

STORMWATER MANAGEMENT PLAN

84 CORRIEDALE DRIVE, MARULAN NSW 2579




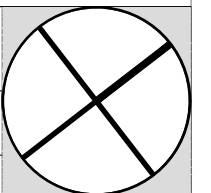
LOCALITY PLAN

NTS

DRAWING SCHEDULE

DWG No.	DRAWING TITLE
21060-D-000	COVER SHEET, LOCALITY PLAN & DRAWING SCHEDULE
21060-D-001	SPECIFICATION NOTES SHEET
21060-D-101	EROSION AND SEDIMENT PLAN
21060-D-102	EROSION AND SEDIMENT DETAILS PLAN
21060-D-200	STORMWATER MANAGEMENT PLAN - CATCHMENT PLAN
21060-D-201	STORMWATER MANAGEMENT PLAN
21060-D-601	TYPICAL STORMWATER DETAILS

REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE	GENERAL NOTES	ARCHITECTURAL DESIGNERS	LEVEL 1, 3A/549-553 WOODVILLE RD GUILDFORD NSW 2161 TEL: 02 80595555	CUSTOMER	TITLE - COVER SHEET, LOCALITY PLAN & DRAWING SCHEDULE								
A	ISSUE FOR DA	KA	21.05.2024	<p>Figured dimensions & larger scale drawings shall be taken in preference to scaled readings.</p> <p>Check all dimensions and levels on site before commencement of work or ordering materials.</p> <p>All workmanship and materials shall comply with all relevant codes, ordinances, Australian standards and manufacturer's instructions.</p> <p>All discrepancies shall be brought to the attention of AKT Engineering & Consulting P/L.</p>	<p>ARCHITECTURAL DESIGNERS</p> <p>CIVIL & STRUCTURAL ENGINEERS</p> <p>NATHERS & BASIX ASSESSORS</p> <p>CONSTRUCTION CERTIFICATES</p> <p>ACCREDITED CERTIFIERS</p> <p>PROJECT MANAGERS</p>	<p>LEVEL 1, 3A/549-553 WOODVILLE RD GUILDFORD NSW 2161 TEL: 02 80595555</p> <p>MOB: 04 04 422 444</p> <p>WWW.AKTENGINEERING.COM.AU</p> <p>INFO@AKTENGINEERING.COM.AU</p> <p>KHALED@AKTENGINEERING.COM.AU</p>	MR OSCAR MERHEBI	<p>PROJECT PORTION</p> <p>PROPOSED 9 LOTS SUBDIVISION</p>								
				<p>Copyright of the material shown hereon & in the accompanying CAD files / drawing sheets vests with AKT Engineering & Consulting P/L.</p> <p>AKT Engineering & Consulting P/L warrants only the original architectural data as retained by the company.</p> <p>The data files are not to be altered without the written approval of AKT Engineering & Consulting P/L.</p> <p>The responsibility of AKT Engineering & Consulting P/L is removed if these conditions are not observed.</p>			<p>PROJECT</p> <p>84 CORRIEDALE DR, MARULAN NSW 2579</p>	<table border="1"> <tr> <td>CHECKED PROPOSAL</td> <td>APPROVED PROPOSAL</td> <td>CLIENT APPROVED</td> <td>ENGINEER APPROVED</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	CHECKED PROPOSAL	APPROVED PROPOSAL	CLIENT APPROVED	ENGINEER APPROVED				
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DRAWN BY: K.A	SCALE: 200	A3	JOB No: 21060	DRG No: D-000	REV: A											



DEVELOPMENT APPLICATION

DRAINAGE NOTES

- ALL DRAINAGE LEVELS TO BE CONFIRMED ON SITE, PRIOR TO ANY CONSTRUCTION COMMENCING.
- ALL PIPES WITHIN THE PROPERTY TO BE A MINIMUM OF 100 DIA UPVC @ 1% MINIMUM GRADE, UNO.BEDDING MATERILS TO AS2032 OR 3725 AS APPROPRIATE .
- THE MINIMUM PIPE SIZE SHALL BE 90mm WHERE RECEIVES ROOF WATER RUNOFF AND 100 mm WHERE RECEIVES RUNOFF FORM PAVED/ UNPAVED AREA INSIDE THE PROPERTY WITH MINUMIN VELOCITY SHALL BE 0.6m/s AND MAXIMUM SHALL BE 6m/s IN 1:100 YEARS STORM.
- MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 450mm IN CARPARK AND 600mm UNDER A SEALED ROADWAY AREAS AND 750 UNDER UNSEALED ROADWAY AREA UNO.

GENERAL NOTES

- LOCATION OF DOWNPIPES & FLOOR WASTE TO BE DETERMINED BY BUILDER/ARCHITECT AT TIME OF CONSTRUCTION & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL /OTHER CONSULTANTS DRAWINGS /SPECIFICATIONS AND SKETCHES AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT .ANY DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH ANY RELATED WORK.CONSTRUCTION FROM THESE DRAWINGS, AND THEIR ASSOCIATED CONSULTANT'S DRAWINGS IS NOT TO COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH AS/NZS 3500.3:2021 STORMWATER DRAINAGE, BCA AND LOCAL COUNCIL POLICY/CONSENT/REQUIREMENTS. ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION
- ALL SET OUT DIMENSIONS /LEVELS SHALL BE VERIFIED BY BUILDER AND OBTAINED FROM ARCHITECTS / ENGINEER'S DETAILS. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT AND ENGINEER FOR DECISION BEFORE PROCEEDING WITH RELATED WORK.
- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER/SUBCONTRACTOR TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
- ALL SURVEY LEVELS / PROPOSED BUILDING / FINISHED SURFACE LEVELS SHOWN IN THESE DRAWINGS ARE BASED ON LEVELS OBTAINED FROM DRAWINGS BY OTHERS.UNLESS NOTED OTHERWISE LEVELS ARE IN METERS AND DIMENSIONS ARE IN MILLIMETERS.
- THE ALIGNMENT AND LEVEL OF ALL SERVICES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM THE POSITION AND LEVEL OF ALL SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED AT THE CONTRACTORS EXPENSE.
- ALL STORMWATER DRAINAGE PIPES ARE TO BE uPVC AT MINIMUM 1% GRADE UNLESS NOTED OTHERWISE.
- ALL PITS WITHIN DRIVEWAYS TO BE 150mm THICK CONCRETE OR EQUAL.
- THIS PLAN IS THE PROPERTY OF AKT ENGINEERING & CONSULTING AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION FROM AKT ENGINEERING & CONSULTING .

ON-SITE DETENSION NOTE:

THE OSD BASIN/TANK IS TO BE BUILT TO THE CORRECT LEVEL & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN FEES ADDITIONAL FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS THE UNDER REQUIRED CONTRACTOR'S EXPENSES.

