

12785-02C - NEW HIGH SCHOOL IN BUNGENDORE
MAJARA ST, BUNGENDORE, NSW 2621
CIVIL & STORMWATER

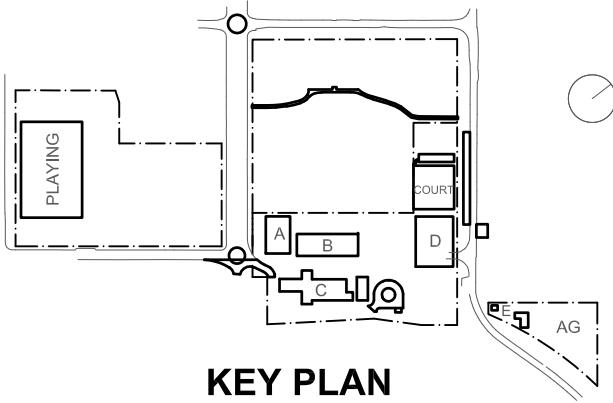
DRAWING No.	DESCRIPTION
BHS-CE-2001	DRAWING REGISTER AND LOCALITY PLAN
BHS-CE-2002	CONSTRUCTION NOTES
BPS-CE-2004	OZTAG FIELD - SEDIMENT & EROSION CONTROL PLAN
BHS-CE-2005	SEDIMENT & EROSION CONTROL PLAN
BHS-CE-2006	SEDIMENT & EROSION CONTROL DETAILS
BHS-CE-2009	BULK EARTHWORKS GENERAL ARRANGEMENT PLAN
BHS-CE-2010	BULK EARTHWORKS DETAIL PLAN - SHEET 1
BHS-CE-2011	BULK EARTHWORKS DETAIL PLAN - SHEET 2
BHS-CE-2012	BULK EARTHWORKS LONGITUDINAL SECTIONS
BHS-CE-2015	AG PLOT - BULK EARTHWORKS PLAN
BHS-CE-2016	AG PLOT - BULK EARTHWORKS LONGITUDINAL SECTIONS
BPS-CE-2020	OZTAG FIELD - BULK EARTHWORKS DETAIL PLAN
BPS-CE-2021	OZTAG FIELD - BULK EARTHWORKS LONG SECTIONS
BHS-CE-2030	GENERAL ARRANGEMENTS PLAN
BHS-CE-2031	STORMWATER DRAINAGE PLAN - SHEET 1
BHS-CE-2032	STORMWATER DRAINAGE PLAN - SHEET 2
BPS-CE-2033	EARLY WORKS PS SITEWORKS & SW DRAINAGE PLAN
BHS-CE-2034	STORMWATER DRAINAGE PLAN - SHEET 3
BHS-CE-2035	STORMWATER DRAINAGE PLAN - SHEET 4
BPS-CE-2040	EARLYWORKS PS SITEWORKS PAVEMENT DETAILS
BHS-CE-2051	STORMWATER DRAINAGE DETAILS SHEET 1
BHS-CE-2052	STORMWATER DRAINAGE DETAILS SHEET 2
BHS-CE-2053	STORMWATER DRAINAGE DETAILS SHEET 3
BHS-CE-2059	SITEWORKS AND PAVEMENT GENERAL ARRANGEMENT PLAN
BHS-CE-2060	SITEWORKS AND PAVEMENT PLAN - SHEET 1
BHS-CE-2061	SITEWORKS AND PAVEMENT PLAN - SHEET 2
BHS-CE-2062	SITEWORKS AND PAVEMENT PLAN - SHEET 3
BHS-CE-2063	SITEWORKS AND PAVEMENT PLAN - SHEET 4
BHS-CE-2064	SITEWORKS AND PAVEMENT PLAN - SHEET 5
BHS-CE-2065	RETAINING WALL, INSITU CONCRETE WALL & STAIR DETAILS
BHS-CE-2066	SITEWORKS AND PAVEMENT PLAN - SHEET 6
BHS-CE-2067	SITEWORKS AND PAVEMENT PLAN - SHEET 7
BHS-CE-2068	RETAINING WALL AND INSITU CONCRETE WALL PLAN
BHS-CE-2071	SITEWORKS DETAILS
BHS-CE-2091	PAVEMENT DETAILS SHEET 1
BHS-CE-2092	PAVEMENT DETAILS SHEET 2
BHS-CE-2140	ROAD CIVIL WORKS SETOUT GENERAL ARRANGEMENT PLAN
BHS-CE-2141	ROAD CIVIL WORKS SETOUT DETAIL PLAN SHEET 1
BHS-CE-2142	ROAD CIVIL WORKS SETOUT DETAIL PLAN SHEET 2
BHS-CE-2150	ROAD CIVIL WORKS SETOUT DETAIL PLAN SHEET 3
BHS-CE-2155	ROAD CIVIL WORKS LONGITUDINAL SECTIONS
BHS-CE-2200	WOMBAT CROSSING PLAN AND DETAILS
BHS-CE-2201	ROUNDBABOUT AND MISCELLANEOUS CIVIL ROAD DETAILS



LOCALITY PLAN

SCALE N.T.S.

BUILDER	CLIENT	Project Managers	Landscape Architecture
Hindmarsh Construction Australia Pty Ltd	NSW Department of Education School Infrastructure NSW	TSA Management	Context
Level 27, 100 Miller Street North Sydney NSW 2060		T+ 61 2 9276 1400	T+ 61 2 8244 8900
T +61 2 9274 1100 F +61 2 6274 8898 www.hindmarsh.com.au	Architect	TKD Architects	Acoustic
		T+ 61 2 9281 4399	Acoustic Logic
		Mechanical, Electrical, Hydraulic, ESD	T+ 61 2 8339 8000
		Norman Disney & Young	
		T+ 61 2 9928 6800	



Rev	Date	Description	Chkd	Auth.
B	18.04.21	SCHEMATIC DESIGN		
C	30.04.21	SCHEMATIC DESIGN		
D	07.05.21	SCHEMATIC DESIGN		
E	12.05.21	SCHEMATIC DESIGN		
F	26.11.21	WORK IN PROGRESS		
G	10.12.21	ISSUED FOR DD		
H	14.02.22	GENERALLY REVISED		
I	14.07.22	ISSUED FOR RT'S REVISED DESIGN		
J	21.07.22	ISSUED FOR RT'S REVISED DESIGN		
K	20.10.22	MINOR REVISIONS FOR RT'S DD ISSUE		
L	23.11.22	ISSUED FOR RT'S		

Project	New High School in Bungendore
MAJARA STREET	BUNGENDORE NSW 2621
Drawing Title	DRAWING REGISTER AND LOCALITY PLAN

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	NTS
Drawing No.	BHS-CE-2001	Revision	L

NOT FOR CONSTRUCTION	
M+G Consulting	
M & G CONSULTING ENGINEERS PTY LTD ABN 65 094 064 990	
Tel: +61 (0)2 8666 7888	
L3, 50 Berry Street North Sydney NSW 2060 (PO Box 1656, NSW 2059)	
CONCRETE AUSTRALIA MEMBER FIRM	
AUSTRALIAN STEEL INSTITUTE	
ACI	

CIVIL NOTES

GENERAL NOTES

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS OR SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH WORK.
- G2 MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATION, CURRENT SAA CODES, BUILDING REGULATIONS AND THE REQUIREMENTS OF ANY OTHER RELEVANT STATUTORY AUTHORITIES.
- G3 THESE DRAWINGS MUST NOT BE SCALED. ALL DIMENSIONS ARE IN METERS. ALL SET OUT DIMENSIONS AND LEVELS, INCLUDING THOSE SHOWN ON THESE DRAWINGS SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S DRAWINGS AND VERIFIED ON SITE.
- G4 ALL SETOUT AND DIMENSIONS OF THE STRUCTURE INCLUDING KERBS AND RETAINING WALLS, AND BULK EARTHWORKS MUST BE TAKEN FROM THE ARCHITECT'S DRAWINGS. SETOUT OF THE STORMWATER PITS BY OTHERS, CONTRACTOR TO CONFIRM SETOUT OF SERVICE TRENCHING INCLUDING SUBSOIL ON SITE.
- G5 THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF AUTHORITIES HAVING JURISDICTION VER THE WORKS. REFER TO GEOTECHNICAL REPORT BY 'DOUGLAS PARTNERS', DATED 4 MAY 2021.
- G6 ALL DIMENSIONS AND REDUCED LEVELS MUST BE VERIFIED ON SITE BEFORE THE COMMENCEMENT OF ANY WORK.
- G7 THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IS NOT AN AUTHORISATION OF A COST VARIATION. THE SUPERINTENDENT MUST APPROVE ANY COST VARIATION INVOLVED BEFORE ANY WORK STARTS.
- G8 ALL LEVELS SHOWN ARE TO THE AUSTRALIAN HEIGHT DATUM.
- G9 SERVICE INFORMATION SHOWN IS APPROXIMATE ONLY. PRIOR TO COMMENCEMENT OF ANY WORKS, THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND SERVICES AND COMPLY WITH ALL REQUIREMENTS OF THOSE AUTHORITIES.
- G10 EXISTING SURFACE CONTOURS, WHERE SHOWN, ARE INTERPOLATED AND MAY NOT BE ACCURATE.
- G11 UNLESS NOTED OTHERWISE, ALL VEGETATION SHALL BE STRIPPED TO A MINIMUM DEPTH OF 150mm UNDER ALL PROPOSED PAVEMENT AND BUILDING AREAS.
- G12 MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.

SITeworks NOTES

- S1 PRIOR TO THE PLACEMENT OF ANY PAVEMENTS, BUILDINGS OR DRAINS THE EXPOSED SUBGRADE SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION IN ACCORDANCE WITH TEST 'E1' OF A.S. 1289 FOR THE TOP 300mm. ANY SOFT SPOTS SHALL BE REMOVED AND REPLACED WITH GRANULAR FILL TO THE ENGINEERS APPROVAL AND COMPACTED IN ACCORDANCE WITH THE COMPACTION REQUIREMENTS SET OUT BELOW. ON HIGHLY REACTIVE CLAY AREAS SITE EXCAVATED MATERIAL MAY BE USED WITH THE PRIOR AUTHORISATION OF THE ENGINEER.
- S2 ALL FILL AND PAVEMENT MATERIALS SHALL BE COMPACTED IN ACCORDANCE WITH GEOTECHNICAL REPORT BY 'DOUGLAS PARTNERS', DATED 4 MAY 2021. MOISTURE CONTENT TO BE MAINTAINED AT +/- 2% OMC. MINIMUM COMPACTION REQUIREMENTS ARE DETAILED BELOW FOR (ALL REQUIREMENTS ARE TO BE VERIFIED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER):
- LANDSCAPED AREAS 98% STD.
 - FILL UNDER ANY FOOTINGS AND FLOOR SLABS FOR ANY STRUCTURE TO SUBGRADE LEVEL:
 - FINE CRUSHED ROCK 98% STD.
 - SELECTED FILL WITHOUT CONSPICUOUS CLAY CONTENT 98% STD.
 - BUILDING BASECOURSE 98% MOD
 - FILL UNDER ROAD PAVEMENTS:
 - TO WITHIN 500mm OF FINISHED SUBGRADE LEVEL 98% STD.
 - UP TO FINISHED SUBGRADE LEVEL 98% STD.
 - ROAD PAVEMENT MATERIALS:
 - SUB BASE 98% MOD.
 - BASE COURSE 98% MOD.
- THE MAXIMUM COMPACTION IS TO BE NO GREAT THAN 4% ON TOP OF THE ABOVE MENTION VALUES.
- S3 GRADE EVENLY BETWEEN FINISHED SURFACE SPOT LEVELS. FINISHED SURFACE CONTOURS ARE SHOWN FOR CLARITY. WHERE FINISHED SURFACE LEVELS ARE NOT SHOWN, THE SURFACE SHALL BE GRADED SMOOTHLY SO THAT IT WILL DRAIN AND MATCH ADJACENT SURFACES OR STRUCTURES.
- S4 ALL DIMENSIONS GIVEN ARE TO FACE OF KERB, CENTER OF PIPE OR EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.
- S5 ANY STRUCTURES, PAVEMENTS OR SURFACES DAMAGED, DIRTIED OR MADE UNSERVICABLE DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE ENGINEER.
- S6 ANY FILL REQUIRED SHALL BE APPROVED BY THE ENGINEER / GEOTECHNICAL CONSULTANT
- S7 CONTRACTOR IS TO ENSURE THAT ALL EXCAVATIONS ARE MAINTAINED IN A DRY CONDITION WITH NO WATER ALLOWED TO REMAIN IN THE EXCAVATIONS.
- S8 ALL FINISHES AND COLOURS TO BE IN ACCORDANCE WITH LANDSCAPE ARCHITECTURAL SPECIFICATIONS.
- S9 REFER TO STRUCTURAL DRAWINGS FOR CONCRETE, REINFORCEMENT AND RETAINING WALL DETAILS.
- S10 GENERALLY FOR TRENCHING WORKS THE CONTRACTOR MUST:
A) COMPLY WITH THE GENERAL PROVISIONS OF PART 3.1 "MANAGING RISKS TO HEALTH AND SAFETY" OF NSW WORK AND HEALTH AND SAFETY REGULATION 2011
B) COMPLY PART 6.3 DIVISION 3 "EXCAVATION WORK" OF NSW WORK HEALTH AND SAFETY REGULATION NSW 2011
- S11 PRIOR TO THE EXCAVATION OF ANY TRENCH DEEPER THAN 1.5 METRES THE CONTRACTOR MUST:
A) NOTIFY THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY ON THE APPROPRIATE FORM.

STORMWATER DRAINAGE NOTES

- SW1 UNLESS NOTED OTHERWISE BY HYDRAULIC ENGINEERS DRAWINGS, ALL DOWNPIPES & GRATED INLETS SHALL BE CONNECTED TO PITS OR MAIN STORMWATER DRAINS WITH 150 DIA. UPVC PIPES LAID AT A MINIMUM GRADE OF 1 IN 100. FOR SYPHONIC ROOF DRAINAGE SYSTEMS ALL DOWNPIPES CONNECTION DRAIN SIZES TO BE CONNECTED INTO MAIN STORMWATER DRAINS SHALL BE IN ACCORDANCE WITH HYDRAULIC ENGINEERS DRAWINGS.
- SW2 ALL MAIN STORMWATER DRAINS SHALL BE CONSTRUCTED USING MATERIALS AS SPECIFIED ON THE DRAWINGS IN ACCORDANCE WITH THE APPROPRIATE A.S. IF NOT SPECIFIED THEN CLASS 2 RRJ RCP SHALL BE USED FOR DIAMETERS > 225mm. SEWER CLASS SEH UPVC IN ACCORDANCE WITH AS1260 SHALL BE USED FOR Ø225mm OR SMALLER.
- SW3 ALL PIPEWORK TO BE INSTALLED IN ACCORDANCE WITH AS3725 FOR RCP AND AS2032 FOR PVC. ALL BEDDING TO BE TYPE H2 UNLESS NOTED OTHERWISE.
- SW4 FOR ALL PITS > 1.2m DEEP, STEP IRONS SHALL BE INSTALLED.
- SW5 PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY M+G CONSULTING.
- SW6 ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- SW7 WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED UPVC SEWER GRADE PIPE IS TO BE USED.
- SW8 GRATES AND COVERS SHALL CONFORM WITH AS 3996 AND AS 1428.1 FOR ACCESS REQUIREMENTS.
- SW9 CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- SW10 AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- SW11 ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

KERBING NOTES

- K1 ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa U.N.O.
- K2 ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 75mm GRANULAR BASECOURSE COMPACTED TO A MINIMUM 98% MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 5.2.1.
- K3 EXPANSION JOINTS (EJ) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.
- K4 WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLAB.
- K5 BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
- K6 IN THE REPLACEMENT OF KERBS:-
 - EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O. FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER, NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O.
 - EXISTING KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.

OSD/INFILTRATON TANK SIGNAGE



CONFINED SPACE DANGER SIGN

A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANKS/ CONFINED SPACE.

COLOURS: 'DANGER' AND BACKGROUND - WHITE
ELLIPTICAL AREA - RED
RECTANGLE CONTAINING ELLIPSE - BLACK
OTHER LETTERING AND BORDER - BLACK

MINIMUM DIMENSIONS:- 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS)
- 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)

MATERIAL: COLOUR BONDED ALUMINIUM OR POLYPROPYLENE.

FIXING: USE SCREWS AT EACH CORNER AND/OR SUITABLE EPOXY GLUE/CEMENT.

SEDIMENT AND EROSION CONTROL NOTES

1. IT HAS BEEN ASSUMED THAT HOARDINGS/SILT FENCING WILL BE PROVIDED TO THE STAGE BOUNDARY SUFFICIENT TO PREVENT SEDIMENT RUNOFF FROM LEAVING SITE (EXCEPT IN THE CASE OF ENTRY/EXIT LOCATIONS WHERE TEMPORARY CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP ARE PROVIDED). IF THIS IS NOT THE CASE, PROVIDE SEDIMENT FENCE TO STANDARD DETAIL BELOW AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING SITE, DIRECT RUNOFF TO SEDIMENT BASIN.
2. ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK".

SEDIMENT CONTROL CONDITIONS

1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSER SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES) AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
3. STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 5m OF HAZARD AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
4. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
5. TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
6. CONTRACTOR TO DESIGN/SIZE/CONSTRUCT TEMPORARY SEDIMENT BASIN. WATER SHOULD BE ALLOWED TO SETTLE BEFORE DISCHARGE. CONTRACTOR MUST VERIFY THAT WATER QUALITY MEETS AUTHORITIES REQUIREMENTS PRIOR TO DISCHARGE. ACCUMULATED SEDIMENT SHOULD THEN BE REMOVED & DISPOSED OF IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT PROCEDURES.

SITE INSPECTION & MAINTENANCE CONDITIONS

THE SITE MANAGER WILL INSPECT THE SITE AT LEAST WEEKLY AND WILL:

1. ENSURE THAT DRAINS OPERATE PROPERLY & TO EFFECT ANY NECESSARY REPAIRS
2. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5m FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS & PAVED AREAS.
3. REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS WITHIN THE STRUCTURE
4. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS APPROPRIATE.
5. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS.
6. MAINTAIN EROSION & SEDIMENT CONTROL MEASURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
7. REMOVE TEMPORARY SOIL CONSERVATION STRUCTURES AS THE LAST ACTIVITY IN THE REHABILITATION PROGRAM.

AS PART OF THE STATUTORY 'DILIGENCE OF CARE' RESPONSIBILITIES, THE SITE MANAGER WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:

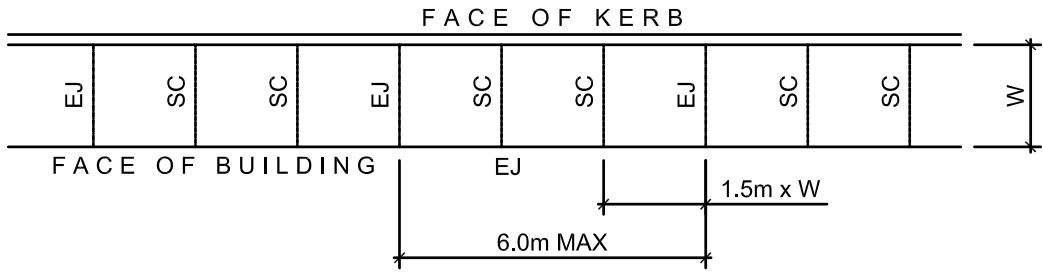
1. THE VOLUME & INTENSITY OF ANY RAINFALL EVENTS
2. THE CONDITION OF ANY SOIL & WATER MANAGEMENT WORKS
3. THE CONDITION OF VEGETATION & ANY NEED TO IRRIGATE
4. THE NEED FOR DUST PREVENTION STRATEGIES
5. ANY REMEDIAL WORKS TO BE UNDERTAKEN

THE BOOK WILL BE KEPT ONSITE & MADE AVAILABLE TO ANY AUTHORISED PERSON ON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF WORKS.

JOINTING NOTES

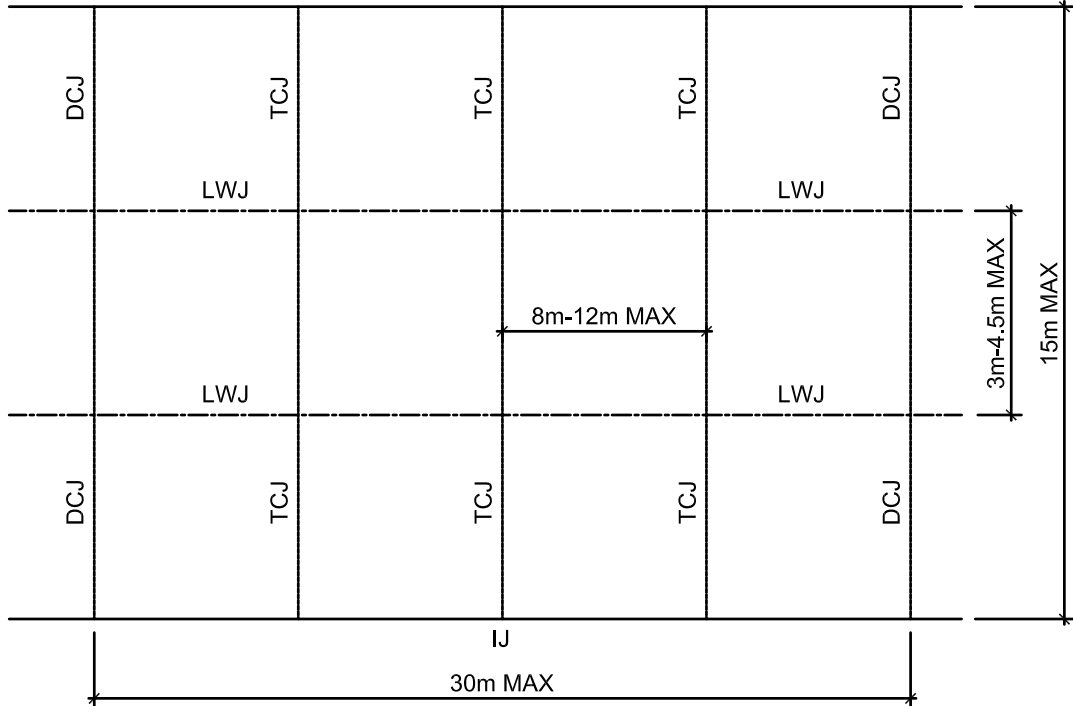
PEDESTRIAN FOOTPATH JOINTS

- J1 EXPANSION JOINTS (EJ) ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT 6m CENTRES.
- J2 SAWCUT JOINTS (SCJ) ARE TO BE LOCATED AT A MAX 1.5m x WIDTH OF PAVEMENT. THE TIMING OF THE SAWCUT IS TO BE CONFIRMED BY THE CONTRACTOR ON SITE. SITE CONDITIONS WILL DETERMINE HOW MANY HOURS AFTER THE CONCRETE POUR BEFORE THE SAW CUTS ARE COMMENCED.
- J3 WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS.
- J4 PROVIDE 10mm WIDE FULL DEPTH EXPANSION JOINTS (EJ) BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS
- J5 ALL PEDESTRIAN FOOTPATH JOINTINGS AS FOLLOWS (U.N.O.).



VEHICULAR PAVEMENT JOINTS

- J6 ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.
- J7 LONGITUDINAL WARPING JOINTS (LWJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 3m TO 4.5m MAX CENTERS. ALL LWJ's SHOULD BE TIED UP TO A MAXIMUM TOTAL WIDTH OF 30m.
- J8 TRANSVERSE CONTRACTION JOINTS (TCJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 8m TO 12m MAX CENTERS. TCJ's CAN BE SPACED AT SUITABLE INTERVALS UP TO A RECOMMENDED MAXIMUM LENGTH OF 15m.
- J9 TRANSVERSE DOWELLED CONSTRUCTION JOINTS (DCJ) TO BE PROVIDED FOR PLANNED INTERRUPTIONS SUCH AS AT THE END OF EACH DAY'S OPERATIONS (POUR BREAK), AT BLOCK OUTS FOR BRIDGES AND INTERSECTIONS OR FOR UNEXPECTED DELAYS WHEN THE SUSPENSION OF OPERATIONS IS LIKELY TO CREATE A JOINT.
- J10 ISOLATION JOINTS WITH SUB-GRADE BEAM (IJ) TO BE PROVIDED AT INTERSECTIONS OR AT THE JUNCTION OF A POUR BREAK.
- J11 ALL VEHICULAR PAVEMENTS TO BE JOINTED IN ACCORDANCE WITH AUSTRROADS AGPT02-12 GUIDE TO PAVEMENT TECHNOLOGY PART 2 STRUCTURAL PAVEMENT DESIGN AND SUPPLEMENT AP-T36-06 PAVEMENT DESIGN FOR LIGHT TRAFFIC
- J12 VEHICULAR PAVEMENT JOINTING AS FOLLOWS (U.N.O.).



DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

BUILDER

HINDMARSH

Hindmarsh Construction Australia Pty Ltd

Level 27, 100 Miller Street
North Sydney NSW 2060

T +61 2 9274 1100
F +61 2 6274 8898
www.hindmarsh.com.au

CLIENT

NSW GOVERNMENT

Education

School Infrastructure

NSW Department of Education |
School Infrastructure NSW

T+ 02 9561 8287

Project Managers

TSA Management

T+ 61 2 9276 1400

Architect

TKD Architects

T+ 61 2 9261 4399

Mechanical, Electrical, Hydraulic, ESD

Norman Disney & Young

T+ 61 2 9928 6800

Landscape Architecture

Context

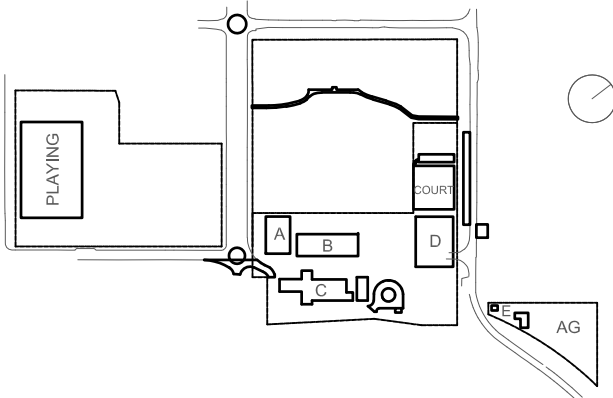
T+ 61 2 8244 8900

Acoustic

Acoustic Logic

T+ 61 2 8339 9000

KEY



WARNING
NO DRAINAGE WORKS SHALL COMMENCE UNTIL THE CONTRACTOR CONFIRMS THE I.L. OF ALL EXISTING DRAINS, AND CONFIRMS IN WRITING WITH THE ENGINEERING SUPERVISOR.

ALL EXISTING PROPERTY SERVICES' LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE VERIFIED ON SITE.
THE CONTRACTOR SHOULD SUPPLY PRECISE LOCATIONS AND DEPTHS TO THE ENGINEER FOR REVIEW PRIOR TO ANY WORKS THAT MAY AFFECT THESE SERVICES.

NOTES

1. SITE SURVEY SUPPLIED BY 'PROJECT SURVEYORS JOB REF: B04901, DRAWING No. B04901-BUN-REV K-1 DATED 06.06.22.

WARNING
BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE.

NOT FOR CONSTRUCTION

M+G Consulting

M & G CONSULTING ENGINEERS PTY LTD ABN 65 094 064 990

Tel: +61 (0)2 8666 7888

L3, 50 Berry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)

CONSENT AUSTRALIA

AUTISTIAN STEEL INSTITUTE

REGISTERED

Rev	Date	Description	Chkd	Auth.
A	24.03.21	DRAFT SCHEMATIC DESIGN ISSUE		
B	16.04.21	SCHEMATIC DESIGN		
C	30.04.21	SCHEMATIC DESIGN		
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F	12.05.21	SCHEMATIC DESIGN		
G	20.11.21	WORK IN PROGRESS		
H	10.12.21	ISSUED FOR DD		
I	14.02.22	GENERALLY REVISED		
J	14.07.22	ISSUED FOR RTS REVISED DESIGN		

Project

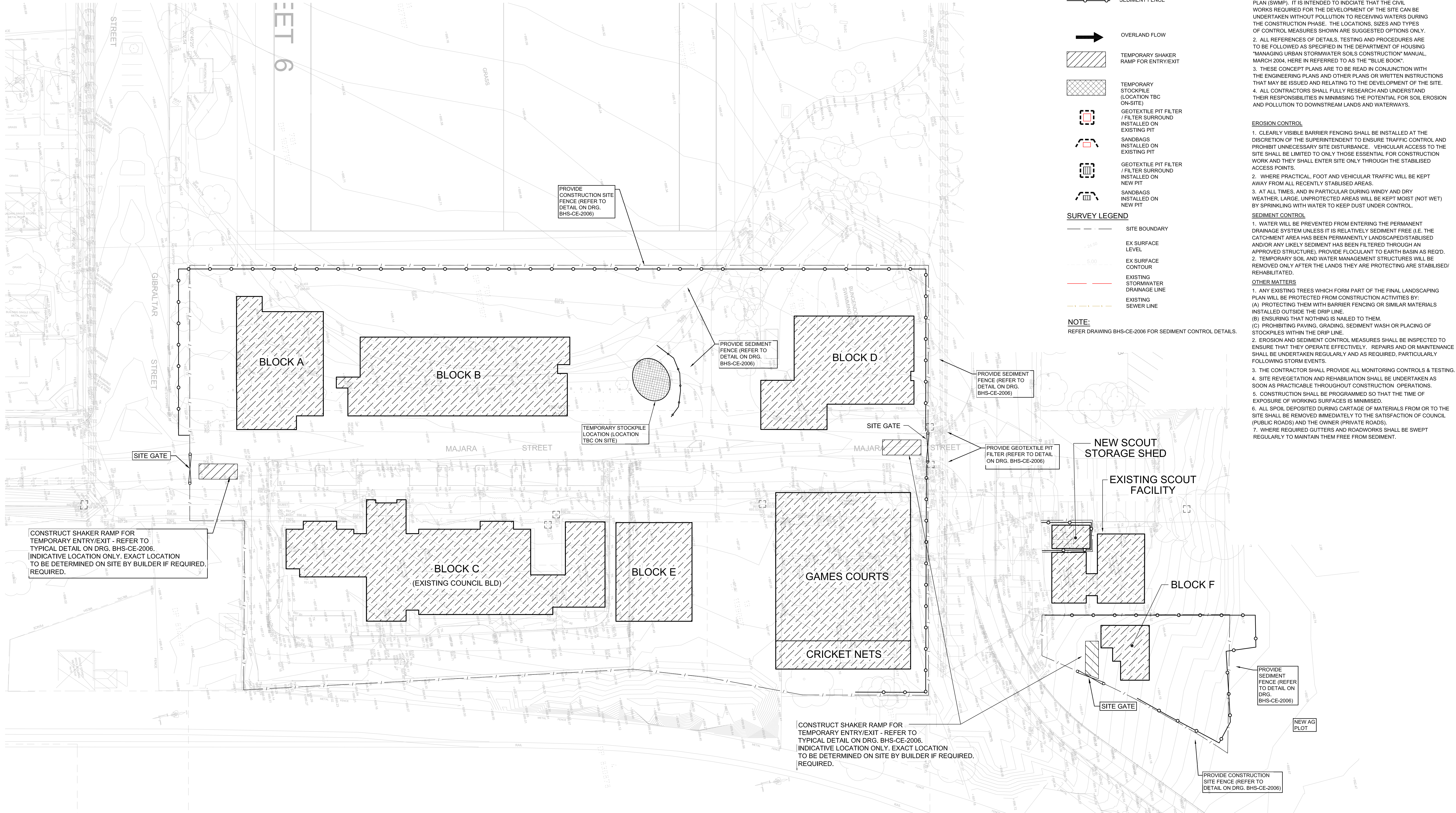
New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title

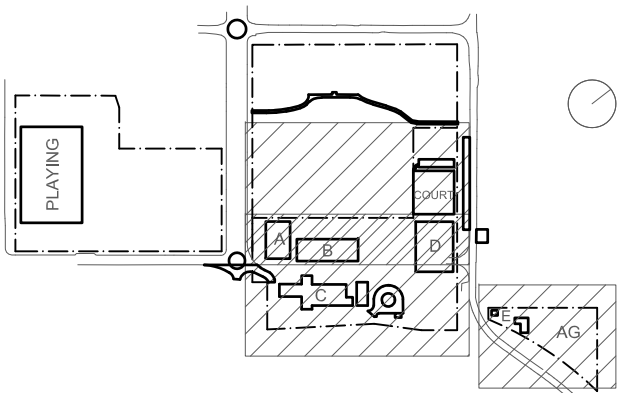
CIVIL NOTES

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	AS NOTED AT B1
Drawing No.	Revision		
BHS-CE-2002	J		



SEDIMENT AND EROSION CONTROL PLAN
SCALE 1:400

KEY



Do not scale drawings. Verify all dimensions on site.			
Rev	Date	Description	Chkd Auth.
A	24.03.21	DRAFT SCHEMATIC DESIGN ISSUE	
B	16.04.21	SCHEMATIC DESIGN	
C	30.04.21	SCHEMATIC DESIGN	
D	07.05.21	SCHEMATIC DESIGN	
E	12.05.21	SCHEMATIC DESIGN	
F	26.11.21	WORK IN PROGRESS	
G	10.12.21	ISSUED FOR DD	
H	14.02.22	GENERALLY REVISED	
I	14.07.22	ISSUED FOR RTS REVISED DESIGN	

Project
New High School in Bungendore
MAJARA STREET
BUNGENDORE NSW 2621
Drawing Title
**SEDIMENT & EROSION
CONTROL PLAN**

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:400
Drawing No.		Revision	
BHS-CE-2005		I	

NOT FOR CONSTRUCTION



NOT TO SCALE



ALTERNATIVE SEDIMENT FENCE

NOT TO SCALE

ALTERNATIVE SEDIMENT FENCE NOTES

1. INSTALL THIS TYPE OF SEDIMENT FENCE WHEN USE OF SUPPORT POSTS IS NOT DESIRABLE OR NOT POSSIBLE. SUCH CONDITIONS MIGHT APPLY, FOR EXAMPLE, WHERE APPROVAL IS GRANTED FROM THE APPROPRIATE AUTHORITIES TO PLACE THESE FENCES IN HIGHLY SENSITIVE ESTUARINE AREAS.
2. USE BENT TRENCH MESH TO SUPPORT THE F82 WELDED MESH FACING AS SHOWN ON THE DRAWING ABOVE. ATTACH THE JUTE MESH TO THE WELDED MESH FACING USING UV-RESISTANT CABLE TIES.
3. STAKE THE WHOLE STRUCTURE WITH SANDBAG OR ROCK ANCHORING OVER THE TRENCH MESH AND THE LEADING EDGE OF THE JUTE MESH. THE ANCHORING SHOULD BE SUFFICIENTLY LARGE TO ENSURE STABILITY OF THE STRUCTURE IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.



NOT TO SCALE



NOT TO SCALE

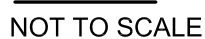


NOT TO SCALE



STRAW BALE BANK SEDIMENT

CONTR



NOT TO SCALE



Drawing Title
SEDIMENT & EROSION
CONTROL DETAILS

H

Drawing No.
BHS-CE-2006

Revision **H** L3, 50 Berry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)

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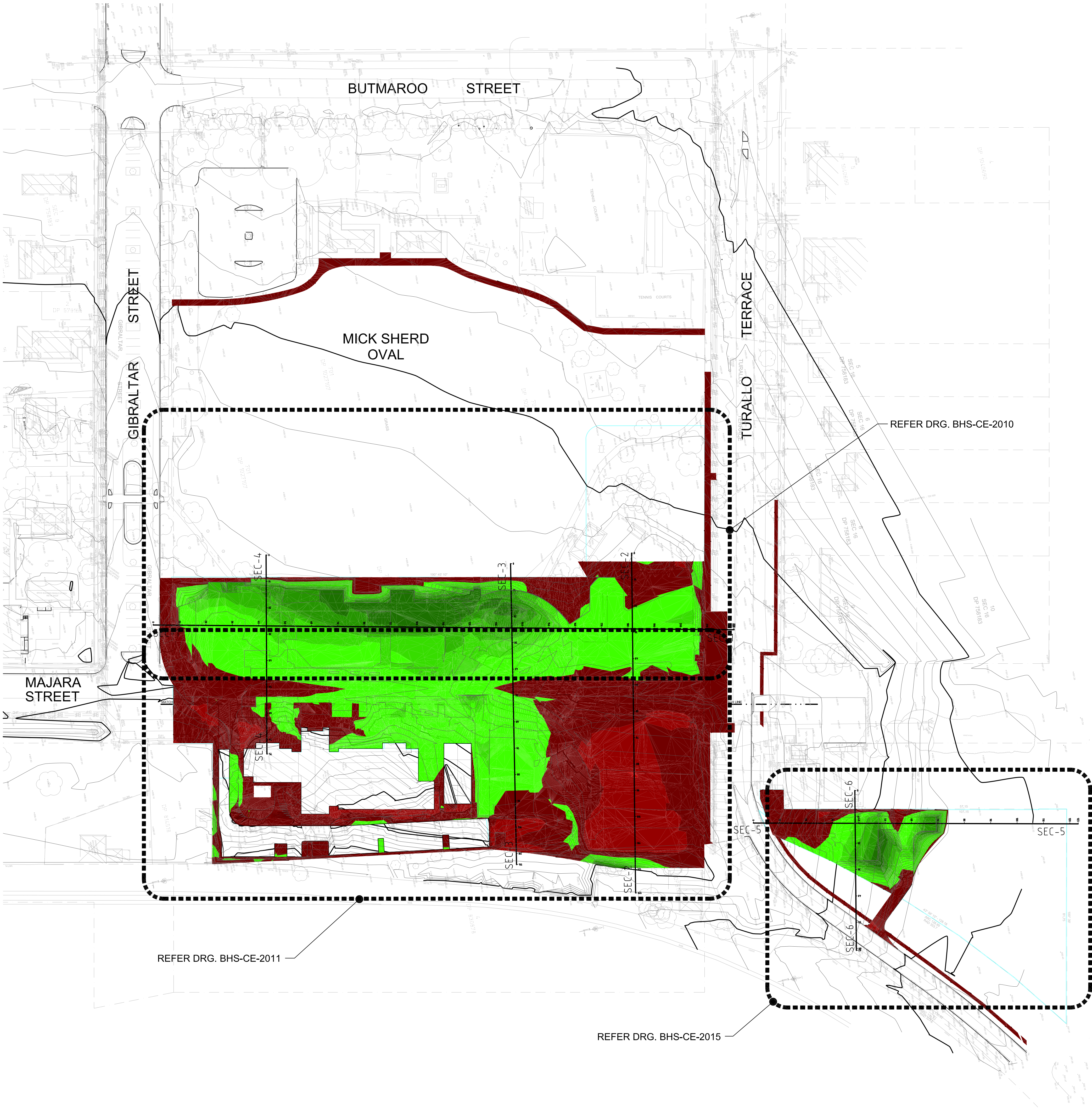
ProjectLands

KEY

CLIENT

ProjectLands

KEY



Surface Analysis: Elevation Ranges			
Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1	Red	-2.000	-1.800
2	Red	-1.800	-1.600
3	Red	-1.600	-1.400
4	Red	-1.400	-1.200
5	Red	-1.200	-1.000
6	Red	-1.000	-0.800
7	Red	-0.800	-0.600
8	Red	-0.600	-0.400
9	Red	-0.400	-0.200
10	Red	-0.200	0.000
11	Green	0.000	0.200
12	Green	0.200	0.400
13	Green	0.400	0.600
14	Green	0.600	0.800
15	Green	0.800	1.000
16	Green	1.000	1.200
17	Green	1.200	1.400

Cut/Fill Summary						
Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
VOLUME	1.000	1.000	21434.033sq.m	2701.197 Cu. M.	3993.522 Cu. M.	1292.325 Cu. M.<Fill>
Totals			21434.033sq.m	2701.197 Cu. M.	3993.522 Cu. M.	1292.325 Cu. M.<Fill>

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- E1 VOLUMES ARE APPROXIMATE ONLY AND DO NOT INCORPORATE BULKING AND SHRINKAGE FACTORS.
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- E7 500mm ZONE OFFSET FROM BUILDING HAS BEEN ALLOWED FOR FORM WORK.
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- E9 EARTHWORKS TO PROVIDE A BUILDING PLATFORM BENCH WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 100 kPa. GEOTECHNICAL ENGINEER TO CONFIRM.
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- E11 A MINIMUM OF LEVEL 2 INSPECTION AND TESTING OF EARTHWORKS TO AS 3798-2007.

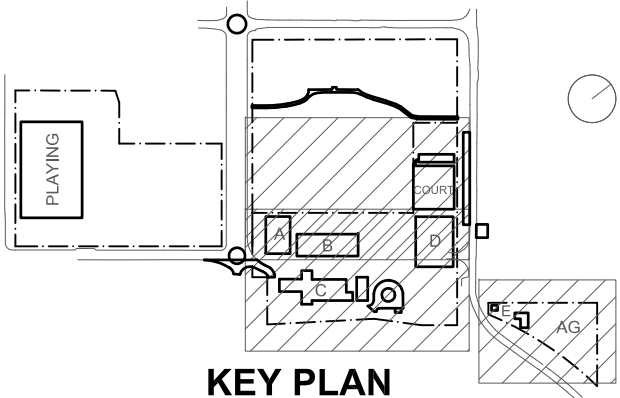
NOTE:
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NOTE:
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BULK EXCAVATION GENERAL ARRANGEMENT PLAN
SCALE 1:750

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Rev Date Description Chkd Auth.		Project New High School in Bungendore		Designed MW		Reviewed SCM		Drawn MW		Sheet B1	
A 14.12.21 ISSUED FOR DD		MAJARA STREET		Job No.		Status		Date		Scale	
B 14.02.22 GENERALLY REVISED		BUNGENDORE NSW 2621		5555		SSDA		OCT '21		1:750	
C 14.07.22 ISSUED FOR RTIS REVISED DESIGN		Drawing Title		Drawing No.		Revision					
D 30.09.22 RTIS REVISED DD ISSUE		BULK EARTHWORKS		BHS-CE-2009		E					
E 23.11.22 ISSUED FOR RTIS		GENERAL ARRANGEMENT PLAN									

Do not scale drawings. Verify all dimensions on site.

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
BULK EARTHWORKS
GENERAL ARRANGEMENT
PLAN

NOT FOR CONSTRUCTION

M+G Consulting

M & G CONSULTING ENGINEERS PTY LTD ABN 65 094 064 990
Tel: +61 (02) 8666 7888

L3, 50 Berry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)

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AUSTRALIAN STEEL INSTITUTE

EXCAVATION NOTES

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NOTE:
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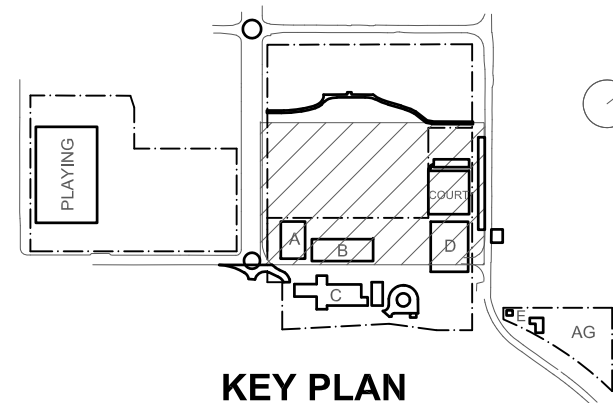
AS THIS BULK EXCAVATION MODEL IS BASED ON INFORMATION FROM OTHERS, WE ARE NOT RESPONSIBLE FOR ITS ACCURACY AND USE OF IT IS AT THE USER'S RISK.

Surface Analysis: Elevation Ranges			
Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1	Red	-2.000	-1.800
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16	Green	1.000	1.200
17	Green	1.200	1.400

FOR CONTINUATION REFER DRG. BHS-CE-2011

PART BULK EXCAVATION PLAN

SCALE 1:250



Cut/Fill Summary

Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
VOLUME	1.000	1.000	21434.033sq.m	2701.197 Cu. M.	3993.522 Cu. M.	1292.325 Cu. M.<Fill>
Totals			21434.033sq.m	2701.197 Cu. M.	3993.522 Cu. M.	1292.325 Cu. M.<Fill>

Rev	Date	Description	Chkd Auth.
A	24.03.21	DRAFT SCHEMATIC DESIGN ISSUE	
B	09.04.21	SCHEMATIC DESIGN	
C	16.04.21	SCHEMATIC DESIGN	
D	30.04.21	SCHEMATIC DESIGN	
E	07.05.21	SCHEMATIC DESIGN	
F	12.05.21	SCHEMATIC DESIGN	
G	10.12.21	ISSUED FOR DD	
H	14.02.22	GENERALLY REVISED	
I	14.07.22	ISSUED FOR RTIS REVISED DESIGN	
J	30.09.22	RTIS REVISED DD ISSUE	
K	23.11.22	ISSUED FOR RTIS	

Project
New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title
**BULK EARTHWORKS
DETAIL PLAN
SHEET 1**

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250

Drawing No.
BHS-CE-2010

Revision
K

NOT FOR CONSTRUCTION

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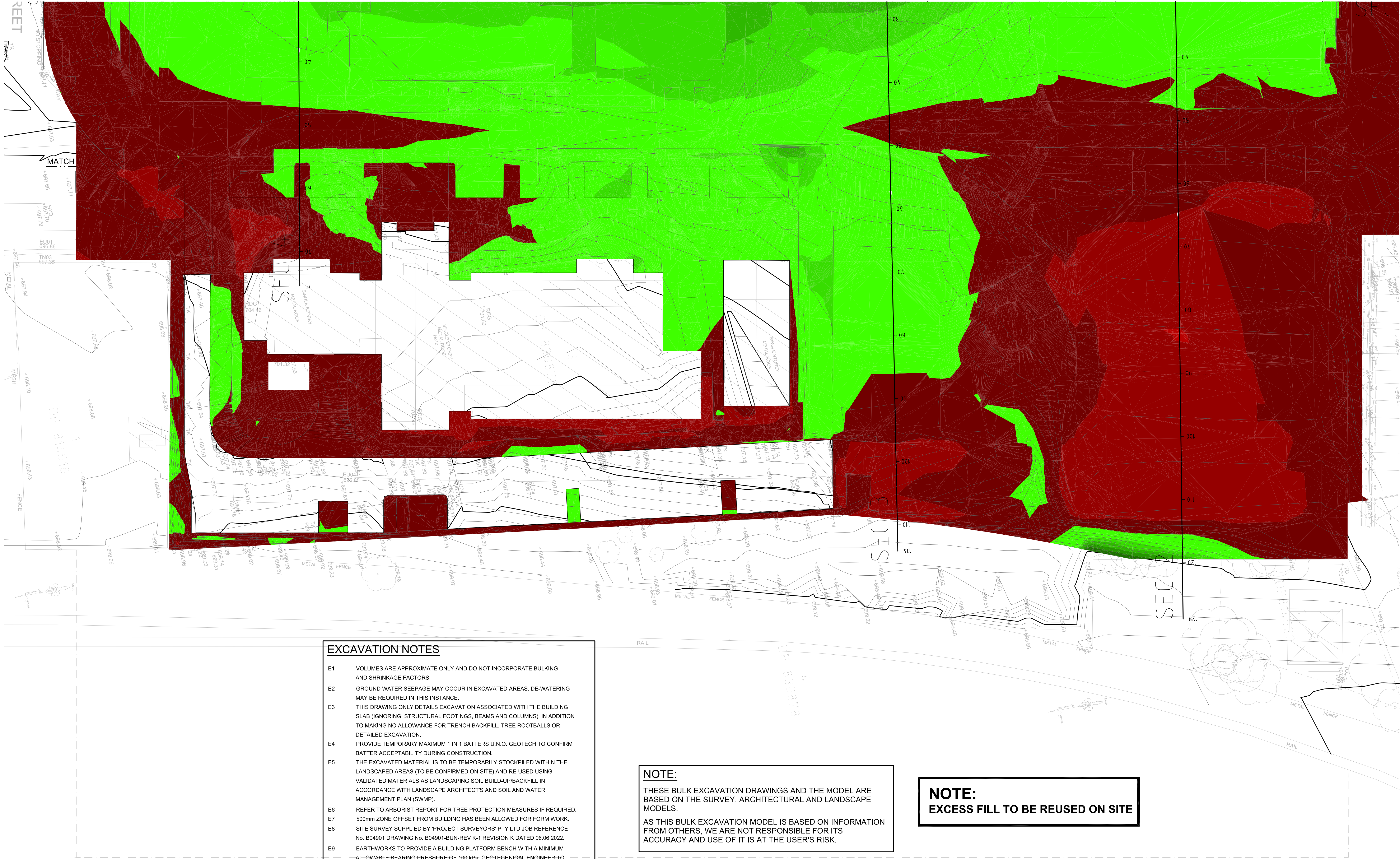
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Landscape Architecture
Context
T+ 61 2 8244 8900
Acoustic
Acoustic Logic
T+ 61 2 8339 9000



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7		-0.800	-0.600
8		-0.600	-0.400
9		-0.400	-0.200
10		-0.200	0.000
11		0.000	0.200
12		0.200	0.400
13		0.400	0.600
14		0.600	0.800
15		0.800	1.000
16		1.000	1.200
17		1.200	1.400

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NOTE:

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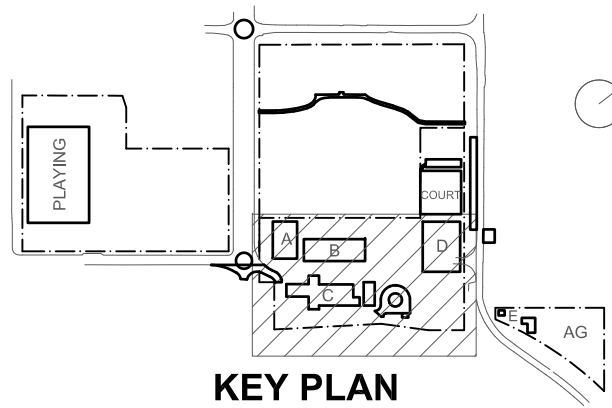
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NOTE:

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PART BULK EXCAVATION PLAN

SCALE 1:250



Cut/Fill Summary

Name	Cut Factor	Fill Factor	2D Area	Cut	Fill	Net
VOLUME	1.000	1.000	21434.033sq.m	2701.197 Cu. M.	3993.522 Cu. M.	1292.325 Cu. M.<Fill>
Totals			21434.033sq.m	2701.197 Cu. M.	3993.522 Cu. M.	1292.325 Cu. M.<Fill>

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Architect
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Landscape Architecture
Context
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Acoustic
Acoustic Logic
T+ 61 2 8339 8000

Do not scale drawings. Verify all dimensions on site.

