

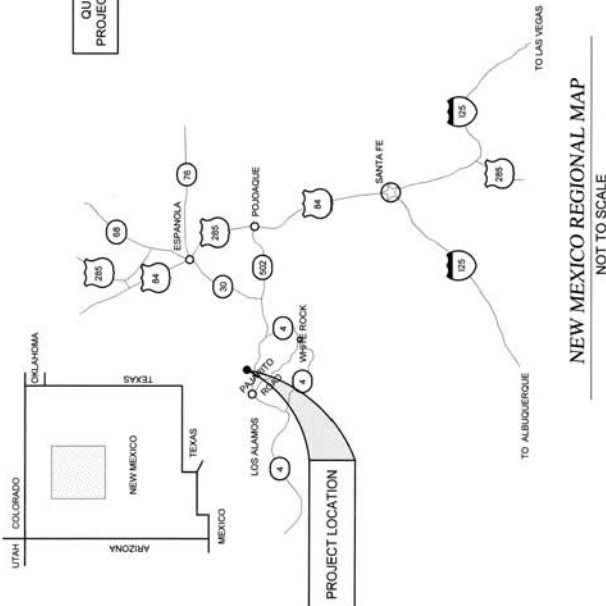
DEPARTMENT OF PUBLIC UTILITIES

IFB26-20

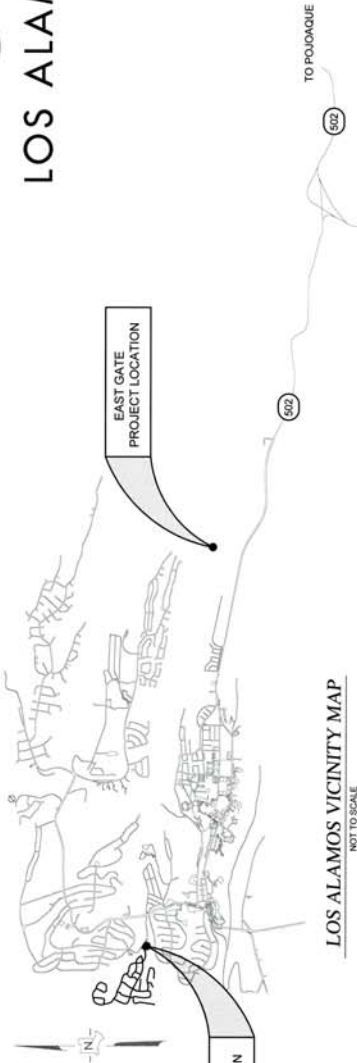
QUEMAZON AND EAST GATE LIFT STATION
LOS ALAMOS COUNTY - NEW MEXICO



LOS ALAMOS



NEW MEXICO REGIONAL MAP
NOT TO SCALE



LOS ALAMOS VICINITY MAP
NOT TO SCALE

DRAWING INDEX

1. COVER SHEET
2. EAST GATE DRY WELL - WET WELL EQUIPMENT
3. EAST GATE CONTROL PANEL
4. EAST GATE BY-PASS PLANS
5. EAST GATE SITE PLAN
6. EAST GATE DETAILS
7. QUEMAZON WET WELL - DRY WELL EQUIPMENT
8. QUEMAZON CONTROL PANEL
9. QUEMAZON SITE PLAN
10. QUEMAZON BY-PASS PLAN



WHITE ROCK VICINITY MAP
NOT TO SCALE

APPROVED BY: _____ DATE: 2/17/25
PUBLIC UTILITIES PROJECT MANAGER
PUBLIC UTILITIES ENGINEER



SHEET 1

INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005



LOS ALAMOS

QUEMAZON AND EAST GATE LIFT
STATION
REHABILITATION PROJECT
IFB26-20
COVER SHEET

DESIGNED BY: KVM
DRAWN BY: KVM
APPROVED BY: _____
DATE: N/A
SCALE: N/A

NO. 1
REVISION DESCRIPTION

NO.	REVISION DESCRIPTION
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DESIGNED BY: J.R.	DRAWN BY: J.R.	APPROVED BY: J.J.A.	DATE: 7/16/2025	SCALE: N/A
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EAST GATE LIFT STATION IFB26-20 WET WELL AND DRY WELL EQUIPMENT UPGRADES

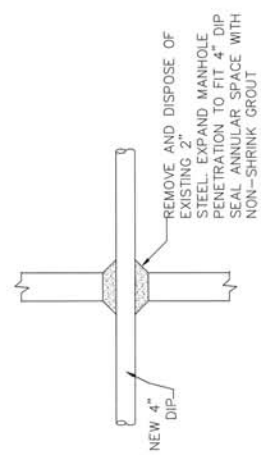
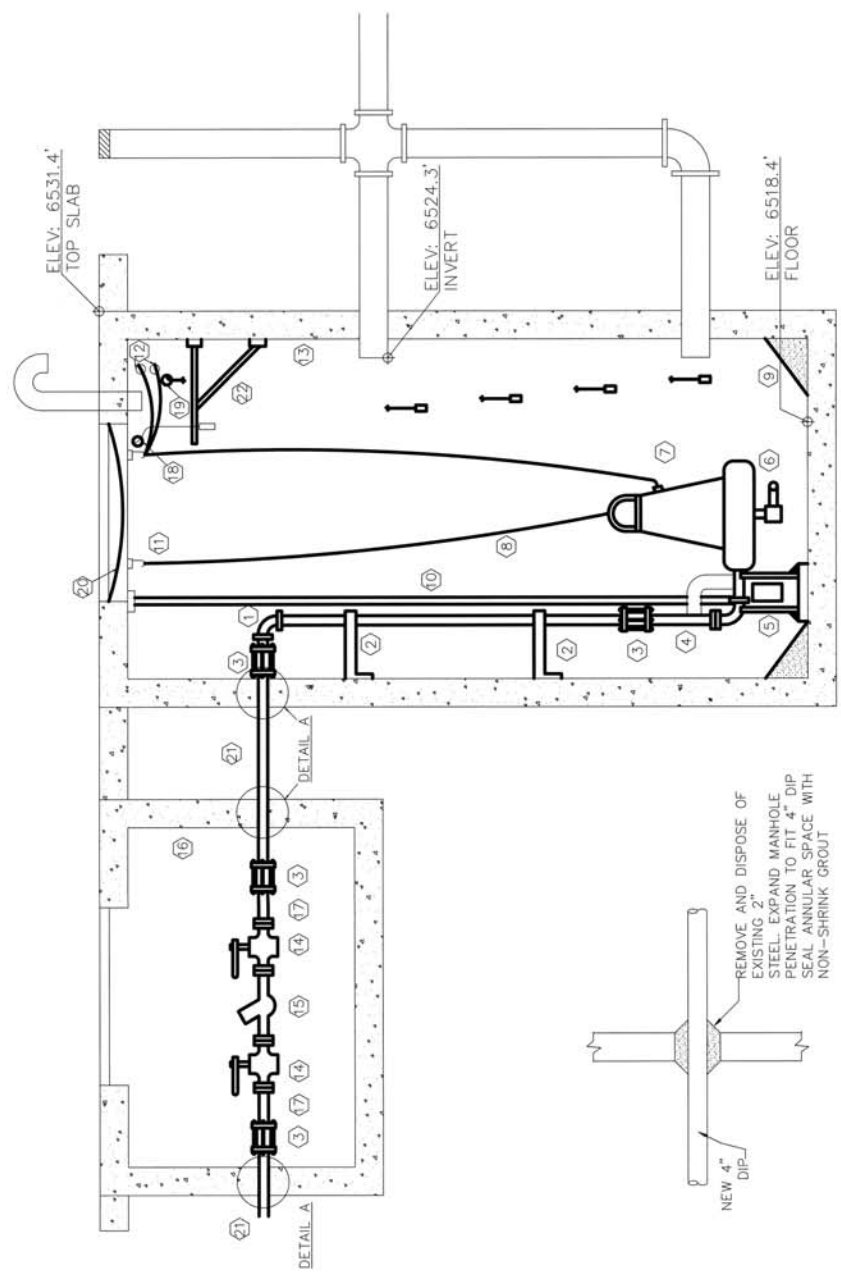


INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES

SHEET
2

KEYED NOTES

- 1) INSTALL 4" 90 DEGREE FLANGE FITTING WITH STAINLESS STEEL BOLTS (2 EACH)
- 2) INSTALL NEW 4" DISCHARGE PIPE SUPPORT ANCHORED TO THE WALL (4 EACH)
- 3) INSTALL 4" COMPRESSION COUPLING WITH STAINLESS STEEL BOLTS AND NUTS (4 EACH)
- 4) INSTALL 24" LONG 4" FLANGE X PLAIN END SPOOL (2 EACH)
- 5) INSTALL PUMP MOUNTING SYSTEM ANCHORED TO THE FLOOR PER PUMP MANUFACTURERS RECOMMENDATION (2 EACH)
- 6) INSTALL MIX-FLUSH VALVE ON ONE PUMP
- 7) NEW FLYGT SUBMERSIBLE PUMP PER SPECIFICATIONS (2 EACH)
- 8) PUMP LIFTING CHAIN PER MANUFACTURERS RECOMMENDATION (2 EACH)
- 9) INSTALL NON-SHRINK GROUT SLOPED TO CENTER, ALONG FULL PERIMETER OF FLOOR
- 10) INSTALL PUMP LIFTING RAIL, TWO RAIL SYSTEM PER MANUFACTURERS RECOMMENDATION
- 11) INSTALL CHAIN AND CABLE HANGERS. TWO FOR CHAINS, TWO FOR PUMP CABLES, ONE FOR FLOATS, AND ONE FOR LEVEL TRANSMITTER (6 EACH)
- 12) NEW PUMP CABLES TO CONTROL PANEL THROUGH EXISTING WALL PENETRATIONS
- 13) EXISTING WET WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED, SURFACE PREPARATION FOR NEW COATING AND ZEBRON COATING SHALL BE PER ZEBRON MANUFACTURERS RECOMMENDATIONS
- 14) INSTALL NEW 4" FLANGED PLUG VALVE (4 EACH)
- 15) INSTALL NEW 4" FLANGED BALL CHECK VALVE (4 EACH)
- 16) EXISTING DRY WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED AND CLEANED
- 17) INSTALL 12" LONG 4" FLANGE X PLAIN END SPOOL (4 EACH)
- 18) RE USE EXISTING RADAR LEVEL TRANSMITTER. NEW RMC FROM CONTROL PANEL INTO WET WELL. NEW WET WELL PENETRATION
- 19) NEW 2" RMC FROM CONTROL PANEL FOR FLOAT WIRES INTO WET WELL. NEW WET WELL PENETRATION
- 20) FURNISH AND INSTALL OSHA APPROVED SAFETY NET FOR FALL PROTECTION
- 21) NEW 4" DIP
- 22) NEW RADAR MOUNTING BRACKET. CONSTRUCT WITH STAINLESS STEEL UNISTRUT WITH STAINLESS STEEL HARDWARE AND ANCHOR BOLTS



DETAIL A

U/L 1/25
LOS ALAMOS NATIONAL LABORATORY

5	REVISION DESCRIPTION
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DESIGNED BY: J.R.	DATE: 7/17/2025
DRAWN BY: J.R.	SCALE: N/A
APPROVED BY: J.J.A.	

