




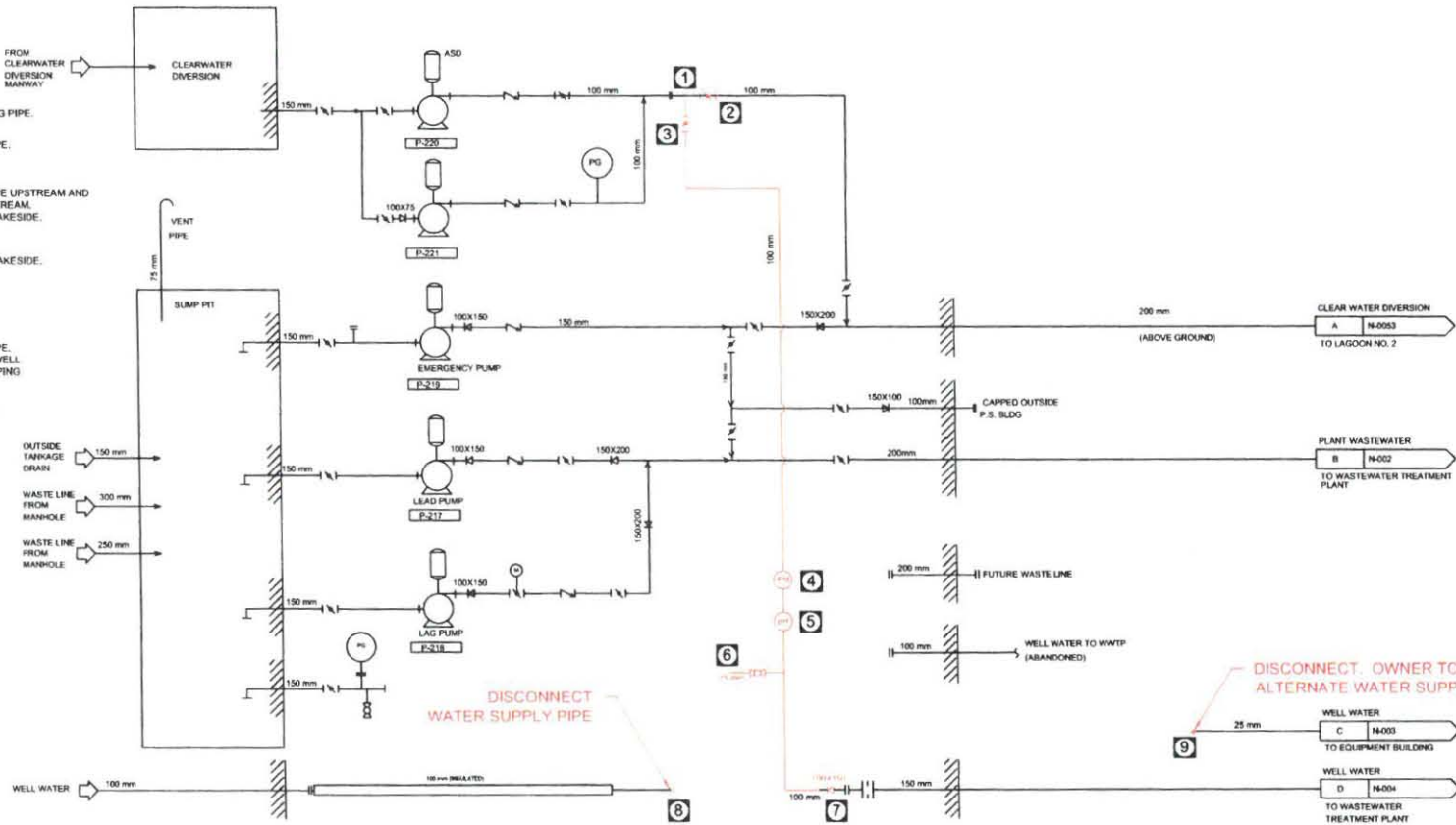
- LEGEND
-  BALL VALVE
 -  CHECK VALVE
 -  BUTTERFLY VALVE

