

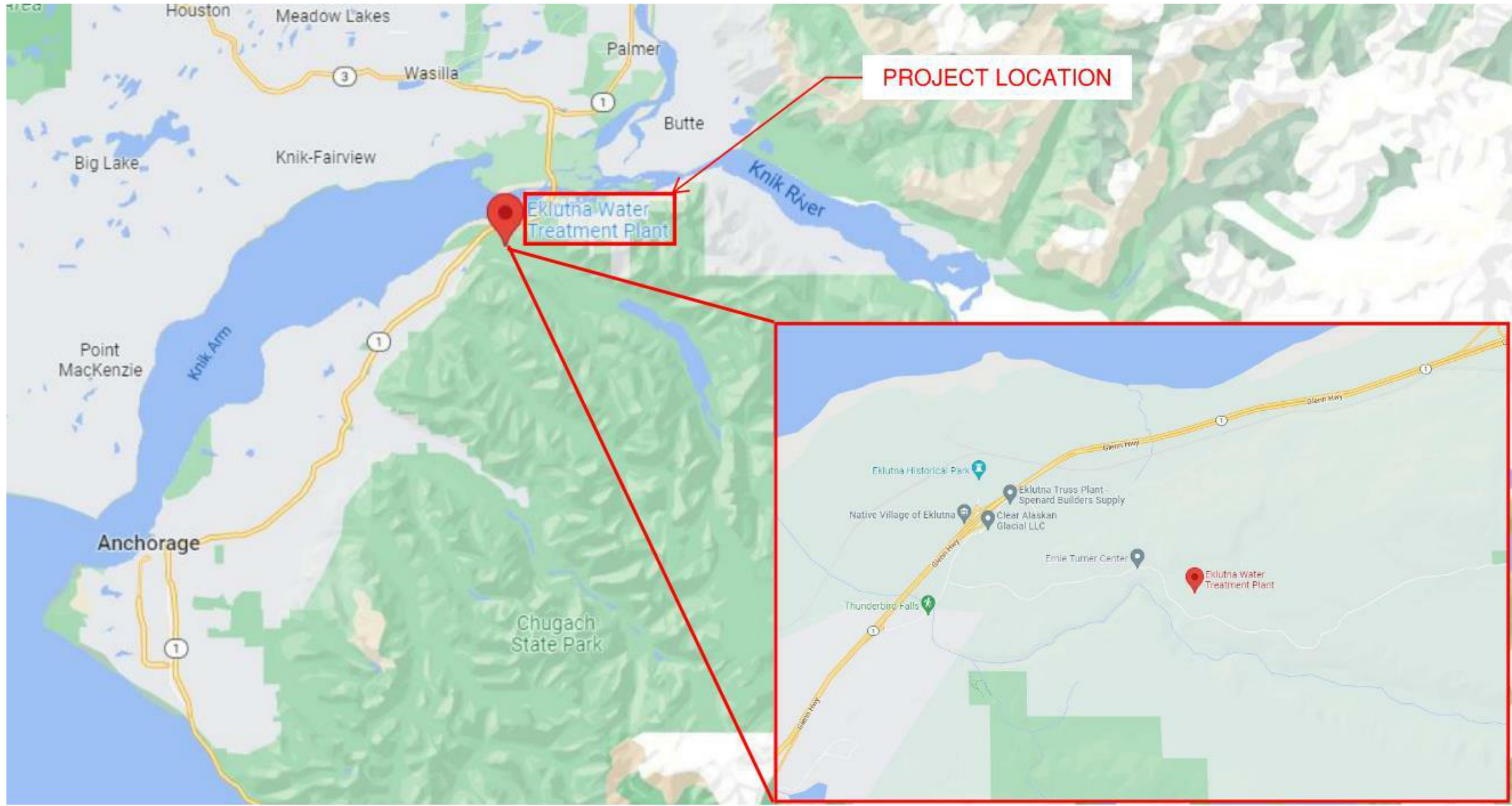
2023C001 WATER TREATMENT FACILITY EARTHQUAKE REPAIRS
SECTION XXI - RECORD DRAWINGS

ANCHORAGE WATER AND WASTEWATER UTILITY WATER TREATMENT FACILITY EARTHQUAKE REPAIRS EKLUTNA FACILITY

PLOT DATE: 12/17/2022 10:33:12 AM

PLOT SCALE: 1:1

AWWU PLAN SET NO. 11350



SCHEDULE AND DRAWINGS	
S1	TITLE PAGE
S2	GEN NOTES AND ABBR
S3	FOUNDATION LEVELS PLAN
S4	UPPER LEVEL PLAN
S5	UPPER LEVEL FLOOR CRACK PLAN
S6	UPPER LEVEL FLOCCULATION BASIN FLOOR BEAM CRACK PLAN
S7	WALL ELEVATIONS
S8	REPAIR DETAILS
S9	REPAIR DETAILS

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
WATER SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

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 BY: _____ DATE: _____

2. DATA TRANSFERRED BY: _____
 COMPANY: _____ DATE: _____

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**MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY**

**EKLUTNA WATER TREATMENT FACILITY
TITLE PAGE**

HORIZ SCALE: AS NOTED	DATE: 11/17/22	GRID: NE1902	S1 of 9
PROJ. ID.: WR0000387482		SHEET	

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GENERAL

THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AMONG THE DRAWINGS BEFORE STARTING ANY WORK OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, REFERENCE STANDARDS, SITE CONDITIONS OR GOVERNING CODE, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL NOTIFY THE ENGINEER OF DISCREPANCIES AND OBTAIN DIRECTION PRIOR TO PROCEEDING. NOTES ON INDIVIDUAL STRUCTURAL DRAWINGS SHALL TAKE PRIORITY OVER GENERAL STRUCTURAL NOTES. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED AS TYP ON THE PLANS BUT SHALL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS.

ALL CONSTRUCTION SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE MUNICIPALITY OF ANCHORAGE (MOA).

SAFETY - THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL FEDERAL, STATE AND LOCAL SAFETY STANDARDS. THE CONTRACTOR IS IN CHARGE OF ALL SAFETY MATTERS ON AND AROUND THE JOB SITE.

STRUCTURAL DESIGN DATA

REPAIR ITEMS DESIGNED TO RESTORE THE STRUCTURE TO ITS PRE-EARTHQUAKE CONDITION.

SPECIAL INSPECTION

THE OWNER SHALL ENGAGE A SPECIAL INSPECTOR PER CHAPTER 17 OF THE IBC. COPIES OF INSPECTION REPORTS SHALL BE AVAILABLE TO THE CONSTRUCTION SITE FOR REVIEW BY THE MOA BUILDING SAFETY PERSONNEL.

PERIODIC SPECIAL INSPECTION & MATERIAL TESTING IS REQUIRED FOR:

- ADHESIVE ANCHOR (PER ICC-ES REPORT)
- CONCRETE CONSTRUCTION (PER SPECIFICATIONS)
- CRACK REPAIRS (PER SPECIFICATIONS)

STRUCTURAL CONCRETE

ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301, STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE, AS MODIFIED BY IBC SECTION 1905 AND LOCAL ADOPTED AMENDMENTS.

ALL CAST-IN-PLACE CONCRETE:

1. EXPOSURE F2, S0, W0, C0 (ACI 318-14, 19.3.1.1)
2. MINIMUM 28-DAY COMPRESSIVE STRENGTH = 4,500 PSI
3. MAXIMUM AGGREGATE SIZE = 3/4"
4. MAXIMUM WATER-CEMENT RATIO = 0.45
5. MAXIMUM CHLORIDE ION CONTENT = 1.00%
6. TARGET AIR CONTENT = 6% (+/-1%), EXCEPT FOR TROWELED INTERIOR SLABS WHICH SHALL NOT EXCEED 3% AIR CONTENT.

CONCRETE SHALL BE PROPORTIONED TO ACHIEVE A WORKABLE MIX THAT CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER.

APPLICABLE ASTM STANDARDS:

- PORTLAND CEMENT = ASTM C150
- AGGREGATE = ASTM C33, NORMAL WEIGHT
- WATER = ASTM C94, SECTION 5.4 OR ASTM C1602
- WATER REDUCING ADMIXTURE = ASTM C494, TYPE A

CONCRETE PLACED DURING COLD WEATHER SHALL CONFORM TO ACI 306. ALL COLD WEATHER CONCRETE AND CONCRETE EXPOSED TO WEATHER SHALL CONTAIN AIR ENTRAINMENT PER ACI 318-14 TABLE 19.3.3.1.

MINIMUM CONCRETE COVER FOR REINFORCEMENT FOR CAST-IN-PLACE CONCRETE = 1 1/2-INCH.

ALL CONCRETE REINFORCING SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 315, ACI 318, CRSI MSP-1 AND ACI SP-66. DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING.

TYPICAL REINFORCING BARS SHALL BE ASTM A615, GRADE 60. LAP SPLICES SHALL BE CLASS B LAPS PER ACI (63 X BAR DIAMETER). LAP SPLICES MAY ALSO ACCOMPLISHED USING MECHANICAL DEVICES THAT DEVELOP 125% OF THE STRENGTH OF THE REBAR.

CHECKED SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING AND PLACEMENT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMIT MIX DESIGNS FOR REVIEW PRIOR TO USE.

EMBEDDED ITEMS (CONDUIT AND SLEEVES) SHALL NOT BE EMBEDDED IN OR PASS THROUGH CONCRETE WITHOUT APPROVAL. ALUMINUM ITEMS SHALL NOT BE EMBEDDED IN CONCRETE. SUBMIT CONDUIT LAYOUT AND EMBEDDED ITEM PLANS FOR REVIEW PRIOR TO PLACING CONCRETE.

NON-SHRINK GROUT SHALL BE NON-METALLIC, CONFORMING TO ASTM C1107.

POST-INSTALLED ANCHORS

INSTALLATION SHALL CONFORM TO MANUFACTURER'S INSTRUCTIONS AND REQUIREMENTS OF ICC-ES REPORT. ALL POST-INSTALLED ANCHORS SHALL HAVE A CURRENT ICC-ES REPORT AND BE AUTHORIZED FOR USE IN SEISMIC DESIGN CATEGORY D. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR ALL POST-INSTALLED ANCHORS. UON. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED SHALL BE PERFORMED BY ACI/CRSI CERTIFIED PERSONNEL ONLY AND REQUIRES CONTINUOUS SPECIAL INSPECTION.

THREADED ROD SHALL BE ASTM A307, UON (OR ISO898 CLASS 5.8), TENSILE STRENGTH OF 60 KSI MIN, AND GALVANIZED WHERE EXPOSED TO THE WEATHER.

EXISTING BASE SHALL BE SCANNED PRIOR TO DRILLING HOLES. EXISTING REBAR LOCATIONS SHALL BE MARKED, AND NEW ANCHOR LOCATIONS REVISED TO AVOID EXISTING REINFORCING. NO REINFORCING BARS SHALL BE CUT TO INSTALL ANCHORS. ALL DEFECTIVE ANCHOR HOLES SHALL BE GROUTED AND A NEW HOLE DRILLED A MINIMUM OF 3 BOLT DIAMETERS AWAY.

ADHESIVE ANCHORS FOR THREADED ROD AND REBAR SHALL BE ONE OF THE FOLLOWING (OR AN APPROVED EQUIVALENT):

- CONCRETE:
- DEWALT "PURE110+" (ESR-3298)
 - HILTI "HIT-HY 200 SAFE SET" (ESR-3187)
 - EPICON "A7+" (ESR-3903)
 - SIMPSON "SET-XP" (ESR-2508)
- MASONRY (SOLID & UNGROUTED):
- SIMPSON "SET-XP" (IAPMO UES ER-265)
 - HILTI "HY-270" (ESR-4143 GROUTED CMU or ESR-4144 UNGROUTED CMU)
 - DEWALT "AC100+gold" (ESR-3200)

SCREW ANCHORS IN CONCRETE AND GROUT FILLED MASONRY SHALL BE ONE OF THE FOLLOWING (OR AN APPROVED EQUIVALENT):

- HILTI "KWIK HUS-EZ" (ESR-3027 CONC, ESR-3056 CMU)
- SIMPSON "TITEN HD" (ESR-2713 CONC, ESR-1056 CMU)
- ITW "TAPCON" (ESR-2202 CONC, ESR-1671 CMU)
- DEWALT "SCREW-BOLT+" (ESR-3889 CONC, ESR-4042 CMU)

CRACK & SPALL REPAIR

ALL CONCRETE AND MASONRY CRACK AND SPALL REPAIRS WILL COMPLY WITH ACI 548.12.

MINOR CRACKS IN CONCRETE AND CMU THAT ARE LESS THAN 0.060" (1/16") WIDE WILL NOT BE REPAIRED.


CONCRETE FLOOR AND WALL CRACKS LARGER THAN 0.060", BUT LESS THAN 0.25" WILL BE REPAIRED WITH PRESSURE INJECTED 'KEMKO 038' TWO-COMPONENT EPOXY RESIN OR EQUAL. CRACK SURFACE WILL BE SEALED WITH 'KEMCO CCS GROUT/SEAL' TWO-COMPONENT NON-SAG PASTE OR EQUAL PRIOR TO INJECTION. OTHER REPAIRS MAY BE NEEDED IF WALL IS HOLLOW OR OPEN CELLS ARE FOUND, CONSULT EOR.

CONCRETE AND MASONRY CRACKS LARGER THAN 0.25", BUT LESS THAN 2" WILL BE SEALED WITH 'FLEXCRETE 102' OR KEMKO 077 IR" LARGE VOID FILLER.

CONCRETE FLOOR CRACKS GREATER THAN 1/4" WILL BE REPAIRED WITH CARBON FIBER STAPLES, 'FORTRESS POWER GRID STITCH' OR EQUAL. CUT 1/8" WIDE X 5/8" DEEP SLOTS PERPENDICULAR TO CRACK. SPACING TO BE DETERMINED IN THE FIELD TO PERMANENTLY REPAIR CRACK; SPACING SHALL NOT EXCEED 24" OC FOR CRACKS BETWEEN 3/16" AND 1/2" WIDE, SPACING SHALL NOT EXCEED 12" OC FOR CRACKS BETWEEN 1/2" AND 2". PROVIDE (2) STAPLES AT 30" ORIENTATION OF CRACK IN "X" ORIENTATION, AT 4" OC MAX SPACING. PLACE CARBON FIBER STAPLES WITH 'FORTRESS 4000' EPOXY RESIN OR EQUAL.

CONCRETE SPALLS AND MASONRY TUCK AND POINT WILL BE REPAIRED WITH 'FLEXCRETE 102' TWO-COMPONENT THERMOSET VINYL POLYMER OR EQUAL. ALL SURFACES WILL BE PREPARED WITH 'FLEXPRIME' PRIMER OR EQUAL PRIOR TO FLEXCRETE APPLICATION. AT VERTICAL AND OVERHEAD APPLICATIONS, FLEXCRETE WILL BE MIXED WITH BLAST SAND AND FUMED SILICA. #4 BASALT REBAR 'GATORBAR' OR GFRP 'GATORGLASS' WILL BE ADHESIVELY EMBEDDED, CROSSING ANY PARALLEL TO SURFACE DELAMINATIONS, AT 6" ON-CENTER, EACH DIRECTION

@	At	BLKG	Blocking	EA	Each	INT	Interior	OH	Overhead	SIM	Similar	TYP	Typical
AB	Anchor Bolts	BM	Beam	EQ	Equal. Earthquake	LAG	Lag Screw	OPNG	Opening	SQ	Square	UON	Unless Otherwise Noted
BLDG	Building	BOT	Bottom	EW	Each Way	LOC	Location	PL	Plate	STL	Steel	VERT	Vertical
ARCH	Architect	BTWN	Between	EXP	Expansion	LONG	Longitudinal	PLS	Places	T&B	Top and Bottom	W/	With
AR	Anchor Rod	CL	Center-Line	FDN	Foundation	MAX	Maximum	PSF	Pounds-per-square-foot	T&G	Tongue and Groove	W/O	Without
ALT	Alternate	CLR	Clear	FF	Finished Floor	MEZZ	Mezzanine	PSI	Pounds-per-square-inch	T.O.	Top of	W	Wide-Flange, Wide
AHJ	Authority Having Jurisdiction	COL	Column	GALV	Galvanized	MIN	Minimum	REQ'D	Required	T.O.B.	Top of Beam	W/C	Water / Cement Ratio
AFF	Above Finish Floor	CONC	Concrete	GLB	Glue-Laminated Beam	MFR	Manufacturer	RO	Rough Opening	T.O.S.	Top of Steel	W.P.	Work Point
ADH	Adhesive	CONT	Continuous, Continue	HORZ	Horizontal	(N)	New	SBN	Shearwall Boundary Nailing	T.O.W.	Top of Wall	WWR	Welded Wire Reinforcement
ADD'L	Additional	DBN	Diaphragm Boundary Nailing	HSS	Hollow Structural Steel	OC	On-Center	SCH	Schedule	TRANS	Transverse		
		(E)	Existing	IBC	International Building Code								

VERIFY SC ALE	THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.	0"  1"	IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY	FULL SIZE SCALE HORZ SCALE: VERT SCALE:					
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELEC TRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

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MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY

EKLUTNA WATER TREATMENT FACILITY GEN NOTES AND ABBR

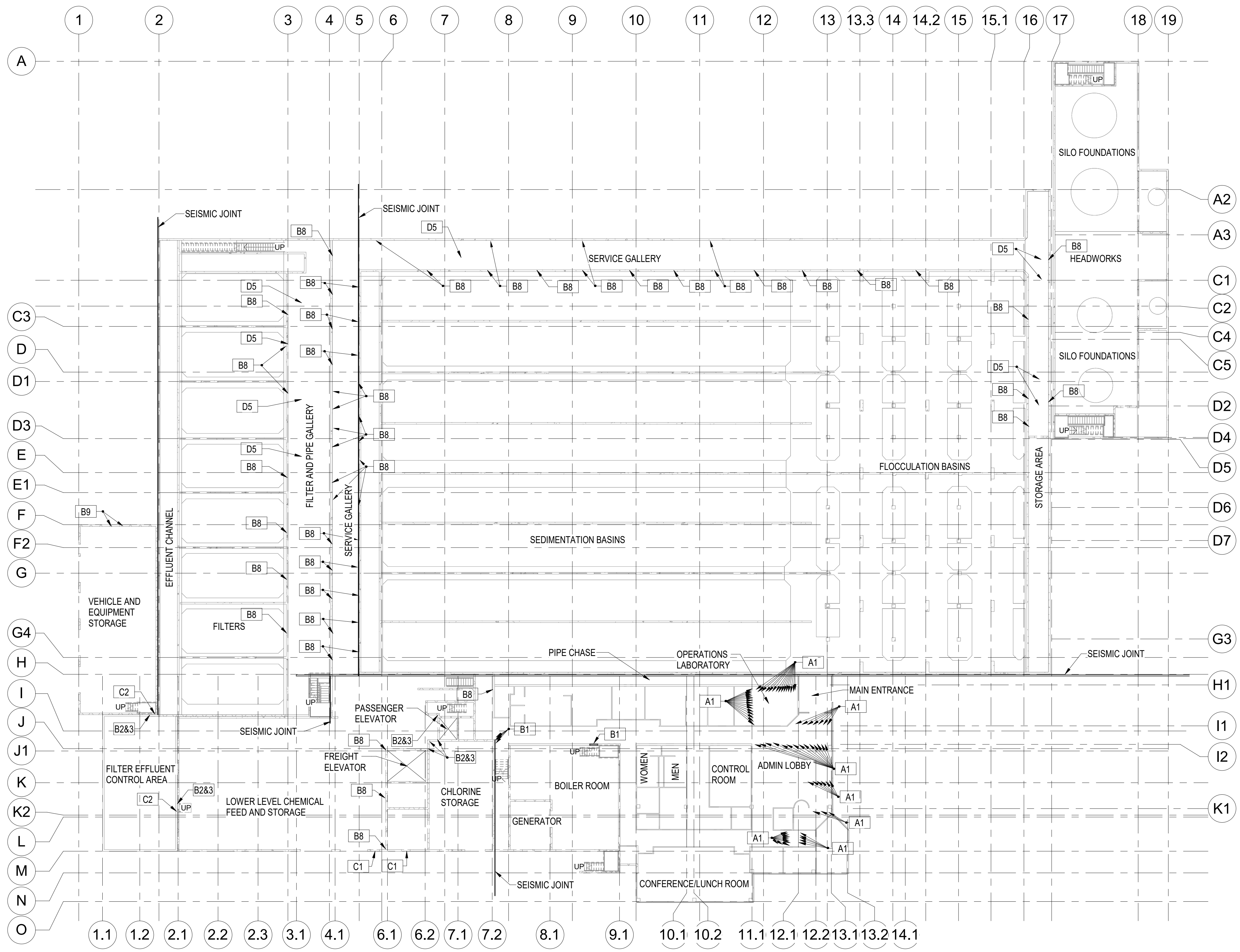
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PROJ. ID.: WR0000387482	SHEET		9

PLOT DATE: 12/17/2022 10:33:13 AM

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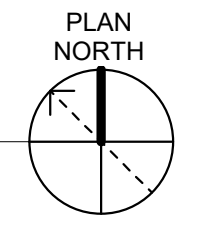
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AWWU PLAN SET NO. 11350



FEMA REPAIR ITEM SCHEDULE	
A1	CRACKED 6" x 6" CERAMIC FLOOR TILES, SEE 4/S8
B1	CRACKED CERAMIC WALL TILES, SEE 4/S8
B2&3	WALL SEISMIC EXPANSION JOINT CAULKING CRACKED, SEE 9/S8
B8	CONCRETE WALL CRACKS, SEE 1/S8 AND 2/S8
B9	ROOF DRAIN PIPE MISSING WALL MOUNT BRACKETS, SEE 6/S8
C1	ENTRY METAL FRAME DOOR OUT OF PLUMB, SEE 8/S8
C2	CAULKING OF DOOR FRAME CRACKED- PERIMETER OF DOOR FRAME, SEE 9/S8
D5	CRACKED CONCRETE CEILING

1 FOUNDATION LEVEL PLAN
3/64" = 1'-0"



DATA	DRAWN BY	CHECKED BY	DATE	DESCRIPTION	BY
BASE	---	---	---	TELEPHONE	---
TOPOGRAPHY	---	---	---	ELECTRIC	---
PROFILE	---	---	---	CABLE TV	---
SANITARY SEWER	---	---	---	TRAFFIC SIGNAL	---
STORM SEWER	---	---	---	DESIGN	---
WATER	---	---	---	QUANTITIES	---
GAS	---	---	---	MUN. FINAL CHECK	---

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STATE OF ALASKA
49 TH
JASON E. KWATKOWSKI
REGISTERED PROFESSIONAL ENGINEER
No. CE 118884
11.17.22

