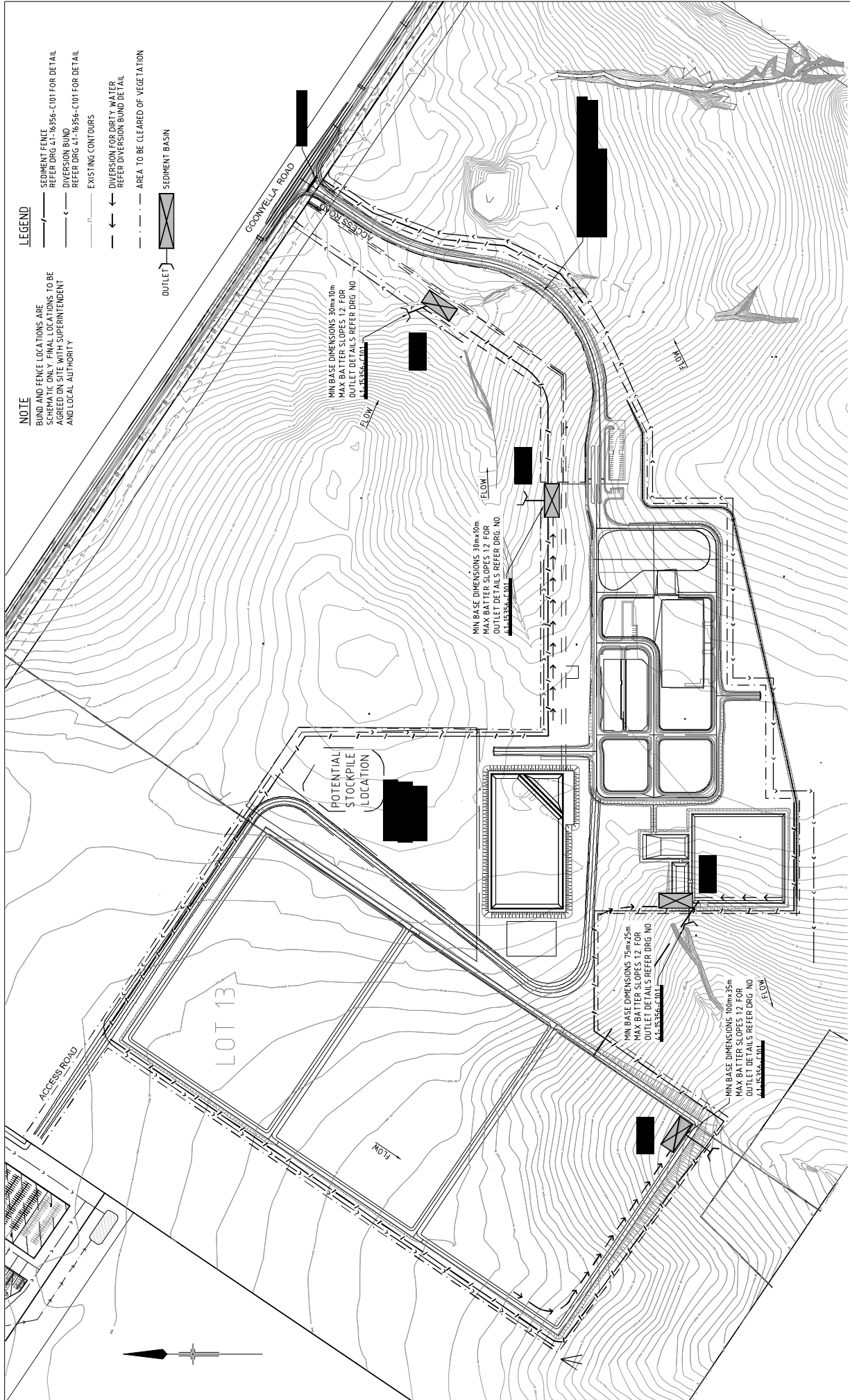




Appendix E

Stormwater Management Plan Drawings (Construction)



NOTE
 BUND AND FENCE LOCATIONS ARE SCHEMATIC ONLY. FINAL LOCATIONS TO BE AGREED ON SITE WITH SUPERINTENDENT AND LOCAL AUTHORITY.

