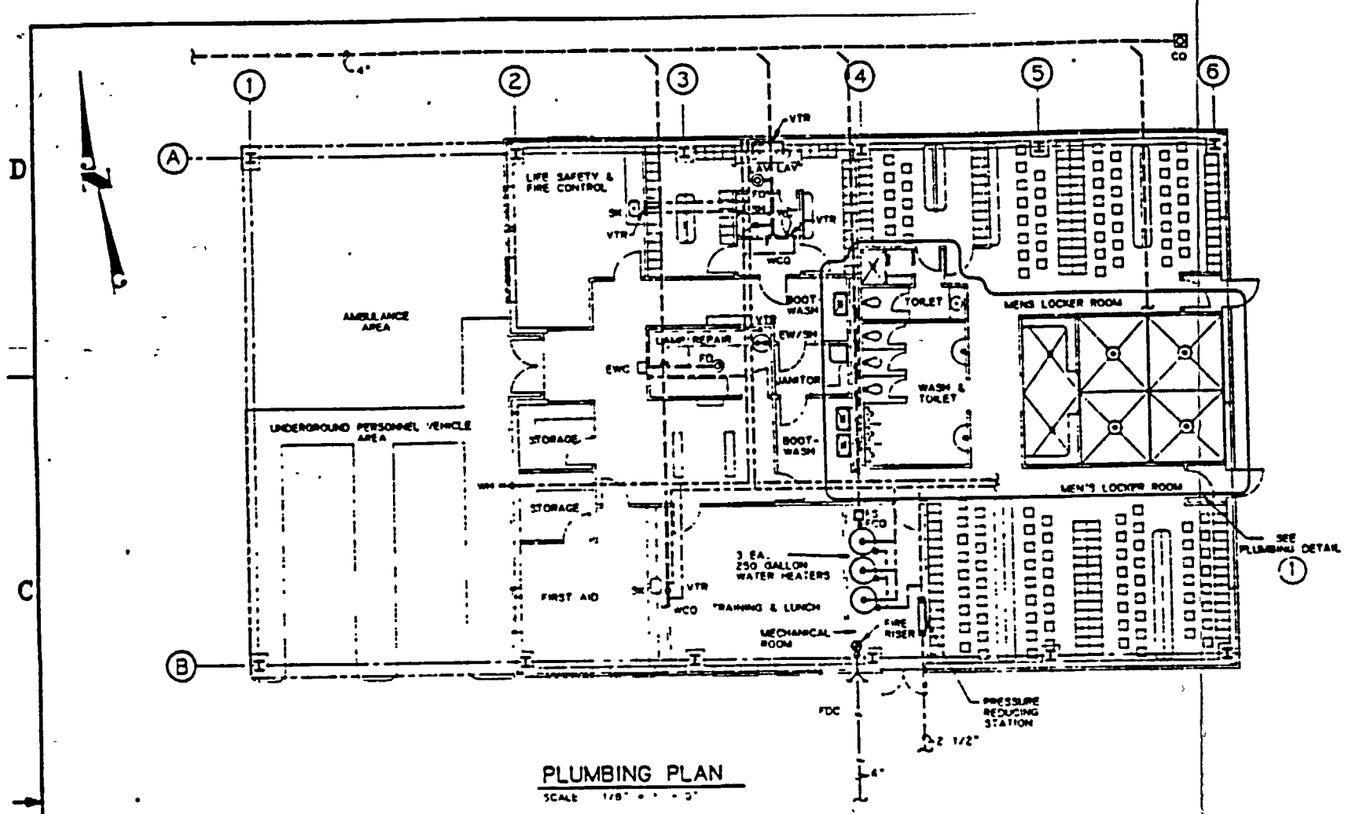
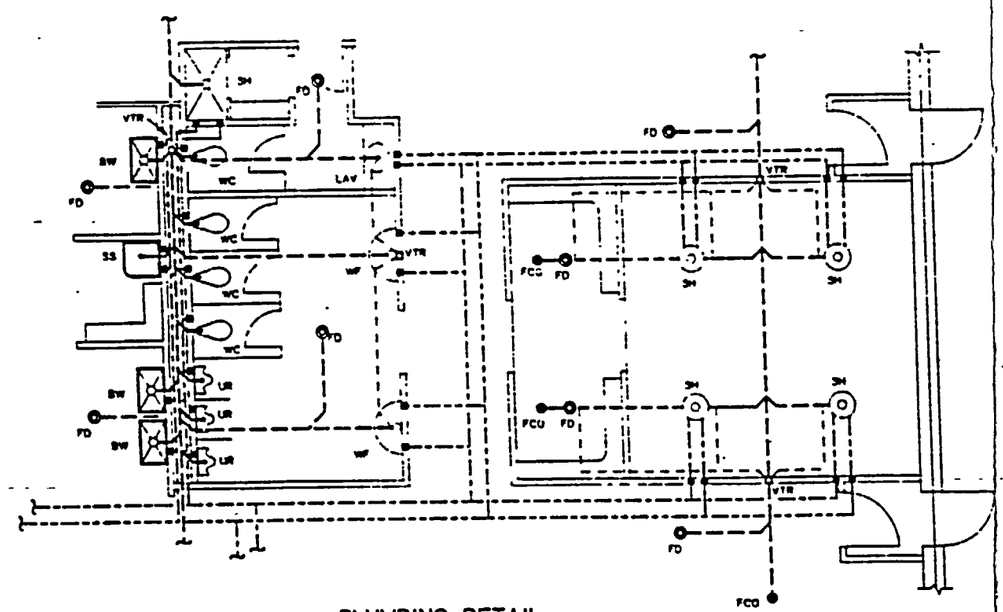


PLUMBING PLAN

SCALE 1/8" = 1' - 0"

PLUMBING LEGEND	
SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER STALL
SH	COLUMN SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EWC	ELECTRIC WATER COOLER



PLUMBING DETAIL 1

SCALE 1/4" = 1' - 0"

SI APERTURE CARD

Also Available On Aperture Card

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

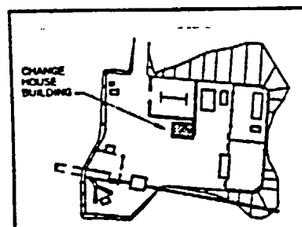
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-GE02

9305250071 -101

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS SOUTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE

LAS VEGAS, NEVADA

APPROVALS	
DESIGN	TAN
DRAWN	TAN
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada

LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY

TS SOUTH PORTAL GENERAL ARRANGEMENT

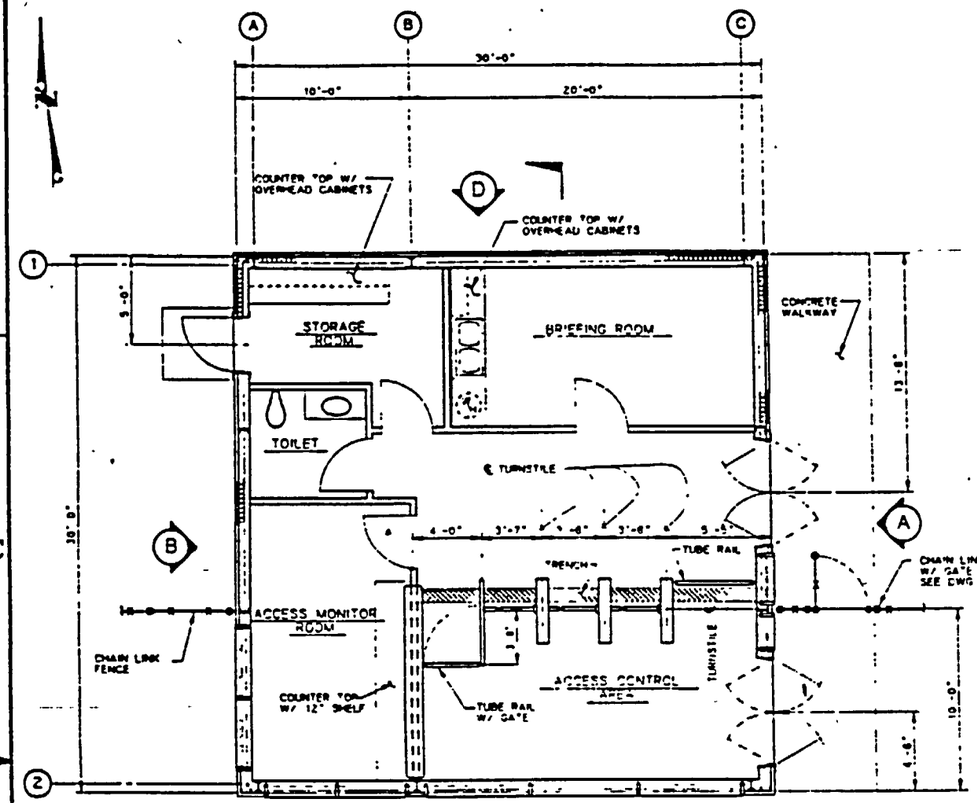
CHANGE HOUSE BUILDING

PLUMBING PLAN

SUBMITTED BY | DATE | DRAWING NO. YMP-025-2-7011-PP01 | REV. 0

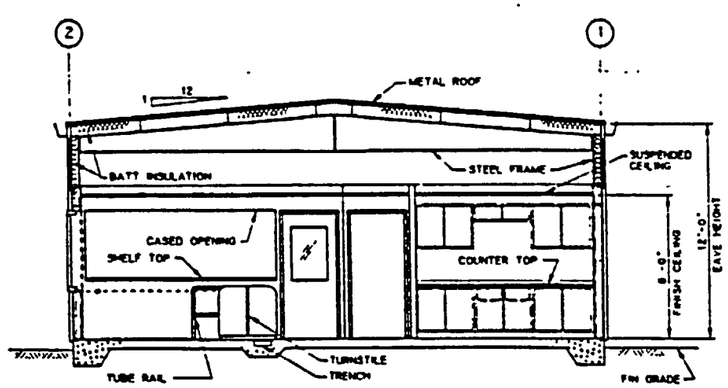
YMPO APPROVED | DATE | SHT | OF

Plotted - Wed Aug 21 10:58 04 1991, PDT Part name YMPU119 DRW -UW



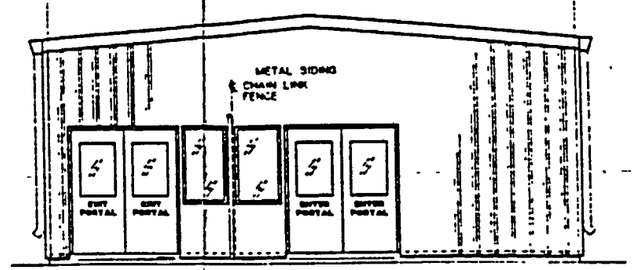
FLOOR PLAN

SCALE 1/4" = 1'-0"



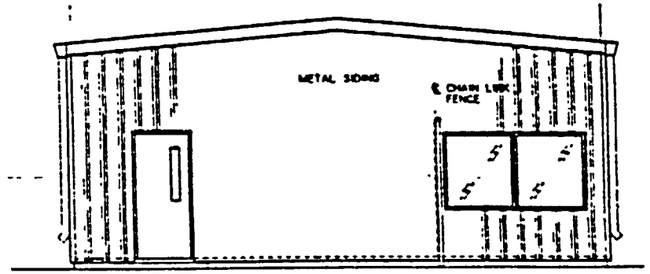
SECTION (E)

SCALE 1/4" = 1'-0"



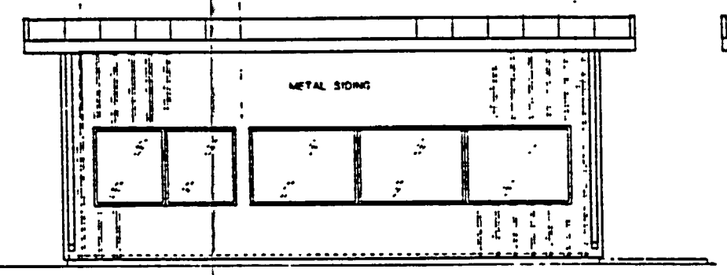
ELEVATION (A)

SCALE 1/4" = 1'-0"



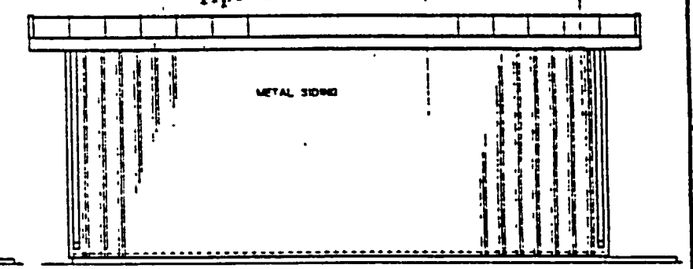
ELEVATION (B)

SCALE 1/4" = 1'-0"



ELEVATION (C)

SCALE 1/4" = 1'-0"



ELEVATION (D)

SCALE 1/4" = 1'-0"

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-C[illegible]-0E02

SI APERTURE CARD

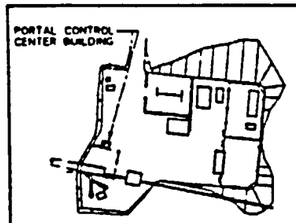
Also Available On Aperture Card

9305250071-102

GRAPHIC SCALE

0 2 4 8 12

1/4" = 1'-0"



TS SOUTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPC

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

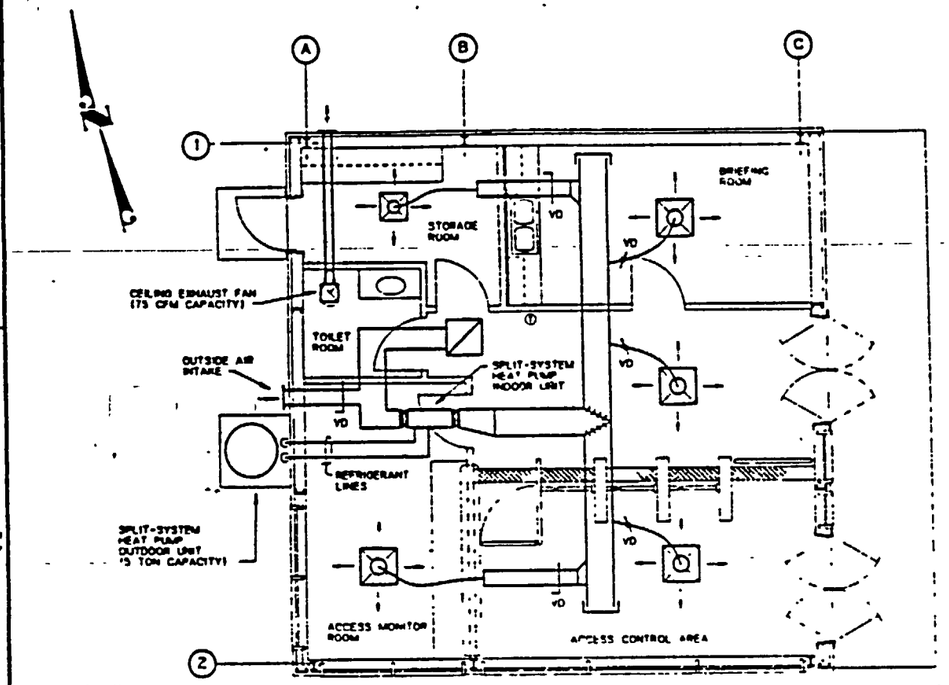
APPROVALS	
DESIGN	RLR
DRAWN	MJH
CHECKED	
DEC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
PORTAL CONTROL CENTER BLDG
PLAN, SECT & ELEV'S

SUBMITTED BY	DATE	DRAWING NO.	REV.
	8-25-91	YMP-025-2-7012-AR01	0

YMPO APPROVED DATE SHT OF



HVAC PLAN

SCALE 1/4" = 1'-0"

HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
D	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR "T" WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
VD	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)
	SIDEWALL REGISTER/LOUVER
	SIDEWALL SUPPLY REGISTER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL / DOOR LOUVER
T	THERMOSTAT (COOLING AND HEATING)
Tc	THERMOSTAT (COOLING ONLY)
Th	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD

Also Available On Aperture Card

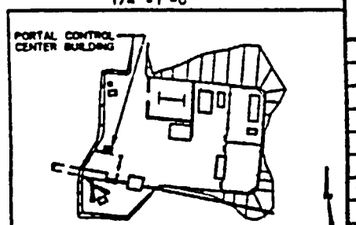
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-GE02

9305250071-103

GRAPHIC SCALE

0 4 8 12 FEET

1/4"=1'-0"



TS SOUTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

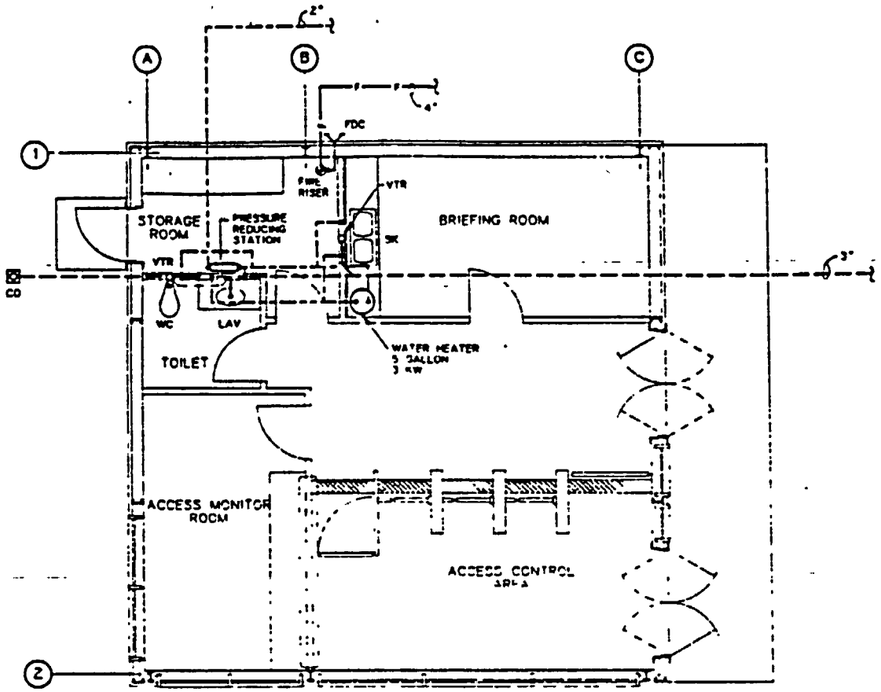
APPROVALS	
DESIGN	SHA
DRAWN	RFC
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
PORTAL CONTROL CENTER BLDG
HVAC PLAN

SUBMITTED BY | DATE | DRAWING NO. YMP-025-2-7012-HV01 | REV. 0

YMPO APPROVED | DATE | SHT OF

PCN YMP-0124 9-21-01 | 1.2.6.3.1.2



PLUMBING PLAN

SCALE 1/4" = 1'-0"

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EWC	ELECTRIC WATER COOLER

GENERAL NOTES:

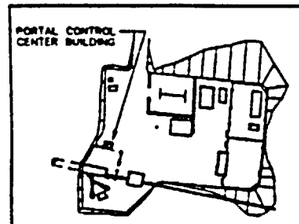
1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD
Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-GE02

9305250071-104

GRAPHIC SCALE
0 4 8 12 FEET
1/4"=1'-0"



TS SOUTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	TAN
DRAWN	TAN
CHECKED	
DEC	
DESIGN ACCEPTANCE	S.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

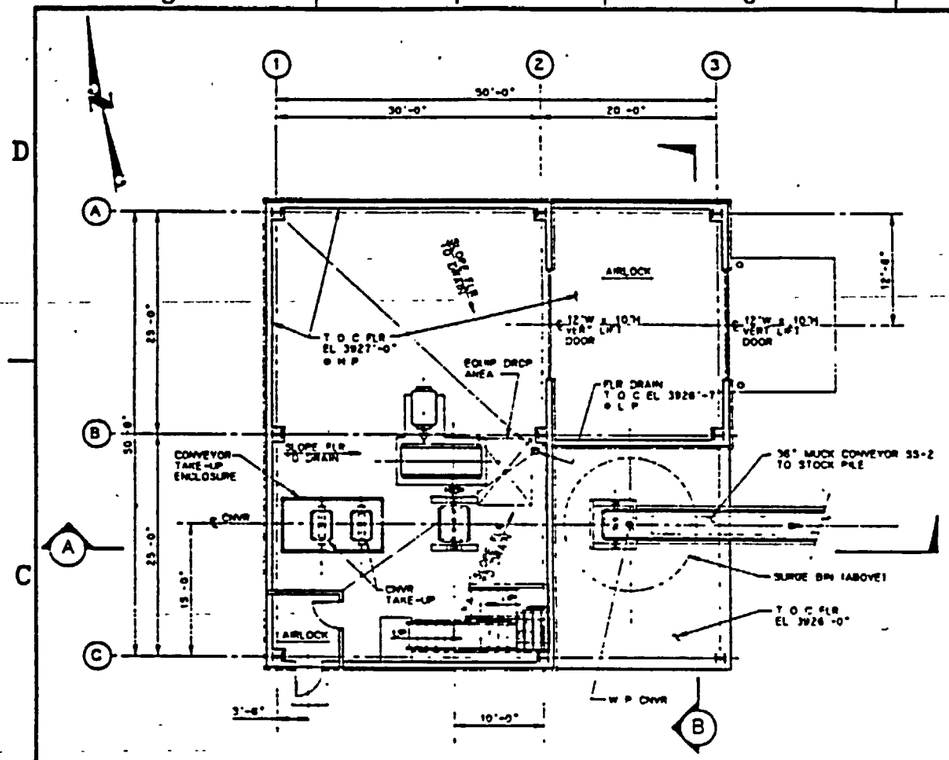
EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
PORTAL CONTROL CENTER BLDG
PLUMBING PLAN

SUBMITTED BY | DATE | DRAWING NO. YMP-025-2-7012-PP01 | REV. 0

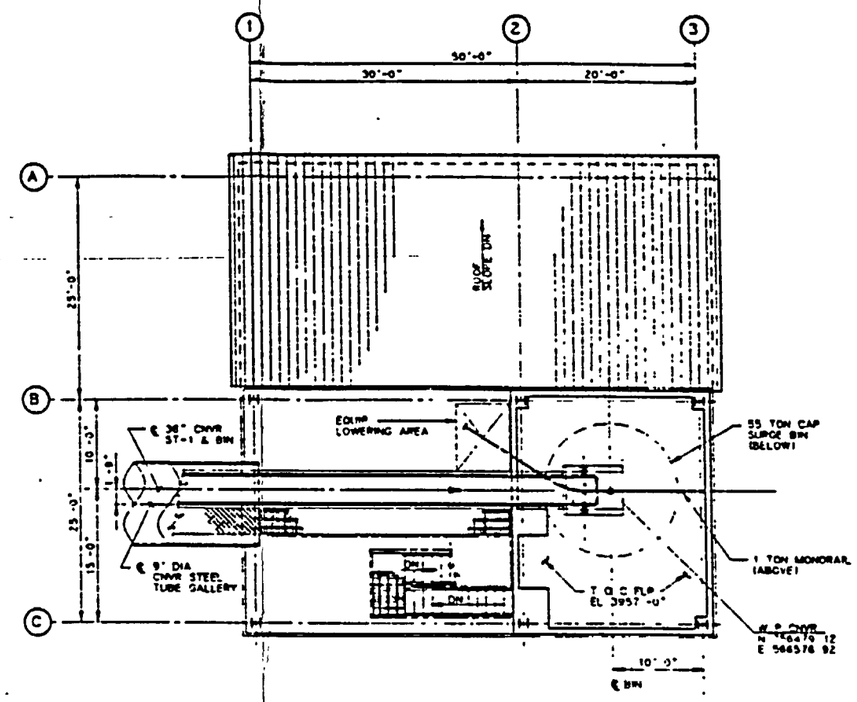
YMPO APPROVED | DATE | SHT OF

FOR YMPO USE 0-21-91

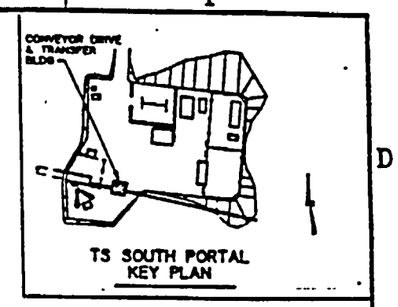
Plotted: Wed Aug 21 11:07:45 1991, PDT Part name YMP0125 DRW -UW



PLAN @ T O C EL 3927'-0"
SCALE 1/8" = 1'-0"



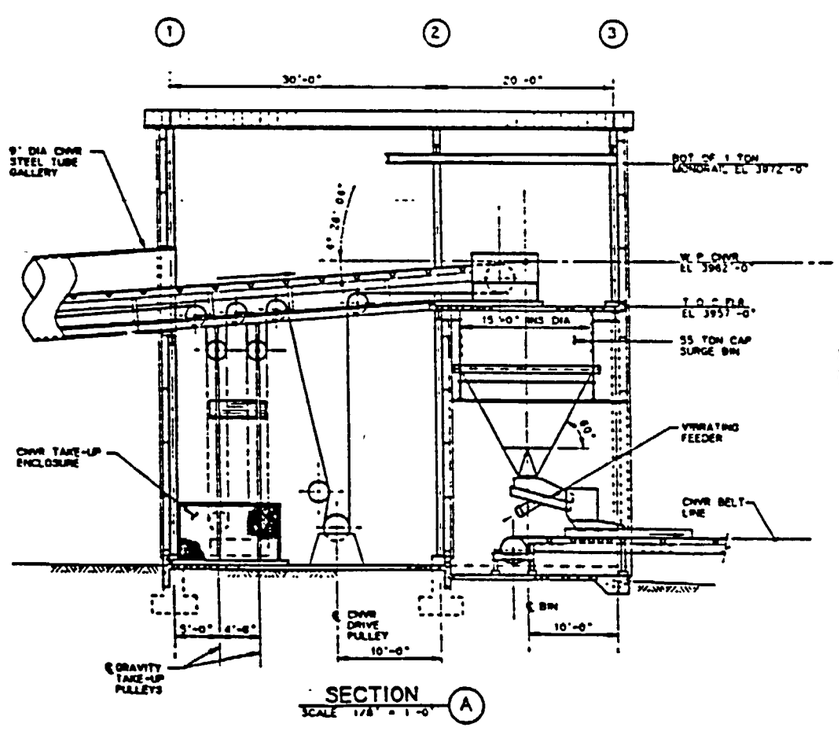
PLAN @ T O C EL 3957'-0"
SCALE 1/8" = 1'-0"



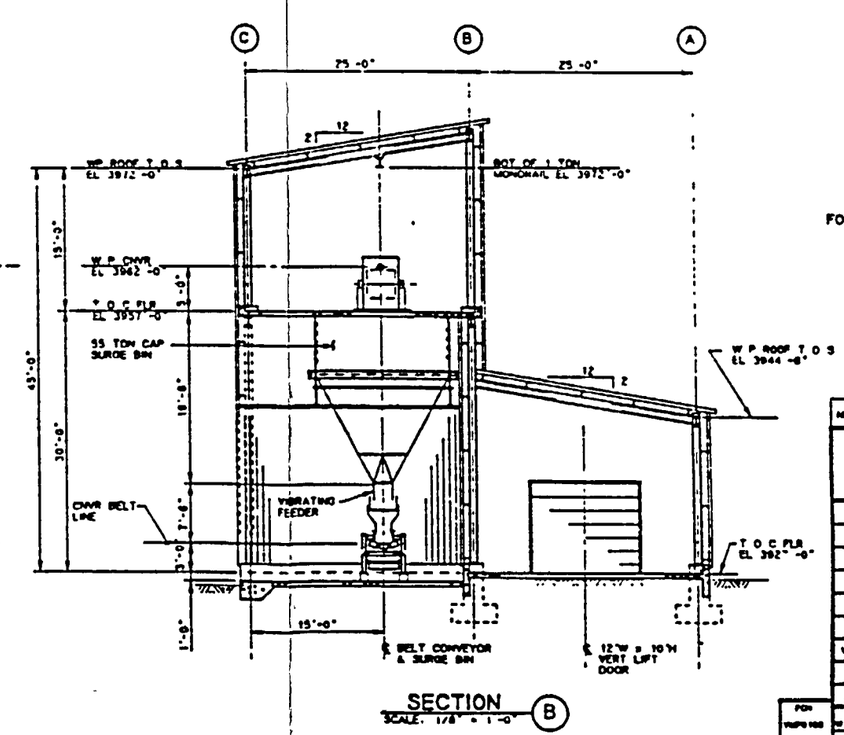
GRAPHIC SCALE
0 8 16 24 FEET
1/8"=1'-0"

SI APERTURE CARD

Also Available On Aperture Card



SECTION (A)
SCALE 1/8" = 1'-0"



SECTION (B)
SCALE 1/8" = 1'-0"

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-0E02

9305250071-105

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

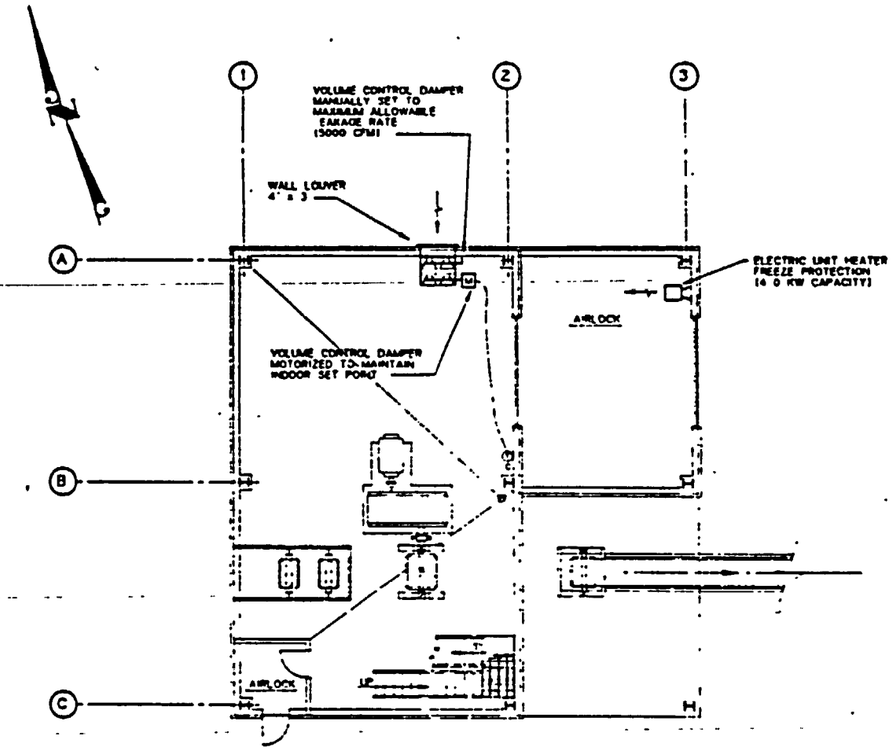
APPROVALS

DESIGN	NBT
DRAWN	MJH
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
CONVEYOR DRIVE & TRANSFER BLDG
PLANS & SECTIONS

SUBMITTED BY | DATE | DRAWING NO. YMP-025-2-7013-AR01 | REV. 0
YMPO APPROVED | DATE | SHT | OF



FLOOR PLAN

SCALE 1/8" = 1'-0"

HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
D	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR "T" WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
VD	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)
	SIDEWALL REGISTER/LOUVER
	SIDEWALL SUPPLY REGISTER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL / DOOR LOUVER
T	THERMOSTAT (COOLING AND HEATING)
T_C	THERMOSTAT (COOLING ONLY)
T_H	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD

Also Available On Aperture Card

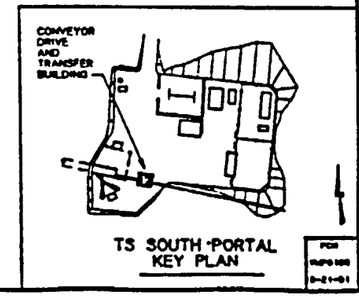
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-GE02

9305250071 - 106

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS SOUTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
CONVEYOR DRIVE AND TRANSFER BUILDING
HVAC PLAN

APPROVALS	
DESIGN	BHA
DRAWING	WC
CHECKED	
DEC	
DESIGN VERIFICATION	N/A
ENV	
SAF	
QUALITY ASSURANCE	

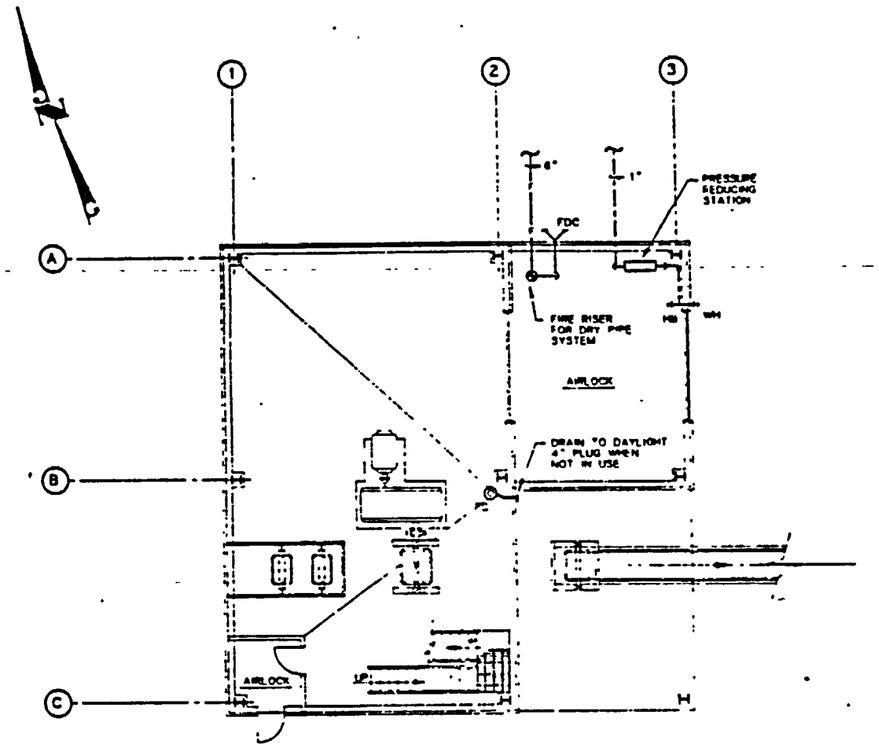
SUBMITTED BY: DATE: 8-26-91

DRAWING NO. YMP-025-2-7013-HV01 REV. 0

YMPO APPROVED: DATE: SHT: OF:

PCN YMP-0100 8-21-91 | U.D.S. NO. 1.2.6.3.1.2 | C.I. NO.

Plotted Wed Aug 21 11:24:15 1991, PDT Part name YMPUTHO.DWG



FLOOR PLAN

SCALE 1/8" = 1'-0"

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EWC	ELECTRIC WATER COOLER

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD
Also Available On Aperture Card

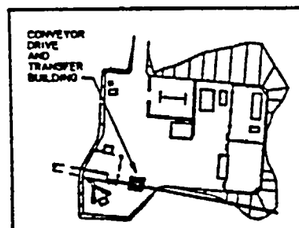
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-Z-CIVL-GE02

9305250071 -107

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS SOUTH PORTAL KEY PLAN

NO.	DATE	REVISION	DES	DRN	CHK	DEC	DM	WMPT	ENV	SAF	QA	TPO	YMPC

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

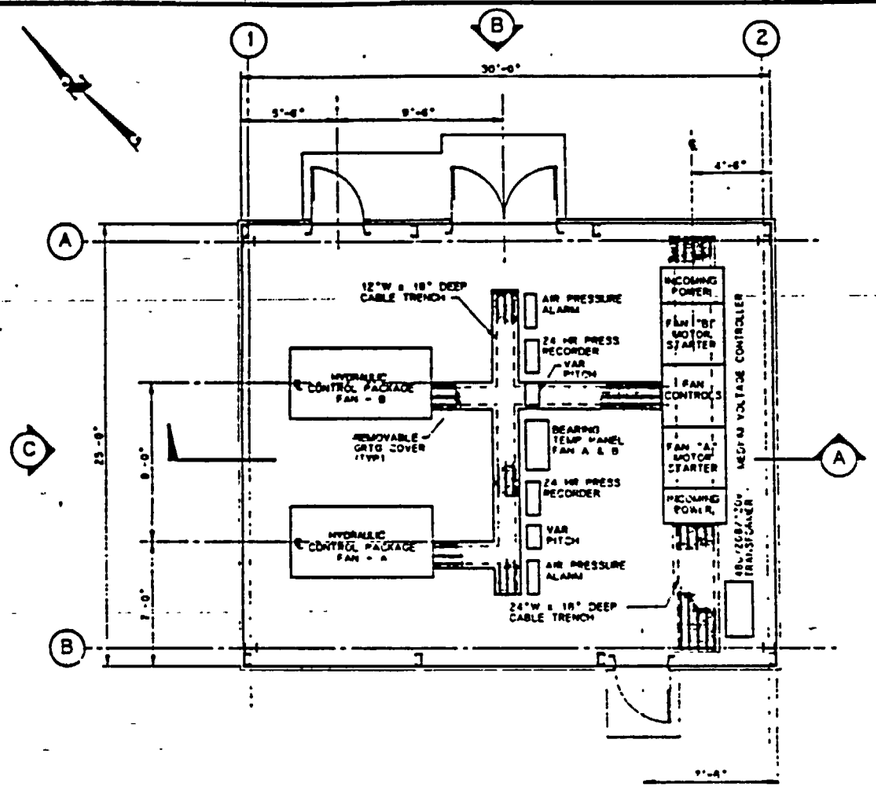
DESIGN	BHA	
DRAWN	RFC	
CHECKED		
DEC		
DESIGN MANAGER	B.CH.	
VERIFICATION	N/A	
ENV / SAF		
QUALITY ASSURANCE		
W.B.S. NO.	1.2.6.3.1.2	
C.I. NO.		

EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
CONVEYOR DRIVE AND TRANSFER BUILDING
PLUMBING PLAN

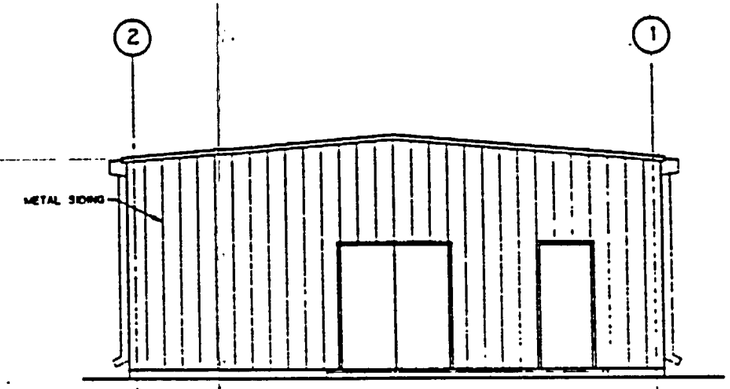
SUBMITTED BY | DATE | DRAWING NO. YMP-025-2-7013-PP01 | REV. 0

YMPO APPROVED | DATE | SMT

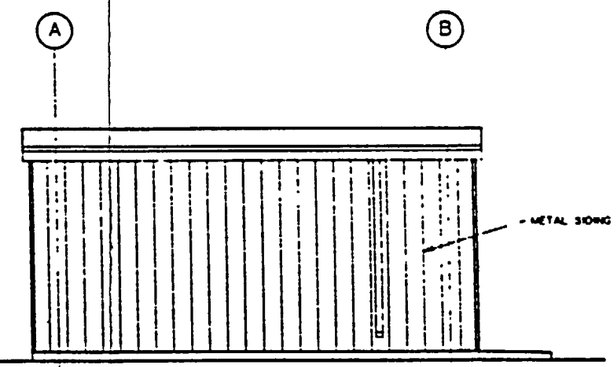
Plotted Wed Aug 21 11:26:58 1991, PDT Part name YMP0181.DWG



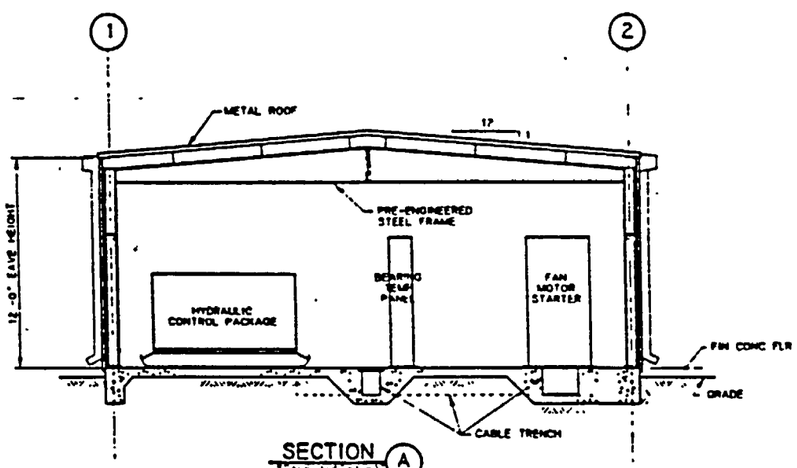
PLAN



ELEVATION B
SCALE 1/4"=1'-0"



ELEVATION C
SCALE 1/4"=1'-0"

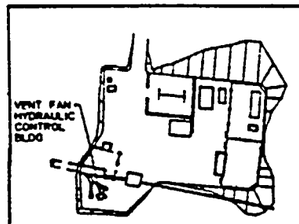


SECTION A
SCALE 1/4"=1'-0"

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-GE02

9305250071 -108

GRAPHIC SCALE
0 2 4 8 12 FEET
1/4"=1'-0"



TS SOUTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VMPY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

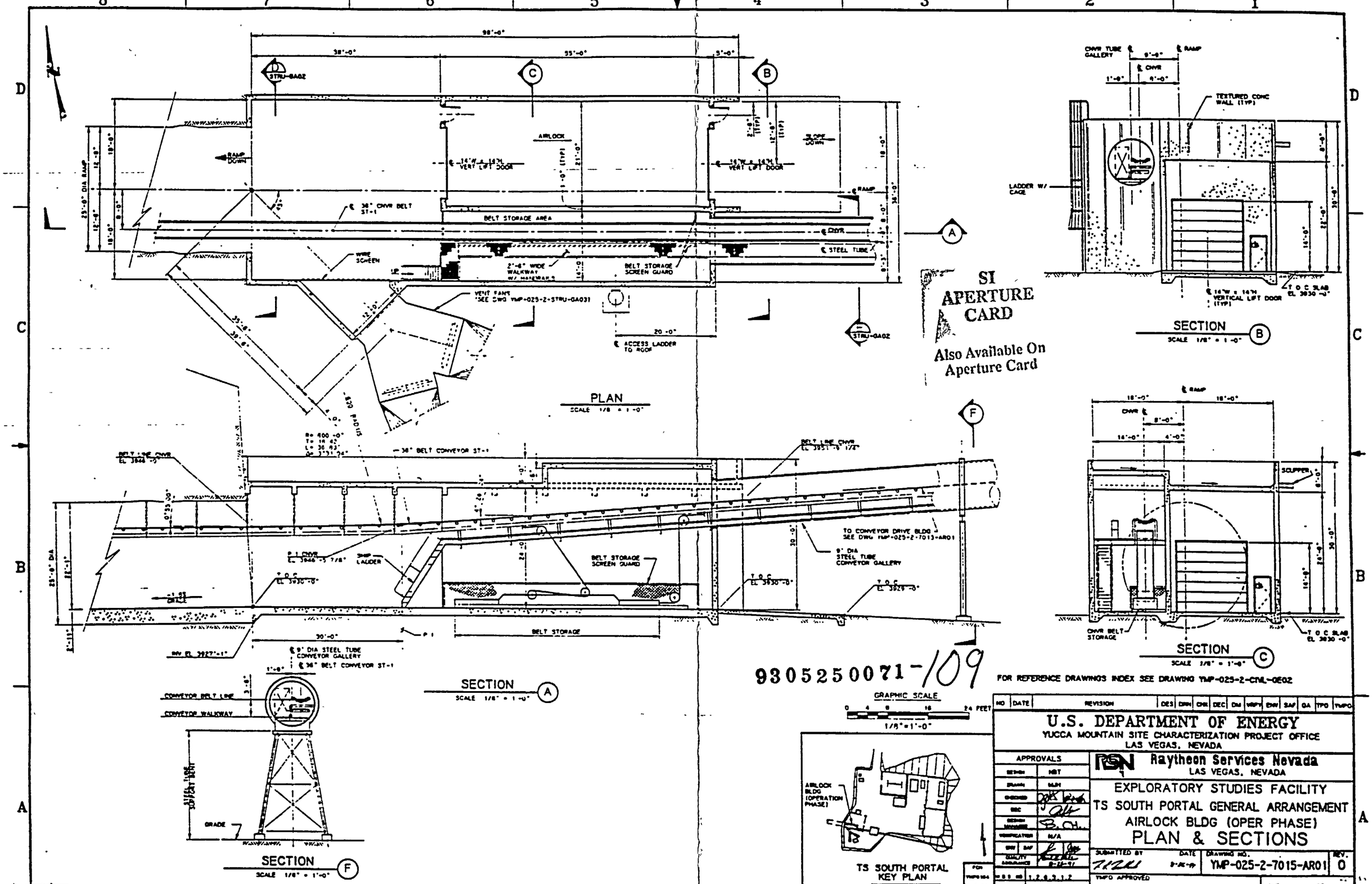
DESIGN	NBT
DRAWN	MJH
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
VENT FAN HYDRAULIC CONTROL BLDG
PLAN AND ELEVATIONS

SUBMITTED BY | DATE | DRAWING NO. YMP-025-2-7014-AR01 | REV. 0

YMPO APPROVED | DATE | SHT

SI APERTURE CARD
Also Available On Aperture Card



SI APERTURE CARD

Also Available On Aperture Card

9305250071-109

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVIL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	TMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

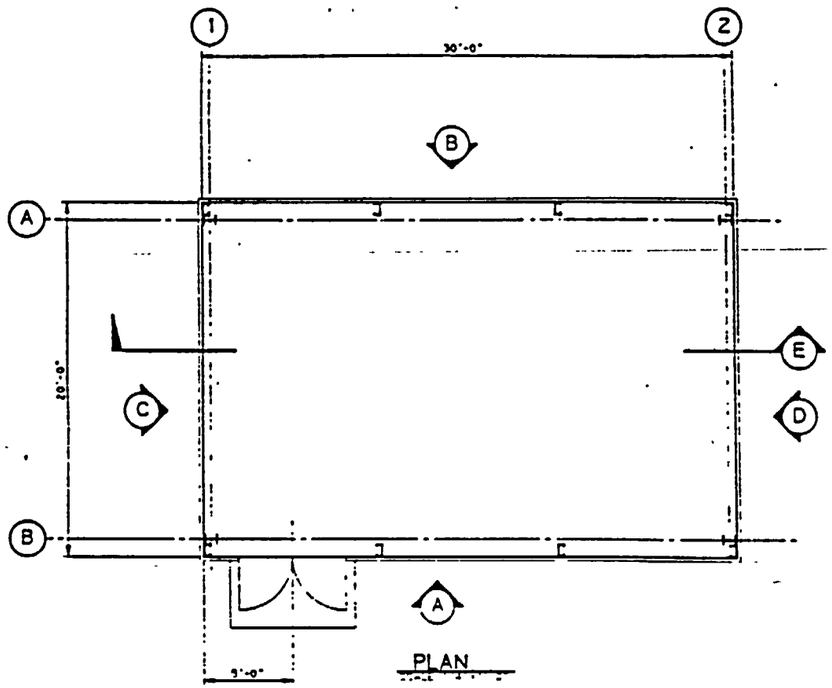
DESIGN	NBT
DRAWN	MJM
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	8-16-91

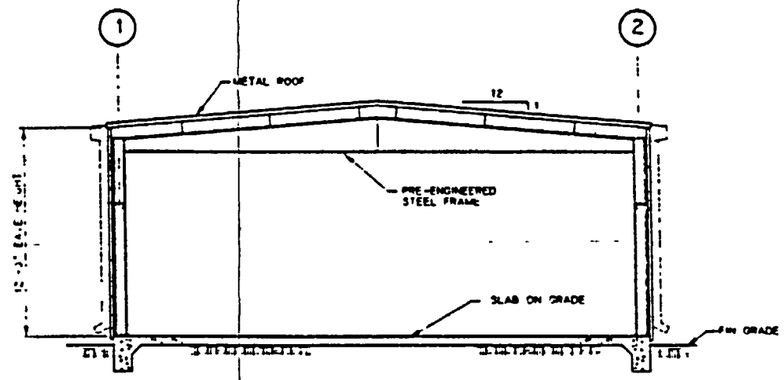
Raytheon Services Nevada
LAS VEGAS, NEVADA

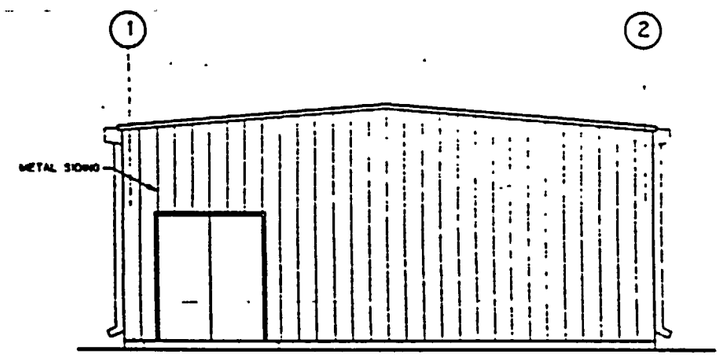
EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
AIRLOCK BLDG (OPER PHASE)
PLAN & SECTIONS

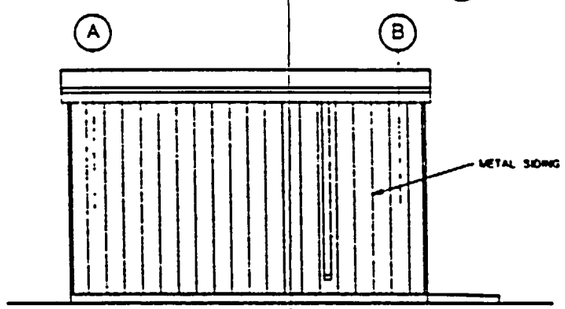
SUBMITTED BY: TMPO — DATE: 8-16-91 — DRAWING NO. YMP-025-2-7015-AR01 — REV. 0

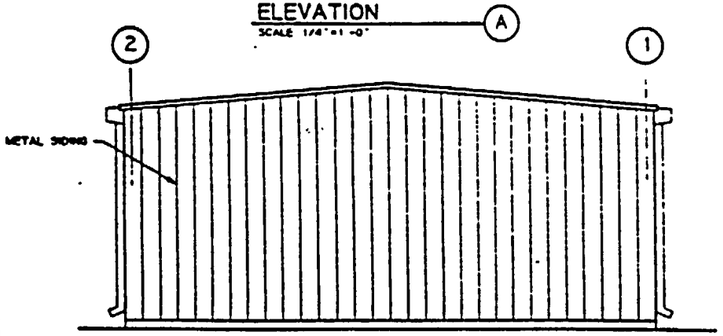
TMPO APPROVED — DATE — SHT — OF

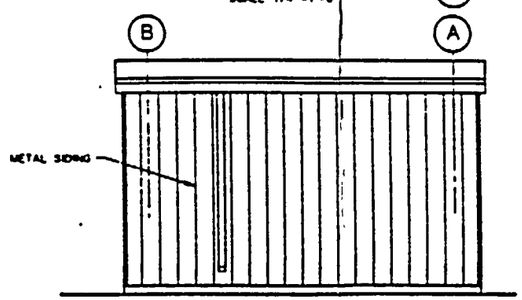








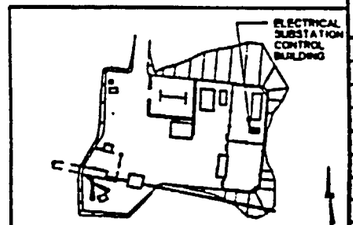




GRAPHIC SCALE

0 2 4 8 12 FEET

1/4"=1'-0"



TS SOUTH PORTAL KEY PLAN

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-0E02

9305250071 - 110

NO	DATE	REVISION	DES	DRN	CHK	DEC	CM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

DRAWN	RLR
DRAWN	MJH
CHECKED	
DEC	
DESIGN REVIEWER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

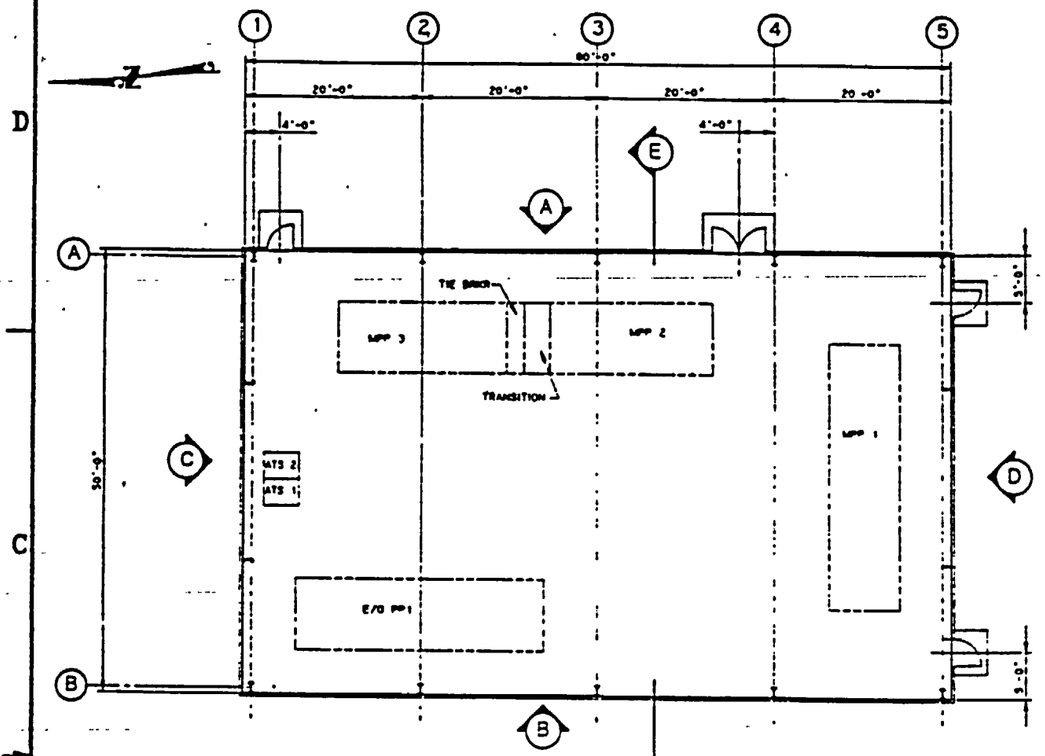
EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
ELECTRICAL SUBSTATION CONTROL BLDG
PLAN AND ELEVATIONS

SUBMITTED BY	DATE	DRAWING NO.	REV.
		YMP-025-2-7016-AR01	0

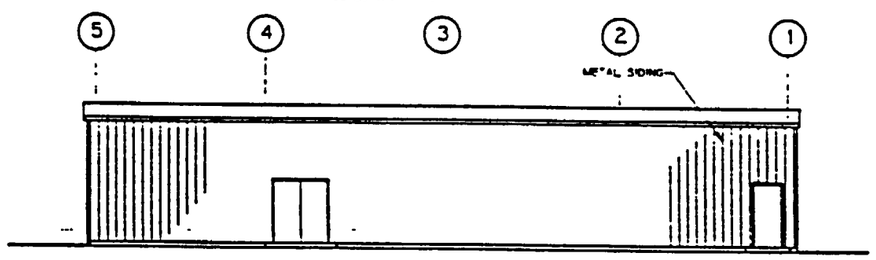
YMPO APPROVED DATE SHT OF

PCN YMP0133 8-22-91 | 1.2.8.3.1.2

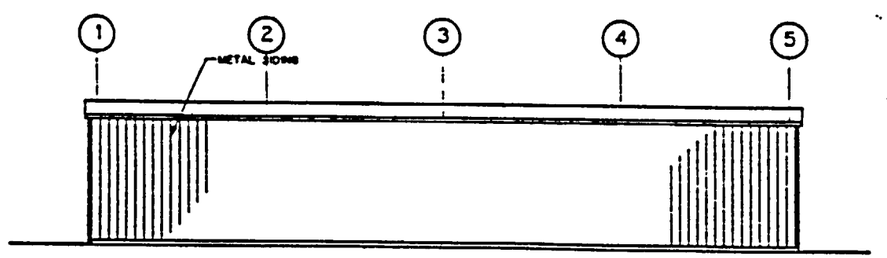
Plotted : Thu Aug 22 13:01 24 1991, PDT Part name ymp0133.dwg



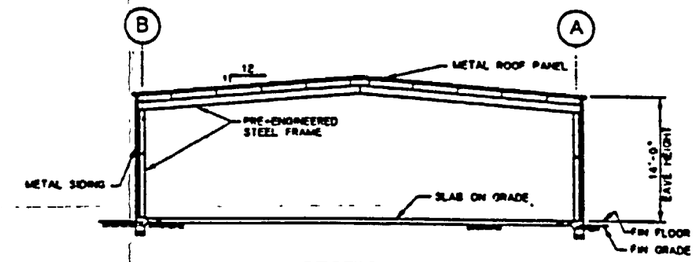
PLAN
SCALE 1/8"=1'-0"



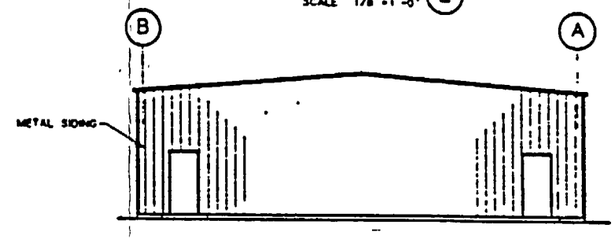
ELEVATION (A)
SCALE 1/8"=1'-0"



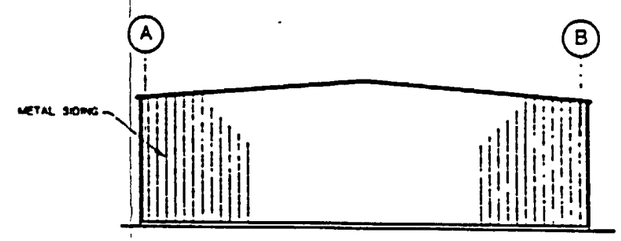
ELEVATION (B)
SCALE 1/8"=1'-0"



SECTION (E)
SCALE 1/8"=1'-0"



ELEVATION (D)
SCALE 1/8"=1'-0"



ELEVATION (C)
SCALE 1/8"=1'-0"

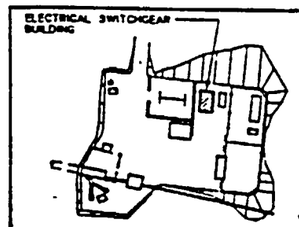
SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-GE02

9305250071 - ///

GRAPHIC SCALE
0 4 8 16 24 FEET
1/8"=1'-0"



TS SOUTH PORTAL KEY PLAN

NO.	DATE	REVISION	DES	DRN	CHK	DEC	DM	YMPO	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

EXPLORATORY STUDIES FACILITY
TS SOUTH PORTAL GENERAL ARRANGEMENT
ELECTRICAL SWITCHGEAR BUILDING
PLAN AND ELEVATIONS

SUBMITTED BY — DATE — DRAWING NO. YMP-025-2-7017-AR01 — REV. 0

YMPO APPROVED — DATE — SHT

Plotted: Thu Aug 22 09:30:36 1991, PDT

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

EXPLORATORY STUDIES FACILITY

TECHNICAL BASELINE

SI
APERTURE
CARD

Also Available On
Aperture Card

VOLUME 2

NORTH PORTAL

DESIGN DRAWINGS

Prepared by:

RAYTHEON SERVICES NEVADA

101 Convention Center Drive

Las Vegas, Nevada

9305250071 -1/2

TS NORTH PORTAL

GENERAL SUPPORT	
TITLE SHEET	YMP-025-1-CIVL-GE01
DRAWING INDEX	YMP-025-1-CIVL-GE02
PERSPECTIVE	YMP-025-1-ARCH-GA01
MATERIAL FLOW DIAGRAM	YMP-025-1-ARCH-GA02
CIVIL	
OVERALL SITE PLAN	YMP-025-1-CIVL-PL01
SURFACE SITE PLAN	YMP-025-1-CIVL-PL02
NORTH PORTAL GRADING PLAN	YMP-025-1-CIVL-GP01
BOOSTER PUMP STATION SITE PLAN	YMP-025-1-CIVL-PL04
WASTE WATER FACILITIES SITE & GRADING PLAN	YMP-025-1-CIVL-PL06
MUCK & TOPSOIL STORAGE PADS PLAN	YMP-025-1-CIVL-PL07
MUCK & TOPSOIL STORAGE PADS SECTION	YMP-025-1-CIVL-PL08
MUCK & TOPSOIL STORAGE PADS SECTION	YMP-025-1-CIVL-PL09
OVERALL UTILITY PLAN	YMP-025-1-CIVL-PL11
NORTH PORTAL UTILITIES PLAN	YMP-025-1-CIVL-PL12
WATER STORAGE TANK SITE & GRADING PLAN	YMP-025-1-CIVL-PL13
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 1	YMP-025-1-CIVL-PR01
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 2	YMP-025-1-CIVL-PR02
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 3	YMP-025-1-CIVL-PR03
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 4	YMP-025-1-CIVL-PR04
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 5	YMP-025-1-CIVL-PR05
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 6	YMP-025-1-CIVL-PR06
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 7	YMP-025-1-CIVL-PR07
H-ROAD IMPROVEMENTS PLAN & PROFILE SHT 8	YMP-025-1-CIVL-PR08
ACCESS ROAD PLAN & PROFILE	YMP-025-1-CIVL-PR12
ACCESS ROAD PLAN & PROFILE	YMP-025-1-CIVL-PR13
BORROW AREA STA 0+00-15+00 PLAN & PROFILE	YMP-025-1-CIVL-PR16
BORROW AREA STA 15+00-30+00 PLAN & PROFILE	YMP-025-1-CIVL-PR17
BORROW AREA STA 30+00-45+00 PLAN & PROFILE	YMP-025-1-CIVL-PR18
BORROW AREA STA 45+00-48+06 03 PLAN & PROFILE	YMP-025-1-CIVL-PR19
WATER STORAGE TANK ACCESS ROAD PLAN & PROFILE	YMP-025-1-CIVL-PR21
CONVEYOR ALIGNMENT PLAN & PROFILE	YMP-025-1-CIVL-PR24
CONVEYOR ALIGNMENT PLAN & PROFILE	YMP-025-1-CIVL-PR25
CONVEYOR ALIGNMENT PLAN & PROFILE	YMP-025-1-CIVL-PR26
PROBABLE MAXIMUM FLOOD (PMF) FLOOD PLAIN	YMP-025-1-CIVL-CI02
ARCHITECTURAL	
SURFACE PLOT PLAN	YMP-025-1-ARCH-PL01
OVERALL PLOT PLAN	YMP-025-1-ARCH-PL02
STRUCTURAL	
PORTAL & CONVEYOR PLAN & SECTIONS	YMP-025-1-STRU-GA01
PORTAL CONST / OPER PHASE PLAN SECT & ELEV'S	YMP-025-1-STRU-GA02
CONVEYOR TRANSFER TOWER PLANS & SECTIONS	YMP-025-1-STRU-GA03
SURFACE CONVEYOR PROFILE SHEET 1	YMP-025-1-STRU-GA04
SURFACE CONVEYOR PROFILE SHEET 2	YMP-025-1-STRU-GA05
UNDERGROUND CONVEYOR PROFILE SHEET 3 & SECT'S	YMP-025-1-STRU-GA06

TS NORTH PORTAL

MINING	
SUBSURFACE ACCESS GENERAL ARRANGEMENT PLAN	YMP-025-1-MING-MR01
TS/CH RAMP INTERSECTION PLAN & SECTION	YMP-025-1-MING-MR02
TS/CH RAMP INTERSECTION SECTIONS	YMP-025-1-MING-MR03
TS/CH RAMP INTERSECTION TBM TRANS / LAUNCH SECT'S	YMP-025-1-MING-MR04
TS PRELIMINARY TEST LOCATIONS PLAN	YMP-025-1-MING-MR06
TS PRELIMINARY TEST LOCATIONS ELEVATION	YMP-025-1-MING-MR07
TS PRELIMINARY TEST LOCATIONS ENLARGED PLAN	YMP-025-1-MING-MR08
TS PRELIMINARY TEST LOCATIONS ENLARGED PLAN	YMP-025-1-MING-MR09
TS PRELIMINARY TEST LOCATIONS ENLARGED PLAN	YMP-025-1-MING-MR10
CH PRELIMINARY TEST LOCATIONS PLAN & ELEVATION	YMP-025-1-MING-MR11
CH PRELIMINARY TEST LOCATIONS ENLARGED PLANS	YMP-025-1-MING-MR12
ELECTRICAL	
POWER TRANSMISSION LINE SITE PLAN (SHEET 1)	YMP-025-1-ELEC-EL01
POWER TRANSMISSION LINE SITE PLAN (SHEET 2)	YMP-025-1-ELEC-EL02
NORTH PORTAL SURFACE SUBSTATION ONE LINE DIAGRAM	YMP-025-1-ELEC-EL04
NORTH PORTAL SURFACE ELECTRICAL ONE LINE DIAGRAM (SHEET 1)	YMP-025-1-ELEC-EL05
NORTH PORTAL SURFACE ELECTRICAL ONE LINE DIAGRAM (SHEET 2)	YMP-025-1-ELEC-EL06
TS NORTH RAMP ELECTRICAL ONE LINE DIAGRAM (SHEET 1)	YMP-025-1-ELEC-EL07
TS NORTH RAMP ELECTRICAL ONE LINE DIAGRAM (SHEET 2)	YMP-025-1-ELEC-EL08
TS NORTH RAMP ELECTRICAL ONE LINE DIAGRAM (SHEET 3)	YMP-025-1-ELEC-EL09
CH NORTH RAMP ELECTRICAL ONE LINE DIAGRAM (SHEET 1)	YMP-025-1-ELEC-EL13
CH NORTH RAMP ELECTRICAL ONE LINE DIAGRAM (SHEET 2)	YMP-025-1-ELEC-EL14
CH NORTH RAMP ELECTRICAL ONE LINE DIAGRAM (SHEET 3)	YMP-025-1-ELEC-EL15

