PROPOSED 2 LOT RESIDENTIAL SUBDIVISION, ROL/2021/19

OPW APPLICATION FOR SEWER, WATER SERVICE AND VEHICLE CROSSINGS 36 GLENELG AVENUE, MERMAID BEACH - COM/2021/140



LAYOUT PLAN



DRAWING INDEX

| Drawing Number | Rev. | Date | Series Number | Drawing Description | | |
|------------------------------|------------------------------|------------|---------------------------------|--|--|--|
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| 50558002 2 15.07.2021 2 of 6 | | 2 of 6 | Legend and Notes | | | |
| 50558003 | 50558003 2 15.07.2021 3 of 6 | | 3 of 6 | Sewerage Reticulation Layout and Longitudinal Section | | |
| 50558004 | 2 | 15.07.2021 | 4 of 6 | Water Reticulation Layout | | |
| 50558005 | 2 | 15.07.2021 | 5 of 6 | Vehicle Crossing Detailed Layout | | |
| 50558006 | 2 | 15.07.2021 | 6 of 6 | Vehicle Crossing Longitudinal Section and Setout Details | | |

SEQ WATER STANDARD DRAWINGS

| Drawing Number | Rev. | Drawing Title |
|----------------|------|--|
| SEQ-SEW-1103-1 | Α | RIGSS Pipelaying Typical Arrangements |
| SEQ-SEW-1104-1 | В | Sewerage House Connections Typical Construction Details RIGSS — Sheet 1 |
| SEQ-SEW-1200-2 | Α | Embedment and Trenchfill Typical Arrangement |
| SEQ-SEW-1201-1 | Α | Typical Standard Embedment Flexible and Rigid Pipes |
| SEQ-SEW-1205-1 | Α | Typical Trench and Bedding Details within Existing Roads Type 14 to 17 |
| SEQ-SEW-1303-1 | В | Maintenance Holes Sewers < DN300 Typical Changes in Level Details |
| SEQ-SEW-1303-2 | Α | Iron Inspection Bends for Typical Internal Drop Pipes in Sewerage Manholes |
| SEQ-SEW-1306-1 | Α | Maintenance Holes Typical Alternative Drop Connections |
| SEQ-WAT-1105-1 | С | Typical Connection to Existing Mains Sheet 1 of 2 |
| SEQ-WAT-1106-1 | D | Typical Property Service Connection Main to Meter - Sheet 1 |
| SEQ-WAT-1106-2 | С | Typical Property Service Connection Main to Meter — Sheet 2 |
| SEQ-WAT-1200-2 | С | Embedment and Trenchfill Typical Arrangement |
| SEQ-WAT-1201-1 | А | Standard Embedment Typical Flexible and Rigid Pipes |

LOCALITY PLAN

| | | REVISIONS | SURVEY DATA | A | |
|-----|----------|-----------------------------------|-------------|--------------|-----|
| REV | DATE | DESCRIPTIONS | CERTIFIED | DATUM | |
| | | | | HORIZ. | |
| | | | | PM 74169 | |
| | | | | HEIGHT | GDA |
| | | | | AHD Derived | UDA |
| | | | | SURVEY BOOKS | |
| 2 | 15.07.21 | Council Information Request Issue | genral | 28128-01 DTM | |
| 1 | 15.06.21 | Council Issue | V/////// | | |

SCALES Not to Scale

Austin and Shae Langridge

CLIENT

15.07.2021 15.07.202 Original signed by G. Lerch

PROPOSED 2 LOT RESIDENTIAL SUBDIVISION 36 GLENELG AVENUE - MERMAID BEACH

50558 50558001

LOCALITY PLAN AND DRAWING INDEX

Series No. 1 of 6

NOTES

SPECIFICATIONS

- 1. Construction specifications shall be in accordance with the current version of the following:
 - City of Gold Coast council SC6.11 City Plan policy Land Development guidelines, standard specifications:
 - 9.7 Roadworks and Bridges
 - SEQ Water SEQ Water Supply and Sewerage Design & Construction Code (2013) Standard Specifications and CoGC Amendments.

