

## 5.02 LIFT STATION DESIGN CRITERIA

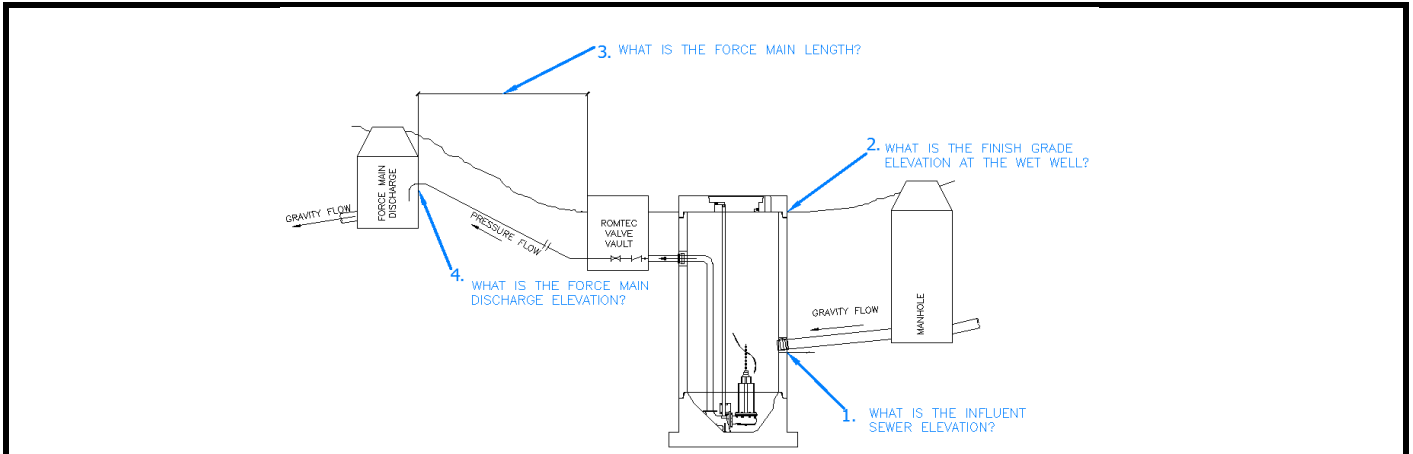
Romtec Utilities has designed this Scope of Supply and Design Submittal based on the following information:

### PART 1: PROJECT CONTACT INFORMATION

Date:	<u>6/8/2017</u>		
Project Name:	<u>West Medway II Facility Project – Waste Water</u>		
Information here in provided by:	<u>Gemma Power</u>		
Name:	_____		
Email Address:	_____		
Telephone:	_____	Phone Ext:	_____
Project Site Address:	<u>Massachusetts</u>		
ACAD site plan drawing available at this time?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Final Project Owner and/or Operator:	<u>Gemma Power</u>		
Governing Sewer or Water Authority:	<u>Gemma Power</u>		
Does Authority have a lift station standard?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does this project require "Buy America" materials?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

### PART 2: DESIGN DATA

*Note: The drawing below is purely to represent elevations. It does not reflect the design of the lift station.*



Source of Water:	<u>Industrial Waste</u>		
Water Type:	<u>Industrial Oily Waste Water</u>		
Peak design inflow (max flow to lift station):	<u>50 g.p.m.</u>		
Pumping Rate:	<u>50 g.p.m. @ 35' TDH</u>		
<b>1.</b> Influent sewer elevation:	<u>194.98 ft.</u>		
<b>2.</b> Finish grade elevation at wet well:	<u>201 ft.</u>		
<b>3.</b> Force main length:	<u>Unknown ft.</u>		
<b>4.</b> Force main discharge elevation:	<u>Unknown ft.</u>		
Force main diameter:	<u>Unknown in. inside dia.</u>		
Force main material (PVC, DI, etc.):	<u>Unknown</u>		
Force Main is:	<input checked="" type="checkbox"/> New	<input type="checkbox"/> New	<input type="checkbox"/> Existing
Force Main Discharge (manhole, pressure force main, etc.)	<u>?</u>		
Standby generator:	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Permanent	<input type="checkbox"/> Portable
Generator fuel:		<input type="checkbox"/> Diesel	<input type="checkbox"/> Natural Gas
Power Supply:	<input checked="" type="checkbox"/> 480V	<input type="checkbox"/> 480V	<input type="checkbox"/> 240V
Power Supply:	<input checked="" type="checkbox"/> Three-Phase	<input type="checkbox"/> Three-Phase	<input type="checkbox"/> Single-phase
Is lift station a classified space?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> No