EAST GATE LIFT STATION	CONTROL PANEL
IFB26-20	



INCORPORATED COUNTY OF LOS ALAMOS	DEPARTMENT OF PUBLIC UTILITIES
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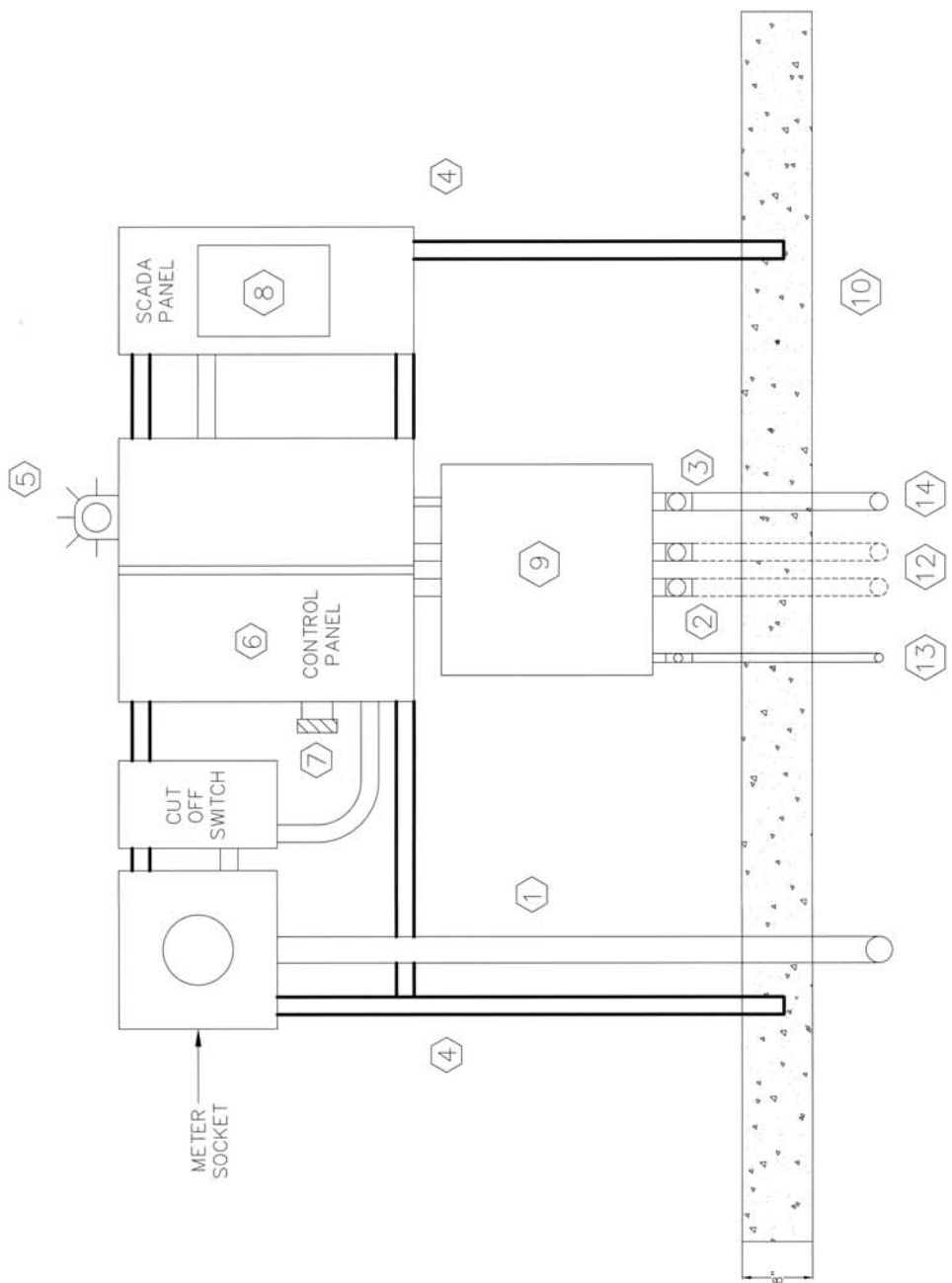
SHEET 3

ELECTRICAL NOTES:

- CONTROL PANEL TO BE NEMA 4 RATED WITH EXTERNAL CONNECTION FOR GENERATOR DURING EMERGENCY OPERATION.
- LIFT STATION SERVICE WILL BE 208V/3-PHASE/60 HTZ.
- CONTROL PANEL FRONT BLANK. LOCAL DEPTH GAUGE, PUMP RUN STATUS LIGHTS, HOA SWITCHES, AMPMETER AND RUN TIME METERS FOR EACH PUMP MOUNTED ON INNER DOOR.
- PUMP CONTROLS TO HAVE LEAD/LAG ALTERNATOR, TIME DELAY ON RESTART AFTER POWER FAILURE.
- ANTI-CONDENSATION HEATER INSIDE PANEL, THERMOSTAT CONTROLLED.
- PANEL MOUNTED 15 AMP, 110V CONVENIENCE GFI OUTLET WITH 20 AMP CIRCUIT BREAKER/DRY TRANSFORMER 110V.
- CONTRACTOR TO INSTALL 3" RMC CONDUIT AND WIRING AS NECESSARY TO CONNECT CONTROL PANEL TO NEW ELECTRIC SERVICE METER SOCKET.
- NEW STATION ELECTRIC SERVICE MUST BE PERMITTED, INSPECTED AND APPROVED BY NEW MEXICO CONSTRUCTION INDUSTRIES.

ELECTRIC KEYED NOTES

- 3" STATION POWER SUPPLY RMC CONDUIT
- 2 - 2" PUMP CABLE RMC CONDUIT
- 2" RMC CONDUIT FOR PUMP CONTROL WIRE FOR FLOATS
- NEW UNISTRUT FRAME STAINLESS STEEL
- HIGH-LEVEL WATER ALARM LIGHT
- CONTROL PANEL
- BRYANT STANDBY GENERATOR POWER CONNECTOR IEC 309 SERIES I + II RECEPTACLE
- SCADA PANEL-BY OWNER
- 24" x 24" NEMA TYPE 4 PANEL, PUMPS AND FLOATS TERMINAL BOX
- INSTALL 8" CONCRETE SLAB W/ 3" WELDED WIRE MESH REINFORCEMENT. LENGTH 10' x WIDTH 3'
- RADAR CABLE FOR CONTROLS DEPTH MONITORING
- INTERCEPT EXISTING PUMP CONDUITS THAT ENTER WET WELL. RE-USE EXISTING CONDUIT THAT ENTERS WET WELL.
- INSTALL 1" RMC FROM NEMA 4 PANEL TO WET WELL. NEW PENETRATION TO WET WELL FOR RADAR
- INSTALL 2" RMC FROM NEMA 4 PANEL TO WET WELL. NEW PENETRATION TO WET WELL FOR FLOATS



