

17th November 2022

CIVIL ENGINEERING SERVICES

Wee Waa High School Earthworks Management Plan





DOCUMENT CONTROL

Rev #	Date	Description of Change	Status
05	17 th November 2022	Updated to include additional CV	Final
04	16 th November 2022	Update to suit SINSW comments	Superseded
03	8 th November 2022	Revised	Superseded
02	25th October 2022	Revised	Superseded
01	21st October 2022	Issue for Review	Superseded

APPROVALS

Rev#	Author	Reviewer	Approver
05	R.XU Engineer – Civil and Water Engineering	James Georgiades Team Leader – Civil and Water Engineering	
04	R.XU Engineer – Civil and Water Engineering	James Georgiades Team Leader – Civil and Water Engineering	
03	R.XU Engineer – Civil and Water Engineering	James Georgiades Team Leader – Civil and Water Engineering	
02	R.XU Engineer – Civil and Water Engineering	James Georgiades Team Leader – Civil and Water Engineering	
01	R.XU Engineer – Civil and Water Engineering		

PREPARED BY:

WARREN SMITH CONSULTING ENGINEERS PTY LTD

ACN 002 197 088 **ABN** 36 300 430 126 Level 9, 233 Castlereagh Street Sydney 2000 NSW Australia **T** 02 9299 1312 **F** 02 9290 1295



PREPARED FOR:

BUILT

Level 4/185 Clarence Street, Sydney NSW 2000, Australia T 02 8332 4111 E: teamadmin@built.com.au





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CIVIL ENGINEERING SERVICES

1. INTRODUCTION

Warren Smith Consulting Engineers (WSCE) has been engaged by Built to prepare the SSDA Compliance Letter in support of the SSDA submission for the proposed development at 105-107 Mitchell Street, Wee Waa NSW 2388.

WSCE has undertaken design and documentation including the following civil engineering services:

• Earthworks Management Plan

2. DESIGN DOCUMENTATION

The following WSCE civil design documentation (Job No: 7490000, Title: Wee Waa High School Main Works) form part of the SSDA submission:

Drawing No.	Title	Rev.#
C3.01	Bulk Earthworks Plan – Ultimate Scenario	А
C3.02	Bulk Earthworks Cut & Fill Plan – Ultimate Scenario	Α
C3.11	Bulk Earthworks Longitudinal Sections – Ultimate Scenario	Α
C3.21	Bulk Earthworks Plan - Interim Scenario	Α
C3.22	Bulk Earthworks Cut & Fill Plan - Interim Scenario	Α
C3.31	Bulk Earthworks Longitudinal Sections - Interim Scenario	Α



3. SSD CONDITIONS MATRIX - SSD 21854025

Condition No.	Description	Reference
B44 (a)	Prior to the commencement of any earthworks, the Applicant must engage a suitably qualified practising Engineer to design an Earthworks Management Plan to the satisfaction of the Certifier. The Earthworks Management Plan must be prepared in consultation with Council and include calculations and plans that: A. Detail the true cut to fill balance.	Section 4 Drawing C3.01 & C30.2 Schedule 2 (CVs) Schedule 3 (Consultation)
B44 (b)	B. identify the volume of material to be removed from the site and where this material is to be placed/spread.	Drawing C3.01 & C30.2
B44 (c)	C. identify the volume of material that will be required to be imported to the site and where this material (meeting the specifications identified in the report) will be sourced	Section 5 Drawing C3.01 & C30.2
B44 (d)	D. it should be noted that Council will not be able to assist in the provision of suitable quarry material as this is already in high-demand with an increasing road maintenance program due to extreme flooding.	Section 5
B44 (e)	E. Given the dispersive nature of the soils on the site, appropriate measures should be put in place to ensure that sediment cannot be tracked onto adjacent roadways	Section 6, Condition B24 Soil and Water Management Plan



4. Cut to Fill Activities

A bulk earthworks plan has been prepared in consultation with council and includes calculations and plans that detail the true cut-to-fill balance. This condition is then satisfied. Refer to WSCE drawing C3.01 and C3.02 for further information. It is noted bulk earthworks plans will be updated over time to suit future staging works.

The volume of material has been identified and the temporary stockpiles are to be placed on the oval and reused below the proposed suspended buildings.

Drawing C3.02 "Bulk Earthworks Cut to Fill Plan" Nominates the cut as 7,660m3 of material and 7,400m3 of fill material.

5. Import / Removal of Material

Import material is to be obtained from the site via. a borrow pit and free-issued material from other Department of Education Projects within the locality. This material is coming directly from the Departments stormwater upgrade works that are occurring from the boundary of the school site towards the Wee Waa Levy and beyond to the Namoi River. Geotechnical advice will be provided to confirm the suitability of any additional import material obtained off-site.

Any additional material noted as for removal from site, will be stockpiled on site and used for additional Department of Education Projects within the Narrabri Shire Council area.

