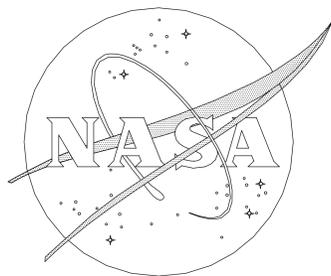


GENERAL NOTES

- 1.) DIMENSIONS ON DRAWINGS ARE PROVIDED FOR REFERENCES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF DIMENSIONS IN FIELD. ACTUAL DIMENSIONS MAY VARY (PLUS OR MINUS) BASED ON EXISTING FIELD CONDITIONS AND NEW CONSTRUCTION INTERFACE.
- 2.) ANY CLARIFICATIONS WITHIN DRAWINGS AND SPECIFICATIONS SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER FOR CLARIFICATION DURING THE BIDDING PERIOD.
- 3.) GENERAL CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH NASA AND ERIE COUNTY AS REQUIRED IN ORDER TO ISOLATE DOMESTIC WATER SUPPLY.
- 4.) CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE SITE CLEAN AT ALL TIMES. PROVIDE METAL CONTAINERS FOR WASTE AND SCRAP MATERIALS. PROVIDE SECURE COVERS WHEN NOT IN USE AND REMOVE FROM SITE WHEN FULL.
- 5.) CONTRACTOR SHALL REMOVE ALL TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AT COMPLETION OF WORK.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
PLUM BROOK STATION
6100 COLUMBUS AVENUE
SANDUSKY, OHIO



FY 14
FOX AND MASON ROAD DOMESTIC WATER
BACKFLOW PREVENTION UPGRADE WON20384

INDEX OF DRAWINGS

GENERAL

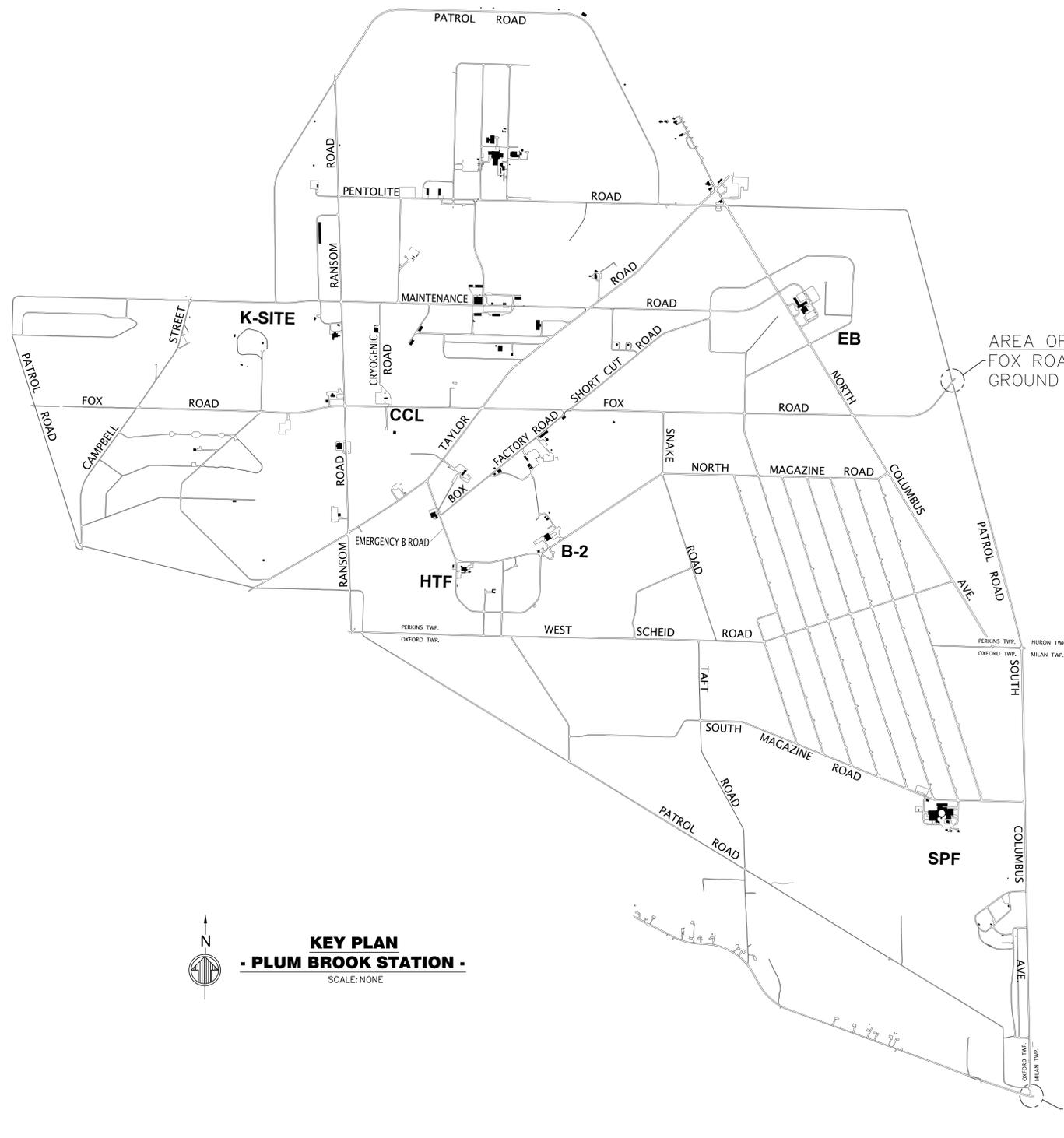
CE-DOMW-WON20384-G-001 TITLE SHEET AND DRAWING INDEX