SHOP / WAREHOUSE BLDG # 7000

ARCHITECTURAL	
SHOP / WAREHOUSE BUILDING FLOOR PLANS	YMP-025-1-7000-AR01
SHOP / WAREHOUSE BUILDING ELEVATIONS & SECTION	YMP-025-1-7000-AR02
MECHANICAL	
SHOP / WAREHOUSE BUILDING HVAC PLAN	YMP-025-1-7000-HV01
SHOP / WAREHOUSE BUILDING PLUMBING PLAN	YMP-025-1-7000-PP01

MAIN WAREHOUSE BLDG # 7001

ARCHITECTURAL	
MAIN WAREHOUSE BUILDING FLOOR PLANS	YMP-025-1-7001-AR01
MAIN WAREHOUSE BUILDING ELEVATIONS & SECTION	YMP-025-1-7001-AR02
MECHANICAL	
MAIN WAREHOUSE BUILDING HVAC PLAN	YMP-025-1-7001-HV01
MAIN WAREHOUSE BUILDING PLUMBING PLAN	YMP-025-1-7001-PP01

CHANGE HOUSE BLDG # 7002

ARCHITECTURAL	
CHANGE HOUSE BUILDING FLOOR PLAN	YMP-025-1-7002-AR01
CHANGE HOUSE BUILDING ELEVATIONS & SECTION	YMP-025-1-7002-AR02
MECHANICAL	
CHANGE HOUSE BUILDING HVAC PLAN	YMP-025-1-7002-HV01
CHANGE HOUSE BUILDING PLUMBING PLAN	YMP-025-1-7002-PP01

SURFACE DATA BLDG # 7003

ARCHITECTURAL	
SURFACE DATA BUILDING FLOOR PLAN	YMP-025-1-7003-AR01
SURFACE DATA BUILDING ELEVATIONS & SECTION	YMP-025-1-7003-AR02
MECHANICAL	
SURFACE DATA BUILDING HVAC PLAN	YMP-025-1-7003-HV01
SURFACE DATA BUILDING PLUMBING PLAN	YMP-025-1-7003-PP01

PORTAL CONTROL CENTER BLDG # 7004

ARCHITECTURAL	
PORTAL CONTROL CENTER BLDG PLAN SECTION & ELEV'S	YMP-025-1-7004-AR01
MECHANICAL	
PORTAL CONTROL CENTER BLDG HVAC PLAN	YMP-025-1-7004-HV01
PORTAL CONTROL CENTER BLDG PLUMBING PLAN	YMP-025-1-7004-PP01

TEST SUPPORT BLDG # 7005

ARCHITECTURAL	
TEST SUPPORT BUILDING FLOOR PLAN	YMP-025-1-7005-AR01
TEST SUPPORT BUILDING ELEVATIONS & SECTION	YMP-025-1-7005-AR02
MECHANICAL	
TEST SUPPORT BUILDING HVAC PLAN	YMP-025-1-7005-HV01
TEST SUPPORT BUILDING PLUMBING PLAN	YMP-025-1-7005-PP01
TEST SUPPORT BUILDING PLUMBING DETAIL	YMP-025-1-7005-PP02

ELECT SUBSTATION CONTROL BLDG # 7006

ARCHITECTURAL	
ELECT SUBSTATION CONTROL BLDG PLAN & ELEV'S	YMP-025-1-7006-AR01

ELECTRICAL SWITCHGEAR BUILDING # 7007

ARCHITECTURAL	
ELECTRICAL SWITCHGEAR BUILDING PLAN & ELEV'S	YMP-025-1-7007-AR01

SI APERTURE CARD

Also Available On Aperture Card

9305250071 - 113

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

DESIGN	MJH
DRAWN	MJH
CHECKED	
DEC	
DESIGN ENGINEER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT

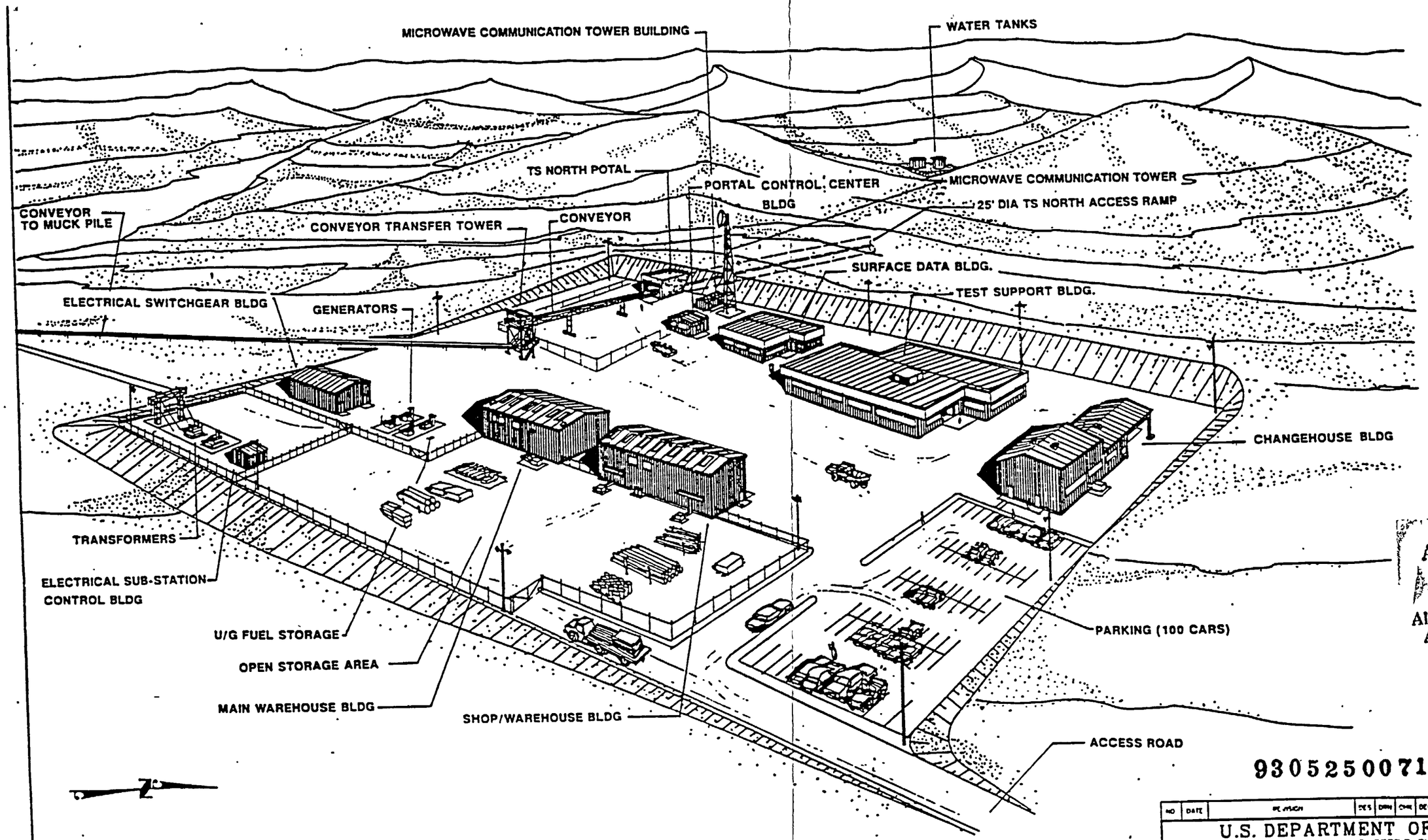
DRAWING INDEX

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-GE02 | REV. 0

YMPO APPROVED | DATE

FOR YMPO USE ONLY 1.2.0.3.1.1

Wednesday 22 12:14 47 1991, PDT Part name = \\ysc2\ymp01G0.DRW



SI
APERTURE
CARD

Also Available On
Aperture Card

9305250071 -114

NO	DATE	REVISION	DES	DRN	CHK	DES	DM	VMP	ENV	SAF	QA	TPO	TMPC

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

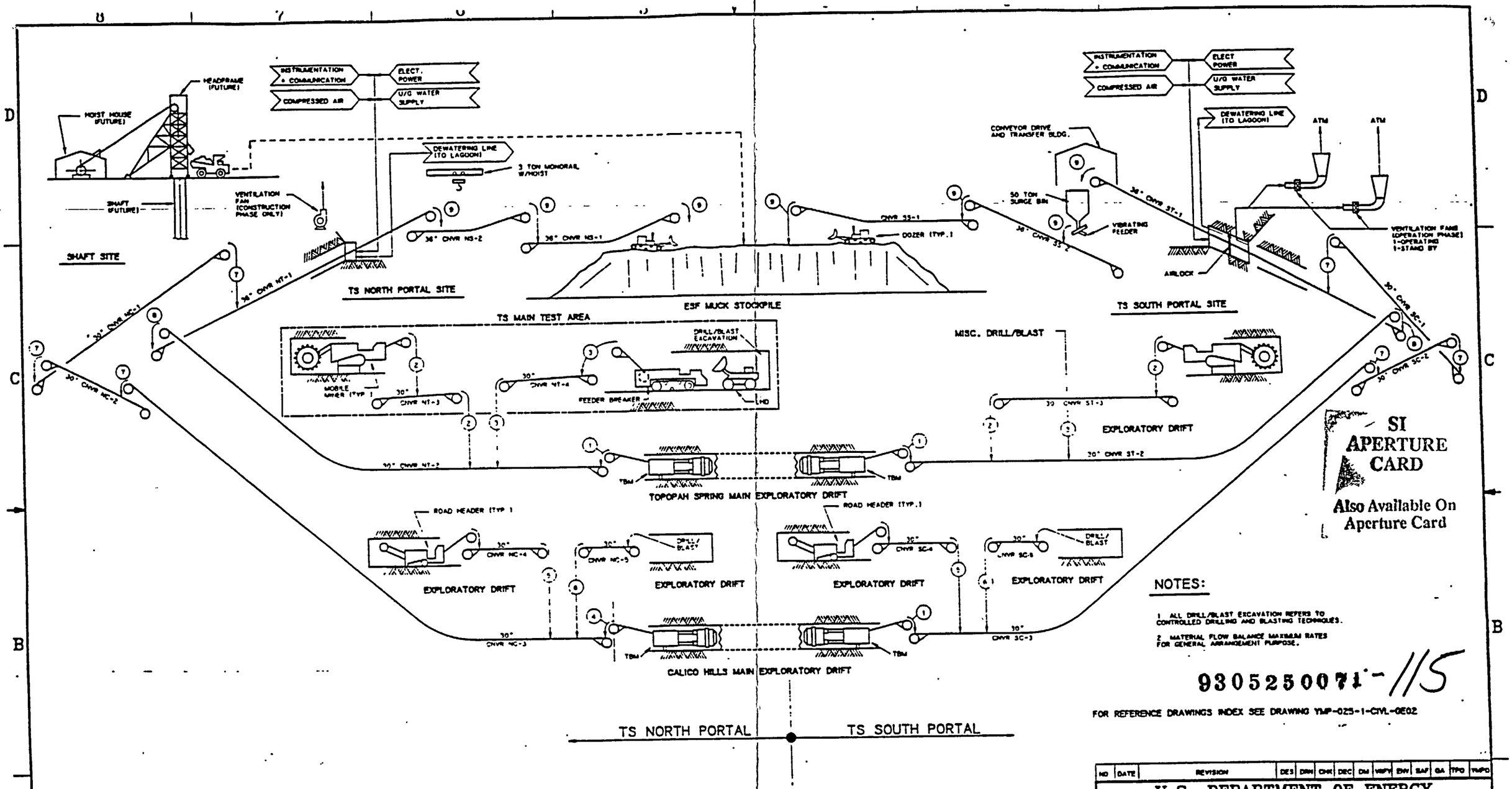
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT

PERSPECTIVE

DESIGN	PZ
DRAWN	PZ
CHECKED	
DES	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	
ADS NO	L26311
CI NO	

SUBMITTED BY: DATE: DRAWING NO. YMP-025-1-ARCH-GA01 REV 0

YMPO APPROVED: DATE: SHT



SI APERTURE CARD

Also Available On Aperture Card

NOTES:

1. ALL DRILL/BLAST EXCAVATION REFERS TO CONTROLLED DRILLING AND BLASTING TECHNIQUES.
2. MATERIAL FLOW BALANCE MAXIMUM RATES FOR GENERAL ARRANGEMENT PURPOSE.

9305250071-115

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

MATERIAL FLOW BALANCE

	1	2	3	4	5	6	7	8	9
TON/HR. (NOMINAL)	302	75	94	169	71	60	300	471	771
TON/HR. (DESIGN)	332	83	103	186	78	66	330	518	848
MAX. LUMP SIZE (INCHES)	-6"	-6"	-6"	-6"	-6"	-6"	-6"	-6"	-6"
MATERIAL DENSITY (#/FT³) (BROKEN)	98	98	98	98	98	98	98	98	98
TEMPERATURE (°F)	AMB	AMB	AMB	AMB	AMB	AMB	AMB	AMB	AMB

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VMPV	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

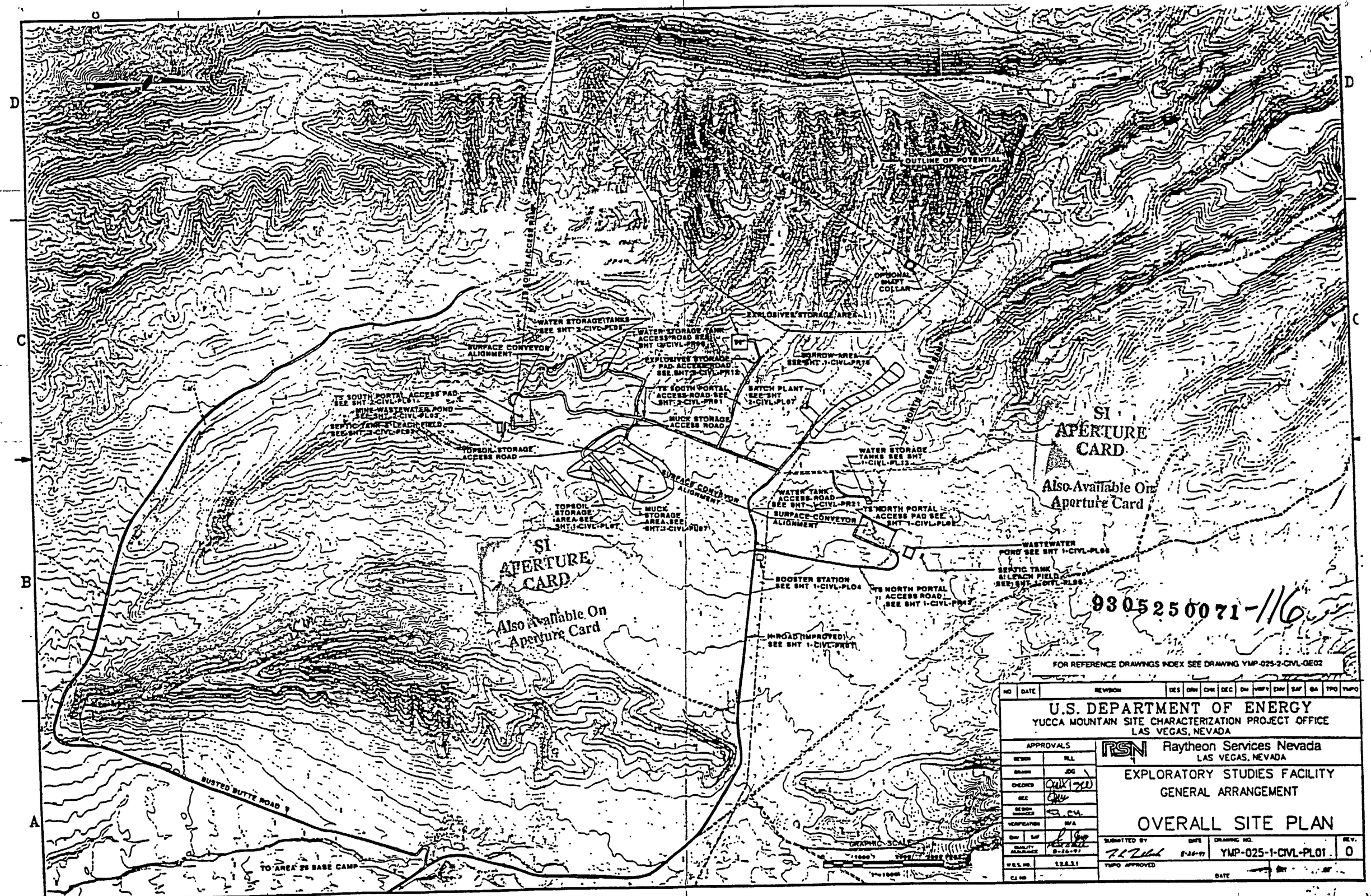
APPROVALS	
DESIGN	MBT
DRAWN	TAN
CHECKED	
DEC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

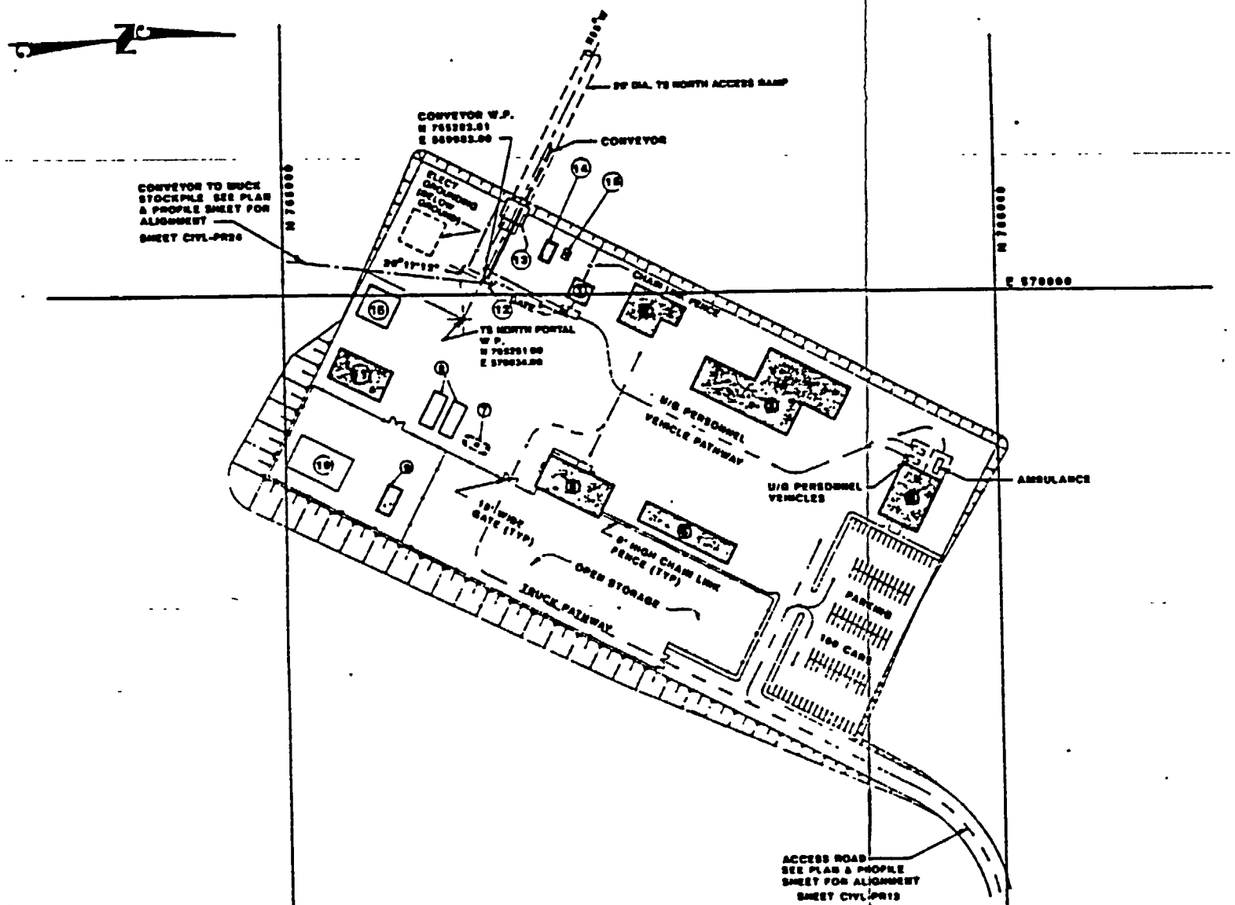
EXPLORATORY STUDIES FACILITY
GENERAL ARRANGEMENT
TS NORTH & TS SOUTH PORTALS
MATERIAL FLOW DIAGRAM

SUBMITTED BY | DATE 9-26-91 | DRAWING NO. YMP-025-1-ARCH-GA02 | REV. 0

YMPO APPROVED | DATE | SHT OF

Plotted : Thu Aug 22 07:37:13 1991, PDT PART name: YMP0143.DRW


OUTLINE OF POTENTIAL DEPRESSURIZATION
OPTIONAL SHAFT COLLAR
EXPLOSIVES STORAGE AREA
WATER STORAGE TANKS SEE SHT 2-CIVL-PL05
WATER STORAGE TANK ACCESS ROAD SEE SHT 1-CIVL-PR09
SURFACE CONVEYOR ALIGNMENT
EXPLOSIVES STORAGE PAD ACCESS ROAD SEE SHT 2-CIVL-PR12
BORROW AREA SEE SHT 1-CIVL-PR14
BATCH PLANT SEE SHT 2-CIVL-PL07
TS SOUTH PORTAL ACCESS ROAD SEE SHT 2-CIVL-PR01
TS SOUTH PORTAL ACCESS PAD SEE SHT 2-CIVL-PL01
MINE WASTEWATER POND SEE SHT 2-CIVL-PL03
SEPTIC TANK & LEACH FIELD SEE SHT 2-CIVL-PL03
MUCK STORAGE ACCESS ROAD
TOPSOIL STORAGE ACCESS ROAD
NORTH ACCESS RAMP
WATER STORAGE TANKS SEE SHT 1-CIVL-PL13
SI APERTURE CARD
Also Available On Aperture Card
WATER TANK ACCESS ROAD SEE SHT 1-CIVL-PR21
SURFACE CONVEYOR ALIGNMENT
TS NORTH PORTAL ACCESS PAD SEE SHT 1-CIVL-PL02
TOPSOIL STORAGE AREA SEE SHT 1-CIVL-PL07
MUCK STORAGE AREA SEE SHT 1-CIVL-PL07
WASTEWATER POND SEE SHT 1-CIVL-PL05
SEPTIC TANK & LEACH FIELD SEE SHT 1-CIVL-PL05
BOOSTER STATION SEE SHT 1-CIVL-PL04
TS NORTH PORTAL ACCESS ROAD SEE SHT 1-CIVL-PR17
H-ROAD (IMPROVED) SEE SHT 1-CIVL-PR11
SI APERTURE CARD
Also Available On Aperture Card
93052500 71-116
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-2-CIVL-GE02
BUSTED BUTTE ROAD
TO AREA 25 BASE CAMP
GRAPHIC SCALE
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA
APPROVALS
DESIGN RLL
DRAWN JDG
CHECKED
REC
DESIGN MANAGER
VERIFICATION N/A
QUALITY ASSURANCE 8-26-97
W.B.S. NO. 1.2.8.3.1
C.I. NO.
Raytheon Services Nevada
LAS VEGAS, NEVADA
EXPLORATORY STUDIES FACILITY
GENERAL ARRANGEMENT
OVERALL SITE PLAN
SUBMITTED BY
DATE 8-26-97
DRAWING NO. YMP-025-1-CIVL-PL01
REV. 0
YMPO APPROVED
DATE



PLAN

SCALE: 1"=100'

GRAPHIC SCALE

100 200 300 FEET

1"=100'

LEGEND

1. PORTAL CONTROL CENTER BUILDING
2. SURFACE DATA BUILDING
3. TEST SUPPORT BUILDING
4. CHANGEHOUSE BUILDING
5. SHOP/WAREHOUSE BUILDING
6. MAIN WAREHOUSE BUILDING
7. UNDERGROUND FUEL STORAGE
8. GENERATORS PADS
9. ELECTRICAL SUB-STATION CONTROL BUILDING
10. TRANSFORMER PAD
11. ELECTRICAL SWITCHGEAR BUILDING
12. CONVEYOR TRANSFER TOWER
13. NORTH PORTAL
14. MICROWAVE COMMUNICATION BLDG.
15. MICROWAVE COMMUNICATION TOWER
16. AIR COMPRESSOR PAD

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GC02

9305250071 -117

NO	DATE	REVISION	DES	DRN	CHK	DEC	SM	VRFY	DSW	SAF	GA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	JDG
CHECKED	
DEC	
DESIGN SUPERVISOR	B. CH.
VERIFICATION	N/A
SAF / SAF	
QUALITY ASSURANCE	
W.B.S. NO	1.2.6.3.1.1
C.I. NO	

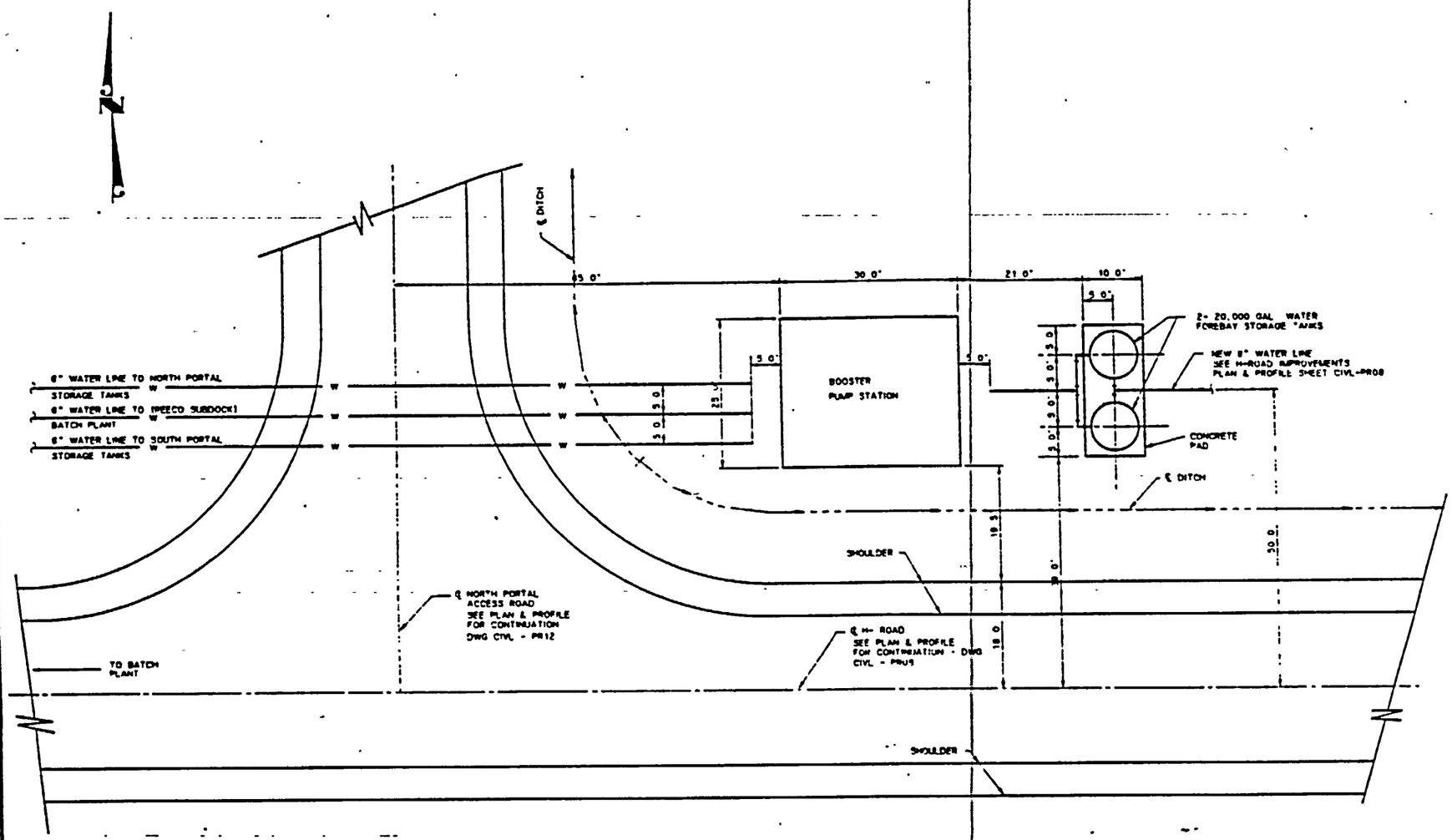
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SURFACE
SITE PLAN

SUBMITTED BY: DATE: 8-26-94

DRAWING NO. YMP-025-1-CIVL-PL02 REV. 0

YMPO APPROVED DATE



BOOSTER PUMP SITE PLAN

SCALE: 1" = 10'

GRAPHIC SCALE

0 10 20 30 FEET

1" = 10'

SI APERTURE CARD

Also Available On Aperture Card

93052500 71 - 118

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

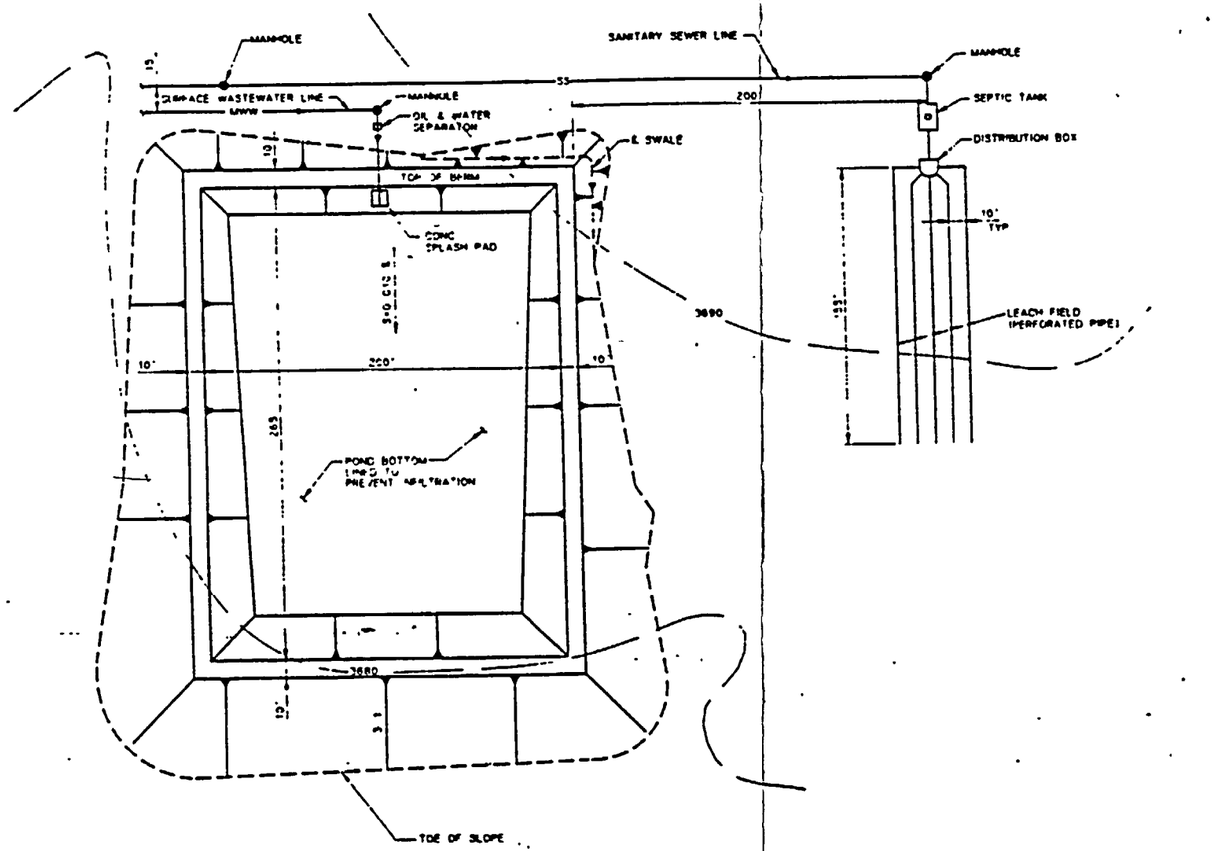
APPROVALS	
DESIGN	RLL
DRAWN	JMK
CHECKED	
DEC	
DESIGN MANAGER	CH.
VERIFICATION	N/A
ENV / SAF	SAF
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
BOOSTER PUMP STATION
SITE PLAN

SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-CIVL-PL04	0

YMPO APPROVED DATE

Plotted: Wed Aug 21 08:03:00 1991, PDT Part name: TOM DWG



WASTE WATER FACILITIES SITE & GRADING PLAN

SCALE: 1"=40'

GRAPHIC SCALE

0 40 80 120 FEET

1" = 40'

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-0E02

9305250071 -119

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	JMK / MJH
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
NORTH PORTAL GENERAL ARRANGEMENT
WASTE WATER FACILITIES
GRADING PLAN

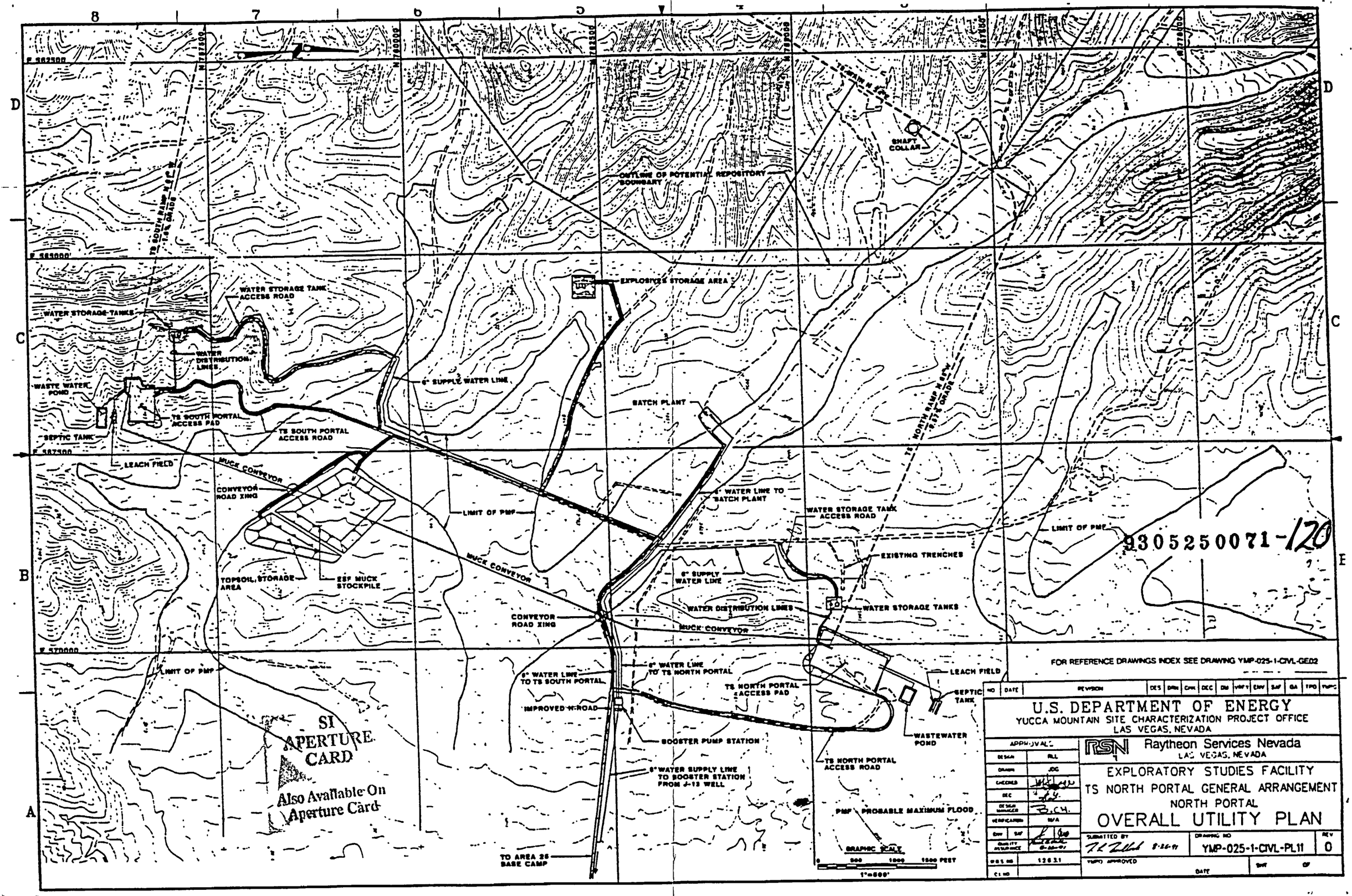
SUBMITTED BY: 7-15-93

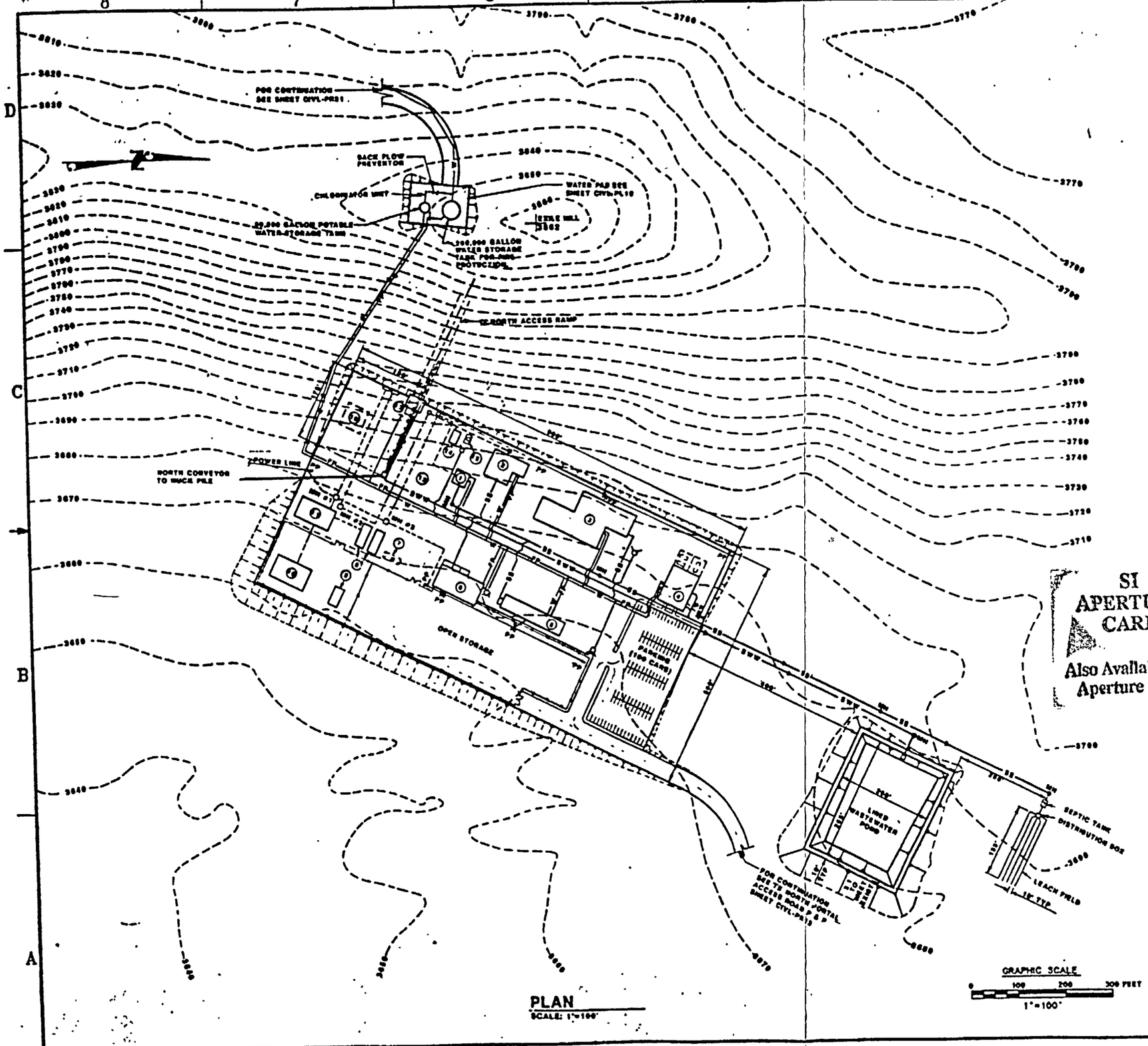
DRAWING NO. YMP-025-1-CIVL-PL06 REV. 0

YMPO APPROVED DATE SHT

1.2.6.3.1.1

SI APERTURE CARD
Also Available On Aperture Card


SHAFT COLLAR
OUTLINE OF POTENTIAL REPOSITORY BOUNDARY
EXPLOSIVES STORAGE AREA
WATER STORAGE TANK ACCESS ROAD
WATER STORAGE TANKS
WATER DISTRIBUTION LINES
6" SUPPLY WATER LINE
WASTE WATER POND
TS SOUTH PORTAL ACCESS PAD
TS SOUTH PORTAL ACCESS ROAD
SEPTIC TANK
LEACH FIELD
MUCK CONVEYOR
CONVEYOR ROAD XING
LIMIT OF PMP
BATCH PLANT
6" WATER LINE TO BATCH PLANT
WATER STORAGE TANK ACCESS ROAD
EXISTING TRENCHES
6" SUPPLY WATER LINE
WATER DISTRIBUTION LINES
WATER STORAGE TANKS
TOPSOIL STORAGE AREA
ESF MUCK STOCKPILE
6" WATER LINE TO TS SOUTH PORTAL
6" WATER LINE TO TS NORTH PORTAL
TS NORTH PORTAL ACCESS PAD
IMPROVED H-ROAD
BOOSTER PUMP STATION
6" WATER SUPPLY LINE TO BOOSTER STATION FROM J-13 WELL
TS NORTH PORTAL ACCESS ROAD
WASTEWATER POND
PMP PROBABLE MAXIMUM FLOOD
TO AREA 25 BASE CAMP
GRAPHIC SCALE
1"=600'
SI APERTURE CARD
Also Available On Aperture Card
9305250071-120
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA
Raytheon Services Nevada
LAS VEGAS, NEVADA
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
NORTH PORTAL
OVERALL UTILITY PLAN
YMP-025-1-CIVL-PL11
0



PLAN
SCALE: 1"=100'

LEGEND:

1. PORTAL CONTROL CENTER BUILDING
2. SURFACE DATA BUILDING
3. TEST SUPPORT BUILDING
4. CHANGEHOUSE BUILDING
5. SHOP/WAREHOUSE BUILDING
6. MAIN WAREHOUSE BUILDING
7. UNDERGROUND FUEL STORAGE
8. GENERATORS PADS
9. ELECTRICAL SUB-STATION CONTROL BUILDING
10. TRANSFORMER PAD
11. ELECTRICAL SWITCHGEAR BUILDING
12. CONVEYOR TRANSFER TOWER
13. NORTH PORTAL
14. MICROWAVE COMMUNICATION BUILDING
15. MICROWAVE COMMUNICATION TOWER
16. BELOW GRADE GROUNDING GRID

FP — FIRE PROTECTION WATER LINE
SWW — SURFACE WASTEWATER LINE
SS — SANITARY SEWER LINE
W — POTABLE WATER LINE
SM — SANITARY SEWER MANHOLE
FIRE HYDRANT
EM — ELECTRICAL MANHOLE
PP — POWER POLE W/GUY ANCHORS

SI APERTURE CARD
Also Available On Aperture Card

9305250071-121

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	YMP'S	ENV	S&F	GA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

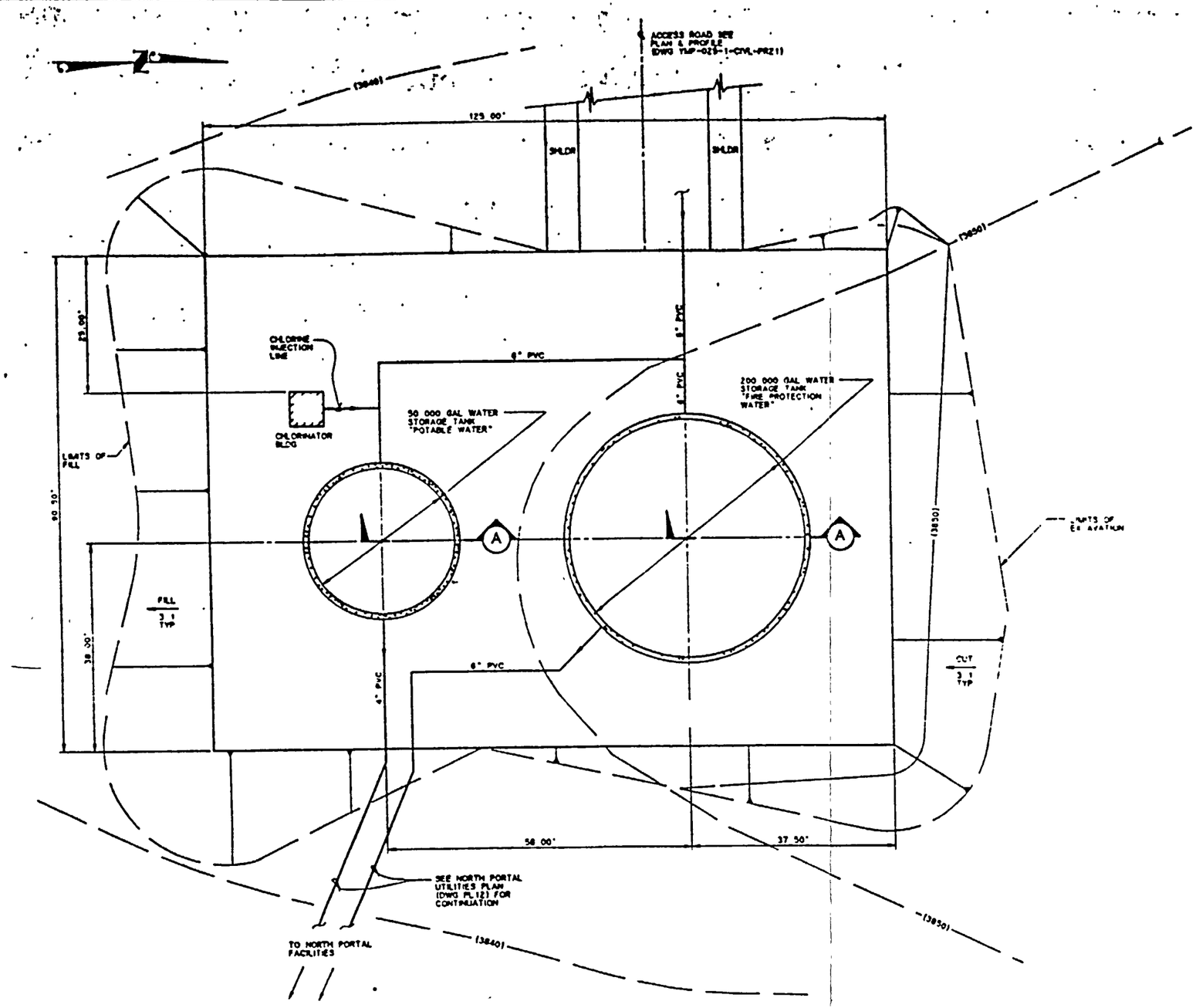
APPROVALS

DESIGN	RLL
DRAWN	JDC
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / S&F	
QUALITY ASSURANCE	8-26-94
SDS NO	1.2.8.2.1
CS NO	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
NORTH PORTAL
UTILITIES PLAN

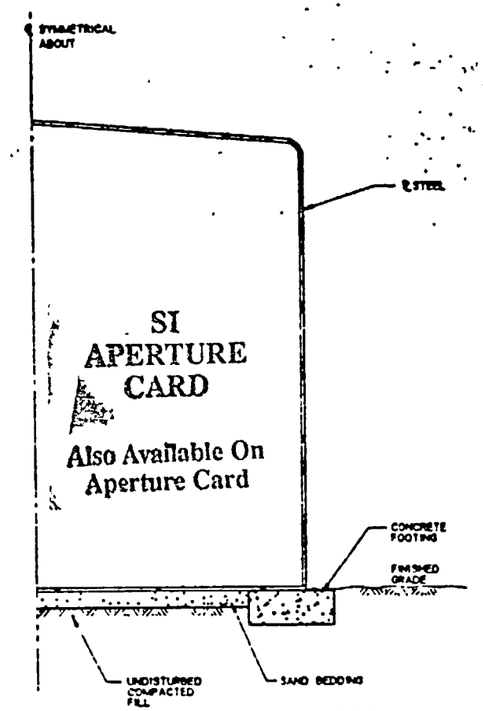
SUBMITTED BY: 8-26-94
DRAWING NO. YMP-025-1-CIVL-PL12
REV. 0
YMPO APPROVED
DATE
SHT 1 OF

9305250071-121



WATER STORAGE TANK SITE & GRADING PLAN

SCALE: 1" = 10



NOTE
SEE PLAN FOR TANK CAPACITIES

SECTION (A)
NOT TO SCALE

9305250071 -122

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE
0 10 20 30 FEET
1"=10'

NO	DATE	REVISION	DES	DRW	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

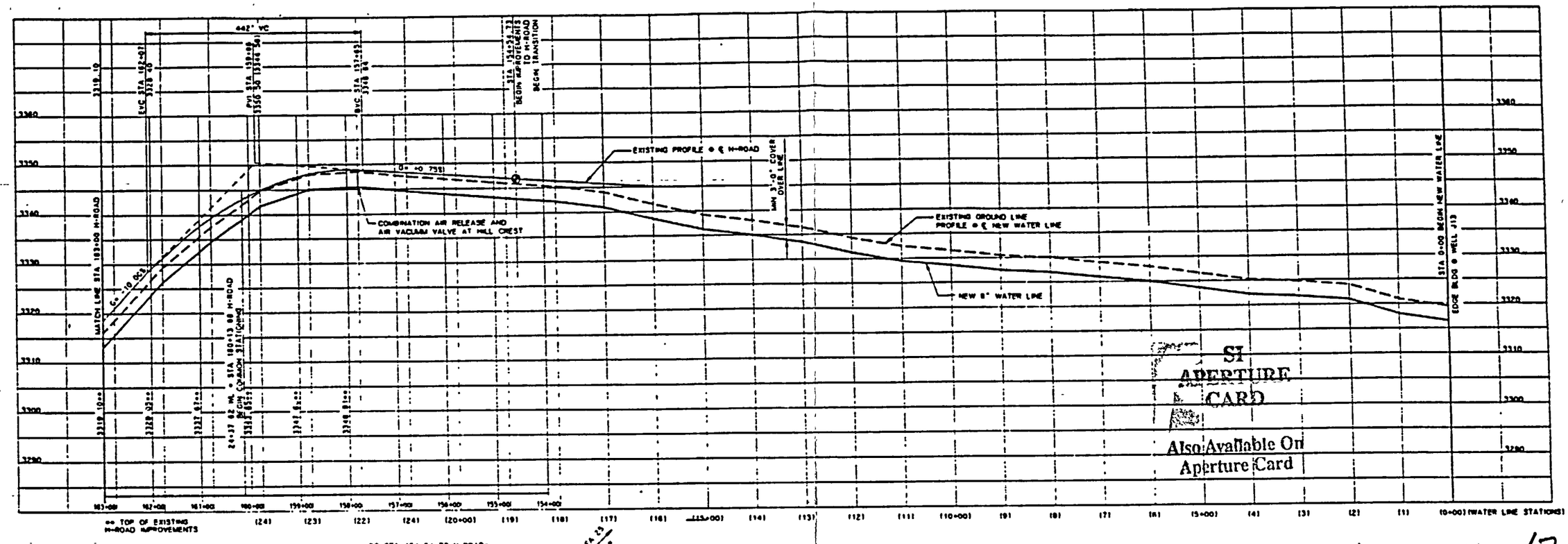
Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLL
DRAWN	CLG
CHECKED	
DEC	
DESIGN MANAGER	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
WATER STORAGE TANK
SITE & GRADING PLAN

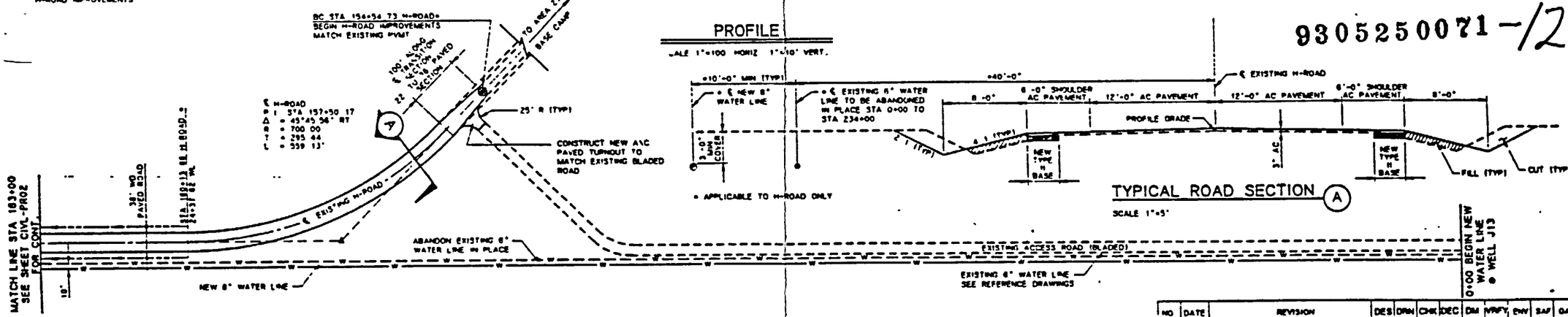
SUBMITTED BY: R.L. Bell DATE: 8-21-91
DRAWING NO.: YMP-025-1-CIVL-PL13 REV. 0
YMPO APPROVED DATE
SHT OF

Plotted: Wed Aug 21 10:41:30 1991, PDT Part name: ymp0050 DRW -U



PROFILE

SCALE 1"=100 HORIZ 1"=10' VERT.



PLAN

SCALE 1"=100'

TYPICAL ROAD SECTION (A)

SCALE 1"=5'

NOTE:

1. EXACT LOCATION OF UTILITIES SHALL BE VERIFIED BY CONTRACTOR IN THE FIELD BEFORE CONSTRUCTION.

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

9305250071-123

SI APERTURE CARD

Also Available On Aperture Card

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	MRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	MJP
CHECKED	
DEC	
DESIGN MANAGER	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

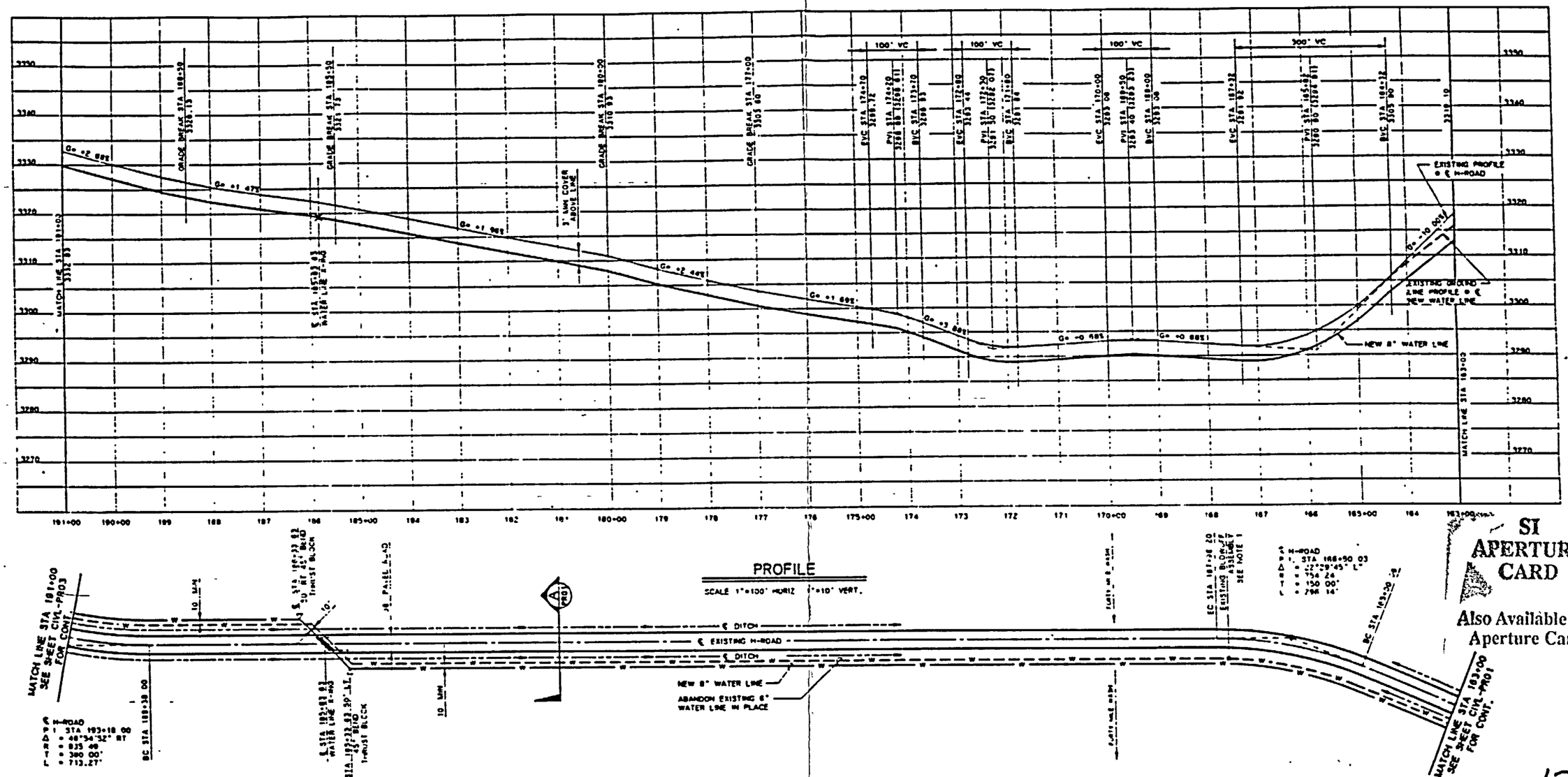
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

SUBMITTED BY	DATE	DRAWING NO.	REV.
	9-21-91	YMP-025-1-CIVL-PR01	0

YMPO APPROVED DATE SHT OF

PCN YMP0088 9-21-91 1.2.6.3.1.1

Plotting: Wed Aug 21 03:34:23 1991 PDT Part name: ymp0088 UNW



SI APERTURE CARD

Also Available On Aperture Card

9305250071-124

NOTE:

1. EXACT LOCATION OF UTILITIES SHALL BE VERIFIED BY CONTRACTOR IN THE FIELD BEFORE CONSTRUCTION.

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	R.L.
DRAWN	M.P.
CHECKED	
DEC	
DESIGN REVIEWER	
VERIFICATION	N/A
ENV	SAF
QUALITY ASSURANCE	

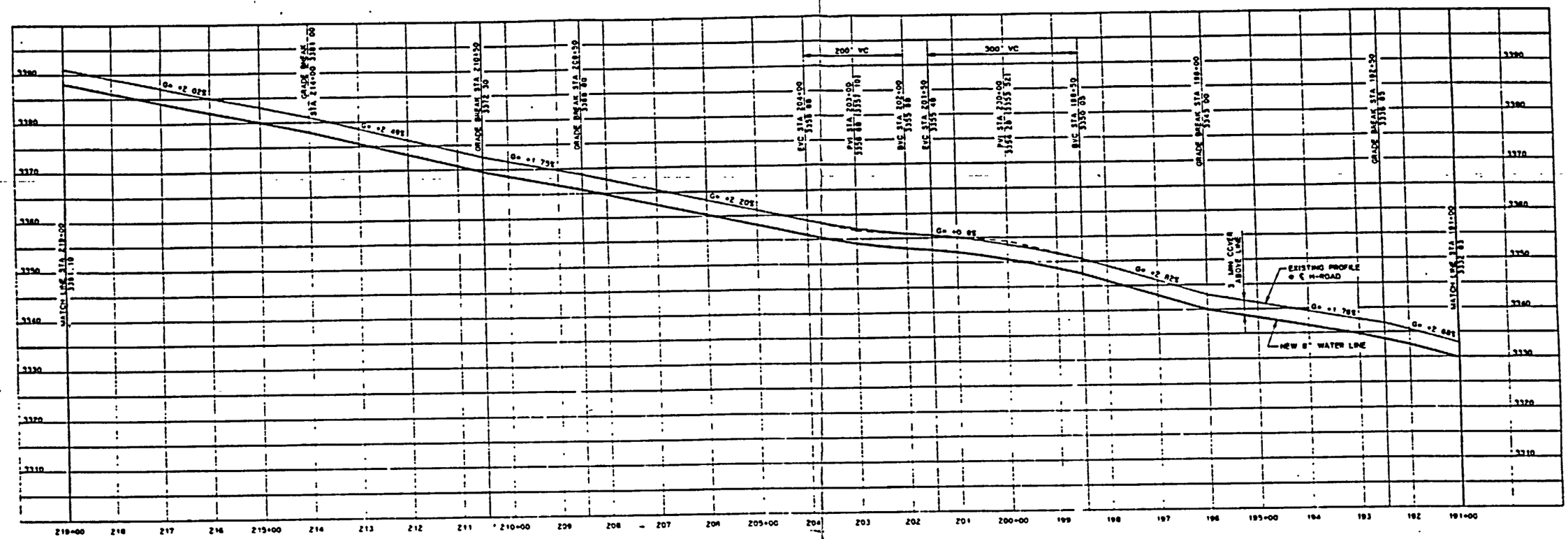
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

SUBMITTED BY	DATE	DRAWING NO	REV.
	8-21-91	YMP-025-1-CIVL-PR02	0

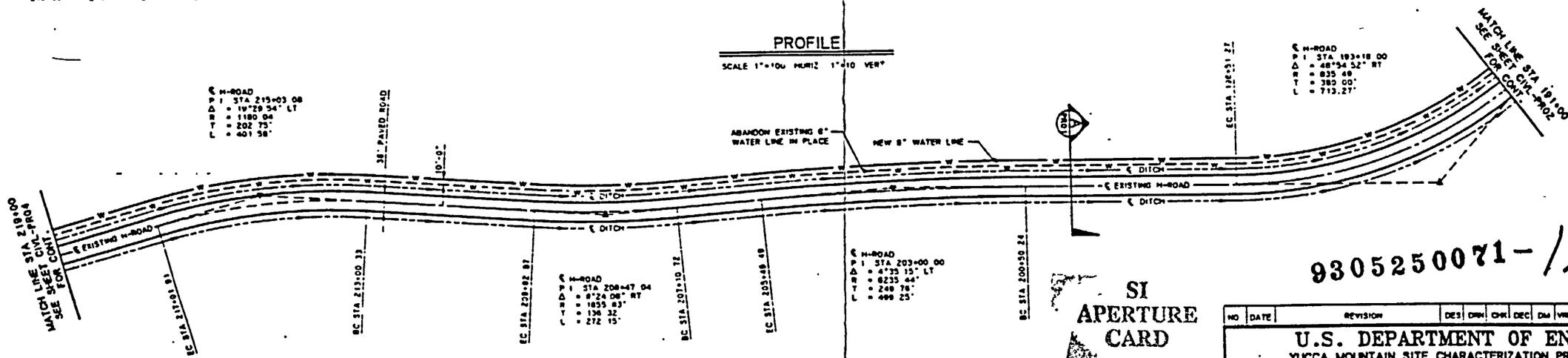
YMPO APPROVED DATE SHT OF

Plotted Wed Aug 21 10:43:46 1991, PDT Part name YMP0069 DRW -



PROFILE

SCALE 1"=100 HORIZ 1"=10 VERT



PLAN

SCALE 1"=100

9305250071-125

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-IND02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	MJP
CHECKED	
DEC	
DESIGN REVIEWER	3.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

