PROPOSED EDUCATIONAL FACILITY AT 95 - 105 SEVENTEENTH AVENUE, AUSTRAL NSW 2179 **STAGE 1 - STORMWATER DRAINAGE PLANS**

DRAINAGE NOTES:

ALL PIPES TO BE LAID ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED

100mm AND 150mm DIAMETER PIPES TO BE LAID ON MINIMUM 1% GRADE

MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm

ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS

BACKFILL TRENCHES WITH COMPACTED SAND OR APPROVED AGGREGATE MATERIAL

ALL PITS TO HAVE 600x600mm INTERNAL DIMENSIONS (U.N.O.)

SILT ARRESTORS TO HAVE 900x900mm INTERNAL DIMENSIONS

HEAVY DUTY GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFICABLE AREAS

PIT GRATE TO BE TYPE WELDLOK OR APPROVED EQUIVALENT

ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP

ALL PITS SHALL BE MAINTAINED REGULARLY

TOP OF BENCHING SHALL BE TO THE HALF OF THE OUTLET PIPE DIAMETER

MAXIMUM FRONT ENTRY PIPE:-STRAIGHT ENTRY - Ø750 SKEW ENTRY 45° - Ø525

Ø100 SUBSOIL DRAINAGE PIPE 3000mm LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED ADJACENT TO INLET PIPES

COMPRESSIVE STRENGTH f'c FOR CAST IN SITU CONCRETE TO BE A MINIMUM OF 20MPa AT 28 DAYS

PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS

ISOLATED JOINTS TO BE PROVIDED TO ISOLATE CONCRETE PAVEMENTS FROM PITS

ALL TRENCH GRATES PROVIDED SHALL HAVE A MINIMUM CLEAR WIDTH OF 200mm

STORMWATER DRAINAGE CONNECTIONS TO THE MAIN SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL

AUTHORITY STORMWATER NOTES:

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK ALL SET OUT AND LEVELS PRIOR TO COMMENCEMENT OF WORKS AND TO REPORT ANY DISCREPANCIES FOUND TO THE SUPERINTENDANT.

ALL SET OUT DIMENSIONS ARE TO FACE OF KERB, CENTERLINE OF FENCE/BOLARD/PIPE.

SMOOTH ALL TRANSITIONS BETWEEN NEW AND EXISTING WORK IN BOTH LEVEL AND ALIGNMENT.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL SAFETY FENCES, WARNING SIGNS, TRAFFIC DIVERSIONS AND THE LIKE DURING CONSTRUCTION. ALL WORKS TO COMPLY WITH OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS AND OTHER RELEVANT AUTHORITY SAFETY REQUIREMENTS.

NO TREES SHALL BE REMOVED, CUTBACK OR RELOCATED WITHOUT THE WRITTEN INSTRUCTION FROM THE SUPERINTENDENT.

THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPACTION AND PAVEMENT THICKNESS FROM A NATA REGISTERED TESTING AUTHORITY. MINIMUM THREE TESTS PER LAYER AS FOLLOWS

PIPE BACKFILL SELECT FILL SELECT FILL (LESS THAN 300mm BELOW BASE COURSE) BASE COURSE

95% STANDARD 98% MODIFIED 100% MODIFIED

THE AUSPEC SPECIFICATION SHALL BE THE SPECIFICATION FOR THESE WORKS.

KERB INLET PIT NOTES:

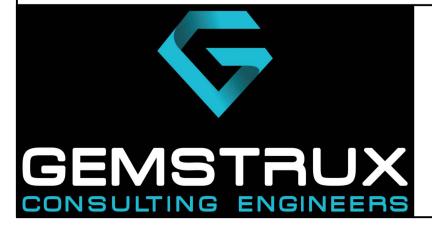
KERB INLET PITS TO BE CONSTRUCTED TO LOCAL COUNCIL STANDARDS.

ALL KERB INLET PITS TO BE CAST IN-SITU

ALL CONCRETE SHALL BE 25MPa STRENGTH AT 28 DAYS WITH F82 MESH CENTRALLY PLACED.



