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HVAC DESIGN DRAWINGS

Anwar Ali Architects (Pvt.) Ltd.
Consulting, Architects, Engineers
Planners & Management Consultants
06 HBF BLOCK A Faisal Town Lahore

AR ENGINEERS
Architects, Structural, Earthquake Engineering, Geo Technical,
Public Health, Highway, Electrical Design Solution.

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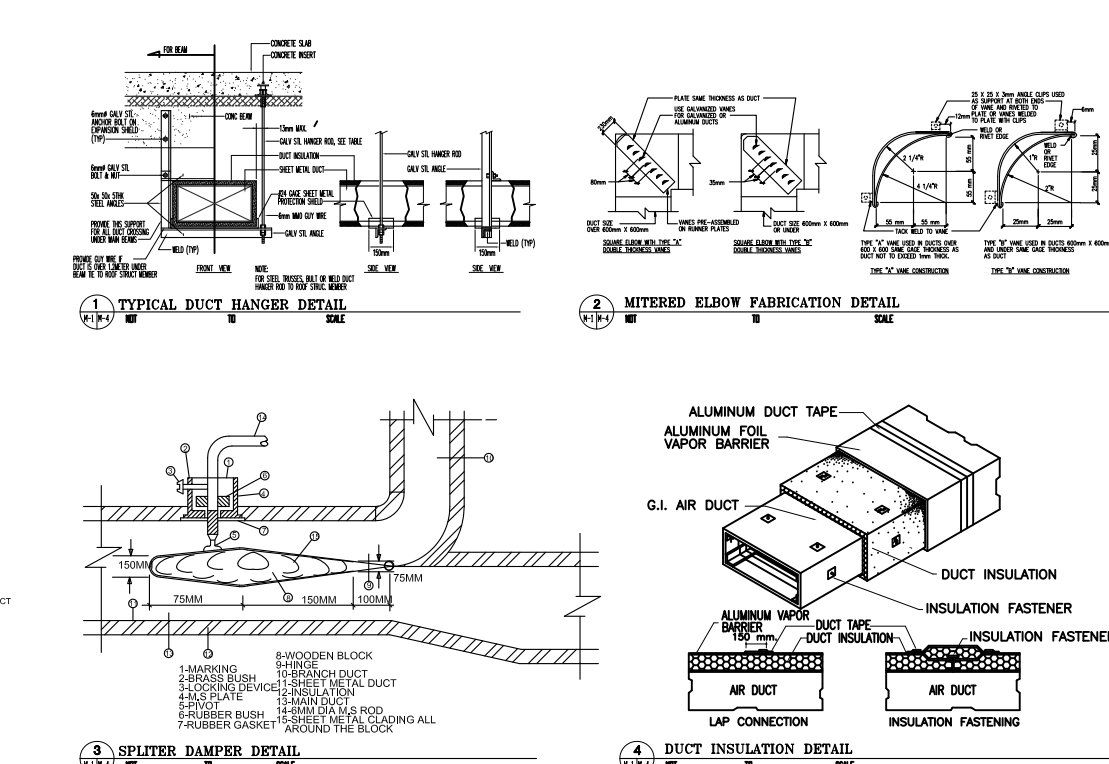
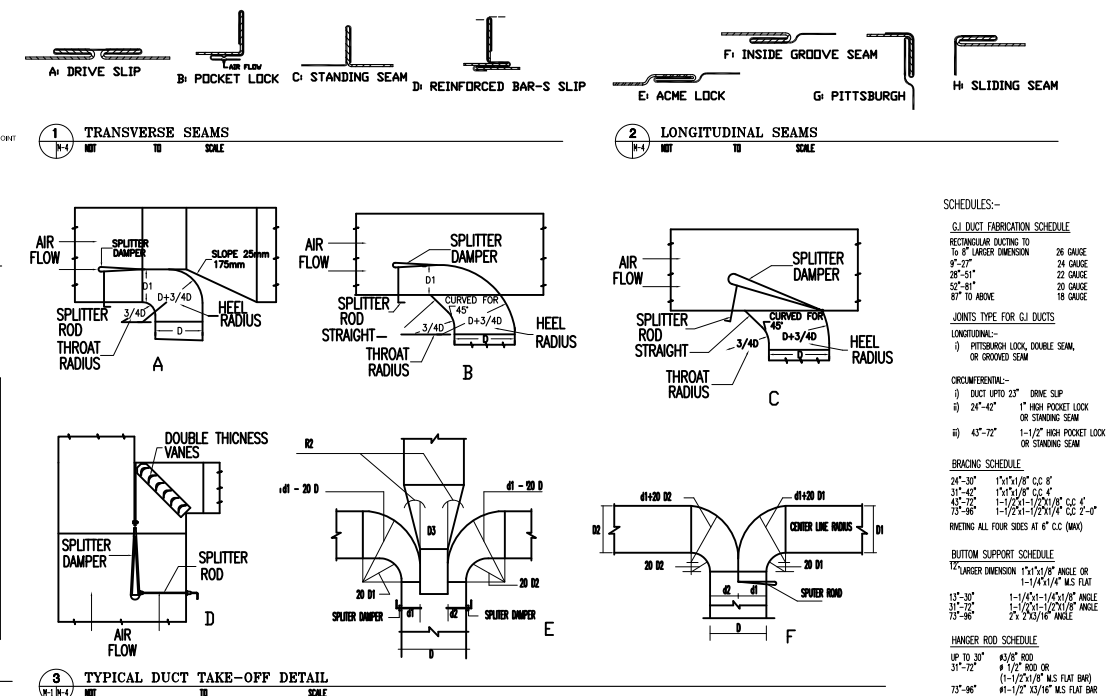
Consultancy Services for the Preparation of Detailed Design, Procurement Support and Construction Supervision of New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

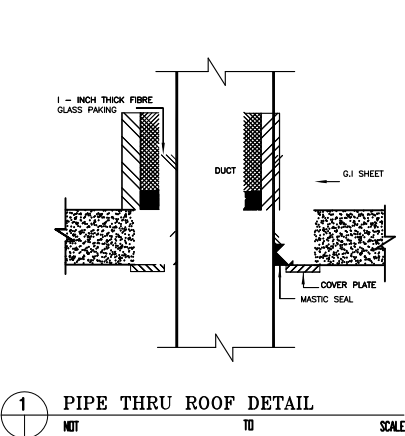
HVAC -DETAIL 1

Diagram illustrating the cross-section of a roof assembly:

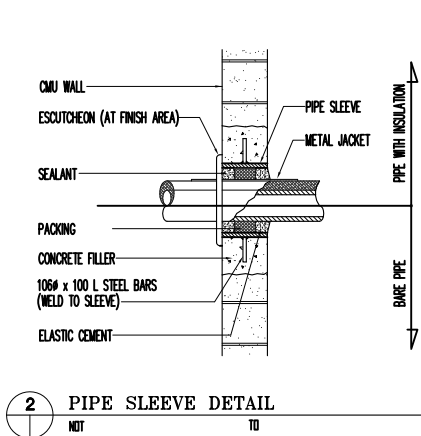
- Top layer: Insulation (hatched pattern)
- Middle layer: AIR DUCT (indicated by a downward arrow)
- Bottom layer: INSULATION FASTENING (indicated by upward arrows)

ISSUE FOR TENDER

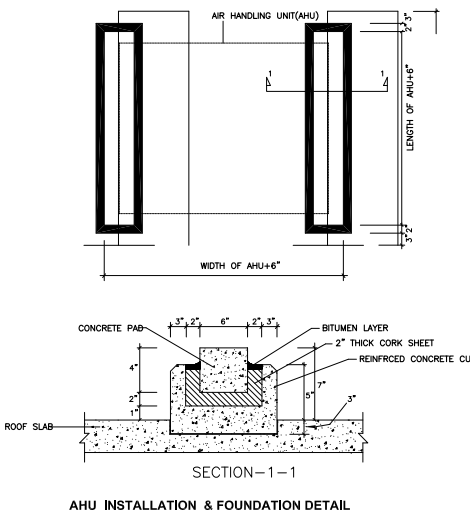




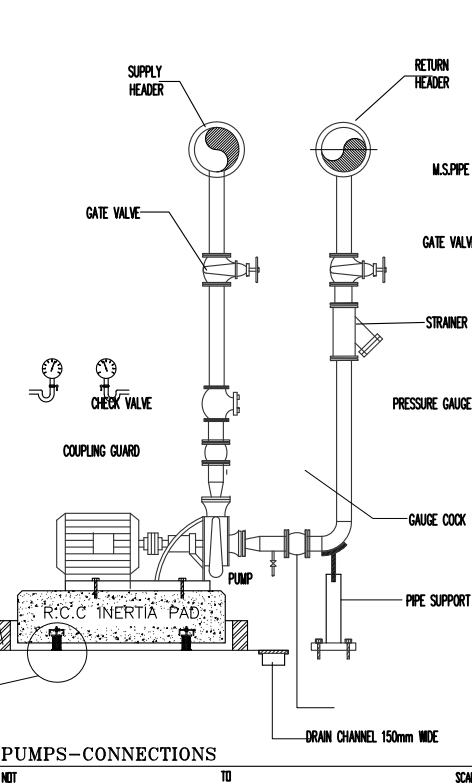
1 PIPE THRU ROOF DETAIL
NOT TO SCALE



2 PIPE SLEEVE DETAIL
NOT TO SCALE



SECTION-1-1
AHU INSTALLATION & FOUNDATION DETAIL



3 PUMPS-CONNECTIONS
NOT TO SCALE

SCHEDULES:-

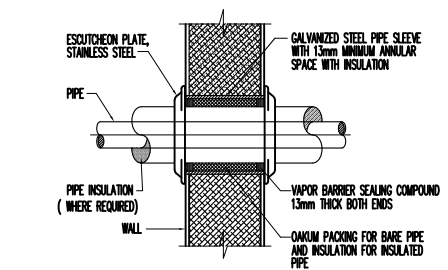
PIPE SUPPORT SCHEDULE "A"

PIPE SIZE	U BOLT	HANGER ROD	ANGLE SIZE
1/2" TO 3/4"	1/4"	3/8"	1-1/2" x 1-1/2" x 3/16" THK
1" TO 1-1/4"	3/8"	3/8"	2" x 2" x 1/4" THK
1-1/2" TO 2-1/2"	1/2"	1/2"	2-1/2" x 2-1/2" x 1/4" THK
3" TO 4"	1/2"	1/2"	2-1/2" x 2-1/2" x 3/8" THK
5" TO 6"	1/2"	1/2"	3" x 3" x 3/8" THK

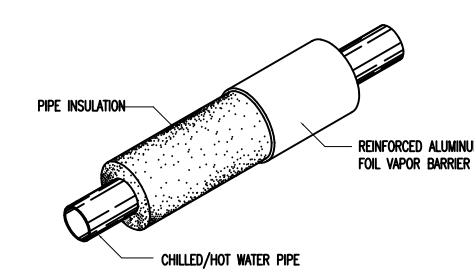
PIPE SUPPORT SCHEDULE "B" (HORIZONTAL LINE)

NOMINAL PIPE SIZE	1/2" TO 1"	1-1/4"	1-1/2"	2"
MAX SPAN OF STEEL PIPE SUPPORT	8'	8'	8'	10'

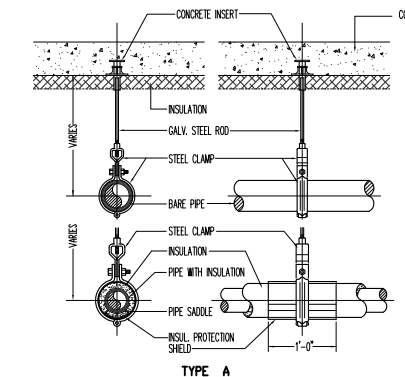
NOMINAL PIPE SIZE	2-1/2"	3"	4"	5"	6"
MAX SPAN OF STEEL PIPE SUPPORT	10'	10'	10'	10'	10'



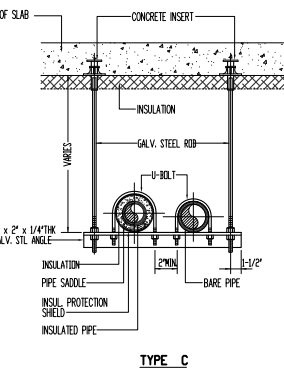
3 PIPE THRU WALL DETAILS
NOT TO SCALE



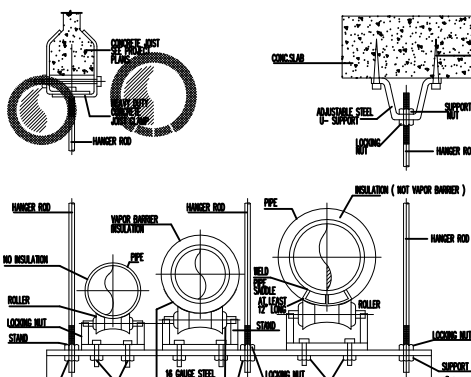
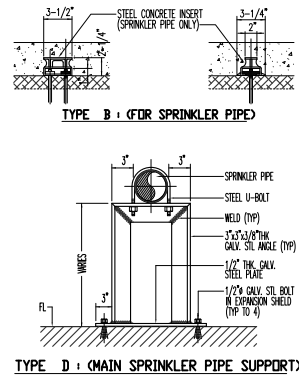
4 PIPE INSULATION DETAILS
NOT TO SCALE



