

PROPOSED INDUSTRIAL DEVELOPMENT 9 CHRISTENSEN ROAD SOUTH, STAPYLTON OPERATIONAL WORKS - BULK EARTHWORKS

GENERAL NOTES

1. ALL DIMENSIONS GIVEN ON THESE DRAWINGS ARE IN METRES, UNLESS NOTED OTHERWISE.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH THE PROJECT DRAWINGS, SPECIFICATION AND CURRENT COUNCIL STANDARDS AND SPECIFICATIONS.
3. ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE WORK HEALTH AND SAFETY REGULATION (2011).
4. CONTRACTOR TO PROVIDE TRAFFIC MANAGEMENT FOR THE DURATION OF CONSTRUCTION IN ACCORDANCE WITH "THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
5. THE CONTRACTOR IS TO LOCATE, IDENTIFY AND ESTABLISH THE CONNECTIVITY OF ALL EXISTING SERVICES WITHIN THE LIMITS OF PROPOSED WORKS AND CONFIRM THIS INFORMATION WITH THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
6. PROPERTY BOUNDARIES ARE SUBJECT TO CONFIRMATION BY FIELD SURVEY CARRIED OUT BY A REGISTERED SURVEYOR.
7. ALL WORK SHALL BE JOINED NEATLY TO EXISTING FEATURES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MEASURING DEVICES, SAFETY EQUIPMENT AND MACHINERY REQUIRED TO CARRY OUT INSPECTIONS/MEETINGS AS SPECIFIED OR REQUESTED BY THE ENGINEER.
9. PROOF ROLLING SHALL BE CARRIED OUT USING A SINGLE AXLE HIGHWAY TRUCK WITH A REAR AXLE LOAD NOT LESS THAN 8 TONNES AND TYRES INFLATED TO 550kPa OR APPROVED EQUIVALENT. EQUIPMENT LABOUR AND LOADING REQUIRED FOR PROOF ROLLING IS TO BE PROVIDED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL RESTORE ALL EXISTING AREAS TO BE MAINTAINED, TO THEIR ORIGINAL CONDITION UPON COMPLETION OF THE WORKS.
11. AS CONSTRUCTED SURVEY OF ALL COMPLETED WORKS IS TO BE COMPLETED BY A REGISTERED SURVEYOR AT CONTRACTOR COST, AND PROVIDED AT THE COMPLETION OF WORKS.
12. THESE NOTES SHALL APPLY TO ALL PORTIONS OF THE WORKS.
13. FOR SETOUT REFER TO CONSULTING ENGINEER FOR DIGITAL DATA.

SCHEDULE OF PROJECT DRAWINGS

DRG. NO.	DRAWING TITLE
101	COVER SHEET, SITE PLAN, LOCALITY PLAN, SCHEDULE OF DRAWINGS AND GENERAL NOTES
BE101	BULK EARTHWORKS PLAN
BE102	BULK EARTHWORKS DETAILS
SE101	SEDIMENT AND EROSION CONTROL PLAN
SE102	SEDIMENT AND EROSION CONTROL DETAILS

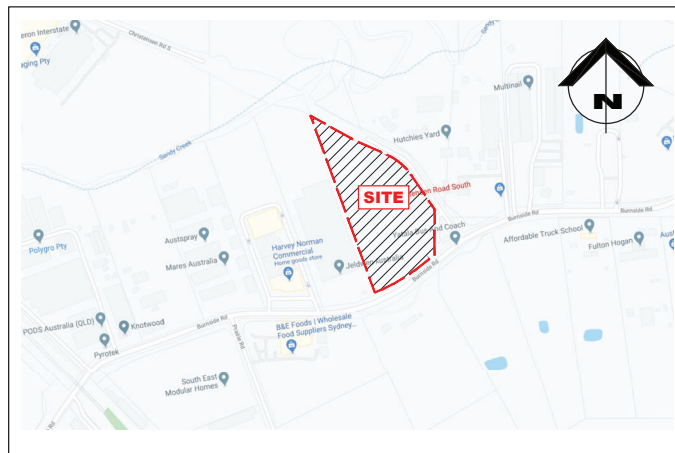
APPROVAL ISSUE
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PLANS AND DOCUMENTS referred to in the
DEVELOPMENT APPROVAL

