

NWM_ESSENDON HYDRAULIC SERVICES

GENERAL NOTES

DRAWINGS

- THESE DRAWINGS ARE A GUIDE ONLY FOR THE LOCATION AND LAYOUT OF THE SERVICE PIPES. ANY EXISTING PIPEWORK SHOWN ON THESE DRAWINGS IS IN ACCORDANCE WITH THE INFORMATION AVAILABLE AND NO RESPONSIBILITY CAN BE ACCEPTED FOR THE CORRECT LOCATION. THESE DRAWINGS DO NOT PURPORT TO INDICATE ALL SERVICES TO AS3500. THE CONTRACTOR SHALL ALLOW FOR ALL WORK TO COMPLY WITH AS3500. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW BY THE SUPERINTENDENT.
- DO NOT SCALE FROM THESE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT DIMENSIONS.
- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL SPECIFICATION AND DRAWINGS FOR THE FINAL POSITION OF FIXTURES AND FITTINGS. THE CONTRACTOR SHALL ALLOW TO SUPPLY AND INSTALL ALL SANITARY FIXTURES, TAPWARE AND ASSOCIATED PIPEWORK, COVER PLATES, ACCESS PANELS, ETC.
- THE CONTRACTOR SHALL SUPPLY 3 SETS OF AS BUILT DRAWINGS BEFORE PRACTICAL COMPLETION WITHIN HARD BACK FOLDER WITH COVER SHEET AND AN INDEX INCLUDING INFORMATION ON FIXTURES, COPY OF P.I.C. CERTIFICATE, ETC ALL WITHIN PLASTIC SHEETS, COMPLETE WITH ONE COPY OF THE AS BUILT CONDITIONS ON AUTOCAD 2010 DISC.

LEVELS

- THE CONTRACTOR IS TO VERIFY ALL INVERT LEVELS, SURFACE LEVELS, CLEARANCES AND COVERS ARE CORRECT AND OBTAINABLE BEFORE COMMENCEMENT OF ANY WORKS.
- THE CONTRACTOR IS TO VERIFY THE POSITIONS OF ALL DRAINAGE PIPES AND SERVICE LINES AND THAT THE INVERT AND SURFACE LEVELS ARE CORRECT BEFORE COMMENCING WORKS. ACCESSORIES. REFER TO ARCHITECTURAL SPECIFICATION FOR SCHEDULE.

REGULATIONS

- ALL WORK IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE AUSTRALIAN STANDARDS, PLUMBING AND DRAINAGE ACT, AND TO THE APPROVAL OF THE PERSON IN CHARGE.
- ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARD PLUMBING AND DRAINAGE REGULATION, AND THE RELEVANT AUSTRALIAN STANDARDS. THE CONTRACTOR SHALL PROVIDE A CERTIFICATE OF COMPLIANCE AT PRACTICAL COMPLETION SHOWING SATISFACTORY COMPLETION OF SERVICES AND PLUMBING INDUSTRY COMMISSION CERTIFICATE OF COMPLIANCE.

EXISTING SERVICES

- ALL EXISTING SERVICES WHICH ARE NO LONGER REQUIRED SHALL BE REMOVED OR SEALED OFF.

FEES

- THE CONTRACTOR IS TO PAY ALL FEES IN ASSOCIATION WITH LOCAL AUTHORITY APPROVALS, CONNECTION AND CONSTRUCTION COSTS AS WELL AS REQUIRED TESTS AND INSPECTIONS FOR THIS PROJECT.

SITE CONSTRAINTS

- THE CONTRACTOR IS TO MAKE THEMSELVES FAMILIAR WITH ALL SITE CONSTRAINTS THROUGH A SITE VISIT PRIOR TO FINAL TENDER SUBMISSION.

CO-ORDINATION

- THE CONTRACTOR SHALL CO-ORDINATE ALL PIPEWORK WITH THE OTHER TRADE SERVICES PRIOR TO COMMENCEMENT OF ANY WORK.

SHUTDOWNS AND INTERFACES

- THE HYDRAULIC SERVICES CONTRACTOR THROUGH THE HEAD CONTRACTOR, SHALL BE FULLY RESPONSIBLE FOR PROGRAMMING ALL WORKS AND INTERFACES WITH EXISTING SERVICES TO MEET THE CLIENT'S OPERATIONAL REQUIREMENTS. THE HYDRAULIC SERVICES CONTRACTOR SHALL COMPLETE WORKS IN OCCUPIED SPACES, REQUIRED SHUTDOWNS AND INTERFACE WORKS OUT OF HOURS AS DIRECTED BY THE CLIENT.

HOT & COLD WATER SUPPLY

RETICULATION

- ALL HOT AND COLD WATER RETICULATION PIPE WORK SHALL BE IN COPPER & OF THE SIZE INDICATED, WITH A MINIMUM OF DN20, WITH FINAL CONNECTION TO FIXTURE'S IN REHAU. (PIPE SIZES INDICATED ON DRAWINGS ARE IN COPPER, PIPE SIZES WILL NEED TO BE CONVERTED IN ACCORDANCE WITH AS 3500)
- ALL HOT & COLD WATER RETICULATION SHALL BE RUN IN THE CEILING SPACE OR THE CAVITY SPACE OF THE WALLS.
- ALL BASINS AND SINKS ARE TO BE FITTED WITH MINI STOPS TAPS BELOW THE FIXTURE.

VALVES

- LOCATION OF ISOLATING VALVES ARE SHOWN DIAGRAMMATICALLY ONLY TO BE LOCATED ON SITE IN AN ACCESSIBLE POSITION. INDIVIDUAL ISOLATING VALVES TO FIXTURES TO BE Ø15MM UNO.
- ALL BRANCHES FROM MAIN LINES SHALL BE FITTED WITH ISOLATING VALVES.

SANITARY PLUMBING & DRAINAGE

GENERAL

- SEWER DRAINAGE SHALL BE UPVC (0°C - 60°C), HDPE (0°C - 80°C) OR 316 STAINLESS STEEL (HIGH TEMPERATURE DISCHARGE (0°C - 100°C)) & INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL PIPEWORK AND FITTING, ELBOWS ETC SHALL BE SUPPLIED BY ONE MANUFACTURER.
- ALL PIPEWORK SUPPORT AND EXPANSION PROVISIONS SHALL BE IN ACCORDANCE WITH AS 3500.
- ALL INTERNAL SUSPENDED SANITARY DRAINAGE & STACKS SHALL BE WRAPPED WITH 25MM THICK ACOUSTIC INSULATION, SOUNDLAG OR EQUAL TO MANUFACTURER'S RECOMMENDATIONS.
- ALL EXPOSED PIPEWORK SHALL BE CHROME PLATED.

MATERIALS

- INTERNAL TO BUILDING: UPVC CLASS DWV TO AS/NZS 1260 SOLVENT WELDED JOINTS. VENT: UPVC CLASS DWV TO AS/NZS 1260 SOLVENT WELDED JOINTS.
- ALL EXPOSED PIPEWORK SHALL BE CHROME PLATED.

FIXTURES AND FITTINGS

- ALL FIXTURES, FITTINGS AND ASSOCIATED MATERIALS AND COSTS REQUIRED FOR INSTALLATION AND CORRECT OPERATION SHALL BE PROVIDED BY THE CONTRACTOR.

LINE TYPE, LEGENDS & SYMBOL ABBREVIATION

	EXISTING SANITARY PLUMBING
	PROPOSED SANITARY PLUMBING
	TRADE WASTE
	EXISTING VENT
	PROPOSED VENT
	EXISTING HOT WATER SUPPLY
	PROPOSED HOT WATER SUPPLY
	EXISTING COLD WATER SUPPLY
	PROPOSED COLD WATER SUPPLY
	EXISTING STORMWATER SUPPLY
	PROPOSED STORMWATER SUPPLY
	EXISTING OVERFLOW SUPPLY
	PROPOSED OVERFLOW SUPPLY
	NON PORTABLE COLD WATER
	PROPOSED GAS SUPPLY

	THERMOSTATIC MIXING VALVE
	PIPEWORK RISE / DROP
	ALTERING PIPE SIZE
	AIR ADMITTANCE VALVE
	ISOLATING BALL / GATE VALVE
	ISOLATING BALL VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE (NON RETURN VALVE)
	PIPEWORK ADAPTOR
	BOUNDARY TRAP
	SHOWER OUTLET
	TUNDISH
	MAG IN WALL TUNDISH
	FLOOR WASTE GULLY
	RAINWATER OUTLET
	RPZD VALVE IN WALL BOX
	HOT WATER FLOW DIRECTION
	PUMP
	INSPECTION OPENING
	WATER METER
	PRESSURE LIMITING VALVE (PLV)
	SEWER REFLUX VALVE
	HOSE BIB TAP
	BALANCING VALVE
	DUAL HEAD MILLCOCK
	FIRE HOSE REEL
	SEALED END
	PIPEWORK CONTINUATION
	THERMOSTATIC MIXING VALVE

	DENOTES SERVICE RISING
	DENOTES SERVICE TYPE
	DENOTES SERVICE SIZE
	DENOTES SERVICE DROPPING

LEGEND OF SYMBOL & ABBREVIATIONS

AAV	AIR ADMITTANCE VALVE
ADT.	PIPEWORK ADAPTOR
AFFL	ABOVE FINISHED FLOOR LEVEL
B	BASIN FIXTURE
BTH	BATH FIXTURE
BW	BOILING WATER UNIT
C/S C/SPACE	CEILING SPACE
C.SK	CLEANERS SINK FIXTURE
CV	CHECK VALVE
CWM	CLOTHES WASHING MACHINE
CW	DOMESTIC COLD WATER
DCV	DOUBLE CHECK VALVE
DG	DISCONNECTOR GULLY
DP	DOWNPIPE
DV	DRAINAGE VENT
DWM	DISH WASHING MACHINE
EJ	EXPANSION JOINT
e.....	EXISTING SERVICES (SYMBOL INCLUDED)
FFL	FINISHED FLOOR LEVEL
FJ	FLEXIBLE JOINT CONNECTION
FWG	FLOOR WASTE GULLY
FWT	FLOOR WASTE TRENCH
HB	HOSE BIB TAP
H/L HL	HIGH LEVEL PIPE
HW	DOMESTIC HOT WATER
HWF	HOT WATER FLOW
HWR	HOT WATER RETURN
HWU	HOT WATER UNIT
NPWCW	NON PORTABLE COLD WATER
I.O	INSPECTION OPENING
I.O.S	INSPECTION OPENING TO SURFACE
L/L	LOW LEVEL
L.TR	LAUNDRY TROUGH FIXTURE
ORG	OVERFLOW RELIEF GULLY
O/F	OVERFLOW
PE	POLYETHYLENE PIPE MATERIAL
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE
RPZD	REDUCED PRESSURE ZONE DEVICE
RV	RELIEF VENT
SE	SEALED END / CAPPED END
SHR	SHOWER FIXTURE
SK	SINK FIXTURE
SP	SILT PIT
SRV	SEWER REFLUX VALVE
SW	STORMWATER
TD	TUNDISH
TMV	THERMOSTATIC MIXING VALVE
TR	TROUGH FIXTURE
TYP.	TYPICAL
UPVC	UNPLASTICISED POLYVINYL CHLORIDE
V	VENT

NOTES:

- SUPPLY AND INSTALL APPROVED TYPE FIRE COLLARS TO ALL PENETRATIONS THROUGH FIRE RATED MEMBERS.
- ALLOW TO INSTALL EXPANSION JOINTS TO ALL FORMS OF PLASTIC WASTE PIPES & STACKS, TO MANUFACTURER'S AND IN ACCORDANCE WITH AS.3500.
- ALL SANITARY WASTE PIPES ARE TO BE INSTALLED STARTING HARD UP TO THE UNDERSIDE OF THE CONCRETE SLAB. WASTE PIPES ARE TO BE RUN WITHIN THE "BEAM SPACE" AND ONLY ROLL UNDER THE BEAM WHERE REQUIRED
- UNLESS NOTED OTHERWISE CONNECTIONS TO THE SANITARY FIXTURES AND FITTINGS SHALL COMPLY WITH AS3500 AND WASTE PIPE

DIAMETERS SHALL BE:

- BASINS - 40mm DIAMETER
- SINKS - 50mm DIAMETER
- CLOSETS - 100mm DIAMETER
- FLUSHING SINKS - 100mm DIAMETER
- URINALS - 50mm DIAMETER
- SHOWERS - 80mm DIAMETER
- FLOOR WASTES - 100mm DIAMETER

- FOR FINAL LOCATION OF SANITARY FIXTURES, REFER TO ARCHITECTS PENETRATION DRAWINGS
- TYPICALLY SERVICES PENETRATE THROUGH ACOUSTIC WALLS, REFER TO ACOUSTIC CONSULTANTS REPORT AND ARCHITECTURAL DRAWING AA16-0001.
- TYPICALLY PIPES PENETRATE THROUGH PRIMARY STEEL AS PER STRUCTURAL DRAWING S551. REFER TO DRAWINGS TO QUANTIFY INSTANCES.