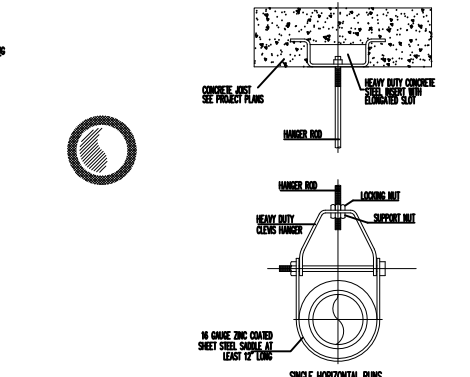
TYPE A



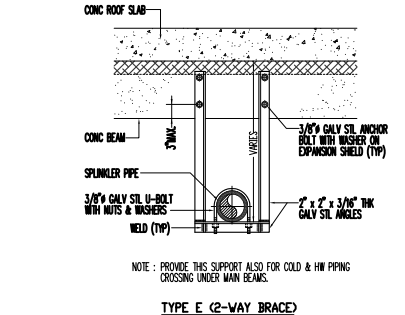
TYPE C



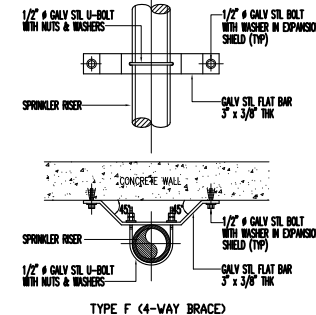
1 TRAPEZE HANGER
NOT TO SCALE



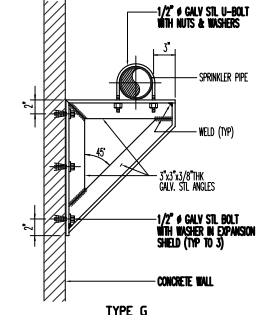
2 CLEVIS HANGER
NOT TO SCALE



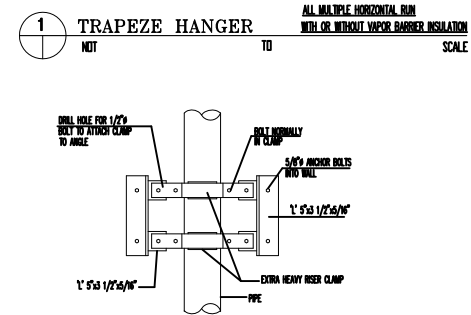
TYPE E (2-WAY BRACE)



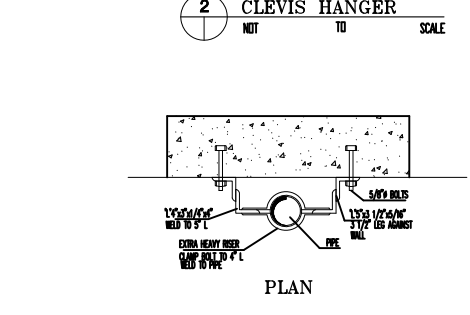
TYPE F (4-WAY BRACE)



TYPE G



3 ANCHOR TO CONCRETE BEAM
NOT TO SCALE



4 ANCHOR TO VERTICAL WALL
NOT TO SCALE

1 TYPICAL PIPE SUPPORT DETAILS
NOT TO SCALE

TO SCALE

TO SCALE

TO SCALE

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TITLE PAGE:

HVAC
DESIGN DRAWINGS

CLIENT NAME



MAIN CONSULTANT



JV MEMBERS



STRUCTURAL CONSULTANT

AR ENGINEERS
Architects, Structural, Earthquake Engineering, Geo Technical, Public Health, Highway, Electrical Design Solution.

MEP CONSULTANT



Project Name

Consultancy Services for the Preparation of Detailed Design, Procurement Support and Construction Supervision of New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

HVAC

HVAC - DETAIL 2

Date	27 April, 2026
Scale	NTS
Drawn by	IBRAHIM
Checked by	FAHEEM
Approved by	MUBASHIR
Drawing No.	IEST/310/AAA/TD/14

ISSUE FOR TENDER

LIST OF DRAWINGS		
SR.NO.	DWG. NO.	DESCRIPTION
	PUBLIC HEALTH	
01	LOD-00	LIST OF DRAWINGS
02	GN-00	PUBLIC HEALTH LEGENDS, GENERAL NOTES
03	SE-00	SEWERAGE SYSTEM MASTER PLAN
04	SE-01	SEWERAGE SYSTEM GROUND FLOOR PLAN
05	SE-02	SEWERAGE SYSTEM MEZZANINE FLOOR PLAN
06	SE-03	SEWERAGE SYSTEM FIRST FLOOR PLAN
07	SE-04	SEWERAGE SYSTEM ROOF TOP PLAN
08	SE-05	SEWERAGE SYSTEM ARFF FLOOR PLAN
09	SE-06	SEWERAGE SYSTEM ATCT PLAN
10	SE-07	SEWERAGE SYSTEM ATCT ROOF TOP PLAN
11	SE-08	SEWERAGE SYSTEM SECTIONAL DETAILS
12	DD-01	DRAINAGE SYSTEM (MASTER PLAN)
13	WS-01	WATER SUPPLY SYSTEM GROUND FLOOR PLAN
14	WS-02	WATER SUPPLY SYSTEM MEZZANINE FLOOR PLAN
15	WS-03	WATER SUPPLY SYSTEM FIRST FLOOR PLAN
16	WS-04	WATER SUPPLY SYSTEM FIRST FLOOR PLAN (HIGH LEVEL PLAN)
17	WS-05	WATER SUPPLY SYSTEM ROOF FLOOR PLAN
18	PH-MD-01	PUBLIC HEALTH MISCELLANEOUS DETAILS
19	OHWT-01	OVER WATER TANK DETAIL
20	SP-01	SEPTIC TANK DETAIL
21	UG-01	UNDER GROUND WATER TANK DETAIL
22	SO-01	SOAKAGE PIT DETAIL
23	SC-01	WATER SUPPLY SYSETM SCHEMATIC DIAGRAM
24	SC-02	SEWERAGE SYSETM SCHEMATIC DIAGRAM
25	TW-01	TUBE WELL DETAILS
26	RW-01	RAIN WATER TANK DETAILS

ISSUE FOR TENDER

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CLIENT NAME	
	
MAIN CONSULTANT	
	
JV MEMBERS	
	
STRUCTURAL CONSULTANT	
	
MEP CONSULTANT	
	
Project Name	
Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport	
DETAILED PUBLIC HEALTH Design Drawings	
Sheet Name	
LIST OF DRAWINGS	
Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	LOD-00

WATER SUPPLY NOTES

1. ALL WATER SUPPLY PIPE DIAMETERS MENTIONED ARE EXTERNAL DIAMETERS UNLESS OTHERWISE MENTIONED.
2. PROVIDE ISOLATION (GATE) VALVE ON ALL COLD & HOT WATER SUPPLY LINES AT THE INLET TO EACH TOILET. VALVES SHALL BE INSTALLED AT ACCESSIBLE LOCATIONS.
3. ALL WATER SUPPLY PIPES ARE POLYPROPYLENE RANDOM PIPE (PPR-PN 20) UNLESS OTHERWISE MENTIONED.
4. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS, ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED.
5. PROVIDE THERMAL INSULATION ON ALL HOT WATER & HOT WATER RETURN PIPES.
6. ALL WATER SUPPLY PIPES ARE SUSPENDED ALONG CEILING OR CONCEALED IN WALLS.
7. ALL WATER SUPPLY PIPES WITHIN THE BUILDING SHALL RUN AT HIGH LEVEL UNLESS OTHERWISE SPECIFIED.
8. ALL WCs, WASH BASINS AND SINKS TO BE PROVIDED WITH T STOP COCKS.
9. CONTRACTOR SHALL VERIFY THE PUMPING FOR ALL PUMPS AS PER THE SITE CONDITION AND SHALL INFORM TO THE ENGINEER FOR ANY VARIATION.
- 10 ALL PUMP SHALL BE PROVIDED WITH FLEXIBLE CONNECTOR AT SUCTION AND DISCHARGE.
11. PROVIDE ISOLATION / STOP COCKS AT ALL GAS CONNECTIONS BURNERS.

12. FIRE WATER PIPE SHALL BE M.S SCHEDULE 40 UNLESS OTHER WISE MENTIONED.

13. PROVIDE PRESSURE REDUCING VALVES (PRV) ON HOT & COLD WATER PIPES ABOVE FALSE CEILING IN EACH BATHROOM, KITCHEN, etc WITH INLET PRESSURE AT 120 PSI AND OUT PRESSURE UPTO 30 PSI.

14. ALL JOINTS IN PIPE WORK AND JOINTS OF PIPE WORK TO APPLIANCES SHALL BE AIRTIGHT AND WATERTIGHT AND SHALL REMAIN SO DURING USE. CARE SHALL BE TAKEN TO ENSURE THAT NO JOINING MATERIAL PROJECTS INSIDE THE CORE OF THE PIPE. SOME FLEXIBILITY IS DESIRABLE WHERE THERE IS A POSSIBILITY OF MOVEMENT IN A PIPELINE OR BETWEEN THE PIPE AND THE APPLIANCE AND PROVISION SHALL BE MADE IN ASSEMBLY OF SANITARY PIPE WORK TO ACCOMMODATE AND CONTROL THERMAL MOVEMENT.

15. ALL PIPE PENETRATION THROUGH ROOF AND EXTERIOR WALLS SHALL BE FULLY WATERPROOFED.

16. COMPLETED PLUMBING SYSTEM INSTALLATIONS SHALL BE TESTED IN ACCORDANCE WITH ACCEPTED CODES AND STANDARD TESTING PROCEDURE.

17. ALL ITEMS TO BE INSTALLED SHALL IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS.

18. SEISMIC RESTRAINTS WILL BE PER THE REFERENCED BUILDING CODE

SEWERAGE NOTES

1. ALL PIPE DIAMETERS ARE IN INCHES UNLESS OTHERWISE MENTIONED.
2. ALL SOIL, WASTE AND VENT PIPES ARE UPVC (UNPLASTICIZED POLYVINYL CHLORIDE) CLASS B UNLESS OTHERWISE MENTIONED.
3. ALL MANHOLE COVERS SHALL BE OF HEAVY DUTY CAST IRON.
4. INVERT LEVELS WILL BE ADJUSTED AS PER SITE CONDITION.
5. ALL DIAMETERS MENTIONED ARE NOMINAL DIAMETERS.
6. ALL VERTICAL WC'S & URINALS WILL BE PROVIDED WITH MUSLIM SHOWER.
7. ALL RAIN WATER DISPOSAL PIPES SHALL BE OF uPVC CLASS-B & HORIZONTAL (ON LOWER FLOOR) SHALL BE uPVC CLASS D.
8. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.
9. ALL SEWERAGE PIPING FROM FIXTURES TO MANHOLES AND GULLY TRAPS SHALL BE OF uPVC.
10. ALL CLEAN OUTS & FLOOR DRAINS SHALL BE COORDINATE WITH INTERIOR.
11. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS SHOWN IN BELOW TABLE.
12. SLOPE OF ROOF VALLEY LINE SHOULD BE BETWEEN 0.02% TO 0.025%.
13. BOTTLE TRAP SHALL BE USED WITH ALL WASH BASIN.
14. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER.
15. DRAINAGE AND STORM SYSTEMS WITHIN THE INTERIOR OF THE BUILDING SHALL BE TESTED AND APPROVED BY OWNER IN ACCORDANCE WITH THE PROVISIONS OF THE PLUMBING CODE.

16. ALL PIPES RUN SHOWN ARE ABOVE FALSE CEILING LEVEL UNLESS OTHERWISE MENTIONED.

17. CONNECTION OF HORIZONTAL DRAINAGE LINES WITH OTHER HORIZONTAL DRAINAGE LINES SHALL BE MADE USING 45 DEGREE "Y" BRANCHES, COMBINATION "Y" AND 1/8 BEND BRANCHES OR OTHER APPROVED FITTINGS OF EQUIVALENT SWEEP, UNLESS SPECIFIED OTHERWISE.