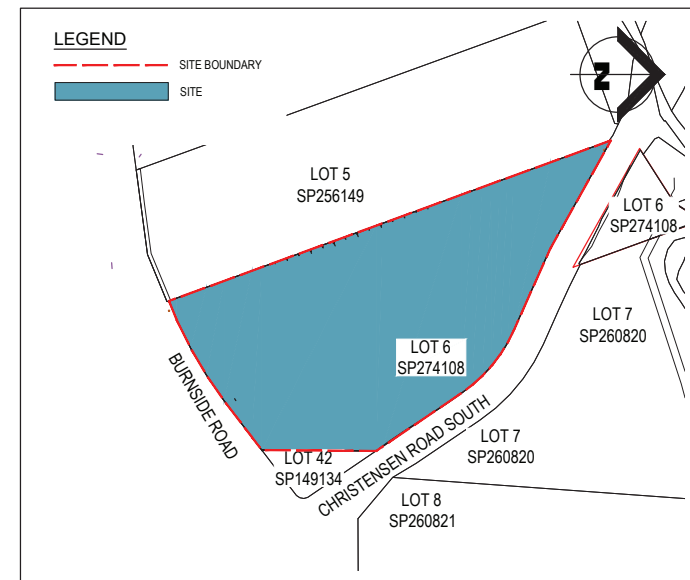
Application No.: OPW/2020/1492

Dated: 18 December 2020

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LOCALITY PLAN
NOT TO SCALE



SITE PLAN
SCALE: 1:2000

			 KNOBEL 工程顧問 建築專業服務  Suite 4 - 155 Varsity Parade, PO Box 41, Varsity Lakes QLD 4227 Varsity Lakes Q 4227 ABN: 33 071 435 202 T: 07 5580 9777 F: 07 5580 9133 W: knobelengineers.com.au E: eng@knobelengineers.com.au GOLD COAST BRISBANE BALLINA ROCKHAMPTON	CLIENT TAYLEX PTY LTD		DESIGN HH	DRAWN HH	APPROVED LH	TITLE COVERSHEET, SITE PLAN, LOCALITY PLAN, SCHEDULE OF DRAWINGS AND GENERAL NOTES	PROJECT NO. K5176	
				PROJECT PROPOSEDE INDUSTRIAL SUBDIVISION 9 CHRISTENSEN ROAD SOUTH STAPYLTON QLD 4207	L.HARRIOTT - R.P.E.Q. NUMBER 22487			SCALE AS SHOWN	DWG NO. 101	ISSUE A	
A	22.09.2020	ISSUE FOR APPROVAL		 C. Harrriott			22.09.2020				
1	03.09.20	ISSUE FOR INFORMATION					SIGNED				DATE

BULK EARTHWORKS LEGEND

- AREA OF CUT (TO FINISHED SURFACE)
- AREA OF FILL (TO FINISHED SURFACE)
- FINISHED SURFACE CONTOURS
- EXISTING SURFACE CONTOURS
- CONCRETE SLEEPER RETAINING WALL (REFER TO STRUCTURAL ENGINEER FOR DETAILS)
- STAGE BOUNDARY
- PROPERTY BOUNDARY
- DIVERSION DRAIN
- EARTHWORKS SPOT LEVEL
- TOW 0.000
- BOW 0.000
- TOP / BOTTOM OF WALL LEVEL

BULK EARTHWORKS VOLUMES

ITEM	VOLUME (m³)
TOPSOIL STRIP (100mm)	2 856
CUT	13 425
FILL	10 504
BALANCE	+(2 920)
	+(EXCESS)
	-(SHORTFALL)

PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

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EARTHWORKS PAD TO MATCH NEATLY WITH STEEP BATTER IN ADJACENT LOT 5 ON SP256149. REFER TO DRG. No. BE102 FOR DETAILS

