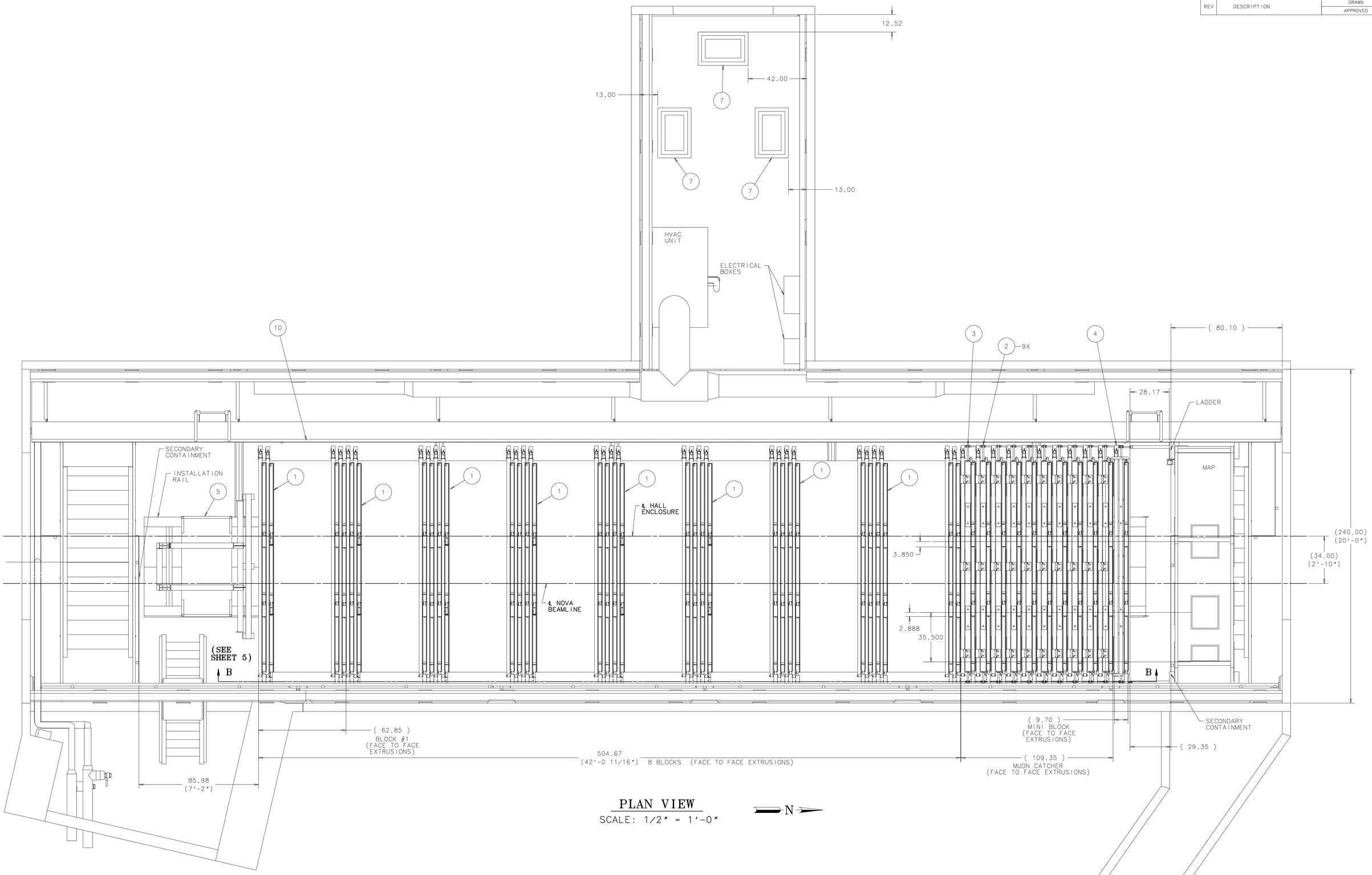
REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE



PLAN VIEW

SCALE: 1/2" = 1'-0"

NOTES :

1. SHEET LEGEND:
   - SHEET 1 - PLAN VIEW
   - SHEET 2 - EAST ELEVATION
   - SHEET 3 - SOUTH ELEVATION
   - SHEET 4 - SECTION A-A
   - SHEET 5 - SECTION B-B
   - SHEET 6 - ISOMETRIC VIEW
   - SHEET 7 - BLOCK & MUON CATCHER TRANSPORT

PARTS LIST

ITEM	PART NO.	DESCRIPTION OR SIZE	QTY.
12		COOLING WATER PIPING	1
11	ME-493837	PCN/DCM SIDE SUPPORT ASSY	1
10	ME-493774	SCINTILLATOR FILL PIPING	1
9		24 PLANE BLOCK TRANSPORT ASSY	1
8	ME-493845	MUON CATCHER LIFTING & ASSY LAYOUT	1
7	COML	RELAY RACK, 36" X 24" X 87"	3
6	COML	SHIM PLATE 1/4" THK STEEL	AS REQD
5	ME-444253	IPND BOOKEND ASSY	1
4	ME-493481	MINI BLOCK ASSY	1
3	ME-493592	ND 3 X 2 SPCL MUON CATCHER ASSY	1
2	ME-493588	ND 3 X 2 MUON CATCHER ASSY	9
1	ME-493039	24 PLANE ND BLOCK ASSY	8

