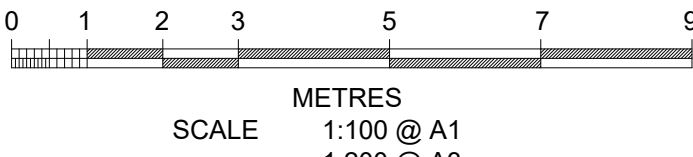


PROPOSED STORMWATER PLAN



LEGEND PROPOSED

- STORMWATER PIPE
- CHARGED DRAINAGE LINE
- GRATED PIT
- JUNCTION PIT
- SEDIMENT FENCE
- PAVEMENT LEVEL
- CONTOURS
- KERB ONLY
- SWALE TO DETAILS
- CATCHMENT TO OSD

LEGEND EXISTING

- STORMWATER PIPE
- STORMWATER PIT
- WATER LINE
- SEWER LINE
- TELSTRAL LINE
- EXISTING SPOT LEVEL
- EXISTING CONTOURS
- GAS LINE
- ELECTRICAL LINE
- KERB & GUTTER

STORMWATER NOTES:

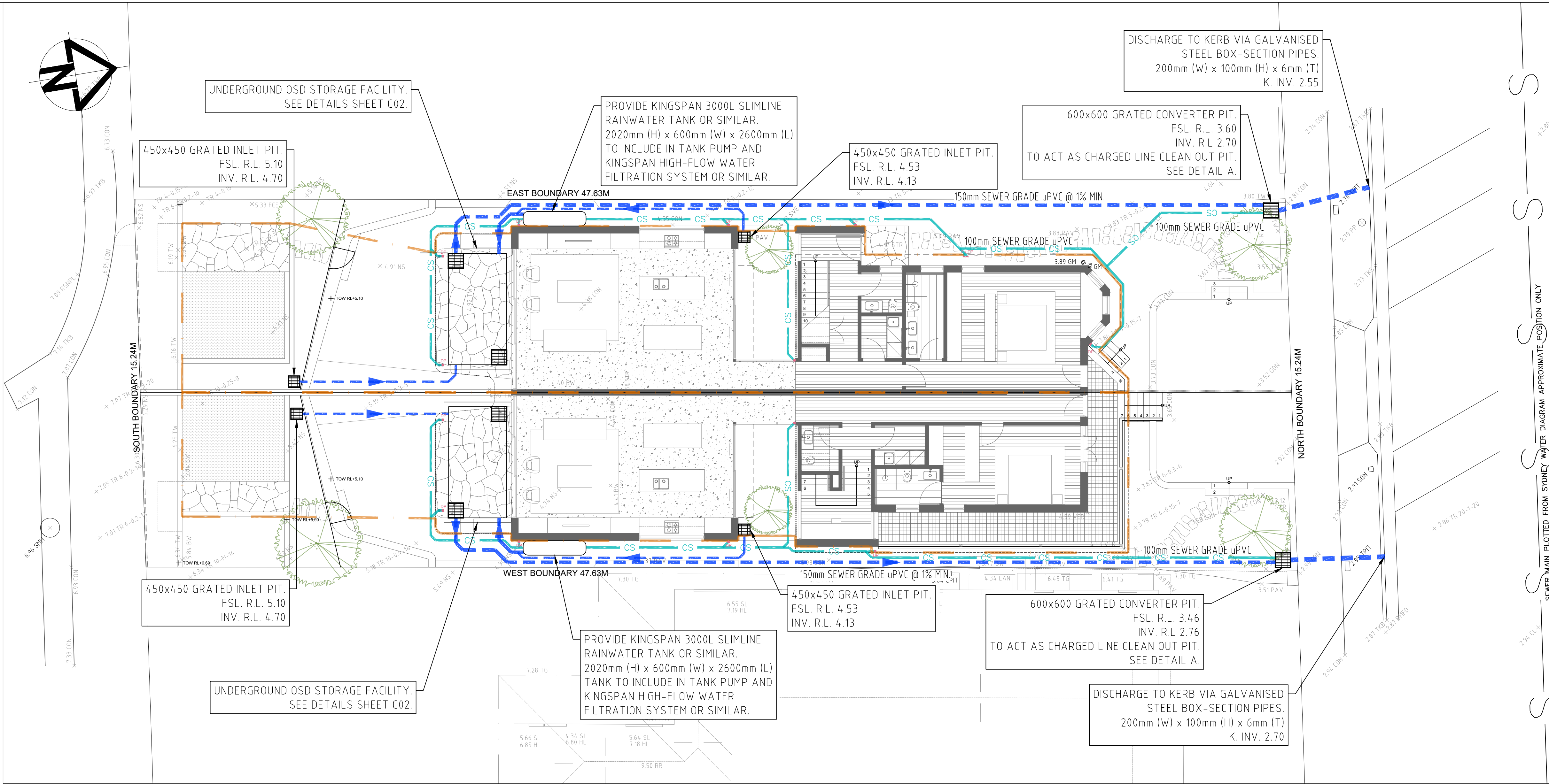
- ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S WORKS AND DRAINAGE SPECIFICATIONS AND ON SITE DETENTION POLICY.
- THE CONTRACTOR IS TO LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST IF NECESSARY.
- THE CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJOINING LANDS WITHOUT THE PERMISSION OF THE SUPERINTENDENT.
- ALL NEW WORKS TO MAKE SMOOTH CONNECTION TO EXISTING CONDITIONS.
- ALL PIPES ARE TO BE 100mm U.P.V.C. ON 1% MINIMUM GRADE U.N.O. AND TO HAVE MIN 200mm COVER.
- MINIMUM SLOPE AS PER AS3500.3.2-1998 :
 - DN 100 1.0%,
 - DN 150 1.0%,
 - DN 225 0.5%
 - DN 375 0.5%
- THE CONTRACTOR IS TO MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
- ALL IMPORTED FILL TO BE USED TO SUPPORT GROUND SLABS TO BE COMPACTED TO A MINIMUM LEVEL OF COMPACTING OF 98% OF MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +- 2% OF OPTIMUM (AS1289.5.1.1)
- ALL DOWNPIPES ARE SHOWN DIAGRAMATICALLY POSITION OF DOWNPIPES ARE TO BE CONFIRMED ON SITE USING THE WORKING DRAWINGS.
- THE CONTRACTOR IS TO LOCATE AND LEVEL ALL EXISTING DRAINAGE PITS AND PIPES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND THE CONSTRUCTION IS TO COMMENCE FROM THE DOWNSTREAM PIT AND STRUCTURES.

