

GB5225 Lowndes Street, Kennington

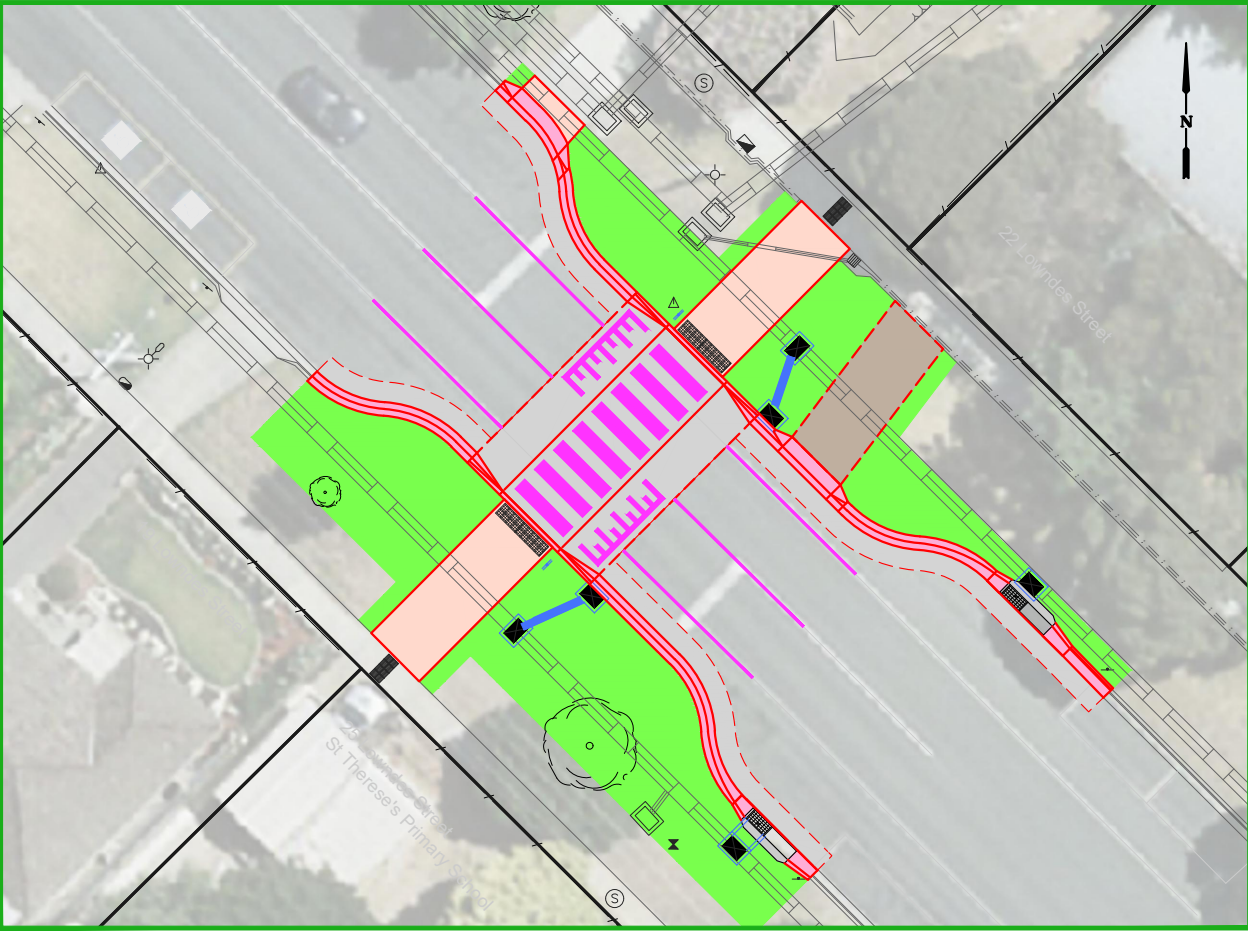
Raised pedestrian crossing

September 2023


| DOCUMENT CONTROL | | | | |
|------------------|-------------------------|----------|----------|--------------|
| SHEET No. | SHEETD ESC. | 20-9-23 | xx/xx/xx | xx/xx/xx |
| | | DRAFT | TENDER | CONSTRUCTION |
| | | REVISION | REVISION | REVISION |
| 1 | COVER SHEET | A | | |
| 2 | GENERAL NOTES | A | | |
| 3 | DEMO PLAN | A | | |
| 4 | DESIGN DETAILS | A | | |
| 5 | LINEMARKING AND SIGNAGE | A | | |
| 6 | SECTIONS | A | | |
| 7 | DRAINAGE DETAILS | A | | |
| 8 | SETOUT | A | | |



LOCALITY MAP



PROJECT EXTENTS

| APPROVAL TO CONSTRUCT STAMP | | PROJECT PLANNING REQUIREMENTS | | | |  CITY OF GREATER BENDIGO | PROJECT DESIGN STATUS | | | PROJECT DETAILS | | SHEET DETAILS | | | |
|--------------------------------|------------------|-------------------------------|--------------------------------|------------|------------------------------|---|-----------------------|-------------|--------------------------|--------------------|--|---------------|-------------|---------------------------------------|--|
| DO NOT CONSTRUCT WITHOUT STAMP | Item | Required | Comments | Contractor | Surveyor: | | H. Whytock | Aug 2023 | Location: Lowndes Street | Suburb: Kennington | Works: IP43 - Raised pedestrian crossing | GB No: GB5225 | COVER SHEET | Sheet number: 1 of 8 | |
| | Vegetation | No | - | | Designer: | | N. Sartori | Aug 2023 | | | | | | Plan Scale: - A3 | |
| | DTP (Vicroads) | YES | MOA required, not yet received | | Draft Checked: | | A. Smith | Aug 2023 | | | | | | Plotted: 20/09/2023 By:Nathan Sartori | |
| | CMA | No | - | | Tender Approved: N. Sartori | | Aug 2023 | | | | | | | | |
| | Planning Permit | No | - | | SHEET REVISIONS AFTER TENDER | | | | | | | | | | |
| | Land Acquisition | No | - | | Revision | | Description | Approved by | | Date | | | | | |
| | CHMP | No | - | | - | | - | - | - | - | | | | | |
| Other | YES | Lighting by others | | - | - | - | - | - | | | | | | | |

CONSTRUCTION SPECIFICATIONS

All construction undertaken by, or on behalf of, The City of Greater Bendigo (CoGB) shall be undertaken in accordance with all DTP/Vicroads 200-700 series of Standard Specifications.

Compliance with the specifications to the satisfaction of the project Superintendent is required before a project can meet Practical Completion.

