

LEGEND

PROPOSED SERVICES

SW

STORMWATER MAIN

STORMWATER SPEL FILTER

STORMWATER TANK

STORMWATER GRATED PIT

NEW STORMWATER GRATED TRENCH DRAIN

EXISTING SERVICES

eSW

STORMWATER MAIN

STORMWATER MANHOLE

STORMWATER KERB INLET PIT

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BLOCK BOUNDARY

**WARNING:**  
EXISTING SERVICES SHOWN ARE BASED ON INFORMATION PROVIDED BY SERVICE AUTHORITIES AND ARE ESTIMATES ONLY. UNDER NO CIRCUMSTANCES SHOULD THE LOCATIONS OF SERVICES SHOWN ON THIS PLAN BE RELIED UPON FOR ON SITE WORK. ALL INFORMATION MUST BE CONFIRMED IN THE FIELD.

- STORMWATER NOTES
- STORMWATER CONNECTION TO THE BLOCK MUST BE DESIGNED BY A SUITABLY QUALIFIED CIVIL ENGINEER PRIOR TO CONSTRUCTION.
  - STORMWATER DESIGN TO BE REVIEWED AT DETAILED DESIGN BY A SUITABLY QUALIFIED ENGINEER PRIOR TO CONSTRUCTION.
  - ALL EXISTING STORMWATER CONNECTIONS TO THE BLOCK ARE TO BE CAPPED AND WATERPROOFED.
  - ALL WORKS TO BE DESIGNED AND CONSTRUCTED TO COMPLY WITH AS/NZS 3500.3:2018 EXCEPT WHERE CITY OF WAGGA WAGGA COUNCIL STANDARDS, DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE.
  - THE CONTRACTOR MUST VISIT THE SITE OF WORKS BEFORE TENDERING AND MAKE ALLOWANCES IN THEIR TENDER FOR ALL TOPOGRAPHIC CONSTRAINTS AFFECTING THE EXECUTION OF THE WORKS AND THE RESTORATION OF THE SITE.
  - THE CONTRACTOR MUST SECURE ALL PERMITS, ARRANGE ALL CLEARANCES AND PAY ALL FEES REQUIRED TO COMPLETE THE PROJECT, PRIOR TO THE COMMENCEMENT OF WORK.
  - ALTHOUGH THE POSITION OF EXISTING UNDERGROUND SERVICES HAS BEEN PLOTTED FROM AVAILABLE RECORDS, THE CONTRACTOR MUST DIG TEST PITS BY HAND AT UTILITY CROSSINGS AND/OR CONNECTIONS IN ADVANCE OF TRENCHING AND ADVISE THE SUPERINTENDENT OF ANY POTENTIAL CLASHES.
  - EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE AND DUMPED AT AN APPROVED SPOIL AREA.
  - CONTRACTOR TO ALLOW FOR THE SUPPLY AND INSTALLATION OF 11 SPEL STORMSACKS OR EQUIVALENT.
  - THIS PLAN IS TO BE READ IN CONJUNCTION WITH CR193049\_EC06 WSUD.

VERIFIER:  
JOB MANAGER: MP/KE  
DESIGNED: NGR/INTER  
DRAWN: NGR/INTER

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	FOR COMMENT	NG		MP	16.04.20
2	FOR COMMENT (V2)	NG		MP	23.04.20
3	FOR COMMENT (V3)	NG		MP	10.07.20
4	DA (V2)	NG		MP	16.07.20

CLIENT  
**INNOVATION PROPERTY TRUST**

ARCHITECT  
**DARYL JACKSON  
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ARCHITECTS**



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PLAN

SCALE 1:200 @ A1

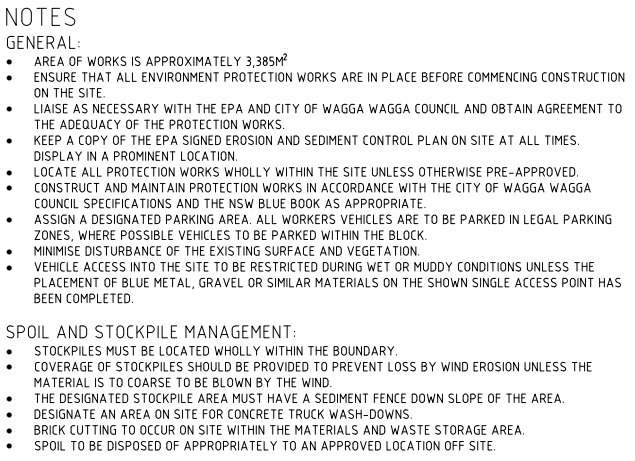
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PROJECT  
**THE RIVERINA CLINIC  
336 - 344 EDWARD STREET  
WAGGA WAGGA**

