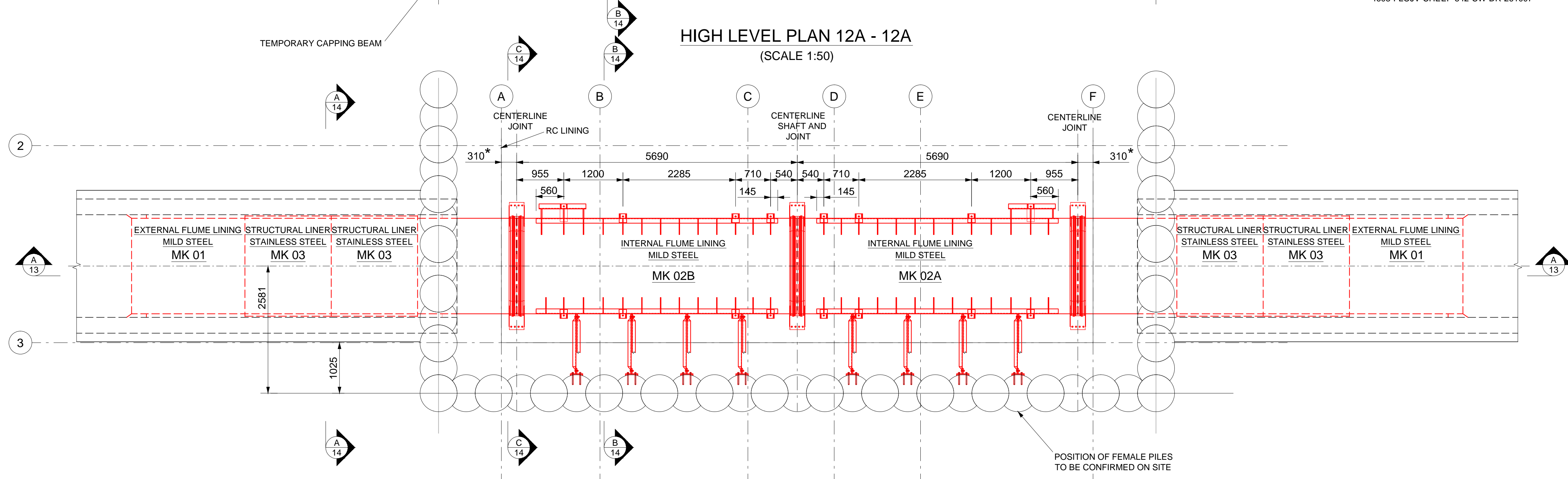
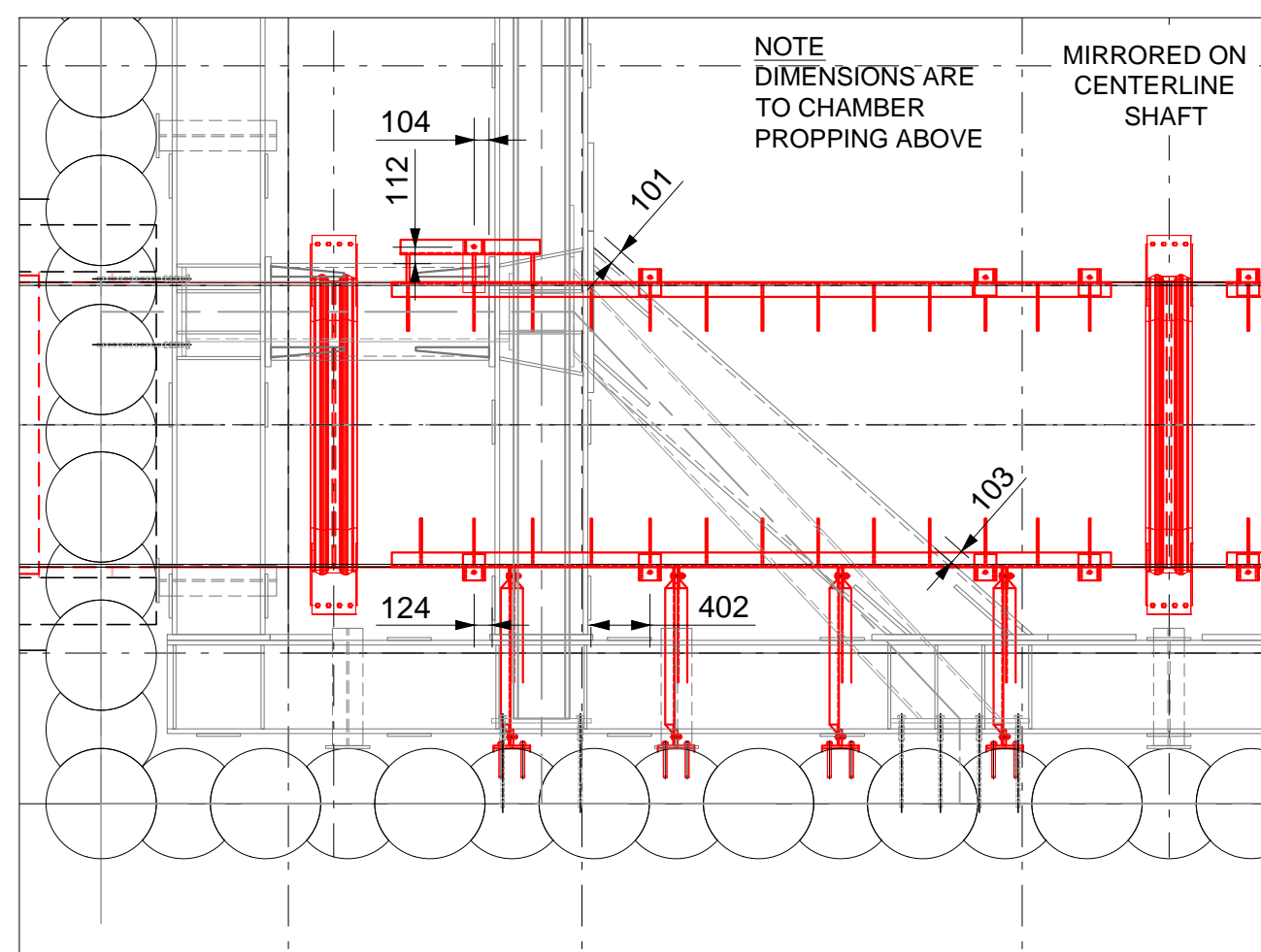


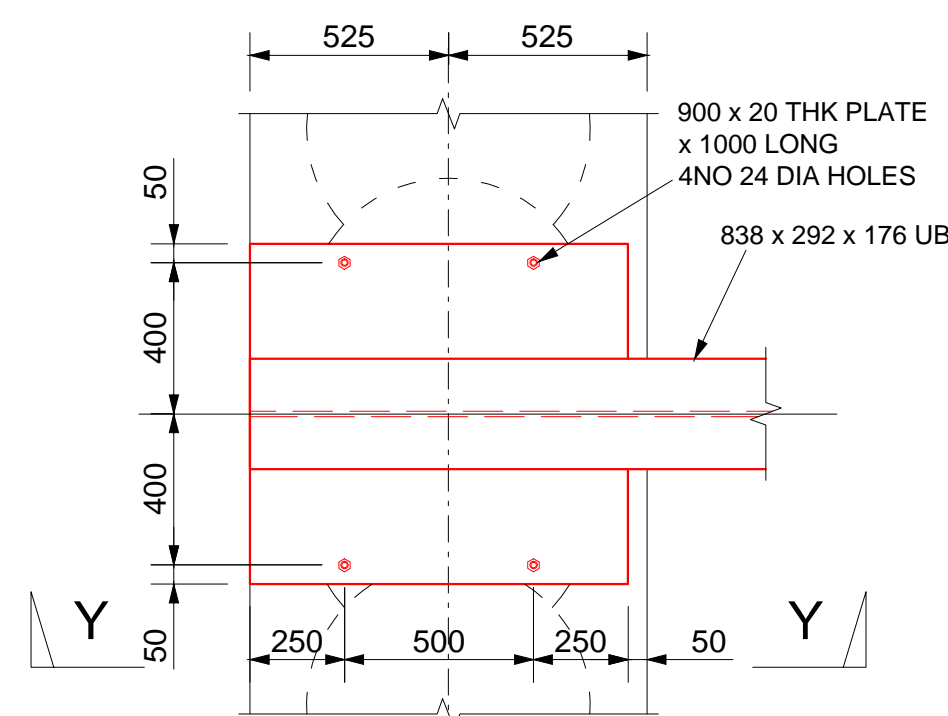
HIGH LEVEL PLAN 12A - 12A
(SCALE 1:50)



LOW LEVEL PLAN 12B - 12B
(SCALE 1:50)

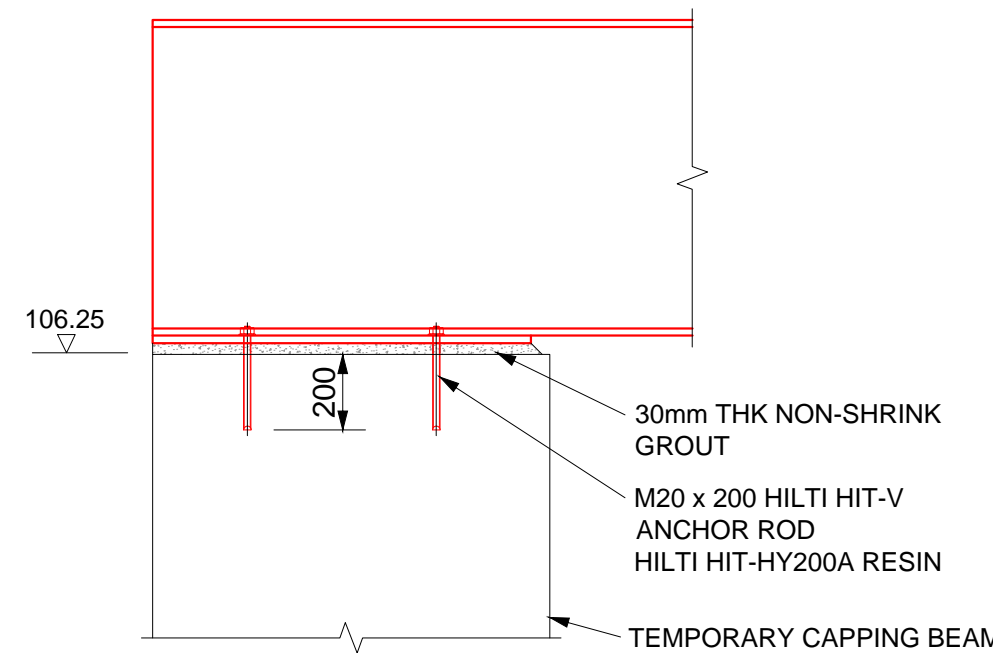


PLAN SHOWING CHAMBER
PROPPING
(SCALE 1:50)



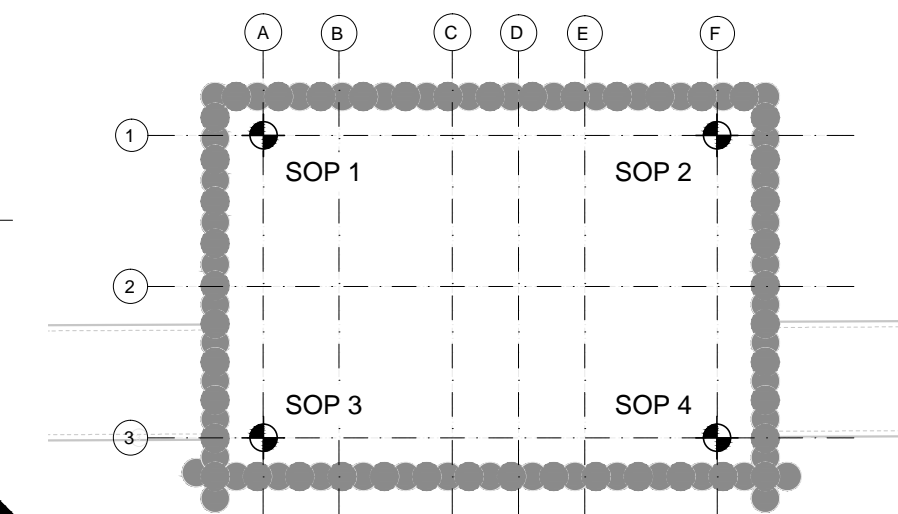
DETAIL X
(SCALE 1:20)

TOTAL VERTICAL LOAD APPLIED EQUALLY
OVER 4NO STEEL BEAM ENDS ONTO CAPPING BEAMS:
- CHARACTERISTIC DEAD LOAD: 216.3 kN
- CHARACTERISTIC LIVE LOAD: 383.9 kN
ONLY NOMINAL HORIZONTAL LOAD EXPECTED.



SECTION Y - Y
(SCALE 1:20)

NOTE:
CONTRACTOR TO UNDERTAKE TRIAL ERECTION
BEFORE STARTING ON SITE



GRIDLINES AND SETTING
OUT POINTS
(SCALE 1:200)

DATA	EASTINGS	NORTHINGS
SOP 1	528410.838	177904.383
SOP 2	528422.356	177907.750
SOP 3	528413.083	177896.704
SOP 4	528424.601	177900.072

GRIDLINES SETTING OUT DERIVED
FROM DRG. No.
4603-FLOJV-CHEEF-542-CW-DR-261007



Mapping reproduced by permission of Ordnance
Survey on behalf of HMSO. © Crown Copyright
and Database right 2015. All rights reserved.
Ordnance Survey licence number 100056637

NOTES:

- MILD STEEL SHALL BE GRADE S275 TO BS EN 10025:1993
UNLESS NOTED OTHERWISE.
- STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088-2
:1995 UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
- ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL
TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2:2012.
BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
- ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.
- GROUT TO BE CONBEXTRA AT GROUT.
- COUPLING REQUIRED TO BE VICTAULIC NON-RESTRAINED
FLEXIBLE COUPLING STYLE 230, NOMINAL PIPE SIZE 1950mm
WITH ISOPRENE RUBBER O-RING GASKETS.
- REFER ALSO TO PERMANENT WORKS DRAWINGS:
4603-FLOJV-CHEEF-542-CW-DR-260XXX AND 261XXX SERIES.
- PIPE SECTIONS TO BE LIFTED DOWN INTO THE SEWER WITH
LIFTING BEAM AND CHAINS. EYE BOLTS FOR LIFTING TO BE
M24 LONG SHANK COLLAR EYE BOLTS TO BS 4278. EYE BOLTS
ARE INSERTED INTO PURPOSE MADE HOLES ALONG THE
SOFFIT FOR ALL LINER SEGMENTS (SEE DETAIL Y ON
DRAWING 4440-FLOJV-CHEEF-240-UW-DA-400013).

* = DIMENSIONS TO BE CHECKED ON SITE

SAFETY HEALTH AND
ENVIRONMENTAL

REFER TO THE CDM DESIGNER'S RISK ASSESSMENT
4428-FLOJV-CHEEF-530-UW-HI-100006

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH
THE WORK DETAILED ON THIS DRAWING, NOTE:-

DEMOLITION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER
FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE AND DEEP EXCAVATION.