STANDARD DRAWINGS

- 2. The following Standard Drawings shall apply to this project:
 - Institute of Public Works Engineering Australia (IPWEA)
 - DS-041 Sediment and Erosion Devices Kerb and Field Inlet Check Dams and Straw Bales
 - RS-049 Vehicle Crossing Low Density Residential Plan 1 of 2
 - RS-050 Vehicle Crossings Residential Driveways Plan 2 of 2
 - RS-065 Pathways Concrete Pathway Construction Details
 - SEQ Water (Sewerage Reticulation)
 - SEQ-SEW-1103-1 RIGSS Pipelaying Typical Arrangements
 - SEQ-SEW-1104-1 Sewerage House Connections Typical Construction Details RIGSS Sheet 1
 - SEQ-SEW-1200-2 Embedment and Trench Typical Arrangement
 - SEQ-SEW-1201-1 Typical Standard Embedment Flexible and Rigid Pipes
 - SEQ-SEW-1201-1 Typical Standard Embedment Flexible and Rigid Pipes
 SEQ-SEW-1205-1 Typical Trench and Bedding Details within Existing Roads Type 14 to 17
 - SEQ-SEW-1303-1 Maintenance Holes Cast In-Situ and Precast Typical Pipe Connection Details
 - SEQ-SEW-1303-2 Iron Inspection Bends for Typical Internal Drop Pipes in Sewerage Manholes
 - SEQ-SEW-1306-1 Maintenance Holes Typical Alternative Drop Connections
 - SEQ Water (Water Reticulation)
 - SEQ-WAT-1105-1 Typical Connection to Existing Mains Sheet 1 of 2
 - SEQ-WAT-1106-1 Typical Property Service Connection Main to Meter
 - SEQ-WAT-1106-2 Typical Property Service Connection Main to Meter
 - SEQ-WAT-1200-2 Embedment and Trenchfill Typical Arrangement
 - SEQ-WAT-1201-1 Standard Embedment Typical Flexible and Rigid Pipes
 - City of Gold Coast Water and Waste (Water Reticulation)
 - 11-161 Existing Surface Fittings on Proposed Driveways for Compliance to NMP 1.1

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

Application No: COM / 2021 / 140

Dated: 29 July 2021

Development shall comply with the conditions of approval as detailed in the Decision Notice and Council's Planning Scheme, Local Laws and Planning Policies

PUBLIC UTILITY PLANT (PUP)

- 3. The location of existing PUP shown on the drawings has been taken survey information and CoGC As Constructed information.
- 4. Details of existing PUP are provided for information only and no responsibility is taken for the accuracy or completeness of the information provided or supplied.
- 5. The Contractor is responsible for confirming the location of all PUP with the relevant authorities prior to commencing work and providing all necessary measures to protect all services during the course of the work.
- The Contractor will be solely responsible for any damage incurred to existing PUP as a result of execution of the work.

SEWERAGE AND WATER RETICULATION

- Location and existing levels of existing sewer and water mains, structures and services has been taken survey information, and CoGC As Constructed information.
- 8. Contractor to confirm the locations and level of all existing services prior to commencement of construction.
- 9. These drawings shall be read in conjunction with the SEQ Water Supply & Sewerage Design and Construction Code and Standard Drawings.
- 10. All materials workmanship to be in accordance with the current SEQ Water Supply & Sewerage Design and Construction Code and relevant Australian Standards.
- 11. All pipes and materials shall comply with the current SEQ "Accepted Civil Products and Materials" (IPAM) list.
- 23. Contractor shall submit an 'Application to work on the City's Infrastructure' including detailed construction methodology and all supporting documentation, and gain all necessary approvals for the connection works to the existing sewerage maintenance hole and capping of the existing house connection.
- 24. All Live connection works to be performed under Gold Coast Water and Waste supervision.