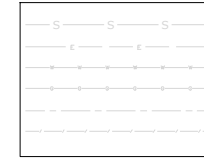
PIPES NOTE:

Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

EROSION AND SEDIMENT CONTROL NOTES

- THESE NOTES ARE TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS IN THIS DRAWING SET AND IN ACCORDANCE WITH LOCAL COUNCIL 'S DCP .
- THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND TO THE SATISFACTION OF THE RELEVANT LOCAL AUTHORITY PRIOR TO THE COMMENCEMENT OF AND DURING CONSTRUCTION. NO DISTURBANCE TO THE SITE SHALL BE PERMITTED OTHER THAN IN THE IMMEDIATE AREA OF THE WORKS AND NO MATERIAL SHALL BE REMOVED FROM THE SITE WITHOUT THE RELEVANT LOCAL AUTHORITY APPROVAL. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STANDARDS OUTLINED IN NSW DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTIONS".
- PLACE STRAW BALES LENGTH WISE IN A ROW AS PARALLEL AS POSSIBLE TO THE SITE CONTOURS, UNO. BALE ENDS TO BE TIGHTLY BUTTED. BALES ARE TO BE PLACED SO THAT STRAWS ARE PARALLEL TO THE ROW. BALES ARE TO BE PLACED 1.5M TO 2M DOWNSLOPE FROM THE TOE OF THE DISTURBED BATTER, UNO.
- COUNCIL APPROVED FILTER FABRIC TO BE ENTRENCHED 150MM DEEP UPSLOPE TOWARDS DISTURBED SURFACE. FABRIC TO BE A MINIMUM SF2000 OR BETTER. FIX FABRIC TO POSTS WITH WIRE TIES OR AS RECOMENDED WITH MANUFACTURER'S SPECIFICATIONS. FABRIC JOINTS TO HAVE A MINIMUM OF 150MM OVERLAP. WIRE TO BE STRUNG BETWEEN POSTS WITH FILTER FABRIC OVERLAP TO PREVENT SAGGING.
- STABILISED ENTRY/EXIT POINTS TO REMAIN INTACT UNTIL FINISHED DRIVEWAY IS COMPLETE. CONSTRUCTION OF ENTRY/EXIT POINTS TO BE MAINTAINED AND REPAIRED AS REQUIRED SO THAT IT'S FUNCTION IS NOT COMPROMISED. CONSTRUCTION OF ENTRY/EXIT POINT TO BE IN ACCORDANCE WITH THE DETAIL CONTAINED WITHIN THIS DRAWING SET. ALL DRAINAGE PIPE INLETS TO BE CAPPED UNTIL DOWNPIPES CONNECTED/PITS CONSTRUCTED AND PROTECTED WITH SILT BARRIER
- PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENT IS REVEGETATED OR PAVED.
- THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM SUCH DEVICES SUCH THAT MORE THAN 60% OF THEIR CAPACITY IS LOST. ALL THE SILT IS TO BE PLACED OUTSIDE THE LIMIT OF WORKS. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND FURTHER AS MAY BE DIRECTED BY THE SUPERINTENDENT OR COUNCIL.
- THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL BY REGULARLY WETTING DOWN (BUT NOT SATURATING) DISTURBED AREA.
- TOPSOIL SHALL BE STRIPPED AND STOCKPILED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE LINES. THIS TOPSOIL SHALL BE RESPREAD LATER ON AREAS TO BE REVEGETATED AND STABILISED ONLY, (I.E. ALL FOOTPATHS, BATTERS, SITE REGARDING AREAS, BASINS AND CATCHDRAINS). TOPSOIL SHALL NOT BE RESPREAD ON ANY OTHER AREAS UNLESS SPECIFICALLY INSTRUCTED BY THE SUPERINTENDENT. IF THEY ARE TO REMAIN FOR LONGER THAN ONE MONTH STOCKPILES SHALL BE PROTECTED FROM EROSION BY COVERING THEM WITH A MULCH AND HYDROSEEDING AND, IF NECESSARY, BY LOCATING BANKS OR DRAINS DOWNSTREAM OF A STOCKPILE TO RETARD SILT LADEN RUNOFF.
- THE CONTRACTOR SHALL GRASS SEED ALL DISTURBED AREAS WITH AN APPROVED MIX AS SOON AS PRACTICABLE AFTER COMPLETION OF EARTHWORKS AND REGRADING.

SEWER
ELECTRICITY
WATER
GAS MAIN
CENTRELINE
FENCE



LEGEND

AHD	AUSTRALIAN HEIGHT DATUM
AG	AC-PIPE (SUB SOIL DRAINAGE)
ARI	AVERAGE RECURRENCE INTERVAL
BG	BOX GUTTER
BWL	BOTTOM WATER LEVEL
CL	COVER LEVEL
CO	CLEAN OUT INSPECTION OPENING
DCP	DISCHARGE CONTROL PIT
DP	DOWN PIPE
DRP	DROPPER PIPE
EBG	EXISTING BOX GUTTER
EDP	EXISTING DOWN PIPE
EEG	EXISTING EAVES GUTTER
EG	EAVES GUTTER
FRC	FIBER REINFORCED CONCRETE
FW	FLOOR WASTE
GD	GRATED DRAIN
GISP	GRATED SURFACE INLET PIT
HED	HIGH EARLY DISCHARGE
HP	HIGH POINT OF GUTTER
IL	INVERT LEVEL
IO	INSPECTION OPENING
OIF	OVERFLOW
OSD	ON-SITE DETENTION
PSD	PERMISSIBLE SITE DISCHARGE
P1	PIPE
RCP	REINFORCED CONCRETE PIPE
RHS	RECTANGULAR HOLLOW SECTION
RL	REDUCED LEVEL
RR	RUBBER RING JOINT
RRT	RAIN WATER RE-USE TANK
RWH	RAIN WATER HEAD
RWO	RAIN WATER OUTLET
SLAP	SEALED LID ACCESS PIT
SP	SPREADER PIPE
SFR	SPREADER
SS	STAINLESS STEEL
SU	BOX GUTTER SUMP
TW	TOP OF WALL
TWL	TOP WATER LEVEL
UIS	UNDERSIDE OF SLAB
VG	VALLY GUTTER
UNO	UNLESS NOTED OTHERWISE

SYMBOLS

SURFACE INLET PIT	
SURFACE INLET PIT (WITH ENVIROPOD 200 MICRON)	
ACCESS GRATE (WITH ENVIROPOD 200 MICRON)	
ACCESS GRATE (TO HED PIT)	
450 SQUARE INTERVAL	450 X 450
GRATE LEVEL =65.00	SL 65.00
INVERT LEVEL = RL 65.20	IL 65.20
PROPOSED DOWNPIPE 90mm DIA. OR 100mm x 50mm MIN.	
GRATED TRENCH DRAIN	
ABSORPTION TRENCH	
PROPOSED ROOF GUTTER FALL	
PROPOSED DOWNPIPE SPREADER	
STORMWATER PIPE TO RW	
STORMWATER PIPE TO OSD	
STORMWATER PIPE BYPASSING OSD/RWT	
SUBSOIL PIPE	
EXISTING STORMWATER PIPE	
INSPECTION RISER	
RAINWATER HEAD	
RETAINING WALL	
COLLECTION PIPE	

