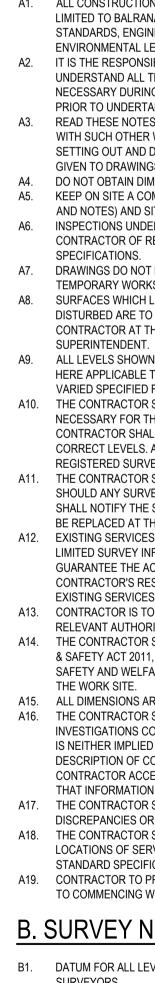
# **NSW HEALTH INFRASTRUCTURE BALRANALD KEY WORKERS ACCOMMODATION CIVIL STORMWATER LAYOUT** 12618687

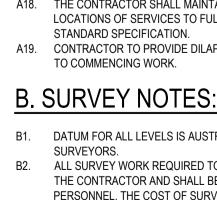


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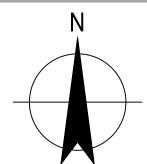
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Desig	ner	R. TORRES	Design Check				

Plot Date: 8 September 2023 - 12:04 PM Plotted by: Mahdi Milani



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### A. GENERAL NOTES

- ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH BUT NOT LIMITED TO BALRANALD SHIRE COUNCIL, RELEVANT AUSTRALIAN STANDARDS, ENGINEERING SPECIFICATIONS, BCA GUIDELINES AND
- ENVIRONMENTAL LEGISLATIVE REQUIREMENTS IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THEY INDERSTAND ALL THE RELEVANT REQUIREMENTS AND SEEK CLARIFICATION AS
- NECESSARY DURING THE DELIVERY OF THIS PROJECT WHERE NECESSARY AND PRIOR TO UNDERTAKING THE WORKS READ THESE NOTES IN CONJUNCTION WITH OTHER ENGINEERING DRAWINGS, AND
- WITH SUCH OTHER WRITTEN INSTRUCTIONS ISSUED. REFER TO DRAWINGS FOR SETTING OUT AND DETAIL DIMENSIONS. IN CASE OF DISCREPANCY, PRECEDENCE IS GIVEN TO DRAWINGS THEN NOTES O NOT OBTAIN DIMENSIONS BY SCALING FROM DRAWINGS
- KEEP ON SITE A COMPLETE SET OF CONTRACT DOCUMENTS (INCLUDING DRAWING AND NOTES) AND SITE INSTRUCTIONS.
- INSPECTIONS UNDERTAKEN BY SUPERINTENDENT OR OTHERS DO NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS AND
- DISTURBED ARE TO BE RESTORED TO THE PRE CONSTRUCTION CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE
- ALL LEVELS SHOWN ARE FINISHED SURFACE LEVELS UNLESS NOTED OTHERWISE. HERE APPLICABLE THE CONTRACTOR SHALL ALLOW FOR THE THICKNESS OF THE VARIED SPECIFIED FINISHES.
- A10. THE CONTRACTOR SHALL PROVIDE ALL LABOUR, MATERIALS AND EQUIPMENT NECESSARY FOR THE ACCURATE SETTING OUT OF THE ENTIRE WORKS. THE CONTRACTOR SHALL ENSURE THAT ALL SURFACES ARE CONSTRUCTED TO THE CORRECT LEVELS, ALL WORKS AS EXECUTED INFORMATION TO BE VERIFIED BY REGISTERED SURVEYOR.
- A11. THE CONTRACTOR SHALL NOT DISTURB NOR OBLITERATE ANY SURVEY MARK. SHOULD ANY SURVEY MARK BE DISTURBED OR OBLITERATED. THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENT IMMEDIATELY AND THE SURVEY MARK SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- EXISTING SERVICES HAVE BEEN PLOTTED FROM CURRENT BYDA INFORMATION AND LIMITED SURVEY INFORMATION ONLY. THE SUPERINTENDENT DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF DATA USED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE LOCATION AND DEPTH OF ALL EXISTING SERVICES PRIOR TO COMMENCING WORK.
- A13. CONTRACTOR IS TO OBTAIN CLEARANCES AND COORDINATE WORK WITH ALL RELEVANT AUTHORITIES PRIOR TO COMMENCEMENT.
- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE WORK HEALTH & SAFETY ACT 2011, WHICH REQUIRES EMPLOYERS TO ENSURE THE HEALTH, SAFETY AND WELFARE OF ALL THEIR EMPLOYEES AND PERSONS IN THE VICINITY OF
- A15. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- A16. THE CONTRACTOR SHALL BE PROVIDED WITH THE RESULTS OF PREVIOUS SITE INVESTIGATIONS CONDUCTED AT THE SITE FOR INFORMATION PURPOSES ONLY. IT IS NEITHER IMPLIED NOR WARRANTED BY THE PRINCIPAL TO BE A COMPLETE DESCRIPTION OF CONDITIONS EXISTING AT OR BELOW GROUND LEVEL AND THE CONTRACTOR ACCEPTS ALL RISKS INVOLVED WITH INTERPRETATION AND USE OF
- A17. THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENT IMMEDIATELY OF ANY DISCREPANCIES OR ERRORS THAT MAY BE PRESENT WITHIN THESE PLANS. A18. THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF LEVELS AND LOCATIONS OF SERVICES TO FULLY COMPLY WITH REFERENCE DOCUMENTS AND STANDARD SPECIFICATION.
- A19. CONTRACTOR TO PROVIDE DILAPIDATION REPORT ON EXISTING CONDITIONS PRIOR O COMMENCING WORK.

