NEPEAN CREATIVE AND PERFORMING ARTS HIGH SCHOOL

enstruct

CIVIL ENGINEERING WORKS

BOUNDARY AND EASEMENT NOTE

The property boundary and easement locations shown on enstruct drawing's have been based from information received from: YSCO GEOMATICS
Land Resource Consultants
enstruct makes no guarantees that the boundary or easement information shown is correct. enstruct will accept no liabilities for boundary inaccuracies. The contractor/builder is advised to check/confirm all boundaries in relation to all proposed work prior to the commencement of construction. Boundary inaccuracies found are to be reported to the superintendent prior to construction starting.

CONCRETE FINISHING NOTES

1. All exposed concrete pavements are to be broomed finished.
2. All edges of the concrete pavement including keyed and dowelled joints are to be finished with an edging tool.
3. Concrete pavements with grades greater than 10 % shall be heavily broomed finished.
4. Carborundum to be added to all stair treads and ramped crossings U.N.O.

CIVIL SAFETY IN DESIGN

enstruct (NSW) Pty Ltd operates under Safe Work Australia's code of Conduct for the Safe Design of Structures.
These drawings shall be read in conjunction with the enstruct Transfer of Information Letter and Civil risk and Solutions Register. Under the Code of Conduct it is the Client's responsibility to provide a copy of the Civil Risk and Solutions Register to the Principal Contractor.
It is the Principal Contractor's responsibility to review the hazards and risks identified during the design process to ensure a safe workplace is maintained for the construction, maintenance and eventual demolition of the civil infrastructure.

DBYD SERVICES NOTE

"Public Service Utility information shown on plan has been complied from information received from Dial Before You Dig inquiry, reference Number 20286159, which was obtained on 21/09/20.
Unless specifically shown otherwise, this location and depth of services shown on this plan have not been verified.

The location of services shown on this drawing have been plotted as accurately as possible from diagrams provided by service authorities and should be confirmed by site inspection."

KERBING NOTES

Includes all kerbs, gutters, dish drains, crossings and edges.

1. All kerbs, gutters, dish drains and crossings to be constructed on minimum 75mm granular basecourse compacted to minimum 98% modified maximum dry density in accordance with AS 1289 5.2.1.
2. Expansion joints (EJ) to be formed from 10mm compressible cork filler board for the full depth of the section and cut to profile. Expansion joints to be located at drainage pits, on tangent points of curves and elsewhere at 12m centres except for integral kerbs where the expansion joints are to match the joint locations in slabs.
3. Weakened plane joints to be min 3mm wide and located at 3m centres except for integral kerbs where weakened plane joints are to match the joint locations in slabs.
4. Broomed finished to all ramped and vehicular crossings, all other kerbing or dish drains to be steel float finished.
5. In the replacement of kerbs -
   Existing road pavement is to be sawcut 900mm from lip of gutter. Upon completion of new kerbs, new basecourse and surface is to be laid 900mm wide to match existing materials and thicknesses.
   Existing allotment drainage pipes are to be built into the new kerb with a 100mm dia hole.
   Existing kerbs are to be completely removed where new kerbs are shown.

GENERAL NOTES

1. Contractor must verify all dimensions and existing levels on site prior to commencement of works. Any discrepancies to be reported to the Engineer
2. Strip all topsoil from the construction area. All stripped topsoil shall be disposed of off-site unless directed otherwise.
3. Make smooth connection with all existing works.
4. Compact subgrade under buildings and pavements to minimum 98% standard maximum dry density in accordance with AS 1289 5.1.1. Compaction under buildings to extend 2m minimum beyond building footprint.
5. All work on public property, property which is to become public property, or any work which is to come under the control of the Statutory Authority; the Contractor is to ensure that the drawings used for construction have been approved by all relevant authorities prior to commencement site.
6. All work on public property, property which is to become public property, or any work which is to come under the control of the Statutory Authority is to be carried out in accordance with the requirements of the relevant Authority. The Contractor shall obtain these requirements from the Authority. Where the requirements of the Authority are different to the drawings and specifications, the requirements of the Authority shall be applicable.
7. For all temporary batters refer to geotechnical recommendations.

REFERENCE DRAWINGS

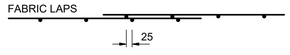
1. These drawings have been based from, and to be read in conjunction with the following Consultants drawings. Any conflict to the drawings must be notified immediately to the Engineer.

Consultant	Dwg Title	Dwg No	Rev	Date
BKA Architecture	Site Plan			
	Demolition Plan			
	Floor Plan			
	Section			

REINFORCEMENT NOTES

1. Fix reinforcement as shown on drawings. The type and grade is indicated by a symbol as shown below. On the drawings this is followed by a numeral which indicates the size in millimetres of the reinforcement.
   N. Hot rolled ribbed bar grade D500N
   R. Plain round bar grade R250N
   SL. Square mesh grade 500L
   RL. Rectangular mesh grade 500L
2. Provide bar supports or spacers to give the following concrete cover to all reinforcement unless otherwise noted on drawings.
   Footings - 50 top, 50 bottom, 50 sides.
   Walls - 30 generally.
   - 30 when cast in forms but later exposed to weather or ground.
   - 50 when cast directly in contact with ground.
3. Cover to reinforcement ends to be 50 mm u.n.o.
4. Provide N12-450 support bars to top reinforcement as required, Lap 500 U.N.O.
5. Maintain cover to all pipes, conduits, reglets, drip grooves etc
6. All cogs to be standard cogs unless noted otherwise.
7. Fabric end and side laps are to be placed strictly in accordance with the manufacturers requirements to achieve a full tensile lap. Fabric shall be laid so that there is a maximum of 3 layers at any location.

FABRIC LAPS

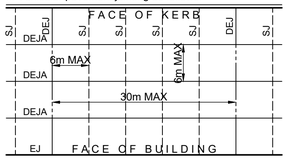


8. Laps in reinforcement shall be made only where shown on the drawings unless otherwise approved. Lap lengths as per table below.

JOINTING NOTES

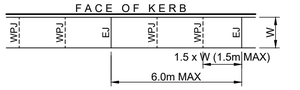
Vehicular Pavement Jointing

1. All vehicular pavements to be jointed as shown on drawings.
2. Keyed construction joints should generally be located at a maximum of 6m centres.
3. Sawn joints should generally be located at a maximum of 6m centres or 1.5 x the spacing of keyed joints, where key joint spacing is less than 4m, with dowelled expansion joints at maximum of 30m centres.
4. Provide 10mm wide full depth expansion joints between buildings and all concrete or unit pavers.
5. The timing of the saw cut is to be confirmed by the contractor on site. Site conditions will determine how many hours after the concrete pour before the saw cuts are commenced. Refer to the specification for weather conditions and temperatures required.
6. Vehicular pavement jointing as follows.



Pedestrian Footpath Jointing

1. Expansion joints are to be located where possible at tangent points of curves and elsewhere at max 6.0m centres.
2. Weakened plane joints are to be located at a max 1.5 x width of the pavement.
3. Where possible joints should be located to match kerbing and / or adjacent pavement joints.
4. All pedestrian footpath jointings as follows (uno).



RETAINING WALLS

1. Drainage shall be provided as shown on the drainage drawings.
2. Backfilling shall be carried out after grout or concrete has reached a minimum strength of 0.85 f'c. Backfilling shall be approved granular material compacted in layers not exceeding 200mm to 95% Standard compaction unless noted otherwise.
3. Provide waterproofing to back of walls as specified or noted.
4. Where retaining walls rely on connecting structural elements for stability, do not backfill against the wall unless it is adequately propped or the elements have been constructed and have sufficient strength to withstand the loads.
5. For all temporary batters obtain geotechnical engineers recommendations.