DRAWING REGISTER REVISION NUMBER NAME SW01 COVER SHEET 02 SW02 STORMWATER DRAINAGE PLAN & DETAILS 02



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	AMENDMENTS				PROJECT:	CLIENT:	ALL DIMENSIONS
REVISION	DESCRIPTION	DATE	drawn: J.M.	designed: J.M.	 PROPOSED EDUCATIONAL FACILITY	MEDINA PROJECTS P/L	IN 'mm'
01	ISSUED FOR CC APPROVAL	24.02.2020	APPROVED: J.M.	DATE: 02.03.2020			UNLESS OTHERWISE STATED
02	ISSUED FOR CC APPROVAL	02.03.2020		D) (1 21 02.00.2020	95 -105 SEVENTEENTH AVENUE, AUSTRAL		
			B.E CIVIL/STRUCTUR	AL		TITLE:	PROJECT NO.
			BEng,MIEAust MEMB. NO: 4622990				G20050
					LGA - LIVERPOOL COUNCIL	COVER SHEET	DRAWING NO.
			SCALE: 1:100 @ A1, 1:200 @ A3				SW01

DENSITY INDEX 75

EROSION & SEDIMENT CONTROL

NOTES: PROVIDE SILT FENCE/HAY BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS (TYPICAL). ISOLATE EXISTING STORMWATER PITS WITH HAY BALES TO FILTER ALL INCOMING FLOWS.

DO NOT STOCK PILE EXCAVATED MATERIAL ON THE ROAD WAY.

STORMWATER PIPE **BEDDING/PAVING NOTES:**

WHERE TRENCH BASE IS ROCK A MINIMUM OF 75mm BEDDING TO BE PROVIDED UNDER PIPE COLLARS.

STORMWATER PIPE BEDDING DETAIL TO BE IN ACCORDANCE WITH LOCAL COUNCIL REQUIREMENTS. BEDDING DETAILS TO BE CONFIRMED UPON EXCAVATION & PRIOR TO INSTALLATION OF PIPEWORK.

FOOTPATH REINSTATEMENT NOTES:

REMOVE ALL SAND FILL WITHIN THE FOOTPATH AREA TO THE EXISTING SUBGRADE.

SUPPORT ALL AUTHORITY SERVICES TO STRUCTURAL ENGINEERS DETAILS DURING EXCAVATION.

REINSTATE FOOTPATH SUBGRADE.

THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPACTION FROM A NATA REGISTERED TESTING AUTHORITY. MINIMUM THREE TESTS PER LAYER AS FOLLOWS: SELECT FILL 95% MODIFIED SELECT FILL (LESS THAN 300mm 98% MODIFIED

BELOW BASE COURSE) BASE COURSE

100% MODIFIED

AB	BR	EV	ΊΑ [·]	ΤI	10	NS:

Ø or DIA	DIAMETER
CBR	CALIFORNIA BEARING RATIO
CH	CHAINAGE
CL	CENTER LINE
CO	CLEAR OUT
DD	DISH DRAIN
DDO	DISH DRAIN OUTLET
DEJ	DOWELLED EXPANSION JOINT
DGB	DENSE GRADED BASECOURSE
DGS	DENSE GRADED SUB-BASE
DP	DOWNPIPE
e	EXISTING
FFL	FINISHED FLOOR LEVEL
GTD	GRATED TRENCH DRAIN
GSIP	GRATED SURFACE INLET PIT
HYD	HYDRANT
IJ	ISOLATING JOINT
IK	INTEGRAL KERB
IL	INVERT LEVEL
IP	INTERSECTION POINT
KIP	KERB INLET PIT
KO	KERB ONLY
K&G	KERB & GUTTER
KR	KERB RETURN
LS	LONGITUDINAL SECTION
NGL	NATURAL GROUND LEVEL
OFP	OVERLAND FLOW PATH
OSD	ON-SITE DETENTION
RL	REDUCED LEVEL
RW	RETAINING WALL
RWT	RAINWATER TANK
SJ	SAWN CONTROL JOINT
SMH	SEWER MAN HOLE
SW	STORMWATER
SWP	STORMWATER PIT
SWRM	STORMWATER RISING MAIN
SWS	STORMWATER SUMP
SV	STOP VALVE
TOK	TOP OF KERB
TOW	TOP OF WALL
TWL	TOP WATER LEVEL
TP UPVC	TANGENT POINT UNPLASTICISED POLYVINYL CHLORIDE
UNO	UNLESS NOTED OTHERWISE
WPJ	WEAKENED PLANE JOINT
FF	FIRST FLUSH DEVICE
TYP	TYPICAL

