

# HORSLEY DRIVE BUSINESS PARK

## CRN HORSLEY DRIVE & COWPASTURE ROAD

### WETHERILL PARK NSW

#### DRAWING LIST:

DRAWING NO.	DRAWING TITLE
Co11492.00-DA10	DRAWING LIST & GENERAL NOTES
Co11492.00-DA20	EROSION & SEDIMENT CONTROL PLAN
Co11492.00-DA25	EROSION & SEDIMENT CONTROL DETAILS - SHEET 1
Co11492.00-DA26	EROSION & SEDIMENT CONTROL DETAILS - SHEET 2
Co11492.00-DA31	BULK EARTHWORKS PLAN - SHEET 1
Co11492.00-DA32	BULK EARTHWORKS PLAN - SHEET 2
Co11492.00-DA33	BULK EARTHWORKS SECTIONS - SHEET 1
Co11492.00-DA34	BULK EARTHWORKS SECTIONS - SHEET 2
Co11492.00-DA35	BULK EARTHWORKS SECTIONS - SHEET 3
Co11492.00-DA36	BULK EARTHWORKS SECTIONS - SHEET 4
Co11492.00-DA37	BULK EARTHWORKS SECTIONS - SHEET 5
Co11492.00-DA38	BULK EARTHWORKS SECTIONS - SHEET 6

#### GENERAL NOTES:

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
2. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT STANDARDS AUSTRALIA CODES AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
3. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEER'S DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. ENGINEER'S DRAWINGS ISSUED IN ANY ELECTRONIC FORMAT MUST NOT BE USED FOR DIMENSIONAL SETOUT.
4. REFER TO THE ARCHITECT'S DRAWINGS FOR ALL DIMENSIONAL SETOUT INFORMATION.
5. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
6. UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.
7. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH ACCEPTABLE SAFETY STANDARDS & APPROPRIATE SAFETY SIGNS SHALL BE INSTALLED AT ALL TIMES DURING THE PROGRESS OF THE JOB.

#### SITE PREPARATION NOTES:

1. ALL EARTHWORKS SHALL BE COMPLETED GENERALLY IN ACCORDANCE WITH THE GUIDELINES SPECIFIED BY THE GEOTECHNICAL REPORT AND NOTES PROVIDED BY AUSSWIDE GEOTECHNICAL PTY LTD TITLED PRELIMINARY - STAGE 2 GEOTECHNICAL INVESTIGATION, DATED 28 MAY 2012, REF: A/W264/06.
2. EXISTING LEVELS ARE BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS BUILT ENVIRONMENT CONSULTANTS DATED 1 JUNE 2012, REF: SV07301000.
3. STRIP ANY TOP SOIL OR DELETERIOUS MATERIAL AND DISPOSE OF FROM SITE OR STORE AS DIRECTED.
4. COMPLETE CUT TO FILL EARTHWORKS TO ACHIEVE THE REQUIRED LEVELS AS INDICATED ON THE DRAWINGS WITHIN A TOLERANCE OF +0mm/-50mm.
5. PREPARE STEEP BATTERS TO RECEIVE FILL BY CONSTRUCTING BENCHING TO FACILITATE FILL PLACEMENT AND COMPACTION.
6. AREAS TO RECEIVE FILL THAT ARE NOT ON BENCHED BATTERS) AND AREAS IN CUT SHALL BE PROOF ROLLED TO IDENTIFY ANY SOFT HEAVING MATERIAL. SOFT MATERIAL SHALL BE BOXED OUT AND REMOVED PRIOR TO FILL PLACEMENT.
7. SITE WON FILL TO BE PLACED IN MAXIMUM 300mm LOOSE LAYERS AND COMPACTED TO 100% STANDARD AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT. NOTE THAT FILL COMPACTED GREATER THAN 103% STANDARD SHALL BE REJECTED AND WILL REQUIRE REMOVAL AND REPLACEMENT. FILL PLACED WITH MOISTURE GREATER THAN 2% FROM OMC SHALL BE REJECTED AND SHALL BE REMOVED AND REPLACED. IMPORTED FILL SHALL BE PLACED IN MAXIMUM 300mm LOOSE LAYERS AND COMPACTED TO 100% STANDARD AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
8. ALL EARTHWORKS SHALL BE COMPLETED UNDER LEVEL 1 CONTROL IN ACCORDANCE WITH AS 3199-2007.
9. AT COMPLETION OF EARTHWORKS SITE SHALL BE CLEARED AND MADE READY FOR INSTALLATION OF EROSION CONTROL AS OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL PLAN.
10. EXCESS SOIL, IF ANY, TO BE MOUNDDED AROUND SITE AS OUTLINED IN BULK EARTHWORKS PLAN.
11. EXISTING ROCK SHALL BE REMOVED BY HEAVY ROCK BREAKING OR RIPPING.

#### STORMWATER DRAINAGE NOTES:

1. ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLAN.
2. PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN.
3. EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON SITE.
4. ALL STORMWATER PIPES Ø375 OR GREATER SHALL BE CLASS 2 REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
5. ALL PIPES UP TO AND INCLUDING 300Ø TO BE uPVC GRADE S18.
6. ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTRED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE Fc-25 MPa. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
7. IN ADDITION TO ITEM 6 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
8. PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED. RAM AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMMERS OR OTHER SUITABLE TAMPING DETAILS.
9. WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED Ø100 uPVC TO EACH SIDE OF PIPE.
10. ALL SUBSOIL DRAINAGE LINES SHALL BE Ø100 SLOTTED uPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1% IN 200 MINIMUM. PROVIDE CAPPED CLEANING EVE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/LANDSCAPED INTERFACES, TO REAR OF ENGINEER/ AND AS SHOWN ON PLAN.
11. ALL PIPE GRADES 1 IN 100 MINIMUM UNO.
12. PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
13. MIN. 600 COVER TO PIPE OVERBENT BENEATH ROADS & MIN. 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
14. PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY'. THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS B 'MEDIUM DUTY' UNO.
15. PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
16. DOWN PIPES TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE UNO. ON PLAN. PROVIDE CLEANING EYE AT GROUND LEVEL.
17. PIPE LENGTHS NOMINATED ON PLAN OR LONGSECTIONS ARE MEASURED FROM CENTER OF PITS TO THE NEAREST 0.5m AND DO NOT REPRESENT ACTUAL LENGTH. THE CONTRACTOR IS TO ALLOW FOR THIS.

