

ELECTRICAL SYMBOLS

	CIRCUIT BREAKER
	EARTH LEAKAGE CIRCUIT BREAKER
	REQUIRE CIRCUIT RATING xxx A = MAXIMUM REQUIRED SETTABLE CIRCUIT RATING
	ON LOAD ISOLATOR
	EMERGENCY LIGHTING TEST FACILITY
	KILOWATT HOUR METER
	SINGLE PHASE CONDUCTOR
	THREE PHASE CONDUCTOR
	SPARE SPACE (SINGLE PHASE)
	SPARE SPACE (THREE PHASE)
	SPARE SPACE (NON)
	SURGE DIVERTER
	CABLE TAKE OFF BOX
	CURRENT TRANSFORMER
	LINK
	TRANSFORMER - GENERIC
	PHOTO ELECTRIC CELL WITH TIMER SHUTOFF

	SWITCHBOARD
	SWITCHBOARD BY OTHERS
	ELECTRICAL EQUIPMENT GENERAL
	INVERTER
	POLE TOP LUMINAIRE
	ELECTRICAL PIT (SQUARE)
	CORE HOLE/S FOR SUBMAIN RETICULATION
	INVERTER (GENERAL ARRANGEMENT)
	SECURITY FIELD PANEL
	CENTRAL BATTERY SYSTEM

COMMUNICATIONS SYMBOLS

	COMMUNICATIONS PIT (SQUARE)
	SECURITY PIT (SQUARE)
	COMMUNICATIONS RACK, 45 RU, ALL METAL CONSTRUCTION, LOCKABLE MESH DOORS, LOCKABLE SIDE PANELS
	TELECOMMUNICATIONS OUTLETS FOR BUILDING SERVICES
	OPTICAL FIBRE
	CAT6A STRUCTURED CABLE
	EXISTING EQUIPMENT/ SERVICE TO BE RETAINED IN CURRENT LOCATION.
	SLAB PENETRATION FOR STRUCTURED CABLING RETICULATION
	CONDUIT EMBEDDED IN BUILDING FABRIC FOR STRUCTURED CABLING

PHASING

CONTAINMENT	FIXTURES / FITTINGS	
		DENOTES EXISTING ELECTRICAL SERVICES TO REMAIN
		DENOTES EXISTING ELECTRICAL SERVICES TO BE DEMOLISHED OR RELOCATED
		DENOTES EXISTING ELECTRICAL SERVICES RELOCATED POSITION
LINETYPE FOR RELOCATED OR NEW CABLETRAY/CONDUIT DETERMINED BY SYSTEM TYPE.		

CONDUIT

	1/E	LOW VOLTAGE ELECTRICAL CONDUIT
	1/C	COMMUNICATION CONDUIT
	1/S	SECURITY CONDUIT

CONDUIT, SIZE AS INDICATE
1: INDICATES NUMBER OF CONDUITS
E: INDICATES ELECTRICAL CONDUIT
C: INDICATES COMMUNICATIONS CONDUIT
S: INDICATES SECURITY CONDUIT

COLOURS ABOVE ARE INDICATIVE OF NEW SERVICE CONDUIT, WHERE CONDUIT IS EXISTING AND TO REMAIN, EXISTING AND TO BE DEMOLISHED OR EXISTING AND TO BE RELOCATED, COLOURS ARE AS PER PHASING SECTION OF LEGEND.

CABLE TRAY

	300 ECT	POWER CABLE TRAY
	300 CCT	COMMUNICATIONS CABLE TRAY
		POWER VERTICAL CABLE TRAY
		COMMUNICATIONS VERTICAL CABLE TRAY

EXAMPLE - 300ECT
- 300 DENOTES WIDTH
- E DENOTES SERVICE
E = POWER
C = COMMUNICATIONS
S = SECURITY
B = BMS
- CT DENOTES CABLE CONTAINMENT TYPE
CT = CABLE TRAY
CL = CABLE LADDERS
CB = CABLE BASKET

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS.
- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SERVICES SPECIFICATIONS.
- DO NOT SCALE FOR SIZING. REFER TO ARCHITECTURAL, MANUFACTURERS DOCUMENTATION AND SPECIFICATION FOR EXACT MEASUREMENTS.
- CONTRACTOR TO CONDUCT FULL SITE SURVEY TO CONFIRM EXACT LOCATIONS OF ALL EXISTING ELECTRICAL SERVICES AND EQUIPMENT.
- ALL WORKS ARE NEW UNLESS NOTED OTHERWISE.
- EACH CAPTIVE SCREW OUT SHALL BE ON A DEDICATED CIRCUIT. EACH PAIR OF OUTLETS PROVIDED TO A RACK SHALL BE ON THE SAME PHASE.
- THE CONTRACTOR IS TO REFER TO THE SSU BRIEF FOR THE SECURITY SCOPE AND TECHNICAL REQUIREMENTS.
- ALL NEW DATA CABLING IS TO MEET THE DoE STRUCTURED CABLING SYSTEM SPECIFICATION v1.4
- THE CONTRACTOR IS TO REFER TO THE NSW PUBLIC SCHOOLS - AUDIO-VISUAL STANDARDS FOR SCHOOL LEARNING DISPLAYS FOR AV SCOPE AND TECHNICAL REQUIREMENTS.

ABBREVIATIONS

DBPO	DOUBLE GENERAL POWER OUTLET
DTO	DOUBLE TELECOMMUNICATIONS OUTLET
GPO	GENERAL POWER OUTLET (SINGLE)
LED	LIGHT EMITTING DIODE
RU	RACK UNIT
STO	SINGLE TELECOMMUNICATIONS OUTLETS
TO	TELECOMMUNICATIONS OUTLET
WP	WEATHER PROOF

GENERAL NOTES

- NEW PA SYSTEM CURRENTLY IN PLANNING STAGE FOR EXISTING SITE. ASSUME NEW PA SYSTEM INSTALLED AND APPROPRIATE FOR EXPANSION TO INCLUDE NEW BUILDING.

CONDUIT TAG LEGEND

-  MINIMUM 2x100MM DIA HD-UPVC UNDERGROUND CONDUIT
-  MINIMUM 1x50MM DIA HD-UPVC UNDERGROUND CONDUIT

DISTRIBUTION BOARDS (DB)
(PROPOSED NEW)
SEE BLOCK Y POWER AND COMMUNICATIONS ARRANGEMENT FOR DETAILS. TO BE SUPPLIED FROM NEW MSB WITH SUBMAINS RETICULATED THROUGH INGROUND CONDUIT WITH CABLE PITS EVERY 30M OR WHEN CHANGE IN DIRECTION OCCURS.

BUILDING COMMUNICATIONS ROOM (BCR)
(PROPOSED NEW)
SEE BLOCK Y LEVEL 1 POWER AND COMMUNICATIONS ARRANGEMENT FOR DETAILS.

COMMUNICATIONS CABLE PIT ADJACENT TO PROPOSED NEW BLOCK BLOCK TO BE P5 TYPE. COMMUNICATIONS CONDUIT IS TO CONSIST OF MINIMUM 2x 100mm DIAMETER. OTHER COMMUNICATIONS PITS ALONG CONDUIT RETICULATION PATH TO BE P6 TYPE. ALL COMMUNICATION CABLE PITS USED ARE TO HAVE CONCRETE LIDS

COMMUNICATION AND SECURITY CABLE RETICULATION - OPTION 2
RETICULATION FROM MCR TO PROPOSED BUILDING BCR. TO BE USED WHERE EXISTING CONDUIT PATHWAY DOES NOT HAVE SUFFICIENT SPARE CAPACITY FOR ADDITIONAL REQUIRED CABLING. NEW CABLE SHALL TRAVERSE BLOCK V THROUGH THE CEILING VOID AND EXIT AT HIGH LEVEL INTO VERTICAL CONDUIT ON BUILDING EXTERIOR BEFORE ENTERING IN-GROUND CONDUIT. COMMUNICATIONS CABLE PIT ADJACENT TO BLOCK V TO BE P8 TYPE. COMMUNICATIONS CABLE PIT ADJACENT TO PROPOSED NEW BLOCK BLOCK TO BE P5 TYPE. COMMUNICATIONS CONDUIT IS TO CONSIST OF MINIMUM 2x 100mm DIAMETER. OTHER COMMUNICATIONS PITS ALONG CONDUIT RETICULATION PATH TO BE P6 TYPE. ALL COMMUNICATION CABLE PITS USED ARE TO HAVE CONCRETE LIDS.

INDICATIVE LOCATION OF EXISTING MAIN COMMUNICATIONS ROOM.

MAIN SWITCHBOARD (MSB)
(EXISTING)
EXISTING MAIN SWITCHBOARD TO REMAIN AND BE BACK FED FROM NEW MAIN SWITCHBOARD.



INDICATIVE LOCATION OF EXISTING COMMUNICATIONS SERVICES. TO BE USED FOR RUN OF ADDITIONAL FIBRE OPTIC CABLE WHERE COMMUNICATION CABLE RETICULATION OPTION 1 IS USED.