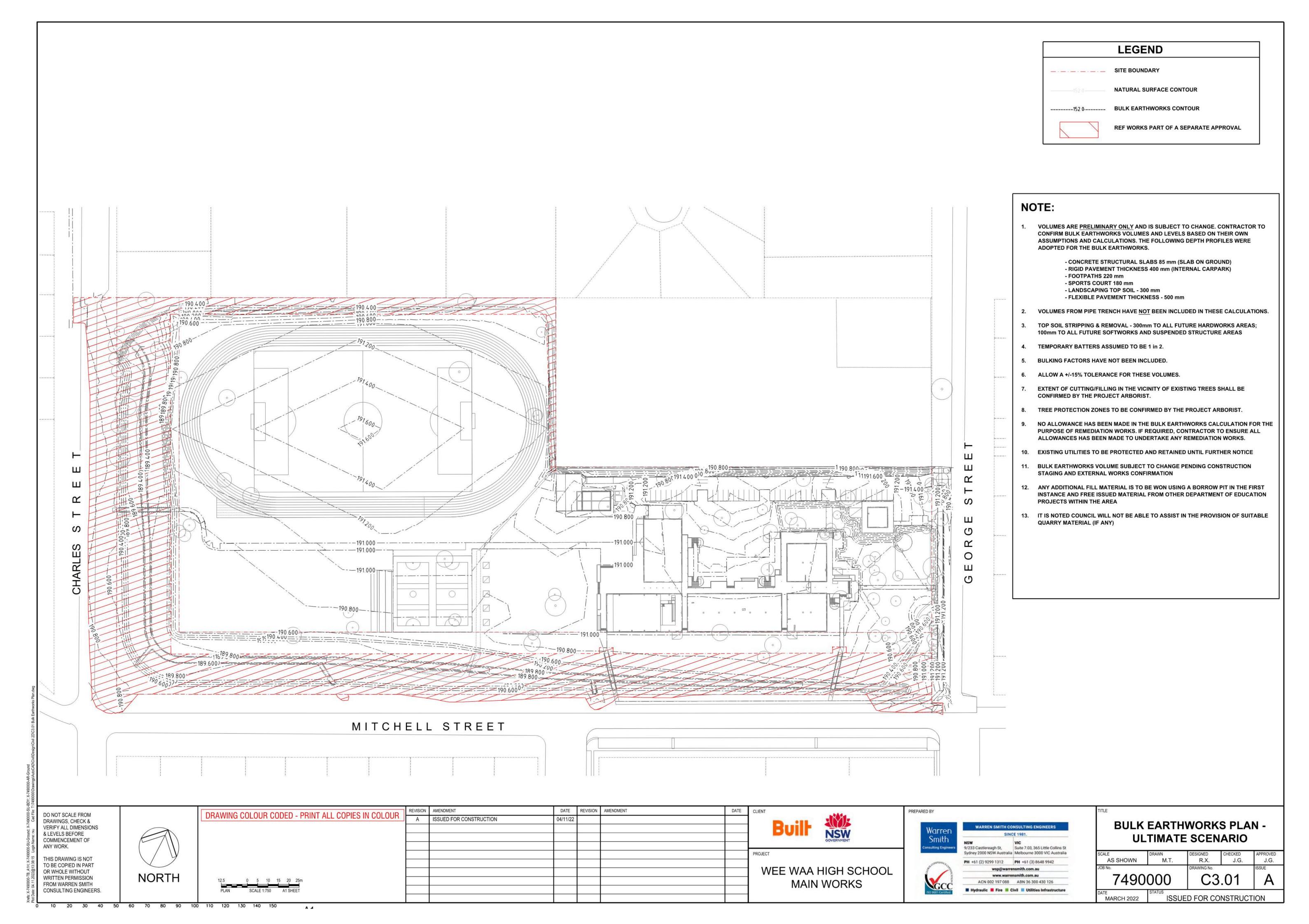
It is acknowledged that the council will not be able to assist in the provision of quarry materials.

