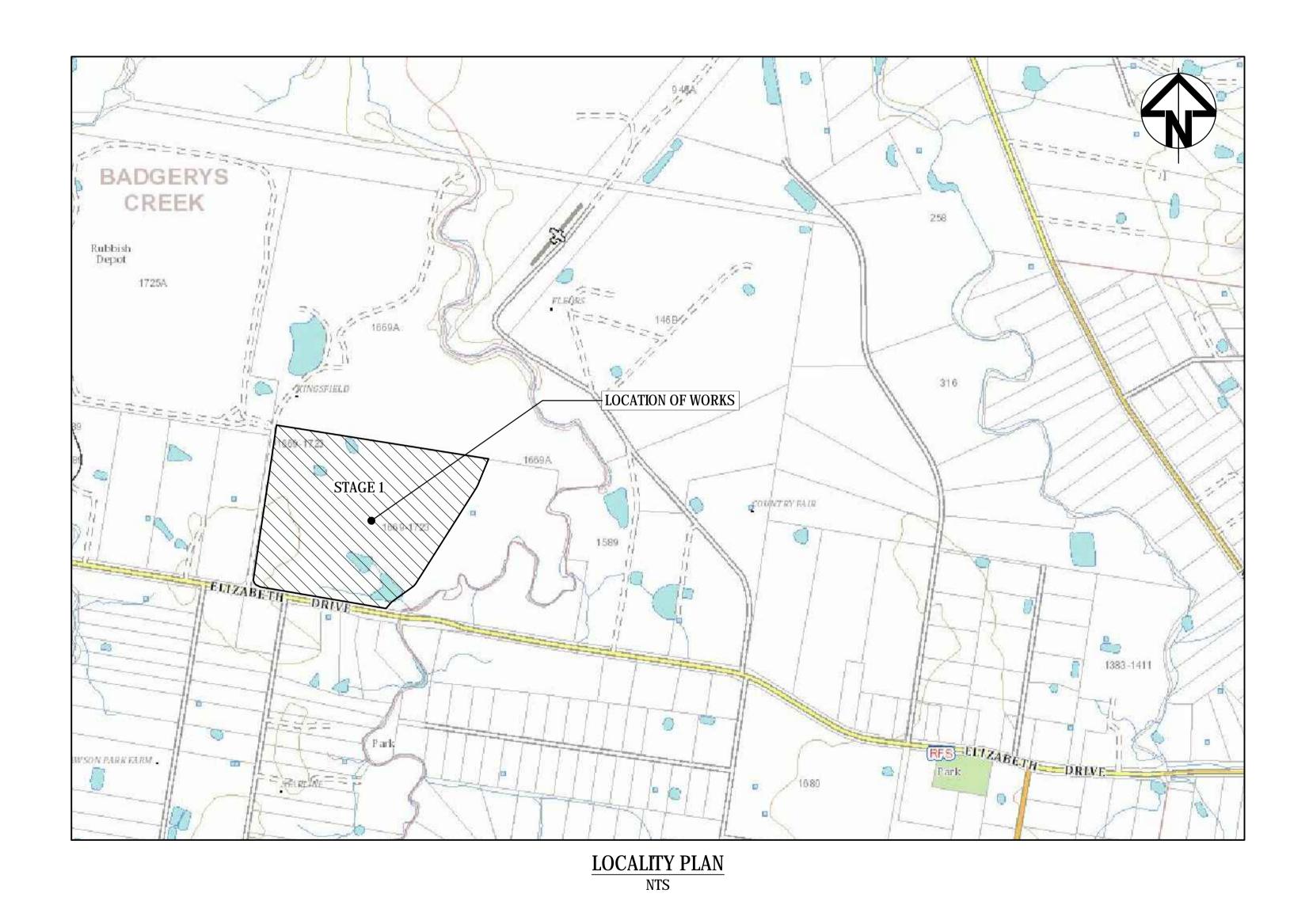
ELIZABETH ENTERPRISE PRECINCT

DEVELOPMENT APPLICATION BULK EARTHWORKS

DRAWING LIST

COVER SHEET 16-369-C0000 16-369-C0001 NOTES AND LEGENDS SHEET GENERAL ARRANGEMENT PLAN 16-369-C0002 16-369-C0011 TYPICAL SECTIONS SHEET 1 16-369-C0012 TYPICAL SECTIONS SHEET 2 16-369-C0200 BULK EARTHWORKS CUT / FILL PLAN **BULK EARTHWORKS PLAN SHEET 1** 16-369-C0211 16-369-C0212 BULK EARTHWORKS PLAN SHEET 2 16-369-C0213 **BULK EARTHWORKS PLAN SHEET 3** 16-369-C0214 **BULK EARTHWORKS PLAN SHEET 4** 16-369-C0215 **BULK EARTHWORKS PLAN SHEET 5** 16-369-C0216 **BULK EARTHWORKS PLAN SHEET 6** 16-369-C0217 **BULK EARTHWORKS PLAN SHEET 7** 16-369-C0601 **EROSION & SEDIMENT CONTROL PLAN SHEET 1 EROSION & SEDIMENT CONTROL PLAN SHEET 2** 16-369-C0602 16-369-C0603 EROSION & SEDIMENT CONTROL PLAN SHEET 3 **EROSION & SEDIMENT CONTROL PLAN SHEET 4** 16-369-C0604 EROSION & SEDIMENT CONTROL PLAN SHEET 5 16-369-C0605 16-369-C0606 EROSION & SEDIMENT CONTROL PLAN SHEET 6 16-369-C0607 EROSION & SEDIMENT CONTROL PLAN SHEET 7



		Bar Scales	Key Plan	Client	Scales	Drawn	JB	Project	Civil Engineers and Project Managers
					NTS	Designed	JB	ELIZABETH ENTERPRISE	Level 7, 153 Walke North Sydney NSW
					Grid MGA	Checked	AMc	PRECINCT	ABN 96 130 882 40 Tel: 02 9439 17
E ISSUE FOR DEVELOPMENT APPLICATION	20-08-20				Height AID	Approved		BULK EARTHWORKS	Fax: 02 9923 109 www.atl.net.au
D ISSUE FOR DEVELOPMENT APPLICATION	21-11-19				Datum AHD			Title	info@atl.net.au
C ISSUE FOR DEVELOPMENT APPLICATION	04-11-19			MICVAC					Status
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A ISSUE FOR DEVELOPMENT APPLICATION	29-03-19				OR USED FOR ANY OTHER INTENDED WITHOUT	PURPOSE OTHER THAN THE WRITTEN PERMISS		SHEET	NOT TO BE USED FOR CONSTRUCTION Project NoDrawing No.
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SITEWORKS NOTES

- 1. ORIGIN OF LEVELS:- REFER SURVEY NOTES.
- 2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
- 3. MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- 4. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- 5. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- 6. PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- 7. ASPHALTIC CONCRETE SHALL CONFORM TO RMS. SPECIFICATION R116.