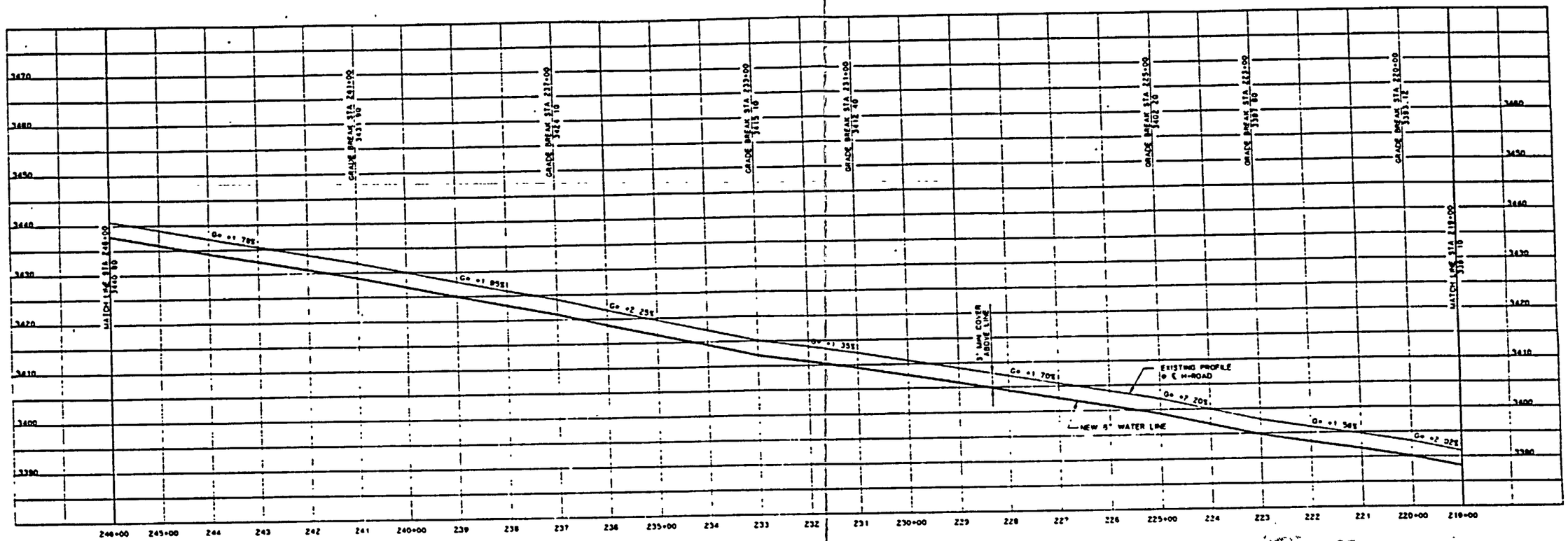
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR03 | REV. 0

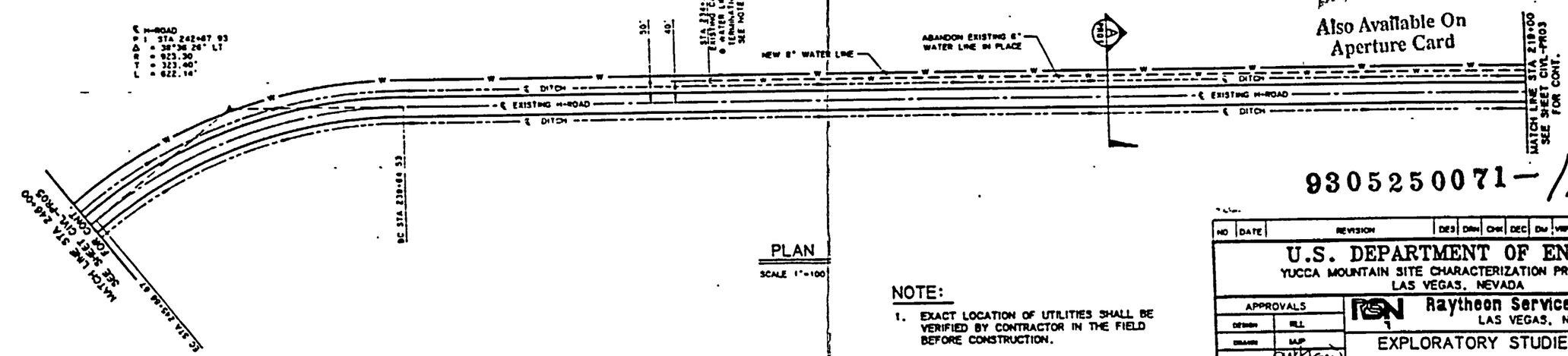
YMPO APPROVED | DATE | SHT OF

Plotted Wed Aug 21 10:47:15 1991, PDT Part name: YMP0070 DRW -



PROFILE

SCALE 1"=100' HORIZ 1"=10' VERT



PLAN

SCALE 1"=100'

NOTE:

1. EXACT LOCATION OF UTILITIES SHALL BE VERIFIED BY CONTRACTOR IN THE FIELD BEFORE CONSTRUCTION.

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

SI APERTURE CARD

Also Available On Aperture Card

9305250071-126

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VERIF	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

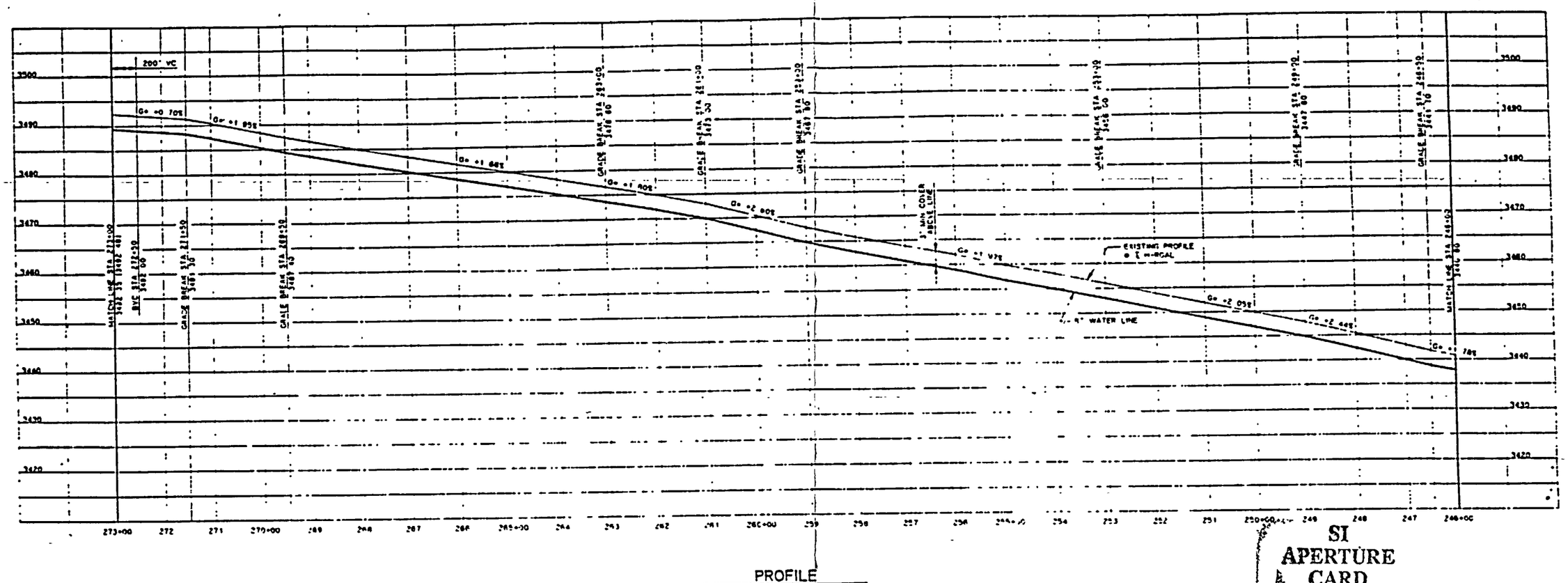
DESIGN	RLL
DRAWN	MJP
CHECKED	
DEC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	8-26-01

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

SUBMITTED BY | DATE 8-21-01 | DRAWING NO. YMP-025-1-CIVL-PR04 | REV. 0

YMPO APPROVED | DATE | SHT OF

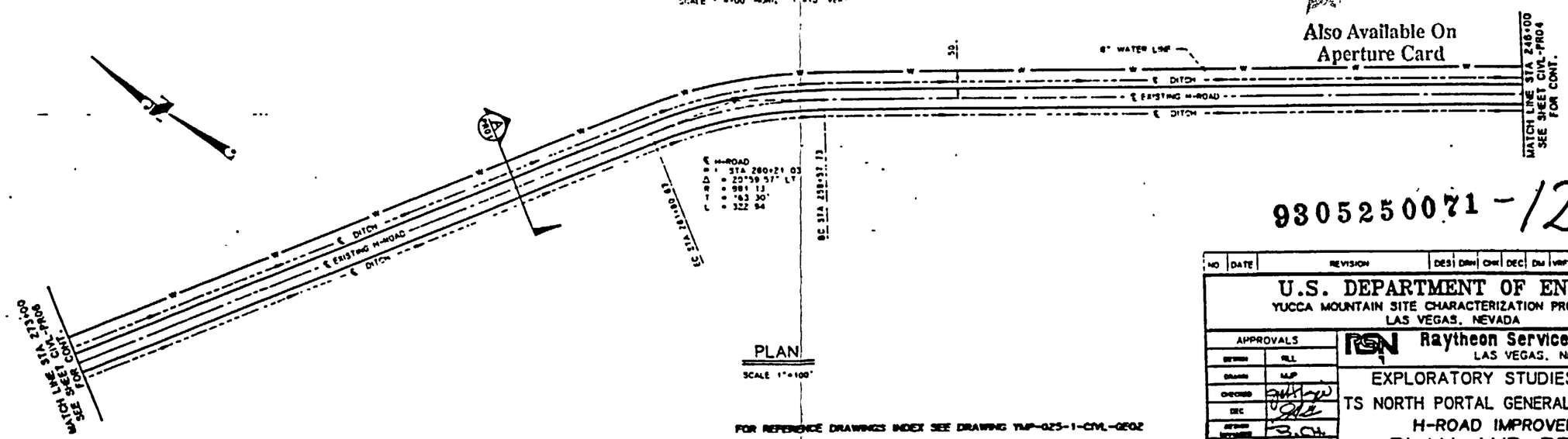


PROFILE

SCALE 1"=100' HORIZ 1"=10' VERT

SI APERTURE CARD

Also Available On Aperture Card



PLAN

SCALE 1"=100'

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

9305250071 -127

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	JSAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

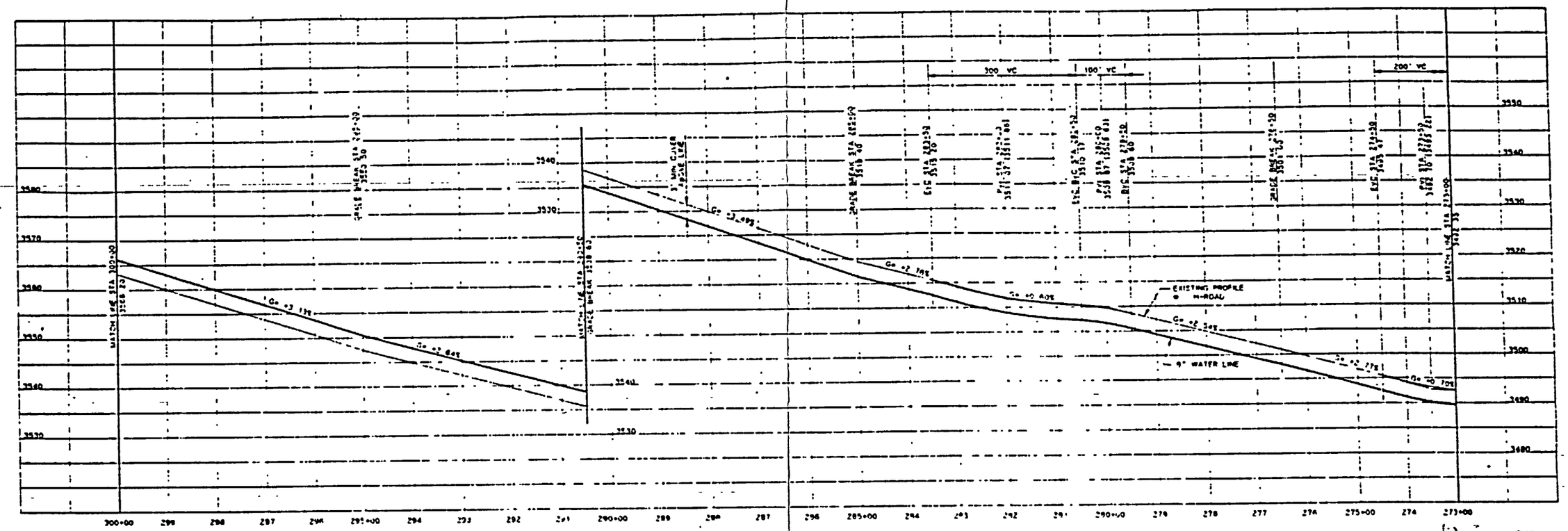
APPROVALS	
DESIGN	RLL
DRAWN	MJP
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

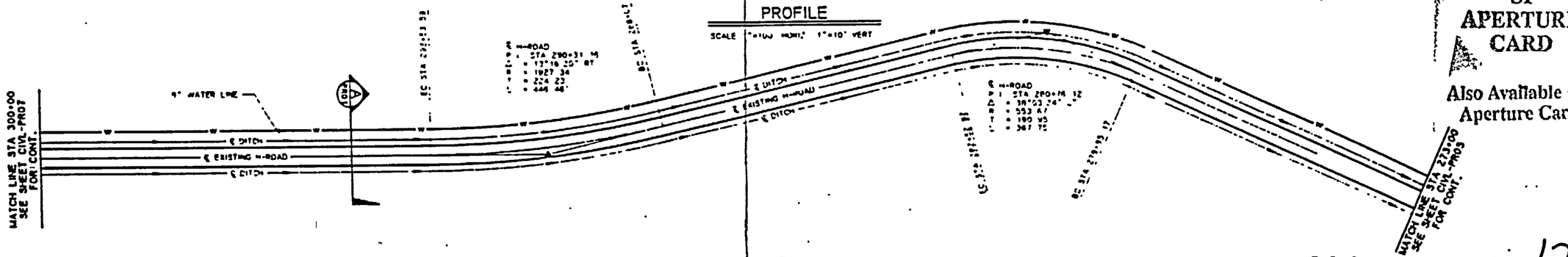
SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-CIVL-PR05	0

YMPO APPROVED DATE SHT OF



PROFILE

SCALE 1"=100' HORIZ, 1"=10' VERT



PLAN

SCALE 1"=100'

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

SI APERTURE CARD

Also Available On Aperture Card

9305250071-128

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	WSPY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLL
DRAWN	MJP
CHECKED	
REC	
DESIGN MANAGER	S.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

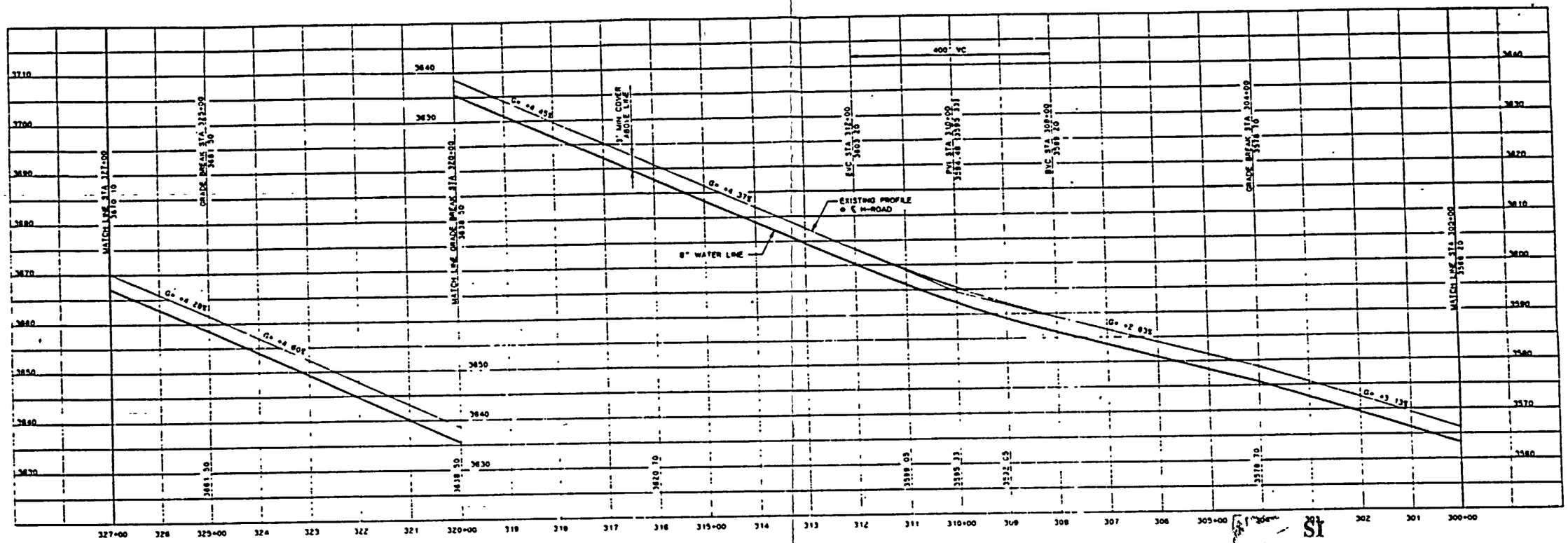
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO YMP-025-1-CIVL-PR06 | REV. 0

YMPO APPROVED | DATE | SHT OF

FCN YMP0073 9-21-01

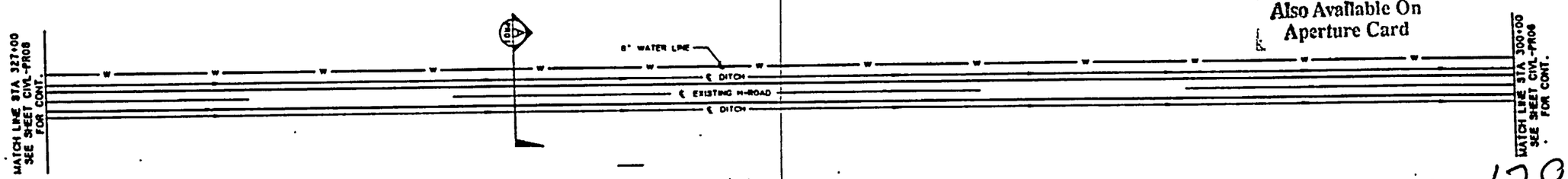


PROFILE

SCALE 1"=100' HORIZ 1"=10' VERT

SI
APERTURE
CARD

Also Available On
Aperture Card



9305250071-129

PLAN

SCALE 1"=100'

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENW	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	R.L.
DRAWN	M.P.
CHECKED	
DEC	
DESIGN ENGINEER	B.CH.
VERIFICATION	N/A
ENW SAF	
QUALITY ASSURANCE	

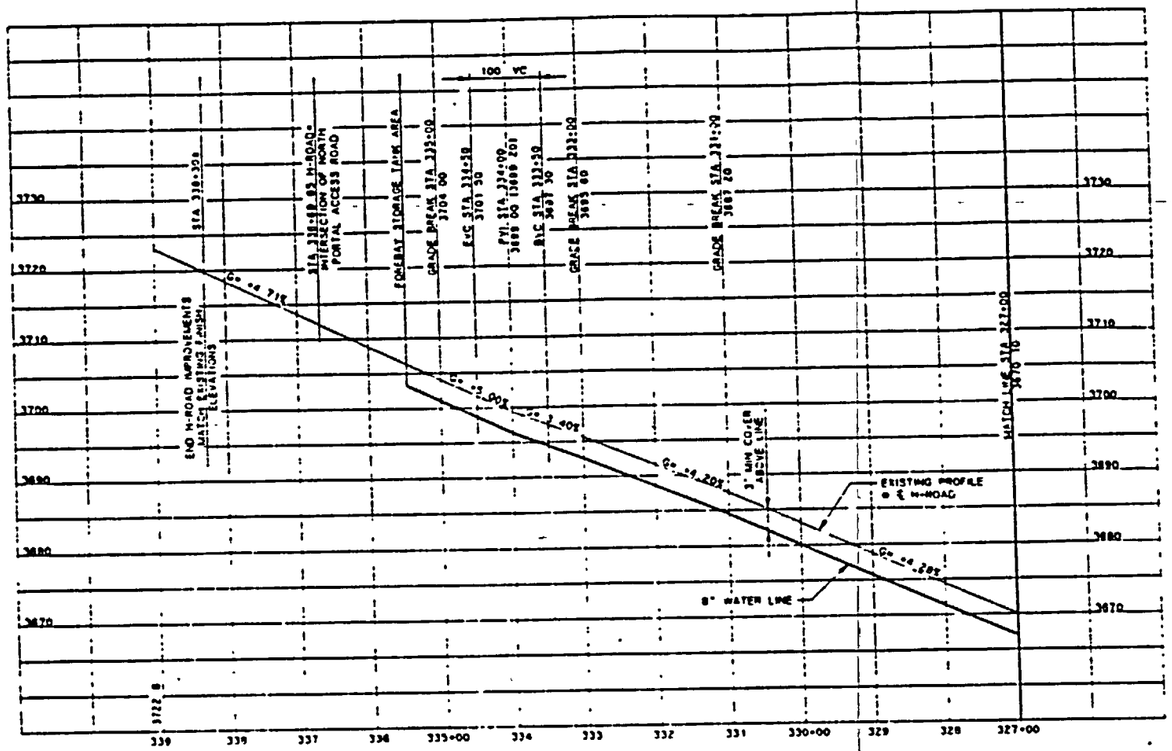
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR07 | REV. 0

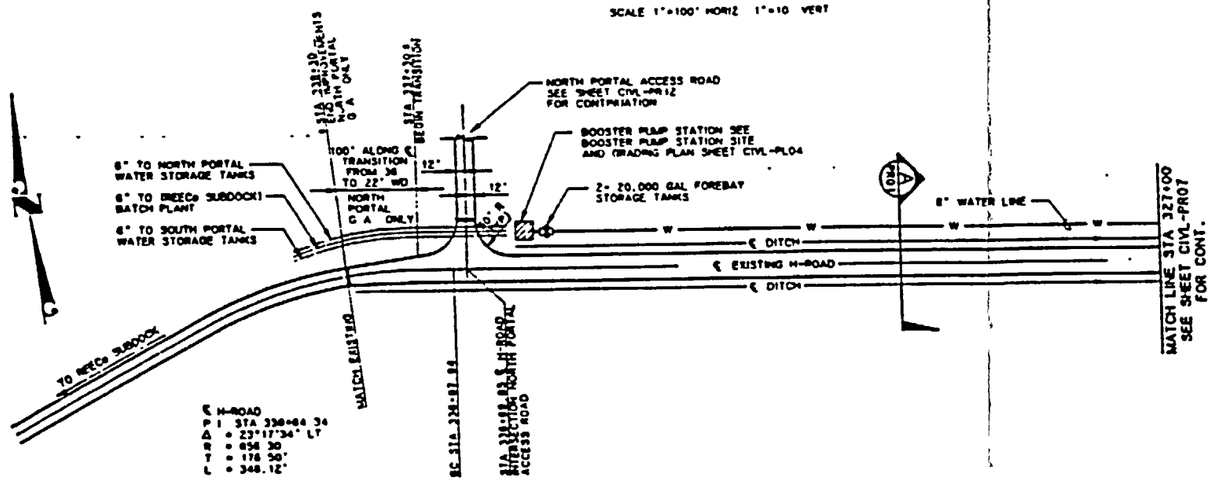
YMPO APPROVED | DATE | SHT OF

Plotted : Wed Aug 21 13:23:28 1991 PDT Pen4 name YMP0024.DRW



PROFILE

SCALE 1"=100' HORIZ 1"=10' VERT



PLAN

SCALE 1"=100'

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

SI APERTURE CARD

Also Available On Aperture Card

9305250071-130

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VERIF	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	MJP
CHECKED	
DEC	
DESIGN REVIEWER	B. CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

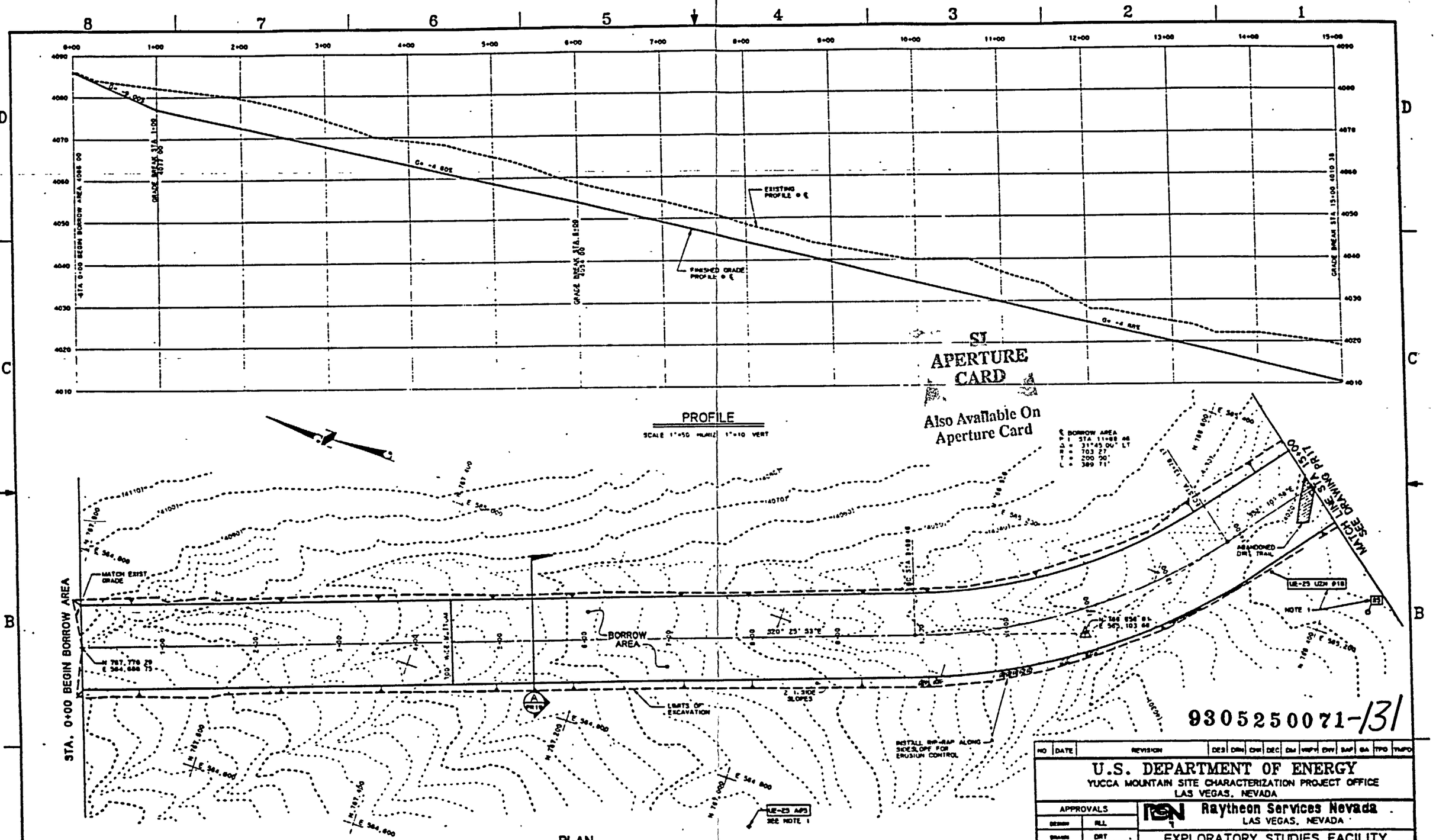
Raytheon Services Nevada
LAS VEGAS, NEVADA

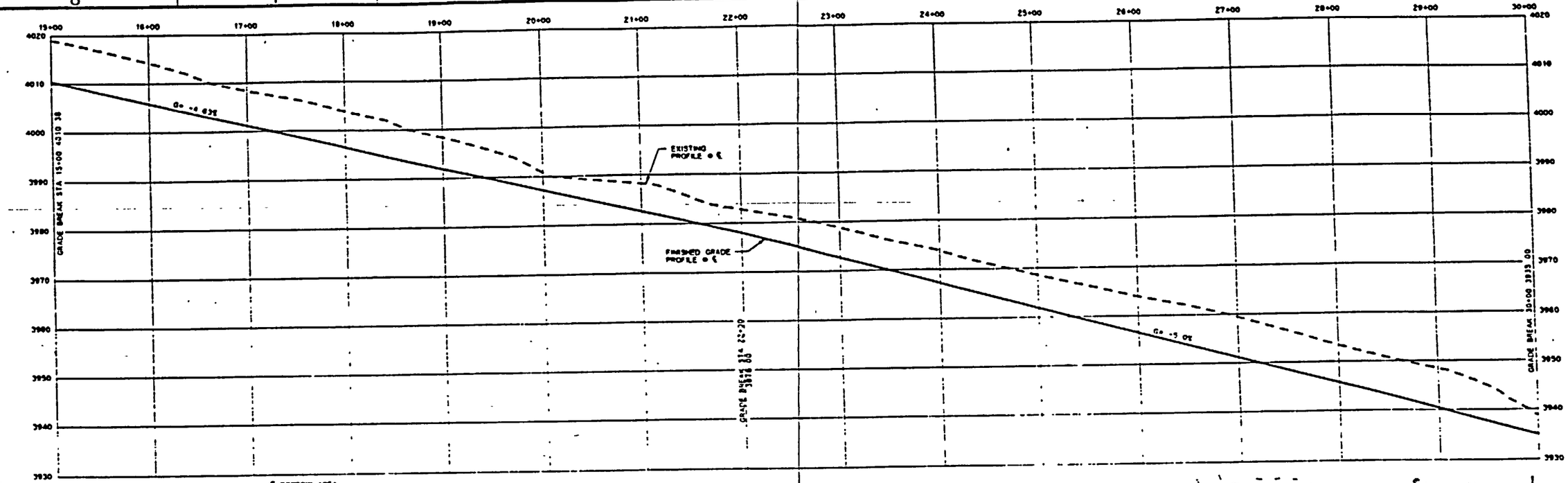
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
H-ROAD IMPROVEMENTS
PLAN AND PROFILE

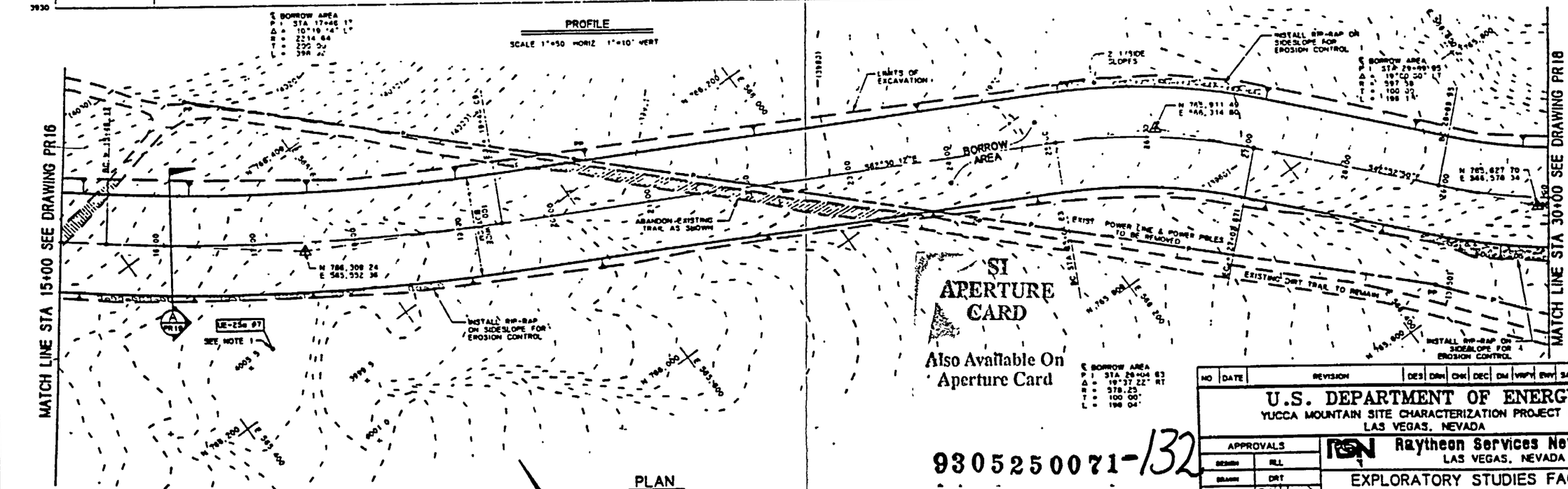
SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR08 | REV. 0

YMPO APPROVED | DATE

Plotted: Wed Aug 21 13:27:28 1991, PDT Part name: YMP0075.DWG


PROFILE
SCALE 1"=50' HORIZ 1"=10' VERT
EXISTING PROFILE ℄
FINISHED GRADE PROFILE ℄
STA 0+00 BEGIN BORROW AREA 4066.00
GRADE BREAK STA. 1+00 4077.00
GRADE BREAK STA. 8+00 4034.00
GRADE BREAK STA. 15+00 4010.38
PLAN
SCALE 1"=50'
STA. 0+00 BEGIN BORROW AREA
MATCH EXIST GRADE
BORROW AREA
LIMITS OF EXCAVATION
2:1 SIDE SLOPES
INSTALL RIP-RAP ALONG SIDESLOPE FOR EROSION CONTROL
ABANDONED DIRT TRAIL
MATCH LINE STA 15+00 SEE DRAWING PR17
℄ BORROW AREA
P.I. STA 11+88.46
Δ = 31°45'00" LT
R = 703.27'
T = 200.90'
L = 389.71'
320° 23' 53" E
N 787,776.29
E 364,686.73
N 786,934.81
E 367,103.64
UE-25 UZH #18
UE-25 AP3
SEE NOTE 1
NOTE 1
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-DE02
GRAPHIC SCALE
0 50 100 150 FEET
1" = 50'
NOTES
1. ITEMS REQUIRE INTERFACE CONTROL MEASURES PER AP3.10Q
2. ALL CONSTRUCTION FEATURES, MATERIALS TEST AND DETAILS SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
3. CONTRACTOR TO REMOVE DESIGNATED MATERIAL FROM SITE AND TRANSFER TO STORAGE AREA AT TOPSOIL STORAGE PAD.
NO DATE REVISION DES DRN CHK DEC DM WMP ENV SAF QA TPO YMPO
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA
APPROVALS
DESIGN RLL
DRAWN DRT
CHECKED
DEC
DESIGN MANAGER B.C.H.
WORKPLACE N/A
ENV SAF
QUALITY ASSURANCE
Raytheon Services Nevada
LAS VEGAS, NEVADA
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
BORROW AREA STA 0+00-15+00
PLAN AND PROFILE
SUBMITTED BY
DATE
DRAWING NO. YMP-025-1-CIVL-PR16
REV. 0
YMPO APPROVED
SI APERTURE CARD
Also Available On Aperture Card
9305250071-131





SI APERTURE CARD

Also Available On Aperture Card

9305250071-132

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NOTES

1. ITEMS REQUIRE INTERFACE CONTROL MEASURES PER AP3.10Q
2. ALL CONSTRUCTION FEATURES, MATERIALS TEST AND DETAILS SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
3. CONTRACTOR TO REMOVE DESIGNATED MATERIAL FROM SITE AND TRANSFER TO STORAGE AREA AT TOPSOIL STORAGE PAD.

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

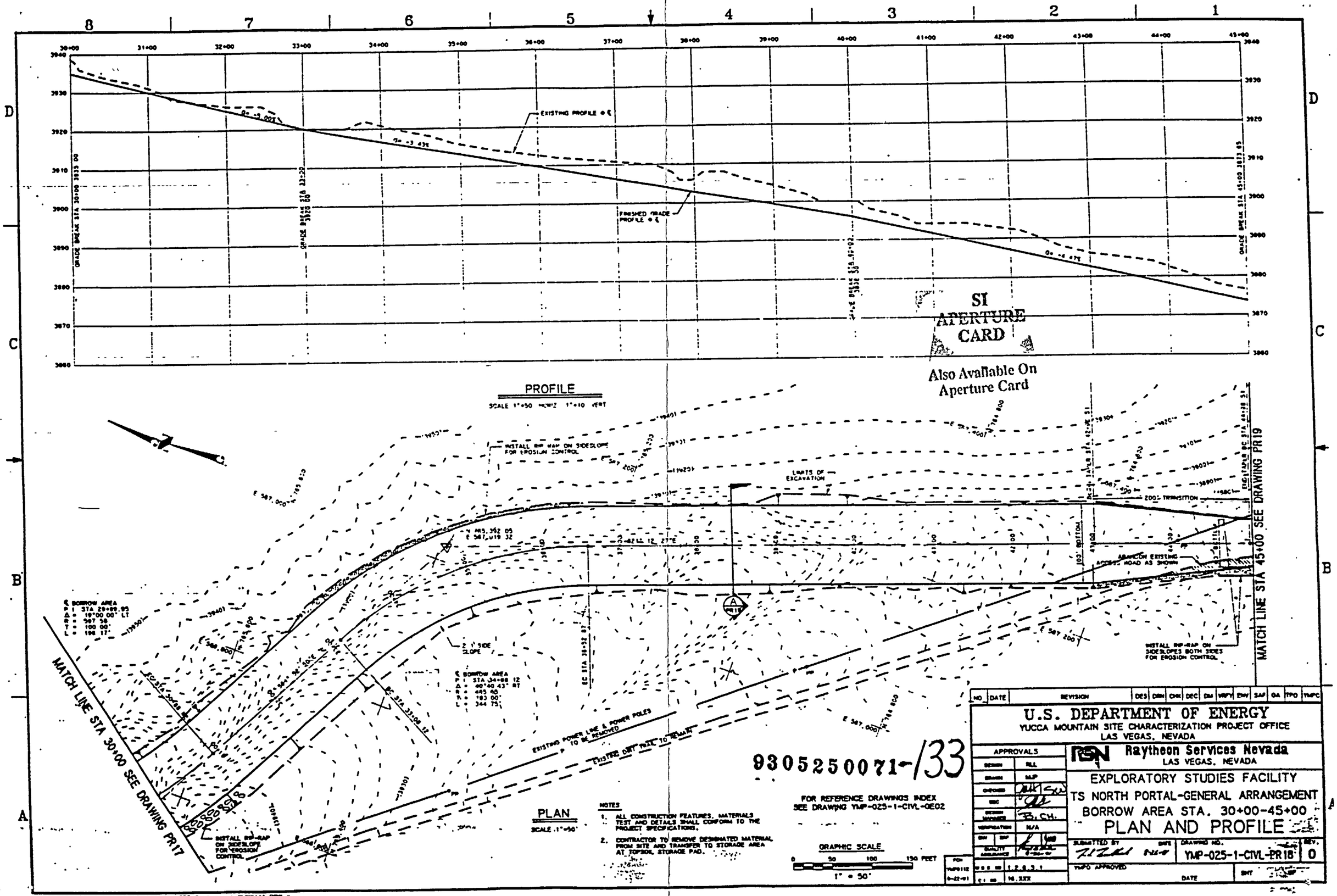
APPROVALS	
DESIGN	RLL
DRAWN	DRT
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

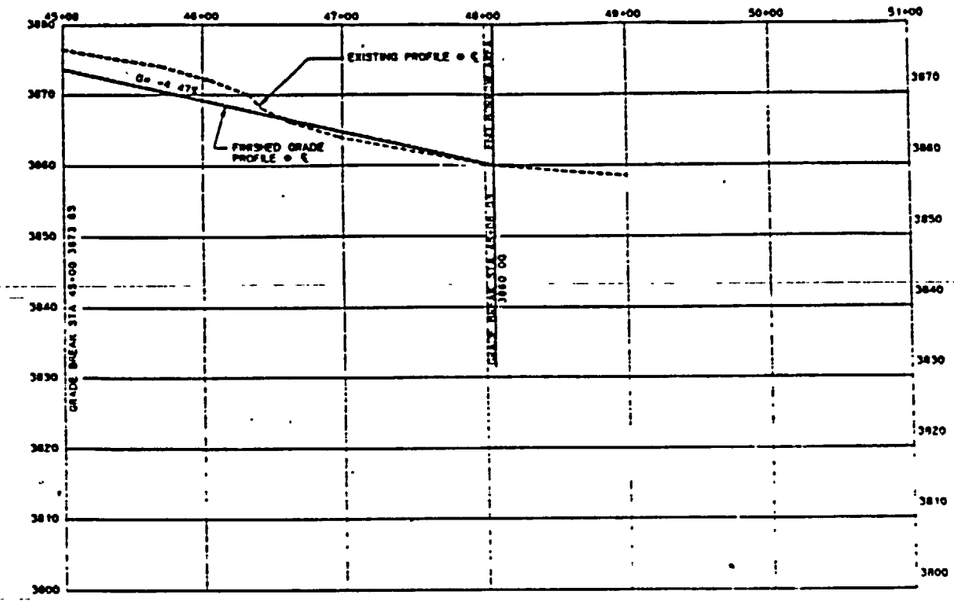
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
BORROW AREA STA. 15+00-30+00
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR17 | REV. 0

YMPO APPROVED | DATE | SHT

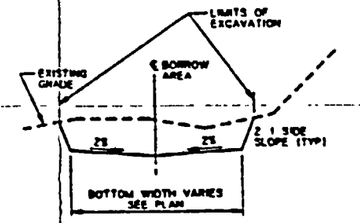
Plotted : Thu Aug 22 03:55:53 1991, PDT Part name: ymP0111.DRW


PROFILE
SCALE 1"=50' HORIZ 1"=10' VERT
EXISTING PROFILE ℄
FINISHED GRADE PROFILE ℄
PLAN
SCALE 1"=50'
MATCH LINE STA 30+00 SEE DRAWING PR17
MATCH LINE STA 45+00 SEE DRAWING PR19
INSTALL RIP-RAP ON SIDESLOPE FOR EROSION CONTROL
LIMITS OF EXCAVATION
200' TRANSITION
ABANDON EXISTING ACCESS ROAD AS SHOWN
EXISTING POWER LINE & POWER POLES TO BE REMOVED
EXISTING DIRT TRACK TO REMAIN
℄ BORROW AREA
P.I. STA 29+89.95
Δ = 19°00'00" LT
R = 597.58'
T = 100.00'
L = 198.17'
℄ BORROW AREA
P.I. STA 34+68.12
Δ = 40°40'43" RT
R = 485.40'
T = 183.00'
L = 344.75'
2:1 SIDE SLOPE
N 845,392.05
E 567,019.32
S 42°12'12" E
EC STA 38+52.87
EC STA 33+08.12
GRAPHIC SCALE
0 50 100 150 FEET
1" = 50'
SI APERTURE CARD
Also Available On Aperture Card
9305250071-133
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02
NOTES
1. ALL CONSTRUCTION FEATURES, MATERIALS TEST AND DETAILS SHALL CONFORM TO THE PROJECT SPECIFICATIONS.
2. CONTRACTOR TO REMOVE DESIGNATED MATERIAL FROM SITE AND TRANSFER TO STORAGE AREA AT TOPSOIL STORAGE PAD.
NO. DATE REVISION DES DRN CHK DEC DM WRT EW SAF QA TPO YMPC
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA
APPROVALS
DESIGN RLL
DRAWN MJP
CHECKED
DEC
DESIGN MANAGER
VERIFICATION N/A
QUALITY ASSURANCE
Raytheon Services Nevada
LAS VEGAS, NEVADA
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
BORROW AREA STA. 30+00-45+00
PLAN AND PROFILE
SUBMITTED BY
DATE
DRAWING NO. YMP-025-1-CIVL-PR18
REV. 0
YMPO APPROVED
DATE
SHT



PROFILE

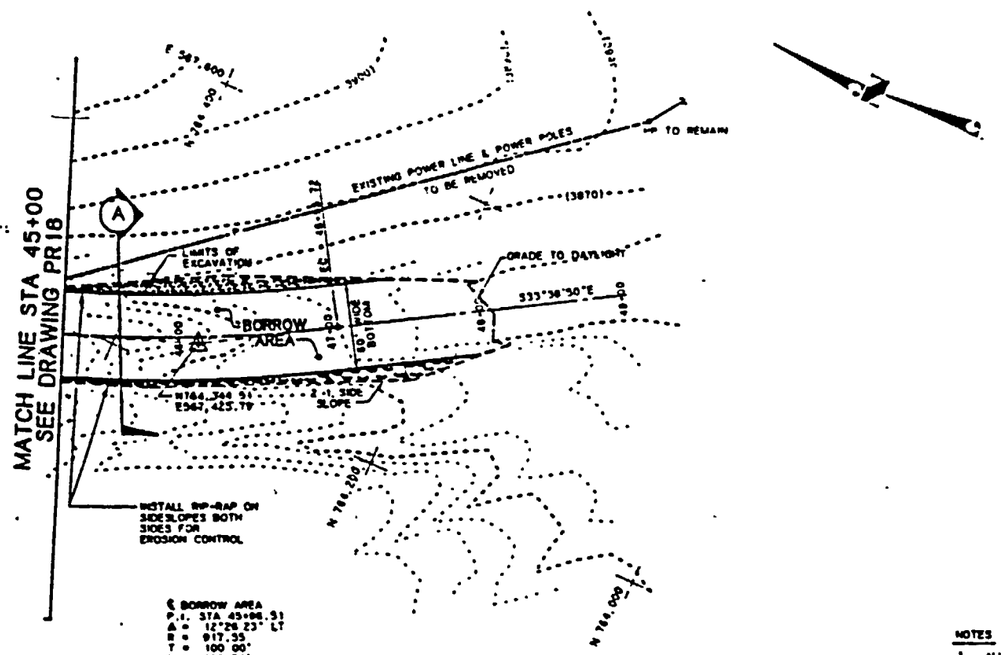
SCALE 1"=50' HORIZ 1"=10' VERT



TYPICAL SECTION

NOT TO SCALE

A PR19 PR17, PR18 & PR19



PLAN

SCALE 1"=50'

NOTES

1. ALL CONSTRUCTION FEATURES, MATERIALS TEST AND DETAILS SHALL CONFORM TO THE PROJECT SPECIFICATIONS
2. CONTRACTOR TO REMOVE DESIGNATED MATERIAL FROM SITE AND TRANSFER TO STORAGE AREA AT TOPSOIL STORAGE PAD.

GRAPHIC SCALE

0 50 100 150 FEET

1" = 50'

SI APERTURE CARD

Also Available On Aperture Card

9305250071-134

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	MAP
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

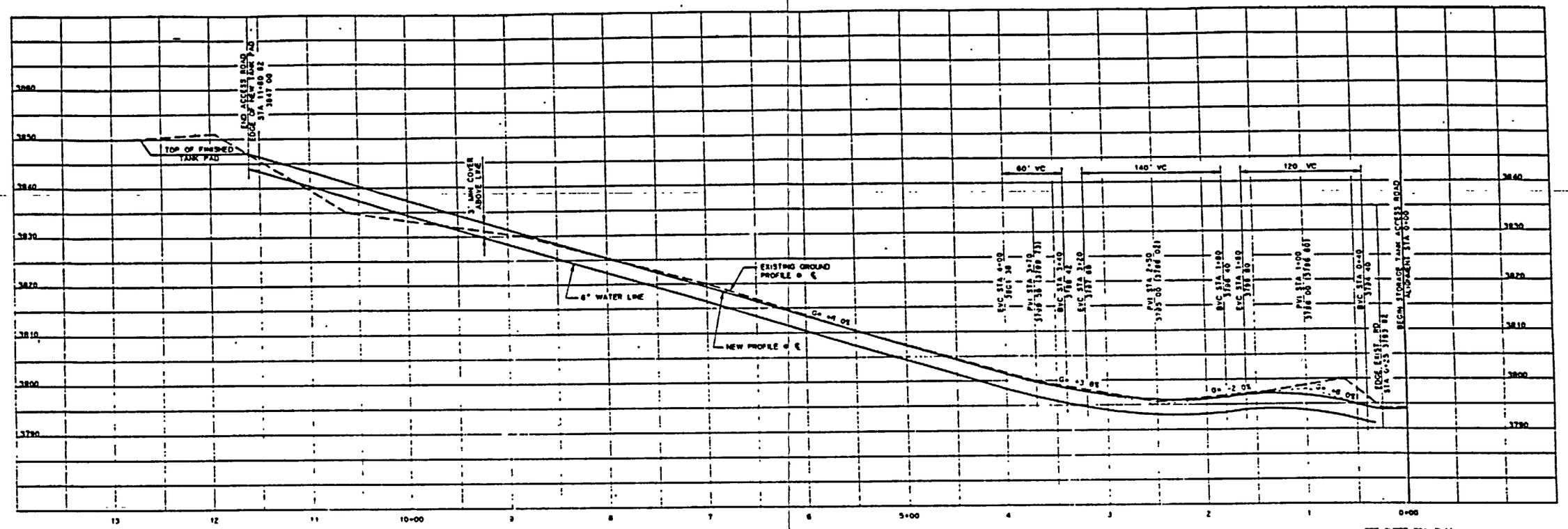
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
BORROW AREA STA. 45+00-48+06.03
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO YMP-025-1-CIVL-PR19 | REV. 0

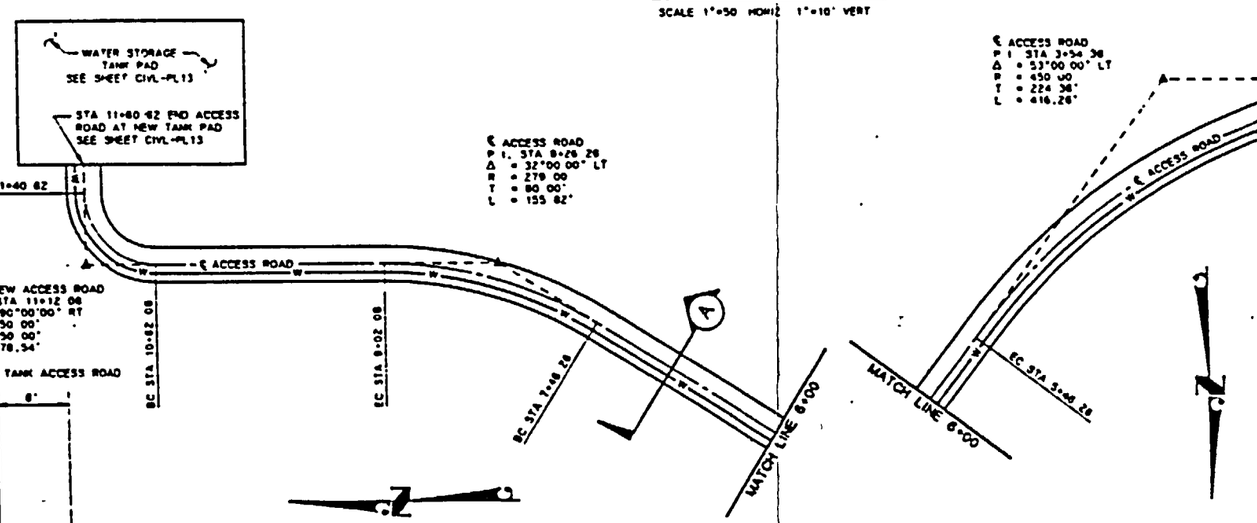
YMPO APPROVED | DATE | SHT | OF

PCN YMP0113 | W.B.S. NO 1.2.6.3.1 | C.I. NO 16 XXX



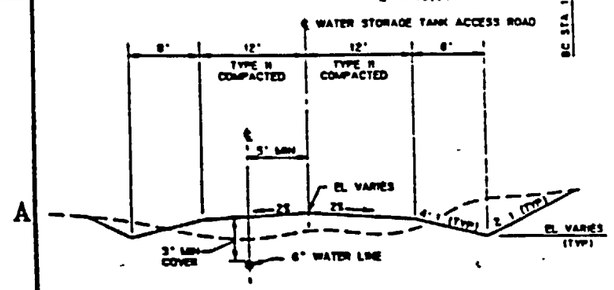
PROFILE

SCALE 1"=50' HORIZ 1"=10' VERT



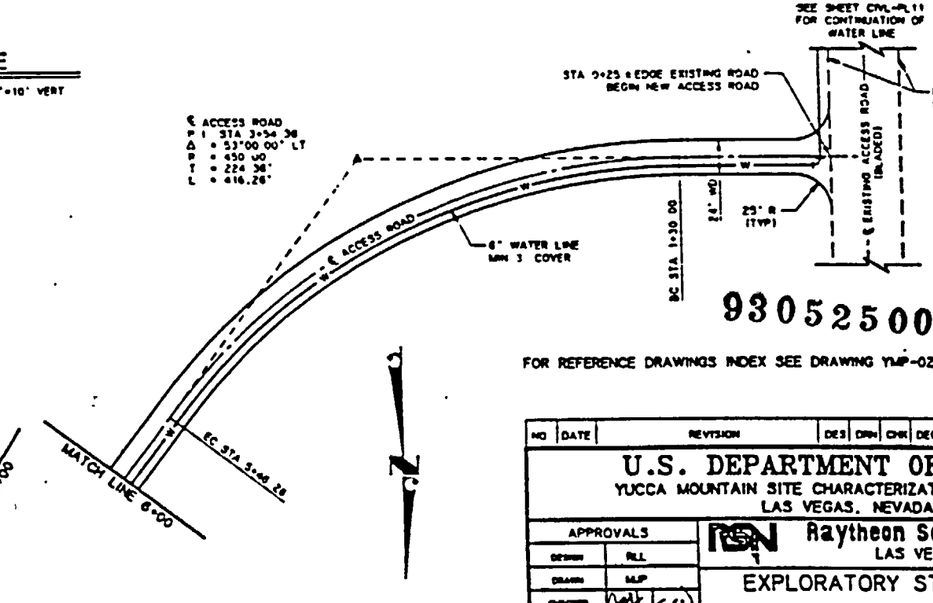
PLAN

SCALE 1"=50'



SECTION A

NOT TO SCALE



GRAPHIC SCALE

0 50 100 150 FEET

1"=50'

SI APERTURE CARD

Also Available On Aperture Card

9305250071-135

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENW	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLL
DRAWN	MJP
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

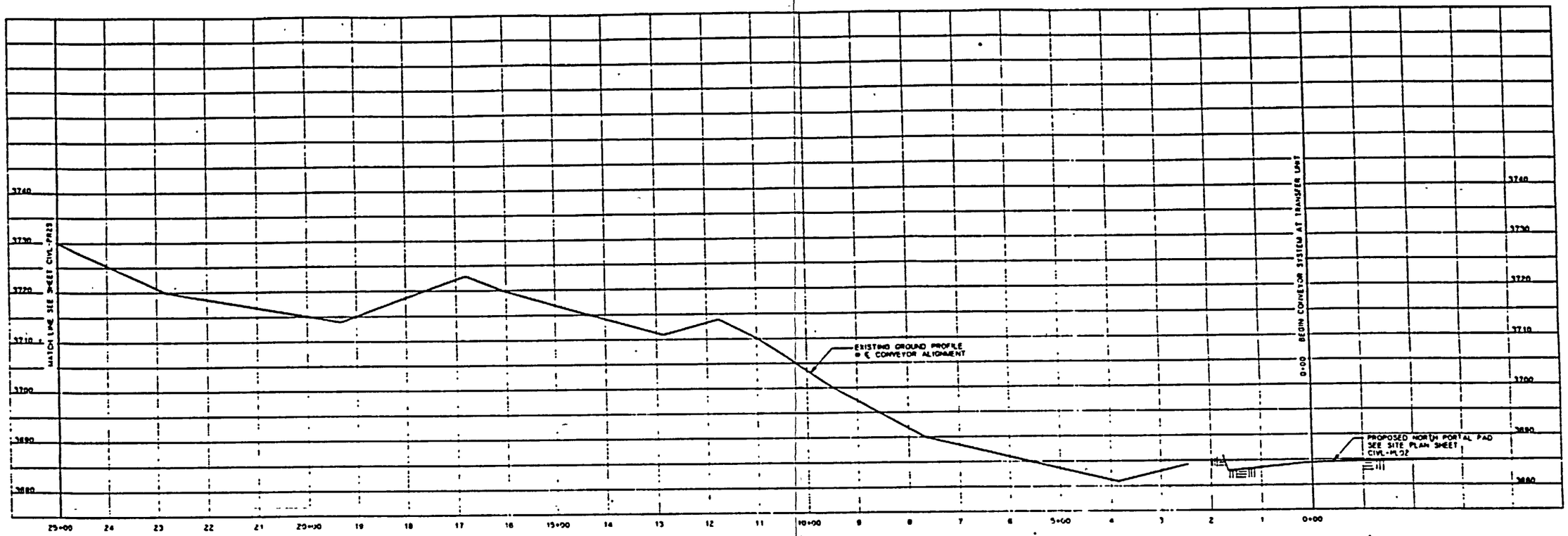
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
WATER STORAGE TANK ACCESS ROAD
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR21 | REV. 0

YMPO APPROVED | DATE | SHT

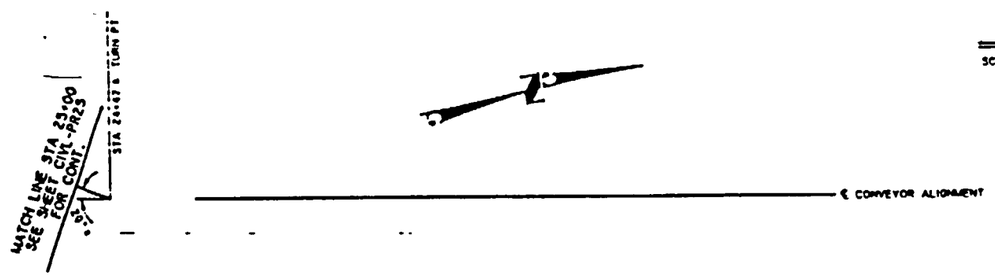
PCN YMP0000 9-22-91 | 1.2.8.3.1

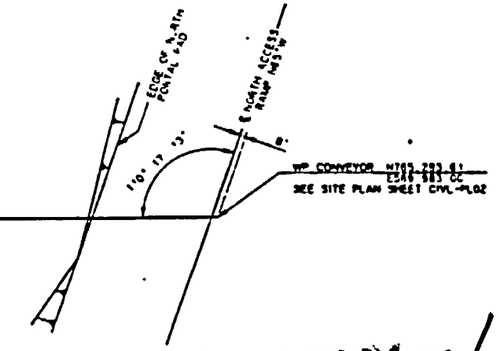
Plotted - Thu Aug 22 07:45:36 1991, PDT Part name YMPCA098.DWG



PROFILE

SCALE 1"=100' HORIZ 1"=10' VERT.





PLAN

SCALE 1"=100'

SI APERTURE CARD

Also Available On Aperture Card

9305250071 -136

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

NO	DATE	REVISION	DES	DRN	CHK	IDR	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLL
DRAWN	DRT
CHECKED	
IDC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

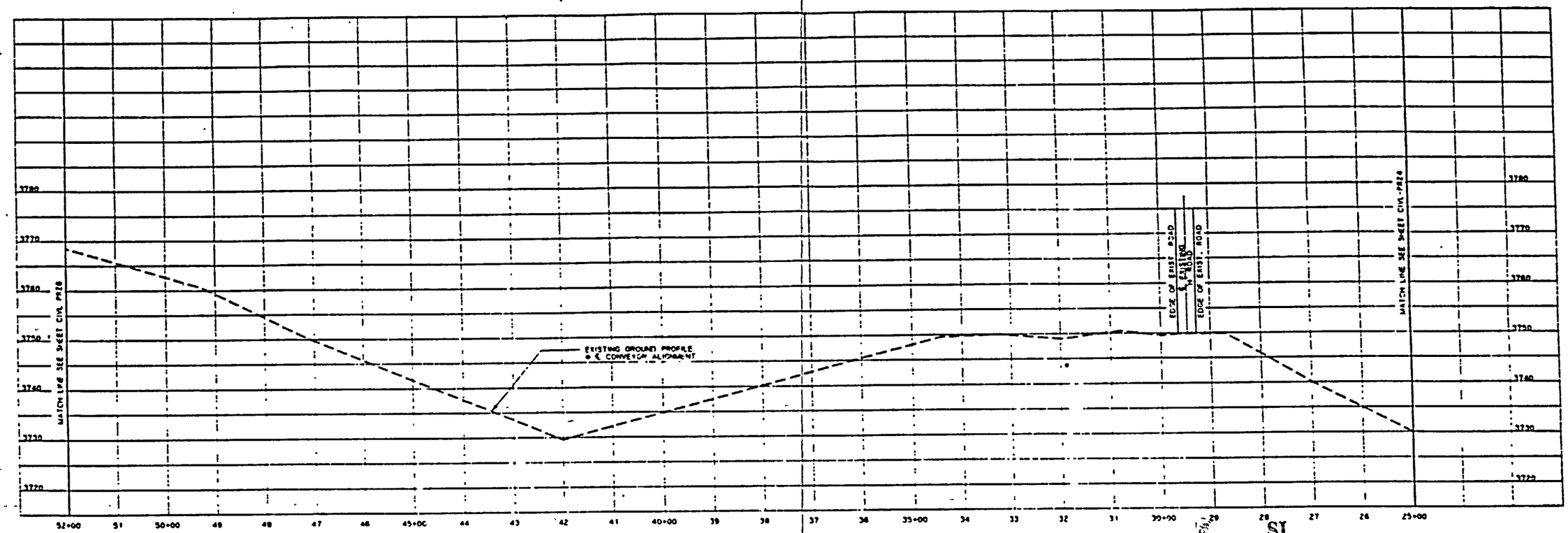
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
CONVEYOR ALIGNMENT
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR24 | REV. 0

YMPO APPROVED | DATE | SHT

FOR YMP-0044 8-22-91 | 1.2.6.3.1

Plotted Thu Aug 22 08:05:06 1991, PDT Part name: YMPCIVL4.DWG



PROFILE

SCALE 1"=100' HORIZ 1"=10' VERT

MATCH LINE STA 52+00 SEE SHEET CIVL-PR26 FOR CONT.

℄ CONVEYOR ALIGNMENT

MATCH LINE STA 25+00 SEE SHEET CIVL-PR24 FOR CONT.