EXISTING INTEGRITY SECURITY HEADEND AND CCTV NETWORK VIDEO RECORDER LOCATED IN BLOCK A STORE ROOM.

COMMUNICATION AND SECURITY CABLE RETICULATION - OPTION 1 - PREFERRED
PROPOSED IN-GROUND COMMUNICATIONS AND SECURITY CONDUITS FOR CABLE RETICULATION FROM MCR TO PROPOSED BUILDING BCR. EXISTING CONDUIT TO BE INVESTIGATED FOR SPARE CAPACITY AND REUSED FOR NEW CABLE RUN IF SPARE CAPACITY IS AVAILABLE. NEW CONDUIT IS TO BE INSTALLED FROM MARKED PITS FOR FINAL SEGMENT OF THE CABLE RETICULATION. ELECTRICAL CONTRACTOR IS TO INVESTIGATE PRIOR TO TENDER

EXISTING CONSUMER MAINS TO BE REMOVED AND CONDUIT INVESTIGATED BY ELECTRICAL CONTRACTOR FOR REUSE IN RETICULATION OF NEW SUBMAIN FEEDER. NEW SUBMAIN FEEDER TO BE INSTALLED BETWEEN NEW MSB AND NEW MDB REUSING EXISTING IN-GROUND CONDUIT FOR A PORTION OF THE RUN IF POSSIBLE OR INSTALLING NEW CONDUIT FOR ENTIRE LENGTH IS EXISTING CONDUIT IS FOUND TO BE NOT FIT FOR PURPOSE. ELECTRICAL CONTRACTOR TO PRICE BASED ON NEW CONDUIT AND ALLOW FOR ADJUSTMENT BASED ON THE INVESTIGATION OUTCOME.

SUBSTATION (500kVA)
(EXISTING - TO BE RETAINED)
INDICATIVE LOCATION. CONNECTION OFFER FOR NEW RESTRICTED SUPPLY CAPACITY OF 642A HAS BEEN RECEIVED FROM ENDEAVOUR ENERGY.

MAIN SWITCHBOARD (MSB)
(PROPOSED NEW)
A NEW EXTERNAL MSB IS TO BE INSTALLED IN THE INDICATED LOCATION WITH FRONT FACING AWAY FROM PEDESTRIAN PATHWAY. NEW CONSUMER MAINS TO CONNECT TO PROPOSED NEW SUBSTATION. CONCRETE SLAB TO BE INSTALLED TO PROVIDE FLAT SURFACE FOR MSB AND 1400 mm IN FRONT OF MSB.

COVERED WALKWAY LIGHTING
(PROPOSED NEW)
LIGHTING TO BE PROVIDED ALONG THE ENTIRE LENGTH OF THE NEW EXTERNAL WALKWAY

INDICATIVE IN-GROUND CONDUIT PATHWAYS TO SUPPORT EXTERNAL PATHWAY LIGHTING. LOCATION AND QUANTITIES OF EXTERNAL POLE TOP LUMINAIRES IS INDICATIVE AND SHALL BE DEVELOPED FURTHER IN DETAILED DESIGN PHASE. LUMINAIRE ARRANGEMENT IS TO COMPLY WITH AS/NZS 4292 AND AS/NZS 1158.

NEW SECURITY CONDUIT IS TO CONSIST OF MINIMUM 2x 50mm CONDUIT. SECURITY CABLE PITS TO BE SIZED BASED ON SITE CONDITIONS, MANUFACTURER REQUIREMENTS AND RELEVANT STANDARDS.

GENERAL HYDRAULIC NOTES

- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS, SERVICES AND STRUCTURES ON SITE PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL ARRANGE FOR ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- ON COMPLETION OF PROPOSED WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KREBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS UNLESS NOTED OTHERWISE.
- MAKE SMOOTH TRANSITION TO EXISTING SERVICES AND MAKE GOOD WHERE REQUIRED.
- WHERE NEW WORKS ABUT EXISTING THE SUB CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER OR IN CLOSE PROXIMITY TO THESE SERVICES. HAND EXCAVATE IN THESE AREAS.
- THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL AND COMMUNICATIONS/SECURITY DRAWINGS AND SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER NON CORROSIVE CONNECTION BETWEEN DISSIMILAR PIPEWORK.
- ALL ELEVATED SERVICES PIPEWORK SHALL BE CLEARLY LABELED IN ACCORDANCE WITH REQUIREMENTS OF AS3500 AND AS1345.
- ALL ELEVATED SERVICES SHALL BE CHARGED AND TESTED PRIOR TO CONCEALMENT.
- ALL SERVICE CONDUITS SHOWN ARE INDICATIVE ONLY AND FINAL PIPE AND CONDUIT DETAILS AND LOCATIONS ARE TO BE OBTAINED BY THE SUB CONTRACTOR COORDINATING WITH AND GAINING CONFIRMATION FROM THE RELEVANT SERVICES.
- ELECTRICAL CONDUITS FOR HYDRAULIC SERVICES PLANT AND EQUIPMENT SHALL BE ORANGE HEAVY DUTY RIGID TYPE IN ACCORDANCE WITH CATEGORY 'A' OF AS3000 AND AS DESCRIBED IN THE ELECTRICAL SPECIFICATION AND DOCUMENTATION.
- ON COMPLETION, ALL PIPEWORK SHALL BE SUBJECT TO A PRESSURE TEST REQUIRED BY THE HYDRAULIC SERVICES CONSULTANT. ANY DEFECTS FOUND IN THE SYSTEM SHALL BE REMEDIED AND THE TEST RE-APPLIED.
- TRENCHES THROUGH EXISTING ROAD AND CONCRETE AREAS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING. REINSTATE WITH ADDITIONAL REINFORCEMENT AND DOWELING AS REQUIRED BY STRUCTURAL ENGINEERS.
- CONTRACTOR SHALL PROVIDE ALL TIMBERING, SHORING AND SHUTTERING AS NECESSARY TO CONSTRUCT PIPEWORK INCLUDING THE REMOVAL OF SAME UPON COMPLETION OF PIPEWORK.
- CONTRACTOR SHALL OBTAIN ALL AUTHORITY APPROVALS AND PAY ALL FEES.
- ALL WORK TO BE IN ACCORDANCE WITH THE RELEVANT WATER AUTHORITY, FIRE AND RESCUE NSW, AS3500, AS2444, AS2419 AND RELATED STANDARDS AS APPROPRIATE.
- CONTRACTOR TO PROVIDE 'AS BUILT' DOCUMENTATION UPON PRACTICAL COMPLETION OF THE PROJECT AND SHALL BE IN CAD FORMAT (AUTOCAD) AND REVIT 3D MODELING.
- ORIGIN OF LEVELS: AUSTRALIAN HEIGHT DATUM.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND OR AN APPROVED GRANULAR MATERIAL AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 E1.1.
- ALL SERVICES THAT CROSS FOOTINGS ETC. SHALL BE BACKFILLED WITH GRANULAR MATERIAL TO SUBGRADE LEVEL AND COMPACTED TO 95% M.M.D.D.
- FOR INTERNAL LAYOUTS OF THE BUILDING FOR THE CORE AMENITIES - REFER TO THE PATTERN BOOK SUITE OF DOCUMENTATION (SOURCED VIA SINSW).

SANITARY DRAINAGE AND STORMWATER NOTES

- CONTRACTOR TO PROVIDE ANY ADDITIONAL EXCAVATION (INCLUDING IN ROCK), BACKFILL OF PIPES, FITTINGS AND ALL JUMP-UPS TO LOCAL AUTHORITY REQUIREMENTS INCLUDING THOSE TO BRANCH DRAINS.
- ALL MANHOLES GREATER THAN 1.2m DEEP SHALL BE CONSTRUCTED WITH STEP IRONS TO LOCAL WATER AUTHORITY REQUIREMENTS.
- DRAINS TO BE SUPPORTED ON OR FROM SOLID GROUND. LOCATION AND DEPTH/INVERT LEVEL OF BRANCH SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
- DRAINS UNDER BUILDINGS SHALL BE RETESTED WHERE DIRECTED BY MANAGING CONTRACTOR.
- PROVIDE 80mm COMPRESSIBLE EXPANDED FOAM MATERIAL OVER PIPEWORK WHERE CLEARANCE TO UNDERSIDE OF FOOTING IS LESS THAN 150mm, UNLESS NOTED OTHERWISE.
- SANITARY DRAINAGE LINES SHALL BE CONSTRUCTED OUTSIDE ZONE OF INFLUENCE OF STRUCTURAL BEAMS AND PIPES.
- ALL BUILDING SANITARY DRAINAGE PIPEWORK SHALL BE UPVC-DWV UNLESS NOTED OTHERWISE.
- ALL PIPE JUNCTIONS, BENDS AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS. MITRE FITTINGS WILL NOT BE ACCEPTED IN ANY CIRCUMSTANCE.
- ALL CONNECTIONS TO DRAINAGE PITS AND MANHOLES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH AND MADE WATERTIGHT.
- PIPE BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH AS3500 AND ALSO IN ACCORDANCE WITH THE HYDRAULIC SERVICES SPECIFICATION.
- WHERE STORMWATER LINES PASS UNDER FLOOR SLABS SEWER GRADE RUBBER RING JOINTS ARE TO BE USED.

