

## **5.1. Design Approval - West Street Cycling, Walking and Streetscape Upgrades**

**AUTHOR:** Max White, Sustainable Transport Project Coordinator

**ENDORSED BY:** Jon Higlett, Acting Director Engineering and Property Services

### **ATTACHMENTS:**

1. Attachment A Concept Design Flyer [5.1.1 - 1 page]
2. Attachment B Civil Engineering Plan [5.1.2 - 26 pages]

### **PURPOSE:**

The purpose of this report is for final approval of West Street Cycling, Walking and Streetscape Upgrades, Stage 1 designs in preparation for construction.

### **EXECUTIVE SUMMARY:**

West Street Cycling, Walking and Streetscape Upgrades - Stage 1 (West Street Stage 1) will provide cycling, walking and streetscape upgrades along West Street between the Pacific Highway and Ridge Street, North Sydney.

On Monday 30 November 2023, Council resolved to proceed to tender and construction documentation stage and for the North Sydney Traffic Committee to approve the final designs.

This report provides the concept design flyer (Attachment A) and Civil Engineering Plan (Attachment B) for the Traffic Committee to review and approve.

### **FINANCIAL IMPLICATIONS:**

The total estimated project cost is \$850,000 with \$800,000 (94.12%) from state funding and a \$50,000 (5.88%) Council contribution. Council has received an \$800,000 grant under the NSW Government's Get NSW Active Program 2022/23 for this project. The project funding that Council has received needs to be committed this financial year. \$50,000 of Council's money was allocated from the 2022/23 'Bike Facilities' budget towards the project.

The project is scheduled to commence construction this financial year

### **RECOMMENDATION:**

**1. THAT** the North Sydney Traffic Committee approve the final designs for West Street Cycling, Walking and Streetscape Upgrades Stage 1.

## LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

- 2. Our Built Infrastructure
  - 2.2 Vibrant public domains and villages
  - 2.3 Prioritise sustainable and active transport
  - 2.4 Efficient traffic mobility and parking
  
- 4. Our Social Vitality
  - 4.1 North Sydney is connected, inclusive, healthy and safe

## BACKGROUND

Council's North Sydney Integrated Cycling Strategy (2014) aims to deliver a cycling network accessible to people of all ages and cycling abilities and to enable more people in the community to choose cycling for day-to-day transport needs, particularly for short trips of between 2-5km. West Street Cycling, Walking and Streetscape Upgrades, Stage 1 (West Street Stage 1) forms part of the Strategy's Route 1: Sydney Harbour Bridge to Cammeray via West Street.

The final concept designs were publicly exhibited to the community from 4 October to 14 November 2022 and an outcomes report was provided to Council 30 November 2022. Council resolved for the North Sydney Traffic Committee to review and approve the final designs.

## CONSULTATION REQUIREMENTS

Community engagement has occurred in accordance with Council's *Community Engagement Protocol*. The detail of this report provides the outcomes from the engagement for Council to consider prior to adoption.

**Relates to ECM No:** 9064987

**Standard or Guideline Used:** AS 2876 – Concrete kerbs and channels (gutters), AS 1428 – Design for access and mobility, AS 1657 – Fixed Platforms, walkways, stairways and ladders, AS 1742 – Traffic Control Devices, AS 1743 – Road Signs, AS 3500.3 – Plumbing and drainage – Stormwater Drainage, RMS Supplements to the Australian Standards and Austroads guidelines, RMS Delineation, RMS Traffic Sign Database, RMS Technical Directions, North Sydney Council Infrastructure Specifications, North Sydney Council Public Domain Style Manual and Design Codes, Guide to Road Design Part 6A: Paths for Walking and Cycling, Transport for NSW Cycleway Design Toolbox

**Signs & Lines Priority:** N/A

**Precinct and Ward:** Stanton Precinct, Hayberry precinct, Cammeraygal Ward, St Leonards Ward

**Impact on Bicycles:** Separated cycleway will have a positive impact on cyclist user experience and safety.

**Impact on Pedestrians:** Additional pedestrian crossings, pavement upgrades will have a positive impact on cyclist user experience and safety.

**Impact on Parking:** There is no parking loss associated with the project.

## DETAIL

West Street Stage 1 will deliver upgrades to cycling and walking infrastructure as well as streetscape improvements. It is located along West Street, North Sydney, between Pacific Highway and Ridge Street.



FIGURE 1. Existing cycleway along Ridge Street in blue, shared path along Hazelbank Place in green, West Street Stage 2 in dashed red, future priority route links in dashed purple and West Street Stage 1 in solid red line

A 42-day public exhibition period was held 4 October to 14 November 2022 to ensure widespread stakeholder awareness of the opportunity to provide feedback on the plan. A total of 92 submissions were received. Outcomes included:

- 83 (90%) indicated support for the project, 8 (9%) opposed the project, 1 (1%) were neutral.
- 50 (54%) of submissions came from residents/businesses within the North Sydney LGA. Of these submissions, 42 (84%) supported the project, 7 (14%) opposed the project and 1 (2%) were neutral.
- 10 comments were made on the interactive map from 7 participants.

An outcomes report was taken to 30 November 2022 Council meeting (Item 10.4. West Street Cycling, Walking and Streetscape Upgrades Stage 1 - Consultation Outcomes) and it was resolved that:

1. *THAT Council notes the outcome of the community consultation undertaken for this project (West Street Cycleway - Stage 1).*
2. *THAT Council proceeds to tender and construction documentation stage for West Street Cycleway - Stage 1.*
3. *THAT the final detailed design for the project be subject to approval of the North Sydney Traffic Committee.*

As per resolution 3, this report provides the concept design flyer (Attachment A) and Civil Engineering Plan (Attachment B) for North Sydney Traffic Committee approval.

## Timeline

### Next Steps



### Conclusion

Community feedback indicates strong support for West Street Stage 1 design. The proposed route is consistent with Council's Integrated Cycling Strategy (2014) and deliver a key section of 'Priority Route 1' project as well as anticipated improvements to the broader walking and cycling network.

It is recommended that the North Sydney Traffic Committee approve the final concept designs and civil engineering documentation for West Street Stage 1 for construction to begin May 2023.



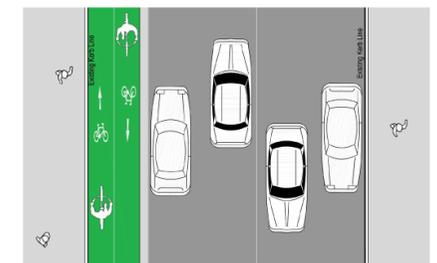
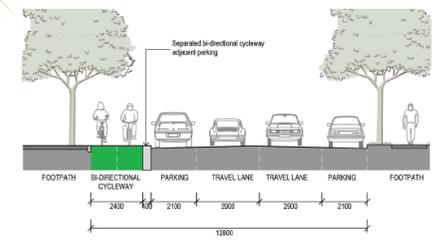
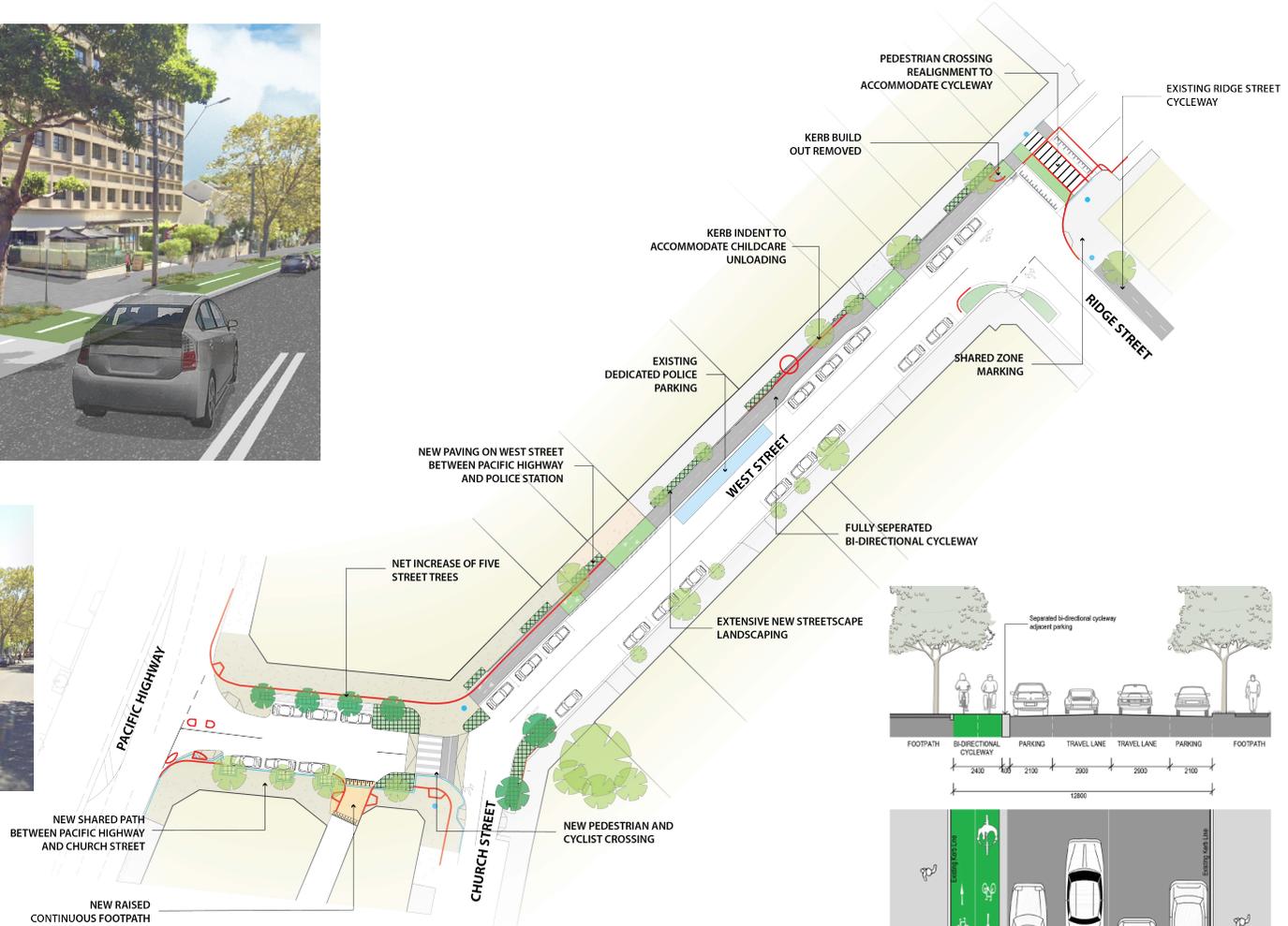
# WEST STREET CYCLING, WALKING AND STREETScape UPGRADES



PROPOSED CONDITIONS LOOKING NORTH TOWARDS RIDGE STREET



EXISTING CONDITIONS LOOKING NORTH TOWARDS RIDGE STREET



TYPICAL SECTION SEPERATED CYCLEWAY



**TREE COVERAGE**

LOSS	GAIN	TOTAL
-1	+6	+5



**PARKING**

THERE IS NO PARKING LOSS ASSOCIATED WITH THESE WORKS

**LEGEND**

- EXISTING ITEM TO BE REMOVED
- NEW GARDEN BED
- EXISTING TREE RETAINED
- NEW PAVEMENT
- EXISTING CAR PARKING
- SEPERATED CYCLEWAY
- EXISTING GARDEN BED
- PROPOSED TREE
- EXISTING FOOTPATH
- CYCLEWAY ACROSS ACCESS POINT
- RAISED CONTINUOUS FOOTPATH
- REMOVED TREE
- SHARED PATH



# WEST STREET ACTIVE TRANSPORT - STAGE 1 PACIFIC HIGHWAY TO RIDGE STREET, NORTH SYDNEY CIVIL ENGINEERING PLANS

DRAWING LIST	
DWG No.	DESCRIPTION
C1.001	COVER SHEET
C1.101	GENERAL NOTES
C1.201	TYPICAL DETAILS - SHEET 1
C1.202	TYPICAL DETAILS - SHEET 2
C1.203	TYPICAL DETAILS - SHEET 3
C1.204	TYPICAL DETAILS - SHEET 4
C1.205	TYPICAL DETAILS - SHEET 5
C1.206	TYPICAL DETAILS - SHEET 6
C1.207	TYPICAL DETAILS - SHEET 7
C1.208	TYPICAL DETAILS - SHEET 8
C1.301	OVERALL LAYOUT KEY PLAN
C3.001	SITWORKS PLAN - SHEET 1
C3.002	SITWORKS PLAN - SHEET 2
C3.003	SITWORKS PLAN - SHEET 3
C3.101	SIGNAGE AND LINEMARKING PLAN - SHEET 1
C3.102	SIGNAGE AND LINEMARKING PLAN - SHEET 2
C3.103	SIGNAGE AND LINEMARKING PLAN - SHEET 3
C5.101	TYPICAL ROAD SECTIONS AND DETAILS
C5.301	ROAD CROSS SECTIONS - SHEET 1
C5.302	ROAD CROSS SECTIONS - SHEET 2
C6.001	PAVEMENT PLAN - SHEET 1
C6.002	PAVEMENT PLAN - SHEET 2
C6.003	PAVEMENT PLAN - SHEET 3
C8.001	SOIL EROSION AND SEDIMENT CONTROL PLAN - SHEET 1
C8.002	SOIL EROSION AND SEDIMENT CONTROL PLAN - SHEET 2
C8.003	SOIL EROSION AND SEDIMENT CONTROL PLAN - SHEET 3
C8.101	SOIL EROSION AND SEDIMENT CONTROL - NOTES AND DETAILS



**EXISTING SERVICES NOTE:**  
EXISTING SERVICE ALIGNMENTS HAVE BEEN PLOTTED UTILISING INFORMATION OBTAINED FROM DIAL BEFORE YOU DIG AND ALL ALIGNMENTS ARE APPROXIMATE.  
EXISTING POWER POLES AND OVERHEAD ELECTRICITY, HAVE BEEN PLOTTED FROM ON SITE INSPECTION AND ARE APPROXIMATE.  
THE CONTRACTOR IS TO DETERMINE LOCATION AND DEPTH OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK

DIAL BEFORE YOU DIG



IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.

NOT FOR CONSTRUCTION

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Issue	Description	Date	Checked	Approved
F	ISSUE FOR TENDER	28.02.23	UF	VG
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG
D	ISSUED FOR 100%	15.11.21	RD	VG
C	ISSUE FOR INFORMATION	08.09.21	RP	VG



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**Project**  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawing Title					
COVER SHEET					
Drawn	Date	Scale	AT	D.A. Check	Date
ROB	JUNE 2021	NOT TO SCALE			
Checked	Project No.	Draw No.	Issue		
VG	NSW20022	1	F		

GENERAL NOTES

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL LANDSCAPE AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED.
- ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- ALL DIMENSIONS ON DETAILS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. ALL PLANS AND LEVELS ARE EXPRESSED IN METRES.
- DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURAL STABILITY OF THE WORKS AND ENSURE NO PARTS BE OVER STRESSED UNDER CONSTRUCTION ACTIVITIES.
- WORKSMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS INCLUDING ALL AMENDMENTS, AND THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARYED BY THE CONTRACT DOCUMENTS.
- THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE PRINCIPAL BUT IS NOT AN AUTHORISATION FOR A VARIATION, ANY VARIATIONS INVOLVED MUST BE TAKEN UP WITH THE PRINCIPAL BEFORE THE WORK COMMENCES.
- ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE PRINCIPAL FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS. ALL INSPECTIONS AND CERTIFICATIONS TO BE INCLUDED IN CONTRACTORS COST.
- BUILDING FROM THESE DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES.
- REFER TO GROUP GSA DRAWINGS ?????? SERIES FOR DEMOLITION WORKS.
- ALL CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE RELEVANT CURRENT WORKPLACE HEALTH AND SAFETY LEGISLATION.
- THE CONSTRUCTION CONTRACTOR SHALL COORDINATE WITH THE ADJACENT SCHOOL AND BUSINESSES TO STAGE AND UNDERTAKE WORKS AS NOT TO CAUSE INCONVENIENCE TO THOSE ENTITIES AND MINIMISE DISTURBANCE TO THE ACCESS AND OPERATIONS OF THOSE ENTITIES.
- THE CONSTRUCTION CONTRACTOR SHALL KEEP INFORMED ALL RESIDENTS ADJACENT THE WORKSITES OF CONSTRUCTION ACTIVITIES THAT MAY AFFECT THE EXISTING ACCESS TO THEIR PROPERTIES AND MINIMISE DISTURBANCE TO THE EXISTING ACCESS TO THEIR PROPERTIES.
- ALL DESIGN TRAFFIC LOADINGS (ESA4) HAVE BEEN BASED UPON NORTH SYDNEY CITY COUNCIL'S DESIGN CRITERIA FOR THE DEFINED ROAD CATEGORY - CONTRACTOR TO CONFIRM DESIGN ESA4 WITH COUNCIL PRIOR TO COMMENCEMENT OF THE WORKS AND TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES.

EXISTING SERVICES AND FEATURES

- THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION, REMOVAL AND DISPOSAL IF REQUIRED OF ALL EXISTING SERVICES IN AREAS AFFECTED BY WORKS WITHIN THE CONTRACT AREA AS DIRECTED OTHERWISE BY THE PRINCIPAL.
- THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED.
- EXISTING BUILDINGS, EXTERNAL STRUCTURES, AND TREES SHOWN ON THESE DRAWINGS ARE FEATURES EXISTING PRIOR TO ANY DEMOLITION WORKS.
- CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE PRINCIPAL. ONCE DIVERSION IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE PRINCIPAL.
- INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPAL AND ASSET OWNER. CONTRACTOR TO GAIN APPROVAL OF PRINCIPAL AND ASSET OWNER FOR TIME OF INTERRUPTION.

TRAFFIC CONTROL MANAGEMENT

- TRAFFIC CONTROL IS TO BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE RMS TRAFFIC CONTROL AT WORKSITES (TCAWS) MANUAL AND AS1423
- THE CONSTRUCTION CONTRACTOR SHALL ASSESS AND MANAGE APPROPRIATELY THE INTERFACE BETWEEN ALL ROAD USERS (PEDESTRIANS, CYCLISTS AND MOTORISTS) AND THE SITE OPERATIONS INCLUDING ACCESS AND EGRESS.

