

PANELBOARD SCHEDULE													
PANEL: 3114PP11		PROJECT: NAMPA WWTP PHASE 1 UPGRADES - PROJECT GROUP A											
VOLTAGE (L-L): 480		PHASE: 3		WIRE: 3		AMPERE RATING: 250		SC RATING: 35 KAIC					
ENTRY: TOP		MOUNTING: SURFACE		MAIN CIRCUIT BREAKER: 225		MAX AVAILABLE FAULT CURRENT:							
LOADS: PHASE A: 30814		LOAD TYPES: 1 = LIGHTING		TOTAL CALCULATED LOAD AMPS: 118.7		REMARKS:							
PHASE B: 30814		2 = RECEPTACLE											
PHASE C: 30814		3 = MISC											
TOTAL: 92442		4 = MOTOR											
LOAD (VA)	LOAD SERVED	LOAD TYPE	AMPS/POLES	CKT NO	PHASE	CKT NO	AMPS/POLES	LOAD TYPE	LOAD SERVED	LOAD (VA)			
544	LIGHTING - AERATION BASIN 3	1	20 3	1	A	2	20 3	4	AB1 VALVE ACTUATORS 4475 & 4439	2800			
544	-	1	- - 3	3	B	4	- - 4	-	-	2800			
544	-	1	- - 5	5	C	6	- - 4	-	-	2800			
2800	AB1 VALVE ACTUATORS 4463 & 4464	4	20 3	7	A	8	20 3	4	AB1 VALVE ACTUATORS 4421, 4422, 4423, 4424, 4425	1250			
2800	-	4	- - 9	9	B	10	- - 4	-	-	1250			
2800	-	4	- - 11	11	C	12	- - 4	-	-	1250			
2800	AB2 VALVE ACTUATORS 4476 & 4440	4	20 3	13	A	14	20 3	4	AB2 VALVE ACTUATORS 4466 & 4465	2800			
2800	-	4	- - 15	15	B	16	- - 4	-	-	2800			
2800	-	4	- - 17	17	C	18	- - 4	-	-	2800			
1250	AB2 VALVE ACTUATORS 4426, 4427, 4428, 4429, 4430	4	20 3	19	A	20	30 3	3	OUTDOOR CONDENSING UNIT (3098CU1)	8400			
1250	-	4	- - 21	21	B	22	- - 3	-	-	8400			
1250	-	4	- - 23	23	C	24	- - 3	-	-	8400			
1700	INDOOR FANCOIL UNIT (3097FCU1)	3	15 3	25	A	26	20 3	4	PEP OUTLET VALVE ACTUATORS 3104, 3105, & 3106	4200			
1700	-	3	- - 27	27	B	28	- - 4	-	-	4200			
1700	-	3	- - 29	29	C	30	- - 4	-	-	4200			
4200	PEPS TO AB VALVE ACTUATORS 3411, 3412, & 3413	4	20 3	31	A	32	20 3	4	PEP OUTLET VALVE ACTUATORS (FUTURE)	-			
4200	-	4	- - 33	33	B	34	- - 4	-	-	-			
4200	-	4	- - 35	35	C	36	- - 4	-	-	-			
-	PEPS TO AB VALVE ACTUATORS (FUTURE)	4	20 3	37	A	38	20 3	1	LIGHTING - PEPS	70			
-	-	4	- - 39	39	B	40	- - 1	-	-	70			
-	-	4	- - 41	41	C	42	- - 1	-	-	70			

	LIGHTING	RECPT	MISC.	MOTOR	TOTAL LOAD
CONNECTED VA	1,842	0	24,300	66,300	92,442
DEMAND FACTOR	SEE NOTE 4	SEE NOTE 1	1.00	SEE NOTE 2	
DEMAND VA	737	0	24,300	67,350	92,387
LOADING FOR O.C.P.	921	0	30,375	67,350	98,646

- NOTES
- DEMAND FACTOR: 1ST 10kVA AT 100%; OVER 10kVA AT 50%.
 - LARGEST MOTOR LOAD AT 125%; ALL OTHERS AT 100%.
 - INDICATES 30mA GFI CIRCUIT BREAKER
 - DEMAND FACTOR: 1ST 50kVA AT 40%; OVER 50kVA AT 20%.

PANELBOARD SCHEDULE													
PANEL: 3118LP11		PROJECT: NAMPA WWTP PHASE 1 UPGRADES - PROJECT GROUP A											
VOLTAGE (L-L): 208		PHASE: 3		WIRE: 4		AMPERE RATING: 225		SC RATING: 65 KAIC					
ENTRY: TOP		MOUNTING: SURFACE		MAIN CIRCUIT BREAKER: 175		MAX AVAILABLE FAULT CURRENT:							
LOADS: PHASE A: 10160		LOAD TYPES: 1 = LIGHTING		TOTAL CALCULATED LOAD AMPS: 90.8		REMARKS:							
PHASE B: 8230		2 = RECEPTACLE											
PHASE C: 7790		3 = MISC											
TOTAL: 26180		4 = MOTOR											
LOAD (VA)	LOAD SERVED	LOAD TYPE	AMPS/POLES	CKT NO	PHASE	CKT NO	AMPS/POLES	LOAD TYPE	LOAD SERVED	LOAD (VA)			
540	RECEPTACLES, PEPS ELECTRICAL BLDG	2	20 1	1	A	2	30 3	3	ELECTRIC UNIT HEATER (3108UHPEB)	2900			
1315	AB1 HEAT TRACE	3	30 2	3 ■	B	4	- - 3	-	-	2900			
1315	-	3	- - 5	5	C	6	- - 3	-	-	2900			
1315	AB2 HEAT TRACE	3	30 2	7 ■	A	8	30 2	3	AB3 HEAT TRACE	1315			
1315	-	3	- - 9	9	B	10	- - 3	-	-	1315			
1695	PEPS HEAT TRACE (SEC. INFLUENT, SEAL WATER)	3	30 2	11 ■	C	12	30 2	3	PEPS HEAT TRACE (PUMP OUTLETS)	1395			
1695	-	3	- - 13	13	A	14	- - 3	-	-	1395			
100	HVAC MASTER CONTROL PANEL	3	15 1	15	B	16	30 2	3	SEC. CLARIFIER METER VAULTS HEAT TRACE	485			
-	AB1 EFFLUENT MIXER PIPE HEAT TRACE (FUTURE)	3	30 2	17 ■	C	18	- - 3	-	-	485			
-	-	3	- - 19	19	A	20	30 2	3	AB3 EFFLUENT MIXER PIPE HEAT TRACE (FUTURE)	-			
-	AB2 EFFLUENT MIXER PIPE HEAT TRACE (FUTURE)	3	30 2	21 ■	B	22	- - 3	-	-	-			
-	-	3	- - 23	23	C	24	30 2	3	PEPS HEAT TRACE (FUTURE)	-			
1000	NO. 4 WATER PUMP STATION PHOS. ANALYZER	3	15 1	25	A	26	- - 3	-	-	-			
800	AB3 RECEPTACLES	2	20 1	27	B	28	20 1	1	SPARE	-			
-	SPARE	20	1	29	C	30	20 1	1	SPARE	-			
-	SPARE	20	1	31	A	32	20 1	1	SPARE	-			
-	SPARE	20	1	33	B	34	20 1	1	SPARE	-			
-	SPARE	20	1	35	C	36	20 1	1	SPARE	-			
-	SPACE			37	A	38			SPACE	-			
-	SPACE			39	B	40			SPACE	-			
-	SPACE			41	C	42			SPACE	-			

	LIGHTING	RECPT	MISC.	MOTOR	TOTAL LOAD
CONNECTED VA	0	1,340	24,840	0	26,180
DEMAND FACTOR	SEE NOTE 4	SEE NOTE 1	1.00	SEE NOTE 2	
DEMAND VA	0	1,340	24,840	0	26,180
LOADING FOR O.C.P.	0	1,675	31,050	0	32,725

- NOTES
- DEMAND FACTOR: 1ST 10kVA AT 100%; OVER 10kVA AT 50%.
 - LARGEST MOTOR LOAD AT 125%; ALL OTHERS AT 100%.
 - INDICATES 30mA GFI CIRCUIT BREAKER
 - DEMAND FACTOR: 1ST 50kVA AT 40%; OVER 50kVA AT 20%.

PANELBOARD SCHEDULE													
PANEL: 3115PP12		PROJECT: NAMPA WWTP PHASE 1 UPGRADES - PROJECT GROUP A											
VOLTAGE (L-L): 480		PHASE: 3		WIRE: 3		AMPERE RATING: 250		SC RATING: 35 KAIC					
ENTRY: TOP		MOUNTING: SURFACE		MAIN CIRCUIT BREAKER: 225		MAX AVAILABLE FAULT CURRENT:							
LOADS: PHASE A: 17970		LOAD TYPES: 1 = LIGHTING		TOTAL CALCULATED LOAD AMPS: 66.1		REMARKS:							
PHASE B: 17970		2 = RECEPTACLE											
PHASE C: 17970		3 = MISC											
TOTAL: 53910		4 = MOTOR											
LOAD (VA)	LOAD SERVED	LOAD TYPE	AMPS/POLES	CKT NO	PHASE	CKT NO	AMPS/POLES	LOAD TYPE	LOAD SERVED	LOAD (VA)			
2800	AB3 VALVE ACTUATORS 4477 & 4441	4	20 3	1	A	2	20 3	4	AB3 VALVE ACTUATORS 4470 & 4469	2800			
2800	-	4	- - 3	3	B	4	- - 4	-	-	2800			
2800	-	4	- - 5	5	C	6	- - 4	-	-	2800			
1250	AB3 VALVE ACTUATORS 4431, 4432, 4433, 4434, 4435	4	15 3	7	A	8	20 3	4	AB3 EFFLUENT BOX GATE ACTUATOR 4480	4160			
1250	-	4	- - 9	9	B	10	- - 4	-	-	4160			
1250	-	4	- - 11	11	C	12	- - 4	-	-	4160			
4160	COLLECTION BOX 3 GATE ACTUATOR 3126	4	20 3	13	A	14	20 3	4	COLLECTION BOX 3 GATE ACTUATORS (FUTURE)	-			
4160	-	4	- - 15	15	B	16	- - 4	-	-	-			
4160	-	4	- - 17	17	C	18	- - 4	-	-	-			
-	AB1 EFFLUENT BOX GATE ACTUATOR (FUTURE)	4	20 3	19	A	20	20 3	4	AB2 EFFLUENT BOX GATE ACTUATOR (FUTURE)	-			
-	-	4	- - 21	21	B	22	- - 4	-	-	-			
-	-	4	- - 23	23	C	24	- - 4	-	-	-			
-	SPACE			25	A	26	20 3	4	TFSE VALVE ACTUATORS 3110 & 3111	2800			
-	SPACE			27	B	28	- - 4	-	-	2800			
-	SPACE			29	C	30	- - 4	-	-	2800			
-	SPACE			31	A	32	20 3		SPACE	-			
-	SPACE			33	B	34	- -		-	-			
-	SPACE			35	C	36	- -		-	-			
-	SPACE			37	A	38			SPACE	-			
-	SPACE			39	B	40			SPACE	-			
-	SPACE			41	C	42			SPACE	-			

	LIGHTING	RECPT	MISC.	MOTOR	TOTAL LOAD
CONNECTED VA	0	0	0	53,910	53,910
DEMAND FACTOR	SEE NOTE 4	SEE NOTE 1	1.00	SEE NOTE 2	
DEMAND VA	0	0	0	54,950	54,950
LOADING FOR O.C.P.	0	0	0	54,950	54,950

- NOTES
- DEMAND FACTOR: 1ST 10kVA AT 100%; OVER 10kVA AT 50%.
 - LARGEST MOTOR LOAD AT 125%; ALL OTHERS AT 100%.
 - INDICATES 30mA GFI CIRCUIT BREAKER
 - DEMAND FACTOR: 1ST 50kVA AT 40%; OVER 50kVA AT 20%.

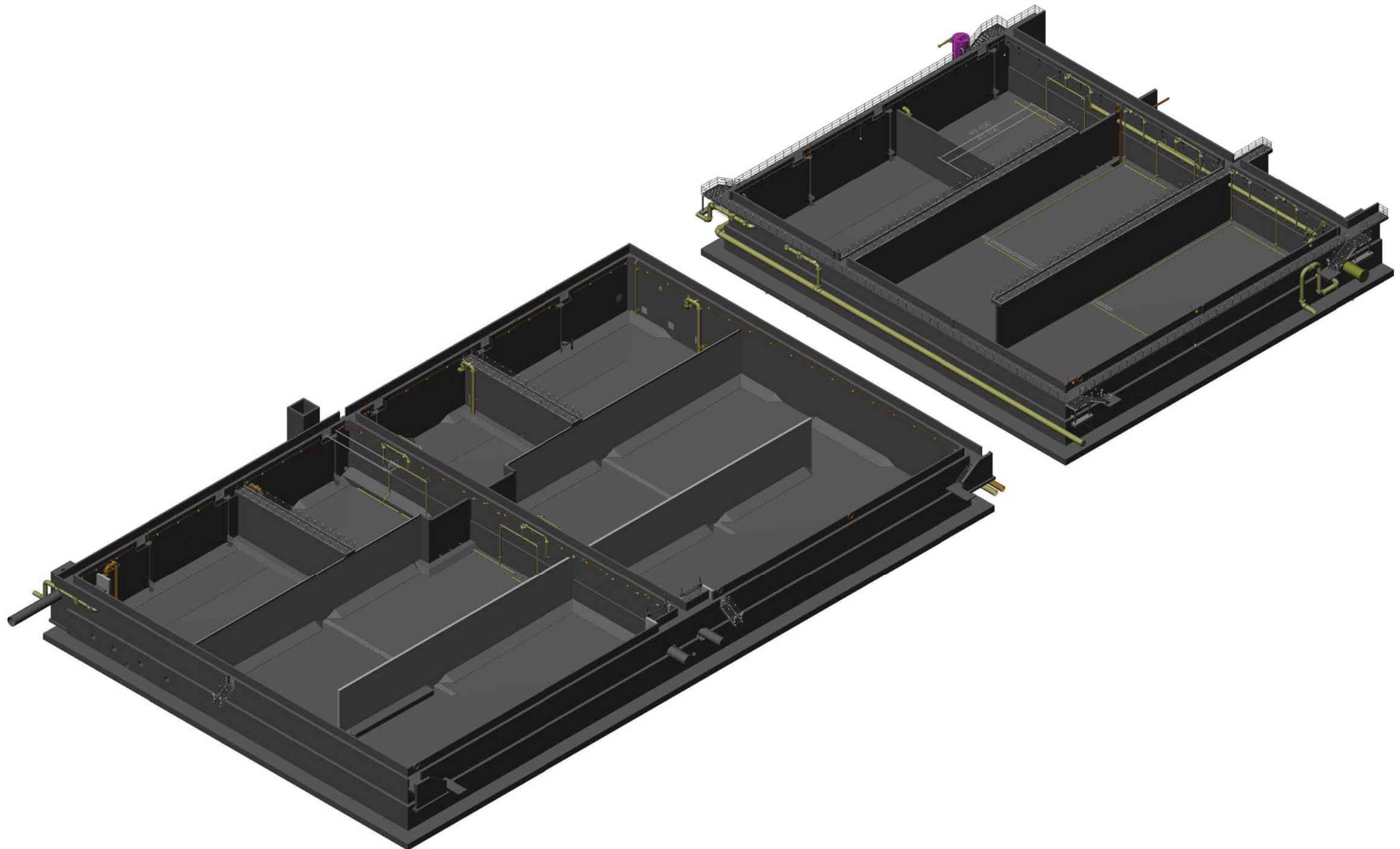
PANELBOARD SCHEDULE													
PANEL: 3119LP11S		PROJECT: NAMPA WWTP PHASE 1 UPGRADES - PROJECT GROUP A											
VOLTAGE (L-L): 208		PHASE: 3		WIRE: 4		AMPERE RATING: 125		SC RATING: 18 KAIC					
ENTRY: TOP		MOUNTING: SURFACE		MAIN CIRCUIT BREAKER: 60		MAX AVAILABLE FAULT CURRENT:							
LOADS: PHASE A: 1720		LOAD TYPES: 1 = LIGHTING		TOTAL CALCULATED LOAD AMPS: 30.1		REMARKS:							
PHASE B: 3548		2 = RECEPTACLE											
PHASE C: 4100		3 = MISC											
TOTAL: 9368		4 = MOTOR											
LOAD (VA)	LOAD SERVED	LOAD TYPE	AMPS/POLES	CKT NO	PHASE	CKT NO	AMPS/POLES	LOAD TYPE	LOAD SERVED	LOAD (VA)			
1120	LIGHTING, INTERIOR, 3099ERU1, 3122MD1, 3123MD2	1	20 1	1	A	2	20 1	3	CONTROL PANEL (3096CCMPEP)	600			
48	LIGHTING, EXTERIOR	1	20 1	3	B	4	40 2	3	UNINTERRUPTIBLE POWER SUPPLY (3113UPS)	3500			
600	FIBER OPTIC SECURITY BOX (3125SEC)	3	20 1	5	C	6	- - 3	-	-	3500			
-	SPACE			7	A	8	20 1		SPACE	-			
-	SPACE			9	B	10	20 1		SPACE	-			
-	SPACE			11	C	12	20 1		SPACE	-			
-	SPACE			13	A	14	20 1		SPACE	-			
-	SPACE			15	B	16	20 1		SPACE	-			
-	SPACE			17	C	18	20 1		SPACE	-			
-	SPACE			19	A	20			SPACE	-			
-	SPACE			21	B	22			SPACE	-			
-	SPACE			23	C	24			SPACE	-			
-	SPACE			25	A	26			SPACE	-			
-	SPACE			27	B	28			SPACE	-			
-	SPACE			29	C	30			SPACE	-			
-	SPACE			31	A	32			SPACE	-			
-	SPACE			33	B	34			SPACE	-			
-	SPACE			35	C	36			SPACE	-			
-	SPACE			37	A	38			SPACE	-			
-	SPACE			39	B	40			SPACE	-			
-	SPACE			41	C	42			SPACE	-			

