CONTRACT No. 1

PHASE 23 WTP AND SYSTEM IMPROVEMENTS

FOR THE

SRF PROJECT NO. - WX21001032

KIA LOAN NO. - F23-0065

Columbia-Adair Utilities District
Adair County, Kentucky

MAY 2024

P.O. Box 1034
VERSAILLES, KENTUCKY 40383
KENTUCKY ENGINEERING GROUP, PLLC

COMMONWEALTH OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
5/31/24

PROJECT NO. 23011

BID DOCUMENTS

P:\PROJECTS\Columbia-Adair Utility District\23011 - Phase 23 WTP and System Imp\DWG\WTP\23011 G-0-00.dwg KEG 8/01/24

ABBREVIATIONS

A.B.	ANCHOR BOLT
ABAND	ABANDONED
ADD'L.	ADDITIONAL
ALT.	ALTERNATE/ALTERNATIVE
ALUM	ALUMINUM
APPROX	APPROXIMATE
@	AT
AUX	AUXILIARY
B./BOTT./BOT.	BOTTOM
B'FLY	BUTTERFLY
BLDG.	BUILDING
BM.	BEAM
B.O.	BOTTOM OF
B.O.S.	BOTTOM OF STEEL
BRDG.	BRIDGING
C/C	CENTER TO CENTER
C.I.P.	CAST IN PLACE
C.J.	CONTROL JOINT
CL	CENTERLINE
CLR., CL.	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COL.	COLUMN
CONC.	CONCRETE
CONSTR.	CONSTRUCTION
CONN.	CONNECTION
CONT.	CONTINUOUS
PVC	POLYVINYL CHLORIDE PIPE
CTR.	CENTER
CW	CITY WATER/PLANT WATER
D	DRAIN
DEMO	DEMOLISH
DEMO'D	DEMOLISHED
DET.	DETAIL
DIA. OR	DIAMETER
DIM.	DIMENSION
DIP	DUCTILE IRON PIPE
DN.	DOWN
DO.	DITTO
DP.	DEEP
DWG.	DRAWING
DWL.	DOWEL
EA.	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
ELEC.	ELECTRIC/ELECTRICAL
EL, ELEV.	ELEVATION
EMB., EMBED.	EMBEDMENT
ENG.	ENGINEER
EQ.	EQUAL/EQUIVALENT
E.W.	EACH WAY
EX, EXIST, EXTG	EXISTING
EXP.	EXPANSION
FD	FLOOR DRAIN
FE	FLOW ELEMENT
FF	FINISHED FLOOR OR FAR FACE
FG	FIBER GLASS
FIT	FLOW INSTRUMENT AND TRANSMITTER
FL, FLR	FLOOR
FLG	FLANGE
FM	FLOW METER
FTW	FILTER TO WASTE
FV	FLAP VALVE
GAL	GALLON
GALV	GALVANIZE(D)
GAS	NATURAL GAS
G.V.	GATE VALVE
G.V. & BOX	GATE VALVE AND BOX
H, HORIZ	HORIZONTAL
H.B.	HOSE BIB
HDG	HEAVY DUTY GRATING
H-O-A	HAND-OFF-AUTOMATIC
HP	HIGH POINT
HPS	HIGH PRESSURE SWITCH
I.D.	INSIDE DIAMETER
JNT.	JOINT
L.L.V.	LONG LEG VERTICAL
L.L.H.	LONG LEG HORIZONTAL
LONGIT.	LONGITUDINAL
L.P.	LOW POINT
LPS	LOW PRESSURE SWITCH
LYR.	LAYER/LAYERS
MAT'L.	MATERIAL
MAX.	MAXIMUM
MACH.	MACHINE/MACHINERY
MECH.	MECHANICAL
MFGR.	MANUFACTURER/MANUFACTURING
M.H.	MANHOLE
MID.	MIDDLE/MID POINT
MIN.	MINIMUM
MTL.	METAL
MJ	MECHANICAL JOINT
NEC.	NECESSARY
N.F.	NEAR FACE
N.I.C.	NOT IN CONTRACT
NPT	NATIONAL PIPE THREAD
NPW	NON POTABLE WATER
N.T.S.	NOT TO SCALE
O.D.	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OPNG.	OPENING
OR EQ.	OR EQUIVALENT
O.C. OR O/C	ON CENTERS
PD	PRESSURE DRAIN
PE	PRESSURE TRANSDUCER ELEMENT
PERIM.	PERIMETER
pHE	pH TRANSDUCER ELEMENT
PIT	PRESSURE INSTRUMENT ELEMENT
P	PROPERTY LINE
PRO.	PROPOSED
PSI	POUND PER SQUARE INCH
PT.	POINT
PV	PINCH VALVE
PVC	POLYVINYL CHLORIDE
R.C.	REINFORCED CONCRETE
REINF.	REINFORCED/REINFORCEMENT
REQ'D.	REQUIRED
REQ'T.	REQUIREMENT
RPM	REVOLUTIONS PER MINUTE
SAN	SANITARY SEWER

ABBREVIATIONS CONT.

S.C.J.	SAWN CONTROL JOINT
SD	STANDARD DETAIL
SEC.	SECTION
SG	SLIDE OR SLUICE GATE
SL	SLUDGE LINE
SP.	SPACE/SPACES
SPEC.	SPECIFY/SPECIFICATIONS
SQ. OR	SQUARE
S.B.	STAINLESS STEEL
STAG.	STAGGER/STAGGERED
STIFF.	STIFFENER
STD.	STANDARD
STS	STORM SEWER
SWD	SIDE WATER DEPTH
THRU	THROUGH
TYP.	TYPICAL/TYPICALLY
UG	UNDERGROUND ELECTRIC POWER
U.O.N.	UNLESS OTHERWISE NOTED
U.V.	ULTRAVIOLET
V, VERT	VERTICAL
VE	VELOCITY ELEMENT
VIT	VELOCITY INSTRUMENT AND TRANSMITTER
W/	WITH
W/O	WITHOUT
W.C.	WATER COLUMN
W.S.E.	WATER SURFACE ELEVATION

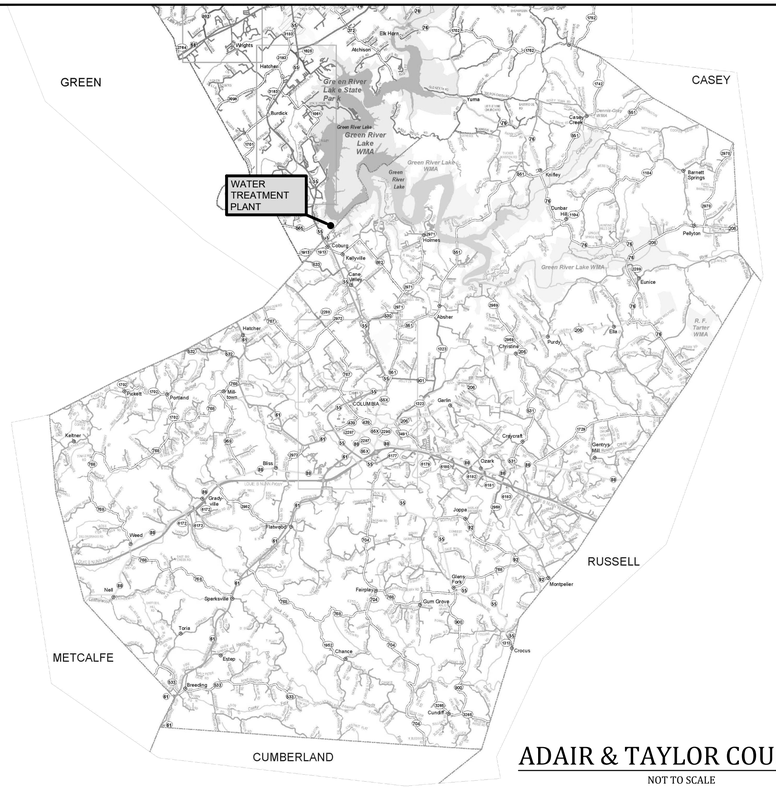
LEGEND

- WATER LINE
- GAS LINE
- ELECTRIC LINE
- CATV LINE
- SANITARY LINE
- STORM LINE
- FENCE LINE
- PROPERTY LINE

GENERAL NOTES

1. THE CONTRACTOR SHALL FIELD LOCATE EXISTING STRUCTURES AND PIPING AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES ENCOUNTERED BEFORE BEGINNING CONSTRUCTION OPERATIONS. SITE (YARD) PIPING LAYOUT OR DIMENSIONS, WHERE GIVEN, ARE TO SHOW THE ENGINEER'S INTENT AND TO AID THE CONTRACTOR IN PIPE INSTALLATION.
2. GENERALLY, THE LIMITS OF CONSTRUCTION SHALL BE AS NOTED. A WRITTEN REQUEST FOR ANY ADDITIONAL EASEMENTS OR ACCESS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE OWNER PRIOR TO ANY CONSTRUCTION OPERATIONS.
3. DIMENSIONS OF EXISTING STRUCTURES AND/OR SITE RESTRICTIONS ARE APPROXIMATE. ALL NECESSARY DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES & TOPOGRAPHY SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.
4. GENERALLY, ALL EXISTING EQUIPMENT, PIPING VALVING, ETC., SHOWN TO BE REMOVED, SHALL, AFTER REMOVAL, BE DISPOSED OF BY THE CONTRACTOR UNLESS SHOWN OTHERWISE ON THESE DRAWINGS. CONTRACTOR SHALL CONSULT PLANT REPRESENTATIVE BEFORE DISPOSAL OF ANY ITEMS.
5. ALL WALL PENETRATIONS FOR PIPING SHALL CONFORM TO THE STANDARD DETAILS AS REQUIRED BY THE CONTRACT DRAWINGS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
6. ALL BURIED PIPES SHALL HAVE A MINIMUM OF 3'-6" OF COVER AS MEASURED VERTICALLY FROM FINISHED GRADE TO THE TOP OF PIPE, UNLESS OTHERWISE NOTED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO WORK ALL APPLICABLE DRAWINGS AND THE APPROPRIATE SPECIFICATIONS AS A UNIT. ANY OMISSIONS, DELETIONS, OR CONFLICTS ARISING AS A RESULT OF FAILURE TO INCORPORATE ALL DRAWINGS AND SPECIFICATIONS THAT APPLY SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDED COST TO THE OWNER.
8. PIPE AND CONDUIT SUPPORTS ARE TYPICALLY NOT SHOWN. HOWEVER ALL PIPING, INSIDE AND OUTSIDE, SHALL BE ADEQUATELY SUPPORTED AND BLOCKED SO AS NOT TO PRODUCE UNDUE STRAIN OR VIBRATION ON PIPE JOINTS OR EQUIPMENT, SEE SPECIFICATIONS.
9. ALL PIPING ABANDONED IN PLACE SHALL BE PROPERLY CAPPED OR PLUGGED AT EACH END AND RENDERED LEAKPROOF.
10. EXACT LOCATIONS OF DUCTS, CONDUITS, LIGHT FIXTURES AND PIPES SHALL BE FIELD LOCATED AND COORDINATED WITH THE WORK OF SUBCONTRACTORS FOR THE VARIOUS TRADES INVOLVED.
11. ELECTRICAL AND INSTRUMENTATION SUBCONTRACTORS SHALL NOTIFY THE CONTRACTOR AND COORDINATE THE SIZES AND LOCATIONS OF ALL OPENINGS AND RECESSES IN STRUCTURES REQUIRED FOR THEIR WORK.
12. ALL EXISTING PAVING DISTURBED DURING CONSTRUCTION SHALL BE RENOVATED IN ACCORDANCE WITH STANDARD DETAILS.
13. CONTRACTOR SHALL FIELD LOCATE AND EXPOSE UTILITIES BEFORE INSTALLING PIPE OR CONDUITS.
14. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING, SHEET AND SHORING, REQUIRED FOR EXCAVATION AND SHALL SUBMIT PLANS STAMPED BY A LICENSED KY PROFESSIONAL ENGINEER PRIOR TO ANY EXCAVATION.
15. ALL NON-POTABLE WATER OUTLETS WHERE READILY ACCESSIBLE TO PLANT EMPLOYEES USE SHALL BEAR THE FOLLOWING SIGN: "NON-POTABLE WATER - DO NOT DRINK"
16. THE CONTRACTOR SHALL SCHEDULE ALL WORK TO ALLOW PLANT OPERATION TO BE MAINTAINED THROUGHOUT CONSTRUCTION CONTRACT TIME PERIOD.
17. EXTREME CARE SHALL BE TAKEN TO PROTECT UNDERGROUND PIPING AND UNDER SLAB PIPING FROM SURFACE LOADS EXERTED BY CONSTRUCTION EQUIPMENT (TRUCKS, LOADERS, CRANES, ETC.).
18. THE RENOVATION WILL BE ACCOMPLISHED IN PHASES, THEREFORE THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT COMPLETED WORK FROM ONGOING RENOVATION WORK.
19. THE CONTRACTOR SHALL CONFIRM THE CONTENTS OF ANY AND ALL PIPING INVOLVED IN DEMOLITION REQUIREMENTS AND PROVIDE AND WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE PROTECTION.

