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FGL	FINISHED GRATE/LID LEVEL
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL FLOOR / FINISHED LEVEL
FSL	FINISHED SURFACE LEVEL
TOW	TOP OF WALL / TOP OF RETAINING WALL
BOW	BOTTOM OF WALL / BOTTOM OF RETAINING WALL
● (E) 100.00	EXISTING SURFACE LEVEL
● 103.00	FINISHED FLOOR/SURFACE LEVEL
Ø150	STORMWATER DRAINAGE LINE AND DIAMETER
○	DRAINAGE OUTLET FOR PLANTING AREAS REFER TO DRAWING C4.02 FOR DETAIL
⊗	Ø300 STAINLESS STEEL GRATE COMPLIANT TO DDA STANDARDS AND AS4586
	STORMWATER DRAINAGE STRUCTURE WITH NUMBER REFER TO DRAWING C2.02 FOR DETAIL
	STORMWATER DRAINAGE STRUCTURE WITH NUMBER REFER TO DRAWING C2.02 FOR DETAIL

ALL DIMENSIONS SHOWN ON THE PROJECT DRAWINGS ARE IN METRES UNLESS NOTED OTHERWISE.

2. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.).
3. ALL PROPOSED CIVIL WORKS HAVE BEEN GENERALLY DESIGNED IN ACCORDANCE WITH THE FOLLOWING AUSTRALIAN STANDARDS :
 - AS 1348 GLOSSARY OF TERMS ROADS AND TRAFFIC ENGINEERING
 - HORNSBY SHIRE COUNCIL, (HSC) DESIGN GUIDELINES FOR CIVIL ENGINEERING WORKS
 - MANAGING URBAN STORMWATER: SOILS AND CONSTRUCTION, "THE BLUE BOOK" 4TH EDITION, LANDCOM
4. WORK SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND THE DIRECTION OF PROJECT MANAGER OR HIS REPRESENTATIVE, UNLESS NOTED OTHERWISE.
5. THE DETAILS SHOWN ON THE SURVEY DRAWINGS ARE THOSE AT THE TIME OF SURVEY. THE BUILDER SHALL NOTIFY THE PRINCIPAL IF THESE DETAILS AT THE COMMENCEMENT OF WORKS ARE DIFFERENT FROM THOSE SHOWN ON THE DRAWINGS. THE BUILDER SHALL NOTIFY THE PROJECT MANAGER WITHIN 48 HOURS OF TAKING POSSESSION OF THE SITE. NO VARIATIONS WILL BE ACCEPTED FOR DIFFERENCE IN DETAILS AFTER THIS PERIOD.
6. ALL MATERIALS SHALL COMPLY WITH THE PROJECT DRAWINGS AND IN THE PROJECT SPECIFICATIONS, UNLESS DIRECTED OTHERWISE.
7. THE BUILDER SHALL VERIFY THE (VERTICAL AND HORIZONTAL ALIGNMENT) OF ALL EXISTING HOUSE AND AUTHORITY SERVICES WITHIN THE SITE, 14-16 ESSEX STREET AND THE ESSEX STREET ROAD RESERVE PRIOR TO THE COMMENCEMENT OF ANY WORK ON SITE. ANY POTENTIAL CONFLICTS WITH EXISTING SERVICES SHALL BE ADVISED TO THE PROJECT MANAGER AND AWAIT HIS DIRECTION.
8. THE BUILDER SHALL VERIFY OFFSET PEGS AND BENCHMARK LEVELS, AND ADVISE THE PROJECT MANAGER OF ANY DISCREPANCY PRIOR TO COMMENCING ANY WORK CONSTRUCTION ON SITE.
9. THE BUILDER SHALL VERIFY ALL EXISTING LEVELS WHERE NEW WORKS ARE TO JOIN TO EXISTING WORKS, AND ADVISE THE PROJECT MANAGER OF ANY DISCREPANCY PRIOR TO COMMENCING CONSTRUCTION AND ENSURE A SMOOTH JUNCTION.
10. A COPY OF "APPROVED" CONSTRUCTION DRAWINGS AND ANY APPROVAL CONDITIONS ARE TO BE KEPT ON-SITE AT ALL TIMES.
11. THE BUILDER SHALL BE RESPONSIBLE FOR ERECTING A SIGN AT EACH SITE ENTRANCE THAT VISIBLY DISPLAYS THE BUILDER'S NAME, CONTACT DETAILS FOR COMPLAINTS, AND CONTACT DETAILS FOR EMERGENCY CONTACT. ANY SIGNAGE SHALL BE ERECTED IN ACCORDANCE WITH TRANSPORT FOR NSW (TNSW) AND WORK COVER REQUIREMENTS.
12. WHERE CERTIFICATION IS REQUIRED, INSPECTIONS ARE TO BE PERFORMED AS REQUIRED BY DULY APPOINTED PERSONNEL FROM SCP CONSULTING PTY LTD. EACH BUILDER IS TO PREPARE HIS OWN INSPECTION AND TEST PLAN FOR REVIEW AND COMMENT BY THE PRINCIPAL OR HIS AUTHORISED REPRESENTATIVE. THE ITP IS TO BE REVIEWED BY SCP CONSULTING PTY LTD. THESE ARE TO BE IN OPERATION PRIOR TO COMMENCEMENT OF ALL WORKS ON SITE. THE BUILDERS SHALL BE RESPONSIBLE FOR THE INSTALLATION, OPERATION AND MAINTENANCE OF ALL SEDIMENT AND EROSION WORKS FOR THE DURATION OF ALL WORKS AND ALL OTHER CIVIL WORKS SHOWN ON THE DRAWINGS
13. EROSION AND SEDIMENT CONTROL MEASURES AND WATER MANAGEMENT WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS, AND IN ACCORDANCE WITH THE LANDCOM - MANAGING URBAN STORMWATER: SOIL AND CONSTRUCTION, 4th EDITION, MARCH 2004 GUIDELINES.
14. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
15. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
16. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH AN APPROVED NON-NATURAL GRANULAR MATERIAL AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289.5.1.1.
17. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
18. ON COMPLETION OF PIPE INSTALLATION ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS.
19. ALL BATTERS TO BE FINISHED WITH APPROVED MATERIAL TO THE APPROVAL OF THE PROJECT MANAGER, AND THE LANDSCAPE ARCHITECT.
20. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS.
21. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
22. ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN 880 uPVC SEWER GRADE CONDUITS EXTENDING A MIN OF 500mm PAST PAVING.

3. THESE NOTES SHALL BE READ IN CONJUNCTION WITH:
 - A. GENERAL NOTES AND DISCLAIMERS FOR THE PROJECT
 - B. EROSION AND SEDIMENT CONTROL NOTES FOR THE PROJECT, AND
 - D. GEOTECHNICAL INVESTIGATION REPORT
2. THE BUILDER IS RESPONSIBLE FOR THE REMOVAL, COMPACTION AND DISPOSAL OF ALL EXCAVATED MATERIAL.
3. BUILDER TO ALLOW FOR SITE ESTABLISHMENT, INCLUDING; STRIPPING, SITE CLEARANCE, EXCLUSION FENCE, SILT FENCE, SANDBAGGING ETC.
4. THE BUILDER IS RESPONSIBLE FOR ENGAGING A GEOTECHNICAL ENGINEER TO UNDERTAKE THE ALL THE NECESSARY INSPECTIONS INVESTIGATION AND REPORTING REQUIRED
5. ALL EARTHWORKS EXTERNAL TO THE SHORING WALL IS TO BE COMPACTED TO 95% STANDARD MAXIMUM DRY DENSITY (SMDD), UNLESS DIRECTED OTHERWISE.
6. ALL EARTHWORKS AREAS ARE TO BE LEFT IN A FREE DRAINING STATE AT ALL TIMES. NO ADDITIONAL COSTS WILL BE ALLOWED FOR NON COMPLIANCE WITH THIS REQUIREMENT.
7. ALL SUBGRADE AREAS EXTERNAL TO THE SHORING WALL ARE TO BE PROOF ROLLED IN PRESENCE OF GEOTECHNICAL ENGINEER. ALL UNSUITABLE SOFT AND WET AREAS TO BE REMOVED AND BACKFILLED WITH SITE EXCAVATED APPROVED MATERIAL AND COMPACTED TO 95% SMDD. ALL NATURAL SUBGRADE IS TO BE COMPACTED TO 95% STANDARD COMPACTION IN ACCORDANCE WITH AS1289 PRIOR TO PLACEMENT OF FILL MATERIAL. APPROVAL TO THIS WORK SHALL BE BY THE PRINCIPAL PRIOR TO COMMENCEMENT.
8. MATERIAL WON FROM THE SITE TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER FOR APPROVAL PRIOR TO USE AS FILL. ALL FILL TO BE COMPACTED TO 98% STANDARD COMPACTION IN 200mm MAXIMUM THICK LAYERS (LOOSE) IN ACCORDANCE WITH AS3798.2007 AT A RATE REQUIRED FOR EACH LAYER WITH A FREQUENCY NOT LESS THAN PROVIDED IN AS3798.2007 TO CONFIRM THE TARGET DENSITIES ARE BEING ACHIEVED.
9. WHERE THE FILL WILL BE USED TO SUPPORT PAVEMENTS, THE TESTING MAY COMPRISE LEVEL 2 TESTING AS DEFINED IN AS3798. EXCEPT WHERE FOUNDATIONS ARE FOUNDED ON THE FILL WHERE LEVEL 1 TESTING WILL BE REQUIRED.
10. TEST CERTIFICATES ON THE FILL MATERIAL SHALL BE SUPPLIED TO THE PROJECT MANAGER, PRIOR TO HAULING AND TRANSPORTATION OF FILL MATERIAL. ALL FILL MATERIAL SHALL BE VENM CERTIFIED MATERIAL.

3. ALL STORMWATER DRAINAGE WORKS WITHIN THE SITE 14-16 ESSEX STREET SHALL COMPLY WITH AS3600 AND IN ESSEX STREET TO HSC STANDARDS AND REQUIREMENTS
2. ALL Ø375 DRAINAGE PIPES AND LARGER SHALL BE CLASS "2" APPROVED SPIGOT AND SOCKET FRC OR RCP PIPES WITH RUBBER RING JOINTS. (U.N.O.). ALL Ø100, Ø150, Ø225 AND Ø300 STORMWATER DRAINAGE PIPES SHALL BE uPVC STORMWATER WITHIN ESSEX STREET ALL PIPES SHALL BE RCP RRJ CLASS "3"
3. ALL PIPE JOUNCTIONS UP TO AND INCLUDING 450 DIA. AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.
4. MINIMUM GRADE TO STORMWATER LINES TO BE 1%. (U.N.O.)
5. BUILDER TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.
6. ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
7. PRECAST PITS CAN BE USED SUBJECT TO PROVISION OF A STRUCTURAL ENGINEER CERTIFICATION.
8. WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN. 50MM CONCRETE BED (OR 75MM THICK BED OF 12mm SINGLE SIZE NATURAL AGGREGATE) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. IN OTHER THAN ROCK, PIPES SHALL BE LAID ON A 75MM THICK SAND BED. IN ALL CASES BACKFILL THE TRENCH WITH WITH APPROVED GRANULAR BACKFILL TO 200MM ABOVE THE PIPE. BACKFILL REMAINDER OF TRENCH WITH APPROVED GRANULAR BACKFILL COMPACTED IN 150MM LAYERS TO 98% STANDARD MAX. DRY DENSITY.
9. BEDDING SHALL BE (U.N.O.) TYPE H2, IN ACCORDANCE WITH CURRENT RELEVANT AUSTRALIAN STANDARDS.
10. PROVIDE FLEXIBLE JOINT 600 EITHER SIDE OF PENETRATION THROUGH SHORING WALL
11. PROVIDE 3.0M LENGTH OF 100 DIA. SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK. AT UPSTREAM END OF EACH PIT.
12. ALL STORMWATER INLET PITS IN LANDSCAPE AREAS SHALL BE FITTED WITH LITTER BASKETS (STORMWATER 360 ENVIROPODS OR EQUAL) TO SUIT PIT SIZE. BASKETS SHALL BE INSTALLED STRICTLY TO MANUFACTURERS SPECIFICATIONS.
13. PROVIDE PLASTIC COATED STEP IRONS FOR ALL PIT DEPTHS GREATER THAN 1200.

1. BUILDER SHALL AFTER APPROVAL OF THE INSTALLATION OF THE PIPE WORK, DOCUMENT ON ELECTRONIC FILES SUPPLIED BY THE PRINCIPAL THE HORIZONTAL AND VERTICAL ALIGNMENT OF THAT SECTION OF PIPE WORK APPROVED.
2. THE BUILDERSHALL VERIFY THE HORIZONTAL AND VERTICAL ALIGNMENT OF ALL STORMWATER PIPE WORK EXTERNAL TO THE BUILDING.

1. THE BUILDER SHALL DEVELOP, IMPLEMENT, ADMINISTER AND BE RESPONSIBLE FOR A WORKPLACE HEALTH AND SAFETY PROGRAM THAT WILL ENSURE THAT ALL CONSTRUCTION ACTIVITIES ARE PERFORMED TO THE RELEVANT AND CURRENT WORKPLACE HEALTH AND SAFETY REQUIREMENTS AND ALL OTHER APPLICABLE RELEVANT STATUTORY REQUIREMENTS.
2. THE WORKPLACE HEALTH AND SAFETY PROGRAM MUST BE CO-ORDINATED WITH ADJOINING PROPERTY OWNERS AND ALL RELEVANT PARTIES (INCLUDING TRADE CONTRACTORS) AS NECESSARY TO ENSURE A SAFE BUILDING ENVIRONMENT AT ALL TIMES.
3. THE WORKPLACE OF HEALTH AND SAFETY PROGRAM SHALL BE REVIEWED BY THE PROJECT MANAGER. THE BUILDERS SHALL BE RESPONSIBLE AT ALL FOR THE IMPLEMENTATION AND ADMINISTRATION OF THIS PROGRAM.