Rev	Date	Description	Chkd	Auth
A	24.03.21	DRAFT SCHEMATIC DESIGN ISSUE		
B	08.04.21	SCHEMATIC DESIGN		
C	16.04.21	SCHEMATIC DESIGN		
D	30.04.21	SCHEMATIC DESIGN		
E	07.05.21	SCHEMATIC DESIGN		
F	12.05.21	SCHEMATIC DESIGN		
G	10.02.21	ISSUED FOR DD		
H	14.02.22	GENERALLY REVISED		
I	14.07.22	ISSUED FOR RT'S REVISED DESIGN		
J	30.09.22	RT'S REVISED DD ISSUE		
K	23.11.22	ISSUED FOR RT'S		

Project
New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title
BULK EARTHWORKS
DETAIL PLAN
SHEET 2

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250

Drawing No.
BHS-CE-2011

Revision
K

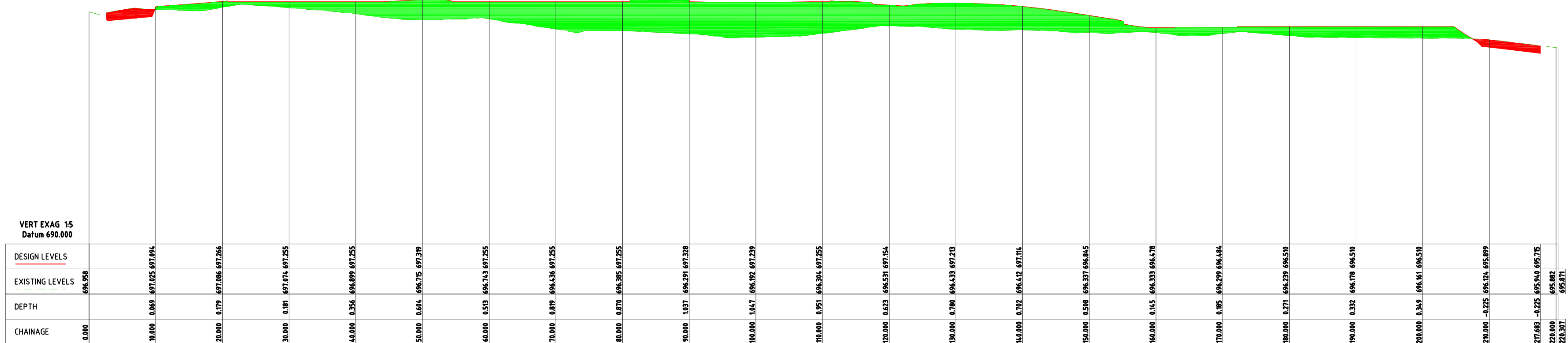
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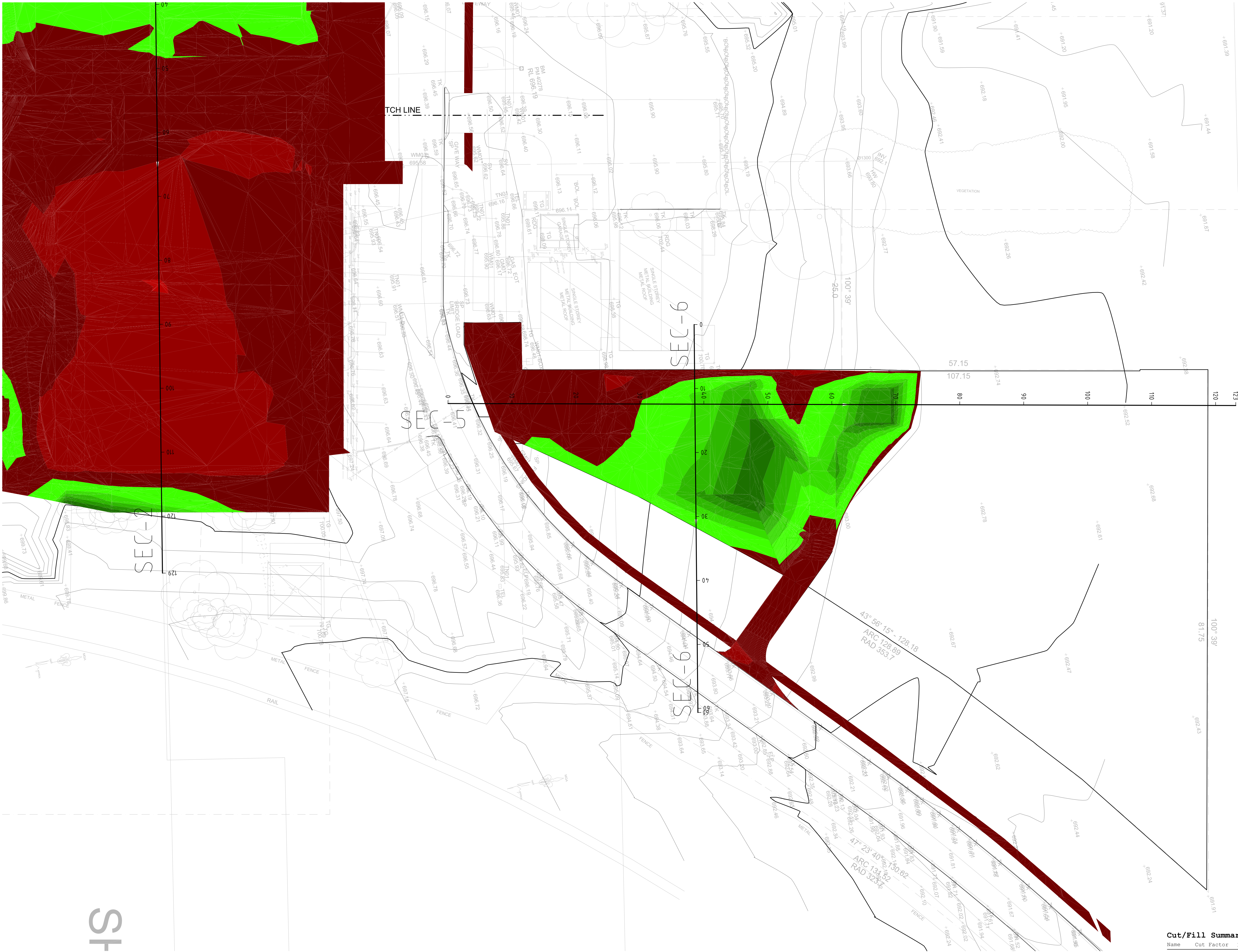
M+G Consulting

M & G CONSULTING ENGINEERS PTY LTD ABN 65 094 064 990
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Surface Analysis: Elevation Ranges			
Number	Color	Minimum Elevation (m)	Maximum Elevation (m)
1		-2.000	-1.800
2		-1.800	-1.600
3		-1.600	-1.400
4		-1.400	-1.200
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7		-0.800	-0.600
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AG PLOT BULK EXCAVATION PLAN
SCALE 1:250

Cut/Fill Summary				
Name	Cut Factor	Fill Factor	2d Area	Cut Fill Net
VOLUME	1.000	1.000	24353.206sq.m	3003.969 Cu. M. 4080.919 Cu. M. 1076.950 Cu. M.<Fill>
Totals			24353.206sq.m	3003.969 Cu. M. 4080.919 Cu. M. 1076.950 Cu. M.<Fill>

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

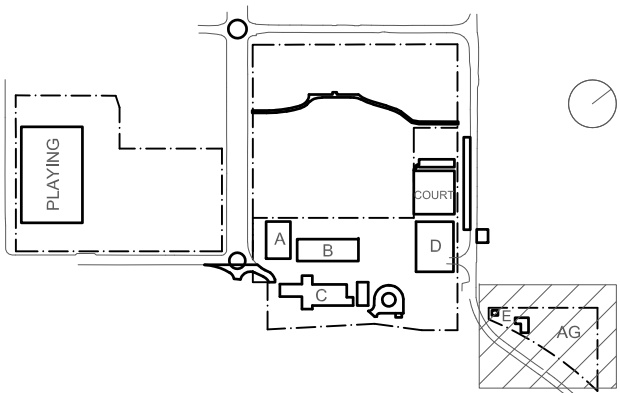
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Acoustic
Acoustic Logic
T+ 61 2 8339 9000

KEY



Rev	Date	Description	Chkd Auth.
A	11.05.21	SCHEMATIC DESIGN	
B	10.12.21	ISSUED FOR DD	
D	14.02.22	GENERALLY REVISED	
C	14.07.22	ISSUED FOR RT'S REVISED DESIGN	
E	30.09.22	RTS REVISED DD ISSUE	

Project
New High School in Bungendore
MAJARA STREET
BUNGENDORE NSW 2621
Drawing Title
AG PLOT
BULK EARTHWORKS PLAN

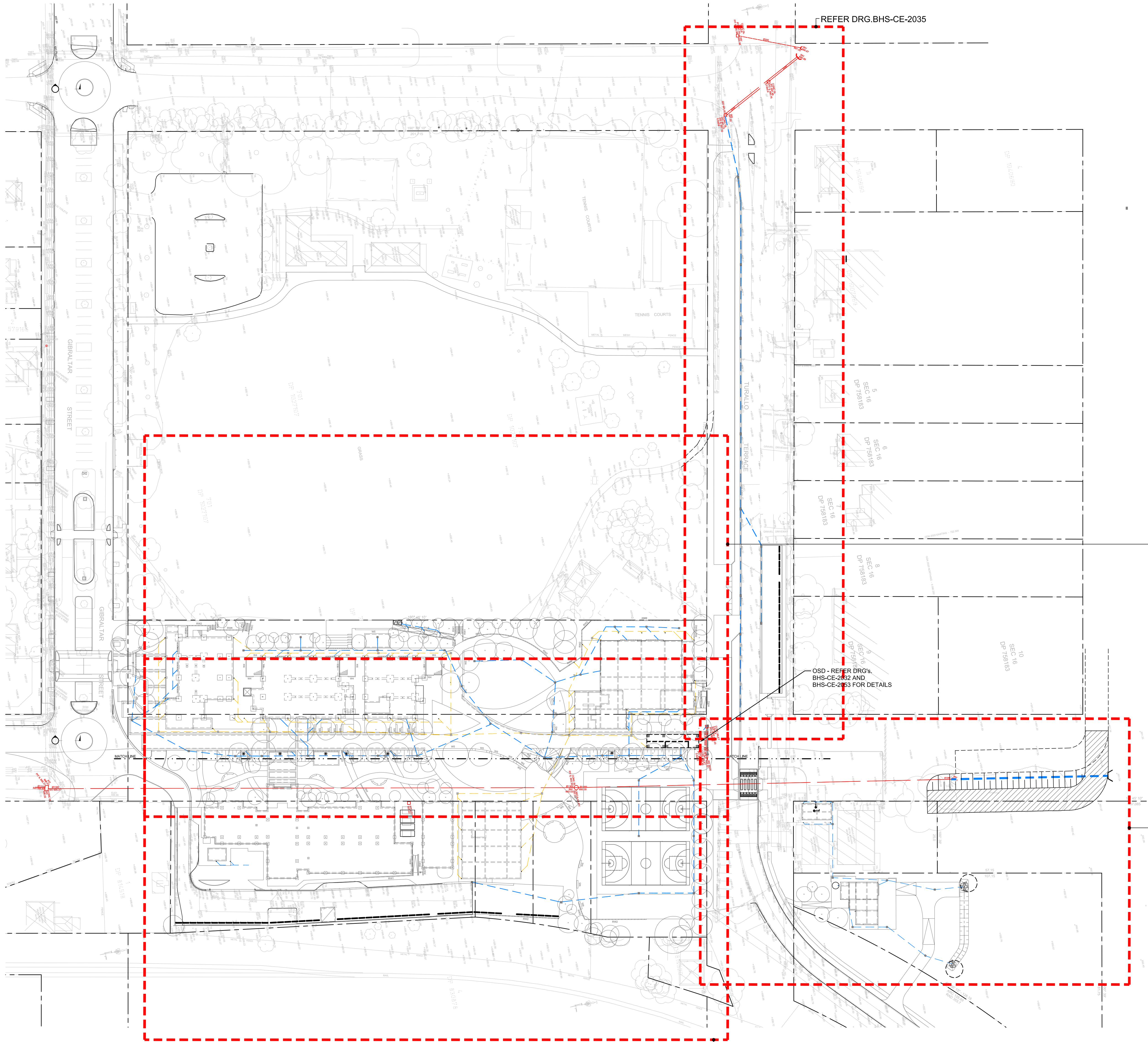
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MW
Reviewed
SCM
Drawn
MW
Sheet
B1
Job No.
5555
Status
SSDA
Date
OCT '21
Scale
1:250
Drawing No.
BHS-CE-2015
Revision
E

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(PO Box 1656, NSW 2059)
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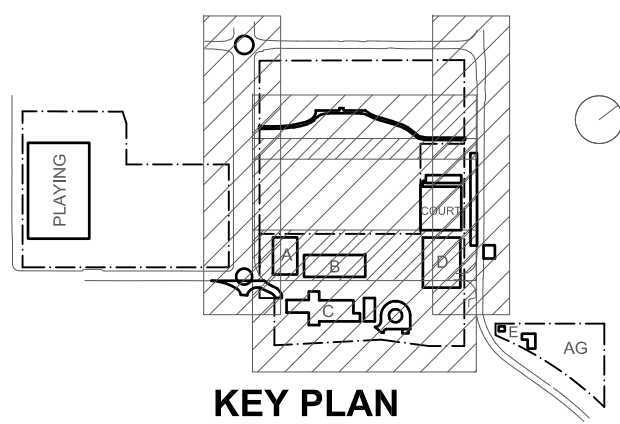
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6		-1.000	-0.800
7		-0.800	-0.600
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13		0.400	0.600
14		0.600	0.800
15		0.800	1.000
16		1.000	1.200
17		1.200	1.400



DRAINAGE LEGEND

- EXISTING SURFACE/PAVEMENT LEVEL
- + 8.05 PROPOSED SURFACE/PAVEMENT LEVEL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING STORMWATER PIPE AND PIT
- PROPOSED UPVC STORMWATER PIPE AND JUNCTION PIT
- PROPOSED UPVC STORMWATER PIPE AND SURFACE INLET PIT
- PROPOSED UPVC STORMWATER PIPE AND JUNCTION PIT (DRAINING TO RW TANK)
- PROPOSED UPVC STORMWATER PIPE AND SURFACE INLET PIT (DRAINING TO RW TANK)
- PROPOSED 1000 SUBSOIL PIPE
- PROPOSED DOWNPIPE
- INVERT LEVEL OF PIPE
- GUTTER OVERFLOW (SPITTER) INTO COURTYARD
- PROPOSED FLUSHING POINT
- PROPOSED SUMP POINT
- OVERLAND FLOW PATH
- GRATED DRAIN
- DIRECTION OF FALL
- FINISHED FLOOR LEVEL
- RAINWATER OUTLET
- CONFIRM ON SITE
- PROPOSED SEDIMENT FENCE
- GEOTEXTILE FABRIC TO PIT

STORMWATER GENERAL ARRANGEMENT PLAN
SCALE 1:250



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Hindmarsh Construction Australia Pty Ltd
Level 27, 100 Miller Street
North Sydney NSW 2060
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F +61 2 6274 8898
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T +61 2 9276 1400
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T +61 2 9276 1400
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TKD Architects
T +61 2 9281 4399
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Norman Disney & Young
T +61 2 9281 8287

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Rev	Date	Description	Chkd	Auth.
P	23.11.21	50% DD ISSUE		
G	10.12.21	ISSUED FOR DD		
H	21.12.21	ISSUED FOR DD		
I	14.02.22	GENERALLY REVISED		
J	14.02.22	ISSUED FOR RTS REVISED DESIGN		
K	21.07.22	ISSUED FOR RTS REVISED DESIGN		
L	26.07.22	ISSUED FOR RTS REVISED DESIGN		
M	27.07.22	ISSUED FOR RTS REVISED DESIGN		
N	30.09.22	RTS REVISED DD ISSUE		
O	20.10.22	MINOR REVISIONS FOR RTS DD ISSUE		
P	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

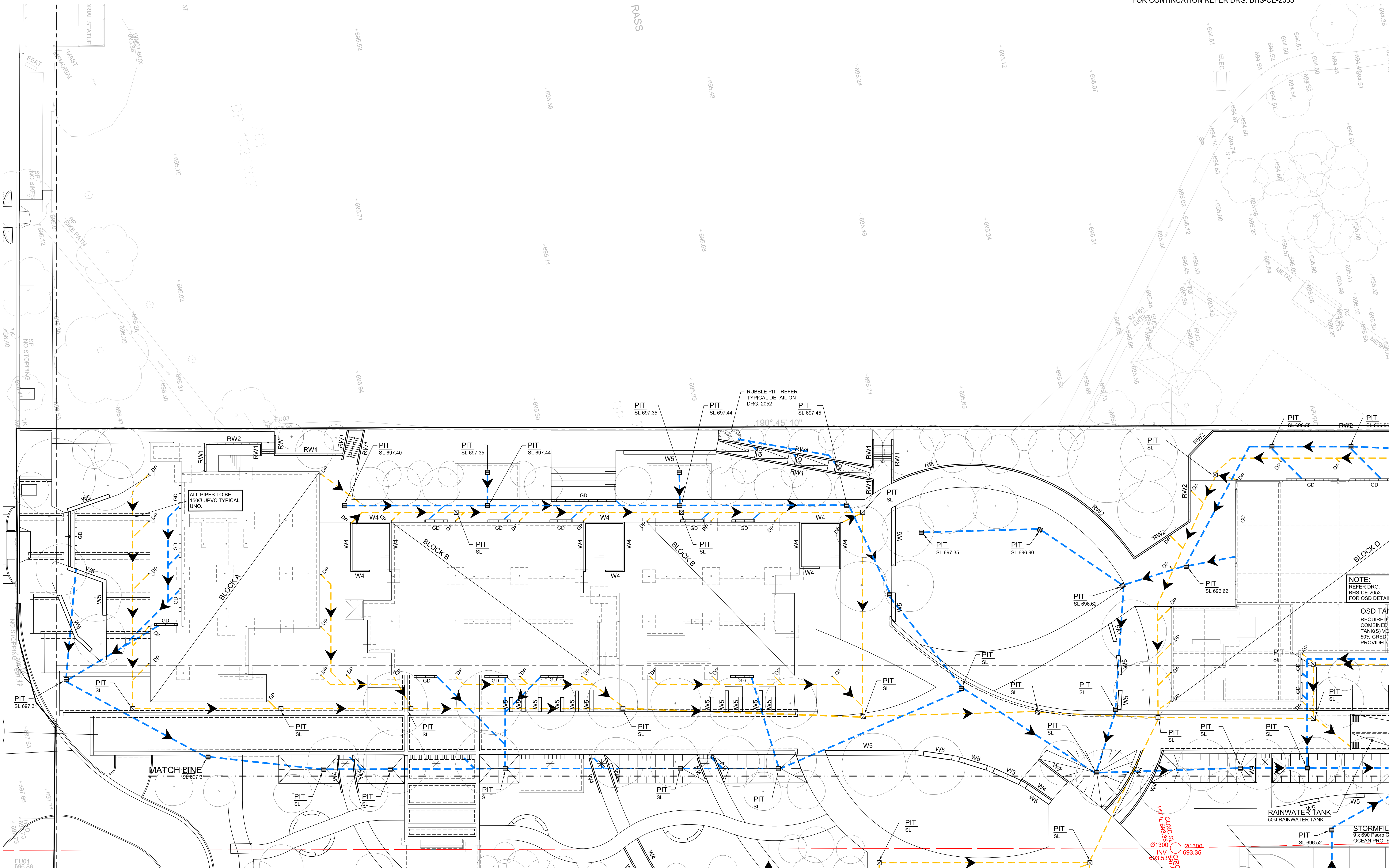
Drawing Title
STORMWATER DRAINAGE
GENERAL ARRANGEMENT
PLAN

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250
Drawing No.			
BHS-CE-2030			

Revision
O

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Tel: +61 (0)2 8666 7888
L3, 50 Berry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)
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FOR CONTINUATION REFER DRG. BHS-CE-2032
STORMWATER DRAINAGE PLAN
SCALE 1:200

NOTE:
FOR DRAINAGE LEGEND REFER DRG. BHS-CE-2030.

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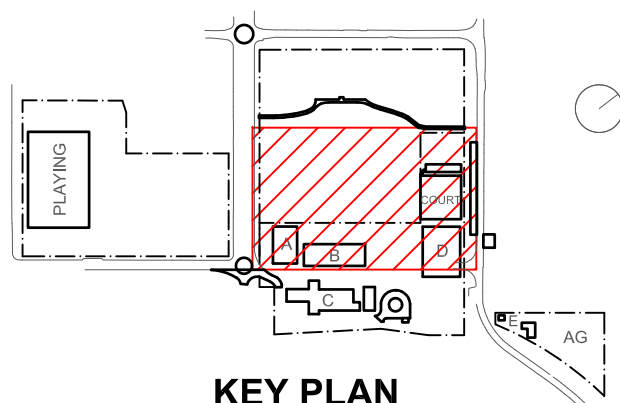
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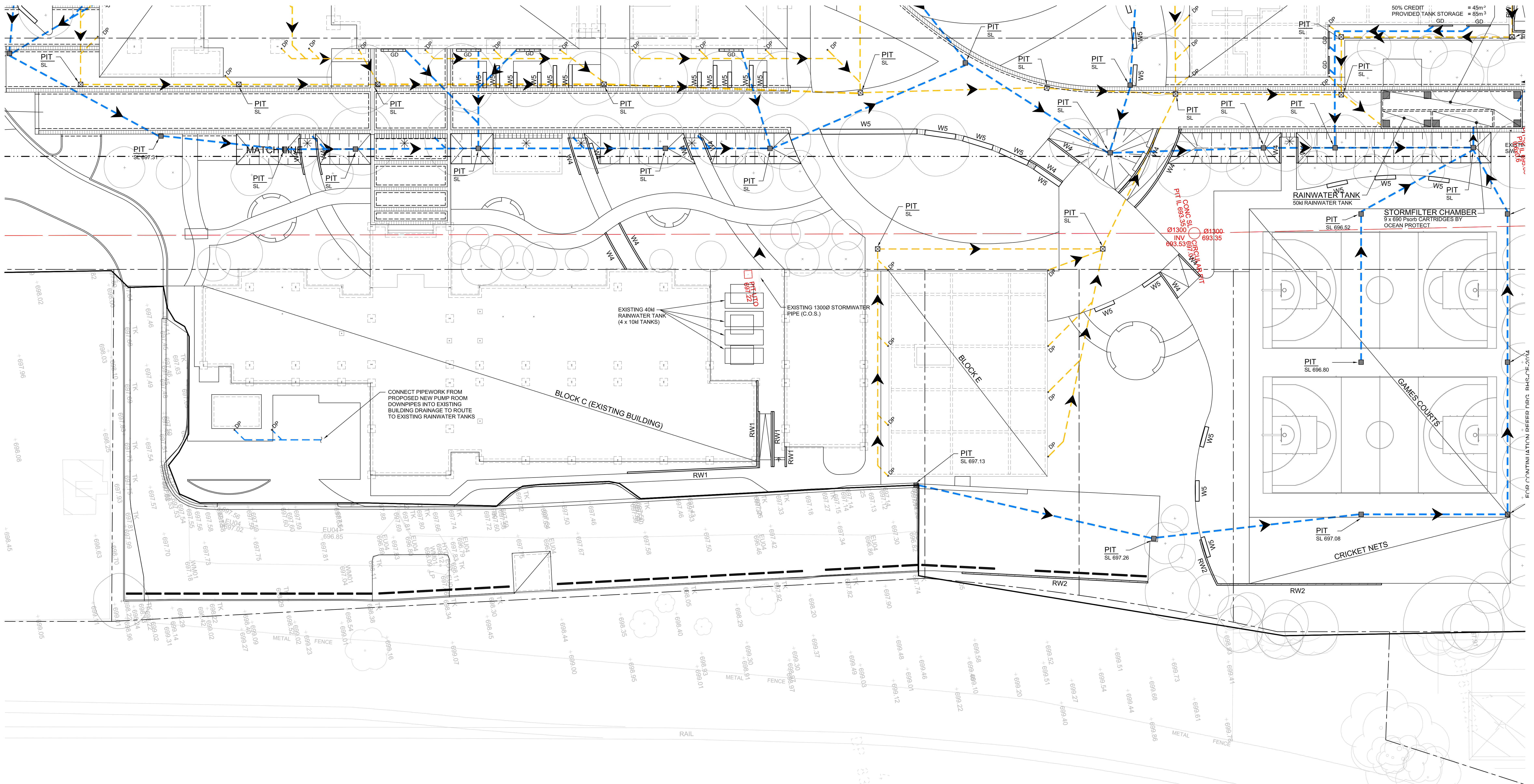
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C	30.04.21	SCHEMATIC DESIGN		
D	07.05.21	SCHEMATIC DESIGN		
E	12.05.21	SCHEMATIC DESIGN		
F	24.11.21	60% DO ISSUE		
G	10.12.21	ISSUED FOR DD		
H	21.12.21	ISSUED FOR DD		
I	14.02.22	GENERALLY REVISED		
J	14.07.22	ISSUED FOR RTIS REVISED DESIGN		
K	30.09.22	RTIS REVISED DO ISSUE		
L	23.11.22	ISSUED FOR RTIS		

Project
New High School in Bungendore
MAJARA STREET,
BUNGENDORE NSW 2621
Drawing Title
STORMWATER DRAINAGE
PLAN
SHEET 1

Designed	Reviewed	Drawn	Sheet
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Job No.	Status	Date	Scale
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Drawing No.	BHS-CE-2031	Revision	L

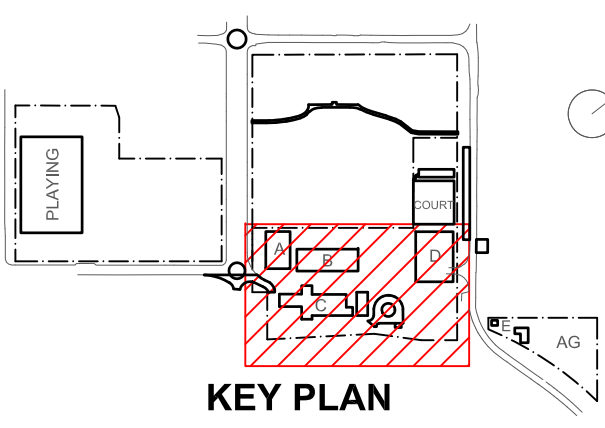
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PART STORMWATER DRAINAGE PLAN

SCALE 1:200
NOTE:
FOR DRAINAGE LEGEND REFER DRG. BHS-CE-2030.
* DENOTES GRATED CONCRETE DRAINAGE CHANNEL.
REFER TYPICAL DETAILS ON DRG. 2091.



Rev	Date	Description	Chkd	Auth.
C	30.04.21	SCHEMATIC DESIGN		
D	07.05.21	SCHEMATIC DESIGN		
E	12.05.21	SCHEMATIC DESIGN		
F	11.06.21	SCHEMATIC DESIGN		
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I	21.12.21	ISSUED FOR DD		
J	14.02.22	GENERALLY REVISED		
K	14.07.22	ISSUED FOR RTS REVISED DESIGN		
L	30.09.22	RTS REVISED DD ISSUE		
M	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
STORMWATER DRAINAGE
PLAN
SHEET 2

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:200
Drawing No.	Revision		
BHS-CE-2032	M		

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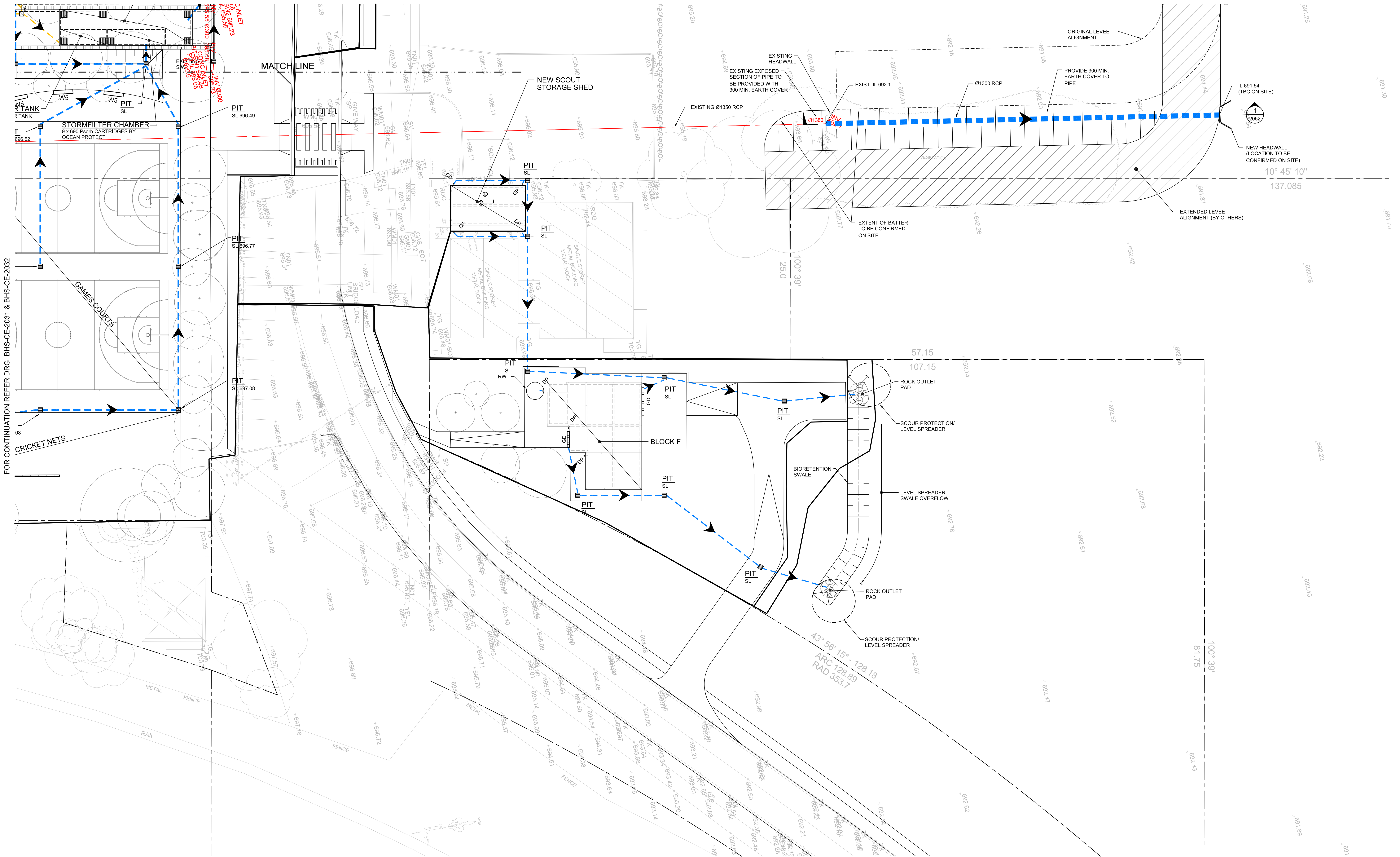
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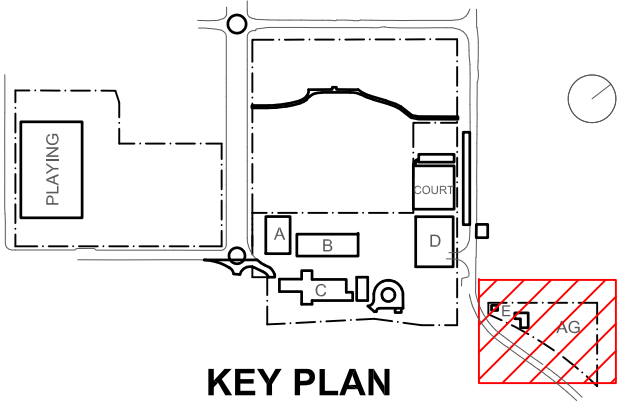
FOR CONTINUATION REFER DRG. BHS-CE-2031 & BHS-CE-2035



FOR CONTINUATION REFER DRG. BHS-CE-2031 & BHS-CE-2032

PART STORMWATER DRAINAGE PLAN

SCALE 1:200
NOTE:
FOR DRAINAGE LEGEND REFER DRG. BHS-CE-2030.



Rev	Date	Description	Chkd	Auth.
A	30.04.21	SCHEMATIC DESIGN		
B	07.05.21	SCHEMATIC DESIGN		
C	07.05.21	SCHEMATIC DESIGN		
D	12.05.21	SCHEMATIC DESIGN		
E	10.12.21	ISSUED FOR DD		
F	14.12.21	DRG. NUMBER REVISED - ISSUED FOR DD		
G	21.12.21	ISSUED FOR DD		
H	14.02.22	GENERALLY REVISED		
I	14.07.22	ISSUED FOR RT'S REVISED DESIGN		
J	30.09.22	RT'S REVISED DD ISSUE		
K	23.11.22	ISSUED FOR RT'S		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
STORMWATER DRAINAGE
PLAN
SHEET 3

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:200
Drawing No.	Revision		
BHS-CE-2034	K		

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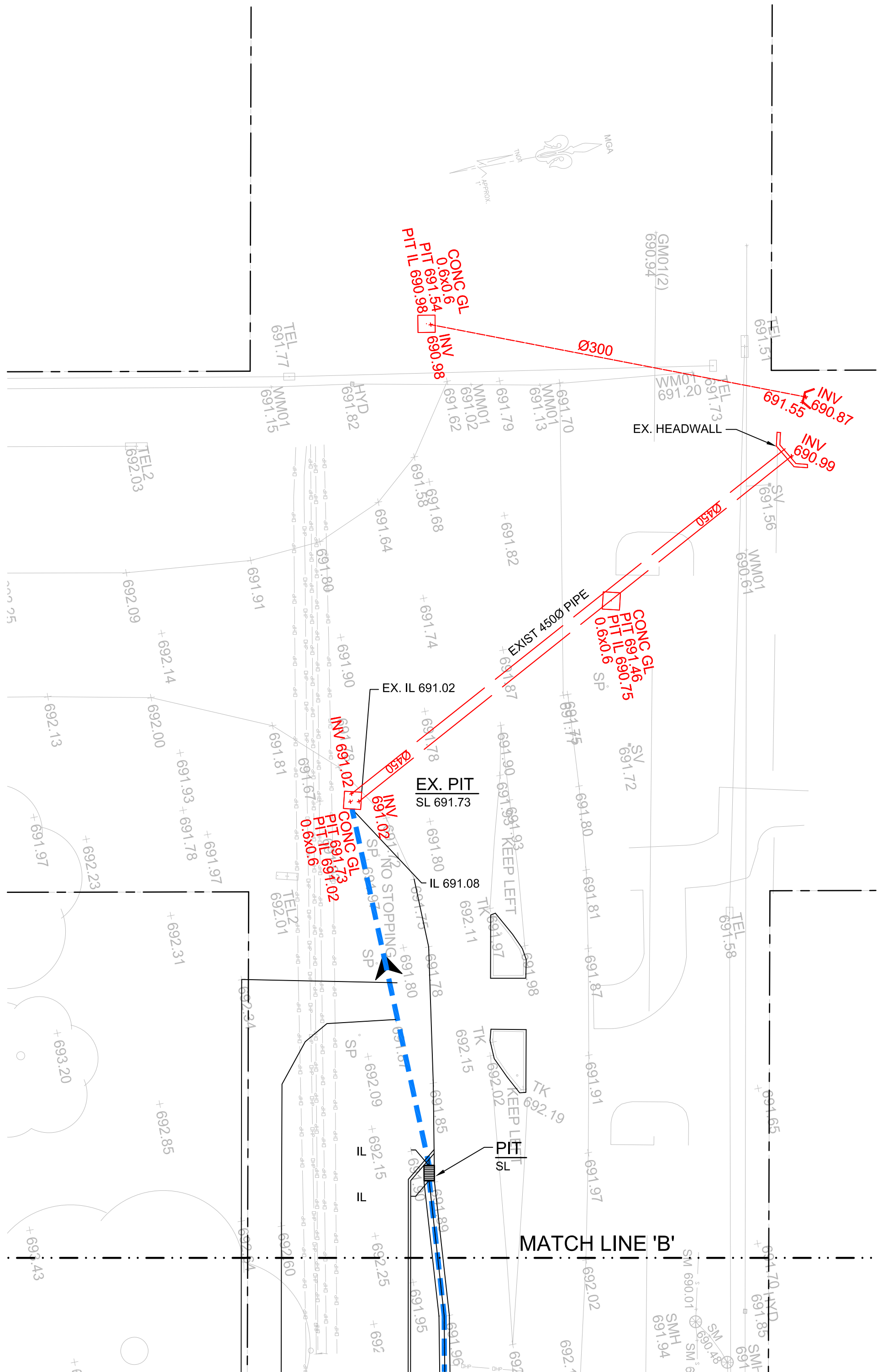
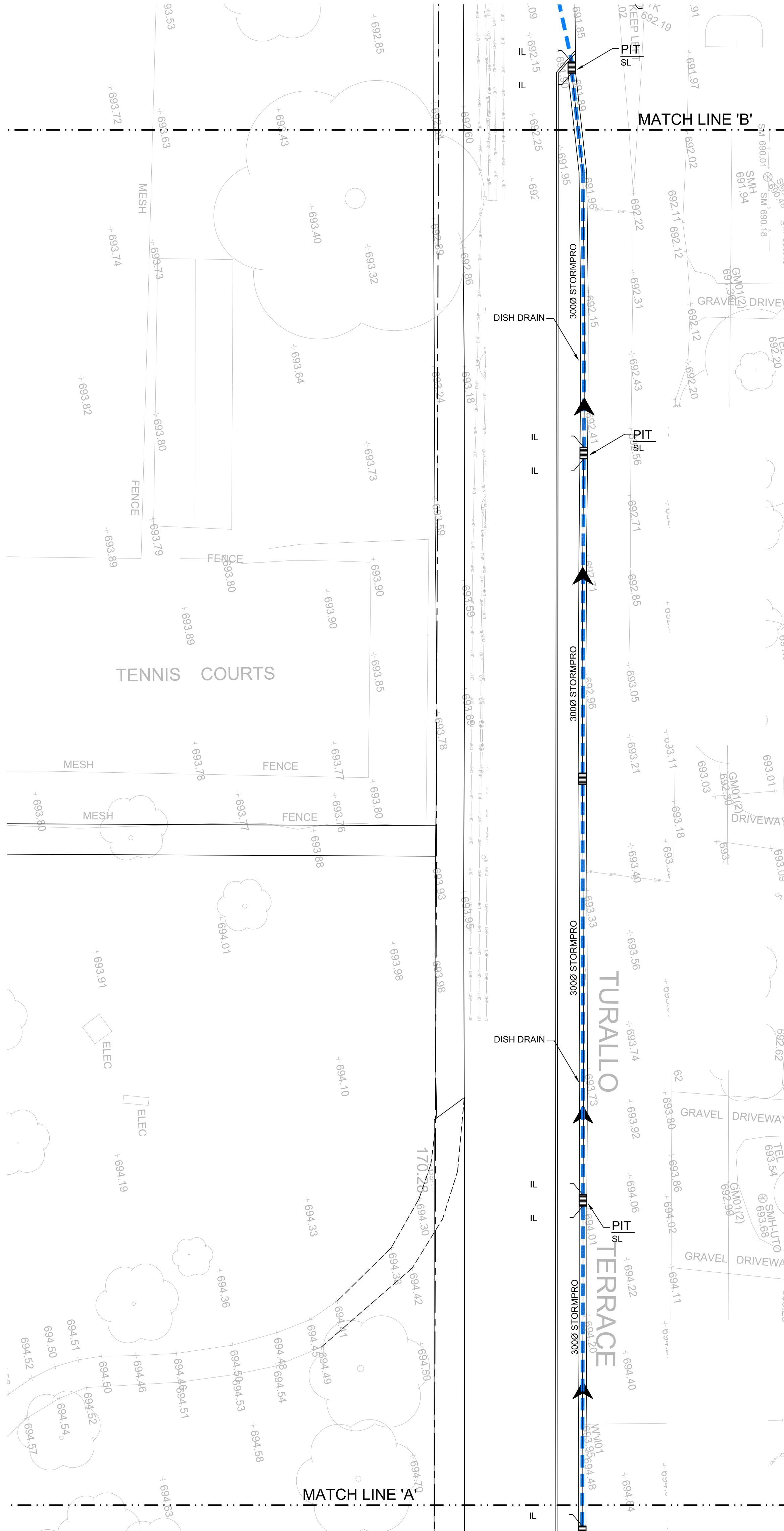
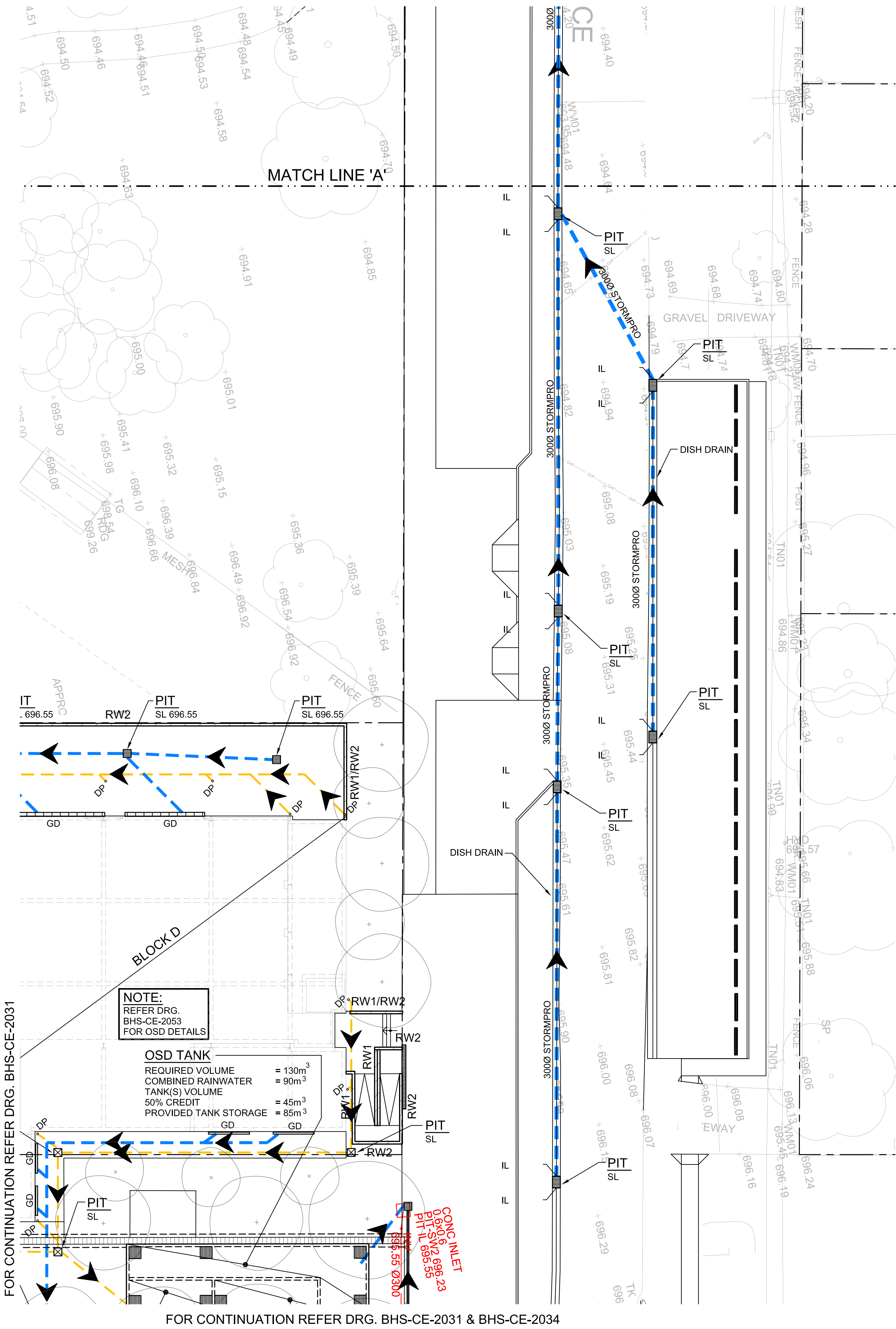
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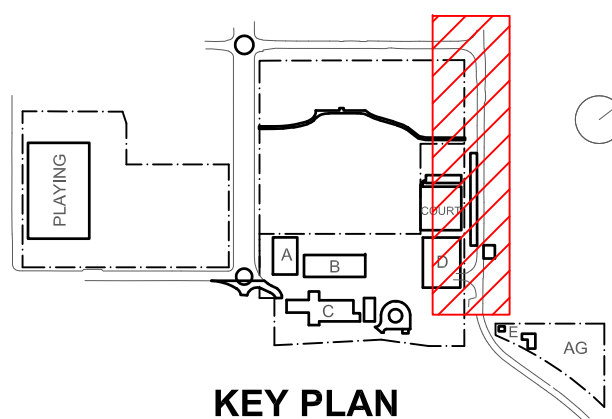
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Rev	Date	Description	Chkd	Auth
A	10.12.21	ISSUED FOR DD		
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C	14.02.22	GENERALLY REVISED		
D	15.02.22	GENERALLY REVISED		
E	14.07.22	ISSUED FOR RTS REVISED DESIGN		
F	27.07.22	ISSUED FOR RTS REVISED DESIGN		
G	30.09.22	RTS REVISED DD ISSUE		
H	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
STORMWATER DRAINAGE
PLAN
SHEET 4

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
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Drawing No.	BHS-CE-2035	Revision	H

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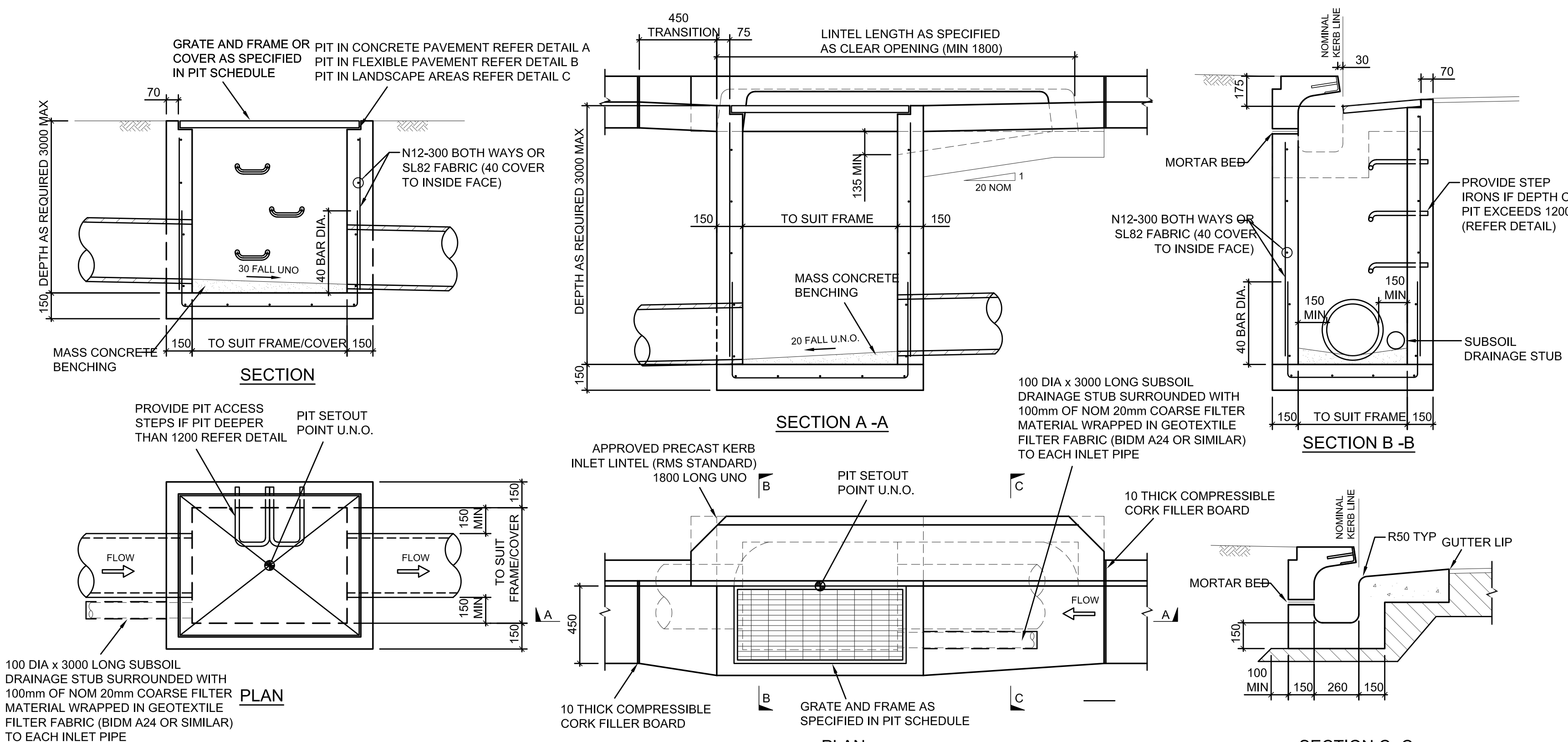
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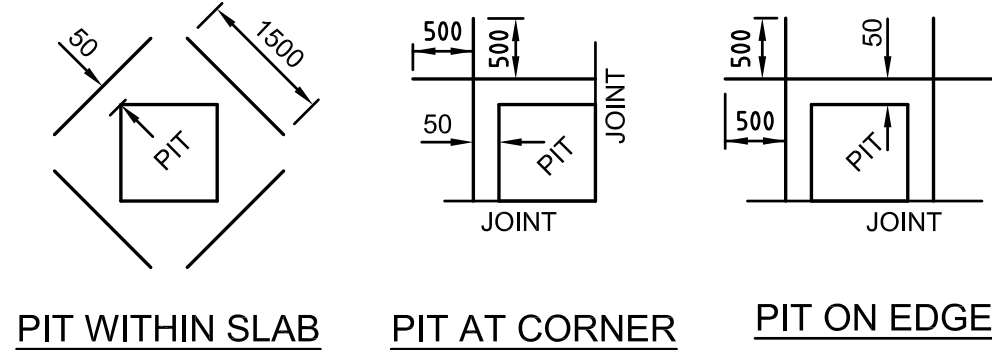
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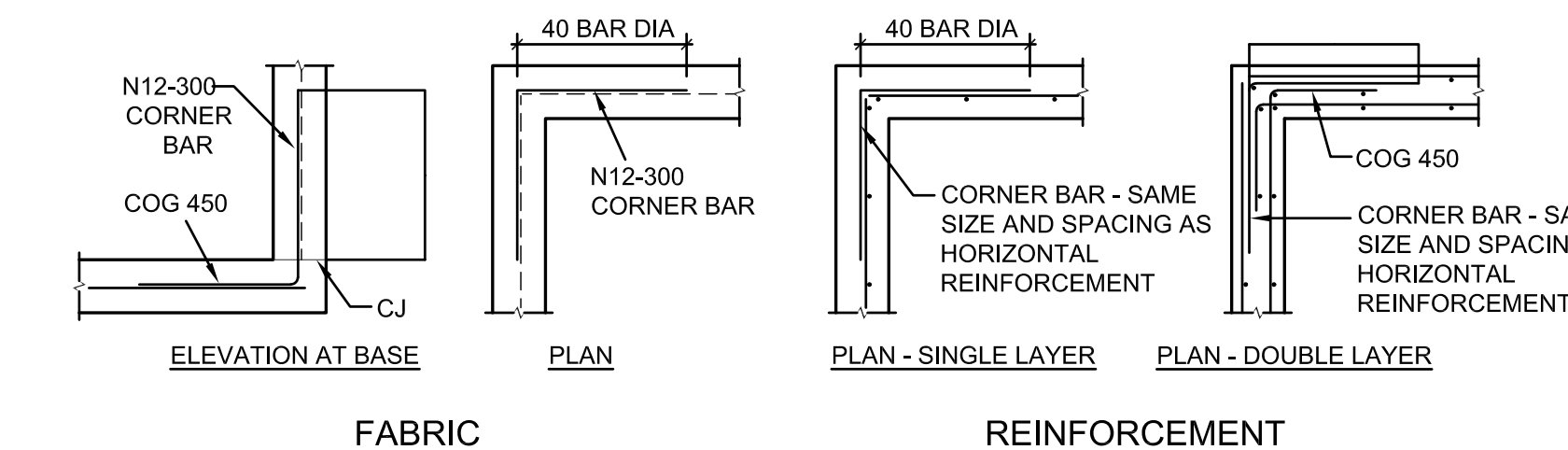
SURFACE INLET/JUNCTION PIT DETAIL
SCALE 1:20

KERB INLET PIT DETAIL
SCALE 1:20

- STORMWATER PIT NOTES**
1. CONCRETE TO HAVE A MIN. COMPRESSIVE STRENGTH (F_c) OF 25 MPa AT 28 DAYS.
 2. REINFORCEMENT NOT REQUIRED IF DEPTH OF PIT IS LESS THAN 1000mm. PITS GREATER THAN 3000mm DEEP TO HAVE WALL AND BASE 200mm THICK REINFORCED WITH N12-250 EACH WAY EACH FACE WITH CONCRETE STRENGTH F_c = 40 MPa.
 3. PROVIDE STEP IRONS AT MAX 350mm CTRS IF DEPTH OF PIT EXCEEDS 1200mm.
 4. IF REINFORCING FABRIC IS TO BE USED REFER TO WALL AND CORNER DETAILS
 5. PRECAST PITS ARE TO GENERALLY COMPLY WITH THESE DETAILS.
 6. PRECAST PIT MAY BE USED SUBJECT TO ENGINEERS APPROVAL.
 7. ALL PITS TO BE LOCKABLE.
 8. FINAL INTERNAL PIT DIMENSIONS ARE TO COMPLY WITH AS 3500.