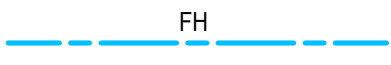
WATER SERVICES NOTES

- ALL COLD WATER PIPEWORK SHALL BE Ø20 MINIMUM. EXCEPT THE LAST 3000mm OF RUN OUT TO ANY SINGLE FIXTURE MAY BE Ø15, UNLESS NOTED OR SHOWN OTHERWISE.
- ALL BRANCHES FROM MAIN LINES SHALL BE FITTED WITH ISOLATING VALVES AS REQUIRED TO ISOLATE GROUPS OR SINGLE FIXTURES.
- BACKFLOW PREVENTION: ALL HOSE COCKS SHALL BE FITTED WITH APPROVED BACKFLOW PREVENTING VACUUM BREAKERS AND INDIVIDUAL STOP TAPS UNLESS NOTED OTHERWISE.
- EXTERNAL HYDRANTS SHALL BE POSITIONED NOT LESS THAN 10m FROM THE BUILDING IT IS PROTECTING, UNLESS PROTECTED BY A CONSTRUCTION HAVING A FIRE RESISTANCE LEVEL OF NOT LESS THAN 90/90/90 EXTENDING AT LEAST 2m EITHER SIDE OF THE HYDRANT OUTLET AND 3m FROM THE GROUND LEVEL ADJACENT TO THE HYDRANT, OR THE HEIGHT OF THE BUILDING, WHICHEVER IS THE LESSER.
- ALL HYDRANTS SHALL BE INSTALLED SO THAT THE VALVE OUTLET IS AT RIGHT ANGLES TO THE FACE OF THE WALL BEHIND (IF ANY) AND THE VALVE OUTLET IS HORIZONTAL OR SLOPING NOT MORE THAN 35 DEGREES BELOW THE HORIZONTAL.
- ALL HYDRANTS SHALL BE INSTALLED TO PROVIDE A MINIMUM OF 100mm CLEARANCE AROUND THE HANDWHEEL IN ALL DIRECTIONS.
- ALL HYDRANT PIPEWORK SHALL BE SUPPORTED IN ACCORDANCE WITH AS2419.
- ALL HYDRANT PIPEWORK SHALL BE IDENTIFIED IN ACCORDANCE WITH AS1345.

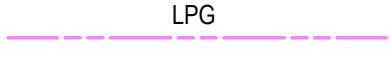
FIRE HYDRANT NOTES

PIPEWORK LEGEND

FIRE

 FIRE HYDRANT

WATER & GAS

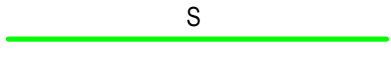
 LIQUEFIED PETROLEUM GAS

 AUTHORITY WATER MAIN

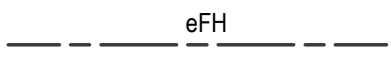
 COLD WATER

DRAINAGE

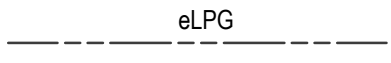
 AUTHORITY SEWER MAIN

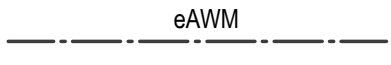
 SEWER

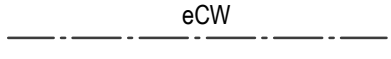
FIRE (EXISTING)

 EXISTING FIRE HYDRANT

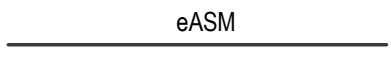
WATER & GAS (EXISTING)

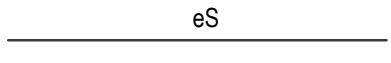
 EXISTING LIQUEFIED PETROLEUM GAS

 EXISTING AUTHORITY WATER MAIN

 EXISTING COLD WATER

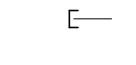
DRAINAGE (EXISTING)

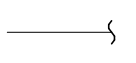
 EXISTING AUTHORITY SEWER MAIN

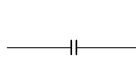
 EXISTING SEWER

SYMBOLS

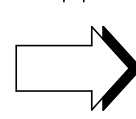
GENERAL

 CAPPED PIPE

 CONTINUATION OF PIPE

 FLANGED JOINT

 CONNECT TO EXISTING

 DRAWING CONTINUATION ARROW

DRAINAGE

 CLEAROUT / INSPECTION OPENING

WATER

 ISOLATION VALVE IN PATH BOX

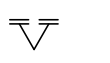
 DUAL CHECK VALVE

 TESTABLE DOUBLE CHECK VALVE

 WATER METER

FIRE HYDRANTS

 EXTERNAL DUAL PILLAR FIRE HYDRANT

 BRIGADE BOOST POINT

 LARGE BORE SUCTION POINT

 FIRE TANK

ABBREVIATIONS

AMU ASSET MANAGEMENT UNIT

CO CLEAROUT

CW COLD WATER

DCV DOUBLE CHECK VALVE

DUCV DUAL CHECK VALVE

e EXISTING

FH FIRE HYDRANT

IO INSPECTION OPENING

LPG LIQUEFIED PETROLEUM GAS

PE POLYETHYLENE

RWT RAINWATER TANK

S SEWER

SIL SEWER INVERT LEVEL

SINSW SCHOOL INFRASTRUCTURE NSW

WM WATER METER

Revision History				
Issue	Description	Date	Drawn	Approved
E	ISSUED FOR TENDER (AS CLOUDED)	04.04.25	GB	RE
D	ISSUED FOR TENDER	06.03.25	GB	RE
C	100% SCHEME DESIGN(PHASE 3)	11.02.25	JW	RE
B	80% SCHEME DESIGN (PHASE 3)	13.12.24	GPM	RE
A	50% SCHEME DESIGN (PHASE 3)	28.11.24	GPM	RE

North

Scale
PRINT IN COLOUR

Client

Architect
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Project
SCHOOL INFRASTRUCTURE NSW MILTON PUBLIC SCHOOL 9 THOMAS STREET, MILTON NSW
TENDER ISSUE NOT FOR CONSTRUCTION

Drawing Title HYDRAULIC SERVICES LEGEND & GENERAL NOTES				
Drawn GB	Designed RE	Q.A. Check RE	Q.A. Date 04.04.25	Scale @ A1 N.T.S
Project No. NA232021	Drawing No. MPS-ACOR-00-00-DR-H-0001	Issue E		

EXISTING INGROUND AUTHORITY
SEWER MAIN PIPEWORK (APPROX)

EXISTING INGROUND SITE SEWER
MAIN PIPEWORK (APPROX)

INGROUND SITE SEWER MAIN
PIPEWORK

INGROUND WATER SUPPLY MAIN
PIPEWORK

EXISTING INGROUND AUTHORITY
SEWER MAIN PIPEWORK (APPROX)

EXISTING INGROUND SITE SEWER
MAIN PIPEWORK (APPROX)

EXISTING INGROUND FIRE
HYDRANT PIPEWORK

EXISTING FIXED ON-SITE FIRE
HYDRANT PUMP ROOM

EXISTING ON-SITE FIRE HYDRANT
WATER STORAGE TANKS.
EFFECTIVE VOL UNKNOWN

LOCATION OF RELOCATED EXISTING
LPG TANK. (LIAISE WITH HAINES GAS
FOR ALL NECESSARY REQUIREMENTS
FOR THE RELOCATION). MUST BE 6m
CLEAR OF BUILDINGS. MUST BE 1m
CLEAR OF SITE BOUNDARY. MUST BE
4m CLEAR OF NEIGHBOURING
HOUSES / BUILDINGS

LOCATION OF EXISTING LPG TANK.
DISCONNECT EXISTING SUPPLY
LINES AND RELOCATE INGROUND
TO NEW LOCATION. (LIAISE WITH
HAINES GAS FOR ALL NECESSARY
REQUIREMENTS FOR THE
RELOCATION)

INGROUND LPG MAIN

LOCATION OF EXISTING DUAL
PILLAR FIRE HYDRANT

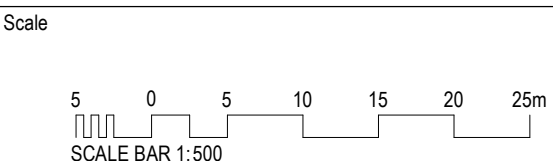
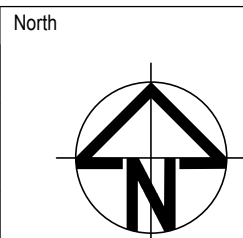
LOCATION OF EXISTING DUAL
PILLAR FIRE HYDRANT