## 5.02 LIFT STATION DESIGN CRITERIA

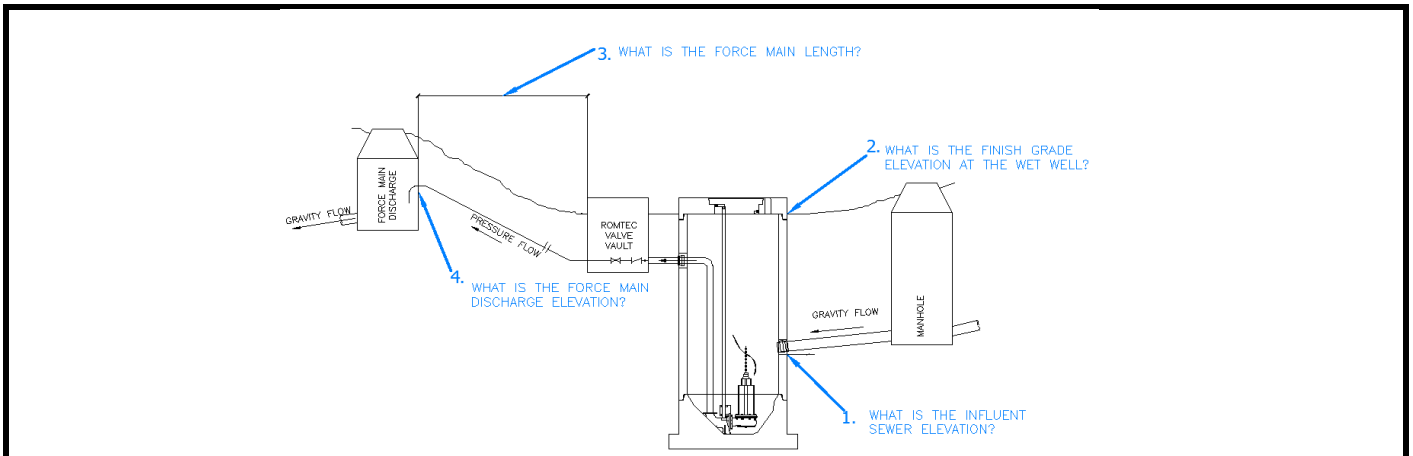
Romtec Utilities has designed this Scope of Supply and Design Submittal based on the following information:

### PART 1: PROJECT CONTACT INFORMATION

Date:	<u>8/22/2016</u>		
Project Name:	<u>West Medway II Facility Project – Oily Waste Water</u>		
Information here in provided by:	<u>Gemma Power</u>		
Name:	_____		
Email Address:	_____		
Telephone:	_____	Phone Ext:	_____
Project Site Address:	<u>Massachusetts</u>		
ACAD site plan drawing available at this time?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Final Project Owner and/or Operator:	<u>Gemma Power</u>		
Governing Sewer or Water Authority:	<u>Gemma Power</u>		
Does Authority have a lift station standard?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does this project require "Buy America" materials?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

### PART 2: DESIGN DATA

*Note: The drawing below is purely to represent elevations. It does not reflect the design of the lift station.*



Source of Water:	<u>Unknown</u>		
Water Type:	<u>Oily Wastewater</u>		
Peak design inflow (max flow to lift station):	<u>30 g.p.m.</u>		
Pumping Rate:	<u>30 g.p.m. @ 20' TDH</u>		
<b>1.</b> Influent sewer elevation:	<u>194.92 ft.</u>		
<b>2.</b> Finish grade elevation at wet well:	<u>202.67 ft.</u>		
<b>3.</b> Force main length:	<u>25 ft.</u>		
<b>4.</b> Force main discharge elevation:	<u>105 ft.</u>		
Force main diameter:	<u>Unknown</u> in. inside dia.		
Force main material (PVC, DI, etc.):	<u>Unknown</u>		
Force Main is:	<input checked="" type="checkbox"/> New	<input type="checkbox"/> New	<input type="checkbox"/> Existing
Force Main Discharge (manhole, pressure force main, etc.)	<u>Unknown</u>		
Standby generator:	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Permanent	<input type="checkbox"/> Portable
Generator fuel:		<u>Diesel</u>	<u>Natural Gas</u>
Power Supply:	<u>480V</u>	<u>480V</u>	<u>240V</u>
Power Supply:	<u>Three-Phase</u>	<u>Three-Phase</u>	<u>Single-phase</u>
Is lift station a classified space?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> No

