Fulton Hogan	Inspection and Test Plan - Control and Supervision of the Works	Document # FHC-ITP-027 Revision : 01 Date : 23/01/2024

Client:	**MRPA**	**Construction Process:**	Prepared by:	Reviewed by :	Approved by :
Project:	**Fitzgerald Road Carpark**	***Pile Footing Construction***	Name: **Fynn Riddick**	Name: Justin Sciacca	Name:
Contract No:		**Specifications:** AS 3600-2018, VicRoads Standard Specification Section 606, 610, 611, 614 **Structure / Component: Pole Footings per days production** **Location: Fitzgerald Road Level Crossing Removal Project**	Signed : Date : 23/01/2024	Signed : Date : 25/01/24	Signed : Date :

Lot No:	**Lot Details:**	**Lot Size/ Quantity:**

Item No.	Task/Activity Description	Inspection / Controls and Verification Detail					HP/ WP/ AP/ IP/ TP/ SCP	Responsibility Project Engineer Site Engineer Superintendent Surveyor Foreman	Checked by:			
		Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity			Client	Fulton Hogan	FH's Sub-contractor	Date
1	**Design and Submissions**											
1.1	Check for correct documentation	Prior to commencing any activity	Ensure that all employees and subcontractors are: - using the correct and complete set of drawings -all drawings are the latest revision	Drawings and drawing registers	Visual inspection	This ITP signed	**HP***	Fulton Hogan Engineer	N/A		N/A	
1.2	Implementation of all measures and controls	Prior to commencing any activity	All necessary measures and controls are being implemented, that is: PSP, EMP, TMP, SWMS & WP	PSP, EMP, TMP, JSEA, SWMS, WP	Visual Inspection	This ITP signed	**HP***	Fulton Hogan Engineer	N/A		N/A	
1.3	Approval of mix design	Prior to the first concrete pour	Structural Concrete Design & Submission ITP completed and signed.	610.07	Verify	This ITP signed	**IP**	Fulton Hogan Engineer	N/A		N/A	
1.4	Reinforcement schedule	Prior to concrete pour	Reinforcement schedule has been prepared for the reinforcement supply, to ensure that it achieves the specified tolerances on member dimensions, concrete cover and specified locations	611.04	Verify	This ITP signed	**IP**	Fulton Hogan Engineer	N/A		N/A	
2	**Construction/Erection of Formwork**											
2.1	Excavation (Pile)	Prior to concrete pour	The Contractor shall notify the Superintendent for inspection of the pile excavation by the Superintendent. Prior to inspection, the pile excavation shall be de-watered and the walls and base of the pile cleaned out, including the internal surface of the casing, to remove all mud, loose or foreign material.	606.05	Inspect	This ITP signed	**HP**	Fulton Hogan Engineer / Suprintendant			N/A	
2.2	Construction Methodology	Prior to erection	Designed and constructed in such a manner so it can be removed without damage to the concrete. Formwork/shoring shall be placed in locations where steel reinforcement and other fixtures can be inspected, and sufficiently tight at joints to prevent loss of slurry	614.04 614.06	Verify	This ITP signed	**IP**	Fulton Hogan Engineer	N/A		N/A	

Item No.	Task/Activity Description	Inspection / Controls and Verification Detail					HP/ WP/ AP/ IP/ TP/ SCP	Responsibility Project Engineer Site Engineer Superintendent Surveyor Foreman	Checked by:			
		Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity			Client	Fulton Hogan	FH's Sub-contractor	Date
2.3	Construction Methodology (Pile)	Prior to construction	Further to the requirements of clause 611.10 spacers and supports for bored pile steel reinforcement shall be placed at intervals of no more than 2 m along the full length of the steel reinforcement cage to ensure that the specified concrete cover to the steel reinforcement is maintained. Concrete shall be placed through a tremie tube and shall not be dropped from a height greater than 2 m through air.	611.10 606.06	Verify	This ITP signed	**IP**	Fulton Hogan Engineer	N/A		N/A	
3	**Pre-Pour Planning and Inspection**											
3.1	Cleaning formwork	Each concrete pour	Concrete shall not be placed until all foreign material has been completely removed from the forms	610.18 (a) (iii)	Verify	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	
3.2	Correct forms, reinforcements, rag bolt assembly and embedments	Prior to concrete pour	Superintendent confirms that the inspected formwork, reinforcement, rag bolt assembly and embedments comply with the project drawings and specifications. **Pre-pour checklist completed and signed.**	610.18 (a)	Verify	This ITP signed & Pre-Pour checklist completed	**HP**	Fulton Hogan / Superintendent			N/A	
3.3	Reinforcement assembly of piles	Prior to concrete pour	Reinforcement and/or concrete shall not be placed until the proposed method of removing mud, loose rock or similar materials has been reviewed by the Superintendent.	610.17 (b),(c), (d)	Verify	This ITP signed	**HP**	Fulton Hogan	N/A		N/A	
3.4	Monitoring weather	Prior to concrete pour	Concrete shall not be place when temperature is <5°c or > 35°C All steel components that are in contact with the concrete shall be cooled to below 32°C before concrete is placed	610.17 (b),(c), (d)	Verify	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	
4	**Placing and Finishing Concrete**											
4.1	Carry out sampling of concrete	Each concrete pour	Sampling in accordance with 610.16	610.16	Checklist	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	
4.2	Discharge time	Each concrete pour	Discharge time (concrete placed and compacted) < 90 minutes from batch time unless approved otherwise. **Batch to be used has a discharge time of 180 minutes.**	610.13	Verify	This ITP signed. Accurate Site Notes & Load Mapping	**IP**	Fulton Hogan	N/A		N/A	
4.3	Methodology of placement (structural)	Each concrete pour	Concrete shall be tansported, handled and placed in a manner that will prevent segregation or loss of materials In continuous pours the max. time lag between truckloads on site is 25 minutes	610.18	Verify	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	
4.4	Methodology of placement (piles)	Each concrete pour	Unless otherwise approved by the Superintendent, temporary casing shall be used to prevent collapse of holes during the excavation operation. Care shall be taken to prevent soil and rock dislodging from the side of the hole and contaminating the concrete forming the minimum cover to the reinforcement.	606.03(b) 606.05	Verify	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	
5	**Post-Pour Details and Inspection**											