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	E.VILLEGAS	30-JUL-2013
.XX	.XXX	ANGLES	DRAWN	D.FRIEND	30-JUL-2013
± .25	± ---	± ---	CHECKED		
1. BREAK ALL SHARP EDGES MAX. 2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MAX. ALL MACH. SURFACES 5. DRAWING UNITS: U.S. INCH			APPROVED		
			USED ON		
			MATERIAL	SEE PARTS LIST ABOVE	

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

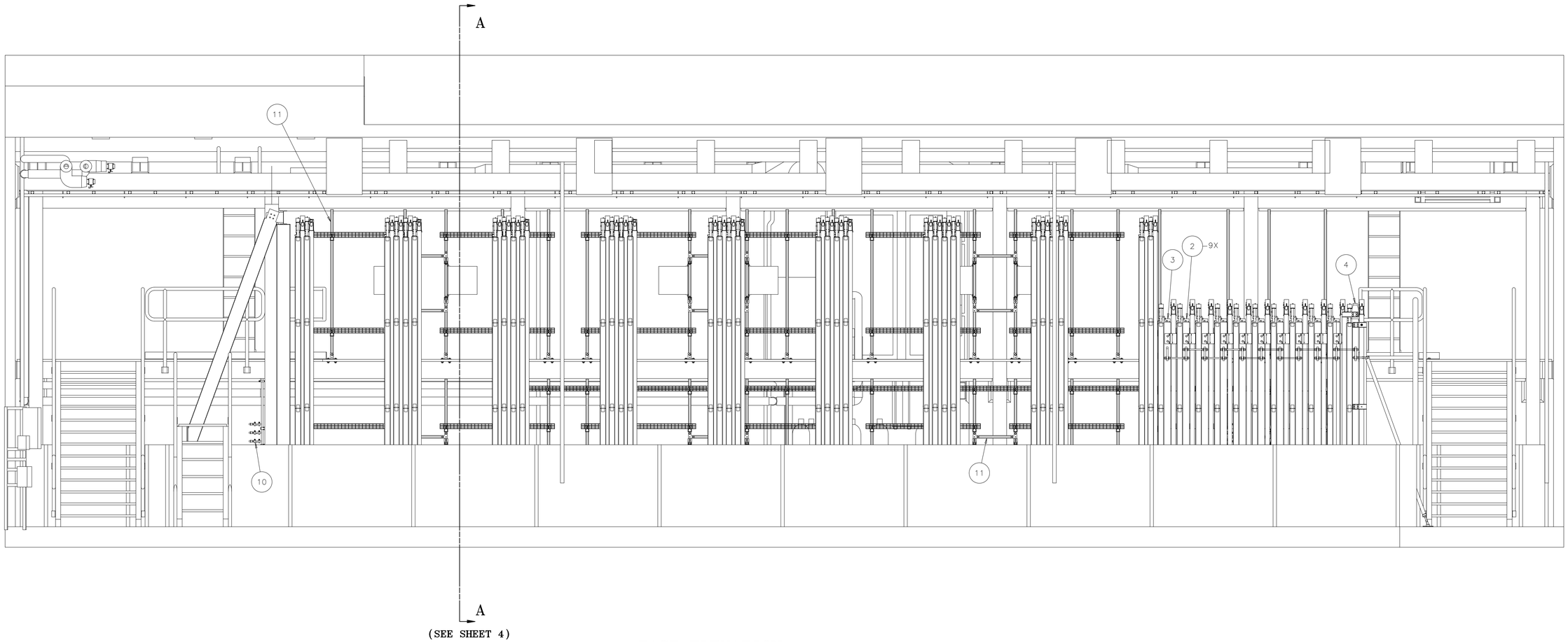
NOVA-NEAR_DETECTOR
NEAR DETECTOR INSTALLATION
ND CAVERN ASSEMBLY LAYOUT

SCALE	DRAWING NUMBER	SHEET	REV
AS NOTED	3929.330-ME-493175	1 OF 7	

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT

PRELIMINARY
30-JUL-2013

REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE



EAST ELEVATION

SCALE: 1/2"=1'-0"

PRELIMINARY
30-JUL-2013

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	E.VILLEGAS	30-JUL-2013
.XX	.XXX	ANGLES	DRAWN	D.FRIEND	30-JUL-2013
± .25	± ---	± ---	CHECKED		
1. BREAK ALL SHARP EDGES MAX.			APPROVED		
2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MAX. ALL MACH. SURFACES			USED ON		
5. DRAWING UNITS: U.S.INCH			MATERIAL	SEE PARTS LIST ABOVE	