LEGEND

- SEDIMENT FENCE REFER DRG 41-16356-C101 FOR DETAIL
- DIVERSION BUND REFER DRG 41-16356-C101 FOR DETAIL
- EXISTING CONTOURS
- ← DIVERSION FOR DIRTY WATER REFER DIVERSION BUND DETAIL
- AREA TO BE CLEARED OF VEGETATION
- OUTLET
- SEDIMENT BASIN

PRELIMINARY

DYNO NOBEL MORANBAH A.I.N. PLANT CONSTRUCTION CAMP SEDIMENT AND EROSION PLAN

Client: Dyno Nobel	Project: Moranbah A.I.N. Plant Construction Camp	Scale: AS 1:1000	Revision: A1
Drawn: [Name]	Checked: [Name]	Approved: [Name]	Date: [Date]

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Scale: 0 25 50 75 100 125m
 SCALE: 1:1000 AT ORIGINAL SIZE

Legend:
 B AMENDED PRELIMINARY ISSUE
 A PRELIMINARY ISSUE
 Rev: [Number] Issue: [Number] (Status: [Checked/Approved]) Date: [Date]

Client: GHD CLIENTS | PEOPLE | PERFORMANCE
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 GHD Pty Ltd (USA) EIN 13-0886904

Project: 41-16356-C100
 Date: 11/12/2018
 Scale: 1:1000
 Drawing No: 41-16356-C100
 Rev: B

GENERAL NOTES

- THE SEQUENCE OF OPERATIONS SHALL BE AS FOLLOWS:
 - DELINEATION OF BUFFER AREAS AND DRAINAGE RESERVES, ERECTION OF BARRIER FENCING
 - LOCATION OF TOPSOIL STOCKPILES AND ERECTION OF DOWNHILL SEDIMENT FENCE
 - CONSTRUCTION OF DIVERSION WORKS NECESSARY TO MINIMISE RUNOFF FROM ENTERING THE SITE
 - THE CONSTRUCTION OF TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (E.G. SILT FENCES), LAND CLEARING AND TOPSOIL STRIPPING
 - CONSTRUCTION OF STORMWATER DRAINAGE FACILITIES
 - LAND SHAPING
 - CONSTRUCTION OF ROADS, AND ACCESS WAYS, INSTALLATION OF SERVICES
 - FINAL REHABILITATION AND LANDSCAPING
 - MAINTENANCE
- ALL SEDIMENT FENCES ARE TO BE INSTALLED PARALLEL TO CONTOURS.
- SEDIMENT FENCES ARE TO BE INSTALLED DOWNHILL AND DIVERSION BANKS UPHILL OF TOPSOIL STOCKPILES
- TOPSOIL STOCKPILES ARE TO BE MULCHED OR TEMPORARILY VEGETATED IF THEY ARE TO REMAIN FOR MORE THAN 30 DAYS.
- MOVEMENT OF CONSTRUCTION EQUIPMENT SHALL BE LIMITED TO THE AREA OF WORK AND EXISTING ROADS. CONTRACTOR TO CONSTRUCT ENTRY/EXIT SEDIMENT TRAP ALTERNATIVE 2. REFER IPWEAO DWG D-0040. LOCATION TO BE CONFIRMED BY CONTRACTOR.