EARTHWORKS NOTES

- STRIP THE CONSTRUCTION AREA OF ALL GRASS, SHRUBS, RUBBISH, DELETERIOUS MATERIAL AND UNSUITABLE TOPSOIL AS NOMINATED BY THE ENGINEER. DISPOSE OF ALL SUCH MATERIAL OFF SITE.
- TOPSOIL APPROVED BY THE ENGINEER FOR REUSE, IS TO BE STOCKPILED ON SITE.
- BULK EARTHWORKS IS TO BE CARRIED OUT IN ACCORDANCE WITH GOLD COAST CITY COUNCIL STANDARDS AND THE REQUIREMENTS OF AS3798. GEOTECHNICAL SUPERVISION OF EARTHWORKS IS TO BE CARRIED OUT IN ACCORDANCE WITH LEVEL 1 OF AS3798 BY A N.A.T.A. REGISTERED GEOTECHNICAL TESTING AUTHORITY AT THE CONTRACTORS COST. THE CONTRACTOR SHALL PROVIDE DETAILS OF ALL TESTING TO THE ENGINEER PROGRESSIVELY THROUGH THE WORKS AND NOTIFY THE ENGINEER OF ANY NON-CONFORMANCES. ALL NON CONFORMING WORK IS TO BE RECTIFIED AS DIRECTED BY THE ENGINEER.
- PRIOR TO FILL OPERATIONS AND IN THE PRESENCE OF THE ENGINEER, PROOF ROLL THE FILL AREA SUBGRADE. REMOVE SOFT AND OR COMPRESSIBLE ZONES AND REPLACE WITH SELECT SITE MATERIAL COMPACTED TO A DENSITY CONSISTENT WITH THAT PRESCRIBED FOR PROPOSED FILLING ABOVE.
- THE MAJORITY OF MATERIAL WON FROM PROPOSED EXCAVATIONS SHOULD BE SUITABLE FOR REUSE AS FILL MATERIAL APART FROM ANY OVERSIZE MATERIAL. SUITABLE MATERIALS FOR FILLING SHOULD GENERALLY HAVE A MAXIMUM PARTICLE SIZE NOT EXCEEDING 150mm. OVERSIZE MATERIAL IS TO BE EITHER CRUSHED TO A PARTICLE SIZE $\leq 150\text{mm}$ FOR REUSE AS FILL MATERIAL OR DISPOSED OF OFF SITE.
- PLACE FILL IN LAYERS OF LOOSE THICKNESS APPROPRIATE TO THE TYPE OF COMPACTION EQUIPMENT BEING USED AND NOT GREATER THAN 250mm. COMPACT EACH FILLING LAYER TO THE MINIMUM DRY DENSITY SPECIFIED. THE MOISTURE CONTENT OF FILL MATERIAL SHOULD BE MAINTAINED WITHIN THE RANGE OF $\pm 2\%$ OF THE OPTIMUM MOISTURE CONTENT.
- EARTHWORKS PROFILES ARE TO BE TRANSITIONED UNIFORMLY BETWEEN PRESCRIBED SLOPES.
- FOLLOWING COMPLETION OF BULK EARTHWORKS OPERATIONS THE CONTRACTOR IS TO NOTIFY THE SUPERINTENDENT. THE FINISHED SURFACE IS TO BE PROOF ROLLED IN THE PRESENCE OF THE ENGINEER PRIOR TO TOPSOILING.
- STOCKPILED TOPSOIL IS TO BE SPREAD TO AN EVEN 100mm THICKNESS OVER ALL BATTERS AND SURROUNDING AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS TO DISPOSE OF EXCESS TOPSOIL OFF SITE.
- IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT THE SITE AND SURROUNDING AREAS FROM DAMAGE RESULTING FROM STORMWATER RUNOFF. TEMPORARY DIVERSION DRAINS AND OR OTHER DRAINAGE CONTROL DEVICES ARE TO BE IMPLEMENTED BY THE CONTRACTOR DURING CONSTRUCTION TO MINIMISE THE EFFECTS OF WEATHER. NO EXTENSIONS OF TIME WILL BE GRANTED SHOULD DAMAGE TO THE WORKS AND SURROUNDING AREAS RESULT FROM THE CONTRACTOR'S NEGLIGENCE IN NOT PROVIDING ADEQUATE PROTECTION.
- IMPORTED FILL MATERIAL IF ORDERED, SHALL BE LOW PLASTICITY GRANULAR FILL HAVING THE FOLLOWING CHARACTERISTICS:
 - MINIMUM CBR 15%
 - PLASTICITY INDEX $< 15\%$
 - % PASSING 0.075mm SIEVE $< 25\%$
- EXCESS SPOIL MATERIAL GENERATED DURING CONSTRUCTION IS TO BE DISPOSED OF AS DIRECTED BY THE SUPERINTENDENT.
- ALL FILL MATERIAL PLACED ON THE SITE COMPRISING ONLY NATURAL EARTH AND ROCK IS TO BE FREE OF CONTAMINANTS (AS DEFINED BY SECTION 11 OF THE ENVIRONMENTAL PROTECTION ACT (EPA) 1994). NOXIOUS, HAZARDOUS, DELETERIOUS AND ORGANIC MATERIALS. SUITABLE FILL MATERIAL IS DEEMED TO COMPLY WITH THE REQUIREMENTS OF CLAUSE 4.3, AS3798, GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS.
- THE MOVEMENT OF MATERIAL TO AND FROM THE SITE IS TO BE IN ACCORDANCE WITH RELEVANT EPA POLICIES, IN PARTICULAR THOSE ADDRESSING PRESENCE AND TREATMENT OF FIRE ANTS.
- ALL BATTERS GREATER THAN 600mm HIGH TO BE MAXIMUM GRADE 1 IN 4. BATTERS LESS THAN 600mm HIGH TO BE MAXIMUM GRADE OF 1 IN 2.

