

Inspection and test plan – Bulk Earthworks

Project no. CC0408 Project name MREH BESS Date _____ SGJV Approval SAMSUNG-GCOR-000121
 ITP no. CC0408-ITP-003 Revision no. C Revision date 03.05.2024 Layer thickness _____
 Plant and equipment used Excavator, Dozer, Moxy, Stabiliser, Grader, Roller, Tandems, Trucks & Trailers, Dozer
 Lot no. _____ Location (chainages, detailed description or marked up plan) _____
 SGJV ITP no. MRH00B00-QAITP0002

Item no.	Activity	Ref docs	Acceptance criteria	Acceptance	Frequency	Verify of acceptance by						Remarks / record (eg. test reports, certificates, checklist etc)
						Symal Infrastructure		SGJV		Principal		
						Key	Resp	Sign/ date	Key	Sign/ date	Sign/ date	
1.0 Preliminaries												
1.1	Determine lot size	N/A	What is the lot size?	_____ m ²	Prior to start of Works	S	SE		S			Lot Map
1.2	Survey set-out	N/A	Is the most current survey file what the team is working to and has the work area been set out for line and level?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	W	SE		S			N/A
1.3	Water management	EMP	Where necessary, have batters been rounded and catch drains constructed to allow for potential surface runoff during the course of excavation? Are environmental controls set up as per the site EMP?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	S	SE		S			N/A
1.4	Clearing	CC0408- ITP-002 or MRH00B00-QAITP0001	Has the area been cleared and grubbed in accordance with CC0408- ITP-002 or MRH00B00-QAITP0001?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Prior to start of Works	W	SE		S			N/A
Is the area in cut / fill / both ? If in cut proceed to step 2.0 and strike out section 3.0. If in fill please strike out section 2.0 and proceed to section 3.0 If in both proceed to step 2.0 as well as section 3.0												
2.0 Bulk earthworks – Cut												



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2.1	Excavation material classification	MRH/00/P/00-PM/SPC/0003 Rev 3; Page 53	Has the material being excavated been inspected with category agreed upon by Superintendent? Tick category below: <input type="checkbox"/> Topsoil <input type="checkbox"/> Unsuitable material <input type="checkbox"/> Fill material <input type="checkbox"/> Other: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Prior to start of Works	W	SE		S			Test reports
2.2	Stockpile	N/A	Has the stockpile location been approved by SGJV.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Prior to start of Works	H	SE		H			SGJV approved stockpile plan
2.3	Subgrade preparation or scarification	MRH/A0/B/00-CV/DWG/0040	Has the cut surface been trimmed to an even surface free from loose material or scarified/ripped? Have surface levels been checked to avoid over excavation?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	S	SE		H			Test reports/as-built survey
2.4	Lime mix	MRH/A0/B/00-CV/DWG/0040	Has lime demand testing been completed and submitted?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Prior to starting	H	SE		H			Test reports No longer applicable.
2.5	Lime stabilisation	MRH/A0/B/00-CV/DWG/0040	Has the prepared subgrade been lime stabilised as per the IFC design?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	S	SE		W			Photos/As-built report No longer applicable.
2.6	Compaction	AS3798 Table 8.1 MRH/00/P/00-PM/SPC/0003 MRH/A0/B00-CV/DWG/0008	Compaction Scale: minimum 3 tests per lot, or 1 test per 1000m2 Has the subgrade been adequately compacted achieving 100% SDD? Is the subgrade material within +/- 2% of the optimum moisture content.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	W	SE		S			<input type="checkbox"/> Test reports



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			Has the layer thickness conformed with Item No. 4.2 'Acceptance criteria' ?									
2.7	Test Rolling	MRH/A0/B/00-CV/DWG/0040	<p>Does the layer withstand test rolling without visible deformation or springing? List Attendees:</p> <p>Type of equipment used:</p> <p><input type="checkbox"/> Water cart <input type="checkbox"/> Tandem <input type="checkbox"/> Others: _____</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>If 'no' please see below. If 'yes' please proceed.</p>	Each lot & Each possession	H	SE		H			<input type="checkbox"/> Proof Roll Inspection Checklist
Identification of soft wet or unstable material		N/A	What quantity of soft, wet, or unstable material is present?	<p>..... m²</p> <p>..... m³</p>	As required	W	SE		S			Photos (if required)
Treatment of unsuitable material		N/A	Has rectification process been submitted to SGJV for review. What was the rectification process used.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	As required	W	SE		S			Aconex Correspondence _____
3.0 Bulk earthworks - Fill												
3.1	Fill material classification	MRH/00/P/00-PM/SPC/0003 page 53	<p>Has the material to be used as fill been approved for use?</p> <p>Material Type: _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Prior to start of Works	S	SE		H			Material Acceptance correspondence/C ertificate
3.2	Stripped surface - test rolling (If applicable)	MRH/A0/B/00-CV/DWG/0040	Does the stripped surface to be filled withstand test rolling without visible deformation or springing?	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>If 'no' please see below.</p>	Each lot & Each possession	H	SE		H			<input type="checkbox"/> Proof roll checklist