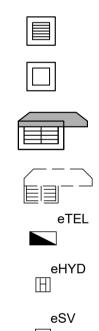
PRIOR TO ANY EXCAVATION ON SITE

TM: TRADE MARK OF THE ASSOCIATION OF DIAL BEFORE YOU DIG SERVICES LTD. USED UNDER LICENSE.

SERVICES SHOWN ON PLAN ARE INDICATIVE, EXACT DEPTH AND LOCATION TO BE CONFIRMED ONSITE. CONTRACTOR TO CARRY OUT DIAL BEFORE YOU DIG APPLICATION AND ENGAGE A REGISTERED SURVEYOR TO PEG OUT ALL EXISTING SERVICES PRIOR TO ANY WORK COMMENCING ONSITE.

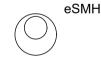
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BENCHMARK

SUBSOIL LINE STORMWATER RISING MAIN HIGH LEVEL STORMWATER LINE **OVERFLOW LINE** EXISTING STORMWATER LINE AUTHORITY STORMWATER LINE AUTHORITY SEWER LINE AUTHORITY WATER LINE AUTHORITY GAS LINE AUTHORITY ELECTRICITY LINE AUTHORITY UNDERGROUND ELECTRICITY LINE AUTHORITY FIBRE OPTIC LINE AUTHORITY COMMS LINE FENCE LINE GRATED SURFACE INLET PIT JUNCTION PIT KERB INLET PIT EXISTING KERB INLET PIT EXISTING TELSTRA PIT **EXISTING HYDRANT** EXISTING STOP VALVE EXISTING POWER POLE EXISTING SEWER MANHOLE OVERLAND FLOW PATH RAINWATER OUTLET **CLEAR OUT POINT** CAPPING DOWNPIPE DROP DOWNPIPE SPOT LEVELS

STORMWATER LINE

DESIGN NOTES:

THE SITE IS LOCATED IN LIVERPOOL COUNCIL.

STAGE 1 DEVELOPMENT AREA ~ 1970m² (BY CAD)

THE DEVELOPMENT CONSISTS OF THE ALTERATIONS & ADDITIONS TO AN EXISTING BUILDING TO CONVERT TO AN ADMINISTRATION OFFICE AND CONSTRUCTION OF TEMPORARY DEMOUNTABLES.

STORMWATER FROM NEW DEVELOPMENT IS TO BE CONNECTED TO EXISTING STORMWATER DRAINAGE SYSTEM. EXACT LOCATION TO BE CONFIRMED ON SITE. STORMWATER ENGINEER TO HAVE FINAL SAY.

ALL NEW STORMWATER PIPES TO HAVE A MINIMUM OF 100mm CONCRETE OR 300mm TOPSOIL COVER U.N.O.

INSTALL CLEAR OUT FOR INSPECTION AND MAINTENANCE PURPOSES WHERE REQUIRED.

ALL STORMWATER PIPES ARE TO BE A MINIMUM OF 600mm CLEAR FROM EXISTING SEWER LINE (TYP).

> APPROXIMATE LOCATION OF -PROPOSED DEMOUNTABLES. LOCATION TO BE CONFIRMED DURING CONSTRUCTION.

EXISTING CONCRETE DRIVEWAY AND -CONSTRUCTED SURFACE INLET PITS TO REMAIN UNHARMED DURING CONSTRUCTION. ALLOW FOR REPLACEMENT IF DAMAGE OCCURS.