1. THE BUILDER SHALL DEVELOP, IMPLEMENT, AND ADMINISTER A PLAN THAT WILL ENSURE THE MANAGEMENT AND MITIGATION OF ALL NOISE AND VIBRATION IMPACTS RESULTING FROM CONSTRUCTION WORKS. REFER TO THE SPECIFICATIONS FOR REQUIRED LIMITS, OTHERWISE, CONTACT THE PRINCIPAL.
2. THE BUILDER WILL NEED TO ENSURE ALL ADJOINING PROPERTY REQUIREMENTS RELATING TO NOISE AND VIBRATION ARE COMPLIED WITH AT ALL TIMES.
3. IF IT IS ESTABLISHED THAT THERE ARE NO SITE SPECIFIC REQUIREMENTS, THEN THE BUILDER SHALL REFER TO MINIMUM REQUIREMENTS FOR ABATEMENT OF NOISE AND VIBRATION NOMINATED BY RELEVANT STATUTORY AUTHORITIES' REQUIREMENTS.
4. THE BUILDER WILL ARRANGE FOR THE PREPARATION OF ALL MONITORING AND MANAGEMENT OF NOISE AND VIBRATION REQUIREMENT BASED ON PROFESSIONAL ADVICE FROM A SUITABLY QUALIFIED AND EXPERIENCED CONSULTANT.
5. ALL OF THE ABOVE WORKS SHALL BE AT THE CONTRACTORS COST.

1. THE BUILDER SHALL ALLOW FOR THE DESIGN, SUPPLY, INSTALLATION AND REMOVAL OF ALL TEMPORARY BACK PROPPING, SAFETY SCREENS, SCAFFOLDING AND OTHER REQUIREMENTS OF THE CONSTRUCTION PROCESS. THE BUILDER SHALL ENGAGE A SUITABLE QUALIFIED ENGINEER REFERRED TO AS "BUILDERS ENGINEER" TO DESIGN INSPECT AND CERTIFY ALL TEMPORARY WORKS, AND DEMOLITION WORKS ARE FIT FOR PURPOSE.
2. THE BUILDER WILL BE RESPONSIBLE FOR THE PREPARATION AND CERTIFICATION OF ENGINEERING DESIGN FOR TEMPORARY WORKS.
3. IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THE OVERALL STABILITY OF ALL STRUCTURES AT ALL TIMES WHILST UNDER CONSTRUCTION.
4. THE BUILDER IS TO HAVE CONSTRUCTION METHODOLOGY STATEMENTS PREPARED AND SUBMITTED FOR REVIEW BY THE PRINCIPAL THE BUILDER WILL AT ALL TIMES BE RESPONSIBLE FOR CONSTRUCTION METHODOLOGY.

1. FOR ALL CONCRETE SPECIFICATION AND REQUIREMENTS RELATING TO STRUCTURAL ELEMENTS REFER TO STRUCTURAL DRAWINGS

1. FOR ALL PAVEMENT DETAILS REFER TO LANDSCAPE ARCHITECT DRAWINGS

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D	ISSUE FOR SECTION 86	20.07.2017
C	ISSUE FOR SECTION 86	11.07.2017
B	DRAWING TITLE AMENDED, ISSUE FOR TENDER	15.09.2016
A	ISSUE FOR TENDER	12.09.2016
Rev	Revision Description	Date



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GREATON PTY LTD; L33/52 MARTIN PLACE; SYD

**RESIDENTIAL APARTMENTS
30-42 OXFORD STREET
EPPING NSW 2121**

COVER SHEET, NOTES AND LEGENDS

cale

NOT TO SCALE

Drawn K2L	Checked JK	Approved	
Project Number 160023		Drawing Number C1.01	Revision D

Key Plan

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CONSTRUCTON

C	ISSUE FOR SECTION 96	20.07.2017
B	ISSUE FOR SECTION 96	11.07.2017
A	ISSUE FOR TENDER	12.09.2016
Rev	Revision Description	Date



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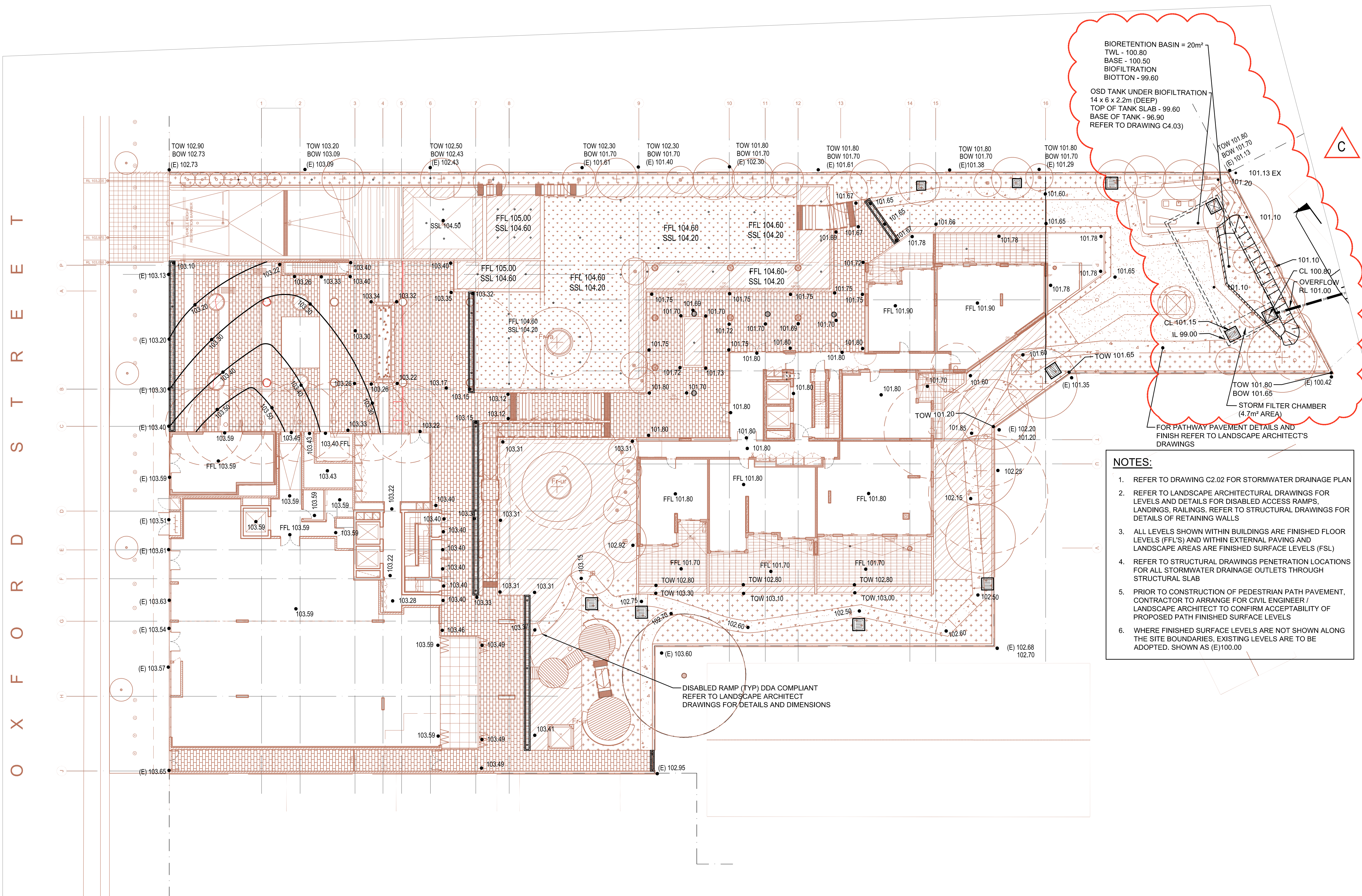
Project
**RESIDENTIAL APARTMENTS
30-42 OXFORD STREET
EPPING NSW 2121**

Title
**GROUND FLOOR - FINISHED LEVELS
PLAN**

Scale
0 4000 10000
1:200 @ A1

Drawn	Checked	Approved
K2L	JK	

Project Number	Drawing Number	Revision
160023	C2.01	C



Key Plan

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Rev	Revision Description	Date



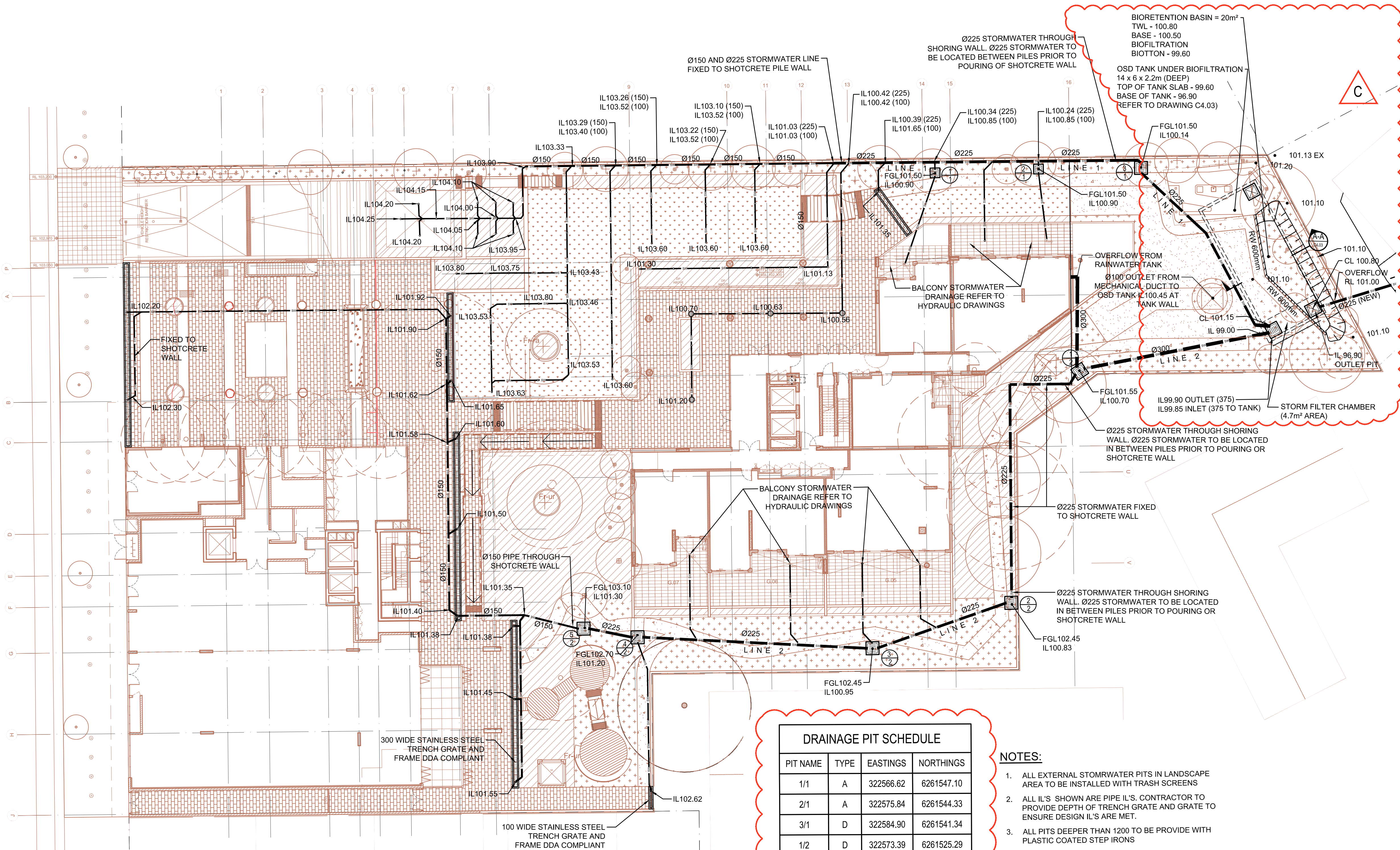
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Project
**RESIDENTIAL APARTMENTS
30-42 OXFORD STREET
EPPING NSW 2121**

Title
**GROUND FLOOR - STORMWATER
DRAINAGE PLAN**

Scale
0 4000 10000
1:200 @ A1

Drawn K2L	Checked JK	Approved	Project Number 160023	Drawing Number C2.02	Revision C
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DRAINAGE PIT SCHEDULE

PIT NAME	TYPE	EASTINGS	NORTHINGS
1/1	A	322566.62	6261547.10
2/1	A	322575.84	6261544.33
3/1	D	322584.90	6261541.34
1/2	D	322573.39	6261525.29
2/2	D	322560.41	6261506.99
3/2	D	322546.83	6261507.16
4/2	D	322526.48	6261515.18
5/2	D	322521.99	6261517.57

PIT TYPE:

A - EVERHARD SERIES 600 STORMWATER PITS OR APPROVE EQUIVALENT
D - PRECAST OR CAST IN SITU 900 x 900 GRATE

NOTES:

- ALL EXTERNAL STORMWATER PITS IN LANDSCAPE AREA TO BE INSTALLED WITH TRASH SCREENS
- ALL IL'S SHOWN ARE PIPE IL'S. CONTRACTOR TO PROVIDE DEPTH OF TRENCH GRATE AND GRATE TO ENSURE DESIGN IL'S ARE MET.
- ALL PITS DEEPER THAN 1200 TO BE PROVIDED WITH PLASTIC COATED STEP IRONS
- ALL GRATES TO BE DDA COMPLIANT
- ALL STORMWATER PIPE DIAMETER NOT SHOWN ARE Ø100 UNO

Key Plan

[illegible]

SCALE 1:250(H) 1:50(V)

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EPPING NSW 2121

Title
**PROPOSED STORMWATER LINE
14-16 ESSEX STREET**

Scale

0 2000 5000

1:100 at A1

Drawn	Checked	Approved	
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K2L	JK		
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Project Number	Drawing Number	Revision
160023	C3.01.01	E