7/17/25

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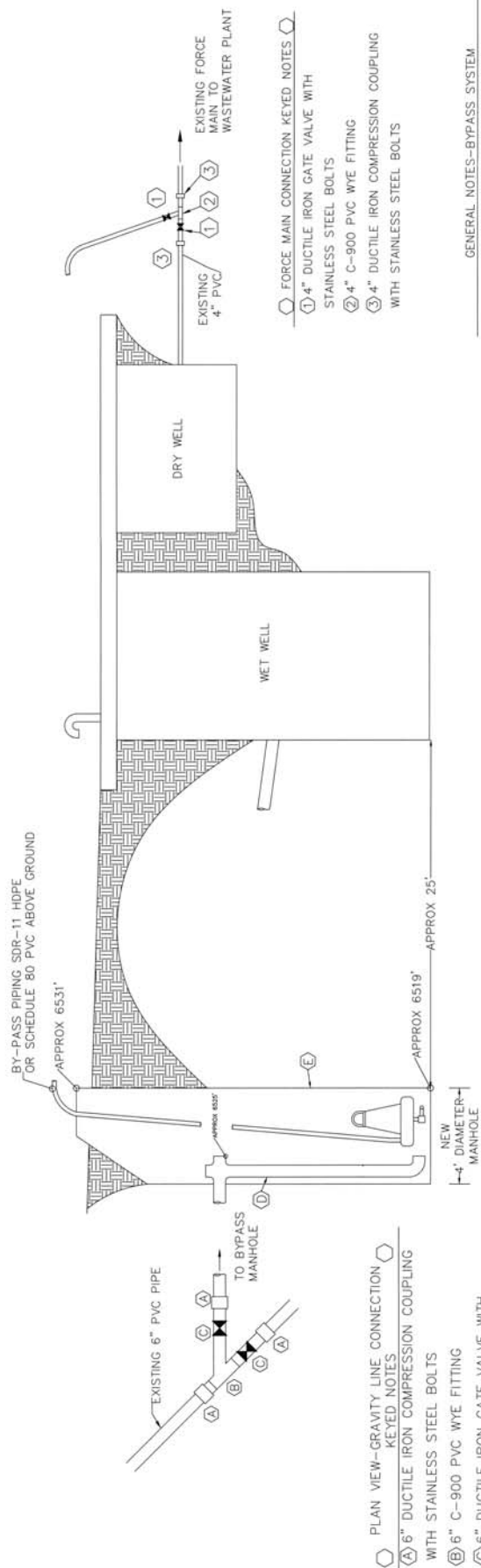
DESIGNED BY:	J.R.
DRAWN BY:	J.R.
APPROVED BY:	J.J.A.
DATE:	7/16/2025
SCALE:	N/A

EAST GATE LIFT STATION	IFB26-20	BY-PASS PLAN
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INCORPORATED COUNTY OF LOS ALAMOS DEPARTMENT OF PUBLIC UTILITIES

SHEET	4
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SCHEMATIC OF TEMPORARY PUMPING SYSTEM



NO.	REVISION DESCRIPTION
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DESIGNED BY:	J.R.
DRAWN BY:	J.R.
APPROVED BY:	J.J.A.
DATE:	7/16/2025
SCALE:	N/A

EAST GATE LIFT STATION
IFB26-20
SITE PLAN



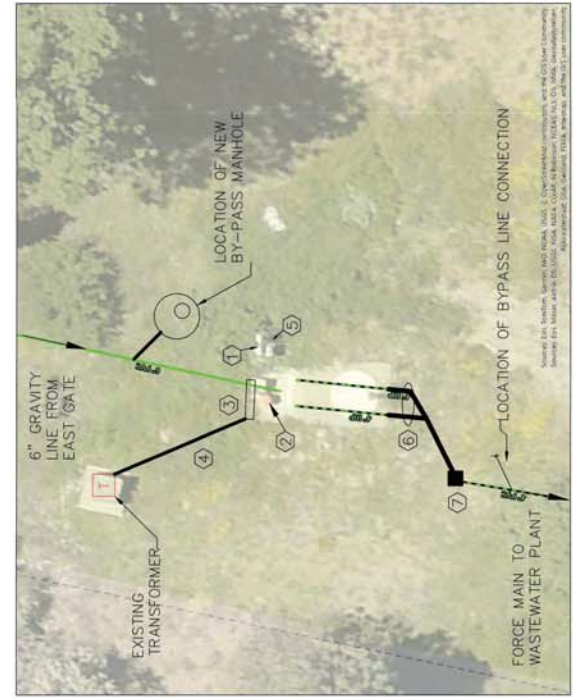
INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES

SHEET
5

8/14/25
JAL/ALB



EXISTING CONTROL PANEL
AND STATION SERVICE



- KEYED NOTES
- 1 REMOVE & DISPOSE EXISTING CONTROL RACK, PANELS, SLAB, AND CONDUITS. EXISTING CONTROL PANEL TO BE SALVAGED BY OWNER.
 - 2 REMOVE & DISPOSE OF 2 PANELS AND MOUNTING HARDWARE. CUT EXISTING CONDUITS 6" ABOVE GROUND. THEY WILL BE REUSED.
 - 3 NEW CONTROL PANEL AND STATION SERVICE PER SHEET 3.
 - 4 NEW 3" PVC ELECTRIC CONDUIT FOR NEW STATION SERVICE.
 - 5 EXISTING SCADA PANEL TO BE SALVAGED AND INSTALLED ON NEW CONTROL RACK.
 - 6 REMOVE AND DISPOSE OF 2" STEEL PIPING. REPLACE WITH NEW 4" DUCTILE IRON PIPING.
 - 7 CONNECTION FROM NEW 4" DIP TO EXISTING 4" PVC. MJ SOLID SLEEVE WITH MEGALUG JOINT RESTRAINT.