ANCHORAGE WATER & WASTEWATER UTILITY
MUNICIPALITY OF ANCHORAGE

MUNICIPALITY OF ANCHORAGE
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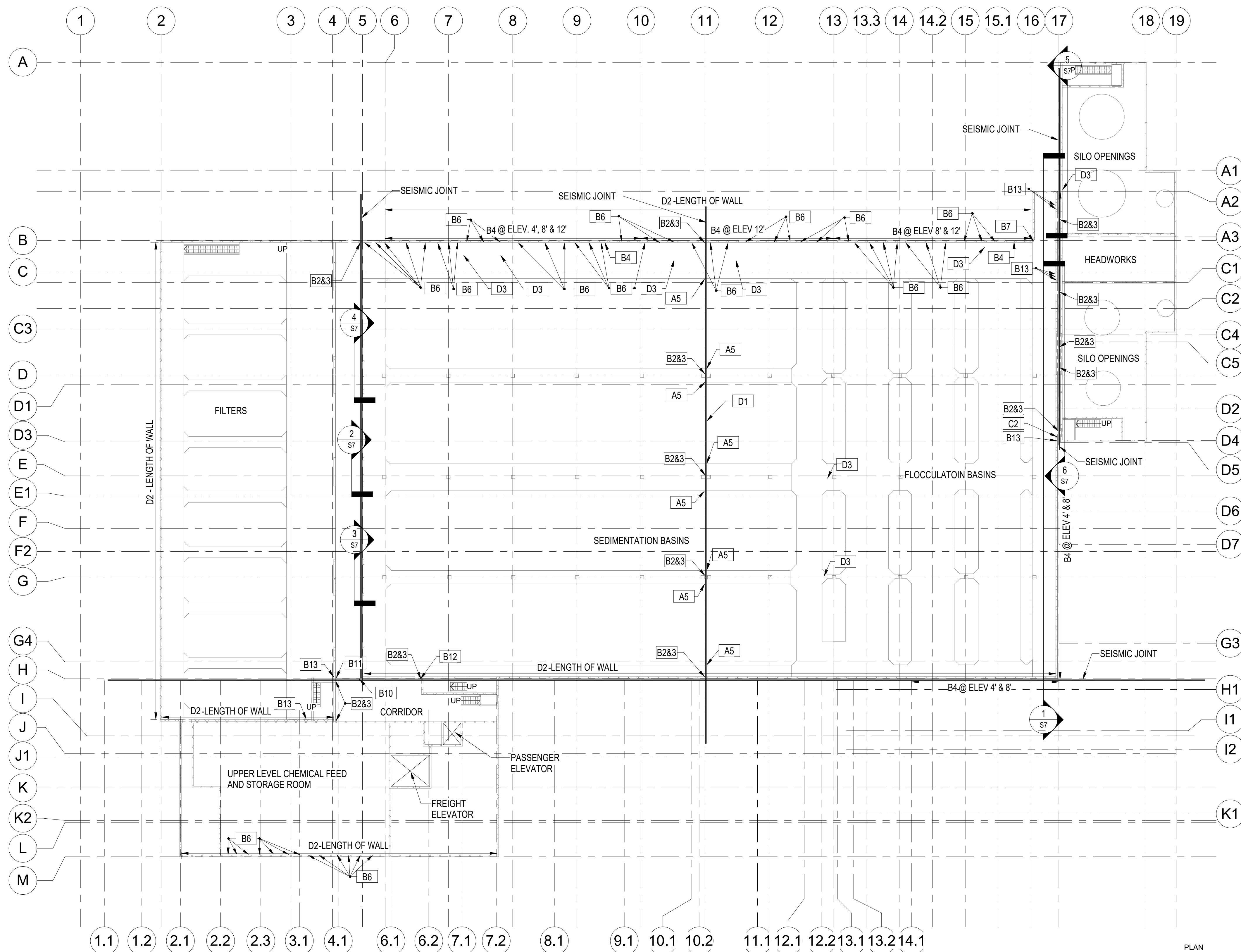
**EKLUTNA WATER TREATMENT FACILITY
FOUNDATION LEVEL PLAN**

HORIZ SCALE: AS NOTED DATE: 11/17/22 GRID: NE1902 SHEET S3 of 9
PROJ. ID.: WR0000387482

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FEMA REPAIR ITEM SCHEDULE	
A5	HANDRAIL SEPARATION, SEE 5/S8
B2&3	WALL SEISMIC EXPANSION JOINT CAULKING CRACKED, SEE 9/S8
B4	CMU MORTAR JOINTS CRACKED, SEE 10/S8
B6	CAULK AT PURLIN LEDGE MISSING OR CRACKED, SEE 9/S8
B7	CONCRETE CORNER WALL SECTION CRACKED AT BUILDING INTERIOR, SEE 2/S8 AND 10/S8
B10	ROOF SUPPORT LEDGE SHEARED OFF, SEE 7/S8
B11	DROPPED CONCRETE BEAM LEDGE SUPPORT, SEE 1/S9
B12	CRACKED CONCRETE BEAM, SEE 11/S8
B13	FIRE BREAK CAULK MISSING, SEE 9/S8
C2	CAULKING OF DOOR FRAME CRACKED- PERIMETER OF DOOR FRAME, SEE 9/S8
D1	SEISMIC JOINT AT CEILING CRACKED-LENGTH OF JOINT
D2	ROOF PANEL TO WALL GROUT CRACKED OR MISSING, SEE 12/S8
D3	NATURAL GAS PIPE BRACKET LOOSE, SEE 6/S8

1 UPPER LEVEL PLAN
3/64" = 1'-0"

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BASE	---	---	---	---	TELEPHONE	---
TOPOGRAPHY	---	---	---	---	ELECTRIC	---
PROFILE	---	---	---	---	CABLE TV	---
SANITARY SEWER	---	---	---	---	TRAFFIC SIGNAL	---
STORM SEWER	---	---	---	---	DESIGN	---
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11.17.22

ANCHORAGE WATER & WASTEWATER UTILITY
MUNICIPALITY OF ANCHORAGE

MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY

EKLUTNA WATER TREATMENT FACILITY UPPER LEVEL PLAN

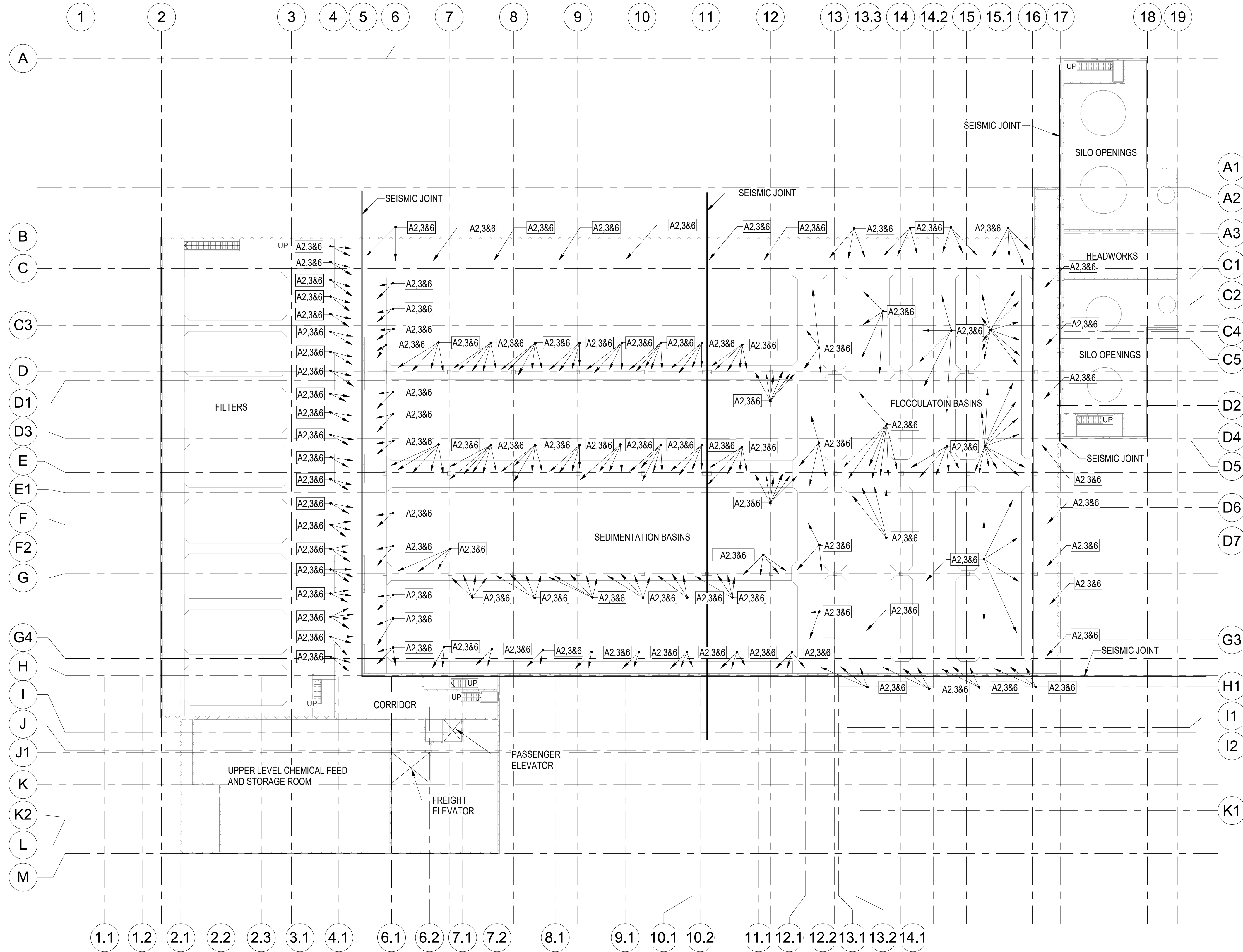
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PROJ. ID.: WR0000387482

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FEMA REPAIR ITEM SCHEDULE	
A2,3&6	CRACKED CONCRETE FLOOR, SEE 1/S8 AND 2/S8

1 UPPER LEVEL PLAN-FLOOR CRACK PLAN
3/64" = 1'-0"

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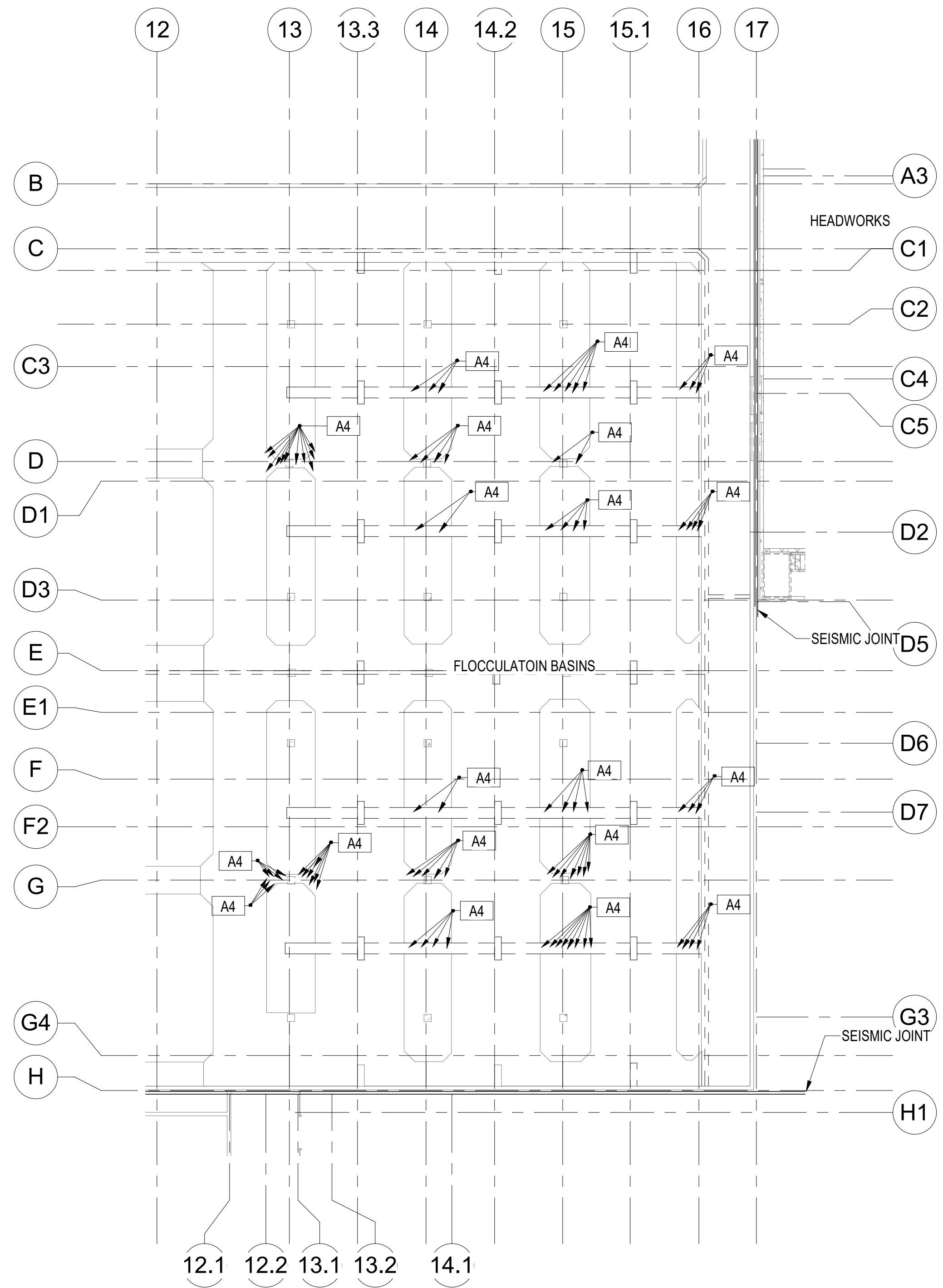
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WATER & WASTEWATER UTILITY

**EKLUTNA WATER TREATMENT FACILITY
UPPER LEVEL FLOOR CRACK PLAN**

HORZ SCALE: AS NOTED DATE: 11/17/22 GRID: NE1902 SHEET 55 of 9
VERT SCALE: AS NOTED
PROJ. ID.: WR0000387482

AWWU PLAN SET NO. 11350



FEMA REPAIR ITEM SCHEDULE	
A4	CRACKED CONCRETE FLOOR CONNECTING BEAM, SEE 1/S8 AND 2/S8

1 UPPER LEVEL PLAN FLOCCULATION BASIN-FLOOR CRACK MAP
1/16" = 1'-0"

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
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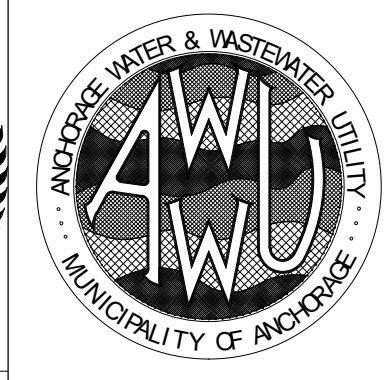
2. DATA TRANSFERRED BY: _____ DATE: _____

CONTRACTOR: _____ TITLE: _____ DATA TRANSFER CHECKED BY: _____

BY: _____ TITLE: _____ COMPANY: _____ DATE: _____

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MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

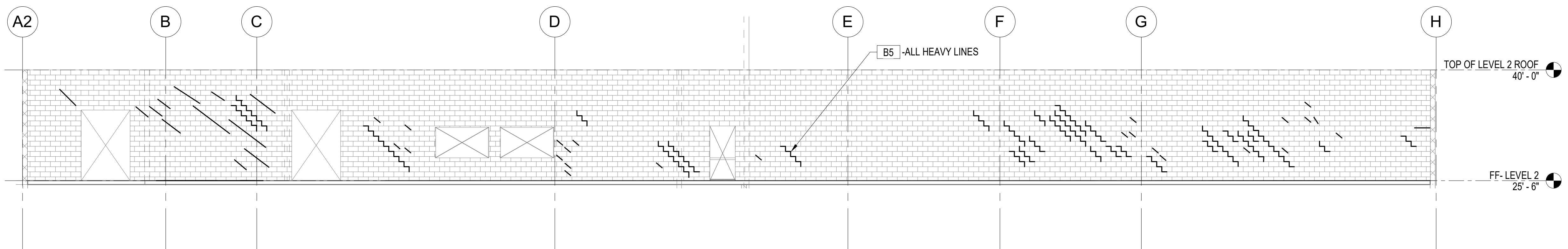
EKLUTNA WATER TREATMENT FACILITY
**UPPER LEVEL FLOCCULATION BASIN
FLOOR BEAM CRACK MAP**

HORIZ SCALE: AS NOTED DATE: 11/17/22 GRID: NE1902 SHEET S6 of 9
VERT SCALE: AS NOTED
PROJ. ID.: WR0000387482

PLOT DATE: 12/17/2022 10:33:18 AM

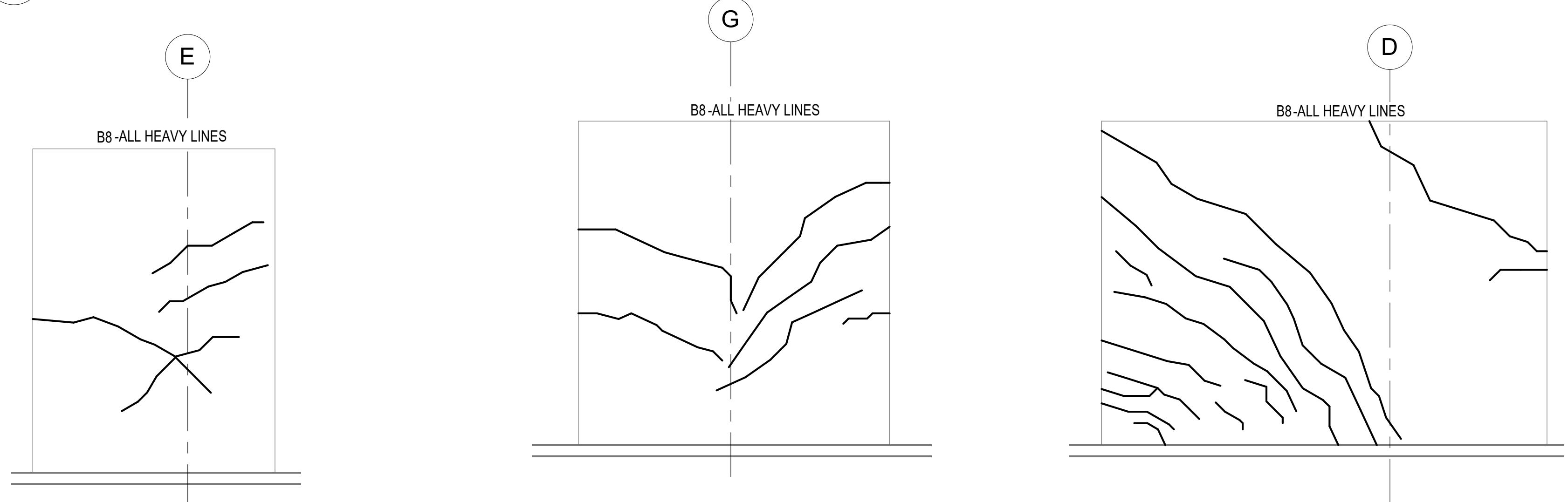
PLOT SCALE: Checker

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FEMA REPAIR ITEM SCHEDULE	
B5	CMU DIAGONAL CRACKS, SEE 3/S8
B8	CONCRETE WALL CRACKS, SEE 1/S8 AND 2/S8

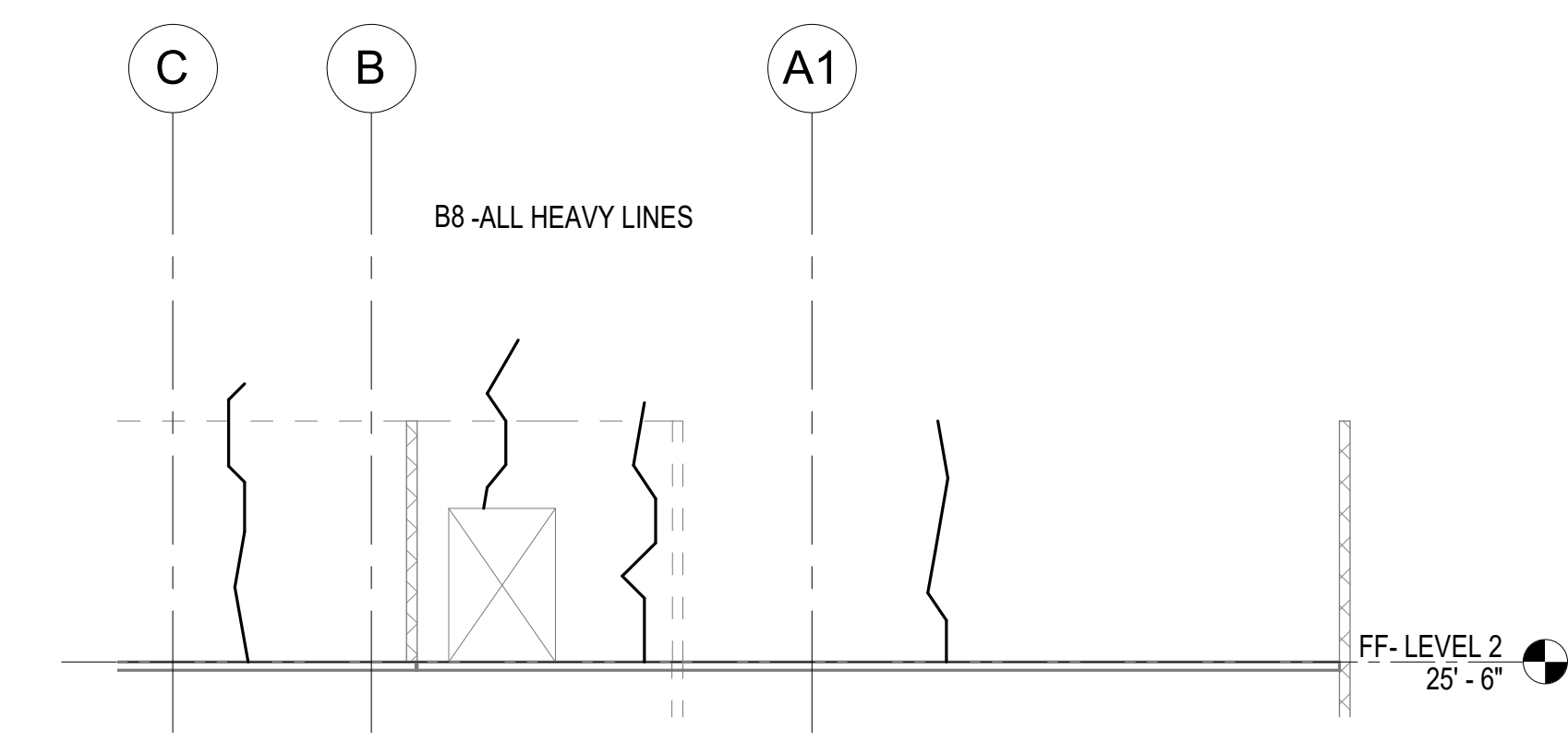
1 WALL AT GRID 17- UPPER LEVEL FLOCCULATION BAINS
S7 1/8" = 1'-0"



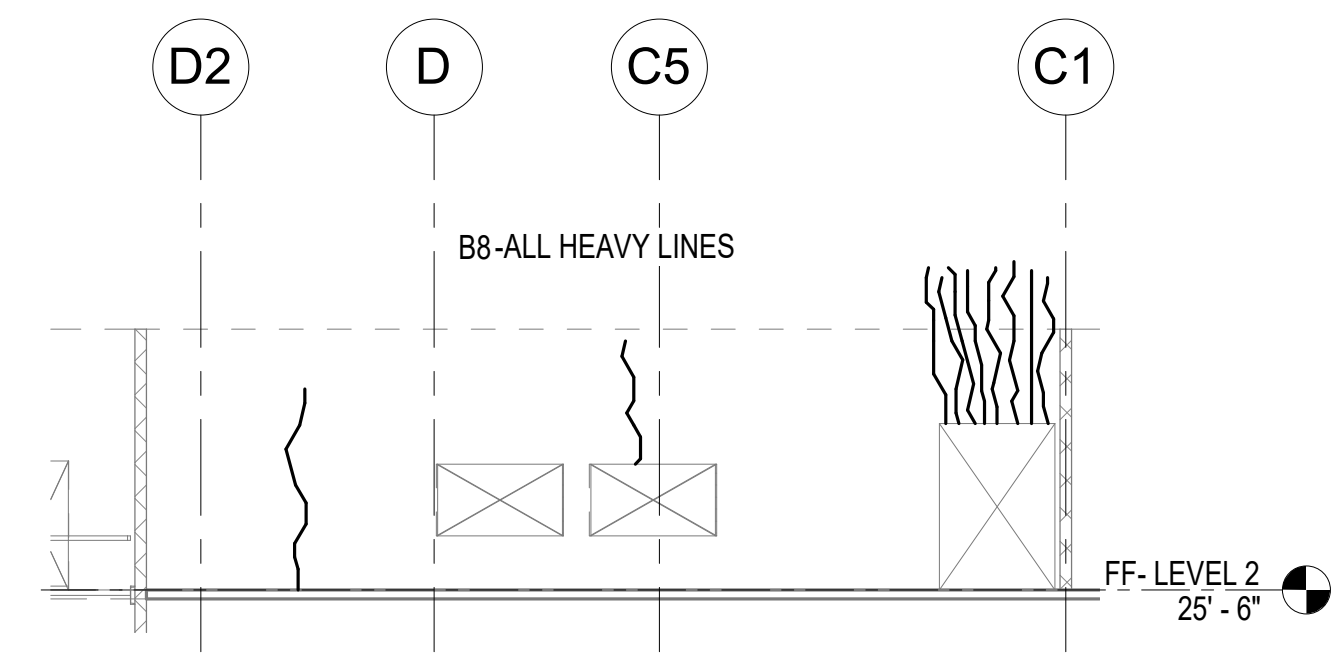
2 WALL AT GRID 5 & E
S7 1/4" = 1'-0"

3 WALL AT GRID 5 & G
S7 1/4" = 1'-0"

4 WALL AT GRID 5 & D
S7 1/4" = 1'-0"



5 WALL AT GRID 17- UPPER LEVEL SILO ROOM 1
S7 3/32" = 1'-0"



6 WALL AT GRID 17 UPPER LEVEL SILO ROOM 2
S7 3/32" = 1'-0"

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

RECORD DRAWING Note: To be filled out on original drawings upon project completion.

