Appendix A

Comparison Summary and Process Flow and Logic Diagrams

Comparison Summary of Retrieval Alternatives

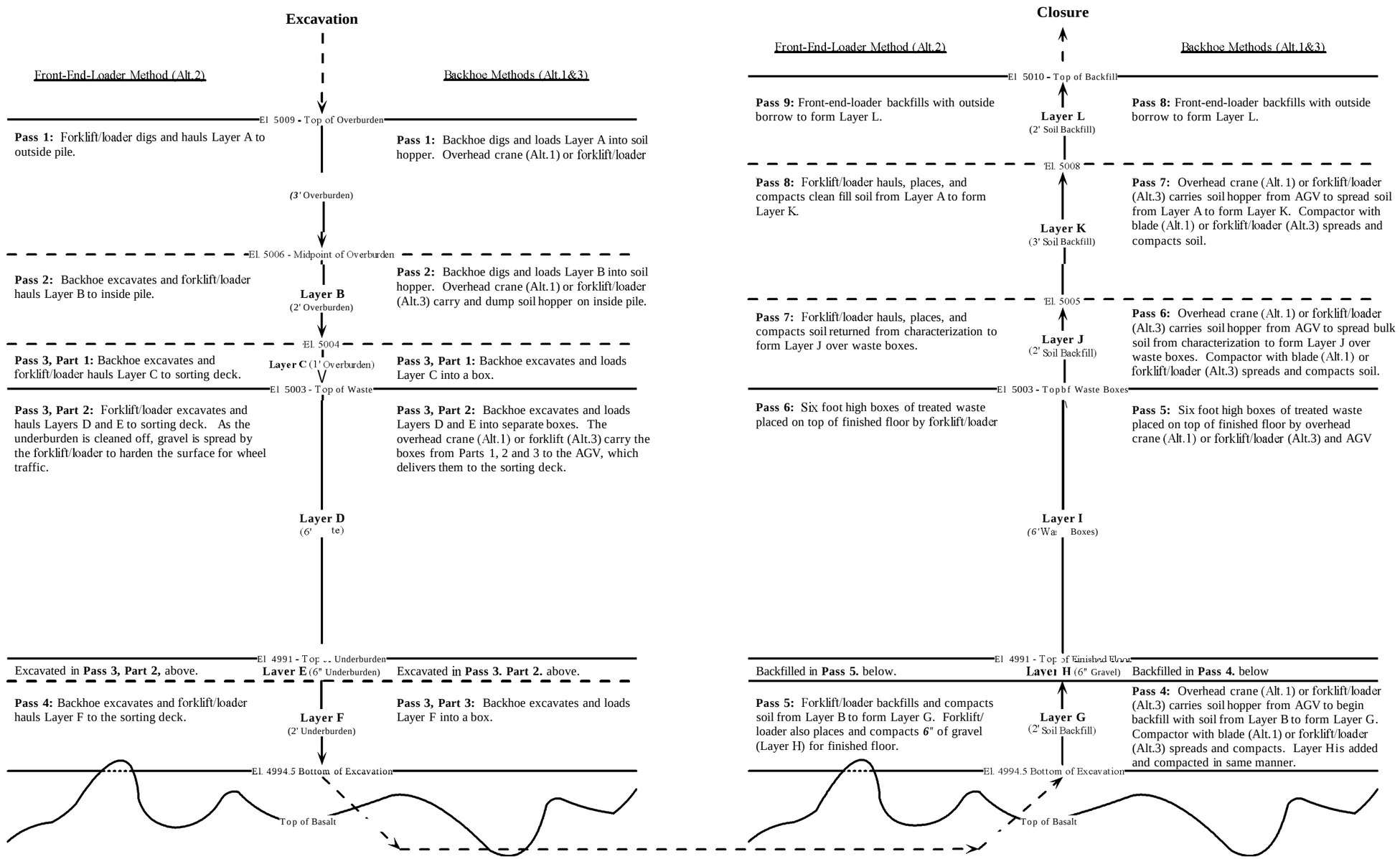
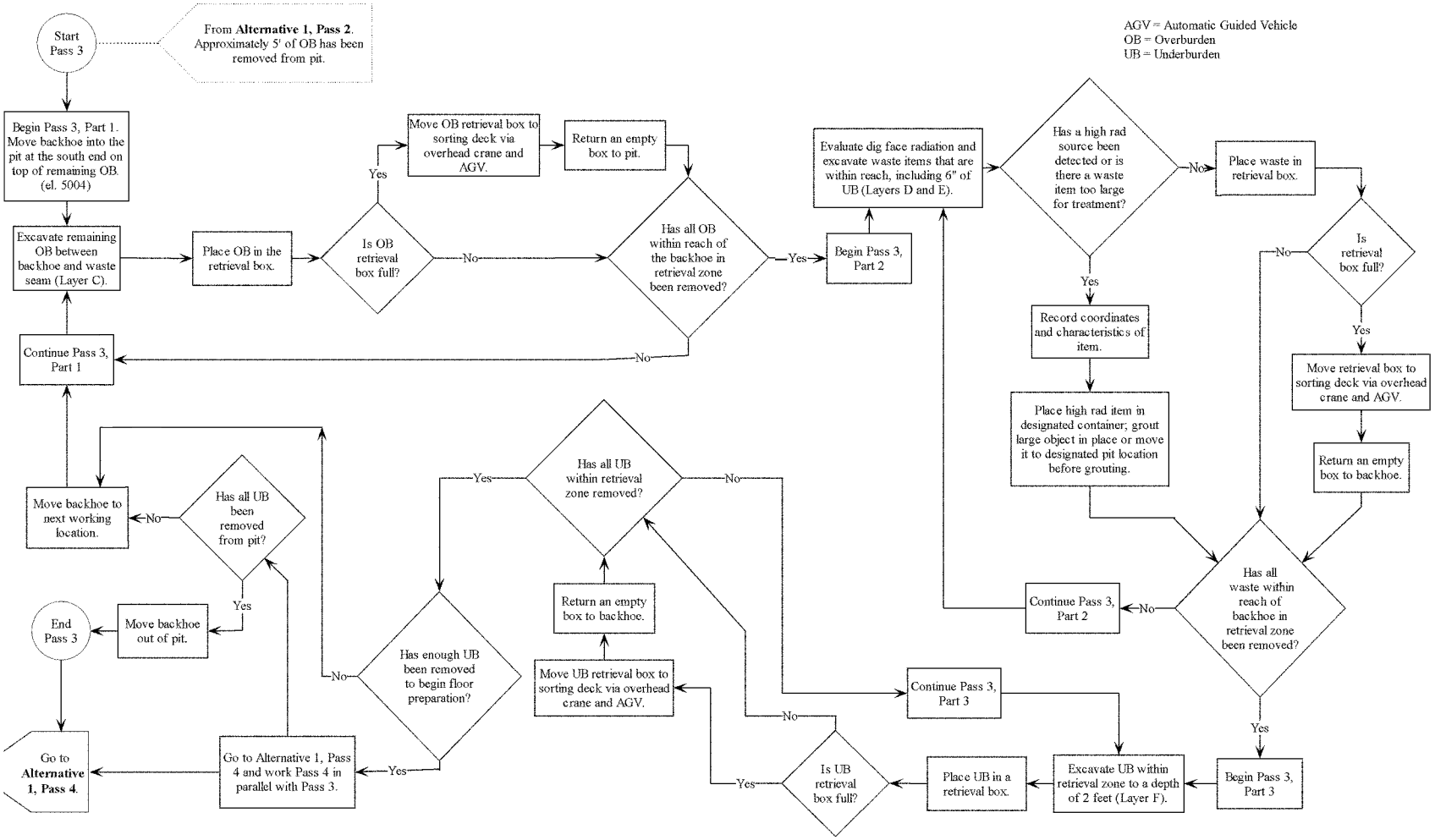


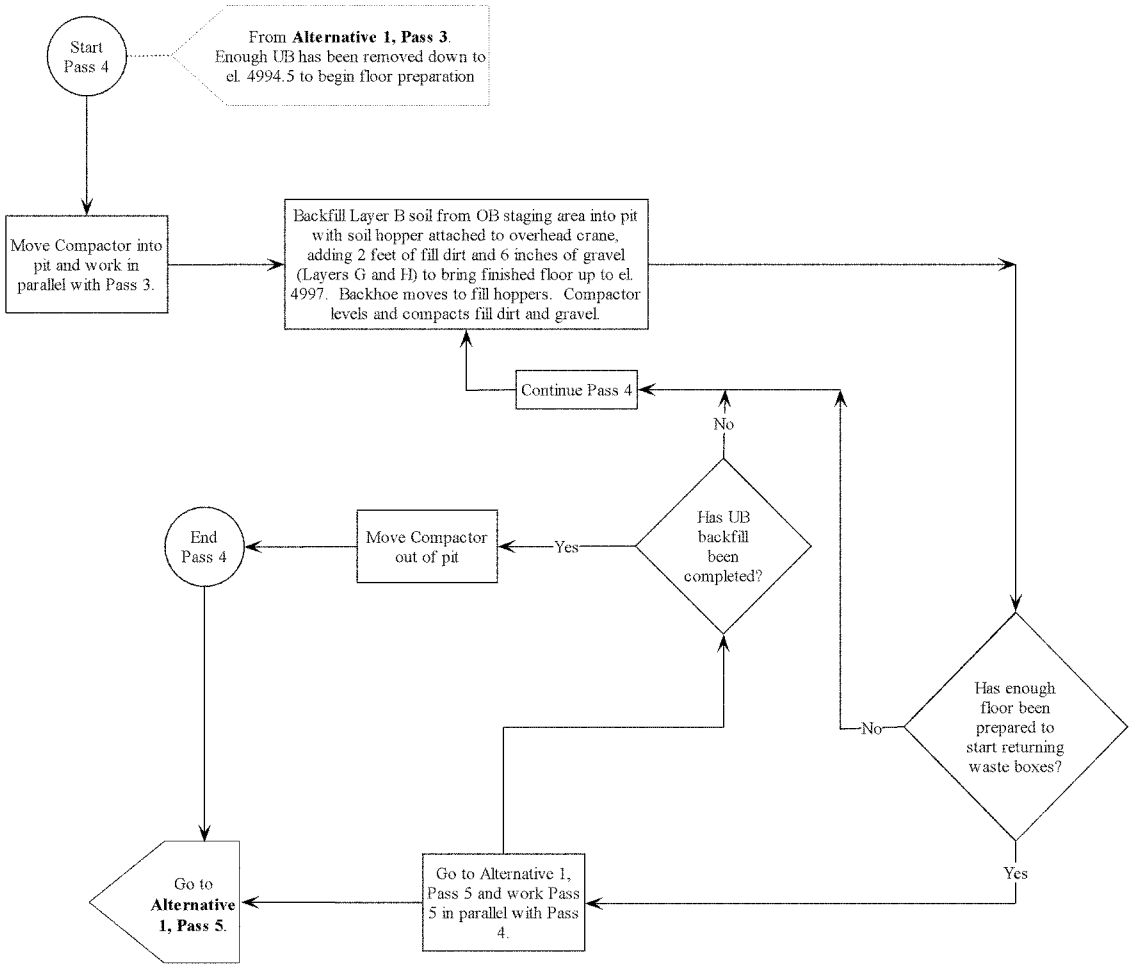
Figure **A-**1. Retrieval methods comparison summary.

Alternative 1
Pass 3
Waste Retrieval and Underburden Excavation with Backhoe and Overhead Crane

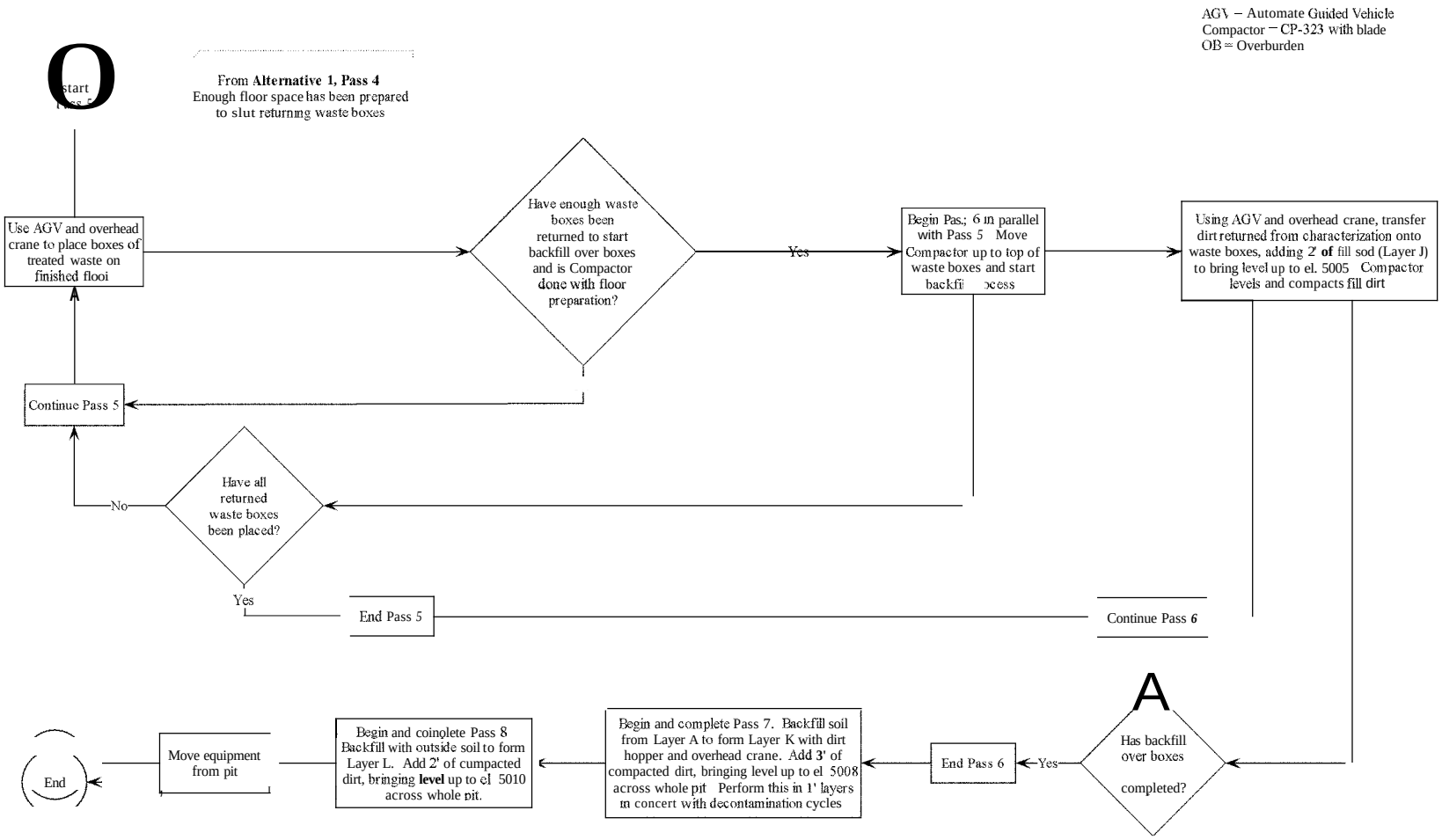


Alternative 1
Pass 4
Floor Preparation with Backhoe and Overhead Crane

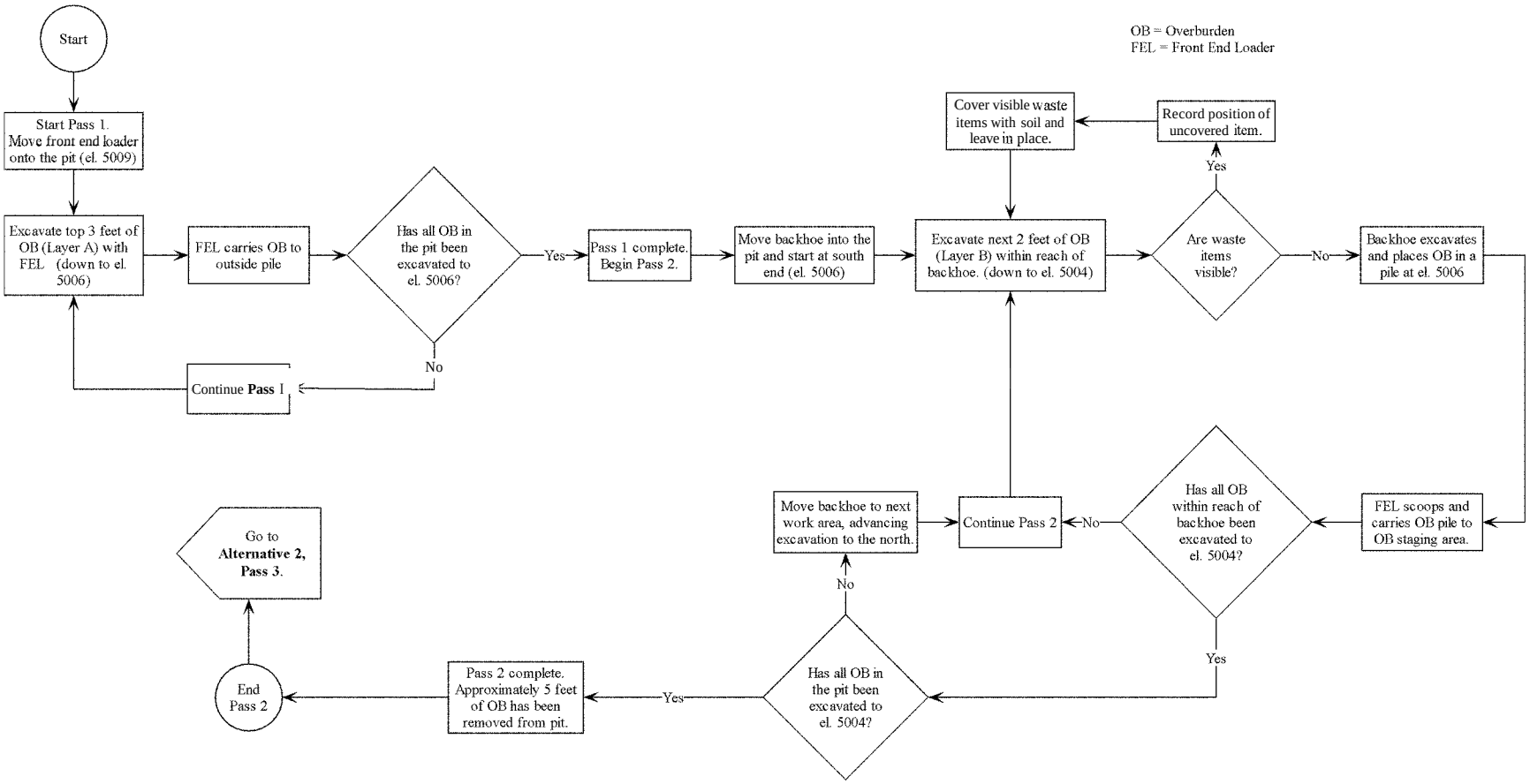
OB = Overburden
UB = Underburden
Compactor = CP-323 with blade



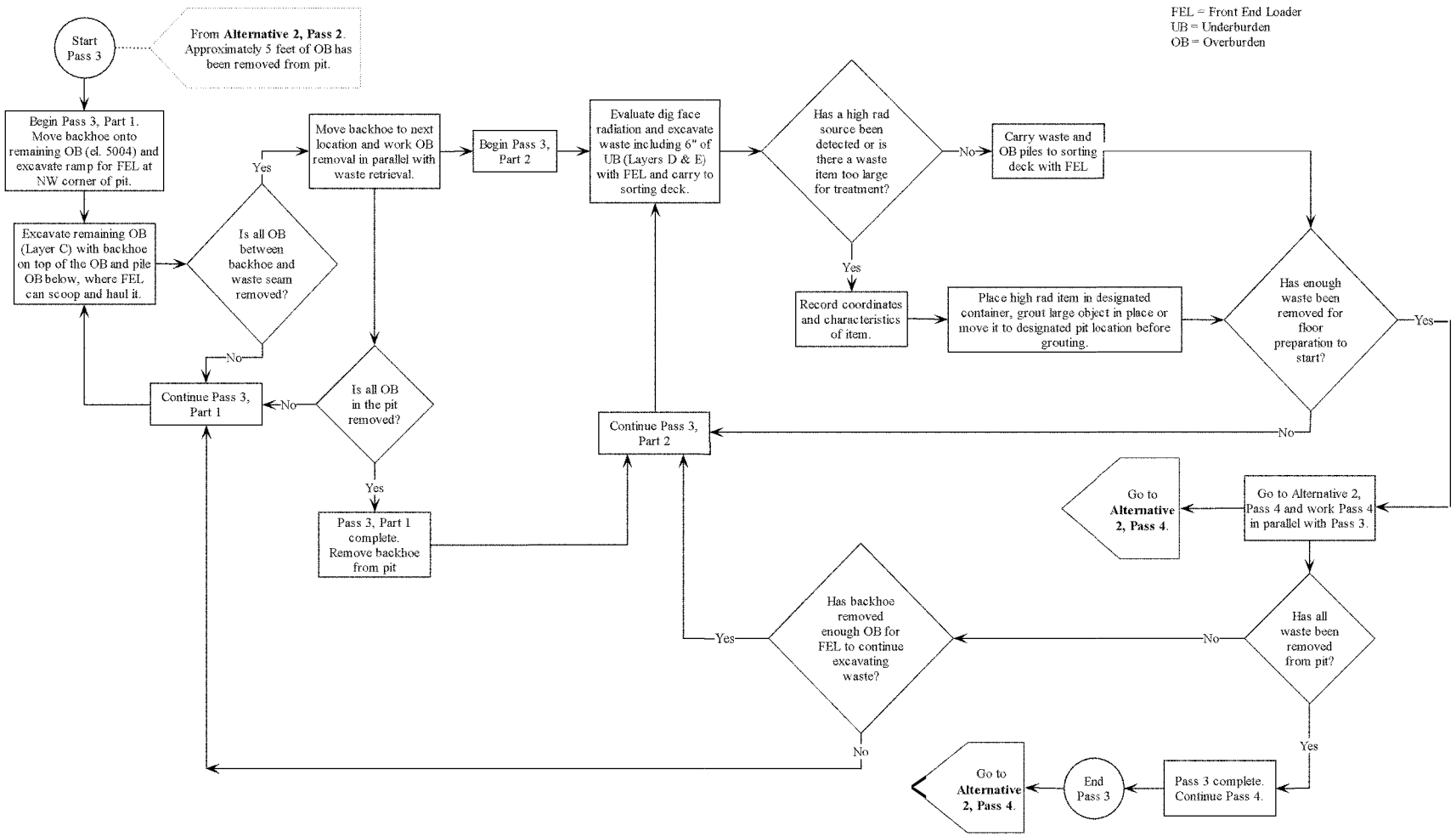
Alternative 1
Passes 5, 6, 7 and 8
Waste Box Return with Backhoe and Overhead Crane