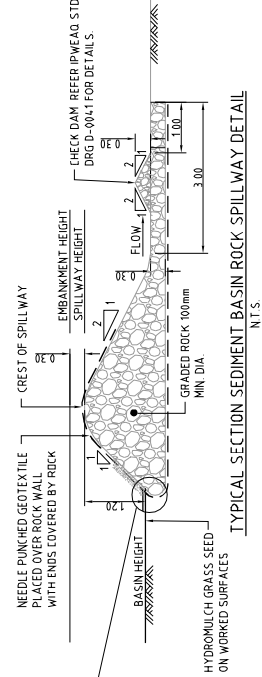
6. DISTURBED AREAS ARE TO BE GRASSED FOLLOWING FINAL FINISHING. AREAS ARE TO BE RESTORED AND RESTORED PROGRESSIVELY.
7. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED AND MAINTAINED AFTER EACH STORM EVENT AND AT REGULAR INTERVALS.
8. KERB AND/OR SURFACE INLET SEDIMENT TRAPS ARE TO BE PROVIDED AT EACH DRAINAGE PIT UNTIL ADJACENT DISTURBED AREAS ARE FULLY RESTORED.
9. FILTER ROLLS TO BE PROVIDED AT ALL STORMWATER INLET PITS.
10. ALL SEDIMENT CONTROL DETAILS SHOWN ARE INDICATIVE ONLY. REFER TO THE SPECIFICATION FOR DETAILS OF THE CONTRACTORS RESPONSIBILITIES IN RELATION TO EROSION AND SEDIMENT CONTROL ON THE SITE.
11. MAINTAIN SEDIMENT CONTROL DEVICES UNTIL NEW GROUND IS ESTABLISHED.
12. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL DEVICES AS DESCRIBED IN QUDM 9.0.3.5 WHERE DIRECTED, TO MINIMISE EROSION AND DOWNSLOPE SEDIMENT TRANSPORT
13. DUST CONTROL SCREENS TO BE CONSTRUCTED AROUND PERIMETER OF WORKS AS DIRECTED.
14. STOCKPILES, BORROW PITS, STORAGE AREAS TO BE CONSTRUCTED IN ACCORDANCE WITH PRINCIPLES DETAILED IN SECTION A.6.3 SOIL EROSION AND SEDIMENT CONTROL GUIDELINES FOR QUEENSLAND CONSTRUCTION SITES, JUNE 1996, IPWEAO.
15. SEDIMENT FENCES AND/OR CHECK DAMS TO BE INSTALLED AT THE ENDS OF DIVERSION BUNDS.

EROSION AND SEDIMENT CONTROL NOTES

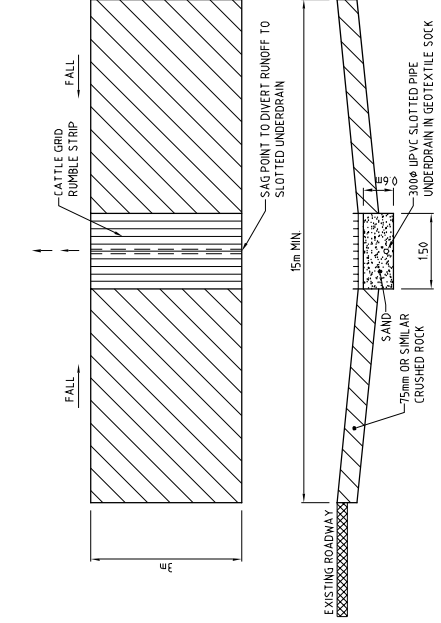
- CONSTRUCTION OF ALL SEDIMENT MANAGEMENT DEVICES SHALL BE COMPLETED AND EFFECTIVE PRIOR TO:
 - STRIPPING OF TOPSOIL AND GRASS
 - BULK EARTHWORKS TO THE SITE
 - SERVICE INSTALLATION
- ALL SEDIMENT MANAGEMENT DEVICES ARE TO REMAIN IN PLACE UNTIL WRITTEN NOTICE FROM LICENSING AND COMPLIANCE
- BOTH TEMPORARY AND PERMANENT SEDIMENT MANAGEMENT DEVICES SHALL BE MAINTAINED AT A SUITABLE LEVEL THROUGHOUT CONSTRUCTION. SEDIMENT FENCES ARE TO BE CLEANED OUT WHEN CAPACITY IS REDUCED BY 25%
- APPROVAL TO COMPLEMENTARY CONSTRUCTION APPROVAL IS TO BE OBTAINED FROM LICENSING AND COMPLIANCE FOR THE LOCATION OF THE SITE ACCESS POINT WASH DOWN AREA WHICH ARE TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- IF EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN FOUND TO BE DEFICIENT OR FAILED IN SERVICE, DUE TO UNFORESEEN CIRCUMSTANCES, CORRECTIVE ACTION IS TO BE UNDERTAKEN IMMEDIATELY WHICH MAY INCLUDE AMENDMENTS/ADDITIONS TO THE ORIGINAL APPROVED EROSION PLANS. SUCH ADDITIONS ARE TO BE APPROVED BY THE LOCAL AUTHORITY.
- THE INSTALLATION, REMOVAL, RELOCATION OR MODIFICATION TO EROSION AND SEDIMENT CONTROL DEVICES MAY BE MADE BY THE LOCAL AUTHORITY IF DEEMED NECESSARY AND RELEVANT.

