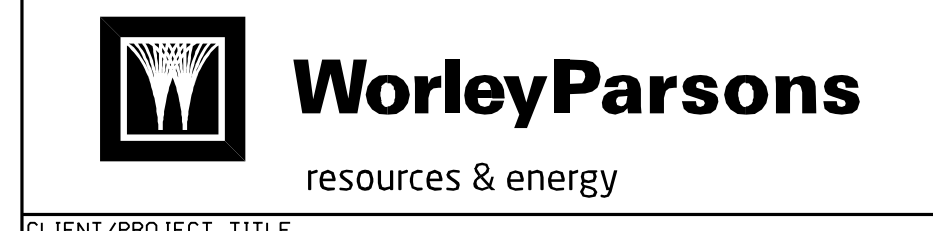


REV	DATE	DESCRIPTION	DRAWN	CHECKED	DESIGNED	ENGINEER/TECH SPECIALIST	LEAD DESIGNER	PROJECT MANAGER	PROJECT
C	03	GENERAL REVISION ISSUED FOR REVIEW AND COMMENT	JEV	JEV/HGE					MH
B	02	GENERAL REVISION ISSUED FOR REVIEW AND COMMENT	JEV	JEV/HGE					MH
A	01	INITIAL ISSUE FOR REVIEW AND COMMENT	JEV	JEV/HGE					MH

PRELIMINARY STATUS DATE REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.  
 APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY JEV	
CHECKED BY	
LEAD DESIGNER	
ENGINEER/TECH SPECIALIST H.G. EISENBISE PROJECT ENGINEERING MANAGER	
PROJECT MANAGER M. HOLDRIDGE	



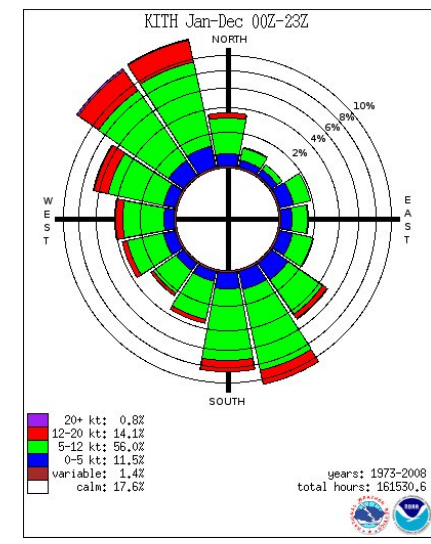
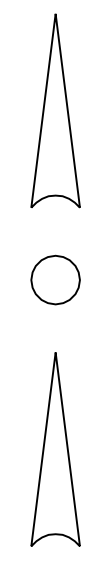
CLIENT/PROJECT TITLE  
 NYSEG  
 SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

GENERAL ARRANGEMENT  
 CYCLE 1  
 AREA PLAN

SCALE 1" = 400'	DRAWING SIZE ARCH D (36" x 24")
WORLDWIDE PARSONS DWG. NO. CAES-1-DW-111-002-001	REV C

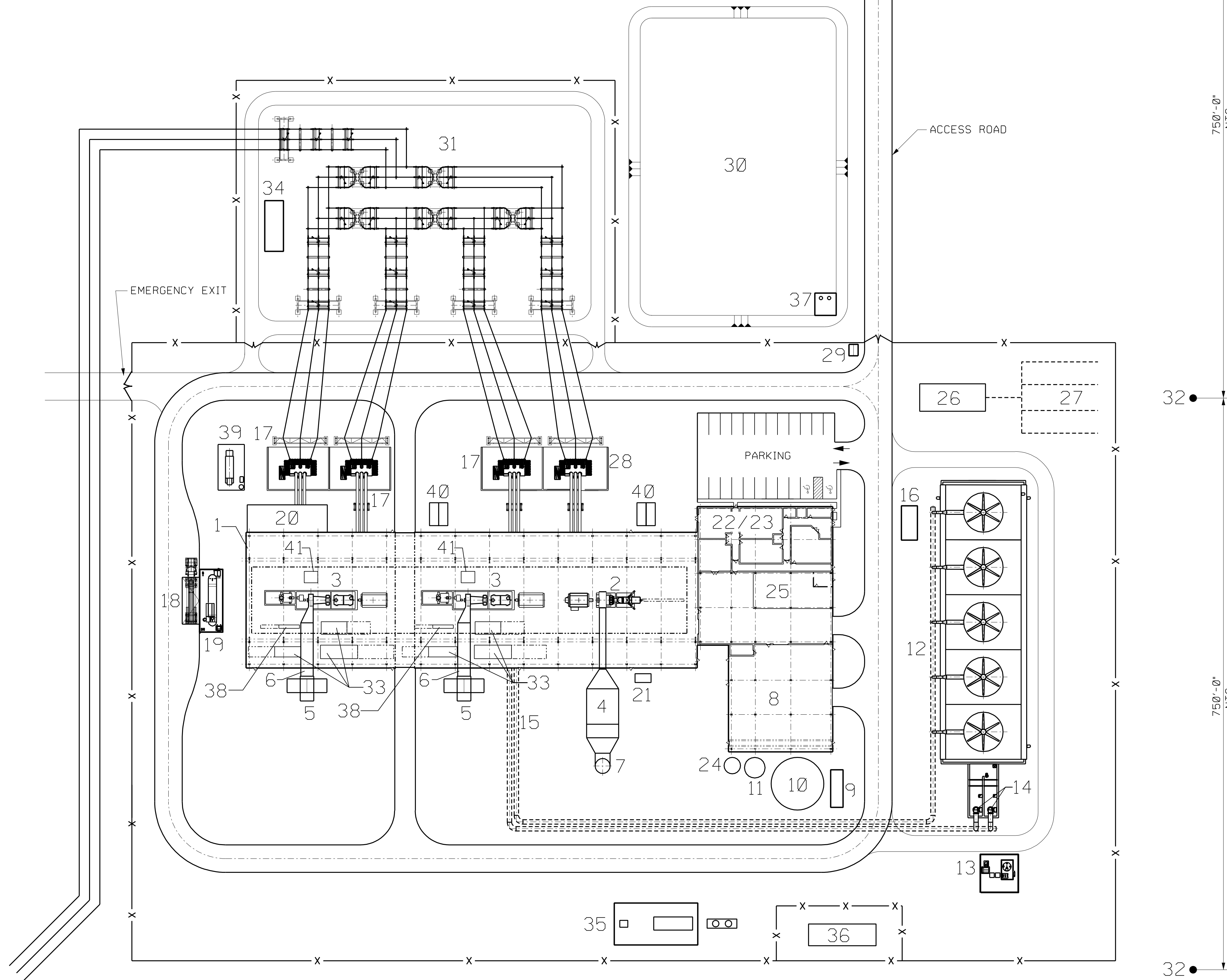
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PLANT NORTH



PLANT DESCRIPTION

- 1 TURBINE/COMPRESSOR BUILDING
- 2 EXPANDER
- 3 COMPRESSOR
- 4 RECUPERATOR
- 5 AIR INLET FILTERS
- 6 AIR INLET DUCT
- 7 STACK
- 8 MECHANICAL EQUIPMENT BLDG.
- 9 FIRE WATER PUMP HOUSE
- 10 SERVICE/FIRE WATER TANK
- 11 DEMIN WATER TANK
- 12 COOLING TOWER
- 13 COOLING TOWER CHEMICAL BLDG.
- 14 CIRC WATER PUMP
- 15 CIRC WATER PIPING
- 16 COOLING TOWER PDC
- 17 TRANSFORMER
- 18 AMMONIA UNLOADING
- 19 AMMONIA STORAGE TANK
- 20 ELECTRICAL PDC
- 21 OIL WATER SEPARATOR
- 22 ADMIN/VISITORS CENTER (2nd FLOOR)
- 23 ADMIN/MAINTENANCE (1st FLOOR)
- 24 POTABLE WATER TANK
- 25 MEZZANINE STORAGE
- 26 SEWAGE SYSTEM
- 27 LEACH FIELD
- 28 STEP UP TRANSFORMER
- 29 GUARD HOUSE
- 30 STORM WATER POND
- 31 SWITCHYARD
- 32 WELL HEAD
- 33 INTERCOOLER
- 34 SWITCHYARD CONTROL BUILDING
- 35 GAS COMPRESSOR
- 36 GAS METERING
- 37 STORM WATER TRANSFER PUMP HOUSE
- 38 AFTER COOLER
- 39 GAS FIRED GENERATOR
- 40 VARIABLE FREQUENCY DRIVE
- 41 LUBE OIL SKID



REV	DATE	DESCRIPTION	DRAWN	CHECKED	DESIGNED	ENGINEER/TECH	LEAD DESIGNER	ENGINEER	PROJECT MANAGER
E	10/26	REV PER LATEST INFORMATION ISSUED FOR REVIEW & COMMENT	JEV	JEVHGE	MH				
D	10/12	REV PER LATEST INFORMATION ISSUED FOR REVIEW & COMMENT	JEV	JEVHGE	MH				
C	09/22	REVISED SWITCHYARD ISSUED FOR REVIEW & COMMENT	JEV	JEVHGE	MH				
B	09/19	REV PER LATEST INFORMATION FOR REVIEW AND COMMENT	JEV	JEVHGE	MH				
A	07/13	INITIAL ISSUE FOR REVIEW AND COMMENT	JEV	JEVHGE	MH				

PRELIMINARY STATUS DATE REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.

APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.

ORIGINATING PERSONNEL PROFESSIONAL ENGINEER'S SEAL

DRAWN BY JEV

CHECKED BY

LEAD DESIGNER J.E. VEEN

ENGINEER/TECH SPECIALIST H.G.EISENBISE

PROJECT ENGINEERING MANAGER

PROJECT MANAGER M. HOLDRIDGE

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ORIGINALLY PREPARED UNDER THE RESPONSIBLE SUPERVISION OF

REL. STATE LIC. NO. DATE

WorleyParsons resources & energy

CLIENT/PROJECT TITLE

NYSEG

SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

GENERAL ARRANGEMENT

CYCLE 1

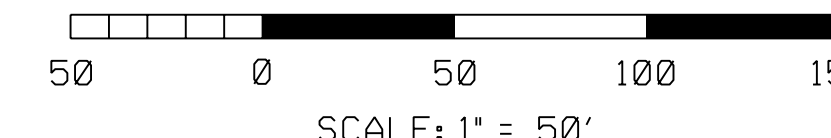
SITE PLAN

SCALE 1"=50'

DRAWING SIZE ARCH D (36' x 24')

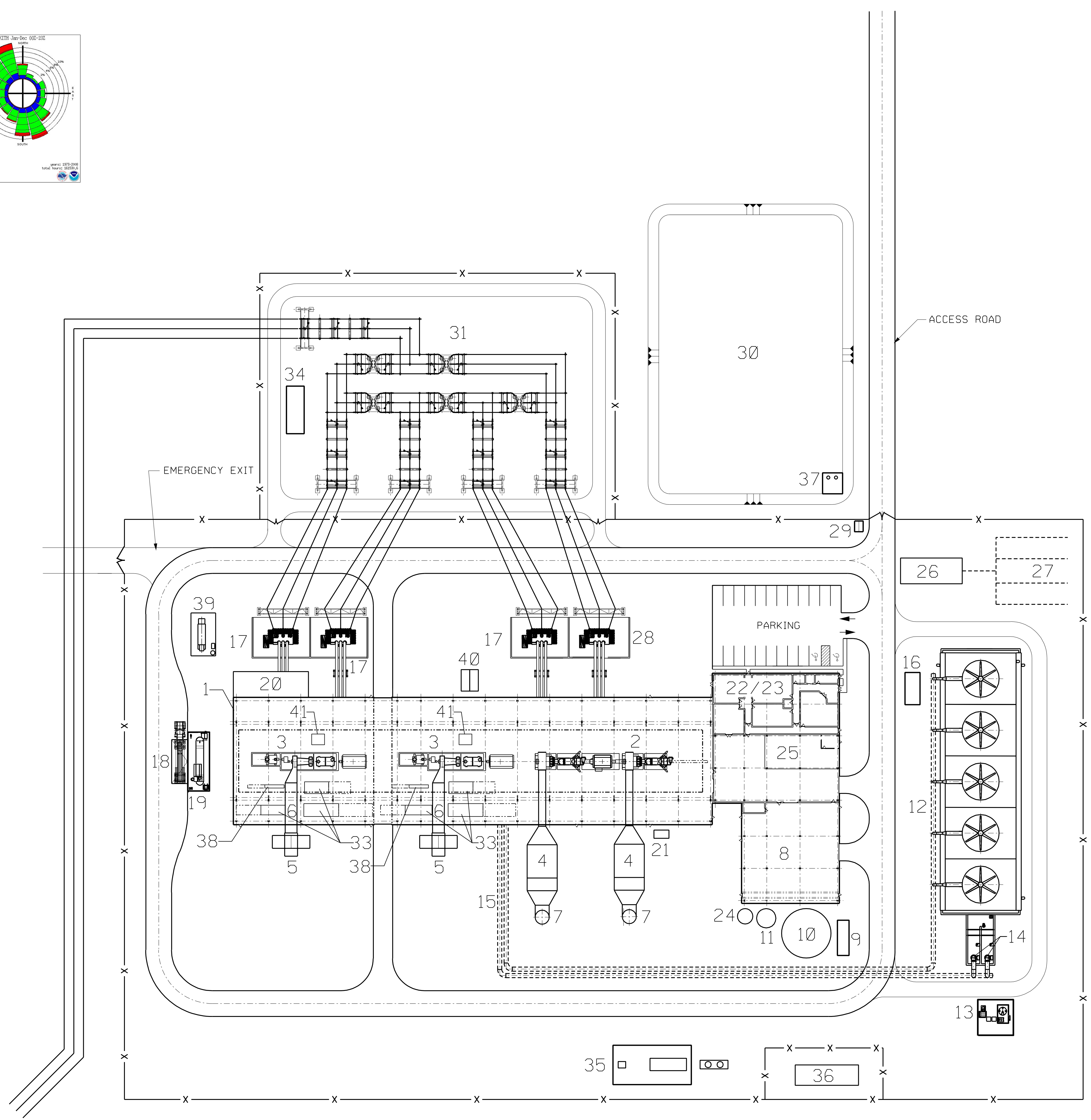
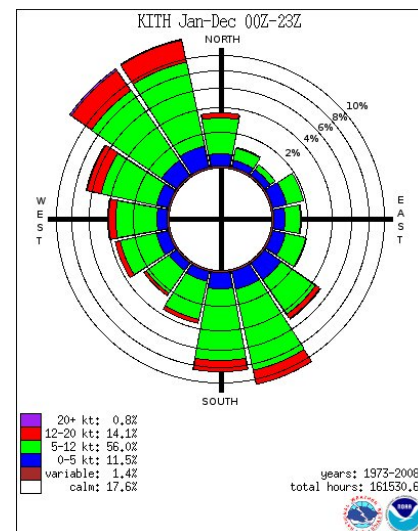
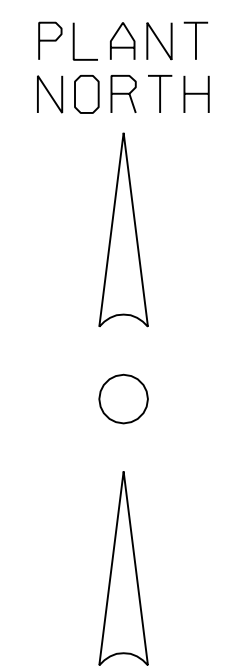
WORLEYPARSONS DWG. NO. CAES-1-DW-111-002-101

REV E



SCALE: 1" = 50'

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**PLANT DESCRIPTION**

- 1 TURBINE/COMPRESSOR BUILDING
- 2 EXPANDER
- 3 COMPRESSOR
- 4 RECUPERATOR
- 5 AIR INLET FILTERS
- 6 AIR INLET DUCT
- 7 STACK
- 8 MECHANICAL EQUIPMENT BLDG.
- 9 FIRE WATER PUMP HOUSE
- 10 SERVICE/FIRE WATER TANK
- 11 DEMIN WATER TANK
- 12 COOLING TOWER
- 13 COOLING TOWER CHEMICAL BLDG.
- 14 CIRC WATER PUMP
- 15 CIRC WATER PIPING
- 16 COOLING TOWER PDC
- 17 TRANSFORMER
- 18 AMMONIA UNLOADING
- 19 AMMONIA STORAGE TANK
- 20 ELECTRICAL PDC
- 21 OIL WATER SEPARATOR
- 22 ADMIN/VISITORS CENTER (2nd FLOOR)
- 23 ADMIN/MAINTENANCE (1st FLOOR)
- 24 POTABLE WATER TANK
- 25 MEZZANINE STORAGE
- 26 SEWAGE SYSTEM
- 27 LEACH FIELD
- 28 STEP UP TRANSFORMER
- 29 GUARD HOUSE
- 30 STORM WATER POND
- 31 SWITCHYARD
- 32 NOT USED
- 33 INTERCOOLER
- 34 SWITCHYARD CONTROL BUILDING
- 35 GAS COMPRESSOR
- 36 GAS METERING
- 37 STORM WATER TRANSFER PUMP HOUSE
- 38 AFTER COOLER
- 39 GAS FIRED GENERATOR
- 40 VARIABLE FREQUENCY DRIVE
- 41 LUBE OIL SKID