DRAWING INDEX

H00	DRAWING INDEX, LEGEND & GENERAL NOTES
H01	SITE PLAN LAYOUT
H02	GROUND FLOOR PLAN DRAINAGE LAYOUT
H03	GROUND FLOOR PLAN WATER LAYOUT
H04	FIRST FLOOR PLAN DRAINAGE LAYOUT
H05	FIRST FLOOR PLAN WATER LAYOUT
H06	ROOF PLAN LAYOUT
H07	STANDARD DETAILS SH 1 OF 3
H08	STANDARD DETAILS SH 2 OF 3
H09	STANDARD DETAILS SH 3 OF 3

TENDER ISSUE

Rev	Date	Amendment Description	By	Chk
DD	16.04.2024	DESIGN DEVELOPMENT	EET	FG
T1	17.04.2024	TENDER ISSUE	EET	FG
T2	10.05.2024	CO-LAB REVIEW	EET	FG

Architect

{Co-lab}
ARCHITECTURE

2/21 Waterloo Road,
Collingwood
T: (03) 9038 8808
E: admin@colabarchitects.com.au
ABN: 97 150 968 497

Client

Northwest Montessori
Preschool

Consulting Engineer

BLUEPRINT ENGINEERING & DEVELOPMENTS PTY LTD

LEVEL 2/627 CHAPEL ST,
SOUTH YARRA VIC 3141
E: info@bdeco.com.au
T: (03) 9038 5404

Project

NWM_ESSENDON

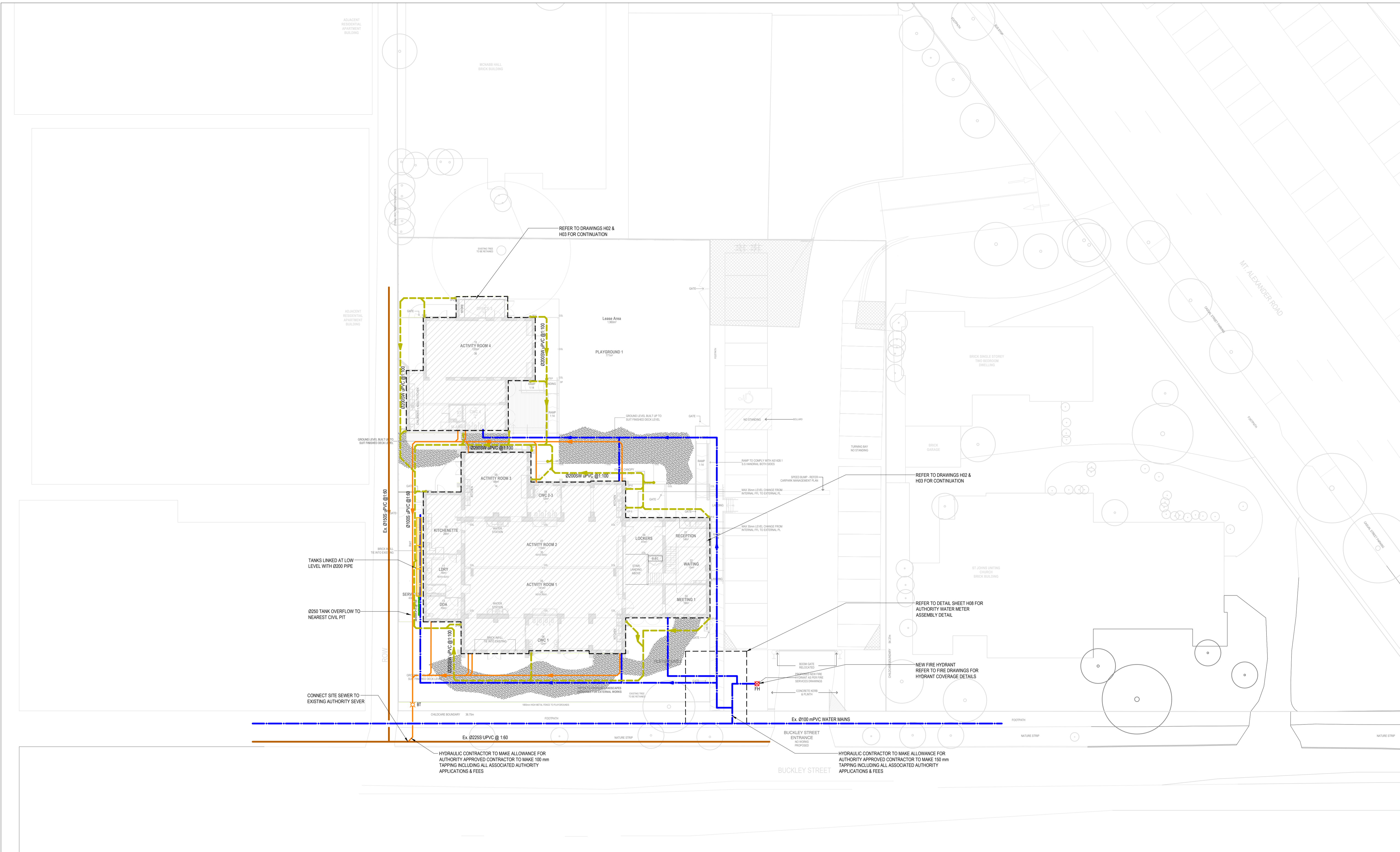
853 MT. ALEXANDER ROAD
ESSENDON VIC 3040

Drawing Title

HYDRAULIC SERVICES

DRAWING INDEX, LEGEND
& GENERAL NOTES

Drawn	EET
Checked	FG
Approved	FG
Date	10.05.2024
Scale @ A1	N.T.S
Sheet No.	-
Job No.	2024 - 011
Drawing No.	H00
Revision	T2




TENDER ISSUE

Rev	Date	Amendment Description	By	Chk
DD	16.04.2024	DESIGN DEVELOPMENT	EET	FG
T1	17.04.2024	TENDER ISSUE	EET	FG
T2	10.05.2024	CO-LAB REVIEW	EET	FG

Architect
{Co-lab}
 ARCHITECTURE
 2/21 Waterloo Road,
 Collingwood
 T: (03) 9038 8808
 E: admin@colabarchitects.com.au
 ABN: 97 150 968 497

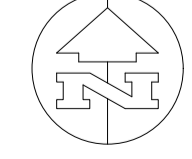
Client

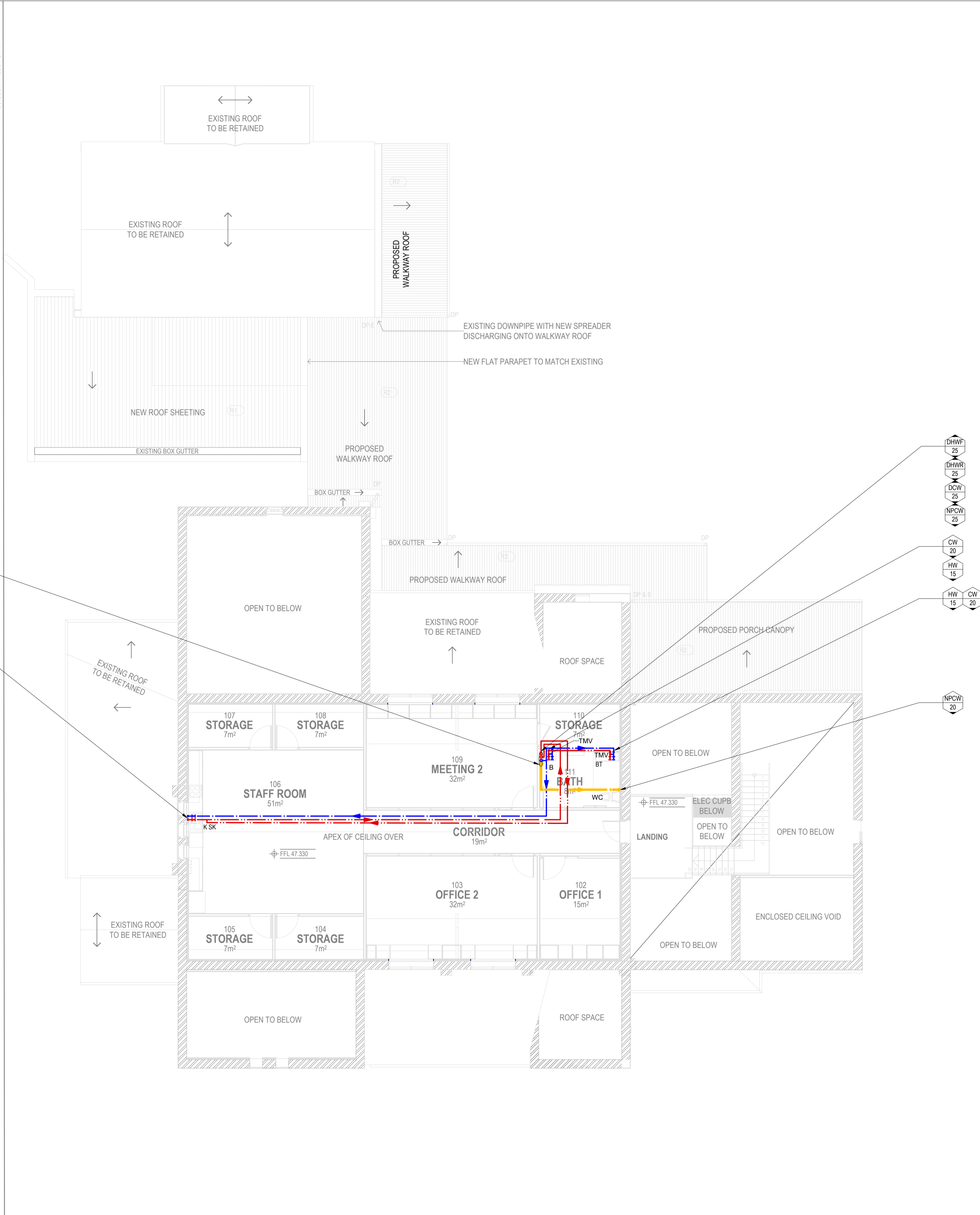
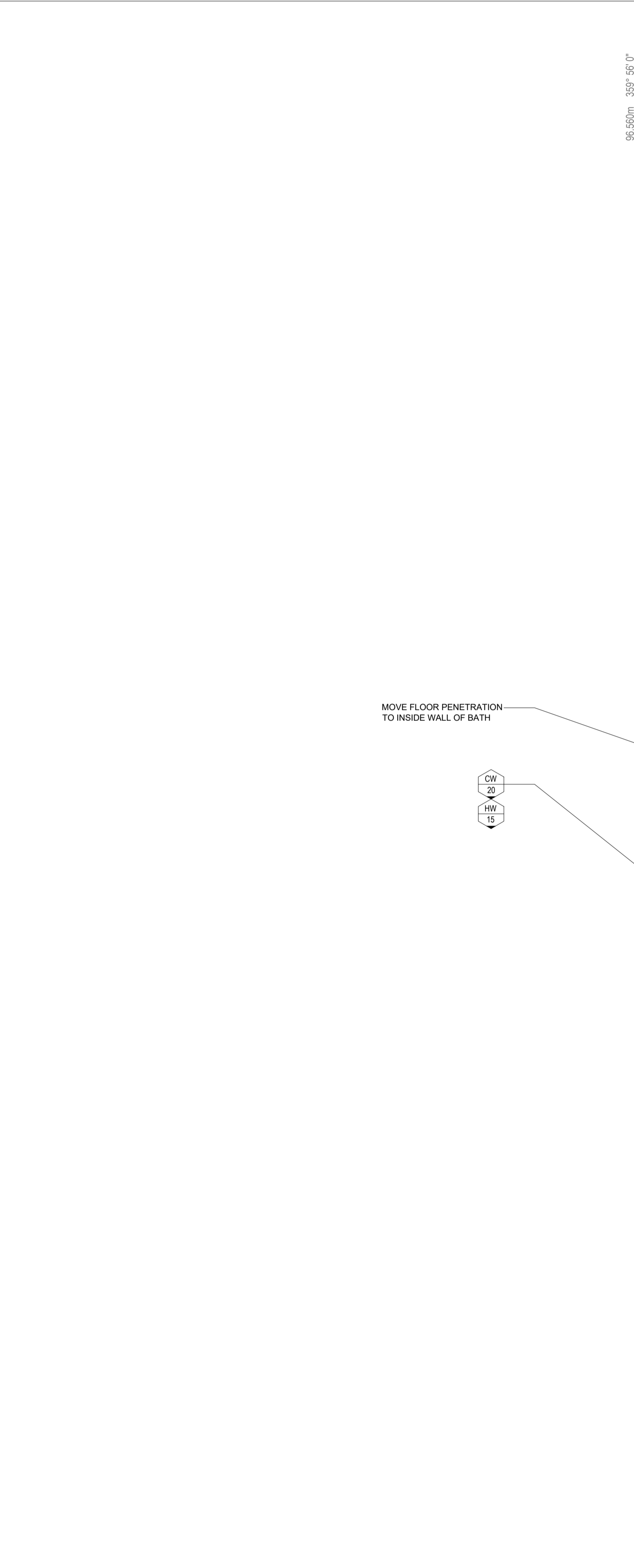
**Northwest Montessori
 Preschool**

