

DOCUMENTATION OF STORMWATER CONCEPT DESIGN

NEW SCHOOL FACILITIES

AT ARDEN ANGLICAN SCHOOL

50 OXFORD STREET EPPING NSW

JAMES TAYLOR AND ASSOCIATES

SUITE 301, 115 MILITARY ROAD NEUTRAL BAY NSW 2089 A.C.N. 002 376 454
Tel: (02) 9969 1999 Email: mail@jamestaylorassociates.com.au

STORMWATER DRAWING LIST	
Sheet Number	Sheet Name
SW.1	STORMWATER CONCEPT DESIGN COVER SHEET
SW.2	STORMWATER CATCHMENT PLAN - EXISTING SITE
SW.3	STORMWATER CATCHMENT PLAN - PROPOSED
SW.10	STORMWATER CONCEPT PLAN SHEET 1
SW.11	STORMWATER CONCEPT PLAN SHEET 2
SW.100	SECTIONS



LOCALITY PLAN

NOT TO SCALE



- STORMWATER NOTES
- SW1. STORMWATER DRAINS TO BE RUN TO SUIT THE LOCAL SEWERAGE AND DRAINAGE BOARD, FROM THE STORMWATER DRAINS WITH PIPES AND FITTINGS SET NOT LESS THAN MINIMUM FALLS RECOMMENDED BY THE GOVERNING AUTHORITY. WITH MATERIALS AND LEVELS SHOWN ON THE DRAWINGS AND IN THE SPECIFICATION.
- SW2. ALL PIPES SHALL BE UPVC 100mm DIAMETER U.N.O. IN ACCORDANCE WITH AS3500.3 NATIONAL PLUMBING AND DRAINAGE CODE, PART 3: STORMWATER DRAINAGE.
- SW3. ALL PIPES TO BE UPVC OR CONCRETE AS NOTED AND IN ACCORDANCE WITH AS3500.3 NATIONAL PLUMBING AND DRAINAGE CODE, PART 3: STORMWATER DRAINAGE.
- SW4. ALL UPVC PIPES TO BE INSTALLED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS2032.
- SW5. ALL PIPES SHALL BE LAID AT A MINIMUM GRADE OF 1 IN 100 U.N.O.
- SW6. ARROWS INDICATE THE DIRECTION OF GRADE.
- SW7. ALL FOOTPATH AND DRIVEWAY CROSSINGS SHALL BE TO LOCAL COUNCIL REQUIREMENTS.
- SW8. ALL LEVELS ARE APPROXIMATE ONLY AND SHALL NEED TO BE CONFIRMED PRIOR TO CONSTRUCTION.
- SW9. ALL EXISTING LEVELS ARE SHOWN AS A SPOT LEVEL OR A CONTOUR WITHOUT ANY PREFIX OR DESCRIPTION.
- LEVEL DESCRIPTIONS ARE AS FOLLOWS;
FL - FLOOR LEVEL
SL - SURFACE LEVEL
IL - INVERT LEVEL
ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD) U.N.O.
- SW10. MINIMUM COVER TO UPVC STORMWATER PIPES SHALL BE: TRAFFICABLE AREAS - 450 mm
LANDSCAPE AREAS - 300 mm
COVER IS MEASURED VERTICALLY FROM THE TOP OF THE PIPE TO THE FINISHED SURFACE LEVEL.
PIPES TO BE PROTECTED BY CONCRETE ENCASEMENT TO ENGINEERS APPROVAL IF MINIMUM COVER CANNOT BE ACHIEVED.
- SW11. CONNECTION OF UPVC TO PRECAST PITS TO BE BY TREATING THE PIPE WITH PVC GLUE AND SEAL WITH A 3:1 SAND CEMENT MORTAR.
- SW12. ALL CONCRETE PIPES AND ASSOCIATED ELEMENTS SHALL BE MANUFACTURED AND PROVIDED WITH A STRENGTH CLASSIFICATION IN ACCORDANCE WITH AS4058, PRECAST CONCRETE PIPES (PRESSURE AND NON-PRESSURE).
- SW13. ALL CONCRETE PIPES AND ASSOCIATED ELEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AS3725, LOADS ON BURIED CONCRETE PIERS AND AS3500.3 NATIONAL PLUMBING AND DRAINAGE CODE, PART 3: STORMWATER DRAINAGE.
- SW14. "K" ON PLAN DENOTES KERB AS DETAILED WITH "T.O.K" DENOTING LEVEL FOR TOP OF KERB FOR DATUM INDICATED.
- SW15. PITS SHALL BE OF A SIZE AS SHOWN OR NOTED WITH GALVANISED GRATED COVERS OR AN APPROVED EQUIVALENT. ALL PITS IN BARKED OR WOODCHIP LANDSCAPED AREAS SHALL HAVE COVERS OR STANDARD COVERS MODIFIED TO ENSURE DEBRIS DOES NOT ENTER STORMWATER SYSTEM.

