













ABBREVIATIONS:

Ø	DIAMETER
A	AIR
ALUM	ALUMINUM
BF	BLIND FLANGE
BLDG	BUILDING
C	COPPER
CB	CATCH BASIN
CI	CAST IRON
CO	CLEANOUT
CONC	CONCRETE
CONT	CONTINUED
CPL	COUPLING
DET	DETAIL
DIA	DIAMETER
DISCH	DISCHARGE
DMH	DRAIN MANHOLE
DI	DUCTILE IRON
DN	DOWN
DR	DRAIN
ECC	ECCENTRIC
EL	ELEVATION
ELL	ELBOW
EQUIP	EQUIPMENT
EXIST	EXISTING
EXP	EXPANSION
FD	FLOOR DRAIN
FE	FINAL EFFLUENT
FIT	FLOW INDICATING TRANSMITTER
FLG	FLANGE
FLR	FLOOR
FM	FORCE MAIN
FPHB	FROST PROOF HOSE BIBB
FRP	FIBERGLASS REINFORCED POLYESTER
GT	GRIT
GA	GALVE
GALV	GALVANIZED
HB	HOSE BIBB
HP	HIGH POINT
HYD	HYDRANT
ID	INSIDE DIAMETER
INF	INFLUENT
INV	INVERT
JT	JOINT
LE	LEVEL ELEMENT
LIT	LEVEL INDICATING TRANSMITTER
LR	LONG RADIUS
MAX	MAXIMUM
MECH	MECHANICAL
MFG	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTD	MOUNTED
NO	NUMBER
NPT	NATIONAL PIPE THREAD
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
PE	POLYETHYLENE
PRV	PRESSURE RELIEF VALVE OR PRESSURE REGULATING VALVE
PRW	PROCESS WATER (CITY WATER USED FOR PROCESS - NON-POTABLE)
PVC	POLYVINYL CHLORIDE
RED	REDUCER
REQ'D	REQUIRED
S	SEWER
SAM	SAMPLE LINE
SCH	SCHEDULE
SD	STORM DRAIN
SECT	SECTION
SHT	SHEET
SLG	SLUICE GATE
SMH	SANITARY SEWER MANHOLE
SP	SUMP PUMP
SPD	SUMP PUMP DISCHARGE
SS	STAINLESS STEEL
STD	STANDARD
STG	STOP GATE
STL	STEEL
SW	SEAL WATER
THK	THICKNESS
TYP	TYPICAL
UD	UNDERDRAIN
VERT	VERTICAL
W	POTABLE WATER
YH	YARD HYDRANT

PROCESS GENERAL NOTES:

1. ALL EQUIPMENT AND PIPING LAYOUT DIMENSIONS SHALL BE FIELD VERIFIED AND COORDINATED WITH EQUIPMENT SUPPLIED, AND/OR EXISTING CONDITIONS. SOME INFORMATION ASSOCIATED WITH EXISTING STRUCTURES, PIPING AND EQUIPMENT LOCATIONS, ELEVATIONS AND SIZES, WERE TAKEN FROM THE RECORD DRAWINGS FOR THE TOWN OF EAST LONGMEADOW. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION OF NEW FACILITIES, EQUIPMENT OR PIPING THAT MAY BE AFFECTED. IN SOME SPECIFIC INSTANCES, SOME DIMENSIONS, ELEVATIONS, ETC. HAVE BEEN NOTED WITH AN " * ". THIS DOES NOT HOWEVER, LIMIT THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATED ALL NECESSARY INFORMATION FOR HIS CONSTRUCTION.
2. ALL BURIED CONNECTIONS TO STRUCTURES, INCLUDING BUT NOT LIMITED TO SEWER FORCE MAIN AND GRAVITY PIPING SHALL HAVE SLEEVE TYPE CONNECTIONS APPROXIMATELY 4 FEET FROM THE STRUCTURES. ALL SLEEVE TYPE COUPLINGS ON PRESSURE LINES SHALL BE RESTRAINED (SOLID SLEEVE TYPE). REFER TO SPECIFICATION SECTION 15088.
3. ALL PIPING (EXCLUDING BUILDING DRAINS/SEWER) INSTALLED BELOW SLABS SHALL BE ENCASED IN CONCRETE. SEE STRUCTURAL DRAWINGS FOR DETAILS.
4. PROVIDE CAST OR DUCTILE IRON WALL CASTINGS, OR GALVANIZED STEEL PIPE SLEEVES, FOR ALL PIPE PENETRATIONS MADE THROUGH CONCRETE FOUNDATIONS, WALLS AND SLABS. ALL WALL SLEEVES AND WALL CASTINGS SHALL HAVE WATERSTOPS. SEE PROCESS, MECHANICAL AND STRUCTURAL DRAWINGS FOR LOCATIONS OF PENETRATIONS. NEW PENETRATIONS THROUGH EXISTING STRUCTURE WALLS SHALL BE BY CORING MACHINE AND "LINK-SEAL" TYPE SEALS, UNLESS OTHERWISE INDICATED. OPENINGS TO BE COMPATIBLE WITH REQUIRED PIPING AND STANDARD LINK SEAL SIZES.
5. FOR PIPING MATERIAL, SEE THE PIPE SCHEDULE IN SPECIFICATION SECTION 15050.
6. ALL FLOW ELEMENTS SHALL BE LOCATED A MINIMUM OF TEN PIPE DIAMETERS DOWNSTREAM AND FIVE DIAMETERS UPSTREAM OF ANY HYDRAULIC DISTURBANCE, EXCEPT IN SITUATIONS WHERE DIMENSIONAL CONSTRAINTS PRECLUDE THESE SEPARATION DISTANCES. IN THESE CASES THE ENGINEER WILL REVIEW THE LAYOUT AND PROVIDE REVISED MINIMUM SEPARATION DISTANCES.
7. PROVIDE DRIP PANS, WITH CENTRAL COLLECTION POINT AND DRAIN TO FLOOR, FOR ELECTRICAL AND INSTRUMENTATION EQUIPMENT LOCATED BENEATH LIQUID CARRYING PIPES.
8. ALL WATER HOSE BIBBS SHALL BE PROVIDED WITH A HOSE RACK AND HOSE, ALONG WITH A SIGN INDICATING "NOT SUITABLE FOR DRINKING". FOR ADDITIONAL HOSE BIBB AND HOSE RACK INFORMATION SEE SPECIFICATION SECTION 15401 AND DRAWINGS. PROVIDE 50' OF HOSE AS SPECIFIED IN SPECIFICATION SECTION 15401 AT EACH HOSE BIBB UNLESS OTHERWISE INDICATED.
9. INSTALL CORPORATION COCKS ON ALL BUILDING AND STRUCTURE INTERIOR PIPING HIGH POINTS TO PREVENT AIR BINDING. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT NUMBER AND LOCATIONS OF THESE CORPORATION COCKS BASED UPON INFORMATION DEPICTED ON DRAWINGS AND ACTUAL FIELD ROUTING OF PIPING. REVIEW LOCATION WITH ENGINEER BEFORE INSTALLATION. THESE MANUAL AIR RELEASES SHALL INCLUDE A 1/2-INCH BRASS CORPORATION COCK WITH 1/2-INCH COPPER TUBING ADEQUATELY SUPPORTED, EXTENDING TO A LOCAL AREA DRAIN. ROUTING OF TUBING AND SELECTED DRAIN TO BE REVIEWED WITH, AND ACCEPTED BY, ENGINEER.
10. PIPES 3-INCH IN DIAMETER AND UNDER SHALL HAVE UNIONS INSTALLED ADJACENT TO EQUIPMENT AND TANKS, UNLESS OTHERWISE NOTED ON DRAWINGS. FLANGES ARE ACCEPTABLE ON 3-INCH DIAMETER PIPING.
11. ALL PIPES SHALL BE ADEQUATELY RESTRAINED AND SUPPORTED IN ACCORDANCE WITH SPECIFICATION SECTION 15094.
12. AFTER INSTALLATION, ALL PIPELINES SHALL BE PRESSURE TESTED FOR TIGHTNESS IN ACCORDANCE WITH SPECIFICATION SECTIONS 15050 AND 02755. ALL LEAKS SHALL BE CORRECTED AND RETESTED UNTIL PRESSURE TEST IS SATISFACTORY COMPLETED.
13. ALL PIPING SHALL BE CLEANED, TO THE SATISFACTION OF THE ENGINEER, BEFORE TESTING.
14. PROVIDE 3 1/2-INCH HIGH (MIN.) REINFORCED CONCRETE PAD UNDER ALL EQUIPMENT, CONTROL PANELS, PIPE AND EQUIPMENT SUPPORTS, TANKS, ETC. UNLESS OTHERWISE INDICATED.
15. DO NOT SCALE DISTANCES OR DIMENSIONS FROM THE DRAWINGS. WRITTEN DIMENSIONS SHALL PREVAIL. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
16. REFER TO SPECIFICATION SECTION 01070 AND THIS DRAWING FOR A LISTING OF COMMONLY USED ABBREVIATIONS.
17. DISCHARGE LINES FOR EACH PUMP SHALL INCLUDE A 3/4" TAP AND BALL VALVE FOR DRAINING THE LINE DURING PUMP MAINTENANCE.
18. ALL REDUCERS SHALL BE CONCENTRIC TYPE UNLESS DESIGNATED AS ECCENTRIC (ECC) ON THE DRAWINGS. ECCENTRIC REDUCERS SHALL BE INSTALLED WITH FLAT SIDE UP.
19. PRESSURE GAGES SHALL BE PROVIDED ON THE SUCTION AND DISCHARGE LINES OF EACH PUMP. PRESSURE GAGES SHALL BE INSTALLED AS SHOWN ON DRAWING PR-4.
20. ALL PENETRATIONS BETWEEN CLASS 1, DIVISION 1 AREAS AND UNCLASSIFIED AREAS SHALL BE GAS TIGHT.
21. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ADAPTERS, FITTINGS AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE INSTALLATION. THE USE OF UNI-FLANGES WILL NOT BE ALLOWED.
22. CONTRACTOR TO NOTE THAT ALL EXISTING INFORMATION ON THE DRAWINGS IS SHOWN WITH A LIGHTER LINE WEIGHT AND INDICATED WITH A SLANTED TYPE TEXT.
23. CONTRACTOR SHOULD BE AWARE OF THE CONVENTION USED IN IDENTIFYING PIPE ELEVATIONS. IN GENERAL, UNLESS OTHERWISE INDICATED, ALL PIPES EXITING A STRUCTURE WHICH ARE CONTINUED ON CIVIL DRAWINGS, HAVE INVERT ELEVATIONS SHOWN. ALL PIPE ELEVATIONS GIVEN WITHIN A STRUCTURE ARE CENTERLINE ELEVATIONS.
24. CONTRACTOR SHALL PROVIDE A PIPING LAYOUT DRAWING VERIFYING THE LOCATIONS OF ALL PIPE PENETRATIONS INCLUDING ELECTRICAL CONDUIT RUNS, ELEVATIONS, EQUIPMENT LOCATIONS, PIPE INVERT ELEVATIONS PRIOR TO THE PLACEMENT OF ANY CONCRETE.
25. THE GENERAL CONTRACTOR SHALL BE REQUIRED TO COORDINATE THE INSTALLATION OF THE PROCESS PIPING AND EQUIPMENT WITH THE ELECTRICAL, MECHANICAL, AND PLUMBING SUBCONTRACTORS.

