GENERAL NOTES

G1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.

G2. IF IN DOUBT, ASK.

G3. ANY DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

G4. SETTING OUT DIMENSIONS AND SIZES OF STRUCTURAL MEMBERS SHALL NOT BE SCALED FROM DRAWINGS.

G5. SETTING-OUT DIMENSIONS SHOWN IN THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER/CONTRACTOR ON SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

G6. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE BUILDING CODE OF AUSTRALIA AND THE RELEVANT AND CURRENT SAA STANDARDS EXCEPT WHERE VARIED BY PROJECT SPECIFICATIONS.

G7. U.N.O. ALL LEVELS ARE IN METRES AND DIMENSIONS ARE IN MILLIMETRES.

G8. DURING CONSTRUCTION THE STRUCTURE/EXCAVATION SHALL BE MAINTAINED IN A SAFE AND STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.

G9. THE STRUCTURAL WORK SHOWN ON THESE DRAWING HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS.

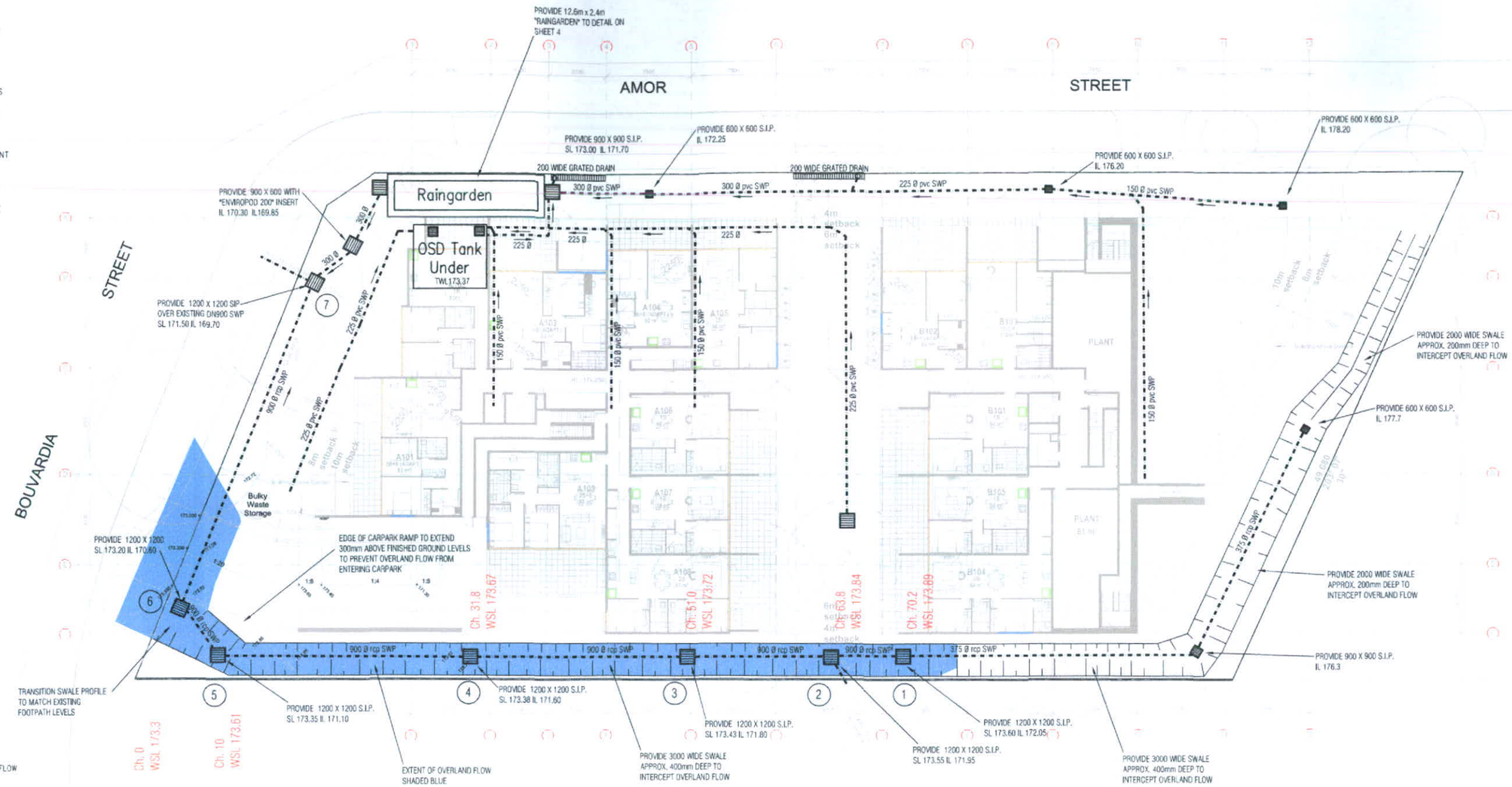
Classification	live load KPa
-	-

PITS AND PIPELINES

1. COMPRESSIVE STRENGTH OF CONCRETE F'c AT 28 DAYS TO BE 25 MPa
2. 100 DIA. SUBSOIL DRAINAGE PIPE 3000 LG. WRAPPED IN FABRIC SOCK TO BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES.
3. PROVIDE CLIMB IRONS WHERE PIT IS DEEPER THAN 1000mm
4. PIT SIZE TO BE INCREASED TO 900 x 900 IF DEEPER THAN 1200mm
5. PIPELINE TO BE LAID ON SAND BEDDING AND BACKFILLED WITH HIGH GRADE COMPACTION SAND TO 100mm ABOVE SOFFIT AND THEN IN ACCORDANCE WITH AS 3500.
6. MINIMUM COVER OF 450mm TO BE PROVIDED OVER PIPES. WHERE COVER IS LESS THE PIPE IS TO BE CONCRETE ENCASED.

LEGEND:

6.16	DENOTES EXISTING SURFACE LEVEL
	DENOTES EXISTING CONTOUR LINE
×	DENOTES DESIGN SURFACE LEVEL
22.2	DENOTES DESIGN CONTOUR LINE
	DENOTES DRAINAGE LINE PIPES TO BE ø 100 UPVC U.N.O. PIPES TO BE AT MIN. 1% GRADE U.N.O.
	DENOTES CATCHMENT BOUNDARY
445m² 15.8L/S	DENOTES CATCHMENT AREA DRAINING TO PIT / DOWNPIPE AND CALCULATED TOTAL FLOW
	DOWNPIPE LOCATIONS SUBJECT TO DETAILED DESIGN
	SEE ARCHITECTURAL DRAWINGS FOR SETOUT OF BUILDING AND DRIVEWAY.
	ALL GRATES LOCATED IN TRAFFICABLE AREAS SHALL BE APPROVED HEAVY DUTY GALVANISED GRATES



NOTE

1. THIS PLAN SHOWS A CONCEPTUAL STORMWATER LAYOUT ONLY AND IS SUBJECT TO DETAILED DESIGN AND CONFIRMATION OF EXISTING LEVELS.
2. THE LOCATION AND LEVEL OF SERVICES SHOWN ARE APPROXIMATE ONLY. THESE ARE TO BE VERIFIED PRIOR TO COMMENCING DETAILED DESIGN.
3. DOWNPIPES TO BE MINIMUM 100mm DIAMETER
4. ALL INTERNAL BOX GUTTERS TO BE MINIMUM 200mm WIDE BY 150mm HIGH. OVERFLOW SPILLWAY TO BE PROVIDED AT HEADER BOX TO DOWNPIPE.

	DESCRIPTION	BY	APPROVED	DATE
C	ISSUED FOR DA APPROVAL - EXTENT OF OVERLAND FLOW LEVELS AMENDED	EL	DT	11/8/14
B	ISSUED FOR DA APPROVAL - EXTENT OF OVERLAND FLOW ADDED AND DRIVEWAY AMENDED	EL	DT	15/7/14
A	ISSUED FOR DA APPROVAL	EL	DT	25/3/14

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DESIGNED: E.L. DATE 15/3/14
APPROVED: _____ DATE _____

EDWARD LUCAS, MIE Aust, CPEng
REGISTERED PROFESSIONAL ENGINEER No.118690
NPER-3 REGISTRATION CATEGORIES - CIVIL

ENGINEER
EWFW
Hydraulics - Fire - Environmental
Suite 5, Level 1
330 Wattle Street
Ultimo NSW
Phone: (02) 9212 1000
Fax: (02) 9212 1001
E-mail: ewfw@ewfw.com.au