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D	ISSUE FOR SECTION 96	20.07.2017
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B	CROSS SECTIONS ADDED, ISSUE FOR TENDER	15.09.2016
A	ISSUE FOR TENDER	12.09.2016

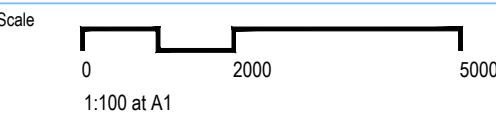
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EPPING NSW 2121**

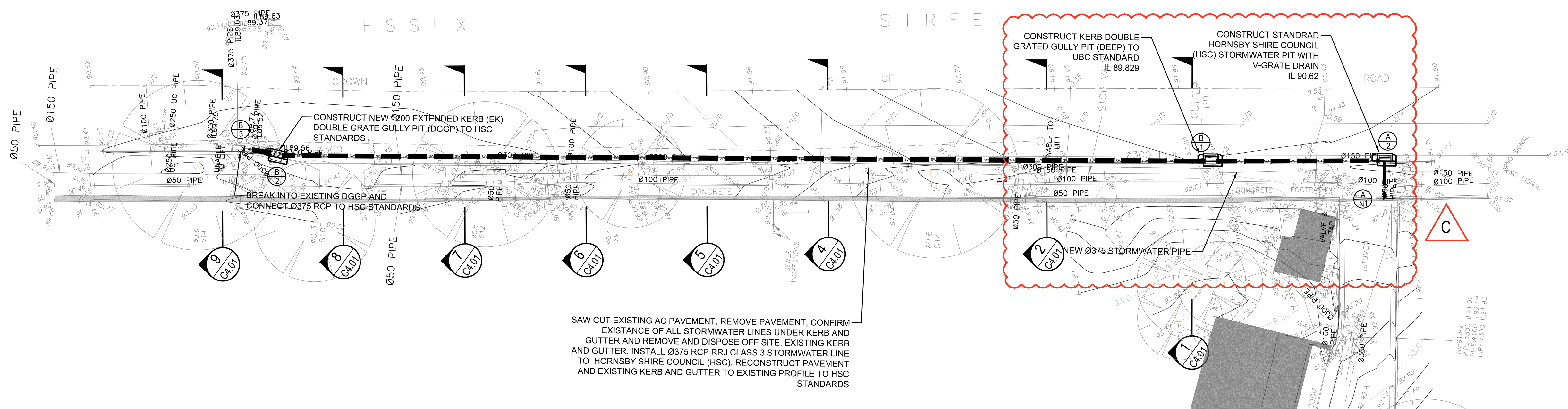
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**14-16 ESSEX STREET
EXISTING CROSS SECTIONS**



Drawn K2L	Checked JK	Approved
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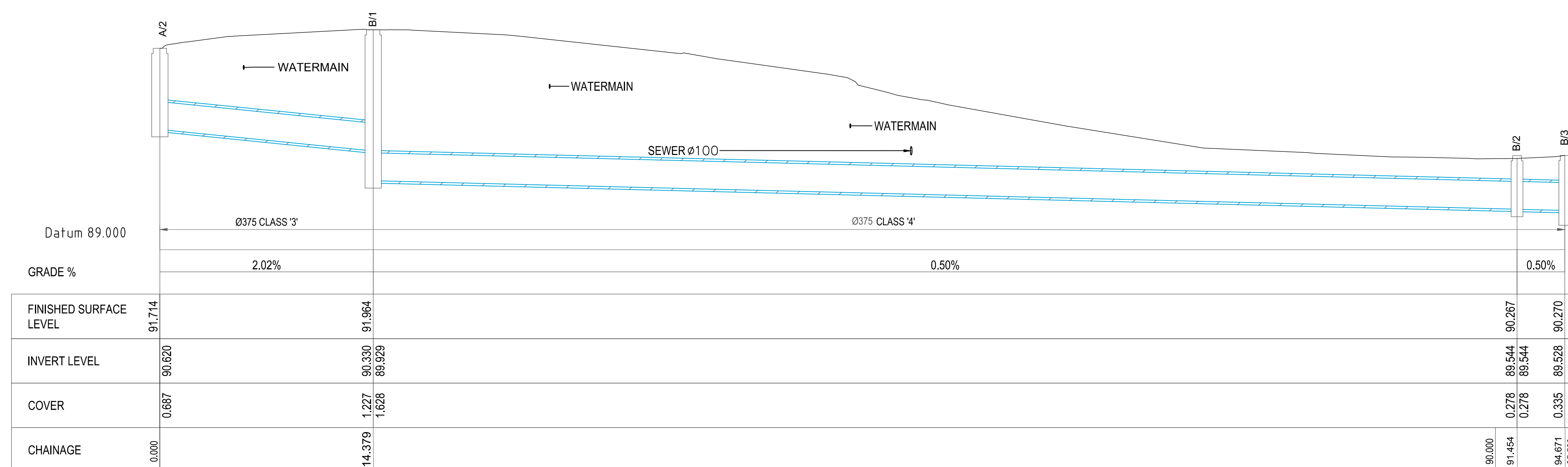
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PLAN

CONSTRUCT Ø375 RRJ RCP CLASS 3



LONGITUDINAL PROFILE

Key Plan

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RESIDENTIAL APARTMENTS
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ESSEX STREET - STORMWATER
DRAINAGE WORKS - OPTION 2

Scale



0 2000 5000

1:100 at A1

Drawn K2L	Checked JK	Approved	
Project Number 160023		Drawing Number C3.03	Revision C

Key Plan

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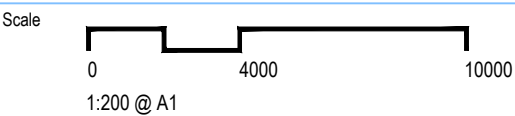
C	ISSUE FOR SECTION 96	20.07.2017
B	ISSUE FOR SECTION 96	11.07.2017
A	ISSUE FOR TENDER	12.09.2016
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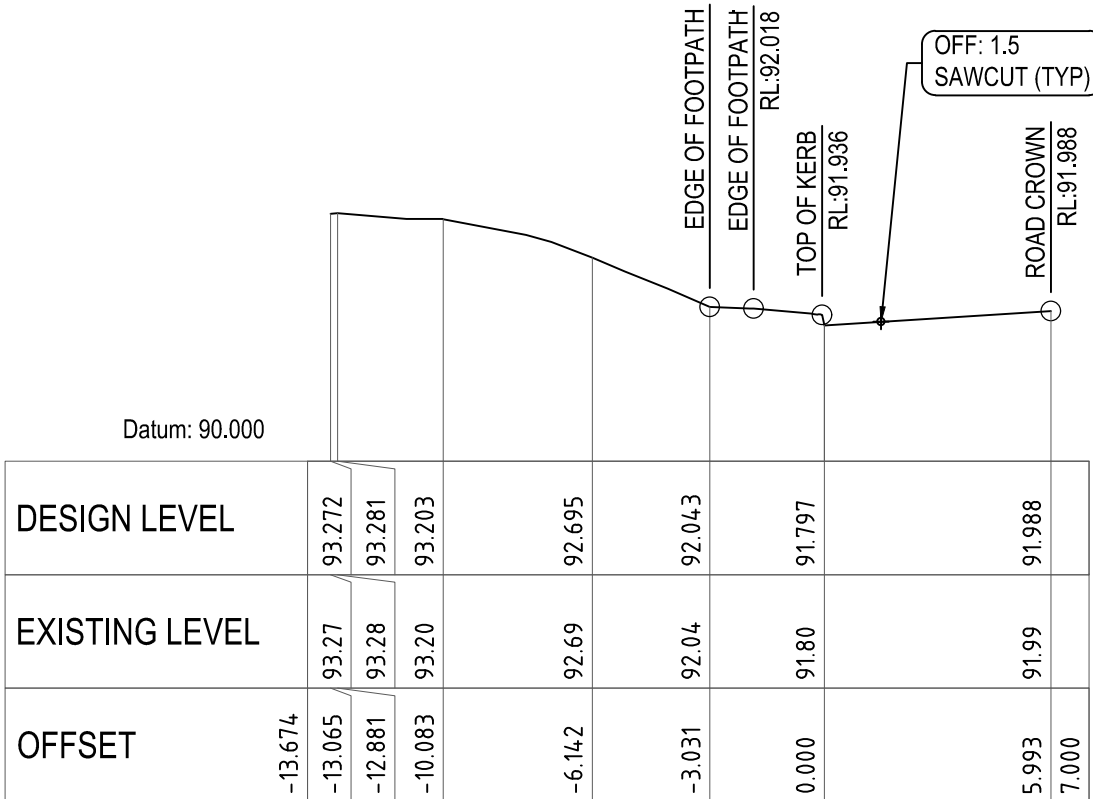
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EPPING NSW 2121**

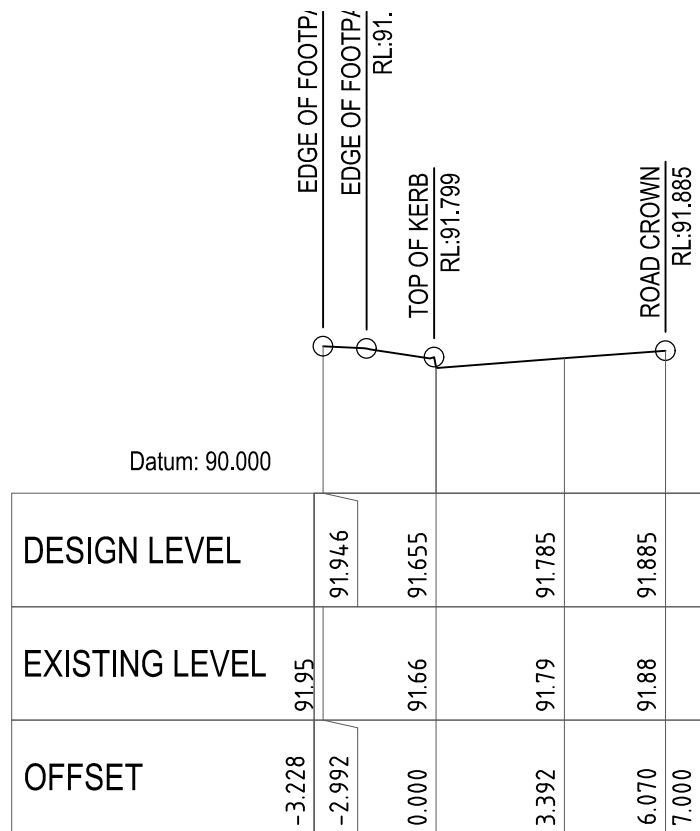
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ESSEX STREET CROSS SECTIONS



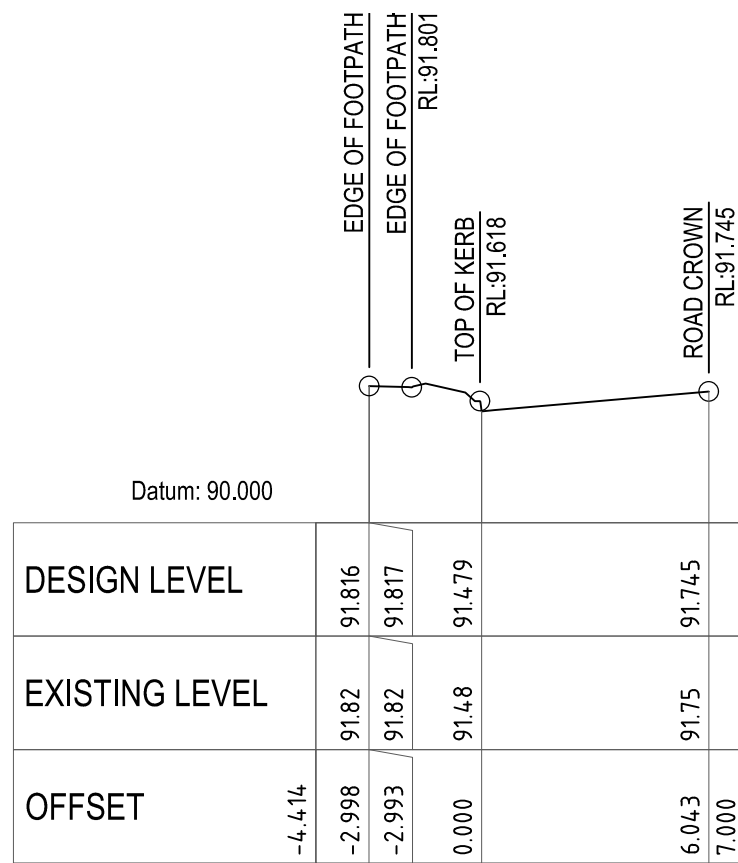
Drawn	Checked	Approved	Revision
K2L	JK		C
Project Number	Drawing Number		
160023	C4.01		



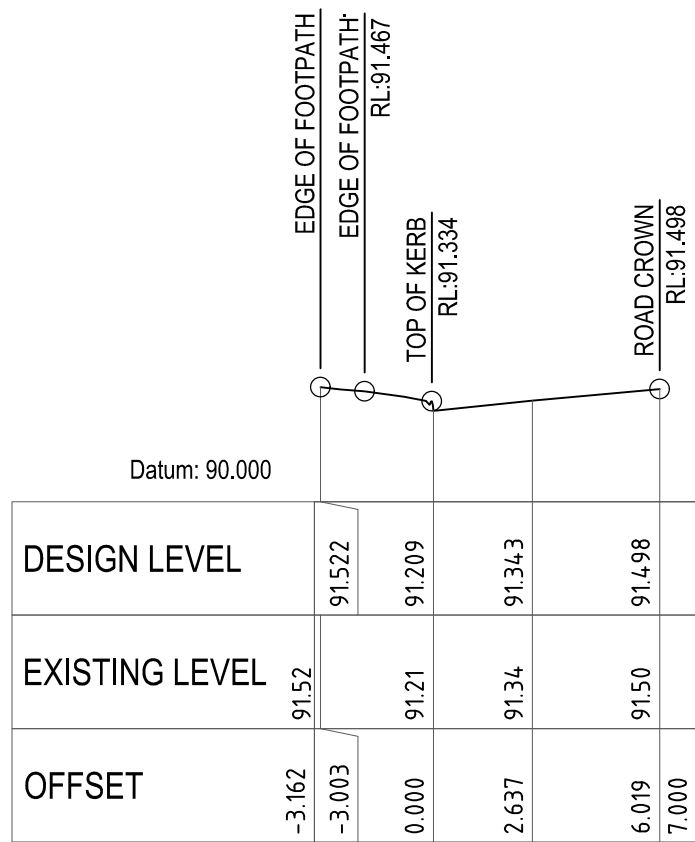
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C3.03