SITWORKS NOTES

- ORIGIN OF LEVELS - AUSTRALIAN HEIGHT DATUM (A.H.D.)
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
- ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS, THE SPECIFICATIONS AND THE DIRECTIONS OF THE PRINCIPAL'S REPRESENTATIVE.
- EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE PRINCIPAL'S REPRESENTATIVE. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH AN APPROVED NON-NATURAL GRANULAR MATERIAL AND COMPACTED TO MINIMUM 98% STANDARD DRY DENSITY IN ACCORDANCE WITH AS 1298.5.1.1.
- ALL TRENCH BACKFILL MATERIAL, NOT SUBJECT TO VEHICULAR LOADS SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ON COMPLETION OF PIPE INSTALLATION ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS.
- CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS.
- ALL BATTERS TO BE GRASSED LINED WITH MINIMUM 100mm TOPSOIL AND KIKUYU LAID AS TURF.
- MAKE SMOOTH TRANSITION TO EXISTING SERVICES AND MAKE GOOD.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS.
- THESE PLANS SHALL BE READ IN CONJUNCTION WITH LANDSCAPE PLANS, DRAWINGS AND SPECIFICATIONS.
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN 600 Ø PVC SEWER GRADE CONDUITS EXTENDING A MIN OF 500mm PAST PAVING.
- ON COMPLETION OF WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL INCLUDING, BUT NOT LIMITED TO, KERBS, FOOTPATHS, CONCRETE AREAS, GRASS AND LANDSCAPED AREAS.

SIGNAGE AND LINE MARKING

- TO ELIMINATE EXCESSIVE GLARE FROM THE SURFACE OF A SIGN IT SHOULD BE TURNED APPROXIMATELY 5° AWAY FROM THE NORMAL TO THE HEADLIGHT BEAM LINE OF SIGHT.
- ALL SIGNAGE TO BE CLEAR OF ALL VEGETATION AND OBSTRUCTIONS.
- SIGNS TO BE INSTALLED IN ACCORDANCE WITH AS1472.
- THE LOCATION OF ALL EXISTING SIGNS TO BE CONFIRMED PRIOR TO COMMENCING WORK. ENSURE ADOPTED METHOD OF CONSTRUCTION WILL AVOID DAMAGE TO ALL SIGNS.
- CONDITION ASSESSMENT TO BE UNDERTAKEN ON ALL EXISTING SIGN FACES TO BE RELOCATED PRIOR TO BEING REUSED IN ACCORDANCE WITH RELEVANT SPECIFICATIONS AND STANDARDS AS DIRECTED BY THE PRINCIPAL.
- ALL EXISTING LINE MARKING EFFECTED BY THE NEW WORKS AND NOT OTHERWISE CONFLICTING WITH PROPOSED LINE MARKING IS TO BE REINSTATED.
- FOR REMOVAL OF LINE MARKING REFER TO RMS DELINEATION GUIDELINE SECTION 14.
- SIGNAGE AND LINE MARKING PLANS TO BE READ IN CONJUNCTION WITH APPROVED TCS DRAWINGS.

COMPACTION NOTES

- STRIP TOPSOIL TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE FOR SELECTIVE RE-USE OR DISPOSE OFF-SITE AS DIRECTED BY THE PRINCIPAL.
- WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE PRINCIPAL. REFER TO SPECIFICATION FOR DETAILS.
- ALL SORT, WET OR UNSUITABLE MATERIAL TO BE REMOVED AS DIRECTED BY THE PRINCIPAL AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
- ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE PRINCIPAL AND SHALL COMPLY WITH THE FOLLOWING:
  - FREE FROM ORGANIC, PERSHABLE AND CONTAMINATED MATTER
  - MAXIMUM PARTICLE SIZE 20mm
  - PLASTICITY INDEX BETWEEN 2% AND 15%
- ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200MM THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ or - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS 1298.5.1 OF NOT LESS THAN THE FOLLOWING STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1298.5.1.1:
 

LOCATION	STANDARD MAXIMUM DRY DENSITY (SMDD)
UNDER BUILDING SLABS	98%
AREAS OF SERVICE TRENCHES	98%
EXTERNAL PAVED AREAS, ROADS AND CARPARKS	98%
LANDSCAPED AREAS	95%

- THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLER MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED BY THE CONTRACTOR AT THEIR COST.
- TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE. FREQUENCY OF TESTING TO AS3798 TABLE 8.1
- THE SUBGRADE MUST BE PRESENTED TO THE PRINCIPAL FOR INSPECTION AND SHALL CONSTITUTE A HOLD POINT PRIOR TO CONSTRUCTION OF THE PAVEMENT. SUBGRADE INSPECTION AT CONTRACTORS EXPENSE

JOINTING NOTES

- VEHICULAR PAVEMENT JOINTING
- ALL VEHICULAR PAVEMENT TO BE JOINTED AS SHOWN ON DRAWINGS.
  - KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6m CENTERS.
  - WEARING COURSE LONGITUDINAL JOINT SHALL BE LOCATED WITHIN ±25mm OF LINE MARKING OR IN THE CENTER OF A LANE.
  - LONGITUDINAL JOINT IN ASPHALT LAYERS SHALL BE OFFSET 150mm MINIMUM FROM JOINTS IN UNDERLYING LAYER.
- PEDESTRIAN FOOTPATH JOINTING
- ALL PEDESTRIAN FOOTPATH JOINTING LAYOUTS AS PER NORTH SYDNEY COUNCIL STANDARD CONCRETE FOOTPATH DETAIL - S104

NORTH SYDNEY COUNCIL SPECIFICATION

ALL WORKS SHALL COMPLY WITH NORTH SYDNEY COUNCIL'S INFRASTRUCTURE SPECIFICATION FOR ROADWORKS, DRAINAGE AND MISCELLANEOUS WORK\*

ASPHALTIC CONCRETE NOTES

- GENERAL
  - MINERAL AGGREGATES TO COMPLY WITH AUSTRALIAN STANDARDS
  - MINERAL FILLER TO COMPLY WITH AS 2357 MINERAL FILLERS OR ASPHALT.
  - BITUMEN BINDER SHALL COMPLY WITH AS 2008
  - BITUMEN BINDER CLASS CS30 SHALL BE USED FOR WEARING COURSE ASPHALT CONCRETE MIXES UNO
- MIX PROPORTIONS
  - JOB MIX - 19mm NOMINAL SIZE AGGREGATE. MINIMUM BITUMEN CONTENT BY MASS OF TOTAL MASS - 5.1%
  - MIX STABILITY - BETWEEN 18N AND 38N AS DETERMINED BY AS 2891
  - AIR VOIDS IN COMPACTED MIX - BETWEEN 4% AND 7% OF THE VOLUME OF THE MIX.
  - VOIDS FILLED IN BINDER - 65-80% OF AIR VOIDS IN THE TOTAL MINERAL AGGREGATE FILLED BY BINDER IN ACCORDANCE WITH AUSTRALIAN STANDARDS
- PAVEMENT PREPARATION
  - THE EXISTING SURFACE TO BE SEALED SHALL BE DRY AND BROOMED BEFORE COMMENCEMENT OF WORK TO ENSURE COMPLETE REMOVAL OF ALL SUPERFICIAL FOREIGN MATTER.
  - ALL DEPRESSIONS OR UNEVEN AREAS ARE TO BE TACK-COATED AND BROUGHT UP TO GENERAL LEVEL OF PAVEMENT WITH ASPHALTIC CONCRETE BEFORE LAYING OF MAIN COURSE.
- TACK COAT
  - THE WHOLE OF THE AREA TO BE SHEETED WITH ASPHALTIC CONCRETE SHALL BE LIGHTLY AND EVENLY COATED WITH RAPID SETTING BITUMEN COMPLYING WITH AUSTRALIAN STANDARDS. APPLICATION RATE FOR RESIDUAL BITUMEN SHALL BE 0.15 TO 0.30 LITRES/SQUARE METRE. APPLICATION SHALL BE BY MEANS OF A MECHANICAL SPRAYER WITH SPRAY BAR.
- SPREADING
  - ALL ASPHALTIC CONCRETE SHALL BE SPREAD WITH A SELF PROPELLED PAVING MACHINE
  - THE ASPHALTIC CONCRETE SHALL BE LAID AT A MIX TEMPERATURE AS SHOWN BELOW.

ROAD SURFACE TEMPERATURE IN SHADE (°C)	MIX TEMPERATURE (°C)
5 - 10	NOT PERMITTED
10 - 15	150
15 - 25	145
OVER 25	140

  - ASPHALTIC CONCRETE SHALL NOT BE LAID WHEN THE ROAD SURFACE IS WET OR WHEN COLD WINDS CHILL THE MIX ADVERSELY AFFECT SPREADING AND COMPACTION.
  - THE MINIMUM COMPACTED THICKNESS IS 30mm OVER EXISTING SEALED PAVEMENTS AND 50mm OVER NEW PAVEMENTS.
- JOINTS
  - THE NUMBER OF JOINTS BOTH LONGITUDINAL AND TRANSVERSE SHALL BE KEPT TO A MINIMUM
  - THE DENSITY AND SURFACE FINISH AT JOINTS SHALL BE SIMILAR TO THOSE OF THE REMAINDER OF THE LAYER.
- COMPACTION
  - ALL COMPACTION SHALL BE UNDERTAKEN USING SELF PROPELLED ROLLERS
  - INITIAL ROLLING SHALL BE COMPLETE BEFORE THE MIX TEMPERATURE FALLS BELOW 100°C
  - SECONDARY ROLLING SHALL BE COMPLETED BEFORE THE MIX TEMPERATURE FALLS BELOW 60°C
  - MINIMUM CHARACTERISTICS VALUE OF RELATIVE COMPACTION OF A LOT WHEN TESTED IN ACCORDANCE WITH AS1250
- FINISHED PAVEMENT PROPERTIES
  - FINISHED SURFACES SHALL BE SMOOTH, DENSE AND TRUE TO SHAPE AND SHALL NOT VARY MORE THAN 10mm FROM THE SPECIFIED PLAN LEVEL AT ANY POINT AND SHALL NOT DEVIATE FROM THE BOTTOM OF A 3m STRAIGHT EDGE LAID IN ANY DIRECTION BY MORE THAN 5mm.

CONCRETE NOTES

- GENERAL
- ALL WORKSMANSHIP AND MATERIALS SHALL COMPLY WITH AS 3600 CURRENT EDITIONS WITH AMENDMENTS, AND THE ACSE CONCRETE SPECIFICATION EXCEPT WHERE VARYED BY THE CONTRACT DOCUMENTS.
  - VERIFY ALL SETTING OUT DIMENSIONS WITH THE SURVEYOR.
  - DO NOT OBTAIN DIMENSIONS BY SCALING THE DRAWINGS.
  - IN CASE OF DOUBT - ASK.
- DESIGN LOADS
- N/A
- CONCRETE
- NOT WITH STANDING RCC STANDARD DRAWING DETAILS FOR CONCRETE TARGET COMPRESSIVE STRENGTH. PLACE CONCRETE OF THE FOLLOWING CHARACTERISTIC COMPRESSIVE STRENGTH F<sub>CD</sub> AS DEFINED IN AS 3600 OR M.R. FORM 609. ADD WATER REDUCING ADMIXTURE EQUAL TO WR4.
- | LOCATION            | AS 3600 F <sub>CD</sub> MPa AT 28 DAYS | SPECIFIED SLUMP | NOMINAL AGG. SIZE |
|---------------------|--|-----------------|-------------------|
| ALL KERB PITS ETC.  | 32                                     | 80              | 20                |
| VEHICULAR PAVEMENTS | 32                                     | 80              | 20                |
| PEDESTRIAN FOOTPATH | 32                                     | 80              | 20                |
- USE GENERAL PURPOSE PORTLAND CEMENT UNLESS OTHERWISE AGREED WITH COUNCIL.
  - ALL CONCRETE SHALL BE SUBJECT TO PROJECT CONTROL SAMPLE AND TESTING TO AS 3600.
  - CONSOLIDATE BY VIBRATION
- REINFORCEMENT
- REFER TO DETAILS SHEET FOR REINFORCEMENT.
  - MINIMUM COVER FOR REINFORCEMENT TO BE 40mm UNLESS OTHERWISE NOTED.
- CURING
- CURING OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH AS3600 AND SHALL COMMENCE WITHIN 2 HOURS OF FINISHING OPERATIONS.
  - CURING SHALL BE CONTINUOUS SATURATION WITH POTABLE WATER FOR 3 DAYS FOLLOWED BY PREVENTION OF MOISTURE LOSS FOR THE NEXT 4 DAYS USING POLYTHENE SHEETING OR WET HESSIAN PROTECTED BY WIND OR TRAFFIC AND THEN ALLOWING GRADUAL DRYING OUT.
  - CURING COMPOUNDS MAY BE USED PROVIDED THAT THEY COMPLY WITH AS3799 AND NOT AFFECT THE PROPOSED FINISH.
  - THE COMPATIBILITY OF CURING COMPOUNDS WITH THE PROPOSED FINISH AND OTHER CONCRETE ADMIXTURES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING AND APPLICATION.
  - CURING COMPOUNDS ARE APPLIED UNIFORMLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. PVA-BASED CURING COMPOUNDS ARE NOT ACCEPTABLE.
  - CURING SHALL BE UNDERTAKEN BY AN EXPERIENCED CONTRACTOR FAMILIAR WITH THE PROPOSED COMPOUNDS AND THE MANUFACTURER'S SPECIFICATIONS.
  - WHERE SHADE TEMPERATURES EXCEEDS 30°C, SPRAY THE EXPOSED SURFACE OF THE CONCRETE PAVEMENT / SLAB DURING THE PHASE OF FINISHING OPERATION WITH A FINE FILM OR APPROVED ALIPHATIC ALCOHOL. REPEAT THE SPRAY IF THE SPRAY SURFACE HAS BEEN RE-WORKED.
  - ENSURE ADEQUATE SUPPLY OF ALIPHATIC ALCOHOL ON-SITE PRIOR TO CONCRETE WORKS.

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E	ISSUE FOR CLIENT REVIEW	23.02.23	UF <td>VG</td> <td></td>	VG	
D	ISSUED FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	08.09.21	RF	VG	
Issue	Drawn	Checked	Approved		

Client  
**NORTH SYDNEY COUNCIL**  
200 MILLER STREET  
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PHONE: 02 9392 8100

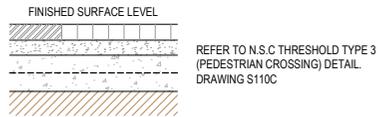
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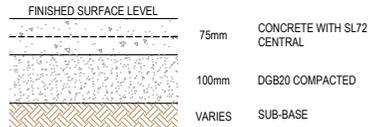
Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawing Title  
**GENERAL NOTES**

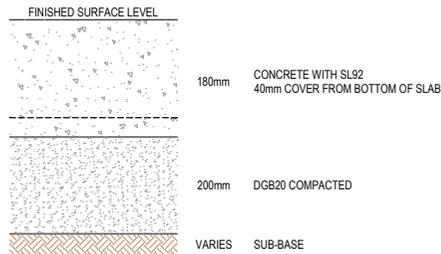
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ROB	JUNE 2021	NOT TO SCALE			
Checked	Project No.	Drawn No.	Issue No.	Issue	
VG					



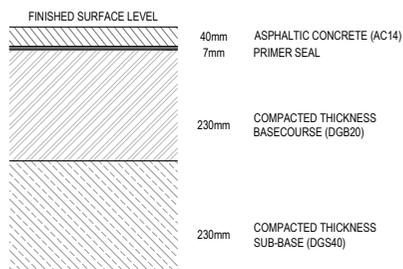
**PAVEMENT TYPE - RC RAISED CROSSING**



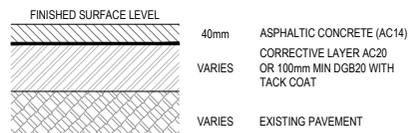
**PAVEMENT TYPE - FP FOOTPATH**  
REFER TO NORTH SYDNEY COUNCIL STANDARD DRAWING S104A



**PAVEMENT TYPE - DW DRIVEWAY**  
REFER TO NORTH SYDNEY COUNCIL STANDARD DRAWING S101A



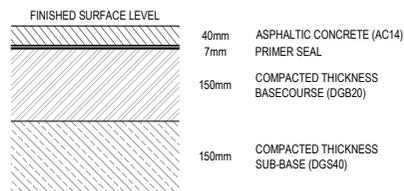
**ROAD PAVEMENT TYPE - RP**  
ASSUMED CBR 3%, ADOPTED ESA 4 x 10<sup>5</sup>



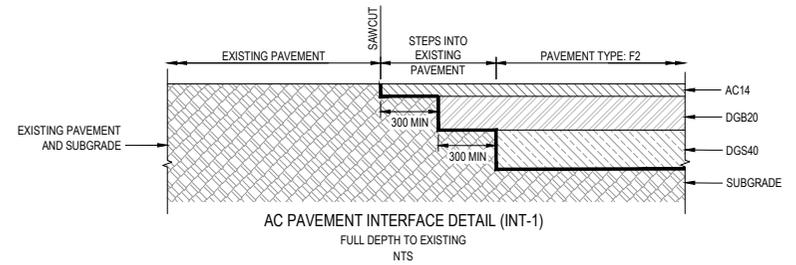
**PAVEMENT TYPE - M&C MILL AND CORRECTION**