DEMOLITION

CE-DOMW-WON20384-MD-401 MASON AND FOX ROAD VAULTS DEMOLITION

PLUMBING

CE-DOMW-WON20384-P-601 MASON AND FOX ROAD WATER MAINS LEGEND, ABBREVIATIONS, MATERIALS AND TESTING
 CE-DOMW-WON20384-P-901 MASON AND FOX ROAD VAULTS PIPING DIAGRAM
 CE-DOMW-WON20384-P-902 MASON AND FOX ROAD VAULTS PLAN AND DETAIL VIEW



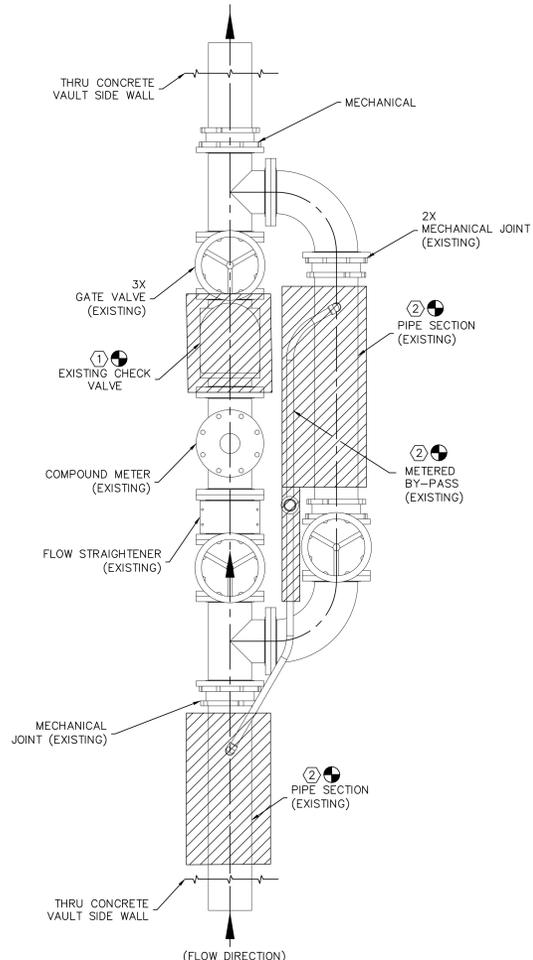
KEY PLAN
- PLUM BROOK STATION -
 SCALE: NONE