REFERENCE DOCUMENTS

- SURVEY DRAWING PREPARED BY:
RPS AUSTRALIA EAST PTY LTD
Ph. 02 9248 9800
JOB No. PR131742 ISSUE B
DATED: 14.11.2016
- GEOTECHNICAL ENG. REPORT BY:
Ph. -
REPORT No. -
DATED: -
- ARCHITECTURAL DRAWINGS BY:
STANTON DAHL
Ph. +61 2 8876 5300
Project No. 1851.15

REFERENCE DOCUMENTS

- SURVEY DRAWING PREPARED BY:
RPS AUSTRALIA EAST PTY LTD
Ph. 02 9248 9800
JOB No. PR131742 ISSUE B
DATED: 01.11.2016
- GEOTECHNICAL ENG. REPORT BY:
DOUGLAS PARTNERS
Ph. 02 9809 0666
PROJECT No. 85787.00
DOCUMENT No. R.001.REV0
DATED: 25.01.2017
- ARCHITECTURAL DRAWINGS BY:
STANTON DAHL
Ph. +61 2 8876 5300
Project No. 1851.15
- ARCHITECTURAL LANDSCAPE
DRAWINGS BY:
TYRELLSTUDIO
Ph. 0282839623
Project No. 1813

JS	R.Y.	ISSUED FOR D.A.	30.01.17	C	
JS	R.Y.	ISSUED FOR INFORMATION	25.01.17	B	
JS	R.Y.	ISSUED FOR INFORMATION	21.12.16	A	
BY	CHKD	DESCRIPTION	DATE	REV	

COPYRIGHT: THIS DESIGN AND PLANS ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART WITHOUT WRITTEN PERMISSION FROM JAMES TAYLOR AND ASSOCIATES

James Taylor & Associates

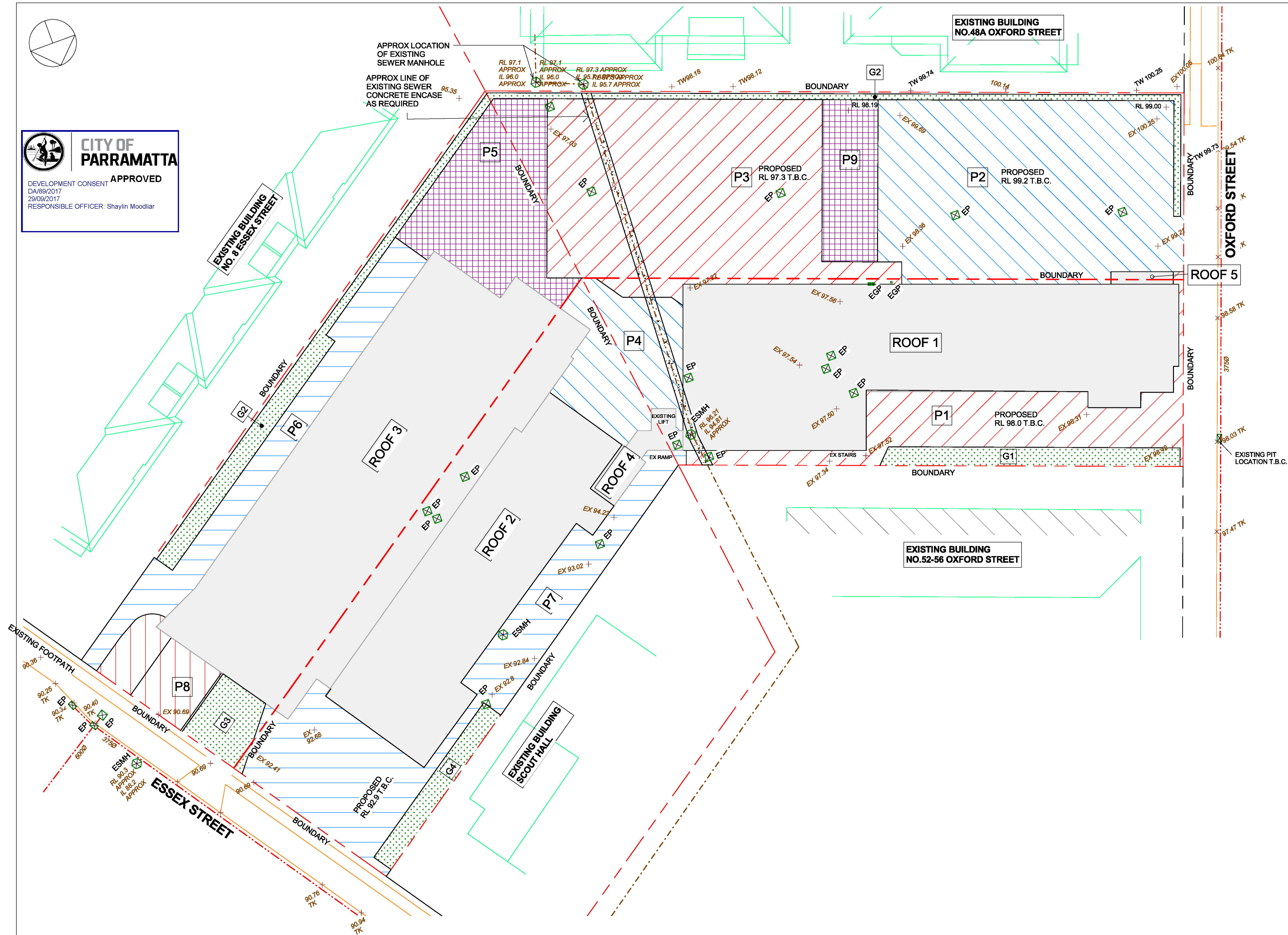
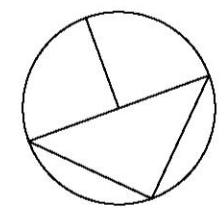
Civil & Structural Consulting Engineers
SUITE 301, 115 MILITARY ROAD NEUTRAL BAY NSW 2089
A.B.N. 33 102 603 556
TEL: 02 99691999 EMAIL: mail@jamestaylorassociates.com.au