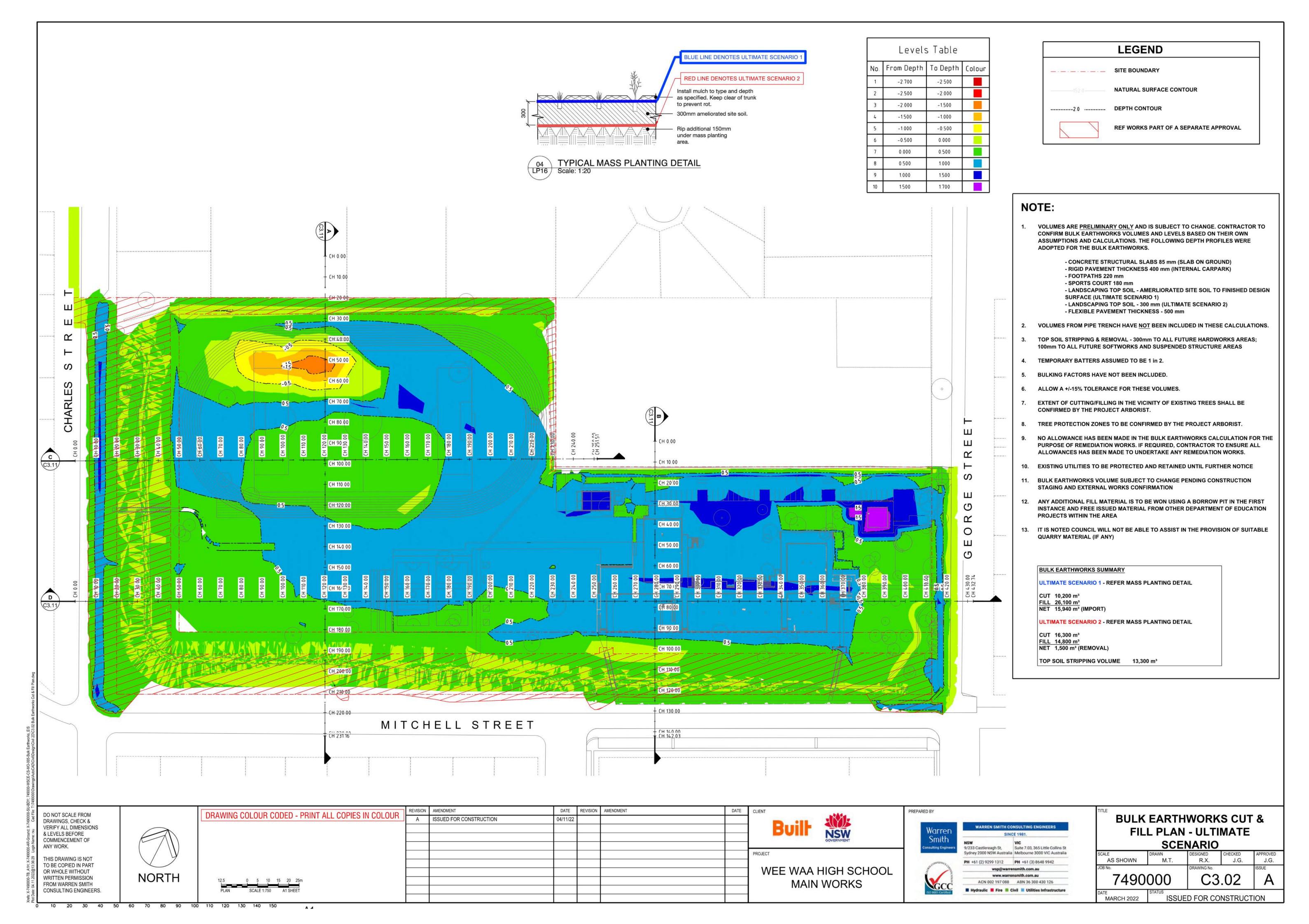
6. Sediment Controls

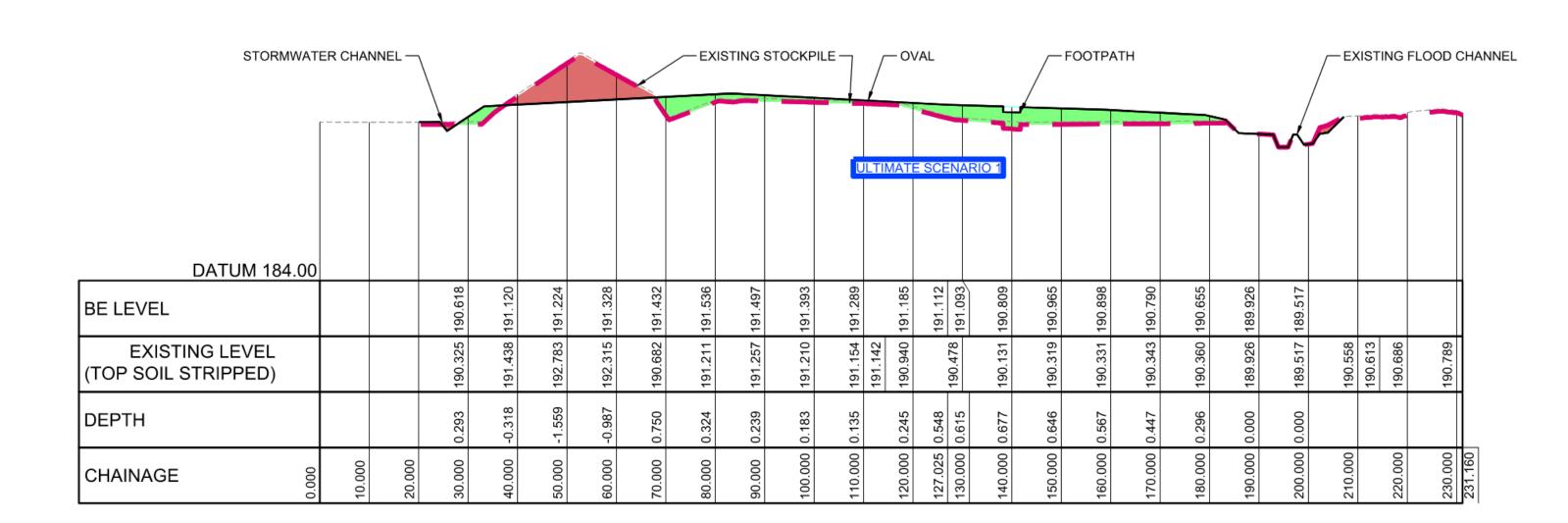
Refer to Condition B24 items A to F for further details on the Sediment and Erosion controls in place for the site, particularly drawing C2.02 noting a Vehicle Shaker Grid to be located at the Construction Vehicle Entry / Exit point of the site. This has been developed in accordance with the "Blue Book" to ensure that the site sediments cannot be tracked onto adjacent roadways.