ALL DOWNPIPES TO BE CHARGED TO OSD/RAINWATER TANK VIA SEWER GRADE uPVC PIPES.

ALL DRAINAGE LINES ARE TO BE A MINIMUM OF 100mm SEWER GRADE uPVC @ 1% UNLESS NOTED OTHERWISE. ALL PIPES SIZED FOR 1% AEP STORM EVENT.

SERVICES SHOWN ARE INDICATIVE ONLY. CONTRACTOR SHALL CONFIRM ALL SERVICE LOCATIONS AND DEPTH PRIOR TO EXCAVATION.

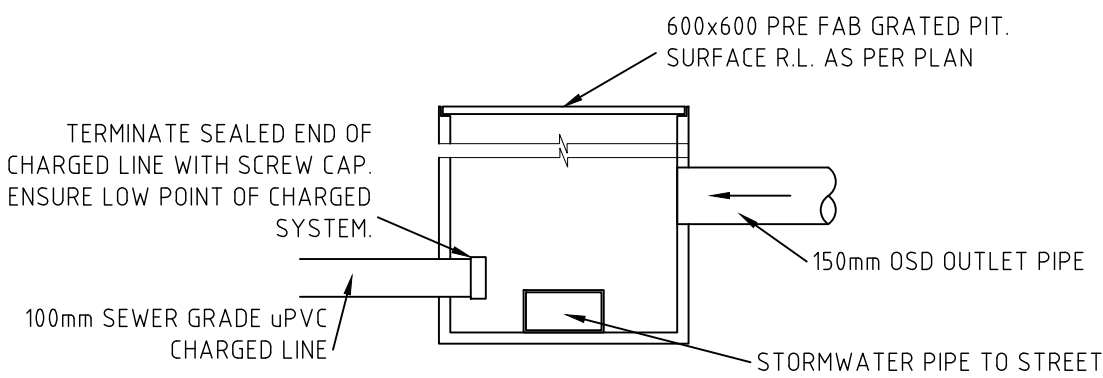
ALL DRAINAGE LINES, BENDS AND PITS ARE TO BE SEALED.