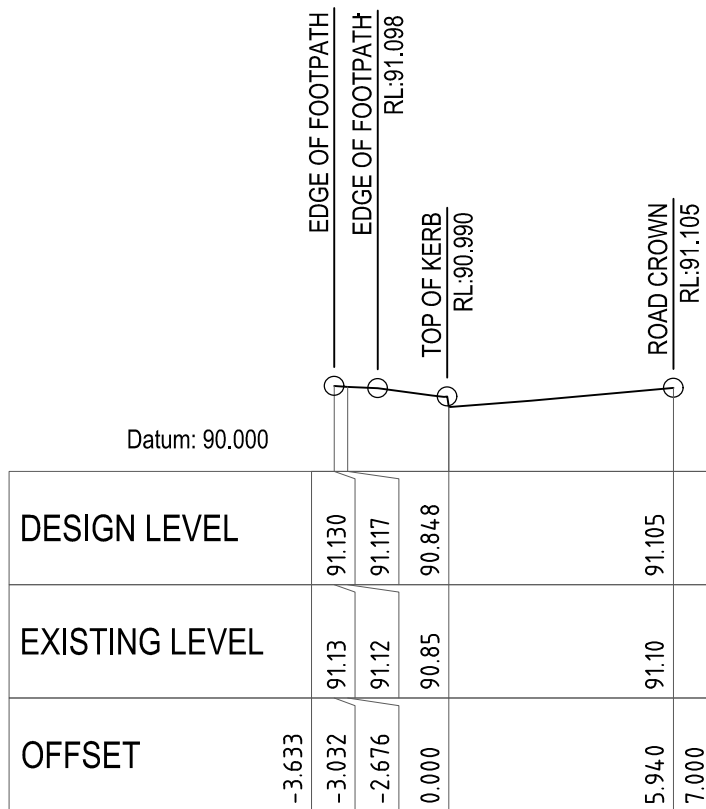
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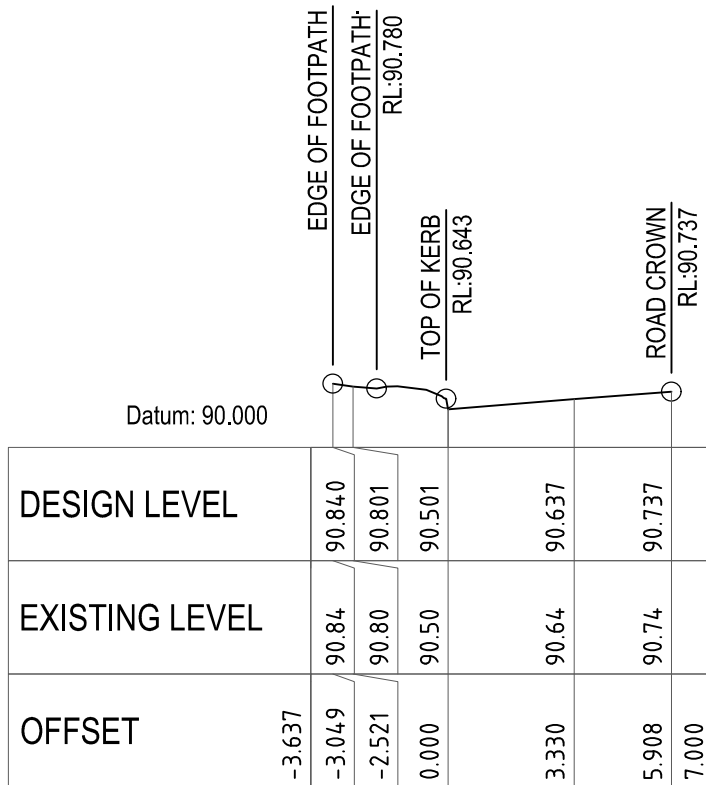
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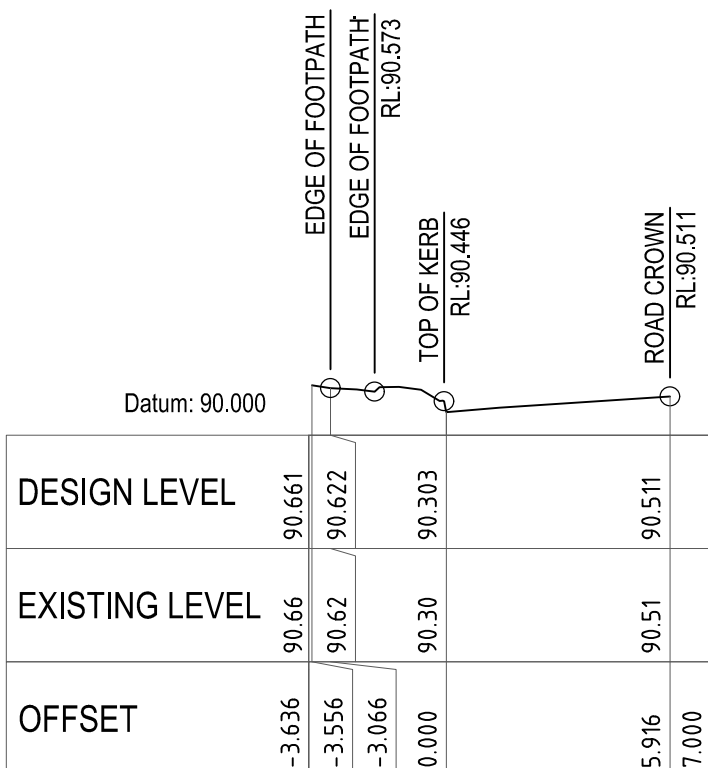
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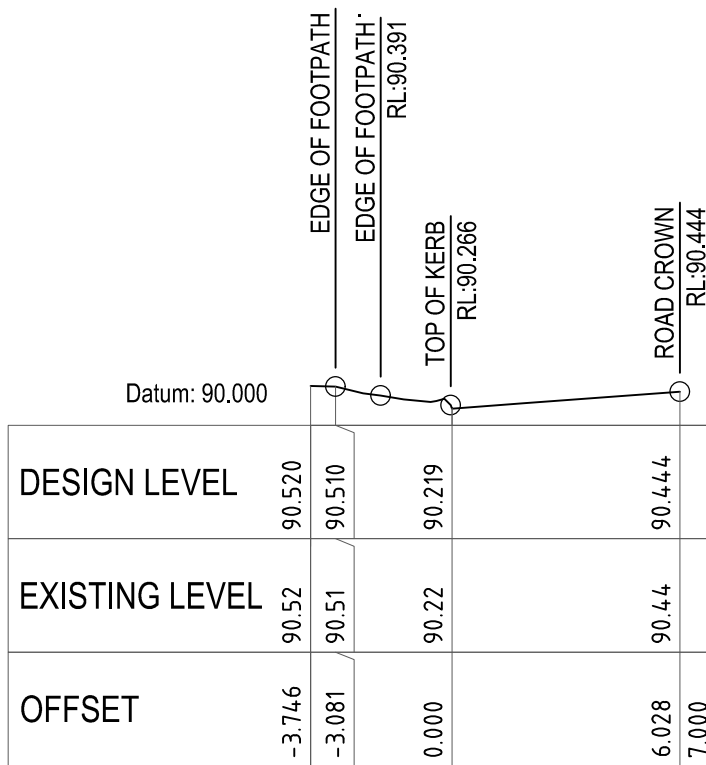
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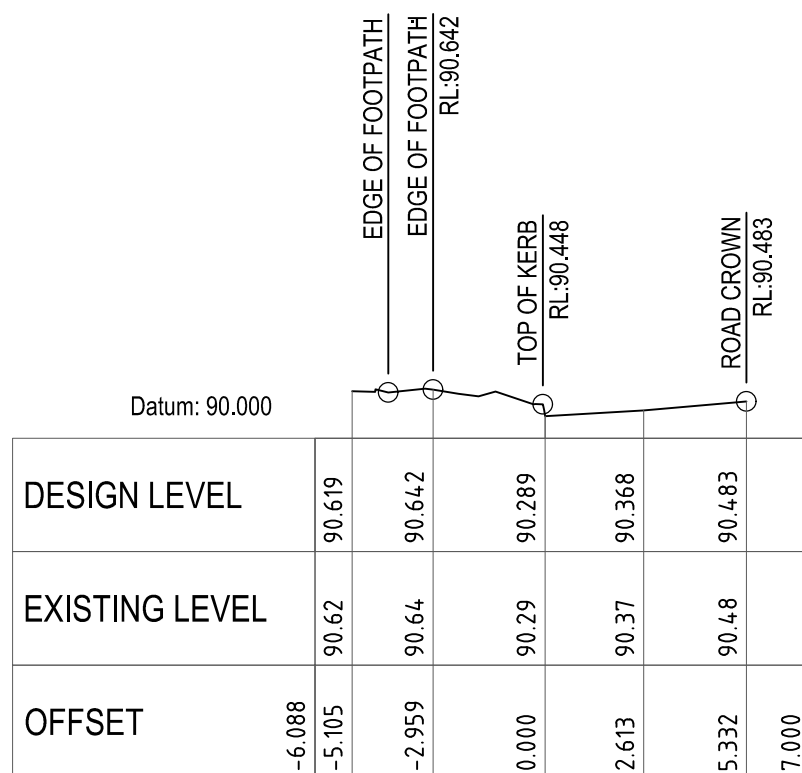
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C3.03