Consulting Engineer

BE CONSULTING ENGINEERS
 BLUEPRINT ENGINEERING & DEVELOPMENTS PTY LTD
 LEVEL 2/627 CHAPEL ST,
 SOUTH YARRA VIC 3141
 E: info@beez.com.au
 T: (03) 9038 5404

Project
NWM_ESSENDON
 853 MT. ALEXANDER ROAD
 ESSENDON VIC 3040

Drawing Title
HYDRAULIC SERVICES
 SITE PLAN LAYOUT

	Drawn	EET			
	Checked	FG			
	Approved	FG			
Date	10.05.2024	Scale @ A1	1:200	Sheet No.	-
Job No.	2024 - 011	Drawing No.	H01	Revision	T2



TENDER ISSUE

Rev	Date	Amendment Description	By	Chk
DD	16.04.2024	DESIGN DEVELOPMENT	EET	FG
T1	17.04.2024	TENDER ISSUE	EET	FG
T2	10.05.2024	CO-LAB REVIEW	EET	FG

Architect
{Co-lab}
 ARCHITECTURE
 2/21 Waterloo Road,
 Collingwood
 T: (03) 9038 8808
 E: admin@colabarchitects.com.au
 ABN: 97 150 968 497

Client

Northwest Montessori Preschool

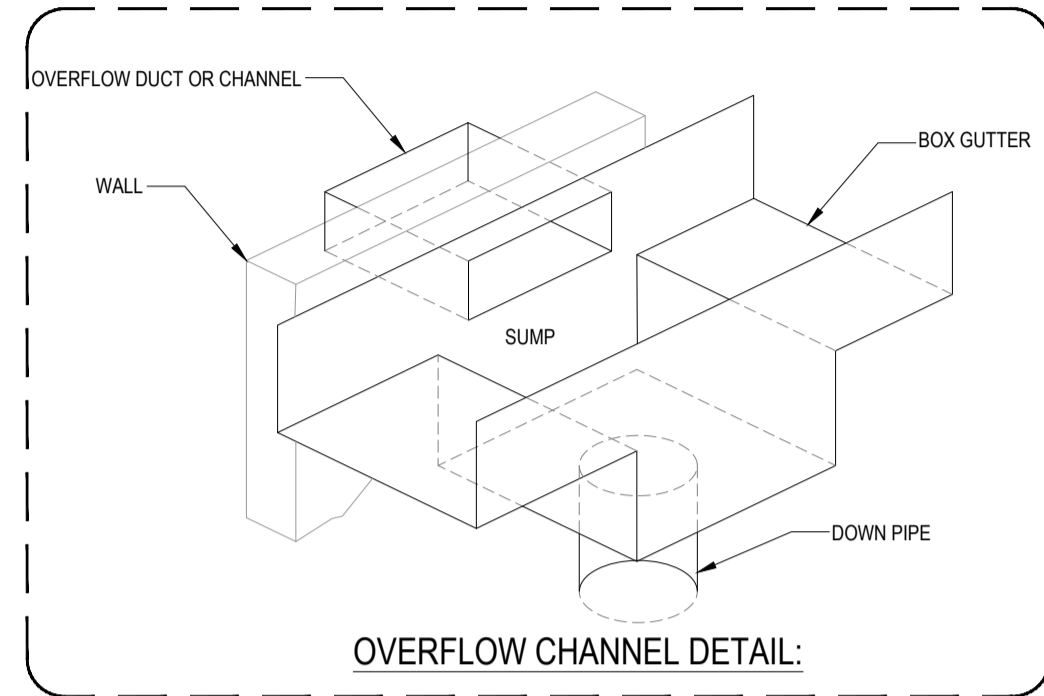
Consulting Engineer

BLUEPRINT ENGINEERING & DEVELOPMENTS PTY LTD
 LEVEL 2/627 CHAPEL ST,
 SOUTH YARRA VIC 3141
 E: info@bdeco.com.au
 T: (03) 9028 5404

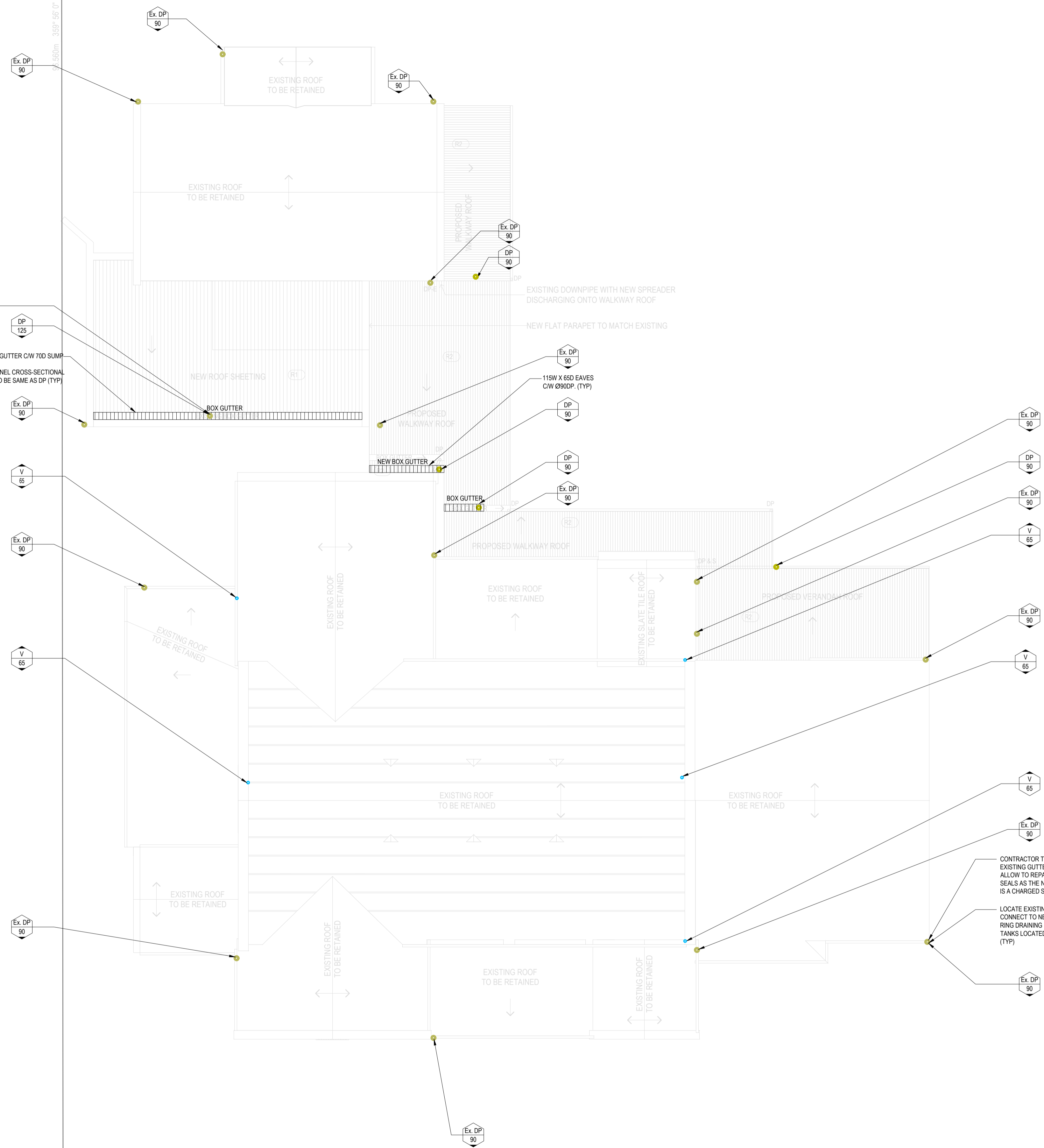
Project
NWM ESSENDON
 853 MT. ALEXANDER ROAD
 ESSENDON VIC 3040

Drawing Title
HYDRAULIC SERVICES
 EXTENSION FF PLAN
 WATER LAYOUT

	Drawn	EET			
	Checked	FG			
	Approved	FG			
Date	10.05.2024	Scale @ A1	1:100	Sheet No.	-
Job No.	2024 - 011	Drawing No.	H05	Revision	T2



450W x 120D BOX GUTTER C/W 700 SUMP AND Ø125DP. OVERFLOW CHANNEL CROSS-SECTIONAL OPENING AREA TO BE SAME AS DP (TYP)



CONTRACTOR TO CHECK THE CONDITION OF EXISTING GUTTERS AND DOWNPIPES AND ALLOW TO REPAIR AND PROVIDE AIRTIGHT SEALS AS THE NEW DRAINAGE SYSTEM IS A CHARGED SYSTEM (TYP)

LOCATE EXISTING DOWNPIPES AND CONNECT TO NEW STORMWATER MAIN RING DRAINING INTO THE RAINWATER TANKS LOCATED IN THE PLANT AREA (TYP)

TENDER ISSUE

Rev	Date	Amendment Description	By	Chk
DD	16.04.2024	DESIGN DEVELOPMENT	EET	FG
T1	17.04.2024	TENDER ISSUE	EET	FG
T2	10.05.2024	CO-LAB REVIEW	EET	FG

Architect
{Co-lab}
 ARCHITECTURE
 2/21 Waterloo Road,
 Collingwood
 T: (03) 9038 8808
 E: admin@colabarchitects.com.au
 ABN: 97 150 968 497

