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Building Nunavut Together
Nunavut liuqatigiingniq
Bâtir le Nunavut ensemble

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Department of Community and Government Services
Nunalingni Kavamatkunnilu Pivikhaqautikkut
Ministère des Services Communautaires et gouvernementaux

Cambridge Bay Water System-new IPH

'as-built drawings'

March 29, 2016

Nunavut Water Board

P.O. Box 119

Gjoa Haven, NU X0B 1L0

Attention: Karen Kharyan, Ph. D, P. Eng., Manager of Licensing

RE: Cambridge Bay Water System new IPH - "as built drawings"

Dear Mr. Karen,

GN-CGS is pleased to submit to Nunavut Water Board the attached file of "as built" drawings of Cambridge Bay Water System new Intake Pump House (IPH), prepared and issued by Stantec Consultants. The construction works done by Sanaqatiit Construction with supervision by Stantec consultants and the project was management by CGS.

These drawings are part of the complete set of drawings of the project works carried in Phase-1

We hope that Nunavut Water Board will find these 'as-built drawings' valuable in operating the Water Licence 3BM-CAM 1520 for water supply to the Hamlet of Cambridge Bay.

Best Regards,

Shah Alam, P. Eng. E.P.

Municipal Planning Engineer,

Community and Government Services

Kitikmeot Region, Cambridge Bay, Nu

Phone: 867-983-4156, fax: 867-983-4124

Email: salam@gov.nu.ca

Enclosure: 'as-built' drawings (pages) of new IPH

Cc: Sean B. Joseph, Technical Advisor, NWB
Baba Pedersen, Resource management Officer, AANDC



Stantec



CAMBRIDGE BAY POTABLE WATER SYSTEM PHASE 1 - AS-BUILT

MARCH 2016

Stantec Project Number: 144901252

GN Project Number: 11-4002

LIST OF DRAWINGS

CIVIL

PROJECT LOCATION
EXISTING SITE LAYOUT
PROPOSED SITE LAYOUT AND ROAD PROFILE
PLAN & PROFILE OF BURIED WATER LINE
PLAN & PROFILE OF WATER INTAKE LINE
INTAKE LINES DETAILS
BUILDING WALL PENETRATION & PIPE SUPPORT DETAILS
ACCESS VAULT STANDARD DETAILS
ACCESS VAULT PIPING LAYOUT
PUMP AND DISCHARGE PIPE DETAILS

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C-102
C-103
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C-501
C-502
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C-504
C-505

TRUCKFILL AND VAULT SCHEMATIC DIAGRAMS
TRUCKFILL DETAILS
EQUIPMENT USE TABLE

D-401
D-402
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MECHANICAL

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MECHANICAL LAYOUT
DETAILS
DETAILS AND CONTROLS SCHEMATIC
HEATING SCHEMATIC
FUEL OIL SCHEMATIC

M-101
M-102
M-501
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ELECTRICAL

LEGEND, SITE PLAN AND DETAILS
SINGLE LINE DIAGRAM, GENERATOR ROOM DETAIL AND
SERVICE CALCULATIONS
LIGHTING FLOOR PLAN AND LUMINAIRE SCHEDULE
POWER FLOOR PLAN AND MOTOR SCHEDULE
HEAT TRACE DETAILS

E-101
E-102

E-103
E-104
E-105

STRUCTURAL

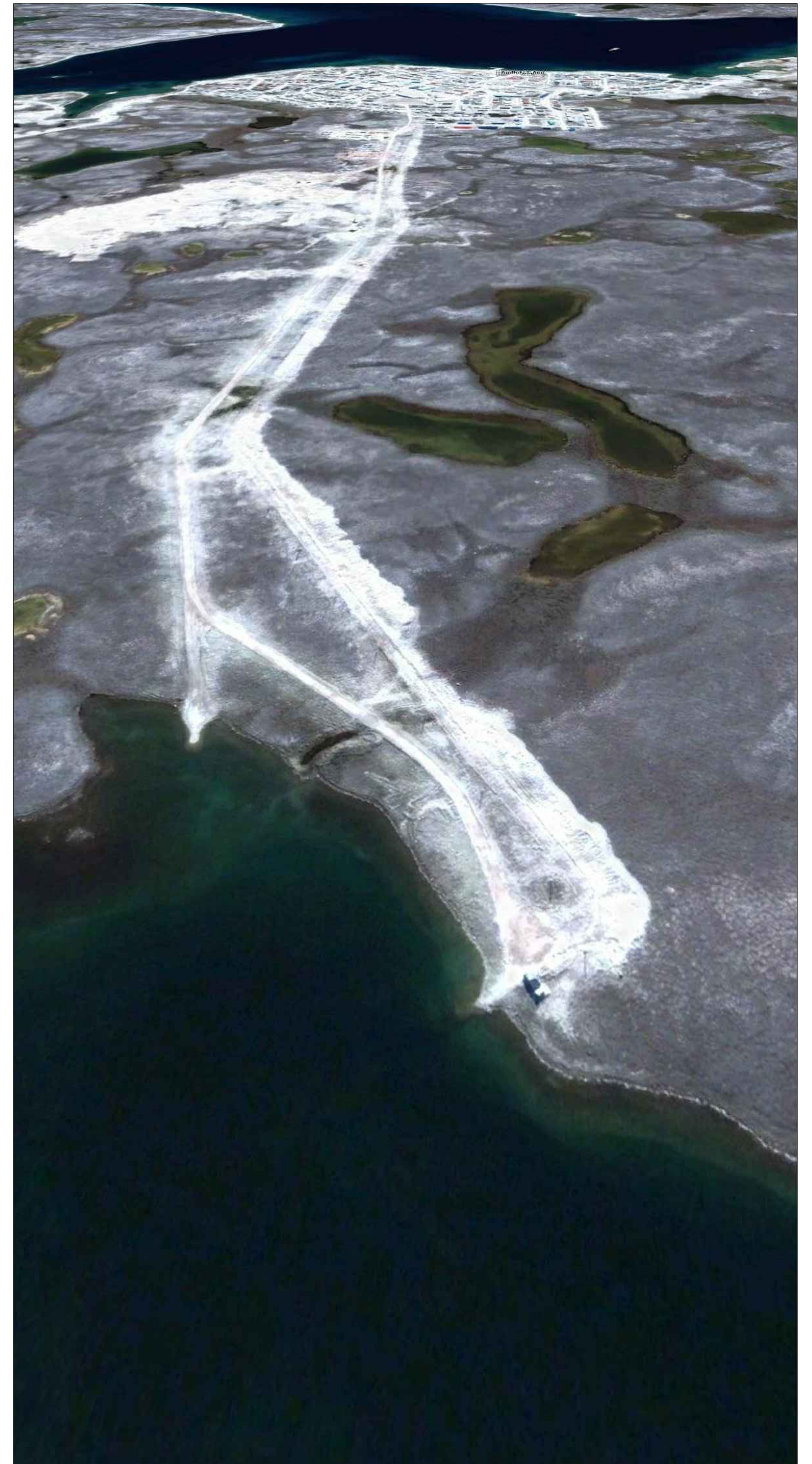
SKID AND SUBFLOOR LAYOUT AND DETAILS
STRUCTURAL DETAILS
STRUCTURAL SECTIONS
STAIR DETAILS
TRUCKFILL ARM DETAILS
STRUCTURAL NOTES

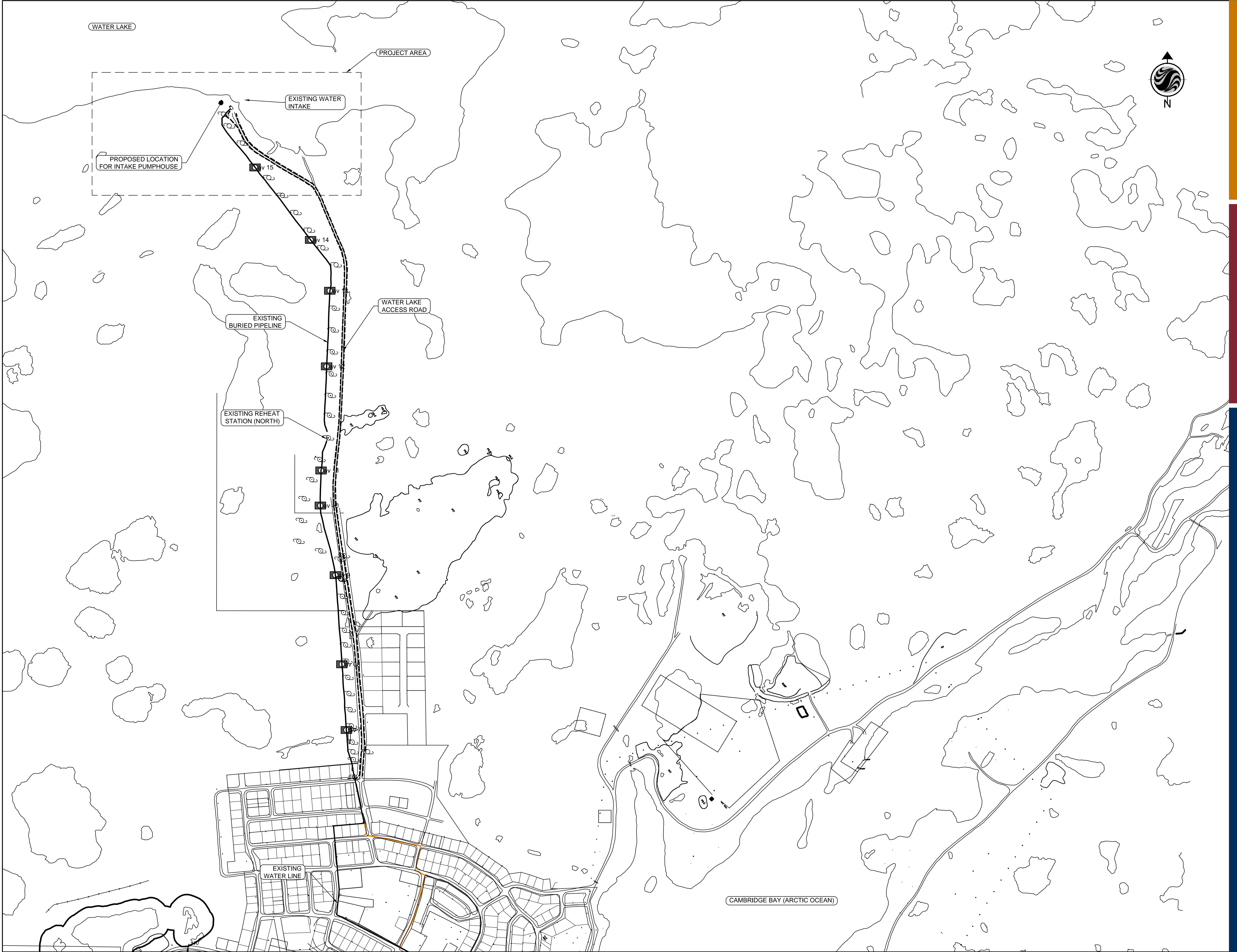
S-501
S-502
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S-506

BUILDING

FLOOR PLAN, ASSEMBLIES & SCHEDULES
BUILDING ELEVATIONS
DETAILS

A-101
A-201
A-301





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Legend

Notes

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ISSUED FOR AS-BUILT	KK	WO	16.03.16
ISSUED FOR CONSTRUCTION	AF	WO	12.09.06
ISSUED FOR TENDER	AF	WO	12.03.30
99% SUBMISSION	JD	WO	12.03.02
50% SUBMISSION	JD	WO	12.01.18
Issued	By	Appd.	YY.MM.DD

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
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Permit-Seal

PLAN OF AS-BUILT DRAWING

Contractor: SANAQATIIT CONSTRUCTION
Construction Certification Date: MARCH 12, 2015

Client/Project
GOVERNMENT OF NUNAVUT

POTABLE WATER SYSTEM
PHASE I
Cambridge Bay, NU

Title
PROJECT LOCATION

Project No. 1449-01252	Scale 1:5000	Revision
Drawing No.	Sheet	Revision

C-101 1 of 10 0



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Notes

1. CONTRACTOR TO CONFIRM INSULATED AND NON-INSULATED HDPE PIPE CASING DIAMETERS
2. REBATE DIAMETERS IN CONCRETE ANCHORS TO BE 12MM LARGER THAN OD OF INSULATED AND NON-INSULATED PIPES.