PIT SCHEDULE

Note: Grate size does not necessarily reflect pit size, refer pit type details, shown on detail sheets - C212
Final internal pit dimensions are to comply with AS3500

Type	Description	Size	Class	Size	Number
B	Surface inlet pit	900 x 900	D	Galvanised mild steel grate hinged to frame	4,8,9,10 11
	Surface inlet pit	600 x 600	D	Galvanised mild steel grate hinged to frame	12
A	OSD Access	900 x 900	D	Galvanised mild steel grate hinged to frame	5,6,7
E	Existing pit to remain				1,2,3

SURVEY AND SERVICES INFORMATION

SURVEY

Origin of levels :
Datum of levels : A.H.D. AUSTRALIAN HEIGHT DATUM
Coordinate system : MGA
Survey prepared by : YSCO GEOTECHNICS
Setout Points : CONTACT THE SURVEYOR

enstruct does not guarantee that the survey information shown on these drawings is accurate and will accept no liability for any inaccuracies in the survey information provided to us from any cause whatsoever.

UNDERGROUND SERVICES - WARNING

The locations of underground services shown on enstruct drawings have been plotted from diagrams provided by service authorities. This information has been prepared solely for the authorities own use and may not necessarily be updated or accurate.

The position of services as recorded by the authority at the time of installation may not reflect changes in the physical environment subsequent to installation.

enstruct does not guarantee that the services information shown on these drawings shows more than the presence or absence of services, and will accept no liability for inaccuracies in the services information shown from any cause whatsoever.

The Contractor must confirm the exact location and extent of services prior to construction and notify any conflict with the drawings immediately to the Engineer/Superintendent.

The contractor is to get approval from the relevant state survey department, to remove/adjust any survey mark. This includes but is not limited to; State Survey Marks (SSM), Permanent Marks (PM), cadastral reference marks or any other survey mark which is to be removed or adjusted in any way.

enstruct plans do not indicate the presence of any survey mark. The contractor is to undertake their own search.

STORMWATER DRAINAGE NOTES

1 Stormwater Design Criteria :
(A) Average exceedance probability -
1% AEP for roof drainage to first external pit
5% AEP for paved and landscaped areas
(B) Rainfall intensities -
Time of concentration: 5 minutes
1% AEP = 240mm/hr
5% AEP = 176mm/hr
(C) Rainfall losses -
Impervious areas: IL= 1.5 mm , CL = 0 mm/hr
Pervious areas: IL= 1.0mm , CL = 1.36 mm/hr

2. Pipes 300 dia and larger to be reinforced concrete Class "2" approved spigot and socket with rubber ring joints U.N.O.
3. Pipes up to 300 dia may be sewer grade uPVC with solvent welded joints, subject to approval by the engineer
4. Equivalent strength FRP pipes may be used subject to approval.
5. Precast pits may be used external to the building subject to approval by engineer
6. Enlargers, connections and junctions to be manufactured fittings where pipes are less than 300 dia.
7. Where subsoil drains pass under floor slabs and vehicular pavements, unslotted uPVC sewer grade pipe is to be used.
8. Grates and covers shall conform with AS 3996-2006, and AS 1428.1 for access requirements.
9. Pipes are to be installed in accordance with AS 3725. All bedding to be type H2 U.N.O.
10. Care is to be taken with invert levels of stormwater lines. Grades shown are not to be reduced without approval.
11. All stormwater pipes to be 150 dia at 1.0% min fall U.N.O.
12. Subsoil drains to be slotted flexible uPVC U.N.O.
13. Adopt invert levels for pipe installation (grades shown are only nominal).

MASONRY NOTES

1. Temporary bracing shall be provided by the contractor to keep the masonry stable at all times.
2. Masonry to be in accordance with AS 3700
3. Masonry units shall comply with AS/NZS 4455 and as follows:

Type of masonry unit	Characteristic unconfined compressive strength (f'uc)	Characteristic lateral modulus of rupture (f'ut)
Clay & Calcium silicate	15 MPa	0.8 MPa
Concrete (used in non-loadbearing internal walls)	4.5 MPa (hollow units) 3.0 MPa (solid or cored units)	0.8 MPa
Concrete (used in unreinforced loadbearing walls, reinforced masonry and non-loadbearing external walls)	15 MPa (hollow units) 10 MPa (solid or cored units)	0.8 MPa

4. Mortar shall consist of the following:
   M3 for general applications
   1 part Type GP cement: 5 parts sand plus water thickener
   M4 for elements in interior environments subject to saline wetting and drying; below a damp-proof course or in contact with ground in aggressive soils; in severe marine environments; in saline or contaminated water including tidal splash zones; and within 1km of an industry producing chemical pollutants.
   1 part Type GP cement: 4 parts sand plus water thickener
5. Other than what is allowed in the specification no chasing or rebates may be made in masonry walls without written approval.
6. The contractor shall provide records that demonstrate all masonry bed joint reinforcement, masonry ties and masonry wall stiffeners have been installed in accordance with the drawings and specification.
7. All load bearing concrete masonry walls shall have all cores filled with grout UNO. Core filling grout shall be thoroughly compacted. Grout to be in accordance with AS3700 and as follows:

Location	f'cg MPa	Specified Slump	Maximum Agg. Size
Grout	20	230	10

8. All core filled blockwalls shall be constructed with "Double U" blocks
9. In core filled blockwalls cleanout openings shall be provided at the bottom of each core and shall be cleaned of mortar protrusions before grouting.
10. All core filled block walls shall have all cores filled with grout UNO. Core filling grout to be in accordance with note 9.
11. Cover to reinforcement to be 50mm to face of block UNO.
12. Provide bed joint reinforcement as follows
    M.E.T. galvanized masonry reo where M3 mortar is used (supplied by DUNSTONE MAZE in NSW)
    Ancon CCL stainless steel where M4 mortar is used and locate as follows
    - in 2 bed joints below and above head and sill flashings to openings
    - in 2 bed joints below and above openings
    - in third bed joint above bottom of wall
    - in second bed joint below top of wall

Date generated 6/11/2020 4:38:39 PM P:\P-620\6260\00 - ENSTRUCT DOCUMENTS\0.1 - CAD\CIVIL\DRAWINGS\NEPEAN CREATIVE AND PERFORMING ARTS HIGH SCHOOL\NHS - C100

rev	date	description	drn	ch'k
B	06/11/20	100% SD	BEJ	KEH
A	13/10/20	ISSUE FOR REVIEW	BEJ	KEH

rev	date	description	drn	ch'k

NSW GOVERNMENT Education School Infrastructure

enstruct group pty ltd
Level 4, 2 Glen Street
Milsons Point NSW 2061
Australia
Telephone (02) 8904 1444
Facsimile (02) 8904 1555
www.enstruct.com.au