#### EROSION CONTROL NOTES

1. ALL CONTROL WORK INCLUDING DIVERSION BANKS AND CATCH DRAINS, V-DRAINS AND SILT FENCES SHALL BE COMPLETED DIRECTLY FOLLOWING THE COMPLETION OF THE EARTHWORKS.
1. SILT FENCES AND SILT FENCE RETURNS SHALL BE ERRECTED CONVEY TO THE CONTOUR TO POND WATER.
2. HAY BALE BARRIERS AND GEOFABRIC FENCES ARE TO BE CONSTRUCTED TO TOE OF BATTER, PRIOR TO COMMENCEMENT OF EARTHWORKS, IMMEDIATELY AFTER CLEARING OF VEGETATION AND BEFORE REMOVAL OF TOP SOIL.
3. ALL TEMPORARY EARTH BERMS, DIVERSION AND SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
4. CLEAR WATER IS TO BE DIVERTED AWAY FROM DISTURBED GROUND AND INTO THE DRAINAGE SYSTEM.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROVIDING ON GOING ADJUSTMENT TO EROSION CONTROL MEASURES AS REQUIRED DURING CONSTRUCTION.
6. ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE, APPROVED LOCATION.
7. ALL FINAL EROSION PREVENTION MEASURES INCLUDING THE ESTABLISHMENT OF GRASSING ARE TO BE MAINTAINED UNTIL THE END OF THE DEFECTS LIABILITY PERIOD.
8. ALL EARTHWORKS AREAS SHALL BE ROLLED ON A REGULAR BASIS TO SEAL THE EARTHWORKS.
9. ALL FILL AREAS ARE TO BE LEFT WITH A BUND AT THE TOP OF THE SLOPE AT THE END OF EACH DAY'S EARTHWORKS. THE HEIGHT OF THE BUND SHALL BE A MINIMUM OF 200MM.
10. ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND MULCHED WITHIN 10 DAYS OF COMPLETION OF FORMATION.
11. AFTER REVEGETATION OF THE SITE IS COMPLETE AND THE SITE IS STABLE IN THE OPINION OF A SUITABLY QUALIFIED PERSON ALL TEMPORARY WORK SUCH AS SILT FENCE, DIVERSION DRAINS ETC SHALL BE REMOVED.
12. ALL TOPSOIL STOCKPILES ARE TO BE SUITABLY COVERED TO PREVENT WIND AND WATER EROSION.
13. ANY AREA THAT IS NOT APPROVED BY THE CONTRACT ADMINISTRATOR FOR CLEARING OR DISTURBANCE BY THE CONTRACTOR'S ACTIVITIES SHALL BE CLEARLY MARKED AND SIGN POSTED, FENCED OFF OR OTHERWISE APPROPRIATELY PROTECTED AGAINST ANY SUCH DISTURBANCE.
14. ALL STOCKPILE SITES SHALL BE SITUATED IN AREAS APPROVED FOR SUCH USE BY THE CONTRACT ADMINISTRATOR. A 6m BUFFER ZONE SHALL EXIST BETWEEN STOCKPILE SITES AND ANY STEADY OR FLOW PATH. ALL STOCKPILES SHALL BE ADEQUATELY PROTECTED FROM EROSION AND CONTAMINATION OF THE SURROUNDING AREA BY USE OF THE MEASURES APPROVED IN THE EROSION AND SEDIMENTATION CONTROL PLAN.
15. ACCESS AND EXIT AREAS SHALL INCLUDE SHAKE-DOWN OR OTHER METHODS APPROVED BY THE CONTRACT ADMINISTRATOR FOR THE REMOVAL OF SOIL MATERIALS FROM MOTOR VEHICLES.
16. WHERE THE NATURAL SURFACE IS DISTURBED BY CONSTRUCTION, INCLUDING ACCESS ROADS, DEPOT AND STOCKPILE SITES, SHALL BE FREE OF POLLUTANTS BEFORE IT IS EITHER DISPERSED TO STABLE AREAS OR DIRECTED TO NATURAL WATERCOURSES.
17. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SLOPES, CROWNS AND DRAINS ON ALL EXCAVATIONS AND EMBANKMENTS TO ENSURE SATISFACTORY DRAINAGE AT ALL TIMES. WATER SHALL NOT BE ALLOWED TO POND ON THE WORKS UNLESS SUCH PONDING IS PART OF AN APPROVED ESCP / SWMP.
18. THE CONTRACTOR SHALL INCORPORATE THE MEASURES ON THIS PLAN WITHIN THE CONTRACTORS CONSTRUCTION MANAGEMENT PLAN.

- Co11492.00-DA50 ACCESS ROAD SECTIONS AND DETAILS
- Co11492.00-DA60 RETAINING WALL LAYOUT PLAN - SHEET 1
- Co11492.00-DA61 RETAINING WALL LAYOUT PLAN - SHEET 2
- Co11492.00-DA65 RETAINING WALL DETAILS
- Co11492.00-DA70 STORMWATER CATCHMENT PLAN



LOCALITY PLAN  
NOT TO SCALE

## FOR DEVELOPMENT APPLICATION

FOR DEVELOPMENT APPLICATION	08.06.12	B
FOR REVIEW AMENDMENTS	07.06.12	A
ISSUE	AMENDMENTS	DATE

CLIENT  
**Western Sydney Parklands Trust**  
WESTERN STONEY PARKLANDS TRUST  
LEVEL 4, 10 VALENTINE AVE  
PARRAMATTA NSW 2150

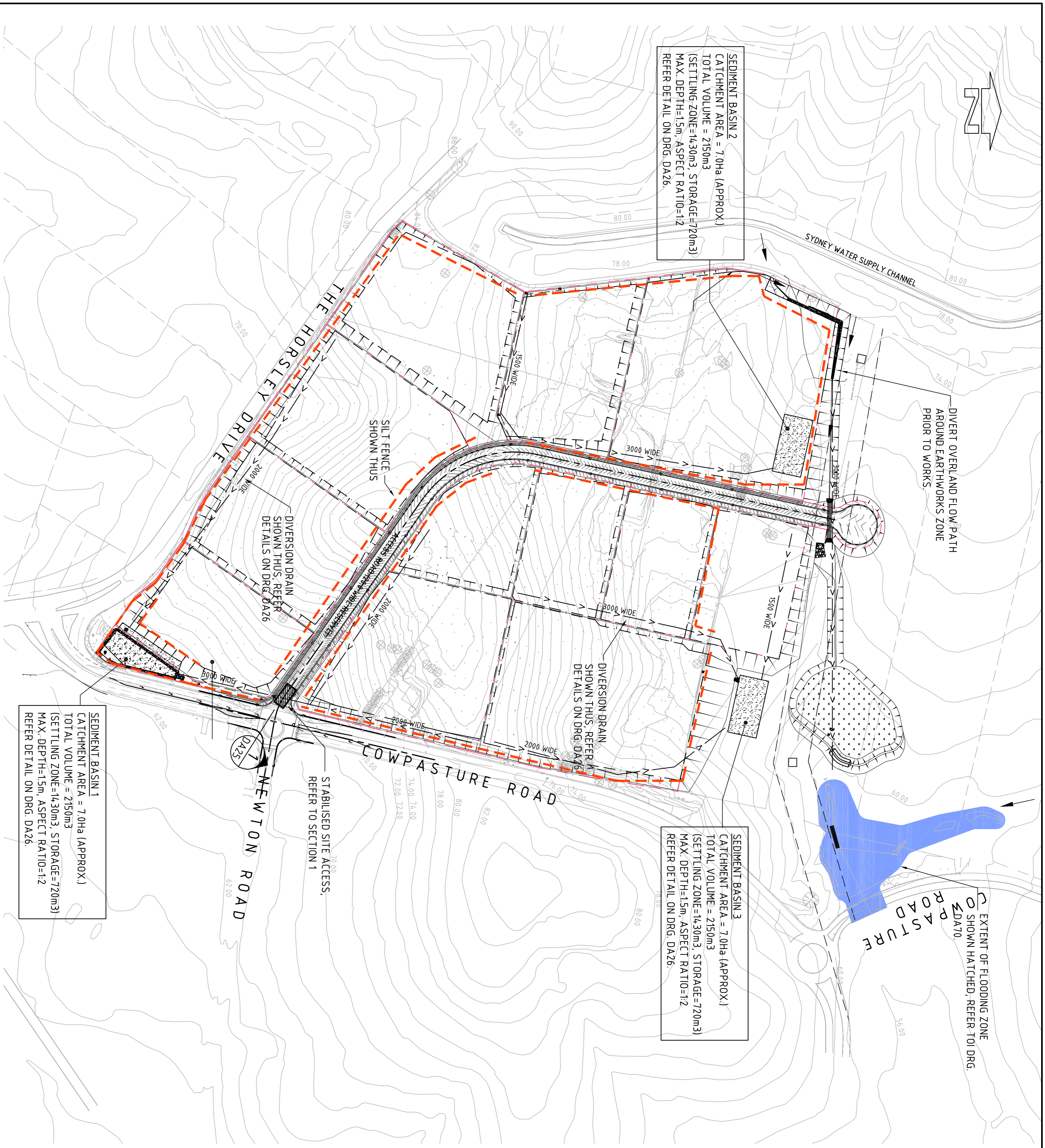
PROJECT	DESIGNED (DRAWN)	CHECKED	DATE	SIZE SCALE	CAD REF.
HORSLEY DV. BUSINESS PARK CNR THE HORSLEY DV. & COWPASTURE RD WETHERILL PARK, NSW	M/W	A1	02.04.12	AS SHOWN	Co11492.00-DA10

**ACEA**  
Consulting Engineers  
Level 1, 8 Wetherill Street  
Mudgee, NSW 2850  
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email: mail@costinroe.com.au

**Costin Roe Consulting Pty Ltd.**  
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Mudgee, NSW 2850  
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**Costin Roe Consulting & General Notes**

DRAWING TITLE	ISSUE
DRAWING LIST & GENERAL NOTES	B



**EROSION & SEDIMENT CONTROL PLAN**  
1:2000

**FOR DEVELOPMENT APPLICATION**

FOR DEVELOPMENT APPLICATION	08.06.12	A	AMENDMENTS	DATE	ISSUE
AMENDMENTS	DATE	ISSUE	AMENDMENTS	DATE	ISSUE
<p>CLIENT</p> <p><b>NSW Western Sydney Parklands Trust</b> WESTERN SYDNEY PARKLANDS TRUST LEVEL 4, 10 VALERIE AVENUE PARRAMATTA NSW 2150</p>					
<p>PROJECT</p> <p><b>HORSELEY DV. BUSINESS PARK</b> CNR THE HORSELEY DV. &amp; COWPASTURE RD WETHERILL PARK NSW</p>					
<p>DESIGNED (DRAWN) DATE</p> <p>M.W. M.C. 02.04.12</p>					
<p>CHECKED (SCALE) DATE</p> <p>AT AS SHOWN</p>					
<p>COO. REF. (COTI1492.00-DA 20)</p>					
<p>Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 8 Miranda Street Miranda NSW 2228 Tel: (02) 852 2989 Fax: (02) 8241-3781 email: mail@costinroe.com.au</p>					
<p>Value in Engineering and Management</p>					
<p><b>Costin Roe Consulting</b></p>					
<p>DRAWING TITLE</p> <p><b>EROSION &amp; SEDIMENT CONTROL PLAN</b></p>					
<p>DRAWING No: C011492.00-DA 20</p>					
<p>ISSUE</p> <p>A</p>					

**LEGEND:**

PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS. TYPICAL (N.S.O.P.)