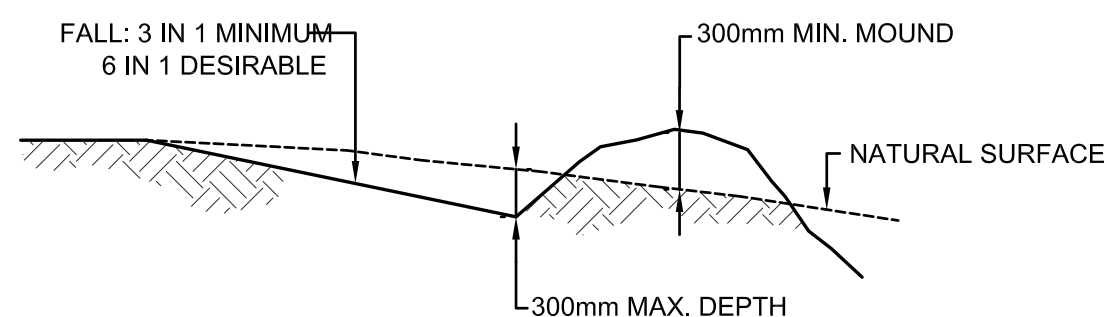


DETAIL OF SLAB REINFORCEMENT AT PITS IN CONCRETE PAVEMENT
N.T.S.

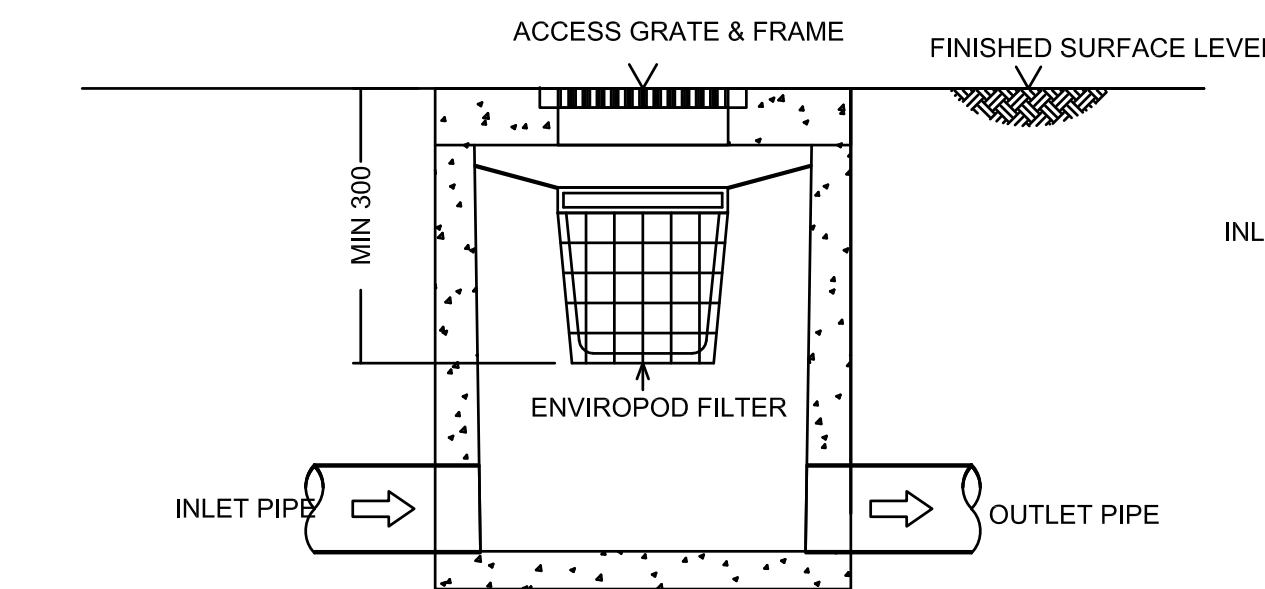


PIT CORNER DETAILS

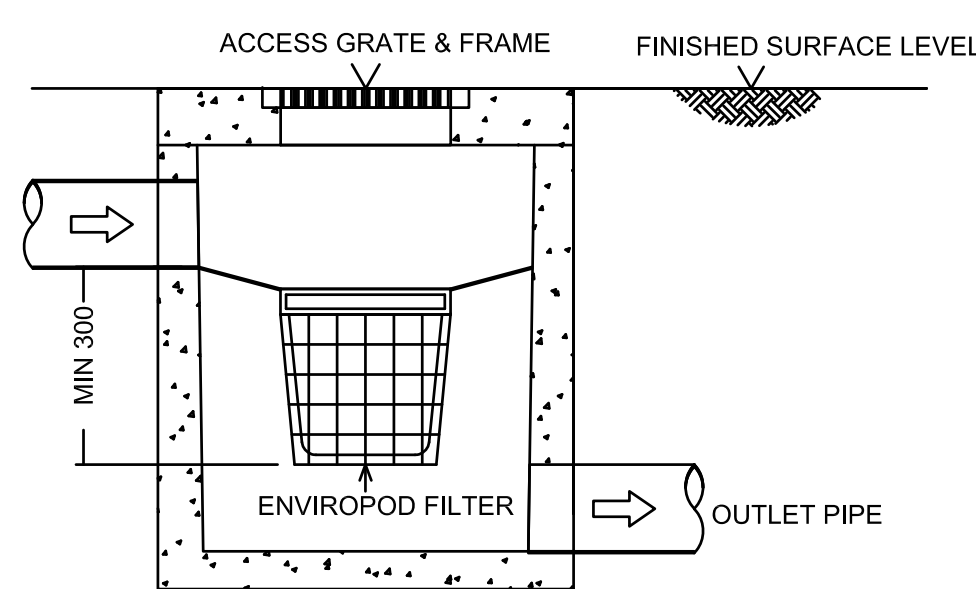
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NOTE: DESIGNER TO VERIFY EXTENT OF DETAILING



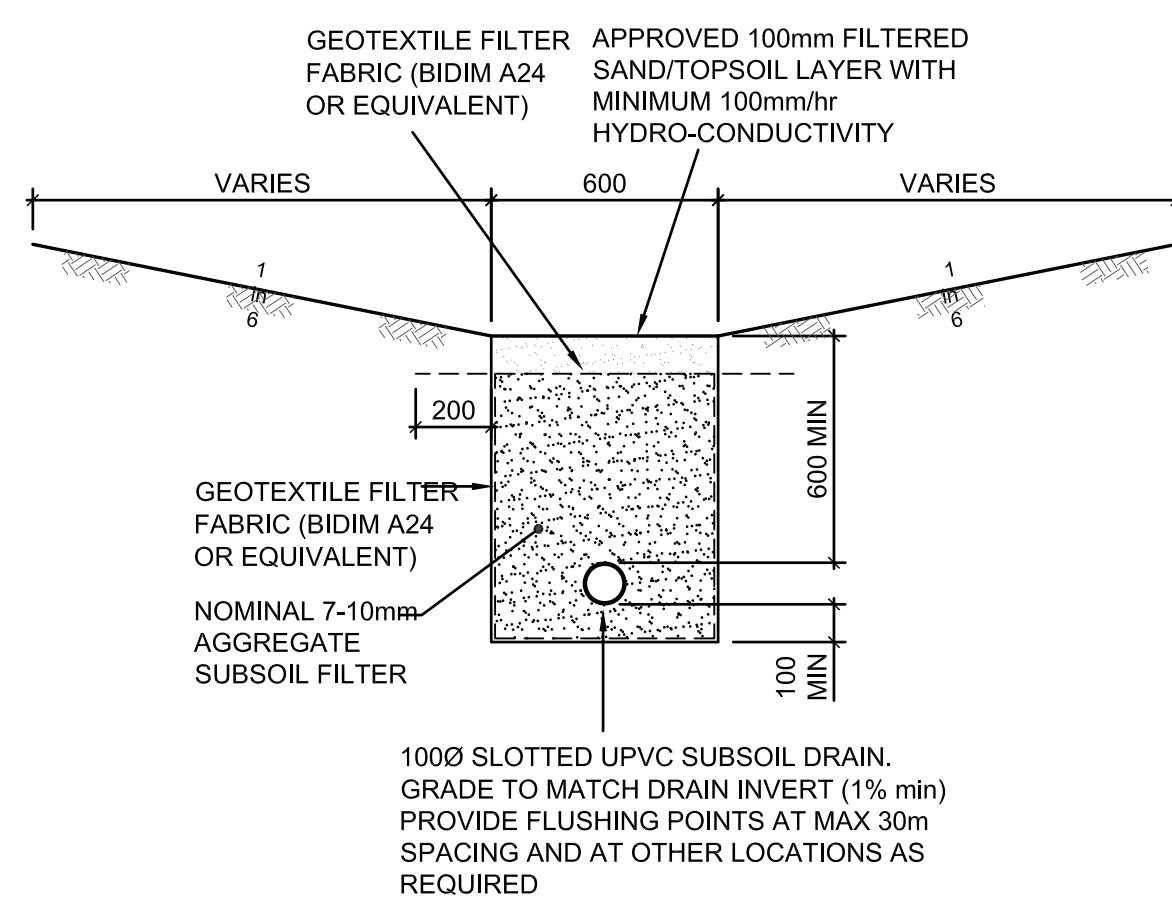
TYPICAL CATCH DRAIN
N.T.S.



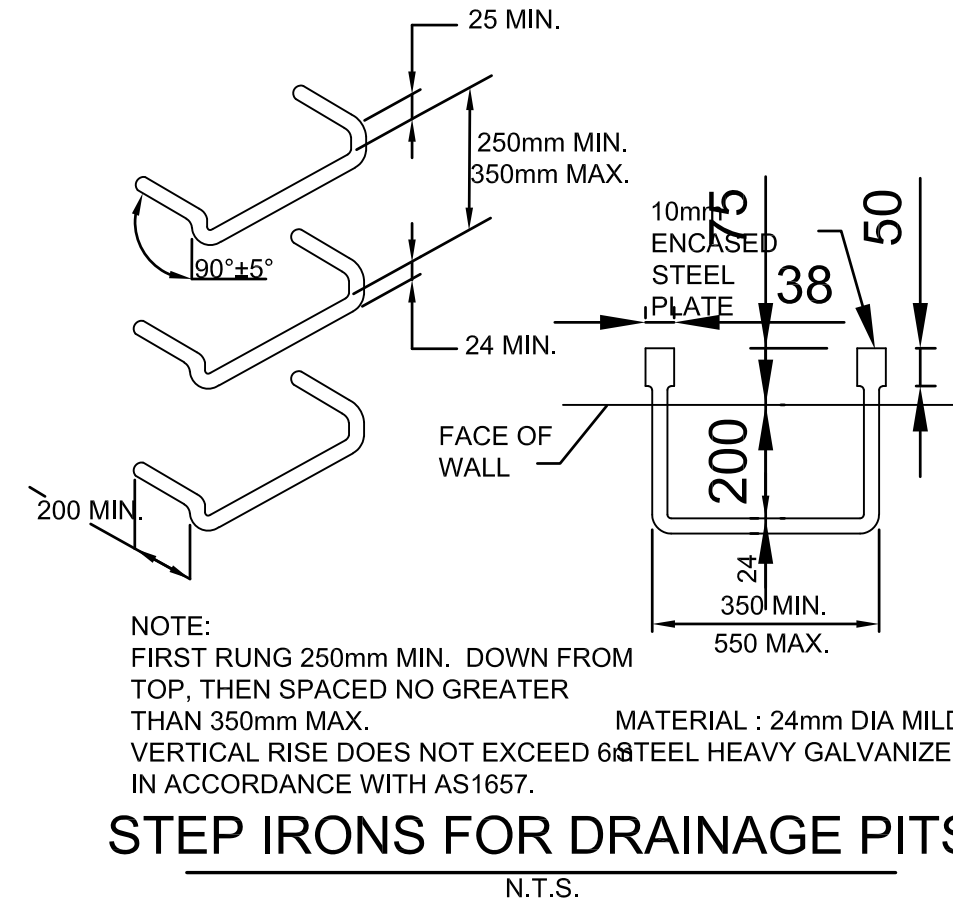
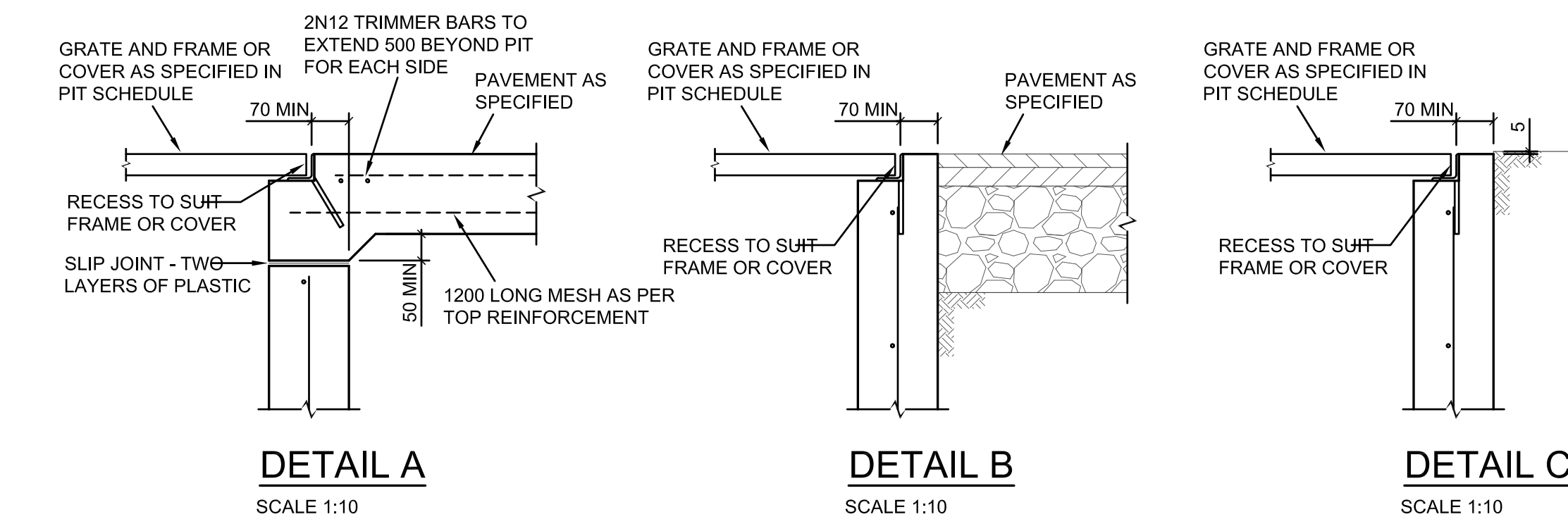
STANDARD ENVIROPOD CONFIGURATION SECTION



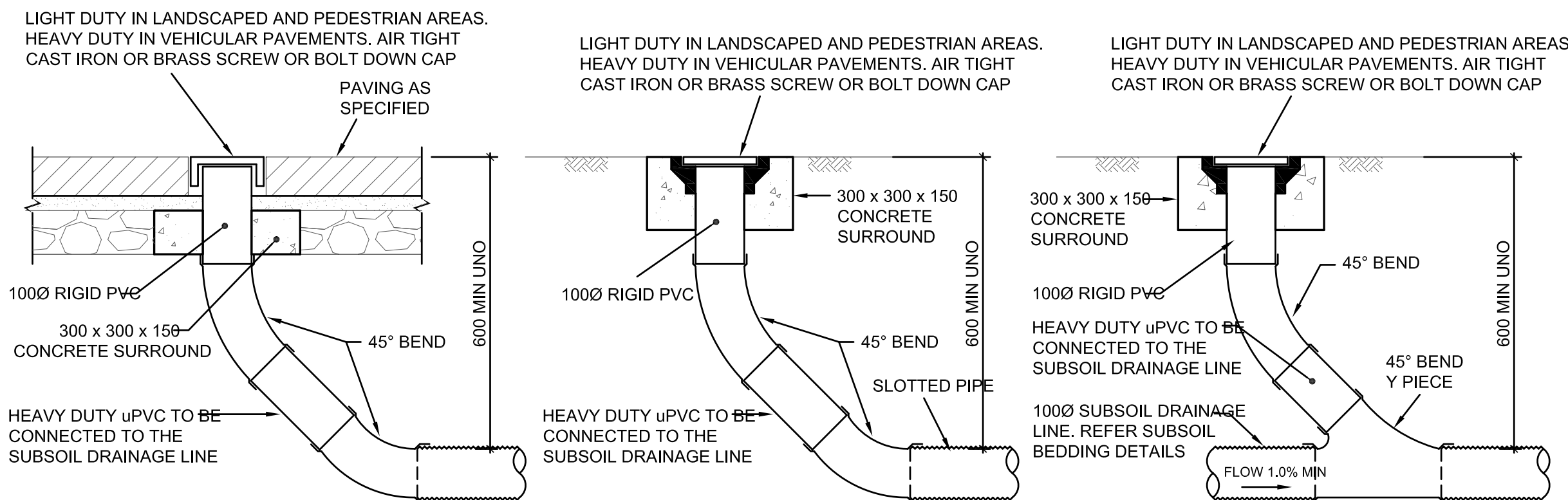
DROP PIPE ENVIROPOD CONFIGURATION SECTION



TURFED SWALE DETAIL
SCALE 1:20



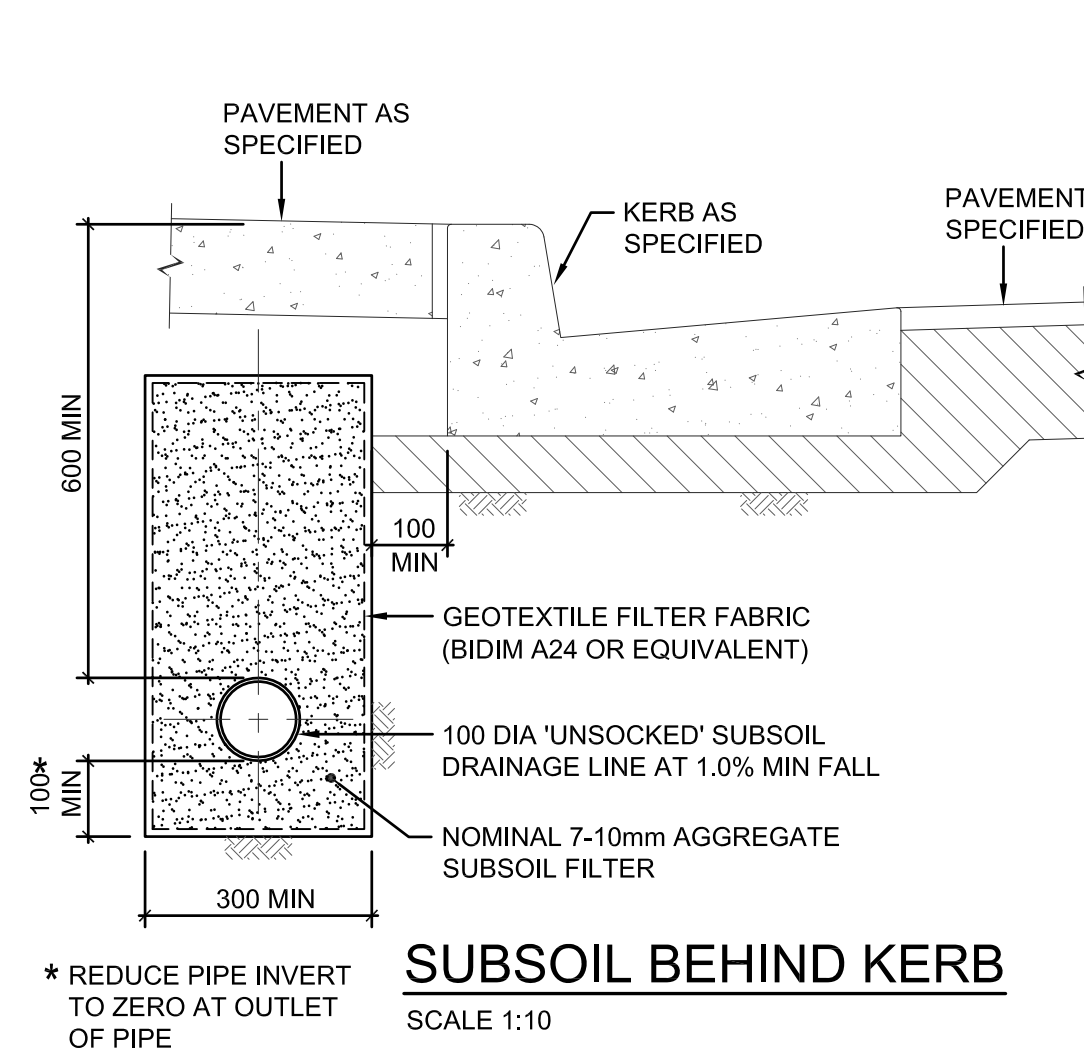
STEP IRONS FOR DRAINAGE PITS
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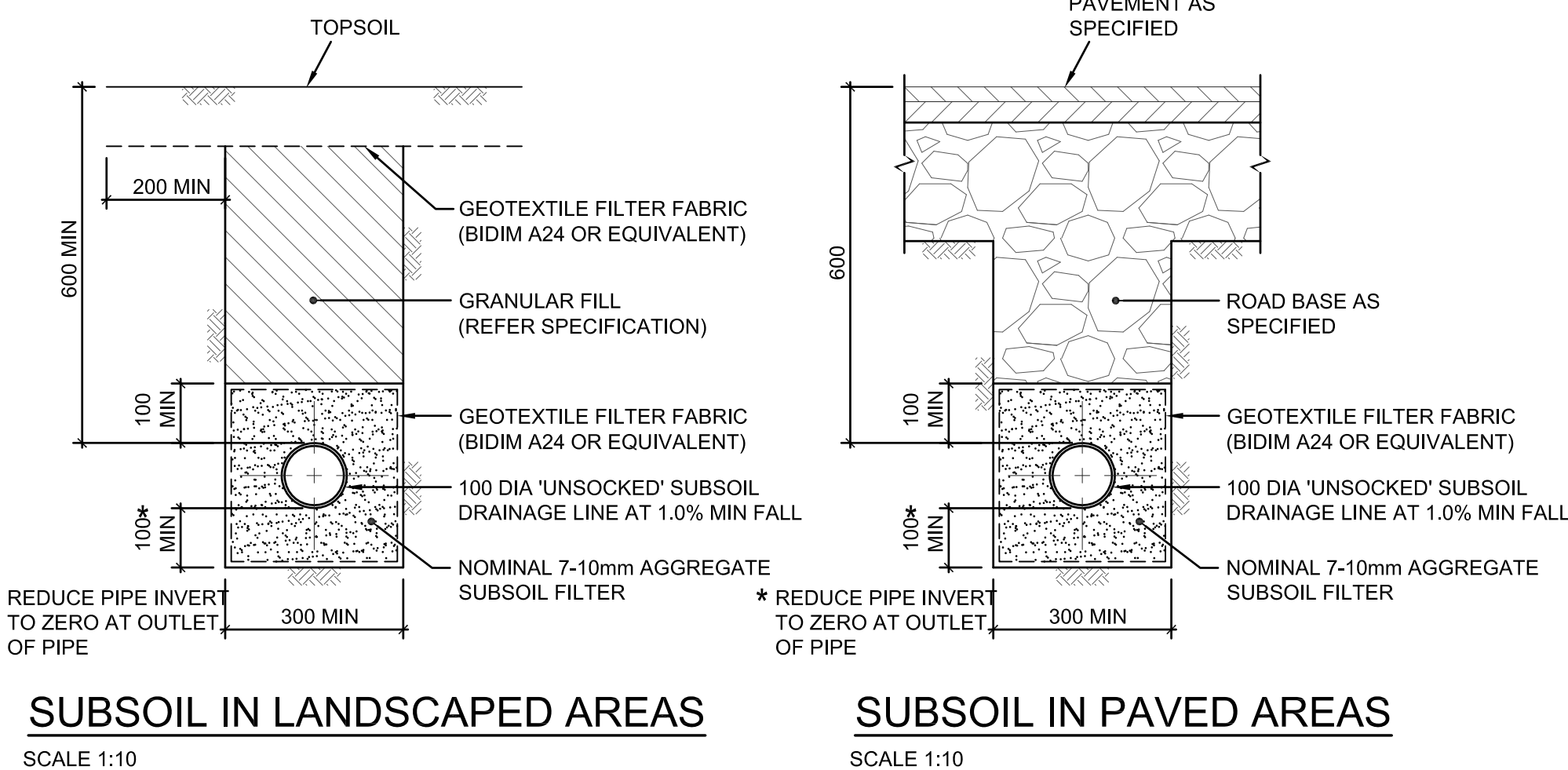
FLUSHOUT RISER (FOR) IN PAVING BRICKS
SCALE 1:10

FLUSHOUT RISER (FOR)
SCALE 1:10
NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS WITHIN DRAINAGE LAYER ONLY

INTERMEDIATE RISER
SCALE 1:10
NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



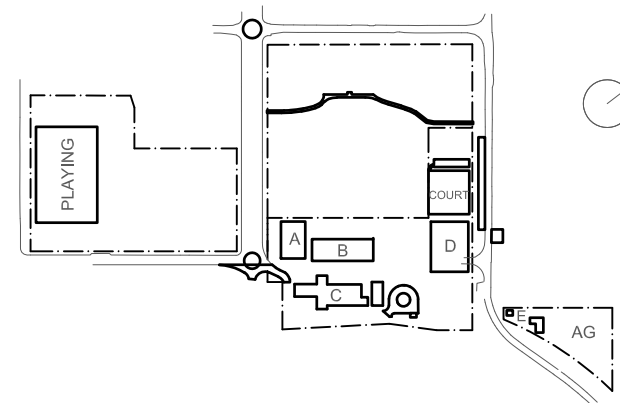
SUBSOIL BEHIND KERB
SCALE 1:10

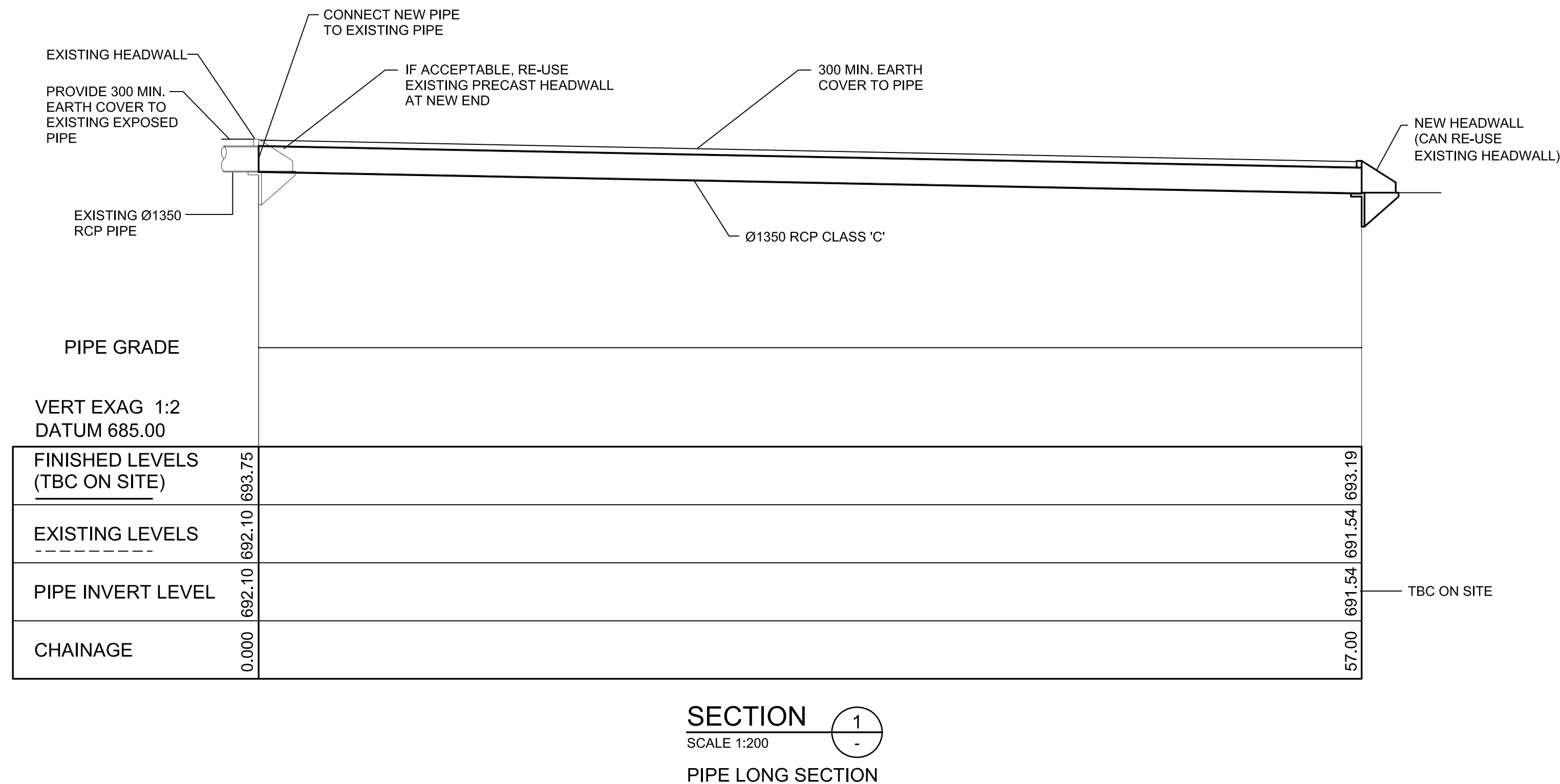
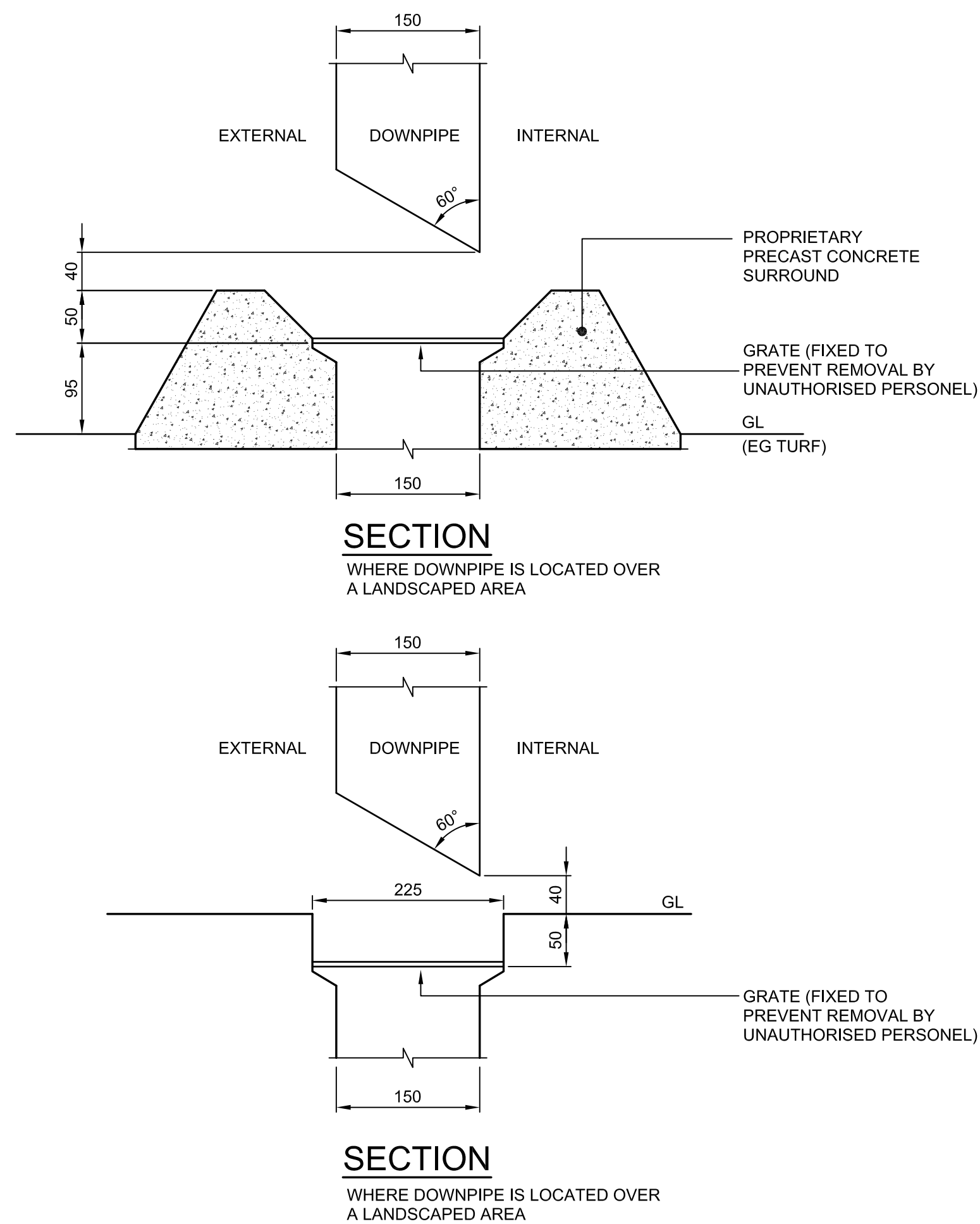
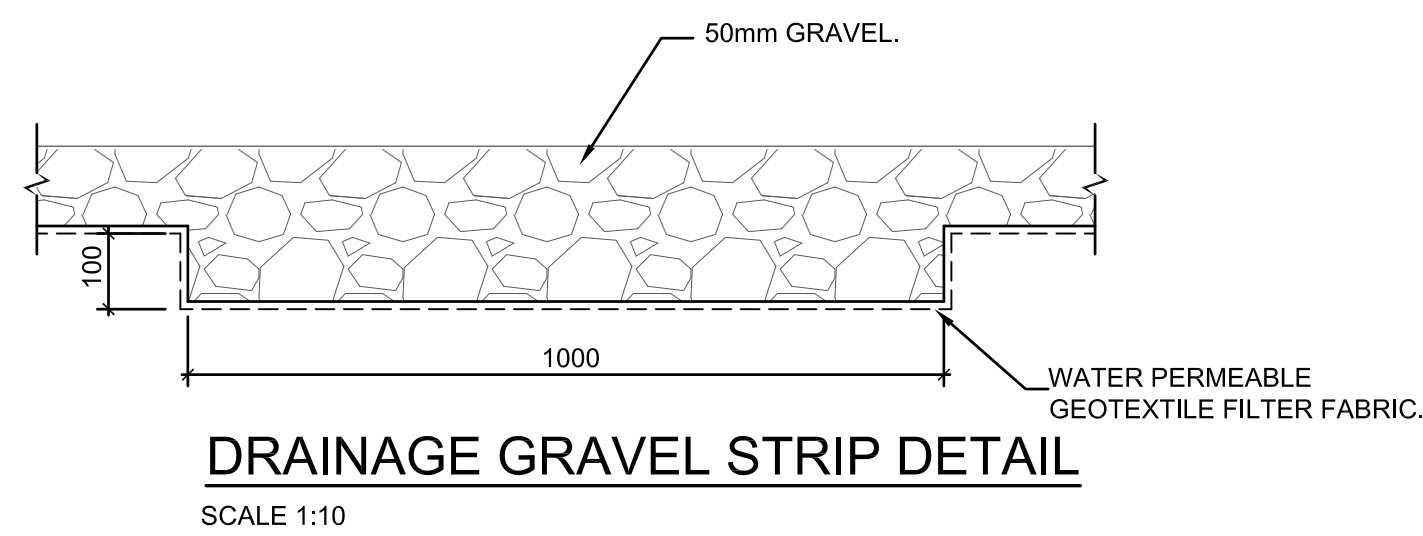
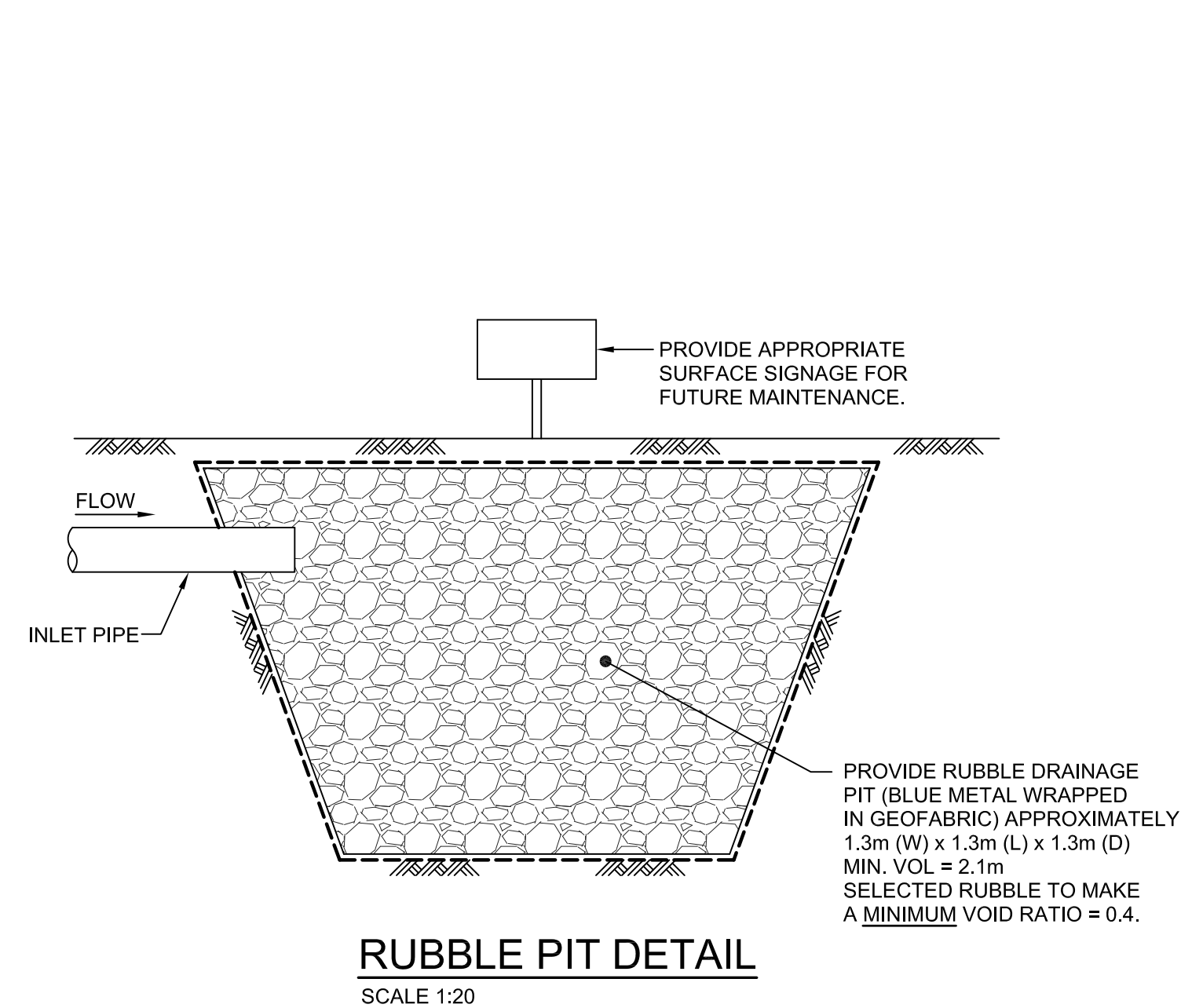
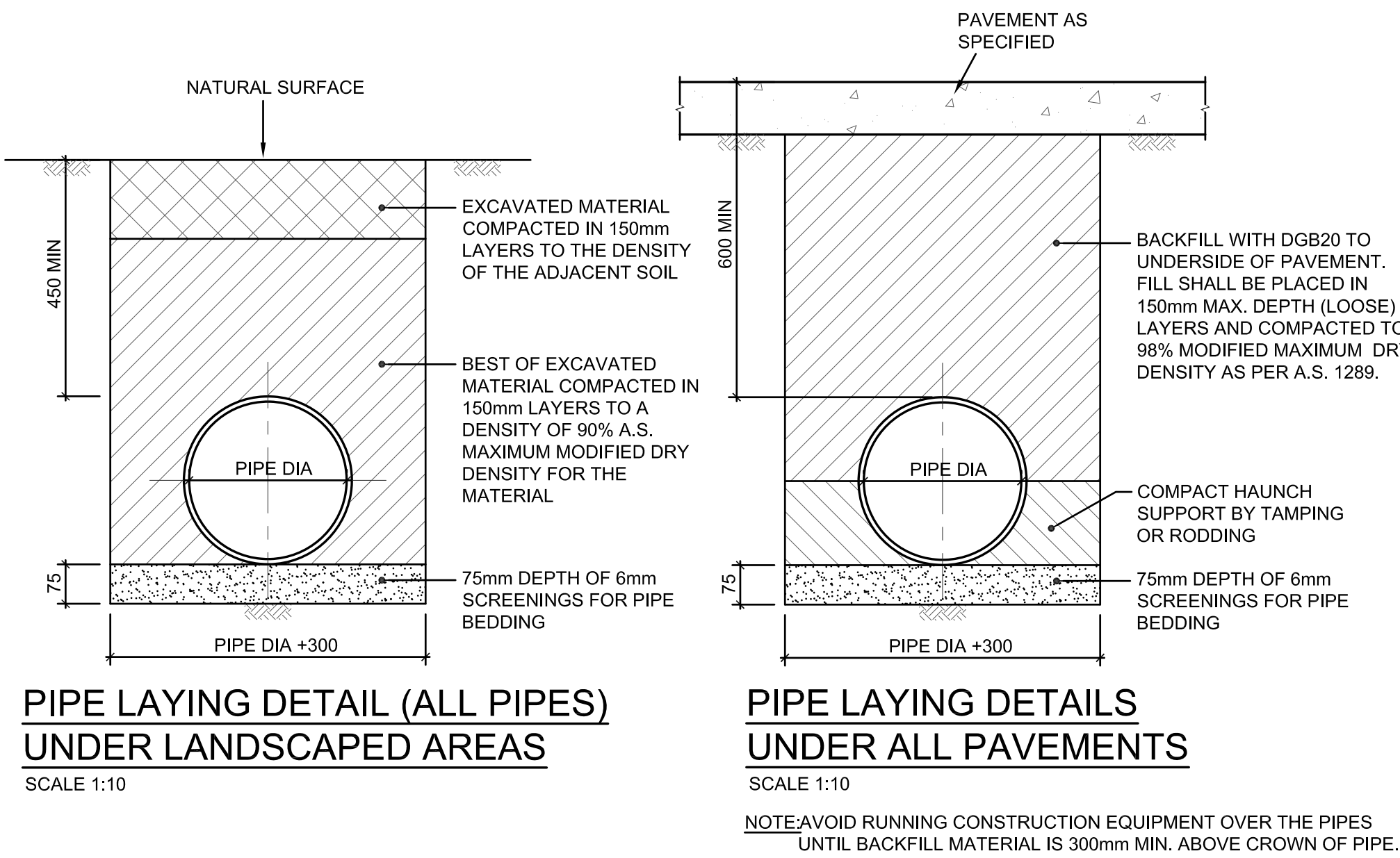
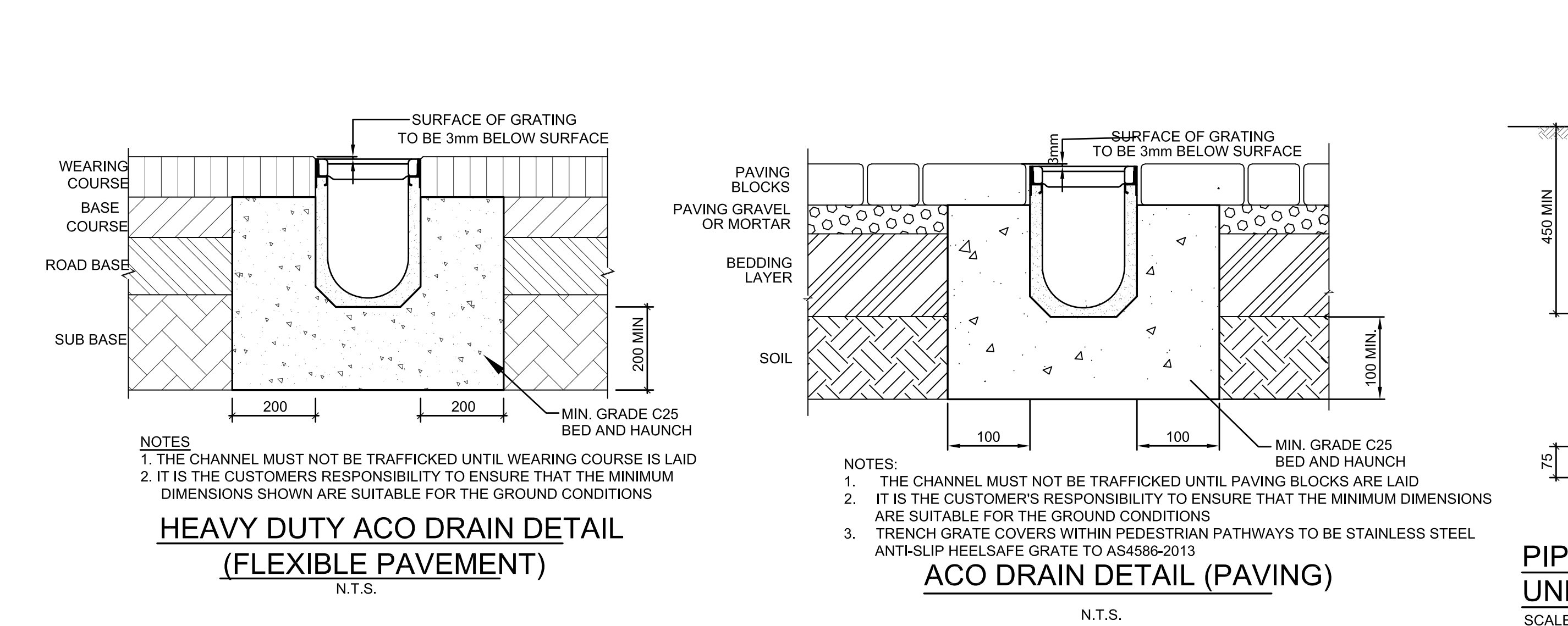