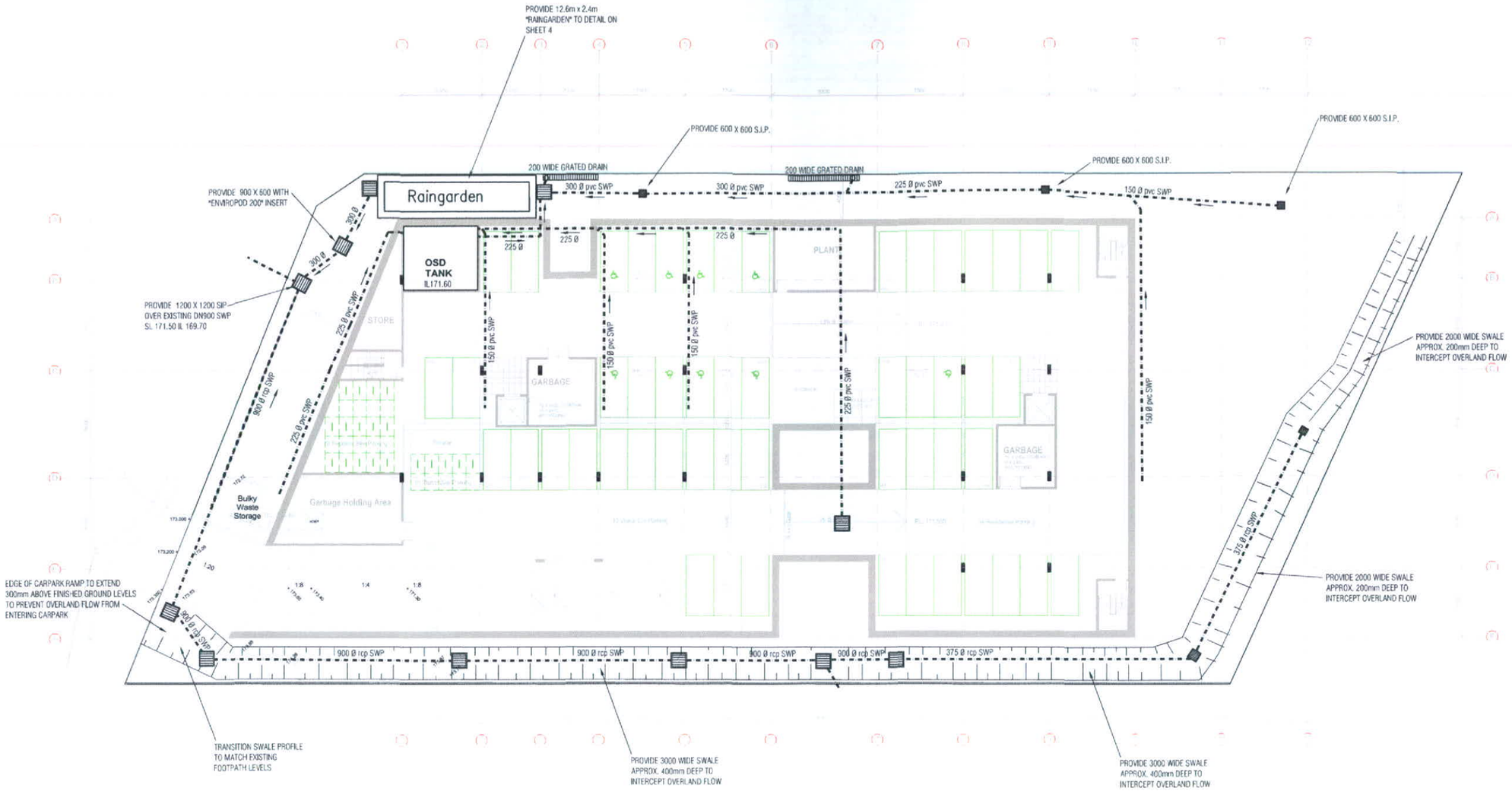
CLIENT
Omada Property Group
Suite 4, 287 MILITARY ROAD
CREMORNE NSW 2090

LOCAL GOVT. AREA
HORNSBY SHIRE COUNCIL

PROJECT:
PROPOSED UNIT DEVELOPMENT
CORNER AMOR STREET AND BOUVARDIA STREET
ASQUITH NSW

DRAWING TITLE
CONCEPT STORMWATER PLAN - GROUND FLOOR PLAN

FILE NO. 3982
COMPUTER REF. 3982-SWD
SHEET NO. SHEET 1 OF 5
REVISION C
DRAWING NO. 3982-SWD-01



C	ISSUED FOR DA APPROVAL – EXTENT OF OVERLAND FLOW LEVELS AMENDED	EL	DT	11/8/14
B	ISSUED FOR DA APPROVAL – EXTENT OF OVERLAND FLOW ADDED AND DRIVEWAY AMENDED	EL	DT	15/7/14
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EDWARD LUCAS, MIE Aust, CPEng
REGISTERED PROFESSIONAL ENGINEER No.118690
NPER-3 REGISTRATION CATEGORIES – CIVIL

