

**SECTION 1 – GENERAL DETAILS**

<b>Project Name:</b>	Peacocke Whatukooruru Drive	<b>ITP Number:</b>	146
<b>Project Number:</b>	DS1205	<b>ITP Status:</b>	For Approval
<b>ITP Description:</b>	Service Bracket Hanger Installation	<b>Revision:</b>	C

<b>Contract Number:</b>	Peacocke Whatukooruru Drive	<b>Drawing Sets:</b>	Drawings DN-1205-065-DRW-01
<b>Customer:</b>	Hamilton City Council	<b>Specification:</b>	Project Specification and Appendices.
<b>Quality Specified:</b>	NZTA Z/1		

Review / Update History					Verification Activity			
Rev:	Status:	Date:	Reviewed By:	Revision Details:	Activity Key		Responsibilities Key	
A	Draft for Approval	28/07/2025	Eva Fan	First Revision for Review and Approval	A	Action	ENG	Engineer / Engineer's Rep
					B	Report by Breach	CR	Customer Rep
B	Submit for Approval	18/08/2025	Eva Fan	Revision for Review and Approval with Engineer's Comments	C	Check	PD	Project Director
					D	Dimension Inspection	PM	Project Manager
C	Submit for Approval	25/08/2025	Eva Fan	Revised 3.01.04 for reinstatement material	E	Examine	OP	Operations Manager
					HP	Hold Point (Engineer)	HSE	HSE Manager / Rep
					H	Hold Point (Internal)	QM	QA Manager / Rep
					I	Inspection	PE	Project Engineer
					M	Monitor on Random Basis	SE	Site Engineer
					O	Operation	QE	Quality Engineer
					R	Review	SUP	Superintendent / Supervisor
					S	Subcontractor	SV	Surveyor
					V	Visual Verification	ITP	Third Party Inspector
					W	Witness Point	SPEC	Specialist

**SECTION 2A – ITP Approval**

**SECTION 2B – ITP CLOSEOUT**

Position	Name:	Signature:	Date:	Position	Name:	Signature:	Date:
Downer PM				Downer PM			
Downer QM				Downer QM			
Client (If Applicable)				Client (If Applicable)			

Item No.	Inspection and Test Point	Acceptance / Conformance Criteria	Standard / Specification	Verifying Document	Frequency	Verification Activity	
						Activity	By
SECTION 1 – PRE-CONSTRUCTION (P&G / ESTABLISHMENT)							
1.01	Site Requirements						
1.01.01	Construction Pack	Construction Pack including a Methodology and JESA to be assembled , uploaded and transmitted on InEight before works commence.	Downer	Construction Pack	Prior to Works	H	PE
1.01.02	Internal Permits	Complete internal Permits as required to complete works including but not limited to: Hot works, concrete saw, lift, confined space, working at height etc.	Downer	Internal Permits	Prior to activity being undertaken	H	PE
1.01.03	Approved Construction Drawings	Prior to starting works, Ensure that the construction drawings are both IFC and the Current Version.	Downer	IFC Drawings	Prior to works start	H	PE
1.01.04	Construction Methodology & ITP	The Contractor must submit their proposed construction methodology, justification and ITP to the Engineer for review at least 10 Working Days prior to commencement of the Works. The Engineer's review will be limited to conceptual assessment of any potential impact on critical elements of the structure.  ITP to be included in QA pack with confirmation of approval	PS - 11.3 SS 2146 - 3	Methodology ITP	At least 10 Working Days prior to commencement	HP	ENG
SECTION 2 – MATERIAL, PERSONNEL & THIRD PARTY APPROVAL							
2.02	Reinforcement						
2.02.01	Steel supply	Certificate of origin for all steel reinforcing supplied	NA	Certificate	Each batch of reinforcement	R	ENG
2.03	Pre fabricated Steel Brackets						
2.03.01	SS Steel Brackets	All QA to be in separate ITP – This item to be acceptance of QA ITP	Structural steel notes on IFC DWG 4001 Construction Drawing	BBO	Before Installation	H	PE
2.03.02	SS M16 Anchor Rod	HILTI HAS-U-A4	Manufacturer Specification	- Material Certification - Delivery dockets or invoice	Before Installation	H	PE
2.03.03	Epoxy	HILTI HIT-HY200	Manufacturer Specification	- Material Certification - Delivery dockets or invoice	Before Installation	H	PE
2.03.04	SS M16 bolts, washers and nuts	Property A4-80	Structural steel notes on IFC DWG 4001 Construction Drawing	- Material Certification - Delivery dockets or invoice	Before Installation	H	PE
SECTION 3 – CONSTRUCTION ACTIVITY							
3.01	M16 Drill and Epoxy						
3.01.01	Hole Drilling at Existing Bridge Structure	Holes to be drilled with hammer drills. Diamond core drilling is not acceptable. Cutting of existing reinforcement is not allowed unless approved by the Engineer.	Manufacturer Specification	NA	Before Epoxy	H	PE