DRAWING TITLE  
**CIVIL WORKS  
CONCEPT STORMWATER  
MANAGEMENT PLAN**

JOB NUMBER <b>CR193049</b>	REVISION <b>4</b>
DRAWING NUMBER <b>C160</b>	
DRAWING SHEET SIZE = A1	

NOT FOR CONSTRUCTION



## SEDIMENT CONTROLS AND STORMWATER:

- ALL SEDIMENT CONTROLS TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS.
- MAINTAIN STRICT SITE ACCESS CONTROL WITH A STABILISED ACCESS POINT THAT ALL VEHICLES MUST USE.
- AT THE END OF EACH DAY OR WHEN DIRT OCCURS OR PRIOR TO ANY RAIN EVENT, REMOVE ANY SEDIMENT FROM PUBLIC ROADS ADJACENT TO THE WORK AREA. DO NOT WASH INTO THE STORMWATER SYSTEM.
- MAINTAIN AS MUCH VEGETATIVE COVER AS PRACTICAL, PARTICULARLY BESIDE MAIN DRAINAGE LINES. FENCE OFF BUFFER AREAS TO PREVENT DISTURBANCE
- PROTECT ALL CUT AND FILL BATTERS FROM RUN-OFF AND STABILISE IMMEDIATELY AFTER CONSTRUCTION.
- USE CONTOUR PLOUGHING AND/OR SURFACE ROUGHENING OF FINISHED LANDFORM TO SLOW WATER FLOW DURING RAIN EVENTS.
- INSTALL SILT FENCES ON THE LOW SIDE OF ANY STOCKPILE
- INSTALL PERMANENT DRAINAGE FACILITIES AT AN EARLY STAGE.
- FILTER SOCKS TO BE INSTALLED AT ALL OPEN PITTS AND KERB SIDE SUMPS
- PROVIDE PROTECTION TO NEW DRAINAGE INLETS IMMEDIATELY ON CONNECTION TO THE DRAINAGE SYSTEM
- ESTABLISH ALTERNATIVE STABLE DRAINAGE SYSTEMS THROUGH THE SITE WHILE PERMANENT FACILITIES ARE BEING INSTALLED
- USE DIVERSION STRUCTURES TO DIVERT RUN-OFF TO A STABLE DISPOSAL AREA.
- STABILISE AND GRASS ALL CONVERSION SWALES AND DRAINS. WHERE MAJOR TEMPORARY DRAINAGE PATHS ARE CREATED, CONSTRUCT HAY BALE WEIRS (WRAPPED IN BIDDIM) ACROSS THE ENTIRE FLOW PATH AND AT 25M INTERVALS.
- STABILISE AND GRASS ALL DIVERSION SWALES AND DRAINS.
- INSTALL SEDIMENT TRAPS AT DRAINAGE INLETS AND OTHER POINTS OF DISCHARGE FROM AREAS OF DISTURBANCE.
- UNDERTAKE VEGETATIVE STABILISATION MEASURES IMMEDIATELY AFTER COMPLETION OF FINAL LAND FORMING.
- PLACE HAY BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE HAY TO FILL ANY GAPS BETWEEN BALES. - ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
- EMBED EACH BALE IN THE GROUND 75mm-100mm AND ANCHOR WITH TWO 12M STAR PICKETS OR STAKES. ANGLE FIRST STAR PICKET/STAKE IN EACH BALE TOWARDS PREVIOUSLY LAID BALE. DRIVE 600mm INTO THE GROUND AND, WHERE STAR PICKETS PROTRUDE ABOVE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.

**AIR QUALITY:**  
SUPPRESS DUST BY THE INCLUDING FOLLOWING METHODS WHERE APPLICABLE:

- a. STAGE WORKS TO LIMIT THE EXTENT OF EXPOSED AND UNPROTECTED AREAS.
- b. REGULAR SPRAYING OF WATER
- c. COVER AND SECURE VEHICLE LOADS ENTERING/EXITING SITE
- d. USE AN ENVIRONMENTALLY FRIENDLY CHEMICAL SPRAY TO BIND SOIL TOGETHER THUS STABILISING UNREST SOIL
- e. UNLIMITED SPEED OF VEHICLES ONSITE

