CARLOW CONCRETE

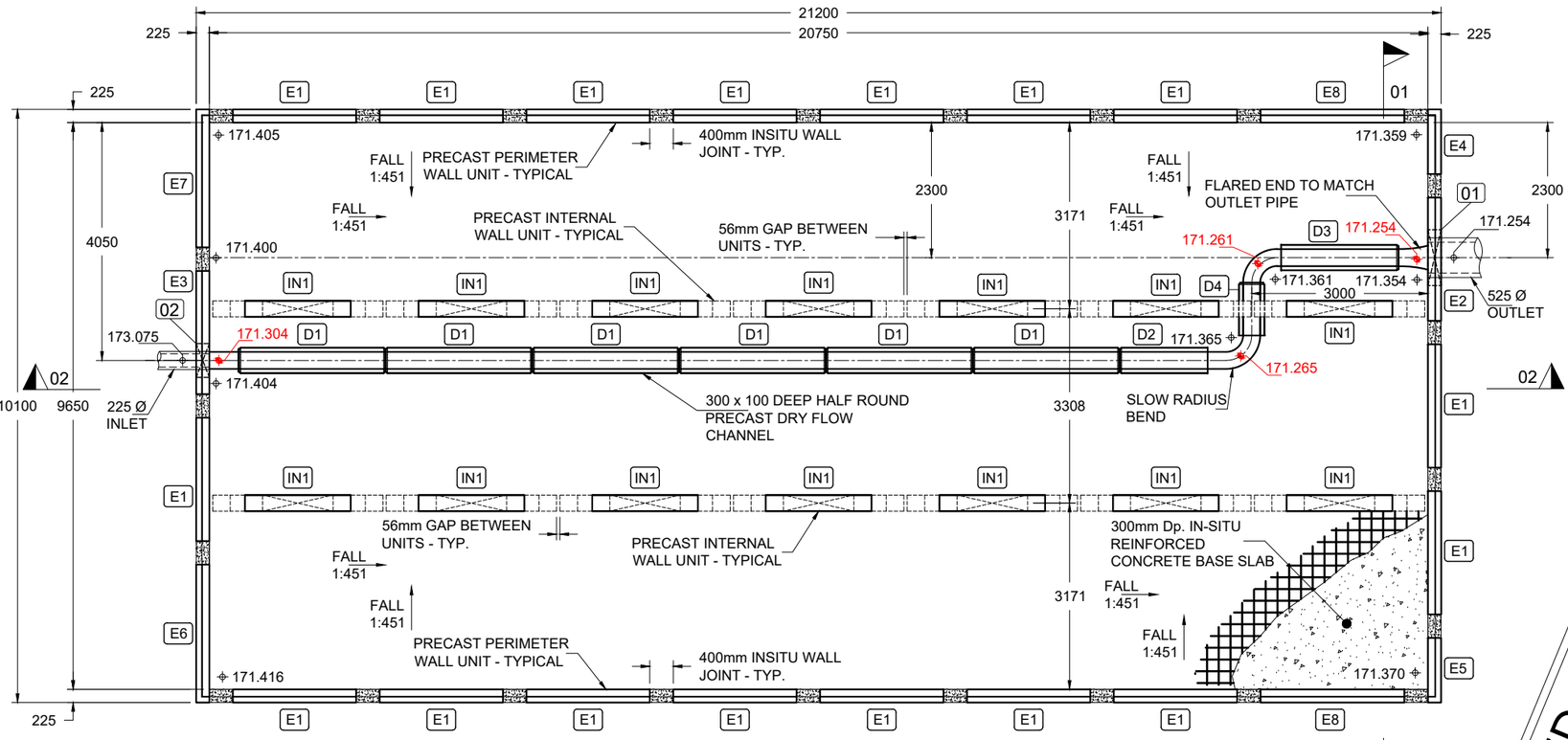
DRAWING TITLE: NEWETT HOMES
YEW TREE ROAD, BIRCHENCLIFFE
2.0m DEEP ATTENUATION TANK

BASE LAYOUT

	Rev.	Date.	Comments.
Drawn By: TH			
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-001	C	06-11-25	TURRET DETAILS ADDED

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

A3



BASE PLAN:
Scale: 1:100

00.000 = DENOTES INVERT LEVEL IN DRY FLOW CHANNEL

00.000 = DENOTES STRUCTURAL SLAB LEVEL

STORAGE VOLUME: 391m³

ISSUED FOR APPROVAL

PRECAST CONCRETE SPECIFICATION	
CONCRETE GRADE:	C40/50
EXPOSURE CLASS:	XD1 / XC4
DESIGN CHEMICAL CLASS:	DC-1
MIN CEMENT CONTENT:	360 kg/m³
CEMENT TYPE:	CEM IIB-S
GGBS CONTENT:	25%
MAX WATER / CEMENT RATIO:	0.45
AGGREGATE TYPE:	LIMESTONE
MAX AGGREGATE SIZE:	14mm
SLUMP CLASS:	N/A

INSITU CONCRETE SPECIFICATION GENERAL	
CONCRETE GRADE:	C35/45
EXPOSURE CLASS:	XD1 / XC4
DESIGN CHEMICAL CLASS:	DC-1
MIN CEMENT CONTENT:	340 kg/m³
MAX CEMENT CONTENT:	400 kg/m³
CEMENT TYPE:	CEM IIIA + SR
GGBS CONTENT:	50%
MAX WATER / CEMENT RATIO:	0.50
AGGREGATE TYPE:	LIMESTONE
MAX AGGREGATE SIZE:	20mm
SLUMP CLASS:	SEE NOTE 1
INSITU CONCRETE SPECIFICATION WALL JOINTS AND ROOF SCREED	
CONCRETE GRADE:	C35/45
EXPOSURE CLASS:	XD1 / XC4
DESIGN CHEMICAL CLASS:	DC-1
MIN CEMENT CONTENT:	380 kg/m³
MAX CEMENT CONTENT:	400 kg/m³
CEMENT TYPE:	CEM IIIA + SR
GGBS CONTENT:	50%
MAX WATER / CEMENT RATIO:	0.50
AGGREGATE TYPE:	LIMESTONE
MAX AGGREGATE SIZE:	10mm
SLUMP CLASS:	SEE NOTE 1

NOTE 1: PUMP MIX 120mm TARGET SLUMP (TOLERANCE -10mm, +40mm)

NOMINAL COVER	
PRECAST:	40mm
INSITU:	45mm
BASE SLAB BOTTOM STEEL :	50mm
SURFACE FINISHES	
ROOF SCREED:	WOOD FLOAT
BASE SLAB:	STEEL TROWEL
INTERNAL SURFACE:	FAIR WORKED
EXTERNAL SURFACE:	FAIR

KEY TO PRECAST WALL TYPES

TYPE	DESCRIPTION	QUANTITY	HEIGHT	WIDTH	WEIGHT
E1	STANDARD EXTERNAL WALL	17	2.550m	2.10m	2.94t
E2	STANDARD EXTERNAL WALL WITH OPENING	1	2.550m	2.10m	2.41t
E3	STANDARD EXTERNAL WALL WITH OPENING	1	2.550m	2.10m	2.72t
E4	CUSTOM EXTERNAL WALL	1	2.550m	1.10m	1.54t
E5	CUSTOM EXTERNAL WALL	1	2.550m	1.10m	1.54t
E6	CUSTOM EXTERNAL WALL	1	2.550m	2.35m	3.29t
E7	CUSTOM EXTERNAL WALL	1	2.550m	2.35m	3.29t
E8	CUSTOM EXTERNAL WALL	2	2.550m	2.45m	3.43t
IN1	STANDARD INTERNAL WALL	14	1.99m	2.90m	1.62t
D1	STANDARD PRECAST DRY FLOW CHANNEL (2.50m LONG)	6	0.100m	0.30m	0.43t
D2	STANDARD PRECAST DRY FLOW CHANNEL (1.50m LONG)	1	0.100m	0.30m	0.26t
D3	STANDARD PRECAST DRY FLOW CHANNEL (2.00m LONG)	1	0.100m	0.30m	0.34t
D4	STANDARD PRECAST DRY FLOW CHANNEL (0.90m LONG)	1	0.100m	0.30m	0.15t

