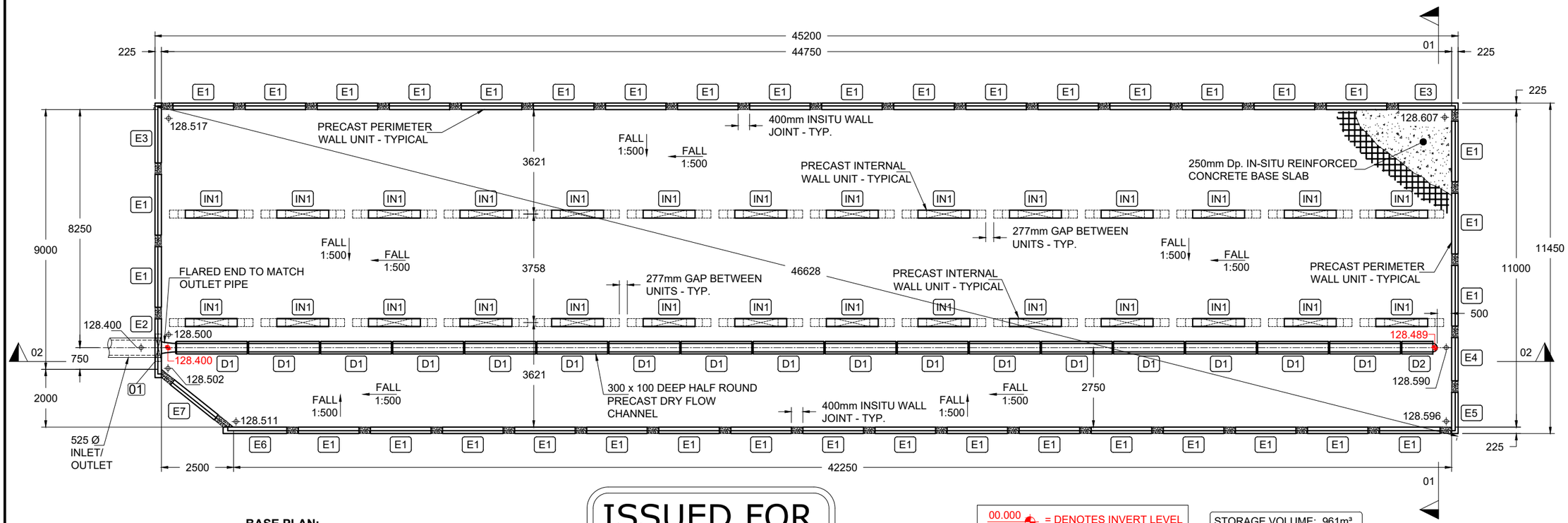
CARLOW CONCRETE

DRAWING TITLE:	KEEPMOAT HOMES FERRAND LANE, GOMERSAL 2.0m DEEP ATTENUATION TANK BASE LAYOUT

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	0	22-07-26	ISSUED FOR APPROVAL
Date: 22-07-26			
Drg No.: STS4640-001			

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "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 MUST BE KITEMARKED"

A3



BASE PLAN:
Scale: 1:150

ISSUED FOR APPROVAL

00.000 = DENOTES INVERT LEVEL IN DRY FLOW CHANNEL

00.000 = DENOTES STRUCTURAL SLAB LEVEL

STORAGE VOLUME: 961m³

DESIGN ASSUMPTIONS	
DESIGN LIFE:	120 YEARS
DESIGN EXPOSURE CLASSIFICATION:	XD2 / XC2
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
IMPOSED SURCHARGE LOAD ON WALLS:	HIGHWAY SURCHARGE TO BS EN 1991-2
MAXIMUM COVER LEVEL:	+132.800m (1.960m OVERBURDEN)
MINIMUM COVER LEVEL:	+131.750m (1.000m OVERBURDEN)
ASSUMED INTERNAL WATER LEVEL:	TOP OF TANK LEVEL
ASSUMED GROUND WATER LEVEL (FLOATATION):	+131.400m (EXISTING SURFACE LEVEL)
ASSUMED GROUND WATER LEVEL (ULS):	SURFACE LEVEL
ASSUMED GROUND WATER LEVEL (SLS):	TOP OF TANK LEVEL
ASSUMED ALLOWABLE BEARING PRESSURE	>200 kn/m² (FOUNDED ON WEATHERED BEDROCK)

KEY TO PRECAST WALL TYPES					
TYPE	DESCRIPTION	QUANTITY	HEIGHT	WIDTH	WEIGHT
E1	STANDARD EXTERNAL WALL	38	2.500m	2.10m	2.88t
E2	CUSTOM EXTERNAL WALL WITH OPENING	1	2.500m	2.035m	2.29t
E3	CUSTOM EXTERNAL WALL	2	2.500m	2.075m	2.85t
E4	CUSTOM EXTERNAL WALL	1	2.500m	1.500m	2.06t
E5	CUSTOM EXTERNAL WALL	1	2.500m	1.425m	1.95t
E6	CUSTOM EXTERNAL WALL	1	2.500m	2.210m	3.03t
E7	CUSTOM EXTERNAL WALL	1	2.500m	1.940m	2.66t
IN1	STANDARD INTERNAL WALL	28	1.99m	2.90m	1.62t
D1	STANDARD PRECAST DRY FLOW CHANNEL (2.50m LONG)	17	0.100m	0.30m	0.43t
D2	STANDARD PRECAST DRY FLOW CHANNEL (1.10m LONG)	1	0.100m	0.30m	0.19t

KEY TO WALL OPENING TYPES			
	QUANTITY	**DESCRIPTION**	INVERT
01	1	950mm x900mm OPENING FOR 525 Ø CONCRETE PIPE	128.400

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

ESTIMATED INSITU CONCRETE VOLUMES	
INSITU CONCRETE BLINDING	47.0m³
BASE SLAB	131.0m³
ROOF SCREED	68.0m³
INSITU WALL JOINTS	9.0m³
BENCHING	n/a