RECOMMENDED MAINTENANCE SCHEDULE

DISCHARGE CONTROL PIT (DCP)	FREQUENCY	RESPONSIBILITY	PROCEDURE
INSPECT FLAP VALVE AND REMOVE ANY BLOCKAGE.	SIX MONTHLY	OWNER	REMOVE GRATE. ENSURE FLAP VALVE MOVES FREELY AND REMOVE ANY BLOCKAGES OR DEBRIS.
INSPECT SCREEN AND CLEAN.	SIX MONTHLY	OWNER	REMOVE GRATE AND SCREEN IF REQUIRED AND CLEAN IT.
INSPECT & REMOVE ANY BLOCKAGE OF ORIFICE.	SIX MONTHLY	OWNER	REMOVE GRATE & SCREEN TO INSPECT ORIFICE. SEE PLAN FOR LOCATION OF DCP.
INSPECT DCP SUMP & REMOVE ANY SEDIMENT/SLUDGE.	SIX MONTHLY	OWNER	REMOVE GRATE AND SCREEN. VENTILATE UNDERGROUND BUILD-UP AND CHECK ORIFICE AND FLAP VALVE CLEAR.
INSPECT GRATE FOR DAMAGE OR BLOCKAGE.	SIX MONTHLY	OWNER	CHECK BOTH SIDES OF GRATE FOR CORROSION, (ESPECIALLY CORNERS AND WELDS) DAMAGE OR BLOCKAGE.
INSPECT RETURN PIPE FROM STORAGE AND RETURN ANY BLOCKAGE.	SIX MONTHLY	OWNER	REMOVE GRATE AND SCREEN. VENTILATE UNDERGROUND STORAGE IF PRESENT. OPEN FLAP VALVE AND REMOVE ANY BLOCKAGES IN RETURN LINE. CHECK FOR SLUDGE/DEBRIS ON UPSTREAM SIDE OF RETURN LINE.
INSPECT OUTLET PIPE AND REMOVE ANY BLOCKAGE.	SIX MONTHLY	MAINTENANCE CONTRACTOR	REMOVE GRATE AND SCREEN. VENTILATE UNDERGROUND STORAGE IF PRESENT. CHECK ORIFICE AND REMOVE ANY BLOCKAGES IN OUTLET PIPE. FLUSH OUTLET PIPE TO CONFIRM IT DRAINS FREELY. CHECK FOR SLUDGE/DEBRIS ON UPSTREAM SIDE OF RETURN LINE.
CHECK FIXING OF STEP IRONS IS SECURE.	SIX MONTHLY	MAINTENANCE CONTRACTOR	REMOVE GRATE AND ENSURE FIXINGS SECURE PRIOR TO PLACING WEIGHT ON STEP IRON.
INSPECT OVERFLOW WEIR & REMOVE ANY BLOCKAGE.	SIX MONTHLY	MAINTENANCE CONTRACTOR	REMOVE GRATE AND OPEN COVER TO VENTILATE UNDERGROUND STORAGE IF PRESENT. ENSURE WEIR CLEAR OF BLOCKAGES.
EMPTY BASKET AT OVERFLOW WEIR (IF PRESENT).	SIX MONTHLY	MAINTENANCE CONTRACTOR	REMOVE GRATE AND VENTILATE UNDERGROUND STORAGE CHAMBER IF PRESENT. EMPTY BASKET. CHECK FIXINGS SECURE AND NOT CORRODED.
CHECK ATTACHMENT OF ORIFICE PLATE TO WALL OF PIT (GAPS LESS THAN 5MM).	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE AND SCREEN. ENSURE PLATE MOUNTED SECURELY. TIGHTEN FIXINGS IF REQUIRED. SEAL GAPS AS REQUIRED.
CHECK ATTACHMENT OF SCREEN TO WALL OF PIT.	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE AND SCREEN. ENSURE SCREEN FIXINGS SECURE. REPAIR AS REQUIRED.
CHECK SCREEN FOR CORROSION.	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE AND EXAMINE SCREEN FOR RUST OR CORROSION, ESPECIALLY AT CORNERS OR WELDS.
CHECK ATTACHMENT OF FLAP VALVE TO WALL OF PIT.	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE. ENSURE FIXINGS OF VALVE ARE SECURE.
CHECK FLAP VALVE SEALS AGAINST WALL OF PIT.	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE. FILL PIT WITH WATER AND CHECK THAT FLAP SEALS AGAINST SIDE OF PIT WITH MINIMAL LEAKAGE.
CHECK ANY HINGES OF FLAP VALVE MOVE FREELY.	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE. TEST VALVE HINGE BY MOVING FLAP TO FULL EXTENT.
INSPECT DCP WALLS (INTERNAL AND EXTERNAL IF APPROPRIATE) FOR CRACKS OR SPALLING.	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE TO INSPECT INTERNAL WALLS. REPAIR AS REQUIRED. CLEAR VEGETATION FROM EXTERNAL WALLS IF NECESSARY AND REPAIR AS REQUIRED.
CHECK STEP IRONS FOR CORROSION.	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE. EXAMINE STEP IRONS AND REPAIR ANY CORROSION OR DAMAGE.
CHECK ORIFICE DIAMETER CORRECT AND RETAINS SHARP EDGE.	FIVE YEARLY	MAINTENANCE CONTRACTOR	COMPARE DIAMETER TO DESIGN (SEE WORK-AS- EXECUTED) AND ENSURE EDGE IS NOT PITTED OR DAMAGED.
STORAGE			
INSPECT & REMOVE ANY BLOCKAGE OF ORIFICE.	SIX MONTHLY	OWNER	REMOVE GRATE AND SCREEN. REMOVE SEDIMENT/SLUDGE BUILD-UP.
CHECK ORIFICE DIAMETER CORRECT AND RETAINS SHARP EDGE.	SIX MONTHLY	OWNER	REMOVE BLOCKAGES FROM GRATE AND CHECK IF PIT BLOCKED.
INSPECT SCREEN AND CLEAN.	SIX MONTHLY	OWNER	REMOVE DEBRIS AND FLOATABLE MATERIAL LIKELY TO BE CARRIED TO GRATES.
CHECK ATTACHMENT OF ORIFICE PLATE TO WALL OF PIT (GAPS LESS THAN 5MM).	ANNUALLY	MAINTENANCE CONTRACTOR	REMOVE GRATE TO INSPECT INTERNAL WALLS. REPAIR AS REQUIRED. CLEAR VEGETATION FROM EXTERNAL WALLS IF NECESSARY AND REPAIR AS REQUIRED.
CHECK ATTACHMENT OF SCREEN TO WALL OF PIT.	FIVE YEARLY	MAINTENANCE CONTRACTOR	COMPARE ACTUAL STORAGE AVAILABLE WITH WORK-AS EXECUTED PLANS. IF VOLUME LOSS IS GREATER THAN 5%, ARRANGE FOR RECONSTRUCTION TO REPLACE THE VOLUME LOST. COUNCIL TO BE NOTIFIED OF THE PROPOSAL.
CHECK ATTACHMENT OF SCREEN TO WALL OF PIT.	FIVE YEARLY	MAINTENANCE CONTRACTOR	CHECK ALONG DRAINAGE LINES AND AT PITS FOR SUBSIDENCE LIKELY TO INDICATE LEAKAGES.