- B1. DATUM FOR ALL LEVELS IS AUSTRALIAN HEIGHT DATUM (AHD) SURVEY BY PROJECT
- ALL SURVEY WORK REQUIRED TO PROVIDE THE SERVICES SHALL BE ARRANGED BY RACTOR AND SHALL BE CARRIED OUT BY APPROPRIATELY QUALIFIED EL. THE COST OF SURVEY SHALL BE BORNE BY THE CONTRACTOR. DTED OTHERWISE, COPIES OF ALL SURVEY RESULTS SHALL BE SENT TO THE SUPERINTENDENT WITHIN 48 HOURS OF BECOMING AVAILABLE IN GRAPHICAL

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- AND TABUI AR FORMAT SURVEY BENCHMARKS SHALL BE ESTABLISHED IN CONSULTATION WITH THE
- SUPERINTENDENT. PRIOR TO BEGINNING CONSTRUCTION OF THE WORKS. THE CONTRACTOR SHAL ESTABLISH A SURVEY GRID OVER THE WORKS AREA. GRID SPACING SHALL BE CONFIRMED IN CONSULTATION WITH THE SUPERINTENDENT. GRID LOCATIONS SHALL INCORPORATE THE SET-OUT POINTS PROVIDED IN THE "SET-OUT TABLES" IN THE ENGINEERING DRAWINGS
- THE CONTRACTOR SHALL CHECK. CONFIRM AND SATISFY THEMSELVES THAT AL DIMENSIONS, LEVELS AND SERVICE LOCATIONS ARE CORRECT PRIOR TO CONSTRUCTION WORKS COMMENCING ON SITE
- THE CONTRACTOR SHALL BE REQUIRED TO COMPLETE THE FOLLOWING SURVE DURING THE WORKS PAVEMENT: FOLLOWING PAVEMENT INSTALLATION, SURVEY COMPLETED LAYER AT ALL GRID LOCATIONS AND AT ANY CHANGES IN GRADE. A CONFORMANCE SURVEY SHALL ALSO BE PROVIDED (WITH CONSIDERATION TO THI SURVEYED FLEVATIONS OF THE UNDERLYING SURFACE) SHOWING CONFORMING
- I AYER THICKNESS WITHIN THE ALLOWABLE TOLERANCES, INCLUDE THE LOCATION OF ANY PAVEMENT CROSSINGS. ALL GENERAL EXCAVATION SHALL HAVE AN ELEVATION TOLERANCE OF +/-100 mm PAVEMENT LAYER THICKNESSES SHALL HAVE A THICKNESS TOLERANCE OF -0 mm,