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CLIENT
TAYLEX PTY LTD

PROJECT
PROPOSED INDUSTRIAL SUBDIVISION
9 CHRISTENSEN ROAD SOUTH
STAPYLTON QLD 4207

DESIGN
HH

DRAWN
HH

APPROVED
LH

TITLE
BULK EARTHWORKS PLAN

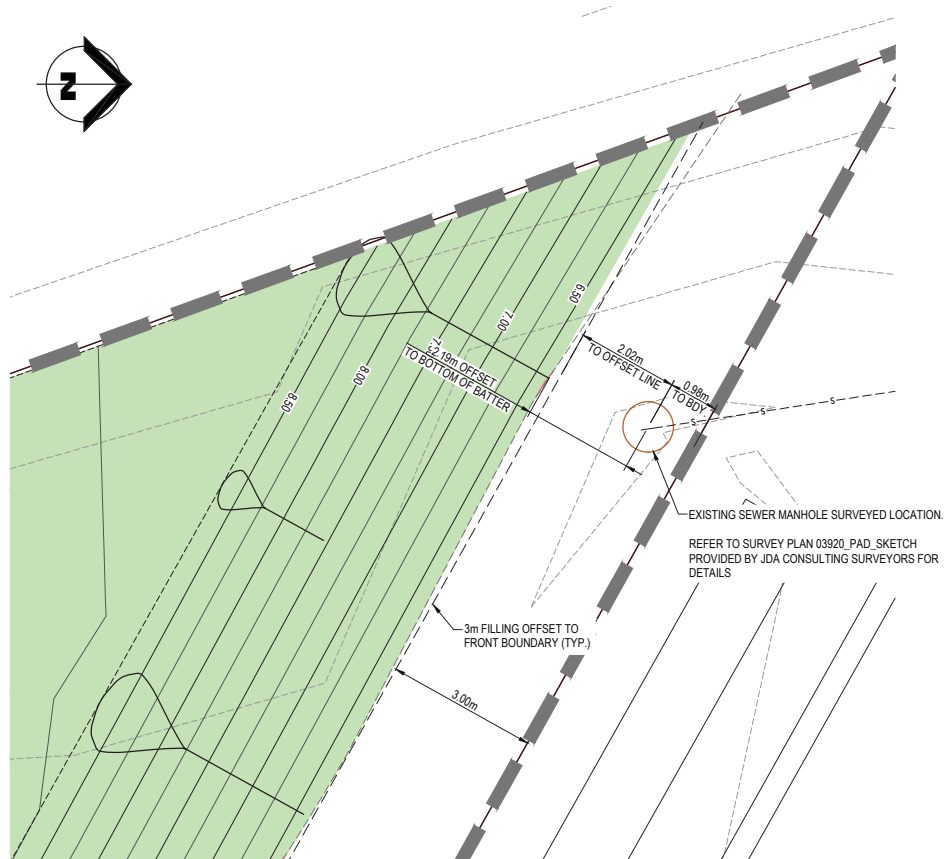
PROJECT NO.
K5176

L HARRIOTT - R.P.E.Q. NUMBER 22487

SIGNED
C. Harrington
DATE
18.11.2020

SCALE
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1:1000 AT A3
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DWG NO.
BE101
ISSUE
B