Sections of the DTP/Vicroads 200-700 series of standard specifications which are of particular relevance for this project include:

FORMATION

201 Site Clearing
204 Earthworks

FLEXIBLE PAVEMENTS

304 Unbound Flexible Pavement Construction
310 Preparation of Granular Pavements for Bituminous Surfacing

ASPHALT AND SURFACE TREATMENTS

402 Removal of Pavement by Cold Planing (profiling)
405 Regulation Gap Graded Asphalt
417 Open Graded Asphalt
430 High Friction Surface Treatment

INCIDENTAL CONSTRUCTION

701 Underground Stormwater Drains
702 Subsurface Drainage
703 General Concrete Paving
705 Drainage Pits and Covers
706 Installation or Replacement of Utility Infrastructure within Road Reserves
710 Fixing Raised Pavement Markers
714 Sign Installation
721 Pavement Markings
731 Road Lighting Installation

MATERIAL SPECIFICATIONS

FOR WORKS DEPARTMENT

All materials used in construction projects undertaken by the CoGB Works department shall be compliant with the specifications setout in the relevant CoGB material panel supply contract.

Where panel supply contract information is not available, material specifications shall be sought from and supplied by the CoGB Engineering Department, and all materials used in construction must comply with those specifications.

FOR EXTERNAL CONSULTANTS (inc. consultants engaged by the Works Dept.)

All materials used by external contractors engaged to undertake CoGB construction projects, or components thereof, shall be as per the material specification supplied within the instrument of engagement (Quote, Tender or Contract), or as per written instruction from the project Superintendents.

PROJECT PLANNING REQUIREMENTS

Permits and approvals

- Project permits and approvals which were required to be obtained prior to construction are listed in the below table
- Construction activities must be compliant with all conditions within the listed permits and approvals.

| PROJECT PLANNING REQUIREMENTS | | | |
|-------------------------------|----------|--------------------------------|------------|
| Item | Required | Comments | Contractor |
| Vegetation | No | - | |
| DTP (Vicroads) | YES | MOA required, not yet received | |
| CMA | No | - | |
| Planning Permit | No | - | |
| Land Acquisition | No | - | |
| CHMP | No | - | |
| Other | YES | Lighting by others | |

GENERAL NOTES

STANDARD DRAWINGS

Standard Drawings that are referenced within the design drawings are noted as 'SD', and are sourced from 3 locations. They are available for download online or from the project superintendent:

- 'CoGB SD' are sourced from the City of Greater Bendigo
<https://www.bendigo.vic.gov.au/Services/Roads-and-Drainage/Roads/Construction-standards>
- 'IDM SD' are sourced from the Infrastructure Design Manual
<https://www.designmanual.com.au/>
- 'Vicroads SD' are sourced from Vicroads
<https://www.vicroads.vic.gov.au/business-and-industry/technical-publications/technical-drawings-for-roadworks/standard-drawings-for-roadworks>

SERVICES SHOWN ON PLANS AND DURING CONSTRUCTION

- The location of underground services shown on design drawings have been derived from available information. Accuracy can not be guaranteed and should therefore be treated as indicative only.
- Gas and water property services are not located or shown on design drawings. It is the contractors responsibility to locate and alter these services as required to achieve the project design.
- Prior to undertaking construction activities, exact service locations must be arranged and marked onsite.
- The contractor will be held responsible for any damage caused to services.
- All service pit lids or valve covers within the works area are to be raised or lowered to match the design surface level to the relevant authority standards, unless noted otherwise on the construction plans, or by approval from the superintendent.
- Any service authority marker post found within the works area is to be relocated adjacent to their current position to a point 150mm offset from the nearest property boundary.
- Any PSM covers affected during works are to be renewed to CoGB SD293 unless noted otherwise, or by approval from the superintendent.

DRAINAGE

- Any private storm water pipes discovered during works are to be plumbed to the nearest CoGB drainage pit, or with approval from the superintendent, to the nearest kerb or pipe

CONSTRUCTION MANAGEMENT GUIDANCE

OCCUPATIONAL HEALTH AND SAFETY

Delivery units shall consider appropriate management of occupational health and safety, and develop management plans compliant with ISO45001, and the City of Greater Bendigo integrated management system prior to any works beginning onsite

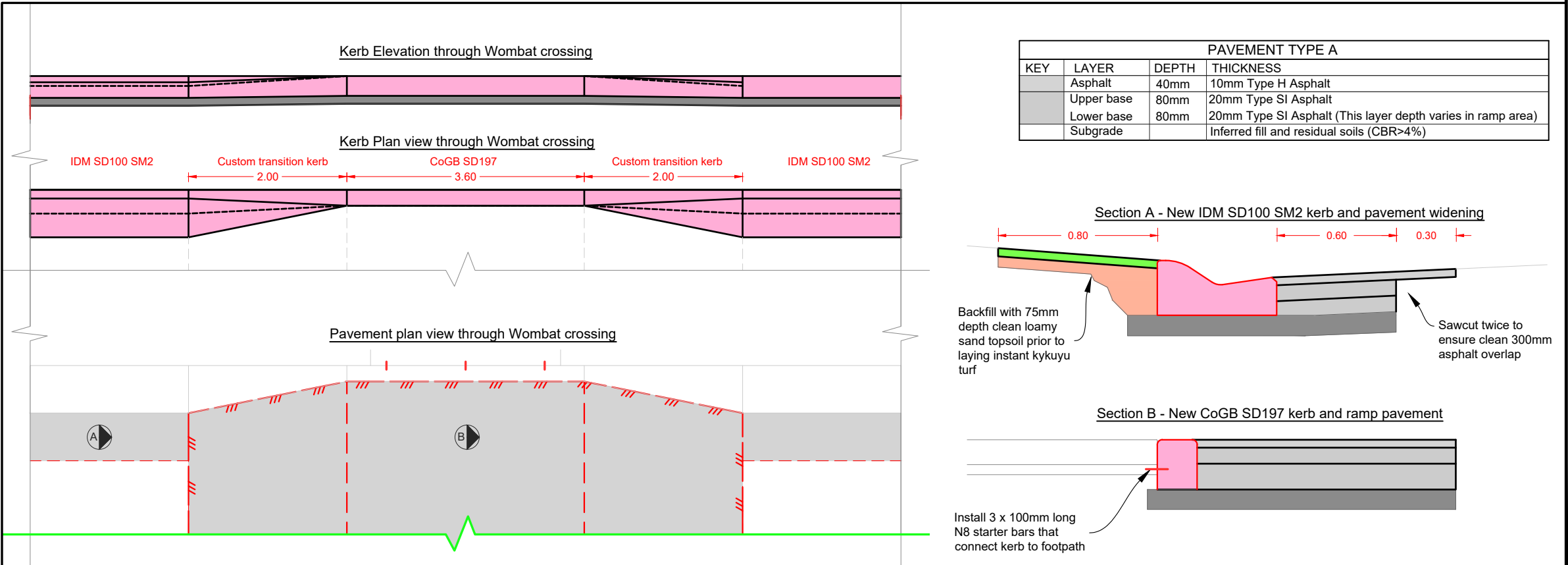
SITE ENVIRONMENTAL MANAGEMENT PLAN

A Site Environmental Management Plan (SEMP) is to be developed by delivery units to manage the project site during the project delivery window. Consideration shall be given to appropriate management of the following, with a SEMP plan filled out and displayed onsite at all times:

- Communication and induction for staff, contractors and sub contractors
- Communication with appropriate adjacent residents/businesses
- Noise and Vibration
- Dust and contamination
- Chemicals
- Erosion and sediment
- Waste
- Vehicle and roadside management
- Vegetation, with particular focus on any relevant permit conditions and AS4970
- Heritage, with particular focus on any relevant permit conditions

TRAFFIC MANAGEMENT PLAN

Where appropriate and prior to any works starting on site, delivery units must organise a AS1742.3 compliant traffic management plan, and have it approved by the relevant road authority.