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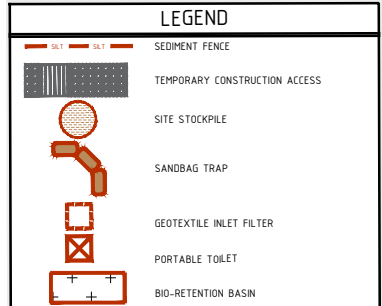
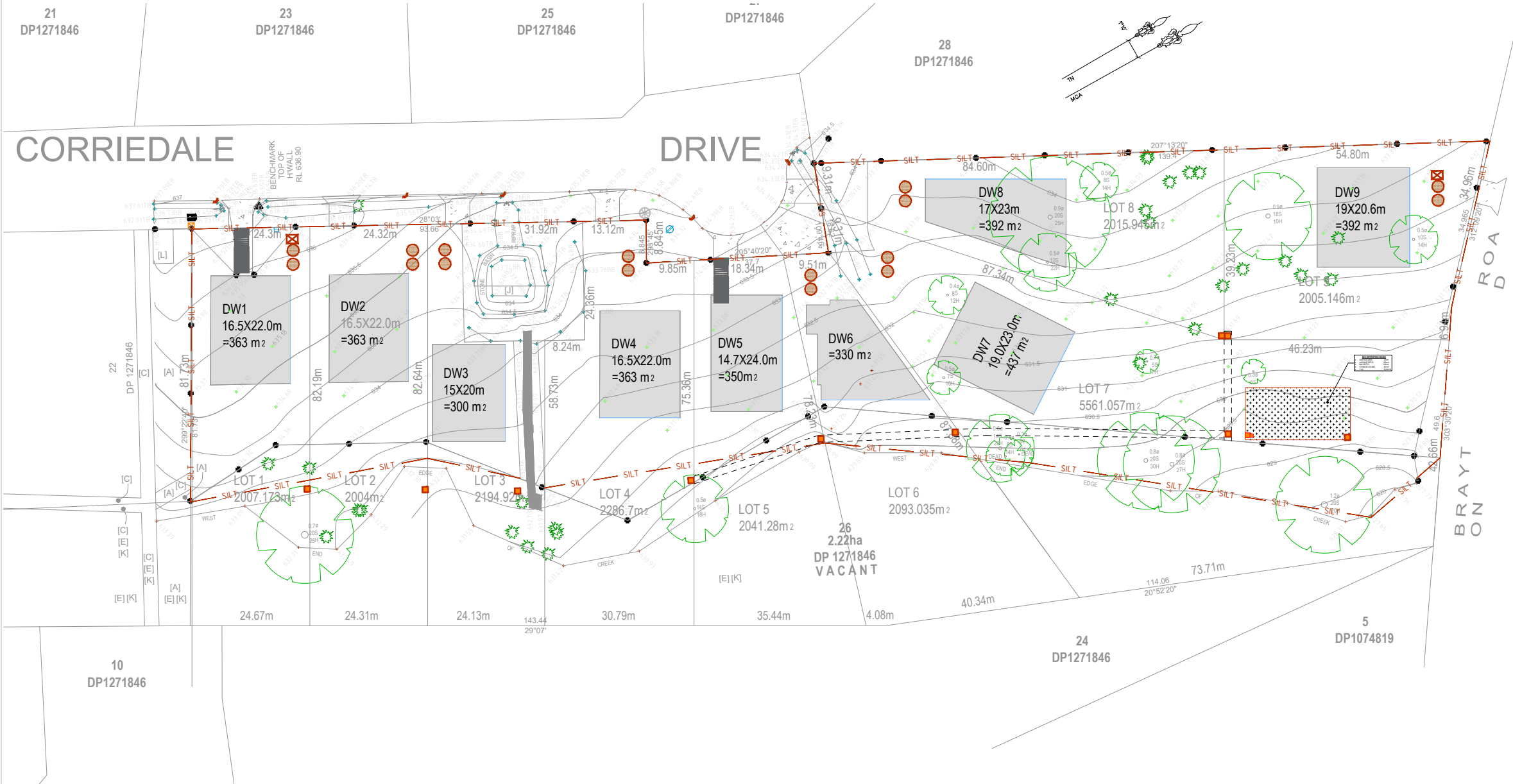
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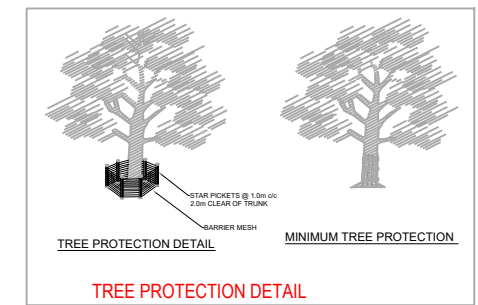
ENGINEERING & CONSULTING P/L

CUSTOMER	MR OSCAR MERHEBI		
PROJECT	84 CORRIEDALE DR, MARULAN NSW 2579		
TITLE	SPECIFICATION NOTES SHEET		
PROJECT PORTION	PROPOSED 9 LOTS SUBDIVISION		
CHECKED PROPOSAL	APPROVED PROPOSAL	CLIENT APPROVED	ENGINEER APPROVED
DRAWN BY: K.A	SCALE: 200	A3 JOB No: 21060	DRG No: D-001 REV: A