BULK EARTHWORKS & SERVICES OFFSET PLAN
SCALE 1:50 AT A1

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PLANS AND DOCUMENTS referred to in the DEVELOPMENT APPROVAL

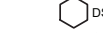
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			 		CLIENT TAYLEX PTY LTD		DESIGN HH		DRAWN HH		APPROVED LH		TITLE BULK EARTHWORKS & SERVICES OFFSET PLAN			PROJECT NO. K5176	
			Suite 4 - 155 Varsity Parade, PO Box 41, Varsity Lakes QLD 4227 Varsity Lakes Q 4227 ABN: 33 072 435 202 T: 07 5580 9717 F: 07 5580 9133 W: knobelengineers.com.au E: eng@knobelengineers.com.au		PROJECT PROPOSEDE INDUSTRIAL SUBDIVISION 9 CHRISTENSEN ROAD SOUTH STAPYLTON QLD 4207		L.HARRIOTT - R.P.E.Q. NUMBER 22487 						SCALE 1:50 AT A1 1:100 AT A3			DWG NO. BE103	
A 18.11.2020 COUNCIL RFI RESPONSE													0 1 2 3 4 5m			ISSUE A	
ISSUE NO. DATE AMENDMENT							18.11.2020										

SEDIMENT & EROSION CONTROL LEGEND

-  SF SEDIMENT FENCE
-  TEMPORARY DIVERSION DRAIN
-  STABILISED ENTRY/EXIT POINT
-  DRAINAGE STRUCTURE PROTECTION
-  WATER QUALITY MONITORING STATION
-  FLOW ARROW
-  ROCK CHECK DAM
-  LAWFUL POINT OF DISCHARGE
-  FINISHED SURFACE CONTOURS
-  EXISTING SURFACE CONTOURS
-  STAGE BOUNDARY
-  PROPERTY BOUNDARY