- ↑ DENOTES DIRECTION OF OVERLAND FLOW
- - - DENOTES SILT FENCE WITH CATCH DRAIN
- - - DENOTES SILT FENCE ONLY
- - - DENOTES DIVERSION DRAIN
- - - SGGP, SINGLE GRATED GULLY PIT
- - - SJP, SEALED JUNCTION PIT
- - - KIP, KERB INLET PIT
- - - FINISHED PAVEMENT CONTOUR (MAJOR) 1.00m INTERVALS
- - - FINISHED PAVEMENT CONTOUR (MINOR) 0.25m INTERVALS

**SEDIMENTATION BASIN NOTE:**

FOR SEDIMENT & EROSION CONTROL DETAILS REFER TO DRAWING C011492.00-DA25 & DA26.

SEDIMENTATION BASIN SIZING BASED ON RECOMMENDATIONS OF SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER-THE BLUE BOOK.  
CAPACITY BASED UPON 5 DAY RAINFALL DEPTH AT 85th PERCENTILE INTENSITY (32.2mm).

APPROXIMATE AREA OF DISTURBED SITE = 20.8 Ha

SEDIMENTATION BASINS TO COLLECT RUN-OFF IN EXTREME RAINFALL EVENTS. COLLECTED RUN-OFF TO BE ASSESSED BY A QUALIFIED LABORATORY FOR DOUSING RATES OF ALUM OR GYPSUM TO ENSURE COAGULATION OF SEDIMENTS PRIOR TO WATER BEING DISCHARGED TO COUNCIL STORMWATER SYSTEM.

EACH BASIN IS TO HAVE A MARKER PLACED AS PER THE DETAIL TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSIFIED AND DEWATERED PRIOR TO REMOVAL FROM SITE.

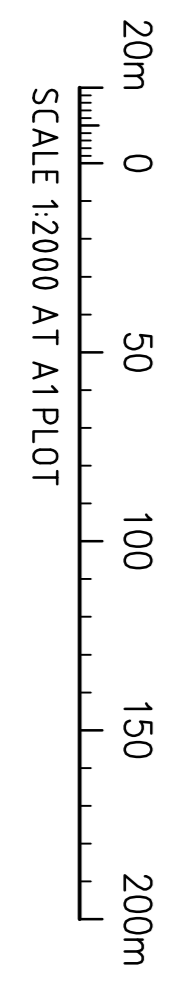
ALLOWANCE TO BE MADE DURING BENCHING OF SITE TO ENSURE RUN-OFF IS DIRECTED TO SEDIMENTATION BASINS.

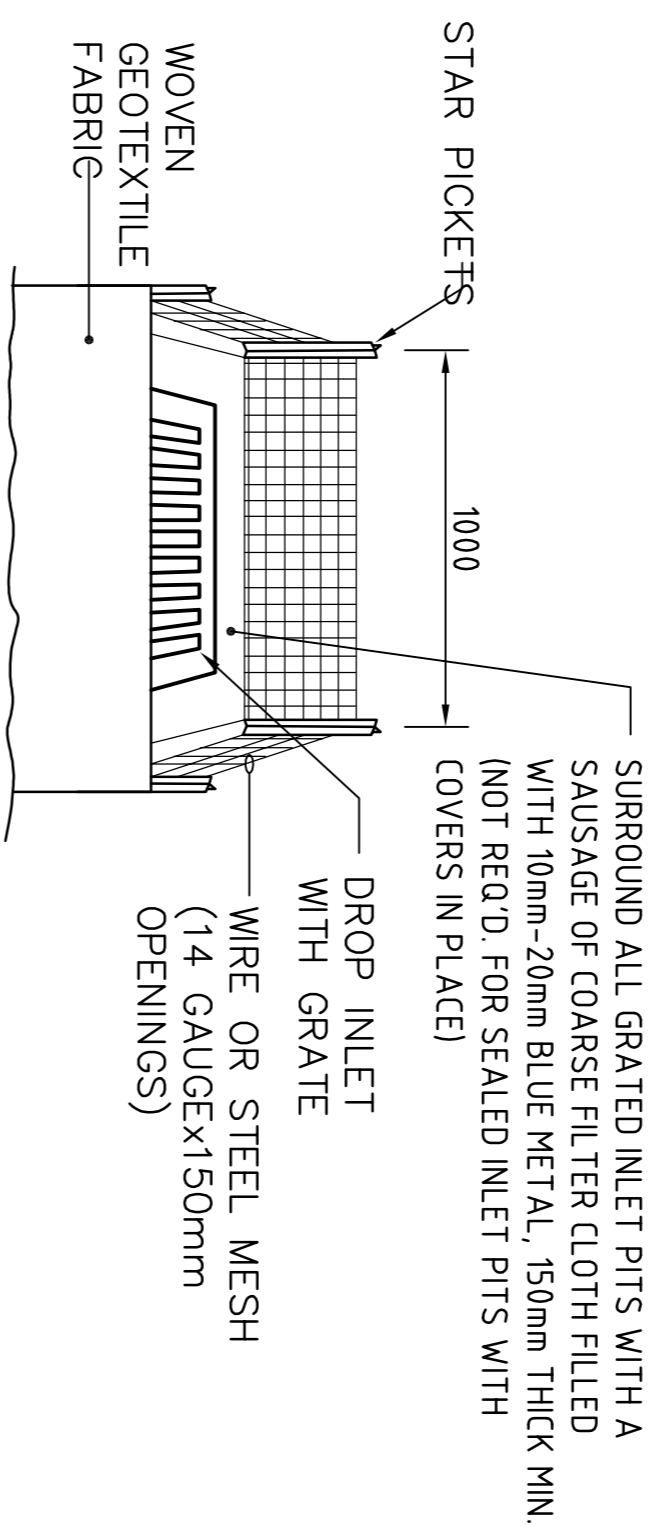
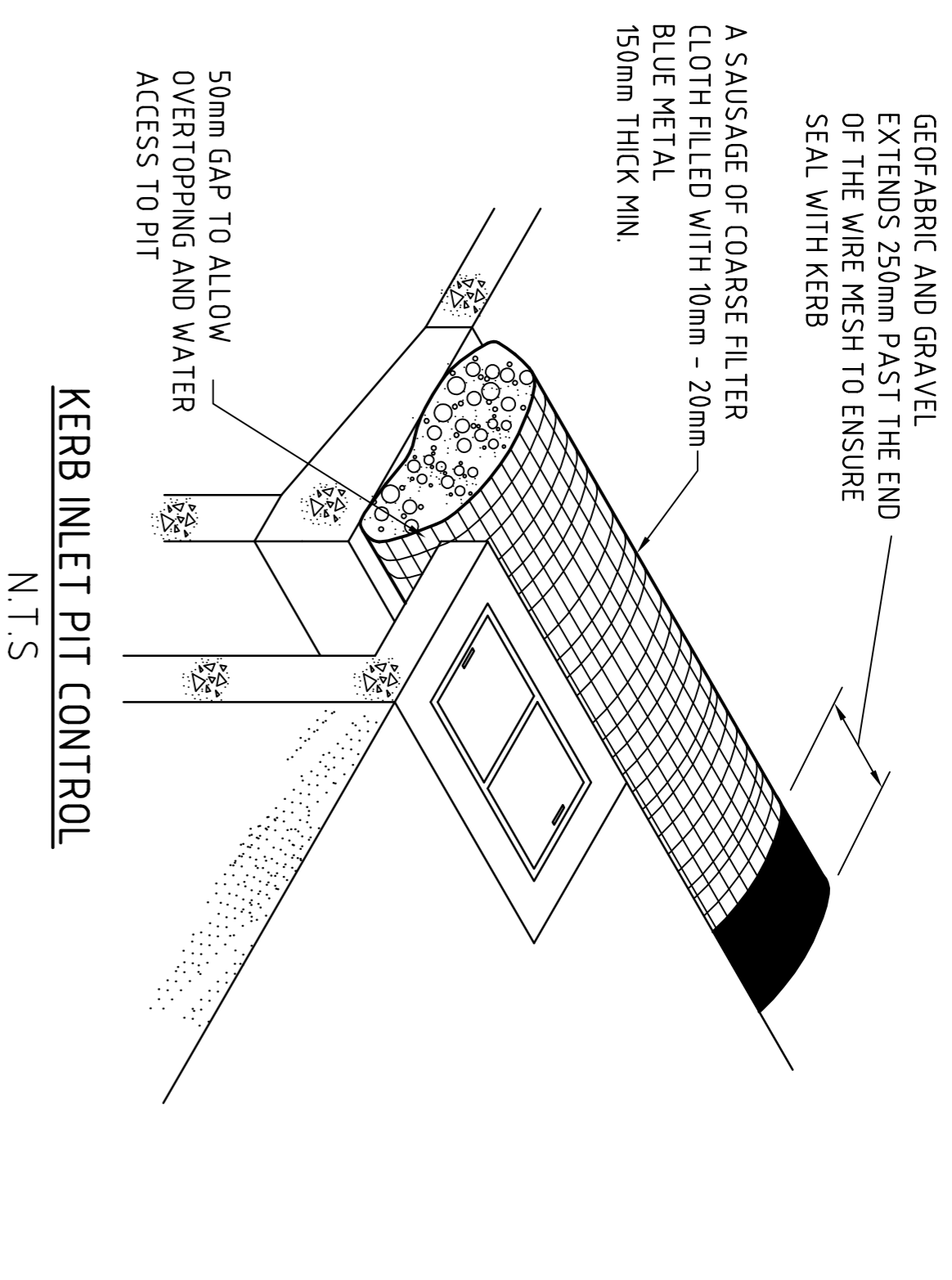
**NOTES:**