IMPORTANT!
The location of underground services have been derived from available information, however accuracy cannot be guaranteed. All existing service information should therefore be treated as indicative only, and service locations must be arranged prior to commencement of any excavation. The contractor will be held responsible for any damage caused to underground services.

SURVEY NOTES
Survey has been conducted to:
- MGA 2020 and orientated via GB4495 (Coordinates centred on STN 901)
- Survey level has been tied to AHD via STN 901 (RL:231.329)
- Title information shown is imported from Land.vic.gov.au and has not been reestablished

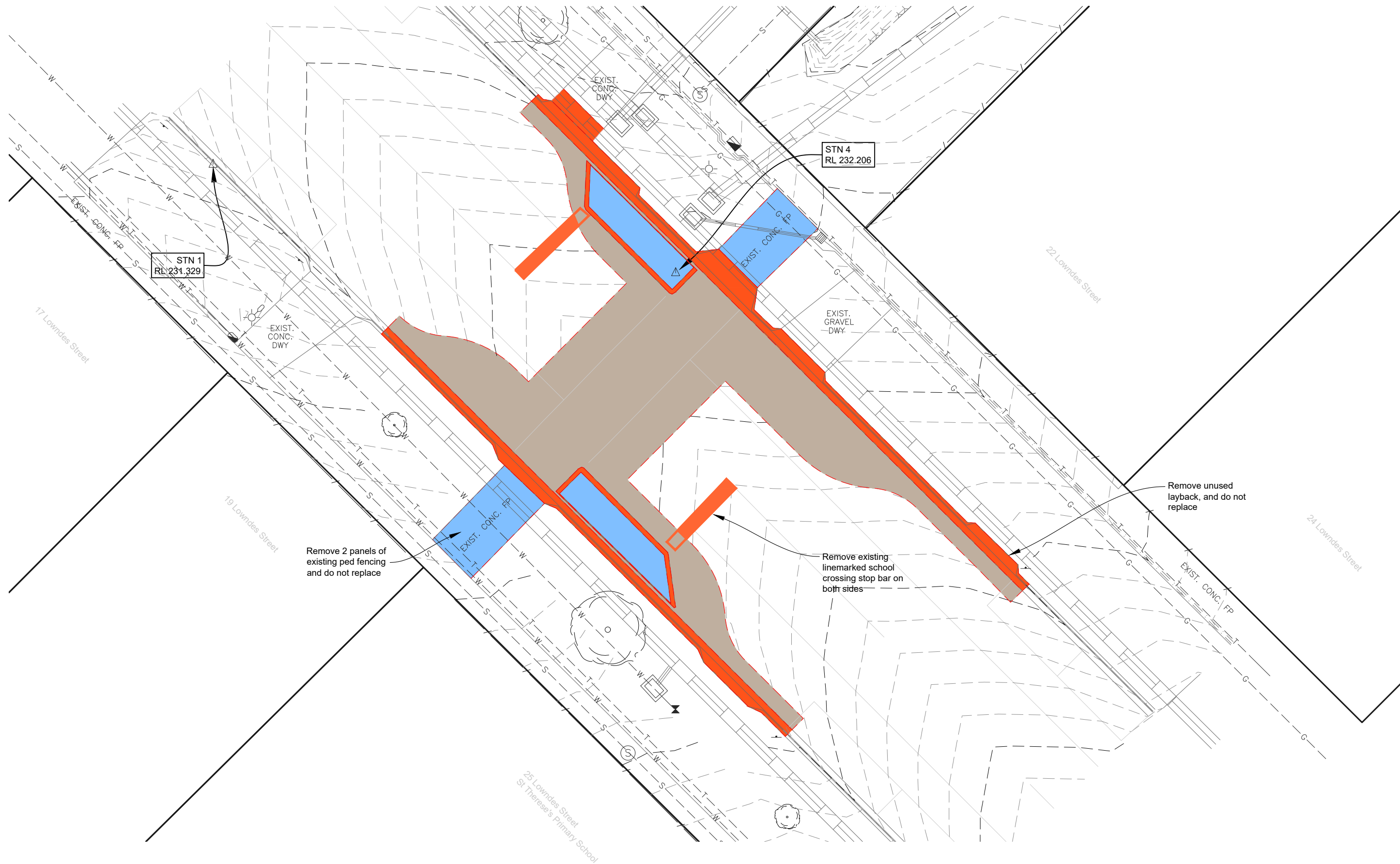


| PROJECT DESIGN STATUS | | |
|-----------------------|------------|----------|
| Surveyor: | H. Whytock | Aug 2023 |
| Designer: | N. Sartori | Aug 2023 |
| Draft Checked: | A. Smith | Aug 2023 |
| Tender Approved: | N. Sartori | Aug 2023 |

**PRELIMINARY DESIGN
DRAFT 1**

| PROJECT DETAILS | |
|-----------------|-----------------------------------|
| Location: | Lowndes Street |
| Suburb: | Kennington |
| Works: | IP43 - Raised pedestrian crossing |
| GB No: | GB5225 |

| SHEET DETAILS | | |
|------------------------------|-------------|--|
| GENERAL NOTES | | Sheet number: 2 of 8 |
| | | Plan Scale: - A3 |
| | | Plotted: 20/09/2023 By: Nathan Sartori |
| SHEET REVISIONS AFTER TENDER | | |
| Revision | Description | Approved by Date |
| - | - | - |
| - | - | - |
| - | - | - |



LEGEND

- Removal: Pavement
- Removal: Kerb
- Removal: Concrete
- Removal: Linemarking
- Removal: Sawcut
- Removal: Pipe
- Removal: Tree



CITY OF GREATER
BENDIGO

PROJECT DESIGN STATUS

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**PRELIMINARY DESIGN
DRAFT 1**

PROJECT DETAILS













Location: Lowndes Street
Suburb: Kennington
Works: IP43 - Raised pedestrian crossing
GB No: GB5225

SHEET DETAILS

| | | |
|------------------------|---------------------------------------|------|
| DEMO PLAN | Sheet number: 3 of 8 | |
| | Plan Scale: 1:200 | A3 |
| | Plotted: 20/09/2023 By:Nathan Sartori | |
| REVISIONS AFTER TENDER | | |
| Description | Approved by | Date |
| - | - | - |
| - | - | - |
| - | - | - |



