Our Ref: BE250306 20260528-Response to RFI
Enquiries to: Jack Shao

11 June 2026

Toowoomba Regional Council
PO Box 3021
TOOWOOMBA QLD 4350

Attention: Krys den Hertog

Dear Council Representative,

Re: Proposed Reconfiguring a Lot (2 Lots into 199 Lots and 2 Balance Lots)
Meringandan Road, Meringandan
Lot 3 AG4138 & Lot 1 RP27298
Information Request Response
Council Reference: RAL/2025/5992

We refer to the Toowoomba Regional Council Information Request dated 13 October 2025 regarding the above project. Please find below appropriate responses to the issues raised.

Submission

Information Requested	
1. LOT LAYOUT	
1.4	**Issue:**
	It is unclear how Lots 344 and 345 can be serviced by a waste collection vehicle in forward gear as no turnaround has been provided.
	Information Required:
	Provide amended plans which demonstrate how Lots 344 and 345 can be appropriately serviced by a waste collection vehicle.
	Response:
	The plans have been amended to provide waste collection bin pads for Lots 344 and 345 to facilitate servicing by waste collection vehicles.
1.6	**Issue:**
	Retaining walls in the order of 3m in height are proposed along lot boundaries (including along northern lot boundaries) impacting on the ability for future residential development to be provided in a manner that protects the amenity, privacy and solar access of future residents.

	Information Required:
	Provide amended plans which reduce the height of retaining walls between lot boundaries. Note: Consideration should be given to incorporating wider/deeper lots to allow for stepped retaining which is provided in accordance with SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure.
	Response:
	The retaining wall layout has been reviewed and amended to reduce retaining wall heights between lot boundaries where practicable, having regard to the existing topography and site constraints. The proposed retaining wall heights have also been annotated on the amended plans to clearly demonstrate the anticipated wall heights throughout the development. The majority of retaining walls between lot boundaries are generally below 3m in height, with localised retaining required due to the natural terrain and proposed road grading constraints.
1.7	**Issue:**
	Retaining walls in the order of 2m in height are proposed adjoining road reserves and pedestrian links throughout the subdivision resulting in poor streetscape and CPTED outcomes inconsistent with Performance Outcome PO1 of the Reconfiguring a Lot Code.
	Information Required:
	Provide amended plans which demonstrate that appropriate interface is provided between retaining walls, pedestrian connections and street frontages. Note: Consideration should be given to incorporating wider/deeper lots to allow for stepped retaining to be provided in accordance with SC6.2 PSP No. 2 – Engineering Standards – Roads and
	Response:
	The retaining wall layout adjoining road reserves and pedestrian links has been reviewed and amended as part of the updated civil design response. The amended plans provide additional detail regarding retaining wall locations and heights to demonstrate the interface treatment between retaining walls, roads and pedestrian connections. Retaining wall heights adjoining public interfaces have been minimised where practicable having regard to the natural terrain, proposed road grading and overall earthworks constraints of the site.
2. INFRASTRUCTURE NETWORK ANALYSIS	
2.1	**Issue:**
	The proposed development is located outside the Priority Infrastructure Area (PIA) meaning that necessary trunk infrastructure has likely not been planned for in Council's LGIP or network planning. Insufficient detail has been provided in relation to the infrastructure networks required to facilitate this development to assist Council in determining and identifying necessary infrastructure to service the growing community.
	Information Required:
	Provide an Infrastructure Network Assessment report (with supporting information, maps and metrics) for four of the infrastructure networks (stormwater, sewer, water and transport) addressing, but not limited to, the following: (a) Identification of the most cost-effective method to extend trunk infrastructure networks from the PIA to and through the development site (including estimation of costs of this infrastructure). Please refer to Part 4.2 of the Toowoomba Regional Planning Scheme 2012 for guidance. This must also include assessment of the cumulative impacts of the full site including balance lots, other approved development, current applications and future development areas outside the PIA; (b) An assessment of the capacity of existing and future trunk infrastructure identified in the LGIP to determine whether adequate capacity exists to accommodate the development;