Client

Northwest Montessori Preschool

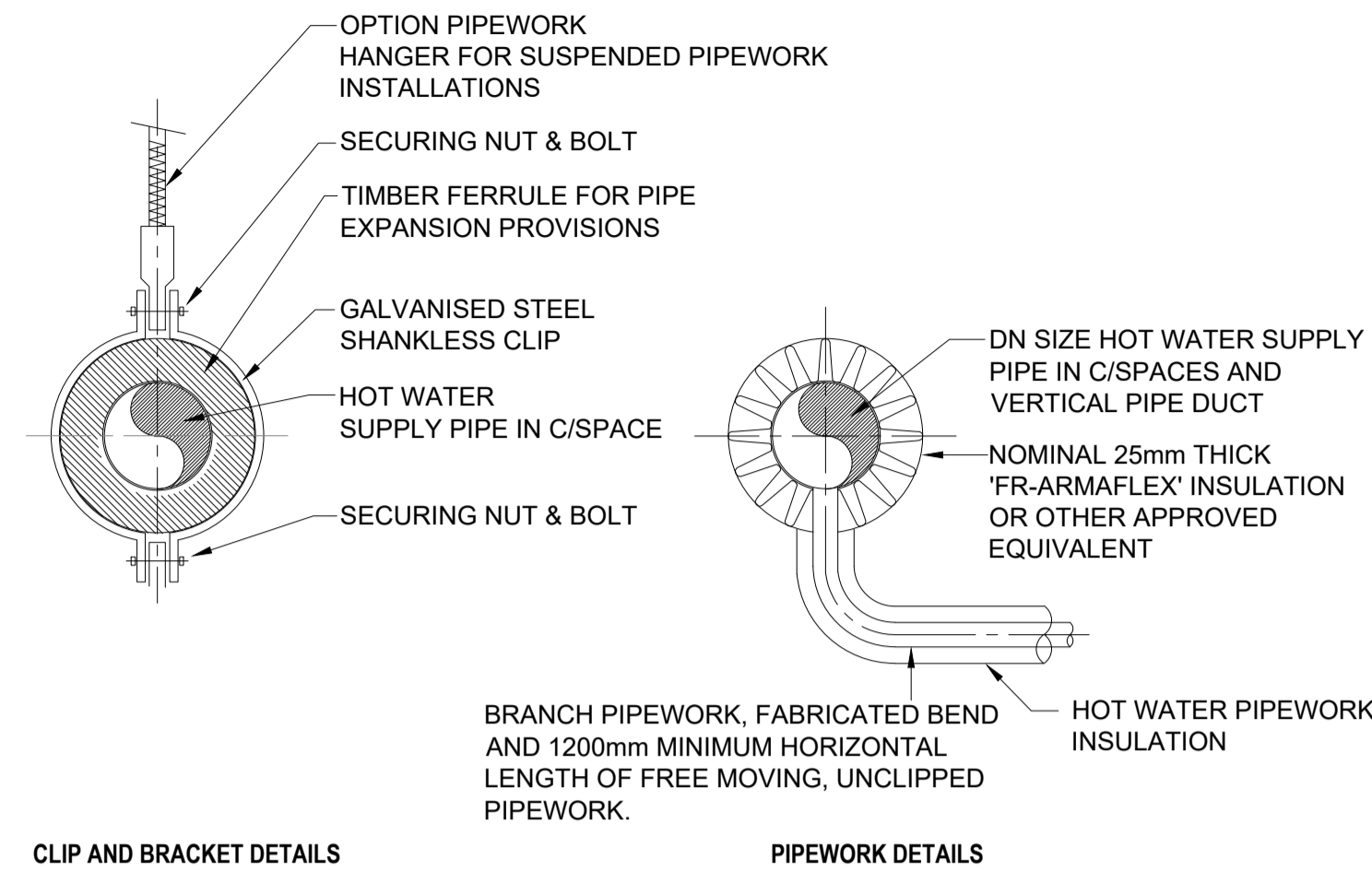
Consulting Engineer

BE CONSULTING ENGINEERS
 BLUEPRINT ENGINEERING & DEVELOPMENTS PTY LTD
 LEVEL 2/627 CHAPEL ST,
 SOUTH YARRA VIC 3141
 E: info@bece.com.au
 T: (03) 9038 5404

Project
NWM ESSENDON
 853 MT. ALEXANDER ROAD
 ESSENDON VIC 3040

Drawing Title
HYDRAULIC SERVICES
 ROOF PLAN LAYOUT

	Drawn	EET			
	Checked	FG			
	Approved	FG			
Date	10.05.2024	Scale @ A1	1:100	Sheet No.	-
Job No.	2024 - 011	Drawing No.	H06	Revision	T2



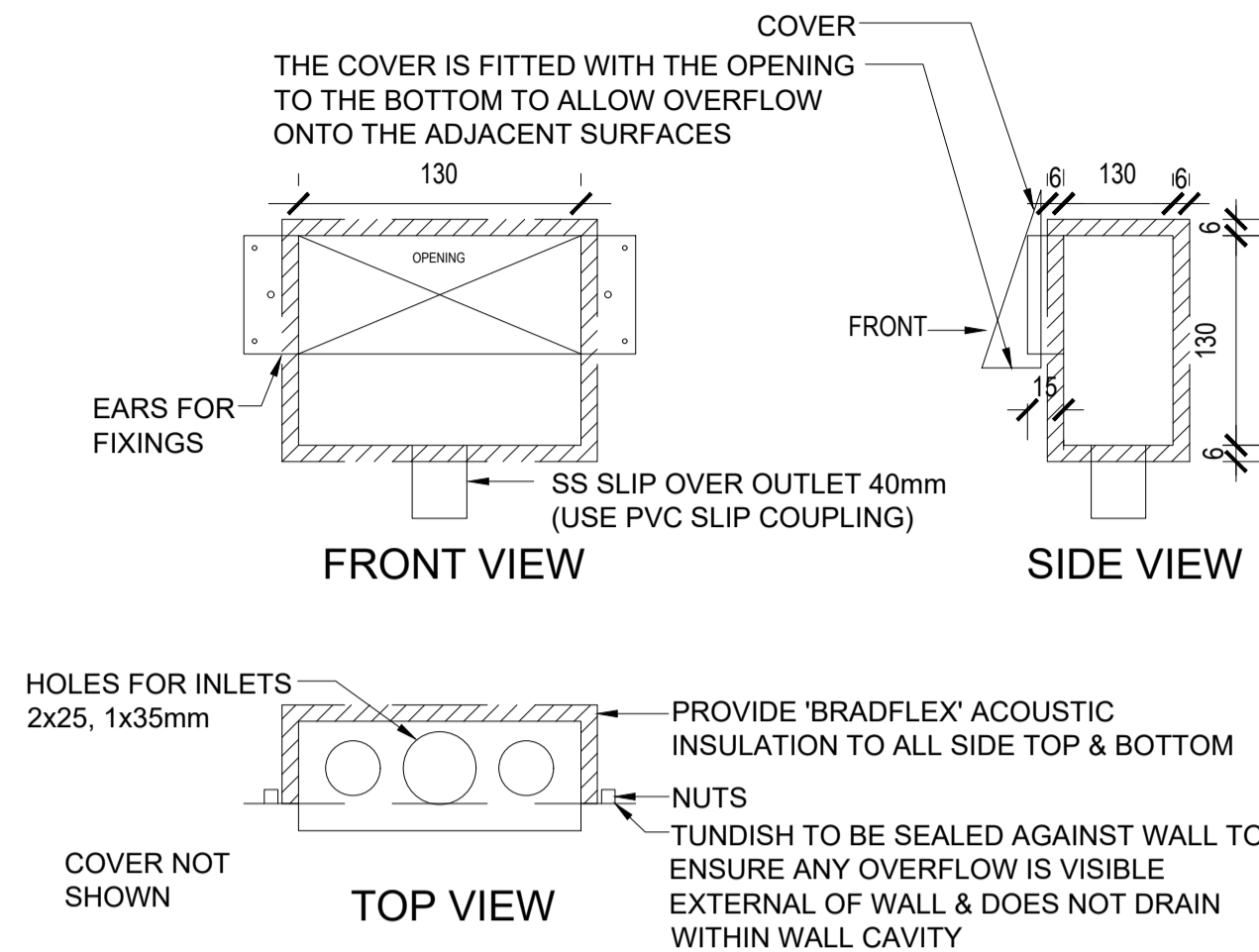
CLIP AND BRACKET DETAILS

PIPEWORK DETAILS

FINAL PIPEWORK ALIGNMENT ABOVE CEILING GRIDS TO BE DETERMINED AFTER CO-ORDINATION WITH ALL OTHER BUILDING SERVICES. CLIP HEIGHTS TO BE ADJUSTED ACCORDINGLY.

DOMESTIC HOT WATER PIPEWORK RETICULATIONS DETAIL
NOT TO SCALE

DOMESTIC COLD WATER PIPEWORK SUPPORTS SIMILAR EXCLUDING TIMBER FERRULE AND THE USE OF RUBBER INSERT PROPRIETARY TYPE CLIPS ARE ACCEPTABLE FOR USE ON THE COLD WATER PIPEWORK INSTALLATIONS.

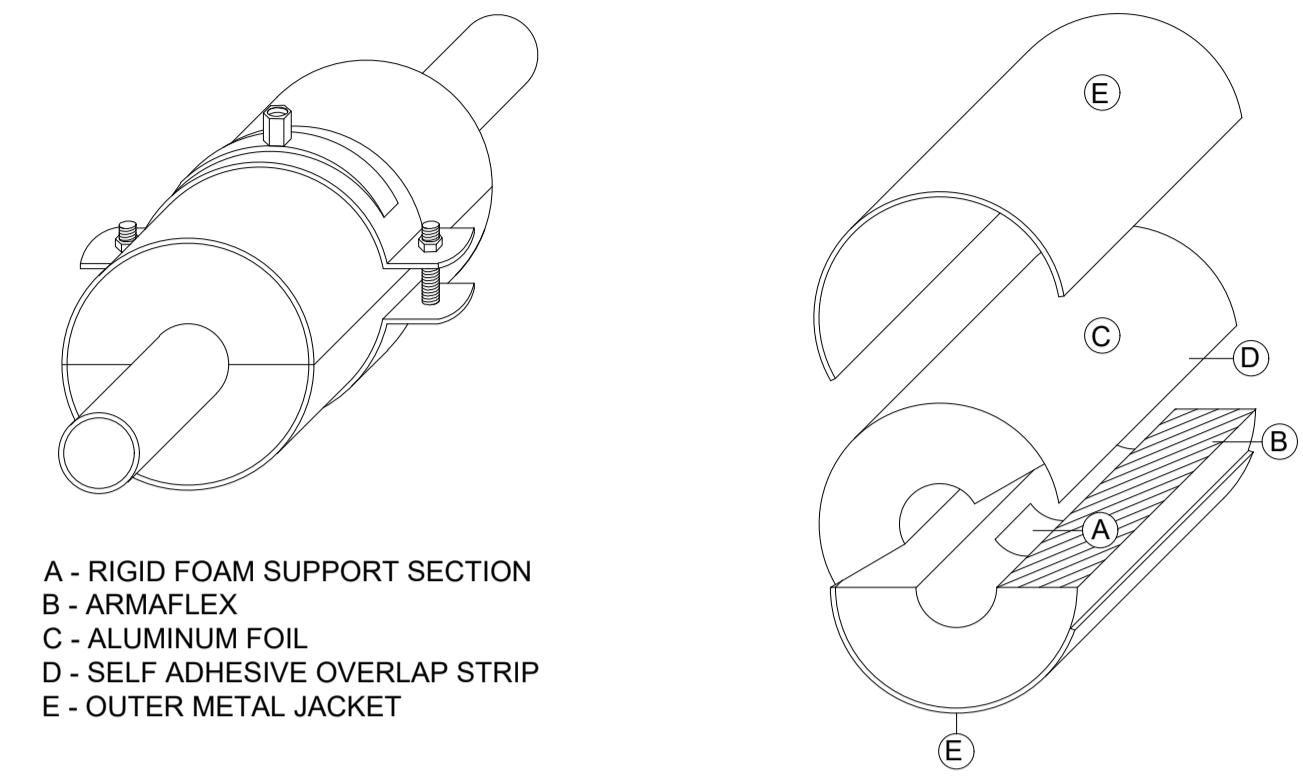


'MAG' INWALL TUNDISH WITH OVERFLOW AT (NOMINATED HEIGHT) ABOVE FINISHED FLOOR LEVEL AND DISCHARGE CONDENSATE WASTES THROUGH CUT-OUTS IN TOP. SEAL AROUND PIPES & WALL FACE WITH SILICON OR EPOXY TO PREVENT ENTRY OF VERMIN & LEAKAGE WITHIN WALL CAVITY. CONNECT TO WASTE OUTLET WITH COPPER SIZE SLIP COUPLING FITTING