CONSTRUCTION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER
FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE.

OPERATION & MAINTENANCE
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER
DURING ANY INSPECTION.

Fit for Construction

Revision History					
Rev	Description	Dsgnr	Chkd	Appd	Date
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19
P02	BEAM MK 01 & 07. GRIDLINES AMENDED	RWIL	PLAN	MSIM	28/08/19
Current Revision					
C01	Issued for Construction (Identical to Revision P02)	RWIL	PLAN	MSIM	28/08/19

Contractor
Approval: CMIT

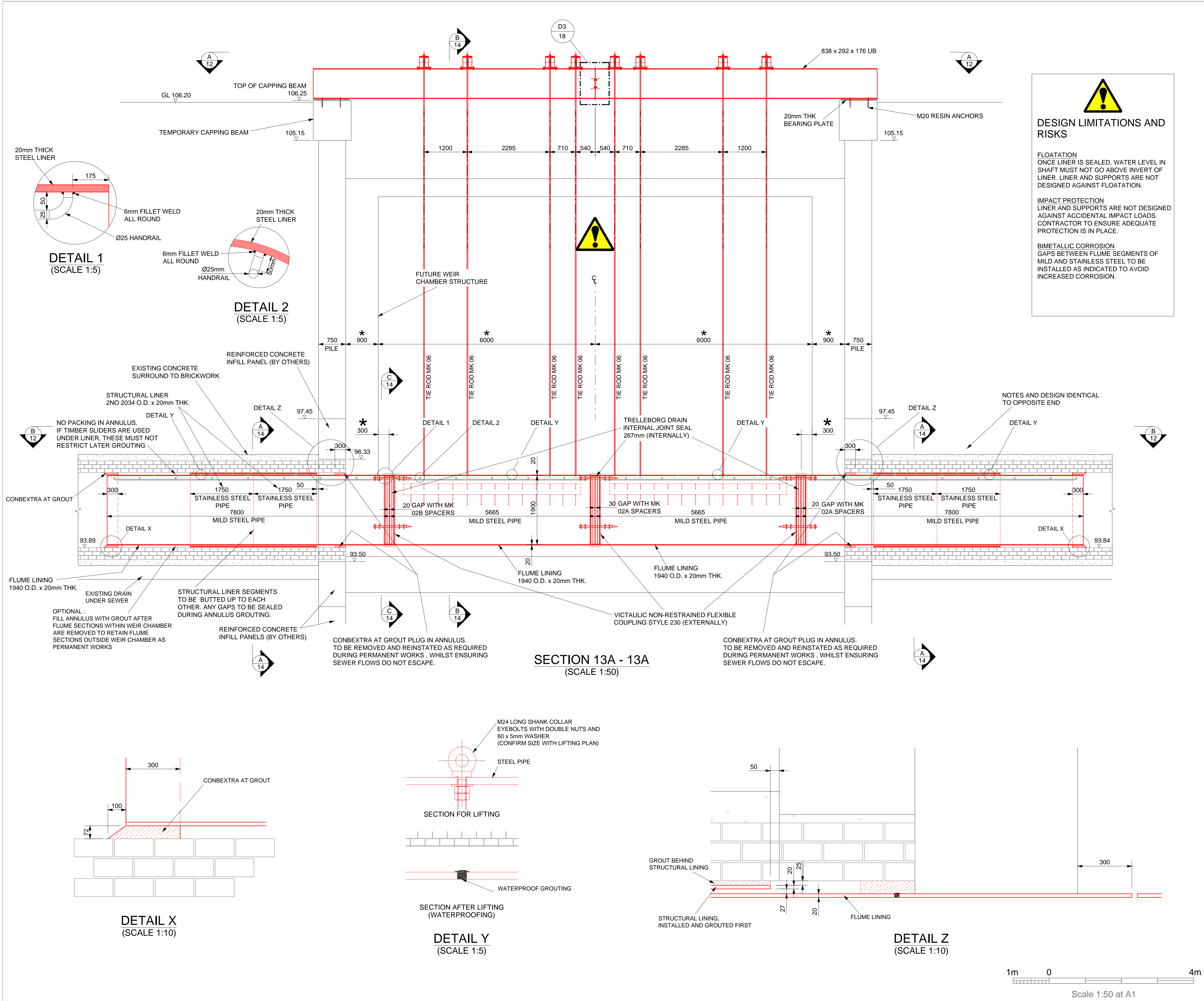
Fit For Construction

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
PLANS

15/07/19
4440-FLOJV-CHEEF-450-UW-DA-400012
OFFICIAL





DESIGN LIMITATIONS AND RISKS

FLOATATION
ONCE LINER IS SEALED, WATER LEVEL IN SHAFT MUST NOT GO ABOVE INVERT OF LINER. LINER AND SUPPORTS ARE NOT DESIGNED AGAINST FLOATATION.

IMPACT PROTECTION
LINER AND SUPPORTS ARE NOT DESIGNED AGAINST ACCIDENTAL IMPACT LOADS. CONTRACTOR TO ENSURE ADEQUATE PROTECTION IS IN PLACE.

BIMETALLIC CORROSION
GAPS BETWEEN FLUME SEGMENTS OF MILD AND STAINLESS STEEL TO BE INSTALLED AS INDICATED TO AVOID INCREASED CORROSION.



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:**
- MILD STEEL SHALL BE GRADE S275 TO BS EN 10025:1993 UNLESS NOTED OTHERWISE.
 - STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088-2 :1995 UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
 - ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2:2012. BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
 - ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.
 - GROUT TO BE CONBEXTRA AT GROUT.
 - COUPLING REQUIRED TO BE VICTAULIC NON-RESTRAINED FLEXIBLE COUPLING STYLE 230, NOMINAL PIPE SIZE 1950mm WITH ISOPRENE RUBBER O-RING GASKETS.
 - REFER ALSO TO PERMANENT WORKS DRAWINGS: 4603-FLOJV-CHEEF-542-CW-DR-260XXX AND 261XXX SERIES.
 - PIPE SECTIONS TO BE LIFTED DOWN INTO THE SEWER WITH LIFTING BEAM AND CHAINS. EYE BOLTS FOR LIFTING TO BE M24 LONG SHANK COLLAR EYE BOLTS TO BS 4278. EYE BOLTS ARE INSERTED INTO PURPOSE MADE HOLES ALONG THE SOFFIT FOR ALL LINER SEGMENTS (SEE DETAIL Y ON DRAWING 4440-FLOJV-CHEEF-240-UW-DA-400013).

* = DIMENSIONS TO BE CHECKED ON SITE

SAFETY HEALTH AND ENVIRONMENTAL

REFER TO THE CDM DESIGNER'S RISK ASSESSMENT 4428-FLOJV-CHEEF-530-UW-HI-100006

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH THE WORK DETAILED ON THIS DRAWING, NOTE:-

DEMOLITION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE AND DEEP EXCAVATION.

CONSTRUCTION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE.

OPERATION & MAINTENANCE
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER DURING ANY INSPECTION.

Fit for Construction

Revision History					
Rev	Description	Dsgnr	Chkd	Appd	Date
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19
P02	STRUCTURAL LINER NOTE ADDED	RWIL	PLAN	MSIM	29/07/19
P03	MILD STEEL PIPE GAP DIM NOTE REVISED	RWIL	PLAN	MSIM	28/08/19
Current Revision					
C01	Issued for Construction (Identical to Revision P03)	RWIL	PLAN	MSIM	28/08/19

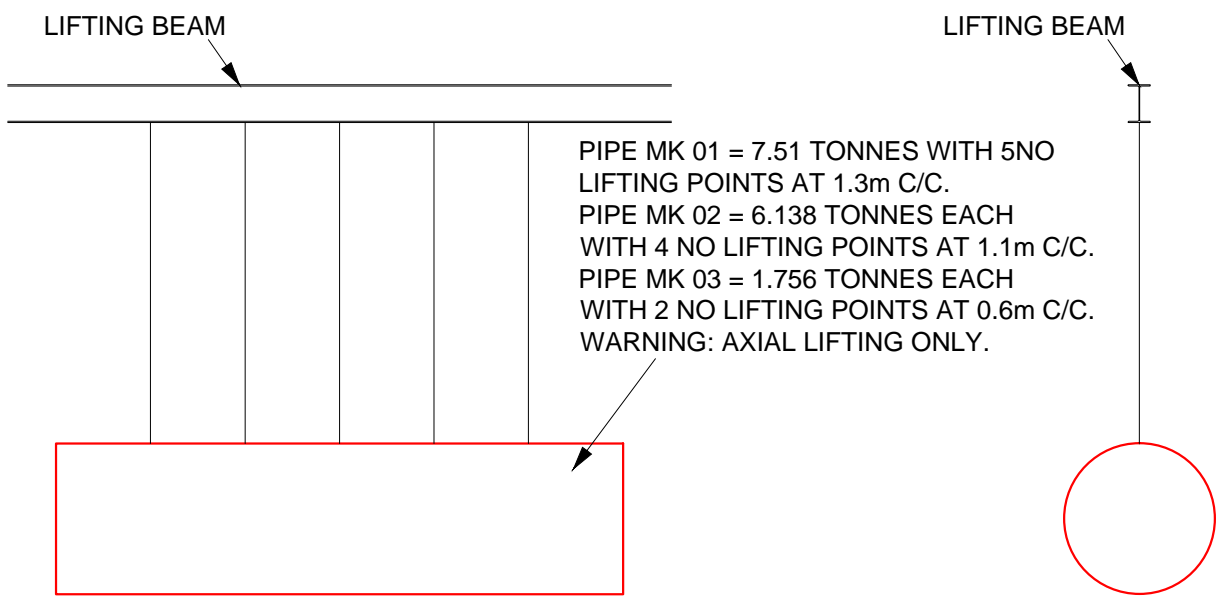
Contractor
Approval: NWAT

Fit For Construction

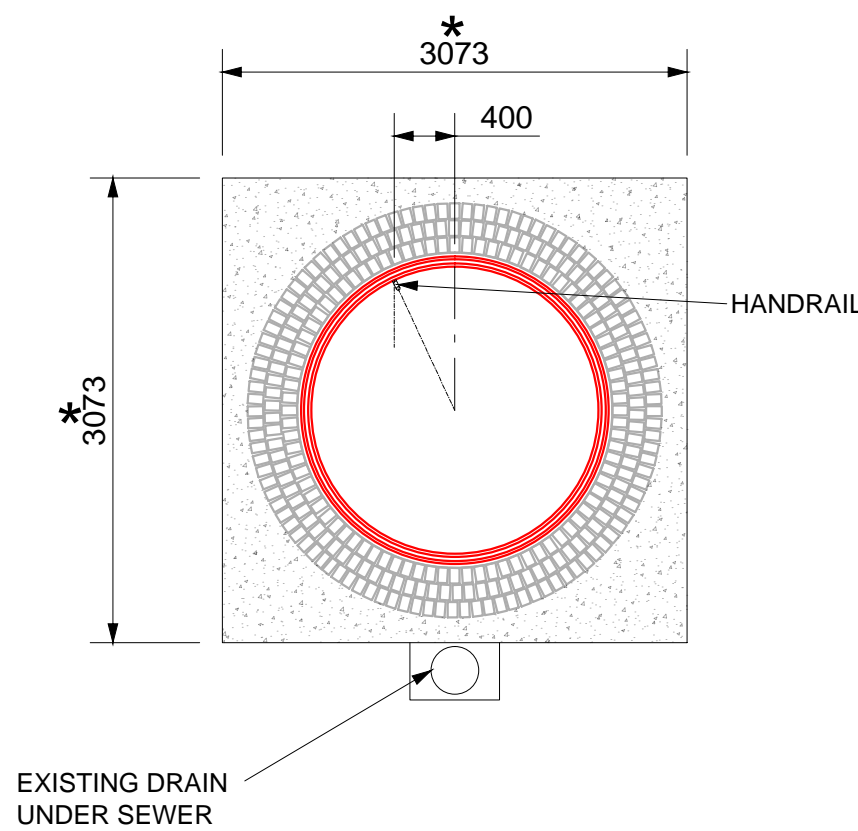
Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
LONG SECTION
22/08/19
4440-FLOJV-CHEEF-450-UW-DA-400013
OFFICIAL