	(c) Identification of any necessary trunk infrastructure identified in the LGIP and that will be made necessary by the development (including an estimation of costs of this infrastructure); (d) Identification of any extra trunk infrastructure which will be made necessary by the development (including an estimation of costs of this infrastructure); (e) Identification of any non-trunk infrastructure which is required to connect the development to trunk infrastructure networks (refer to Planning Scheme Policies for guidance); (f) Commentary regarding the ability to achieve the desired standards of service for each infrastructure network as identified in the LGIP; and (g) The timing and sequencing of the infrastructure (noting that the development is proposed to be staged). Note: The Infrastructure Network Assessment must be prepared by an appropriately qualified RPEQ relevant to the network type. The Infrastructure Network Assessment report may be used to determine if any extra payment should be imposed on the development. It is recommended that the applicant be sufficiently satisfied that they are able to address the above issues and the preceding Information Request item, prior to proceeding to respond to all other items in this Information Request.. An example of the standard of documentation required for the technical reports for each network can be found within the Special Meeting of Council Minutes for RAL/2021/7453 which is available on Development.i.
	Response:
	Stormwater The proposed stormwater infrastructure comprises local drainage infrastructure intended solely to service the subject development, including internal drainage networks, underground drainage infrastructure, road drainage and lawful points of discharge. Accordingly, all stormwater infrastructure associated with the proposed development is considered non-trunk infrastructure as it is intended only to service the subject site and does not form part of any broader regional drainage network. **Water Supply and Sewerage** Toowoomba Regional Council undertook a detailed assessment of the external water supply and sewerage networks associated with the proposed development. The assessment is documented within the “Meringandan Rd Water & Sewer Assessment Report” dated March 2026. The assessment considered the cumulative impacts of the proposed development together with approved developments, current applications and future growth areas. The assessment confirmed that the proposed development can be serviced by the external water supply and sewerage networks subject to the implementation of the infrastructure upgrades and servicing arrangements identified through Council’s network planning investigations. All internal water and sewer reticulation infrastructure within the subject site is considered non-trunk infrastructure intended solely to service the proposed development. **Transport** Transport infrastructure assessment will be addressed separately by others.
3. WATER SUPPLY	
	Issue:
3.1	As the proposed development area is outside of PIA, no demand from this site has been included in previous water supply studies. The submitted Water Supply Network Assessment undertaken by WCS Engineering considered water demand from 199 lots but not the balance of the site and other sites outside the

	PIA. The Water Supply Network Assessment includes technical pre-lodgement advice from Council that hasn't been addressed including: (a) That the existing network does not have sufficient capacity to support the full site development without augmentation works; (b) There are no details about the augmentation works required (e.g. increased sizing of trunk infrastructure due to additional demand) and the cost of such works; and (c) The engineering plans in the Preliminary Civil Engineering Report show a connection to an existing 150 diameter trunk watermain in Main Street which is not the connection point nominated by Council.
	Information Required:
	In conjunction with the Infrastructure Network Assessment, provide an updated Water Supply Network Assessment demonstrating that a compliant water supply system can be provided including assessment of full development of the site with the cumulative impacts of other approved development, current applications and future development areas outside the PIA. The report is to demonstrate, as a minimum, modelling hydraulic results demonstrating pressure and flows with required pipe sizing, the different pressure zones required, the proposed connection points, and the external augmentations required (including costings) to service the full development site. The water supply report is to be undertaken in accordance with Council's Water Infrastructure Policy 2.03.
	Response:
	As mentioned above, a water supply assessment has been undertaken by Toowoomba Regional Council and documented within the "Meringandan Rd Water & Sewer Assessment Report" dated March 2026. The assessment considered the ultimate development of the subject site, including balance lots, together with the cumulative impacts of approved developments, current applications and future growth areas. The assessment included hydraulic modelling of the external water supply network and identified the infrastructure upgrades and servicing arrangements required to accommodate the ultimate development while maintaining Council's adopted standards of service. The development is proposed to connect to the existing water main within Main Street. The Council assessment confirmed that the proposed development can be serviced via this connection subject to implementation of the identified external network upgrades.
4. WASTEWATER	
	Issue:
4.1	As the proposed development area is outside the PIA, no sewerage planning study has been undertaken for this area. The submitted Wastewater Network Assessment undertaken by WCS Engineering assumes full development of the site but not other sites outside the PIA. A gravity sewer connection is proposed to a new pump station at the unformed Heushle Road which then directly feeds into Council's existing sewer pressure main located on the western side of the development. Council does not support an arrangement which has direct pumping into a rising main due to potential maintenance issues. Technical pre-lodgement advice from Council was that connection would be made to the existing sewer pump station (HIPS8) at Meringandan School Road in the interim and a new sewer pump station proposed at Spies Road. Both connection points will impact the capacity and operation of HIPS8 and the downstream pump station HIPS13. The development demand represents a significant portion of available capacity at HIPS8 and the Spies Road pump station and the pumped network does not have long-term capacity to cater for the full development demands of the Subject Site. There is a concept services layout provided within the Engineering Report but no details about pipe size and long-sections, how Lots 419 to 520 will be connected, nor how the balance lots will be connected. Further, the Town Planning Report requests dispensation for sewer main greater than 4m deep. This is unacceptable to Council given the small size of the lots and workplace health and safety issues associated with deep excavation.
	Information Required:

	In conjunction with the Infrastructure Network Assessment, provide a detailed wastewater report demonstrating that a compliant conventional gravity system can be achieved to service each lot in the development including the balance lots. The report must demonstrate how this can be achieved by indicating the connection points, adequacy of downstream sewer from proposed connection points (including any pump stations), ultimate loads from the development and sizing of the mains throughout all stages as a minimum. The report is to be undertaken in accordance with Council's Wastewater Infrastructure Policy 2.04. Note: Council does not support an arrangement which has direct pumping into the HIPS8 rising main. The concept sewer layout needs further development to confirm all sites can be provided with a gravity connection with the maximum depth of gravity sewers limited to 4m.
	Response:
	The proposed wastewater servicing strategy has been revised following further consultation with Council regarding the preferred downstream connection arrangement. The previous concept involving direct pumping into the existing HIPS8 rising main has been removed from the proposal. The proposed development will instead discharge via a conventional gravity sewer system to Heushle Road, before gravitating west to the existing HIPS8 pump station via a proposed aerial gravity sewer crossing. As outlined in the "Meringandan Rd Water & Sewer Assessment Report" dated March 2026, Council has undertaken a detailed assessment of the downstream sewer network and identified the infrastructure and servicing arrangements required to accommodate the proposed development. The updated concept sewer servicing strategy demonstrates a conventional gravity sewer network servicing the proposed DA lots, including connection points and sewer alignments. Refer to the updated Civil Engineering Report and Concept Sewer Servicing Plans for the proposed servicing strategy and gravity sewer layout Servicing arrangements for future development areas outside the current DA application will be considered as part of future development applications.
5. STORMWATER	
	Issue:
5.1	The proposed development area is outside of PIA and no planning study has been done for the urbanisation of this area. The Meringandan Urban Stormwater Master Plan does not anticipate this intensity of development within the Subject Site. The submitted Conceptual Stormwater Management Plan prepared by Burchills, needs to address the following issues: (a) Council does not support the proposed construction of an open channel along Heushle Road reserve for the following reasons: i. The proposed open channel will restrict the future development of land south of Heushle Road, and ii. The steep terrain along the western extent of Heushle Road reserve, combined with the proposed flows, present a high risk of future scour and erosion of an open channel; Note: Council understands that the Meringandan USMP does propose open channels to discharge to the west, however this plan was development in 2019 and does not consider the high-density development currently proposed and occurring in the surrounding area. Additional catchment planning and stormwater design has been undertaken since the development of the USMP and therefore this USMP may not reflect the most up to date assumptions for the catchment. (b) The SMP proposes no on-site detention, however there are significant increases in stormwater flows at multiple discharge points;