## 5.02 LIFT STATION DESIGN CRITERIA



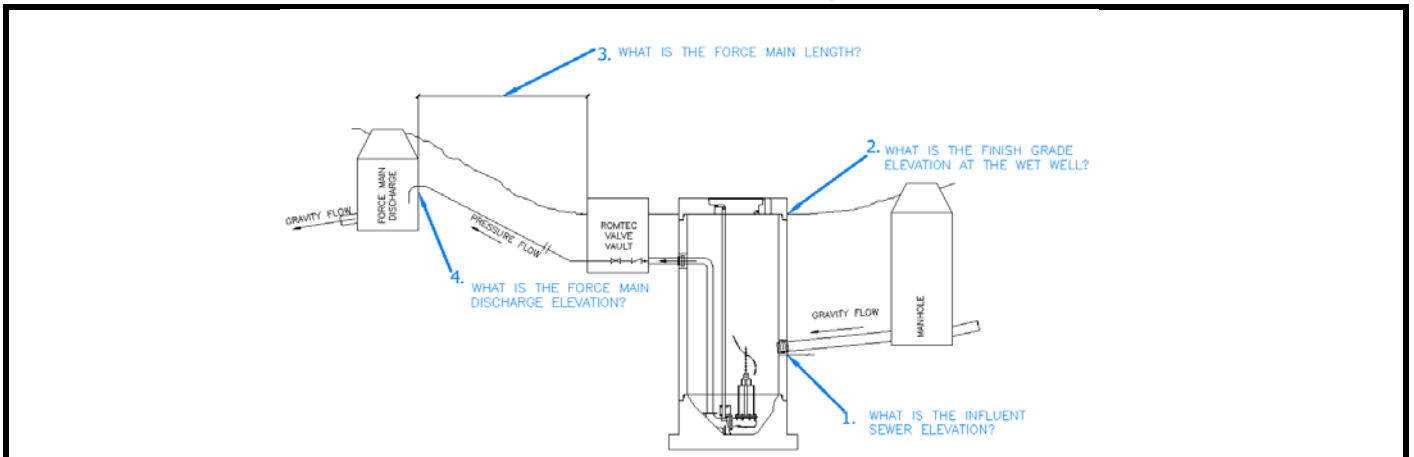
Romtec Utilities has designed this Scope of Supply and Design Submittal based on the following information:

### PART 1: PROJECT CONTACT INFORMATION

Date:	<u>8/17/2017</u>		
Project Name:	<u>West Medway Sanitary Lift Station #1</u>		
Information here in provided by:	<u>Gemma Power</u>		
Name:	<u></u>		
Email Address:	<u></u>		
Telephone:	<u></u>	Phone Ext:	<u></u>
Project Site Address:	<u>Massachusetts</u>		
ACAD site plan drawing available at this time?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Final Project Owner and/or Operator:	<u>Gemma Power</u>		
Governing Sewer or Water Authority:	<u>Gemma Power</u>		
Does Authority have a lift station standard?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does this project require "Buy America" materials?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

### PART 2: DESIGN DATA

*Note: The drawing below is purely to represent elevations. It does not reflect the design of the lift station.*



Source of Water:	<u>Sewage</u>		
Water Type:	<u>Wastewater</u>		
Peak design inflow (max flow to lift station):	<u>100 g.p.m.</u>		
Pumping Rate:	<u>61 g.p.m. @ 15' TDH (The rate for one pump)</u>		
<b>1.</b> Influent sewer elevation:	<u>191.03 ft.</u>		
<b>2.</b> Finish grade elevation at wet well:	<u>100 ft.</u>		
<b>3.</b> Force main length:	<u>Unknown</u> ft.		
<b>4.</b> Force main discharge elevation:	<u>Unknown</u> ft.		
Force main diameter:	<u>Unknown</u> in. inside dia.		
Force main material (PVC, DI, etc.):	<u>Unknown</u>		
Force Main is:	<input checked="" type="checkbox"/> New	<input type="checkbox"/> New	<input type="checkbox"/> Existing
Force Main Discharge (manhole, pressure force main, etc.)	<u>Unknown</u>		
Standby generator:	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Permanent	<input type="checkbox"/> Portable
Generator fuel:	<u></u>	<u>Diesel</u>	<u>Natural Gas</u>
Power Supply:	<u>480V</u>	<u>480V</u>	<u>240V</u>
Power Supply:	<u>Three-Phase</u>	<u>Three-Phase</u>	<u>Single-phase</u>
Is lift station a classified space?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> No