SECTION 7
C3.03



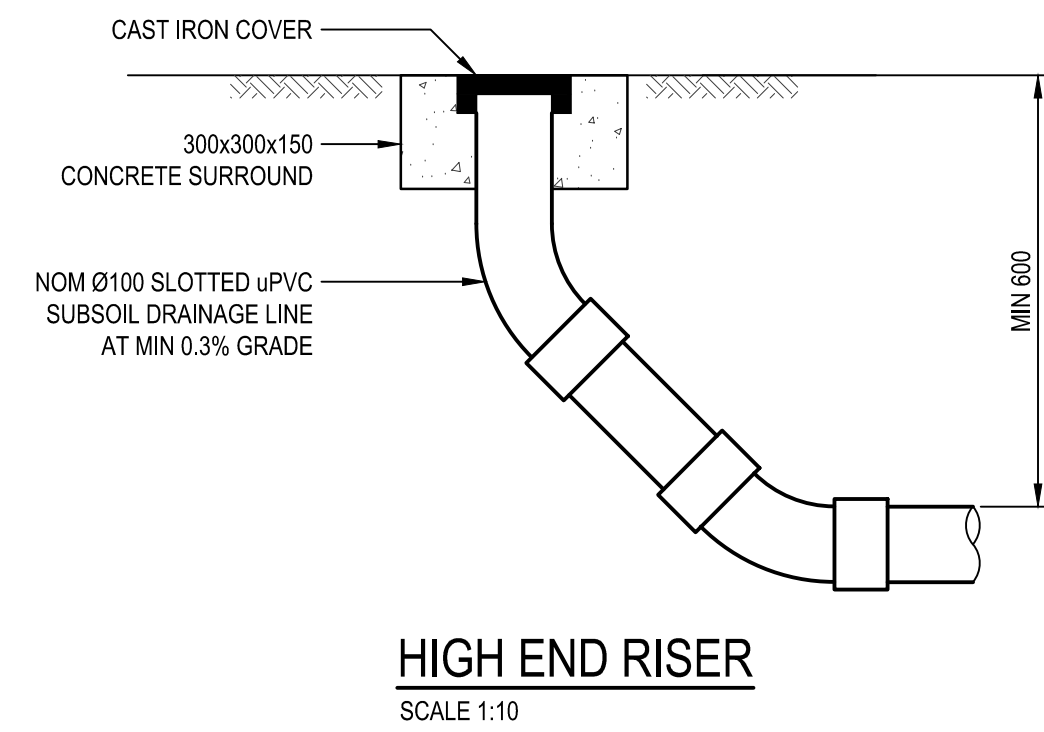
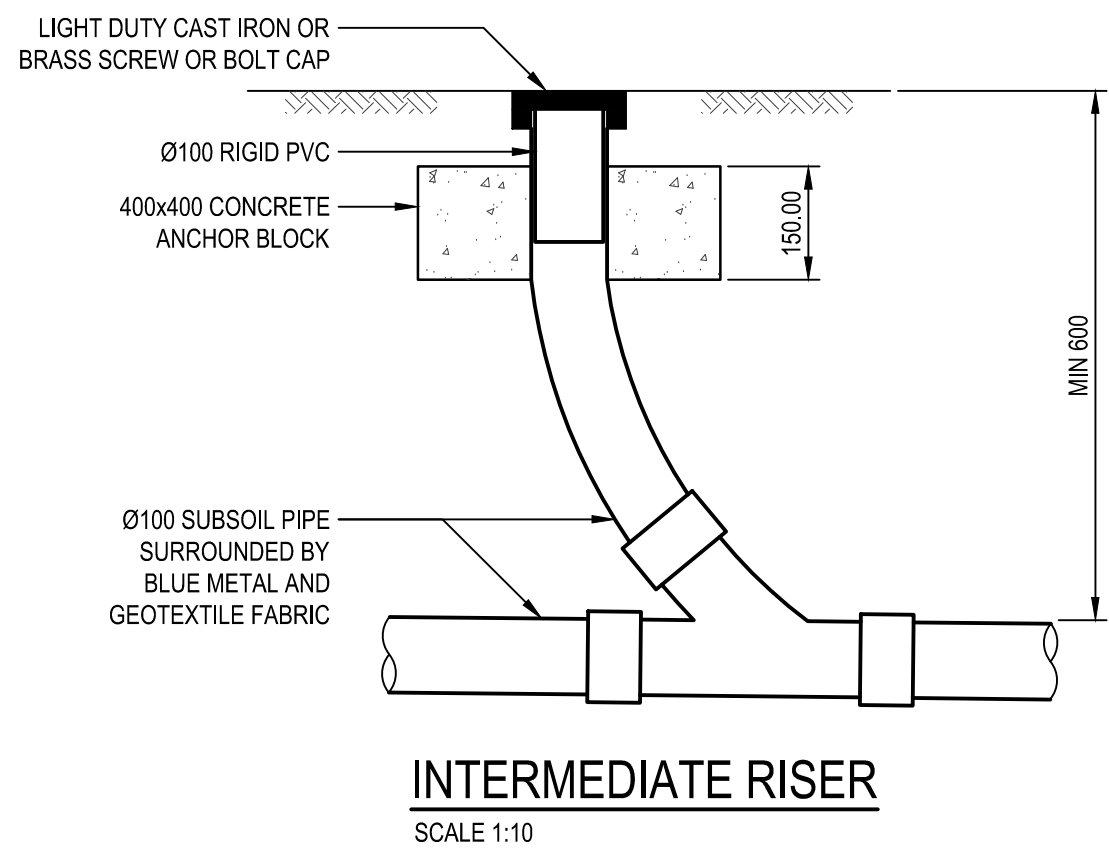
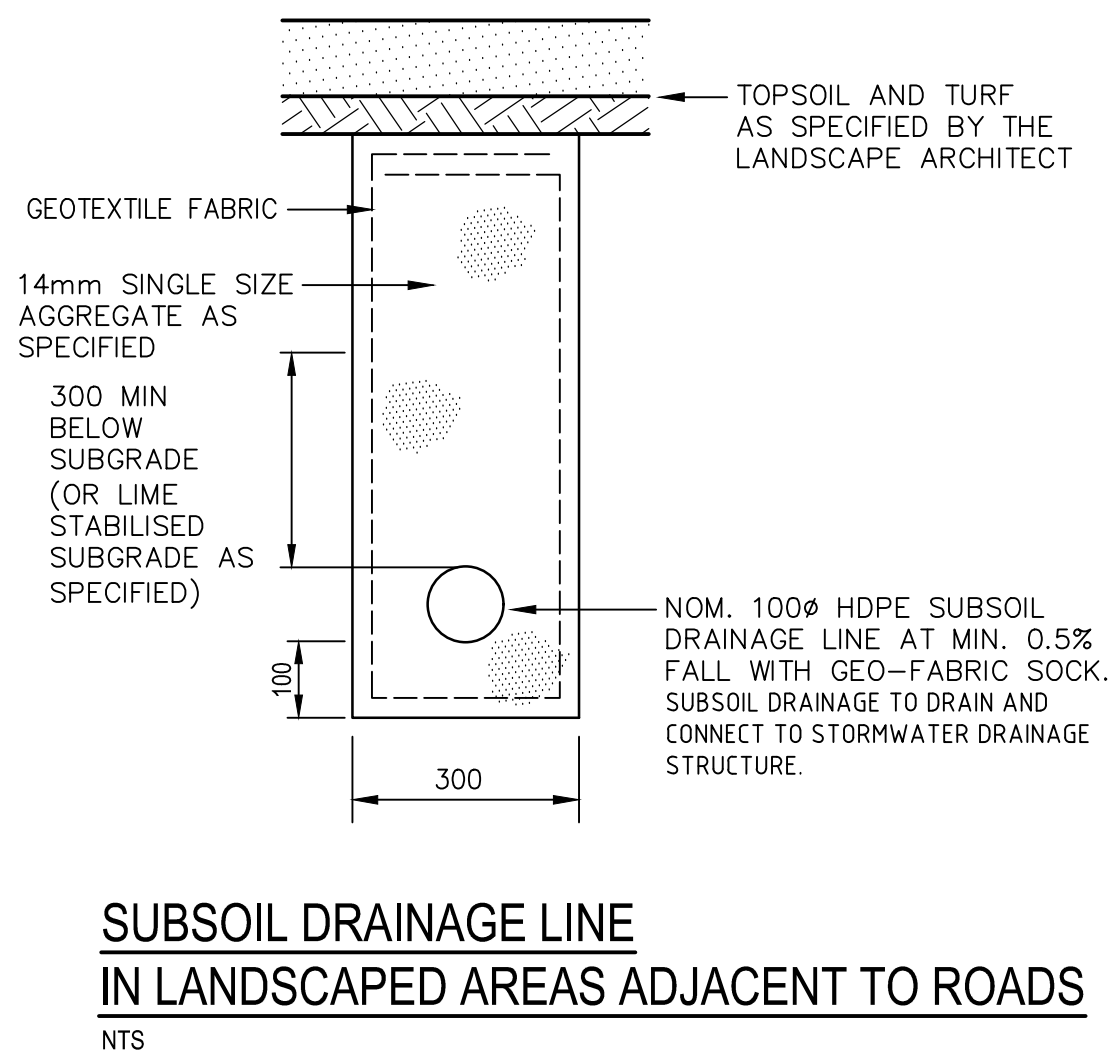
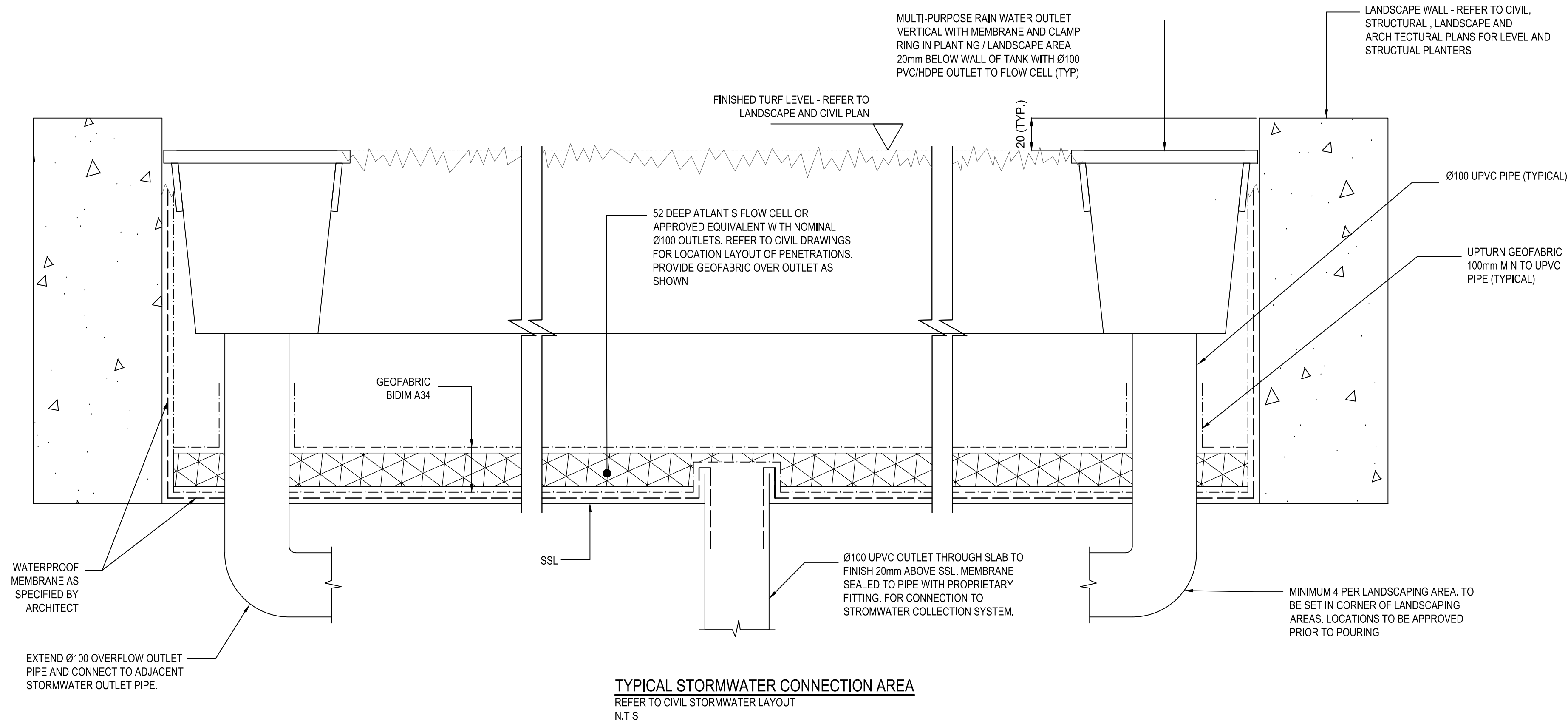
SECTION 8
C3.03



SECTION 9
C3.03

NOTE:
KERB AND GUTTER TO BE RECONSTRUCTED
TO EXISTING LEVELS

Key Plan



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CONSTRUCTION

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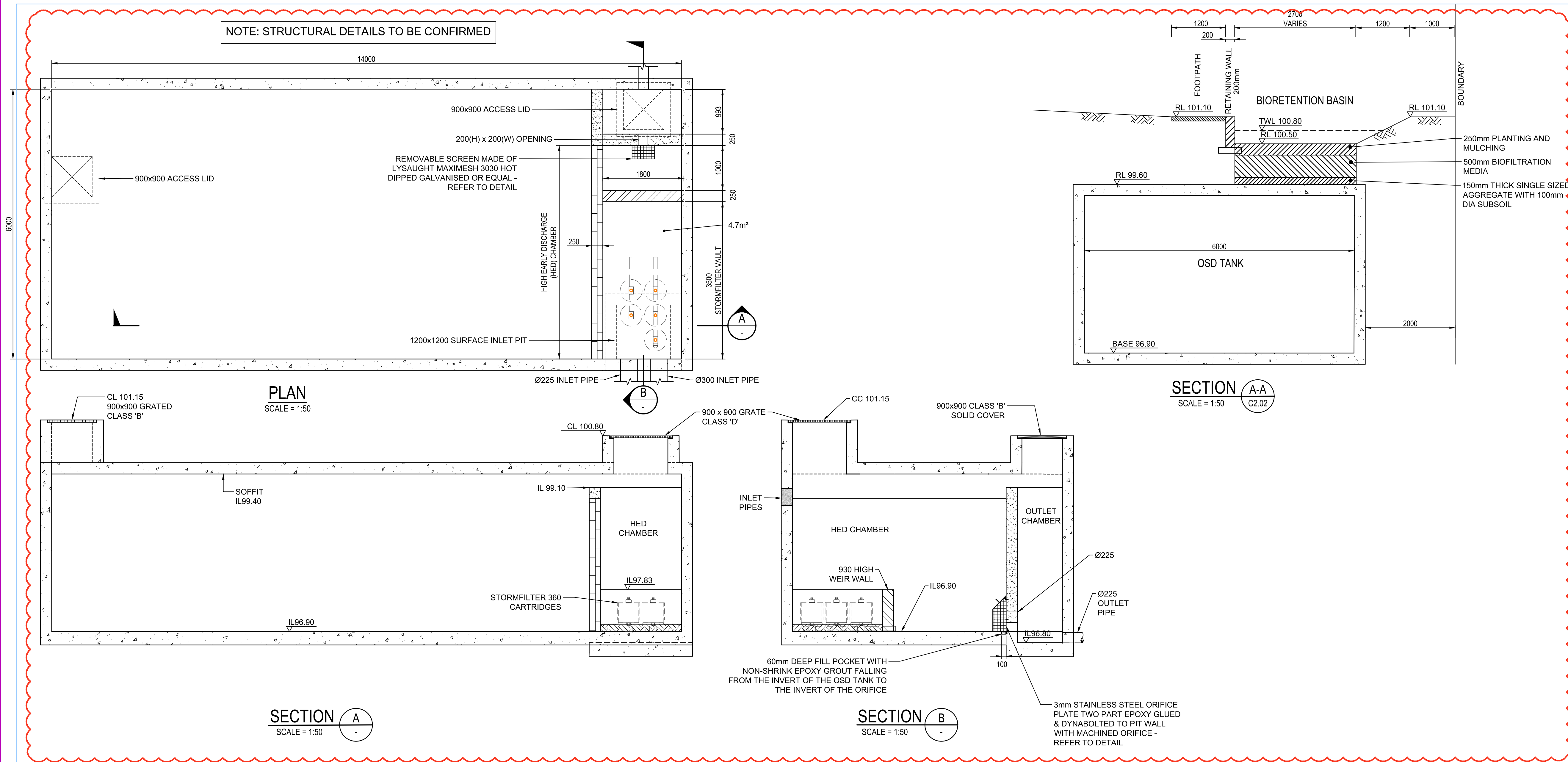
Project
**RESIDENTIAL APARTMENTS
30-42 OXFORD STREET
EPPING NSW 2121**