DETAIL - 'MAG' IN WALL TUNDISH (INSULATED)
NOT TO SCALE

NOTE : THE APPROVED TYPE TUNDISH TO BE SUPPLIED & INSTALLED USING APPROVED METHODS (STANDARD IN WALL STAINLESS STEEL TUNDISH)

PIPE SUPPORTS
ARMAFLEX INSULATED PIPE SUPPORTS COMPRISE A COMPRESSION RESISTANT RIGID FOAM SUPPORT SECTION FACED AT BOTH ENDS WITH ARMAFLEX: A VAPOUR BARRIER CONSISTING OF PURE ALUMINUM FOIL IN A THICKNESS OF 50 MICRONS, WHICH COVERS THE ENTIRE SURFACE OF THE RIGID FOAM SECTION AND THE ARMAFLEX END PIECES: A LONGITUDINAL JOINT WHICH IS IN THE FORM OF A SELF ADHESIVE STRIP WITH A 15mm OVERLAP: AN OUTER METAL COVER MADE OF ALUMINUM SHEET WHICH IS 0.8mm THICK AND IS COATED WITH A DARK GREY POLYESTER.

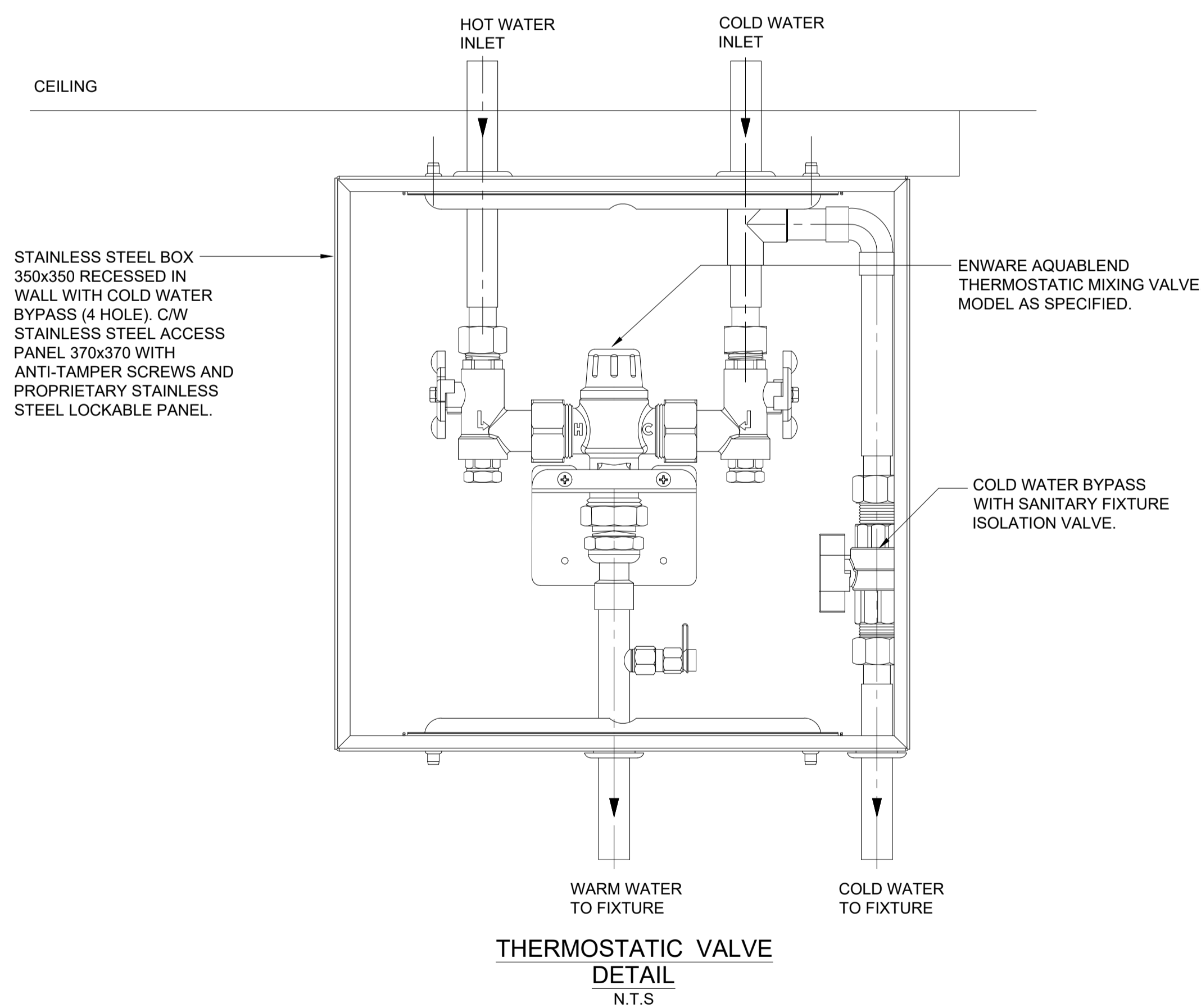


A - RIGID FOAM SUPPORT SECTION
B - ARMAFLEX
C - ALUMINUM FOIL
D - SELF ADHESIVE OVERLAP STRIP
E - OUTER METAL JACKET

TECHNICAL DATA PIPE SUPPORT	
	VALVES
DESCRIPTION	INSULATED PIPE SUPPORTS BASED ON ARMAFLEX WITH SELF ADHESIVE SEALING STRIP
MATERIAL	CFC FREE PUR/PIR BEARING SEGMENTS, EMBEDDED IN CLASS O ARMAFLEX OR NH/ARMAFLEX (FOR STAINLESS STEEL) TUBULAR OR PLATE GOODS AND GLUED TO IT: OUTSIDE BEARING SHELLS MADE OF PAINTED ALUMINUM SHEETING 0.8mm THICK, WHICH SIMULTANEOUSLY SERVES AS THE VAPOUR BARRIER FOR THE PUR/PIR BEARING SEGMENT
MAX SURFACE TEMPERATURE	+105°C
MIN SURFACE TEMPERATURE	-50°C
THERMAL CONDUCTIVITY AT 0°C	0.034 W/(m-K)-50°C
THERMAL CONDUCTIVITY AT +20°C	0.036 W/(m-K)-50°C
THERMAL CONDUCTIVITY AT +40°C	0.038 W/(m-K)-50°C
WATER VAPOUR PERMEABILITY	WITH CLASS O ARMAFLEX u 7.000
DENSITY BEARING INSERTS	145 Kg/m³
FIRE PERFORMANCE ACC. TO BUILDING REGULATION	A CLASS O SYSTEM IS ACHIEVED WHEN CLASS O ARMAFLEX PIPE SUPPORTS ARE USED WITH CLASS O ARMAFLEX
REACTION TO FIRE	SELF EXTINGUISHING, DOES NOT DROP
HEALTH ASPECT	DUST AND FIBRE FREE

19mm - THICKNESS INSULATION FOR INTERNAL STUD WALL APPLICATION		
PIPE O.D (mm)	PRODUCT CODE	QUANTITY PER CARTON PIECES
10	PH1910	30
12 - 15	PH191215	30
20 - 22	PH192022	30
25 - 28	PH192528	30
32 - 35	PH193235	20
38 - 42	PH193842	20
48	PH1948	20
54	PH1954	15
60	PH1960	15
67	PH1967	15

25mm - THICKNESS INSULATION FOR CEILING SPACE / SUSPENDED APPLICATION		
PIPE O.D (mm)	PRODUCT CODE	QUANTITY PER CARTON PIECES
12 - 15	PH251215	30
20 - 22	PH252022	30
25 - 28	PH252528	30
32 - 35	PH253235	20
38 - 42	PH253842	20
48	PH2548	20
54	PH2554	15
60	PH2560	15
67	PH2567	15



HOT WATER PIPE 'ARMAFLEX' BRACKET & SUPPORT SYSTEM

ARMA-CHEK SILVER 350 SHEATHING FOR HOT WATER SYSTEMS
PROTECTIVE COVERINGS SHALL BE INSTALLED ON AREAS OF INSULATION THAT ARE EXPOSED TO WEATHER, SUBJECT TO MECHANICAL DAMAGE OR VISIBLE TO BUILDING OCCUPANTS. THE SURFACE COVERING SHALL BE ARMA-CHEK SILVER 350 OR EQUIVALENT, MADE FROM A 3-LAYER COMPOSITE FILM OF METALLIC APPEARANCE WITH ALUMINUM INTERMEDIATE LAYER & UV PROTECTION. MATERIAL SHALL BE 350um IN THICKNESS, WITH A TOTAL WEIGHT ≥ 500 g/m². & ON PIPE SECTIONS HAVE A PERMANENT CURL. THE MATERIAL SHALL HAVE A FLAMMABILITY INDEX ≤ 5 (AS1530.2) TO COMPLY WITH THE REQUIREMENTS FOR SARKING TYPE MATERIAL IN CLAUSE 7, OF SPECIFICATION C1.10 OF THE BUILDING CODE OF AUSTRALIA 2011 FOR CLAUSE 2 TO 9 BUILDINGS.
CLADDING SHALL BE INSTALLED WITH 30mm - 50mm OVERLAPS ON ALL HORIZONTAL & LONGITUDINAL JOINS. ON OUTDOOR APPLICATIONS, JOINS ALONG THE MATERIAL LENGTH SHALL BE INSTALLED FACING DOWNWARD. THE JOINS SHALL BE SECURED WITH PLASTIC RIVETS IN THE OVERLAP AREA, INSTALLED EVERY 200mm ALONG THE MATERIAL LENGTH. ARMAFLEX 520 ADHESIVE CAN BE USED FOR FLAT SHEETS, OR WHERE RESTRICTED ACCESS PREVENTS USE OF RIVETS. ALL JOINS & OVERLAPS MUST BE FINISHED WITH ARMA-CHEK SILVER PSA TAPE.
ALL BENDS, T-SECTIONS & ENCAPS SHALL PREFERABLY BE CLAD WITH THERMOFORMED FITTINGS OF ARMA-CHEK SILVER 350. FOR FITTINGS OF UNUSUAL SHAPE, OR LARGE SIZE, THE CLADDING MATERIAL SHOULD BE CUT & INSTALLED AS PER TRADITIONAL METAL CLADDING

TENDER ISSUE

Rev	Date	Amendment Description	By	Chk
DD	16.04.2024	DESIGN DEVELOPMENT	EET	FG
T1	17.04.2024	TENDER ISSUE	EET	FG
T2	10.05.2024	CO-LAB REVIEW	EET	FG

Architect
{Co-lab}
ARCHITECTURE
2/21 Waterloo Road,
Collingwood
T: (03) 9038 8808
E: admin@colabarchitects.com.au
ABN: 97 150 968 497

