

# NOTES:

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## NOTE:

STORMWATER RUNOFF FROM LOT 1 TO BE DIRECTED TO EASEMENT VIA LOT 1 BOUNDARY PIT IN ACCORDANCE WITH PART B5 OF PITTWATER 21 DCP AND AS3500.3.

## NOTE:

STORMWATER RUNOFF FROM LOT 2 HARD STAND AREAS TO BE DIRECTED TO EASEMENT VIA LOT 2 BOUNDARY PIT IN ACCORDANCE WITH PART B5 OF PITTWATER 21 DCP AND AS3500.3.

## NOTE:

STORMWATER DRAWINGS DO NOT INCLUDE SUBSOIL AGRICULTURAL DRAINAGE DETAILS FOR D.A. SUBMISSION. NORTHERN BEACHES CONSULTING ENGINEERS PTY LTD MUST BE COMMISSIONED TO INCLUDE THESE DETAILS ONLY WHEN CONSTRUCTION CERTIFICATE AND/OR CONSTRUCTION DOCUMENTATION IS COMPLETE AND PROVIDED.

## STORMWATER NOTES:

- ALL PIPES TO BE 100mm  $\phi$  UNLESS NOTED OTHERWISE.
- ALL PIPES TO BE uPVC TO AS 1254-2002 UNLESS NOTED OTHERWISE.
- ALL PIPES TO BE LAYED AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
- ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS.  
( NO COMPACTION REQUIRED BELOW LANDSCAPING )  
COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
- ALL DOWN PIPES TO BE 100mm  $\phi$  UNLESS NOTED OTHERWISE.
- DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- PROVIDE CLEANING EYES AT ALL DOWNPIPES.
- ALL PITS TO BE CAST INSITU OR, IF PRECAST, APPROVED BY ENGINEER. CAST INSITU PITS TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 12 TOP TIE UNLESS NOTED OTHERWISE. CAST INSITU PITS GREATER THAN 400 DEEP TO BE MINIMUM 400x600 AND TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 12 AT 300 EACH WAY UNLESS NOTED OTHERWISE.
- ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
- THE BOUNDARY OR SILT ARRESTOR PIT SHOULD ALWAYS INCORPORATE A SUMP AND MAXI-MESH SCREEN AS PER LOCAL COUNCIL REQUIREMENTS. HOWEVER, UNLESS SPECIFICALLY REQUIRED BY COUNCILS POLICY OR IF THE SITE CONSISTS OF A CLAY OR ROCK SUBGRADE, ALL OTHER DRAINAGE PITS WILL NOT REQUIRE A SUMP.
- ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO APPROVED SEDIMENT AND EROSION CONTROL PLAN, EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION.
- ALL LEVELS SHOWN ARE TO AHD.
- ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
- ALL WORKS TO BE IN ACCORDANCE WITH AS 3500-2003 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.
- UNLESS NOTED OTHERWISE, SUB-SOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES.
- IF NOT INDICATED ON PLANS, PROVIDE LEAF CATCHERS TO ALL DOWNPIPES OR GUTTER GUARD TO ALL EAVES GUTTERS.

## SUBDIVISION DRAINAGE PLAN

SCALE = 1 : 200

## LEGEND

- NEW 225mm  $\phi$  uPVC STORMWATER EASEMENT PIPE
- NEW STORMWATER PIPE
- STORMWATER PIPE FALL DIRECTION IN CHARGED SYSTEMS
- STORMWATER PIPE FLOW DIRECTION
- PIT
- STORMWATER PIT
- GRATED DRAIN
- GDI - 150 MIN DEPTH x 150 WIDE GRATED DRAIN

NOTE: ALL DRAINAGE LINES ARE INDICATIVE ONLY. LOCATION MAY VARY DUE TO CONSTRAINTS.

