

SEDIMENT FENCE

CONSTRUCTION NOTES:

CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.

DRIVE 1.5 METRE LONG STAR PICKETS INTO GROUND, 3 METRES APART. DIG A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.

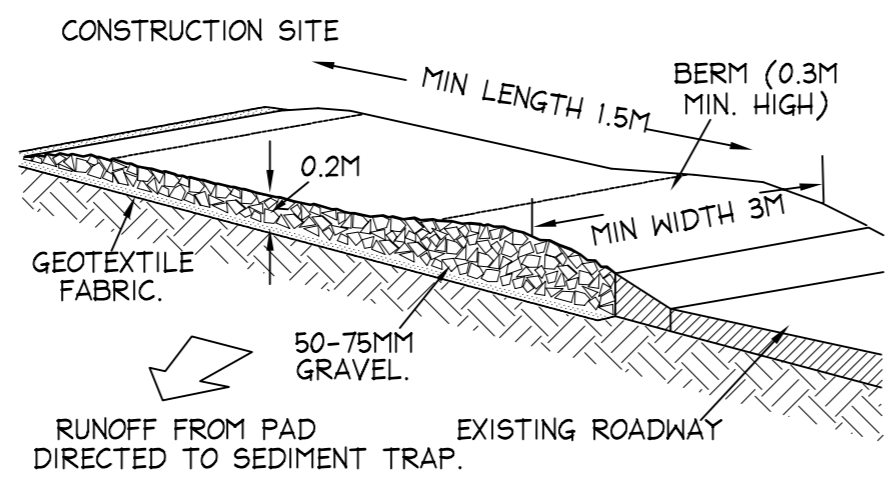
BACKFILL TRENCH OVER BASE OF FABRIC.

FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES or AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.

JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.

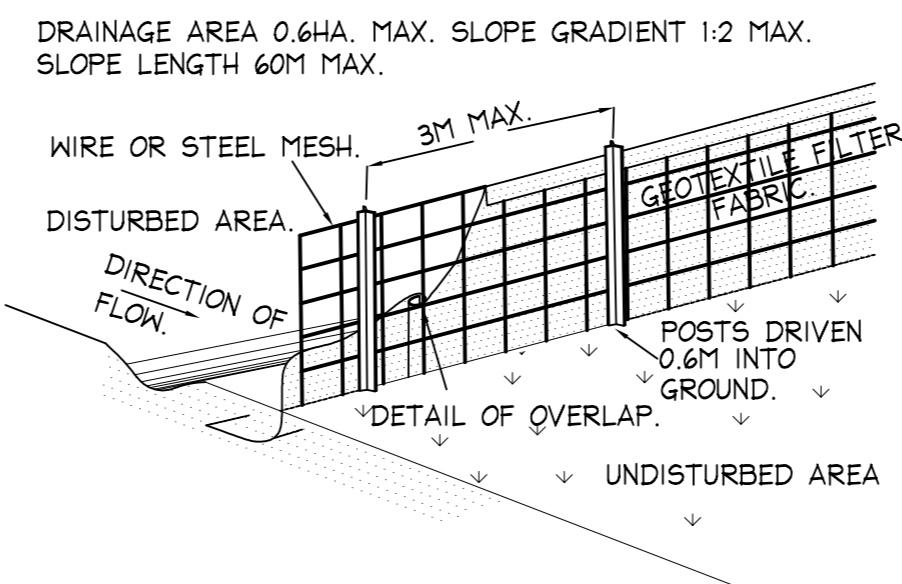
SEDIMENT CONTROL:

1. INSTALL SEDIMENT CONTROL STRUCTURES IN LOCATIONS INDICATED ON DRAWINGS AND AS OTHERWISE REQUIRED TO CONTROL SEDIMENT DURING ALL EXCAVATIONS AND WHILST AREAS OF THE SITE ARE EXPOSED TO EROSION.
2. CONTROL STRUCTURES TO BE AS DETAILED OR AS OTHERWISE REQUIRED BY CERTIFYING AUTHORITY.
3. REVIEW CONTROL MEASURES AND MAINTAIN STRUCTURES DURING CONSTRUCTION.
4. IF ADDITIONAL MEASURES ARE REQUIRED FOR EROSION CONTROL OR BY COUNCIL REQUIREMENTS REFER TO "URBAN EROSION AND SEDIMENT CONTROL" GUIDELINES PREPARED BY THE DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT.