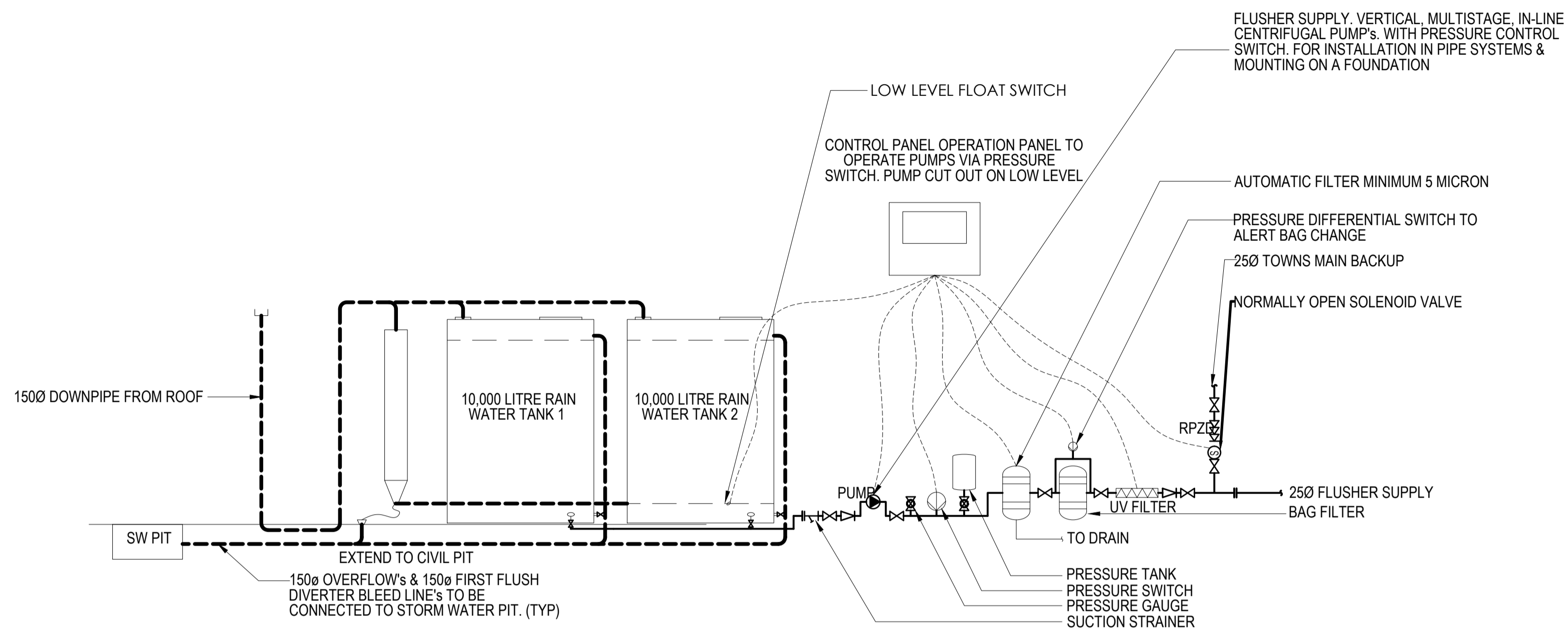
Client
Northwest Montessori Preschool

Consulting Engineer
BE CONSULTING ENGINEERS
BLUEPRINT ENGINEERING & DEVELOPMENTS PTY LTD
LEVEL 2/627 CHAPEL ST,
SOUTH YARRA VIC 3141
E: info@beez.com.au
T: (03) 9038 5404

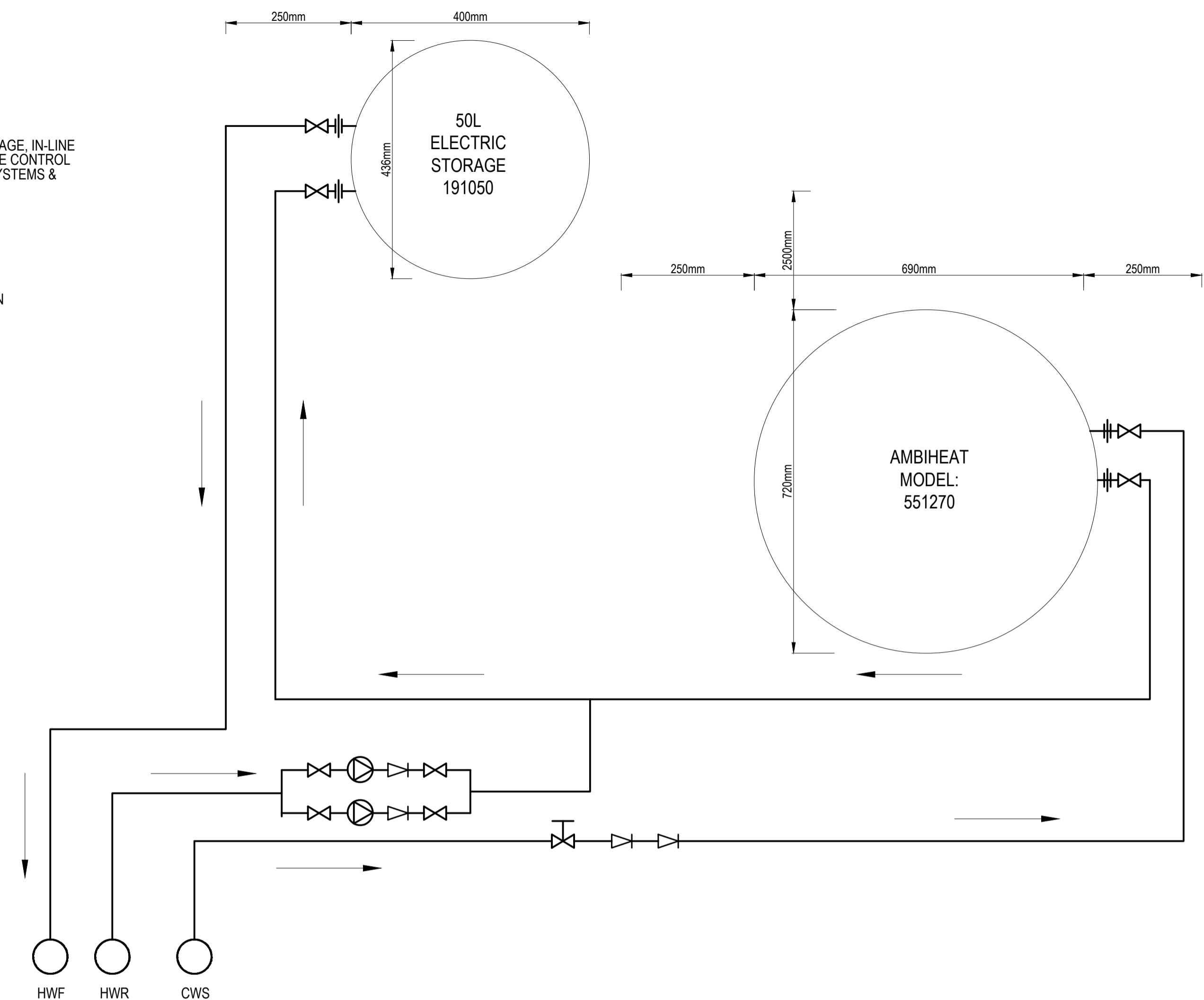
Project
NWM_ESSENDON
853 MT. ALEXANDER ROAD
ESSENDON VIC 3040

Drawing Title
HYDRAULIC SERVICES
STANDARD DETAILS SH 1 OF 3

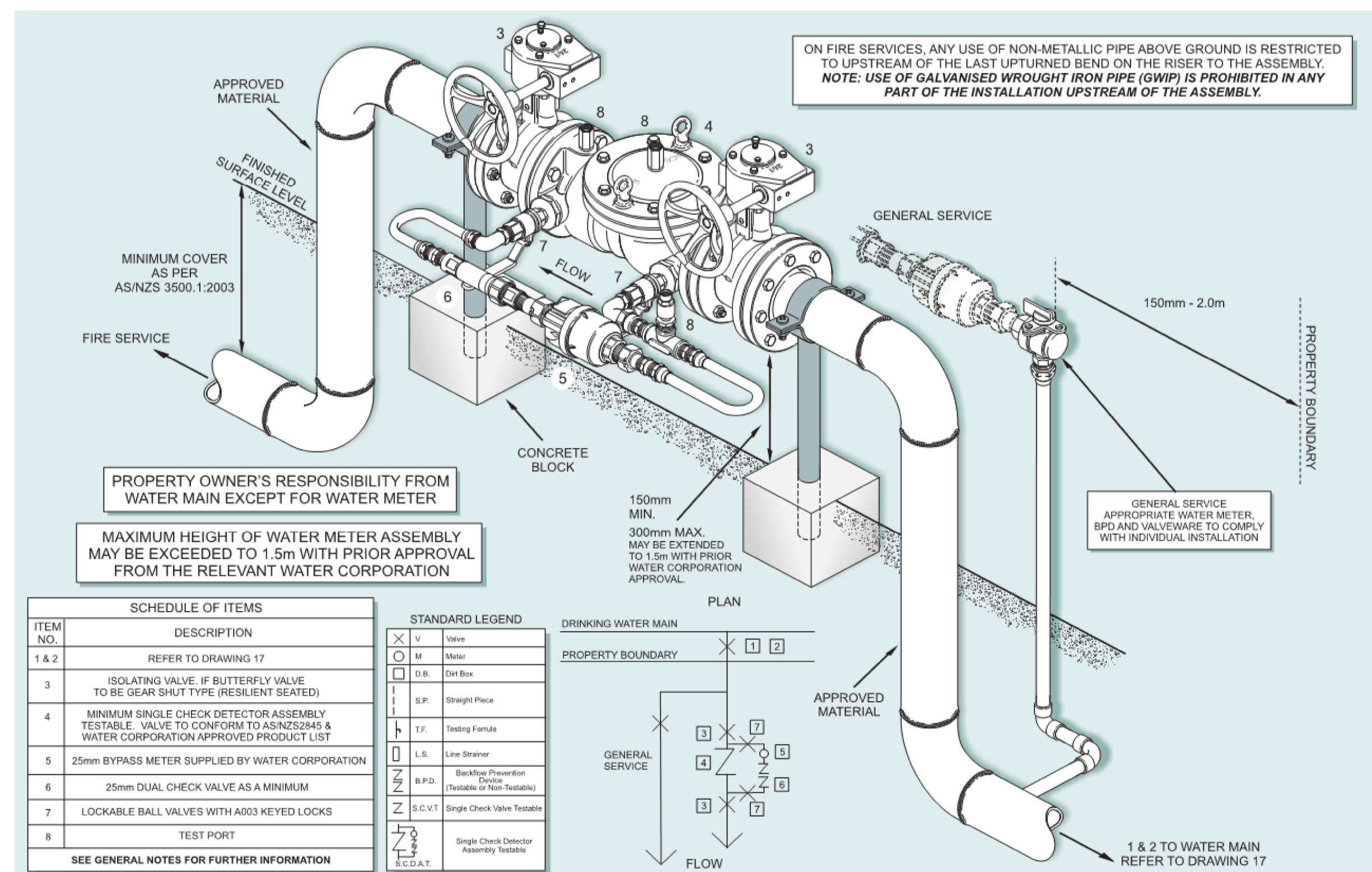
Date	10.05.2024	Scale @ A1	N.T.S.	Sheet No.	.
Job No.	2024 - 011	Drawing No.	H07	Revision	T2



TYPICAL RAIN WATER HARVESTING SYSTEM SCHEMATIC
N.T.S.



HEAT PUMP HOT WATER SCHEMATIC
N.T.S.