Revision	By	Appd.	YY.MM.DD
ISSUED FOR AS-BUILT	KK	WO	16.03.16
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PLAN OF AS-BUILT DRAWING

Contractor: SANAQATIIT CONSTRUCTION
Construction Certification Date: MARCH 12, 2015

Client/Project

GOVERNMENT OF NUNAVUT

POTABLE WATER SYSTEM PHASE I

Cambridge Bay, NU

Title

INTAKE LINES DETAILS

Project No.

1449-01252

Scale AS SHOWN

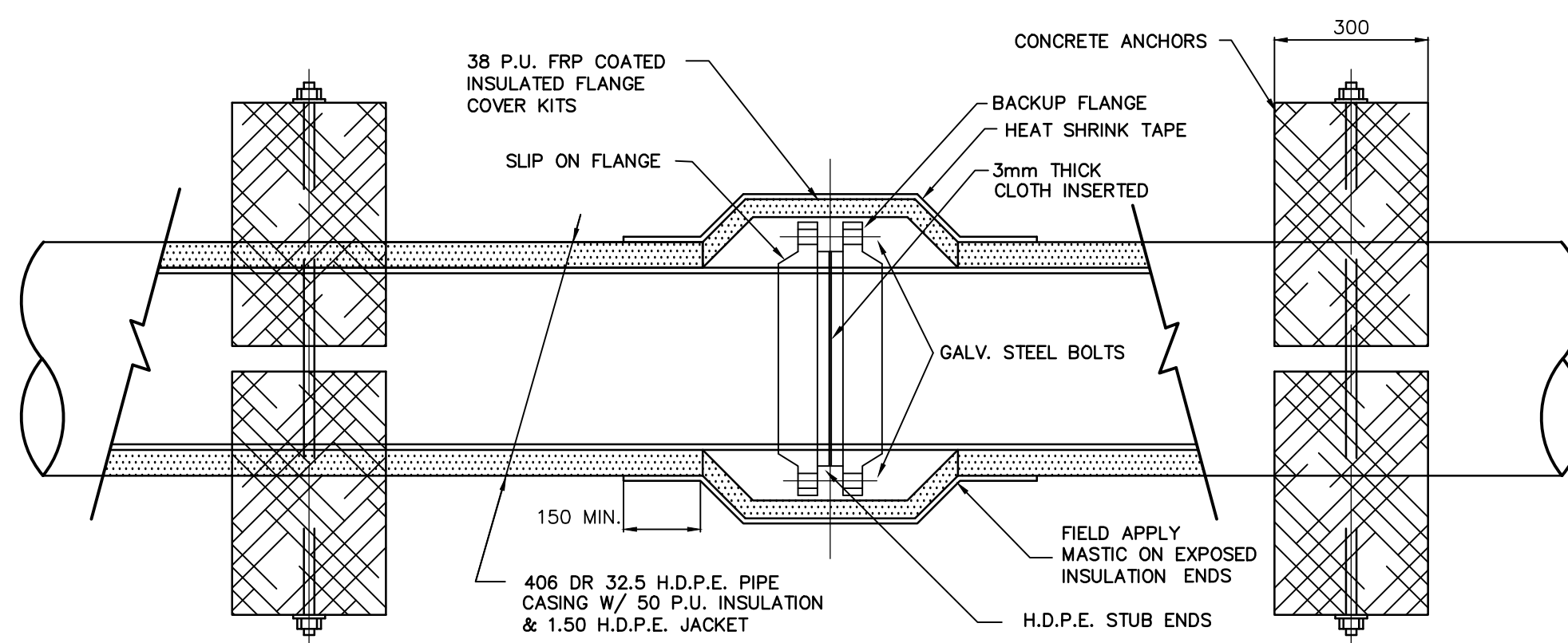
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Sheet

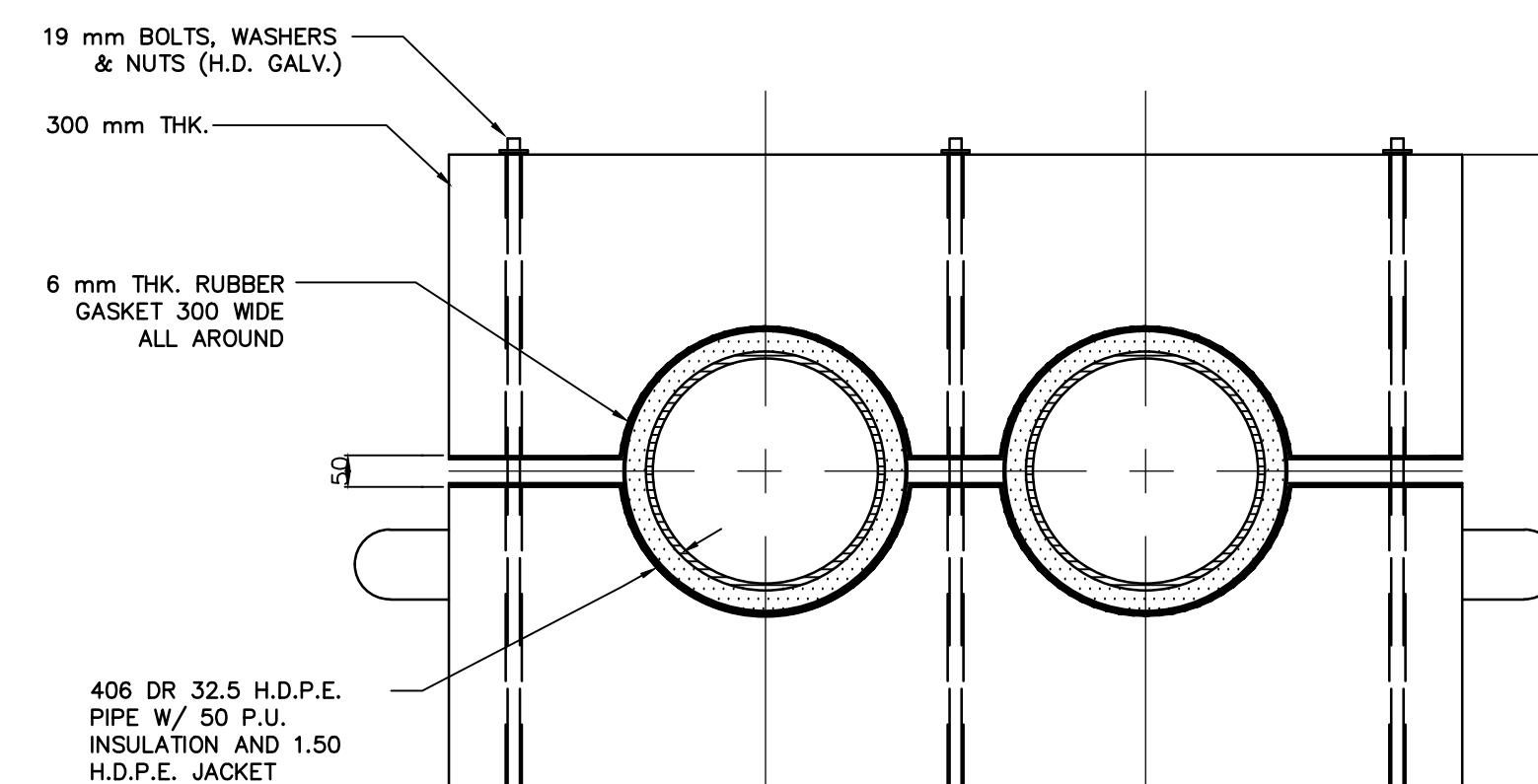
C-501

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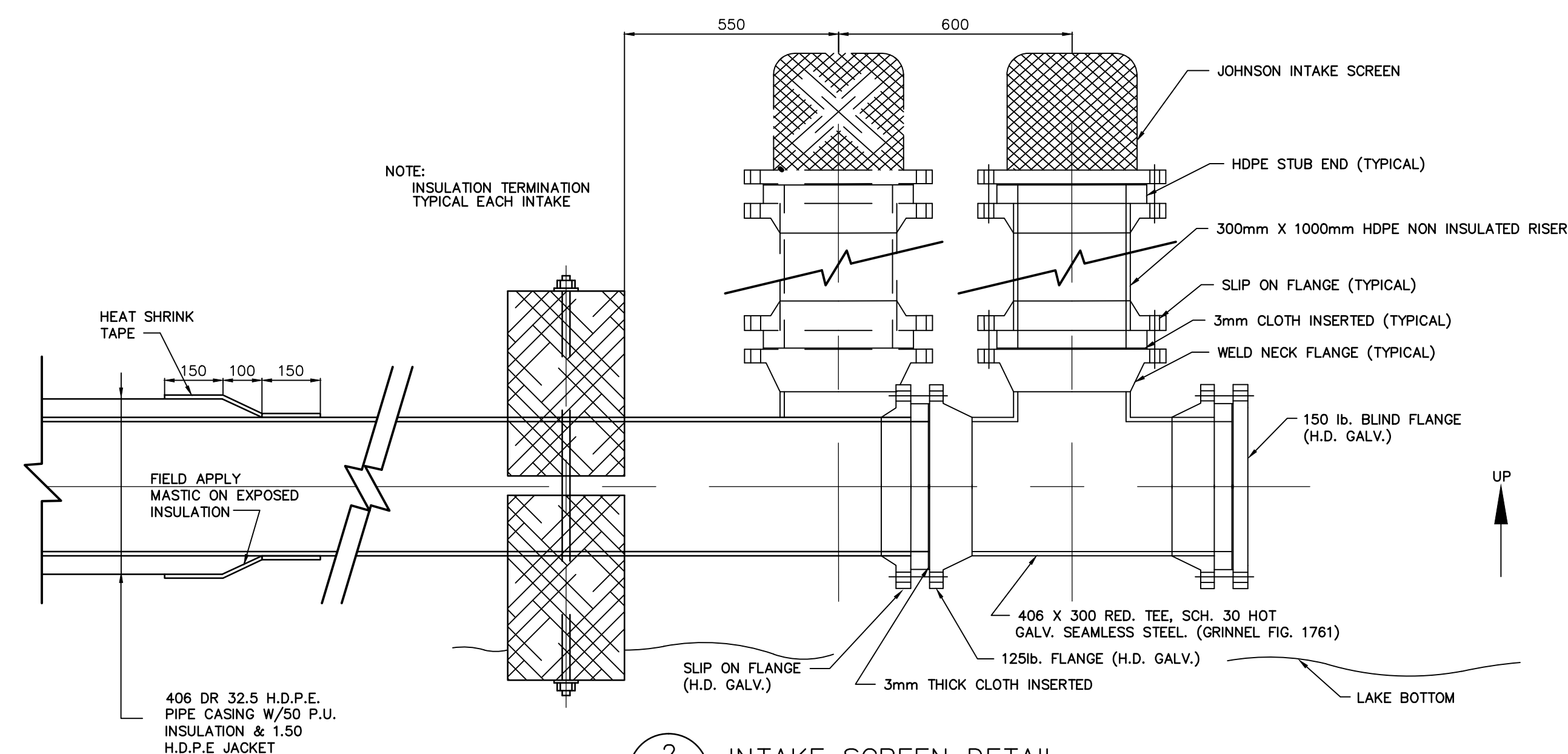
1 INTAKE CASING JOINT DETAIL
C501 SCALE: NTS