ESTIMATED VOLUMES INCLUDE A 5% ALLOWANCE FOR SITE DEVIATION

ESTIMATED MORTAR REQIRED	
M12 MORTAR	0.6m³

ESTIMATED VOLUMES INCLUDE A 5% ALLOWANCE FOR SITE DEVIATION

PRECAST CONCRETE SPECIFICATION	
CONCRETE GRADE:	C40/50
EXPOSURE CLASS:	XD2 / XC2
DESIGN CHEMICAL CLASS:	DC-1
MIN CEMENT CONTENT:	380 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:	XD2 / XC2
DESIGN CHEMICAL CLASS:	DC-1
MIN CEMENT CONTENT:	360 kg/m³
MAX CEMENT CONTENT:	400 kg/m³
CEMENT TYPE:	CEM IIIA + SR
GGBS CONTENT:	50%
MAX WATER / CEMENT RATIO:	0.45
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:	XD2 / XC2
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:	0.45
AGGREGATE TYPE:	LIMESTONE
MAX AGGREGATE SIZE:	10mm
SLUMP CLASS:	SEE NOTE 1

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

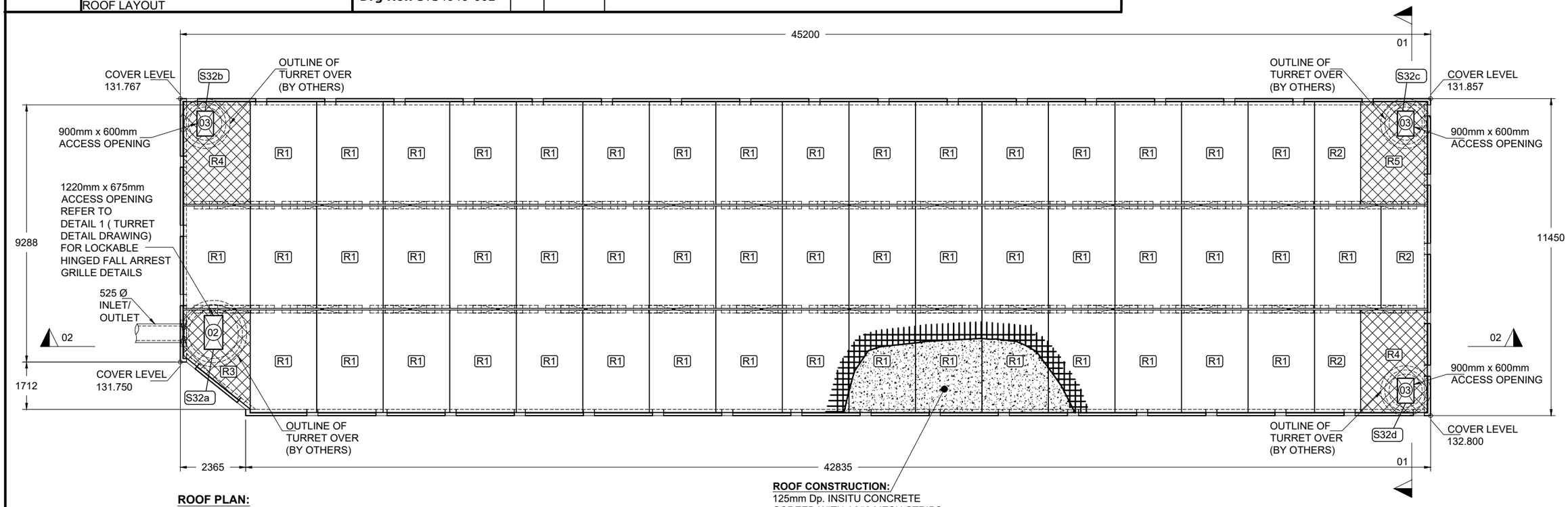
CARLOW CONCRETE

DRAWING TITLE:	KEEPMOAT HOMES FERRAND LANE, GOMERSAL 2.0m DEEP ATTENUATION TANK ROOF LAYOUT

Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	0	22-07-26	ISSUED FOR APPROVAL
Date: 22-07-26			
Drg No.: STS4640-002			

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "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 MUST BE KITEMARKED"

A3



ROOF PLAN:
Scale: 1:150

KEY TO ROOF OPENING TYPES		
	QUANTITY	**DESCRIPTION**
02	1	1220mm x 675mm ROOF OPENING
03	3	900mm x 600mm ROOF OPENING

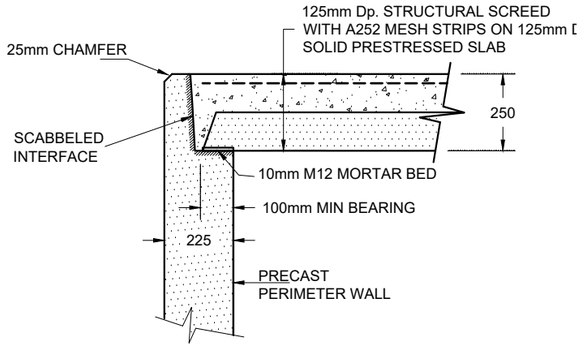
ISSUED FOR APPROVAL

ROOF CONSTRUCTION:
125mm Dp. INSITU CONCRETE SCREED WITH A252 MESH STRIPS ON 125mm Dp. SOLID PRESTRESSED SLAB (STANDARD PRESTRESSED SLAB TO BE REINFORCED USING 12No. 9.3mm Ø + 11No 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	3.700m	125mm	2.61t	50
R2	NARROW SOLID PRESTRESSED SLAB	1.660m	3.700m	125mm	1.80t	3
R3	CUSTOM SLAB WITH OPENING	2.400m	3.570m	150mm	1.98t	1
R4	CUSTOM SLAB WITH OPENING	2.400m	3.700m	150mm	3.06t	2
R5	CUSTOM SLAB WITH OPENING	2.400m	3.700m	150mm	3.06t	1
NOTE: STANDARD PRESTRESSED SLAB TO BE REINFORCED USING 12No. 9.3mm Ø + 11No 12.5mm Ø Y1860S7 STRANDS PER 2.4m WIDE PLANK						