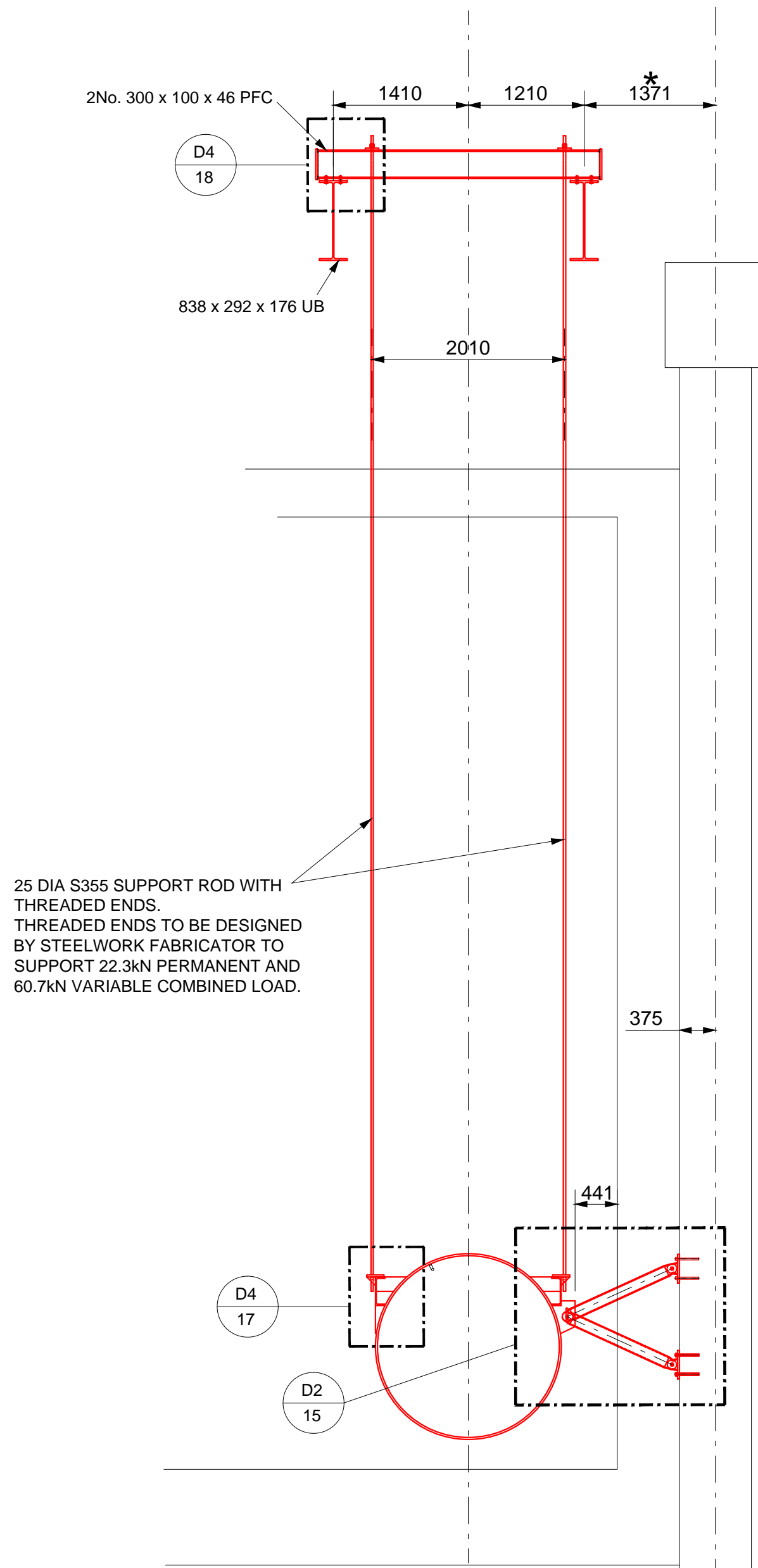




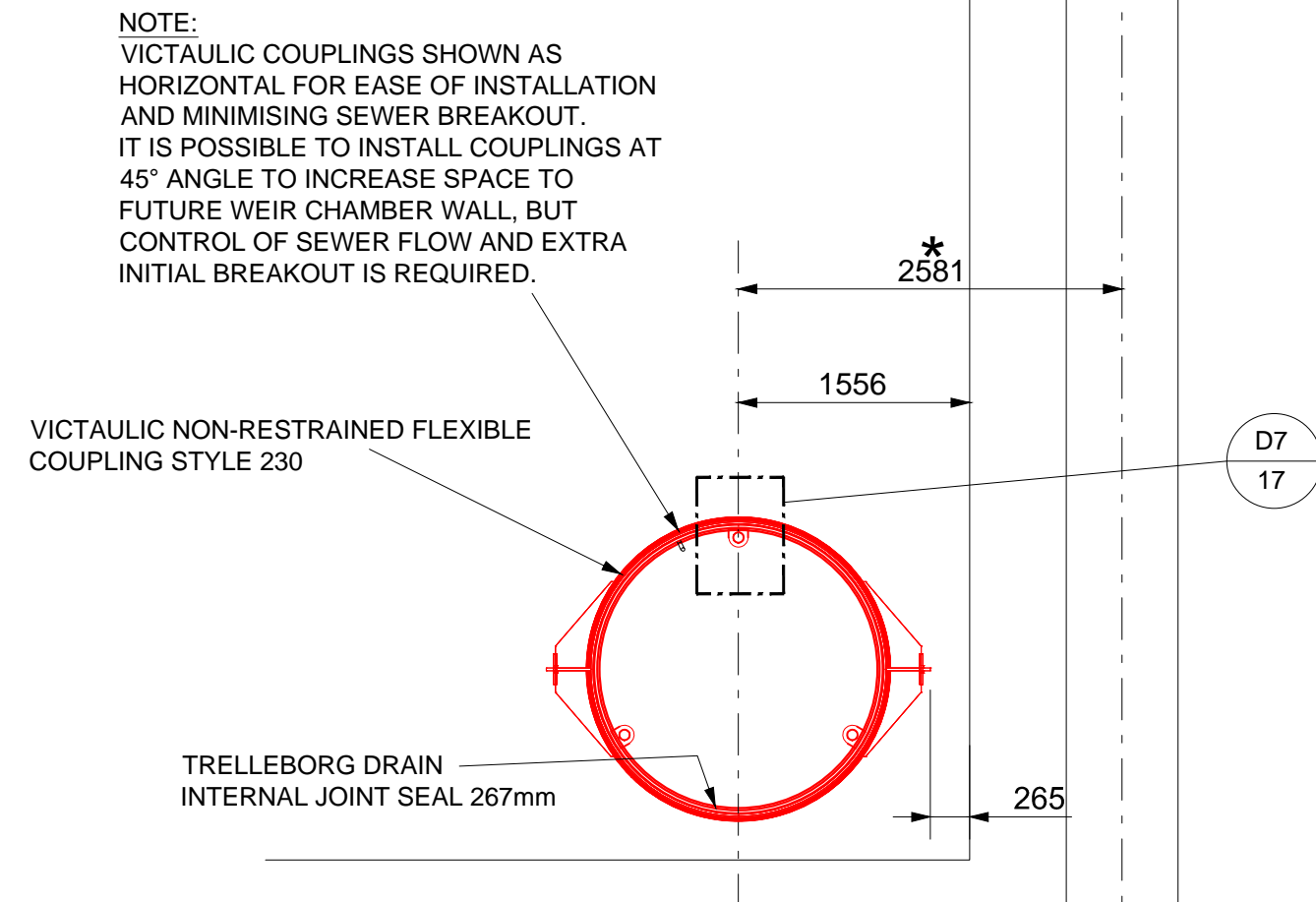
LIFTING METHOD



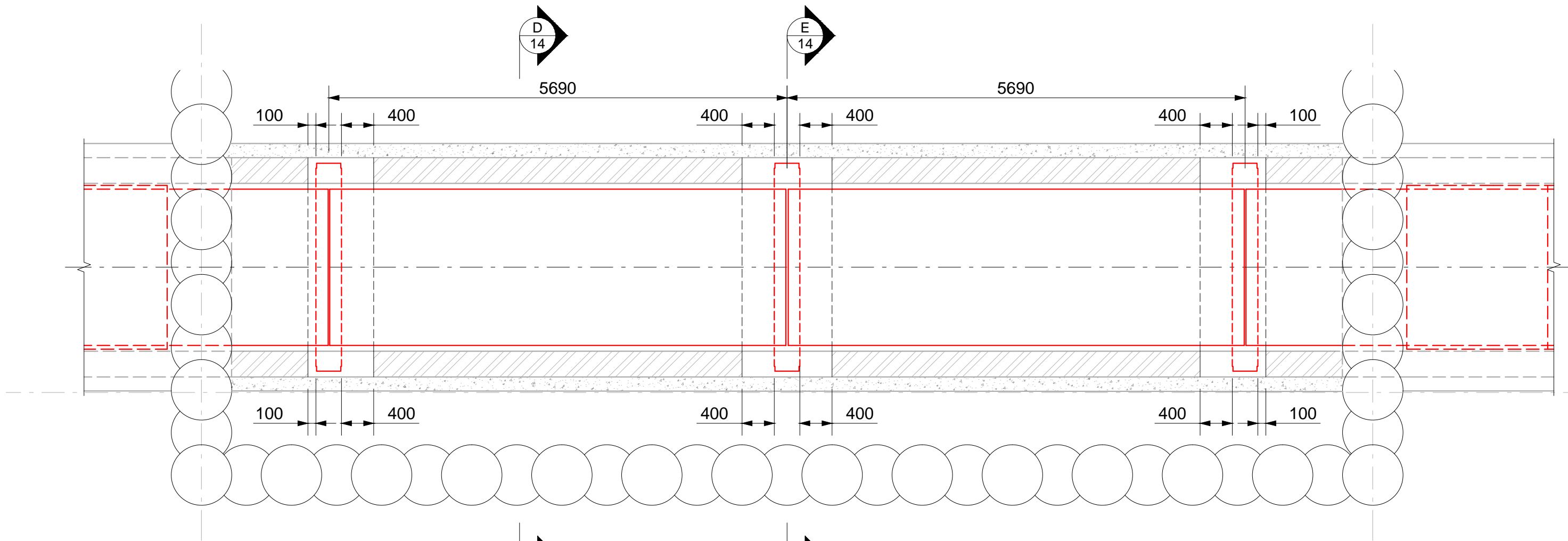
SECTION 14A - 14A
(SCALE 1:50)



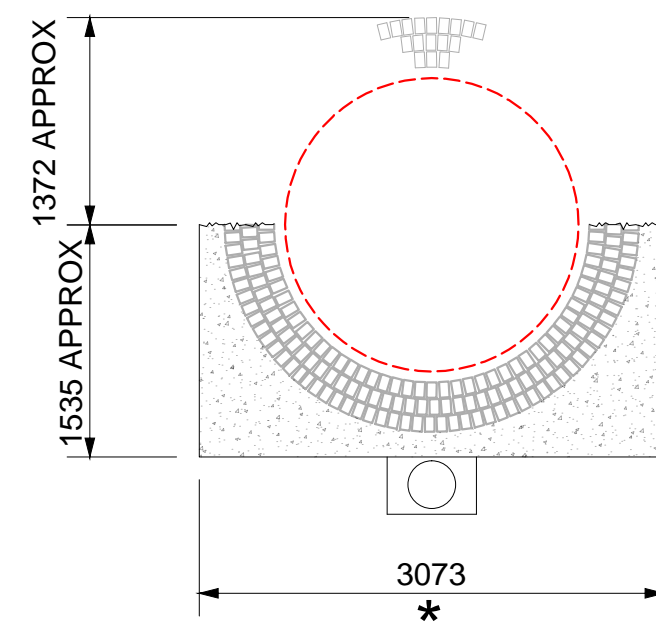
SECTION 14B - 14B
(SCALE 1:50)



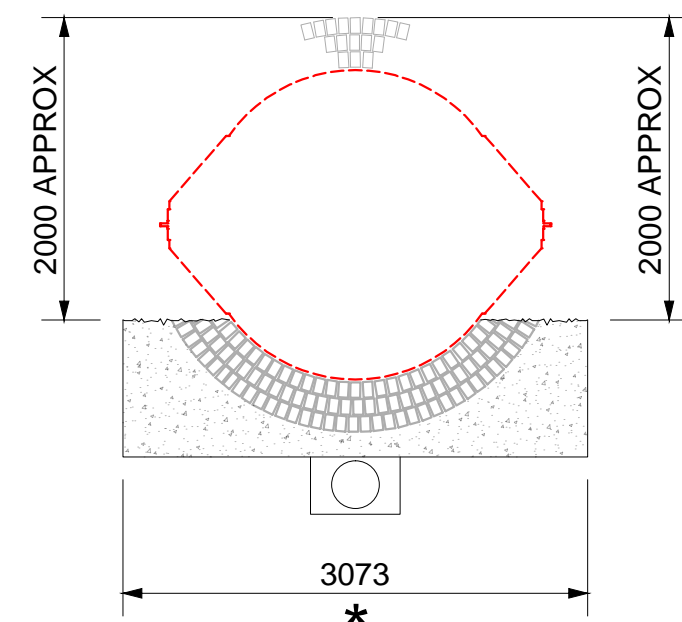
SECTION 14C - 14C
(SCALE 1:50)



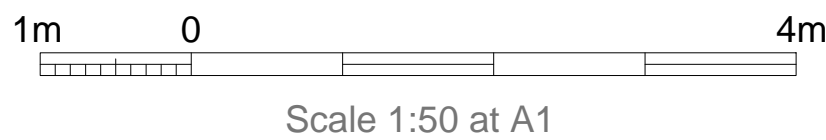
PLAN ON BROKEN DOWN EXISTING BRICK SEWER (SPRINGING LEVEL)
(SCALE 1:50)



SECTION 14D-14D
TYPICAL
(SCALE 1:50)



SECTION 14E-14E
AT COUPLING
(SCALE 1:50)



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:
- MILD STEEL SHALL BE GRADE S275 TO BS EN 10025:1993 UNLESS NOTED OTHERWISE.
 - STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088-2:1995 UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
 - ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2:2012. BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
 - ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.
 - GROUT TO BE CONBEXTRA AT GROUT.
 - COUPLING REQUIRED TO BE VICTAULIC NON-RESTRAINED FLEXIBLE COUPLING STYLE 230, NOMINAL PIPE SIZE 1950mm WITH ISOPRENE RUBBER O-RING GASKETS.
 - REFER ALSO TO PERMANENT WORKS DRAWINGS: 4603-FLOJV-CHEEF-542-CW-DR-260XXX AND 261XXX SERIES.
 - PIPE SECTIONS TO BE LIFTED DOWN INTO THE SEWER WITH LIFTING BEAM AND CHAINS. EYE BOLTS FOR LIFTING TO BE M24 LONG SHANK COLLAR EYE BOLTS TO BS 4278. EYE BOLTS ARE INSERTED INTO PURPOSE MADE HOLES ALONG THE SOFFIT FOR ALL LINER SEGMENTS (SEE DETAIL Y ON DRAWING 4440-FLOJV-CHEEF-240-UW-DA-400013).

* = DIMENSIONS TO BE CHECKED ON SITE

SAFETY HEALTH AND ENVIRONMENTAL

REFER TO THE CDM DESIGNER'S RISK ASSESSMENT 4428-FLOJV-CHEEF-530-UW-HI-100006

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH THE WORK DETAILED ON THIS DRAWING, NOTE:-

DEMOLITION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE AND DEEP EXCAVATION.

CONSTRUCTION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE.

OPERATION & MAINTENANCE
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER DURING ANY INSPECTION.

Fit for Construction

Revision History					
Rev	Description	Dsgnr	Chkd	Appd	Date
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19
P02	MINOR REVISIONS	RWIL	PLAN	MSIM	28/08/19
Current Revision					
C01	Issued for Construction (Identical to Revision P02)	RWIL	PLAN	MSIM	28/08/19

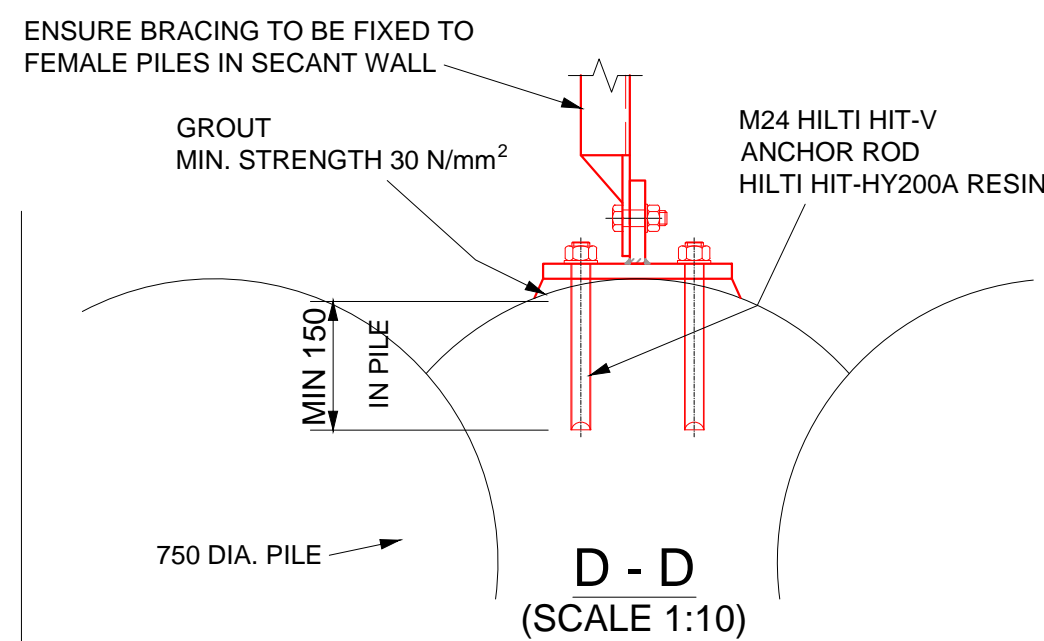
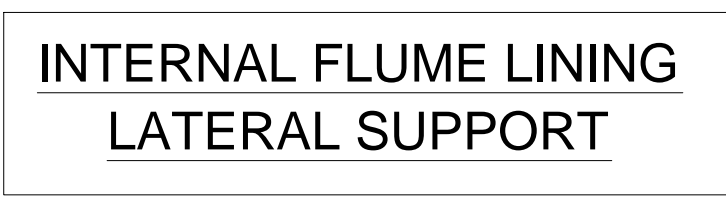
Contractor
Approval: CMIT