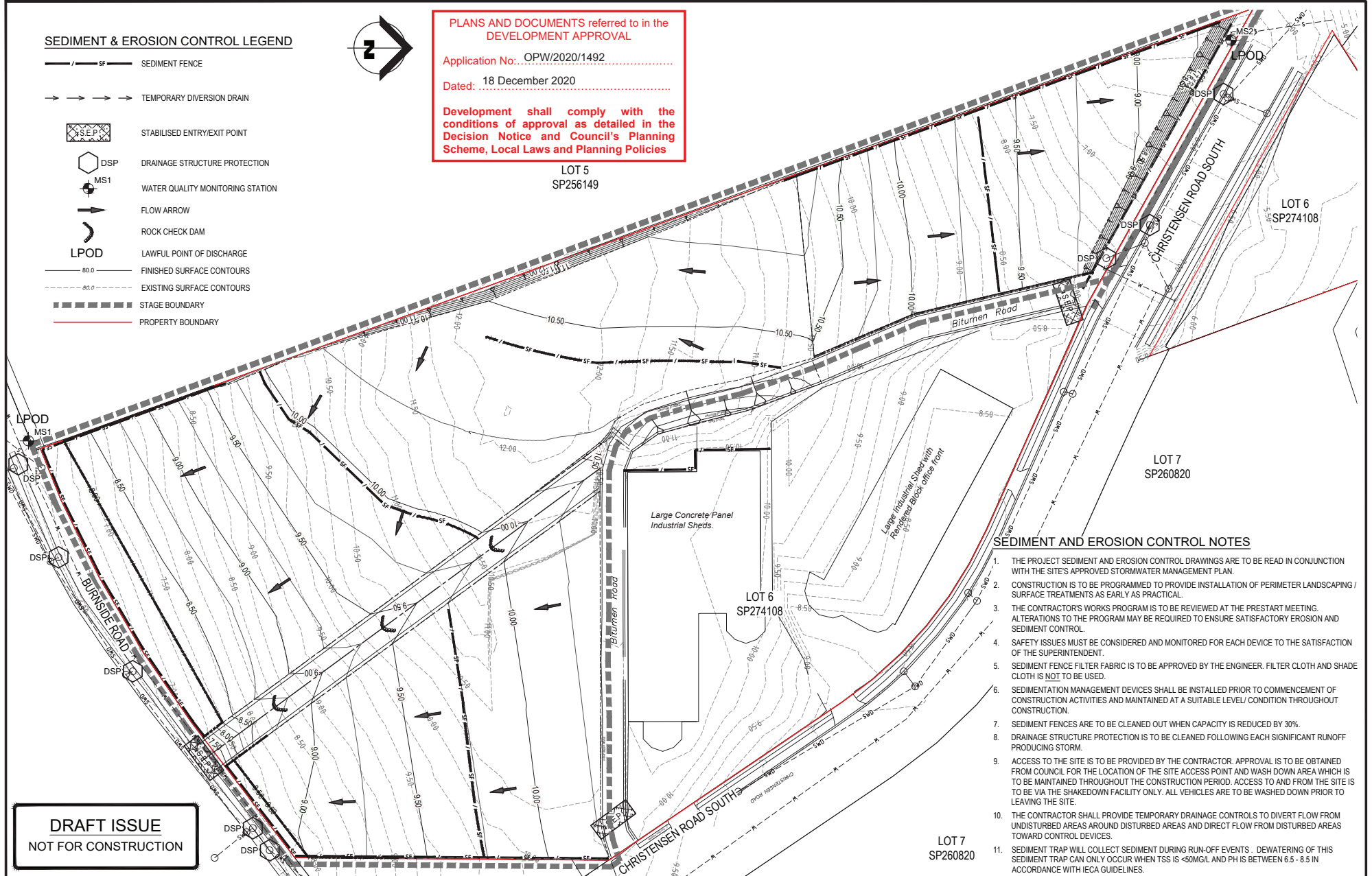


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SEDIMENT AND EROSION CONTROL NOTES

1. THE PROJECT SEDIMENT AND EROSION CONTROL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SITE'S APPROVED STORMWATER MANAGEMENT PLAN.
2. CONSTRUCTION IS TO BE PROGRAMMED TO PROVIDE INSTALLATION OF PERIMETER LANDSCAPING / SURFACE TREATMENTS AS EARLY AS PRACTICAL.
3. THE CONTRACTOR'S WORKS PROGRAM IS TO BE REVIEWED AT THE PRESTART MEETING. ALTERATIONS TO THE PROGRAM MAY BE REQUIRED TO ENSURE SATISFACTORY EROSION AND SEDIMENT CONTROL.
4. SAFETY ISSUES MUST BE CONSIDERED AND MONITORED FOR EACH DEVICE TO THE SATISFACTION OF THE SUPERINTENDENT.
5. SEDIMENT FENCE FILTER FABRIC IS TO BE APPROVED BY THE ENGINEER. FILTER CLOTH AND SHADE CLOTH IS NOT TO BE USED.
6. SEDIMENTATION MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND MAINTAINED AT A SUITABLE LEVEL/ CONDITION THROUGHOUT CONSTRUCTION.
7. SEDIMENT FENCES ARE TO BE CLEANED OUT WHEN CAPACITY IS REDUCED BY 30%.
8. DRAINAGE STRUCTURE PROTECTION IS TO BE CLEANED FOLLOWING EACH SIGNIFICANT RUNOFF PRODUCING STORM.
9. ACCESS TO THE SITE IS TO BE PROVIDED BY THE CONTRACTOR. APPROVAL IS TO BE OBTAINED FROM COUNCIL FOR THE LOCATION OF THE SITE ACCESS POINT AND WASH DOWN AREA WHICH IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. ACCESS TO AND FROM THE SITE IS TO BE VIA THE SHAKEDOWN FACILITY ONLY. ALL VEHICLES ARE TO BE WASHED DOWN PRIOR TO LEAVING THE SITE.
10. THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE CONTROLS TO DIVERT FLOW FROM UNDISTURBED AREAS AROUND DISTURBED AREAS AND DIRECT FLOW FROM DISTURBED AREAS TOWARD CONTROL DEVICES.
11. SEDIMENT TRAP WILL COLLECT SEDIMENT DURING RUN-OFF EVENTS. DEWATERING OF THIS SEDIMENT TRAP CAN ONLY OCCUR WHEN TSS IS <50MG/L AND PH IS BETWEEN 6.5 - 8.5 IN ACCORDANCE WITH IECA GUIDELINES.