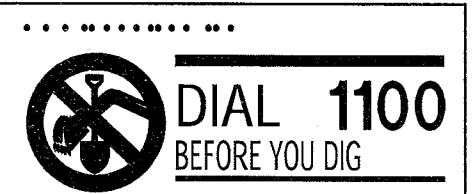
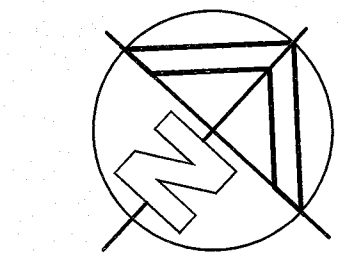
## ONSITE DETENTION CALCULATIONS ACCORDING TO NORTHERN BEACHES COUNCIL (PITTWATER)

TOTAL SITE AREA (LOT 1 & LOT 2)	=	1559 m <sup>2</sup>
LOT 1	=	685 m <sup>2</sup>
PRE DEVELOPED IMPERVIOUS AREA	=	285 m <sup>2</sup> ( 42 % )
PROPOSED IMPERVIOUS AREA	=	175 m <sup>2</sup> ( 26 % )
REDUCTION	=	110 m <sup>2</sup>
LOT 2	=	874 m <sup>2</sup>
PRE DEVELOPED IMPERVIOUS AREA	=	91 m <sup>2</sup> ( 64 % )
PROPOSED IMPERVIOUS AREA	=	400 m <sup>2</sup> ( 70 % )
INCREASE	=	309 m <sup>2</sup>

## OSD REQUIREMENTS FOR LOT 1 & LOT 2

AS ALL STORMWATER FLOWS DISCHARGE DIRECTLY TO BAYVIEW BAY, OSD IS NOT RECOMMENDED FOR THIS DEVELOPMENT.

RAINWATER REQUIREMENT (BASIX) = NOT PROVIDED



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DEVELOPERS & EXCAVATORS MAY BE HELD FINANCIALLY RESPONSIBLE BY THE ASSET OWNER SHOULD THEY DAMAGE UNDERGROUND NETWORKS.

## CARELESS DIGGING CAN:

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## DOCUMENT CERTIFICATION

Date: 30/07/2020  
Rick G Wray  
BE(Civil), CPEng, MIEAust, NER, RPEQ 08298  
(Director NB Consulting Engineers)

## NB Consulting Engineers

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Unit 8, 1726 Gold Coast Highway Burleigh Heads QLD 4220  
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Architect:

Suburban Town Planners

Client:

Lloyd Irwin

Project:

PROPOSED SUBDIVISION  
1744 PITTWATER ROAD, BAYVIEW

Drawing Title:

SUBDIVISION DRAINAGE PLAN

Date:

JULY 2020

Design:

KO

Drawn:

KO

Job No:

191109

Drawing No:

D01

Issue:

B

Scale check - 100mm when printed to scale

AI

08.09.2020 B EASEMENT AMENDED TO SUIT ARBORIST REPORT

31.07.2020 A ISSUE FOR D.A. SUBMISSION ONLY

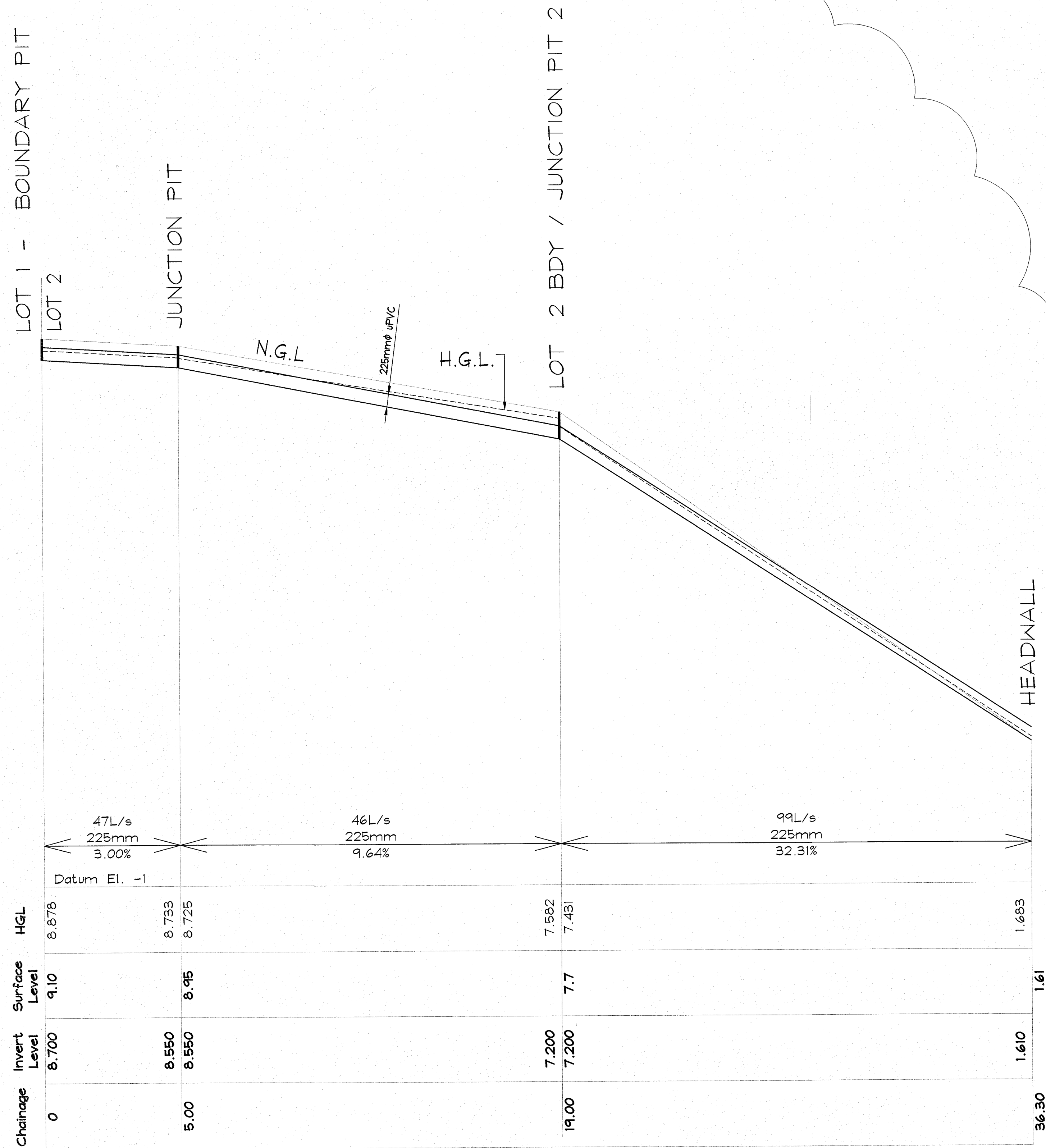
Date: Issue: Description:

By: Review:

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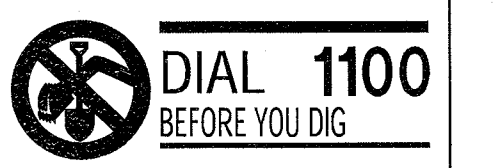
NB Consulting Engineers

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## SUBDIVISION EASEMENT - LONGITUDINAL SECTION

N.T.S.