	LIGHTING	RECPT	MISC.	MOTOR	TOTAL LOAD
CONNECTED VA	1,168	0	8,200	0	9,368
DEMAND FACTOR	SEE NOTE 4	SEE NOTE 1	1.00	SEE NOTE 2	
DEMAND VA	467	0	8,200	0	8,667
LOADING FOR O.C.P.	584	0	10,250	0	10,834

- NOTES
- DEMAND FACTOR: 1ST 10kVA

1 2 3 4 5 6

A
B
C
D



AERATION BASINS 1,2, AND 3 RENDERED MODEL
NTS



NO.	DATE	DR	REVISION	BY
		L FETTKETHER		
		M RARDIN	CHK	
		B HERMAN	APVD	
		G THOMPSON	APVD	

CH2MHILL
GENERAL
AERATION BASINS 1,2, AND 3
RENDERED MODEL

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

AS NOTED	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	DECEMBER 2014
PROJ	480770
DWG	421-G-001
SHEET	103 of 157

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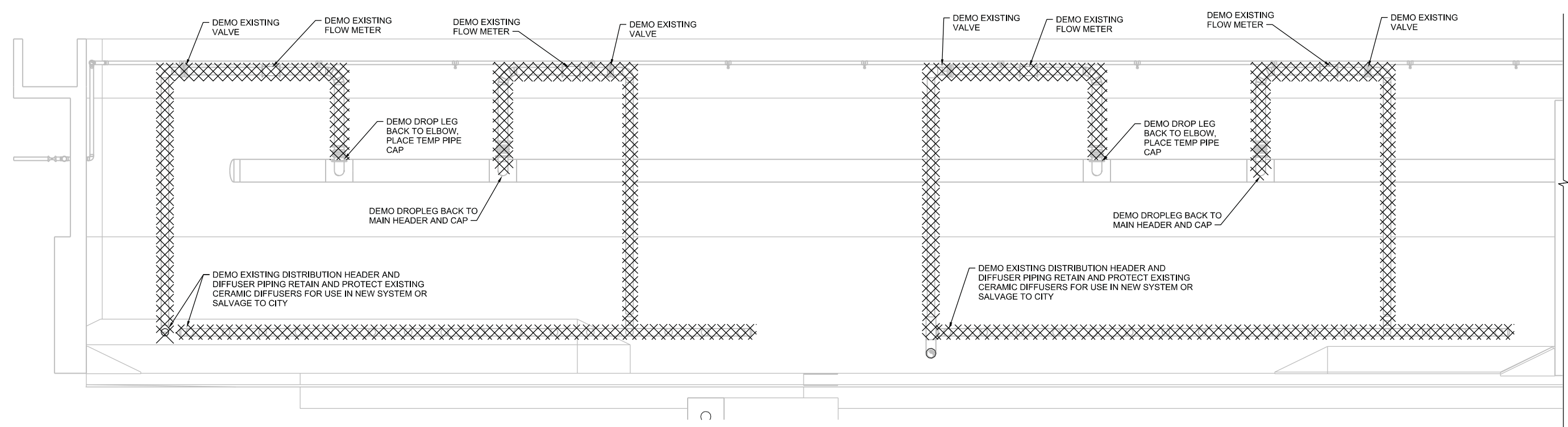
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A

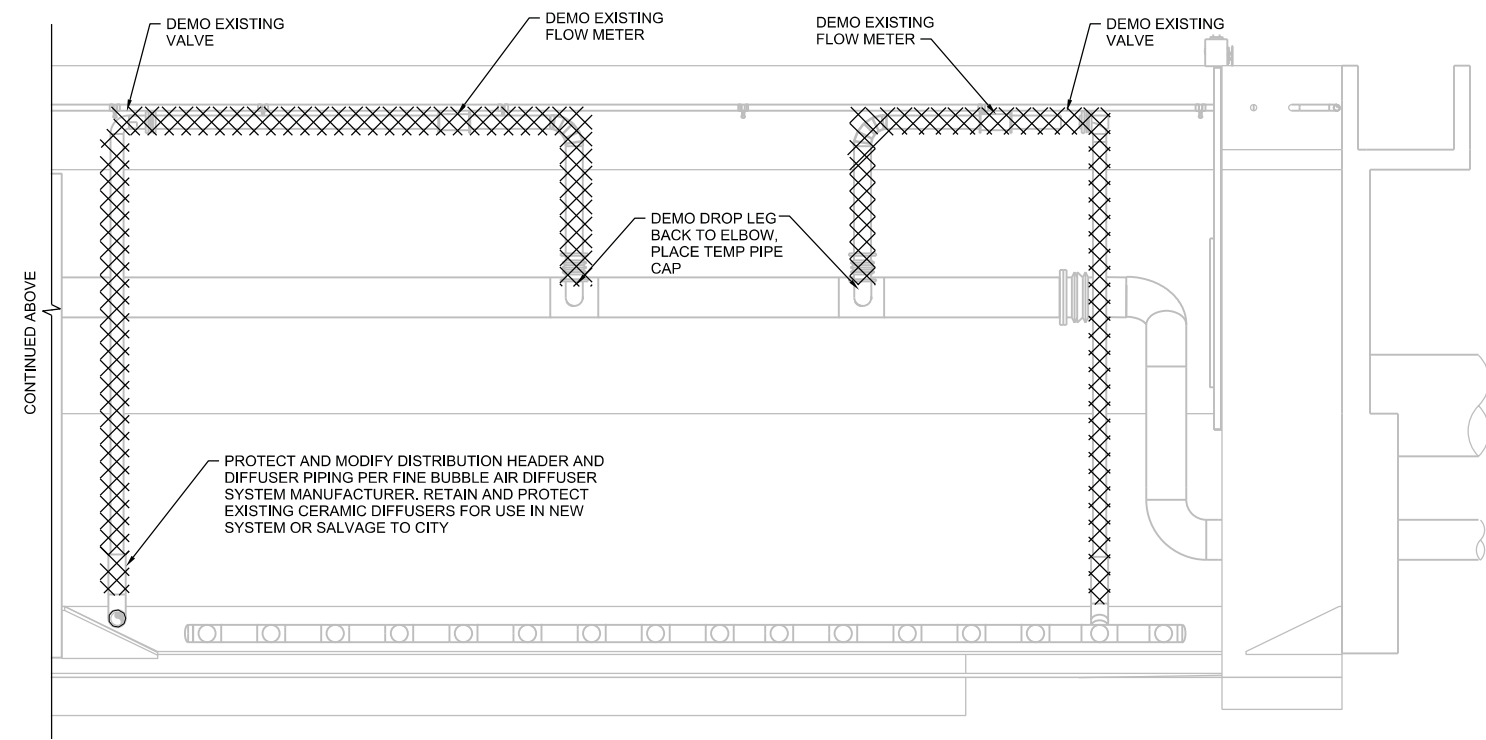
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C

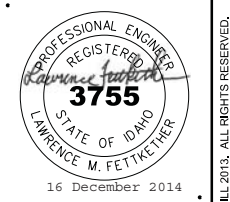
D



A SECTION
1/4" = 1'-0"
421-D-111
421-D-112



A SECTION
1/4" = 1'-0"
421-D-111
421-D-112



NO.	DATE	DR	CHK	REVISION	BY
		A. ARANGO	J. PIGMAN		G. THOMPSON
		DSGN	CHK	APVD	APVD

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL®
DEMOLITION
AERATION BASIN 1
DEMOLITION SECTIONS

AS NOTED	
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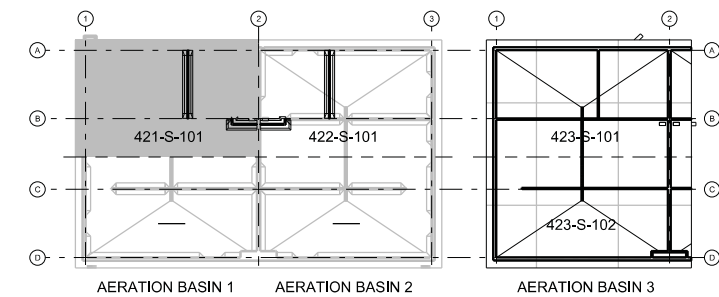
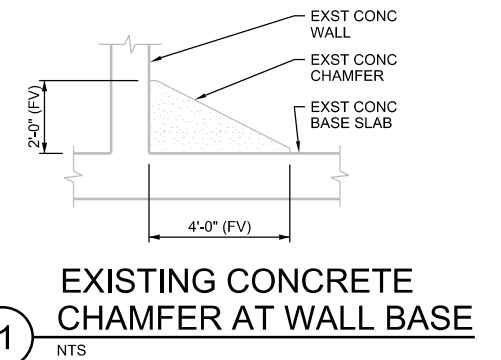
GENERAL SHEET NOTES

- A. FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS, SEE DRAWINGS 010-G-013, 010-G-014, AND 010-G-015.
- B. SEE STANDARD DETAILS FOR ADDITIONAL INFORMATION.
- C. DIMENSIONS TO EXISTING STRUCTURAL ELEMENTS ARE BASED OFF OF ORIGINAL CONSTRUCTION DRAWINGS AND SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
- D. BASINS SHALL BE FILLED OR EMPTIED SLOW ENOUGH THAT THE DIFFERENTIAL WATER ELEVATION ON EITHER SIDE OF INTERIOR WALLS DOES NOT EXCEED 1'-6" AT ANY TIME.



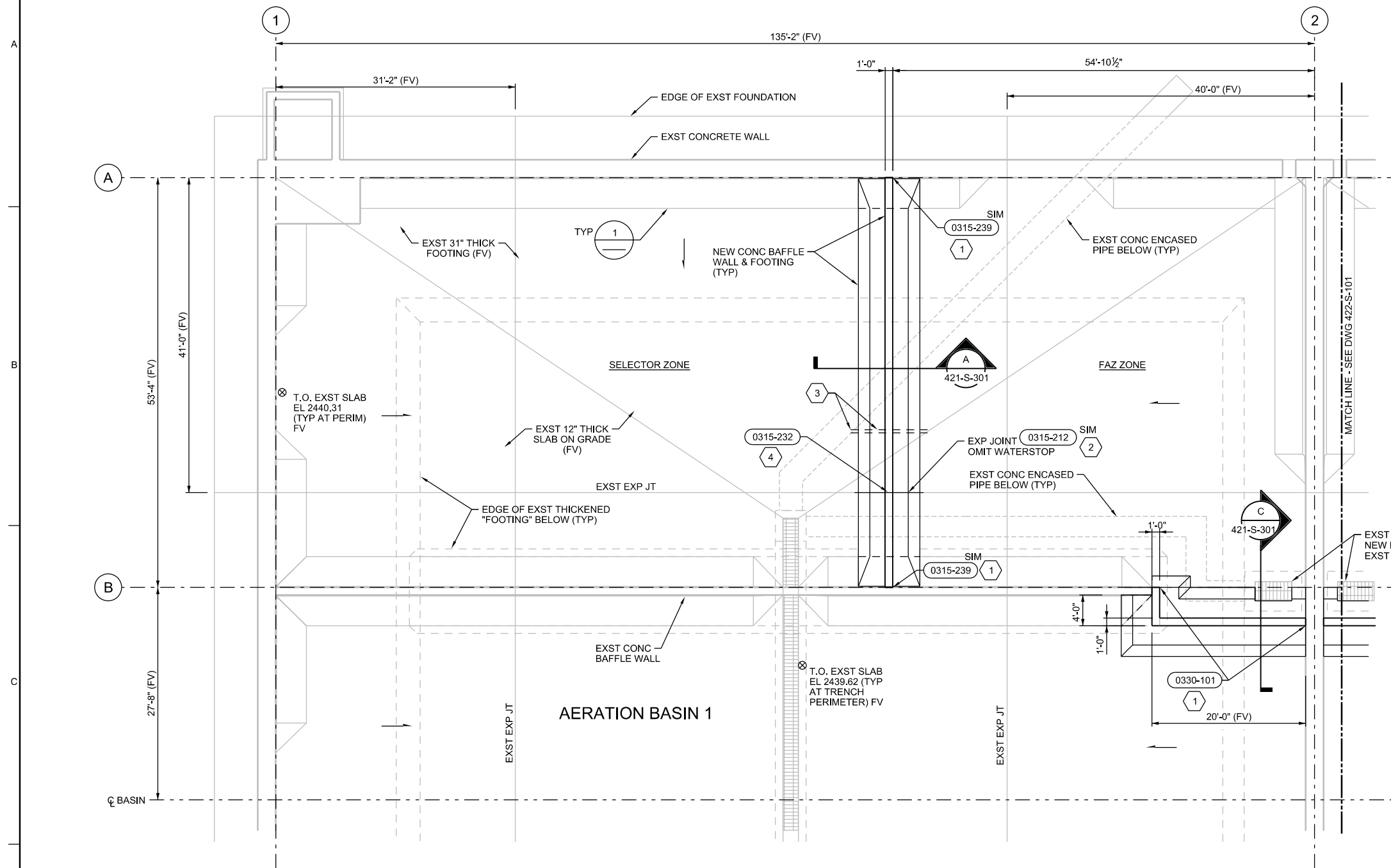
SHEET KEYNOTES

- 1. OMIT WATERSTOP. PROVIDE SEALANT AND BACKUP MATERIAL ON BOTH SIDES OF WALLS.
- 2. EXPANSION JOINT IN NEW FOOTING AND NEW WALL SHALL MATCH LOCATION OF EXISTING EXPANSION JOINT IN EXISTING BASE SLAB.
- 3. (SST) HSS 6x6x1/4 DRAIN PIPE, INSTALL AT VALLEY/FOOTING INTERFACE SO BASIN WILL DRAIN. COORDINATE WITH PROCESS.
- 4. PROVIDE SEALANT AND BACKUP MATERIAL ON BOTH SIDES OF WALL.