DESIGN ASSUMPTIONS	
DESIGN LIFE:	50 YEARS
DESIGN EXPOSURE CLASSIFICATION:	XD1 / XC4
DESIGN CHEMICAL CLASS:	DC-1
TIGHTNESS CLASS:	CLASS 1
IMPOSED LOAD ON COVER SLAB:	MORE ONEROUS OF 10 kn/m² UDL OR 40t HGV AXLE LOADING
MAXIMUM COVER LEVEL:	+175.700m (2.050m OVERBURDEN)
MINIMUM COVER LEVEL:	+174.300m (0.680m OVERBURDEN)
ASSUMED INTERNAL WATER LEVEL:	TOP OF TANK LEVEL
ASSUMED GROUND WATER LEVEL (FLOATATION):	+174.300m (SURFACE LEVEL)
ASSUMED GROUND WATER LEVEL (ULS):	SURFACE LEVEL
ASSUMED GROUND WATER LEVEL (SLS):	TOP OF TANK LEVEL
ASSUMED ALLOWABLE BEARING PRESSURE	>75 kn/m² (FOUNDED ON FIRM BROWN CLAY)

ESTIMATED INSITU CONCRETE VOLUMES	
INSITU CONCRETE BLINDING	21.0m³
BASE SLAB	65.0m³
ROOF SCREED	28.5m³
INSITU WALL JOINTS	5.0m³
BENCHING	n/a
ESTIMATED VOLUMES INCLUDE A 5% ALLOWANCE FOR SITE DEVIATION	

KEY TO WALL OPENING TYPES

	QUANTITY	DESCRIPTION	INVERT
01	1	950mm x 950mm OPENING FOR 525 Ø CONCRETE PIPE	171.254
02	1	575mm x 760mm OPENING FOR 225 Ø CLAY PIPE	173.075

ESTIMATED MORTAR REQIRED	
M12 MORTAR	0.3m³
ESTIMATED VOLUMES INCLUDE A 5% ALLOWANCE FOR SITE DEVIATION	

CARLOW CONCRETE

DRAWING TITLE: NEWETT HOMES
YEW TREE ROAD, BIRCHENCLIFFE
2.0m DEEP ATTENUATION TANK

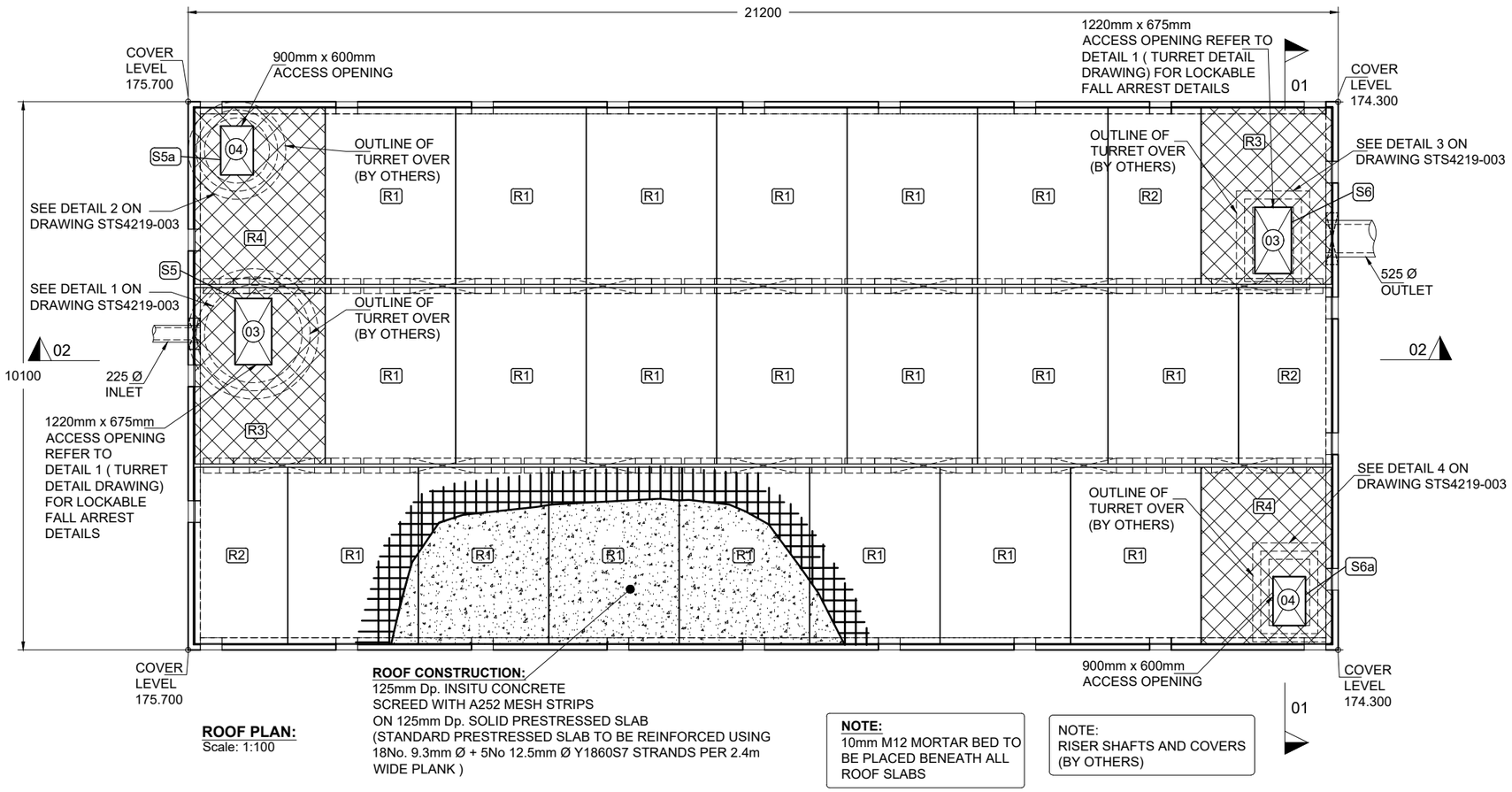
ROOF LAYOUT

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-002	C	06-11-25	TURRET DETAILS ADDED

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

A3

ISSUED FOR APPROVAL



ROOF PLAN:
Scale: 1:100

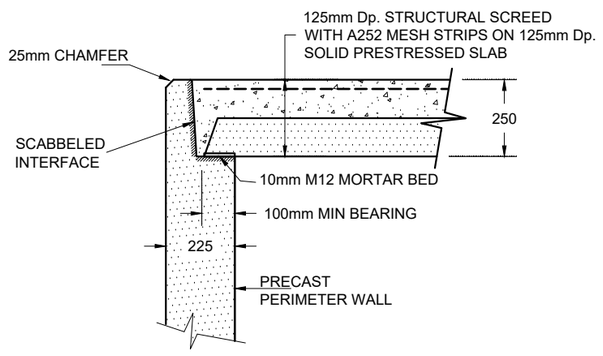
ROOF CONSTRUCTION:
125mm Dp. INSITU CONCRETE SCREED WITH A252 MESH STRIPS ON 125mm Dp. SOLID PRESTRESSED SLAB (STANDARD PRESTRESSED SLAB TO BE REINFORCED USING 18No. 9.3mm Ø + 5No 12.5mm Ø Y1860S7 STRANDS PER 2.4m WIDE PLANK)

NOTE:
10mm M12 MORTAR BED TO BE PLACED BENEATH ALL ROOF SLABS

NOTE:
RISER SHAFTS AND COVERS (BY OTHERS)

KEY TO ROOF SLAB TYPES						
UNIT	**DESCRIPTION**	**WIDTH**	**LENGTH**	**DEPTH**	**WEIGHT**	**QUANTITY**
R1	SOLID PRESTRESSED SLAB	2.400m	3.250m	125mm	2.29t	20
R2	NARROW SOLID PRESTRESSED SLAB	1.710m	3.250m	125mm	1.63t	3
R3	CUSTOM SLAB WITH OPENING	2.400m	3.250m	150mm	2.56t	2
R4	CUSTOM SLAB WITH OPENING	2.400m	3.250m	150mm	2.67t	2
NOTE: STANDARD PRESTRESSED SLAB TO BE REINFORCED USING 18No. 9.3mm Ø + 5No 12.5mm Ø Y1860S7 STRANDS PER 2.4m WIDE PLANK						