# C. SPECIAL REQUIREMENTS:

+100 mm

- C1. AREAS FOR PARKING OF CONSTRUCTION PLANT, ETC SHALL BE KEPT FREE OF ANY CONTAMINATES (EG ENGINE OIL, HYDRAULIC OIL, FUEL, KEROSENE). DAMAGE CAUSED BY CONSTRUCTION EQUIPMENT, ETC, TO ANY NEW OR EXISTING
- INFRASTRUCTURE SHALL BE MADE GOOD BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE SUPERINTENDENT. C3. CONTRACTOR TO TAKE ALL PRECAUTIONS TO PROTECT ABUTTING STRUCTURES
- (RETAINING WALLS, FENCES AND BUILDINGS) AND IS FULLY RESPONSIBLE FOR RESTORATION AND REPAIR. C4. CONTRACTOR SHALL BE REQUIRED TO MEET THE REQUIREMENTS OF

REQUIREMENTS AS SPECIFIED BY BALRANALD SHIRE COUNCIL.

ENVIRONMENTAL REQUIREMENTS AS SPECIFIED BY THE NOMINATED ENVIRONMENTAL CONSULTANT. THE CONTRACTOR SHALL PREPARE AN ENVIRONMENTAL MANAGEMENT PLAN FOR C5. THE WORKS TO IDENTIFY AND DESCRIBE ALL MANAGEMENT METHODS TO BE USED TO MANAGE ENVIRONMENTAL RISKS DURING THE WORKS, FOR APPROVAL BY THE SUPERINTENDENT PRIOR TO COMMENCING ONSITE. THE CONTRACTOR IS TO SEEK CONFIRMATION FROM THE ENGAGED ENVIRONMENTAL CONSULTANT THAT THE

PLAN COMPLIES WITH THE ENVIRONMENTAL AUTHORISATION AND ANY OTHER

# F. CONSTRUCTION NOTES:

- F1. THE FOLLOWING IS A LIST OF ACTIVITIES TO WHICH HOLD POINTS SHALL APPLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL OBLIGATIONS ARE FULFILLED IN REGARDS TO HOLD POINTS WITHIN THE CONTRACT:
- PROVISION OF ALL SPECIFIED CERTIFICATES FOR MATERIALS USED IN THE WORKS, PRIOR TO USE, INCLUDING ALL GEOSYNTHETICS, PIPEWORK, AND OTHER SPECIFIED MATERIALS
- SUBMISSION OF INSPECTION AND TESTING PLANS FOR EACH COMPONENT OF THE WORKS • PROVISION OF ANY OTHER REQUIRED DOCUMENTATION PRIOR TO INITIATING THE
- WORKS, INCLUDING SAFETY AND ENVIRONMENTAL MANAGEMENT DOCUMENTATION • INITIAL EARTHWORKS SURVEY AND CONFIRMATION OF EXTENT OF EARTHWORKS
- SURVEY OF WORK AFTER COMPLETION OF BULK EARTHWORKS AND SUBGRADE PREPARATION
- SURVEY OF WORK AFTER COMPLETION OF PAVEMENT INSTALLATION
- SURVEY OF WORK AFTER COMPLETION OF DRAINAGE WORKS
- SUBMISSION OF WORKS AS EXECUTED DRAWINGS
- F2. WHERE THE HOLD POINT RELATES TO THE CONDITION OF A SURFACE OR INSTALLED MATERIAL, THE CONTRACTOR SHALL VERIFY THAT THE COMPLETED SURFACE HAS ACHIEVED FULL CONFORMANCE WITH THE CONTRACT DOCUMENTS. HOLD POINTS MAY BE RELEASED FOR PART OF THE WORKS AREA ONLY, AS DEFINED BY THE