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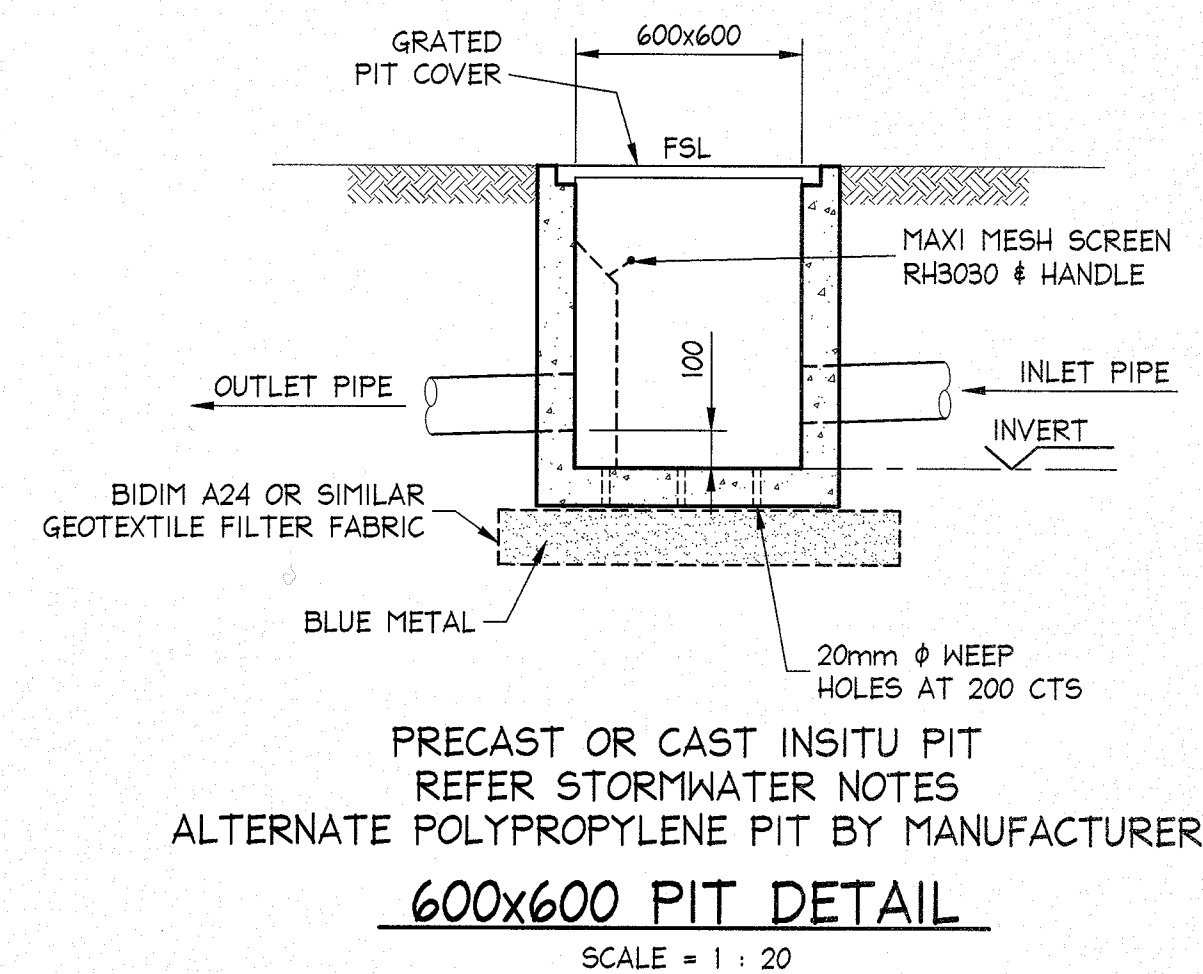
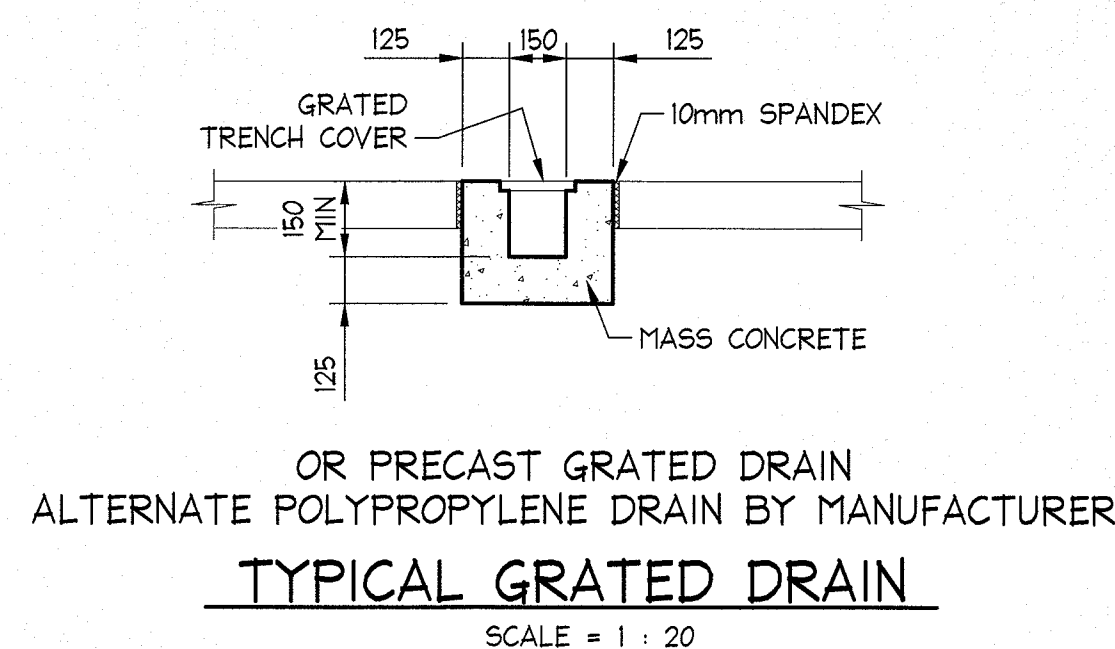