18. CHANGES IN DIRECTION OF DRAINAGE PIPING SHALL BE MADE BY THE APPROPRIATE USE OF APPROVED FITTINGS AND SHALL BE OF THE ANGLES PRESENTED BY 1/16 BEND, 1/8 BEND OR 1/6 BEND OR OTHER APPROVED FITTINGS OF EQUIVALENT SWEEP.

19. HORIZONTAL PIPING SHALL BE SUPPORTED AT SUFFICIENTLY CLOSE INTERVALS TO MAINTAIN PIPE ALIGNMENT AND PREVENT SAGGING.

20. PROVIDE ESCUTCHEONS ON ALL EXPOSED PIPING PASSING THROUGH WALLS, FLOORS, PARTITIONS AND CEILINGS HELD IN PLACE BY INTERNAL SPRING TENSION OR SET SLEEVES.

21. RODDING ACCESS TO BE LOCATED ON WALL OF DUCT SHAFTS AND COORDINATED WITH ARCHITECT (TYPICAL TO ALL DUCT SHAFTS).

22. TRAP ALL FIXTURES AS REQUIRED BY CODES & STANDARDS

23. EXACT ROUTE AND LOCATION OF EACH PIPELINE SHALL BE DETERMINED IN COORDINATION WITH OTHER TRADES PRIOR TO INSTALLATION.

24. PROVIDE PIPE SLEEVE WITH CAULKING FOR ALL PIPES PENETRATING THROUGH CONCRETE STRUCTURES.

25. THE CONTRACTOR MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR FIXTURES PRE-INSTALLATION.

26. UNLESS OTHERWISE SHOWN, ALL PLUMBING MATERIALS SHALL BE AS SPECIFIED.

27. LONG RADIUS BEND SHALL BE USED AT THE FOOT OF VERTICAL SOIL / WASTE STACKS.

28. COMPLETED PLUMBING SYSTEM INSTALLATIONS SHALL BE TESTED IN ACCORDANCE WITH ACCEPTED CODES AND STANDARD TESTING PROCEDURE.

LEGEND FOR SEWERAGE & DRAINAGE SYSTEM

WATER SUPPLY & SEWERAGE LEGENDS				SCHED. OF PIPE DIA		
	TEE STOP COCK		FLOOR DRAIN WITH P-TRAP	OUTER DIA (mm)	INTERNAL DIA (mm) (INCH)	
				20	13.2	0.52
	MIXER		6KG DRY POWDER	25	16.4	0.65
	ELECTRIC WATER GEYSER		CQEXTINGUISHERS	32	21.2	0.83
	NON RETURN VALVE		GULLY TRAP	40	26.6	1.05
	FLOAT SWITCH		GREASE TRAP	50	33.2	1.31
	FLOAT VALVE		MANHOLE	63	42	1.65
	GAS & ELECTRIC GEYSER	DIA & SLOPE		75	50	1.97
	GATE VALVE	3"	1:50	90	60	2.36
	SUBMERSIBLE PUMP	4"	1:100	110	73.2	2.88
	RAIN DRAIN	6"	1:150			
	LINE CLEANOUT	8"	1:200			
WATER SUPPLY & SEWERAGE LEGENDS						
CW	COLD WATER	CO	CLEAN OUT			
HW	HOT WATER	LCO	LINE CLEAN OUT			
HWR	COLD WATER RETURN	SP	SOIL PIPE			
DN	DOWN	WP	WASTE PIPE			
@H/L	HIGH LEVEL	VP	VENT PIPE			
GV	GATE VALVE	RWP	RAIN WATER PIPE			
NRV	NON RETURN VALVE	C.P	CATCH PIT			
STR	STRAINER	RD	RAIN DRAIN			
BV	BALL VALVE	FT	FLOOR DRAIN WITH P-TRAP			
FA	FROM ABOVE	BT	BOTTLE TRAP			
FB	FROM BELOW	IL	INVERT LEVEL			
TA	TO ABOVE	FL	FLOOR LEVEL			
TB	TO BELOW	LOD	LIST OF DRAWINGS			
GN	GENERAL NOTES	T.W	TUBE WELL			
	SOIL PIPE		COLD WATER SUPPLY			
-----	WASTE PIPE	-----	HOT WATER SUPPLY			
	SEWER PIPE	-----	HOT WATER RETURN			
	VENT PIPE		GAS SUPPLY PIPE			

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CLIENT NAME



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Project Name

Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

DETAILED PUBLIC HEALTH Design Drawings

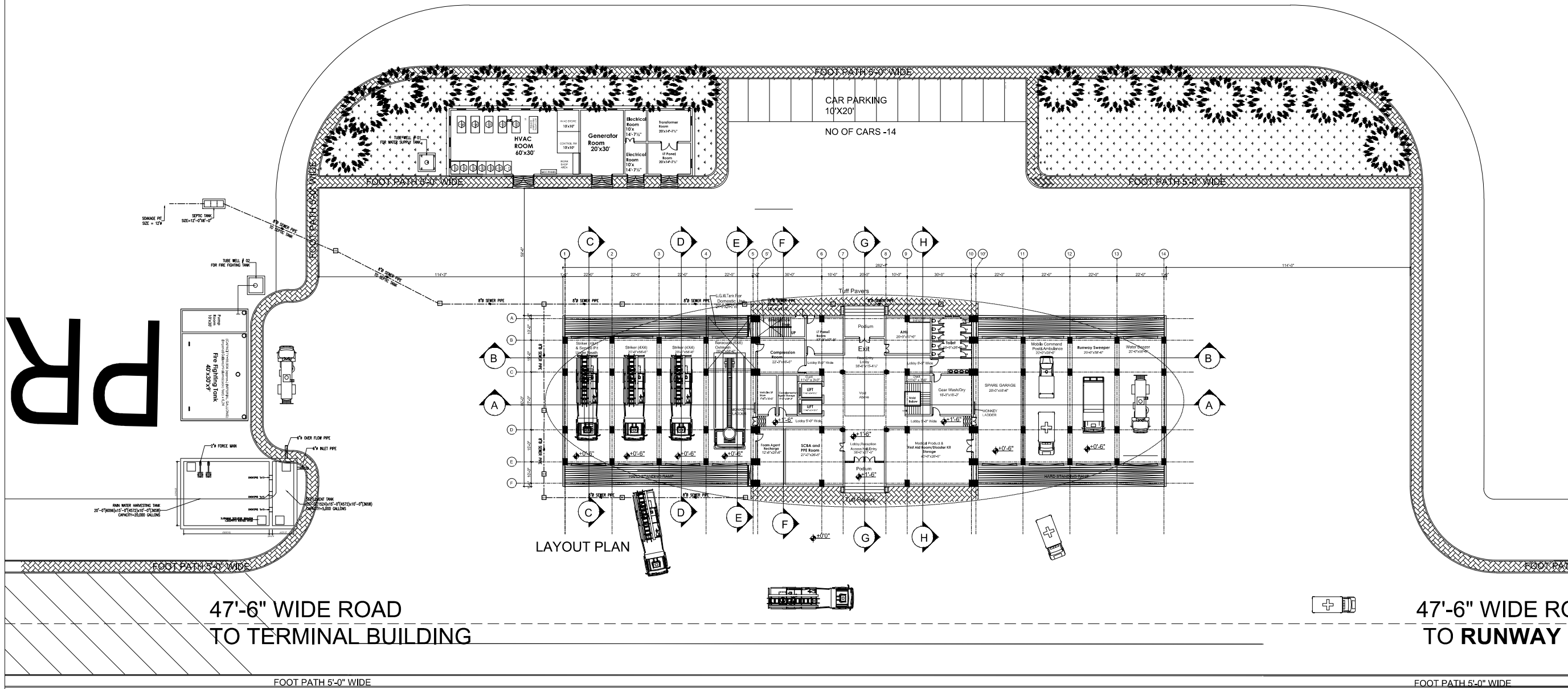
Sheet Name

LEGEND & GEN. NOTES

Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	GN-00

ISSUE FOR TENDER

PR



2

ISSUE FOR TENDER

RAIN WATER HARVESTING
20'-0" (6096) x 15'-0" (4572)

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MEP CONSULTANT



Project Name

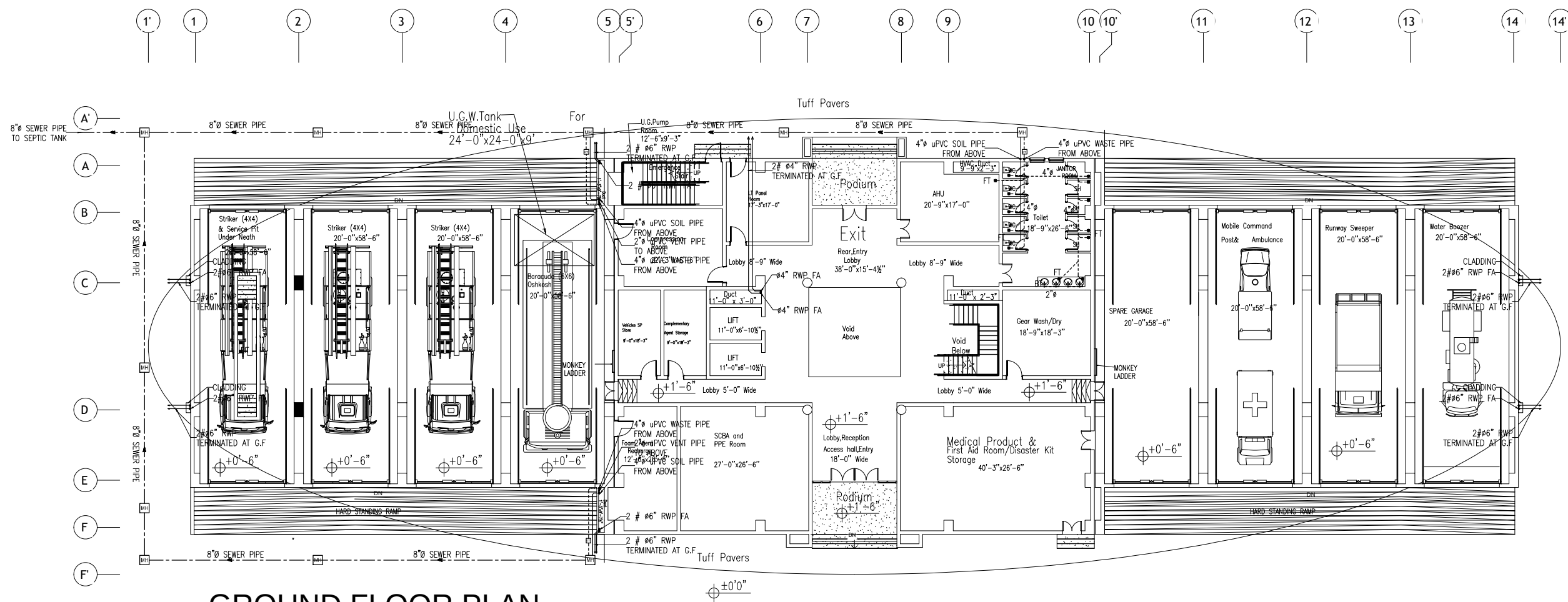
Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

SEWERAGE SYSTEM MASTER PLAN LAYOUT PLAN

Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	SE-00



GROUND FLOOR PLAN

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Project Name

Consultancy Services for
New Air Traffic Control Tower
(ATCT), Fire Station and Allied
Facilities at Skardu
International Airport