enstruct

project: Nepean Creative and Performing Arts High School

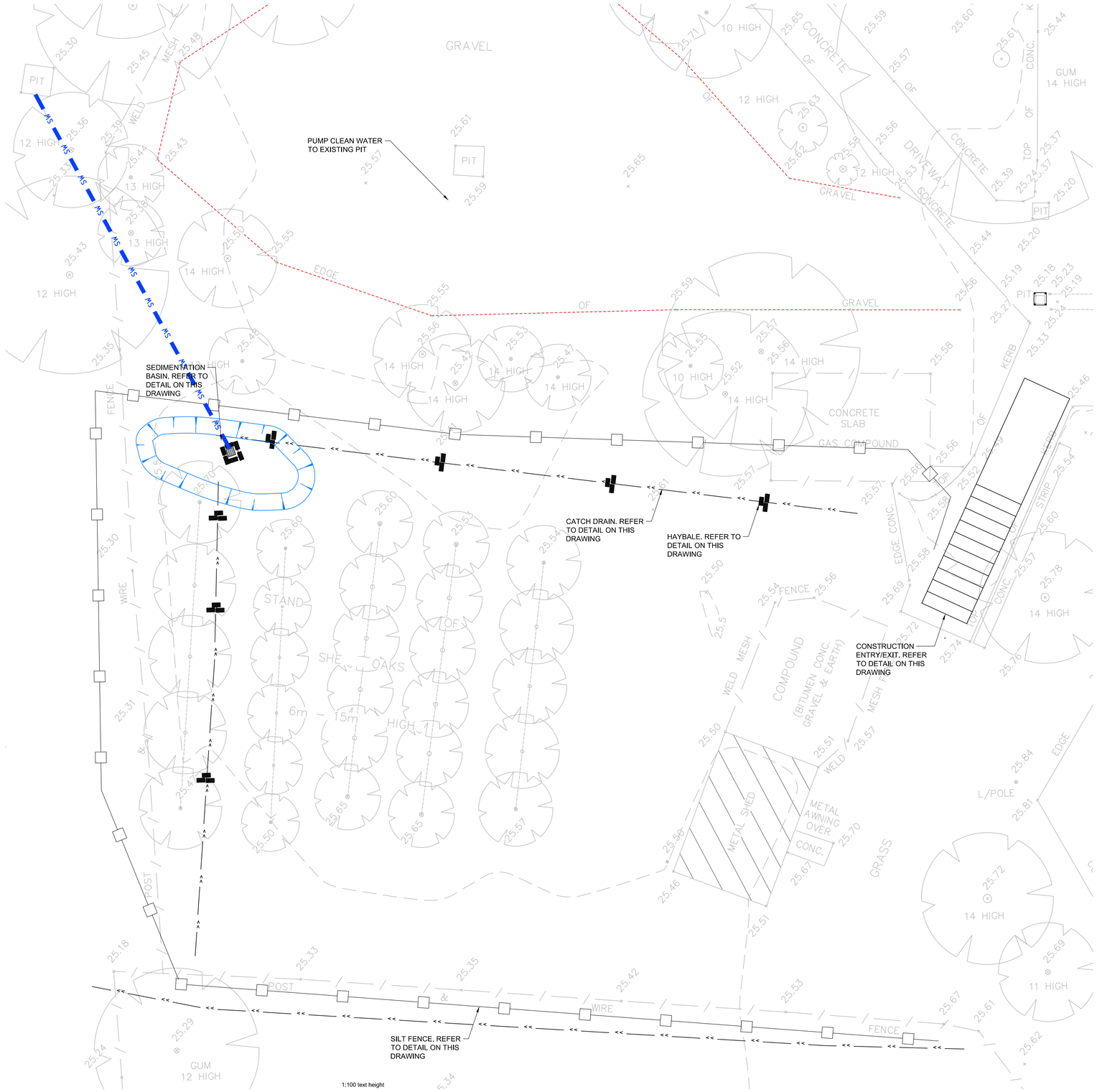
drawing title: COVER, NOTES, AND LEGENDS SHEET

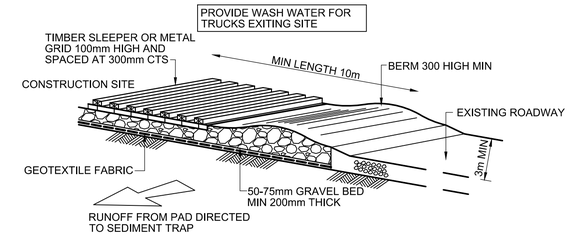
status:

scale at A1	drawn by	checked	
	BEJ	KEH	

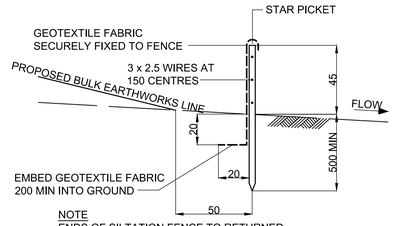
project no.	drawing no.	rev.
6260	NHS - C100	B

Document Set ID: 9511035
Version: 1, Version Date: 15/03/2021

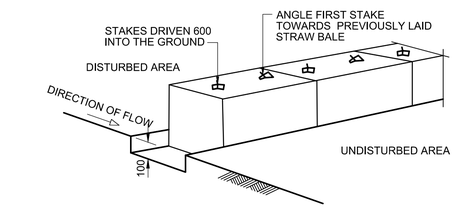




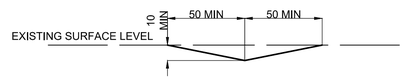
TEMPORARY CONSTRUCTION VEHICLE EXIT
NTS



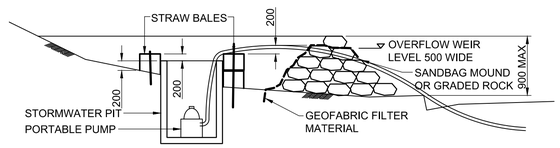
SILTATION FENCE DETAIL
SCALE 1:20



HAY BALE SEDIMENT FILTER
NTS
NOTE: STAKE TO BE EITHER TAR COATED STAR OR 50 x 50 HARDWOOD



TYPICAL SECTION THROUGH CATCH DRAIN
SCALE 1:20



SEDIMENTATION TRAP
NTS

EROSION AND SEDIMENT CONTROL LEGEND

- Batter
- Siltation fence
- Stormwater pit with Geotextile filter surround
- Hay bale filter
- Sandbag sediment trap
- Overland flow path

EROSION AND SEDIMENT CONTROL NOTES

1. All work shall be generally carried out in accordance with
   (A) Local authority requirements,
   (B) EPA - Pollution control manual for urban stormwater,
   (C) LANDCOM NSW - Managing Urban Stormwater: Soils and Construction ("Blue Book").
2. Erosion and sediment control drawings and notes are provided for the whole of the works. Should the Contractor stage these works then the design may be required to be modified. Variation to these details may require approval by the relevant authorities.
   The erosion and sediment control plan shall be implemented and adapted to meet the varying situations as work on site progresses.
3. Maintain all erosion and sediment control devices to the satisfaction of the superintendent and the local authority.
4. When stormwater pits are constructed prevent site runoff entering the pits unless silt fences are erected around pits.
5. Minimise the area of site being disturbed at any one time.
6. Protect all stockpiles of materials from scour and erosion. Do not stockpile loose material in roadways, near drainage pits or in watercourses.
7. All soil and water control measures are to be put back in place at the end of each working day, and modified to best suit site conditions.
8. Control water from upstream of the site such that it does not enter the disturbed site.
9. All construction vehicles shall enter and exit the site via the temporary construction entry/exit.
10. All vehicles leaving the site shall be cleaned and inspected before leaving.
11. Maintain all stormwater pipes and pits clear of debris and sediment. Inspect stormwater system and clean out after each storm event.
12. Clean out all erosion and sediment control devices after each storm event.

