

# NEPEAN HOSPITAL REDEVELOPMENT DERBY STREET, KINGSWOOD NSW 2747 MAIN TOWER

## DRAWING REGISTER AND CONSTRUCTION NOTES - CIVIL & STORMWATER

DRAWING No.	DESCRIPTION
NHR-BON-DRW-CIV-TB1-000001	DRAWING REGISTER AND CONSTRUCTION NOTES
NHR-BON-DRW-CIV-TB1-000102	SOIL AND WATER MANAGEMENT PLAN - SHEET 2
NHR-BON-DRW-CIV-TB1-000202	BULK EARTHWORKS PLAN - SHEET 2
NHR-BON-DRW-CIV-TB1-0002101	BULK EARTHWORKS SECTIONS - SHEET 1
NHR-BON-DRW-CIV-TB1-0002102	BULK EARTHWORKS SECTIONS - SHEET 2
NHR-BON-DRW-CIV-TB1-0002103	BULK EARTHWORKS SECTIONS - SHEET 3
NHR-BON-DRW-CIV-TB1-0002104	BULK EARTHWORKS SECTIONS - SHEET 4
NHR-BON-DRW-CIV-TB1-0002105	BULK EARTHWORKS SECTIONS - SHEET 5
NHR-BON-DRW-CIV-TB1-0002106	BULK EARTHWORKS SECTIONS - SHEET 6
NHR-BON-DRW-CIV-TB1-0003002	SITWORKS & STORMWATER DRAINAGE PLAN - SHEET 2
NHR-BON-DRW-CIV-TB1-0003011	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 1
NHR-BON-DRW-CIV-TB1-0003012	STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 2

### 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 METRES. 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 OVER THE WORKS. REFER TO GEOTECHNICAL REPORT.
- 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.

### SITWORKS 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 ENGINEER'S 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 DOUGLAS PARTNERS GEOTECHNICAL REPORT. 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
- S3 THE MAXIMUM COMPACTION IS TO BE NO GREATER THAN 4% ON TOP OF THE ABOVE MENTION VALUES.
- S4 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.
- S5 ALL DIMENSIONS GIVEN ARE TO FACE OF KERB, CENTER OF PIPE OR EXTERIOR FACE OF BUILDING UNLESS NOTED OTHERWISE.
- S6 ANY STRUCTURES, PAVEMENTS OR SURFACES DAMAGED, DIRTY OR MADE UNSERVICEABLE DUE TO CONSTRUCTION WORK SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER.
- S7 ANY FILL REQUIRED SHALL BE APPROVED BY THE ENGINEER / GEOTECHNICAL CONSULTANT
- S8 CONTRACTOR IS TO ENSURE THAT ALL EXCAVATIONS ARE MAINTAINED IN A DRY CONDITION WITH NO WATER ALLOWED TO REMAIN IN THE EXCAVATIONS.
- S9 ALL FINISHES AND COLOURS TO BE IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS.
- S10 REFER TO STRUCTURAL DRAWINGS FOR CONCRETE, REINFORCEMENT AND RETAINING WALL DETAILS.
- S11 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
- S12 PRIOR TO THE EXCAVATION OF ANY TRENCH DEEPER THAN 15 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 SYNCHRONOUS 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 SEN UPVC IN ACCORDANCE WITH AS1289 SHALL BE USED FOR Ø225mm OR SMALLER.
- SW3 ALL PIPEWORK TO BE INSTALLED IN ACCORDANCE WITH AS1325 FOR RCP AND AS2032 FOR PVC. ALL BEDDING TO BE TYPE H2 UNLESS NOTED OTHERWISE.
- SW4 FOR ALL PITS > 12m DEEP, STEP IRONS SHALL BE INSTALLED.
- SW5 PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY BONACCI GROUP.
- 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.

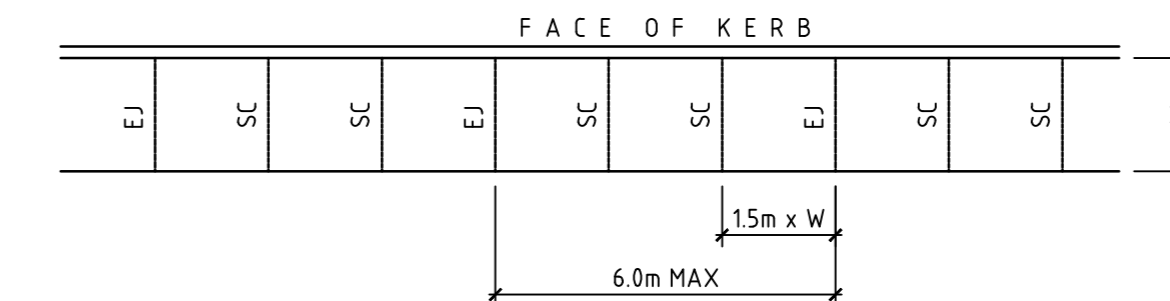
### KERBING NOTES

- K1 ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32 MPa @ UNO.
- 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 S.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 UNO FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER, NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE UNO.
  - EXISTING KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.

### JOINTING NOTES

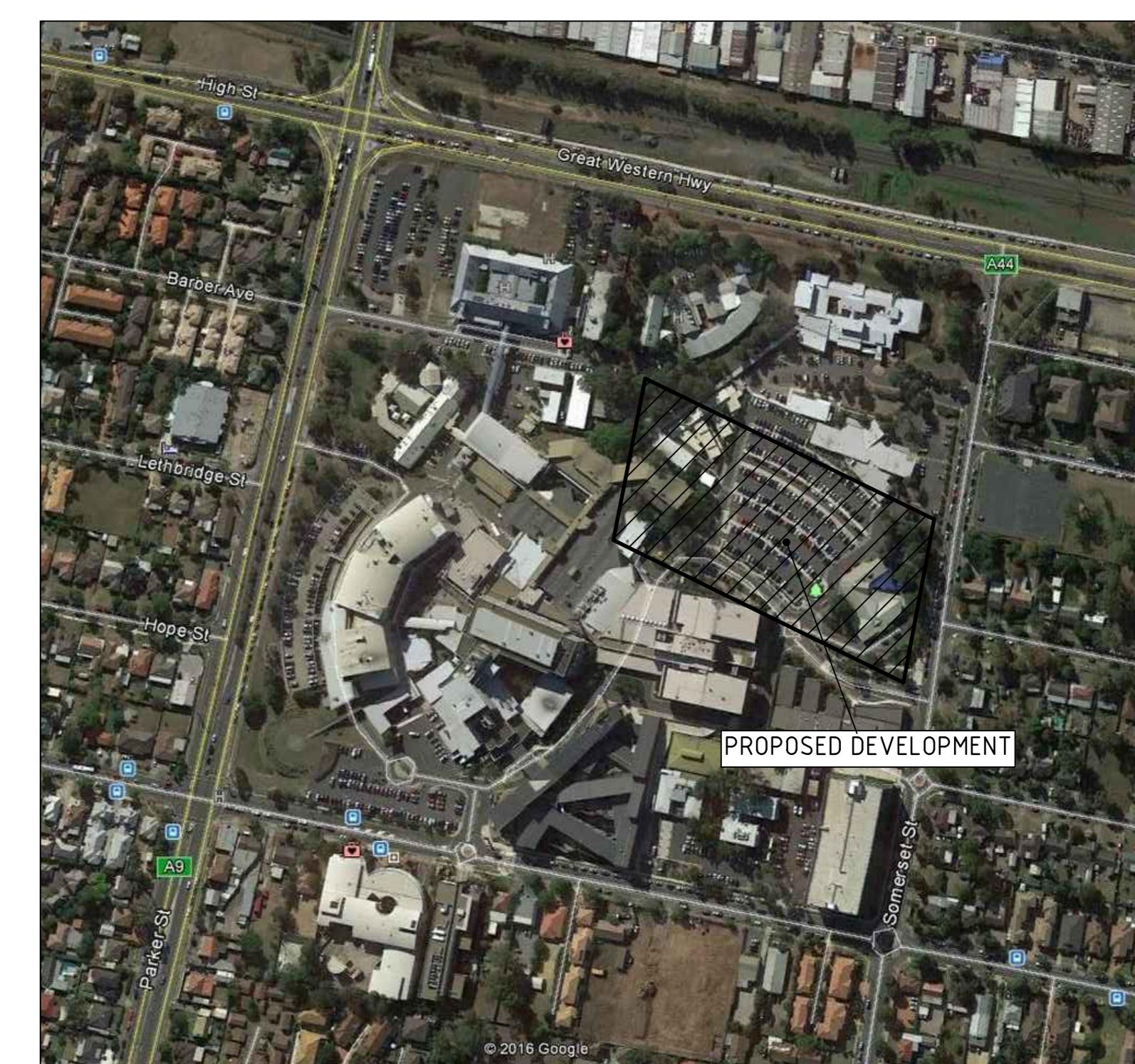
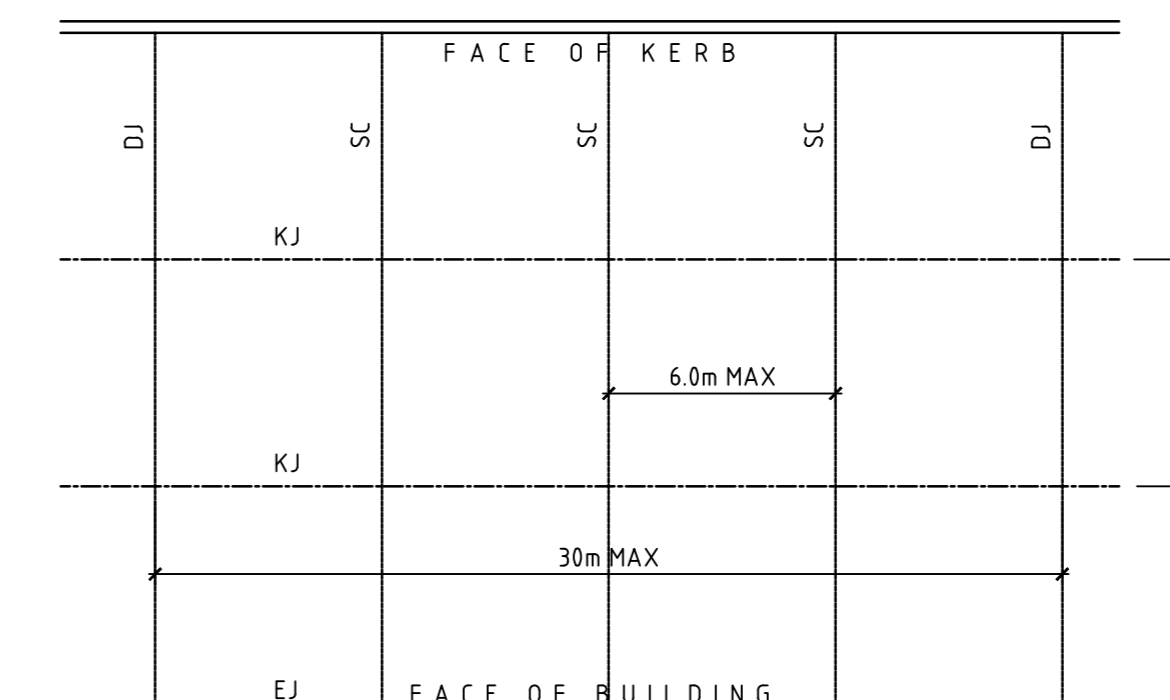
#### PEDESTRIAN FOOTPATH JOINTS (INTERNAL TO SITE)