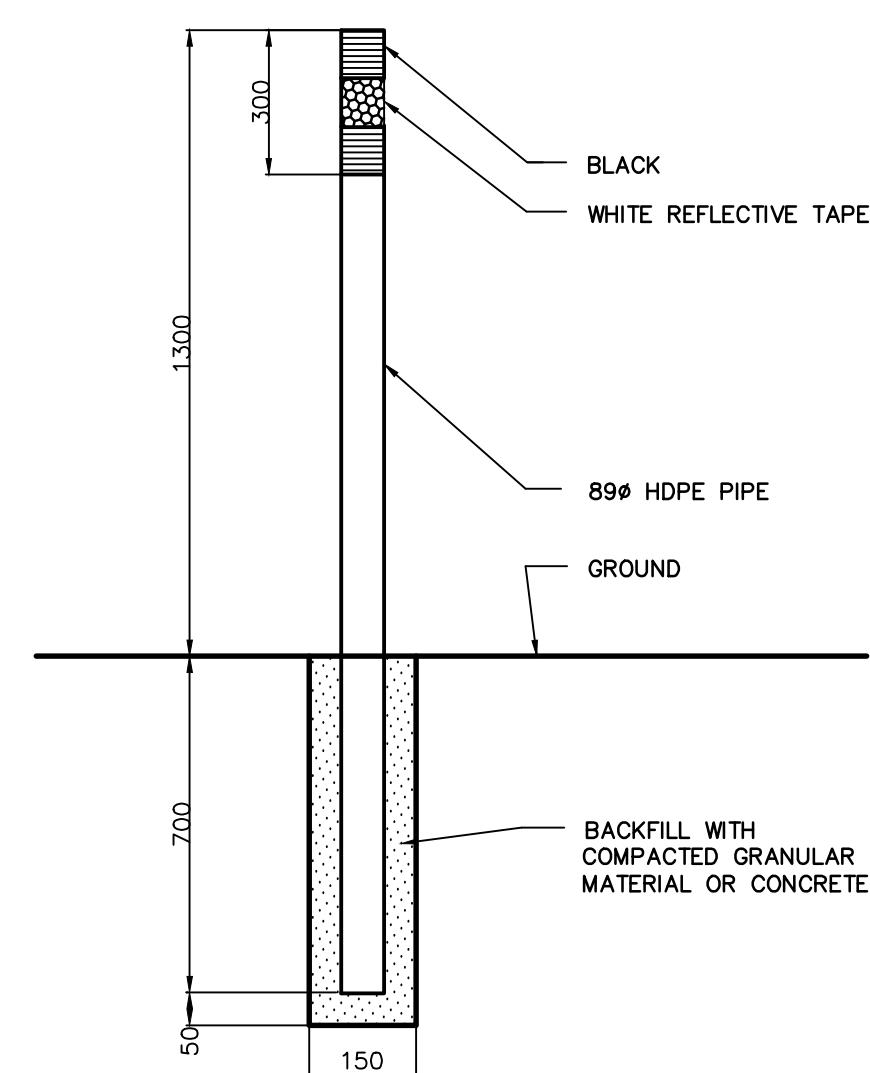
3
C501

INTAKE CONCRETE ANCHOR DETAIL

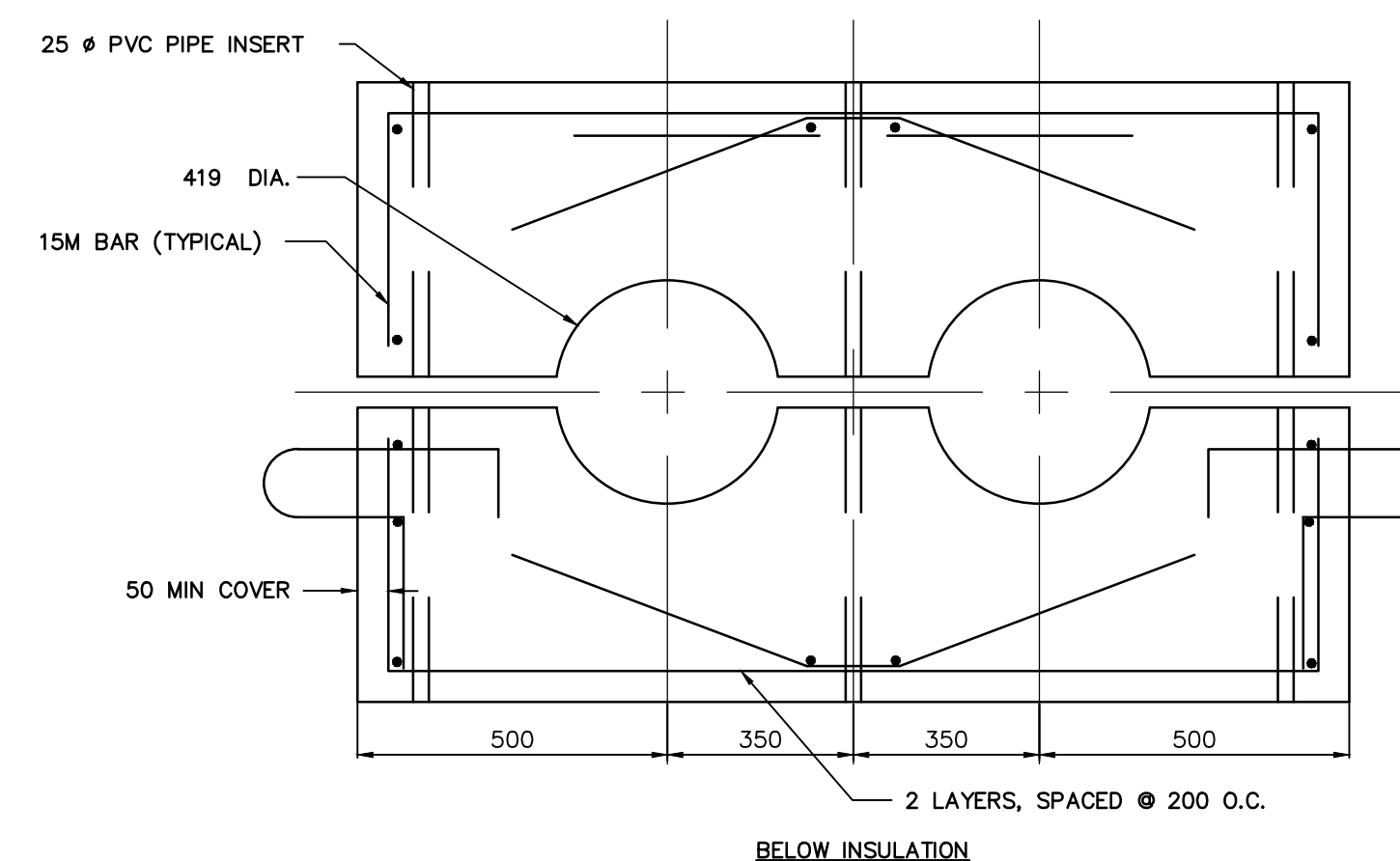
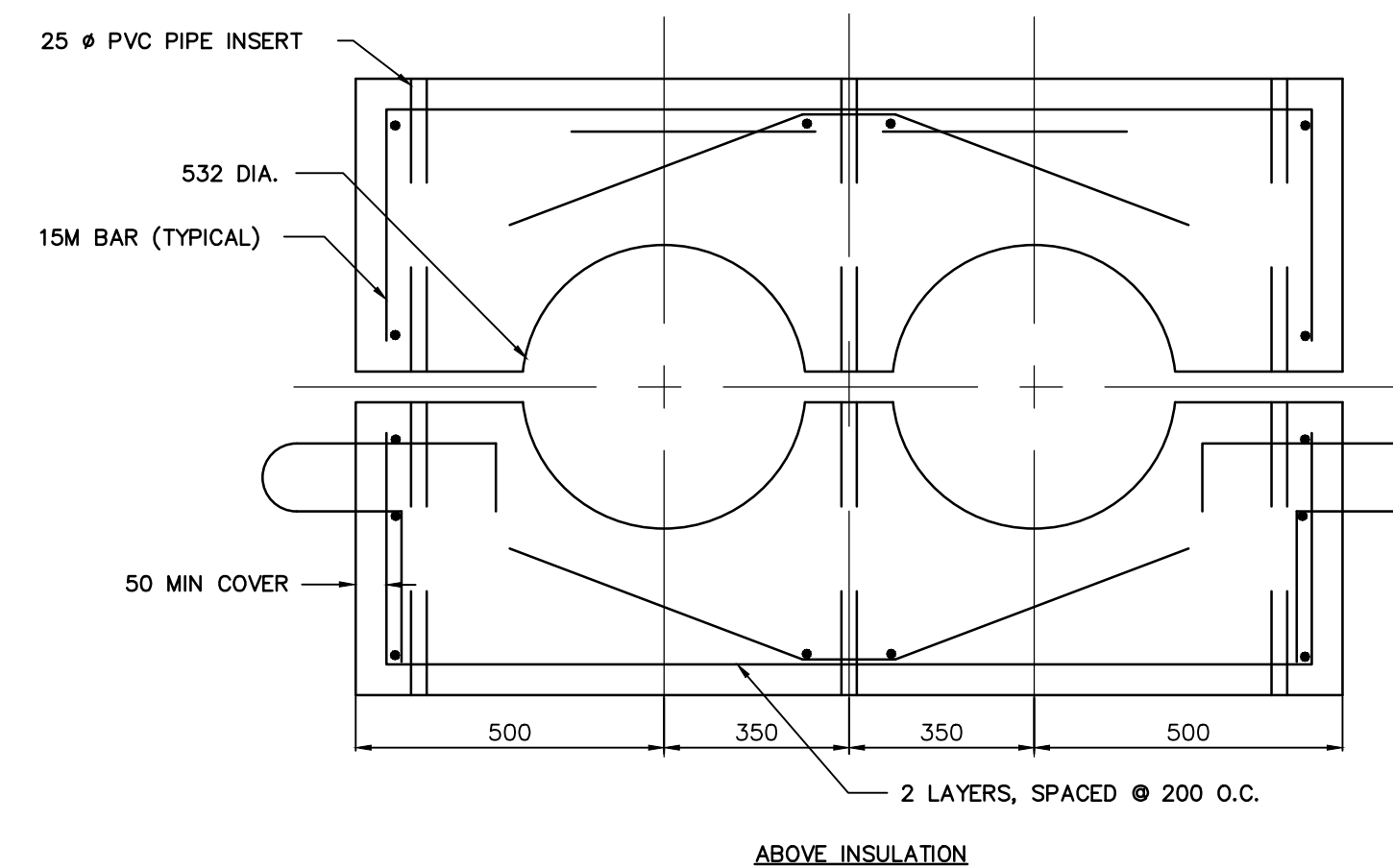
SCALE: NTS



2 INTAKE SCREEN DETAIL
C501 SCALE: NTS



5 MARKER POST DETAIL
C501 SCALE: NTS



4 INTAKE CONCRETE ANCHOR REINFORCEMENT DETAIL
C501 SCALE: NTS



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Construction Certification Date: MARCH 12, 2015