KEY PLAN
NTS

AERATION BASIN 1 NORTH LOWER LEVEL PLAN
1/8"=1'-0"



NO.	DATE	DR	CHK	REVISION	BY	APVD
		W KOHLER	L HENDERSHOTT		B HERMAN	G THOMPSON

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
STRUCTURAL
AERATION BASIN 1 NORTH
LOWER LEVEL PLAN

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: DECEMBER 2014
PROJ: 480770
DWG: 421-S-101
SHEET: 108 of 157

GENERAL SHEET NOTES

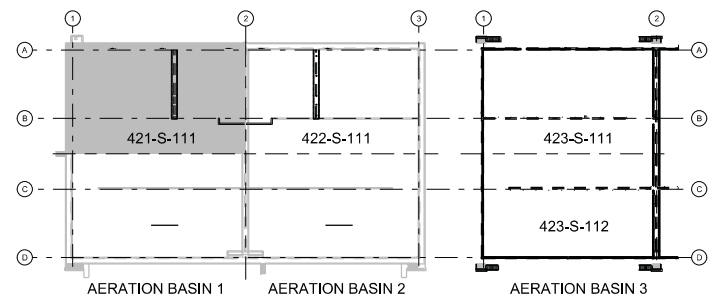
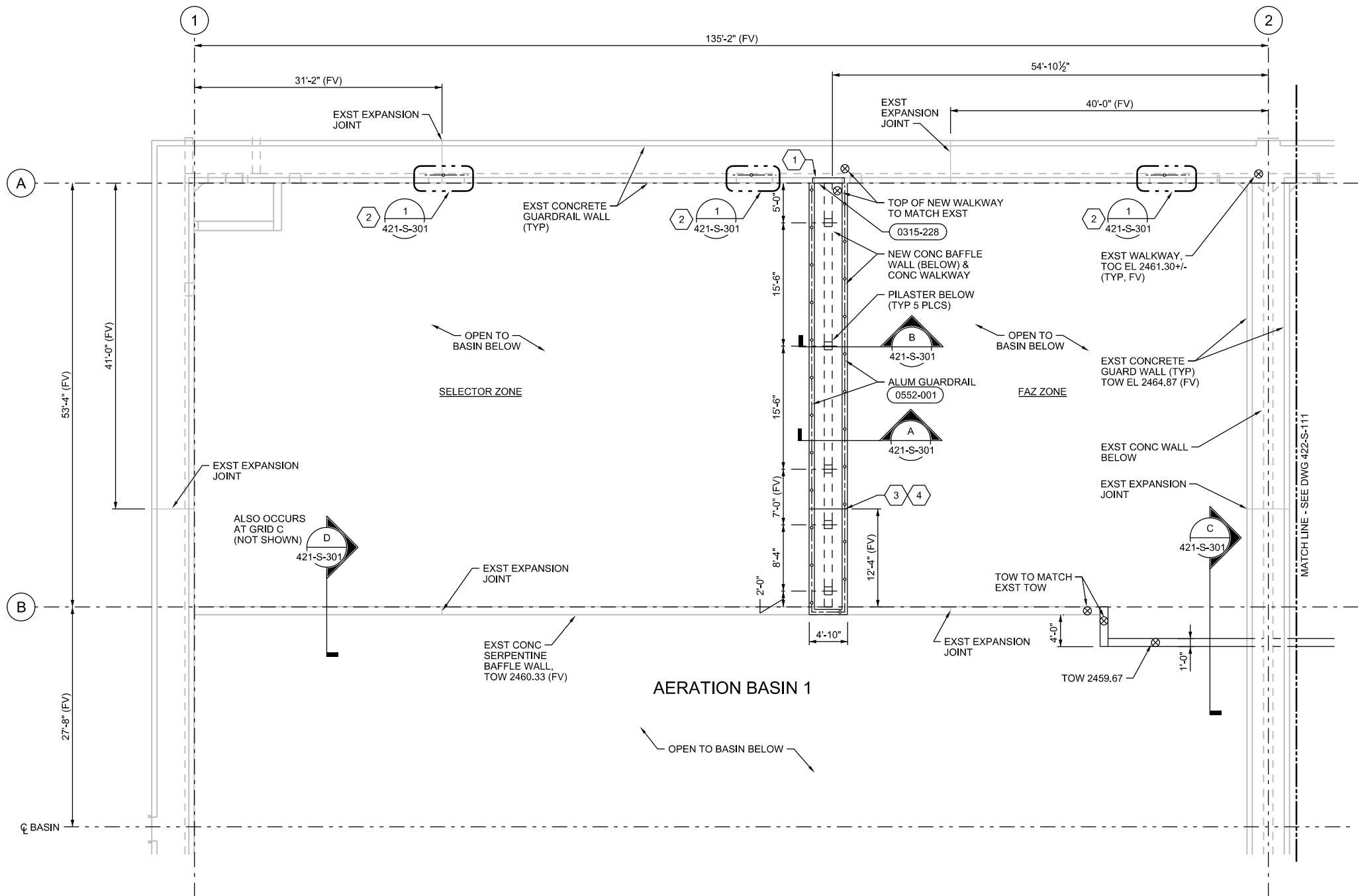
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- B. SEE STANDARD DETAILS FOR ADDITIONAL INFORMATION.
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SHEET KEYNOTES

1. DEMOLISH EXISTING CONCRETE GUARDRAIL FOR ACCESS TO NEW WALKWAY. SEE DWG 421-D-111.
2. SEE DEMOLITION PLAN. PROVIDE EXPANSION JOINT IN RAIL WHERE RAIL CROSSES EXISTING EXPANSION JOINT IN STRUCTURE.
3. EXPANSION JOINT, OMIT WATERSTOP, MATCH LOCATION OF EXST IN BASIN BELOW. SEE 0315-216
4. PROVIDE EXPANSION JOINT IN ALUMINUM GUARDRAIL ON EACH SIDE OF WALKWAY.

NO.	DATE	DSGN	DR	CHK	REVISION	BY	APVD



AERATION BASIN 1 NORTH UPPER LEVEL PLAN
1/8"=1'-0"



CH2MHILL
STRUCTURAL

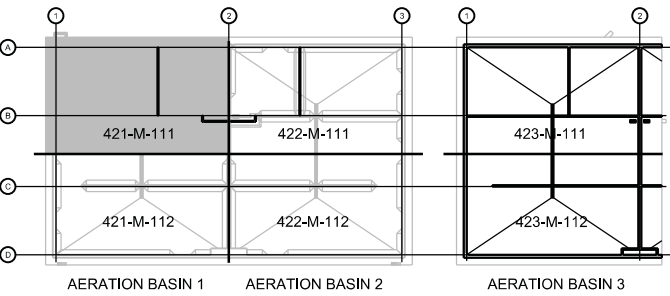
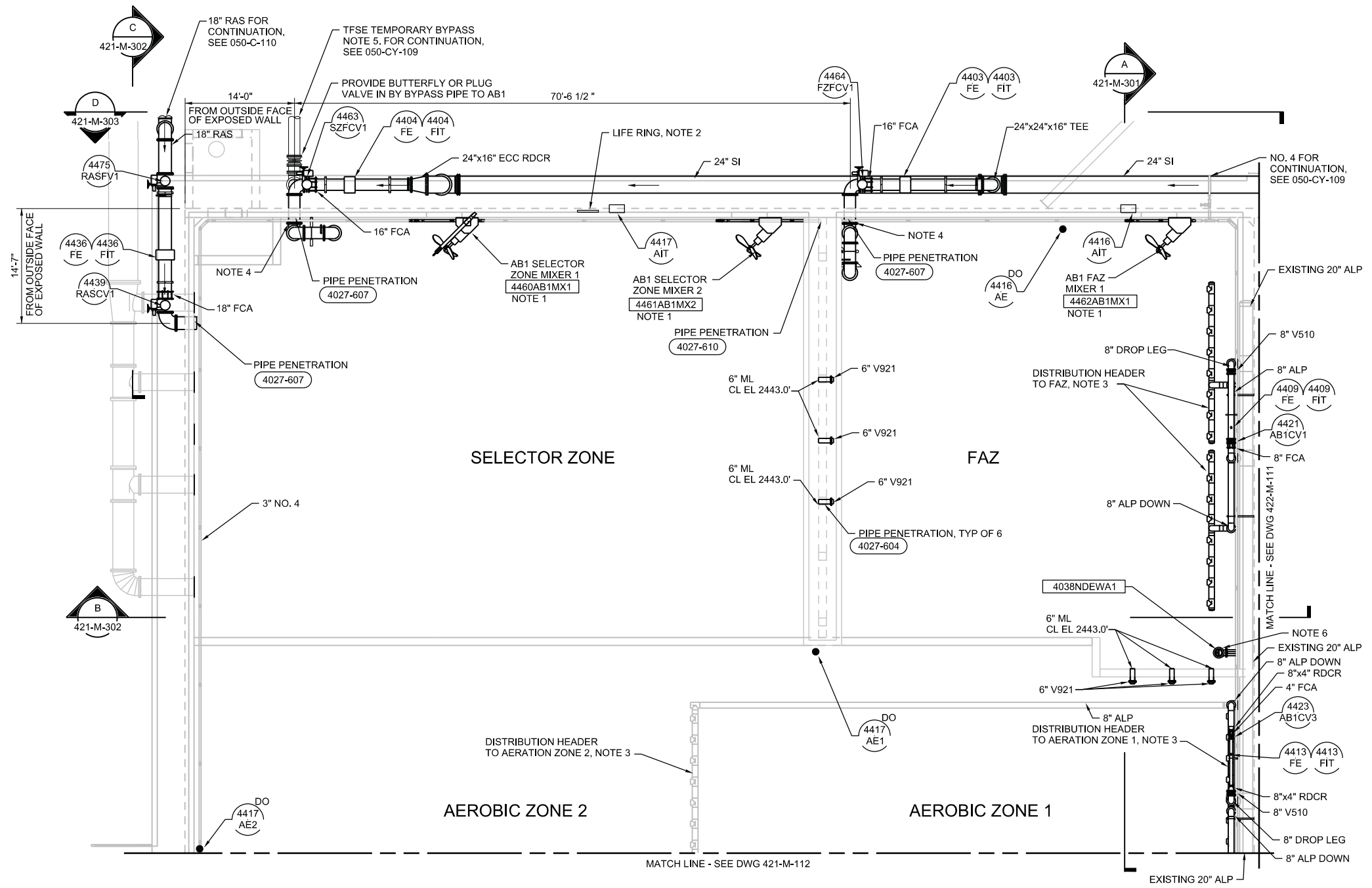
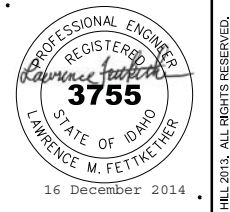
**AERATION BASIN 1 NORTH
UPPER LEVEL PLAN**

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE DECEMBER 2014
PROJ 480770
DWG 421-S-111
SHEET 109 of 157

1 2 3 4 5 6

GENERAL SHEET NOTES

- NOTES:
- COORDINATE MIXER LOCATION WITH MIXER'S MANUFACTURER. FOR AERATION BASIN MIXER INSTALLATION, SEE TYP OF 3.
 - PROVIDE AND INSTALL WALL MOUNTED 33"x33"x5.5" FIBERGLASS LIFE RING CABINET, SAFETY YELLOW, NON-LOCKING T-HANDLE WITH 30" LIFE RING AND 90' ROPE WITH FLOAT AS MANUFACTURED BY CHEYENNE MANUFACTURING INC.
 - DISTRIBUTION HEADERS ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. COORDINATE FINAL LOCATION AND DIMENSIONS WITH FINE BUBBLE AIR DIFFUSER SYSTEM MANUFACTURER.
 - DRILL 1" HOLE AT LOW POINT AT THE BOTTOM OF THE 16" SI.
 - CONNECT TFSE BYPASS PIPING TO THE 16" SI WALL PENETRATION.
 - REMOVE EXISTING SUMP PUMP, BASE ELBOW & RAILS AND SALVAGE TO CITY. INSTALL NEW BASE ELBOW, RAILS & PUMP. MODIFY RAIL TOP BRACKET SUPPORT & PIPE CONNECTION TO BASE ELBOW AS NECESSARY.