KEY TO ROOF OPENING TYPES		
	QUANTITY	**DESCRIPTION**
03	2	1220mm x 675mm ROOF OPENING
04	2	900mm x 600mm ROOF OPENING



PERIMETER WALL - TOP OF WALL DETAIL:
SCALE: 1:20

CARLOW CONCRETE

DRAWING TITLE:	NEWETT HOMES YEW TREE ROAD, BIRCHENCLIFFE 2.0m DEEP ATTENUATION TANK ROOF OPENING PLANS

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-003	C	06-11-25	TURRET DETAILS ADDED

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

A3

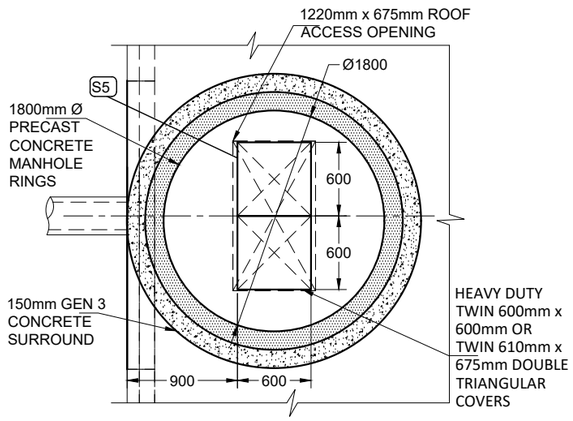
NOTE:
CHAMBER RINGS AND RECTANGULAR SECTIONS TO THE CARLOW TANK MUST NOT OVERHANG THE CARLOW TANK ROOF SLAB

NOTE:
RISER SHAFTS AND COVERS (BY OTHERS)

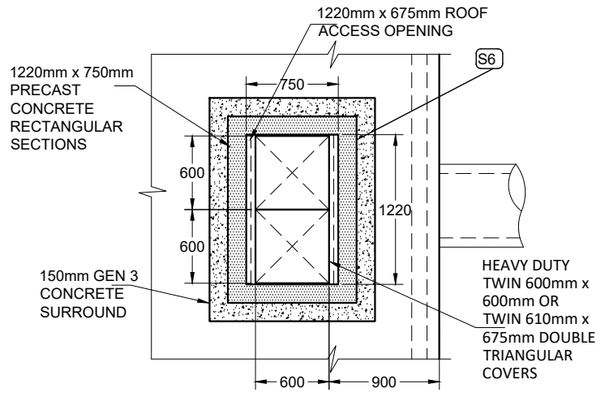
FOR TURRET DETAILS SEE DRAWING STS4219-008 & 009)

ISSUED FOR APPROVAL

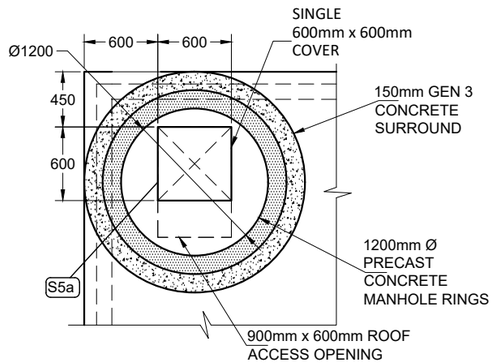
TURRET TYPE 1



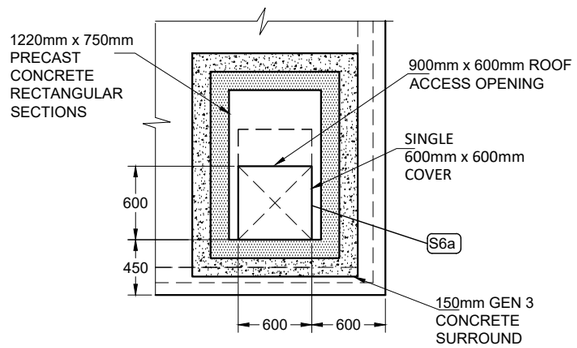
TURRET TYPE 3



TURRET TYPE 2



TURRET TYPE 4



TYPICAL ROOF TURRET PLAN:
Scale: 1:50

CARLOW CONCRETE

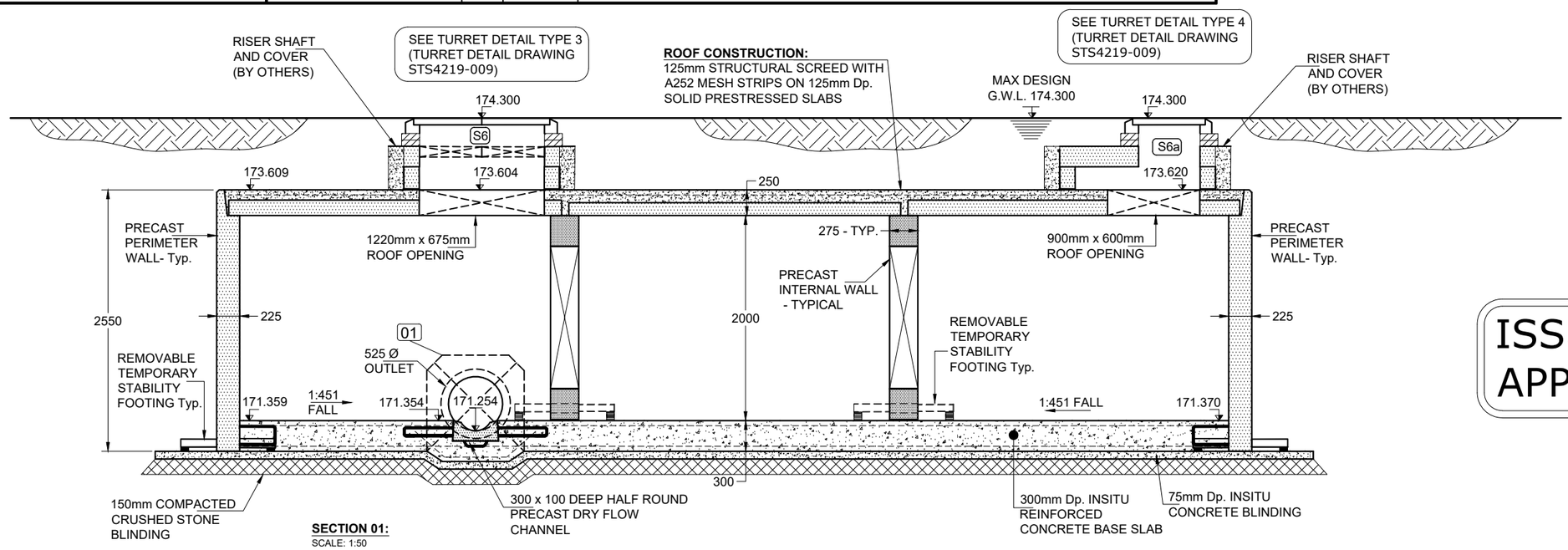
DRAWING TITLE: NEWETT HOMES
YEW TREE ROAD, BIRCHENCLIFFE
2.0m DEEP ATTENUATION TANK

SECTIONS SHEET 1

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-004	C	06-11-25	TURRET DETAILS ADDED