LEGEND

| | | | |
|--|--|---|---|
|  DESIGN CONTOURS - Levels to AHD (0.10m interval) |  DESIGN PAVEMENT: (Refer: Typical road pavement detail.) |  Concrete Driveway area: Normal plain Dwy as per IDM SD240 |  Landscape work: Instant turf (Refer: Typical details pg 2) |
|  EXISTING CONTOURS - Levels to AHD (0.10m interval) |  Concrete Kerb area: Normal plain Kerb as noted and as per: IDM SD100, CoGB SD190,191,192 |  Gravel driveway area: 3.0m wide 150mm depth CL3 FCR |  Landscape work: topsoil and seed (Refer: Typical details pg 2) |
|  Proposed Street Tree (Refer: Typical details pg 2) |  Concrete Footpath area: Normal plain Footpath as per IDM SD 205 & SD210 |  Concrete slab area: Stenciled infill Slab as per IDM SD205 & 210 Stencil: Cobble in Charcoal, clear sealant |  Landscape work: Mulched areas (Refer: Typical details pg 2) |



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| Draft Checked: | A. Smith | Aug 2023 |
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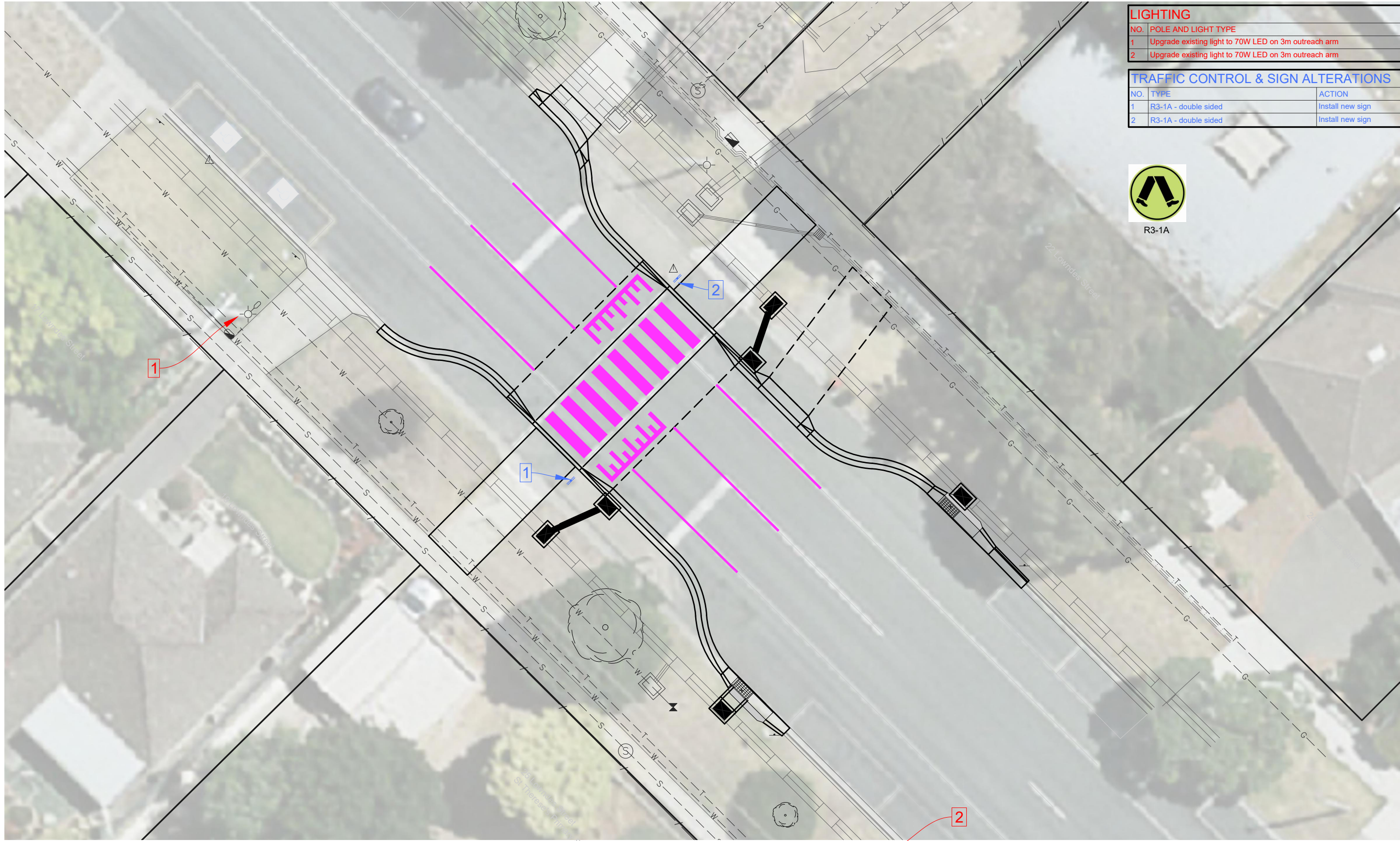
**PRELIMINARY DESIGN
DRAFT 1**

PROJECT DETAILS

Location: Lowndes Street
Suburb: Kennington
Works: IP43 - Raised pedestrian crossing
GB No: GB5225

SHEET DETAILS

| | | | |
|------------------------------|-------------|---------------------------------------|------|
| DESIGN DETAILS | | Sheet number: 4 of 8 | |
| | | Plan Scale: 1:200 A3 | |
| | | Plotted: 20/09/2023 By:Nathan Sartori | |
| SHEET REVISIONS AFTER TENDER | | | |
| Revision | Description | Approved by | Date |
| - | - | - | - |
| - | - | - | - |



| LIGHTING | |
|----------|--|
| NO. | POLE AND LIGHT TYPE |
| 1 | Upgrade existing light to 70W LED on 3m outreach arm |
| 2 | Upgrade existing light to 70W LED on 3m outreach arm |

| TRAFFIC CONTROL & SIGN ALTERATIONS | | |
|------------------------------------|----------------------|------------------|
| NO. | TYPE | ACTION |
| 1 | R3-1A - double sided | Install new sign |
| 2 | R3-1A - double sided | Install new sign |