Title
DETAIL SHEET 1

Scale
AS SHOWN AT A1

Drawn K2L	Checked JK	Approved
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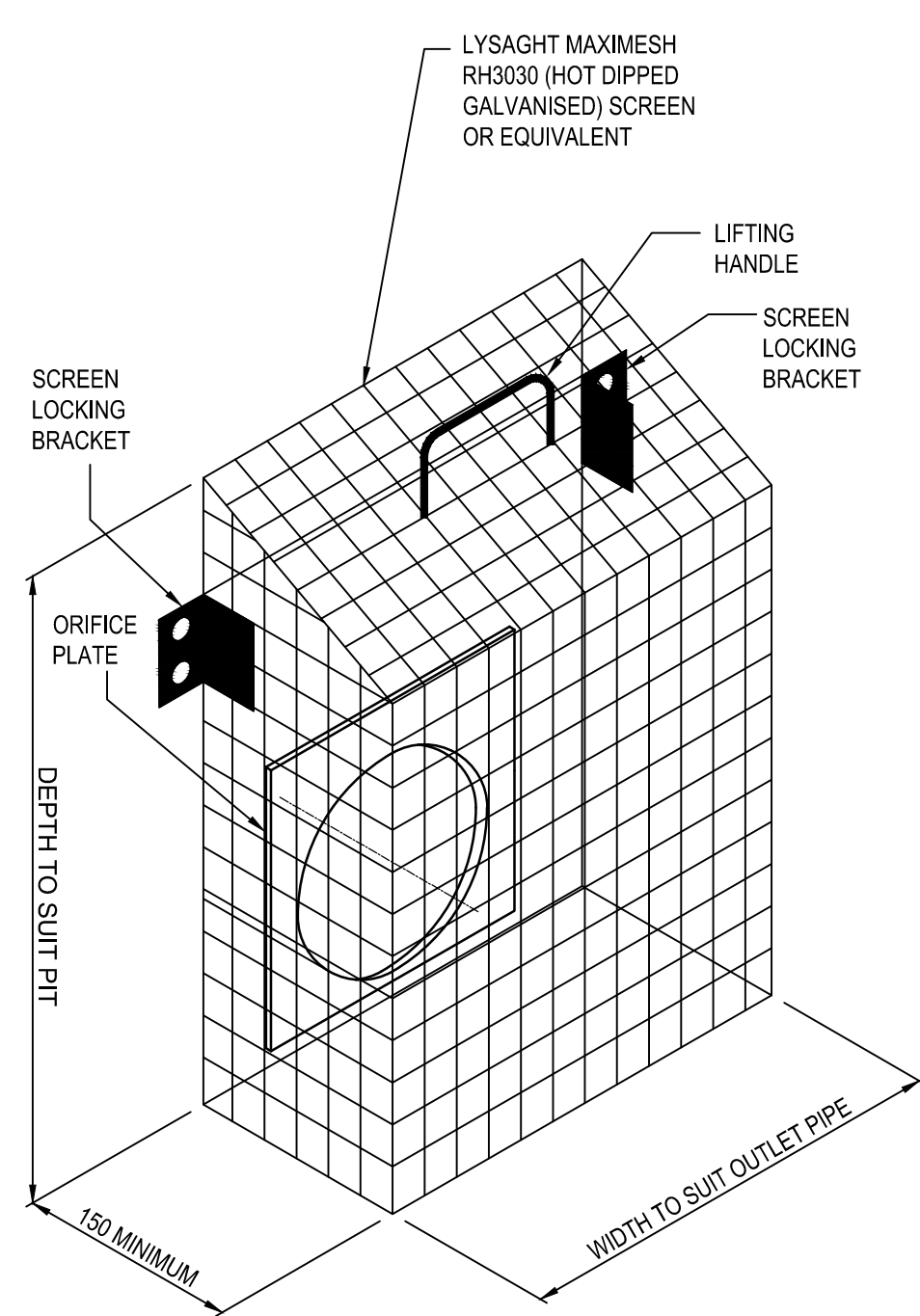
Project Number 160023	Drawing Number C4.02	Revision C
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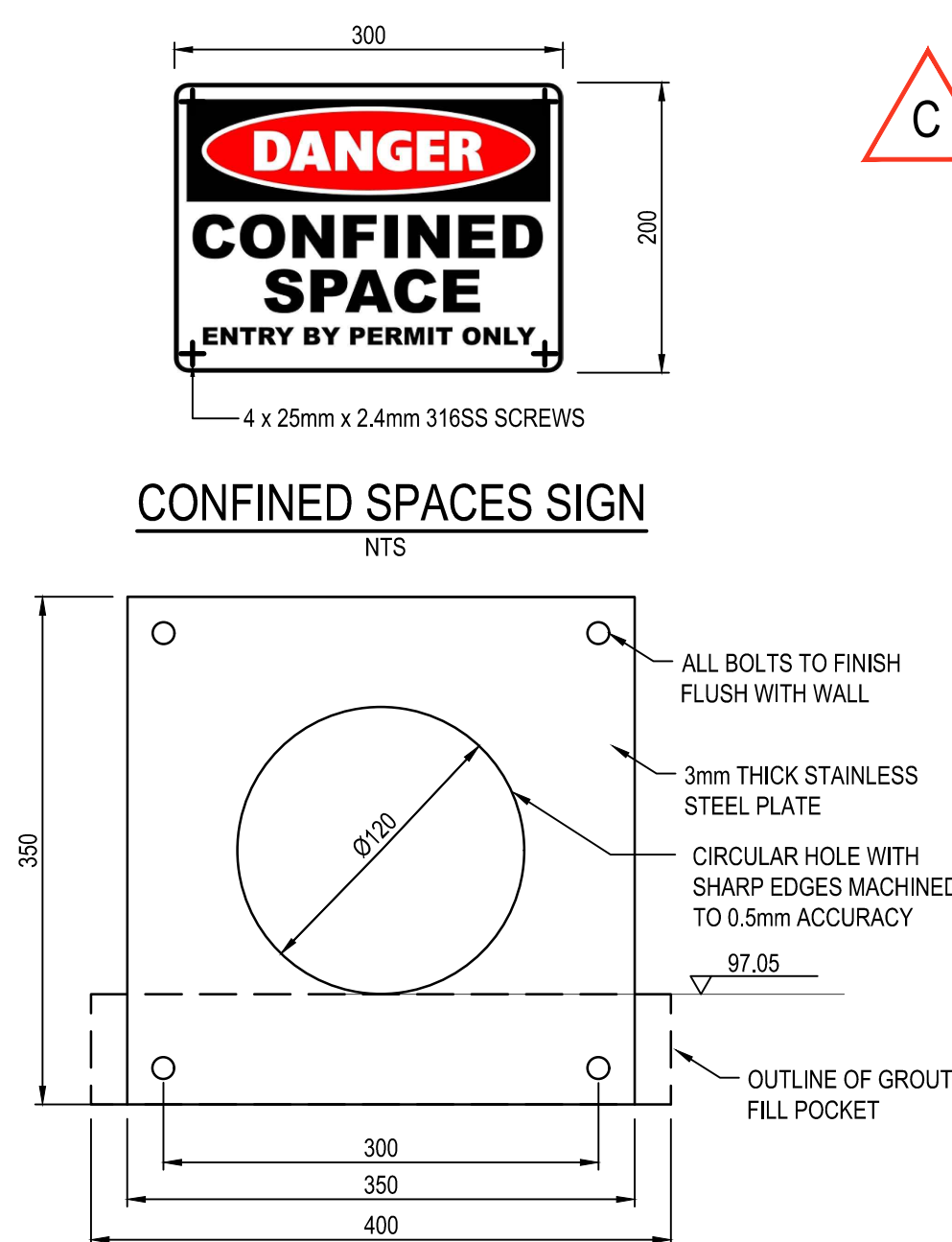
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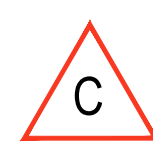


TRASH SCREEN DETAIL (TYPICAL)
SCALE 1:5



CONFINED SPACES SIGN
NTS

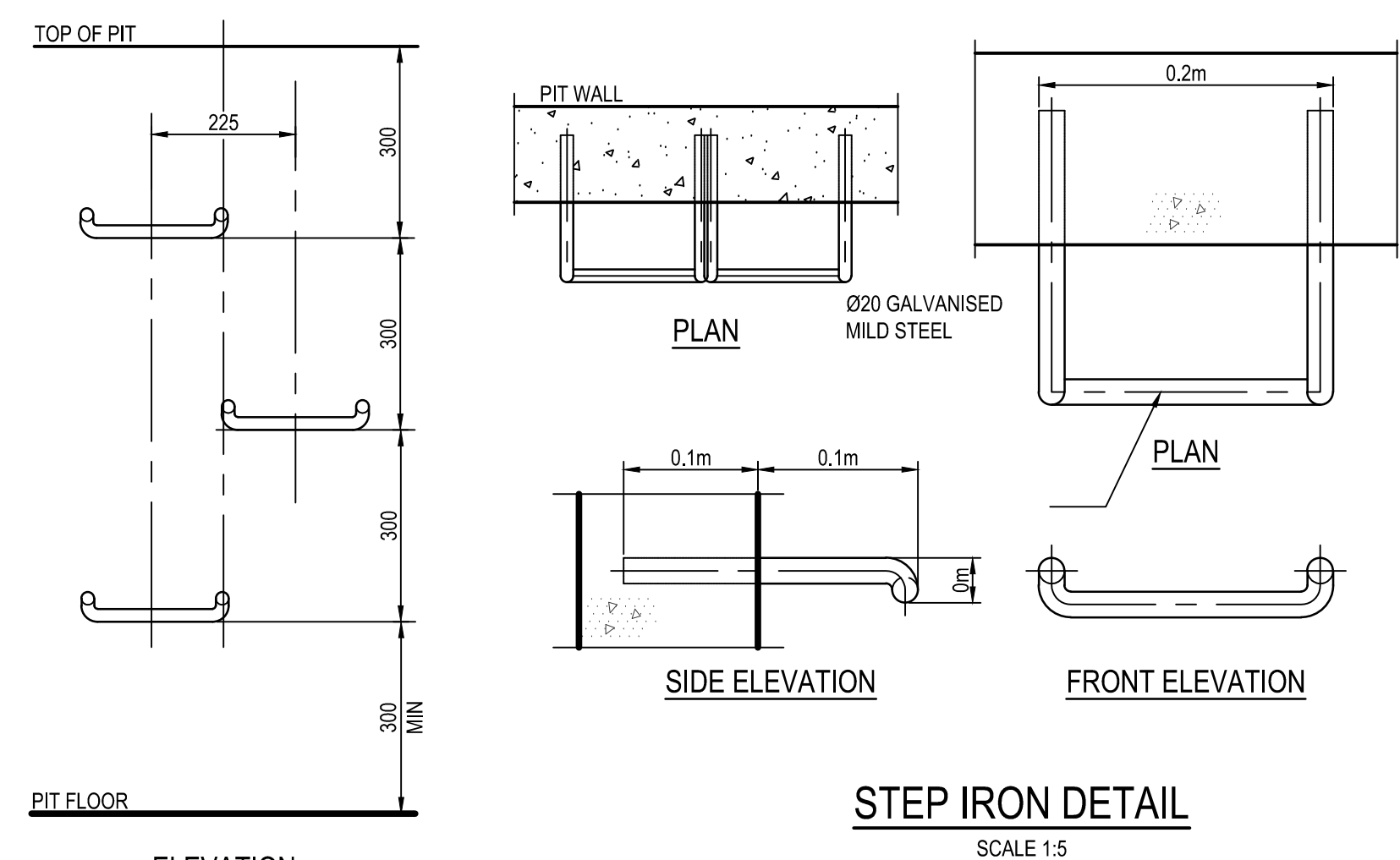
ORIFICE PLATE DETAIL
SCALE 1:5



THIS IS AN
**ON-SITE STORMWATER
DETENTION SYSTEM**
REQUIRED BY CITY OF
HORNSBY SHIRE COUNCIL
IT IS AN OFFENCE TO REDUCE THE VOLUME OF THE
TANK OR TO INTERFERE WITH THE
ORIFICE PLATE THAT CONTROLS THE OUTFLOW
THE BASE OF THE OUTLET CONTROL PIT AND THE
DEBRIS SCREEN MUST BE CLEARED OF DEBRIS AND
SEDIMENT ON A REGULAR BASIS BY THE OWNER
THIS PLATE MUST NOT BE REMOVED

- MARKER PLATE NOTES:
1. THE MARKER PLATE SHALL BE FIXED TO A PERMANENT SURFACE AND IN A PROMINENT POSITION AS NEAR TO TO THE OSD TANK AS POSSIBLE.
 2. THE MINIMUM SIZE OF THE MARKER PLATE IS 150mm X 100mm.
 3. MARKER PLATE SHALL BE MADE FROM A NON-CORROSIVE METAL OR 4mm THICK LAMINATED PLASTIC