**SPECIFICATIONS.**

- SLAB THICKNESS AND REINFORCEMENT**  
RESIDENTIAL: SINGLE DWELLING - 130mm SL72 REO MESH.  
MULTIPLE DWELLING - 180mm SL72 REO MESH.  
COMMERCIAL: 180mm SL92 REO MESH. (TO BE LOCATED WITH 40mm COVER FROM BOTTOM OF SLAB).  
ALL CONCRETE F'c32 MPa.
- BASE COURSE**  
CONSOLIDATED FINE CRUSHED ROCK TO COUNCILS SPECIFICATION
- CONCRETE FINISH**
  - ALL EDGES BE TOOL FINISHED WITH 12mm RAD 50mm WIDE EDGING TOOL
  - GUTTER & LAYBACK SHALL BE FINISHED WITH A STEEL TROWEL
  - DRIVEWAY SLAB TO BE FINISHED WITH WOOD FLOAT.
- EXPANSION JOINTS**  
EXPANSION JOINTS SHALL BE PLACED AT 6m INTERVALS  
CONTRACTORS SHALL CONFORM TO COUNCILS STANDARD CONDITIONS OF APPROVAL FOR CONSTRUCTION OF VEHICULAR CROSSING/CONCRETE FOOTPATHS AND TO LINE LEVEL AND GRADE FIXED BY COUNCIL
- SITE OF WORK**  
DURING AND ON COMPLETION OF WORK, ALL EXCAVATED MATERIAL FROM THE SITE SHALL BE REMOVED AND THE SITE KEPT IN A CLEAN, SAFE AND TIDY CONDITION TO THE SATISFACTION OF COUNCIL'S ENGINEER.
- ALL PLAN DIMENSIONS ARE IN MILLIMETRES, UNLESS NOTED OTHERWISE.**
- AC10mm ADJUSTMENT**  
PROVIDE 600mm WIDE AC10 CORRECTION COURSE LAYER 50mm WHEN CONSTRUCTING NEW KERB IN EXISTING AC PAVEMENT



**PAVEMENT TYPE - CW**  
ASSUMED CBR 3%, ADOPTED ESA 3 x 10<sup>5</sup>



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Client  
**NORTH SYDNEY COUNCIL**  
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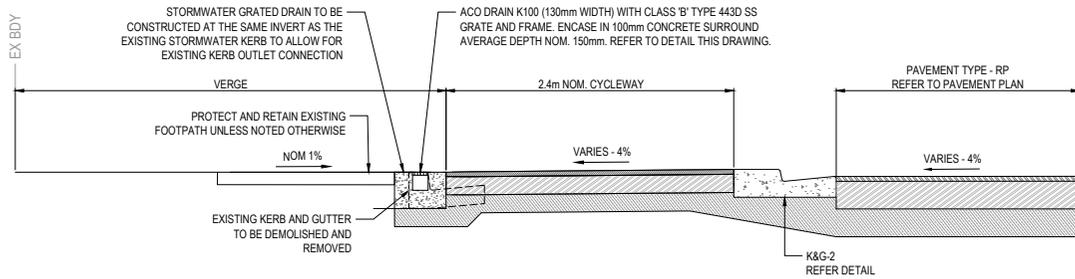
Address  
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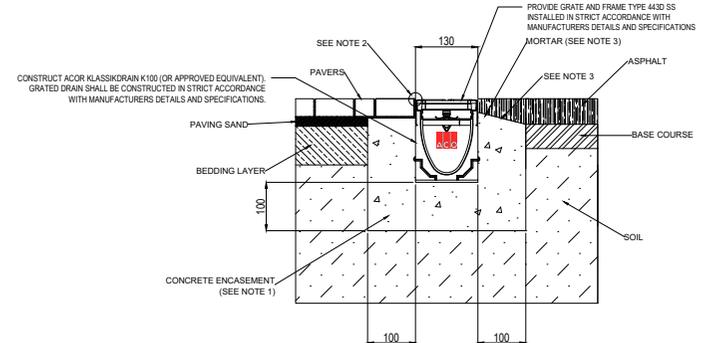
Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawn	Date	Scale	AT	D.A. Check	Date
ROB	JUNE 2021	NOT TO SCALE			
Checked	Project No.	Eng. No.	Issue		
VG			F		

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TYPICAL SECTION (CH70)  
RAISED CYCLEWAY ADJACENT TO NEW KERB ALIGNMENT  
NTS



TYPICAL K100 GRATED DRAIN DETAIL (EXCLUDING DRIVEWAYS)

- NOTES:
- SPECIFIC SITE CONDITIONS MAY REQUIRE AN INCREASE IN CONCRETE ENCASEMENT DIMENSIONS AND/OR REINFORCEMENT. IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE THE CONCRETE ENCASEMENT IS DESIGNED FOR THE APPLICATION. A MINIMUM CONCRETE STRENGTH OF 25MPA IS RECOMMENDED. THE CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS. *ENGINEERING ADVICE MAY BE REQUIRED.*
  - THE FINISHED LEVEL OF THE PAVERS / ASPHALT MUST BE APPROXIMATELY 3mm ABOVE THE TOP OF THE CHANNEL EDGE.
  - HAUNCH SLOPES AWAY AT A RATIO OF 1:4 OR APPROXIMATELY 15°.
  - FOR FURTHER DETAILS, REFER TO ACO'S DESIGN & SITE INSTALLATION FILES AT [WWW.ACODRAIN.COM/RESOURCES](http://WWW.ACODRAIN.COM/RESOURCES).

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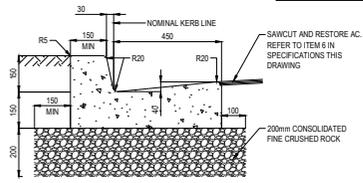
ENGINEERS MANAGERS INFRASTRUCTURE PLANNERS DEVELOPMENT CONSULTANTS

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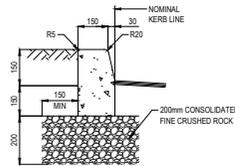
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VG			F		

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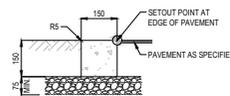
NOTE: INSTALL ISOLATION JOINT AT BACK OF KERB WHEN ABUTTING CONCRETE PAVEMENT FOR FOOTPATH OR MEDIAN



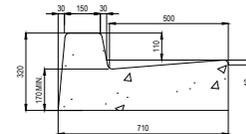
**KERB AND GUTTER 180 (K&G-1)**  
SCALE 1:10  
NOTE: DETAIL AS PER NORTH SYDNEY COUNCIL BARRIER KERB (DRAWING No S1018)



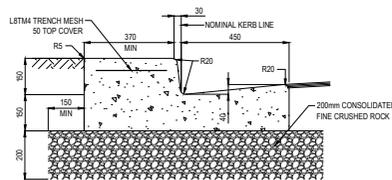
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SCALE 1:10



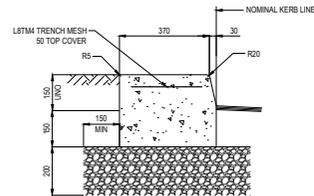
**FLUSH KERB (FK) - TYPE 1**  
SCALE 1:10



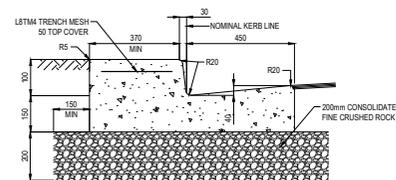
**RMS SA KERB**  
SCALE 1:10  
NOTE: DETAIL AS PER RMS STD DRAWING R0300-01



**KERB AND GUTTER 400 (K&G-2)**  
SCALE 1:10

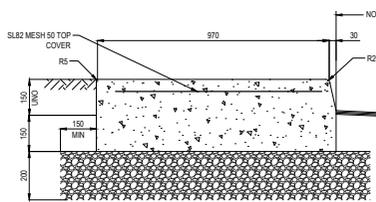


**CONCRETE KERB ONLY (KO-2)**  
SCALE 1:10

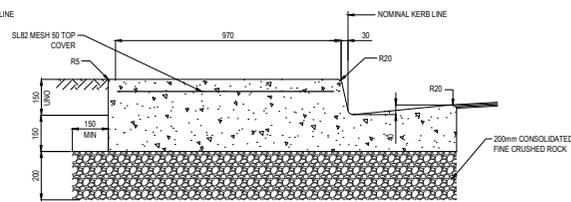


**KERB AND GUTTER 400 (K&G-4)**  
SCALE 1:10

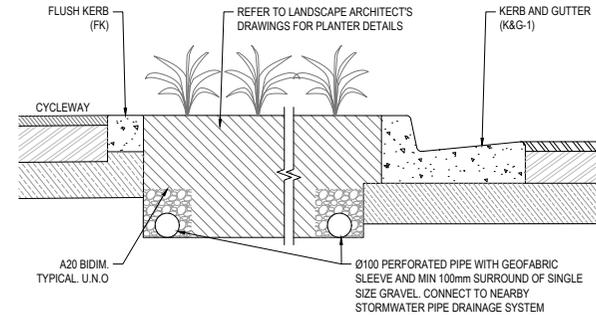
- SPECIFICATIONS**
- BASE COURSE**  
CONSOLIDATED FINE CRUSHED ROCK TO COUNCILS SPECIFICATION.
  - CONCRETE FINISH**  
A. ALL EDGES BE TOOL FINISHED WITH 12mm RAD 50mm WIDE EDGING TOOL.  
B. GUTTER & LAYBACK SHALL BE FINISHED WITH A STEEL TROWEL.
  - EXPANSION JOINTS**  
EXPANSION JOINTS SHALL BE PLACED AT 6m INTERVALS  
CONTRACTORS SHALL CONFORM TO COUNCILS STANDARD CONDITIONS OF APPROVAL FOR CONSTRUCTION OF VEHICULAR CROSSINGS/CONCRETE FOOTPATHS AND TO LINE LEVEL AND GRADE FIXED BY COUNCIL.
  - SITE OF WORK**  
DURING AND ON COMPLETION OF WORK ALL EXCAVATED MATERIAL FROM THE SITE SHALL BE REMOVED AND THE SITE KEPT IN A CLEAN, SAFE AND TIDY CONDITION TO THE SATISFACTION OF COUNCIL'S ENGINEER.
  - AC10mm ADJUSTMENT**  
PROVIDE 60mm WIDE AC10 CORRECTION COURSE LAYER 50mm THICK AS SHOWN.
  - RESTORATION OF TURF**  
RESTORE TURF & TOPSOIL AT COMPLETION OF WORK UP TO 1m BEHIND BACK OF KERB (REMOVE UNWANTED MATERIAL).



**CONCRETE KERB ONLY (KO-3)**  
SCALE 1:10



**KERB & GUTTER 1000 (K&G-3)**  
SCALE 1:10



**PLANTED MEDIAN WITH SSD OUTLET**  
SCALE 1:10

SCALE 1:10 @ A1  
SCALE 1:20 @ A3

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Client  
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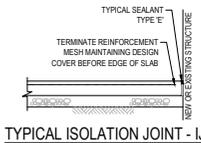
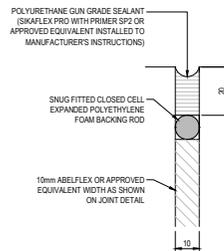
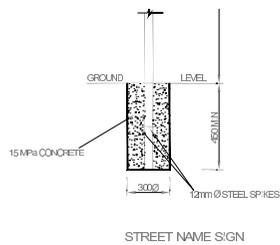
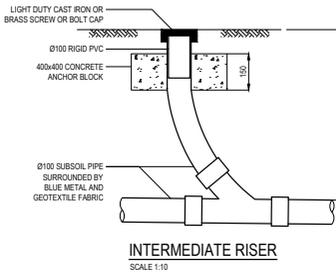
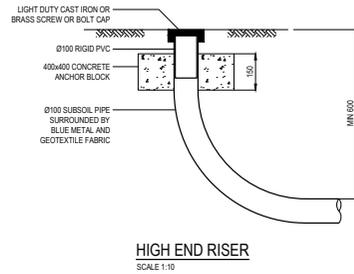
Architect  
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Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawn	Date	Scale	At	D.A. Check	Date
ROB	JUNE 2021	AS SHOWN			
VG					

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**Project**  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawing Title					
TYPICAL DETAILS SHEET 4					
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ROB	JUNE 2021	AS SHOWN			
Checked	Project No.	Eng. No.	Issue		
VG	NSW200722		F		

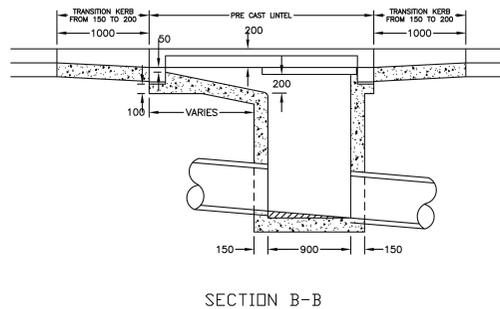
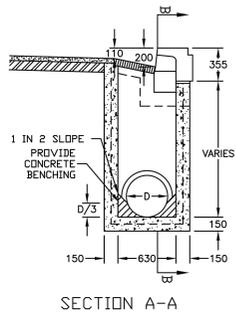
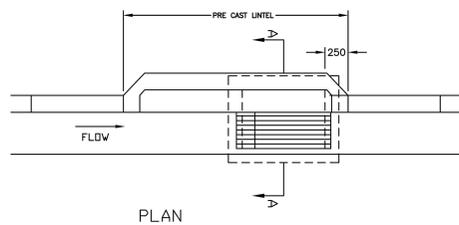
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APPROVED: NORTH SYDNEY COUNCIL  
 COUNCIL ENGINEER  
 DATE: 17/03/20

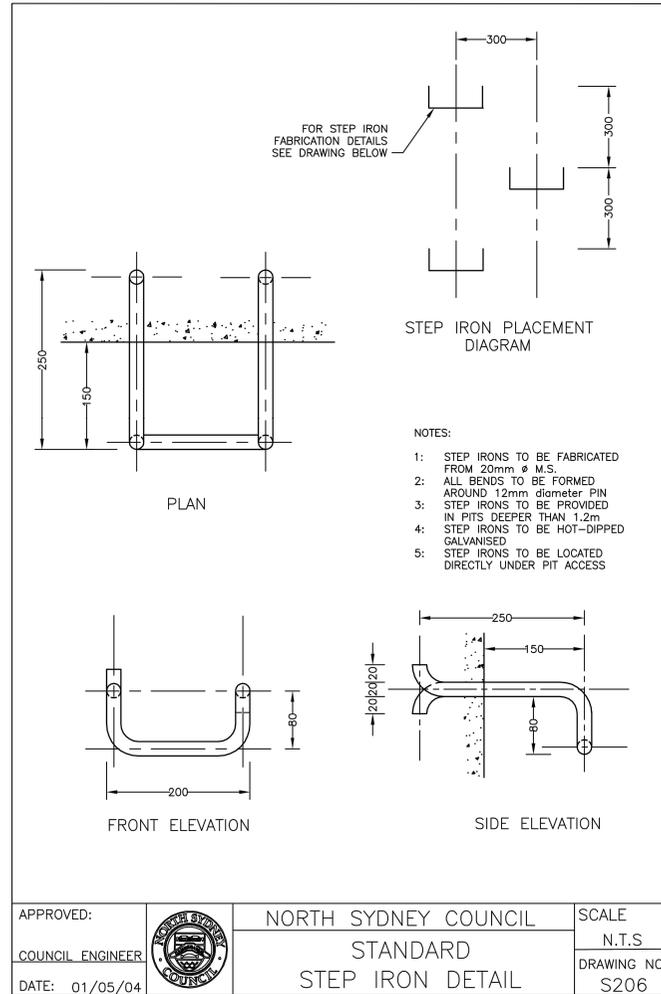
NORTH SYDNEY COUNCIL  
 STANDARD GRATED GULLY PIT  
 WITH PRE-CAST EKI

SCALE: N.T.S.  
 DRAWING NO. S203



NOTES:

1. MAXIMUM PIPE  $\phi$  IS 600mm
2. COMPRESSIVE STRENGTH  $F_c$  FOR CAST IN SITU CONCRETE TO BE MINIMUM 32 MPa AT 28 DAYS
3. COVER TO BE WELDLK 6500 OR APPROVED EQUIVALENT
4. PROVIDE SL82 MESH CENTRALLY PLACED TO WALLS AND BASE FOR ALL PITS  $\geq$  1500 DEEP. MINIMUM 50 COVER. RETURN MESH MIN 300 INTO BASE AND SIDES.
5. PIT NOT TO EXCEED 2500 IN DEPTH
6. STEP IRONS TO BE PROVIDED FOR PITS GREATER THAN 1200 DEEP REFER TO S206.
7. ALL PIPES SHALL BE AS SPECIFIED ON PLANS AND SHALL BE STEEL REINFORCED.
8. PROVIDE A 2m LENGTH SLOTTED AG-PIPE WITH FILTER SOCK AT THE UPSTREAM END OF THE PIT.
9. ALL PITS ARE TO BE CAST IN-SITU UNLESS DIRECTED OTHERWISE



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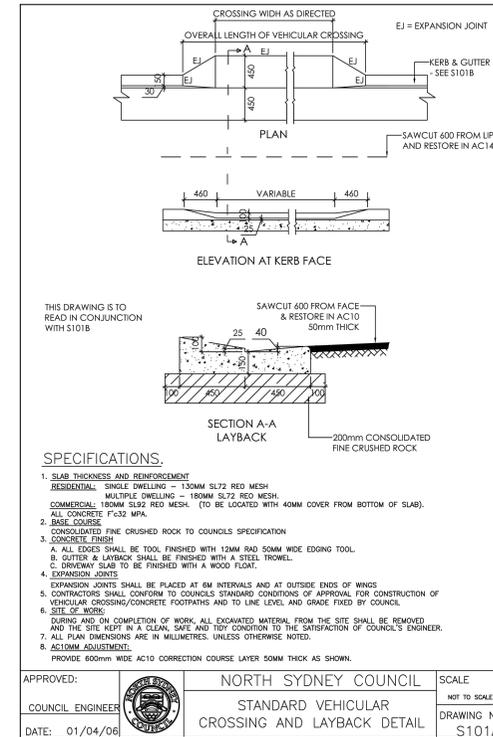
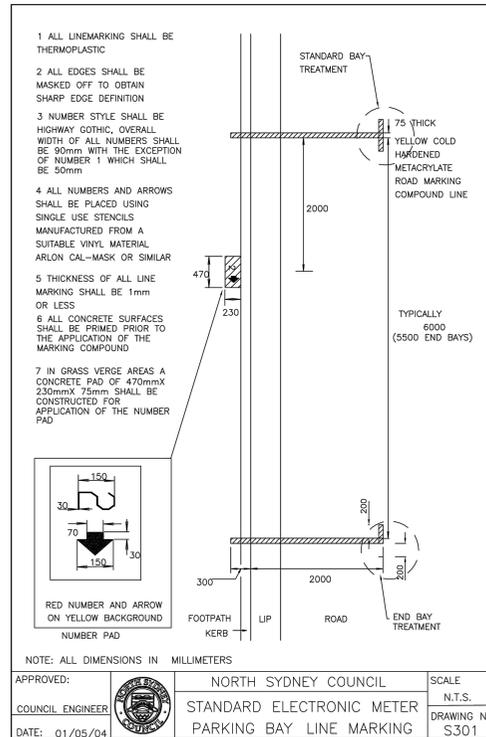
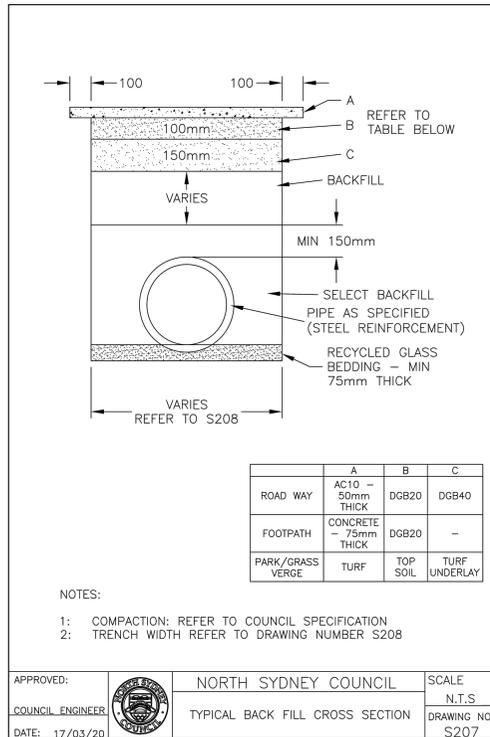
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Project  
**WEST STREET ACTIVE TRANSPORT**  
 PACIFIC HIGHWAY TO RIDGE STREET  
 NORTH SYDNEY, NSW 2060