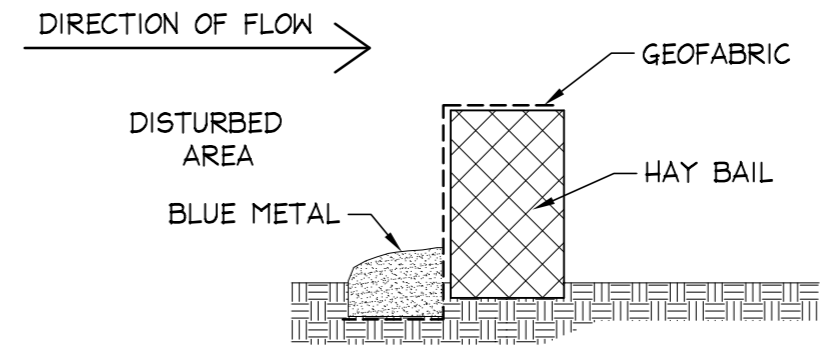
TYPICAL TEMPORARY CONSTRUCTION ENTRY/EXIT DETAIL

- CONSTRUCTION NOTES:**
1. STRIP TOPSOIL AND LEVEL SITE.
 2. COMPACT SUBGRADE.
 3. COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
 4. CONSTRUCT 200mm THICK PAD OVER GEOTEXTILE USING ROADBASE or 30mm AGGREGATE. MINIMUM LENGTH 15 METRES OR TO BUILDING ALIGNMENT. MINIMUM WIDTH 3 METRES.
 5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE or OTHER SEDIMENT TRAP.



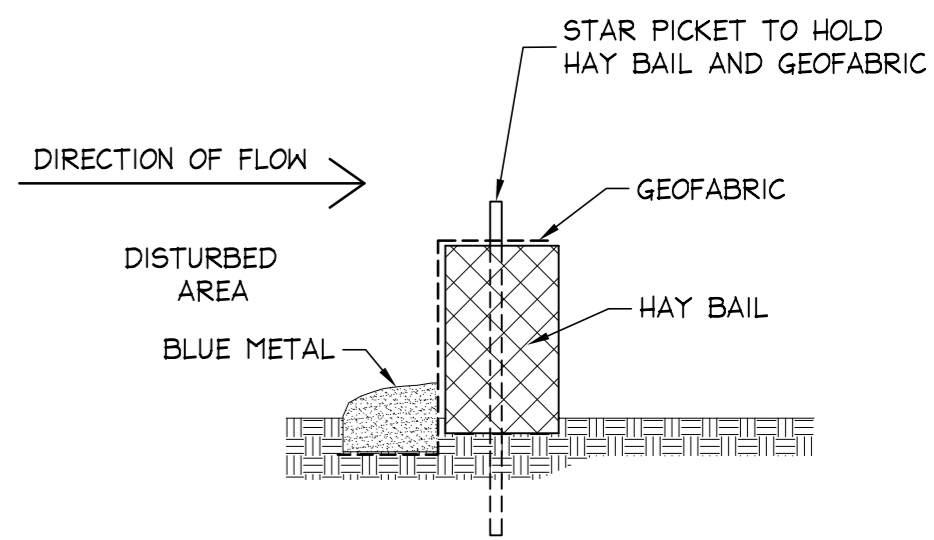
REMOVABLE HAY BAIL DETAIL

SCALE = N.T.S.



REMOVABLE HAY BAIL DETAIL

SCALE = N.T.S.



SILT FENCE DETAIL - OPTION 2

SCALE = N.T.S.

NOTES:

1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.