SUBSOIL IN LANDSCAPED AREAS
SCALE 1:10

SUBSOIL IN PAVED AREAS
SCALE 1:10

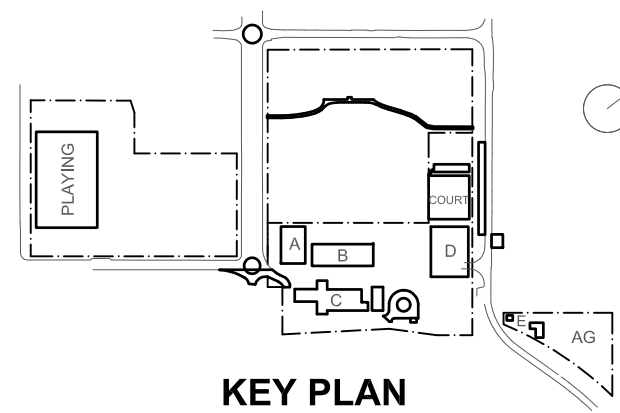
TYPICAL ENVIROPOD OCEAN PROTECT PIT DETAILS





DOWNPIPE OUTLET DETAILS

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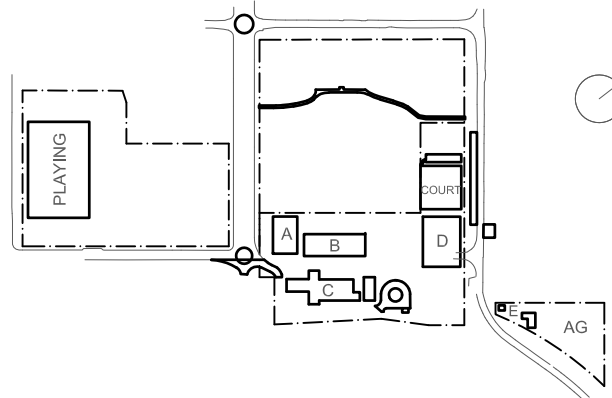
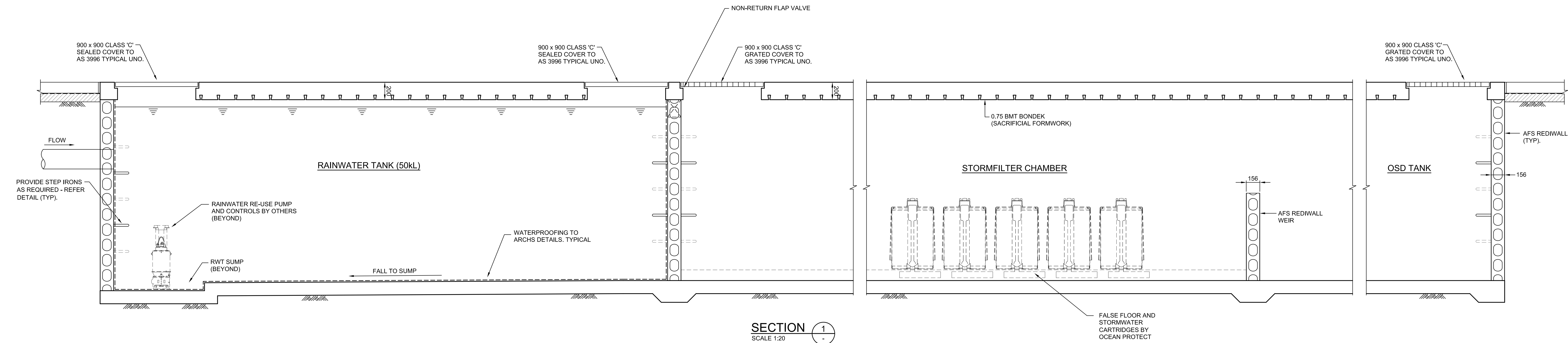
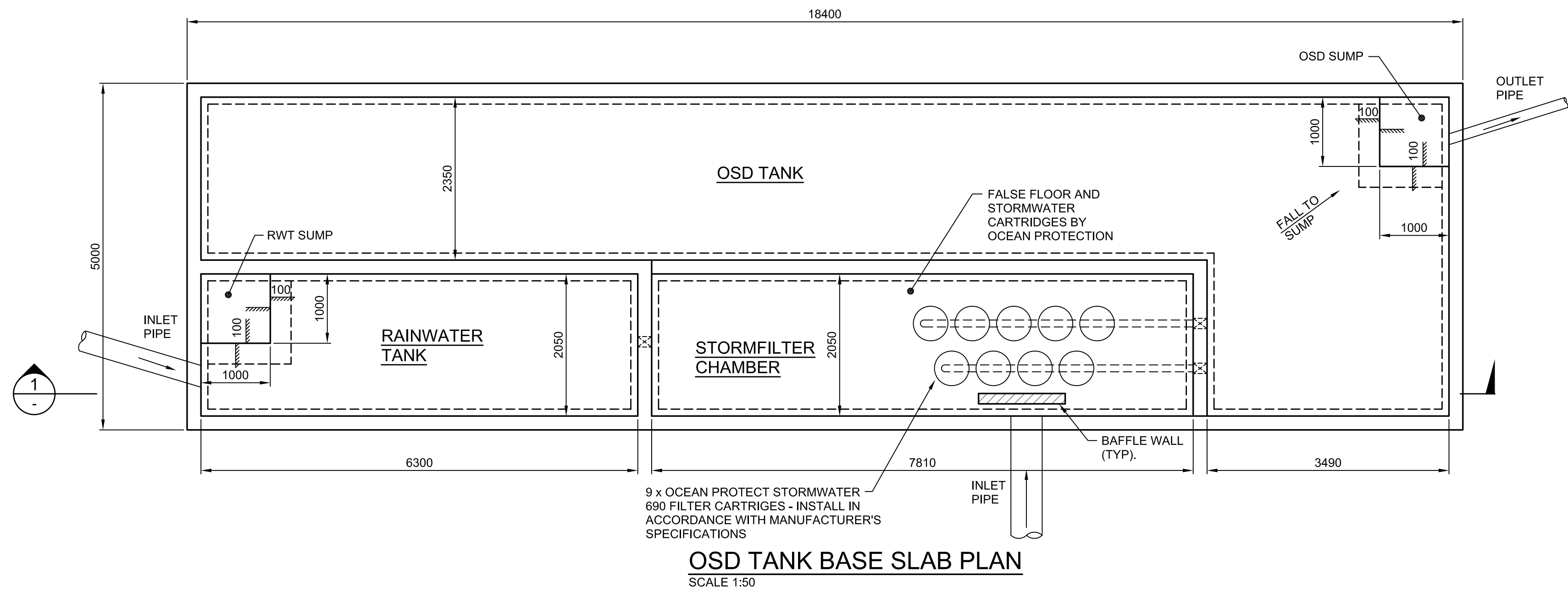
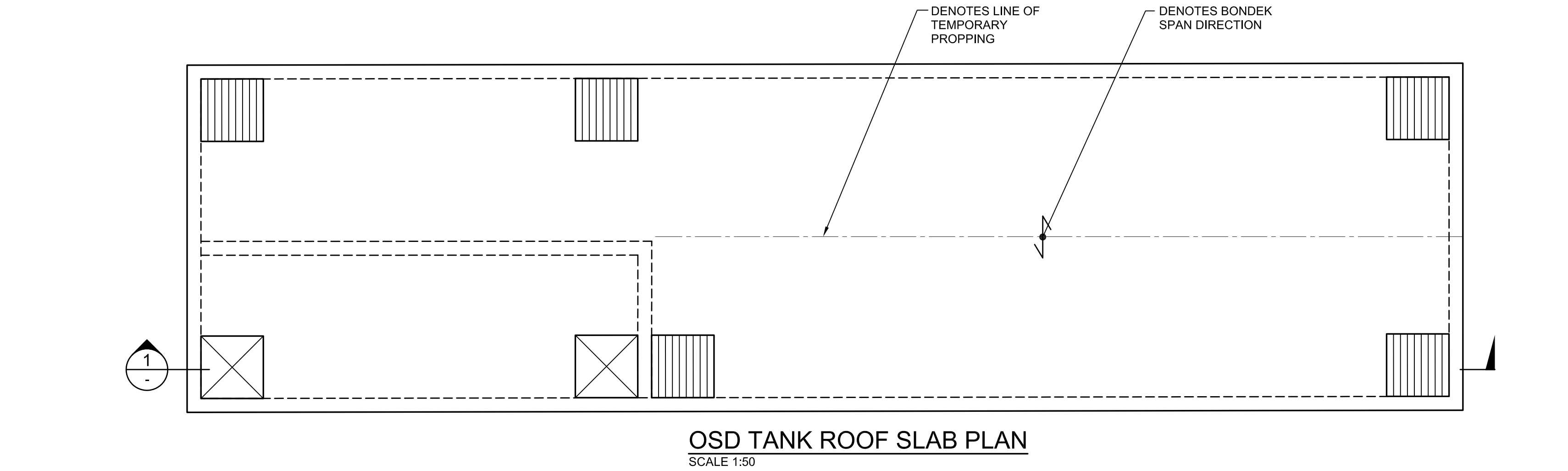
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A	26.11.21	WORK IN PROGRESS		
B	08.12.21	ISSUED FOR DD		
C	14.07.22	ISSUED FOR RTS REVISED DESIGN		
D	30.09.22	RTS REVISED DD ISSUE		
E	23.11.22	ISSUED FOR RTS		

Project	New High School in Bungendore
MAJARA STREET, BUNGENDORE NSW 2621	
Drawing Title	STORMWATER DRAINAGE DETAILS SHEET 2 OF 2

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	AS NOTED AT B1
Drawing No.	Revision		
BHS-CE-2052	E		

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PAVEMENT LEGEND

- PAVEMENT TYPE 1 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 2 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 3 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 4 - REFER
LANDSCAPE ARCHITECT'S
DRAWINGS FOR DETAILS
- PAVEMENT TYPE 5 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 6 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 7 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- DENOTES EXISTING PAVEMENT
TO REMAIN
- DENOTES RECYCLED BRICK PAVING
DRG. BHS-CE-2091 FOR DETAILS

NOTE:
ALL SIGNAGE AND LINEMARKING
TO TRAFFIC ENGINEER'S
DETAIL (TYP).

REFER DRG.
BHS-CE-2066

REFER DRG.BHS-CE-2064

REFER DRG.BHS-CE-2060

REFER DRG.BHS-CE-2061

OSD - REFER DRG'S.
BHS-CE-2032 AND
BHS-CE-2053 FOR DETAILS

REFER DRG.BHS-CE-2063

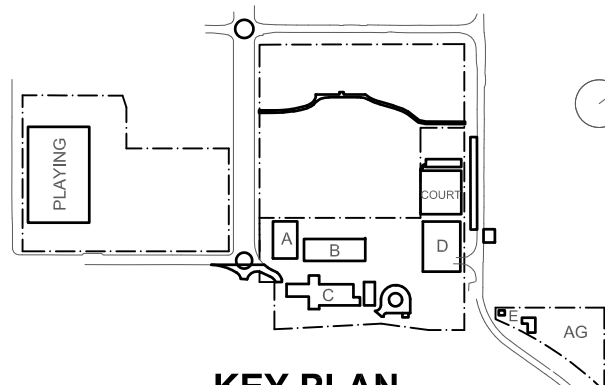
REFER DRG.
BHS-CE-2067

REFER DRG.BHS-CE-2062

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STORMWATER GENERAL ARRANGEMENT PLAN

NTS



KEY PLAN

BUILDER

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Context
T+ 61 2 8244 8900
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Acoustic Logic
T+ 61 2 8339 8000

Do not scale drawings. Verify all dimensions on site.

Rev	Date	Description	Chkd Auth.
A	14.02.22	ISSUED FOR DD	
B	14.07.22	ISSUED FOR RTS REVISED DESIGN	
C	21.07.22	ISSUED FOR RTS REVISED DESIGN	
D	21.07.22	ISSUED FOR RTS REVISED DESIGN	
E	27.07.22	ISSUED FOR RTS REVISED DESIGN	
F	30.09.22	RTS REVISED DD ISSUE	
G	20.10.22	MINOR REVISIONS FOR RTS DD ISSUE	
H	23.11.22	ISSUED FOR RTS	

Project

New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title
SITeworks PAVEMENT
GENERAL ARRANGEMENT
PLAN

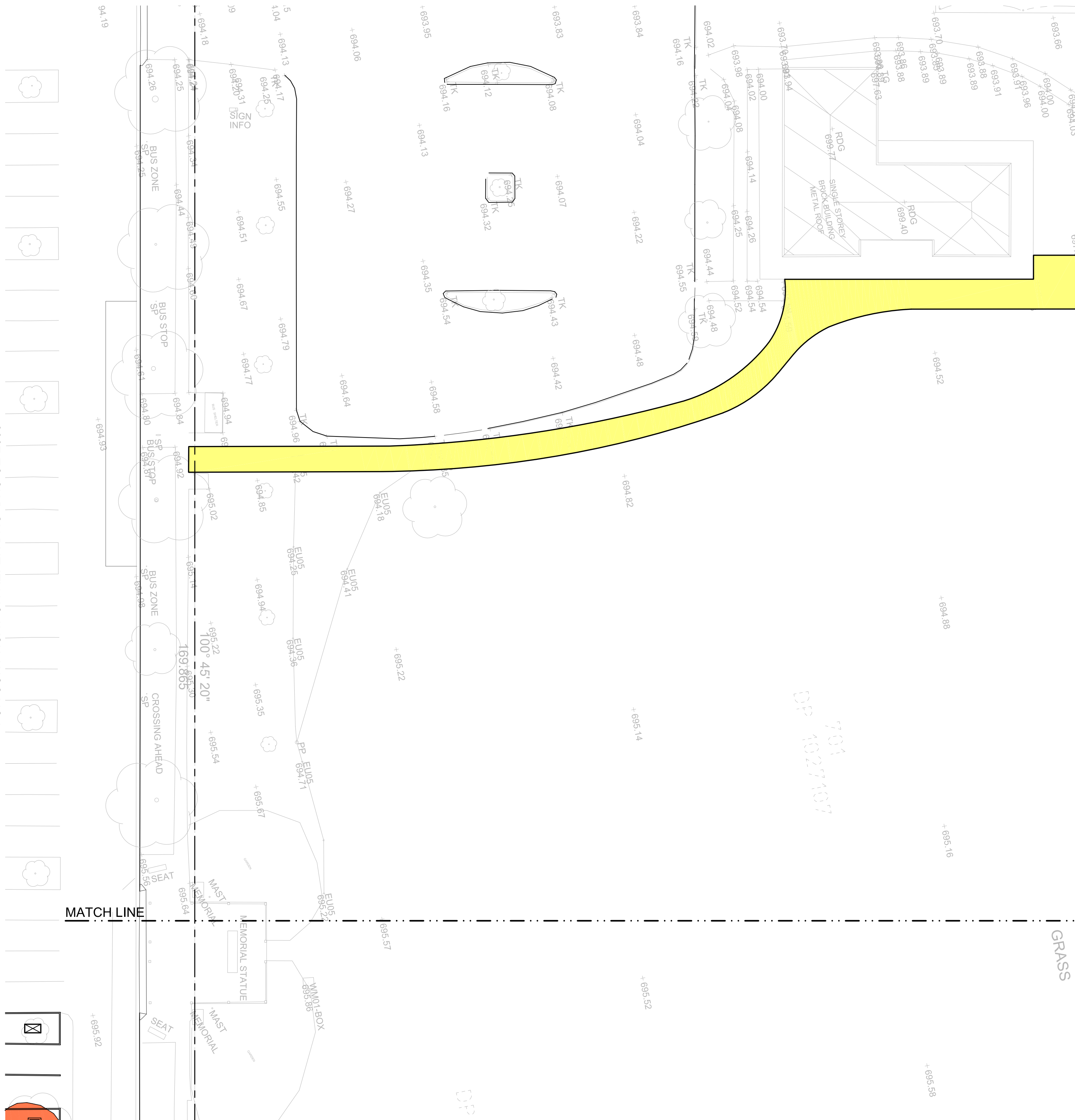
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MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	NTS
Drawing No.			
BHS-CE-2059			

Revision
H

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FOR CONTINUATION REFER DRG. BHS-CE-2066



FOR CONTINUATION REFER DRG. BHS-CE-2064

FOR CONTINUATION REFER DRG. BHS-CE-2061

PART SITEWORKS AND PAVEMENT PLAN

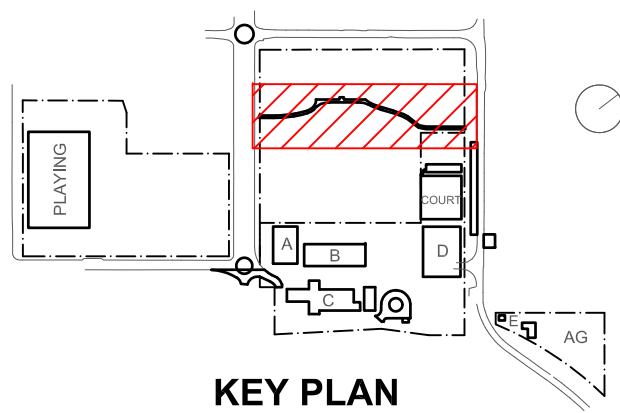
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PAVEMENT LEGEND

- PAVEMENT TYPE 1 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 2 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 3 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 4 - REFER LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS
- PAVEMENT TYPE 5 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 6 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 7 - REFER DRG. BHS-CE-2091 FOR DETAILS
- DENOTES EXISTING PAVEMENT TO REMAIN
- DENOTES RECYCLED BRICK PAVING DRG. BHS-CE-2091 FOR DETAILS

NOTE:

ALL SIGNAGE AND LINEMARKING TO TRAFFIC ENGINEER'S DETAIL (TYP).



KEY PLAN

Do not scale drawings. Verify all dimensions on site.			
Rev	Date	Description	Chkd Auth.
A	10.12.21	ISSUED FOR DD	
B	21.12.21	ISSUED FOR DD	
C	14.02.22	GENERALLY REVISED	
D	14.07.22	ISSUED FOR RTS REVISED DESIGN	
E	21.07.22	ISSUED FOR RTS REVISED DESIGN	
F	26.07.22	ISSUED FOR RTS REVISED DESIGN	
G	27.07.22	ISSUED FOR RTS REVISED DESIGN	
H	20.10.22	MINOR REVISIONS FOR RTS DD ISSUE	
I	23.11.22	ISSUED FOR RTS	

Project New High School in Bungendore	
MAJARA STREET, BUNGENDORE NSW 2621	
Drawing Title SITEWORKS & PAVEMENT PLAN SHEET 1	

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250
Drawing No. BHS-CE-2060		Revision I	

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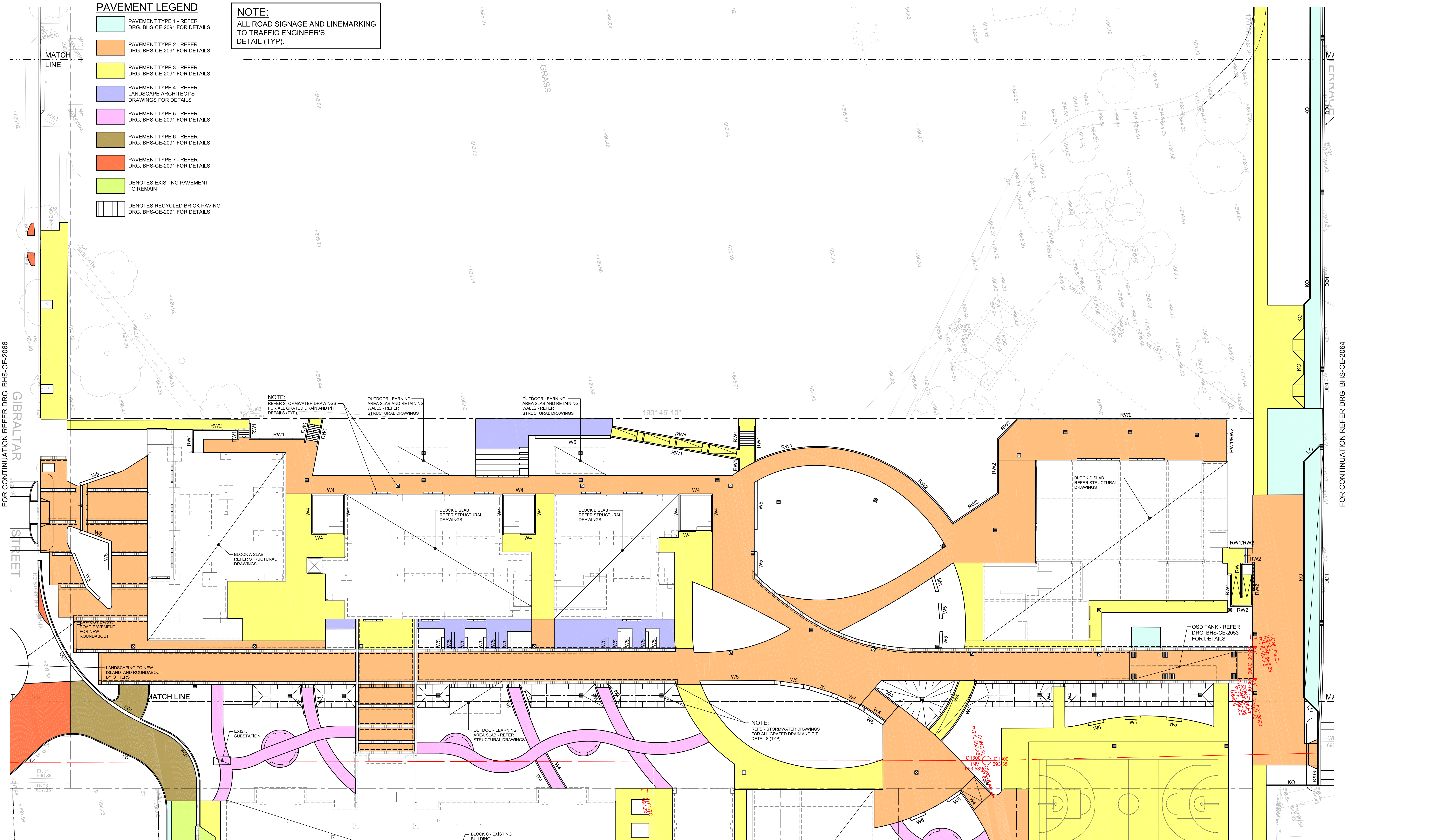
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		Architect TKD Architects T+ 61 2 9281 4399 Mechanical, Electrical, Hydraulic, ESD Norman Disney & Young T+ 61 2 9928 6600	Acoustic Acoustic Logic T+ 61 2 8339 8000



PART SITeworks AND PAVEMENT PLAN

SCALE 1:250

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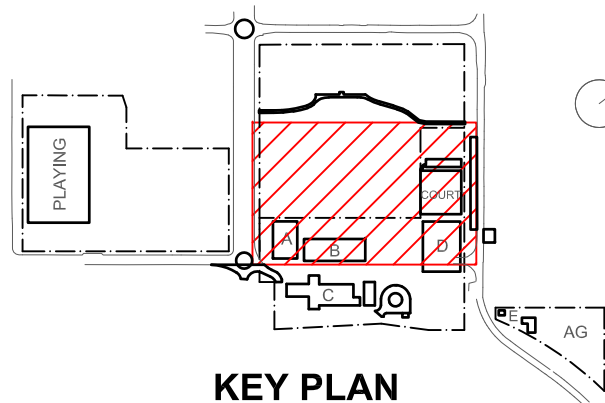
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Rev	Date	Description	Chkd	Auth
E	12.05.21	SCHEMATIC DESIGN		
F	24.11.21	50% DD ISSUE		
G	10.12.21	ISSUED FOR DD		
H	14.02.22	GENERALLY REVISED		
I	14.07.22	ISSUED FOR RTS REVISED DESIGN		
J	21.07.22	ISSUED FOR RTS REVISED DESIGN		
K	26.07.22	ISSUED FOR RTS REVISED DESIGN		
L	27.07.22	ISSUED FOR RTS REVISED DESIGN		
M	30.09.22	RTS REVISED DD ISSUE		
N	20.10.22	MINOR REVISIONS FOR RTS DD ISSUE		
O	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
**SITeworks & PAVEMENT
PLAN
SHEET 2**

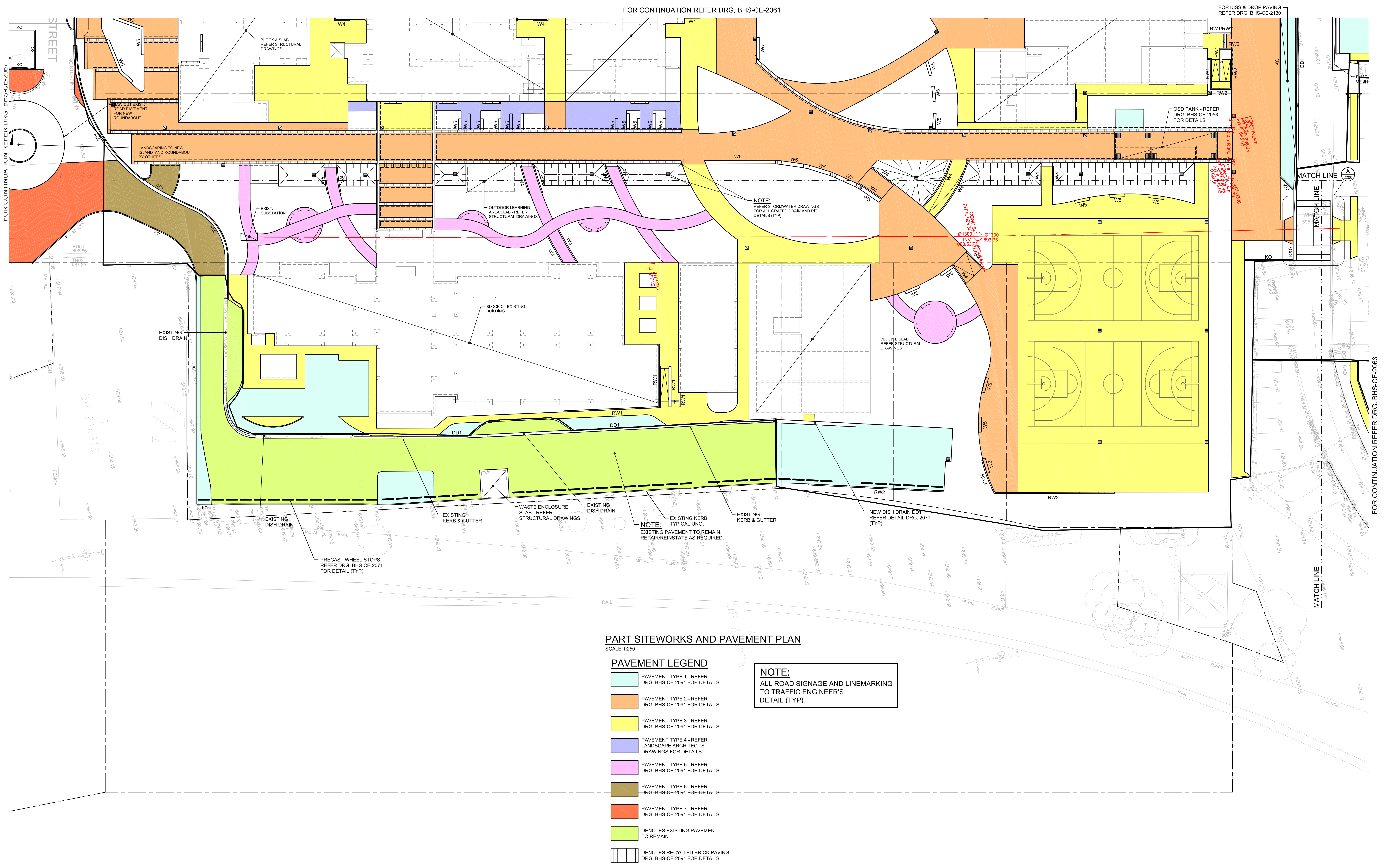
Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250
Drawing No.			Revision
BHS-CE-2061			O

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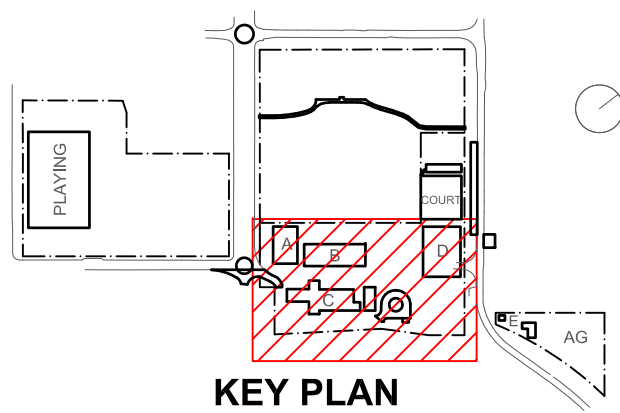
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PART SITeworks AND PAVEMENT PLAN
SCALE 1:250

- PAVEMENT LEGEND
- PAVEMENT TYPE 1 - REFER DRG. BHS-CE-2091 FOR DETAILS
 - PAVEMENT TYPE 2 - REFER DRG. BHS-CE-2091 FOR DETAILS
 - PAVEMENT TYPE 3 - REFER DRG. BHS-CE-2091 FOR DETAILS
 - PAVEMENT TYPE 4 - REFER LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS
 - PAVEMENT TYPE 5 - REFER DRG. BHS-CE-2091 FOR DETAILS
 - PAVEMENT TYPE 6 - REFER DRG. BHS-CE-2091 FOR DETAILS
 - PAVEMENT TYPE 7 - REFER DRG. BHS-CE-2091 FOR DETAILS
 - DENOTES EXISTING PAVEMENT TO REMAIN
 - DENOTES RECYCLED BRICK PAVING DRG. BHS-CE-2091 FOR DETAILS

NOTE:
ALL ROAD SIGNAGE AND LINEMARKING TO TRAFFIC ENGINEER'S DETAIL (TYP).



Rev	Date	Description	Chkd Auth.
E	12.05.21	SCHEMATIC DESIGN	
F	11.06.21	50% DD ISSUE	
G	24.11.21	ISSUED FOR DD	
H	10.12.21	ISSUED FOR DD	
I	21.12.21	ISSUED FOR DD	
J	14.02.22	GENERALLY REVISED	
K	14.07.22	ISSUED FOR RTS REVISED DESIGN	
L	27.07.22	ISSUED FOR RTS REVISED DESIGN	
M	30.09.22	RTS REVISED DD ISSUE	
N	20.10.22	MINOR REVISIONS FOR RTS DD ISSUE	
O	23.11.22	ISSUED FOR RTS	

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
SITEWORKS & PAVEMENT
PLAN
SHEET 3

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250
Drawing No.			Revision
BHS-CE-2062			O

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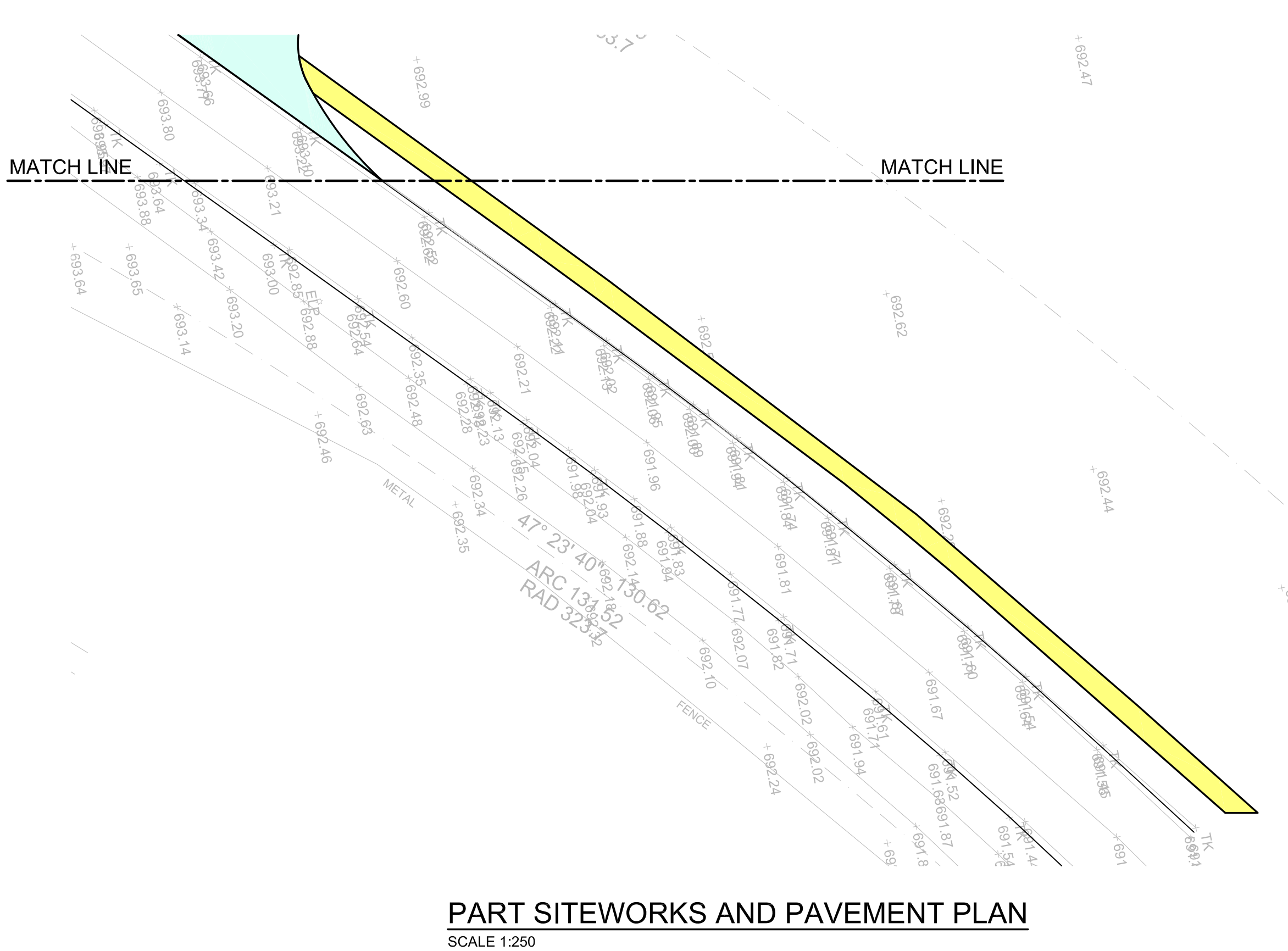
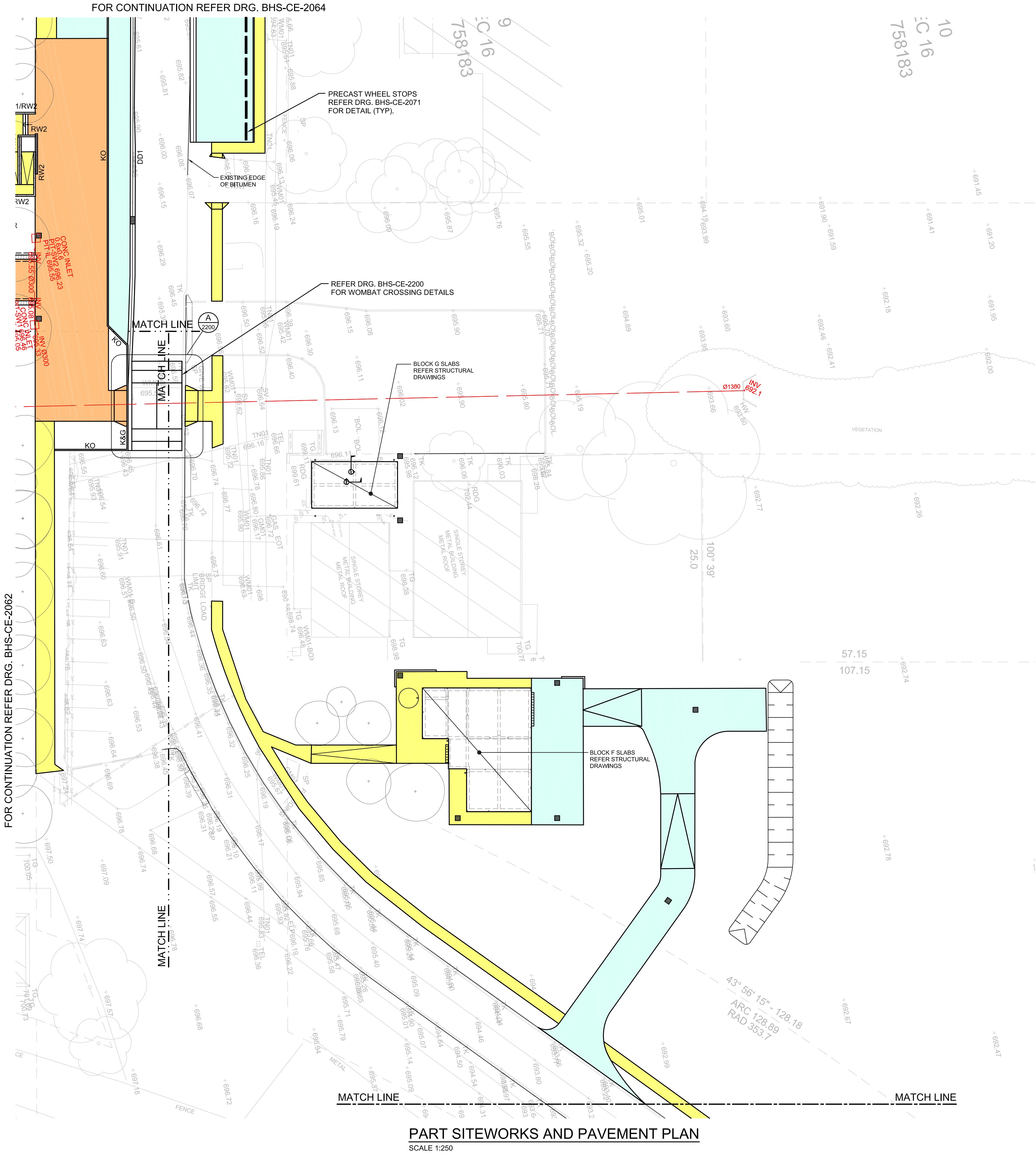
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T+ 61 2 8244 8900

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Acoustic Logic
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PAVEMENT LEGEND

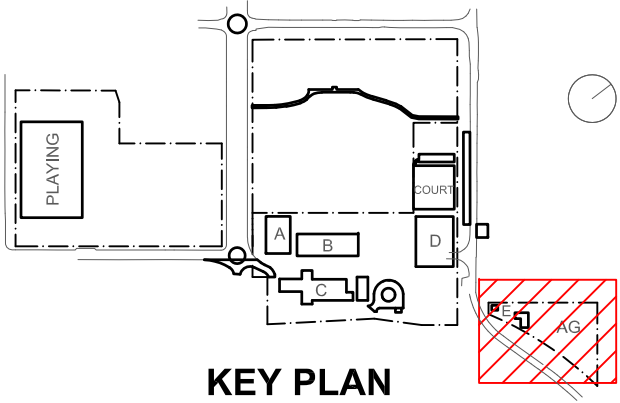
- PAVEMENT TYPE 1 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 2 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 3 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 4 - REFER LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS
- PAVEMENT TYPE 5 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 6 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 7 - REFER DRG. BHS-CE-2091 FOR DETAILS
- DENOTES EXISTING PAVEMENT TO REMAIN
- DENOTES RECYCLED BRICK PAVING DRG. BHS-CE-2091 FOR DETAILS

NOTE:
ALL SIGNAGE AND LINEMARKING TO TRAFFIC ENGINEER'S DETAIL (TYP).

FOR CONTINUATION REFER DRG. BHS-CE-2062

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Rev	Date	Description	Chkd	Auth.
A	10.12.21	ISSUED FOR DD		
B	21.12.21	ISSUED FOR DD		
C	14.02.22	GENERALLY REVISED		
D	14.02.22	ISSUED FOR RTS REVISED DESIGN		
E	27.07.22	ISSUED FOR RTS REVISED DESIGN		
F	30.09.22	RTS REVISED DD ISSUE		
G	20.10.22	MINOR REVISIONS FOR RTS DD ISSUE		
H	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
**SITEWORKS & PAVEMENT
PLAN
SHEET 4**

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250
Drawing No.	Revision		
BHS-CE-2063	H		

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FOR CONTINUATION REFER DRG. BHS-CE-2060

FOR CONTINUATION REFER DRG. BHS-CE-2061

PART SITeworks AND PAVEMENT PLAN

SCALE 1:250

FOR CONTINUATION REFER DRG. BHS-CE-2061

FOR CONTINUATION REFER DRG. BHS-CE-2063

PART SITeworks AND PAVEMENT PLAN

SCALE 1:250

PAVEMENT LEGEND

- PAVEMENT TYPE 1 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 2 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 3 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 4 - REFER
LANDSCAPE ARCHITECT'S
DRAWINGS FOR DETAILS
- PAVEMENT TYPE 5 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 6 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 7 - REFER
DRG. BHS-CE-2091 FOR DETAILS
- DENOTES EXISTING PAVEMENT
TO REMAIN
- DENOTES RECYCLED BRICK PAVING
DRG. BHS-CE-2091 FOR DETAILS

NOTE:

ALL ROAD SIGNAGE AND LINEMARKING
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DETAIL (TYP).