Drawn	Date	Scale	AT	G.A. Check	Date
ROB	JUNE 2021	NOT TO SCALE			
Checked	Project No.	Eng. No.	Issue		
VG	NSW200722	16	F		

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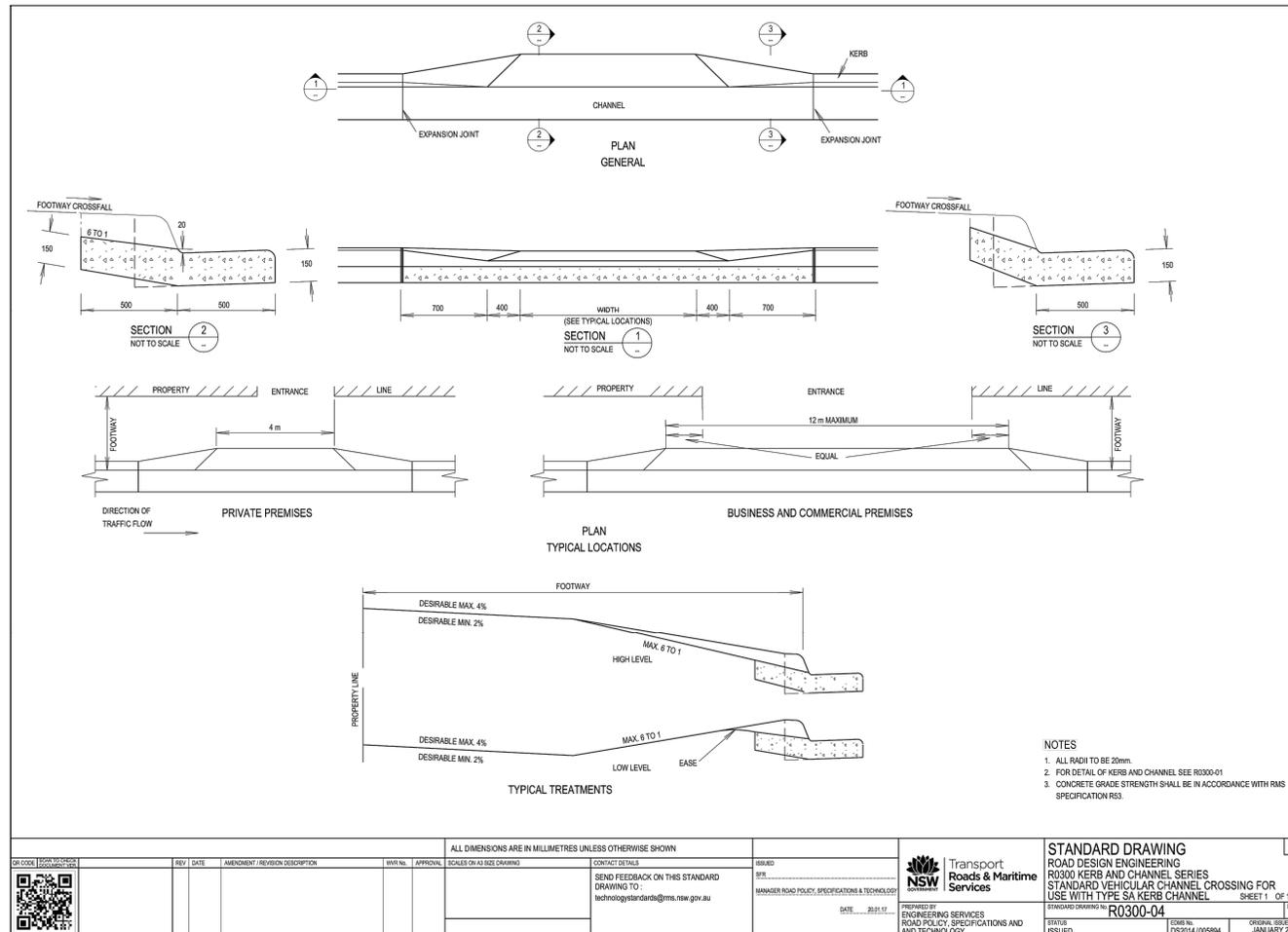
**AcOR CONSULTANTS**  
ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

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Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

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Drawn	Date	Scale	AT	D.A. Check	Date
ROB	JUNE 2021	NOT TO SCALE			
Checked	Project No.	Draw No.	Issue		
VG	NSW200722		F		



<b>QR CODE</b>				REF. DATE AMENDMENT / REVISION DESCRIPTION WVR NO. APPROVAL	ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN SCALES ON A3 SIZE DRAWING	CONTACT DETAILS SEND FEEDBACK ON THIS STANDARD DRAWING TO: technologystandards@nsw.gov.au	REVISED BY: MANAGER ROAD POLICY, SPECIFICATIONS & TECHNOLOGY DATE: 30.01.17	<b>STANDARD DRAWING</b> ROAD DESIGN ENGINEERING R0300 KERB AND CHANNEL SERIES STANDARD VEHICULAR CHANNEL CROSSING FOR USE WITH TYPE SA KERB CHANNEL SHEET 1 OF 1 R0300-04	A3 ORIGINAL ISSUE DATE: JANUARY 2017
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Issue	Description	Date	Drawn	Checked	Approved
F	ISSUE FOR TENDER	28.02.23	UF	VG	North
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG	
D	ISSUED FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	08.09.21	RP	VG	

Client  
**NORTH SYDNEY COUNCIL**  
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 PHONE: 02 9938 8100

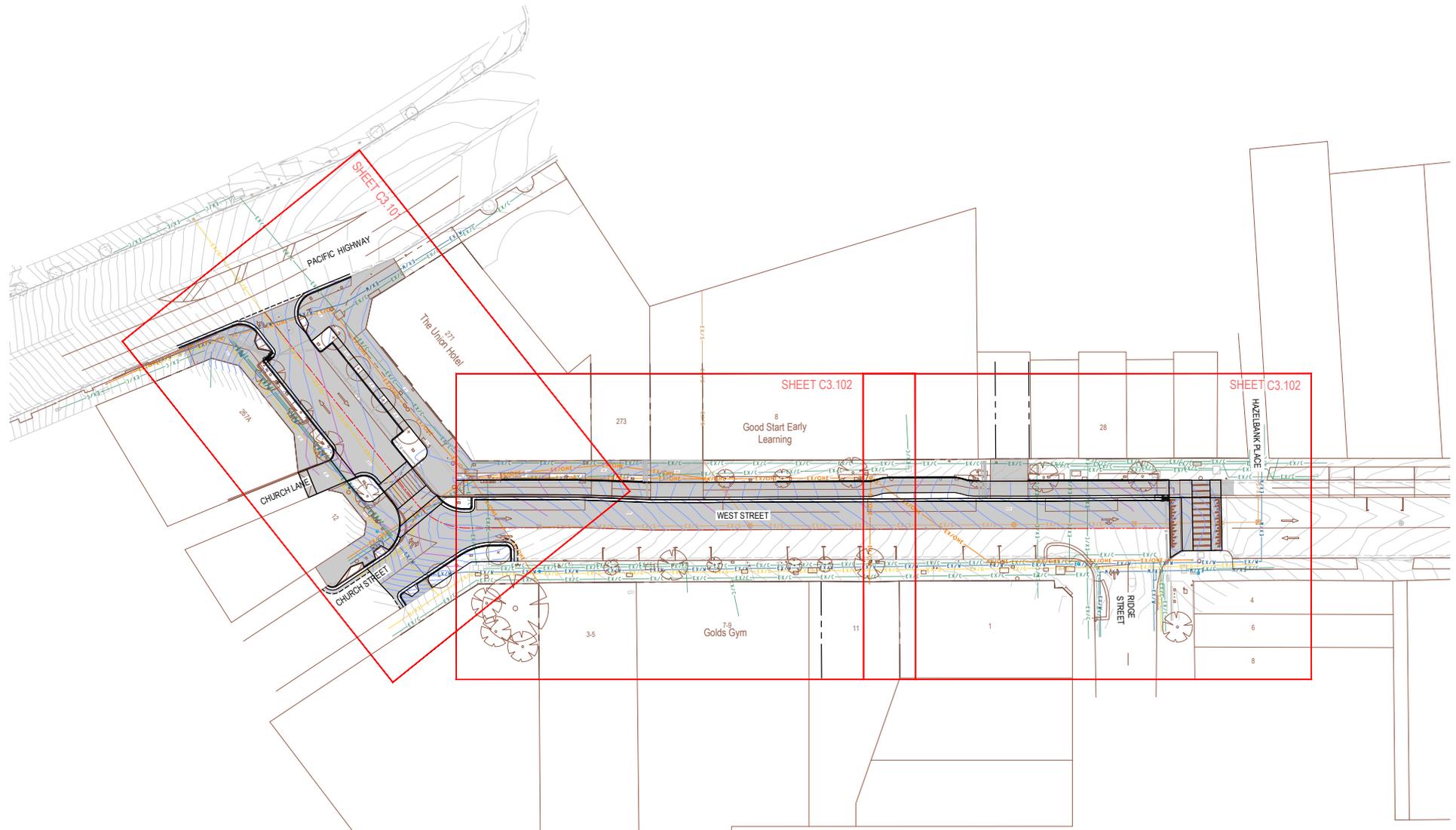
Architect  
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Project  
**WEST STREET ACTIVE TRANSPORT**  
 PACIFIC HIGHWAY TO RIDGE STREET  
 NORTH SYDNEY, NSW 2060

Drawing Title <b>TYPICAL DETAILS SHEET 8</b>					
Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	NOT TO SCALE			
Checked	Project No.	Eng. No.	Issue		
VG	NSW200722	18	F		

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SCALE 1:300 @ A1  
SCALE 1:600 @ A3

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Issue	Description	Date	Drawn	Checked	Approved
F	ISSUE FOR TENDER	28.02.23	UF	VG	North
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG	
D	ISSUE FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	08.09.21	RP	VG	

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Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

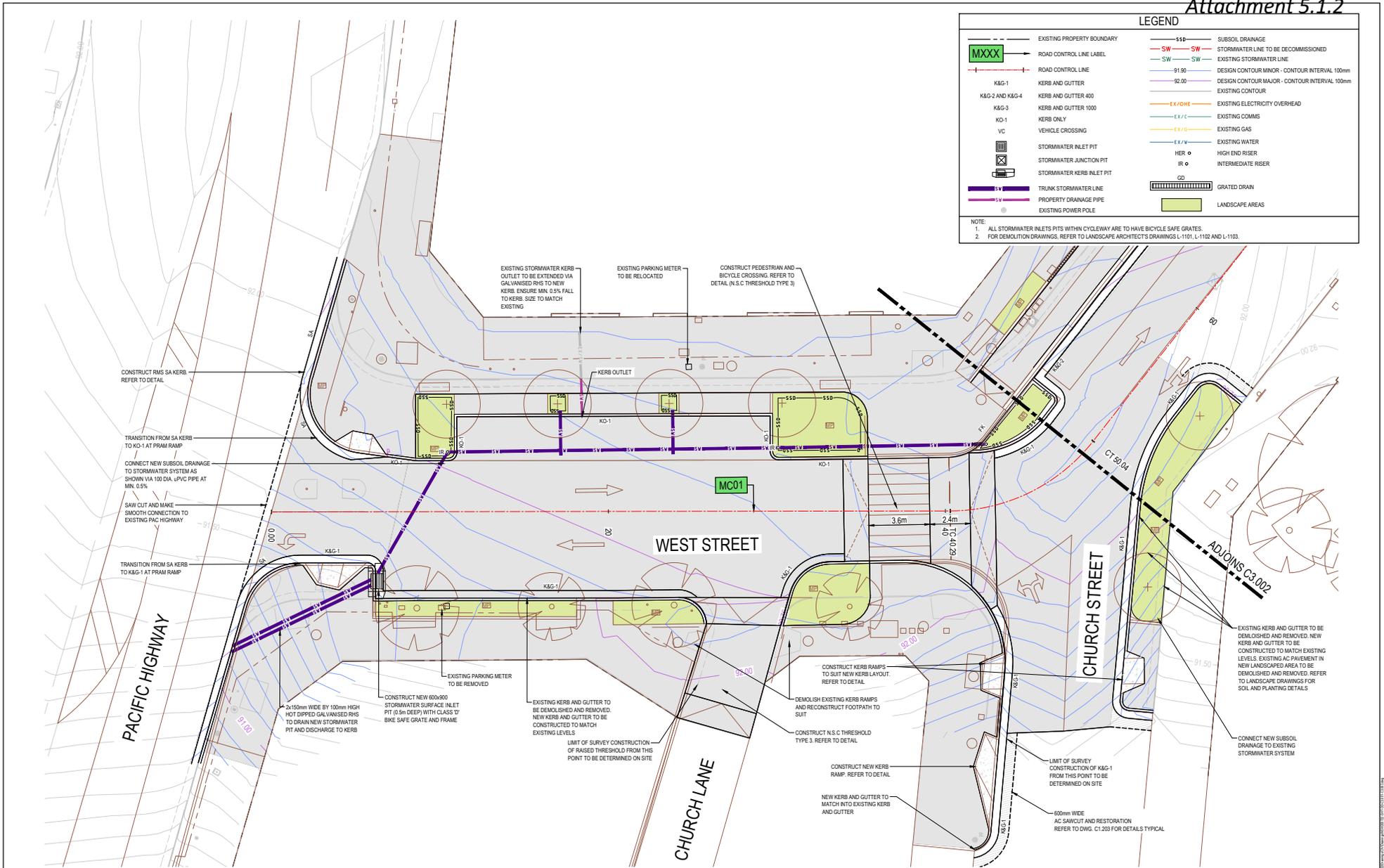
Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:300			
Checked	Project No.	Eng. No.	Issue		
VG	NSW200722		F		

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**LEGEND**

---	EXISTING PROPERTY BOUNDARY	---	SUBSOIL DRAINAGE
---	ROAD CONTROL LINE LABEL	---	STORMWATER LINE TO BE DECOMMISSIONED
---	ROAD CONTROL LINE	---	EXISTING STORMWATER LINE
K&G-1	KERB AND GUTTER	91.00	DESIGN CONTOUR MINOR - CONTOUR INTERVAL 100mm
K&G-2 AND K&G-4	KERB AND GUTTER 400	92.00	DESIGN CONTOUR MAJOR - CONTOUR INTERVAL 100mm
K&G-3	KERB AND GUTTER 1000	---	EXISTING CONTOUR
KD-1	KERB ONLY	EX/OM	EXISTING ELECTRICITY OVERHEAD
VC	VEHICLE CROSSING	EX/C	EXISTING COMMS
---	STORMWATER INLET PIT	EX/G	EXISTING GAS
---	STORMWATER JUNCTION PIT	EX/W	EXISTING WATER
---	STORMWATER KERB INLET PIT	HER	HIGH END RISER
---	TRUNK STORMWATER LINE	IR	INTERMEDIATE RISER
---	PROPERTY DRAINAGE PIPE	GD	GRATED DRAIN
---	EXISTING POWER POLE	---	LANDSCAPE AREAS

NOTE:  
 1. ALL STORMWATER INLETS PITS WITHIN CYCLEWAY ARE TO HAVE BICYCLE SAFE GRATES.  
 2. FOR DEMOLITION DRAWINGS, REFER TO LANDSCAPE ARCHITECT'S DRAWINGS L-1101, L-1102 AND L-1103.