- J1 EXPANSION JOINTS (EJ) ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT 6m CENTRES.
- J2 SAWCUT JOINTS (SCI) ARE TO BE LOCATED AT A MAX 15m x WIDTH OF PAVEMENT.
- J3 WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS.
- J4 ALL PEDESTRIAN FOOTPATH JOINTING AS FOLLOWS (UNO):



#### VEHICULAR PAVEMENT JOINTS

- J5 ALL VEHICULAR PAVEMENTS TO BE JOINTED AS SHOWN ON DRAWINGS.
- J6 KEYPED CONSTRUCTION JOINTS (KJ) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6m CENTRES.
- J7 SAWCUT JOINTS (SCI) SHOULD GENERALLY BE LOCATED AT A MAXIMUM OF 6m CENTRES OR 15 x THE SPACING OF KEYPED JOINTS, WHERE KEYPED JOINT SPACING IS LESS THAN 4m, WITH DOWELLED EXPANSION JOINTS (EJ) AT MAXIMUM OF 30m CENTRES.
- J8 PROVIDE 10mm WIDE FULL DEPTH EXPANSION JOINTS (EJ) BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVERS.
- J9 VEHICULAR PAVEMENT JOINTING AS FOLLOWS (UNO):
- J10 THE TIMING OF THE SAW CUT 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.



LOCALITY PLAN  
NOT TO SCALE

**BONACCI**  
 GROUP 15/17/18/19/20  
 400-410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000

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 OF THE BONACCI GROUP.

NOTE:  
 CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS  
 ON SITE PRIOR TO COMMENCEMENT OF WORK OR  
 PREPARATION OF SHOP DRAWINGS. DO NOT SCALE THIS  
 DRAWING.

ISSUE	DATE	FOR
A	08/07/19	ISSUED FOR INFORMATION
B	08/07/19	ISSUED FOR INFORMATION
C	08/07/19	ISSUED FOR ISD
D	08/07/19	ISSUED FOR ISD

NOTE:  
 ALL DRAWINGS TO BE READ IN  
 CONJUNCTION WITH THE TRADE PACKAGE  
 COVER SHEET AND NOTES

Designed: JH  
 Drawn: JH  
 Project Director Approved: \_\_\_\_\_ Date: \_\_\_\_\_



CPB CONTRACTORS  
 TEL 02 9414 5333 FAX 02 9414 3500  
 ARCHITECTURE  
 BVN ARCHITECTURE PTY LTD  
 TEL 02 8297 7200 FAX 02 8297 7299  
 MECHANICAL  
 STEENSEN WARMING  
 TEL 02 9967 2200  
 ELECTRICAL/COMMS

STEENSEN WARMING  
 TEL 02 9967 2200  
 HYDRAULIC

WSP  
 TEL 02 9299 1312 FAX 02 9290 1295  
 BCA/ODA/FIRE

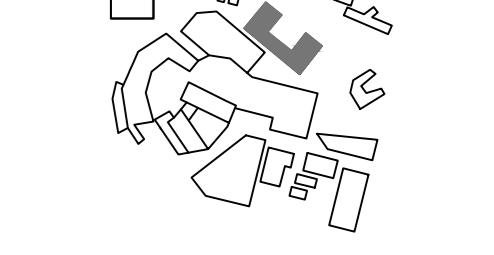
ESD/GREEN STAR  
 FIRE SERVICES

LANDSCAPE  
 MEDICAL GAS

PROJECT

BONACCI PROJECT NUMBER

DRAWING KEY



TRUE NORTH PROJECT NORTH  
 SCALE @A0 DO NOT SCALE

STATUS  
 PRELIMINARY  
 DRAWING

DRAWING REGISTER  
 AND CONSTRUCTION NOTES  
 DRAWING NUMBER ISSUE  
 NHR-BON-DRW-CIV-TB1  
 0000001 D

ISSUE	DATE	FOR
1	18/07/17	ISSUED FOR INFORMATION
2	18/07/17	ISSUED FOR INFORMATION
3	18/07/17	ISSUED FOR INFORMATION
4	18/07/17	ISSUED FOR SUP
5	18/07/17	ISSUED FOR SUP
6	23/07/17	ISSUED FOR SUP

### SOIL AND WATER MANAGEMENT NOTES

- 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.
- ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK".

### SEDIMENT CONTROL CONDITIONS

- SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSE SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES AS NEAR AS POSSIBLE TO THEIR SOURCE.
- SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
- STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 5m OF HAZARDOUS AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
- WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
- TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
- 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:
- ENSURE THAT DRAINS OPERATE PROPERLY & TO EFFECT ANY NECESSARY REPAIRS
  - REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARDOUS AREAS, INCLUDING LANDS CLOSER THAN 5m FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS & PAVED AREAS.
  - REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS WITHIN THE STRUCTURE
  - ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS APPROPRIATE.
  - CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS.
  - MAINTAIN EROSION & SEDIMENT CONTROL MEASURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
  - 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:

- THE VOLUME & INTENSITY OF ANY RAINFALL EVENTS
- THE CONDITION OF ANY SOIL & WATER MANAGEMENT WORKS
- THE CONDITION OF VEGETATION & ANY NEED TO IRRIGATE
- THE NEED FOR DUST PREVENTION STRATEGIES
- ANY REMEDIAL WORKS TO BE UNDERTAKEN

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

### SOIL AND WATER MANAGEMENT LEGEND

	SEDIMENT FENCE		GEOTEXTILE PIT FILTER / FILTER SURROUNDING INSTALLED ON EXISTING PIT
	TEMPORARY SHAKER RAMP FOR ENTRY/EXIT		SANDBAGS INSTALLED ON EXISTING PIT
	TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)		STRAW BALE FILTER
	EARLY WORKS STORMWATER LINE		EARLY WORKS TEMPORARY STORMWATER LINE
	EARLY WORKS SURFACE INLET PIT		EARLY WORKS JUNCTION PIT

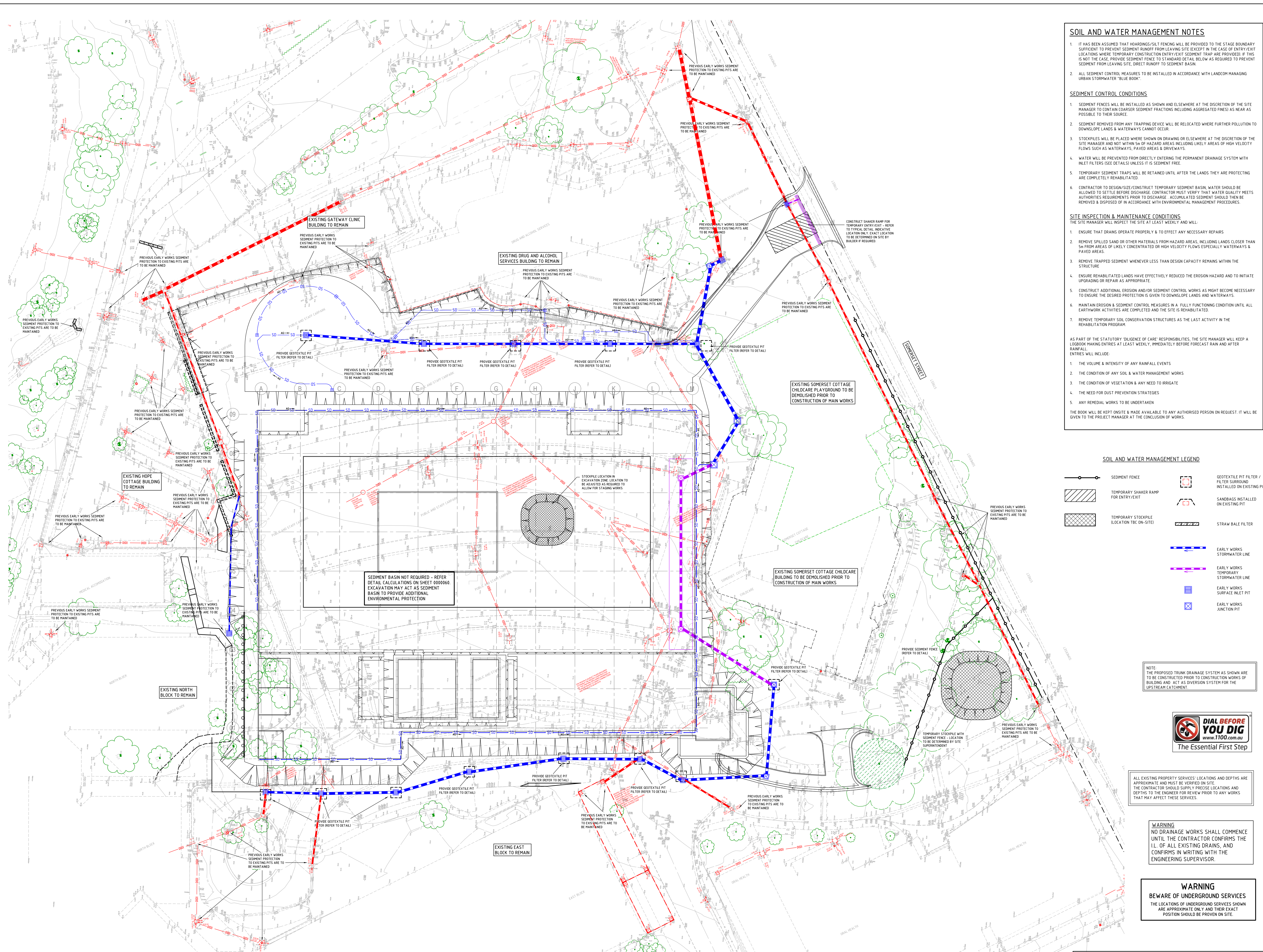
NOTE:  
THE PROPOSED TRUNK DRAINAGE SYSTEM AS SHOWN ARE TO BE CONSTRUCTED PRIOR TO CONSTRUCTION WORKS OF BUILDING AND ACT AS DIVERSION SYSTEM FOR THE UPSTREAM CATCHMENT



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.