ARCHITECT
STANTON DAHL ARCHITECTS
PO BOX 833 EPPING NSW 1710
PHONE +61 2 8876 5300 FAX +61 2 9868 2624

NEW SCHOOL FACILITIES
AT ARDEN ANGLICAN SCHOOL
50 OXFORD STREET EPPING NSW

STORMWATER CONCEPT
DESIGN COVER SHEET

DESIGN RY	DRAWN HL	PROJECT NO.
CHKD.		5912
APPRD.		DRAWING NO. REV
A1	SCALE As indicated	DATE OCT 2016
		SW.1 C



STORMWATER CATCHMENT PLAN - PROPOSED

1 : 200

TOTAL SITE AREA = 5167m²

ROOF AREA

ROOF 1 AREA = 750m²

ROOF 2 AREA = 475m²

ROOF 3 AREA = 940m²

ROOF 4 AREA = 37m²

ROOF 5 AREA = 9m²

TOTAL ROOF AREA = 2211m²

PAVED/IMPERVIOUS AREA

AREA P1 = 241m²

AREA P2 = 622m²

AREA P3 = 617m²

AREA P4 = 175m²

AREA P5 = 234m²

AREA P6 = 192m²

AREA P7 = 377m²

AREA P8 = 87m²

AREA P9 = 104m²

TOTAL PAVED/IMPERVIOUS AREA = 2649m²

GRASSED/PERVIOUS AREA

AREA G1 = 64m²

AREA G2 = 148m²

AREA G3 = 50m²

AREA G4 = 46m²

TOTAL GRASSED/PERVIOUS AREA = 308m²

BY	CHKD	DESCRIPTION	DATE	REV
JS	R.Y.	ISSUED FOR D.A.	30.01.17	C
JS	R.Y.	ISSUED FOR INFORMATION	25.01.17	B
JS	R.Y.	ISSUED FOR INFORMATION	21.12.16	A

COPYRIGHT: THIS DESIGN AND PLANS ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART WITHOUT WRITTEN PERMISSION FROM JAMES TAYLOR AND ASSOCIATES