SCALE 1:100 @ A1  
 SCALE 1:200 @ A3

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Rev	Description	Date	Drawn	Checked	Approved
F	ISSUE FOR TENDER	28.02.23	UF	VG	North
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG	
D	ISSUED FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	08.09.21	RP	VG	

Client  
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Project  
**WEST STREET ACTIVE TRANSPORT**  
 PACIFIC HIGHWAY TO RIDGE STREET  
 NORTH SYDNEY, NSW 2060

Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:100			
Checked					
VG					

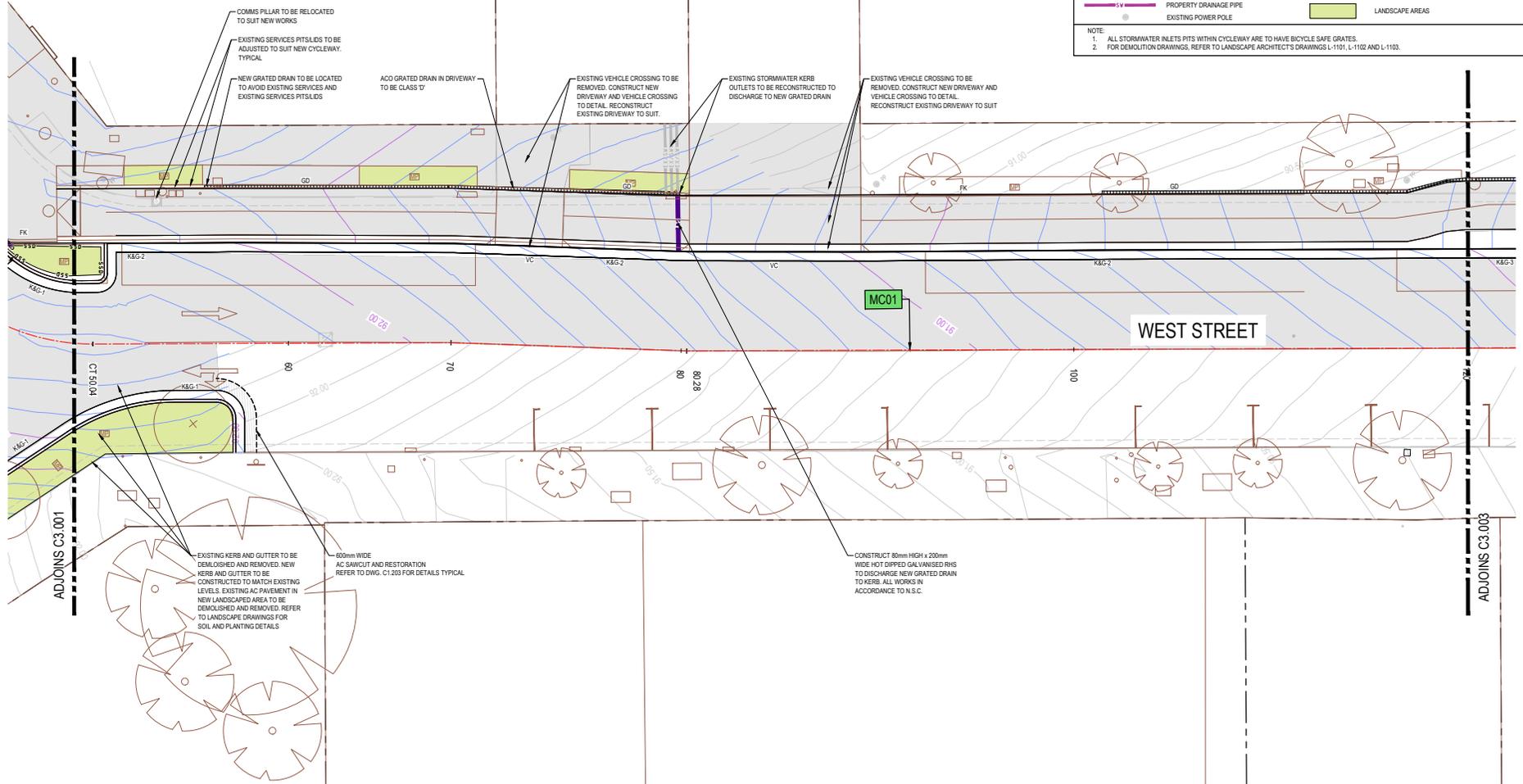
Project No: **NSW200722**  
 Drawing No: **1**  
 Issue: **F**

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**LEGEND**

---	EXISTING PROPERTY BOUNDARY	---	SUBSOIL DRAINAGE
MXXX	ROAD CONTROL LINE LABEL	SW	STORMWATER LINE TO BE DECOMMISSIONED
---	ROAD CONTROL LINE	SW	EXISTING STORMWATER LINE
K&G-1	KERB AND GUTTER	-91.00	DESIGN CONTOUR MINOR - CONTOUR INTERVAL 100mm
K&G-2 AND K&G-4	KERB AND GUTTER 400	-92.00	DESIGN CONTOUR MAJOR - CONTOUR INTERVAL 100mm
K&G-3	KERB AND GUTTER 1000	---	EXISTING CONTOUR
KD-1	KERB ONLY	EX/OHE	EXISTING ELECTRICITY OVERHEAD
VC	VEHICLE CROSSING	EX/C	EXISTING COMMS
[Symbol]	STORMWATER INLET PIT	EX/W	EXISTING GAS
[Symbol]	STORMWATER JUNCTION PIT	EX/V	EXISTING WATER
[Symbol]	STORMWATER KERB INLET PIT	HER	HIGH END RISER
---	TRUNK STORMWATER LINE	IR	INTERMEDIATE RISER
---	PROPERTY DRAINAGE PIPE	GD	GRATED DRAIN
---	EXISTING POWER POLE	[Symbol]	LANDSCAPE AREAS

NOTE:  
 1. ALL STORMWATER INLETS PITS WITHIN CYCLEWAY ARE TO HAVE BICYCLE SAFE GRATES.  
 2. FOR DEMOLITION DRAWINGS, REFER TO LANDSCAPE ARCHITECTS DRAWINGS L-1101, L-1102 AND L-1103.



SCALE 1:100 @ A1  
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E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG	
D	ISSUED FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	08.09.21	RP	VG	
Issue	Drawn	Check	Approved		

Client  
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Project  
**WEST STREET ACTIVE TRANSPORT**  
 PACIFIC HIGHWAY TO RIDGE STREET  
 NORTH SYDNEY, NSW 2060

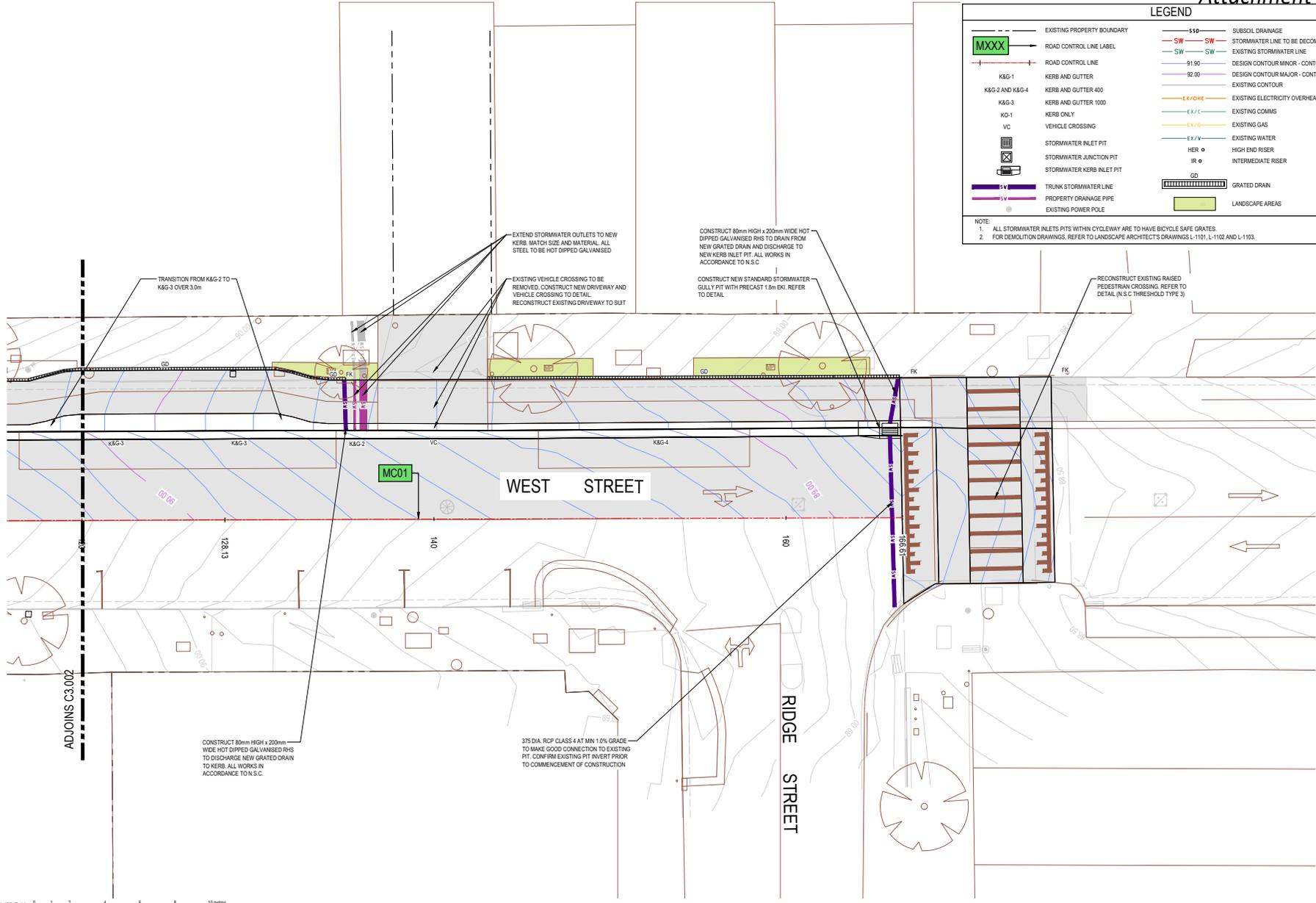
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Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:100			
Checked	Project No.	Draw No.	Issue No.	Issue	Issue
VG	NSW200722	31	2	F	

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### LEGEND

	EXISTING PROPERTY BOUNDARY		SSD	SUBSOIL DRAINAGE
	ROAD CONTROL LINE LABEL		SW	STORMWATER LINE TO BE DECOMMISSIONED
	ROAD CONTROL LINE		SW	EXISTING STORMWATER LINE
	K&G-1		91.00	DESIGN CONTOUR MAJOR - CONTOUR INTERVAL 100mm
	K&G-2 AND K&G-4		92.00	DESIGN CONTOUR MAJOR - CONTOUR INTERVAL 100mm
	K&G-3		EX/OH	EXISTING ELECTRICITY OVERHEAD
	KD-1		EX/G	EXISTING COMMS
	VC		EX/G	EXISTING GAS
	STORMWATER INLET PIT		EX/W	EXISTING WATER
	STORMWATER JUNCTION PIT		HER	HIGH END RISER
	STORMWATER KERB INLET PIT		IR	INTERMEDIATE RISER
	TRUNK STORMWATER LINE		GD	GRATED DRAIN
	PROPERTY DRAINAGE PIPE			LANDSCAPE AREAS
	EXISTING POWER POLE			

NOTE:  
 1. ALL STORMWATER INLETS PITS WITHIN CYCLEWAY ARE TO HAVE BICYCLE SAFE GRATES.  
 2. FOR DEMOLITION DRAWINGS, REFER TO LANDSCAPE ARCHITECT'S DRAWINGS L-1101, L-1102 AND L-1103.



SCALE 1:100 @ A1  
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F	ISSUE FOR TENDER	28.02.23	UF	VG
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG
D	ISSUED FOR 100%	15.11.21	RD	VG
C	ISSUE FOR INFORMATION	08.09.21	RP	VG

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Project  
**WEST STREET ACTIVE TRANSPORT**  
 PACIFIC HIGHWAY TO RIDGE STREET  
 NORTH SYDNEY, NSW 2060

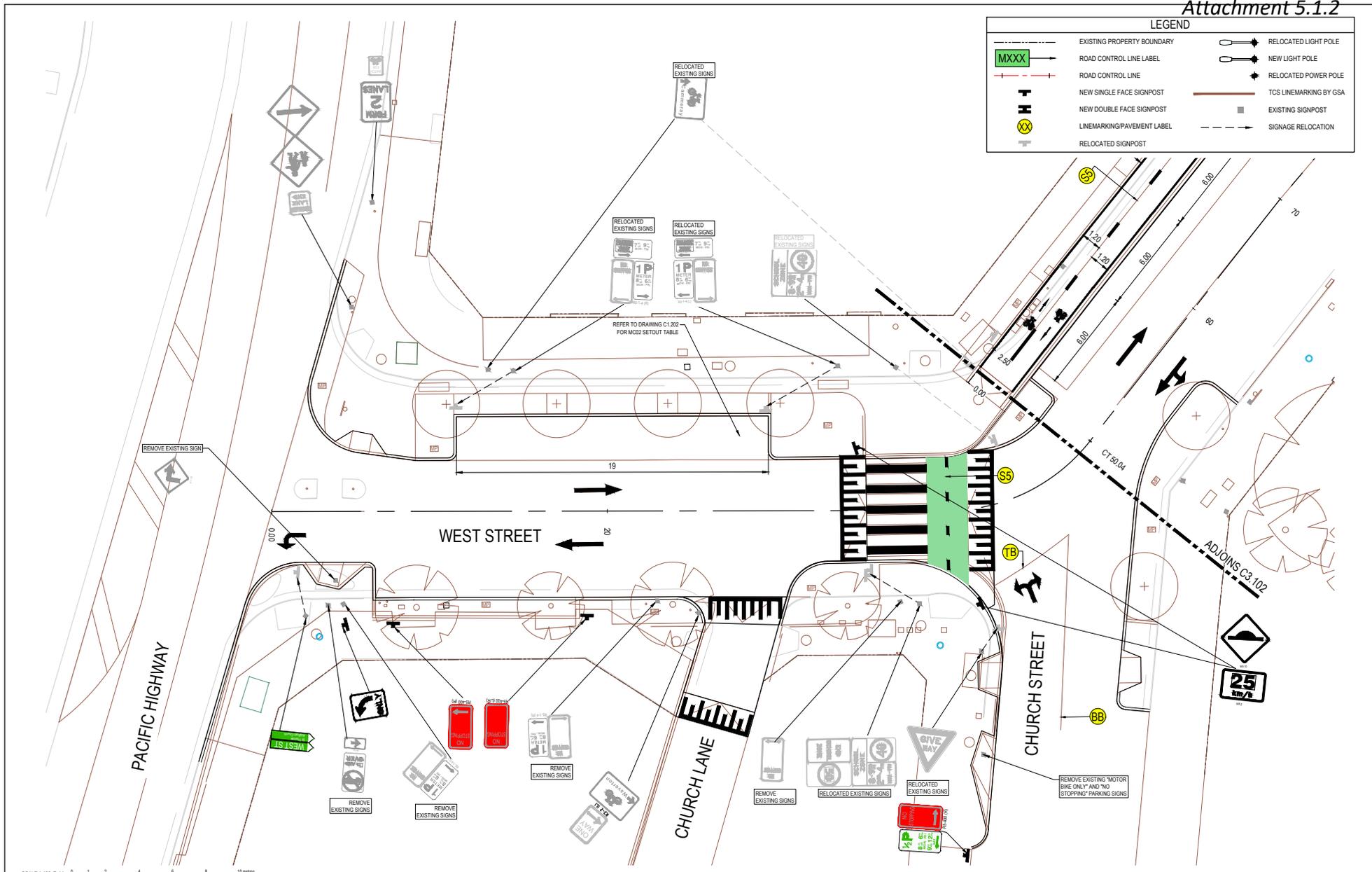
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**SITeworks PLAN SHEET 3**

Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:100			
Checked					
VG					

Page No. 33  
 Issue No. F

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LEGEND			
	EXISTING PROPERTY BOUNDARY		RELOCATED LIGHT POLE
	ROAD CONTROL LINE LABEL		NEW LIGHT POLE
	ROAD CONTROL LINE		RELOCATED POWER POLE
	NEW SINGLE FACE SIGNPOST		TCS LINEMARKING BY GSA
	NEW DOUBLE FACE SIGNPOST		EXISTING SIGNPOST
	LINEMARKING/PAVEMENT LABEL		SIGNAGE RELOCATION
	RELOCATED SIGNPOST		



SCALE 1:100 @ A1  
SCALE 1:200 @ A3

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Issue	Description	Date	Drawn	Approved
F	ISSUE FOR TENDER	28.02.23	UF	VG
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG
D	ISSUE FOR 100%	15.11.21	RD	VG
C	ISSUE FOR INFORMATION	30.08.21	RP	VG

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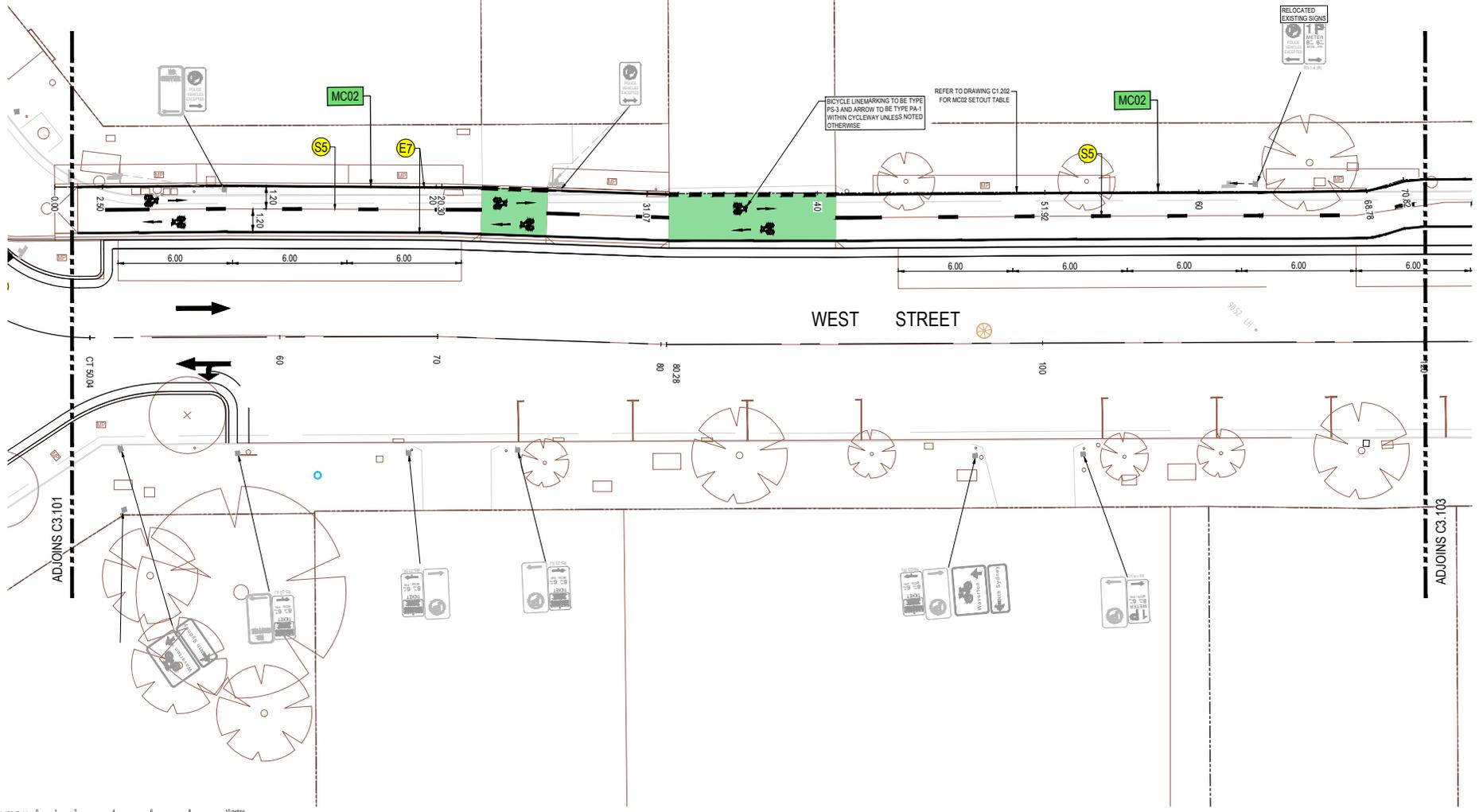
ACOR Consultants Pty Ltd  
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Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:100			
VG					