- 8. ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH RMS. FORM 3051 (UNBOUND), RMS. FORM 3052 (BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1
- FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m OF BASECOURSE MATERIAL PLACED.
- 9. ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH RMS. FORM 3051. 3051.1 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m OF SUB-BASE COURSE MATERIAL PLACED.
- 10. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH RMS. FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
- 11. SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THIS SHALL BE CLEARLY INDICATED IN THEIR TENDER AND THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
- 12. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.

EXISTING UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE. AT & L CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES

CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.

INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.

CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

EROSION AND SEDIMENT CONTROL

GENERAL INSTRUCTIONS

THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A SUITABLY QUALIFIED EROSION AND SEDIMENT CONSULTANT FOR THE DURATION OF THE CONTRACT WITH THE EXPERTISE IN DESIGNING AND DOCUMENTING THE CONTROLS TO ALLOW THE INSTALLATION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROLS. SUITABLE EROSION AND SEDIMENT

CONTROLS SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR

- 2. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH a. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER. SOILS AND CONSTRUCTION". 4th EDITION. MARCH
- b. LOCAL AUTHORITY REQUIREMENTS

REQUIRED TO SUIT THE CONSTRUCTION STAGING

- c. EPA REQUIREMENTS
- 3. MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
- 4. WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
- 5. CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

LAND DISTURBANCE

6. WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN / INSTALLED AS DIRECTED BY THE CONTRACTORS EROSION AND SEDIMENT CONTROL CONSULTANT.