1. DATA PROVIDED BY: _____ This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.

CONTRACTOR: _____ TITLE: _____

BY: _____ DATE: _____

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BY: _____ TITLE: _____

DATE: _____

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STATE OF ALASKA
49 TH
JASON E KWATKOWSKI
No. CE 118884
REGISTERED PROFESSIONAL ENGINEER
11.17.22

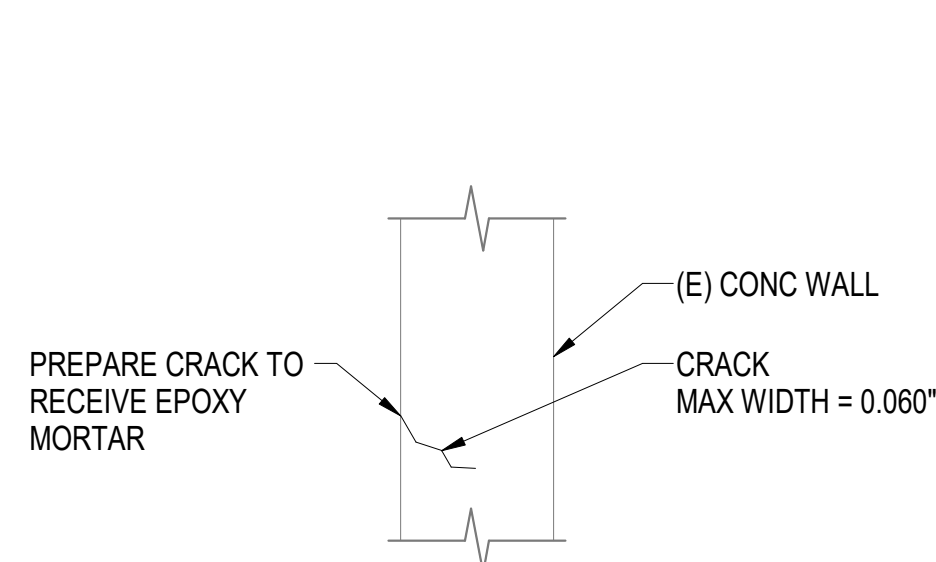
ANCHORAGE WATER & WASTEWATER UTILITY
MUNICIPALITY OF ANCHORAGE

MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

**EKLUTNA WATER TREATMENT FACILITY
WALL ELEVATIONS**

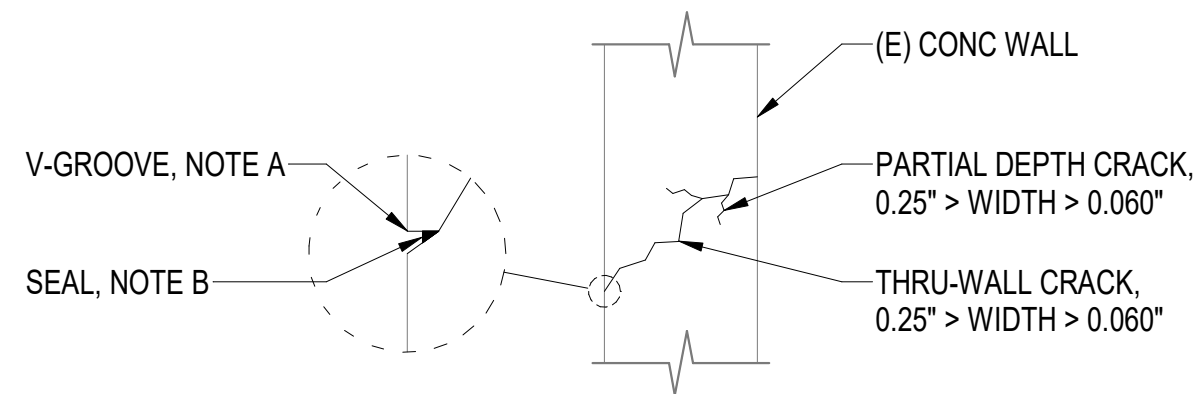
HORZ SCALE: AS NOTED DATE: 11/17/22 GRID: NE1902 SHEET S7 of 9
VERT SCALE: AS NOTED
PROJ. ID.: WR0000387482

AWWU PLAN SET NO. 11350



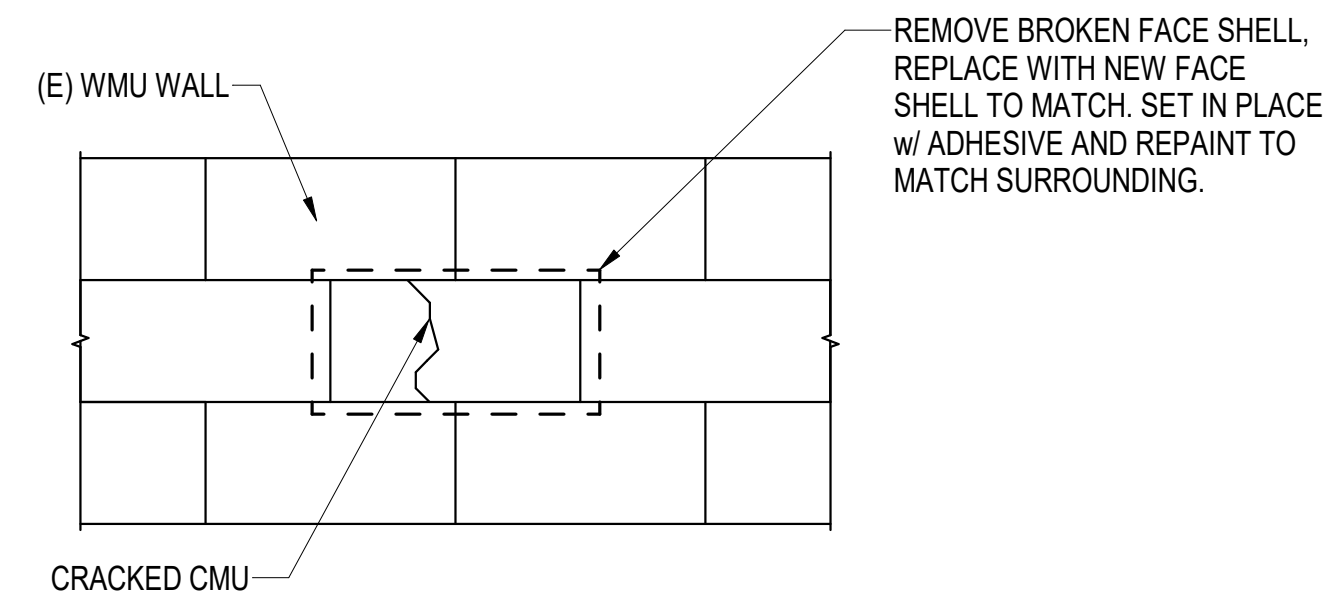
NOTES:
 A. CLEAN CRACK WITH STIFF WIRE BRUSH PRIOR TO EPOXY FILL. IF SURFACE IS DETERIORATED, ROUTE A V-GROOVE UNTIL SOUND MATERIAL IS REACHED.
 B. PRESSURE INJECT EPOXY PER GENERAL NOTES. COMPLY WITH ACI 548.12 AND MANUFACTURER'S INSTRUCTIONS.

1 CONCRETE REPAIR - MINOR CRACKS
 S8 NTS

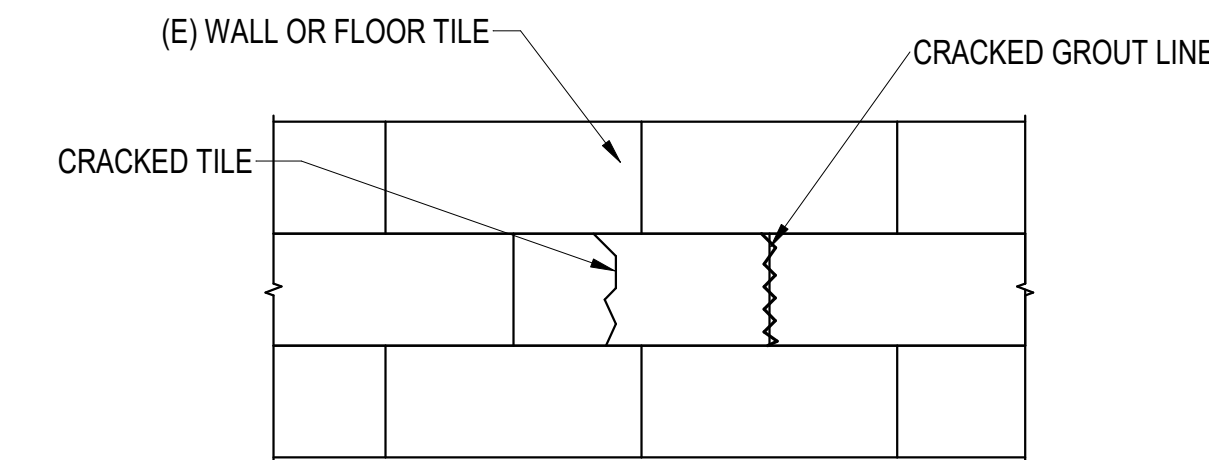


NOTES:
 A. ROUTE A V-GROOVE AT CRACK SURFACE UNTIL SOUND MATERIAL IS REACHED, CLEAN CRACKS.
 B. APPLY SURFACE SEAL OVER ALL EXTERIOR FACES OF CRACK. INSTALL INJECTION AND VENTING PORTS PER MANUFACTURER'S INSTRUCTIONS.
 C. PRESSURE INJECT EPOXY PER GENERAL NOTES. COMPLY WITH ACI 548.12 AND MANUFACTURER'S INSTRUCTIONS.
 D. **DO NOT** USE EPOXY INJECTION TO REPAIR EXTERIOR WALLS WITH CRACKS LARGER THAN 1/4" (PRIOR TO GROOVING).

2 CONCRETE REPAIR - SEVERE CRACKS
 S8 NTS

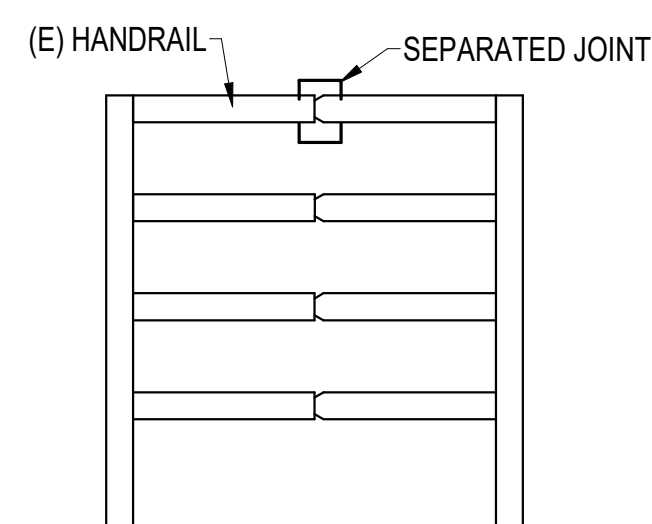


3 CRACKED CMU FACE SHELL REPAIR
 S8 1" = 1'-0"



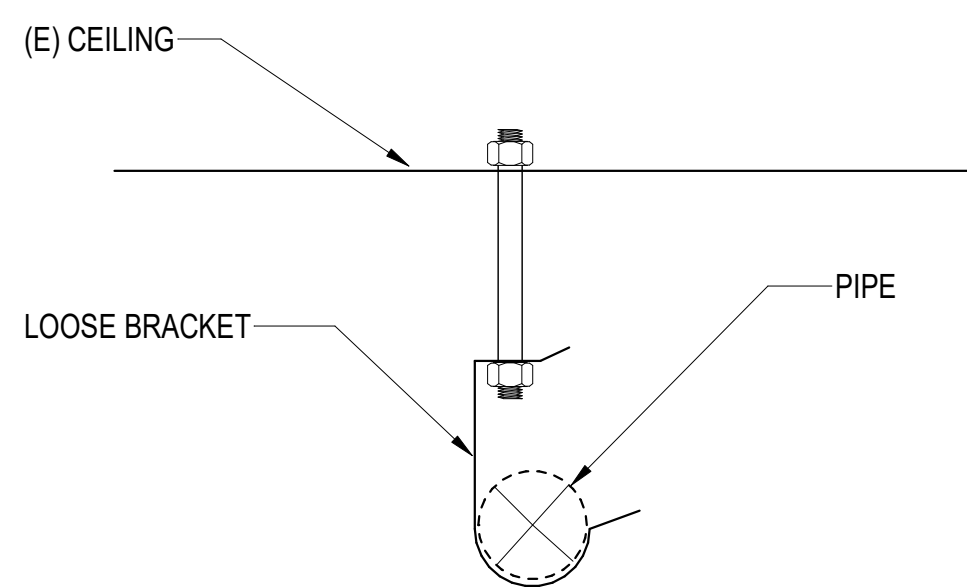
NOTES:
 1. REMOVE EXISTING CRACKED GROUT AND TILE IF BROKEN, REINSTALL NEW TILE AND/OR GROUT TO MATCH EXISTING

4 CRACKED TILE REPLACEMENT AND GROUT REPAIR
 S8 NTS



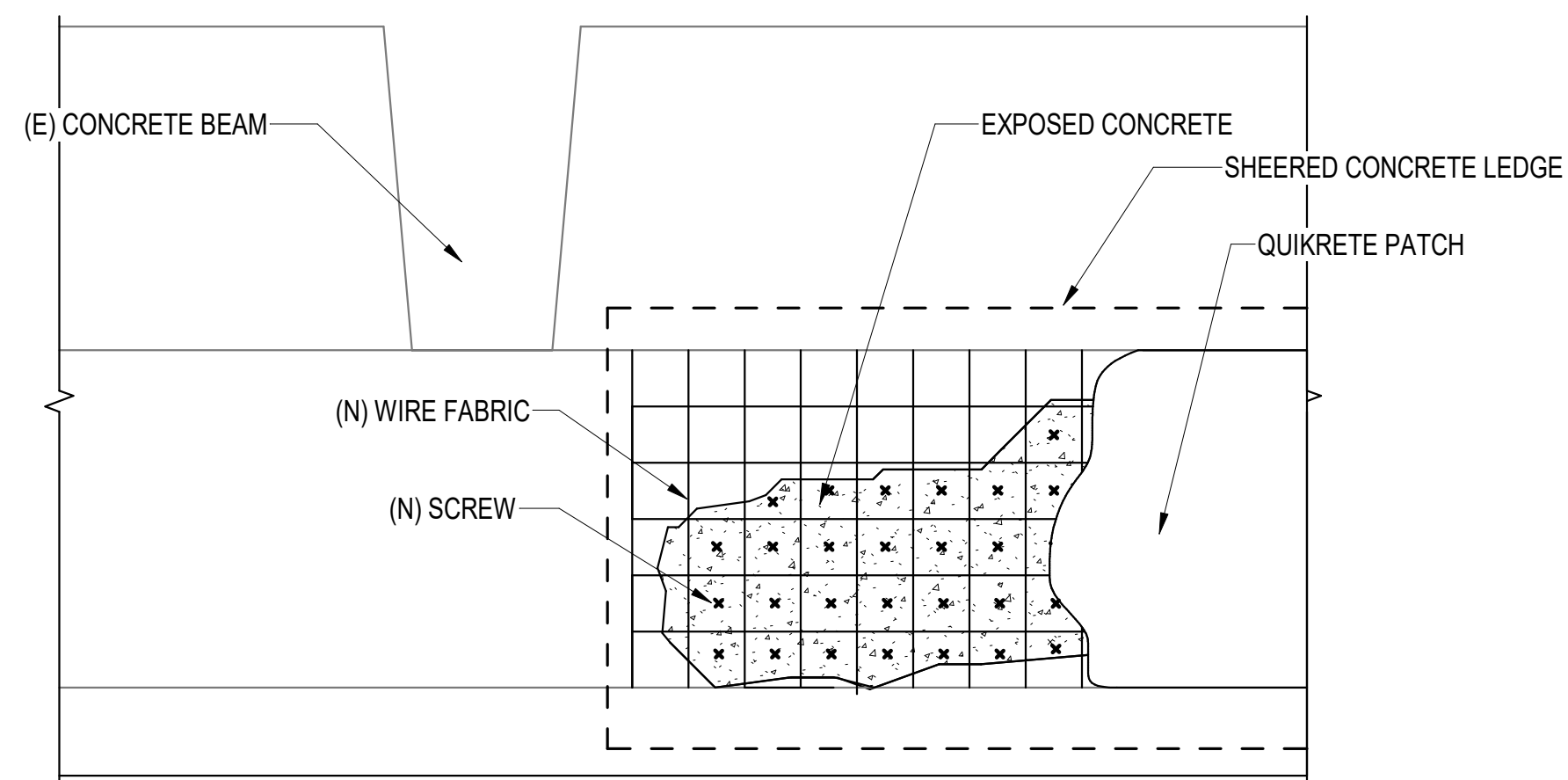
NOTES:
 1. LOOSEN ALL JOINTS, RESET TO MINIMIZE JOINT

5 HANDRAIL REPAIR
 S8 NTS



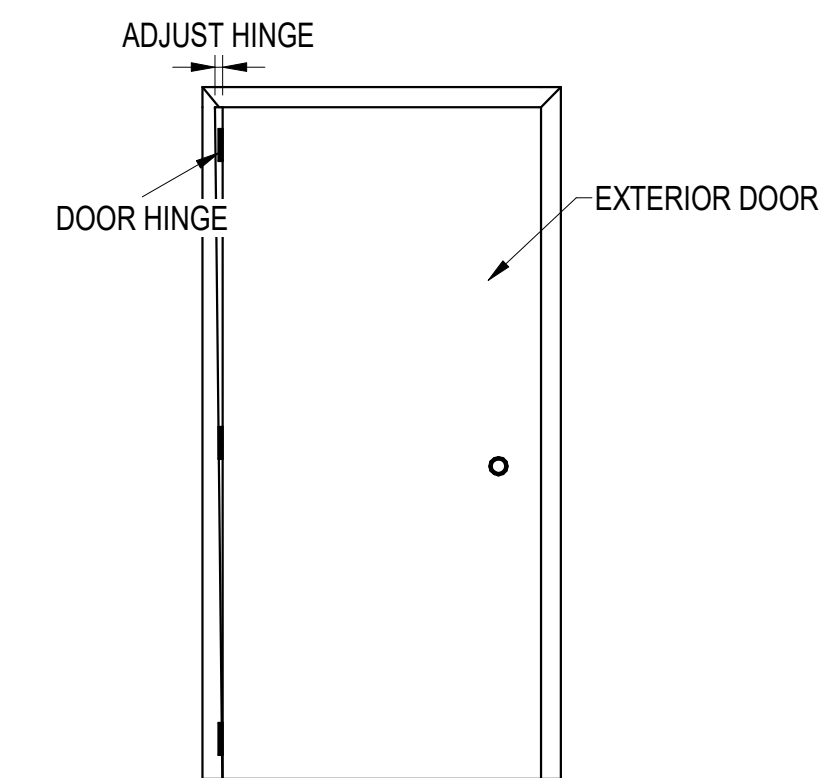
NOTES:
 1. REMOVE LOOSE OR BROKEN BRACKET, REPLACE W/ NEW BRACKET

6 LOOSE PIPE BRACKET
 S8 NTS

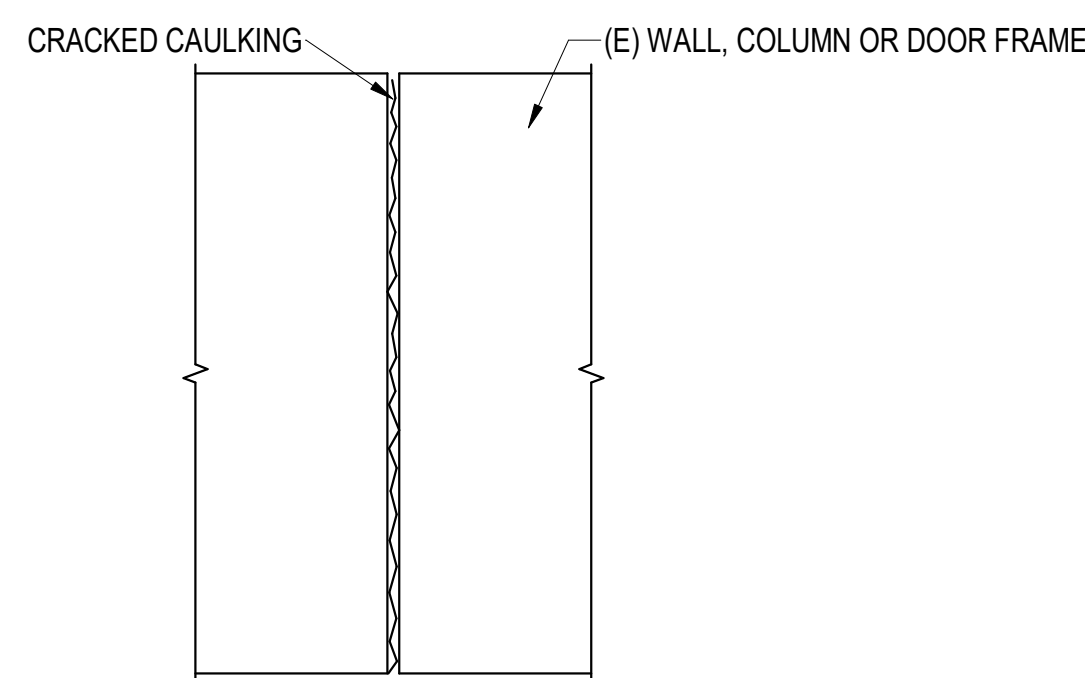


NOTES:
 1. INSTALL NEW 3/16" x 2" CONCRETE SCREWS @ 4" OC EA WAY, REINFORCED W/ 4X4 WELDED WIRE FABRIC AND PATCH WITH QUICKRETE PATCH