PAVEMENT

- 25. Unbound pavements shall be constructed in accordance with the City of Gold Coast Standard Specification 9.7 Roadworks and Bridges, Section 9.7.6 Unbound Pavements.
- 26. Asphalt pavements shall be constructed in accordance with the City of Gold Coast Standard Specification 9.7 Roadworks and Bridges, Section 9.7.11 Asphalt.

CONCRETE

- 27. Concrete work shall be constructed in accordance with MRTS70 Concrete, unless noted otherwise.
- 28. The grade of concrete shall be:
 - N32
 - Slump to be 100mm in accordance with AS 1379 with 20mm maximum nominal aggregate size.
- 29. Do not add water to concrete on site.
- 30. Clear cover to reinforcement to be 50mm top cover, unless noted otherwise.
- 31. Reinforcement to be Class N, grade 500 deformed bar.

SUBGRADE PREPARATION

32. Any poor, saturated, highly compressible or otherwise weak areas of the subgrade should be removed and replaced with suitable replacement material, confirm with Supervising Engineer.

CLIDVEV DATA

33. Provide a level 30mm sand/crusher dust and plastic layer to entire underside of concrete area.

REINFORCEMENT

- 34. Bar chairs shall be spaced appropriately to prevent reinforcement sagging, Maximum spacing of bar chairs is 800mm. Reinforcement must be chaired prior to placement of concrete.
- 35. Minimum reinforcement to be SL82 fabric or as specified.
- 36. All mesh to be lapped a minimum of two cross wires.
- 37. Provide a continuous N12 trimmer bars to the slab perimeter and 2 x N12 trimmer bars around all penetrations. Break only at saw cut and dowel joint locations.

COMPACTION

38. Slabs and sections of concrete greater than 100mm deep are to be compacted using an immersion vibrator.

CURING

39. Provide a minimum curing period of three continuous days. Approved method of curing; covering slab with a continuous covering of clear plastic.

JOINTS

- 40. Control joint saw cuts to be used where slab changes shape or direction and at max. 3.0m spacings, or 1.5 x the width of concrete in accordance with IPWEA Standard Drawing RS—065. Saw cuts are to be made within 12 hours of placing concrete.
- 41. Isolation joints to be used where a slab abuts any independent structure.
- 19. Dowel joints At junctions with existing concrete or max. 12m spacing, refer IPWEA Standard Drawing No. RS-065 for details.
- 20. All joints should be perpendicular to the slab edge for a minimum of 500mm.
- 21. All joints are to be continuous through kerbs/rolled edges etc.

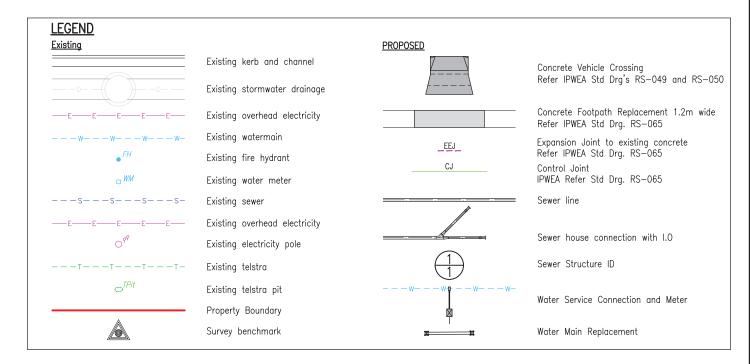
DESIGN

22. The vehicle crossing design has been prepared based on the Survey (File Ref. 20128-01 DTM), dated 04/12/20 by Schlencker Surveying Pty Ltd.

