CITY PLAN COMMISSION STAFF REPORT

CD-CPC-2025-00083

Todd Creek WWTP

November 19, 2025

Docket #1

Request
Development Plan

Applicant
Bryce Dickmeyer
Burns & McDonnell

Owner
City of Kansas City

Site Information

Location	7801 NW 144th St
Area	72 Acres
Zoning	AG-R
Council District	1st
County	Platte
School District	Platte County R-III

Surrounding Land Uses
North: Undeveloped, AG-R, Platte City
South: Undeveloped, AG-R
East: Undeveloped, AG-R
West: Industrial, undeveloped, AG-R

KC Spirit Playbook Alignment
CD-CPC-2025-00083: medium alignment

Land Use Plan
The KCI Area Plan recommends Industrial and Open Space/Buffer for this location. The proposed plan has a high alignment with this designation. See Criteria A for more information.

Major Street Plan
NW 144th Street is not identified on the Major Street Plan.

Approval Process

Overview
The applicant seeks approval of a development plan to construct a wastewater treatment facility in district AG-R in the northernmost part of the city.

Existing Conditions
The subject site is partially undeveloped and partially used for agriculture. There are regulated streams crossing the site and areas of mature riparian vegetation.

Neighborhood(s)
This site is not located within a registered neighborhood or homes association.

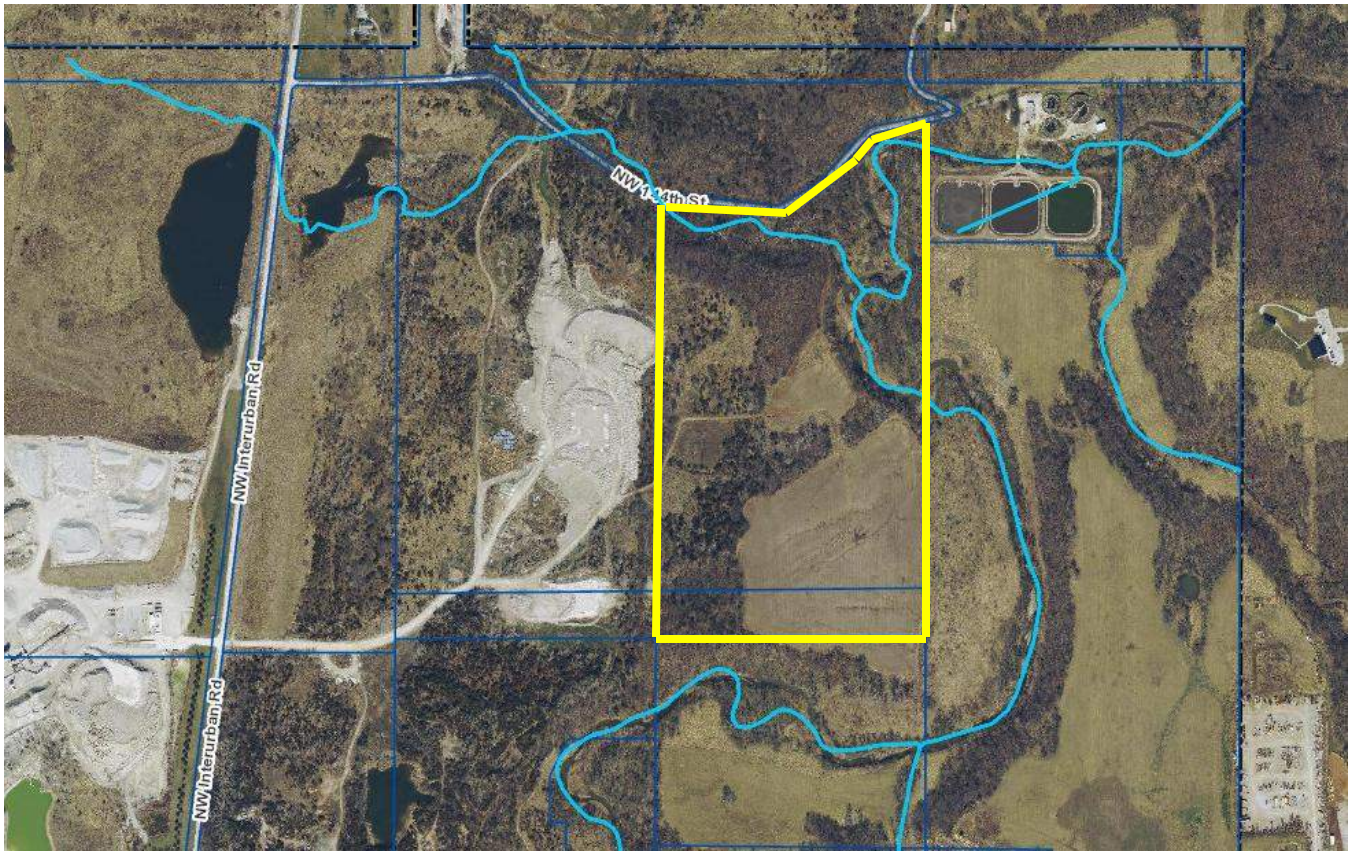
Required Public Engagement
Section 88-505-12, Public Engagement does apply to this request. The applicant hosted a meeting on June 24, 2025. A meeting summary is attached; see Attachment #3.

Controlling + Related Cases
None

Project Timeline
The application was filed on June 12, 2025. Scheduling deviations have occurred due to the applicant needing more time to design the plans.

Professional Staff Recommendation
Docket #1 Approval with Conditions

VICINITY MAP



PLAN REVIEW

The proposed development plan is for construction of a wastewater treatment plant to be operated by KC Water Services. The development will include a variety of buildings and large basins related to wastewater treatment processes. The majority of the development will be located in the southeastern portion of the site.

The facility will be accessed from NW Interurban Road via a cross-access easement over the property to the west, owned by Hunt Midwest. There is an existing drive off of NW Interurban Road that will be extended across the Hunt Midwest property to serve the facility.

A tree preservation and mitigation plan was provided showing about seven acres of tree canopy to be removed and preserving over 10 acres of tree canopy within the stream buffer area. Landscaping calculations were provided in accordance with the Zoning and Development Code, but a detailed landscape plan will be reviewed at the time of building plan submittal.

Proposed building materials include primarily precast concrete and thin brick veneer.

PLAN ANALYSIS

Standards	Meets	Notes
Lot and Building Standards (88-270)	Yes	
Tree Preservation & Protection (88-424)	Yes, subject to conditions	
Parking & Loading (88-420)	Yes	
Landscaping & Screening (88-425)	Yes, subject to conditions	
Outdoor Lighting (88-430)	Yes, subject to conditions	
Signs (88-445)	Yes, subject to conditions	
Pedestrian Standards (88-450)	Yes	

SPECIFIC REVIEW CRITERIA

Development Plan, Project Plan, or Site Plan (88-516-05)

In order to be approved, a development plan, project plan, or site plan must comply with all of the following criteria:

A. The plan must comply with all standards of the Zoning and Development Code and all other applicable city ordinances and policies.

The proposed plan complies with applicable standards of the Zoning and Development Code.

"This project supports a few goals KCI Area Plan and KC Spirit Playbook. The proposed use is consistent with the industrial future land use designation which is recommended for the area north of the airport. The site is located in the northernmost part of the city, near the existing wastewater treatment plant, making it an ideal location. There are no residential properties within half a mile, and the area is surrounded by woodland, further supporting its suitability for the proposed use." -Alexis Berra, 1st District Planner, Community Planning Division

B. The proposed use must be allowed in the district in which it is located.

Utilities and Services use is permitted in the AG-R district subject to the approval of this development plan.

C. Vehicular ingress and egress to and from the site, and circulation within the site must provide for safe, efficient, and convenient movement of traffic not only within the site but on adjacent roadways.

Access to the site is expected to be adequate. Although the property has street frontage along NW 144th Street, there are topographical barriers like stream corridors and grade change that make access from the north difficult. The applicant is proposing to establish a cross-access easement to use an existing drive off of NW Interurban that crosses property owned by Hunt Midwest.

The treatment plan will be a secure facility and traffic to the site is expected to be operators and employees, not the general public.

D. The plan must provide for safe, efficient, and convenient non-motorized travel opportunities, being pedestrian and bicycle movement, on the subject site.

Staff requested the applicant provide some internal pedestrian circulation, as there is no need to provide pedestrian connection through the cross-access easement across the property to the west and out to Interurban Road. The applicant explained to staff in the Development Review Committee meeting that operators of the plant move around the site in their vehicles and do not walk from building to building. Based on this information, no internal pedestrian circulation will be provided as there will be limited pedestrian activity on-site.

E. The plan must provide for adequate utilities based on City standards for the particular development proposed.

The site will have adequate utilities, as conditioned by Water Services staff.

F. The location, orientation, and architectural features, including design and material, of buildings and other structures on the site must be designed to be compatible with adjacent properties.

The proposed building materials are acceptable for the location and type of facility. There are no existing buildings in the area establishing an architectural character. Additionally, the buildings will not be seen from the road.

G. Landscaping, berms, fences, and/or walls must be provided to buffer the site from undesirable views, noises, lighting, or other off-site negative influences and to buffer adjacent properties from negative influences that may be created by the plan.

The area is already generally screened with natural environmental features. A detailed landscape plan will be reviewed at the time of building plan submittal.

H. The design of streets, drives, and parking areas within the project should result in a minimum of area devoted to asphalt or other impervious surfaces consistent with the needs of the project and city code requirements.

The proposed development will take up less than half of the overall site, preserving a large portion of pervious surface. The interior of the facility will also have gravel, which will be more pervious than paved area.

I. **The plan must identify trees to be removed and trees to be preserved during the development of the subject property with the goal of saving trees that are not required to be removed for the development of the property.**

A tree preservation and mitigation plan was reviewed with this application. The plan indicates approximately seven acres of tree canopy will be removed. No mitigation is required based on the remainder of the 70-acre site being preserved.

ATTACHMENTS

1. Conditions Report
2. Applicant's Submittal
3. Public Engagement Materials

PROFESSIONAL STAFF RECOMMENDATION

City staff recommends APPROVAL WITH CONDITIONS as stated in the conditions report.

Respectfully submitted,

Genevieve Kohn-Smith, AICP

Lead Planner

Plan Conditions

Report Date: November 13, 2025

Case Number: CD-CPC-2025-00083

Project: Todd Creek WWTP

Condition(s) by City Planning and Development Department. Contact Genevieve Kohn-Smith at (816) 513-8808 / genevieve.kohn-smith@kcmo.org with questions.

1. The developer shall submit an affidavit, completed by an ISA certified arborist, an SAF certified forester, a professional engineer, or a landscape architect licensed in the State of Missouri, verifying that all trees preserved and all trees planted to meet mitigation required of the approved plan, whichever is applicable, has been installed or preserved in accordance with the plan and is healthy prior to Certificate of Occupancy.

2. All signage shall conform to 88-445 and shall require a sign permit prior to installation. This condition may be satisfied by an assigned City Planning and Development Building Inspector.

3. The developer shall submit an affidavit, prepared by an engineer licensed in the State of Missouri, verifying that all outdoor lighting has been installed in accordance with approved plans and that lighting levels do not exceed that shown on the approved lighting plan at the property lines prior to Certificate of Occupancy. This condition may be satisfied by an assigned City Planning and Development Building Inspector.

4. The developer shall submit an affidavit, completed by a landscape architect licensed in the State of Missouri, verifying that all landscaping required of the approved plan has been installed in accordance with the plan and is healthy prior to Certificate of Occupancy. This condition may be satisfied by an assigned City Planning and Development Building Inspector.

5. Complete a parcel combination with new legal description containing both parcels (either County* or City). No Temporary Certificate of Occupancy (TCO) or Final Certificate of Occupancy (CO) (and/or Final Inspection approval) to be issued prior to providing verifiable parcel combination. Submit documentation to City Planning and Development Department (lotmapping@kcmo.org)
   *If going through the County, please note it is not simply a tax parcel combination, it must be a real estate transaction executed by a title company.