NOT FOR CONSTRUCTION

LEGEND			
	EXISTING PROPERTY BOUNDARY		RELOCATED LIGHT POLE
	ROAD CONTROL LINE LABEL		NEW LIGHT POLE
	ROAD CONTROL LINE		RELOCATED POWER POLE
	NEW SINGLE FACE SIGNPOST		TCS LINEMARKING BY GSA
	NEW DOUBLE FACE SIGNPOST		EXISTING SIGNPOST
	LINEMARKING/PAVEMENT LABEL		
	RELOCATED SIGNPOST		



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Issue	Description	Date	Drawn	Checked	Approved
F	ISSUE FOR TENDER	28.02.23	UF	VG	North
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG	
D	ISSUE FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	30.08.21	RP	VG	

Client  
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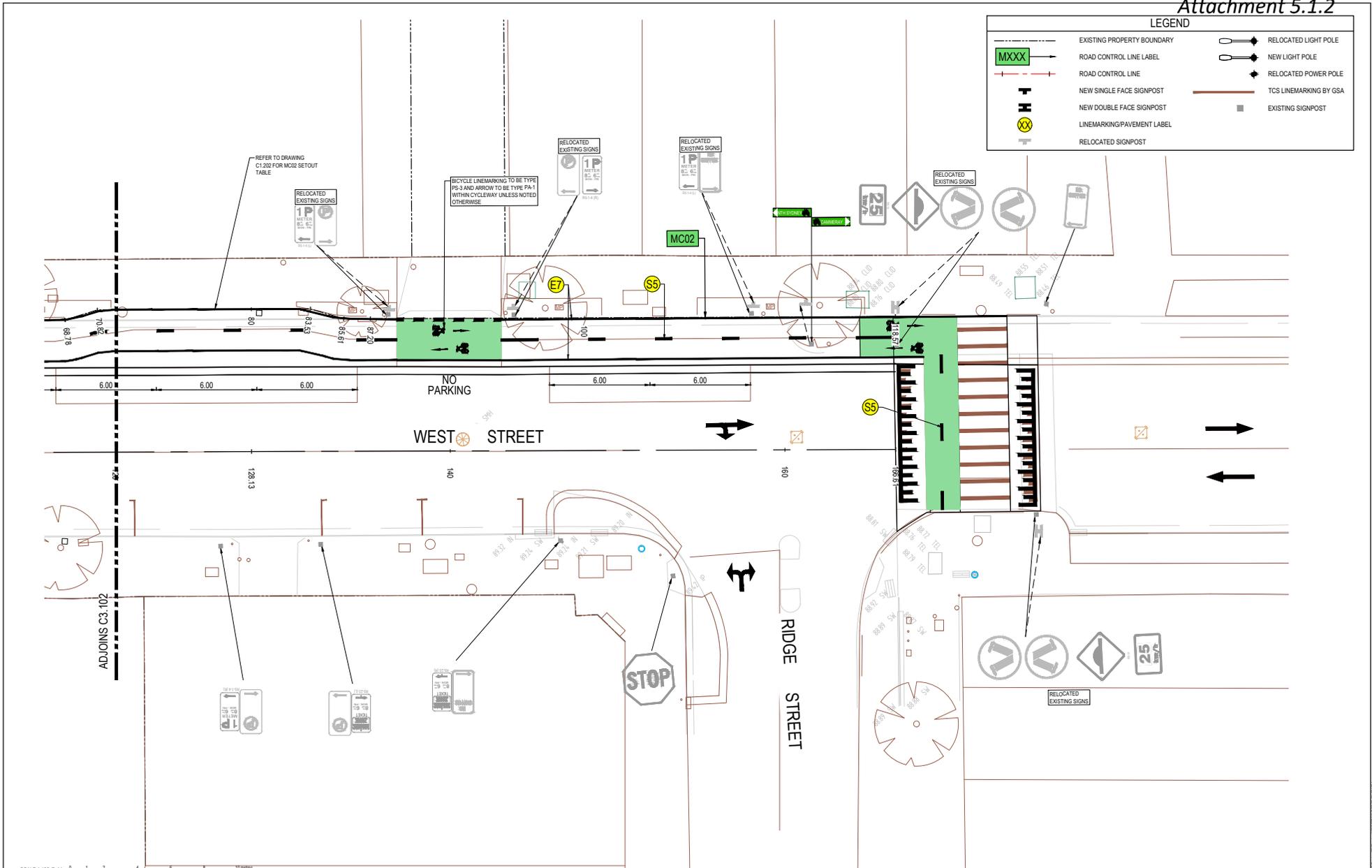
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PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Project  
**WEST STREET ACTIVE TRANSPORT**

Drawing Title			
SIGNAGE AND LINEMARKING PLAN SHEET 2			
Drawn	Date	Scale	A1
ROB	JUNE 2021	1:100	
Checked	Project No.	Eng. No.	Issue
VG	NSW209722	12	F

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LEGEND			
	EXISTING PROPERTY BOUNDARY		RELOCATED LIGHT POLE
	ROAD CONTROL LINE LABEL		NEW LIGHT POLE
	ROAD CONTROL LINE		RELOCATED POWER POLE
	NEW SINGLE FACE SIGNPOST		TCS LINEMARKING BY GSA
	NEW DOUBLE FACE SIGNPOST		EXISTING SIGNPOST
	LINEMARKING/PAVEMENT LABEL		
	RELOCATED SIGNPOST		



SCALE 1:100 @ A1  
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Issue	Description	Date	Drawn	Approved
F	ISSUE FOR TENDER	28.02.23	UF	VG
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG
D	ISSUE FOR 100%	15.11.21	RD	VG
C	ISSUE FOR INFORMATION	30.08.21	RP	VG

Client  
**NORTH SYDNEY COUNCIL**  
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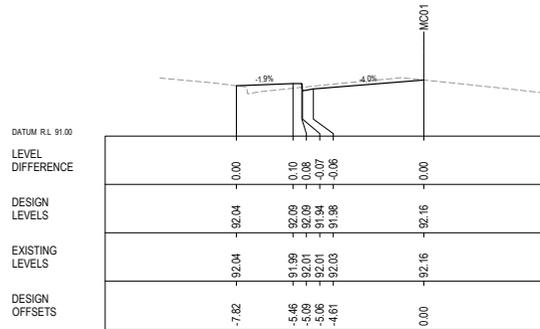
Architect  
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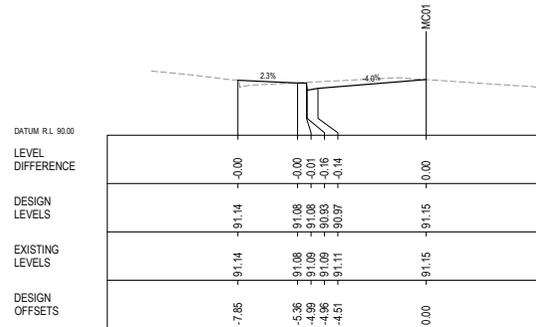
Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:100			
Checked	Project No.	Eng. No.	Issue		
VG	NSW209722	33	F		

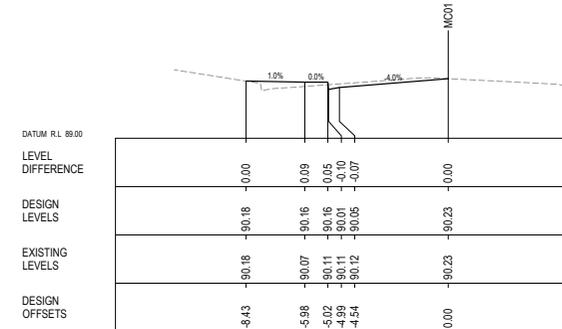
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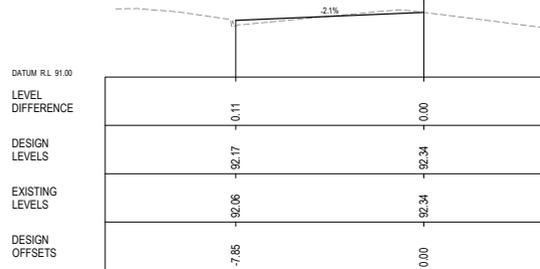
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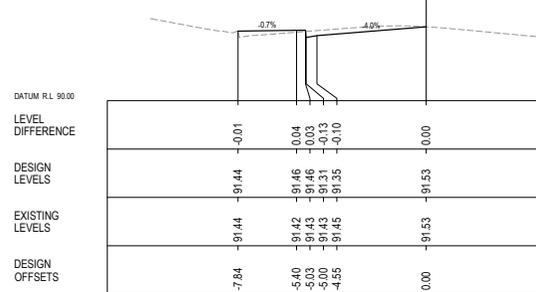
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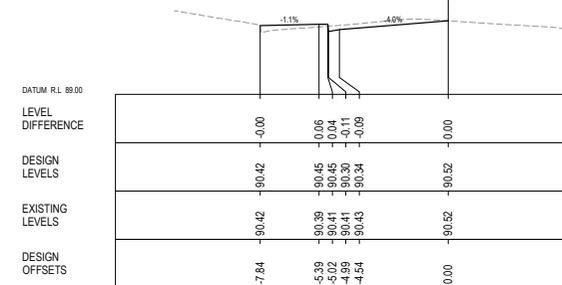
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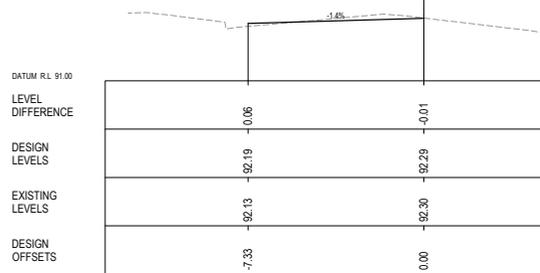
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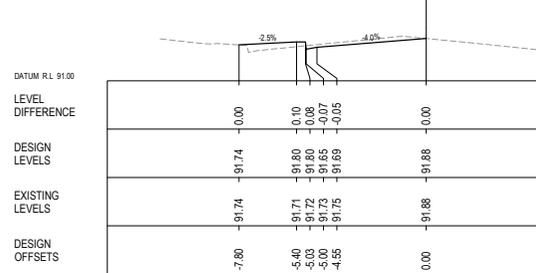
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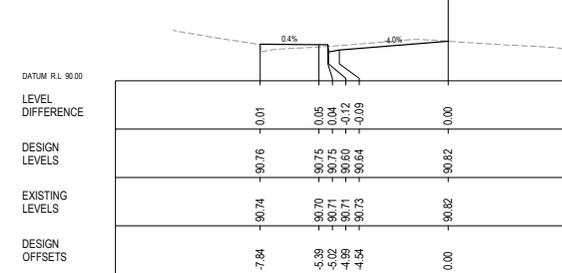
CH 110



CH 44.162



CH 70



CH 100



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F	ISSUE FOR TENDER	28.02.23	UF	VG	North
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG	
D	ISSUE FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	08.09.21	RP	VG	
Issue	Drawn	Checked	Approved		

Client  
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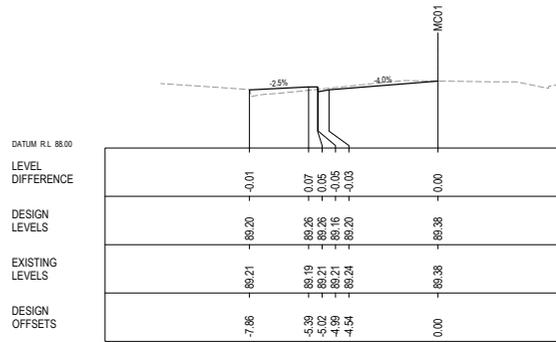
Architect  
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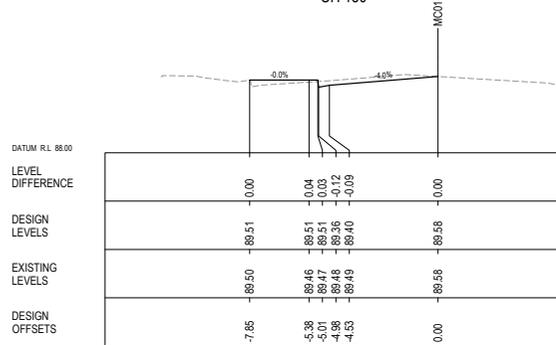
Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawing Title <b>ROAD CROSS SECTIONS SHEET 1</b>					
Drawn	Date	Scale	At	D.A. Check	Date
ROB	JUNE 2021	AS SHOWN			
Checked	Project No.	Draw No.	Issue		
VG	NSW200722		F		

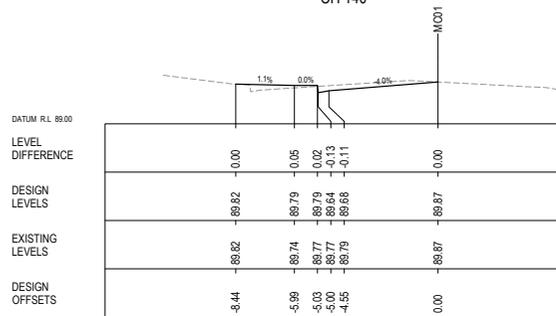
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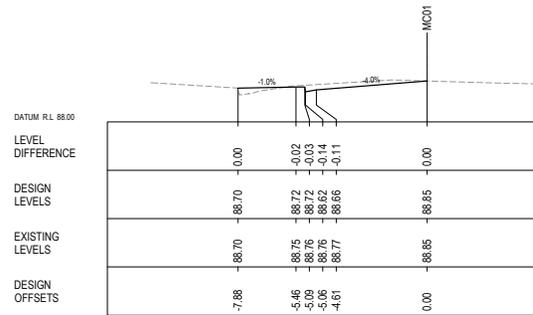
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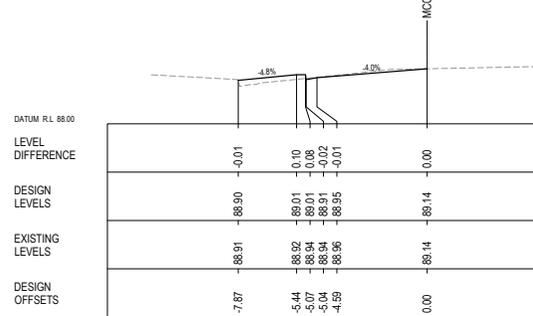
CH 140



CH 130



CH 166.614



CH 160



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F	ISSUE FOR TENDER	28.02.23	UF	VG	North
E	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG	
D	ISSUE FOR 100%	15.11.21	RD	VG	
C	ISSUE FOR INFORMATION	08.09.21	RP	VG	
Issue	Description	Date	Checked	Approved	

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Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawing Title <b>ROAD CROSS SECTIONS SHEET 2</b>					
Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	AS SHOWN			
Checked	Project No.	Eng. No.	Issue		
VG	NSW209722	2	F		

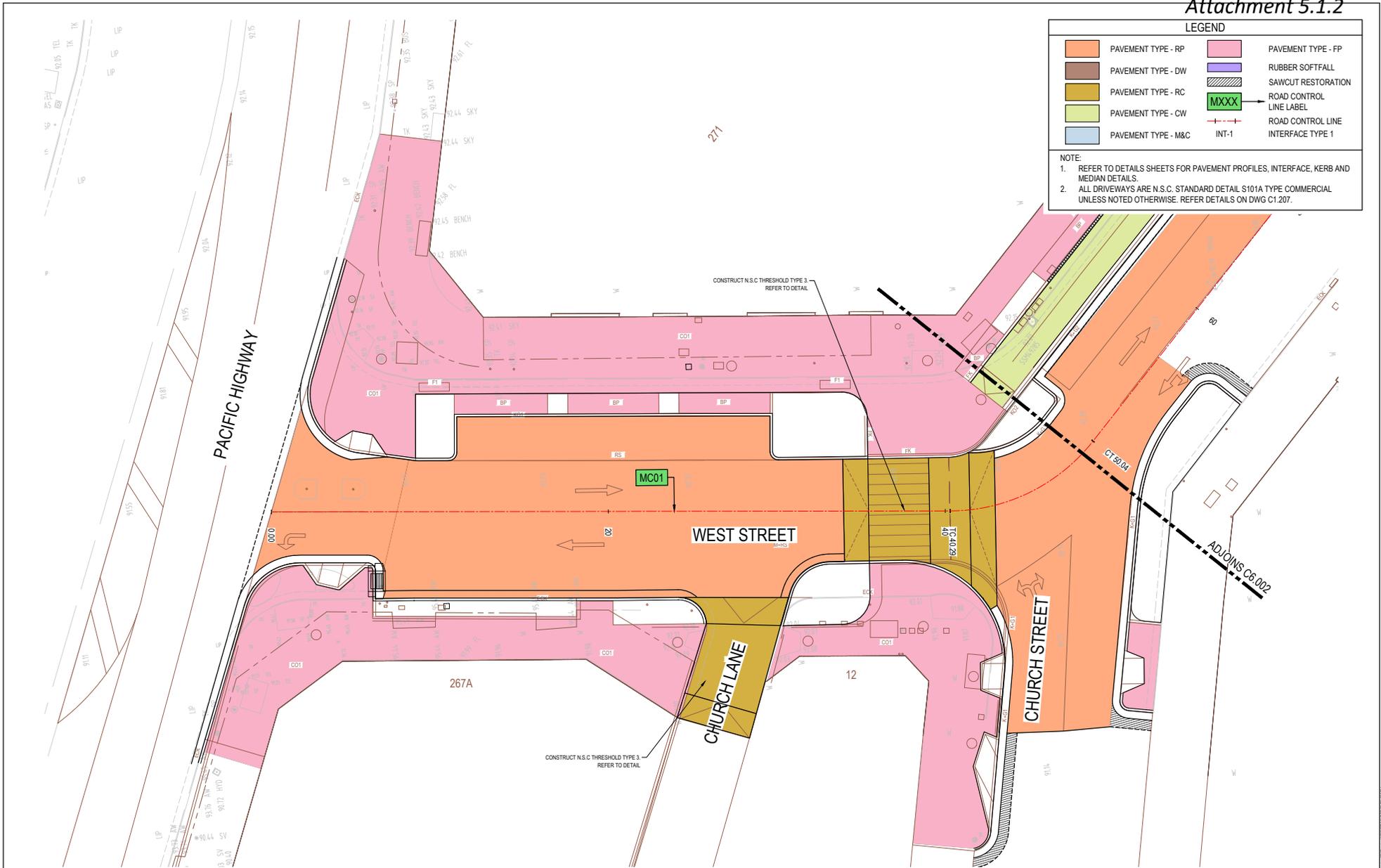
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**LEGEND**

	PAVEMENT TYPE - RP		PAVEMENT TYPE - FP
	PAVEMENT TYPE - DW		RUBBER SOFTFALL
	PAVEMENT TYPE - RC		SAWCUT RESTORATION
	PAVEMENT TYPE - CW		ROAD CONTROL LINE LABEL
	PAVEMENT TYPE - M&C		ROAD CONTROL LINE INTERFACE TYPE 1

**NOTE:**

- REFER TO DETAILS SHEETS FOR PAVEMENT PROFILES, INTERFACE, KERB AND MEDIAN DETAILS.
- ALL DRIVEWAYS ARE N.S.C. STANDARD DETAIL S101A TYPE COMMERCIAL UNLESS NOTED OTHERWISE. REFER DETAILS ON DWG C1.207.