ENGINEER
EWFW
Hydraulics-Fire-Environmental
Suite 5, Level 1
330 Wattle Street
Ultimo NSW
Phone: (02) 9212 1000
Fax: (02) 9212 1001
E-mail:
ewfw@ewfw.com.au

CLIENT
Omada Property Group
Suite 4, 287 MILITARY ROAD
CREMORNE NSW 2090

LOCAL GOVT. AREA
HORNSBY SHIRE COUNCIL

PROJECT:
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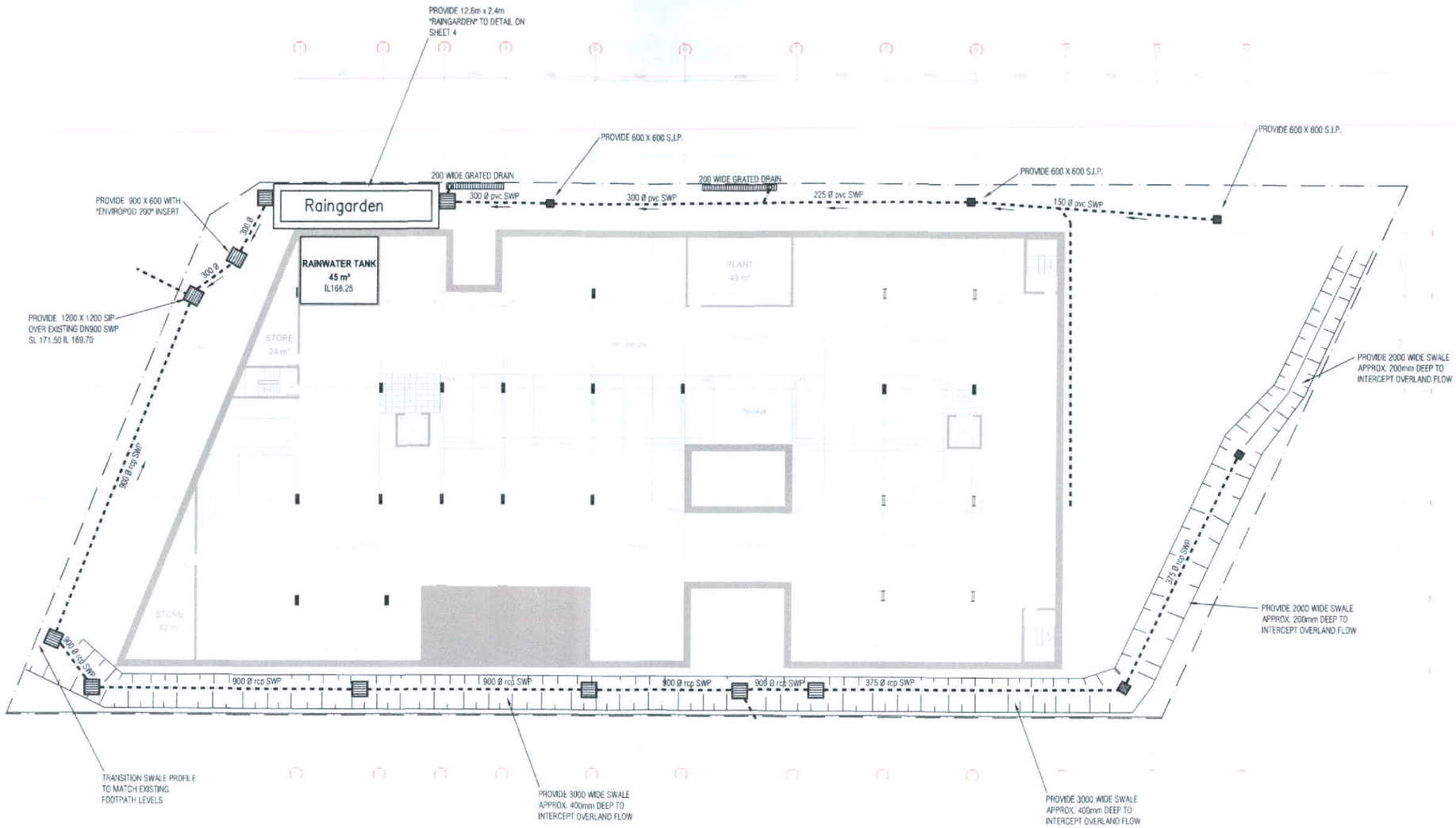
ASQUITH NSW