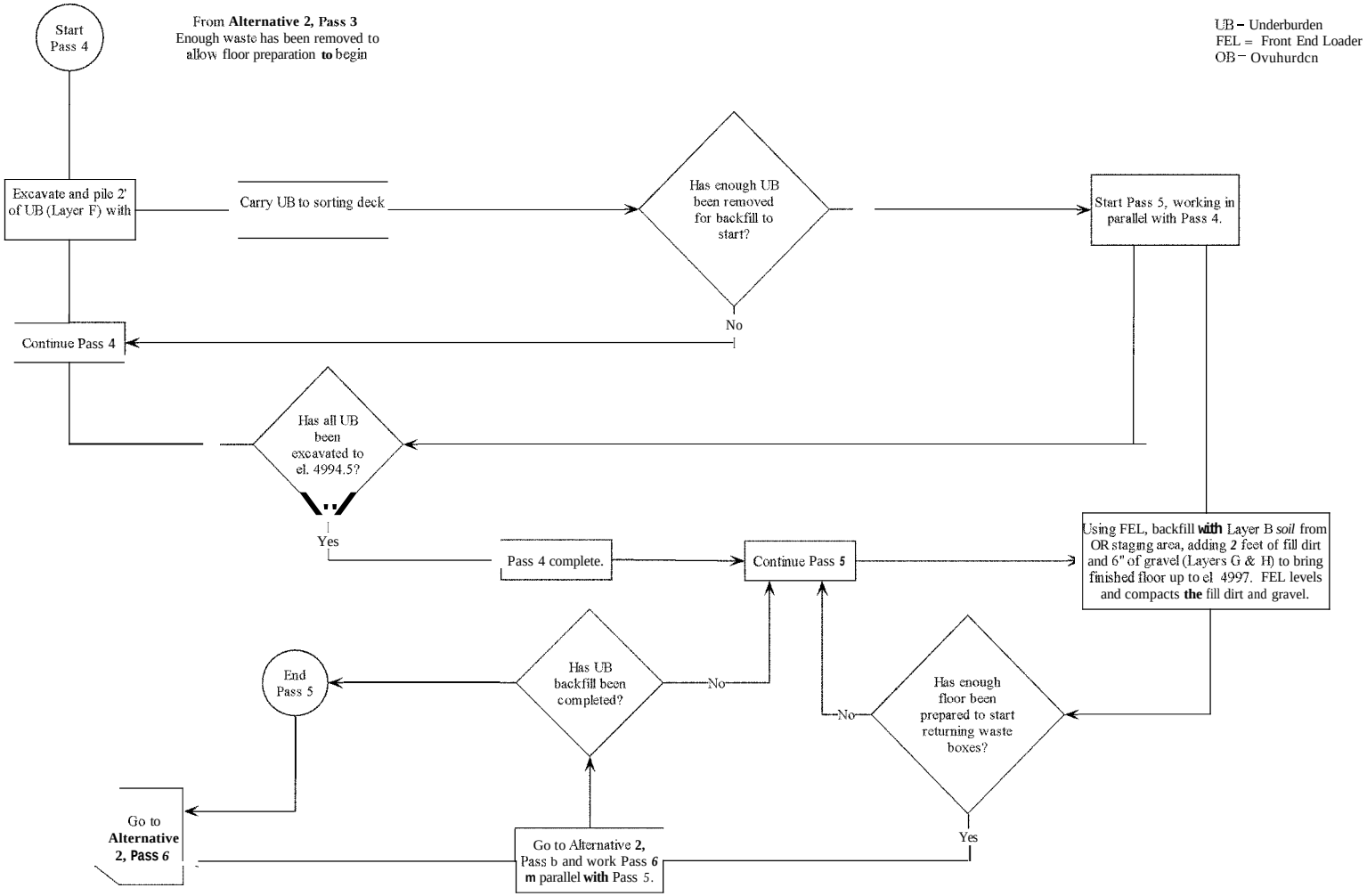
Alternative 2
Passes 1 and 2
Overburden Removal with Front End Loader



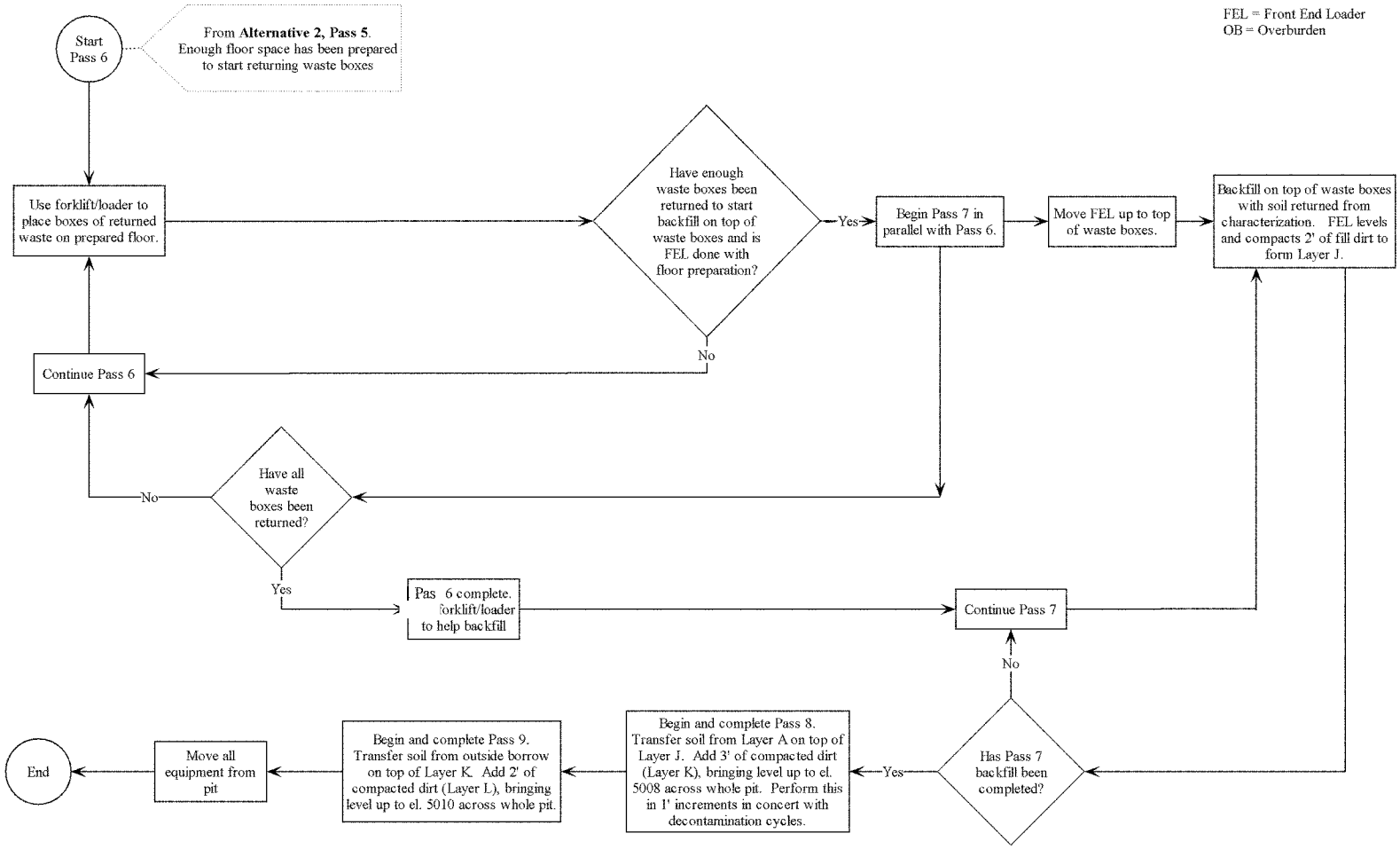
Alternative 2
Pass 3
Waste Retrieval with Front End Loader



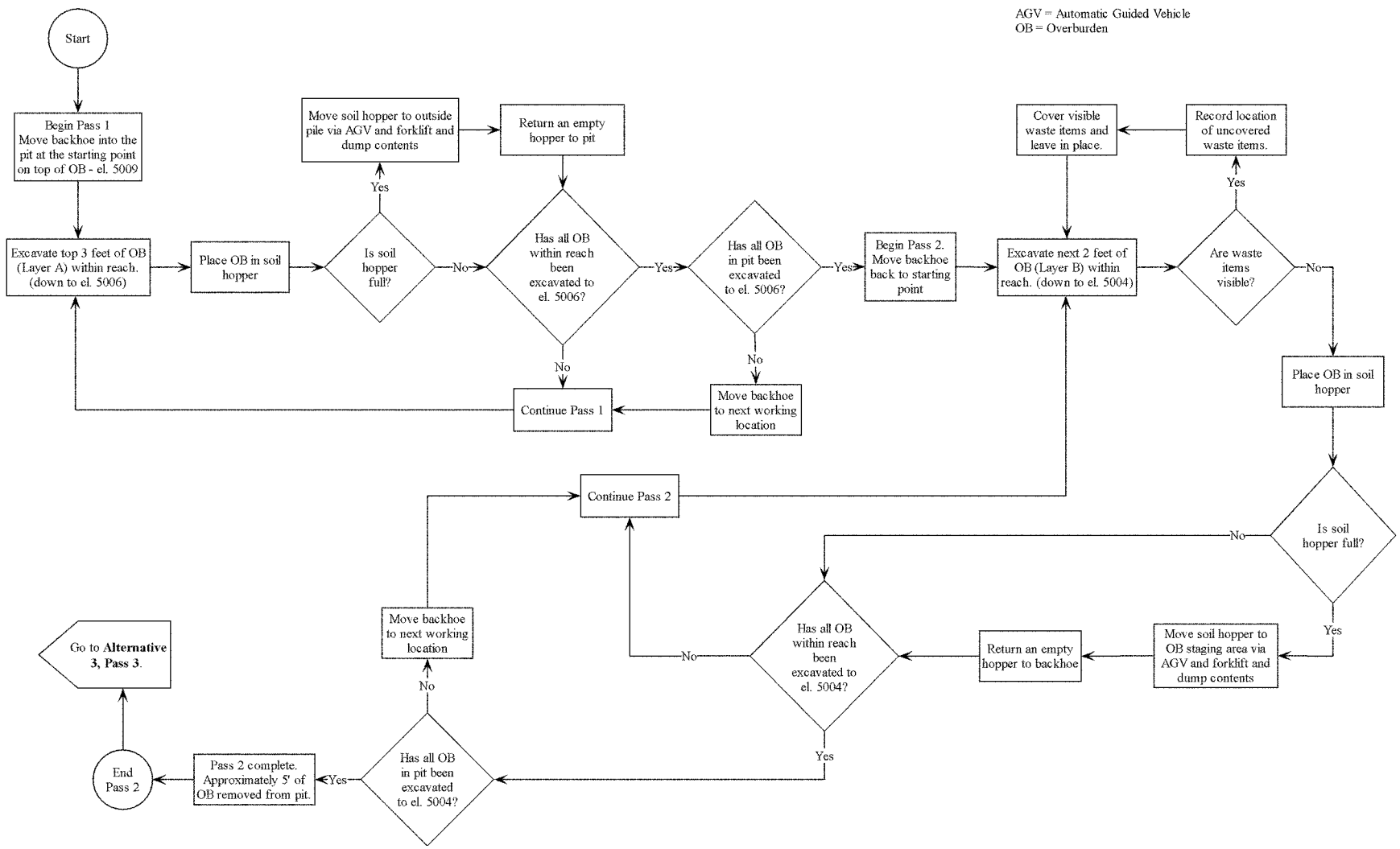
Alternative 2
Passes 4 and 5
Floor Preparation with Front End Loader



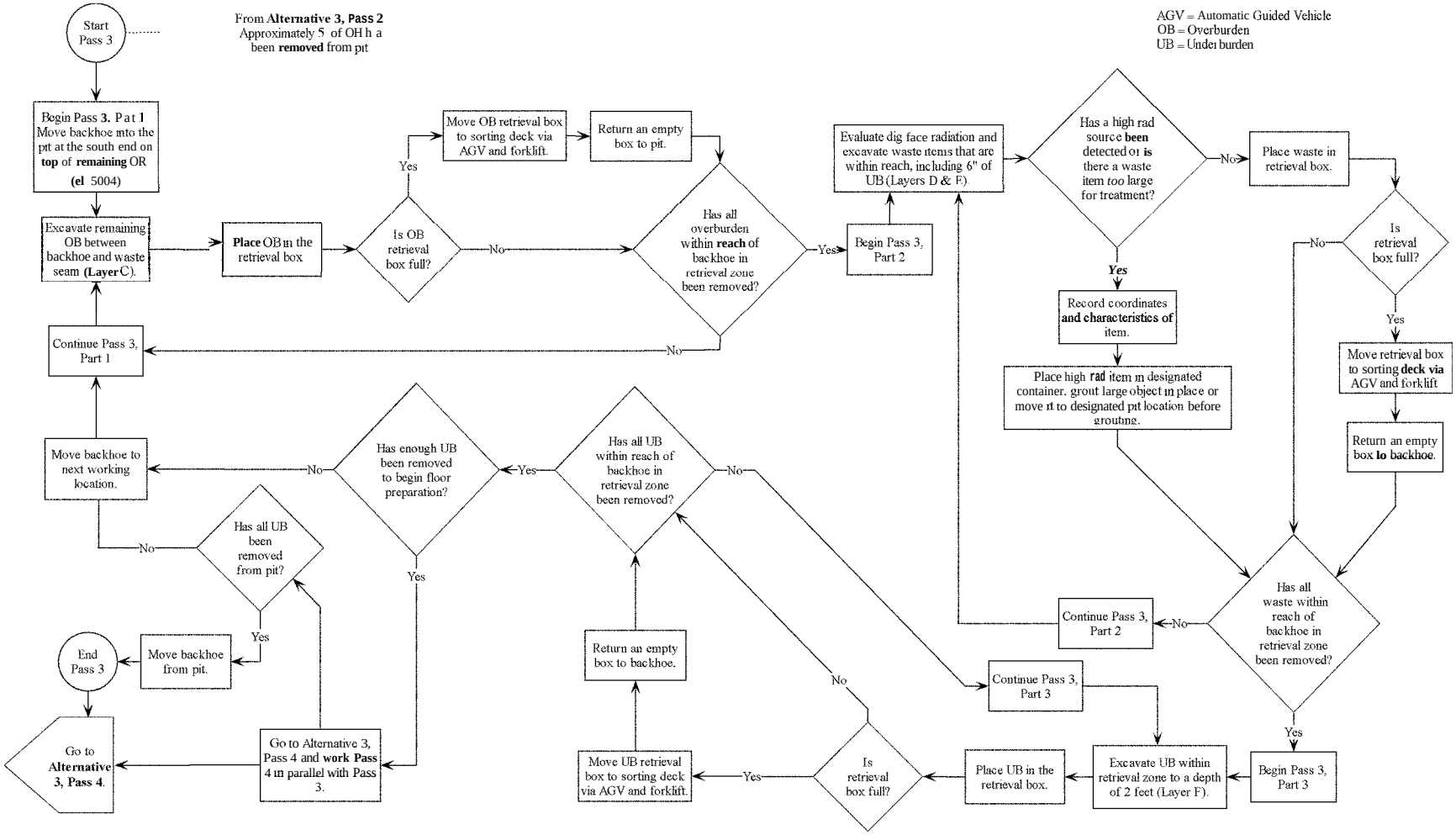
Alternative 2
Passes 6, 7, 8 and 9
Waste Box Return with Front End Loader



Alternative 3
Passes 1 and 2
Overburden Removal with Backhoe and Forklift

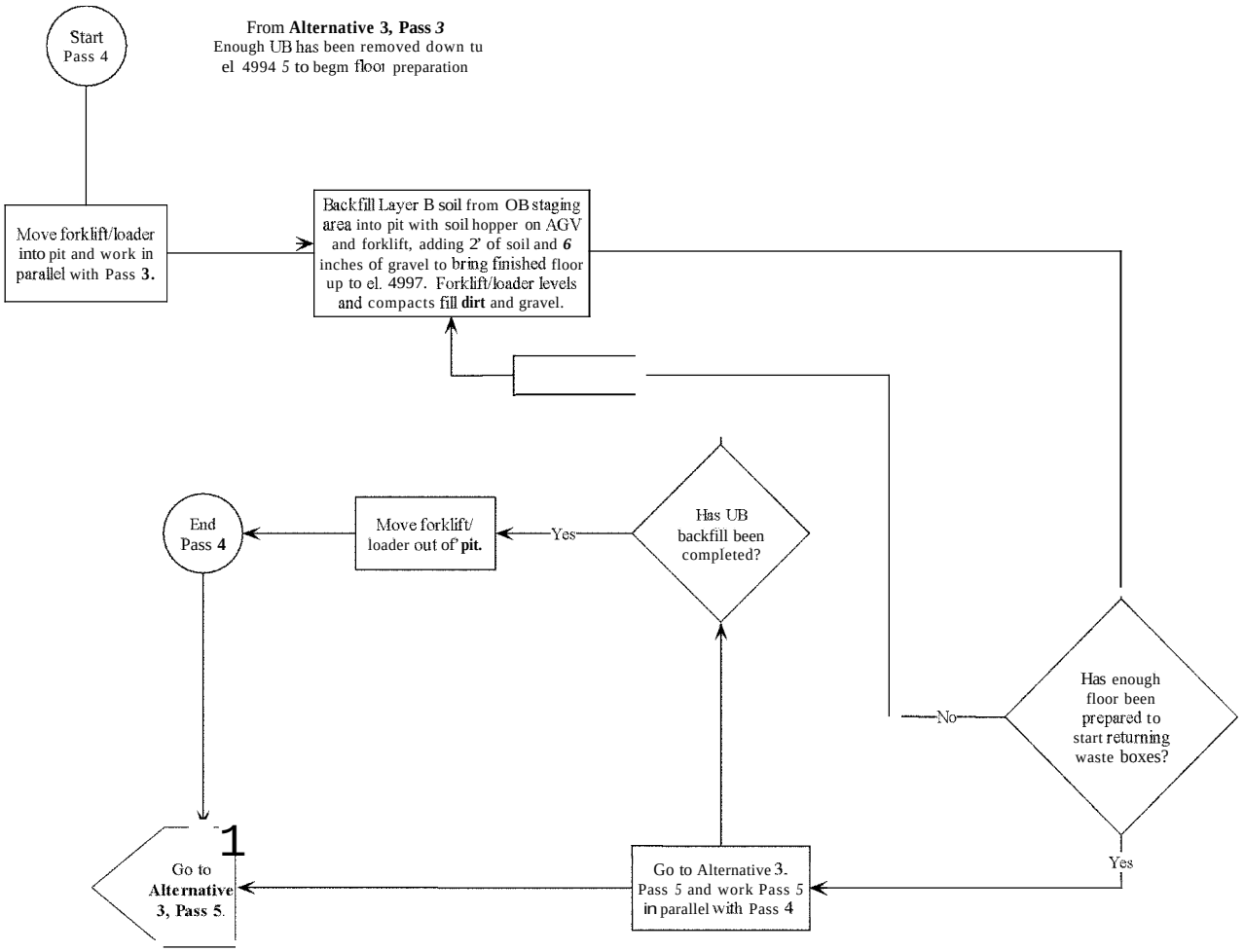


Alternative 3
Pass 3
Waste Retrieval and Underburden Excavation with Backhoe and Forklift

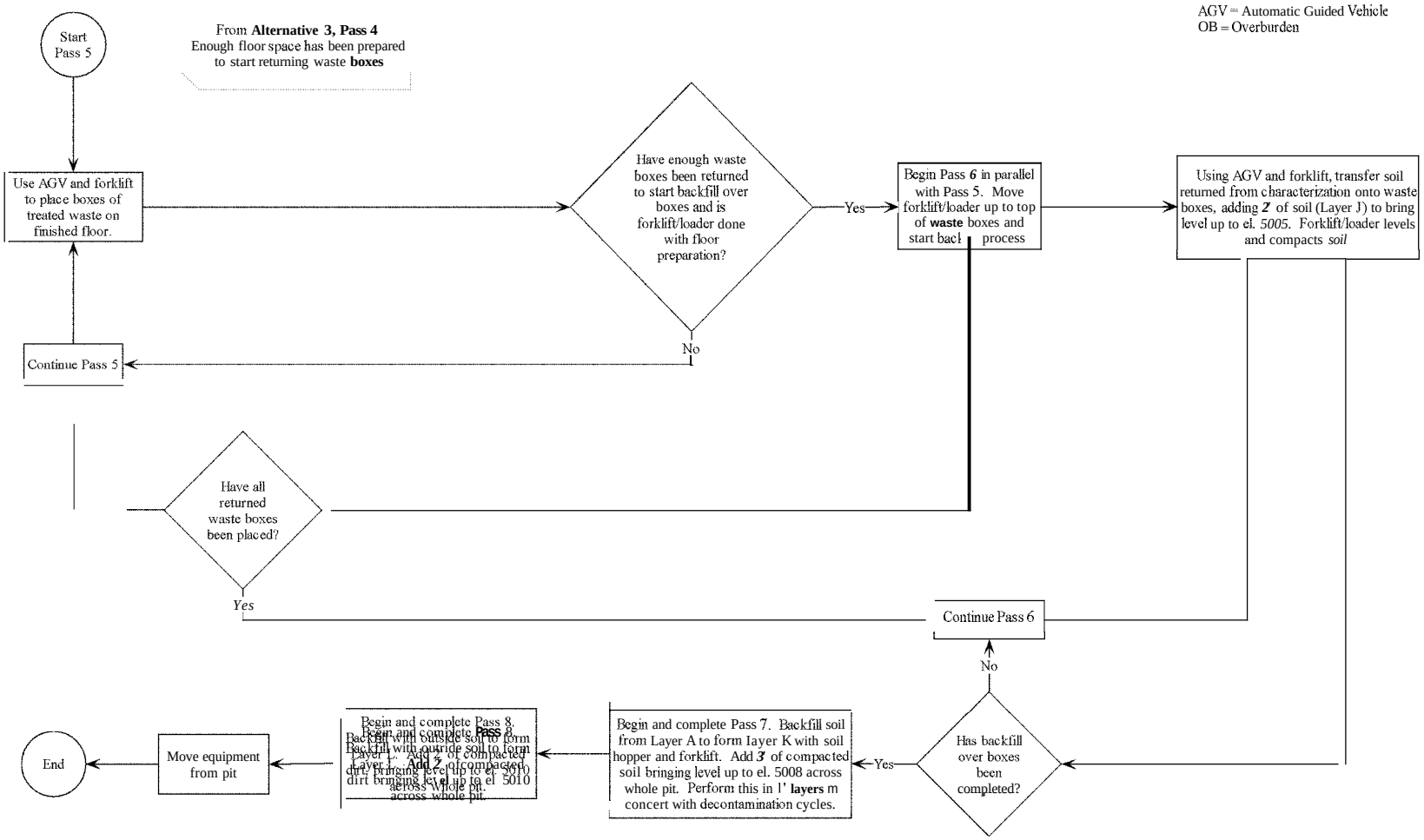


Alternative 3
Pass 4
Floor Preparation with Backhoe and Forklift

AGV = Automatic Guided Vehicle
OR = Overburden
UB = Underburden



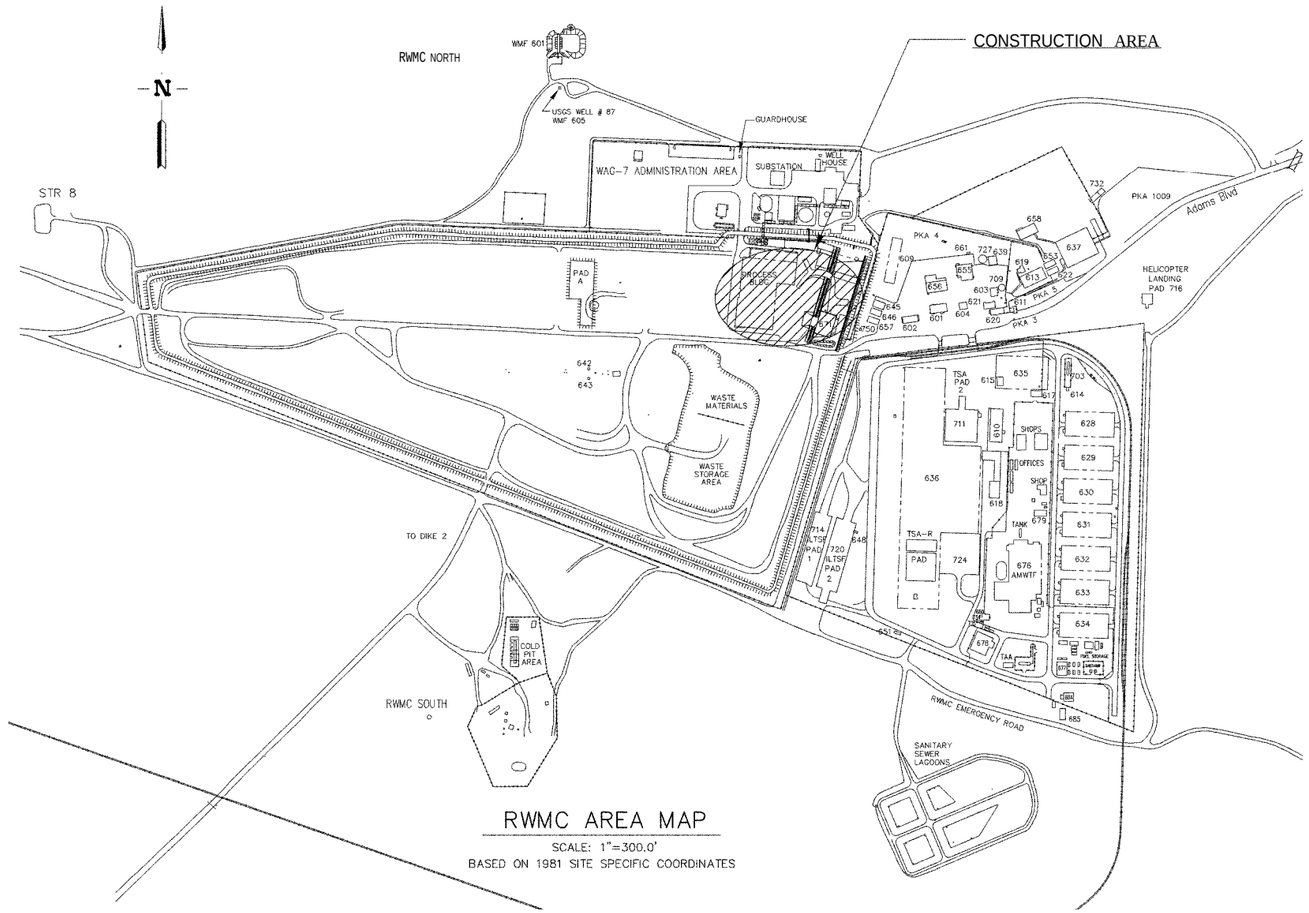
Alternative 3
Passes 5, 6, 7 and 8
Waste Box Return with Backhoe and AGV