James Taylor & Associates

Civil & Structural Consulting Engineers

SUITE 301, 115 MILITARY ROAD NEUTRAL BAY NSW 2089

A.B.N. 33 102 803 558

TEL: 02 99691999 EMAIL: mail@jamestaylorassociates.com.au

ARCHITECT STANTON DAHL ARCHITECTS

PO BOX 833 EPPING NSW 1710

PHONE +61 2 8876 5300 FAX +61 2 9868 2624

NEW SCHOOL FACILITIES

AT ARDEN ANGLICAN SCHOOL

50 OXFORD STREET EPPING NSW

STORMWATER CATCHMENT

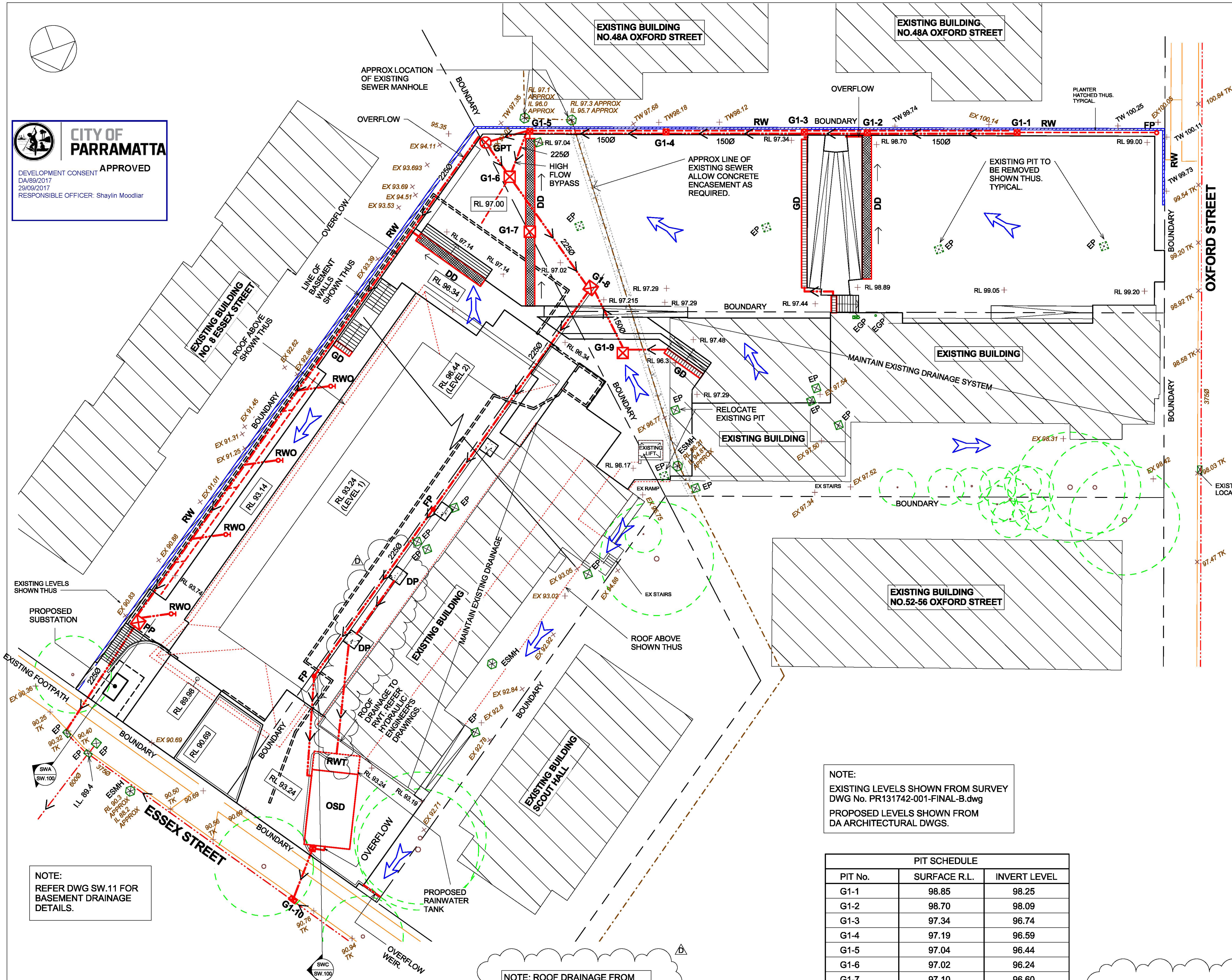
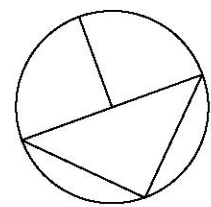
PLAN - PROPOSED

DESIGN RY DRAWN HL PROJECT NO.

CHKD. 5912

APPRD. DRAWING NO. REV

A1 SCALE 1 : 200 DATE OCT 2016 SW.3 C



NOTE:
REFER DWG SW.11 FOR
BASEMENT DRAINAGE
DETAILS.

STORMWATER CONCEPT PLAN SHEET

1 : 200

NOTE: ROOF DRAINAGE FROM
NEW ROOF FLOWS TO RWT+OSD.
DP LOCATIONS BY HYDRAULIC
ENGINEER.

NOTE:
EXISTING LEVELS SHOWN FROM SURVEY
DWG No. PR131742-001-FINAL-B.dwg
PROPOSED LEVELS SHOWN FROM
DA ARCHITECTURAL DWGS.

PIT SCHEDULE		
PIT No.	SURFACE R.L.	INVERT LEVEL
G1-1	98.85	98.25
G1-2	98.70	98.09
G1-3	97.34	96.74
G1-4	97.19	96.59
G1-5	97.04	96.44
G1-6	97.02	96.24
G1-7	97.10	96.60
G1-8	97.22	95.50
G1-9	96.30	95.70
G1-10	90.76	89.70

GPT - JELLYFISH FILTER OR EQUIVALENT
G1-8 - INSTALL SPEL STORMSACK

NOTES:

- DP, RWO, & PIT LOCATIONS & NUMBERS INDICATIVE ONLY & SUBJECT TO FINAL ARCHITECTURAL SETOUT.
- ALL PIPEWORK 100 DIA PVC AT MIN 1% FALL U.N.O.
- ALL WORKS TO BE IN ACCORDANCE WITH AS3500.3.2