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

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



Designed: JH  
Drawn: JH  
Project Director Approved: \_\_\_\_\_  
Date: \_\_\_\_\_

CLIENT  
NSW Health  
Infrastructure  
Health Infrastructure NSW

CPB CONTRACTORS  
TEL 02 9414 5333 FAX 02 9414 3500  
ARCHITECTURE  
BVN ARCHITECTURE PTY LTD  
TEL 02 8297 7200 FAX 02 8297 7299  
MECHANICAL  
STEENSEN WARMING  
TEL 02 9967 2200  
ELECTRICAL/COMMS

STEENSEN WARMING  
TEL 02 9967 2200  
HYDRAULIC

WSP  
TEL 02 9299 1312 FAX 02 9290 1295  
BCA/COA/FIRE

ESD/GREEN STAR

FIRE SERVICES

LANDSCAPE

MEDICAL GAS

PROJECT

BONACCI PROJECT NUMBER

DRAWING KEY

TRUE NORTH  
PROJECT NORTH

SCALE  
1:250 @A0 DO NOT SCALE

STATUS  
PRELIMINARY  
DRAWING  
SOIL AND WATER  
MANAGEMENT PLAN  
SHEET 2  
DRAWING NUMBER  
NHR-BON-DRW-CIV-TB1  
ISSUE  
0001002  
D

**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.



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

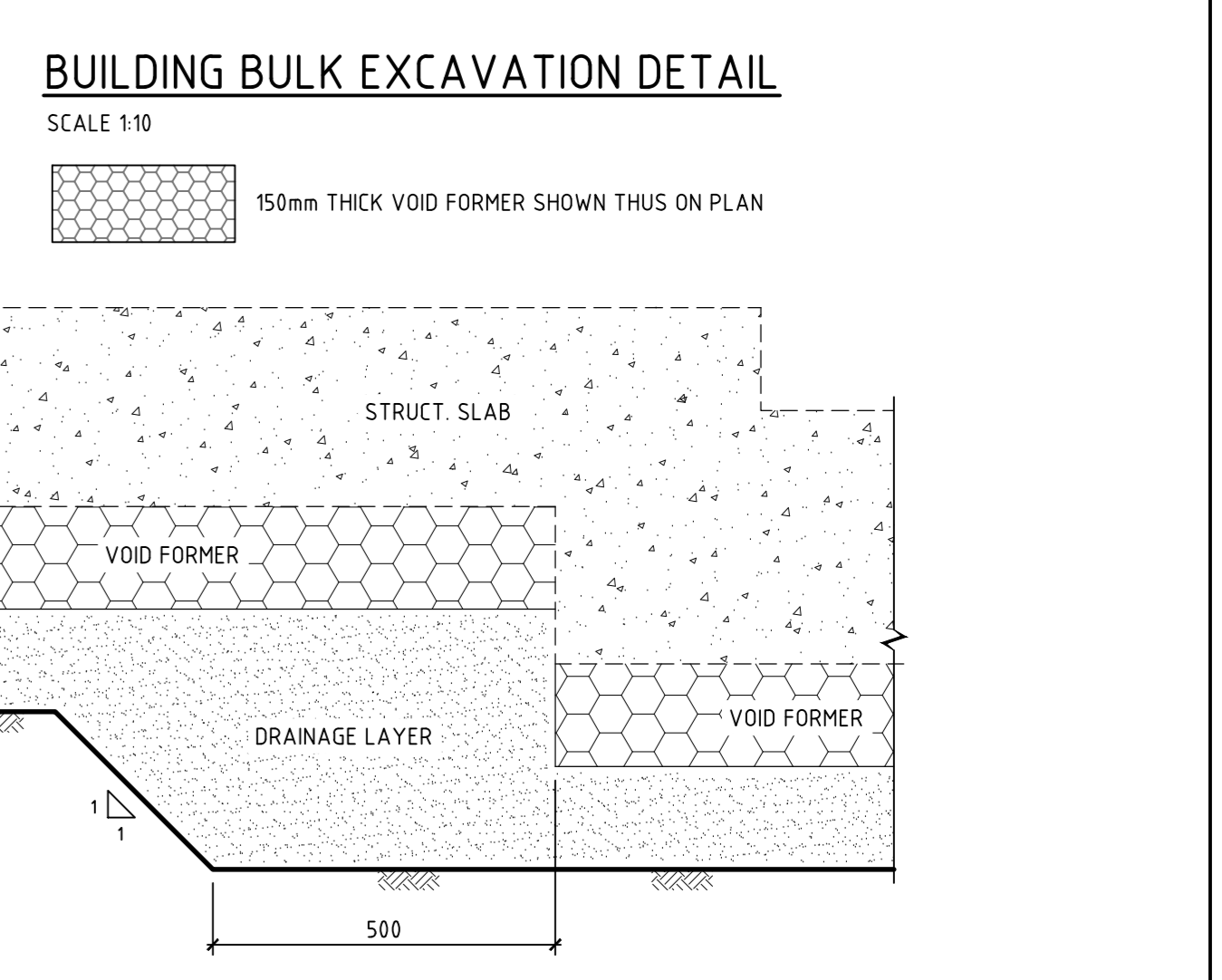
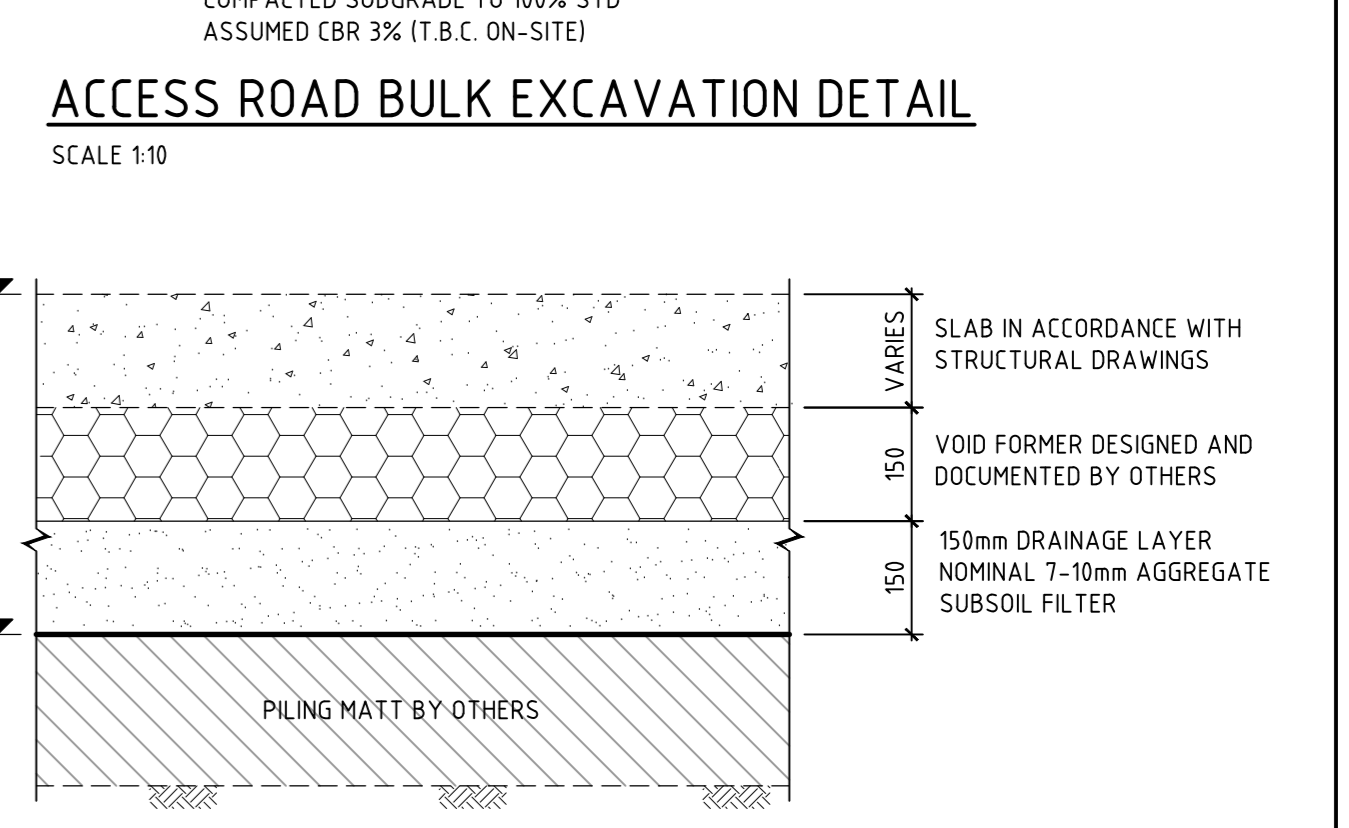
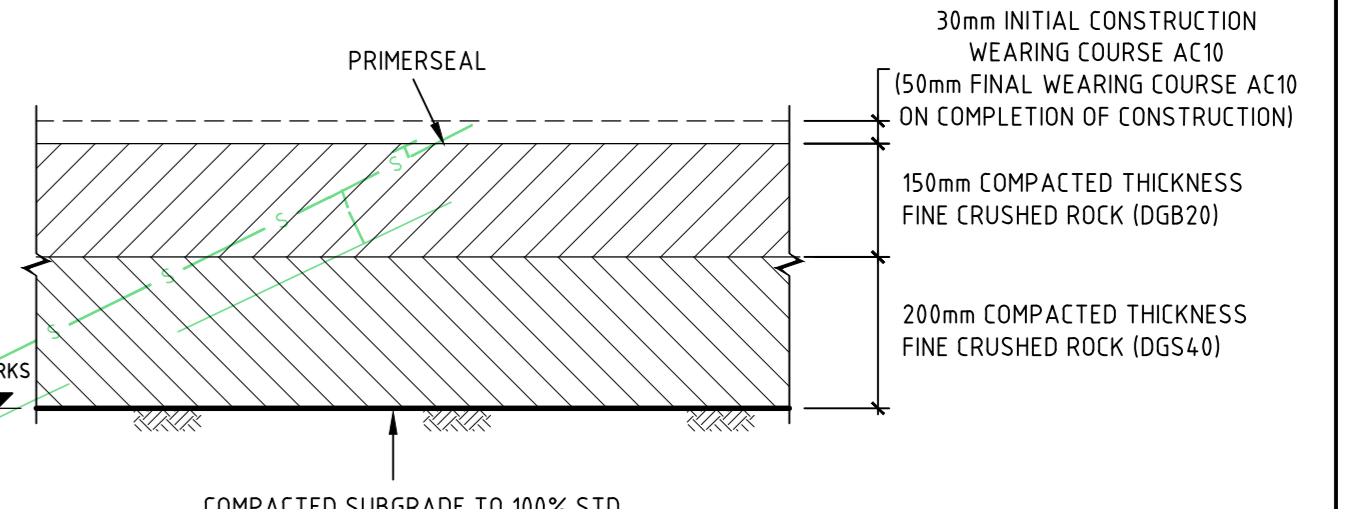
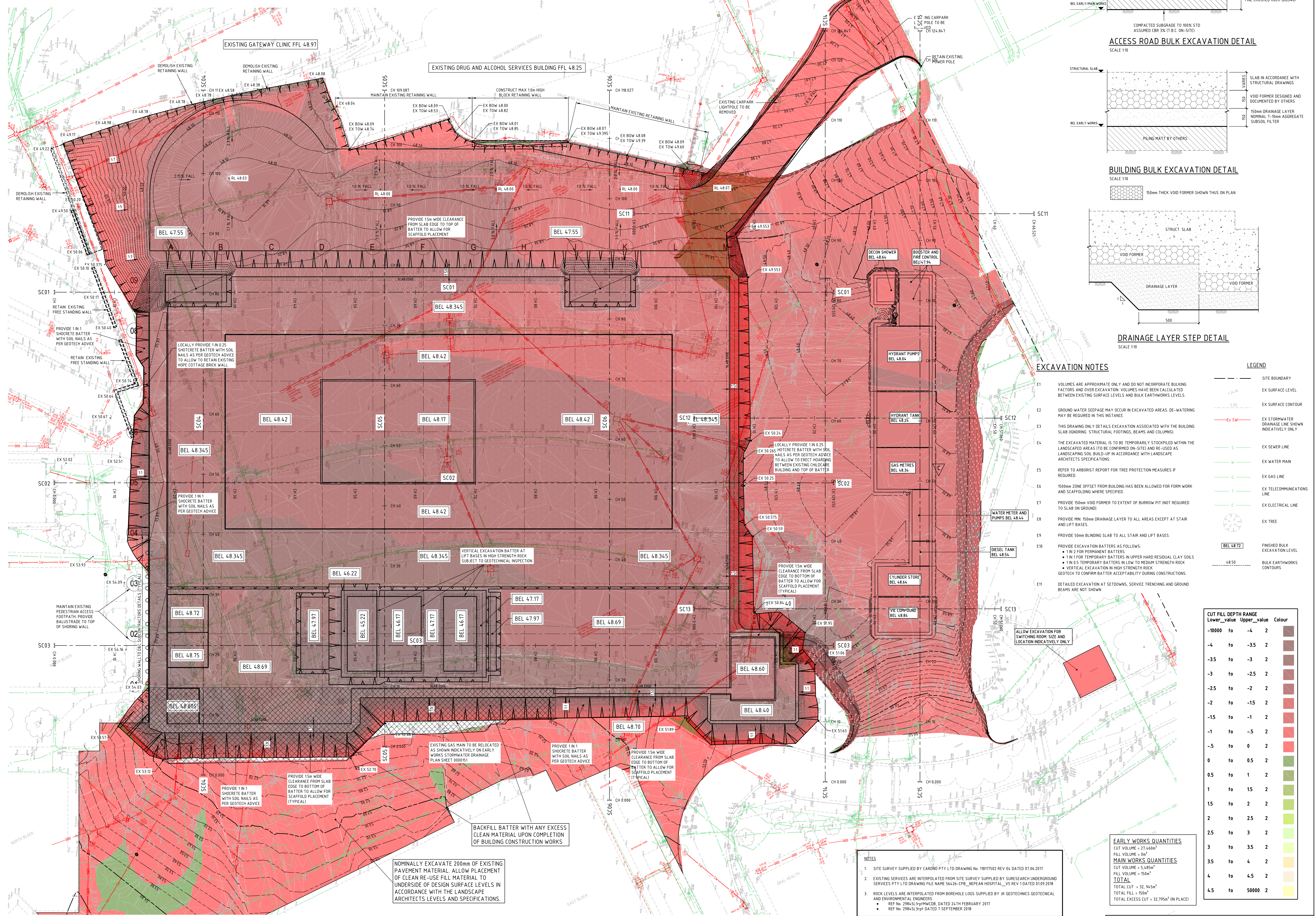