AERATION BASIN 1 NORTH PLAN
1/8"=1'-0"



NO.	DATE	DSGN	DR	CHK	REVISION	BY	APVD

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
PROCESS MECHANICAL
AERATION BASIN 1 NORTH PLAN

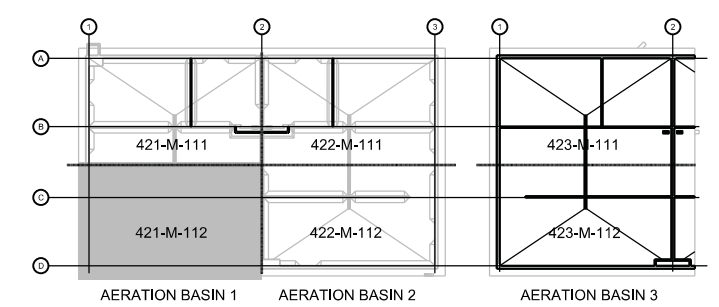
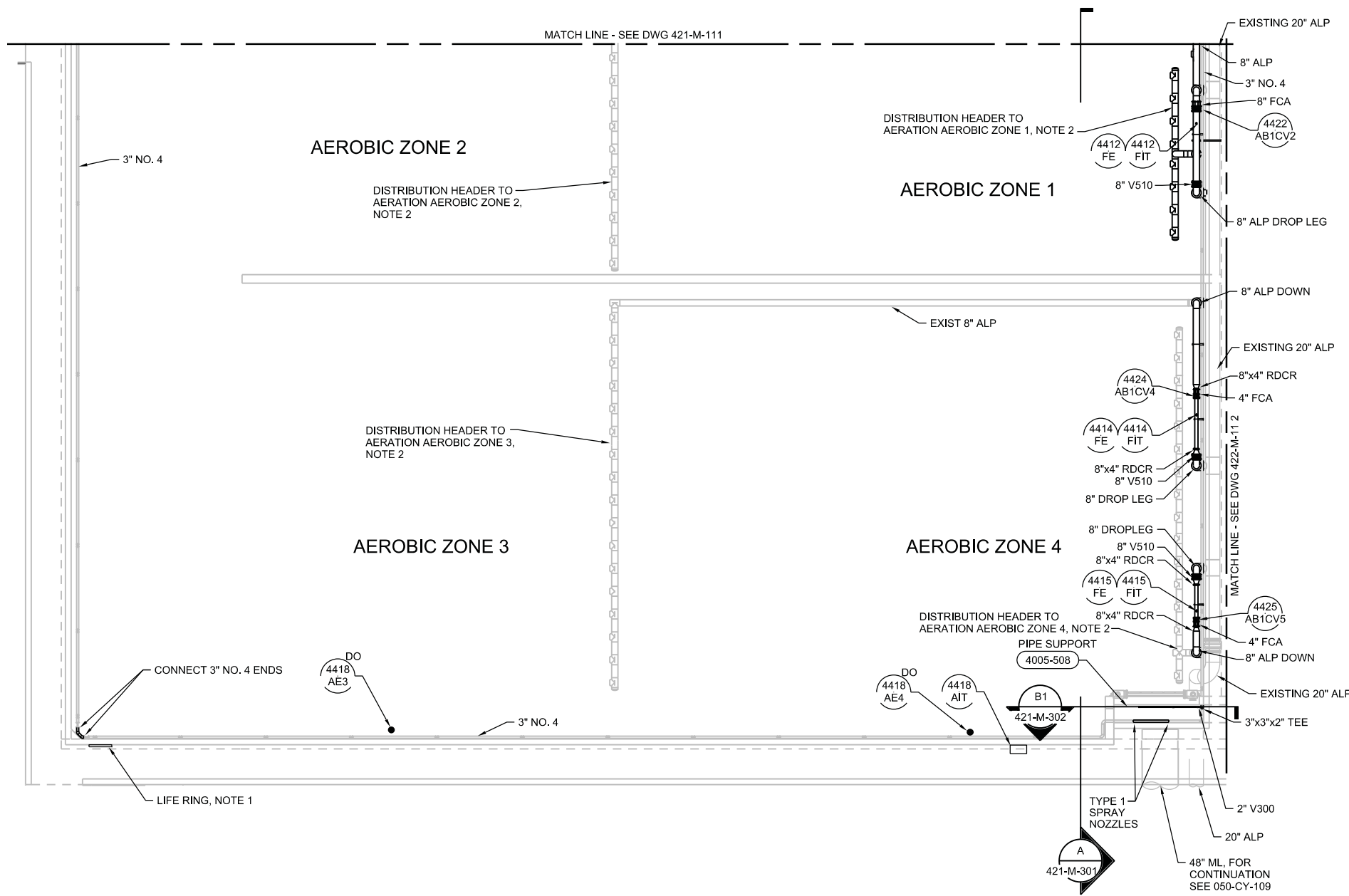
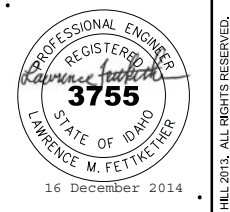
AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE DECEMBER 2014
PROJ 480770
DWG 421-M-111
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GENERAL SHEET NOTES

- NOTES:
- PROVIDE AND INSTALL WALL MOUNTED 33"x33"x5.5" FIBERGLASS LIFE RING CABINET, SAFETY YELLOW, NON-LOCKING T-HANDLE WITH 30" LIFE RING AND 90' ROPE WITH FLOAT AS MANUFACTURED BY CHEYENNE MANUFACTURING INC.
 - DISTRIBUTION HEADERS ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. COORDINATE FINAL LOCATION AND DIMENSIONS WITH FINE BUBBLE AIR DIFFUSER SYSTEM MANUFACTURER.



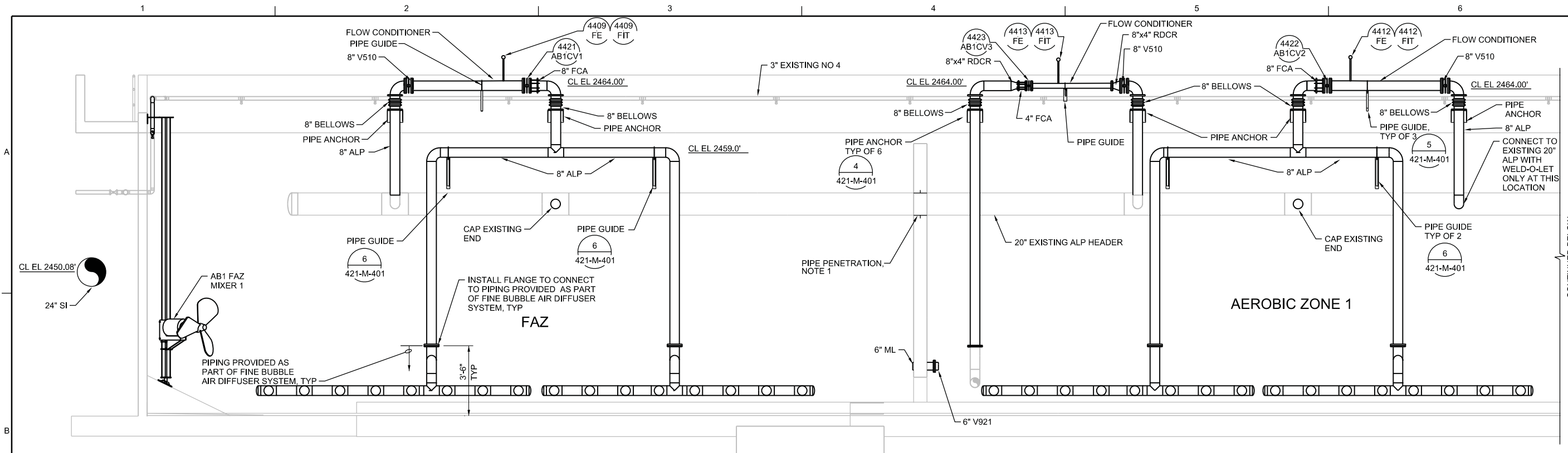
AERATION BASIN 1 SOUTH PLAN
1/8"=1'-0"

KEY PLAN
NTS

NO.	DATE	DSGN	DR	CHK	REVISION	BY	APVD

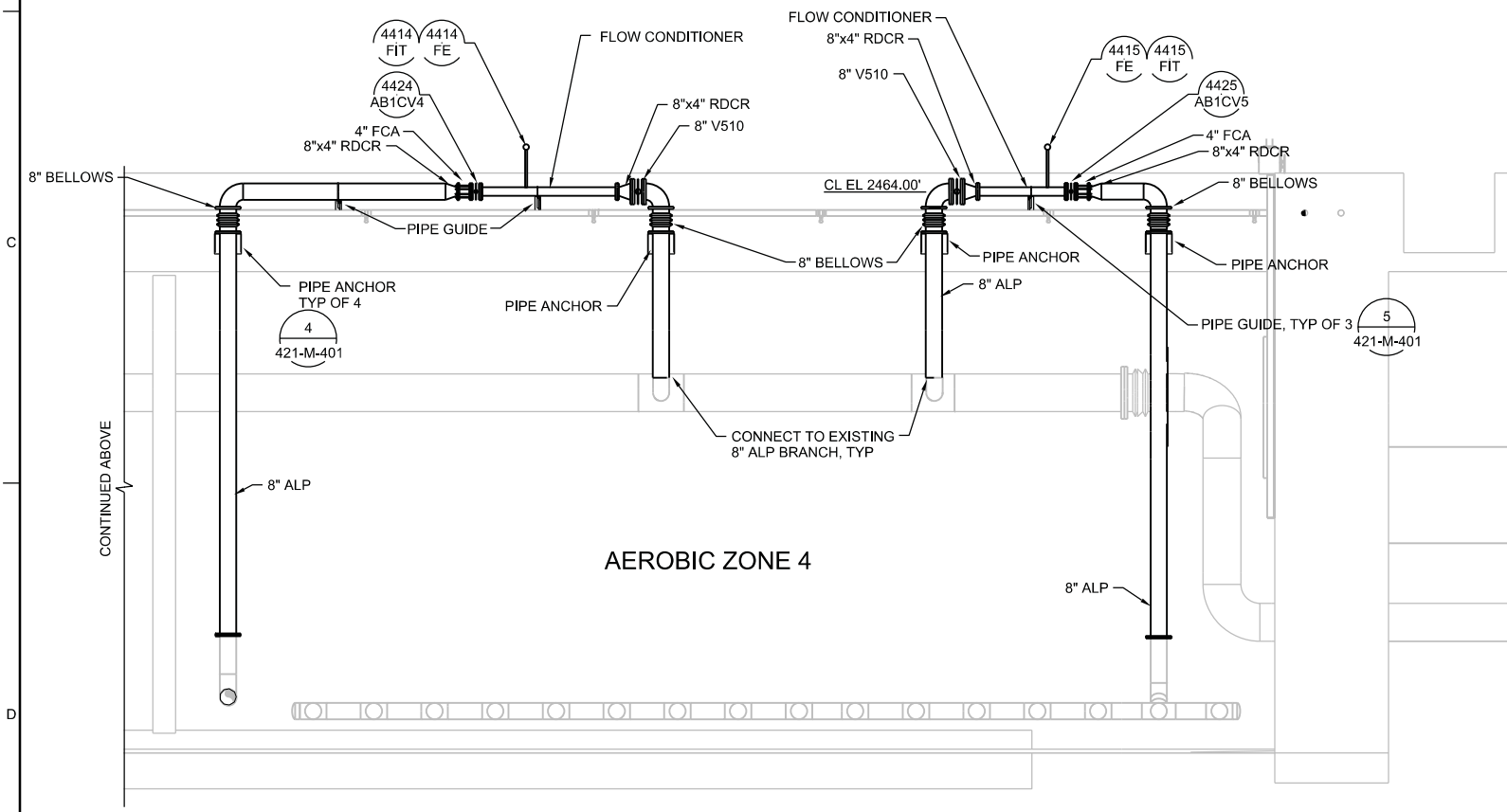
NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL®	
PROCESS MECHANICAL	AERATION BASIN 1 SOUTH PLAN
AS NOTED	VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	DECEMBER 2014
PROJ	480770
DWG	421-M-112
SHEET	112 of 157

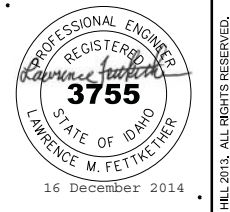
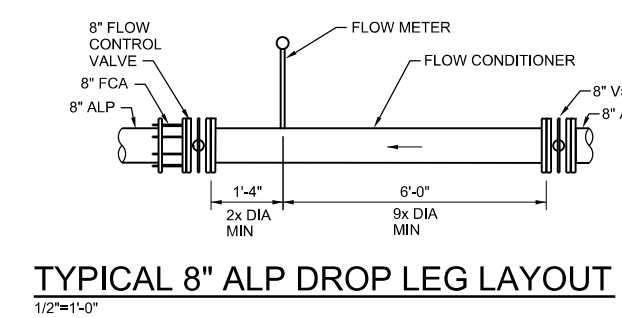
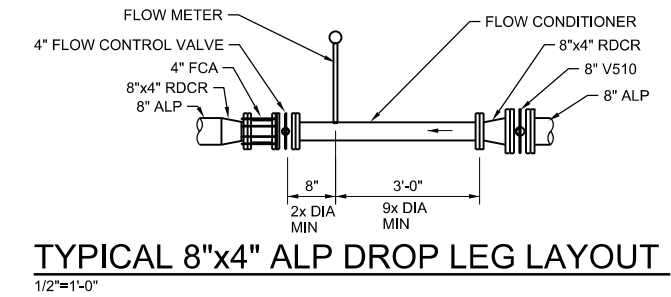


A SECTION
1/4"=1'-0"
421-M-111
421-M-112

NOTE:
1. SLEEVE PIPE SIMILAR TO DETAIL (4027-604) EXCEPT SPLIT SLEEVE AND WELD AROUND PIPE AND DO NOT USE SEALANT.