DRAWING TITLE
CONCEPT STORMWATER PLAN – BASEMENT PLAN

FILE NO. 3982
COMPUTER REF. 3982–SWD
SHEET NO. SHEET 2 OF 5
REVISION C
DRAWING NO. 3982–SWD–02



C	ISSUED FOR DA APPROVAL - EXTENT OF OVERLAND FLOW LEVELS AMENDED	EL	DT	11/8/14
B	ISSUED FOR DA APPROVAL - EXTENT OF OVERLAND FLOW ADDED AND DRIVEWAY AMENDED	EL	DT	15/7/14
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EDWARD LUCAS, ME Aust, CPEng
REGISTERED PROFESSIONAL ENGINEER No.116690
NPER-3 REGISTRATION CATEGORIES - CIVIL

ENGINEER
EWFW
Hydraulics-Fire-Environmental
Suite 5, Level 1
330 Wattle Street
Ultimo NSW
Phone: (02) 9212 1000
Fax: (02) 9212 1001
E-mail:
ewfw@ewfw.com.au

CLIENT
Omada Property Group
Suite 4, 287 MILITARY ROAD
CREMORNE NSW 2090

LOCAL GOVT. AREA
HORNSBY SHIRE COUNCIL

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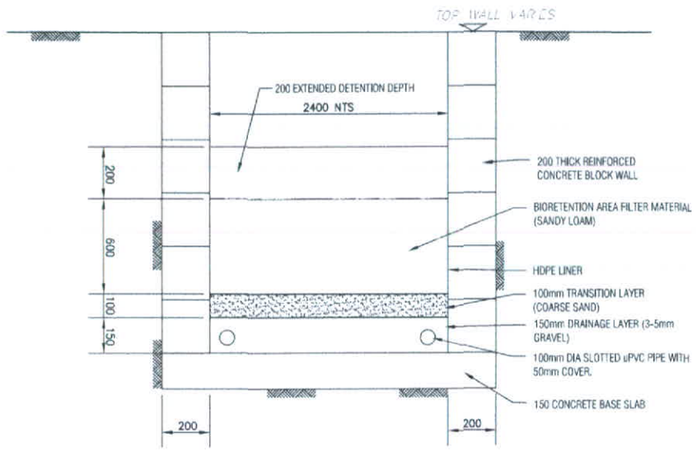
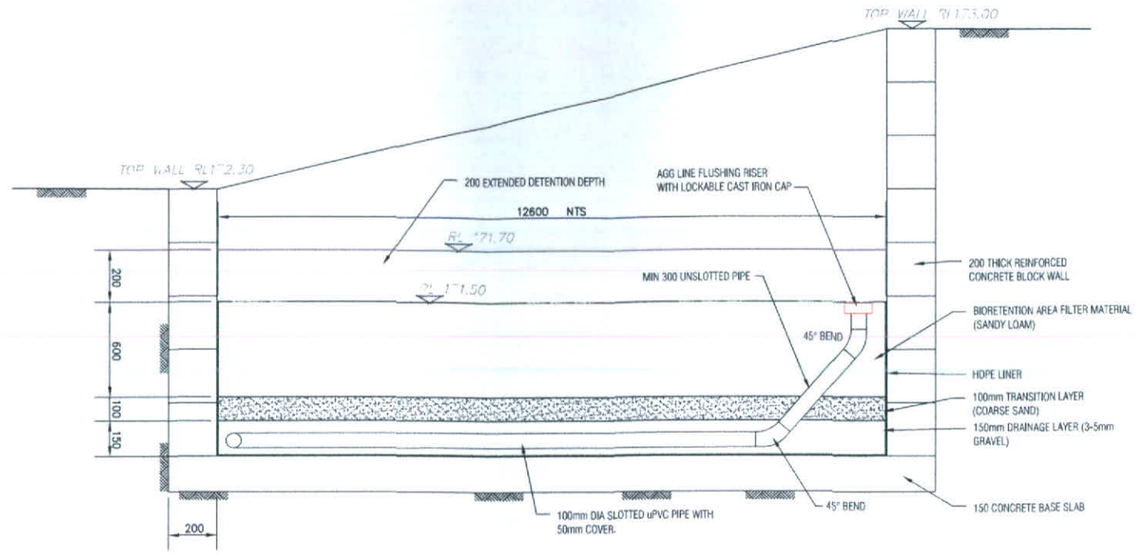
ASQUITH NSW