REV	DATE	DESCRIPTION	DRAWN	CHECKED	DESIGNED	ENGINEER/TECH SPECIALIST	LEAD DESIGNER	PROJECT ENGINEERING MANAGER	PROJECT MANAGER
B	11	REVISED COMPRESSORS	JEV	JEVHGE	MH				
A	17	INITIAL ISSUE FOR REVIEW AND COMMENT	JEV	JEVHGE	MH				

PRELIMINARY STATUS DATE REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.  
 LDE H.G.EISENBISE 11-17-11

APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.  
 LDE

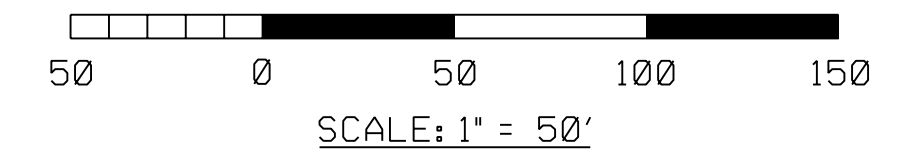
ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY JEV	
CHECKED BY	
LEAD DESIGNER J.E. VEEN	
ENGINEER/TECH SPECIALIST H.G.EISENBISE	
PROJECT ENGINEERING MANAGER	
PROJECT MANAGER M. HOLDRIDGE	

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 WorleyParsons Services Pty Ltd



CLIENT/PROJECT TITLE  
 NYSEG  
 SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

GENERAL ARRANGEMENT  
 CYCLE 1A  
 SITE PLAN



SCALE 1"=50'	DRAWING SIZE ARCH D (36' x 24')
WORLDWIDE DWG. NO. CAES-1-DW-111-002-151	REV B

\\aces-1-dw-111-002-151\_RB.dgn  
 12/1/2011

10 9 8 7 6 5 4 3 2 1



REV	DATE	DESCRIPTION	DRAWN	CHECKED	ENGINEER/TECH SPECIALIST	LEAD DESIGNER	PROJECT MANAGER
B 11	03	GENERAL REVISION ISSUED FOR REVIEW AND COMMENT	JEV	JEV/HGE			MH
A 07	12	INITIAL ISSUE FOR REVIEW AND COMMENT	JEV	JEV/HGE			MH

PRELIMINARY STATUS DATE REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.  
 LDE H.G. EISENBISE 07-12-11

APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.  
 LDE

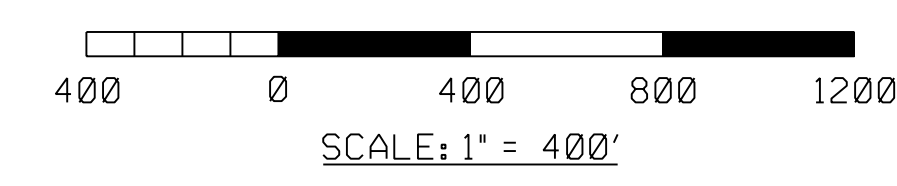
ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY JEV	
CHECKED BY	
LEAD DESIGNER	
ENGINEER/TECH SPECIALIST H.G. EISENBISE	
PROJECT ENGINEERING MANAGER	
PROJECT MANAGER M. HOLDRIDGE	

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 REG. - STATE, LIC. NO. \_\_\_\_\_ DATE: \_\_\_\_\_

CLIENT/PROJECT TITLE  
 NYSEG  
 SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

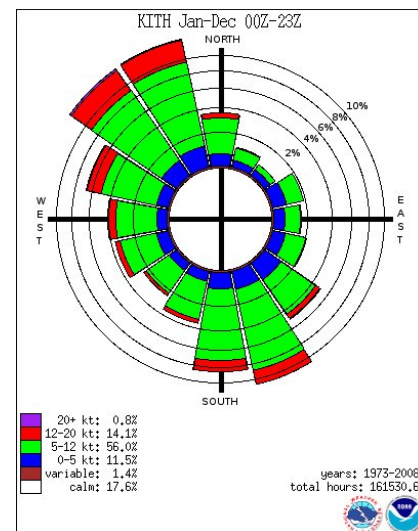
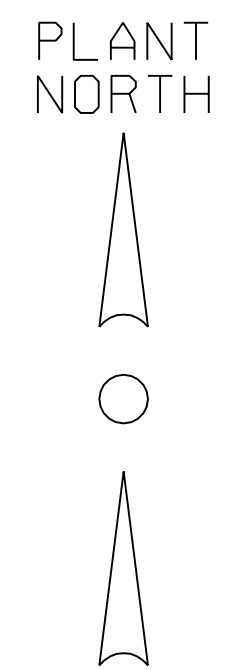
GENERAL ARRANGEMENT  
 CYCLE 2  
 AREA PLAN



SCALE 1"=400'	DRAWING SIZE ARCH D (36' x 24')
WORLEYPARSONS DWG. NO. CAES-1-DW-111-002-002	REV B

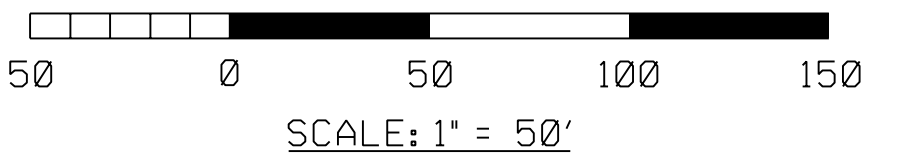
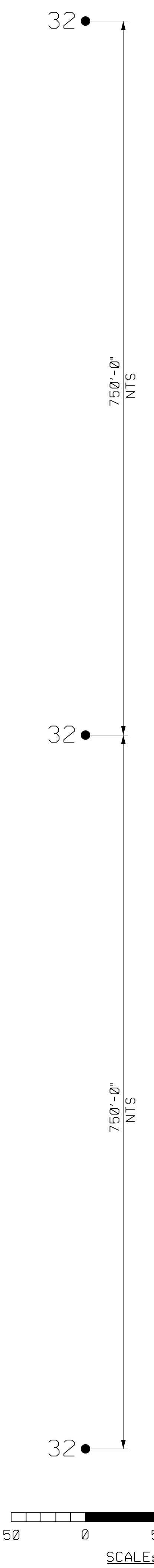
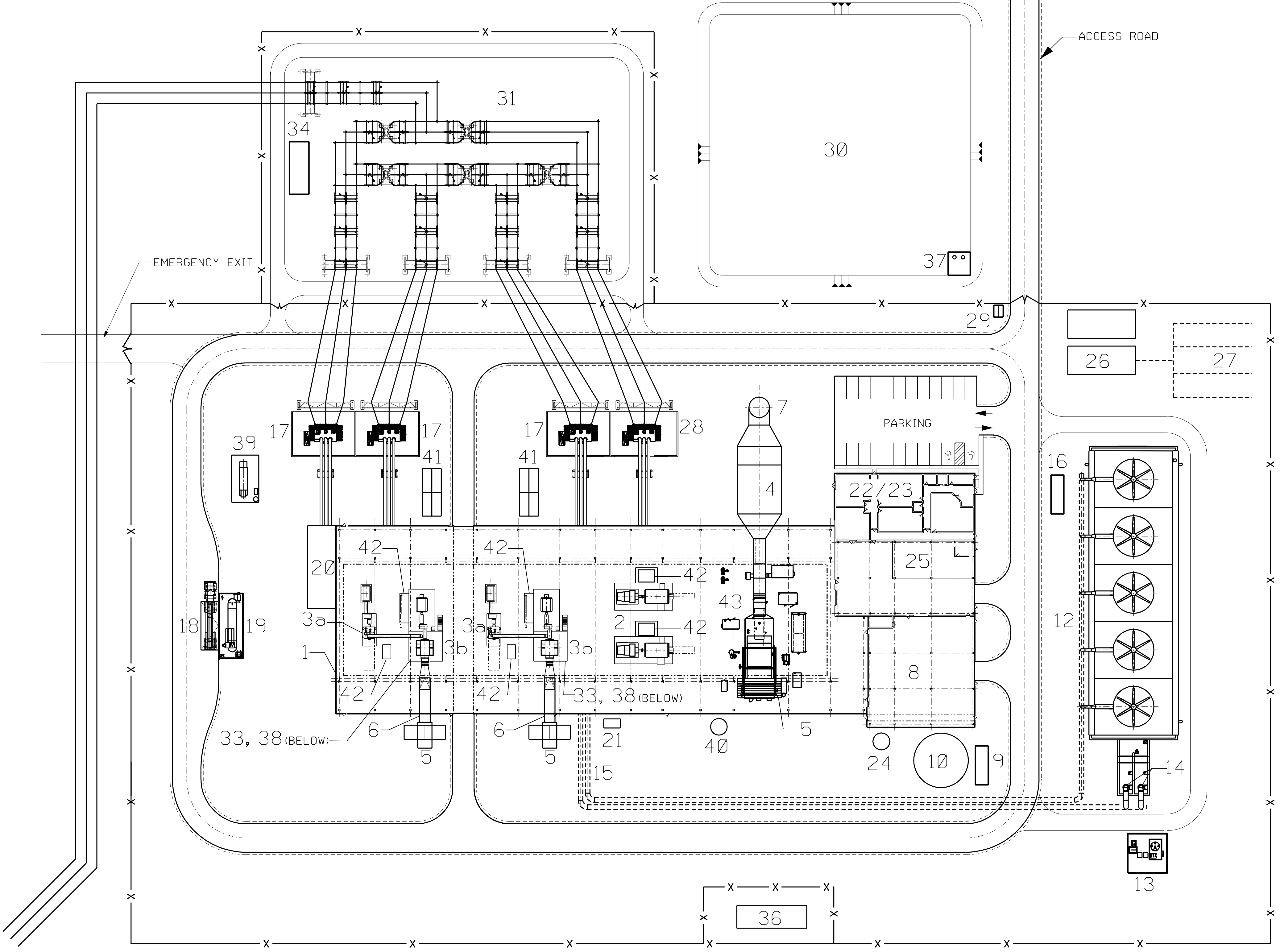
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PLANT DESCRIPTION

