

2. SCOPE OF SUPPLY – PRODUCTS & SERVICES

This section outlines what products and services are provided by Romtec Utilities for this design. In addition, this section includes the Pre Start-Up Preparation Checklist to be filled out by the owner/contractor prior to the scheduled start-up and scheduling information.

This section is structured as follows:

- 2.01 ROMTEC UTILITIES SCOPE OF SUPPLY: PRODUCTS
- 2.02 ROMTEC UTILITIES SCOPE OF SUPPLY: SERVICES
- 2.03 START-UP, TESTING & TRAINING OUTLINE
- 2.04 PRE START-UP CHECKLIST
- 2.05 PRE START-UP SCHEDULING INFORMATION

Send the completed Start-Up Preparation Checklist to:

Romtec Utilities Document Control
18240 North Bank Rd., Roseburg, OR 97470
Phone: 541-496-9678; Fax: 541-496-0804
Romtec8@romtecutilities.com

IMPORTANT!

Various products and services NOT supplied by Romtec Utilities are listed in the Warranty & Limitations section of this Scope of Supply and Design Submittal.

2.01 ROMTEC UTILITIES SCOPE OF SUPPLY: PRODUCTS

COMPLETE PUMP STATION INCLUDES:

DUPLEX WET WELL & RELATED EQUIPMENT

QTY ITEM

1	BASE - WW - 12ft - FLAT - 15in THICK - AMERON
1	PUMP SHELF - 12ft X 14in - AMERON
1	BARREL - 12ft DIA X 1.5ft - AMERON
1	BARREL - 12ft DIA X 2ft - AMERON
1	BARREL - 12ft DIA X 3ft - AMERON
8	BARREL - 12ft DIA X 4ft - AMERON
1	BARREL - 12ft DIA X 3.5ft - AMERON
1	HATCH - WW - 12ft PED -
1	TOP SLAB - WW - 12ft - PED - AMERON
1	DEFLECTOR PANEL ASSEMBLY - 6ft
1	GUILLOTINE CABLE ASSEMBLY - TOTAL LENGTH
1	HDPE - 24in X 24in X 1/2in - BLACK - cut from 4ft x 8ft
2	BRACKET - SS GUILLOTINE SET
1	HDPE - 4ft X 8ft X 1-2in - BLACK
12	ANGLE - 316SS 11GA FORMED (10ftww)
1	VENT - 4in - PVC - MUSHROOM CAP
1	VENT - MUSHROOM CAP
1	ADAPTOR - 4in SCH80 - MALE THD X SLIP
1	ELBOW - PVC - 4in SCH80 - 90 DEG - SLIP X SLIP
4	PIPE - 4in PVC - SCH80 X 48in
1	4in PVC - SCH 80 X 24in
2	BRACKET - UPPER GUIDE BAR - 3in SS
4	BRACKET - INTERMEDIATE GUIDE BAR - 3in
6	DISCHARGE CLAMP - 14in 316SS
3	DISCHARGE PIPE SUPPORT - WALL BRACKET SET
2	BOLT & NUT KIT - UPPER GUIDE BAR BRACKET - 3-8in
4	CABLE HANGER ASSEMBLY
6	DISCHARGE CLAMP BOLT - 1-2 X 1 SS BOLT, WASHER, FIBER LOCK NUT
3	DISCHARGE PIPE SUPPORT - BOLT KIT
1	STILLING WELL SUPPORT BRACKET - STAINLESS
3	DISCHARGE PIPE BRACKET - DUPLEX
24	REBAR - UPLIFT COLLAR - NO.5 X 18in
1	LADDER - ASSEMBLY - 42ft
2	PUMP - NP3356 - 14in -100ft CABLE
2	DISCHARGE ELBOW - 14in - FLYGT
2	ANCHOR KIT - DISCHARGE ELBOW
2	CORD GRIP - 1.75in - 1.99in DIA SS
2	LIFTING SLING - .125in SS CABLE (46ft TOTAL LENGTH)
2	LINK - .375in - HAMMERLOCK LINK - 316 STLS