TENDER ISSUE

Rev	Date	Amendment Description	By	Chk
DD	16.04.2024	DESIGN DEVELOPMENT	EET	FG
T1	17.04.2024	TENDER ISSUE	EET	FG
T2	10.05.2024	CO-LAB REVIEW	EET	FG

Architect
{Co-lab}
ARCHITECTURE
2/21 Waterloo Road.
Collingwood
T: (03) 9038 8808
E: admin@colabarchitects.com.au
ABN: 97 150 968 497

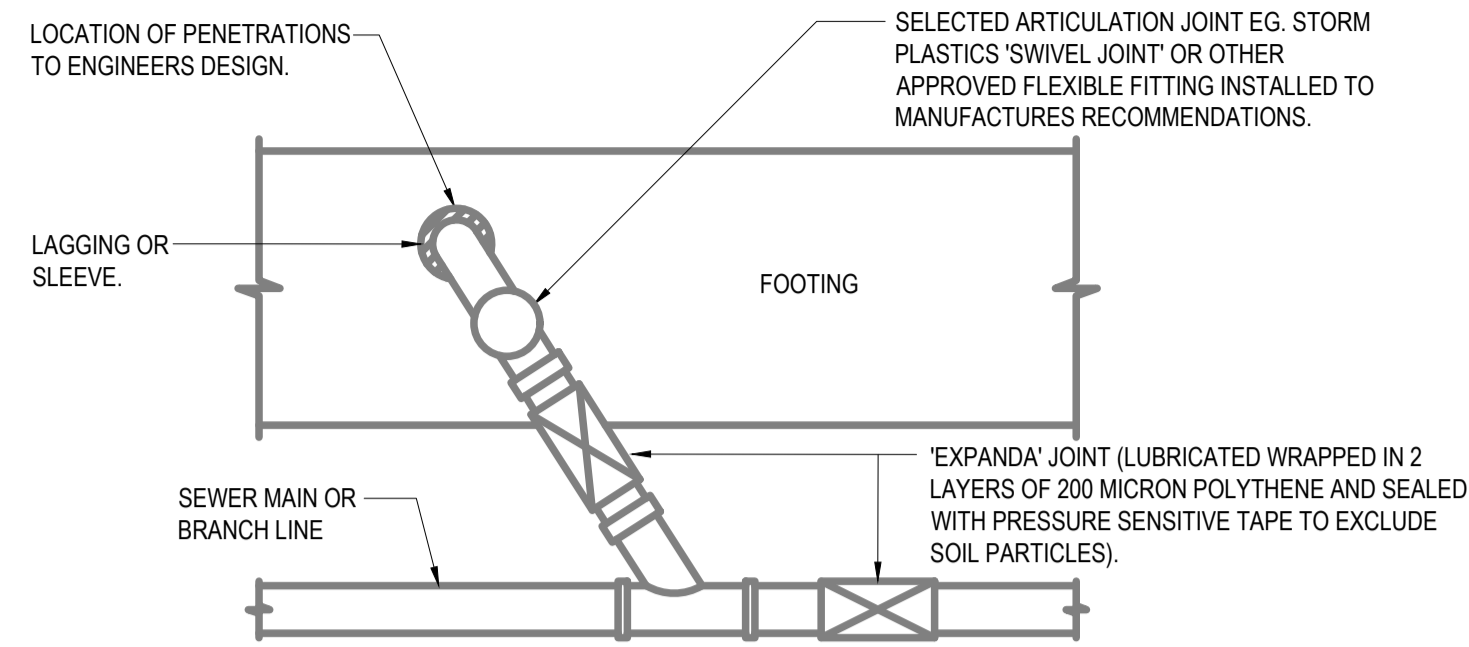
Client
Northwest Montessori Preschool

Consulting Engineer
BE CONSULTING ENGINEERS
BLUEPRINT ENGINEERING & DEVELOPMENTS PTY LTD
LEVEL 2/627 CHAPEL ST,
SOUTH YARRA VIC 3141
E: info@bece.com.au
T: (03) 9038 5404

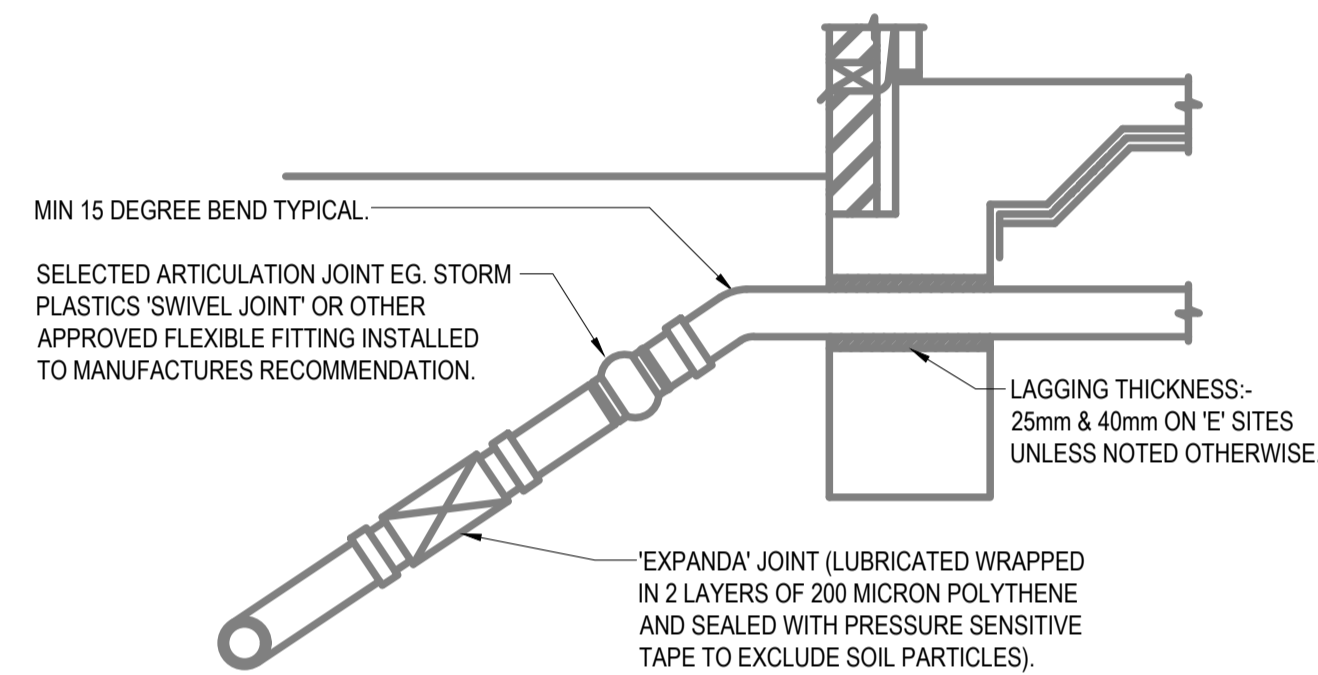
Project
NWM ESSENDON
853 MT. ALEXANDER ROAD
ESSENDON VIC 3040

Drawing Title
HYDRAULIC SERVICES
STANDARD DETAILS SH 2 OF 3

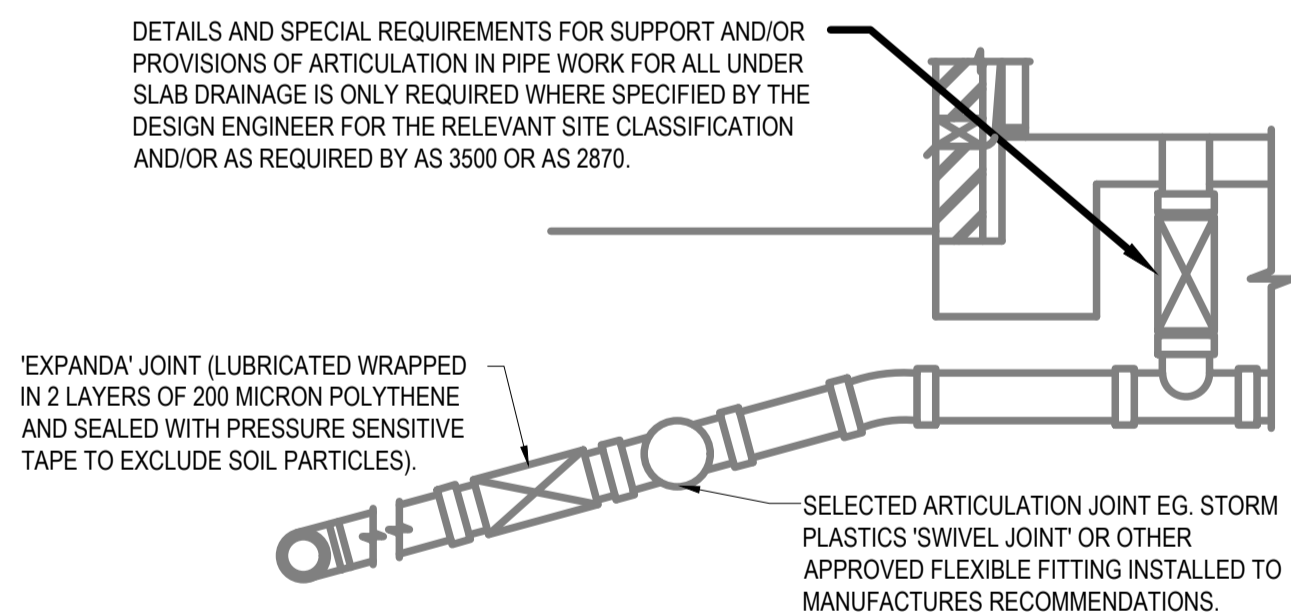
Drawn	EET
Checked	FG
Approved	FG
Date	10.05.2024
Scale	A1
N.T.S.	Sheet No.
Job No.	2024 - 011
Drawing No.	H08
Revision	T2