- 1 TURBINE/COMPRESSOR BUILDING
- 2 EXPANDERS
- 3a HP COMPRESSOR
- 3b LP COMPRESSOR
- 4 RECUPERATOR
- 5 AIR INLET FILTER
- 6 AIR INLET DUCT
- 7 STACK
- 8 MECHANICAL EQUIPMENT BLDG.
- 9 FIRE WATER PUMP HOUSE
- 10 SERVICE/FIRE WATER TANK
- 11 NOT USED
- 12 COOLING TOWER
- 13 COOLING TOWER CHEMICAL BLDG.
- 14 CIRC WATER PUMP
- 15 CIRC WATER PIPING
- 16 COOLING TOWER PDC
- 17 TRANSFORMERS
- 18 AMMONIA UNLOADING
- 19 AMMONIA STORAGE TANK
- 20 ELECTRICAL PDC
- 21 OIL WATER SEPARATOR
- 22 ADMIN/VISITORS CENTER (2nd FLOOR)
- 23 ADMIN/MAINTENANCE (1st FLOOR)
- 24 POTABLE WATER TANK
- 25 MEZZANINE STORAGE
- 26 SEWAGE SYSTEM
- 27 LEACH FIELD
- 28 STEP UP TRANSFORMER
- 29 GUARD HOUSE
- 30 STORM WATER POND
- 31 SWITCHYARD
- 32 WELL HEAD
- 33 INTERCOOLER
- 34 SWITCHYARD CONTROL BUILDING
- 35 NOT USED
- 36 GAS METERING
- 37 STORM WATER TRANSFER PUMP HOUSE
- 38 AFTER COOLER
- 39 GAS FIRED GENERATOR
- 40 AIR STACK
- 41 VARIABLE FREQUENCY DRIVE
- 42 LUBE OIL SKID
- 43 GAS TURBINE

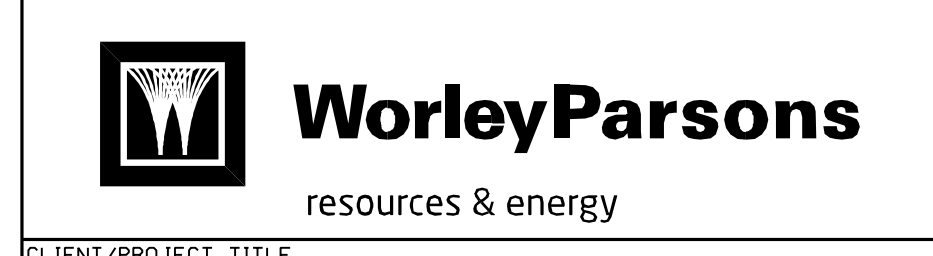


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E	10/12	REV PER LATEST INFORMATION ISSUED FOR REVIEW & COMMENT	JEV	JEV	JEV	JEV	JEV	JEV	JEV	MH
D	09/25	REVISED SWITCHYARD ISSUED FOR REVIEW & COMMENT	JEV	JEV	JEV	JEV	JEV	JEV	JEV	MH
C	09/19	REV PER LATEST INFORMATION ISSUED FOR REVIEW & COMMENT	JEV	JEV	JEV	JEV	JEV	JEV	JEV	MH
B	07/25	FOR REVIEW AND COMMENT	JEV	JEV	JEV	JEV	JEV	JEV	JEV	MH
A	07/13	INITIAL ISSUE FOR REVIEW AND COMMENT	JEV	JEV	JEV	JEV	JEV	JEV	JEV	MH

PRELIMINARY STATUS DATE REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.

APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY JEV	
CHECKED BY	
LEAD DESIGNER J.E. VEEN	
ENGINEER/TECH SPECIALIST H.G. EISENBISE	
PROJECT ENGINEERING MANAGER	
PROJECT MANAGER M. HOLDRIDGE	



CLIENT/PROJECT TITLE  
NYSEG  
SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

