORDER THAT A REPRESENTATIVE OF THE ENGINEER AND THE VILLAGE MAY PROVIDE, WITHOUT CHARGE OR EXPENSE TO THE STATE AND VILLAGE ALL NECESSARY ASSISTANCE TO THE ENGINEER AND BOARD WHEN REQUIRED FOR INSPECTION OR VERIFICATION OF WORK DONE.

### DIMENSIONS, DETAILED DRAWINGS AND ELEVATIONS

FIGURED DIMENSIONS ON DRAWINGS SHALL TAKE PRECEDENCE OVER MEASUREMENTS BY SCALE, AND DETAILED DRAWINGS ARE TO TAKE PRECEDENCE OVER GENERAL DRAWINGS AND SHALL BE CONSIDERED AS EXPLANATORY OF THEM AND NOT AS INDICATING EXTRA WORK. IF, HOWEVER, ANY OF THE DETAILED DRAWINGS SHOW MORE ELABORATE OR EXPENSIVE WORK THAN IS SPECIFIED AND INDICATED BY THE CONTRACT DRAWINGS, NOTICE THEREOF MUST BE GIVEN TO THE ENGINEER BY THE CONTRACTOR WITHIN TEN (10) DAYS AFTER THE RECEIPT OF SUCH DETAILED DRAWINGS IN ORDER THAT THE DRAWINGS MAY BE AMENDED OR THE ADDITIONAL EXPENSE ON ACCOUNT OF SUCH WORK MAY BE ADJUSTED AND AUTHORIZED. IF THE ENGINEER DOES NOT RECEIVE SUCH NOTICE FROM THE CONTRACTOR WITHIN TEN (10) DAYS AFTER DETAILED DRAWINGS HAVE BEEN RECEIVED BY HIM, IT IS HEREBY AGREED THAT THE CONTRACTOR ACCEPTS THE DRAWINGS AND WILL EXECUTE THEM WITHOUT CLAIMS FOR EXTRA COMPENSATION.

### ADDITIONAL WORK

(A) - ATTENTION IS CALLED TO THE FACT THAT THE WORK OF THIS CONTRACT INCLUDES CERTAIN PERFORMANCES AS INCIDENTAL TO THE ITEMIZED REQUIREMENTS HEREOF, THOUGH NOT EXCLUSIVE AS FOLLOWS: TO PERFORM ALL EXCAVATION, BACKFILLING, SHEETING, SHORING, TEMPORARY PAVING AND TESTING OF THE WATERWORKS. GRANULAR MATERIAL (O.D.O.T. ITEM 310) BACKFILL SHALL BE PLACED UNDER EXISTING AND PROPOSED PAVEMENT. FOR THE PERFORMANCE HEREIN DESCRIBED AND FOR OTHER INCIDENTAL PERFORMANCES OF LIKE NATURE, THE STATE WILL MAKE NO SPECIFIC OR SEPARATE PAYMENT OR ALLOWANCE, BUT THE COST THEREOF SHALL BE INCLUDED IN THE PRICES STIPULATED TO BE PAID FOR THE VARIOUS ITEMS OF THE WORK TO BE DONE UNDER THIS CONTRACT.

(B) - PRELIMINARY FLUSHING: BEFORE BEING PLACED IN SERVICE ALL DIRT AND FOREIGN MATTER SHALL BE REMOVED FROM THE NEW WATER MAIN OR EXTENSIONS TO EXISTING MAINS BY A THOROUGH FLUSHING THROUGH THE HYDRANTS OR BY OTHER APPROVED MEANS. EACH VALVED SECTION OF NEWLY LAID PIPE SHALL BE FLUSHED INDEPENDENTLY. THIS SHALL BE DONE AFTER THE PRESSURE TEST AND MAY BE DONE BEFORE OR AFTER THE TRENCH SHALL HAVE BEEN BACKFILLED.