MARKER PLATE DETAIL
NTS



STEP IRON
PLACEMENT TO WALL
SCALE NTS

STEP IRON DETAIL
SCALE 1:5

- NOTE:
- ALL STEPS IRON TO BE PLASTIC COATED
 - STEPS IRONS REQUIRED WHERE DEPTH OF COMPARTMENT IS GREATER THAN 1200mm

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**RESIDENTIAL APARTMENTS
30-42 OXFORD STREET
EPPING NSW 2121**

Title

DETAIL SHEET 2

Scale

AS SHOWN AT A1

Drawn

K2L

Checked

JK

Approved

Project Number

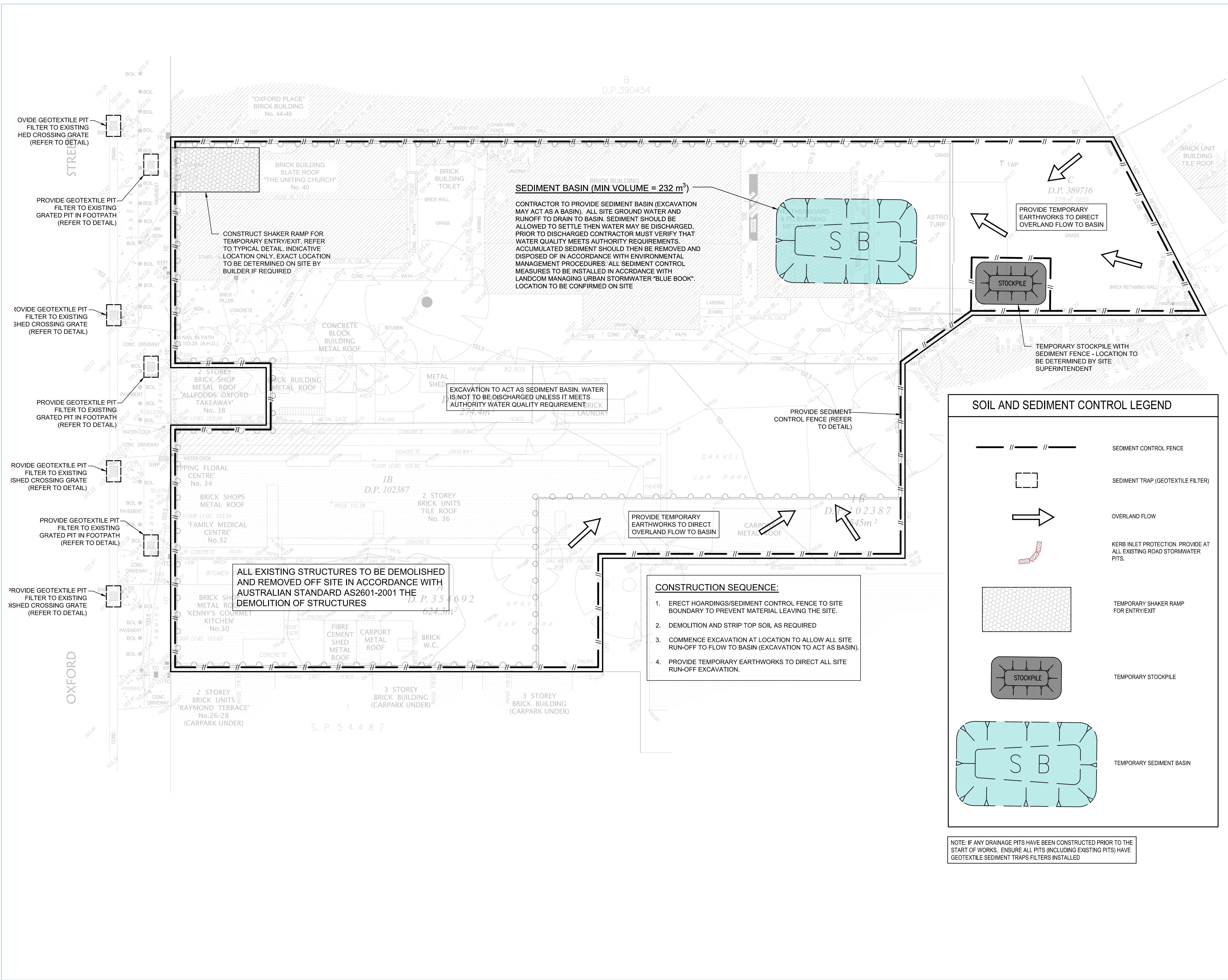
160023

Drawing Number

C4.03

Revision

C



Key Plan

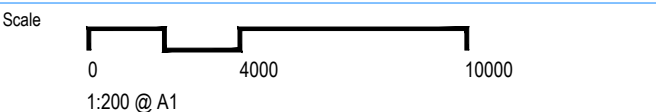
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Project
**RESIDENTIAL APARTMENTS
30-42 OXFORD STREET
EPPING NSW 2121**

Title
**SOIL SEDIMENT CONTROL PLAN
OXFORD STREET**



Drawn	Checked	Approved
K2L	JK	

Project Number	Drawing Number	Revision
160023	C5.01	C

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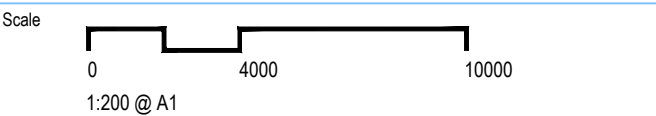
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Rev	Revision Description	Date



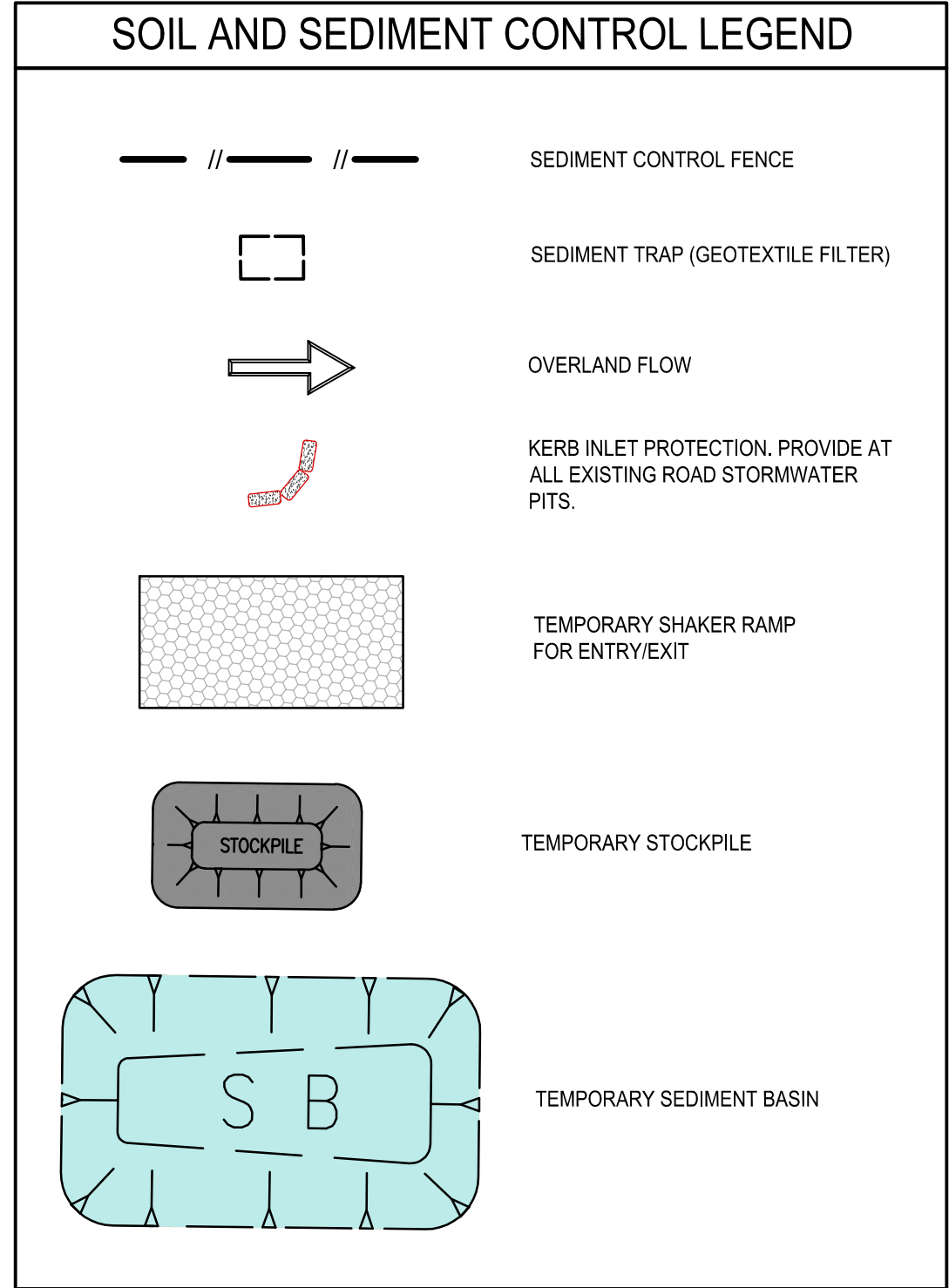
Client
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Project
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30-42 OXFORD STREET
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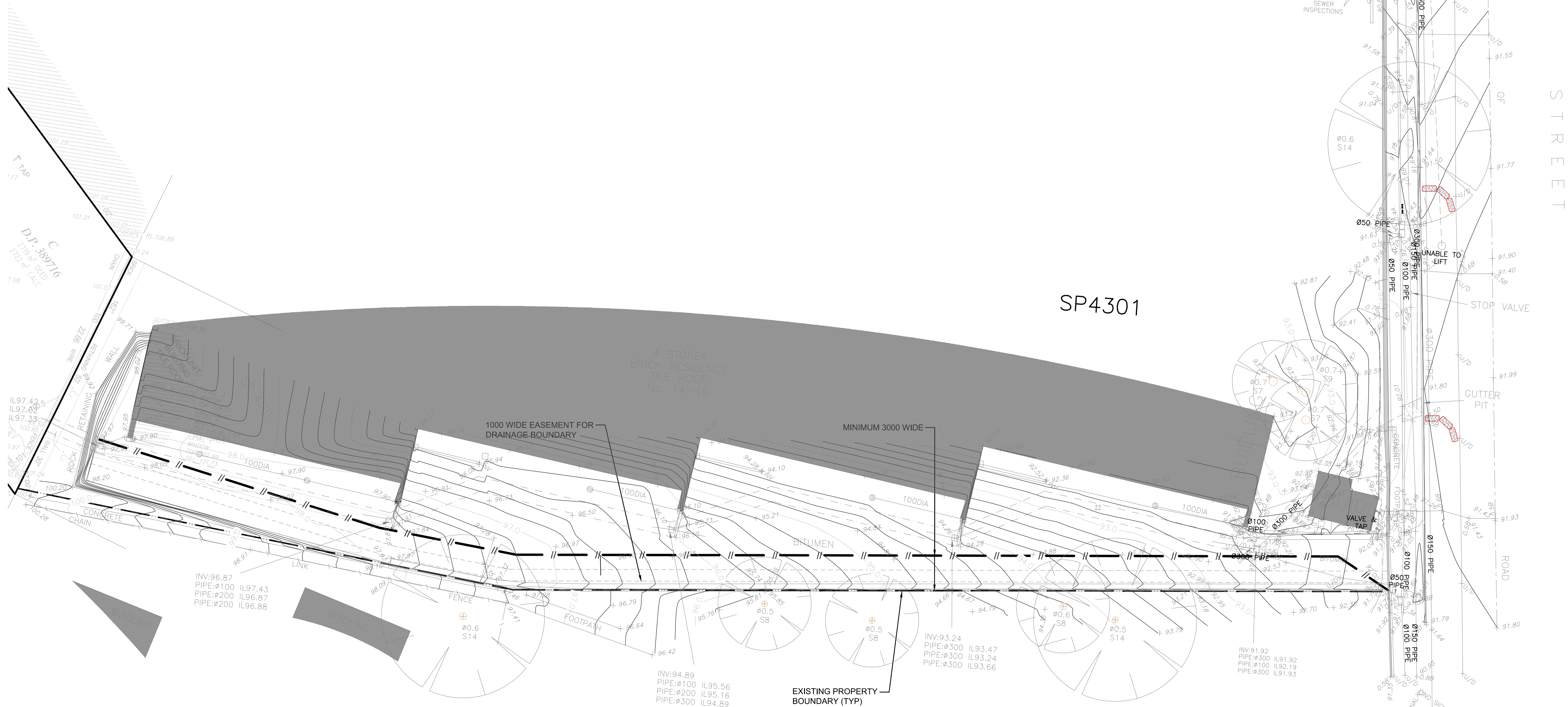
Title
**SOIL SEDIMENT CONTROL PLAN
ESSEX STREET AND 14-16 ESSEX
STREET**



Drawn K2L	Checked JK	Approved	Revision C
Project Number 160023	Drawing Number C5.02		



NOTE: IF ANY DRAINAGE PITS HAVE BEEN CONSTRUCTED PRIOR TO THE START OF WORKS, ENSURE ALL PITS (INCLUDING EXISTING PITS) HAVE GEOTEXTILE SEDIMENT TRAPS FILTERS INSTALLED



Appendix J

J Worksheets

J.1 The Standard Worksheet

Note: These "Standard Calculation" spreadsheets relate only to low erosion hazard lands as identified in figure 4.6 where the designer chooses to not use the RUSLE to size sediment basins. The more "Detailed Calculation" spreadsheets should be used on high erosion hazard lands as identified by figure 4.6 or where the designer chooses to run the RUSLE in calculations.

1. Site Data Sheet

Site name:	PROPOSED RESIDENTIAL APARTMENTS
Site location:	30-42 OXFORD STREET, EPPING
Precinct:	
Description of site:	EXISTING BUILDINGS WITH SURROUNDING ASPHALT, CONCRETE PAVEMENT AND GRASSED AREA (MAX. SITE GRADE APPRO. 4%, MAKES SITE LOW EROSION HAZARD)

Site Area	Site					Remarks
Total catchment area (ha)	0.517					
Disturbed catchment area (ha)	0.517					

Soil analysis

Soil landscape	SOIL HYDROLOGICAL GROUP D1/4					DIPNR mapping (if relevant)
Soil Texture Group	TYPE D/F					Sections 6.3.3(c), (d) and (e)

Rainfall data

Design rainfall depth (days)	5					See Sections 6.3.4 (d) and (e)
Design rainfall depth (percentile)	85					See Sections 6.3.4 (f) and (g)
x-day, y-percentile rainfall event	43.3					See Section 6.3.4 (h)
Rainfall intensity: 2-year, 6-hour storm						See IFD chart for the site
Rainfall erosivity (R-factor)						Automatic calculation from above data

Comments: SITE RUNOFF FROM CONSTRUCTION ACTIVITIES IS TO BE DISCHARGED INTO EXISTING COUNCIL STORWATER SYSTEM ONLY IF WATER QUALITY MEETS THE REQUIREMENTS. UPSTREAM CATCHMENTS ARE TO DIVERTED EARTH BANK (OR APPROVED EQUIVALENT). SOIL HYDROLOGICAL GROUP / TESTURE HAS BEEN ASSUMED TO BE D/F AND D/4. THIS IS TO BE CONFIRMED BY GEOTECH TESTING. THE RESULTS MAY AFFECT SIZING. THE HORNSBY AREA RAINFALL DEPTH HAS BEEN USED (85TH PERCENTILE AS SITE DRAINS TO TERRY CREEK).