DETAILED PUBLIC HEALTH
Design Drawings

Sheet Name

SEWERAGE SYSTEM
GROUND FLOOR PLAN

Date April, 2026

Scale NTS

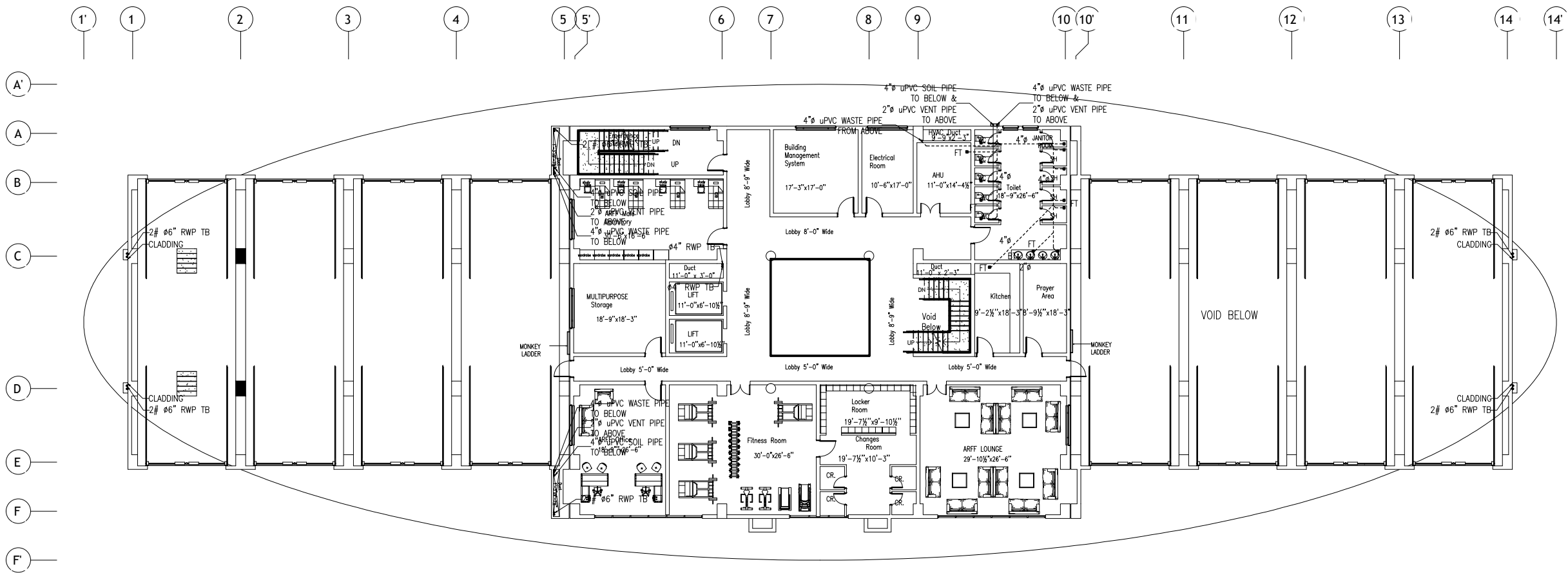
Drawn by A.S.B

Checked by M.K

Approved by M.F

Drawing No. SE-01

ISSUE FOR TENDER



MEZZANINE FLOOR PLAN

ISSUE FOR TENDER

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MAIN CONSULTANT  Anwar Ali Architects (Pvt.) Ltd. Consulting,Architects,Engineers Planners & Management Consultants 06 HBFC BLOCK A FASAL TOWN LAHORE	
JV MEMBERS  	
STRUCTURAL CONSULTANT AR ENGINEERS Architects, Stuctural, Earthquake Engineering, Geo Technical, Public Health, Highway, Electrical Design Solution.	
MEP CONSULTANT  ABSTRACTORS MEP CONSULTANT SUITE-14,3RD FLOOR JINNAH MALL QMIR TOWN, LHR Cell no: 0322-3924199 E-mail: abstractorseng@gmail.com	
Project Name Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport	
DETAILED PUBLIC HEALTH Design Drawings	
Sheet Name SEWERAGE SYSTEM MEZZANINE FLOOR PLAN	
Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	SE-02

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Project Name

Consultancy Services for
New Air Traffic Control Tower
(ATCT), Fire Station and Allied
Facilities at Skardu
International Airport

DETAILED PUBLIC HEALTH
Design Drawings

Sheet Name

SEWERAGE SYSTEM
FIRST FLOOR PLAN

Date April, 2026

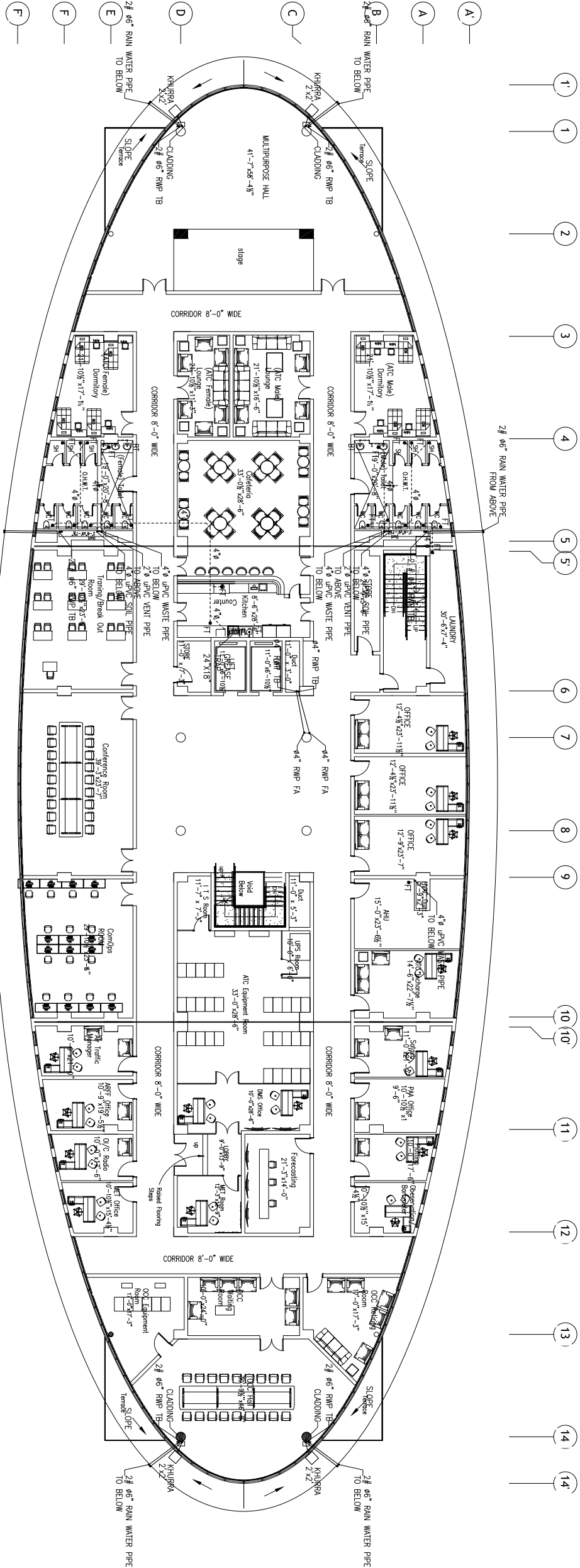
Scale NTS

Drawn by A.S.B

Checked by M.K

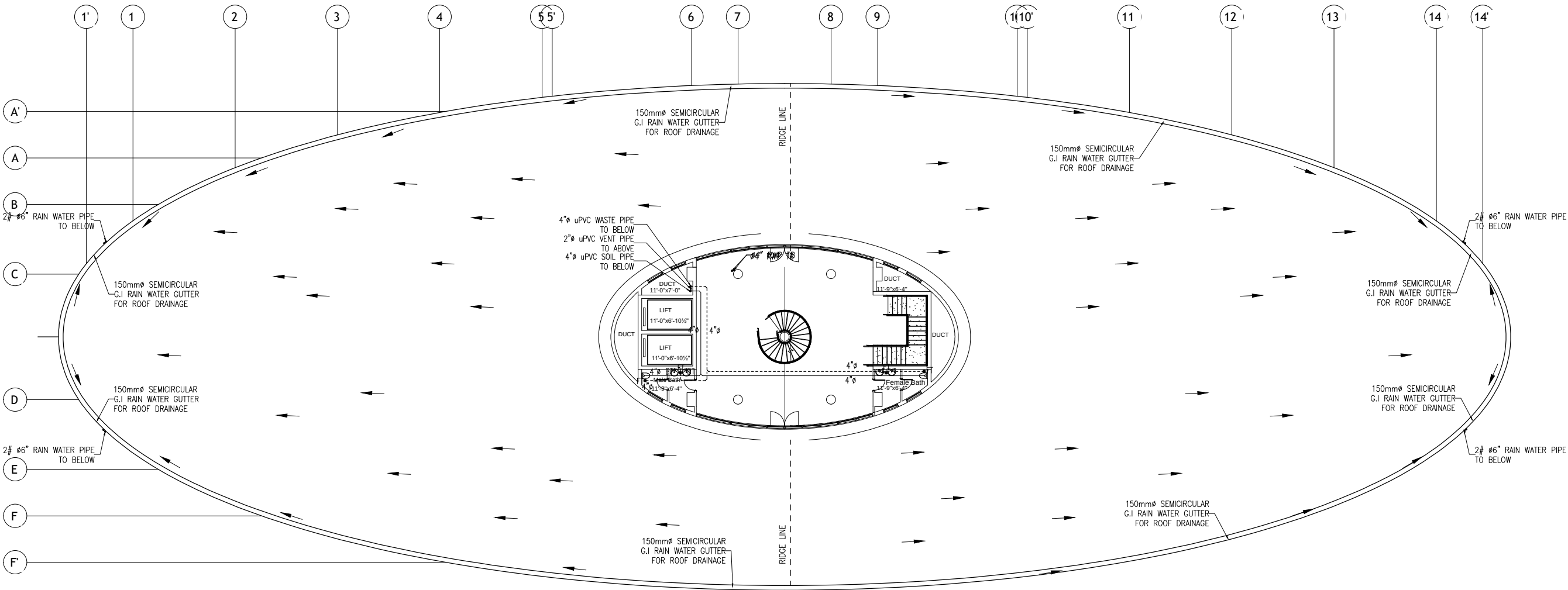
Approved by M.F

Drawing No. SE-03



FIRST FLOOR PLAN

ISSUE FOR TENDER



ROOF TOP FLOOR PLAN

ISSUE FOR TENDER

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JV MEMBERS  	
STRUCTURAL CONSULTANT AR ENGINEERS Architects, Stuctural, Earthquake Engineering, Geo Technical, Public Health, Highway, Electrical Design Solution.	
MEP CONSULTANT  ABSTRACTORS MEP CONSULTANT SUITE-14,3RD FLOOR JINNAH MALL IZMIR TOWN, IZR Cell no: 0322-3924199 E-mail: abstractorseng@gmail.com	
Project Name Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport	
DETAILED PUBLIC HEALTH Design Drawings	
Sheet Name SEWERAGE SYSTEM ROOF TOP PLAN	
Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	SE-04

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JV MEMBERS



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AR ENGINEERS

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MEP CONSULTANT

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Project Name

Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

SEWERAGE SYSTEM

Date	April, 2026
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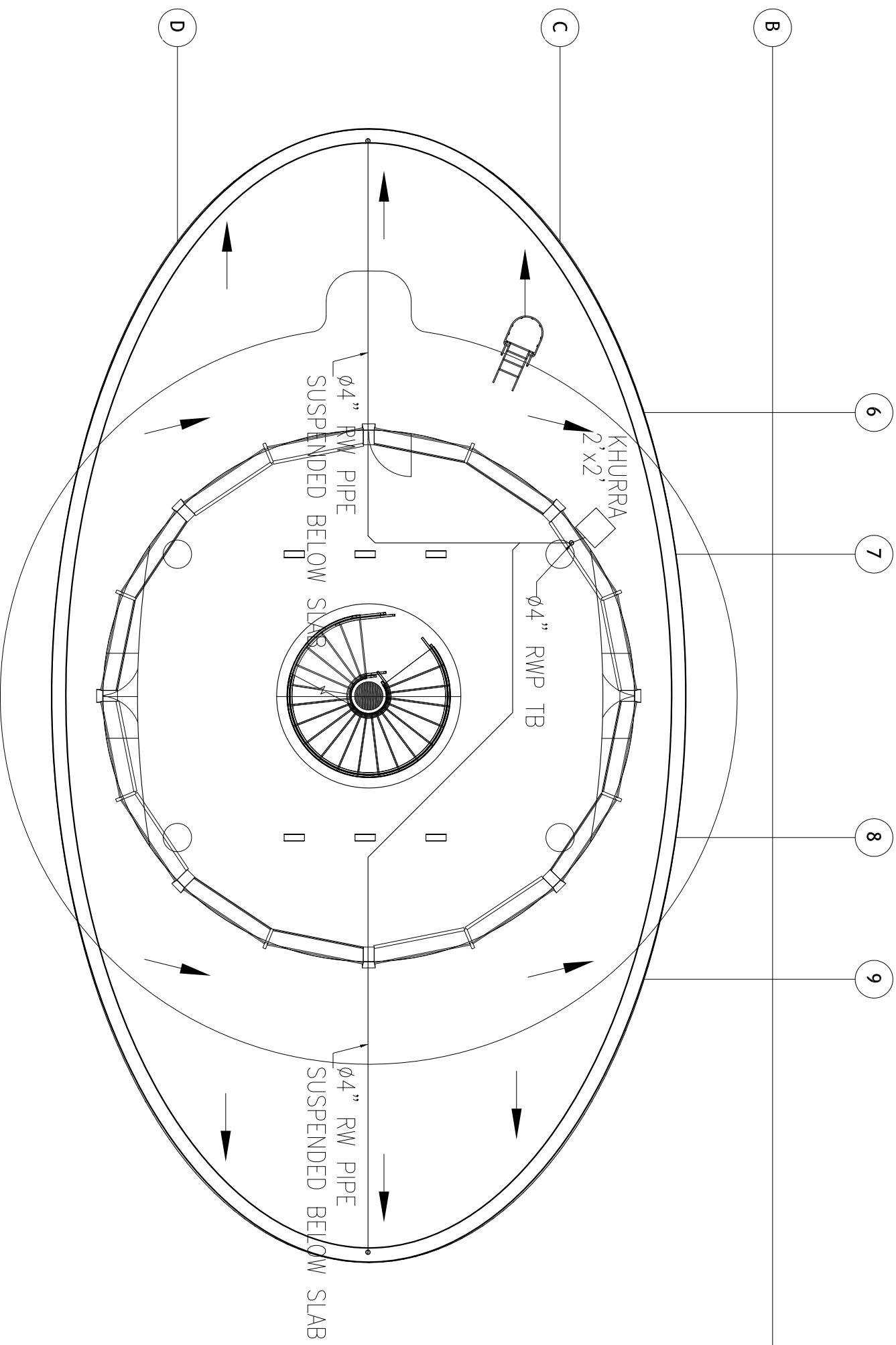
Scale	NTS
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Drawn by	A.S.B
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Checked by

Approved by

Drawing No.	SE-05
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ISSUE FOR TENDER

ARFF FLOOR PLAN

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MAIN CONSULTANT



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JV MEMBERS



STRUCTURAL CONSULTANT

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Architects, Structural, Earthquake Engineering, Geo Technical, Public Health, Highway, Electrical Design Solution.