Sequence Of Works

1. Prior to commencement of excavation the following soil management devices must be installed.
1.1. Construct silt fences below the site and across all potential runoff sites.
1.2. Construct temporary construction entry/exit and divert runoff to suitable control systems.
1.3. Construct measures to divert upstream flows into existing stormwater system.
1.4. Construct sedimentation traps/basin including outlet control and overflow.
1.5. Construct turf lined swales.
1.6. Provide sandbag sediment traps upstream of existing pits.
2. Construct geotextile filter pit surround around all proposed pits as they are constructed.
3. On completion of pavement provide sand bag kerb inlet sediment traps around pits.
4. Provide and maintain a strip of turf on both sides of all roads after the construction of kerbs.

WATER QUALITY TESTING REQUIREMENTS

Prior to discharge of site stormwater, groundwater and seepage water into council's stormwater system, contractors must undertake water quality tests in conjunction with a suitably qualified environment consultant outlining the following:

- Compliance with the criteria of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)
- If required subject to the environmental consultants advice, provide remedial measures to improve the quality of water that is to be discharged into Councils storm water drainage system.This should include comments from a suitably qualified environmental consultant confirming the suitability of these remedial measures to manage the water discharged from the site into Councils storm water drainage system. Outlining the proposed, ongoing monitoring, contingency plans and validation program that will be in place to continually monitor the quality of water discharged from this site. This should outline the frequency of water quality testing that will be undertaken by a suitably qualified environmental consultant.

Date generated: 29/10/2020 12:22:47 PM P:\J1-6200\6260\100 - ENSTRUCT DOCUMENTS\0.1 - CAD\CIVIL\DRAWINGS\NEPEAN CREATIVE AND PERFORMING ARTS HIGH SCHOOL\NHS - C101

rev	date	description	drn	ch'k
B	06/11/20	100% SD	BEJ	KEH
A	13/10/20	ISSUE FOR REVIEW	BEJ	KEH

Education
School Infrastructure

enstruct group pty ltd
Level 4, 2 Glen Street
Milsons Point NSW 2061
Australia
Telephone (02) 8904 1444
Facsimile (02) 8904 1555
www.enstruct.com.au

N

enstruct

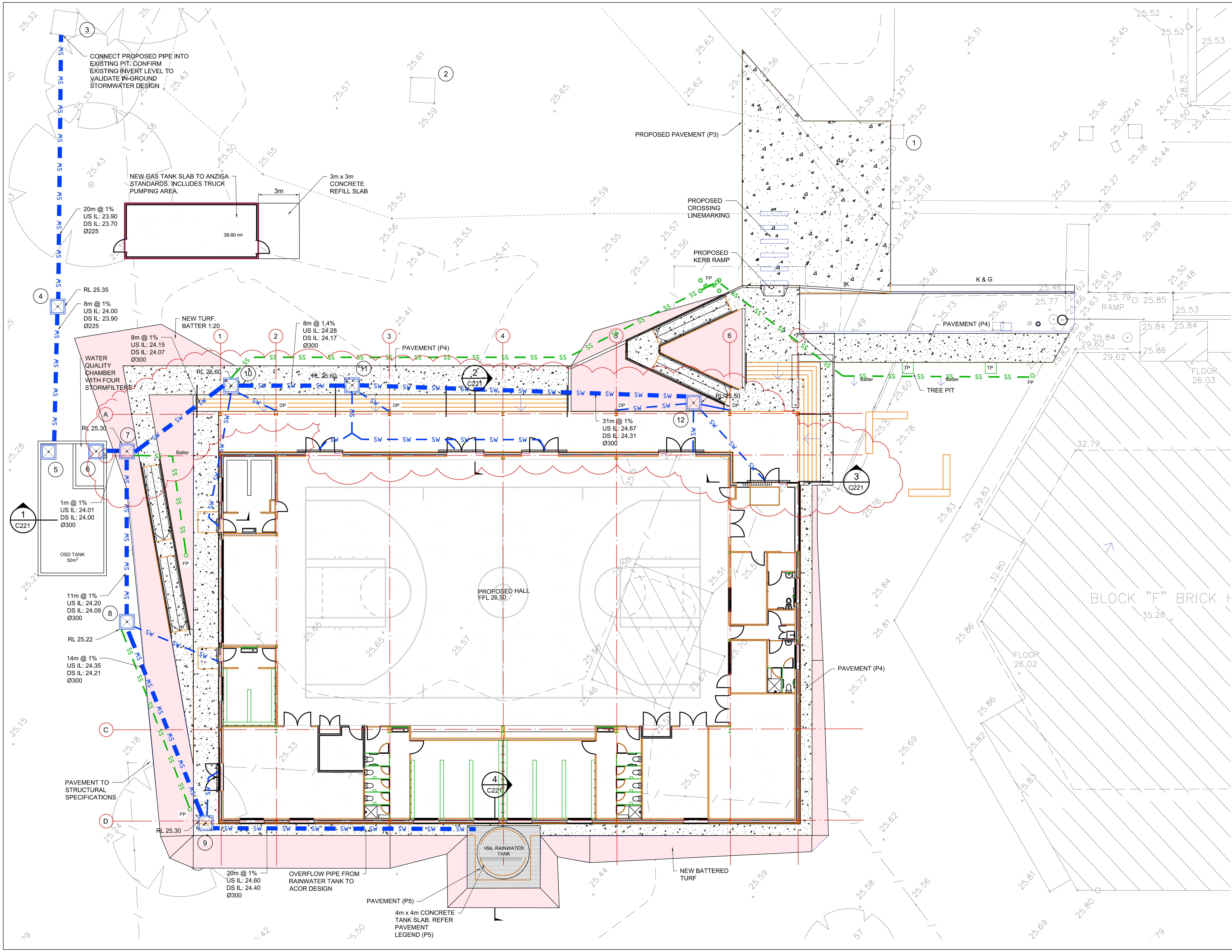
project: Nepean Creative and Performing Arts High School

drawing title: EROSION AND SEDIMENT CONTROL PLAN

status:

scale at A1	drawn by	checked	
1:150	KEH	BEJ	

project no.	drawing no.	rev.
6260	NHS - C101	B



SITEWORKS LEGEND

Symbol	Description
● F22.20	Finished surface level
F22.00	Finished contour
K&G	Kerb and gutter
KO	Kerb only
FK	Flush kerb
DD	Dish drain
SW	Stormwater pit, flow direction and line with
IL10.00 / 600 Ø '2' / 1.25% / Q=345 L/s / IL9.65	Invert level upstream / Pipe size and class / Pipe grade / Flow (Litres per second) / Invert level downstream
GD	Grated drain
SS — IR	Intermediate riser with subsoil drainage line (100 dia)
SS — FP	Flushing point with subsoil drainage line (100 dia)
SW — DP	Down pipe
SW — RP	Rodding point
SW	Concrete encased stormwater line
RW#	Blockwork retaining wall
SJ	Sawn joint
WPJ	Weakened plane joint
EJ	Expansion joint
←	Grass catch drain
<---	Overland flow path

PAVEMENT DETAIL

NOTES
1. Asphaltic concrete shall conform to AS2150 and the specification
2. Pavement based on geotechnical report by: Douglas Partners May 2020