EXISTING COLD WATER METER FOR
SITE

INGROUND LPG MAIN

EXISTING COLD WATER
METER FOR

Issue	Description	Date	Drawn	Approved
D	ISSUED FOR TENDER	06.03.25	GB	RE
C	100% SCHEME DESIGN (PHASE 3)	11.02.25	JW	RE
B	80% SCHEME DESIGN (PHASE 3)	13.12.24	GPM	RE
A	50% SCHEME DESIGN (PHASE 3)	29.11.24	GPM	RE



PRINT IN COLOUR

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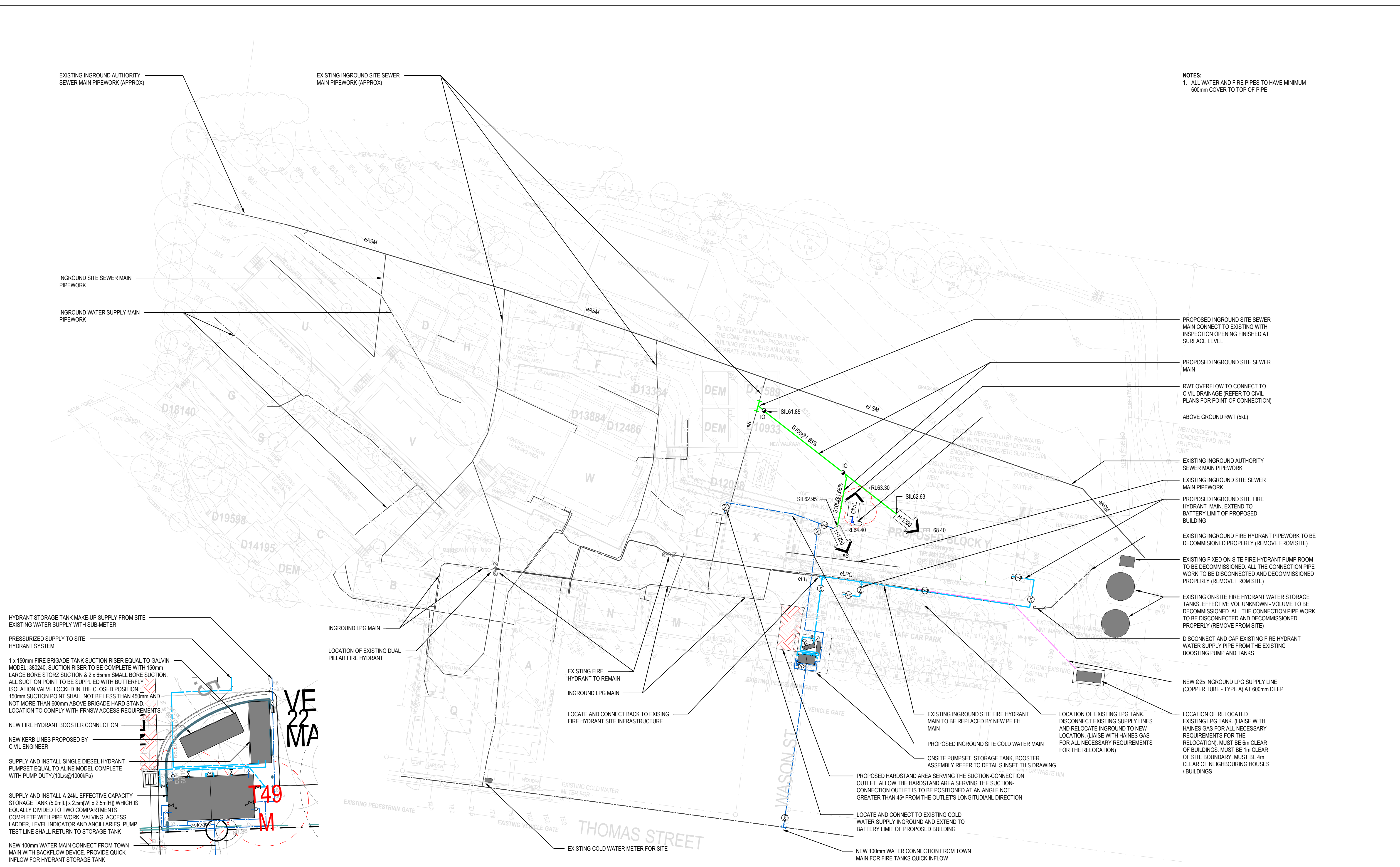


Project
SCHOOL INFRASTRUCTURE NSW
MILTON PUBLIC SCHOOL
9 THOMAS STREET, MILTON NSW

TENDER ISSUE
NOT FOR CONSTRUCTION

Drawing Title
HYDRAULIC SERVICES
EXISTING SITE PLAN & DEMOLITION

Drawn	Designed	Q.A. Check	Q.A. Date	Scale @ A1
GB	RE	RE	05.03.25	1 : 500
Project No.	Drawing No.	Issue		
NA232021	MPS-ACOR-00-00-DR-H-1100	D		



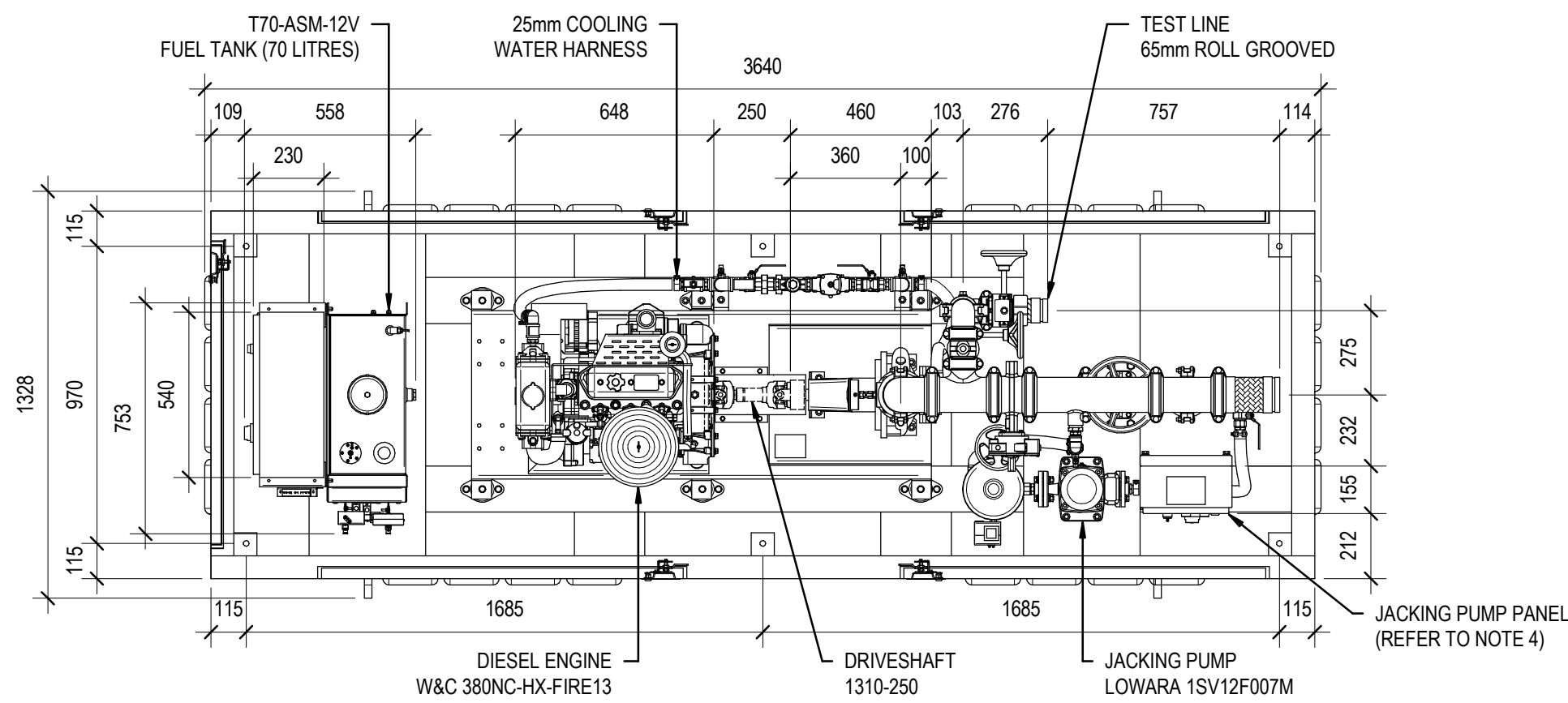
- NOTES:**
1. ALL WATER AND FIRE PIPES TO HAVE MINIMUM 600mm COVER TO TOP OF PIPE.