## 5.02 LIFT STATION DESIGN CRITERIA



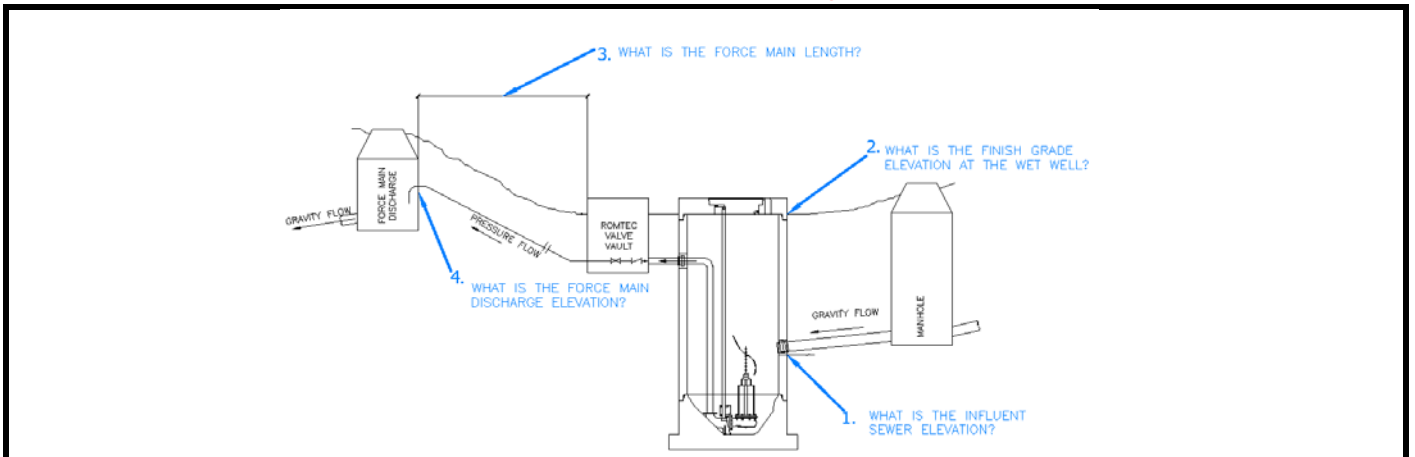
Romtec Utilities has designed this Scope of Supply and Design Submittal based on the following information:

### PART 1: PROJECT CONTACT INFORMATION

Date:	<u>8/17/2017</u>		
Project Name:	<u>West Medway Sanitary Lift Station #2</u>		
Information here in provided by:	<u>Gemma Power</u>		
Name:	<u></u>		
Email Address:	<u></u>		
Telephone:	<u></u>	Phone Ext:	<u></u>
Project Site Address:	<u>Massachusetts</u>		
ACAD site plan drawing available at this time?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Final Project Owner and/or Operator:	<u>Gemma Power</u>		
Governing Sewer or Water Authority:	<u>Gemma Power</u>		
Does Authority have a lift station standard?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Does this project require "Buy America" materials?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

### PART 2: DESIGN DATA

*Note: The drawing below is purely to represent elevations. It does not reflect the design of the lift station.*



Source of Water:	<u>Sewage</u>		
Water Type:	<u>Wastewater</u>		
Peak design inflow (max flow to lift station):	<u>40 g.p.m.</u>		
Pumping Rate:	<u>70 g.p.m. @ 10' TDH (GREATER THAN PEAK INFLOW)</u>		
<b>1.</b> Influent sewer elevation:	<u>205.75 ft.</u>		
<b>2.</b> Finish grade elevation at wet well:	<u>208.5 ft.</u>		
<b>3.</b> Force main length:	<u>Unknown</u> ft.		
<b>4.</b> Force main discharge elevation:	<u>Unknown</u> ft.		
Force main diameter:	<u>Unknown</u> in. inside dia.		
Force main material (PVC, DI, etc.):	<u>Unknown</u>		
Force Main is:	<input checked="" type="checkbox"/> New	<input type="checkbox"/> New	<input type="checkbox"/> Existing
Force Main Discharge (manhole, pressure force main, etc.)	<u>?</u>		
Standby generator:	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Permanent	<input type="checkbox"/> Portable
Generator fuel:	<input type="checkbox"/>	<input type="checkbox"/> Diesel	<input type="checkbox"/> Natural Gas
Power Supply:	<input checked="" type="checkbox"/> 480V	<input type="checkbox"/> 480V	<input type="checkbox"/> 240V
Power Supply:	<input checked="" type="checkbox"/> Three-Phase	<input type="checkbox"/> Three-Phase	<input type="checkbox"/> Single-phase
Is lift station a classified space?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> No