R3-1A

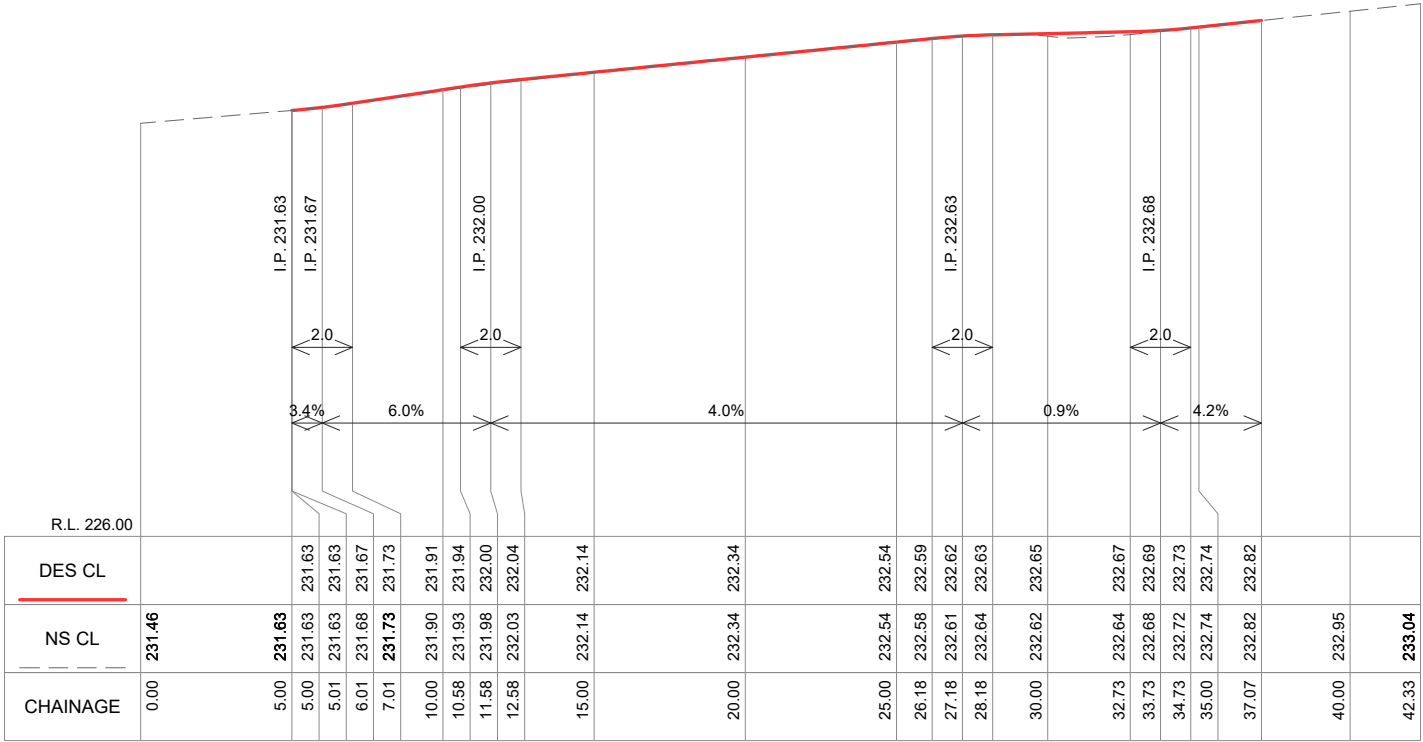
| LEGEND | |
|--------|-----------------------------|
| | Design Linemarking - White |
| | Design Linemarking - Yellow |
| | Design Bicycle Symbol |
| | Design Sign |
| | Existing Sign |
| | Design RRPM - White |
| | Design RRPM - Red |
| | Design RRPM - Yellow |



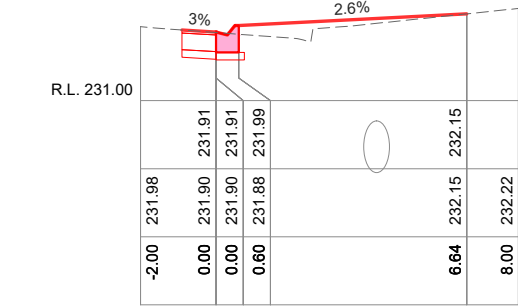
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| PRELIMINARY DESIGN DRAFT 1 | | |

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| Works: | IP43 - Raised pedestrian crossing |
| GB No: | GB5225 |

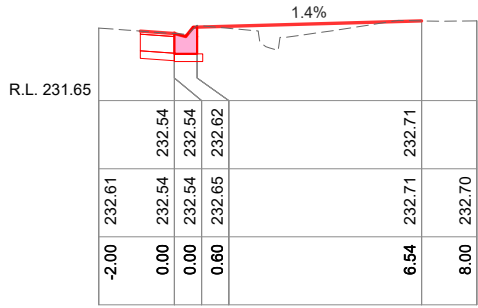
| SHEET DETAILS | | | |
|--------------------------------|-------------|---------------|-------------------------------|
| SIGNAGE AND LINEMARKING | | Sheet number: | 5 of 8 |
| | | Plan Scale: | 1:200 |
| | | Plotted: | 20/09/2023 By: Nathan Sartori |
| SHEET REVISIONS AFTER TENDER | | Approved by | Date |
| Revision | Description | | |
| - | - | - | - |
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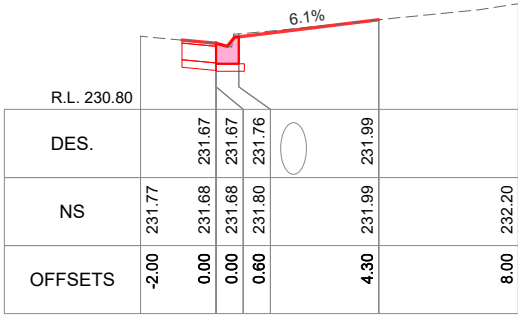
South LK LONGITUDINAL SECTION CH 0.000 To 42.330
SCALES: H 1:250 V 1:100 (A3)