1. ASSUME TYPE D SOIL (CLAY/SILTY CLAY)
2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)

SOIL TYPE ASSESSED FROM GEOTECHNICAL REPORT PROVIDED BY PSM TITLED PSM 1869-009R DATED 10 MAY 2012.

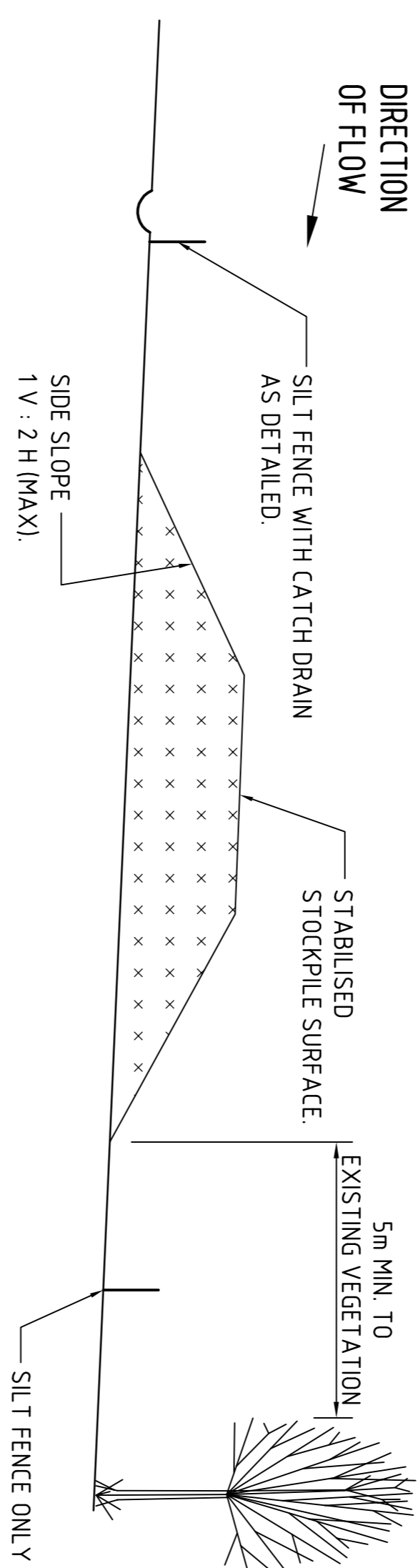
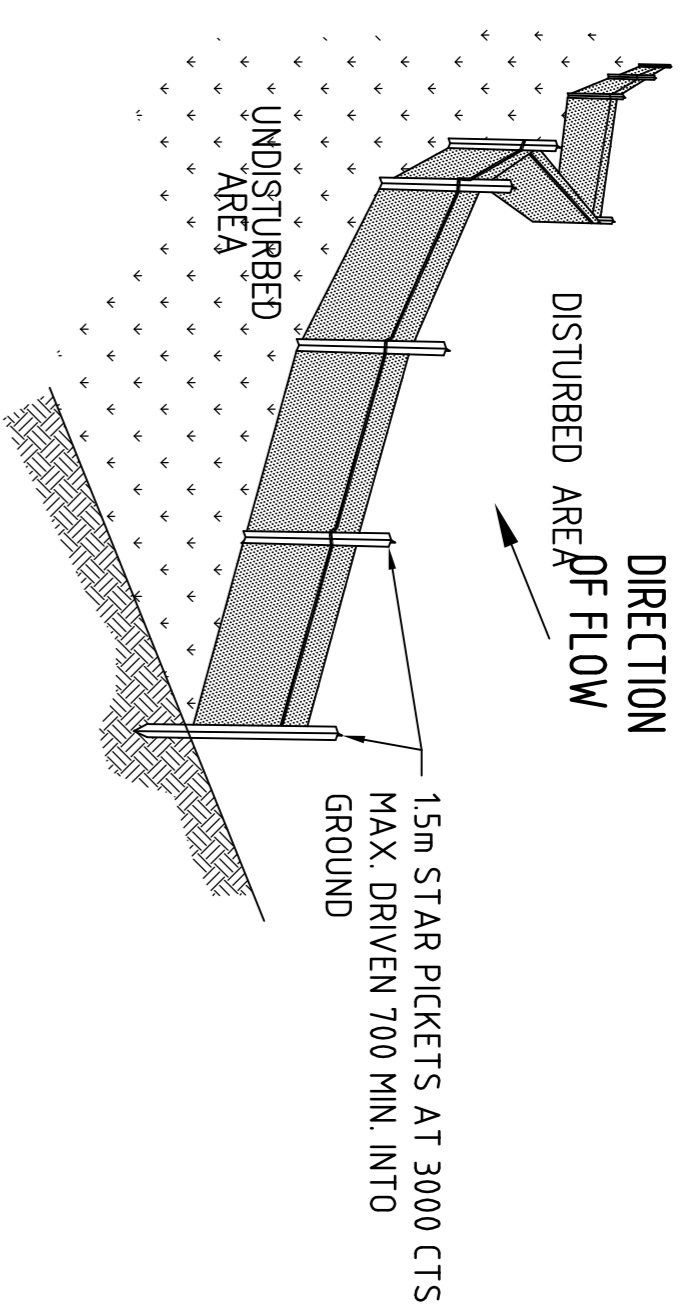
REFER TO DRAWING C011492.00-DA10 FOR EROSION & SEDIMENT CONTROL NOTES. ALL EROSION CONTROL TO BE COMPLETED PRIOR TO COMMENCEMENT OF SITE WORKS.