6. Per the Aviation Department the developer shall provide considerations incorporated into the design to reduce or preclude the movement of wildlife into or across the approach or departure airspace of MCI. This includes methods to reduce the likelihood of the proposed facility attracting hazardous wildlife that would use artificial habitats near the airport for food, water or cover.

7. A detailed landscape plan in accordance with 88-425 shall be provided by the applicant at the time of building plan review.

Condition(s) by Fire Department. Contact Michael Schroeder at (816) 513-4604 / michael.schroeder@kcmo.org with questions.

8. • The developer shall meet the fire flow requirements as set forth in Appendix B of the project International Fire Code 2018. (IFC-2018 § 507.1)

9. • Fire hydrants shall be installed and operable prior to the arrival of any combustible building materials onto the site. (IFC-2018 § 501.4 and 3312.1; NFPA 241-2013 § 8.7.2)
   • Fire hydrant distribution shall follow IFC-2018 Table C102.1

10. • Buildings equipped with a fire standpipe system shall have an operable fire hydrant within 100 feet of the Fire Department Connection (FDC). (IFC2018 § 507.5.1.1)

11. • All Fire Department Connections (FDC) shall be threaded connections, Storz connections are not allowed in the City of Kansas City, Missouri (IFC-2018 § 903.3.6; NFPA 13-2010 § 6.8.1).

12. • The building's FDC shall be immediately recognizable from the street or nearest point of Fire Department access (IFC-2018 § 912.2.1).

13. • Required fire department access roads shall be a minimum unobstructed width of twenty (20) feet and 13 ft. 6 in clearance height. Check with Streets & Traffic (KCMO Public Works) or Missouri Department of Transportation (MODOT) that may have street planning regulations that supersede the Fire Code. (IFC-2018: § 503.2.1)

Condition(s) by Fire Department. Contact Michael Schroeder at (816) 513-4604 / michael.schroeder@kcmo.org with questions.

14. • A required fire department access roads shall be an all weather surface. (IFC-2012: § 503.2.3) (No Grass Pavers Allowed)

15. • Fire Department access roads shall be provided prior to construction/demolition projects begin. (IFC-2018 § 501.4 and 3310.1; NFPA 241-2013 § 7.5.5)

16. • Required fire department access roads shall designed to support a fire apparatus with gross axle weight of 85,000 pounds. (IFC-2018: § 503.2.3)

17. • The turning radius for fire department access roads shall be 30 feet inside and 50 feet outside radius. (IFC-2018: § 503.2.4)

18. • Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus. (IFC-2018: § 503.2.5)

19. • Aerial Fire Apparatus access roads shall be provided for any building that is 30 feet in height or greater. Aerial Fire Apparatus Roads are a minimum 26 feet wide, at least 15 feet away from the building but not more than 30 feet from the structure. (IFC-2018 § D105).

20. • Buildings exceeding three (3) stories or 30 feet in height shall have at least two means of fire apparatus access. (IFC-2018: § D104.1)

21. • Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses. (IFC-2018: § D106.3)

22. • If an approved security gate spans across a fire access road, an approved means for emergency operation shall be provided (IFC-2018 § 503.6)

Condition(s) by Parks & Recreation. Contact Virginia Tharpe at / virginia.tharpe@kcmo.org with questions.

23. The developer shall be responsible for tree preservation in an easement or platted tract, mitigation planting, or payment of cash-in-lieu of preservation or mitigation planting, or any combination thereof in accordance with 88-424. Should the developer choose to pay cash-in-lieu of preservation or mitigation of all or a portion of the required area, the amount due shall be based upon the rate specified in 88-424. This requirement shall be satisfied prior to issuance of certificate of occupancy, or prior to the recording of the final plat, whichever occurs first.

Condition(s) by Water Services Department. Contact Heather Massey at (816) 513-2111 / heather.massey@kcmo.org with questions.

24. The developer shall ensure that water and fire service lines should meet current Water Services Department Rules and Regulations. Prior to issuance of Certificate of Occupancy.
https://www.kcwater.us/wp-content/uploads/2025/02/2025-Final-Rules-and-Regulations-for-Water-Service-Lines.pdf

Condition(s) by Water Services Department. Contact Kirk Rome at (816) 513-0368 / kirk.rome@kcmo.org with questions.

25. Show and label the preliminary size and location of the proposed potable public water main. The KC Water project PM Shawn Cross indicated the preliminary plan is to serve the facility with either an 8" or 12" water main connected to the existing water transmission main in N Winan Ave near NW 136th Street and traverse generally east along and parallel to the proposed sewer line. KC Water staff plan to provide anticipated potable water demands to the KC Water distribution staff to include in the water supply modeling for this area.

Condition(s) by Water Services Department. Contact Philip Taylor at (816) 513-0146 / philip.taylor@kcmo.org with questions.

26. The developer shall submit a Preliminary Stream Buffer plan prior to approval of the plan in accordance with the Section 88-415 requirements.

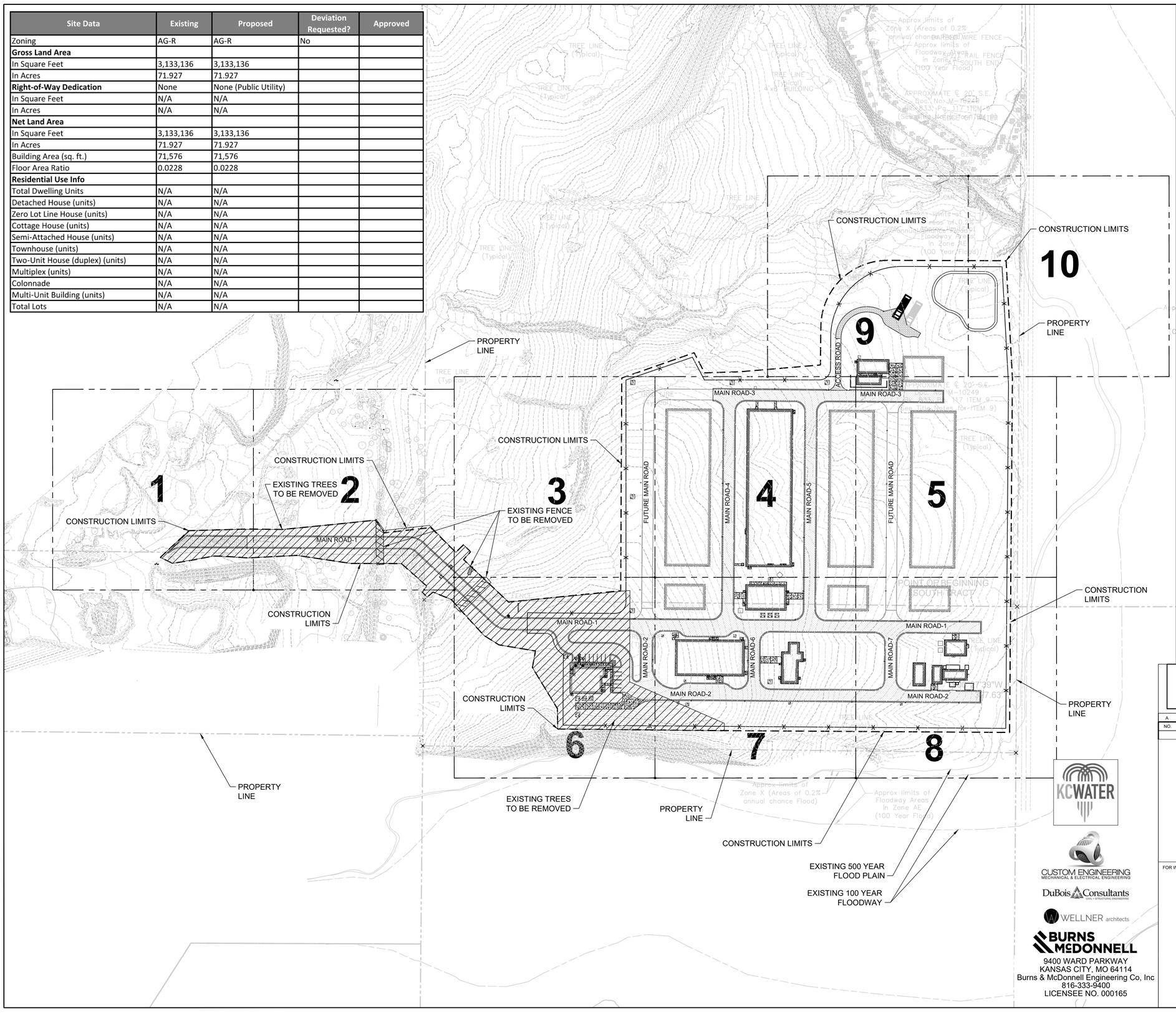
27. The developer shall submit a final stream buffer plan to KC Water for approval prior to issuance of any building permits and obtain permits for the Stream Buffer prior to removal of any mature riparian species within the buffer zones due to construction activities on the site, in accordance with the Section 88-415 requirements.

Attachment 1

Site Plans

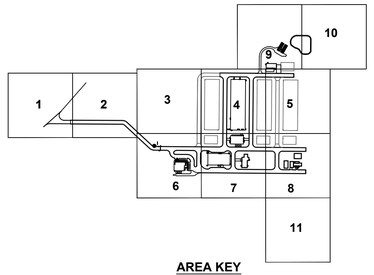
9400 Ward Parkway | Kansas City, MO 64114 | burnsmcd.com

Site Data	Existing	Proposed	Deviation Requested?	Approved
Zoning	AG-R	AG-R	No	
Gross Land Area				
In Square Feet	3,133,136	3,133,136		
In Acres	71.927	71.927		
Right-of-Way Dedication	None	None (Public Utility)		
In Square Feet	N/A	N/A		
In Acres	N/A	N/A		
Net Land Area				
In Square Feet	3,133,136	3,133,136		
In Acres	71.927	71.927		
Building Area (sq. ft.)	71,576	71,576		
Floor Area Ratio	0.0228	0.0228		
Residential Use Info				
Total Dwelling Units	N/A	N/A		
Detached House (units)	N/A	N/A		
Zero Lot Line House (units)	N/A	N/A		
Cottage House (units)	N/A	N/A		
Semi-Attached House (units)	N/A	N/A		
Townhouse (units)	N/A	N/A		
Two-Unit House (duplex) (units)	N/A	N/A		
Multiplex (units)	N/A	N/A		
Colonnade	N/A	N/A		
Multi-Unit Building (units)	N/A	N/A		
Total Lots	N/A	N/A		



DEMOLITION NOTES:

1. CONTRACTOR TO PROTECT ALL TREES THAT WILL NOT BE DESTROYED BY CONSTRUCTION ACTIVITIES. CONTRATOR SHALL REMOVE ONLY THOSE TREES REQUIRED TO GRADE THE SITE TO THE FINAL GRADES SHOWN ON THE GRADING PLAN. IN NO CASE SHALL THE CONTRACTOR REMOVE TREES OR OTHER EXISTING VEGETATION OUTSIDE OF THE LIMITS OF CONSTRUCTION.