(C) - CHLORINATION: FOLLOWING THE PRELIMINARY FLUSHING, THE NEWLY LAID WATER PIPE SHALL BE CHLORINATED. THE PROCESS OF CHLORINATING, THE METHOD OF PROCEDURE, THE CHLORINATING AGENT AND THE RATE OF APPLICATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED BY THE ENGINEER AND THE FAIRPORT HARBOR WATER DEPARTMENT.

(D) - FINAL FLUSHING AND TEST: FOLLOWING CHLORINATION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE NEWLY LAID PIPE AT ITS EXTREMITIES UNTIL THE REPLACEMENT WATER THROUGHOUT ITS LENGTH SHALL, UPON TEST, BOTH CHEMICALLY AND BACTERIOLOGICALLY, BE PROVEN EQUAL TO THE WATER QUALITY SERVED THE PUBLIC FROM THE EXISTING WATER SUPPLY SYSTEM.

(E) - FOR THE PERFORMANCE DESCRIBED IN PARAGRAPHS B, C, AND D, THE STATE WILL MAKE NO SPECIFIC OR SEPARATE PAYMENT OR ALLOWANCES, BUT THE COST THEREOF SHALL BE INCLUDED IN THE PRICES STIPULATED TO BE PAID FOR EACH LINEAR FOOT OF PIPE FURNISHED AND INSTALLED.

### MAINTENANCE OF SERVICE AND CONNECTING RELOCATED MAINS

THE CONTRACTOR SHALL FOLLOW STRICTLY THE SEQUENCE OF CONSTRUCTION SHOWN ON THE PLANS. ALL EXISTING FIRE HYDRANT LEADS AND SERVICE LEADS SHALL BE HAND TUNNELED USING SPECIAL CARE TO AVOID ANY DAMAGE WHICH MIGHT REQUIRE SHUTTING DOWN THE EXISTING MAIN UNTIL THE NEW MAIN IS READY TO BE PLACED IN SERVICE.

WHEN THE NEW MAINS HAVE BEEN TESTED AND CHLORINATED AND ARE READY TO BE CONNECTED TO THE OLD MAIN, THE CONTRACTOR SHALL MAKE SUCH CONNECTIONS AT A TIME DESIGNATED BY THE VILLAGE. PRIOR TO SHUTTING DOWN EXISTING MAINS, THE CONTRACTOR SHALL TAKE SUITABLE PRECAUTIONS TO ASSURE A MINIMUM INTERRUPTION TO SERVICE, INCLUDING THE FOLLOWING:

1. PERFORM ALL NECESSARY EXCAVATION, INCLUDING BELL HOLES, EXPOSING THE EXISTING MAIN SUFFICIENTLY FOR THE OPERATION OF THE PIPE SAW TO CUT THE EXISTING PIPE.
2. REMOVE THE CAP OR PLUG FROM THE END OF THE NEW MAIN.
3. SWAB THE INSIDE OF ALL PIPES, BENDS AND SLEEVES TO BE USED IN MAKING THE CONNECTIONS THOROUGHLY WITH A CHLORINE SOLUTION OF AT LEAST 100 P.P.M.
4. MAKE UP AS MUCH OF THE CONNECTION AS POSSIBLE OUTSIDE THE EXCAVATION TO MINIMIZE THE NUMBER OF JOINTS TO BE MADE DURING THE SHUTDOWN. BY CAREFUL MEASUREMENT ALL PIPE CUTS CAN BE MADE BY THE CONTRACTOR PRIOR TO SHUTTING DOWN.
5. HAVE SUFFICIENT MANPOWER AND EQUIPMENT ON THE SITE TO PERFORM THE OPERATION IN A MINIMUM OF TIME.

### FLOODS AND FREEZING WEATHER

PROPER FACILITIES SHALL BE PROVIDED FOR PROTECTING THE WORK FROM DAMAGE BY FLOOD, RAIN OR FROST, AND WORK DONE IN FREEZING WEATHER SHALL BE DONE IN SUCH MANNER AS THE ENGINEER MAY APPROVE. VALVES SHALL BE PROTECTED FROM FREEZING UNTIL BACKFILLED IN THE COMPLETED WORK.