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NOTE: CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS. PREPARATION OF SHOP DRAWINGS DO NOT SCALE THIS DRAWING.

NO.	DATE	FOR
1	08/07/19	ISSUED FOR INFORMATION
2	08/07/19	ISSUED FOR INFORMATION
3	08/07/19	ISSUED FOR INFORMATION
4	08/07/19	ISSUED FOR INFORMATION
5	08/07/19	ISSUED FOR INFORMATION
6	08/07/19	ISSUED FOR INFORMATION
7	08/07/19	ISSUED FOR INFORMATION

NOTE: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE TRADE PACKAGE COVER SHEET AND NOTES.



**EXCAVATION NOTES**

- E1 VOLUMES ARE APPROXIMATE ONLY AND DO NOT INCORPORATE BULKING FACTORS AND OVER EXCAVATION. VOLUMES HAVE BEEN CALCULATED BETWEEN EXISTING SURFACE LEVELS AND BULK EARTHWORKS LEVELS.
- E2 GROUND WATER SEEPAGE MAY OCCUR IN EXCAVATED AREAS. DE-WATERING MAY BE REQUIRED IN THIS INSTANCE.
- E3 THIS DRAWING ONLY DETAILS EXCAVATION ASSOCIATED WITH THE BUILDING SLAB (IGNORING STRUCTURAL FOOTINGS, BEAMS AND COLUMNS).
- E4 THE EXCAVATED MATERIAL IS TO BE TEMPORARILY STOCKPILED WITHIN THE LANDSCAPED AREAS (TO BE CONFIRMED ON-SITE) AND RE-USED AS LANDSCAPING SOIL BUILD-UP IN ACCORDANCE WITH LANDSCAPE ARCHITECTS SPECIFICATIONS.
- E5 REFER TO ARBORIST REPORT FOR TREE PROTECTION MEASURES IF REQUIRED.
- E6 1500mm ZONE OFFSET FROM BUILDING HAS BEEN ALLOWED FOR FORM WORK AND SCAFFOLDING WHERE SPECIFIED.
- E7 PROVIDE 150mm VOID FORMER TO EXTENT OF BURROW PIT (NOT REQUIRED TO SLAB ON GROUND).
- E8 PROVIDE MIN. 150mm DRAINAGE LAYER TO ALL AREAS EXCEPT AT STAIR AND LIFT BASES.
- E9 PROVIDE 50mm BLINDING SLAB TO ALL STAIR AND LIFT BASES.
- E10 PROVIDE EXCAVATION BATTERS AS FOLLOWS:
  - 1 IN 2 FOR PERMANENT BATTERS
  - 1 IN 1 FOR TEMPORARY BATTERS IN UPPER HARD RESIDUAL CLAY SOILS
  - 1 IN 0.5 TEMPORARY BATTERS IN LOW TO MEDIUM STRENGTH ROCK
  - VERTICAL EXCAVATION IN HIGH STRENGTH ROCK
 GEOTECH TO CONFIRM BATTER ACCEPTABILITY DURING CONSTRUCTIONS.
- E11 DETAILED EXCAVATION AT SETPOINTS, SERVICE TRENCHING AND GROUND BEAMS ARE NOT SHOWN.

**LEGEND**

- SITE BOUNDARY
- EX SURFACE LEVEL
- EX SURFACE CONTOUR
- EX SW
- EX STORMWATER DRAINAGE LINE SHOWN INDICATIVELY ONLY
- EX SEWER LINE
- EX WATER MAIN
- EX GAS LINE
- EX TELECOMMUNICATIONS LINE
- EX ELECTRICAL LINE
- EX TREE
- BEL 48.72
- 48.50

**CUT FILL DEPTH RANGE**

Lower_value	Upper_value	Colour
-10.00	to -4	2
-4	to -3.5	2
-3.5	to -3	2
-3	to -2.5	2
-2.5	to -2	2
-2	to -1.5	2
-1.5	to -1	2
-1	to -0.5	2
-0.5	to 0	2
0	to 0.5	2
0.5	to 1	2
1	to 1.5	2
1.5	to 2	2
2	to 2.5	2
2.5	to 3	2
3	to 3.5	2
3.5	to 4	2
4	to 4.5	2
4.5	to 50000	2

**EARLY WORKS QUANTITIES**

CUT VOLUME = 27,460m<sup>3</sup>  
FILL VOLUME = 0m<sup>3</sup>

**MAIN WORKS QUANTITIES**

CUT VOLUME = 5,485m<sup>3</sup>  
FILL VOLUME = 150m<sup>3</sup>

**TOTAL**

TOTAL CUT = 32,945m<sup>3</sup>  
TOTAL FILL = 150m<sup>3</sup>  
TOTAL EXCESS CUT = 32,795m<sup>3</sup> (IN PLACE)

- NOTES**
- SITE SURVEY SUPPLIED BY CARONO PTY LTD DRAWING NO. 18117502 REV 04 DATED 07.06.2017
  - EXISTING SERVICES ARE INTERPOLATED FROM SITE SURVEY SUPPLIED BY SURESEARCH UNDERGROUND SERVICES PTY LTD DRAWING FILE NAME 56426-CPB\_NEPEAN HOSPITAL\_V5\_REV 1 DATED 01.09.2018
  - ROCK LEVELS ARE INTERPOLATED FROM BOREHOLE LOGS SUPPLIED BY JK GEOTECHNICS GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS
    - REF No. 29845Lp1P1M00B, DATED 24TH FEBRUARY 2017
    - REF No. 29845Lp1P1M00B, DATED 7 SEPTEMBER 2018