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DESIGN
HH

DRAWN
HH

APPROVED
LH

L HARRIOTT - R.P.E.Q. NUMBER 22487

SIGNED
C. Harrriott

DATE
18.11.2020

TITLE
SEDIMENT & EROSION CONTROL PLAN

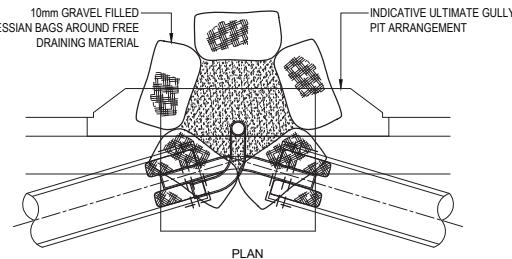
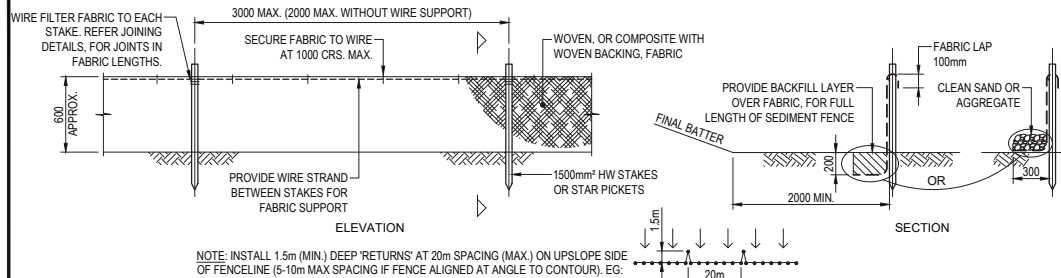
PROJECT NO.
K5176

DWG NO. ISSUE
SE101 B

SCALE
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1:1000 AT A3



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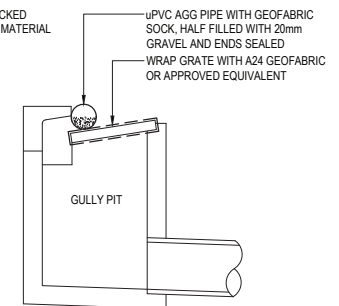
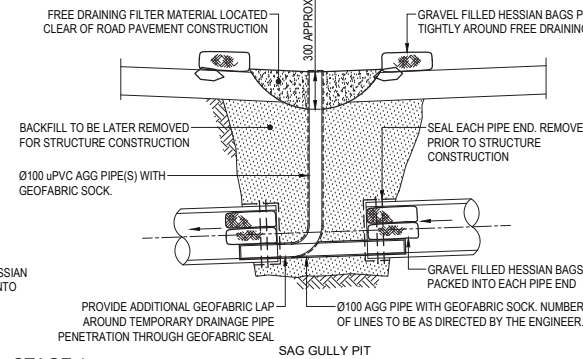
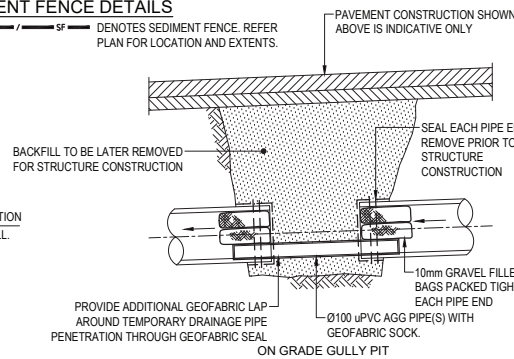
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SEDIMENT FENCE DETAILS