### PAINTING

(A) - IT IS THE INTENTION OF THESE SPECIFICATIONS TO PROVIDE THAT ALL METAL WORK SUBJECT TO CORROSION IS TO BE SATISFACTORILY PROTECTED BY A DURABLE COATING OF PAINT OR OTHER APPROVED MATERIAL AND THAT ALL METAL SURFACES NOT BURIED IN EARTH, OR IN CONCRETE, SHALL BE LEFT COATED AND WELL PAINTED AT THE COMPLETION OF THE CONTRACT. UNLESS OTHERWISE SPECIFIED, THE PROTECTION SHALL BE AT LEAST THAT GIVEN BY THREE (3) COATS OF APPROVED PAINT. THE FIRST COAT IS TO BE APPLIED AT THE SHOP BEFORE THE METAL HAS RUSTED AND AFTER ALL GREASE, DIRT AND SCALE HAS BEEN REMOVED. BOLTS AND NUTS SHALL NOT BE SHOP COATED, BUT SHALL RECEIVE THREE (3) COATS OF APPROVED PAINT AFTER INSTALLATION.

(B) - ALL METAL WORK WHICH HAS NOT BEEN COATED BEFORE ARRIVAL ON THE JOB SHALL BE GIVEN A TEMPORARY PROTECTIVE COATING OF SUCH A NATURE AS TO PERMIT THE READY ADHERENCE TO FUTURE COATINGS. THE TEMPORARY COATING SHALL BE A GOOD GRADE ASPHALTIC PAINT OR OTHER APPROVED MATERIAL. THIS TEMPORARY PROTECTION SHALL APPLY PARTICULARLY TO THE VALVE BOXES AND COVERS, MANHOLE RINGS AND COVERS, LADDERS AND LADDER RUNGS AND ELSEWHERE WHEN IN THE OPINION OF THE ENGINEER, SUCH PROTECTION IS NECESSARY.

(C) - ALL SURFACES OF METAL WHICH WILL BE IN CONTACT AFTER ASSEMBLING SHALL BE PAINTED, AT LEAST ONE COAT, BEFORE ASSEMBLING. THE FINAL COAT OF PAINT ON ALL EXPOSED WORK SHALL BE GIVEN SHORTLY BEFORE THE COMPLETION OF THE CONTRACT.

(D) - WHERE PAINTING CLAUSES APPEAR HEREINAFTER, THEY SHALL TAKE PRECEDENCE OVER THIS SECTION, EXCEPT THAT TEMPORARY PROTECTION HEREIN DESCRIBED MAY BE REQUIRED.

(E) - ALL OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE PARTICULAR ITEM REQUIRING THE PAINTING.

### TESTS, INSPECTION, AND REPORTS

NOTWITHSTANDING THE REQUIREMENTS OF ANY OTHER PROVISIONS OF THESE SPECIFICATIONS, THE CONTRACTOR SHALL ARRANGE FOR AND PAY ALL COSTS INVOLVED FOR SHOP INSPECTION OF ALL MATERIALS FURNISHED, MANUFACTURE OF ALL PIPE, VALVES, FITTINGS, ETC., FIELD AND SHOP WELDS AND WELDINGS, AND FURNISH TO THE STATE AND THE VILLAGE COPIES OF ALL SHOP, FABRICATION, MANUFACTURE AND OTHER RELATED INSPECTION REPORTS OF MATERIALS FURNISHED. THIS INSPECTION SHALL BE DONE BY A RECOGNIZED INSPECTION LABORATORY APPROVED BY THE STATE AND THE VILLAGE. IN THE CASE OF ANY ITEM NOT SPECIFICALLY MENTIONED IN THE "WATERWORK NOTES", THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION AND MATERIAL SPECIFICATIONS - JANUARY 1, 1985" SHALL GOVERN.

### NOTICE BY CONTRACTOR

THE FAIRPORT HARBOR WATER DEPARTMENT SHALL BE NOTIFIED BY THE CONTRACTOR TWO (2) WORKING DAYS BEFORE WORK IS STARTED. CALL MR. GERALD LEPISTO AT 357-6343 BETWEEN 8 A.M. AND 4 P.M.