MEP CONSULTANT

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Project Name

**Consultancy Services for
New Air Traffic Control Tower
(ATCT), Fire Station and Allied
Facilities at Skardu
International Airport**

DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

SEWERAGE SYSTEM

Date	April, 2026
------	-------------

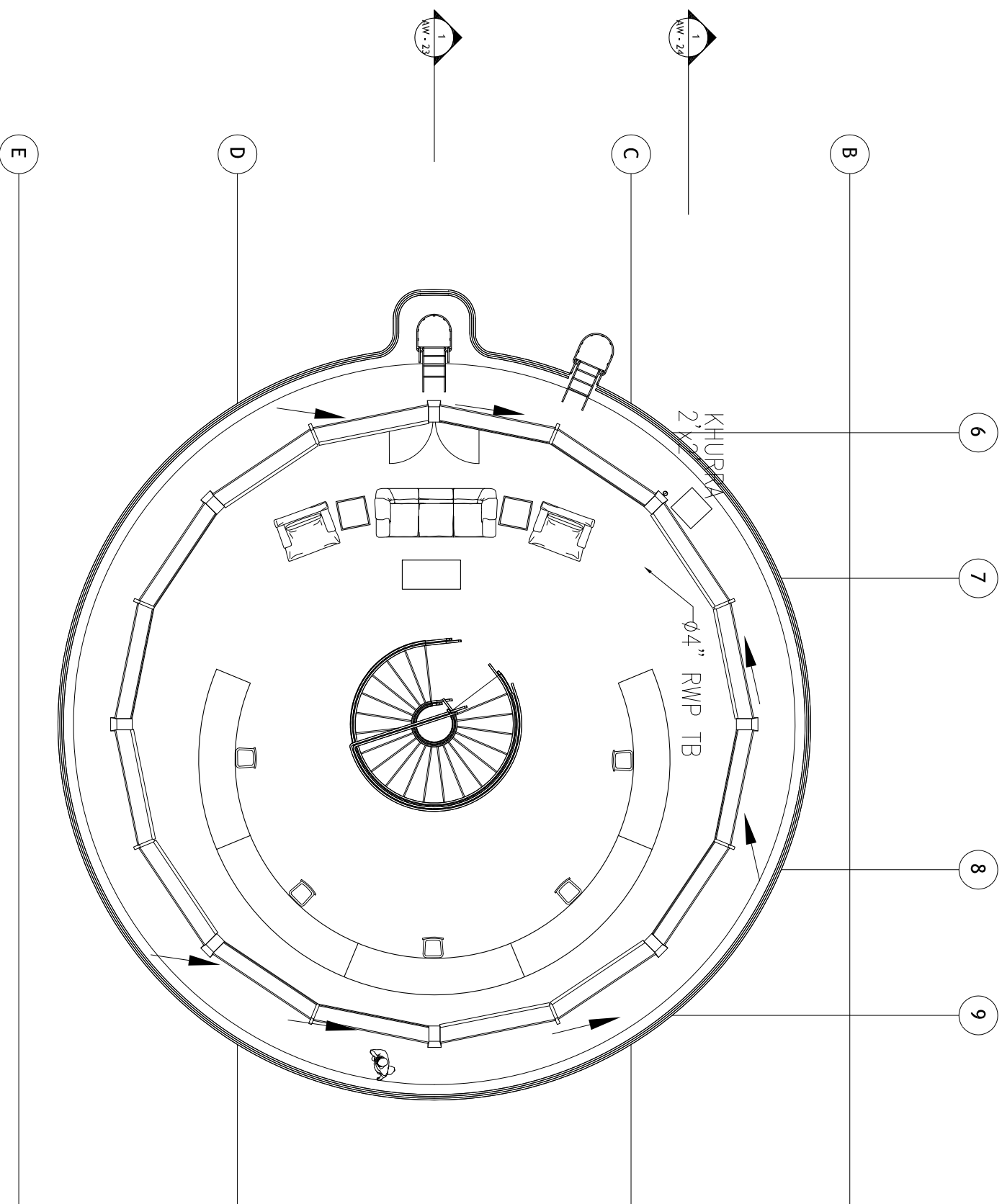
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Drawn by A.S.B

Checked by

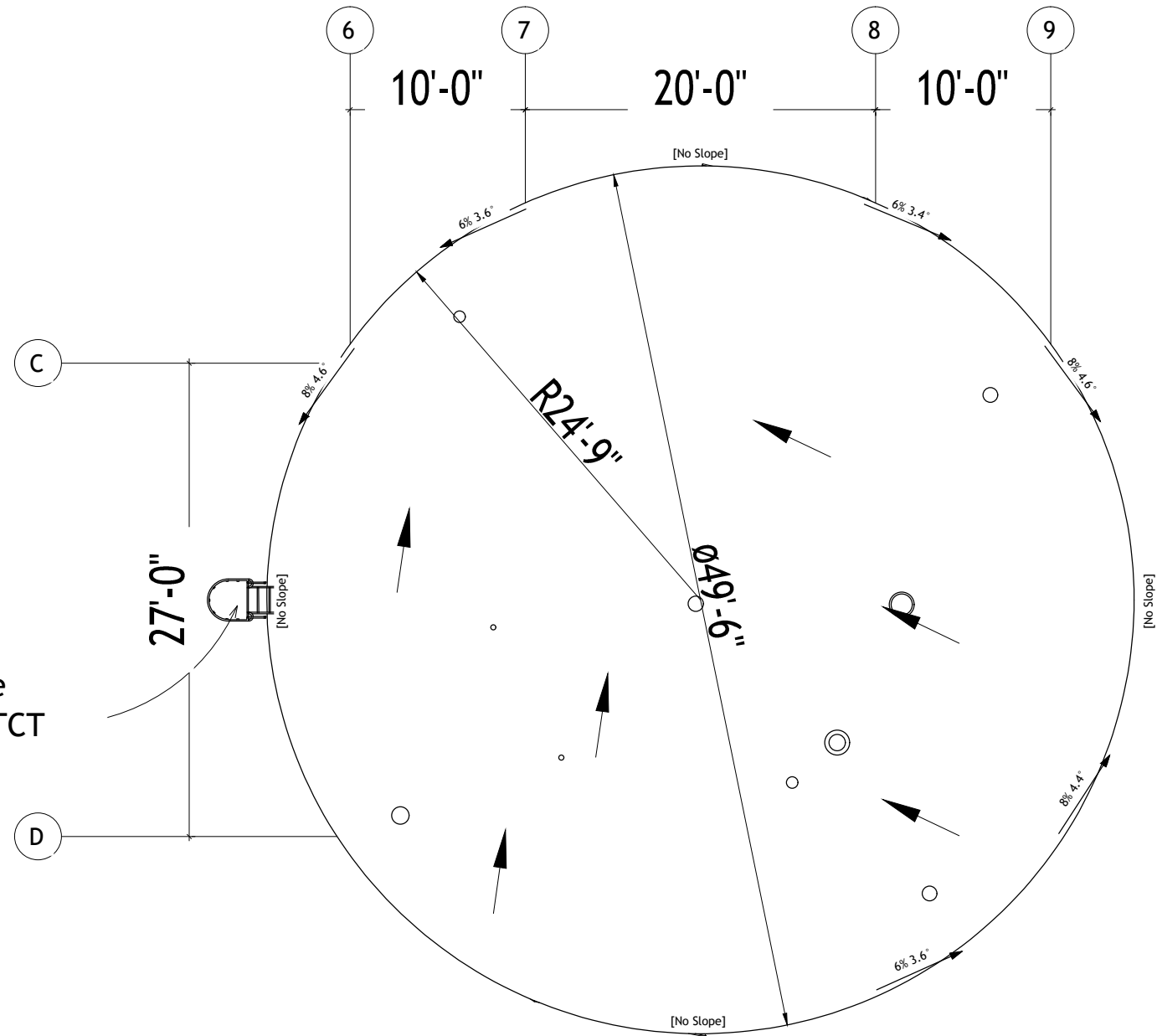
Approved by

Drawing No.	SE-06
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ATCT FLOOR PLAN

ISSUE FOR TENDER



Ladder for the
Roof top of ATCT

ROOFTOP FLOOR PLAN

ISSUE FOR TENDER

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AR ENGINEERS
Architects, Stuctural, Earthquake Engineering, Geo Technical, Public Health, Highway, Electrical Design Solution.

MEP CONSULTANT



Project Name

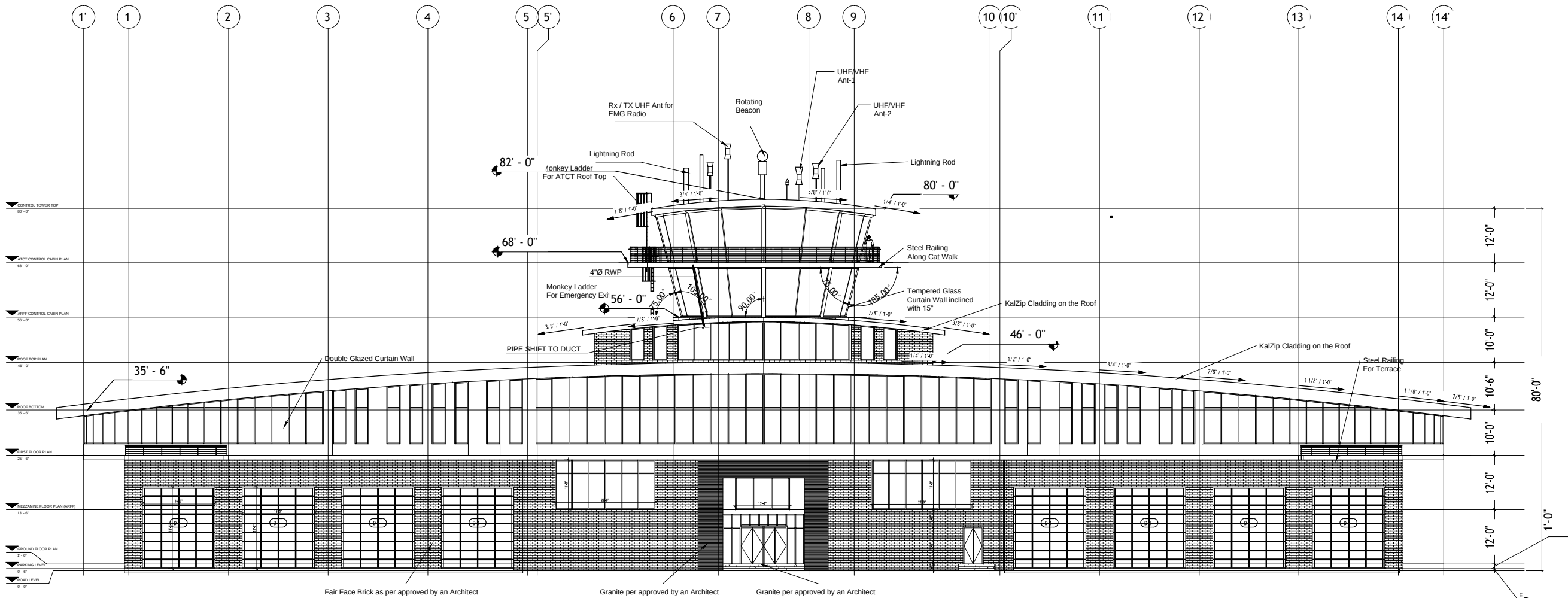
Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