AREA KEY

NORTH

0 50' 100'
SCALE IN FEET

FLOOD PLAIN ELEVATIONS
100 YR. 837.00
500 YR. 839.00

KCWATER SERVICES
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL • STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

PRELIMINARY - NOT FOR CONSTRUCTION

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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND DEMOLITION PLAN

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C102

PROJECT NO. 81000927

SHEET 2 OF 40

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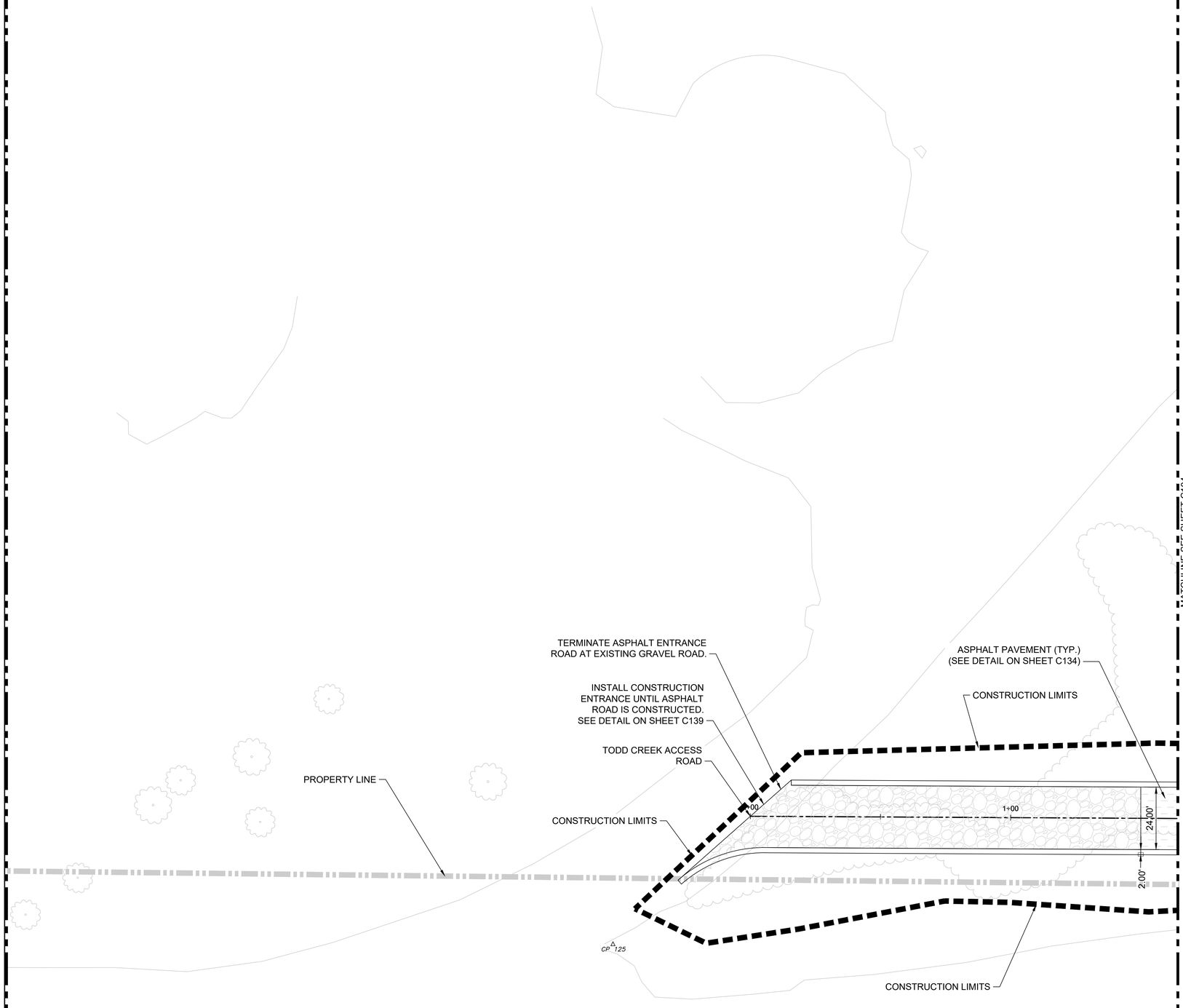
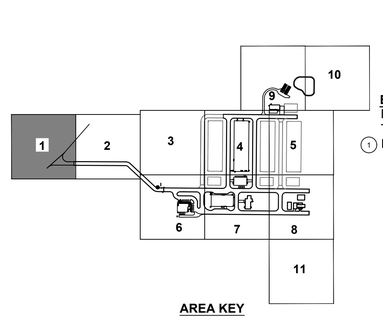


LEGEND

- NEW FENCING
- ASPHALT
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



AREA KEY

ELEVATION NOTES:
FINISHED FLOOR FOR BUILDINGS
TOP OF CONCRETE FOR NON-BUILDING STRUCTURES
(1) DENOTES STRUCTURE LOCATION POINT

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 1

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CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C103

PROJECT NO.	SHEET	OF
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MATCHLINE SEE SHEET C103

MATCHLINE SEE SHEET C105

TREE LINE

TREE LINE

PROPERTY LINE

EXISTING FENCE

EAST LINE, WEST 1/2, NW 1/4, SECTION 1–T52N–R34W

WEST LINE, EAST 1/2, NW 1/4, SECTION 1–T52N–R34W

Unplatted – Parcel 17-1.0-01-000-000-010.000 Ownership: MMT-Midwest Properties LLC

CONSTRUCTION LIMITS

ASPHALT PAVEMENT (TYP.) (SEE DETAIL ON SHEET C134)

30" RCP AND RCP END SECTION (TYP) (SEE DETAIL ON SHEET C134) (SEE PROFILE ON SHEET C133)

REMOVE EXISTING FENCE

2+00 3+00 4+00 5+00 6+00

MAIN ROAD 1

24.00'

2.00'

PC: 5+11.51

R49.00'

MA: 15°25'26"

PT: 5+39.00

R25.00'

6' WIDE CONCRETE FLUME W/ RIP RAP

WEST 1/2, NW 1/4 OF SECTION 1-T52N-R34W UNPLATTED

FLOOD LINE

CONSTRUCTION LIMITS

RIP RAP (6'W X 15'L) (SEE DETAIL ON SHEET C134)

SW CORNER, EAST 1/2,

LEGEND

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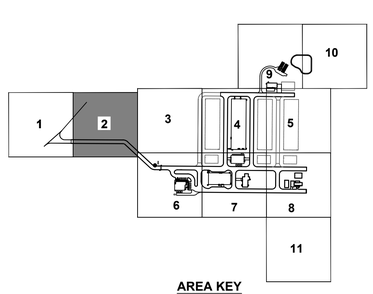
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 2

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C104

PROJECT NO. 81000927

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TREE LINE (Typical)

TREE LINE

FENCE
(SEE DETAILS ON SHEET C136)
(SEE SPEC SEC 02820)

TREE LINE

CONSTRUCTION LIMITS

103

TREE LINE (Typical)

MATCHLINE SEE SHEET C104

MATCHLINE SEE SHEET C106

30" RCP AND RCP END SECTION (TYP)
(SEE DETAIL ON SHEET C134)
(SEE PROFILE ON SHEET C133)

RIP-RAP (7.5'W X 17.25'L)
(SEE DETAIL ON SHEET C134)

CONSTRUCTION LIMITS

EXISTING FENCE

WIRE FENCE

ASPHALT PAVEMENT (TYP.)
(SEE DETAIL ON SHEET C134

2.00'

EXISTING FENCE

MATCHLINE SEE SHEET C108

FENCE AND GATE POST POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
103	1158693.69	2740500.65	FENCE CORNER

LEGEND

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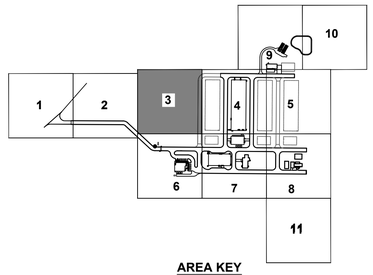

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 3

FOR WSD USE:

KCWATER
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DuBois Consultants CIVIL & STRUCTURAL ENGINEERING
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CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO				DATE COMPLETED	
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C105	
PROJECT NO. 81000927			SHEET 5 OF 40		

Saved 09-12-2025 12:16:53 AM by DAVID
PLOT DATE 9/12/2025 12:25:35 AM by DAVID
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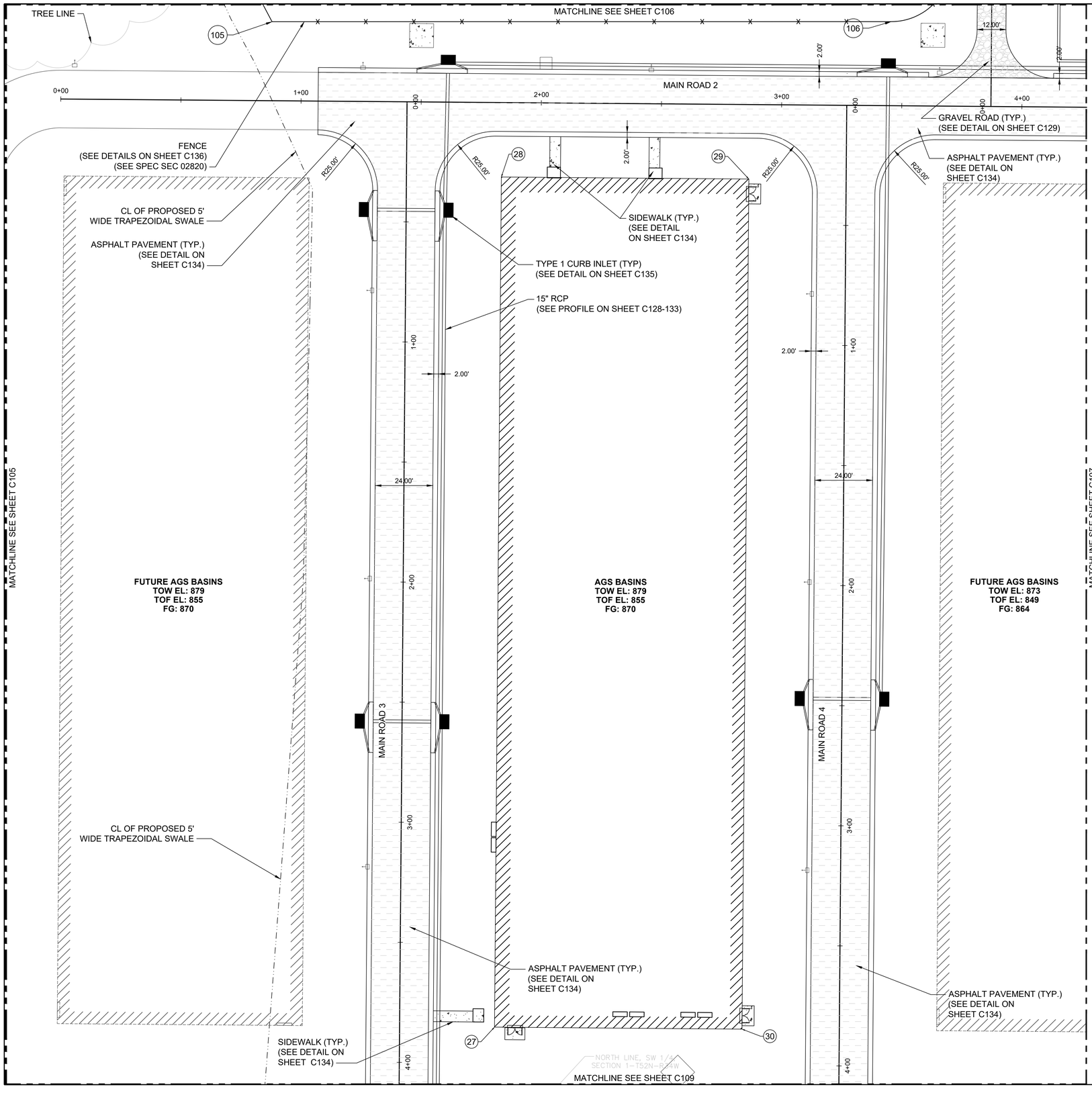
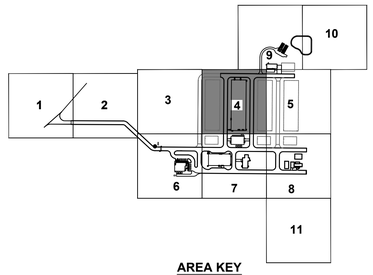