ONSITE PUMPSET, STORAGE TANK AND BOOSTER ASSEMBLY DETAIL
SCALE: 1 : 100

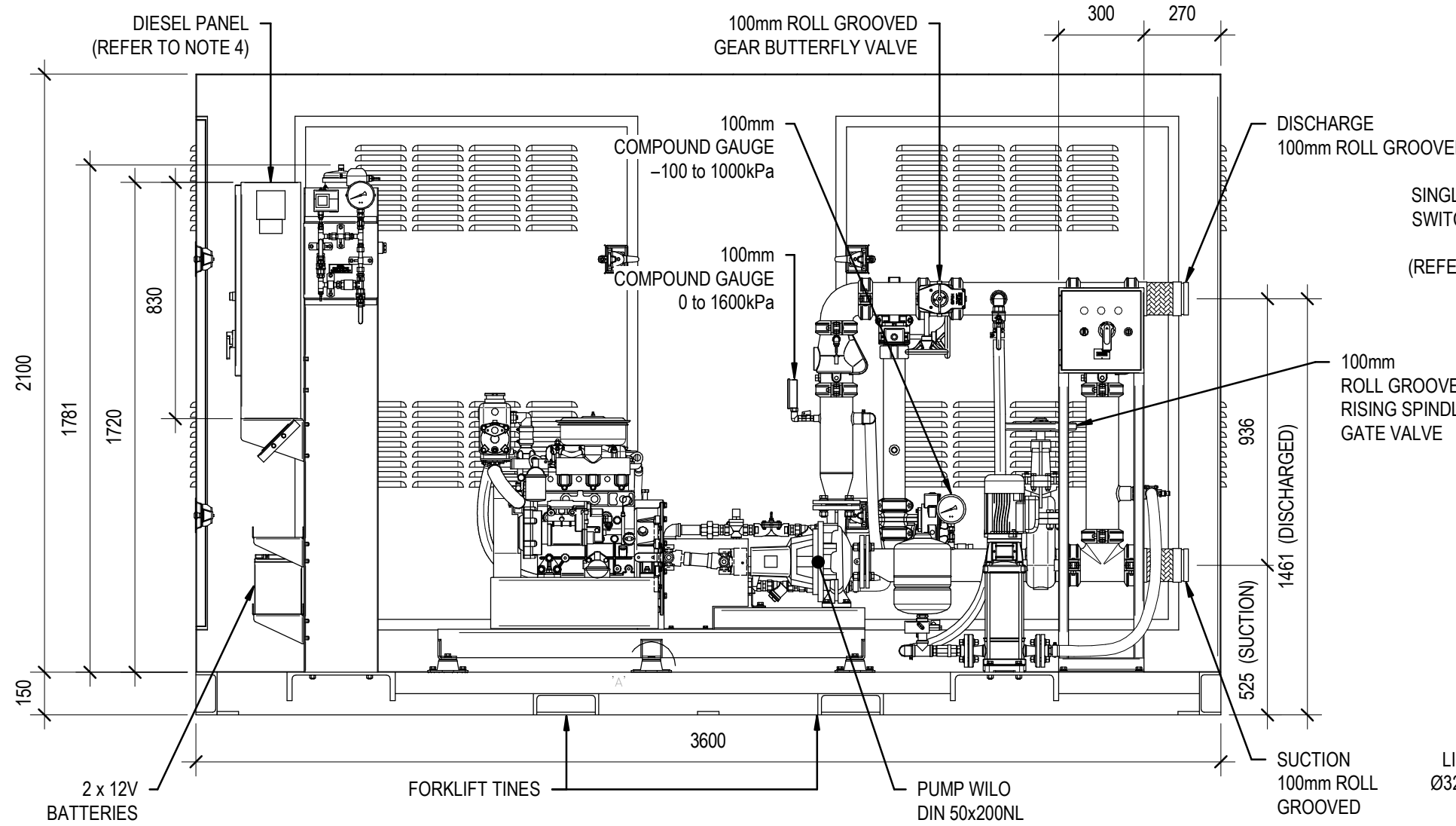
PROPOSED SITE PLAN
SCALE: 1 : 500

<table><tr><td></td><td></td><td></td><td></td></tr><tr><td>E</td><td>ISSUED FOR TENDER (AS CLOUDED)</td><td>04.04.25</td><td>GB RE</td></tr><tr><td>D</td><td>ISSUED FOR TENDER</td><td>06.03.25</td><td>GB RE</td></tr><tr><td>C</td><td>100% SCHEME DESIGN(PHASE 3)</td><td>11.02.25</td><td>JW RE</td></tr><tr><td>B</td><td>80% SCHEME DESIGN (PHASE 3)</td><td>13.12.24</td><td>GPM RE</td></tr><tr><td>A</td><td>50% SCHEME DESIGN (PHASE 3)</td><td>28.11.24</td><td>GPM RE</td></tr><tr><td>Issue:</td><td>Description</td><td>Date</td><td>Drawn Approved</td></tr></table>								E	ISSUED FOR TENDER (AS CLOUDED)	04.04.25	GB RE	D	ISSUED FOR TENDER	06.03.25	GB RE	C	100% SCHEME DESIGN(PHASE 3)	11.02.25	JW RE	B	80% SCHEME DESIGN (PHASE 3)	13.12.24	GPM RE	A	50% SCHEME DESIGN (PHASE 3)	28.11.24	GPM RE	Issue:	Description	Date	Drawn Approved	North Scale SCALE BAR 1:500 PRINT IN COLOUR		Client		Architect FULTON TROTTER ARCHITECTS SUITE 904, LEVEL 9, 28-36 FOVEAUX STREET SURRY HILLS NSW 2010 T: 02 8383 5151 E: sydney@fultontrotter.com.au		ACOR Consultants Pty Ltd Level 8, 55 Market Street Sydney NSW 2000 T: +61 2 9438 5098		Project SCHOOL INFRASTRUCTURE NSW MILTON PUBLIC SCHOOL 9 THOMAS STREET, MILTON NSW		Drawing Title HYDRAULIC SERVICES PROPOSED SITE PLAN <table><tr><td>Drawn</td><td>Designed</td><td>Q.A. Check</td><td>Q.A. Date</td><td>Scale @ A1</td></tr><tr><td>GB</td><td>RE</td><td>RE</td><td>04.04.25</td><td>As indicated</td></tr></table> Project No. NA232021 Drawing No. MPS-ACOR-00-00-DR-H-1200 Issue E				Drawn	Designed	Q.A. Check	Q.A. Date	Scale @ A1	GB	RE	RE	04.04.25	As indicated
E	ISSUED FOR TENDER (AS CLOUDED)	04.04.25	GB RE																																																				
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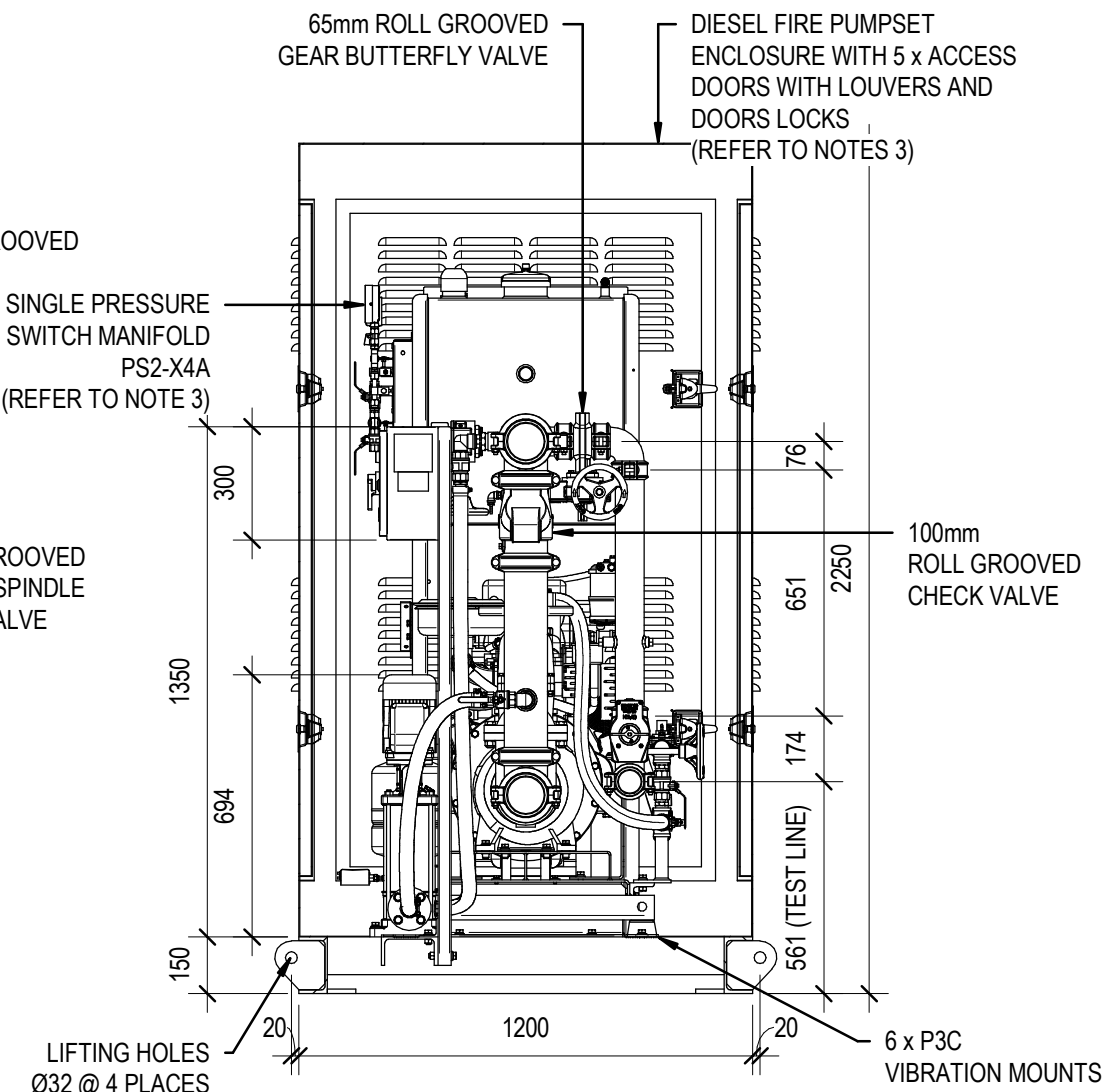
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PLAN VIEW