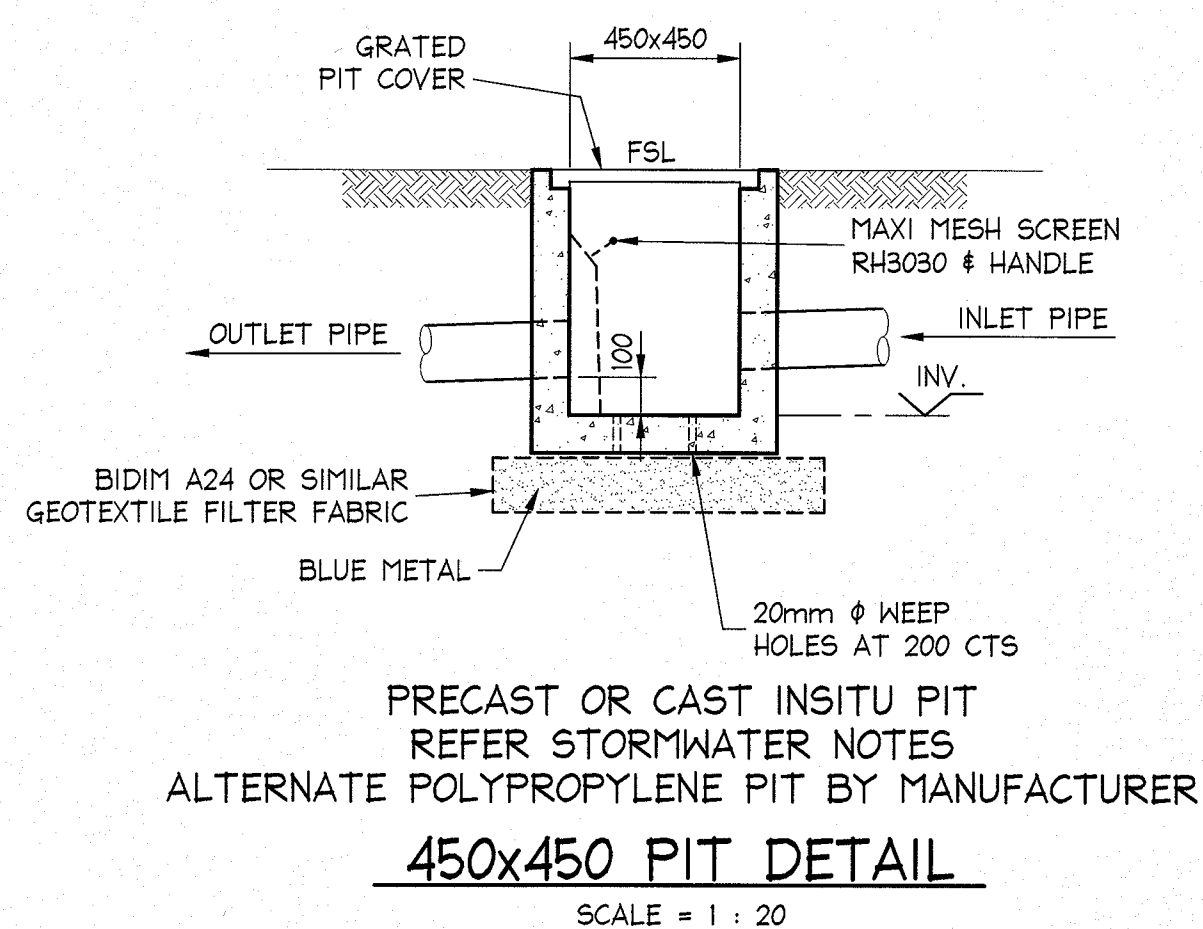
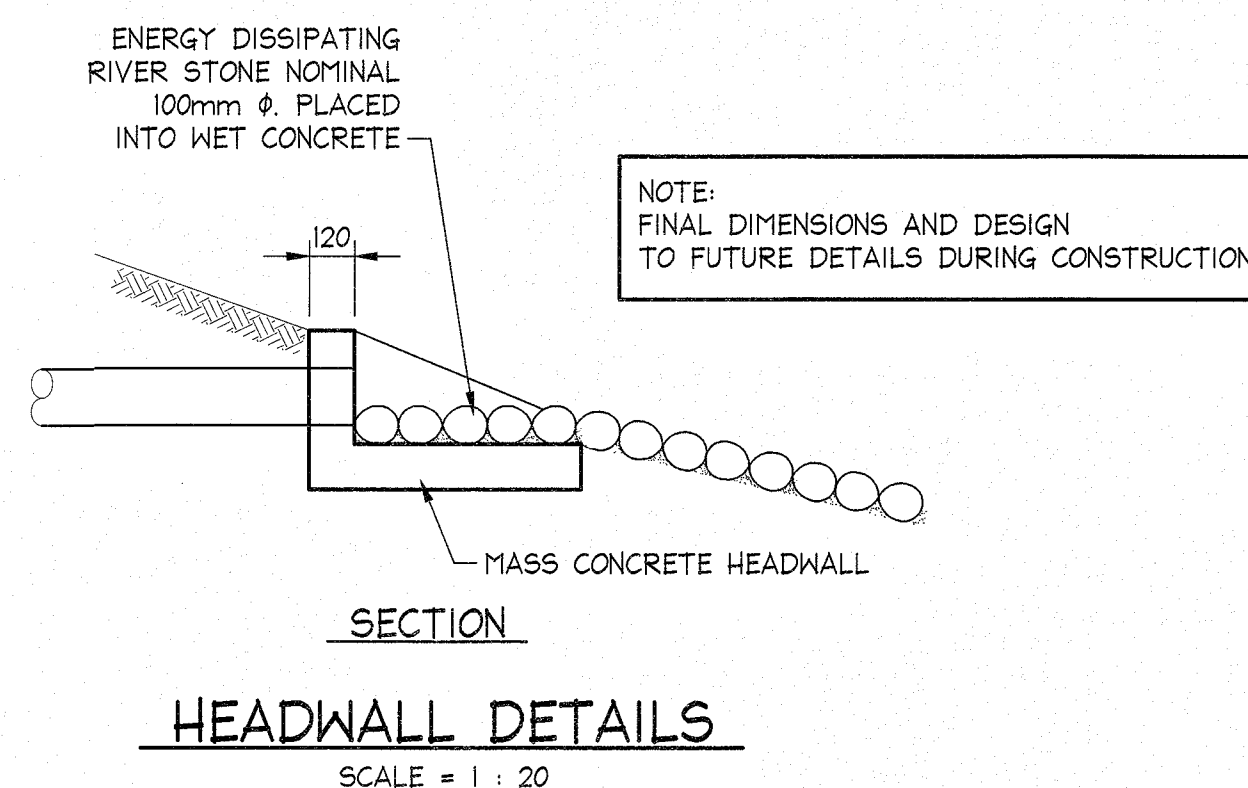