GOVERNMENT OF NUNAVUT

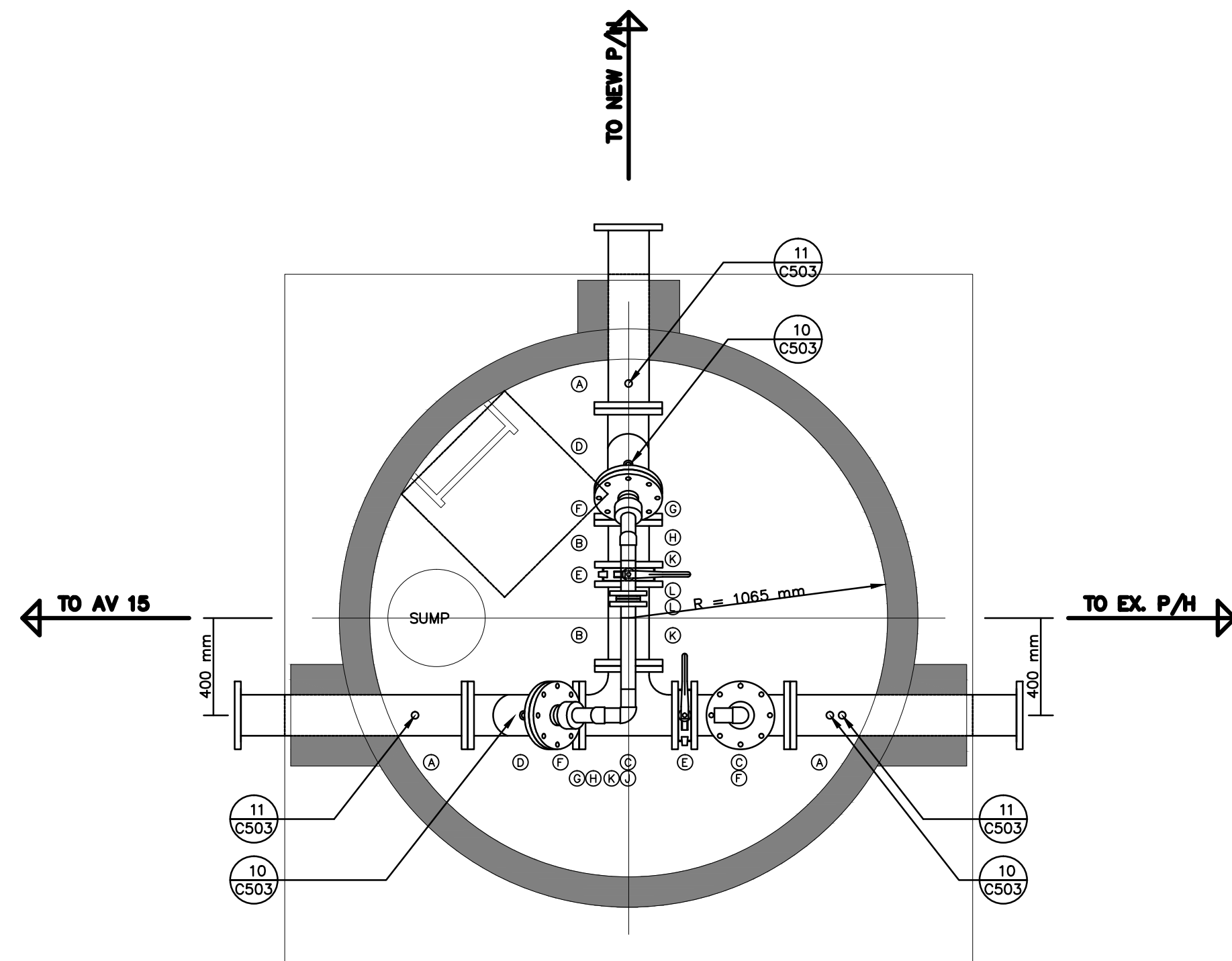
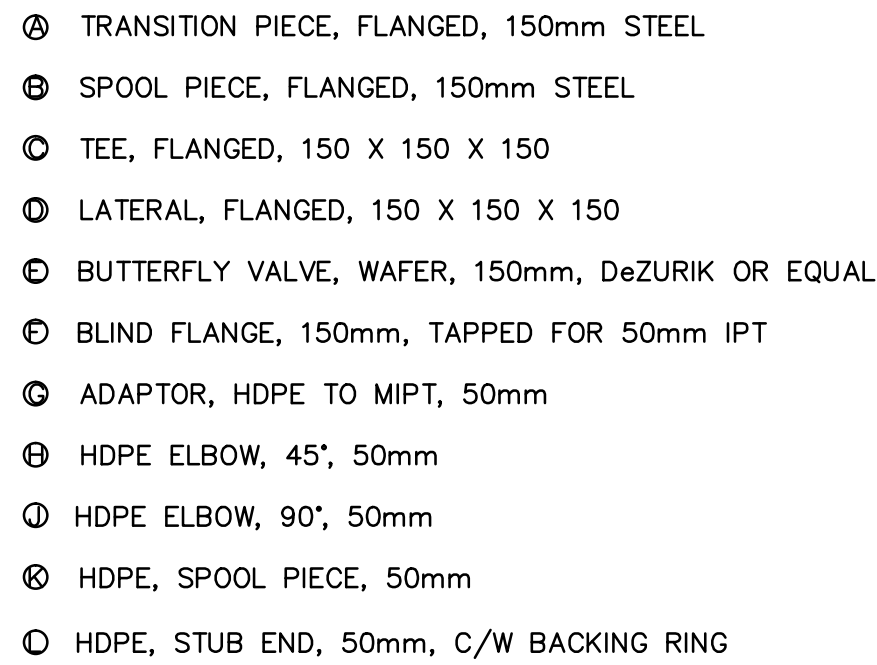
Cambridge Bay, NU

Title
ACCESS VAULT
PIPING LAYOUT

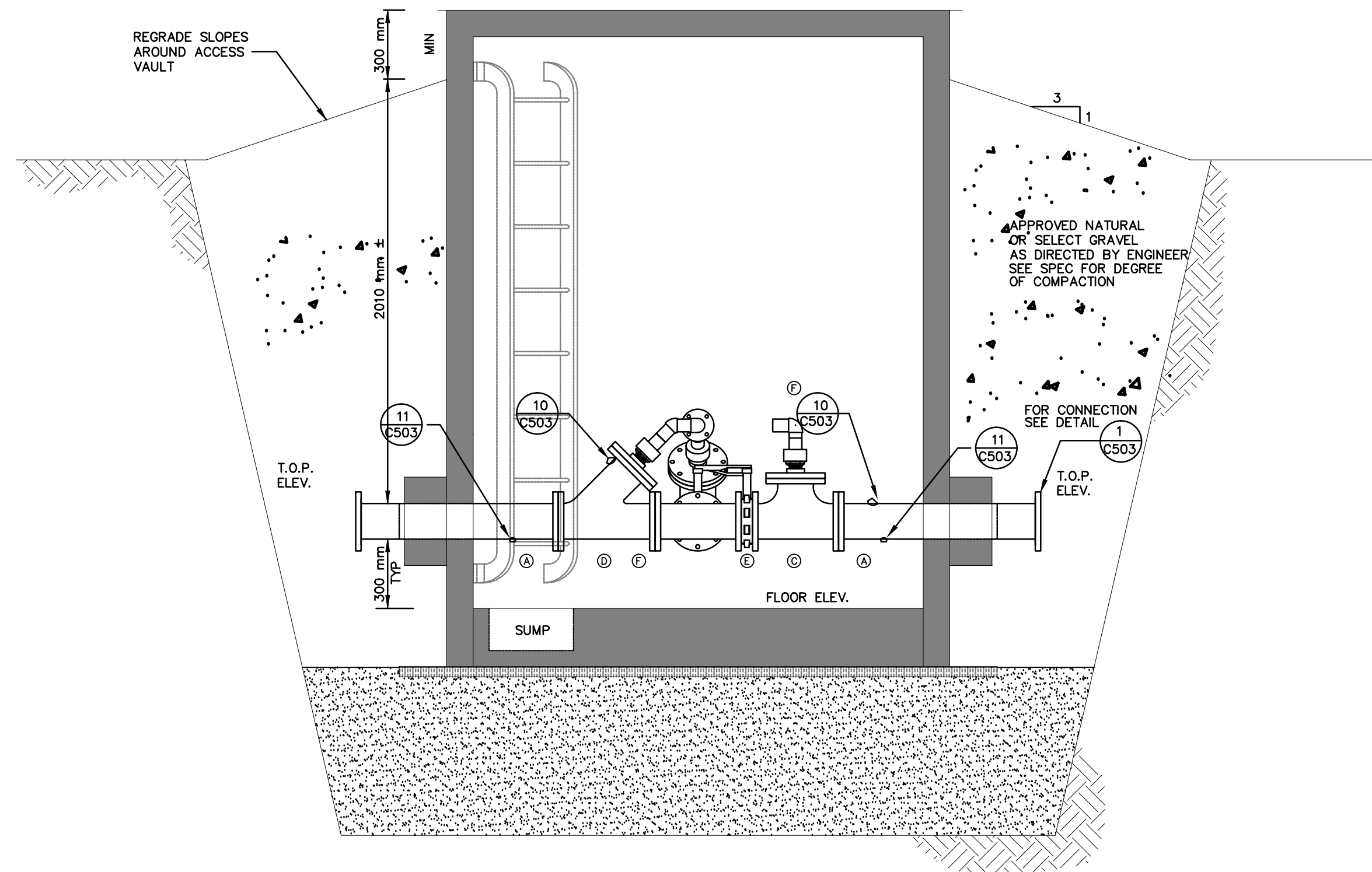
Project No. 1449-01252	Scale AS SHOWN
Drawing No.	Sheet Revision

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D



1 PLAN — NEW ACCESS VAULT
C504 SCALE: NTS



2 ELEVATION — NEW ACCESS VAULT
C504 SCALE: NTS



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50% SUBMISSION			12.01.18
Issued	By	Appd.	YY.MM.DD

File Name:			
Permit-Seal	Dwn.	Chkd.	Dsgn.

PLAN OF AS-BUILT DRAWING

Contractor: SANAQATIIT CONSTRUCTION
Construction Certification Date: MARCH 12, 2015

Client/Project
GOVERNMENT OF NUNAVUT

POTABLE WATER SYSTEM
PHASE I
Cambridge Bay, NU

Title
PUMP & DISCHARGE PIPE
DETAILS

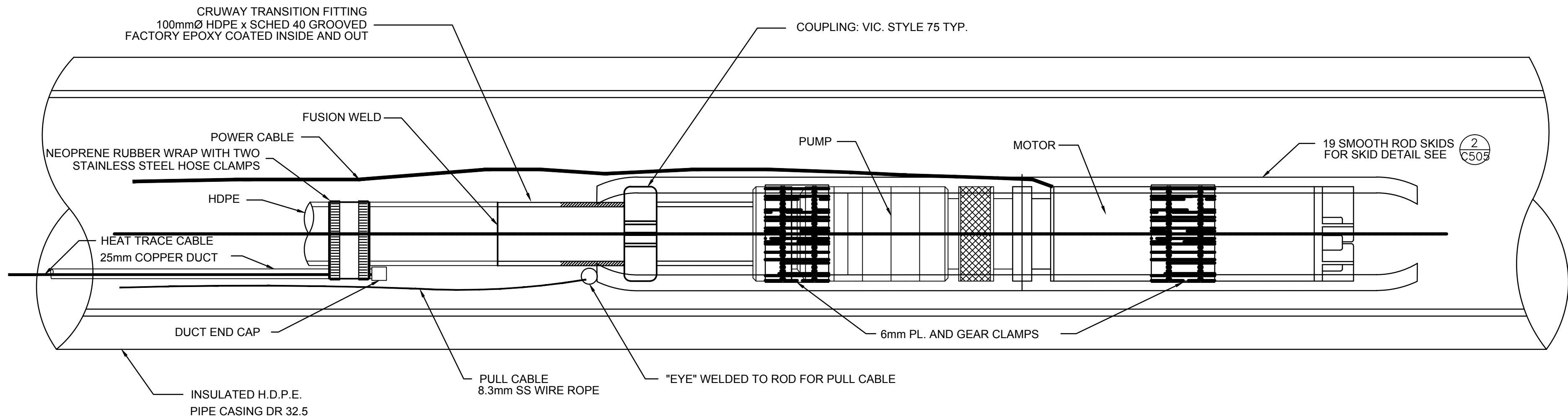
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Drawing No.	Sheet	Revision
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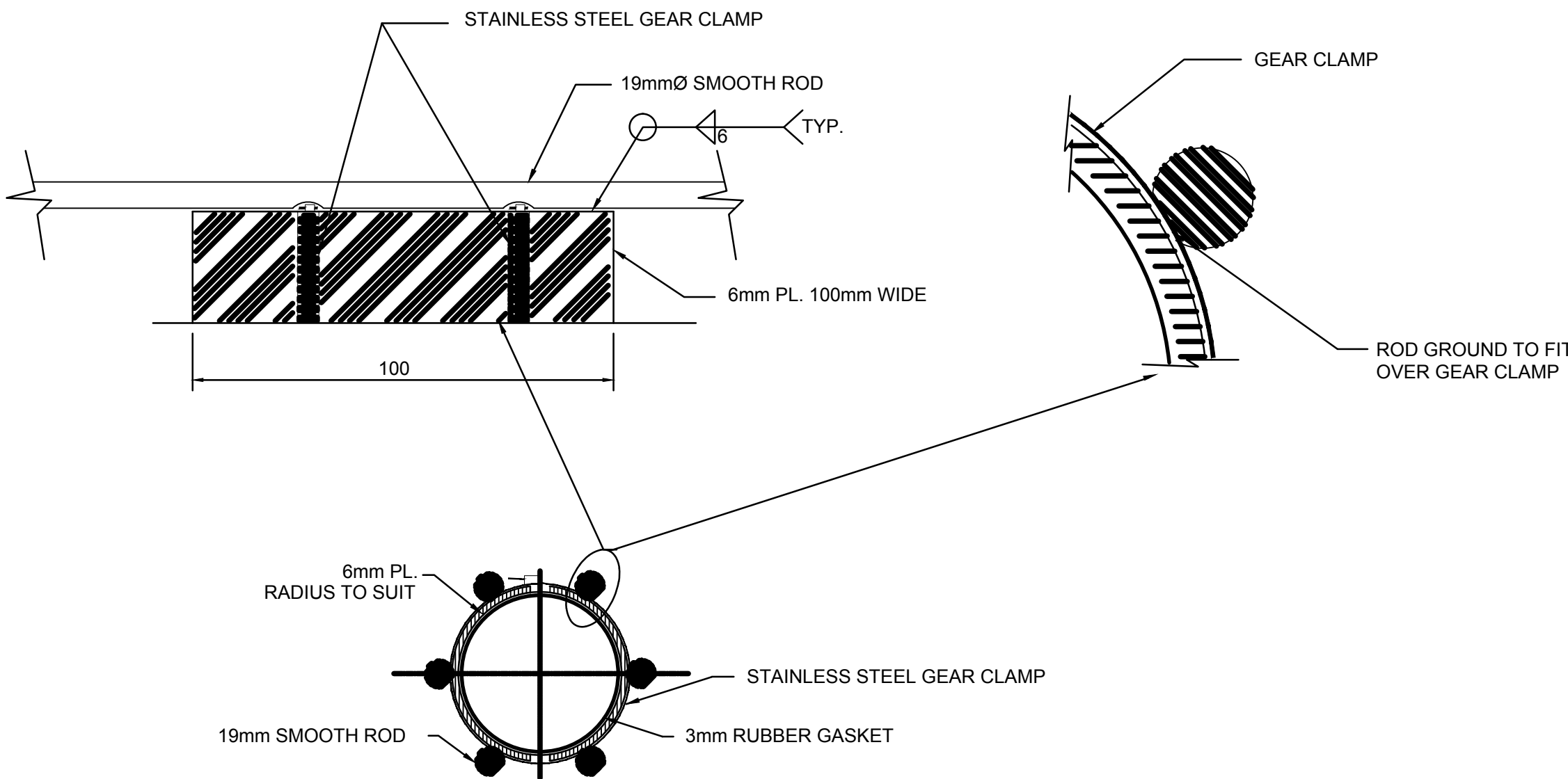
C-505