ATTACHMENT F.1

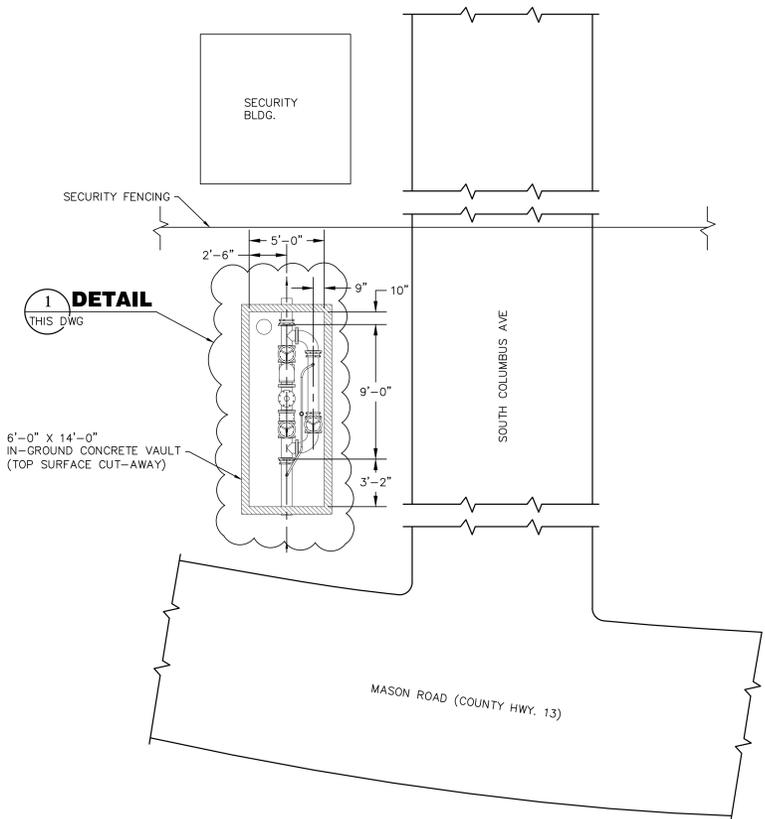
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REVISIONS			
CAD DRAWING - DO NOT REVISE MANUALLY			
DRAWING/DESIGN STATUS: FOR CONSTRUCTION 03/07/2014			
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION JOHN H. GLENN RESEARCH CENTER LEWIS FIELD & PLUM BROOK STATION, OHIO			
PLUM BROOK STATION BACKFLOW PREVENTERS			
BACKFLOW PREVENTION UPGRADE TITLE SHEET AND DRAWING INDEX			
SIZE	BLDG/SYS	PROJECT ID	DISCP TYP SEQ
CE DOMW -		WON20384 -	G- 001
AREA:	SHEET	01 OF	01
UNITS: ENGLISH	SOFTWARE: AUTOCAD 20013	REVISION	VER
SCALE: AS NOTED	OFFICIAL DATE:		1

DRAWING MANAGEMENT SYSTEM: SUB-SYS: FACILITY: CONFIG:			
NASA APPROVALS			
DR:	DES:	PROJ. MGR:	KJIS
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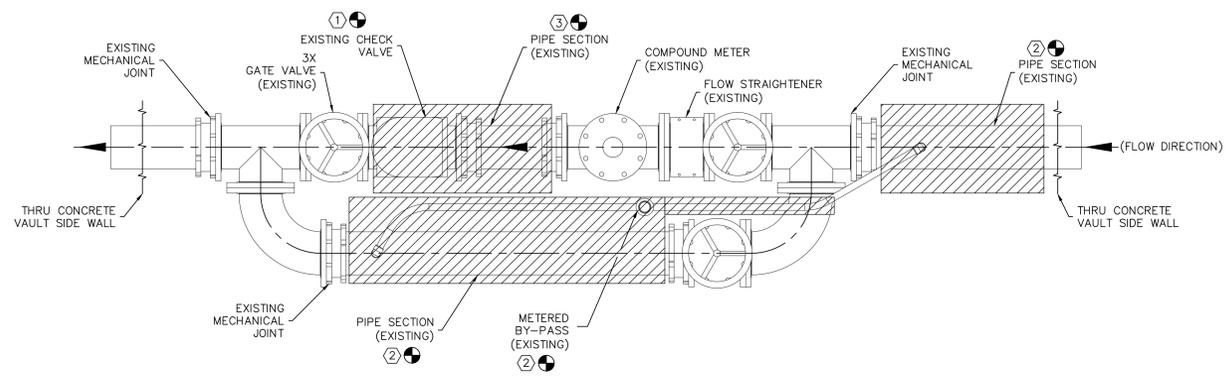