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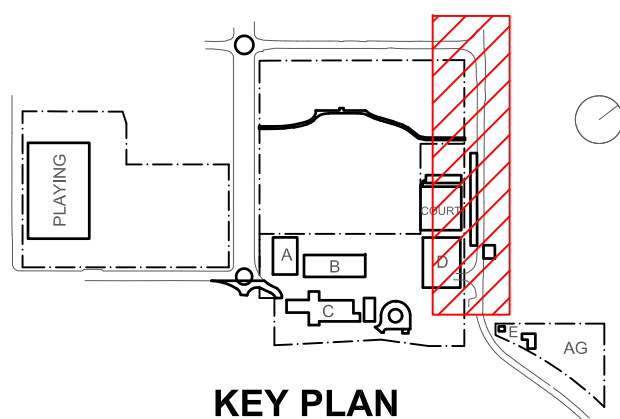
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Acoustic
Acoustic Logic

T+ 61 2 8339 8000



KEY PLAN

Rev	Date	Description	Chkd	Auth.
A	20.10.22	RTS REVISED DD ISSUE		
B	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title
**SITeworks & PAVEMENT
PLAN
SHEET 5**

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:250
Drawing No.	Revision		
BHS-CE-2064	B		

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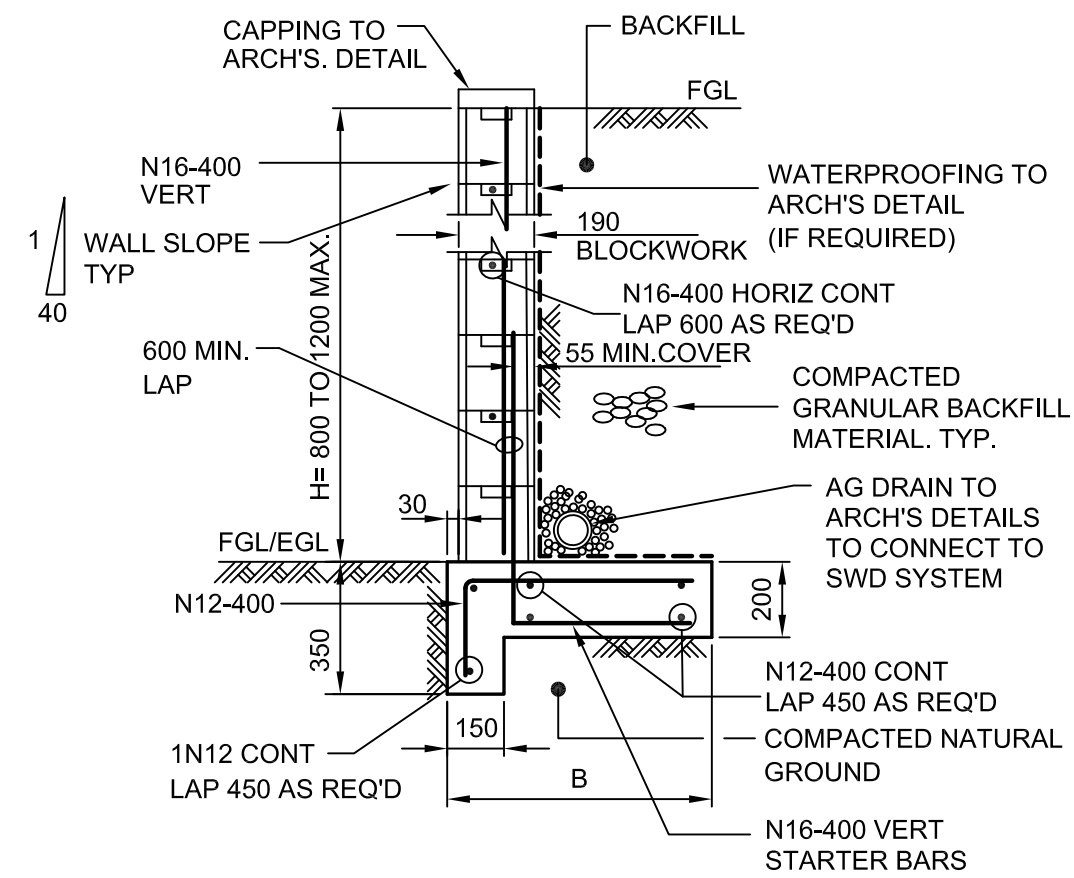
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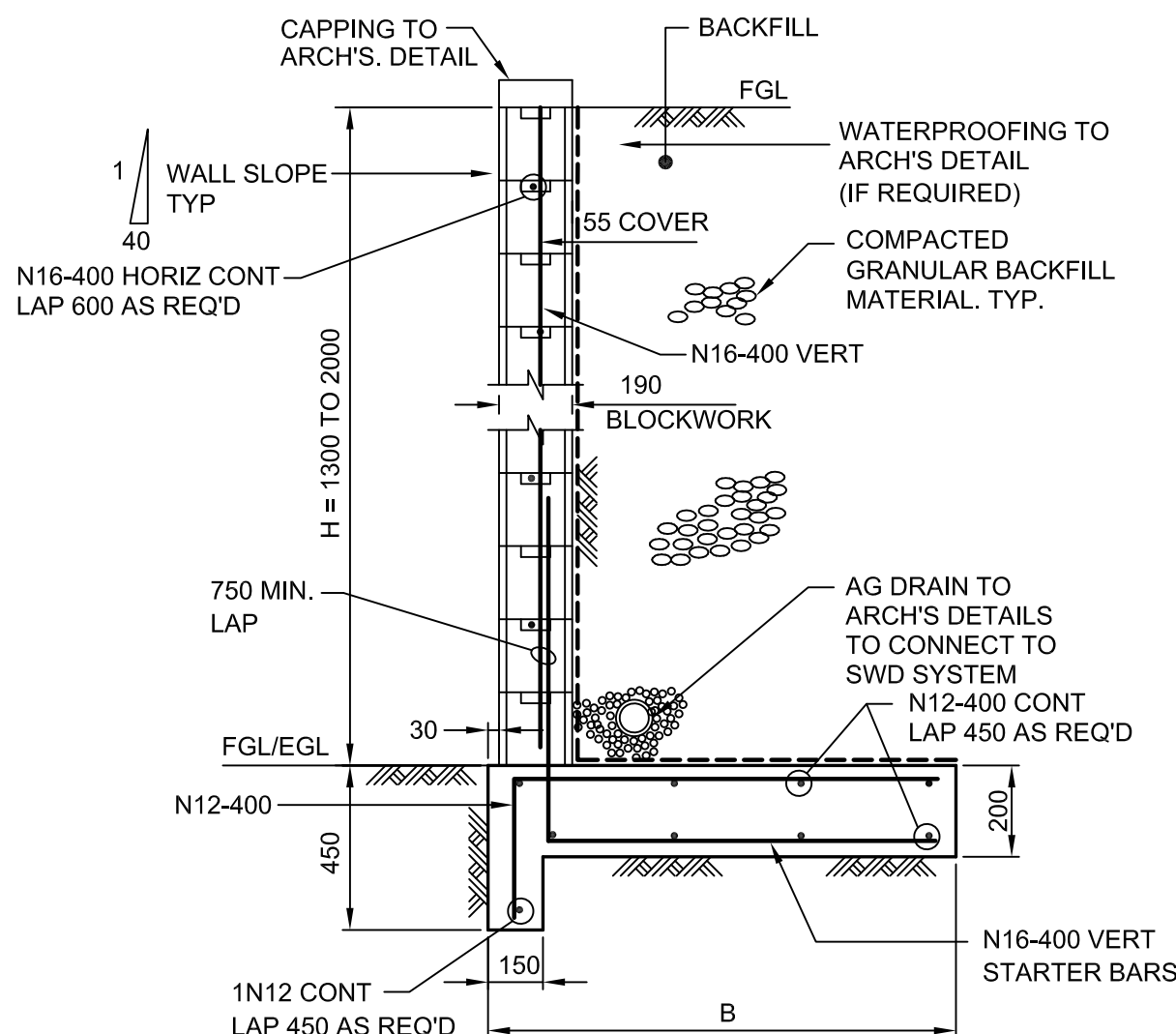


TYPICAL RETAINING WALL DETAIL

H = 600 TO 1200 MAX

SCALE 1:20

BASE DIMENSIONS	
H	B
600	500
800	600
1000	700
1200	800

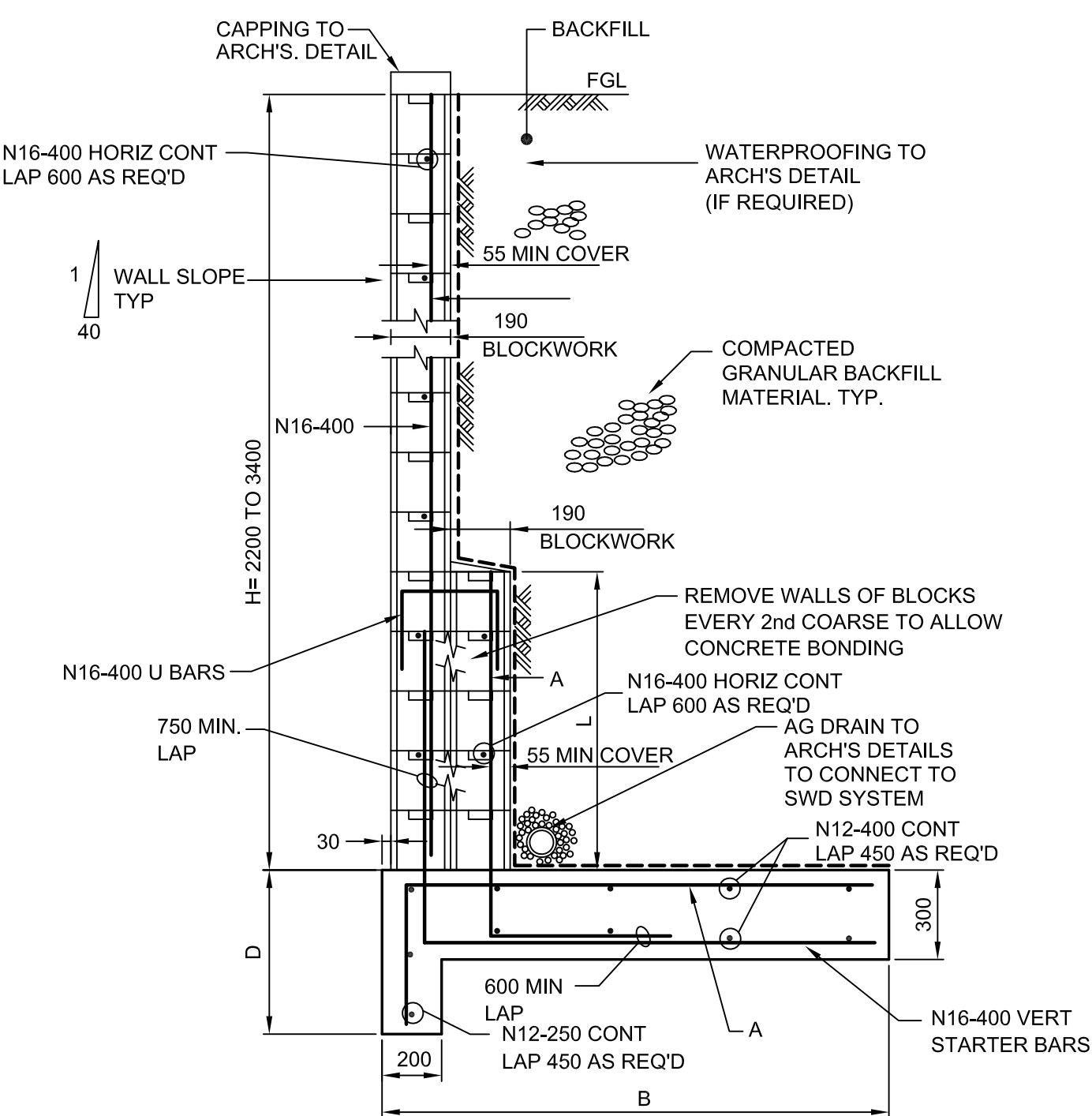


TYPICAL RETAINING WALL DETAIL

H = 1300 TO 1600 MAX

SCALE 1:20

BASE DIMENSIONS	
H	B
1400	1000
1600	1100
1800	1200

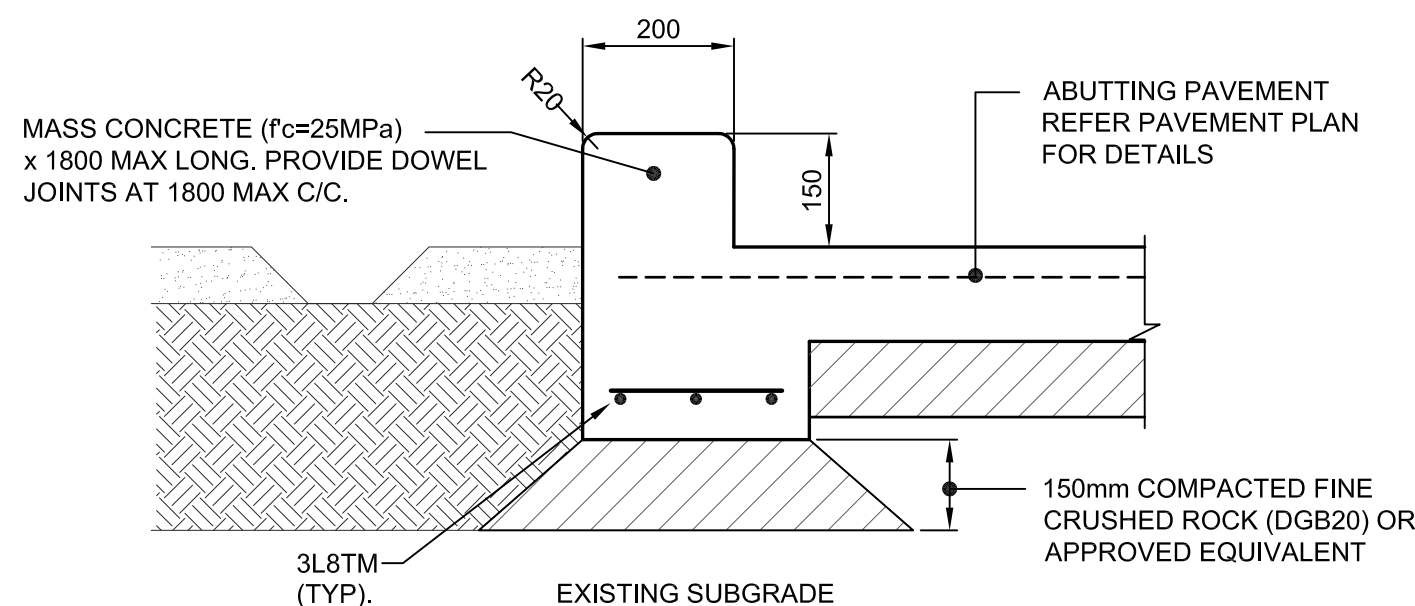


TYPICAL RETAINING WALL DETAIL

H = 2200 TO 3400 MAX

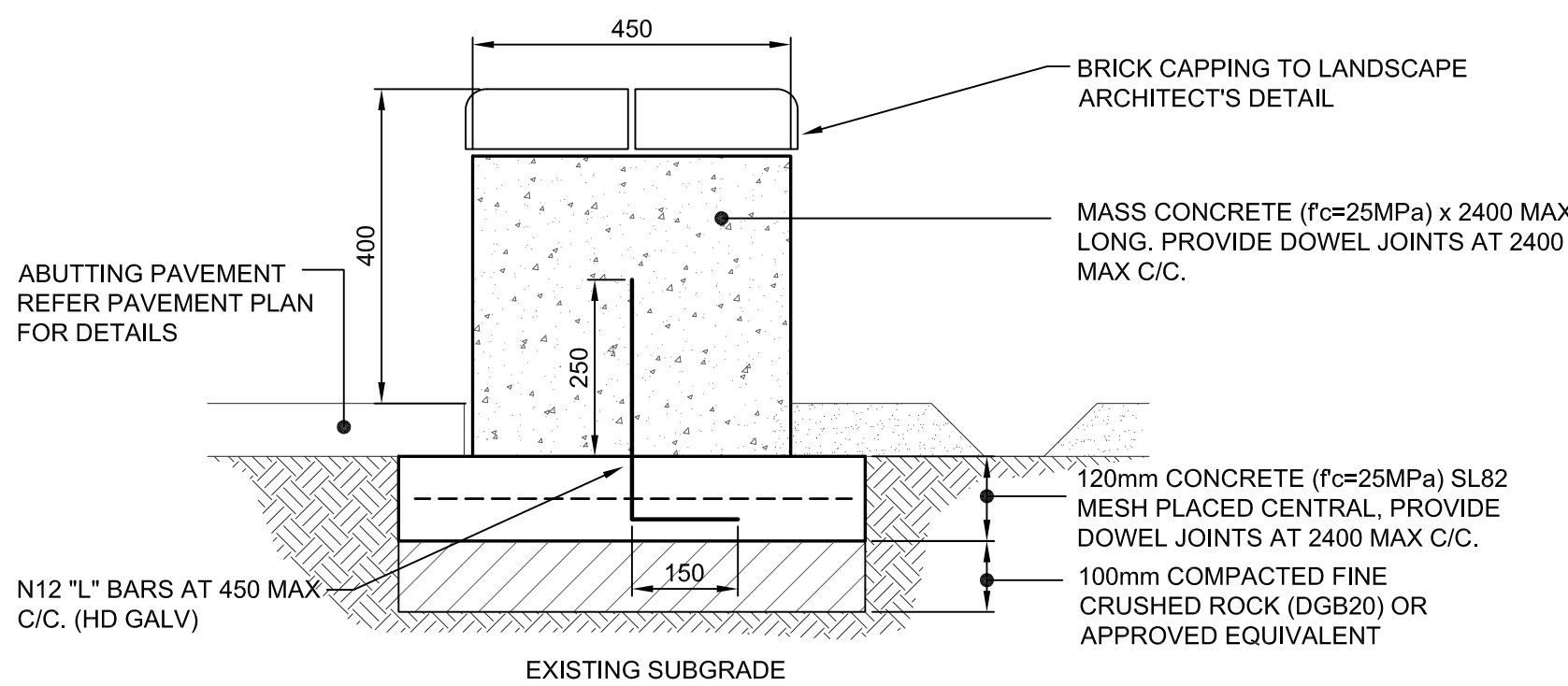
SCALE 1:20

BASE DIMENSIONS					
H	B	L	A	A	D
2200	1400	600	N16-400	550	
2400	1600	800	N16-400	550	
2600	1800	1000	N16-400	550	
2800	2000	1200	N16-400	550	
3000	2300	1400	N20-400	750	
3200	2600	1600	N20-400	750	
3400	3000	1800	N20-400	750	



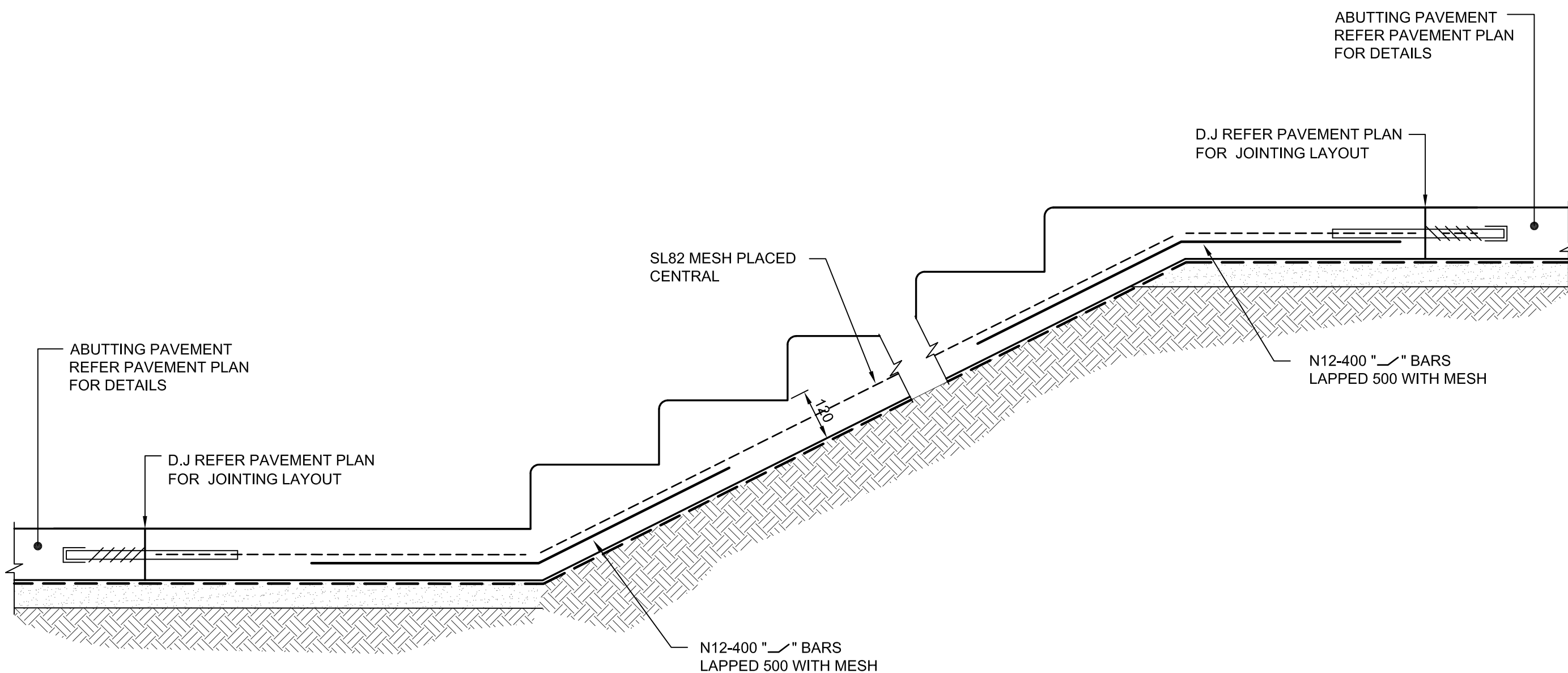
LANDSCAPE WALL TYPE W4

DENOTED W4 ON PLAN



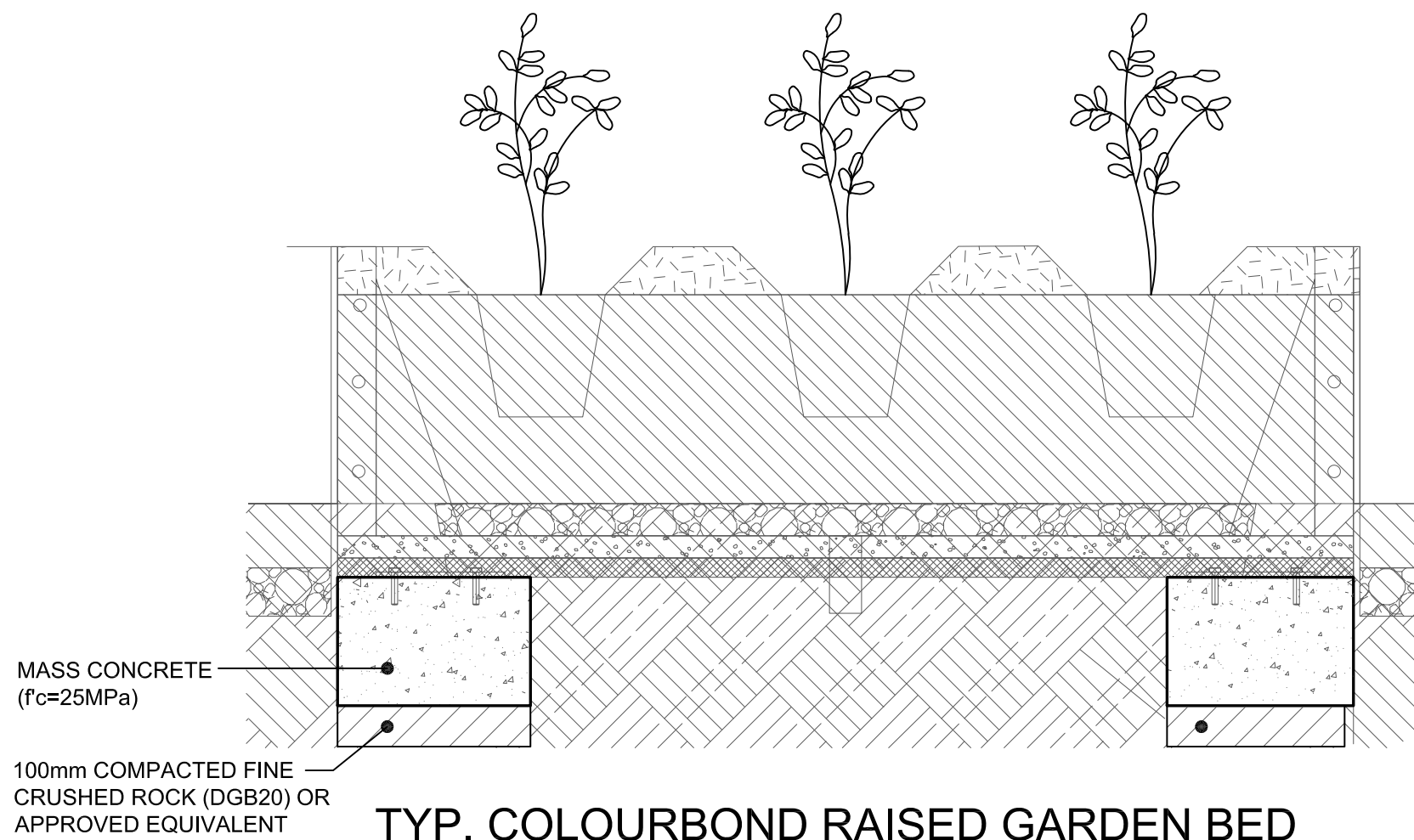
LANDSCAPE WALL TYPE W5

DENOTED W5 ON PLAN



TYPICAL EXTERNAL CONCRETE STAIR DETAIL

SCALE 1:10

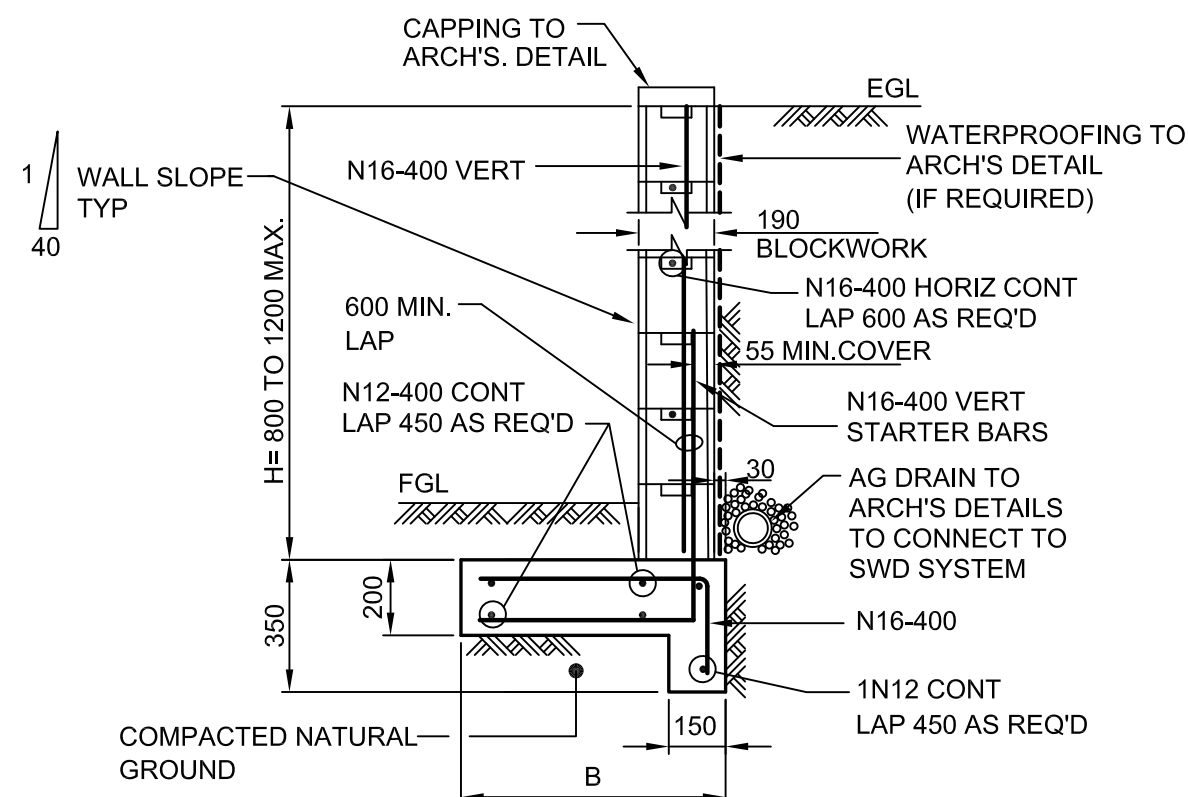


TYP. COLOURBOND RAISED GARDEN BED

SCALE 1:10

BLOCKWORK NOTES:

- ALL BLOCKS TO BE 190 DOUBLE 'U' BLOCKS. PROVIDE CLEAN OUT HOLES TO BTM. COURSE. FILL ALL CORES WITH CONCRETE: 10mm AGG. 15 MPa 225 SLUMP
- 50 MIN. COVER TO ALL BASE REINFORCEMENT.
- BACKFILL TO BE COMPACTED CLEAN GRANULAR FREE DRAINING MATERIAL.

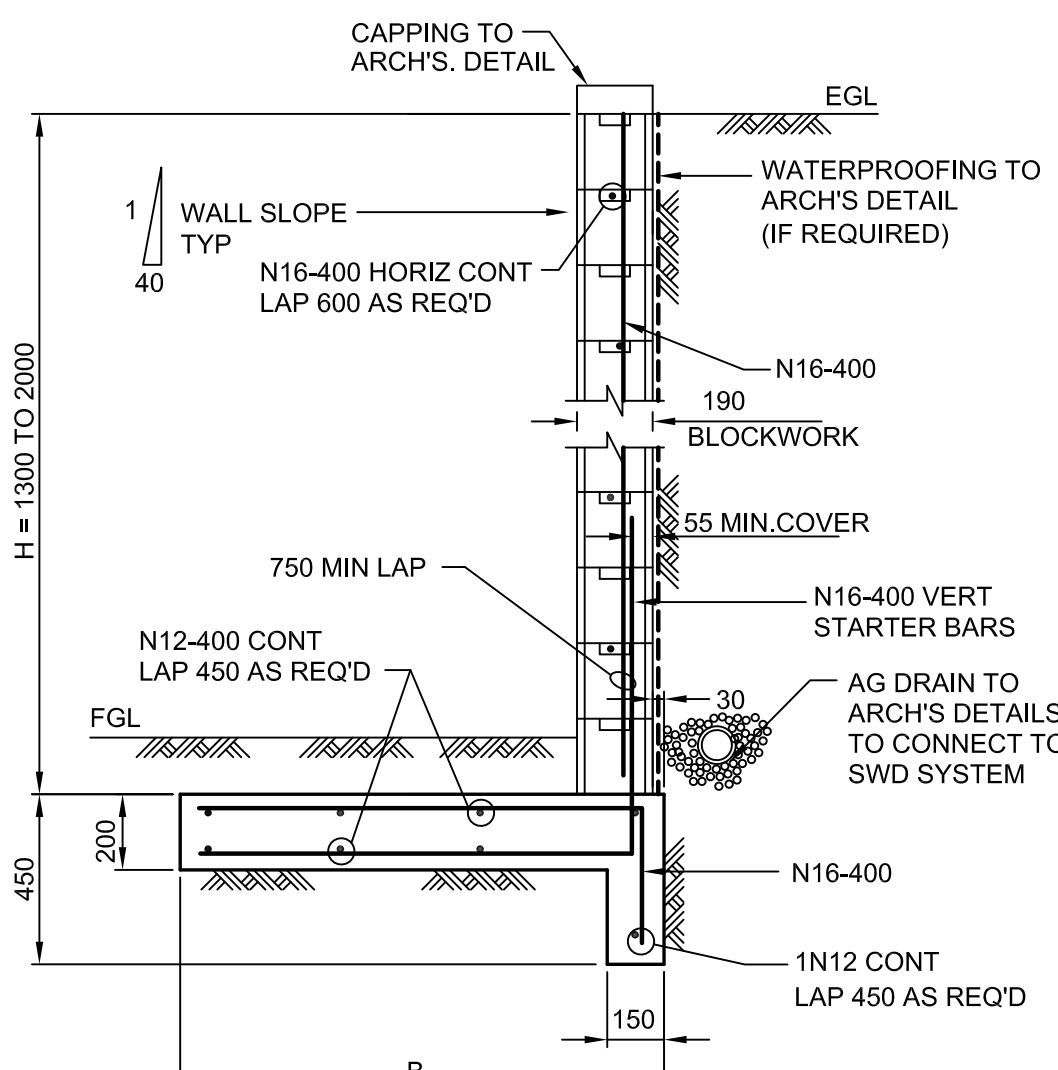


TYPICAL RETAINING WALL DETAIL

H = 600 TO 1200 MAX

SCALE 1:20

BASE DIMENSIONS	
H	B
600	500
800	600
1000	700
1200	800

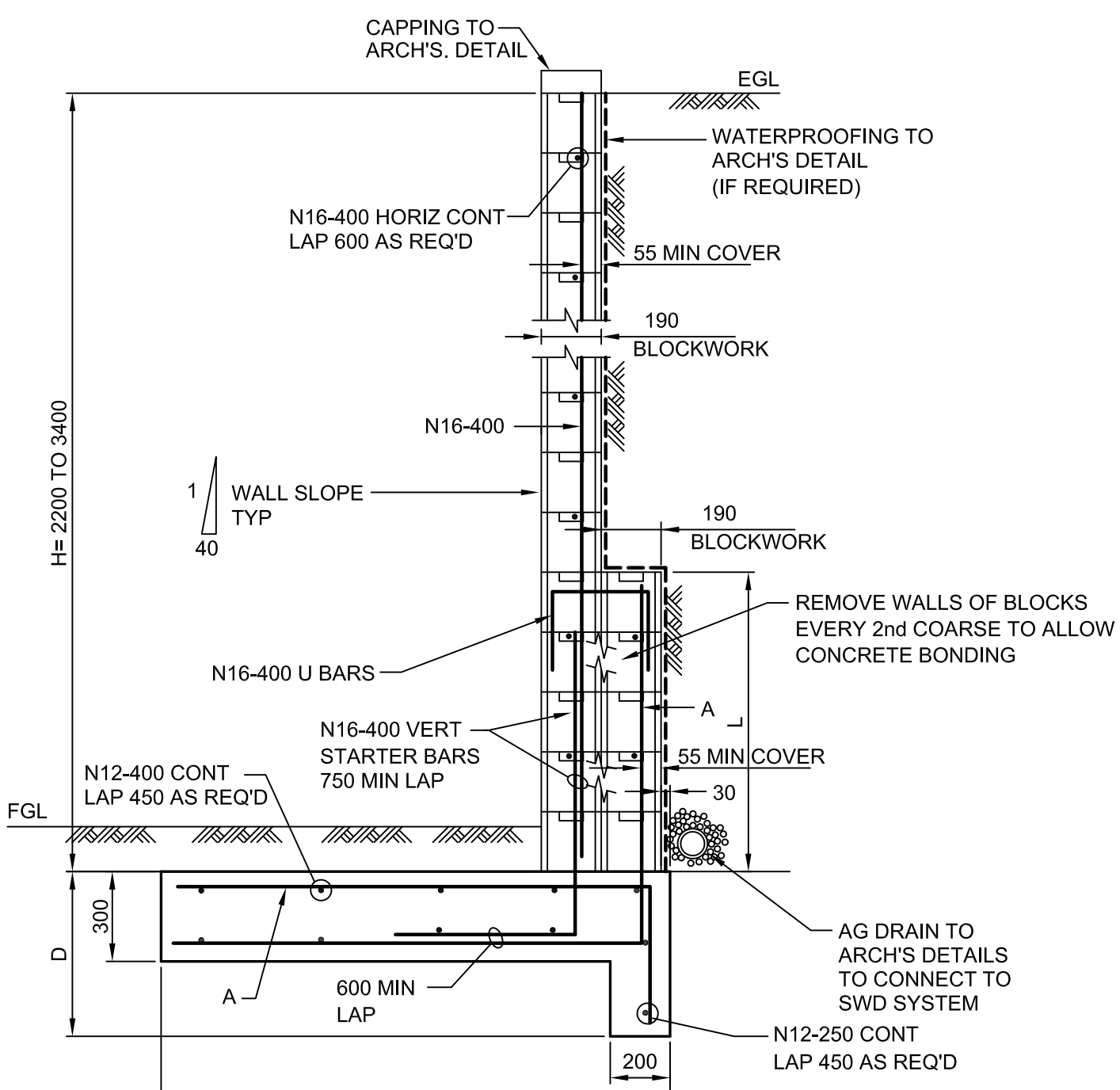


TYPICAL RETAINING WALL DETAIL

H = 1300 TO 1600 MAX

SCALE 1:20

BASE DIMENSIONS	
H	B
1400	1000
1600	1100
1800	1200



TYPICAL RETAINING WALL DETAIL

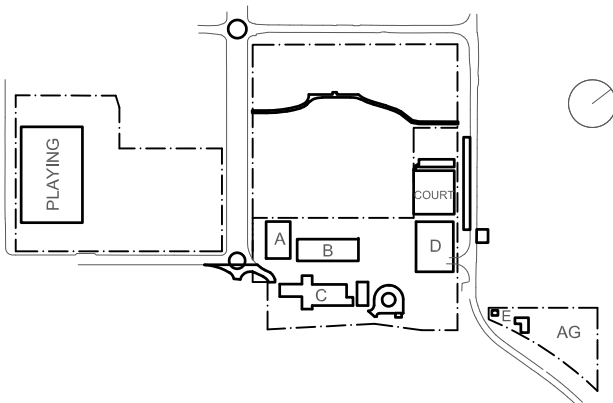
H = 2200 TO 3400 MAX

SCALE 1:20

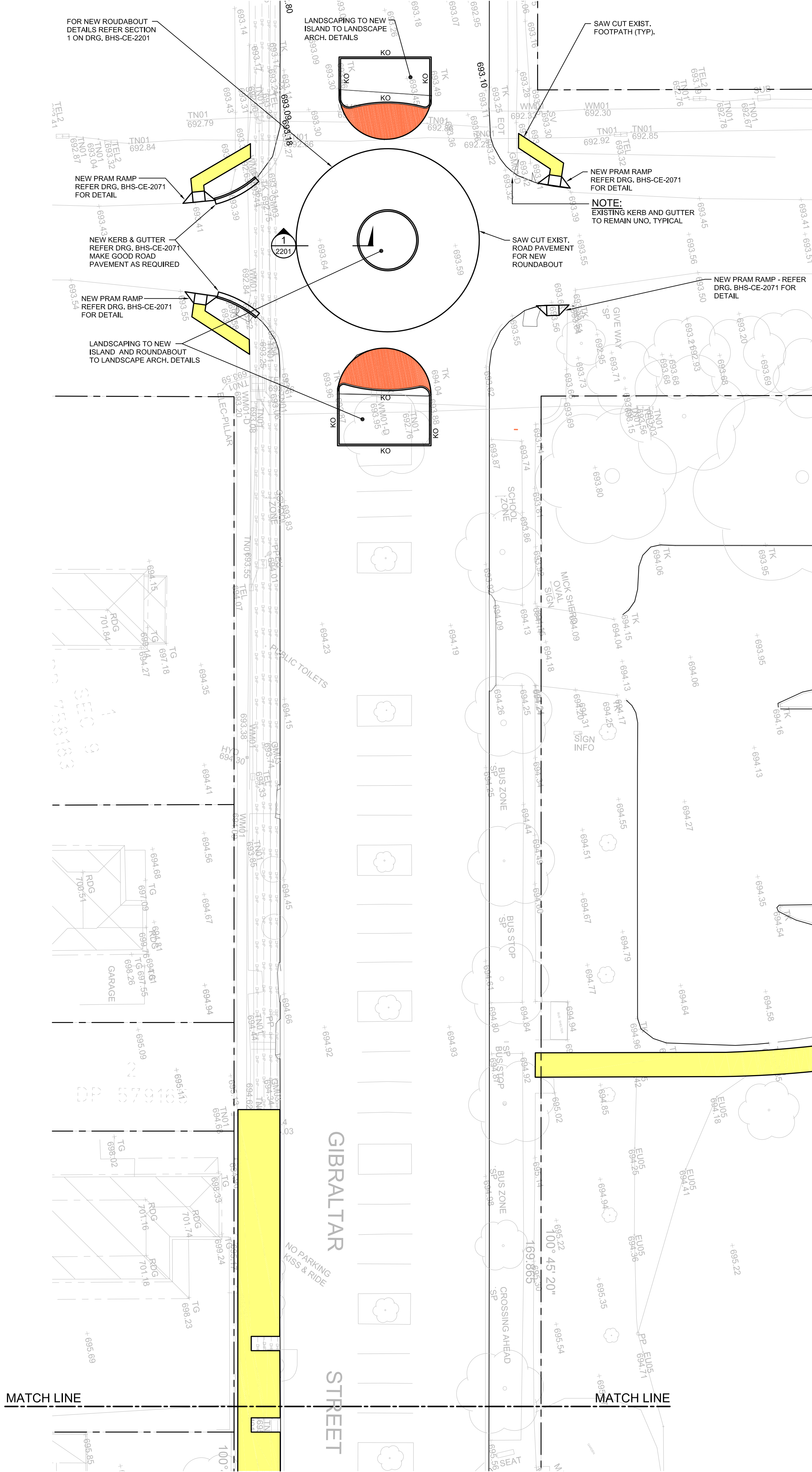
BASE DIMENSIONS					
H	B	L	A	A	D
2200	1400	600	N16-400	550	
2400	1600	800	N16-400	550	
2600	1800	1000	N16-400	550	
2800	2000	1200	N16-400	550	
3000	2300	1400	N20-400	750	
3200	2600	1600	N20-400	750	
3400	3000	1800	N20-400	750	

TYPICAL RETAINING WALL DETAILS IN CUT

DENOTED RW2 ON PLANS

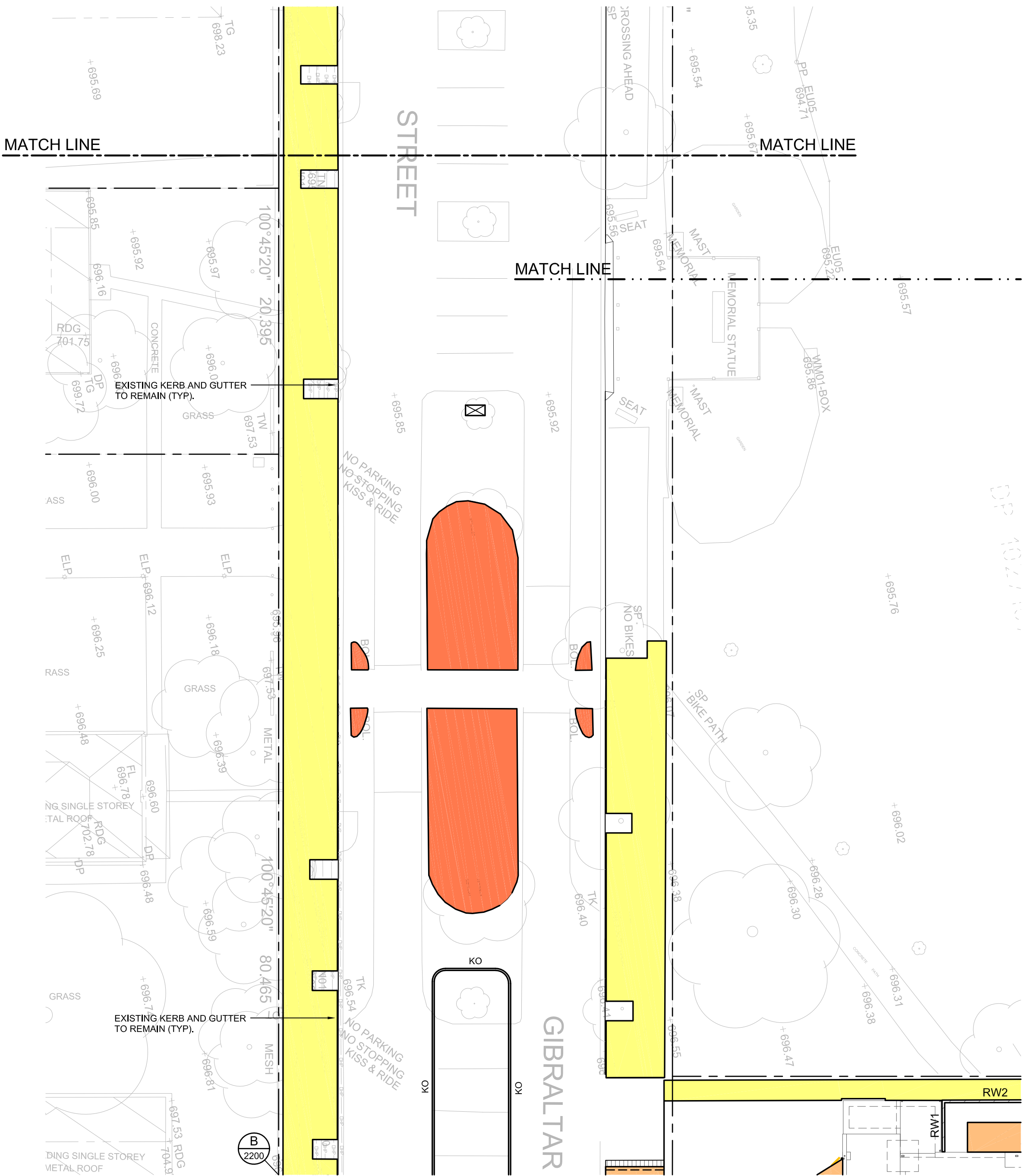


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PART SITEWORKS AND PAVEMENT PLAN
SCALE 1:250

FOR CONTINUATION REFER DRG. BHS-CE-2060



PART SITEWORKS AND PAVEMENT PLAN
SCALE 1:250

FOR CONTINUATION REFER DRG. BHS-CE-2061

PAVEMENT LEGEND

- PAVEMENT TYPE 1 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 2 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 3 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 4 - REFER LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS
- PAVEMENT TYPE 5 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 6 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 7 - REFER DRG. BHS-CE-2091 FOR DETAILS
- DENOTES EXISTING PAVEMENT TO REMAIN
- DENOTES RECYCLED BRICK PAVING DRG. BHS-CE-2091 FOR DETAILS

NOTE:

ALL ROAD SIGNAGE AND LINEMARKING TO TRAFFIC ENGINEER'S DETAIL (TYP).

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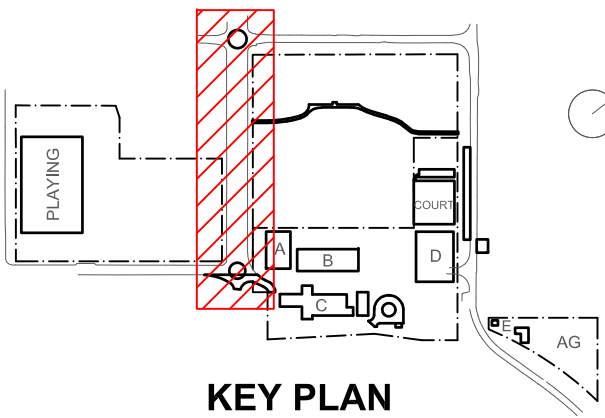
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A	20.10.22	ISSUED FOR RTS DO ISSUE		
B	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621
Drawing Title
SITEWORKS & PAVEMENT
PLAN
SHEET 6

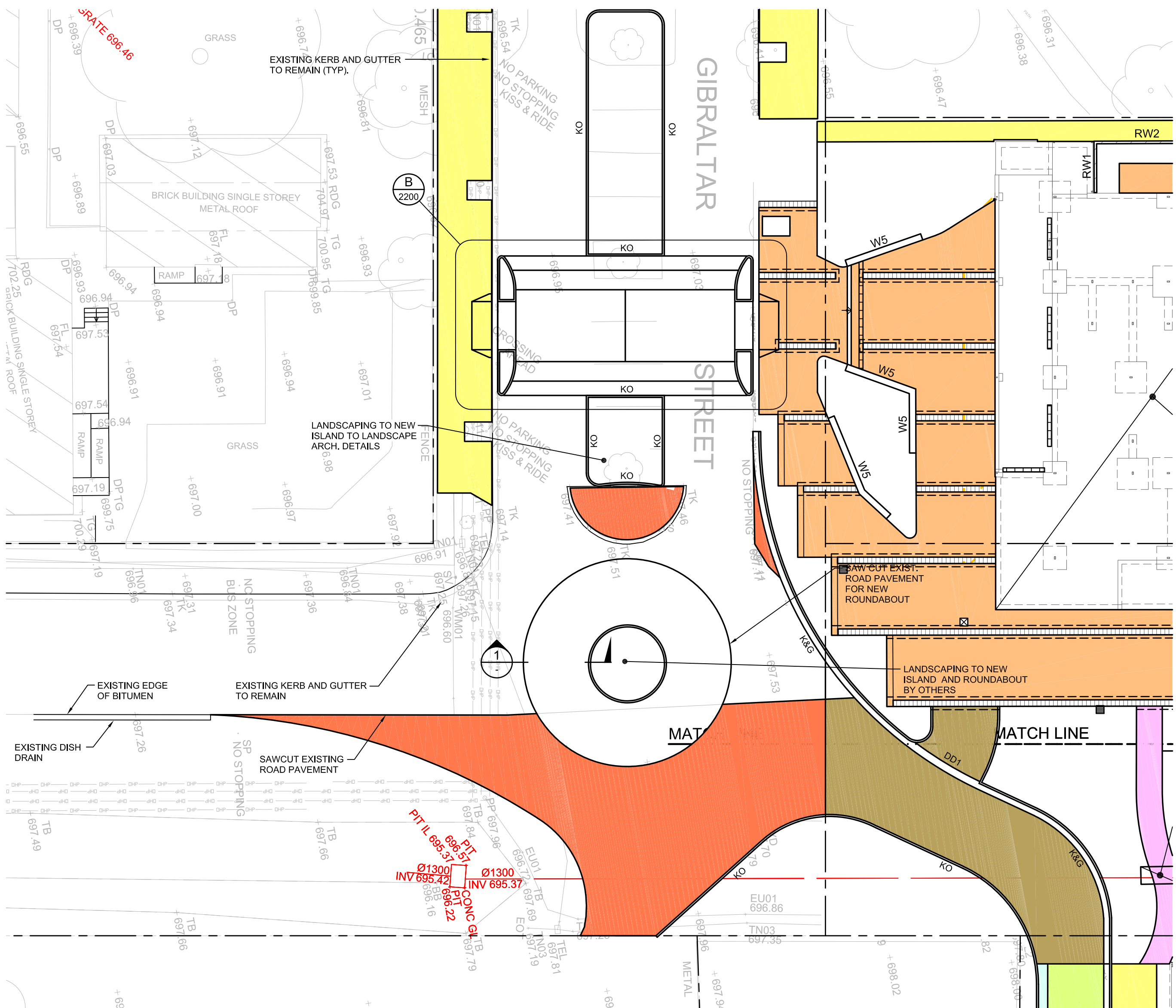
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Job No.	Status	Date	Scale
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PART SITEWORKS AND PAVEMENT PLAN
SCALE 1:250

PAVEMENT LEGEND

- PAVEMENT TYPE 1 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 2 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 3 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 4 - REFER LANDSCAPE ARCHITECT'S DRAWINGS FOR DETAILS
- PAVEMENT TYPE 5 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 6 - REFER DRG. BHS-CE-2091 FOR DETAILS
- PAVEMENT TYPE 7 - REFER DRG. BHS-CE-2091 FOR DETAILS
- DENOTES EXISTING PAVEMENT TO REMAIN
- DENOTES RECYCLED BRICK PAVING DRG. BHS-CE-2091 FOR DETAILS

NOTE:
ALL ROAD SIGNAGE AND LINEMARKING TO TRAFFIC ENGINEER'S DETAIL (TYP).