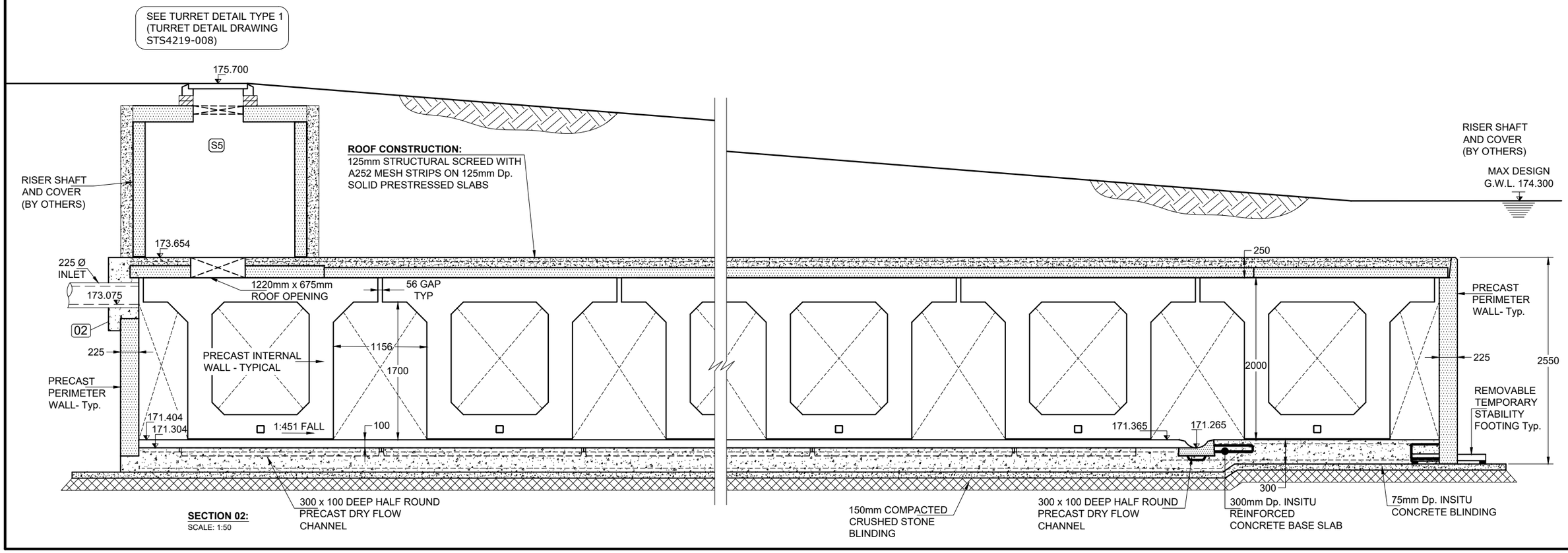
ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

A3



SECTION 01:
SCALE: 1:50

ISSUED FOR APPROVAL



SECTION 02:
SCALE: 1:50

CARLOW CONCRETE

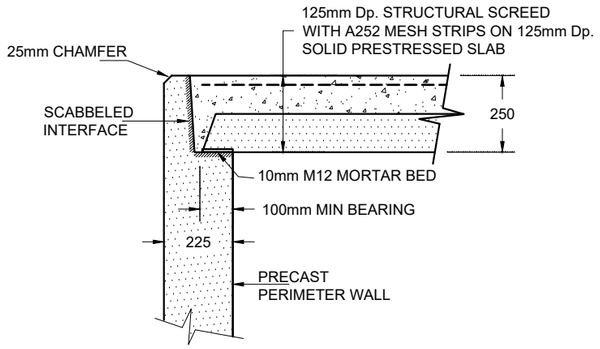
DRAWING TITLE: NEWETT HOMES
YEW TREE ROAD, BIRCHENCLIFFE
2.0m DEEP ATTENUATION TANK

DETAILS SECTIONS

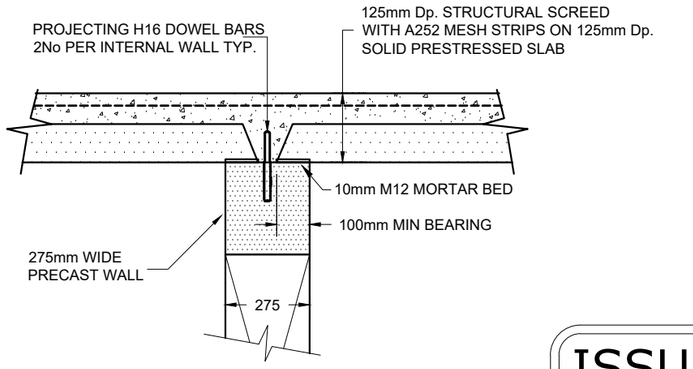
Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-005	C	06-11-25	TURRET DETAILS ADDED