7 SHEERED CONCRETE LEDGE
 S8 1" = 1'-0"

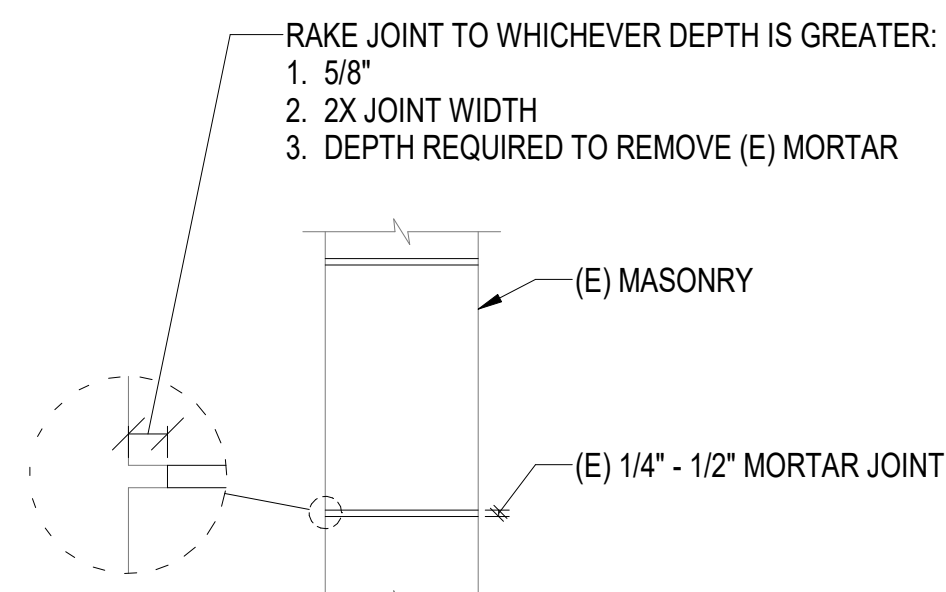


8 DOOR REPAIR
 S8 1/2" = 1'-0"



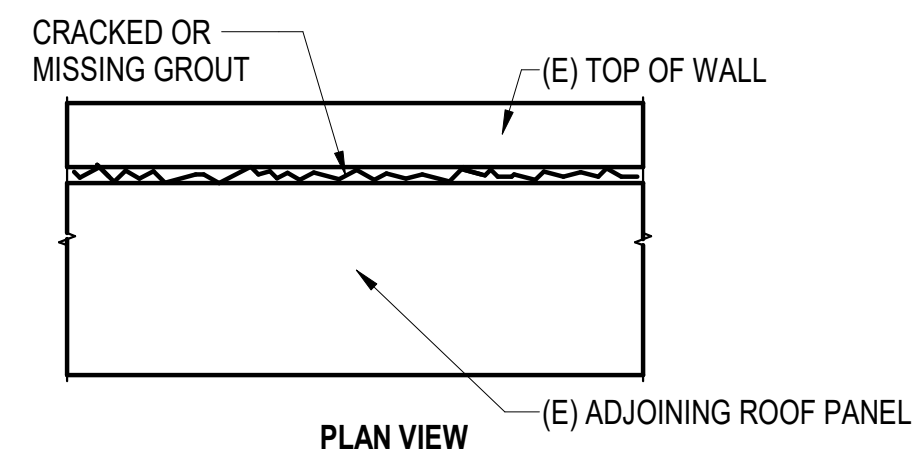
NOTES:
 1. REMOVE CRACKED CAULKING, REINSTALL NEW CAULKING

9 CRACKED CAULKING REPAIR
 S8 NTS



NOTES:
 A. CAREFULLY RAKE OUT EXISTING MORTAR USING NON-IMPACT TOOLS ONLY. CLEAN JOINTS PRIOR TO PLACING NEW MORTAR.
 B. REPOINT IN STAGES TO ALLOW EACH STAGE TO CURE BEFORE RAKING AND REPOINTING THE NEXT STAGE. PROVIDE TEMPORARY SHIMS AND SUPPORTS AS NEEDED. REPAIR VOIDS LEFT BY SHIMS AND SUPPORTS WHEN NO LONGER NEEDED.

10 MASONRY REPOINTING
 S8 1" = 1'-0"



NOTE:
 REMOVE EXISTING GROUT, RESEAL JOINT WITH NEW FLEXIBLE SEALANT.

11 ROOF PANEL TO WALL CONNECTION
 S8 1/2" = 1'-0"

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE
BASE	---	---	TELEPHONE	---	---		
TOPOGRAPHY	---	---	ELECTRIC	---	---		
PROFILE	---	---	CABLE TV	---	---		
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---		
STORM SEWER	---	---	DESIGN	---	---		
WATER	---	---	QUANTITIES	---	---		
GAS	---	---	MUN. FINAL CHECK	---	---		
PLAN CHECK				REVISIONS			

RECORD DRAWING		Note: To be filled out on original drawings upon project completion.	
1. DATA PROVIDED BY:	This will serve to certify that these Record Drawings are a true and accurate representation of the project as constructed.	3. Based on periodic field observations by the Engineer (or an individual under his/her direct supervision), the Contractor-provided data appears to represent the project as constructed.	
CONTRACTOR:	BY: _____ TITLE: _____	DATE TRANSFER CHECKED BY:	DATE: _____
2. DATA TRANSFERRED BY:	COMPANY: _____ DATE: _____	BY: _____ TITLE: _____	DATE: _____

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CONSULTANT

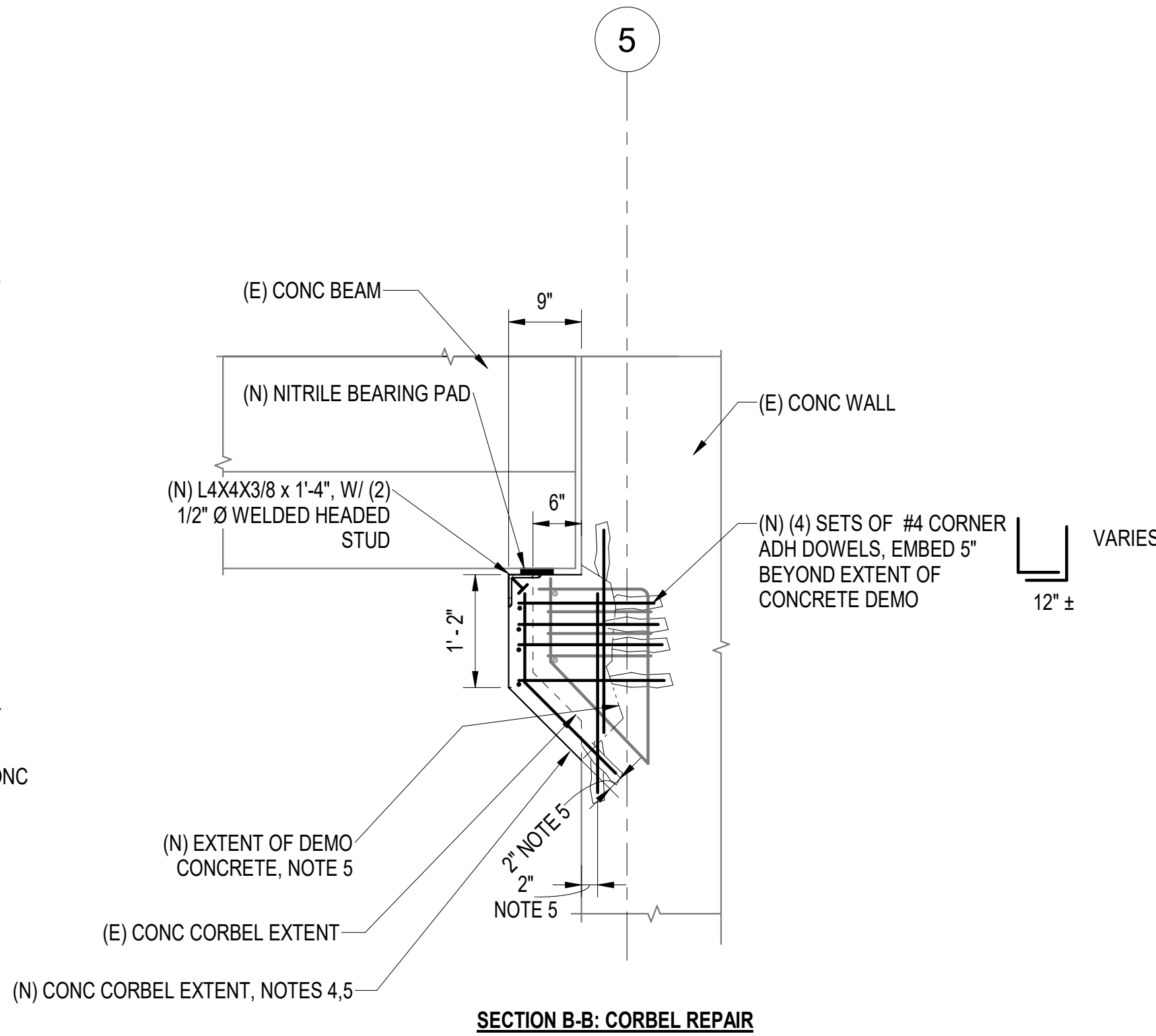
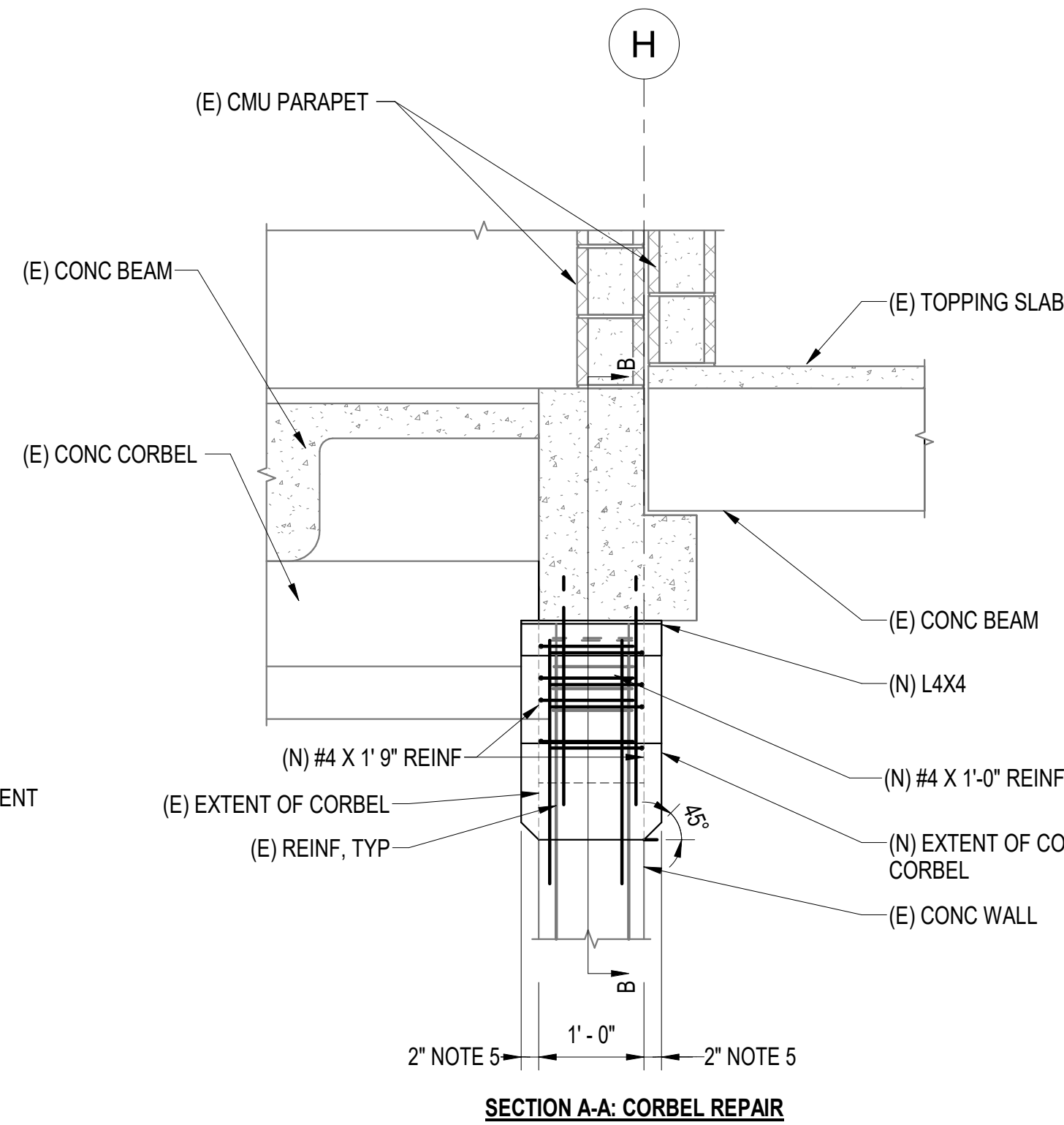
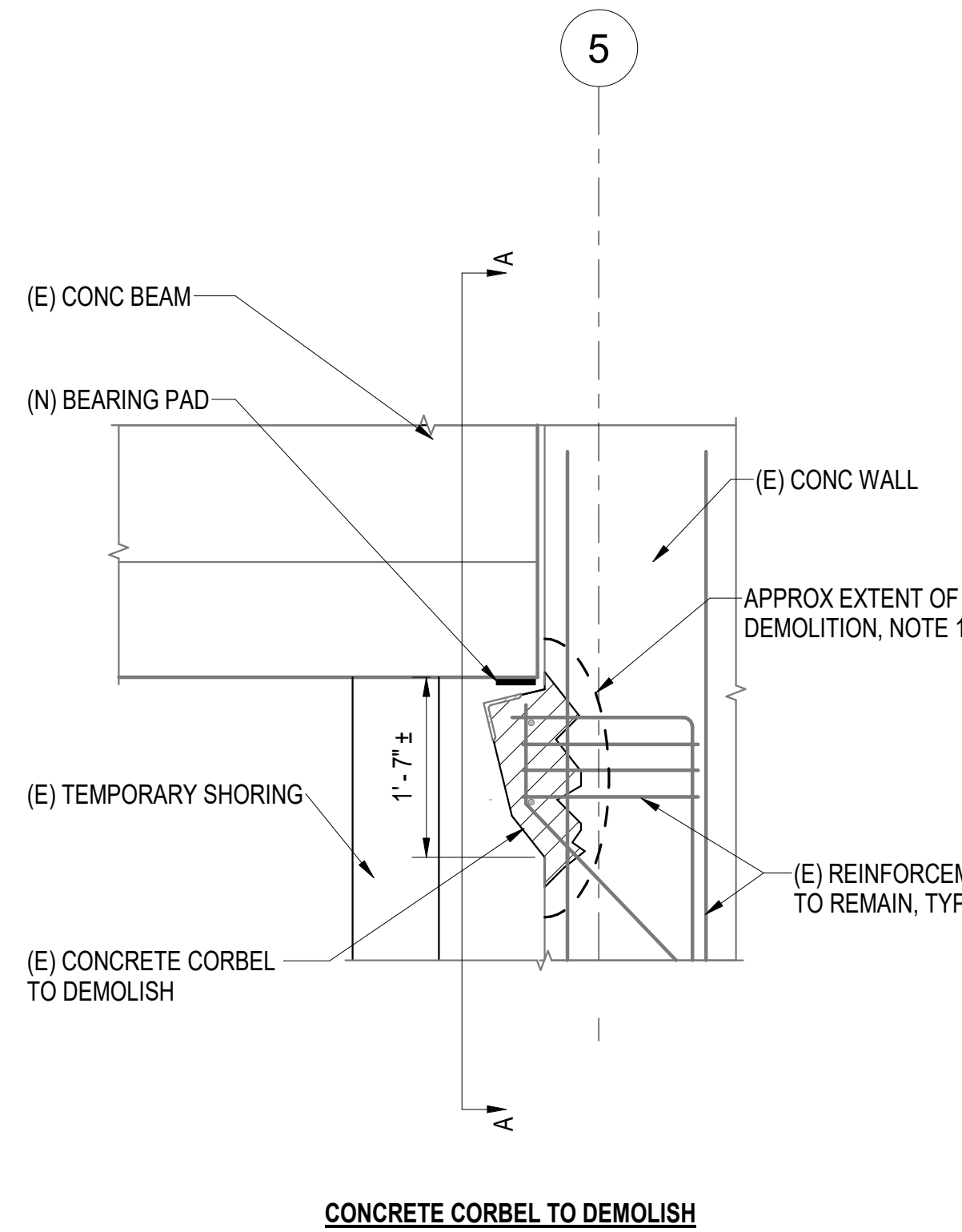
STATE OF ALASKA
 49 TH
 JASON E KWATKOWSKI
 No. CE 118884
 REGISTERED PROFESSIONAL ENGINEER
 11.17.22
 SEAL

ANCHORAGE WATER & WASTEWATER UTILITY
 AWWU
 MUNICIPALITY OF ANCHORAGE

MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY

**EKLUTNA WATER TREATMENT FACILITY
 REPAIR DETAILS**

HORZ SCALE: AS NOTED DATE: 11/17/22 GRID: NE1902 S8
 VERT SCALE: AS NOTED
 PROJ. ID.: WR0000387482 SHEET 9 of 9



NOTES:

1. REMOVE CORBEL AND ALL CRACKED CONCRETE, MAINTAIN EXISTING REINFORCEMENT. PROVIDE NEW REINFORCING AND ADHESIVE DOWELS TO EXISTING WALL. RECAST NEW CONCRETE CORBEL PER NOTES 4 AND 5, AND INSTALL NEW BEARING PAD. REMOVE TEMPORARY SHORING ONCE NEW CONCRET IS CURED.
2. SCAN AND LOCATE ALL EXISTING REINFORCEMENT BARS. LOCATE ALL NEW REINF SO AS TO NOT CONFLICT WITH EXISTING REINFORCEMENT.
3. EXISTING REINFORCEMENT NOT ALL SHOWN THESE VIEWS.
4. CLEAN AND REMOVE DEBRIS FROM FACE OF DEMOLISHED CONCRETE. APPLY EPOXY BONDING ADHESIVE PER MFRS INSTRUCTIONS AT INTERFACE BETWEEN EXISTING AND NEW CONCRETE.
5. CAST CONCRETE TO FACE OF EXISTING DEMOLISHED CONCRETE, PROVIDE MIN 1 1/2\"/>

1 CONCRETE CORBEL REPAIR
 S9 3/4\"/>

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELEC TRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

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CONTRACTOR: _____ DATA TRANSFER CHECKED BY: _____

BY: _____ TITLE: _____ COMPANY: _____

DATE: _____ DATE: _____

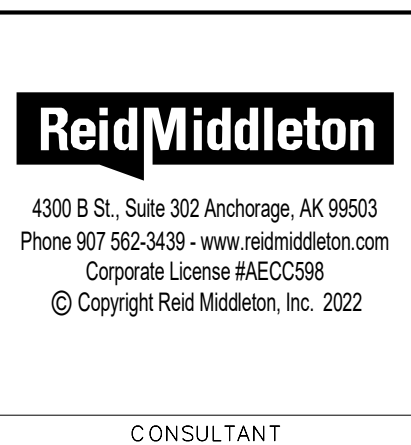
2. DATA TRANSFERRED BY: _____

COMPANY: _____

DATE: _____

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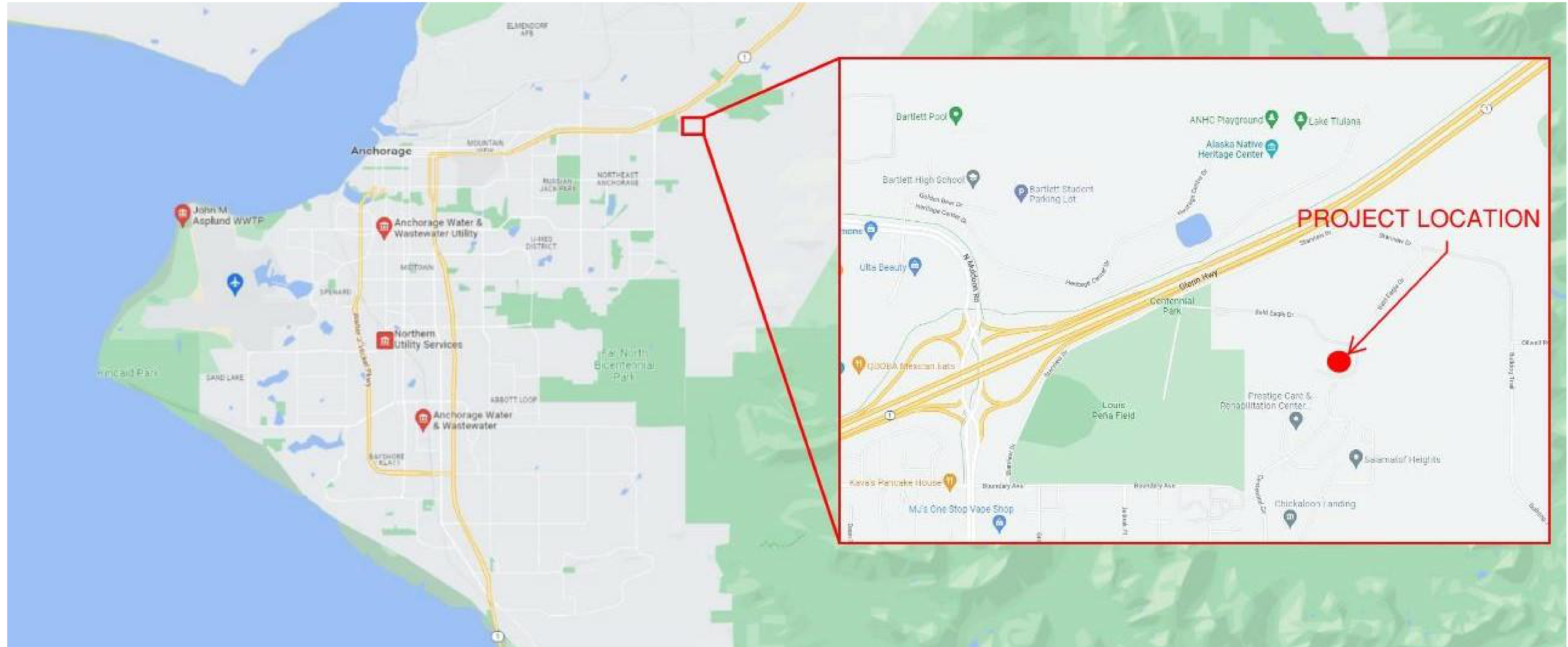
MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY

EKLUTNA WATER TREATMENT FACILITY
 REPAIR DETAILS

HORZ SCALE: AS NOTED DATE: 11/17/22 GRID: NE1902 SHEET S9 of 9

PROJ. ID.: WR0000387482

ANCHORAGE WATER AND WASTEWATER UTILITY WATER TREATMENT FACILITY EARTHQUAKE REPAIRS SHIP CREEK FACILITY



SCHEDULE AND DRAWINGS	
S1	TITLE PAGE
S2	GEN NOTES AND ABBR
S3	LEVEL 1 PARTIAL PLAN- 1984 ADDITION
S4	LEVEL 2 PARTIAL PLAN- 1984 ADDITION
S5	LEVEL 2 PARTIAL FRAMING PLAN- 1984 ADDITION
S6	LEVEL 2 PARTIAL PLAN- 1962 BUILDING
S7	ELEVATIONS
S8	REPAIR DETAILS

PLOT DATE: 12/17/2022 10:07:48 AM

PLOT SCALE: Checker

FILE PATH AND NAME: \\Users\dstewart\Documents\AWWU_SCWTF_STRUC_T_R2020_dwgds177.rvt

AWWU PLAN SET NO. 11352

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TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
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PLAN CHECK					REVISIONS				

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**MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY**

**SHIP CREEK WATER TREATMENT FACILITY
TITLE PAGE**

HORZ SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1142 SHEET S1 of 8

VERT SCALE: AS NOTED

PROJ. ID.: WR0000254699

GENERAL

THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AMONG THE DRAWINGS BEFORE STARTING ANY WORK OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, REFERENCE STANDARDS, SITE CONDITIONS OR GOVERNING CODE, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL NOTIFY THE ENGINEER OF DISCREPANCIES AND OBTAIN DIRECTION PRIOR TO PROCEEDING. NOTES ON INDIVIDUAL STRUCTURAL DRAWINGS SHALL TAKE PRIORITY OVER GENERAL STRUCTURAL NOTES. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED AS TYP ON THE PLANS BUT SHALL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS.