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SUPERINTENDENT, SO THAT THE WORKS CAN BE MANNER. THE SUPERINTENDENT'S APPROVAL OF REQUIRED PRIOR TO THE RELEASE OF EACH HOL THE CONTRACTOR SHALL BE REQUIRED TO STOC

- SUITABLE FOR DAILY COVER IN THE AREA SHOWN SUPERINTENDENT SHALL CONFIRM THE RELEVANT SPECIFICATIONS FOR DAILY COVER MATERIAL PRIOR TO CONSTRUCTION.
- IN THE EVENT THAT ANY LIVESTOCK ENTER THE WORKS AREA. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE SUPERINTENDENT TO ALLOW THE FARMER TO **REMOVE FROM SITE**

# H. EXISTING SERVICES:

- H1. ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR BEFORE YOU DIG AUSTRALIA SEARCHES. THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK ANY DISCREPANCIES SHALL BE REPORTED INTENDENT CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY NOTE SERVICE AUTHORITY REQUIREMENT FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS
- CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS AREA TO BE UNDERTAKEN OVER COMMUNICATION, GAS OR ELECTRICAL SERVICES. HAND EXCAVATION ONLY IN THESE AREAS.
- H3. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING SERVICES THAT ARE TO BE RETAINED IN THE VICINITY OF THE PROPOSED WORKS. ANY AND ALL DAMAGE TO THESE SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS. H5. THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR
- BY THE SUPERINTENDENT. H6. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED AND MAINTAINED.
- H7. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THE PROGRAM FOR THE RELOCATION AND/OR CONSTRUCTION OF TEMPORARY SERVICES AND FOR ANY ASSOCIATED INTERRUPTION OF SUPPLY
- H8. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.

## K. STORMWATER DRAINAGE

- K1. CONCRETE PIPES SHALL BE INSTALLED UNDER TRENCH CONDITIONS IN ACCORDANCE WITH AS 3725 UNLESS OTHERWISE SPECIFIED. TRENCH WIDTHS FOR CONCRETE PIPES SHALL BE 1.4 TIMES THE EXTERNAL PIPE DIAMETER OR THE EXTERNAL PIPE DIAMETER PLUS 600MM MEASURED AT THE LEVEL OF THE CROWN OF THE PIPE, WHICHEVER IS GREATER. K2. ALL STORMWATER PIPES TO HAVE A MINIMUM OF 0.5% SLOPE IN DIRECTION
- SHOWN K3. ALL PIPES TO BE MINIMUM 450MM BELOW LANDSCAPED SURFACES AND 600MM BELOW SURFACE IN TRAFFICABLE AREA.
- K4. UNLESS NOTED OTHERWISE, THE IN-GROUND STORMWATER PIPES SHALL BE STEEL REINFORCED CONCRETE CLASS 2 APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS.

	Client	JOSS CONSTRUCTIONS
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Project No. 12618687	Status	PRELIMINARY

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THE COMPLETED ITEMS IS
D POINT.
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I ON THE DRAWINGS. THE

