

PROJECT LOCATION

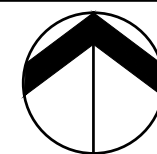
LOCATION MAP

COUNTY: FILLMORE

LOCATION MAP



WWTF - PROJECT LOCATION

VICINITY MAP

CITY OF PRESTON, MINNESOTA

RBC REPLACEMENT PROJECT

PROJECT NO. 173420152

SEPTEMBER 2025



Stantec

Minneapolis, MN 55402
www.stantec.com

AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

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FLICK DAINIEL

SIGNATURE: Paul Voil
DATE: OCTOBER 6, 2025 LIC. NO. 47543

CITY OF PRESION, MINNESOTA
PROCUREMENT PROJECT

RBC REPLACEMENT PROJECT

TITLE SHEET AND VICINITY MAP

REVISION	DATE
ISSUED FOR BID	8/29/25
SURVEY	
DRAWN	ACL
DESIGNED	
CHECKED	
APPROVED	
PROJ. NO.	173420152

SHEET NUMBER
G001

1. ALL WORK SHALL CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS FOR CONSTRUCTION AND THE CONDITIONS OF ALL APPLICABLE PERMITS.
2. ITEMS NOT INCLUDED IN THE BID FORM AS A PAY ITEM BUT INCLUDED ELSEWHERE IN THE PLANS SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE CONSIDERED INCIDENTAL ITEMS.
3. A COPY OF THE APPROVED PLANS, SPECIFICATIONS, AND ALL REQUIRED PERMITS MUST BE ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR WORK, EXCEPT WHERE SPECIFICALLY NOTED.
5. PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SCHEDULE AND ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE OWNER AND ENGINEER.
6. CONTRACTOR SHALL PROVIDE A ONE (1) WEEK NOTICE TO ENGINEER, OWNER, AND PROPERTY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF CONSTRUCTION FENCE AS NECESSARY TO COMPLETE THE WORK. INSPECTION AND ACCEPTANCE OF ALL CONSTRUCTION FENCE INSTALLATION SHALL BE ACCOMPLISHED BY REPRESENTATIVE OF THE OWNER PRIOR TO COMMENCING WORK.
8. ALL MATERIALS INCLUDING EXCESS EXCAVATED MATERIAL, PIPE, UTILITIES, STUMPS, ROOTS, AND ANY OTHER ITEMS THE OWNER DOES NOT WISH TO SALVAGE SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY, INCIDENTAL TO THE CONTRACT.
9. THE CONTRACTOR SHALL KEEP STREETS CLEAN AT ALL TIMES BY SWEEPING. WASHING OF STREETS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL.
10. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY PUMPING AND PIPING NECESSARY TO COMPLETE THE WORK.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING OSHA STANDARDS FOR ALL CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL FOLLOW THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS AND GUIDES FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION.
3. THE CONTRACTOR SHALL FOLLOW MN DEPARTMENT OF TRANSPORTATION STANDARD DRAWINGS WHEN SETTING UP THE TRAFFIC CONTROL DEVICES.

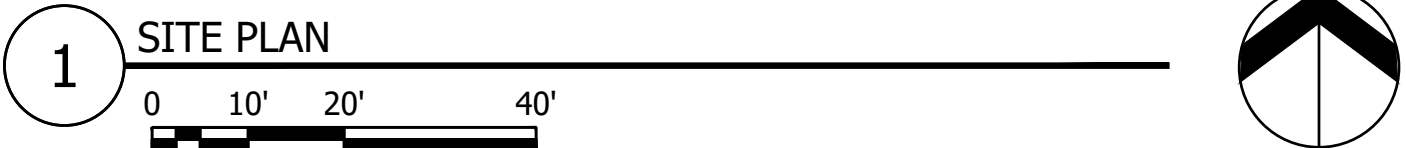
1. ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THESE PLANS HAVE NOT BEEN VERIFIED BY THE ENGINEER OR OWNER. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN ON THESE PLANS WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
2. CONTRACTOR SHALL VERIFY ALL PLAN AND EXISTING ELEVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING STRUCTURES AND LOCATIONS OF ALL UTILITY CONNECTIONS TO EXISTING SYSTEMS PRIOR TO COMMENCING WORK.
3. MISCELLANEOUS ITEMS SUCH AS, AND NOT LIMITED TO, MAILBOXES, STREET LIGHTS, TRAFFIC LIGHTS, SIGNS, FENCES, POLES, ETC. SHALL BE PROTECTED OR REMOVED AND REINSTALLED BY THE CONTRACTOR INCIDENTAL TO THE CONTRACT.
4. CONTRACTOR SHALL USE POT-HOLING OR VAC-TRUCK EXPLORATION TECHNIQUES TO LOCATE UNDERGROUND UTILITIES WHERE IDENTIFIED ON THE PLANS AND AS DETERMINED TO BE NECESSARY BY CONTRACTOR TO LOCATE AND AVOID EXISTING UTILITIES.
5. THE CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURE LIDS, VALVE BOXES, AND UTILITY ACCESS STRUCTURES TO FINISH GRADES WITHIN AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS.
6. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS DURING TRENCH EXCAVATION TO PROTECT EXISTING UTILITIES AND STRUCTURES FROM DAMAGE AND SETTLEMENT. ANY DAMAGE TO EXISTING UTILITIES AND STRUCTURES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES MAY NEED TO BE REMOVED BY CONTRACTOR AND REPLACED AFTER WORK IS COMPLETE - THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
7. CONTRACTOR SHALL BE REQUIRED TO CLEAN AND MAINTAIN ROADWAYS, SIDEWALKS, AND CURBS AFFECTED BY CONSTRUCTION ACTIVITIES, INCLUDING HAUL ROUTES, ON A WEEKLY BASIS, OR AS NEEDED. CONTRACTOR SHALL REPAIR ALL ROADWAYS, SIDEWALKS, AND CURBS TO THE CONDITION THEY WERE IN PRIOR TO THE START OF CONSTRUCTION, OR BETTER, PRIOR TO THE PROJECT COMPLETION. ALL COSTS FOR CLEANING, MAINTENANCE, AND REPAIR SHALL BE INCIDENTAL TO THE CONTRACT.
8. CONTRACTOR MUST RE-ESTABLISH ANY DISTURBED PROPERTY PINS WITH SERVICES OF REGISTERED LAND SURVEYOR (RLS) REGISTERED IN MINNESOTA. CONTRACTOR MUST SUBMIT CERTIFICATE OF SURVEY FOR EACH PROPERTY WITH RE-ESTABLISHED PROPERTY PINS. THE COST FOR RLS SERVICES SHALL BE INCIDENTAL TO THE CONTRACT.