Pavement type	Layers
PAVEMENT TYPE 1 ASPHALTIC ROAD (P1)	40m Thickness asphaltic concrete (AC10); 100mm Compacted thickness fine crushed rock (DGB20); 300mm Compacted thickness fine crushed rock (DGS40)
PAVEMENT TYPE 2 ASPHALTIC ROAD (P2)	5mm Thickness asphaltic concrete (AC5); 5mm Thickness asphaltic concrete (AC5); 100mm Compacted thickness fine crushed rock (DGB20); 200mm Compacted thickness fine crushed rock (DGS40)
PAVEMENT TYPE 3 CONCRETE ROAD (P3)	150mm Thickness concrete (f'c=32MPa) with SL92 fabric (40 top cover); 100mm Compacted thickness fine crushed rock (DGB20)
PAVEMENT TYPE 4 PEDESTRIAN FOOTPATH (P4)	100mm SL72 Thickness concrete (f'c=25MPa) with expansion joints at max 6.0m centres and weakened plane joints at max 1.5m centres; 100mm DGB20
PAVEMENT TYPE 5 RAIN WATER TANK (P5)	180mm Thickness concrete (f'c=32MPa) with SL92 fabric top and bottom (40 cover); 100mm Compacted thickness fine crushed rock (DGB20)

rev	date	description	drn	ch'k
F	25/01/21	S/W MOVE OUT OF STRUCTURAL SLAB	NKK	KEH
E	10/12/20	BUILDING FFL RAISED	NKK	KEH
D	19/11/20	ISSUE FOR SD	NKK	KEH
C	06/11/20	100% SD	NKK	KEH
B	20/10/20	ISSUE FOR REVIEW	BEJ	KEH
A	13/10/20	ISSUE FOR REVIEW	BEJ	KEH

NSW GOVERNMENT Education School Infrastructure

enstruct group pty ltd
Level 4, 2 Glen Street
Milsons Point NSW 2061
Australia
Telephone (02) 8904 1444
Facsimile (02) 8904 1555
www.enstruct.com.au
enstruct

project: Nepean Creative and Performing Arts High School

drawing title: SITE WORKS PLAN

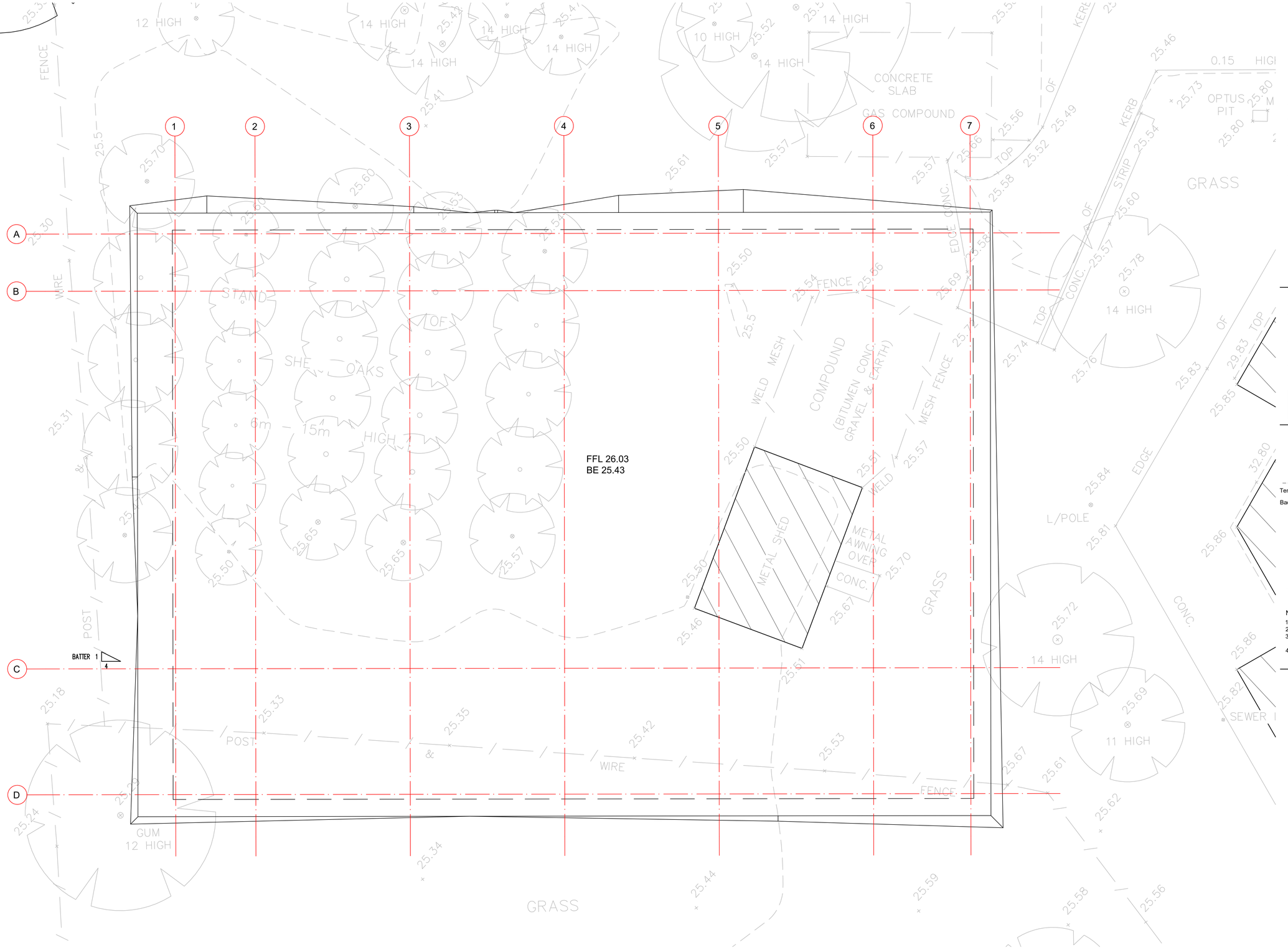
status: FOR INFORMATION ONLY

scale at A1	drawn by	checked
1:150	NKK	KEH

project no.	drawing no.	rev.
6260	NHS - C201	F

Date generated 22/01/2021 3:13:46 PM P:\1-6200\6260\00 - ENSTRUCT DOCUMENTS\0.1 - CAD\CIVIL\DRAWINGS\NEPEAN CREATIVE AND PERFORMING ARTS HIGH SCHOOL\NHS - C201
Document Set ID: 9511035
Version: 1, Version Date: 15/03/2021

A1



BULK EARTHWORKS NOTES

1. All bulk earthworks setout from grid lines U.N.O.
2. All temporary batters at a slope of 1 (H) :1 (V) U.N.O.
3. All permanent batters at a slope of 4 (H) : 1 (V) U.N.O.
4. Excavated material may be used as structural fill provided,
   (i) it complies with the specification requirements for fill material,
   (ii) the placement moisture content complies with the Geotechnical Consultants requirements, and allows filling to be placed and proofrolled in accordance with the specification. Where necessary the Contractor must moisture condition the excavated material to meet these requirements.