Item No.	Task/Activity Description	Inspection / Controls and Verification Detail					HP/ WP/ AP/ IP/ TP/ SCP	Responsibility Project Engineer Site Engineer Superintendent Surveyor Foreman	Checked by:			
		Frequency	Acceptance Criteria	Reference Documents	Inspection / Test Method	Record of conformity			Client	Fulton Hogan	FH's Sub-contractor	Date
5.1	Curing	Each concrete pour	Sufficient time shall be given for the concrete to cure prior to loading.	610.23	Verify	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	
5.2	Formwork removal	Each concrete pour	Formwork shall be removed carefully and in such a manner as to avoid damage to the member or the concrete surfaces and maintain safety at all stages of removal. Formwork and formwork supports shall not be disturbed or adjusted during the concreting operation	610.25	Verify	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	
5.3	Positional tolerance and dimensions of concrete members and piles	Each concrete pour	The centre of the pile head shall be in the specified plan position ±75 mm;	607.06	Verify	This ITP signed Post Pour Checklist completed	**IP**	Fulton Hogan	N/A		N/A	
5.4	Concrete Sampling and Testing	Prior to lot closure	Concrete sampled and tested for Compressive Strength: - 2 cylinders @ 28 days Compressive Strength=32MPa - 1 cylinders @ 7 days for Compressive Strength=20MPa	610.05 610.06 610.13 610.16	Verify	This ITP signed	**TP**	Fulton Hogan	N/A		N/A	
5.5	Protection of Adjacent Piles	Prior to commencing any piling	No pile construction shall be commenced within 2.5m clear distance of a newly cast pile until the concrete in the pile has attained a strength of 15 MPa. Installation of piles by methods which involve driven temporary casing or result in significant vibration shall not be carried out within the distance 2.5 m to 9.0 m until the concrete in the pile has attained a strength of 15 MPa and set for a minimum of 24 hours.	606.04(a) 606.04(c)	Verify	This ITP signed	**HP***	Fulton Hogan	N/A		N/A	
5.6	Testing Post-Pour	Prior to lot closure	Where necessary, piles shall be tested in accordance with 606.07; integrity testing, static load testing & dynamic testing	606.07	Verify	This ITP signed	**TP**	Fulton Hogan	N/A		N/A	
5.7	As Built Drawings	Prior to lot closure	Recorded of as-built drawings	Fulton Hogan Procedure	Verify	This ITP signed	**IP**	Fulton Hogan	N/A		N/A	

Final Inspection

The signature below verifies that this ITP has been completed in accordance with the FH's Quality system Procedures and verifies lot compliance with specifications.

Print Name: Position: Signature: Date: / /

Legend					
HP	Hold Point	Work shall not proceed past the HP until released by the Superintendent	**IP**	Inspection point	Formal Inspection to be done and recorded
HP*	FH Hold Point	Work shall not proceed past the HP* until released by FH	**TP**	Test Point	Product compliance test to be undertaken and recorded/reported
WP	Witness Point	An inspection which must be witnessed by the Superintendent	**SCP**	Survey conformance point	A qualified surveyor to check product/section/structure and report
AP	Approval Point	Written or verbal approval given by the Superintendent			