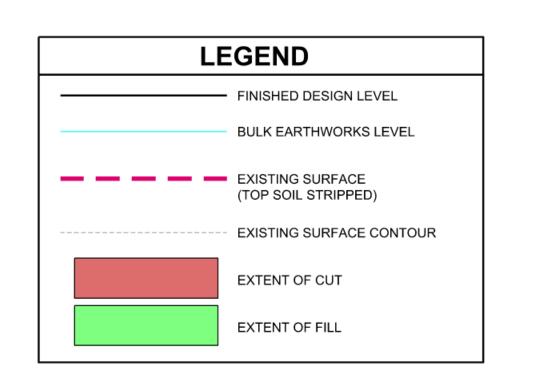


SCHEDULE 1 – WSCE CIVIL DRAWINGS

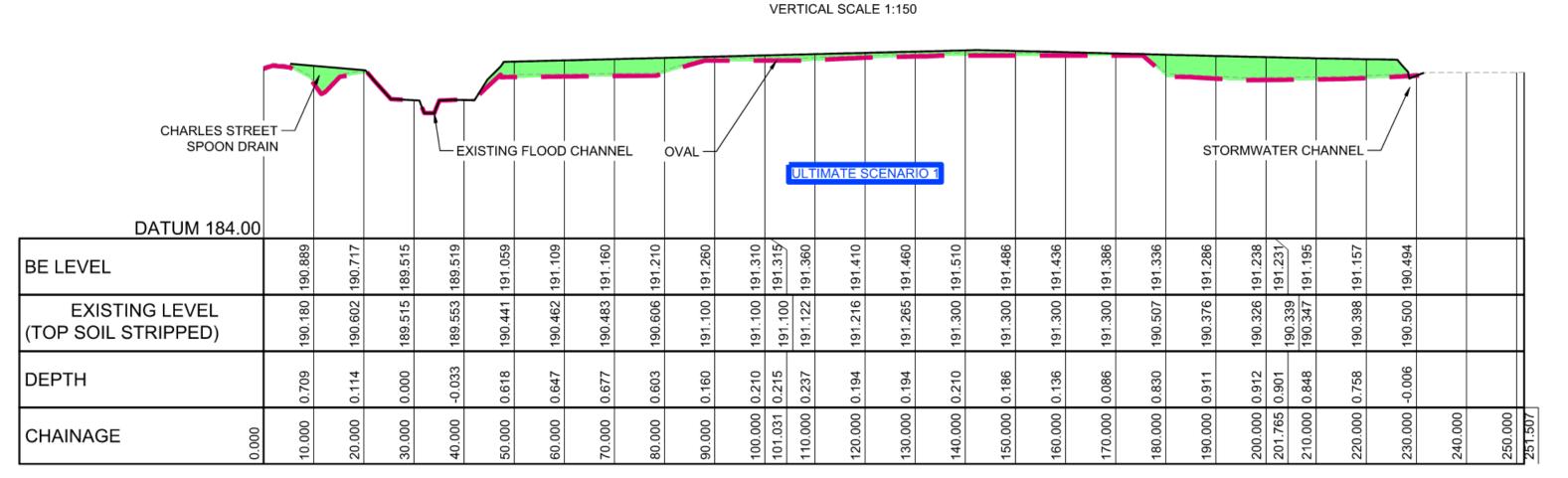


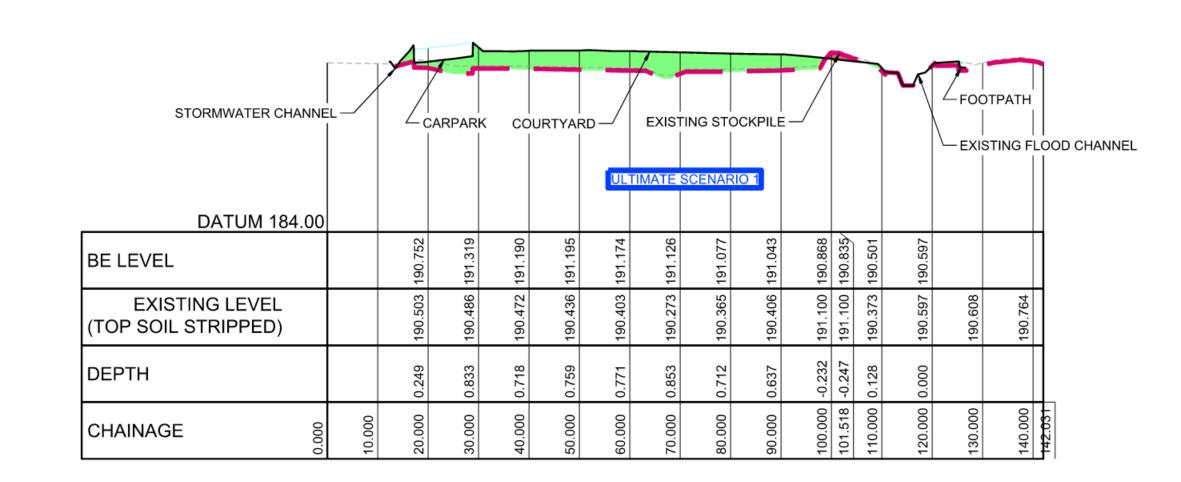






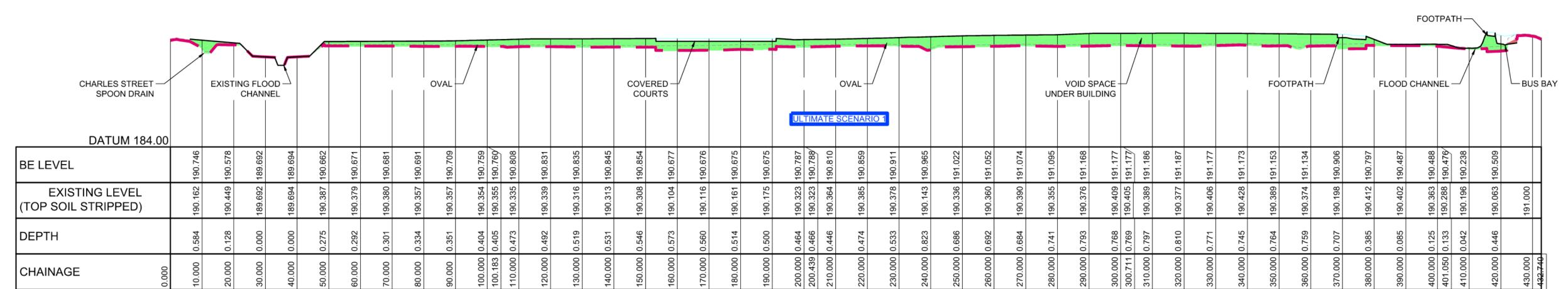
BE-A LONGITUDINAL SECTION HORIZONTAL SCALE 1:750





BE-C LONGITUDINAL SECTION HORIZONTAL SCALE 1:750 VERTICAL SCALE 1:150

BE-B LONGITUDINAL SECTION HORIZONTAL SCALE 1:750 VERTICAL SCALE 1:150



BE-D LONGITUDINAL SECTION HORIZONTAL SCALE 1:750

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WARREN SMITH CONSULTING ENGINEERS **SINCE 1981** 9/233 Castlereagh St, Suite 7.03, 365 Little Collins St Sydney 2000 NSW Australia Melbourne 3000 VIC Australia PH +61 (2) 9299 1312 PH +61 (3) 8648 9942