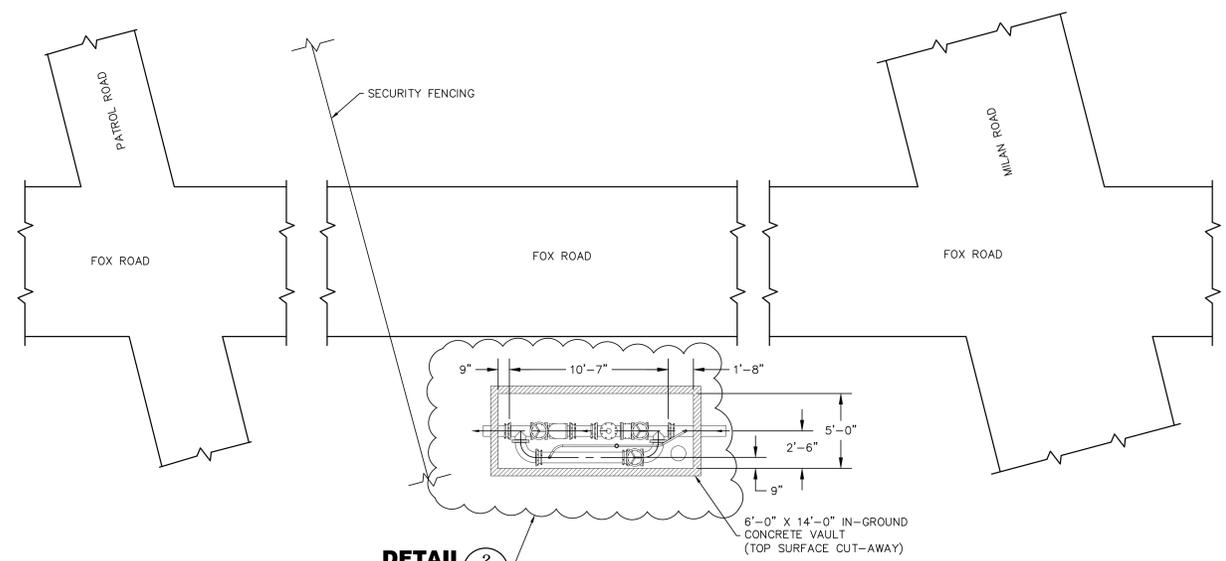
MASON ROAD VAULT ASSEMBLY - DEMOLITION DETAIL -
 (SHOWN WITHOUT CONCRETE VAULT)
 SCALE: 1/2" = 1'-0"
 THIS DWG



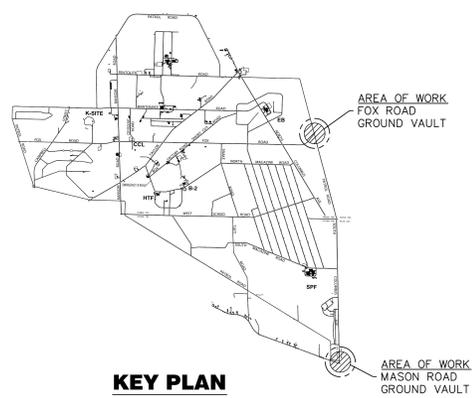
MASON ROAD IN-GROUND VAULT - DEMOLITION PLAN VIEW -
 SCALE: 1/4" = 1'-0"



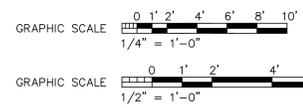
FOX ROAD VAULT ASSEMBLY - DEMOLITION DETAIL -
 (SHOWN WITHOUT CONCRETE VAULT)
 SCALE: 1/2" = 1'-0"
 THIS DWG



FOX ROAD IN-GROUND VAULT - DEMOLITION PLAN VIEW -
 SCALE: 1/4" = 1'-0"



KEY PLAN - PLUM BROOK STATION -
 SCALE: NONE



GENERAL NOTES

1. REFERENCE: DOMW-WON20384-P-901 PIPING DIAGRAM AND DOMW-WON20384-P-902 PLAN AND DETAIL DRAWING.
2. FOR LEGEND, ABBREVIATIONS AND MATERIALS AND TESTING TABLES REFER TO DRAWING DOMW-WON20384-P-601.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO CONSTRUCTION/FABRICATION. ANY DISCREPANCIES SHALL BE REPORTED TO NASA PROJECT MANAGER (PM).
4. ALL VALVES MUST OPEN RIGHT (CLOCKWISE). OPENING DIRECTION SHALL BE INDICATED ON THE VALVE. PLACE CONCRETE SUPPORTS UNDER ALL VALVES AND METERS.

CODED DEMOLITION NOTATIONS:

- 1 REMOVE EXISTING CHECK VALVE. REFER TO PIPING DIAGRAM DRAWING M-901 FOR FURTHER INFORMATION.
- 2 MODIFY LINE LENGTH RESULTING FROM INSTALLATION OF NEW DOUBLE CHECK VALVE.
- 3 REMOVE / MODIFY / REPLACE LINE LENGTH RESULTING FROM INSTALLATION OF NEW DOUBLE CHECK VALVE.