Appendix B

Detailed Drawings of Alternate Retrieval Facilities

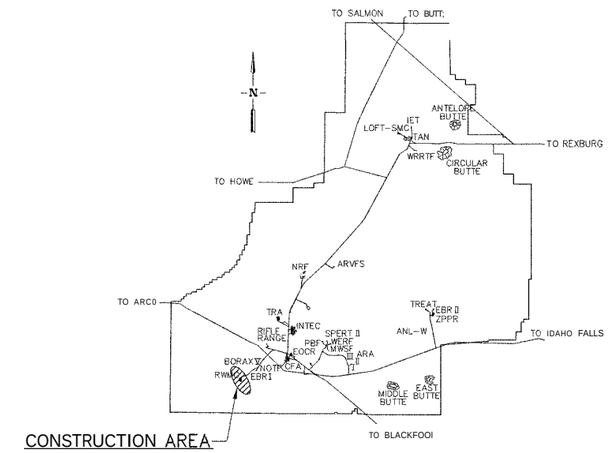
REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE



RWMC AREA MAP

SCALE: 1"=300.0'

BASED ON 1981 SITE SPECIFIC COORDINATES



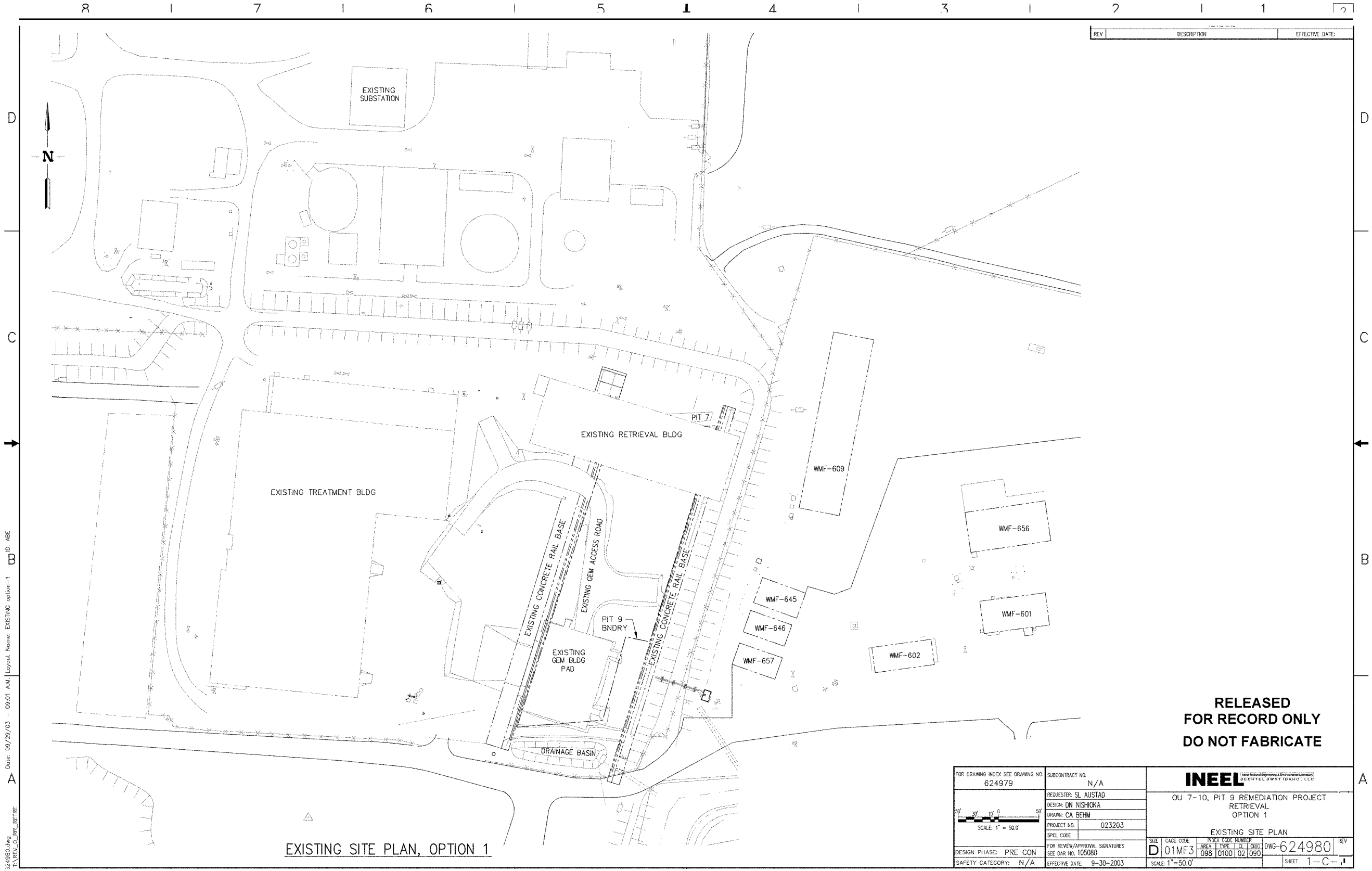
INEEL SITE MAP

SCALE. NONE

DRAWING INDEX

PAGE NO.	DWG NO.	A-E DWG NO	REV	DRAWING TITLE
1	624979	1-T-1		SITE MAP, AREA MAP AND DRAWING INDEX
2	624980	1-C-1		EXISTING SITE PLAN
3	624981	1-C-2		IMPROVED SITE PLAN
4	624982	1-A-1		GENERAL BUILDING FLOOR PLAN
5	624983	1-A-2		UPPER RETRIEVAL PLAN
6	624984	1-A-3		ELEVATIONS
7	624985	I-A-4		ENLARGED PLANS
8	624986	1-A-5		SECTION AND DETAIL
9	624987	1-A-6		SECTION
10	624988	1-HV-1		HVAC FLOW DIAGRAM
11	924989	I-E-1		ONELINE DIAGRAM

FOR DRAWING INDEX SEE DRAWING NO 624979	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO LLC
300' 200' 100' 0 300 SCALE: 1" = 300.0'	REQUESTER SL AUSTAO DESIGN DN NISHIOKA DRAWN CA BEHM PROJECT NO 023203 SPEC CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
DESIGN PHASE PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SITE MAP, AREA MAP AND DRAWING INDEX
SAFETY CATEGORY N/A	EFFECTIVE DATE: 9-30-2003	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 0100 CL 01 OBJ 090 · DWG- 624979 · REV · SCALE: NOTED · SHEET 1-T-1



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DO NOT FABRICATE

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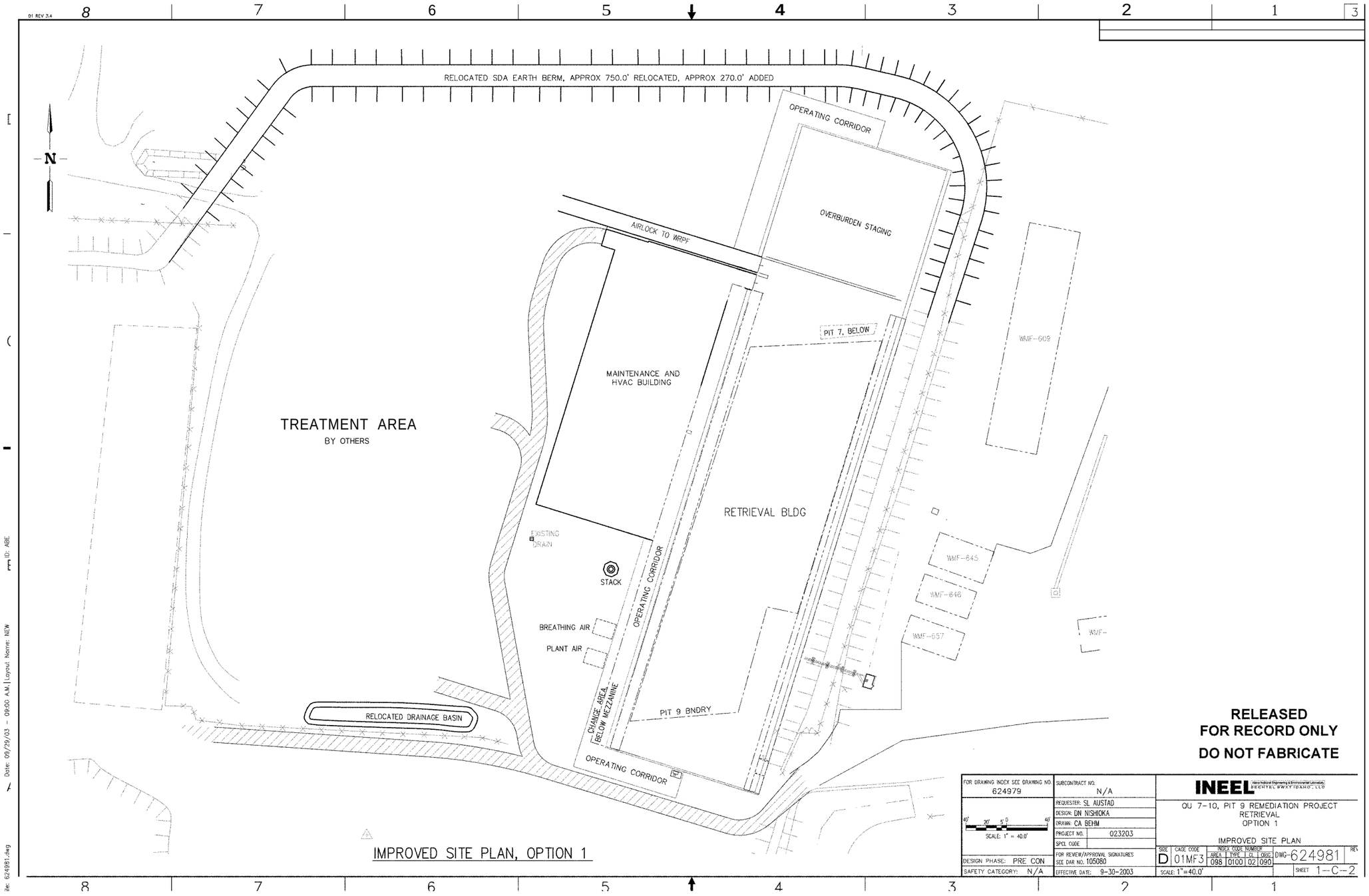
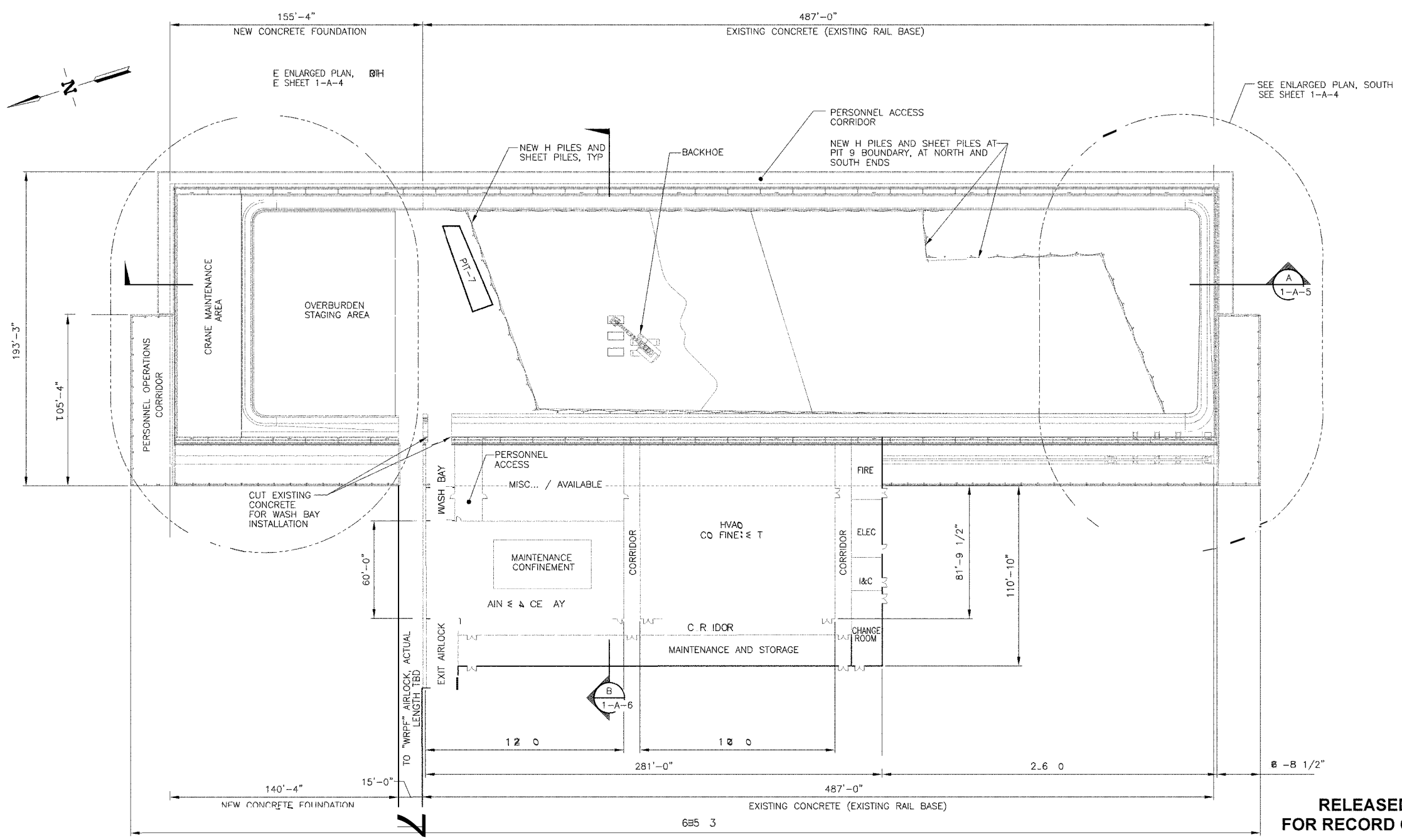
	DESIGN: DN NISHIOKA	
	DRAWN: CA BEHM	
	PROJECT NO. 023203	EXISTING SITE PLAN
	SPCL CODE	
DESIGN PHASE: PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 0100 CL 02 ORIG 090 · DWG-624980 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: 1"=50.0' · SHEET 1-C-1

Date: 09/29/03 - 09:01 A.M. Layout Name: EXISTING option-1 ID: ABE

624980.dwg T:\REV_0_RR_RETRE



IMPROVED SITE PLAN, OPTION 1



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GENERAL BUILDING FLOOR PLAN

SCALE: 1" = 30'-0"

FOR DRAWING INDEX SEE DRAWING NO. 624979	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 30.0'	REQUESTER: SL AUSTAD DESIGN: BC SPAULDING DRAWN: CA KELLEY	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
	PROJECT NO. 023203 SPCL CODE	GENERAL BUILDING FLOOR PLAN
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D; CAGE CODE 01MF3; INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 DISC 090; DWG- 624982; REV
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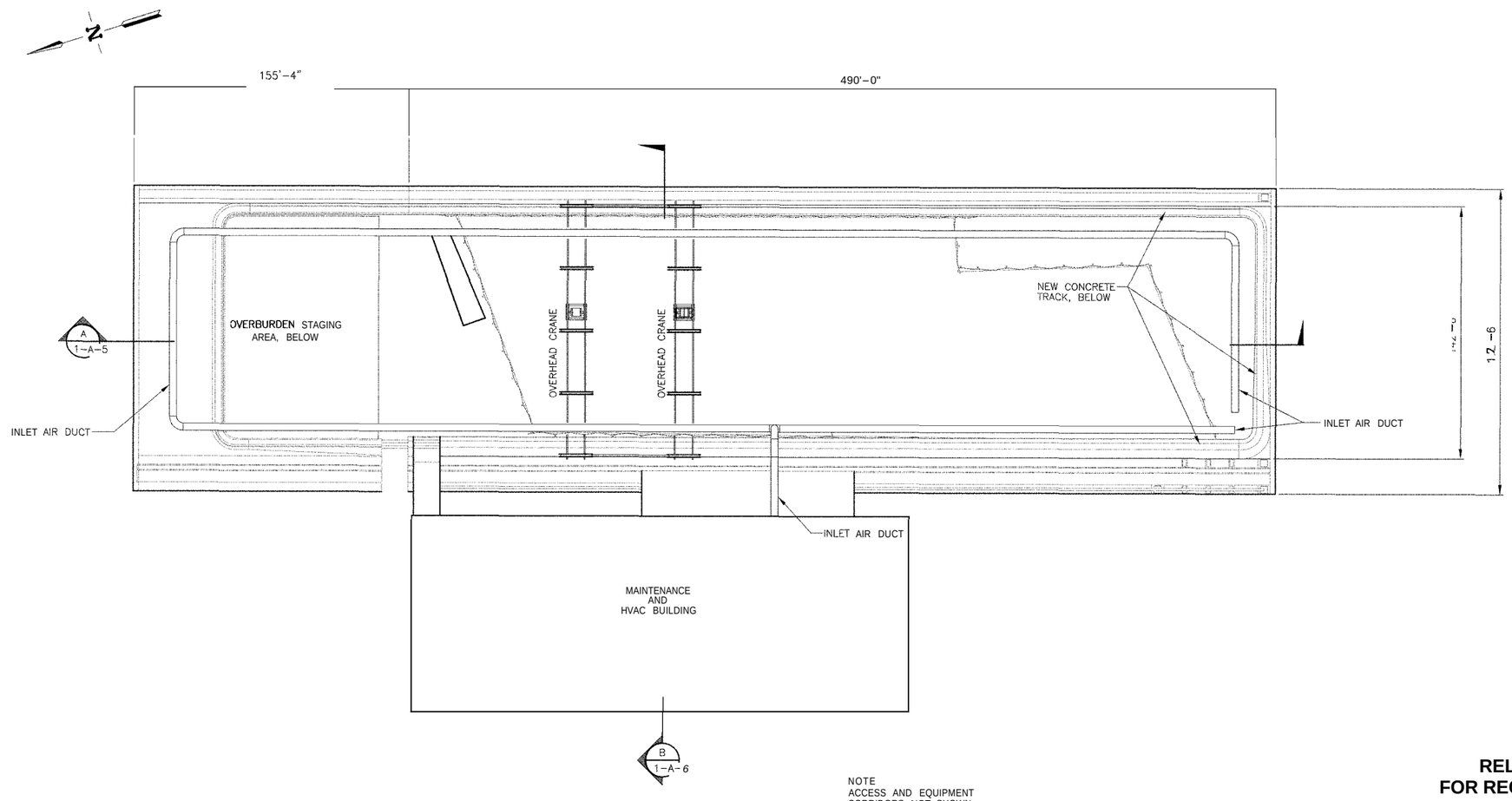

NOTE
ACCESS AND EQUIPMENT CORRIDORS NOT SHOWN FOR CLARITY

UPPER RETREIVAL PLAN

SCALE 1' = 30'-0"

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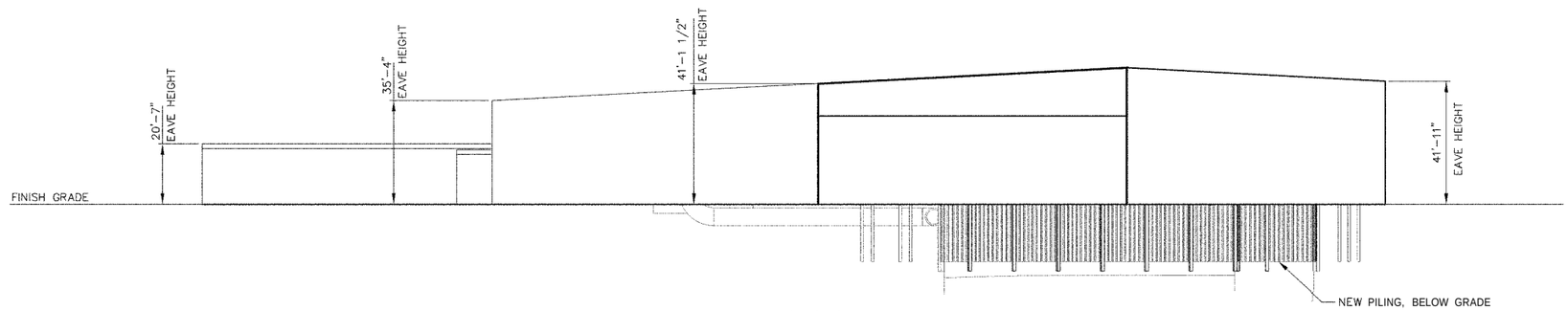
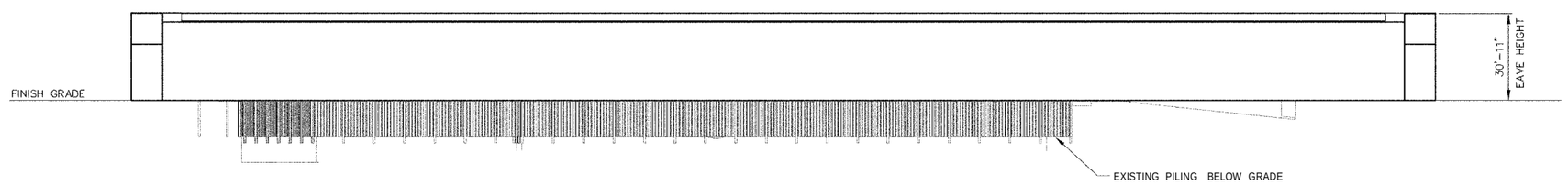
FOR DRAWING INDEX SEE DRAWING NO. 624979	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
30' 20' 10' 0 30' SCALE: 1" = 30.0'	REQUESTER: SL AUSTAD DESIGN: BC SPAULDING DRAWN: CA KELLEY PROJECT NO. 023203 SPCL CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1 UPPER RETEIVAL PLAN
DESIGN PHASE: PRE-CON SAFETY CATEGORY: N/A	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080 EFFECTIVE DATE: 9-30-2003	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CI 00 ORIG 090 · DWG-624983 · REV SCALE: NOTED · SHEET 1-A-2



LOOKING NORTH

SOUTH ELEVATION

SCALE 1"=20'



LOOKING WEST

EAST ELEVATION

SCALE 1"=30'

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DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 624979	SUBCONTRACT NO. N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 20.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
SCALE: 1" = 30.0'	DESIGN: BC SPAULDING	
	DRAWN: CA KELLEY	
	PROJECT NO. 023203	ELEVATIONS
	SPCL CODE	
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 OBJ 090 · DWG-624984 · REV
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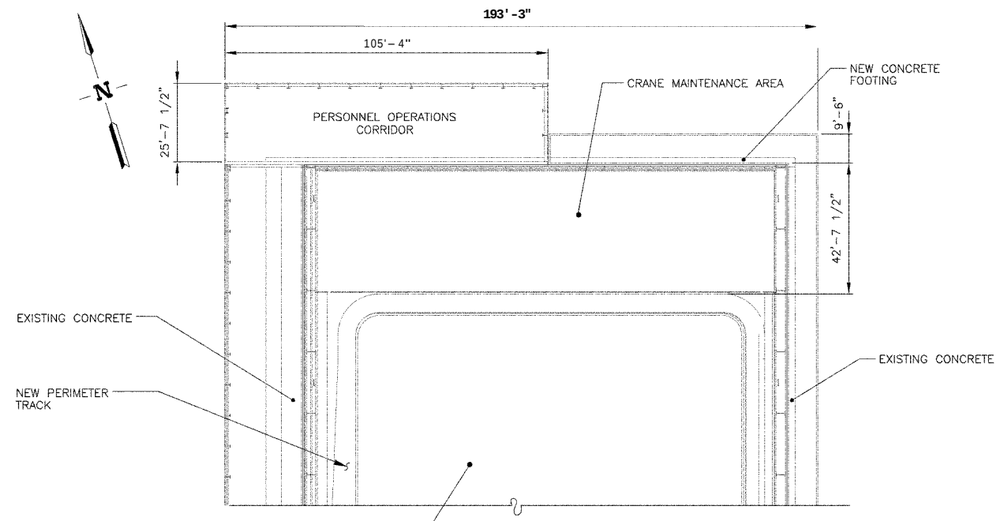
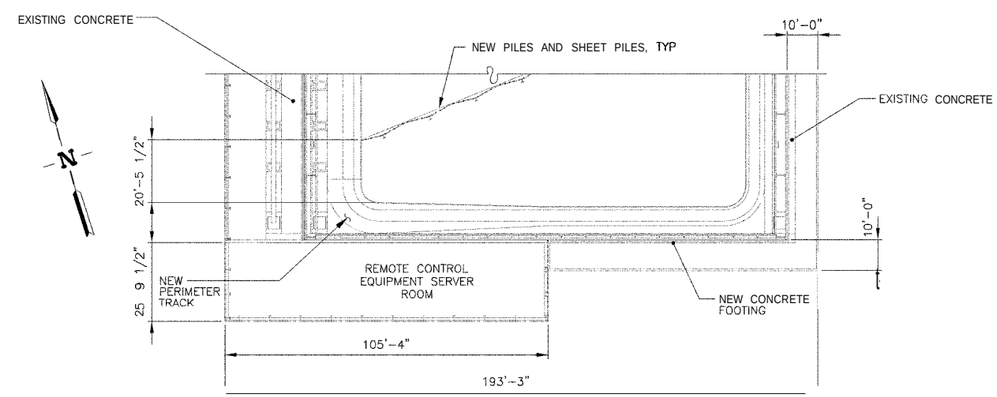