FENCE AND GATE POST POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
105	1158693.69	2740676.53	FENCE CORNER
106	1158693.72	2740934.16	FENCE CORNER

STRUCTURE LOCATION SCHEDULE				
NO	DESCRIPTION	NORTH	EAST	ELEVAT
27	BC	1158275.0314	2740769.1095	870.0
28	BC	1158629.0199	2740771.9574	870.0
29	BC	1158628.1913	2740874.9540	870.0
30	BC	1158274.2028	2740872.1061	870.0

LEGEND

- NEW FENCING
- ASPHALT
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



AREA KEY

ELEVATION NOTES:
FINISHED FLOOR FOR BUILDINGS
TOP OF CONCRETE FOR NON-BUILDING STRUCTURES
(1) DENOTES STRUCTURE LOCATION POINT

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 4

FOR WSD USE:

KCWATER
CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C106

PROJECT NO. 81000927 SHEET 6 OF 40

Saved 09-12-2025 12:15:59 AM by DAVID
PLOT DATE 9/12/2025 12:26:35 AM by DAVID
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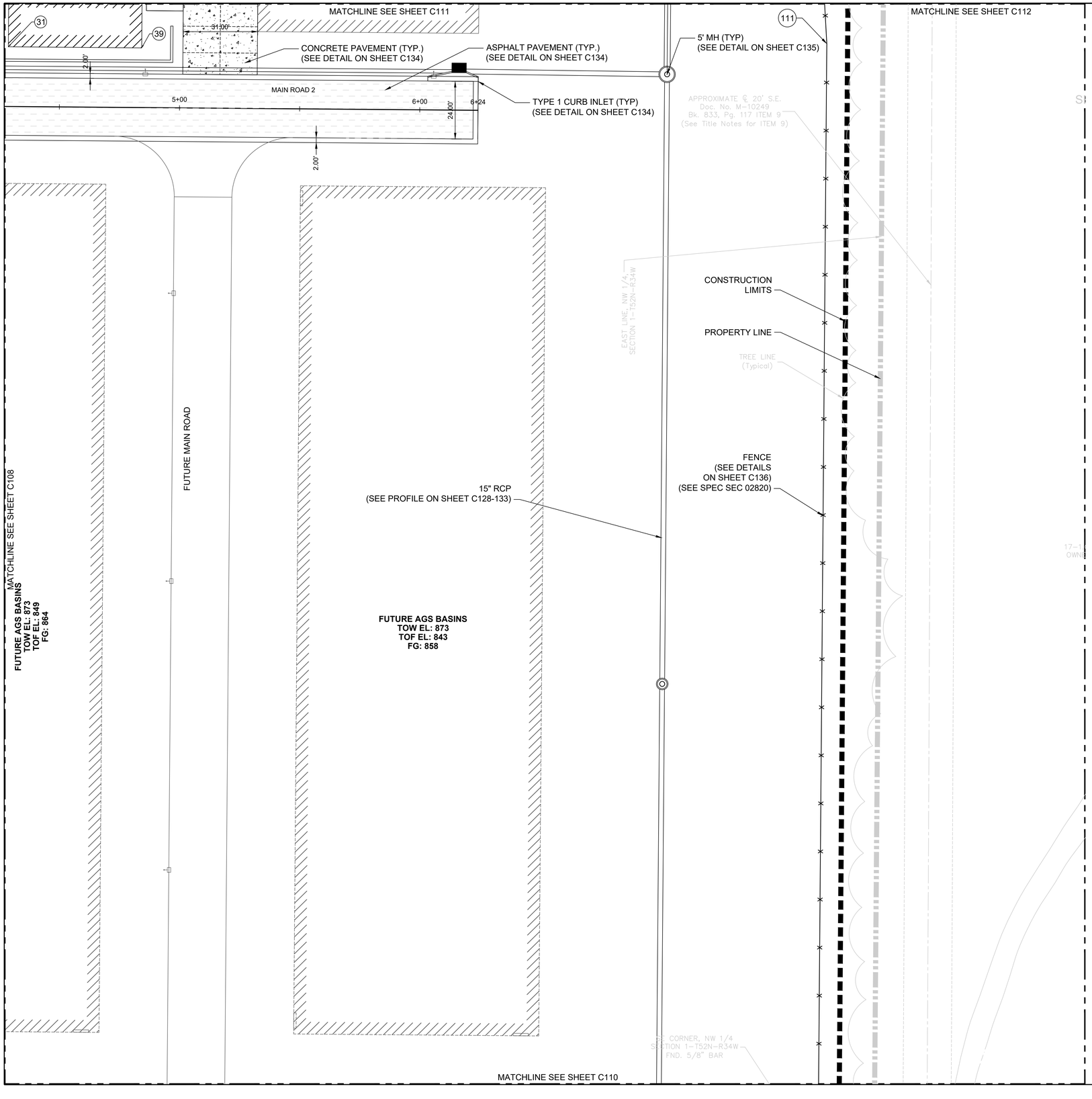
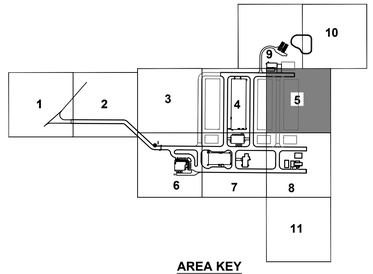


FENCE AND GATE POST POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
111	1158684.18	2741357.99	FENCE CORNER

STRUCTURE LOCATION SCHEDULE				
NO	DESCRIPTION	NORTH	EAST	ELEVATION
31	BC	1158682.8988	2741017.3681	858.00
39	BC	1158682.4529	2741072.8663	858.00

LEGEND

- NEW FENCING
- ASPHALT
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



AREA KEY

ELEVATION NOTES:
FINISHED FLOOR FOR BUILDINGS
TOP OF CONCRETE FOR NON-BUILDING STRUCTURES
① DENOTES STRUCTURE LOCATION POINT

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 5

FOR WSD USE:

KCWATER
CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C107

PROJECT NO. 81000927

SHEET 7 OF 40

Saved 09-12-2025 12:14:38 AM by DAVID
PLOT DATE 9/12/2025 12:27:21 AM by DAVID
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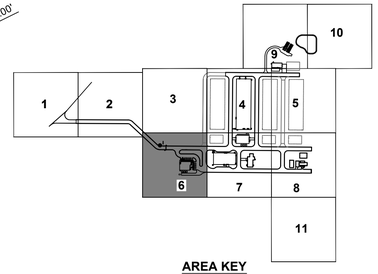
FENCE AND GATE POST POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
100	1158171.67	2740279.96	FENCE CORNER
101	1158170.10	2740475.45	FENCE CORNER
102	1158195.10	2740500.65	FENCE CORNER
113	1157919.52	2740359.71	FENCE CORNER
114	1158077.47	2740360.20	FENCE CORNER
116	1158111.69	2740337.25	FENCE CORNER
117	1158125.33	2740321.67	FENCE CORNER
118	1158125.67	2740279.33	FENCE CORNER

STRUCTURE LOCATION SCHEDULE				
NO	DESCRIPTION	NORTH	EAST	ELEVATION
1	BC	1157990.6875	2740374.6820	875.50
2	BC	1158034.6859	2740375.0333	875.50
3	BC	1158034.6302	2740382.0331	875.50
4	BC	1158050.6294	2740382.1608	875.50
5	BC	1158050.0546	2740454.1586	875.50
6	BC	1158026.0555	2740453.9669	875.50
7	BC	1158026.1113	2740446.9669	875.50
8	BC	1157990.1126	2740446.6794	875.50

LEGEND

- NEW FENCING
- ASPHALT
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



AREA KEY

ELEVATION NOTES:
FINISHED FLOOR FOR BUILDINGS
TOP OF CONCRETE FOR NON-BUILDING STRUCTURES
① DENOTES STRUCTURE LOCATION POINT

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 6

FOR WSD USE:

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C108

PROJECT NO. 81000927

SHEET 8 OF 40

Saved 09-12-2025 12:13:37 AM by DAVID
PLOT DATE 9/12/2025 12:27:37 AM by DAVID
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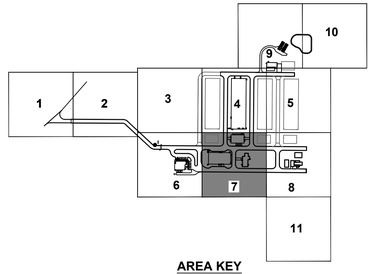
STRUCTURE LOCATION SCHEDULE				
NO	DESCRIPTION	NORTH	EAST	ELEVATION
9	BC	1158030.6317	2740610.9865	872.00
10	BC	1158111.6291	2740611.6381	872.00
11	BC	1158110.3821	2740766.6331	872.00
12	BC	1158029.3848	2740765.9814	872.00
13	BC	1158012.6132	2740848.5906	871.00
14	BC	1158084.1109	2740849.1659	871.00
15	BC	1158083.9889	2740864.3320	871.00
16	BC	1158105.8215	2740864.5077	871.00
17	BC	1158105.6204	2740889.5069	871.00
18	BC	1158083.7877	2740889.3312	871.00
19	BC	1158083.7167	2740898.1643	871.00
20	BC	1158061.7174	2740897.9873	871.00
21	BC	1158061.8059	2740886.9876	871.00
22	BC	1158012.3075	2740886.5894	871.00
23	BC	1158177.5348	2740768.3251	871.00
24	BC	1158235.0327	2740768.7877	871.00
25	BC	1158234.2926	2740860.7843	871.00
26	BC	1158176.7947	2740860.3217	871.00

LEGEND

- NEW FENCING
- ASPHALT
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



AREA KEY

ELEVATION NOTES:
FINISHED FLOOR FOR BUILDINGS
TOP OF CONCRETE FOR NON-BUILDING STRUCTURES
(1) DENOTES STRUCTURE LOCATION POINT

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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A	–	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 7

FOR WSD USE:

KCWATER
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL • STRUCTURAL • ENVIRONMENTAL
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C109