A SECTION
1/4"=1'-0"
421-M-111
421-M-112

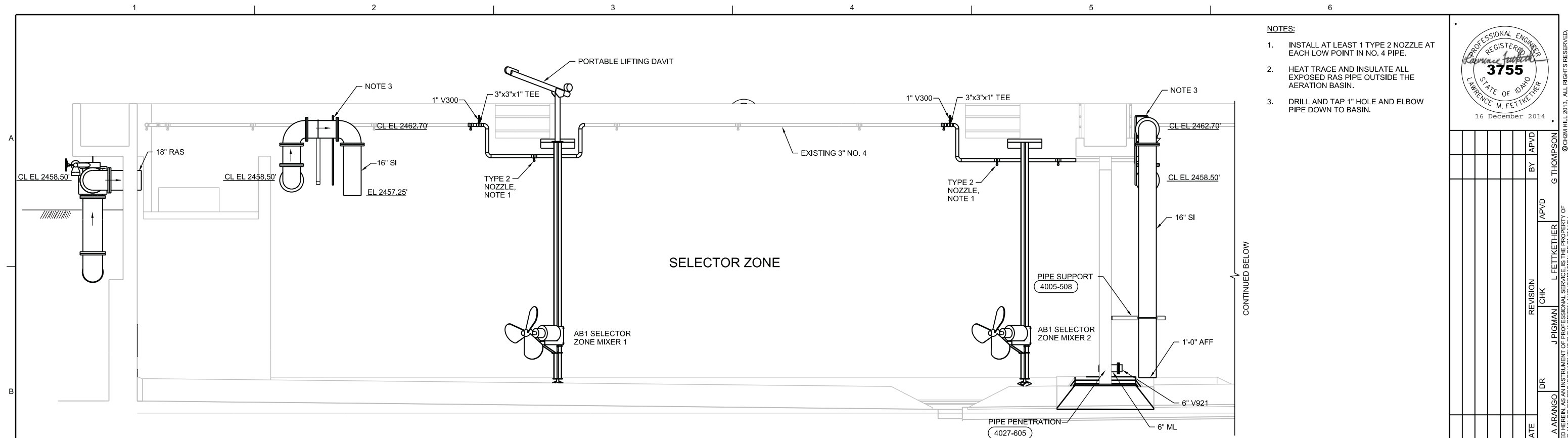


NO.	DATE	DR	CHK	BY
		A ARANGO	J PIGMAN	G THOMPSON
			L FETTKETHER	

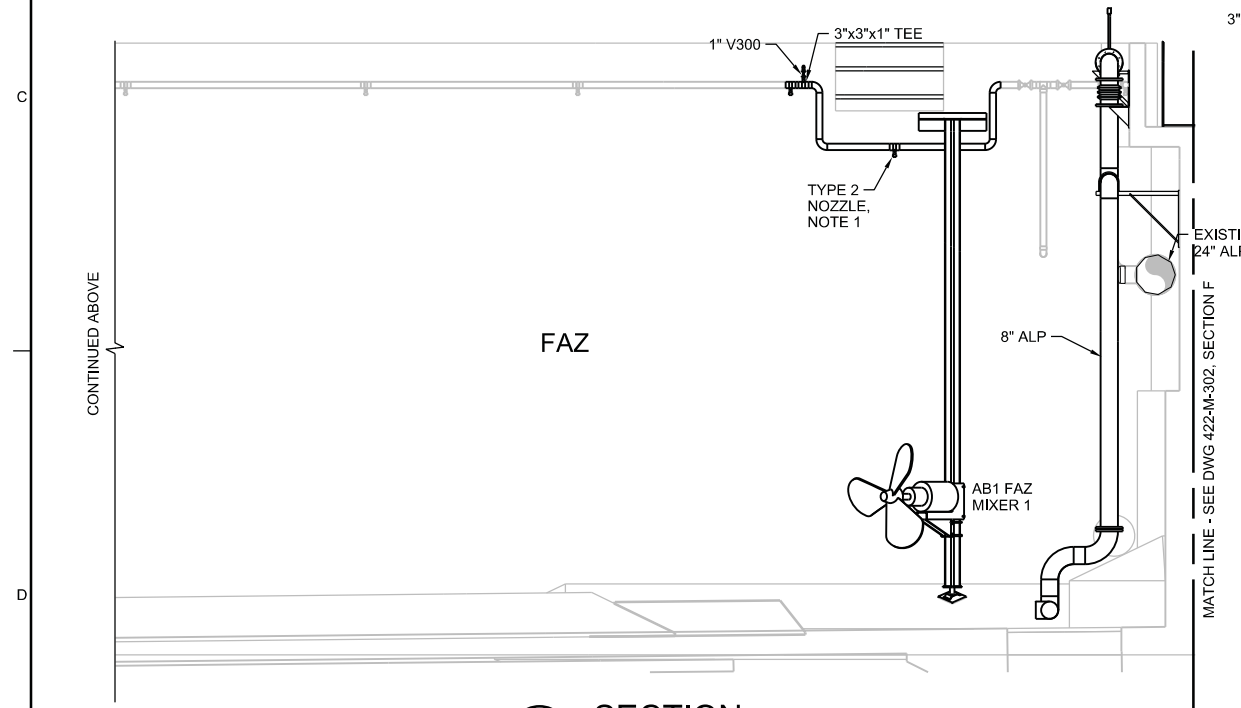
NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
PROCESS MECHANICAL
AERATION BASIN 1 SECTIONS

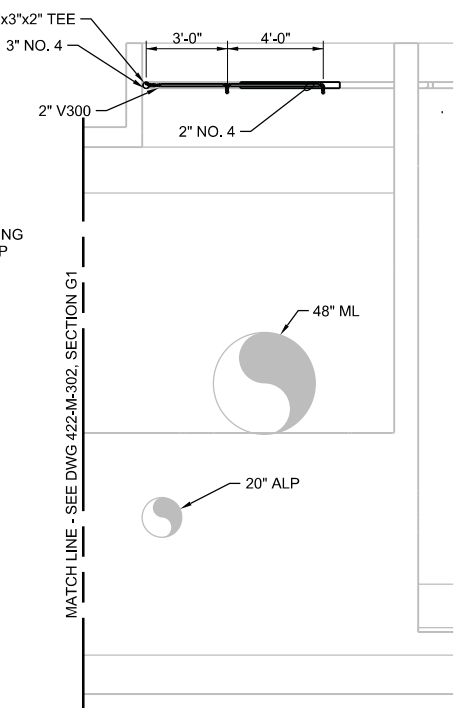
AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
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PROJ 480770
DWG 421-M-301
SHEET 113 of 157



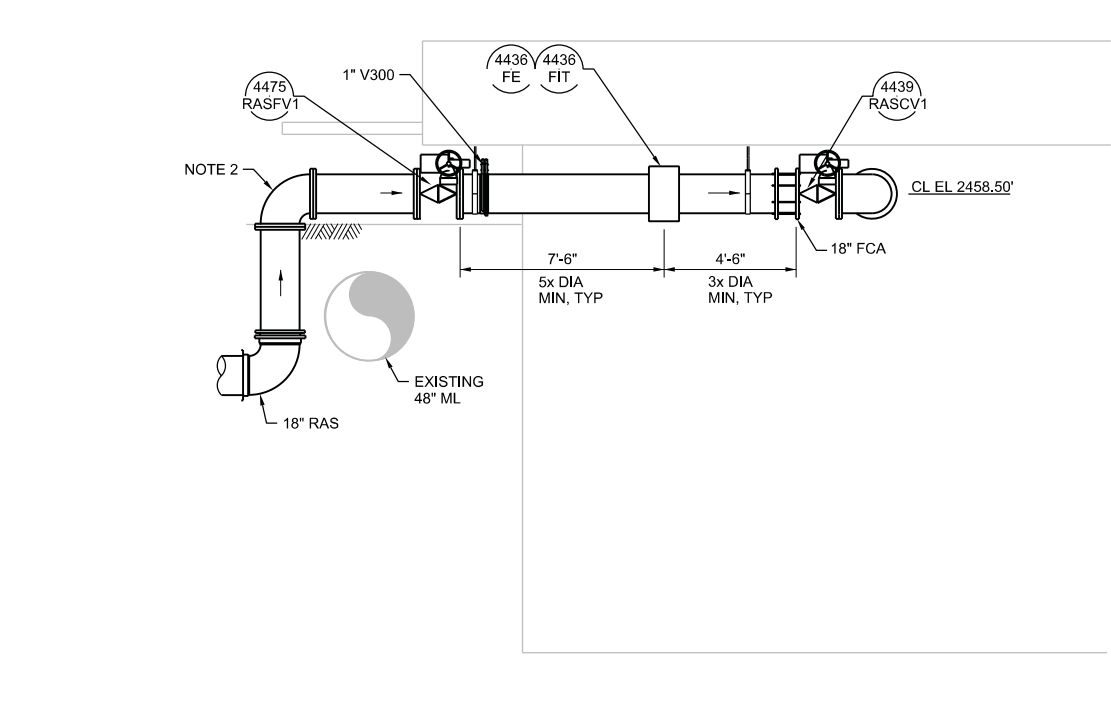
B SECTION
1/4"=1'-0"
421-M-111



B SECTION
1/4"=1'-0"
421-M-111

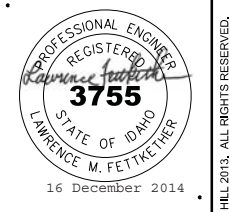


B1 SECTION
1/4"=1'-0"
421-M-111



C SECTION
1/4"=1'-0"
421-M-111

- NOTES:**
- INSTALL AT LEAST 1 TYPE 2 NOZZLE AT EACH LOW POINT IN NO. 4 PIPE.
 - HEAT TRACE AND INSULATE ALL EXPOSED RAS PIPE OUTSIDE THE AERATION BASIN.
 - DRILL AND TAP 1" HOLE AND ELBOW PIPE DOWN TO BASIN.



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			L. FETTKETHER			

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
PROCESS MECHANICAL
AERATION BASIN 1 SECTIONS

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE DECEMBER 2014
PROJ 480770
DWG 421-M-302
SHEET 114 of 157

1

2

3

4

5

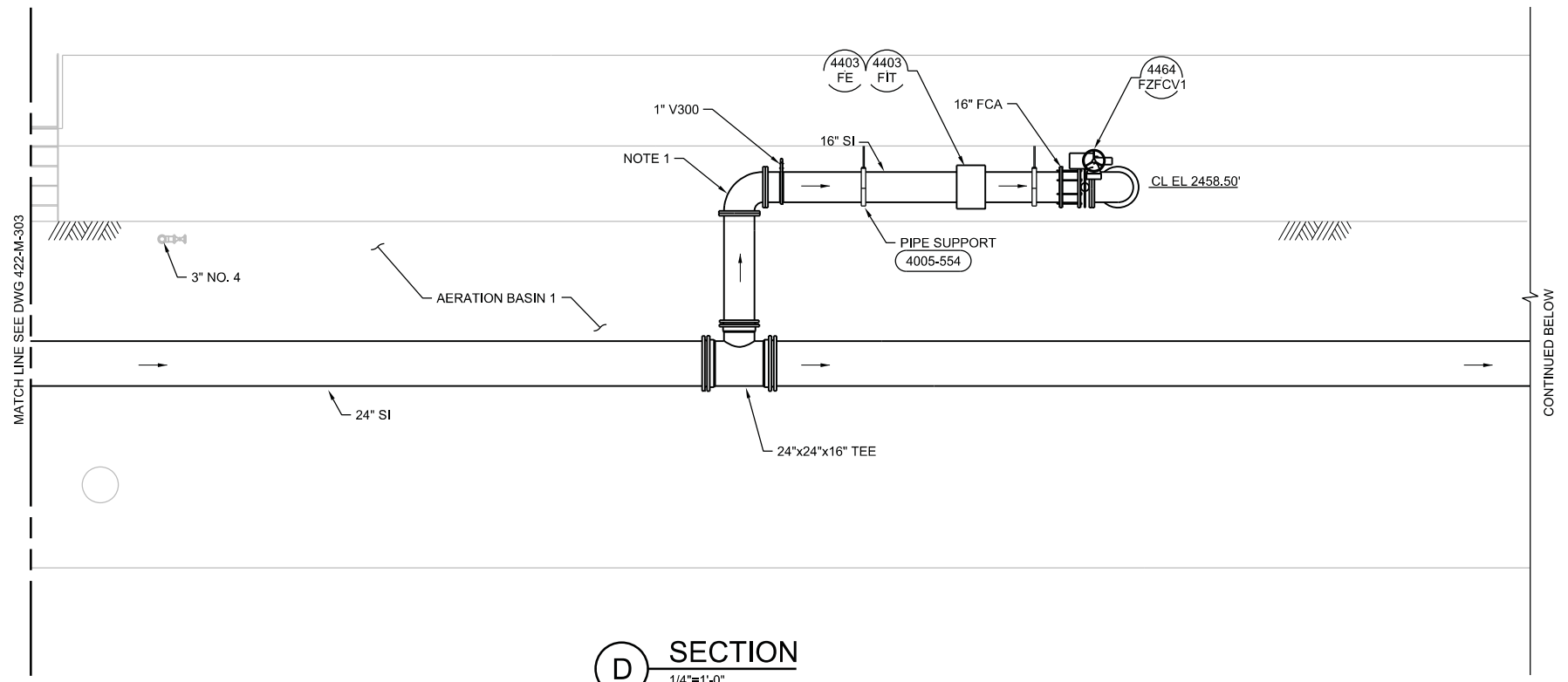
6

A

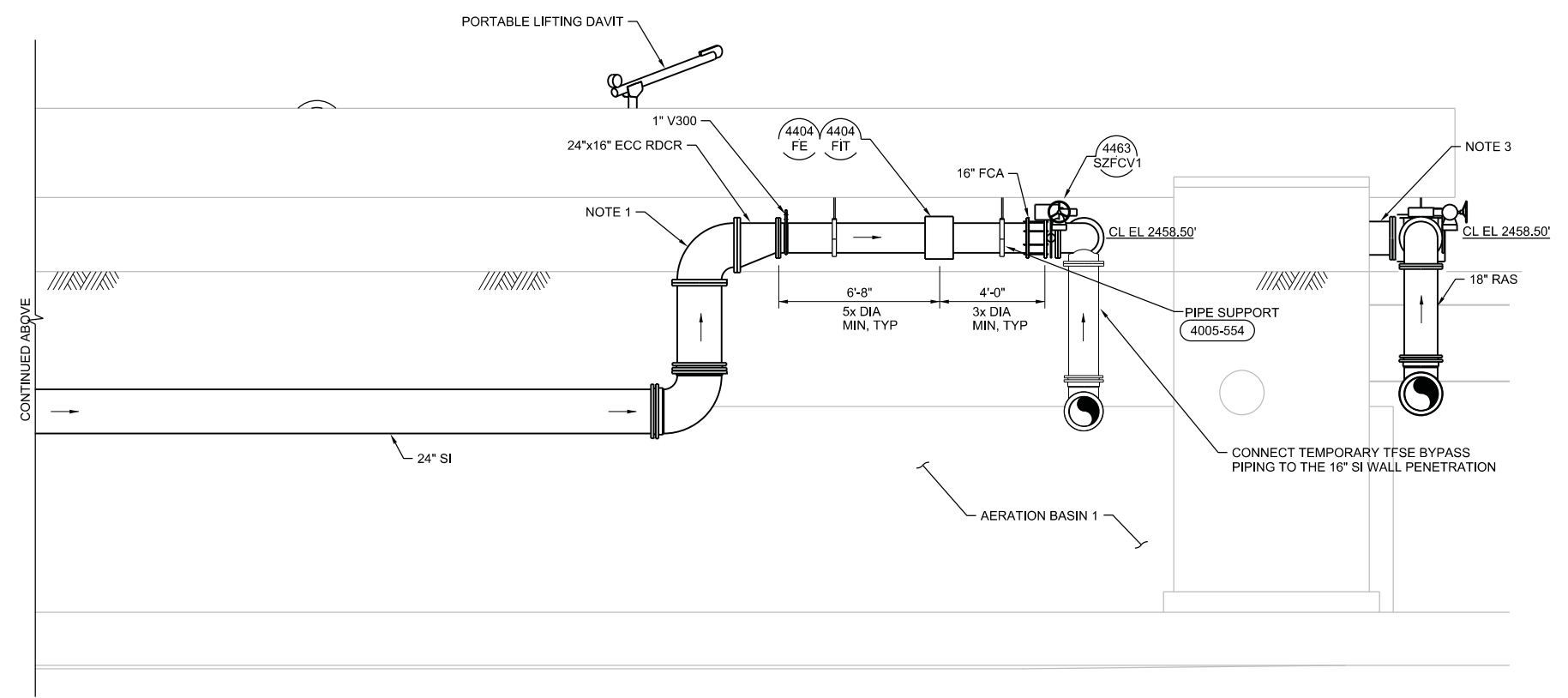
B

C

D



D SECTION
1/4"=1'-0"
421-M-111



D SECTION
1/4"=1'-0"
421-M-111

NOTES:

- 1. HEAT TRACE AND INSULATE EXPOSED SI AND RAS PIPES OUTSIDE THE AERATION BASIN.