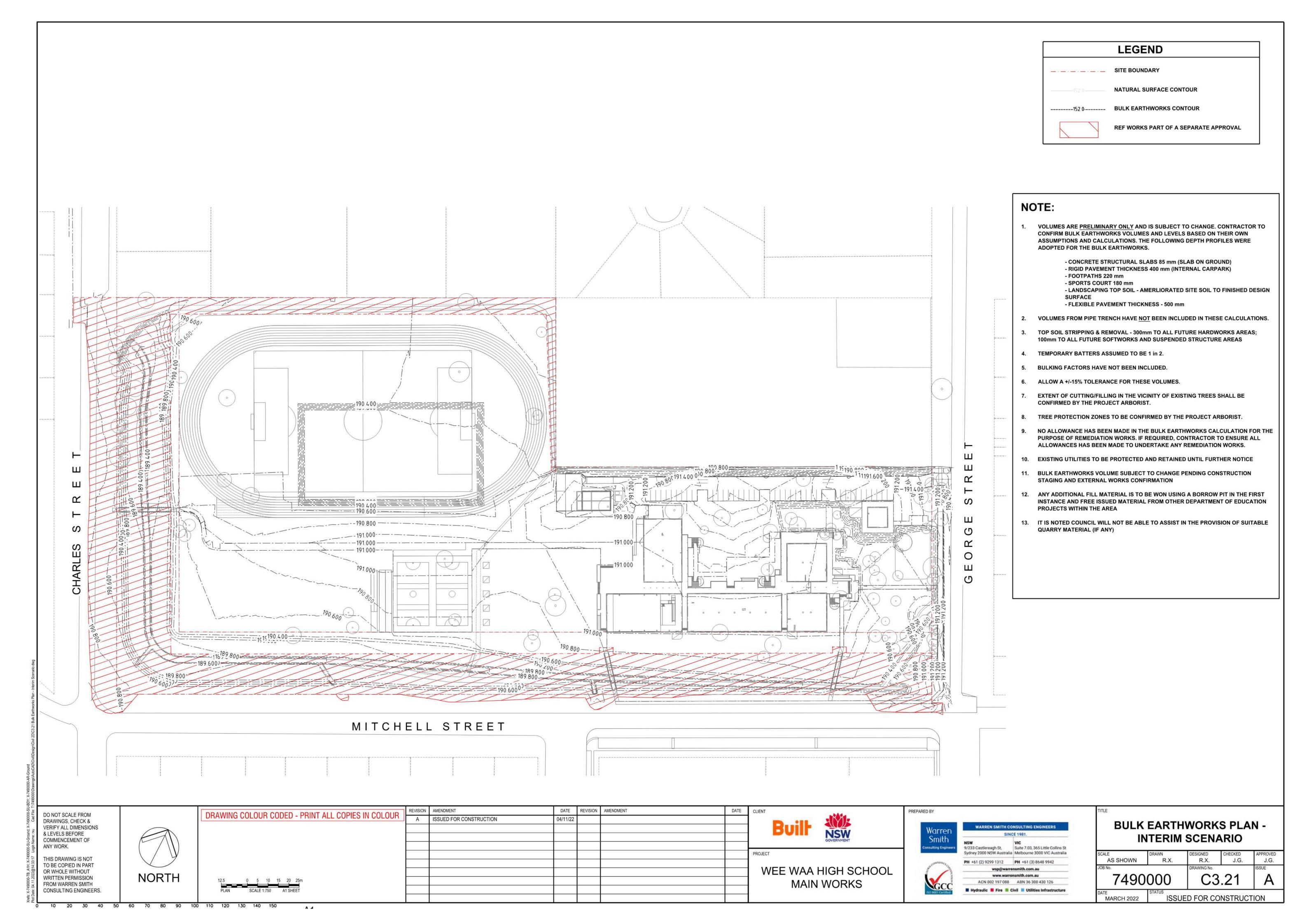
www.warrensmith.com.au ACN 002 197 088 ABN 36 300 430 126 ■ Hydraulic ■ Fire ■ Civil ■ Utilities Infrastructure