NORTH

ENLARGED PLAN

SCALE: 1' = 20'-0"



SOUTH

ENLARGED PLAN

SCALE 1' = 20'-0"

FOR DRAING INDEX SEE DRAWING NO 624979	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO LLC
SCALE: 1" = 20.0'	REQUESTER: SL AUSTAD DESIGN: BC SPAULDING DRAWN: CA KELLEY PROJECT NO. 023203	OU 7-10 PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
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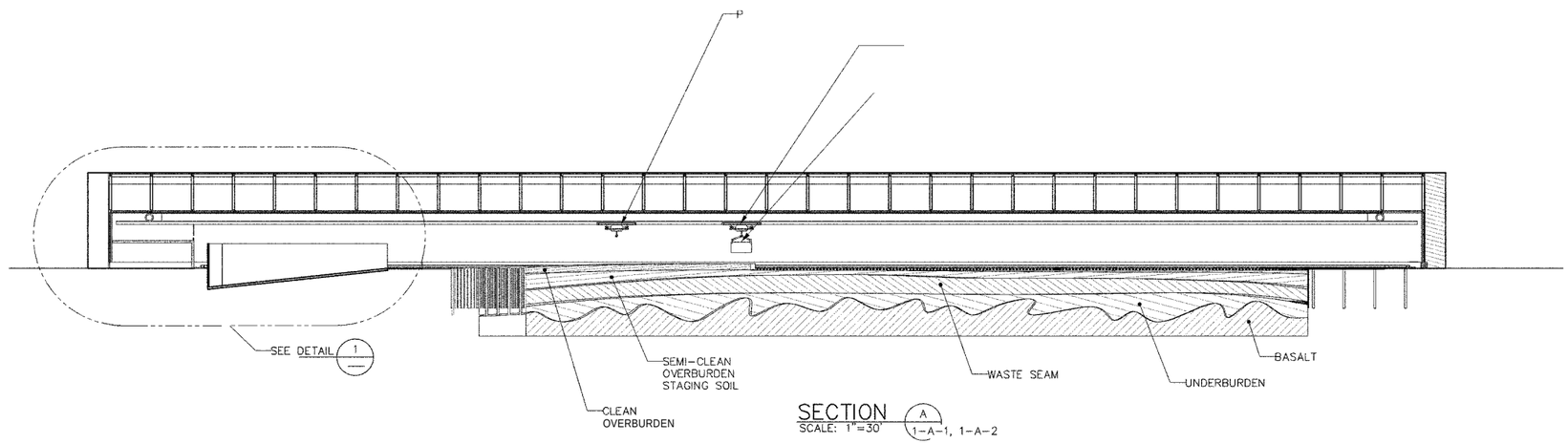
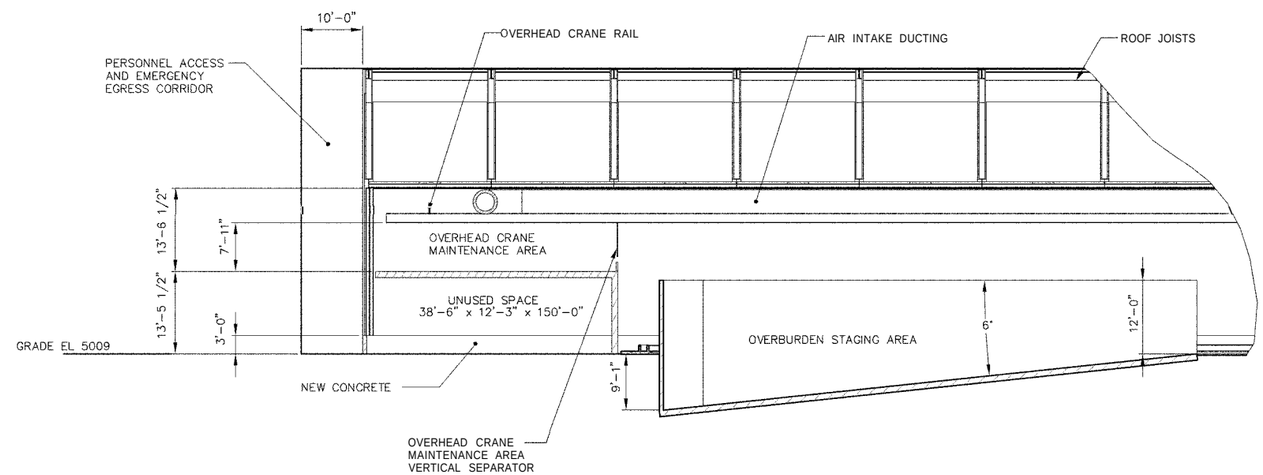


SECTION A
SCALE: 1"=30'
1-A-1, 1-A-2



DETAIL 1
SCALE: 1"=10'

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SCALE: 1" = 10.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
SCALE: 1" = 30.0'	DESIGN: BC SPAULDING	
	DRAWN: CA KELLEY	
	PROJECT NO. 023203	SECTION AND DETAIL
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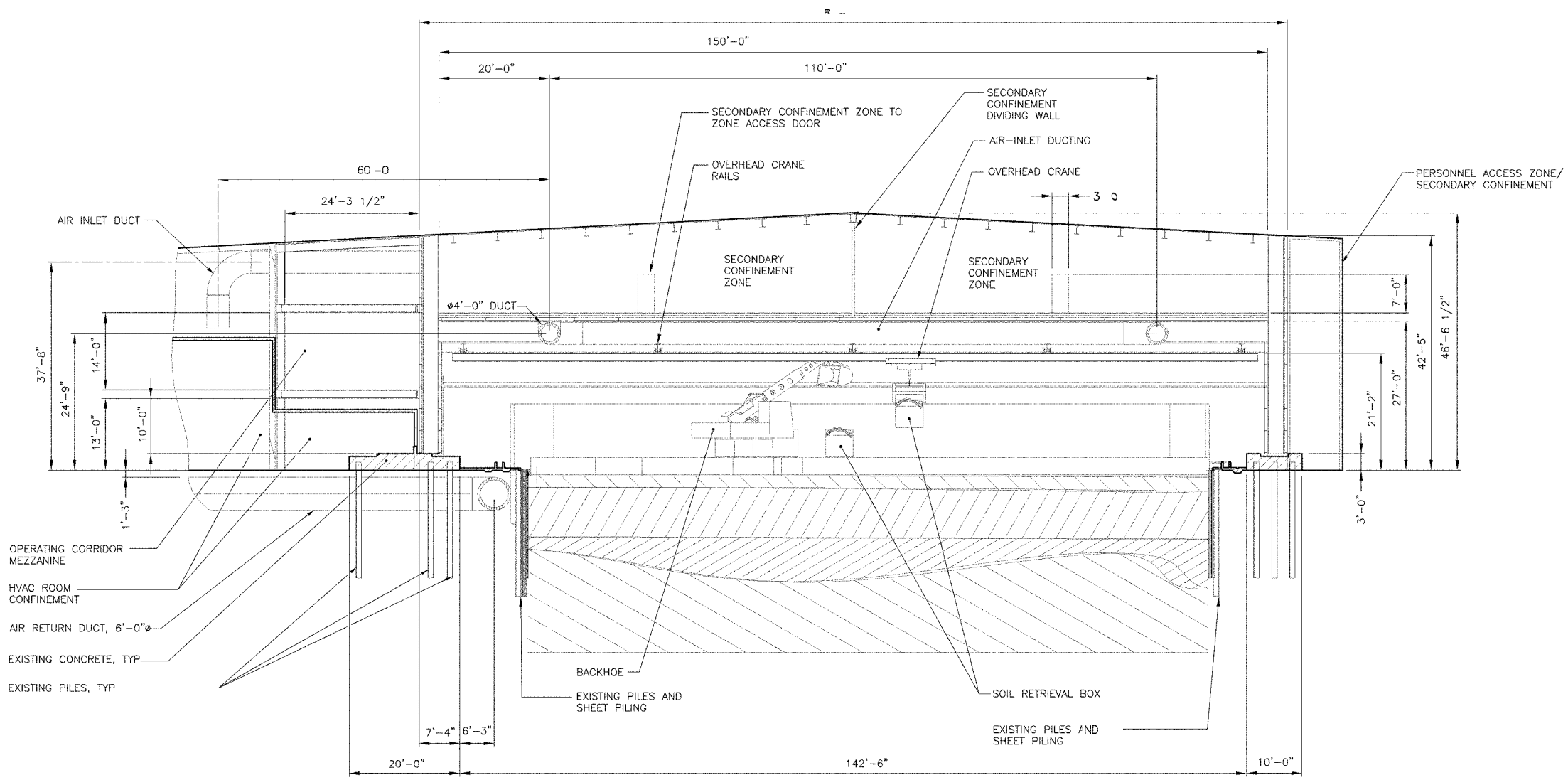

SECTION B 1-A-1 1 & 2

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SCALE: 1" = 10.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
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	DRAWN: CA KELLEY	
	PROJECT NO. 023203	SECTION
	SPCL CODE	
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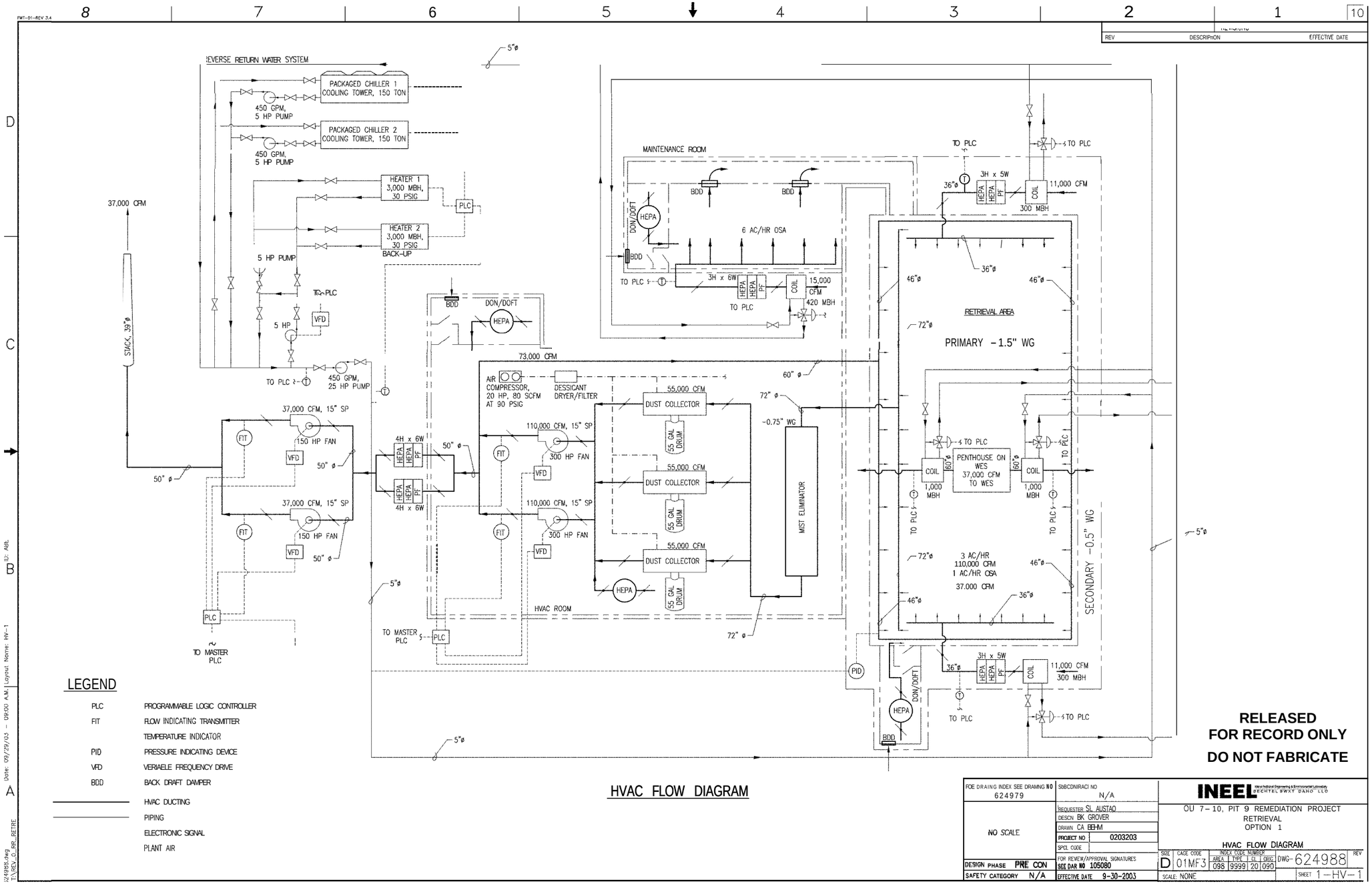

LEGEND

PLC	PROGRAMMABLE LOGIC CONTROLLER
FIT	FLOW INDICATING TRANSMITTER
	TEMPERATURE INDICATOR
PID	PRESSURE INDICATING DEVICE
VFD	VERIABLE FREQUENCY DRIVE
BDD	BACK DRAFT DAMPER
	HVAC DUCTING
	PIPING
	ELECTRONIC SIGNAL
	PLANT AIR

HVAC FLOW DIAGRAM

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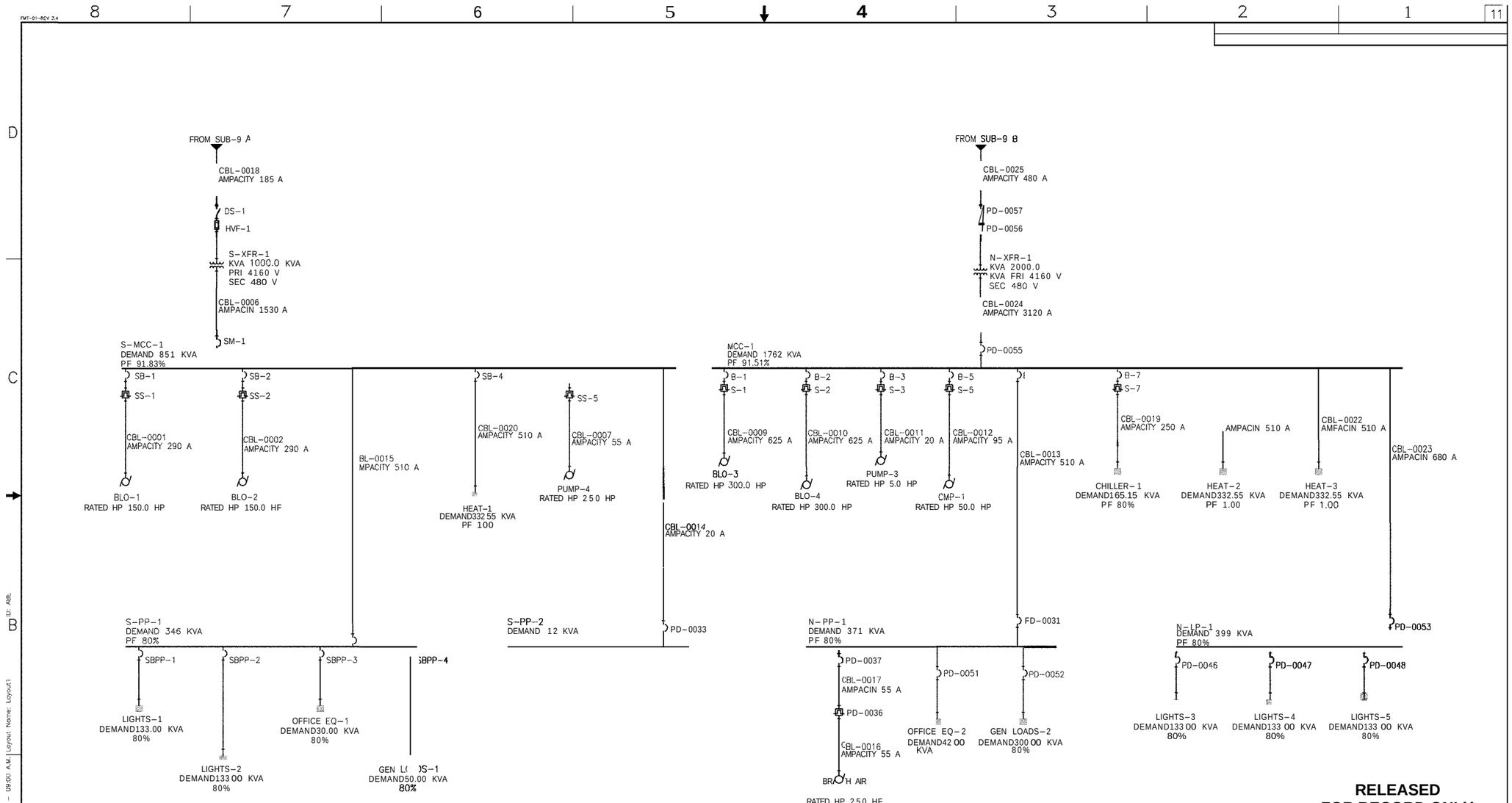
FOE DRAING INDEX SEE DRAWING NO 624979	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT DAHO LLC
NO SCALE	REQUESTER SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
	DESCN BK GROVER	
	DRAWN CA BEHM	
	PROJECT NO 0203203	HVAC FLOW DIAGRAM
	SPCL CODE	
DESIGN PHASE PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 20 ORG 090 · DWG-624988 · REV
SAFETY CATEGORY N/A	EFFECTIVE DATE 9-30-2003	SCALE: NONE · SHEET 1-HV-1



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ONELINE DIAGRAM

FOR DRAING INDEX SEE DRAWING NO 624979	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO LLC
NO SCALE	REQUESTER: SL AUSTAD DESIGN: BL COWLEY DRAWN: BL COWLEY PROJECT NO 023203 SPCL CODE	OU 7-10, FIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 1
DESIGN PHASE FRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO 105080	ELECTRICAL ONELINE DIAGRAM
SAFETY CATEGORY N/A	EFFECTIVE DATE 9-30-2003	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 10 ORG 090 · DWG- 624989 · REV · SCALE: NONE · SHEET 1-E-1

REVISIONS		
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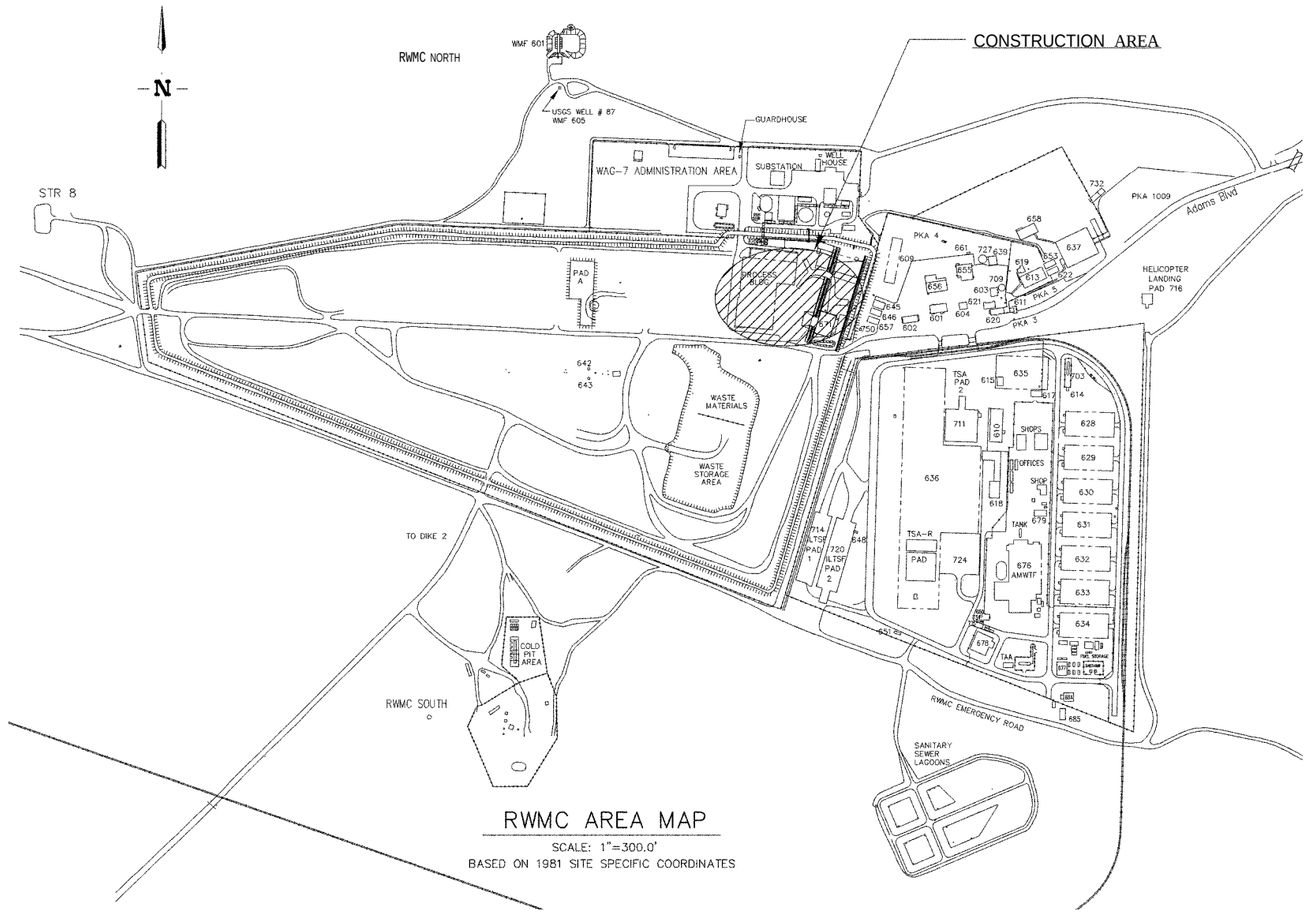
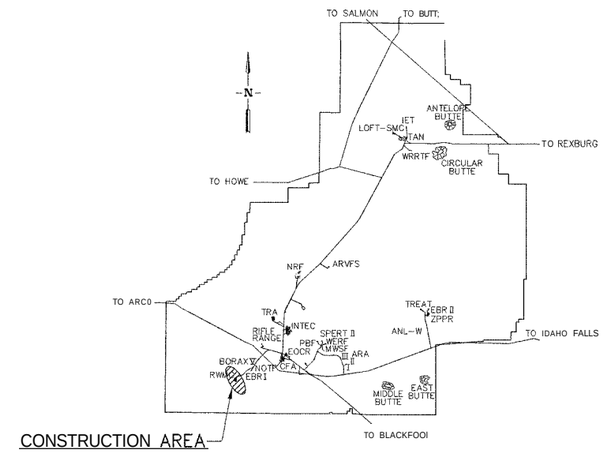


RWMC AREA MAP

SCALE: 1"=300.0'

BASED ON 1981 SITE SPECIFIC COORDINATES



INEEL SITE MAP

SCALE. NONE

DRAWING INDEX

PAGE NO.	DWG NO.	A-E DWG NO	REV	DRAWING TITLE
1	624990	2-T-1		SITE MAP, AREA MAP AND DRAWING INDEX
2	624991	2-C-1		EXISTING SITE PLAN
3	624992	2-C-2		IMPROVE0 SITE PLAN
4	624993	2-A-1		GENERAL BUILDING FLOOR PLAN
5	624994	2-A-2		UPPER RETRIEVAL PLAN
6	624995	2-A-3		ELEVATIONS
7	624996	2-A-4		ENLARGED PLANS
8	624997	2-A-5		SECTION AND DETAIL
9	624998	2-A-6		SECTION
10	624999	2-HV-1		HVAC FLOW DIAGRAM
11	625000	2-E-1		ONELINE DIAGRAM