	Note: Council is aware of drainage concerns along Main Street and are currently in the process of updating the flood modeling for this area. There is no additional stormwater capacity within the road. (c) Council has concerns regarding the assumed fraction impervious values given approximately 45% of lots are proposed to be 400m2 or less. A fraction impervious of at least 80% should be used for residential lots; and (d) There is no stormwater quality treatment proposed. As outlined within the pre-lodgement advice, stormwater quality treatment must be provided that meets the post-construction design objectives for water quality within the State Planning Policy July 2017. Stormwater treatment facilities must be located in drainage reserves or streets with provision made for maintenance access. Treatment facilities could include street tree bio-retention pods, grass swales, and bio-retention filters.
	Information Required:
	In conjunction with the Infrastructure Network Assessment, provide an updated Conceptual Stormwater Management Plan, prepared having regard to Toowoomba Regional Planning Scheme 2012 and in accordance with the requirements of PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure (PSP No. 2) and the Queensland Urban Drainage Manual (QUDM), which includes, but is not limited to: (a) Demonstration that the post-development peak flows will not exceed pre-developed peak flows from the site for storm events with an ARIs from 2 years up to and including 100 years. That is, there is "no-worsening" effect as a result of this development on upstream, downstream, adjoining and nearby properties including roads; (b) A fraction impervious of at least 80% should be used for residential lots; (c) No open channel on Heushle Road and restriction of development on the southern side of that road; and (d) Stormwater quality treatment that meets the design objectives of the State Planning Policy.
	Response:
	a). The proposed open channel arrangement along the Heushle Road reserve has been removed from the revised stormwater strategy. The revised strategy no longer relies on a large open drainage channel within the Heushle Road reserve to manage increased flows at LPD B. Instead, the internal drainage strategy has been revised to divert a portion of flows previously directed toward LPD B toward LPD A. This reduces the developed catchment area discharging toward LPD B and reduces the extent of downstream drainage infrastructure required within the Heushle Road reserve. A 750 mm diameter RCP is still proposed within the Heushle Road reserve to convey controlled flows to the west. This pipe replaces the previously proposed large open channel arrangement and provides a more contained conveyance solution within the road reserve. The proposed 750 mm diameter RCP will be designed to convey the required developed flows west within the Heushle Road reserve while avoiding the need for a large open channel that could restrict future development south of Heushle Road. b). The revised stormwater strategy now includes on-site detention. A detention basin is proposed to manage developed flows discharging toward LPD F / High Street. The basin has been sized to ensure that post-development peak discharge to LPD F does not exceed the pre-development peak discharge for the assessed design events. This directly addresses Council's concern that there is no additional stormwater capacity within Main Street. The revised strategy also reduces flows directed toward LPD B by diverting a portion of the developed catchment toward LPD A. The hydraulic impact of this diversion has been assessed using TUFLOW and has been demonstrated to result in only minor localised impacts confined within the drainage channel, technical justification to these increases are included in the updated Stormwater Management Plan.

The revised SMP does include updated peak discharge comparison tables for the relevant Lawful Points of Discharge, including LPD A, LPD B and LPD F.

c). The hydrologic modelling has been updated to adopt a minimum fraction impervious of 80% (or equivalent IL and CL applied in the hydraulic modelling) for residential lots.

This revised impervious assumption reflects the proposed residential lot sizes, including the proportion of lots that are 400 m² or less.

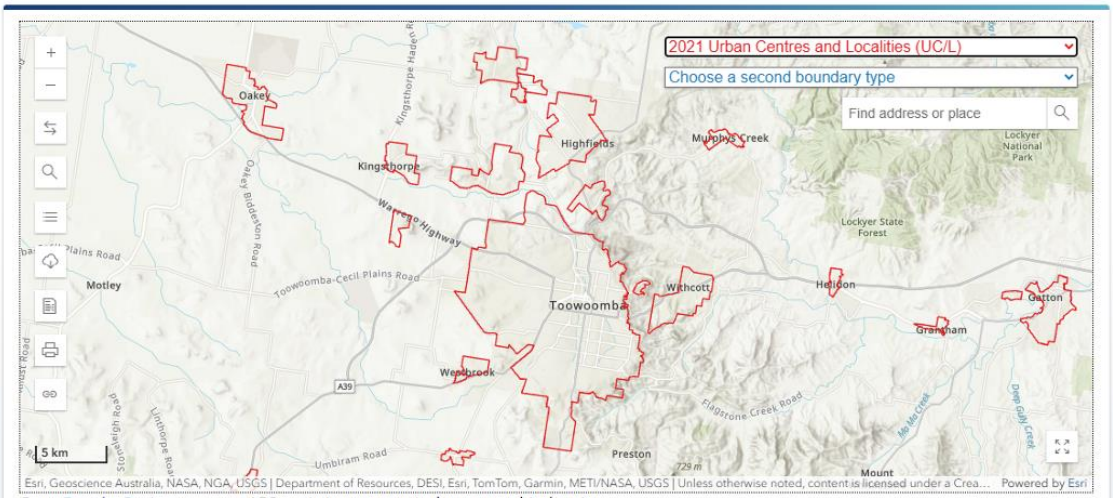
The updated impervious fractions have been used in the revised hydrologic modelling and inform the updated peak discharge assessment, detention basin sizing and hydraulic impact assessment.