1. ALL BOLTS AND ANCHOR BOLTS INSTALLED THROUGHOUT THE PROJECT SHALL BE STAINLESS STEEL, UNLESS OTHERWISE NOTED IN THE DRAWINGS AND SPECIFICATIONS.
2. PVC AND POLYETHYLENE PIPE SHALL BE STORED COVERED OUT OF DIRECT SUNLIGHT.

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY SEDIMENTATION COLLECTION FACILITIES TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL OR PUBLIC DRAINAGE SYSTEM. AS CONSTRUCTION PROGRESSES AND UNEXPECTED CONDITIONS DICTATE, ADDITIONAL SEDIMENT CONTROL MEASURES MAY BE REQUIRED TO PREVENT SEDIMENT FROM LEAVING THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY ITS ACTIVITIES AND TO PROVIDE ADDITIONAL MEASURES THAT MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES.
2. NON-COMPLIANCE WITH EROSION AND SEDIMENT CONTROL REQUIREMENTS, WATER QUALITY REQUIREMENTS, AND CLEARING LIMITS MAY RESULT IN REVOCATION OF PROJECT PERMITS, PLAN APPROVAL, AND BOND FORECLOSURES.
3. THE TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY GRADING OR EXTENSIVE LAND CLEARING IN ACCORDANCE WITH THE APPROVED TEMPORARY EROSION CONTROL PLAN.
4. ALL EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS.
5. STOCKPILES ARE TO BE LOCATED IN SAFE AREAS AND ADEQUATELY PROTECTED BY PLASTIC SHEETING AND PERIMETER SEDIMENT CONTROLS.
6. THE SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD THESE SEDIMENT CONTROL MEASURES SHALL BE UPGRADED AS NEEDED.
7. ANY DISTURBED SOILS WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 14 DAYS (OR 7 DAYS IF WITHIN 1 MILE OF A SPECIAL OR IMPAIRED WATER) SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED EROSION CONTROL METHOD (I.E. SEEDING, MULCHING, EROSION BLANKET, ETC.).
8. EROSION PREVENTION MEASURES AND SEDIMENT CONTROL DEVICES SHALL BE INSPECTED AND REPAIRED AS NECESSARY WITHIN 24 HOURS FOLLOWING A STORM EVENT.
9. ALL EROSION PREVENTION MEASURES AND SEDIMENT CONTROL DEVICES SHALL CONFORM TO THE MINNESOTA POLLUTION CONTROL AGENCY GENERAL CONSTRUCTION STORMWATER PERMIT.
10. CONTRACTOR RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE PROJECT CONSTRUCTION STORMWATER PERMIT, IF APPLICABLE. CONTRACTOR ALSO RESPONSIBLE FOR COMPLYING WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), IF APPLICABLE.

DRAWING NO.	SHEET TITLE
GENERAL	
G001	TITLE SHEET AND VICINITY MAP
G002	SHEET INDEX AND GENERAL CONSTRUCTION NOTES
CIVIL	
C001	SITE PLAN
PROCESS	
D101	DEMO PLAN
D102	RBC IMPROVEMENTS - PLAN AND SECTIONS
ELECTRICAL	
E101	ELECTRICAL PLAN

<div style="text-align: center; font-weight: bold;">CITY OF PRESTON, MINNESOTA</div> <div style="text-align: center; margin-top: -8px;">RBC REPLACEMENT PROJECT GENERAL SHEET INDEX AND GENERAL CONSTRUCTION NOTES</div>	<div>I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE PROFESSIONAL ENGINEER ACT UNDER THE LAWS OF THE STATE OF MINNESOTA.</div> <div>PRINT NAME: PETER DANIELS Signature: <i>Peter Daniels</i></div> <div>SIGNATURE: _____ DATE: OCTOBER 6, 2025 I.C. NO.: 47543</div>
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ISSUED FOR BID 8/29/25	
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APPROVED	
PROJ. NO.	1734201/52
SHEET NUMBER	
G002	