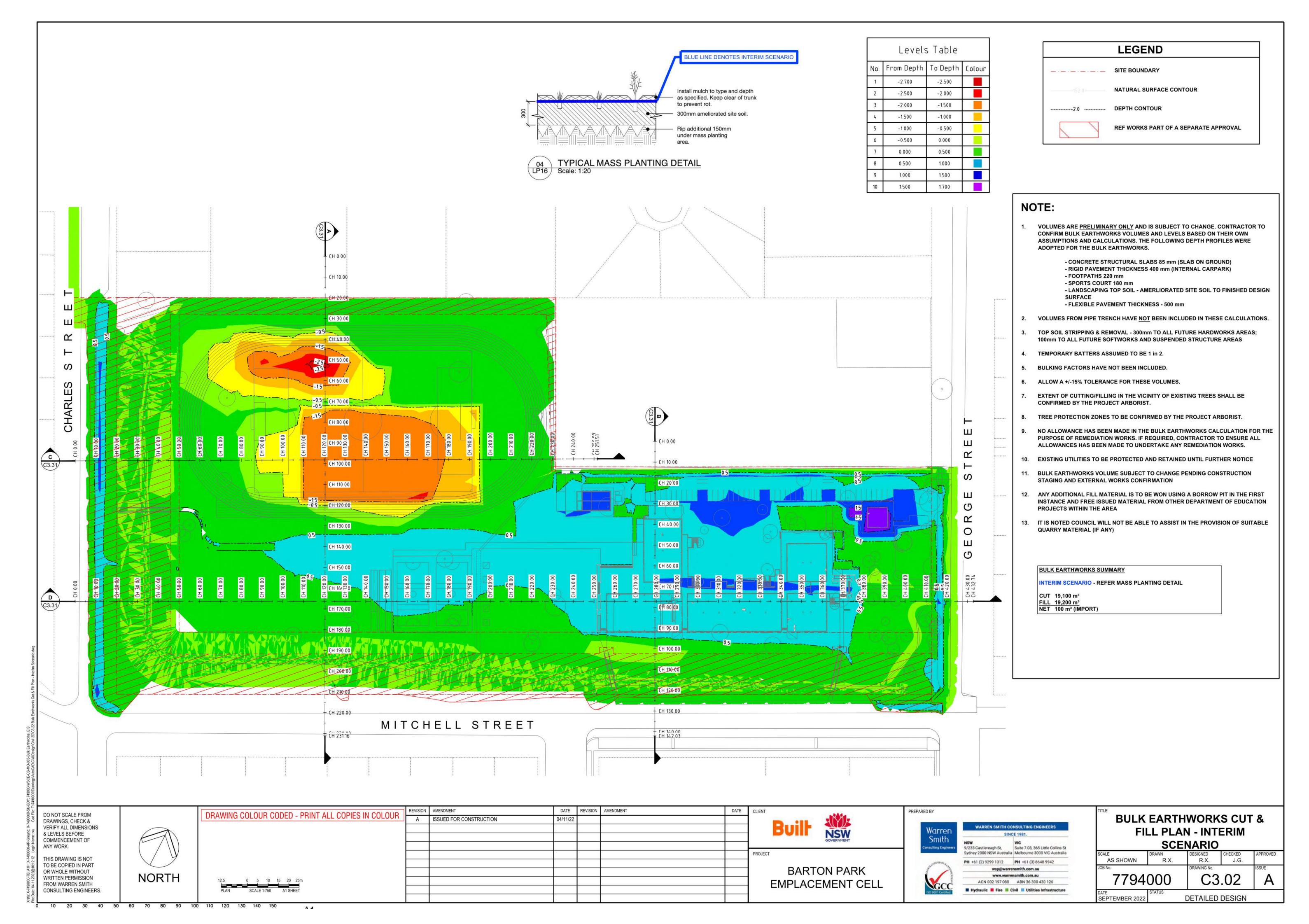
BULK EARTHWORKS LONGITUDINAL SECTIONS-**ULTIMATE SCENARIO**

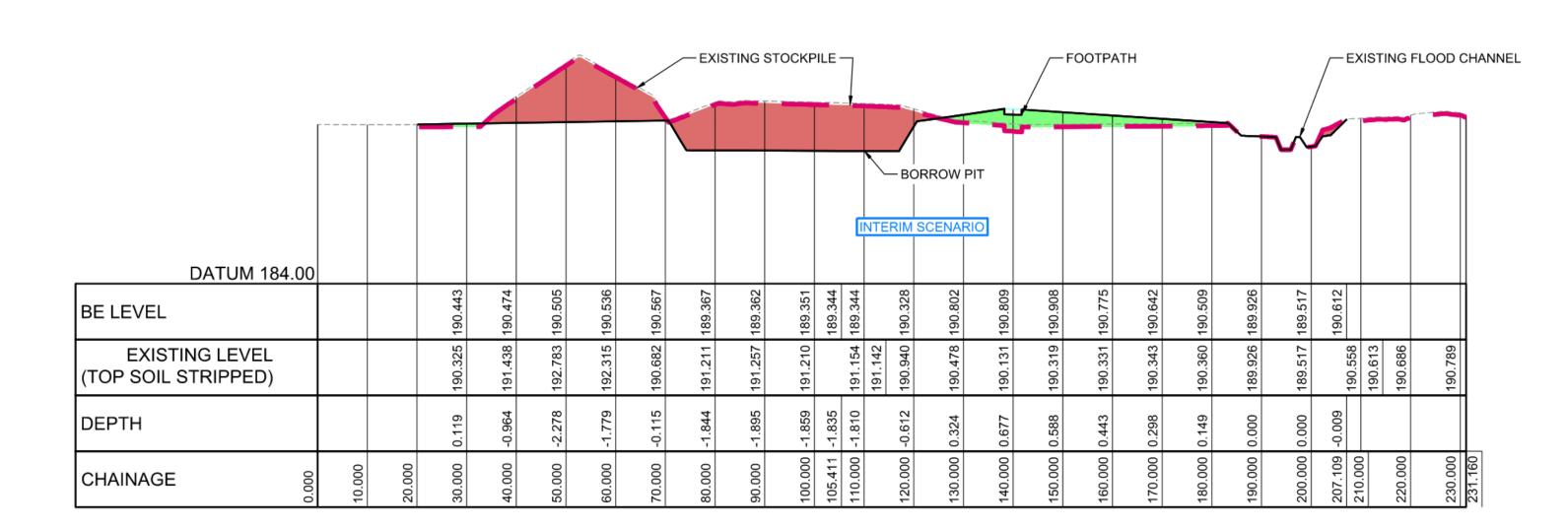
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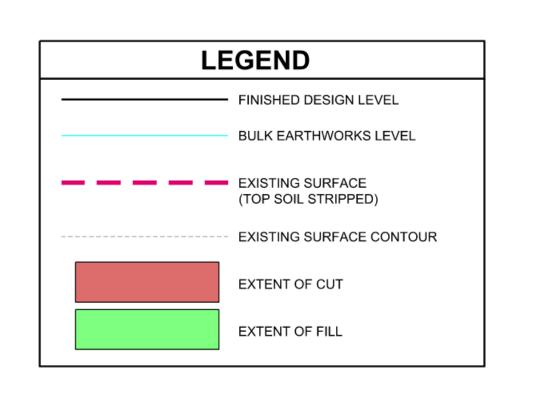
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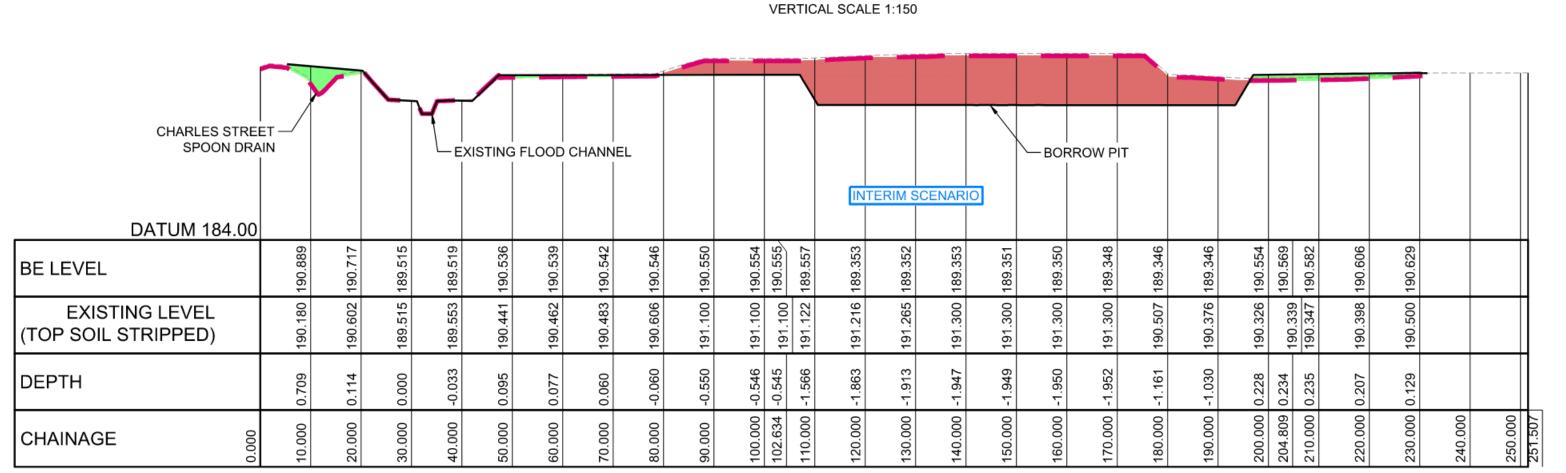