REV.	DESCRIPTION	DATE	APPROVED
A	DRAFT. ISSUED FOR REVIEW	JUNE9/16	
B	DRAFT. ISSUED FOR REVIEW	JUNE14/16	

ASMUNDSSON ENGINEERING			
DIAGEO CLEARWATER SWITCHOVER WWTP - PARTIAL PROCESS FLOW DIAGRAM			
EXISTING CONDITIONS			
SCALE	DRAWING NUMBER	REVISION	
NTS	PFD3	B	

KEY NOTES

- 1 TIE IN POINT 1.
- 2 NEW 100mm BUTTERFLY VALVE INSTALLED IN EXISTING PIPE.
- 3 NEW 100mm BUTTERFLY VALVE INSTALLED IN NEW PIPE.
- 4 NEW 100 mm MAG. FLOW METER
ROSEMOUNT 8705T5AD40C1M0N6B3
REQUIRES AT LEAST 5 PIPE DIAMETERS STRAIGHT PIPE UPSTREAM AND
AT LEAST 2 PIPE DIAMETERS STRAIGHT PIPE DOWNSTREAM.
SEE ATTACHED SUBMITTAL - BUDGET QUOTE FROM LAKESIDE.
- 5 NEW ROSEMOUNT ANALYTICAL 3900VP-01-10
GENERAL PURPOSE pH/ORP SENSOR WITH VP
SEE ATTACHED SUBMITTAL - BUDGET QUOTE FROM LAKESIDE.
- 6 NEW SAMPLING PORT
1" PIPE WITH BALL VALVE
- 7 TIE IN POINT 2
- 8 NEW BLANK FLANGE ON EXISTING WATER SUPPLY PIPE.
CONTRACTOR TO PHYSICALLY SEPARATE EXISTING WELL
WATER PIPE FROM NEW CLEARWATER DIVERSION PIPING
AND CAP WELL WATER PIPE.
- 9 PREVIOUSLY EXISTING WELL WATER PIPE PROVIDED
WATER TO THE NEW EQUIPMENT BUILDING.
ONCE THIS WELL WATER PIPE IS RE-PURPOSED TO
BEING THE CLEARWATER DIVERSION PIPE THEN
THE CONNECTION TO THE EQUIPMENT BLDG.
WATER SUPPLY MUST BE DISCONNECTED.
THIS IS OWNER'S RESPONSIBILITY.



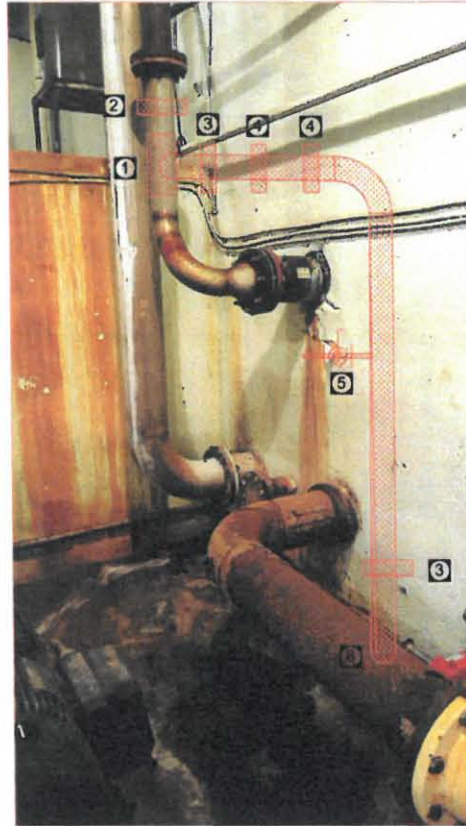
NOTE:

1. EXISTING CONDITIONS COPIED DIRECTLY FROM CH2M HILL DRAWING - PHASE 1 ENGINEERING SERVICES, AS CONSTRUCTED, DATED MARCH 2016
2. EXISTING PIPING SHOWN IN BLACK AND NEW PIPING SHOWN IN RED.

