




















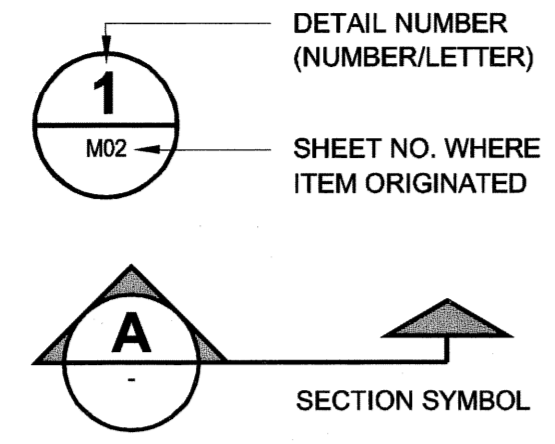


LEGEND

-  PRESSURE REGULATOR
-  STRAINER
-  UNION
-  CAP
-  GATE VALVE
-  CONTROL VALVE
-  BALL VALVE - NORMALLY OPEN
-  BALL VALVE - NORMALLY CLOSED
-  CHECK VALVE
-  BUTTERFLY VALVE
-  FLEXIBLE PIPE CONNECTOR
-  REDUCER
-  THERMOSTAT
-  THERMOMETER
-  BACK FLOW PREVENTION VALVE
-  VENT
-  FLOW ARROW
-  ELBOW TURNED UP
-  ELBOW TURNED DOWN
-  ROUND DUCT OR PIPE IN SECTION
-  INSULATED PIPING



GENERAL NOTES:

1. DIMENSIONS AND BUILDING ORIENTATION SHOWN ON THE DRAWING ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE TO VERIFY EQUIPMENT/BUILDING LOCATIONS AND DIMENSIONS ON SITE.
2. PATCH ALL OPENINGS REMAINING AFTER EQUIPMENT, DUCT, OR PIPING INSTALLATION/REMOVALS. PATCHING TO ACHIEVE COLOUR MATCHED FINISH OF LIKE MATERIALS TO THE SURROUNDING SURFACE MATERIAL.
3. CUT ALL NEW OPENINGS REQUIRED FOR NEW INSTALLATIONS OR DEMOLITION WORK USING DUE CARE AND APPROPRIATE TOOLS AND METHODS TO MAINTAIN THE INTEGRITY OF THE STRUCTURE/ASSEMBLY IN WHICH THE OPENING IS BEING CUT. MECHANICAL CONTRACTOR SHALL SUPPLY GALVANIZED STEEL SHEET METAL AND SLEEVES FOR EQUIPMENT PENETRATING THE WALL.
4. ELECTRICALLY ISOLATE ALL DISSIMILAR METALS.
5. PROVIDE ADDITIONAL FRAMING AT ALL WALL PENETRATIONS AS REQUIRED.
6. PERFORM ALL WORK IN CO-ORDINATION WITH ALL OTHER TRADES AND CONTRACTORS. PROVIDE COMPLETE FUNCTIONAL AND CODE COMPLIANT SYSTEMS.
7. CONTRACTOR IS RESPONSIBLE FOR TAKING OUT PERMITS AND PAYING ALL FEES RELATED TO DEMOLITION/MODIFICATION OF THE EXISTING SYSTEMS, CONSTRUCTION, MODIFICATION AND INSTALLATION OF NEW SYSTEMS.
8. DEMOLITION/MODIFICATION/DISPOSAL/INSTALLATION OF MECHANICAL COMPONENTS WHICH INVOLVE NATURAL GAS PIPING AND EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, INDUSTRY STANDARDS AND LOCAL BYLAWS.
9. USE SKILLED AND LICENSED LABOURERS AND JOURNEYMEN TO PERFORM ALL WORK.
10. ALL WASTE AND RECYCLABLE TO BE DISPOSED OF OFF SITE IN AN APPROVED FACILITY LICENSED TO ACCEPT SUCH WASTE AS PER SPECIFICATIONS.
11. CONTRACTOR IS RESPONSIBLE TO REMOVE ANY CONTAMINATED OR HAZARDOUS WASTE/REFUSE, WHICH IS CAUSED BY THIS CONSTRUCTION WORK, AND TO DISPOSE THEM OFF SITE AS PER CODE.
12. CONTRACTOR TO PROVIDE PROTECTION TO OWNER EQUIPMENT DURING CONSTRUCTION. WORK WITH EXTREME CARE AROUND OPERATING EQUIPMENT.
13. COORDINATE THE TIMING, DURATION AND SAFETY REQUIREMENTS FOR SHUT-DOWNS TO ALLOW PIPING TIE-INS AND WORK IN HAZARDOUS ATMOSPHERE WITH THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT.
14. VERIFY CONFINED SPACES ENTRY REQUIREMENTS WITH CITY PRIOR TO ENTERING SUCH SPACES.
15. CONTRACTOR SHALL PROVIDE SITE OFFICE AND REQUIRED PERSONNEL FACILITIES FOR STAFF ON SITE.