Fit For Construction

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
SECTIONS
15/07/19
4440-FLOJV-CHEEF-450-UW-DA-400014
OFFICIAL



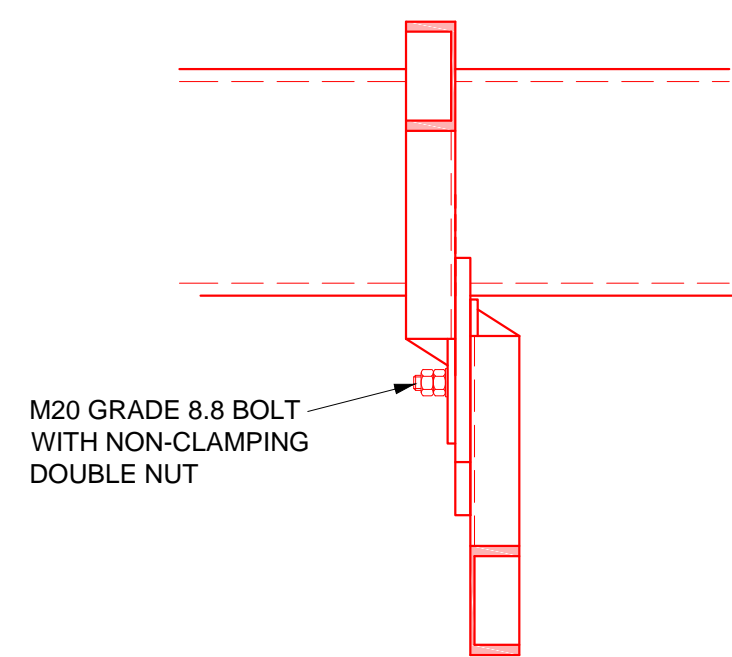
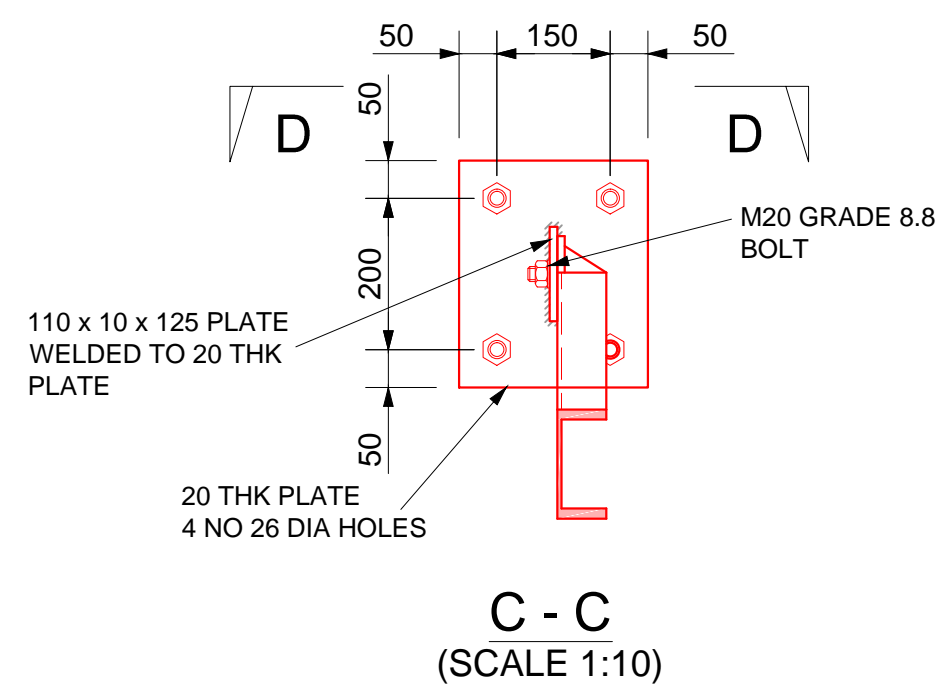


HORIZONTAL LOAD PERPENDICULAR TO PILE & WALL PER ANCHORED PLATE:

- CHARACTERISTIC DEAD LOAD:	0 kN
- CHARACTERISTIC LIVE LOAD:	46.4 kN

VERTICAL LOAD ON PILE & WALL PER ANCHORED PLATE:
NOTE - VERTICAL LOADS ARE EQUAL AND OPPOSITE
BETWEEN PAIRS OF PLATES.

- CHARACTERISTIC DEAD LOAD:	0.2 kN
- CHARACTERISTIC LIVE LOAD:	32.5 kN



B - B
(SCALE 1:10)

ITEM REFERENCE	No OFF
BRACE MK 04	16
BRACKET MK 05	16



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved.
Ordnance Survey licence number 100056637

NOTES:

1. MILD STEEL SHALL BE GRADE S275 TO BS EN 10025: 1993 UNLESS NOTED OTHERWISE.
2. STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088-2 :1995 UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
4. ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL.
TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2: 2012.
BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
5. ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.
6. GROUT TO BE CONBEXTRA AT GROUT.
7. COUPLING REQUIRED TO BE VICTAULIC NON-RESTRAINED FLEXIBLE COUPLING STYLE 230, NOMINAL PIPE SIZE 1950mm WITH ISOPRENE RUBBER O-RING GASKETS.
8. REFER ALSO TO PERMANENT WORKS DRAWINGS:
4603-FLQJV-CHEEF-542-CW-DR-260XXX AND 261XXX SERIES.
9. PIPE SECTIONS TO BE LIFTED DOWN INTO THE SEWER WITH LIFTING BEAM AND CHAINS. EYE BOLTS FOR LIFTING TO BE M24 LONG SHANK COLLAR EYE BOLTS TO BS 4278. EYE BOLTS ARE INSERTED INTO PURPOSE MADE HOLES ALONG THE SOFFIT FOR ALL LINER SEGMENTS (SEE DETAIL Y ON DRAWING 4440-FLQJV-CHEEF-240-UW-D-400013).

* = DIMENSIONS TO BE CHECKED ON SITE

SAFETY HEALTH AND ENVIRONMENTAL

REFER TO THE CDM DESIGNER'S RISK ASSESSMENT
4428-FLOJV-CHEEF-530-UW-HI-100006

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH THE WORK DETAILED ON THIS DRAWING, NOTE:-

DEMOLITION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER
FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE AND DEEP EXCAVATION.

CONSTRUCTION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER
FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE.

OPERATION & MAINTENANCE
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER
DURING ANY INSPECTION.

Fit for Construction

Revision History					
Rev	Description	Dsgnr	Chkd	Appd	Date
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19
P02	ISSUED FOR ACCEPTANCE	PLIG	PLAN	JWAL	16/07/19
P03	ITEM REFERENCE TABLE AMENDED	RWIL	PLAN	MSIM	28/08/19
Current Revision					
C01	Issued for Construction (Identical to Revision P03)	RWIL	PLAN	MSIM	28/08/19

Contractor
Approval: **CMIT**

Fit For Construction

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information

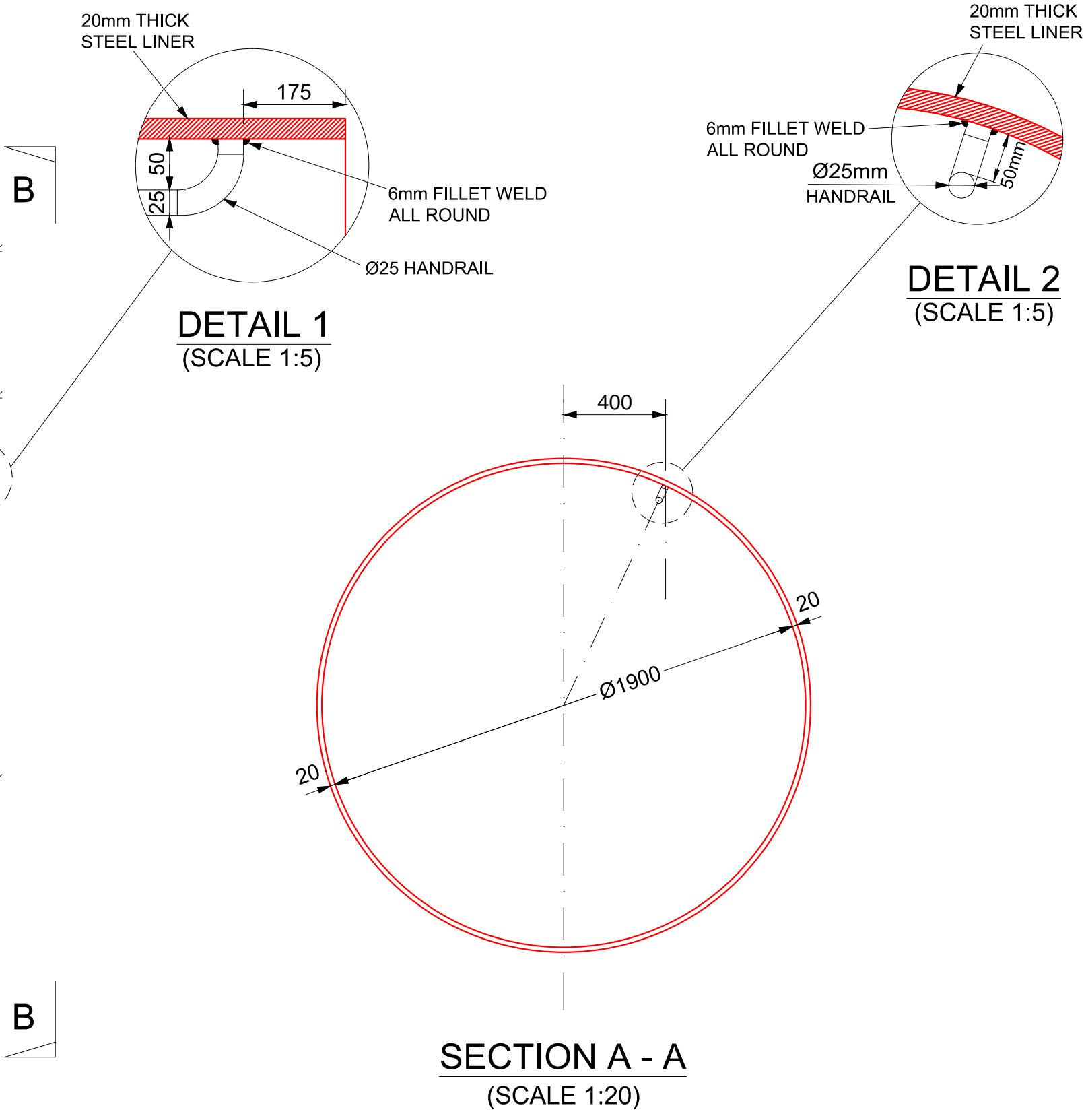
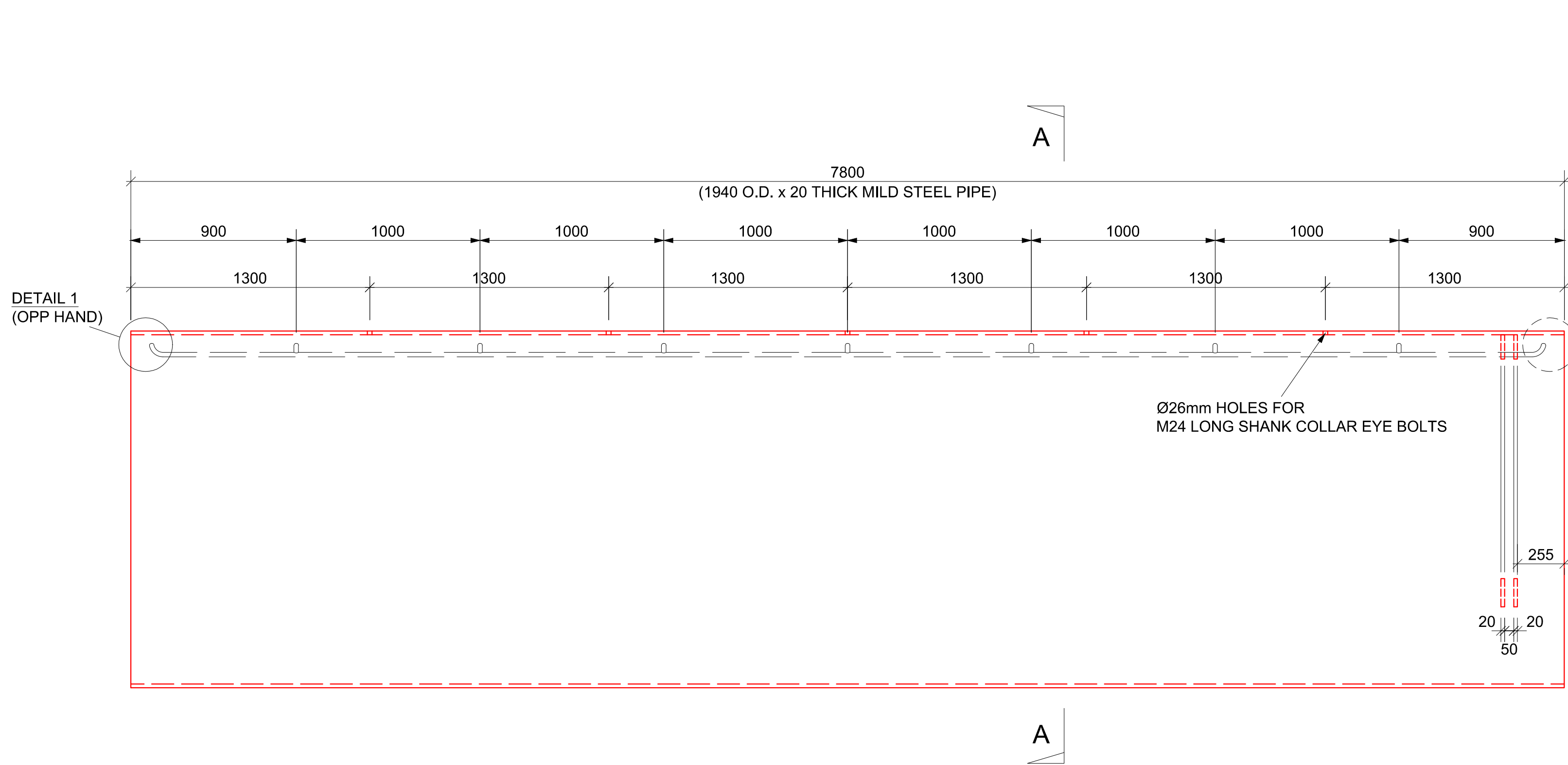
Robert Walpole