LEGEND

EXISTING SEWER PIPE	---
PROPOSED SEWER PIPE	---
EXISTING STORMWATER PIPE	---
PROPOSED STORMWATER PIPE	---
SUBSLAB/SPOON DRAIN	---
FLUSH POINT	○ FP
DOWNPIPE	○ DP
RAIN WATER OUTLET	○ RWO
PROPOSED STORMWATER PIT	■ ## - #
PROPOSED STORMWATER PUMP OUT PIT	■ ## - #
PROPOSED SEWER PIT	■ PSP
PROPOSED GROSS POLLUTANT TRAP	■ GPT
EXISTING PIT	■ OR ■ EP
EXISTING PIT TO BE REMOVED	■ OR ■ EP
EXISTING SEWER MANHOLE	■ ESMH
EXISTING LEVEL FROM SURVEY	+ x.xxx
PROPOSED GRATED DRAIN	■ GD
PROPOSED FORMED DISH DRAIN	■ DD
PROPOSED RETAINING WALL	■ RW
RAINWATER TANK	■ RWT
ON SITE DETENTION TANK	■ OSD
EXISTING TREES	○
OVERLAND FLOW	→

REFER PIT SCHEDULE ON DWG SW.--

REFER SW.-- FOR STORMWATER CALCULATION

PIPE SIZES AND GRADIENTS
ALL PIPEWORK SHALL BE IN ACCORDANCE
WITH AS3500.3

HL	R.Y.	AMENDED AS NOTED	28.02.17	D
JS	R.Y.	ISSUED FOR D.A.	30.01.17	C
JS	R.Y.	ISSUED FOR INFORMATION	25.01.17	B
JS	R.Y.	ISSUED FOR INFORMATION	21.12.16	A
BY	CHKD	DESCRIPTION	DATE	REV

COPYRIGHT: THIS DESIGN AND PLANS ARE NOT TO BE USED
OR REPRODUCED WHOLLY OR IN PART WITHOUT WRITTEN
PERMISSION FROM JAMES TAYLOR AND ASSOCIATES

James Taylor & Associates

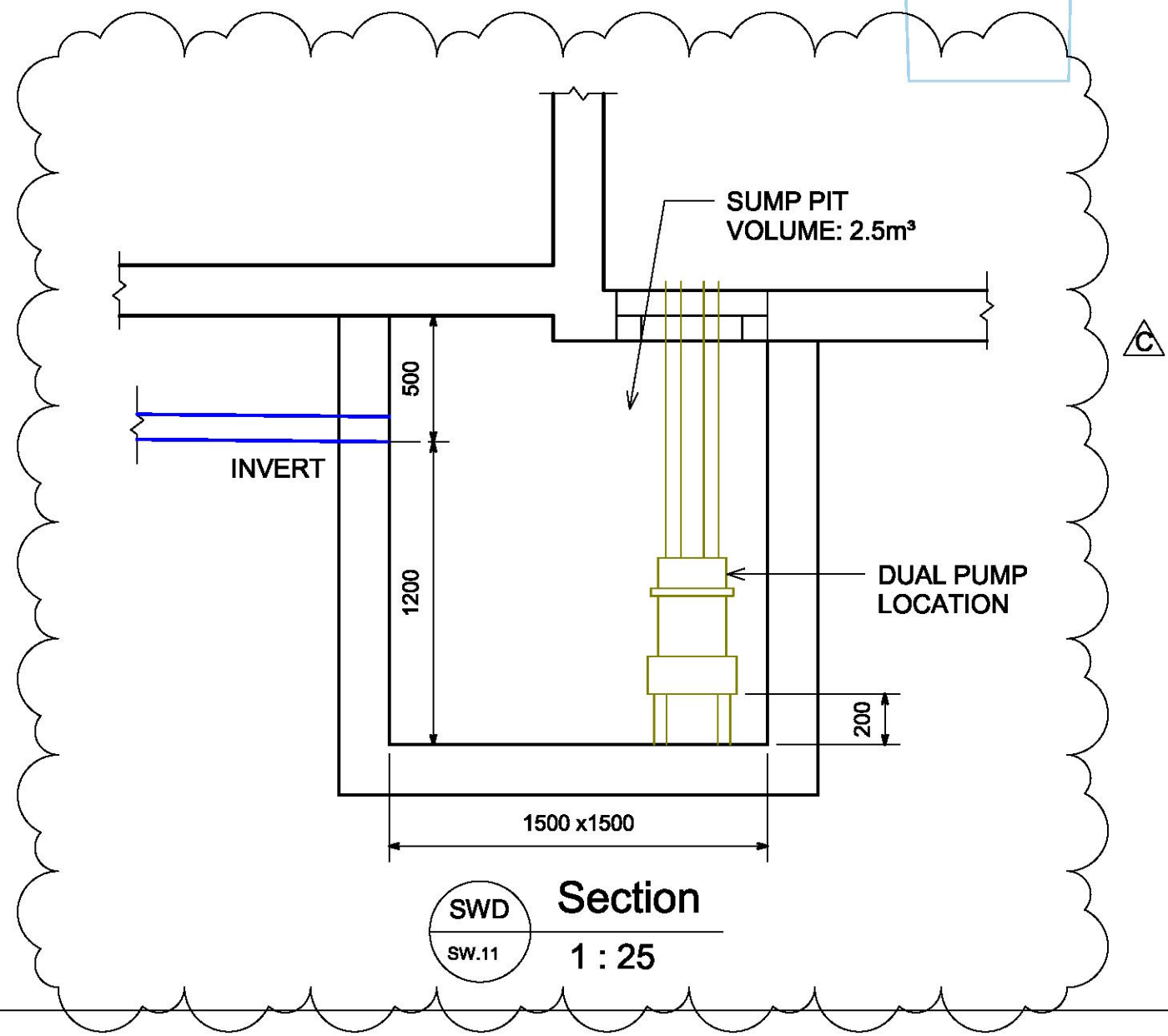
Civil & Structural Consulting Engineers
SUITE 301, 115 MILITARY ROAD NEUTRAL BAY NSW 2089
A.B.N. 33 102 603 556
TEL: 02 99691999 EMAIL: mail@jamestaylorassociates.com.au