SHEET NUMBER
C001

CITY OF PRESTON, MINNESOTA

PRINT NAME: PETER DANIELS

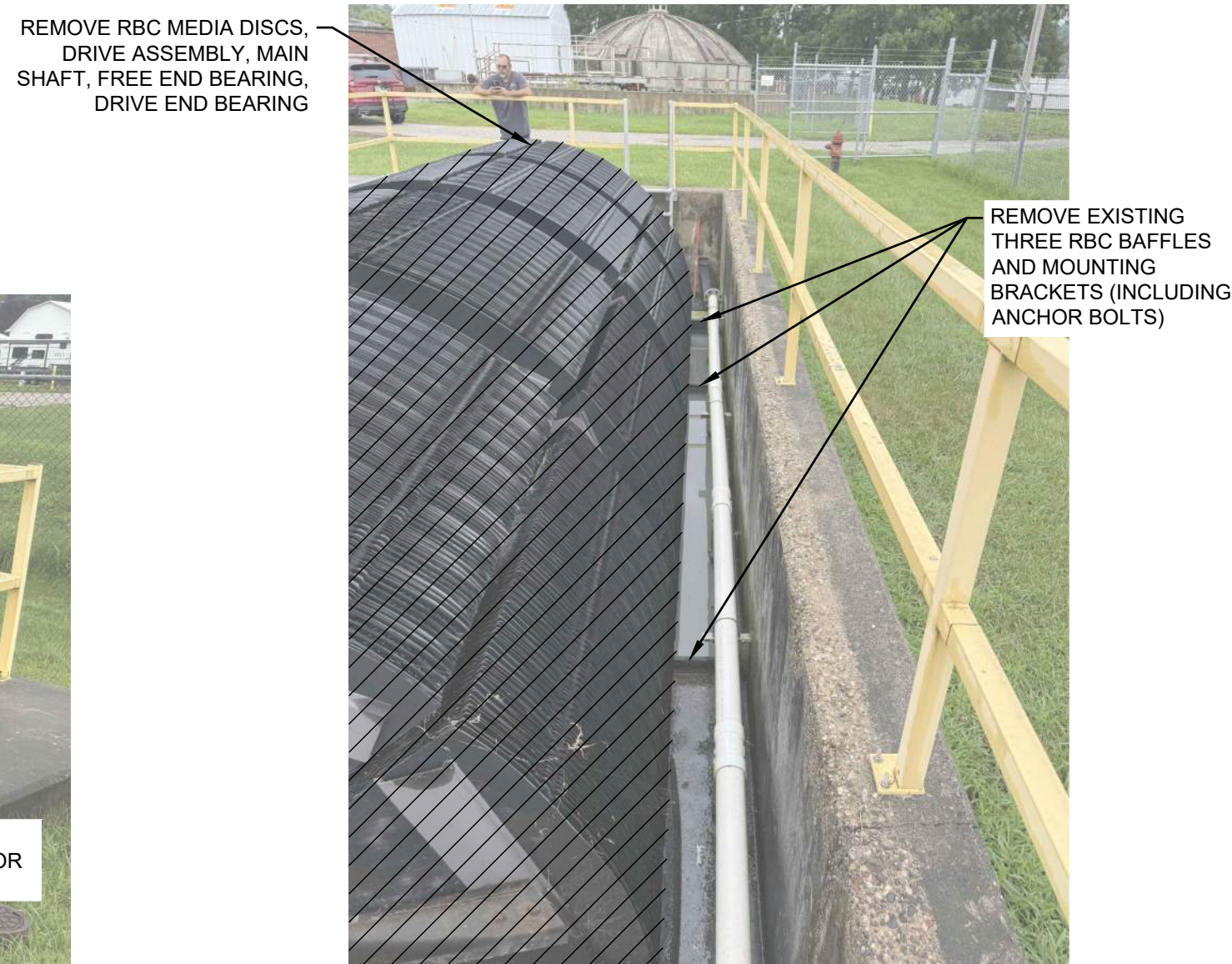
SIGNATURE: *Peter Daniels*

DATE: OCTOBER 6, 2025 LIC. NO.: 47543

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1 RBC DEMO DETAIL



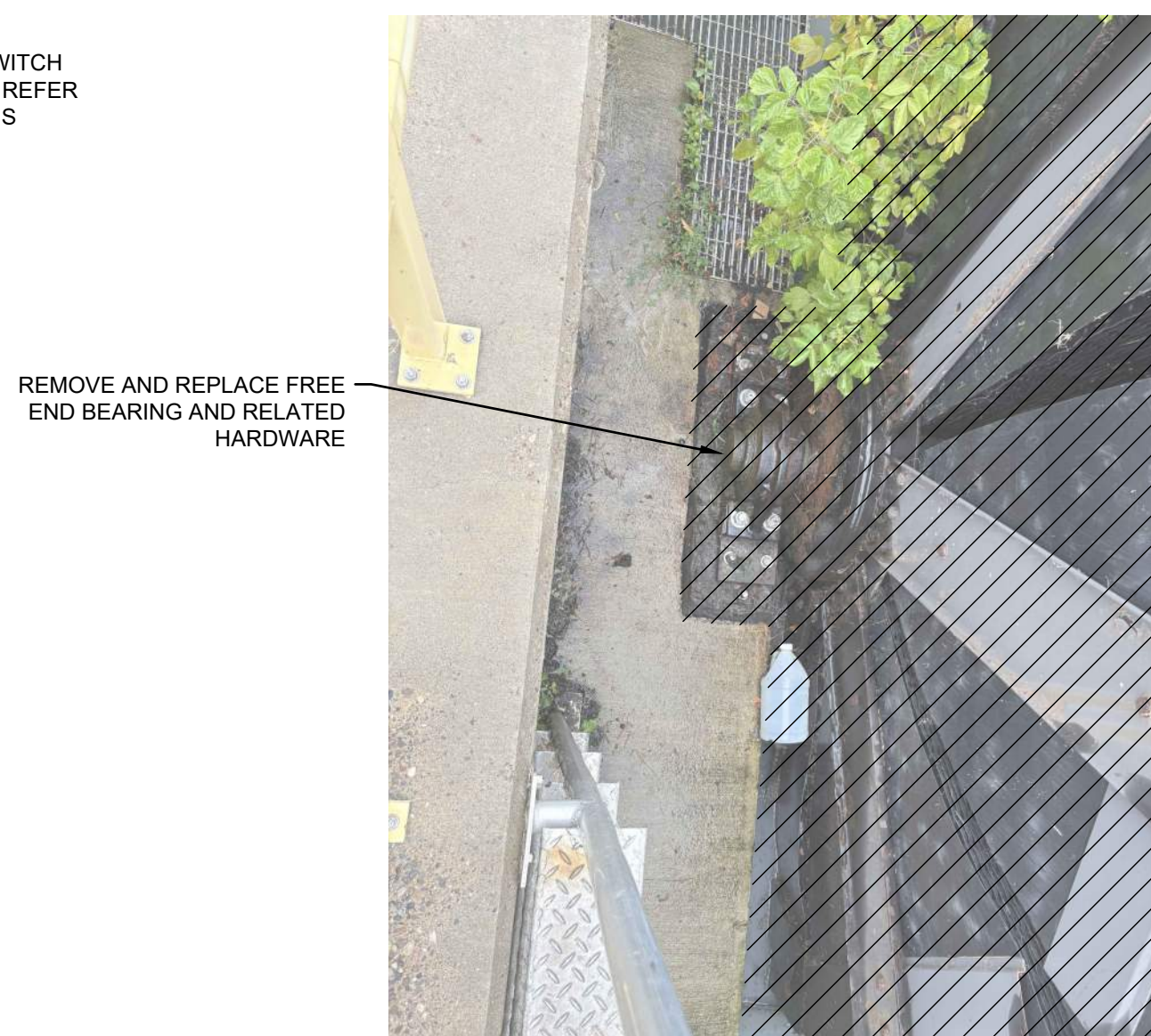
2 RBC DEMO DETAIL



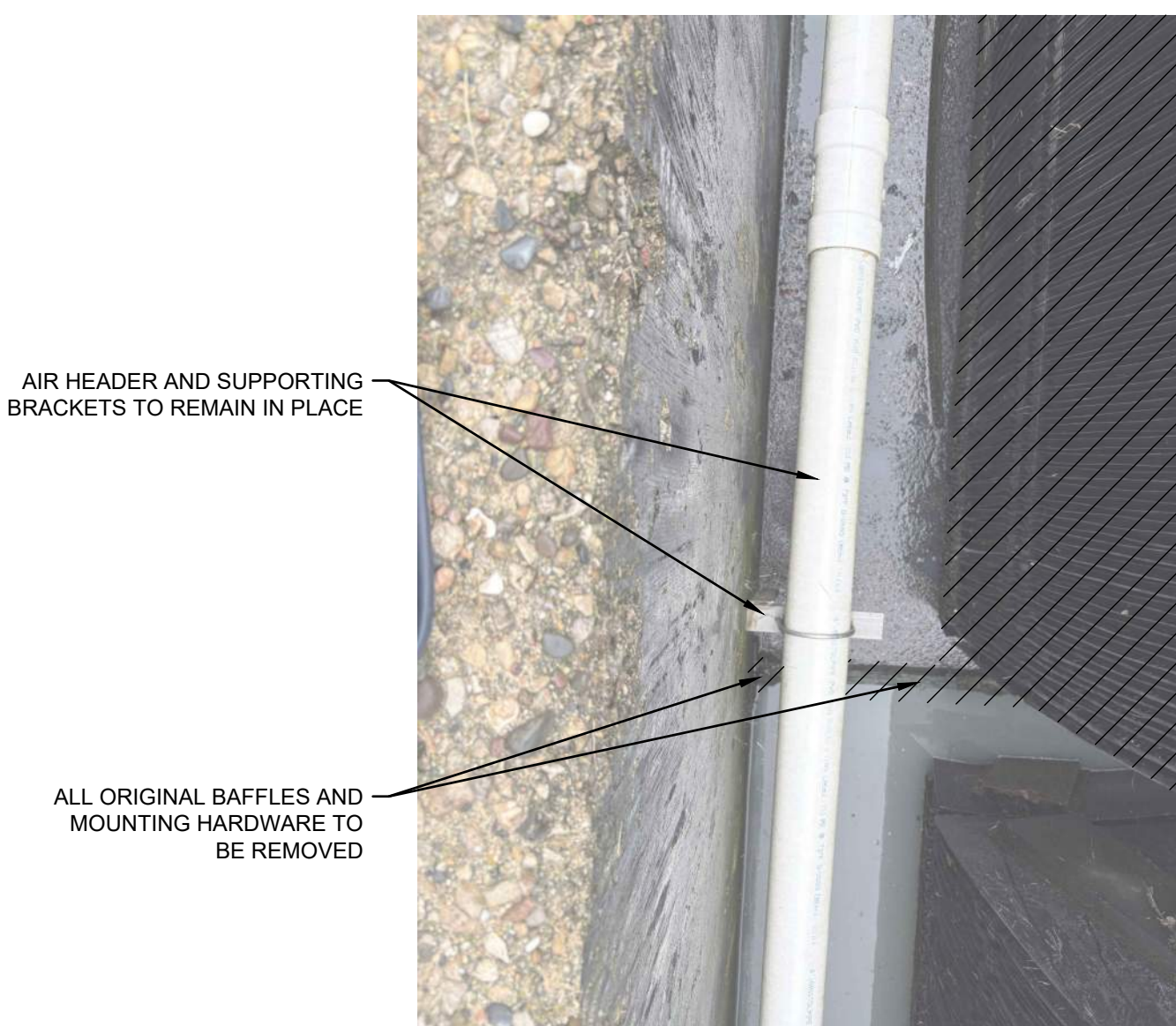
3 RBC DEMO DETAIL



4 RBC DEMO DETAIL



5 RBC DEMO DETAIL



6 RBC DEMO DETAIL

GENERAL SHEET NOTES

1. CONTRACTOR SHALL PROTECT ALL EXISTING SYSTEMS TO REMAIN DURING CONSTRUCTION. THIS INCLUDES ELECTRICAL, PROCESS EQUIPMENT, LADDERS, CONCRETE, AND ALL OTHER INFRASTRUCTURE ADJACENT TO THE WORK AREA.
2. CONTRACTOR SHALL COMPLETE TURF AND ACCESS ROAD RESTORATION AFTER WORK IS COMPLETE FOR ANY LAWN OR DRIVEWAY AREAS DAMAGED DURING CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE DRAINING THE RBC BASIN WITH THE OWNER. OWNER SHALL UTILIZE EXISTING DRAIN TO DRAIN LIQUID FROM TANK AS MUCH AS PRACTICAL. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE DRAINED TANK IS CLEANED APPROPRIATELY TO ALLOW FOR SAFE WORKING CONDITIONS. CONTRACTOR SHALL USE VAC TRUCK TO REMOVE ALL LIQUIDS AND SOLIDS FROM TANK PRIOR TO RBC EQUIPMENT INSTALLATION.