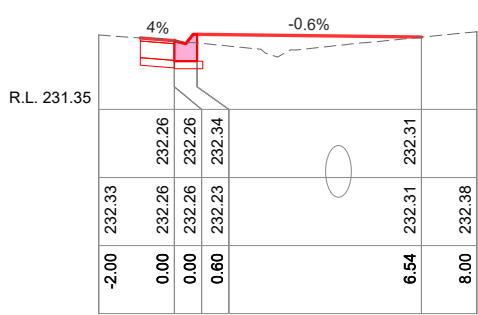
Ch 10.00



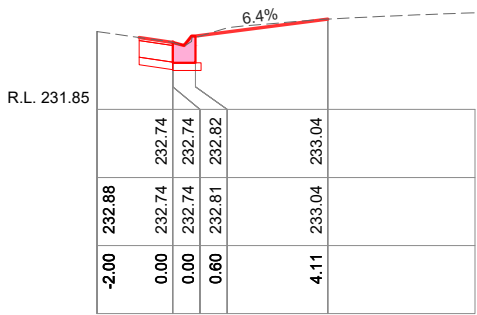
Ch 25.00



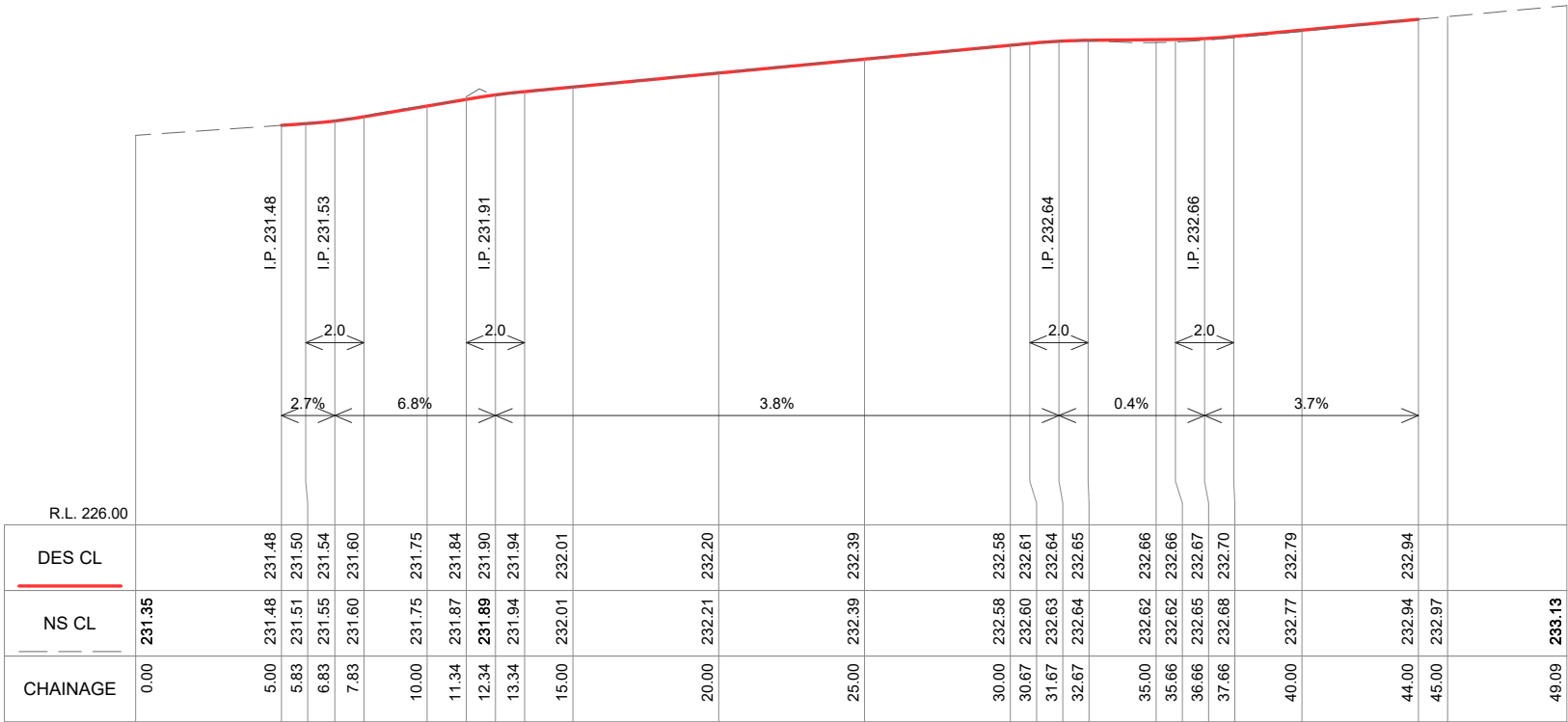
South LK CROSS SECTIONS Ch 6.00
SCALES: H 1:200 V 1:100 (A3)



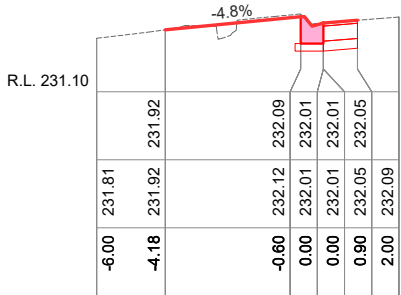
Ch 18.00



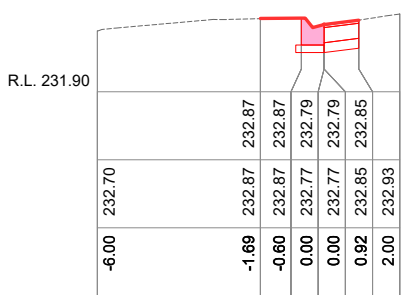
Ch 35.00



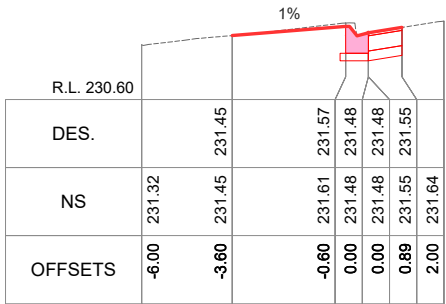
North LK LONGITUDINAL SECTION CH 0.000 To 49.088
SCALES: H 1:250 V 1:100 (A3)



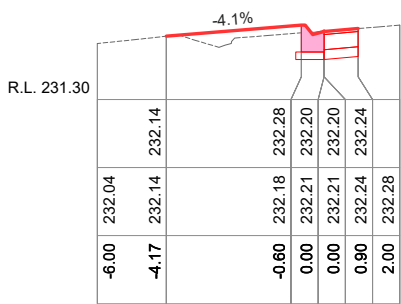
Ch 15.00



Ch 40.00



North LK CROSS SECTIONS Ch 5.00
SCALES: H 1:200 V 1:100 (A3)