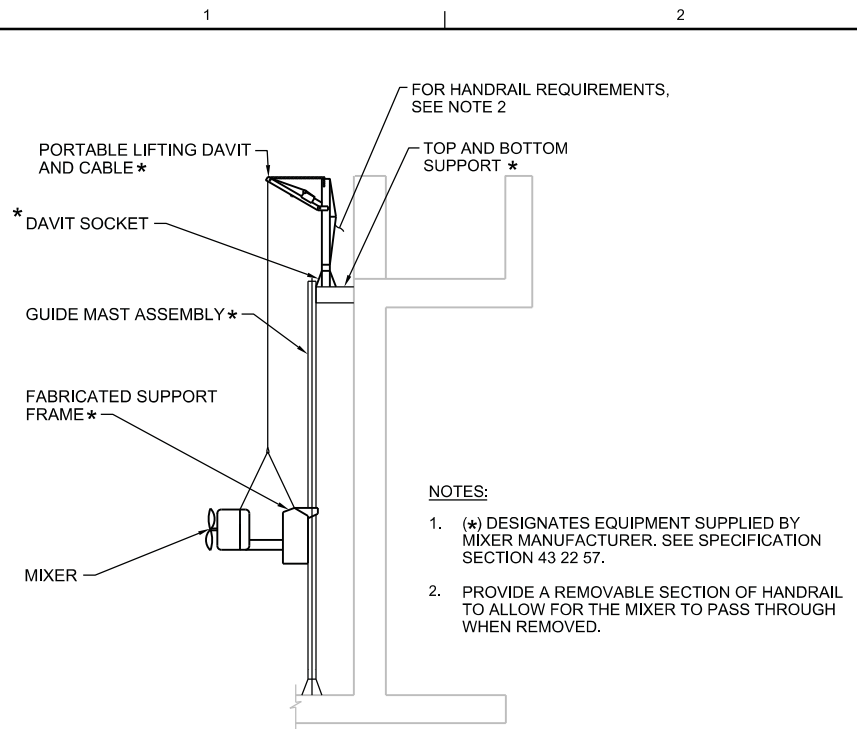


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			L. FETTKETHER		
					G. THOMPSON

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

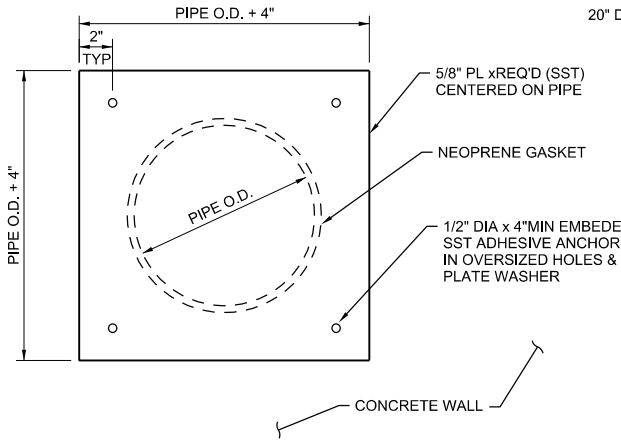
CH2MHILL®
PROCESS MECHANICAL
AERATION BASIN 1
SECTIONS

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE DECEMBER 2014
PROJ 480770
DWG 421-M-303
SHEET 115 of 157

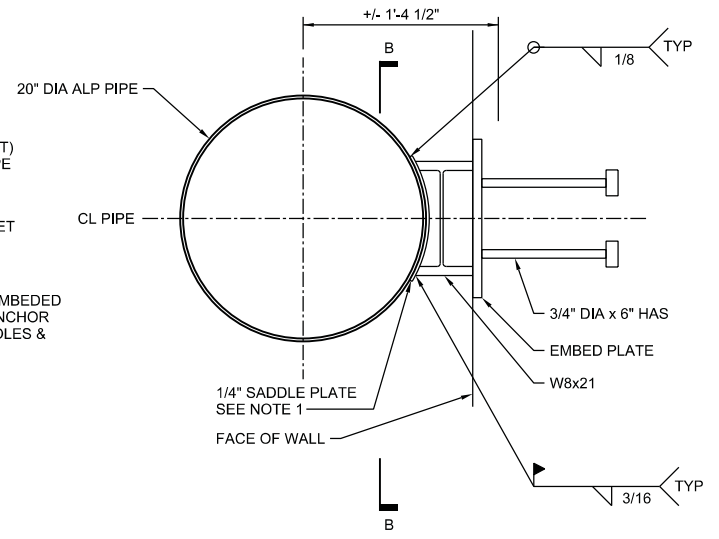


- NOTES:**
- (*) DESIGNATES EQUIPMENT SUPPLIED BY MIXER MANUFACTURER. SEE SPECIFICATION SECTION 43 22 57.
 - PROVIDE A REMOVABLE SECTION OF HANDRAIL TO ALLOW FOR THE MIXER TO PASS THROUGH WHEN REMOVED.

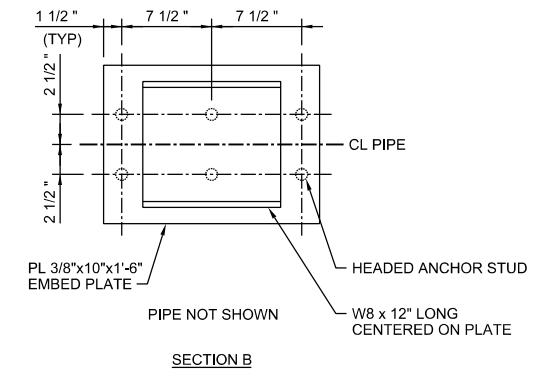
1 **DETAIL**
NTS
421-M-111



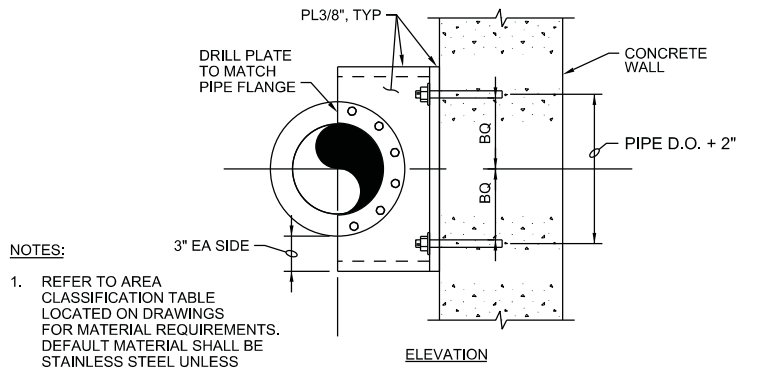
2 **PIPE OPENING COVER DETAIL**
NTS
421-D-111
422-D-112



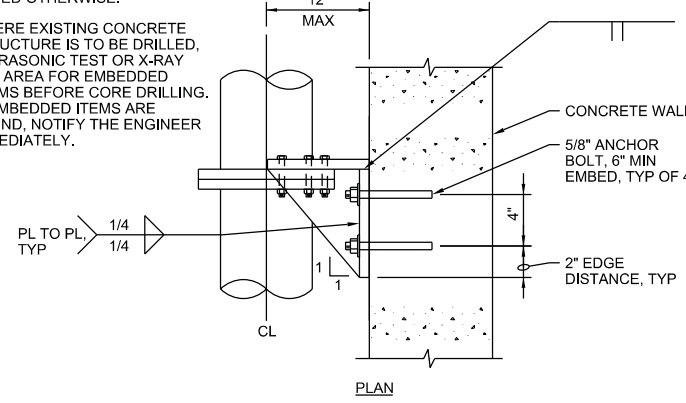
3 **DETAIL**
NTS
421-D-111
423-M-112



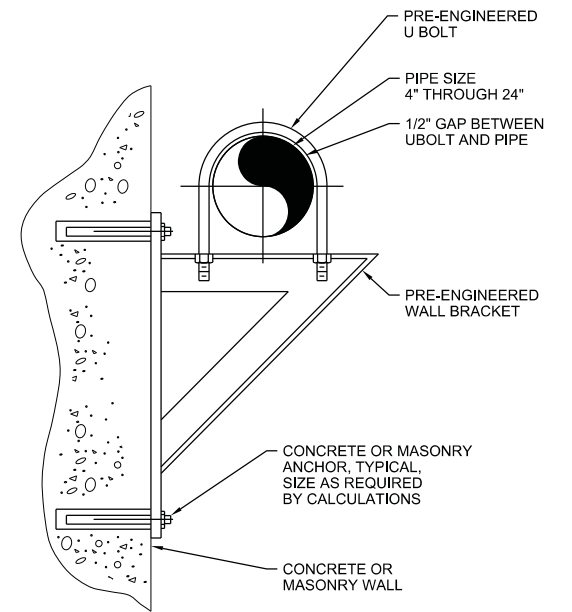
- NOTE:**
- SADDLE PLATE SHALL MATCH LENGTH OF WF AND EXTEND 1" BEYOND TOP AND BOTTOM FLANGE.
 - ALL COMPONENTS SHALL BE STAINLESS STEEL.



- NOTES:**
- REFER TO AREA CLASSIFICATION TABLE LOCATED ON DRAWINGS FOR MATERIAL REQUIREMENTS. DEFAULT MATERIAL SHALL BE STAINLESS STEEL UNLESS NOTED OTHERWISE.
 - WHERE EXISTING CONCRETE STRUCTURE IS TO BE DRILLED, ULTRASONIC TEST OR X-RAY THE AREA FOR EMBEDDED ITEMS BEFORE CORE DRILLING. IF EMBEDDED ITEMS ARE FOUND, NOTIFY THE ENGINEER IMMEDIATELY.

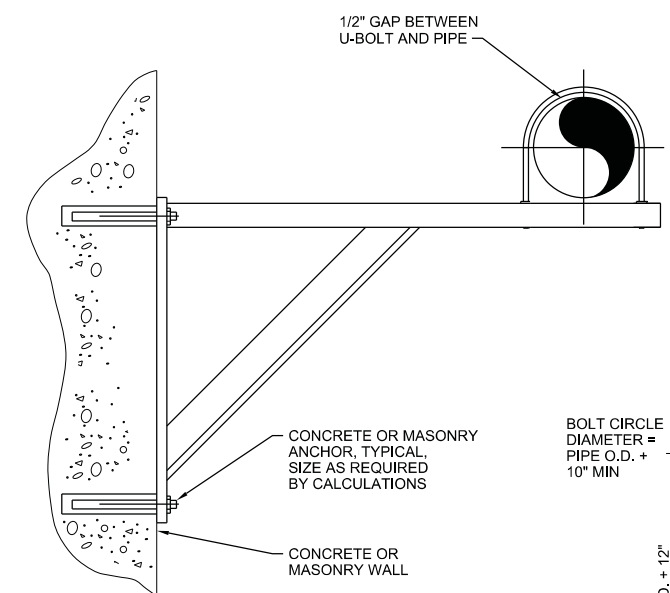


4 **DETAIL**
NTS
PIPE ANCHOR



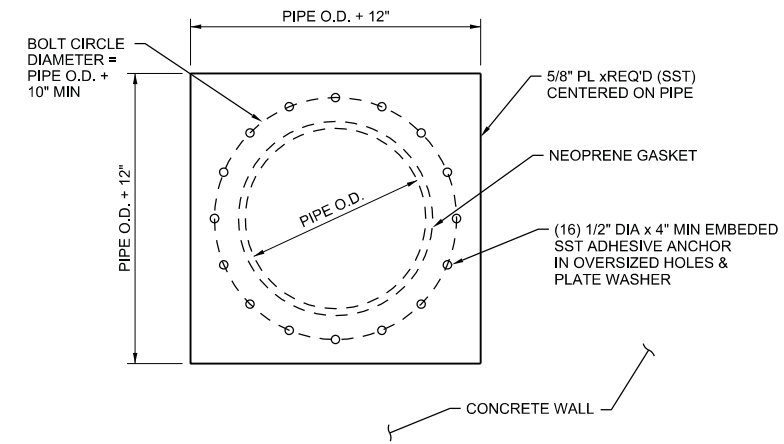
- NOTES:**
- WALL BRACKET SHALL BE MEDIUM HEAVY DUTY AS REQUIRED BY CALCULATIONS.
 - SUBMIT FINAL DESIGN AND CALCULATIONS FOR SUPPORT AND ANCHORAGE AS SPECIFIED.

5 **DETAIL**
NTS
ALP PIPE GUIDE DETAIL

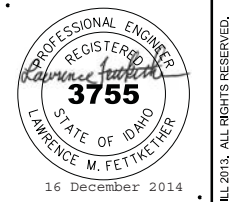


- NOTES:**
- WALL BRACKET SHALL BE MEDIUM HEAVY DUTY AS REQUIRED BY CALCULATIONS.
 - SUBMIT FINAL DESIGN AND CALCULATIONS FOR SUPPORT AND ANCHORAGE AS SPECIFIED.

6 **DETAIL**
NTS
ALP PIPE GUIDE DETAIL



6 **DETAIL**
NTS



NO.	DATE	DR	CHK	REVISION	BY	APVD
		A. ARANGO	J. PIGMAN			G. THOMPSON
						L. FELTKETHER

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
PROCESS MECHANICAL
**AERATION BASIN 1
DETAILS**

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: DECEMBER 2014
PROJ: 480770
DWG: 421-M-401
SHEET: 116 of 157

GENERAL SHEET NOTES

- A. FOR CIRCUITS SEE BLOCK DIAGRAMS.
- B. SEE AREA CLASSIFICATION AND MATERIAL SELECTION TABLE ON DRAWING 010-G-028.

SHEET KEYNOTES

- 1. WALL MOUNT DEVICES UNDER WALKWAY.
- 2. PIPE AND CONDUIT ROUTING ALONG WALKWAY BETWEEN BASINS WILL BE CONGESTED. COORDINATE CONDUIT SUPPORTS AND ROUTING WITH MECHANICAL.
- 3. MOUNT CONDUIT ALONG WALKWAY IN ACCORDANCE WITH 2605-302.
- 4. TWO NEW PUMPS SHALL BE INSTALLED IN EXISTING UNDERDRAIN PUMP STATION TO REPLACE EXISTING PUMPS. RECONNECT NEW PUMPS TO EXISTING ELECTRICAL CIRCUITS. MODIFY OR REPLACE EXISTING MOTOR OVERLOAD PROTECTION TO SUIT MOTOR SIZE AT STARTER LOCATION.