SITE VISITS

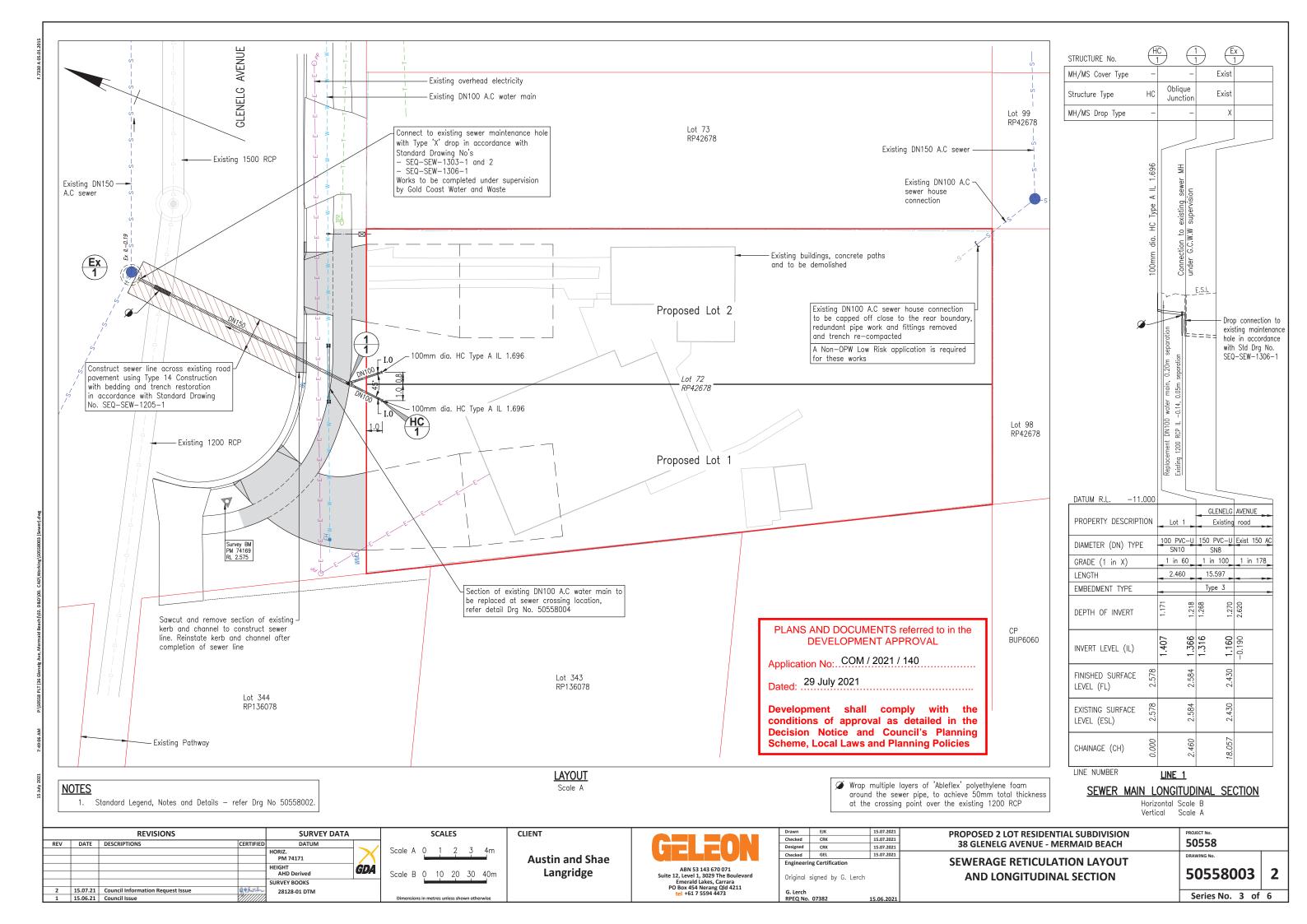
- 23. A prestart meeting will be arranged by Geleon and held onsite with the City of Gold Coast council and the Contractor prior to any works being undertaken.
- 24. Minimum testing requirements should be confirmed with the OPW approval and Geleon prior to commencing construction.
- 25. Geleon require a minimum of 48 hours notice prior to any request for a site visit.
- 26. In order for Geleon to certify that the sewerage reticulation and pavement reistatement works, and vehicular crossings comply with the design drawings and relevant standards as required by the Operational Works approval, Geleon will need to undertake the following site inspections:
 - Pre-start inspection
 - During construction of sewer line
 - VXO inspection on vehicle crossings
 - Prior to pouring all concrete
 - On Maintenance inspection after completion of works
 - Off Maintenance inspection at completion of maintenance period