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

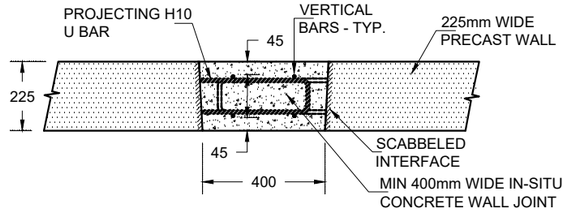
A3



PERIMETER WALL - TOP OF WALL DETAIL:
SCALE: 1:20

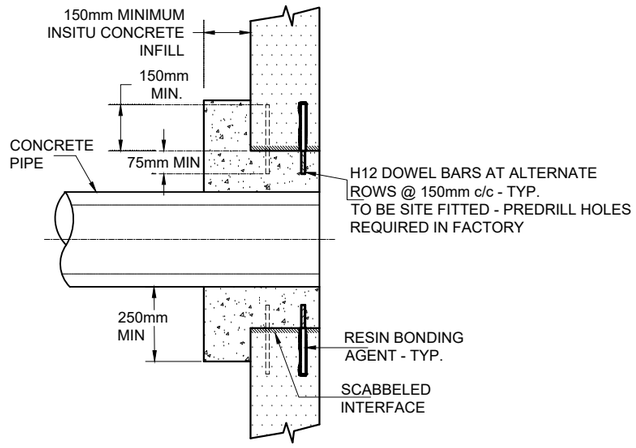


INTERNAL WALL - TOP OF WALL DETAIL:
SCALE: 1:20

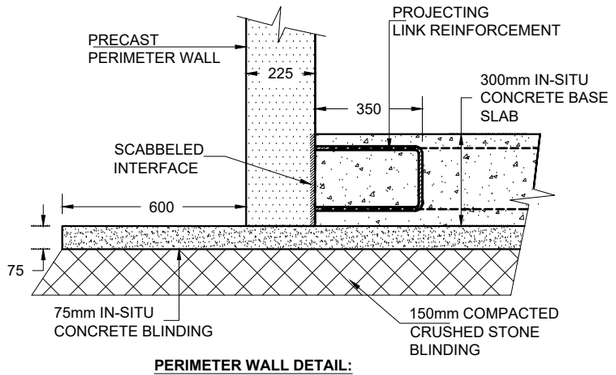


PLAN VIEW - TYPICAL WALL JOINT DETAIL:
SCALE: 1:20

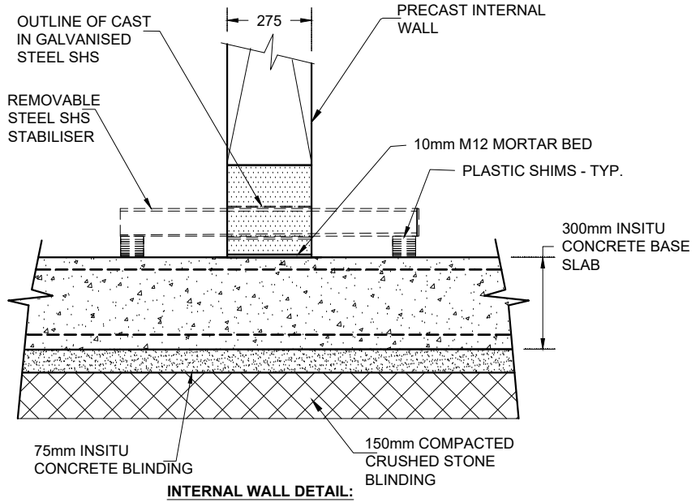
ISSUED FOR APPROVAL



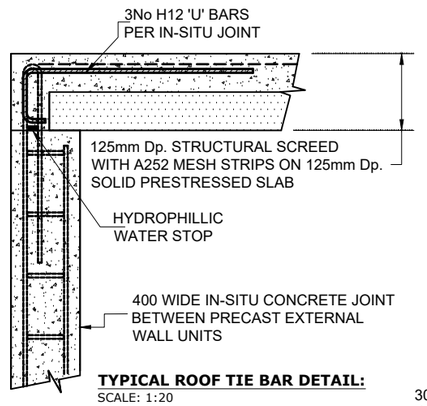
PIPE CONNECTION SECTION
SCALE: 1:20



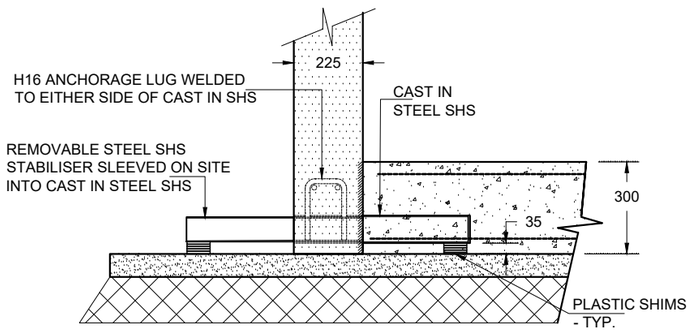
PERIMETER WALL DETAIL:
SCALE: 1:20



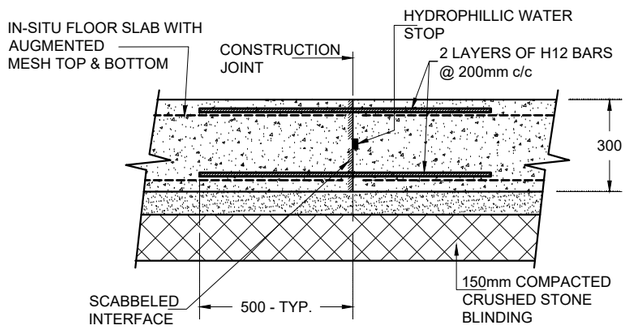
INTERNAL WALL DETAIL:
SCALE: 1:20



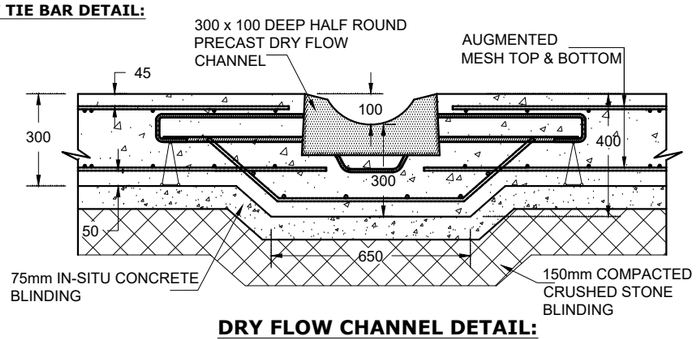
TYPICAL ROOF TIE BAR DETAIL:
SCALE: 1:20



PERIMETER WALL - TEMPORARY STABILITY FOOTING DETAIL:
SCALE: 1:20



CONSTRUCTION JOINT DETAIL:
(AS REQUIRED)
SCALE: 1:20



DRY FLOW CHANNEL DETAIL:
SCALE: 1:20

CARLOW CONCRETE

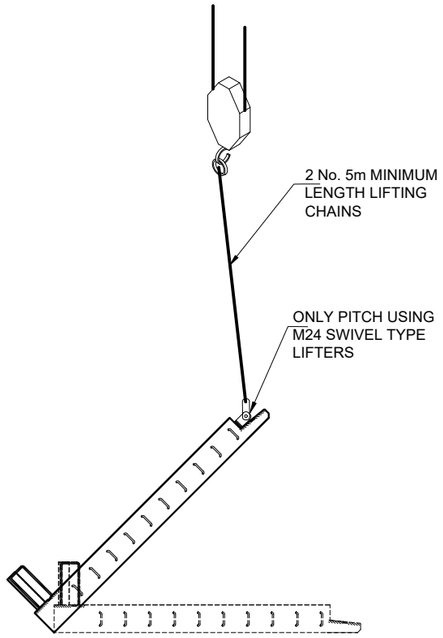
DRAWING TITLE: NEWETT HOMES
YEW TREE ROAD, BIRCHENCLIFFE
2.0m DEEP ATTENUATION TANK

LIFTING DETAILS

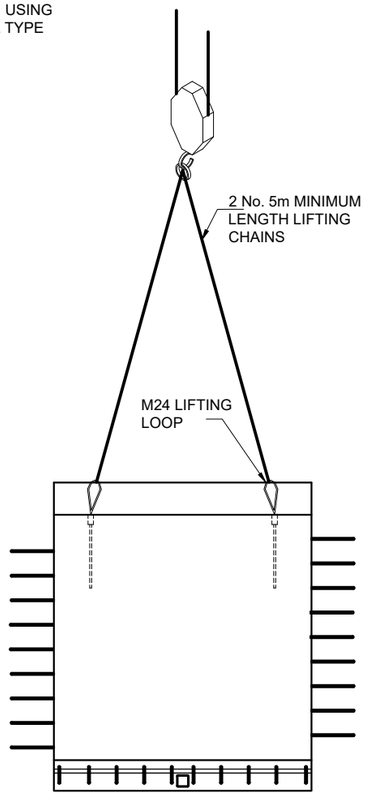
Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-006	C	06-11-25	TURRET DETAILS ADDED

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

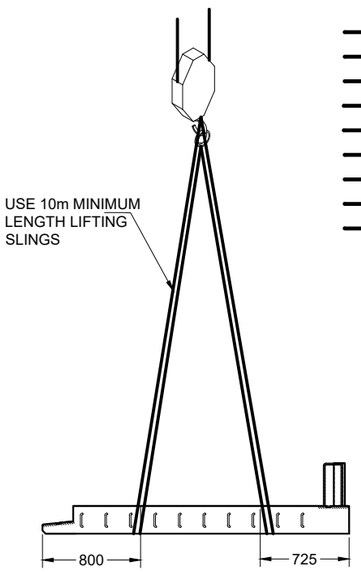
A3



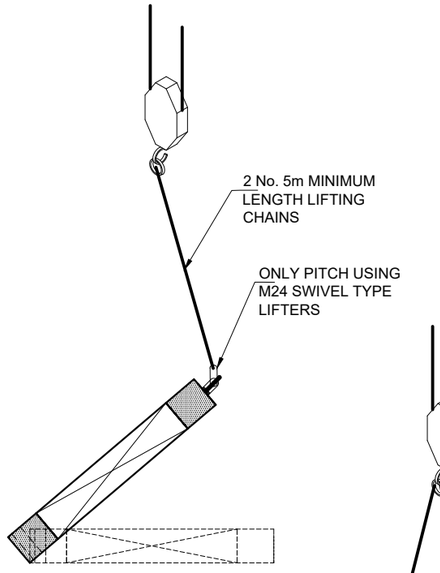
EXTERNAL WALL
LIFTING ARRANGEMENT - PITCHING UNIT:



EXTERNAL WALL
LIFTING ARRANGEMENT -
GENERAL LIFTING AND FINAL POSITIONING:

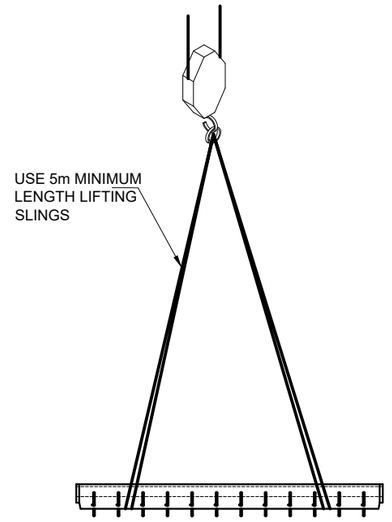


EXTERNAL WALL
LIFTING ARRANGEMENT - HORIZONTAL LIFTING:

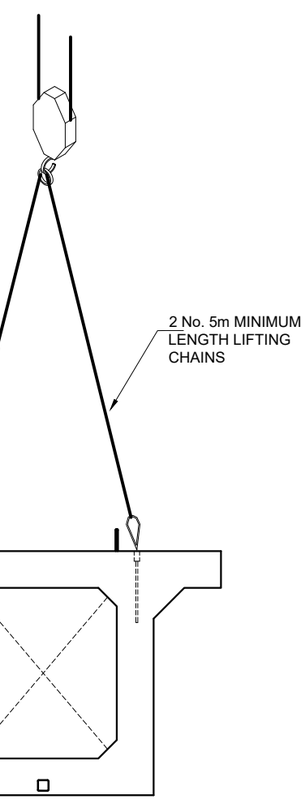


INTERNAL WALL
LIFTING ARRANGEMENT - PITCHING UNIT:

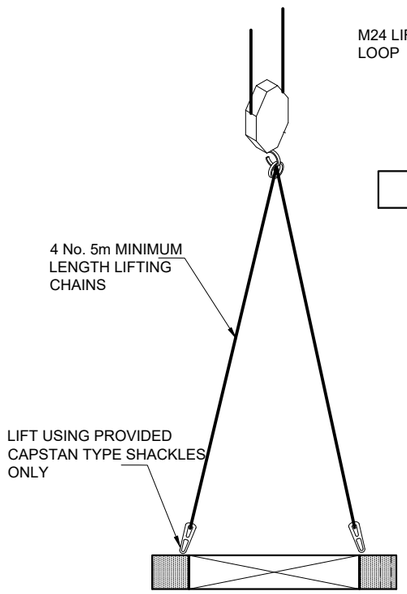
ISSUED FOR APPROVAL



PRECAST DRY FLOW CHANNEL
LIFTING ARRANGEMENT -
GENERAL LIFTING AND FINAL POSITIONING:



INTERNAL WALL
LIFTING ARRANGEMENT -
GENERAL LIFTING AND FINAL POSITIONING:



INTERNAL WALL
LIFTING ARRANGEMENT - HORIZONTAL LIFTING:

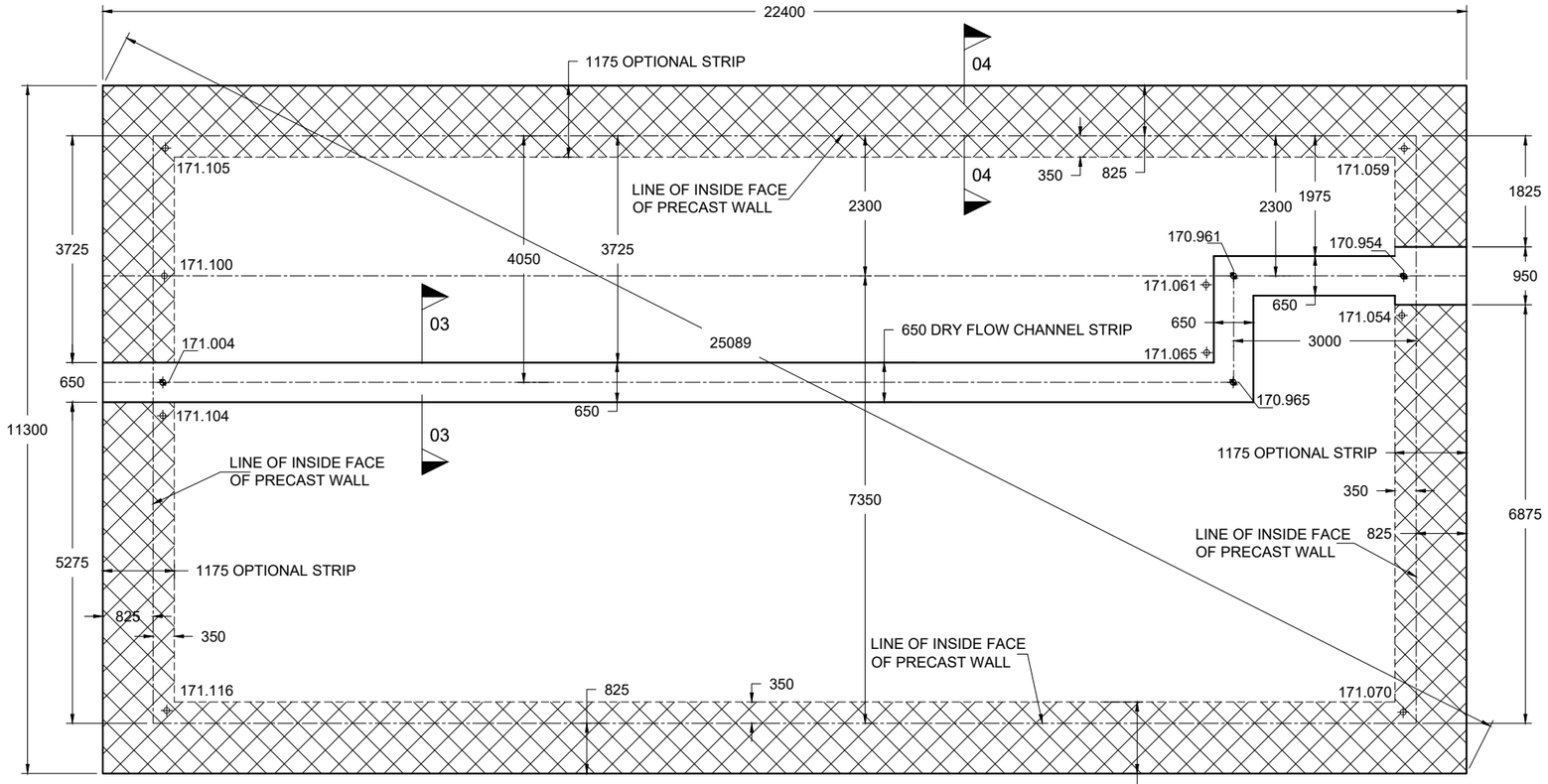
CARLOW CONCRETE

DRAWING TITLE:	NEWETT HOMES YEW TREE ROAD, BIRCHENCLIFFE 2.0m DEEP ATTENUATION TANK BLINDING LAYOUT

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-007	C	06-11-25	TURRET DETAILS ADDED