GENERAL ARRANGEMENT  
CYCLE 2  
SITE PLAN

SCALE	DRAWING SIZE	REV
1"=50'	ARCH D (36' x 24')	F
CAES-1-DW-111-002-201		

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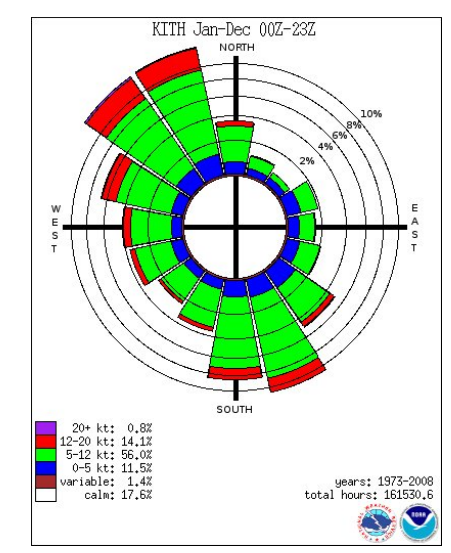
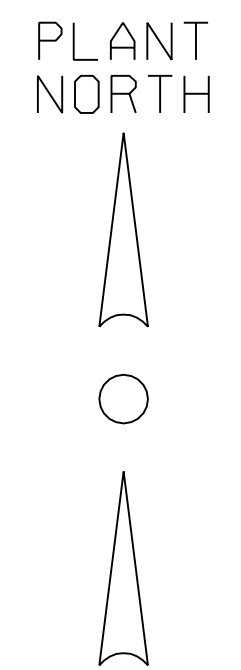
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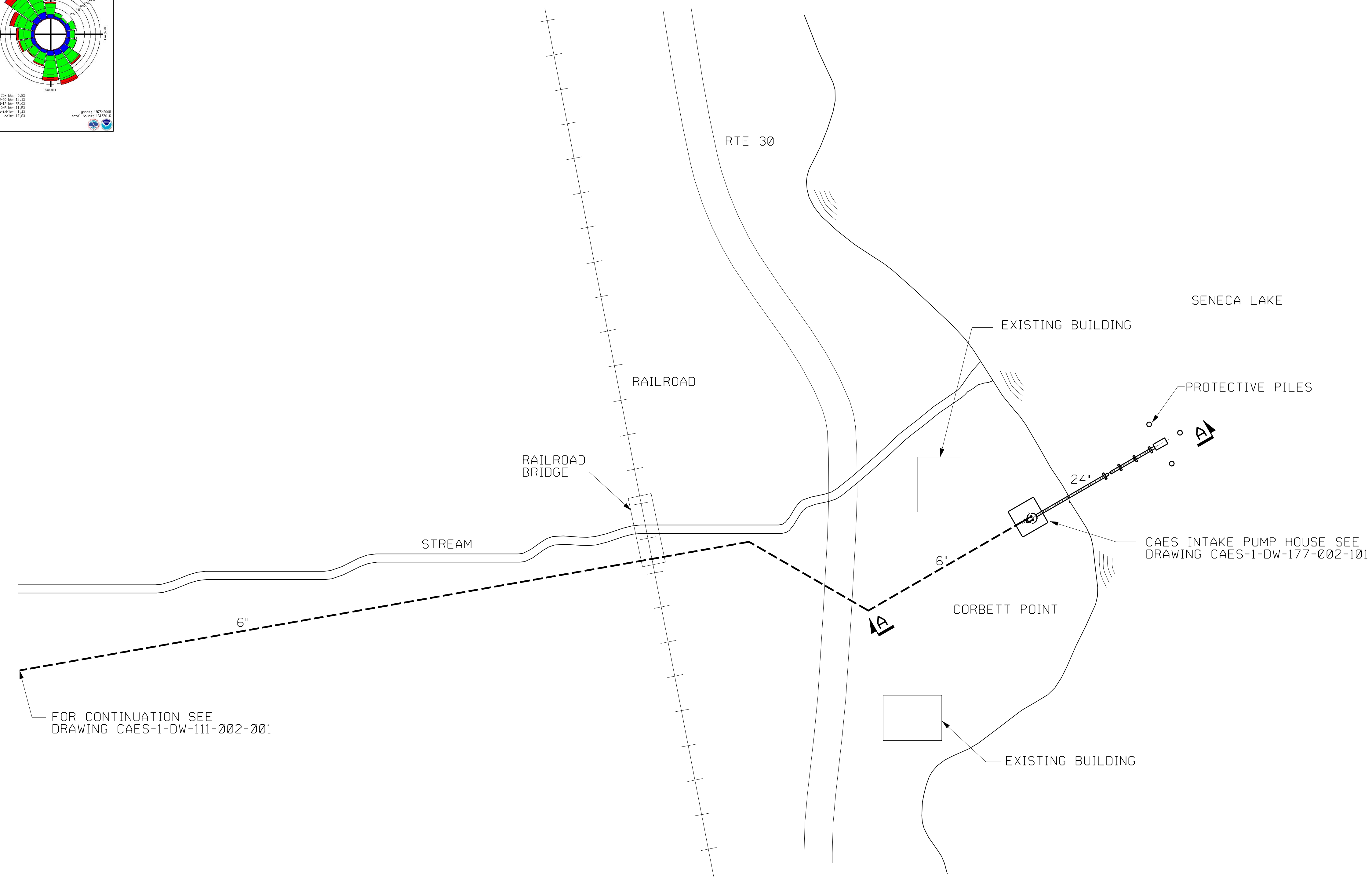
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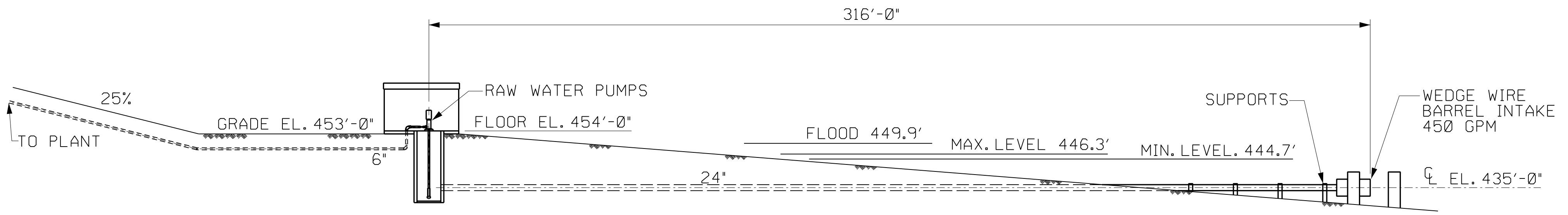
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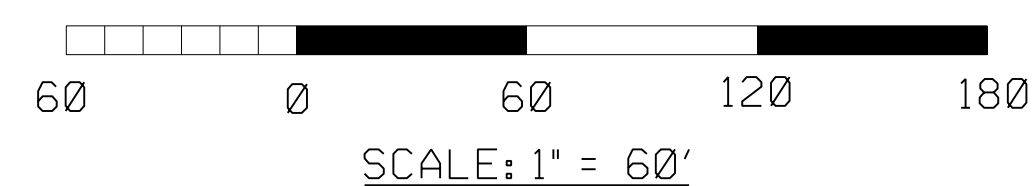
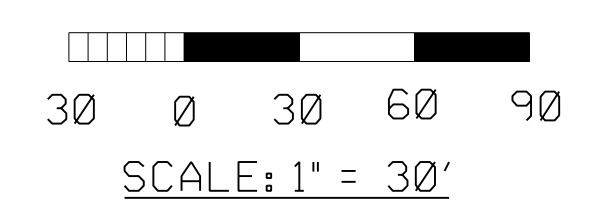


FOR CONTINUATION SEE DRAWING CAES-1-DW-111-002-001

PLAN  
SCALE: 1"=60'



SECTION A-A  
SCALE: 1"=30'



REV	DATE	DESCRIPTION	CHECKED	DESIGNED	ENGINEER	LEAD DES	PROJECT MANAGER
A	08/29/11	INITIAL ISSUE FOR REVIEW AND COMMENT	JEV	JEV/HGE			MH

PRELIMINARY STATUS DATE REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.  
 APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY JEV	
CHECKED BY	
LEAD DESIGNER J.E. VEEN	
ENGINEER/TECH SPECIALIST H.G. EISENBISE	
PROJECT ENGINEERING MANAGER	
PROJECT MANAGER M. HOLDRIDGE	



CLIENT/PROJECT TITLE  
 NYSEG  
 SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