16/07/19

4440-FLOJV-CHEEF-450-UW-DA-400015

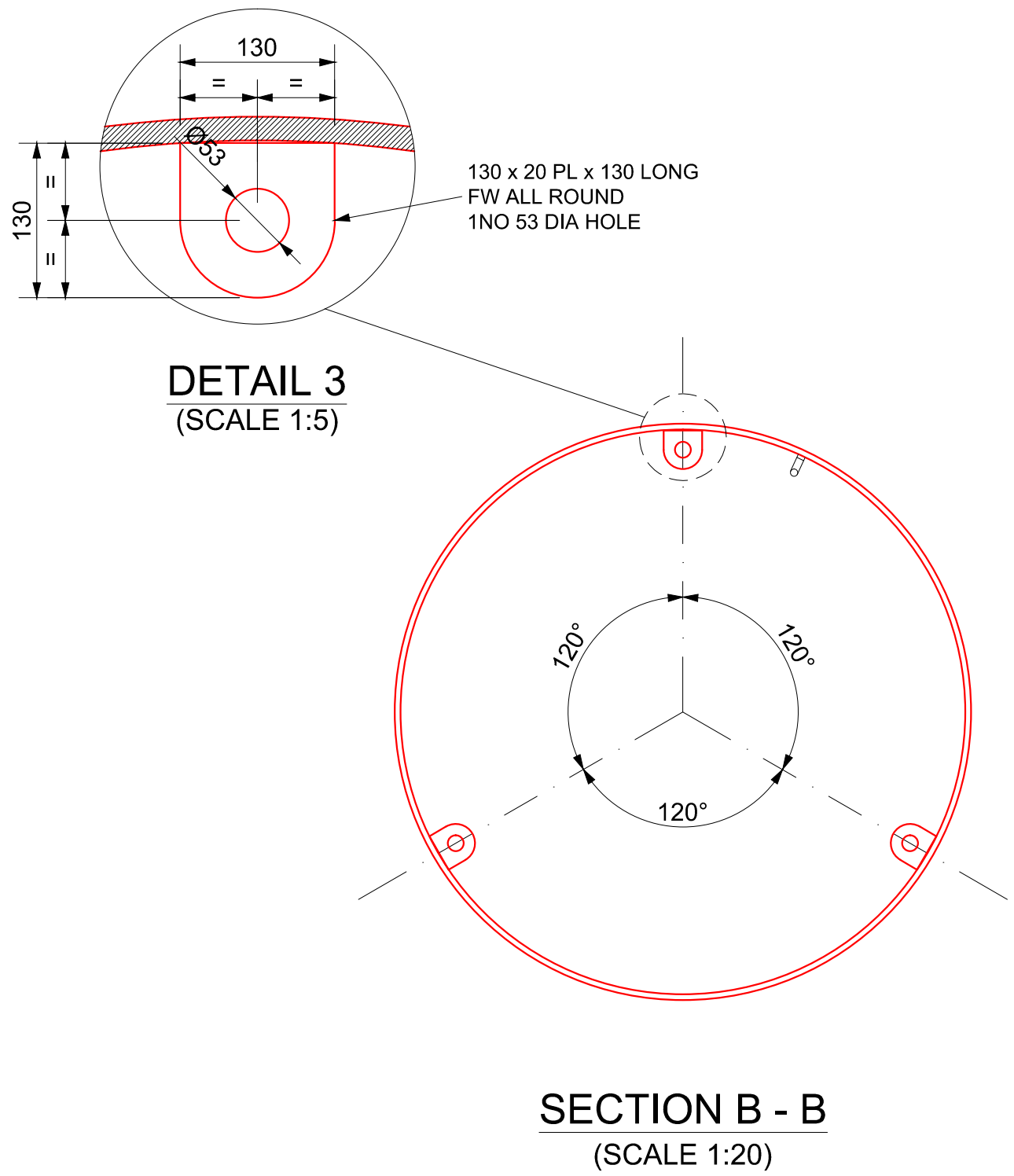
OFFICIAL





EXTERNAL FLUME LINING MK 01
(SCALE 1:20)
WEIGHT: 7510kg

EXTERNAL FLUME LINING
MILD STEEL



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:
1. MILD STEEL SHALL BE GRADE S275 TO BS EN 10025:1993 UNLESS NOTED OTHERWISE.
 2. STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088-2 :1995 UNLESS NOTED OTHERWISE.
 3. ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
 4. ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2:2012. BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
 5. ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.

ITEM REFERENCE	No OF
STEEL PIPE ASSEMBLY MK 01	2

Fit for Construction

Revision History						
Rev	Description	Dsgnr	Chkd	Appd	Date	
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19	
P02	FLUME LINING CHANGED TO MILD STEEL	RWIL	PLAN	MSIM	28/08/19	
Current Revision						
C01	Issued for Construction (Identical to Revision P02)	RWIL	PLAN	MSIM	28/08/19	

Contractor
Approval: CMIT

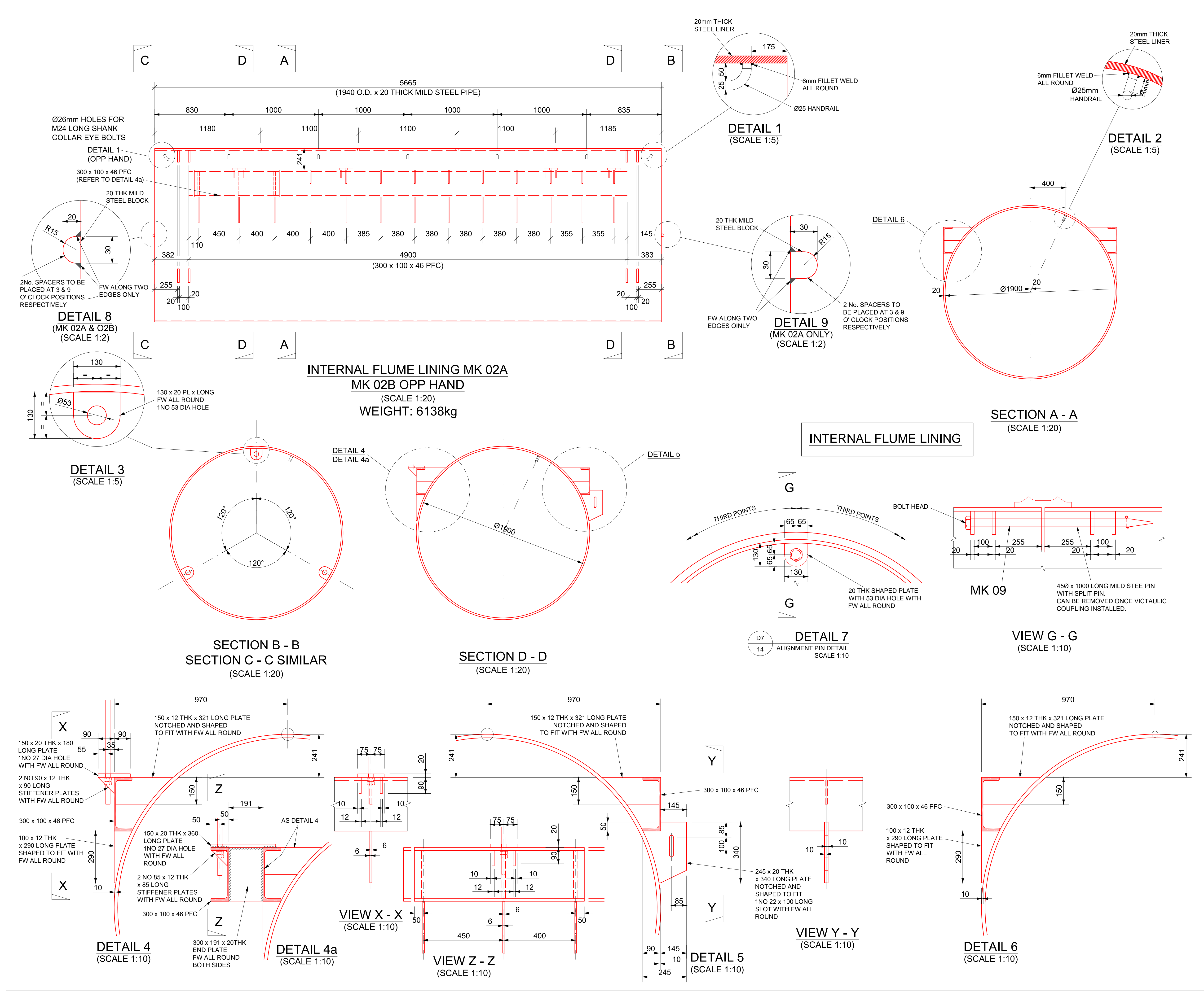
C01

Fit For Construction

A

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA
Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
FABRICATION DETAILS SHEET 1 OF 4
15/07/19
4440-FLOJV-CHEEF-450-UW-DA-400016
OFFICIAL





Keyplan:
This drawing

Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

NOTES:

- MILD STEEL SHALL BE GRADE S275 TO BS EN 10025:1993 UNLESS NOTED OTHERWISE.
- STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088-2 :1995 UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
- ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2:2012. BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
- ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.

ITEM REFERENCE	No OF
INTERNAL FLUME LINING MK 02A	1
INTERNAL FLUME LINING MK 02B	1
ALIGNMENT PIN MK 09	9

100mm 0 1000mm
Scale 1:10 at A1

Fit for Construction

Revision History					
Rev	Description	Dsgnr	Chkd	Appd	Date
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19
P02	DETAIL 4a REVISED	RWIL	PLAN	MSIM	29/07/19
P03	DETAILS 8 AND 9 ADDED	RWIL	PLAN	MSIM	28/08/19
Current Revision					
C01	Issued for Construction (Identical to Revision P03)	RWIL	PLAN	MSIM	28/08/19

Contractor Approval: NWAT

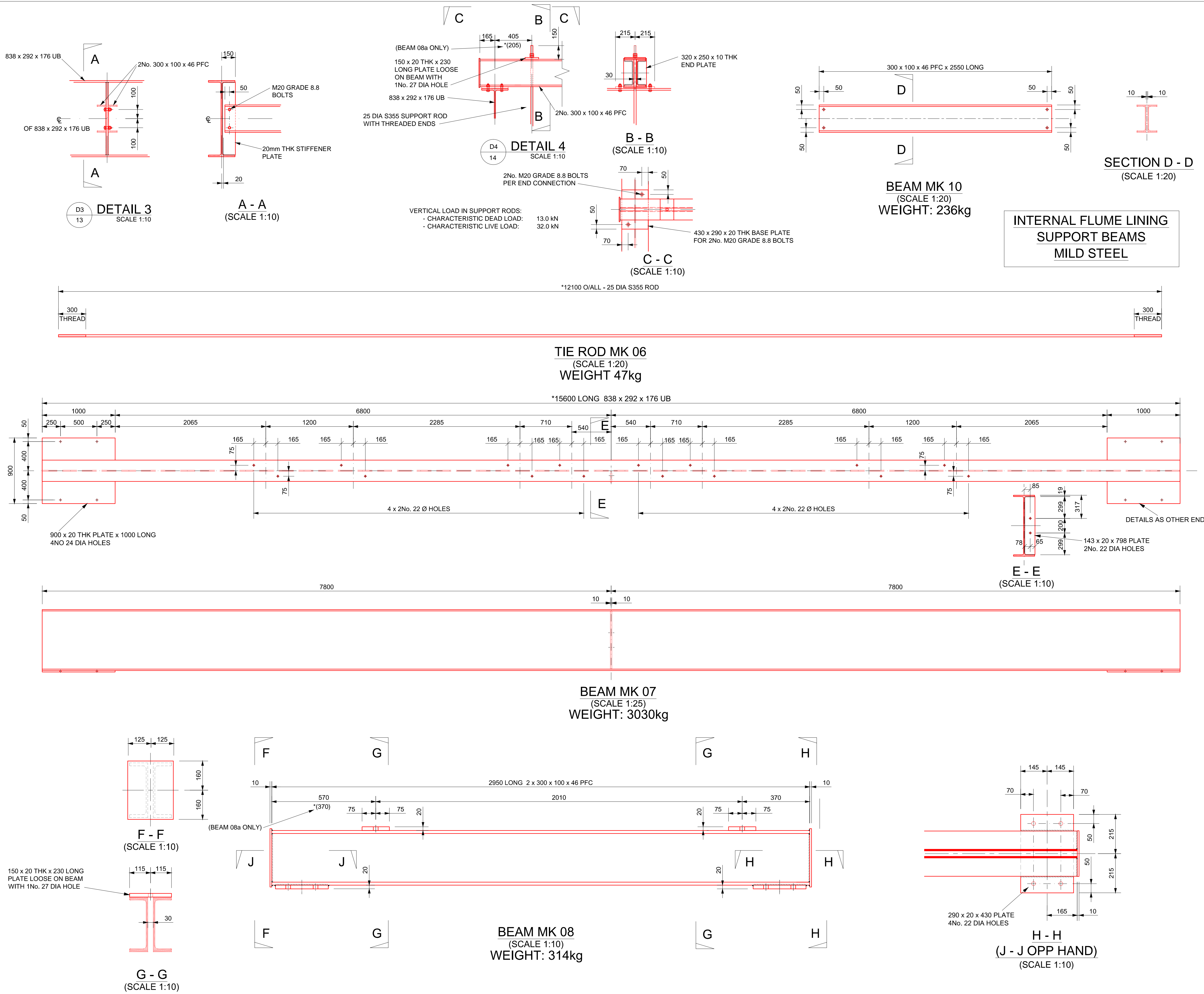
Fit For Construction

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
FABRICATION DETAILS SHEET 2 OF 4
22/08/19
4440-FLOJV-CHEEF-450-UW-DA-400017
OFFICIAL

C01

Tideway



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:**
- MILD STEEL SHALL BE GRADE S275 TO BS EN 10025:1993 UNLESS NOTED OTHERWISE.
 - STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088-2 :1995 UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
 - ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2:2012. BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
 - ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.