Designed: JF  
Drawn: JF  
Project Director Approved: \_\_\_\_\_ Date: \_\_\_\_\_

**CLIENT**  
NSW Health Infrastructure  
Health Infrastructure NSW

**CPB CONTRACTORS**  
TEL 02 9414 5333 FAX 02 9414 3500  
ARCHITECTURE  
BVN ARCHITECTURE PTY LTD  
TEL 02 8297 7200 FAX 02 8297 7299  
MECHANICAL  
STEENSENS WARMING  
TEL 02 9967 2200  
ELECTRICAL COUPLERS  
STEENSENS WARMING  
TEL 02 9967 2200  
HYDRAULIC

**WSP**  
TEL 02 9299 1312 FAX 02 9290 1295  
BCA 1004/FIRE

ESD GREEN STAR

**FIRE SERVICES**

**LANDSCAPE**

**MEDICAL GAS**

**PROJECT**

BONACCI PROJECT NUMBER  
DRAWING KEY

TRUE NORTH PROJECT NORTH

SCALE 1:200 @A0 DO NOT SCALE

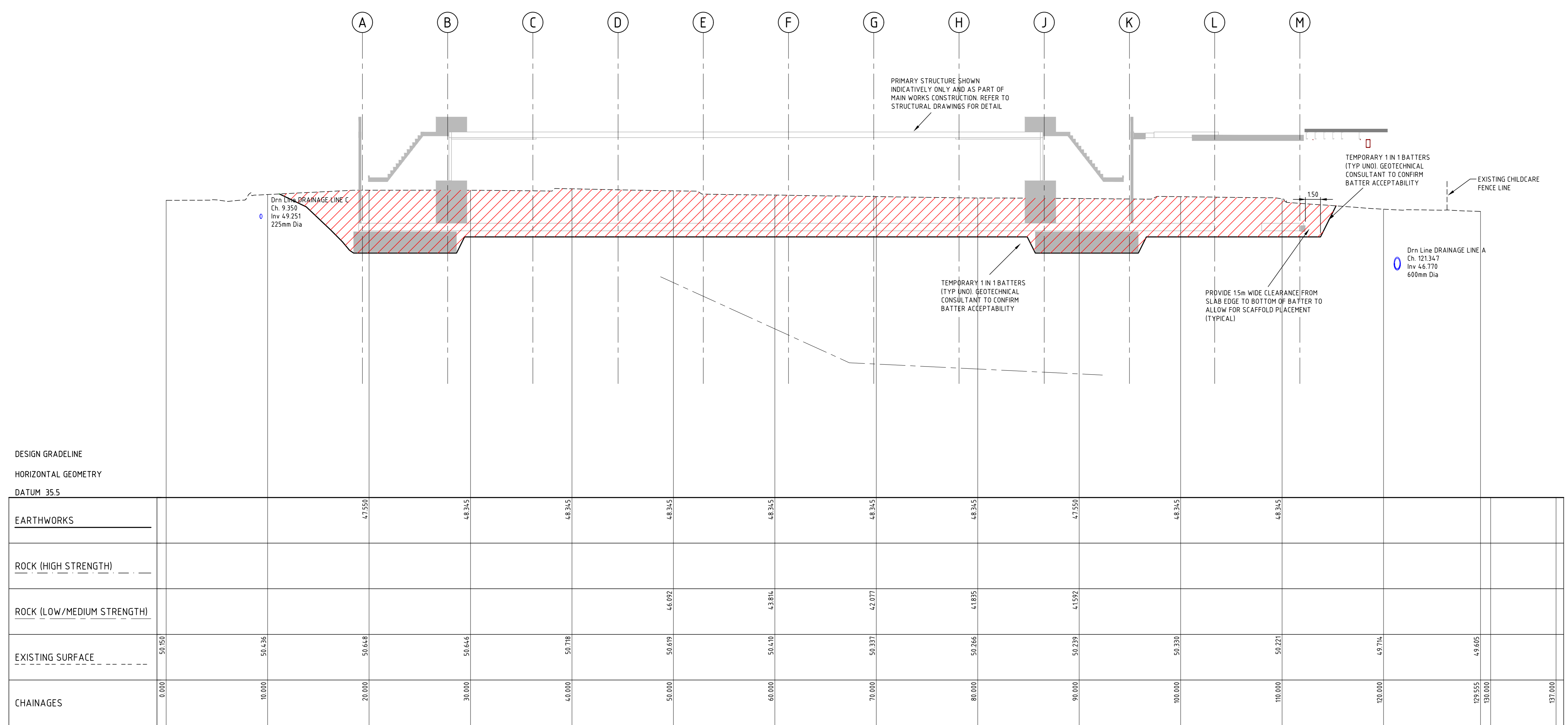
**STATUS**  
PRELIMINARY DRAWING

**BULK EARTHWORKS PLAN SHEET 2**

DRAWING NUMBER: NHR-BON-DRW-CIV-TB1  
ISSUE: 0002002

THIS DRAWING MAY BE PREPARED IN COLOUR AND MAY BE INCOMPLETE IF COPIED

ISSUE	DATE	FOR
1	08/27/18	ISSUED FOR INFORMATION
2	09/14/18	ISSUED FOR INFORMATION
3	09/14/18	ISSUED FOR INFORMATION
4	09/14/18	ISSUED FOR INFORMATION
5	09/14/18	ISSUED FOR INFORMATION
6	09/14/18	ISSUED FOR INFORMATION
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10	09/14/18	ISSUED FOR INFORMATION

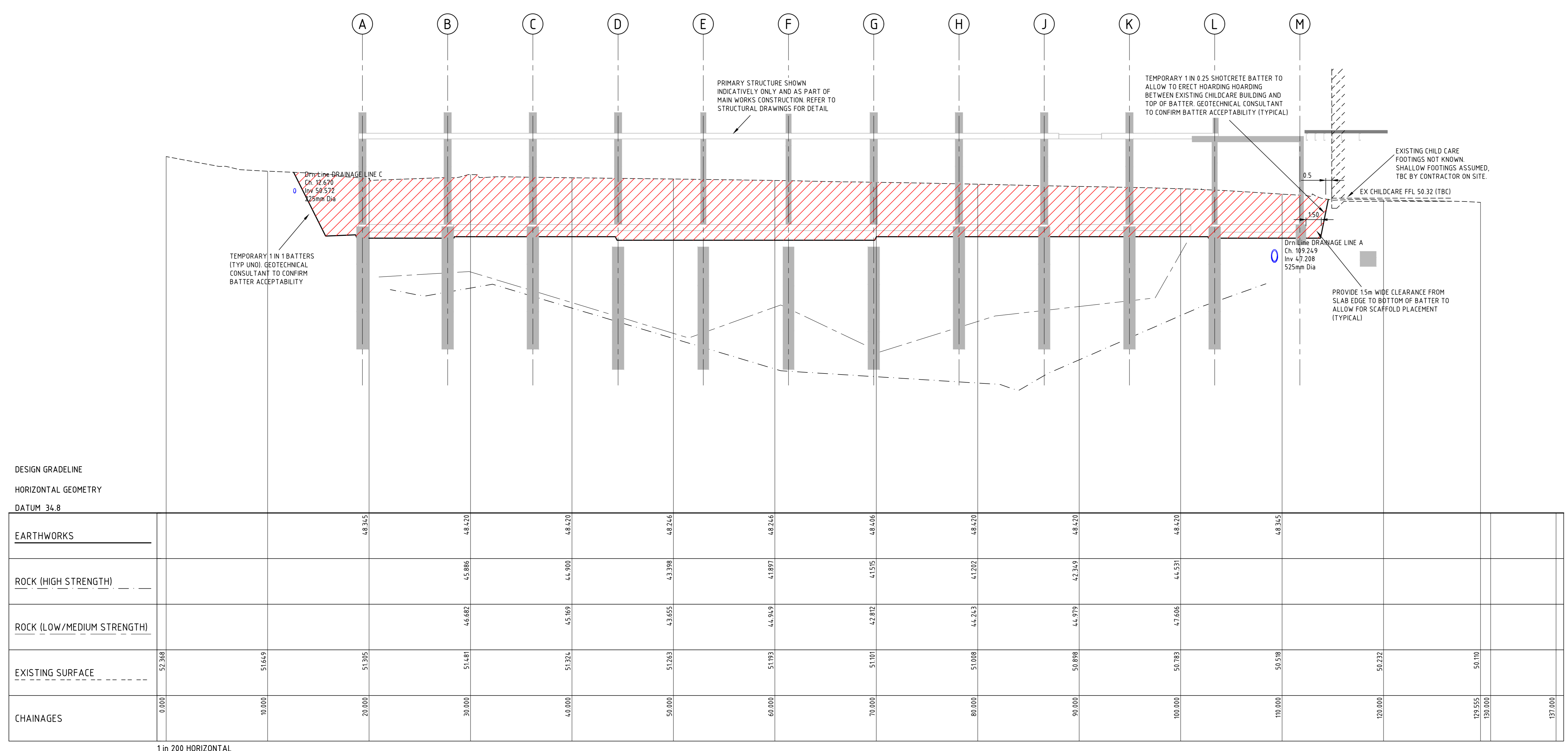


DESIGN GRADELINE  
 HORIZONTAL GEOMETRY  
 DATUM 35.5

CHAINAGES	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000
EARTHWORKS			4.9251	4.8345	4.8345	4.8345	4.8345	4.8345	4.8345	4.7550	4.8345	4.8345	4.8345	
ROCK (HIGH STRENGTH)														
ROCK (LOW/MEDIUM STRENGTH)						4.6972	4.8874	4.8777	4.8835	4.1592				
EXISTING SURFACE	50.950	50.636	50.648	50.646	50.788	50.891	50.420	50.337	50.246	50.239	50.330	50.221	49.774	49.405
CHAINAGES	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000

1 in 200 HORIZONTAL  
 1 in 100 VERTICAL

SC01 LONGITUDINAL SECTION



DESIGN GRADELINE  
 HORIZONTAL GEOMETRY  
 DATUM 34.8

CHAINAGES	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000
EARTHWORKS			4.8345	4.8270	4.8270	4.8246	4.8246	4.8246	4.8246	4.8246	4.8246	4.8246	4.8246	4.8345
ROCK (HIGH STRENGTH)				4.5886	4.4300	4.3388	4.1897	4.1955	4.1922	4.2349	4.2349	4.1931	4.1931	
ROCK (LOW/MEDIUM STRENGTH)				4.6482	4.5369	4.3655	4.4319	4.6482	4.4243	4.4979	4.7665	4.7665	4.7665	
EXISTING SURFACE	52.388	51.645	51.395	51.481	51.324	51.093	51.193	51.101	51.008	50.898	50.783	50.788	50.722	50.100
CHAINAGES	0.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000