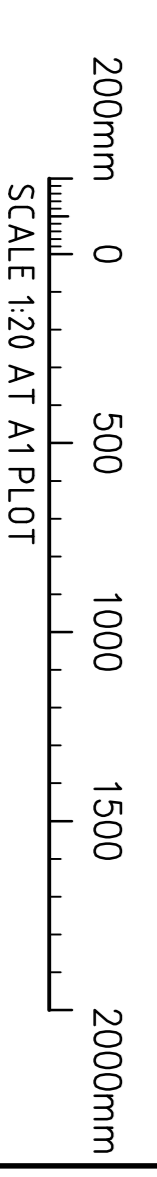
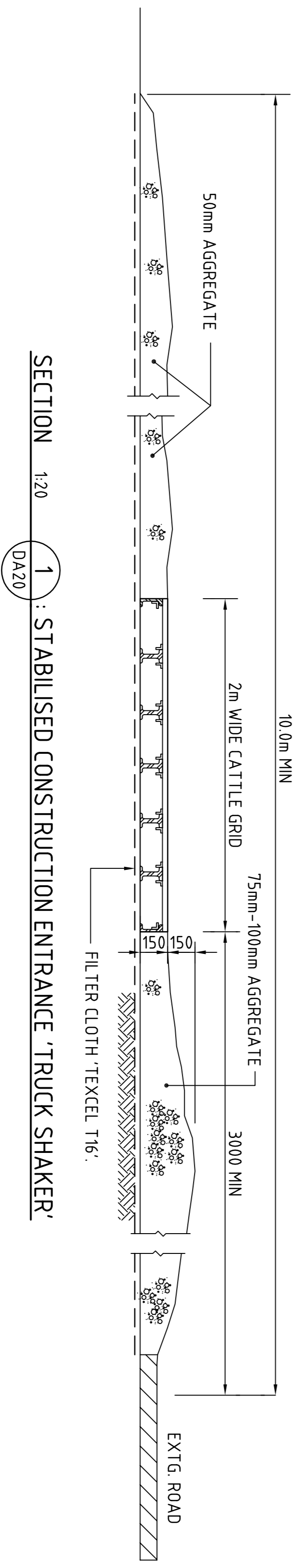
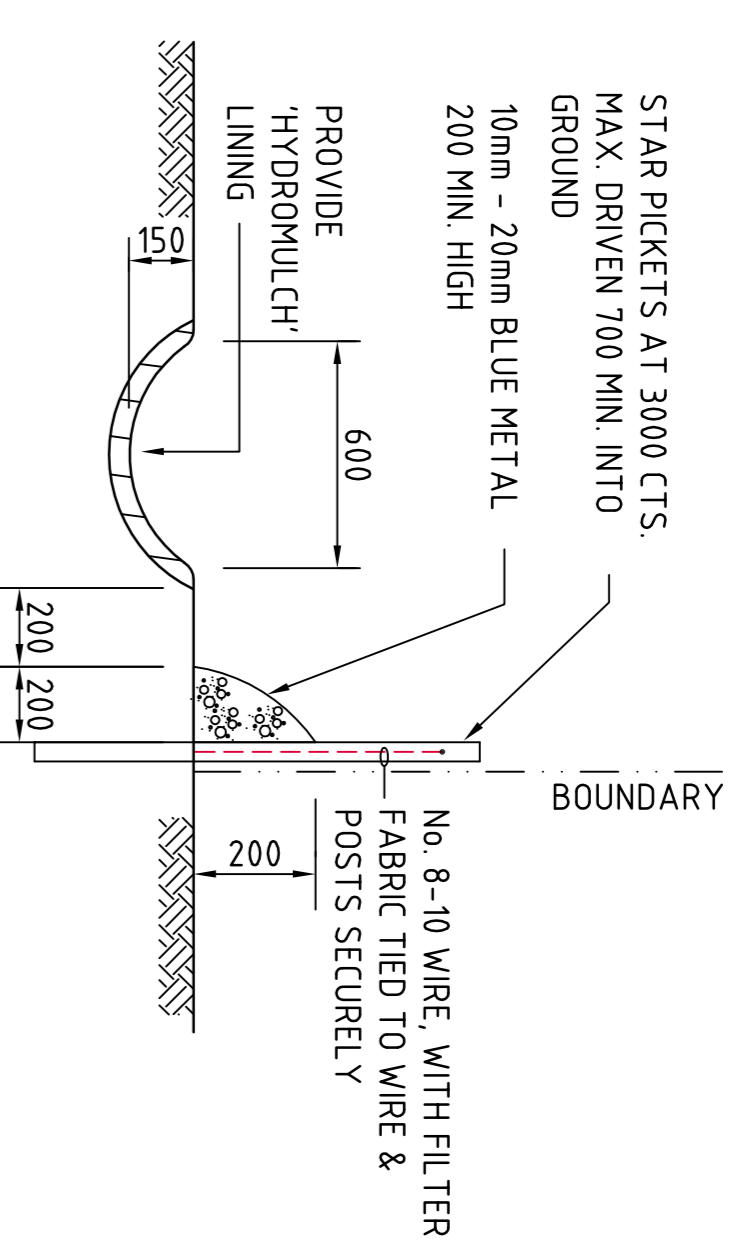


NOTE: ADOPT ABOVE DETAILS AROUND ALL PITS WITHIN AREA ENCOMPASSED BY SILT FENCE & TO PITS ON THE ROAD ADJACENT TO SITE BOUNDARY.

**NOTES:**  
 ALL EROSION & SEDIMENT CONTROL MEASURES TO BE INSPECTED & MAINTAINED DAILY BY SITE MANAGER.  
 MINIMISE DISTURBED AREAS.  
 ROADS & FOOTPATHS TO BE SWEEP DAILY.  
 12m TURF TO BE PLACED BEHIND KERBS.  
 DUST MINIMISATION CONTROL BY WATERING TO BE IMPLEMENTED BY SITE MANAGER AS REQUIRED OR AS DIRECTED BY THE EPA.

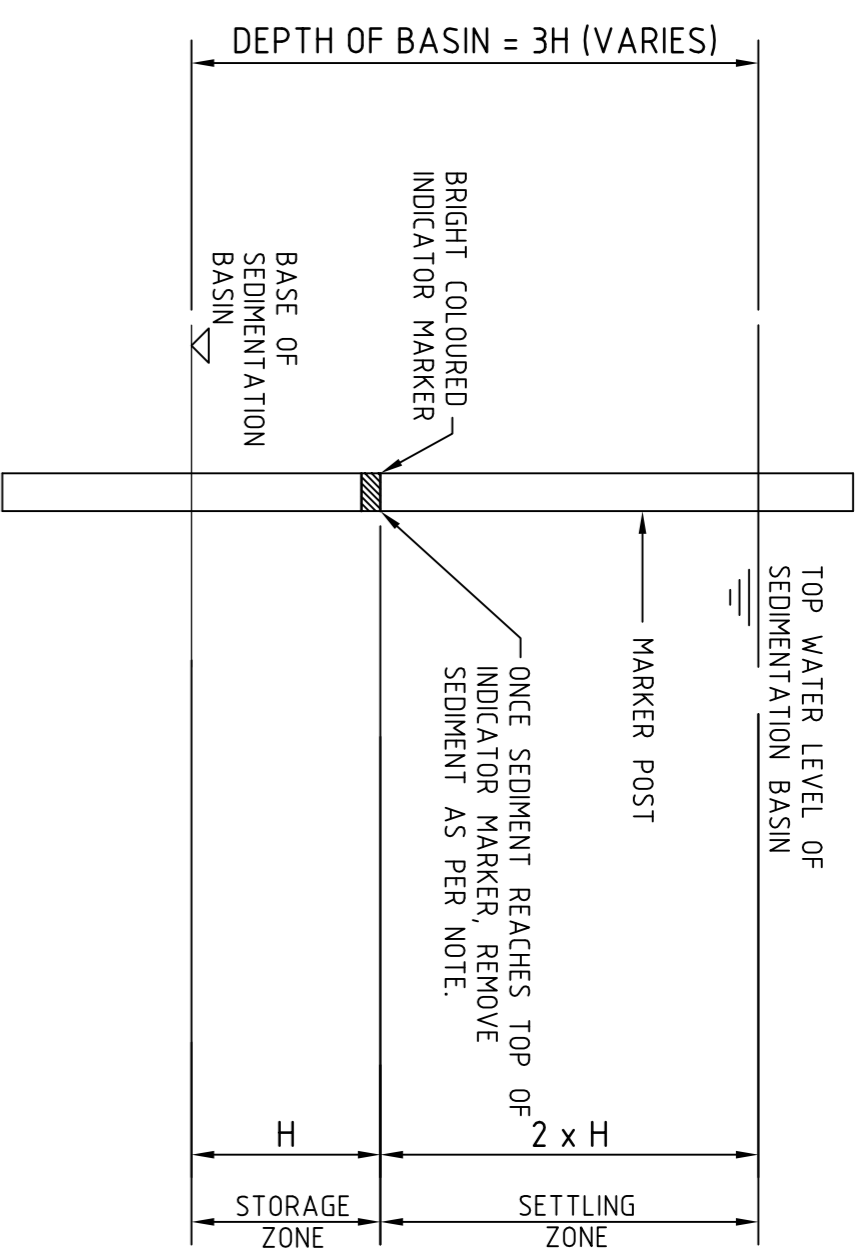


**STOCKPILE NOTES**  
 1. PLACE ALL STOCKPILES IN LOCATIONS MORE THAN 5m FROM EXISTING VEGETATION, ROADS & HAZARD AREAS.  
 2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT ELONGATED MOUNDS.  
 SIDE SLOPE TO BE 1 V : 2 H MAX.  
 3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.  
 4. WHERE STOCKPILES ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, SUITABLY STABILISE OR COVER THE STOCKPILES.  
 5. CONSTRUCT SILT FENCE WITH CATCH DRAIN ON UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES & SILT FENCE ONLY 1 TO 2m DOWNSLOPE AS SHOWN.