4. Volume of Sediment Basins, Type D and Type F Soils

Basin volume = settling zone volume + sediment storage zone volume

Settling Zone Volume

The settling zone volume for Type F and Type D soils is calculated to provide capacity to contain all runoff expected from up to the y-percentile rainfall event. The volume of the basin's settling zone (V) can be determined as a function of the basin's surface area and depth to allow for particles to settle and can be determined by the following equation:

$$V = 10 \times C_v \times A \times R_y \times \frac{x}{100} \text{ (m}^3\text{)}$$

where:

10 = a unit conversion factor

C_v = the volumetric runoff coefficient defined as that portion of rainfall that runs off as stormwater over the x-day period

R = is the x-day total rainfall depth (mm) that is not exceeded in y percent of rainfall events. (See Sections 6.3.4(d), (e), (f), (g) and (h)).

A = total catchment area (ha)

Sediment Storage Zone Volume

In the standard calculation, the sediment storage zone is 50 percent of the settling zone. However, designers can work to capture the 2-month soil loss as calculated by the RUSLE (Section 6.3.4(i)(iii)), in which case the "Detailed Calculation" spreadsheets should be used.

Total Basin Volume

Site	C_v	R x-day y-%ile	Total catchment area (ha)	Settling zone volume (m ³)	Sediment storage volume (m ³)	Total basin volume (m ³)
	0.69	43.3	0.517	154.5	77.3	231.8

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS, AND ANY OTHER PLANS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO DEVELOPMENT AT THE SUBJECT SITE.
- THE SITE SUPERINTENDENT WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THIS SPECIFICATION.
- ALL BUILDERS AND SUB-CONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.

CONSTRUCTION SEQUENCE

- THE SOIL EROSION POTENTIAL ON THIS SITE SHALL BE MINIMISED. HENCE WORKS SHALL BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:

- INSTALL SEDIMENT FENCES, TEMPORARY CONSTRUCTION EXIT AND SANDBAG KERB INLET SEDIMENT TRAP.
- UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

EROSION CONTROL

- DURING WINDY CONDITIONS, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

FENCING

- STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.

- ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.

- TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.

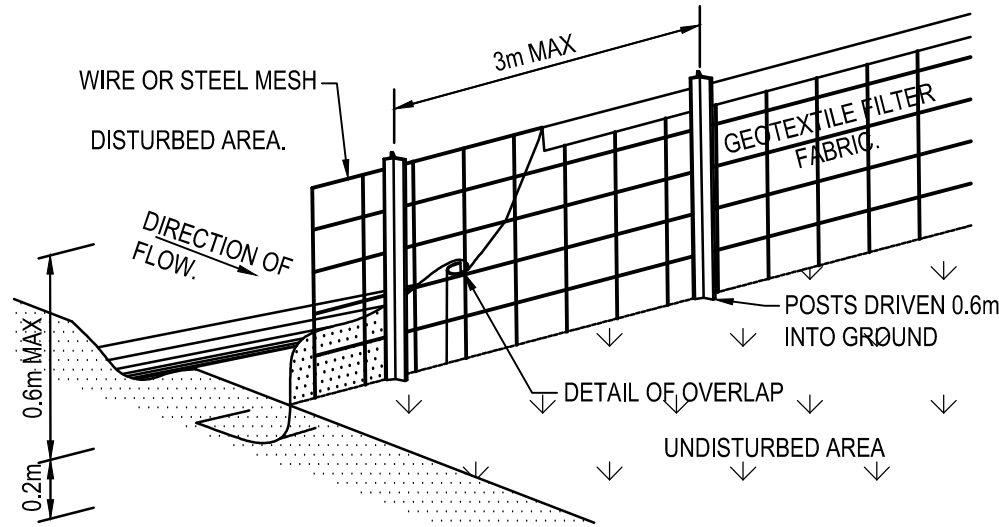
OTHER MATTERS

- ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.

- RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER ARE TO BE EMPTIED AS NECESSARY. DISPOSAL OF WASTE SHALL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.

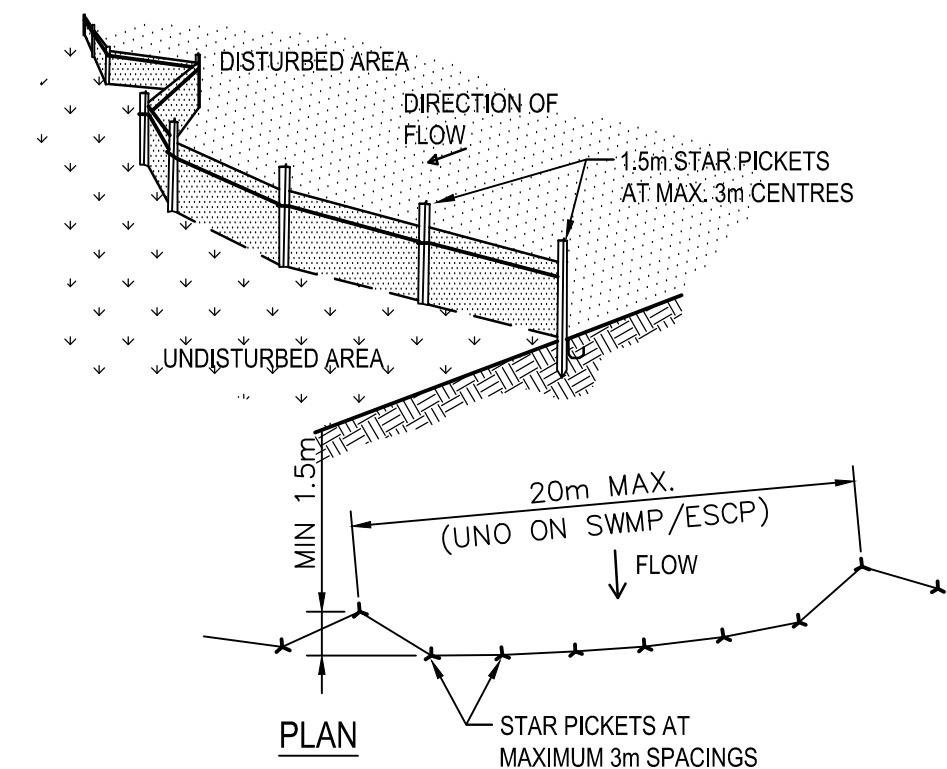
SITE INSPECTION & MAINTENANCE

- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER RAINFALL EVENTS TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIR AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED.

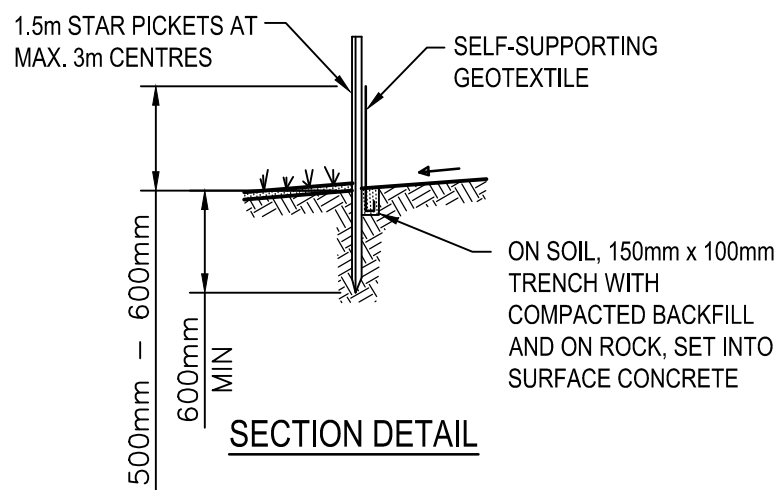


SEDIMENT CONTROL FENCE

NTS



PLAN



SECTION DETAIL

CONSTRUCTION NOTES

- CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE CONTOURS OF THE SITE.
- DRIVE 1.5m 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 FENCE

NTS

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RESIDENTIAL APARTMENTS
30-42 OXFORD STREET
EPPING NSW 2121

Title

EROSION AND SEDIMENT CONTROL
NOTES AND DETAILS

Scale

NOT TO SCALE

Drawn

K2L

Checked

JK

Approved

Project Number

160023

Drawing Number

C5.10

Revision

C

NOTE:
ENSURE THAT ALL COUNCIL AND PUBLIC UTILITY ASSETS ARE MAINTAINED AND PROTECTED AT ALL TIMES IN THE VICINITY OF THE TEMPORARY CONSTRUCTION EXIT

GEOTEXTILE FABRIC DESIGNED TO PREVENT INTERMIXING OF SUBGRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUB-BASE LAYERS. GEOTEXTILE MAY BE WOVEN OR NEEDLE PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500N.

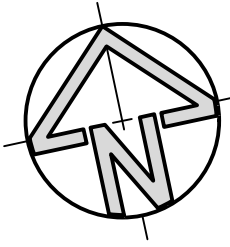
CONSTRUCTION NOTES

- STRIP TOPSOIL AND LEVEL SITE.
- COMPACT SUBGRADE.
- COVER AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
- CONSTRUCT 200MM THICK PAD OVER GEOTEXTILE USING ROADBASE OR 30MM AGGREGATE.
- CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP WHERE THE SEDIMENT IS COLLECTED AND REMOVED.

MAINTENANCE NOTES

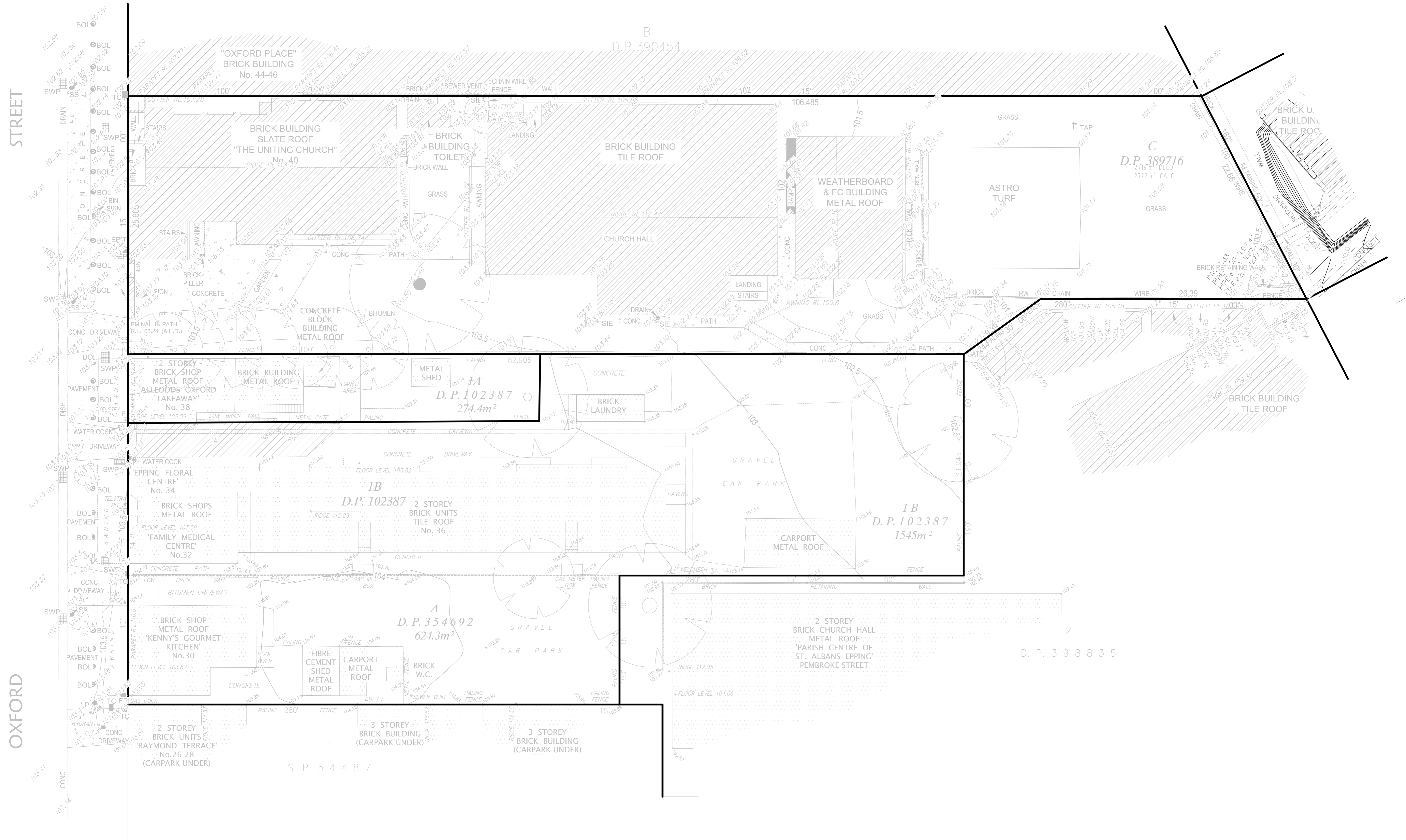
THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TRACKING OR FLOWING OF SEDIMENT OFF THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OFF THE CONSTRUCTION SITE MUST BE REMOVED IMMEDIATELY.

TEMPORARY STABILISED CONSTRUCTION EXIT



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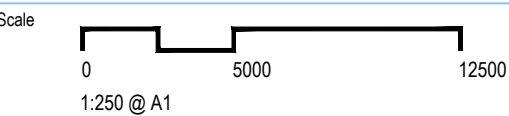
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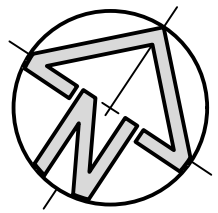
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Title
**SURVEY SITE PLAN -
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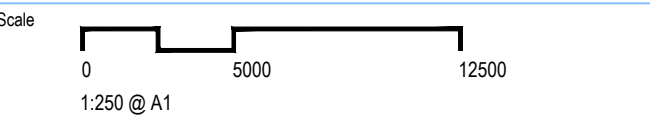
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**SURVEY OF ESSEX ST -
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