REV.	DESCRIPTION	DATE	APPROVED
A	DRAFT. ISSUED FOR REVIEW	JUNE 9/16	

ASMUNDSSON ENGINEERING		
DIAGEO CLEARWATER SWITCHOVER LIFT STATION PROCESS FLOW DIAGRAM		
NEW CONDITIONS		
SCALE	DRAWING NUMBER	REVISION
NTS	PFD2	A

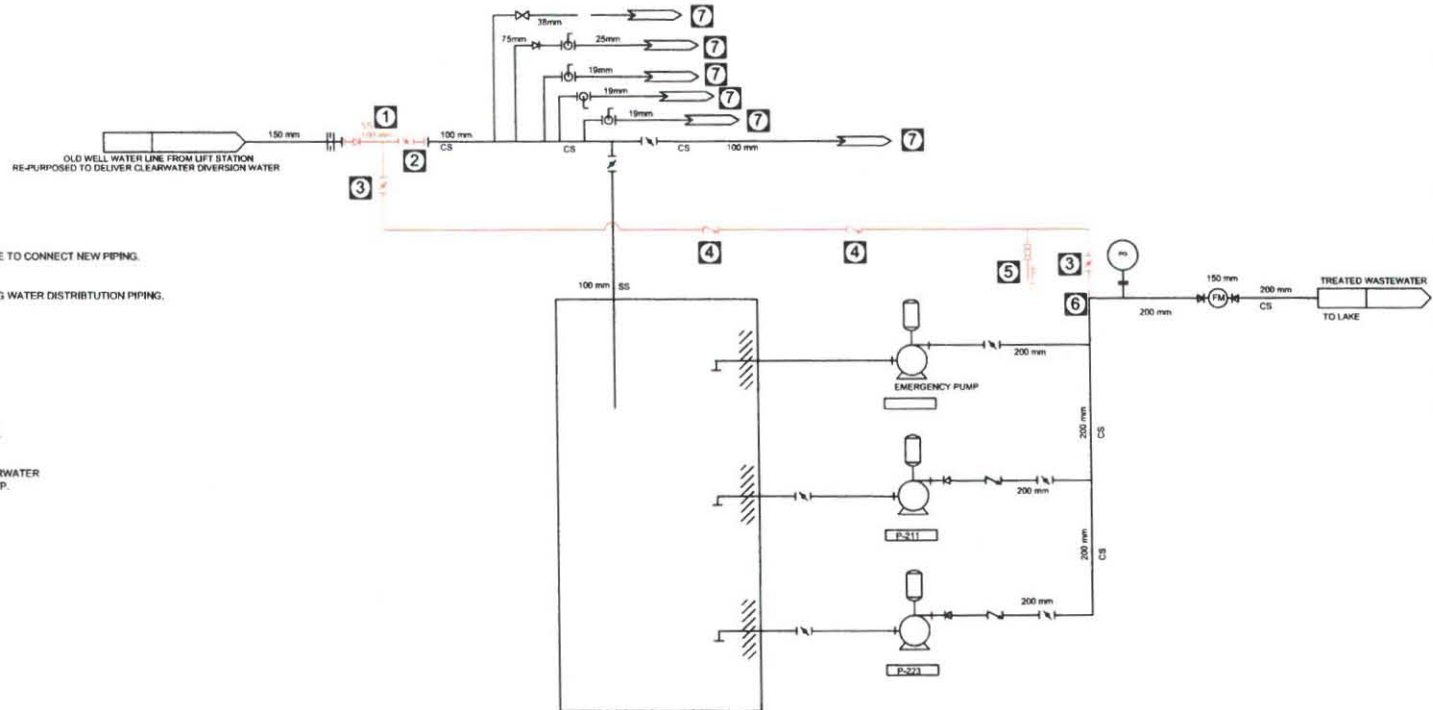
- ❶ TIE IN POINT 'A'. REPLACE EXISTING SHORT SPOOL SECTION OF SS PIPE WITH NEW CAW TEE TO CONNECT NEW PIPING.
- ❷ NEW 100 mm BUTTERFLY VALVE TO ISOLATE NEW CLEARWATER DIVERSION FROM EXISTING WATER DISTRIBUTION PIPING.
- ❸ NEW 100 mm BUTTERFLY VALVE, x 2
- ❹ NEW 100 mm CHECK VALVE x 2
- ❺ 19mm DRAIN/SAMPLING PORT/OPTIONAL PRESSURE GAUGE LOCATION
- ❻ TIE IN POINT 'B'. CONNECT NEW 100 mm SS PIPE TO EXISTING 200 mm CARBON STEEL PIPE. USE APPROPRIATE WELDING ROD OR CONNECTION TYPE.