LOCATION MAP



ADAIR & TAYLOR COUNTIES

NOT TO SCALE

SYMBOLS

- WATER SURFACE ELEVATION
- DIRECTION OF FLOW
- PP — POWER POLE
- UP — UTILITY POLE
- LP — LIGHT POLE
- FH — FIRE HYDRANT
- YH — YARD HYDRANT
- XXX — EXISTING CONTOUR ELEVATION

UTILITIES

ELECTRIC:
KENTUCKY UTILITIES
800-981-0600

GAS:
ATMOS ENERGY
866-322-8667

WATER AND SEWER:
CITY OF LANCASTER
859-792-2170

BUD - BEFORE YOU DIG
1-800-752-6007

BUD - Before You Dig
1-800-752-6007
or DIAL 811

NOTE:

IN ACCORDANCE WITH KENTUCKY STATE LAW, ANY ACTIVITY THAT RESULTS IN MOVEMENT, PLACEMENT, BORING, PROBING OR DIGGING IN OR ON THE GROUND SHALL CONTACT THE ONE CALL CENTER FOR UNDERGROUND UTILITY LOCATIONS.

INDEX OF DRAWINGS

P:\PROJECTS\Columbia-Adair Utility District\23011 - Phase 23 WTP and System Imp\DWG\WTP\23011 G-0-01.dwg KEG 8/01/24

NO.	DATE	REVISIONS	BY

DATE:	MAY 2024
PROJECT MGR:	RCC
DRAWN BY:	JAB
CHECKED BY:	RCC
SCALE:	AS NOTED

P.O. Box 1034
VERSAILLES, KENTUCKY 40383
KENTUCKY ENGINEERING GROUP, PLLC

CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

ABBREVIATIONS, GENERAL NOTES, LEGEND, LOCATION MAP, AND INDEX

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
4/19/24

PROJECT NO.
23011

SHEET NO.
G-0-01

BID DOCUMENTS

PROCESS / BUILDING NUMBER INDEX

1. SEDIMENTATION BASINS
2. PLANT WORKS BUILDING
3. BELT PRESS BUIDING

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CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

SITE IDENTIFICATION PLAN

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
8/1/24

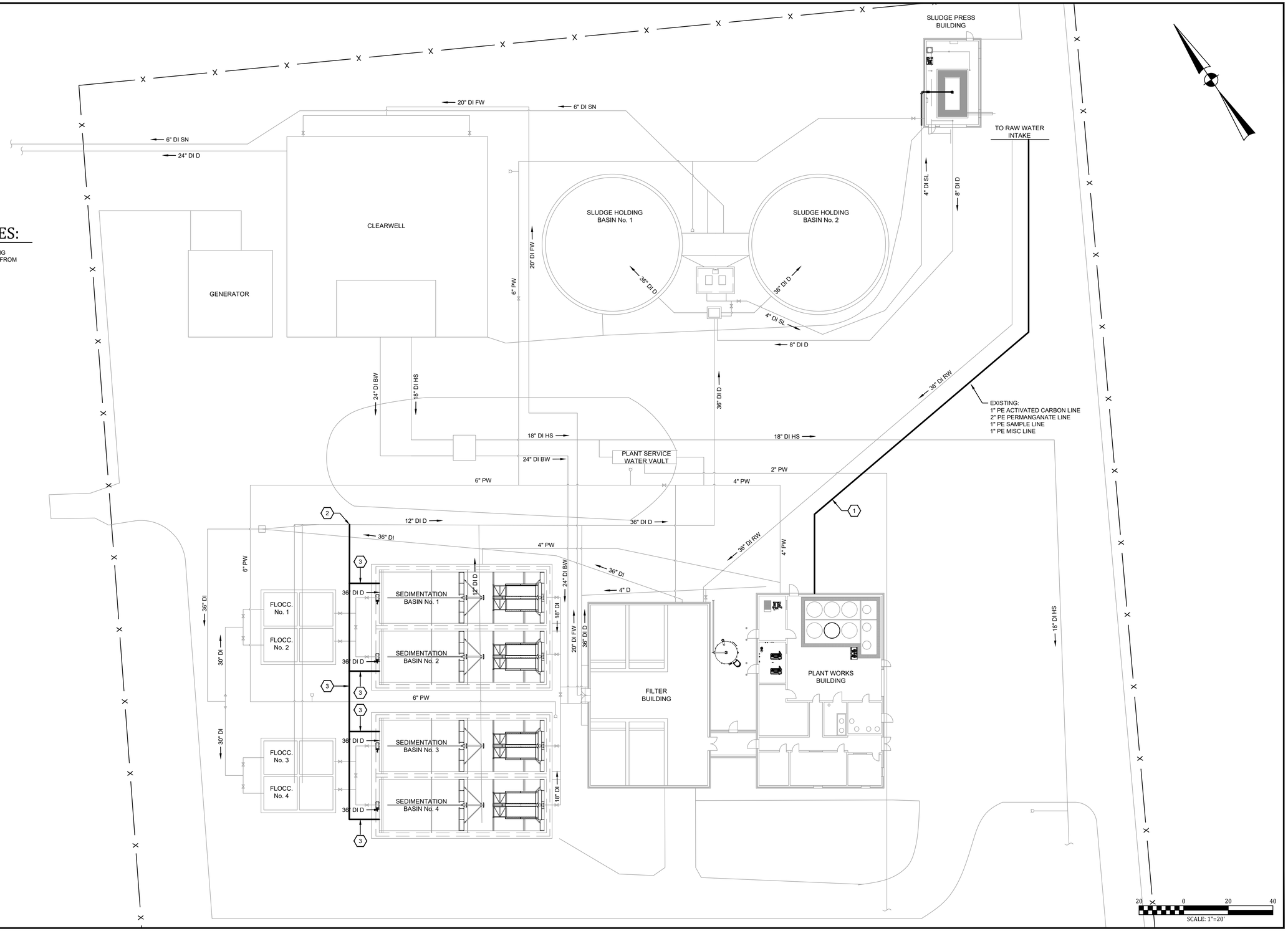
PROJECT NO.
23011

SHEET NO.
C-0-01

BID DOCUMENTS

REFERENCE NOTES:

1. CONTRACTOR SHALL PRESSURE TEST EXISTING "MISC" LINE & THEN CONNECT TO DISCHARGE FROM NEW CARBON FEED SYSTEM.
2. CONNECT 4" DRAIN TO EX. 12" DRAIN
3. 4" DI PIPE (DRAIN)



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CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
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COLUMBIA-ADAIR UTILITIES DISTRICT

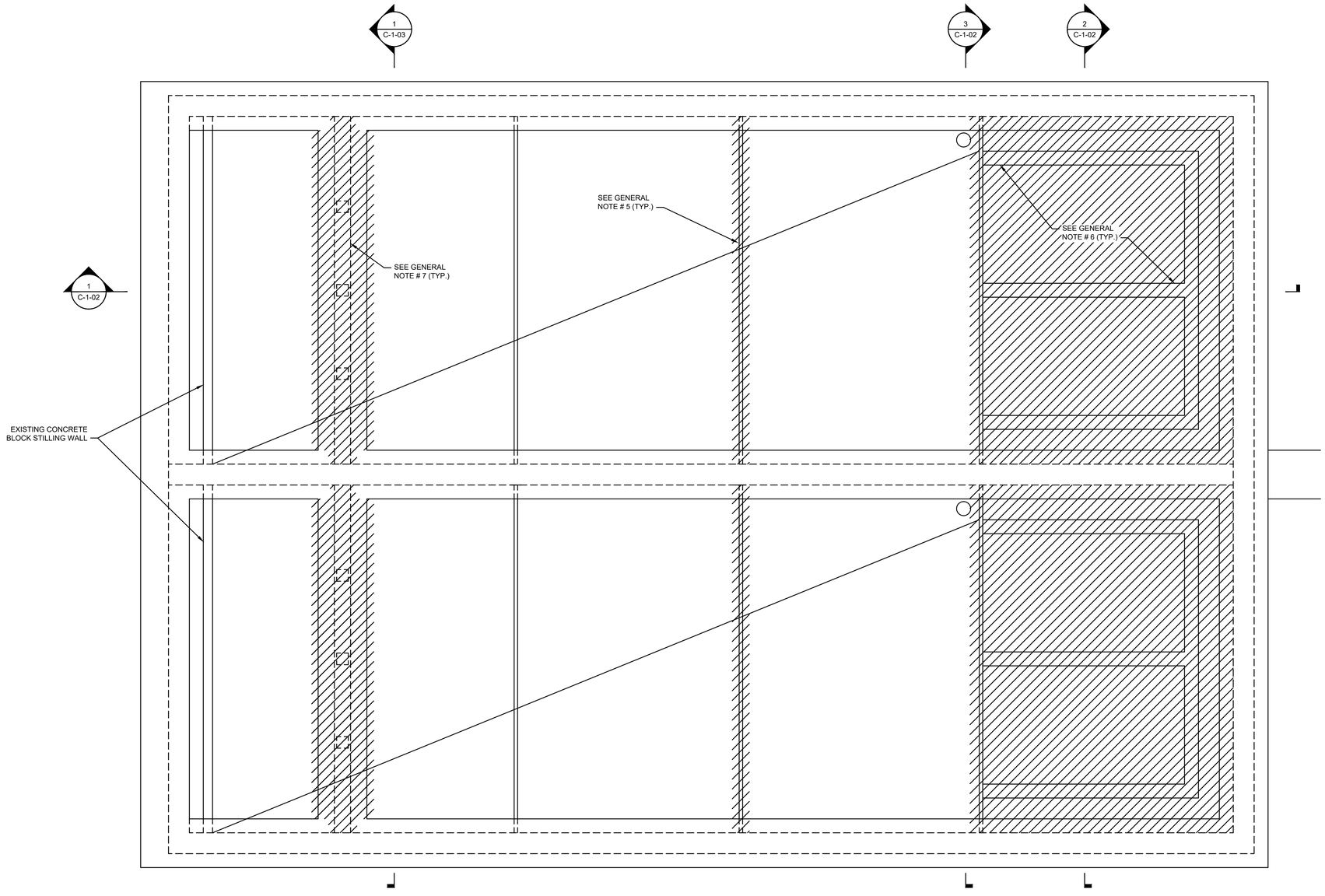
SITE PIPING PLAN

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
8/1/24

PROJECT NO. 23011

SHEET NO. C-0-02

BID DOCUMENTS



SEDIMENTATION BASIN PLAN (TYP. OF 2)

SCALE: 1/4"=1'-0" 0 2' 4' 8'

LEGEND:

DENOTES AREA TO BE DEMOLISHED

GENERAL NOTES:

1. ALL REMOVAL AND DEMOLITION SHALL BE COORDINATED WITH THE CONSTRUCTION SEQUENCING SCHEDULE.
2. NOTES, DIMENSIONS, ETC. TAKEN FROM EXISTING AS-BUILT PLANS. CONTRACTOR SHALL FIELD VERIFY.
3. CONTRACTOR SHALL COORDINATE DEMOLITION WITH WTP OPERATORS. SERVICE SHALL NOT BE INTERRUPTED. IF REQUIRED, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROVIDING ALL NECESSARY MATERIAL AND EQUIPMENT FOR BYPASSING DURING CONSTRUCTION.
4. DRAWING SHOWS TWO (2) - 1.5 MGD SEDIMENTATION BASIN TRAINS. THERE IS A TOTAL OF FOUR (4) - 1.5 SEDIMENTATION BASIN TRAINS.
5. RELOCATE EXISTING BAFFLE (TYP.)
6. REMOVE EXISTING TUBE SETTLERS/WEIRS/TROUGHS (TYP.)
7. REMOVE CONCRETE WALL, SIDEWALK, & HANDRAILS (TYP.)