ITEM REFERENCE	No OFF
TIE ROD MK 06	16
SUPPORT BEAM MK 07	2
BEAM MK 08	6
BEAM MK 08a	2
BEAM MK 10	2

* = DIMENSIONS TO BE CHECKED ON SITE



Fit for Construction

Revision History					
Rev	Description	Dsgnr	Chkd	Appd	Date
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19
P02	BEAM MK 07 BASEPLATE REVISED	RWIL	PLAN	MSIM	28/08/19
Current Revision					
C01	Issued for Construction (Identical to Revision P02)	RWIL	PLAN	MSIM	28/08/19

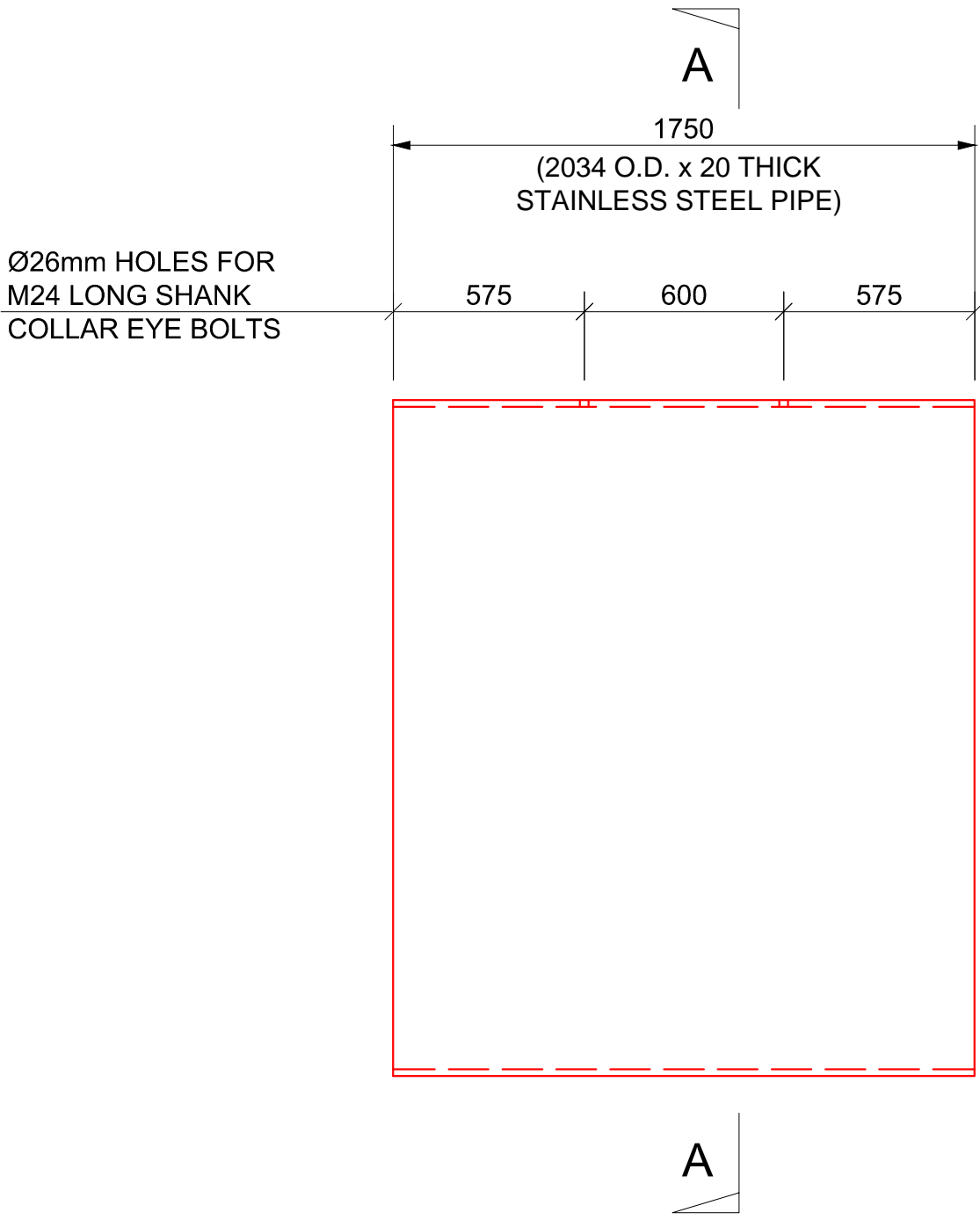
Contractor
Approval: CMIT

Fit For Construction

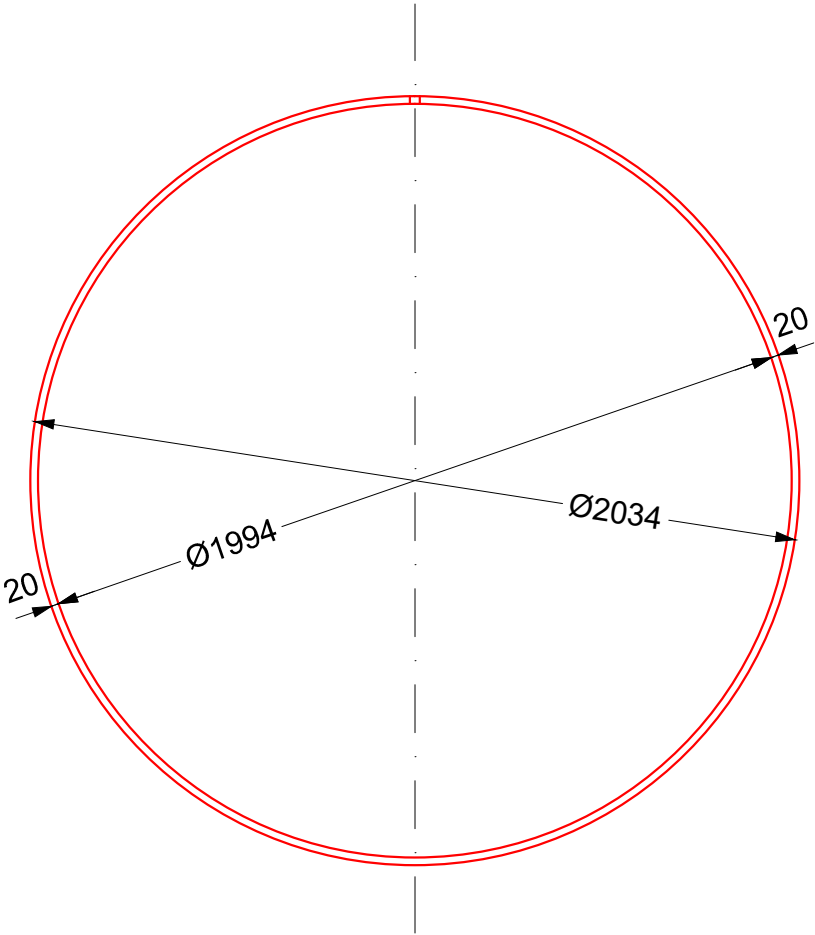
Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
FABRICATION DETAILS SHEET 3 OF 4
15/07/19
4440-FLOJV-CHEEF-450-UW-DA-400018
OFFICIAL





STRUCTURAL LINER MK 03
(SCALE 1:20)
WEIGHT: 1756kg
(4No. OFF)



SECTION A - A
(SCALE 1:20)

STRUCTURAL LINER
STAINLESS STEEL



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:
1. MILD STEEL SHALL BE GRADE S275 TO BS EN 10025: 1993 UNLESS NOTED OTHERWISE.
 2. STAINLESS STEEL SHALL BE GRADE 1.4404 TO BS EN 10088 -2 :1995 UNLESS NOTED OTHERWISE.
 3. ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
 4. ALL BOLTS AND NUTS ARE TO BE GRADE 8.8 STEEL TO BS EN ISO 898-1:2013 AND BS EN ISO 898-2:2012. BOLTS AND NUTS NOT TO BE GALVANISED, JUST MILD STEEL.
 5. ALL WELDS ARE TO BE 6mm FILLET WELD ALL ROUND U.N.O.

Fit for Construction

Revision History						
Rev	Description	Dsgnr	Chkd	Appd	Date	
P01	ISSUED FOR ACCEPTANCE	MKOV	RJON	RJON	17/05/19	
P02	NOTE ADDED	RWIL	PLAN	MSIM	28/08/19	
Current Revision						
C01	Issued for Construction (Identical to Revision P02)	RWIL	PLAN	MSIM	28/08/19	

Contractor
Approval: CMIT

C01

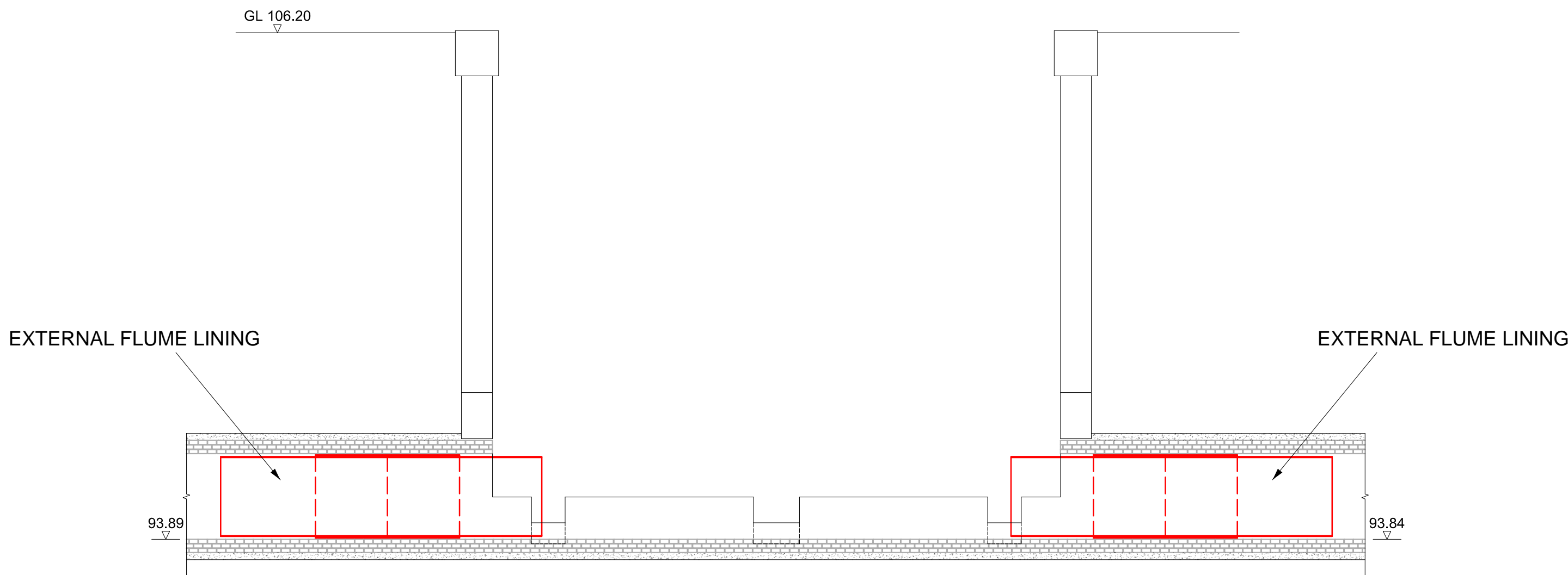
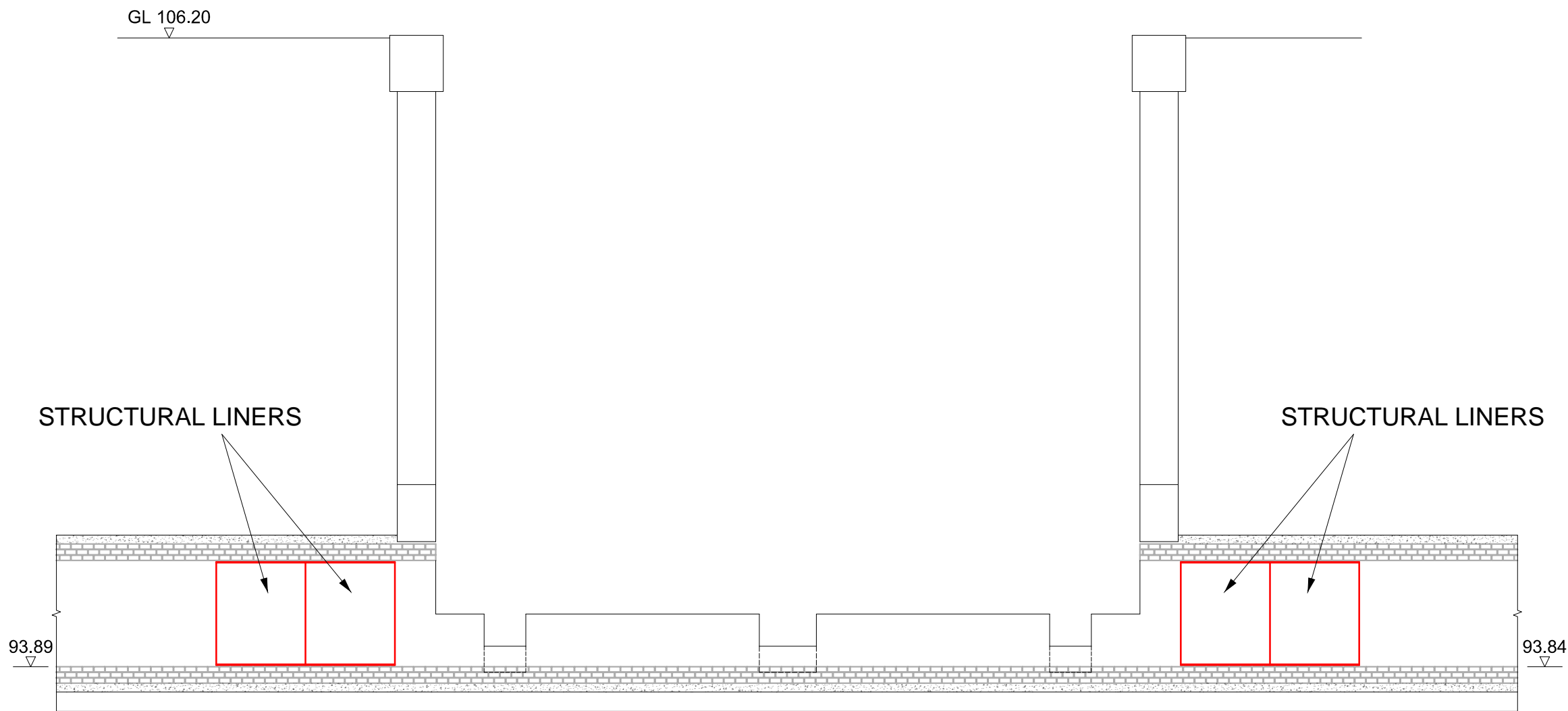
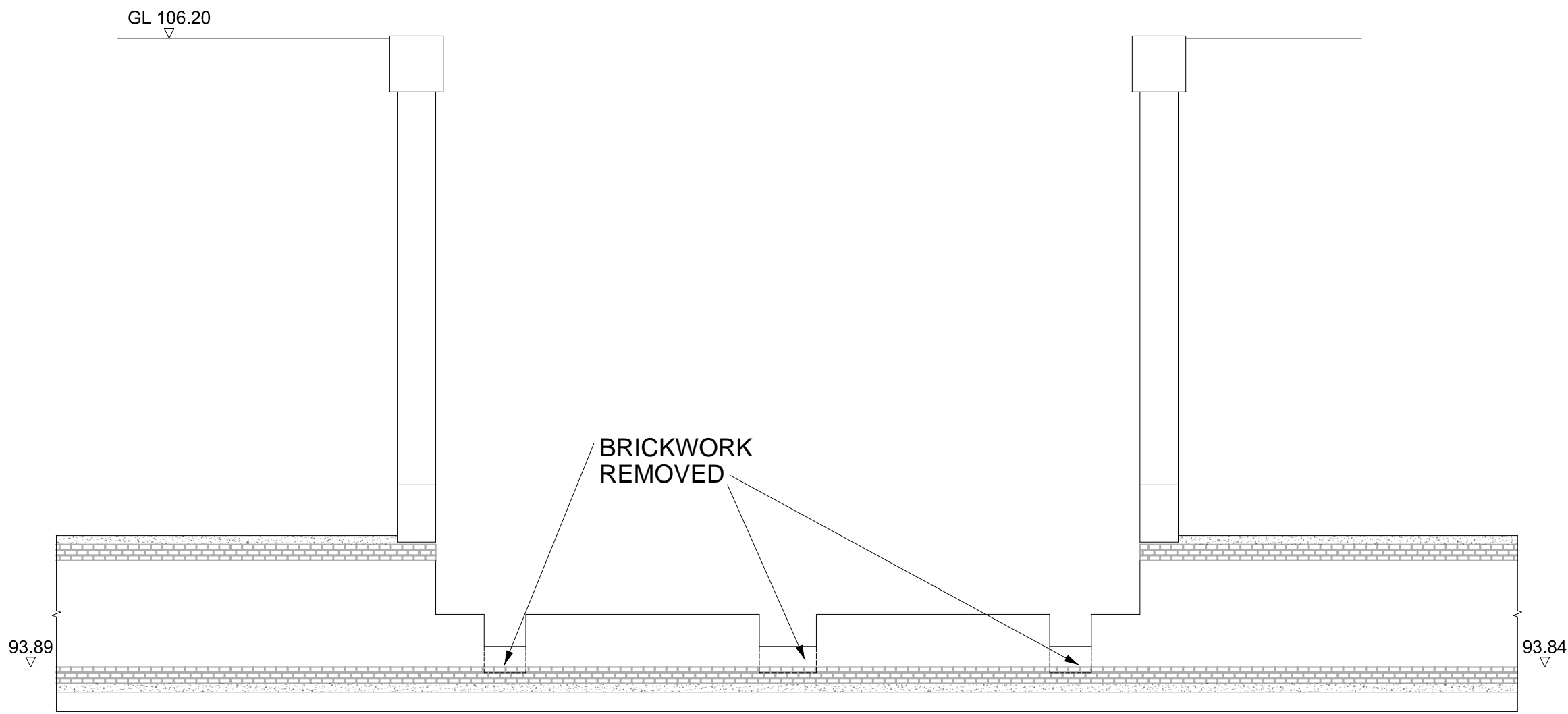
Fit For Construction