GENERAL ARRANGEMENT  
 INTAKE PUMP HOUSE  
 SITE PLAN

SCALE AS NOTED	DRAWING SIZE ARCH D (36" x 24")
WORLDWIDE PARSONS DWG. NO. CAES-1-DW-111-002-103	REV A

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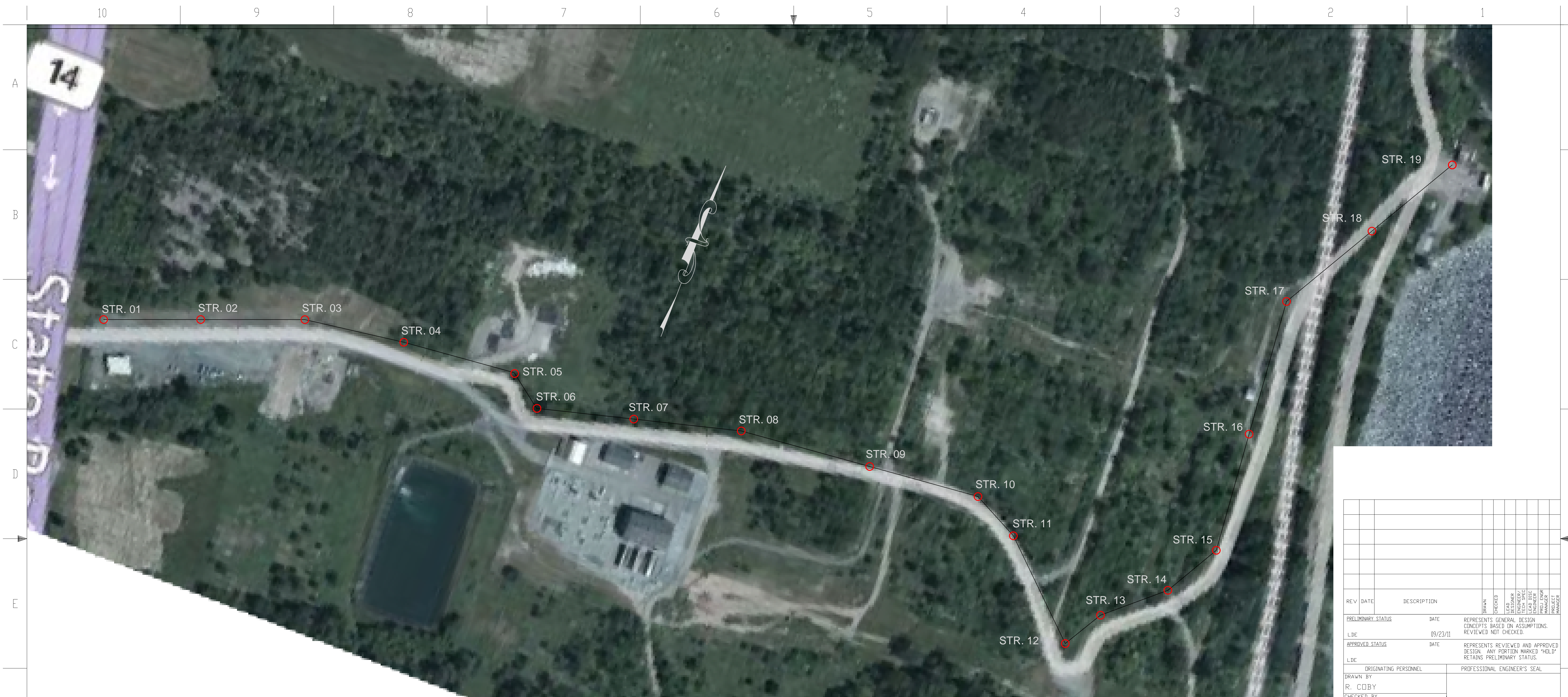
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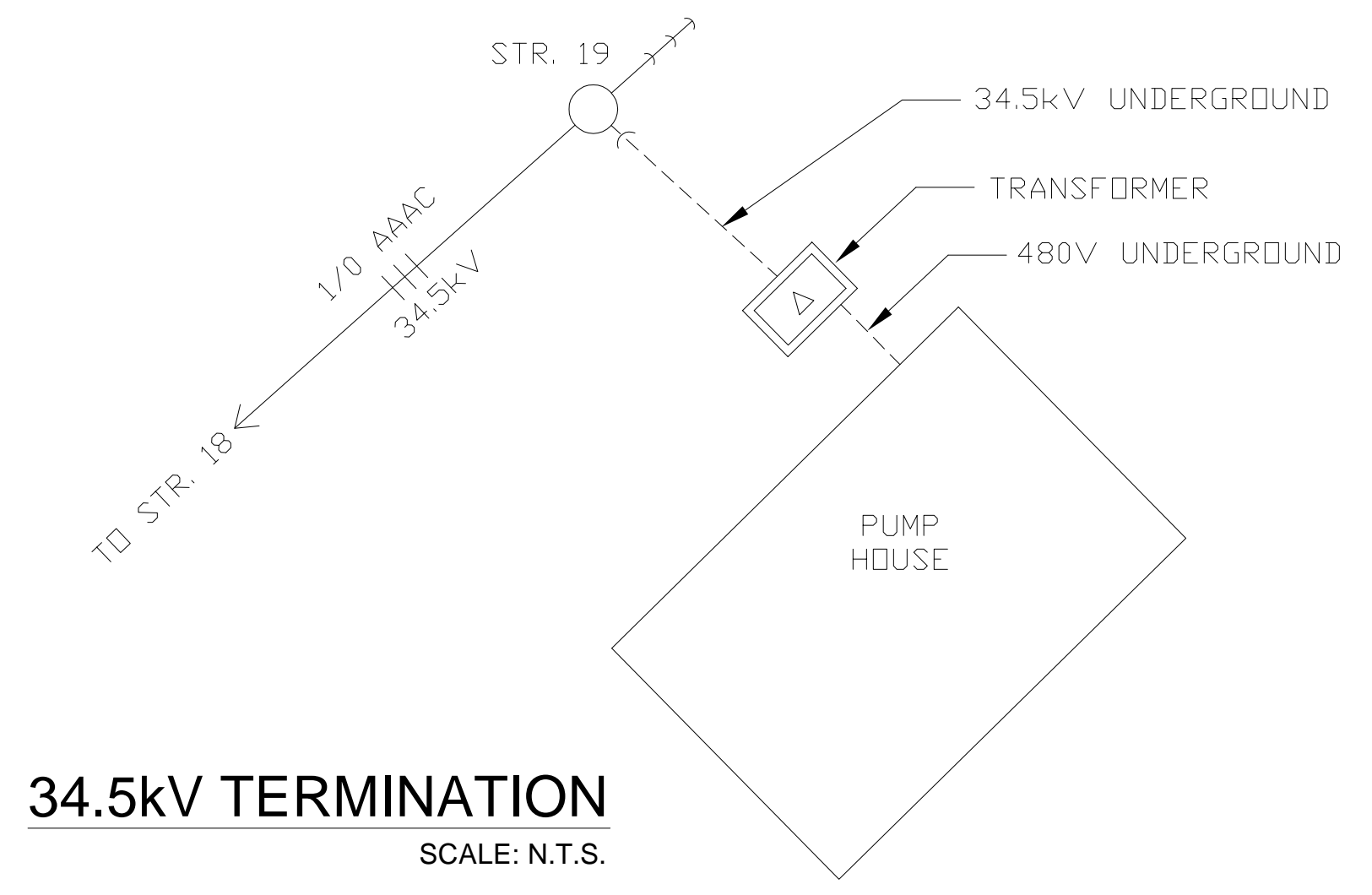
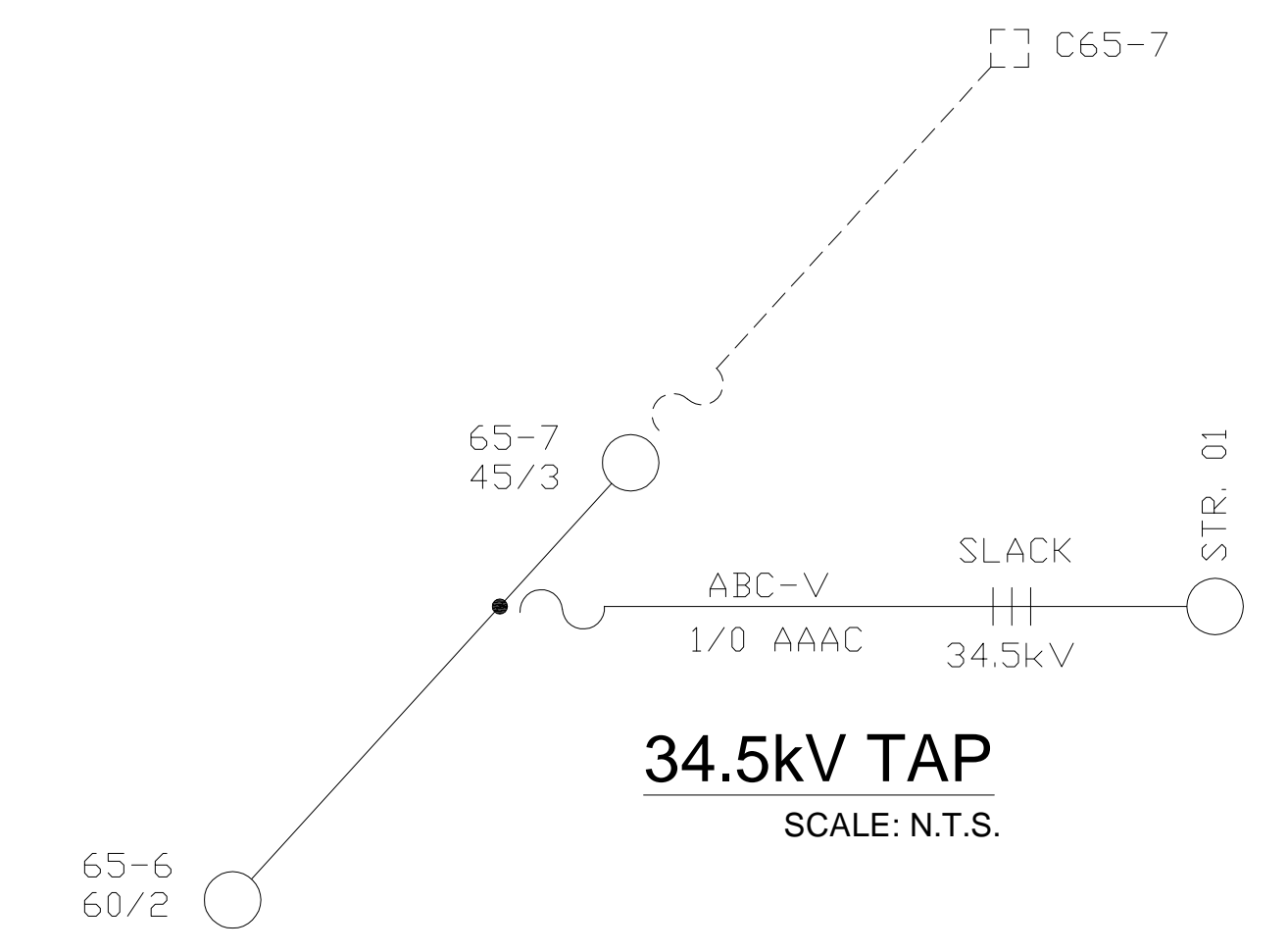