Item No.	Inspection and Test Point	Acceptance / Conformance Criteria	Standard / Specification	Verifying Document	Frequency	Verification Activity													
						Activity	By												
3.01.02	Hole Drilling at Existing Bridge Structure	All holes shall be cleaned using a stiff bristled wire bottlebrush and an oil free compressed air source to remove all dust and debris from the side of the hole.  Check to verify no reinforcements have been hit.	Manufacturer Specification	NA	Before Epoxy	H	PE												
3.01.03	Engineers Inspection	The Contractor shall advise the Engineer when he intends to commence the epoxy process. No epoxy shall be applied without Engineer's acceptance.	SS 2146 - 6 PS - 2.2.16	Hold Point Release	Min 48h Notice	HP	ENG												
<div>REV C</div> 3.01.04	Reinforcement clash	If reinforcement have been hit, new spot to be scanned and marked for another potential drill hole position. New EA to be fabricated to suit the new anchor bolt position if necessary.  All unused holes to be reinstated by Sika412.	Downer	Record / Photo	Before Epoxy	H	PE												
3.02 Steel Bracket (Hanger) Installation																			
3.02.01	Steel bracket installation	Ensure tensioning tolerances for steelwork/bolts are checked.  <div>TABLE G1 MINIMUM BOLT TENSION</div> <table><tr><th>Nominal diameter of bolt</th><th>Minimum bolt tension kN</th></tr><tr><td>M16</td><td>95</td></tr><tr><td>M20</td><td>145</td></tr><tr><td>M24</td><td>210</td></tr><tr><td>M30</td><td>335</td></tr><tr><td>M36</td><td>490</td></tr></table> <div>NOTE: The minimum bolt tensions given in this Table are approximately equivalent to the minimum proof loads derived from a proof load stress of 600 MPa, as specified in AS 4291.1.</div>	Nominal diameter of bolt	Minimum bolt tension kN	M16	95	M20	145	M24	210	M30	335	M36	490	Downer / AS/NZS 5131: 2016	Hold Point Release	Before Installation	H	PE
Nominal diameter of bolt	Minimum bolt tension kN																		
M16	95																		
M20	145																		
M24	210																		
M30	335																		
M36	490																		
3.02.02	Tension bolts	Check each bolt has a washer and nut and tension all bolts	AS/NZS 5131: 2016	Photo/Site- Approva/Checksheet	Each Baseplate	I	SE												
3.02.03	Isolation between SS & HDG Elements	Verify separation has been achieved between SS and HDG elements	Downer	Record / Photo	After Epoxy	H	PE												
SECTION 4 – POST CONSTRUCTION (FINAL INSPECTION AND HANDOVER)																			
4.01 General																			
4.01.01	Construction Record Compilation	Compile construction records for final submission ensuring defects (NCRs) / Snags / missing records are captured or closed out, all tests have been received and passed, and changes / omissions have been noted.	Downer	Records	Post construction	H	SE												
4.01.02	Redline Drawings	Create a set of Redline Drawings for Asbuilt creation noting all changes and departures in red pen. Red line to show any changes to footpath location or basecourse depth.	Downer	Redlines	Post construction	H	PE												
4.01.03	Defect, Snag and Punch List	Update the project Defect, Snag and Punch List Register	Downer	Register	Post construction	H	PE												