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Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:100			
Checked	Project No.	Eng. No.	Issue		
VG	NSW209722		F		

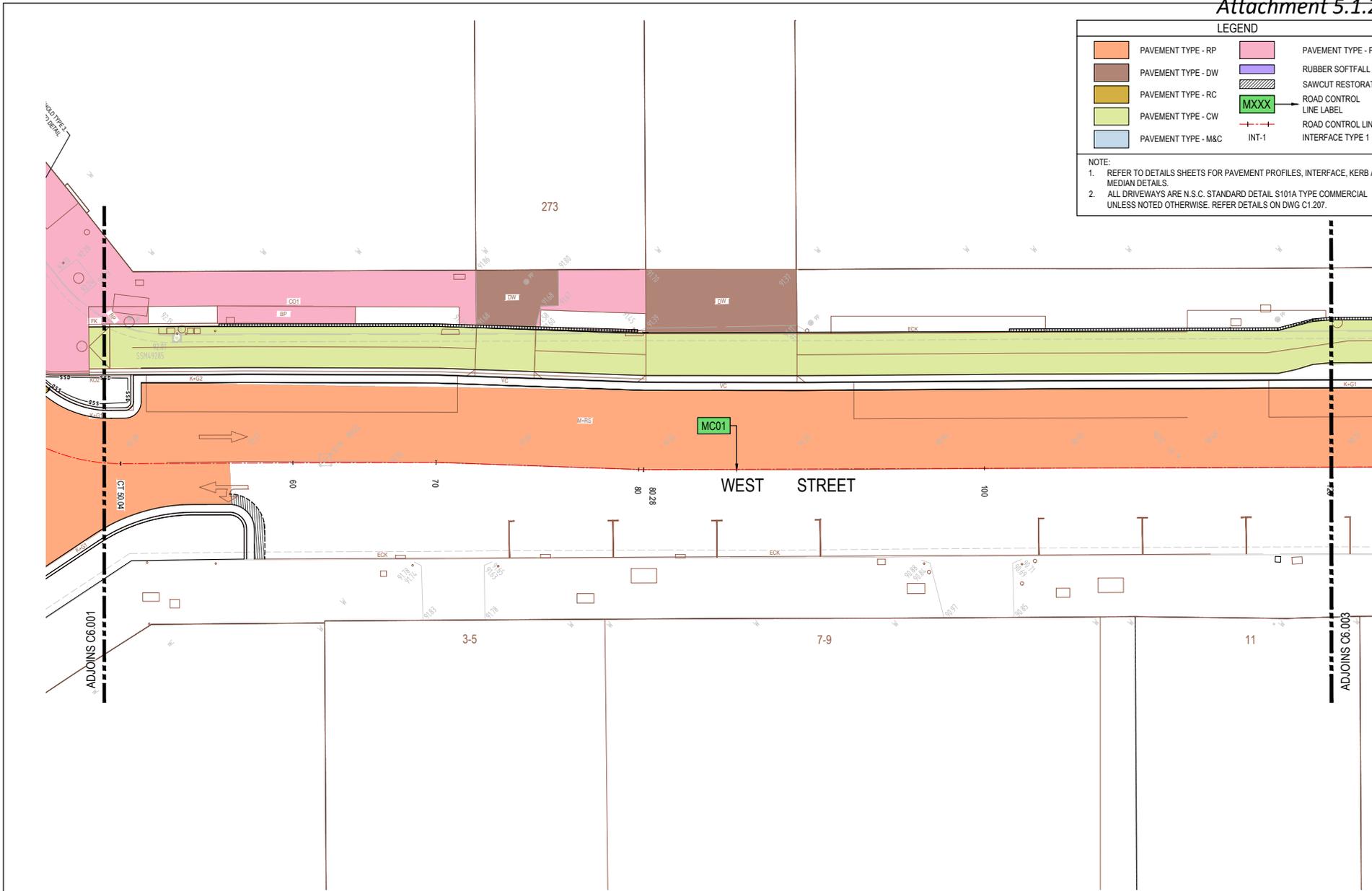
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**LEGEND**

	PAVEMENT TYPE - RP		PAVEMENT TYPE - FP
	PAVEMENT TYPE - DW		RUBBER SOFTFALL
	PAVEMENT TYPE - RC		SAWCUT RESTORATION
	PAVEMENT TYPE - CW		ROAD CONTROL LINE LABEL
	PAVEMENT TYPE - M&C		ROAD CONTROL LINE
			INTERFACE TYPE 1

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ROB	JUNE 2021	1:100			
Checked	Project No.				
VG	NSW209722				

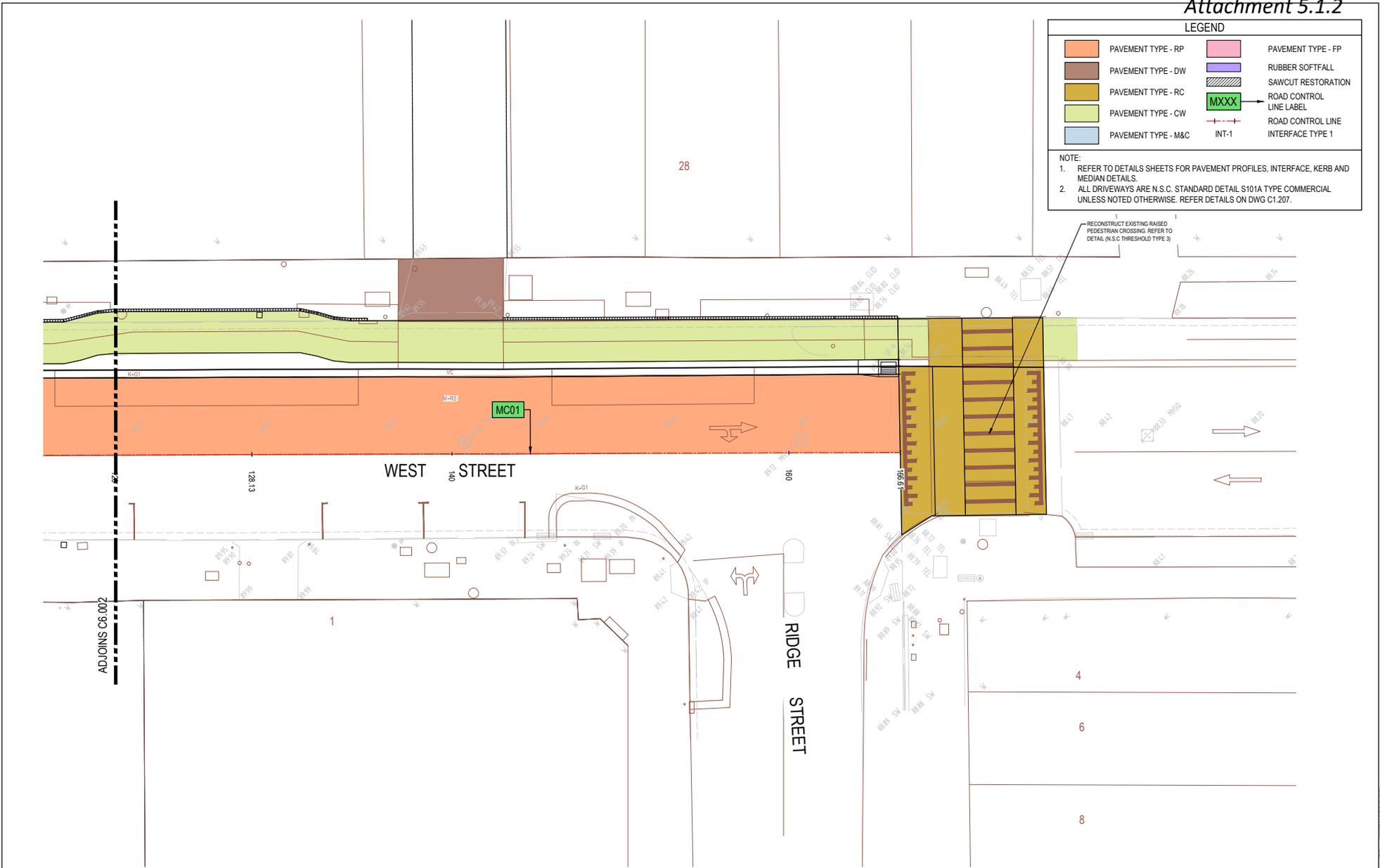
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**LEGEND**

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	PAVEMENT TYPE - DW		RUBBER SOFTFALL
	PAVEMENT TYPE - RC		SAWCUT RESTORATION
	PAVEMENT TYPE - CW		ROAD CONTROL LINE LABEL
	PAVEMENT TYPE - M&C		ROAD CONTROL LINE INTERFACE TYPE 1

**NOTE:**

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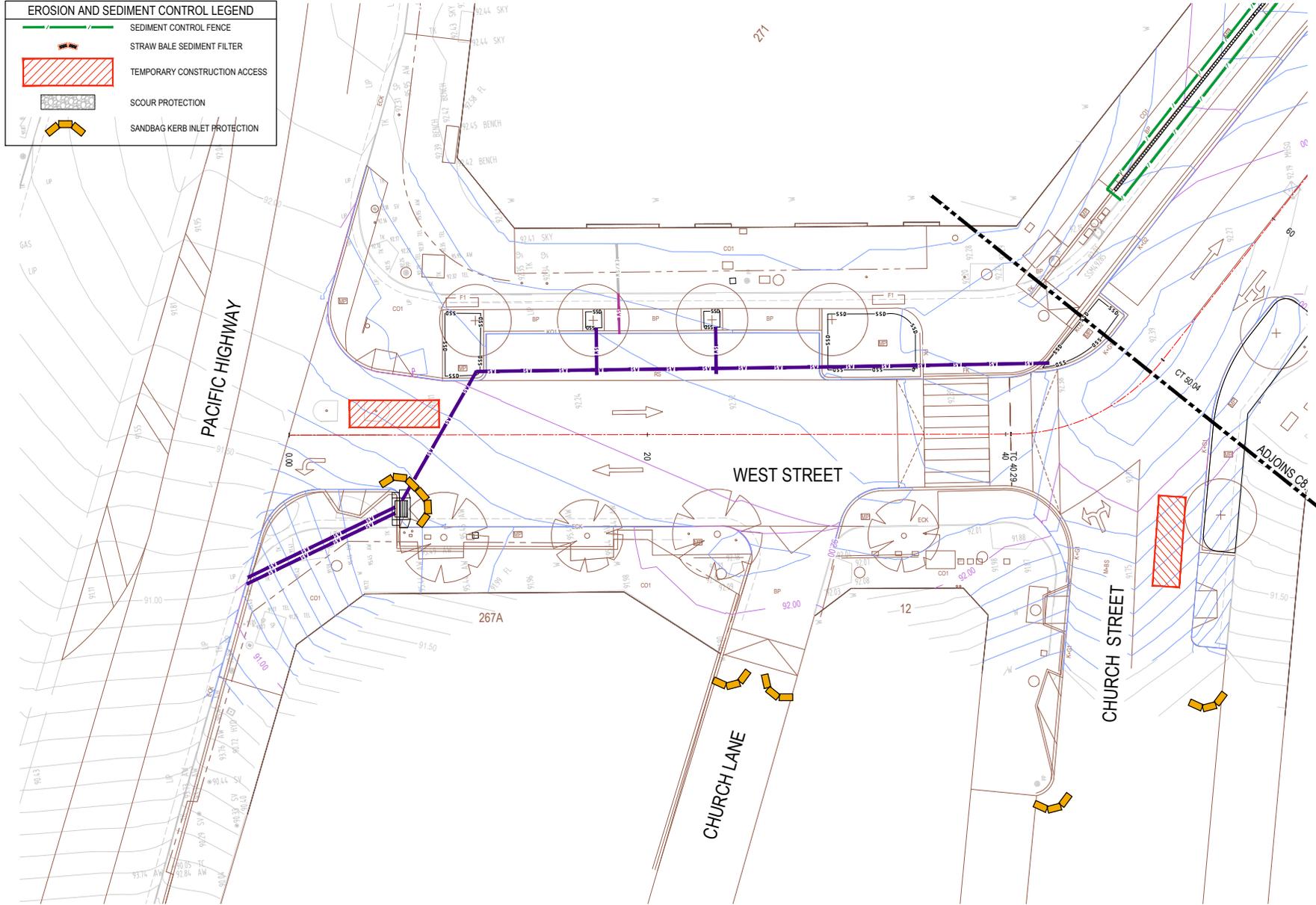
Drawing Title: PAVEMENT PLAN SHEET 3

Drawn	Date	Scale	A1	D.A. Check	Date
ROB	JUNE 2021	1:100			
VG					

NSW209722 of 31

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EROSION AND SEDIMENT CONTROL LEGEND	
	SEDIMENT CONTROL FENCE
	TEMPORARY CONSTRUCTION ACCESS
	SCOUR PROTECTION
	SANDBAG KERB INLET PROTECTION



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A	ISSUE FOR CLIENT REVIEW	23.02.23	UF	VG



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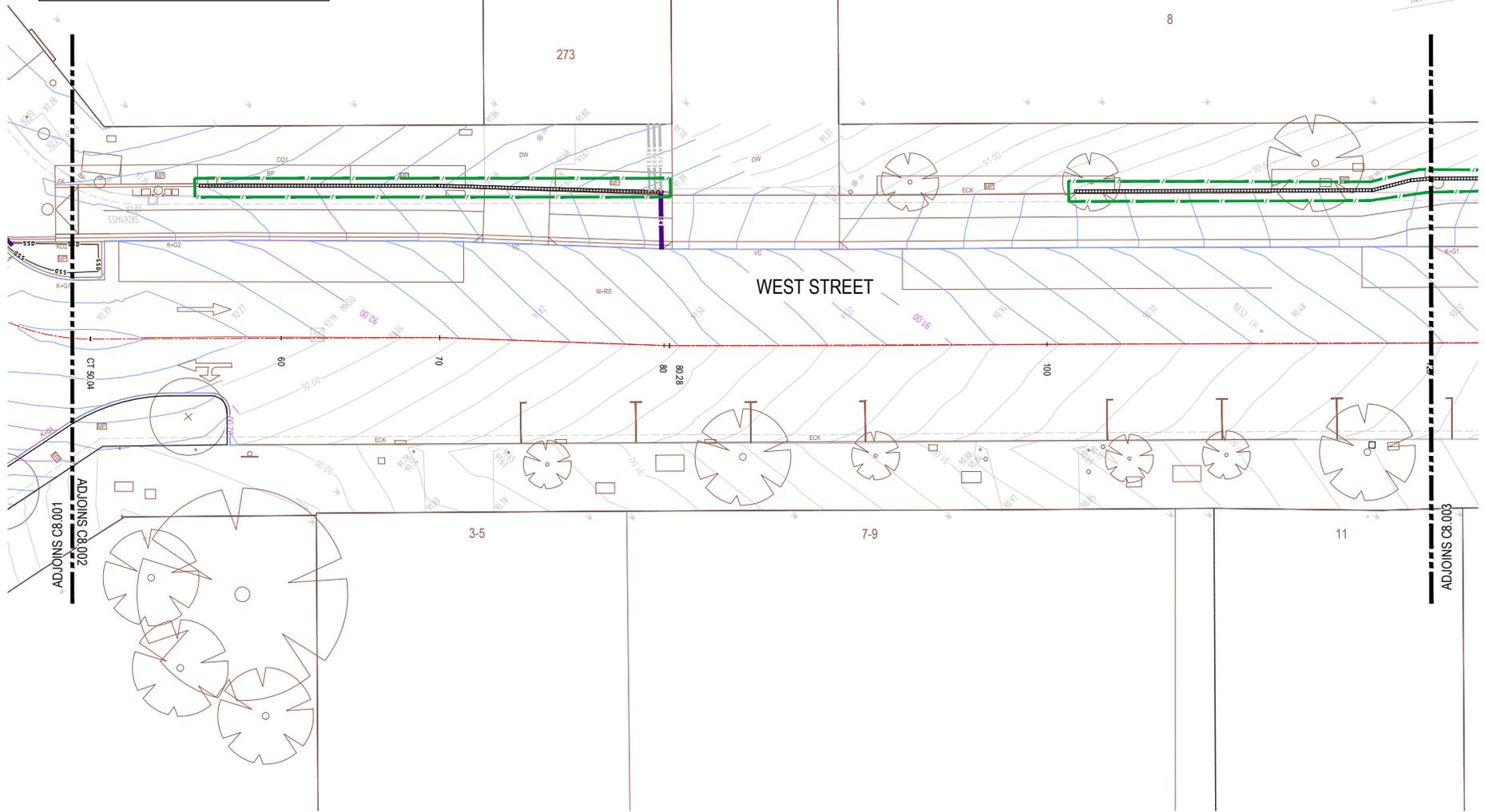
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Project  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawing Title				
SOIL EROSION AND SEDIMENT CONTROL PLAN SHEET 1				
Drawn	Date	Scale	A1	D.A. Check
RD	JUNE 2021	1:100		
Checked	Project No.	Eng. No.	Issue	
VG	NSW209322		B	