DEVELOPMENT APPLICATION



- ### NOTES
- 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)
 - 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 ADOPTED TO MEET THE VARYING SITUATIONS AS WORK ON SITE PROGRESSES.
 - MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
 - WHEN STORMWATER PITS ARE CONSTRUCTED PREVENT SITE RUNOFF ENTERING THE PITS UNLESS SILT FENCES ARE ERECTED AROUND PITS.
 - MINIMISE THE AREA OF SITE BEING DISTURBED AT ANY ONE TIME.
 - PROTECT ALL STOCKPILES OF MATERIALS FROM SCOUR AND EROSION. DO NOT STOCKPILE LOOSE MATERIAL IN ROADWAYS, NEAR DRAINAGE PITS OR IN WATERCOURSES.
 - 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.
 - CONTROL WATER FROM UPSTREAM OF THE SITE SUCH THAT IT DOES NOT ENTER THE DISTURBED SITE.
 - ALL CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE SITE VIA THE TEMPORARY CONSTRUCTION ENTRY/EXIT.
 - ALL VEHICLES LEAVING THE SITE SHALL BE CLEANED AND INSPECTED BEFORE LEAVING.
 - MAINTAIN ALL STORMWATER PIPES AND PITS CLEAR OF DEBRIS AND SEDIMENT. INSPECT STORMWATER SYSTEM AND CLEAN OUT AFTER EACH STORM EVENT.
 - CLEAN OUT ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH STORM EVENT.
- #### SEQUENCE OF WORKS
- PRIOR TO COMMENCEMENT OF EXCAVATION THE FOLLOWING SOIL MANAGEMENT DEVICES MUST BE INSTALLED.
 - CONSTRUCT SILT FENCES BELOW THE SITE AND ACROSS ALL POTENTIAL RUNOFF SITES.
 - CONSTRUCT TEMPORARY CONSTRUCTION ENTRY/EXIT AND DIVERT RUNOFF TO SUITABLE CONTROL SYSTEMS.
 - CONSTRUCT MEASURES TO DIVERT UPSTREAM FLOWS INTO EXISTING STORMWATER SYSTEM.
 - CONSTRUCT SEDIMENTATION TRAP/BASIN INCLUDING OUTLET CONTROL AND OVERFLOW.
 - CONSTRUCT TURF LINED SWALES.
 - PROVIDE SANDBAGS SEDIMENT TRAPS UPSTREAM OF EXISTING PITS.
 - CONSTRUCT GEOTEXTILE FILTER PIT AROUND ALL PROPOSED PITS AS THEY ARE CONSTRUCTED.
 - ON COMPLETION OF PAVEMENT PROVIDE SAND BAG KERB INLET SEDIMENT TRAPS AROUND PITS.
 - PROVIDE AND MAINTAIN A STRIP OF TURF ON BOTH SIDES OF ALL ROADS AFTER THE CONSTRUCTION OF KERBS.
- #### PUMP OUT NOTES
- ANY ACCUMULATED WATER CONTAMINATED WITH SEDIMENT, FROM A SEDIMENT BASIN OR EXCAVATION PIT, IS TO BE FLOCCULATED OR FILTERED IN ORDER TO LOWER THE SUSPENDED SOLID LOAD TO LESS THAN 50MG PER LITRE. GYPSUM GAS OR OTHER APPROVED FLOCCULANT SHOULD BE APPLIED WITHIN 24 HOURS OF THE END OF THE STORM EVENT. THE GYPSUM MUST BE SPREAD EVENLY OVER THE ENTIRE WATER SURFACE. PUMPING IS NOT TO OCCUR FOR AT LEAST 36 HOURS AND PREFERABLY 48 HOURS AFTER APPLICATION. CLEAN WATER IS TO BE DISCHARGED TO THE WATER TABLE VIA A HALF BAIL SEDIMENT FILTER IN A WAY THAT DOES NOT PICK UP SEDIMENT THAT HAS DROPPED TO THE BOTTOM.
- NOTE: GYPSUM IS A HYDRATED FORM OF CALCIUM SULPHATE AND IS AVAILABLE AT MANY SWIMMING POOL SHOPS AND HARDWARE STORES.
- #### DUST CONTROL NOTES
- NOTE: DURING EXCAVATION, DEMOLITION AND CONSTRUCTION, ADEQUATE MEASURES SHALL BE TAKEN TO PREVENT DUST FROM AFFECTING THE AMENITY OF THE NEIGHBORHOOD.
- THE FOLLOWING MEASURES MUST BE ADOPTED:
- PHYSICAL BARRIERS SHALL BE ERECTED AT RIGHT ANGLES TO PREVENT WIND DIRECTION OR SHALL BE PLACED AROUND OR OVER DUST SOURCES TO PREVENT WIND OR ACTIVITY FROM GENERATING DUST.
 - EARTHWORKS AND SCHEDULING ACTIVITIES SHALL BE MANAGED TO COINCIDE WITH THE NEXT STAGE OF DEVELOPMENT TO MINIMISE THE AMOUNT OF TIME THE SITE IS LEFT TO CUT OR EXPOSED.
 - ALL MATERIALS SHALL BE STORED OR STOCKPILED AT THE BEST LOCATIONS.
 - THE GROUND SURFACE SHOULD BE DAMPENED SLIGHTLY TO PREVENT DUST FROM BECOMING AIRBORNE BUT SHOULD NOT BE WET TO THE EXTENT THAT RUN-OFF OCCURS.
 - ALL VEHICLES CARRYING SOIL OR RUBBLE TO OR FROM THE SITE SHALL AT ALL TIMES BE COVERED TO PREVENT THE ESCAPE OF DUST.
 - ALL EQUIPMENT WHEELS SHALL BE WASHED BEFORE EXISTING THE SITE USING MANUAL OR AUTOMATED SPRAYERS AND DRIVE-THROUGH WASHING BAYS.
 - GATES SHALL BE CLOSED BETWEEN VEHICLE MOVEMENTS SHALL BE FITTED WITH SHADE CLOTH.
 - CLEANING OF FOOTPATHS AND ROADWAYS SHALL CARRIED OUT DAILY.
 - ALL BUILDERS REFUSE, SPOIL AND/OR MATERIAL UNSUITABLE FOR USE IN LANDSCAPE AREAS SHALL BE REMOVED FROM SITE ON COMPLETION OF THE BUILDING WORKS.



REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE
A	ISSUE FOR DA	KA	21.05.2024