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FOR DRAWING INDEX SEE DRAWING NO. 624990	SUBCONTRACT NO. N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO, LLC
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	DESIGN DN NISHIOKA	
300' 200' 100' 0 300 SCALE: 1" = 300.0'	DRAWN CA BEHM	
	PROJECT NO 023203	SITE MAP, AREA MAP AND DRAWING INDEX
	SPEC CODE	
DESIGN PHASE PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 0100 CL 01 OBJ 090 · DWG- 624990 · REV
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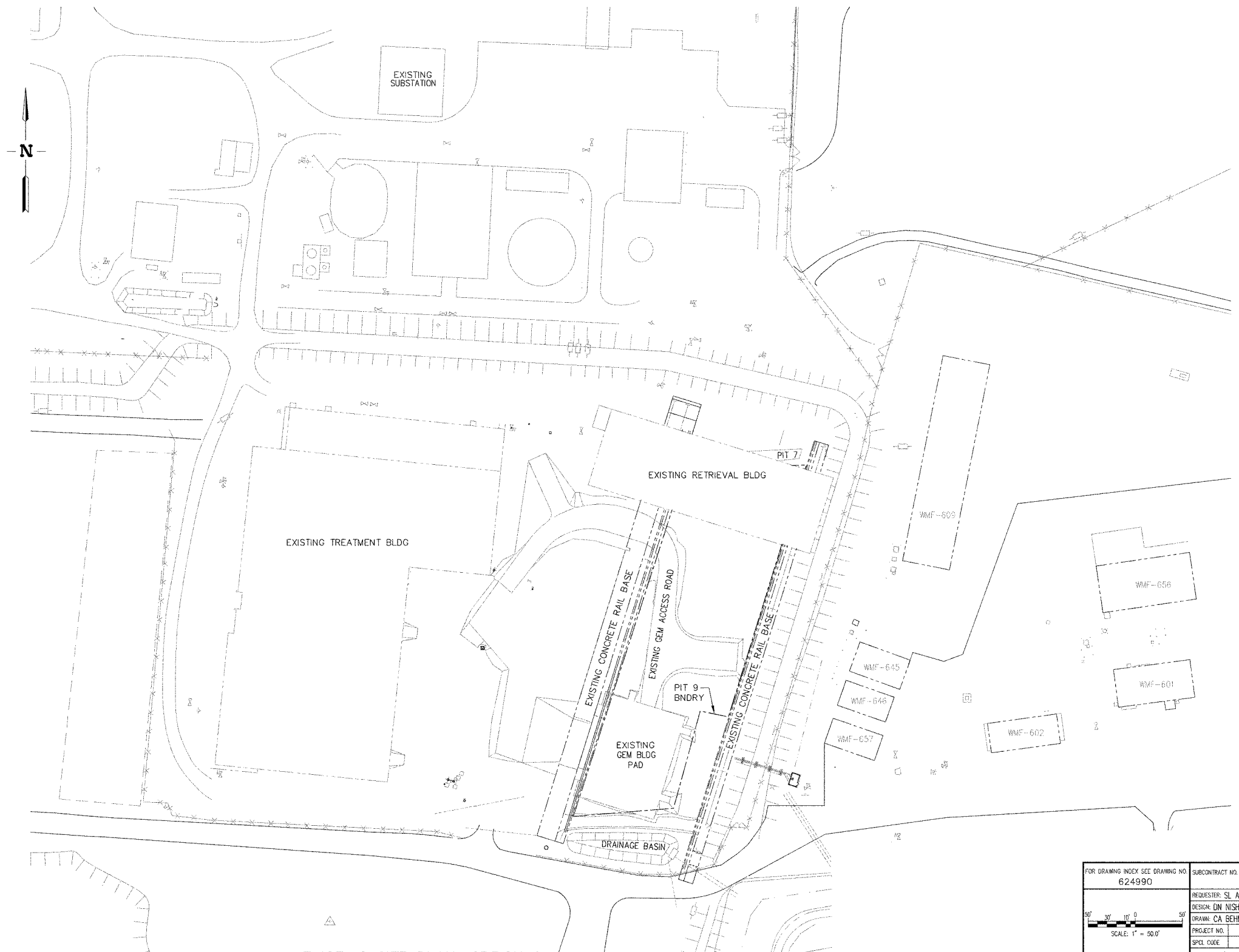

EXISTING SITE PLAN, OPTION 2

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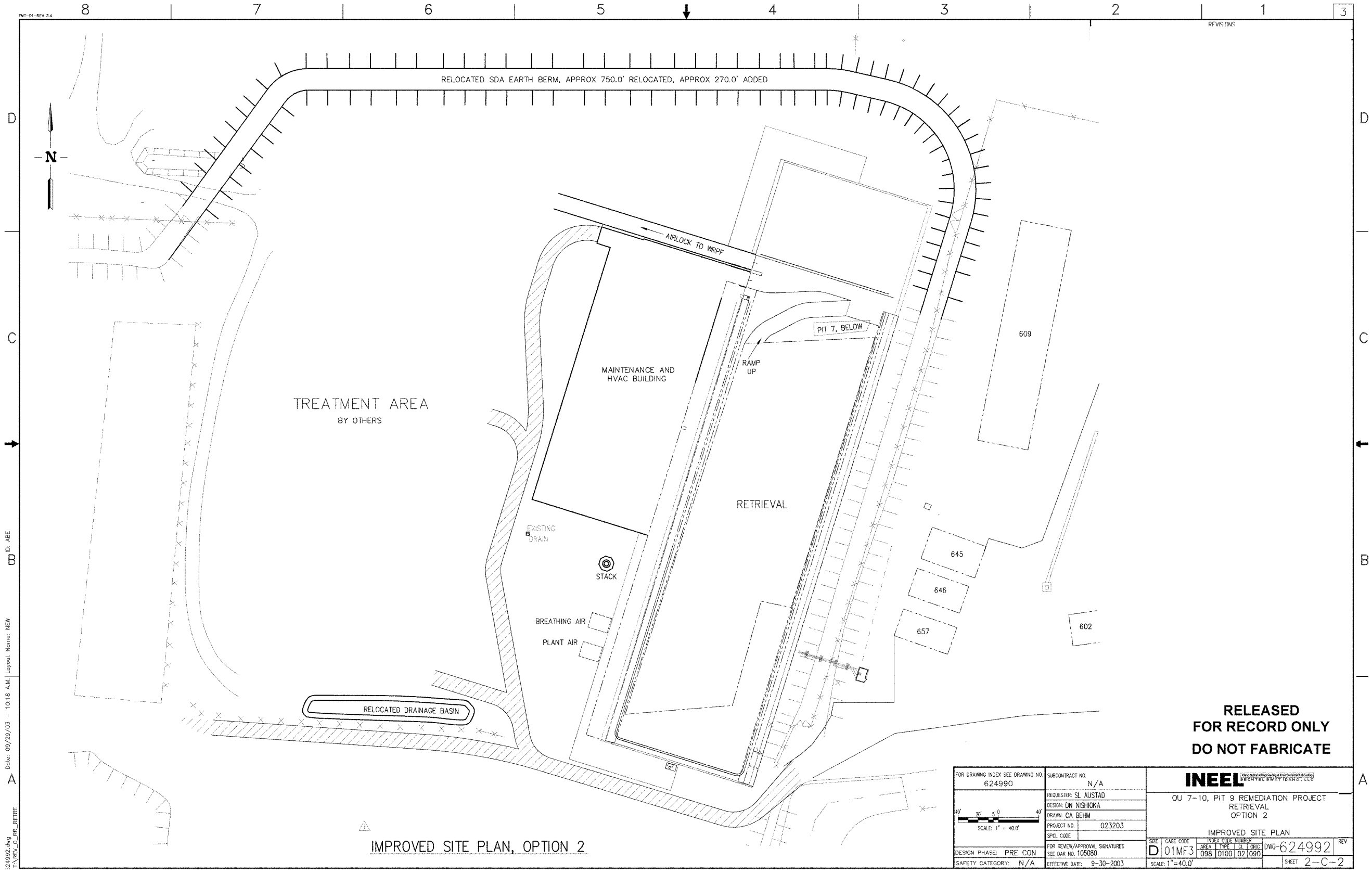
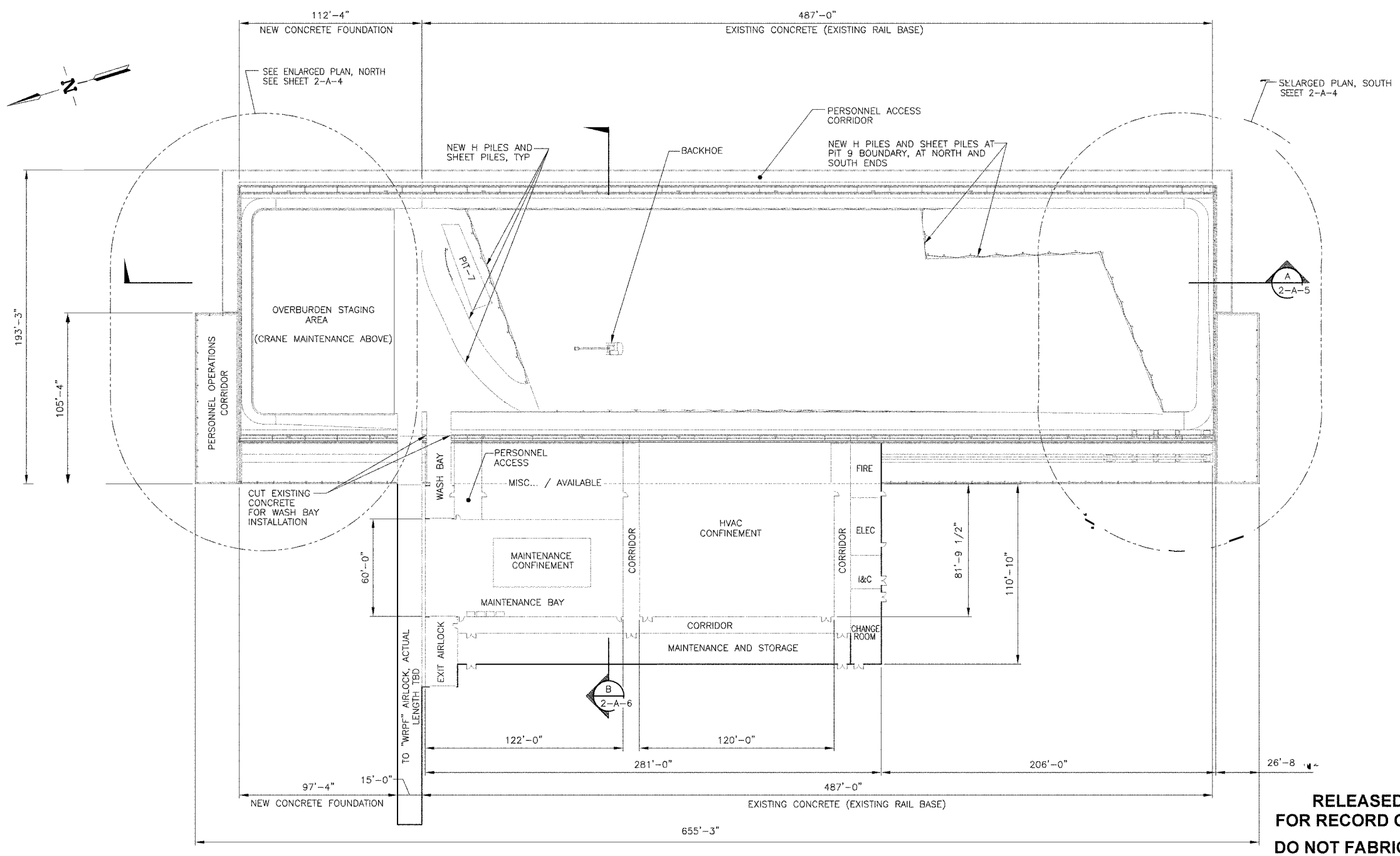
DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 624990	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
50' 30' 10' 0 50' SCALE: 1" = 50.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2
	DESIGN: DN NISHIOKA	
	DRAWN: CA BEHM	
	PROJECT NO. 023203	EXISTING SITE PLAN
	SPCL CODE	
DESIGN PHASE: PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 0100 CL 02 SEQ 090 · DWG-624991 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: 1"=50.0' · SHEET 2-C-1

624991.dwg
T:\REV_0_RR_RETRE
Date: 09/29/03 - 10:17 A.M. Layout Name: EXISTING option-1 ID: ABE


RELOCATED SDA EARTH BERM, APPROX 750.0' RELOCATED, APPROX 270.0' ADDED
N
AIRLOCK TO WRPF
PIT 7, BELOW
RAMP UP
MAINTENANCE AND HVAC BUILDING
TREATMENT AREA
BY OTHERS
RETRIEVAL
609
645
646
657
602
EXISTING DRAIN
STACK
BREATHING AIR
PLANT AIR
RELOCATED DRAINAGE BASIN
RELEASED
FOR RECORD ONLY
DO NOT FABRICATE
FOR DRAWING INDEX SEE DRAWING NO. 624990
SCALE: 1" = 40.0'
DESIGN PHASE: PRE CON
SAFETY CATEGORY: N/A
SUBCONTRACT NO. N/A
REQUESTER: SL AUSTAD
DESIGN: DN NISHIOKA
DRAWN: CA BEHM
PROJECT NO. 023203
SPCL CODE
FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080
EFFECTIVE DATE: 9-30-2003
INEEL
BECHTEL BWXT IDAHO, LLC
OU 7-10, PIT 9 REMEDIATION PROJECT
RETRIEVAL
OPTION 2
IMPROVED SITE PLAN
SIZE D
CAGE CODE 01MF3
INDEX CODE NUMBER AREA 098 TYPE 0100 CL 02 ORIG 090
DWG-624992
REV
SCALE: 1"=40.0'
SHEET 2-C-2
IMPROVED SITE PLAN, OPTION 2

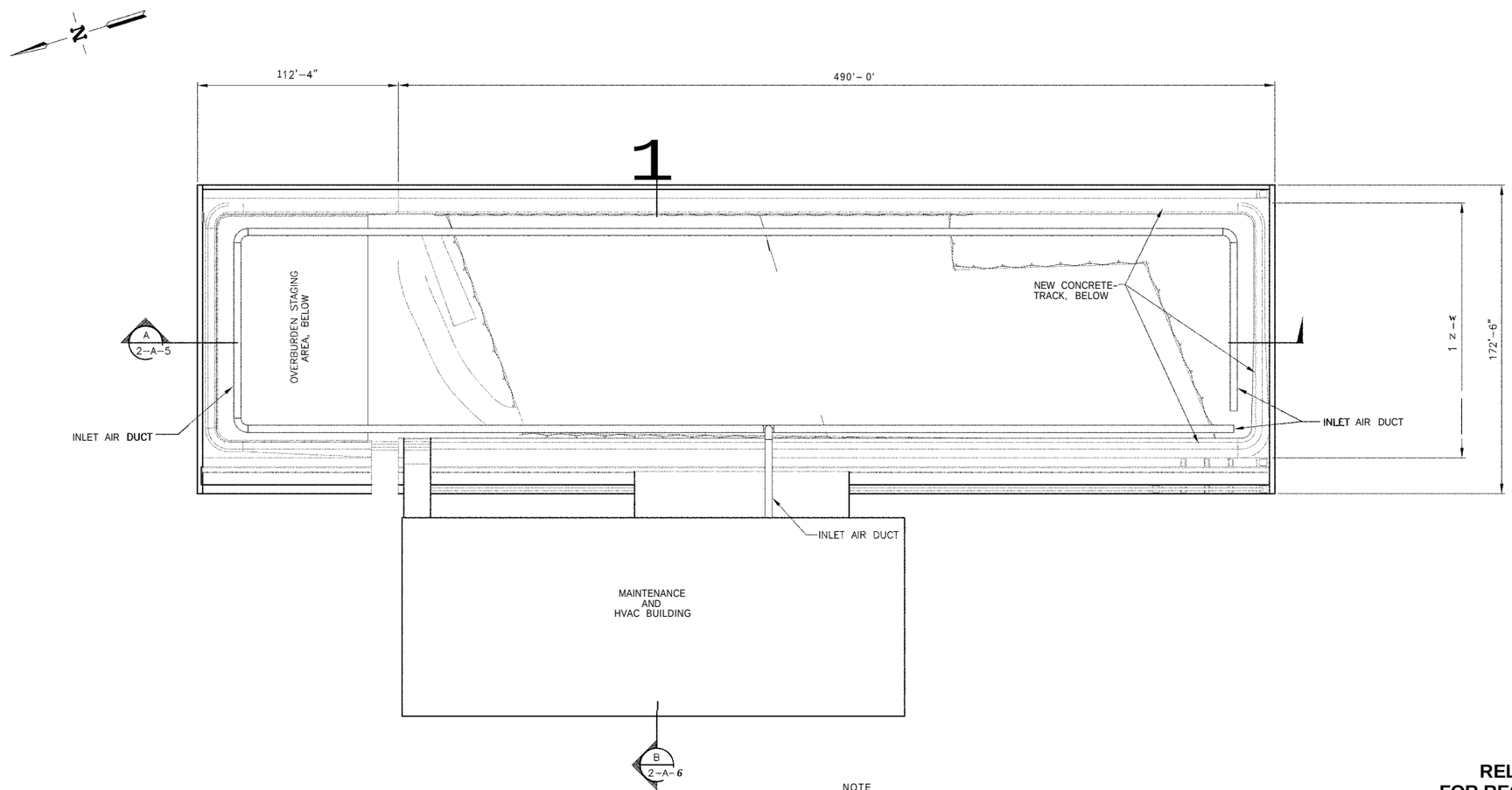


RELEASED
FOR RECORD ONLY
DO NOT FABRICATE

GENERAL BUILDING FLOOR PLAN
SCALE: 1" = 30'-0"

FOR DRAWING INDEX SEE DRAWING NO. 624990	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 30.0'	REQUESTER: SL AUSTAD DESIGN: BC SPAULDING DRAWN: CA KELLEY PROJECT NO. 023203 SPCL CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	GENERAL BUILDING FLOOR PLAN
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 ORG 090 · DWG- 624993 · REV
		SCALE: NOTED · SHEET 2-A-1

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:



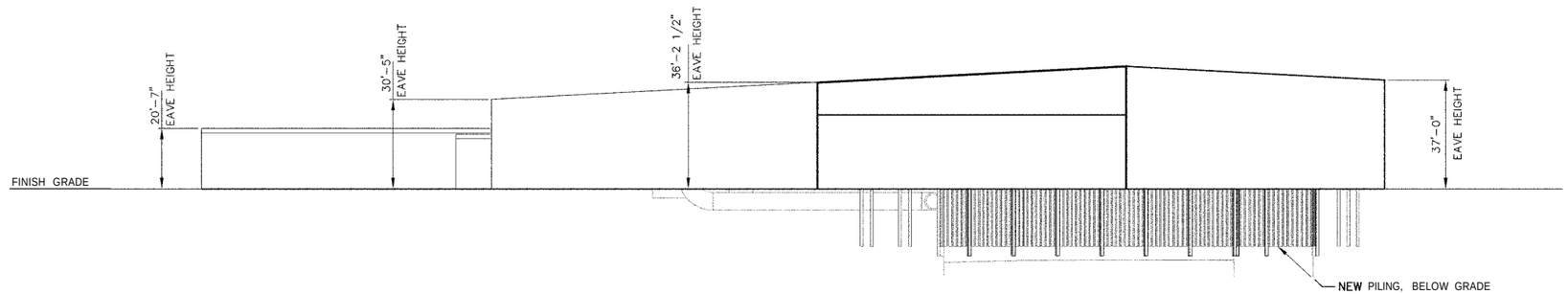
NOTE
ACCESS AND EQUIPMENT CORRIDORS NOT SHOWN FOR CLARITY

UPPER RETREIVAL PLAN
SCALE 1' = 30'-0"

RELEASED FOR RECORD ONLY

DO NOT FABRICATE

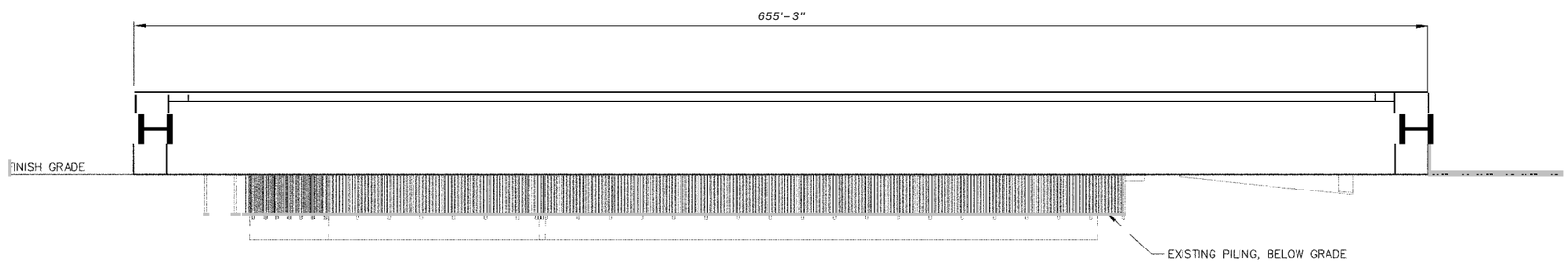
FOR DRAWING INDEX SEE DRAWING NO 624990	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
30' 20' 10' 0 30' SCALE: 1" = 30.0'	REQUESTER: SL AUSTAD DESIGN: BC SPAULDING DRAWN: CA KELLEY PROJECT NO. 023203 SPCL CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2 UPPER RETREIVAL PLAN
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CADE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 OBJ 090 · DWG- 624994 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NOTED · SHEET 2-A-2



LOOKING NORTH

SOUTH ELEVATION

SCALE 1"=20'



LOOKING WEST

EAST ELEVATION

SCALE: 1"=30

RELEASED
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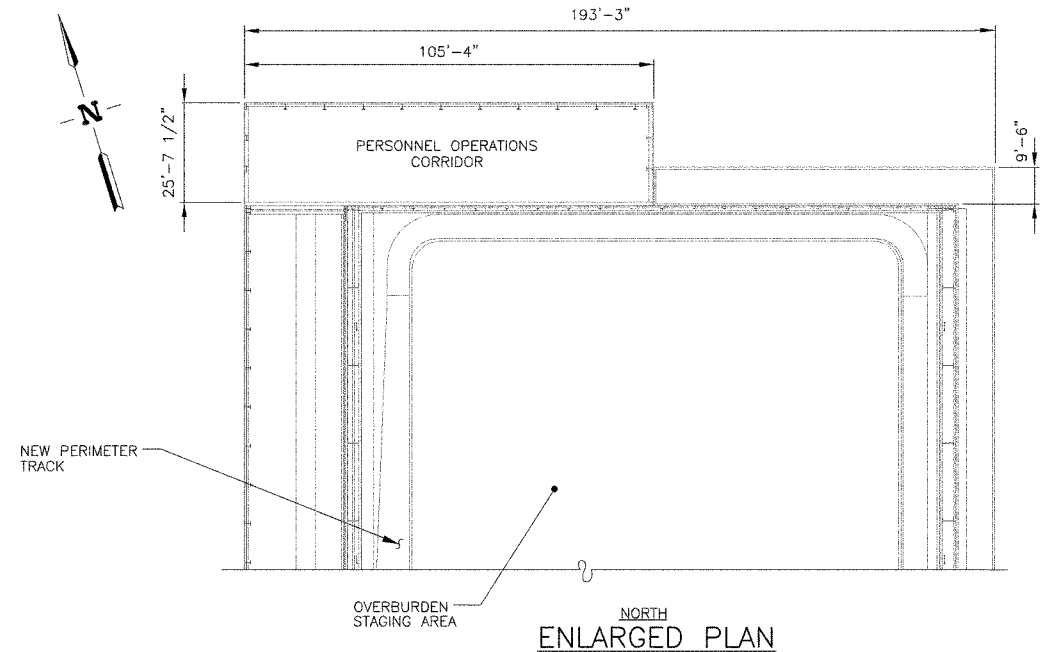
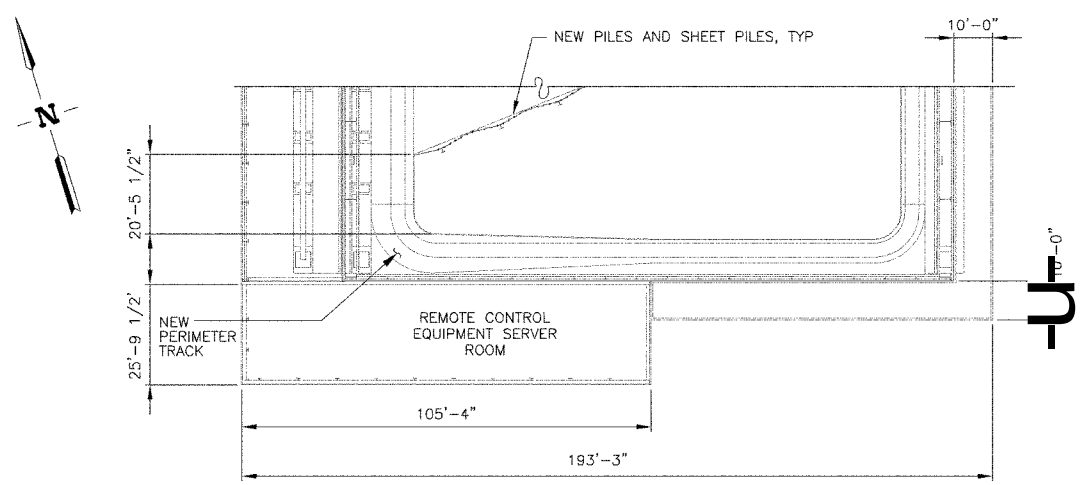
DO NOT FABRICATE