LEGEND

- Equipment \ Components to be altered \ removed
- Area of Demolition

DRAWING DESIGN STATUS: FOR CONSTRUCTION 03/07/2014	
DRAWING MANAGEMENT	
SYSTEM: DOMW	SUB-SYS: FACILITY: CONFIN:
NASA APPROVALS	
DR: JCZ	DES: KJS
D'ENG: JCZ	PROJ. MGR: KJS
RELEASE APPROVAL: [Signature]	DATE: [Date]
CONTRACTOR: GESSA TEAM	CONTRACT NO: WNC12BA01B
DRWN: [Signature]	DESIGN: [Signature]
APPROVED: [Signature]	APPROVAL DATE: [Date]
RELEASE STATUS: WORKING	

CHG	NUM	DESCRIPTION	APP/DATE
REVISIONS			
CAD DRAWING - DO NOT REVISE MANUALLY			
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION JOHN H. GLENN RESEARCH CENTER LEWIS FIELD & PLUM BROOK STATION, OHIO			
PLUM BROOK STATION BACKFLOW PREVENTERS BACKFLOW PREVENTION UPGRADE MASON AND FOX ROAD VAULTS -DEMOLITION-			
SIZE	BLDG/SYS	PROJECT ID	DISC# TYP SEQ
CE DOMW - WON20384		-MD 401	
AREA:	UNITS: ENGLISH	SOFTWARE: AUTOCAD 20013	SHEET 01 OF 01
SCALE: AS NOTED	OFFICIAL DATE:	REVISION	VER 1

GENERAL NOTES

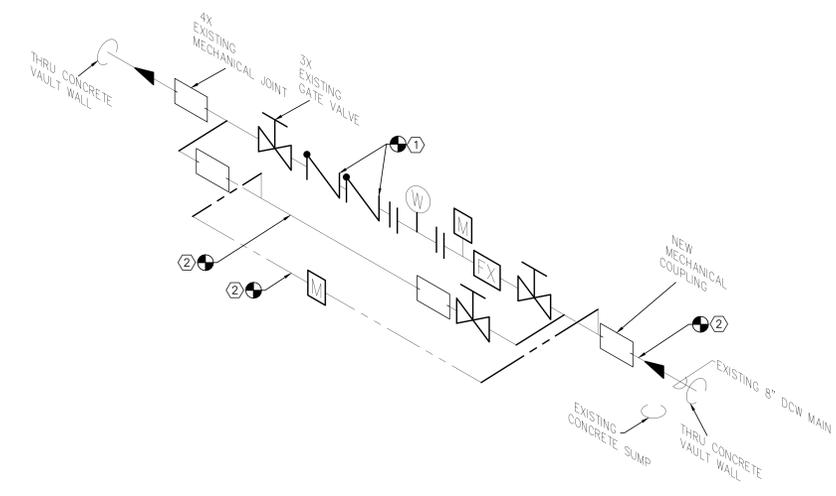
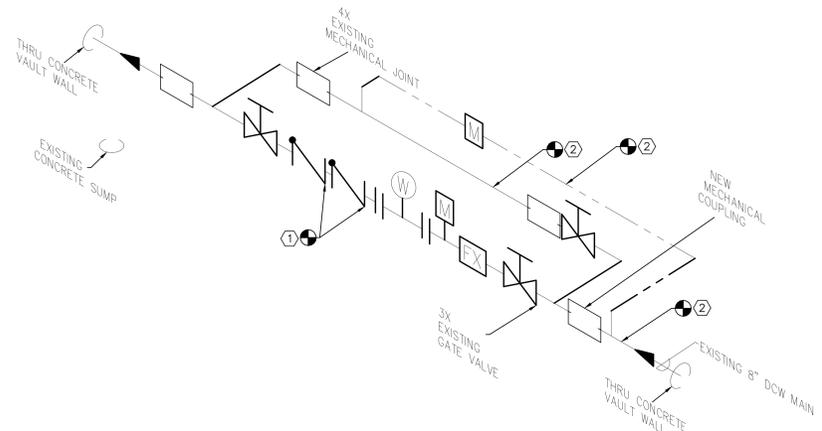
- REFERENCE DEMOLITION DRAWING DOMW-WON20384-MD-401 AND PLAN AND DETAIL DRAWING DOMW-WON20384-P-902.
- FOR LEGEND, ABBREVIATIONS AND MATERIALS AND TESTING TABLES REFER TO DRAWING DOMW-WON20384-P-601.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO CONSTRUCTION/ FABRICATION. ANY DISCREPANCIES SHALL BE REPORTED TO NASA PROJECT MANAGER (PM).

CONSTRUCTION NOTES

- REPLACE EXISTING CHECK VALVE WITH WATTS 8" SERIES 774 DOUBLE CHECK VALVE ASSEMBLY.
- MODIFY LINE LENGTH RESULTING FROM INSTALLATION OF NEW DOUBLE CHECK VALVE.