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EROSION AND SEDIMENT CONTROL LEGEND	
	SEDIMENT CONTROL FENCE
	STRAW BALE SEDIMENT FILTER
	TEMPORARY CONSTRUCTION ACCESS
	SCOUR PROTECTION
	SANDBAG KERB INLET PROTECTION



M.G.A. NORTH

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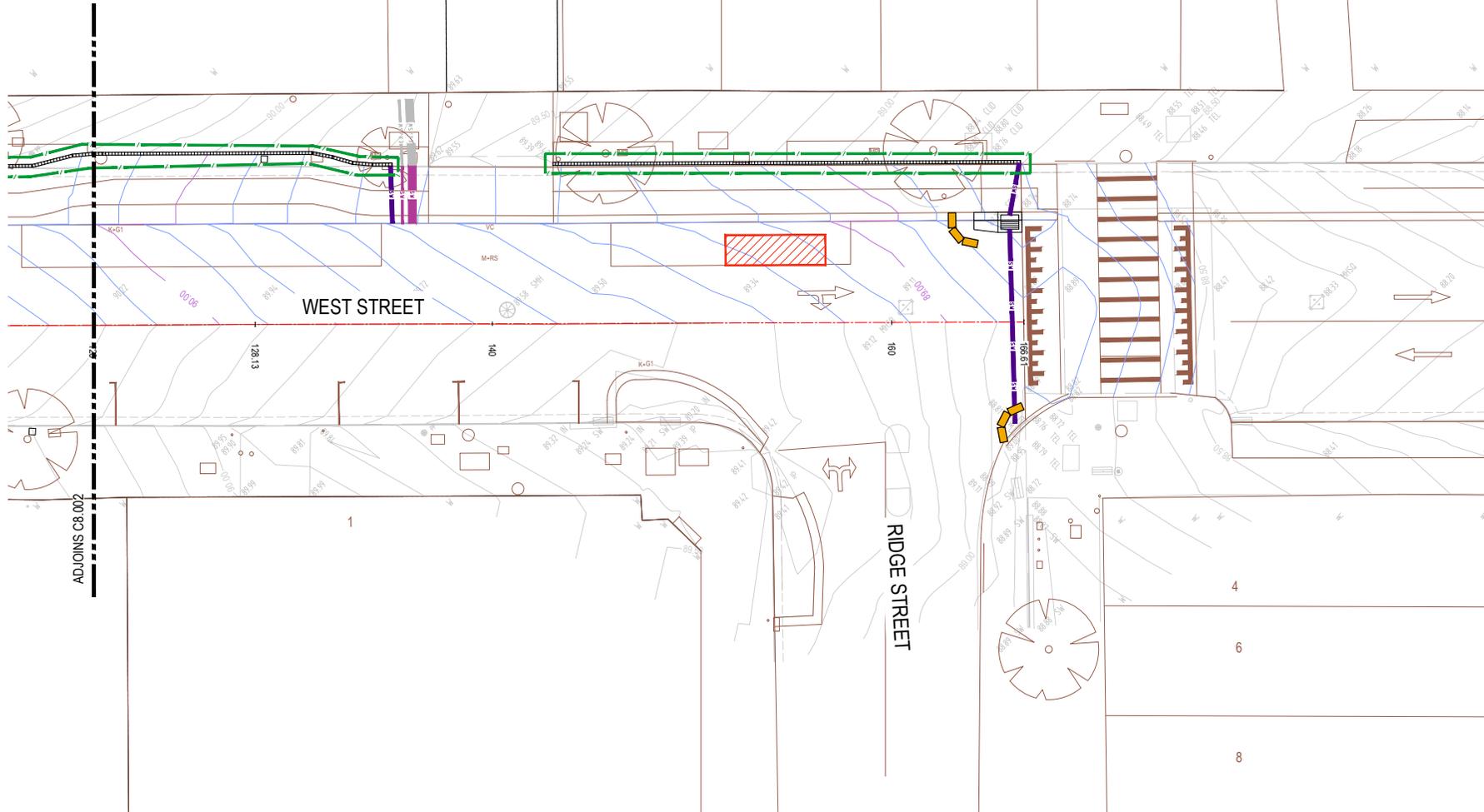
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Drawn	Date	Scale	AT	G.A. Check	Date
RD	JUNE 2021	1:100			
VG					

EROSION AND SEDIMENT CONTROL LEGEND	
	SEDIMENT CONTROL FENCE
	STRAW BALE SEDIMENT FILTER
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Drawing Title					
SOIL EROSION AND SEDIMENT CONTROL PLAN SHEET 3					
Drawn	Date	Scale	A1	D.A. Check	Date
RD	JUNE 2021	1:100			
Designed	Project No.	Eng. No.	Issue		
VG	NSW20072	103	B		

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**EROSION AND SEDIMENT CONTROL NOTES**

**GENERAL INSTRUCTIONS**

1. THIS SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERING PLANS RELATING TO THIS DEVELOPMENT.
2. CONTRACTORS WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS INSTRUCTED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE GUIDELINES OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION", DEPT OF HOUSING, 1998 (BLUE BOOK).
3. ALL SUBCONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN REDUCING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE AREAS.

**LAND DISTURBANCE INSTRUCTIONS**

1. DISTURBANCE TO BE NO FURTHER THAN 5 (PREFERABLY 2) METRES FROM THE EDGE OF ANY ESSENTIAL ENGINEERING ACTIVITY AS SHOWN ON APPROVED PLANS. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE ZONES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UP/SLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR MATERIALS.
2. ACCESS AREAS ARE TO BE LIMITED TO A MAXIMUM WIDTH OF 10 METRES THE SITE MANAGER WILL DETERMINE AND MARK THE LOCATION OF THESE ZONES ON-SITE. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE BOUNDARIES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UP/SLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR MATERIALS.
3. ENTRY TO LANDS NOT REQUIRED FOR CONSTRUCTION OR ACCESS IS PROHIBITED EXCEPT FOR ESSENTIAL THINNING OF PLANT GROWTH.
4. WORKS ARE TO PROCEED IN THE FOLLOWING SEQUENCE:
  - a. INSTALL ALL BARRIER AND SEDIMENT FENCING WHERE SHOWN ON THE PLAN
  - b. CONSTRUCT THE STABILISED SITE ACCESS
  - c. CONSTRUCT DIVERSION DRAINS AS REQUIRED
  - d. INSTALL MESH AND GRAVEL INLETS FOR ANY ADJACENT KERB INLETS
  - e. INSTALL GEOTEXTILE INLET FILTERS AROUND ANY ON-SITE DROP INLET PITS
  - f. CLEAR SITE AND STRIP STOCKPILE TOPSOIL LOCATIONS SHOWN ON THE PLAN
  - g. UNDERTAKE ALL ESSENTIAL CONSTRUCTION WORKS ENSURING THAT ROOF AND/OR PAVED AREA STORMWATER SYSTEMS ARE CONNECTED TO PERMANENT DRAINAGE AS SOON AS PRACTICABLE
  - h. GRADE LOT AREAS TO FINAL GRADES AND APPLY PERMANENT STABILISATION (LANDSCAPING) WITHIN 20 DAYS OF COMPLETION OF CONSTRUCTION WORKS
  - i. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER THE PERMANENT LANDSCAPING HAS BEEN COMPLETED.
5. ENSURE THAT SLOPE LENGTHS DO NOT EXCEED 80 METRES WHERE PRACTICABLE. SLOPE LENGTHS ARE DETERMINED BY SILTATION FENCING AND CATCH DRAIN SPACING. 6. ON COMPLETION OF MAJOR WORKS LEAVE DISTURBED LANDS WITH A SCARPED SURFACE TO ENCOURAGE WATER INFILTRATION AND ASSIST WITH EROSION CONTROL LATER.
6. CONTRACTOR TO MANAGE THE ALIGNMENT OF CATCH DRAINS ON SITE AND TO ENSURE THAT CATCH DRAINS INTERCEPT THE SITE SURFACE RUNOFF AND DIRECT THE RUNOFF TOWARDS THE SEDIMENTATION BASINS.

**SITE INSPECTION AND MAINTENANCE INSTRUCTIONS**

1. THE SITE SUPERINTENDENT WILL INSPECT THE SITE AT LEAST WEEKLY AND AT THE CONCLUSION OF EVERY STORM EVENT TO:
  - a. ENSURE THAT DRAINS OPERATE PROPERLY AND TO EFFECT ANY NECESSARY REPAIRS
  - b. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5 METRES FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS AND PAVED AREAS
  - c. REMOVE TRAPPED SEDIMENT WHENEVER THE DESIGN CAPACITY OF THAT STRUCTURE HAS BEEN EXCEEDED
  - d. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS NECESSARY
  - e. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS. MAKE ONGOING CHANGES TO THE PLAN WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECT TO CHANGES IN CONDITIONS ON THE WORK SITE OR ELSEWHERE IN THE CATCHMENT.
  - f. MAINTAIN EROSION AND SEDIMENT CONTROL STRUCTURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
2. THE SITE SUPERINTENDENT WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:
  - a. THE VOLUME AND INTENSITY OF ANY RAINFALL EVENTS
  - b. THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS
  - c. THE CONDITION OF VEGETATION AND ANY NEED TO IRRIGATE
  - d. THE NEED FOR DUST PREVENTION STRATEGIES
  - e. ANY REMEDIAL WORKS TO BE UNDERTAKEN. THE LOGBOOK WILL BE KEPT ON SITE AND MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF THE WORKS.

**EROSION AND SEDIMENT CONTROL NOTES**

**SEDIMENT CONTROL INSTRUCTIONS**

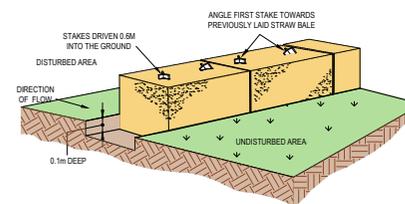
1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN ON THE PLAN AND ELSEWHERE AT THE DISCRETION OF THE SITE SUPERINTENDENT TO CONTAIN SOIL AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT FENCES WILL NOT HAVE CATCHMENT AREAS EXCEEDING 900 SQUARE METRES AND HAVE A STORAGE DEPTH OF AT LEAST 0.6 METRES.
3. SEDIMENT REMOVED FROM ANY TRAPPING DEVICES WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS CANNOT OCCUR.
4. STOCKPILES ARE NOT TO BE LOCATED WITHIN 5 METRES OF HAZARD AREAS INCLUDING AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS AND DRIVEWAYS.
5. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR WATER HAS BEEN TREATED BY AN APPROVED DEVICE. 6. TEMPORARY SEDIMENT TRAPS WILL REMAIN IN PLACE UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
6. ACCESS TO SITES SHOULD BE STABILISED TO REDUCE THE LIKELIHOOD OF VEHICLES TRACKING SOIL MATERIALS ONTO PUBLIC ROADS AND ENSURE ALL WEATHER ENTRYPOINTS.

**SOIL EROSION CONTROL INSTRUCTIONS**

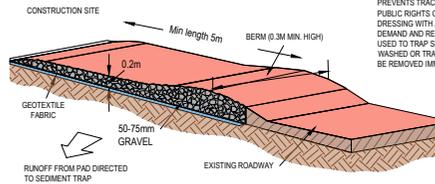
1. EARTH BATTERS WILL BE CONSTRUCTED WITH AS LOW A GRADIENT AS PRACTICABLE BUT NO STEEPER, UNLESS OTHERWISE NOTED, THAN:
  - a. 2%:1(V) WHERE SLOPE LENGTH LESS THAN 12 METRES
  - b. 2.5%:1(V) WHERE SLOPE LENGTH BETWEEN 12 AND 16 METRES
  - c. 3%:1(V) WHERE SLOPE LENGTH BETWEEN 16 AND 20 METRES
  - d. 4%:1(V) WHERE SLOPE LENGTH GREATER THAN 20 METRES.
2. ALL WATERWAYS, DRAINS, SPILLWAYS AND THEIR OUTLETS WILL BE CONSTRUCTED TO BE STABLE IN AT LEAST THE 120 YEAR ARI, TIME OF CONCENTRATION STORM EVENT.
3. WATERWAYS AND OTHER AREAS SUBJECT TO CONCENTRATED FLOWS AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND COVER C FACTOR OF 0.05 (70% GROUND COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION. FLOW VELOCITIES ARE TO BE LIMITED TO THOSE SHOWN IN TABLE 5.1 OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION", DEPT OF HOUSING, 1998 (BLUE BOOK). FOOT AND VEHICULAR TRAFFIC WILL BE PROHIBITED IN THESE AREAS.
4. STOCKPILES AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND COVER C FACTOR OF 0.1 (60% GROUND COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION.
5. ALL LANDS, INCLUDING WATERWAYS AND STOCKPILES, DURING CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND COVER C FACTOR OF 0.15 (50% GROUND COVER) WITHIN 20 WORKING DAYS FROM INACTIVITY EVEN THOUGH WORKS MAY CONTINUE LATER.
6. FOR AREAS OF SHEET FLOW USE THE FOLLOWING GROUND COVER PLANT SPECIES FOR TEMPORARY COVER, JAPANESE MILLET 20 KG/HA AND OATS 20 KG/HA.
7. PERMANENT REHABILITATION OF LANDS AFTER CONSTRUCTION WILL ACHIEVE A GROUND COVER C FACTOR OF LESS THAN 0.1 AND LESS THAN 0.05 WITHIN 60 DAYS. NEWLY PLANTED LANDS WILL BE WATERED REGULARLY UNTIL AN EFFECTIVE COVER IS ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY. FOLLOW-UP SEED AND FERTILISER WILL BE APPLIED AS NECESSARY.
8. RE-VEGETATION SHOULD BE AIMED AT RE-ESTABLISHING NATURAL SPECIES. NATURAL SURFACE SOILS SHOULD BE REPLACED AND NON-PERSISTANT ANNUAL COVER CROPS SHOULD BE USED.

**WASTE CONTROL INSTRUCTIONS**

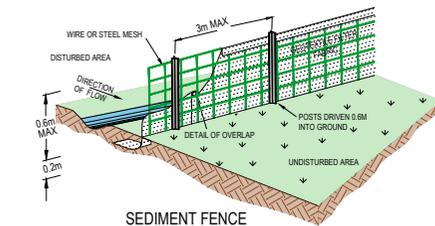
1. ACCEPTABLE BINS WILL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHING, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES WILL BE PROVIDED AT LEAST WEEKLY. DISPOSAL OF WASTE WILL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.
2. ALL POSSIBLE POLLUTANT MATERIALS ARE TO BE STORED WELL CLEAR OF ANY POORLY DRAINED AREAS, FLOOD PRONE AREAS, STREAMBANKS, CHANNELS AND STORMWATER DRAINAGE AREAS. STORE SUCH MATERIALS IN A DESIGNATED AREA UNDER COVER WHERE POSSIBLE AND WITHIN CONTAMINATION BOUNDS.
3. ALL SITE STAFF AND SUB-CONTRACTORS ARE TO BE INFORMED OF THEIR OBLIGATION TO USE WASTE CONTROL FACILITIES PROVIDED.
4. ANY DE-WATERING ACTIVITIES ARE TO BE CLOSELY MONITORED TO ENSURE THAT WATER IS NOT POLLUTED BY SEDIMENT, TOXIC MATERIALS OR PETROLEUM PRODUCTS.
5. PROVIDE DESIGNATED VEHICULAR WASHDOWN AND MAINTENANCE AREAS WHICH ARE TO HAVE CONTAMINATION BOUNDS.



**STRAW BALE SEDIMENT FILTER (ALTERNATE)**



**TEMPORARY CONSTRUCTION EXIT**



**SEDIMENT FENCE**

**MAINTENANCE**  
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAROUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY.

**EROSION AND SEDIMENT CONTROL NOTES**

**IMPORTANT NOTES:**

1. THIS DRAWINGS IS FOR GUIDANCE PURPOSES ONLY - THE SOIL AND EROSION CONTROLS ARE INDICATIVE AND REMAIN SUBJECT TO CONSTRUCTION METHODOLOGY - THE CONTRACTOR SHALL AT ALL TIMES REMAIN RESPONSIBLE FOR COMPLIANCE WITH ALL LAWS AND REGULATIONS PERTAINING TO SAFETY AND PROTECTION OF ENVIRONMENT
2. ALL SOIL AND EROSION CONTROLS TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH COUNCIL GUIDELINES AND CONDITIONS AND THE CURRENT NSW DEPT OF CONSERVATION AND LAND MANAGEMENT "URBAN EROSION AND SEDIMENT CONTROL" HANDBOOK
3. CONTRACTOR TO ENSURE THAT SEDIMENT IS NOT ALLOWED TO ENTER ADJACENT LOTS TO DOWNSTREAM STORMWATER SYSTEMS. ANY DAMAGE WHATSOEVER CAUSED THROUGH BREACH OF THIS CONDITION BY THE CONTRACTOR SHALL BE RECTIFIED SOLELY AT THE CONTRACTORS COST
4. NO SEDIMENT IS TO BE DEPOSITED ON EXISTING PUBLIC ROADS. CONTRACTOR TO ARRANGE SWEEPER VACUUM TRUCK TO REMOVE ANY SEDIMENT PRIOR TO END OF DAY OR NEXT RAINFALL EVENT WHICHEVER COMES FIRST.

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Issue	Date	By	Approved
B	28.02.23	UF	VG
A	23.02.23	UF	VG

Traffic Committee Meeting - 17 March 2023 Agenda

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**Project**  
**WEST STREET ACTIVE TRANSPORT**  
PACIFIC HIGHWAY TO RIDGE STREET  
NORTH SYDNEY, NSW 2060

Drawn	Date	Scale	AT	D.A. Check	Date
RD	JUNE 2021	NOT TO SCALE			
Checked					
VG					

NSW 200722  
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NOT FOR CONSTRUCTION