PLAN

SCALE 1"=100'

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

SI
APERTURE
CARD

Also Available On
Aperture Card

9305250071-137

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	DRT
CHECKED	
DEC	
DESIGN MANAGER	B. CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

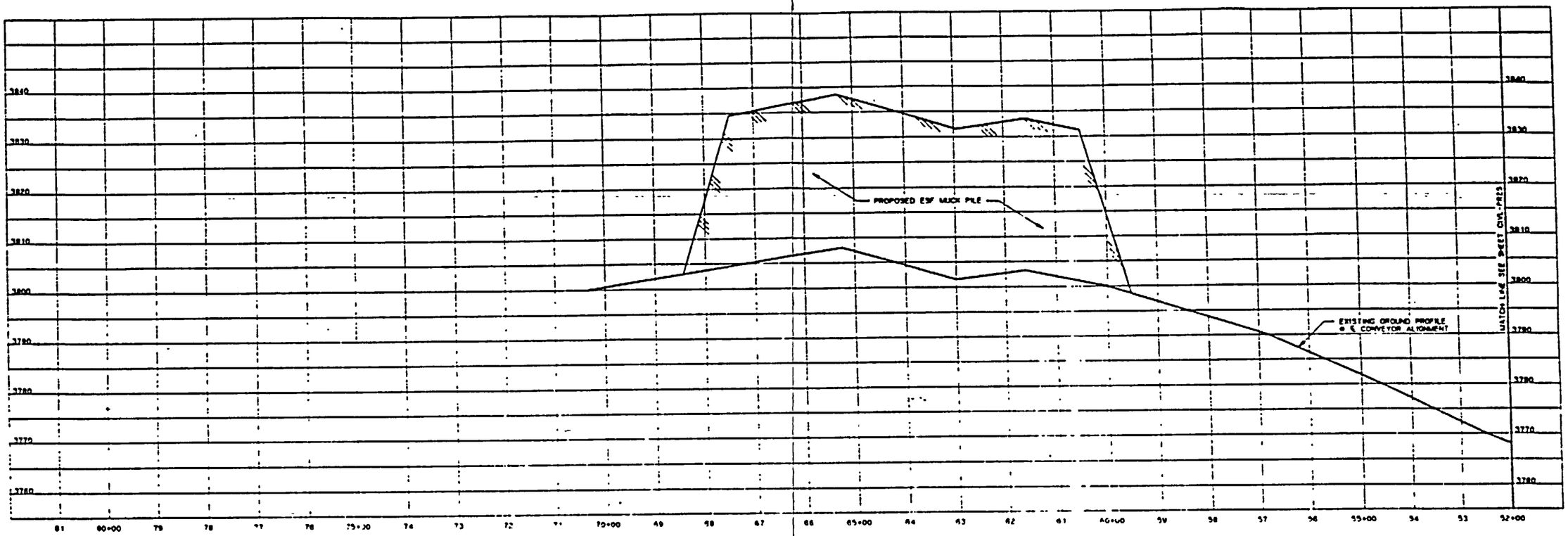
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
CONVEYOR ALIGNMENT
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR25 | REV. 0

YMPO APPROVED | DATE | SHT OF

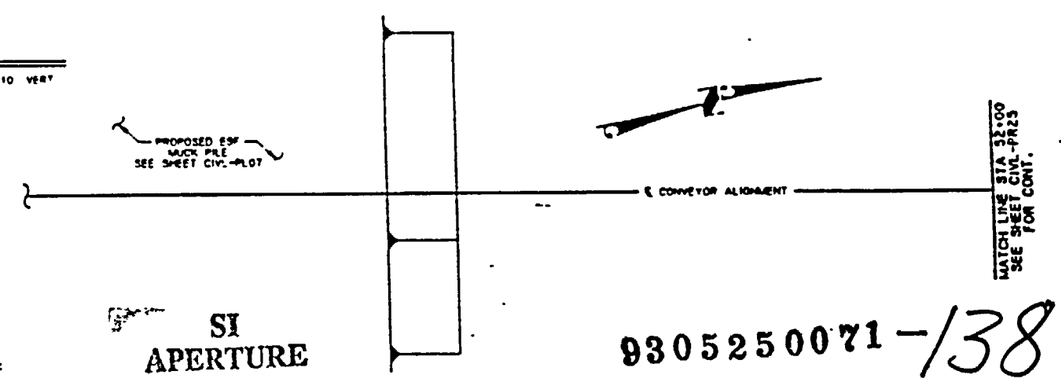
FOR YMP0045 9-22-91

Plotted : Thu Aug 22 08:30:06 1991, PDT Part name: YMP0045.DRW



PROFILE

SCALE 1"=100' HORIZ 1"=10' VERT



PLAN

SCALE 1"=100'

SI APERTURE CARD

Also Available On Aperture Card

9305250071 -138

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

GRAPHIC SCALE

0 100 200 300 FEET

1"=100'

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLL
DRAWN	MJP
CHECKED	
DEC	
DESIGN VERIFIED	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL-GENERAL ARRANGEMENT
CONVEYOR ALIGNMENT
PLAN AND PROFILE

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-CIVL-PR26 | REV. 0

YMPO APPROVED | DATE | SHT | OF

Plotted - Thu Aug 22 08 45 06 1991, PDT Part name YMP0046 DRW -

OUTLINE OF POTENTIAL REPOSITORY BOUNDARY

PMF FLOOD PLAIN

SHAFT COLLAR

EXPLOSIVES STORAGE AREA

WATER STORAGE TANKS

WATER STORAGE TANK ACCESS ROAD

TS SOUTH PORTAL ACCESS ROAD

TS SOUTH PORTAL ACCESS PAD

WASTE WATER POND

SEPTIC TANK & LEACH FIELD

BATCH PLANT

EXPLOSIVES STORAGE PAD ACCESS ROAD

BORROW AREA

TOPSOIL STORAGE AREA

MUCK STORAGE AREA

SURFACE CONVEYOR ALIGNMENT

TS NORTH PORTAL ACCESS PAD

BOOSTER STATION

TS NORTH PORTAL ACCESS ROAD

H ROAD (IMPROVED)

BUSTED BUTTE ROAD

SI APERTURE CARD

Also Available On Aperture Card

9305250071-139

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NOTE:

THE PMF LIMITS AS SHOWN ON THIS PLAN ARE TAKEN FROM A PROBABLE MAXIMUM FLOOD STUDY PREPARED BY THE US DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION, ENGINEERING AND RESEARCH CENTER DENVER COLORADO JANUARY 1986. THIS INFORMATION SHALL BE VERIFIED DURING TITLE II DESIGN.

FLOOD PLAIN SITE PLAN

SCALE: 1"=1000'

GRAPHIC SCALE

0 1000 2000 3000 FEET

1"=1000'

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

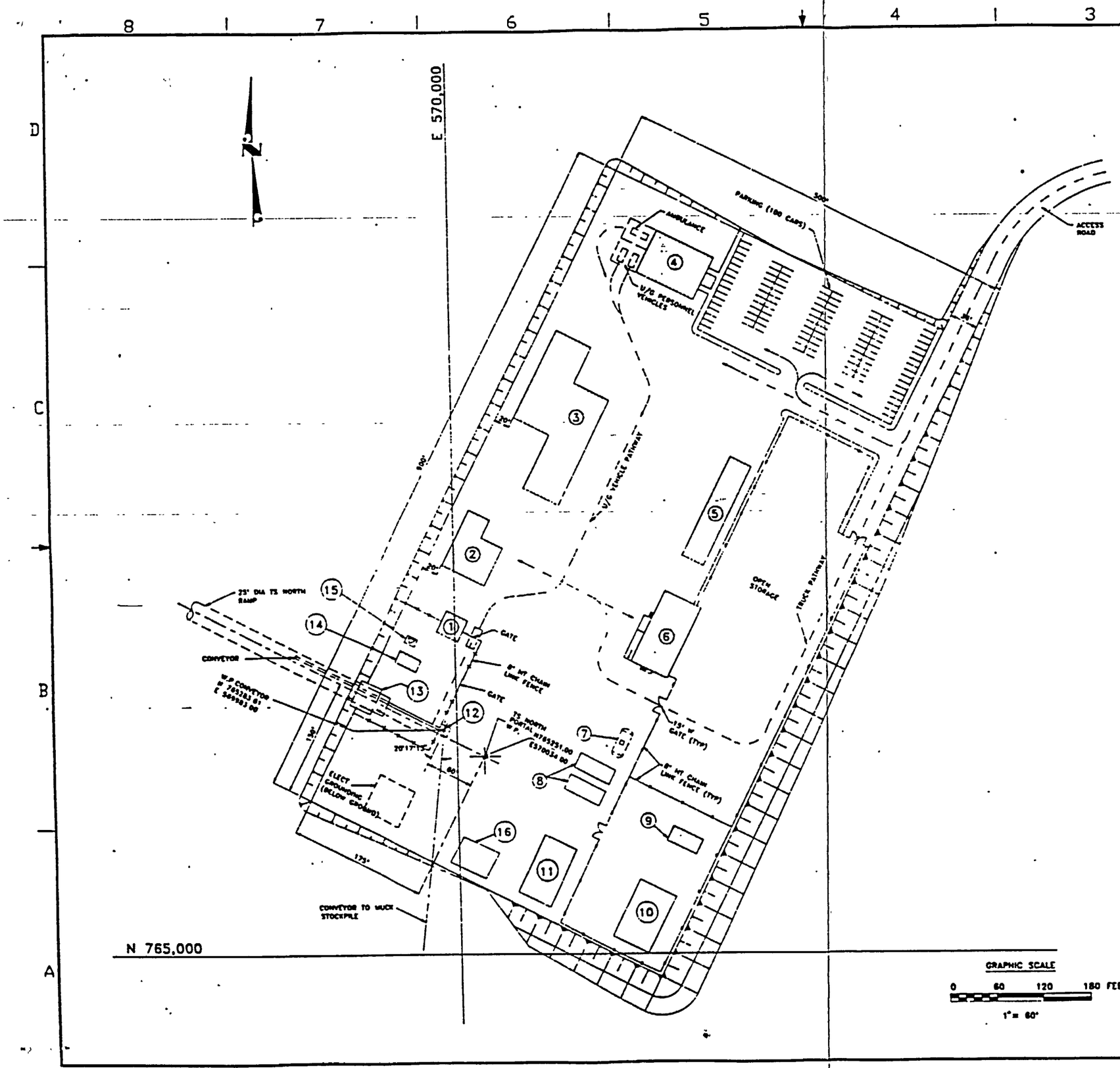
APPROVALS	
DESIGN	RLL
DRAWN	JDC
CHECKED	
DEC	
DESIGN MANAGER	B. CH.
VERIFICATION	N/A
FSM / SAF	
QUALITY REVIEWER	
WBS NO	1.2.6.2.1
CI NO	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
PROBABLE MAXIMUM FLOOD (PMF)
FLOOD PLAIN

SUBMITTED BY 8-26-91 | DRAWING NO YMP-025-1-CIVL-C102 | REV 0

YMPO APPROVED DATE | SHT OF



LEGEND

1. PORTAL CONTROL CENTER BUILDING
2. SURFACE DATA BUILDING
3. TEST SUPPORT BUILDING
4. CHANGE HOUSE BUILDING
5. SHOP/WAREHOUSE BUILDING
6. MAIN WAREHOUSE BUILDING
7. UNDERGROUND FUEL STORAGE
8. GENERATORS PADS
9. ELECT. SUB-STATION CONTROL BUILDING
10. TRANSFORMER PAD
11. ELECTRICAL SWITCHGEAR BUILDING
12. CONVEYOR TRANSFER TOWER
13. NORTH PORTAL
14. MICROWAVE COMMUNICATION BLDG.
15. MICROWAVE COMMUNICATION TOWER
16. AIR COMPRESSOR PAD

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-140

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VMPT	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

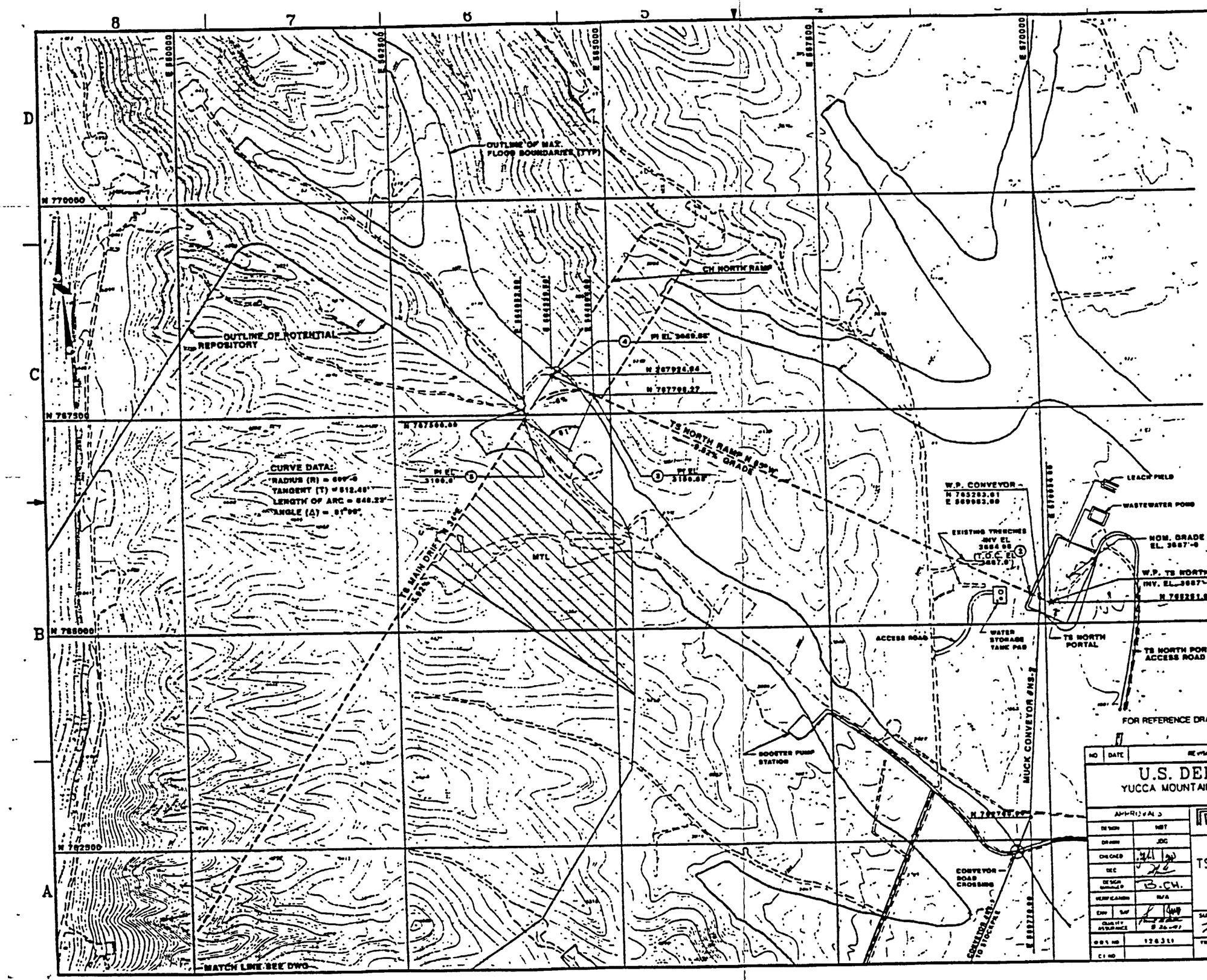
APPROVALS

DESIGN	RLL
DRAWN	JMC
CHECKED	
DEC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	
W.B.S. NO	1.2.6.3.1.1
C.I. NO	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SURFACE
PLOT PLAN

SUBMITTED BY: TTRW | DATE: FEB-0 | DRAWING NO: YMP-025-1-ARCH-PL01 | REV. 0

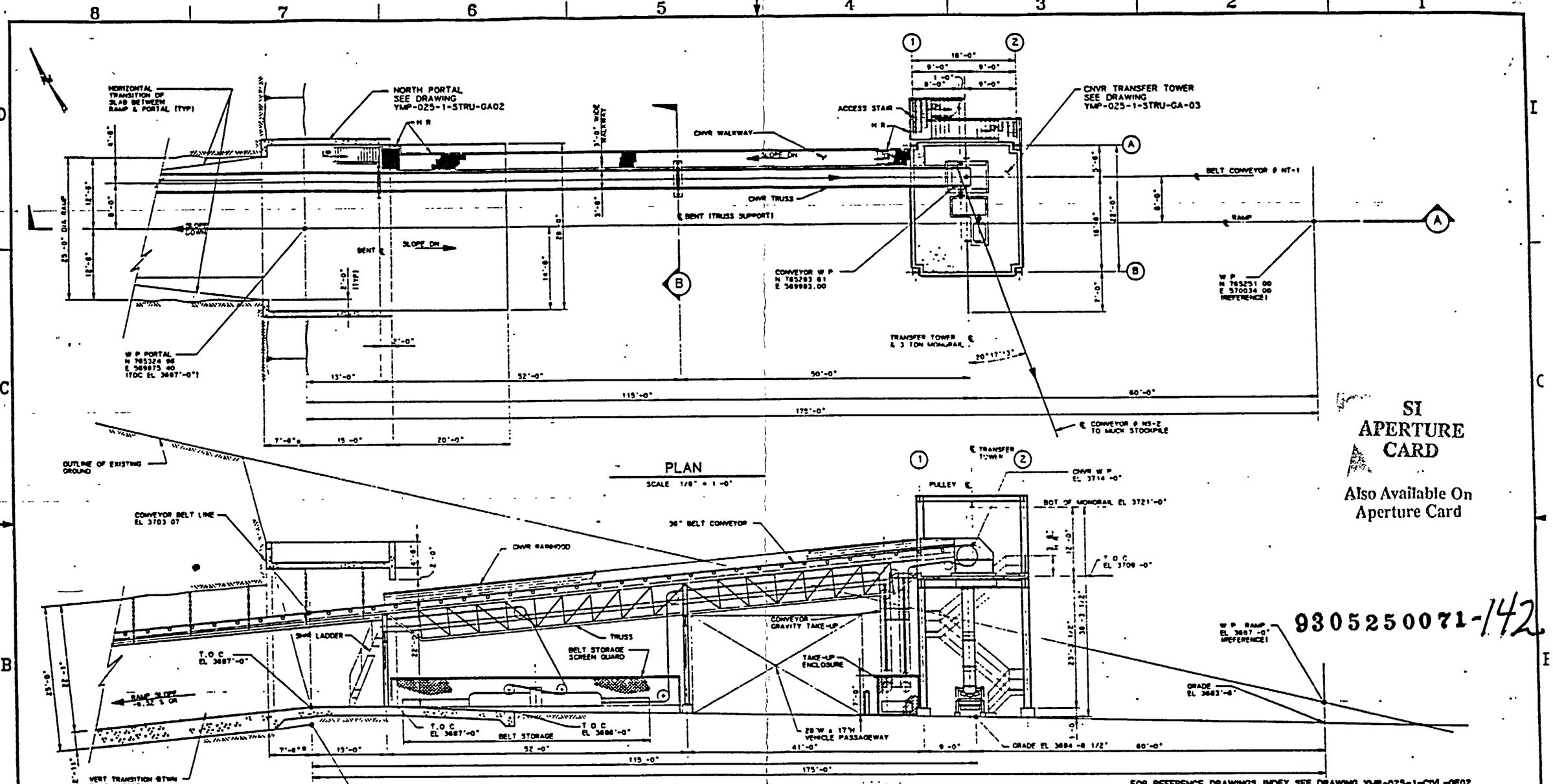
YMPO APPROVED | DATE | SHT | OF



SI APERTURE CARD

Also Available On Aperture Card

9305250071-144



SI APERTURE CARD

Also Available On Aperture Card

9305250071-142

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO.	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	NBT
DRAWN	MJH
CHECKED	
DEC	
DESIGN MANAGER	B. CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

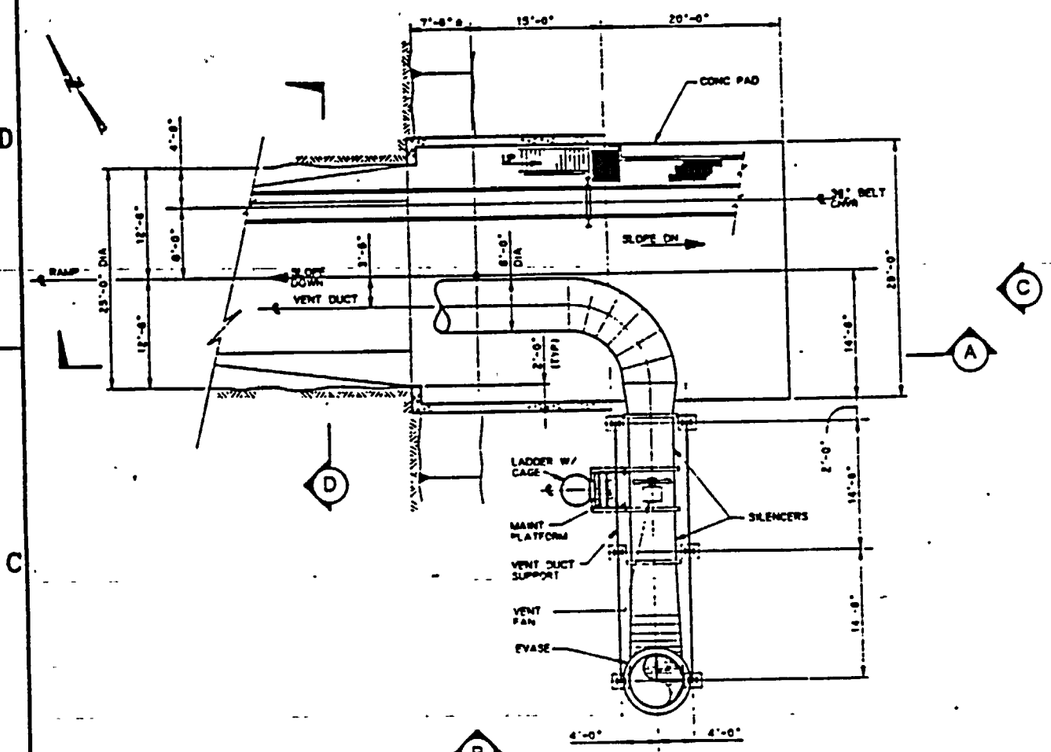
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
PORTAL & CONVEYOR
PLAN & SECTIONS

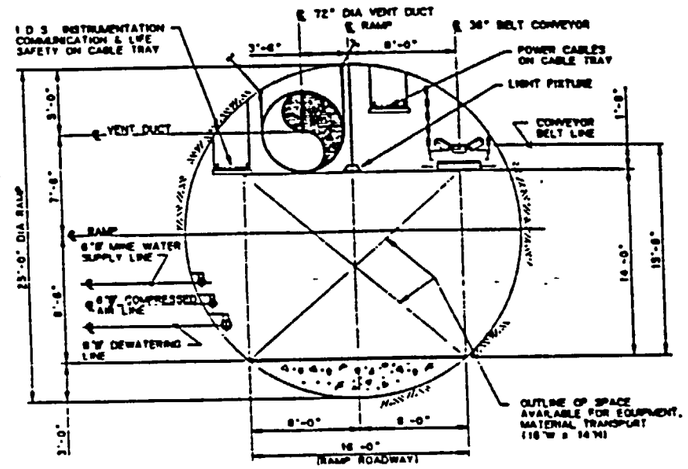
SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-STRU-GA01 | REV. 0

YMPO APPROVED | DATE | SHT ___ OF ___

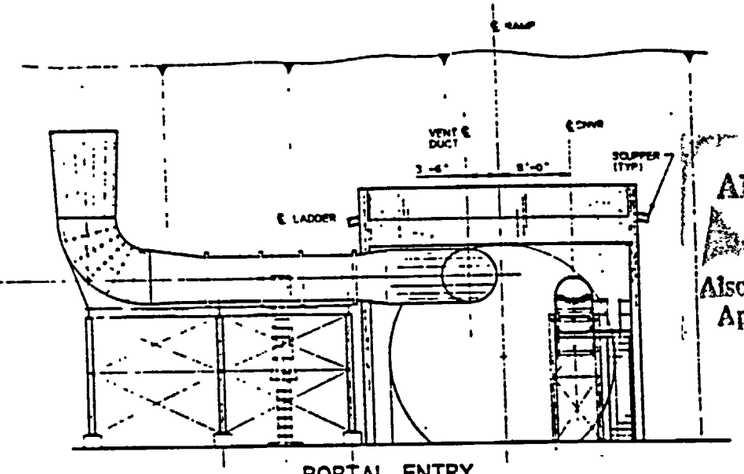
Plotted Wed Aug 21 08 09 39 1991, PDT Par* name d:\vbcz\ymp0JT8.DWG -UW



PLAN
SCALE 1/8" = 1'-0"
(CONSTRUCTION PHASE)



SECTION D
SCALE 3/16" = 1'-0"



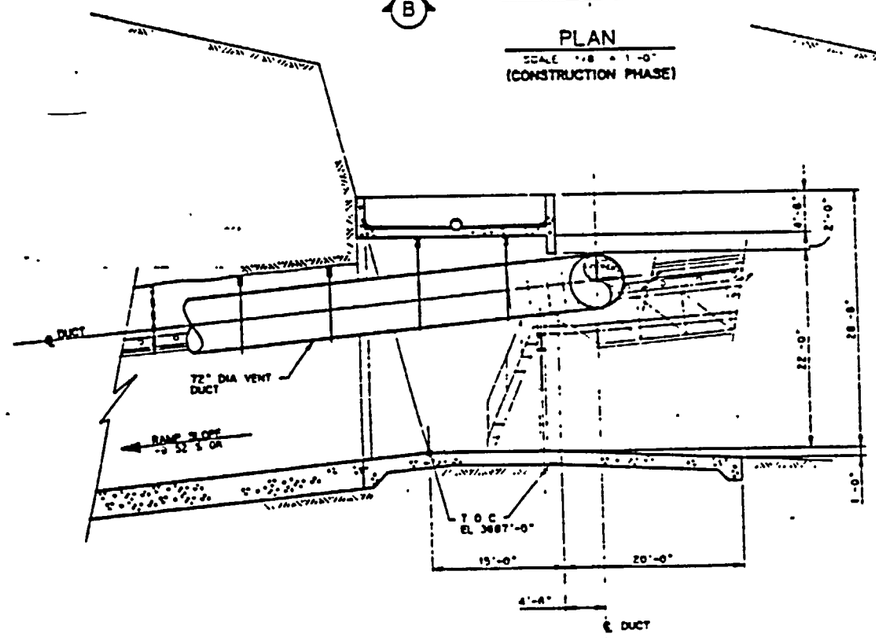
PORTAL ENTRY
ELEVATION C
SCALE 1/8" = 1'-0"
(CONSTRUCTION PHASE)

SI APERTURE CARD

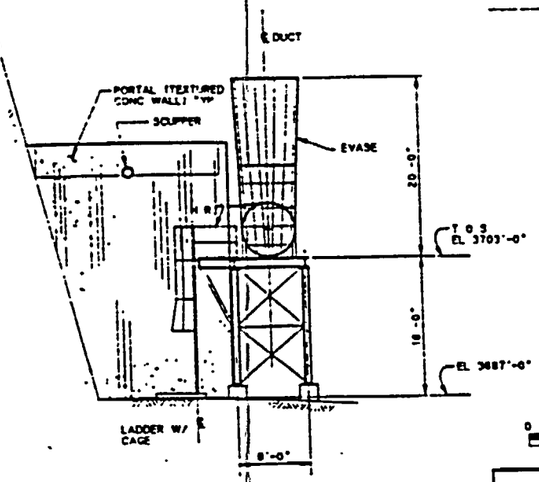
Also Available On Aperture Card

9305250071-143

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

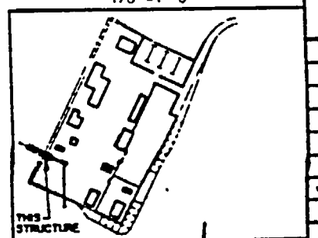


SECTION A
SCALE 1/8" = 1'-0"
(CONSTRUCTION PHASE)



ELEVATION B
SCALE 1/8" = 1'-0"
(CONSTRUCTION PHASE)

GRAPHIC SCALE
0 4 8 16 24 FEET
1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

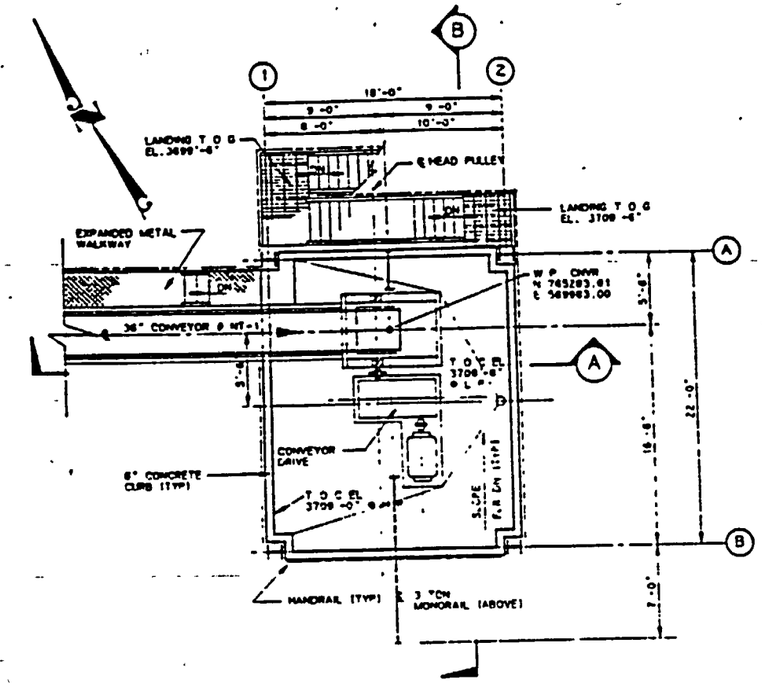
APPROVALS

DESIGN	PZ
DRAWN	MJH
CHECKED	
DEC	
DESIGN SUPERVISOR	B. CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
PORTAL CONST / OPER PHASE
PLAN, SECT & ELEV'S

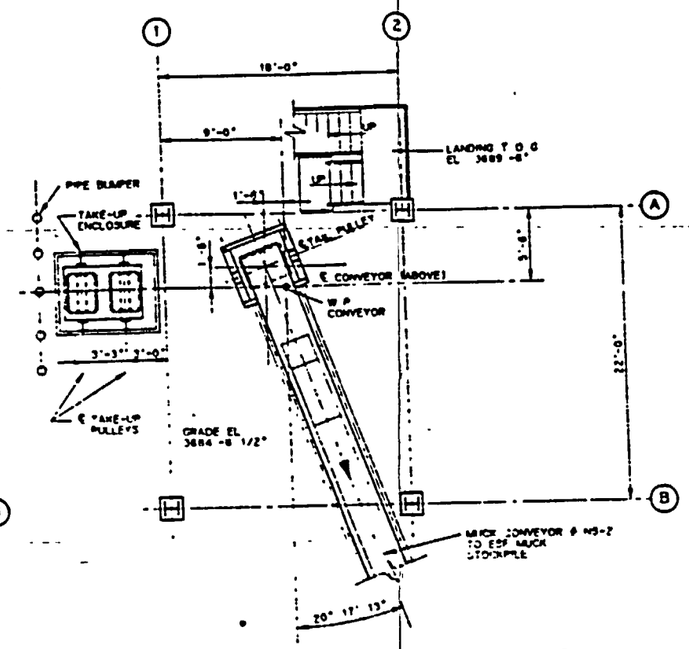
SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-STRU-GA02 | REV. 0

YMPO APPROVED | DATE | SHT | OF



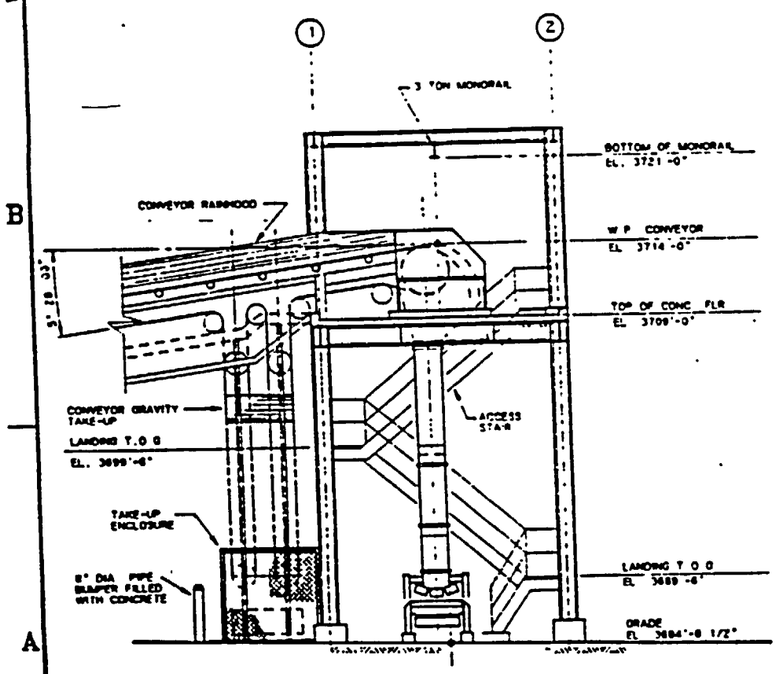
PLAN AT EL. 3709'-0"

SCALE 3/16" = 1'-0"



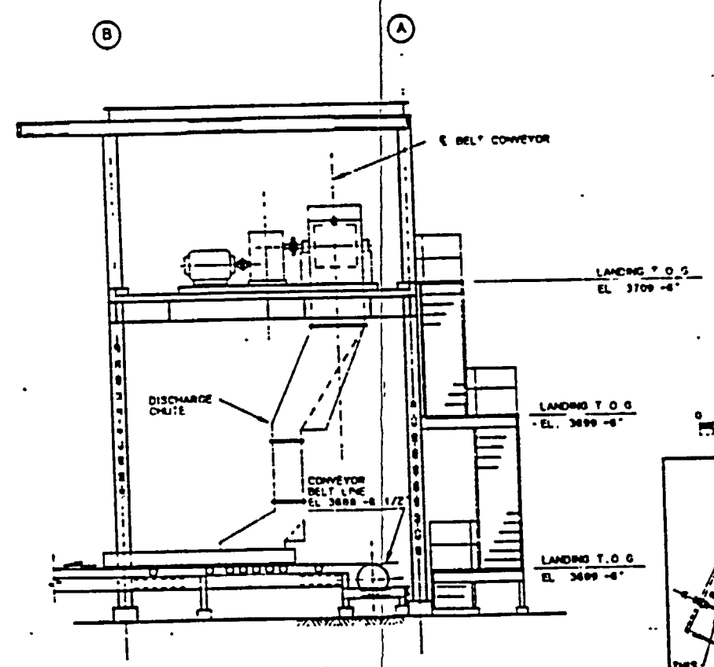
PLAN AT EL. 3684'-8 1/2"

SCALE 3/16" = 1'-0"



SECTION (A)

SCALE 3/16" = 1'-0"



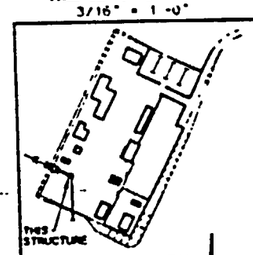
SECTION (B)

SCALE 3/16" = 1'-0"

GRAPHIC SCALE

0 2 4 8 12 FEET

3/16" = 1'-0"



TS NORTH PORTAL KEY PLAN

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -144

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

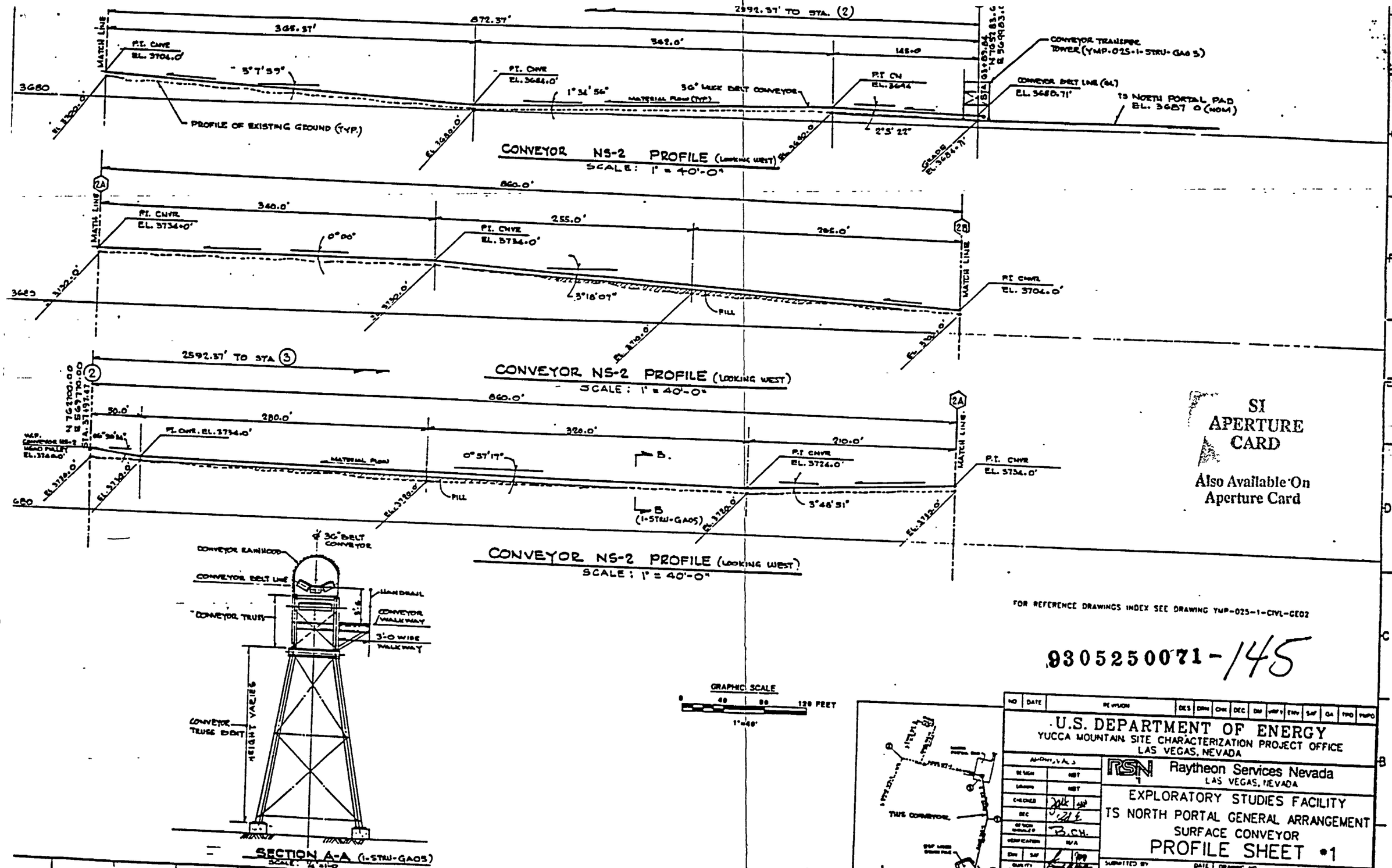
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

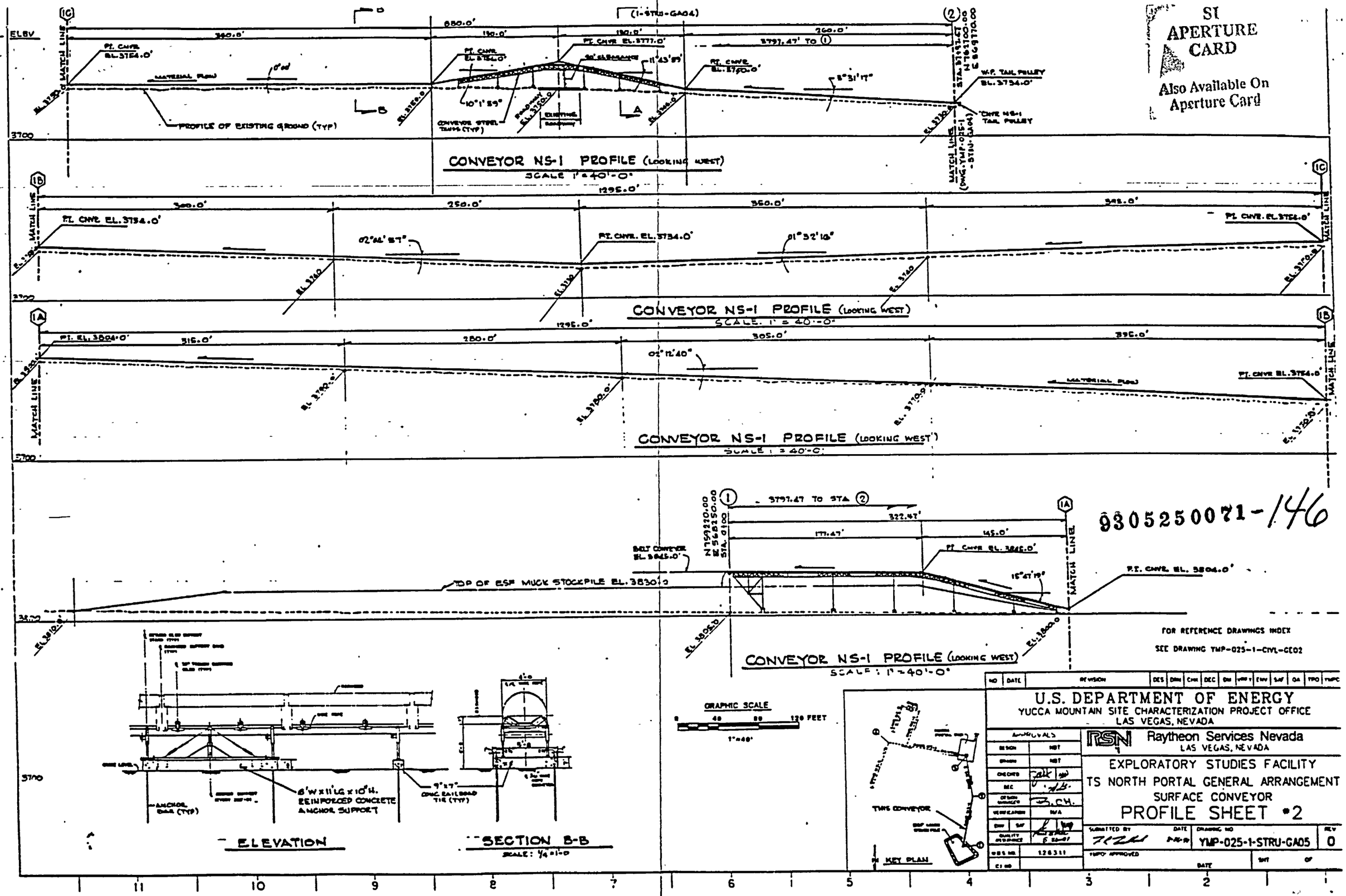
APPROVALS	
DESIGN	HBT
DRAWN	TAN / MJH
CHECKED	
DEC	
DESIGN MANAGER	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
CONVEYOR TRANSFER TOWER
PLANS AND SECTIONS

SUBMITTED BY	DATE	DRAWING NO.	REV.
		YMP-025-1-STRU-GA03	0
YMPO APPROVED	DATE	SHT	OF

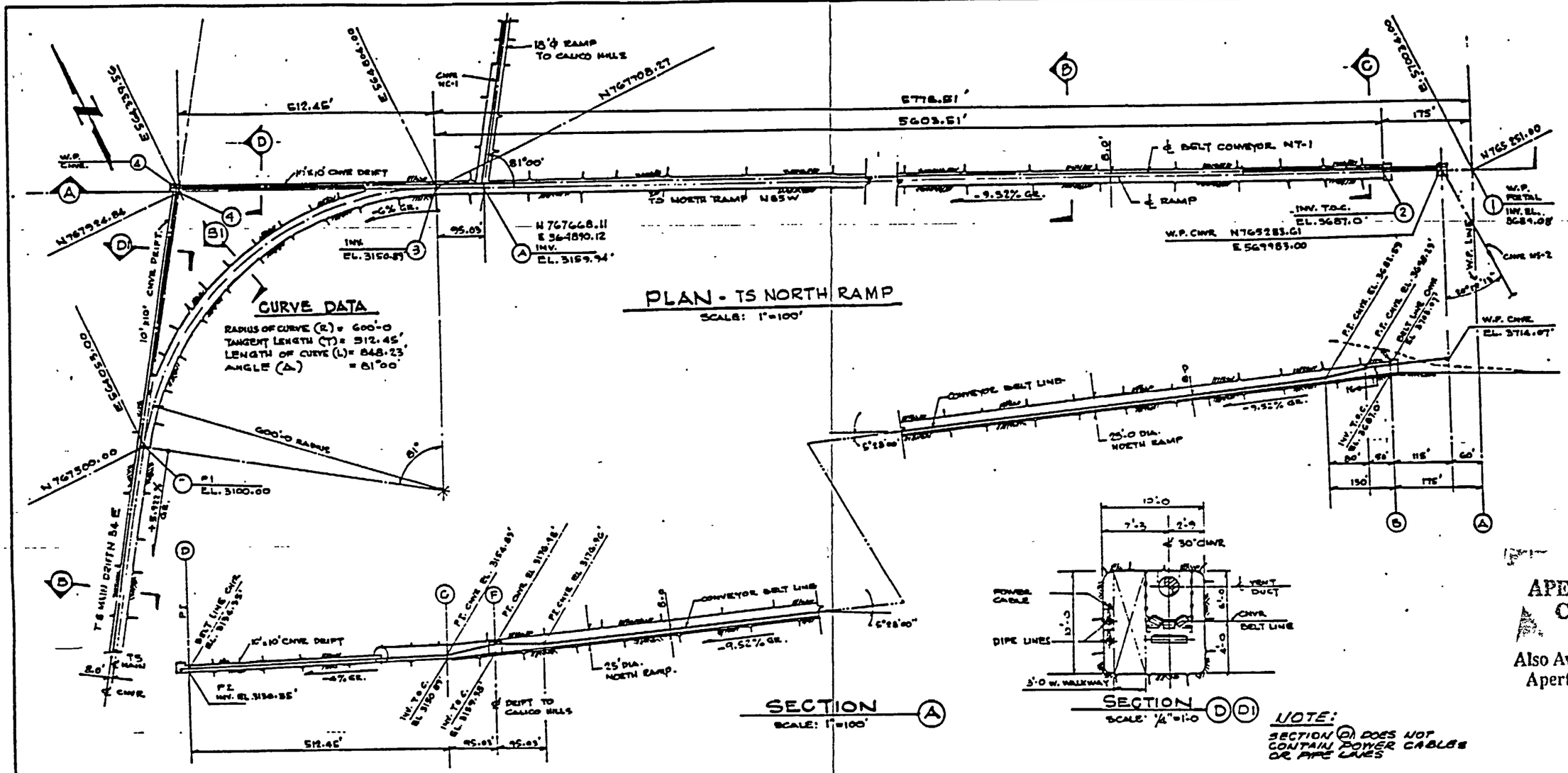

2592.37' TO STA. (2)
872.37'
365.37'
342.0'
145.0'
MATCH LINE
P.I. CNVR EL. 3704.0'
3°7'39"
P.I. CNVR EL. 3684.0'
1°34'56"
30" BELT CONVEYOR
MATERIAL FLOW (TYP)
P.I. CN EL. 3644
2°3'22"
CONVEYOR TRANSFER TOWER (YMP-025-1-STRU-GA05)
CONVEYOR BELT LINE (BL) EL. 3680.71'
TS NORTH PORTAL PAD EL. 3687.0 (NOM)
PROFILE OF EXISTING GROUND (TYP.)
CONVEYOR NS-2 PROFILE (LOOKING WEST)
SCALE: 1" = 40'-0"
860.0'
340.0'
255.0'
295.0'
P.I. CNVR EL. 3734.0'
0°00'
3°18'07"
PILL
P.I. CNVR EL. 3704.0'
2592.37' TO STA 3
CONVEYOR NS-2 PROFILE (LOOKING WEST)
SCALE: 1" = 40'-0"
50.0'
280.0'
320.0'
210.0'
P.I. CNVR. EL. 3734.0'
MATERIAL FLOW
0°57'17"
P.I. CNVR EL. 3724.0'
P.I. CNVR EL. 3734.0'
3°46'31"
PILL
B (1-STRU-GA05)
CONVEYOR NS-2 PROFILE (LOOKING WEST)
SCALE: 1" = 40'-0"
36" BELT CONVEYOR
CONVEYOR RAINHOOD
CONVEYOR BELT LINE
HANDRAIL
CONVEYOR TRUSS
CONVEYOR WALKWAY
3'-0 WIDE WALKWAY
HEIGHT VARIES
CONVEYOR TRUSS EDGE
SECTION A-A (1-STRU-GA05)
SCALE: 1/4"=1'-0"
GRAPHIC SCALE
0 40 80 120 FEET
1"=40'
KEY PLAN
TWS CONVEYOR
SI APERTURE CARD
Also Available On Aperture Card
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02
9305250071-145
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA
Raytheon Services Nevada
LAS VEGAS, NEVADA
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SURFACE CONVEYOR
PROFILE SHEET #1
YMP-025-1-STRU-GA04
REV 0



SI APERTURE CARD

Also Available On Aperture Card

9305250071-146



NOTE:
SECTION (B1) DOES NOT CONTAIN POWER CABLES OR PIPE LINES

NOTE:
SECTION (B) DOES NOT CONTAIN CONVEYOR

NOTE:
SECTIONS (B) & (C) REPRESENT A RAMP CROSS SECTION DURING OPERATION PHASE. THESE SECTIONS DO NOT APPLY TO AREA 250' BEHIND T.B.M. TRAILING GEAR, WHERE GEOLOGIC MAPPING IS REQUIRED.

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-147

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VERIF	ENV	SAF	QA	TPO	YMP

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

DESIGN	NBT
DRAWN	NBT
CHECKED	
DEC	
DESIGN ENGINEER	B. CH
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	
WBS NO	126311
CI NO	

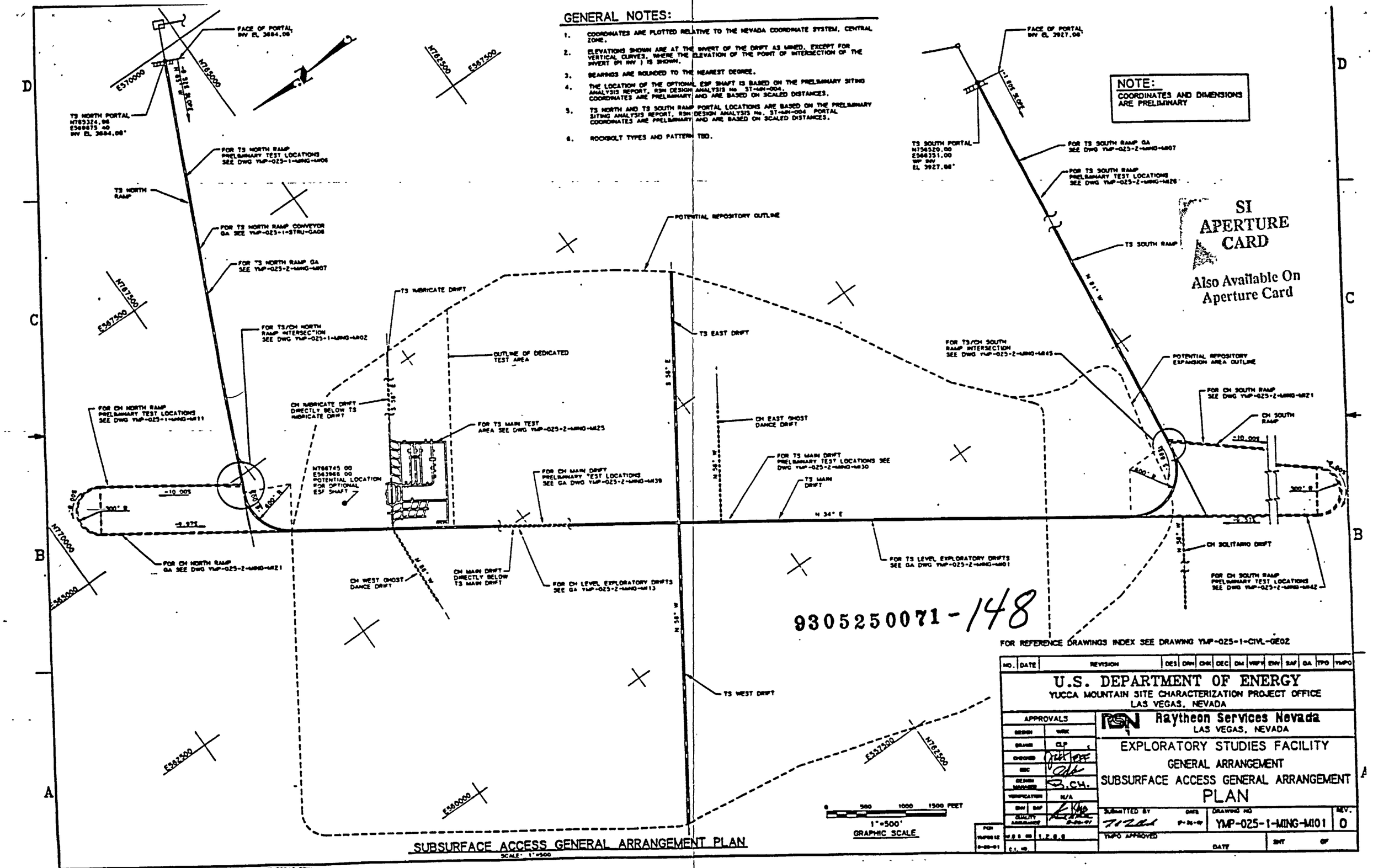
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
UNDERGROUND CONVEYOR
PROFILE SHEET #3 & SECT'S

SUBMITTED BY | DATE | DRAWING NO: YMP-025-1-STRU-GA06 | REV 0

YMPO APPROVED | DATE

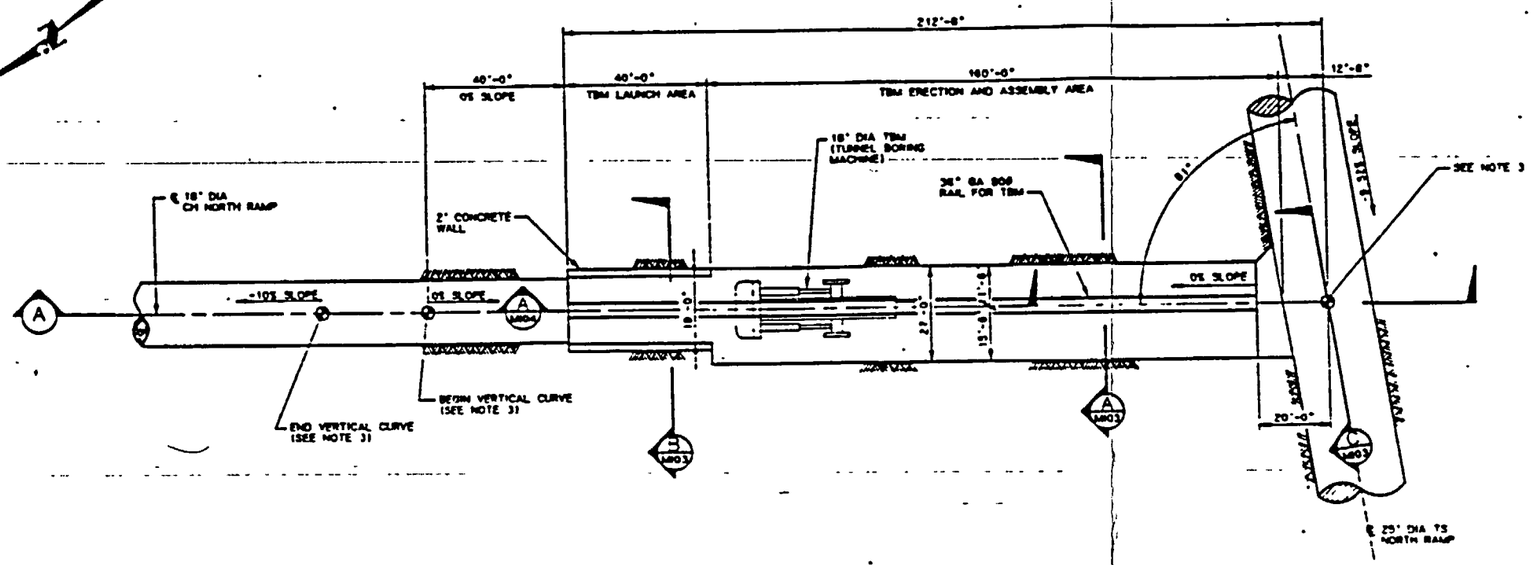
GENERAL NOTES:

1. COORDINATES ARE PLOTTED RELATIVE TO THE NEVADA COORDINATE SYSTEM, CENTRAL ZONE.
2. ELEVATIONS SHOWN ARE AT THE INVERT OF THE DRIFT AS MINED, EXCEPT FOR VERTICAL CURVES, WHERE THE ELEVATION OF THE POINT OF INTERSECTION OF THE INVERT OF RW 1 IS SHOWN.
3. BEARINGS ARE ROUNDED TO THE NEAREST DEGREE.
4. THE LOCATION OF THE OPTIONAL ESF SHAFT IS BASED ON THE PRELIMINARY SITING ANALYSIS REPORT, RSN DESIGN ANALYSIS No. ST-MN-004. COORDINATES ARE PRELIMINARY AND ARE BASED ON SCALED DISTANCES.
5. TS NORTH AND TS SOUTH RAMP PORTAL LOCATIONS ARE BASED ON THE PRELIMINARY SITING ANALYSIS REPORT, RSN DESIGN ANALYSIS No. ST-MN-004. PORTAL COORDINATES ARE PRELIMINARY AND ARE BASED ON SCALED DISTANCES.
6. ROCKBOLT TYPES AND PATTERN TBD.

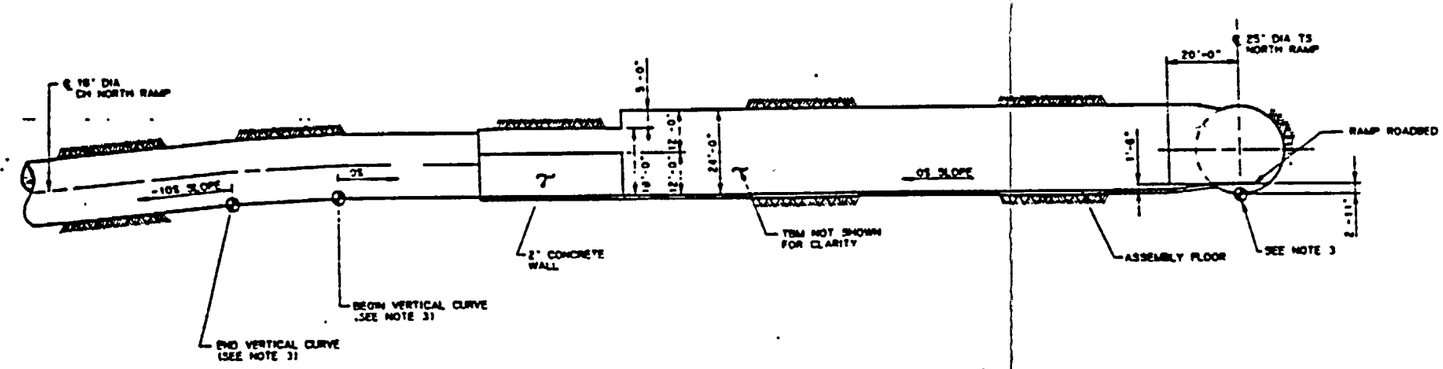


9305250071-148

Plotted: Tue Aug 20 14:37:12 1991, PDT Part name: YMP0012.DRW



PLAN
SCALE 1"=20'



SECTION (A)
SCALE 1"=20'

0 20 40 60 FEET
1"=20'
GRAPHIC SCALE

SI APERTURE CARD

Also Available On Aperture Card

NOTES:

1. DIMENSIONS SHOWN ARE APPROXIMATE. ACTUAL DIMENSIONS DEPEND ON TBM SELECTED
2. ⊕ SYMBOL IS FOR REFERENCE ONLY AND DOES NOT INDICATE SURVEY STATIONS LOCATIONS.
3. SEE CALCULATION 57-SA-001 FOR MAJOR COORDINATES AND VERTICAL CURVE DATA

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -149

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	MJE
DRAWN	CLP
CHECKED	
DEC	
DEPARTMENT MANAGER	J.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	9-26-91

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS/CH NORTH RAMP INTERSECTION
PLAN & SECTION

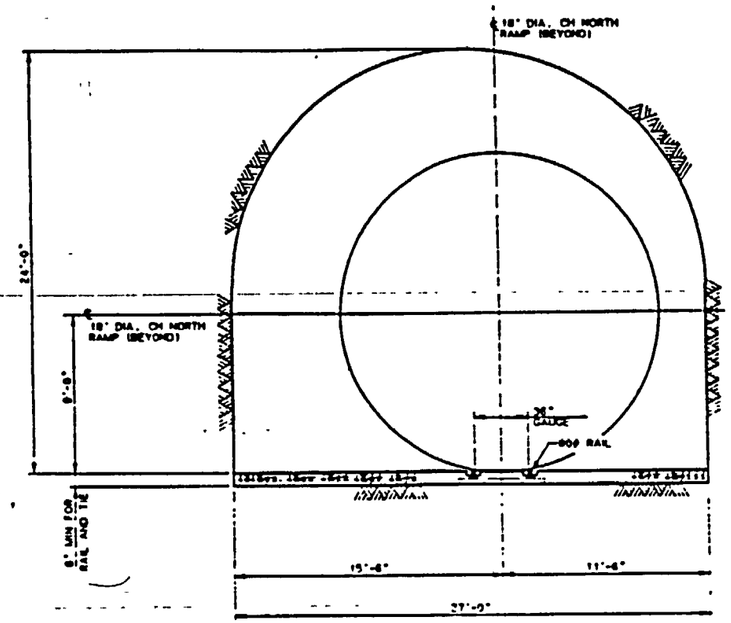
SUBMITTED BY	DATE	DRAWING NO.	REV.
	9-26-91	YMP-025-1-MNG-M02	0

YMPO APPROVED DATE SHT OF

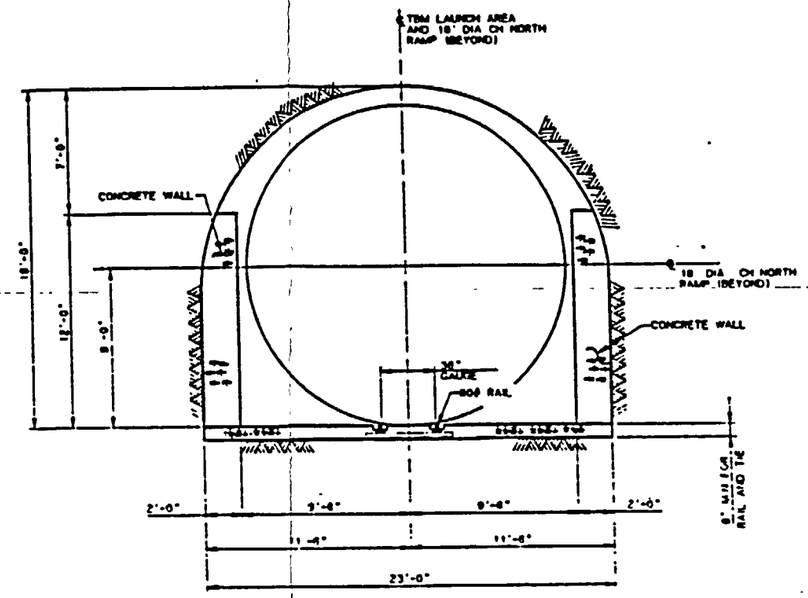
FOR YMPO USE 9-26-91

U.S. NO 1,2,6,9
C.I. NO

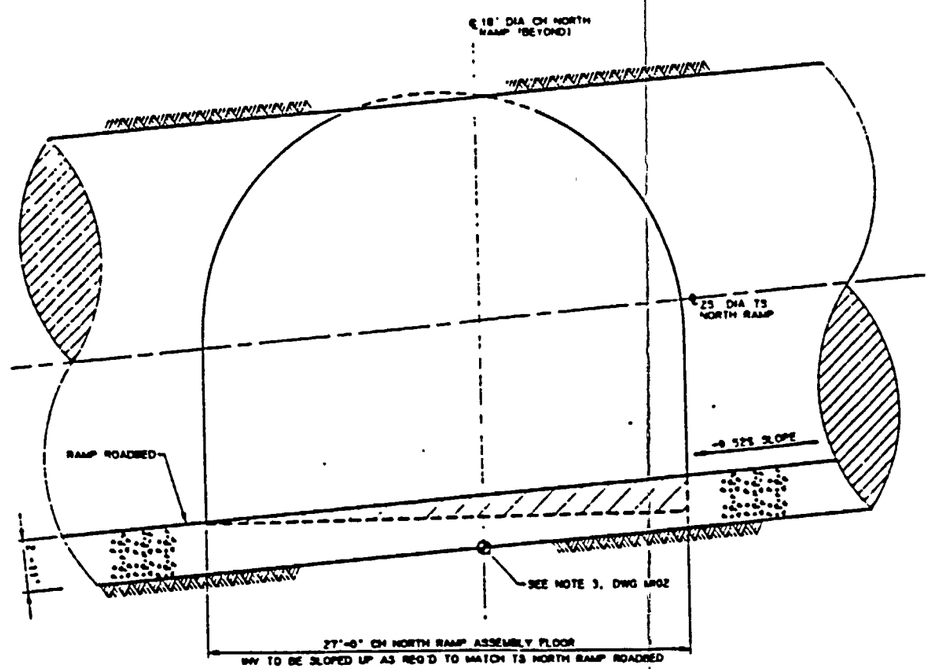
Plotted Wed Aug 21 14:31:00 1991, PDT Part name ymp0018 DWG



SECTION A
SCALE 1/4"=1'-0" MI02



SECTION B
SCALE 1/4"=1'-0" MI02



SECTION C
SCALE 1/4"=1'-0" MI02

SI APERTURE CARD

Also Available On Aperture Card

NOTES:

1. DIMENSIONS SHOWN ARE APPROXIMATE. ACTUAL DIMENSIONS DEPEND ON TBM SELECTED
2. ⊕ SYMBOL IS FOR REFERENCE ONLY AND DOES NOT INDICATE SURVEY STATIONS LOCATIONS

9305250071 -150

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-0E02

0 4 8 12 FEET
1/4"=1'-0"
GRAPHIC SCALE

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	MJE
DRAWN	CLP
CHECKED	
DEC	
DESIGN MANAGER	S.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

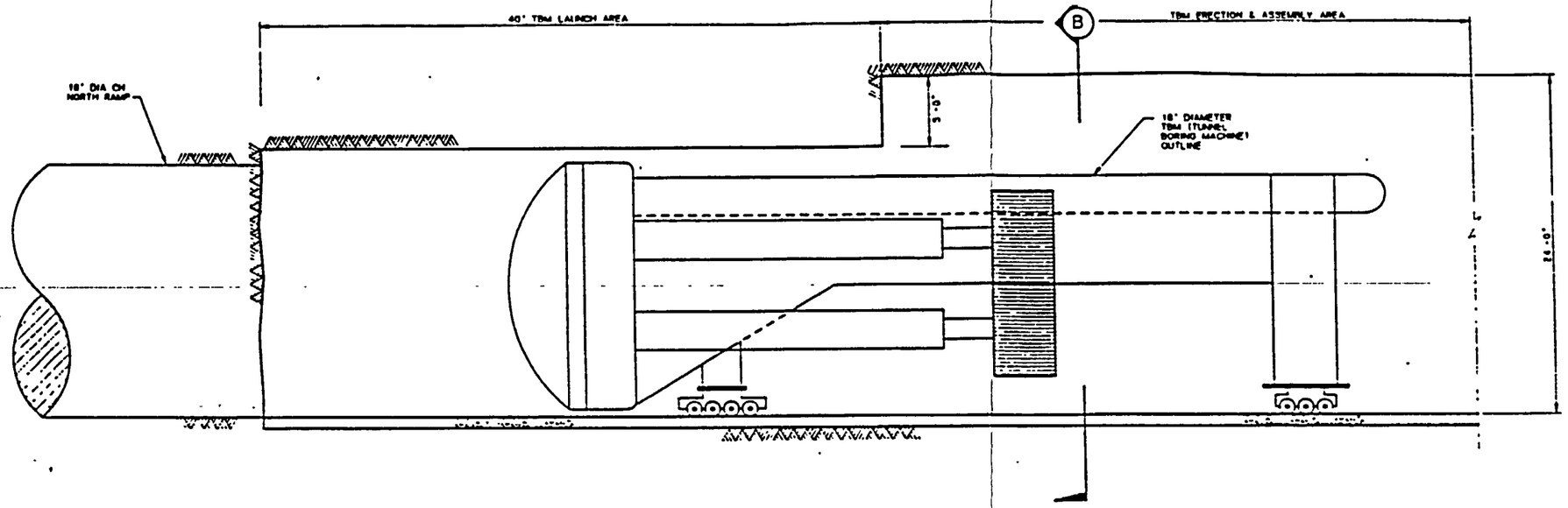
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS/CH NORTH RAMP INTERSECTION
SECTIONS

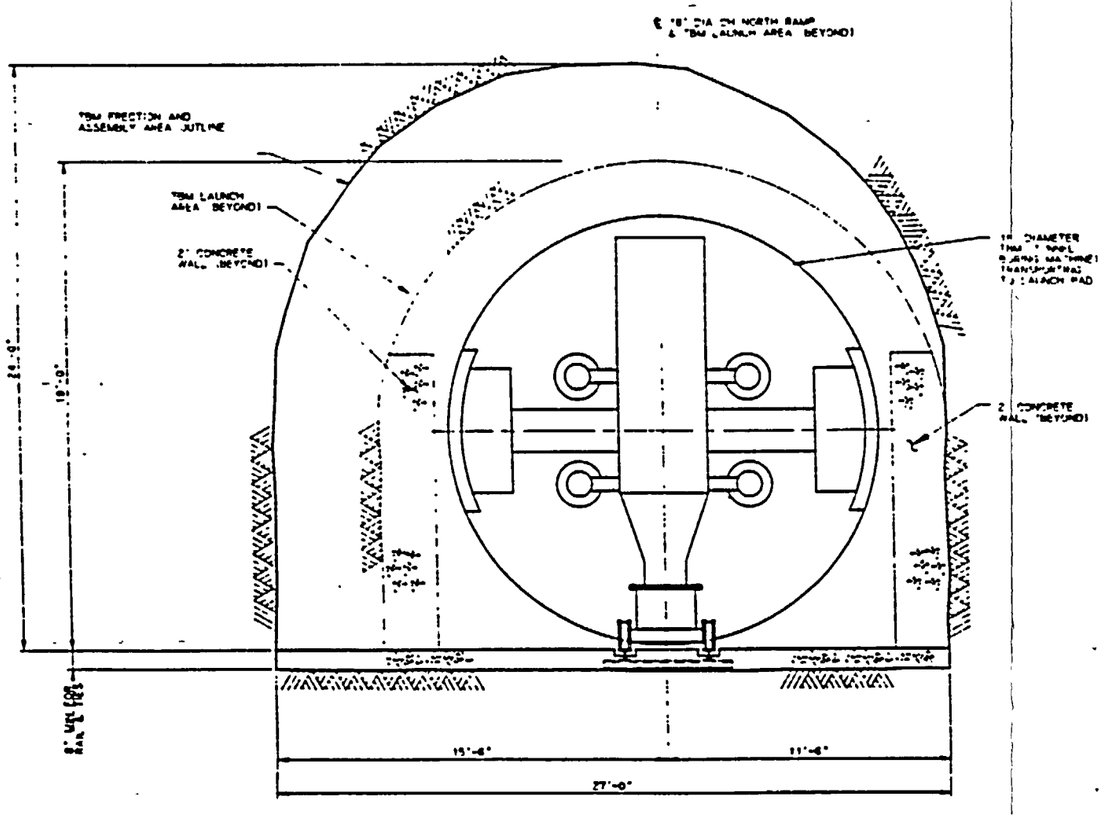
SUBMITTED BY: 7-26-91 | DATE | DRAWING NO. YMP-025-1-MING-MI03 | REV. 0

YMPO APPROVED | DATE | SHT ___ OF ___

Plotted Wed Aug 21 14:33:42 1991, PDI Part name YMP0019.DWG



SECTION A
NOT TO SCALE



SECTION B
NOT TO SCALE

SI APERTURE CARD

Also Available On Aperture Card

NOTE:
DIMENSIONS SHOWN ARE APPROXIMATE
ACTUAL DIMENSIONS DEPEND ON TBM SELECTED.