SEWERAGE SYSTEM
ATCT ROOF TOP PLAN

Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	SE-07



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MEP CONSULTANT



Project Name

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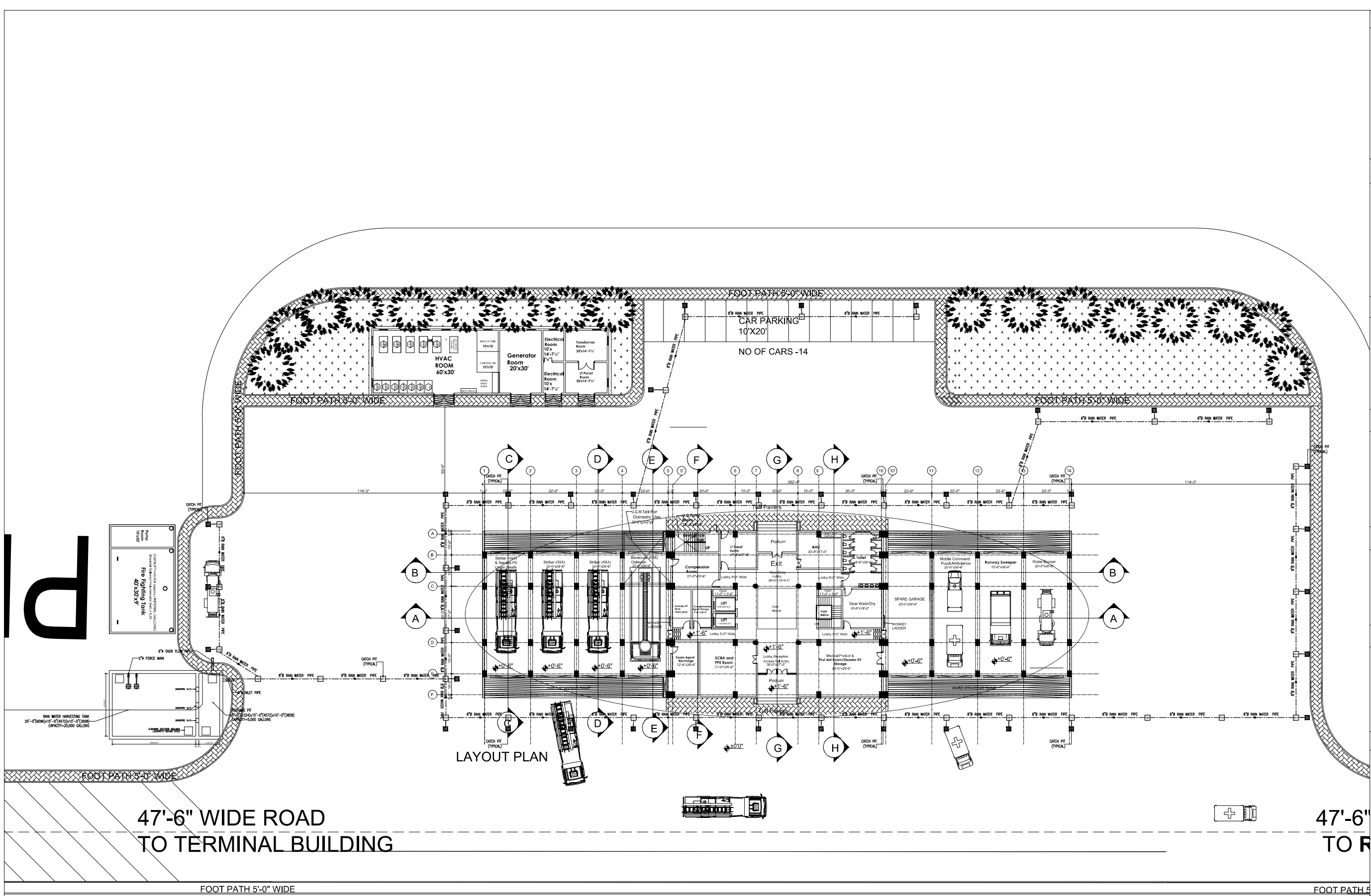
DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

SEWERAGE SYSTEM FRONT ELEVATION DETAILS

Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	SE-08

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MEP CONSULTANT



Project Name

Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

DRAINAGE SYSTEM GROUND FLOOR PLAN

Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	DD-01

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Consulting, Architects, Engineers
Planners & Management Consultants
06 HBFC BLOCK A FAISAL TOWN LAHORE

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Architects, Structural, Earthquake Engineering, Geo Technical,
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Cell no: 0322-3924199
E-mail: abstractorseng@gmail.com

Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

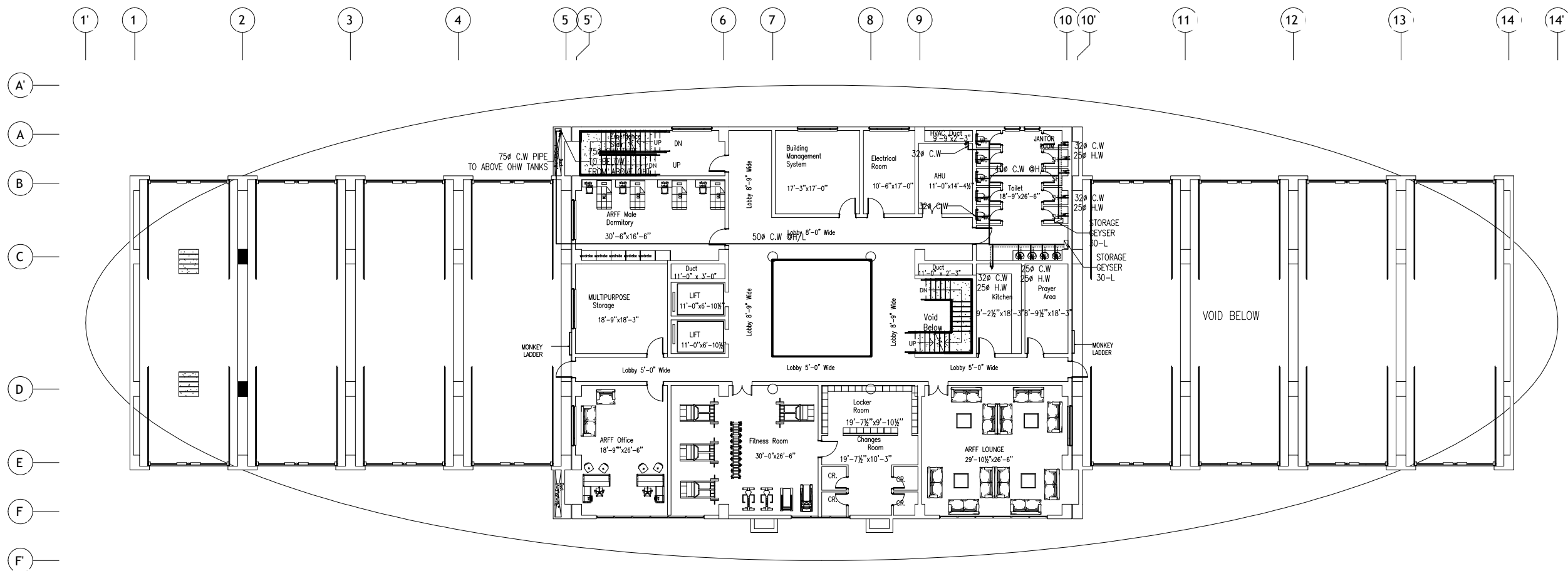
WATER SUPPLY SYSTEM GROUND FLOOR PLAN

Scale	NTS
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Checked by	M.K
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Drawing No.	WS-01
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MEZZANINE FLOOR PLAN

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Project Name Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport	
DETAILED PUBLIC HEALTH Design Drawings	
Sheet Name WATER SUPPLY SYSTEM MEZZANINE FLOOR PLAN	
Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	WS-02

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AR ENGINEERS
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Public Health, Highway, Electrical Design Solution.

MEP CONSULTANT

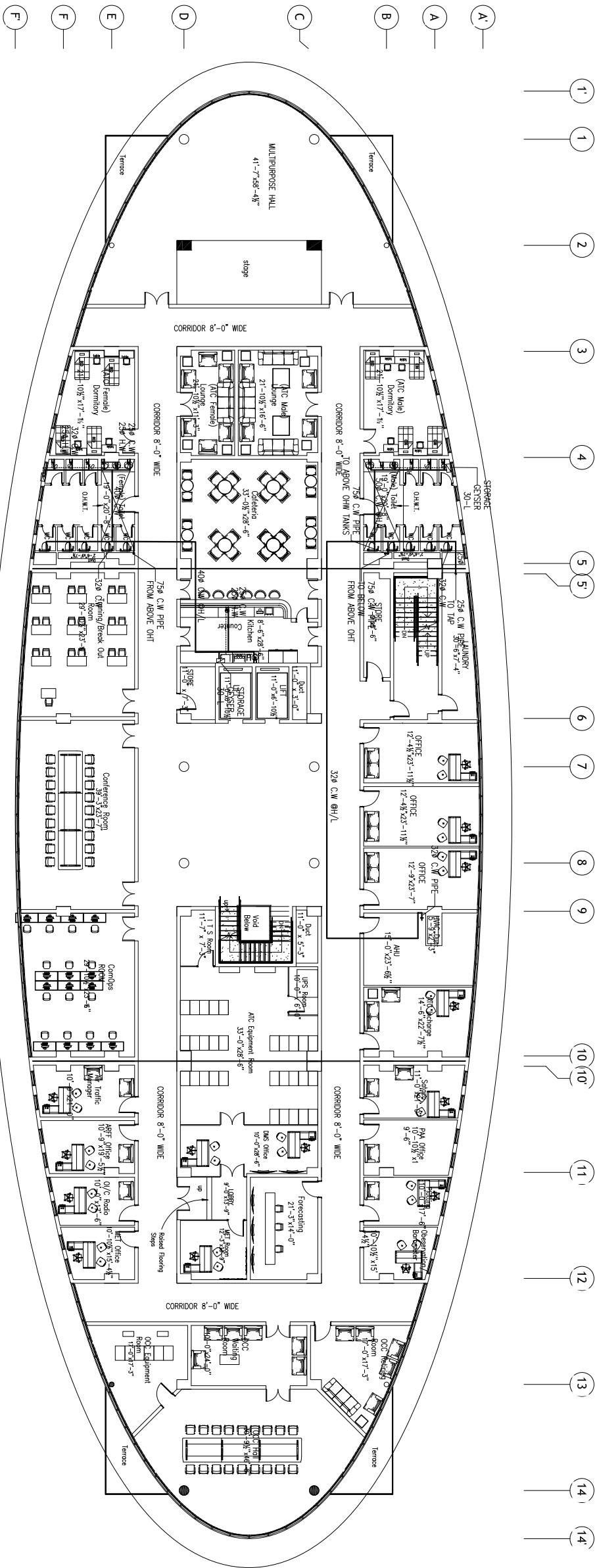
ABSTRACTORS
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Cell no: 0322-3924199
E-mail: abstractorseng@gmail.com

Project Name

Consultancy Services for
New Air Traffic Control Tower
(ATCT), Fire Station and Allied
Facilities at Skardu
International Airport

