Inspection and Test Plan - VSD 2 Delivery and Installation

ITP Reference Number 561482-ITP-002.2

SECTION 1 – GENERAL DETAILS										
Project Name:	DCC11014 Water Pump Station Renewals - SILVERSTREAM			**Inspection Key** *Use in sections 3, 4 and*		**Responsibilities** *Use in sections 3, 4 and 5.*				
Project Number:	561482			**A**	Action	**Role Key**		**Name**	**Signature/ Initial**	
Customer:	Dunedin City Council			**B**	Report by Breach	**CM**	Construction Manager	Stephen Vorgers		
Contract Number:	DCC11014-WPS002			**C**	Check	**CR**	Cust. Representative	Joff Riley / Mark Todd		
Area/ Sub-System:	VSD Delivery and Installation - SILVERSTREAM	Lot ID Number:	N/A	**D**	Dimension Inspection	**IP**	Inspection Personnel	Hamish Watson		
				E	Examine	**MC**	Material Controller			
ITP Number:	561482-ITP-002.2	**Version**:	DRAFT	**H**	Hold Point	**OP**	Operations Manager			
ITP Description:	VSD2 Delivery and Installation			**I**	Inspection	**PM**	Project Manager	Matt Paterson		
Discipline:	VSD's			**M**	Monitor on Random Basis	**PS**	Project Supervisor			
Specification:	C11014 Water Pump Station Renewals Specification 12581908			**O**	Operation	**QE**	Quality Engineer			
				R	Review	**QM**	QA Manager			
Drawings:	Construction Issue Drawings as issued by GHD - Silverstream Pump Station Project Ref: 12581908-GHD-PS-SS-DRG-GN Drawings: G0001, M0001 through M0004 & P0001			**S**	Subcontractor	**SP**	Supervisor	Hamish Watson		
				V	Visual Verification	**ST**	Superintendent			
Prepared By: *(Name)*	Hamish Watson / Matt Paterson	Date:	10/12/2024	**W**	Witness Point	**SV**	Surveyor			
Quality Specified:	None - As per Specification requirements					**WS**	Welding Supervisor			

SECTION 2 – SIGNATURES – CLOSE-OUT & APPROVAL					
ITP Close-Out by Downer	Name:	Hamish Watson	Signature:		Date:
Downer Approval	Name:	Matt Paterson/Stephen Vorgers	Signature:		Date:
Customer Approval	Name:	Joff Riley / Bruce Buxton	Signature:		Date:

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SECTION 3 – RECEIVING INSPECTIONS *Insert additional or delete unused rows as required. Include reference to specification.*								
Item No.	**Activity/ Task Description**	**Inspection Point: Quality Control Activity**	**Acceptance Criteria**	**Verifying Document**	**Frequency**	**Inspection Type** *(Visual, other)*	**Inspection**	
							Key	**By** *(Role Key)*
3.1	Inspection of VSD prior to delivery to site	Check overall condition of packaging, noting any obvious signs of damage, Check rating of drives is correct.	Visual check and report any defects or areas of concern		Once	Visual + Photograph	C	IP/B
3.2	Delivery of VSD to Site	Check and verify that correct VSD are delivered and that drives are undamaged	VSD are damage free	VSD Delivery documents	Once	Visual	C	IP

SECTION 4 – IN-PROCESS INSPECTIONS *Insert additional or delete unused rows as required. Include reference to specification.*								
Item No.	**Activity/ Task Description**	**Inspection Point: Quality Control Activity**	**Acceptance Criteria**	**Verifying Document**	**Frequency**	**Inspection Type** *(Visual, other)*	**Inspection**	
							Key	**By** *(Role Key)*
4.1	On-site assembly of mounting Frame	materials for frame delivered to site	Correct materials on site, protective coatings correct.	Delivery Docket for Materials	Once	Visual	I	IP
4.2	Assembly and mounting of Frame	Frame Built and bolted to Ground.	Frame built and Securely attached to ground, minimal flex/ movement when force applied.	N/a	Once	Visual + Photograph	I	IP
4.3	Mounting of VSD to Frame	VSD Mounted to frame	VSD Mounted satisfactorily, bolts tight, washers and spring washers present, S/S bolts and fixings used.	VSD Inspection Sheets.	Once	Visual + Photograph	I	IP
4.4	Installation of supply cables to VSD	Cables installed, not terminated into VSDs or switchboard	Correct Cables installed, suitable for full load plus 20 percent of VSD, insulation resistance acceptable	VSD Cable Test Sheets.	Once	Visual + Inspection	I	IP
4.5	Installation of Output Cables From VSD to Motors	Cables installed, not terminated at motors or VSD	Correct Cables installed, suitable for full load of motor plus 20 percent, insulation resistance acceptable	VSD Cable Test Sheets.	Once	Visual + Inspection	I	IP
4.6	Termination of cabling to VSD	Cables terminated into VSD	Correct Cables installed, terminals tightened to correct torque, cables prepared correctly. cable earths and screens fit off correctly.	VSD Cable Test Sheets.	Once	Visual + Inspection	I	IP

4.7	Termination of cabling to Switchboard	Cables fit off at Switchboard.	Correct Cables installed, terminals tightened to correct torque, cables prepared correctly. cable earths and screens fit off correctly.	VSD Cable Test Sheets.	Once	Visual + Inspection	I	IP
4.8	Verification of motors electrically	Cables installed, not terminated into motor	Correct motors installed. insulation resistance verified, winding configuration confirmed against nameplate.	VSD Cable Test Sheets.	Once	Visual + Inspection	I	IP
4.9	Termination of cabling to Motor	Cables fit off at Motor	Cables Lugged off correctly, terminals tightened to correct torque	Motor Inspection Sheets	Once	Visual + Photograph	I	IP

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SECTION 5 – FINAL INSPECTION AND HANDOVER *Insert additional or delete unused rows as required. Include reference to specification.*								
Item No.	**Activity/ Task Description**	**Inspection Point: Quality Control Activity**	**Acceptance Criteria**	**Verifying Document**	**Frequency**	**Inspection Type** *(Visual, other)*	**Inspection**	
							Key	**By** *(Role Key)*
5.1	VSD	VSD Energised and set up, motor nameplate data entered, protections set, Labels attached	VSD parameters set correctly, inputs set up as per drawings. analog i/o set correctly and verified to plc	VSD ITR Document	Once	Visual + Document	I	IP
5.2	Motors	Assembled and in position, inspection carried out and approved	Motors Tested, rotation direction confirmed, pumps operating as intended.	Motor inspection Sheet	Once	Visual + Document	I	IP
SECTION 6 – COMMENTS								
			Customer Release Granted:	☐ Yes	☐ No	Date:		
			Certificate Number:					