- K5. STORMWATER PIPES ARE TO BE INSTALLED IN ACCORDANCE WITH AS 3725.
- ALL BEDDING IS TO BE TYPE H2 UNLESS NOTED OTHERWISE. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADE SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL
- K7. STORMWATER PITS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
- K8. GRATES AND COVERS SHALL CONFORM WITH AS 3996-1992. K9. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH CURRENT STANDARDS AND CONSTRUCTION SPECIFICATIONS.
- K10 THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING SERVICES WITH ALL RELEVANT AUTHORITIES BEFORE COMMENCING CONSTRUCTION.
- K11. ALL STRUCTURES TO BE CONSTRUCTED TO NEW FINISHED SURFACE LEVEL K12. DATUM FOR LEVELS IS AHD, THE POSITION, SIZE, SURFACE LEVELS AND INVERT LEVELS EXISTING STORMWATER PITS ARE TAKEN FROM SURVEY DRAWINGS. THESE NEED TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION
- K13. ALL STORMWATER PITS SHALL BE CONSTRUCTED USING CAST IN-SIT CONCRETE.
- K14. CONNECTION TO EXISTING STORMWATER PITS TO BE CARRIED OUT BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATION AND IN CONSULTATION WITH COUNCIL. MAKE REQUIRED OPENING IN THE EXISTING STORMWATER PIT WALL AT THE CONNECTION POINT OF NEW LINE. REPAIR AND MAKE GOOD THE PIT WALL INCLUDING NECESSARY ADJUSTMENT OF TH OUT BENCHING TO MATCH NEW PIPE CONNECTIONS.
- K15. SPEL OSD AND WSUD UNIT TO BE INSTALLED AND MAINTAINED AS PER "MANUFACTURER'S" REQUIREMENTS.

### SUBSOIL DRAINAGE

- K16. Ø100mm SUBSOIL DRAINAGE LINES WITH NON-WOVEN GEOTEXTILE FILTER SOCK SURROUND SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT MIN 1% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS;
- 1.1. THE HIGH SIDE OF PROPOSED TRAFFICKED PAVEMENT AREAS.
- 1.2. ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO PAVEMENT AREAS
- 1.3. BEHIND RETAINING WALLS (IN ACCORDANCE WITH RETAINING WALL DETAILS).
- 1.4. ALL OTHER AREAS SHOWN ON DRAWINGS.
- CONTRACTOR IS TO MAKE ALLOWANCE IN BOTH TENDER AND 1.5. CONSTRUCTION COSTING TO ALLOW FOR SUBSURFACE DRAINAGE BEHIND ALL RETAINING WALLS / ABOVE LOCATIONS AND TO MAKE CONNECTION TO STORMWATER SYSTEM.