DOCUMENT CERTIFICATION

Date : OCT '20

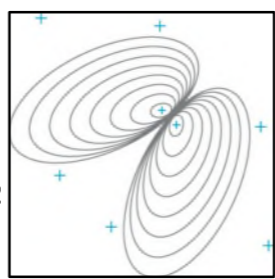
Bruce Lewis

Bruce Lewis (Principal : Peninsula Consulting Engineers) BE(Civil), CPEng, MIEAust., NPER, Institute of Engineers Membership No. 879131

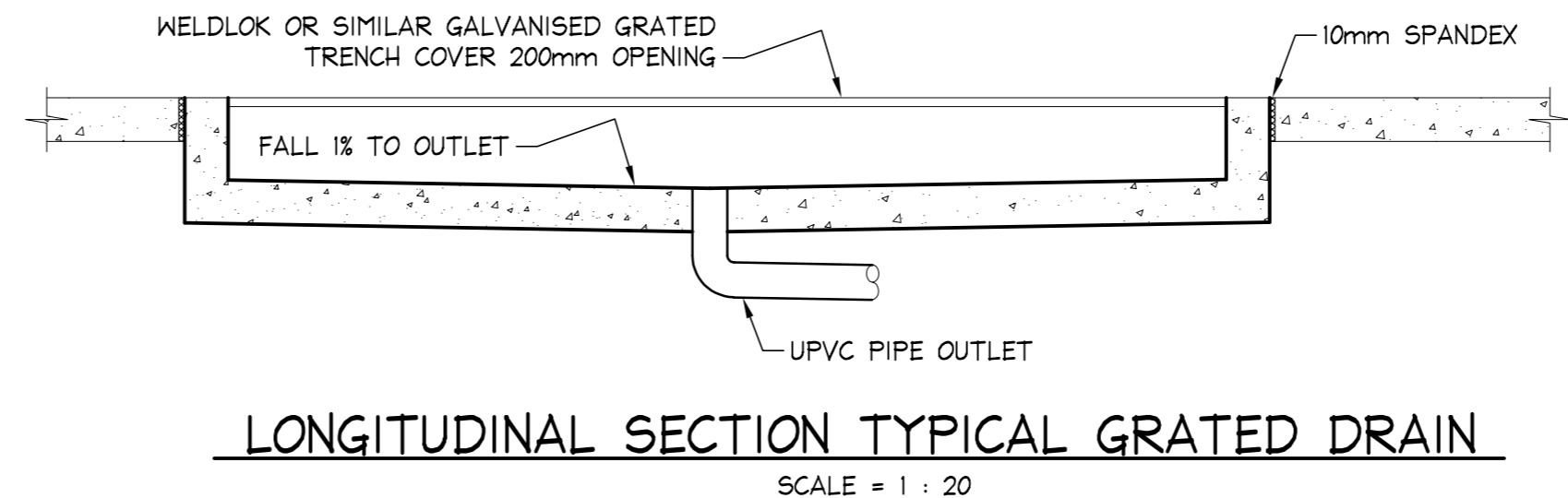
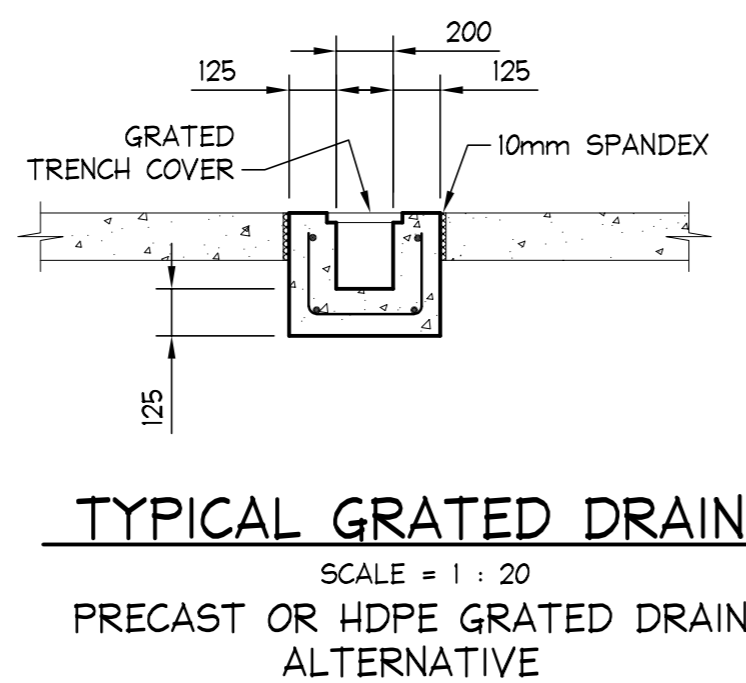
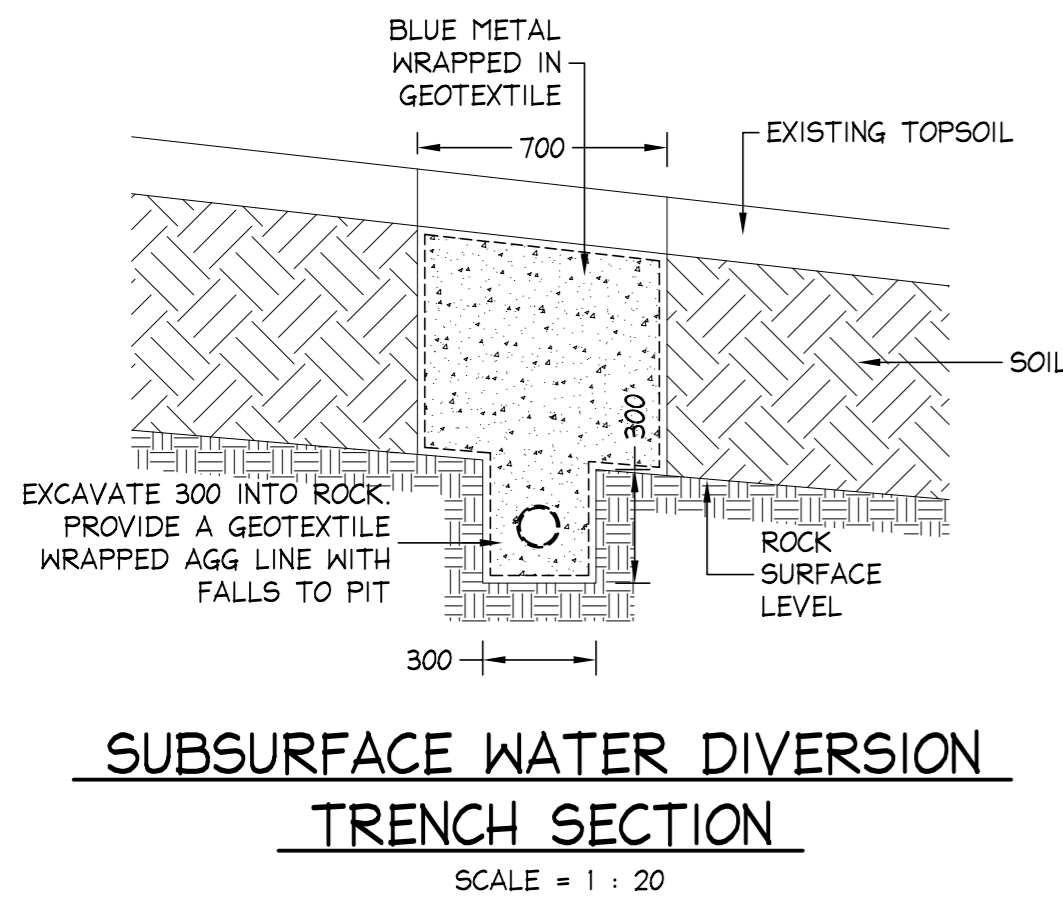