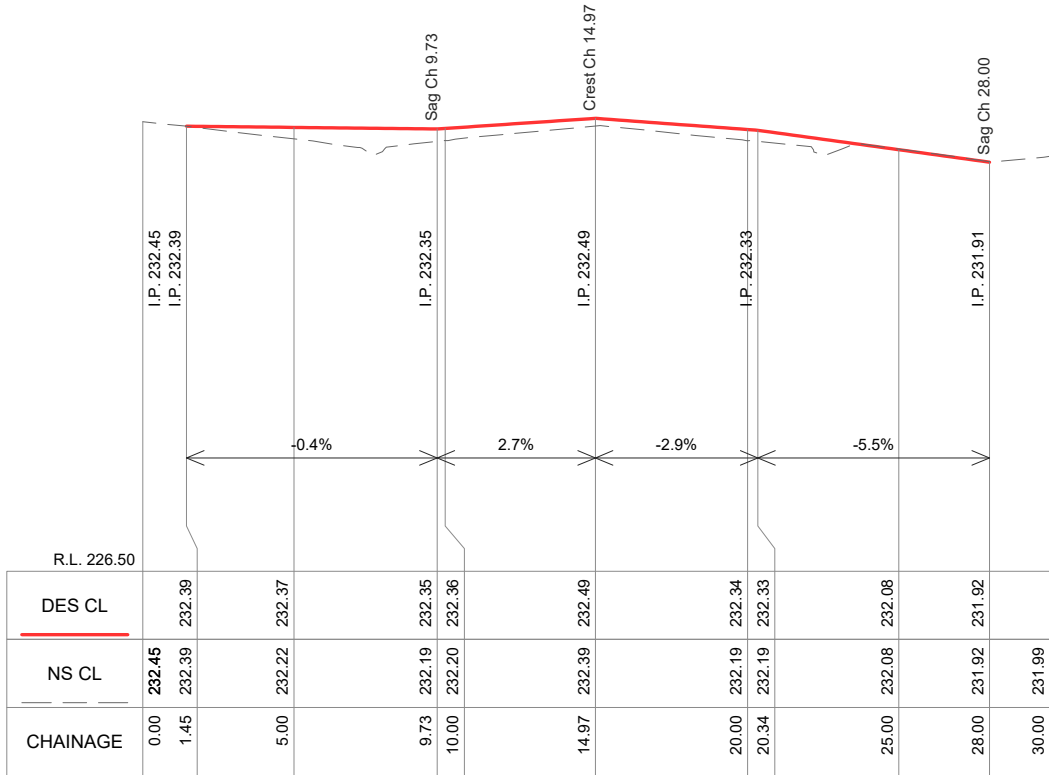
Ch 20.00



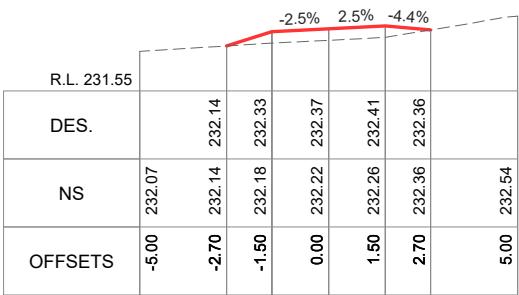
| PROJECT DESIGN STATUS | | |
|-----------------------------------|------------|----------|
| Surveyor: | H. Whytock | Aug 2023 |
| Designer: | N. Sartori | Aug 2023 |
| Draft Checked: | A. Smith | Aug 2023 |
| Tender Approved: | N. Sartori | Aug 2023 |
| PRELIMINARY DESIGN DRAFT 1 | | |

| PROJECT DETAILS | |
|-----------------|-----------------------------------|
| Location: | Lowndes Street |
| Suburb: | Kennington |
| Works: | IP43 - Raised pedestrian crossing |
| GB No: | GB5225 |

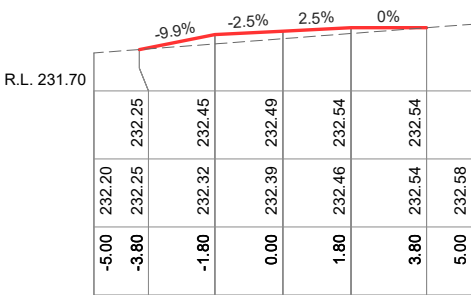
| SHEET DETAILS | | |
|------------------------------|---------------|------------------------------|
| SECTIONS | Sheet number: | 6 of 8 |
| | Plan Scale: | 1:XXX A3 |
| | Plotted: | 20/09/2023 By:Nathan Sartori |
| SHEET REVISIONS AFTER TENDER | | |
| Revision | Description | Approved by Date |
| - | - | - |
| - | - | - |
| - | - | - |



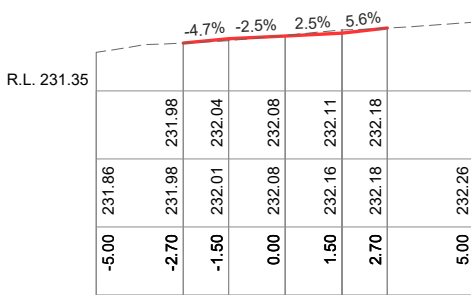
Footpath CL LONGITUDINAL SECTION CH 0.000 To 30.000
SCALES: H 1:250 V 1:100 (A3)



FP CROSS SECTIONS Ch 5.00
SCALES: H 1:200 V 1:100 (A3)