624990	N/A	INEEL BECHTEL BWXT DAHO, LLC
SCALE 1" 20'0"	REQUESTER SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2
	DESIGN: BC SPAULDING	
	DRAWN CA KELLEY	
	PROJECT NO. 023203	
	SPCL CODE	SIZE / CAGE CODE / INDEX CODE NUMBER

REV	DESCRIPTION	EFFECTIVE DATE:



NORTH
ENLARGED PLAN
SCALE: 1" = 20'-0"

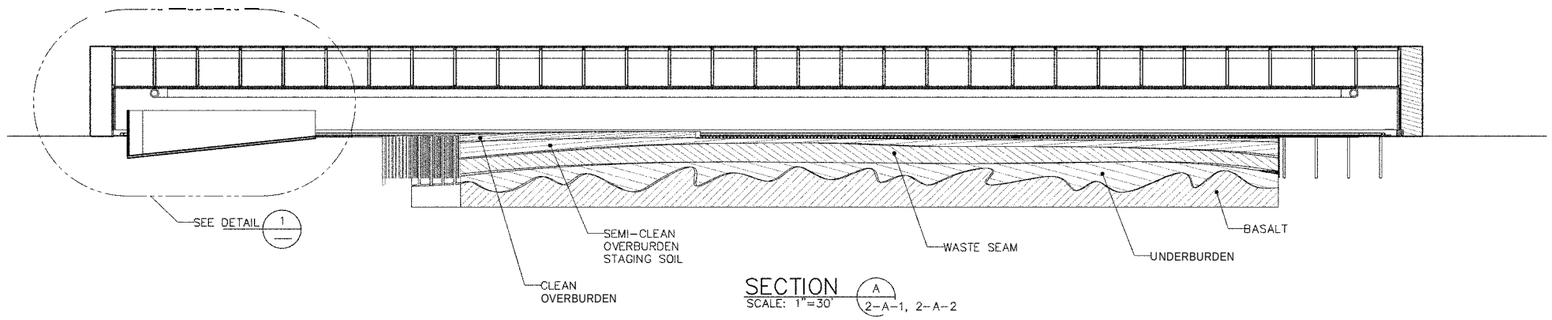


SOUTH
ENLARGED PLAN
SCALE: 1" = 20'-0"

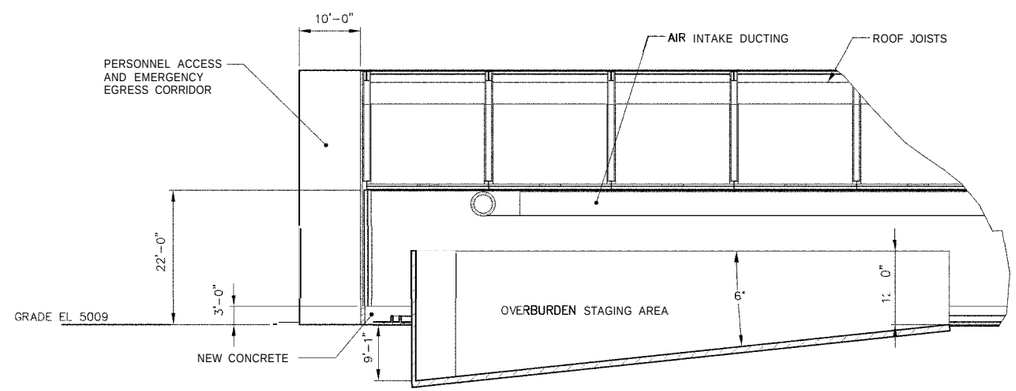
RELEASED FOR RECORD ONLY

DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 624990	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
20' 10' 5' 0 20' SCALE: 1" = 20.0'	REQUESTER: SL AUSTAD DESIGN: BC SPAULDING DRAWN: CA KELLEY PROJECT NO. 023203 SPCL CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2 ENLARGED PLANS
DESIGN PHASE: PRE-CON SAFETY CATEGORY: N/A	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080 EFFECTIVE DATE: 9-30-2003	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 DISC 090 · DWG-624996 · REV SCALE: NOTED · SHEET 2-A-4



SECTION A
SCALE: 1"=30'
2-A-1, 2-A-2



DETAIL 1
SCALE: 1"=10'

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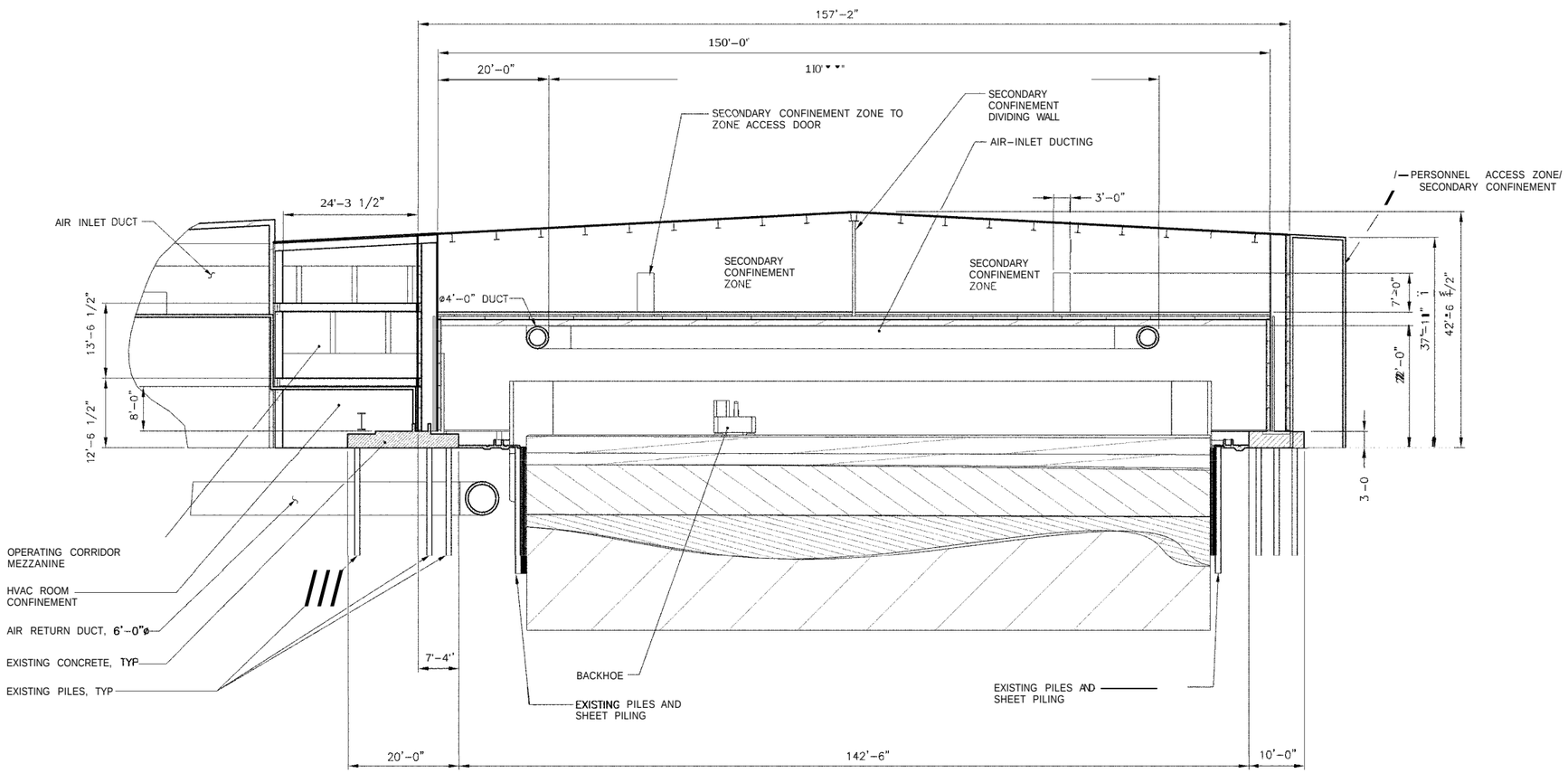
FOR DRAWING INDEX SEE DRAWING NO. 624990	SUBCONTRACT NO. N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 10.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2
SCALE: 1" = 30.0'	DESIGN: BC SPAULDING	
	DRAWN: CA KELLEY	
	PROJECT NO. 023203	SECTION AND DETAIL
	SPCL CODE	
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 LEL 00 DWG 090 · DWG- 624997 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NOTED · SHEET 2-A-5

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:



SECTION B 2-A-1, 2-A-2

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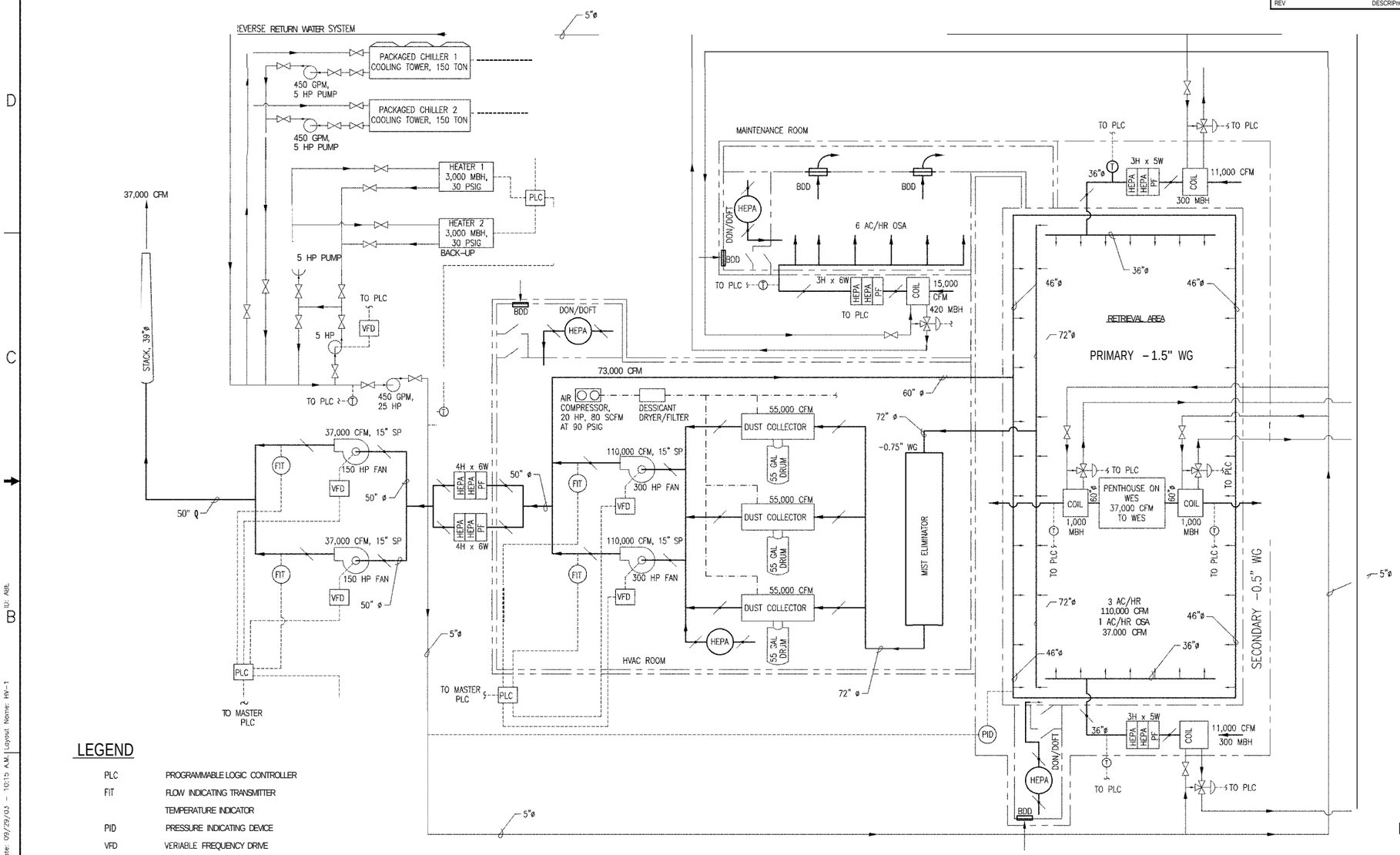
DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 624990	SUBCONTRACT NO. N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 10.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2
	DESIGN: BC SPAULDING	
	DRAWN: CA KELLEY	
	PROJECT NO. 023203	SECTION
	SPCL CODE	
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 109080	SIZE D; CAGE CODE 01MF3; INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 ORG 090; DWG- 624998; REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: 1" = 10'-0"; SHEET 2-A-6



LEGEND

PLC	PROGRAMMABLE LOGIC CONTROLLER
FIT	FLOW INDICATING TRANSMITTER
	TEMPERATURE INDICATOR
PID	PRESSURE INDICATING DEVICE
VFD	VERIABLE FREQUENCY DRIVE
BDD	BACK DRAFT DAMPER
———	HVAC DUCTING
———	PIPING
	ELECTRONIC SIGNAL
	PLANT AIR

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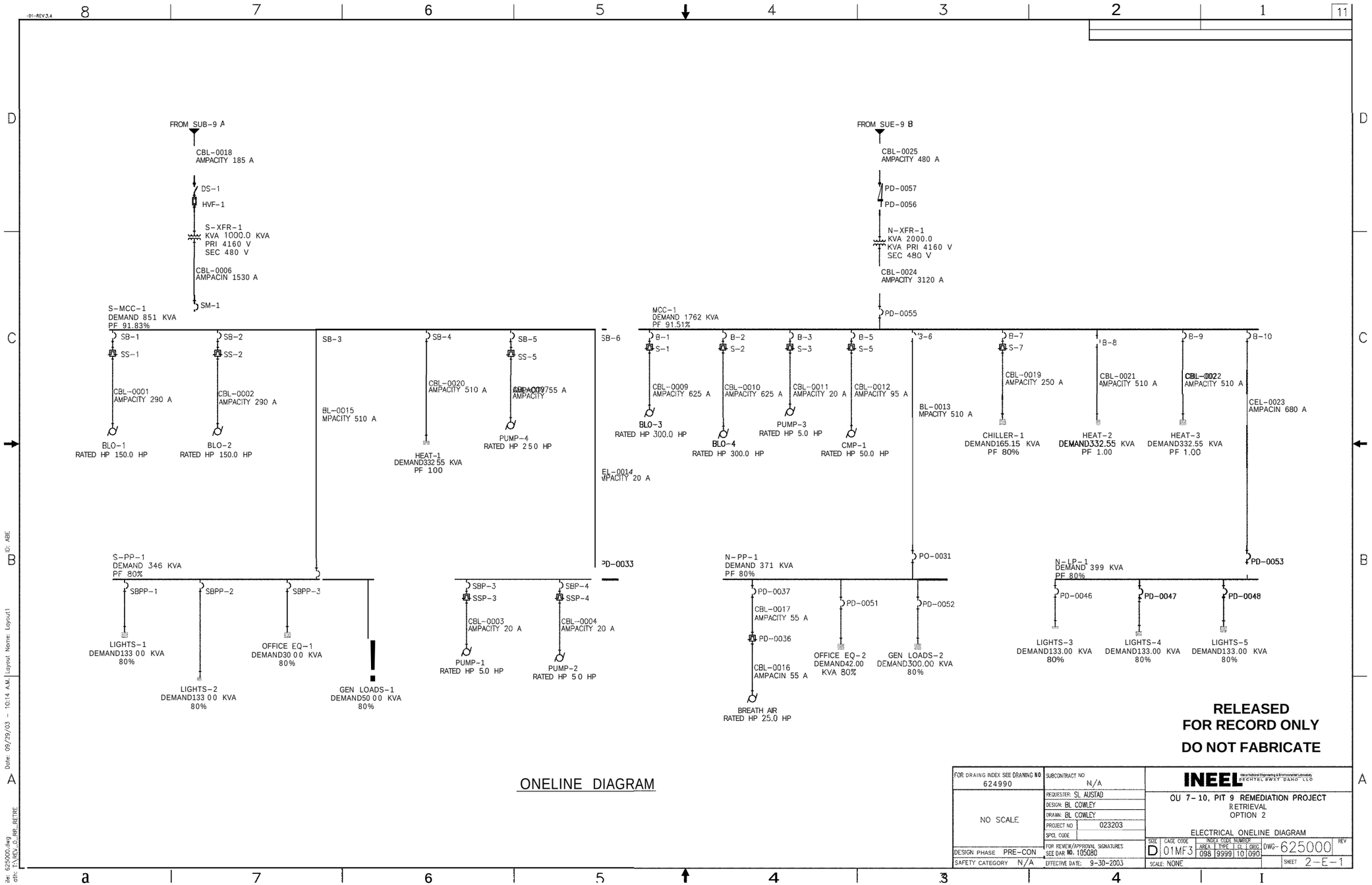
HVAC FLOW DIAGRAM

FOE DRAING INDEX SEE DRAWING NO 624990	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO LLC
NO SCALE	REQUESTER SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 2
	DESCN BK GROVER	
	DRAWN CA BEHM	
	PROJECT NO 0203203	HVAC FLOW DIAGRAM
	SPCL CODE	
DESIGN PHASE PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO 105080	SIZE D; CAGE CODE 01MF3; INDEX CODE NUMBER AREA 098 TYPE 9999 CL 20 DISC 090; DWG- 624999; REV
SAFETY CATEGORY N/A	EFFECTIVE DATE 9-30-2003	SCALE: NONE; SHEET 2-HV-1


FROM SUB-9 A
CBL-0018
AMPACITY 185 A
DS-1
HVF-1
S-XFR-1
KVA 1000.0 KVA
PRI 4160 V
SEC 480 V
CBL-0006
AMPACIN 1530 A
SM-1
S-MCC-1
DEMAND 851 KVA
PF 91.83%
SB-1
SS-1
CBL-0001
AMPACITY 290 A
BLO-1
RATED HP 150.0 HP
SB-2
SS-2
CBL-0002
AMPACITY 290 A
BLO-2
RATED HP 150.0 HP
SB-3
BL-0015
MPACITY 510 A
SB-4
CBL-0020
AMPACITY 510 A
HEAT-1
DEMAND332.55 KVA
PF 100
SB-5
SS-5
PUMP-4
RATED HP 250 HP
SB-6
EL-0014
MPACITY 20 A
PD-0033
S-PP-1
DEMAND 346 KVA
PF 80%
SBPP-1
LIGHTS-1
DEMAND133.00 KVA
80%
SBPP-2
LIGHTS-2
DEMAND133.00 KVA
80%
SBPP-3
OFFICE EQ-1
DEMAND30.00 KVA
80%
GEN LOADS-1
DEMAND50.00 KVA
80%
SBP-3
SSP-3
CBL-0003
AMPACITY 20 A
PUMP-1
RATED HP 5.0 HP
SBP-4
SSP-4
CBL-0004
AMPACITY 20 A
PUMP-2
RATED HP 5.0 HP
FROM SUE-9 B
CBL-0025
AMPACITY 480 A
PD-0057
PD-0056
N-XFR-1
KVA 2000.0
KVA PRI 4160 V
SEC 480 V
CBL-0024
AMPACITY 3120 A
PD-0055
MCC-1
DEMAND 1762 KVA
PF 91.51%
B-1
S-1
CBL-0009
AMPACITY 625 A
BLO-3
RATED HP 300.0 HP
B-2
S-2
CBL-0010
AMPACITY 625 A
BLO-4
RATED HP 300.0 HP
B-3
S-3
CBL-0011
AMPACITY 20 A
PUMP-3
RATED HP 5.0 HP
B-5
S-5
CBL-0012
AMPACITY 95 A
CMP-1
RATED HP 50.0 HP
B-6
BL-0013
MPACITY 510 A
B-7
S-7
CBL-0019
AMPACITY 250 A
CHILLER-1
DEMAND165.15 KVA
PF 80%
B-8
CBL-0021
AMPACITY 510 A
HEAT-2
DEMAND332.55 KVA
PF 1.00
B-9
CBL-0022
AMPACITY 510 A
HEAT-3
DEMAND332.55 KVA
PF 1.00
B-10
CEL-0023
AMPACIN 680 A
PD-0053
PO-0031
N-PP-1
DEMAND 371 KVA
PF 80%
PD-0037
CBL-0017
AMPACITY 55 A
PD-0036
CBL-0016
AMPACIN 55 A
BREATH AIR
RATED HP 25.0 HP
PD-0051
OFFICE EQ-2
DEMAND42.00
KVA 80%
PD-0052
GEN LOADS-2
DEMAND300.00 KVA
80%
N-LP-1
DEMAND 399 KVA
PF 80%
PD-0046
LIGHTS-3
DEMAND133.00 KVA
80%
PD-0047
LIGHTS-4
DEMAND133.00 KVA
80%
PD-0048
LIGHTS-5
DEMAND133.00 KVA
80%
RELEASED
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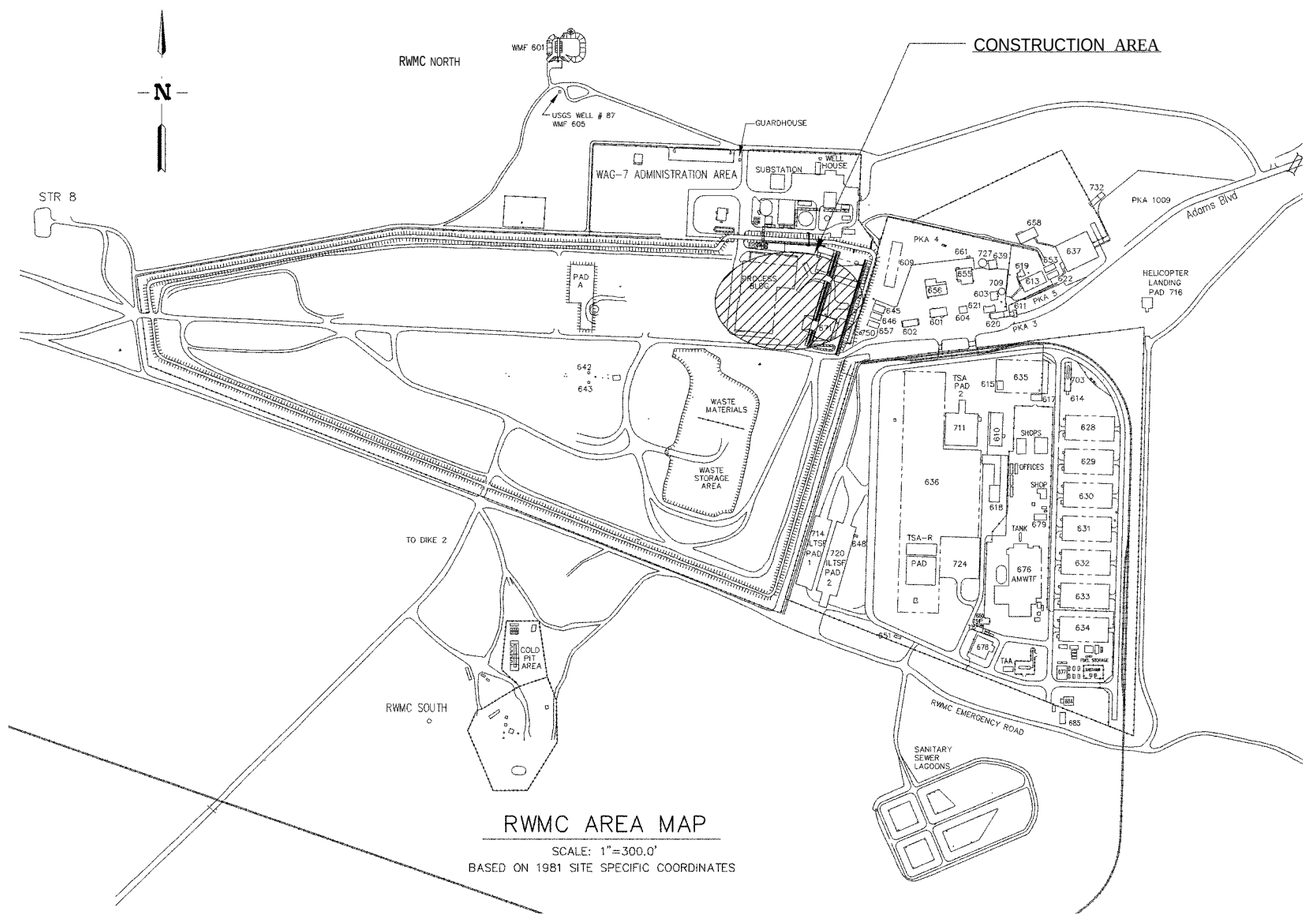
DO NOT FABRICATE
ONELINE DIAGRAM
FOR DRAING INDEX SEE DRAWING NO
624990
SUBCONTRACT NO
N/A
NO SCALE
REQUESTER: SL AUSTAD
DESIGN: BL COWLEY
DRAWN: BL COWLEY
PROJECT NO 023203
SPCL CODE
DESIGN PHASE PRE-CON
FOR REVIEW/APPROVAL SIGNATURES
SEE DAR NO. 105080
SAFETY CATEGORY N/A
EFFECTIVE DATE: 9-30-2003
INEEL
BECHTEL BWXT IDAHO LLC
OU 7-10, PIT 9 REMEDIATION PROJECT
RETRIEVAL
OPTION 2
ELECTRICAL ONELINE DIAGRAM
SIZE D
CAGE CODE 01MF3
NOUN CODE NUMBER
AREA TYPE CL ORIG
098 9999 10 090
DWG-625000
REV
SCALE: NONE
SHEET 2-E-1