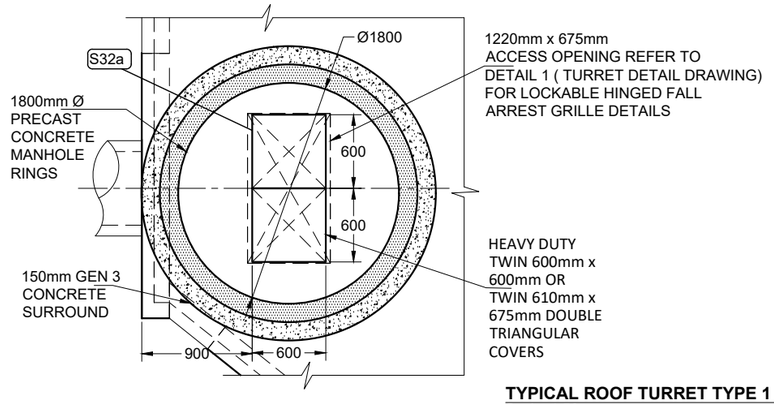
PERIMETER WALL - TOP OF WALL DETAIL:
SCALE: 1:20

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

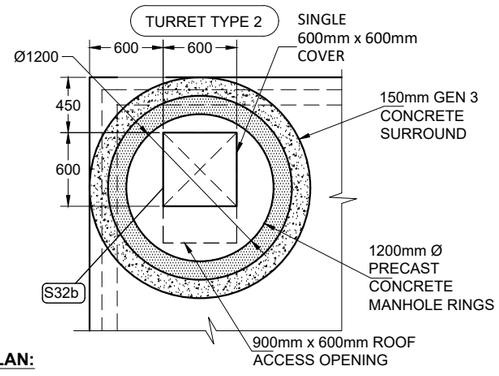
NOTE:
RISER SHAFTS AND COVERS (BY OTHERS)

FOR TURRET DETAILS SEE DRAWING STS4640-007)

TURRET TYPE 1



TURRET TYPE 2



TYPICAL ROOF TURRET TYPE 1 & 2 PLAN:
Scale: 1:50

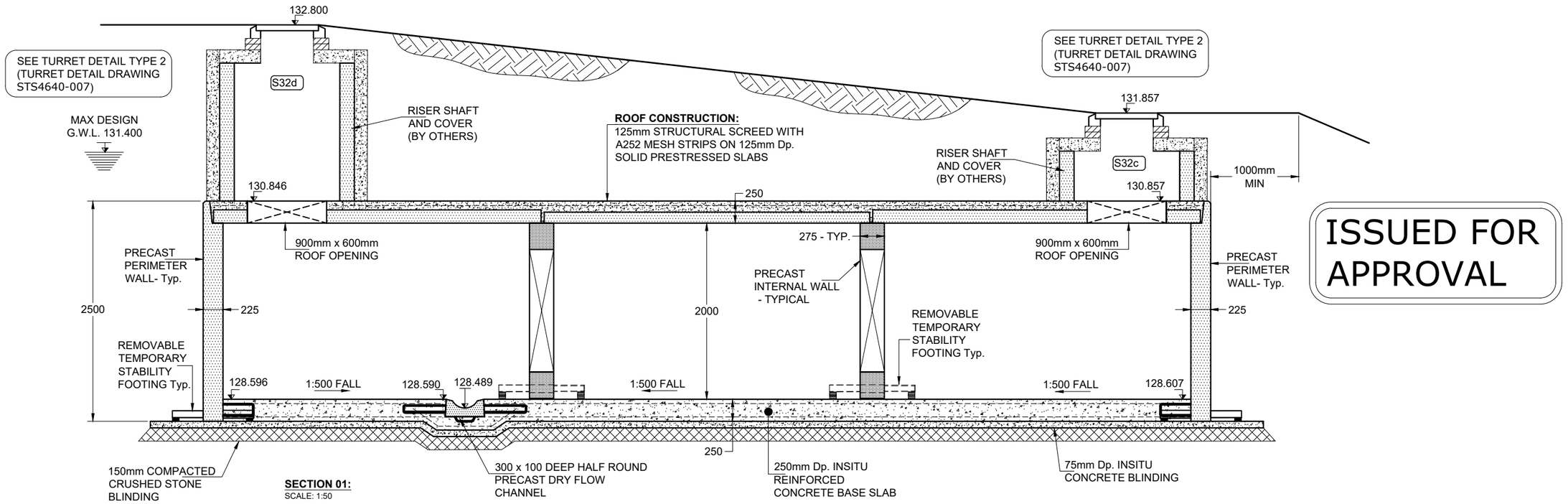
CARLOW CONCRETE

DRAWING TITLE:	KEEPMOAT HOMES FERRAND LANE, GOMERSAL 2.0m DEEP ATTENUATION TANK SECTIONS SHEET 1

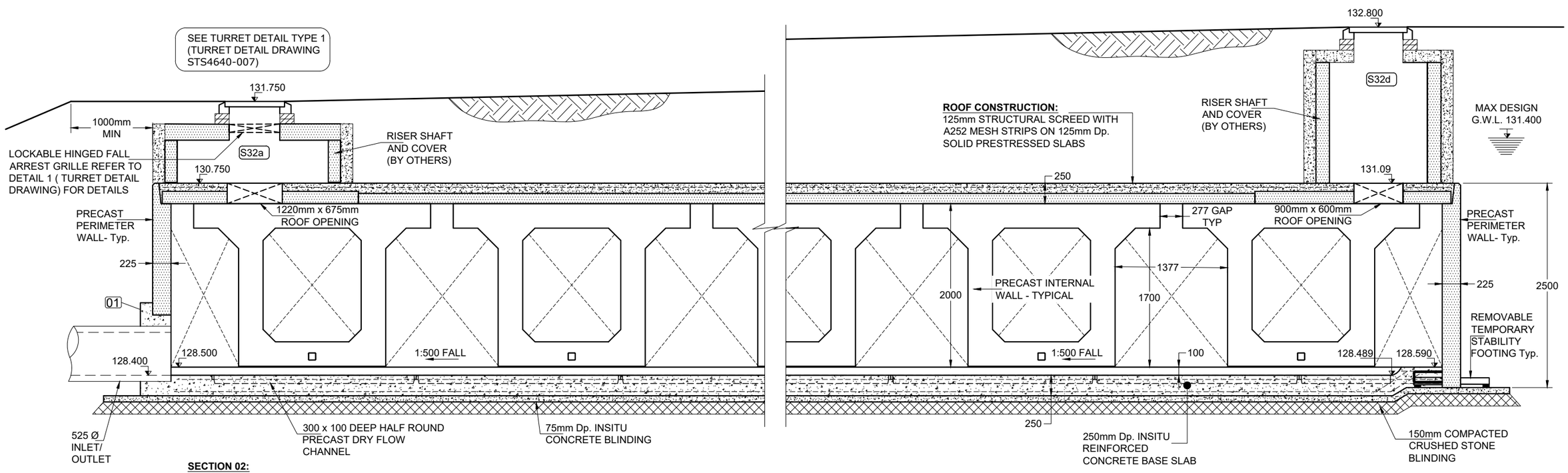
Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	0	22-07-26	ISSUED FOR APPROVAL
Date: 22-07-26			
Drg No.: STS4640-003			