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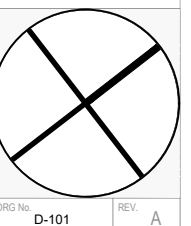
ARCHITECTURAL DESIGNERS
CIVIL & STRUCTURAL ENGINEERS
NATHERS & BASIX ASSESSORS
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ACCREDITED CERTIFIERS
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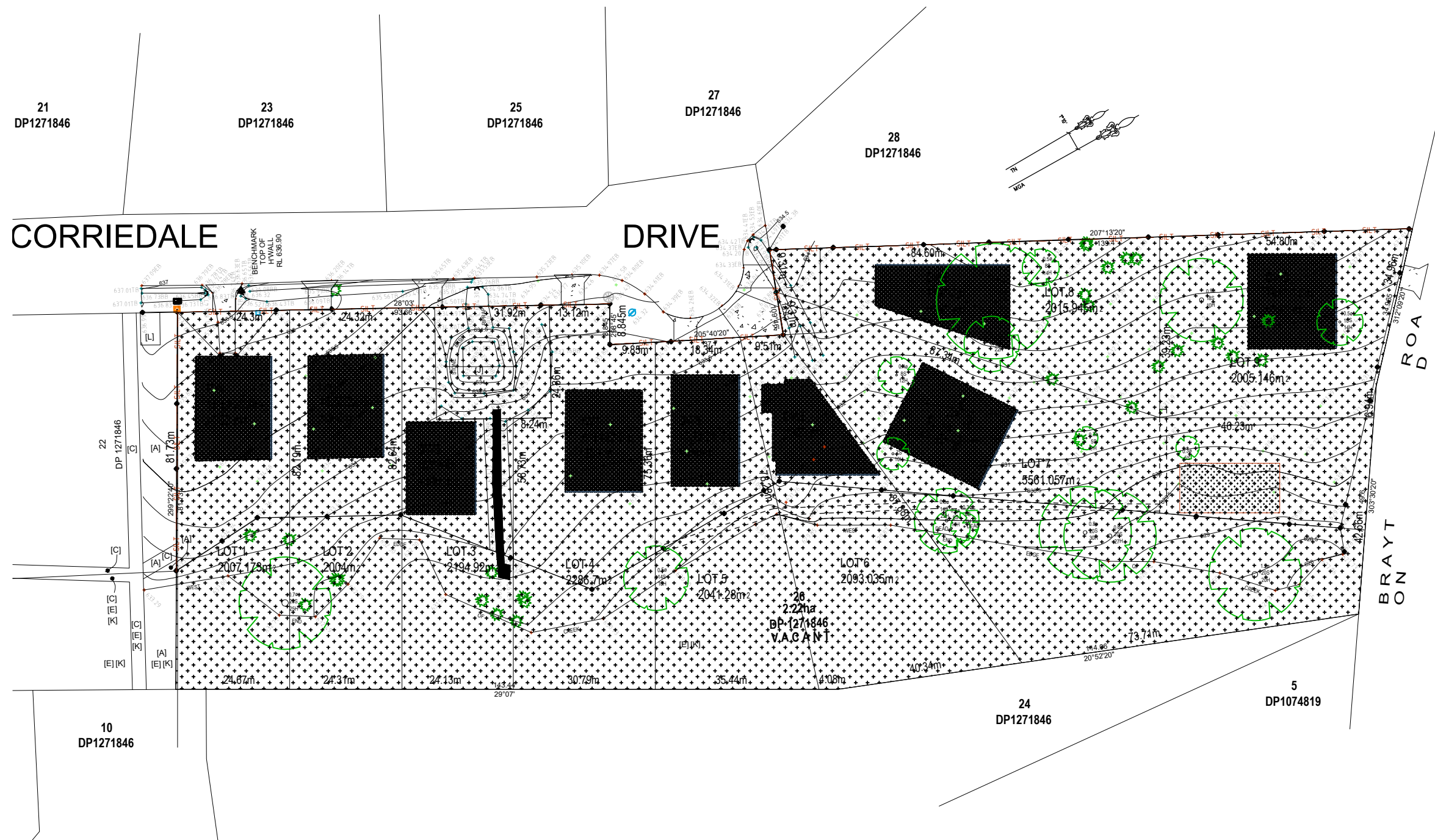
CUSTOMER	MR OSCAR MERHEBI
PROJECT	84 CORRIEDALE DR, MARULAN NSW 2579

TITLE: EROSION AND SEDIMENT PLAN			
PROJECT PORTION: PROPOSED 9 LOTS SUBDIVISION			
CHECKED PROPOSAL	APPROVED PROPOSAL	CLIENT APPROVED	ENGINEER APPROVED
DRAWN BY: KA	SCALE: 200 A3	JOB No: 21060	DRG No: D-101 REV: A



DEVELOPMENT APPLICATION

DEVELOPMENT CATCHMENT AREA:	
PROPOSED SITE AREA =2.2 ha	
PERVIOUS AREA:	18710 m ² 
IMPERVIOUS AREA:	3290 m ² 



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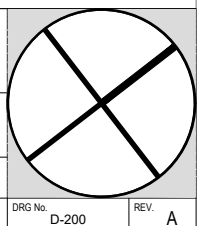
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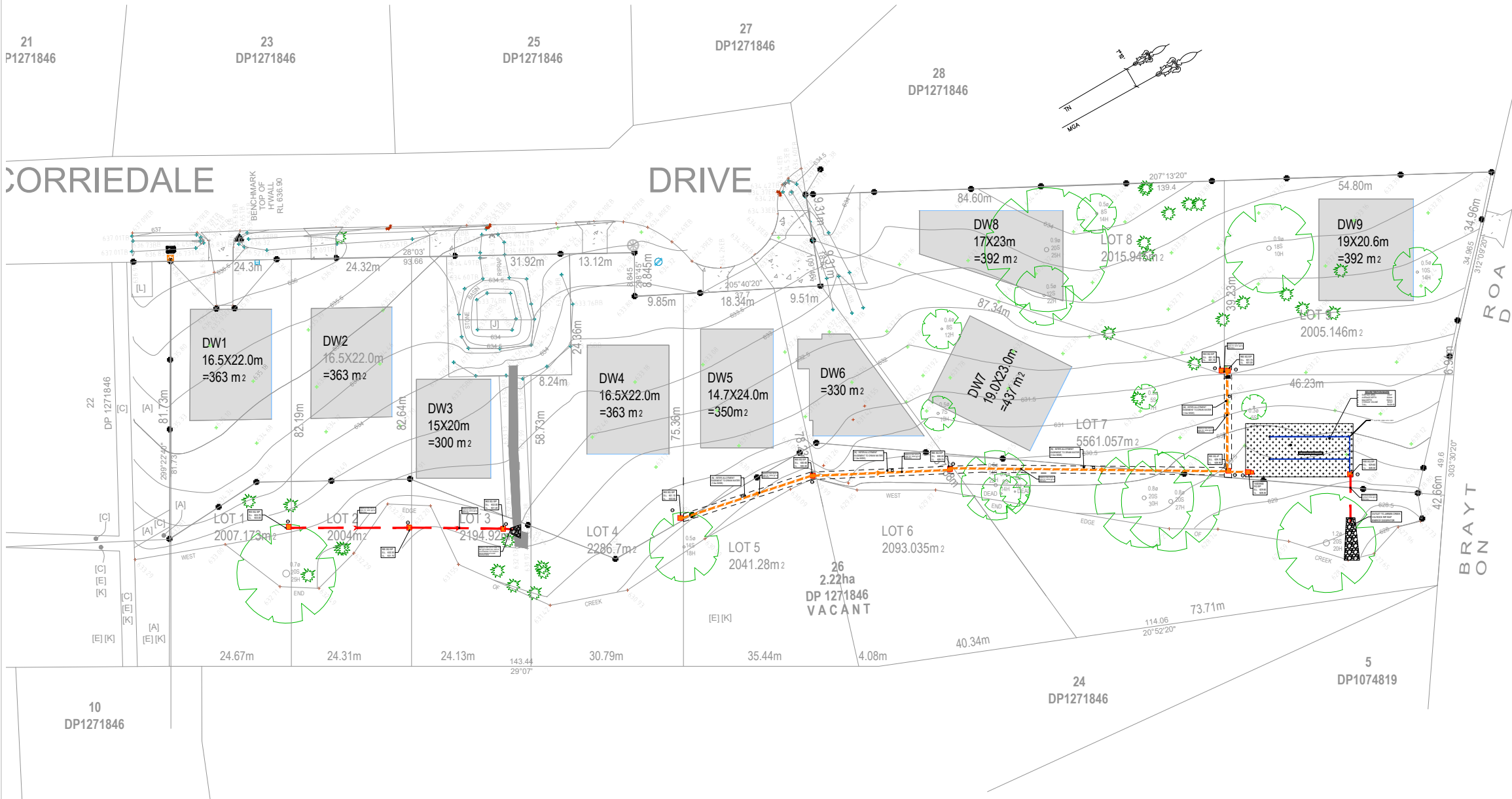
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CUSTOMER	MR OSCAR MERHEBI
PROJECT	84 CORRIEDALE DR, MARULAN NSW 2579