ENGINE NOTE:

ALL CONNECTION LOCATIONS AND ENGINE INFORMATION SHOWN HEREIN IS BASED ON PRELIMINARY DESIGN INFORMATION FOR A WAUKESHA F3514GSI ENGINE. PIPE SIZES FOR COMBUSTION AIR, EXHAUST, WATER AND SEWER, AND FUEL ARE BASED ON PUBLISHED VALUES FOR CATERPILLAR (G3512TA) SERIES AND WAUKESHA (VHP F35XX) SERIES ENGINES, WITH ROUTINGS APPROXIMATELY AS SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONNECTION LOCATION DESIGN CHANGES THAT MAY BE REQUIRED FOR USE OF A CATERPILLAR OR OTHER WAUKESHA ENGINE. BOTH ENGINES WILL BE GIVEN EQUAL CONSIDERATION BY THE CITY OF WINNIPEG.

IMPORTANT: ASBESTOS NOTIFICATION AND ACKNOWLEDGMENT

Every effort has been made to identify known asbestos containing materials within the areas of the proposed work. As a precautionary measure, where material is encountered by trades and contractors that is suspected or suspicious, the Trade/Contractor/Subcontractor is to contact the Contract Administrator who will have samples taken and tested to confirm its composition.

Mo. Reg. 53-86 (Workplace Health Hazard Regulation), Mo. Reg. 100-86R (Fibrosis and Silicosis Regulation) and associated Guidelines apply to all maintenance and renovation work that may disturb asbestos or suspect asbestos-containing materials in the Workplace. Such regulations and guidelines state that any disturbance of asbestos-containing materials may only be performed by workers or by an outside contractor who have first received the required training in asbestos-related procedures.

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS CAN CAUSE VARIOUS TYPES OF LUNG DISEASE INCLUDING CANCER. SMOKING INCREASES THE RISK OF LUNG CANCER FROM ASBESTOS EXPOSURE.

ACKNOWLEDGMENT:

In undertaking the work of this project, we the trade or contractor agree to perform our work in such a manner so as NOT to disturb any asbestos-containing materials without:

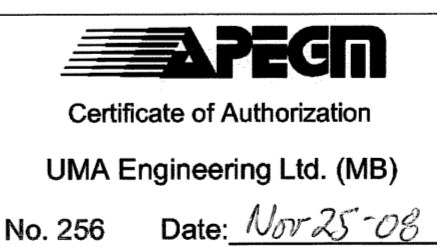
1. giving notice to the appropriate supervisor, individual manager and/or project coordinator at the Water And Waste Department that known or suspected asbestos-containing material(s) will be disturbed, or
2. halting work and giving notice to the Contract Administrator when unforeseen suspected asbestos-containing materials are uncovered during the provisions of service/contract.


DRN	CHK	DES	ENG	DR
AS	CC	CC	CC	CC
UMA REVIEW				

NO.	REVISIONS	DATE	BY
B	ISSUED FOR BID	08/11/21	RS
A	ISSUED FOR REVIEW	08/10/26	RS
NO.	REVISIONS	YYMMDD	BY


UMA AECOM	
DESIGNED BY	CC
DRAWN BY	RS
HOR. SCALE	AS NOTED
VERT. SCALE	AS NOTED
DATE	

CHECKED BY	
APPROVED BY	
RELEASED FOR CONSTRUCTION	
DATE	





Certificate of Authorization
 UMA Engineering Ltd. (MB)
 No. 256 Date: *Nov 25-08*



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

G. C. MACLEAN PUMPING STATION
P-26 ENGINE REPLACEMENT
MECHANICAL
LEGEND AND GENERAL NOTES

SHEET 1 OF 1
 CITY DRAWING NUMBER
1-0630M-M0001-001 REV B

© 2008 UMA Engineering Ltd. All Rights Reserved. This document is protected by copyright law and may not be used, reproduced or modified in any manner or for any purpose except with the written permission of UMA Engineering Ltd. or a party to which its copyright has been assigned. UMA accepts no responsibility, and denies any liability whatsoever, to any party that uses, reproduces, modifies, or relies on this document without UMA's express written consent.

CONSULTANT DRAWING NO.
 D265-199-00_05-M-0001_RX.dwg