LEGEND

- DCW MAIN LINE
- 1" BY-PASS LINE
- CONNECT TO EXISTING \ MODIFY
- WATER METER
- FLOW METER
- FLOW STRAIGHTENER



PIPING COMPONENT SYMBOLS				ACTUATOR SYMBOLS		PRIMARY CONTROL ELEMENT SYMBOLS				ITEM DESIGNATIONS		INSTRUMENT LETTER DESIGNATIONS FOR				INSTRUMENT SYMBOLS	
Butterfly Valve	Pressure Regulator	Directional Valves	Cylinder Regulator	Pressure Gauge	Heat Exchanger	ELEC-PNEU XDCR	LIMIT SWITCH CLOSED	TEMP ELEMENT	LOCALLY MOUNTED	B-BURNER	L-LEVEL	U-UNCLASSIFIED	IC - CLOSED	GENERAL	DATA COLLECTOR FACILITY		
Check Valve	Relief Valve	3-WAY 4-WAY	Cross Over Valve	Loader	Reducer	ELEC-HYDR XDCR	MASS FLOW CONTROL	TEMP SWITCH	CONTROL ROOM LOCATED	E-EMERGENCY	P-PRESSURE	V-VIBRATION	IO - OPEN	PRGM LOGIC CONTROLLER	PRGM PROCESS CONTROLLER		
Gate Valve	Plug Valve	Ball Valve	Globe Valve	Strainer	Union	LIFT INDICATOR	PRESSURE SWITCH	TEMP TRANSMITTER	ALTN CONTROL ROOM LOCATED	F-FLOW	S-SURGE	X-SPEED		HARDWIRED SHUTDOWN	INTERLOCK		
Gate Valve	Ball Valve	Globe Valve	3-WAY VALVE	Pump	Orifice	LIG LEVEL SWITCH	PRESS DIFF SWITCH	VAR TRANSDUCER		H-HAND	T-TEMPERATURE	Z-POSITION					
				Motor	Cap/Plug	LIG LEVEL XDCR	PRESS DIFF XMTR	VIBRATION ELEMENT		A-ALARM	I-INDICATE	R-RECORD					
				Solenoid	Temp Sensor	LIMIT SWITCH	PRESS TRANSMITTER	SPEED ELEMENT		C-CONTROL	L-LOW	S-SHUTDOWN					
						LIMIT SWITCH OPEN	THERMOCOUPLE	POS INDICATOR XDCR		D-DIFFERENTIAL	P-PERMISSIVE	T-TRANSMITTER					
										H-HIGH	Q-CALCULATION	Y-DATALOG					

REGISTRATION STAMP

DRAWING/DESIGN STATUS:
FOR CONSTRUCTION 03/07/2014

DRAWING MANAGEMENT
SYSTEM: DOMW | SUB-SYS: FACILITY | CONFIG: CONFIG

NASA APPROVALS
DR: [] | DES: []
D'ENG: JCZ | PROD. MGR: KJS
RELEASE APPROVAL: [] DATE: []

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN H. GLENN RESEARCH CENTER
LEWIS FIELD & PLUM BROOK STATION, OHIO

PLUM BROOK STATION BACKFLOW PREVENTERS
BACKFLOW PREVENTION UPGRADE
MASON AND FOX ROAD VAULTS
PIPING DIAGRAM

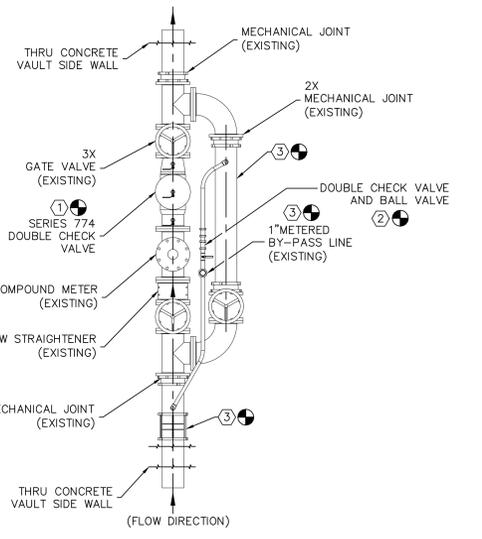
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CE DOMW - WON20384 - P- 901

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SCALE: NONE | OFFICIAL DATE: [] REVISION VER: []