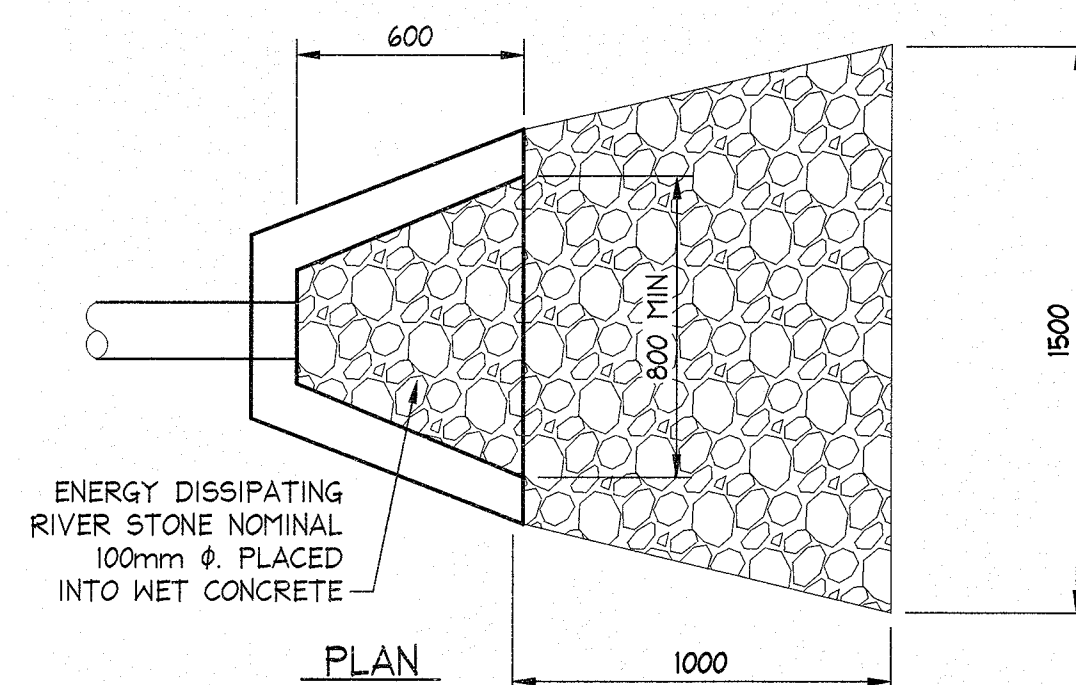
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Scale check - 100mm when printed to scale