PROJECT NO. 81000927

SHEET 9 OF 40

Saved 09-12-2025 12:12:10 AM by DAVID
PLOT DATE 9/12/2025 12:27:55 AM by DAVID
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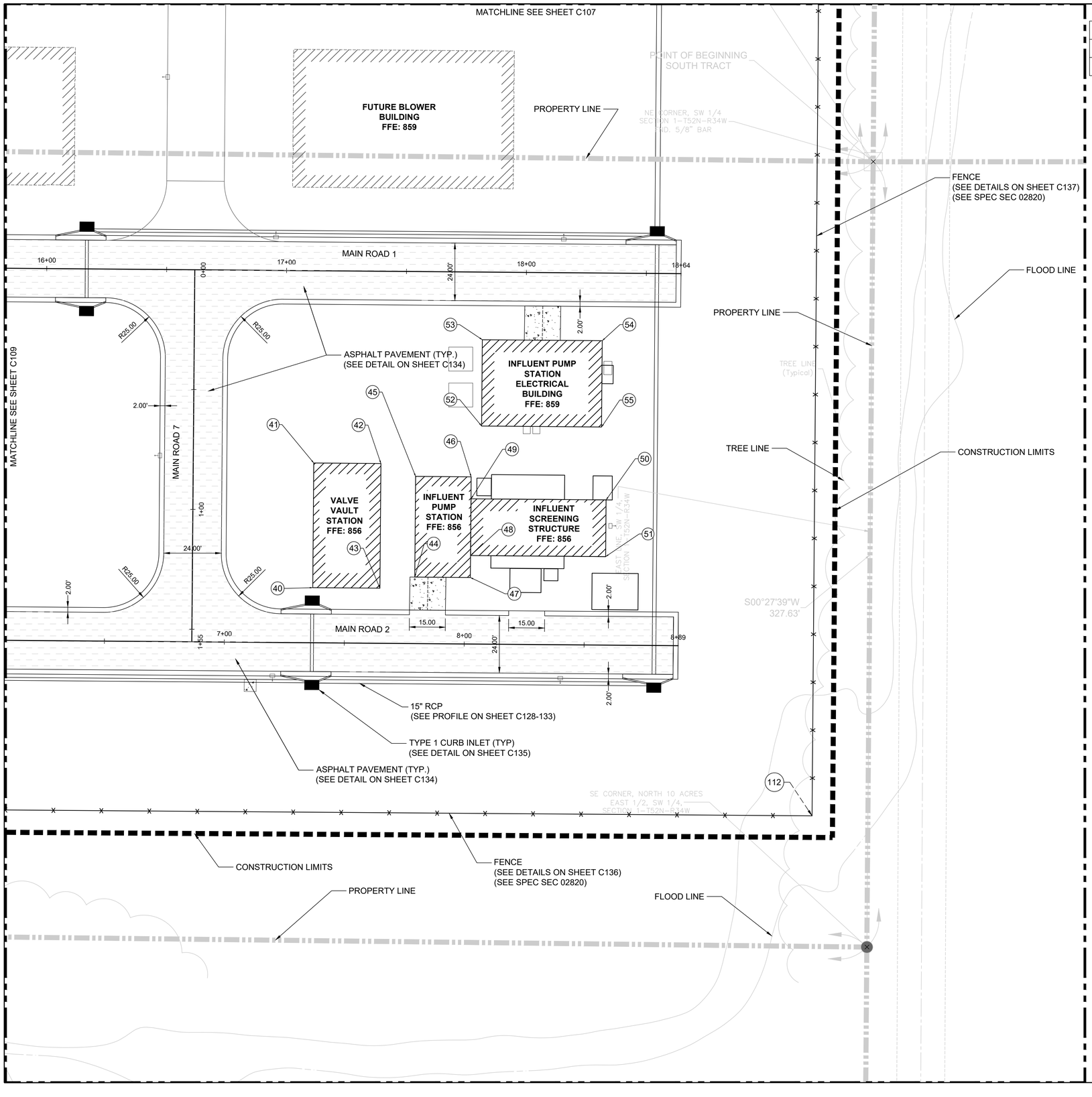
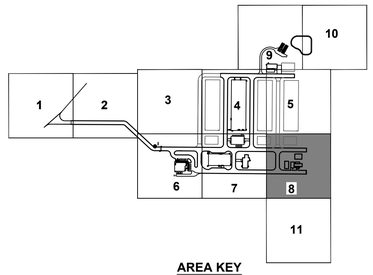


FENCE AND GATE POST POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
112	1157912.31	2741351.89	FENCE CORNER

STRUCTURE LOCATION SCHEDULE				
NO	DESCRIPTION	NORTH	EAST	ELEVATION
40	BC	1158007.5077	2741143.7225	856.00
41	BC	1158059.5061	2741144.1408	856.00
42	BC	1158059.2808	2741172.1399	856.00
43	BC	1158007.2825	2741171.7216	856.00
44	BC	1158011.9157	2741186.2593	856.00
45	BC	1158053.9143	2741186.5972	856.00
46	BC	1158053.7279	2741209.7631	856.00
47	BC	1158011.7293	2741209.4253	856.00
48	BC	1158020.8952	2741209.5593	856.00
49	BC	1158044.5613	2741209.7227	856.00
50	BC	1158044.1084	2741266.0209	856.00
51	BC	1158020.4425	2741265.8305	856.00
52	BC	1158074.9170	2741214.1274	859.00
53	BC	1158110.9158	2741214.4170	859.00
54	BC	1158110.5136	2741264.4154	859.00
55	BC	1158074.5147	2741264.1258	859.00

LEGEND

- NEW FENCING
- ASPHALT
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



AREA KEY

ELEVATION NOTES:
FINISHED FLOOR FOR BUILDINGS
TOP OF CONCRETE FOR NON-BUILDING STRUCTURES
(1) DENOTES STRUCTURE LOCATION POINT

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION
REVISION BLOCK				

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 8

FOR WSD USE:

KCWATER
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL & STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01
CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO				DATE COMPLETED	
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C110	
PROJECT NO.			SHEET	10 OF	40
81000927					

Saved 09-12-2025 12:11:07 AM by DAVID
PLOT DATE 9/12/2025 12:28:15 AM by DAVID
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RACT
00-000-008.000
84.428 Acres±,
treet right of way

/2, NW 1/4,
2N-R34W
nty Deed recorded
o Hunt Midwest
orded as Document
1221, at Page 87,
(Allmon Tract)

HIP:
OPERTIES, LLC
DRESS:
d Dr, Suite 100
64161-0000
(None Assigned)

TREE LINE

CONSTRUCTION LIMITS

RIP RAP

109

CONSTRUCTION LIMITS

DETENTION BASIN

FENCE
(SEE DETAILS ON SHEET C136)
(SEE SPEC SEC 02820)

TREE LINE
(Typical)

CASCADE AERATION TOW EL: 848

FUTURE CASCADE AERATION

110

TREE LINE
(Typical)

RIP-RAP (7.5'W X 17.25'L)
(SEE DETAIL ON SHEET C134)

2+00

R70.00

R38.00

R20.00

R20.00

3+00

ACCESS ROAD 1

3+83

R20.00

R20.00

GRAVEL ROAD (TYP.)
SEE DETAIL ON SHEET C139

PROPOSED BOLLARD (TYP.)
SEE DETAIL, SHEET C134

108

12.00'

1+00

ACCESS ROAD 1

CONSTRUCTION LIMITS

107

35

36

SERIES 600 UV DISINFECTION STRUCTURE FFE: 858

CONCRETE PAVEMENT (TYP.)
(SEE DETAIL ON SHEET C134)

37

34

33

38

32

FUTURE FILTER BUILDING (BY OTHERS)

CONSTRUCTION LIMITS

MATCHLINE SEE SHEET C106

MATCHLINE SEE SHEET C107

MATCHLINE SEE SHEET C107

FENCE AND GATE POST POINTS

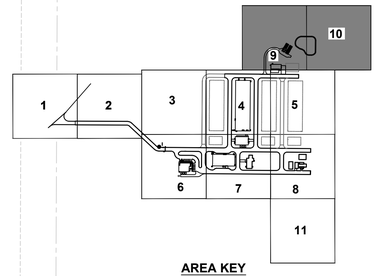
POINT #	NORTHING	EASTING	DESCRIPTION
107	1158718.54	2740959.16	FENCE CORNER
108	1158799.41	2740959.75	FENCE CORNER
109	1158948.20	2741116.00	FENCE CORNER
110	1158947.59	2741343.58	FENCE CORNER

STRUCTURE LOCATION SCHEDULE

NO	DESCRIPTION	NORTH	EAST	ELEVATION
32	BC	1158704.3981	2741017.5408	858.00
33	BC	1158704.3927	2741018.2075	858.00
34	BC	1158708.0593	2741018.2380	858.00
35	BC	1158740.0583	2741018.4940	858.00
36	BC	1158739.4798	2741090.4917	858.00
37	BC	1158707.4808	2741090.2346	858.00
38	BC	1158703.9522	2741073.0390	858.00

LEGEND

- NEW FENCING
- ASPHALT
- CONCRETE
- 2"-3" COURSE AGGREGATE (CONSTRUCTION ENTRANCE)
- RIP RAP
- GATE PEDESTAL MOUNTED CARD READER
- CONSTRUCTION LIMITS



AREA KEY

ELEVATION NOTES:
FINISHED FLOOR FOR BUILDINGS TOP OF CONCRETE FOR NON-BUILDING STRUCTURES
(1) DENOTES STRUCTURE LOCATION POINT

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE AND FENCING PLAN 9

FOR WSD USE:

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C111

PROJECT NO. 81000927

SHEET 11 OF 40

Saved 08-12-2025 12:21:22 AM by DAVID
PLOT DATE 8/12/2025 12:28:39 AM by DAVID
G:\J20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C111-GENERAL SITE AND FENCING PLAN 9.DWG

PROPERTY LINE

CASCADE AERATION TOW EL: 848

FUTURE CASCADE AERATION

CONSTRUCTION LIMITS

SERIES 600 UV DISINFECTION STRUCTURE FFE: 858

10

DETENTION BASIN

RIP RAP

FUTURE FILTER BUILDING (BY OTHERS)

CONSTRUCTION LIMITS

SERIES 400 AGS STRUCTURES FFE: 870

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

9

ACCESS ROAD 1

MAIN ROAD-3

MAIN ROAD-3

CL OF 5' WIDE TRAPEZOIDAL SWALE

5' MH

CONSTRUCTION LIMITS

FUTURE MAIN ROAD

MAIN ROAD-4

MAIN ROAD-5

FUTURE MAIN ROAD

5' MH

PROPERTY LINE

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

SERIES 400 FUTURE BLOWER BUILDING (BY OTHERS)

1

2

3

4

5

CONCRETE FLUMES

CONSTRUCTION LIMITS

TODD CREEK ACCESS ROAD

MAIN ROAD-1

RIP RAP

RIP RAP

SERIES 400 FUTURE BLOWER BUILDING (BY OTHERS)

MAIN ROAD-1

MAIN ROAD-1

INFLUENT PUMP STATION ELECTRIAL FFE: 859

INFLUENT SCREENING STATION FFE: 856

INFLUENT PUMP STATION FFE: 856

INFLUENT VALVE VAULT FFE: 856

MAIN ROAD-2

MAIN ROAD-6

MAIN ROAD-7

MAIN ROAD-2

MAIN ROAD-2

CONSTRUCTION LIMITS

CONCRETE SIDEWALK (TYP)

6

7

8

PROPERTY LINE

SERIES 800 ADMINISTRATION BUILDING FFE: 875.50

EQUIPMENT PAD LOCATIONS REFERENCE ELECTRICAL DRAWINGS

SERIES 700 SOLIDS HANDLING FFE: 872

SERIES 400 BLOWER BUILDING FFE: 871

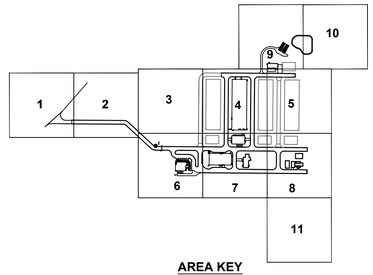
SERIES 300 HEADWORKS BUILDING FFE: 871

APPROXIMATE LIMITS OF FLOODWAY (100 YEAR FLOOD)

CONSTRUCTION LIMITS

NOTES:

1. SEE SHEETS C113 THRU C122 FOR DETAILED GRADING INFORMATION.
2. ALL AREAS TO GRADE TO DRAIN AWAY FROM STRUCTURES.
3. ALL ASPHALT PAVEMENT SHALL BE SLOPED TO DRAIN.