SITE DISCHARGE (L/s)						
AEP	PRE-DEVELOPMENT	POST-DEVELOPMENT				
		EAST		WEST		TOTAL
		OSD	BYPASS	OSD	BYPASS	
20%	23.13	7.28	3.94	6.67	3.39	21.28
5%	34.20	8.70	6.45	7.97	4.96	28.09
1%	51.09	10.81	8.62	9.90	7.46	36.80

OSD DISCHARGE CONTROL (EAST)					
STORAGE VOLUME @ RL		4.38	=	13.03 m3	
ORIFICE DIAMETER			=	69 mm	
CENTRE OF ORIFICE LEVEL			=	3.20 m	
WEIR LEVEL			=	4.68 m	
WEIR LENGTH			=	0.10 m	
ARI (YEARS)	DISCHARGE IN	MAX WATER LEVEL	DISCHARGE ORIFICE	DISCHARGE WEIR	DISCHARGE TOTAL
5	8.59	3.75	7.28	0.00	7.28
20	12.05	3.98	8.70	0.00	8.70
100	18.32	4.38	10.81	0.00	10.81

OSD DISCHARGE CONTROL (WEST)					
STORAGE VOLUME @ RL		4.38	=	13.03 m3	
ORIFICE DIAMETER			=	66 mm	
CENTRE OF ORIFICE LEVEL			=	3.20 m	
WEIR LEVEL			=	4.68 m	
WEIR LENGTH			=	0.10 m	
ARI (YEARS)	DISCHARGE IN	MAX WATER LEVEL	DISCHARGE ORIFICE	DISCHARGE WEIR	DISCHARGE TOTAL
5	8.07	3.75	6.67	0.00	6.67
20	11.32	3.98	7.97	0.00	7.97
100	17.21	4.38	9.90	0.00	9.90