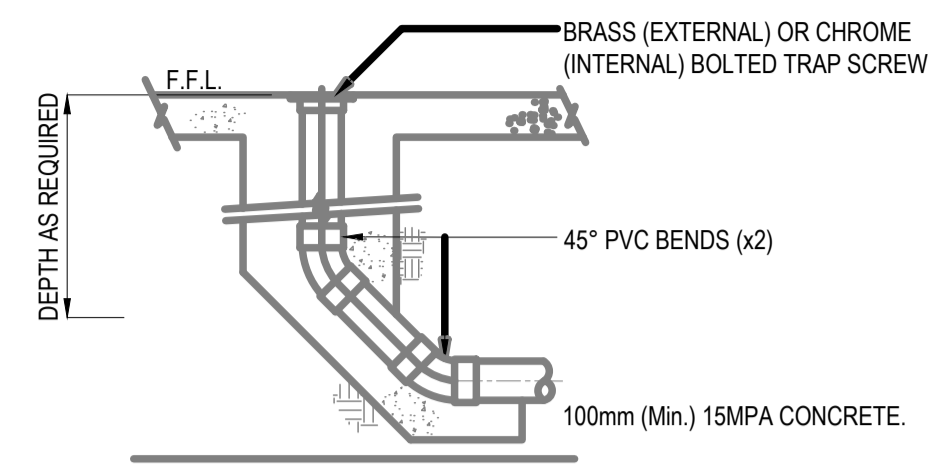
TYPICAL CONNECTION FROM PIPE WORK TO BRANCH LINE DETAIL
SCALE: 1:100



TYPICAL PIPE THROUGH FOOTING DETAIL - SECTION
SCALE: 1:100

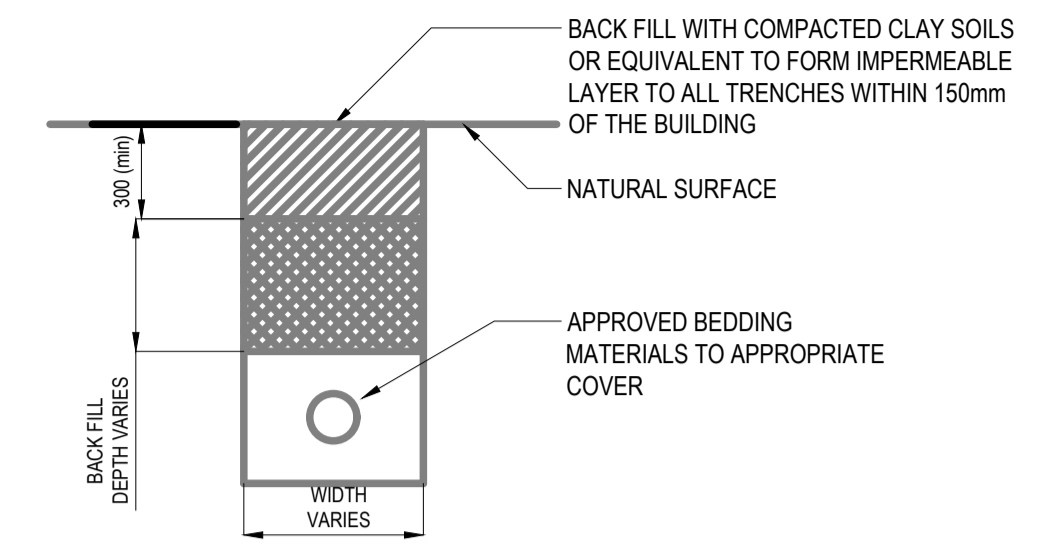


TYPICAL UNDER SLAB-EDGE BEAM/WAFFLE POD DETAIL
SCALE: 1:100

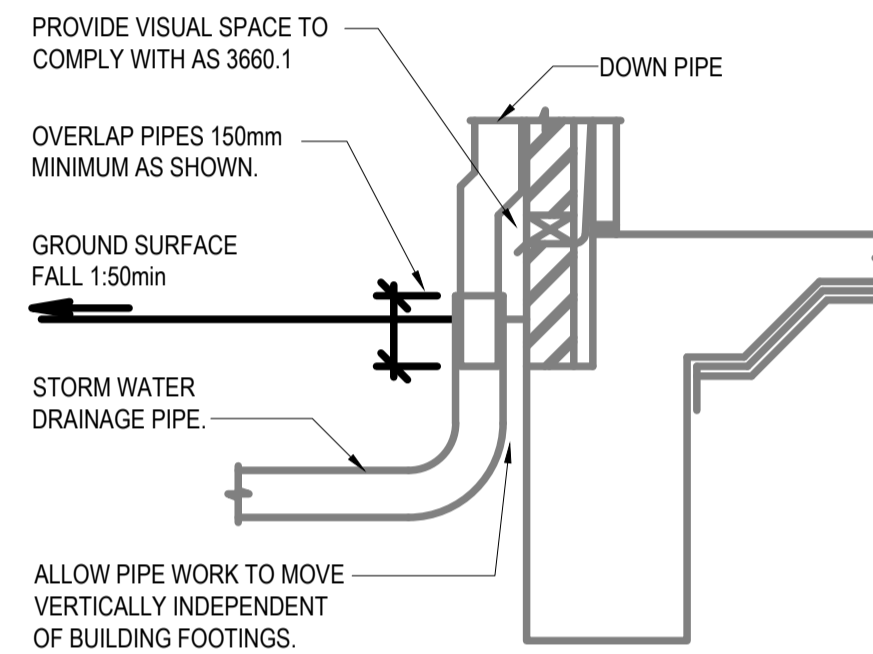


TYPICAL IOS DETAIL
SCALE: NTS

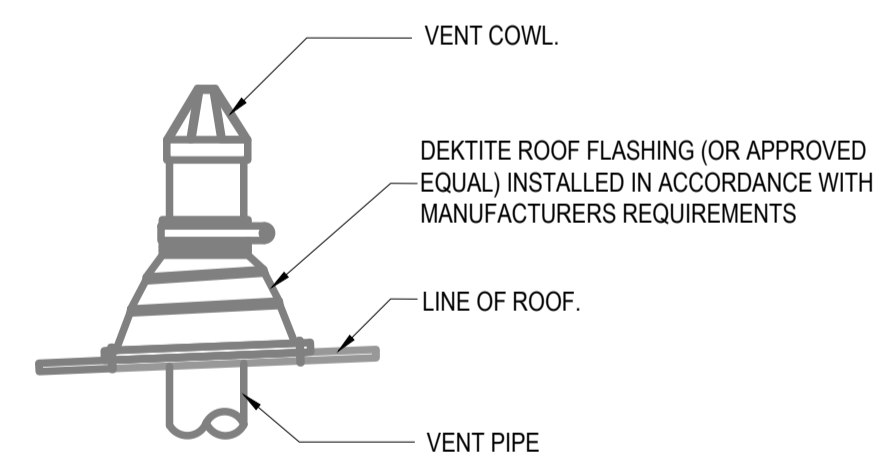
NOTE:
BOLTED TRAP SCREW TO FINISH LEVEL WITH SURROUNDING CONCRETE. INSTALL WITH CONCRETE SURROUND IF LOCATED IN A GRASSED OR LANDSCAPED AREA.



TYPICAL TRENCH DETAIL
SCALE: 1:100



TYPICAL STORM WATER DETAIL (ALTERNATIVE)
SCALE: 1:100



ROOF PENETRATION DETAIL
SCALE: NTS

GUIDELINES FOR DESIGN AND INSTALLATION

NOTE: THE FOLLOWING NOTES AND DETAILS PROVIDED ARE A GUIDE ONLY FOR SANITARY PLUMBING DRAINAGE AND SHOULD READ IN CONJUNCTION WITH AS/NZS 3500, AS 2870 AND ANY OTHER RELEVANT STANDARD AND THE REQUIREMENTS OF THE BCA.

- ALL DRAINS INSTALLED IN GROUND THAT IS FILLED, UNSTABLE, EXPANSIVE (EG. M, H, E AND P SITES) OR WATER CHARGED AND WHERE SOIL MOVEMENT MAY EFFECT THE PERFORMANCE OF ANY DRAIN, A CERTIFIED PLAN AND SPECIFICATION SHOULD BE PROVIDED BY AN APPROPRIATELY QUALIFIED PERSON. WHEN A COMPLIANCE PERMIT AND ASSESSMENT IS REQUIRED BY THE LOCAL AUTHORITY, A SOIL REPORT AND ALL CALCULATIONS SHOWING PROPOSED METHOD TO PROTECT THE DRAINAGE FROM POTENTIAL GROUND MOVEMENTS MAY BE REQUIRED.
- ALL SEWER AND STORM WATER TO BE CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 AND THE REQUIREMENTS OF AS 2870 SECTION 5, CLAUSE 5.5 AND SECTION 6, CLAUSE 6.6 ARTICULATION AND OF EXPANSION JOINTS ARE TO BE PROVIDED TO ACCOMMODATE MOVEMENT IN ALL PIPE WORK WITHIN 3 METRES OF THE DWELLING AND COMPLY WITH AS 1260.
- PLUMBING AND DRAINAGE UNDER THE SLAB SHOULD BE VOIDED WHERE PRACTICAL (REFER AS/NZS 3500 CLAUSE 4.10)
- GRADES IN PIPE WORK ON M, H, AND P SITES SHOULD HAVE A MINIMUM GRADE OF 1:30 WITHIN 1.5 METRES OF THE BUILDING AND 1:60 ELSEWHERE. GRADES IN FLEXIBLE FITTINGS TO BE SET AT THE MINIMUM GRADE.
- ALL EXPANSION AND ARTICULATION JOINTS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL JOINTS TO BE SET MID POINT SO AS TO ALLOW FOR MAXIMUM IN EITHER DIRECTION.
- STORM PLASTICS (SA) PTY LTD 'SWIVEL JOINTS' SHOULD NOT BE USED AS A BEND TO ACHIEVE CORRECT FALLS. THE JOINTS SHOULD BE SET IN A STRAIGHT LINE OF THE DRAIN TO ALLOW MAXIMUM (+) OR (-) MOVEMENT. A MINIMUM 15° BENT TO BE INSTALLED BEFORE SWIVEL JOINTS TO ACHIEVE MINIMUM GRADES FROM THE FACE OF THE FOOTINGS.
- DETAIL AND SUPPORT OF TRAPS AT THE O.R.G. TO BE CONSIDERED ON SITE. TO ALLOW FOR POTENTIAL MOVEMENTS INCLUDING ISOLATION AND ARTICULATION ASSOCIATED WITH PATHS AND PAVEMENTS. THE O.R.G. SHOULD BE CAST IN CONCRETE MONOLITHICALLY WITH THE FOOTING SYSTEM ON CLASS H AND E SITES.
- ALL PVC PIPE WORK PASSING THROUGH CONCRETE MUST HAVE 25MM LAGGING.
- STORM WATER SYSTEMS THAT COLLECT ROOF WATER AND SURFACE WATER ARE REQUIRED TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS/NZS 3500 PART 5.
- THE USE OF CORRUGATED FLEXIBLE PVC PIPE PRODUCTS SHOULD BE AVOIDED ON CLASS H AND E SITES AS THEY ARE NOT ABLE TO EXPAND LONGITUDINALLY TO ACCOMMODATE POTENTIAL VERTICAL AND LATERAL MOVEMENTS AT THE SLAB OR FOOTING EDGE UNLESS SPECIFICALLY DETAILED BY THE MANUFACTURER.
- ALL JOINTS IN STORM WATER PIPES WITHIN 3.0 METRES OF THE HOUSE UNDER CONSTRUCTION SHOULD BE ARTICULATED TO ACCOMMODATE GROUND MOVEMENTS WITHOUT LEAKAGE.
- SEPTIC TANKS AND ASSOCIATED SOAKAGE AREAS SHOULD BE LOCATED TO MINIMISE SOIL MOISTURE INCREASES WITHIN THE FOUNDATION. JOINTS IN PLUMBING PIPES WITHIN 3.0 METRES OF THE HOUSE UNDER CONSTRUCTION SHOULD BE ARTICULATED TO ACCOMMODATE GROUND MOVEMENTS WITHOUT LEAKAGE. SEPTIC TANKS IN PARTICULAR REQUIRE CAREFUL DETAILED.
- ALL PIPEWORK INCLUDING STORM WATER FITTINGS AND ADAPTORS SHOULD BE PROTECTED FROM MECHANICALLY DAMAGE.
- TERMITE PROTECTION NOT SHOWN ON THESE DRAWINGS AS THERE ARE VARIOUS OPTIONS. REFER TO THE BUILDING DESIGNER.
- ALL DETAILS ARE INDICATIVE ONLY. DESIGN OF PATHS FOOTINGS ETC. AND LOCATION OF PENETRATIONS TO BE SPECIFIED BY AN ENGINEER.
- PROVISIONS SHOULD BE MADE FOR THE CONNECTION OF OVERFLOW OR WATER DISCHARGE FROM FIXTURES SUCH AS H.W.S. AND A.C. TO A DRAIN AS REQUIRED BY THE RELEVANT LOCAL AUTHORITY.
- EXPECTED MINIMUM REQUIREMENTS FOR EXPANSION AND ALLOWABLE RELATION IN FITTINGS AS FOLLOWS:

SITE CLASS	MINIMUM REQUIRED EXPANSION JOINT CAPACITY	ALLOWABLE ROTATION
"E"	150MM	15°
"H"	70MM	15°
"P"	70MM PLUS ADDITIONAL REQUIREMENTS IN THE CASE OF FILL (MIN DEPENDENT ON SITE CONDITION)	15°
"M"	MINIMUM 25MM LAGGING THROUGH FOOTINGS	NOT APPLICABLE

TENDER ISSUE

Rev	Date	Amendment Description	By	Chk
DD	16.04.2024	DESIGN DEVELOPMENT	EET	FG
T1	17.04.2024	TENDER ISSUE	EET	FG
T2	10.05.2024	CO-LAB REVIEW	EET	FG

Architect
{Co-lab}
ARCHITECTURE
2/21 Waterloo Road,
Collingwood
T: (03) 9038 8808
E: admin@colabarchitects.com.au
ABN: 97 150 968 497

Client

Northwest Montessori Preschool

Consulting Engineer

BE CONSULTING ENGINEERS
BLUEPRINT ENGINEERING & DEVELOPMENTS PTY LTD
LEVEL 2/627 CHAPEL ST,
SOUTH YARRA VIC 3141
E: info@bece.com.au
T: (03) 9038 5404

Project
NWM_ESSENDON
853 MT. ALEXANDER ROAD
ESSENDON VIC 3040

Drawing Title
HYDRAULIC SERVICES
STANDARD DETAILS SH 3 OF 3

Date	10.05.2024	Scale @ A1	N.T.S	Sheet No.	-
Job No.	2024 - 011	Drawing No.	H09	Revision	T2