SIDE ELEVATION



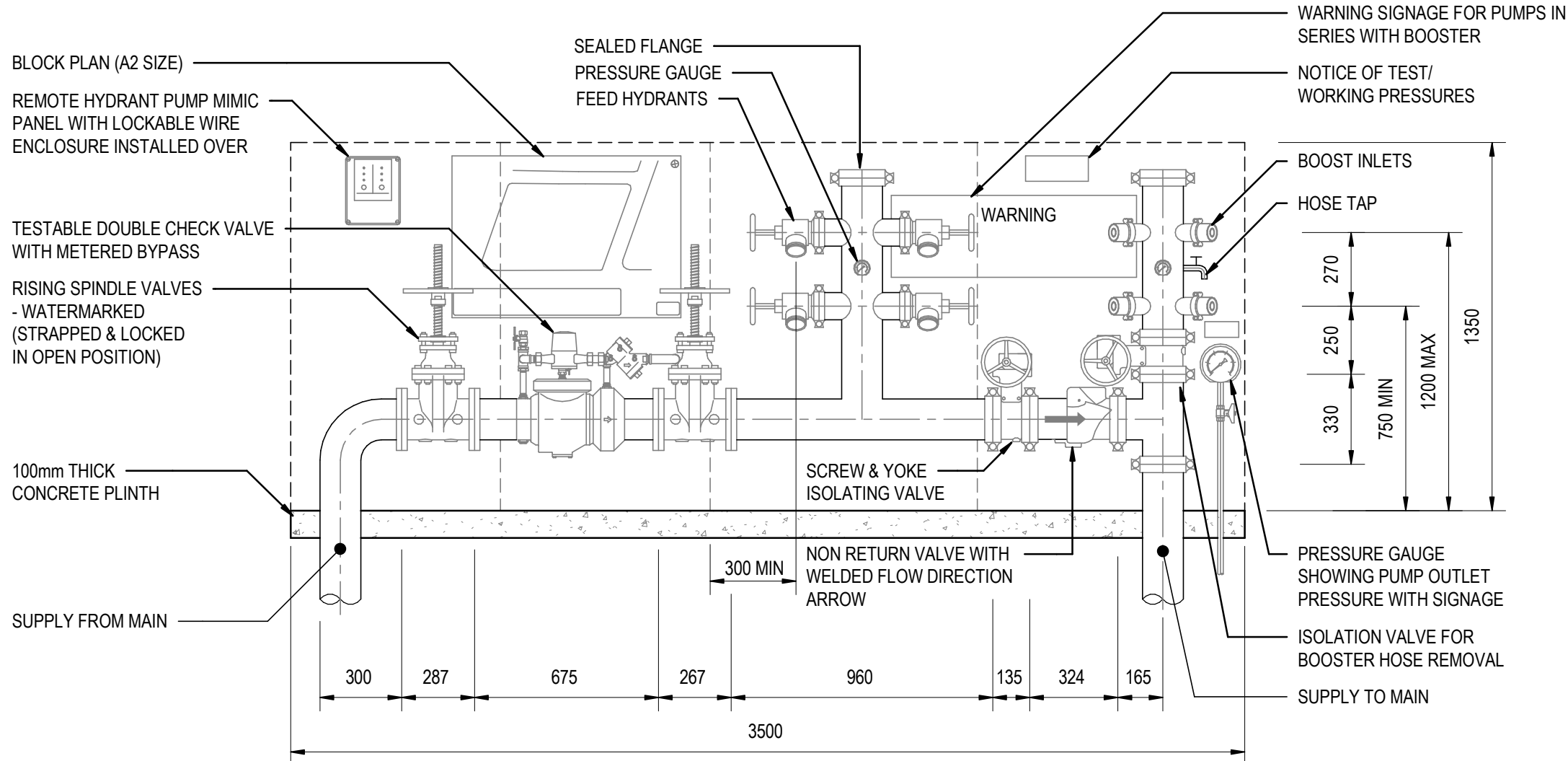
FRONT ELEVATION

FIRE PUMP ENCLOSURE

NOT TO SCALE

NOTES:

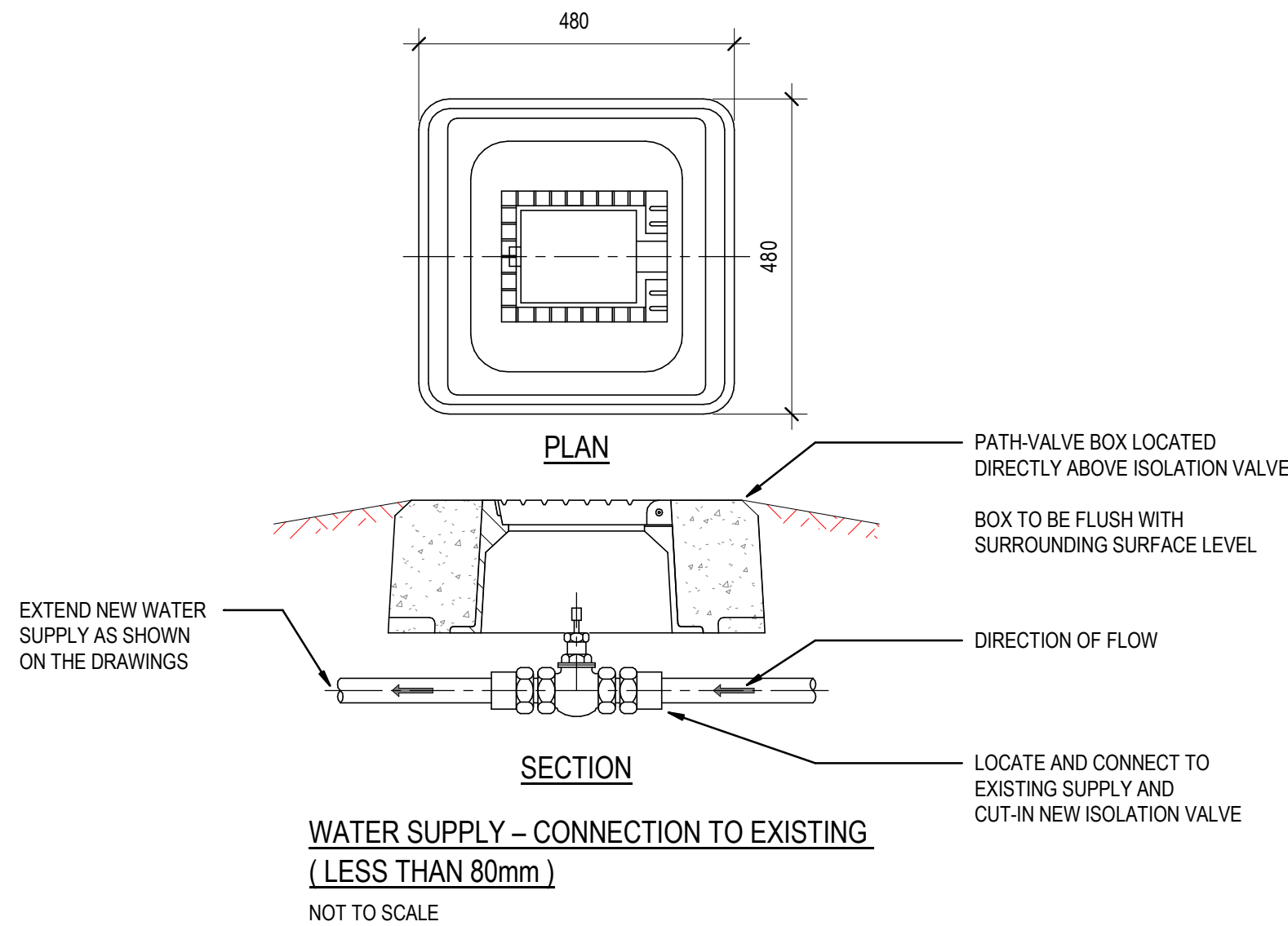
- ENCLOSURE DIMENSIONS:
1350 HIGH x 3500 WIDE x 450mm DEEP
- ENTIRE BOOSTER VALVE ARRANGEMENT IS TO BE
INSTALLED IN ACCORDANCE WITH AS2419.1, AS2419.2 AND AS2419.3
- PROVIDE INSTALLATION DETAILS INCLUDING DIMENSIONS FOR
APPROVAL PRIOR TO CONSTRUCTION
- SUPPORTS NOT SHOWN
- ALL FIRE HYDRANTS INSTALLED WITH STORTZ FITTING