4. Compact fill areas and subgrade to not less than:

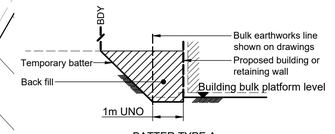
Location	Standard dry density (AS 1289 5.1.1.)	Moisture (OMC)
Under building slabs on ground:	98%	±2%
Under roads and carparks:	98%	±2%
Landscaped areas:	95%	±2%

5. Before placing fill, proof roll exposed subgrade with a 10 tonne minimum roller to test subgrade and then remove soft spots (areas with more than 3mm movement under roller). Soft spots to be replaced with select fill U.N.O.
6. Contractor shall place safety barriers around excavations in accordance with relevant safety regulations.
7. For interpretation of bulk earthworks foot print line shown on the bulk earthworks drawings refer to the bulk earthworks construction legend.
8. Bulk earthwork drawings are not to be used for detailed excavation.
9. Refer to Geotechnical Report prepared by -
   Douglas Partners
   October 2020

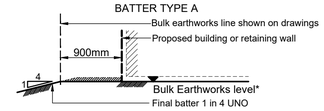
BULK EARTHWORKS LEGEND

- Batter
- B10.00+X B10.00+X / B10.00 X STEP B10.00 — Bulk Earthworks Step (Step from low side to high side)
- B22.00 — Bulk earthworks spot level
- B22.00 — Bulk earthworks contour level
- BE 22.00 — Bulk earthworks platform level
- Flat platforms shown with dots

BULK EARTHWORKS CONSTRUCTION LEGEND



BATTER TYPE A



BATTER TYPE B

NOTE
1. * Bulk Earthworks level = Finish surface - (Slab thickness + base course)
2. Refer architects drawings for building setout
3. Bulk Earthwork drawings are for bulk excavation only. They are not to be used for detailed excavation such as: lift shafts, footings, pits etc.
4. Bulk Earthwork setout refers to bulk excavation only. They are not to be used for building, kerb or any other setout.

NOTE

BULK LEVEL BASED ON A 600mm DEEP RAFT SLAB

PRELIMINARY
BULK VOLUMES 55m³ FILL
240m³ CUT
SITE STRIPPING AND TRENCHING ARE NOT INCLUDED IN BULK VOLUMES

rev	date	description	drn	ch'k
B	06/11/20	100% SD	BEJ	KEH
A	13/10/20	ISSUE FOR REVIEW	BEJ	KEH

enstruct group pty ltd
Level 4, 2 Glen Street
Milsons Point NSW 2061
Australia
Telephone (02) 8904 1444
Facsimile (02) 8904 1555
www.enstruct.com.au

project: Nepean Creative and Performing Arts High School

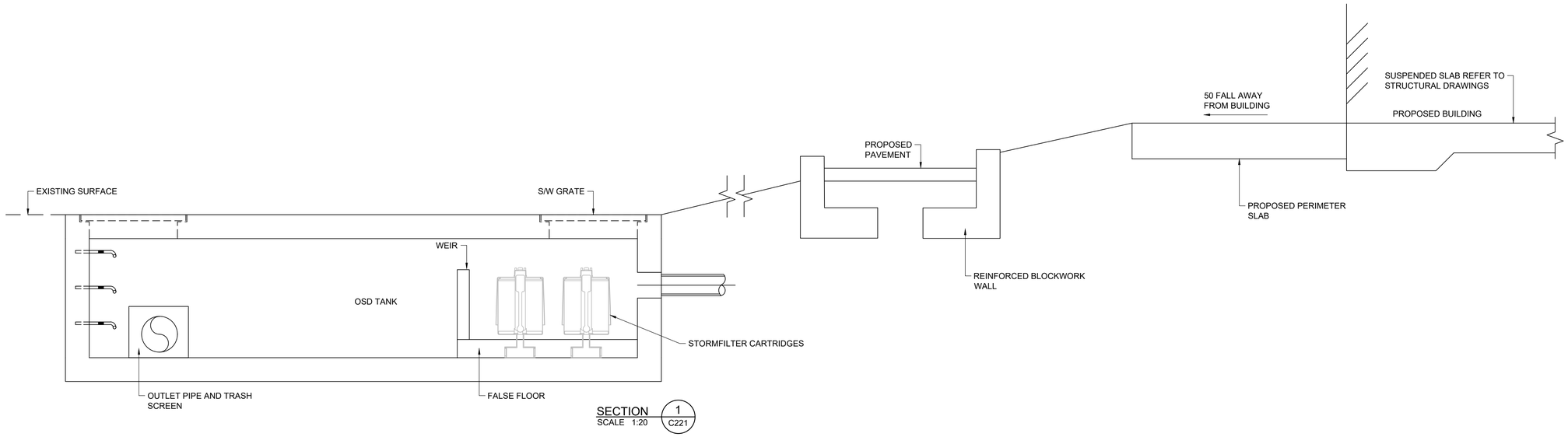
drawing title: BULK EARTHWORKS PLAN

status:

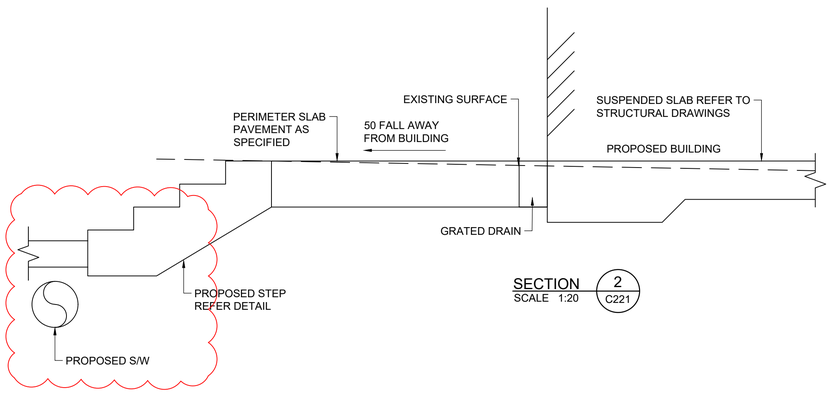
scale at A1: 1:100 | drawn by: KEH | checked: BEJ

project no.: 6260 | drawing no.: NHS - C111 | rev.: B

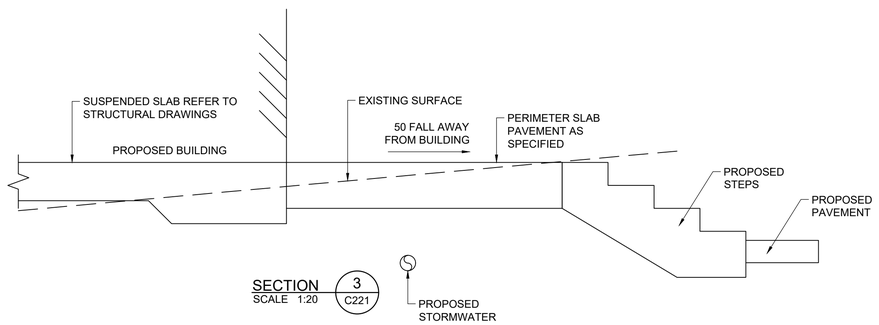
Date generated 5/11/2020 2:52:00 PM P:\J1-6200\6260\00 - ENSTRUCT DOCUMENTS\0.1 - CAD\CIVIL\DRAWINGS\NEPEAN CREATIVE AND PERFORMING ARTS HIGH SCHOOL\NHS - C111
Document Set ID: 9511035
Version: 1, Version Date: 15/03/2021