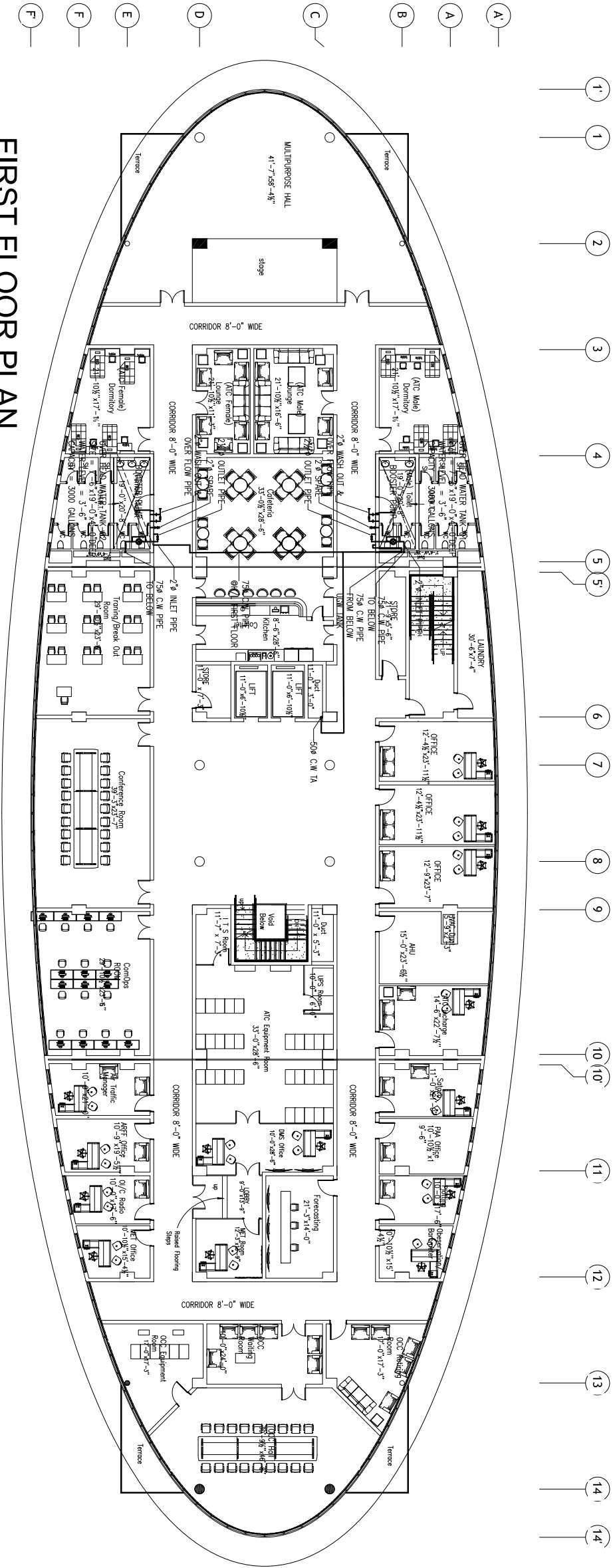
DETAILED PUBLIC HEALTH
Design Drawings

Sheet Name	
SEWERAGE SYSTEM FIRST FLOOR PLAN	
Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	WS-03



FIRST FLOOR PLAN

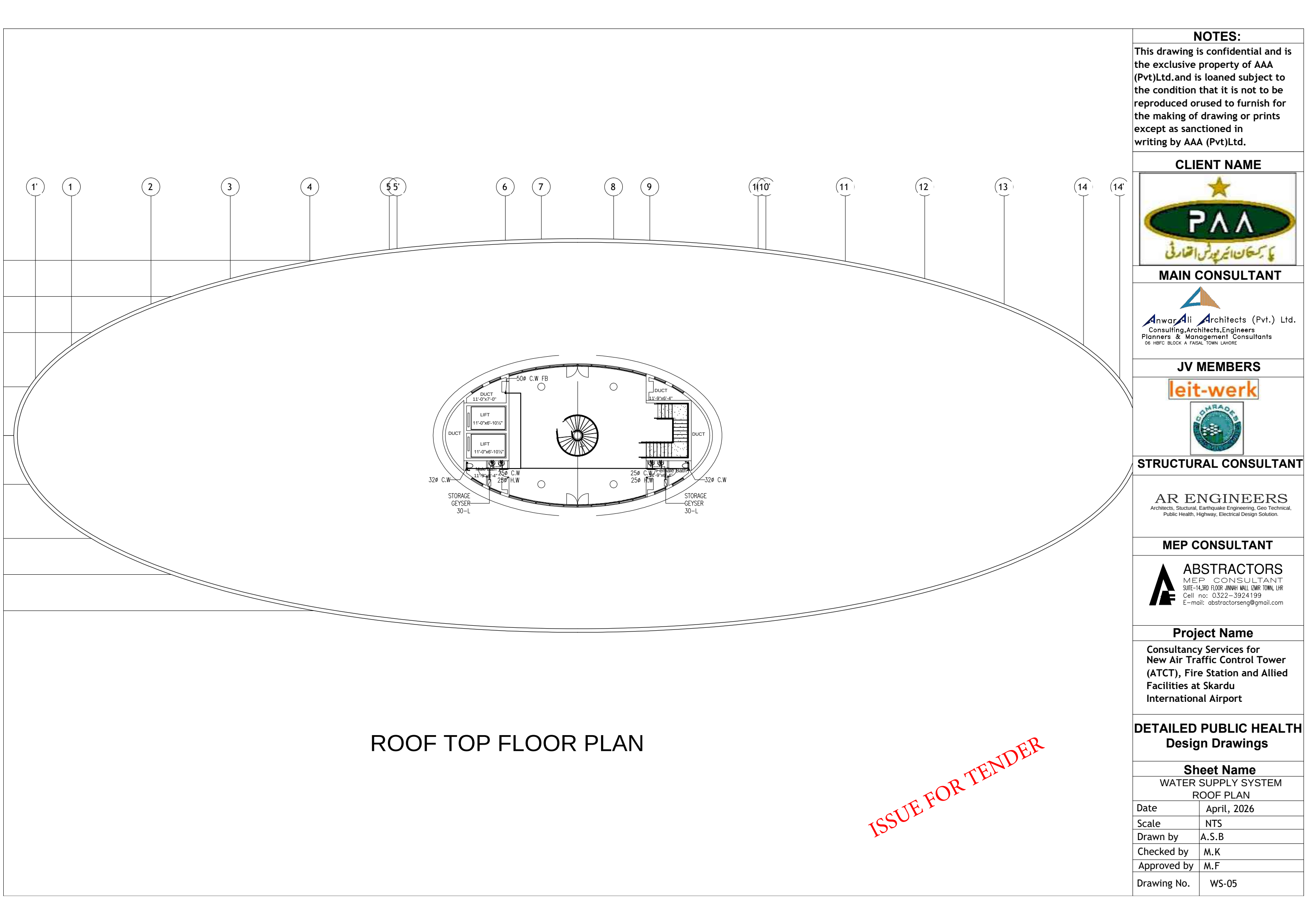
ISSUE FOR TENDER



FIRST FLOOR PLAN

ISSUE FOR TENDER

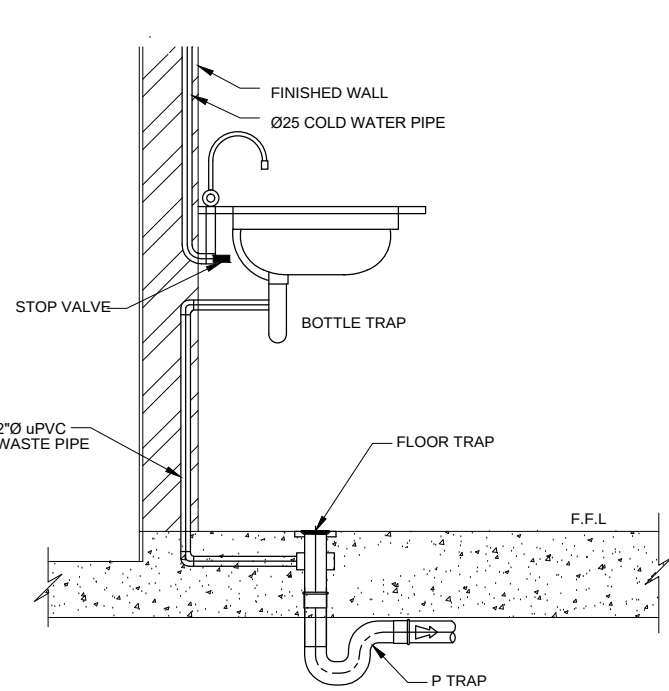
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MEP CONSULTANT	
Project Name	Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport
DETAILED PUBLIC HEALTH Design Drawings	
Sheet Name	WATER SUPPLY SYSTEM FIRST HIGH LEVEL PLAN
Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	WS-04



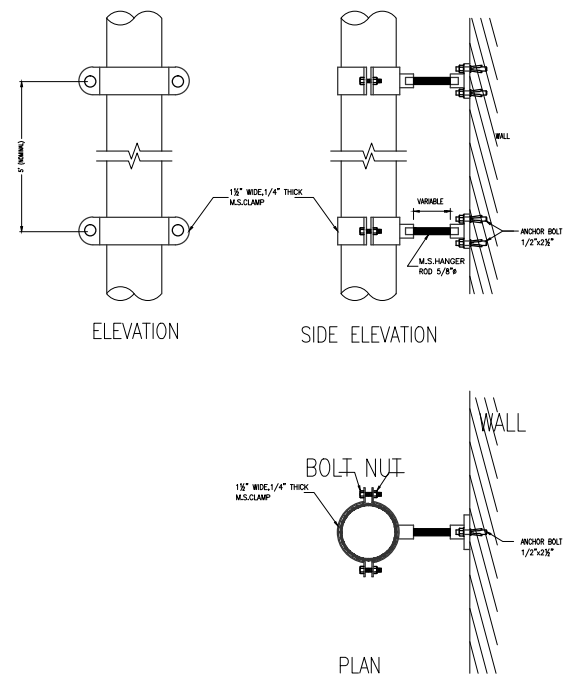
ROOF TOP FLOOR PLAN

ISSUE FOR TENDER

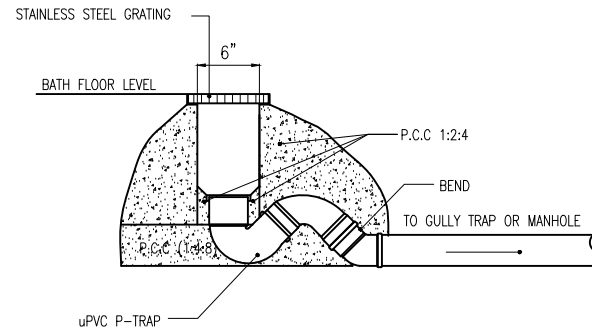
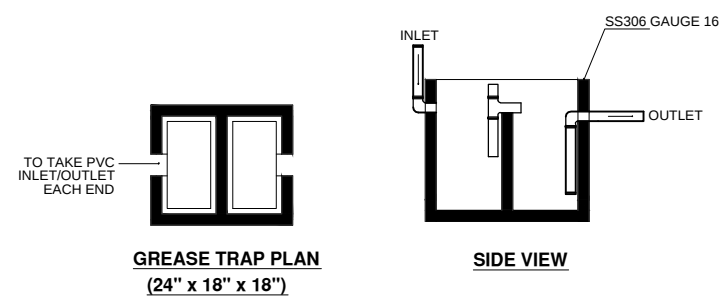
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JV MEMBERS  	
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MEP CONSULTANT  ABSTRACTORS MEP CONSULTANT SUITE-14,3RD FLOOR JINNAH MALL IZMIR TOWN, LHR Cell no: 0322-3924199 E-mail: abstractorseng@gmail.com	
Project Name Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport	
DETAILED PUBLIC HEALTH Design Drawings	
Sheet Name WATER SUPPLY SYSTEM ROOF PLAN	
Date	April, 2026
Scale	NTS
Drawn by	A.S.B
Checked by	M.K
Approved by	M.F
Drawing No.	WS-05



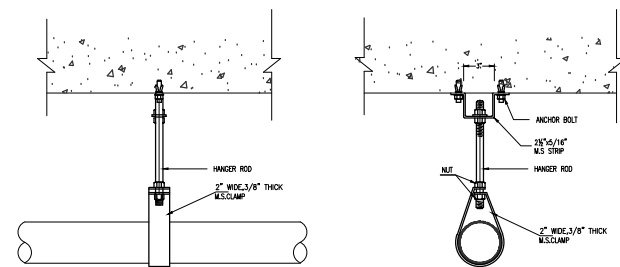
DETAIL OF BASIN CONNECTION
WITH FLOOR TRAP



VERTICAL PIPE HANGERS (UP TO 4"Ø PIPE)