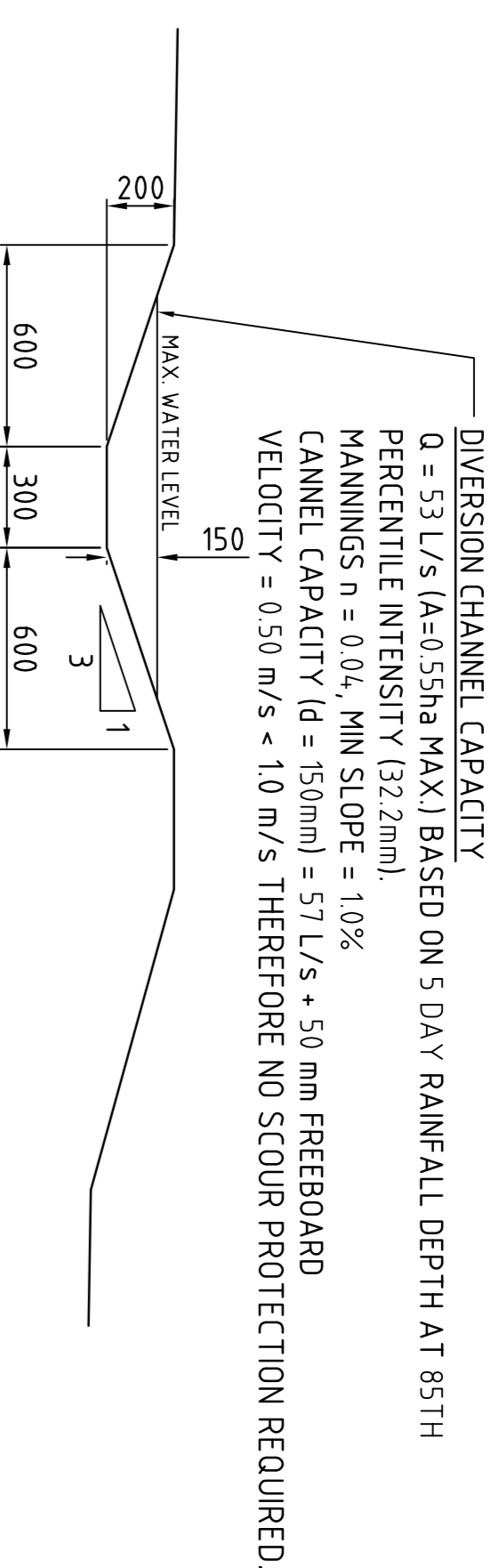


# FOR DEVELOPMENT APPLICATION

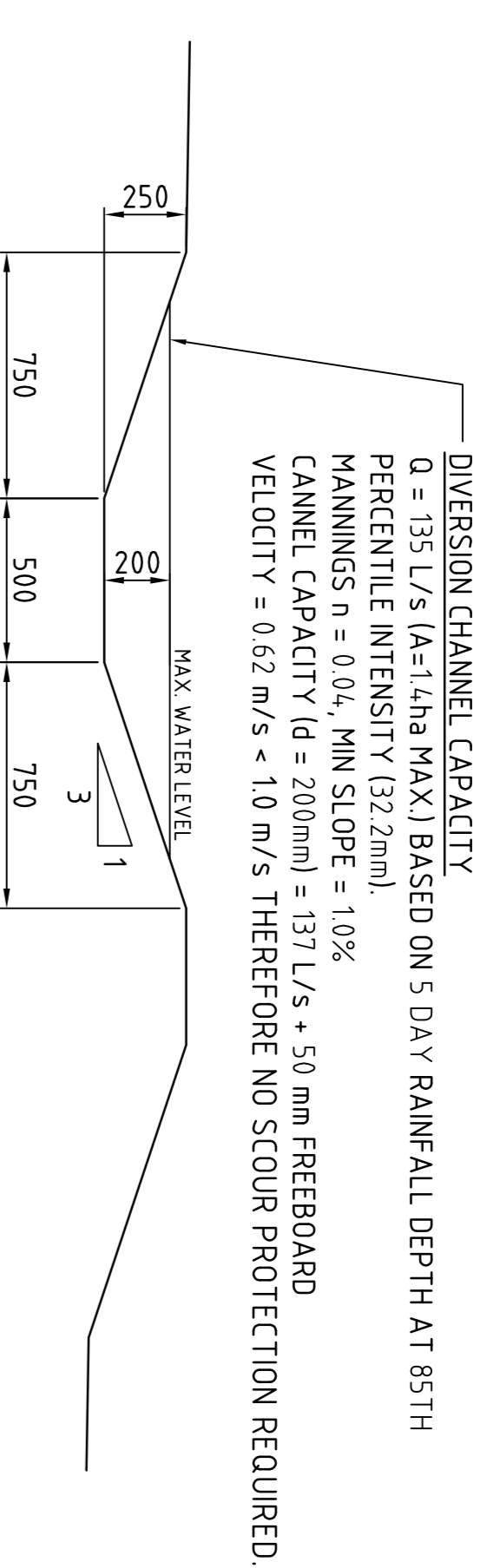
FOR DEVELOPMENT APPLICATION	08.06.12	A	AMENDMENTS	DATE	ISSUE
CLIENT	 WESTERN SYDNEY PARKLANDS TRUST LEVEL 4, 10 VALENTINE AVE PARRAMATTA, NSW - 2150				
PROJECT	HORSELEY DV. BUSINESS PARK CNR THE HORSELEY DV. & COMPASTURE RD WETHERILL PARK, NSW				
DESIGNED (P/AM)	M.W.	M.C.	DATE	CHECKED	AT
SCALE	AS SHOWN	DATE	02/04/12	SIZE	A1
CON. REF.	C011492.00-DA 25				
CONSULTING ENGINEERS	 Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 8 Miranda Street Miranda NSW 2228 Tel: (02) 9263 2700 Fax: (02) 9264 3781 Email: mail@costinroe.com.au				
VALUE IN ENGINEERING AND MANAGEMENT					
DRAWING TITLE	EROSION & SEDIMENT CONTROL DETAILS SHEET 1				
DRAWING NO.	C011492.00-DA25				
ISSUE	A				