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CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

SEDIMENTATION BASIN DEMOLITION PLAN

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
4/15/24

PROJECT NO. 23011

SHEET NO. C-1-01

BID DOCUMENTS

LEGEND:

DENOTES AREA TO BE DEMOLISHED

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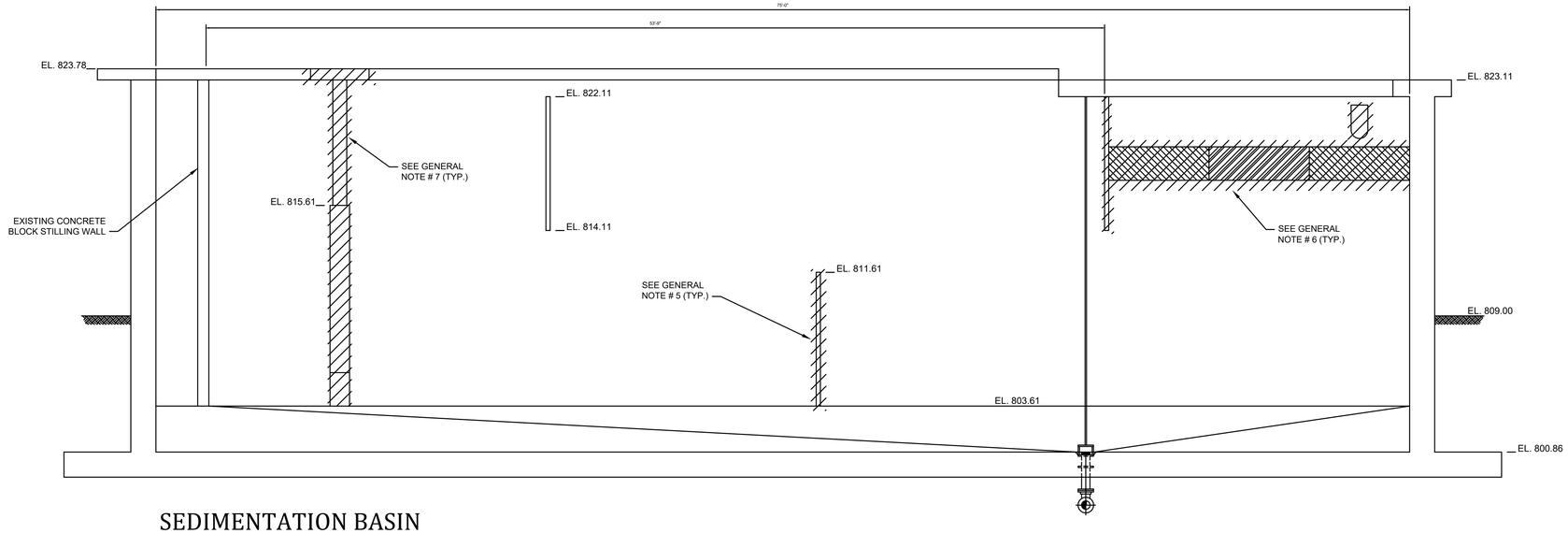
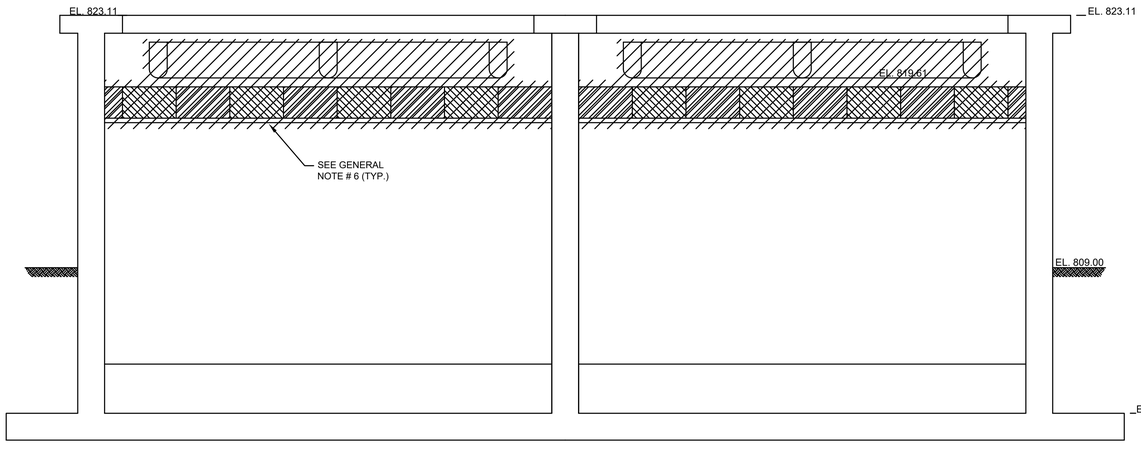


1 C-1-02

SEDIMENTATION BASIN SECTION

SCALE: 1/4"=1'-0"

0 2' 4' 8'



2 C-1-02

SEDIMENTATION BASIN SECTION

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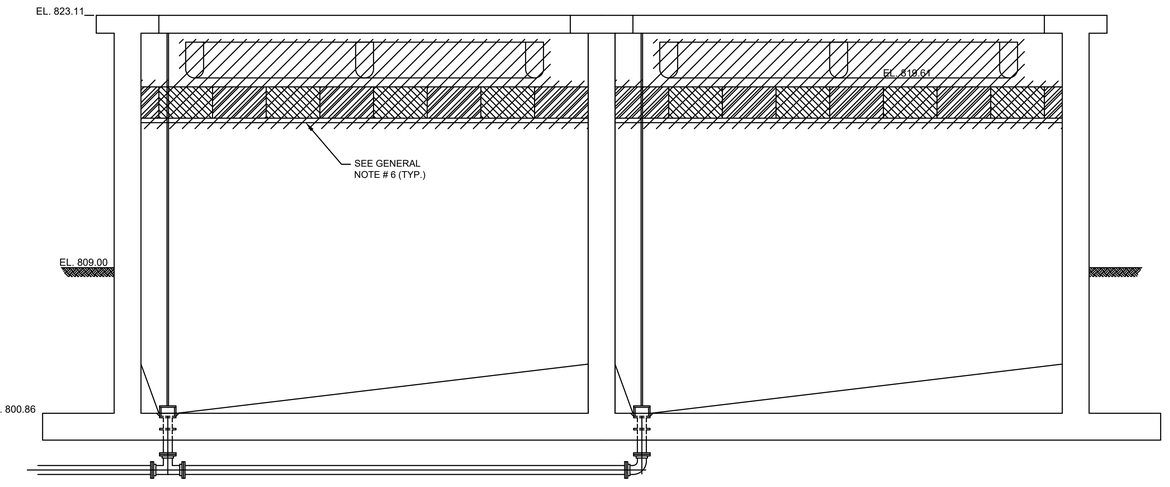

3 C-1-02

SEDIMENTATION BASIN SECTION

SCALE: 1/4"=1'-0"

0 2' 4' 8'

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CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

SEDIMENTATION BASIN DEMOLITION SECTIONS

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
4/15/24

PROJECT NO. 23011

SHEET NO. C-1-02

BID DOCUMENTS

LEGEND:

DENOTES AREA TO BE DEMOLISHED

GENERAL NOTES:

1. ALL REMOVAL AND DEMOLITION SHALL BE COORDINATED WITH THE CONSTRUCTION SEQUENCING SCHEDULE.
2. NOTES, DIMENSIONS, ETC. TAKEN FROM EXISTING AS-BUILT PLANS. CONTRACTOR SHALL FIELD VERIFY.
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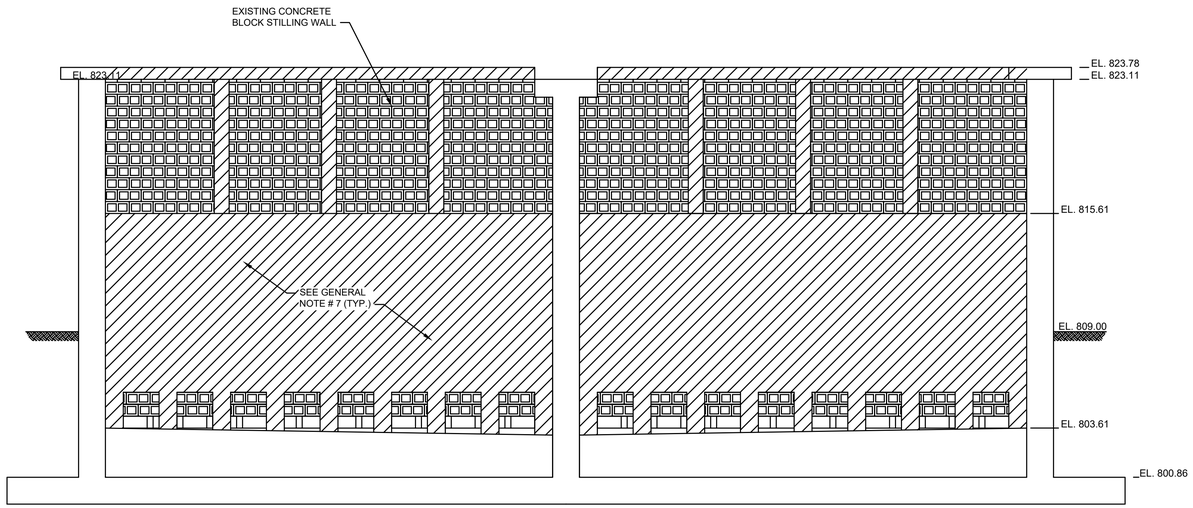
4. DRAWING SHOWS TWO (2) - 1.5 MGD SEDIMENTATION BASIN TRAINS. THERE IS A TOTAL OF FOUR (4) - 1.5 SEDIMENTATION BASIN TRAINS.
5. REMOVE EXISTING BAFFLES (TYP.)
6. REMOVE EXISTING TUBE SETTLERS/WEIRS/TROUGHS (TYP.)
7. REMOVE CONCRETE WALL, SIDEWALK, & HANDRAILS (TYP.)



2 C-1-03

SEDIMENTATION BASIN SECTION

SCALE: 1/4"=1'-0" 0 2' 4' 8'

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SEDIMENTATION BASIN DEMOLITION SECTION

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
8/01/24

PROJECT NO. 23011

SHEET NO. C-1-03

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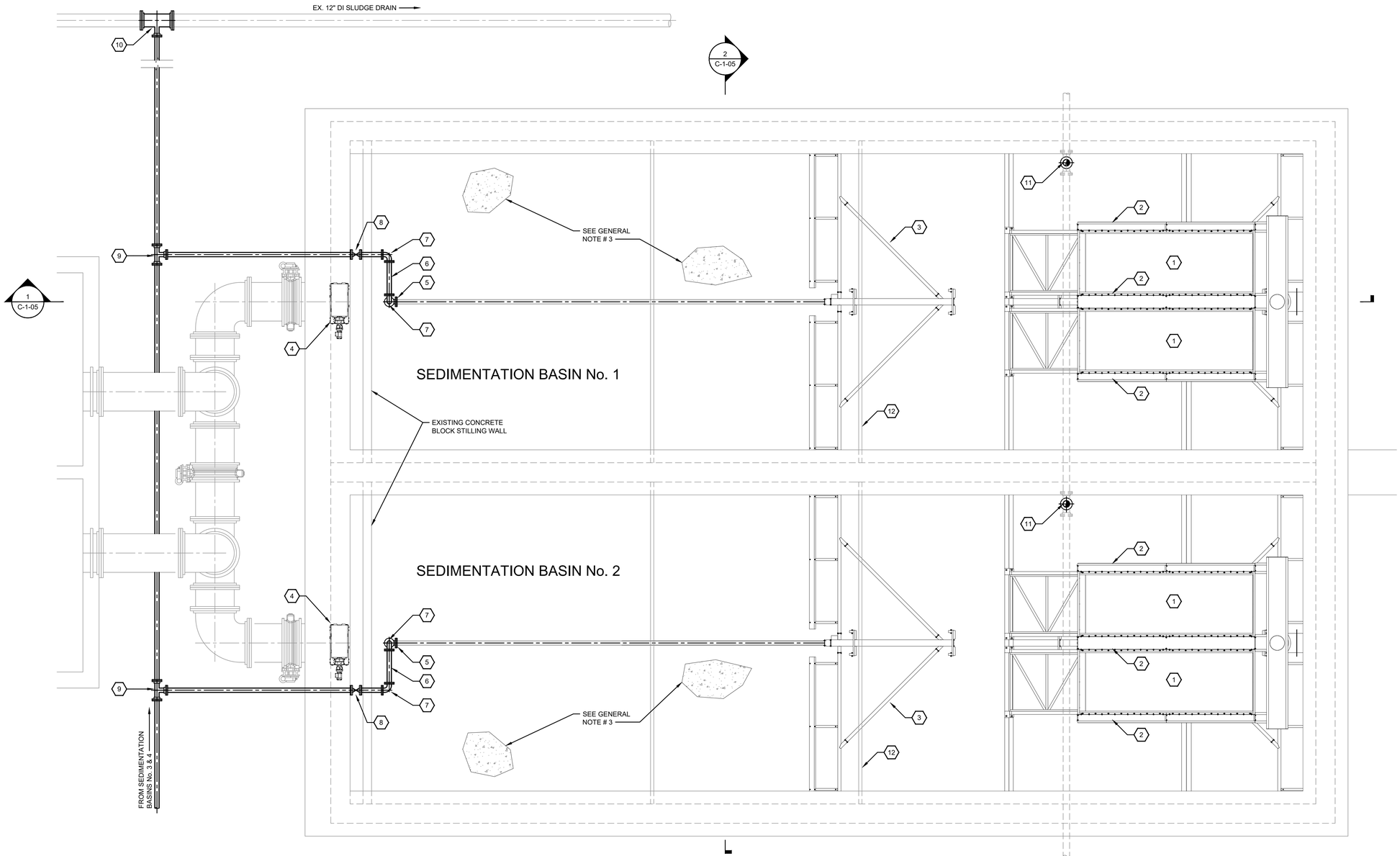