AREA KEY

NORTH

0 100' 200'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL GRADING PLAN

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C112

PROJECT NO. 81000927

SHEET 12 OF 40

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
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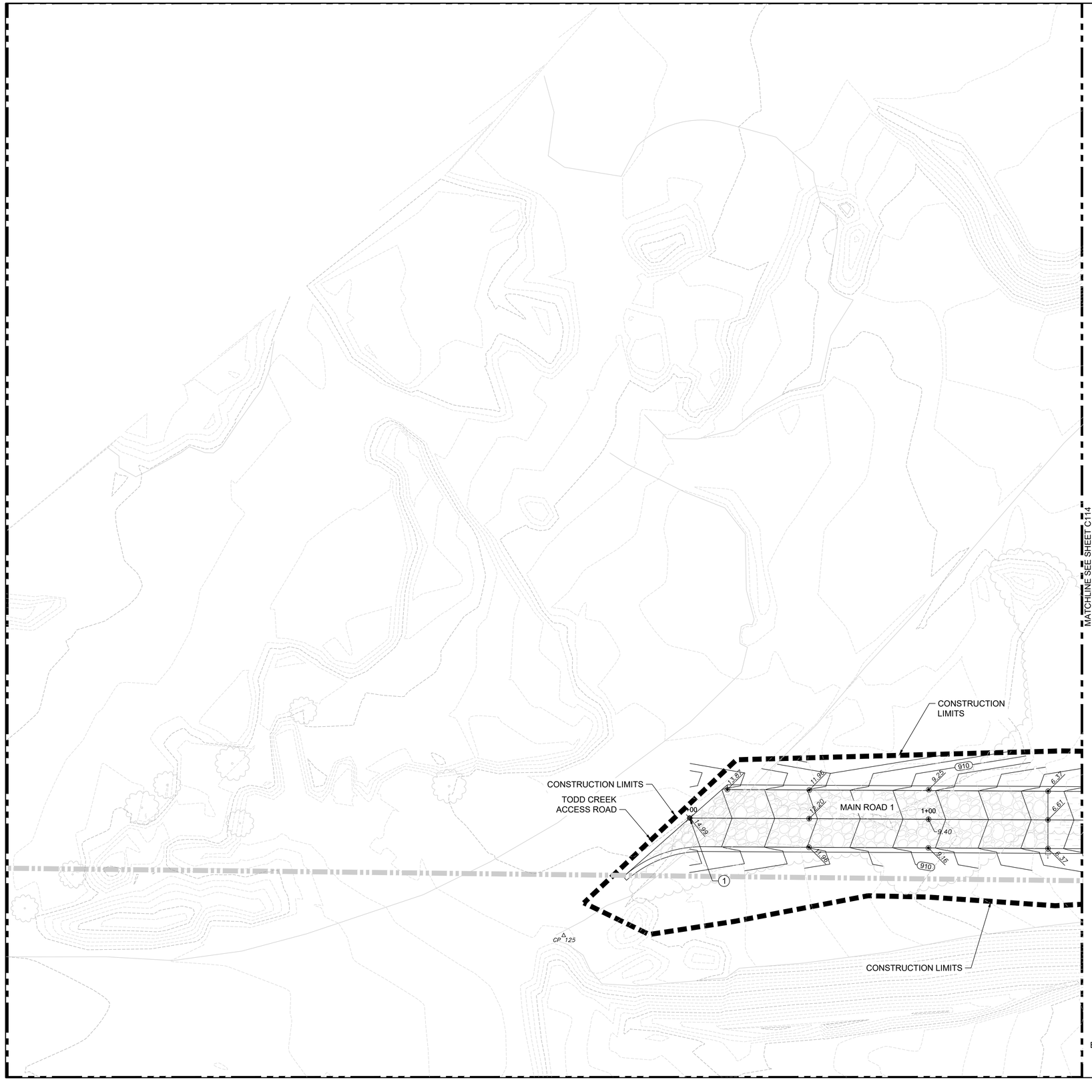
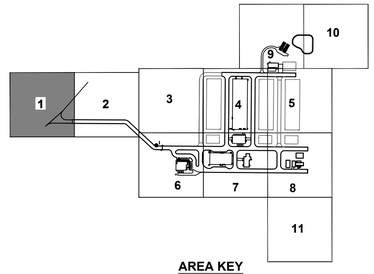
G:\J20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C112-GENERAL GRADING PLAN.DWG

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1158331.2902	2739501.4097	914.99	PI

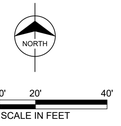


GRADING NOTE:

1. THE FIRST NUMBER OF THE SPOT ELEVATION SHOWN ON THESE PLANS HAS BEEN TRUNCATED. CONTRACTOR SHALL ADD 700, 800 OR 900 TO THE SPOT ELEVATIONS SHOWN TO GET TO ACTUAL PLAN ELEVATIONS. SEE ADJOINING CONTOUR LABELS WHEN DETERMINING ACTUAL ELEVATIONS. ALL CONTOURS LABELS ARE ACTUAL PLAN ELEVATIONS AND REQUIRE NO ADJUSTMENT.



AREA KEY



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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 1

FOR WSD USE:

KCWATER

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MECHANICAL & ELECTRICAL ENGINEERING

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WELLNER architects

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C113

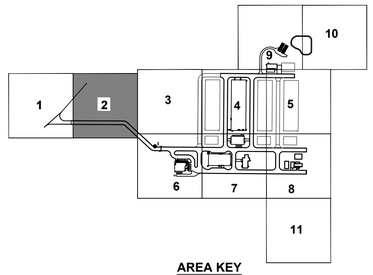
PROJECT NO.	SHEET 13 OF 40
81000927	

Saved 09-12-2025 12:07:00 AM by DAVID
PLOT DATE 9/12/2025 12:29:34 AM by DAVID
O:\J20004 - TODD CREEK CIVIL\07-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C113-GRADING PLAN 1.DWG

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
2	1158291.6339	2740012.7222	885.03	CTR
3	1158328.6334	2740012.9144	886.41	BC
4	1158326.0401	2740026.3316	885.68	MID
5	1158318.7534	2740037.8923	885.03	EC
11	1158328.5585	2740027.3277	885.68	PI

GRADING NOTE:

1. THE FIRST NUMBER OF THE SPOT ELEVATION SHOWN ON THESE PLANS HAS BEEN TRUNCATED. CONTRACTOR SHALL ADD 700, 800 OR 900 TO THE SPOT ELEVATIONS SHOWN TO GET TO ACTUAL PLAN ELEVATIONS. SEE ADJOINING CONTOUR LABELS WHEN DETERMINING ACTUAL ELEVATIONS. ALL CONTOURS LABELS ARE ACTUAL PLAN ELEVATIONS AND REQUIRE NO ADJUSTMENT.



AREA KEY

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 2

FOR WSD USE:

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WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01
CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO				DATE COMPLETED	
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C114	
PROJECT NO.			SHEET	14 OF	40
81000927					

Saved 09-12-2025 12:06:59 AM by DAVID
PLOT DATE 9/12/2025 12:29:58 AM by DAVID
G:\20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C114-GRADING PLAN 2.DWG

(Typical)

TREE-LINE
(Typical)

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

CONSTRUCTION
LIMITS

MATCHLINE SEE SHEET C114

MATCHLINE SEE SHEET C116

CONSTRUCTION
LIMITS

RIP RAP

975

980

3:1

3:1

MATCHLINE SEE SHEET C118

AREA KEY

PRELIMINARY - NOT FOR CONSTRUCTION

NORTH

0 10' 20' 40'
SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 3

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C115

PROJECT NO.	SHEET 15 OF 40
81000927	

Saved 09-12-2025 12:06:57 AM by DAVID
PLOT DATE 9/12/2025 12:30:20 AM by DAVID
G:\J20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C115-GRADING PLAN 3.DWG

MATCHLINE SEE SHEET C121

MAIN ROAD 2

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

CL OF PROPOSED 5'
WIDE TRAPEZOIDAL SWALE

SIDEWALK (TYP.)
(SEE DETAIL
ON SHEET C134)

MAIN ROAD 3

MAIN ROAD 4

FUTURE AGS BASINS
TOW EL: 879
TOF EL: 855
FG: 870

AGS BASINS
TOW EL: 879
TOF EL: 855
FG: 870

FUTURE AGS BASINS
TOW EL: 873
TOF EL: 849
FG: 864

CL OF PROPOSED 5'
WIDE TRAPEZOIDAL SWALE

SIDEWALK (TYP.)
(SEE DETAIL ON
SHEET C134)

FOR DOOR STOOP
DETAILS (TYP)
(SEE STRUCTURAL
DRAWINGS)

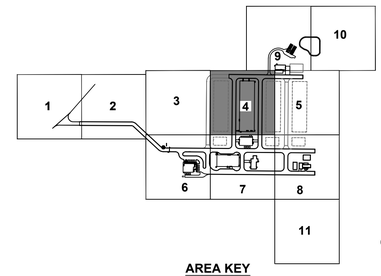
NORTH LINE, SW 1/4
SECTION 1-T52N-R34W

MATCHLINE SEE SHEET C119

MATCHLINE SEE SHEET C115

MATCHLINE SEE SHEET C117

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
20	1158661.4962	2740588.6091	868.66	BRD3
21	1158660.3376	2740732.7056	867.26	BRD4
22	1158658.8663	2740915.6997	865.50	BRD5
43	1158658.3839	2740975.6995	863.80	BACRD1



AREA KEY

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	–	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 4

FOR WSD USE:

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MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C116

PROJECT NO. 81000927

SHEET 16 OF 40

Saved 09-11-2025 10:57:19 PM by DAVID
PLOT DATE: 9/12/2025 12:30:50 AM by DAVID
G:\J20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C116-GRADINGPLAN 4.DWG

MATCHLINE SEE SHEET C121

MATCHLINE SEE SHEET C122

MATCHLINE SEE SHEET C116

MATCHLINE SEE SHEET C120

MAIN ROAD 2

FUTURE MAIN ROAD

FUTURE FILTER BUILDING (BY OTHERS)

SERIES 600 UV DISINFECTION STRUCTURE FFE: 858

CONCRETE PAVEMENT (TYP.) (SEE DETAIL ON SHEET C134)

FUTURE AGS BASINS TOW EL: 873 TOF EL: 843 FG: 858

APPROXIMATE ℄ 20' S.E. Doc. No. M-10249 Bk. 833, Pg. 117 ITEM 9 (See Title Notes for ITEM 9)

EAST LINE, NW 1/4, SECTION 1-T52N-R34W

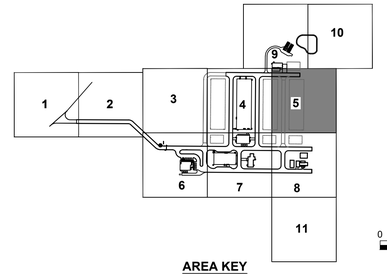
TREE LINE (Typical)

CONSTRUCTION LIMITS

FENCE (TYP.) (SEE DETAIL ON SHEET C136)

SE CORNER, NW 1/4, SECTION 1-T52N-R34W FND. 5/8" BAR

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
23	1158656.4934	2741210.8189	855.86	PI



AREA KEY

NORTH

0 10' 20' 40'

SCALE IN FEET

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
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REVISION BLOCK

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DuBois Consultants CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

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KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

FOR WSD USE:

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 5

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C117

PROJECT NO. 81000927

SHEET 17 OF 40

Saved 09-11-2025 11:08:00 PM by DAVID
PLOT DATE 9/12/2025 12:31:19 AM by DAVID
G:\Z0004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C117-GRADING PLAN 5.DWG

MATCHLINE SEE SHEET C115

CONSTRUCTION LIMITS

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

MAIN ROAD 2

MAIN ROAD 1

WIRE FENCE

SEE SPECIFICATION 02765
FOR PAVEMENT MARKING

DRIVEWAY 1
1+00

TREE LINE
(Typical)

SIDEWALK (TYP)
(SEE DETAIL ON DRAWING C134)

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

DROP FOOTING TO
ACCOMMODATE
PROPOSED GRADES.
(SEE STRUCTURAL PLANS.