ELEVATION

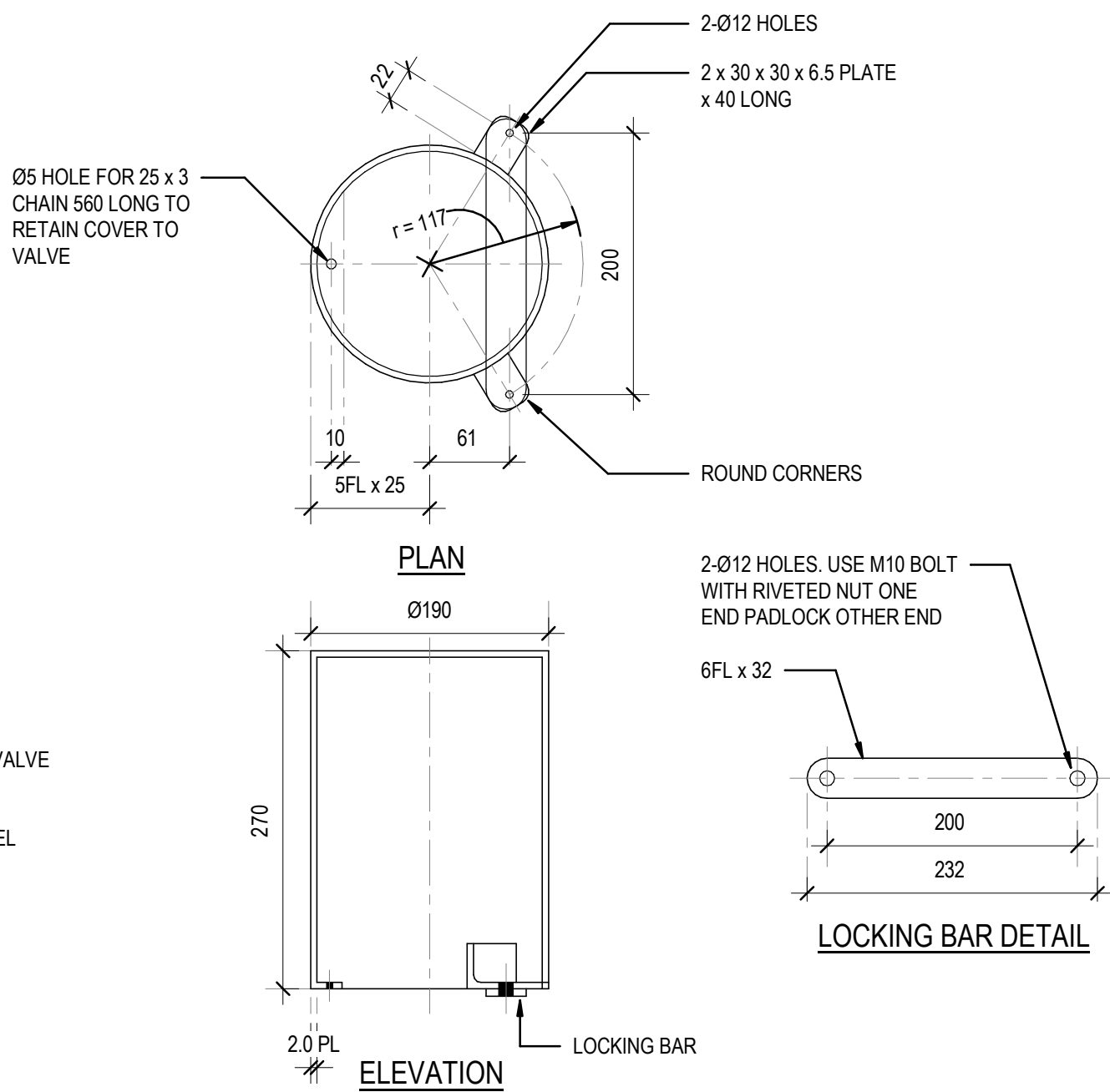
150mm FIRE HYDRANT BOOSTER VALVE WITH HORIZONTAL TESTABLE DOUBLE CHECK VALVE

NOT TO SCALE



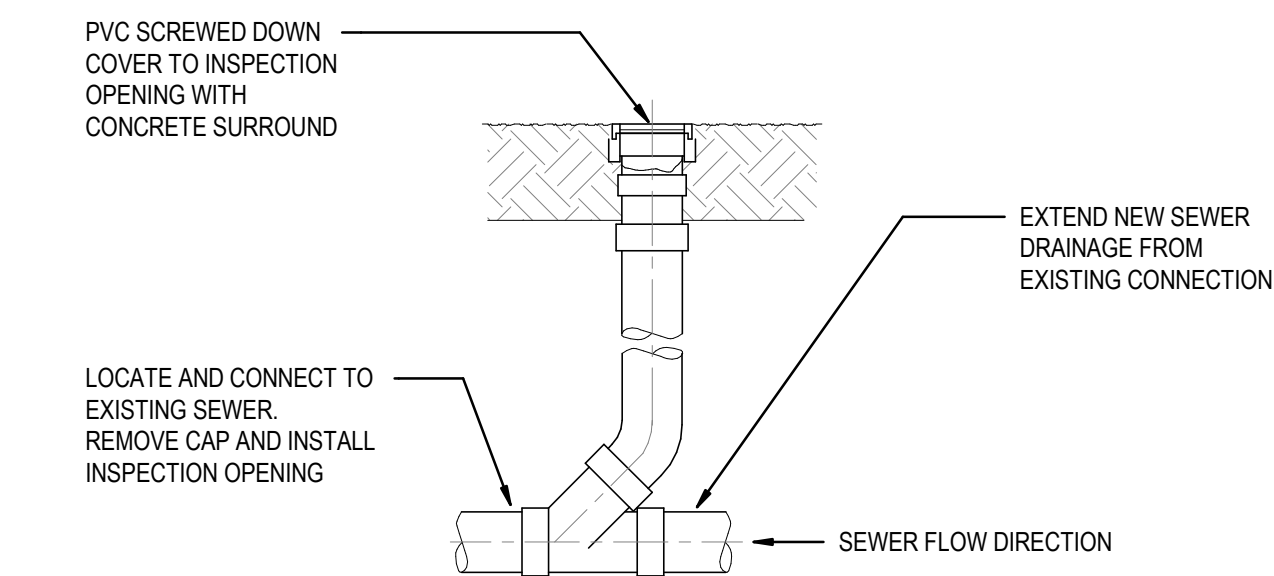
WATER SUPPLY - CONNECTION TO EXISTING (LESS THAN 80mm)

NOT TO SCALE



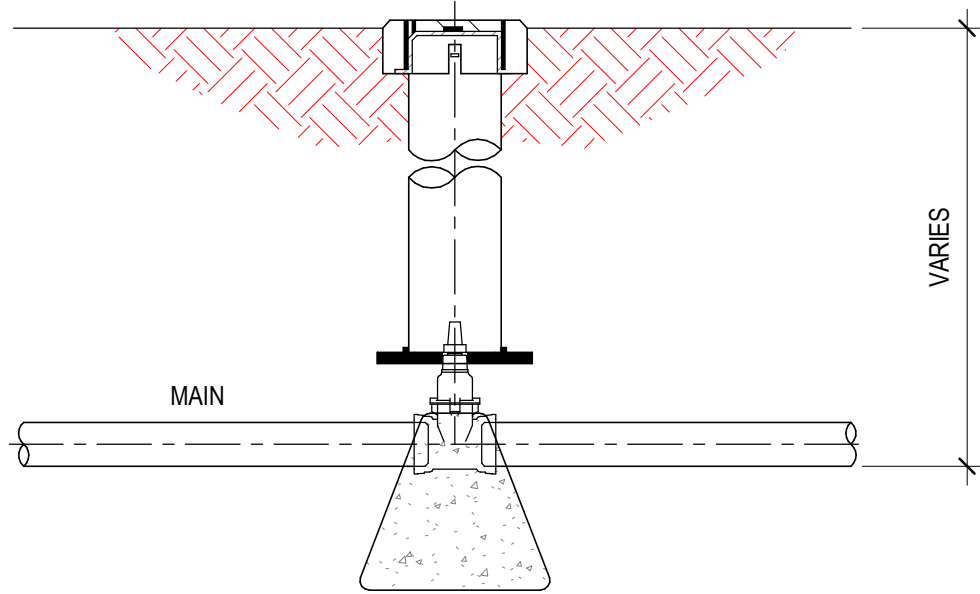
FIRE HYDRANT SECURITY COVER

N.T.S.