2.01 ROMTEC UTILITIES SCOPE OF SUPPLY: PRODUCTS

- 4 CHAIN - S5 3-8in 316SS (2 @ 2ft)
- 168 PIPE - 304SS - 3in SCH40 (12 @ 14ft)
- 2 COUPLING - ROMAC - RFCA - 14in - FBEC - SS HARDWARE
- 2 KOR-N-SEAL - 24in CORE - 14in DI
- 1 KOR-N-SEAL - 8in CORE -1.70 THRU 4.80 PIPE
- 2 SPOOL - FLG X PE - 14in X 72in - DI
- 2 SPOOL - FLG X FLG - 14in X 17.5ft - DI
- 2 SPOOL - FLG X PE - 14in X 17.5ft - DI
- 2 ELBOW - DI - 14in - 90 DEG
- 6 GASKET - FLANGE - 14in X 1/8in
- 1 6" PVC PIPE - PERFORATED X 40ft
- 576 TAPECOAT - 6in X .65mils X LFT
- 754 SEALANT - 1in X 1in X 14.5ft CS-202
- 1 NEVER SIEZE - TUBE
- 1 PRESSURE TRANSDUCER - 4-20 ma - 0-20 PSI - CL1 DIV1 - 100ft CABLE
- 1 BRACKET - PRESS TRANS
- 1 AMERON WELDING

TRIPLEX WET WELL & RELATED EQUIPMENT

QTY ITEM

- 1 PUMP SHELF - 12ft X 14in - AMERON
- 1 BASE - WW - 12ft - FLAT - 15in THICK - AMERON
- 1 BARREL - 12ft DIA X 1.5ft - AMERON
- 1 BARREL - 12ft DIA X 2ft - AMERON
- 9 BARREL - 12ft DIA X 4ft - AMERON
- 1 BARREL - 12ft DIA X 2.5ft - AMERON
- 1 HATCH - WW - 12ft PED - 78333 - 64 X 122
- 1 TOP SLAB - WW - 12ft - PED - AMERON
- 1 DEFLECTOR PANEL ASSEMBLY - 6ft
- 1 GUILLOTINE CABLE ASSEMBLY - TOTAL LENGTH
- 1 HDPE - 24in X 24in X 1/2in - BLACK - cut from 4ft x 8ft
- 2 BRACKET - SS GUILLOTINE SET
- 1 HDPE - 4ft X 8ft X 1-2in - BLACK
- 12 ANGLE - 316SS 11GA FORMED (10ftww)
- 1 VENT - 4in - PVC - MUSHROOM CAP
- 1 VENT - MUSHROOM CAP
- 1 ADAPTOR - 4in SCH80 - MALE THD X SLIP
- 1 ELBOW - PVC - 4in SCH80 - 90 DEG - SLIP X SLIP
- 4 PIPE - 4in PVC - SCH80 X 48in
- 1 4in PVC - SCH 80 X 24in
- 1 BRACKET - UPPER GUIDE BAR - 3in SS
- 2 BRACKET - INTERMEDIATE GUIDE BAR - 3in
- 1 DISCHARGE CLAMP - 14in 316SS
- 4 BRACKET - INTERMEDIATE GUIDE BAR - 2in
- 3 DISCHARGE PIPE SUPPORT - WALL BRACKET SET
- 2 BRACKET - UPPER GUIDE BAR - 2in SS
- 3 BOLT & NUT KIT - UPPER GUIDE BAR BRACKET - 3-8in