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 G THOMPSON
 APVD
 BY
 APVD
 M MACROSTIE
 CHK
 K BARTLETT
 DR
 T PALIN
 DSGN

NO.	DATE	DR	CHK	REVISION

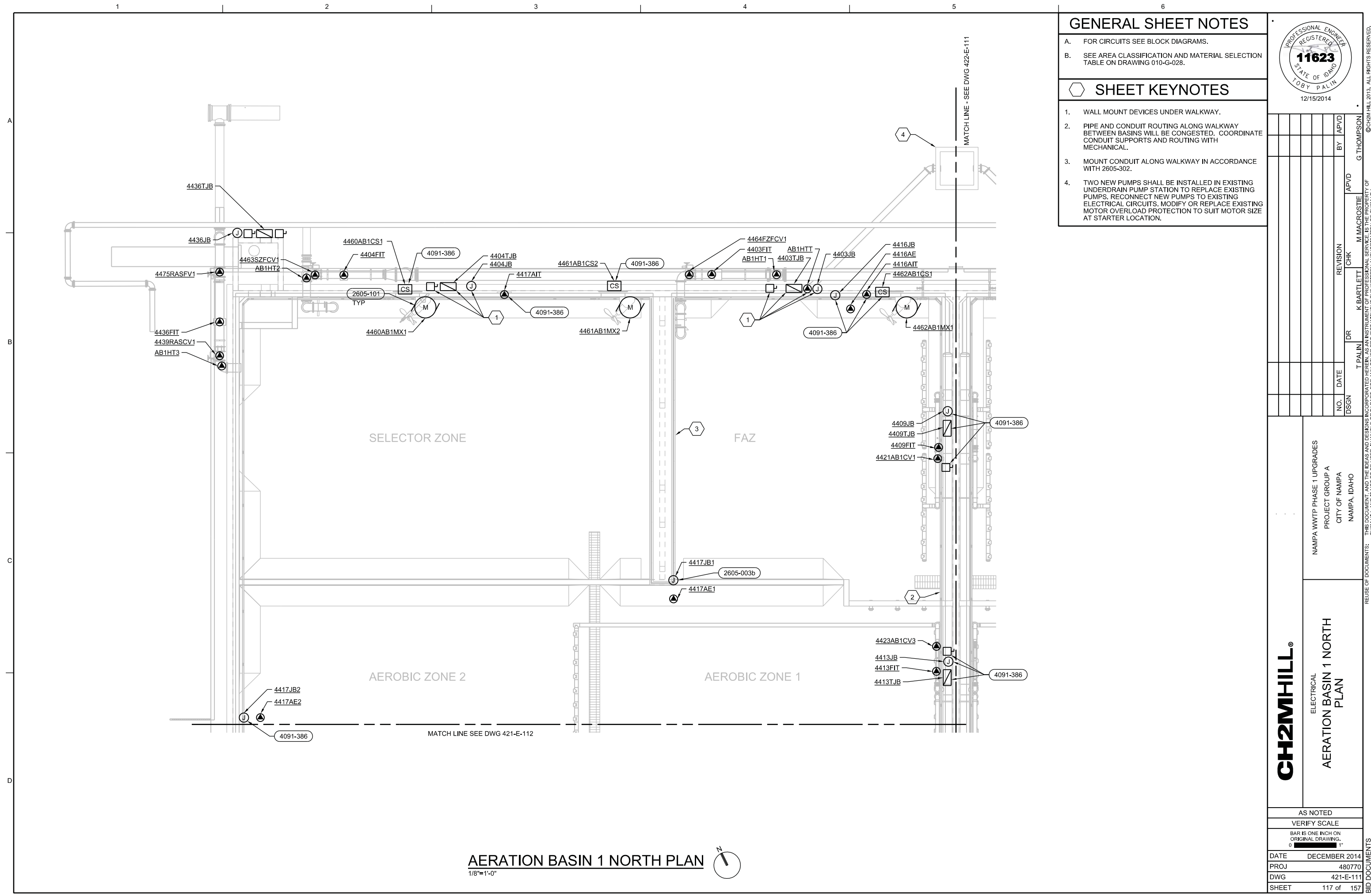
NAMPA WWTP PHASE 1 UPGRADES
 PROJECT GROUP A
 CITY OF NAMPA
 NAMPA, IDAHO

CH2MHILL®

ELECTRICAL AERATION BASIN 1 NORTH PLAN

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
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DWG 421-E-111
SHEET 117 of 157

BID DOCUMENTS

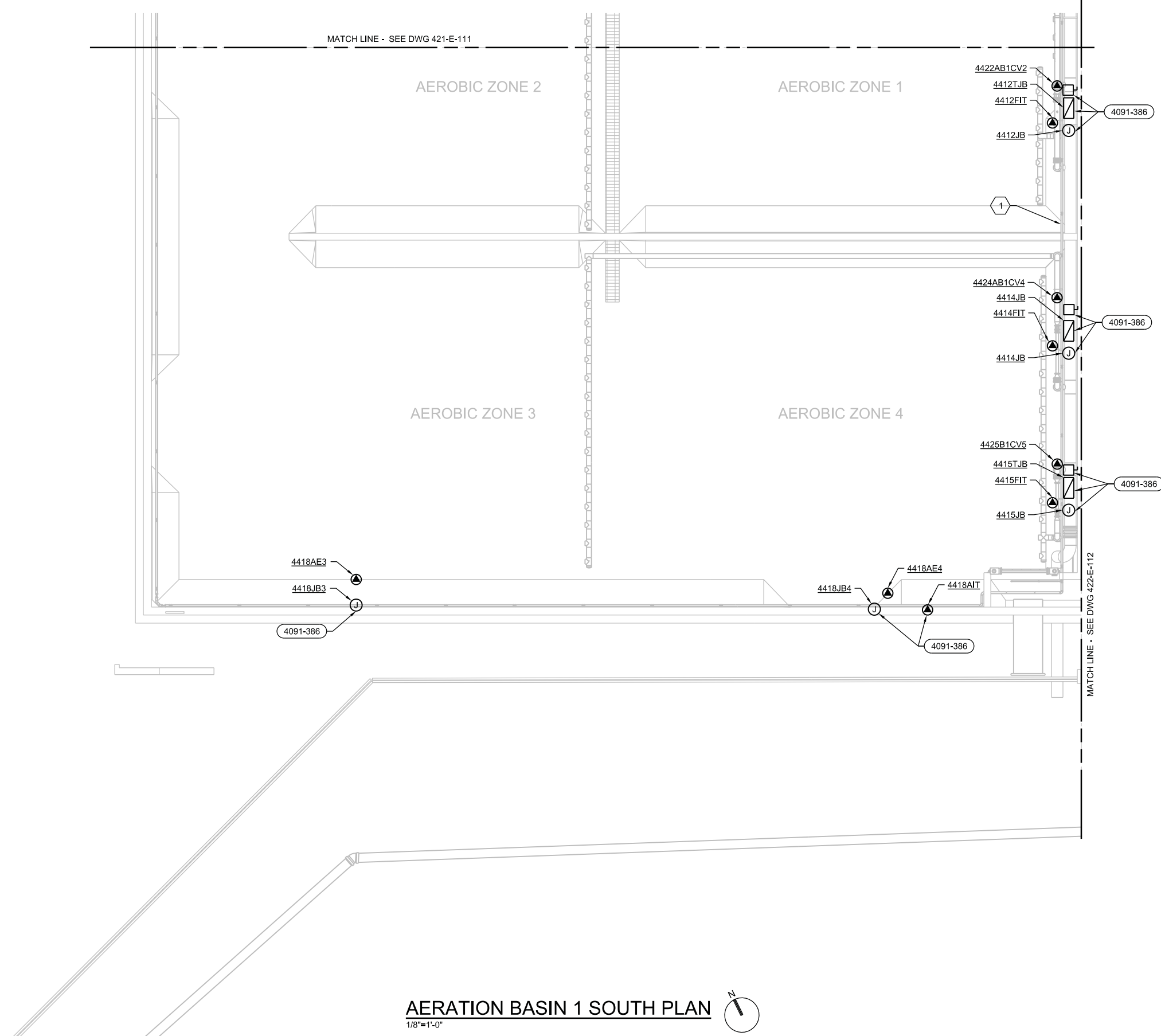


AERATION BASIN 1 NORTH PLAN
 1/8"=1'-0"



1 2 3 4 5 6

A
B
C
D



GENERAL SHEET NOTES

- A. FOR CIRCUITS SEE BLOCK DIAGRAMS.
- B. SEE AREA CLASSIFICATION AND MATERIAL SELECTION TABLE ON DRAWING 010-G-028.

SHEET KEYNOTES

- 1. PIPE AND CONDUIT ROUTING ALONG WALKWAY BETWEEN BASINS WILL BE CONGESTED. COORDINATE CONDUIT SUPPORTS AND ROUTING WITH MECHANICAL.



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					K. BARTLETT	
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NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
ELECTRICAL
AERATION BASIN 1 SOUTH PLAN

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SHEET: 118 of 157

AERATION BASIN 1 SOUTH PLAN
1/8"=1'-0"



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SHEET KEYNOTES

1. SAWCUT AND REMOVE EXISTING CONCRETE GUARD WALL AT WALKWAY. GRIND SMOOTH AT EXISTING WALKWAY ELEVATION. WIDTH OF DEMOLITION SHALL BE 3'-6" WIDE, CENTERED ON NEW WALKWAY. SEE 421-S-111 FOR WALKWAY LOCATION. SEE DETAIL 1 ON 421-S-301 (SIM) OMIT GUARDRAIL.
2. SAWCUT AND REMOVE EXISTING CONCRETE GUARDWALL TO FACILITATE MIXER MAINTENANCE AND REMOVAL. LOCATIONS SHOWN ARE APPROXIMATE. COORDINATE FINAL LOCATIONS WITH MIXER EQUIPMENT INSTALLATION IN FIELD. SEE PROCESS MECHANICAL AND DETAIL 1 ON 421-S-301.
3. DEMOLISH EXISTING CONCRETE "CHAMFER" TO ACCOMMODATE PLACEMENT OF NEW WALL FOOTING. COORDINATE LOCATION WITH AB2-S-101.

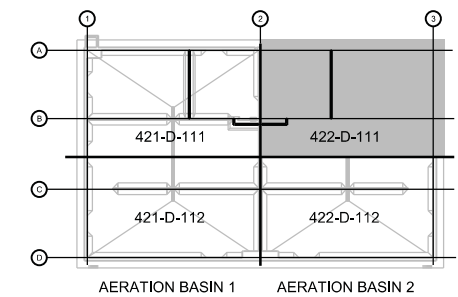
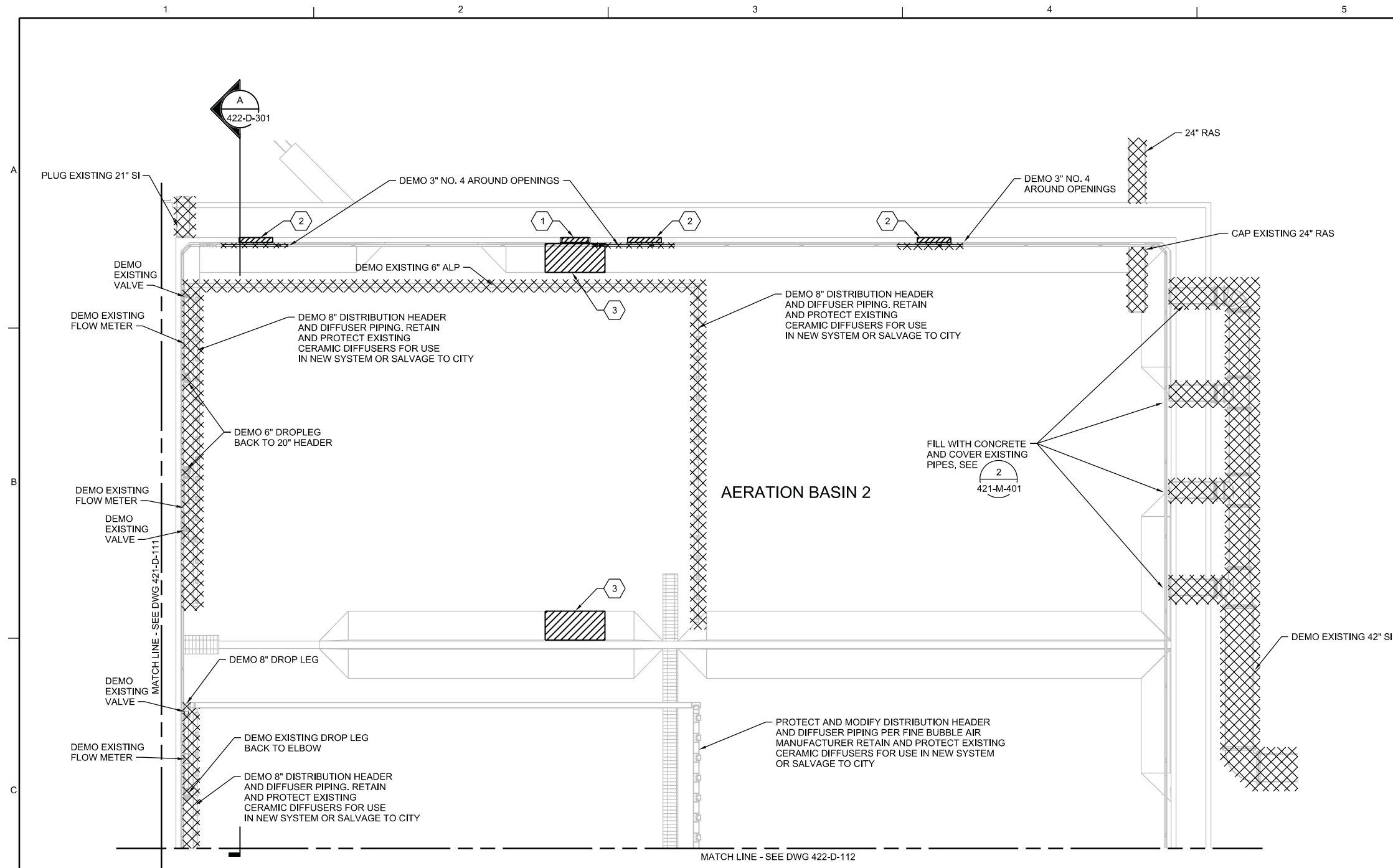


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		DGN	REVISION	APVD
				G. THOMPSON

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
DEMOLITION
**AERATION BASIN 2 NORTH
DEMOLITION PLAN**

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
DATE: DECEMBER 2014
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DWG: 422-D-111
SHEET: 121 of 157

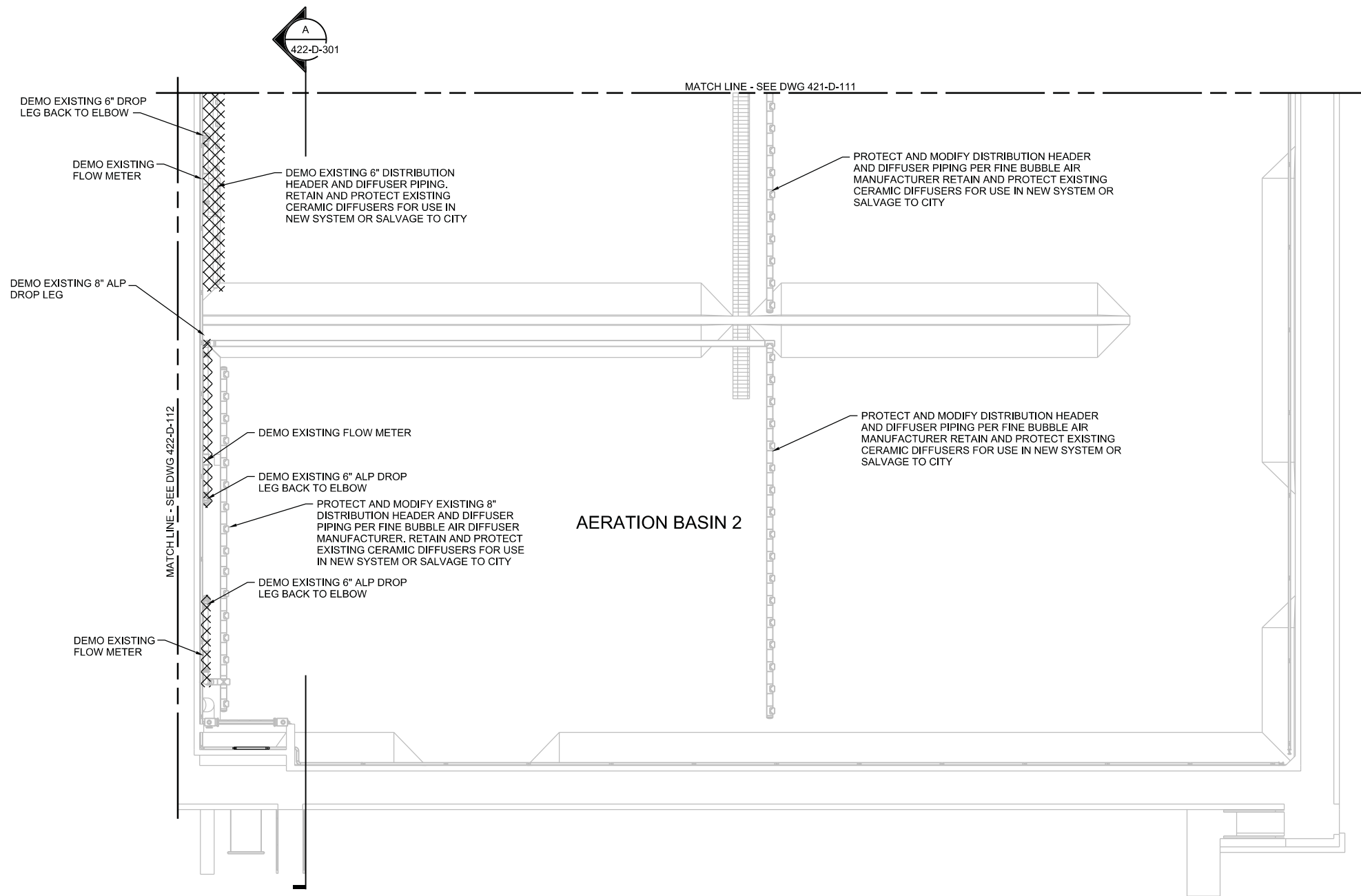


AERATION BASIN 2 NORTH DEMOLITION PLAN
1/8"=1'-0"