P TRAP DETAILED

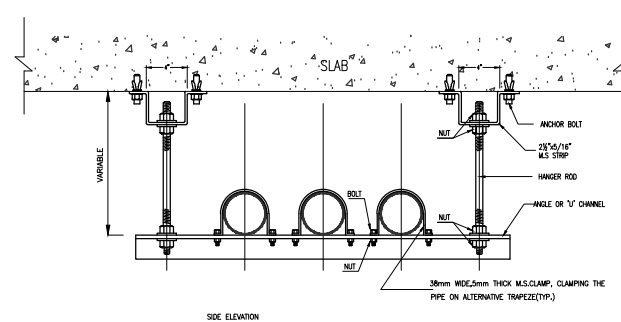


ELEVATION

SIDE ELEVATION

HORIZONTAL PIPE HANGER

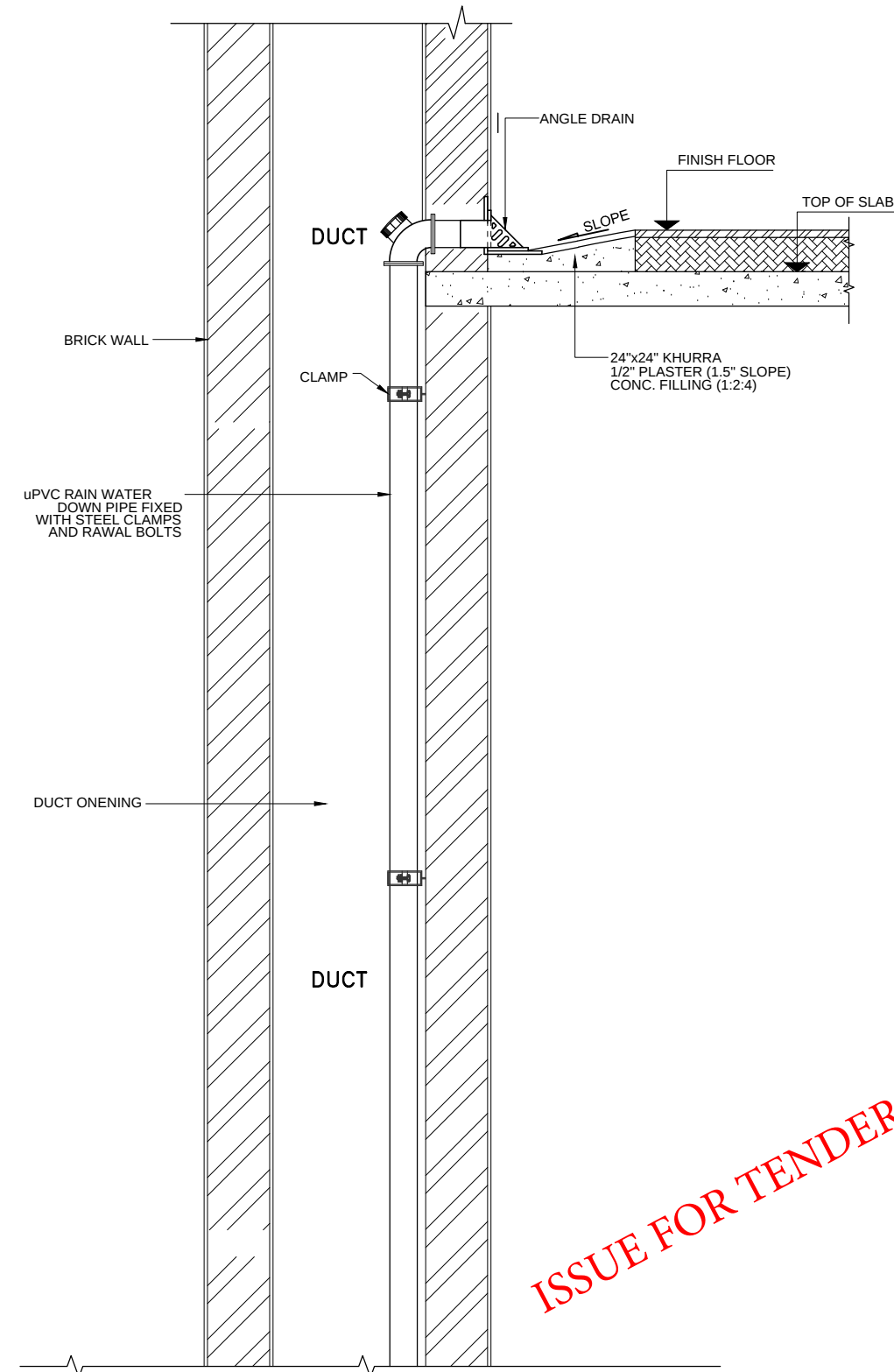
PIPE SIZE	MAX. SPACING	HANGER ROD Ø	ANCHOR BOLT
3/4" — 2"	5'-0"	1/2"	1/2" x 2 1/2"
2 1/2" — 3"	6'-0"	5/8"	1/2" x 2 1/2"
4" — 6"	6'-0"	3/4"	5/8" x 3"



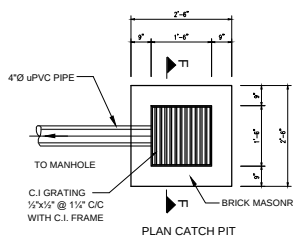
SIDE ELEVATION

HORIZONTAL PIPE HANGER (TRAPEZE)

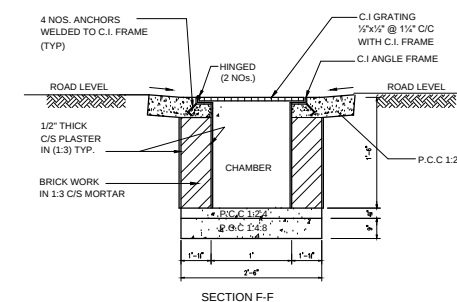
PIPE SUPPORT SCHEDULE					
PIPE SIZE	HANGER ROD Ø	ANGLE SIZE	U-CHANNEL	SPACING	ANCHOR BOLT
1/2 TO 3/4"	3/8"	1 1/2" x 1 1/2" x 3/16"	--	5'	1/2" x 2 1/2"
1" TO 1 1/4"	3/8"	2" x 2" x 1/4"	--	5'	1/2" x 2 1/2"
1 1/2" TO 2 1/2"	1/2"	2 1/2" x 2 1/2" x 1/4"	--	6'	1/2" x 2 1/2"
3" TO 4"	1/2"	2 1/2" x 2 1/2" x 3/8"	--	6'	5/8" x 3"
5"	3/4"	3" x 3" x 3/8"	--	6'	3/4" x 4"
6"	1"	--	3" x 1 1/2" x 1/4"	7'	3/4" x 4"
8"	1"	--	4" x 1 1/2" x 5/16"	7'	3/4" x 4"
10"	1"	--	4" x 1 1/2" x 5/16"	7'	3/4" x 4"
12"	1 1/4"	--	4" x 1 1/2" x 5/16"	7'	3/4" x 4"



ISSUE FOR TENDER



PLAN CATCH PIT



SECTION F-F

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JV MEMBERS



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Architects, Structural, Earthquake Engineering, Geo Technical, Public Health, Highway, Electrical Design Solution.

MEP CONSULTANT



Project Name

Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

PUBLIC HEALTH SYSTEM MISC. DETAILS

Date April, 2026

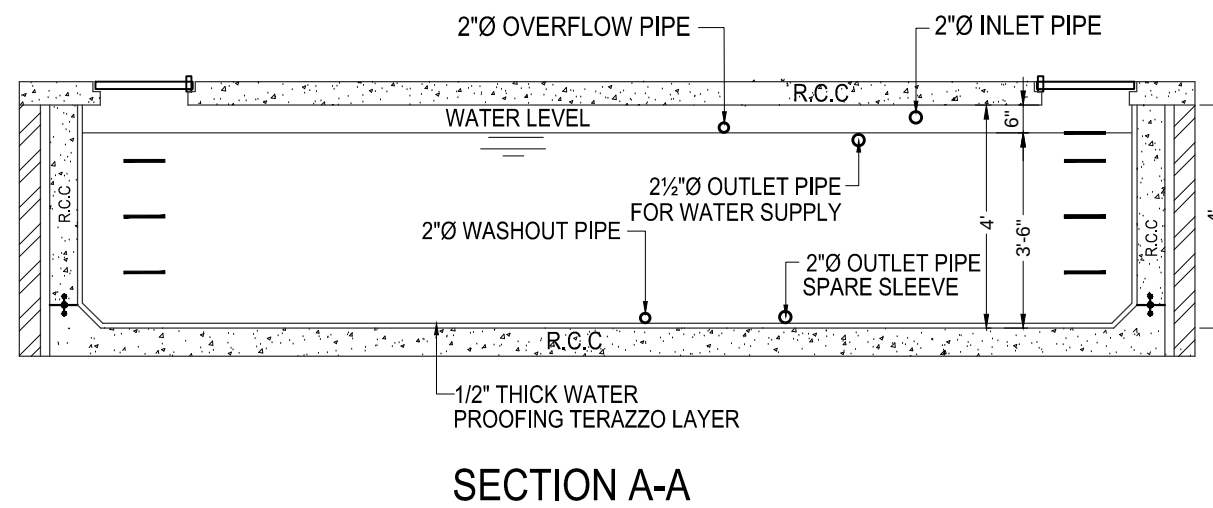
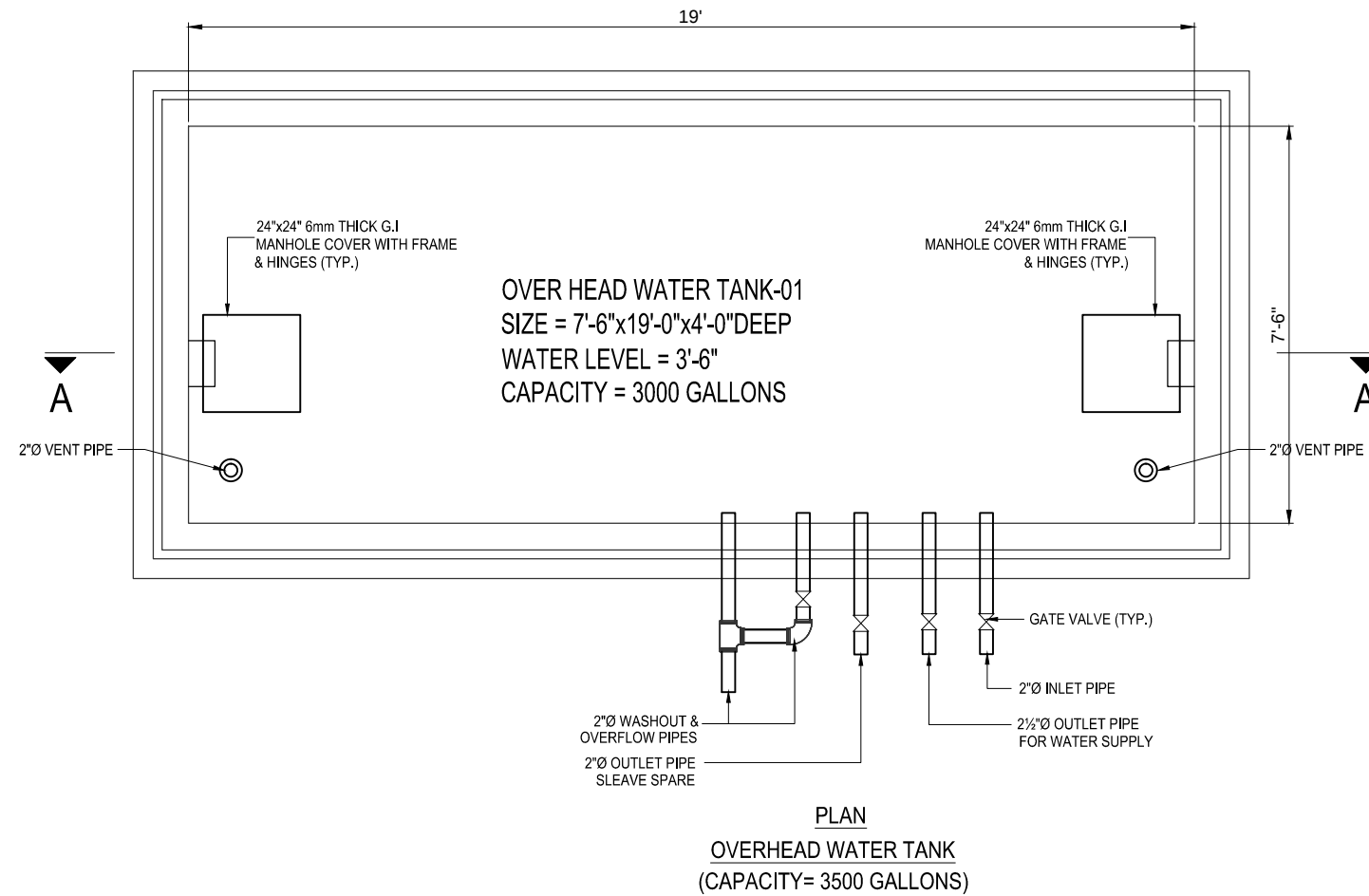
Scale NTS

Drawn by A.S.B

Checked by M.K

Approved by M.F

Drawing No. PH-MD-01



ISSUE FOR TENDER

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Project Name

Consultancy Services for New Air Traffic Control Tower (ATCT), Fire Station and Allied Facilities at Skardu International Airport

DETAILED PUBLIC HEALTH Design Drawings

Sheet Name

OVER HEAD WATER TANK DETAIL

Date April, 2026

Scale NTS

Drawn by A.S.B

Checked by M.K

Approved by M.F

Drawing No. OHWT-01