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

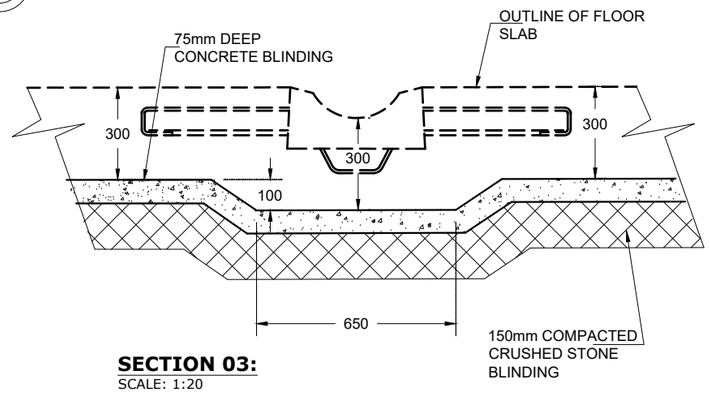
A3



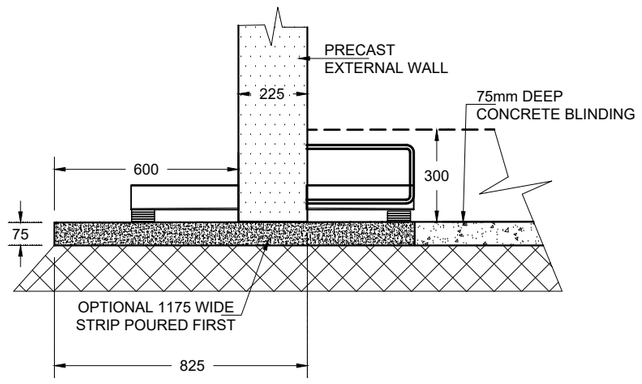
BLINDING SETTING OUT PLAN:
Scale: 1:100

NOTE:
ALL LEVELS ARE TOP OF BLINDING LAYER LEVEL

ISSUED FOR APPROVAL



SECTION 03:
SCALE: 1:20



SECTION 04:
SCALE: 1:20

CARLOW CONCRETE

DRAWING TITLE: NEWETT HOMES
YEW TREE ROAD, BIRCHENCLIFFE
2.0m DEEP ATTENUATION TANK

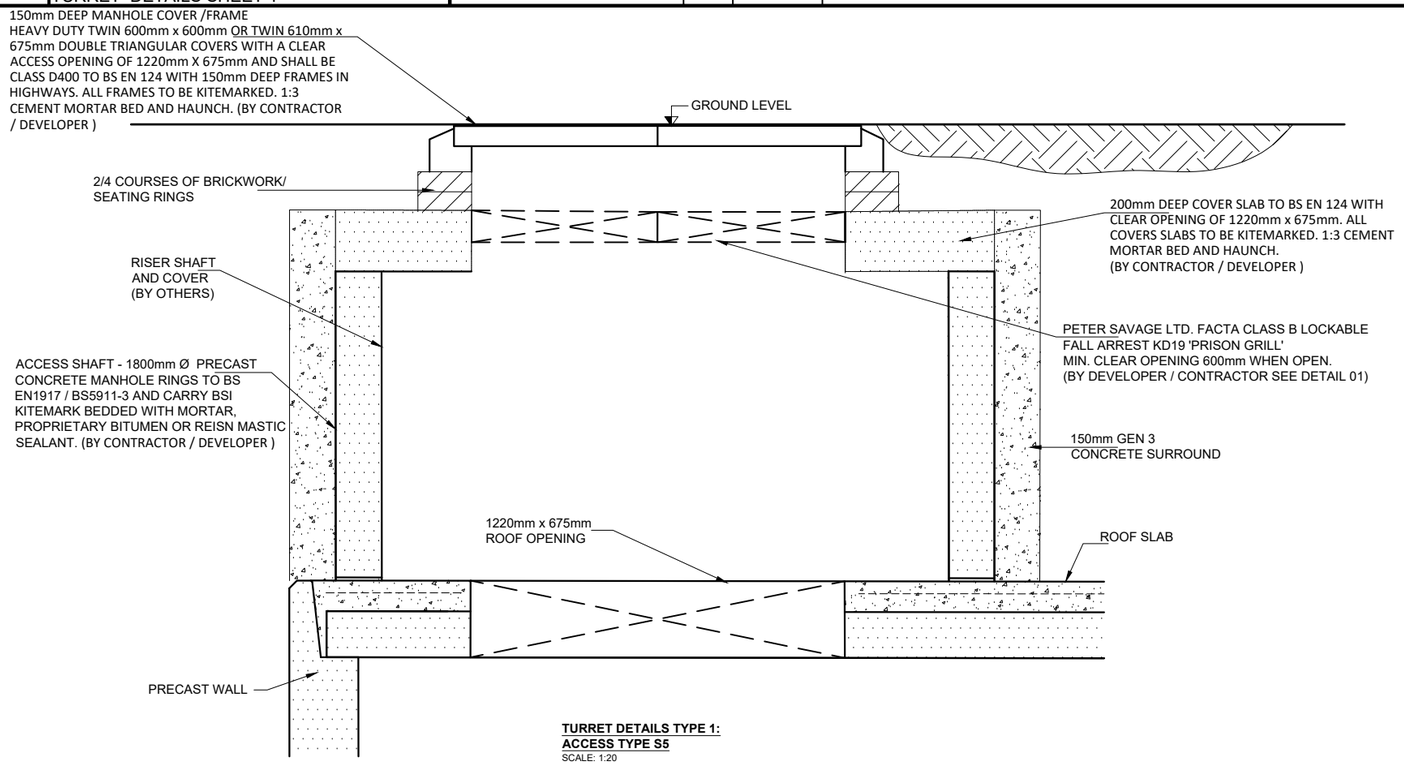
TURRET DETAILS SHEET 1

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-008	C	06-11-25	TURRET DETAILS ADDED