2.01 ROMTEC UTILITIES SCOPE OF SUPPLY: PRODUCTS

- 6 DISCHARGE CLAMP - 4in 316SS
- 4 CABLE HANGER ASSEMBLY
- 9 DISCHARGE PIPE SUPPORT - BOLT KIT
- 9 DISCHARGE CLAMP BOLT - 1-2 X 1 SS BOLT, WASHER, FIBER LOCK NUT
- 1 STILLING WELL SUPPORT BRACKET - STAINLESS
- 3 DISCHARGE PIPE BRACKET - SIMPLEX
- 24 REBAR - UPLIFT COLLAR - NO.5 X 18in
- 1 LADDER - ASSEMBLY - 42ft
- 1 PUMP - NP3356 - 14in
- 2 PUMP - FLYGT - NP3102 MT 464 5HP
- 1 DISCHARGE ELBOW - 14in - FLYGT
- 3 ANCHOR KIT - DISCHARGE ELBOW
- 2 DISCHARGE ELBOW - 4in - 540 13 05
- 1 CORD GRIP - 1.75in - 1.99in DIA SS
- 2 BOW SHACKLE - 3-8in - SS W-SCREW PIN
- 2 BOW SHACKLE - 1-2in - SS W-SCREW PIN
- 2 CORD GRIP - .750in - .990 DIA SS
- 3 LIFTING SLING - .125in SS CABLE (46ft TOTAL LENGTH)
- 4 CHAIN - S5 9-32in 316SS (2 @ 2ft)
- 1 LINK - .313in - HAMMERLOCK LINK - 316 STLS
- 2 CHAIN - S5 3-8in 316SS (1 @ 2ft)
- 84 PIPE - 304SS - 3in SCH40 (6 @ 14ft)
- 168 PIPE - 304SS - 2in SCH40 (12 @ 14ft)
- 1 COUPLING - ROMAC - RFCA - 14in - FBEC - SS HARDWARE
- 2 COUPLING - ROMAC - RFCA - 4in FBEC - WITH SS HARDWARE
- 1 KOR-N-SEAL - 24in CORE - 14in DI
- 3 KOR-N-SEAL - 8in CORE -1.70 THRU 4.80 PIPE
- 2 SPOOL - FLG X FLG - 4in X 17.5ft - DI
- 2 SPOOL - FLG X FLG - 4in X 24in - DI
- 2 SPOOL - FLG X PE - 4in X 6ft - DI
- 1 SPOOL - FLG X PE - 14in X 72in - DI
- 1 SPOOL - FLG X FLG - 14in X 17.5ft - DI
- 1 SPOOL - FLG X PE - 14in X 17.5ft - DI
- 2 SPOOL - FLG X PE - 4in X 17.5ft - DI
- 2 ELBOW - DI - 4in - 90 DEG - FLG X FLG
- 1 ELBOW - DI - 14in - 90 DEG
- 8 GASKET - FLANGE - 4in X 1/8in
- 3 GASKET - FLANGE - 14in X 1/8in
- 1 6" PVC PIPE - PERFORATED X 40ft
- 576 TAPECOAT - 6in X .65mils X LFT
- 754 SEALANT - 1in X 1in X 14.5ft CS-202
- 1 PRESSURE TRANSDUCER - 4-20 ma - 0-20 PSI - CL1 DIV1 - 100ft CABLE
- 1 BRACKET - PRESS TRANS
- 1 AMERON WELDING