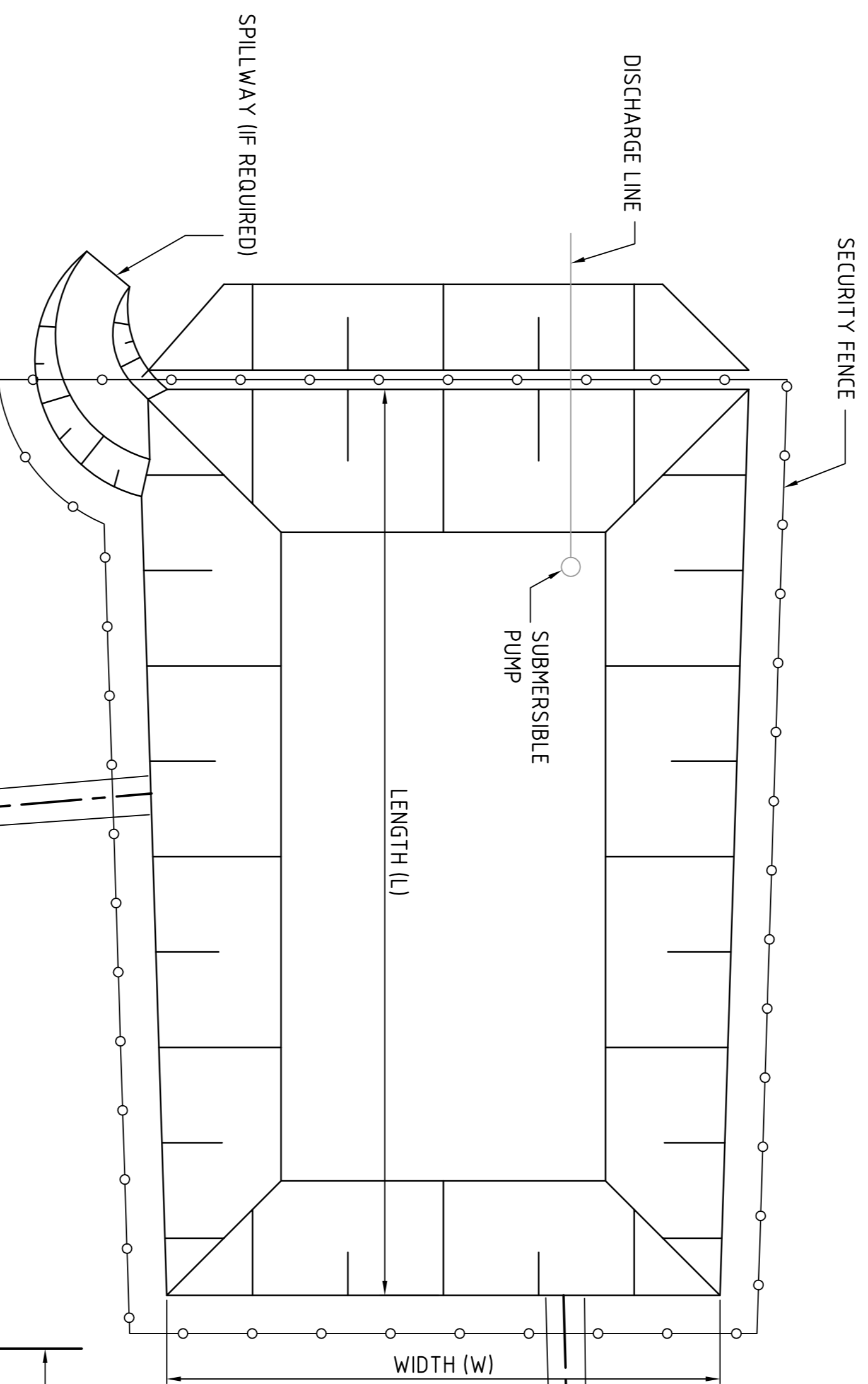
**SEDIMENT STORAGE MARKER**  
SCALE 1:20



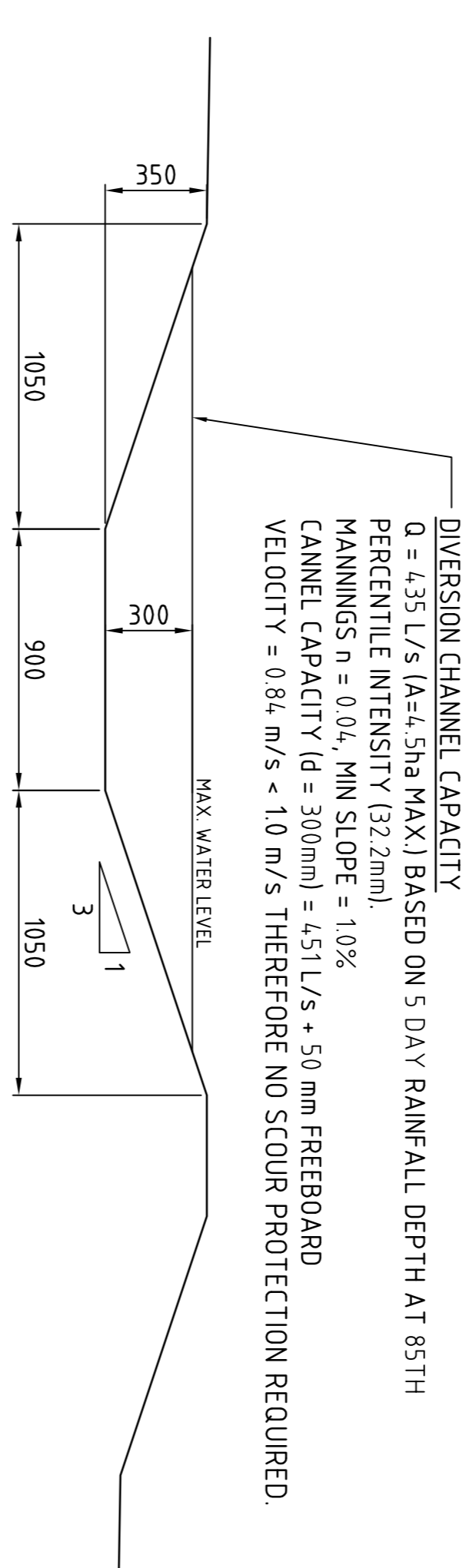
**1500 WIDE DIVERSION DRAIN SECTION**  
SCALE 1:20



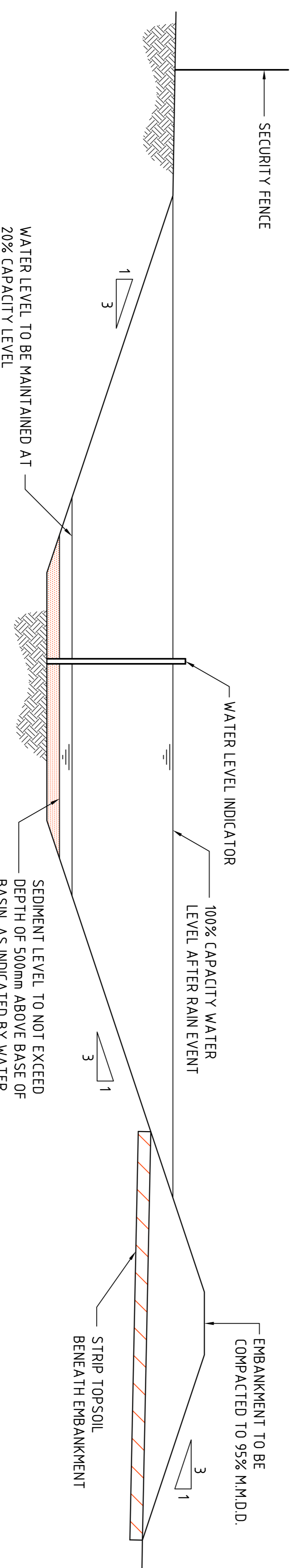
**2000 WIDE DIVERSION DRAIN SECTION**  
SCALE 1:20



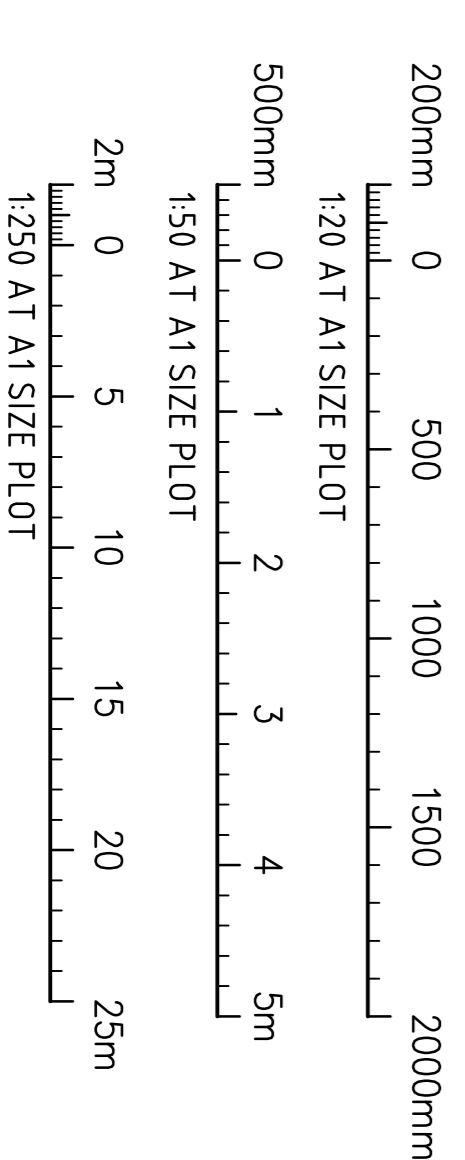
**TYPICAL SEDIMENT CONTROL POND PLAN**  
SCALE 1:250



**3000 WIDE DIVERSION DRAIN SECTION**  
SCALE 1:20



**TYPICAL SEDIMENT CONTROL BASIN SECTION**  
SCALE 1:50



**FOR DEVELOPMENT APPLICATION**

FOR DEVELOPMENT APPLICATION		08.06.12	A	CLIENT		WESTERN SYDNEY PARKLANDS TRUST LEVEL 4, 10 VALENTINE AVE PARRAMATTA NSW 2150	
AMENDMENTS	DATE	ISSUE	AMENDMENTS	DATE	ISSUE	PROJECT	<b>HORSLEY DV. BUSINESS PARK</b> CNR THE HORSELEY DV. & COMPASTURE RD WETHERILL PARK, NSW
						DESIGNED (P/NAME)	M.C.
						CHECKED	DATE
						SIZE	SCALE
						AT	AS SHOWN
						CAD REF.	C011492.00-DA 26
						Costin Roe Consulting Pty Ltd. Level 1, 8 Miranda Street Miranda NSW 2228 Tel: (02) 856 3789 Fax: (02) 8241 3781 email: mail@costinroe.com.au	
						Value in Engineering and Management	
						DRAWING TITLE <b>EROSION &amp; SEDIMENT CONTROL</b> DETAILS SHEET 2	
						DRAWING No	C011492.00-DA 26
						ISSUE	A

**NOTE**

REFER TO DRAWING DA10 FOR SITE PREPARATION NOTES.