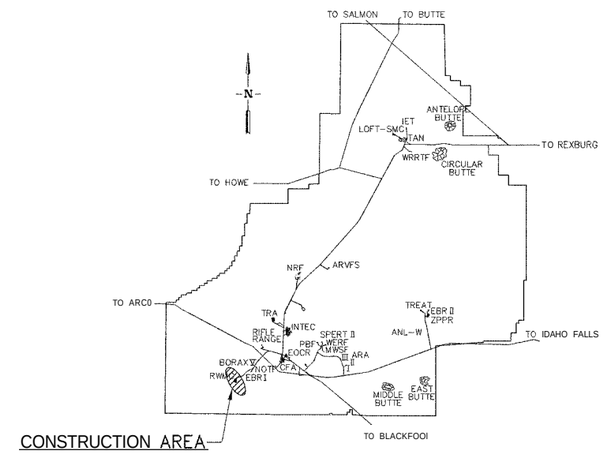
REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE



RWMC AREA MAP

SCALE: 1"=300.0'

BASED ON 1981 SITE SPECIFIC COORDINATES



INEEL SITE MAP

SCALE. NONE

DRAWING INDEX

PAGE NO.	DWG NO.	A-E DWG NO	REV	DRAWING TITLE
1	625001	3-T-1		SITE MAP, AREA MAP AND DRAWING INDEX
2	625002	3-C-1		EXISTING SITE PLAN
3	625003	3-C-2		IMPROVED SITE PLAN
4	625004	3-A-1		GENERAL BUILDING FLOOR PLAN
5	625005	3-A-2		UPPER RETRIEVAL PLAN
6	625006	3-A-3		ELEVATIONS
7	625007	3-A-4		ENLARGED PLANS
8	625008	3-A-5		SECTION AND DETAIL
9	625009	3-A-6		SECTION
10	625010	3-HV-1		HVAC FLOW DIAGRAM
11	625011	3-E-1		ONELINE DIAGRAM

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FOR DRAWING INDEX SEE DRAWING NO 625001	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO LLC
300' 200' 100' 0 300' SCALE: 1" = 300.0'	REQUESTER: SL AUSTAD DESIGN: WH LANDMAN DRAWN: CA BEHM PROJECT NO. 023203 SPEC CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETREIVAL OPTION 3 SITE MAP, AREA MAP AND DRAWING INDEX
DESIGN PHASE: PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 0100 CL 01 OBJ 090 · DWG- 625001 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NOTED · SHEET 3-T-1

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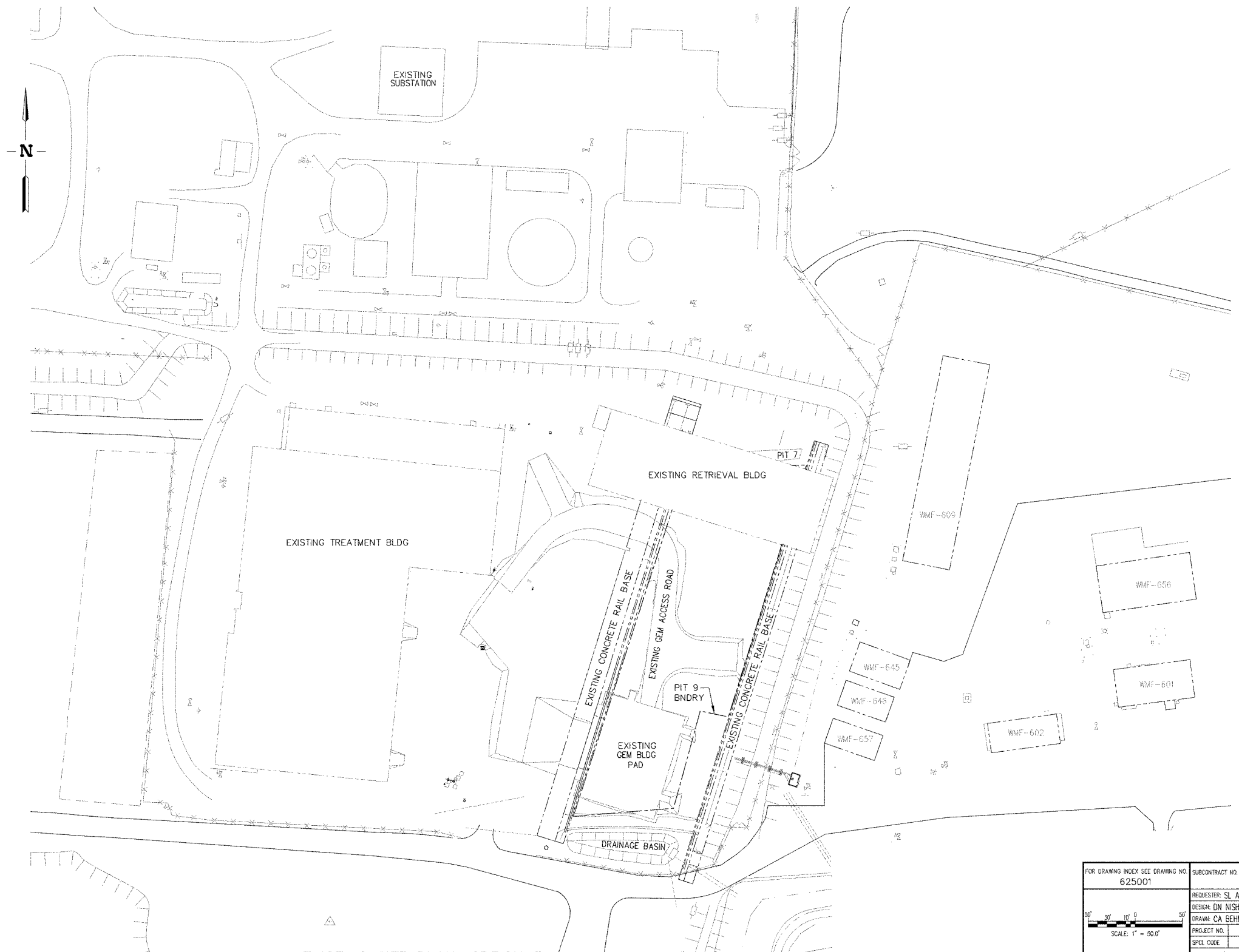

EXISTING SITE PLAN, OPTION 3

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DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 625001	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
50' 30' 10' 0 50' SCALE: 1" = 50.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3
	DESIGN: DN NISHIOKA	
	DRAWN: CA BEHM	
	PROJECT NO. 023203	EXISTING SITE PLAN
	SPCL CODE	
DESIGN PHASE: PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 0100 CL 02 ORIG 090 · DWG-625002 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: 1"=50.0' · SHEET 3-C-1

Date: 09/29/03 - 1:50 P.M. | Layout Name: EXISTING option-1 | ID: ABE

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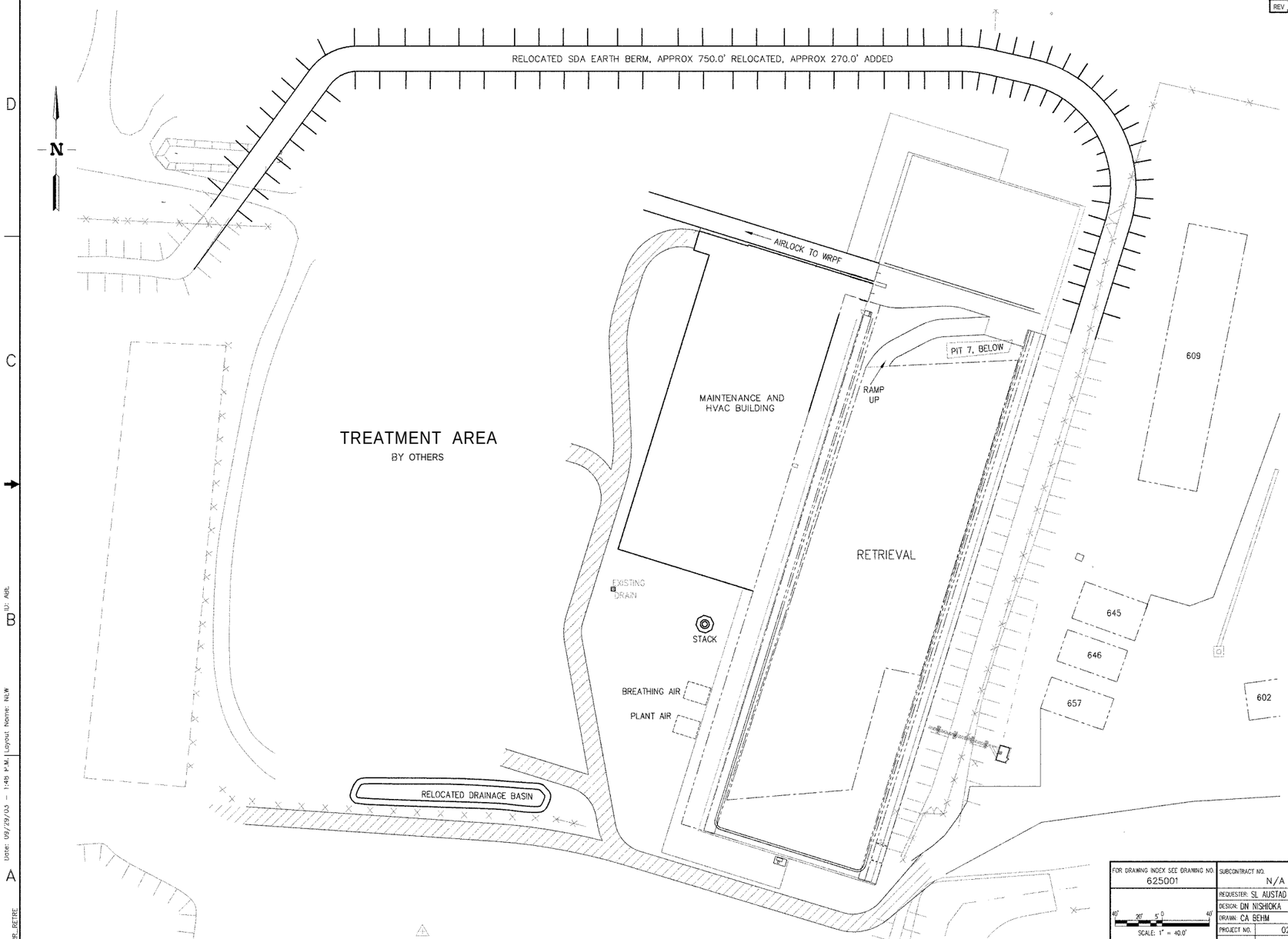
REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:



IMPROVED SITE PLAN, OPTION 3

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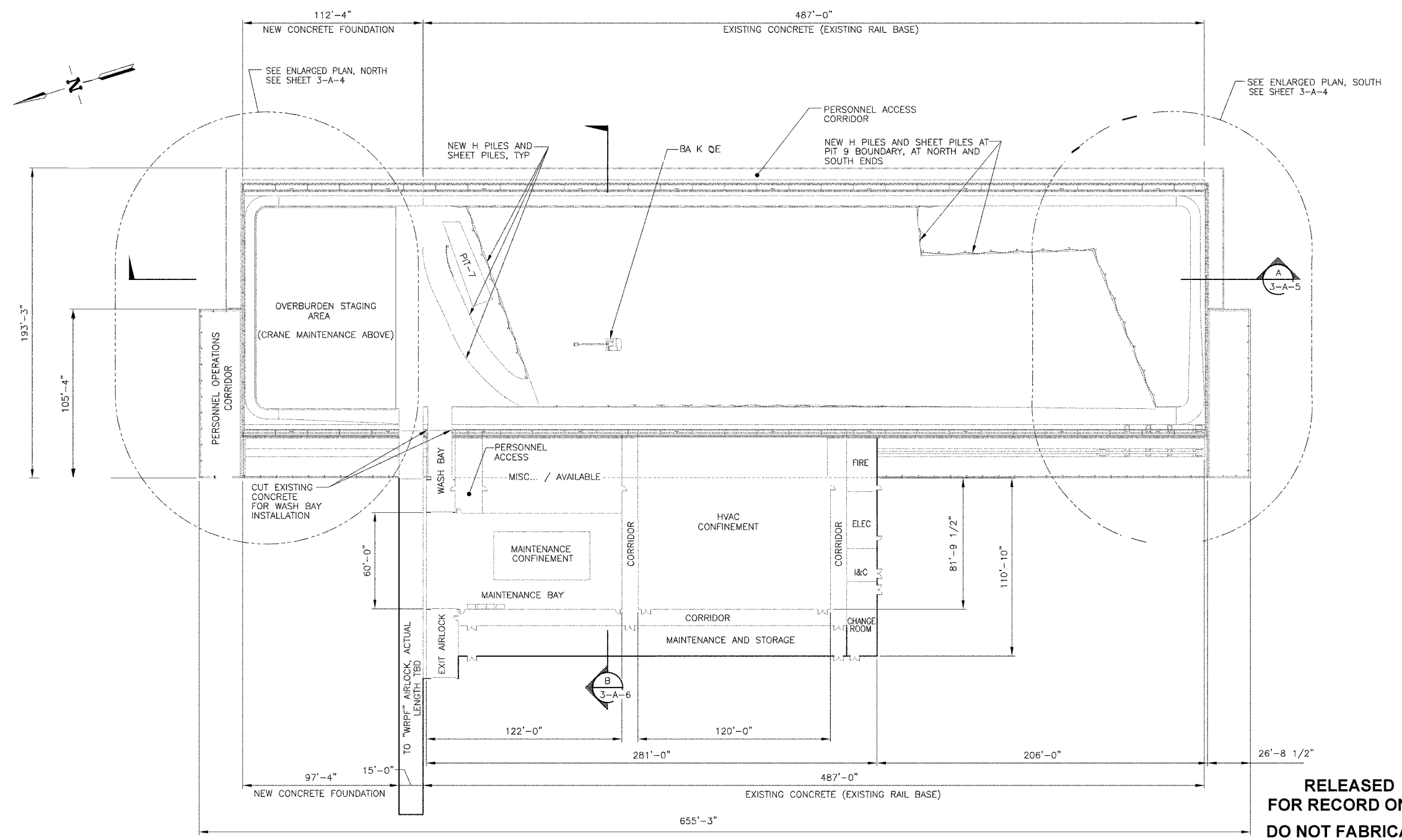
DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 625001	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
40' 20' 5' 0 40' SCALE: 1" = 40.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3
	DESIGN: DN NISHIOKA	
	DRAWN: CA BEHM	
	PROJECT NO. 023203	IMPROVED SITE PLAN
	SPCL CODE	
DESIGN PHASE: PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 0100 CL 02 DISC 090 · DWG-625003 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: 1"=40.0' · SHEET 3-C-2

FMT-01-REV 3.4

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:



RELEASED FOR RECORD ONLY

DO NOT FABRICATE

GENERAL BUILDING FLOOR PLAN

SCALE: 1" = 30'-0"

FOR DRAWING INDEX SEE DRAWING NO. 625001	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
30' 20' 10' 0 30' SCALE: 1" = 30.0'	REQUESTER: SL AUSTAD DESIGN: BC SPAULDING DRAWN: CA KELLEY PROJECT NO. 023203 SPCL CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3 GENERAL BUILDING FLOOR PLAN
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 GEC 090 · DWG- 625004 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NOTED · SHEET 3-A-1

Date: 09/29/03 - 1:45 P.M. Layout Name: Layout1 ID: ABE

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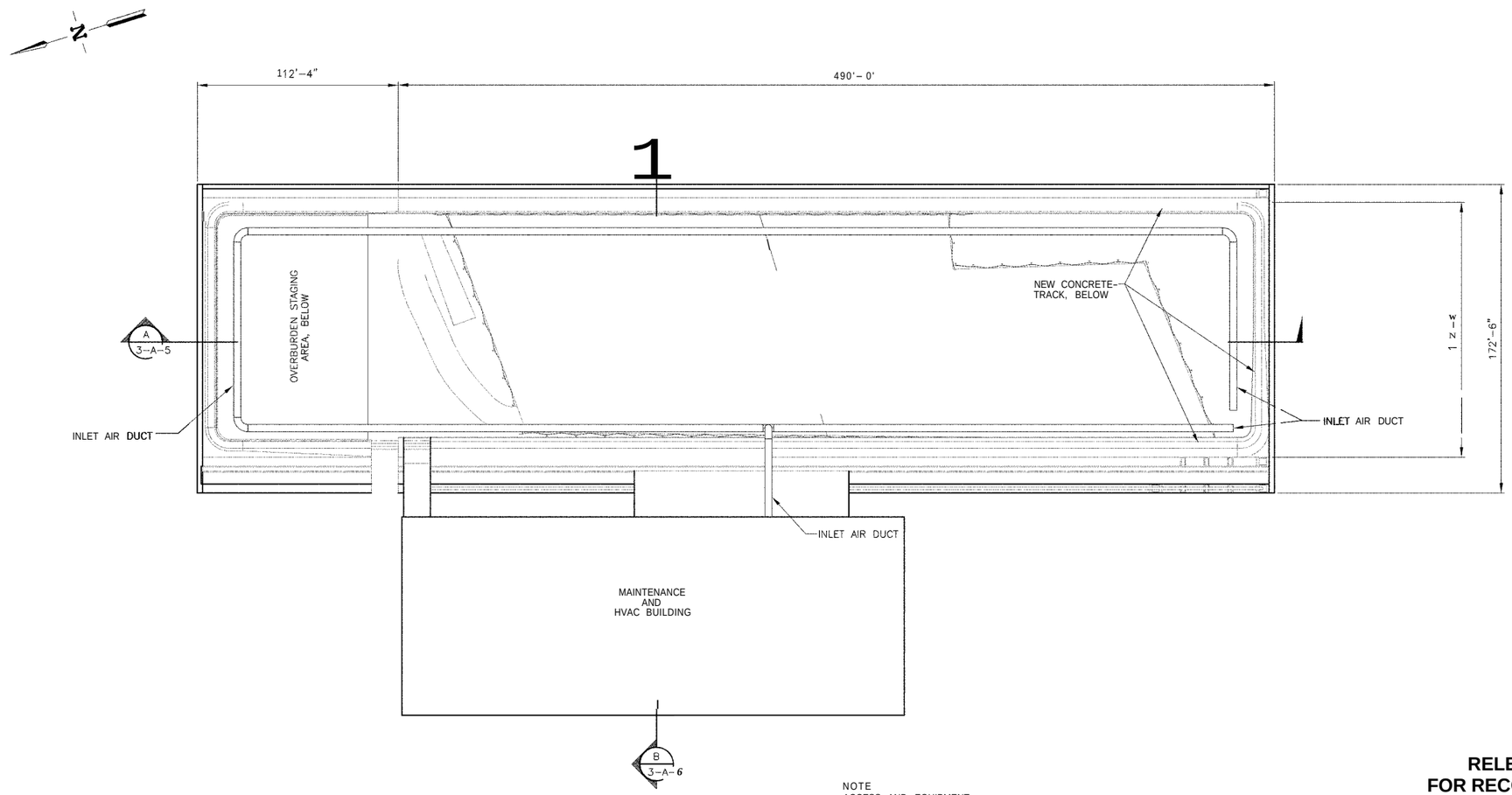


NOTE
ACCESS AND EQUIPMENT CORRIDORS NOT SHOWN FOR CLARITY

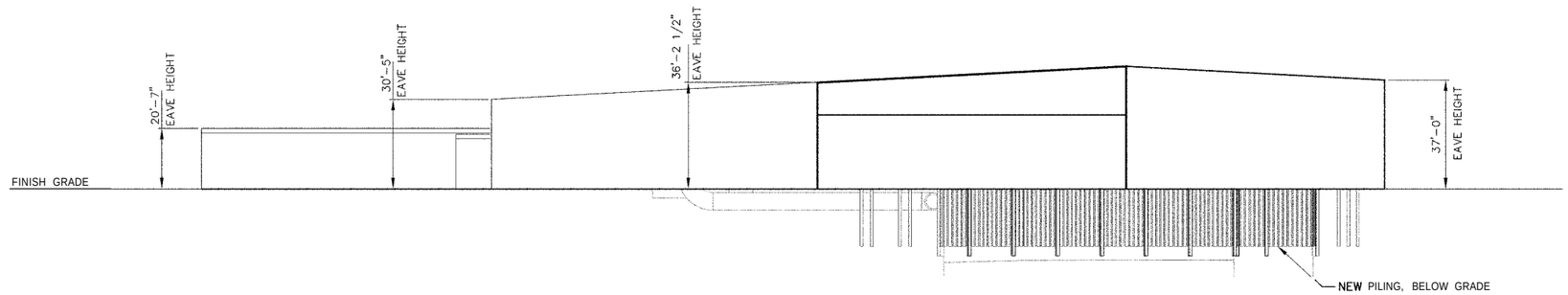
UPPER RETREIVAL PLAN

SCALE 1' = 30'-0"

RELEASED FOR RECORD ONLY

DO NOT FABRICATE

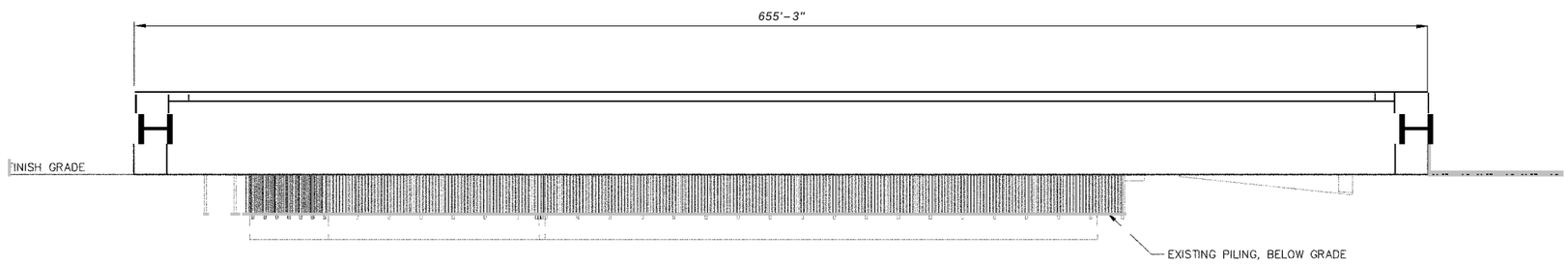
FOR DRAWING INDEX SEE DRAWING NO. 625001	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 30.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3
	DESIGN: BC SPAULDING	
	DRAWN: CA KELLEY	
	PROJECT NO. 023203	UPPER RETREIVAL PLAN
	SPCL CODE	
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 DISC 090 · DWG- 625005 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NOTED · SHEET 3-A-2



LOOKING NORTH

SOUTH ELEVATION

SCALE 1"=20'