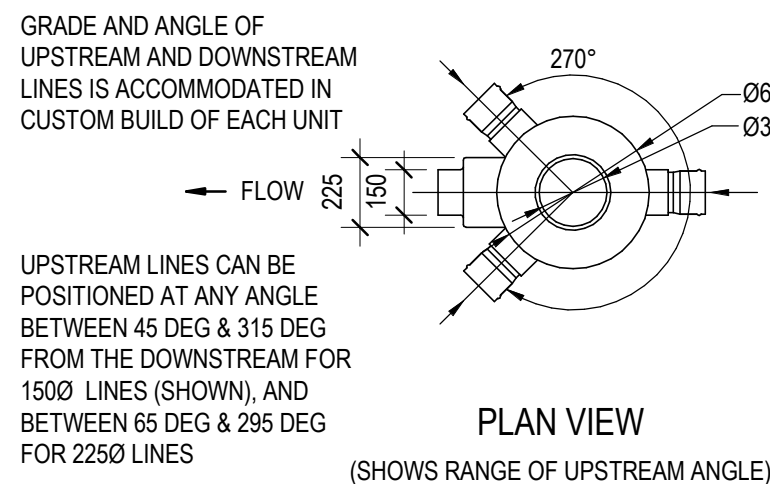
SEWER - CONNECTION TO EXISTING/INSPECTION OPENING

N.T.S.

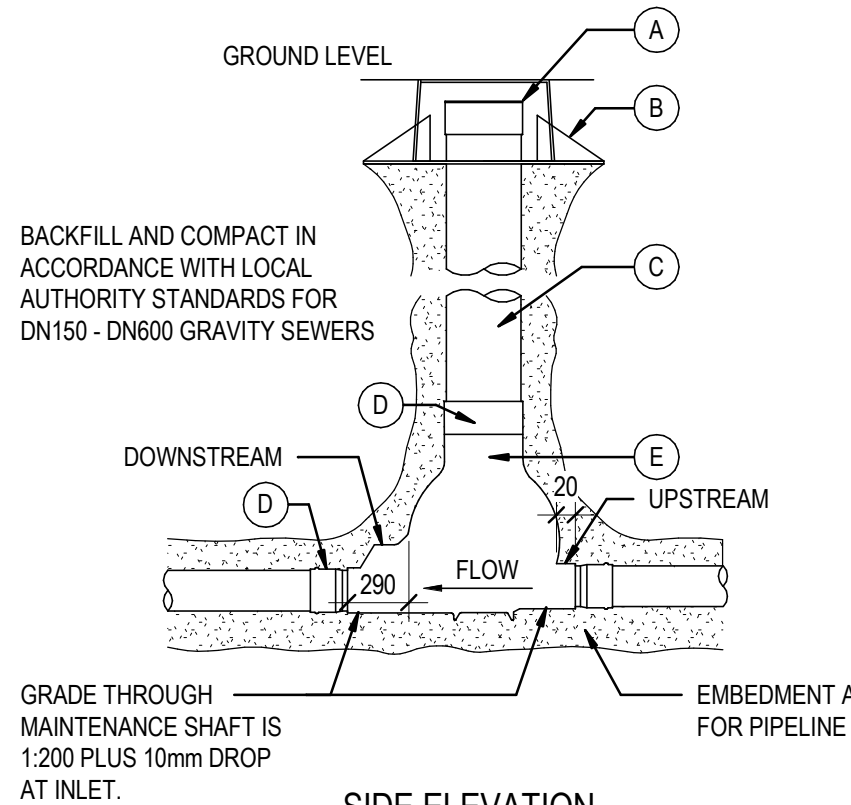


FIRE HYDRANT SUPPLY - CONNECTION TO EXISTING

N.T.S.



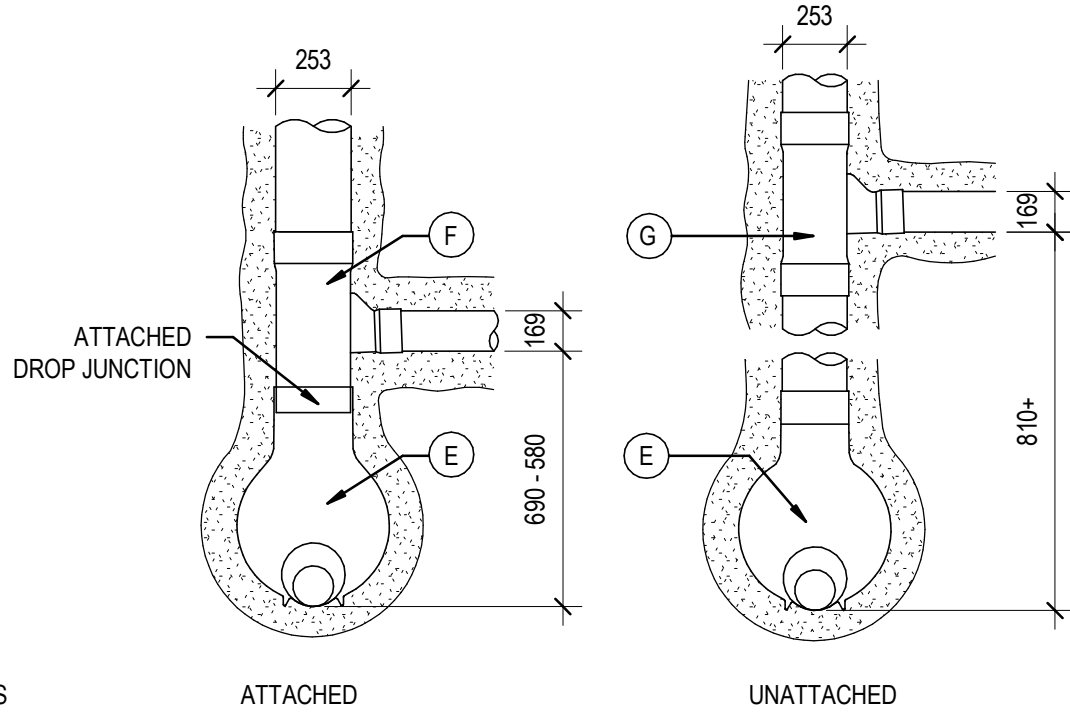
PLAN VIEW
(SHOWS RANGE OF UPSTREAM ANGLE)



SIDE ELEVATION

SEWER - POO PIT

N.T.S.



DROP JUNCTION
TYPES

COMPONENTS		
ITEM	DESCRIPTION	MATERIAL
A	VERTICAL RISER CAP	PVC
B	ACCESS COVER CLASS 'B' 'C' OR 'D'	VARIOUS
C	DN 225Ø PVC OR DN 250Ø PE RISER SHAFT	VARIOUS
D	VARIOUS FITTINGS AVAILABLE	VARIES
E	MAINTENANCE SHAFT BODY	MOPE (POLYETHYLENE)
F	225 - 150 PVC OR 250 - 160 PE DROP JUNCTION	VARIOUS
G	225 - 150 PVC OR 250 - 160 PE DROP JUNCTION	VARIOUS

- GENERAL NOTES:
- ALL DIMENSIONS IN mm.
 - MAINTENANCE SHAFTS CAN ACCOMMODATE MOST CONNECTIONS TYPES FOR 100 - 250mm PIPE. REFER TO MANUFACTURER FOR DETAILS.
 - BACKFILL AND COMPACTION IN ACCORDANCE WITH LOCAL AUTHORITY.
 - CONTRACTOR TO SUPPLY PIPE FROM MAINTENANCE SHAFT TO VERTICAL RISER CAP.
 - CLEARANCE BETWEEN THE VERTICAL RISER CAP AND THE UNDERNEATH OF THE COVER SHOULD BE 150mm.

Issue	Description	Date	Drawn	Approved
C	ISSUED FOR TENDER	06.03.25	GB	RE
B	100% SCHEME DESIGN(PHASE 3)	11.02.25	JW	RE
A	80% SCHEME DESIGN (PHASE 3)	13.12.24	GPM	RE

PRINT IN COLOUR

Architect
FULTON TROTTER ARCHITECTS

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Project
SCHOOL INFRASTRUCTURE NSW
MILTON PUBLIC SCHOOL
9 THOMAS STREET, MILTON NSW

TENDER ISSUE
NOT FOR CONSTRUCTION

Drawing Title
HYDRAULIC SERVICES
DETAILS

Drawn	Designed	Q.A. Check	Q.A. Date	Scale
GB	RE	RE	05.03.25	@ A1 N.T.S.
Project No.	Drawing No.	Issue		
NA232021	MPS-ACOR-00-00-DR-H-9000	C		