EXISTING PIPING SHOWN IN BLACK AND NEW PIPING SHOWN IN RED.

WWTP BASEMENT

REV.	DESCRIPTION	DATE	APPROVED	ASMUNDSSON ENGINEERING					
A	DRAFT. ISSUED FOR REVIEW	JUN12/16		DIAGEO CLEARWATER SWITCHOVER WWTP BASEMENT PIPING SKETCH					
B	DRAFT. ISSUED FOR REVIEW	JUN14/16							
				NEW CONDITIONS					
				SCALE	DRAWING NUMBER				
				M2					B



KEY NOTES

- 1 TIE IN POINT 'A'. REPLACE EXISTING SHORT SPOOL SECTION OF SS PIPE WITH NEW CW TEE TO CONNECT NEW PIPING.
- 2 NEW 100 mm BUTTERFLY VALVE TO ISOLATE NEW CLEARWATER DIVERSION FROM EXISTING WATER DISTRIBUTION PIPING.
- 3 NEW 100 mm BUTTERFLY VALVE, x 2
- 4 NEW 100 mm CHECK VALVE x 2
- 5 19mm DRAIN/SAMPLING PORT/OPTIONAL PRESSURE GAUGE LOCATION
- 6 TIE IN POINT 'B'. CONNECT NEW 100 mm SS PIPE TO EXISTING 200 mm CARBON STEEL PIPE. USE APPROPRIATE WELDING ROD OR CONNECTION TYPE.
- 7 EXISTING WELL WATER DISTRIBUTION PIPING SHALL BE ISOLATED TO ENSURE THAT CLEARWATER DIVERSION WATER IS NOT FED INTO THE WELL WATER DISTRIBUTION SYSTEM IN THE WWTP. IDEALLY, PHYSICALLY DISCONNECT AND SEPARATE. THIS IS THE OWNER'S RESPONSIBILITY.

NOTE:

1. EXISTING PIPING SHOWN IN BLACK AND NEW PIPING SHOWN IN RED.

REV.	DESCRIPTION	DATE	APPROVED	ASMUNDSSON ENGINEERING		
A	DRAFT, ISSUED FOR REVIEW	JUNE 9/16		DIAGEO CLEARWATER SWITCHOVER WWTP - PARTIAL PROCESS FLOW DIAGRAM		
B	DRAFT, ISSUED FOR REVIEW	JUNE 14/16				
				NEW CONDITIONS		
				SCALE	DRAWING NUMBER	REVISION
				NTS	PFD4	B

KEY NOTES

- 1 TIE IN POINT 1.
- 2 NEW 100mm BUTTERFLY VALVE INSTALLED IN EXISTING PIPE.
- 3 NEW 100mm BUTTERFLY VALVE INSTALLED IN NEW PIPE.
- 4 NEW 100 mm MAG. FLOW METER
ROSEMOUNT 8702SAS40C1MKNR83
REQUIRES AT LEAST 5 PIPE DIAMETERS STRAIGHT PIPE UPSTREAM AND
AT LEAST 2 PIPE DIAMETERS STRAIGHT PIPE DOWNSTREAM.
SEE ATTACHED SUBMITTAL - BUDGET QUOTE FROM LAKESIDE.
- 5 NEW ROSEMOUNT ANALYTICAL 3900VP-01-10
GENERAL PURPOSE pH/ORP SENSOR WITH VP
SEE ATTACHED SUBMITTAL - BUDGET QUOTE FROM LAKESIDE.
- 6 NEW SAMPLING PORT
1" PIPE WITH BALL VALVE
- 7 TIE IN POINT 2



EXISTING PIPING SHOWN IN BLACK AND NEW PIPING SHOWN IN RED.

LIFT STATION BASEMENT

REV.	DESCRIPTION	DATE	APPROVED	ASMUNDSSON ENGINEERING		
A	DRAFT. ISSUED FOR REVIEW	JUN12/16		DIAGEO CLEARWATER SWITCHOVER LIFT STATION BASEMENT PIPING SKETCH		
B	DRAFT. ISSUED FOR REVIEW	JUN14/16				
				NEW CONDITIONS		
				SCALE	DRAWING NUMBER	REVISION
				M1		B