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

PRINT NAME: PETER DANIELS

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SIGNATURE: Ken Dail

DATE: OCTOBER 6, 2025 LIC. NO. 47543

CITY OF PRESTON, MINNESOTA

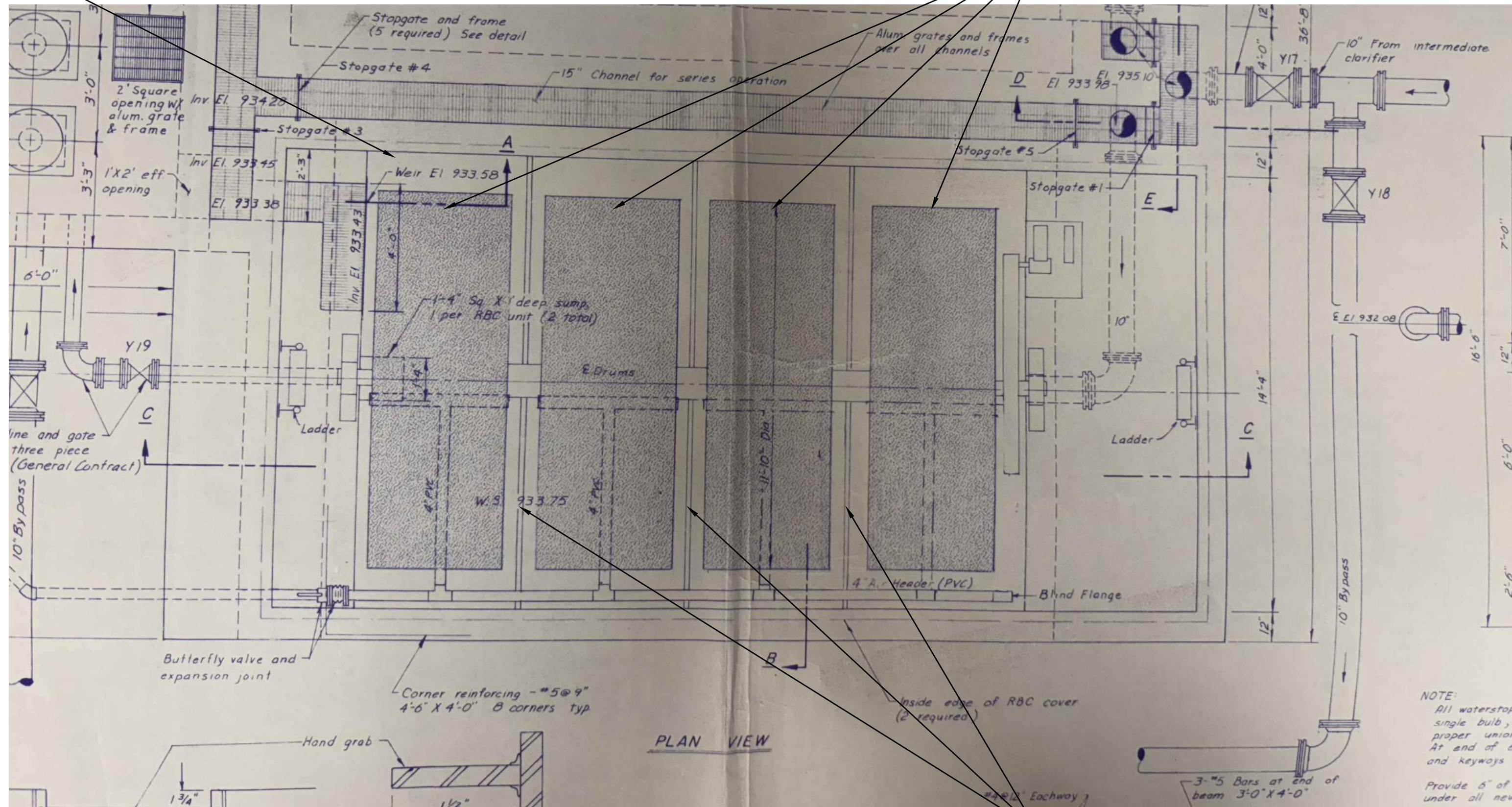

RBC REPLACEMENT PROJECT

DEMO PLAN

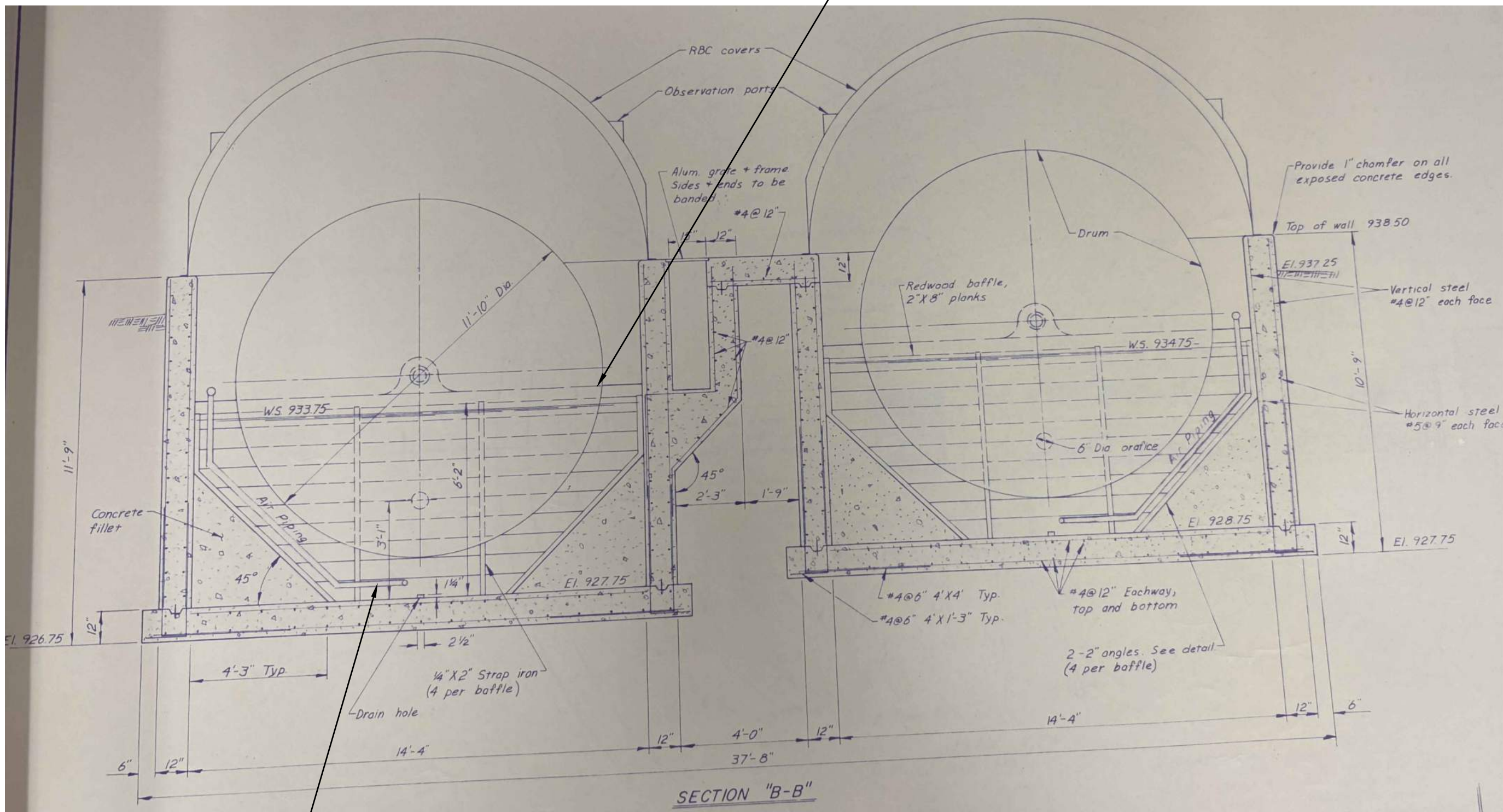
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PROJ. NO.		173420152