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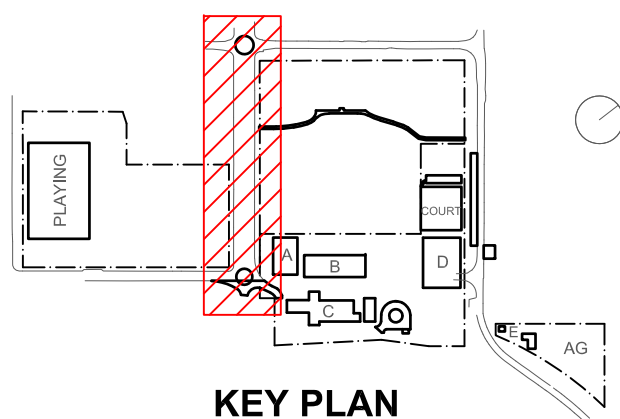
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A	20.10.22	ISSUED FOR RTS DD ISSUE		
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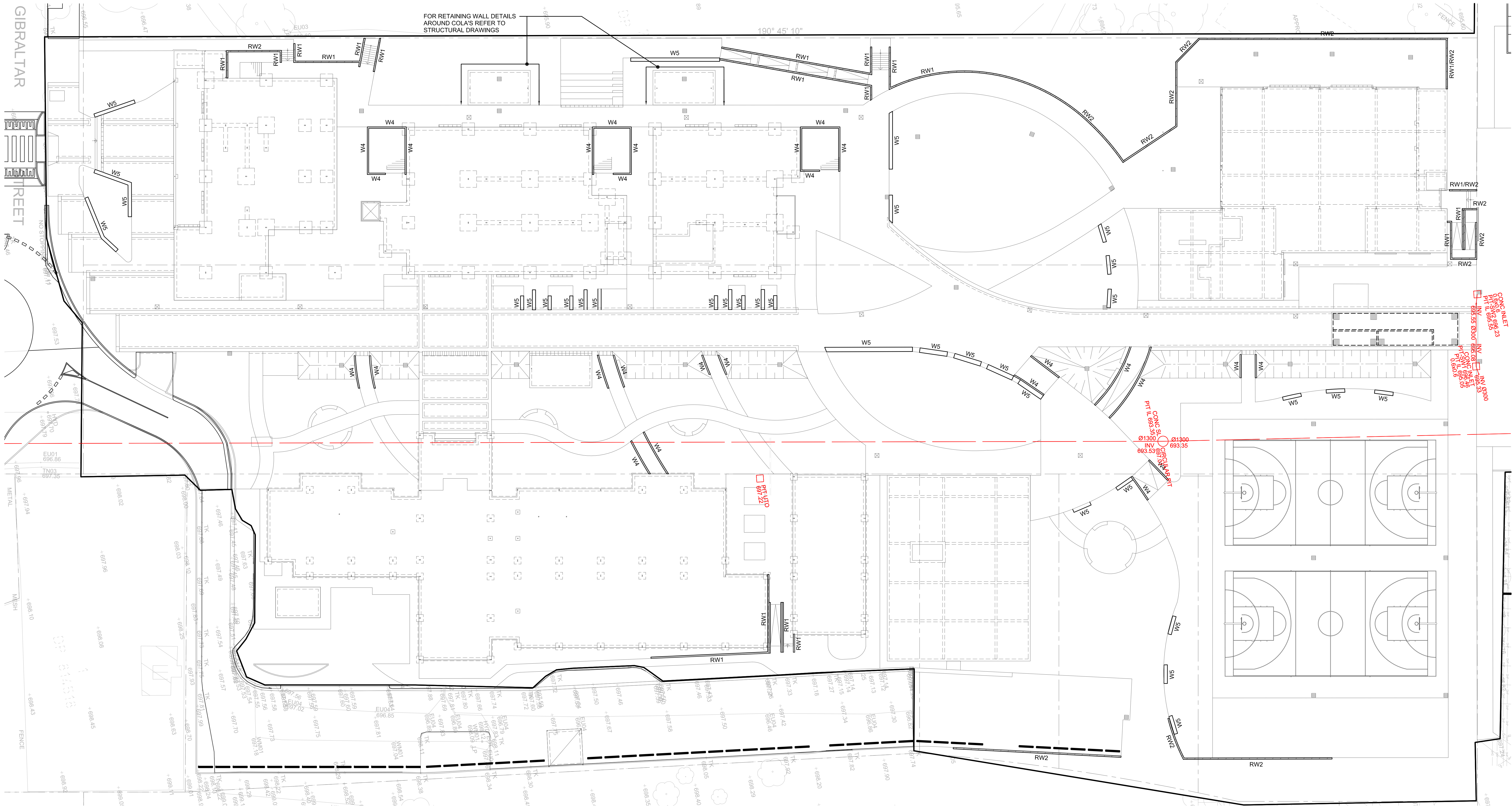
Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621
Drawing Title
**SITEWORKS & PAVEMENT
PLAN
SHEET 7**

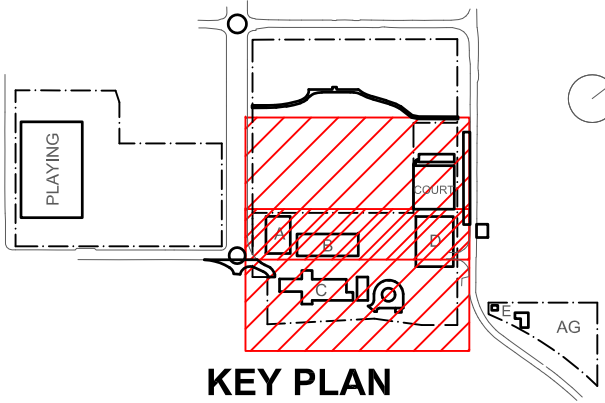
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BHS-CE-2067	B		

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RETAINING WALL & INSITU CONCRETE WALL PLAN
SCALE 1:250
NOTE:
FOR ALL WALL DETAILS REFER DRG. BHS-CE-2065.



Rev	Date	Description	Chkd	Auth.
A	20.10.22	RTS REVISED DD ISSUE		
B	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621

Drawing Title
**RETAINING WALL AND
INSITU CONCRETE WALL
PLAN**

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
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Drawing No.	Revision		
BHS-CE-2068	B		

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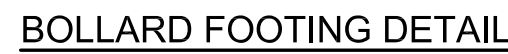
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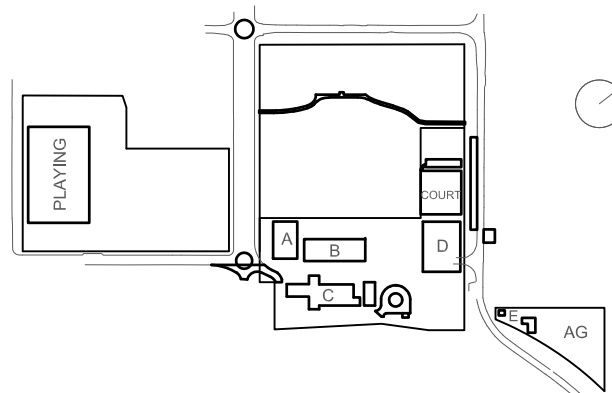


PRAM RAMP DETAIL

NTS

NOTES

2. THE RAMP AND SLOPING SIDES SHOULD BE SLIP RESISTANT AND OF A COLOUR THAT CONTRASTS WITH THE ADJOINING SURFACES.
3. A TACTILE INDICATOR, AS SPECIFIED IN AS1428.4 SHOULD BE INTEGRATED AND EXTENDED FOR 200mm AWAY FROM THE RAMP AT THE SHARP TRANSITION AT THE TOP AND BOTTOM OF THE RAMP. THIS COULD TAKE THE FORM OF ROUGH BRIDGES OR A SIMILAR TEXTURE WHICH WILL AID ORIENTATION FOR PEOPLE WITH A VISUAL IMPAIRMENT.
3. # WHERE CONSTRAINTS DICTATE THE ANGLE MAY BE REDUCED TO 30° IN ACCORDANCE WITH RMS STANDARD DRAWING NO. R0300-11.
4. MINIMUM 125mm THICKNESS OF CONCRETE REINFORCED WITH S182 MESH BOTTOM. 40mm COVER

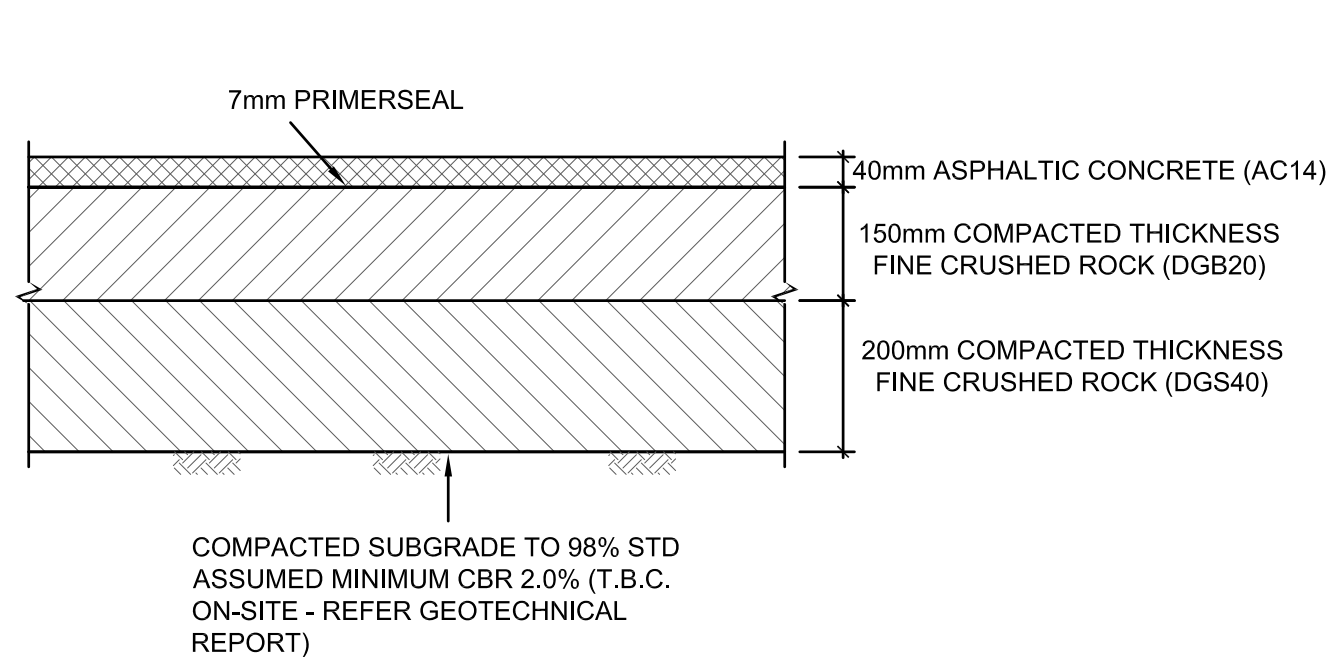


Project
New High School in Bungendore

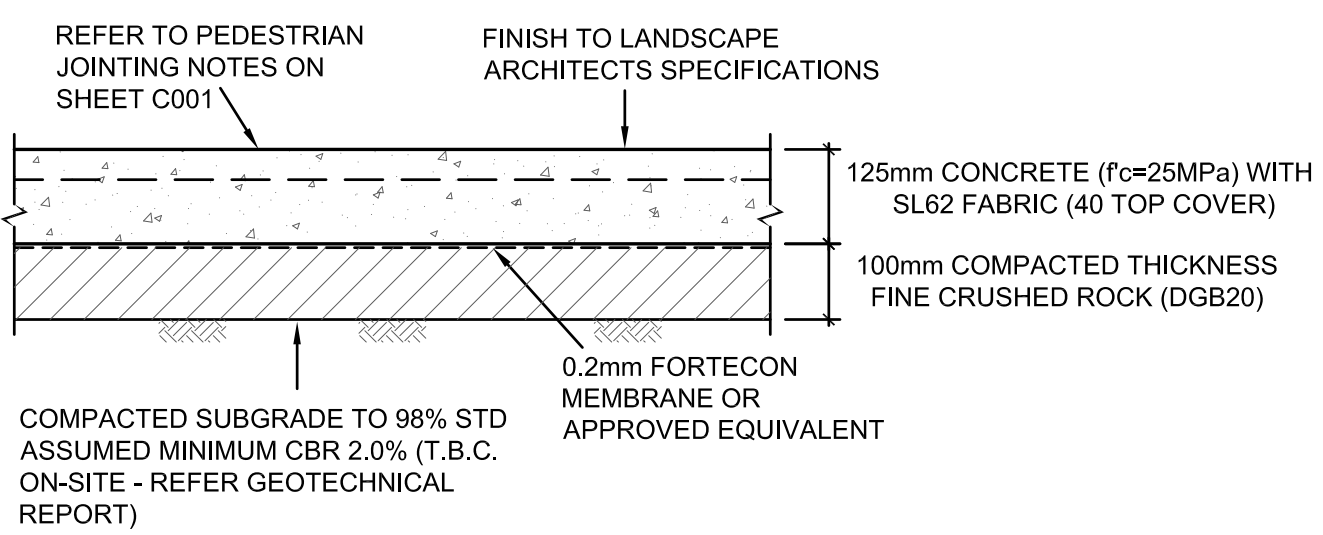
MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title
SITE WORK DETAILS

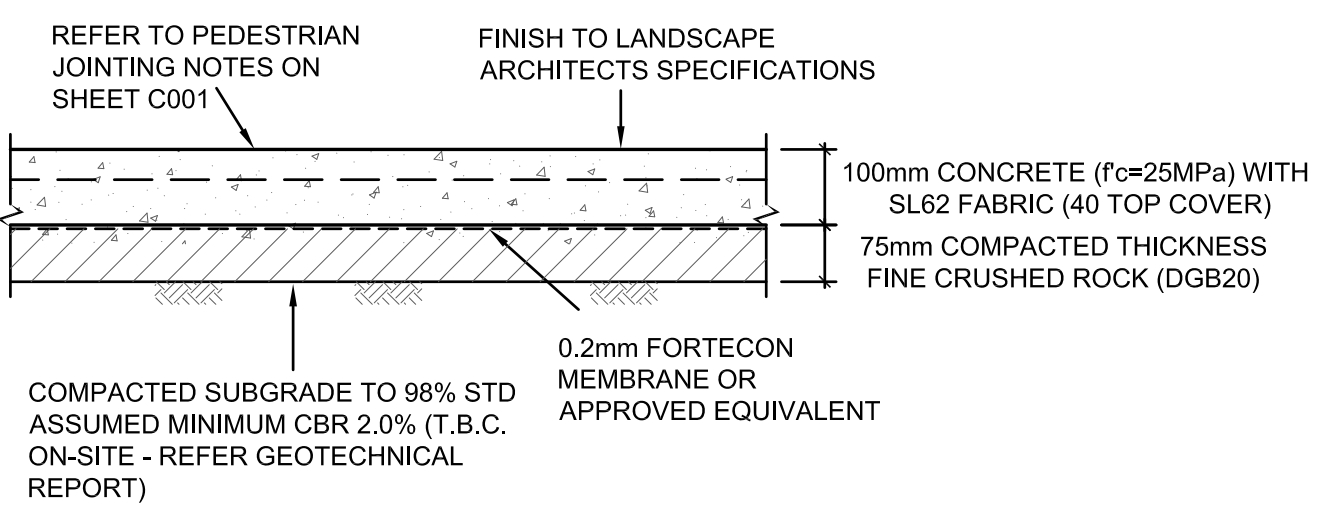
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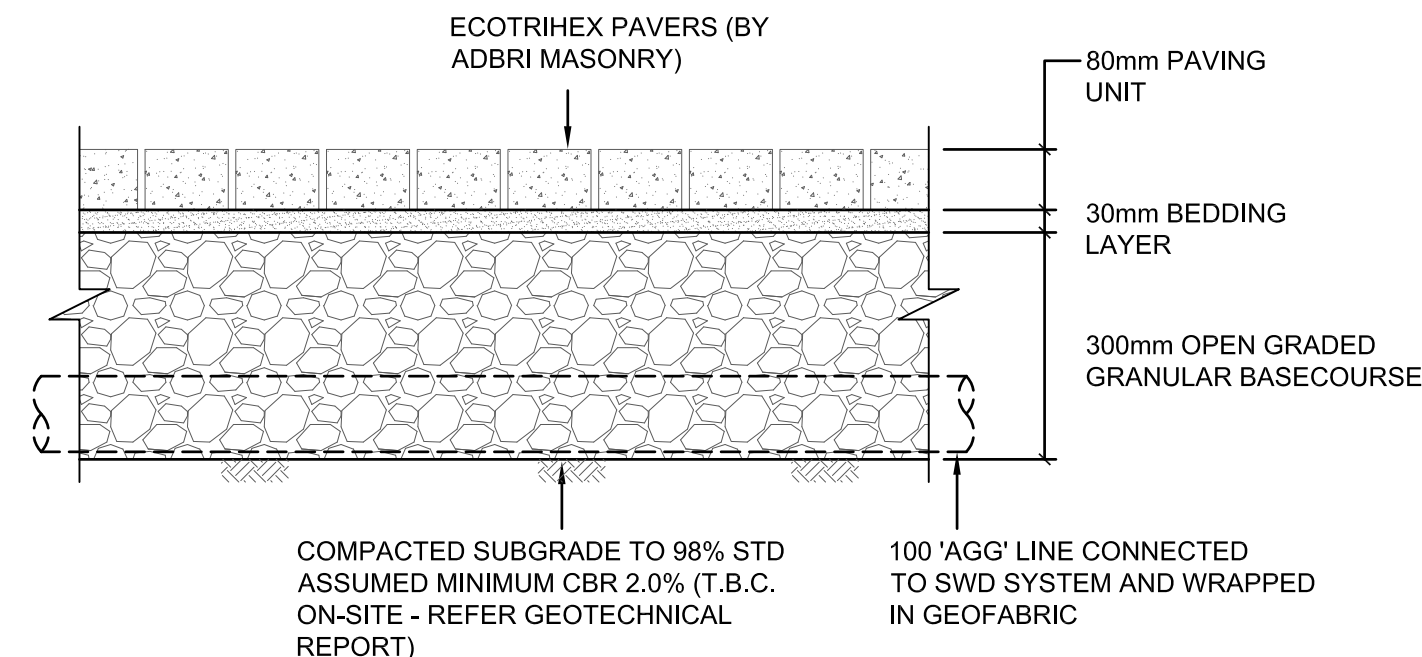
PAVEMENT TYPE 1
MEDIUM DUTY - COMMERCIAL VEHICLE
ASPHALT PAVEMENT
SCALE 1:10



PAVEMENT TYPE 2
PEDESTRAIN & LIGHT VEHICLE
(GVM LESS THAN 3 TONNES)
CONCRETE PAVEMENT
SCALE 1:10



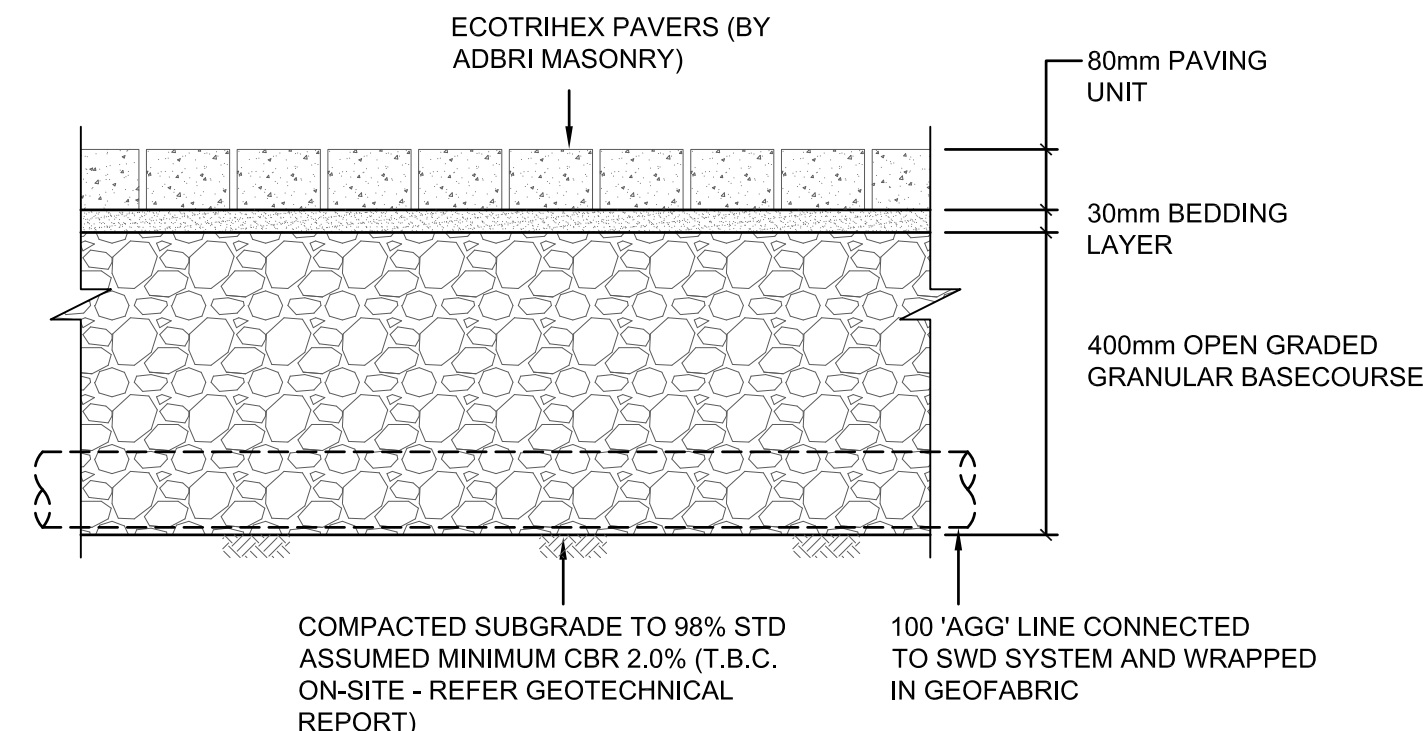
PAVEMENT TYPE 3
FOOTPATH - PEDESTRAIN ONLY
CONCRETE PAVEMENT
SCALE 1:10



PAVEMENT TYPE 4
FOOTPATH - PEDESTRIAN ONLY
PERMEABLE PAVEMENT
SCALE 1:10



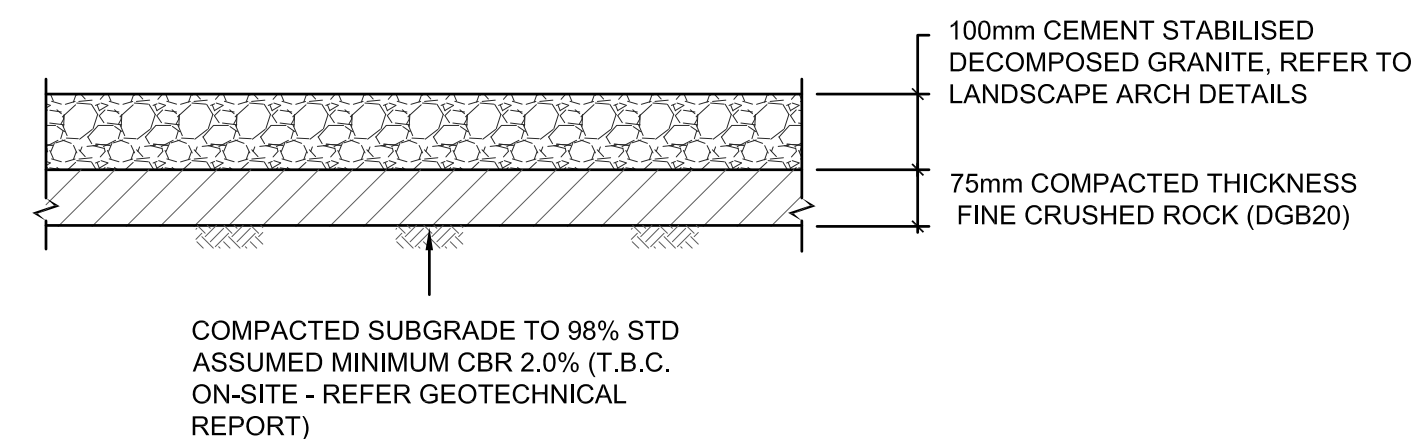
NOTE: PERMEABLE PAVEMENTS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION (ADBRI MASONRY)



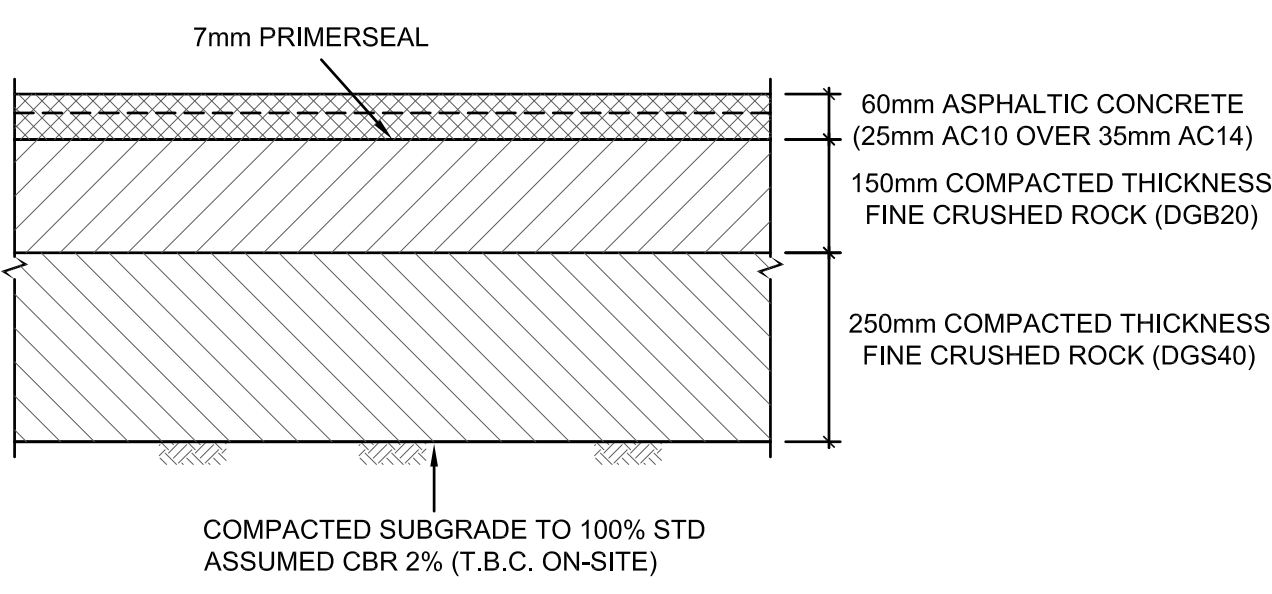
PAVEMENT TYPE 6
COMMERCIAL VEHICLE
PERMEABLE PAVEMENT
SCALE 1:10



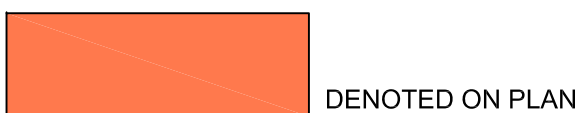
NOTE: PERMEABLE PAVEMENTS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION (ADBRI MASONRY)



PAVEMENT TYPE 5
SCALE 1:10

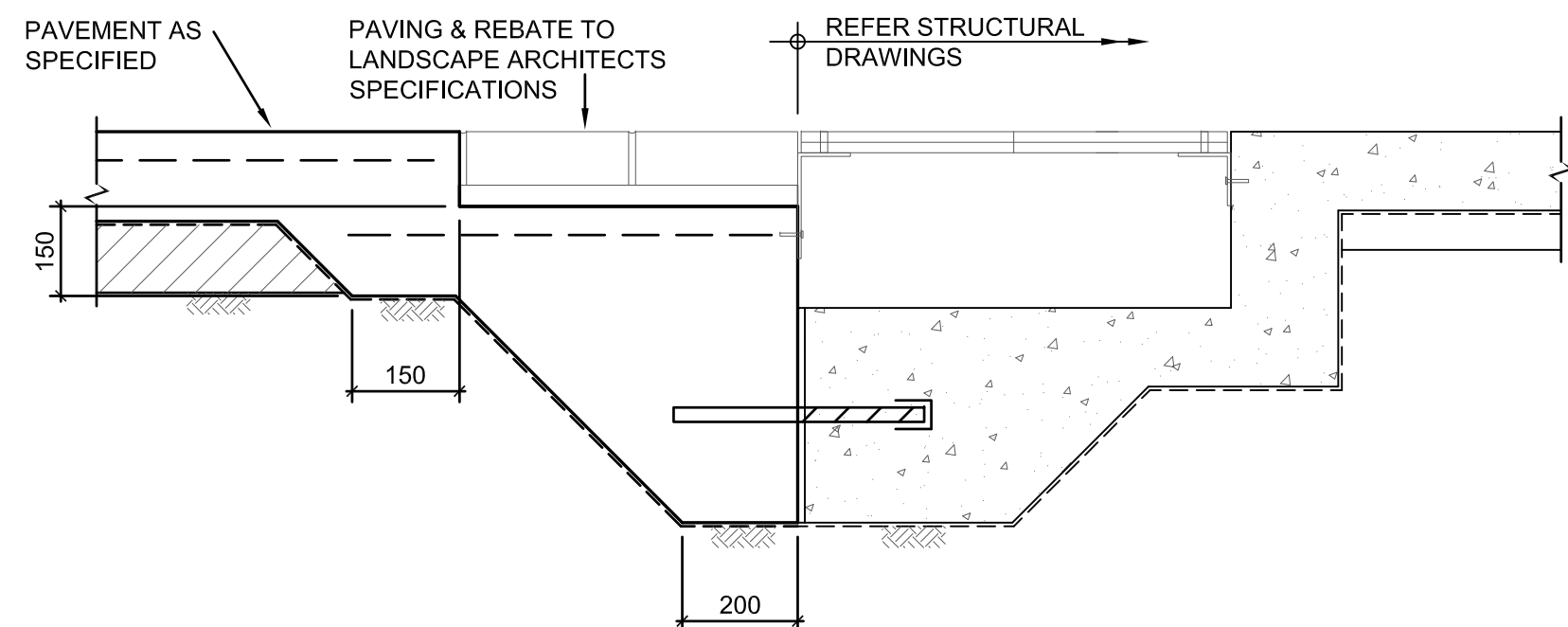


PAVEMENT TYPE 7
HEAVY DUTY ASPHALT PAVEMENT
SCALE 1:10

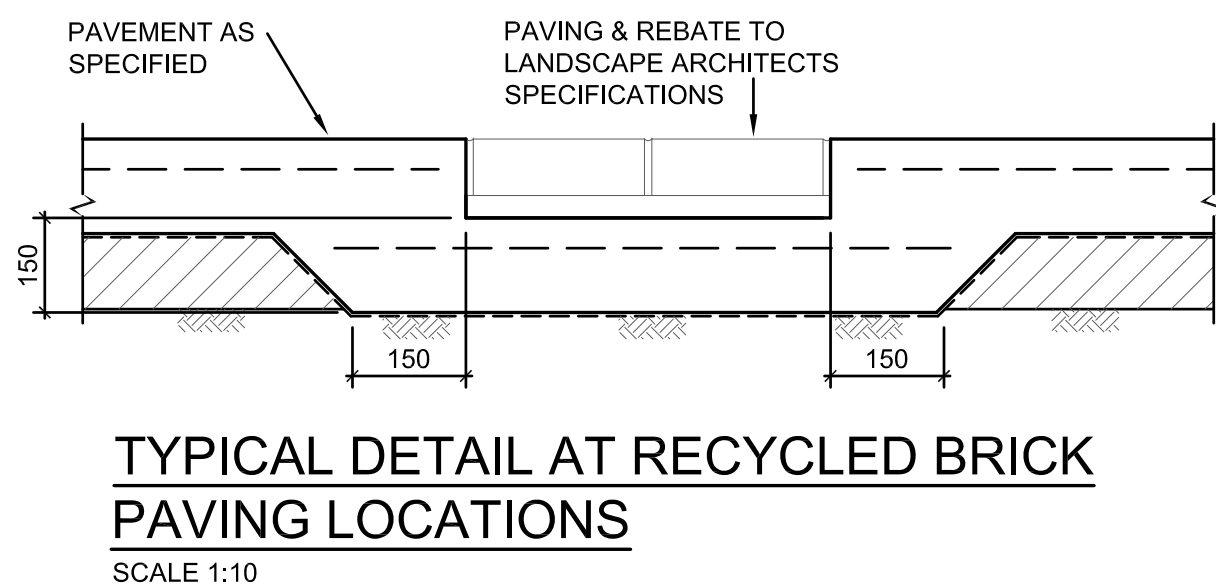


PAVEMENT TYPE 4 GRADING REQUIREMENTS (TO ADBRI MASONRY'S SPECIFICATION)		
SIEVE SIZE (mm)	OPEN GRADED GRANULAR BASECOURSE	BEDDING LAYER AND JOINTING MATERIAL (PERCENTAGE PASSING)
26.5	100	-
19	95-100	-
13.2	70-93	-
9.5	55-85	100
4.75	20-75	85-100
2.36	10-50	10-40
1.18	0-25	0-10
0.6	0-12	-
0.3	0-8	0.3
0.15	0-6	-
0.075	0-5	-

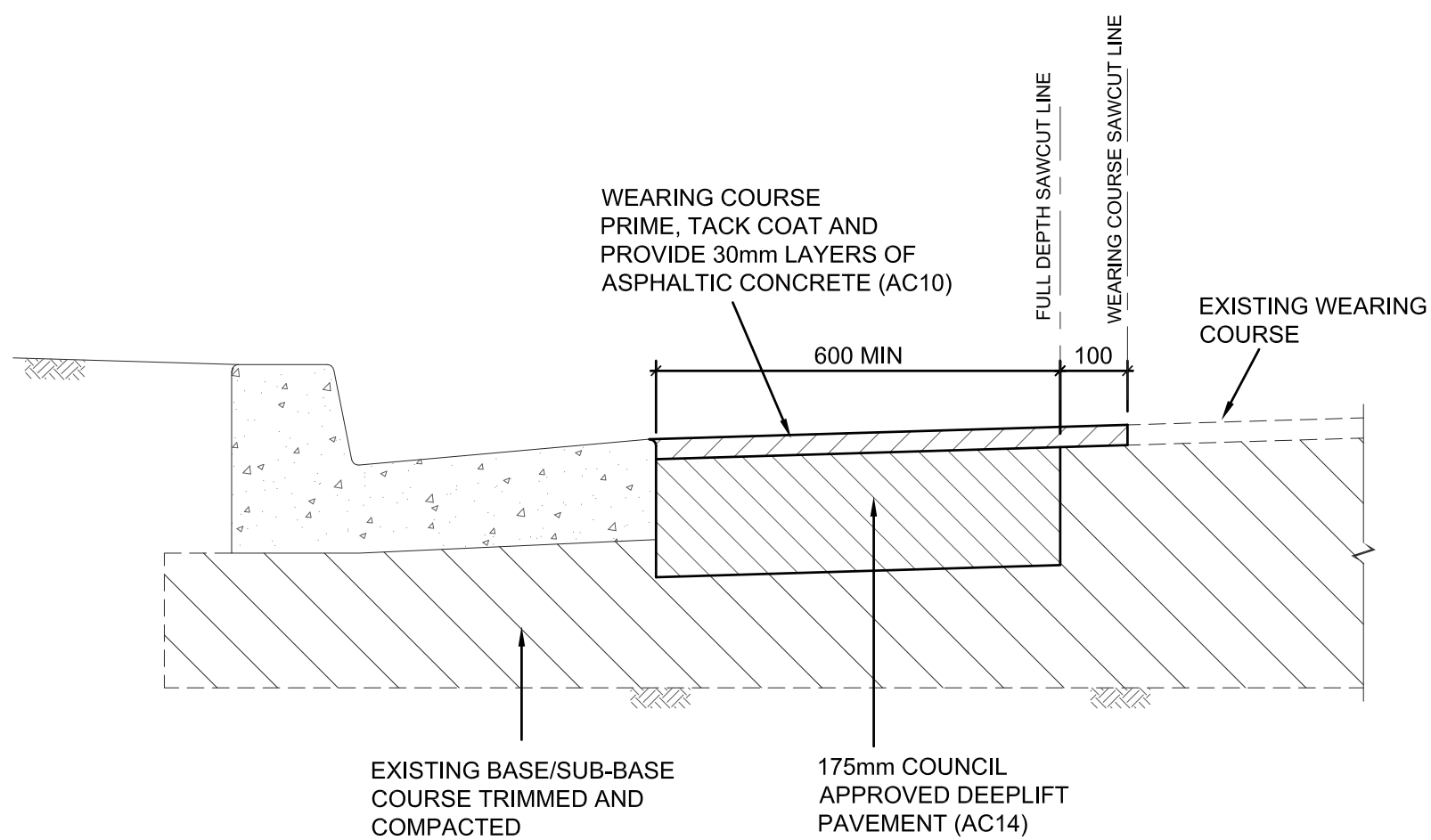
PAVEMENT TYPE 6 GRADING REQUIREMENTS (TO ADBRI MASONRY'S SPECIFICATION)		
SIEVE SIZE (mm)	OPEN GRADED GRANULAR BASECOURSE	BEDDING LAYER AND JOINTING MATERIAL (PERCENTAGE PASSING)
26.5	100	-
19	95-100	-
13.2	70-93	-
9.5	55-85	100
4.75	20-75	85-100
2.36	10-50	10-40
1.18	0-25	0-10
0.6	0-12	-
0.3	0-8	0.3
0.15	0-6	-
0.075	0-5	-



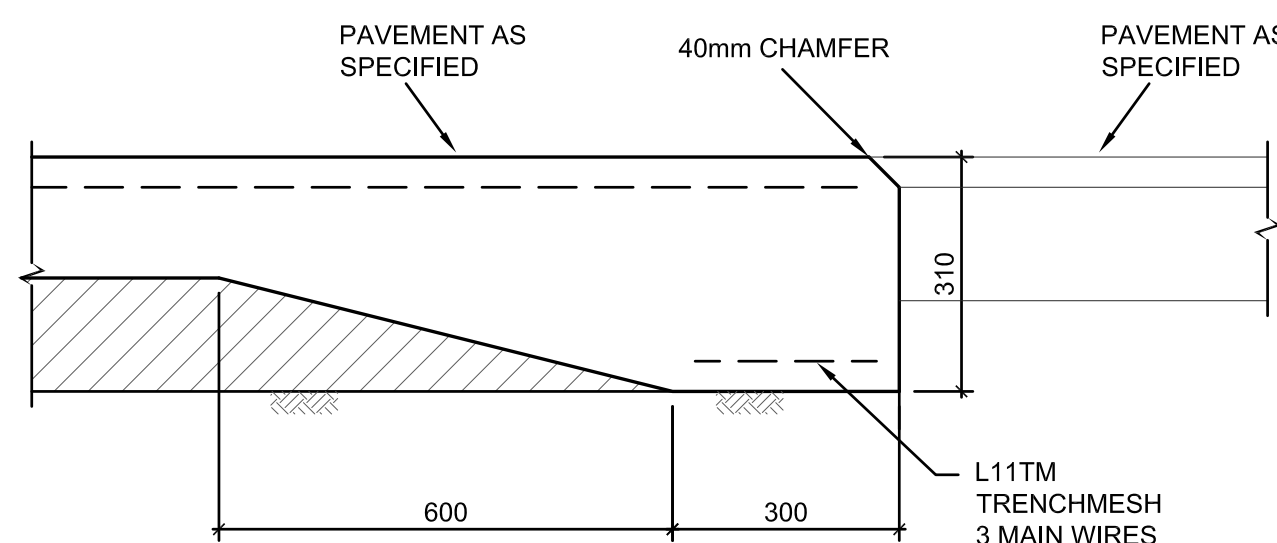
TYPICAL DETAIL AT GRATED CONCRETE DRAINAGE CHANNEL
SCALE 1:10



TYPICAL DETAIL AT RECYCLED BRICK PAVING LOCATIONS
SCALE 1:10



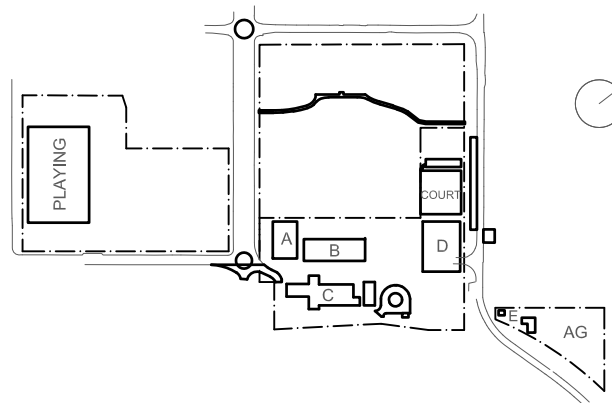
PAVEMENT - DEEPLIFT
SCALE 1:10



EDGE THICKENING (ET)
SCALE 1:10

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JOINT SPACING REQUIREMENTS FOR PAVEMENT TYPES (UNO)

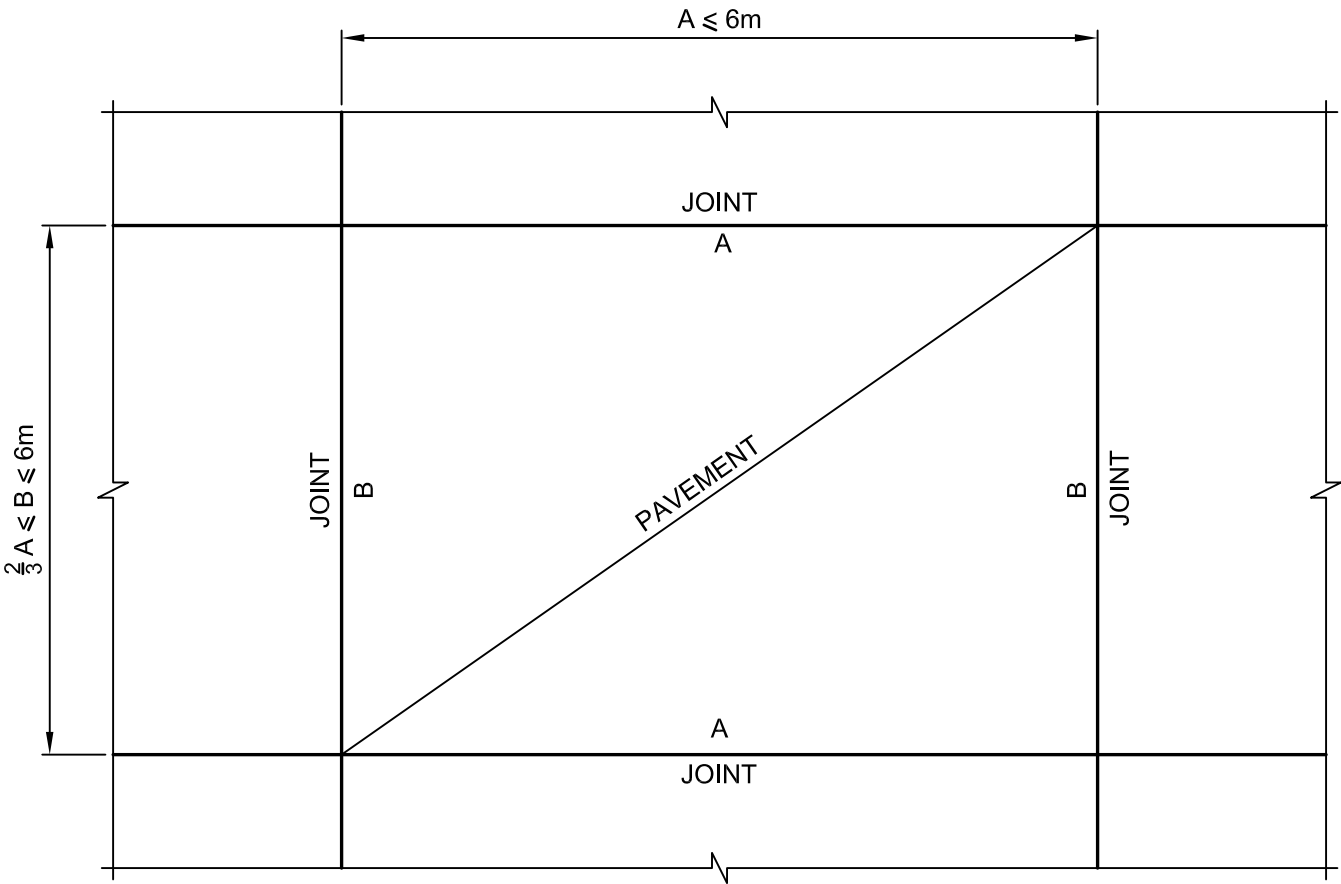
NOTE: ALL JOINTING LAYOUTS TO BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION AND PLACEMENT OF CONCRETE.

PEDESTRIAN LOADINGS:

- PROVIDE WEAKENED PLANE JOINTS AT 6m C/C. MAX. AT AN ASPECT RATIO OF 1:1.5 MAX.
- PROVIDE APPROVED DOWEL JOINTS AT 18m C/C. OR AFTER EVERY THIRD WEAKENED PLANE JOINT (WHICHEVER IS LESSER).

FREQUENT/INFREQUENT VEHICLE LOADINGS:

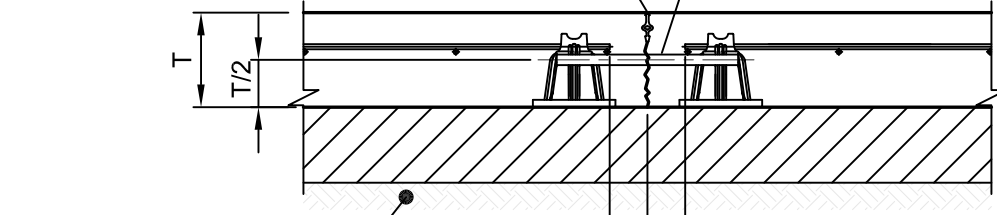
- PROVIDE APPROVED DOWEL JOINTS AT 6m C/C. MAX. AT AN ASPECT RATIO OF 1:1.5 MAX.



JOINT ASPECT RATIO DETAIL
NTS

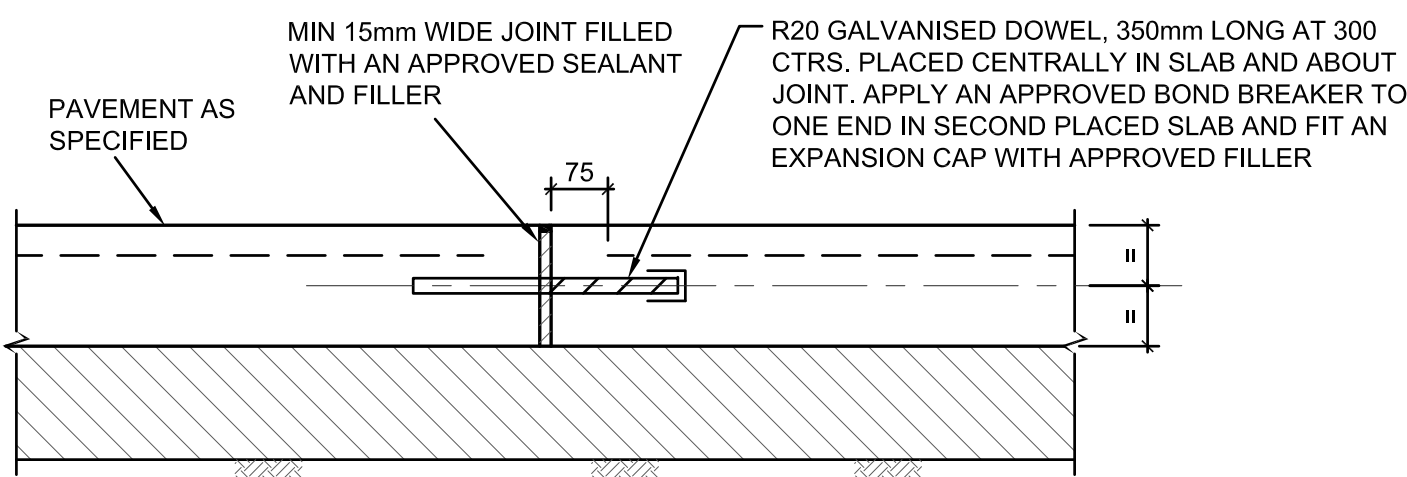
DANLEY™ PAVEX™ CRACK-A-JOINT™ CORROSION-FREE CRACK INDUCER WITH RIP-A-STRIP™, MIN. 1/4 SLAB DEPTH. (REFER TO INSTALLATION INSTRUCTIONS FROM SUPPLIER).