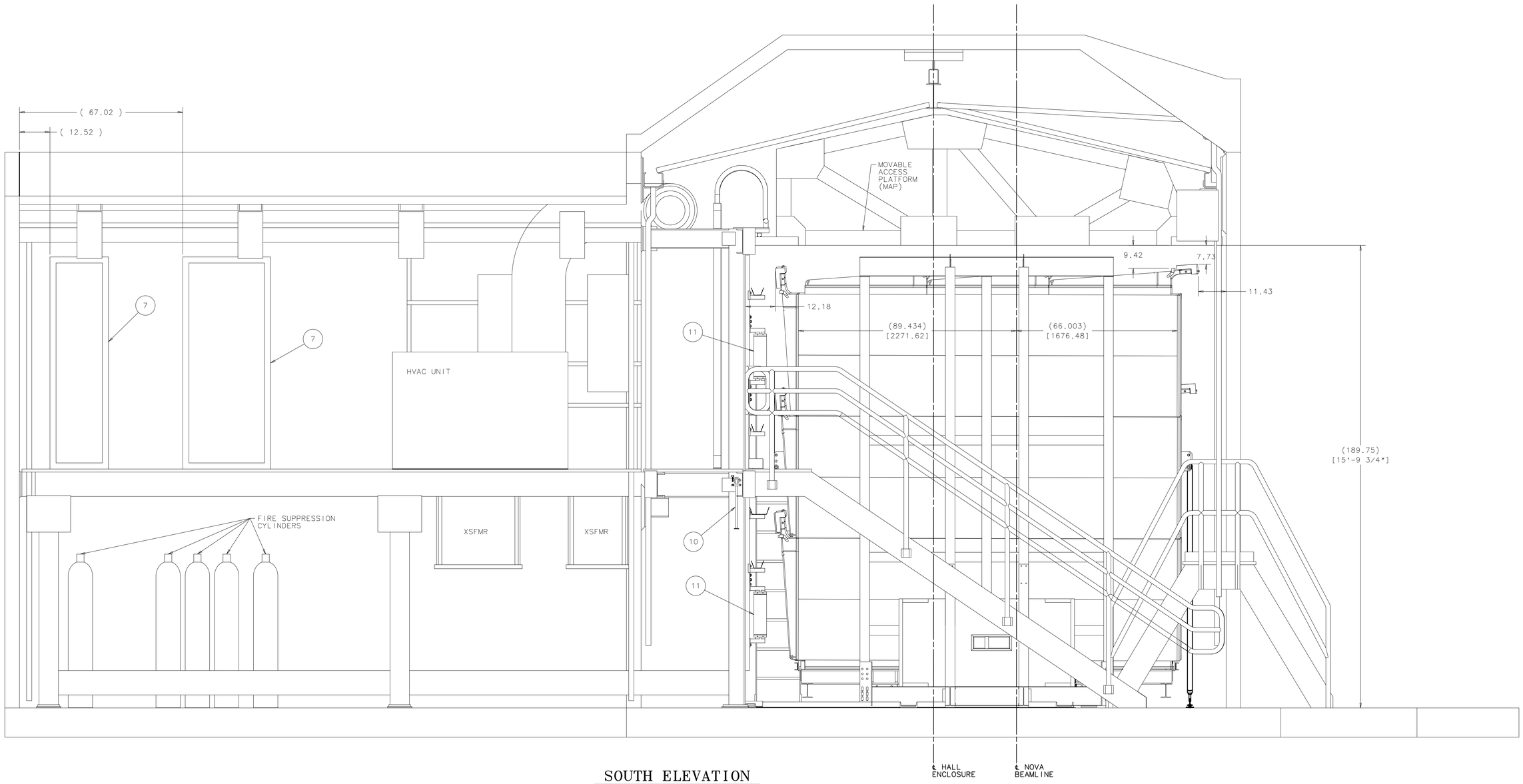
FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

NOVA-NEAR_DETECTOR
NEAR DETECTOR INSTALLATION
ND CAVERN ASSEMBLY LAYOUT

SCALE	DRAWING NUMBER	SHEET	REV
AS NOTED	3929.330-ME-493175	2 OF 7	

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT

REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE



SOUTH ELEVATION

SCALE: 3/4"=1'-0"

PRELIMINARY
30-JUL-2013

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	E.VILLEGAS	30-JUL-2013
.XX	.XXX	ANGLES	DRAWN	D.FRIEND	30-JUL-2013
± .25	± ---	± ---	CHECKED		
1. BREAK ALL SHARP EDGES MAX. 2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MAX. ALL MACH. SURFACES 5. DRAWING UNITS: U.S. INCH			APPROVED		
			USED ON		
			MATERIAL	SEE PARTS LIST ABOVE	