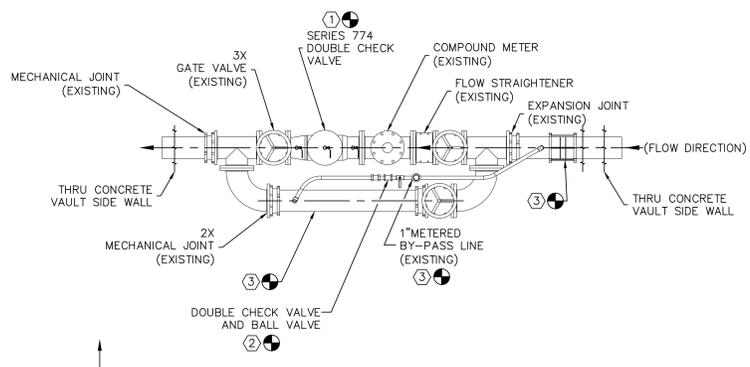
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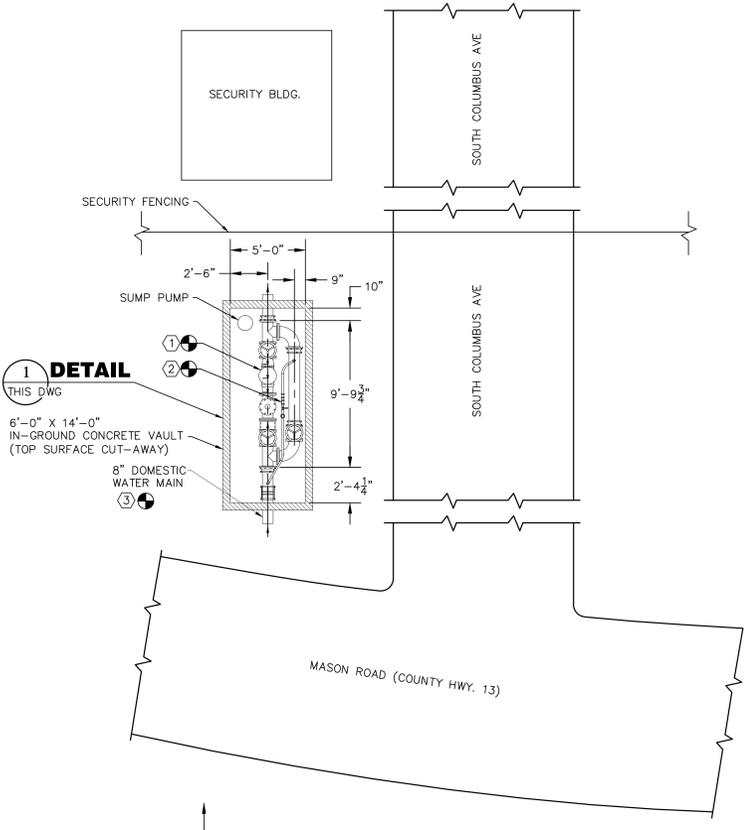
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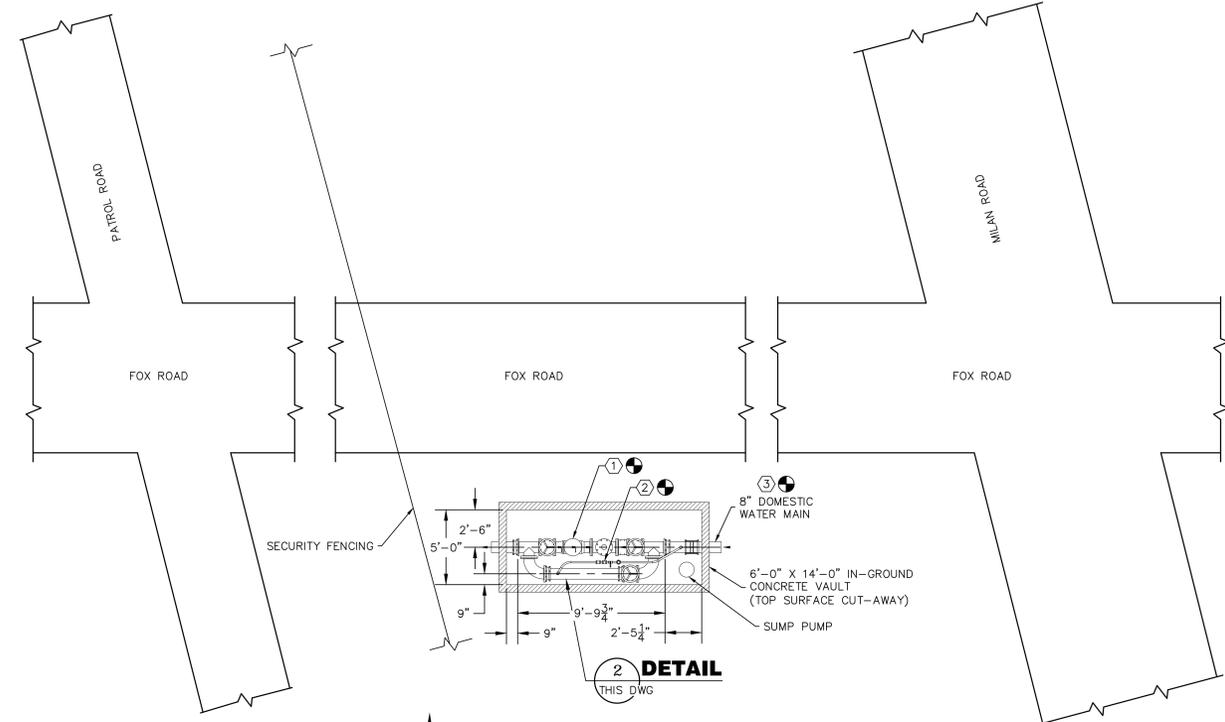
MASON ROAD COMPONENT ASSEMBLY
- TOP VIEW -
(SHOWN WITHOUT CONCRETE VAULT)
SCALE: 1/2" = 1'-0"
1 THIS DWG