ALL CONSTRUCTION SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE MUNICIPALITY OF ANCHORAGE (MOA).

SAFETY - THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL FEDERAL, STATE AND LOCAL SAFETY STANDARDS. THE CONTRACTOR IS IN CHARGE OF ALL SAFETY MATTERS ON AND AROUND THE JOB SITE.

STRUCTURAL DESIGN DATA

REPAIR ITEMS DESIGNED TO RESTORE THE STRUCTURE TO ITS PRE-EARTHQUAKE CONDITION.

EXISTING CONDITIONS

CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING WORK. DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. EXISTING CONDITIONS SHOWN ON DRAWINGS ARE BASED ON EITHER SITE OBSERVATIONS, ORIGINAL DRAWINGS, OR WERE ASSUMED BASED ON EXPECTED CONDITIONS. IF EXISTING CONDITIONS DO NOT CLOSELY MATCH CONDITIONS SHOWN ON DRAWINGS, OR IF EXISTING MATERIALS ARE OF QUESTIONABLE OR SUBSTANDARD QUALITY, NOTIFY ENGINEER PRIOR TO COMMENCING WORK.

SPECIAL INSPECTION

THE OWNER SHALL ENGAGE A SPECIAL INSPECTOR PER CHAPTER 17 OF THE IBC. COPIES OF INSPECTION REPORTS SHALL BE AVAILABLE TO THE CONSTRUCTION SITE FOR REVIEW BY THE MOA BUILDING SAFETY PERSONNEL.

PERIODIC SPECIAL INSPECTION IS REQUIRED FOR:

- CRACK REPAIRS (PER SPECIFICATIONS)

CRACK & SPALL REPAIR

ALL CONCRETE AND MASONRY CRACK AND SPALL REPAIRS WILL COMPLY WITH ACI 548.12.

MINOR CRACKS IN CONCRETE AND CMU THAT ARE LESS THAN 0.060" (1/16") WIDE WILL NOT BE REPAIRED.

CONCRETE FLOOR AND WALL CRACKS LARGER THAN 0.060", BUT LESS THAN 0.25" WILL BE REPAIRED WITH PRESSURE INJECTED 'KEMKO 038' TWO-COMPONENT EPOXY RESIN OR EQUAL. CRACK SURFACE WILL BE SEALED WITH 'KEMCO CCS GROUT/SEAL' TWO-COMPONENT NON-SAG PASTE OR EQUAL PRIOR TO INJECTION. OTHER REPAIRS MAY BE NEEDED IF WALL IS HOLLOW OR OPEN CELLS ARE FOUND, CONSULT EOR.

CONCRETE AND MASONRY CRACKS LARGER THAN 0.25", BUT LESS THAN 2" WILL BE SEALED WITH 'FLEXCRETE 102' OR KEMKO 077 IR" LARGE VOID FILLER.

CONCRETE FLOOR CRACKS GREATER THAN 1/4" WILL BE REPAIRED WITH CARBON FIBER STAPLES, 'FORTRESS POWER GRID STITCH' OR EQUAL. CUT 1/8" WIDE X 5/8" DEEP SLOTS PERPENDICULAR TO CRACK. SPACING TO BE DETERMINED IN THE FIELD TO PERMANENTLY REPAIR CRACK; SPACING SHALL NOT EXCEED 24" OC FOR CRACKS BETWEEN 3/16" AND 1/2"WIDE, SPACING SHALL NOT EXCEED 12" OC FOR CRACKS BETWEEN 1/2" AND 2". PROVIDE (2) STAPLES AT 30" ORIENTATION OF CRACK IN "X" ORIENTATION, AT 4' OC MAX SPACING. PLACE CARBON FIBER STAPLES WITH 'FORTRESS 4000' EPOXY RESIN OR EQUAL.

CONCRETE SPALLS AND MASONRY TUCK AND POINT WILL BE REPAIRED WITH 'FLEXCRETE 102' TWO-COMPONENT THERMOSET VINYL POLYMER OR EQUAL. ALL SURFACES WILL BE PREPARED WITH 'FLEXPRIME' PRIMER OR EQUAL PRIOR TO FLEXCRETE APPLICATION. AT VERTICAL AND OVERHEAD APPLICATIONS, FLEXCRETE WILL BE MIXED WITH BLAST SAND AND FUMED SILICA. #4 BASALT REBAR 'GATORBAR' OR GFRP 'GATORGLASS' WILL BE ADHESIVELY EMBEDDED, CROSSING ANY PARALLEL TO SURFACE DELAMINATIONS, AT 6" ON-CENTER, EACH DIRECTION

TILE REPAIR

ALL TILE REPAIR/REPLACEMENT TO MATCH SIZE, MATERIAL, AND COLOR OF EXISTING TILE.

ALL GROUT TO MEET ANSI A 118.3 REQUIREMENTS. ALL GROUT TO BE DESIGNED FOR INDUSTRIAL APPLICATIONS. PROVIDE SMOOTH, FLUSH, AND UNIFORM JOINTS. HAVE A HIGH STAIN RESISTANCE. HAVE HIGH CHEMICAL AND ACID RESISTANCE, PROVIDE FOR WATER CLEAN UP. ALL GROUT TO MATCH EXISTING COLOR.


ALL MORTAR TO BE COORDINATED WITH SELECTED TILE MATERIAL AND SUBSTRATE AT EACH LOCATION. ALL MORTAR TO BE NON-SAG, AND TO BE APPROVED FOR USE IN INTERIOR AND EXTERIOR APPLICATIONS.

PRIOR TO INSTALLATION, CONTRACTOR TO SUBMIT PRODUCT DATA INFORMATION FOR EACH TYPE OF MORTAR, GROUT, AND TILE - INCLUDING COLOR, GEOMETRY, AND MATERIAL.

SUBMITTALS

THE CONTRACTOR MUST REVIEW, STAMP WITH THEIR APPROVAL, DATE AND SIGN ALL SHOP DRAWINGS AND SUBMITTALS REQUIRED BY THE CONTRACT DRAWINGS PRIOR TO SUBMITTAL TO THE ENGINEER. AT THE TIME OF SUBMISSION, THE CONTRACTOR MUST INFORM THE ENGINEER IN WRITING OF ANY DEVIATION IN THE SHOP DRAWINGS FROM THE REQUIREMENTS OF THE CONTRACT DRAWINGS. DIMENSIONS AND QUANTITIES ARE THE CONTRACTOR'S RESPONSIBILITY AND WILL NOT BE REVIEWED.

@	At	BLKG	Blocking	EA	Each	INT	Interior	OH	Overhead	SIM	Similar	TYP	Typical
AB	Anchor Bolts	BM	Beam	EQ	Equal. Earthquake	LAG	Lag Screw	OPNG	Opening	SQ	Square	UON	Unless Otherwise Noted
BLDG	Building	BOT	Bottom	EW	Each Way	LOC	Location	PL	Plate	STL	Steel	VERT	Vertical
ARCH	Architect	BTWN	Between	EXP	Expansion	LONG	Longitudinal	PLS	Places	T&B	Top and Bottom	W/	With
AR	Anchor Rod	CL	Center-Line	FDN	Foundation	MAX	Maximum	PSF	Pounds-per-square-foot	T&G	Tongue and Groove	W/O	Without
ALT	Alternate	CLR	Clear	FF	Finished Floor	MEZZ	Mezzanine	PSI	Pounds-per-square-inch	T.O.	Top of	W	Wide-Flange, Wide
AHJ	Authority Having Jurisdiction	COL	Column	GALV	Galvanized	MIN	Minimum	REQ'D	Required	T.O.B.	Top of Beam	W/C	Water / Cement Ratio
AFF	Above Finish Floor	CONC	Concrete	GLB	Glue-Laminated Beam	MFR	Manufacturer	RO	Rough Opening	T.O.S.	Top of Steel	W.P.	Work Point
ADH	Adhesive	CONT	Continuous, Continue	HORZ	Horizontal	(N)	New	SBN	Shearwall Boundary Nailing	T.O.W.	Top of Wall	WWR	Welded Wire Reinforcement
ADD'L	Additional	DBN	Diaphragm Boundary Nailing	HSS	Hollow Structural Steel	OC	On-Center	SCH	Schedule	TRANS	Transverse		
		(E)	Existing	IBC	International Building Code								

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.				0"  1"				IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY				FULL SIZE SCALE HORZ SCALE: VERT SCALE:	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY						
BASE	---	---	TELEPHONE	---	---										
TOPOGRAPHY	---	---	ELECTRIC	---	---										
PROFILE	---	---	CABLE TV	---	---										
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---										
STORM SEWER	---	---	DESIGN	---	---										
WATER	---	---	QUANTITIES	---	---										
GAS	---	---	MUN. FINAL CHECK	---	---										
PLAN CHECK															
REVISIONS															

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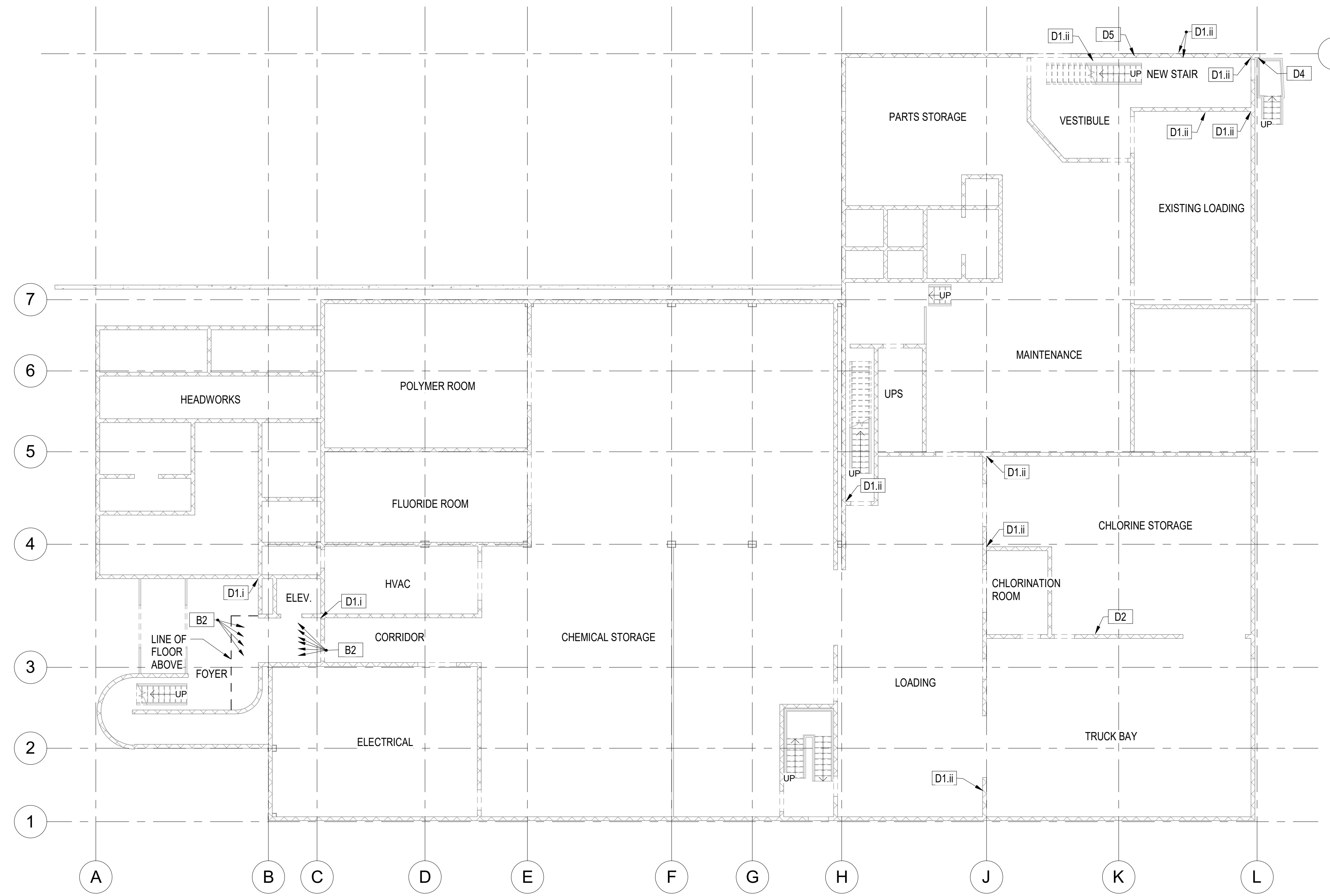
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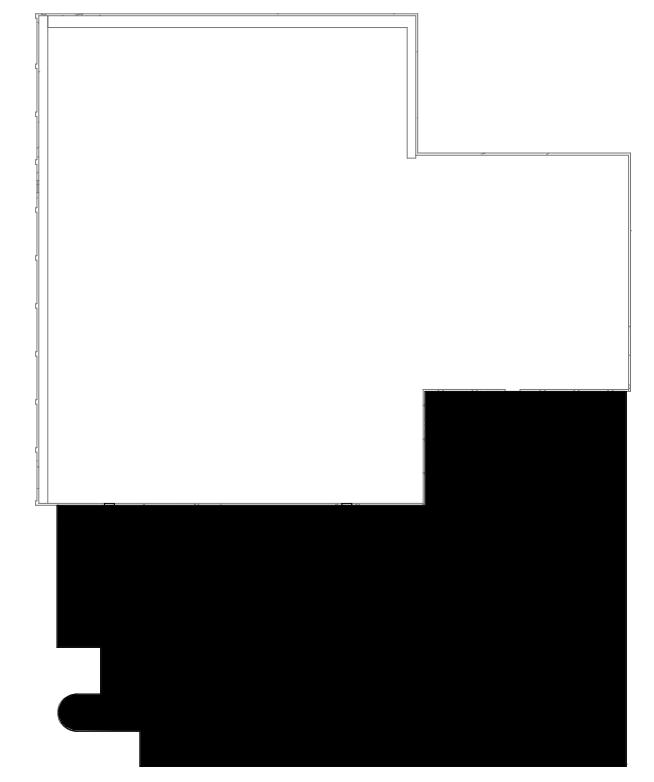
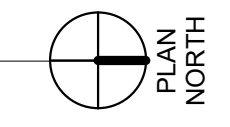
MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY

SHIP CREEK WATER TREATMENT FACILITY
GEN NOTES AND ABBR

HORZ SCALE: AS NOTED	DATE: 11/17/2022	GRID: SW1142	S2
VERT SCALE:			of 8
PROJ. ID.: WR0000254699			SHEET



1 LEVEL 1 PARTIAL PLAN- 1984 ADDITION
3/32" = 1'-0"



KEY PLAN

REPAIR ITEM SCHEDULE	
B2	CRACKED FLOOR TILES, SEE 6/S8
D1.i	RE-GROUT INTERIOR TILE WALL, SEE 6/S8
D1.ii	RE-GROUT INTERIOR CMU WALL, SEE 4/S8
D2	CRACKED INTERIOR CMU, SEE 5/S8
D4	CONCRETE WALL DAMAGE, SEE 3/S8
D5	CONCRETE WALL SUPPORT SPLIT, SEE 1/S8 AND 2/S8

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE HORZ SCALE: VERT SCALE:	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

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 BY: _____ DATE: _____

DATA TRANSFER CHECKED BY: _____
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 BY: _____ TITLE: _____
 DATE: _____

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 JASON E KWATKOWSKI
 No. CE 118884
 REGISTERED PROFESSIONAL ENGINEER
 11.17.22

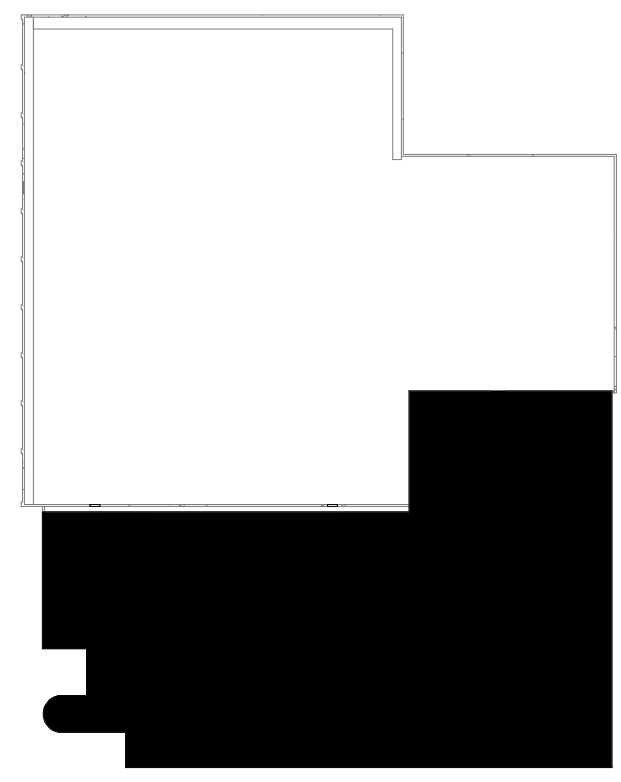
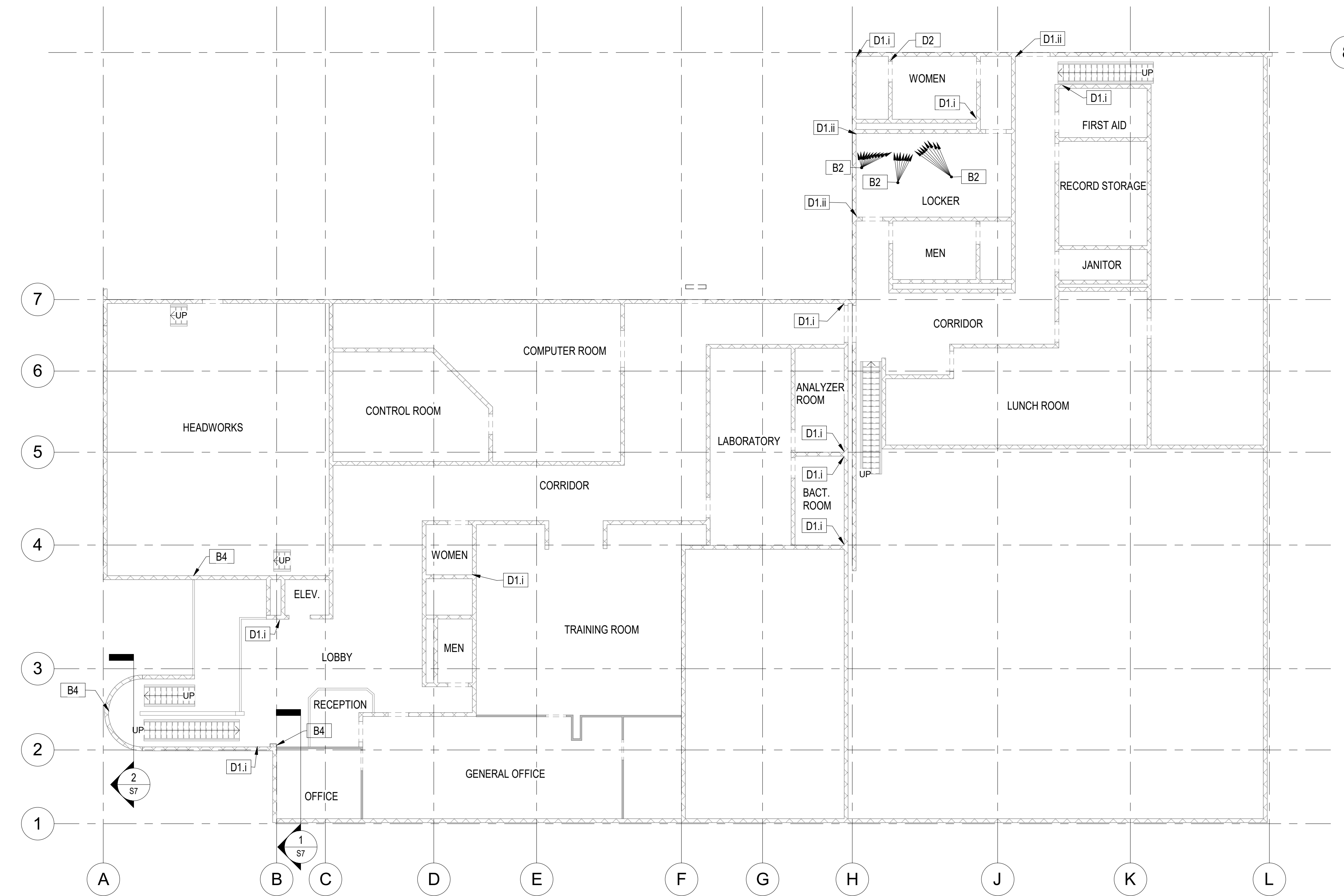
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**SHIP CREEK WATER TREATMENT FACILITY
 LEVEL 1 PARTIAL PLAN -
 1984 ADDITION**

HORZ SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1142 S3
 VERT SCALE: AS NOTED SHEET 8 of 8
 PROJ. ID.: WR0000254699



KEY PLAN

REPAIR ITEM SCHEDULE	
B2	CRACKED FLOOR TILES, SEE 6/S8
B4	CRACKED WALL TILES, SEE 6/S8
D1.i	RE-GROUT INTERIOR TILE WALL, SEE 6/S8
D1.ii	RE-GROUT INTERIOR CMU WALL, SEE 4/S8
D2	CRACKED INTERIOR CMU, SEE 5/S8

1 LEVEL 2 PARTIAL PLAN - 1984 ADDITION
3/32" = 1'-0"



DATA	DRAWN BY	CHECKED BY	DATE	DESCRIPTION	BY
BASE	---	---	---	TELEPHONE	---
TOPOGRAPHY	---	---	---	ELECTRIC	---
PROFILE	---	---	---	CABLE TV	---
SANITARY SEWER	---	---	---	TRAFFIC SIGNAL	---
STORM SEWER	---	---	---	DESIGN	---
WATER	---	---	---	QUANTITIES	---
GAS	---	---	---	MUN. FINAL CHECK	---