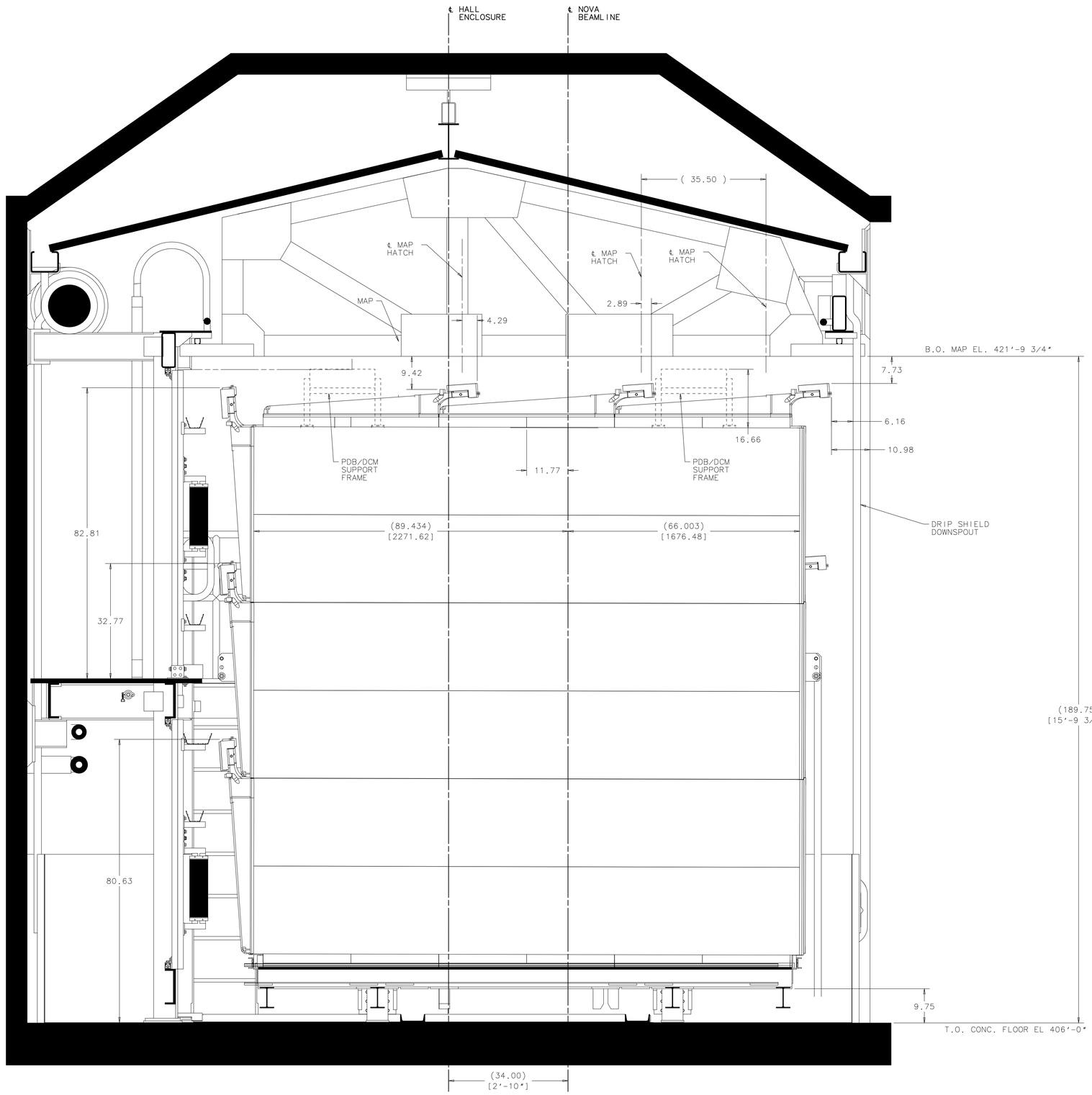
FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

NOVA-NEAR_DETECTOR
NEAR DETECTOR INSTALLATION
ND CAVERN ASSEMBLY LAYOUT

SCALE	DRAWING NUMBER	SHEET	REV
AS NOTED	3929.330-ME-493175	3 OF 7	

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT

REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE



SECTION A-A

SCALE: 1"=1'-0"

PRELIMINARY
30-JUL-2013

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	E.VILLEGAS	30-JUL-2013
.XX	.XXX	ANGLES	DRAWN	D.FRIEND	30-JUL-2013
± .25	± ---	± ---	CHECKED		
1. BREAK ALL SHARP EDGES MAX.			APPROVED		
2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MAX. ALL MACH. SURFACES			USED ON		
5. DRAWING UNITS: U.S.INCH			MATERIAL	SEE PARTS LIST ABOVE	