REV	DATE	DESCRIPTION	CHECKED	DRAWN	DESIGNER	ENGINEER/TECH SPECIALIST	PROJECT MANAGER
PRELIMINARY STATUS	DATE	REPRESENTS GENERAL DESIGN CONCEPTS BASED ON ASSUMPTIONS. REVIEWED NOT CHECKED.					
L.DE	09/23/11						
APPROVED STATUS	DATE	REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.					
L.DE							
ORIGINATING PERSONNEL				PROFESSIONAL ENGINEER'S SEAL			
DRAWN BY R. COBY							
CHECKED BY							
LEAD DESIGNER							
ENGINEER/TECH SPECIALIST R. COBY							
PROJECT ENGINEERING MANAGER W. BILENKI							
PROJECT MANAGER							

**GENERAL NOTES**

**PROJECT DESCRIPTION**  
 NEW 34.5kV FEEDER FOR CAES NATURAL WATER PUMPING PLANT. FEEDER WILL BE LOCATED JUST TO THE NORTH OF ACCESS ROAD

**DESIGN CRITERIA**  
 VOLTAGE 34.5kV



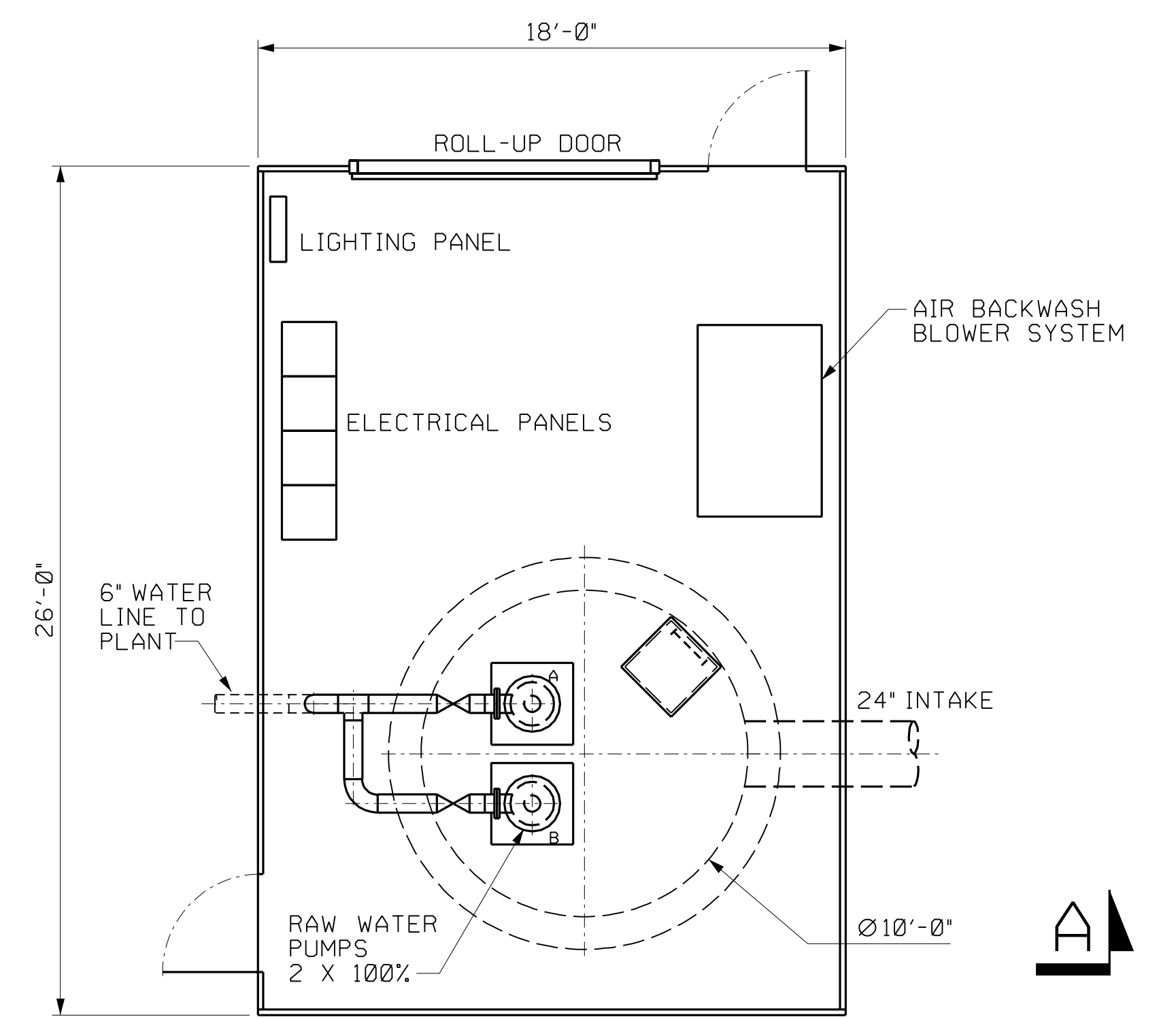
**WorleyParsons**  
resources & energy

CLIENT/PROJECT TITLE  
 NYSEG  
 SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

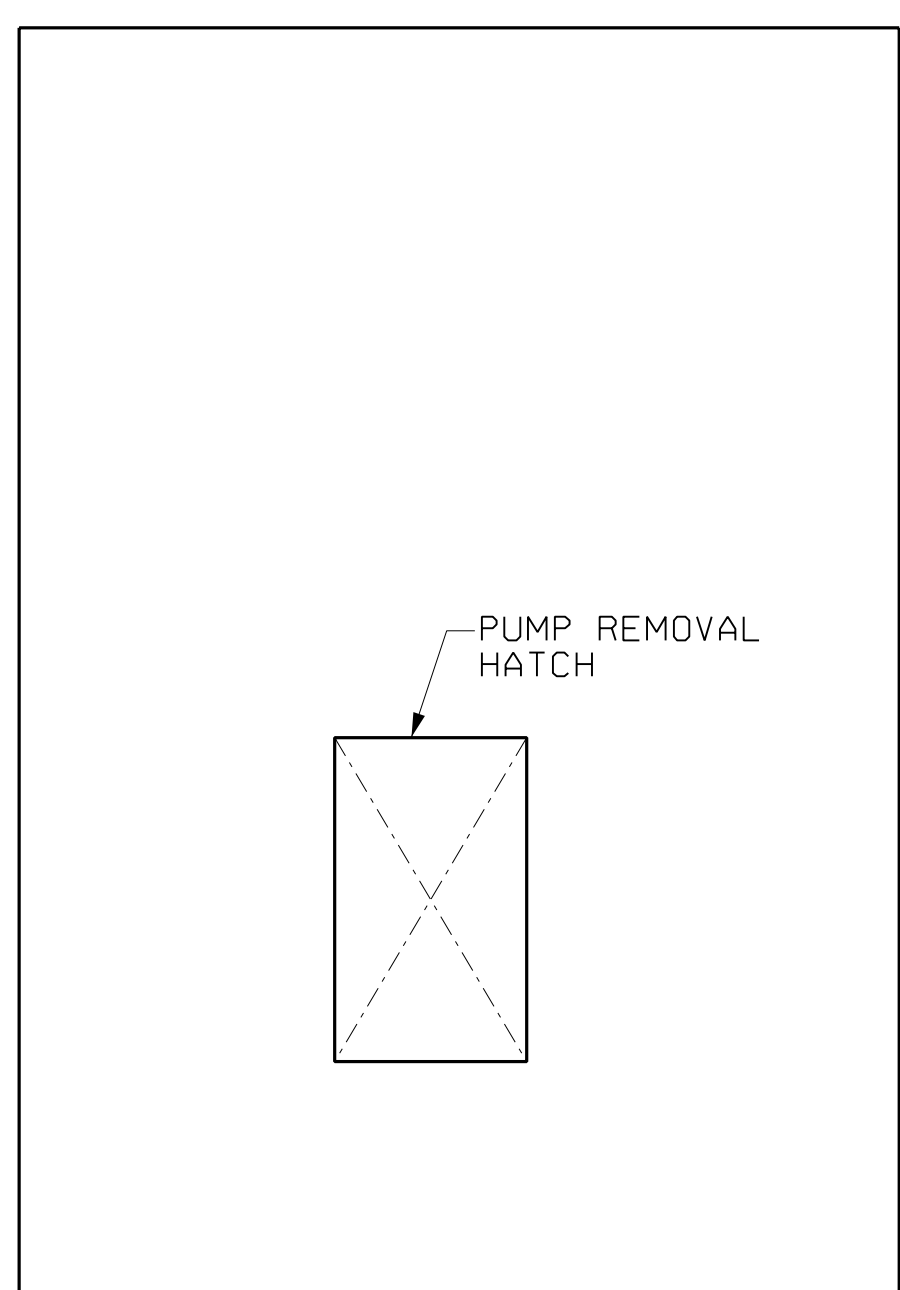
GENERAL ARRANGEMENT  
 34.5kV Feeder  
 NATURAL WATER PUMPING PLANT