1 in 200 HORIZONTAL  
 1 in 100 VERTICAL

SC02 LONGITUDINAL SECTION

**WARNING**  
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 I.L. OF ALL EXISTING DRAINS, AND  
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**LEGEND**  
 CUT FROM EXISTING SURFACE  
 TO BULK EARTHWORK LEVEL

- NOTES**
- REFER TO STRUCTURAL DRAWINGS FOR DETAILED EXCAVATION TO BUILDING STRUCTURES (IE EDGE BEAMS, ETC)
  - SITE SURVEY SUPPLIED BY CARDNO PTY LTD DRAWING No. 118117502 REV 04 DATED 07.06.2017
  - EXISTING SERVICES ARE INTERPOLATED FROM SITE SURVEY SUPPLIED BY SURESEARCH UNDERGROUND SERVICES PTY LTD DRAWING FILE NAME 56426-CPB\_NEPHAN HOSPITAL\_V5 REV 1 DATED 01.09.2018
  - ROCK LEVELS ARE INTERPOLATED FROM BOREHOLE LOGS SUPPLIED BY JK GEOTECHNICS GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS
    - REF No. 298454-1gptm4w02b, DATED 24TH FEBRUARY 2017
    - REF No. 298454-3gpt dated 7 SEPTEMBER 2018



CPB CONTRACTORS  
 TEL 02 9414 5333 FAX 02 9414 3500  
 ARCHITECTURE  
 BVN ARCHITECTURE PTY LTD  
 TEL 02 8297 7200 FAX 02 8297 7299  
 MECHANICAL  
 STEENSEN WARMING  
 TEL 02 9967 2200  
 ELECTRICAL / COMMS



STEENSEN WARMING  
 TEL 02 9967 2200  
 HYDRAULIC

WSP  
 TEL 02 9299 1312 FAX 02 9290 1295  
 BCA / DDA / FIRE

ESD / GREEN STAR

FIRE SERVICES

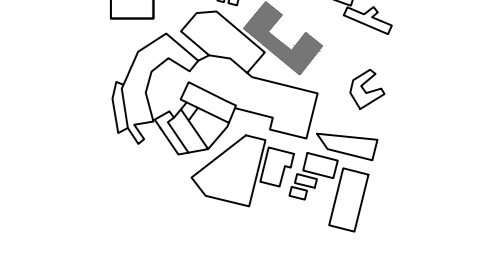
LANDSCAPE

MEDICAL GAS

PROJECT

BONACCI PROJECT NUMBER

DRAWING KEY



TRUE NORTH  
 PROJECT NORTH

SCALE  
 AS SHOWN @A@ DO NOT SCALE

STATUS

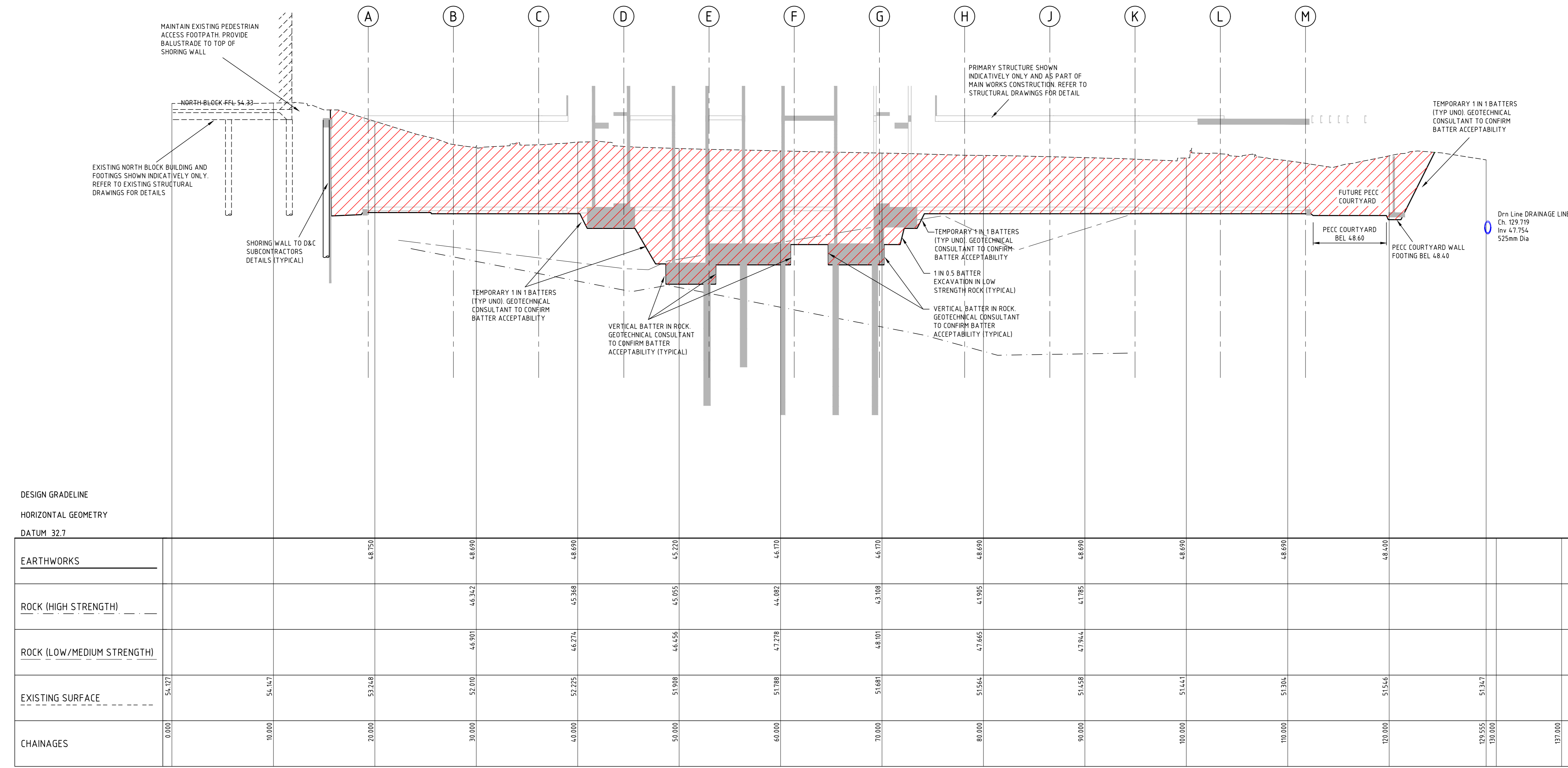
PRELIMINARY  
 DRAWING

**BULK EARTHWORKS  
 LONGITUDINAL SECTIONS  
 SHEET 1**

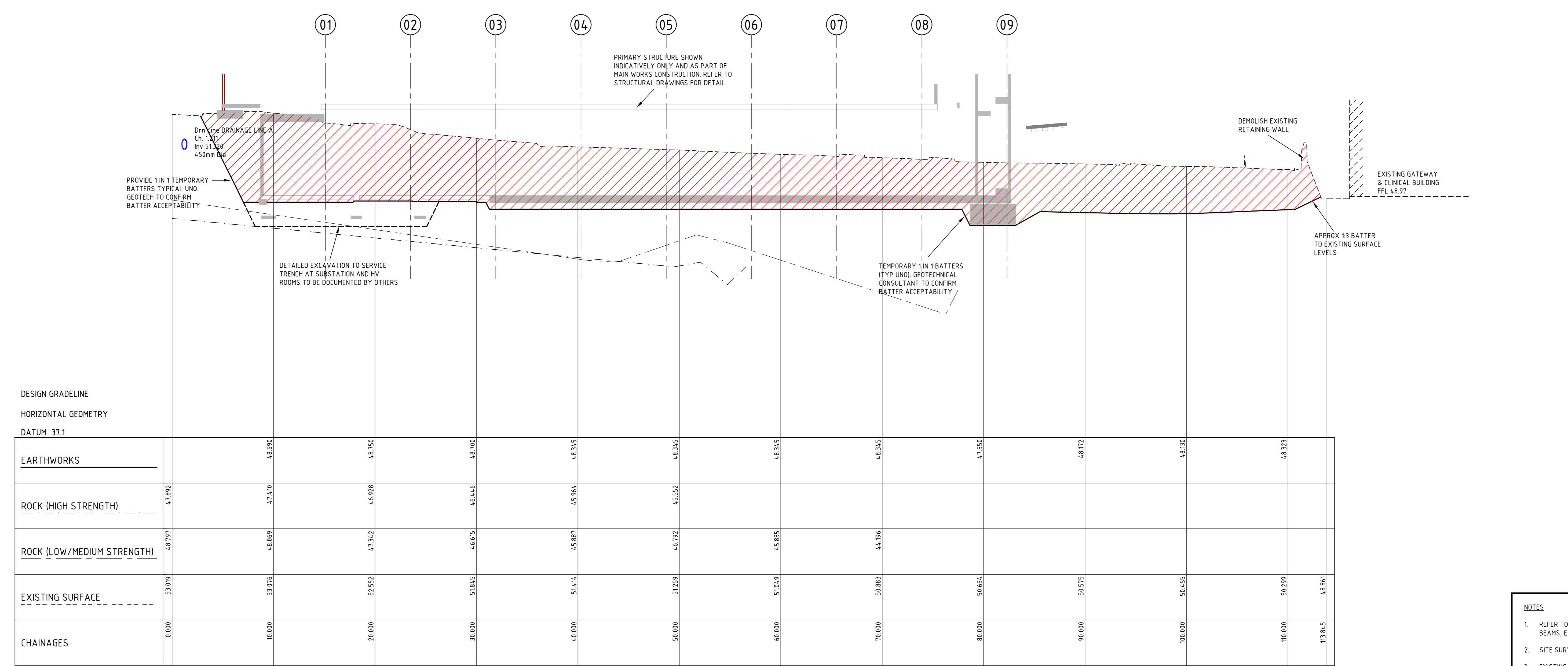
DRAWING NUMBER  
 NHR-BON-DRW-CIV-TB1  
**0002101**