9305250071-151

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	MJE
DRAWN	CLP
CHECKED	
DEC	
DESIGN MANAGER	B.C.M.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

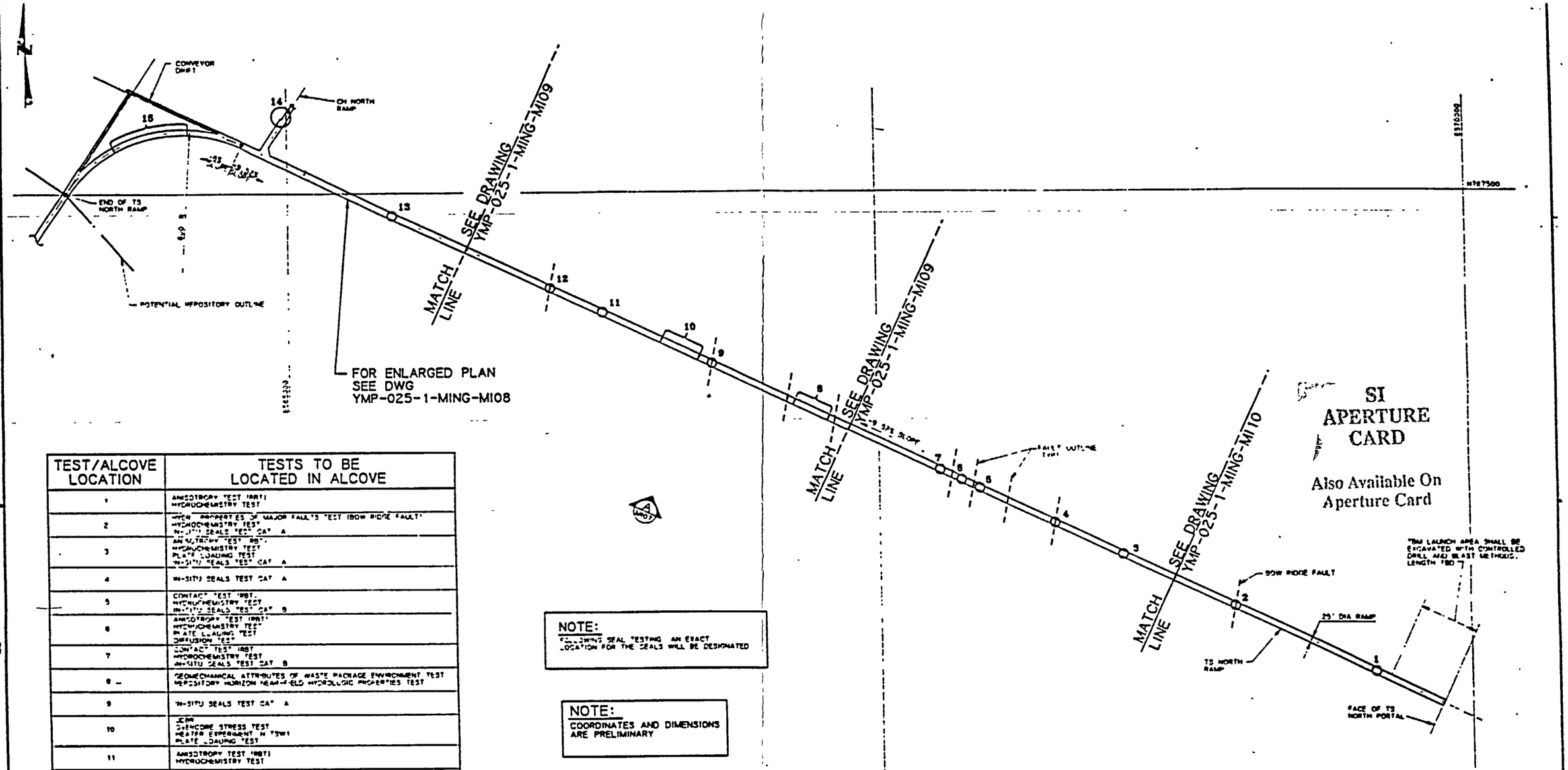
EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS/CH NORTH RAMP INTERSECTION
TBM TRANS TO LAUNCH AREA SECTS

SUBMITTED BY	DATE	DRAWING NO.	REV.
	8-21-91	YMP-025-1-MING-M104	0

YMPO APPROVED DATE | SHT OF

PCN YMP0020 8-21-91 | W.B.S. NO 1.2.6.5 | C.I. NO

Plotted Wed Aug 21 15:04:44 1991, PDT Part name YMP0020.DWG



SI APERTURE CARD

Also Available On Aperture Card

TEST/ALCOVE LOCATION	TESTS TO BE LOCATED IN ALCOVE
1	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST
2	HYDR PROPERTIES OF MAJOR FAULTS TEST (BOW RIDGE FAULT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT A
3	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST PLATE LOADING TEST IN-SITU SEALS TEST CAT A
4	IN-SITU SEALS TEST CAT A
5	CONTACT TEST (RBT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B
6	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST PLATE LOADING TEST DIFFUSION TEST
7	CONTACT TEST (RBT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B
8	GEOMECHANICAL ATTRIBUTES OF WASTE PACKAGE ENVIRONMENT TEST REPOSITORY HORIZON NEAR-FIELD HYDROLOGIC PROPERTIES TEST
9	IN-SITU SEALS TEST CAT A
10	DCRA DRIFT SCALE STRESS TEST HEATER EXPERIMENT (TSW) PLATE LOADING TEST
11	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST
12	IN-SITU SEALS TEST CAT A
13	HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B
14	EXCAVATION EFFECTS TEST
15	HYDR PROPERTIES OF MAJOR FAULTS (DRILL HOLE WASH STRUCTURE) HYDROCHEMISTRY TEST

NOTE:
FOLLOWING SEAL TESTING AN EXACT LOCATION FOR THE SEALS WILL BE DESIGNATED

NOTE:
COORDINATES AND DIMENSIONS ARE PRELIMINARY

GENERAL NOTES

1. THE BASIS FOR THE TEST ALCOVE LOCATIONS ESF DR YMP/CC-0013, REV 5/31-91
2. THE GEOLOGICAL, STRUCTURAL FEATURES ARE BASED ON SAIC PRELIMINARY CROSS SECTION CC-CC', DATE 5/3/91
3. ACTUAL TEST ALCOVES WILL BE LOCATED IN THE FIELD AS GEOLOGY IS REVEALED BY EXCAVATION ALCOVE LOCATIONS SHOWN ARE APPROXIMATIONS
4. AN AREA OF LENGTH TO BE DETERMINED BEHIND AN ADVANCING TBM WILL HAVE THE UTILITIES LOCATED IN A MANNER TO PERMIT OPTIMIZED MAPPING OF THE RAMP PERIMETER
5. SEE CALCULATION ST-SA-001 FOR MAJOR COORDINATES AND VERTICAL CURVE DATA

TS NORTH RAMP PLAN WITH PRELIMINARY TEST LOCATIONS

SCALE 1"=200

0 200 400 600 FEET
1"=200"
GRAPHIC SCALE

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPC

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLC
DRAWN	CLP
CHECKED	
DEC	
DESIGN VERIFIER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	8-26-91

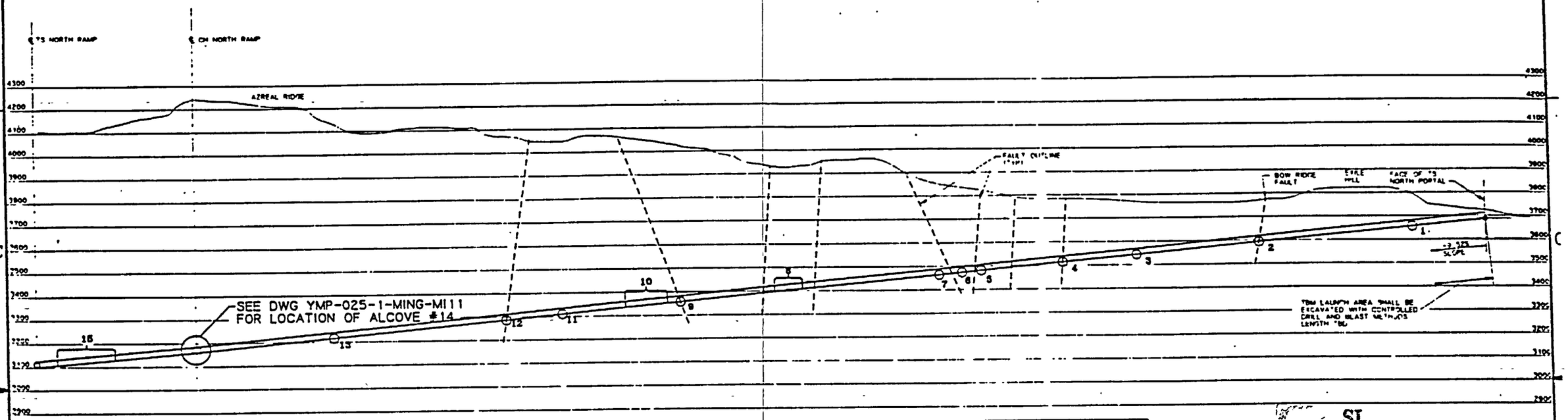
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS PRELIMINARY TEST LOCATIONS
PLAN

SUBMITTED BY	DATE	DRAWING NO	REV.
	8-26-91	YMP-025-1-MING-MI06	0

YMPO APPROVED DATE SHT OF

9305250071-152



TEST/ALCOVE LOCATION	TESTS TO BE LOCATED IN ALCOVE
1	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST
2	HYDR PROPERTIES OF MAJOR FAULTS TEST (BOW RIDGE FAULT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT A
3	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST PLATE LOADING TEST IN-SITU SEALS TEST CAT B
4	IN-SITU SEALS TEST CAT A
5	CONTACT TEST (RBT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B
6	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST PLATE LOADING TEST DIFFUSION TEST
7	CONTACT TEST (RBT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B
8	GEOMECHANICAL ATTRIBUTES OF WASTE PACKAGE ENVIRONMENT TEST REPOSITORY HORIZON NEAR-FIELD HYDROLOGIC PROPERTIES TEST
9	IN-SITU SEALS TEST CAT A
10	UCDR OVERCORE STRESS TEST HEATER EXPERIMENT IN TSW1 PLATE LOADING TEST
11	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST
12	IN-SITU SEALS TEST CAT. A
13	HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B
15	HYDR PROPERTIES OF MAJOR FAULTS (DRILL HOLE WASH STRUCTURE) HYDROCHEMISTRY TEST

ELEVATION (A / MI06)
SCALE 1"=200'

NOTE:
COORDINATES AND DIMENSIONS ARE PRELIMINARY

0 200 400 600 FEET
1"=200'
GRAPHIC SCALE

SI APERTURE CARD

Also Available On Aperture Card

FOR GENERAL NOTES SEE DWG YMP-025-1-MING-MI06
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-153

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLC
DRAWN	CLP
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

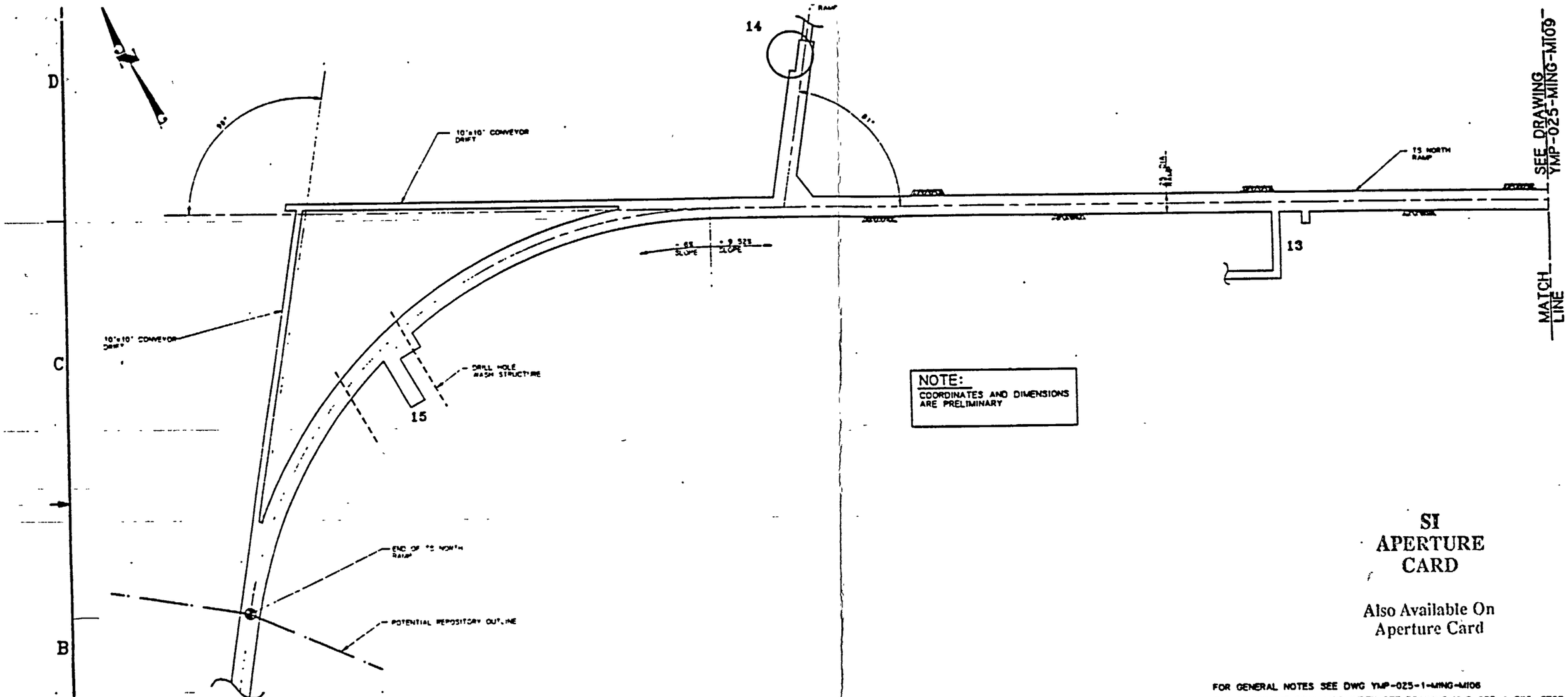
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS PRELIMINARY TEST LOCATIONS
ELEVATION

SUBMITTED BY	DATE	DRAWING NO	REV.
	8-4-93	YMP-025-1-MING-MI07	0

YMPO APPROVED DATE SHT OF

FOR PURPOSES 1 2 3 5
0-21-01



PLAN
SCALE 1"=60'

NOTE:
COORDINATES AND DIMENSIONS ARE PRELIMINARY

TEST/ALCOVE LOCATION	TESTS TO BE LOCATED IN ALCOVE	EXCAVATION SIZE REQUIRED (PRELIMINARY)
13	HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B	12'Wx15'Lx8'H 10' DIAMLENGTH TBD - 3 TUNNEL DIA AWAY
14	EXCAVATION EFFECTS TEST	USE EXISTING TBM ERECTION/LAUNCH AREA
15	HYDR PROPERTIES OF MAJOR FAULTS (DRILL HOLE WASH STRUCTURE) HYDROCHEMISTRY TEST	50'Wx80'Lx28'H (MAX DIMENSIONS) (SAME ALCOVE)

0 60 120 180 FEET
1"=60'
GRAPHIC SCALE

SI
APERTURE
CARD

Also Available On
Aperture Card

FOR GENERAL NOTES SEE DWG YMP-025-1-MING-M106
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-154

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

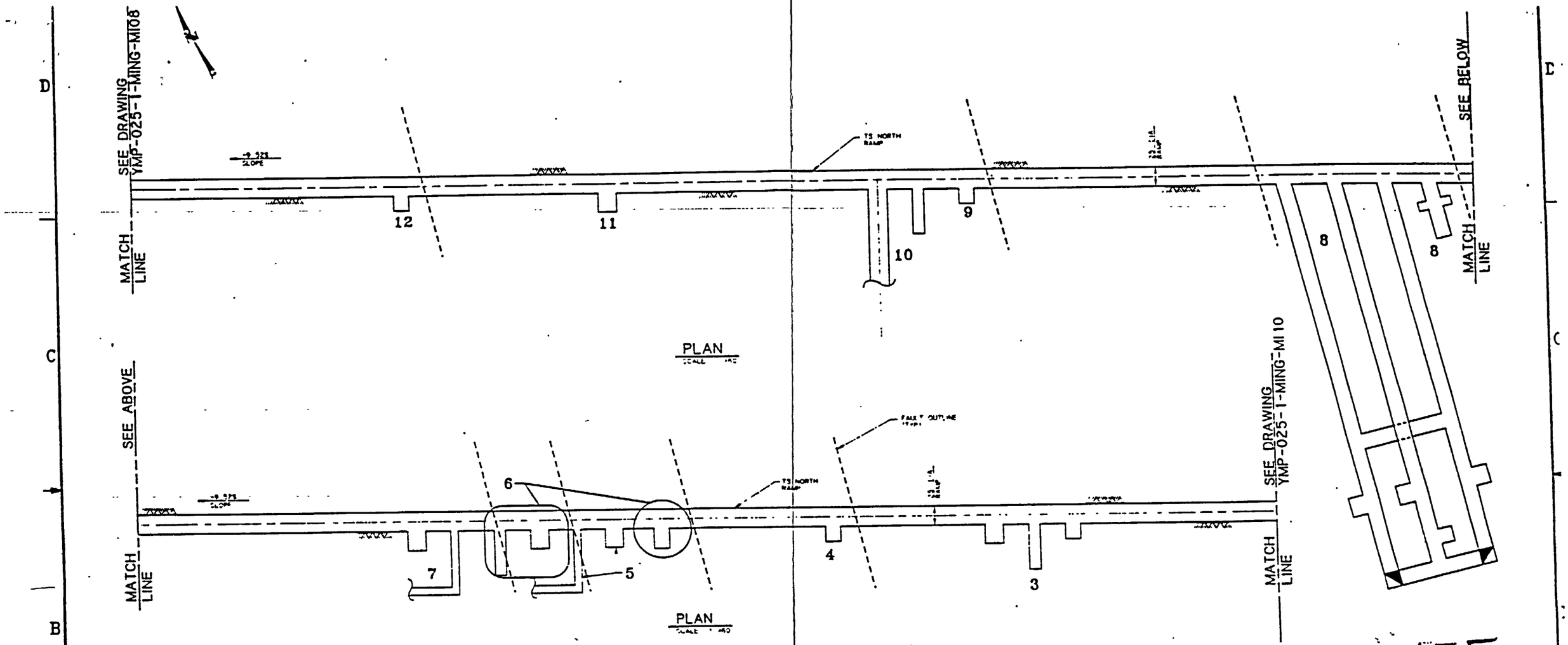
APPROVALS
DESIGN RLC
DRAWN CLP
CHECKED
DEC
DESIGN MANAGER
VERIFICATION N/A
ENV SAF
QUALITY ASSURANCE

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS PRELIMINARY TEST LOCATIONS
ENLARGED PLAN

SUBMITTED BY DATE 5-25-93
DRAWING NO YMP-025-1-MING-M108
REV. 0
YMPO APPROVED DATE
SHT OF

Plotted Wed Aug 21 15:25:23 1991, PDT Part name YMP0094.DWG



9305250071-155

TEST/ALCOVE LOCATION	TESTS TO BE LOCATED IN ALCOVE	EXCAVATION SIZE REQUIRED (PRELIMINARY)
3	ANISOTROPY TEST (MBT) HYDROCHEMISTRY TEST PLATE LOADING TEST IN-SITU SEALS TEST CAT A	24 W x 25 L x 26 H SAME ALCOVE AS ANISOTROPY TEST 15 W x 60 L x 8 H 20 W x 20 L x 10 H
4	IN-SITU SEALS TEST CAT A	20'W x 20'L x 10 H
5	CONTACT TEST (MBT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B	24 W x 25 L x 26 H SAME ALCOVE AS ANISOTROPY TEST 10 DIA x LENGTH TBD - 3 TUNNEL DIA AWAY
6	ANISOTROPY TEST (MBT) HYDROCHEMISTRY TEST PLATE LOADING TEST DIFFUSION TEST	24 W x 25 L x 26 H SAME ALCOVE AS CONTACT TEST 15 W x 60 L x 8 H 20 W x 20 L x HEIGHT (TBD)
7	CONTACT TEST (MBT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT B	24 W x 25 L x 26 H SAME ALCOVE AS CONTACT TEST 10 DIA x LENGTH TBD - 3 TUNNEL DIA AWAY
8	GEOMECHANICAL ATTRIBUTES OF WASTE PACKAGE ENVIRONMENT TEST REPOSITORY HORIZON NEAR-FIELD HYDROLOGIC PROPERTIES TEST	20 W x 72 L x 15 H (12) 12'W x 12'L ALCOVES TBDW x TBDL x TBDH
9	IN-SITU SEALS TEST CAT. A	20 W x 20 L x 10 H
10	UDGR OVERCORE STRESS TEST HEATER EXPERIMENT IN T3W1 PLATE LOADING TEST	25W x LENGTH (TBD) x HEIGHT (TBD) SAME ALCOVE AS UDGR SAME ALCOVE AS UDGR 15 W x 60 L x 8 H
11	ANISOTROPY TEST (MBT) HYDROCHEMISTRY TEST	24 W x 25 L x 26 H SAME ALCOVE AS ANISOTROPY TEST
12	IN-SITU SEALS TEST CAT A	20'W x 20'L x 10 H

NOTE:
WHEN EVER POSSIBLE TEST ALCOVES WILL BE UTILIZED FOR MORE THAN ONE TEST. CO-UTILIZATION WILL BE DEPENDENT UPON SUCH FACTORS AS SCHEDULES, SPACE FOR DRILLING AND OPERATIONS INTERFERENCE. THE NUMBER OF ALCOVES SHOWN WILL BE REDUCED IF POSSIBLE

NOTE:
COORDINATES AND DIMENSIONS ARE PRELIMINARY

SI APERTURE CARD

Also Available On Aperture Card

0 60 120 180 FEET
1"=60'
GRAPHIC SCALE

FOR GENERAL NOTES SEE DWG YMP-025-1-MING-MI08
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

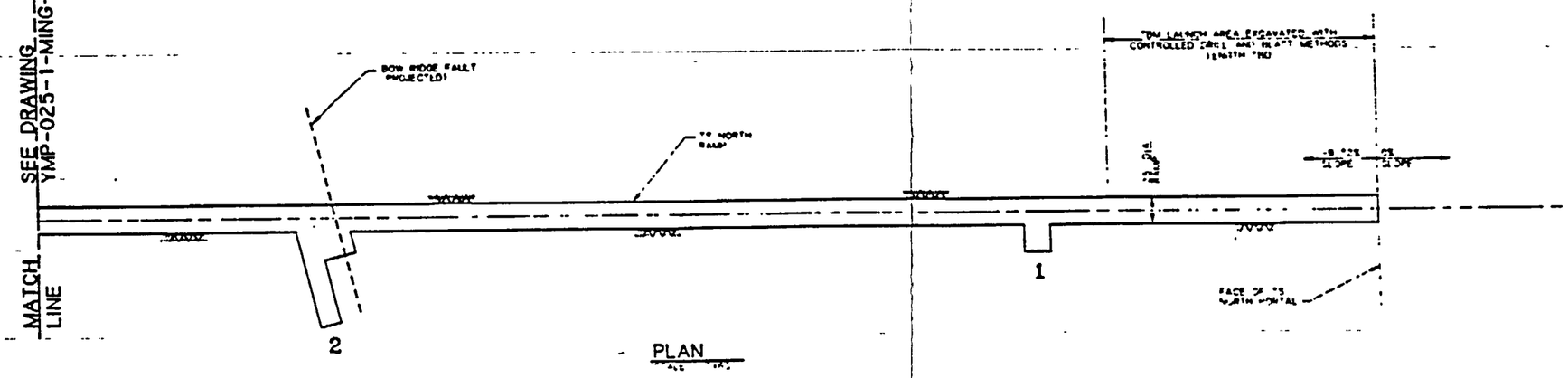
APPROVALS: RLC, CLP, DESIGN MANAGER T.S.C.H., VERIFICATION N/A, QUALITY ASSURANCE

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS PRELIMINARY TEST LOCATIONS
ENLARGED PLANS

SUBMITTED BY | DATE | DRAWING NO YMP-025-1-MING-MI09 | REV. 0
YMPO APPROVED | DATE | SHT | OF

FOR PURPOSES 0-21-01 | WBS NO 1.2.6.5

Plotted Wed Aug 21 15:44:39 1991, MD Part name



PLAN

NOTE:
COORDINATES AND DIMENSIONS ARE PRELIMINARY

TEST/ALCOVE LOCATION	TESTS TO BE LOCATED IN ALCOVE	EXCAVATION SIZE REQUIRED (PRELIMINARY)
1	ANISOTROPY TEST (NBT) HYDROCHEMISTRY TEST	24 W x 25 L x 26 H SAME ALCOVE AS ANISOTROPY TEST
2	HYDR PROPERTIES OF MAJOR FAULTS TEST (BOW RIDGE FAULT) HYDROCHEMISTRY TEST IN-SITU SEALS TEST CAT A	50 W x 80 L x 26 H (MAX DIMENSIONS) SAME ALCOVE AS HYDR PROPERTIES TEST SAME ALCOVE AS HYDR PROPERTIES TEST

0 60 120 180 FEET
1" = 60'
GRAPHIC SCALE

SI APERTURE CARD

Also Available On Aperture Card

FOR GENERAL NOTES SEE DWG YMP-025-1-MING-MI06
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-156

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS
DESIGN RLC
DRAWN CLP
CHECKED
DEC
DESIGN VERIFIER
VERIFICATION N/A
ENV SAF
QUALITY ASSURANCE 8-26-91

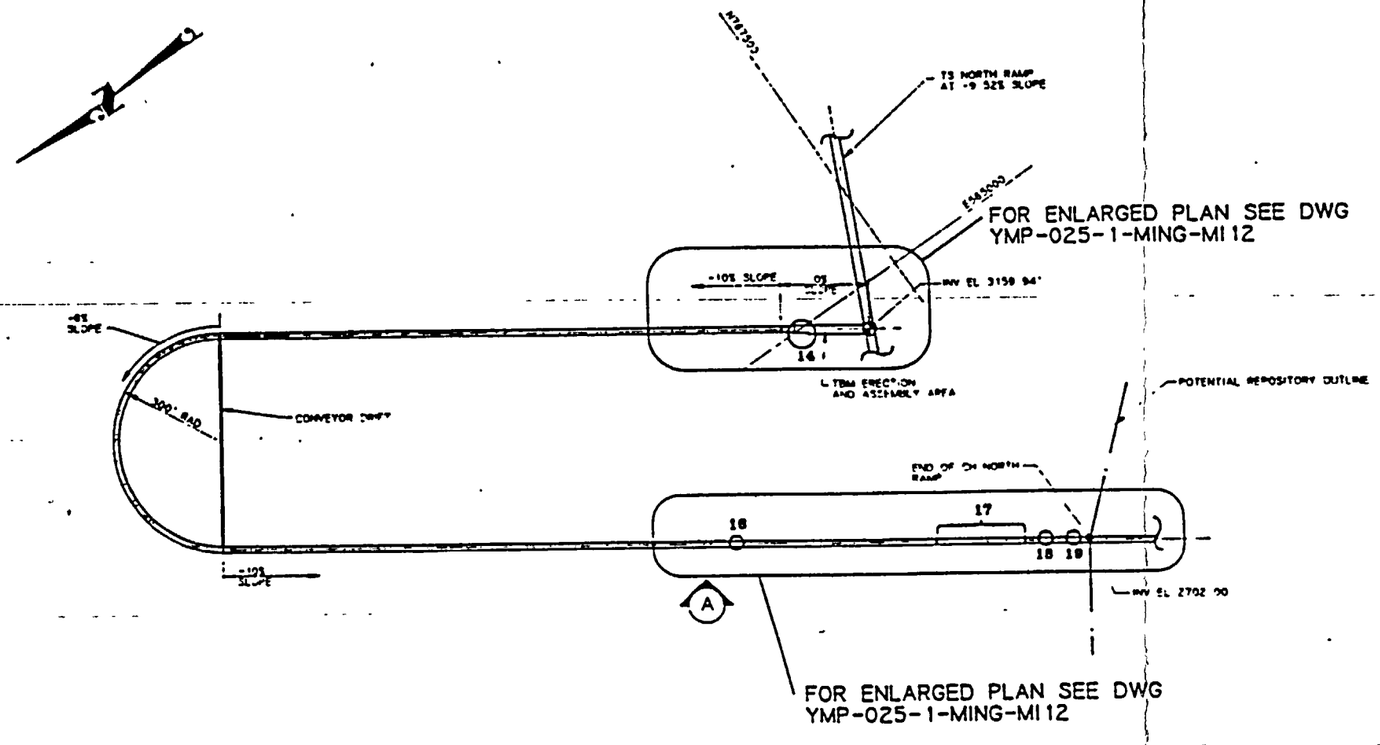
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP GENERAL ARRANGEMENT
TS PRELIMINARY TEST LOCATIONS
ENLARGED PLAN

SUBMITTED BY DATE 8-26-91
DRAWING NO YMP-025-1-MING-MI10
REV 0
YMPO APPROVED DATE
SHT OF

FOR PURPOSES 8-21-91
U.S. NO 1,2,8,3
C.I. NO

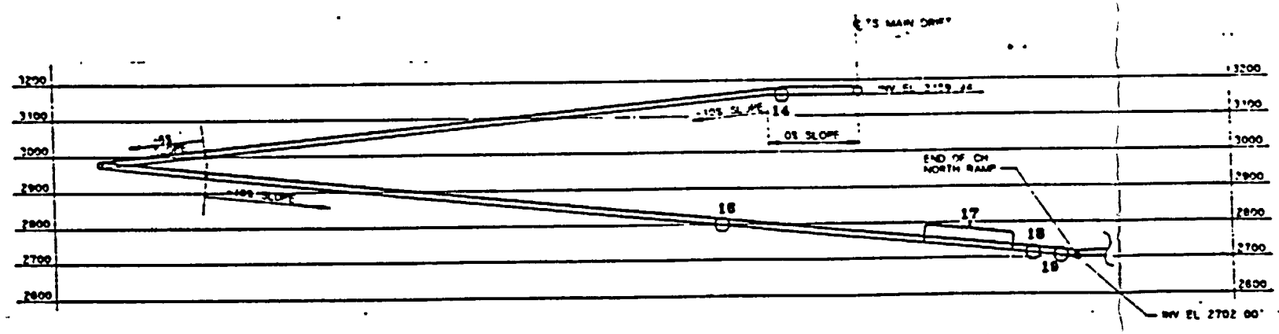
Plotted: Wed Aug 21 13:31:41 1991, PDT Part name YMP-J098.DRW



CH NORTH RAMP PLAN

SCALE 1"=200'

NOTE:
COORDINATES AND DIMENSIONS ARE PRELIMINARY



ELEVATION (A)

SCALE 1"=200'

0 200 400 800 FEET

1"=200'

GRAPHIC SCALE

TEST/ALCOVE LOCATION	TESTS TO BE LOCATED IN ALCOVE
14	EXCAVATION EFFECTS TEST
16	ANISOTROPY TEST (RBT) HYDROCHEMISTRY TEST PLATE LOADING TEST
17	HYDR PROPERTIES OF MAJOR FAULTS (DRILL HOLE WASH STRUCTURE) HYDROCHEMISTRY TEST
18	PLATE LOADING TEST
19	CONTACT TEST (RBT) HYDROCHEMISTRY TEST

SI APERTURE CARD

Also Available On Aperture Card

GENERAL NOTES

1. THE BASIS FOR THE TEST ALCOVE LOCATIONS IS [illegible] REV 5/31/91
2. THE GEOLOGICAL STRUCTURAL FEATURES ARE BASED ON SAIC PRELIMINARY CROSS SECTION (ALIGNED ALONG NORTH ACCESS RAMP) DATE 5/5/91
3. ACTUAL TEST ALCOVES WILL BE LOCATED IN THE FIELD AS GEOLOGY IS REVEALED BY EXCAVATION ALCOVE LOCATIONS SHOWN ARE APPROXIMATIONS
4. AN AREA OF LENGTH TO BE DETERMINED BEHIND AN ADVANCING TBM WILL HAVE THE STRATA SUPPORTED IN A MANNER TO PERMIT OPTIMIZED MAPPING OF THE RAMP PERIMETER
5. SEE CALCULATION 57-SA-001 FOR MAJOR COORDINATES AND VERTICAL CURVE DATA

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -157

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RLC
DRAWN	CLP
CHECKED	
REC	
DESIGN MANAGER	B.CH.
CERTIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

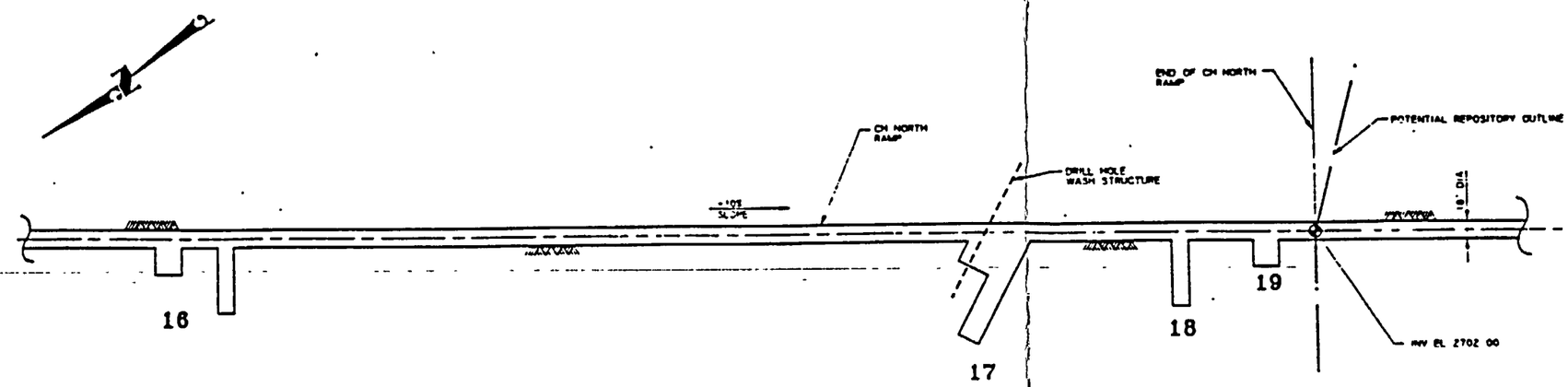
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
CH NORTH RAMP GENERAL ARRANGEMENT
CH PRELIMINARY TEST LOCATIONS
PLAN AND ELEVATION

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-MING-MI11 | REV 0
YMPO APPROVED | DATE | SHT | OF

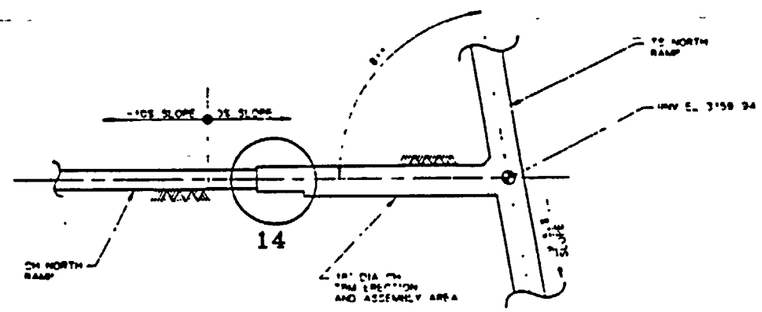
FCN YMP0017 8-21-91

Plotted: Wed Aug 21 16:08:31 1991, PDT Part name YMP-MI11.Dwg



PLAN

SCALE
(SEE DWG YMP-025-1-MING-M111)



PLAN

SCALE
(SEE DWG YMP-025-1-MING-M111)

NOTE:
COORDINATES AND DIMENSIONS ARE PRELIMINARY

TEST/ALCOVE LOCATION	TESTS TO BE LOCATED IN ALCOVE	EXCAVATION SIZE REQUIRED (PRELIMINARY)
14	EXCAVATION EFFECTS TEST	USE EXISTING TBM ERECTION/LAUNCH AREA
16	ANISOTROPY TEST (MBT) HYDROCHEMISTRY TEST PLATE LOADING TEST	24'Wx25'Lx26'H SAME ALCOVE AS ANISOTROPY TEST 15'Wx60'Lx6'H
17	HYDR PROPERTIES OF MAJOR FAULTS (DRILL HOLE WASH STRUCTURE) HYDROCHEMISTRY TEST	50'Wx60'Lx26'H (MAX DIMENSIONS) SAME ALCOVE AS HYDR PROPERTIES TEST
18	PLATE LOADING TEST	15'Wx60'Lx6'H
19	CONTACT TEST (MBT) HYDROCHEMISTRY TEST	24'Wx25'Lx26'H SAME ALCOVE AS CONTACT TEST

NOTE:
WHEN EVER POSSIBLE TEST ALCOVES WILL BE UTILIZED FOR MORE THAN ONE TEST. CO-UTILIZATION WILL BE DEPENDENT UPON SUCH FACTORS AS SCHEDULES, SPACE FOR DRILLING AND OPERATIONS INTERFERENCE. THE NUMBER OF ALCOVES SHOWN WILL BE REDUCED IF POSSIBLE

0 60 120 180 FEET
1"=60'
GRAPHIC SCALE

SI APERTURE CARD

Also Available On Aperture Card

FOR GENERAL NOTES SEE DWG YMP-025-1-MING-M111
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-158

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VMPV	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLC
DRAWN	CLP
CHECKED	
DEC	
DESIGN MANAGER	CH.
VERIFICATION	N/A
ENV SAF	
QUALITY ASSURANCE	

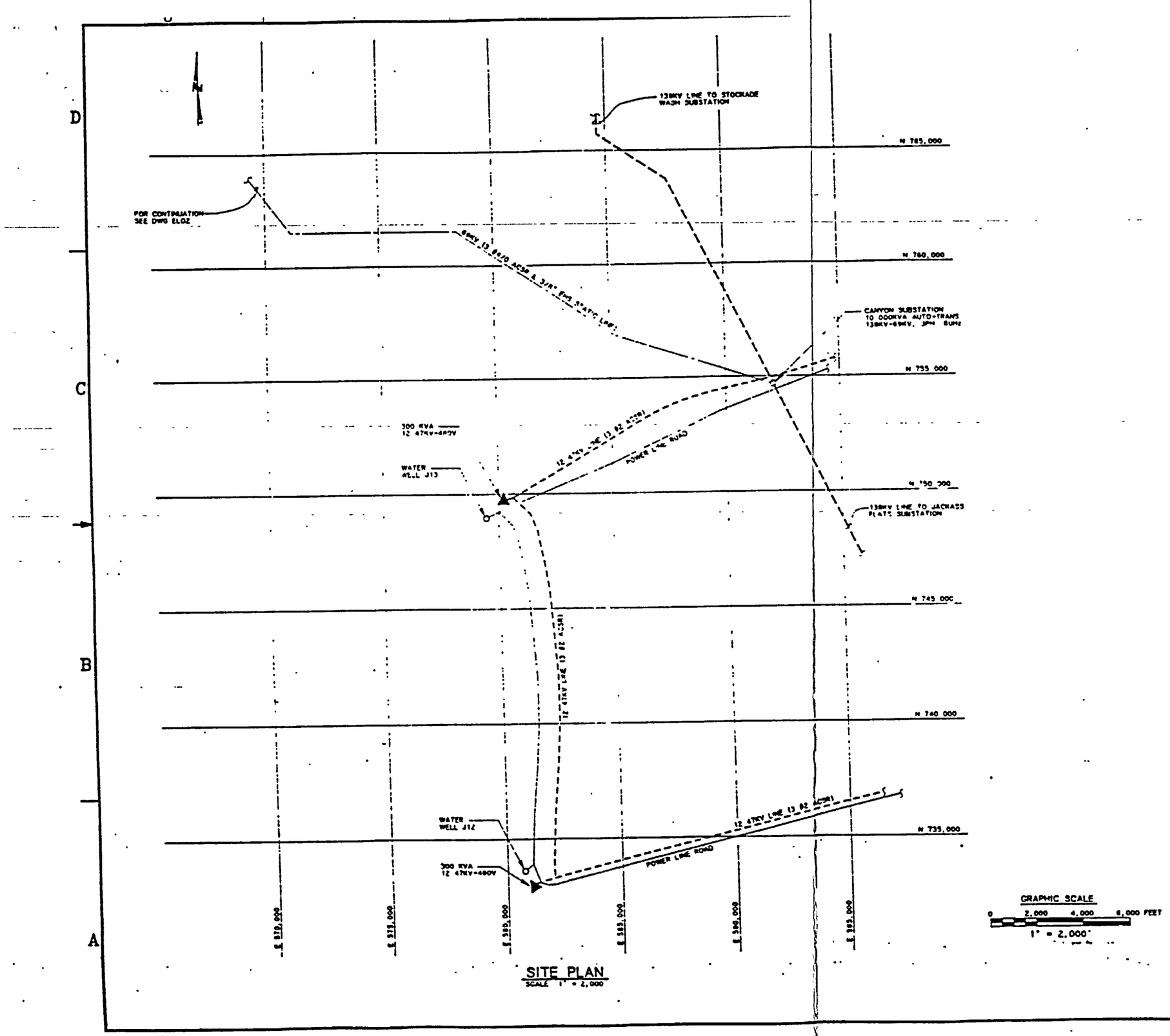
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
CH NORTH RAMP GENERAL ARRANGEMENT
CH PRELIMINARY TEST LOCATIONS
ENLARGED PLANS

SUBMITTED BY	DATE	DRAWING NO	REV
		YMP-025-1-MING-M112	0

YMPO APPROVED DATE SHT OF

Plotted Wed Aug 21 16 16 44 1991, PDT Part name: YMP025V LAW



SITE PLAN
SCALE 1" = 2,000'

GRAPHIC SCALE
0 2,000 4,000 8,000 FEET
1" = 2,000'

GENERAL NOTES

1. THESE ELECTRICAL DRAWINGS DEPICT ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS, SPECIAL INSTRUCTIONS, & EQUIPMENT RATINGS SHALL BE DETERMINED DURING THE TITLE II EFFORT.
2. ALL EQUIPMENT SHALL BE U.L. LISTED
3. ALL WORK, EQUIPMENT, & MATERIAL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, ANSI C2, & THE PROJECT CONSTRUCTION SPECIFICATIONS (TO BE DEVELOPED DURING THE TITLE II EFFORT).

NOTE:

1. CANYON SUBSTATION & ALL TRANSMISSION LINES, TRANSFORMERS, WATER WELLS, & ROADS (SHOWN ON THIS DRAWING ONLY) ARE EXISTING & IN PLACE.

LEGEND (THIS DRAWING ONLY)

- 138KV POLE LINE
- 69KV POLE LINE
- 12.47KV POLE LINE
- ▲ TRANSFORMER

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -159

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

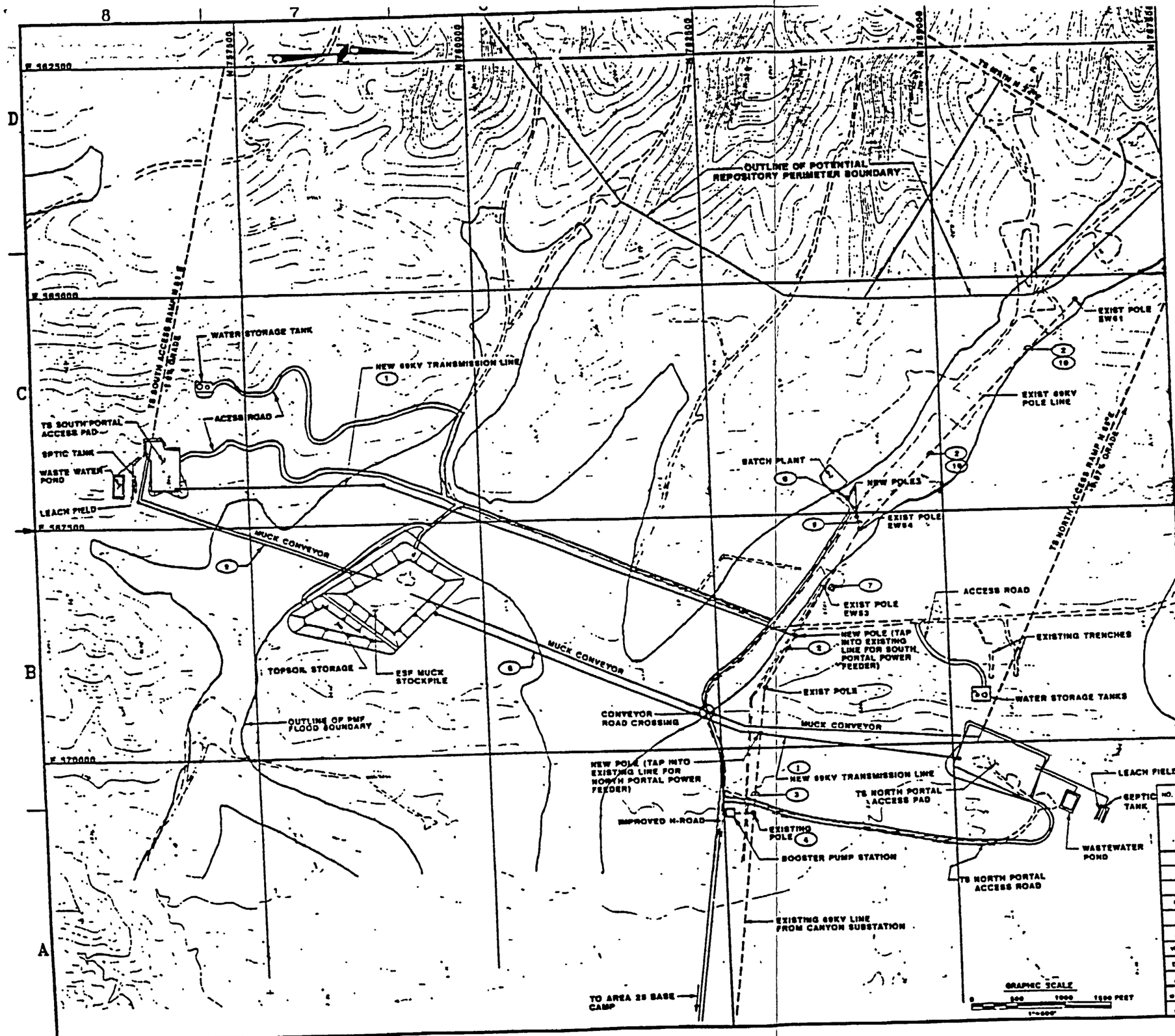
DESIGN	MDF
DRAWN	CLG
CHECKED	
DEC	
DESIGN MANAGER	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY

POWER TRANSMISSION LINE
SITE PLAN

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-ELEC-ELO1

YMPO APPROVED | DATE | SHT



KEYED NOTES:

1. THE NEW 69KV TRANSMISSION LINE DEPICTS A PRELIMINARY ROUTING OF POWER TO THE NORTH AND SOUTH PORTAL AREAS. THE ROUTING IS SUBJECT TO CHANGE.
2. EXISTING 69KV TRANSMISSION LINE WITH 12.47KV # 4/0 ACSR, UNDERBUILT.
3. EXTEND EXISTING 12.47KV UNDERBUILT FROM POLE EW52 TO POLE EW51.
4. INSTALL KVA, 12.47KV-480V/277V, 3PH, 60HZ TRANSFORMER ON POLE EW51 FOR UNDERGROUND SERVICE TO BOOSTER PUMP STATION. VALUES NOT SHOWN WILL BE DEVELOPED DURING TITLE II.
5. EXTEND EXISTING 12.47KV #4/0 ACSR, FROM POLE EW54 TO BATCH PLANT AREA.
6. INSTALL KVA, 12.47KV - 480V/277V, 3PH, 60HZ TRANSFORMER WITH A AMP, 480V/277V, 4W, 3PH PANEL MOUNT ON POLE. VALUES NOT SHOWN WILL BE DEVELOPED DURING TITLE II
7. EXISTING 1.5MVA, 69-12.47KV SUBSTATION #25-15.
8. NEW 12.47KV DISTRIBUTION LINE FOR MUCK CONVEYOR POWER, NORTH PORTAL. ROUTING SUBJECT TO CHANGE. (FED FROM THE NORTH PORTAL).
9. SAME AS NOTE 8 EXCEPT. FOR THE SOUTH PORTAL CONVEYORS. (FED FROM THE SOUTH PORTAL).
10. REMOVE THE #4/0 ACSR CONDUCTORS & POLES FOR THE 69KV TRANSMISSION AND 12.47KV UNDERBUILT DISTRIBUTION LINE FROM POLE # EW54 TO POLE EW61.

SI APERTURE CARD

Also Available On Aperture Card

9305250071 — 160

FOR GENERAL NOTES, SEE DWG YMP-025-1-ELEC-EL01

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

NO.	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

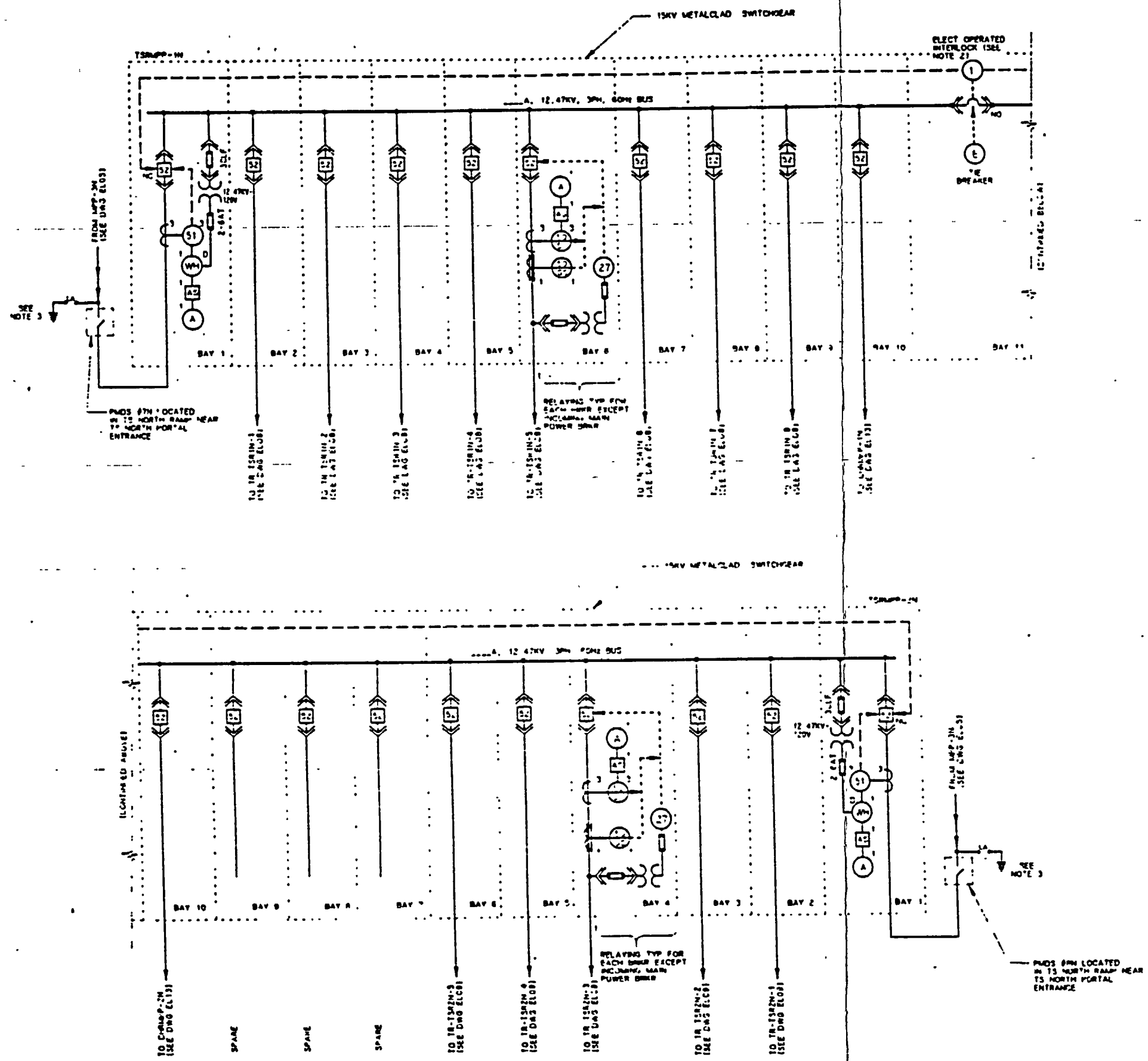
Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLL
DRAWN	JDG
CHECKED	
REC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	
W.B.S. NO.	1.2.6.2.2.1
C.I. NO.	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
POWER TRANSMISSION LINE
SITE PLAN

SUBMITTED BY
DRAWING NO. YMP-025-1-ELEC-EL02
REV 0
YMPO APPROVED
DATE
SHT OF



TS NORTH RAMP - ONE LINE DIAGRAM

NOTES:

1. ALL CIRCUITS SHALL HAVE GROUND-CHECK MONITORS AND FEEDERS SHALL HAVE GROUND-CHECK CONDUCTORS.
2. THE TWO INCOMING FEEDER CIRCUIT BREAKERS ARE NORMALLY CLOSED WITH THE TIE CIRCUIT BREAKER NORMALLY OPEN. IF ONE OF THE FEEDERS HAS A DIRECT SHORT CIRCUIT OR POWER FAILURE, THE AFFECTED BREAKER OPENS AND SIMULTANEOUSLY THE TIE CIRCUIT BREAKER CLOSES TO ENERGIZE THE TOTAL BUS.
3. THIS GROUND IS CONNECTED TO THE SURFACE MINE SAFETY GROUND SYSTEM ONLY

SI APERTURE CARD

Also Available On Aperture Card

9305250071 -161

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

FOR GENERAL NOTES, SEE DRAWING YMP-025-1-ELEC-EL01.

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

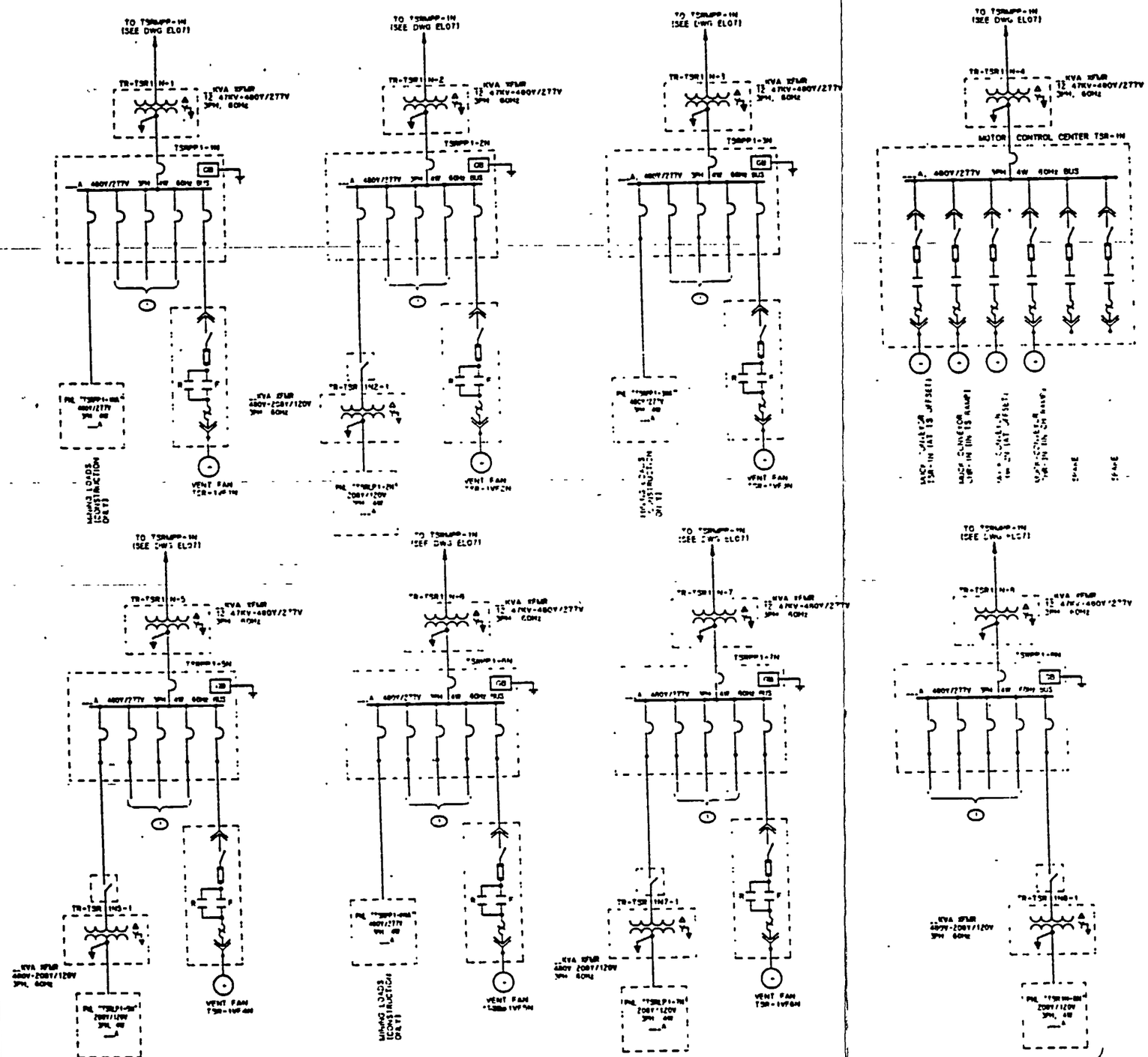
APPROVALS	
DESIGN	MSF
DRAWN	CLG
CHECKED	
DEC	
DESIGN VERIFIER	S.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP
ELECTRICAL
ONE LINE DIAGRAM

SUBMITTED BY	DATE	DRAWING NO.	REV.
		YMP-025-1-ELEC-EL07	0

YMPO APPROVED DATE SHT OF



① POWER PANELS LOCATED IN TS NORTH RAMP AT VARIOUS FACILITIES REQUIRING POWER FOR INSTRUMENTATION TESTING LIGHTING, UPS(S), ETC

TS NORTH RAMP - ONE LINE DIAGRAM

NOTES:

1. FOR RELATED NOTES TO THIS DRAWING, SEE DRAWING YMP-025-1-ELEC-EL07

SI APERTURE CARD

Also Available On Aperture Card

9305250071 - 162

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

FOR GENERAL NOTES, SEE DRAWING YMP-025-1-ELEC-EL01.