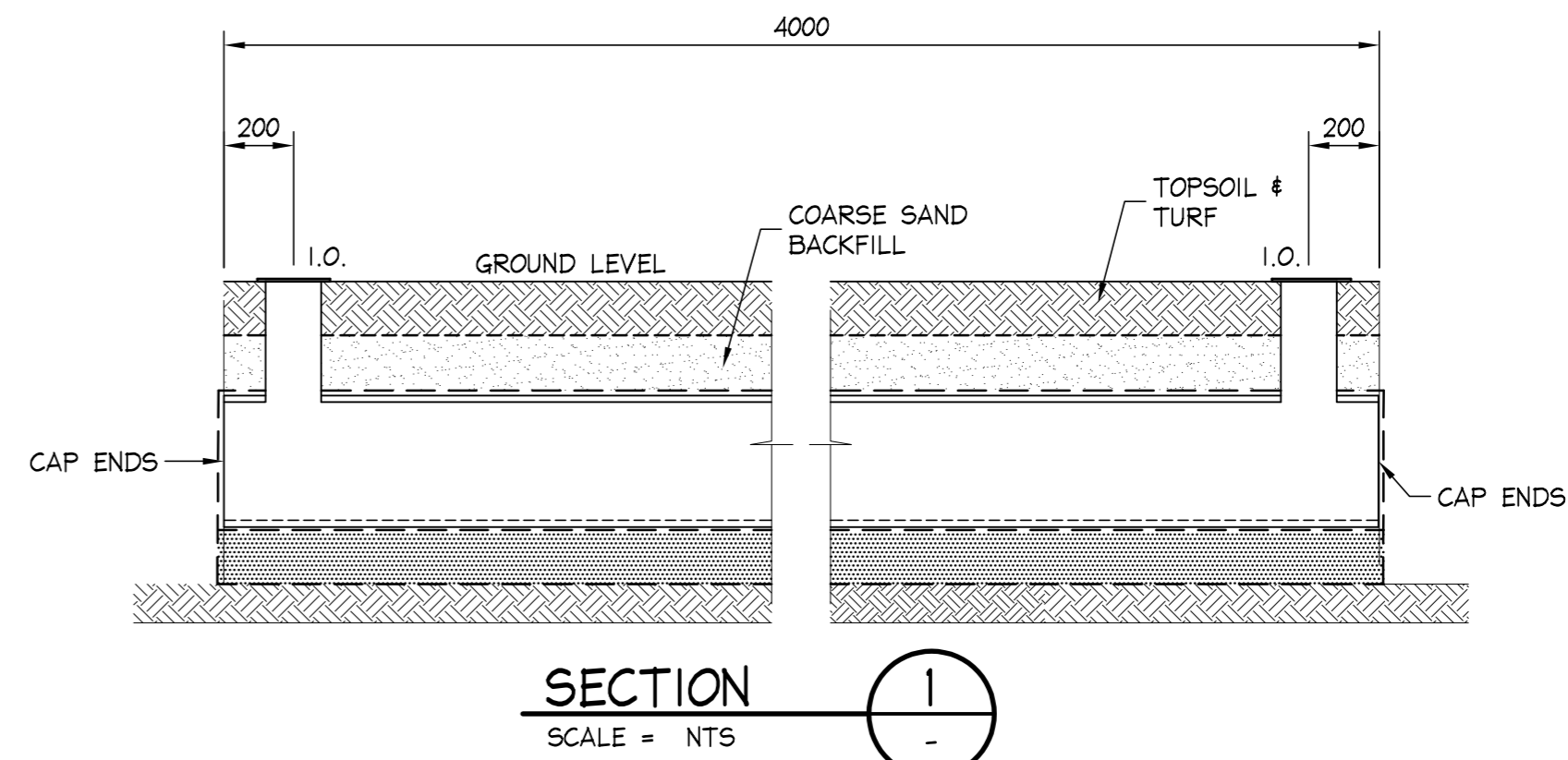
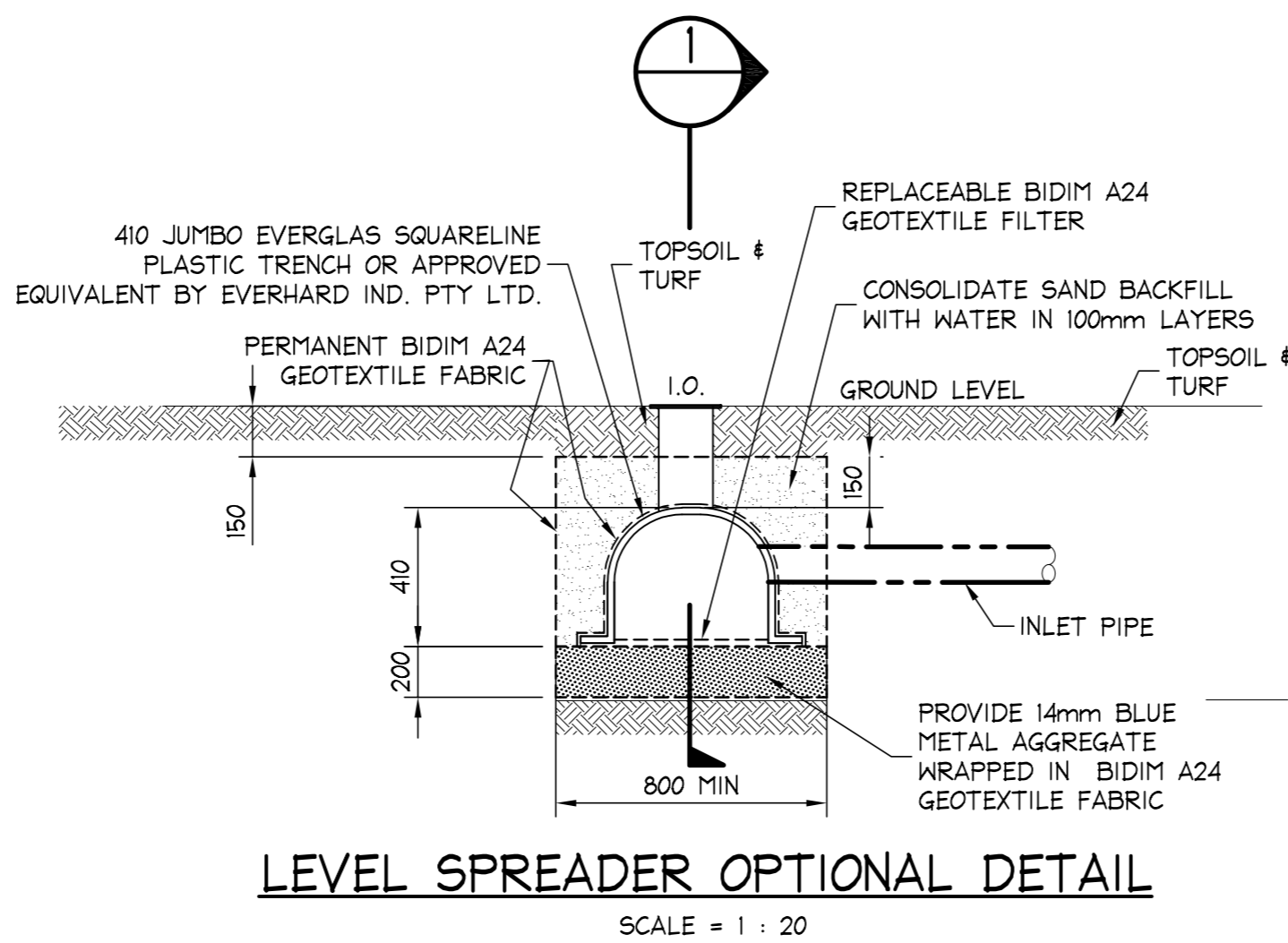
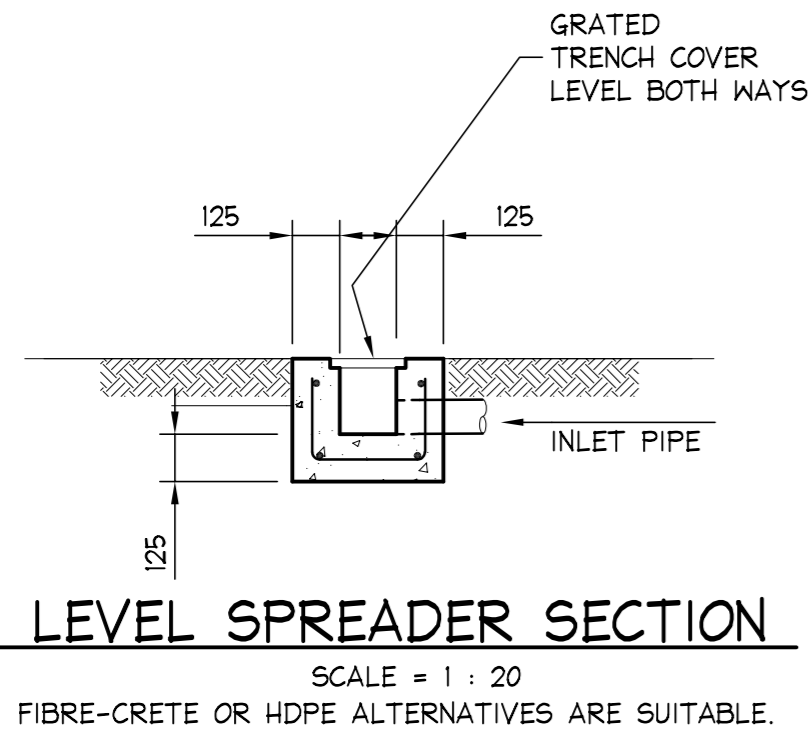
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|-----------|------|------------------------|
| 6-10-2020 | A | FOR COUNCIL SUBMISSION |
| 2-10-2020 | P2 | DRAFT |
| Date: | Rev: | Amendment: |