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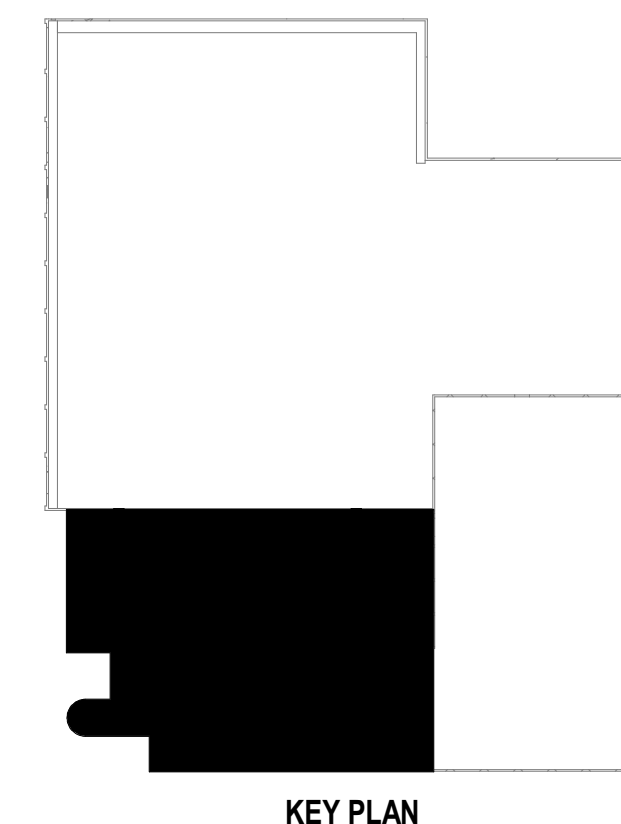
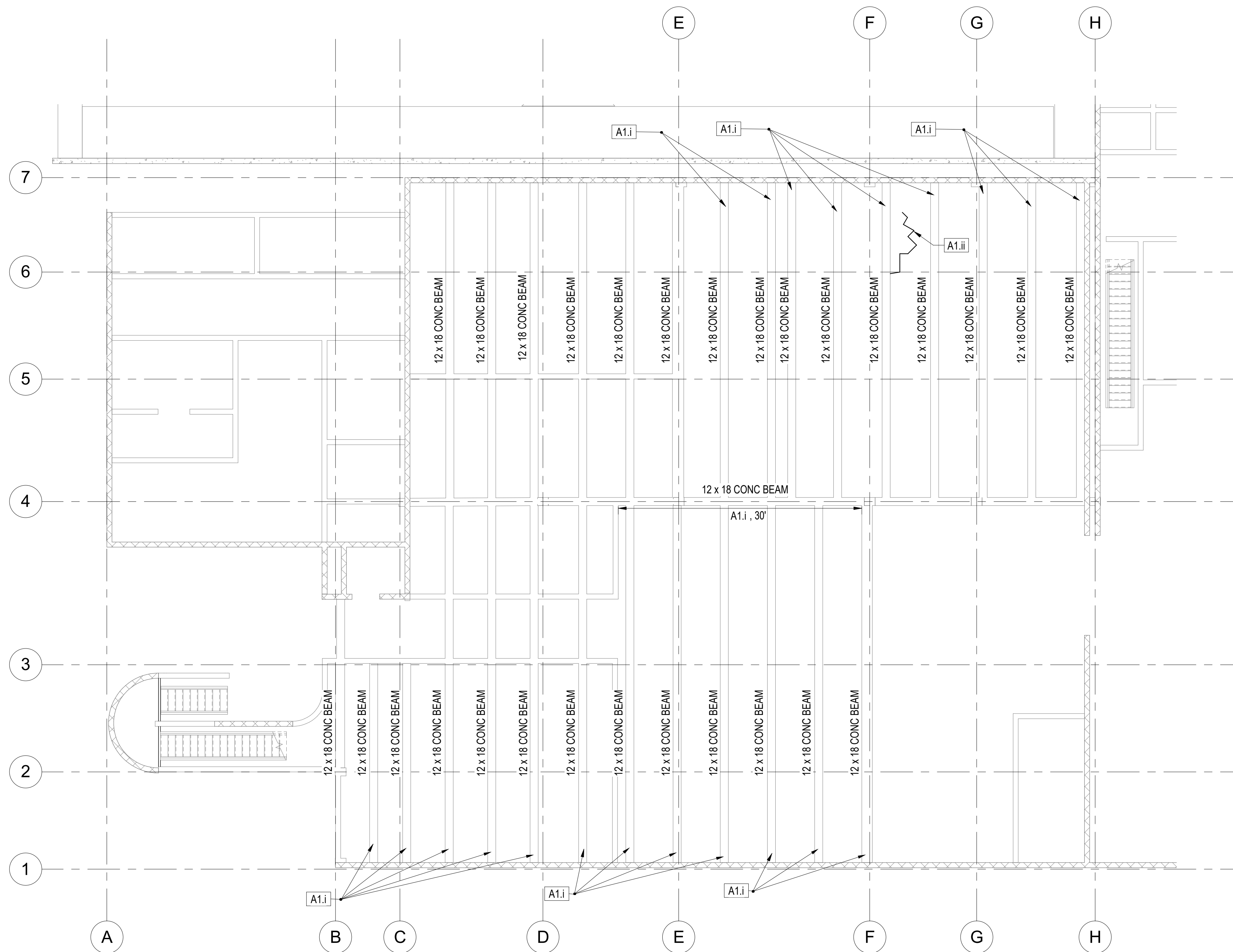
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SHIP CREEK WATER TREATMENT FACILITY
LEVEL 2 PARTIAL PLAN - 1984 ADDITION

HORIZ SCALE: AS NOTED	DATE: 11/17/2022	GRID: SW1142	S4
PROJ. ID.: WR0000254699	SHEET		of 8



KEY PLAN

REPAIR ITEM SCHEDULE	
A1.i	CONCRETE BEAM CRACKS- TRANSVERSE CRACKS 2' O.C. @ EA FACE AND LONGITUDINAL CRACK DOWN CENTERLINE OF BOTTOM OF BEAM ALONG BEAM LENGTH, SEE 1/8" AND 2/8"
A1.ii	CONCRETE SLAB CRACKS, SEE 1/8" AND 2/8"

1 LEVEL 2 PARTIAL FRAMING PLAN- 1984 ADDITION
1/8" = 1'-0"

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

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JASON E KWATKOWSKI
No. CE 118884
REGISTERED PROFESSIONAL ENGINEER

11.17.22

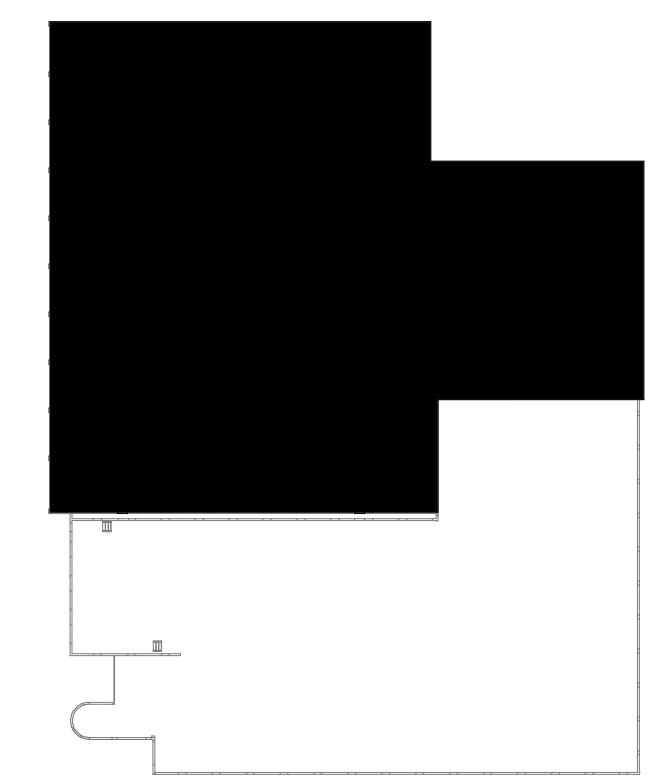
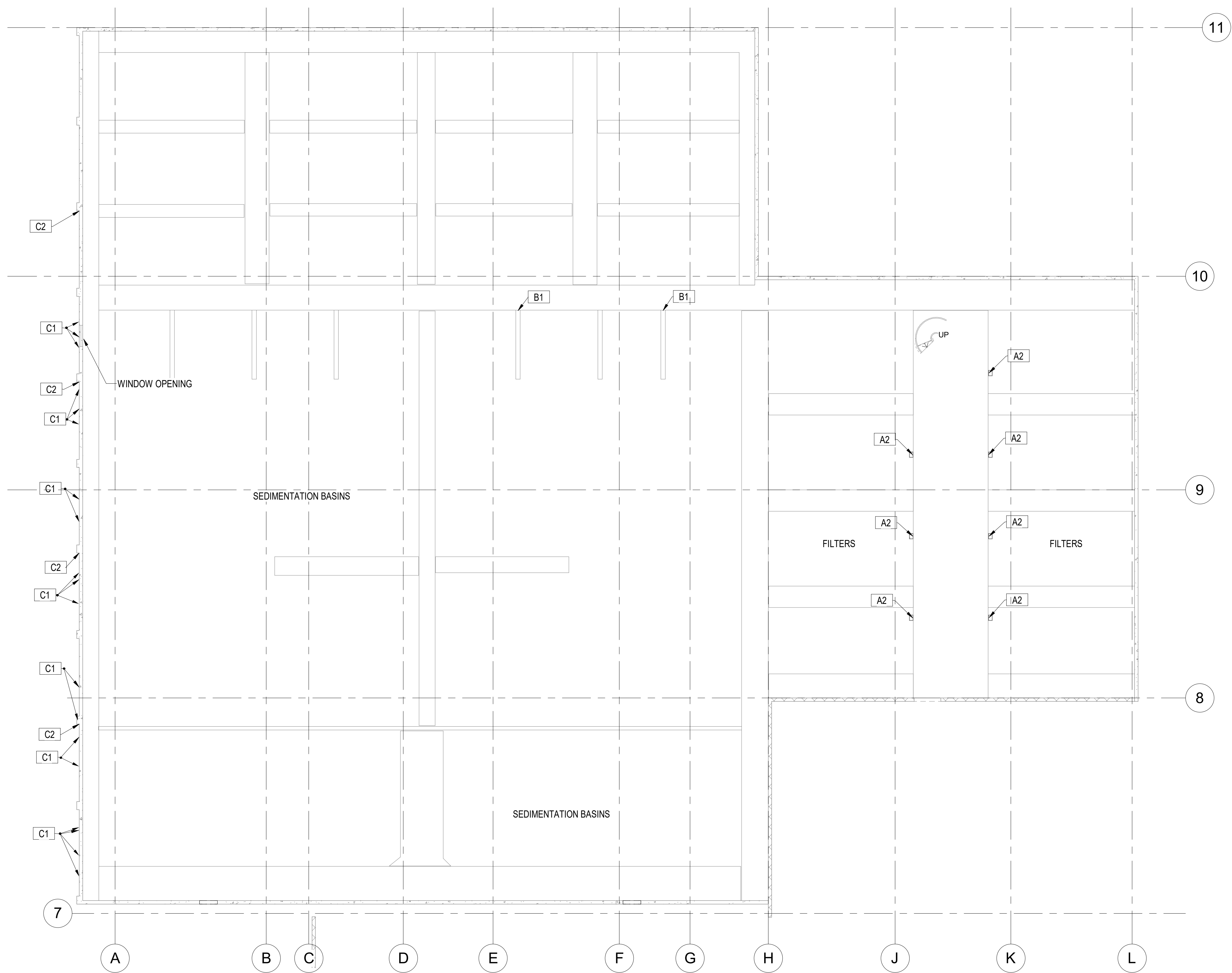
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SHIP CREEK WATER TREATMENT FACILITY
LEVEL 2 PARTIAL FRAMING PLAN - 1984 ADDITION

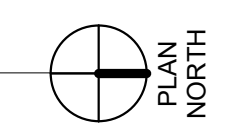
HORIZ SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1142 SHEET 55 of 8
VERT SCALE: AS NOTED PROJ. ID.: WR0000254699



KEY PLAN

REPAIR ITEM SCHEDULE	
A2	CRACKED CONCRETE CORBEL, SEE 1/S8 AND 2/S8
B1	CONCRETE SURFACE DAMAGE, SEE 2/S8
C1	EXTERIOR WALL CRACKS, SEE 1/S8 AND 2/S8
C2	RE-GROUT EXTERIOR WALL, SEE 1/S8 AND 2/S8

1 LEVEL 2 PARTIAL PLAN - 1962 BUILDING
3/32" = 1'-0"



DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

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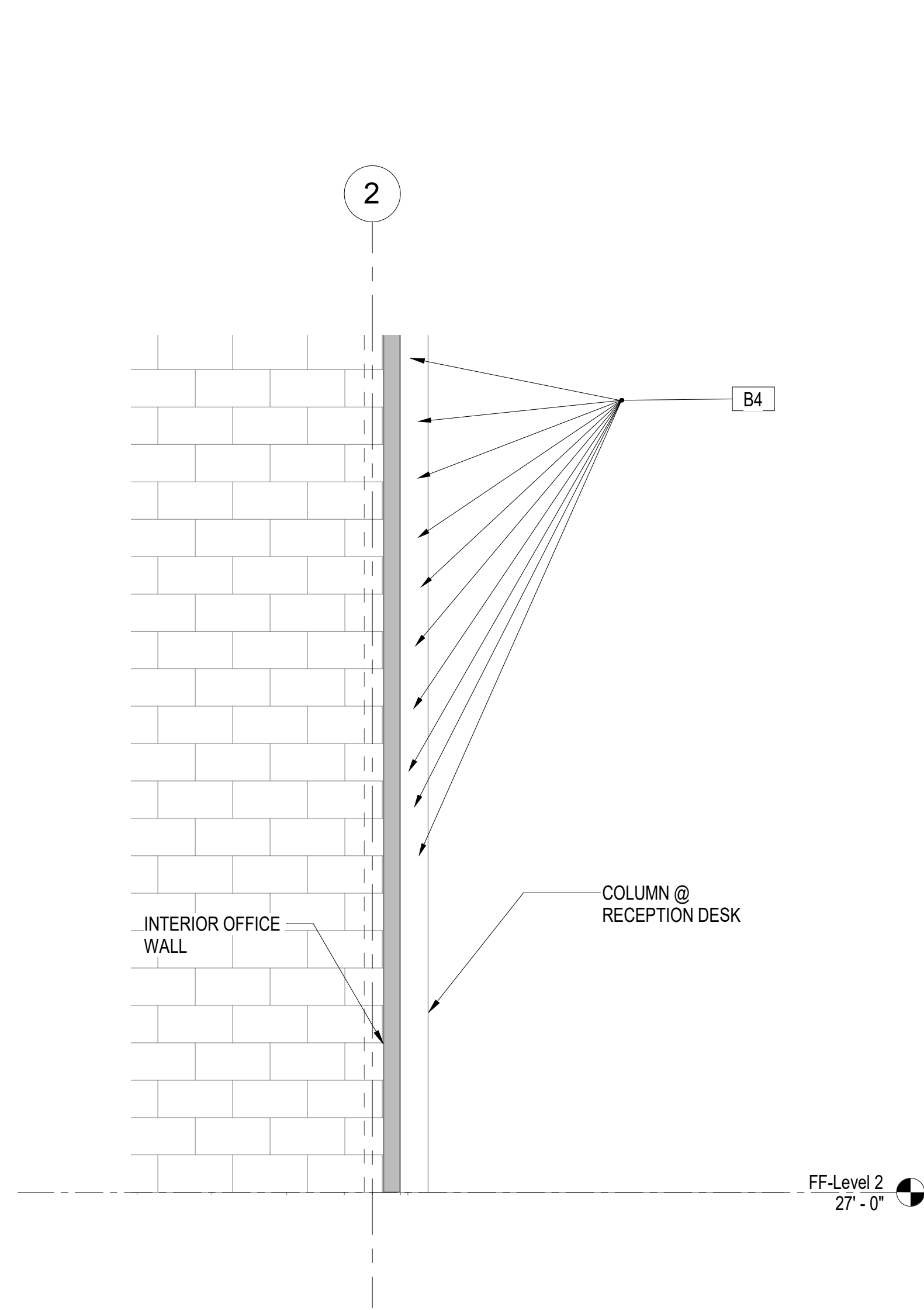
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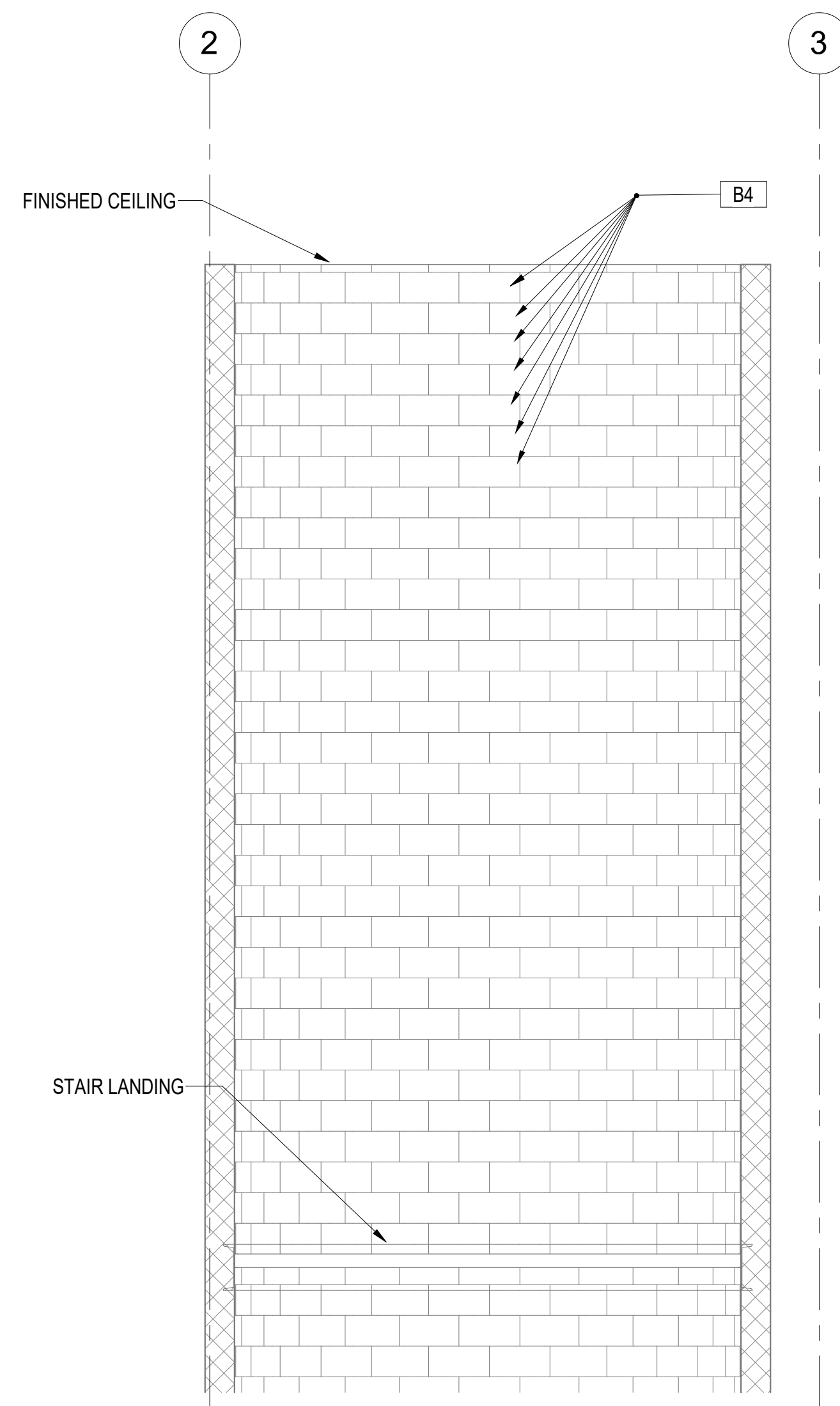
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SHIP CREEK WATER TREATMENT FACILITY
LEVEL 2 PARTIAL PLAN - 1962 BUILDING

HORIZ SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1142 SHEET 56 of 8
VERT SCALE: AS NOTED PROJ. ID.: WR0000254699



1 ITEM B4 AT RECEPTION DESK COLUMN
S7 1/2" = 1'-0"



2 ITEM B4 AT STAIRCASE WALL
S7 3/8" = 1'-0"

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.				0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE HORZ SCALE: VERT SCALE:	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	DATE	REVISIONS
BASE	---	---	TELEPHONE	---	---						
TOPOGRAPHY	---	---	ELECTRIC	---	---						
PROFILE	---	---	CABLE TV	---	---						
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---						
STORM SEWER	---	---	DESIGN	---	---						
WATER	---	---	QUANTITIES	---	---						
GAS	---	---	MUN. FINAL CHECK	---	---						

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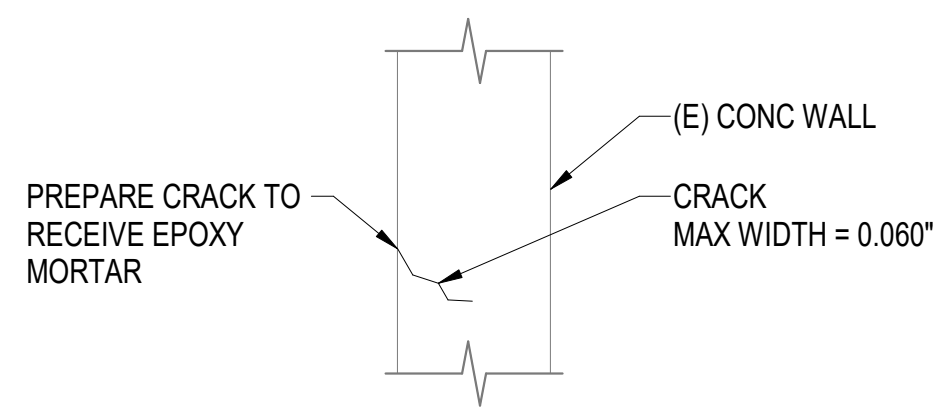
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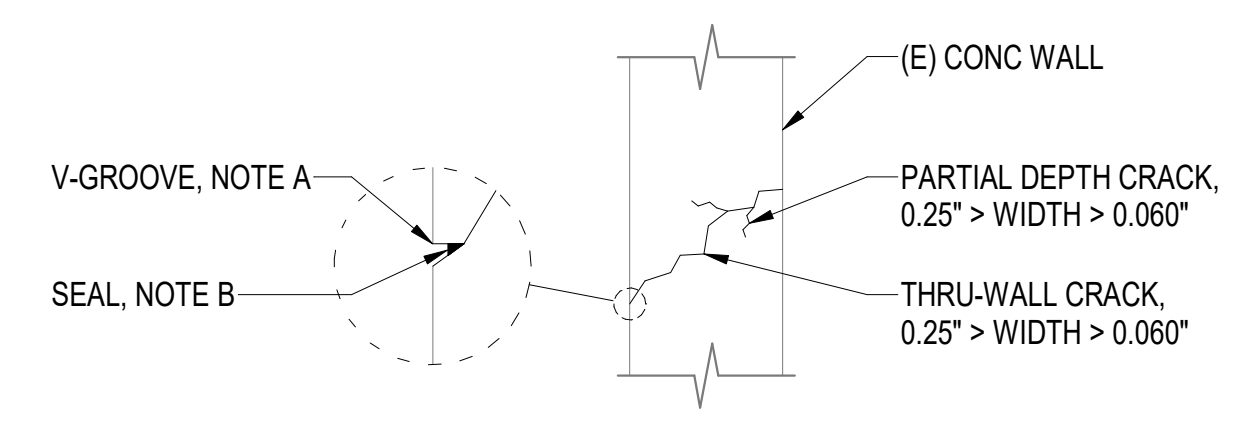
SHIP CREEK WATER TREATMENT FACILITY
 ELEVATIONS

HORZ SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1142 SHEET S7 of 8
 VERT SCALE: AS NOTED PROJ. ID.: WR0000254699



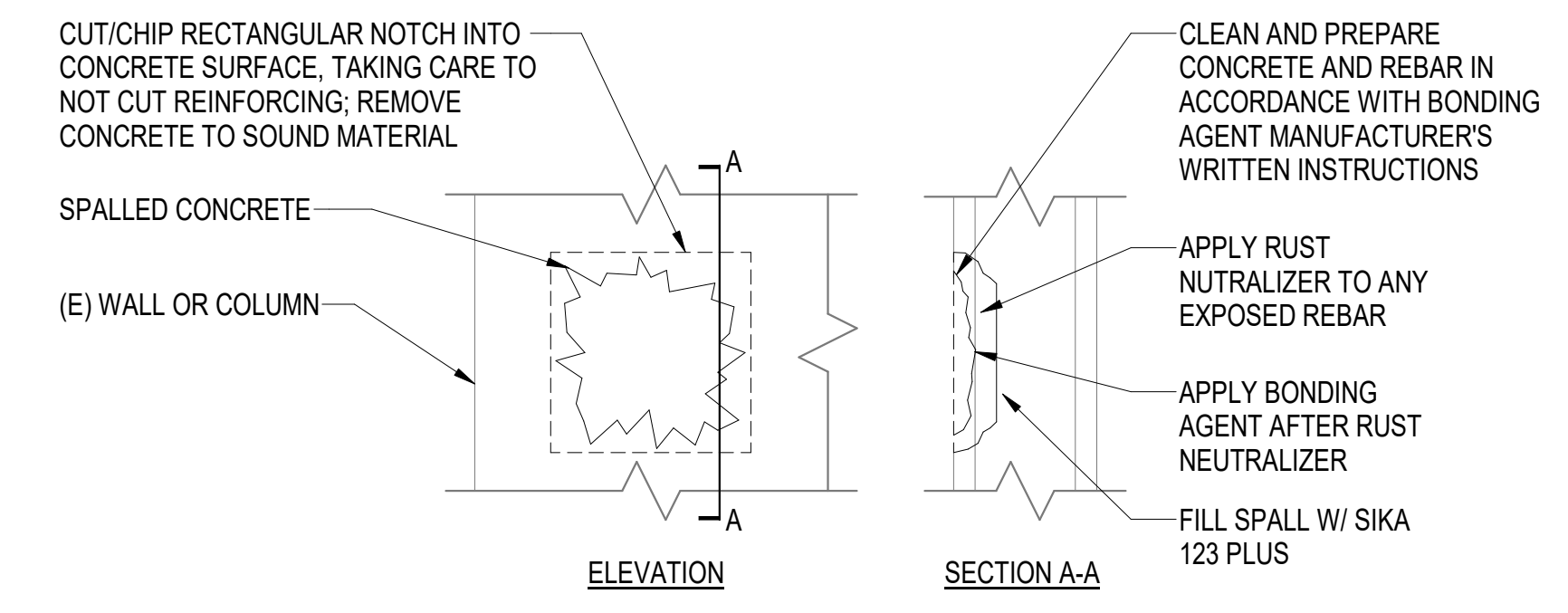
NOTES:
 A. REMOVE EXISTING PAINT 3" EACH SIDE OF CRACK. CLEAN CRACK WITH STIFF WIRE BRUSH PRIOR TO EPOXY FILL. IF SURFACE IS DETERIORATED, ROUTE A V-GROOVE UNTIL SOUND MATERIAL IS REACHED.
 B. PRESSURE INJECT EPOXY PER GENERAL NOTES. COMPLY WITH ACI 548.12 AND MANUFACTURER'S INSTRUCTIONS.