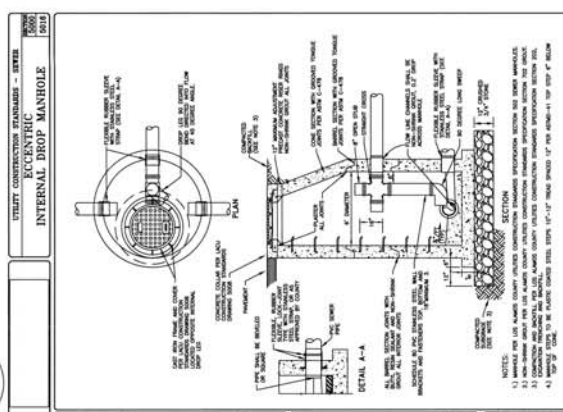
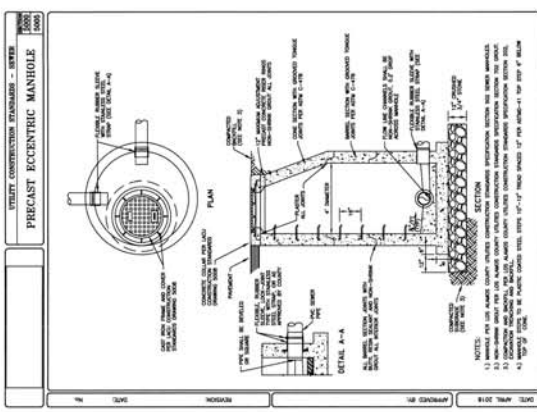
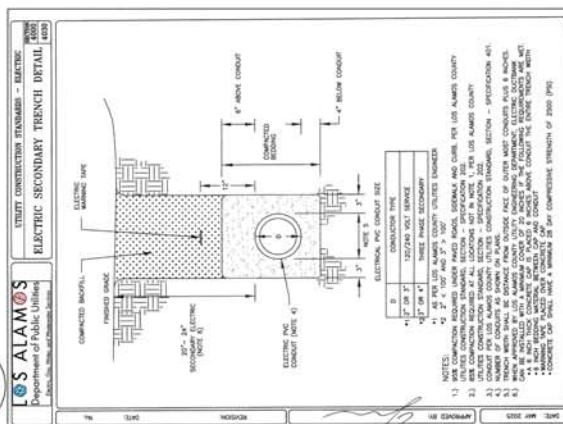
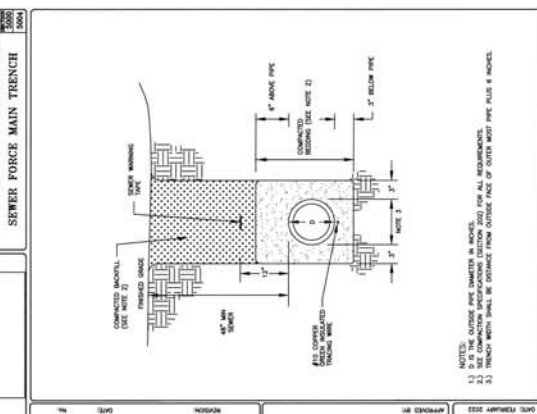
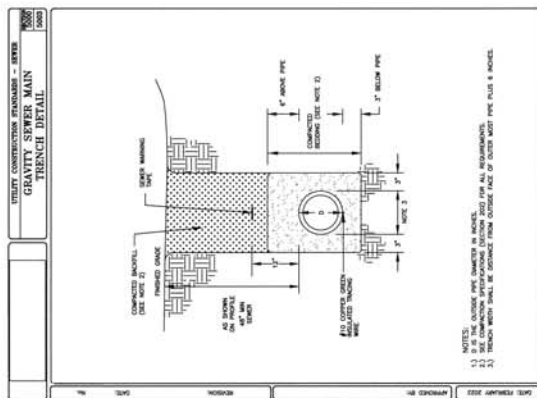
EXISTING PANELS