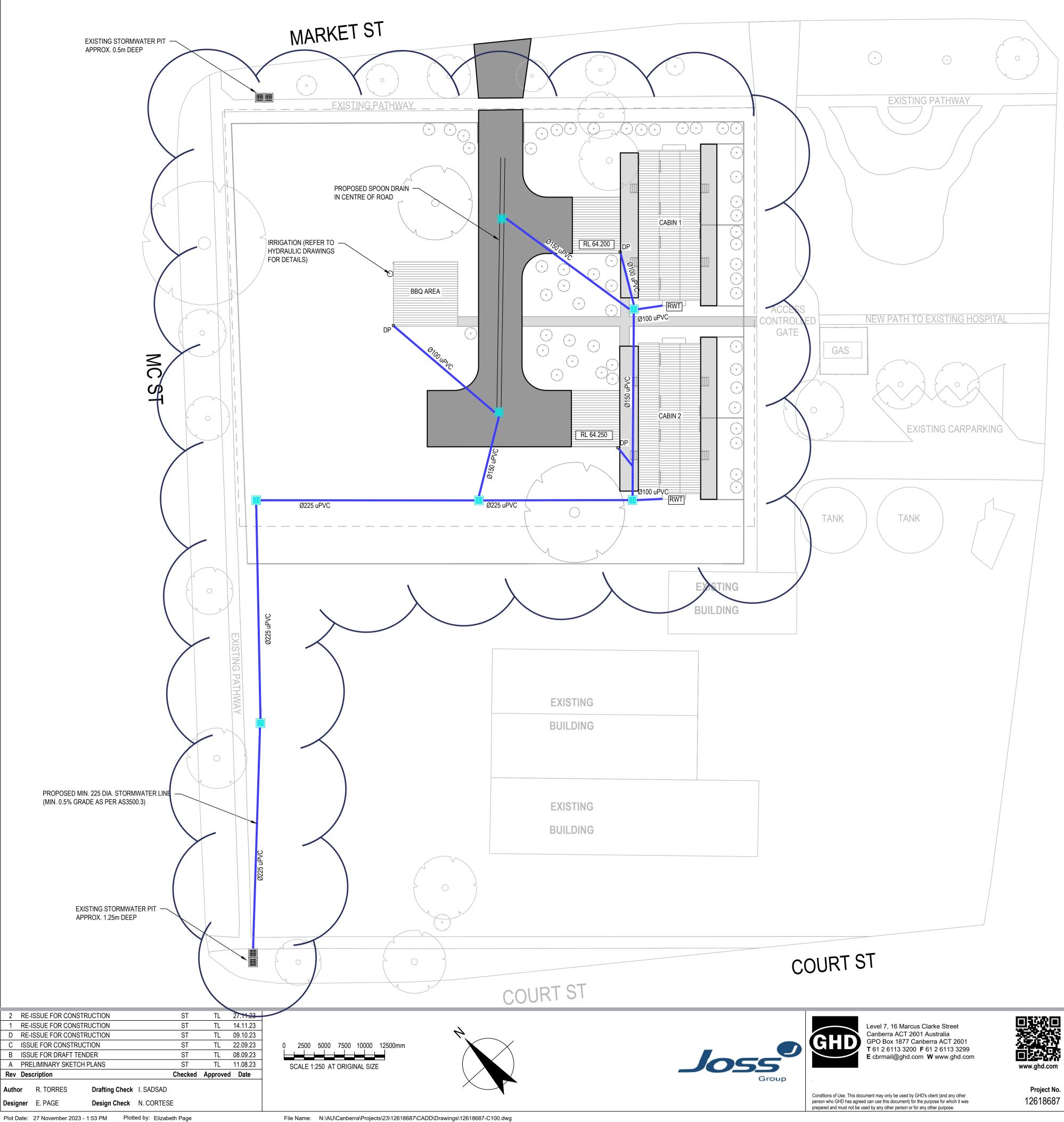
# . PRECAST STORMWATER PITS:

L1. THE USE OF PRE-CAST STORMWATER DRAINAGE PITS IS NOT ACCEPTED WITHOUT CONFIRMATION BETWEEN GHD ENGINEERS AND THE CONTRACTOR REGARDING QUALITY CONTROL AND CERTIFICATION OF FINISHES.

# Drawing CIVIL STORMWATER LAYOUT

# COVER SHEET, LOCALITY PLAN AND NOTES

12618687-0



# NOTES:

- AT THE TIME OF CONSTRUCTION.
- APPROPRIATE SERVICE PRIOR TO CONSTRUCTION.

## LEGEND

	EXISTING STORMWATER PI
	PROPOSED STORMWATER
	PROPOSED STORMWATER
RWT	PROPOSED RAIN WATER TA
$\bigcirc$	EXISTING TREE

PIPE DIAMETER (mm)	
150	1
225	0.5
PIT DEPTH (mm)	MIN
≤900	600
>900	900

# JOSS CONSTRUCTIONS

Project BALRANALD KEY WORKERS ACCOMMODATION

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1. UNDERGROUND SERVICES HAVE BEEN LOCATED BY SURFACE INVESTIGATION ONLY & MAY NOT BE EXHAUSTIVE OR CURRENT

2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN CURRENT INFORMATION WITH REGARD TO ALL UNDERGROUND SERVICES & TO LOCATE THEM PRIOR TO COMMENCEMENT OF CONSTRUCTION. 3. WHERE LOCATION IS CRITICAL TO THE DESIGN IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND LEVEL THE

PIT

R PIT (SIZE AS PER BELOW TABLE)

R LINE AND SIZE AT MINIMUM GRADES AS PER BELOW TABLE TANK (3000L)

INIMUM PIPE GRADE (%)
5
INIMUM PIT SIZE (mm)
00X600
)0X900