SEDIMENTATION BASIN PLAN (TYP. of 2)

SCALE: 1/4"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

1. ALL PIPING SHALL BE RESTRAINT JOINT.
2. ALL WORK ASSOCIATED WITH THE SLUDGE REMOVAL SYSTEM INCLUDING, PIPING, GROUT FILLING SEDIMENTATION BASINS, DEMO EXISTING CONCRETE WALLS/SIDEWALKS, SHALL BE CONSIDERED AS ADDITIVE ALTERNATE No. 1.
3. CONTRACTOR SHALL GROUT FILL TO LEVEL BASINS AS REQUIRED BY SLUDGE REMOVAL SYSTEM MANUFACTURER. (INCLUDED AS ADDITIVE ALTERNATE No. 1)

⬡ REFERENCE NOTES:

1. PLATE SETTLER
2. S.S. EFFLUENT TROUGH

INCLUDED IN ADDITIVE ALTERNATE No. 1

3. SLUDGE VACUUM ASSEMBLY
4. SLUDGE VACUUM DRIVE
5. CONNECT TO SLUDGE REMOVAL SYSTEM PIPING
6. 4" DI PIPE
7. 4" DI 90° ELBOW
8. 4" PLUG VALVE W/ ELECTRIC MOTOR OPERATOR. ACTUATOR SUPPORT FACE MOUNTED TO WALL (TYP.)
9. 4" DI MJ TEE
10. 12" X 4" DI MJ TEE
11. 6" MUD VALVE (RECESSED INTO GROUT)
12. RELOCATE EXISTING BAFFLE

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CONTRACT No. 1
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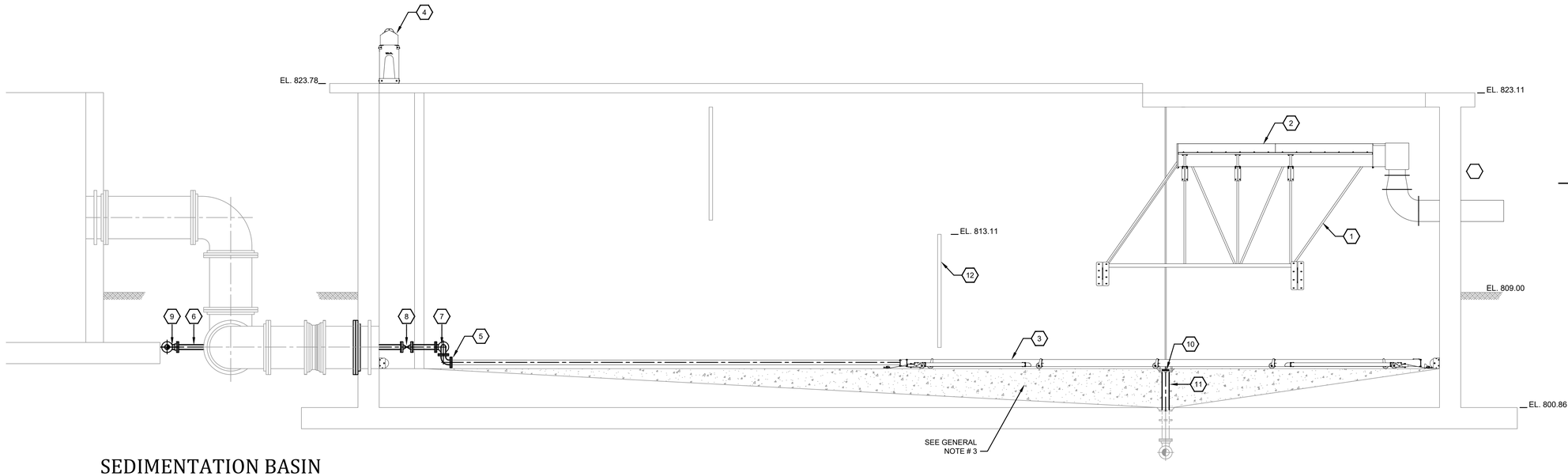
SEDIMENTATION BASIN MODIFICATION PLAN

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER

PROJECT NO. 23011

SHEET NO. C-1-04

BID DOCUMENTS

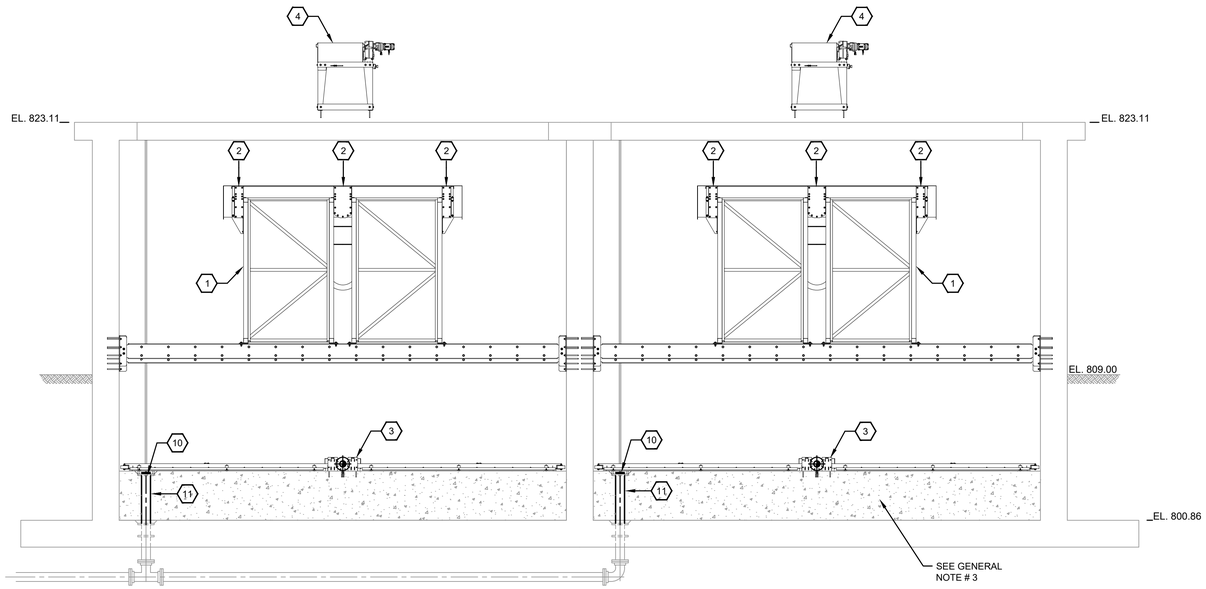


1 C-1-05

SEDIMENTATION BASIN SECTION

SCALE: 1/4"=1'-0"

0 2' 4' 8'



2 C-1-05

SEDIMENTATION BASIN SECTION

SCALE: 1/4"=1'-0"

0 2' 4' 8'

GENERAL NOTES:

1. ALL PIPING SHALL BE RESTRAINT JOINT.
2. ALL WORK ASSOCIATED WITH THE SLUDGE REMOVAL SYSTEM INCLUDING, PIPING, GROUT FILLING SEDIMENTATION BASINS, DEMO EXISTING CONCRETE WALLS/SIDEWALKS, SHALL BE CONSIDERED AS ADDITIVE ALTERNATE No. 1.
3. CONTRACTOR SHALL GROUT FILL TO LEVEL BASINS AS REQUIRED BY SLUDGE REMOVAL SYSTEM MANUFACTURER. (INCLUDED AS ADDITIVE ALTERNATE No. 1)

REFERENCE NOTES:

1. PLATE SETTLER
2. S.S. EFFLUENT TROUGH

INCLUDED IN ADDITIVE ALTERNATE No. 1

3. SLUDGE VACUUM ASSEMBLY
4. SLUDGE VACUUM DRIVE
5. CONNECT TO SLUDGE REMOVAL SYSTEM PIPING
6. 4" DI PIPE
7. 4" DI 90° ELBOW
8. 4" PLUG VALVE W/ ELECTRIC MOTOR OPERATOR. ACTUATOR SUPPORT FACE MOUNTED TO WALL (TYP.)
9. 4" DI MJ TEE
10. 6" MUD VALVE (RECESSED INTO GROUT)
11. 6" DI PIPE
12. RELOCATE EXISTING BAFFLE

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DATE:	MAY 2024
PROJECT MGR:	RCC
DRAWN BY:	JAB
CHECKED BY:	RCC
SCALE:	AS NOTED

P.O. Box 1034
VERSAILLES, KENTUCKY 40383
KENTUCKY ENGINEERING GROUP, PLLC

CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

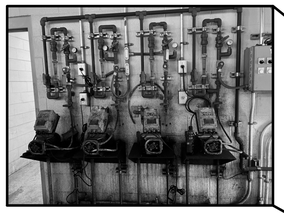
SEDIMENTATION BASIN MODIFICATION SECTIONS

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
8/1/24

PROJECT NO. 23011

SHEET NO. C-1-05

BID DOCUMENTS



SEE SHEET C-2-02
FOR PLAN

ALUM DAY TANK

CAUSTIC DAY TANK

MISC. DAY TANK

ALUM STORAGE TANK

CAUSTIC STORAGE TANK

ALUM STORAGE TANK

CAUSTIC STORAGE TANK

SEE GENERAL NOTE #7

ALUM STORAGE TANK

MISC. STORAGE TANK

CHEMICAL FEED AREA

POTASSIUM ROOM

OFFICE

FLUORIDE ROOM

LABORATORY

MOTOR CONTROL ROOM

BATHROOM / LOCKER ROOM / CLOSET

SEE GENERAL NOTE #4

SEE GENERAL NOTE #5

SEE GENERAL NOTE #6

ACTIVATED CARBON FEED ROOM

CHLORINE ROOM

PLANT WORKS BUILDING PLAN

SCALE: 1/4"=1'-0"

0 2' 4' 8'

LEGEND:

DENOTES AREA TO BE DEMOLISHED

GENERAL NOTES:

1. ALL REMOVAL AND DEMOLITION SHALL BE COORDINATED WITH THE CONSTRUCTION SEQUENCING SCHEDULE.
2. NOTES, DIMENSIONS, ETC. TAKEN FROM EXISTING AS-BUILT PLANS. CONTRACTOR SHALL FIELD VERIFY.
3. CONTRACTOR SHALL COORDINATE DEMOLITION WITH WTP OPERATORS. SERVICE SHALL NOT BE INTERRUPTED. IF REQUIRED, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROVIDING ALL NECESSARY MATERIAL AND EQUIPMENT FOR BYPASSING DURING CONSTRUCTION.
4. REMOVE EXISTING CARBON FEEDER ALONG WITH MIXING TANK, PIPING VALVES, PUMPS, ELECTRIC CONDUIT, ETC.
5. REMOVE EXISTING CHLORINE GAS DISINFECTION SYSTEM INCLUDING CYLINDERS, CHLORINATORS, PIPING, VALVES, ELECTRIC CONDUIT, ETC.
6. CONTRACTOR SHALL SET UP TEMPORARY SODIUM HYPO FEED SYSTEM INCLUDING PUMPS, PIPING, TOTE, ETC. FOR DISINFECTION UNTIL NEW DISINFECTION SYSTEM IS IN OPERATION.
7. REMOVE ONE CAUSTIC STORAGE TANK. COORDINATE LOCATION AT THE WTP OWNER WANTS TANKS MOVED TO.