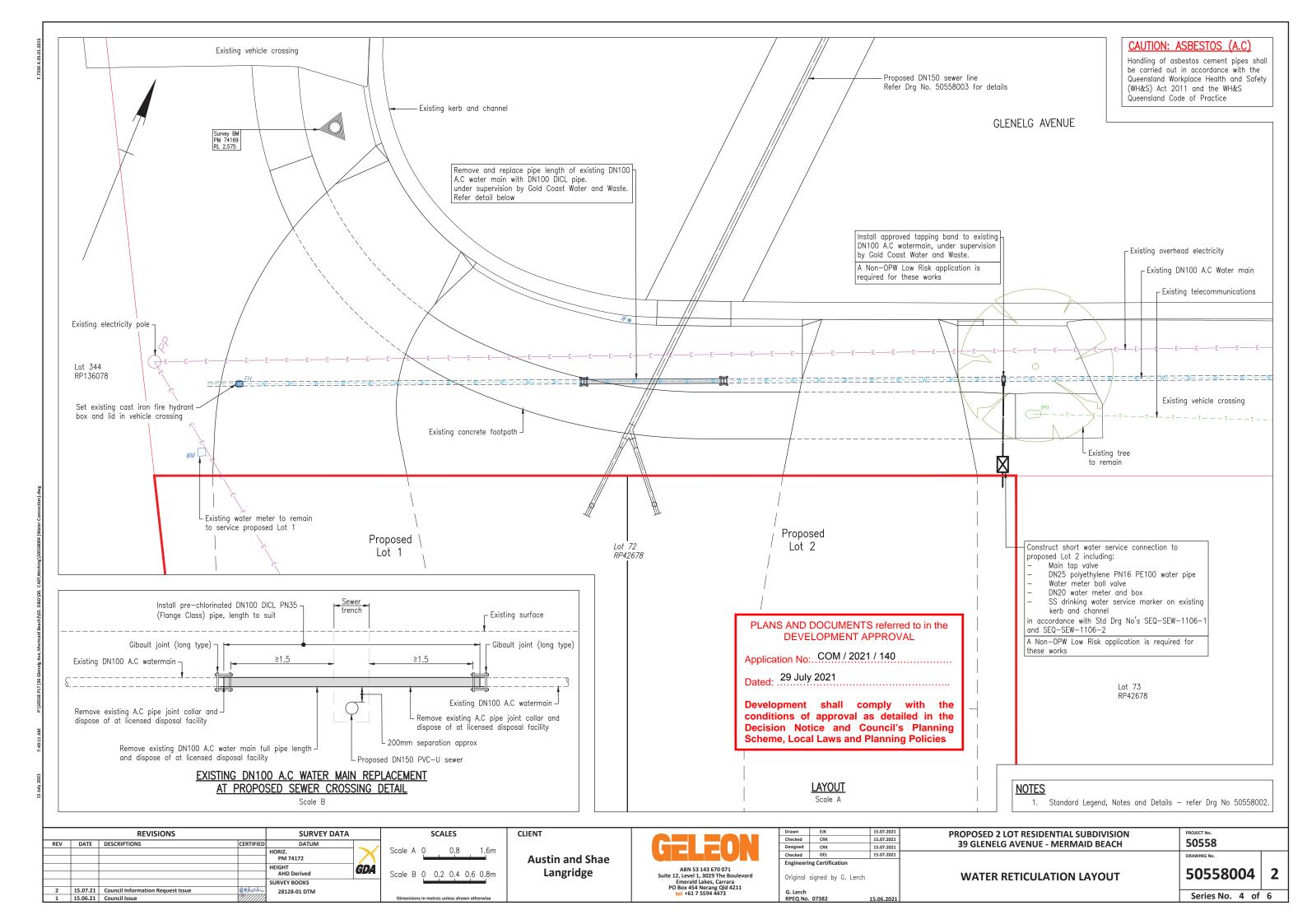
Failure to include Geleon as part of this process will affect the ability to issue compliance documentation.