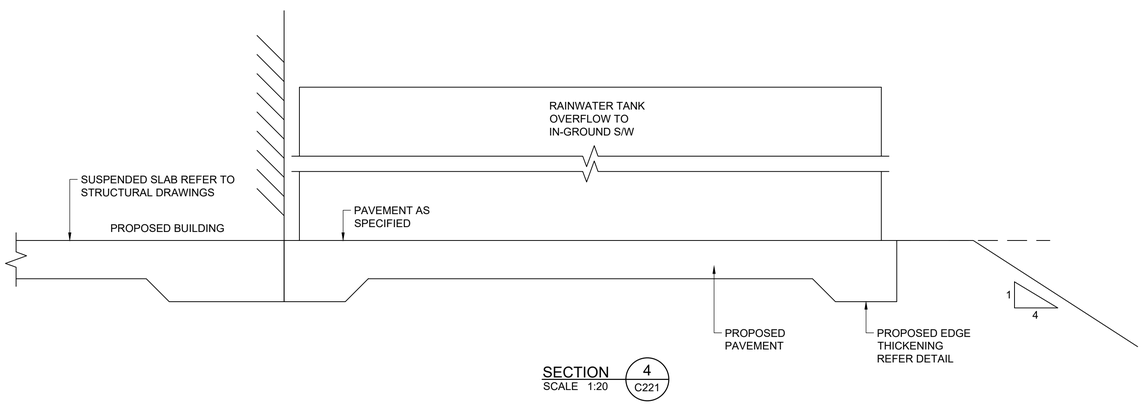
SECTION 1 / C221
SCALE 1:20



SECTION 2 / C221
SCALE 1:20



SECTION 3 / C221
SCALE 1:20



SECTION 4 / C221
SCALE 1:20

Date generated 10/12/2020 11:55:26 AM P:\J1-6020\6260\00 - ENSTRUCT DOCUMENTS\0.1 - CAD\CIVIL\DRAWINGS\NEPEAN CREATIVE AND PERFORMING ARTS HIGH SCHOOL\NHS - C221

rev	date	description	drn	ch'k
D	25/01/21	STORMWATER MOVED	NKK	KEH
C	10/12/20	BUILDING FFL RAISED	NKK	KEH
B	06/11/20	100% SD	BEJ	KEH
A	13/10/20	ISSUE FOR REVIEW	BEJ	KEH

rev	date	description	drn	ch'k

NSW GOVERNMENT Education School Infrastructure

enstruct group pty ltd

Level 4, 2 Glen Street
Milsons Point NSW 2061
Australia

Telephone (02) 8904 1444
Facsimile (02) 8904 1555
www.enstruct.com.au

enstruct

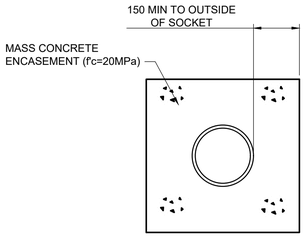
project: Nepean Creative and Performing Arts High School

drawing title: SECTIONS SHEET 1

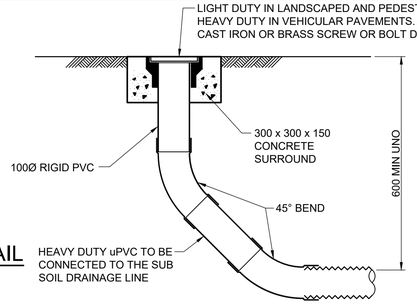
status: FOR INFORMATION ONLY

scale at A1	drawn by	checked	
AS SHOWN	NKK	KEH	

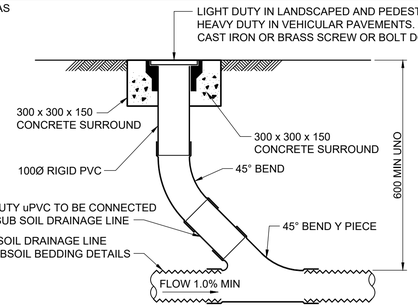
project no.	drawing no.	rev.
6260	NHS - C221	D