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VERF	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	MSF
DRAWN	CLG
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

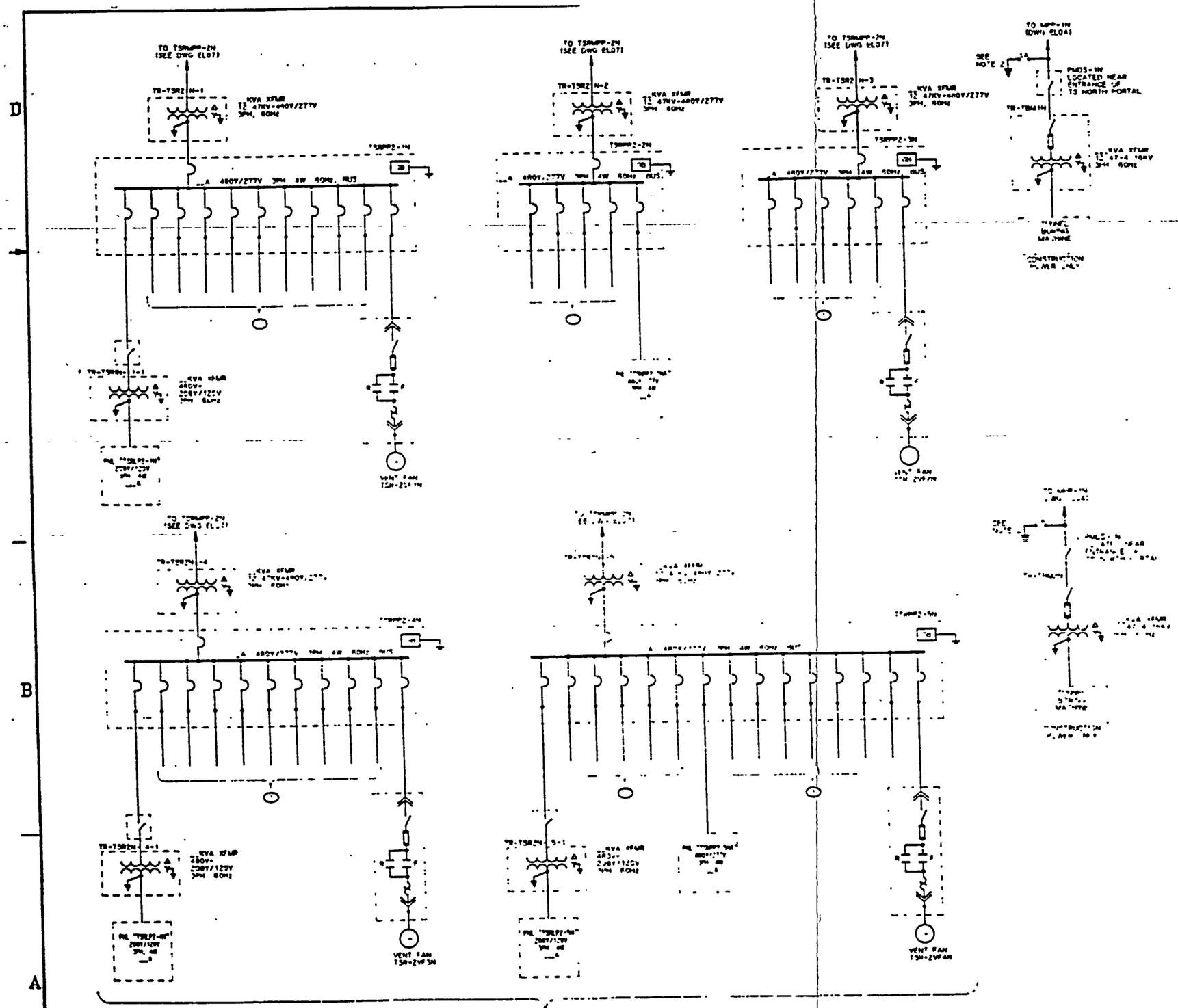
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP
ELECTRICAL
ONE LINE DIAGRAM

SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-ELEC-EL08	0
YMPO APPROVED	DATE	SHT	OF

PCN 1 2 6 2 2 1

Plotted : Fri Aug 23 08:20 38 1991, PDT Part name: YMP0082.DWG



① POWER PANELS LOCATED IN TOPOPAH SPRING NORTH ACCESS RAMP AT VARIOUS FACILITIES REQUIRING POWER FOR INSTRUMENTATION TESTING, LIGHTING, UPS(S), ETC

TS NORTH RAMP - ONE LINE DIAGRAM

NOTES:

1. FOR RELATED NOTES TO THIS DRAWING, SEE DRAWING YMP-025-1-ELEC-EL07
2. THIS GROUND IS CONNECTED TO THE SURFACE MINE SAFETY GROUND SYSTEM ONLY

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL GE02

FOR GENERAL NOTES, SEE DRAWING YMP-025-1-ELEC-EL01.

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VMPO	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

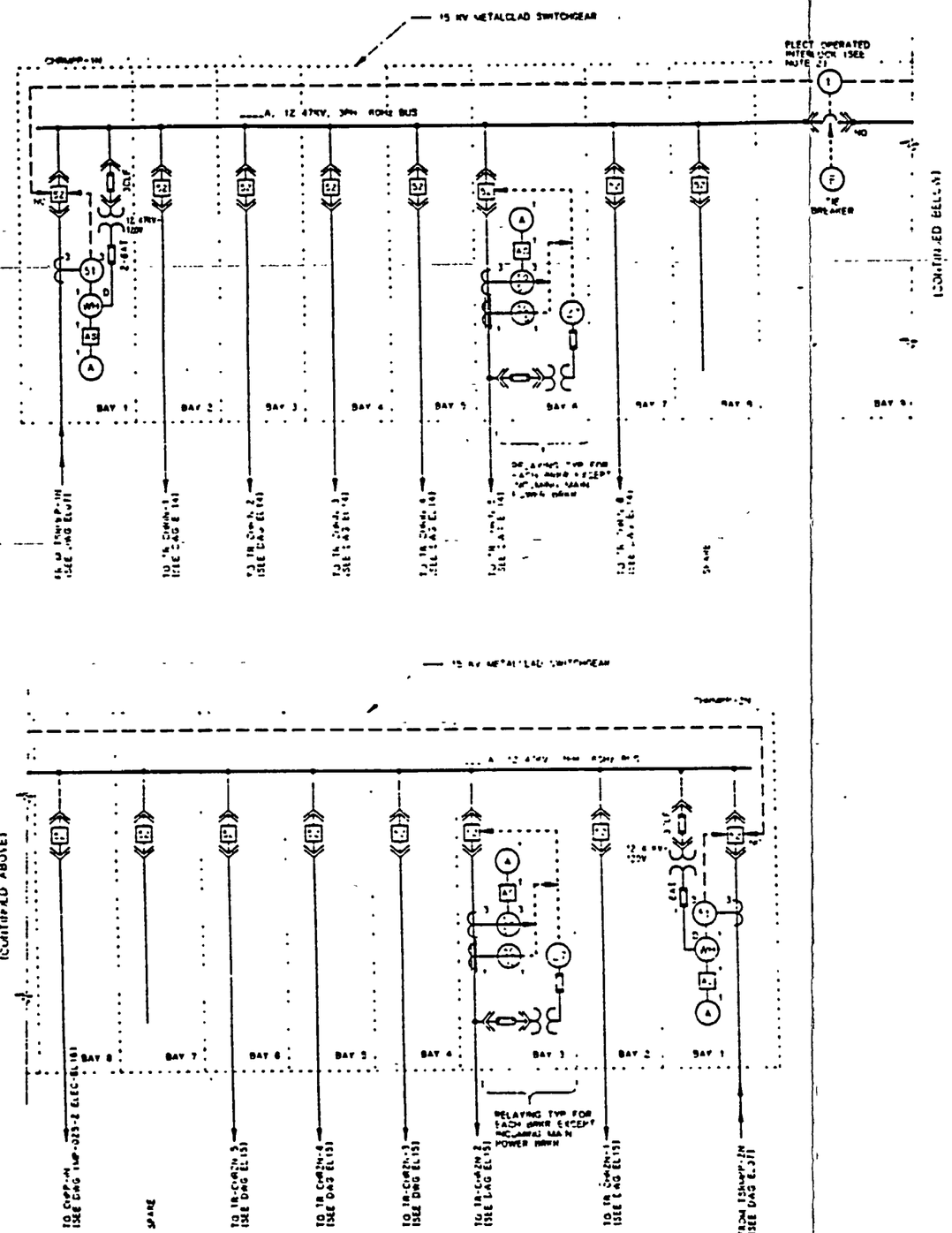
APPROVALS	
DESIGN	MDF
DRAWN	CLG
CHECKED	
DEC	
DESIGN SUPERVISOR	B.CH.
VERIFICATION	N/A
DRN / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH RAMP
ELECTRICAL
ONE LINE DIAGRAM

SUBMITTED BY	DATE	DRAWING NO	REV
		YMP-025-1-ELEC-EL09	0

YMPO APPROVED DATE SHT OF

9305250071-163



CH NORTH RAMP - ONE LINE DIAGRAM

NOTES:

1. ALL CIRCUITS SHALL HAVE GROUND-CHECK MONITORS AND FEEDERS SHALL HAVE GROUND-CHECK SUPERVISORS.
2. THE TWO INCOMING FEEDER CIRCUIT BREAKERS ARE NORMALLY CLOSED WITH THE TIE CIRCUIT BREAKER NORMALLY OPEN. IF ONE OF THE FEEDERS HAS A DIRECT SHORT RESULT IN POWER FAILURE, THE AFFECTED BREAKER OPENS AND SIMULTANEOUSLY THE TIE CIRCUIT BREAKER CLOSES TO ENERGIZE THE TOTAL BUS.

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

FOR GENERAL NOTES, SEE DRAWING YMP-025-1-ELEC-EL01.

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	YMPO	ENV	SAF	QA	TPO	YMPC

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	MSF
DRAWN	CLG
CHECKED	
DPC	
DESIGN VERIFICATION	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

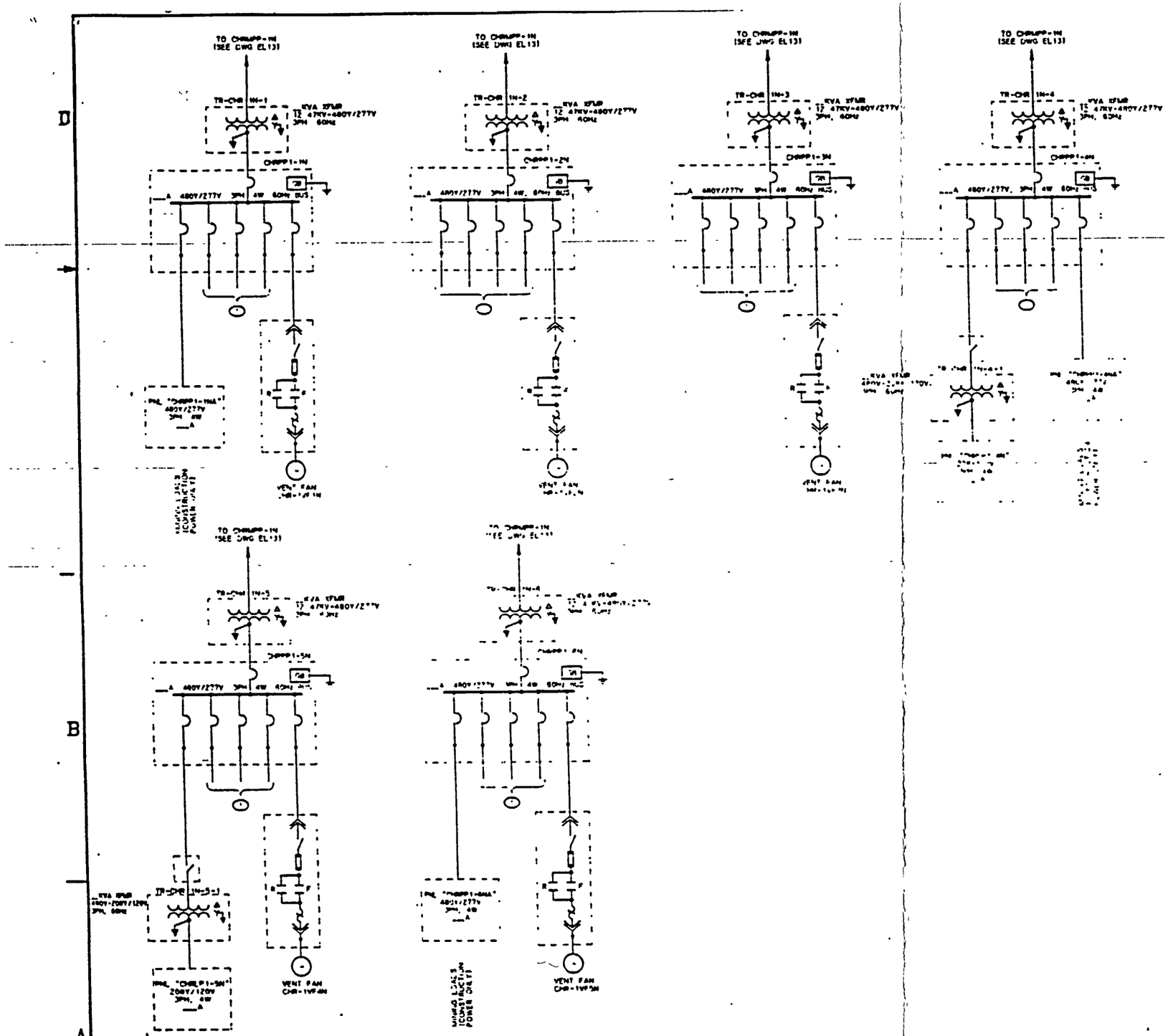
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
CH NORTH RAMP
ELECTRICAL
ONE LINE DIAGRAM

SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-ELEC-EL13	0

YMPO APPROVED DATE SHT OF

9305250071-164



CH NORTH RAMP - ONE LINE DIAGRAM

NOTE:

1. FOR RELATED NOTES TO THIS DRAWING, SEE DRAWING YMP-025-1-ELEC-EL13

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

FOR GENERAL NOTES, SEE DRAWING YMP-025-1-ELEC-EL01.

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRF	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	MSF
DRAWN	CLG
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

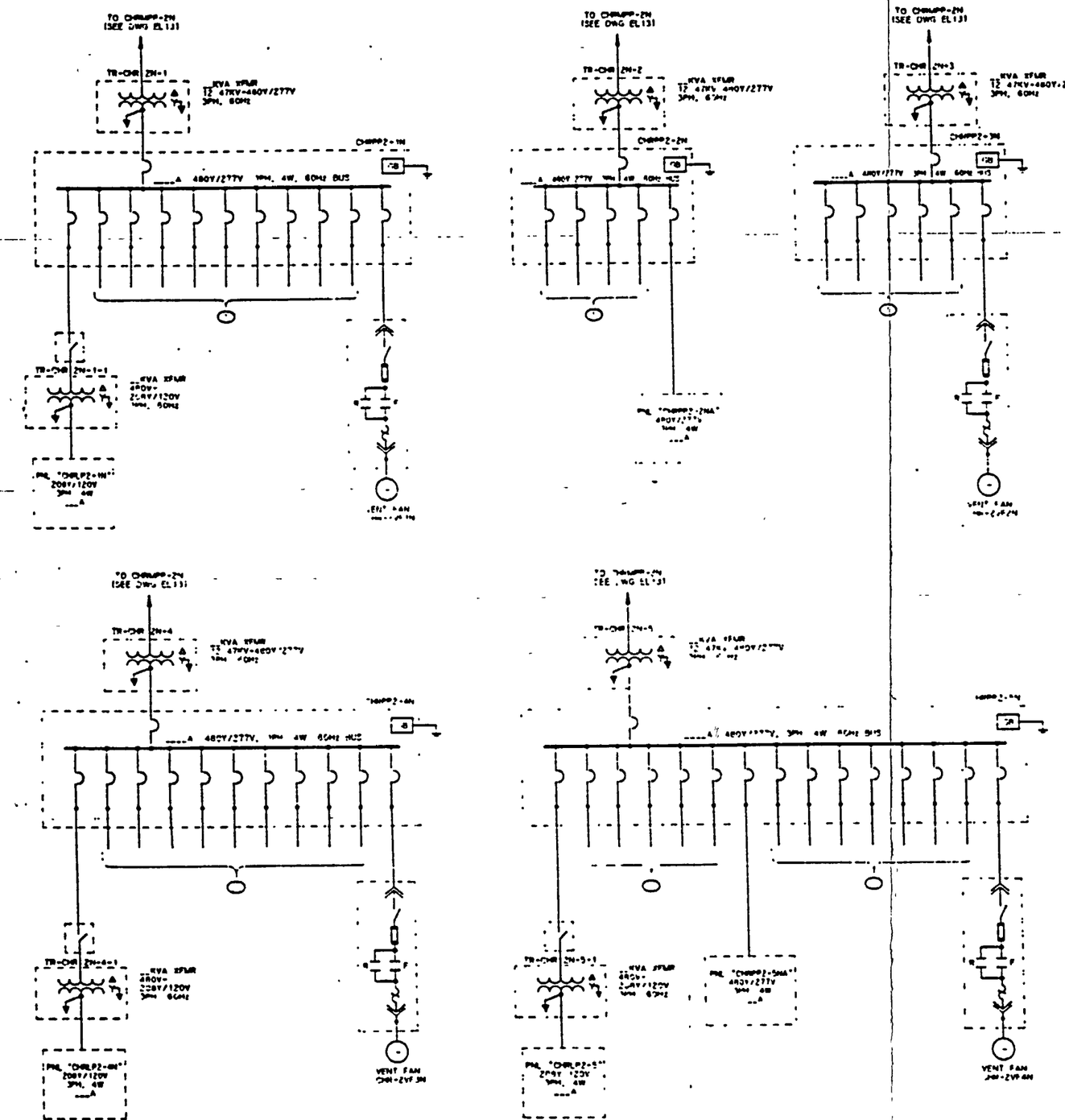
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
CH NORTH RAMP
ELECTRICAL
ONE LINE DIAGRAM

SUBMITTED BY	DATE	DRAWING NO.	REV.
		YMP-025-1-ELEC-EL14	0

YMPO APPROVED DATE SHT OF

9305250071-165



① POWER PANELS LOCATED IN CH NORTH RAMP AT VARIOUS FACILITIES REQUIRING POWER FOR INSTRUMENTATION TESTING, LIGHTING, UPS131, ETC

CH NORTH RAMP - ONE LINE DIAGRAM

NOTE:

1. FOR RELATED NOTES TO THIS DRAWING, SEE DRAWING YMP-025-1-ELEC-EL13

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

FOR GENERAL NOTES, SEE DRAWING YMP-025-1-ELEC-EL01.

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	YMP	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

DESIGN	MDF
DRAWN	CLG
CHECKED	
DEC	
DESIGN VERIFIER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

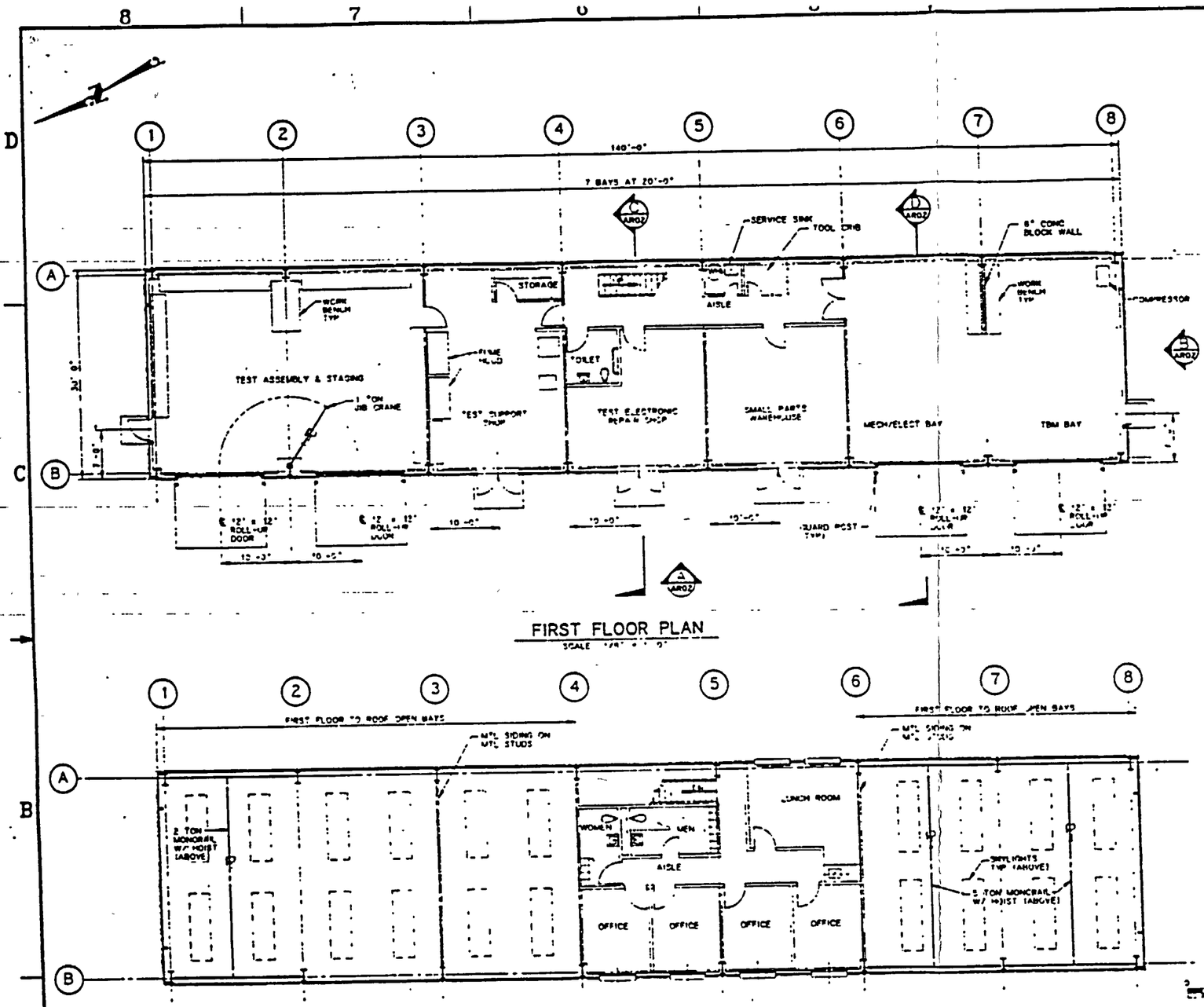
EXPLORATORY STUDIES FACILITY
CH NORTH RAMP
ELECTRICAL
ONE LINE DIAGRAM

SUBMITTED BY | DATE | DRAWING NO: YMP-025-1-ELEC-EL15 | REV. 0

YMPO APPROVED | DATE | SHT | OF

FOR PURPOSE 8-23-91

9305250071-166



FIRST FLOOR PLAN

SCALE 1/8" = 1'-0"

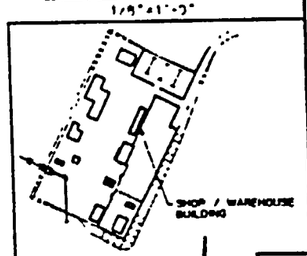
SECOND FLOOR PLAN

SCALE 1/8" = 1'-0"

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-167

NO	DATE	REVISION	DES	DRW	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

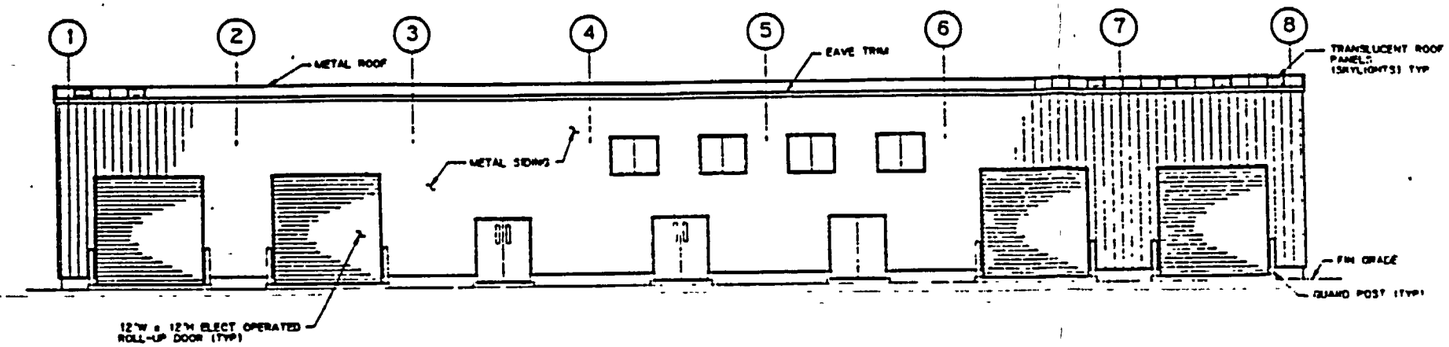
Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	PZ
DRAWN	CLP / MJM
CHECKED	
DEC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	8-26-91

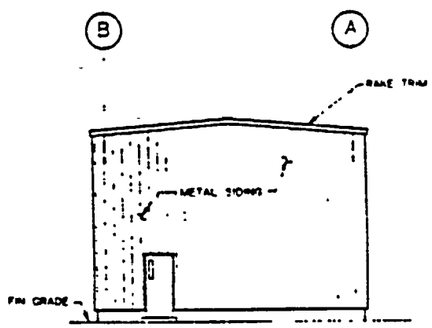
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SHOP / WAREHOUSE BUILDING
FLOOR PLANS

SUBMITTED BY	DATE	DRAWING NO.	REV.
	8-26-91	YMP-025-1-7000-AR01	0
YMPO APPROVED	DATE	SHT	OF

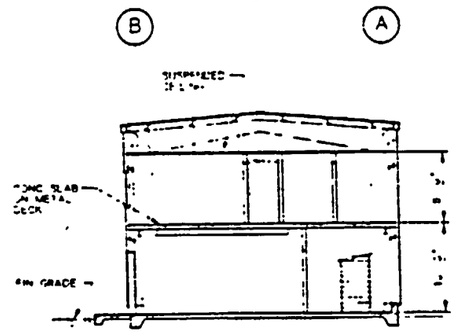
Plotted: Wed Aug 21 10:33:30 1991, PDT Part name: d:\ymp\025\1\ymp025-1-arw.dwg



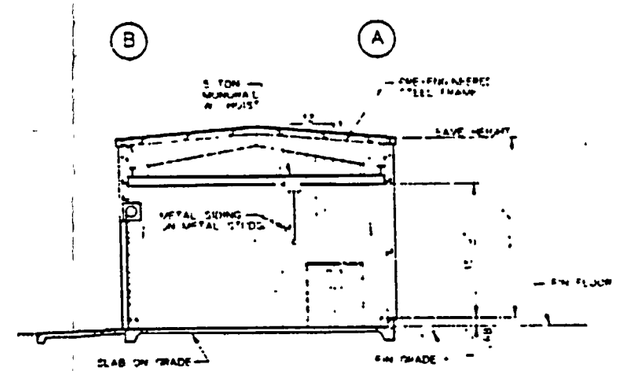
ELEVATION (A / AR01)



ELEVATION (B / AR01)



SECTION (C / AR01)



SECTION (D / AR01)

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 168

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	PZ
DRAWN	MJM
CHECKED	
DEC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

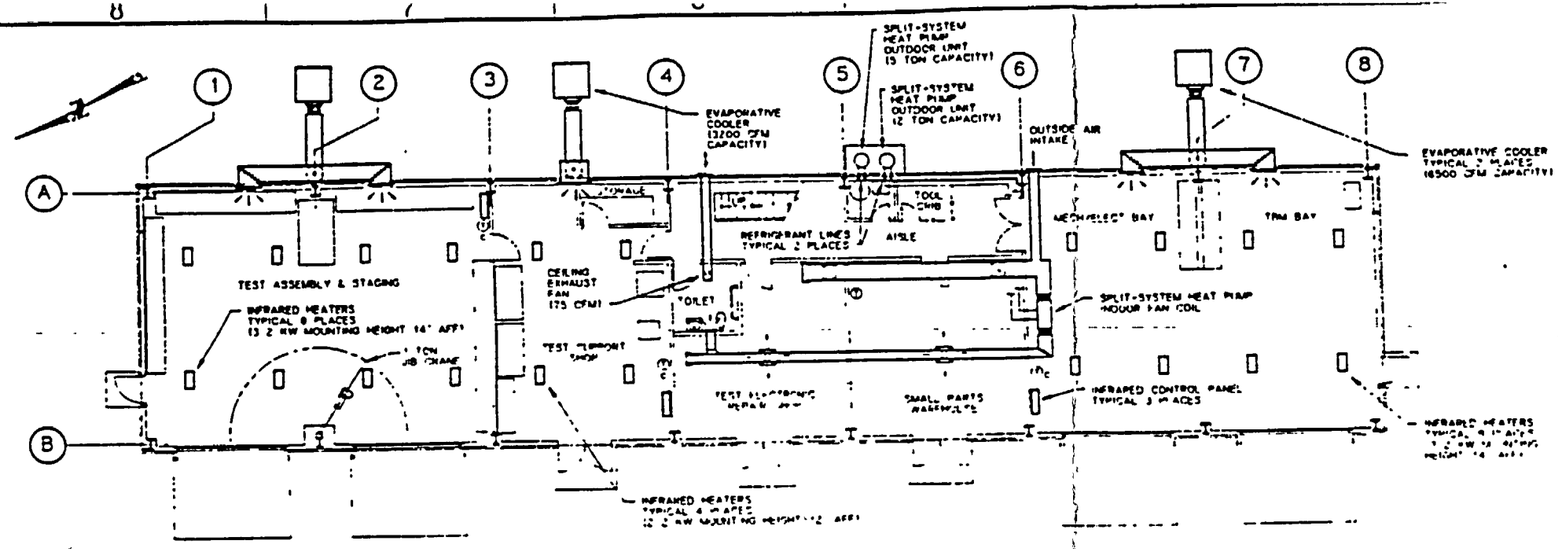
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SHOP / WAREHOUSE BUILDING
ELEVATIONS & SECTION

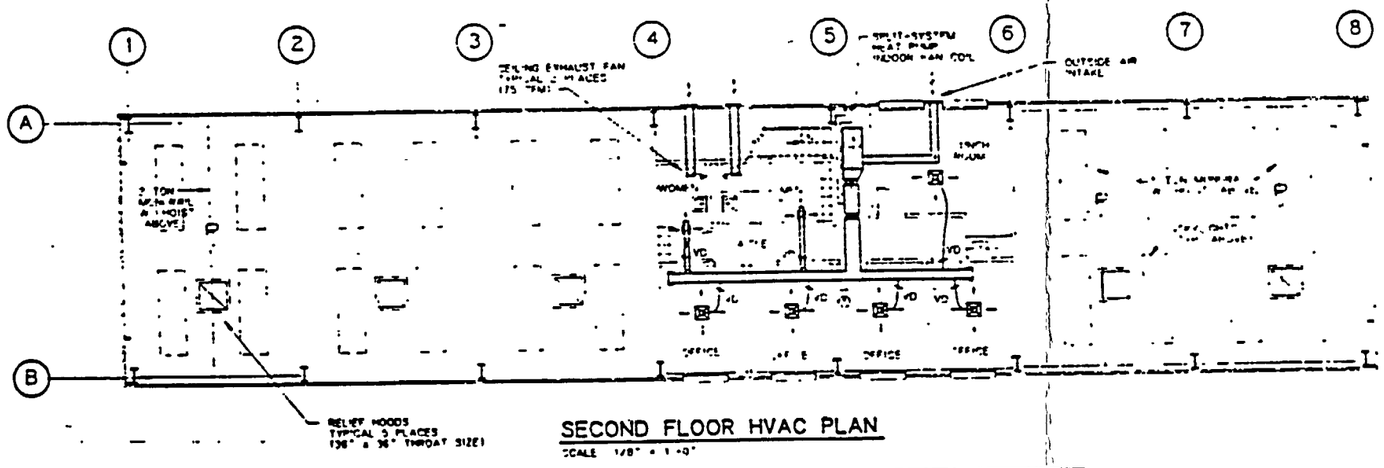
SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-7000-AR02 | REV. 0

YMPO APPROVED | DATE | SHT | OF

FOR TRACKING 7-29-01 | W.O. NO. 120311 | C.I. NO.



FIRST FLOOR HVAC PLAN



SECOND FLOOR HVAC PLAN

SCALE 1/8" = 1'-0"

HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
D	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR "T" WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
VD	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF

HVAC LEGEND CONTINUATION

SYMBOL	DESCRIPTION
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)
	SIDEWALL REGISTER/LOUVER
	SIDEWALL SUPPLY REGISTER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL / DOOR LOUVER
T	THERMOSTAT (COOLING AND HEATING)
Tc	THERMOSTAT (COOLING ONLY)
Th	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

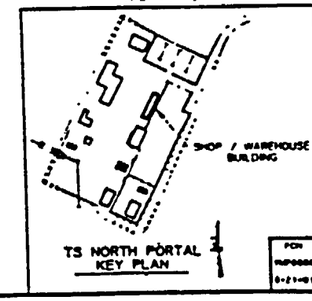
SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-169

GRAPHIC SCALE 0 4 8 16 24 FEET 1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS: DESIGN EPA; DRAWN RFC; CHECKED; DEC; DESIGN MANAGER; VERIFICATION N/A; ENV SAF; QUALITY ASSURANCE 6-26-91

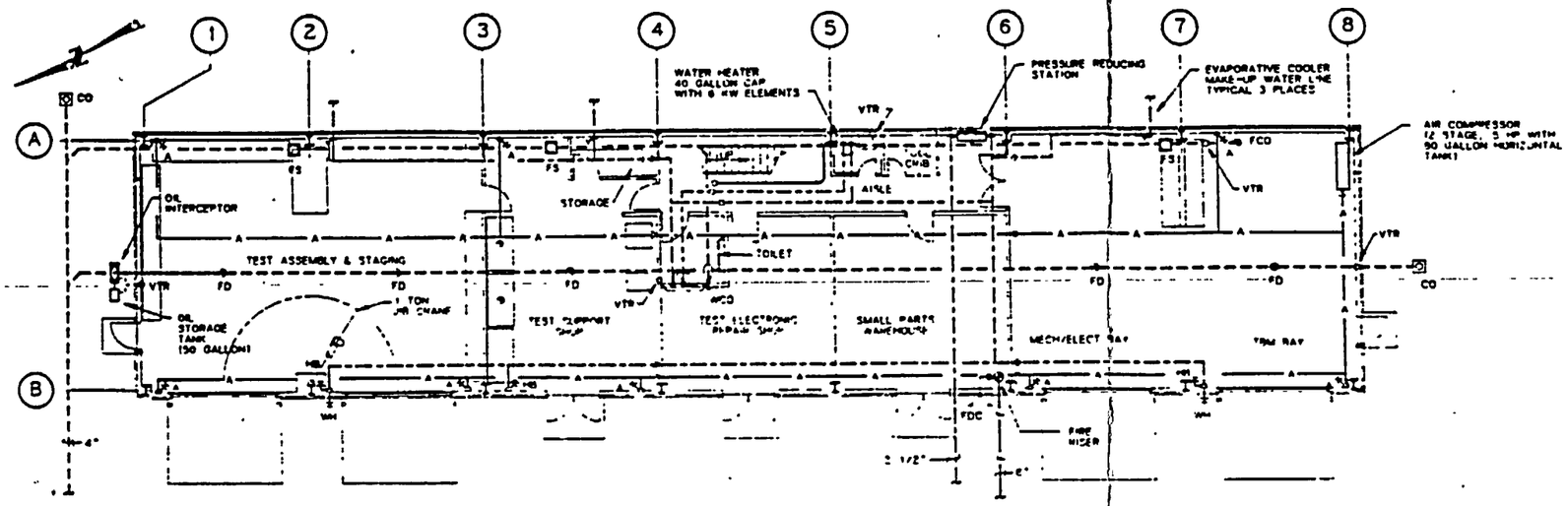
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEME
SHOP / WAREHOUSE BUILDING
HVAC PLAN

SUBMITTED BY; DATE; DRAWING NO. YMP-025-1-7000-HV01

YMPO APPROVED; DATE; SHT OF

PCN YMP0088 0-21-91; 0 0 1 NO; 1 2 3 4 1 1; C 1 NO

Plotted Wed Aug 21 07:38:31 1991, PL1 Part name YMP/086 LRW HVW



FIRST FLOOR PLUMBING PLAN

SCALE 1/8" = 1'-0"

SECOND FLOOR PLUMBING PLAN

SCALE 1/8" = 1'-0"

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
F F	FIRE LINE
A	COMPRESSED AIR LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
A	COMPRESSED AIR STATION
WH	WALL HYDRANT

PLUMBING LEGEND CONTINUATION

SYMBOL/ABBREVIATION	DESCRIPTION
SH	SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EWC	ELECTRIC WATER COOLER

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT

SI
APERTURE
CARD

Also Available On
Aperture Card

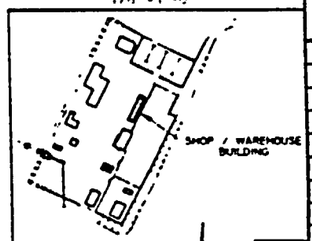
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 170

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS NORTH PORTAL
KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	TAN
DRAWN	BFC
CHECKED	
BFC	
DESIGN MANAGER	
VERIFICATION	N/A
SAF / SAF	
QUALITY ASSURANCE	

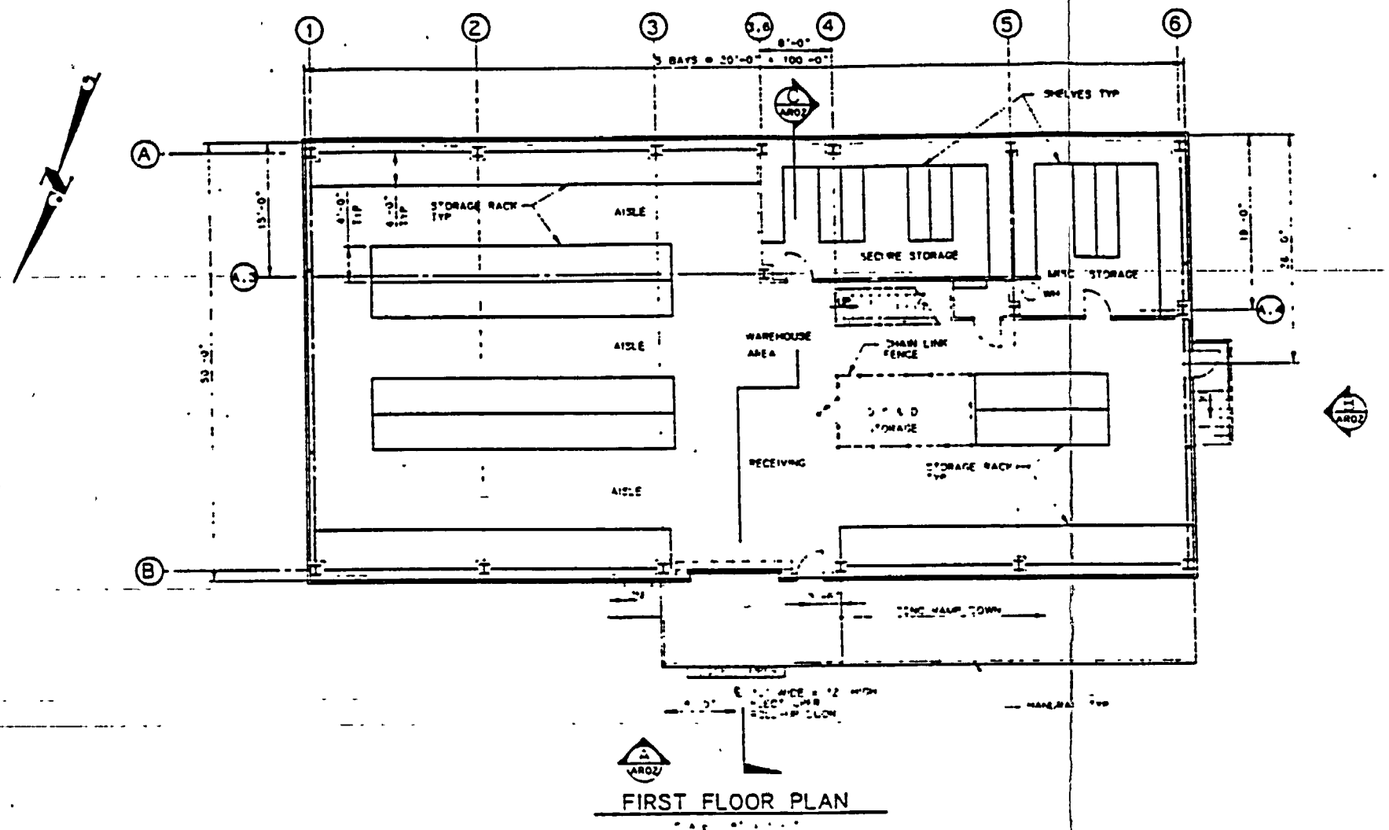
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SHOP / WAREHOUSE BUILDING
PLUMBING PLAN

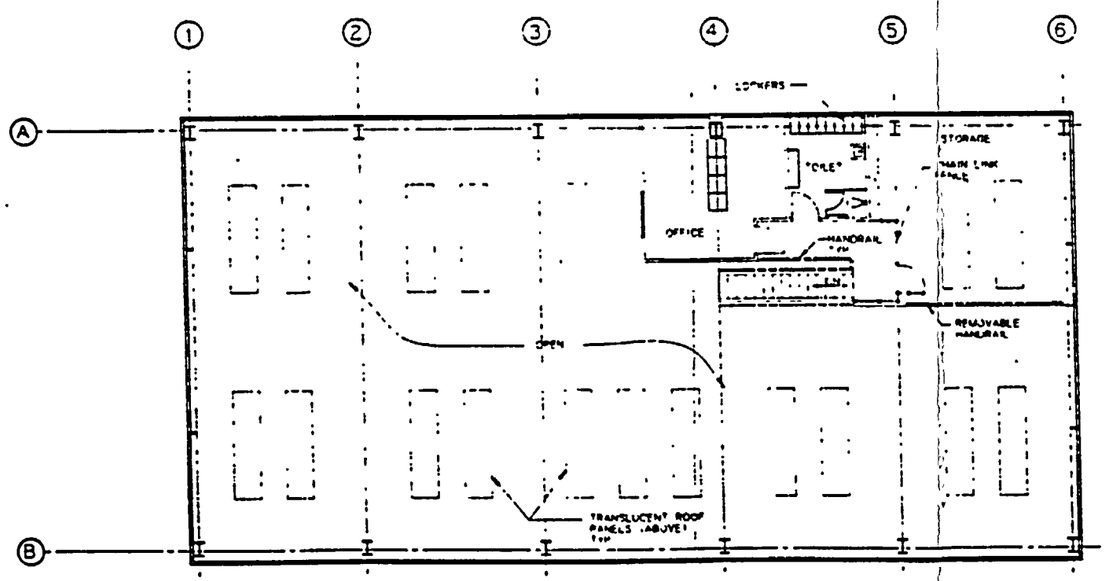
SUBMITTED BY	DATE	DRAWING NO.	REV.
	9-16-9	YMP-025-1-7000-PP01	0

YMPO APPROVED DATE SHT OF

Plotted Wed Aug 21 07 33 41 1991, PDT Part name YMP0087 DRW -UW



FIRST FLOOR PLAN



SECOND FLOOR PLAN

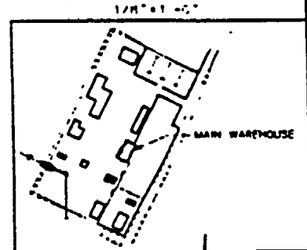
SCALE 1/8" = 1'-0"

SI
APERTURE
CARD
Also Available On
Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 171

GRAPHIC SCALE



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

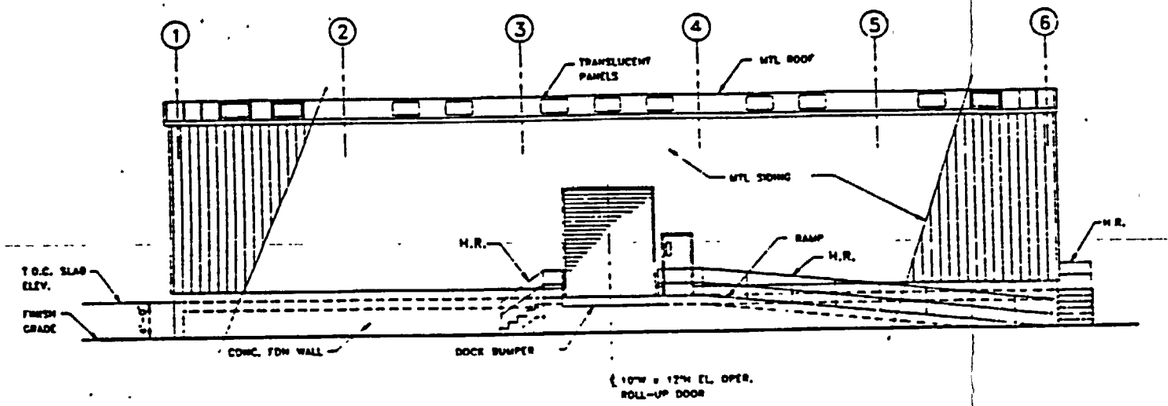
APPROVALS

DESIGN	PZ
DRAWN	MJH
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
MAIN WAREHOUSE
FLOOR PLANS

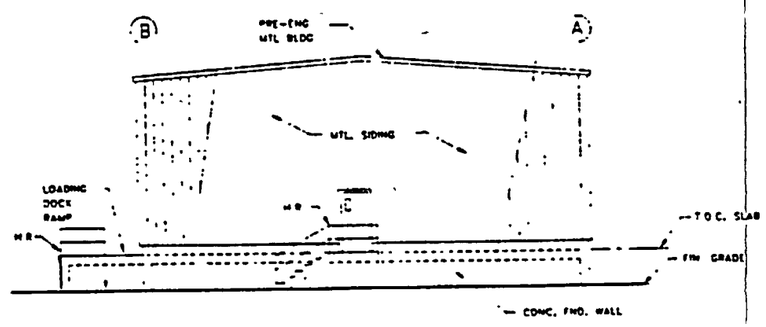
SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-7001-AR01	0

YMPO APPROVED DATE SHT OF



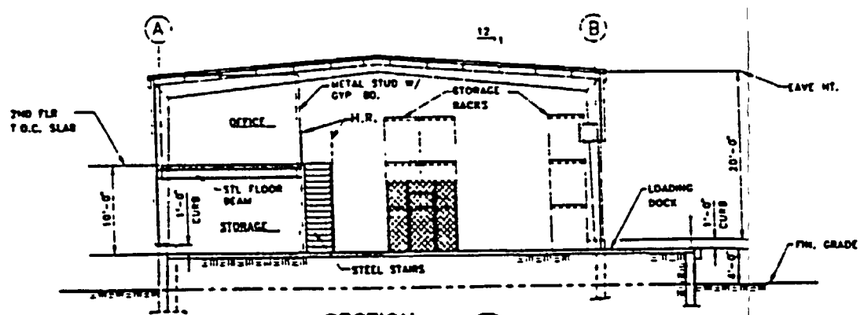
ELEVATION (A / AR01)

SCALE 1/8" = 1'-0"



ELEVATION (B / AR01)

SCALE 1/8" = 1'-0"



SECTION (C / AR01)

SCALE 1/8" = 1'-0"

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-172

NO	DATE	REVISION	DFS	DRN	CHK	DEC	DM	VERIFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
MAIN WAREHOUSE

ELEVATIONS AND SECTION

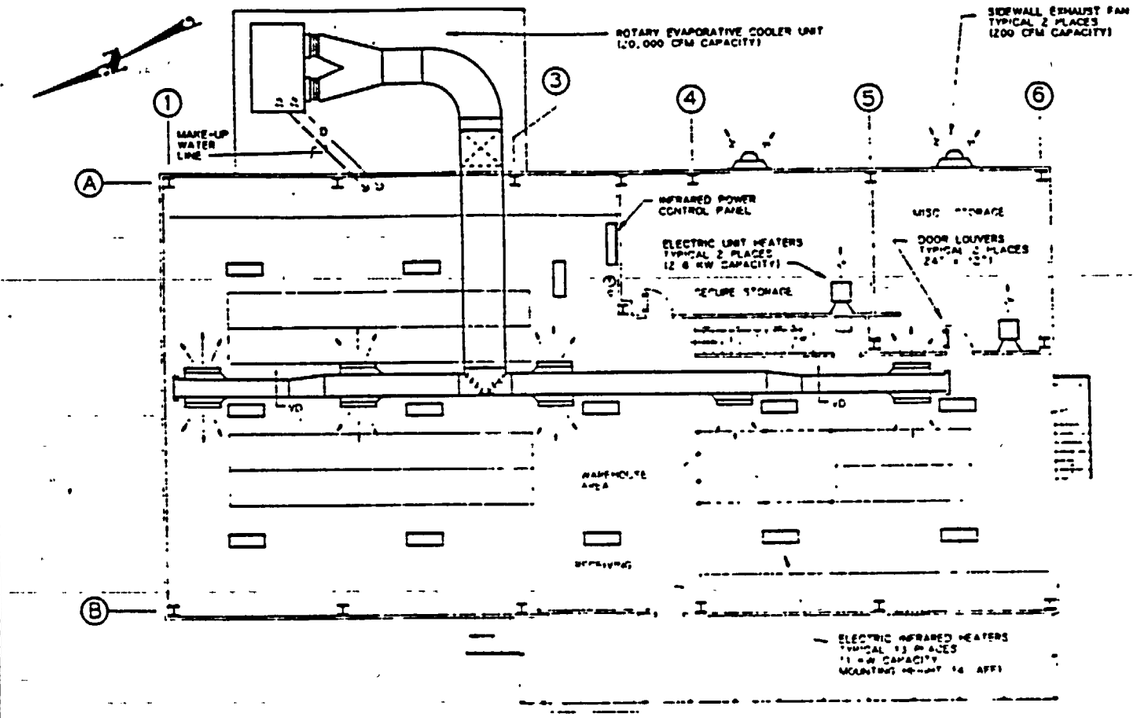
ORIGINAL	
DESIGN	PZ
DRAWN	JMC
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ENGINEER	

DRAFTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-7001-AR02	0
YMPO APPROVED	DATE	SHT OF	

FCN YMP0036 0 22 01

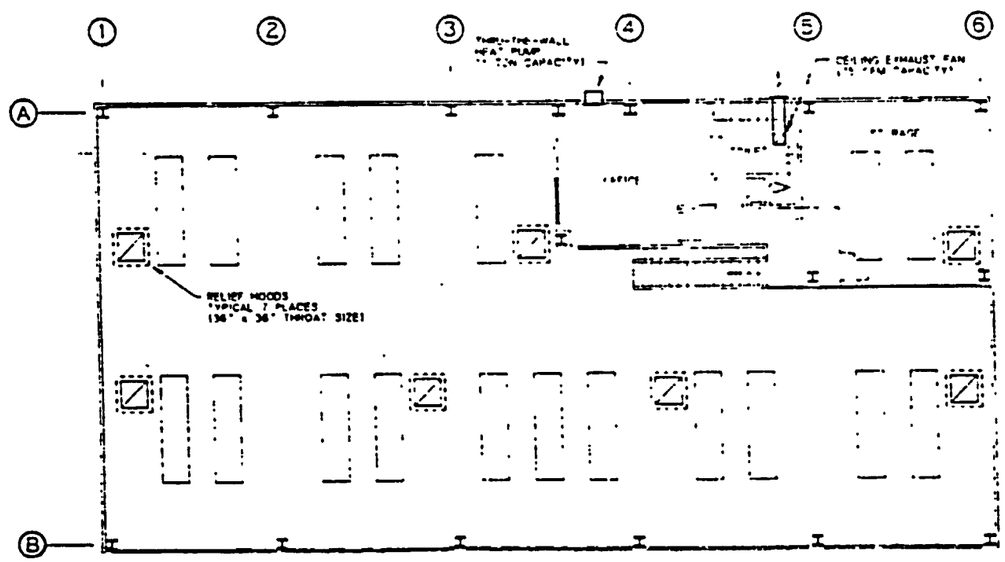
CDS NO 126311

CI NO



FIRST FLOOR HVAC PLAN

SCALE 1/8" = 1'-0"



SECOND FLOOR HVAC PLAN

SCALE: 1/8" = 1'-0"

HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
D	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR TEE WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)
	SIDEWALL REGISTER/LOUVER
	SIDEWALL SUPPLY REGISTER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL / DOOR LOUVER
	THERMOSTAT (COOLING AND HEATING)
	THERMOSTAT (COOLING ONLY)
	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD

Also Available On Aperture Card

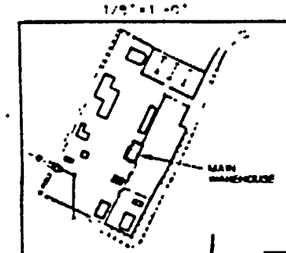
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -173

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO.	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	BMA
DRAWN	RFC
CHECKED	
REC	
DESIGN SUPERVISOR	B.CH
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

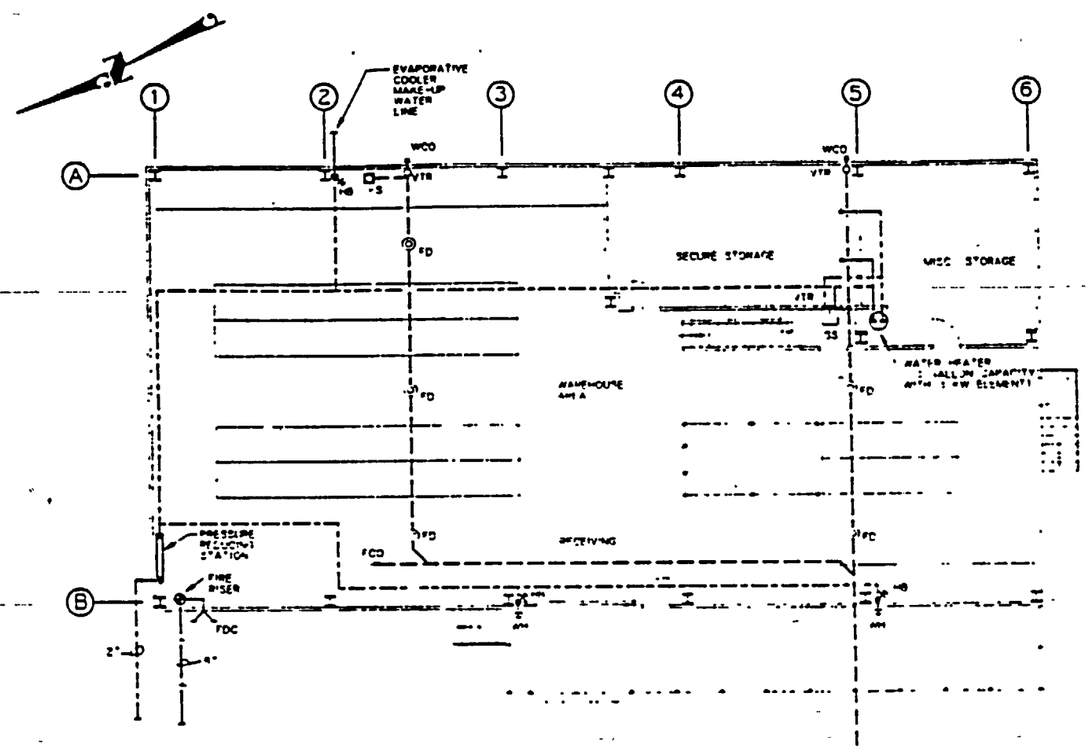
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
MAIN WAREHOUSE
HVAC PLAN

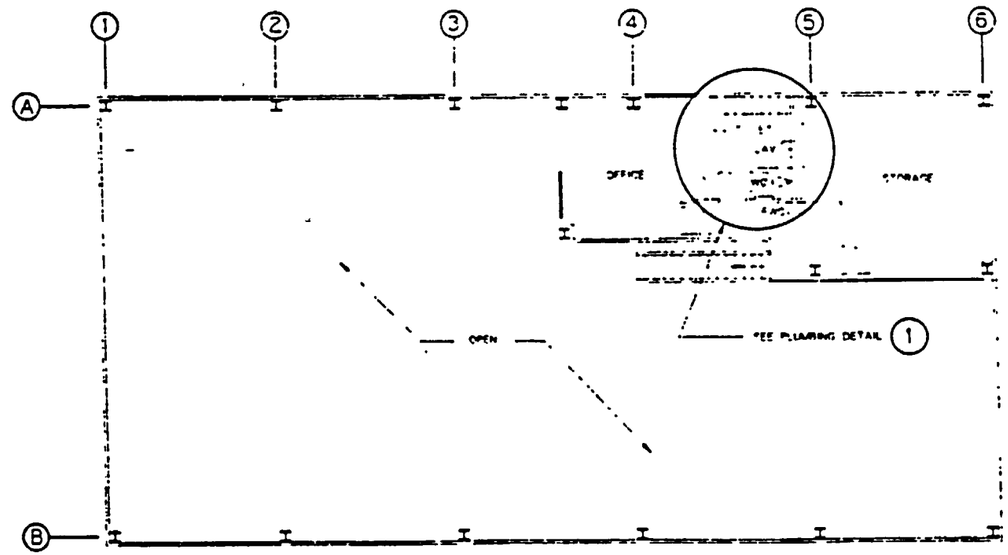
SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-7001-HV01	0

YMPO APPROVED DATE SHT OF

PLOTTED Wed Aug 21 11:05 08 1991, PLT: Part name YMP-025-1-CIVL

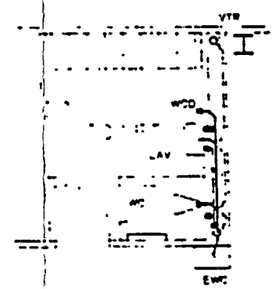


1ST FLOOR PLUMBING PLAN



2ND FLOOR PLUMBING PLAN

SCALE 1/8" = 1'-0"



PLUMBING DETAIL 1

SCALE 1/4" = 1'-0"

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EWC	ELECTRIC WATER COOLER

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD

Also Available On Aperture Card

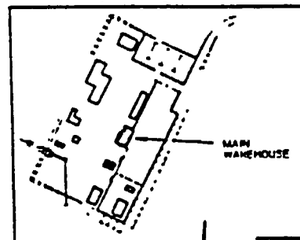
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-0E02

9305250071-174

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO.	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRB	VI	ENV	SAF	QA	TPO	YMPC

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

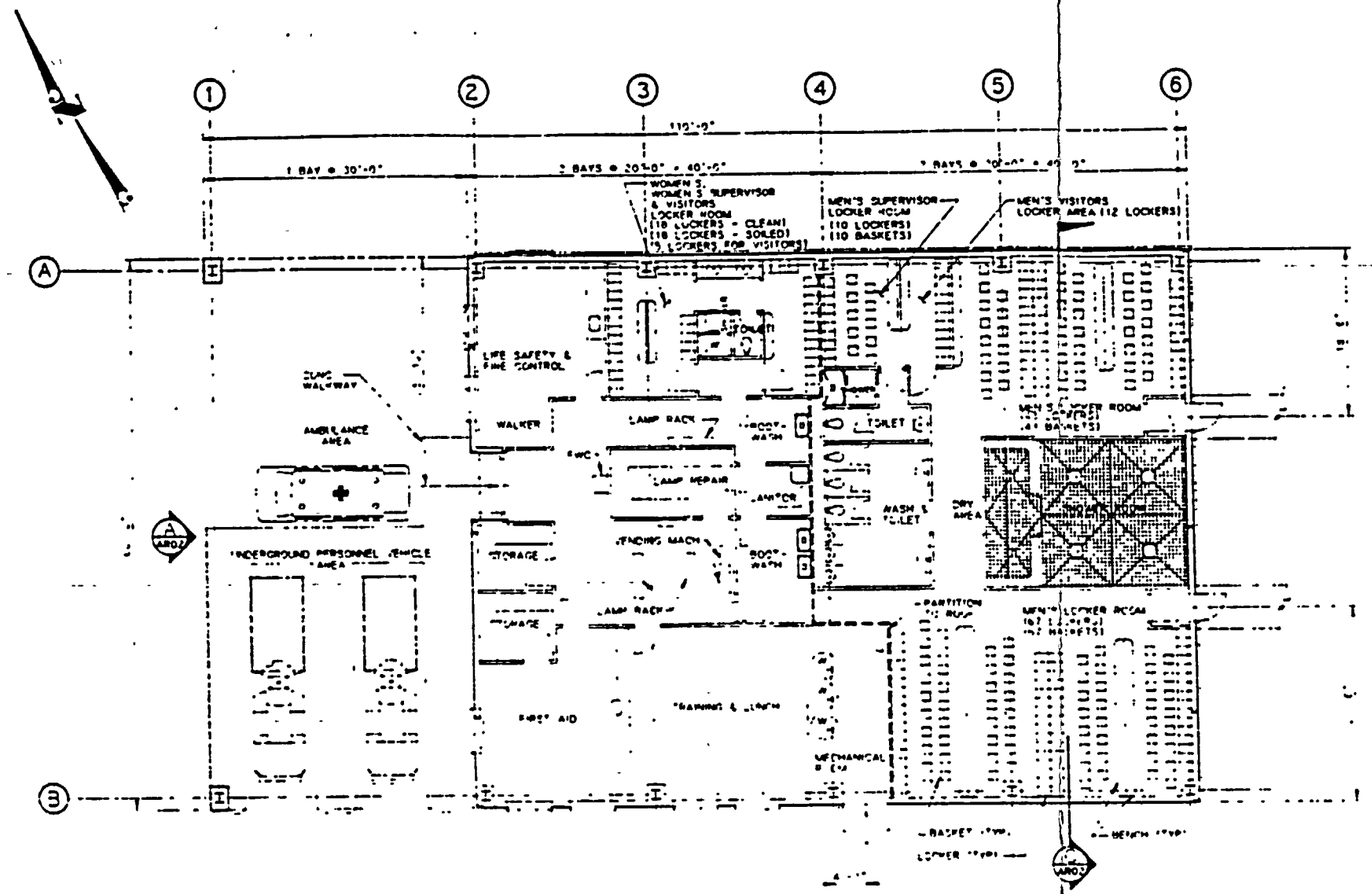
Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	TAN
DRAWN	JMK
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
MAIN WAREHOUSE
PLUMBING PLAN

SUBMITTED BY	DATE	DRAWING NO	REV.
	8-26-0	YMP-025-1-7001-PP01	0

YMPO APPROVED DATE SHT OF



FLOOR PLAN

SCALE

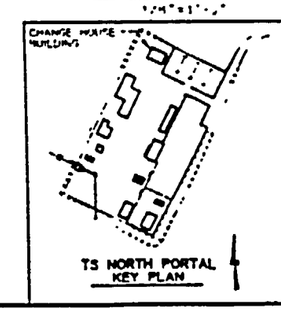
SI
APERTURE
CARD

Also Available On
Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-0E02

9305250071 - 175

GRAPHIC SCALE



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	WRP	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	PZ
DRAWN	RFC / MJK
CHECKED	
DPC	
DESIGN MANAGER	TB, CH
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

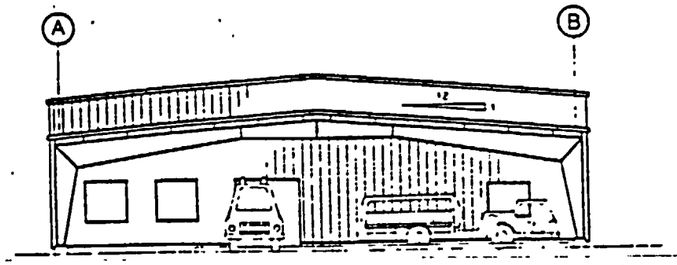
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
CHANGE HOUSE BUILDING
FLOOR PLAN

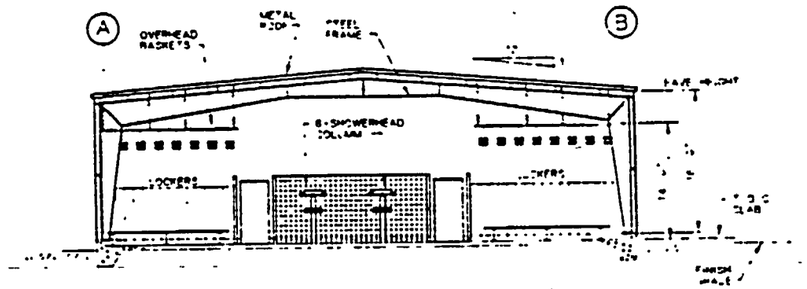
SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-7002-AR01	0

YMPO APPROVED DATE SHT OF

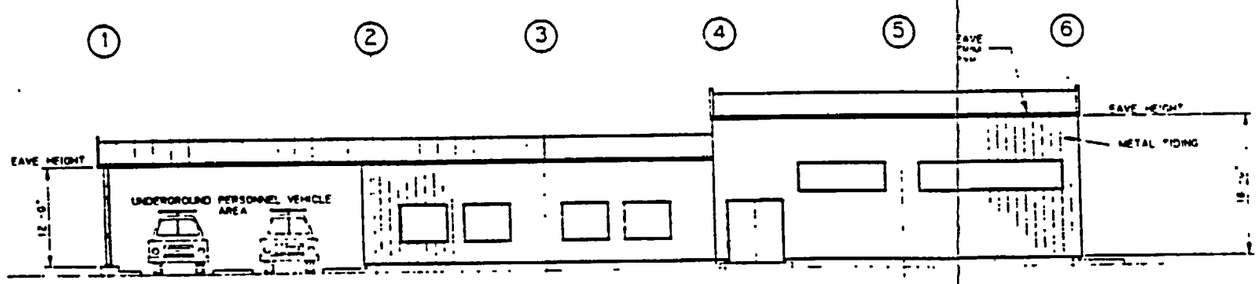
Plotted Wed Aug 21 12 52 08 1991, PLT Part name



ELEVATION (A) AR01



SECTION (A) AR01



ELEVATION (B) AR01

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 176

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENVI	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	PZ
DRAWN	BC / MH
CHECKED	
DEC	
DESIGN VERIFICATION	B.CH.
VERIFICATION	N/A
DRM / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
CHANGE HOUSE BUILDING
ELEVATIONS & SECTION

