



ITP-
Project-
ITP No.-
Revision-

Earthworks (Excavation, Subgrade and Sub-Base)

WSBI - 1211

ITP-003

Rev-02

Item No.	Inspection and Test Point	Acceptance/Conformance criteria	Standard/Specification	Verifying Document	Frequency	Verification Activity		Downer Conformance of Compliance Signoff				
						Activity	By	Downer Signature	Date	Engineer Rep Signature (Blank as req.)	MSQA (Blank as req.)	Comments/Closeout Details
SECTION 3 - PRE CONSTRUCTION (P&G/ESTABLISHMENT)												
3.1	Pre- construction	Site Clearance and service location completed. Before U Dig, GPR service locate and pilot holing as required. Protect existing services and liaise with utility providers as necessary	Aurecon Civil Spec 19.5	Service Locate or Asbuilts / Sample Dig permit	Prior excavation	H	SE	H		I		
SECTION 4 - MATERIAL, PERSONNEL & THIRD PARTY APPROVAL												
4.1	Aggregate MAR	Sub-Base to be ATAP40 and comply with TNZ M/4 specification for aggregate properties - At least seven working days prior to delivery of Sub-Base course the contractor shall deliver to the engineer the results of production property tests carried out by an IANZ accredited lab in accordance with the relevant NZ standards	Aurecon Spec 7.5.1	Approved MAR / IANZ test report	Once prior Sampling rate as per civil 6.5.1	H	DES	H		R	I	
SECTION 5 - CONSTRUCTION ACTIVITY												
5.1	Excavation	Set- out position completed RL marked. For excavation level	Aurecon Civil Spec Section 19.11.2	ITP sign off	In Process Check	V	SV	V		I		
Site Clearance												
5.2	Site Clearance (Cut to Subgrade)	Area of work Cleared in accordance with Resource consent and local authority requirements. Discovery of unsuitable materials to be advised to the engineer and disposed of or repalced as directed.	Aurecon Civil Spec; Section 3.3 and 3.6	ITP Sign off	In Process Check	W	SE	V		I		
5.3	Discovery of antiques and valuables (If applicable)	Arcaeology: Works to be completed as per CMP Archaeological discovey protocol, records in site diary and Aconex sent to the Engineer. Antiques: Owners must contact the Heritage New Zealand for authority to proceed.	Aurecon Spec 3.10 and Heritage New Sealand	ITP Sign off	Upon Discovery (May not be Applicable)	H	PE	H		I		
Removal of Structures and Obstructions												
5.4	Discovery of Contaminated or Hazardous Material (May not be Applicable)	Contaminated material or Waste exhibiting hazardous characteristics handled and removed as per work safe guidnlins and taken off site to be tested. Hazardous or contaminated materials disposed at approved landfills only. Volume or any disposed hazardous or contaminated materials to be recorded.	Arecon Civil Spec 4.5.6 and management plan	Disposal docketts (If applicable) /Site Diary (If applicable)	Upon Discovery (May not be Applicable)	H	PE	H		H		
5.5	Disposal of materials	Demolished Materials sorted as required and disposed of correctly. Materials or item salvaged for re-use as appropriate	Aurecon Civil Spec 4.5.7	Daily Diary (If applicable)	In Process Check	I	SE	I				
5.6	Demolition and removal of obstructions		Submit works over approvals for Relevant NUO's where utilities found. Confirm approval to remove structure or protection requirements as per Aurecon DRG's	Aurecon Civil Spec 4.5.5	Email confirmation where applicable or works over permit alginig with the consent	Upon Discovery (May not be Applicable)	H	PE	H		I	
5.7	Tree Removal (If applicable)	Refer to Tree Management Plan, Tree Management plan certification and relevant resource consents/approvals	Resource Consent	Resource consent	Each Tree (If applicable)	W	PE/DES/ENG	W		I	R	
5.8	Services/Sun Surface infrastrucure removal	Existing services and drainage structures to be located where possble or as agreed with the Engineer. Pilot hole, disconnect or isolate live services prior to demolitions as required. Services or pipes to be abandoned are to be completely removed or grout filled as per drawing or approval by assest owner if different.	Aurecon Civil Spec 4.5.4 and 4.5.5	Service As built	As Encountered	H	PE/ENG	H		R		
Excavation												

5.9	Subgrade Testing	Contractor to Confirm subgrade strength and report to Engineer via Inspection. Clegg to be ≥ 10 value.	Aurecon Civil Spec 5.6.11	QA sheet	Every 20m or as agreed by the Engineer	H	SE	H		R	I	
5.10	Line and Level of subgrade	Pavement Subgrade tolerance +/-10mm from design subgrade level (or as applicable with existing services). Excavation depth must be at least the design pavement depth for LMC locations. Subgrade shape as per survey set out. To be verified on site.	Aurecon Civil Spec 5.6.9	As builts	Each Subgrade section	H	PE	H		R	W	
Sub-Base												
5.11	Sub-Base Level and Shape	Construct lifts between 2.5 to 5X maximum stone size to ensure good compaction (100-200m). Surface shape, finished and tolerances shall comply with requirments of TNZ B/02- -25mm/+5mm to design FL measured between centreline and pavement edge	Aurecon Civil Spec 6.7.4 TNZ B/2	QA cheetsb and as built survey	Every 10m for each section of basecourse	H	SE	H		R	I	
5.12	Sub base Compaction	Clegg testing of Sub-base course to achieve CIV 25+	Aurecon Spec 6.1 and GCOR-0042	QA sheets	Every 10m for each section of basecourse	H	SE	H		R	R	
SECTION 6 - POST CONSTRUCTION (FINAL INSPECTION AND HANDOVER)												
6.1	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	ENG	H		H	R	
6.2	Survey Record	Installation of works under contract completed compliant in accordance with all relevant regulations, COP and standards	Design Specification / Downer	QA Checksheet Redlines	Post Construction	H	ENG	H		H	R	
6.3	Redline Drawings	Ensure all items have been installed create a Redline Drawings for Asbuilt creation noting all changes with RFI numbers and departures in red pen	Downer	Redlines	Post Construction	H	ENG	H		H	R	
6.4	Defect, Snag and Punch List	Update the project defects, snag and punch list register	Downer	Redlines	Post Construction	H	ENG	H		H	R	
SECTION 7 - SIGN OFF												
		Customer Release Granted:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	Date:						
		Certificate Number:										