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "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 MUST BE KITEMARKED"

A3



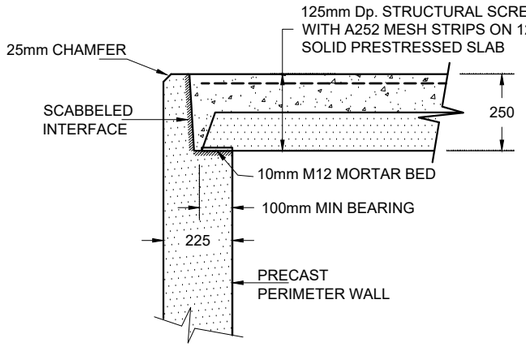
ISSUED FOR APPROVAL



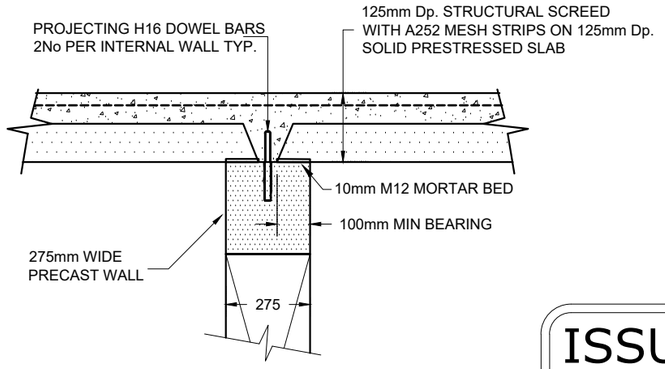
CARLOW CONCRETE	**Drawn By:** TH	**Rev.**	**Date.**	**Comments.**
DRAWING TITLE: KEEPMOAT HOMES FERRAND LANE, GOMERSAL 2.0m DEEP ATTENUATION TANK DETAILS SECTIONS	**Chkd By:** PL	0	22-07-26	ISSUED FOR APPROVAL
	Date: 22-07-26			
	Drg No.: STS4640-004			

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "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 MUST BE KITEMARKED"