TITLE : STORMWATER MANAGEMENT PLAN - CATCHMENT PLAN			
PROJECT PORTION PROPOSED 9 LOTS SUBDIVISION			
CHECKED PROPOSAL	APPROVED PROPOSAL	CLIENT APPROVED	ENGINEER APPROVED
DRAWN BY: KA	SCALE: 200	A3 JOB No: 21060	DRG No: D-200 REV: A



DEVELOPMENT APPLICATION



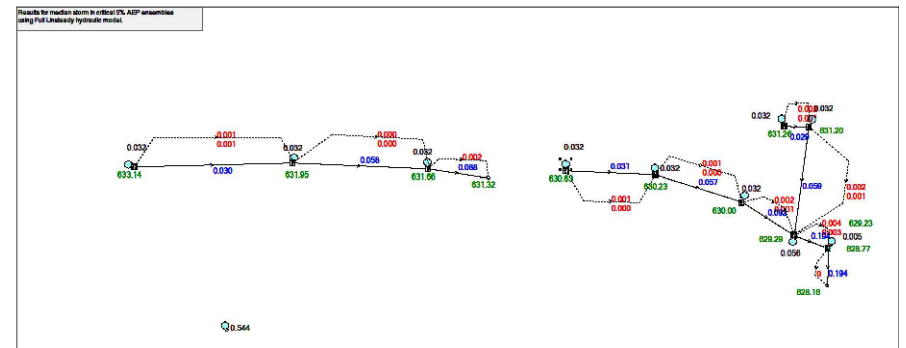
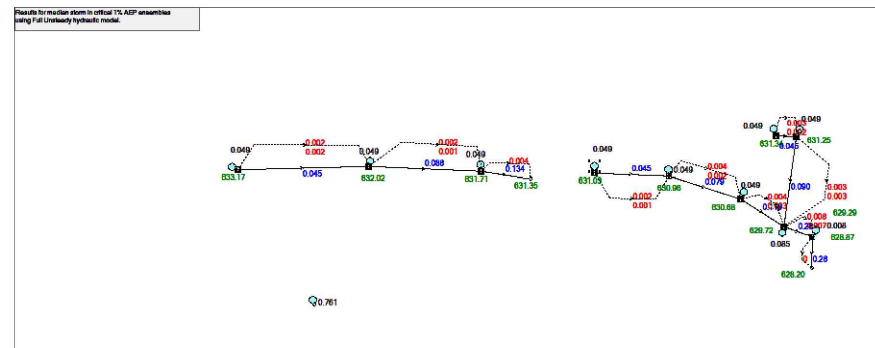
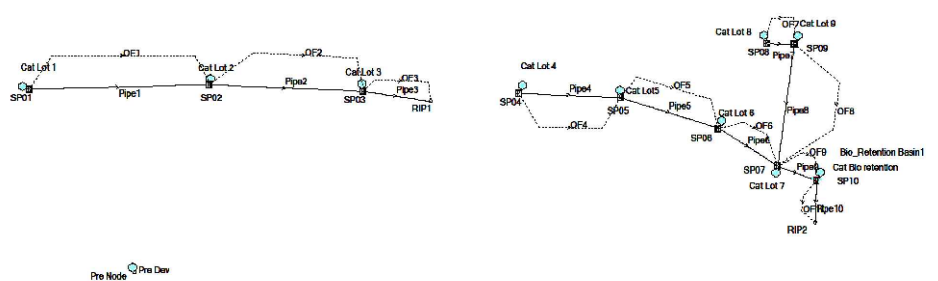
PLAN NOTES

- ROOF DRAINAGE NOTE:** AS 3500 ROOF DRAINAGE REQUIRES EAVES GUTTERS TO BE SIZED FOR 100 YEAR 5 MIN. STORM = 319mm/hr. FOR EAVES GUTTERS, AS 3500.3.2021 THEN HAS THE FOLLOWING REQUIREMENTS:
 - OVERFLOW METHOD TO FIGURE G1 OF AS 3500.3.2021 IT IS THE RESPONSIBILITY OF THE PLUMBER AND / OR BUILDER TO COMPLY WITH THIS. THIS DRAWING SHOWS PRELIMINARY LOCATIONS / NUMBERS OF DOWNPIPES ONLY WHICH ARE TO BE VERIFIED BY BUILDER / PLUMBER
- TREE PRESERVATION:** IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PRIOR APPROVAL REQUIRED FROM COUNCIL WITH RESPECT TO POTENTIAL IMPACT ON TREES FOR ANY WORKS SHOWN ON THIS DRAWING PRIOR TO THE COMMENCEMENT OF THOSE WORKS
- THIS DRAWING IS NOT TO BE USED FOR SET-OUT PURPOSES - REFER TO ARCHITECTURAL DRAWINGS
- LOCATION OF SURFACE STORMWATER GRATED INLET PITS MAY BE VARIED OR NEW PITS INSTALLED AT THE CONSTRUCTION STAGE PROVIDED DESIGN INTENT OF THIS DRAWING IS MAINTAINED

LICENSE BUILDER/PLUMBER TO CONFIRM ADEQUACY OF EXISTING STORM WATER SYSTEM OF EXISTING PIT AND COMPLY WITH AS 3500.3:2021 ,LOCAL ENGINEERING COUNCIL POLICIES .

STORMWATER MANAGEMENT PLAN

1:200
 - ALL DRAINAGE LINES SHALL BE uPVC (CLASS SH) STORMWATER DRAINAGE PIPE, U.N.O.
 - ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, U.N.O.
LEGEND
 PIPE = Ø100 U.N.O.