**C**

ISSUE	DATE	FOR
J1	08/02/17	ISSUED FOR INFORMATION
J2	08/02/17	ISSUED FOR INFORMATION
A	08/02/17	ISSUED FOR INFORMATION
B	08/02/17	ISSUED FOR INFORMATION
C	08/02/17	ISSUED FOR INFORMATION
D	23/07/18	ISSUED FOR SDA



SC03 LONGITUDINAL SECTION



SC04 LONGITUDINAL SECTION



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**LEGEND**  
 CUT FROM EXISTING SURFACE  
 TO BULK EARTHWORK LEVEL

- NOTES**
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  - SITE SURVEY SUPPLIED BY CARDNO PTY LTD DRAWING NO. 11817502 REV 04 DATED 07.06.2017
  - EXISTING SERVICES ARE INTERPOLATED FROM SITE SURVEY SUPPLIED BY SURESEARCH UNDERGROUND SERVICES PTY LTD DRAWING FILE NAME 56426-CPB\_NEPAN HOSPITAL\_V5 REV 1 DATED 01.09.2018
  - ROCK LEVELS ARE INTERPOLATED FROM BOREHOLE LOGS SUPPLIED BY JK GEOTECHNICS GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS
    - REF No. 298454 18/04/2018 DATED 24TH FEBRUARY 2017
    - REF No. 298454 3/01/2018 DATED 7 SEPTEMBER 2018



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**STEENSEN WARMING**  
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 ELECTRICAL / COMMS

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 HYDRAULIC

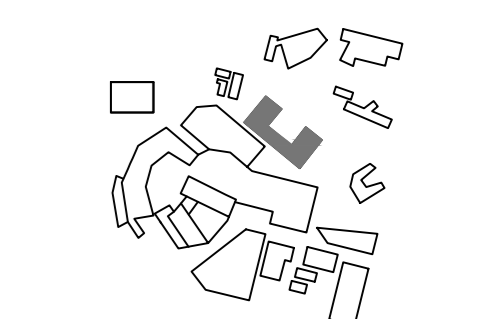
**WSP**  
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 BCA / DDA / FIRE

ESD / GREEN STAR  
 FIRE SERVICES  
 LANDSCAPE  
 MEDICAL GAS

PROJECT

BONACCI PROJECT NUMBER

DRAWING KEY



TRUE NORTH  
 PROJECT NORTH

SCALE  
 AS SHOWN @ A0 DO NOT SCALE

STATUS  
**PRELIMINARY**  
 DRAWING

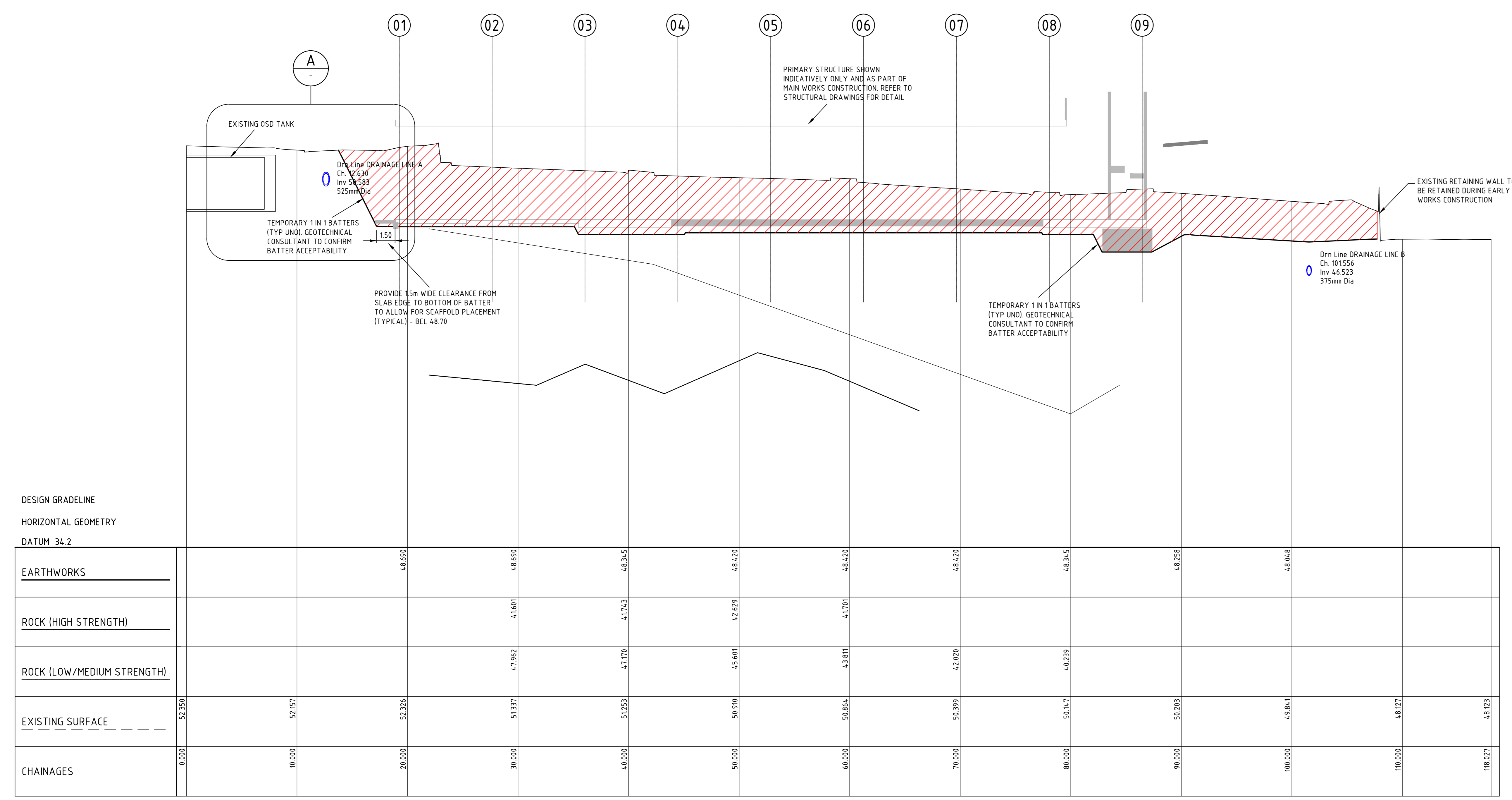
**BULK EARTHWORKS**  
 LONGITUDINAL SECTIONS  
 SHEET 2

DRAWING NUMBER  
 NHR-BON-DRW-CIV-TB1  
**0002102**

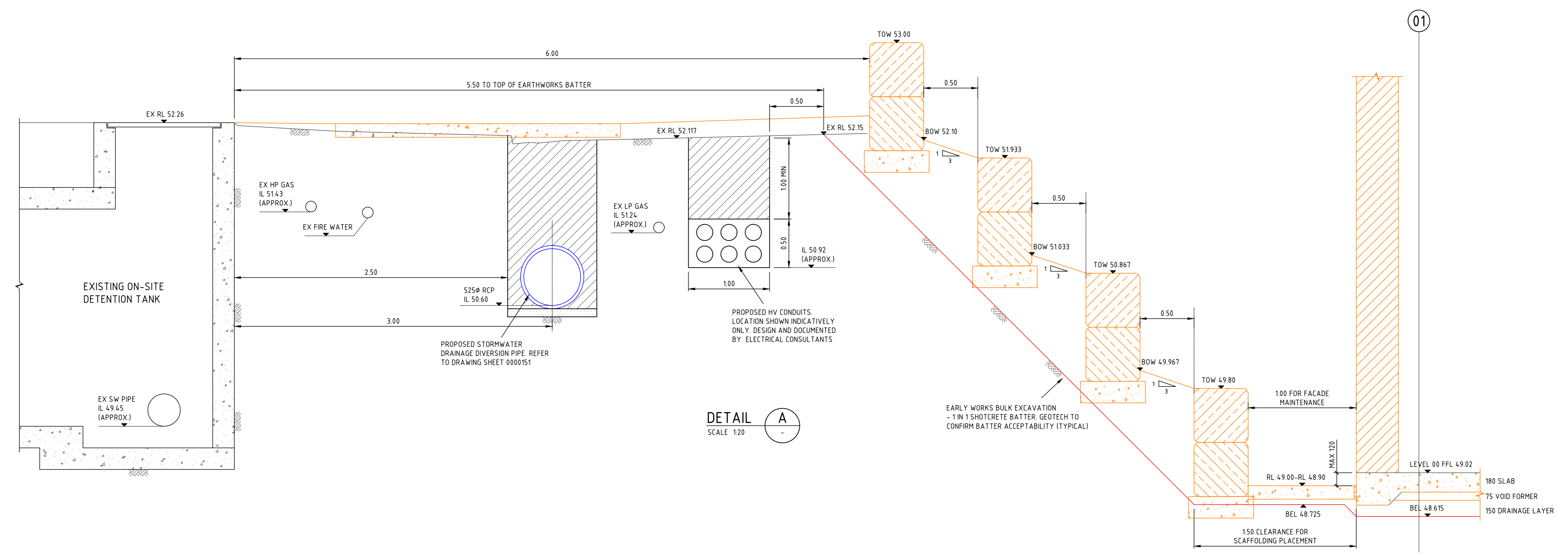
ISSUE  
**D**



ISSUE	DATE	FOR
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2	2018.08.07	ISSUED FOR INFORMATION
3	2018.08.07	ISSUED FOR INFORMATION
4	2018.08.07	ISSUED FOR INFORMATION
5	2018.08.07	ISSUED FOR INFORMATION
6	2018.08.07	ISSUED FOR INFORMATION
7	2018.08.07	ISSUED FOR INFORMATION
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17	2018.08.07	ISSUED FOR INFORMATION
18	2018.08.07	ISSUED FOR INFORMATION
19	2018.08.07	ISSUED FOR INFORMATION
20	2018.08.07	ISSUED FOR INFORMATION



SC06 LONGITUDINAL SECTION



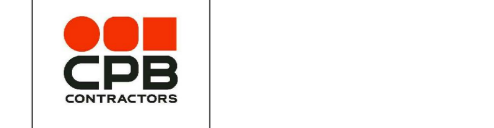
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**LEGEND**  
 CUT FROM EXISTING SURFACE TO BULK EARTHWORK LEVEL