1
S8 CONCRETE REPAIR - MINOR CRACKS
 1" = 1'-0"

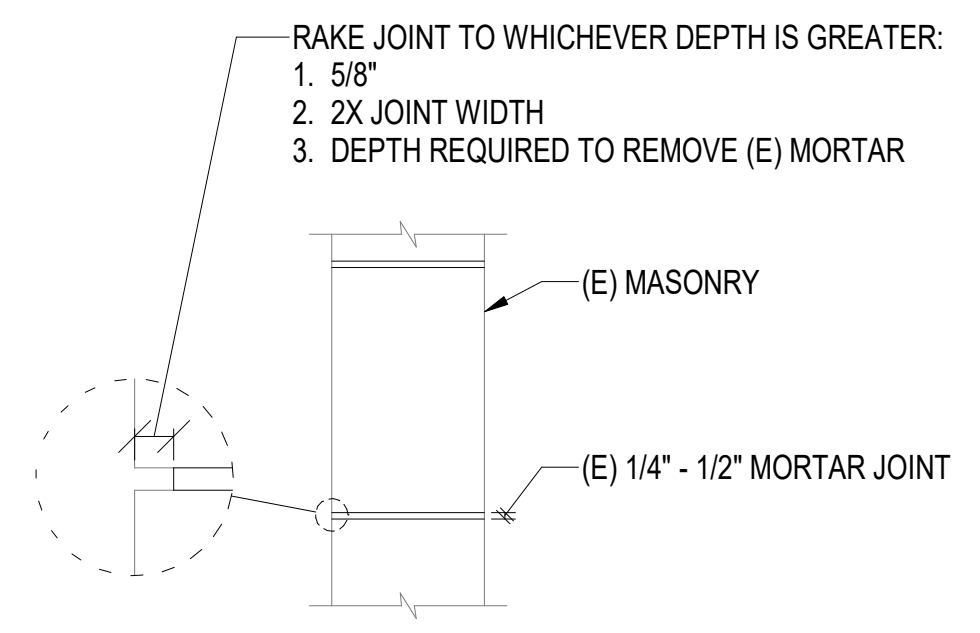


NOTES:
 A. REMOVE EXISTING PAINT 3" EACH SIDE OF CRACK. ROUTE A V-GROOVE AT CRACK SURFACE UNTIL SOUND MATERIAL IS REACHED, CLEAN CRACKS.
 B. APPLY SURFACE SEAL OVER ALL EXTERIOR FACES OF CRACK. INSTALL INJECTION AND VENTING PORTS PER MANUFACTURER'S INSTRUCTIONS.
 C. PRESSURE INJECT EPOXY PER GENERAL NOTES. COMPLY WITH ACI 548.12 AND MANUFACTURER'S INSTRUCTIONS.
 D. DO NOT USE EPOXY INJECTION TO REPAIR EXTERIOR WALLS WITH CRACKS LARGER THAN 1/4" (PRIOR TO GROOVING).

2
S8 CONCRETE REPAIR - SEVERE CRACKS
 1" = 1'-0"

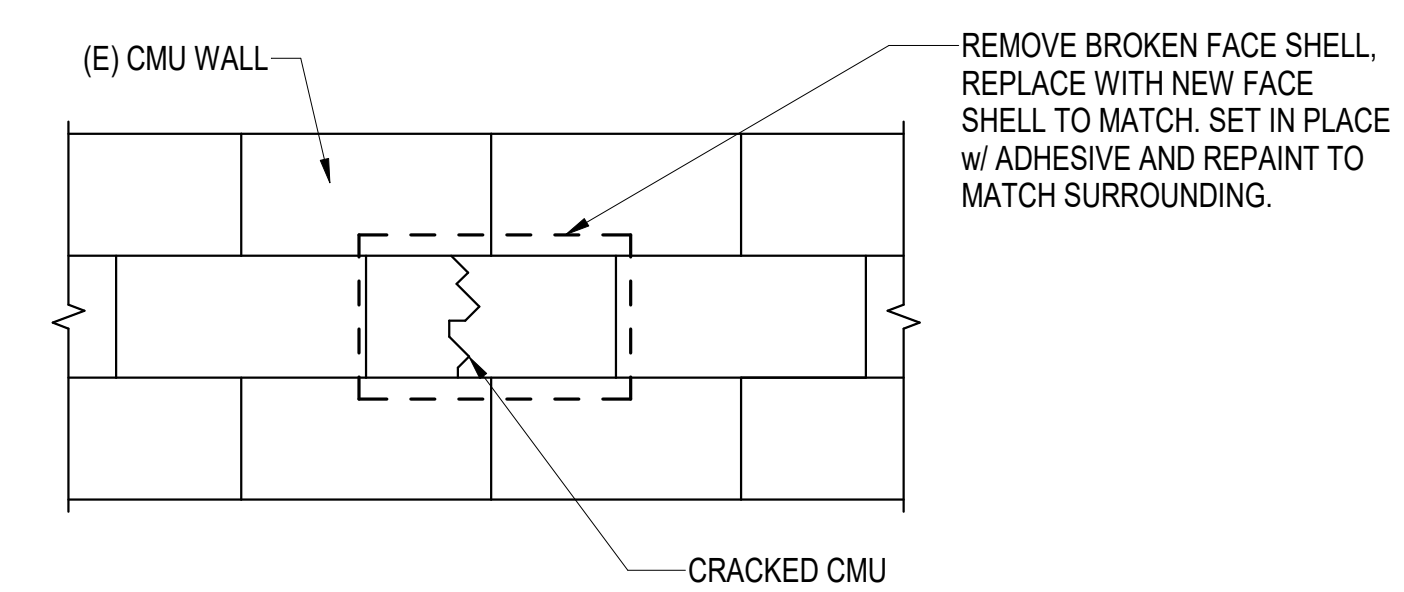


3
S8 SPALLED CONCRETE REPAIR
 1" = 1'-0"

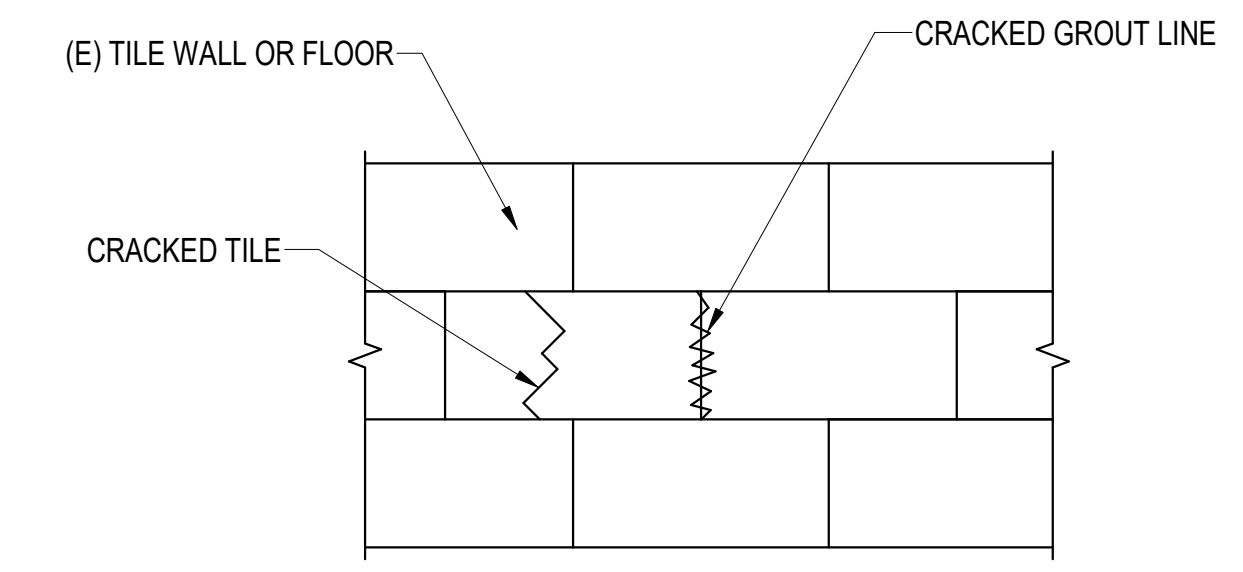


NOTES:
 A. CAREFULLY RAKE OUT EXISTING MORTAR USING NON-IMPACT TOOLS ONLY. CLEAN JOINTS PRIOR TO PLACING NEW MORTAR.
 B. REPOINT IN STAGES TO ALLOW EACH STAGE TO CURE BEFORE RAKING AND REPOINTING THE NEXT STAGE. PROVIDE TEMPORARY SHIMS AND SUPPORTS AS NEEDED. REPAIR VOIDS LEFT BY SHIMS AND SUPPORTS WHEN NO LONGER NEEDED.

4
S8 MASONRY REPOINTING
 1" = 1'-0"



5
S8 CRACKED CMU FACE SHELL REPAIR
 1" = 1'-0"



NOTES:
 1. REMOVE EXISTING CRACKED GROUT AND TILE IF BROKEN, REINSTALL NEW TILE AND/OR GROUT TO MATCH SURROUNDING

6
S8 TILE REPLACEMENT AND GROUT REPAIR
 NTS

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
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BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
WATER	---	---	DESIGN	---	---				
GAS	---	---	QUANTITIES	---	---				
			MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

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 DATE: _____

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 WATER & WASTEWATER UTILITY

SHIP CREEK WATER TREATMENT FACILITY
 REPAIR DETAILS

HORIZ SCALE: AS NOTED VERT SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1142 SHEET 8 of 8
 PROJ. ID.: WR0000254699

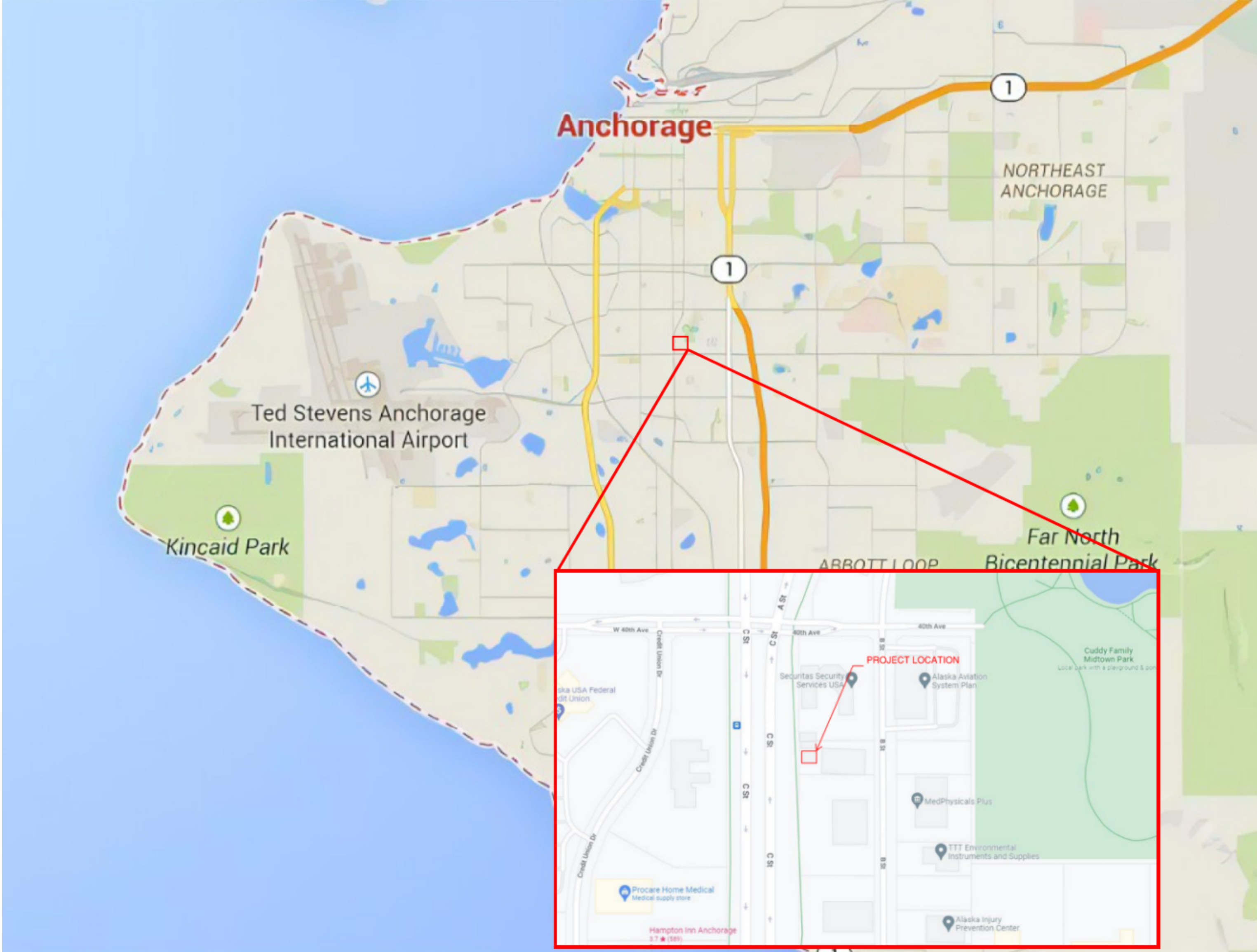
ANCHORAGE WATER AND WASTEWATER UTILITY WATER TREATMENT FACILITY EARTHQUAKE REPAIRS WELL HOUSE NO. 12

PLOT DATE: 12/17/2022 10:03:42 AM

PLOT SCALE: 1:1

FILE PATH AND NAME: \\Users\dstewart\Documents\AWWU_WTF_Well_12_Struct_R2020_covidst77.rvt

AWWU PLAN SET NO. 11351



SCHEDULE OF DRAWINGS	
S1	TITLE PAGE
S2	GENERAL NOTES
S3	PLAN AND DETAILS

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
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PROFILE			CABLE TV						
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PLAN CHECK					REVISIONS				

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**MUNICIPALITY OF ANCHORAGE
WATER & WASTEWATER UTILITY**

**WELL HOUSE NO. 12
TITLE PAGE**

HORZ SCALE: AS NOTED	DATE: 11/17/2022	GRID: SW1730	S1 of 3
PROJ. ID.: WR0000387484			SHEET

GENERAL

THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AMONG THE DRAWINGS BEFORE STARTING ANY WORK OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, REFERENCE STANDARDS, SITE CONDITIONS OR GOVERNING CODE, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL NOTIFY THE ENGINEER OF DISCREPANCIES AND OBTAIN DIRECTION PRIOR TO PROCEEDING. NOTES ON INDIVIDUAL STRUCTURAL DRAWINGS SHALL TAKE PRIORITY OVER GENERAL STRUCTURAL NOTES. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED AS TYP ON THE PLANS BUT SHALL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS.

ALL CONSTRUCTION SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE MUNICIPALITY OF ANCHORAGE (MOA).

SAFETY - THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL FEDERAL, STATE AND LOCAL SAFETY STANDARDS. THE CONTRACTOR IS IN CHARGE OF ALL SAFETY MATTERS ON AND AROUND THE JOB SITE.

STRUCTURAL DESIGN DATA

THIS REPAIR WAS DESIGNED TO RESTORE THE STRUCTURE TO ITS PRE-EARTHQUAKE CONDITION.

EXISTING CONDITIONS

CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING WORK. DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. EXISTING CONDITIONS SHOWN ON DRAWINGS ARE BASED ON EITHER SITE OBSERVATIONS, ORIGINAL DRAWINGS, OR WERE ASSUMED BASED ON EXPECTED CONDITIONS. IF EXISTING CONDITIONS DO NOT CLOSELY MATCH CONDITIONS SHOWN ON DRAWINGS, OR IF EXISTING MATERIALS ARE OF QUESTIONABLE OR SUBSTANDARD QUALITY, NOTIFY ENGINEER PRIOR TO COMMENCING WORK.

SPECIAL INSPECTION

THE OWNER SHALL ENGAGE A SPECIAL INSPECTOR PER CHAPTER 17 OF THE IBC. COPIES OF INSPECTION REPORTS SHALL BE AVAILABLE TO THE CONSTRUCTION SITE FOR REVIEW BY THE MOA BUILDING SAFETY PERSONNEL.

PERIODIC SPECIAL INSPECTION & MATERIAL TESTING IS REQUIRED FOR:

- ADHESIVE ANCHOR (PER ICC-ES REPORT)
- CMU CONSTRUCTION (PER SPECIFICATIONS)
- CONCRETE CONSTRUCTION (PER SPECIFICATIONS)
- CRACK REPAIRS (PER SPECIFICATIONS)

SUBMITTALS

THE CONTRACTOR MUST REVIEW, STAMP WITH THEIR APPROVAL, DATE AND SIGN ALL SHOP DRAWINGS AND SUBMITTALS REQUIRED BY THE CONTRACT DRAWINGS PRIOR TO SUBMITTAL TO THE ENGINEER. AT THE TIME OF SUBMISSION, THE CONTRACTOR MUST INFORM THE ENGINEER IN WRITING OF ANY DEVIATION IN THE SHOP DRAWINGS FROM THE REQUIREMENTS OF THE CONTRACT DRAWINGS. DIMENSIONS AND QUANTITIES ARE THE CONTRACTOR'S RESPONSIBILITY AND WILL NOT BE REVIEWED.

DRAIN LINE REPAIR AND RETROFIT

ALL DRAIN PIPE AND TRENCHLESS DRAIN PIPE LINING TO CONSIST OF CHEMICALLY RESISTANT MATERIALS. CONTRACTOR TO PROVIDE SUBMITTAL INFORMATION REGARDING DRAIN PIPE REPAIR PRODUCTS INCLUDING PRODUCT DATA SHEET ON TYPE OF REPLACEMENT PIPING AS WELL AS TRENCHLESS PIPE LINING.

CRACK & SPALL REPAIR

ALL CONCRETE MASONRY CRACK AND SPALL REPAIRS WILL COMPLY WITH ACI 548.12.

MINOR CRACKS IN CMU THAT ARE LESS THAN 0.060" (1/16") WIDE WILL NOT BE REPAIRED.

MASONRY CRACKS LARGER THAN 0.25", BUT LESS THAN 2" WILL BE SEALED WITH FLEXCRETE 102' OR KEMKO 077 IR" LARGE VOID FILLER.

STRUCTURAL CONCRETE

ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301, STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE, AS MODIFIED BY IBC SECTION 1905 AND LOCAL ADOPTED AMENDMENTS.

ALL CAST-IN-PLACE CONCRETE:

1. EXPOSURE F3, S0, W0, C2 (ACI 318-14, 19.3.1.1)
2. MINIMUM 28-DAY COMPRESSIVE STRENGTH = 5,000 PSI
3. MAXIMUM AGGREGATE SIZE = 3/4"
4. MAXIMUM WATER-CEMENT RATIO = 0.4
5. MAXIMUM CHLORIDE ION CONTENT = 0.06%
6. TARGET AIR CONTENT = 6% (+/-1%)

CONCRETE SHALL BE PROPORTIONED TO ACHIEVE A WORKABLE MIX THAT CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER.

APPLICABLE ASTM STANDARDS:

- PORTLAND CEMENT = ASTM C150
- AGGREGATE = ASTM C33, NORMAL WEIGHT
- WATER = ASTM C1602
- WATER REDUCING ADMIXTURE = ASTM C494, TYPE A

CONCRETE PLACED DURING COLD WEATHER SHALL CONFORM TO ACI 306. ALL COLD WEATHER CONCRETE AND CONCRETE EXPOSED TO WEATHER SHALL CONTAIN AIR ENTRAINMENT PER ACI 318-14 TABLE 19.3.3.1.

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT FOR CAST-IN-PLACE CONCRETE:

- A. CONCRETE EXPOSED TO EARTH OR WEATHER
- #6 AND LARGER 2-INCHES
- #5 AND SMALLER 1½-INCHES

ALL CONCRETE REINFORCING SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 315, ACI 318, CRSI MSP-1 AND ACI SP-66. DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING.

TYPICAL REINFORCING BARS SHALL BE ASTM A615, GRADE 60. LAP SPLICES SHALL BE CLASS B LAPS PER ACI (63 X BAR DIAMETER). LAP SPLICES MAY ALSO ACCOMPLISHED USING MECHANICAL DEVICES THAT DEVELOP 125% OF THE STRENGTH OF THE REBAR.

CHECKED SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING AND PLACEMENT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMIT MIX DESIGNS FOR REVIEW PRIOR TO USE.

EMBEDDED ITEMS (CONDUIT AND SLEEVES) SHALL NOT BE EMBEDDED IN OR PASS THROUGH CONCRETE WITHOUT APPROVAL. ALUMINUM ITEMS SHALL NOT BE EMBEDDED IN CONCRETE. SUBMIT CONDUIT LAYOUT AND EMBEDDED ITEM PLANS FOR REVIEW PRIOR TO PLACING CONCRETE.

STRUCTURAL MASONRY

HOLLOW LOAD BEARING CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE I, NORMAL WEIGHT, WITH A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2,800 PSI. PROTECT UNITS FROM MOISTURE PRIOR TO INSTALLATION.

MORTAR SHALL MEET ASTM C270, TYPE S. PROPORTIONS SHALL COMPLY WITH TMS 602-16 TABLE SC-1. MINIMUM 28 DAY COMPRESSIVE STRENGTH = 1,800 PSI.