DRAINS MODEL LAYOUT
NTS

100YEAR ARI (1% AEP) POST DEVELOPMENT -DRAINS MODEL

20YEAR ARI (5% AEP) POST DEVELOPMENT -DRAINS MODEL

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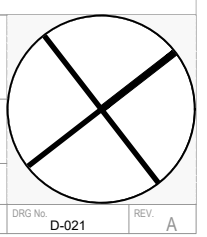
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 KHALED@AKTENGINEERING.COM.AU

CUSTOMER: MR OSCAR MERHEBI
 PROJECT: 84 CORRIEDALE DR, MARULAN NSW 2579

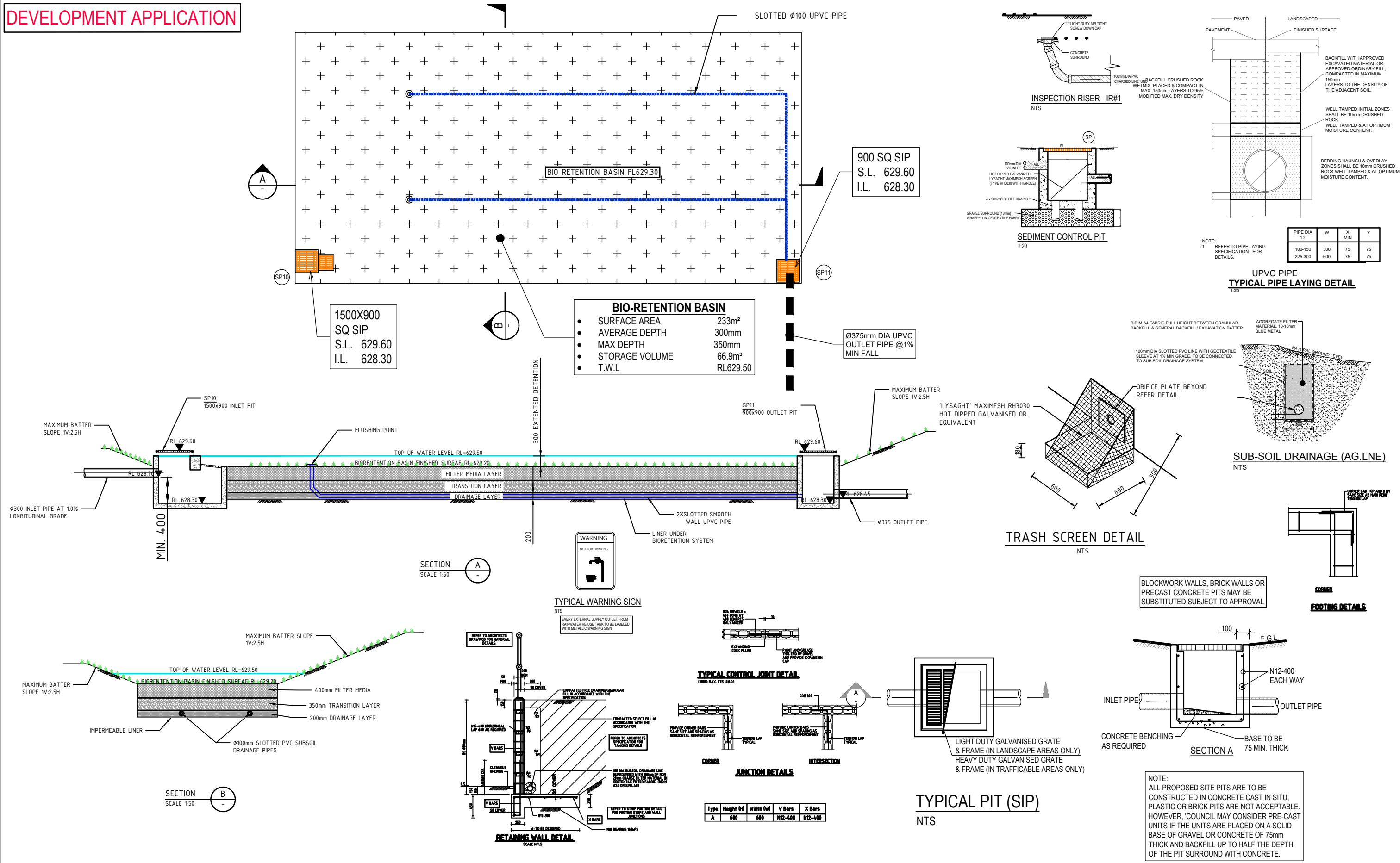
TITLE: GROUND FLOOR STORMWATER PLAN
 PROJECT PORTION: PROPOSED 9 LOTS SUBDIVISION

CHECKED PROPOSAL	APPROVED PROPOSAL	CLIENT APPROVED	ENGINEER APPROVED
------------------	-------------------	-----------------	-------------------

DRAWN BY: K.A SCALE: 200 A3 JOB No: 21060 DRG No: D-021 REV: A



DEVELOPMENT APPLICATION



1500X900
SQ SIP
S.L. 629.60
I.L. 628.30

BIO-RETENTION BASIN

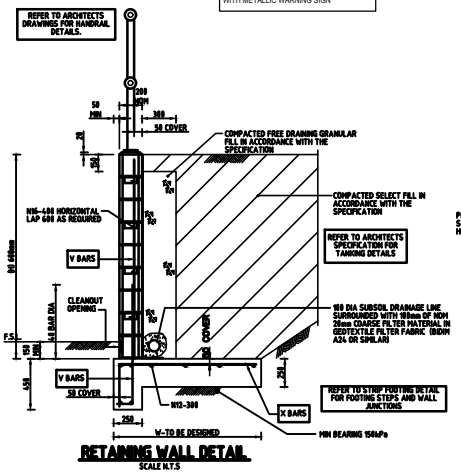
- SURFACE AREA 233m²
- AVERAGE DEPTH 300mm
- MAX DEPTH 350mm
- STORAGE VOLUME 66.9m³
- T.W.L RL629.50

900 SQ SIP
S.L. 629.60
I.L. 628.30

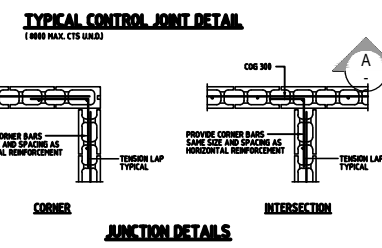


SECTION A
SCALE 1:50

SECTION B
SCALE 1:50



RETAINING WALL DETAIL
SCALE 1:15



TYPICAL CONTROL JOINT DETAIL
SCALE 1:15

Type	Height (H)	Width (W)	V Bars	X Bars
A	600	600	N12-400	N12-400

TYPICAL PIT (SIP)
NTS

NOTE:
ALL PROPOSED SITE PITS ARE TO BE CONSTRUCTED IN CONCRETE CAST IN SITU. PLASTIC OR BRICK PITS ARE NOT ACCEPTABLE. HOWEVER, 'COUNCIL MAY CONSIDER PRE-CAST UNITS IF THE UNITS ARE PLACED ON A SOLID BASE OF GRAVEL OR CONCRETE OF 75mm THICK AND BACKFILL UP TO HALF THE DEPTH OF THE PIT SURROUND WITH CONCRETE.

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CUSTOMER
MR OSCAR MERHEBI

PROJECT
84 CORRIEDALE DR, MARULAN NSW 2579

TITLE: TYPICAL STORMWATER DETAILS			
PROJECT PORTION PROPOSED 9 LOTS SUBDIVISION			
CHECKED PROPOSAL	APPROVED PROPOSAL	CLIENT APPROVED	ENGINEER APPROVED
DRAWN BY: K.A	SCALE: 200	A3 JOB No: 21060	ORG No: D-601 REV: A