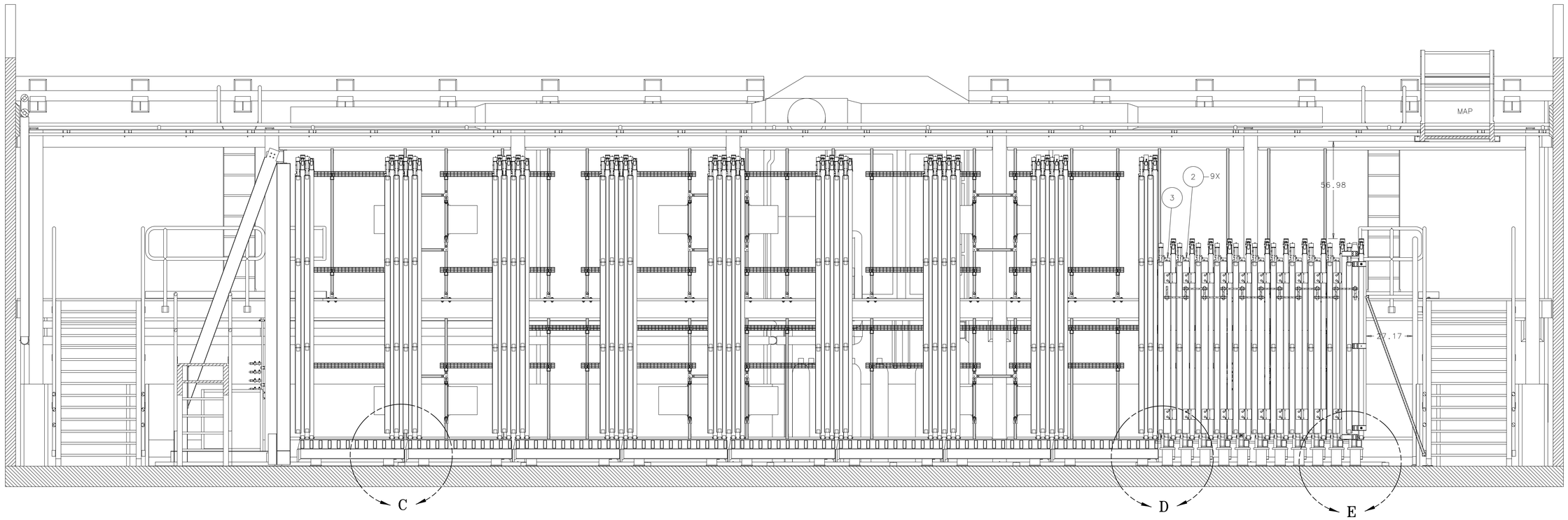
FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

NOVA-NEAR_DETECTOR
NEAR DETECTOR INSTALLATION
ND CAVERN ASSEMBLY LAYOUT

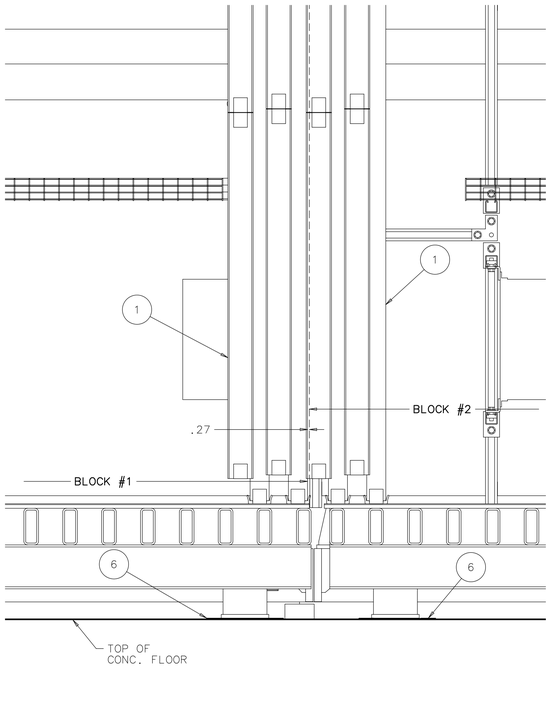
SCALE	DRAWING NUMBER	SHEET	REV
AS NOTED	3929.330-ME-493175	4 OF 7	

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT

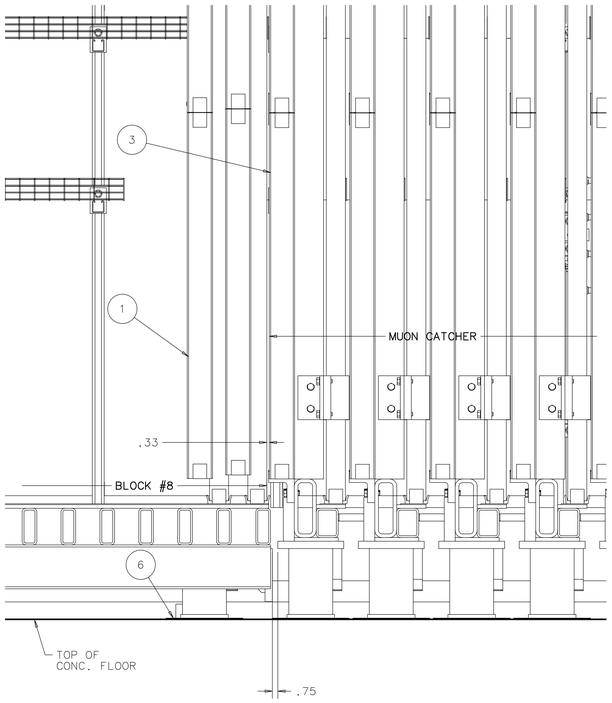
REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE



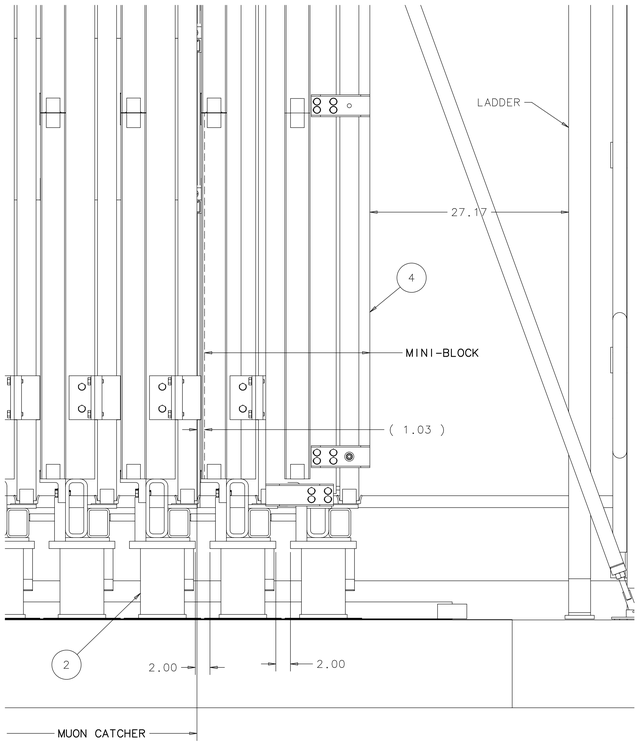
SECTION B-B
SCALE: 1/2" = 1'-0"



DETAIL C
SCALE: 1:8



DETAIL D
SCALE: 1:8



DETAIL E
SCALE: 1:8

PRELIMINARY
30-JUL-2013

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	E.VILLEGAS	30-JUL-2013
.XX	.XXX	ANGLES	DRAWN	D.FRIEND	30-JUL-2013
± .25	± ---	± ---	CHECKED		
1. BREAK ALL SHARP EDGES MAX. 2. DO NOT SCALE DRAWING. 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MAX. ALL MACH. SURFACES			APPROVED		
			USED ON		
5. DRAWING UNITS: U.S. INCH			MATERIAL	SEE PARTS LIST ABOVE	

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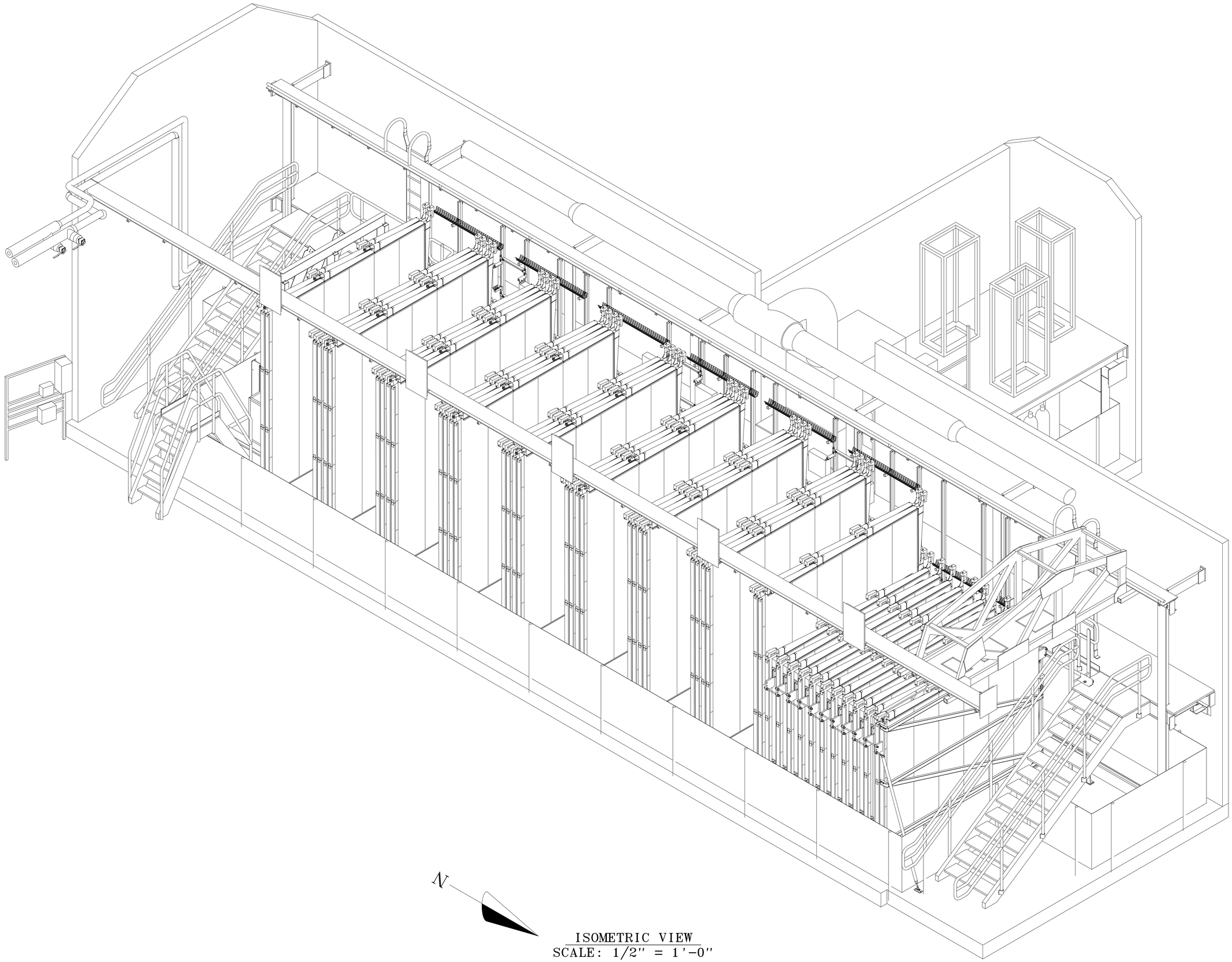
UNITED STATES DEPARTMENT OF ENERGY