2.01 ROMTEC UTILITIES SCOPE OF SUPPLY: PRODUCTS

DUPLEX VALVE VAULT & ASSOCIATED MECHANICAL

QTY	ITEM
1	HATCH KEY
1	BASE - VV - 810 MIDDLE
1	BASE - VV - 810
1	RISER - VV - 810 - 1ft
1	HATCH - VV - 810 - PED - 79X93
1	TOP SLAB - VV - 810 - PED
5	PIPE STAND - 14in - S89 FLG
3	PIPE STAND - 14in - S92 SAD
1	LADDER - 8ft-1in
4	NIPPLE - BRASS - .50in X 3in
1	PIPE - DI - 14in - CL52 X 6ft
2	PIPE - DI - 14in - CL52 X 5ft
2	VALVE - PLUG - 14in - WITH HAND WHEEL
2	VALVE - SWING CHECK - 14in
2	VALVE - BALL - 1-2in BRASS - 1-4 TURN
2	PRESSURE GUAGE - 3.5in 60PSI - 1/2in BACK MOUNT
3	COUPLING - ROMAC - RFCA - 14in - FBEC - SS HARDWARE
2	COUPLING - 14in - ROMAC - SHORT SLEEVE - WITH ACCES PAK
3	RETAINER GLAND - 14in
3	KOR-N-SEAL - 20in CORE - 14in PIPE
1	FLANGE - BLIND - 14in
1	SPOOL - FLG X FLG - 14in X 19.75in - DI
2	TEE - DI - 14in - FLG X FLG
8	GASKET - FLANGE - 14in X 1/8in
87	SEALANT - 1in X 1in X 14.5ft CS-202

TRIPLEX VALVE VAULT & ASSOCIATED MECHANICAL

QTY	ITEM
1	HATCH KEY
1	BASE - VV - 810 MIDDLE
1	BASE - VV - 810
1	RISER - VV - 810 - 1ft
1	HATCH - VV - 810 - PED - 79X93
1	TOP SLAB - VV - 810 - PED
5	PIPE STAND - 14in - S89 FLG
1	PIPE STAND - 14in - S92
1	LADDER - 8ft-1in
4	PIPE STAND - 4in - S89 FLG - NO BASE
2	PIPE STAND - 4in - S92 SAD - NO BASE
6	NIPPLE - BRASS - .50in X 3in
2	PIPE - DI - 4in - 5ft - CL52

2.01 ROMTEC UTILITIES SCOPE OF SUPPLY: PRODUCTS

1	PIPE - DI - 14in - CL52 X 72in
1	PIPE - DI - 14in - CL52 X 60in
1	VALVE - PLUG - 14in - WITH HAND WHEEL
1	VALVE - SWING CHECK - 14in
3	VALVE - BALL - 1-2in BRASS - 1-4 TURN
2	MECHANICAL INDICATOR - 4in
3	PRESSURE GUAGE - 3.5in 60PSI - 1/2in BACK MOUNT
2	VALVE - PLUG - 4in - WITH GEAR OP AND HAND WHEEL
2	VALVE - SWING CHECK - 4in
2	BACKFLOW ACTUATOR - 4in & 6in
2	COUPLING - ROMAC - RFCA - 14in - FBEC - SS HARDWARE
1	COUPLING - 14in - ROMAC - SHORT SLEEVE - WITH ACCES PAK
2	ROMAGRIP ACCESSORY PACK - 14in DI MJ
2	RETAINER GLAND - 4in
2	COUPLING - ROMAC - RFCA - 4in FBEC - WITH SS HARDWARE
4	ROMAGRIP ACCESSORY PACK - 4in DI MJ
2	SLEEVE - 4in - SOLID DI SHORT
2	KOR-N-SEAL - 20in CORE - 14in PIPE
2	KOR-N-SEAL - 8in CORE -1.70 THRU 4.80 PIPE
2	REDUCER - DI - CONCENTRIC - FLG - 8 X 4
1	FLANGE - BLIND - 14in
1	TEE - DI - 14in - FLG X FLG
2	REDUCING TEE - DI - 14in X 8in - FLG X FLG
2	GASKET - FLANGE - 8in X 1/8in
4	GASKET - FLANGE - 4in X 1/8in
7	GASKET - FLANGE - 14in X 1/8in
87	SEALANT - 1in X 1in X 14.5ft CS-202