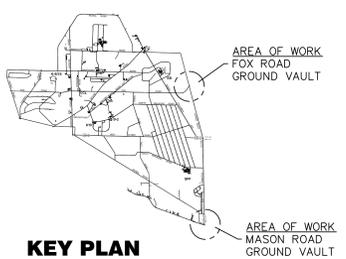
FOX ROAD COMPONENT ASSEMBLY
- TOP VIEW -
(SHOWN WITHOUT CONCRETE VAULT)
SCALE: 1/2" = 1'-0"
2 THIS DWG



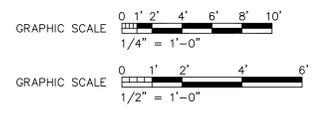
MASON ROAD GROUND VAULT
- PLAN VIEW -
SCALE: 1/4" = 1'-0"



FOX ROAD GROUND VAULT
- PLAN VIEW -
SCALE: 1/4" = 1'-0"



KEY PLAN
- PLUM BROOK STATION -
SCALE: NONE



- GENERAL NOTES**
1. REFERENCE DEMOLITION DRAWING DOMW-WON20384-MD-401 AND PIPING DIAGRAM DOMW-WON20384-P-901.
 2. FOR LEGEND, ABBREVIATIONS AND MATERIALS AND TESTING TABLES REFER TO DRAWING DOMW-WON20384-P-601.
 3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO CONSTRUCTION/FABRICATION. ANY DISCREPANCIES SHALL BE REPORTED TO NASA PROJECT MANAGER (PM).
 4. ALL VALVES MUST OPEN RIGHT (CLOCKWISE). OPENING DIRECTION SHALL BE INDICATED ON THE VALVE. PLACE CONCRETE SUPPORTS UNDER ALL VALVES AND METERS.

- CONSTRUCTION NOTES**
1. REPLACE EXISTING CHECK VALVE WITH WATTS 8" SERIES 774 DOUBLE CHECK VALVE ASSEMBLY. REFER TO PIPING DIAGRAM DRAWING M-901 FOR FURTHER INFORMATION.
 2. INSTALL 2 - 1" CHECK VALVES AND A 1" BALL VALVE IN-LINE AS SHOWN.
 3. MODIFY LINE LENGTH RESULTING FROM INSTALLATION OF NEW DOUBLE CHECK VALVE. INSTALL A DUCTILE IRON MECHANICAL JOINT COUPLING COMPLYING WITH AWWA-C219 PREPARING ENDS AS REQUIRED BY COUPLING MANUFACTURER. BOLTS AND NUTS SHALL BE MADE OF ASTM 304 STAINLESS STEEL. GASKETS SHALL BE SBR PER ASTM D2000 MBA 710.

DRAWING/DESIGN STATUS: FOR CONSTRUCTION 03/04/2014		NATIONAL AERONAUTICS AND SPACE ADMINISTRATION JOHN H. GLENN RESEARCH CENTER LEWIS FIELD & PLUM BROOK STATION, OHIO	
DRAWING MANAGEMENT			
SYSTEM: DOMW	SUB-SYS: CONFG	PLUM BROOK STATION BACKFLOW PREVENTERS	
NASA APPROVALS			
DR: JCZ	DES: KJIS	BACKFLOW PREVENTION UPGRADE MASON AND FOX ROAD VAULTS PLAN AND DETAIL VIEW	
CONTRACTOR: GESSO TEAM	RELEASE APPROVAL: DATE:	PROJ. MGR: KJIS	DATE:
CONTRACT NO: WNC12BA01B	RELEASE APPROVAL: DATE:	DATE:	DATE:
DRWN: J.P.	DESIGN: J.P.	CHECKED: DATE:	RELEASE STATUS: WORKING
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CHG	NUM	DESCRIPTION	APP/DATE
REVISIONS			
CAD DRAWING - DO NOT REVISE MANUALLY			
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SCALE: AS NOTED	OFFICIAL DATE:		REVISION VER
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