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NO.	DATE	REVISIONS	BY

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PROJECT MGR:	RCC
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SCALE:	AS NOTED

P.O. Box 1034
VERSAILLES, KENTUCKY 40383
KENTUCKY ENGINEERING GROUP, PLLC

CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

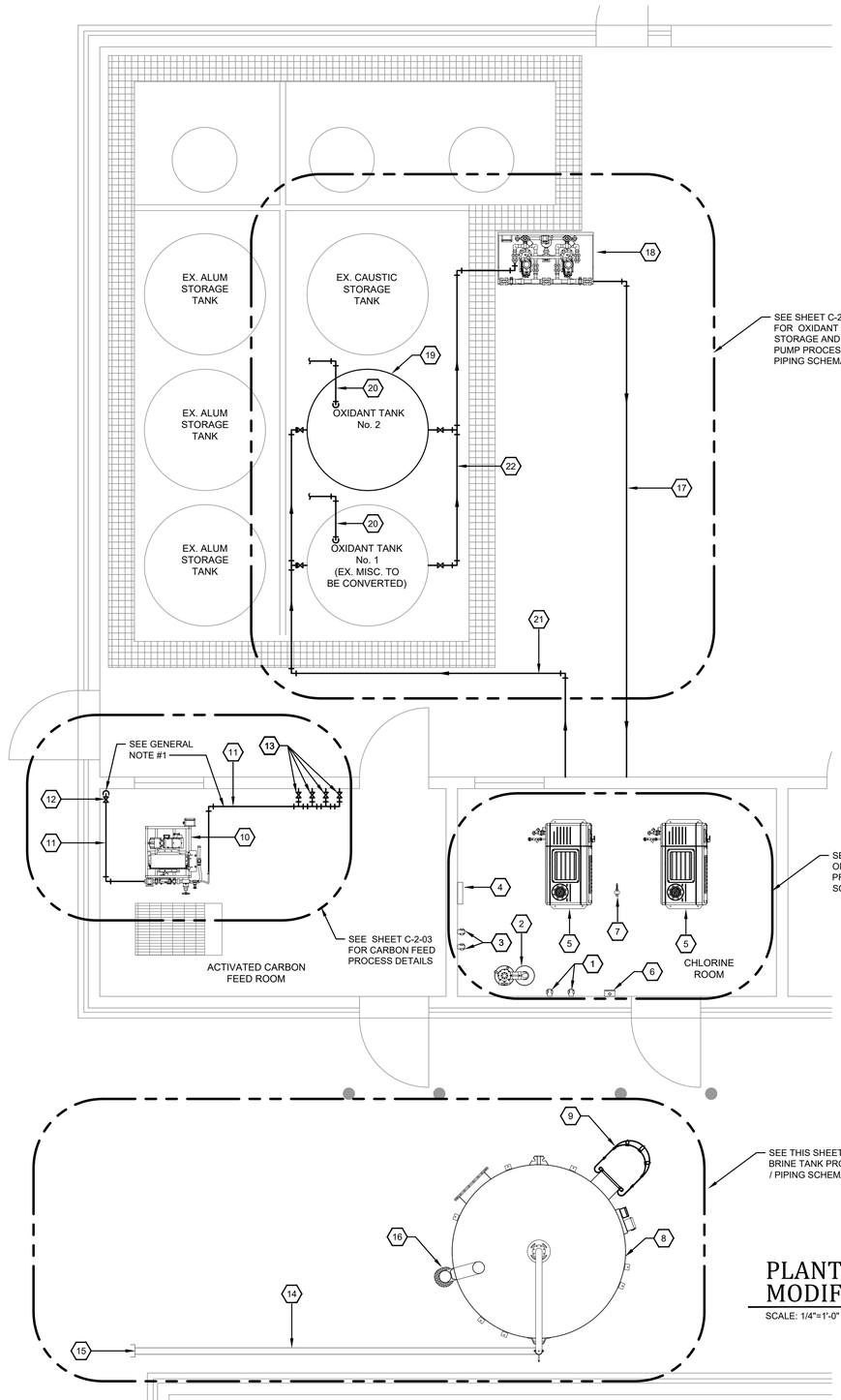
PLANTWORKS BUILDING DEMOLITION PLAN

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
4/19/24

PROJECT NO. 23011

SHEET NO. C-2-01

BID DOCUMENTS



PLANT WORKS BUILDING MODIFICATION PLAN

SCALE: 1/4"=1'-0"

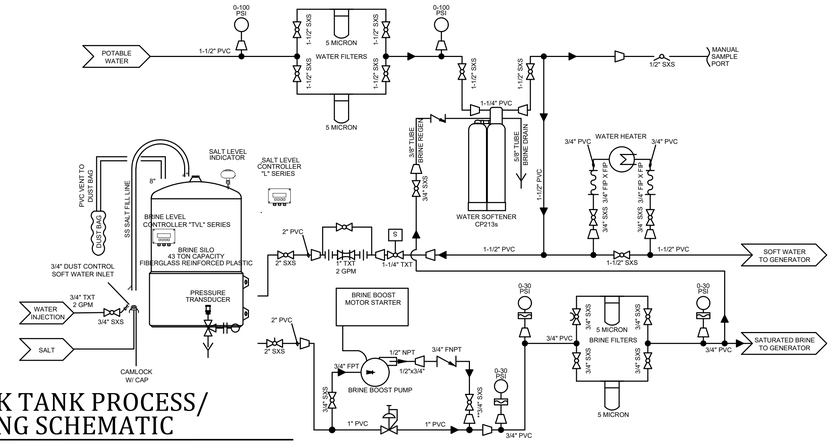
0 2' 4' 8'

REFERENCE NOTES:

1. WATER FILTER
2. WATER SOFTENER
3. BRINE FILTER
4. WATER HEATER
5. ON-SITE GENERATOR
6. HYDROGEN MONITOR
7. HYDROGEN SENSOR
8. 10'-0" DIA. BRINE GENERATOR SILO (43 TON CAPACITY)
9. FRP LADDER W/ SAFETY CAGE
10. DRY PAC FEED SYSTEM
11. 2" SCH 80 PVC
12. 2" PVC BALL VALVE
13. 1" PVC BALL VALVE
14. 4" SST SALT FILL LINE
15. 4" SST QUICK CONNECT
16. 8" PVC VENT
17. 1" SCH 80 CPVC
18. OXIDANT METERING PUMP SKID
19. 2,000 GALLON BULK STORAGE TANK
20. 4" CPVC VENT TO OUTSIDE (TYP.)
21. 4" SCH 80 CPVC
22. 2" SCH 80 CPVC

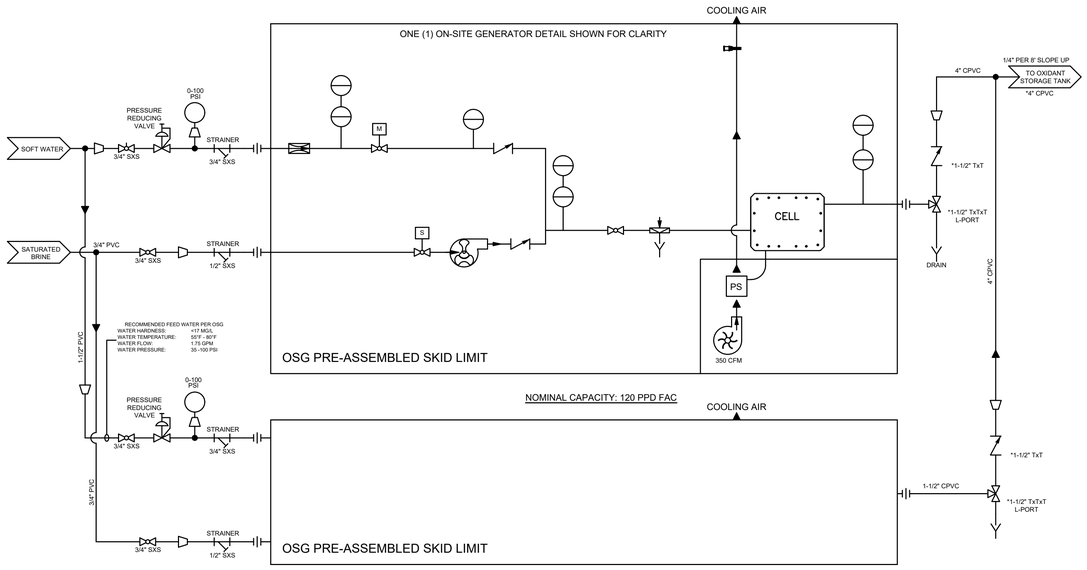
GENERAL NOTES:

1. CARBON FEED SYSTEM SHALL BE CONNECTED TO EX. PLANT WATER FOR "PUSH WATER". INSTALL BACKFLOW PREVENTER, VALVES & PIPING AS REQUIRED. DISCHARGE SHALL BE CONNECTED TO "1-INCH PE MISC. LINE" FOR FEED TO RAW WATER INTAKE VAULT AS SHOWN ON C-0-02.
2. SODIUM HYPOCHLORITE GENERATOR SYSTEM SHALL BE CONNECTED TO EX. PLANT WATER W 1-1/2" PVC. INSTALL BACKFLOW PREVENTER, VALVES, AND PIPING AS REQUIRED.
3. ALL PLUMBING ASSOCIATED W/ THE SODIUM HYPOCHLORITE GENERATOR SYSTEM SHALL BE SCH 80 CPVC UNLESS OTHERWISE NOTED.



BULK TANK PROCESS/ PIPING SCHEMATIC

NOT TO SCALE



NOMINAL CAPACITY: 120 PPD FAC

ON-SITE GENERATOR/ PIPING SCHEMATIC

NOT TO SCALE

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PROJECT MGR:	RCC
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SCALE:	AS NOTED

P.O. Box 1034
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KENTUCKY ENGINEERING GROUP, PLLC

CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

PLANTWORKS BUILDING MODIFICATION PLAN & SCHEMATICS

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
4/19/24

PROJECT NO. 23011

SHEET NO. C-2-02

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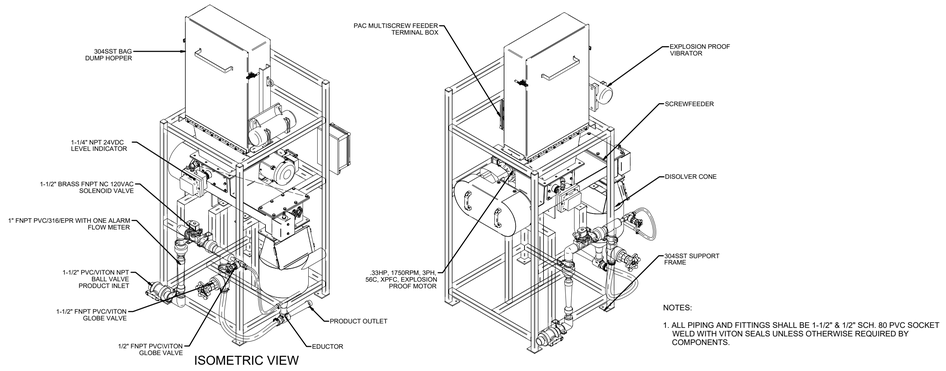


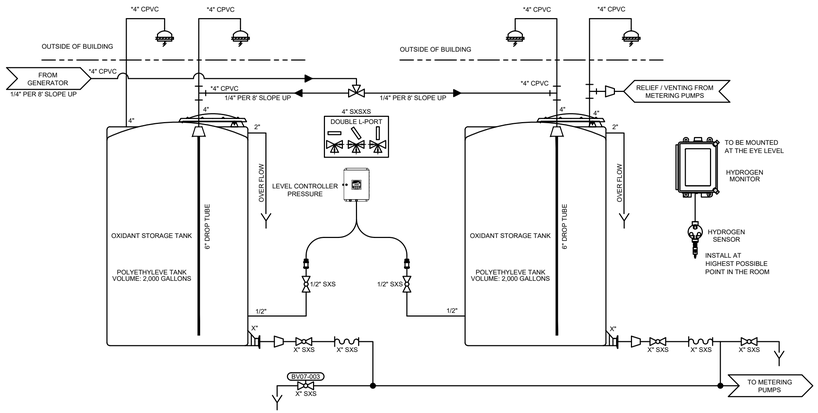
ISOMETRIC VIEW

NOTES:

1. ALL PIPING AND FITTINGS SHALL BE 1-1/2" & 1/2" SCH. 80 PVC SOCKET WELD WITH VITON SEALS UNLESS OTHERWISE REQUIRED BY COMPONENTS.