EROSION CONTROL

- 7. DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- 8. FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

SEDIMENT CONTROL

- 9. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS. INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT
- 10. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- 11. 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 AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED
- 12. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

OTHER MATTERS

- 13. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- 14. 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 EXCEPT UNDER THE FOLLOWING CONDITIONS.
- (I) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER
- (II) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN
- 300 MILLIMETRES DEPTH (III) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

EROSION AND SEDIMENT CONTROL NOTES

STAGING

- SUITABLE EROSION AND SEDIMENT CONTROLS SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT ALL STAGES OF WORKS. THROUGHOUT THE FULL TERM OF THE CONTRACT, WHERE SHOWN ON AT&L DRAWINGS OR WHERE DIRECTED BY THE SUPERINTENDENT OR PENRITH CITY COUNCIL'S ENGINEERS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING. DOCUMENTING, INSTALLING AND MAINTAINING THE SEDIMENT AND EROSION CONTROLS REQUIRED TO SUIT THE SELECTED CONSTRUCTION STAGING. THIS IS TO BE DOCUMENTED IN THE FORM OF A SOIL AND WATER MANAGEMENT PLAN TO BE DEVELOPED BY THE CONTRACTOR AND THEIR EROSION ND SEDIMENT CONSULTANT AND PROVIDED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION COMMENCEMENT.
- SUCH CONTROLS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROTECTION OF THE ENVIRONMENT OPERATIONS ACT, PENRITH CITY COUNCIL'S SPECIFICATIONS AND THE OFFICE OF ENVIRONMENT AND HERITAGE'S 'MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION. LANDCOM, (4TH EDITION) MARCH 2004 (REPRINTED 2006) (THE "BLUE BOOK"). VOLUME 1 AND VOLUME 2.
- AT COMPLETION OF THE WASTE DISPOSAL FILL IMPORTATION WORKS, ALL AREAS TO BE APPROPRIATELY STABILISED TO ENSURE ADEQUATE DUST, SOIL AND EROSION CONTROL.

BULK EARTHWORKS NOTES

- 1. ORIGIN OF LEVELS: REFER SURVEY NOTES
- 2. STRIP ALL TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
- 3. EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT.
- 4. COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN: LOCATION STANDARD DRY DENSITY

(AS 1289 E 5.1.1.) UNDER BUILDING SLABS

- ON GROUND UNDER ROADS AND LANDSCAPED AREAS UNLESS NOTED OTHERWISE 98%
- 5. FOR NON COHESIVE MATERIAL, COMPACT TO 75% DENSITY INDEX.
- 6. BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 8 TONNE (MIN) DEADWEIGHT SMOOTH DRUM VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER).
- 7. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN: (A) 1 TEST PER 200m OF FILL PLACED PER 300 LAYER OF FILL (B) 3 TESTS PER VISIT
- (C) 1 TEST PER 1000m² OF EXPOSED SUBGRADE TESTING SHALL BE "LEVEL 1" TESTING IN ACCORDANCE WITH AS 3798
- 8. FILLING TO BE PLACED AND COMPACTED IN MAXIMUM 150mm LAYERS 9. NO FILLING SHALL TAKE PLACE TO EXPOSE SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF AT & L

AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.

Key Plan

SURVEY NOTES

- THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY LTS LOCKLEY, BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS
- FOR DESIGN. AT & L DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.
- SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA,
- THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM THE ORIGINAL
- SURVEY DOCUMENTS. 1. THE BOUNDARIES HAVE NOT BEEN MARKED
- 2. ALL AREAS AND DIMENSIONS HAVE BEEN COMPILED FROM PLANS MADE AVAILABLE BY THE OFFICE of LAND & PROPERTY INFORMATION (NSW) AND ARE SUBJECT TO FINAL SURVEY
- 3. ORIGIN OF LEVELS ON A.H.D. IS TAKEN FROM PM25505 R.L. 59.292 (A.H.D.) IN ELIZABETH DRIVE
- 4. CONTOUR INTERVAL 0.5 m
- 5. CONTOURS ARE INDICATIVE ONLY. ONLY SPOT LEVELS SHOULD BE USED FOR CALCULATIONS OF QUANTITIES WITH CAUTION
- 6. KERB LEVELS ARE TO THE TOP OF KERB UNLESS SHOWN OTHERWISE . FLOOR LEVELS SHOWN ARE THRESHOLD LEVELS. NO INVESTIGATION OF
- INTERNAL FLOOR LEVELS HAS BEEN UNDERTAKEN 8. NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. SERVICES HAVE BEEN PLOTTED FROM RELEVANT AUTHORITIES INFORMATION AND HAVE NOT BEEN SURVEYED. ALL RELEVANT AUTHORITIES SHOULD BE NOTIFIED PRIOR TO ANY EXCAVATION ON OR
- NEAR THE SITE 9. 8/.4/7 DENOTES TREE SPREAD OF 8m, TRUNK DIAMETER OF 0.4m & APPROX HEIGHT OF 7m
- 10. SHOWS APPROXIMATE POSITION OF ROAD LINEMARKING AND IS INDICATIVE ONLY
- 11. BEARINGS SHOWN ARE MGA (MAP GRID OF AUSTRALIA) ADD APPROX. 1°00' EOD TOLIE NODTH