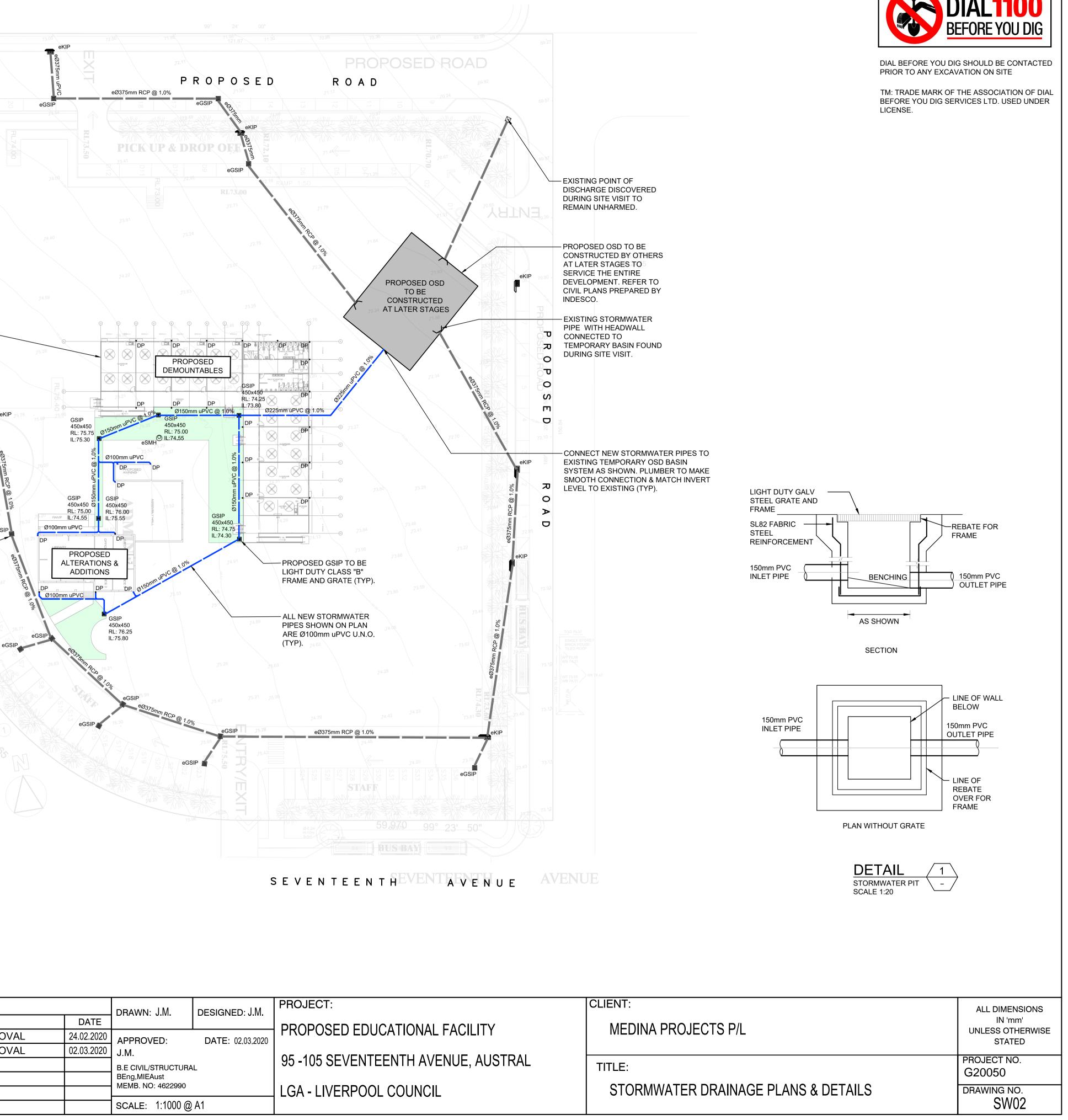
eGSIP



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		SCALE: 1:1000 @ A1		LGA - LIVERPOOL COUNCIL	STORMWATE