NOVA-NEAR_DETECTOR
NEAR DETECTOR INSTALLATION
ND CAVERN ASSEMBLY LAYOUT

SCALE	DRAWING NUMBER	SHEET	REV
AS NOTED	3929.330-ME-493175	5 OF 7	

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT

REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE



ISOMETRIC VIEW
SCALE: 1/2" = 1'-0"

PRELIMINARY
30-JUL-2013

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	E.VILLEGAS	30-JUL-2013
.XX	.XXX	ANGLES	DRAWN	D.FRIEND	30-JUL-2013
± .25	± ---	± ---	CHECKED		
1. BREAK ALL SHARP EDGES MAX.			APPROVED		
2. DO NOT SCALE DRAWING.			USED ON		
3. DIMENSIONS BASED UPON ASME Y14.5M-1994					
4. MAX. ALL MACH. SURFACES √			MATERIAL	SEE PARTS LIST ABOVE	
5. DRAWING UNITS: U.S. INCH					

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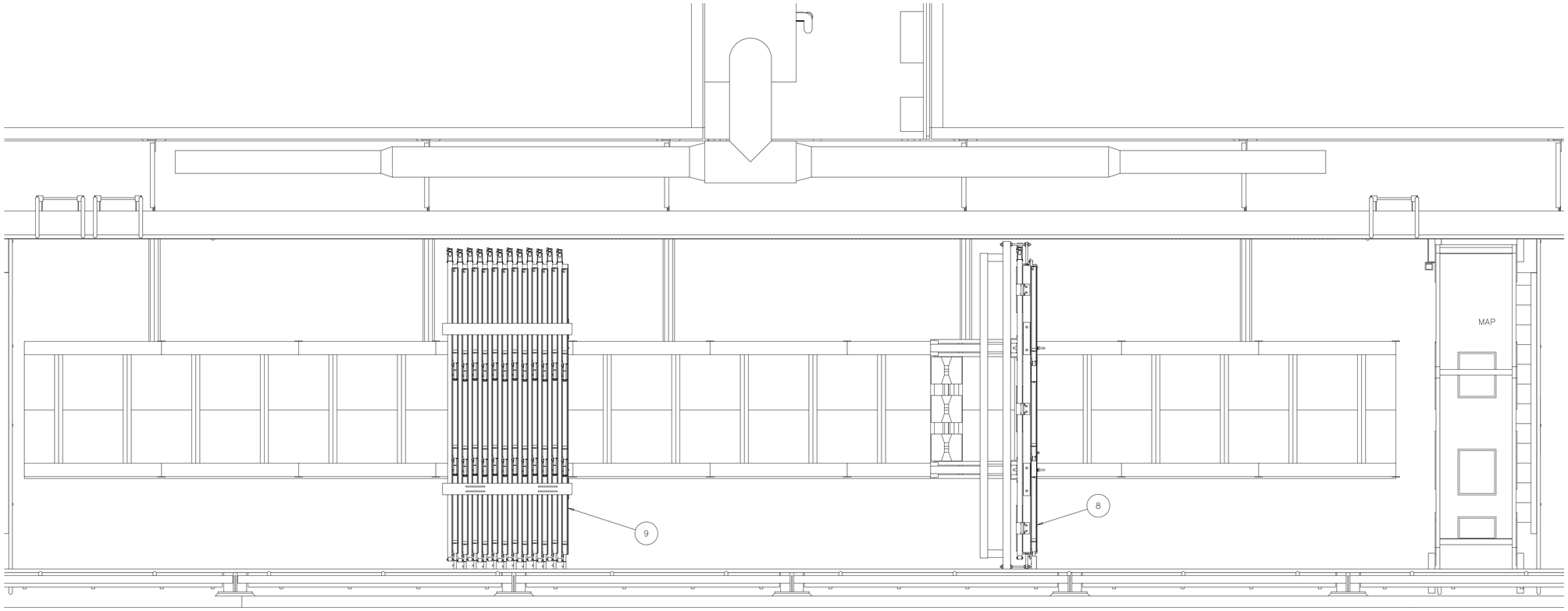
UNITED STATES DEPARTMENT OF ENERGY