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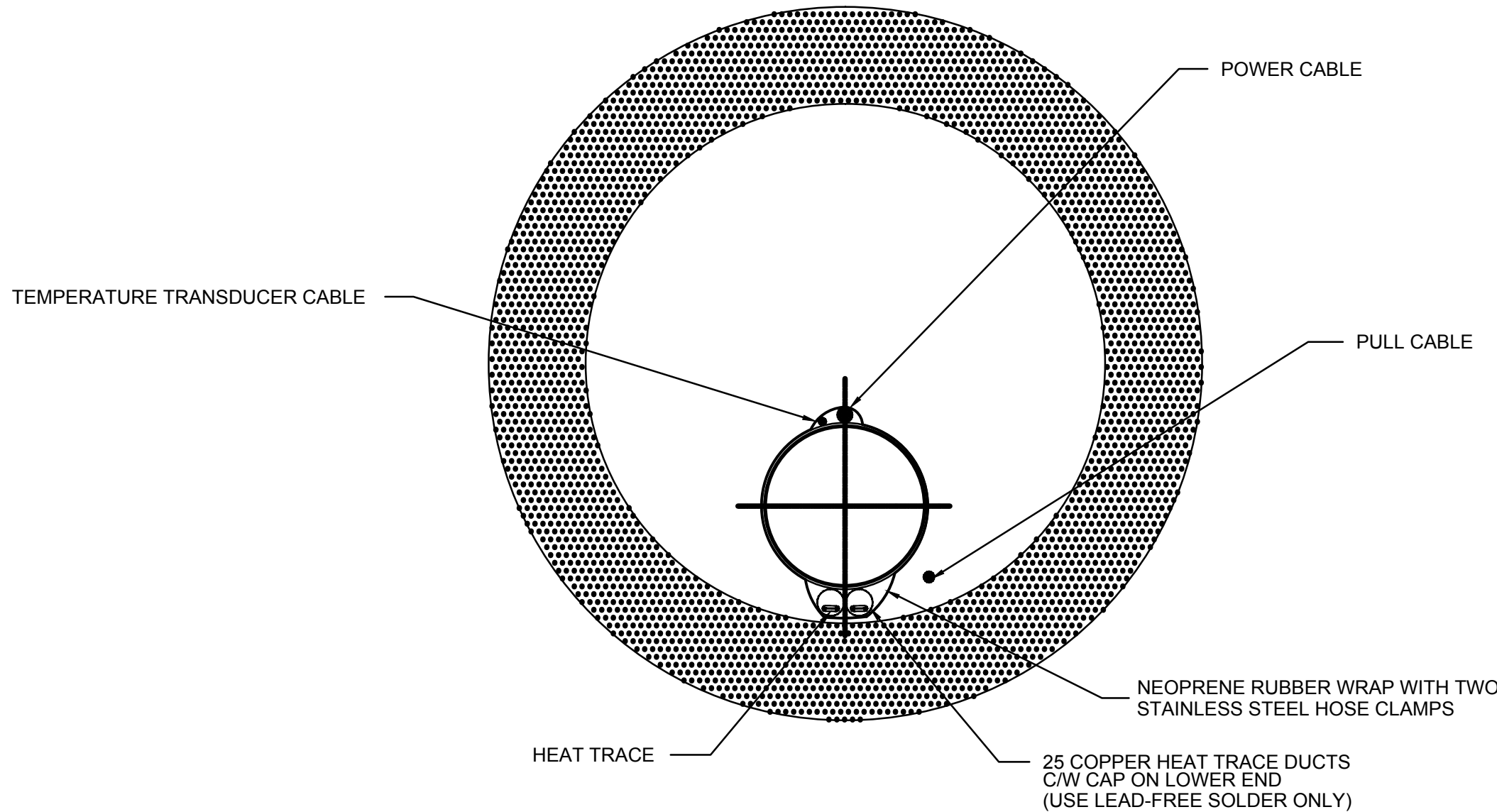
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1 PUMP DETAIL
C505 N.T.S.



2 SKID DETAIL
C505 N.T.S.



3 INTAKE PIPE SECTION
C505 N.T.S.



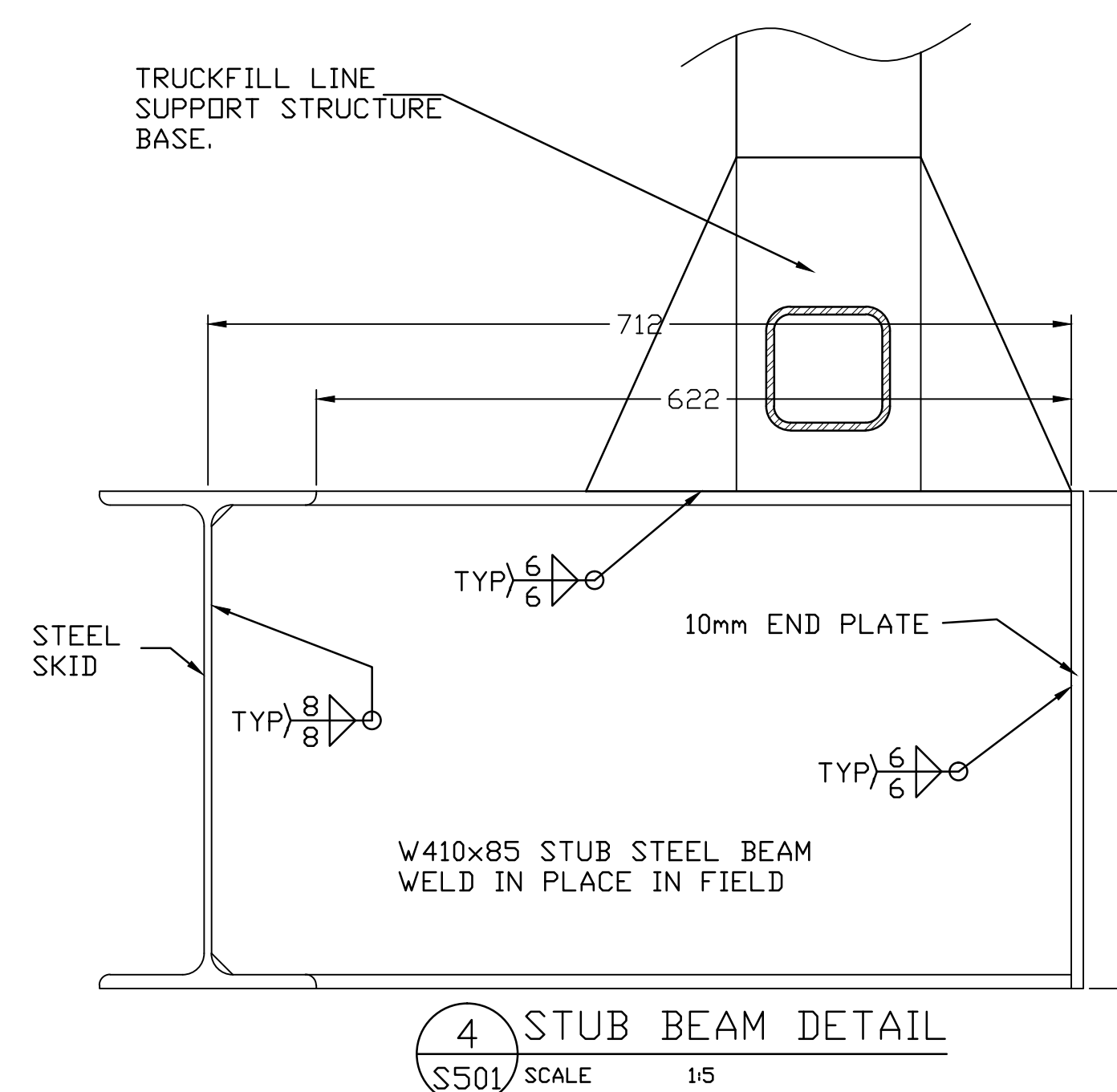
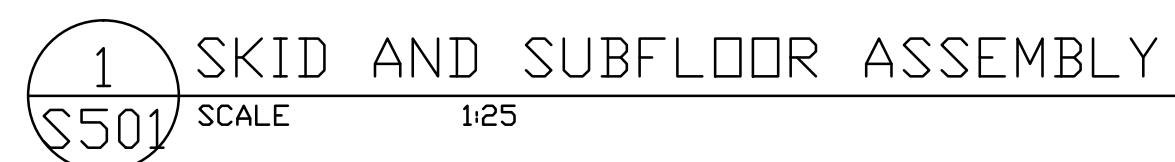
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50%SUB.		J.D.	W.O.	12.01.18
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PLAN OF AS-BUILT DRAWING

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Client/Project
Government of Nunavut

POTABLE WATER SYSTEM
PHASE 1
Cambridge Bay, NU

Title
SKID ,SUBFLOOR LAYOUT

AND DETAILS

Project No.	Scale
144901252	AS NOTED

Drawing No.	Sheet	Revision
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Structural

Walter Orr P.Eng.