A

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
FABRICATION DETAILS SHEET 4 OF 4
15/07/19
4440-FLOJV-CHEEF-450-UW-DA-400019
OFFICIAL





VICTAULIC NON-RESTRAINED FLEXIBLE COUPLING

Stage 1

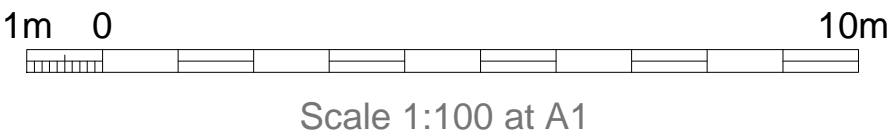
- Sewer fabric removed to springing level. Local brickwork removal for Victaulic Couplings.
- Leakage liner removed. Refer to drawing 4440-FLOJV-CHEEF-240-UW-DR-400007 for liner details.

Stage 2

- Timber rails fixed to 5 & 7 o'clock positions to support and guide structural liners and flume linings into place.
- 4No. structural liners sections lowered and manoeuvred into place, ensuring ends are butted up to each other.
- Structural liners aligned and grouted into place.

Stage 3

- Two external external flume linings lowered and manoeuvred into place.
- Maintain clear 47mm annulus between structural liner and external flume lining.



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:
1. DESIGN AND SEQUENCE DRAWINGS FOR PILES AND WEIR CHAMBER BY OTHERS.
 2. ALL LEVELS ARE IN METRES RELATIVE TO TUNNEL DATUM, UNLESS NOTED OTHERWISE.
 3. FOR FURTHER DETAILS REFER TO DRAWINGS:
4440-FLOJV-CHEEF-240-UW-DA-400012
4440-FLOJV-CHEEF-240-UW-DA-400013
4440-FLOJV-CHEEF-240-UW-DA-400014
4440-FLOJV-CHEEF-240-UW-DA-400015

SAFETY HEALTH AND ENVIRONMENTAL

REFER TO THE
CDM DESIGNER'S RISK ASSESSMENT
4428-FLOJV-CHEEF-530-UW-HI-100006

IN ADDITION TO THE RISKS NORMALLY
ASSOCIATED WITH THE WORK DETAILED
ON THIS DRAWING, NOTE:-

DEMOLITION
CONTINUOUS FLOW OF FOUL WATER
THROUGH SEWER FOR DURATION OF
WORKS.
WORKING IN CONFINED SPACE AND DEEP
EXCAVATION.

CONSTRUCTION
CONTINUOUS FLOW OF FOUL WATER
THROUGH SEWER FOR DURATION OF
WORKS.
WORKING IN CONFINED SPACE.

OPERATION & MAINTENANCE
CONTINUOUS FLOW OF FOUL WATER
THROUGH SEWER DURING ANY
INSPECTION.

Fit for Construction

Revision History						
Rev	Description	Dsgnr	Chkd	Appd	Date	
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19	
P02	STAGE 2 REVISED	RWIL	PLAN	MSIM	28/08/19	
Current Revision						
C01	Issued for Construction (Identical to Revision P02)	RWIL	PLAN	MSIM	28/08/19	

Contractor
Approval: CMIT

Fit For Construction

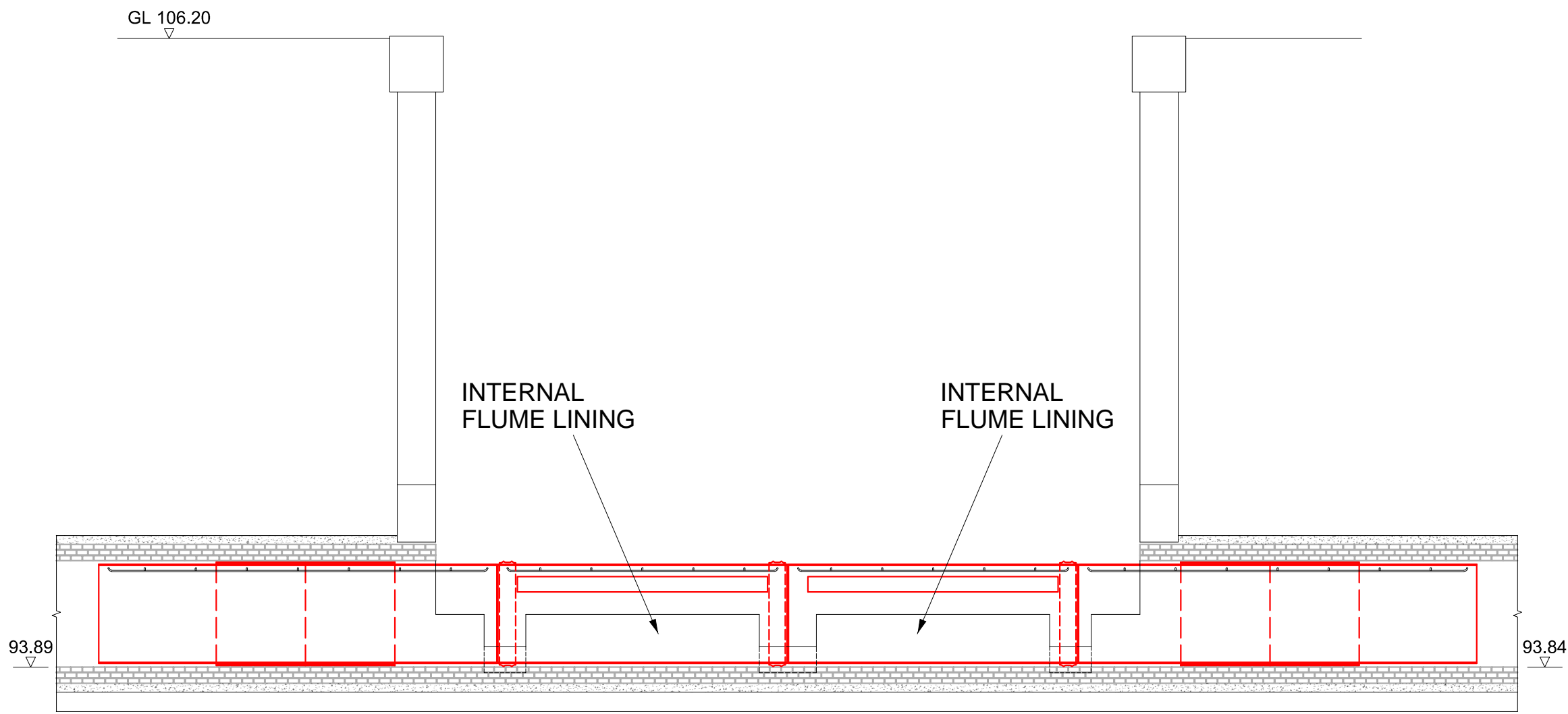
C01

A

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

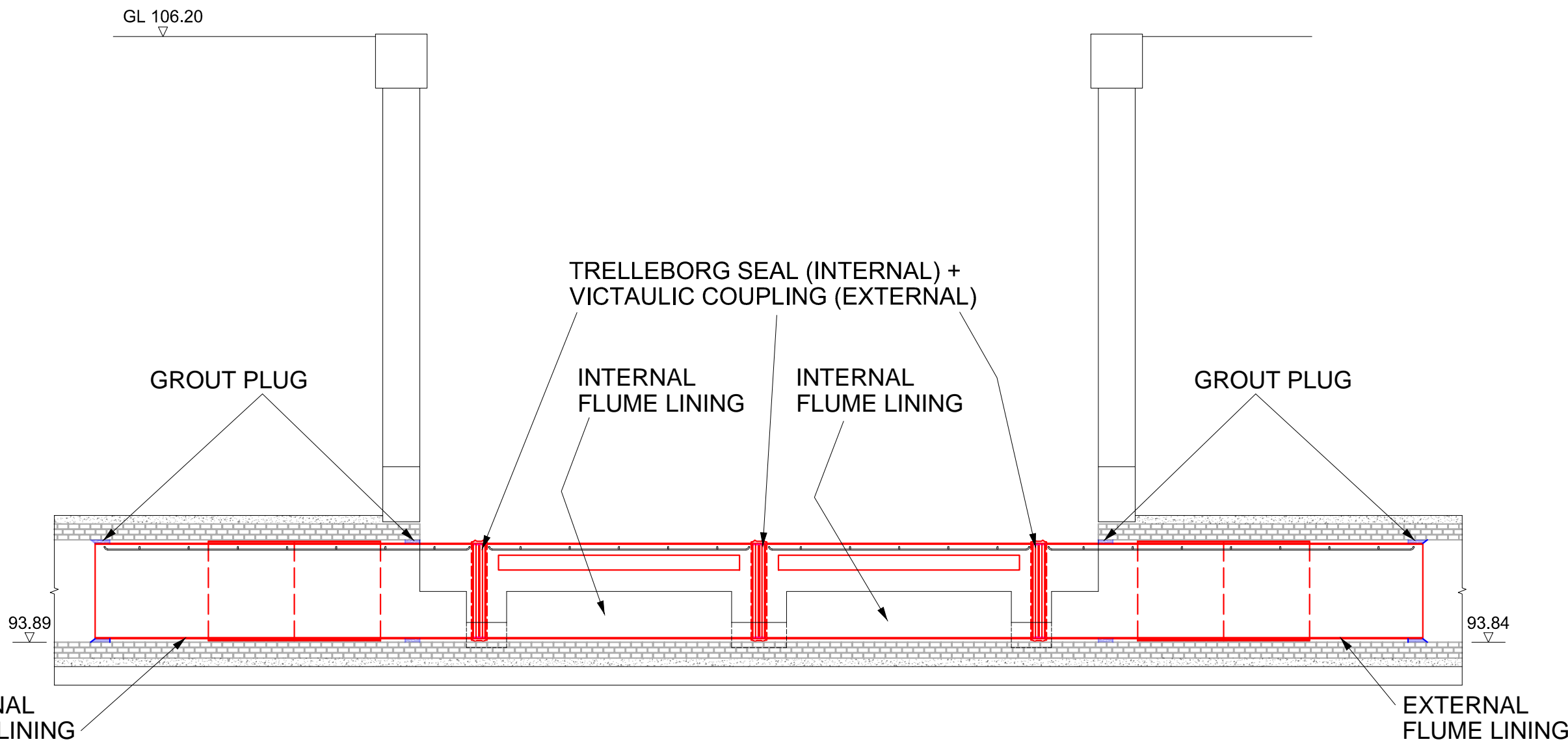
Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
ERECTION SEQUENCE SHEET 1 OF 3
15/07/19
4440-FLOJV-CHEEF-450-UW-DA-400020
OFFICIAL