- NOTES**
- REFER TO STRUCTURAL DRAWINGS FOR DETAILED EXCAVATION TO BUILDING STRUCTURES (IE EDGE BEAMS, ETC)
  - SITE SURVEY SUPPLIED BY CARDNO PTY LTD DRAWING No. 11817502 REV 04 DATED 07.06.2017
  - EXISTING SERVICES ARE INTERPOLATED FROM SITE SURVEY SUPPLIED BY SURESEARCH UNDERGROUND SERVICES PTY LTD DRAWING FILE NAME 56426-CPB\_NEPHAN HOSPITAL\_V5 REV 1 DATED 01.09.2018
  - ROCK LEVELS ARE INTERPOLATED FROM BOREHOLE LOGS SUPPLIED BY JK GEOTECHNICS GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS
    - REF No. 298454 1st/4th/6th/8th, DATED 24TH FEBRUARY 2017
    - REF No. 298454 3rd/4th DATED 7 SEPTEMBER 2018



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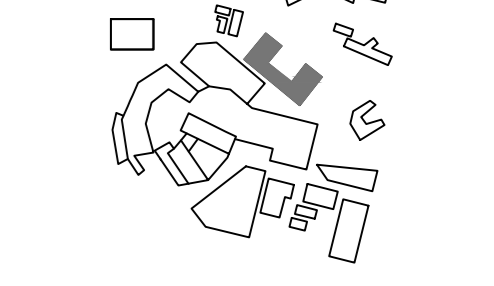
LANDSCAPE

MEDICAL GAS

PROJECT

BONACCI PROJECT NUMBER

DRAWING KEY



TRUE NORTH

SCALE AS SHOWN @ A/D DO NOT SCALE

STATUS  
 PRELIMINARY  
 DRAWING

**BULK EARTHWORKS  
 LONGITUDINAL SECTIONS  
 SHEET 4**

DRAWING NUMBER  
 NHR-BON-DRW-CIV-TB1  
 ISSUE  
**0002104**





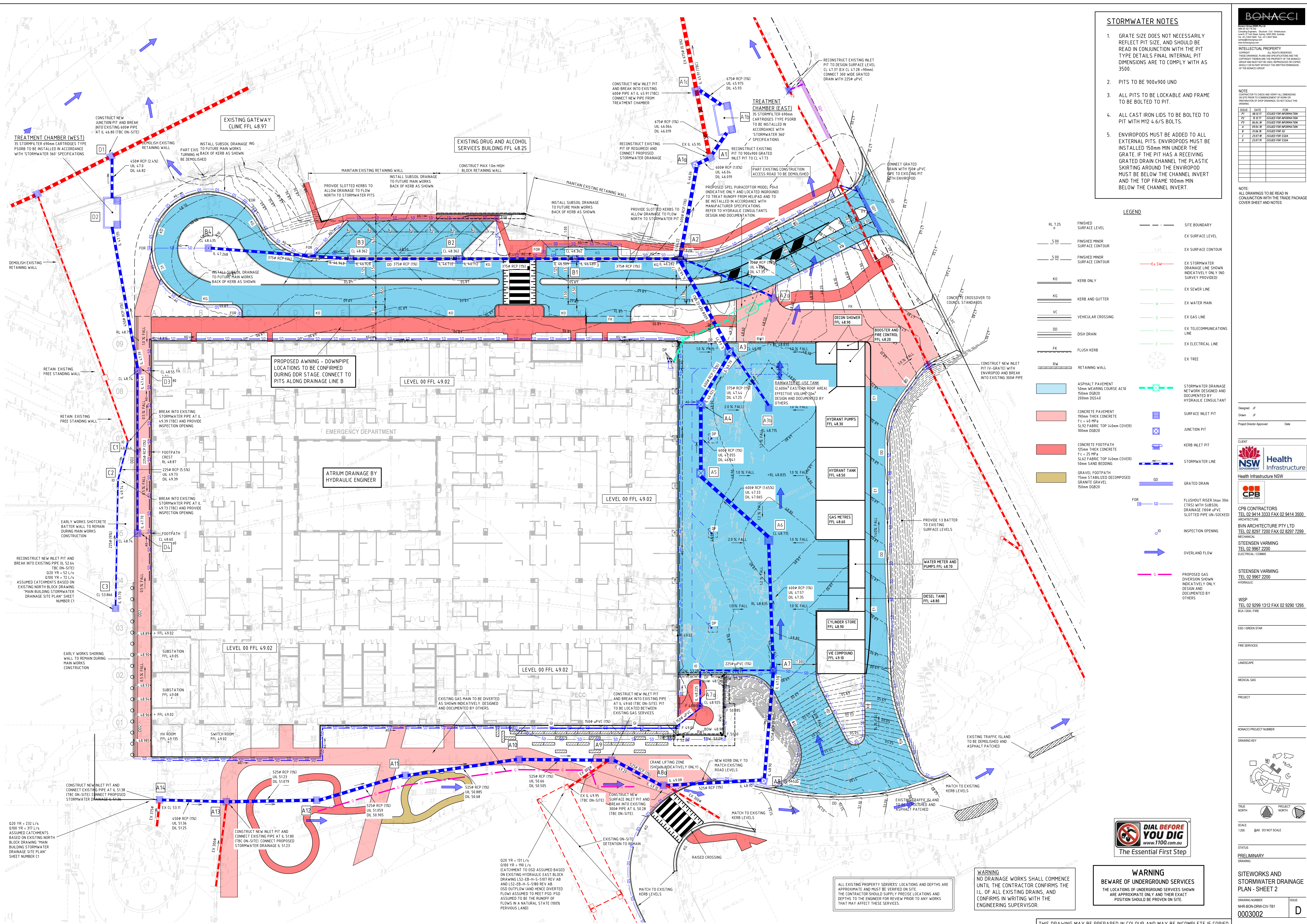
STORMWATER NOTES

- GRATE SIZE DOES NOT NECESSARILY REFLECT PIT SIZE, AND SHOULD BE READ IN CONJUNCTION WITH THE PIT TYPE DETAILS. FINAL INTERNAL PIT DIMENSIONS ARE TO COMPLY WITH AS 3500.
- PITS TO BE 900x900 UNO
- ALL PITS TO BE LOCKABLE AND FRAME TO BE BOLTED TO PIT.
- ALL CAST IRON LIDS TO BE BOLTED TO PIT WITH M12 4.6/S BOLTS.
- ENVIROPODS MUST BE ADDED TO ALL EXTERNAL PITS. ENVIROPODS MUST BE INSTALLED 150mm MIN UNDER THE GRATE. IF THE PIT HAS A RECEIVING GRATED DRAIN CHANNEL THE PLASTIC SKIRTING AROUND THE ENVIROPOD MUST BE BELOW THE CHANNEL INVERT AND THE TOP FRAME 100mm MIN BELOW THE CHANNEL INVERT.

NOTE: CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS. PREPARATION OF SHOP DRAWINGS DO NOT SCALE THIS DRAWING.

NO.	DATE	FOR
1	18/07/20	ISSUED FOR INFORMATION
2	18/07/20	ISSUED FOR INFORMATION
3	18/07/20	ISSUED FOR INFORMATION
4	18/07/20	ISSUED FOR INFORMATION
5	18/07/20	ISSUED FOR SD
6	22/07/20	ISSUED FOR SD
7	22/07/20	ISSUED FOR SD

NOTE: ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE TRADE PACKAGE COVER SHEET AND NOTES.



LEGEND

- |                   |   |     |   |
|-------------------|---|-----|---|
| RL 7.25           | FINISHED SURFACE LEVEL  | --- | SITE BOUNDARY   |
| 5.00              | FINISHED MINOR SURFACE CONTOUR  | --- | EX SURFACE LEVEL  |
| 5.00              | FINISHED MINOR SURFACE CONTOUR  | --- | EX SURFACE CONTOUR  |
| KD                | KERB ONLY   | --- | EX STORMWATER DRAINAGE LINE SHOWN INDICATIVELY ONLY (NO SURVEY PROVIDED)                  |
| KG                | KERB AND GUTTER   | --- | EX SEWER LINE   |
| VC                | VEHICULAR CROSSING  | --- | EX WATER MAIN   |
| DD                | DISH DRAIN  | --- | EX GAS LINE   |
| FK                | FLUSH KERB  | --- | EX TELECOMMUNICATIONS LINE  |
| RW                | RETAINING WALL  | --- | EX ELECTRICAL LINE  |
| ASPHALT PAVEMENT  | 50mm WEARING COURSE AC10<br>150mm DGB20<br>200mm DGB40                                    | --- | EX TREE   |
| CONCRETE PAVEMENT | 150mm THICK CONCRETE<br>f'c = 40 MPa<br>SL92 FABRIC TOP (40mm COVER)<br>100mm DGB20       | --- | STORMWATER DRAINAGE NETWORK DESIGNED AND DOCUMENTED BY HYDRAULIC CONSULTANT               |
| CONCRETE FOOTPATH | 125mm THICK CONCRETE<br>f'c = 25 MPa<br>SL62 FABRIC TOP (40mm COVER)<br>50mm SAND BEDDING | --- | SURFACE INLET PIT   |
| GRAVEL FOOTPATH   | 75mm STABILIZED DECOMPOSED GRANITE GRAVEL<br>150mm DGB20                                  | --- | JUNCTION PIT  |
|                   |   | --- | KERB INLET PIT  |
|                   |   | --- | STORMWATER LINE   |
|                   |   | --- | GRATED DRAIN  |
|                   |   | --- | FLUSHOUT RISER (max 30m (CRS)) WITH SUBSOIL DRAINAGE (1000 uPVC SLOTTED PIPE UN-SOCKETED) |
|                   |   | --- | INSPECTION OPENING  |
|                   |   | --- | OVERLAND FLOW   |
|                   |   | --- | PROPOSED GAS DIVERSION SHOWN INDICATIVELY ONLY. DESIGN AND DOCUMENTED BY OTHERS.          |

Design: JF  
Drawn: JF  
Project Director Approved: \_\_\_\_\_ Date: \_\_\_\_\_

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BCA (D&I) FIRE

ESD (GREEN STAR)  
FIRE SERVICES  
LANDSCAPE  
MEDICAL GAS  
PROJECT

BONACCI PROJECT NUMBER  
DRAWING KEY

TRUE NORTH  
PROJECT NORTH

SCALE  
1:200 @A0 DO NOT SCALE

STATUS  
PRELIMINARY DRAWING

SITWORKS AND STORMWATER DRAINAGE PLAN - SHEET 2

DRAWING NUMBER  
NHR-BON-DRW-CIV-B1

ISSUE  
0003002

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

**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.