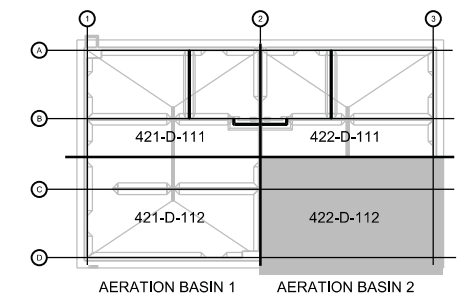
KEY PLAN
NTS

1 2 3 4 5 6

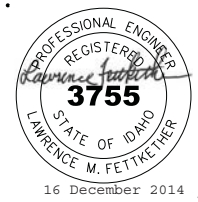
A
B
C
D



AERATION BASIN 2 SOUTH DEMOLITION PLAN
1/8"=1'-0"



KEY PLAN
NTS



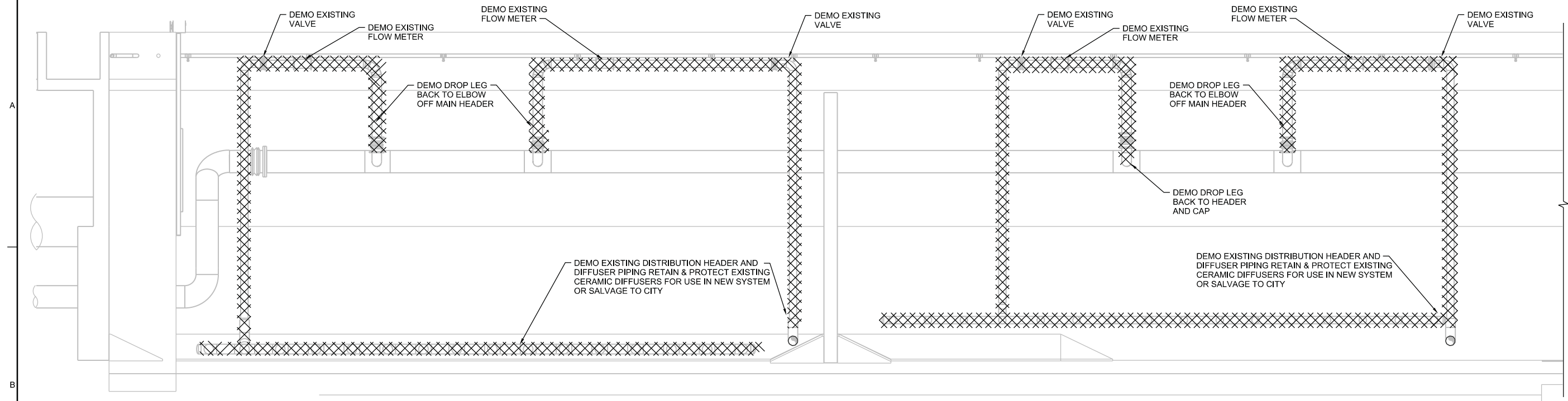
NO.	DATE	DSGN	DR	CHK	REVISION	BY	APVD
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				L FETTKETHER			
				A ARANGO			
				G THOMPSON			

NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL®
DEMOLITION
**AERATION BASIN 2 SOUTH
DEMOLITION PLAN**

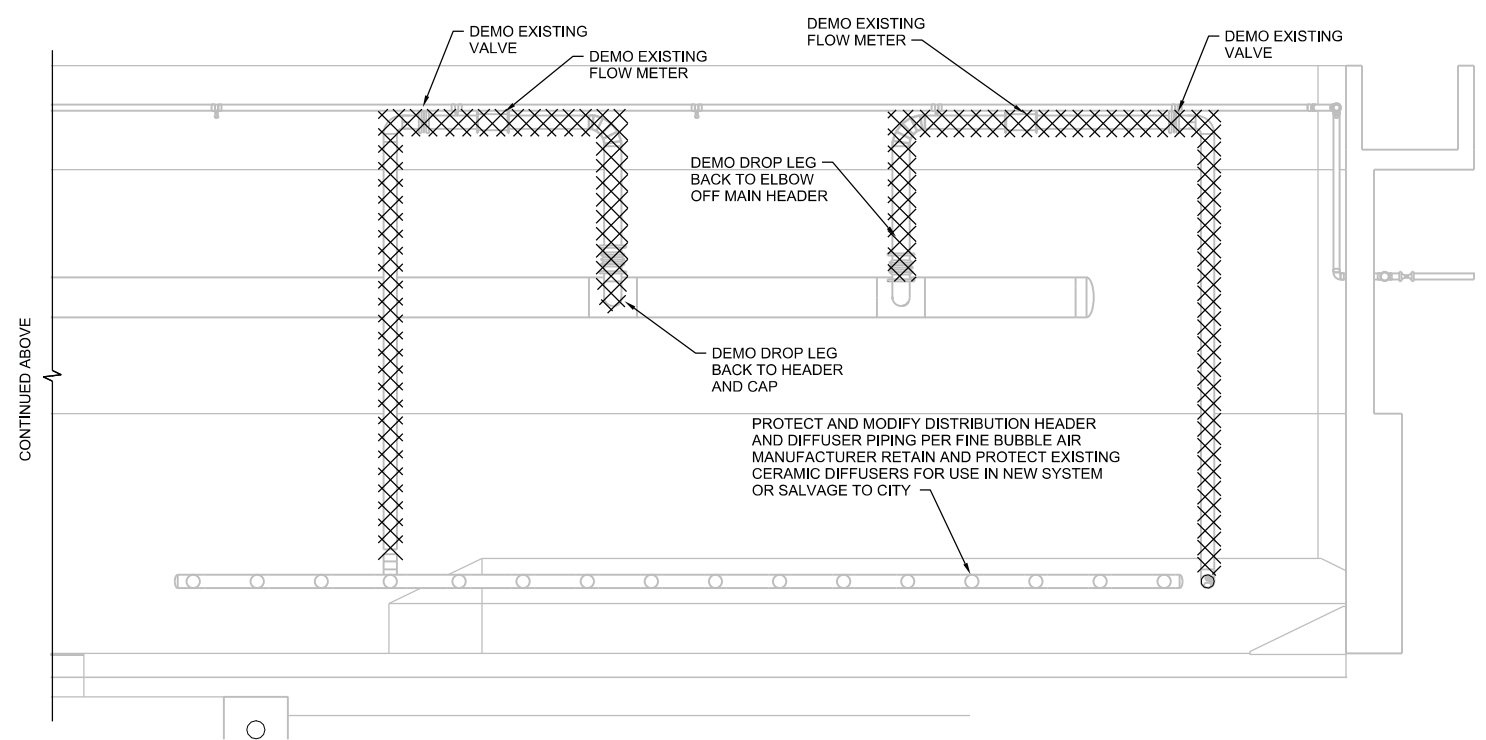
AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
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DWG 422-D-112
SHEET 122 of 157

1 2 3 4 5 6



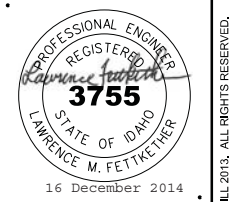
CONTINUED BELOW

A SECTION
1/4" = 1'-0"
422-D-111
422-D-112



CONTINUED ABOVE

A SECTION
1/4" = 1'-0"
422-D-111
422-D-112



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NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

CH2MHILL
DEMOLITION
AERATION BASIN 2
DEMOLITION SECTIONS

AS NOTED	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	DECEMBER 2014
PROJ	480770
DWG	422-D-301
SHEET	123 of 157

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GENERAL SHEET NOTES

- A. FOR GENERAL STRUCTURAL NOTES AND ABBREVIATIONS, SEE DRAWINGS 010-G-013, 010-G-014, AND 010-G-015.
- B. SEE STANDARD DETAILS FOR ADDITIONAL INFORMATION.
- C. DIMENSIONS TO EXISTING STRUCTURAL ELEMENTS ARE BASED OFF OF ORIGINAL CONSTRUCTION DRAWINGS AND SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
- D. BASINS SHALL BE FILLED OR EMPTIED SLOW ENOUGH THAT THE DIFFERENTIAL WATER ELEVATION ON EITHER SIDE OF INTERIOR WALLS DOES NOT EXCEED 1'-6" AT ANY TIME.



SHEET KEYNOTES

- 1. OMIT WATERSTOP. PROVIDE SEALANT AND BACKUP MATERIAL ON BOTH SIDES OF WALL.
- 2. EXPANSION JOINT IN NEW FOOTING AND NEW WALL SHALL MATCH LOCATION OF EXPANSION JOINT IN EXISTING BASE SLAB.
- 3. (SST) HSS6x6x1/4. INSTALL AT VALLEY/FOOTING INTERFACE SO BASIN WILL DRAIN. COORDINATE WITH PROCESS.
- 4. PROVIDE SEALANT AND BACKUP MATERIAL ON BOTH SIDES OF WALL.

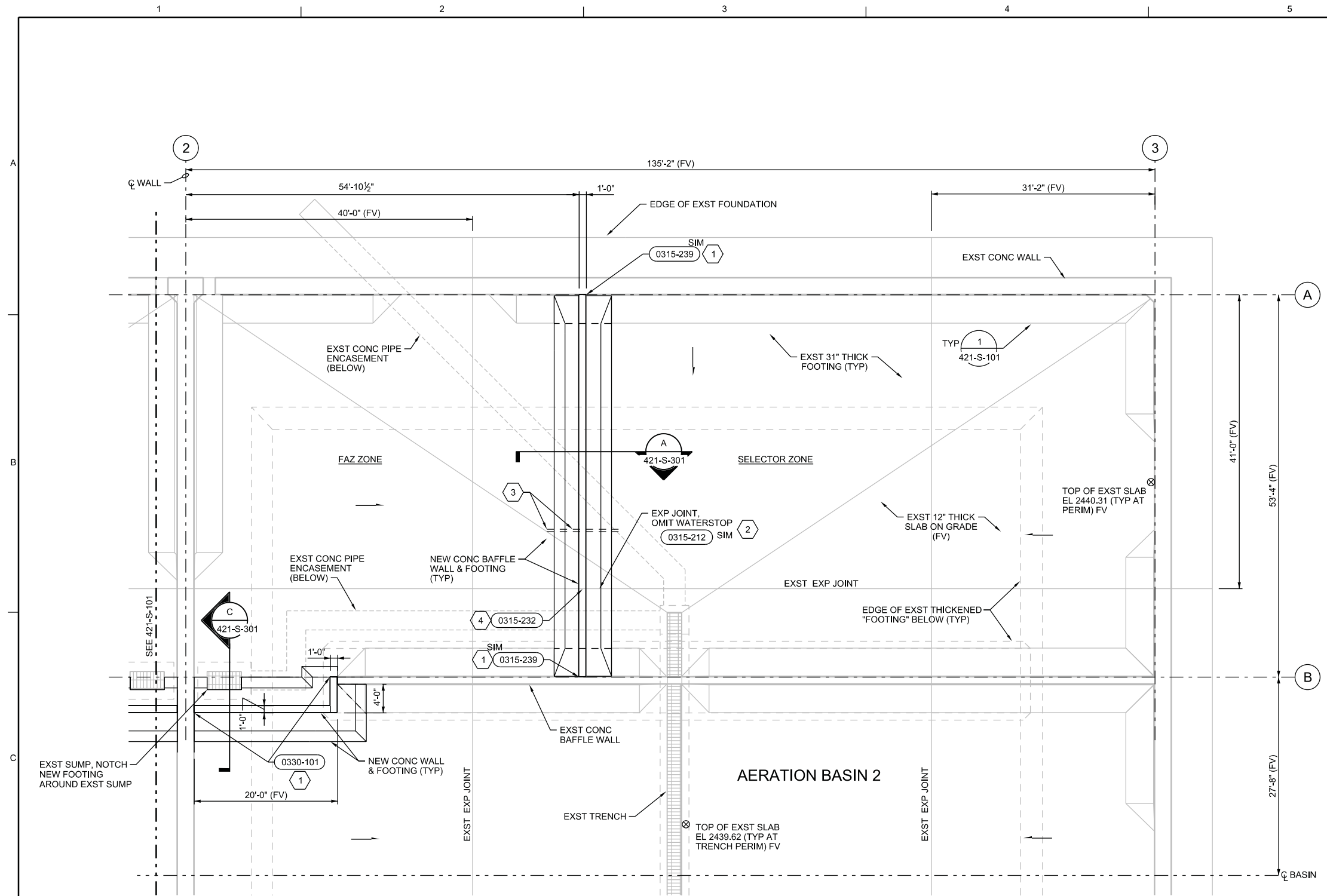
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NAMPA WWTP PHASE 1 UPGRADES
PROJECT GROUP A
CITY OF NAMPA
NAMPA, IDAHO

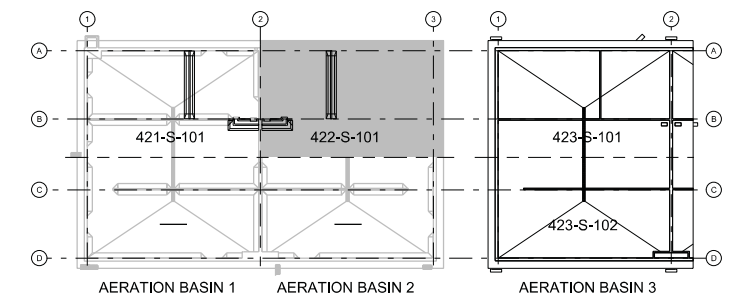
CH2MHILL
STRUCTURAL
**AERATION BASIN 2 NORTH
LOWER LEVEL PLAN**

AS NOTED
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
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DWG: 422-S-101
SHEET: 124 of 157

BID DOCUMENTS



AERATION BASIN 2 NORTH LOWER LEVEL PLAN
1/8"=1'-0"



KEY PLAN
NTS