LOOKING WEST

EAST ELEVATION

SCALE: 1"=30

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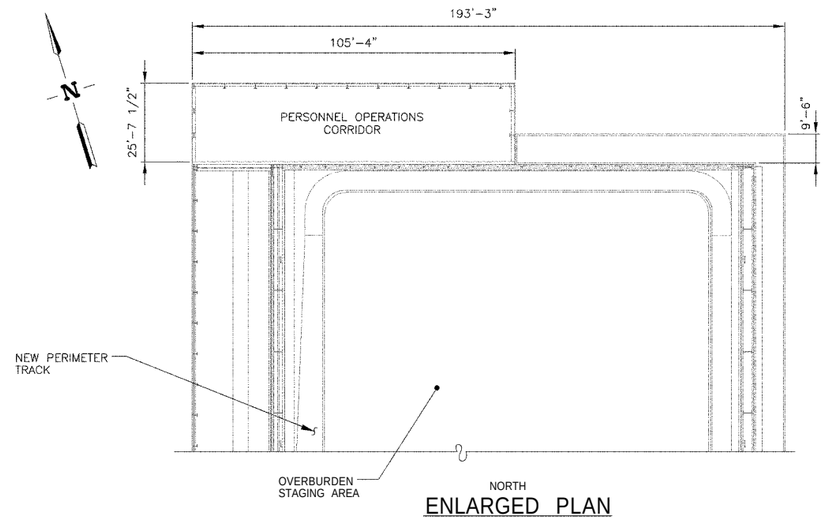
FOR RECORD ONLY
DO NOT FABRICATE

DESIGN: BC SPAULDING

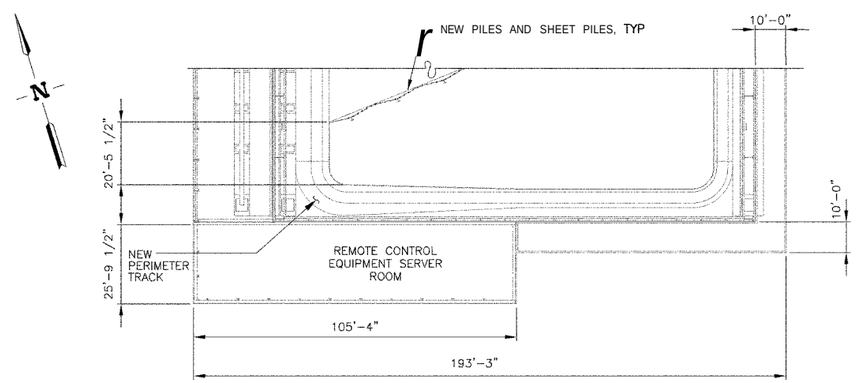
PROJECT NO. 023203

SPCL CODE

SIZE | CAGE CODE | INDEX CODE NUMBER



ENLARGED PLAN
SCALE 1' = 20'-0"

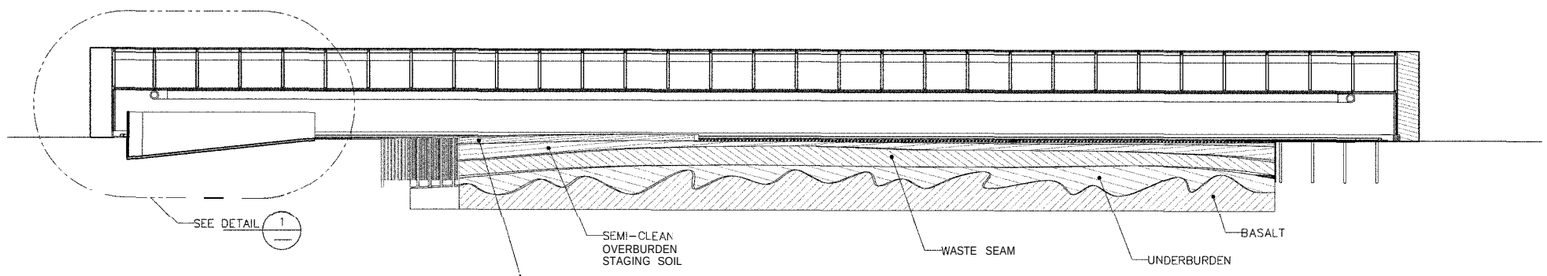


ENLARGED PLAN
SCALE: 1' = 20'-0"

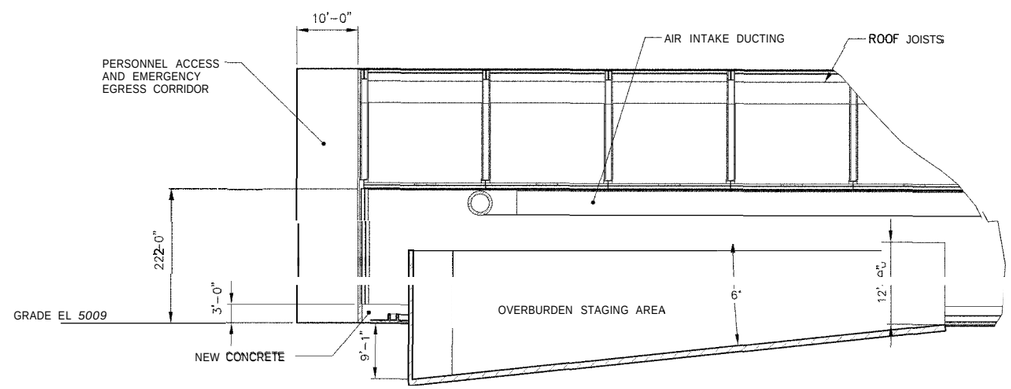
RELEASED FOR RECORD ONLY

DO NOT FABRICATE

FOR DRAING INDEX SEE DRAWING NO 625001	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT DAHO LLC
SCALE: 1" = 20.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3
	DESIGN BC SPAULDING	
	DRAWN CA KELIN	
	PROJECT NO. 023203	ENLARGED PLANS
	SPCL CODE	
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 OBJ 090 · DWG- 625007 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NOTED · SHEET 3-A-4



SECTION A
SCALE: 1"=30'
3-A-1, 3-A-2



DETAIL 1
SCALE: 1"=10'

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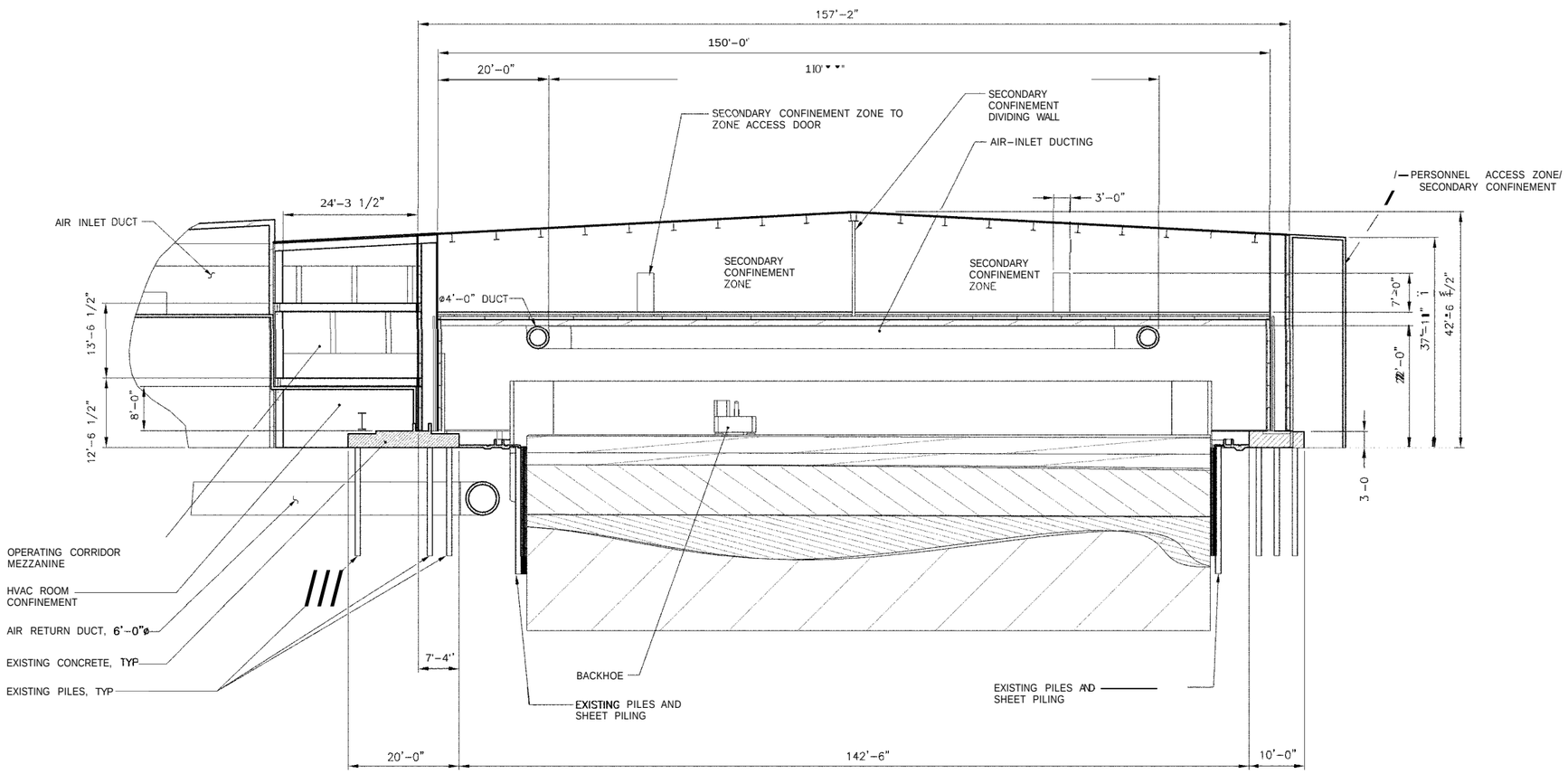
DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 625001	SUBCONTRACT NO. N/A	INEEL (Idaho National Engineering & Environmental Laboratory) BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 10.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3
SCALE: 1" = 30.0'	DESIGN: BC SPAULDING	
	DRAWN: CA KELLEY	
	PROJECT NO. 023203	SECTION AND DETAIL
	SPCL CODE	
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CAGE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 ORIG 090 · DWG-625008 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NOTED · SHEET 3-A-5

REVISIONS		
REV	DESCRIPTION	EFFECTIVE DATE:

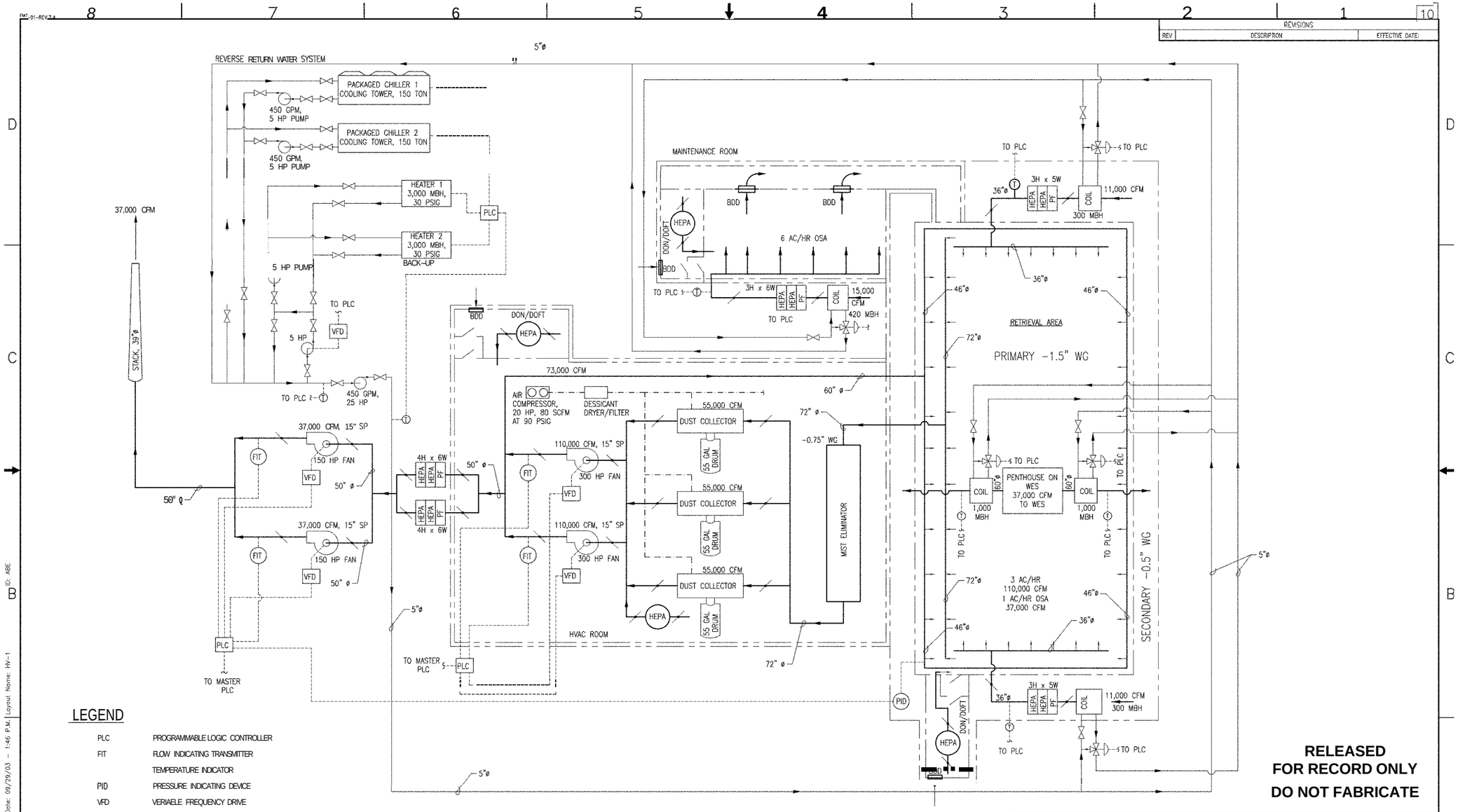


SECTION B
3-A-1, 3-A-2

RELEASED FOR RECORD ONLY

DO NOT FABRICATE

FOR DRAWING INDEX SEE DRAWING NO. 625001	SUBCONTRACT NO. N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO, LLC
SCALE: 1" = 10.0'	REQUESTER: SL AUSTAD	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3
	DESIGN: BC SPAULDING	
	DRAWN: CA KELLEY	
	PROJECT NO. 023203	SECTION
	SPCL CODE	
DESIGN PHASE: PRE-CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 109080	SIZE D; CAGE CODE 01MF3; INDEX CODE NUMBER AREA 098 TYPE 9999 CL 00 ORG 090; DWG- 625009; REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: 1" = 10'-0"; SHEET 3-A-6



LEGEND

PLC	PROGRAMMABLE LOGIC CONTROLLER
FIT	FLOW INDICATING TRANSMITTER
	TEMPERATURE INDICATOR
PID	PRESSURE INDICATING DEVICE
VFD	VERIAELE FREQUENCY DRIVE
BDD	BACK DRAFT DAMPER
	HVAC DUCTING
	PIPING
	ELECTRONIC SIGNAL
	PLANT AIR

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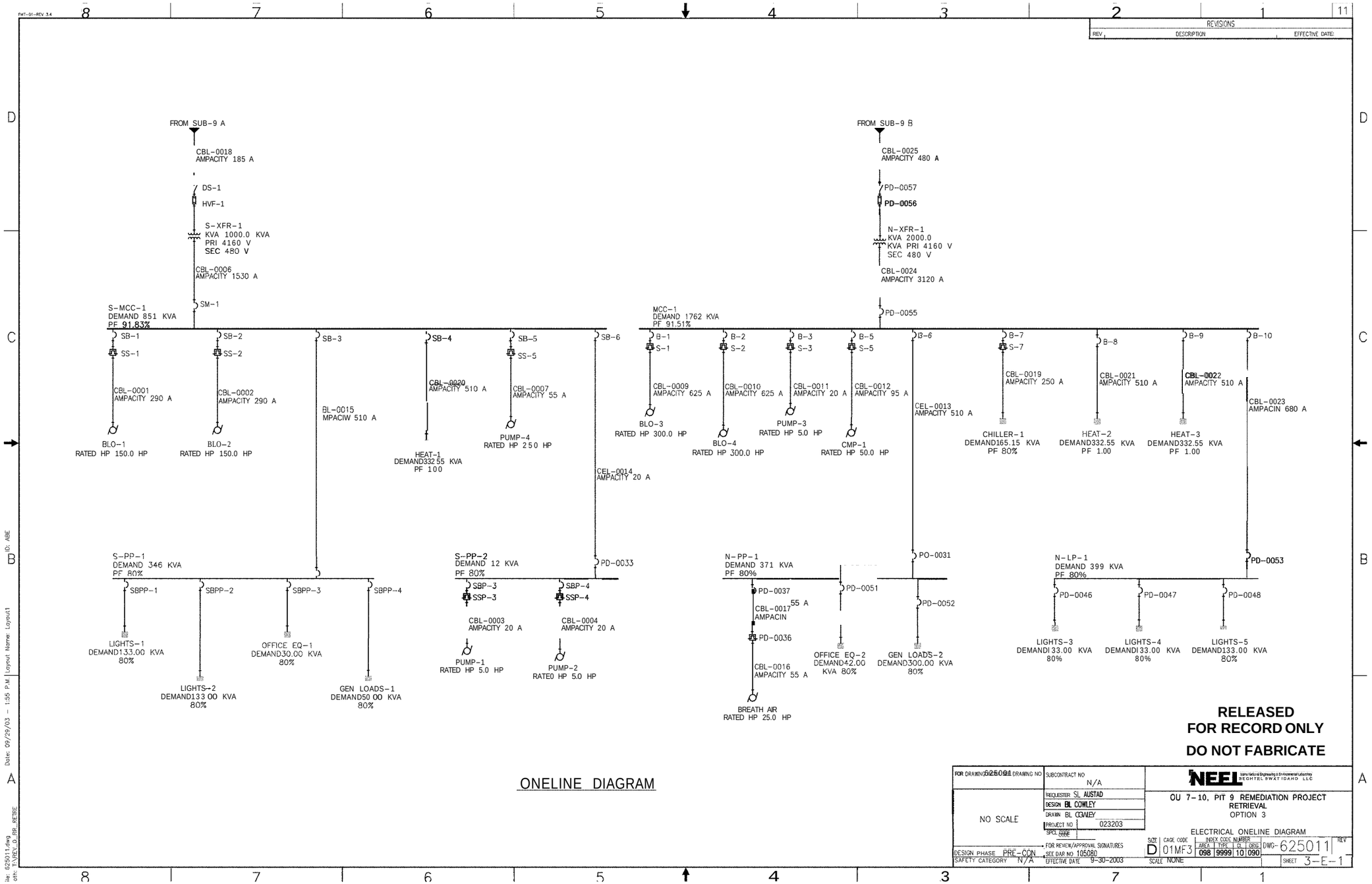
DO NOT FABRICATE

HVAC FLOW DIAGRAM

FOR DRAING INDEX SEE DRAWING NO 625001	SUBCONTRACT NO N/A	INEEL Idaho National Engineering & Environmental Laboratory BECHTEL BWXT IDAHO LLC
NO SCALE	REQUESTER: SL AUSTAD DESIGN BK GROVER DRAWN CA BEHM PROJECT NO. 0203203 SPCL CODE	OU 7-10, PIT 9 REMEDIATION PROJECT RETRIEVAL OPTION 3 HVAC FLOW DIAGRAM
DESIGN PHASE: PRE CON	FOR REVIEW/APPROVAL SIGNATURES SEE DAR NO. 105080	SIZE D · CADE CODE 01MF3 · INDEX CODE NUMBER AREA 098 TYPE 9999 CL 20 DISC 090 · DWG- 625010 · REV
SAFETY CATEGORY: N/A	EFFECTIVE DATE: 9-30-2003	SCALE: NONE · SHEET 3-HV-1


FMT-01-REV 3.4
REVISIONS
REV
DESCRIPTION
EFFECTIVE DATE
FROM SUB-9 A
CBL-0018
AMPACITY 185 A
DS-1
HVF-1
S-XFR-1
KVA 1000.0 KVA
PRI 4160 V
SEC 480 V
CBL-0006
AMPACITY 1530 A
SM-1
S-MCC-1
DEMAND 851 KVA
PF 91.83%
SB-1
SS-1
CBL-0001
AMPACITY 290 A
BLO-1
RATED HP 150.0 HP
SB-2
SS-2
CBL-0002
AMPACITY 290 A
BLO-2
RATED HP 150.0 HP
SB-3
BL-0015
MPACIW 510 A
SB-4
CBL-0020
AMPACITY 510 A
HEAT-1
DEMAND332.55 KVA
PF 100
SB-5
SS-5
CBL-0007
AMPACITY 55 A
PUMP-4
RATED HP 250 HP
SB-6
CEL-0014
AMPACITY 20 A
FROM SUB-9 B
CBL-0025
AMPACITY 480 A
PD-0057
PD-0056
N-XFR-1
KVA 2000.0
KVA PRI 4160 V
SEC 480 V
CBL-0024
AMPACITY 3120 A
PD-0055
MCC-1
DEMAND 1762 KVA
PF 91.51%
B-1
S-1
CBL-0009
AMPACITY 625 A
BLO-3
RATED HP 300.0 HP
B-2
S-2
CBL-0010
AMPACITY 625 A
BLO-4
RATED HP 300.0 HP
B-3
S-3
CBL-0011
AMPACITY 20 A
PUMP-3
RATED HP 5.0 HP
B-5
S-5
CBL-0012
AMPACITY 95 A
CMP-1
RATED HP 50.0 HP
B-6
CEL-0013
AMPACITY 510 A
B-7
S-7
CBL-0019
AMPACITY 250 A
CHILLER-1
DEMAND165.15 KVA
PF 80%
B-8
CBL-0021
AMPACITY 510 A
HEAT-2
DEMAND332.55 KVA
PF 1.00
B-9
CBL-0022
AMPACITY 510 A
HEAT-3
DEMAND332.55 KVA
PF 1.00
B-10
CBL-0023
AMPACIN 680 A
S-PP-1
DEMAND 346 KVA
PF 80%
SBPP-1
LIGHTS-1
DEMAND133.00 KVA
80%
SBPP-2
LIGHTS-2
DEMAND133.00 KVA
80%
SBPP-3
OFFICE EQ-1
DEMAND30.00 KVA
80%
SBPP-4
GEN LOADS-1
DEMAND50.00 KVA
80%
S-PP-2
DEMAND 12 KVA
PF 80%
PD-0033
SBP-3
SSP-3
CBL-0003
AMPACITY 20 A
PUMP-1
RATED HP 5.0 HP
SBP-4
SSP-4
CBL-0004
AMPACITY 20 A
PUMP-2
RATED HP 5.0 HP
N-PP-1
DEMAND 371 KVA
PF 80%
PD-0037
CBL-0017
AMPACIN
55 A
PD-0036
CBL-0016
AMPACITY 55 A
BREATH AIR
RATED HP 25.0 HP
PD-0051
OFFICE EQ-2
DEMAND42.00
KVA 80%
PO-0031
PD-0052
GEN LOADS-2
DEMAND300.00 KVA
80%
N-LP-1
DEMAND 399 KVA
PF 80%
PD-0053
PD-0046
LIGHTS-3
DEMANDI33.00 KVA
80%
PD-0047
LIGHTS-4
DEMANDI33.00 KVA
80%
PD-0048
LIGHTS-5
DEMAND133.00 KVA
80%
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DO NOT FABRICATE
ONELINE DIAGRAM
FOR DRAWING 625011 DRAWING NO
SUBCONTRACT NO
N/A
NO SCALE
REQUESTER SL AUSTAD
DESIGN BL COWLEY
DRAWN BL COWLEY
PROJECT NO 023203
SPCL CODE
NEEL
BECHTEL BWXT IDAHO LLC
OU 7-10, PIT 9 REMEDIATION PROJECT
RETRIEVAL
OPTION 3
ELECTRICAL ONELINE DIAGRAM
FOR REVIEW/APPROVAL SIGNATURES
SEE DAR NO 105080
EFFECTIVE DATE 9-30-2003
DESIGN PHASE PRE-CON
SAFETY CATEGORY N/A
SIZE D
CAGE CODE 01MF3
INDEX CODE NUMBER
AREA TYPE CL ORG
098 9999 10 090
DWG- 625011
REV
SCALE NONE
SHEET 3-E-1
ID: ABE
Date: 09/29/03 - 1:55 P.M. | Layout Name: Layout1
file: 625011.dwg
dim: VREL-0.DRP_RETRE