DOWEL TO BE PLACE CENTRALLY IN SLAB AS PER AS 3727.1:2016

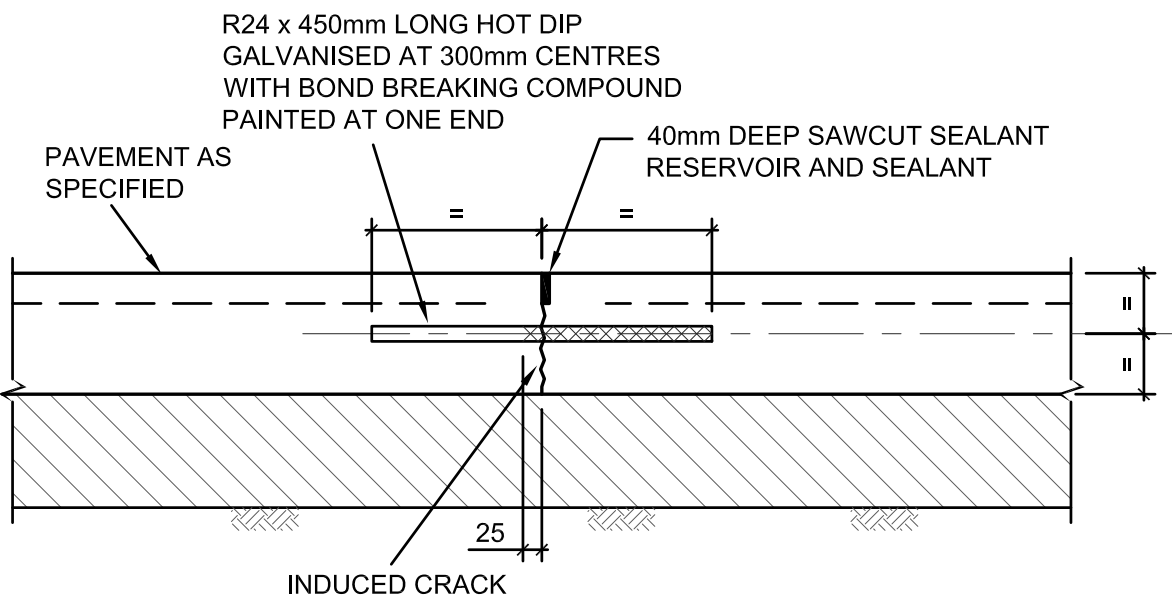


FOR SUBGRADE REFER PAVEMENT DETAILS

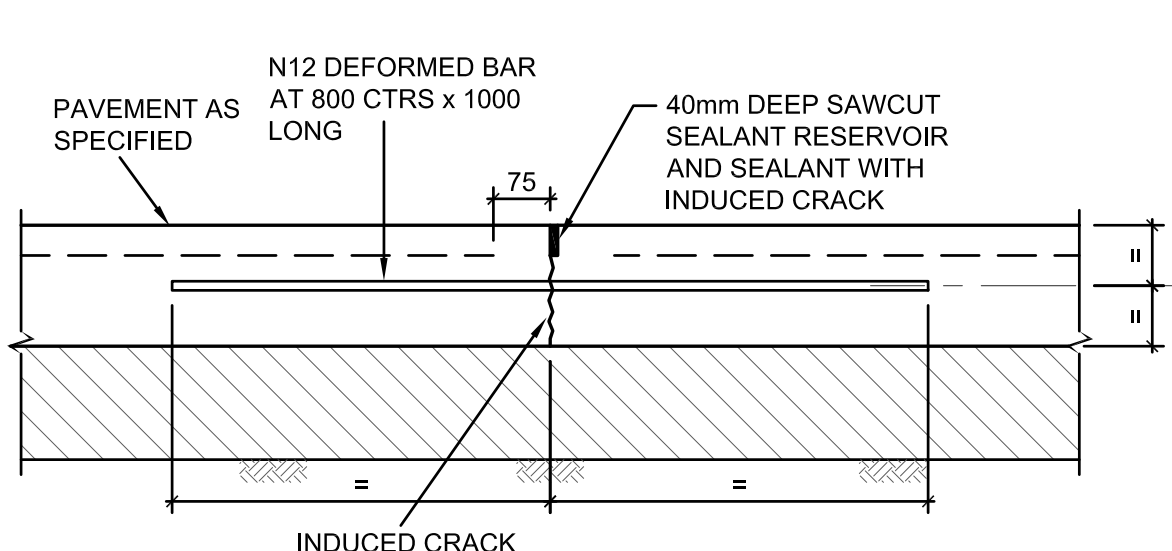
WEAKENED PLANE JOINT (W.P.J.) DETAIL
SCALE: 1:10



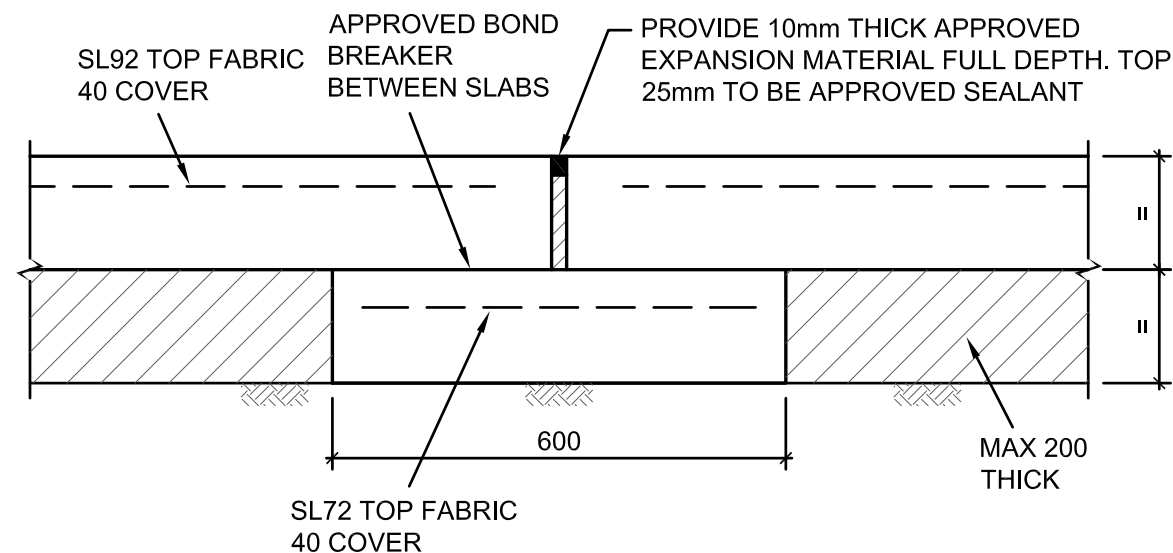
DOWELLED EXPANSION JOINT (DEJ)
SCALE 1:10



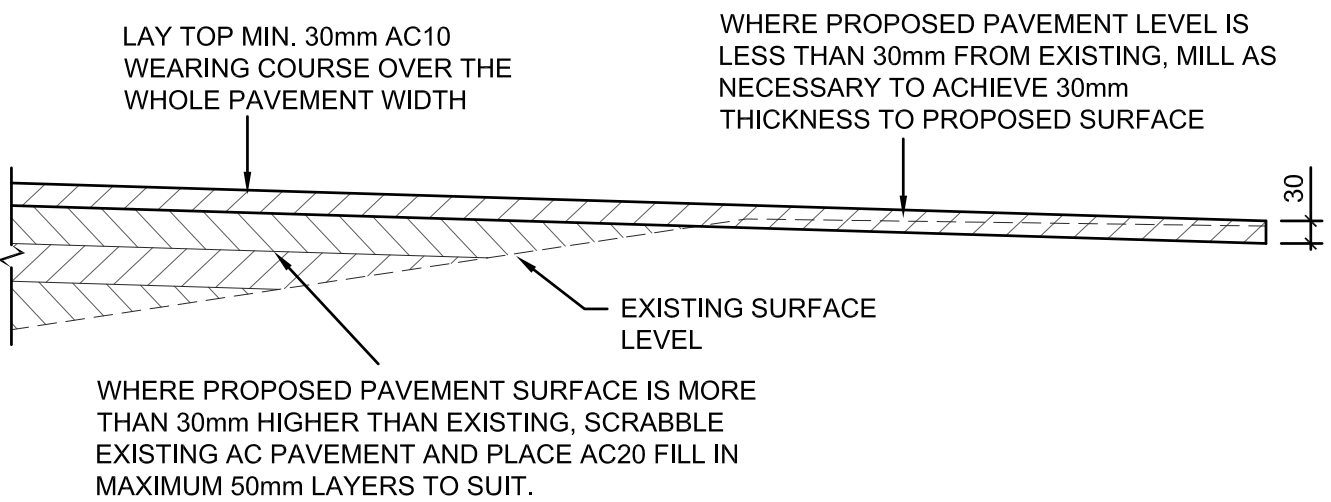
TRANSVERSE CONTRACTION JOINT (TCJ)
SCALE 1:10



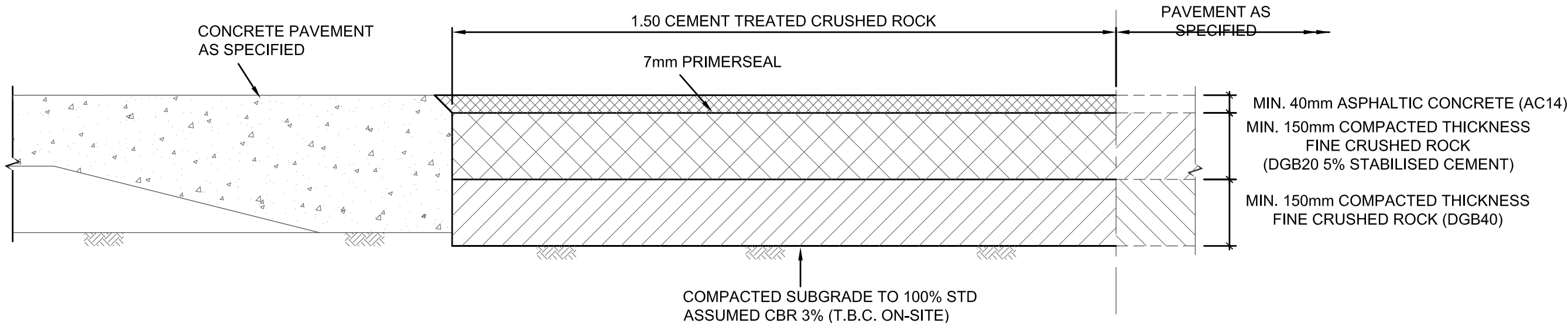
LONGITUDINAL WARPING JOINT (LWJ)
SCALE 1:10



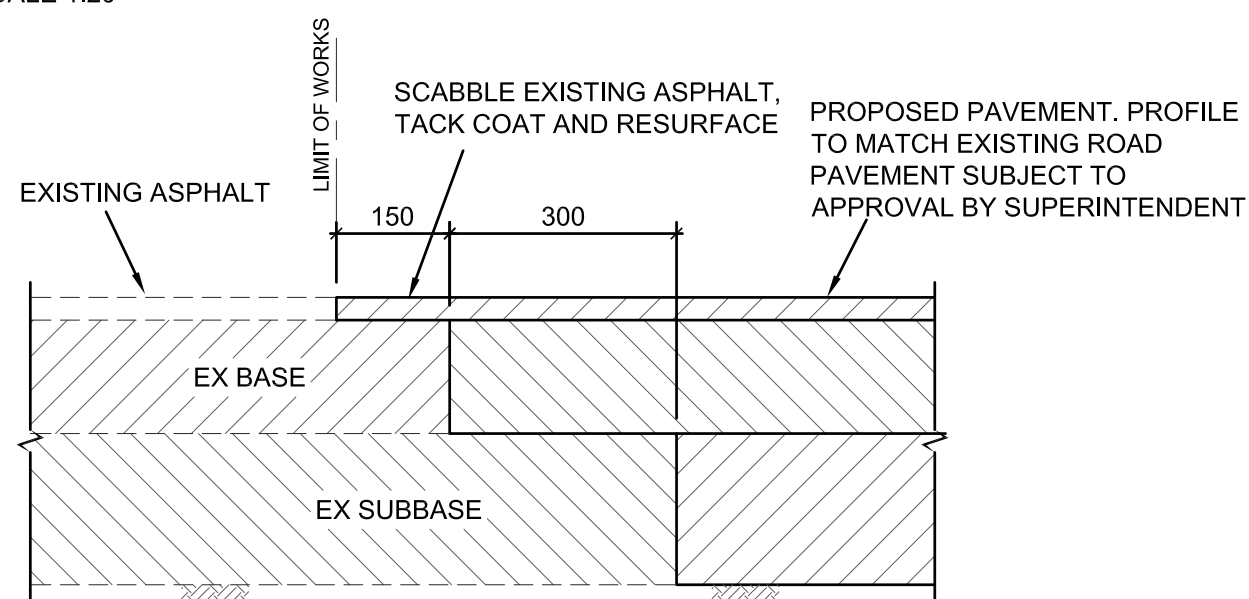
ISOLATION JOINT (IJ) WITH SUBGRADE BEAM
SCALE 1:20



MILL RE-SHEET/SCRABBLE AND FILL DETAIL
SCALE 1:10



CONCRETE CONNECTION TO ASPHALT PAVEMENT
SCALE 1:10



ASPHALT CONNECTION TO EXISTING PAVEMENT
SCALE 1:10

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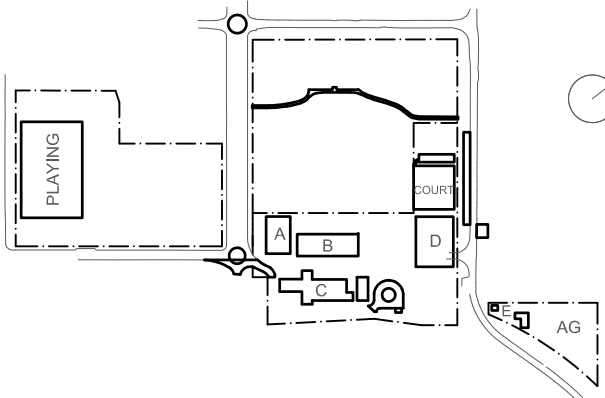
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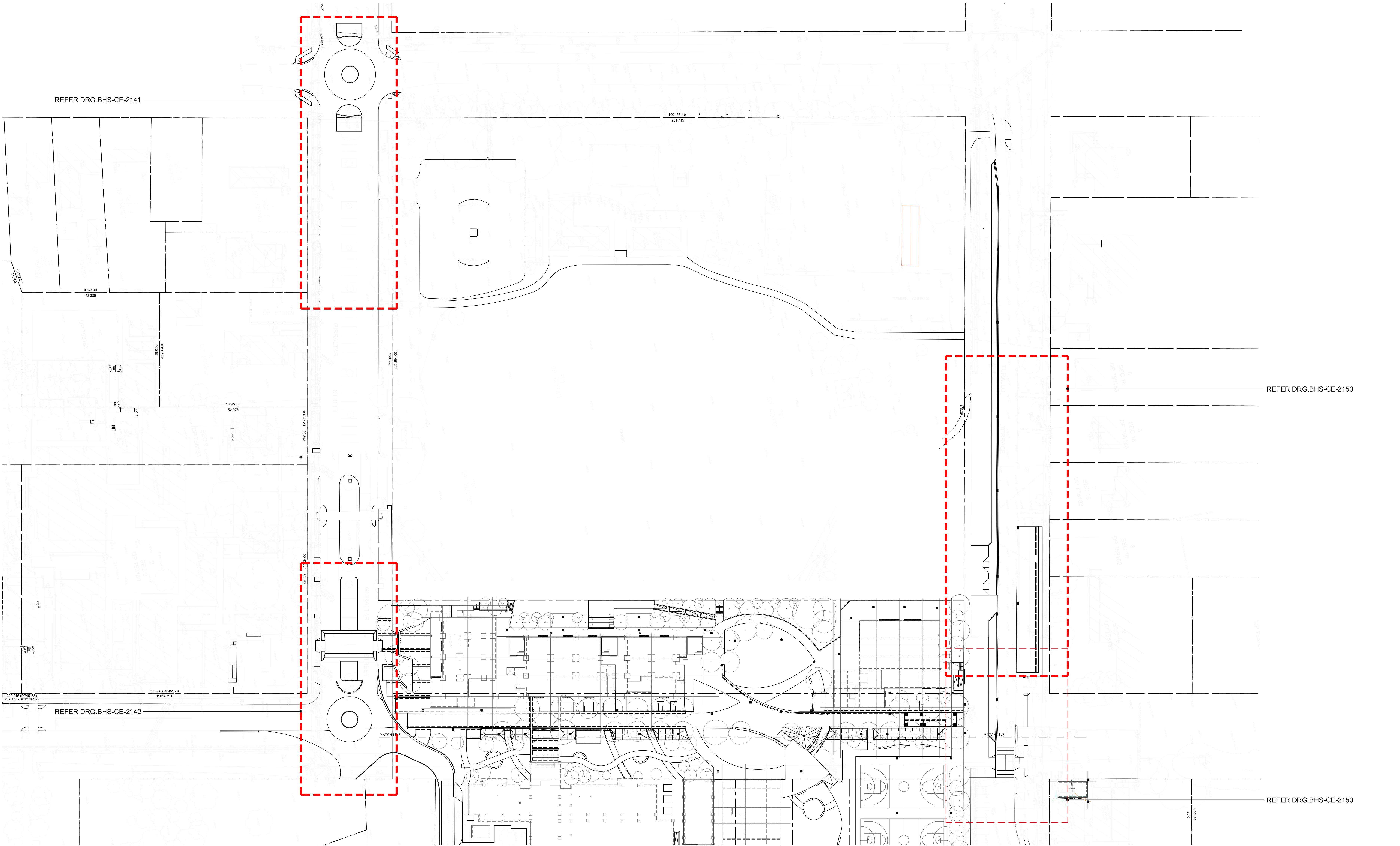
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Rev Date Description Chkd Auth.
A 20.10.22 RTS REVISED DD ISSUE

Project
New High School in Bungendore
MAJARA STREET,
BUNGENDORE NSW 2621
Drawing Title
**PAVEMENT DETAILS
SHEET 2**

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	AS NOTED
Drawing No.	Revision		
BHS-CE-2092	A		

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ROAD CIVIL WORKS SETOUT GENERAL ARRANGEMENT PLAN
SCALE 1:500

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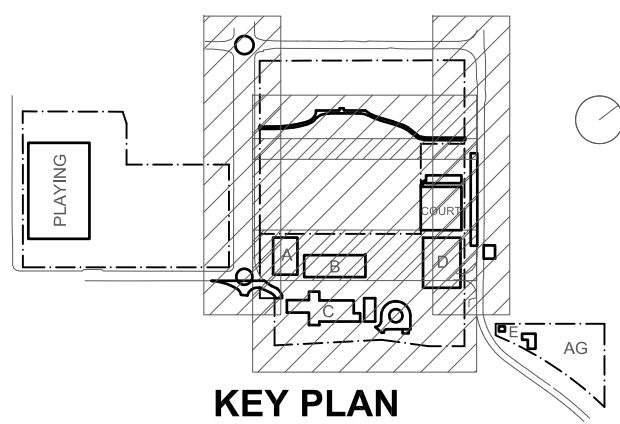
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A	21.12.21	ISSUED FOR DD		
B	14.02.22	GENERALLY REVISED		
C	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title
ROAD CIVIL WORKS
SETOUT GENERAL
ARRANGEMENT PLAN

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
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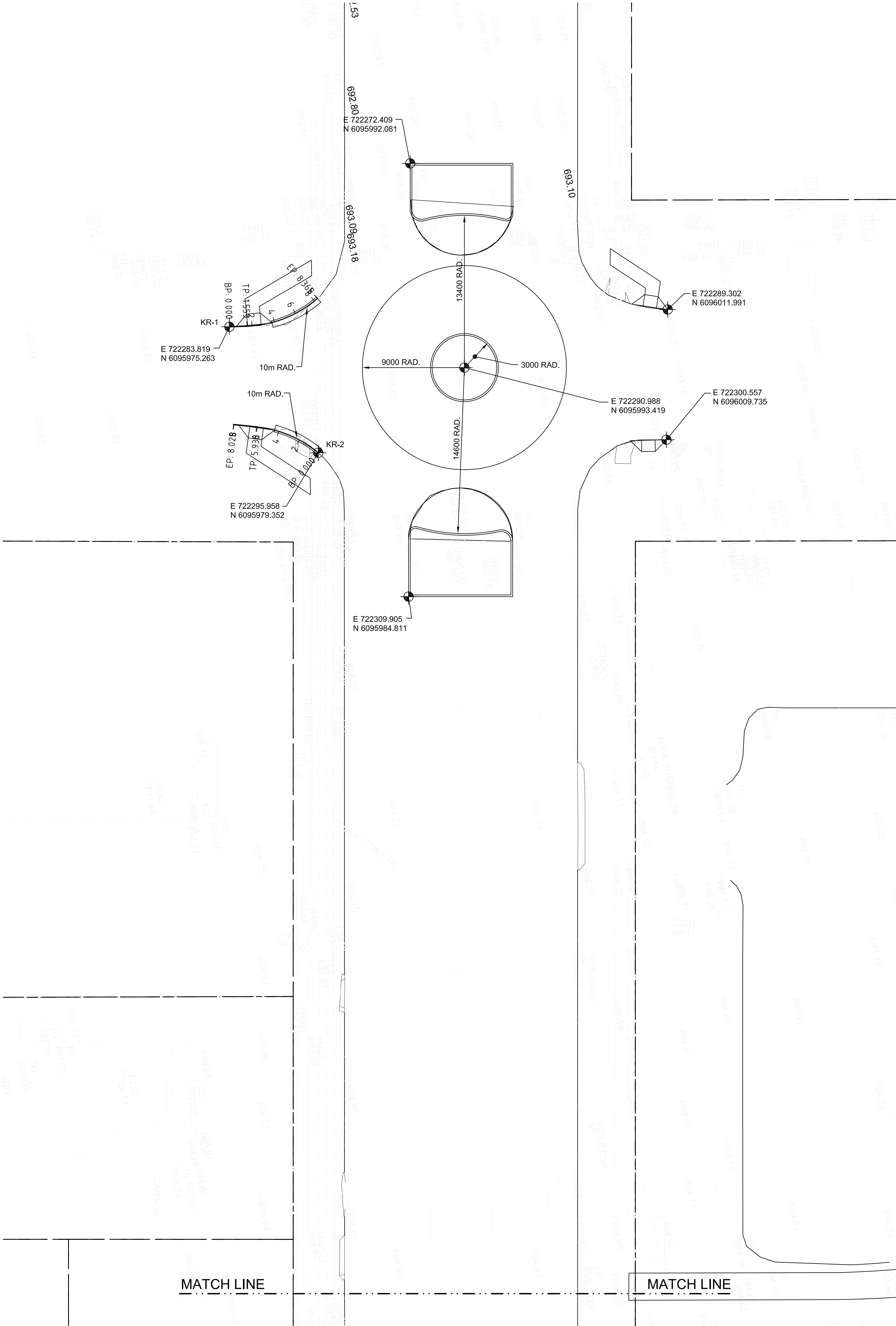
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BHS-CE-2140

Revision
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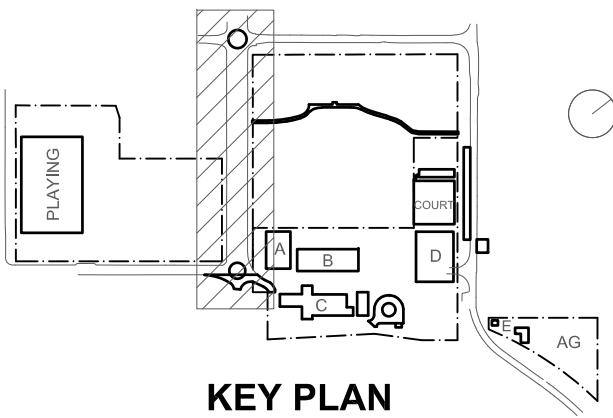
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ROAD CIVIL WORKS SETOUT DETAIL PART PLAN
SCALE 1:200



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Project New High School in Bungendore	
MAJARA STREET, BUNGENDORE NSW 2621	
Drawing Title ROAD CIVIL WORKS SETOUT DETAIL PLAN SHEET 1	

Designed	Reviewed	Drawn	Sheet
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Job No.	Status	Date	Scale
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Drawing No. BHS-CE-2141			Revision C

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Rev	Date	Description	Chkd	Auth.
A	21.12.21	ISSUED FOR DD		
B	14.02.22	GENERALLY REVISED		
C	23.11.22	ISSUED FOR RTS		

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title ROAD CIVIL WORKS
SETOUT PART PLAN
SHEET 2

Designed MW	Reviewed SCM	Drawn MW	Sheet B1
Job No. 5555	Status DD	Date OCT '21	Scale 1:200

Drawing No.
BHS-CE-2142

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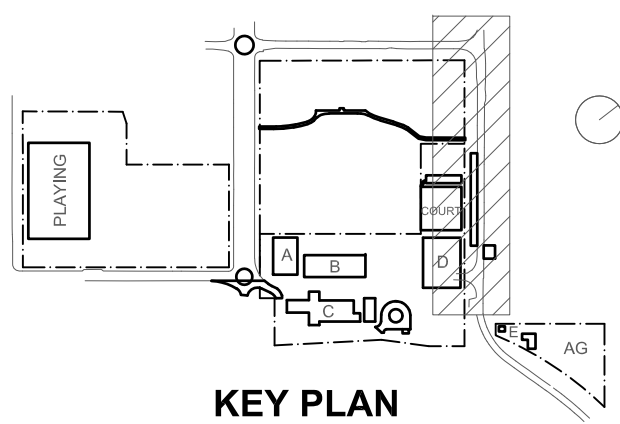
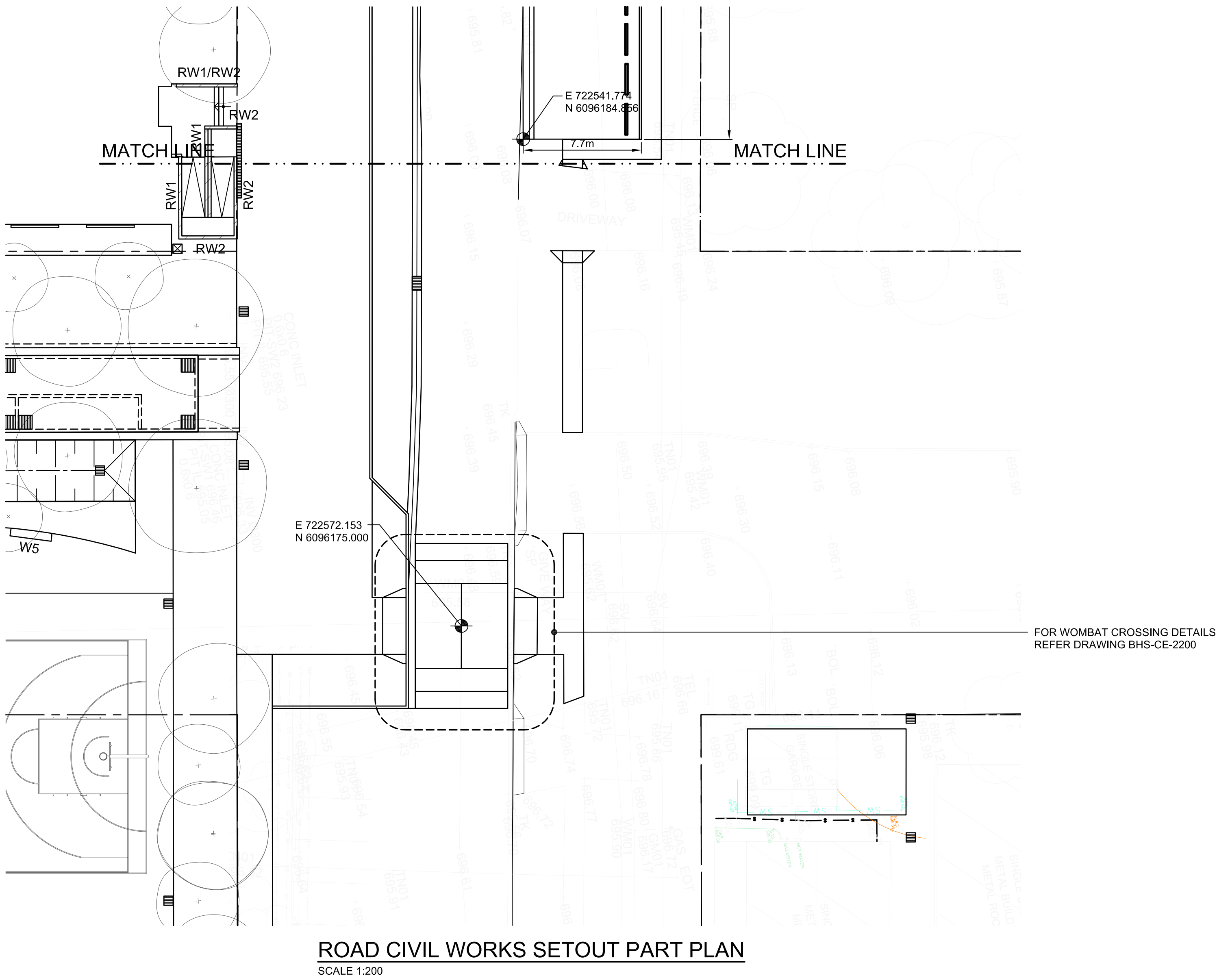
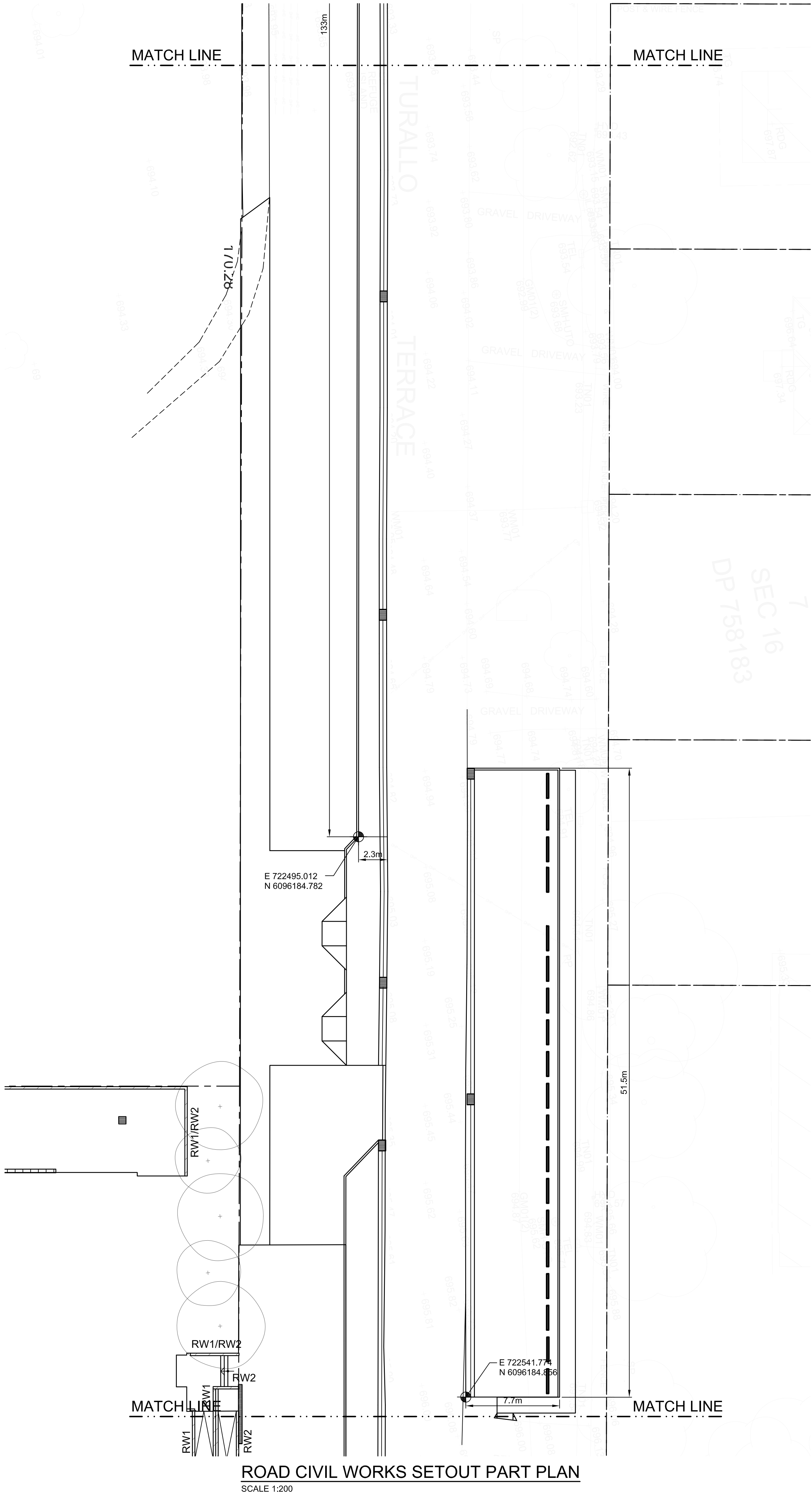
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Project

New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title
ROAD CIVIL WORKS
SETOUT PART PLAN
SHEET 3

Designed

MW

Reviewed

SCM

Drawn

MW

Sheet

B1

Job No.

5555

Status

DD

Date

OCT '21

Scale

1:200

Drawing No.

BHS-CE-2150

Revision

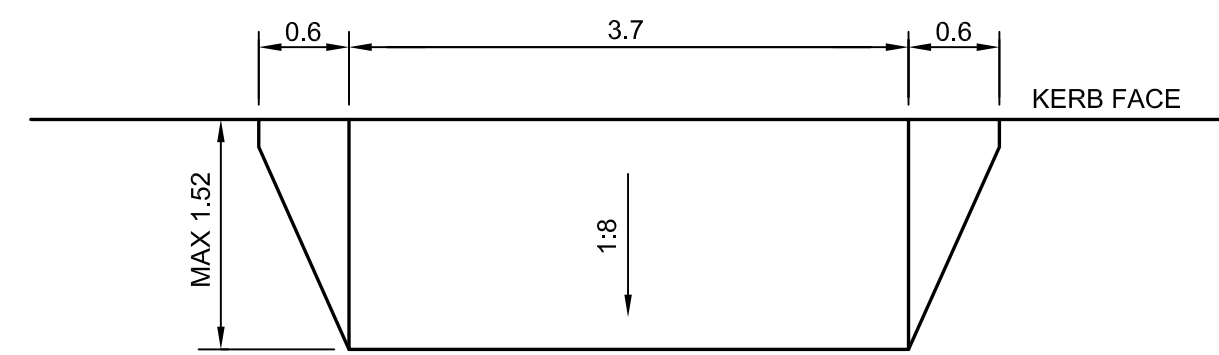
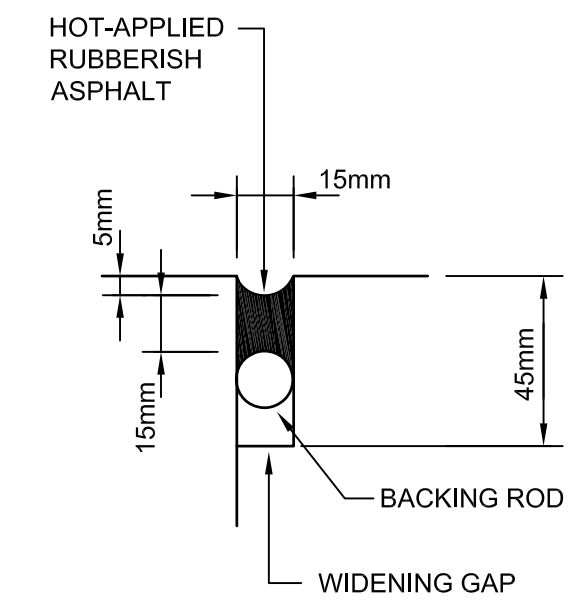
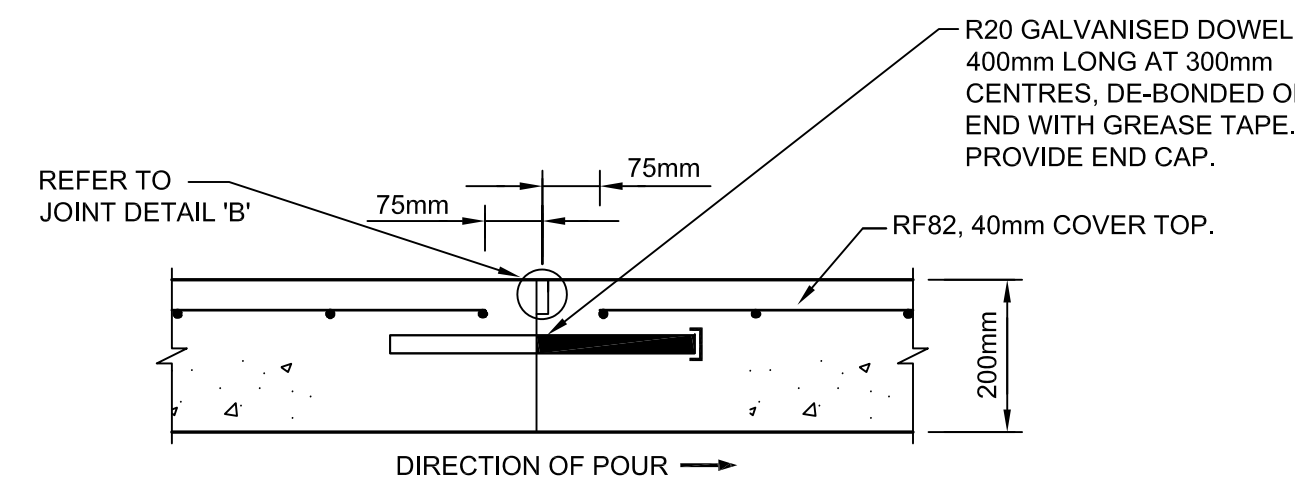
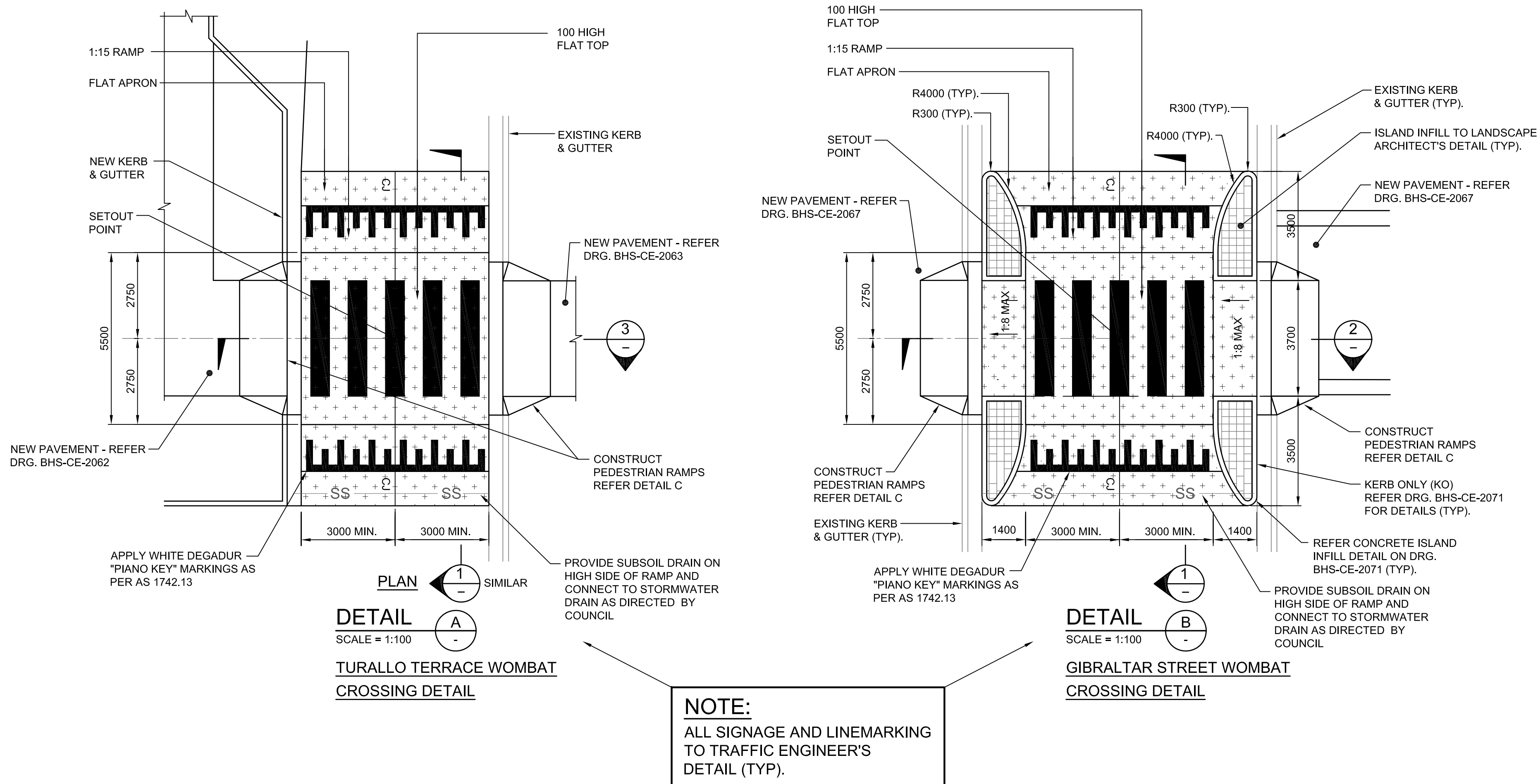
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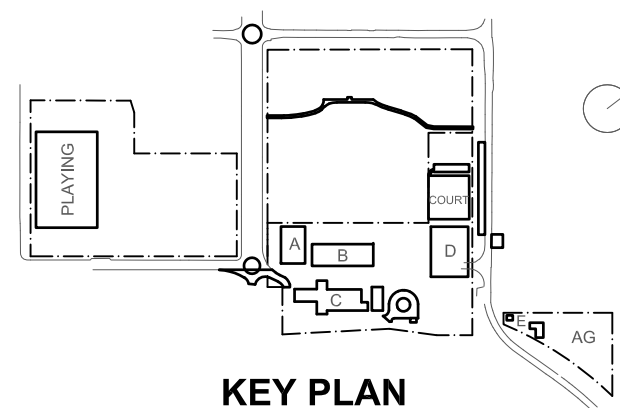
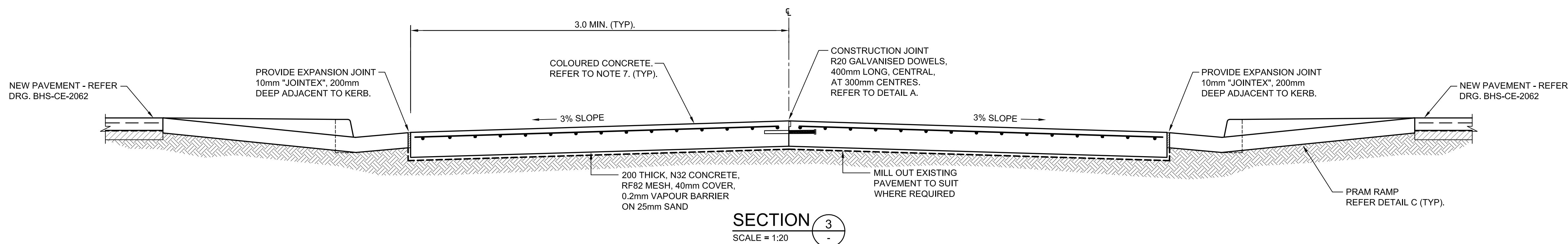
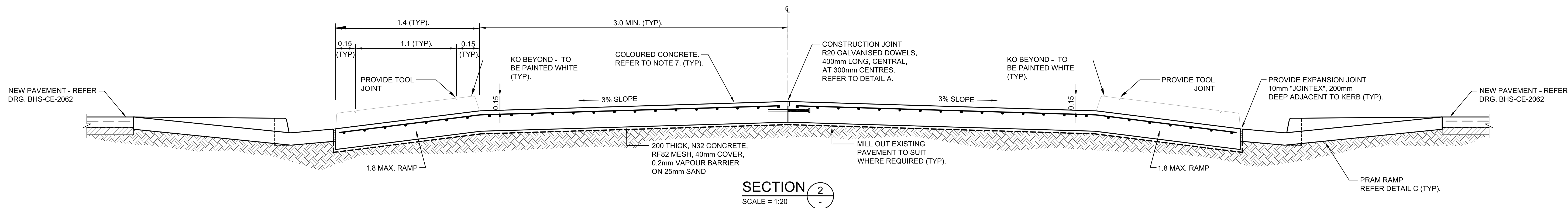
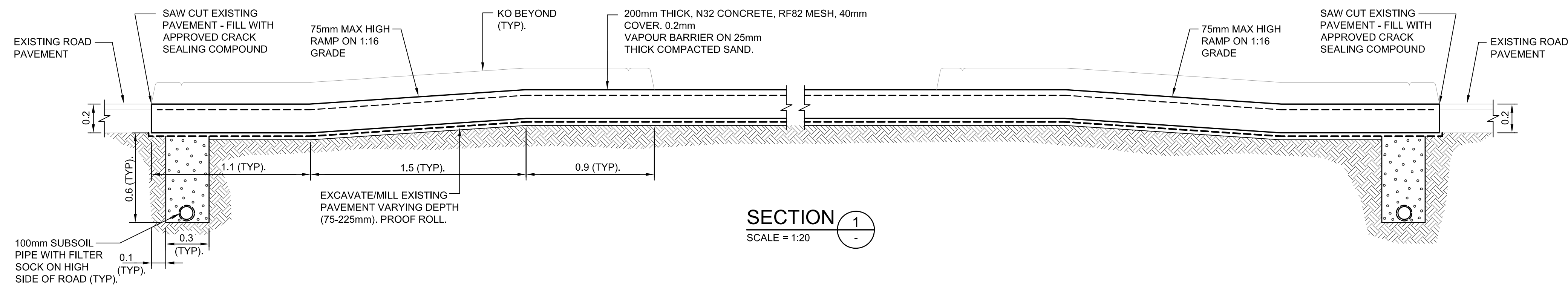
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PRAM RAMP DETAIL

NOTE: REFER DRG. BHS-CE-2071 FOR PRAM RAMP DETAIL



LEGEND

- MEDIAN INFILL TO LANDSCAPE ARCHITECT'S DETAIL.
- CONSTRUCT 200mm THICK, N32 CONCRETE "ONYX" COLOURED CONCRETE TO RAMP AND RAISED PLATFORM. REFER TO NOTE 7.
- CONSTRUCT PEDESTRIAN RAMP IN ACCORDANCE WITH DETAIL C.
- APPLY CROSSING MARKING 3.7m LONG 0.60m WIDE, 0.60m GAP USING DEGADUR PAINT. APPLY SEALER PRIOR TO PLACEMENT.
- CJ CONSTRUCTION JOINT
- CONSTRUCT SUBSOIL DRAIN AND FLUSHING POINT TO SD4. BACKFILL SUBSOIL DRAIN WITH NO FINES CONCRETE. SEE ALSO SECTION 2.