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			List Attendees:	If 'yes' please proceed to item 3.3								
	Identification of soft wet or unstable material	N/A	What quantity of soft, wet or unstable material is present? m ² m ³		H	SE		S			Photos / Visual inspection
	Treatment of unsuitable material	N/A	What rectification process is to be undertaken	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	As required	S	SE		S			Aconex Correspondence /Approval from SGJV
3.3	Preparation of surface	MRH/A0/B/00-CV/DWG/0040	Has adequate water been added to the stripped surface to ensure adhesion to the next layer?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	S	SE		S			Photos (if required)
3.4	Fill Placement	MRH/00/P/00-PM/SPC/0003 MRH/A0/B00-CV/DWG/0008	Has fill been placed in maximum 200mm and minimum 100mm compacted layer thickness? Rock in the fill should be less than 75 mm. Fill should be free of clay and free from organic.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	S	SE		S			Photos (if required)
3.5	Moisture	AS 3798	Has the material maintained at optimum moisture content (within +/- 2% of optimum moisture), with additional water being added if required during compaction?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	As required	S	SE		S			Test Reports
3.6	Lime mix	MRH/A0/B/00-CV/DWG/0040	Has mix demand testing been completed and submitted?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Once	H	SE		H			<input type="checkbox"/> Test reports No longer applicable.



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3.7	Lime stabilisation	MRH/A0/B/00-CV/DWG/0040	Has the prepared subgrade been lime stabilised as per the IFC design?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	S	SE		W			Photos/As-built report No longer applicable.
3.8	Compaction	MRH/A0/B/00-CV/DWG/0008	Compaction Scale: minimum 3 tests per lot, or 1 test per 1000m2 Has the subgrade been adequately compacted achieving 100% SDD? Is the subgrade material within +/- 2% of the optimum moisture content.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Each lot & Each possession	W	SE		S			<input type="checkbox"/> Test reports
3.9	Test Rolling	MRH/A0/B/00-CV/DWG/0040	Does the layer withstand test rolling without visible deformation or springing? List Attendees: Type of equipment used: <input type="checkbox"/> Water cart <input type="checkbox"/> Tandem <input type="checkbox"/> Other: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If 'no' please see below. If 'yes' please proceed	Each lot & Each possession	H	SE		H			<input type="checkbox"/> Proof Roll Inspection Checklist
Identification of soft wet or unstable material		N/A	What quantity of soft, wet or unstable material is present? m ² m ³	As required	S	SE		S			Photos (if required)



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	Treatment of unsuitable material	N/A	Has rectification process been submitted to SGJV for Review? What was the rectification process used?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	As required	H	SE		S			Photos (if required)
4.0 Conformance check												
4.1	Width and alignment	IFC Drawings	Has the pavement been constructed at the correct width and alignment as detailed in the construction drawings?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Once	W	SE		H			<input type="checkbox"/> As built report
4.2	Subgrade level and shape	IFC Drawings	Has the prepared subgrade been surveyed in accordance with and verifying specified requirements? Is the subgrade within +/- 20mm of design surface.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	As required	W	SE		H			<input type="checkbox"/> As built report

Comments:

Works complete (signer SS) _____ Date works complete _____

Lot conforms (signer SE) _____ Date lot closed _____ NCR/s no. raised _____ Date NCR closed for this lot _____



SGJV / Client Representative signoff:

Name_____ **Company**_____ **Signature** _____ **Date** _____

Name_____ **Company**_____ **Signature** _____ **Date** _____

Responsibility (Resp.) Key: **PM** - Project Manager, **PE**-Project Engineer, **SE**- Site Engineer, **CS**-Civil Superintendent, **SS**-Site Supervisor, **SV**-Surveyor, **CR**-Client Representative

Inspection key: **W** – Witness, **H** – Hold Point, **S** - Surveillance