NOVA-NEAR_DETECTOR
NEAR DETECTOR INSTALLATION
ND CAVERN ASSEMBLY LAYOUT

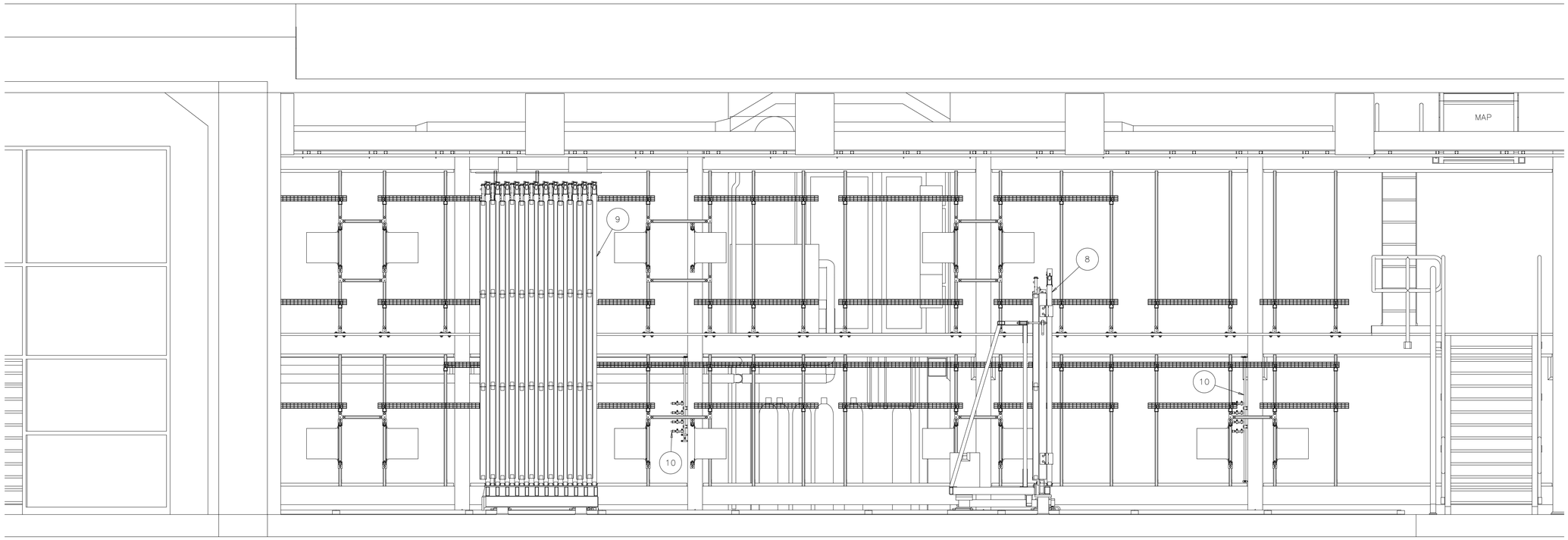
SCALE	DRAWING NUMBER	SHEET	REV
AS NOTED	3929.330-ME-493175	6 OF 7	

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT

REV	DESCRIPTION	DRAWN	DATE
		APPROVED	DATE



PLAN VIEW
MUON CATCHER MODULE
& 24 PLANE BLOCK TRANSPORT
ASSEMBLIES
SCALE: 1/2"=1'-0"



ELEVATION VIEW
MUON CATCHER MODULE
& 24 PLANE BLOCK TRANSPORT
ASSEMBLIES
SCALE: 1/2"=1'-0"

PRELIMINARY
30-JUL-2013

UNLESS OTHERWISE SPECIFIED			ORIGINATOR	E.VILLEGAS	30-JUL-2013
.XX	.XXX	ANGLES	DRAWN	D.FRIEND	30-JUL-2013
± .25	± ---	± ---	CHECKED		
1. BREAK ALL SHARP EDGES MAX.			APPROVED		
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NOVA-NEAR_DETECTOR
NEAR DETECTOR INSTALLATION
ND CAVERN ASSEMBLY LAYOUT

SCALE	DRAWING NUMBER	SHEET	REV
AS NOTED	3929.330-ME-493175	7 OF 7	

CREATED WITH : Ideas12NXSeries GROUP: PPD/MECHANICAL DEPARTMENT