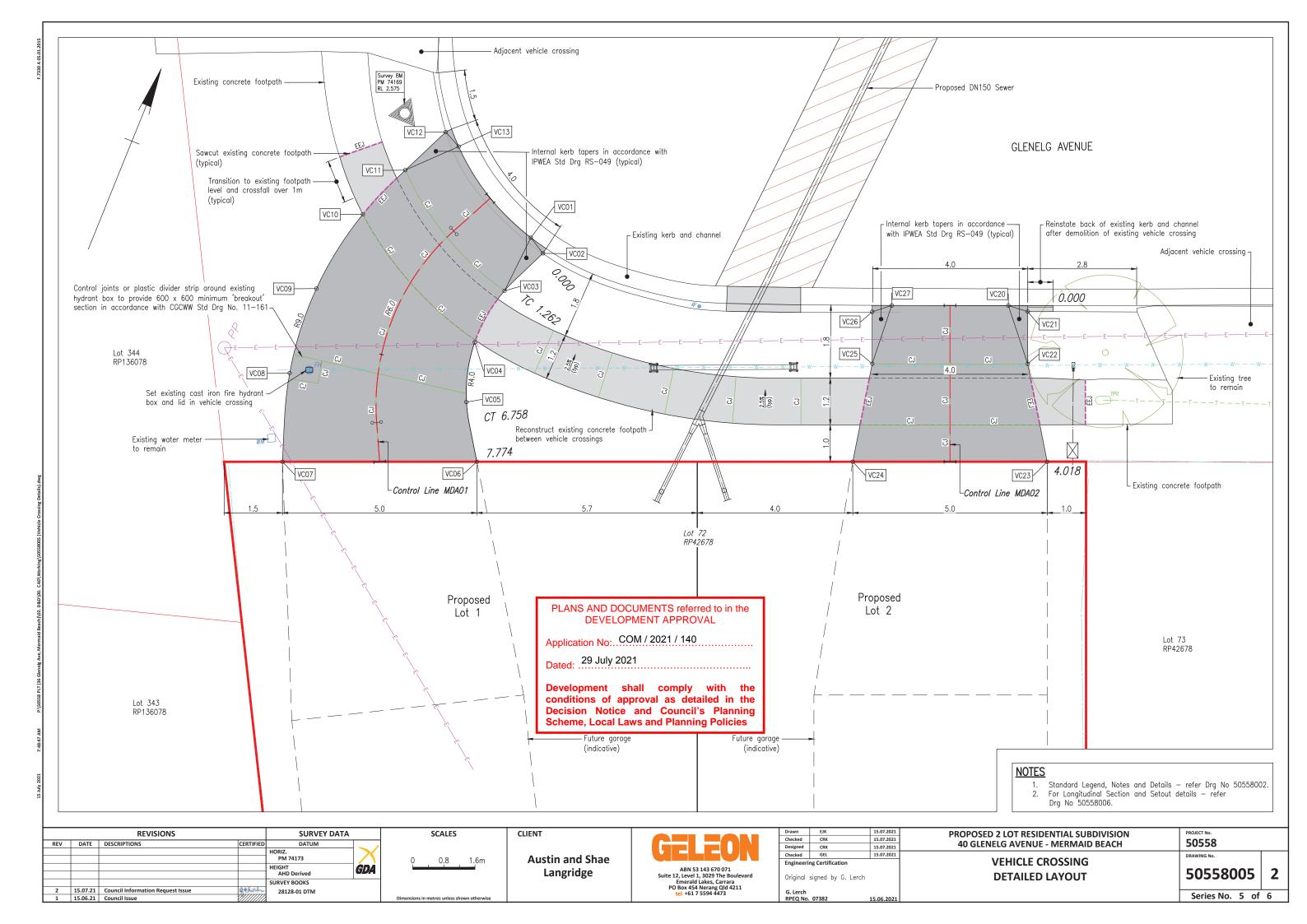


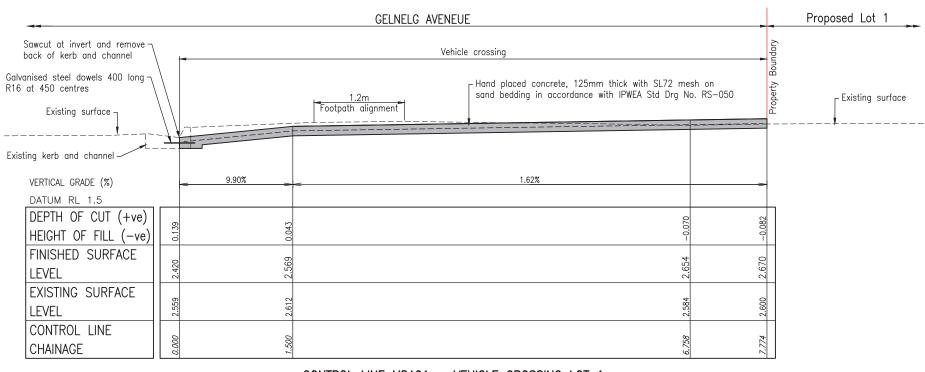
DDODOGED 3 LOT DECIDENTIAL CUIDDIVICION

| 1 | | KEVISIONS | | SURVEY DATA | SCALES | CLIENT | | Checked | CDV | 15.07.2021 | PROPOSED 2 LOT RESIDENTIAL SUBDIVISION | PROJECT NO. | |
|----------|----------|-----------------------------------|-----------|--------------|---|-----------------|---|------------|------------------|------------|--|-----------------|---|
| REV | DATE | DESCRIPTIONS | CERTIFIED | DATUM | • | | | Designed | CRK | 15.07.2021 | 37 GLENELG AVENUE - MERMAID BEACH | 50558 | |
| | | | | HORIZ. | | A | | Checked | GEL | 15.07.2021 | | DRAWING No. | |
| - | | | | PM 74170 | Not to Scale | Austin and Shae | | Engineeri | ng Certification | | | 1 | 1 |
| <u> </u> | | | | AHD Derived | ! | Langridge | ABN 53 143 670 071 Suite 12, Level 1, 3029 The Boulevard | Original | signed by G. Ler | rch | LEGEND AND NOTES | 50558002 | 2 |
| | | | | SURVEY BOOKS | | | Emerald Lakes, Carrara PO Box 454 Nerang Old 4211 | originar . | signed by o. Len | | LEGEND AND NOTES | | 1 |