ARCHITECT
STANTON DAHL ARCHITECTS
PO BOX 833 EPPING NSW 1710
PHONE +61 2 8876 5300 FAX +61 2 9868 2624

NEW SCHOOL FACILITIES
AT ARDEN ANGLICAN SCHOOL
50 OXFORD STREET EPPING NSW

STORMWATER CONCEPT PLAN SHEET 1

DESIGN RY	DRAWN HL	PROJECT NO.
CHKD.		5912
APPRD.		DRAWING NO. REV
A1	SCALE 1:200	DATE OCT 2016 SW.10 D



PIPE SIZES AND GRADIENTS
ALL PIPEWORK SHALL BE IN ACCORDANCE
WITH AS3500.3

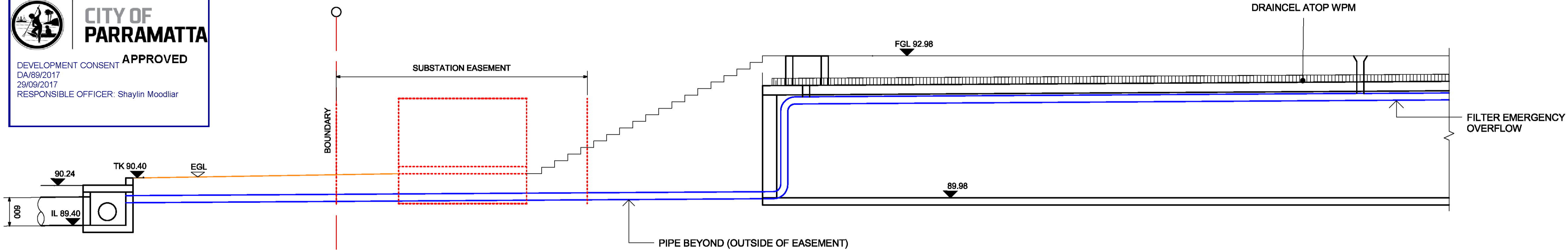
HL	R.Y.	AMENDED AS NOTED	28.02.17	C	
JS	R.Y.	ISSUED FOR D.A.	30.01.17	B	A
JS	R.Y.	ISSUED FOR INFORMATION	25.01.17	A	B
BY	CHKD	DESCRIPTION	DATE	REV	
<p>COPYRIGHT: THIS DESIGN AND PLANS ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART WITHOUT WRITTEN PERMISSION FROM JAMES TAYLOR AND ASSOCIATES</p>					
<p align="center">James Taylor & Associates Civil & Structural Consulting Engineers SUITE 301, 115 MILITARY ROAD NEUTRAL BAY NSW 2089 A.B.N. 33 102 603 558 TEL: 02 9689 9199 EMAIL: mail@jamestaylorassociates.com.au</p>					
<p>ARCHITECT STANTON DAHL ARCHITECTS PO BOX 833 EPPING NSW 1710 PHONE +61 2 8876 5300 FAX +61 2 9868 2624</p>					
<p align="center">NEW SCHOOL FACILITIES AT ARDEN ANGLICAN SCHOOL 50 OXFORD STREET EPPING NSW</p>					
<p align="center">STORMWATER CONCEPT PLAN SHEET 2</p>					
DESIGN RY		DRAWN HL	PROJECT NO. 5912		
CHKD.					
APPRD.			DRAWING NO.	REV	
SCALE As indicated		DATE OCT 2016		SW.11	C