EAST GATE LIFT STATION
IFB26-20
DETAILS

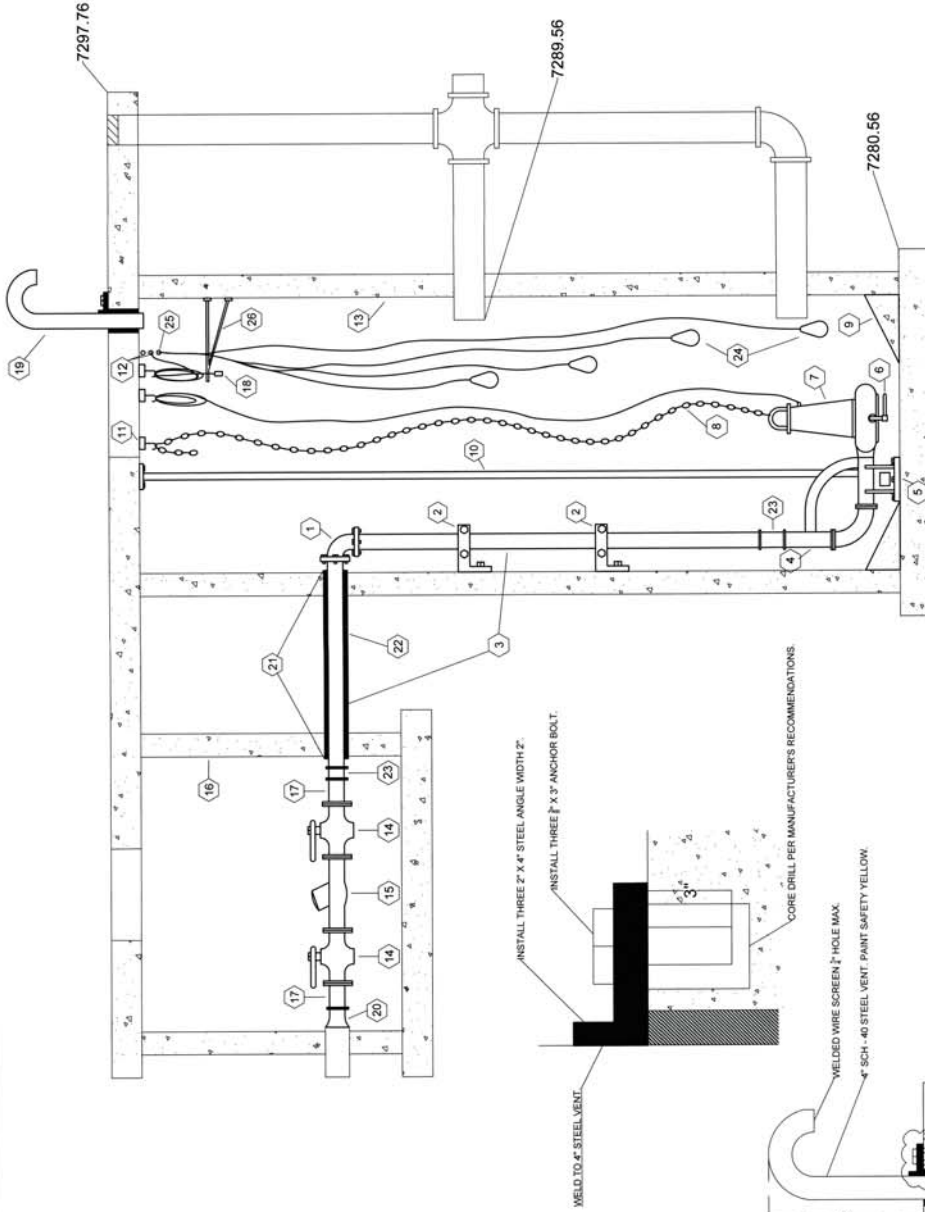
DESIGNED BY: J.R.
DRAWN BY: J.R.
APPROVED BY: J.J.A.
DATE: 7/17/2025
SCALE: N/A

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NO.	REVISION DESCRIPTION



KEYED NOTES

1. INSTALL NEW 4" 90 DEGREE ELBOW WITH STAINLESS STEEL BOLTS.
2. INSTALL NEW 4" DISCHARGE PIPE SUPPORT ANCHORED TO THE WALL (4 EACH).
3. INSTALL 4" DUCTILE IRON PIPE.
4. INSTALL 24" LONG 4" FLANGE X PLAIN END SPOOL (2 EACH).
5. INSTALL PUMP MOUNTING SYSTEM ANCHORED TO THE FLOOR PER PUMP MANUFACTURERS' RECOMMENDATION (2 EACH).
6. INSTALL MIX-FLUSH VALVE ON ONE PUMP.
7. NEW FLYGHT SUBMERSIBLE PUMP PER SPECIFICATIONS (2 EACH).
8. PUMP LIFTING CHAIN PER MANUFACTURERS' RECOMMENDATION (2 EACH).
9. INSTALL NON-SHRINK GROUT SLOPED TO CENTER, ALONG FULL PERIMETER OF FLOOR.
10. INSTALL PUMP LIFTING RAIL, TWO RAIL SYSTEM PER MANUFACTURERS' RECOMMENDATION.
11. INSTALL CHAIN AND CABLE HANGERS, TWO FOR CHAINS AND TWO FOR PUMP CABLES, ONE FOR FLOATS, TWO FOR LEVEL TRANSMITTER (6 EACH).
12. NEW PUMP CABLES TO NEMA 4 PANEL THROUGH EXISTING WALL PENETRATIONS.
13. EXISTING WET WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED, SURFACE PREPARATION SHALL BE PER ZEPHRON COATING, COATING SHALL BE PER ZEPHRON MANUFACTURERS' RECOMMENDATIONS.
14. INSTALL NEW 4" FLANGED PLUG VALVE (4 EACH).
15. INSTALL NEW 4" FLANGED BALL CHECK VALVE (2 EACH).
16. EXISTING DRY WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED AND CLEANED.
17. INSTALL 12" LONG 4" FLANGED X PLAIN END SPOOL (2 EACH).
18. EXISTING RADAR LEVEL TRANSMITTER WILL BE RE-USED.
19. REPLACE EXISTING 6" VENT WITH NEW 4" VENT PER DETAIL A.
20. INSTALL 6" X 4" MJ REDUCER WITH STAINLESS STEEL BOLTS.
21. CUT EXISTING 6" PIPE 2' FROM WALL OF VAULT INTERIOR - 4 - PLACES.
22. SLEEVE NEW 4" DUCTILE IRON PIPE THROUGH 6" PIPE.
23. 4" MJ SOLID SLEEVE WITH STAINLESS STEEL BOLTS.
24. 4 FLOAT SWITCHES.
25. NEW PENETRATION AND 2" CONDUIT TO NEMA 4 PANEL FOR FLOATS.
26. INSTALL NEW PADAR MOUNTING BRACKET WITH STAINLESS STEEL UNISTRUT, WITH STAINLESS BOLTS AND HARDWARE ANCHORED TO WALL.



WELD TO 4" STEEL VENT

INSTALL THREE 2" X 4" STEEL ANGLE WIDTH 2"

INSTALL THREE 1/2" X 3" ANCHOR BOLT.

1. REMOVE EXISTING CORRODED 6" VENT. WELD TO 4" STEEL VENT.

WELDED WIRE SCREEN 1/2" HOLE MAX.

4" SCH. 40 STEEL VENT PAINT SAFETY YELLOW.

USE EXISTING PENETRATION NON-SHRINK GROUT TO SEAL ANULAR SPACE.

DETAIL A - VENT

DEMOLITION NOTES

1. REMOVE AND DISPOSE OF EXISTING PIPING IN BOTH THE WET WELL AND DRY WELL.
2. REPAIR ANY VOIDS, CRACKS, OR BOLT HOLES WITH NON-SHRINK GROUT ON THE INTERIOR WALLS OF WET WELL.
3. REMOVE AND DISPOSE OF ALL EXISTING PUMPS, CABLES, AND ACCESSORIES THAT WILL BE REPLACED.



SHEET 7



INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

QUEMAZON AND EAST GATE LIFT
STATION
REHABILITATION PROJECT
IFB26-20
QUEMAZON DRY WELL - WET WELL
EQUIPMENT

DESIGNED BY: KVM
DRAWN BY: KVM
APPROVED BY: N/A
DATE: N/A
SCALE: N/A

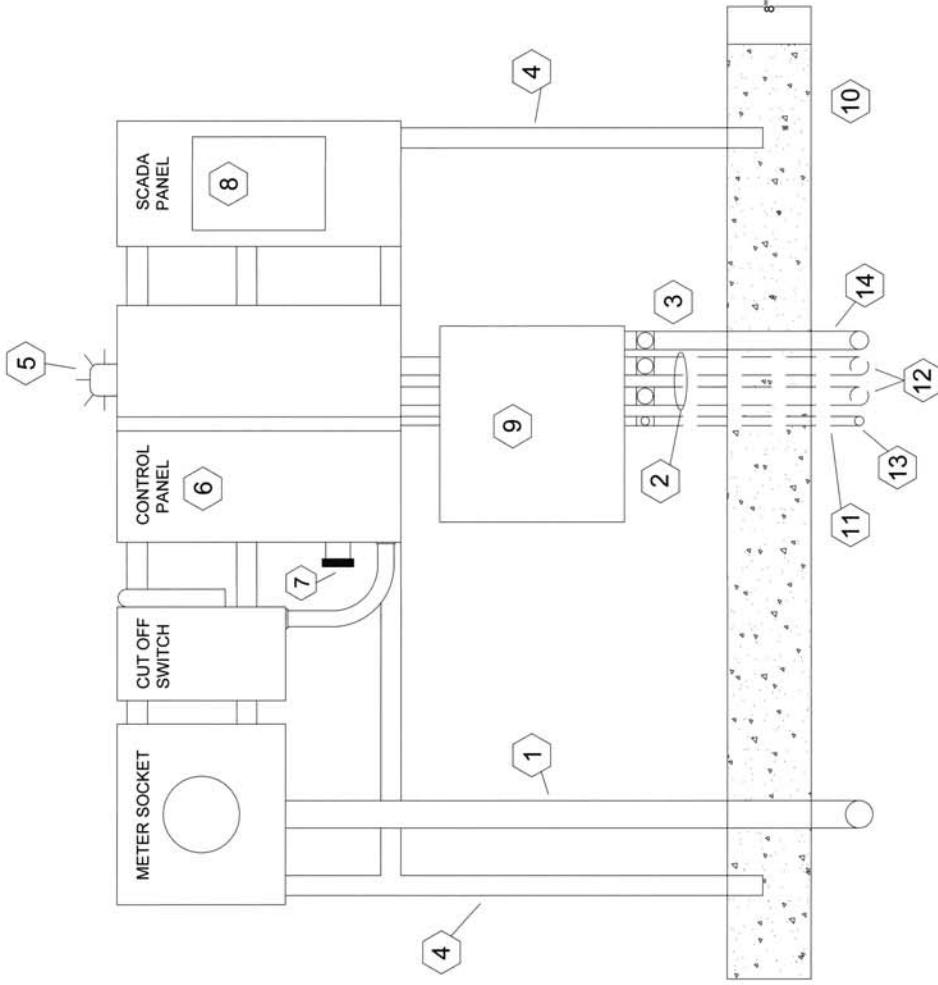
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ELECTRICAL NOTES