The revised SMP will include updated catchment parameter tables documenting the adopted impervious fractions for each developed catchment.

d).

The State Planning Policy 2017, Planning Act 2016 and Planning Regulation 2017 do not specifically define the term “population centre” for the purpose of applying the stormwater quality design objectives. In the absence of a specific statutory definition, the accepted approach is to interpret population centres by reference to the Australian Bureau of Statistics Urban Centres and Localities classification and associated Queensland Government population centre mapping. This has been confirmed by various government departments https://data.gov.au/data/dataset/population-centres-queensland

ABS Maps



On this basis, Meringandan is identified as a separate population centre and is not part of the Toowoomba urban centre. Meringandan has a population of less than 25,000 people and is located within the Western Queensland climatic region.

Accordingly, while the State Planning Policy stormwater quality provisions have been considered, the post-construction pollutant reduction targets for Western Queensland population centres greater than 25,000 people are not applicable to the development. Permanent stormwater quality treatment infrastructure is therefore not required to achieve SPP pollutant load reduction targets.

Table B: Post construction phase – stormwater management design objectives

Application:

(1) A material change of use for an urban purpose that involves premises 2500 metres² or greater in size and:

(a) will result in six or more dwellings; or

(b) an impervious area greater than 25 per cent of the net developable area.

(2) Reconfiguring a lot for urban purposes that involves premises 2500 metres² or greater in size and will result in six or more lots.

Climatic region	Design objectives Reductions in mean annual load from unmitigated development (%)				
	Total suspended solids (TSS)	Total phosphorus (TP)	Total nitrogen (TN)	Gross pollutants >5mm	Waterway stability management
South East Queensland	80	60	45	90	Limit the peak 1-year ARI event discharge within the receiving waterway to the pre-development peak 1-year ARI discharge
Central Queensland (south)	85	60	45	90	
Central Queensland (north)	75	60	40[15]	90	
Cape York[14], wet tropics and dry tropics	80	60[16]	40	90	
Western Queensland[14]	85	60	45	90	

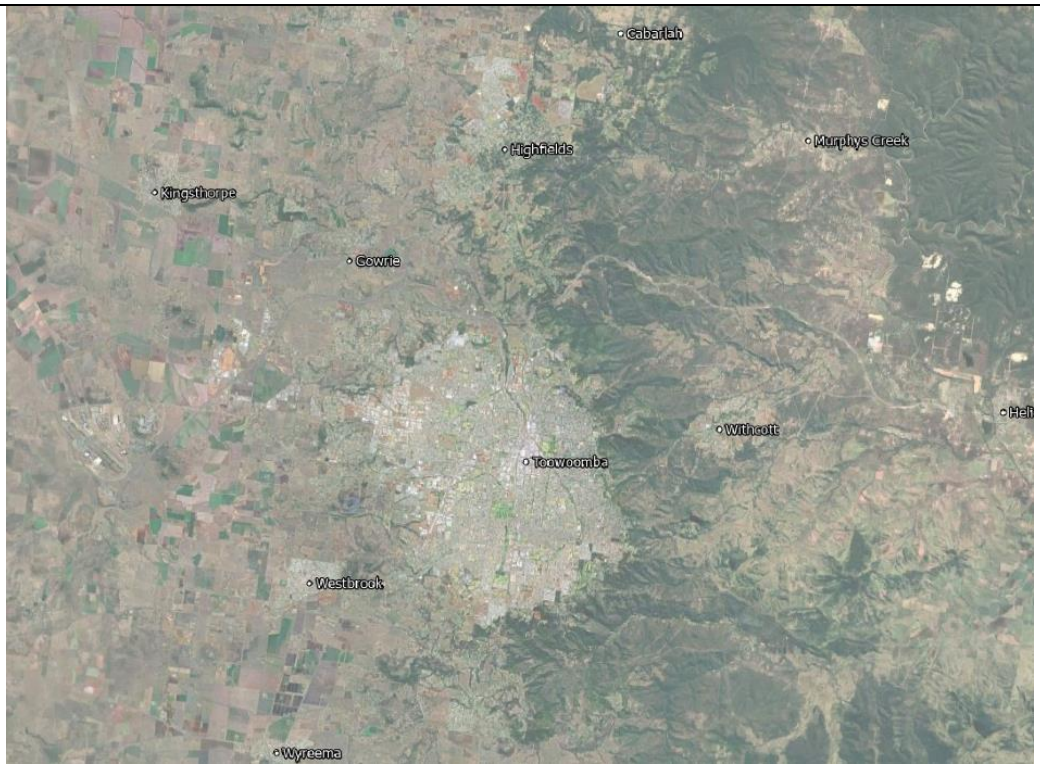
Notes:

- Mapping of climatic regions is available on the State Planning Policy Interactive Mapping System.
- In lieu of modelling, the default bio-retention treatment area to comply with load reduction targets for all Queensland regions in 1.5 per cent of the contributing catchment area.
- Water stability objective applies if development drains to an unlined waterway within or downstream of the site where a risk of increased erosion exists due to changes in hydrology. Local government may also require application of the waterway stability objective where there are planned future rehabilitation works to return a lined channel to a natural channel design.
- The SPP Water quality guidance material provides advice on the measures that demonstrate compliance with table B.

[14] Note: Applies to population centres greater than 25,000 persons.
[15] Note: Mackay Regional Council has adopted a 35 per cent reduction for TN.
[16] Note: Townsville City Council has adopted a 65 per cent reduction for TP.

Stormwater quality during the construction phase will be managed through best-practice erosion and sediment control measures, including the preparation and implementation of site-specific, staged erosion and sediment control plans.

Further to this, Meringandan is part of the Condamine River Basin Healthy Waters Management Plan. https://environment.qld.gov.au/__data/assets/pdf_file/0019/87103/hwmp-condamine-river basin.pdf Section 1.6.4 confirms the fact that the objectives currently apply only to the city of Toowoomba.



1.6.4 State Planning Policy: state interest —water quality

The State Planning Policy (SPP, July 2017) guides local governments in preparing and amending planning schemes to ensure 17 State Interests are considered. The State Interest for Water Quality specifies that the environmental values and quality of Queensland waters are protected and enhanced. Policy elements and development benchmarks are specified in the SPP for the State Interest for Water Quality to ensure development is planned, designed, constructed and operated to manage stormwater and wastewater in a way that supports the protection of environmental values identified in the Environmental Protection (Water) Policy 2009. The policy elements and benchmarks include the consideration of receiving waters and development in water resource catchments and water supply buffer areas.

The development benchmarks refer to applicable stormwater management design objectives outlined in Tables A and B in Appendix 2 of the SPP. Table A specifies construction phase stormwater management design objectives which apply to all climatic regions in Queensland and aim to minimise the risk of sediment washing off sites and polluting waterways during construction. Table B specifies post-construction phase stormwater management design objectives to address pollutants known to be generated from urban land uses. For the Western Queensland region, post construction phase stormwater management design objectives for total suspended solids, nutrients, gross pollutants and waterway stability management apply to population centres greater than 25, 000 persons.

[3] The *Aboriginal Cultural Heritage Act 2003* (ACHA) and *Torres Strait Islander Cultural Heritage Act 2003* (TSICHA) provide for the recognition, protection and conservation of Aboriginal and Torres Strait Islander cultural heritage and impose a duty of care in relation to the carrying out of activities. The requirements of the ACHA and TSICHA apply separately and in addition to the SPP.

Therefore, these objectives currently apply to the city of Toowoomba in the QMDB region, as it classifies as a population centre greater than 25,000 persons.

6. EARTHWORKS	
7.1	**Issue:**
	While cross sections of earthworks have been provided, no information regarding the depths of cut and fill has been included.
	Information Required:
	Provide annotated cross sections showing cut and fill heights and batter slopes.
	Response:
	Refer to the Concept Bulk Earthworks Layout Plans for the preliminary cut and fill depths and the updated cross-sectional plans for the indicative batter slopes across the development site.

If additional information is needed or you require clarification on any of the issues addressed, please do not hesitate to contact the undersigned on (07) 5509 6400.

Yours faithfully

JACK SHAO
Civil Engineer & Project Manager