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|---|--|--|---|---------------------------|------------------|
| The copyright of this drawing remains with Peninsula Consulting Engineers. | | | Drawing Title: SEDIMENT & EROSION & WASTE MANAGEMENT PLAN & DETAILS | | |
| Project: PROPOSED WORKS at: 28 DAREEN STREET, BEACON HILL for: MR & MRS HOLST | | | Job No: 20-0616 | Drawing No: H02 | Rev: A |



| Northern Beaches [Warringah] Council | | | | | | | | | |
|--------------------------------------|-------------|------------------|-------------|------------|------------|------------|------------|-----------|--|
| 28 Dareen St Beacon Hill | | | | | | | | | |
| On Site Detention Calculations | | | | | | | | | |
| DRAINS Data Post Development | | | | | | | | | |
| PIT / NODE DETAILS | | | | | | | | | |
| Name | Type | Surface Elev (m) | | | | | | | |
| N1 | Node | 140.12 | | | | | | | |
| DETENTION BASIN DETAILS | | | | | | | | | |
| Name | Elev | Surf. Area | Outlet Type | Dia(mm) | Centre RL | | | | |
| Tank 1 | 141.45 | 1 | Orifice | 61 | 141.65 | | | | |
| | 142.29 | 1 | | | | | | | |
| | 142.3 | 2.3 | | | | | | | |
| | 144.47 | 2.3 | | | | | | | |
| Basin1 | 140 | 1 | Orifice | 120 | 140.07 | | | | |
| | 140.2 | 1 | | | | | | | |
| | 140.26 | 63 | | | | | | | |
| | 140.5 | 63 | | | | | | | |
| SUB-CATCHMENT DETAILS | | | | | | | | | |
| Name | Pit or Node | Total Area | Paved Area | Grass Area | Supp Area | Paved Time | Grass Time | Supp Time | |
| | | (ha) | % | % | % | (min) | (min) | (min) | |
| Cat1 | Tank 1 | 0.0234 | 100 | 0 | 0 | 5 | 5 | 5 | |
| Cat2 | Basin1 | 0.0559 | 28 | 72 | 0 | 5 | 5 | 5 | |
| PIPE DETAILS | | | | | | | | | |
| Name | From | To | Length (m) | U/S IL (m) | D/S IL (m) | Slope (%) | Type | Dia (mm) | |
| Pipe 1 | Tank 1 | Basin1 | 18 | 142.58 | 140 | 14.33 | uPVC | 150 | |
| Pipe 2 | Basin1 | N1 | 5.3 | 140 | 139.4 | 11.32 | uPVC | 150 | |