1. CONTROL PANEL TO BE NEMA 4 RATED WITH EXTERNAL CONNECTION FOR GENERATOR DURING EMERGENCY OPERATION. TO BE DETERMINED BY L.A.C.U. ENGINEERING. LOCATION IS SITE SPECIFIC.
2. STATION SERVICE WILL BE 208 V / 3-PHASE / 60 HTZ.
3. CONTROL PANEL FRONT BLANK. LOCAL DEPTH GAUGE, PUMP RUN STATUS LIGHTS, HOA POWER SWITCHES, AMPMETER AND RUN TIME METERS FOR EACH PUMP MOUNTED ON INNER DOOR.
4. PUMP CONTROLS TO HAVE LEAD / LAG ALTERNATOR, TIME DELAY ON RE-START AFTER POWER FAILURE, AND PHASE / LOW VOLTAGE MONITOR.
5. ANTI-CONDENSATION HEATER INSIDE PANEL, 100 WATT, THERMOSTAT CONTROLLED.
6. PANEL MOUNTED 15 AMP, 110V CONVENIENCE GFI OUTLET WITH 20 AMP CIRCUIT BREAKER / DRY TRANSFORMER 110V.
7. CONTRACTOR TO INSTALL 3" RMC CONDUIT AND WIRING AS NECESSARY TO CONNECT CONTROL PANEL TO NEW ELECTRIC SERVICE METER SOCKET.
8. NEW STATION ELECTRIC SERVICE MUST BE PERMITTED, INSPECTED AND APPROVED BY NEW MEXICO CONSTRUCTION INDUSTRIES.

ELECTRIC KEYED NOTES

- 1 3" STATION POWER SUPPLY RMC CONDUIT.
- 2 2-2" PUMP CABLE RMC CONDUIT.
- 3 2" RMC CONDUIT FOR PUMP CONTROL WIRE FOR FLOATS.
- 4 NEW UNISTRUT FRAME STAINLESS STEEL.
- 5 HIGH-LEVEL WATER ALARM LIGHT.
- 6 CONTROL PANEL.
- 7 BRYANT STANDBY GENERATOR POWER CONNECTOR IEC 309 SERIES I + II RECEPTACLE.
- 8 SCADA PANEL. RE-USE EXISTING SCADA PANEL.
- 9 24" X 24" NEMA TYPE 4 PANEL. PUMPS, RADAR CABLE, AND FLOATS TERMINAL BOX.
- 10 INSTALL 8" CONCRETE SLAB W / 3" WELDED WIRE MESH REINFORCEMENT. LENGTH 10' X 3' WIDE.
- 11 RADAR CABLE FOR CONTROLS DEPTH MONITORING.
- 12 INTERCEPT EXISTING PUMP CONDUITS THAT ENTER WET WELL. RE-USE EXISTING CONDUIT THAT ENTERS WET WELL.
- 13 INTERCEPT EXISTING RADAR CABLE CONDUIT THAT ENTERS WET WELL. RE-USE EXISTING CONDUIT THAT ENTERS WET WELL.
- 14 INSTALL 2" RMC FROM NEMA 4 PANEL TO WET WELL. NEW PENETRATION TO WET WELL FOR FLOATS.



8
SHEET

INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES
1000 CENTRAL AVE. SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005



QUEMAZON AND EAST GATE LIFT
STATION
REHABILITATION PROJECT
IFB26-20
QUEMAZON CONTROL PANEL

DESIGNED BY: KVM
DRAWN BY: KVM
APPROVED BY: N/A
DATE: N/A
SCALE: N/A

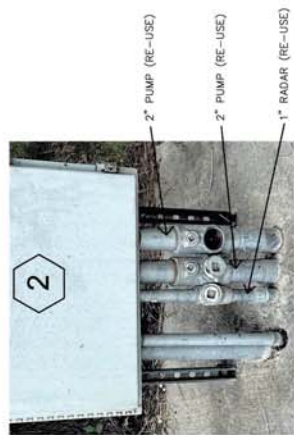
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KEYED NOTES

- EXISTING POWER SUPPLY AND CONTROL PANELS TO BE REMOVED AND DISPOSED.
- EXISTING PANEL CONTAINS PUMP CABLES AND LEVEL CONTROL RADAR CABLE. PRESERVE AND RE-USE RMC FROM THIS PANEL INTO WET WELL.
- EXISTING 6" STEEL VENT TO BE REPLACED PER SHEET 7, DETAIL A.
- EXISTING 6" STEEL VENT TO REMAIN. RE-PAINT SAFETY YELLOW.
- NEW CONTROL PANEL PER SHEET 8.
- NEW 3" ELECTRIC CONDUIT FOR NEW ELECTRIC SERVICE.
- APPROXIMATE LOCATION OF 1500 GALLON ABOVE GROUND POLYETHYLENE BY-PASS PUMPING SYSTEM TANK.
- NEW TEMPORARY 8" HDPE OR SDR-35 PVC GRAVITY LINE TO BY-PASS TANK. THIS LINE SHALL HAVE A MINIMUM SLOPE OF 2% TO THE BY-PASS TANK. REFER TO SHEET 10 FOR BY-PASS SYSTEM.
- NEW TEMPORARY BY-PASS FORCE MAIN. ABOVE GROUND. REFER TO SHEET 10.