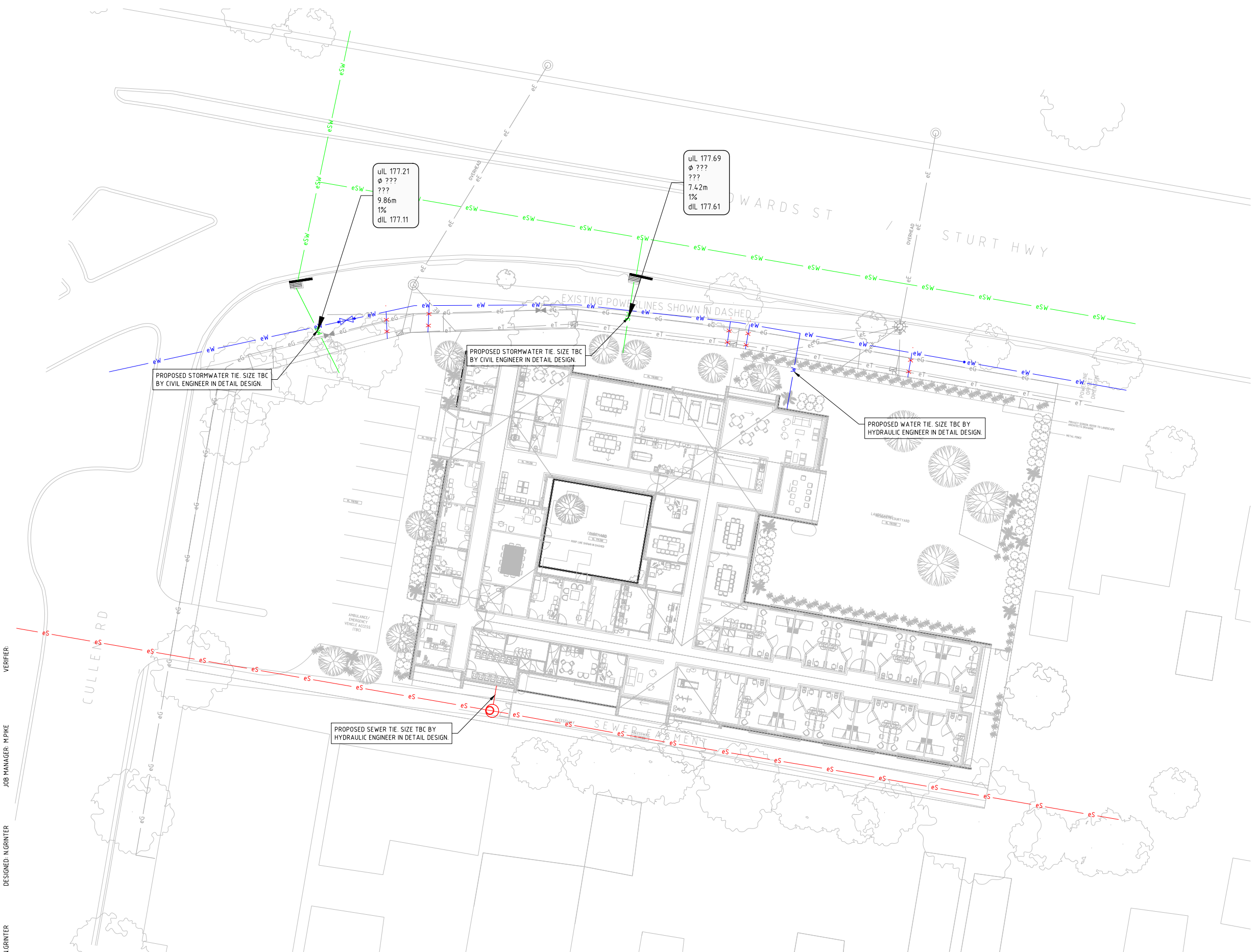
- f. COVER STOCKPILES TO PROTECT FROM THE WIND

- IMPLEMENT MEASURES TO LIMIT AIR POLLUTION BY VEHICLES AND PLANT WORKING ON OR PASSING THROUGH THE SITE
- MAINTAIN POLLUTION CONTROL MEASURES DURING CONSTRUCTION AND UNTIL FULL STABILISATION. ROUTINELY INSPECT EACH WEEK AND AFTER SIGNIFICANT RAINFALL EVENTS. REPAIR AND REINSTATE WORKS AS NEEDED TO MAINTAIN PROTECTION. RECORD MAINTENANCE ACTIVITIES AND DETAILS AND PROVIDE TO EPA FOR INSPECTION WHEN REQUESTED.