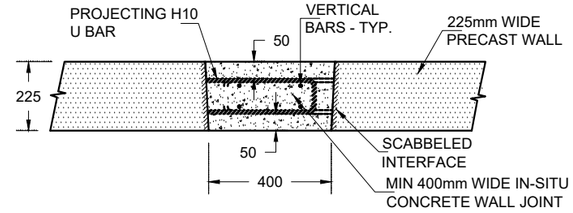
A3



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

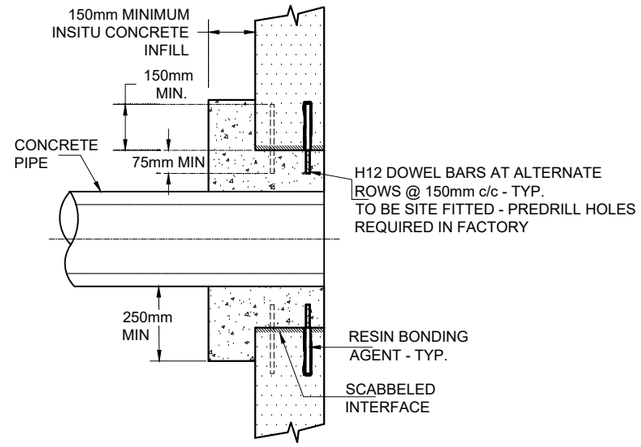


INTERNAL WALL - TOP OF WALL DETAIL:
SCALE: 1:20

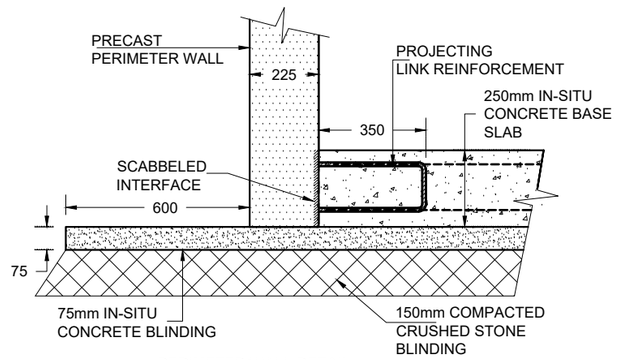


PLAN VIEW - TYPICAL WALL JOINT DETAIL:
SCALE: 1:20

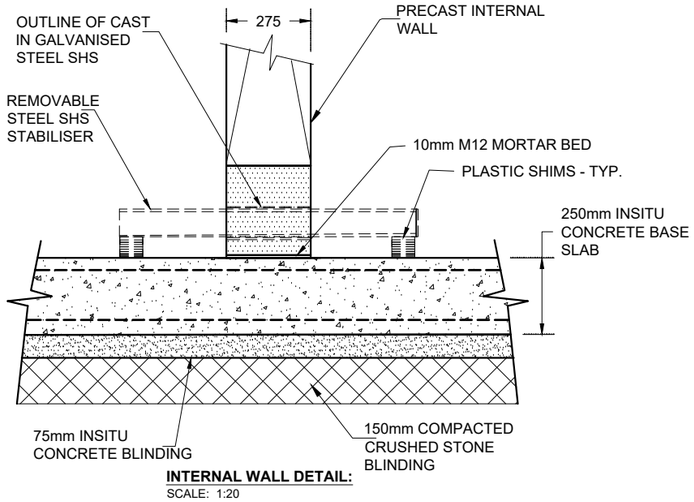
ISSUED FOR APPROVAL



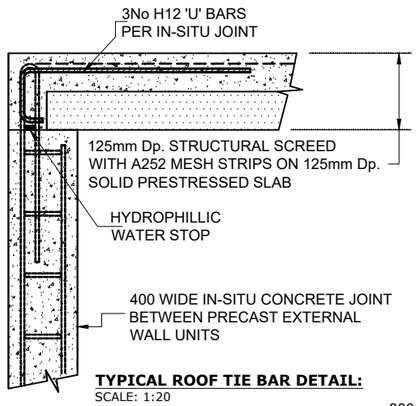
PIPE CONNECTION SECTION
SCALE: 1:20



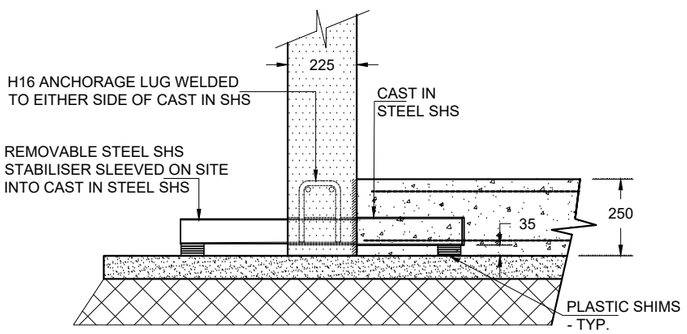
PERIMETER WALL DETAIL:
SCALE: 1:20



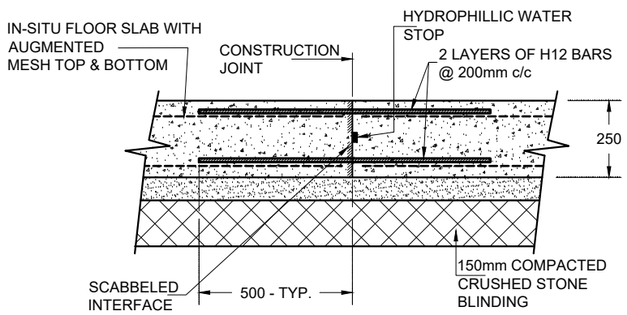
INTERNAL WALL DETAIL:
SCALE: 1:20



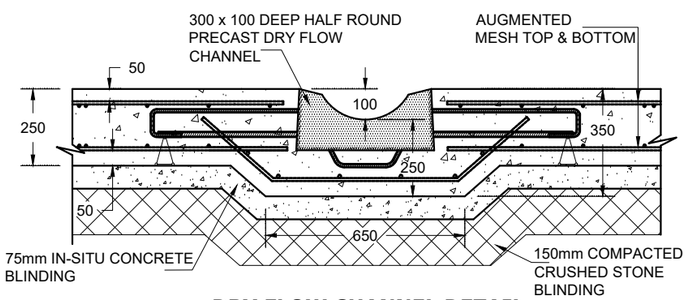
TYPICAL ROOF TIE BAR DETAIL:
SCALE: 1:20



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

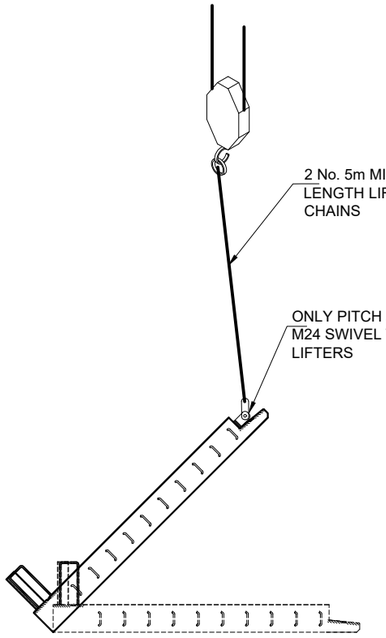
DRAWING TITLE: KEEPMOAT HOMES
FERRAND LANE, GOMERSAL
2.0m DEEP ATTENUATION TANK

LIFTING DETAILS

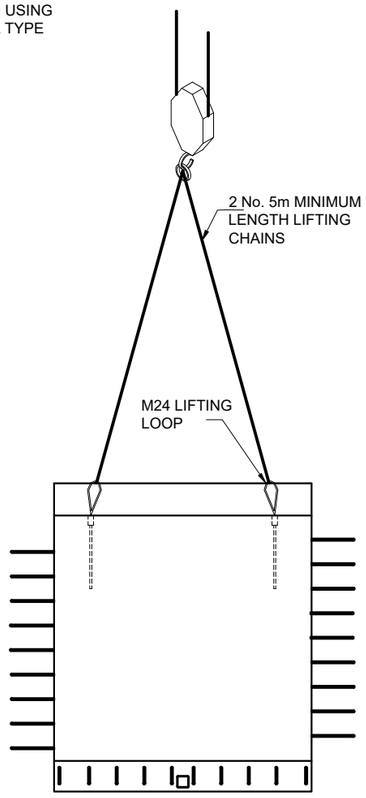
Drawn By: TH	Rev.	Date.	Comments.
Chkd By: PL	0	22-07-26	ISSUED FOR APPROVAL
Date: 22-07-26			
Drg No.: STS4640-005			

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "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 MUST BE KITEMARKED"