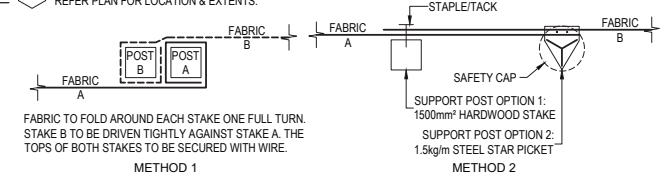
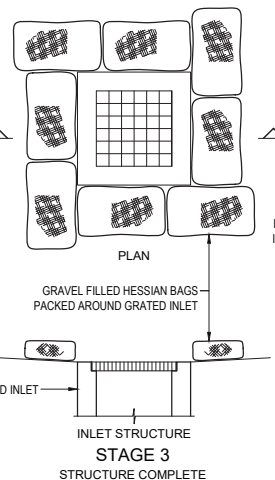
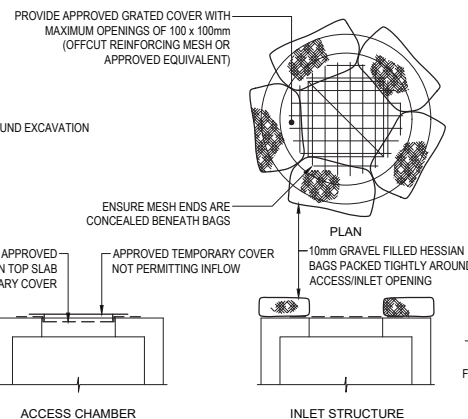
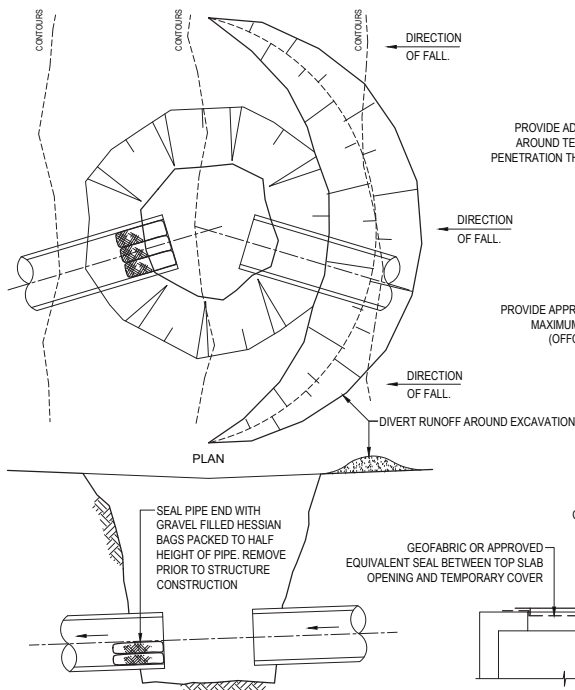
N.T.S. DENOTES SEDIMENT FENCE. REFER PLAN FOR LOCATION AND EXTENTS.



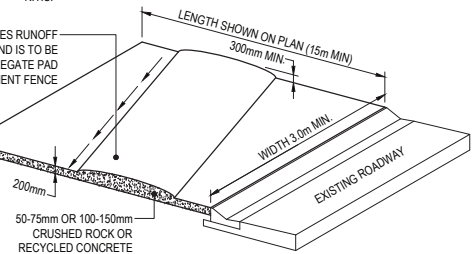
STAGE 2 STRUCTURE COMPLETE

STAGE 1 EXCAVATION, PIPE INSTALLATION AND INTERIM BACKFILLING

ROADWAY GULLY PIT DENOTES DRAINAGE STRUCTURE PROTECTION. REFER PLAN FOR LOCATION & EXTENTS.



SEDIMENT FENCE FABRIC JOINING DETAILS



STABILISED ENTRY/EXIT POINT

N.T.S. DENOTES STABILISED ENTRY/EXIT POINT. REFER PLAN FOR LOCATIONS.

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PROJECT
**PROPOSED INDUSTRIAL SUBDIVISION
9 CHRISTENSEN ROAD SOUTH
STAPYLTON QLD 4207**

DESIGN	DRAWN	APPROVED
HH	HH	LH
L.HARRIOTT - R.P.E.Q. NUMBER 22487		
C. HARRIOTT		
SIGNED	22.09.2020	DATE

TITLE	PROJECT NO.
SEDIMENT & EROSION CONTROL NOTES	K5176
SCALE NTS	DWG NO. SE102
	ISSUE A