CHARGED LINE END PIT
SCALE 1:20

DEVELOPMENT APPLICATION

SITE ADDRESS
41 PACIFIC PARADE, MANLY
LOT 1 IN DP932637

CLIENT
WORNER RESIDENCE

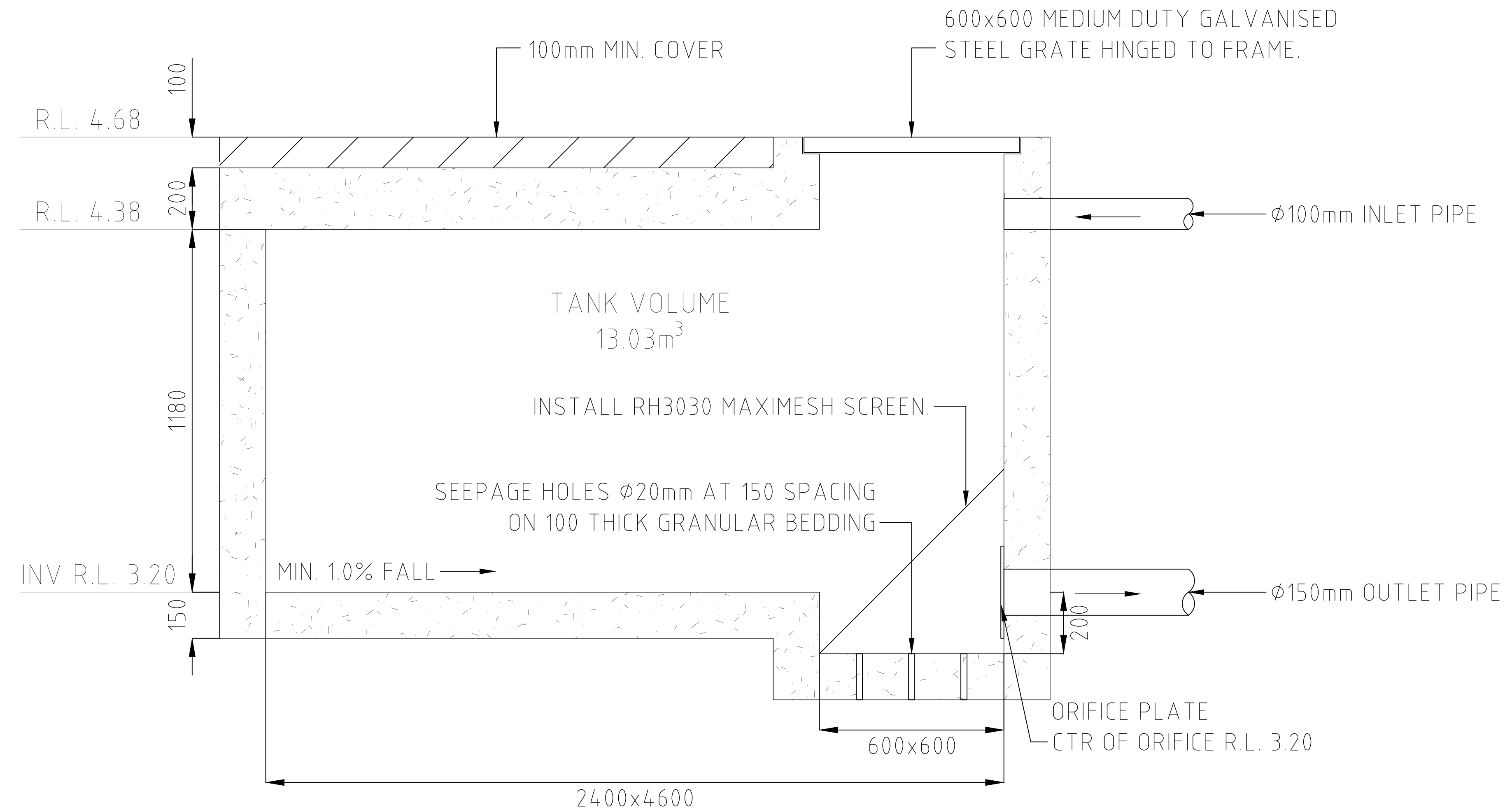
STORMWATER DESIGN PLANS

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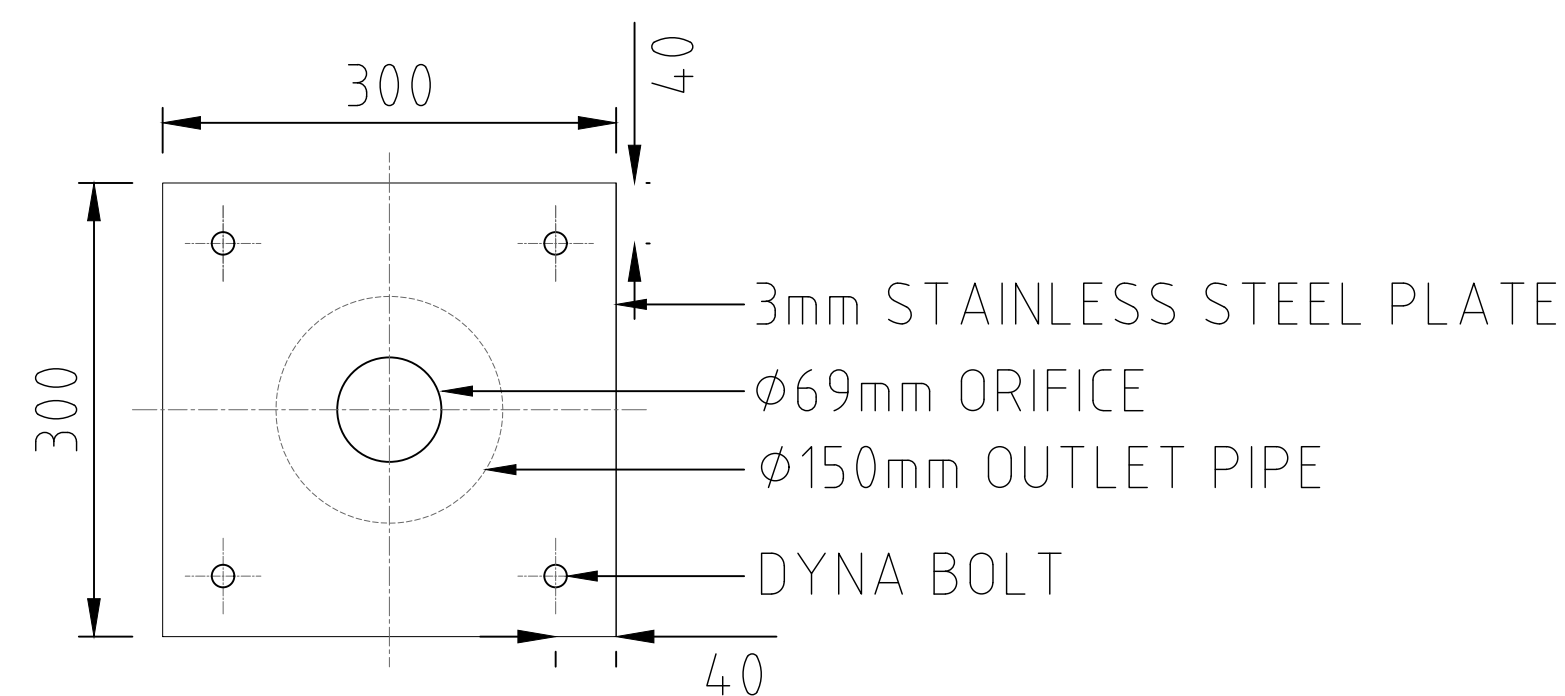
JOB NUMBER: SC21011	SCALE 1:100	SHEET No C01	REV A
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REV	DATE	AMENDMENT / REVISION DESCRIPTION	TITLE	NAME
A	30/03/2021	ISSUED FOR DEVELOPMENT APPLICATION	DRAWN	JT
			DESIGNED	JT
			DRG CHECK	AC
			DESIGN CHECK	AC
			APPROVED	AC