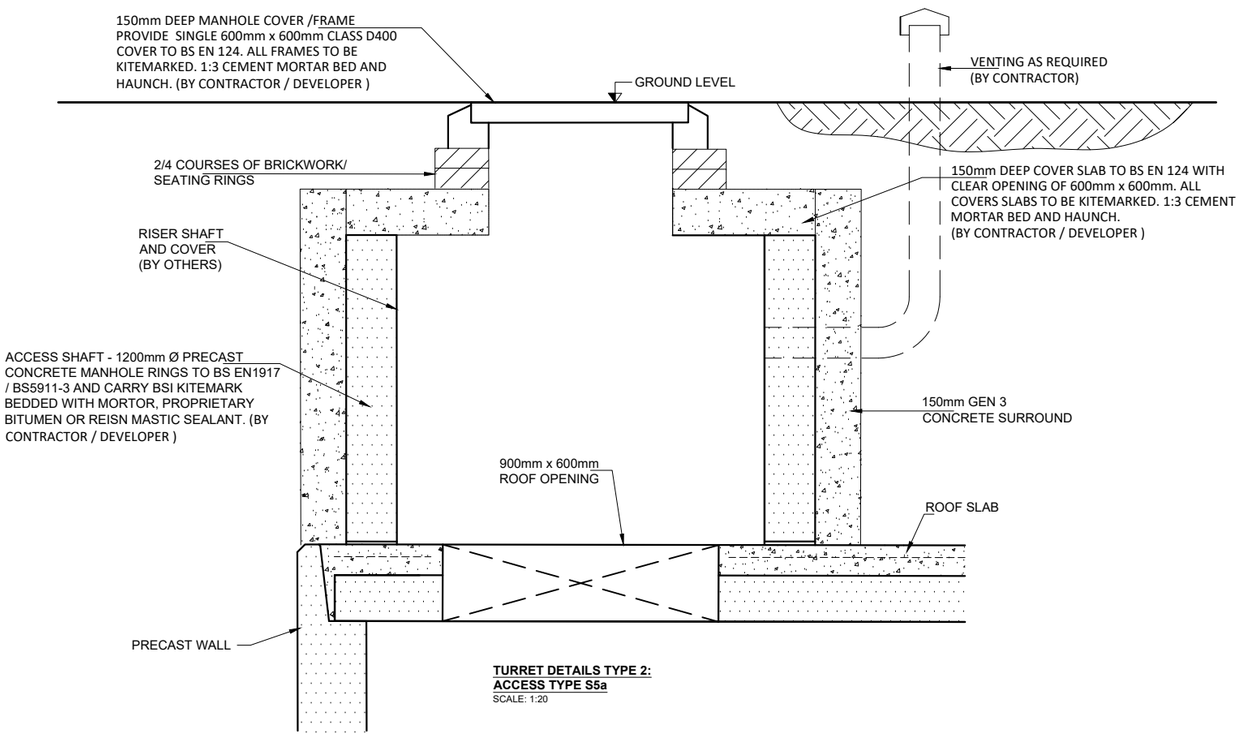
A3

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

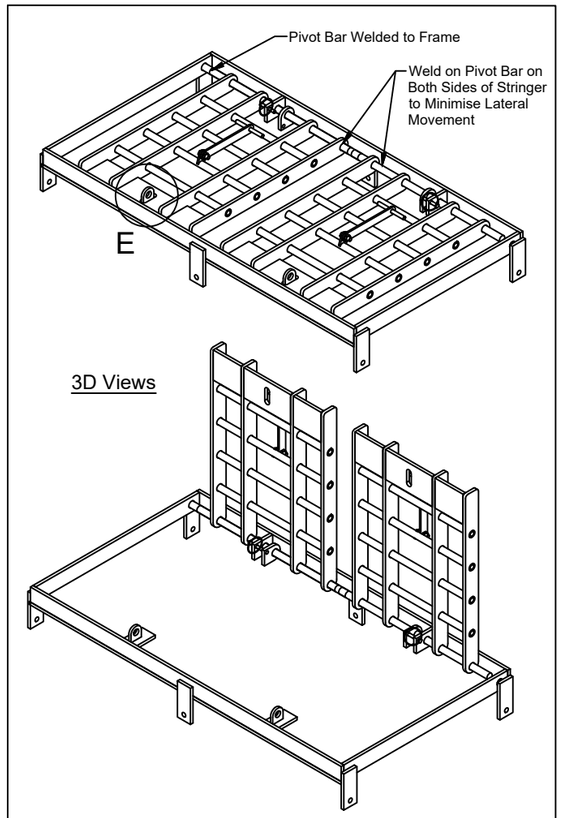
ISSUED FOR APPROVAL



TURRET DETAILS TYPE 1:
ACCESS TYPE S5
SCALE: 1:20



TURRET DETAILS TYPE 2:
ACCESS TYPE S5a
SCALE: 1:20



DETAIL 01 PETER SAVAGE Ltd. KD19 FRAME:
(BY DEVELOPER / CONTRACTOR)
SCALE: 1:10

CARLOW CONCRETE

DRAWING TITLE: NEWETT HOMES
YEW TREE ROAD, BIRCHENCLIFFE
2.0m DEEP ATTENUATION TANK

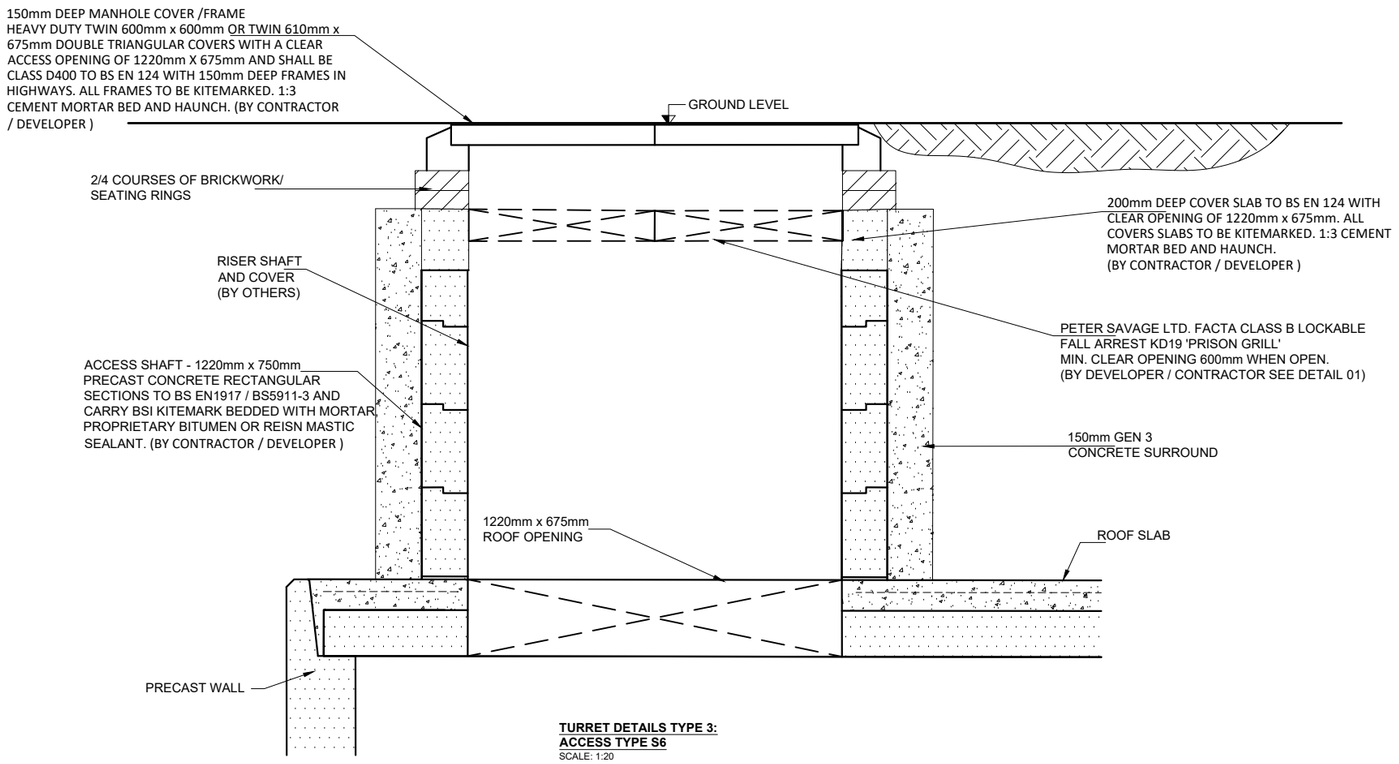
TURRET DETAILS SHEET 2

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	A	30-10-25	INVERT AND SURFACE LEVELS REVISED
Date: 05-06-25	B	04-11-25	PLAN DIMENSIONS REVISED. EXTRA LINE OF INTERNAL WALLS ADDED
Drg No.: STS4219-009	C	06-11-25	TURRET DETAILS ADDED

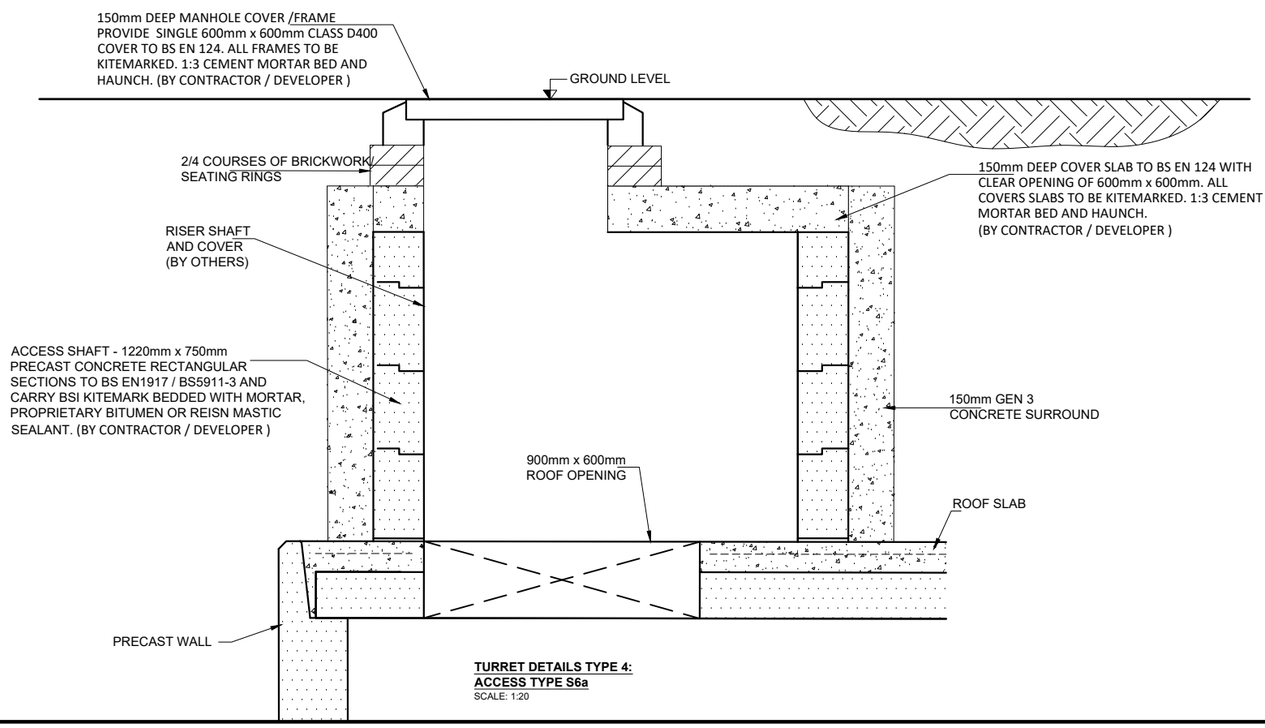
ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE [CODE FOR ADOPTION]. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERSIBLE FOUL AND SURFACE WATER PUMPING STATIONS AND KITEMARKED

A3

ISSUED FOR APPROVAL



TURRET DETAILS TYPE 3:
ACCESS TYPE S6
SCALE: 1:20



TURRET DETAILS TYPE 4:
ACCESS TYPE S6a
SCALE: 1:20