A1

DOCUMENT CERTIFICATION				NB Consulting Engineers		Architect:	Suburban Town Planners	Project:	PROPOSED SUBDIVISION 1744 PITTWATER ROAD, BAYVIEW	Date:	JULY 2020	Design:	KO	Drawn:	KO
Date: 08.09.2020				Rick G Wray		Sydney: Ph: (02) 9984 7000		Client:		Drawing Title:		Job No:		Drawing No:	
31.07.2020				BE(Civil), CPEng, MIEAust., NER, RPEQ 08326		Suite 207, 30 Fisher Road Dee Why N.S.W. 2099		Lloyd Irwin		SUBDIVISION DRAINAGE EASEMENT LONGITUDINAL SECTION		191109		D02	
Issue: A				Description: EASEMENT AMENDED TO SUIT ARBORIST REPORT		Gold Coast: Ph: (07) 5631 4744								Issue: B	
By: KO				Review: MW		Unit 8, 1726 Gold Coast Highway Burleigh Heads QLD 4220									
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Date: 31.07.2020				Issue: A		Description: ISSUE FOR D.A. SUBMISSION ONLY		By: KO		Review: MIN		Job No: 191109		Drawing No: D03	
Date: 31.07.2020				Issue: A		Description: ISSUE FOR D.A. SUBMISSION ONLY		By: KO		Review: MIN		Job No: 191109		Drawing No: D03	
Date: 31.07.2020				Issue: A		Description: ISSUE FOR D.A. SUBMISSION ONLY		By: KO		Review: MIN		Job No: 191109		Drawing No: D03	