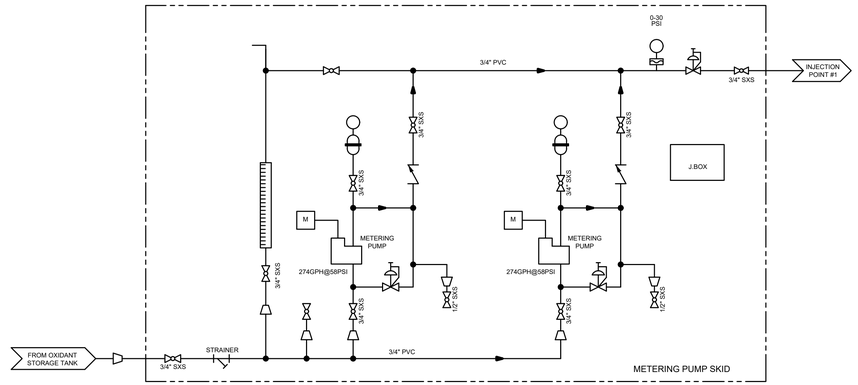
CARBON FEED PROCESS/ DETAILS

NOT TO SCALE



OXIDANT BULK TANK PROCESS/ PIPING SCHEMATIC

NOT TO SCALE



METER PUMP PROCESS/ PIPING SCHEMATIC

NOT TO SCALE

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PROJECT MGR:	RCC
DRAWN BY:	JAB
CHECKED BY:	RCC
SCALE:	AS NOTED

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KENTUCKY ENGINEERING GROUP, PLLC

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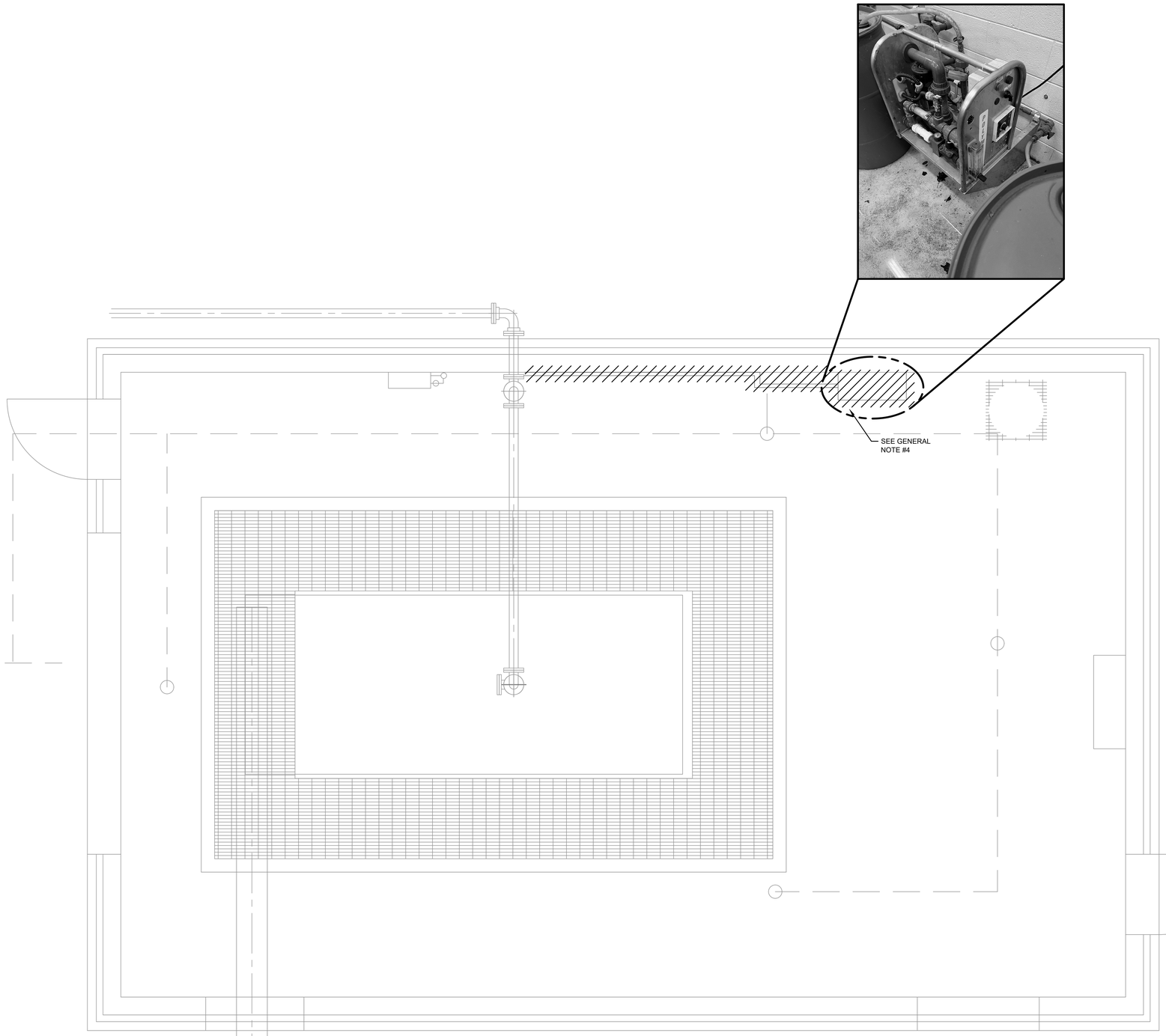
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

PLANTWORKS BUILDING SCHEMATICS

PROJECT NO. 23011

SHEET NO. C-2-03

BID DOCUMENTS



LEGEND:

DENOTES AREA TO BE DEMOLISHED

GENERAL NOTES:

1. ALL REMOVAL AND DEMOLITION SHALL BE COORDINATED WITH THE CONSTRUCTION SEQUENCING SCHEDULE.
2. NOTES, DIMENSIONS, ETC. TAKEN FROM EXISTING AS-BUILT PLANS. CONTRACTOR SHALL FIELD VERIFY.
3. CONTRACTOR SHALL COORDINATE DEMOLITION WITH WTP OPERATORS. SERVICE SHALL NOT BE INTERRUPTED. IF REQUIRED, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PROVIDING ALL NECESSARY MATERIAL AND EQUIPMENT FOR BYPASSING DURING CONSTRUCTION
4. REMOVE EXISTING POLYMER FEED SYSTEM INCLUDING PUMPS, PIPING, VALVES, ETC.

SLUDGE BELT PRESS DEMOLITION PLAN

SCALE: 1/2"=1'-0" 0 1' 2' 4'

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SCALE:	AS NOTED

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CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

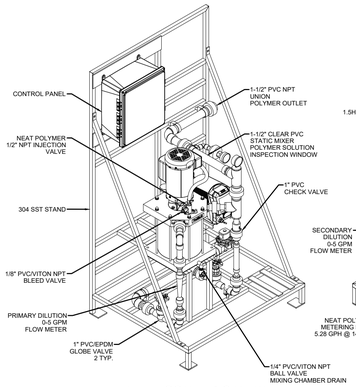
SLUDGE BELT PRESS DEMOLITION PLAN

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
11/15/24

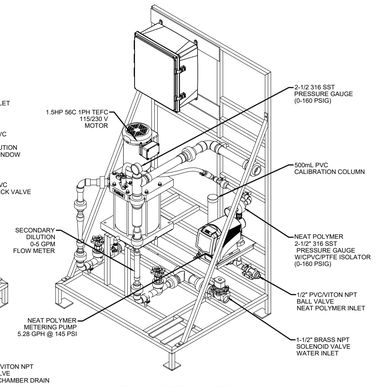
PROJECT NO. 23011

SHEET NO. C-3-01

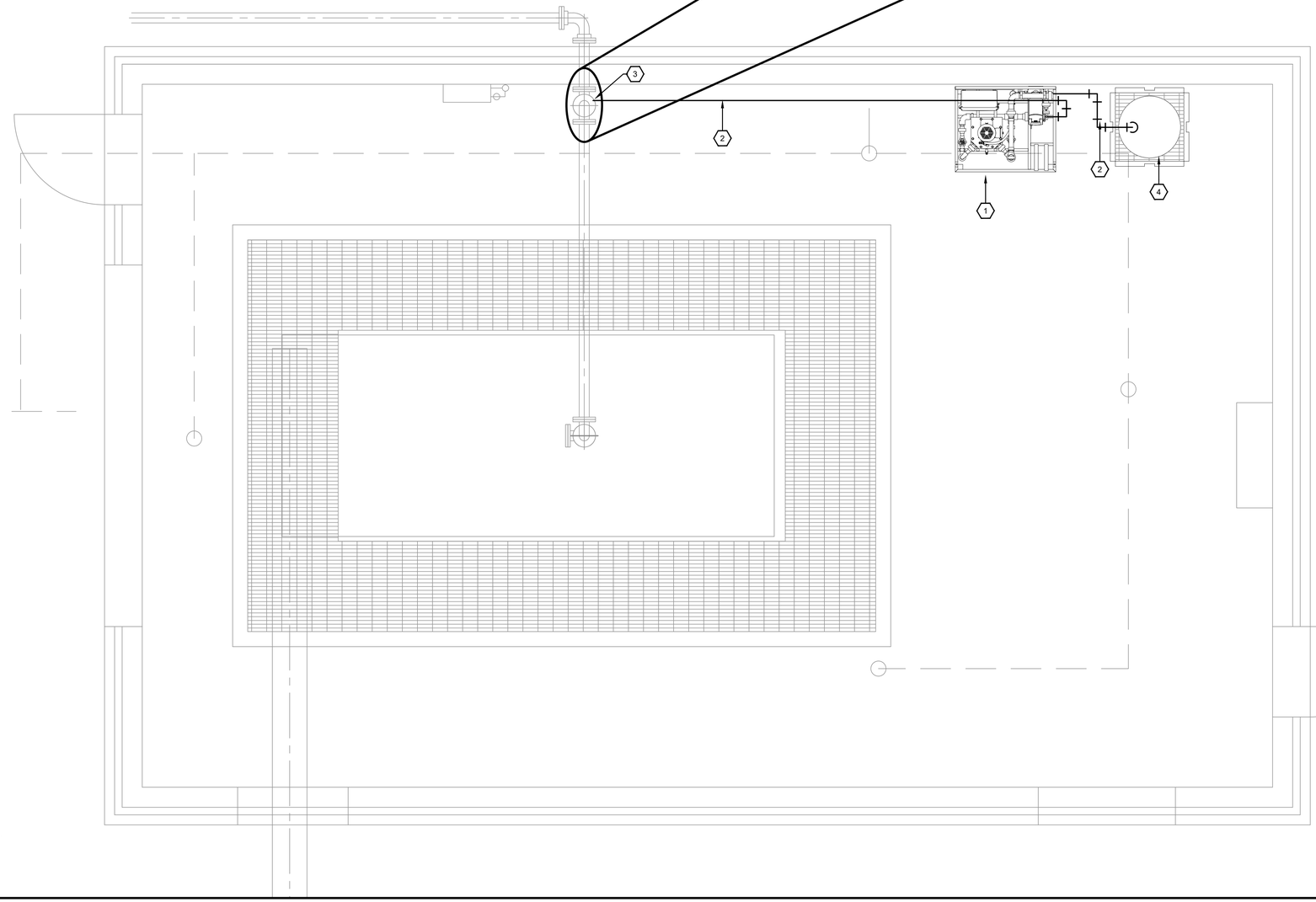
BID DOCUMENTS



LEFT ISOMETRIC VIEW



RIGHT ISOMETRIC VIEW



SLUDGE BELT PRESS MODIFICATION PLAN

SCALE: 1/2"=1'-0" 0 1' 2' 4'

REFERENCE NOTES:

1. POLYMER FEED SYSTEM SKID, SEE ISOMETRICS THIS SHEET
2. 2" PVC CONDUIT W/ 1-1/2" PE TUBING
3. CONNECT 1-1/2" TUBING TO EX. MIXING VALVE ASSEMBLY
4. 55 GALLON STORAGE DRUM W/ SPILL CONTAINMENT PALLET (BY OTHERS)

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FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

SLUDGE BELT PRESS MODIFICATION PLAN

STATE OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
8/1/24

PROJECT NO. 23011

SHEET NO. C-3-02

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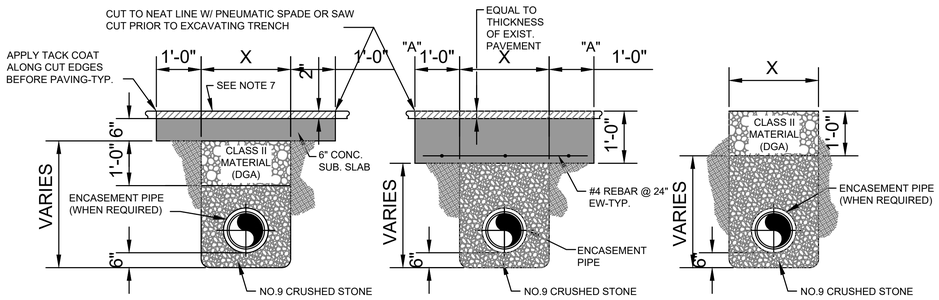


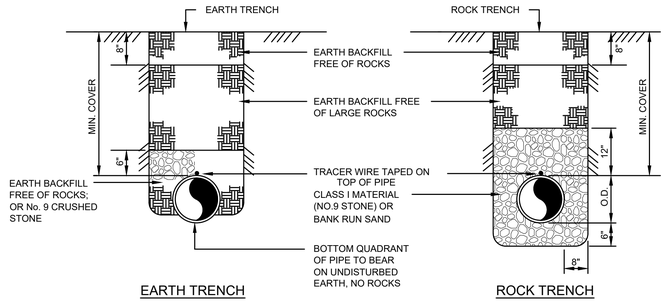
BITUMINOUS SURFACE | CONCRETE PAVEMENT | CRUSHED STONE PAVEMENT

NOTES:

1. REPLACE BITUMINOUS PAVEMENT WITH SAME TYPE AND THICKNESS (2" MIN.) AS EXISTING PAVEMENT.
2. IF ROCK IS ENCOUNTERED, A MINIMUM OF 6" NO.9 CRUSHED STONE MUST BE PLACED UNDER THE PIPE.
3. X = MAX. WIDTH OF TRENCH AT SURFACE UNDER NORMAL CONDITIONS (3" + PIPE O.D.)
4. FROM POINTS "A" TO NEAREST JOINT OR BREAK IN PAVEMENT MUST BE AT LEAST SIX (6) FEET OR MORE. IF LESS THAN SIX (6) FEET, REMOVE PAVEMENT TO JOINT OR BREAK AND REPLACE ENTIRE SLAB.
5. NO.610 CRUSHED STONE MAY BE SUBSTITUTED FOR MECHANICALLY TAMPED EARTH BACKFILL WITH PRIOR APPROVAL OF THE ENGINEER.
6. SEE DETAIL "A" FOR PLACEMENT OF CARRIER PIPE IN CASING PIPE
7. 1' SAW CUT OUTSIDE OF TRENCH LINES, BITUMINOUS PATCH PLACED IN 2" LIFTS WITH TACK COAT ON EACH SIDE, EACH LIFT COMPACTED WITH SMALL ROLLER.