| 2 | | Council Information Request Issue | gehren | 28128-01 DTM | | | tel +61 7 5594 4473 | G. Lerch | | | | Series No. 2 of | |
| 1 1 | 15.06.21 | Council Issue | 7//////// | | Dimensions in metres unless shown otherwise | | 1 | RPFO No | 07382 | 15.06.2021 | | Jeries No. 2 or | 0 |









CONTROL LINE MDA01 - VEHICLE CROSSING LOT 1

LONGITUDINAL SECTIONS

Scale A

SURVEY CONTROL

| Point Easting | | Northing | Height |
|---------------|----------|----------|--------|
| PM 74169 | 200.9508 | 810.0490 | 2.575 |

<u>VEHICLE CROSSING 2 - SETOUT POINTS TABLE</u>

| Point | Easting | Northing | Height |
|-------|---------|----------|--------|
| VC20 | 217.195 | 811.281 | 2.245 |
| VC21 | 217.718 | 811.322 | 2.350 |
| VC22 | 218.220 | 810.077 | 2.407 |
| VC23 | 219.628 | 807.930 | 2.505 |
| VC24 | 214.992 | 806.057 | 2.525 |
| VC25 | 214.512 | 808.580 | 2.456 |
| VC26 | 214.011 | 809.818 | 2.410 |
| VC27 | 214.413 | 810.158 | 2.270 |
| | | | |