FIRE:

- BURNING OF WASTE MATERIALS MUST NOT BE UNDERTAKEN.





LEGEND  
PROPOSED SERVICES

- SW NEW STORMWATER PIPE
- NEW STORMWATER GRATED PIT
- NEW STORMWATER TANK
- NEW STORMWATER SPEL FILTER
- NEW STORMWATER GRATED TRENCH
- eS NEW SEWER PIPE
- W NEW WATER PIPE
- EXISTING SERVICES
- eSw EXISTING STORMWATER PIPE / KERB INLET PIT
- eS EXISTING SEWER PIPE / MAINTENANCE HOLE
- H SV EXISTING WATER PIPE FIRE HYDRANT / SLUICE VALVE
- X eW X EXISTING WATER PIPE TO BE ABANDONED
- eE EXISTING ELECTRICITY / POLE / STREETLIGHT
- eG EXISTING GAS SERVICE / VALVE
- eT EXISTING COMMUNICATIONS SERVICE / PIT

GENERAL NOTES

1. WATER AND SEWER CONNECTIONS TO THE BLOCK MUST BE DESIGNED BY A SUITABLY QUALIFIED HYDRAULIC ENGINEER PRIOR TO CONSTRUCTION.
  2. REDUNDANT WATER TIES TO BE REMOVED IN ACCORDANCE WITH RIVERINA WATER'S AND WATER METERS RETURNED TO RIVERINA WATER AS APPLICABLE.
  3. STORMWATER DESIGN TO BE REVIEWED AT DETAILED DESIGN BY A SUITABLY QUALIFIED ENGINEER PRIOR TO CONSTRUCTION.
  4. ALL EXISTING SEWER, STORMWATER AND WATER CONNECTIONS TO THE BLOCK ARE TO BE CAPPED AND WATERPROOFED.
  5. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH RIVERINA WATER SPECIFICATIONS, WATER SERVICES ASSOCIATION OF AUSTRALIA CODES, CITY OF WAGGA WAGGA COUNCIL STANDARDS, SPECIFICATIONS AND DRAWINGS AND RELEVANT AUSTRALIAN STANDARDS.
  6. THE CONTRACTOR MUST VISIT THE SITE OF WORKS BEFORE TENDERING AND MAKE ALLOWANCES IN THERE TENDER FOR ALL TOPOGRAPHIC CONSTRAINTS AFFECTING THE EXECUTION OF THE WORKS AND THE RESTORATION OF THE SITE.
  7. THE CONTRACTOR MUST SECURE ALL PERMITS, ARRANGE ALL CLEARANCES AND PAY ALL FEES REQUIRED TO COMPLETE THE PROJECT, PRIOR TO THE COMMENCEMENT OF WORK.
  8. ALTHOUGH THE POSITION OF EXISTING UNDERGROUND SERVICES HAS BEEN PLOTTED FROM AVAILABLE RECORDS, THE CONTRACTOR MUST DIG TEST PIT BY HAND AT UTILITY CROSSINGS AND/OR CONNECTIONS IN ADVANCE OF TRENCHING.
  9. EXCESS EXCAVATED MATERIAL MATERIAL SHALL BE REMOVED FROM THE SITE AND DUMPED AT AN APPROVED SPOIL AREA.
- WARNING:  
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REINSTATEMENT GENERALLY

1. UNLESS OTHERWISE DIRECTED REINSTATE ALL SURFACES DISTURBED BY THE WORKS WITH MINIMUM 100mm SITE TOP SOIL, DRY LAND GRASS, BITUMEN, STRAW MULCH.
2. CONSOLIDATE FOR 13 WEEKS ONCE HEALTHY SWARD ESTABLISHED.
3. REMOVE ALL EXCESS SOIL INCLUDING EXCESS TOPSOIL AND UNSUITABLE SUBGRADE FROM THE SITE UNLESS DIRECTED OTHERWISE.

NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	FOR COMMENT		NG	MP	16.04.20
2	FOR COMMENT (V2)		NG	MP	23.04.20
3	DA (V2)		NG	MP	16.07.20

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SCALE 1:200 @ A1	

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PROJECT	THE RIVERINA CLINIC 336 - 344 EDWARD STREET WAGGA WAGGA
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DRAWING TITLE	CIVIL WORKS EXTERNAL SERVICES PLAN
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JOB NUMBER	CR193049
DRAWING NUMBER	REVISION
C172	3
DRAWING SHEET SIZE = A1	