OVERALL CONTROL PANEL AND ELECTRIC GEAR



PANEL CONNECTED TO WET WELL



6
SHEET

INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES
1000 CENTRAL AVE. SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 862-8333 FAX (505) 862-8005



LOS ALAMOS

QUEMAZON AND EAST GATE LIFT
STATION
REHABILITATION PROJECT
IFB26-20
QUEMAZON SITE PLAN

DESIGNED BY: KVM
DRAWN BY: KVM
APPROVED BY: N/A
DATE: N/A
SCALE: N/A

NO.	REVISION DESCRIPTION
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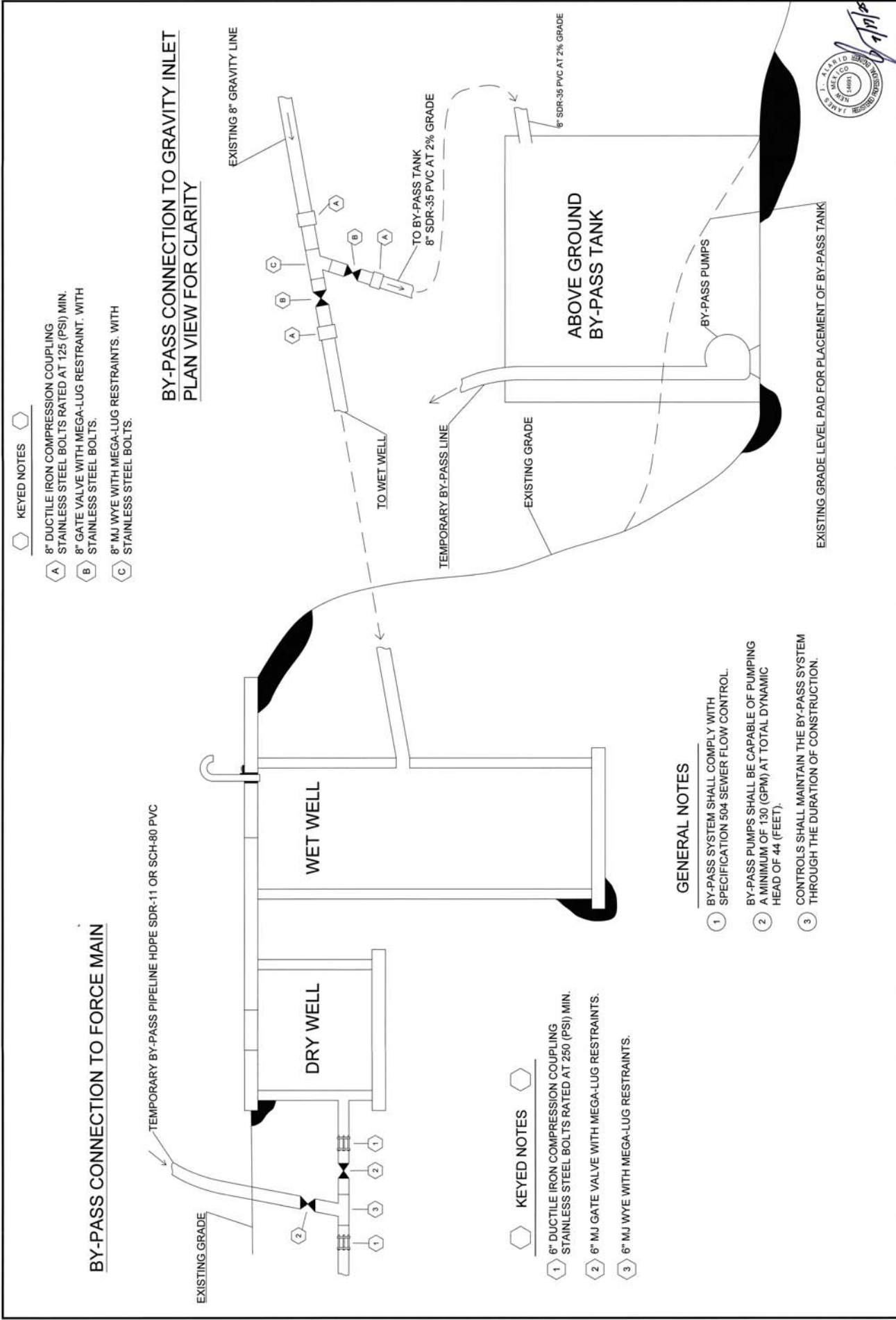
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APPROVED BY:	
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QUEMAZON AND EAST GATE LIFT STATION REHABILITATION PROJECT IFB26-20	QUEMAZON BY-PASS PLAN
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INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

10
SHEET



KEYED NOTES

- A 8" DUCTILE IRON COMPRESSION COUPLING
- B 8" GATE VALVE WITH MEGA-LUG RESTRAINT. WITH STAINLESS STEEL BOLTS.
- C 8" MJ WYE WITH MEGA-LUG RESTRAINTS. WITH STAINLESS STEEL BOLTS.

TEMPORARY BY-PASS PIPELINE HDPE SDR-11 OR SCH-80 PVC

BY-PASS CONNECTION TO FORCE MAIN

KEYED NOTES

- 1 6" DUCTILE IRON COMPRESSION COUPLING
- 2 6" MJ GATE VALVE WITH MEGA-LUG RESTRAINTS.
- 3 6" MJ WYE WITH MEGA-LUG RESTRAINTS.

GENERAL NOTES

- 1 BY-PASS SYSTEM SHALL COMPLY WITH SPECIFICATION 504 SEWER FLOW CONTROL.
- 2 BY-PASS PUMPS SHALL BE CAPABLE OF PUMPING A MINIMUM OF 130 (GPM) AT TOTAL DYNAMIC HEAD OF 44 (FEET).
- 3 CONTROLS SHALL MAINTAIN THE BY-PASS SYSTEM THROUGH THE DURATION OF CONSTRUCTION.



EXISTING GRADE LEVEL PAD FOR PLACEMENT OF BY-PASS TANK

ABOVE GROUND
BY-PASS TANK

BY-PASS PUMPS

TO WET WELL

TO BY-PASS TANK
8" SDR-35 PVC AT 2% GRADE

EXISTING GRADE

8" SDR-35 PVC AT 2% GRADE

EXISTING 8" GRAVITY LINE

WET WELL

DRY WELL