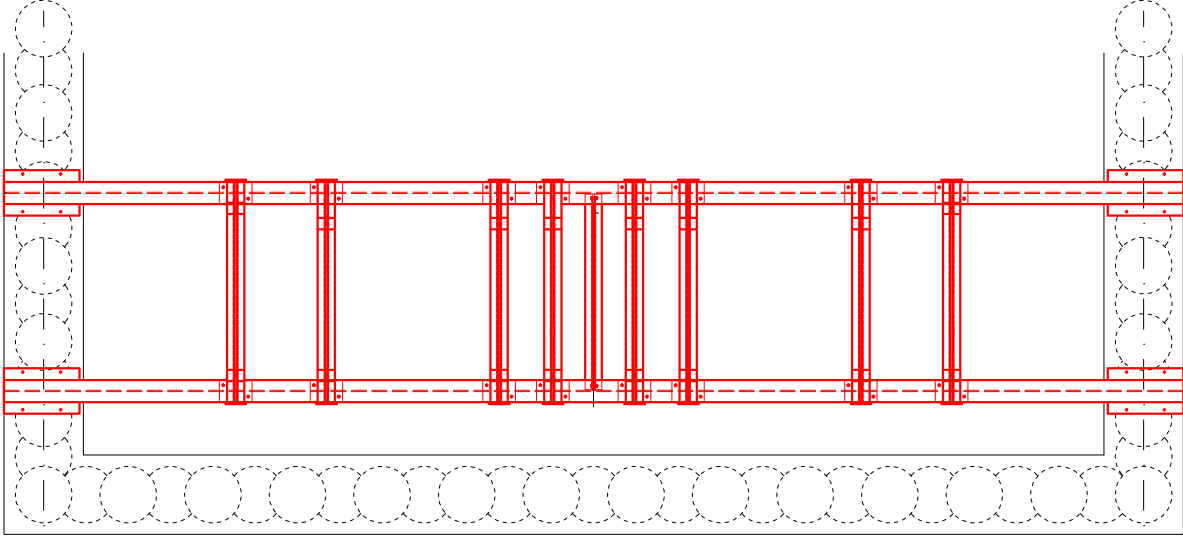
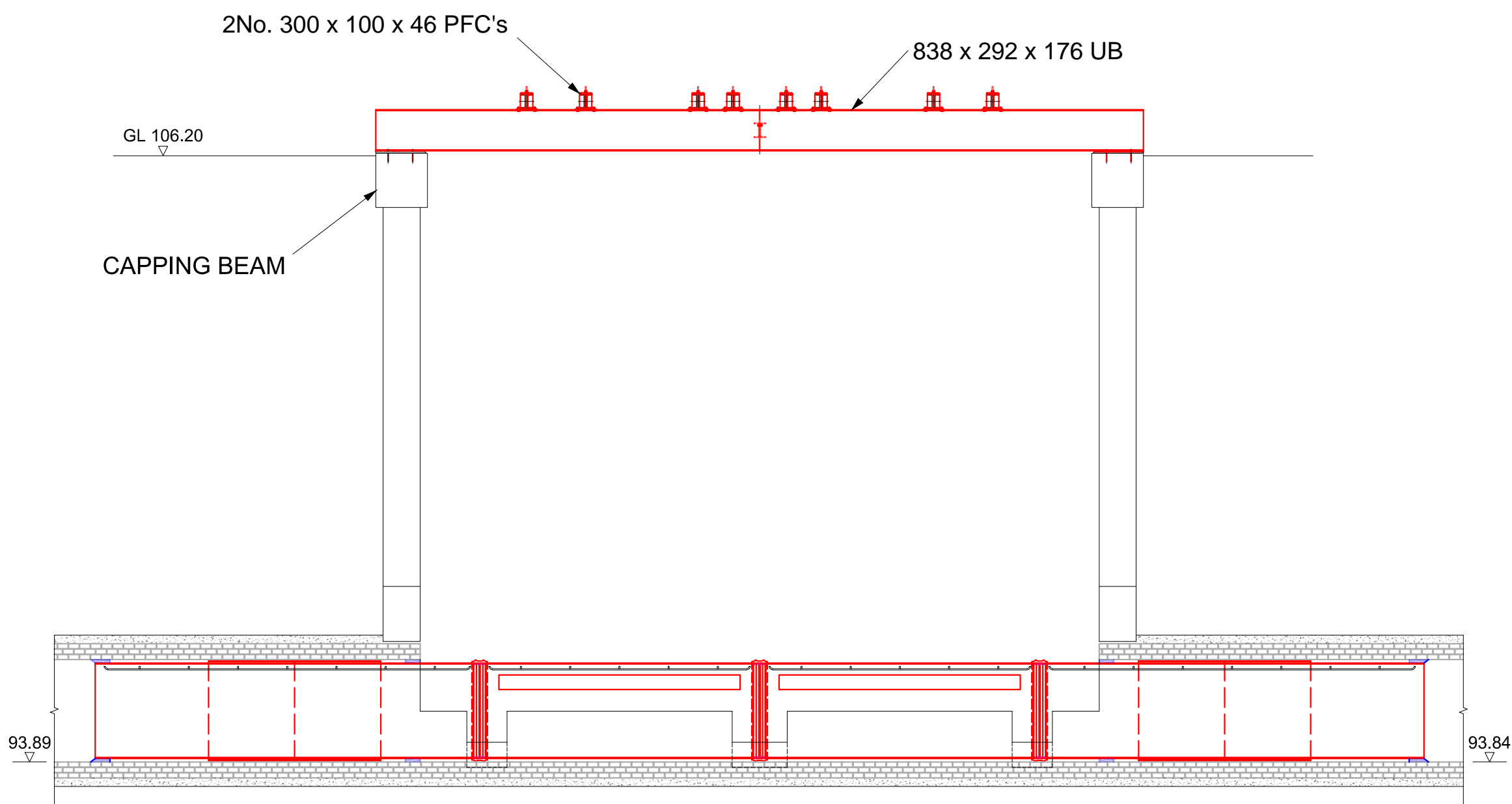
Stage 4

- Two internal flume linings with Victaulic Couplings are lowered and manoeuvred into place and supported on timber rails.
- In final position all 4 flume segments to be butting up via steel spacer blocks at 3 and 9 o' clock positions, see steel MK 02A and 02B.



Stage 5

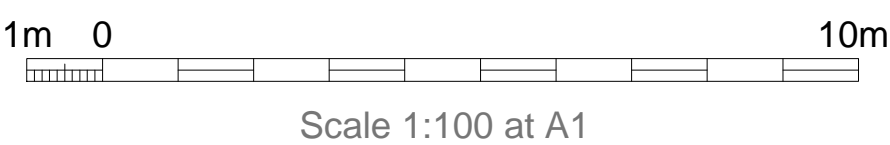
- Water tight seal formed at both ends of external flume linings using 300mm grout plug. Remaining annulus left as void. Grout plugs to be installed in order from upstream to downstream.
- 3No. Victaulic couplings installed.
- 3No. 267mm long Trelleborg joint seals are then installed internally at each joint. (Access from TWMH 3802 SE)



PLAN

Stage 6

- 2No. 838 x 292 x 176 UB lowered into place on capping beam.
- 18No. 300 x 100 x 46 PFCs installed spanning between UBs.
- UBs anchored into capping beam.



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:
1. DESIGN AND SEQUENCE DRAWINGS FOR PILES AND WEIR CHAMBER BY OTHERS.
 2. ALL LEVELS ARE IN METRES RELATIVE TO TUNNEL DATUM, UNLESS NOTED OTHERWISE.
 3. FOR FURTHER DETAILS REFER TO DRAWINGS:
4440-FLOJV-CHEEF-240-UW-DA-400012
4440-FLOJV-CHEEF-240-UW-DA-400013
4440-FLOJV-CHEEF-240-UW-DA-400014
4440-FLOJV-CHEEF-240-UW-DA-400015

SAFETY HEALTH AND ENVIRONMENTAL

REFER TO THE CDM DESIGNER'S RISK ASSESSMENT 4428-FLOJV-CHEEF-530-UW-HI-100006

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH THE WORK DETAILED ON THIS DRAWING, NOTE:-

DEMOLITION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE AND DEEP EXCAVATION.

CONSTRUCTION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE.

OPERATION & MAINTENANCE
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER DURING ANY INSPECTION.

Fit for Construction

Revision History						
Rev	Description	Dsgnr	Chkd	Appd	Date	
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19	
P02	GENERAL NOTES AND STAGE 6 AMENDED	PLIG	PLAN	MSIM	29/07/19	
P03	STAGE 4 NOTE REVISED	RWIL	PLAN	MSIM	28/08/19	
Current Revision						
C01	Issued for Construction (Identical to Revision P03)	RWIL	PLAN	MSIM	28/08/19	

Contractor
Approval: NWAT

Fit For Construction

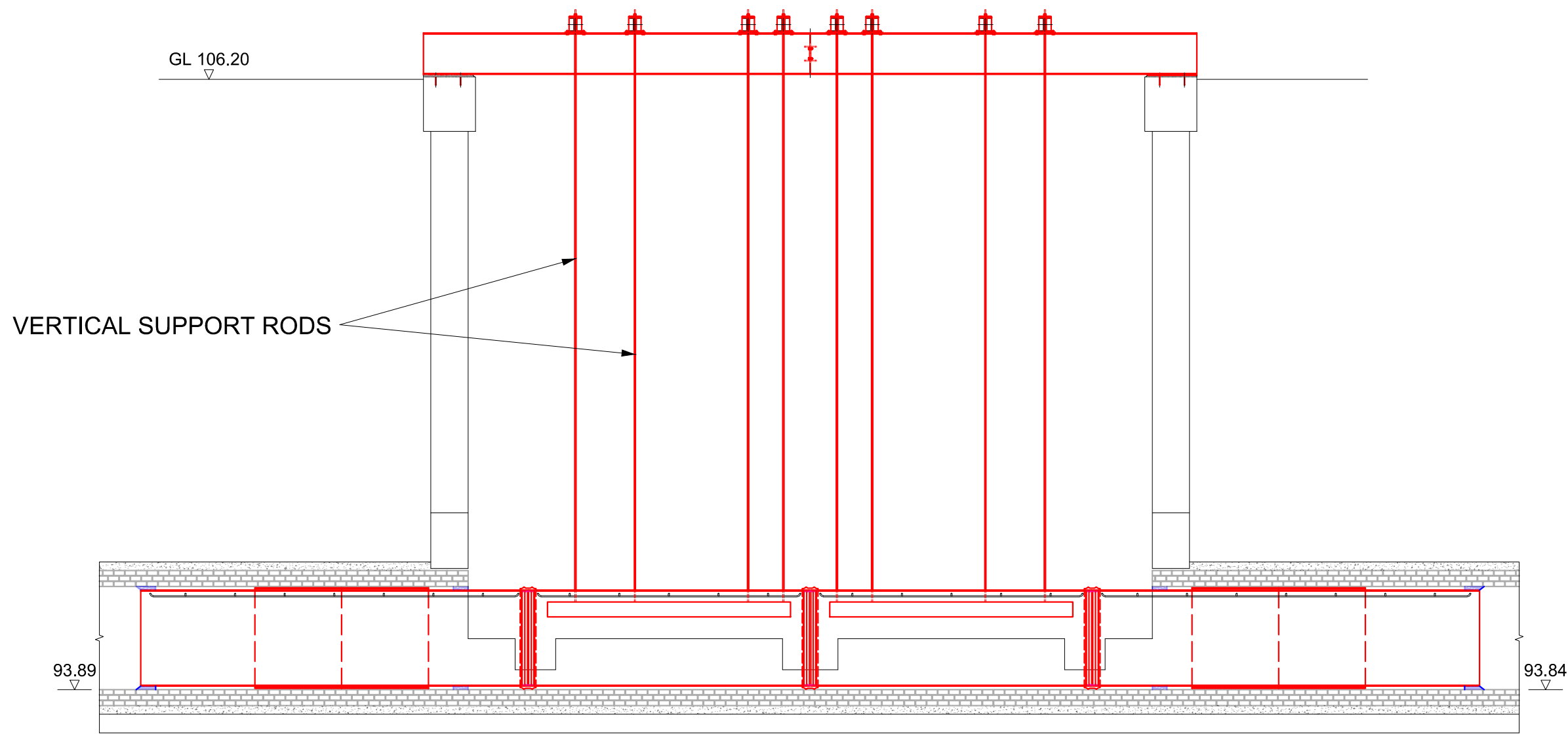
C01

A

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
ERECTION SEQUENCE SHEET 2 OF 3
22/08/19
4440-FLOJV-CHEEF-450-UW-DA-400021
OFFICIAL





Stage 7

- 16No. vertical support rods installed between the top PFCs and the PFC side beams on the internal flume linings.
- Vertical support rods tightened to take the weight of the flumes. Flume to be horizontal with approx. 850mm water depth within, and with steel rod temperature between 10 and 20°C.
- Maintain lateral support with timber rails at 5 and 7 o'clock.



Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2015. All rights reserved. Ordnance Survey licence number 100056637

- NOTES:**
1. DESIGN AND SEQUENCE DRAWINGS FOR PILES AND WEIR CHAMBER BY OTHERS.
 2. ALL LEVELS ARE IN METRES RELATIVE TO TUNNEL DATUM, UNLESS NOTED OTHERWISE.
 3. FOR FURTHER DETAILS REFER TO DRAWINGS:
4440-FLOJV-CHEEF-240-UW-DA-400012
4440-FLOJV-CHEEF-240-UW-DA-400013
4440-FLOJV-CHEEF-240-UW-DA-400014
4440-FLOJV-CHEEF-240-UW-DA-400015

SAFETY HEALTH AND ENVIRONMENTAL

REFER TO THE
CDM DESIGNER'S RISK ASSESSMENT
4428-FLOJV-CHEEF-530-UW-HI-100006

IN ADDITION TO THE RISKS NORMALLY ASSOCIATED WITH THE WORK DETAILED ON THIS DRAWING, NOTE:-

DEMOLITION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE AND DEEP EXCAVATION.

CONSTRUCTION
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER FOR DURATION OF WORKS.
WORKING IN CONFINED SPACE.

OPERATION & MAINTENANCE
CONTINUOUS FLOW OF FOUL WATER THROUGH SEWER DURING ANY INSPECTION.

Fit for Construction

Revision History					
Rev	Description	Dsgnr	Chkd	Appd	Date
P01	ISSUED FOR ACCEPTANCE	PLIG	RJON	MSIM	17/05/19
P02	ERECTION SEQUENCES 7 & 8 REVISED	PLIG	PLAN	MSIM	29/07/19
P03	STAGE 7 NOTE REVISED	RWIL	PLAN	MSIM	28/08/19
Current Revision					
C01	Issued for Construction (Identical to Revision P03)	RWIL	PLAN	MSIM	28/08/19

Contractor
Approval: NWAT

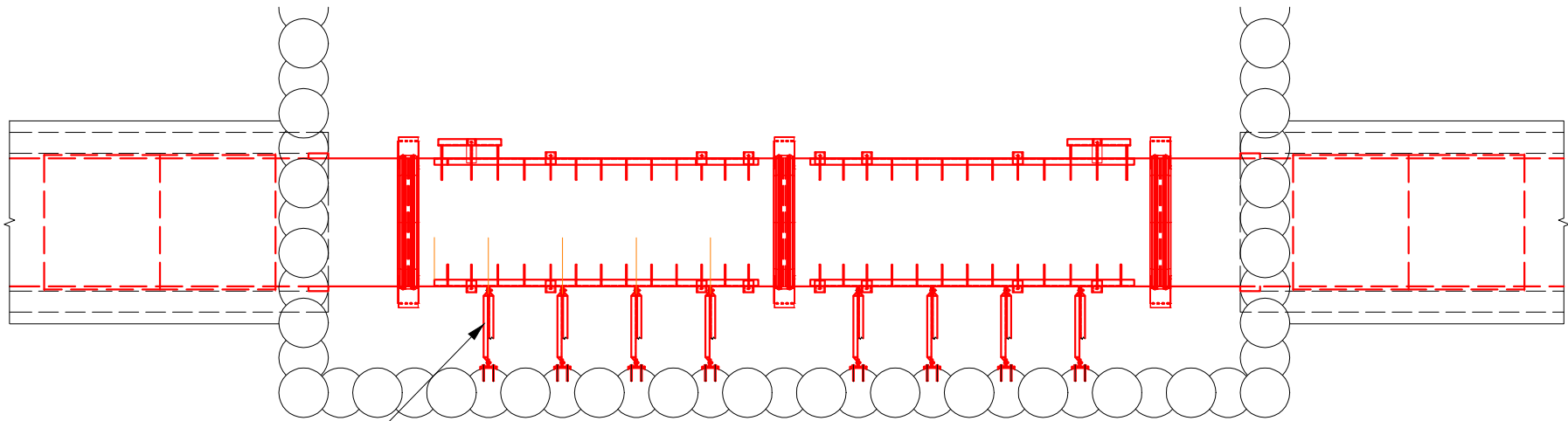
Fit For Construction

C01

A

Location
Chelsea Embankment Foreshore
KENSINGTON & CHELSEA

Document Information
Robert Walpole
LOW LEVEL NO1 WEIR CHAMBER
STRUCTURAL LINER AND FLUME LINING
ERECTION SEQUENCE SHEET 3 OF 3
22/08/19
4440-FLOJV-CHEEF-450-UW-DA-400022
OFFICIAL



PLAN

Stage 8

- Excavate trenches for PFC lateral supports to 94.40 ATD.
- 8No. lateral supports installed between the piling face and the side beams.