VEHICLE CROSSING 1 - SETOUT POINTS TABLE

| Point | Easting | Northing | Height |
|-------|---------|----------|--------|
| VC01 | 205.156 | 808.297 | 2.390 |
| VC02 | 205.595 | 808.041 | 2.540 |
| VC03 | 205.040 | 806.778 | 2.553 |
| VC04 | 204.824 | 805.262 | 2.640 |
| VC05 | 205.203 | 803.758 | 2.644 |
| VC06 | 206.027 | 802.435 | 2.670 |
| VC07 | 201.391 | 800.562 | 2.670 |
| VC08 | 200.709 | 802.743 | 2.637 |
| VC09 | 200.532 | 805.018 | 2.610 |
| VC10 | 200.932 | 807.264 | 2.583 |
| VC11 | 201.511 | 808.699 | 2.534 |
| VC12 | 202.107 | 809.999 | 2.580 |
| VC13 | 202.555 | 809.777 | 2.445 |

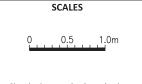
VEHICLE CROSSING 2 - CONTROL LINE MDA02 SETOUT TABLE

| | PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING | RAD/SPIRAL | A.LENGTH |
|---|------|----------|---------|----------|--------|---------------|------------|----------|
| | IP 1 | 0.000 | 215.804 | 810.719 | 2.252 | 158*00'00.00" | | |
| ĺ | IP 2 | 4.018 | 217.310 | 806.994 | 2.505 | 158*00'00.00" | | |

VEHICLE CROSSING 1 - CONTROL LINE MDA01 SETOUT TABLE

| PT | CHAINAGE | EASTING | NORTHING | HEIGHT | BEARING | RAD/SPIRAL | A.LENGTH |
|------|----------|---------|----------|--------|---------------|------------|----------|
| IP 1 | 0.000 | 203.808 | 808.848 | 2.420 | 206*09'51.79" | | |
| TC | 1.262 | 203.251 | 807.715 | 2.545 | 206*09'51.79" | | |
| IP 2 | 4.010 | 201.947 | 805.060 | 2.609 | | R -6.000 | 5.496 |
| CT | 6.758 | 203.258 | 802.409 | 2.654 | 153*40'41.08" | | |
| IP 3 | 7.774 | 203.709 | 801.498 | 2.670 | 153*40'41.08" | | |

| | | REVISIONS | SURVEY DATA | | |
|-----|----------|-----------------------------------|-------------|--------------|-----|
| REV | DATE | DESCRIPTIONS | CERTIFIED | DATUM | |
| | | | | HORIZ. | |
| | | | | PM 74173 | |
| | | | | HEIGHT | GD4 |
| | | | | AHD Derived | UDA |
| | | | | SURVEY BOOKS | |
| 2 | 15.07.21 | Council Information Request Issue | gewil | 28128-01 DTM | |
| 1 | 15.06.21 | Council Issue | V/////// | | |



Austin and Shae Langridge

CLIENT



| Drawn | EJK | | | 15.07.2021 | | | | | |
|---------------------------|--------|-------|-------|------------|---|--|--|--|--|
| Checked | CRK | | | 15.07.2021 | | | | | |
| Designed | CRK | | | 15.07.2021 | 1 | | | | |
| Checked | GEL | | | 15.07.2021 | | | | | |
| Engineering Certification | | | | | | | | | |
| Original | signed | by G. | Lerch | | | | | | |
| G. Lerch RPEQ No. | 07382 | | | 15.06.2021 | | | | | |
| | | | | | | | | | |

PROPOSED 2 LOT RESIDENTIAL SUBDIVISION
40 GLENELG AVENUE - MERMAID BEACH

VEHICLE CROSSING

LONGITUDINAL SECTIONS

AND SETOUT DETAILS

PROJECT NO. 50558

DRAWING NO. 2

Series No. 6 of 6