NOTES

- DIMENSIONS ARE IN METRES, UNLESS OTHERWISE.
- TAKE EXTREME CARE WHEN WORKING ABOVE EXISTING SERVICES TO AVOID DAMAGE TO SERVICES DUE TO VIBRATION AND LOADING.
- CONTRACTORS SHALL OBTAIN THEIR OWN 'DIAL BEFORE YOU DIG' INFORMATION, AND ASCERTAIN THE DEPTH OF ALL SERVICES, PRIOR TO WORK COMMENCING.
- ENSURE STREET LIGHTING MEETS THE REQUIREMENTS OF AS 1158.4.
- 45° DIAGONAL PAINTED MARKING TO BE 1.0m WIDE, 2.0m GAP.
- PAINT ALL PROPOSED BARRIER KERBS WHITE.
- GREY COLOURED CONCRETE SHALL BE OBTAINED BY ADDING 'ONYX' OXIDE, SUPPLIED BY CSR READYMIX. MIX PROPORTION SHALL BE 18kg OF 'ONYX' PER CUBIC METRE OF CONCRETE, MIXED AT BATCH PLANT. ALTERNATE SUPPLIERS WILL BE ALLOWED WHICH MATCH THIS COLOUR.
- INSTALL POST FOR R3-3 FLAG, AND STOP LINE (TF) AT DESIGNATED CHILDREN'S CROSSINGS, IN ACCORDANCE WITH AS1742.10

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A	21.12.21	ISSUED FOR DD		
B	14.02.22	GENERALLY REVISED		
C	14.07.22	ISSUED FOR RTIS REVISED DESIGN		
D	20.10.22	MINOR REVISIONS FOR RTIS DD ISSUE		
E	23.11.22	ISSUED FOR RTIS		

Project

New High School in Bungendore

MAJARA STREET,
BUNGENDORE NSW 2621

Drawing Title

WOMBAT CROSSING
PLAN AND DETAILS

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	1:500
Drawing No.	Revision		
BHS-CE-2200	E		

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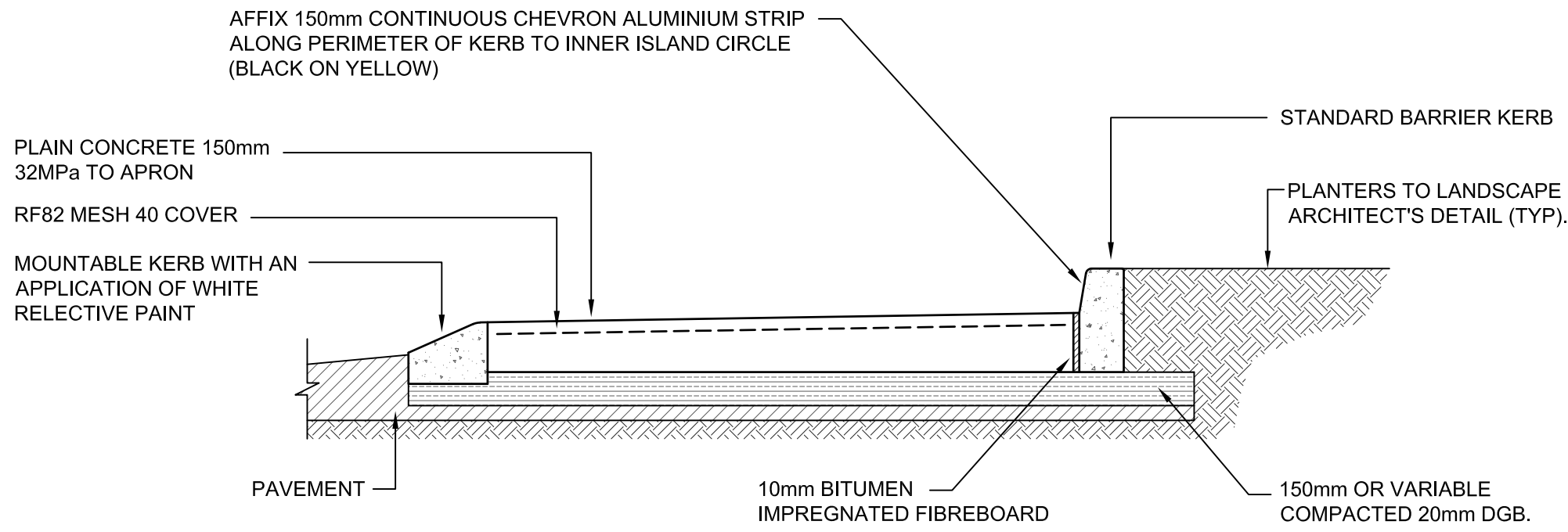
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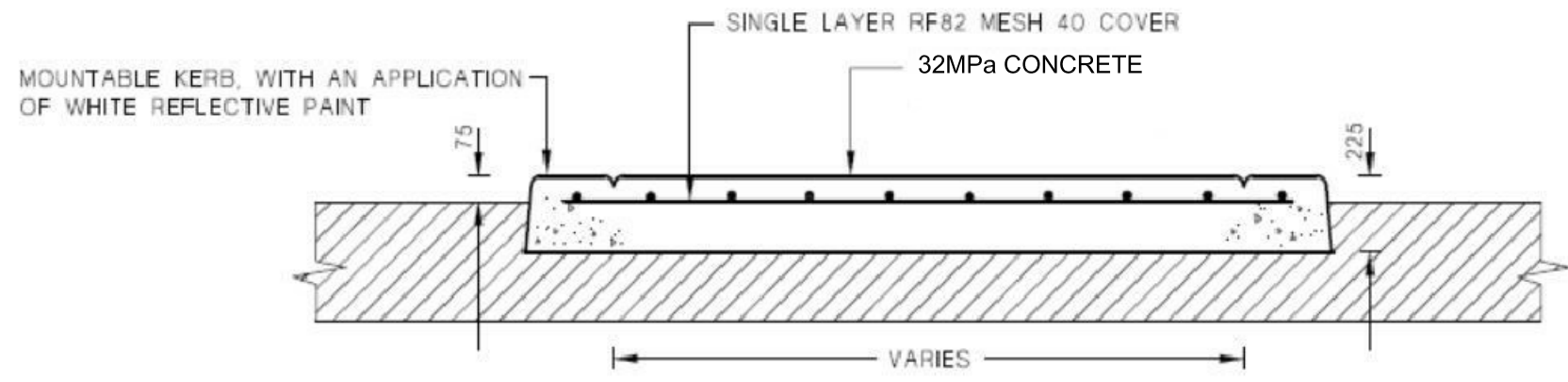
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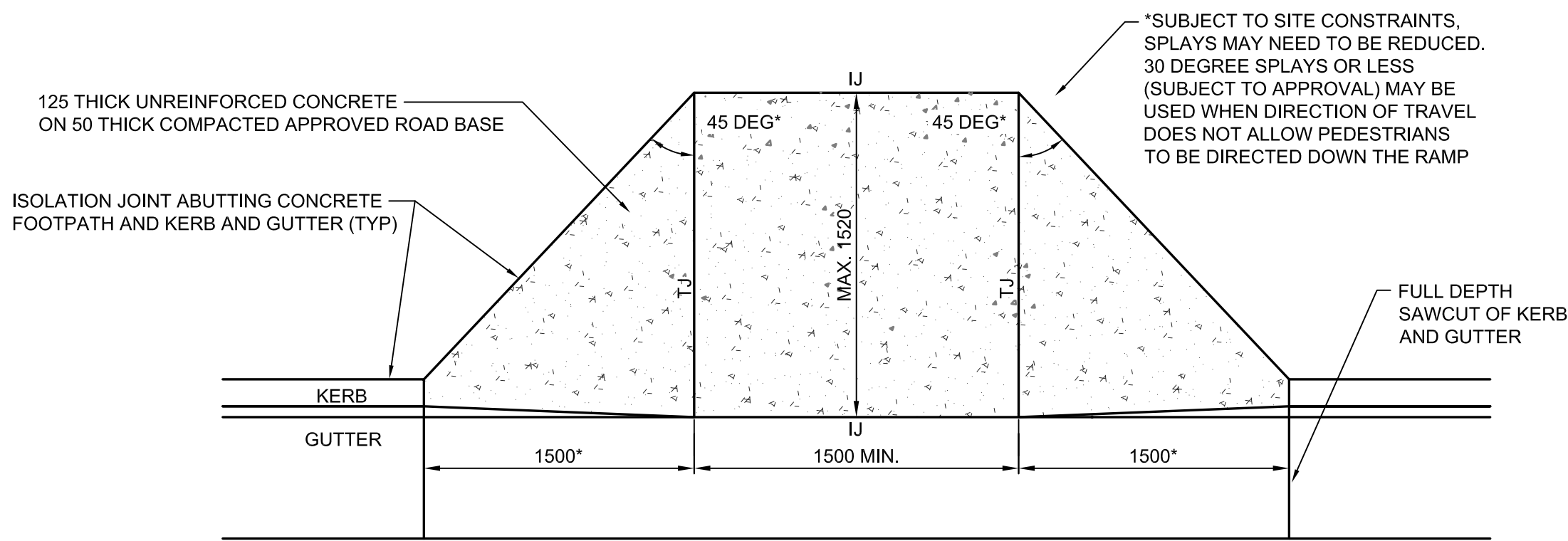
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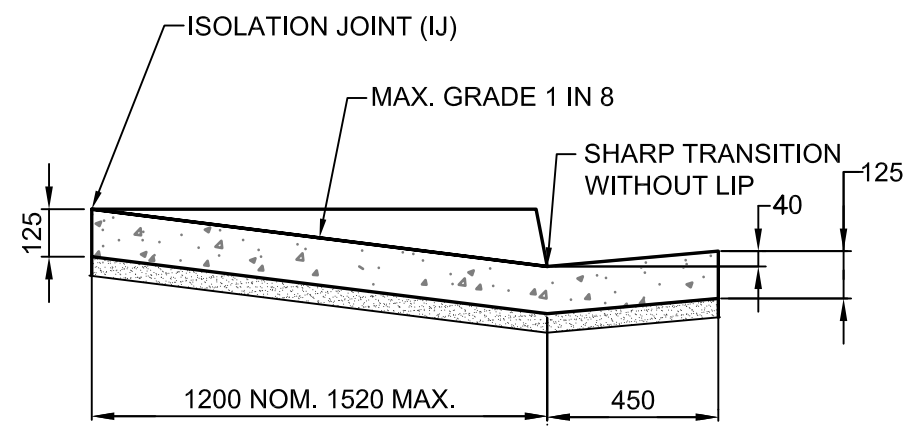
CENTRE ISLAND SECTION A-A NON TRAFFICABLE ANNULUS
N.T.S



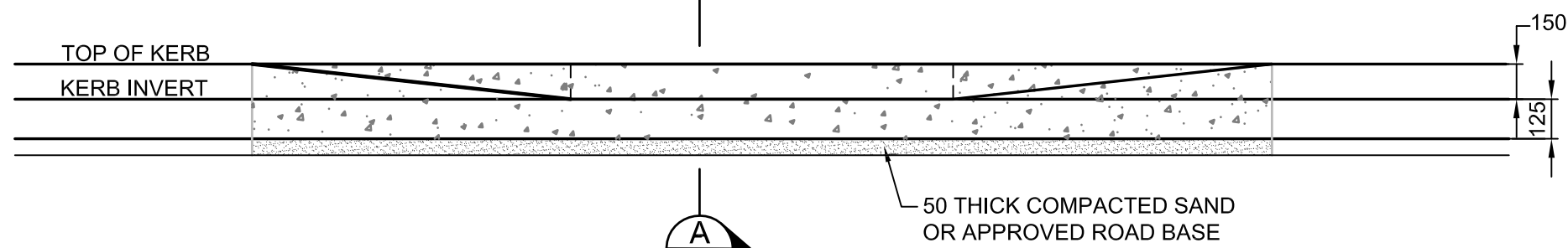
MOUNTABLE SPLITTER ISLAND SECTION B - B DETAIL
NOT TO SCALE



PRAM RAMP PLAN
N.T.S
*NOTE: ANGLED SPLAYS (<45 DEG) AND WINGS MAY NEED TO BE REDUCED DUE TO SITE CONSTRAINTS BUT SHOULD NOT BE LESS THAN 500 WHERE PRACTICAL



PRAM RAMP SECTION A-A
N.T.S



PRAM RAMP ELEVATION
N.T.S

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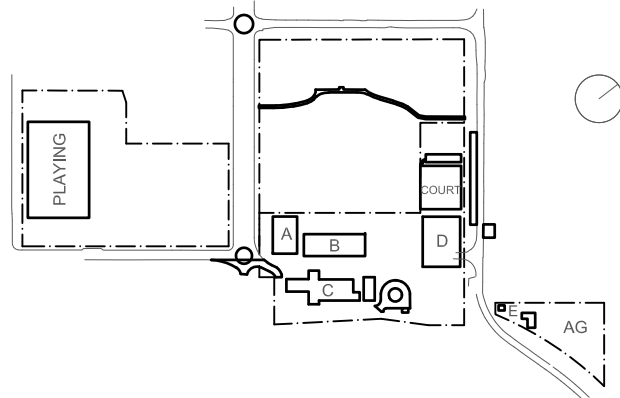
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A	21.12.21	ISSUED FOR DD		
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C	14.07.22	ISSUED FOR RTS REVISED DESIGN		

Project
New High School in Bungendore

Drawing Title
ROUNDABOUT AND
MISCELLANEOUS CIVIL
ROAD DETAILS

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	SSDA	OCT '21	NTS

Drawing No.
BHS-CE-2201

Revision
C

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SOIL AND WATER MANAGEMENT NOTES

INTRODUCTORY NOTES

1. THIS IS A CONCEPTUAL SOIL AND WATER MANAGEMENT PLAN (SWMP). IT IS INTENDED TO INDICATE THAT THE CIVIL WORKS REQUIRED FOR THE DEVELOPMENT OF THE SITE CAN BE UNDERTAKEN WITHOUT POLLUTION TO RECEIVING WATERS DURING THE CONSTRUCTION PHASE. THE LOCATIONS, SIZES AND TYPES OF CONTROL MEASURES SHOWN ARE SUGGESTED OPTIONS ONLY.
2. ALL REFERENCES OF DETAILS, TESTING AND PROCEDURES ARE TO BE FOLLOWED AS SPECIFIED IN THE DEPARTMENT OF HOUSING "MANAGING URBAN STORMWATER SOILS CONSTRUCTION" MANUAL, MARCH 2004, HERE IN REFERRED TO AS THE "BLUE BOOK".
3. THESE CONCEPT PLANS ARE TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS AND WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO THE DEVELOPMENT OF THE SITE.
4. ALL CONTRACTORS SHALL FULLY RESEARCH AND UNDERSTAND THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSTREAM LANDS AND WATERWAYS.

EROSION CONTROL

1. CLEARLY VISIBLE BARRIER FENCING SHALL BE INSTALLED AT THE DISCRETION OF THE SUPERINTENDENT TO ENSURE TRAFFIC CONTROL AND PROHIBIT UNNECESSARY SITE DISTURBANCE. VEHICULAR ACCESS TO THE SITE SHALL BE LIMITED TO ONLY THOSE ESSENTIAL FOR CONSTRUCTION WORK AND THEY SHALL ENTER SITE ONLY THROUGH THE STABILISED ACCESS POINTS.
2. WHERE PRACTICAL, FOOT AND VEHICULAR TRAFFIC WILL BE KEPT AWAY FROM ALL RECENTLY STABILISED AREAS.
3. AT ALL TIMES, AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.

SEDIMENT CONTROL

1. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE (I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED/STABILISED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE). PROVIDE FLOCCULANT TO EARTH BASIN AS REQ'D.
2. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED/REHABILITATED.

OTHER MATTERS

1. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
 - (A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE.
 - (B) ENSURING THAT NOTHING IS NAILED TO THEM.
 - (C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE.
2. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.
3. THE CONTRACTOR SHALL PROVIDE ALL MONITORING CONTROLS & TESTING.
4. SITE REVEGETATION AND REHABILITATION SHALL BE UNDERTAKEN AS SOON AS PRACTICABLE THROUGHOUT CONSTRUCTION OPERATIONS.
5. CONSTRUCTION SHALL BE PROGRAMMED SO THAT THE TIME OF EXPOSURE OF WORKING SURFACES IS MINIMISED.
6. ALL SPOIL DEPOSITED DURING CARTAGE OF MATERIALS FROM OR TO THE SITE SHALL BE REMOVED IMMEDIATELY TO THE SATISFACTION OF COUNCIL (PUBLIC ROADS) AND THE OWNER (PRIVATE ROADS).
7. WHERE REQUIRED GUTTERS AND ROADWORKS SHALL BE SWEEPED REGULARLY TO MAINTAIN THEM FREE FROM SEDIMENT.

SOIL AND WATER MANAGEMENT LEGEND

- / — SITE BOUNDARY
- FENCE
- ○ — SEDIMENT FENCE
- CD — CATCH DRAIN
- OVERLAND FLOW
- TEMPORARY SHAKER RAMP FOR ENTRY/EXIT
- TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)
- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON EXISTING PIT
- SANDBAGS INSTALLED ON EXISTING PIT
- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON NEW PIT
- SANDBAGS INSTALLED ON NEW PIT

SURVEY LEGEND

- — — SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EXISTING STORMWATER DRAINAGE LINE
- EXISTING SEWER LINE

NOTE:

REFER DRAWING BHS-CE-2006 FOR SEDIMENT CONTROL DETAILS.

SEDIMENT AND EROSION CONTROL PLAN

SCALE 1:250

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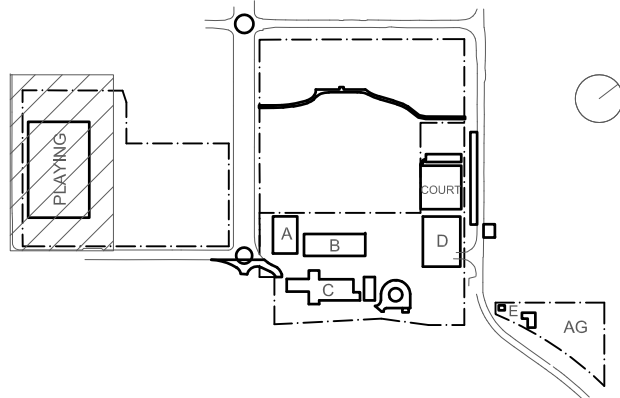
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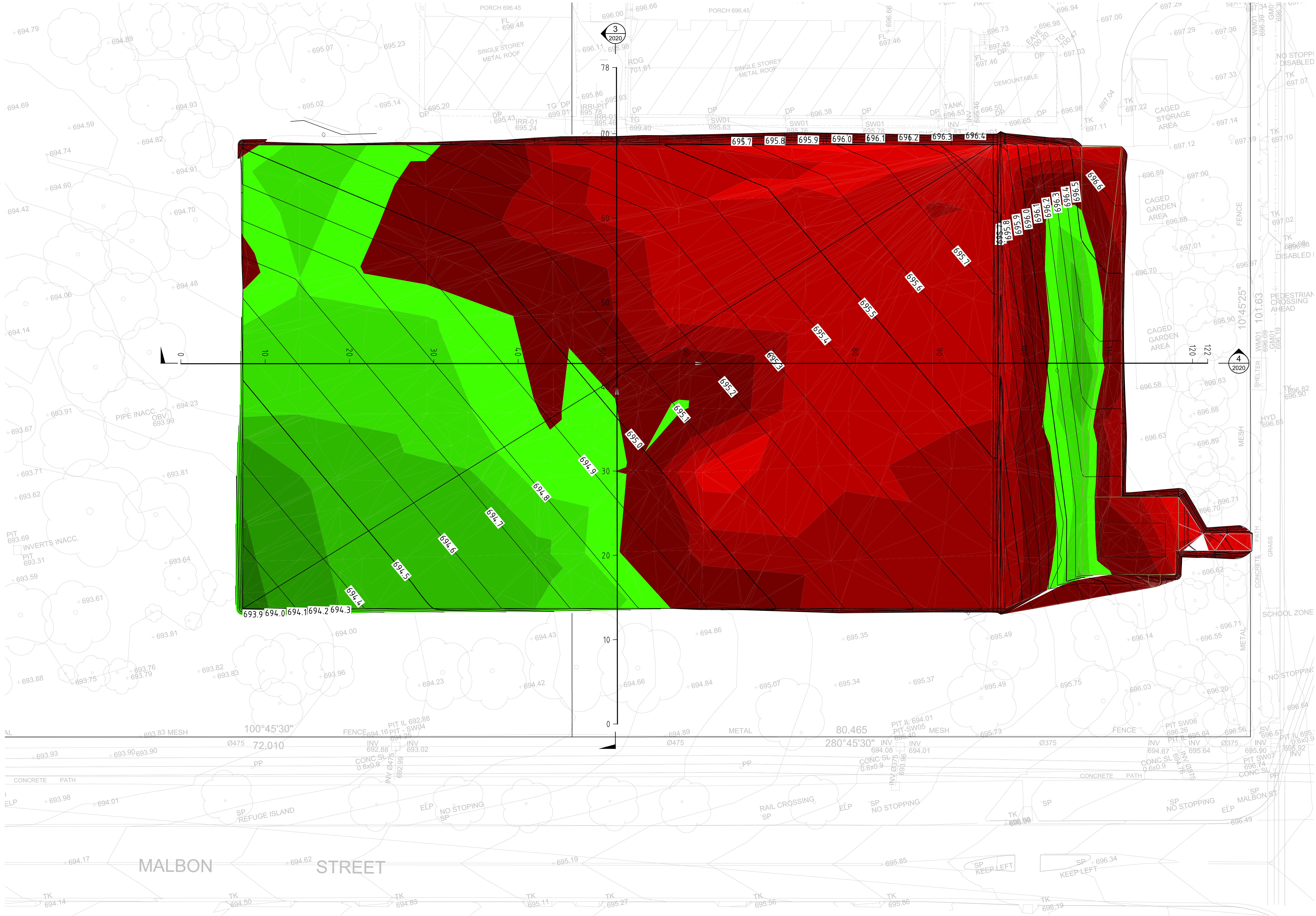


Rev	Date	Description	Chkd	Auth
A	24.03.21	DRAFT SCHEMATIC DESIGN ISSUE		
B	18.04.21	SCHEMATIC DESIGN ISSUE		
C	10.12.21	ISSUED FOR DD		
D	14.02.22	GENERALLY REVISED		
E	20.10.22	MINOR REVISIONS FOR RTS DO ISSUE		

Project
New High School in Bungendore
MAJARA STREET,
BUNGENDORE NSW 2621
Drawing Title **PLAYING FIELD UPGRADE
SEDIMENT & EROSION
CONTROL PLAN**

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	DD	OCT '21	1:250
Drawing No.	Revision		
BPS-CE-2004	E		

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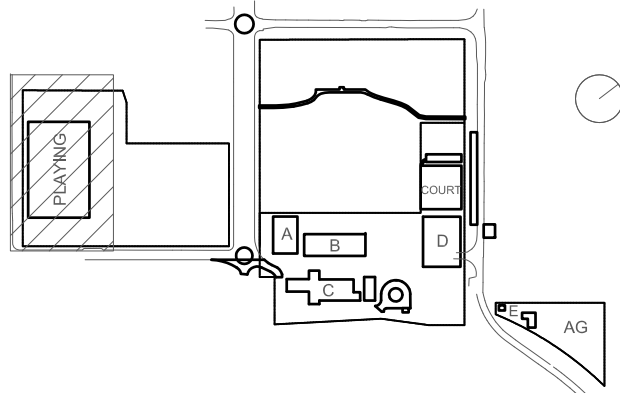
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9		0.100	0.200
10		0.200	0.300
11		0.300	0.400
12		0.400	0.500

PLAYING FIELD BULK EXCAVATION PLAN
SCALE 1:200

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
VOLUME	1.000	1.000	6014.162sq.m	962.310 Cu. M.	333.015 Cu. M.	629.295 Cu. M.<Cut>
Totals			6014.162sq.m	962.310 Cu. M.	333.015 Cu. M.	629.295 Cu. M.<Cut>

KEY



Rev	Date	Description	Chkd	Auth
C	28.04.21	ISSUED FOR INFORMATION		
D	30.04.21	SCHEMATIC DESIGN		
E	07.05.21	SCHEMATIC DESIGN		
F	13.05.21	SCHEMATIC DESIGN		
G	17.05.21	SCHEMATIC DESIGN		
H	28.11.21	WORK IN PROGRESS		
I	09.12.21	ISSUED FOR DD		
J	21.01.22	ISSUED FOR DA		
K	28.01.22	RE-ISSUED FOR DA		
L	14.02.22	GENERALLY REVISED		

Project
New High School in Bungendore
MAJARA STREET
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Drawing Title
PLAYING FIELD UPGRADE
BULK EARTHWORKS PLAN

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	DD	OCT '21	1:200
Drawing No.	Revision		
BPS-CE-2020	L		

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CHAINAGE	DEPTH	EXISTING LEVELS	BE LEVELS	FINISHED LEVELS
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10.000	0.150	694.402	694.553	695.045
20.000	0.156	694.520	694.676	695.155
30.000	0.129	694.670	694.799	695.265
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120.000		696.821		
121.795		696.856		


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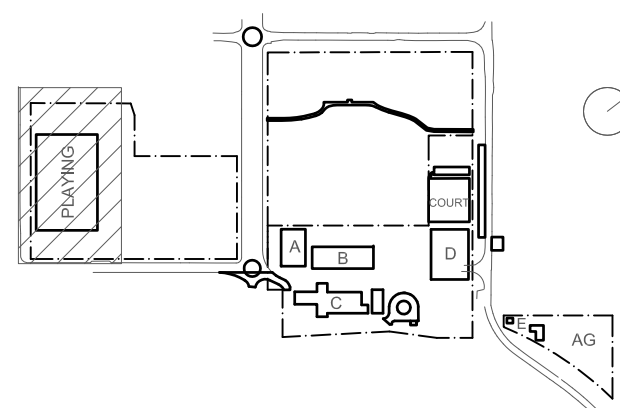
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D	30.04.21	SCHEMATIC DESIGN	
E	07.05.21	SCHEMATIC DESIGN	
F	13.05.21	SCHEMATIC DESIGN	
G	17.05.21	SCHEMATIC DESIGN	
H	26.11.21	WORK IN PROGRESS	
I	09.12.21	ISSUED FOR DD	
J	21.01.22	ISSUED FOR DA	
K	29.01.22	RE-ISSUED FOR DA	
L	14.02.22	GENERALLY REVISED	

Project
New High School in Bungendore

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Drawing Title **PLAYING FIELD UPGRADE
BULK EARTHWORKS
LONGITUDINAL SECTIONS**

Designed MW	Reviewed SCM	Drawn MW	Sheet B1
Job No. 5555	Status DD	Date OCT '21	Scale 1:200
Drawing No. BPS-CE-2021			

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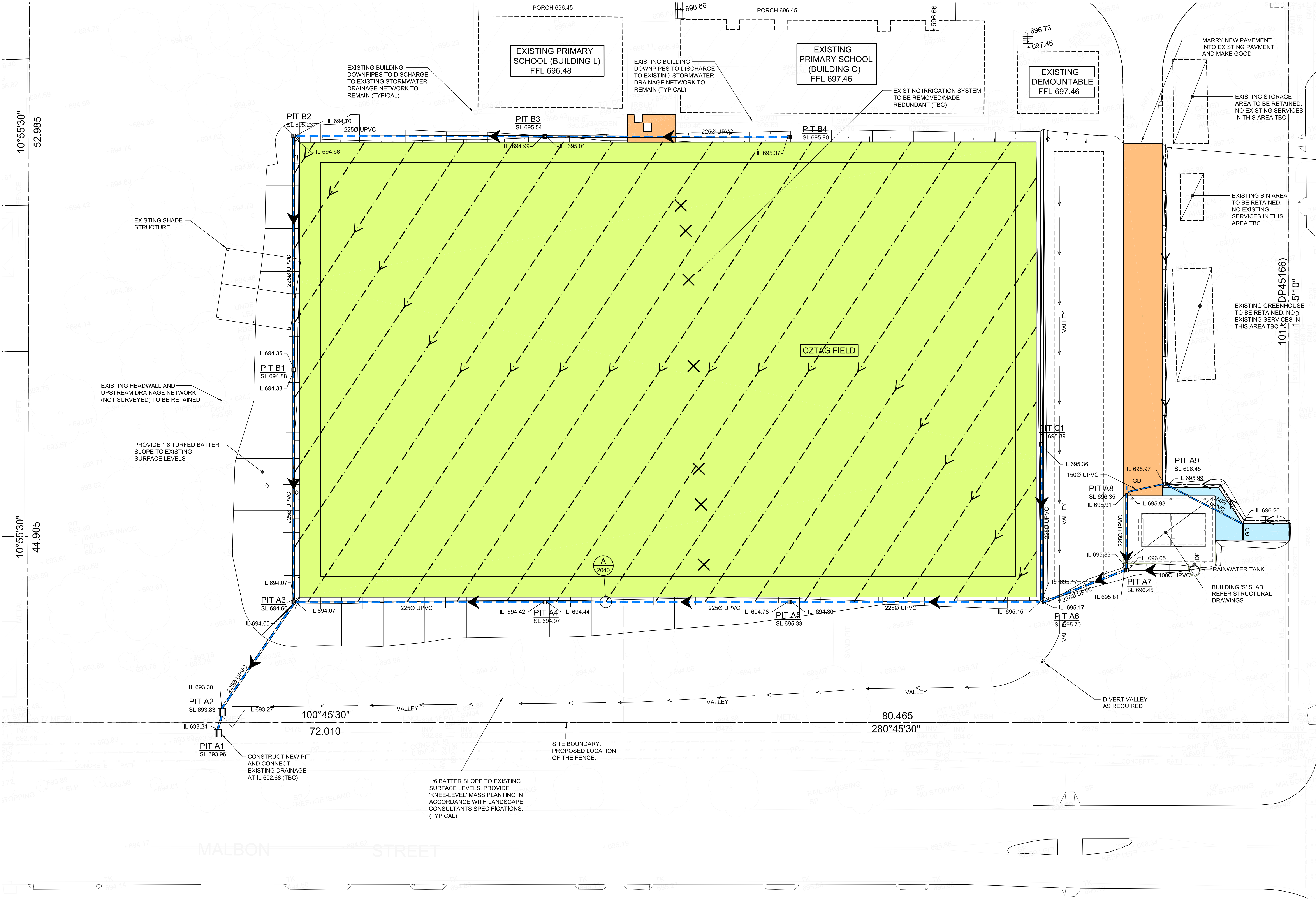
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 ACSI
COMPUTED THERMAL ANALYSIS



DRAINAGE LEGEND

- EXISTING SURFACE/PAVEMENT LEVEL
- + 8.05 PROPOSED SURFACE/PAVEMENT LEVEL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING STORMWATER PIPE AND PIT
- EXISTING IRRIGATION SYSTEM TO BE REMOVED/MADE REDUNDANT (TBC)
- PROPOSED UPVC STORMWATER PIPE AND JUNCTION PIT
- PROPOSED UPVC STORMWATER PIPE AND SURFACE INLET PIT
- PROPOSED MEGAFO PERFORATED 300mm FLAT PIPE
- PROPOSED RAINWATER PIPE
- PROPOSED 1000 SUBSOIL PIPE
- PROPOSED DOWNPIPE
- INVERT LEVEL OF PIPE
- GUTTER OVERFLOW (SPITTER) INTO COURTYARD
- PROPOSED FLUSHING POINT
- PROPOSED SUMP POINT
- OVERLAND FLOW PATH
- GD - GRATED DRAIN
- DIRECTION OF FALL
- FINISHED FLOOR LEVEL
- RAINWATER OUTLET
- CONFIRM ON SITE
- PROPOSED SEDIMENT FENCE
- GEOTEXTILE FABRIC TO PIT

PAVEMENT & SURFACE LEGEND

- SURFACE TYPE 1
REFER DRG. BPS-CE-2040 FOR DETAILS
- PAVEMENT TYPE A
REFER DRG. BPS-CE-2040 FOR DETAILS
- PAVEMENT TYPE B
REFER DRG. BPS-CE-2040 FOR DETAILS

PIT SCHEDULE

PIT No.	SIZE	LID TYPE (TO AS.3996)
A1	450 x 450	
A2	450 x 450	
A3	450 x 450	
A4	450 x 450	
A5	450 x 450	
A6	450 x 450	
A7	450 x 450	
A8	450 x 450	
A9	450 x 450	
B1	450 x 450	
B2	450 x 450	
B3	450 x 450	
B4	450 x 450	
C1	450 x 450	

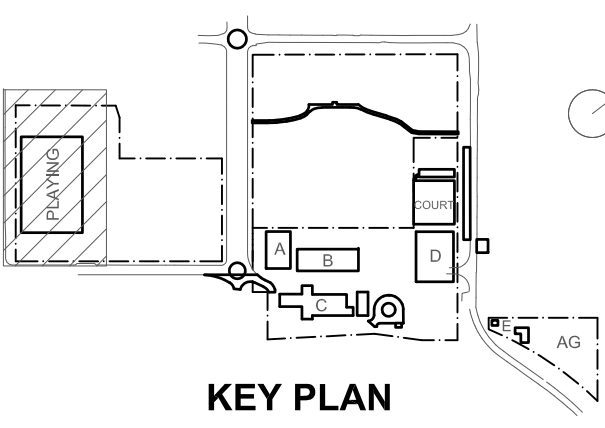
- PIT NOTES:
- PITS DEEPER THAN 1000 TO HAVE STEP IRONS.
 - ALL GRATES TO BE CAST INTO NEW SLABS.
 - ALL OSD/PIT/TRENCH DRAIN LIDS AND GRATES TO BE TO AS 3996. REFER TO PLANS/SECTIONS FOR CLASS OF PIT/GRATE.
 - ALL GRATED TRENCH DRAINS TO BE 250mm (W) x 150mm (D) MIN (CLEAR DIMENSIONS UNO.) & HAVE A STEEL TROWELLED FINISH.
 - ALL PIT SURFACE LEVELS TO BE CONFIRMED ON SITE. ANY SIGNIFICANT VARIATIONS FROM PROVIDED SURFACE LEVELS, ENGINEER TO BE ADVISED FOR ANY CHANGES TO THE PIPE INVERT LEVELS.

PLAYING FIELD UPGRADE SITEWORKS AND STORMWATER DRAINAGE PLAN

SCALE 1:200

NOTE:

FOR ALL FINISHED SURFACE LEVELS REFER TO LANDSCAPE ARCHITECT'S DRAWINGS.
ALL DRAINAGE PIT SURFACE LEVELS TO BE CONFIRMED WITH ARCHITECT.



Rev	Date	Description	Chkd	Auth
A	28.04.21	ISSUED FOR INFORMATION		
B	30.04.21	SCHEMATIC DESIGN		
C	07.05.21	SCHEMATIC DESIGN		
D	13.05.21	SCHEMATIC DESIGN		
E	17.05.21	SCHEMATIC DESIGN		
F	26.11.21	WORK IN PROGRESS		
G	08.12.21	ISSUED FOR DD		
H	28.01.22	ISSUED FOR DA		
I	14.02.22	GENERALLY REVISED		
J	23.11.22	ISSUED FOR RTS		

Project
New High School in Bungendore

MAJARA STREET
BUNGENDORE NSW 2621
Drawing Title
PLAYING FIELD UPGRADE
SITEWORKS AND
STORMWATER DRAINAGE

Designed	Reviewed	Drawn	Sheet
MW	SCM	MW	B1
Job No.	Status	Date	Scale
5555	DD	OCT '21	1:200

Drawing No.
BPS-CE-2033

Revision
J

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M+G Consulting

M & G CONSULTING ENGINEERS PTY LTD
Tel: +61 (0)2 8666 7888
L3, 50 Berry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)

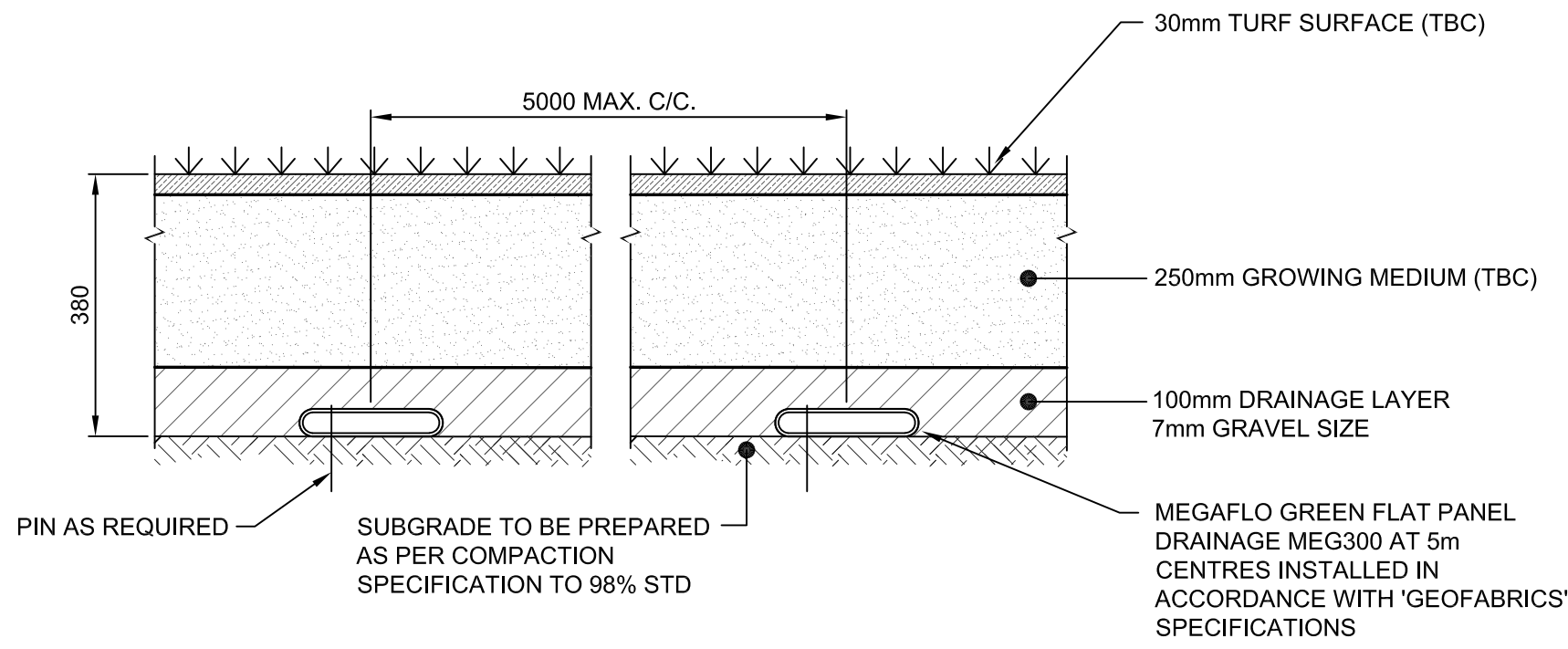
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BUILDER
Hindmarsh Construction Australia Pty Ltd
Level 27, 100 Miller Street
North Sydney NSW 2060
T +61 2 9274 1100
F +61 2 6274 8898
www.hindmarsh.com.au

CLIENT
NSW GOVERNMENT
Education
School Infrastructure
NSW Department of Education |
School Infrastructure NSW
T+ 02 9561 8287

Project Managers
TSA Management
T+ 61 2 9276 1400
Architect
TKD Architects
T+ 61 2 9261 4399
Mechanical, Electrical, Hydraulic, ESD
Norman Disney & Young
T+ 61 2 9928 6800

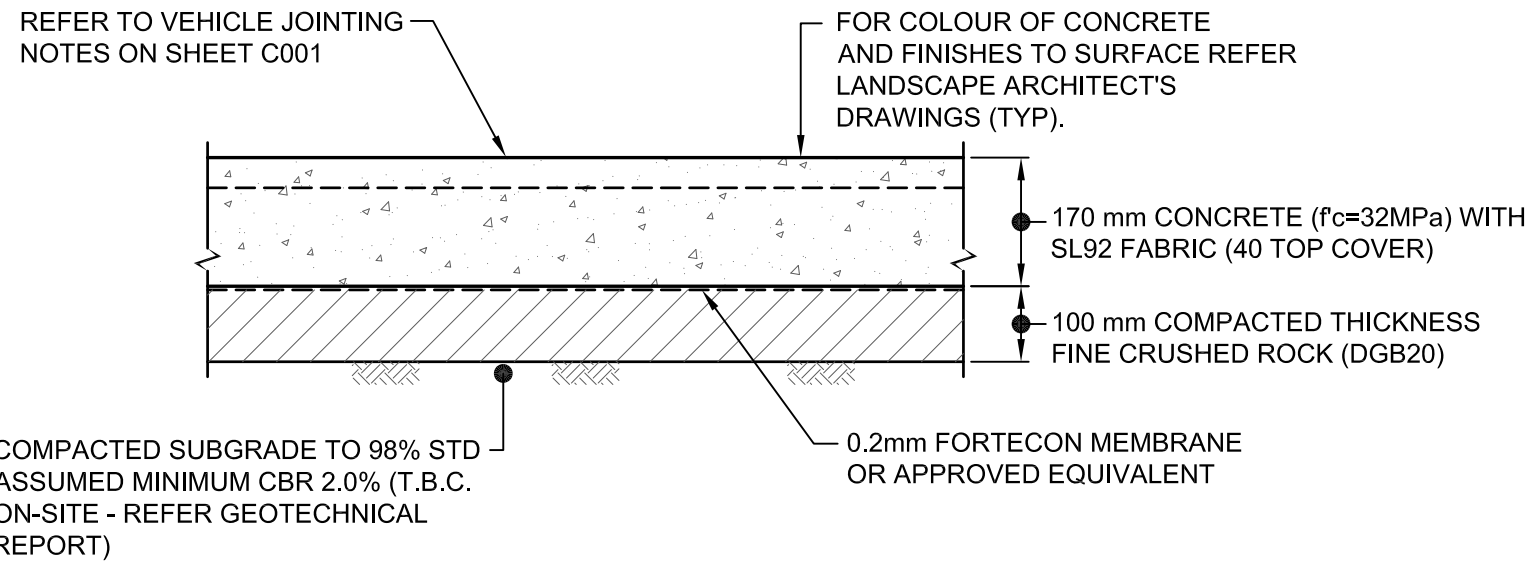
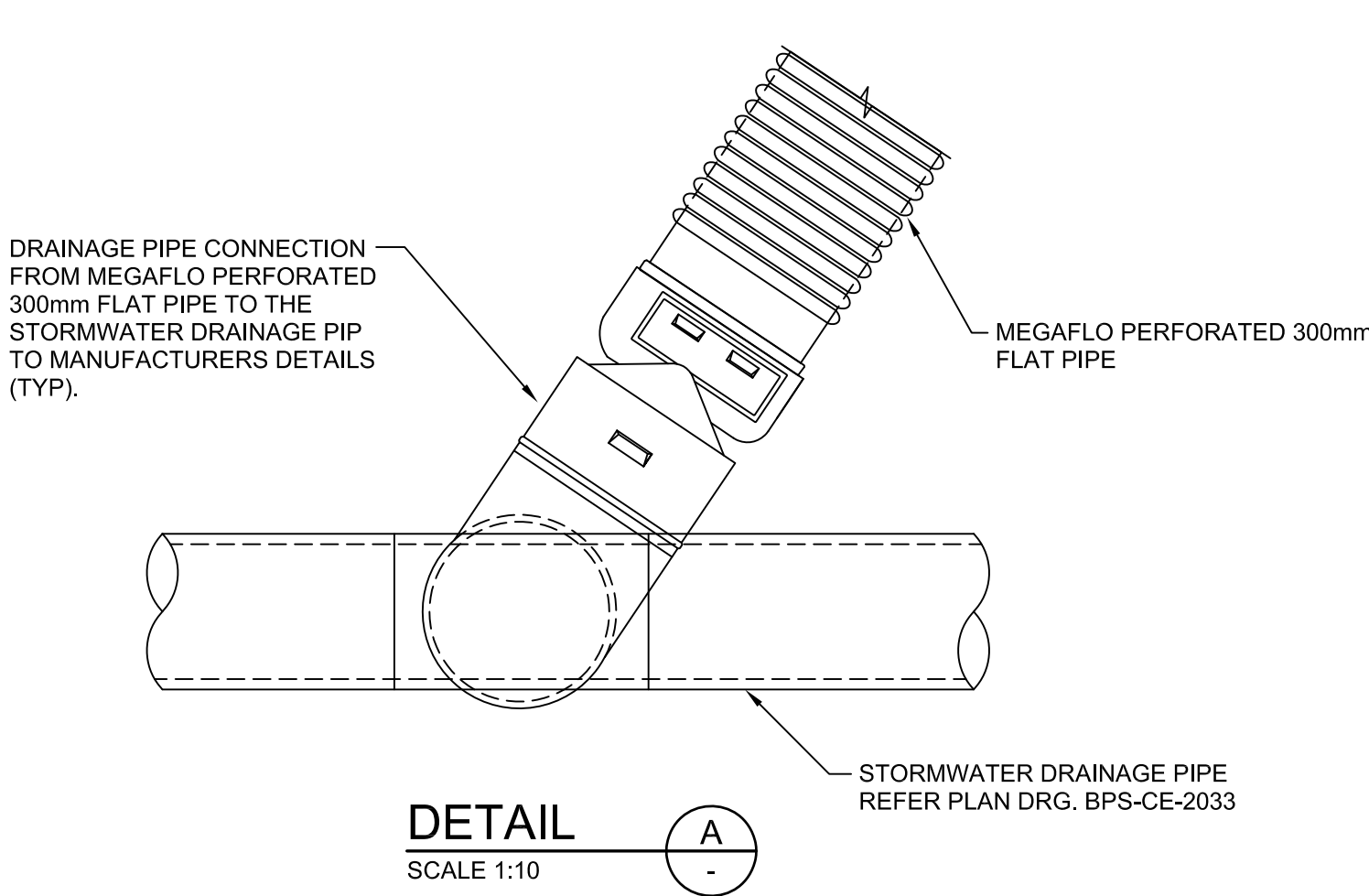
Landscape Architecture
Context
T+ 61 2 8244 8900
Acoustic
Acoustic Logic
T+ 61 2 8339 9000



SURFACE TYPE 1

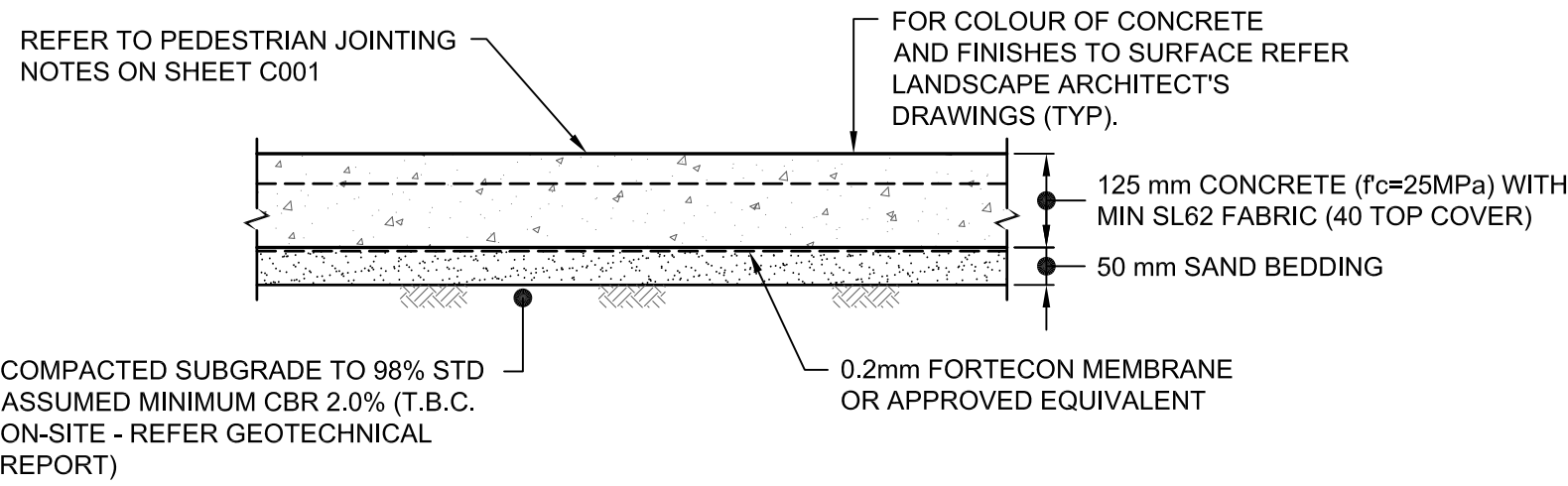
N.T.S.
DENOTED ON PLAN

- NOTES:
- FOR FURTHER DETAIL REFER TO LANDSCAPE DOCUMENTATION;
 - MEGAFLO OUTFALL AT 4 DEGREES MIN. AS PER MEGAFLOW SPEC
 - DETAIL TO BE CONFIRMED BY SPECIALIST SPORTS FIELD CONSULTANT



PAVEMENT TYPE A
HEAVY DUTY CONCRETE PAVEMENT

SCALE 1:10
DENOTED ON PLAN

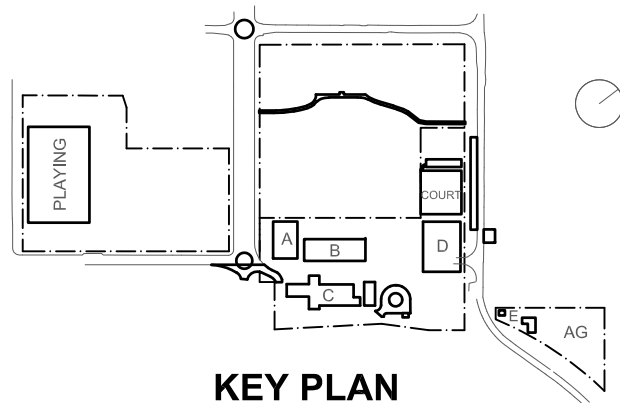


PAVEMENT TYPE B
CONCRETE FOOTPATH PAVEMENT

SCALE 1:10
DENOTED ON PLAN

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BUILDER	CLIENT	Project Managers	Landscape Architecture
		TSA Management	Context
Hindmarsh Construction Australia Pty Ltd Level 27, 100 Miller Street North Sydney NSW 2060 T +61 2 9274 1100 F +61 2 6274 8898 www.hindmarsh.com.au	NSW Department of Education School Infrastructure NSW	T+ 61 2 9276 1400	T+ 61 2 8244 8900
		Architect	Acoustic
		TKD Architects	Acoustic Logic
		T+ 61 2 9281 4399	T+ 61 2 8339 8000
		Mechanical, Electrical, Hydraulic, ESD	
		Norman Disney & Young	
		T+ 02 9561 8287	T+ 61 2 9828 6800



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Project	New High School in Bungendore
MAJARA STREET, BUNGENDORE NSW 2621	
Drawing Title	PLAYING FIELD UPGRADE SITEWORKS PAVEMENT DETAILS

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Tel: +61 (0)2 8666 7888

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L3, 50 Berry Street
North Sydney NSW 2060
(PO Box 1656, NSW 2059)