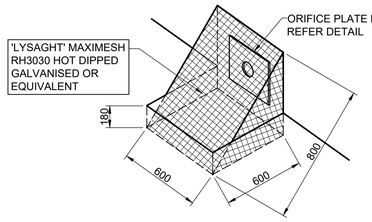
CONCRETE ENCASEMENT DETAIL
SCALE 1:10



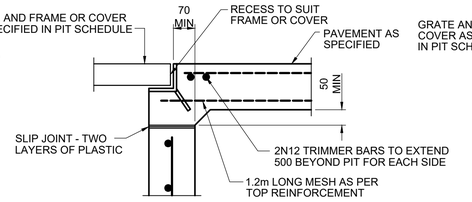
FLUSHING POINT (FP)
SCALE 1:10



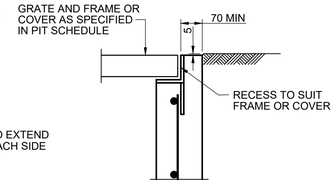
INTERMEDIATE RISER (IR)
SCALE 1:10



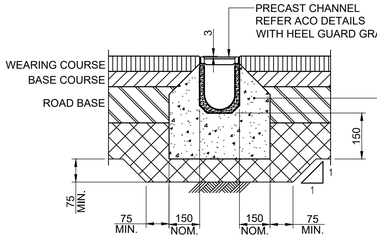
TRASH SCREEN DETAIL
NTS



DETAIL D
SCALE 1:10

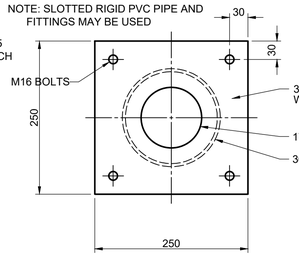


DETAIL F
SCALE 1:10

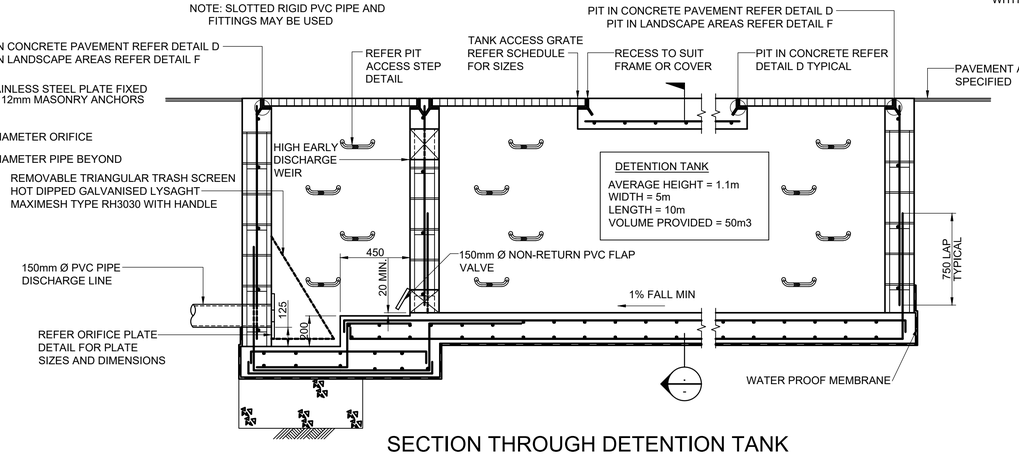


NOTE:
1. THE CHANNEL MUST NOT BE TRAFFICKED UNTIL WEARING COURSE IS LAID

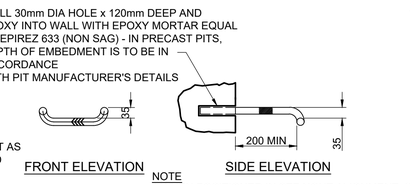
GRATED DRAIN (GD)
SCALE 1:10



ORIFICE PLATE DETAIL
SCALE 1:5

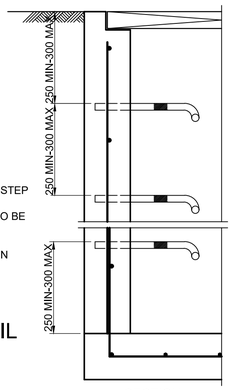


SECTION THROUGH DETENTION TANK
SCALE 1:20

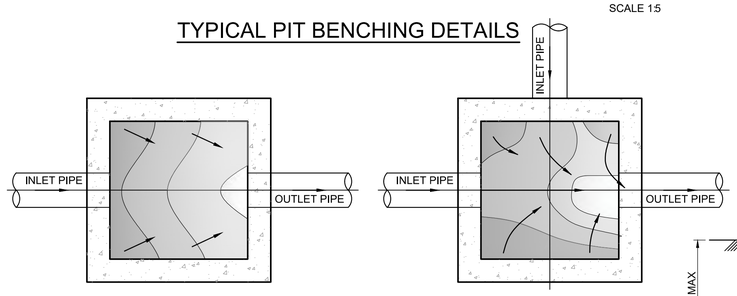


NOTE
1 WHEN POSITIONED IN STRAIGHT ALIGNMENT, STEP TO BE 400 WIDE.
2 STAGGERED STEPS TO BE 200 WIDE, STEPS TO BE STAGGERED 200 CENTRE TO CENTRE FOR ALTERNATE STEPS.
3 SPACING OF STEPS TO BE UNIFORM TO WITHIN ±5mm IN EACH PIT.

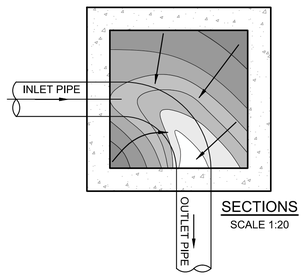
PIT ACCESS STEP DETAIL
SCALE 1:10
TO BE PROVIDED FOR PITS DEEPER THAN 900mm



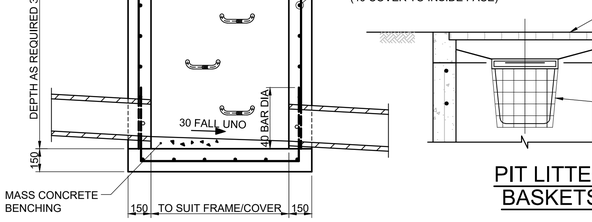
TYPICAL PIT BENCHING DETAILS



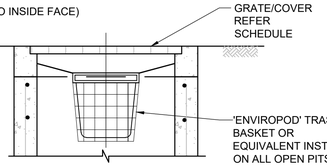
NOTES:
1. MASS CONCRETE BENCHING WITHIN PITS MUST BE FORMED SO AS TO CONVEY WATER FROM INLET(S) TO OUTLET.
2. BENCHING SHOULD BE ACHIEVE MINIMUM CROSS FALLS WITHIN PITS AS REQUIRED BY ENSTRUCT'S PIT DETAILS AND AUSTRALIAN STANDARDS.
3. NO WATER STAND IN PITS WHEN BENCHING IS COMPLETE.



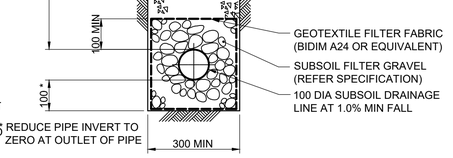
SECTIONS
SCALE 1:20



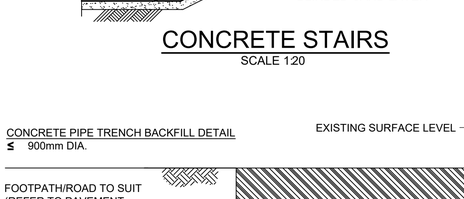
SECTION
SCALE 1: 20



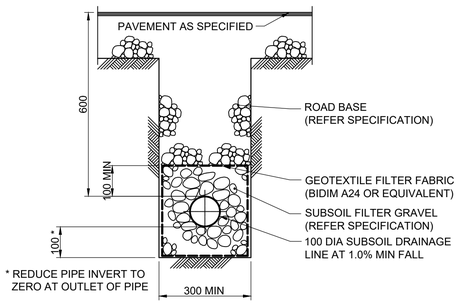
PIT LITTER BASKETS



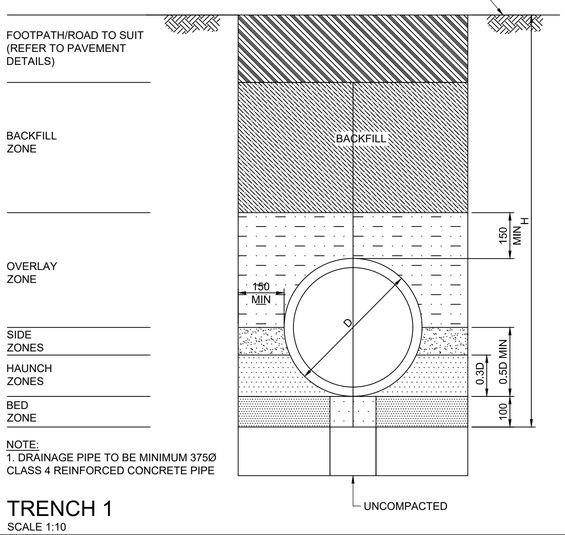
SUBSOIL IN LANDSCAPED AREAS
SCALE 1:10



CONCRETE STAIRS
SCALE 1:20

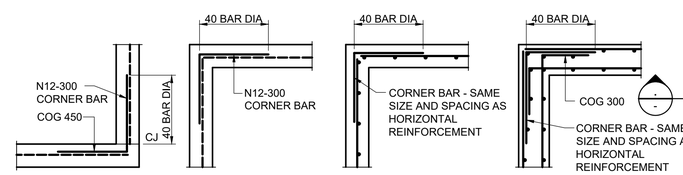


SUBSOIL IN PAVED AREAS
SCALE 1:10



NOTE:
1. DRAINAGE PIPE TO BE MINIMUM 375Ø CLASS 4 REINFORCED CONCRETE PIPE

TRENCH 1
SCALE 1:10

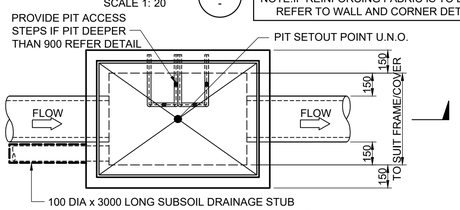


ELEVATION AT BASE | PLAN | PLAN-SINGLE LAYER | PLAN-DOUBLE LAYER

MESH | REINFORCEMENT

PIT CORNER DETAILS
SCALE 1:20

NOTE:IF REINFORCING FABRIC IS TO BE USED REFER TO WALL AND CORNER DETAILS



PLAN
SCALE 1:20

PIT TYPE B

rev	date	description	drn	ch'k
C	10/12/20	BUILDING FFL RAISED	NKK	KEH
B	06/11/20	100% SD	BEJ	KEH
A	13/10/20	ISSUE FOR REVIEW	BEJ	KEH

NSW GOVERNMENT Education School Infrastructure

enstruct group pty ltd
Level 4, 2 Glen Street
Milsons Point NSW 2061
Australia
Telephone (02) 8904 1444
Facsimile (02) 8904 1555
www.enstruct.com.au
enstruct

project: Nepean Creative and Performing Arts High School

drawing title: DETAILS SHEET 2

status: FOR INFORMATION ONLY

scale at A1	drawn by	checked	
AS SHOWN	NKK	KEH	

project no.	drawing no.	rev.
6260	NHS - C212	C