GROUT SHALL MEET ASTM C476. PROPORTIONS SHALL COMPLY WITH TMS 602-16 TABLE SC-7. MINIMUM COMPRESSIVE STRENGTH = 2,000 PSI. PROVIDE ADEQUATE TEMPORARY BRACING DURING CONSTRUCTION TO WITHSTAND LATERAL LOADS AND THE PRESSURES OF FLUID GROUT.

THE MINIMUM DESIGN STRENGTH OF THE MASONRY ASSEMBLAGE (MASONRY UNITS, MORTAR, AND GROUT) f_m = 2,000 PSI.

CMU SHALL BE LAID IN RUNNING BOND, AND CONSTRUCTION SHALL COMPLY WITH TMS 602-16 SECTION 3.3.

REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60. WELDABLE REINFORCING SHALL MEET A706 AND SHALL BE WELDED PER ANSI/AWS D1.4. LAP SPLICES SHALL BE PER TMS 402-16 SECTION 6.1.6.1.1 (43 X BAR DIAMETER).

VERTICAL CELLS TO BE FILLED WITH GROUT SHALL BE ALIGNED TO PROVIDE A CONTINUOUS, UNOBSTRUCTED OPENING. CELLS WHICH WILL CONTAIN VERTICAL REINFORCING SHALL HAVE A MINIMUM FOUR (4) INCH CLEAR OPENING.

MASONRY INSTALLED IN COLD WEATHER SHALL MEET TMS 602-16 SECTION 1.8 C.

POST-INSTALLED ANCHORS

INSTALLATION SHALL CONFORM TO MANUFACTURER'S INSTRUCTIONS AND REQUIREMENTS OF ICC-ES REPORT. ALL POST-INSTALLED ANCHORS SHALL HAVE A CURRENT ICC-ES REPORT AND BE AUTHORIZED FOR USE IN SEISMIC DESIGN CATEGORY D. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR ALL POST-INSTALLED ANCHORS, UON.

ADHESIVE ANCHORS FOR THREADED ROD AND REBAR SHALL BE ONE OF THE FOLLOWING (OR AN APPROVED EQUIVALENT):

- MASONRY (SOLID & UNGROUTED):
- SIMPSON "SET-XP" (IAPMO UES ER-265)
- HILTI "HY-270" (ESR-4143 GROUTED CMU or ESR-4144 UNGROUTED CMU)
- DEWALT "AC100+gold" (ESR-3200)

@	At	BLKG	Blocking	EA	Each	INT	Interior	OC	On-Center	SCH	Schedule	TRANS	Transverse
AB	Anchor Bolts	BM	Beam	EQ	Equal Earthquake	LAG	Lag Screw	OH	Overhead	SIM	Similar	TYP	Typical
BLDG	Building	BOT	Bottom	EW	Each Way	LOC	Location	OPNG	Opening	SQ	Square	UON	Unless Otherwise Noted
ARCH	Architect	BTWN	Between	EXP	Expansion	LONG	Longitudinal	PL	Plate	STL	Steel	VERT	Vertical
AR	Anchor Rod	CL	Center-Line	FDN	Foundation	MAINT	Maintenance	PLS	Places	T&B	Top and Bottom	W/	With
ALT	Alternate	CLR	Clear	FF	Finished Floor	MAX	Maximum	PSF	Pounds-per-square-foot	T&G	Tongue and Groove	W/O	Without
AHJ	Authority Having Jurisdiction	COL	Column	GALV	Galvanized	MEZZ	Mezzanine	PSI	Pounds-per-square-inch	T.O.	Top of	W	Wide-Flange, Wide
AFF	Above Finish Floor	CONC	Concrete	GLB	Glue-Laminated Beam	MIN	Minimum	REQ'D	Required	T.O.B.	Top of Beam	W/C	Water / Cement Ratio
ADH	Adhesive	CONT	Continuous, Continue	HORZ	Horizontal	MFR	Manufacturer	RO	Rough Opening	T.O.S.	Top of Steel	W.P.	Work Point
ADD'L	Additional	DBN	Diaphragm Boundary Nailing	HSS	Hollow Structural Steel	(N)	New	SBN	Shearwall Boundary Nailing	T.O.W.	Top of Wall	WWR	Welded Wire Reinforcement
		(E)	Existing	IBC	International Building Code								

VERIFY SCALE		THIS BAR REPRESENTS ONE INCH ON ORIGINAL DRAWING.		0" = 1"		IF BAR IS NOT ONE INCH, ADJUST DRAWING SCALE ACCORDINGLY.		FULL SIZE SCALE	
DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
BASE	---	---	TELEPHONE	---	---				
TOPOGRAPHY	---	---	ELECTRIC	---	---				
PROFILE	---	---	CABLE TV	---	---				
SANITARY SEWER	---	---	TRAFFIC SIGNAL	---	---				
STORM SEWER	---	---	DESIGN	---	---				
WATER	---	---	QUANTITIES	---	---				
GAS	---	---	MUN. FINAL CHECK	---	---				
PLAN CHECK					REVISIONS				

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CONSULTANT



MUNICIPALITY OF ANCHORAGE WATER & WASTEWATER UTILITY

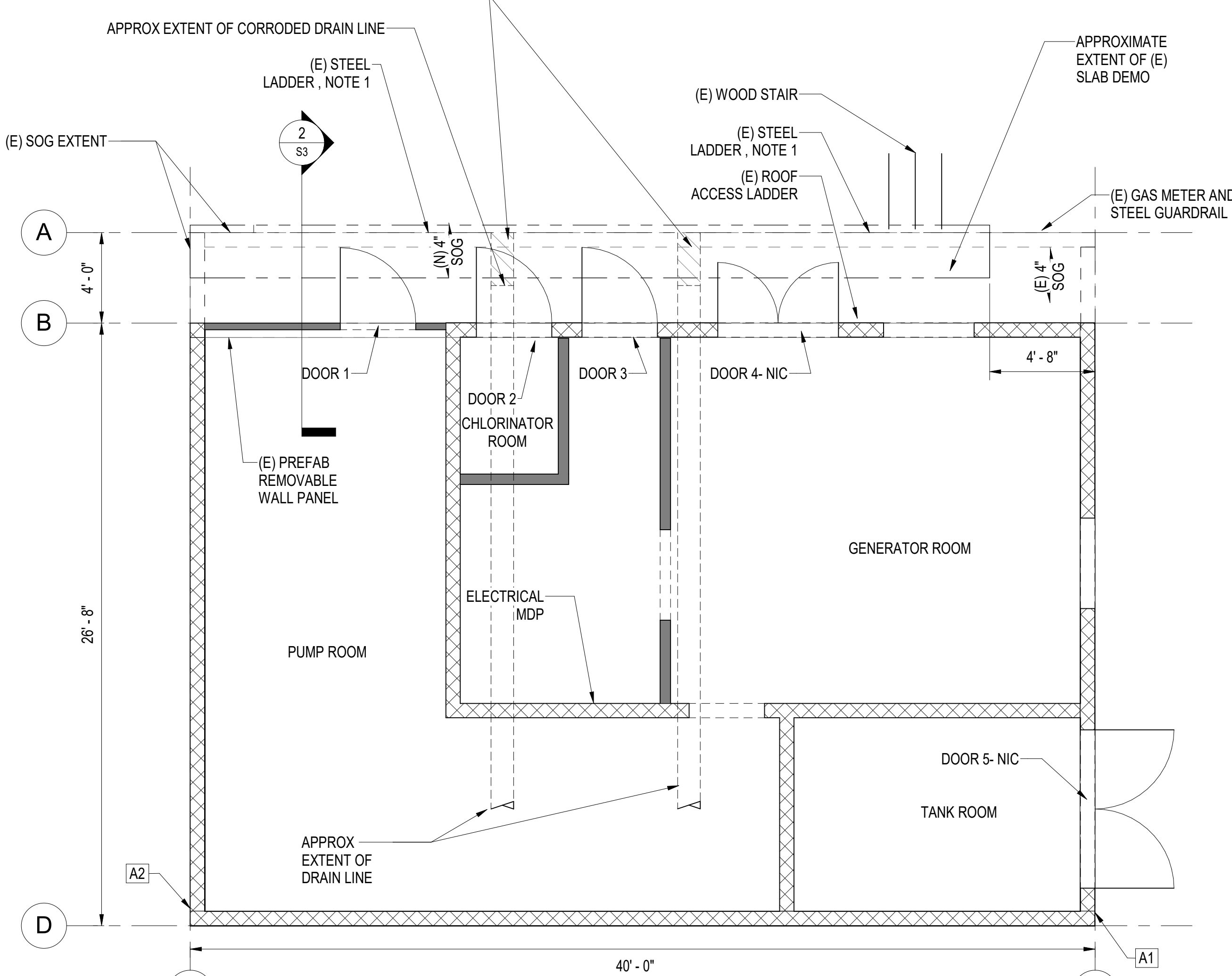
WELL HOUSE NO. 12 GENERAL NOTES

HORZ SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1730 SHEET S2 of 3

VERT SCALE: AS NOTED

PROJ. ID.: WR0000387484

MAINTENANCE REPAIR: REPAIR AND REPLACE CORRODED PORTION OF (E) FLOOR DRAIN LINES WITH NON-METALLIC CHEMICAL RESISTANT DRAIN LINE THROUGH (N) CMU WALL SUPPORTING EXTERIOR SOG. DRAIN PIPE TO EXIT FACE OF WALL W/ MIN 1" CLEAR. DRAIN OPENING TO HAVE SECURITY SCREEN W/ MAX OPNG OF 1/2" CLR ANY DIR. CONTRACTOR TO PROVIDE CHEMICAL RESISTANT TRENCHLESS LINING ORIGINATING AT FLOOR DRAIN AND EXITING AT EXTERIOR CMU WALL



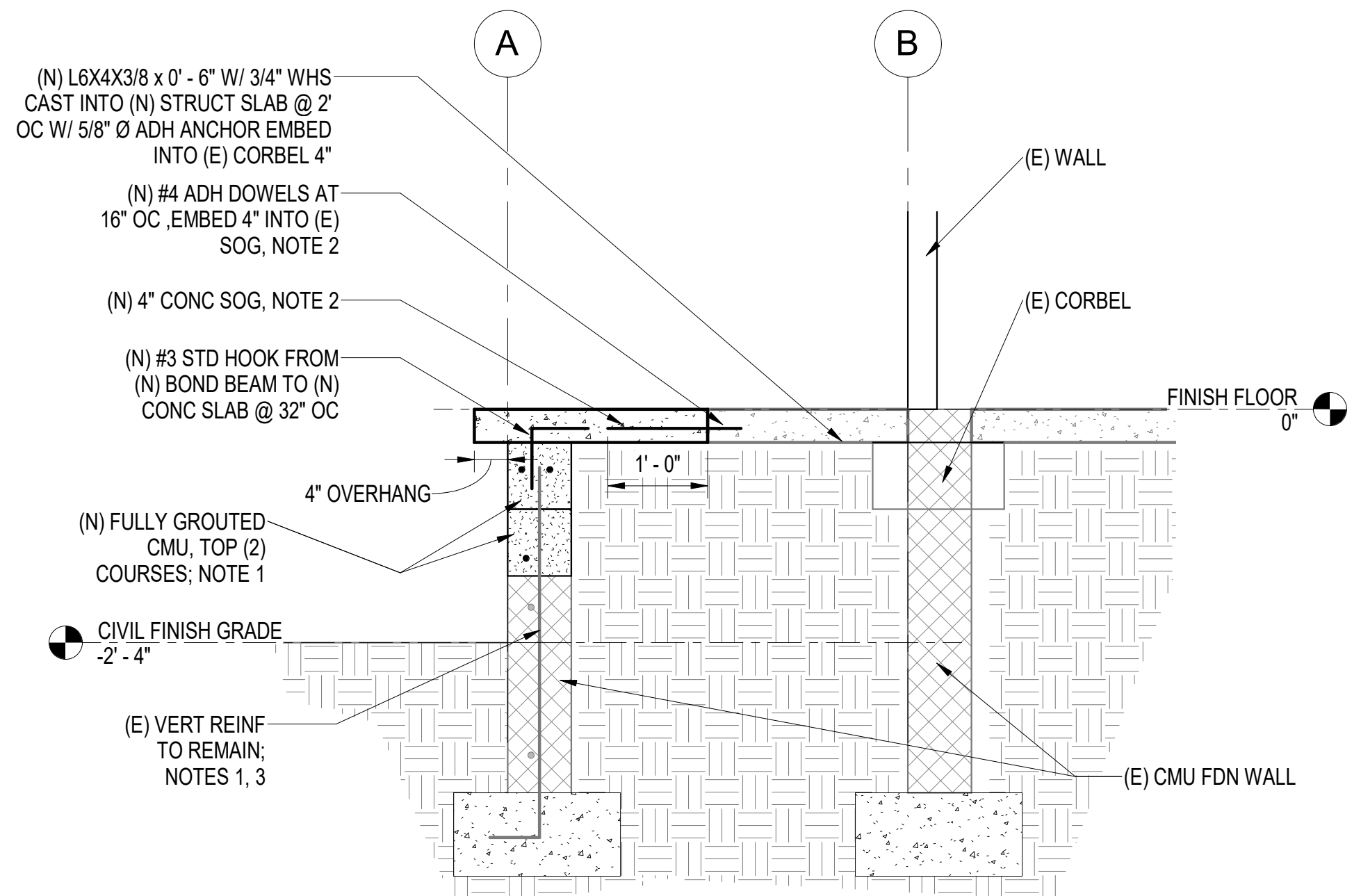
EARTHQUAKE RECOVERY REPAIR ITEM LEGEND

A1	CRACKED CMU JOINT SEE 3/S3
A2	CRACKED CMU JOINT SEE 4/S3

- NOTES:
- ITEMS MARKED AS MAINT, MAINTENANCE OR OTHERWISE UNMARKED ARE MAINTENANCE REPAIR SCOPE. ITEMS DESIGNATED AS EARTHQUAKE RECOVERY ARE PART OF FEMA EARTHQUAKE REPAIR SCOPE
 - (E) STEEL LADDERS BE CLEANED OF ANY SURFACE RUST, TREATED WITH RUST INHIBITING PRIMER, PAINTED AND REINSTALLED TO (E) CMU WALL AND (N) CONC STRUCTURAL SLAB; MAINTENANCE REPAIR
 - (E) WOOD STAIR TO BE REMOVED AND REINSTALLED TO FACILITATE (N) STRUCTURAL REPAIR MAINTENANCE SCOPE.

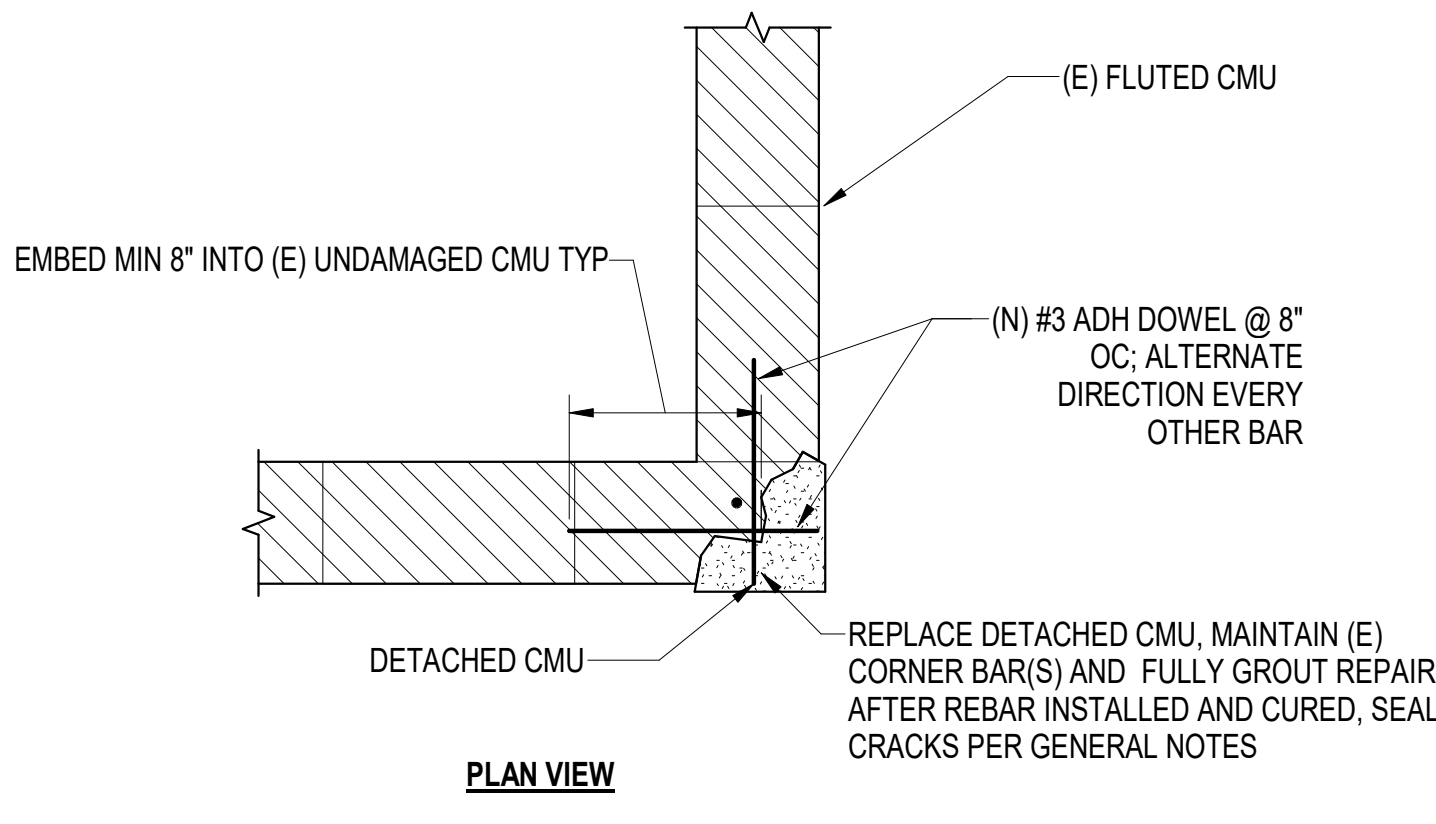
DOOR AND FRAME REPLACEMENTS - MAINTENANCE REPAIR
 REMOVE AND REPLACE THE EXISTING FRAMES AND DOORS #1, 2, AND 3. PROVIDE NEW 3-0 X 6-8 DOORS. FIELD VERIFY NEW FRAME SIZE AND DEPTHS TO FIT EXISTING OPENINGS. SALVAGE ALL EXISTING DOOR HARDWARE AND RETURN TO OWNER. SEE SPECIFICATIONS FOR NEW HOLLOW METAL INSULATED DOORS AND FRAMES AND NEW HARDWARE.

1 LEVEL 1 PLAN
S3 1/4" = 1'-0"

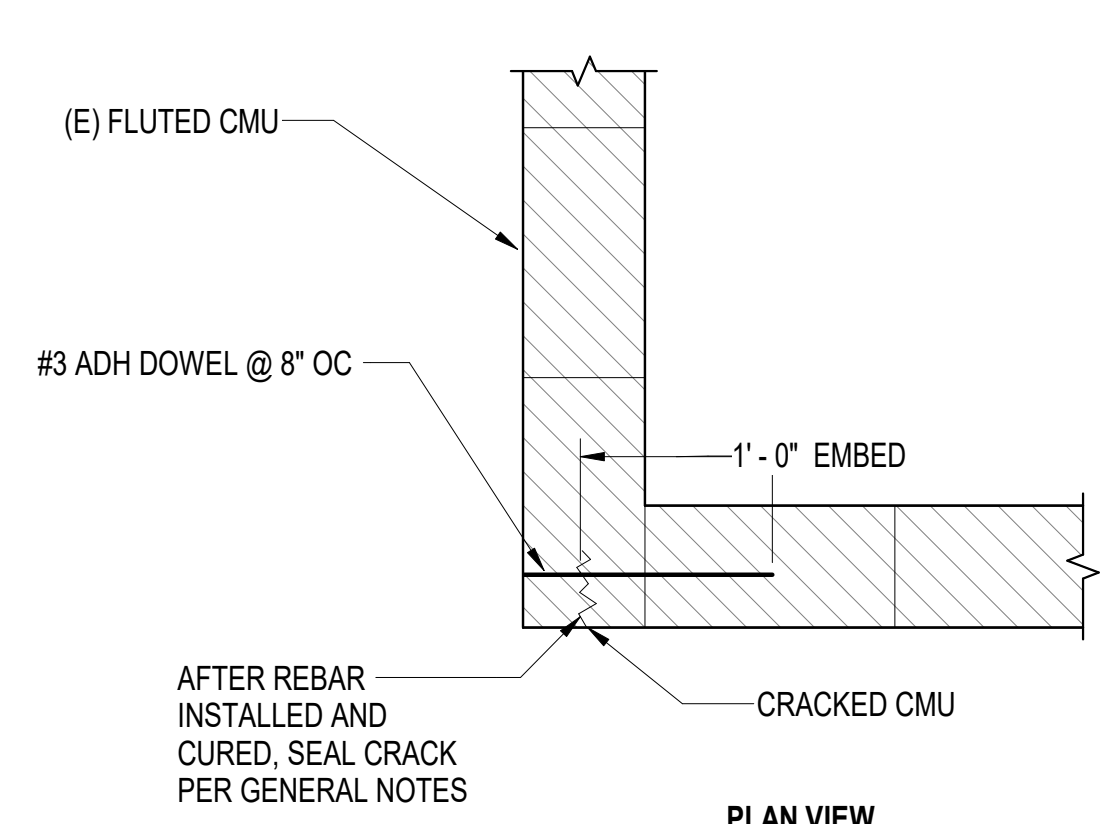


- NOTES:
- REMOVE (E) DAMAGED TOP COURSE OF CMU. REPLACE W/ (N) BOND BEAM AT TOP COURSE WITH (2) #4 CONT REINF BAR. GROUT (E) VERTS INTO (N) TOP COURSE
 - TYP SOG REINF NOT SHOWN, #4 BARS AT 16" OC EA WAY
 - CONTRACTOR TO PLACE NFS FILL COMPACTED TO 95% DRY DENSITY PRIOR TO POURING NEW SLAB ON GRADE.

2 SECTION AT STRUCTURAL SLAB - MAINTENANCE REPAIR
S3 3/4" = 1'-0"



3 CMU REPAIR - SE CORNER - EARTHQUAKE RECOVERY
S3 1" = 1'-0"



4 CMU REPAIR - SW CORNER - EARTHQUAKE RECOVERY
S3 1" = 1'-0"

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY
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TOPOGRAPHY			ELECTRIC						
PROFILE			CABLE TV						
SANITARY SEWER			TRAFFIC SIGNAL						
STORM SEWER			DESIGN						
WATER			QUANTITIES						
GAS			MUN. FINAL CHECK						

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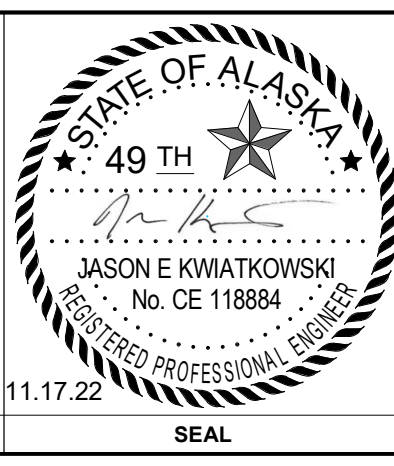
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MUNICIPALITY OF ANCHORAGE
 WATER & WASTEWATER UTILITY

WELL HOUSE NO. 12
PLAN AND DETAILS

HORIZ SCALE: AS NOTED DATE: 11/17/2022 GRID: SW1730 SHEET S3 of 3
 VERT SCALE: PROJ. ID.: WR0000387484