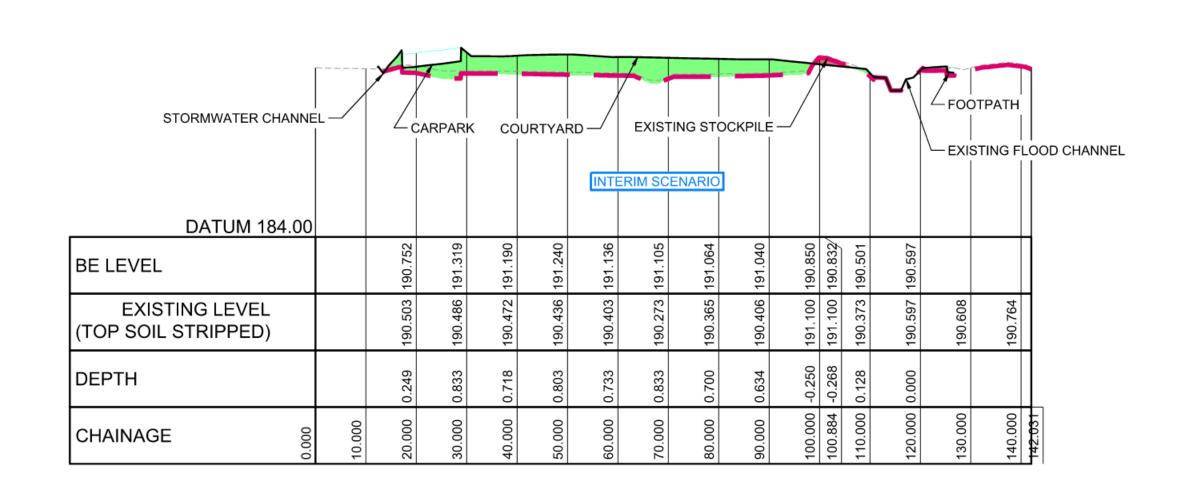




BE-A LONGITUDINAL SECTION HORIZONTAL SCALE 1:750

BE-C LONGITUDINAL SECTION





BE-B LONGITUDINAL SECTION

HORIZONTAL SCALE 1:750 HORIZONTAL SCALE 1:750 VERTICAL SCALE 1:150 VERTICAL SCALE 1:150 FOOTPATH-CHARLES STREET EXISTING FLOOD -COVERED -FOOTPATH — FLOOD CHANNEL └─ BUS BAY VOID SPACE -OVAL OVAL -SPOON DRAIN COURTS UNDER BUILDING CHANNEL NTERIM SCENARIO DATUM 184.00 BE LEVEL EXISTING LEVEL (TOP SOIL STRIPPED)

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BULK EARTHWORKS LONGITUDINAL SECTIONS -INTERIM SCENARIO

R.X. J.G. J.G. AS SHOWN C3.31 MARCH 2022

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DEPTH

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ISSUED FOR CONSTRUCTION



SCHEDULE 2 - CVs



Curriculum Vitae



James Georgiades

Team Leader - Urban Development

Phone: +61 9299 1312 **Mobile:** +61 406 649 228

Email: jgeorgiades@warrensmith.com.au

Nationality: Australian

EXPERIENCE

2021 - Current

Team Leader – Urban Developer Warren Smith Consulting Engineers

2015 - 2021

Associate Civil Engineer (2020 – 2021) Senior Civil Engineer (2018 – 2020) Civil Engineer (2017 – 2018) Graduate Civil Engineer (2015 – 2017) Woolacotts Consulting Engineers