SCALE: As Noted      DRAWING SIZE: ARCH D (36" x 24")  
 WORLEYPARSONS DWG. NO. CAES-1-DW-623-002-001      REV: A

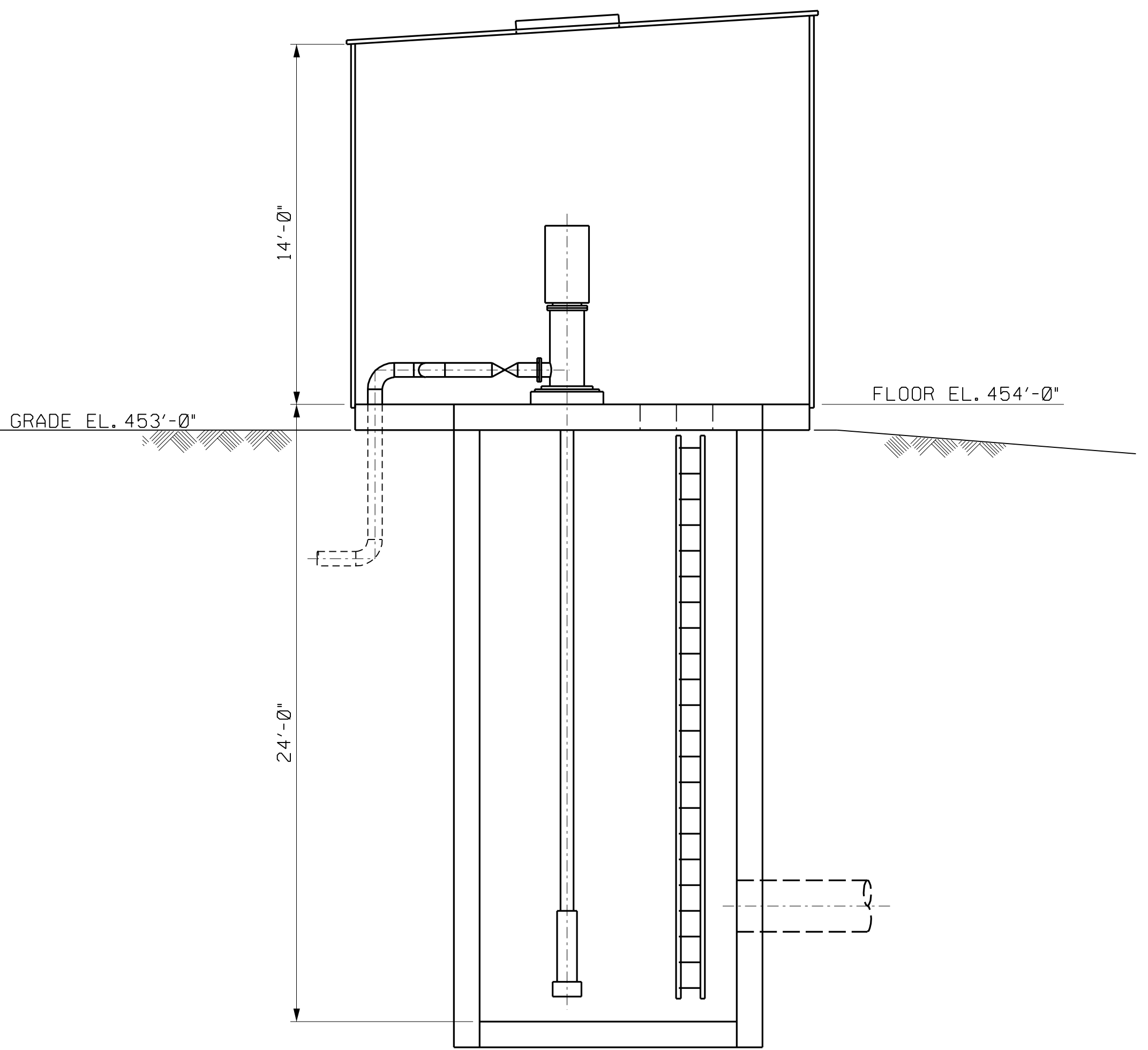
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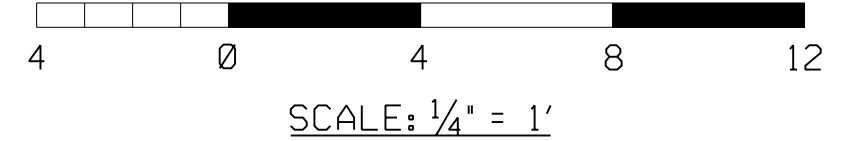
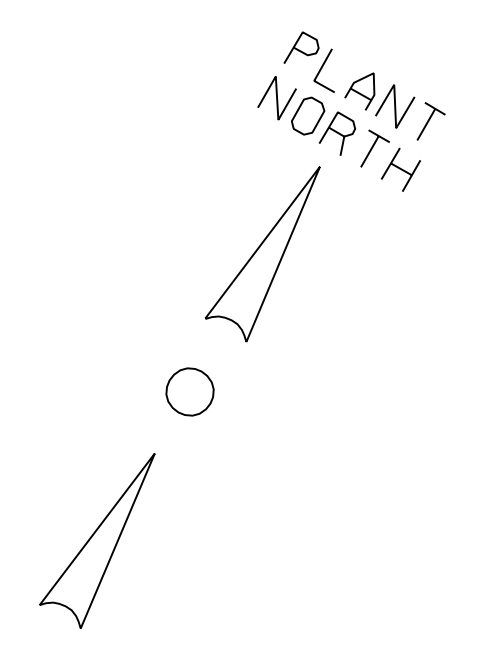
FLOOR PLAN



ROOF PLAN



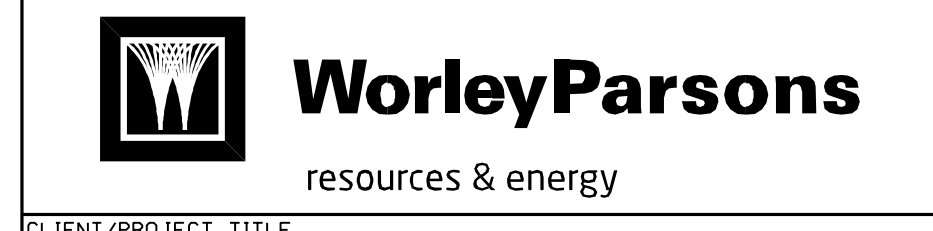
SECTION A-A




REV	DATE	DESCRIPTION	DRAWN	CHECKED	DESIGNED	ENGINEER/TECH	LEAD DESIGNER	ENGINEER	LEAD ENGINEER	PROJECT MANAGER	PROJECT MANAGER
A	08/29/11	INITIAL ISSUE FOR REVIEW AND COMMENT	JEV	HGE	MH						

PRELIMINARY STATUS DATE INFORMATION ONLY - NOT TO BE USED FOR CONSTRUCTION.  
 APPROVED STATUS DATE REPRESENTS REVIEWED AND APPROVED DESIGN. ANY PORTION MARKED "HOLD" RETAINS PRELIMINARY STATUS.

ORIGINATING PERSONNEL	PROFESSIONAL ENGINEER'S SEAL
DRAWN BY JEV	
CHECKED BY	
LEAD DESIGNER	
ENGINEER/TECH SPECIALIST H.G. EISENBISE PROJECT ENGINEERING MANAGER	
PROJECT MANAGER M. HOLDRIDGE	
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CLIENT/PROJECT TITLE  
 NYSEG  
 SENECA COMPRESSED AIR ENERGY STORAGE (CAES) PROJECT

GENERAL ARRANGEMENT  
 RAW WATER PUMPHOUSE

SCALE	DRAWING SIZE
1/4"=1'	ARCH D (36' x 24')
WORLEYPARSONS DWG. NO. <b>CAES-1-DW-177-002-101</b> REV <b>A</b>	

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