SUBMITTED BY	DATE	DRAWING NO	REV.
	8-16-01	YMP-025-1-7002-AR02	0

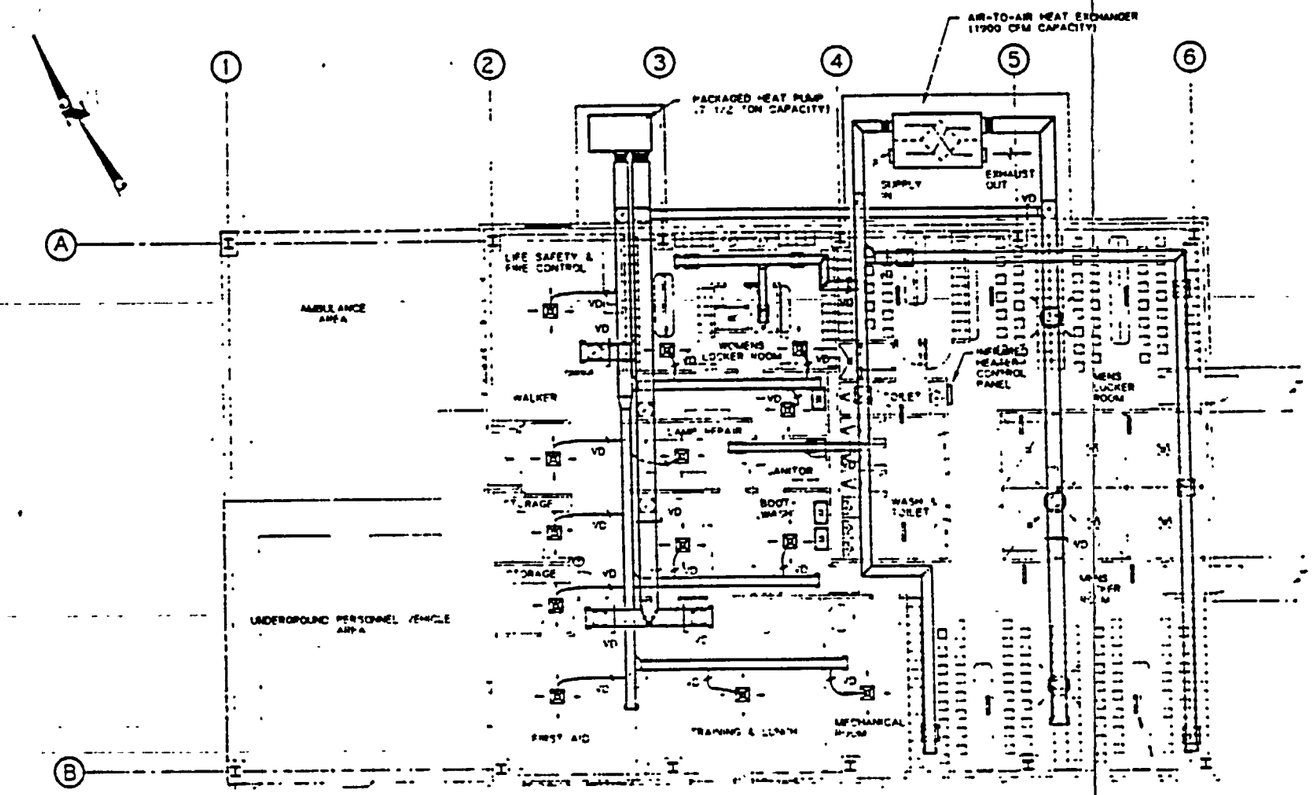
YMPO APPROVED DATE SHT OF

FOR PROPOSAL 8-22-01

W.B.S. NO 1 2 6 3 1 1

C.I. NO

Plotted Thu Aug 22 10 01 23 1981, PDT Part name YMP0022 JAW -U/W



HVAC PLAN

HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
D	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR TEE WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
VD	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)

HVAC LEGEND CONTINUATION

SYMBOL	DESCRIPTION
	SIDEWALL REGISTER/LOUVER
	SIDEWALL SUPPLY REGISTER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL OR DOOR LOUVER
	THERMOSTAT (COOLING AND HEATING)
	THERMOSTAT (COOLING ONLY)
	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

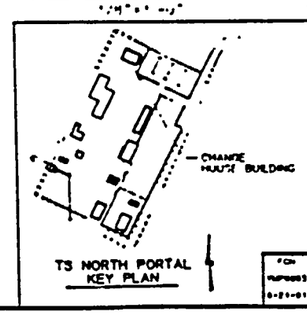
SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -177

GRAPHIC SCALE



NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

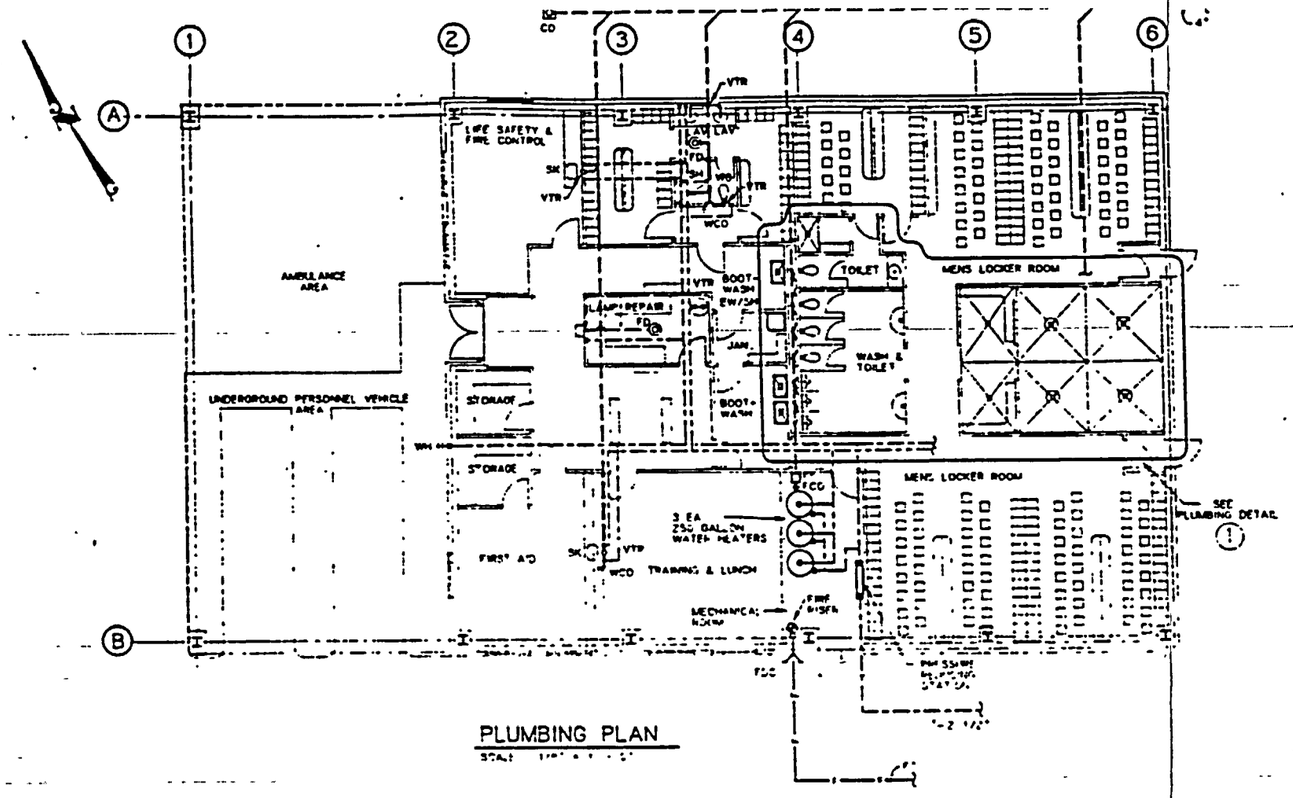
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

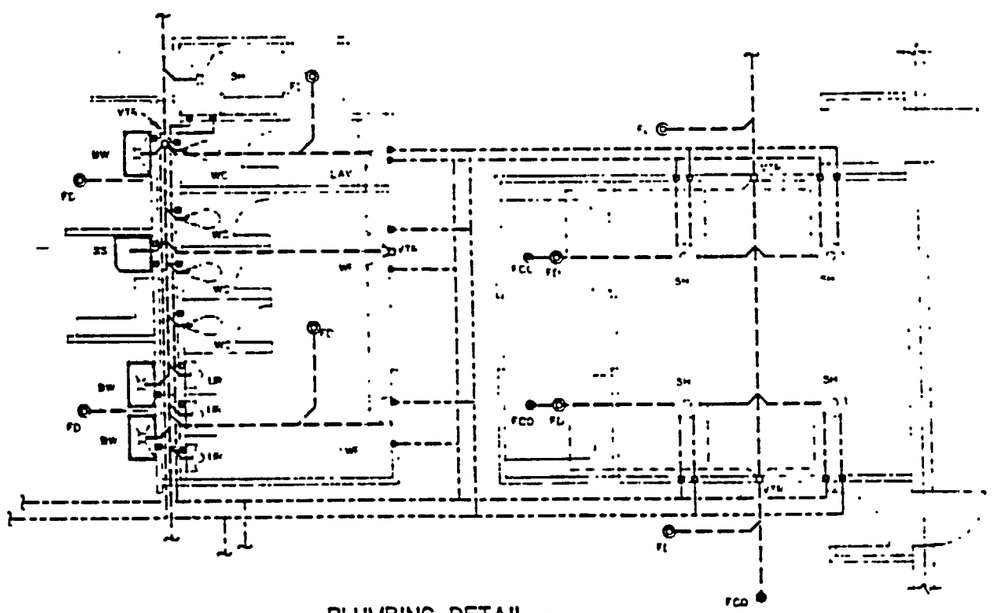
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
CHANGE HOUSE BUILDING
HVAC PLAN

APPROVALS	
DESIGN	EMA
DRAWN	RFC
CHECKED	
DEC	
DESIGN MANAGER	
HSE/FACILITIES	N/A
ENV / SAF	
QUALITY ASSURANCE	

SUBMITTED BY: DATE: 8-26-91
DRAWING NO: YMP-025-1-7002-HV01
REV.: 0
YMPO APPROVED: DATE:
SHT OF



PLUMBING PLAN



PLUMBING DETAIL 1

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER STALL
SH	COLUMN SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EW	ELECTRIC WATER COOLER

SI APERTURE CARD

Also Available On Aperture Card

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THE PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL PROVISIONS SHALL BE DEVELOPED DURING THE TITLE II PHASE.

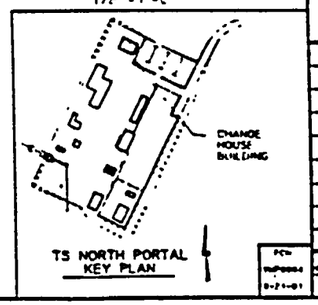
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 178

GRAPHIC SCALE

0 4 8 16 24 FEET

1/2" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

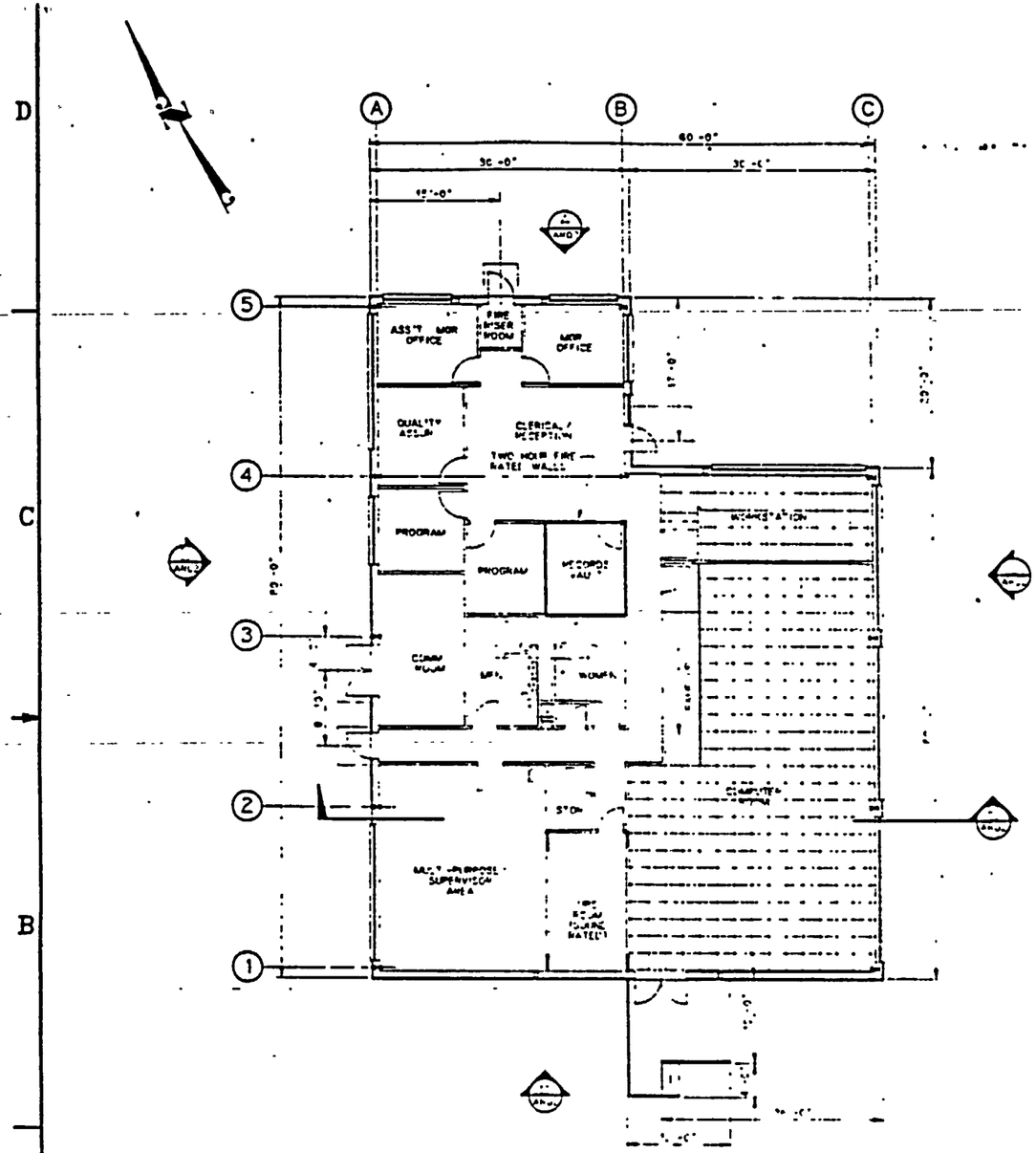
APPROVALS	
DESIGN	TAN
DRAWN	TAN
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
CHANGE HOUSE BUILDING
PLUMBING PLAN

SUBMITTED BY	DATE	DRAWING NO	REV
	8-26-91	YMP-025-1-7002-PP01	0

YMPO APPROVAL DATE | SHT OF



FLOOR PLAN

SCALE 1/8" = 1'-0"

SI
APERTURE
CARD

Also Available On
Aperture Card

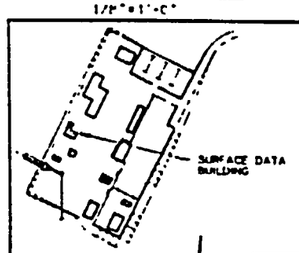
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-179

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DES	DM	VERIF	ENV	SAF	QA	TPC	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLR
DRAWN	RFC
CHECKED	
DES	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SURFACE DATA BUILDING
FLOOR PLAN

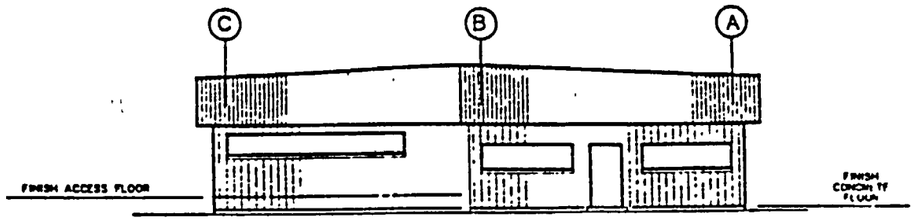
SUBMITTED BY	DATE	DRAWING NO	REV.
		YMP-025-1-7003-AR01	0

YMPO APPROVED DATE SHT OF

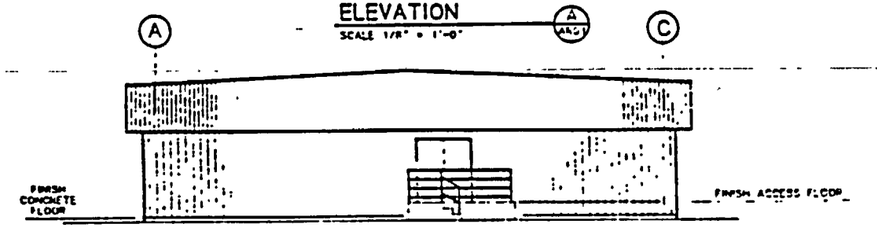
FOR PURPOSES 9-27-91

1 2 3 4 5

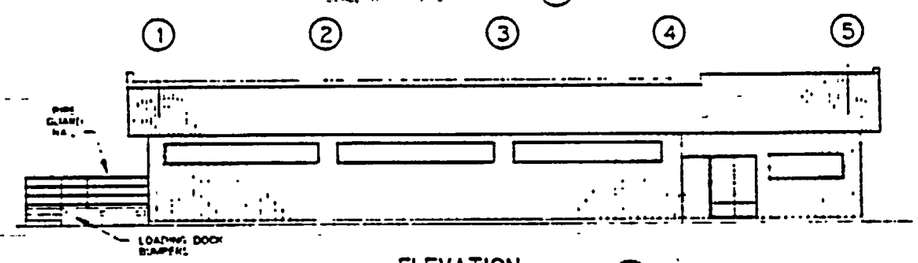
Plotted Thu Aug 22 09:33:43 1991, PL Plot name TMP0000.DWG



ELEVATION
SCALE 1/8" = 1'-0"

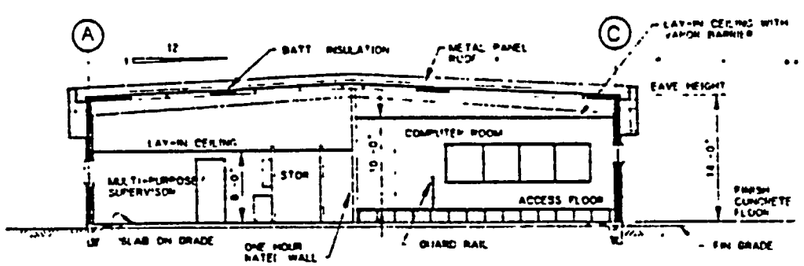


ELEVATION
SCALE 1/8" = 1'-0"



ELEVATION
SCALE 1/8" = 1'-0"

ELEVATION
SCALE 1/8" = 1'-0"



SECTION
SCALE 1/8" = 1'-0"

SI
APERTURE
CARD

Also Available On
Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-1-CIVL-GE02

9305250071 - 180

NO	DATE	REVISION	DES	DRW	CHK	DEC	DM	VMP	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	RER
DRAWN	PFC / MJH
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	8-22-01

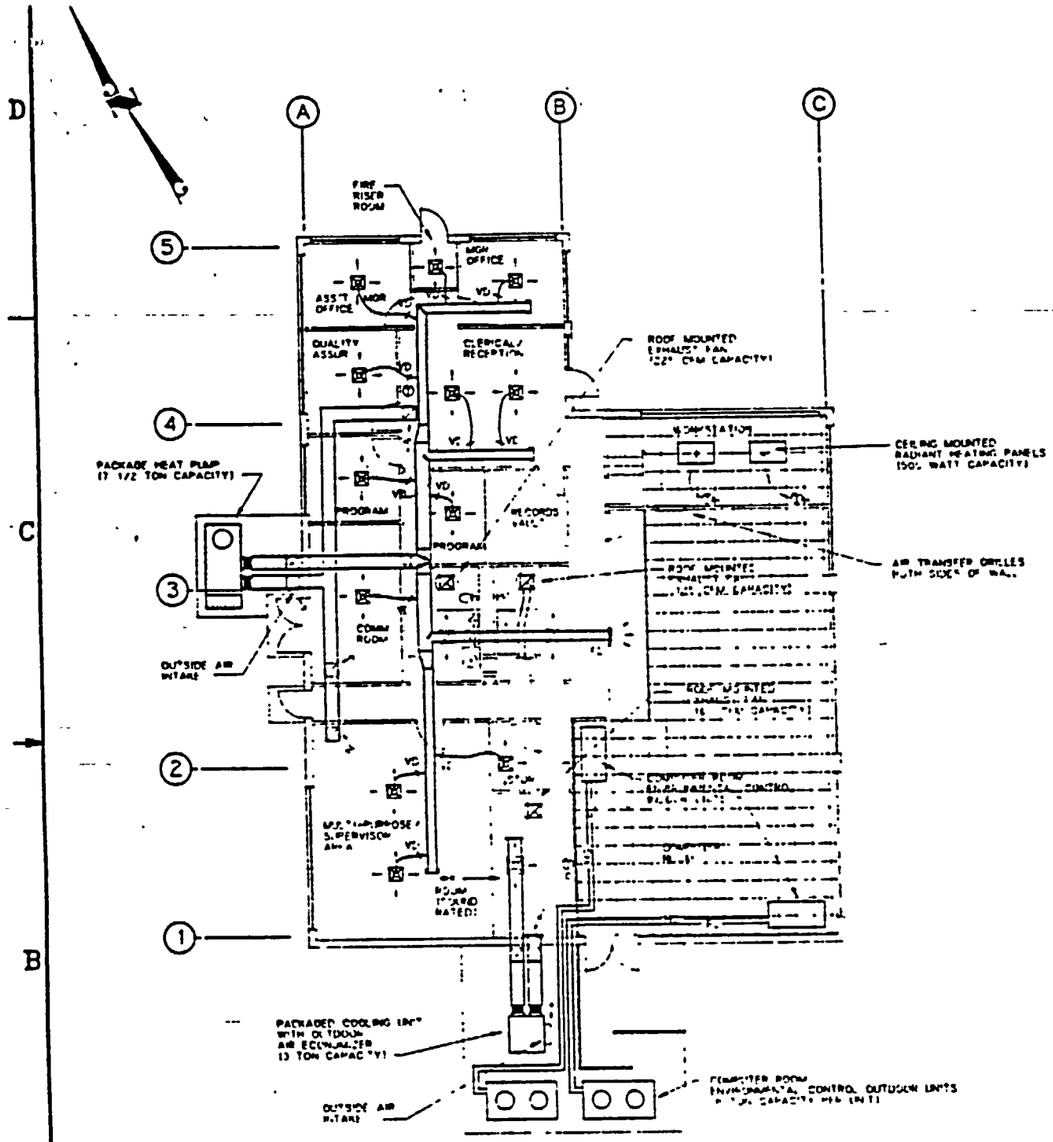
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SURFACE DATA BUILDING
ELEVATIONS AND SECTIONS

SUBMITTED BY	DATE	DRAWING NO	REV
	8-22-01	YMP-025-1-7003-AR02	0

YMPO APPROVEL DATE SHT OF

FOR INFORMATION 8-22-01



HVAC PLAN

SCALE 1/8" = 1'-0"

HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
C	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR "T" WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
VD	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)
	SIDEWALL REGISTER/LOUVER
	SIDEWALL SUPPLY REGISTER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL / DOOR LOUVER
	THERMOSTAT (COOLING AND HEATING)
	THERMOSTAT (COOLING ONLY)
	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD

Also Available On Aperture Card

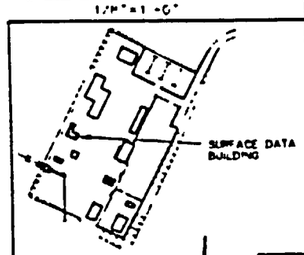
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -181

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DES	DM	VRFY	PRN	SAF	QA	TPO	TMPL

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

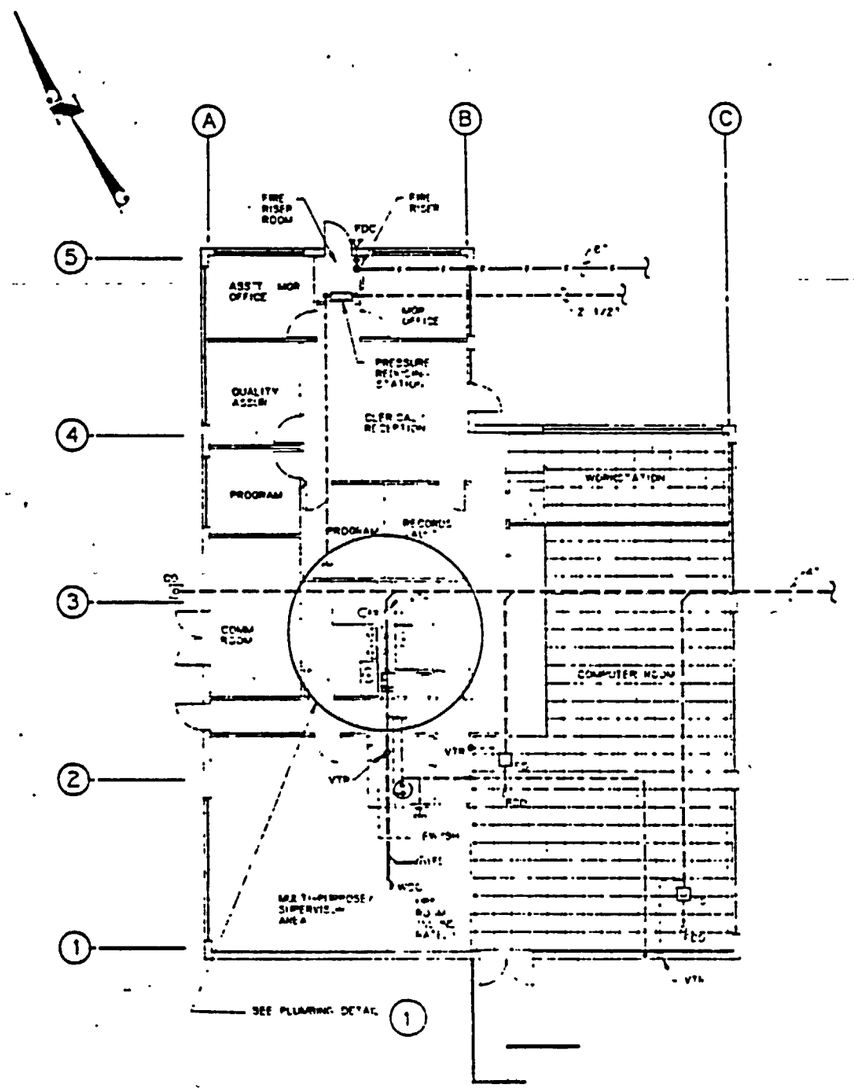
APPROVALS

DESIGN	BMA
DRAWN	RFC
CHECKED	
DRC	
DESIGN MANAGER	
VERIFICATION	N/A
DRN / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

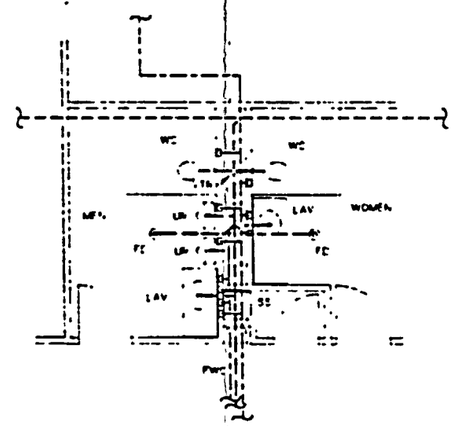
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SURFACE DATA BUILDING
HVAC PLAN

SUBMITTED BY	DATE	DRAWING NO	REV
		YMP-025-1-7003-HV01	0
YMPO APPROVED	DATE	SHT	OF



PLUMBING PLAN

SCALE 1/8" = 1'-0"



PLUMBING DETAIL 1

SCALE 1/4" = 1'-0"

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCC	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
RW	BODY WASH
EWC	ELECTRIC WATER COOLER

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT

SI APERTURE CARD

Also Available On Aperture Card

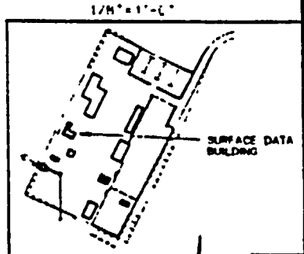
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-0E02

9305250071 - 182

GRAPHIC SCALE

0 4 8 16 24 FEET

1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

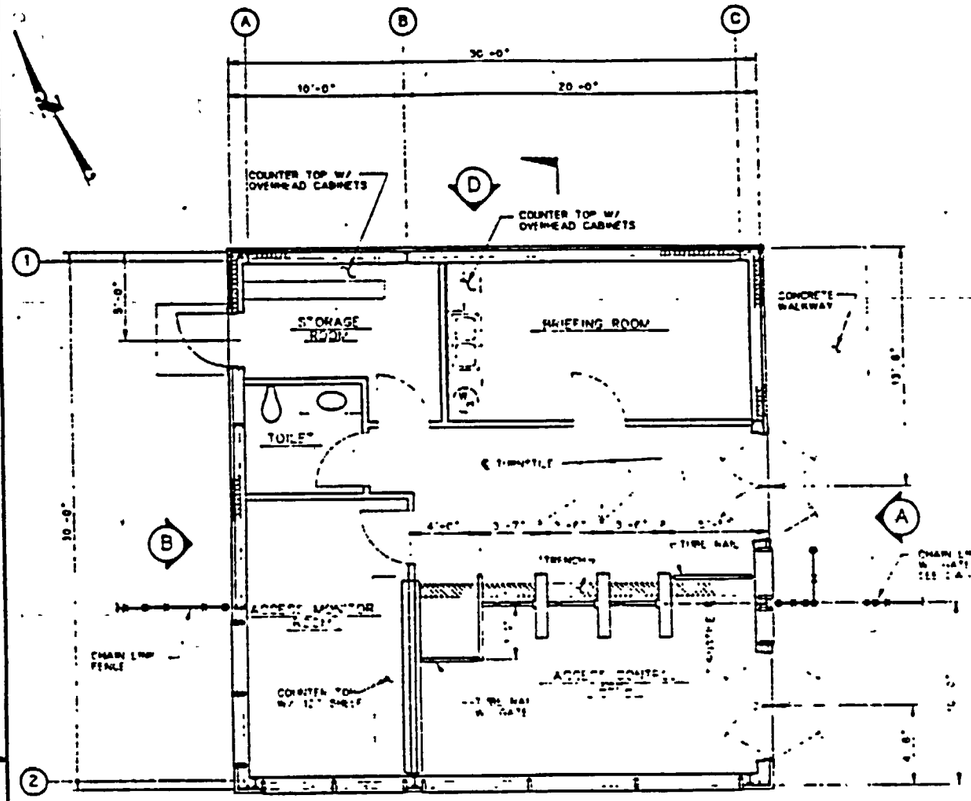
U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	TAN
DRAWN	BFC
CHECKED	
DEC	
DESIGN MANAGER	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

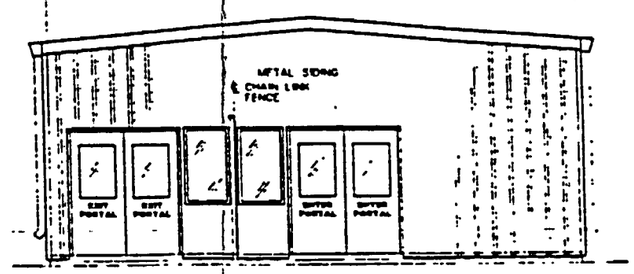
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
SURFACE DATA BUILDING
PLUMBING PLAN

SUBMITTED BY: T.K. Tullis — DATE: 8-26-91
DRAWING NO: YMP-025-1-7003-PP01 — REV: 0
YMPO APPROVAL — DATE — SHT — OF



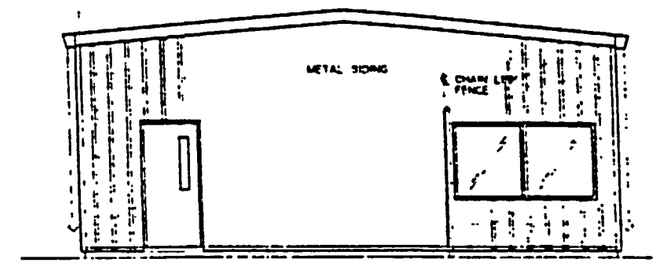
FLOOR PLAN

SCALE 1/4" = 1'-0"



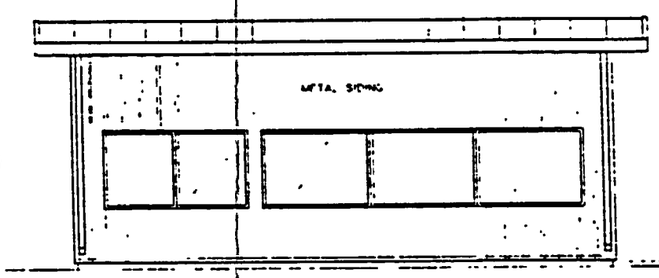
ELEVATION (A)

SCALE 1/4" = 1'-0"



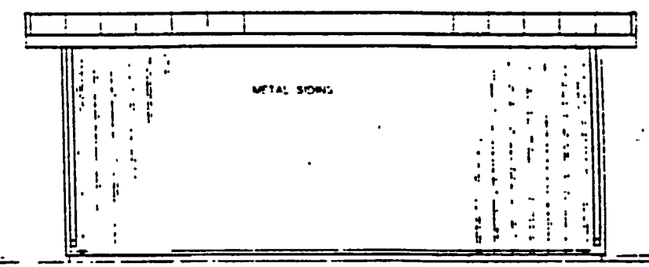
ELEVATION (B)

SCALE 1/4" = 1'-0"



ELEVATION (C)

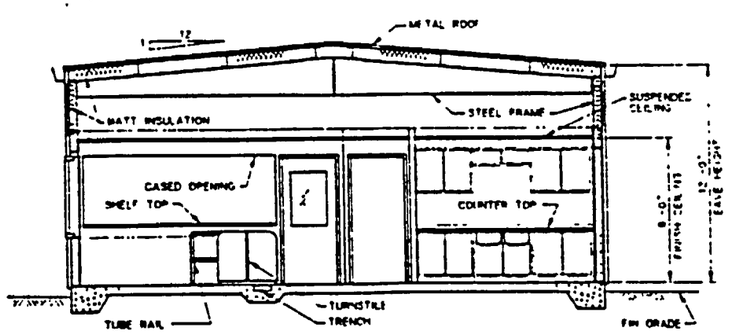
SCALE 1/4" = 1'-0"



ELEVATION (D)

SCALE 1/4" = 1'-0"

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1 CIVIL-GE87



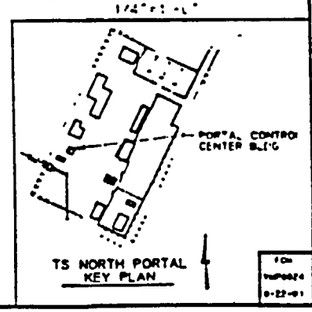
SECTION (E)

SCALE 1/4" = 1'-0"

SI APERTURE CARD

Also Available On Aperture Card

9305250071 -183



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VERIF	ENV	SAF	QA	TPC	TMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

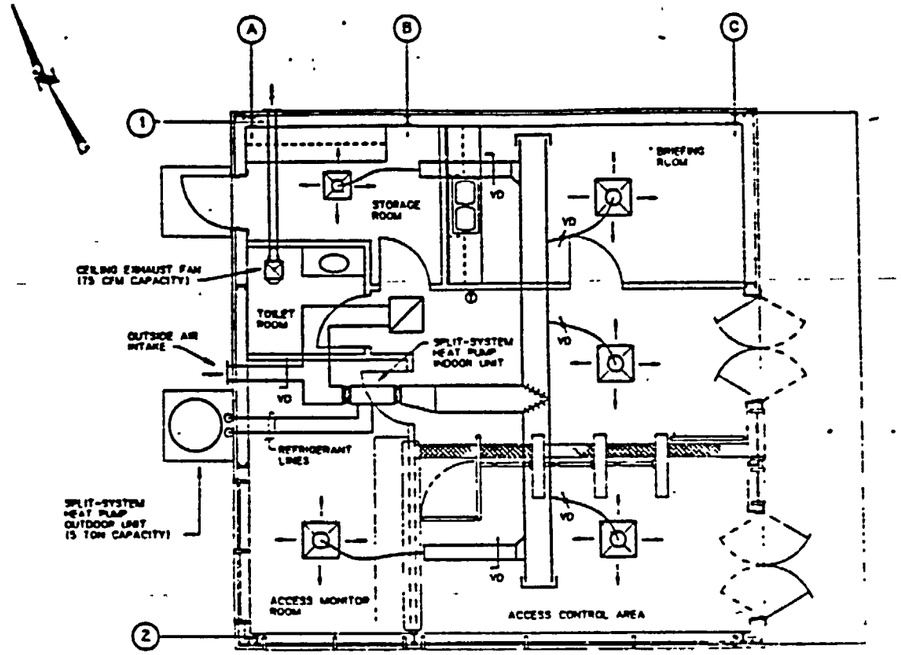
APPROVALS

DESIGN	RLR
DRAWN	MJH
CHECKED	
DEC	
DESIGN SUPERVISOR	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
PORTAL CONTROL CENTER BLDG
PLAN, SECT & ELEV'S

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-7004-AR01 | REV 0

YMPO APPROVAL | DATE | SHT | OF



HVAC PLAN

SCALE 1/4" = 1'-0"

HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
D	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR "T" WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
VD	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)
	SIDEWALL REGISTER/LOUVER
	SIDEWALL SUPPLY REGISTER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL / DOOR LOUVER
T	THERMOSTAT (COOLING AND HEATING)
Tc	THERMOSTAT (COOLING ONLY)
Th	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT

SI APERTURE CARD

Also Available On Aperture Card

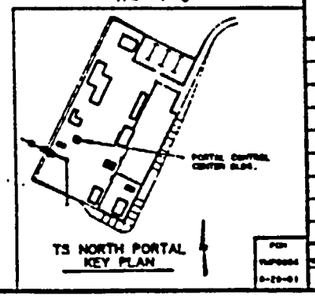
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -184

GRAPHIC SCALE

0 4 8 12 FEET

1/4"=1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	CM	VRFY	ENW	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS

DESIGN	EMA
DRAWN	RFC
CHECKED	
DEC	
DESIGN VERIFIED	N/A
VERIFICATION	N/A
ENW / SAF	
QUALITY ASSURANCE	

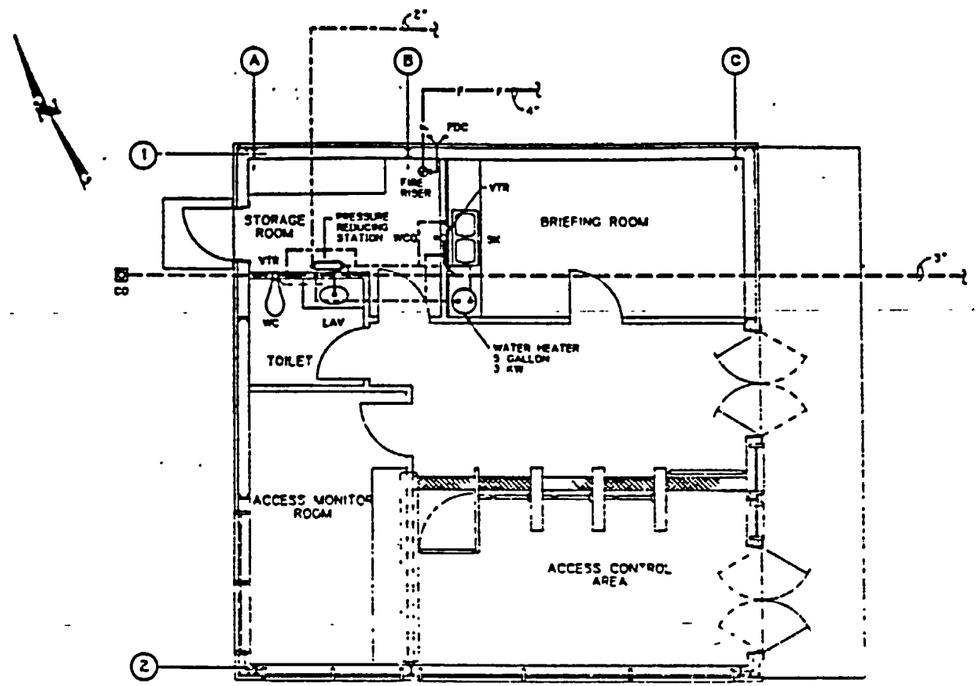
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
PORTAL CONTROL CENTER BLDG
HVAC PLAN

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-7004-HV01 | REV. 0

YMPO APPROVED | DATE | SHT | OF

Plotted: Tue Aug 20 14:20:29 1991, PDT Part name: ymp0084 DRW -UW

3



PLUMBING PLAN

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

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EWC	ELECTRIC WATER COOLER

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT.

SI APERTURE CARD

Also Available On Aperture Card

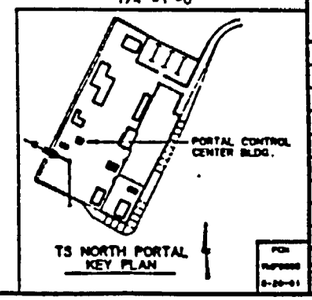
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071-185

GRAPHIC SCALE

0 4 8 12 FEET

1/4"=1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	TMPY

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS	
DESIGNED	TAN
DRAWN	TAN
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

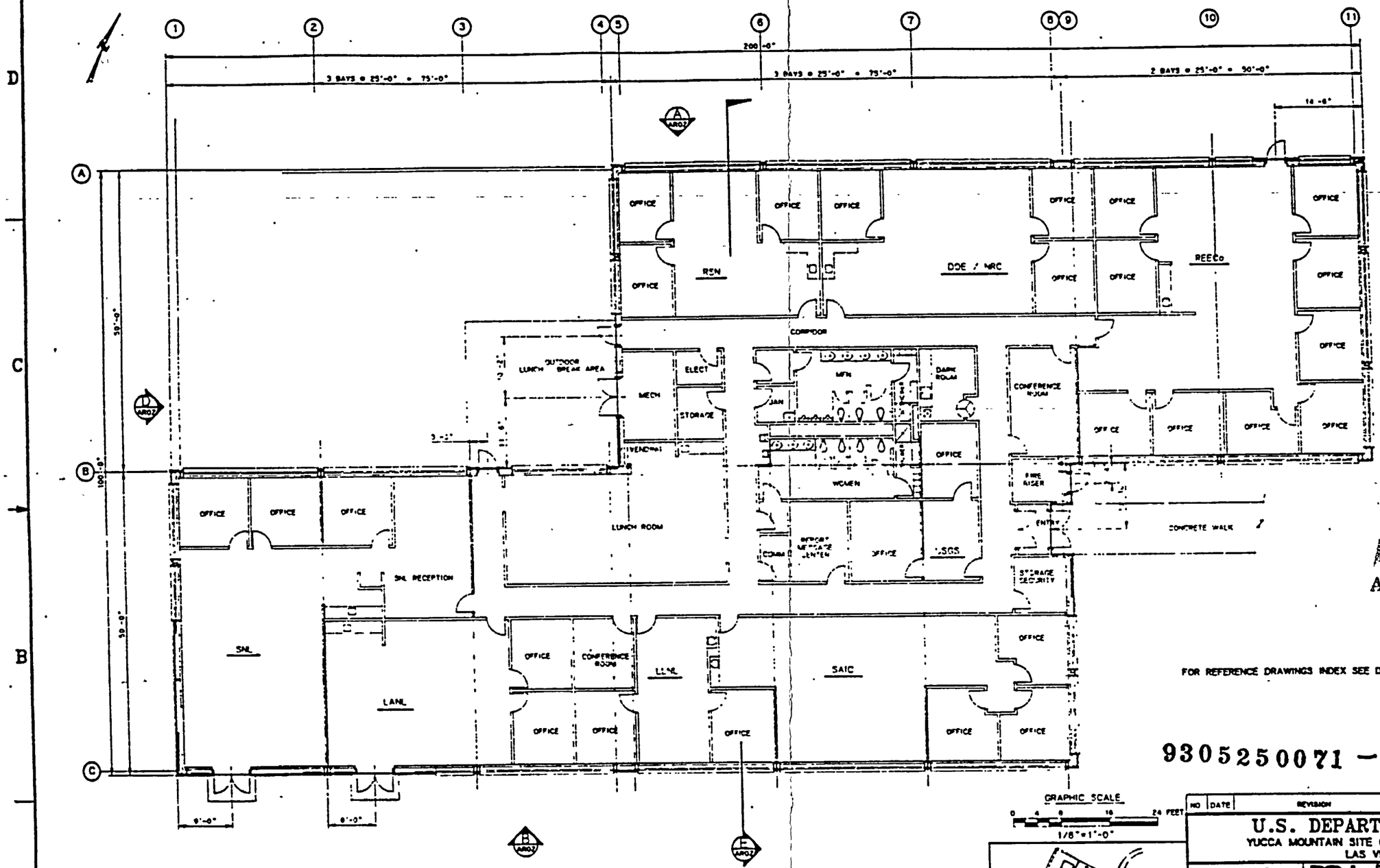
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
PORTAL CONTROL CENTER BLDG.
PLUMBING PLAN

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-7004-PP01 | REV. 0

YMPO APPROVED | DATE | SHT

Plotted: Tue Aug 20 14:49:33 1991, PDT Part name ymp0065 DRW -UW

34



FLOOR PLAN
SCALE 1/8" = 1'-0"

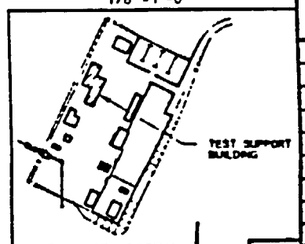
SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 186

GRAPHIC SCALE
0 4 8 16 24 FEET
1/8"=1'-0"



TS NORTH PORTAL KEY PLAN

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLP
DRAWN	MJH
CHECKED	
DEC	
DESIGN ACCEPTANCE	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

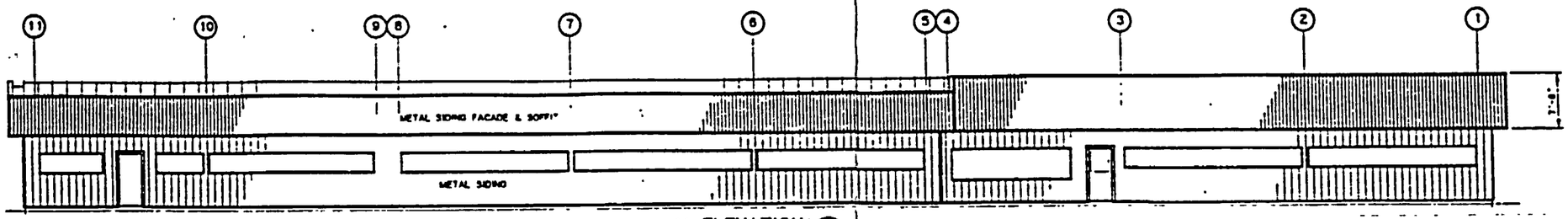
Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
TEST SUPPORT BUILDING
FLOOR PLAN

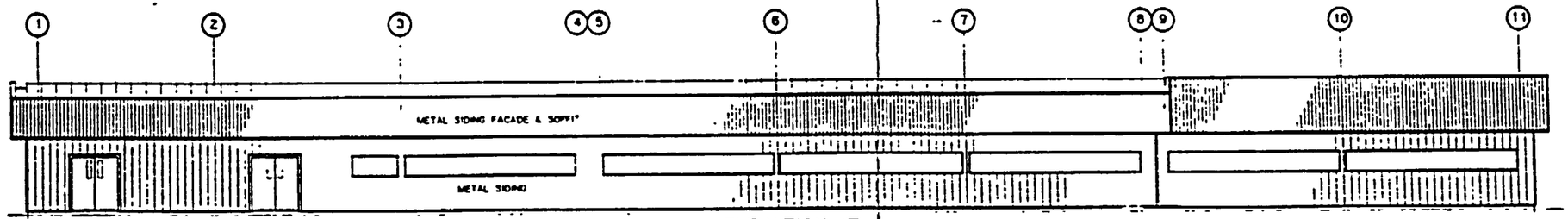
SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-7005-AR01 | REV. 0

YMPO APPROVED | DATE | SHT

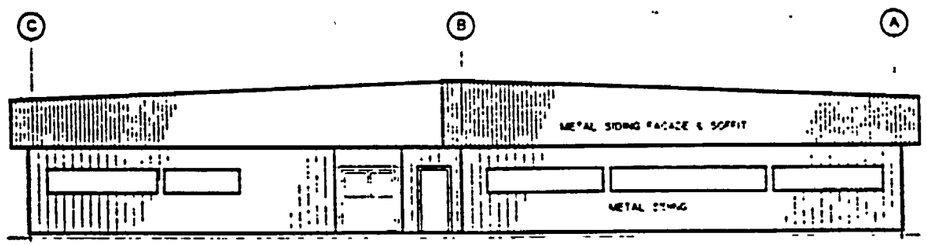
Plotted : Thu Aug 22 09:47:43 1991, PDT Part name YMP0039.LAW



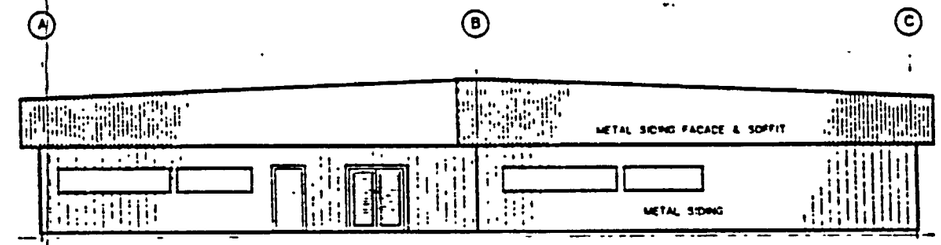
ELEVATION (A) ARO1
SCALE 1/8" = 1'-0"



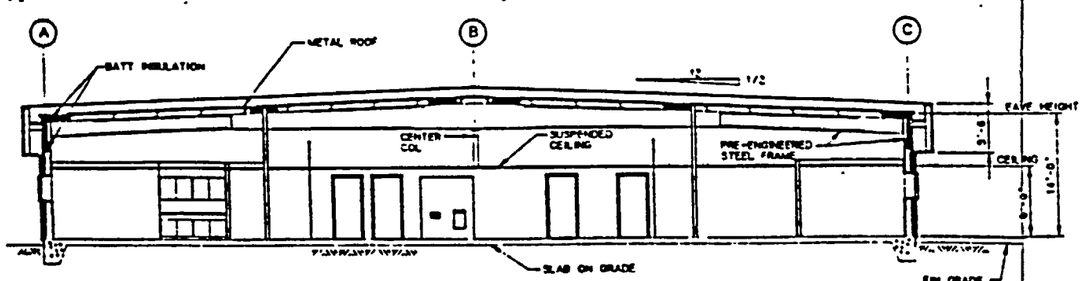
ELEVATION (B) ARO1
SCALE 1/8" = 1'-0"



ELEVATION (C) ARO1
SCALE 1/8" = 1'-0"



ELEVATION (D) ARO1
SCALE 1/8" = 1'-0"



SECTION (E) ARO1
SCALE 1/8" = 1'-0"

SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 187

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLR
DRAWN	MJH
CHECKED	
DEC	
DESIGN VERIFIED	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

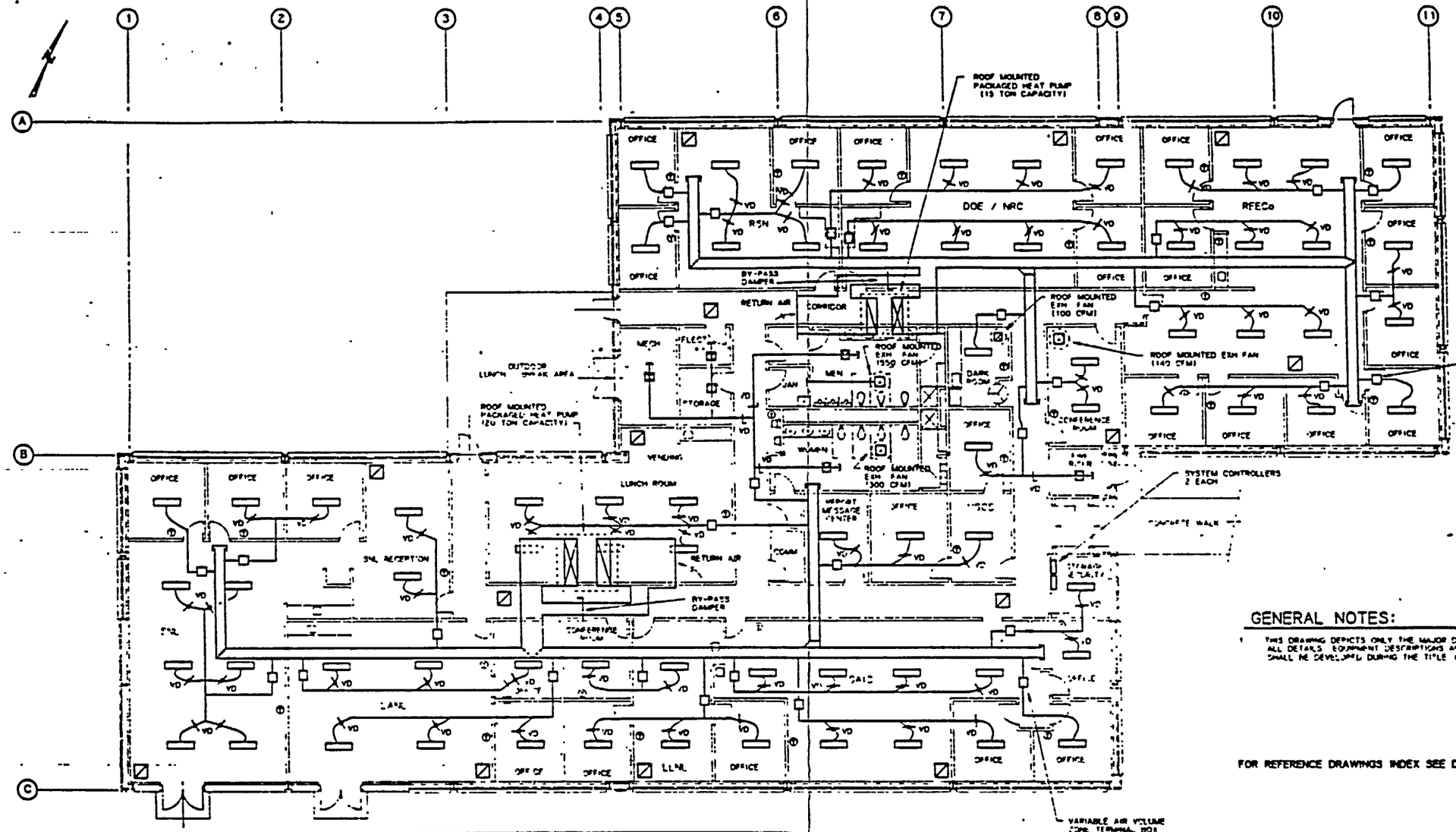
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
TEST SUPPORT BUILDING
ELEVATIONS & SECTION

SUBMITTED BY	DATE	DRAWING NO.	REV.
		YMP-025-1-7005-AR02	0

YMPO APPROVED DATE SHT OF

Plotted 22 09-21-30 1991, FDI Part name: YMP0031 DRW AUW

6



HVAC PLAN
SCALE 1/8" = 1'-0"

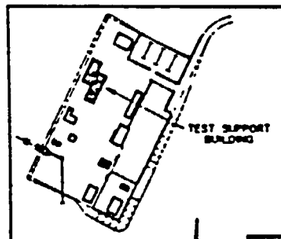
HVAC LEGEND

SYMBOL	DESCRIPTION
RL	REFRIGERANT LIQUID LINE
HG	REFRIGERANT HOT GAS LINE
RS	REFRIGERANT SUCTION LINE
D	DRAIN LINE
	FLEXIBLE CONNECTION TO EQUIPMENT
	DUCT TRANSITION
	ELBOW WITH TURNING VANES
	RECTANGULAR "T" WITH TURNING VANES
	BRANCH DUCT WITH TURNING VANES
VD	VOLUME DAMPER IN RIGID DUCT TAKEOFF
FD	FIRE DAMPER IN WALL PENETRATION

HVAC LEGEND CONTINUATION

SYMBOL	DESCRIPTION
VD	VOLUME DAMPER IN FLEXIBLE DUCT TAKEOFF
	DUCT SECTION (SUPPLY)
	DUCT SECTION (RETURN)
	CEILING DIFFUSER (SUPPLY)
	SIDEWALL REGISTER/LOUVER
	CEILING GRILLE (RETURN)
	CEILING GRILLE (EXHAUST)
	WALL LOUVER
T	THERMOSTAT (COOLING AND HEATING)
T_C	THERMOSTAT (COOLING ONLY)
T_H	THERMOSTAT (HEATING ONLY)
	DIRECTION OF AIR FLOW

GRAPHIC SCALE
0 4 8 16 24 FEET
1/8" = 1'-0"



TS NORTH PORTAL KEY PLAN

SI APERTURE CARD

Also Available On Aperture Card

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE I EFFORT.