DRAWING TITLE
CONCEPT STORMWATER PLAN - LOWER BASEMENT PLAN

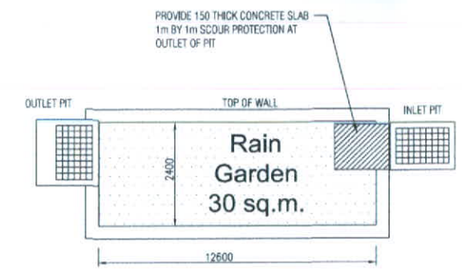
FILE NO. 3982
COMPUTER REF. 3982-SWD
SHEET NO. SHEET 3 OF 5
REVISION C
DRAWING NO. 3982-SWD-03



TYPICAL CROSS SECTION THROUGH RAINGARDEN N.T.S.



TYPICAL LONG SECTION THROUGH RAINGARDEN N.T.S.



RAINGARDEN PLAN N.T.S.

GENERAL NOTES:

1. INVERT OF RAIN GARDEN TO BE 100mm ABOVE THE INVERT OF THE DOWNSTREAM STORMWATER PIT

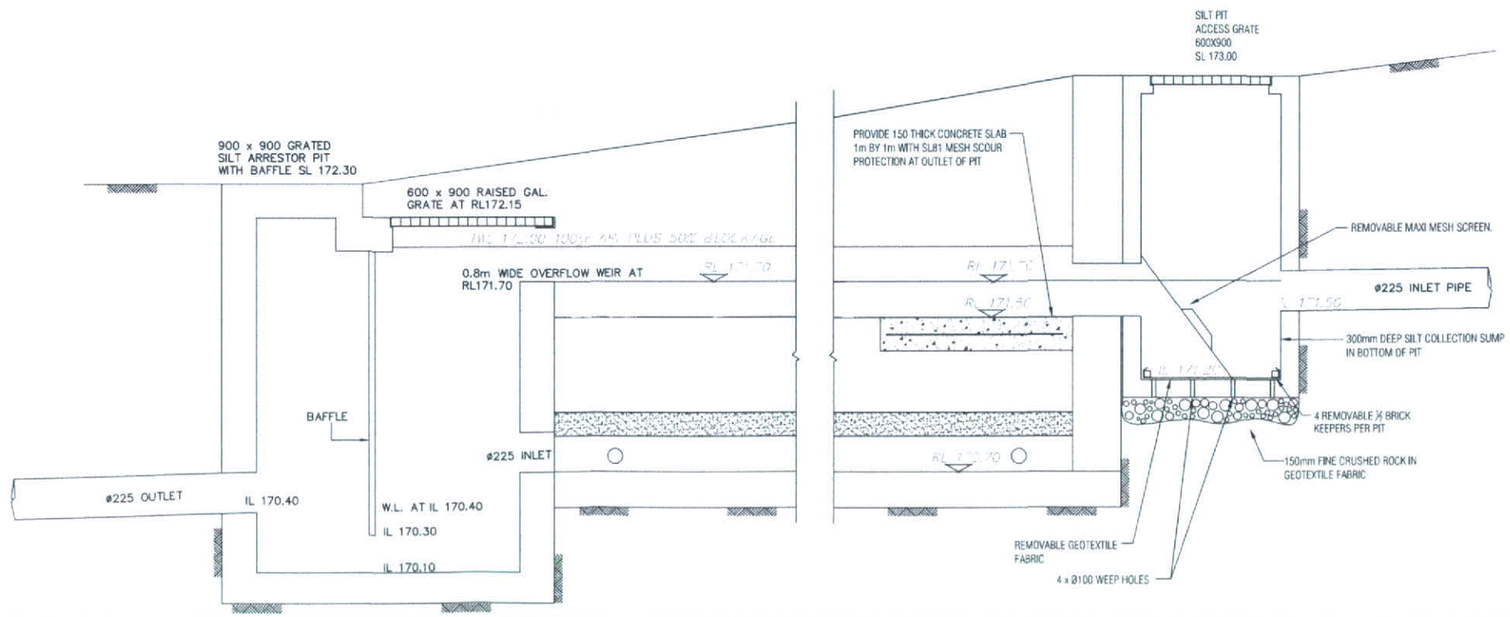
2. RAIN GARDEN TO HAVE SURFACE AREA OF 21sq.m. UNLESS AS OTHERWISE SPECIFIED IN DETAILED DESIGN PLANS