SHEET NUMBER

D101



1 FLOOR PLAN



3 SECTION _____

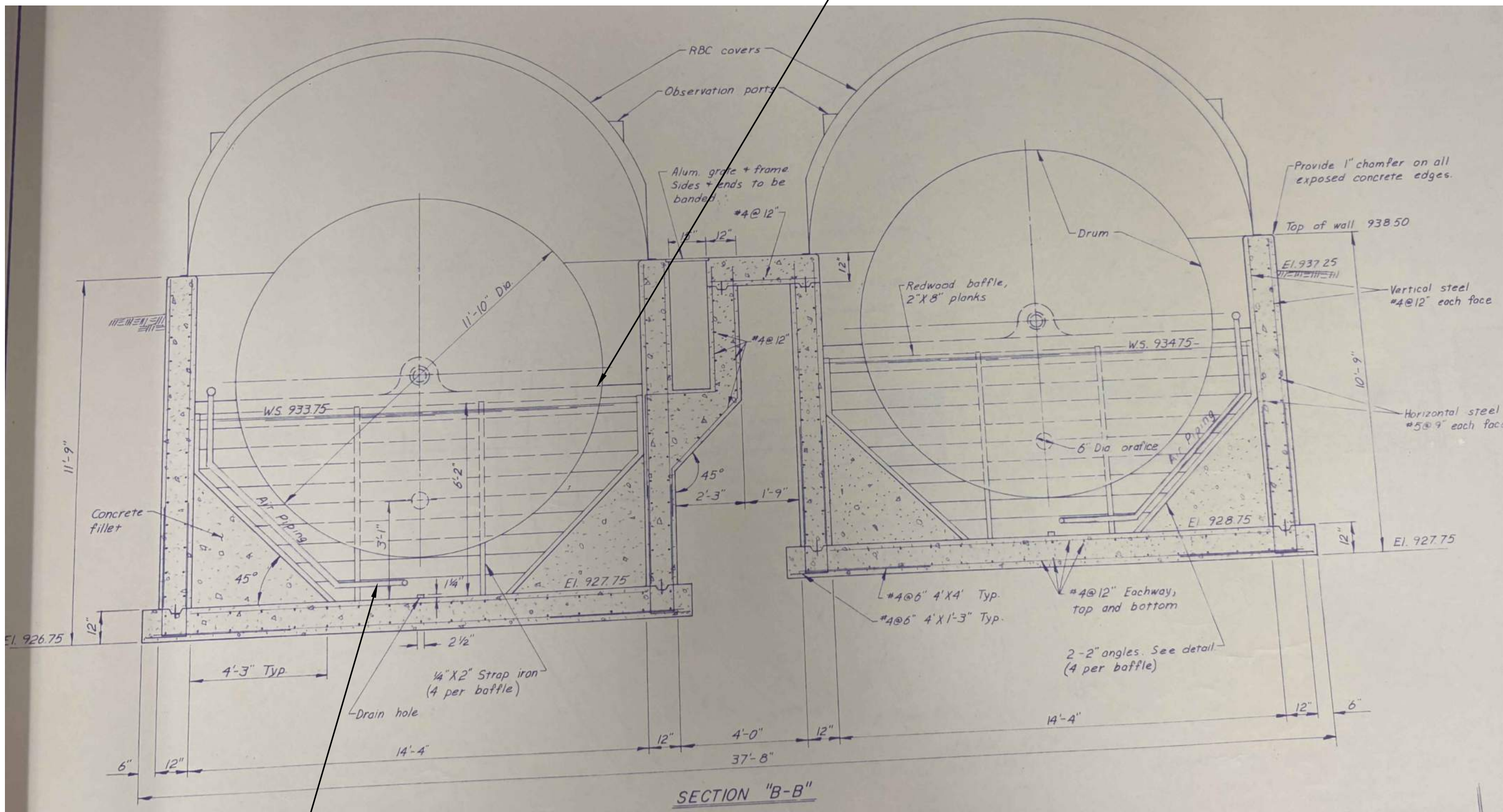
GENERAL SHEET NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING RBC EQUIPMENT PRIOR TO SHOP DRAWING PREPARATION. PHOTOS OF ORIGINAL 1981 DRAWINGS PROVIDED ON THIS SHEET ARE FOR REFERENCE ONLY AND HAVE NOT BEEN VERIFIED. HARDCOPY FILES OF 1981 DRAWINGS ARE AVAILABLE AT THE WWTF.
2. ALL NEW MOUNTING HARDWARE SHALL BE 304 STAINLESS STEEL.
3. CONTRACTOR SHALL PROVIDE TEMPORARY PUMPING/PIPING AS REQUIRED TO ACCOMMODATE RBC EQUIPMENT REPLACEMENT.
4. REPLACE ALL RBC-2 COMPONENTS INCLUDING:
 - A. MEDIA DISCS
 - B. MAIN SHAFT
 - C. DRIVE AND FREE END BEARINGS
 - D. DRIVE ASSEMBLY
 - E. DIFFUSED AIR PIPING AND DIFFUSERS BELOW MAIN AIR HEADER (INCLUDING MOUNTING/SUPPORT BRACKETS)
 - F. REDWOOD BAFFLES
 - G. PROVIDE CONCRETE MODIFICATIONS TO ACCOMMODATE INSTALLATION/MOUNTING OF NEW EQUIPMENT AS REQUIRED
5. ALL OTHER COMPONENTS REQUIRED TO PROVIDE A FULLY FUNCTIONAL RBC-1 SYSTEM.