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 188

NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

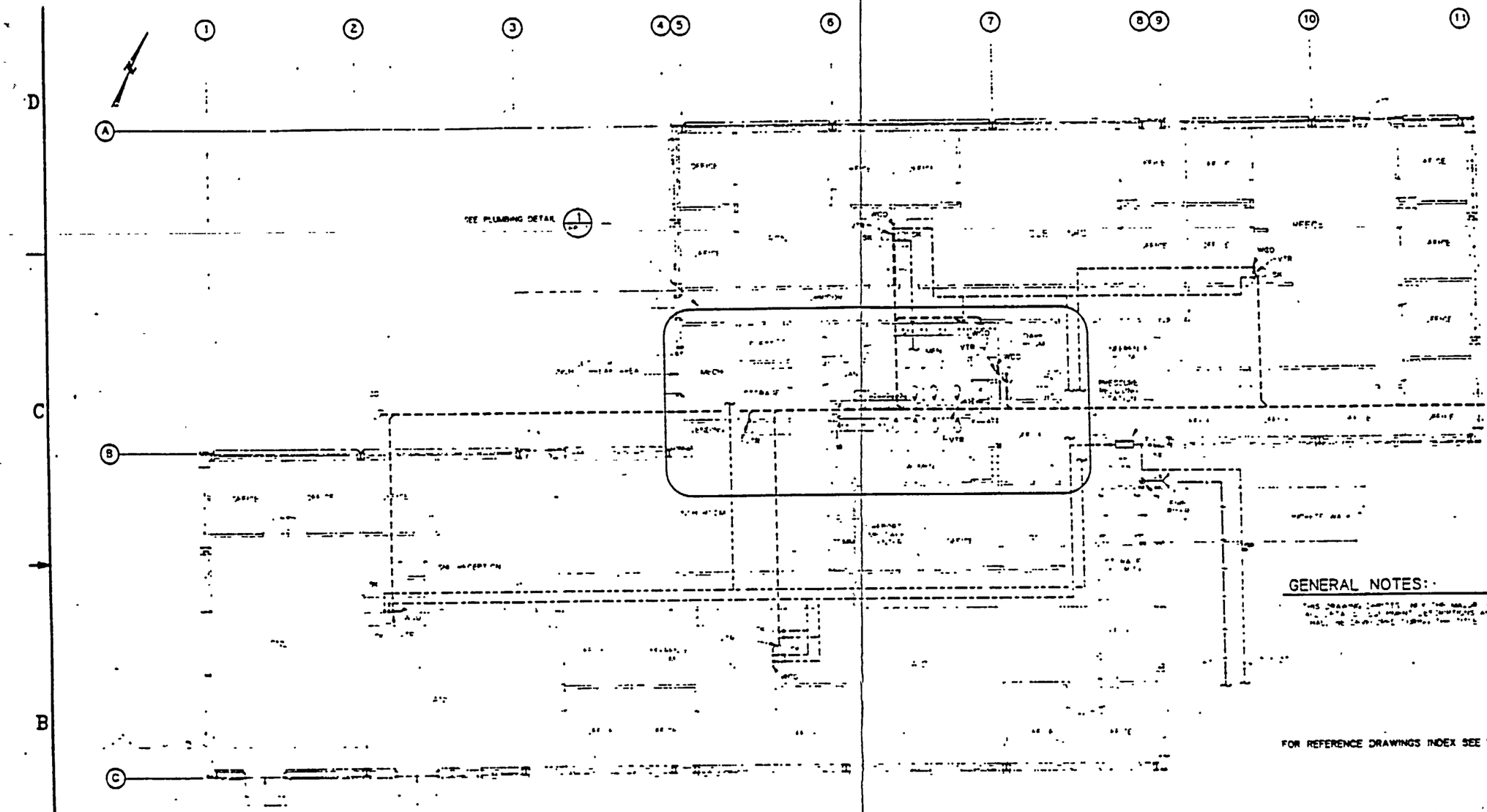
APPROVALS	
DESIGN	BMA
DRAWN	RFC
CHECKED	
DEC	
DESIGN MANAGER	
VERIFICATION	N/A
ENV	
SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
TEST SUPPORT BUILDING
HVAC PLAN

SUBMITTED BY | DATE | DRAWING NO. YMP-025-1-7005-HV01 | REV. 0
YMPO APPROVED | DATE | SHT | OF

Plotted: Wed Aug 21 13:28:23 1991, PDT Part name: ymP0J66.DWG -UW



PLUMBING PLAN

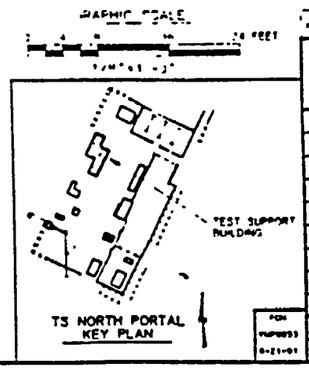
SI APERTURE CARD

Also Available On Aperture Card

GENERAL NOTES:

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -189



TS NORTH PORTAL KEY PLAN

NO.	DATE	REVISION	DES	DRN	CHK	DES.	DM	VERIF	ENV	SAF	QA	PPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

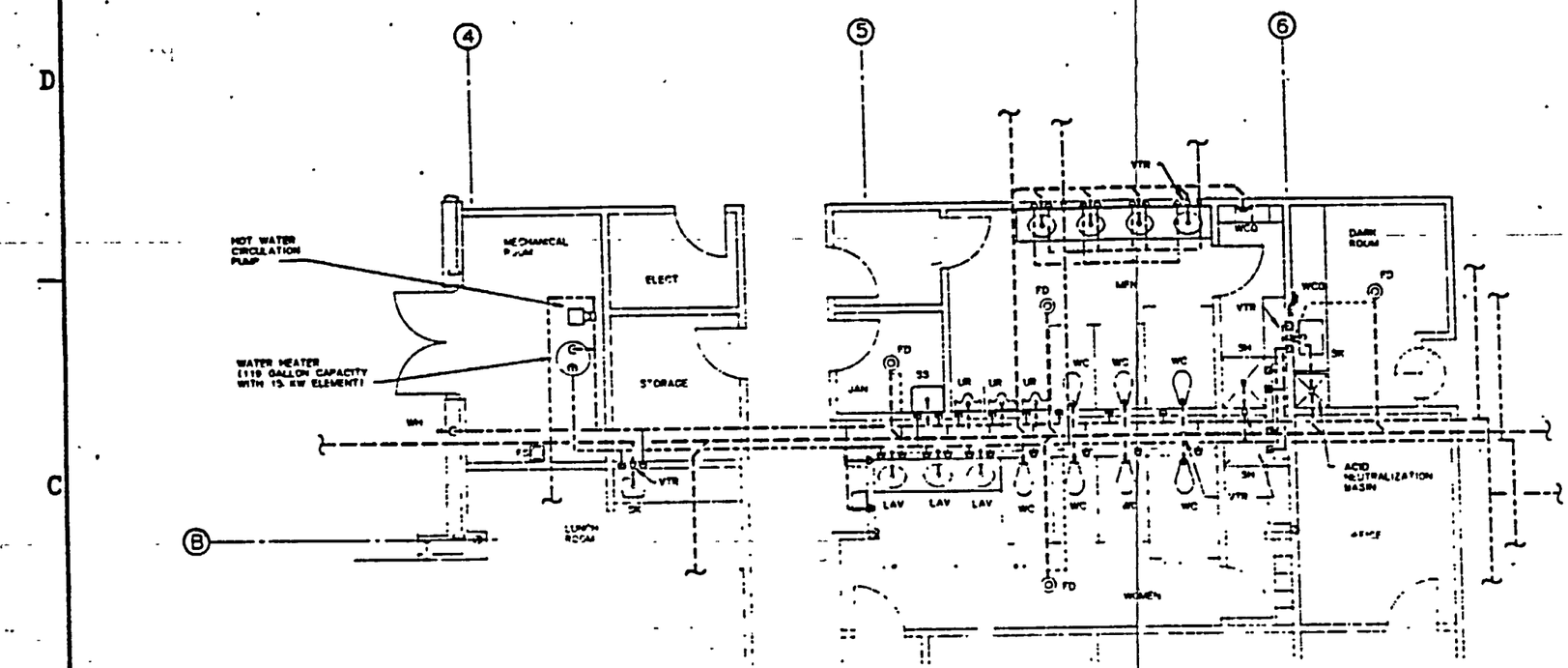
Raytheon Services Nevada
LAS VEGAS, NEVADA

APPROVALS	
DESIGN	TAN
DRAWN	PFC
CHECKED	
DFC	
DESIGN MANAGER	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
TEST SUPPORT BUILDING
PLUMBING PLAN

SUBMITTED BY	DATE	DRAWING NO	REV
	8-26-91	YMP-025-1-7005-PP01	0

YMPO APPROVED DATE SHT OF



PLUMBING DETAIL (1 / P01)

SCALE 1/4" = 1'-0"

PLUMBING LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
	SOIL/WASTE (ABOVE GRADE)
	SOIL/WASTE (BELOW GRADE)
	VENT PIPING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RETURN
F F	FIRE LINE
	FIRE RISER
FDC	FIRE DEPARTMENT CONNECTION
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FS	FLOOR SINK
WCO	WALL CLEAN OUT
CO	CLEAN OUT AT FINISH GRADE
VTR	VENT THRU ROOF
HB	HOSE BIBB
WH	WALL HYDRANT
SH	SHOWER
WC	WATER CLOSET
UR	URINAL
SS	SERVICE SINK
LAV	COUNTER TOP LAVATORY
LAV	WALL MOUNTED LAVATORY
SK	COUNTER TOP SINK
WF	WASH FOUNTAIN
EW/SH	EYE WASH/SHOWER
BW	BOOT WASH
EWC	ELECTRIC WATER COOLER

GENERAL NOTES:

1. THIS DRAWING DEPICTS ONLY THE MAJOR DESIGN FEATURES OF THIS PROJECT. ALL DETAILS, EQUIPMENT DESCRIPTIONS AND SPECIAL INSTRUCTIONS SHALL BE DEVELOPED DURING THE TITLE II EFFORT

SI APERTURE CARD

Also Available On Aperture Card

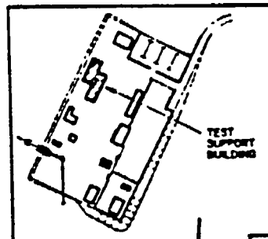
FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 - 190

GRAPHIC SCALE

0 4 8 12 FEET

1/4"=1'-0"



NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPO

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

Raytheon Services Nevada
LAS VEGAS, NEVADA

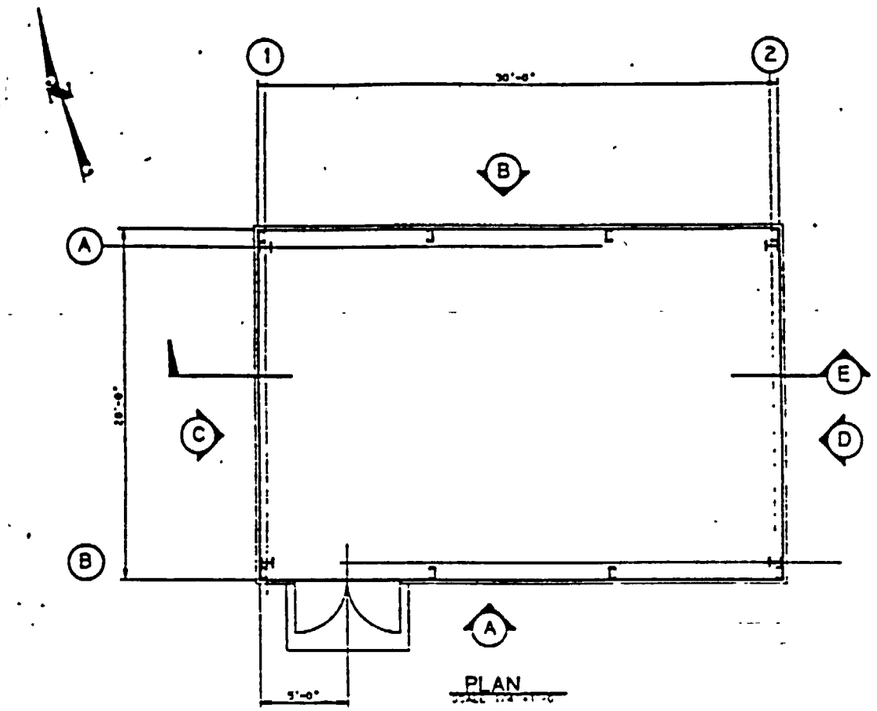
APPROVALS	
DESIGN	TAN
DRAWN	RFC
CHECKED	
DEC	
DESIGN MANAGER	B.CH.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	8-26-91

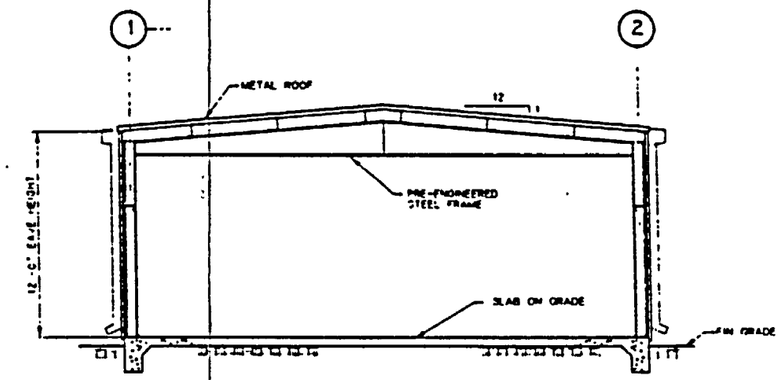
EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
TEST SUPPORT BUILDING
PLUMBING DETAIL

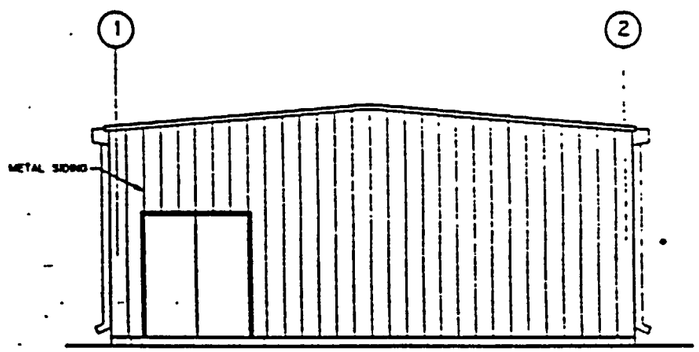
SUBMITTED BY: 8-26-91 | DRAWING NO: YMP-025-1-7005-PP02 | REV. 0

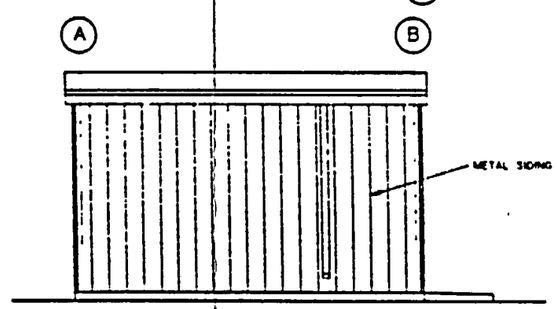
YMPO APPROVED | DATE | SHT ___ OF ___

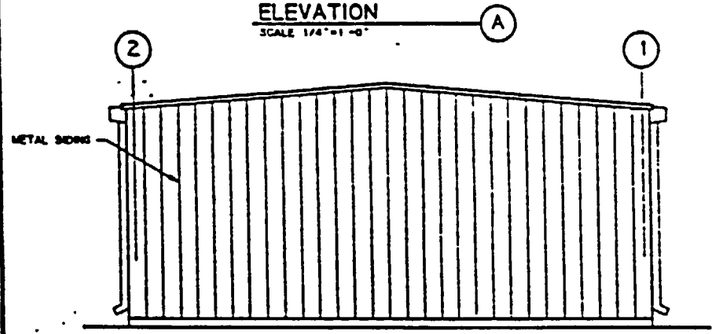
Plotted : Wed Aug 21 07:09:37 1991, PDT Part name ymP0034.DRW

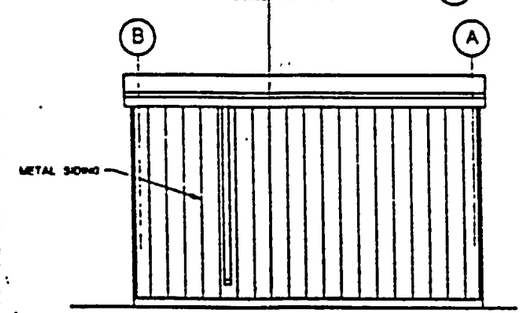












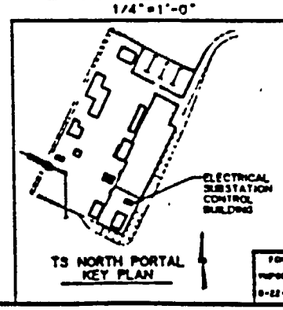
SI APERTURE CARD

Also Available On Aperture Card

FOR REFERENCE DRAWINGS INDEX SEE DRAWING YMP-025-1-CIVL-GE02

9305250071 -191

GRAPHIC SCALE
0 4 8 12 FEET
1/4"=1'-0"



NO	DATE	REVISION	DES	DRN	CHK	DEC	DM	VRFY	ENV	SAF	QA	TPO	YMPC

U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
LAS VEGAS, NEVADA

APPROVALS

DESIGN	RLB
DRAWN	CLP
CHECKED	
DEC	
DESIGN MANAGER	B.C.H.
VERIFICATION	N/A
ENV / SAF	
QUALITY ASSURANCE	

Raytheon Services Nevada
LAS VEGAS, NEVADA

EXPLORATORY STUDIES FACILITY
TS NORTH PORTAL GENERAL ARRANGEMENT
ELECTRICAL SUBSTATION CONTROL BLDG
PLAN AND ELEVATIONS

SUBMITTED BY | DATE | DRAWING NO | REV.
YMP-025-1-7006-AR01 | 0

YMPO APPROVED | DATE | SHT.

Plotted : Thu Aug 22 09:10:30 1991, PDT Part name: YMP0027.DRW

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

EXPLORATORY STUDIES FACILITY

TECHNICAL BASELINE

VOLUME 2

PARSONS BRINCKERHOFF

DRAWINGS

Prepared by:

RAYTHEON SERVICES NEVADA

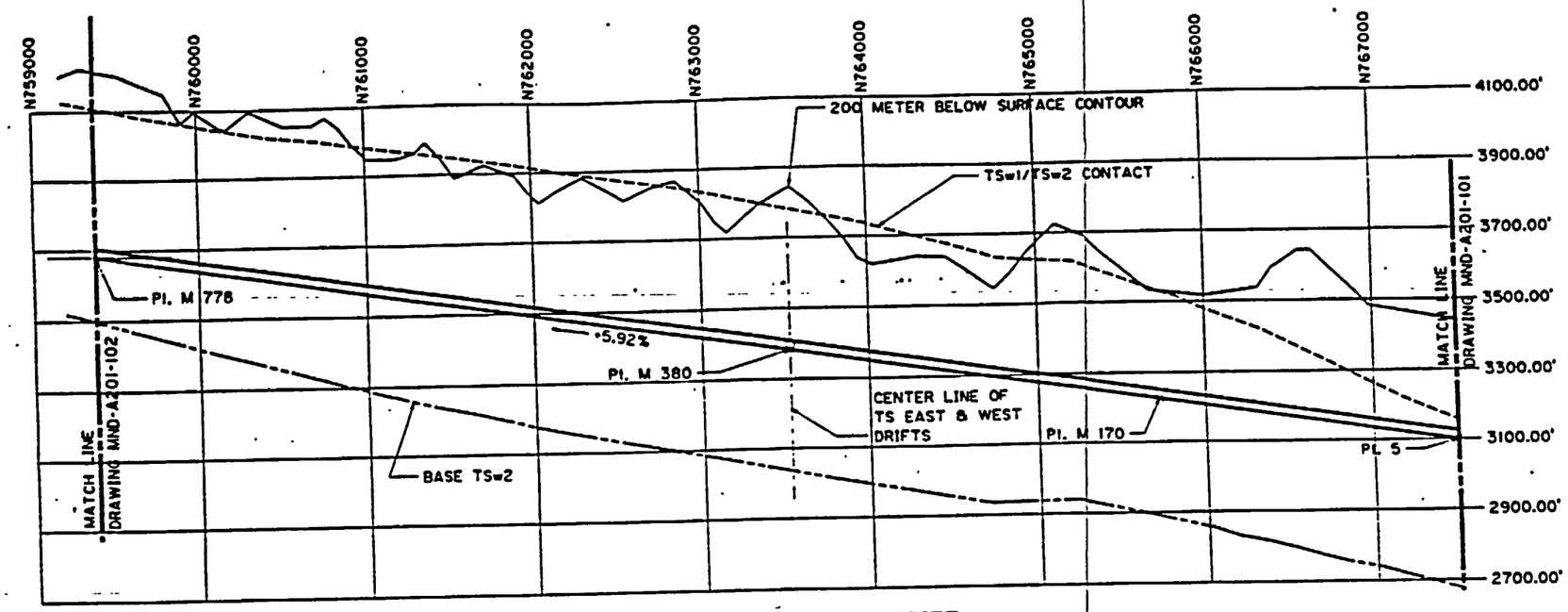
101 Convention Center Drive

Las Vegas, Nevada

SI
APERTURE
CARD

Also Available On
Aperture Card

9305250071-192



SECTION THROUGH TS MAIN DRIFT

LOOKING WEST - WORK WITH DRAWING MND-A201-103

S	767500.00	564053.00	3100.00
M 170	765724.20	562895.21	3226.86
M 380	763530.87	561375.58	3383.56
W 381	763498.33	561126.87	3383.56
PW 380	765653.50	558225.24	3469.72
PE 380	761729.97	564045.08	3214.81
M 778	759375.43	55872.91	3680.40

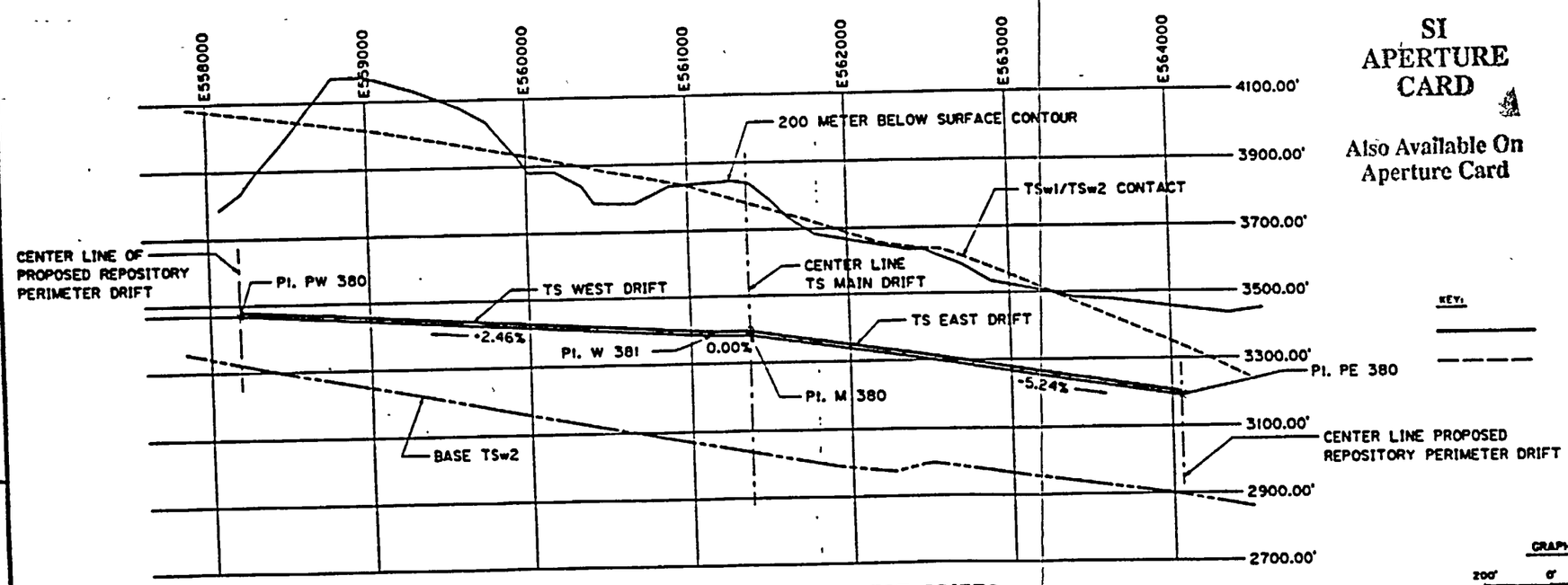
NOTES:

1. THE GRID SYSTEM SHOWN ON THESE DRAWINGS IS THE NEVADA COORDINATE CENTRAL SYSTEM. THE POINT NUMBERS ARE BASED ON PB DEVELOPED REPOSITORY NUMBERING SYSTEM.
2. DIMENSIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. DIMENSIONS, ELEVATIONS AND GRADES ARE ROUNDED OFF TO THE NEAREST TWO DECIMAL PLACES.
3. THE CONTOUR OF THE BASE OF THE TSW2 FORMATIONS WAS DETERMINED FROM SNL DRAWING CAL0304
4. THE CONTOUR OF THE TSW1/TSW2 FORMATION CONTACT WAS DETERMINED FROM SNL DRAWING CAL0302
5. THE 200 METER BELOW THE SURFACE CONTOUR WAS DEVELOPED FROM A 1 INCH = 500 FEET SCALE TOPOGRAPHIC MAP WITH A 10 FOOT CONTOUR INTERVAL.
6. THE SECTION OF TS WEST DRIFT FROM POINT M 380 TO POINT W 381 IS TO BE DRIVEN AT 0.00% GRADE TO ACCOMODATE ADDITIONAL FUTURE REPOSITORY MAIN DRIFTS.
7. THE TS EAST/WEST DRIFTS ARE LOCATED ALONG THE SAME CENTER LINES AS WASTE EMPLACEMENT DRIFT NO. 38. WASTE EMPLACEMENT IS NOT PLANNED FOR THESE DRIFTS.
8. FOR THE PURPOSES OF THESE INTERFACE DRAWINGS, THE TS EAST/WEST DRIFTS ARE ASSUMED TO BE RECTANGULAR IN SHAPE AND 20 FEET WIDE BY 12 FEET HIGH.
9. ALL OTHER DRIFTS SHOWN ON THIS DRAWING ARE ASSUMED TO BE 25.0 FOOT DIAMETER AND DRIVEN BY TUNNEL BORING MACHINES.
10. ELEVATIONS SHOWN ARE AT THE INVERT OF THE DRIFT WITH NO FILL, LINING OR CONCRETE. EXCEPT THAT PL. S IS THE POINT OF INTERSECTION OF THE TANGENT OF THE TS NORTH RAMP LOWER VERTICAL CURVE AND THE TS MAIN DRIFT.
11. FOR PLAN VIEW SEE MND-A201-103

SI APERTURE CARD

Also Available On Aperture Card

9305250071 -193



SECTION THROUGH TS EAST AND WEST DRIFTS

LOOKING NORTH - WORK WITH DRAWING MND-A201-103

KEY:

ESF

REPOSITORY

GRAPHIC SCALES

200' 0' 200' 400'
1" = 200' VERTICAL

500' 0' 500' 1000'
1" = 500' HORIZONTAL

PROJ. & W.O. NO.	DATE	REVISION	BY	CK.	APP

PROPERTY OF
RAYTHEON SERVICES NEVADA

Parsons Brinckerhoff DEVELOPED BY
Parsons Brinckerhoff Quade & Douglas, Inc.

YUCCA MOUNTAIN PROJECT

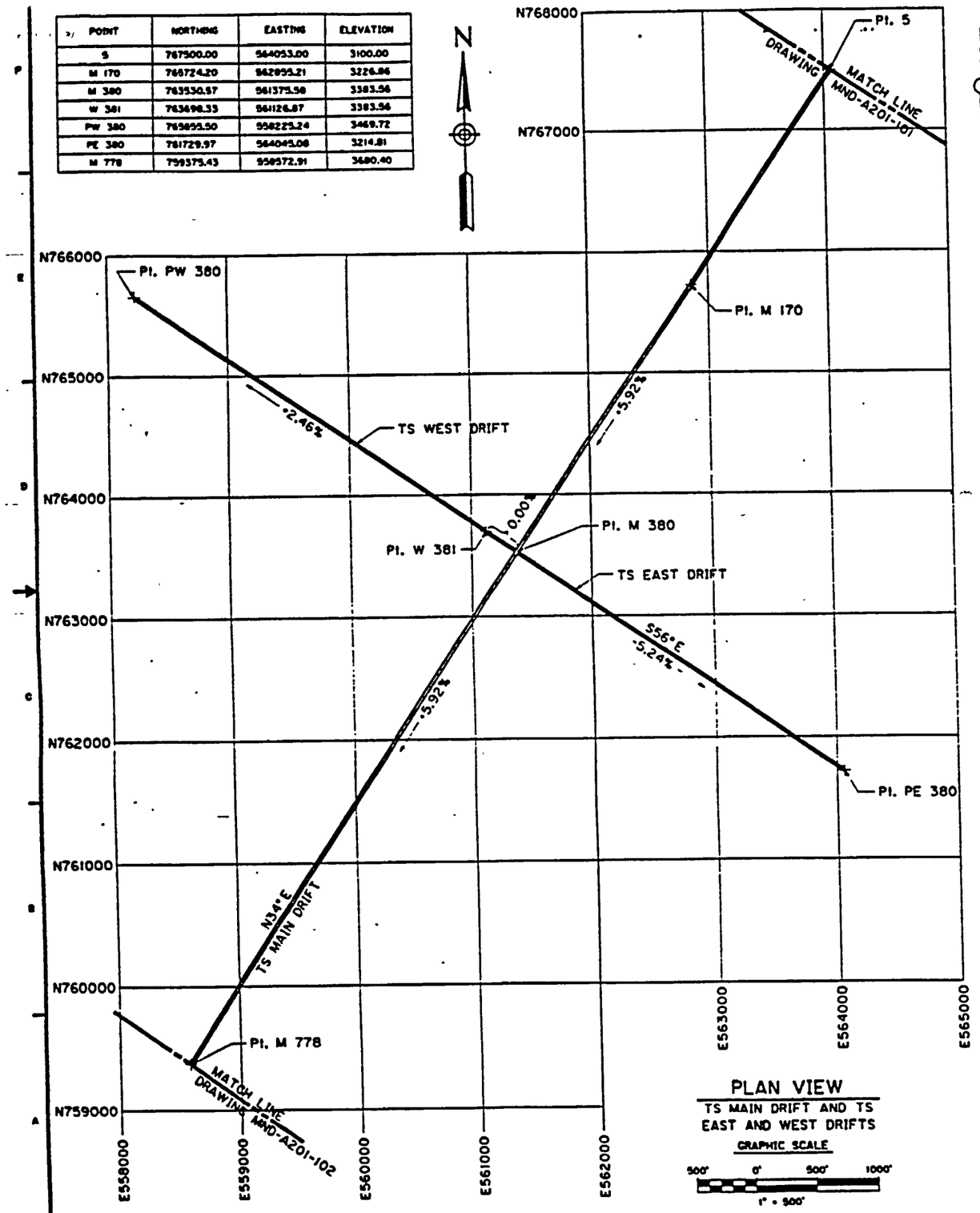
REPOSITORY MAIN DRIFTS & TS EAST/WEST DRIFTS - CROSS SECTIONS

DES. JBL | DR. MTH | CK. DJS | DWG. APPROVED | DATE | SIZE D

APP. JBL | CK. | SUB-PM | DATE | DWG. CLASS | PAGE NO.

SCALE AS SHOWN | PB DWG. NO. - REV. MND-A201-104 | REV. | CLIENT'S DWG. NO. | CAT.

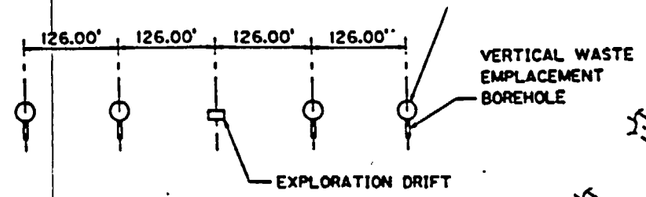
POINT	NORTHING	EASTING	ELEVATION
S	767500.00	564053.00	3100.00
M 170	766724.20	562855.21	3226.86
M 380	763530.97	561375.58	3383.56
W 381	763498.33	561126.87	3383.56
PW 380	765855.50	558225.24	3469.72
PE 380	761729.97	564045.08	3214.81
M 778	759375.43	558572.91	3680.40



PLAN VIEW

TS MAIN DRIFT AND TS EAST AND WEST DRIFTS

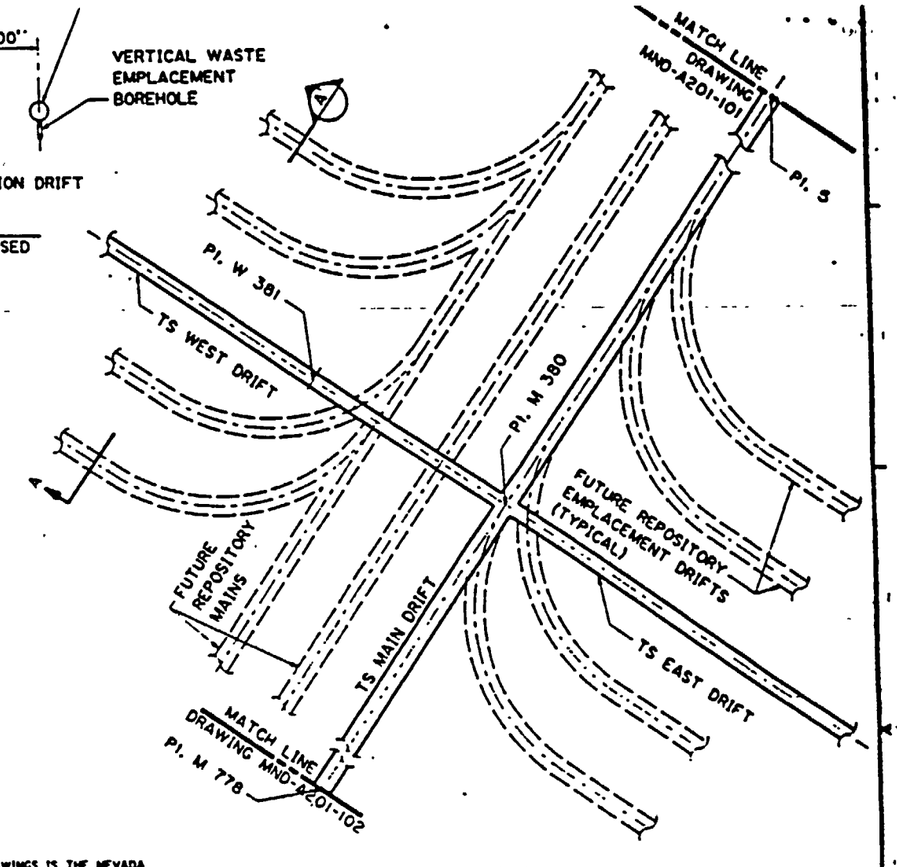
GRAPHIC SCALE



SECTION A-A'

ACROSS TS WEST DRIFT AND PROPOSED WASTE EMPLACEMENT DRIFTS

SCALE 1" = 100'



KEY:

ESF

REPOSITORY

NOTES:

1. THE GRID SYSTEM SHOWN ON THESE DRAWINGS IS THE NEVADA COORDINATE CENTRAL SYSTEM. THE POINT NUMBERS ARE BASED ON PB DEVELOPED REPOSITORY NUMBERING SYSTEM.
2. DIMENSIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. DIMENSIONS, ELEVATIONS AND GRADES ARE ROUNDED OFF TO THE NEAREST TWO DECIMAL PLACES.
3. FOR THE PURPOSES OF THESE INTERFACE DRAWINGS, THE TS EAST/WEST DRIFTS ARE ASSUMED TO BE RECTANGULAR IN SHAPE AND 20 FEET WIDE BY 12 FEET HIGH.
4. ALL OTHER DRIFTS SHOWN ON THIS DRAWING ARE ASSUMED TO BE 25.0 FOOT DIAMETER AND DRIVEN BY TUNNEL BORING MACHINES.
5. A FOURTH REPOSITORY MAIN DRIFT MAY BE REQUIRED, BUT THE EXACT LOCATION IS NOT KNOWN. IT IS NOT SHOWN FOR CLARITY.
6. THE 126.00 FEET CENTER TO CENTER DISTANCE BETWEEN WASTE EMPLACEMENT DRIFTS IS FOR ILLUSTRATIVE PURPOSES ONLY AND MAY BE CHANGED FOLLOWING FURTHER EVALUATIONS.
7. HORIZONTAL CURVES SHOWN FROM THE REPOSITORY MAINS TO THE WASTE EMPLACEMENT DRIFTS ARE SHOWN USING A 250.00 FOOT RADIUS FOR ILLUSTRATIVE PURPOSES. THIS RADIUS MAY BE CHANGED FOLLOWING FURTHER EQUIPMENT AND OPERATIONAL EVALUATIONS.
8. THE TS EAST/WEST DRIFTS ARE LOCATED ALONG THE SAME CENTER LINES AS WASTE EMPLACEMENT DRIFT NO. 38. WASTE EMPLACEMENT IS NOT PLANNED FOR THESE DRIFTS.
9. ELEVATIONS SHOWN ARE AT THE INVERT OF THE DRIFT WITH NO FILL, LINING OR CONCRETE. EXCEPT THAT PI. 5 IS THE POINT OF INTERSECTION OF THE TANGENT OF THE TS NORTH RAMP LOWER VERTICAL CURVE AND THE TS MAIN DRIFT.
10. FOR CROSS SECTIONS SEE MND-A201-104.

SI APERTURE CARD

Also Available On Aperture Card

DETAIL PLAN VIEW

INTERSECTION OF TS MAIN DRIFT AND TS EAST/WEST DRIFTS

GRAPHIC SCALE

100' 0' 100' 200'

1" = 100'

PROJ & W.O. NO.	DATE	REVISION	BY	CK.	APP.

PROPERTY OF

RAYTHEON SERVICES NEVADA

Parsons Brinckerhoff DEVELOPED BY

Parsons Brinckerhoff Quade & Douglas, Inc.

YUCCA MOUNTAIN PROJECT

REPOSITORY MAIN DRIFTS & TS EAST/WEST DRIFTS - PLAN VIEW

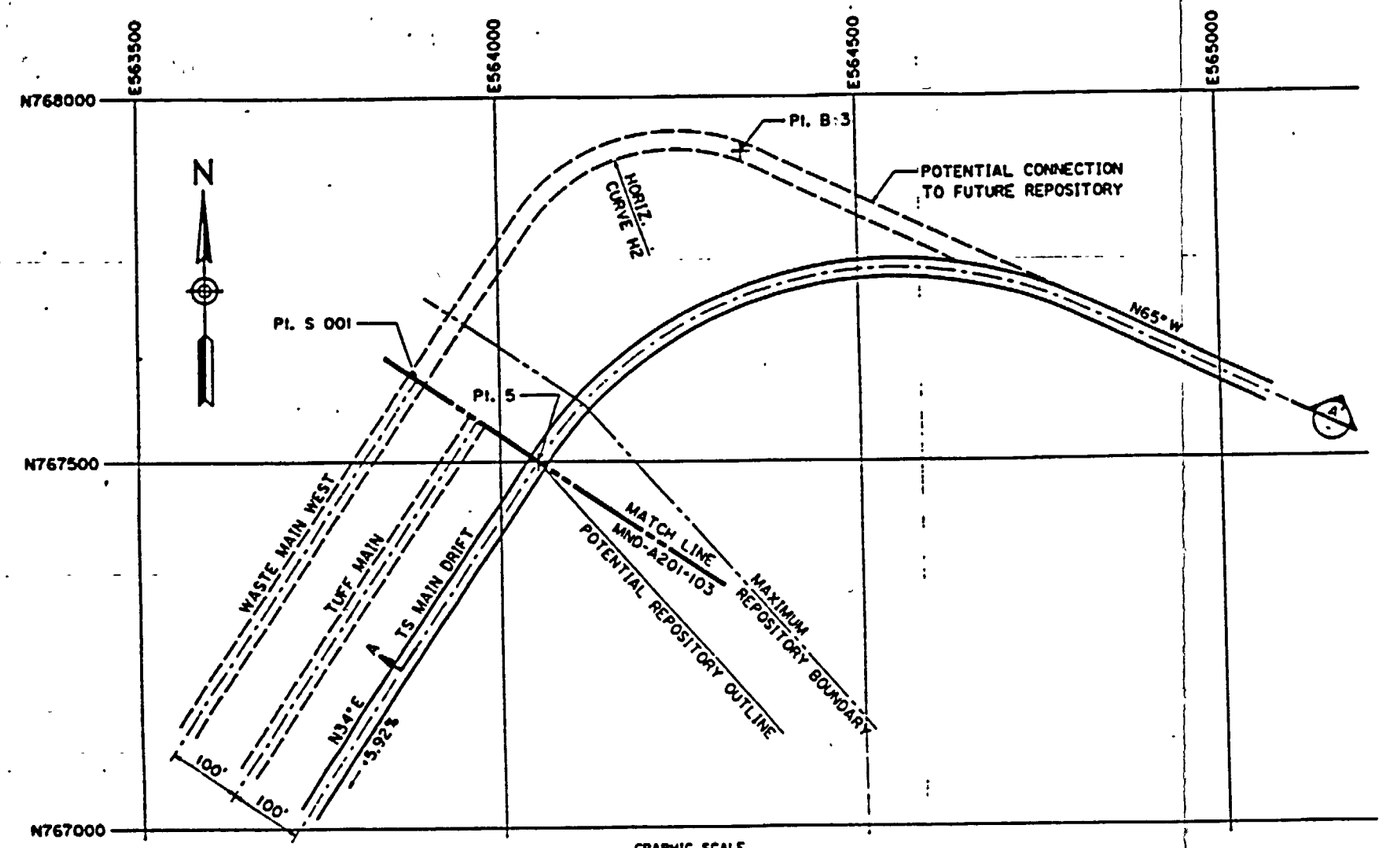
DES. JBC | DR. MTH | CK. DJB | DWG. APPROVED | DATE | SIZE D

APP. DOC. MGR. | DR. | DATE | DWG. CLASS | PAGE NO.

SUB. PM | DATE

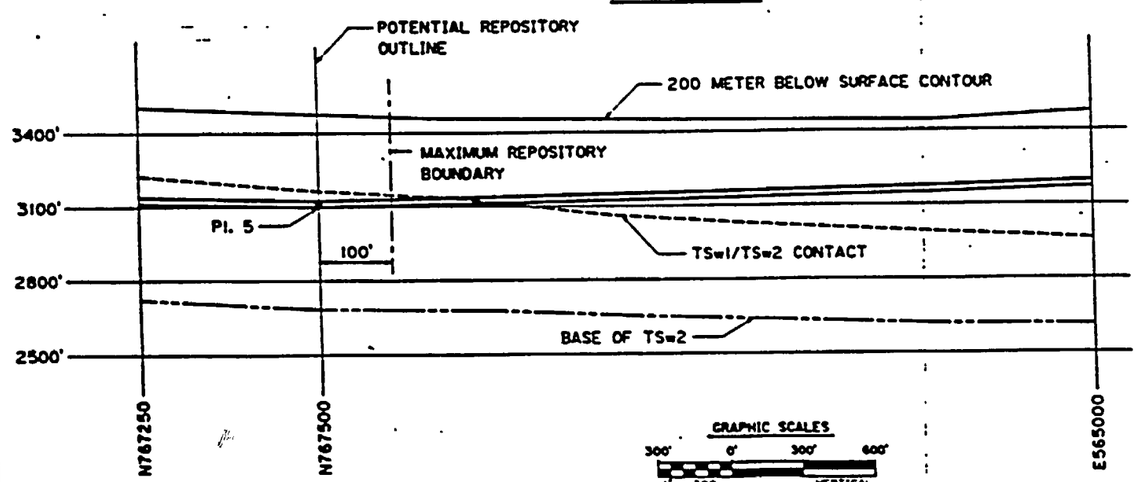
SCALE AS SHOWN | PB DWG. NO. - REV. MND-A201-100 | REV. | CLIENT'S DWG. NO. | CAT.

9305250071-194



GRAPHIC SCALE
100' 0' 100' 200'
1" = 100'

PLAN VIEW



GRAPHIC SCALES
300' 0' 300' 600'
1" = 300' VERTICAL
100' 0' 100' 200'
1" = 100' HORIZONTAL

SECTION A-A'
UNFOLDED CENTERLINE SECTION

NOTES:

1. THE GRID SYSTEM SHOWN ON THESE DRAWINGS IS THE NEVADA COORDINATE CENTRAL SYSTEM. THE POINT NUMBERS ARE BASED ON PB DEVELOPED REPOSITORY NUMBERING SYSTEM.
2. DIMENSIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. DIMENSIONS, ELEVATIONS AND GRADES ARE ROUNDED OFF TO THE NEAREST TWO DECIMAL PLACES.
3. THE CONTOUR OF THE BASE OF THE TSw2 FORMATION WAS DERIVED FROM SNL DRAWING CAL0304.
4. THE CONTOUR OF THE TSw1/TSw2 FORMATION CONTACT WAS DETERMINED FROM SNL DRAWING CAL0302
5. THE 200 METER BELOW THE SURFACE CONTOUR WAS DEVELOPED FROM A 1 INCH = 500 FEET SCALE TOPOGRAPHIC MAP WITH A 10 FOOT CONTOUR INTERVAL.
6. THE 100' CENTER TO CENTER DISTANCE BETWEEN MAIN DRIFTS IS FOR ILLUSTRATION PURPOSES ONLY AND MAY BE ALTERED AFTER FURTHER EVALUATION.
7. ELEVATIONS SHOWN ARE AT THE INVERT OF THE DRIFT WITH NO FILL, LINING OR CONCRETE.
8. ALTHOUGH THERE ARE ONLY THREE MAIN DRIFTS SHOWN, A FOURTH MAIN MAY BE REQUIRED FOR ADDITIONAL VENTILATION.
9. COORDINATES CANNOT BE SCALED OFF THE UNFOLDED CENTERLINE SECTION A-A'
10. Pl. 5 IS THE POINT OF INTERSECTION OF THE TS NORTH RAMP AND THE REPOSITORY.
11. THE TS NORTH RAMP WILL NOT EXCEED A GRADE OF 10%.
12. ALL DRIFTS ON THIS DRAWING ARE ASSUMED TO BE 25.0 FOOT DIAMETER AND DRIVEN BY TUNNEL BORING MACHINES, EXCEPT FOR THE CONVEYOR DRIFTS.

SI APERTURE CARD

Also Available On Aperture Card

CURVE DATA				
POINT	RADIUS OF CURVE	TANGENT LENGTH	CURVE LENGTH	ANGLE
N2	250	213.52	353.43	81.00

POINT	NORTHING	EASTING	ELEVATION
9	767500.00	564053.00	3400.00
B 3	767924.84	564339.56	3069.85
S 001	767645.81	563941.16	3100.00

KEY:
ESF
REPOSITORY

PROJ. & W.O.	NO.	DATE	REVISION	BY	CK.	APP.

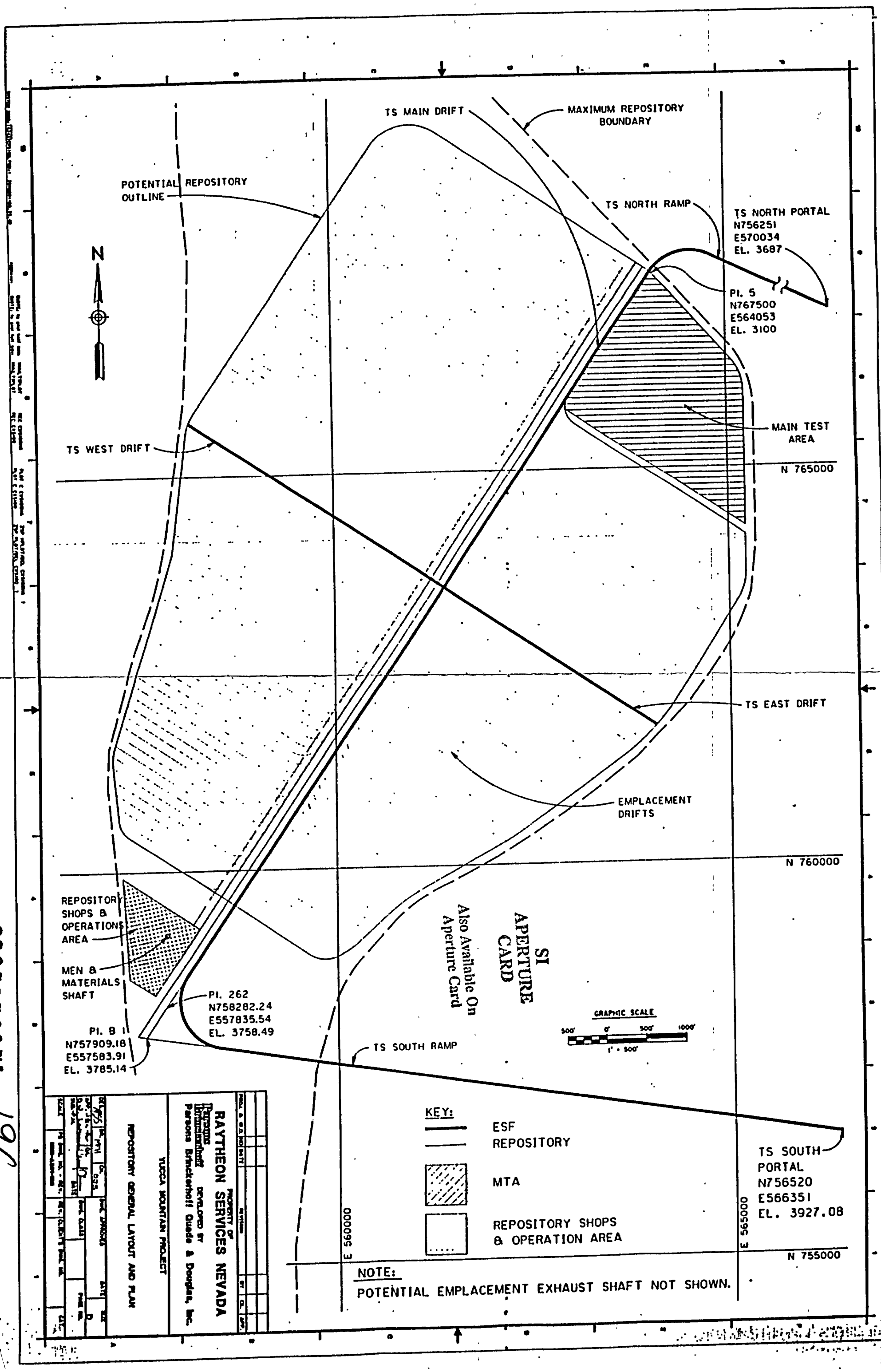
PROPERTY OF
RAYTHEON SERVICES NEVADA
Parsons Brinckerhoff DEVELOPED BY
Parsons Brinckerhoff Quade & Douglas, Inc.

YUCCA MOUNTAIN PROJECT

TS NORTH RAMP / MAIN DRIFT PLAN & SECTION

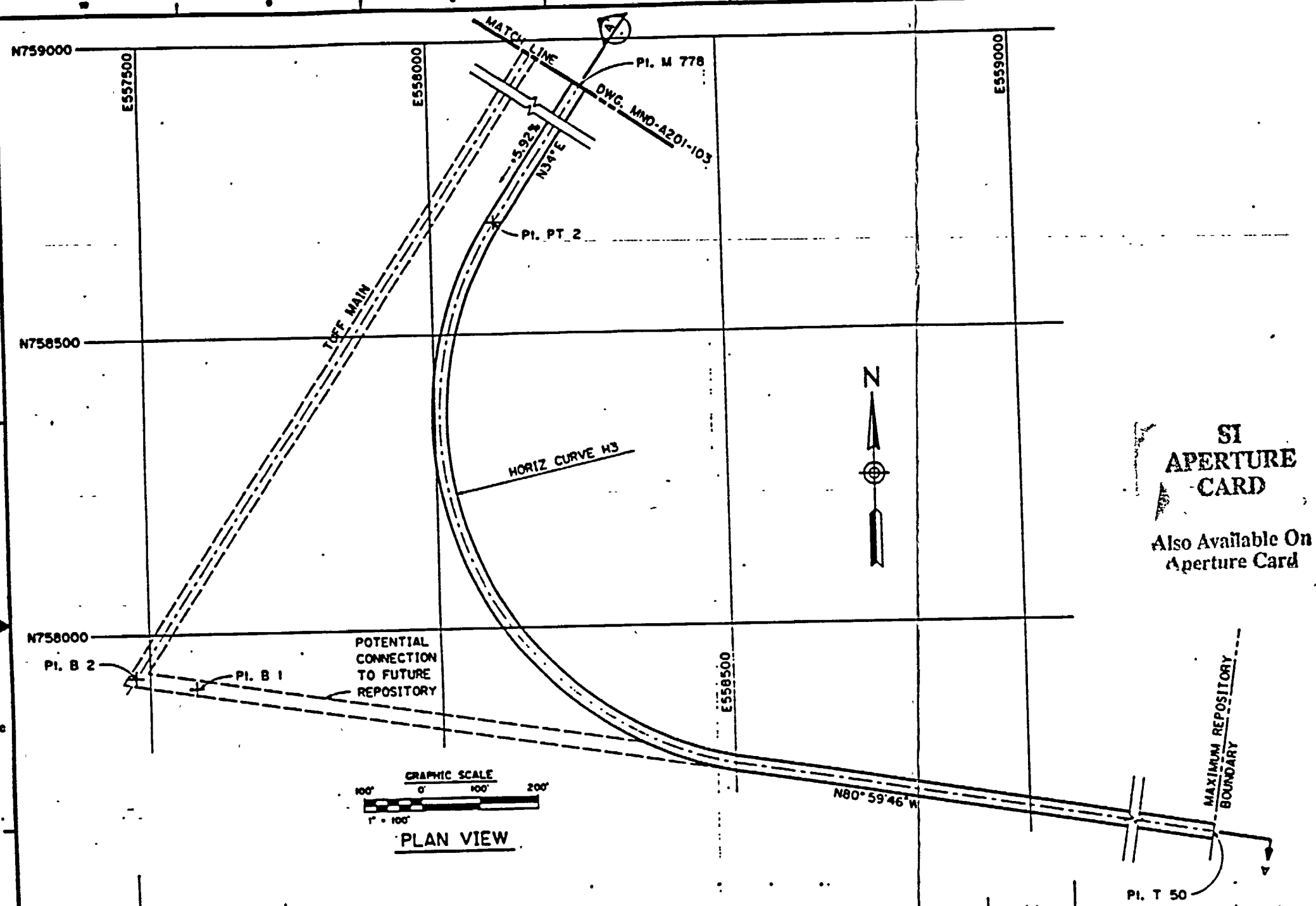
DR. RS DR. MTH CK. DJS
DWG. APPROVED DATE SIZE D
DWG. CLASS PAGE NO.
SCALE AS SHOWN
PB DWG. NO. - REV. MND-A201-101
REV. CLIENT'S DWG. NO. CAT.

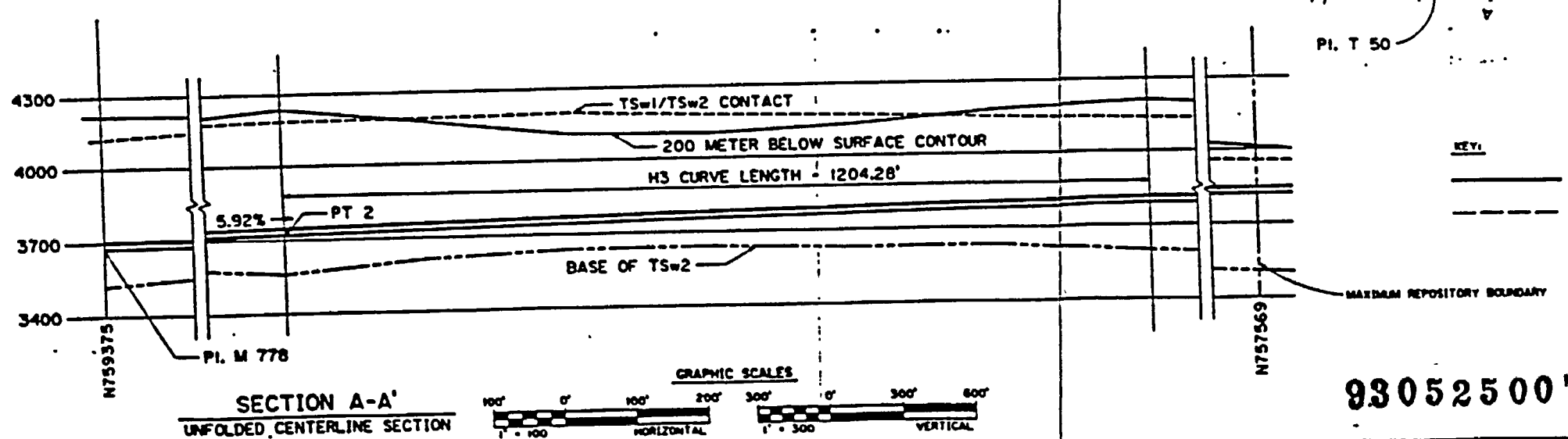
9305250071-195



Also Available On Aperture Card
SI APERTURE CARD

9305250071-196





SECTION A-A'
UNFOLDED CENTERLINE SECTION

SI APERTURE CARD

Also Available On Aperture Card

NOTES:

1. THE GRID SYSTEM SHOWN ON THESE DRAWINGS IS THE NEVADA COORDINATE CENTRAL SYSTEM. THE POINT NUMBERS ARE BASED ON PB DEVELOPED NUMBERING SYSTEM.
2. DIMENSIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. DIMENSIONS, ELEVATIONS AND GRADES ARE ROUNDED OFF TO THE NEAREST TWO DECIMAL PLACES.
3. THE CONTOUR OF THE BASE OF THE TSw2 FORMATION WAS DERIVED FROM SNL DRAWING CAL0304.
4. THE CONTOUR OF THE TSw1/TSw2 FORMATION CONTACT WAS DETERMINED FROM SNL DRAWING CAL0302
5. THE 200 METER BELOW THE SURFACE CONTOUR WAS DEVELOPED FROM A 1 INCH = 500 FEET SCALE TOPOGRAPHIC MAP WITH A 10 FOOT CONTOUR INTERVAL.
6. THE 100' CENTER TO CENTER DISTANCE BETWEEN MAIN DRIFTS IS FOR ILLUSTRATION PURPOSES ONLY AND MAY BE ALTERED AFTER FURTHER EVALUATION.
7. ELEVATIONS SHOWN ARE AT THE INVERT OF THE DRIFT WITH NO FILL, LINING OR CONCRETE.
8. ALTHOUGH THERE ARE ONLY THREE MAIN DRIFTS SHOWN, A FOURTH MAIN MAY BE REQUIRED FOR ADDITIONAL VENTILATION.
9. COORDINATES CANNOT BE SCALED OFF THE UNFOLDED CENTERLINE SECTION A-A'
10. ALL DRIFTS ON THIS DRAWING ARE ASSUMED TO BE 25.0 FOOT DIAMETER AND DRIVEN BY TUNNEL BORING MACHINES, EXCEPT FOR THE CONVEYOR DRIFTS.
11. MAXIMUM RAMP GRADE NOT TO EXCEED 10%.

CURVE DATA

POINT	RADIUS OF CURVE	TANGENT LENGTH	CURVE LENGTH	ANGLE
H3	600	941.74	1204.24	114°59'46"

POINT	NORTHING	EASTING	ELEVATION
PT 2	758689.92	558110.52	3729.37
B 1	757909.18	557583.91	3785.14
B 2	757926.45	557474.94	3783.38
M 778	759375.43	558572.91	3680.40
T 50	757569.57	559727.17	3819.84

PROJ. & W.O. NO.	DATE	REVISION	BY	CK.	APP.

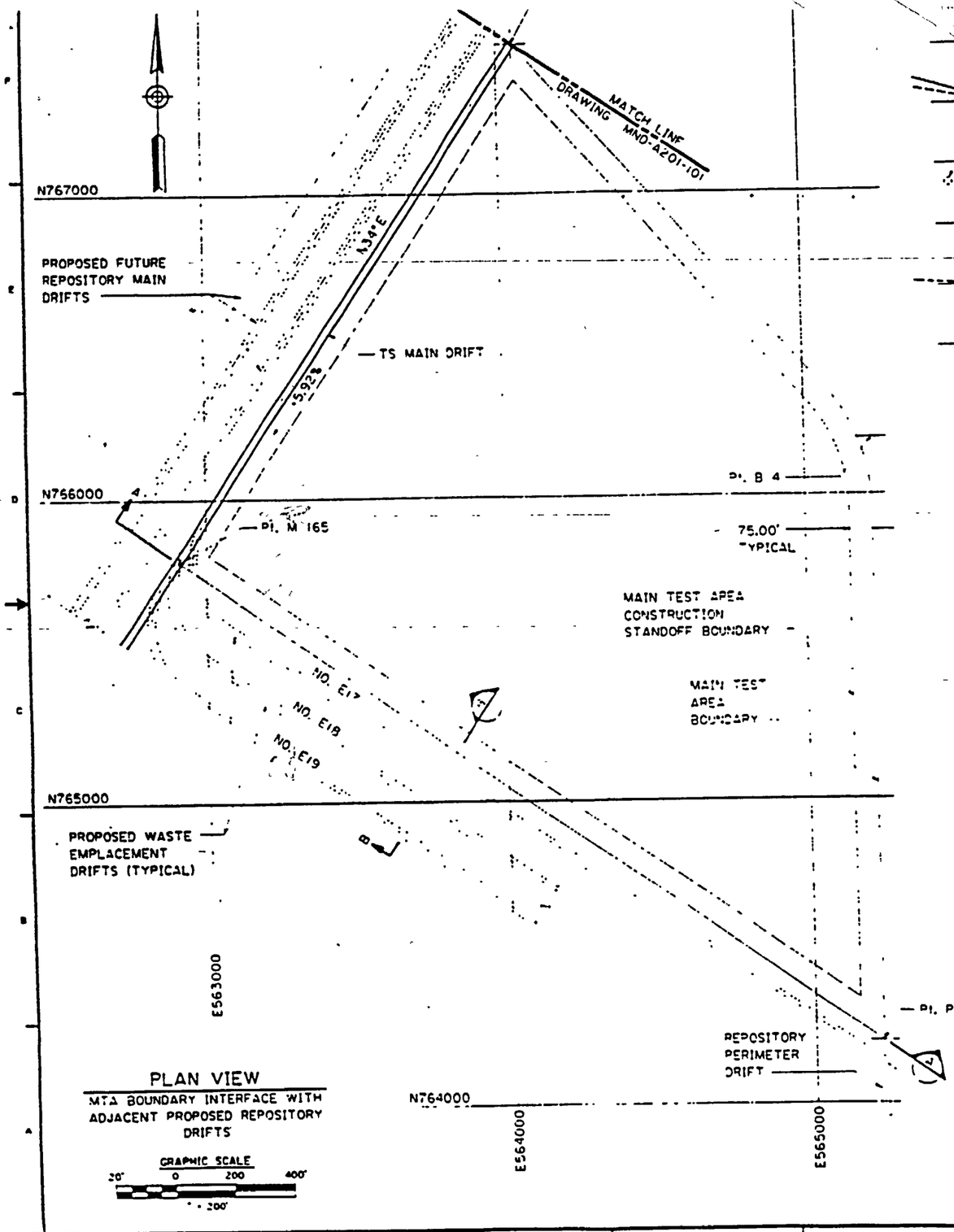
PROPERTY OF
RAYTHEON SERVICES NEVADA
Parsons Brinckerhoff DEVELOPED BY
Parsons Brinckerhoff Quade & Douglas, Inc.

YUCCA MOUNTAIN PROJECT

TS SOUTH RAMP / MAIN DRIFT PLAN & SECTION

DES. MS DR. MTH CK. DJS DWG. APPROVED DATE SIZE D
APP. DWG. NO. DWG. CLASS PAGE NO.
SCALE AS SHOWN PB DWG. NO. - REV. MND-A201-102 REV. CLIENT'S DWG. NO. CAT.

9305250071-197



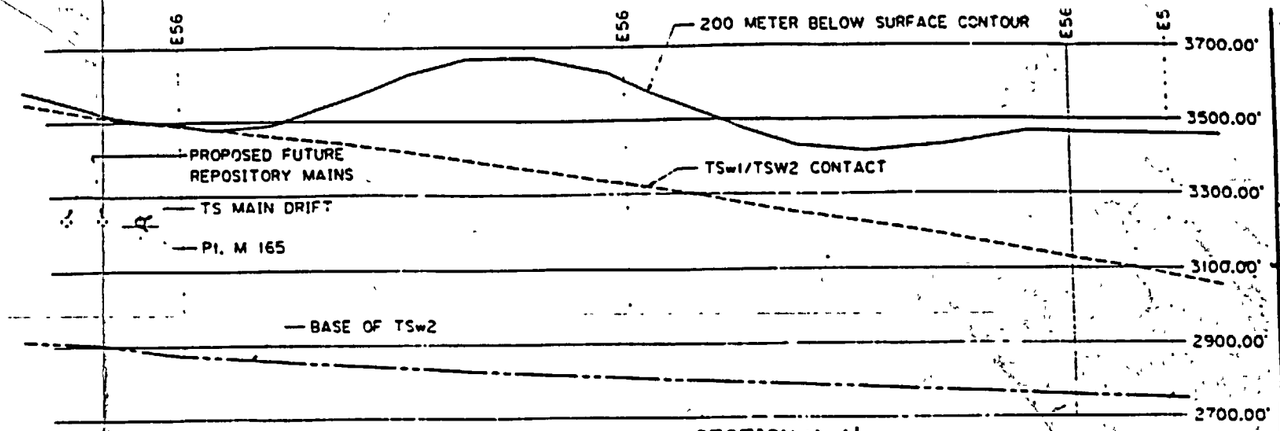
PLAN VIEW

MTA BOUNDARY INTERFACE WITH ADJACENT PROPOSED REPOSITORY DRIFTS

GRAPHIC SCALE

20' 0 200 400'

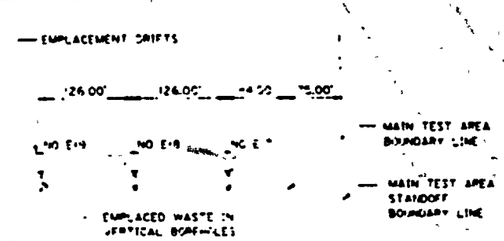
1" = 200'



SECTION A-A'

SCALE 1" = 200'

PI. PE 165 — BOUNDARY LINE



SECTION B-B'

NOTES:

1. THE GRID SYSTEM SHOWN ON THESE DRAWINGS IS THE NEVADA COORDINATE CENTRAL SYSTEM. THE POINT NUMBERS BASED ON PB DEVELOPED REPOSITORY NUMBERING SYSTEM.
2. DIMENSIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE SPECIFIED. DIMENSIONS, ELEVATIONS AND GRADES ARE ROUNDED OFF TO THE NEAREST TWO DECIMAL PLACES.
3. THE CONTOUR OF THE BASE OF THE TSW2 FORMATIONS WAS DETERMINED FROM SNL DRAWING [illegible]
4. THE CONTOUR OF THE TSW1/TSW2 FORMATION CONTACT WAS DETERMINED FROM SNL DRAWING [illegible]
5. THE 200 METER BELOW THE SURFACE CONTOUR WAS DEVELOPED FROM A 1 INCH = 500 FEET SCALE TOPOGRAPHIC MAP WITH A 10 FOOT CONTOUR INTERVAL.
6. ALL DRIFTS SHOWN ON THIS DRAWING ARE ASSUMED TO BE 25.0 FOOT DIAMETER AND DRIVEN BY TUNNEL BORING MACHINE.
7. THE 126.00 FEET CENTER TO CENTER DISTANCE BETWEEN WASTE EMPLACEMENT DRIFTS IS FOR ILLUSTRATIVE PURPOSES ONLY AND MAY BE CHANGED AFTER FURTHER EVALUATIONS.
8. THE MAIN TEST AREA IS FORMED BOUNDARY LINES CONNECTING THE FOLLOWING POINTS: 5, M 165, PE 165 AND B 4. THE AREA INSIDE THIS BOUNDARY IS APPROXIMATELY 42.2 ACRES.
9. DEPENDING UPON FURTHER VENTILATION EVALUATIONS, WASTE EMPLACEMENT DRIFT NO E17, ADJACENT TO THE MAIN TEST AREA BOUNDARY, MAY BE USED FOR VENTILATION AND NOT WASTE EMPLACEMENT AS ILLUSTRATED.
10. ALTHOUGH THERE ARE ONLY THREE REPOSITORY MAINS SHOWN ON THESE DRAWINGS, A FOURTH MAIN WILL PROBABLY BE REQUIRED FOR ADDITIONAL VENTILATION. ITS LOCATION IS NOT SHOWN FOR CLARITY.
11. NO OPENINGS RELATED TO THE MAIN TEST AREA ARE TO BE LOCATED CLOSER THAN 750 FEET TO THE MAIN TEST AREA BOUNDARY LINES, OTHER THAN MTA CONNECTIONS TO THE TS MAIN DRIFT. THIS IS SHOWN ON THE DRAWING AS THE MAIN TEST AREA CONSTRUCTION STANDOFF BOUNDARY.
12. CERTAIN FACILITIES REQUIRED DURING ACTUAL WASTE EMPLACEMENT OPERATIONS WILL BE LOCATED WITHIN THE MAIN TEST AREA AS OUTLINED BY THE FOUR BOUNDARY POINTS. AN AREA CONSISTING OF A MINIMUM OF 16 ACRES ACCESSIBLE TO THE TS MAIN DRIFT MUST BE ALLOWED FOR WITHIN THE MAIN TEST AREA. NO FURTHER DETAILS ARE AVAILABLE AT THIS TIME PENDING FURTHER DESIGN AND EVALUATION.
13. DESIGN OF MAIN TEST AREA DRIFTS INCLUDING SIZES, LENGTHS AND GRADES ARE TO THE EXTENT POSSIBLE INDEPENDENT OF THE REPOSITORY DESIGN. FOR FUTURE REPOSITORY DESIGN PURPOSES THE MAIN TEST AREA DRAINAGE IS TO DRAIN TO A SUMP LOCATED NEAR PI. 5.
14. ELEVATIONS SHOWN ARE AT THE INVERT OF THE DRIFT WITH NO FILL, LINING OR CONCRETE. EXCEPT THAT PI. 5 IS THE POINT OF INTERSECTION OF THE TANGENT OF THE TS NORTH RAMP LOWER VERTICAL CURVE AND THE TS MAIN DRIFT.
15. PI. B 4 IS THE INTERSECTION OF TANGENTS FOR A 600.00' RADIUS CURVE.

KEY

ESF

REPOSITORY

SI APERTURE CARD

Also Available On Aperture Card

POINT	NORTHING	EASTING	ELEVATION
5	767500.00	564053.00	3100.00
M 165	765793.84	562902.18	3221.88
PE 165	764230.45	565220.00	
B 4	766185.50	565220.00	

ACTUAL M 65 IS INVERT OF ESF CONSTRUCTED MAIN DRIFT, HOWEVER ELEVATION HAS NO RELATIONSHIP TO ACTUAL LOCATION OF MTA HORIZON.

PROJ. & W.O. NO.	INDICATE	REVISION	BY	CK	APP

PROPERTY OF
RAYTHEON SERVICES NEVADA
Parsons Brinckerhoff DEVELOPED BY
Parsons Brinckerhoff Quade & Douglas, Inc.

YUCCA MOUNTAIN PROJECT

REPOSITORY/MAIN TEST AREA BOUNDARY INTERFACE - PLANS AND CROSS SECTIONS

DES. DR. CK. 7/25 | DWG. APPROVED | DATE | SIZE D
APP. DWG. QA. | DWG. CLASS | PAGE NO.
SUB-P.M. DATE
SCALE AS SHOWN | PB DWG. NO. - REV. MND-A201-100 | REV. | CLIENT'S DWG. NO. | CAT.

9305250071 - 198

THESE 5 PAGES ARE OVERSIZED DRAWINGS OR FIGURES,

THAT CAN BE VIEWED AT THE RECORD TITLED:

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT TITLE I DESIGN SUMMARY RPT-REV 2.0 27-AUG-91 EXPLORATORY STUDIES FACILITY WBS 1.2.6

WITHIN THIS PACKAGE

NOTE: Because of these page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.

D-01 THROUGH D-05