Legend

Notes

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Revision	By	Appd.	YY.MM.DD
ISSUED FOR AS-BUILT	KK	WO	16.03.16
ISSUED FOR CONSTRUCTION	AF	WO	12.09.06
99%SUB.	K.K.	W.O.	12.02.02
50%SUB.	J.D.	W.O.	12.01.18
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PLAN OF AS-BUILT DRAWING

Contractor: SANAQATIIT CONSTRUCTION
Construction Certification Date: MARCH 12, 2015

Client/Project

Government of Nunavut

POTABLE WATER SYSTEM
PHASE 1

Cambridge Bay, NU

Title

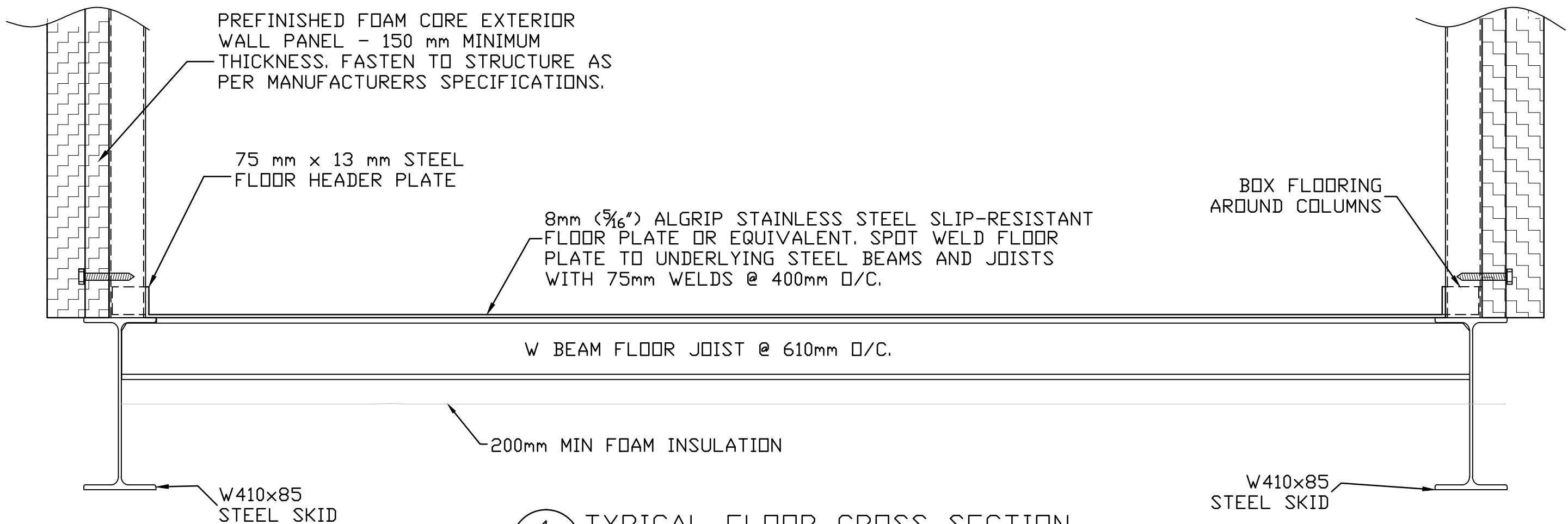
STRUCTURAL DETAILS

Project No. 144901252	Scale AS NOTED
Drawing No.	Sheet
	Revision

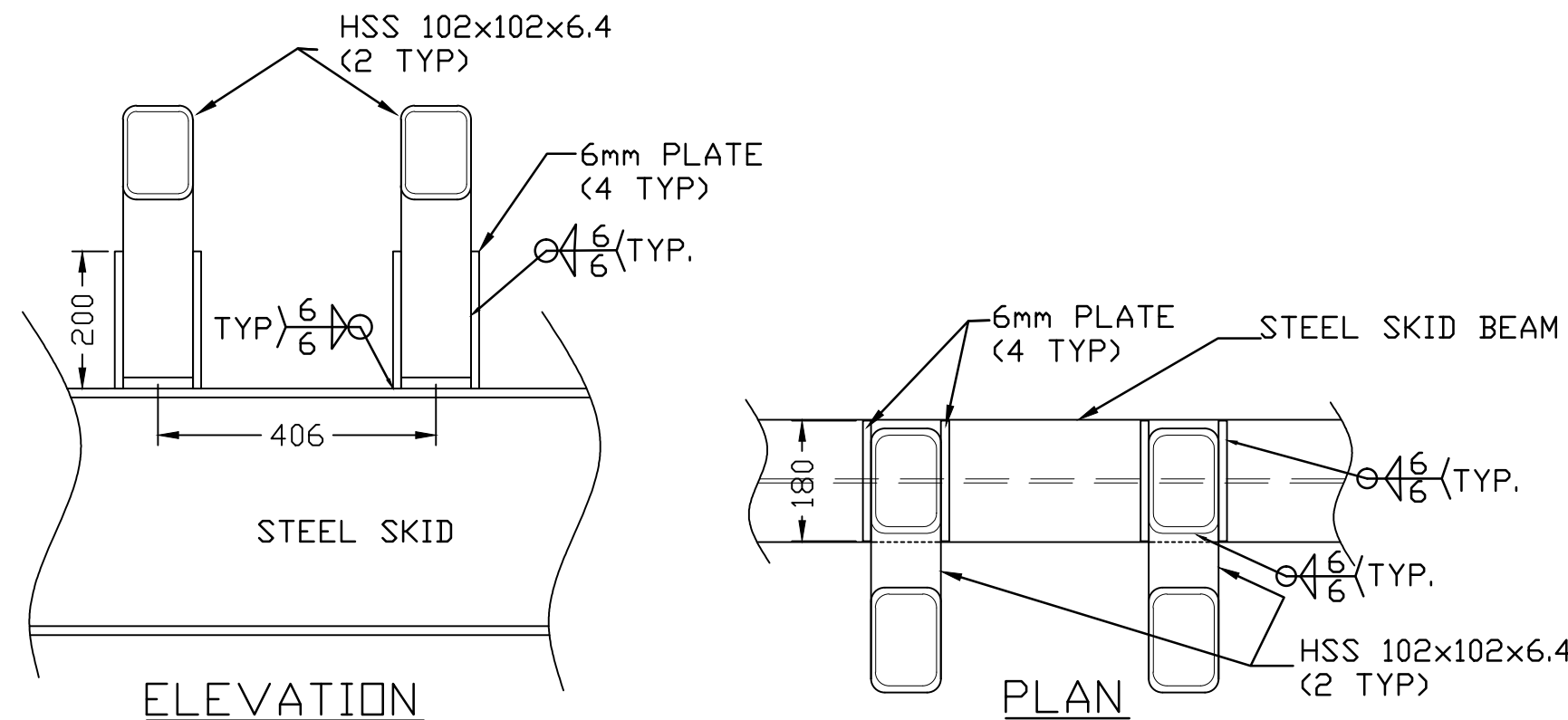
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2 of 6

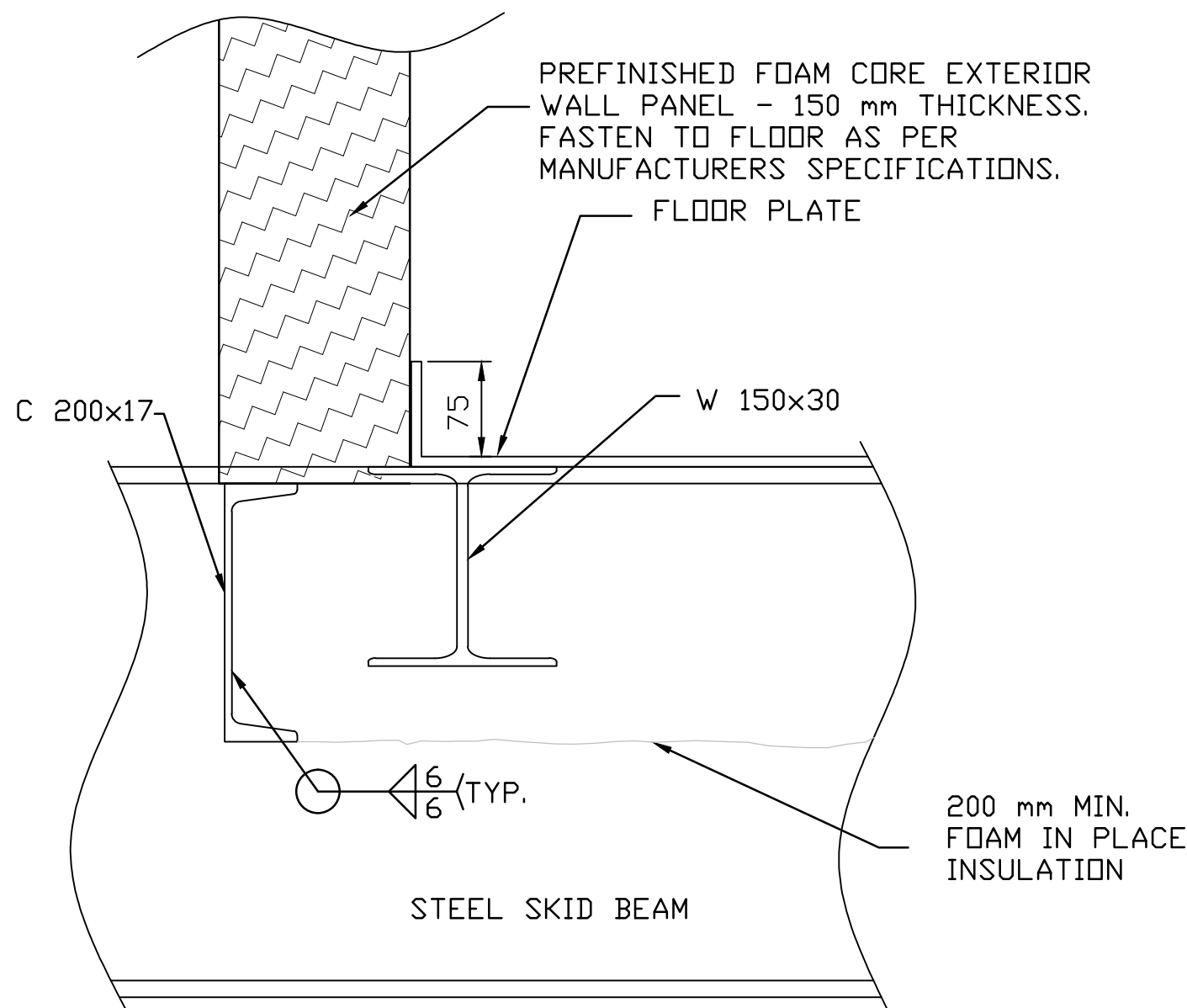
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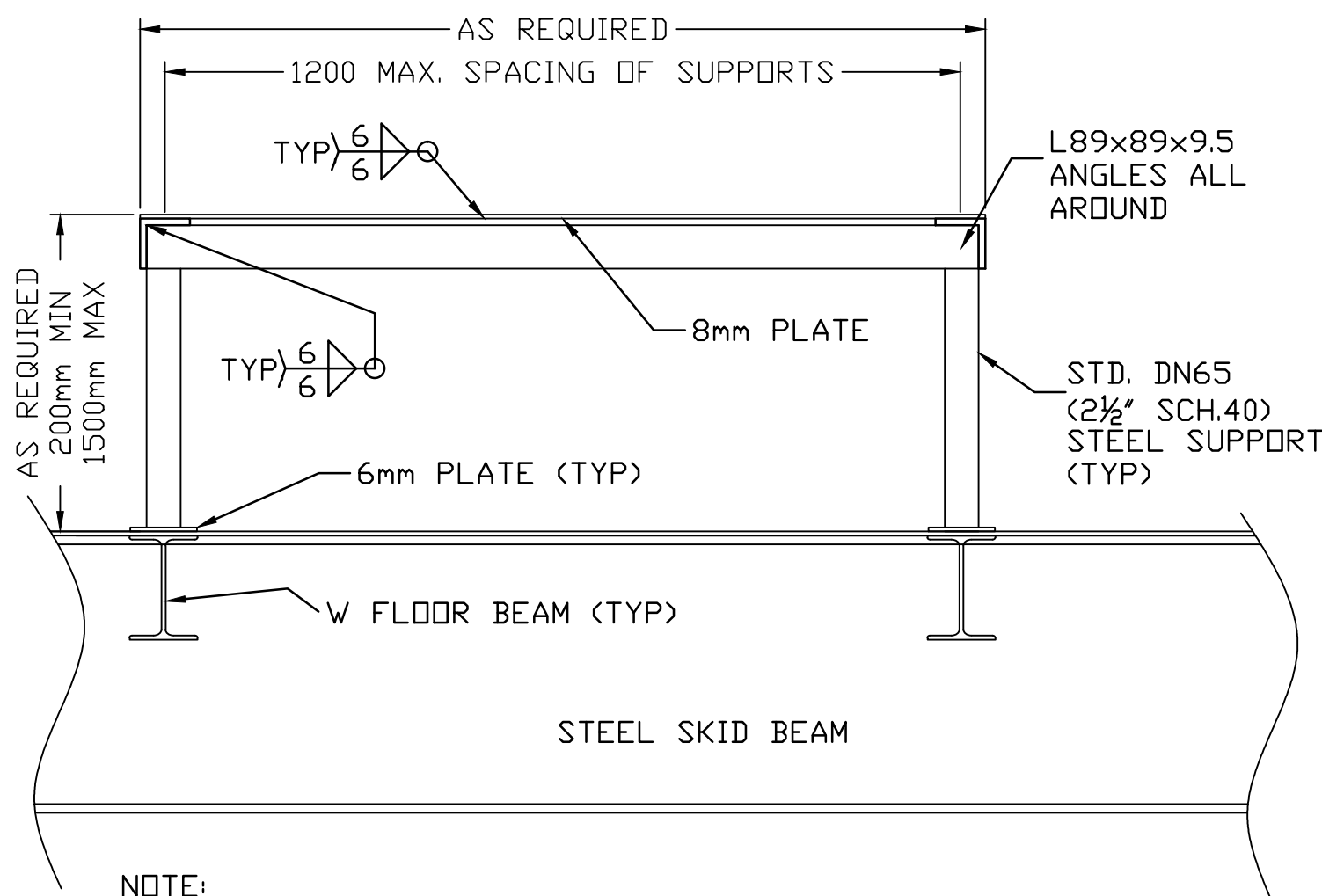
1 TYPICAL FLOOR CROSS SECTION
SCALE 1:10