July 2013 - December 2014

Construction Site Engineer
Alpene Group – Concrete & Structures Contractors

EDUCATION

- Bachelor of Engineering (Civil) Hons, Diploma in Engineering Practice University of Technology, Sydney 2010 – 2014
- CPEng, NER Civil Membership No. 5219706
- Member of Engineers Australia (MIEAust)
- BSB41415 Certificate IV in Work Health and Safety Training Aid Australia Pty Ltd 2016

KEY PROJECTS

Some of the more significant projects currently in progress and successfully undertaken and completed with involvement of James include:

Educational and Tertiary

- The Governors Centre For Excellence
- Schofields Public School
- Bella Vista Public School
- Marist Kogarah, Art and Learning Centre
- Cammeraygal High School
- St Pius X College, New Learning Hub, Chatswood
- NSW Secondary Schools Renewal Program
- Cherrybrook Technology High School
- Corrimal High School
- Rainbow Street Public School Upgrade
- Randwick Public School
- Homebush West Public School
- Bardia Public School Upgrade
- Alexandria Park Community School Redevelopment

Warren Smith Consulting Engineers

Curriculum Vitae

- Ku Lance Community Preschool
- Curl Curl North Public School
- Proposed Sports Hall, Frensham School, Mittagong
- Monaro High School Redevelopment
- Riverbank Public School
- Alexandria Park Community School Peer Review
- Penshurst Public School
- Western Sydney University, Bankstown
- Burwood East Public School, Victoria

Community Infrastructure

- Childcare Centre, City of Sydney
- Coptic Church, Macquarie Fields
- · Church of Scientology, Chatswood
- New Amenities Building at Campbell Park Chiswick
- Review of proposed GPT Upgrade at Boundary Creek
- Civic Park Pendle Hill
- North Sydney Public Domain
- Leichhardt and Camperdown Precincts Public Domain Masterplan
- Eagle Stadium, Werribee VIC
- Todd Park Aquatic & Leisure Centre
- Sydney Olympic Park
- Mick Doohan Reserve, Oran Park
- Western Sydney Parkland BMX track Wylde
- Appian Way, Bankstown Public Domain
- St Leonards Park Upgrades Stage 3

Justice and Emergency

- Clarence Correctional Centre
- Parklea Correctional Centre
- Outer Metropolitan Multi-Purpose Correctional Centre
- Bathurst, Outer Metropolitan, Dillwynia, Cessnock Prisons
- Dame Phyllis Frost Centre, Deer Park
- Truganina MRC Infill Expansion
- OMMPCC Demountables
- Wellington Pop Up Correctional Centre

Health and Aged Care

- Southern Cross Aged Care, Dandenong
- Kiama Hospital Community Health Services Facility and Port Kembla Hospital
- Port Macquarie Nursing Home
- Cooranbong Aged Care Facility 383 Freemans Drive, Cooranbong

Industrial

- Industrial Building at Yulong Close, Moorebank NSW
- Goodman Fielder, Moorebank
- RAAF Base Williamtown
- · Warehouse Extension, Lidcombe
- Bunnings Rozelle



Robert Xu Engineer - Civil & Water Engineering



CONTACT



+61 421 975 566



rxu@warrensmith.com.au

EDUCATION

 University of Western Sydney, Bachelor of Engineering (Civil)

PROFESSIONAL EXPERIENCE

November 2020 – Current Warren Smith & Partners Civil Engineer

January 2016 – November 2020 Engineering Studio Pty Ltd Civil Engineer

February 2015 – January 2016 S & G Consultants Pty Ltd Junior Engineer

KEY PROJECTS

Some of the more significant projects currently in progress and successfully undertaken and completed by Robert Xu include:-

- Woronora Caravan Park
- Jackson Road, Warriewood Recreational Facility
- Taronga Zoo Capital Works
- TfNSW Paramedic Response Points (PRP)
- Box Hill Residential Subdivision Development The Gables
- · Lutanda Aged-Care Facility
- Marsden Park Child-care Centre and Mixed-use development
- Belrose Child-care Centre and Mixed-use development
- · Rydalmere Apartments



SCHEDULE 3 – Evidence of Consultation

Britney Pereira

From: Paul Nelson

Sent: Tuesday, 15 November 2022 9:49 AM

To: council@narrabri.nsw.gov.au

Cc: Rebecca Deegan; Britney Pereira; Michelle Henry

Subject: RE: SSD 21854025 Wee Waa High School Conditions B24, B34

Hi NSC,

Just confirming that the below consultation period has since ended and we have not received any comments from Council.

We will now proceed based on the information provided.

Regards, Paul

Paul Nelson Design Manager



THE NEW WAY

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From: Paul Nelson

Sent: Monday, 7 November 2022 10:44 PM

To: council@narrabri.nsw.gov.au

Cc: Rebecca Deegan <rebeccadeegan@built.com.au>; Britney Pereira <bri>britneypereira@built.com.au>; Michelle

Henry <michelleh@narrabri.nsw.gov.au>

Subject: SSD 21854025 Wee Waa High School Conditions B24, B34

Dear Narrabri Shire Council,

RE: Wee Waa High School - SSD 21854025

We submitted the following documents for NSC review & consultation in the development of this report for the above project.

1. Soil & Water Management Plan

2. Earthwork Management Plan

Due to size limitations on this email, we are submitted via a drop box link.

https://www.dropbox.com/sh/3d9ld4mozq6jfzg/AABJlKk8rwsgrnYPzC8i7yaga?dl=0

If you have any comments, can you please advise by COB on Friday 11th November 2022.

We welcome any feedback and happy discuss further prior to this date for any reason council may deem necessary.

Kind Regards,