3. FILTER MATERIAL TO BE SANDY LOAM WITH A SATURATED HYDRAULIC CONDUCTIVITY OF 180mm/hr AND GENERALLY HAVE PARTICLE SZES OF BETWEEN: CLAY 5–15%, SILT < 30%, SAND 50–70% ;BETWEEN 5% AND 10% ORGANIC CONTENT MEASURED INACCORDANCE WITH AS1289 4.1.1 AND BE pH NEUTRAL.

4. DRAINAGE LAYER TO BE 150mm OF 3–5mm GRAVEL GRADED AT 0.5% TOWARDS OUTLET.

5. TRANSITION LAYER MATERIAL TO BE COARSE SAND SUCH AS UNIMIN $^{15}/_{30}$ FG SAND GRADING OR EQUIVALENT. THE SAND SHALL HAVE PARTICLE SIZE DISTRIBUTION OF 100% PASSING 1.4mm, 80% PASSING 1.0mm, 44% PASSING 0.7mm AND 8.4% PASSING 0.5mm.

6. GRASSES AND PLANTS AS SPECIFIED BY LANDSCAPE ARCHITECT. PLANTS TO BE APPROPRIATE SPECIES FOR THE BIORETENTION SYSTEM IN ACCORDANCE WITH THE BCC HANDBOOK PART 5 – VEGETATION SELECTION GUIDE (SEPTEMBER 2012 OR AS REVISED) FOR THE 600mm DEEP FILTER MEDIA. PLANTING WITHIN THE FILTER AREA SHOULD INCORPORATE SEVERAL GROWTH FORMS, INCLUDING SHRUBS AND TUFTED PLANTS AND BE DENSELY PLANTED (TUFTED PLANTS AT A MINIMUM OF 8 PLANTS PER SQUARE METRE) TO ENSURE PLANT ROOTS OCCUPY ALL PARTS OF THE MEDIA. GROUNDCOVER SPECIES NOT BE USED. TO ENSURE DIVERSITY AND DISEASE RESISTANCE A MINIMUM OF 5 DIFFERENT SPECIES IS REQUIRED. ALL PLANTS WITHIN THE FILTER AREA ARE TO BE PLANTED FROM TUBESTOCK ONLY.



TYPICAL SECTION THROUGH DISCHARGE PIT N.T.S.

C	ISSUED FOR DA APPROVAL – EXTENT OF OVERLAND FLOW LEVELS AMENDED	EL	DT	11/8/14
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EDWARD LUCAS, MIE Aust, CPEng
REGISTERED PROFESSIONAL ENGINEER No.118690

ENGINEER
EWFW
Hydraulics-Fire-Environmental
Suite 5, Level 1
330 Wattle Street
Ultimo NSW
Phone: (02) 9212 1000
Fax: (02) 9212 1001
E-mail:

CLIENT
Omada Property Group
Suite 4, 287 MILITARY ROAD
CREMORNE NSW 2090

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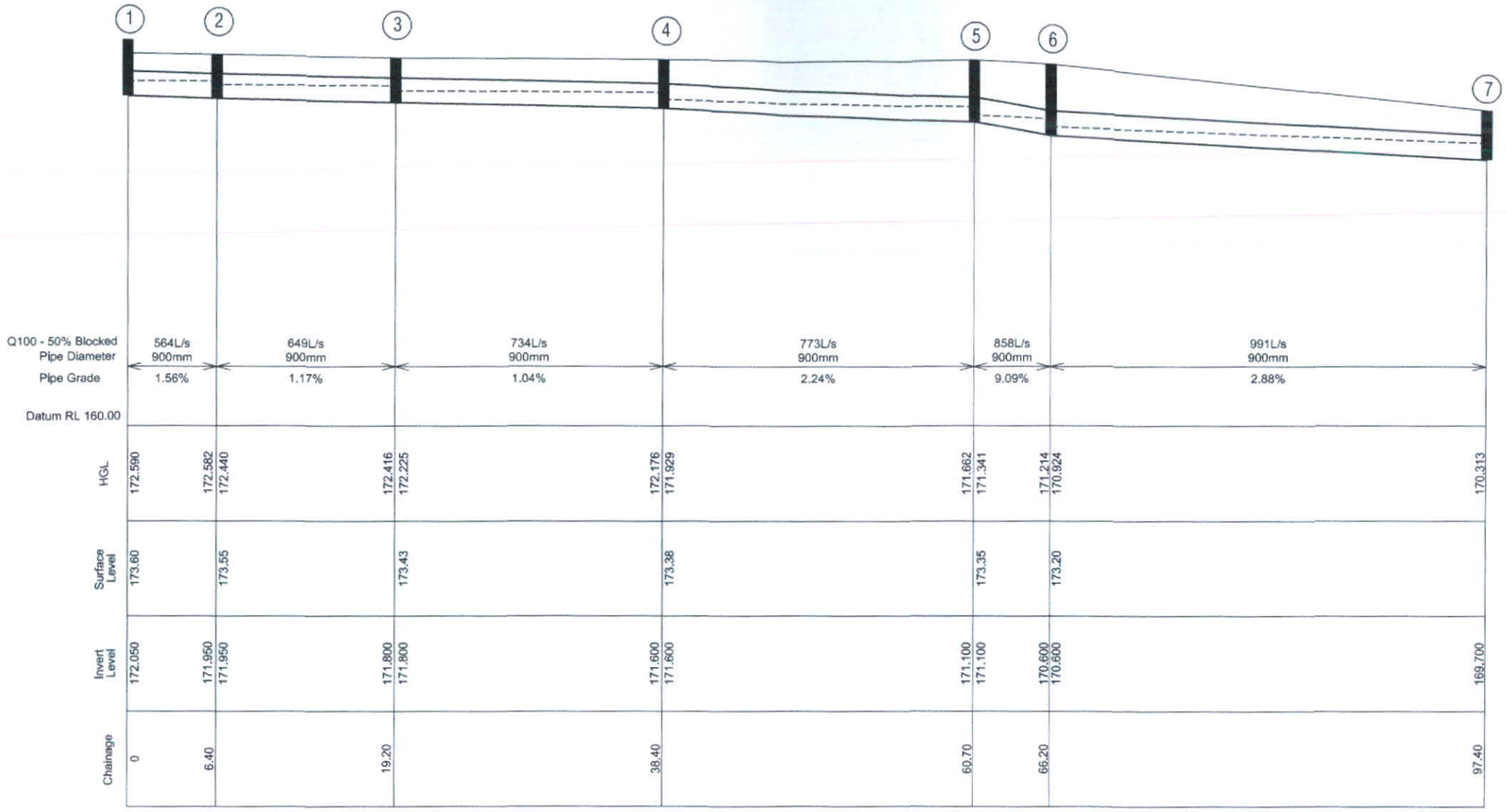
DRAWING TITLE
CONCEPT STORMWATER PLAN – RAIN GARDEN DETAIL

FILE NO.	COMPUTER REF.
3982	3982-SWD
SHEET NO.	REVISION
SHEET 4 OF 5	C
DRAWING NO.	
3982-SWD-04	



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	DESCRIPTION	BY	APPROVED	DATE

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1:200 hor. @ A1
1:100 vert. @ A1

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EDWARD LUCAS, MIE Aust, CPEng
REGISTERED PROFESSIONAL ENGINEER No.118690
NPER-3 REGISTRATION CATEGORIES - CIVIL

ENGINEER
EWFW
Hydraulics - Fire - Environmental
EWFW
Hydraulics/Fire/Environmental
Suite 5, Level 1
330 Wattle Street
Ultimo NSW
Phone: (02) 9212 1000
Fax: (02) 9212 1001
E-mail:
ewfw@ewfw.com.au

CLIENT
Omada Property Group
Suite 4, 287 MILITARY ROAD
CREMORNE NSW 2090

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PROJECT:
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ASQUITH NSW

DRAWING TITLE
CONCEPT STORMWATER PLAN - DN900 LONGSECTION

FILE NO. 3982
COMPUTER REF. 3982-SWD
SHEET NO. SHEET 5 OF 5
REVISION B
DRAWING NO. 3982-SWD-05