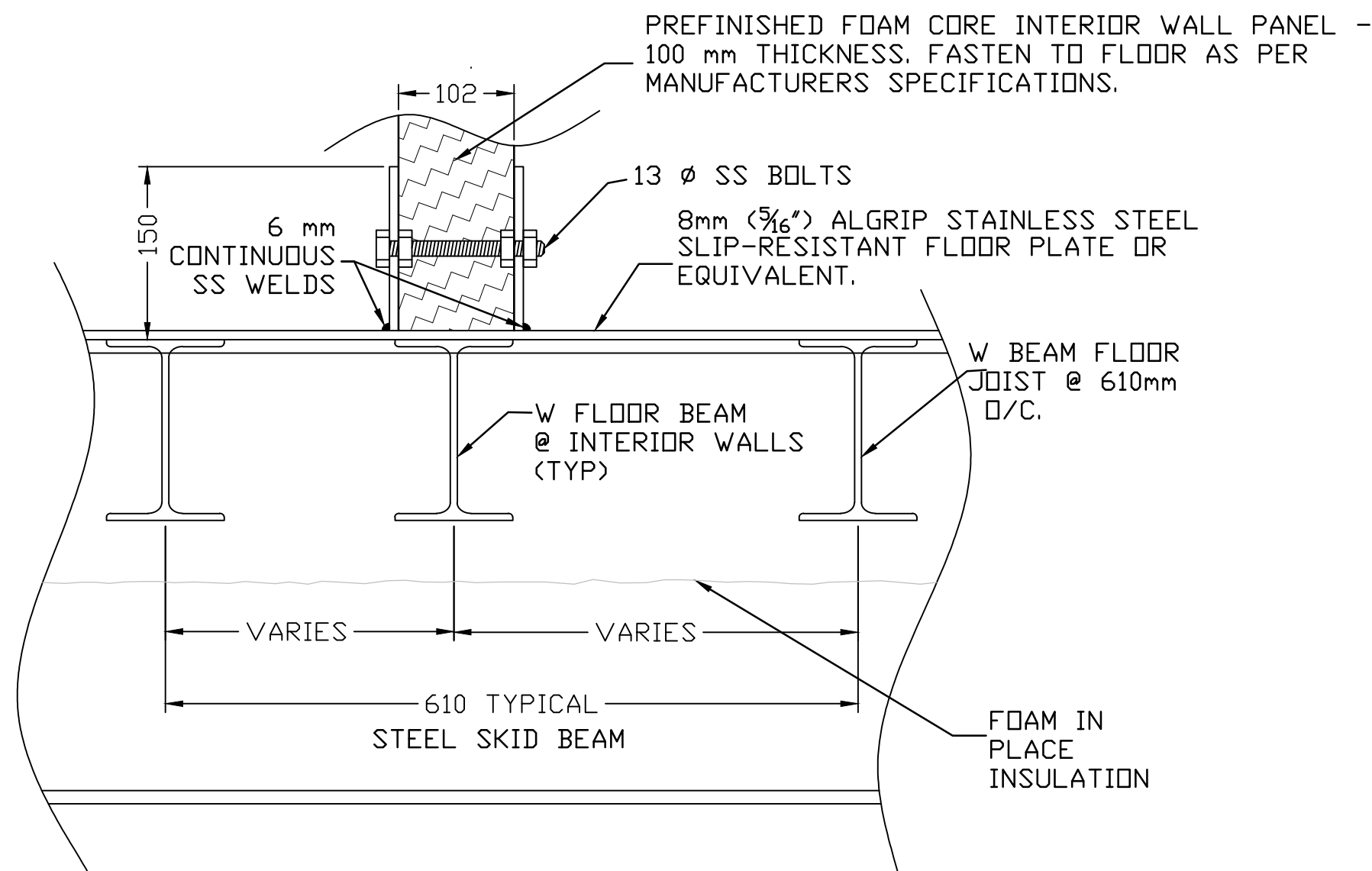
2 SKID/TRUCKFILL ARM STRUT CONNECTION
SCALE 1:10



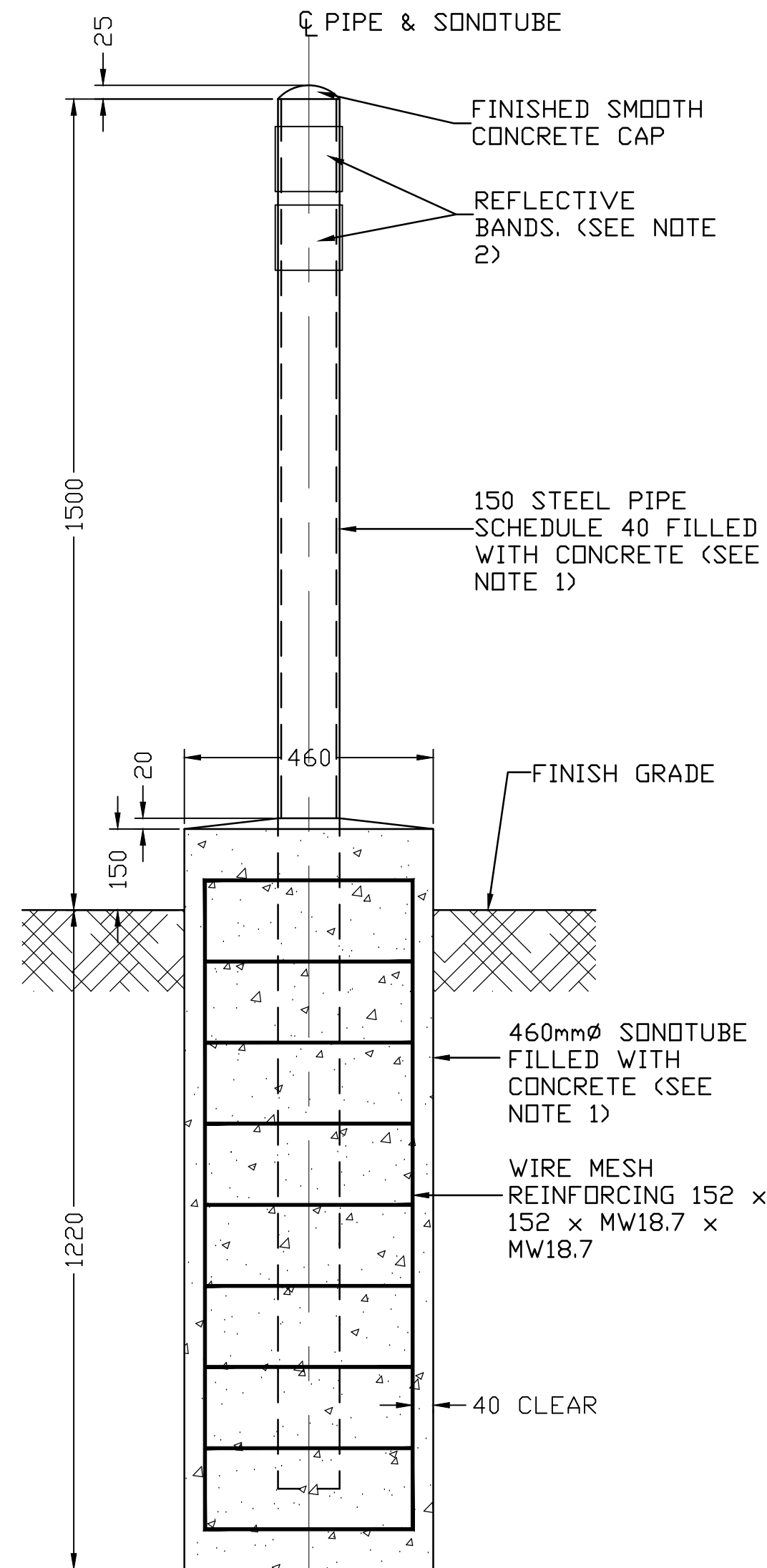
4 TYPICAL EXTERIOR END WALL SECTION
SCALE 1:5



3 TYPICAL EQUIPMENT STAND
SCALE 1:10



5 TYPICAL INTERIOR WALL SECTION
SCALE 1:5



NOTES:
1. ALL CONCRETE SHALL HAVE 28 DAY COMPRESSIVE STRENGTH OF 25 MPa. SLUMP OF 75 mm +/- 10%, AIR ENTRANCE 5-7% AND MAXIMUM AGGREGATE SIZE OF 20mm. CONCRETE QUALITY CONTROL TESTING MUST BE COMPLETED BY QUALIFIED PERSONNEL AND REPORTS TO BE SUBMITTED TO THE ENGINEER.
2. BOLLARD TO BE PAINTED YELLOW WITH REFLECTIVE BANDS.

6 TYPICAL BOLLARD DETAIL
SCALE 1:10



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Structura

Walter Orr P.Eng.

Legend

Notes



NOTE:
ALL DIMENSIONS ARE APPROXIMATE .
FOR CORRECT BUILDING SIZE SEE
ARCHITECTURAL DRAWINGS.

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50%SUB.	J.D.	W.O.	12.01.18
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	Dwn.	Chkd.	Dsgn.
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PLAN OF AS-BUILT DRAWING

Contractor: SANAQATIIT CONSTRUCTION
Construction Certification Date: MARCH 12, 20

Client/Project

Government of Nunavut

POTABLE WATER SYSTEM PHASE 1

Cambridge Bay, NU

Title

STRUCTURAL SECTIONS

Project No.