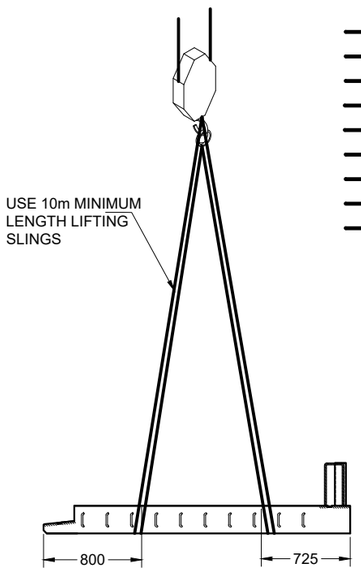
A3



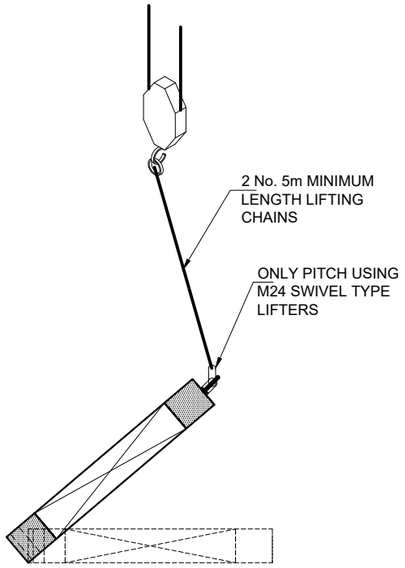
EXTERNAL WALL
LIFTING ARRANGEMENT - PITCHING UNIT:



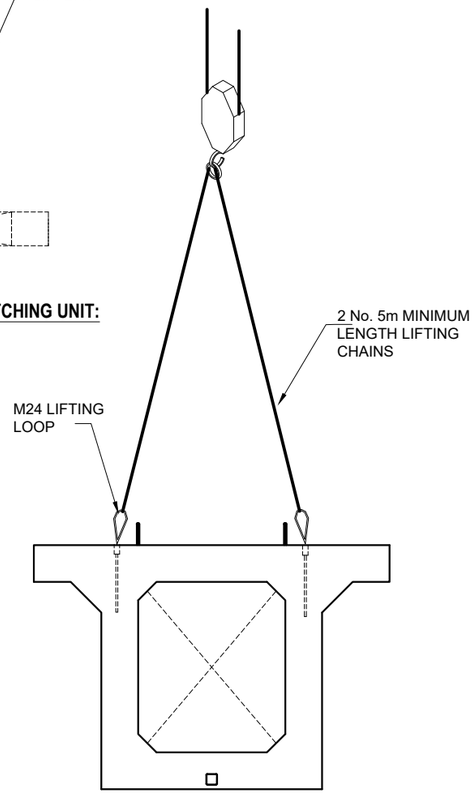
EXTERNAL WALL
LIFTING ARRANGEMENT -
GENERAL LIFTING AND FINAL POSITIONING:



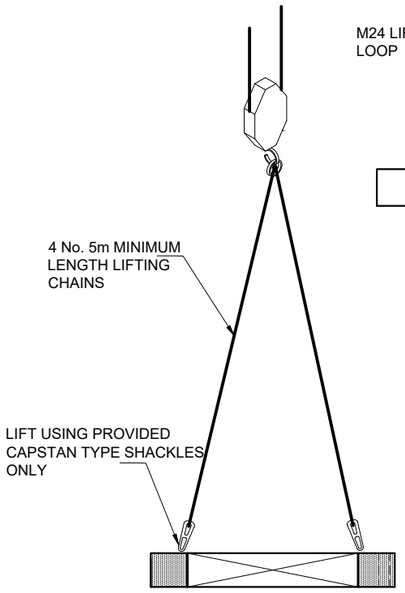
EXTERNAL WALL
LIFTING ARRANGEMENT - HORIZONTAL LIFTING:



INTERNAL WALL
LIFTING ARRANGEMENT - PITCHING UNIT:

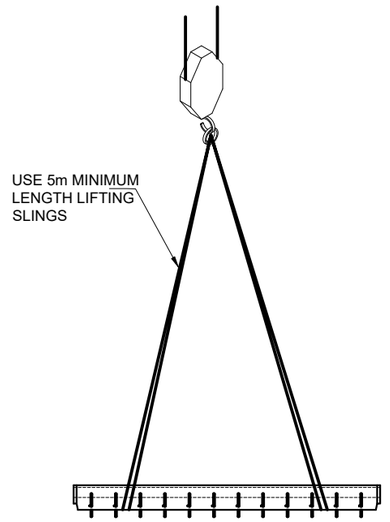


INTERNAL WALL
LIFTING ARRANGEMENT -
GENERAL LIFTING AND FINAL POSITIONING:



INTERNAL WALL
LIFTING ARRANGEMENT - HORIZONTAL LIFTING:

ISSUED FOR APPROVAL



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

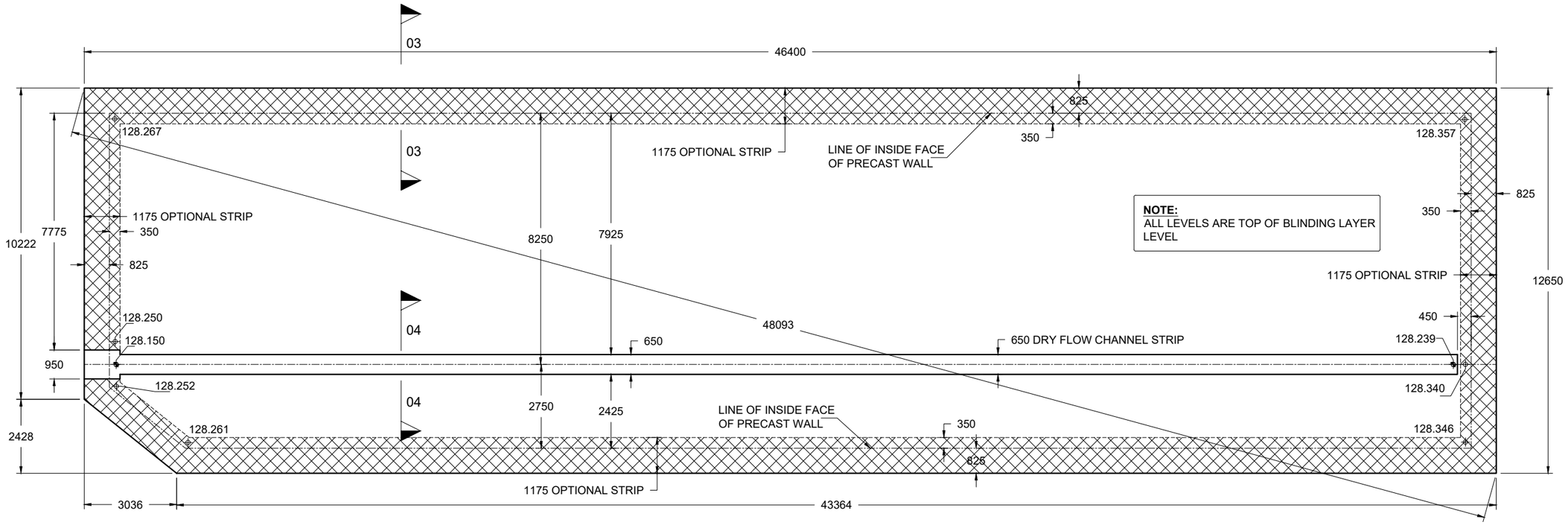
CARLOW CONCRETE

DRAWING TITLE:	KEEPMOAT HOMES FERRAND LANE, GOMERSAL 2.0m DEEP ATTENUATION TANK BLINDING LAYOUT

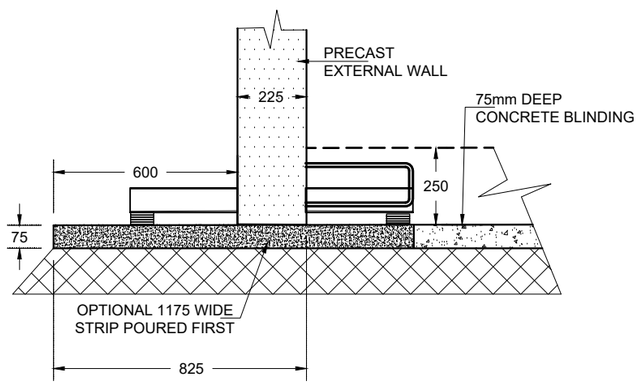
Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	0	22-07-26	ISSUED FOR APPROVAL
Date: 22-07-26			
Drg No.: STS4640-006			

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "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 MUST BE KITEMARKED"