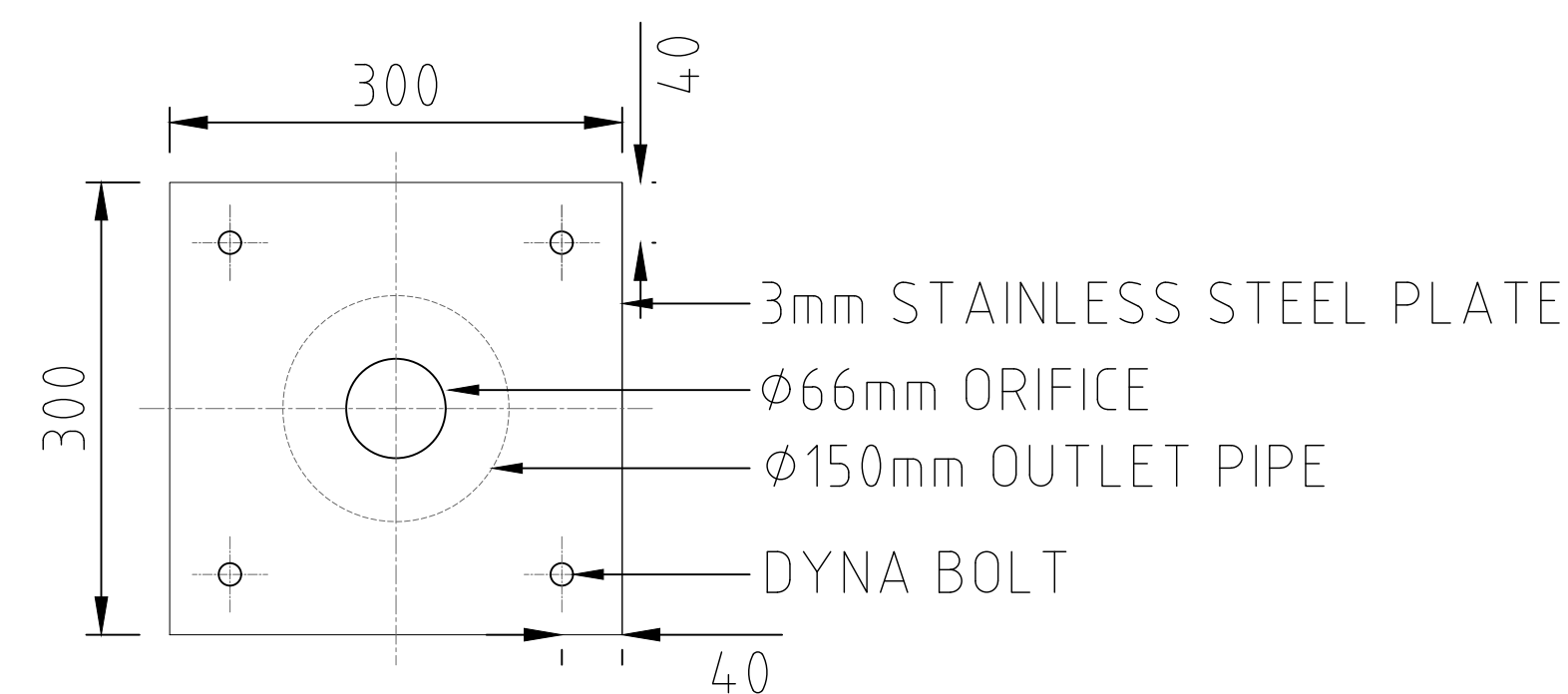
HYVE DESIGNS



OSD TANK SECTION
SCALE 1:10



ORIFICE PLATE DETAIL
(EAST)
SCALE 1:10



ORIFICE PLATE DETAIL
(WEST)
SCALE 1:10

DEVELOPMENT APPLICATION

REV	DATE	AMENDMENT / REVISION DESCRIPTION	TITLE	NAME
A	30/03/2021	ISSUED FOR DEVELOPMENT APPLICATION	DRAWN	JT
			DESIGNED	JT
			DRG CHECK	AC
			DESIGN CHECK	AC
			APPROVED	AC

HYVE DESIGNS



SITE ADDRESS 41 PACIFIC PARADE, MANLY LOT 1 IN DP932637			
CLIENT WORNER RESIDENCE			
STORMWATER DESIGN PLANS			
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JOB NUMBER: SC21011	SCALE 1:100	SHEET No C02	REV A