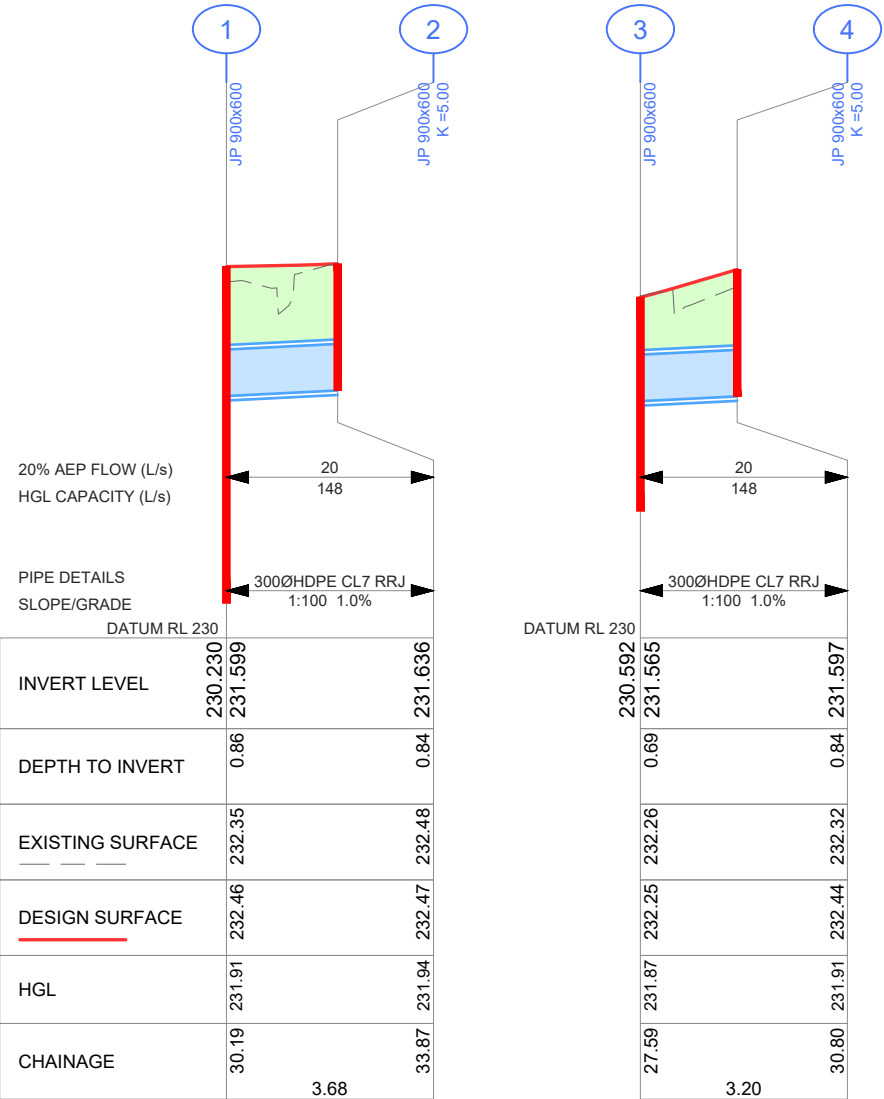


Ch 15.00



Ch 25.00

| Pit Schedule | | | | | | | | | | |
|--------------|----------------------------|-----------|------------|-----------------|------------------|----------------|-----------------|-----------|---------------|--|
| Pit No. | Pit Type | Pit Width | Pit Length | Outlet Diameter | Outlet Invert RL | Inlet Diameter | Inlet Invert RL | Pit Depth | Pit Lid Level | Comment |
| | | (mm) | (mm) | (mm) | (m) | (mm) | (m) | (m) | (m) | |
| 1 | CoGB SD590 - A - C - L - T | 600 | 900 | 675 | 230.230 | 300 | 231.599 | 2.226 | 232.456 | Break into existing pipe and construct pit |
| 2 | CoGB SD590 - A - C - G - T | 600 | 900 | 300 | 231.636 | | | 0.838 | 232.474 | Position in low point of kerb |
| 3 | CoGB SD590 - A - C - L - T | 600 | 900 | 675 | 230.838 | 300 | 231.565 | 1.416 | 232.254 | Break into existing pipe and construct pit |
| 4 | CoGB SD590 - A - C - G - T | 600 | 900 | 300 | 231.597 | | | 0.839 | 232.436 | Position in low point of kerb |
| 5 | CoGB SD590 - B - C - J - T | 900 | 2400 | 675 | 230.838 | | | 2.062 | 232.900 | EKI - R |
| 6 | CoGB SD590 - B - C - J - T | 900 | 1800 | 675 | 231.205 | | | 1.615 | 232.820 | EKI - L |



DRAINAGE LONGITUDINAL SECTIONS
SCALES: HORIZONTAL 1:250 VERTICAL 1:50

LEGEND

EXISTING PIPE TO REMAIN

DESIGN PIPE / PIT or ENDWALL

CoGB SD390 TRENCH BACKFILL (BEHIND KERB)

CoGB SD391 TRENCH BACKFILL (UNDER NEW ROAD)

CoGB SD392 TRENCH BACKFILL (UNDER EXISTING ROAD)

CITY OF GREATER BENDIGO

PROJECT DESIGN STATUS

Surveyor: H. Whytock Aug 2023

Designer: N. Sartori Aug 2023

Draft Checked: A. Smith Aug 2023

Tender Approved: N. Sartori Aug 2023

PRELIMINARY DESIGN DRAFT 1

PROJECT DETAILS

Location: Lowndes Street

Suburb: Kennington

Works: IP43 - Raised pedestrian crossing

GB No: GB5225

SHEET DETAILS

DRAINAGE DETAILS

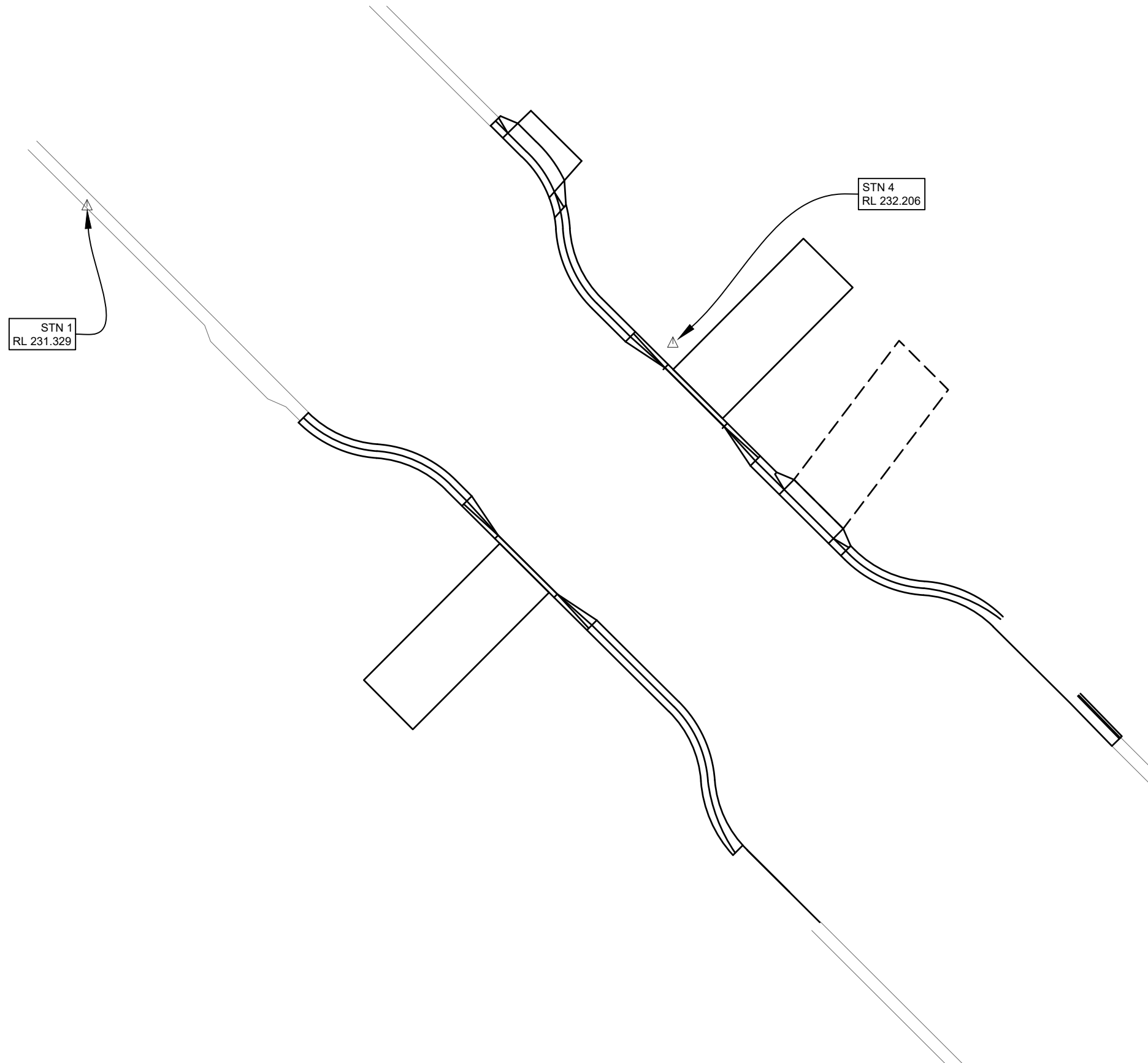
Sheet number: 7 of 8

Plan Scale: 1:XXX A3

Plotted: 20/09/2023 By: Nathan Sartori

SHEET REVISIONS AFTER TENDER

| Revision | Description | Approved by | Date |
|----------|-------------|-------------|------|
| - | - | - | - |
| - | - | - | - |
| - | - | - | - |



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| SHEET DETAILS | | | |
|------------------------------|-------------|--|--------|
| SETOUT | | Sheet number: | 8 of 8 |
| | | Plan Scale: 1:200 | A3 |
| | | Plotted: 20/09/2023 By: Nathan Sartori | |
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