NEW PAVEMENT & PAVEMENT REPLACEMENT TRENCH DETAILS

NOT TO SCALE



EARTH TRENCH | ROCK TRENCH

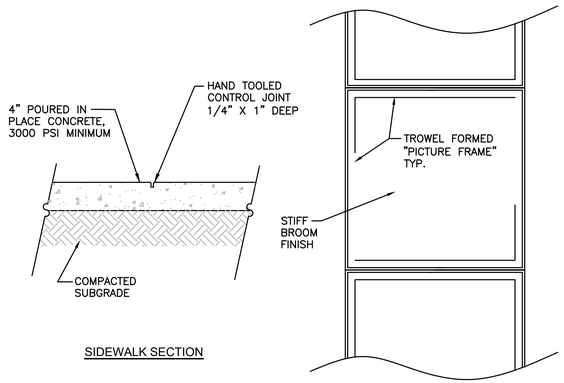
TYPICAL - BEDDING AND BACKFILL

NOT TO SCALE

NOTES:

1. REPLACE BITUMINOUS PAVEMENT WITH SAME TYPE AND THICKNESS (2" MIN.) AS EXISTING PAVEMENT.
2. IF ROCK IS ENCOUNTERED, A MINIMUM OF 6" NO. 9 CRUSHED STONE MUST BE PLACED UNDER THE ENCASEMENT PIPE.
3. X = MAX. WIDTH OF TRENCH AT SURFACE UNDER NORMAL CONDITIONS (36" + PIPE O.D.)
4. FROM POINTS "A" TO NEAREST JOINT OR BREAK IN PAVEMENT MUST BE AT LEAST 6' OR MORE. IF LESS THAN 6' REMOVE PAVEMENT TO JOINT OR BREAK AND REPLACE ENTIRE SLAB.
5. NO. 610 CRUSHED STONE MAY BE SUBSTITUTED FOR MECHANICALLY TAMPED EARTH BACKFILL WITH PRIOR APPROVAL OF THE ENGINEER.
6. 1' SAW CUT OUTSIDE OF TRENCH LINES, BITUMINOUS PATCH PLACED IN 2" LIFTS WITH TACK COAT ON EACH SIDE, EACH LIFT COMPACTED WITH SMALL ROLLER.

NOTE:
ALL WATER LINES CONSTRUCTED WITHIN 3' OF A COUNTY ROAD SHALL BE BACKFILLED WITH DGA TO FULL DEPTH.



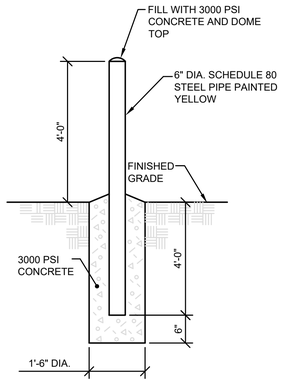
SIDEWALK SECTION | WIDTH SIDEWALK PLAN

NOTE:

1. SIDEWALK WIDTH AS SHOWN ON PLAN.

CONCRETE SIDEWALK

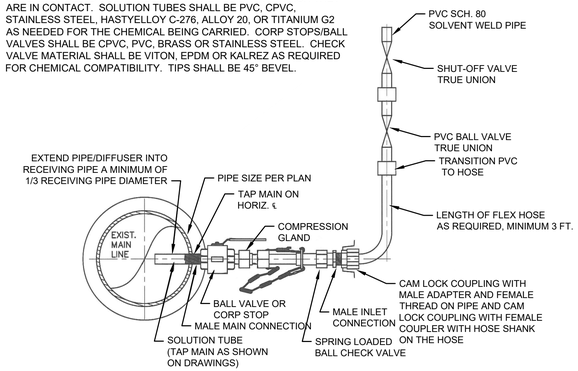
NOT TO SCALE



BOLLARD

NOT TO SCALE

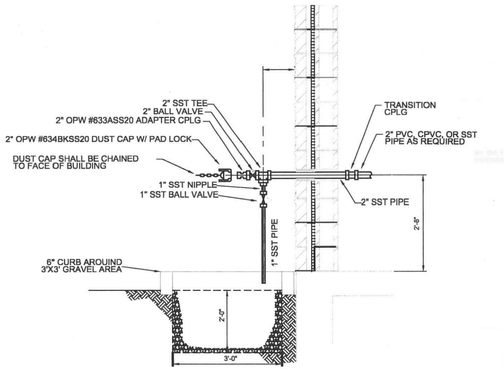
NOTE:
THE INJECTOR SHALL BE OF ALL METAL CONSTRUCTION WITH THE MATERIALS BEING COMPATIBLE WITH THE FLUID WITH WHICH THEY ARE IN CONTACT. SOLUTION TUBES SHALL BE PVC, CPVC, STAINLESS STEEL, HASTYELLOY C-276, ALLOY 20, OR TITANIUM G2 AS NEEDED FOR THE CHEMICAL BEING CARRIED. CORP STOPS/BALL VALVES SHALL BE CPVC, PVC, BRASS OR STAINLESS STEEL. CHECK VALVE MATERIAL SHALL BE VITON, EPDM OR KALREZ AS REQUIRED FOR CHEMICAL COMPATIBILITY. TIPS SHALL BE 45° BEVEL.



RETRACTABLE INJECTOR 150 psi RATED W/ CHECK VALVE FOR WATER CONNECTIONS

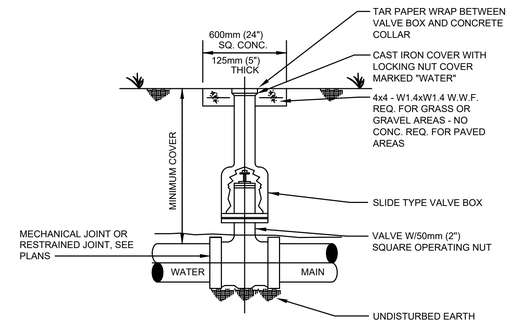
CHEMICAL FEED INJECTION POINT

NOT TO SCALE



CHEMICAL FILL STATION

NOT TO SCALE



VALVE INSTALLATION

NOT TO SCALE

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PROJECT MGR:	RCC
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SCALE:	AS NOTED

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CONTRACT No. 1
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FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

STANDARD DETAILS

COMMONWEALTH OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
11/15/24

PROJECT NO. 23011

SHEET NO. SD-0-01

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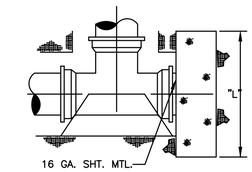
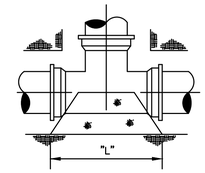
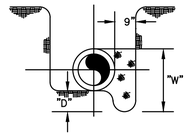


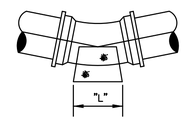
PLUGGED TEE



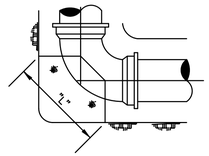
TEE



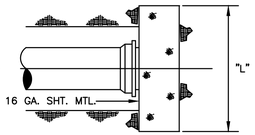
SECTION – TYP.



11 1/4°, 22 1/2°, AND 45° BEND



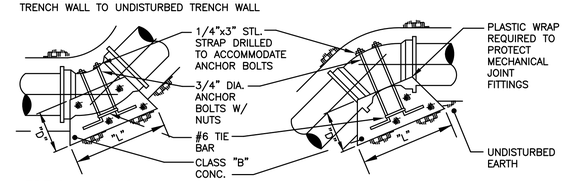
90° BEND



END OF MAIN

NOTE: MECHANICAL JOINT FITTINGS ARE REQUIRED.

W = WIDTH OF CONC. FROM UNDISTURBED TRENCH WALL TO UNDISTURBED TRENCH WALL



VERTICAL BEND

(SEE THRUST BLOCK SCHEDULE FOR DIMENSIONS OF BLOCKING)

VERTICAL BEND

(SEE THRUST BLOCK SCHEDULE FOR DIMENSIONS OF BLOCKING)

THRUST BLOCK SCHEDULE

PIPE SIZE	90° BEND			45° BEND			22 1/2° BEND			11 1/4° BEND			*		
	D	W	L	D	W	L	D	W	L	D	W	L	D	W	L
2"	6"	10"	4"	4"	7"	3"	4"	7"	3"	4"	7"	3"	6"	10"	4"
3"	6"	10"	8"	4"	8"	6"	4"	8"	3"	4"	8"	3"	6"	10"	6"
4"	6"	11"	9"	6"	11"	7"	4"	9"	5"	4"	9"	3"	6"	11"	8"
6"	8"	15"	13"	6"	13"	12"	4"	11"	8"	4"	11"	4"	8"	15"	10"
8"	10"	21"	19"	8"	17"	17"	6"	15"	10"	4"	13"	6"	10"	21"	21"
10"	10"	23"	29"	8"	20"	22"	6"	17"	13"	6"	17"	7"	10"	23"	30"
12"	12"	27"	31"	10"	24"	27"	10"	23"	14"	6"	19"	9"	12"	27"	36"
14"	14"	31"	38"	13"	29"	31"	12"	27"	17"	6"	21"	12"	14"	31"	42"
16"	15"	34"	44"	15"	33"	36"	14"	31"	19"	8"	25"	13"	17"	36"	48"
18"	21"	42"	45"	18"	39"	37"	16"	36"	21"	10"	29"	14"	21"	41"	54"
20"	22"	45"	53"	21"	43"	42"	18"	39"	24"	10"	31"	16"	22"	44"	60"

* TEE & END OF MAIN

(SEE THRUST BLOCK SCHEDULE FOR DIMENSIONS OF BLOCKING)

THRUST BLOCKS

NOT TO SCALE

P:\PROJECTS\Columbia-Adair Utility District\23011 - Phase 23 WTP and System Imp\DWG\WTP\23011 SD-0-02.dwg KEG 8/01/24

NO.	DATE	REVISIONS	BY

DATE:	MAY 2024
PROJECT MGR:	RCC
DRAWN BY:	JAB
CHECKED BY:	RCC
SCALE:	AS NOTED

P.O. Box 1034
VERSAILLES, KENTUCKY 40383
KENTUCKY ENGINEERING GROUP, PLLC

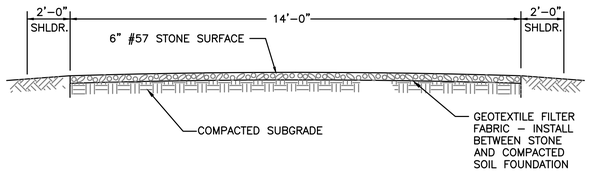
CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

STANDARD DETAILS

PROJECT NO.
23011

SHEET NO.
SD-0-02

BID DOCUMENTS



CONSTRUCTION ROAD STABILIZATION

NOT TO SCALE

NOTES:

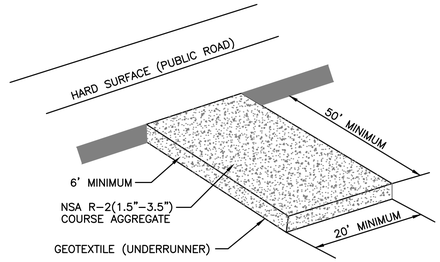
1. TREES, STUMPS, ROOTS, BRUSH, WEEDS, AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED FROM THE WORK AREA.
2. UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE ROADBED AND PARKING AREAS.
3. GRADING, SUBGRADE PREPARATION, AND COMPACTION SHALL BE DONE AS NEEDED. FILL MATERIAL SHALL BE DEPOSITED IN LAYERS NOT TO EXCEED 9 INCHES AND COMPACTED WITH THE CONTROLLED MOVEMENT OF COMPACTING AND EARTH MOVING EQUIPMENT.
4. THE ROADBED SHALL BE GRADED TO THE REQUIRED ELEVATION. SUBGRADE PREPARATION AND PLACEMENT OF THE SURFACE COURSE SHALL BE IN ACCORDANCE WITH SOUND ROADWAY CONSTRUCTION.
5. ALL CUT AND FILLS SHALL BE 2;1 OR FLATTER TO THE EXTENT POSSIBLE.
6. WATER BREAKS OR BARS MAY BE USED TO CONTROL SURFACE RUNOFF.
7. ROADS SHALL BE LAID OUT ACCORDING TO GOOD LANDSCAPE MANAGEMENT PRINCIPLES.
8. ALL ROADSIDE DITCHES, CUTS, FILLS, AND DISTURBED AREAS ADJACENT TO ROADS SHALL BE STABILIZED WITH APPROPRIATE TEMPORARY OR PERMANENT VEGETATION.