DRAINS DATA

| Northern Beaches [Warringah] Council | | | | | | | |
|--|----------|----------|----------------|------------|---|-------|---|
| 28 Dareen St Beacon Hill | | | | | | | |
| On Site Detention Calculations | | | | | | | |
| DRAINS Results Post Development | | | | | | | |
| NODE DETAILS | | | | | | | |
| Name | Max HGL | | | | | | |
| | | | | | | | |
| N1 | 140.12 | | | | | | |
| SUB-CATCHMENT DETAILS | | | | | | | |
| Name | Max | Paved | Grassed | Paved | Grassed | Supp. | Due to Storm |
| | Flow Q | Max Q | Max Q | Tc | Tc | Tc | |
| | (cu.m/s) | (cu.m/s) | (cu.m/s) | (min) | (min) | (min) | |
| Cat1 | 0.017 | 0.017 | 0 | 5 | 5 | 5 | AR&R 100 year, 1.5 hours storm, average 74.0 mm/h, Zone 1 |
| Cat2 | 0.035 | 0.011 | 0.023 | 5 | 5 | 5 | AR&R 100 year, 1.5 hours storm, average 74.0 mm/h, Zone 1 |
| | | | | | | | |
| PIPE DETAILS | | | | | | | |
| Name | Max Q | Max V | Max U/S | Max D/S | Due to Storm | | |
| | (cu.m/s) | (m/s) | HGL (m) | HGL (m) | | | |
| Pipe 1 | 0.01 | 3 | 142.615 | 140.462 | AR&R 100 year, 1.5 hours storm, average 74.0 mm/h, Zone 1 | | |
| Pipe 2 | 0.017 | 0.92 | 140.195 | 140.12 | AR&R 100 year, 1 hour storm, average 95.0 mm/h, Zone 1 | | |
| | | | | | | | |
| DETENTION BASIN DETAILS | | | | | | | |
| Name | Max WL | MaxVol | Max Q | Max Q | Max Q | | |
| | | | Total | Low Level | High Level | | |
| Tank 1 | 144.14 | 5.1 | 0.01 | 0.01 | 0 | | |
| Basin1 | 140.46 | 14.4 | 0.017 | 0.017 | 0 | | |
| | | | | | | | |
| CONTINUITY CHECK for AR&R 100 year, 1.5 hours storm, average 74.0 mm/h, Zone 1 | | | | | | | |
| Node | Inflow | Outflow | Storage Change | Difference | | | |
| | (cu.m) | (cu.m) | (cu.m) | % | | | |
| Tank 1 | 25.74 | 25.6 | 1.5 | -5.3 | | | |
| Basin1 | 58.4 | 58.64 | -0.05 | -0.3 | | | |
| N1 | 58.64 | 58.64 | 0 | 0 | | | |

DRAINS RESULTS

A1

NOTES:

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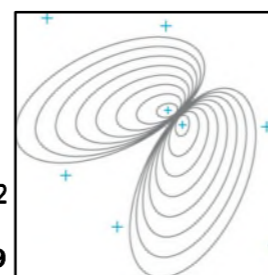
DOCUMENT CERTIFICATION

Date : OCT '20
 Bruce Lewis
 (Principal : Peninsula Consulting Engineers)
 BE(Civil), CPEng, MIEAust., NPER
 Institute of Engineers Membership No. 879131

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Project:

PROPOSED WORKS
at: 28 DAREEN STREET,
BEACON HILL
for: MR & MRS HOLST

Drawing Title:

ALTERNATIVE OSD STORMWATER
CALCULATIONS & DETAILS SHT 1

Job No:

20-0616

Drawing No:

H04

Rev:

A

4 November 2020

#20-0616

Mr & Mrs Holst
28 Dareen Street
BEACON HILL, NSW, 2100

HYDRAULIC DESIGN CERTIFICATE FOR WORKS
At: 28 Dareen Street, Beacon Hill

I, Bruce Lewis, of Peninsula Consulting Engineers hereby certify that:

I am a Civil Engineer with 'The Institute of Engineers Australia' membership number 879131 & NPER Registration. BE CPEng MIE (Aust).

I am currently practising as a Structural & Civil Design Engineer with Peninsula Consulting Engineers.

The design for the above project (being Job No.20-0616, Drawing No's 20-0616-H01B, H02A, H03B, H04A & H05A) complies with SAA Codes & Standards and the Local Council's Stormwater Specification.

We trust that this certificate meets with your requirements. Please contact the author if further clarification is required.

Yours Faithfully,



Bruce Lewis
Principal BE(Civil) Cpeng NPER
Peninsula Consulting Engineers