BAR SCREEN VAULT

QTY ITEM

1	BASE - WW - 12ft - FLAT - AMERON
1	BARREL - 12ft DIA X 1.5ft - AMERON
7	BARREL - 12ft DIA X 4ft - AMERON
1	BARREL - 12ft DIA X 2.5ft - AMERON
1	HATCH - WW - 12ft PED - 78333 - 64 X 122
1	TOP SLAB - WW - 12ft - PED - AMERON
1	VENT - 4in - PVC - MUSHROOM CAP
1	VENT - MUSHROOM CAP
1	ADAPTOR - 4in SCH80 - MALE THD X SLIP
1	ELBOW - PVC - 4in SCH80 - 90 DEG - SLIP X SLIP
4	PIPE - 4in PVC - SCH80 X 48in
1	4in PVC - SCH 80 X 24in
1	CABLE HANGER ASSEMBLY

2.01 ROMTEC UTILITIES SCOPE OF SUPPLY: PRODUCTS

24	REBAR - UPLIFT COLLAR - NO.5 X 18in
1	LADDER - ASSEMBLY - 32ft
1	KOR-N-SEAL - 8in CORE -1.70 THRU 4.80 PIPE
1	BAR SCREEN TRACK ASSEMBLY - RIGHT
1	BAR SCREEN TRACK ASSEMBLY - LEFT
1	BAR SCREEN ASSEMBLY - REMOVABLE
445	TAPECOAT - 6in X .65mils X LFT
580	SEALANT - 1in X 1in X 14.5ft CS-202
1	FLOAT - NOLTA - MS1 - 20m

GENERATOR

QTY	ITEM
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1	Cummins 400KW Diesel Generator, 480V, 3PH. Sound attenuated enclosure
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CONTROL PANEL/ELECTRICAL & COMMUNICATION

QTY	ITEM
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1	Motor Control Center - 480V/3-PHASE - NEMA3R
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2.02**ROMTEC UTILITIES SCOPE OF SUPPLY:
SERVICES****1. Administrative & design services**

- a. Receive pump station design criteria from customer or customer's representative.
- b. Design pump station to meet the design criteria and perform as specified.
- c. Produce all drawings and other documents included in this Scope of Supply and Design Submittal.
- d. Only if ordered by customer or customer's representative, provide optional sealing of drawings, calculations and/or the entire Design Submittal at additional cost to customer.
- e. Receive submittal approval from customer or customer's representative
- f. Receive purchase order and notice to proceed from customer's installation contractor.

2. Production services

- a. Produce the complete pump station as specified in Scope of Supply-Products.

3. Delivery services

- a. Deliver pump station to project site on date(s) specified by customer or customer's representative.
- b. Provide information on weights of parts and lifting devices.

4. Pre-installation & installation advisory services

- a. Provide advisory services to our customer or customer's representative and/or their contractor(s) and others who will install/construct this pump station on the site. One day is provided.
- b. Romtec Utilities personnel at the project site during installation of the pump station's underground components are there only in an advisory capacity. Romtec Utilities does not perform work during this phase of the project, unless such work is specified in the SSDS.

5. Electrical advisory services

- a. Provide advisory services through customer or customer's representative to the licensed electrical contractor installing electrical service to the pump station.

2.02

ROMTEC UTILITIES SCOPE OF SUPPLY: SERVICES

6. Start-up services

- a. Direct all pump station start-up activities at the project site on the designated start-up day. One day is provided.

7. Testing & training services

- a. Perform all pump station tests specified in Field Start-Up Report for the project, report test results to the Customer or Customer's representative, deliver O&M Manuals and train any and all owners.
- b. Training is provided contiguous to the start-up date. If the testing and training is not scheduled and/or completed the day following start-up, there will be additional charges for Romtec Utilities to return and complete the testing and training services.
- c. It is required that the main contact to be in charge of operation and maintenance of the lift station, through the duration of the warranty period, be identified and present at the training. This person is responsible for troubleshooting, with the help of Romtec Utilities over the phone, in the event of a warranty issue throughout the one year warranty period beginning the day Start up Training is completed. All other personnel relevant to the maintenance and operation of the lift station are required to be present for the duration of startup training.