REPLACE BAFFLES AND MOUNTING HARDWARE. ALL NEW HARDWARE SHALL BE STAINLESS STEEL. PROVIDE BAFFLES WITH ORIFICE AND STRAPPING AS REQUIRED.

Technical drawing of a circular structure, likely a tank or drum, showing a cross-section and elevation view. The drawing includes the following details:

- Drum**: The main circular body of the structure.
- Redwood baffle, 2"x8" planks**: Baffles are shown as horizontal planks across the drum.
- 6" Dia orifice**: A circular opening in the baffle.
- W.S. 93475**: A vertical line indicating a specific elevation or wall section.
- Elevations**:
 - Top of wall 938.50**: The highest elevation point shown.
 - E1 937.25**: Elevation of the top of the baffle structure.
 - E1 928.75**: Elevation of the bottom of the baffle structure.
 - E1 927.75**: Elevation of the base of the structure.
- Vertical steel #4@12" each face**: Reinforcement bars for the vertical wall.
- Horizontal steel #5@9" each face**: Reinforcement bars for the horizontal baffle.
- 2"-2" angles. See detail (4 per baffle)**: Angles used for mounting the baffles.
- 4@6" 4"x4" Typ.**: Reinforcement bars for the base.
- 4@6" 4"x1'-3" Typ.**: Reinforcement bars for the base.
- 14'-4"**: The overall diameter of the drum.
- 12"** and **6"**: Horizontal dimensions at the base.
- 10'-9"**: Vertical dimension from the base to the top of the wall.
- Provide 1" chamfer on all exposed concrete edges.**: A note indicating the required chamfer on the concrete.



2 SECTION _____

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT
 WAS PREPARED BY OR UNDER MY DIRECT SUPERVISION
 AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER
 UNDER THE LAWS OF THE STATE OF MINNESOTA

PRINT NAME: PETER DANIELS

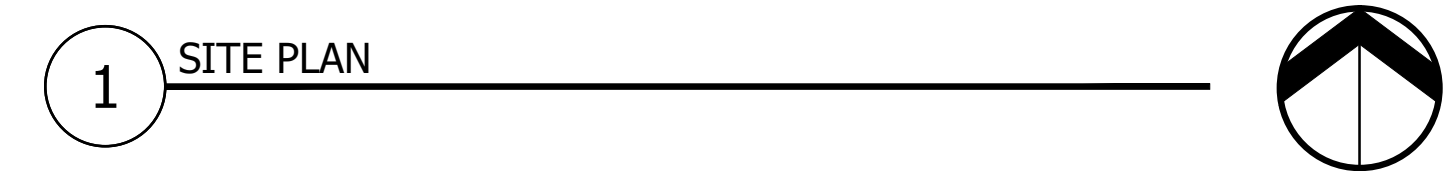
SIGNATURE: *PmDril*

DATE: OCTOBER 6, 2025 LIC. NO. 47543

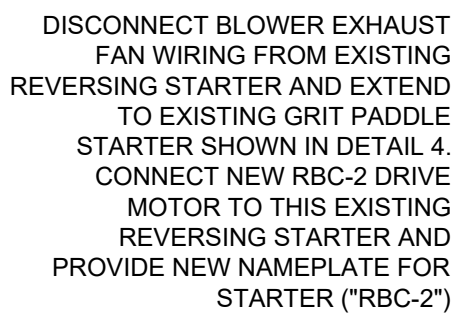
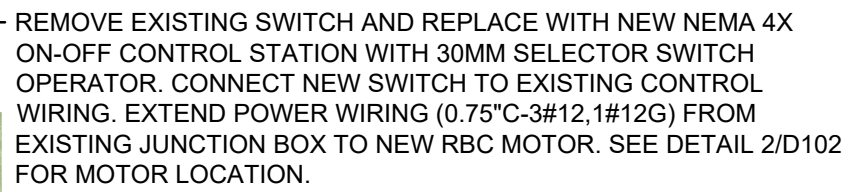
CITY OF PRESTON, MINNESOTA
RBC REPLACEMENT PROJECT
RBC IMPROVEMENTS - PLAN AND SECTIONS

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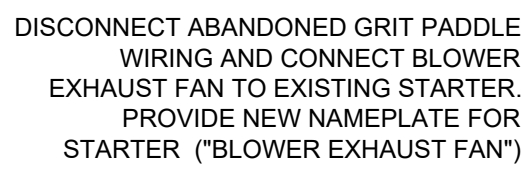
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Drawing name: U:\173420152\06_design\CAD\dwg\sheets\173420152_E101.dwg
Krefs: 173420152_BDR



2 SITE PLAN



3 EXISTING EXHAUST FAN STARTER



4 EXISTING GRIT PADDLE STARTER

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

PRINT NAME: MICHAEL I. FITZPATRICK

SIGNATURE: Michael I. FitzPatrick

DATE: OCTOBER 6, 2025 LIC. NO.: 53078

CITY OF PRESTON, MINNESOTA
RBC REPLACEMENT PROJECT
ELECTRICAL PLAN

NO	REVISION	DATE
		ISSUED FOR BID 8/29/25
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SHEET NUMBER
E101