LEGEND

	NEEDLE VALVE		PLUG VALVE
	GATE VALVE		PRESSURE RELIEF VALVE
	REDUCER		STOP GATE
	SOLENOID VALVE		SLUICE GATE
	PRESSURE GAGE		UNION
	SWITCH		
	CHECK VALVE		

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF THE INFORMATION FURNISHED BY OTHERS. THE ENGINEER HAS CONDUCTED VISUAL GENERAL VERIFICATION OF THE INFORMATION AND HAS NOTED ANY DISCREPANCIES WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.

DEPARTMENT OF PUBLIC WORKS
TOWN OF EAST LONGMEADOW, MA
VINELAND AVENUE PUMP STATION
CONTRACTS NO. 1 AND NO. 2

PROCESS PIPING NOTES,
ABBREVIATIONS AND LEGEND

DWG PR-1

30 OF 49



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DRAWN BY TAP
CHECKED BY SCH
DATE 12-19-02
APPROVED BY SCH
DATE 1-31-03
BOOK NO.
PROJECT NO. 2051K
SCALE AS NOTED

NO RECORD DRAWINGS 12/04

PROCESS NOTES
ISSUED FOR REVIEW 12-02
ISSUED FOR BIDDING 2-03
NOT FOR CONSTRUCTION
DATE MODIFIED
BY NAME