DOOR

HEAD/SILL

GAS (DBYD)

TELSTRA (DBYD)

STORMWATER (DBYD)

ELECTRICITY (OVERHEAD)

ELECTRICITY (U'GROUND) (DBYD)

NATIONAL BROADBAND NETWORK (DBYD)

WATER (DBYD)

SEWER (DBYD)

Client

1°00' FOR TRUE NORTH	
<u>LEGEND</u>	
BENCH MARK	A
TELSTRA PILLAR	⊠ TP
TELSTRA PIT	■ TEL
ELECTRIC LIGHT POLE	● ELP
ELECTRICITY PILLAR	■ EPIL
POWER POLE	● PP
STORMWATER PIT	☐ SWPIT
PIT WITH CONCRETE LID	
STREET SIGN	⊠ SS
KERB INLET PIT	KIP
SEWER INSPECTION POINT	O SIP
STOP VALVE	O SV
HYDRANT	■ HYD
WATER METER	► WM
WATER TAP	 X TAP
GAS PILLAR	₩ GPIL
VEHICLE CROSSING	(VC)
PRAM CROSSING	(PC)
WINDOW	W

H/S

— G —

— T —

— W —

—— SW ——

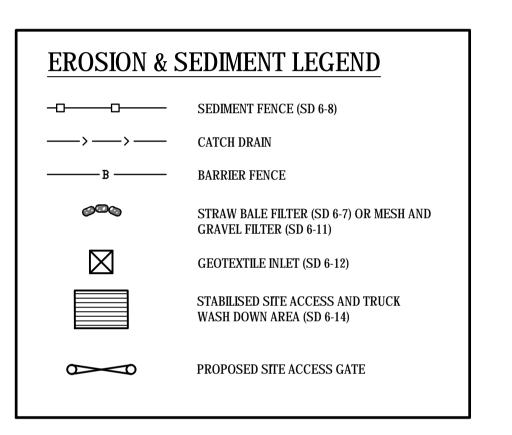
— S —

— P —

— E —

——NBN ——

WORKS LEGEND EXISTING BOUNDARY _____ +59.28 SURFACE LEVEL CONTOUR (0.5m INTERVAL) ____/ ______/ ____ **FENCE** TREE TREE TO BE REMOVED PMF EXTENT 100 YR FLOOD EXTENT E2 ZONE PROPOSED PROPOSED FUTURE LOT BOUNDARY PROPOSED CONTOUR (0.5m INTERVAL) —··—·58.5··—··— PROPOSED CONTOUR (0.25m INTERVAL) ______ PROPOSED EARTHWORKS LEVEL **BATTER** BATTER SLOPE



LEVELS SHOWN ON PLANS T.BC. ±1m



			Bar Scales
E	ISSUE FOR DEVELOPMENT APPLICATION	20-08-20	
D	ISSUE FOR DEVELOPMENT APPLICATION	21-11-19	
C	ISSUE FOR DEVELOPMENT APPLICATION	04-11-19	
В	ISSUE FOR DEVELOPMENT APPLICATION	19-07-19	
A	ISSUE FOR DEVELOPMENT APPLICATION	29-03-19	
Issue	Description	Date	

100mm on Original

Project JB NTS Designed Checked MGA AMc Height Approved AHD Title

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ELIZABETH ENTERPRISE PRECINCT BULK EARTHWORKS

NOTES AND LEGENDS SHEET



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FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION Project No.-Drawing No.

Issue 16-369-C0001

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