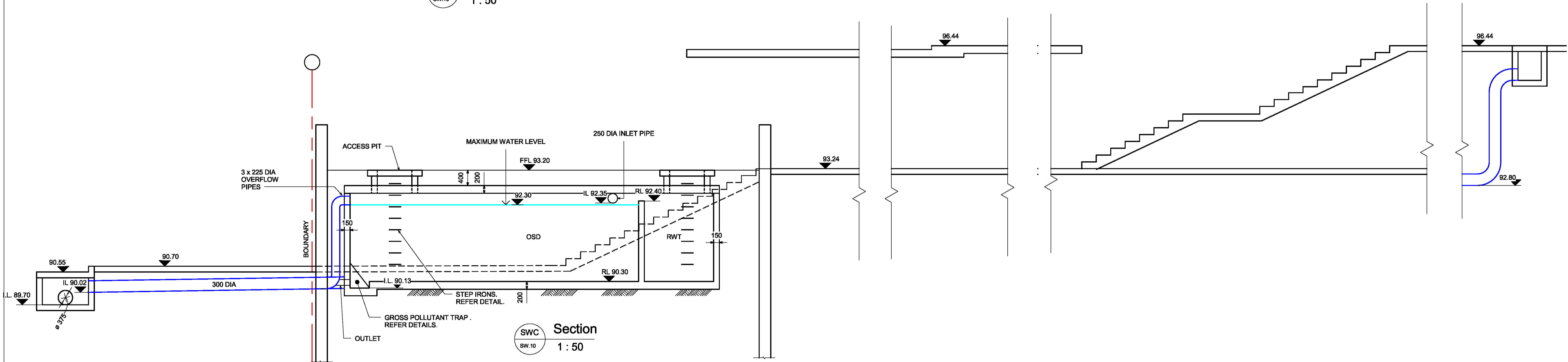
CITY OF PARRAMATTA

DEVELOPMENT CONSENT
DA/89/2017
RESPONSIBLE OFFICER: Shaylin Moodliar

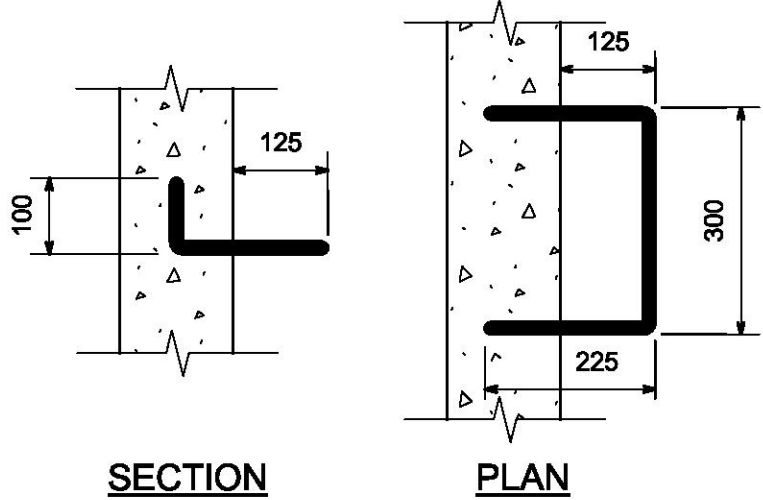
APPROVED



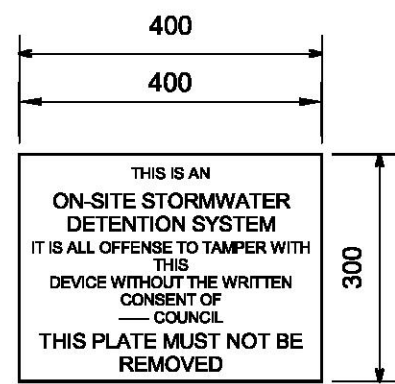
SWA
SW.10
Section
1 : 50



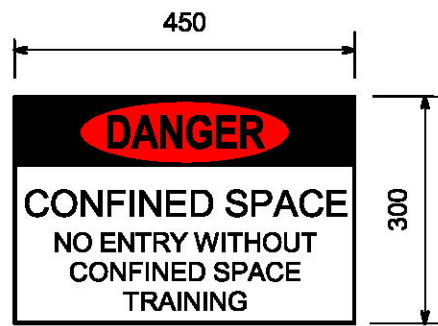
OSD VOLUME : 82m³
OUTLET : 85mm I.L. = 90.13m³