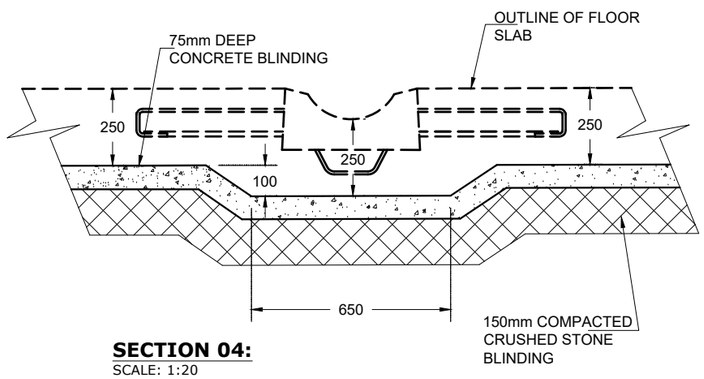
A3



BLINDING SETTING OUT PLAN:
Scale: 1:150



SECTION 03:
SCALE: 1:20



SECTION 04:
SCALE: 1:20

ISSUED FOR APPROVAL

CARLOW CONCRETE

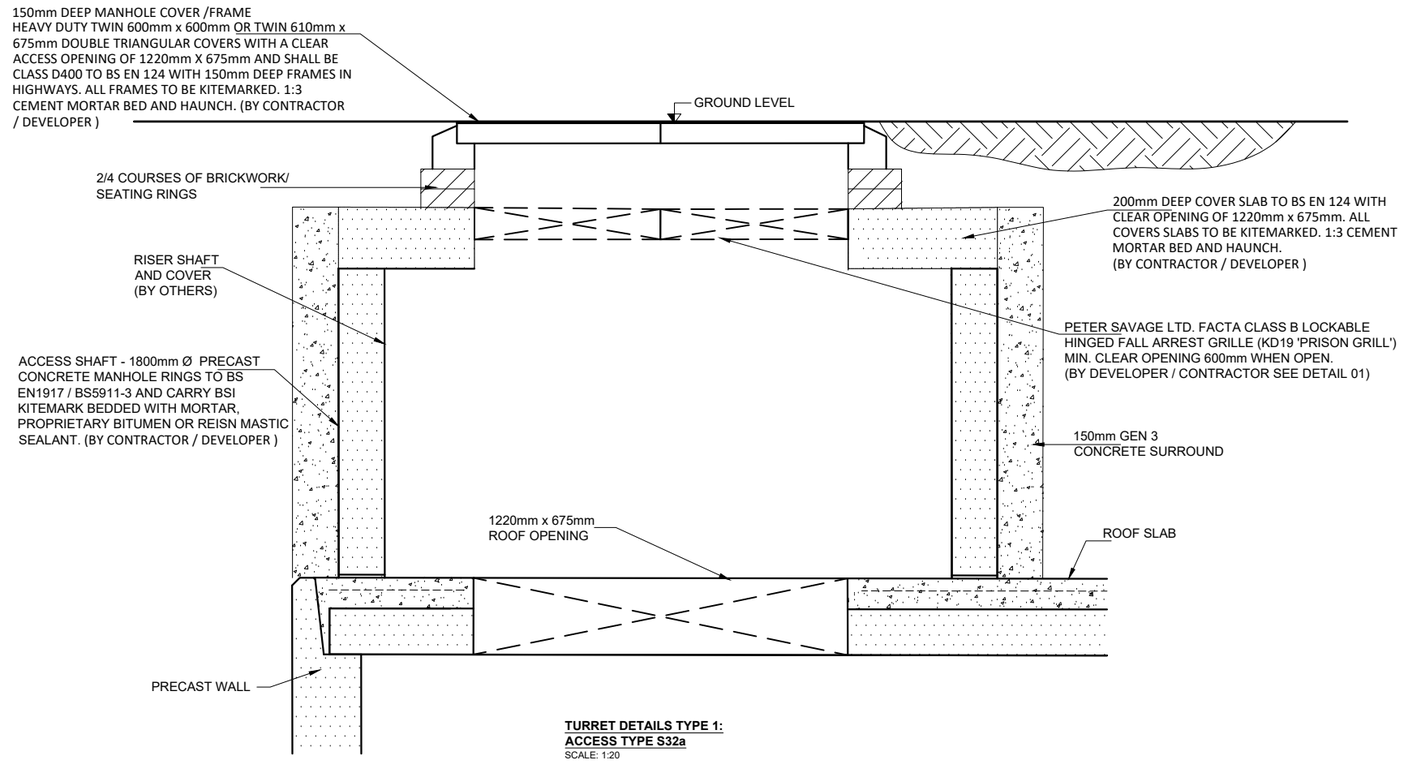
DRAWING TITLE: KEEPMOAT HOMES
FERRAND LANE, GOMERSAL
2.0m DEEP ATTENUATION TANK

TURRET DETAILS

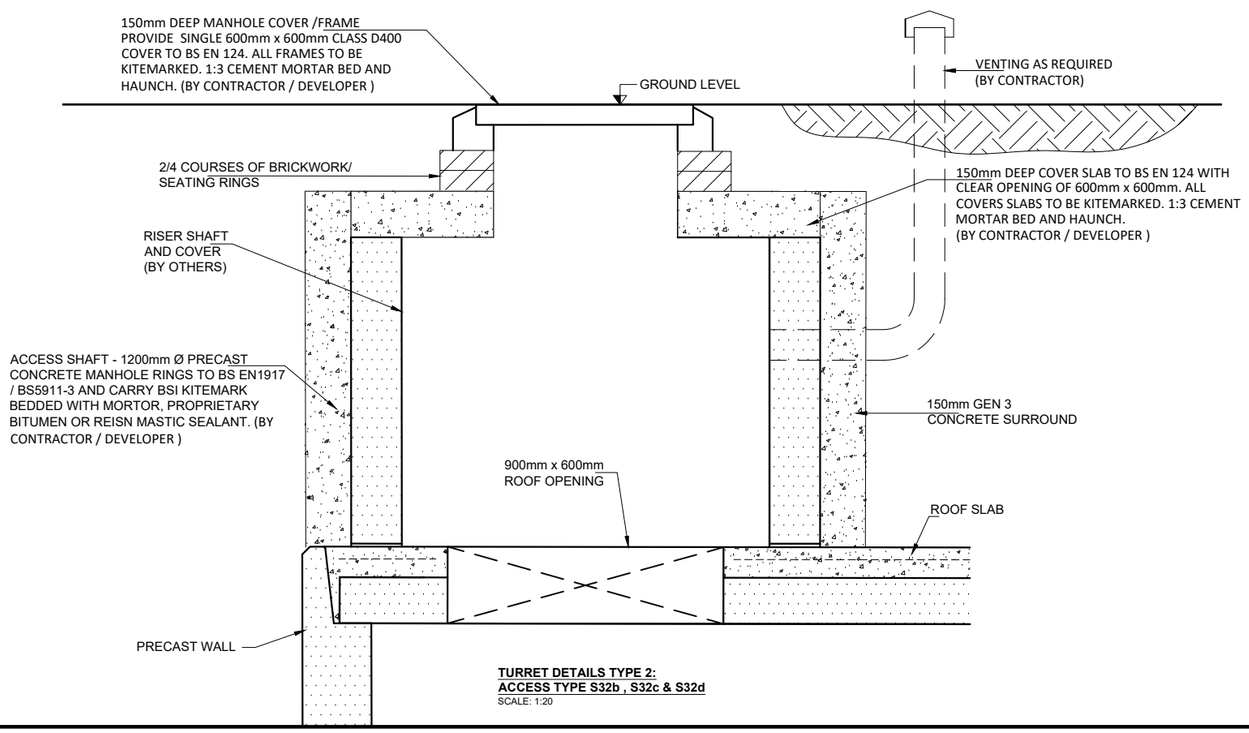
Drawn By: TH	**Rev.**	**Date.**	**Comments.**
Chkd By: PL	0	22-07-26	ISSUED FOR APPROVAL
Date: 22-07-26			
Drg No.: STS4640-007			

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "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 MUST BE KITEMARKED"

A3

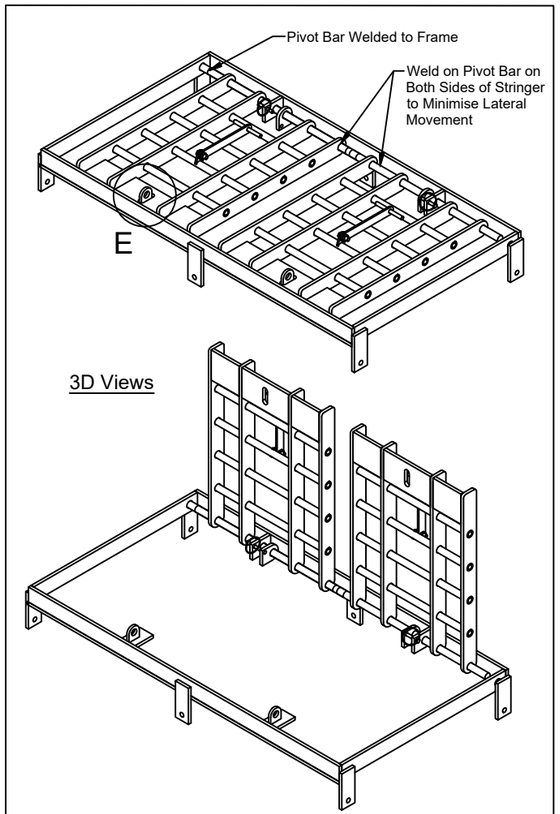


TURRET DETAILS TYPE 1:
ACCESS TYPE S32a
SCALE: 1:20



TURRET DETAILS TYPE 2:
ACCESS TYPE S32b , S32c & S32d
SCALE: 1:20

ISSUED FOR APPROVAL



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