**SUMMARY NOTES**

PRELIMINARY BULK EARTHWORKS VOLUMES BASED A NOMINAL TOPSOIL STRIP OF 75mm:

TOPSOIL	= 25 600 m <sup>3</sup>
CUT	= - 412 900 m <sup>3</sup>
FILL	= + 469 000 m <sup>3</sup>
BALANCE	= + 56 100 m <sup>3</sup>

NET IMPORT OF 56,100 m<sup>3</sup> TO ACCOUNT FOR DETAILED EXCAVATION OF STORMWATER AND SERVICES AND BULKING FACTORS.

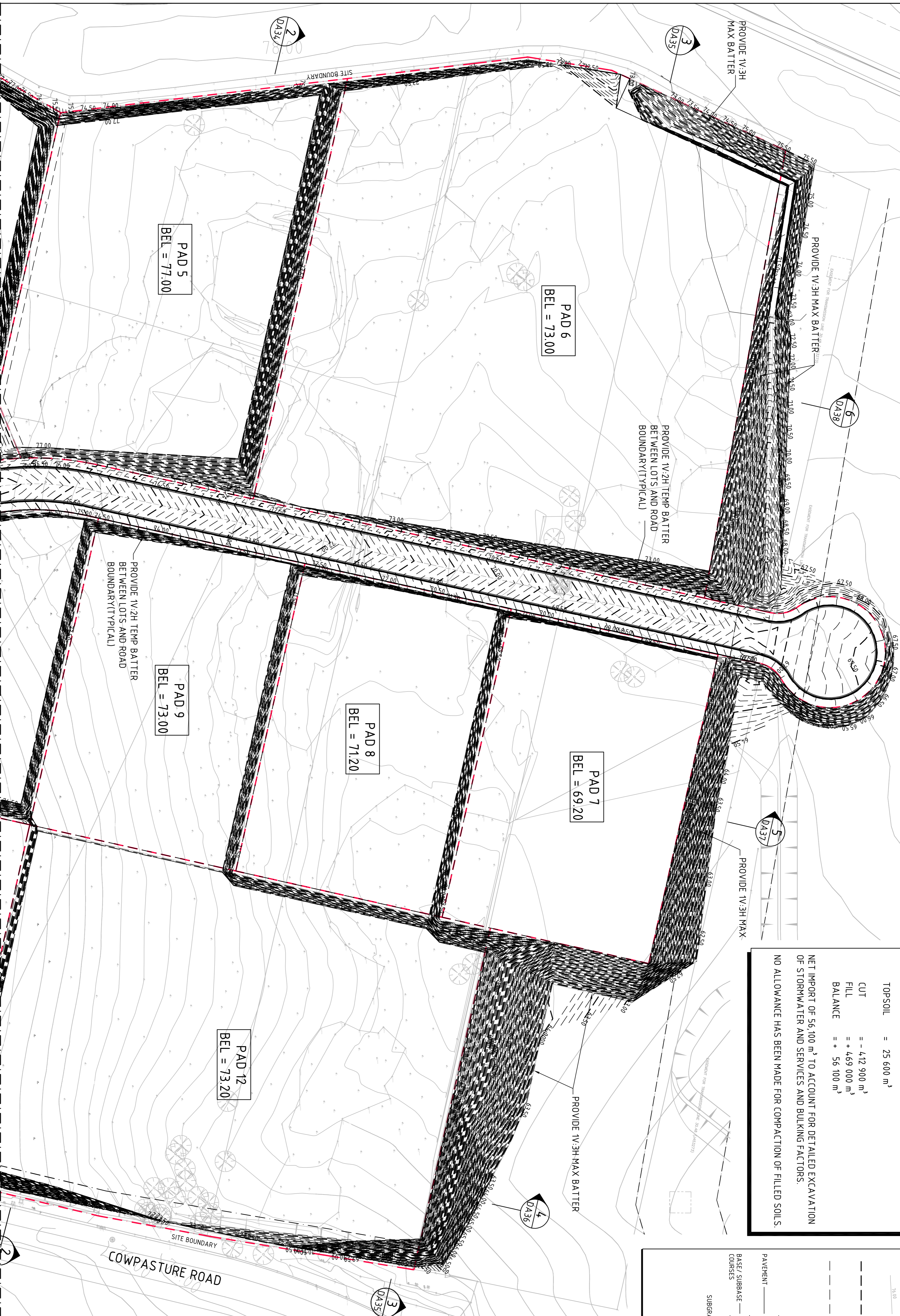
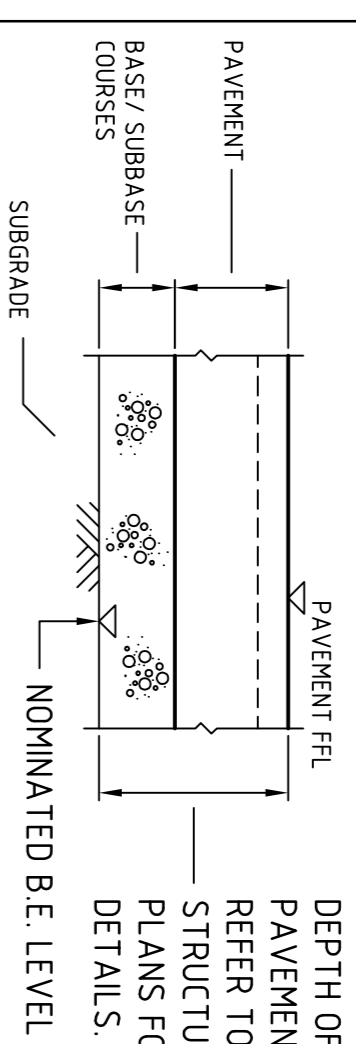
NO ALLOWANCE HAS BEEN MADE FOR COMPACTION OF FILLED SOILS.

**LEGEND**

LEVELS DATUM IS AHD

- EXISTING CONTOUR
- B.E.L. CONTOUR (MAJOR 1.00m)
- B.E.L. CONTOUR (MINOR 0.25m)

**NOMINATED B.E.L. DETAIL**  
N.T.S.



**FOR DEVELOPMENT APPLICATION**

BREAKLINE - REFER TO DRAWING DA32 FOR CONTINUATION

BULK EARTHWORKS PLAN-SHEET 1



FOR DEVELOPMENT APPLICATION	08.06.12	B
FOR INFORMATION	07.06.12	A
AMENDMENTS	DATE	ISSUE

CLIENT

WESTERN SYDNEY PARKLANDS TRUST  
LEVEL 4, 10 VALENTINE AVE  
PARRAMATTA, NSW, 2150

PROJECT

HORSLEY DV. BUSINESS PARK  
CNR THE HORSLEY DV. & COWPASTURE RD  
WETHERILL PARK, NSW

DESIGNED (P/AMN)	DATE	CHECKED	SIZE	SCALE	COO. REF.
H.W.	02.04.12	AT	AS SHOWN	C011492.00-DA 31	

ACEA

Costin Roe Consulting Pty Ltd.  
Consulting Engineers  
Level 1, 8 Miranda Street  
Miranda NSW 2225  
Tel: (02) 9299 7100 Fax: (02) 9294 3781  
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Value in Engineering and Management

DRAWING TITLE

BULK EARTHWORKS PLAN  
SHEET 1

DRAWING No C011492.00-DA31

ISSUE B