MAINTENANCE OF SEDIMENT CONTROL DEVICES
ALL DEVICES SHOWN ARE TO BE IN PLACE PRIOR TO CONSTRUCTION. THEY ARE TO BE MAINTAINED IN GOOD CONDITION THROUGHOUT THE CONTRACT AND MAINTENANCE PERIOD. SEDIMENT BUILD UP IS TO BE REMOVED FROM THESE DEVICES AT REGULAR INTERVALS, ESPECIALLY IN WET WEATHER TO MAINTAIN THEIR EFFECTIVENESS

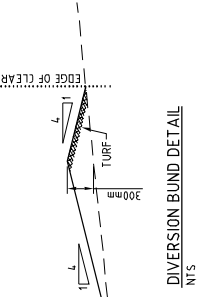
ALL SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL - ENGINEERING GUIDELINES FOR QUEENSLAND SITES PUBLISHED BY THE INSTITUTION OF ENGINEERS, AUSTRALIA, QUEENSLAND DIVISION, 1996.



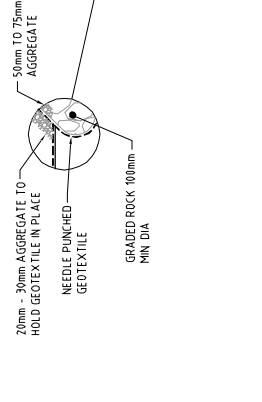
TYPICAL SECTION SEDIMENT BASIN ROCK SPILLWAY DETAIL
NTS



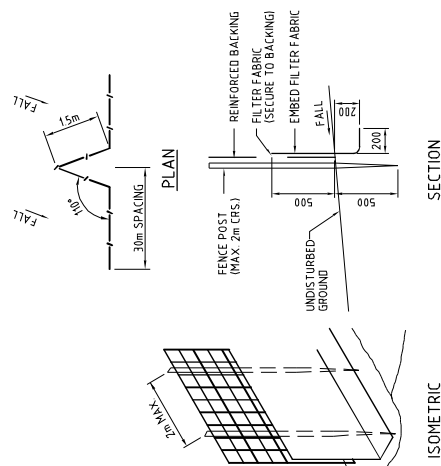
ENTRY/EXIT SEDIMENT TRAP
NTS



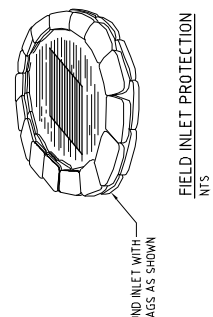
DIVERSION BUND DETAIL
NTS



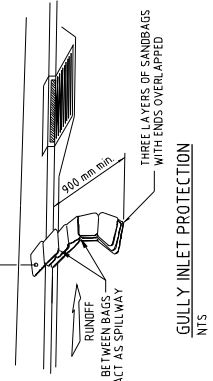
ISOMETRIC SEDIMENT CONTROL DETAILS
NTS



SEDIMENT FENCES SEDIMENT CONTROL DETAILS
NTS



FIELD INLET PROTECTION
NTS



GULLY INLET PROTECTION
NTS

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NO.	REVISION	DATE	BY	CHKD	APP'D
B	AMENDED PRELIMINARY ISSUE	11/12/2018	CI		
A	PRELIMINARY ISSUE	AMG			
1	Issue for Review	14/02/2019	AMG	CI	

PRELIMINARY
DYNO NOBEL MORANBAH A.N. PLANT CONSTRUCTION CAMP SEDIMENT AND EROSION DETAILS
Client: Dyno Nobel
Project: Moranbah A.N. Plant Construction Camp
Site: Moranbah A.N. Plant Construction Camp
Scale: AS B-DOWN
Drawing No: 41-16356-C101
Sheet: A1