EROSION CONTROL NOTES

1. A KPDES STORMWATER PERMIT IS REQUIRED FOR THIS PROJECT. COVERAGE STARTS WHEN THE KY DIVISION OF WATER ACKNOWLEDGES RECEIPT OF A NOTICE OF INTENT FOR COVERAGE.
2. THE KPDES PERMIT REQUIRES THAT THE PERMITTEE SHALL MINIMIZE DISTURBANCE AND THE PERIOD OF TIME THAT THE DISTURBED AREA IS WITHOUT STABILIZATION PRACTICES.
3. FINAL STABILIZATION SHALL BEGIN WITHIN 14 DAYS ON AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR HAVE BEEN SUSPENDED FOR MORE THAN 180 DAYS. WHEN SNOW COVER CAUSES DELAYS, STABILIZATION SHALL BEGIN AS SOON AS POSSIBLE. STABILIZATION PRACTICES INCLUDE SEEDING, MULCHING, PLACING SOD, PLANTING TREES OR SHRUBS, AND USING GEOTEXTILE FABRICS AND OTHER APPROPRIATE MEASURES. SEEDING RATES, DATES, AND MATERIALS MAY BE OBTAINED FROM THE LOCAL NATURAL RESOURCES CONSERVATION SERVICE FIELD OFFICE.
4. FOR ALL CRITICAL AREAS (WITHIN 25' OF A STREAM), SOIL STABILIZATION TECHNIQUES SHALL BE IMPLEMENTED WITHIN 24 HOURS OR AS SOON AS PRACTICAL AFTER COMPLETION OF GRADING OR DISTURBANCE. TEMPORARY STABILIZATION PRACTICES SHALL BE INITIATED WITHIN 14 DAYS OF CESSATION OF CONSTRUCTION ACTIVITIES.
5. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE DEVELOPED AND IMPLEMENTED AS OUTLINED IN THE KPDES STORMWATER PERMIT KYR 10.
6. SEDIMENT BASINS (DEBRIS BASINS, DESILTING BASINS, OR SEDIMENT TRAPS) SHALL BE PROPERLY DESIGNED.
7. SEDIMENT BASINS (DEBRIS BASINS, DESILTING BASINS, OR SEDIMENT TRAPS) SHALL BE INSTALLED DURING THE INITIAL GRADING AT LOCATIONS THAT WILL PROVIDE THE BEST PROTECTION FROM OFF-SITE DAMAGES.
8. ALL SLOPES EXCEEDING 3:1 SHALL HAVE EXTRA SLOPE PROTECTION SUCH AS NETTING.
9. A MULTI-PURPOSE BASIN USED FOR A SEDIMENT TRAP THAT IS THEN CONVERTED TO A DETENTION/RETENTION BASIN SHALL BE DREDGED PERIODICALLY DURING CONSTRUCTION ACTIVITIES AND AFTER STABILIZATION IN ORDER TO PROVIDE ADEQUATE STORAGE.
10. INLET PROTECTION IS REQUIRED TO MINIMIZE DISCHARGE OF SEDIMENT LADEN WATER.
11. SITE PERIMETER CONTROLS ARE REQUIRED AND SHALL BE INSTALLED TO PREVENT THE DEPOSIT OF SOIL AND DEBRIS FROM GRADED SURFACES ONTO PUBLIC STREETS, INTO DRAINAGE CHANNELS OR SEWERS, OR ONTO ADJOINING LAND.
12. EROSION CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIRED, CONTRACTOR SHALL PROVIDE ADDITIONAL CONTROL AND REVISE THE CONTROLS AS NEEDED.

INSPECTIONS AND MAINTENANCE

1. ALL EROSION CONTROL MEASURES, DISCHARGE LOCATIONS, VEHICLE EXITS, DISTURBED AREAS OF THE SITE, AND MATERIALS STORAGE AREAS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER. EACH INSPECTION MUST BE DOCUMENTED IN ACCORDANCE WITH THE KPDES GENERAL PERMIT FOR STORMWATER POINT SOURCE DISCHARGES FROM CONSTRUCTION ACTIVITIES (KYR10).
2. SEDIMENT ACCUMULATED AT THE SILT FENCES, INLET PROTECTION AREAS, AND OTHER SILT CHECK DEVICES SHOULD BE REMOVED NO LATER THAN WHEN IT REACHES 1/3 HEIGHT OF THE FENCE OR 9 INCHES MAXIMUM.
3. SEDIMENT MUST BE REMOVED FROM ANY SEDIMENT BASINS WHEN THE NO MORE THAN 1/3 VOLUME HAS BEEN FILLED WITH COLLECTED SEDIMENT.
4. ALL REQUIRED REPAIRS ARE TO BE MADE IMMEDIATELY.
5. REMOVED SEDIMENT MUST BE SPREAD AND VEGETATED OR OTHERWISE STABILIZED IN A MANNER THAT DOES NOT RESULT IN MUDDY RUNOFF TO NEARBY DITCHES AND WATERBODIES.
6. INSPECT THE CONSTRUCTION ENTRANCE DAILY TO ENSURE NO TRACKING OR DIRT ONTO LOCAL ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS MUST BE REMOVED IMMEDIATELY. SEE NOTE 3 FOR HANDLING OF REMOVED SEDIMENT.
7. MAINTAIN THE ENTRANCE AS NECESSARY TO PREVENT TRACKING OF DIRT.

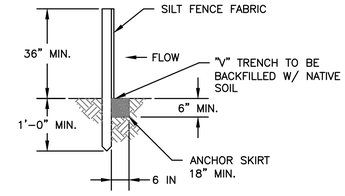


STABILIZED CONSTRUCTION ENTRANCE

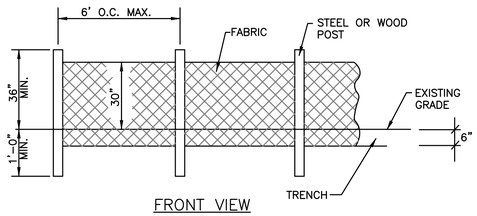
NOT TO SCALE

NOTES:

1. A STABILIZED ENTRANCE PAD OF CRUSHED STONE SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
2. GEOTEXTILE (KYTC TYPE III) SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVED SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.



TRENCH DETAIL FOR SEDIMENT FENCE



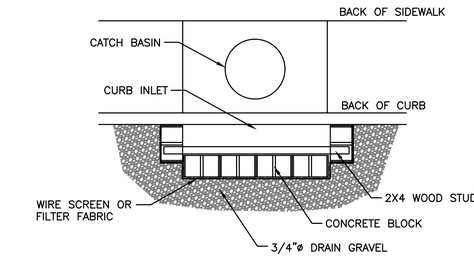
FRONT VIEW

NOTES:

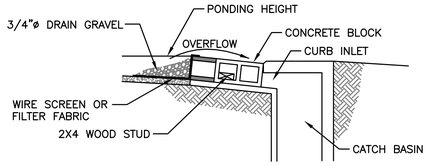
1. GEOTEXTILE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE OF THE BARRIER. WHEN JOINTS CANNOT BE AVOID, GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER ONLY AT A POST WITH 3 FOOT MIN. OVERLAP, AND SECURELY SEALED.
2. POSTED SHALL BE AT LEAST 5 FEET IN LENGTH
3. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE AND FABRIC.
4. WOOD POSTS SHALL BE 2 INCHES BY 2 INCHES OR EQUIVALENT. STEEL POSTS SHALL BE 1/33 LBS PER LINEAR FOOT.
5. IF REQUIRED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH IN LENGTH, WIRE TIES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE
6. TURN SILT FENCE UP SLOPE AT ENDS.

SEDIMENT BARRIER

NOT TO SCALE



PLAN



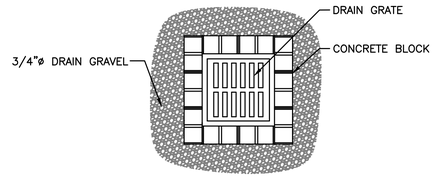
SECTION

NOTES:

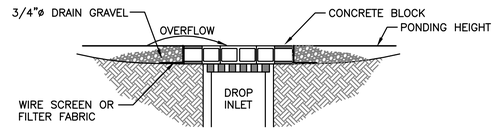
1. USE BLOCK AND GRAVEL TYPE SEDIMENT BARRIER WHEN CURB INLET IS LOCATED IN GENTLY SLOPING STREET SEGMENT WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. BARRIER SHALL ALLOW FOR OVERFLOW FROM SEVERE STORM EVENT.
3. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

CURB INLET SEDIMENT BARRIER

NOT TO SCALE



PLAN



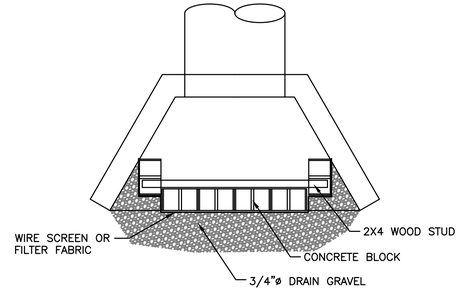
SECTION

NOTES:

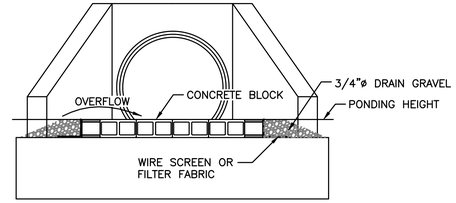
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5% SLOPE)
2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

DROP INLET SEDIMENT BARRIER

NOT TO SCALE



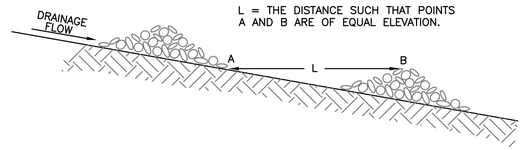
PLAN



FRONT ELEVATION

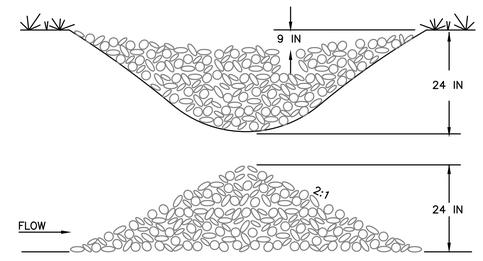
CULVERT INLET SEDIMENT BARRIER

NOT TO SCALE



CHECKDAM SPACING

N.T.S.



NOTES:

1. ROCK CHECK DAMS SHOULD BE CONSTRUCTED OF GRADED 5 TO 10 INCH STONE. MECHANICAL OR HAND PLACEMENTS SHALL BE REQUIRED TO ENSURE COMPLETE COVERAGE OF THE ENTIRE WIDTH OF DITCH OR SWALE AND THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES.
2. INSPECT BEHIND RIPRAP CHECKDAM DAILY AND CLEAN WHEN COLLECTED DEBRIS EXCEEDS HALF OF ITS DEPTH.

ROCK CHECK DAM

NOT TO SCALE

NO.	DATE	REVISIONS	BY

DATE:	MAY 2024
PROJECT MGR:	RCC
DRAWN BY:	JAB
CHECKED BY:	RCC
SCALE:	AS NOTED

P.O. Box 1034
VERSAILLES, KENTUCKY 40383
KENTUCKY ENGINEERING GROUP, PLLC

CONTRACT No. 1
PHASE 23 WTP AND SYSTEM IMPROVEMENTS
FOR THE
COLUMBIA-ADAIR UTILITIES DISTRICT

EROSION CONTROL DETAILS

COMMONWEALTH OF KENTUCKY
RYAN C. CARR
23455
LICENSED PROFESSIONAL ENGINEER
11/15/24

PROJECT NO. 23011

SHEET NO. SD-0-03

BID DOCUMENTS

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