STEP IRONS
NOT TO SCALE



OSD SIGN
NOT TO SCALE

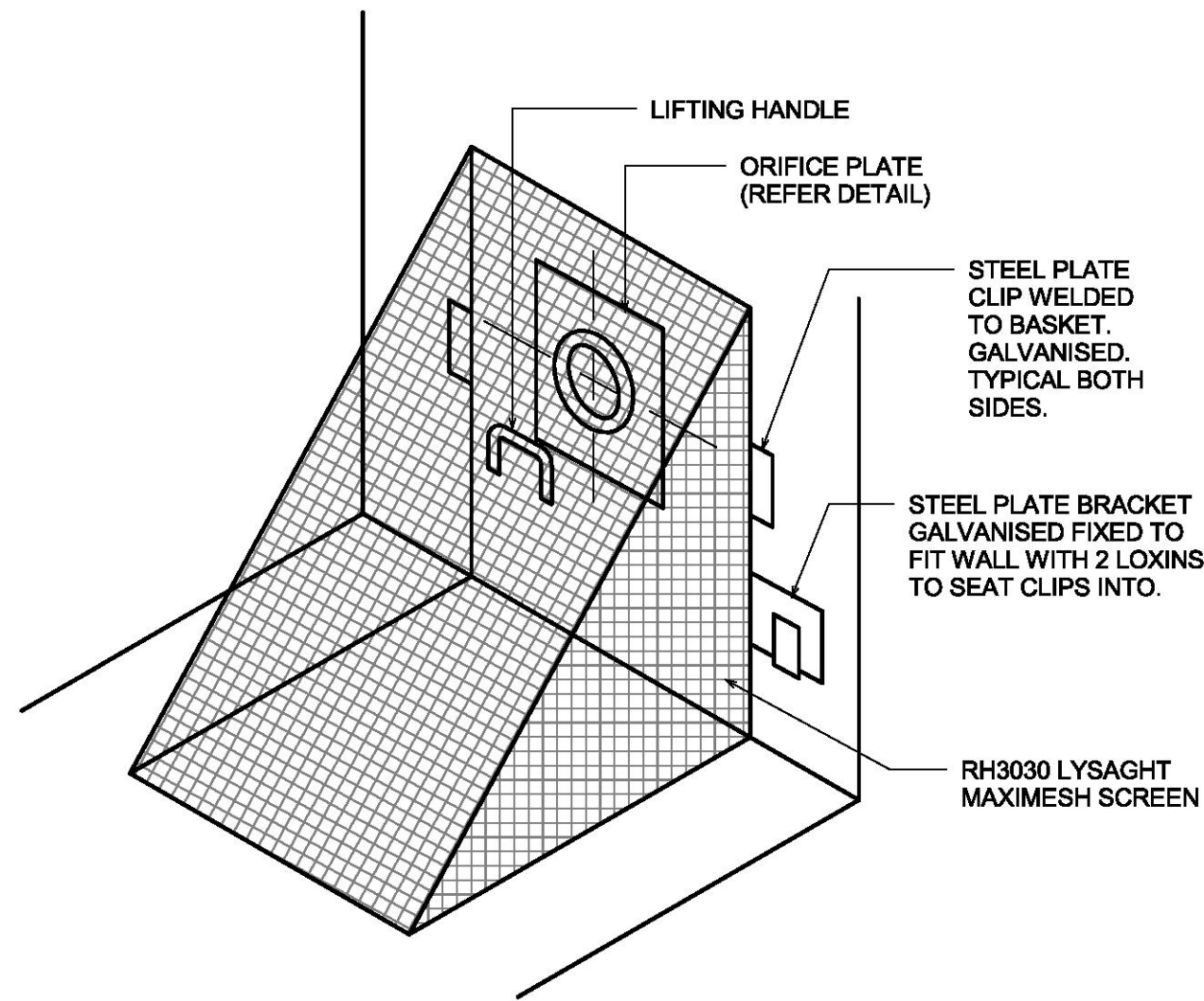


CONFINED SPACE SIGN
NOT TO SCALE

NOTE:
BACKGROUND IS YELLOW
TEXT IS WHITE ON BLACK
BACKGROUND



RAINWATER SIGN
NOT TO SCALE



GROSS POLLUTANT TRAP
NOT TO SCALE

BY	CHKD	DESCRIPTION	DATE	REV
JS	R.Y.	ISSUED FOR D.A.	30.01.17	C
JS	R.Y.	ISSUED FOR INFORMATION	25.01.17	B
JS	R.Y.	ISSUED FOR INFORMATION	21.12.16	A

COPYRIGHT: THIS DESIGN AND PLANS ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART WITHOUT WRITTEN PERMISSION FROM JAMES TAYLOR AND ASSOCIATES

James Taylor & Associates
Civil & Structural Consulting Engineers
SUITE 301, 115 MILITARY ROAD NEUTRAL BAY NSW 2089
A.B.N. 33 102 803 558
TEL: 02 99691999 EMAIL: mail@jamestaylorassociates.com.au

ARCHITECT
STANTON DAHL ARCHITECTS
PO BOX 833 EPPING NSW 1710
PHONE +61 2 8876 5300 FAX +61 2 9868 2624

NEW SCHOOL FACILITIES
AT ARDEN ANGLICAN SCHOOL
50 OXFORD STREET EPPING NSW

SECTIONS			
DESIGN RY	DRAWN HL	PROJECT NO. 5912	
CHKD.		DRAWING NO.	REV
APPRD.		SW.100	C
A1	SCALE As indicated	DATE OCT 2016	