



**State of Alaska**  
**Department of Environmental Conservation**  
**Village Safe Water Program**

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August 6, 2025

To: Vendor List

Re: Amendment 2  
ITB 26-VSW-UNK-004  
Covenant Lift Station Project  
ITB Due Date: August 21, 2025 @ 2:00 PM AST

**The following are vendor questions and the department's response:**

1. Vendor: Can you please confirm with the Engineer on which pump they would like us to select for this application. Per the pump data and design criteria page a Vaughan S3P-082 was selected and listed. That Model Vaughan pump will not hit the Head and Flow listed. The HP is also incorrect for those Duty Points. We worked with the Vaughan Factory Rep and he helped us select the Vaughan S3V in 20HP which will handle both the 93-106 TDH and also the 225.5-232.5 GPM. Please pass along this info to your Engineer so they can make the change or give an explanation on why they need the S3P.

Department: The pump curve shown in Attachment 3 Covenant Lift Station – IFC Drawings (page 12, under [1] CL-001 Pump Data and Design Criteria) is based on an incorrect impeller size. Using the correct impeller size (8.20 inches) results in the desired single pump operating point of 160 gpm at 54.7 ft TDH. The specified pump (Vaughan S3P-082 with 7.5 HP motor) is correct. See attached Pump Performance Datasheet for Vaughan S3P-082.

John McDonald  
*John McDonald*  
Procurement Specialist

**Pump Performance Datasheet**

Customer	:	Quote number	: 1873094
Customer reference	:	Size	: S3P - Trim Dia
Item number	: 001	Stages	: 1
Service	:	Based on curve number	: E3P-1750-TD
Quantity	: 1	Date last saved	: 17 Apr 2023 9:00 AM

**Operating Conditions**

<b>Flow, rated</b>	: 160.0 USgpm
Differential head / pressure, rated (requested)	: 47.00 ft
<b>Differential head / pressure, rated (actual)</b>	: 54.69 ft
Suction pressure, rated / max	: 0.00 / 0.00 psi.g
NPSH available, rated	: Ample
Site Supply Frequency	: 60 Hz

**Liquid**

Liquid type	: Water
Additional liquid description	:
Solids diameter, max	: 0.00 in
Solids concentration, by volume	: 0.00 %
Temperature, max	: 68.00 deg F
Fluid density, rated / max	: 1.000 / 1.000 SG
Viscosity, rated	: 1.00 cP
Vapor pressure, rated	: 0.34 psi.a

**Performance**

Speed criteria	: Synchronous
Speed, rated	: 1730 rpm
<b>Impeller diameter, rated</b>	: 8.20 in
Impeller diameter, maximum	: 10.30 in
Impeller diameter, minimum	: 8.00 in
Efficiency	: 49.12 %
NPSH required / margin required	: 6.37 / 0.00 ft
Ns (imp. eye flow) / Nss (imp. eye flow)	: 1,190 / 3,752 US Units
MCSF	: 60.00 USgpm
Head, maximum, rated diameter	: 68.64 ft
Head rise to shutoff	: 25.53 %
Flow, best eff. point	: 225.5 USgpm
Flow ratio, rated / BEP	: 70.96 %
Diameter ratio (rated / max)	: 79.61 %
Head ratio (rated dia / max dia)	: 54.35 %
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00
<b>Selection status</b>	: Acceptable

**Material**

Material selected	: Standard
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**Pressure Data**

Maximum working pressure	: 29.71 psi.g
Maximum allowable working pressure	: 150.0 psi.g
Maximum allowable suction pressure	: 100.0 psi.g
Hydrostatic test pressure	: 0.00 psi.g

**Driver & Power Data (@Max density)**

Driver sizing specification	: Maximum power
Margin over specification	: 0.00 %
Service factor	: 1.00
Power, rated	: 4.50 hp
Power, maximum, rated diameter	: 6.35 hp
<b>Minimum recommended motor rating</b>	: 7.50 hp / 5.59 kW