144901252

Scale

AS NOTED

Drawing No

Shee

Revision

S-503

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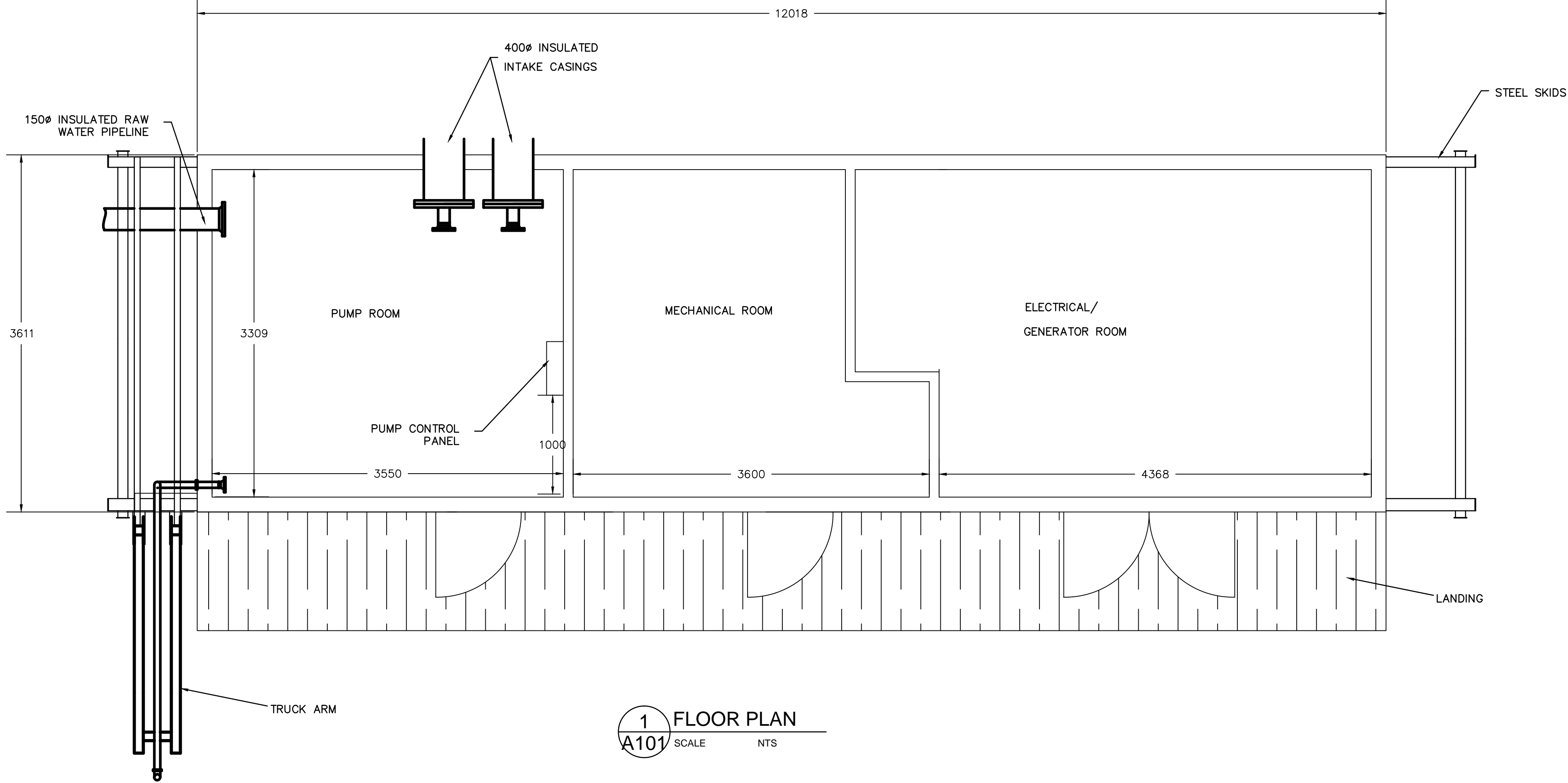
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Legend

Notes



1 FLOOR PLAN
A101 SCALE NTS

ROOF CONSTRUCTION ASSEMBLIES

R1 ROOF (152 MM, RSI 8.13 / R-46)
152 MM THICK PRE-FINISHED INSULATED METAL ROOF PANEL, PROFILE & CONFIGURATION AS PER EXTERIOR ELEVATIONS, COLOUR; AS PER OWNER MECHANICAL FASTENERS AS PER MANUFACTURER'S SPECIFICATIONS TO STEEL SUPPORT FRAMES AS PER STRUCTURAL DRAWINGS

EXTERIOR WALL CONSTRUCTION ASSEMBLIES

EW1 EXTERIOR WALL (152 MM, RSI 8.13 / R-46)
152 MM THICK PRE-FINISHED INSULATED METAL WALL PANEL, PROFILE & CONFIGURATION AS PER EXTERIOR ELEVATIONS, COLOUR; AS PER OWNER MECHANICAL FASTENERS AS PER MANUFACTURER'S SPECIFICATIONS TO STEEL SUPPORT FRAMES AS PER STRUCTURAL DRAWINGS

FLOOR CONSTRUCTION ASSEMBLIES

F1 MAIN FLOOR - NONCOMBUSTIBLE CONSTRUCTION (230 MM, RSI 8.45 / R-48)
8 MM STAINLESS STEEL SLIP RESISTANT FLOOR PLATE, ALL SEAMS WELDED W150x JOISTS @ 610 MM O.C. WELDED TO STEEL BEAMS AS PER STRUCTURAL DRAWINGS.
203 MM POLYURETHANE SPRAY FOAMED REQUIRED FOR TOTAL FLOOR SYSTEM, DEPTH OF 230mm
SPUN OLEFIN WEATHER BARRIER
19 MM PRE-FINISHED METAL CLADDING SOFFIT LINER PANEL, MECHANICAL FASTENED AS PER MANUFACTURER

INTERIOR WALL CONSTRUCTION ASSEMBLIES

- REFER TO FLOOR PLANS FOR PARTITION LOCATIONS.
- ALL STEEL STUD PARTITIONS TO HAVE MID-HEIGHT CONTINUOUS BRIDGING CHANNEL C/W BRIDGING ANGLE CLIP.
- LOCATE CONTROL JOINTS AT 10M O.C. ON 1500 MODULE OR ABOVE DOOR FRAME CORNER WHEREVER POSSIBLE.
- PARTITIONS NOT SPECIFICALLY DESIGNATED SHALL BE CONSIDERED TO BE CONSTRUCTED AS A GW1 WALL ASSEMBLY AND EXTEND 150 MM ABOVE FINISHED CEILING.
- ACOUSTICALLY SEAL PERIPHERY OF WALL AND ALL PENETRATIONS AIRTIGHT.

INTERIOR WALL CONSTRUCTION ASSEMBLIES

GW1 (89 MM)
89mm THICK PRE-FINISHED PRE-INSULATED METAL WALL PANEL. COLOUR WHITE. MECHANICAL FASTENERS AS PER MANUFACTURER'S SPECIFICATIONS TO STEEL SUPPORT FRAMES AS PER STRUCTURAL DRAWINGS.

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PLAN OF AS-BUILT DRAWING

Contractor: SANAQATIIT CONSTRUCTION
Construction Certification Date: MARCH 12, 2015

Client/Project

GOVERNMENT OF NUNAVUT

POTABLE WATER SYSTEM
PHASE I

Cambridge Bay, NU

Title

FLOOR PLAN, ASSEMBLIES,
AND SCHEDULES

Project No. 1449-01252	Scale NTS	Revision
Drawing No.	Sheet	Revision

A-101

1 of 3

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Legend

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File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD
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PLAN OF AS-BUILT DRAWING

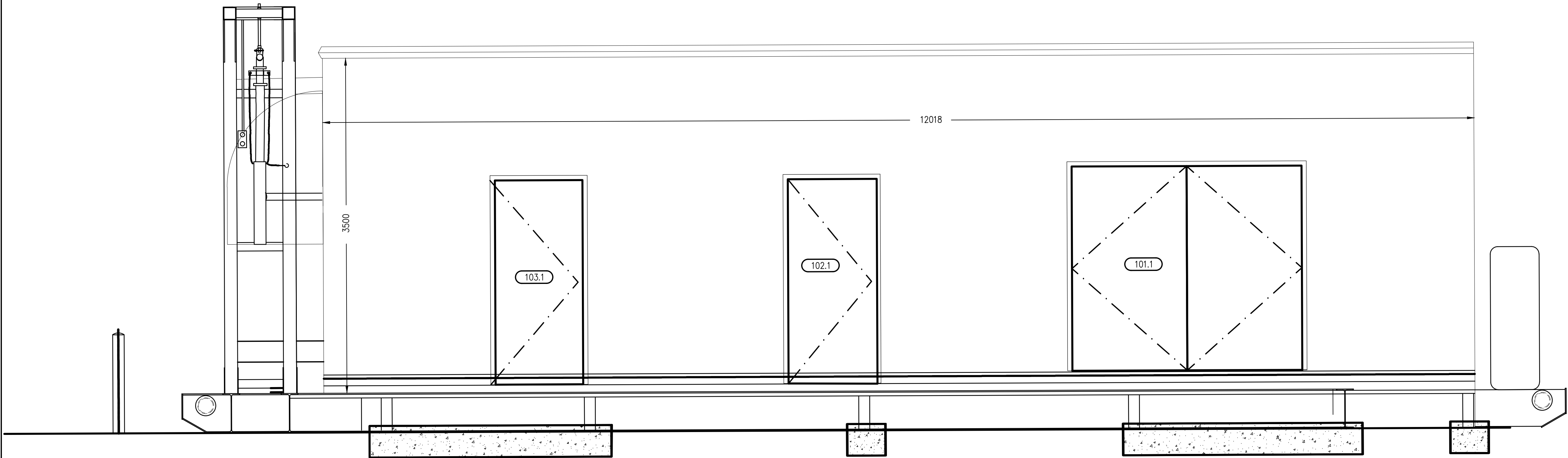
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GOVERNMENT OF NUNAVUT

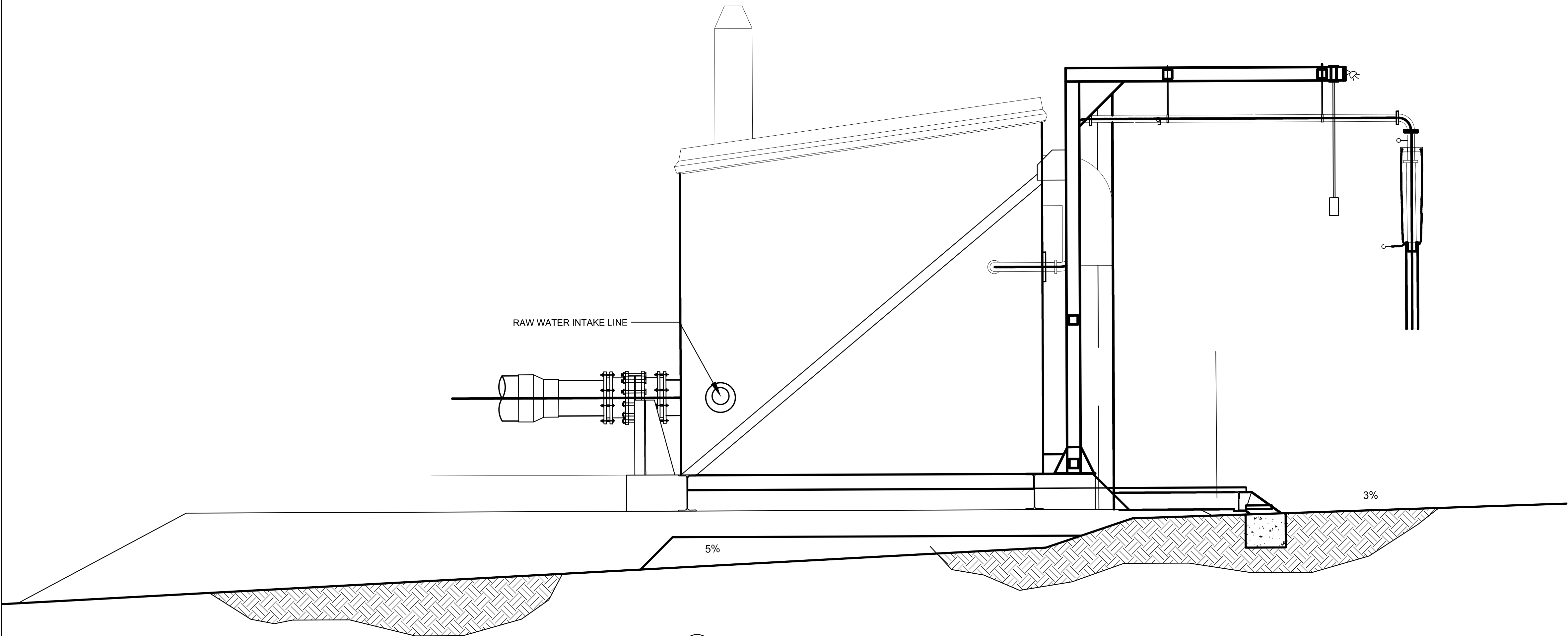
POTABLE WATER SYSTEM
PHASE I
Cambridge Bay, NU

Title
BUILDING ELEVATIONS

Project No. 1449-01252	Scale AS SHOWN	Revision 0
Drawing No. A-201	Sheet 2 of 3	



1 FRONT ELEVATION
A201 SCALE 1:25



1 SIDE ELEVATION
A201 SCALE 1:25