ADMIN BUILDING
FFE: 875.50

CONSTRUCTION LIMITS

PROPOSED ELECTRICAL
PAD (TYP)

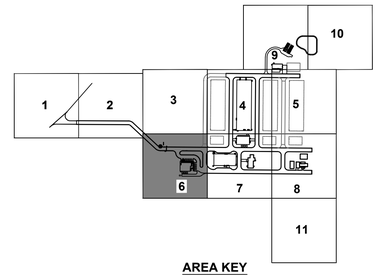
FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

CONSTRUCTION LIMITS

FLOOD LINE

MATCHLINE SEE SHEET C119

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
6	1158184.0098	2740237.4604	883.30	CTR
7	1158156.8904	2740212.2902	884.65	BC
8	1158149.6230	2740223.8022	883.98	MID
9	1158147.0110	2740237.1632	883.30	EC
12	1158147.1263	2740222.8105	883.98	PI
13	1158144.5180	2740547.4542	875.00	BRD2
15	1158026.3058	2740546.5044	873.80	BC
16	1158000.0566	2740557.1309	873.51	MID
19	1157989.3070	2740546.2072	873.51	PI
28	1158146.0405	2740357.9478	877.38	BDRWY1
29	1158119.0053	2740357.7268	876.93	BC
30	1158091.7330	2740384.6446	875.78	EC
31	1158118.7841	2740384.7773	877.04	CTR
32	1158091.0832	2740465.9888	875.25	BC
33	1158054.0844	2740465.6932	875.20	CTR
34	1158080.0265	2740492.0752	874.85	MID
35	1158053.7578	2740502.6918	874.46	EC
36	1158033.7796	2740502.5154	874.19	BC
37	1158002.8749	2740519.9103	873.68	MID
38	1158033.6408	2740538.4197	873.70	CTR
39	1158001.9853	2740555.3628	873.56	EC
40	1158099.7814	2740365.5243	876.08	MID



AREA KEY

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 6

FOR WSD USE:

KCWATER

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MECHANICAL & ELECTRICAL ENGINEERING

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CIVIL & STRUCTURAL ENGINEERING

WELLNER architects

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9400 WARD PARKWAY
KANSAS CITY, MO 64114
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816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01
CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO			DATE COMPLETED		
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C118	
PROJECT NO.			SHEET	18 OF	40
81000927					

Saved 09-11-2025 11:14:14 PM by DAVID
PLOT DATE 9/12/2025 12:31:46 AM by DAVID
G:\20\0004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C118-GRADING PLAN 6.DWG

MATCHLINE SEE SHEET C116

MATCHLINE SEE SHEET C118

MATCHLINE SEE SHEET C120

FUTURE BLOWER BUILDING FFE: 871

CONCRETE PAVEMENT (TYP.) (SEE DETAIL ON SHEET C134)

SIDEWALK (TYP.) (SEE DETAIL ON SHEET C134)

BLOWER BUILDING FFE: 871

FUTURE BLOWER BUILDING FFE: 865

MAIN ROAD-1

MAIN ROAD-2

MAIN ROAD-4

MAIN ROAD-5

MAIN ROAD-6

PIPE BOLLARD ON EACH SIDE OF OVERHEAD DOOR (TYP) (SEE DETAIL ON SHEET C134)

SOLIDS BUILDING FFE: 872

SERIES 300 HEADWORKS BUILDING ELEV: 871

PROPOSED BOLLARD (TYP.) (SEE DETAIL SHEET C134)

ASPHALT PAVEMENT (TYP.) (SEE DETAIL, SHEET C134)

FENCE (SEE DETAILS ON SHEET C136) (SEE SPEC SEC 02820)

CONSTRUCTION LIMITS

TREE LINE

PROPERTY LINE

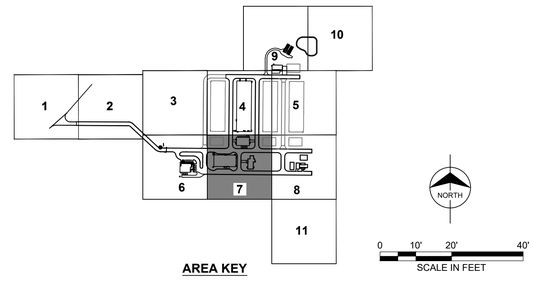
FLOOD LINE

FLOOD LINE

TREE LINE (Typical)

SOUTH LINE NORTH 1/2 OF THE EAST 1/2 SECTION 36 T52N – R34W

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
14	1158026.0085	2740583.5032	872.91	CTR
17	1157989.0097	2740583.2060	872.91	EC
24	1158143.0630	2740728.5502	871.86	ERD4
25	1158142.5838	2740788.2330	870.83	BRD6
26	1158141.5927	2740911.5443	870.00	ERD5
41	1157987.3726	2740786.9861	868.73	ERD6



AREA KEY

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 7

FOR WSD USE:

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MECHANICAL & ELECTRICAL ENGINEERING

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WELLNER architects

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Burns & McDonnell Engineering Co, Inc
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LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C119

PROJECT NO. 81000927

SHEET 19 OF 40

Saved 09-12-2025 12:51:23 AM by DAVID
PLOT DATE 9/12/2025 12:52:17 AM by DAVID
G:\20\0004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C119-GRADING PLAN 7.DWG

MATCHLINE SEE SHEET C117

MATCHLINE SEE SHEET C119

FUTURE BLOWER BUILDING FFE: 859

INFLUENT PUMP STATION ELECTRICAL BUILDING FFE: 859

VALVE VAULT STATION FFE: 856

INFLUENT PUMP STATION FFE: 856

INFLUENT SCREENING STRUCTURE FFE: 856

MAIN ROAD 1

MAIN ROAD 2

MAIN ROAD 7

PROPERTY LINE

FENCE
(SEE DETAILS ON SHEET C136)
(SEE SPEC SEC 02820)

FLOOD LINE

TREE LINE

CONSTRUCTION LIMITS

ASPHALT PAVEMENT (TYP.)
(SEE DETAIL ON SHEET C134)

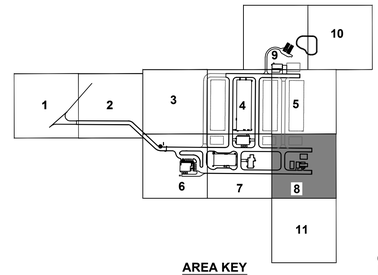
POINT OF BEGINNING
SOUTH TRACT

NE CORNER SW 1/4
SECTION 1-50N-R34W
MO. BASE BAR

SE CORNER SW 1/4
SECTION 1-50N-R34W

S00°27'39"W
327.69'

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	1158138.4935	2741297.2798	860.00	PI
18	1157983.2828	2741296.0579	856.00	PI
27	1158140.1224	2741094.5403	858.20	BRD7
42	1157984.9118	2741093.2922	856.17	ERD7



AREA KEY

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A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 8

FOR WSD USE:

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01
CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO			DATE COMPLETED		
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C120	
PROJECT NO. 81000927		SHEET 20 OF 40			

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CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
44	1158788.5219	2740976.7451	856.69	BC
45	1158788.0078	2741040.7430	853.37	CTR
46	1158843.6748	2741009.1649	852.79	MID
47	1158843.2030	2741073.1388	845.99	EC
48	1158793.3574	2741158.0343	843.17	EACRD1

FENCE
(SEE DETAILS ON SHEET C136)
(SEE SPEC SEC 02820)

CONSTRUCTION LIMITS

DETENTION BASIN
(SEE DETAIL SHEET C137)

FUTURE CASCADE AERATION

CASCADE AERATION TOW EL: 848

RIP RAP

TREE LINE (Typical)

Approx limits of Floodway Areas in Zone AE (100 Year Flood)

ACCESS ROAD 1

SWALE CL

CONCRETE PAVEMENT (TYP.)
(SEE DETAIL ON SHEET C134)

PROPOSED BOLLARD (TYP.)
(SEE DETAIL SHEET C134)

GRAVEL ROAD (TYP.)
(SEE DETAIL ON SHEET C123)

FOR DOOR STOOP DETAILS (TYP)
(SEE STRUCTURAL SHEETS)

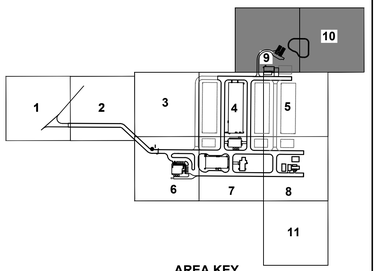
SERIES 600
UV DISINFECTION
STRUCTURE
FFE: 858

FUTURE FILTER
BUILDING
(BY OTHERS)

MATCHLINE SEE SHEET C116

MATCHLINE SEE SHEET C117

MATCHLINE SEE SHEET C117



AREA KEY

NORTH

0 10' 20' 40'
SCALE IN FEET

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 9

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WELLNER architects
BURNS McDONNELL
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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C121

PROJECT NO. 81000927

SHEET 21 OF 40

Saved 09-11-2025 11:49:12 PM by DAVID
PLOT DATE 9/12/2025 12:32:55 AM by DAVID
G:\20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C121-GRADING PLAN 9.DWG

RIP RAP

RIP RAP

CONSTRUCTION LIMITS

DETENTION BASIN
(SEE DETAIL ON SHEET C137)

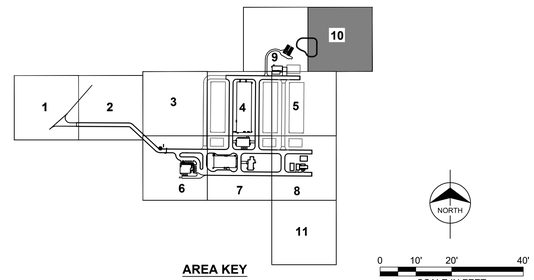
FENCE
(SEE DETAILS ON SHEET C137)
(SEE SPEC SEC 02820)

RIP RAP

CONSTRUCTION LIMITS

MATCHLINE SEE SHEET C121

MATCHLINE SEE SHEET C117



AREA KEY

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 10

FOR WSD USE:

KCWATER

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MECHANICAL & ELECTRICAL ENGINEERING

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WELLNER architects

BURNS McDONNELL
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KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C122

PROJECT NO.	SHEET 22 OF 40
81000927	

Saved 09-11-2025 11:51:51 PM by DAVID
PLOT DATE 9/12/2025 12:33:16 AM by DAVID
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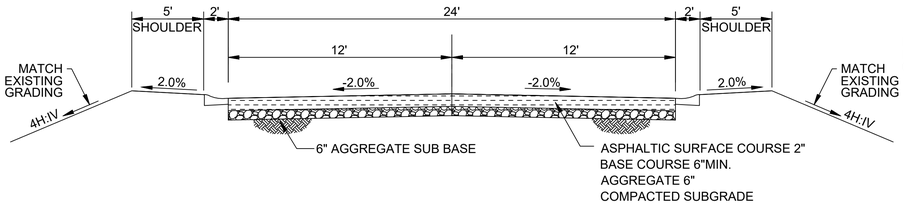
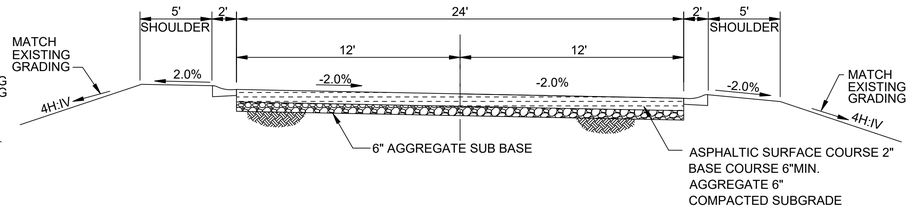
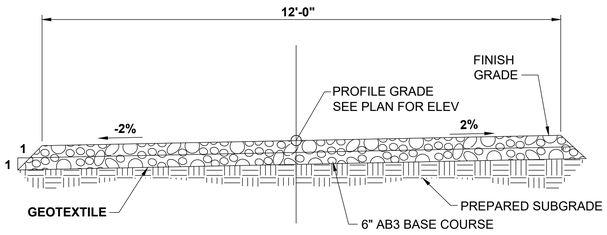


TYPICAL ASPHALT ROAD SECTION
NOT TO SCALE



TYPICAL 2% CROSS SLOPE ASPHALT ROAD SECTION
NOT TO SCALE



ACCESS ROAD 1
NOT TO SCALE

SIGN LEGEND

= STOP SIGN

= HANDICAP PARKING SIGN

NOTES:

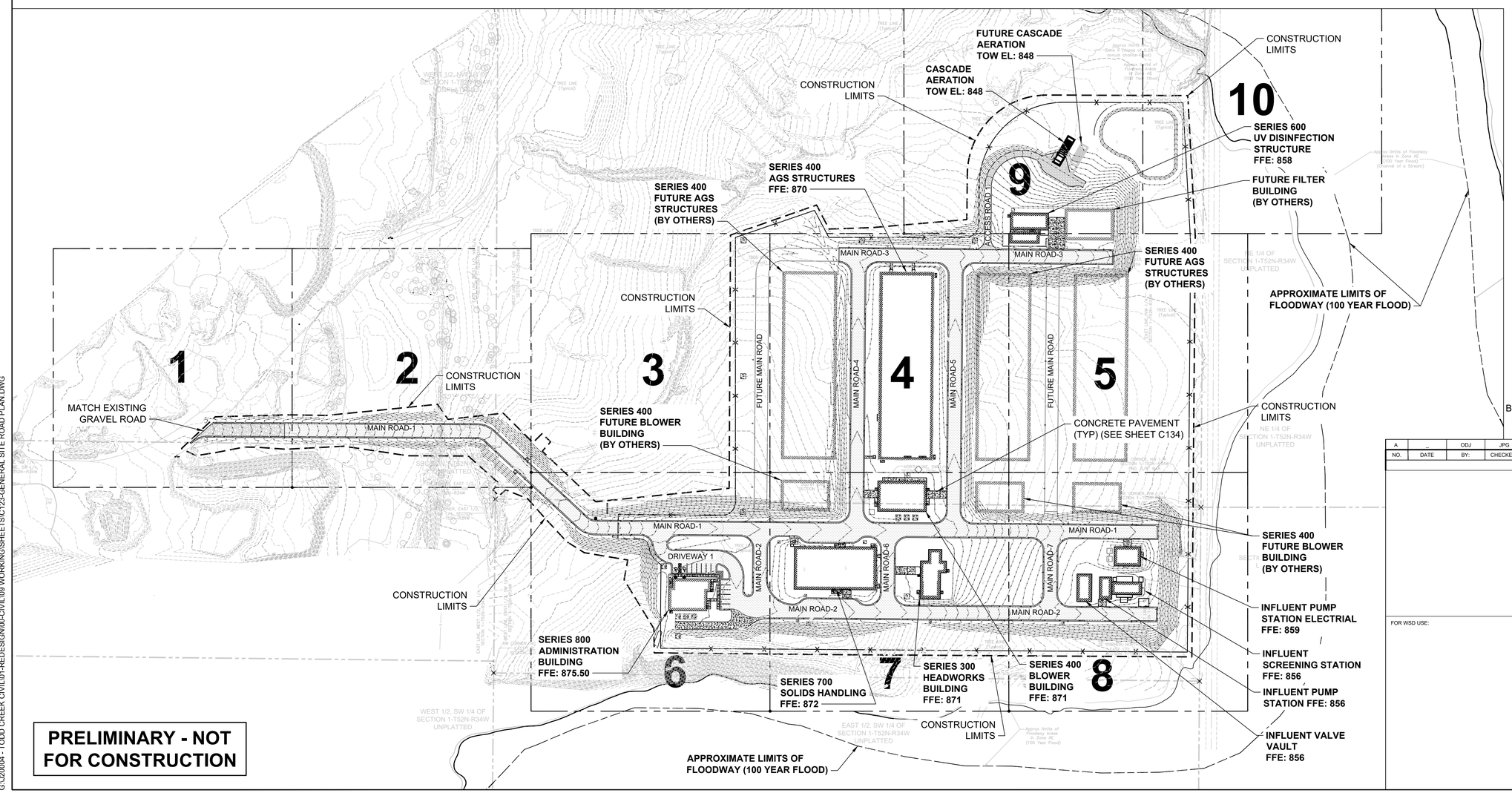
1. SEE SHEET C103-C111 FOR FENCE COORDINATE TABLES.
2. SEE SHEET C134 FOR PAVEMENT DETAILS.
3. SEE SHEET C134 FOR CONCRETE WALK DETAILS.
4. MAINTAIN 20' CLEAR ZONE CENTERED ON FENCE.

PAVEMENT LEGEND

= ASPHALTIC PAVEMENT

= CONCRETE SIDEWALK

= GRAVEL SURFACING



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NORTH
0 50' 100'
SCALE IN FEET

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GENERAL SITE ROAD PLAN

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C123

PROJECT NO. 81000927 SHEET 23 OF 40

Saved 09-11-2025 11:54:07 PM by DAVID
PLOT DATE 9/12/2025 12:33:25 AM by DAVID
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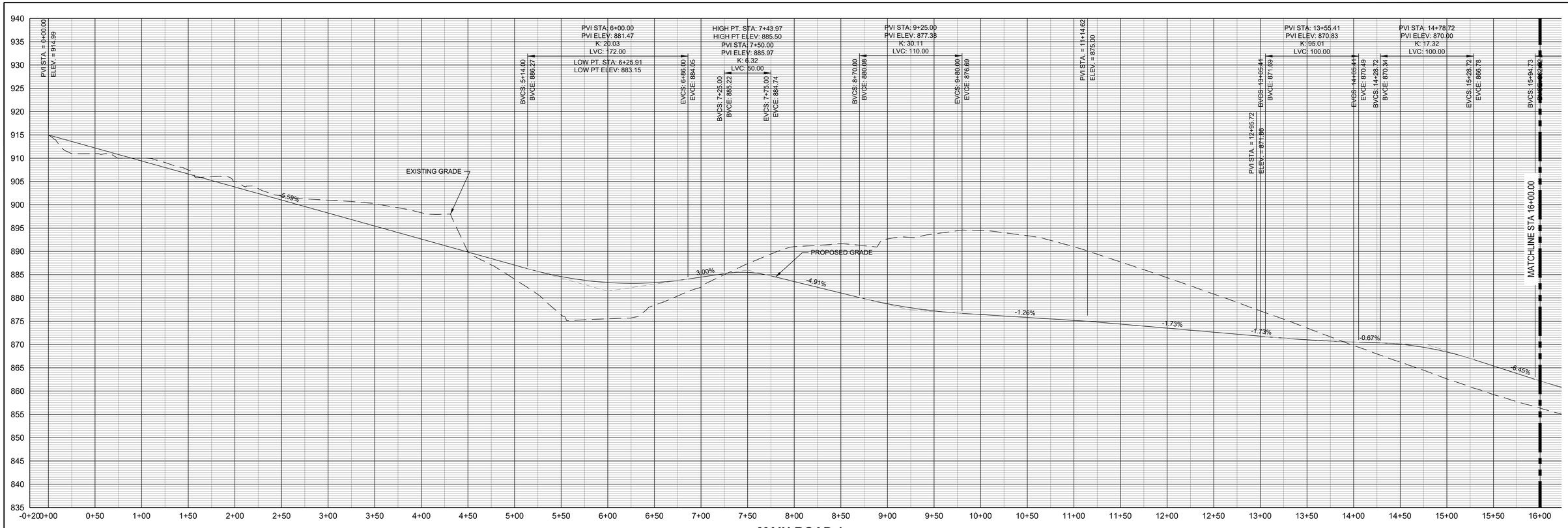
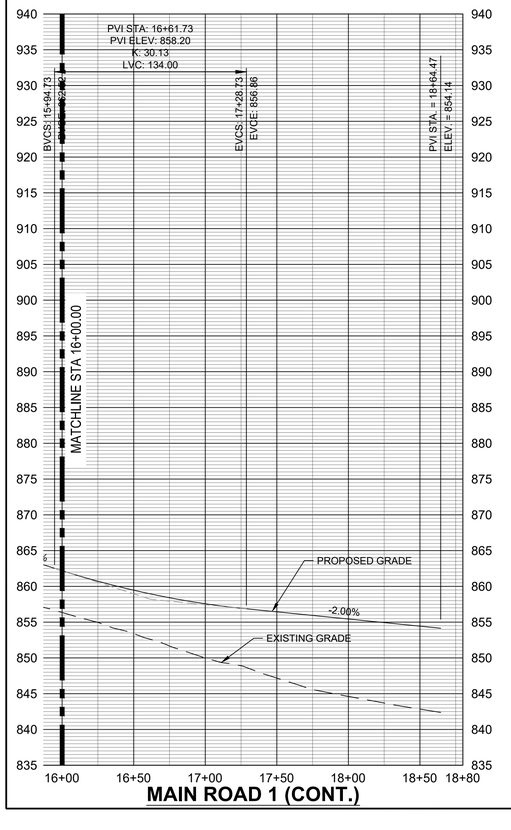


MAIN ROAD 1



MAIN ROAD 1 (CONT.)

0 10' 20'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 50' 100'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

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TODD CREEK WWTP EXPANSION AND UPGRADE

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ROAD PROFILES 1

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C124

PROJECT NO. 81000927

SHEET 24 OF 40

Saved 09-11-2025 11:55:11 PM by DAVID
PLOT DATE 9/12/2025 12:33:36 AM by DAVID
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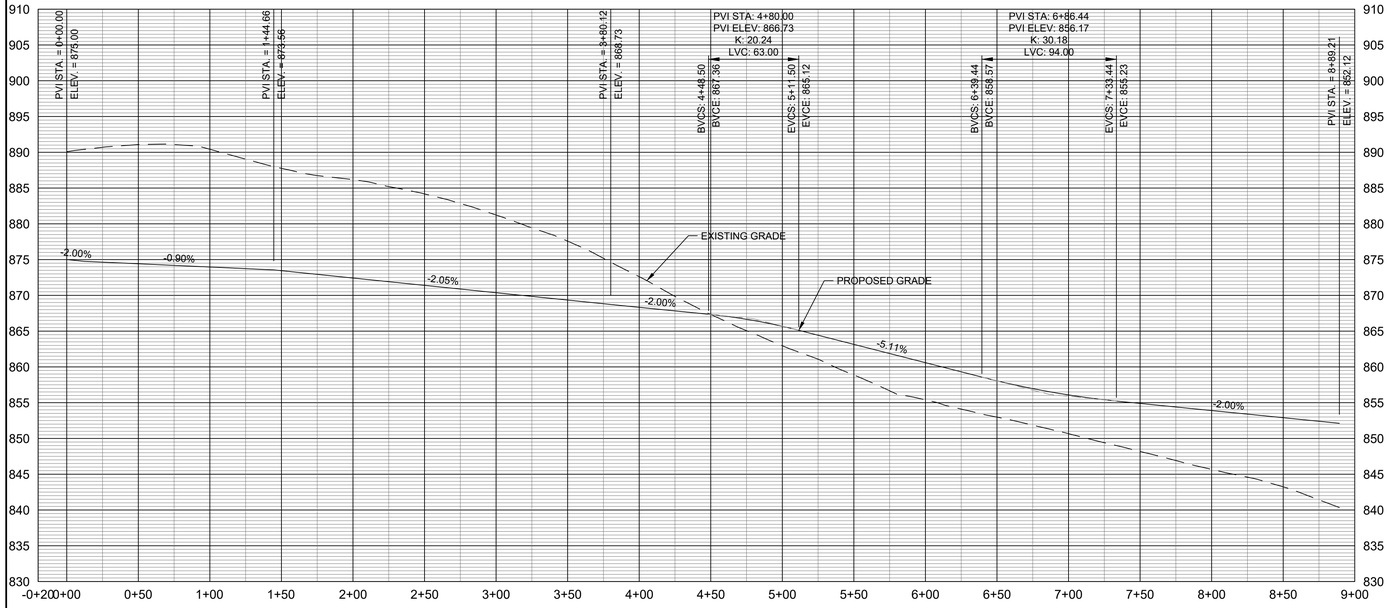
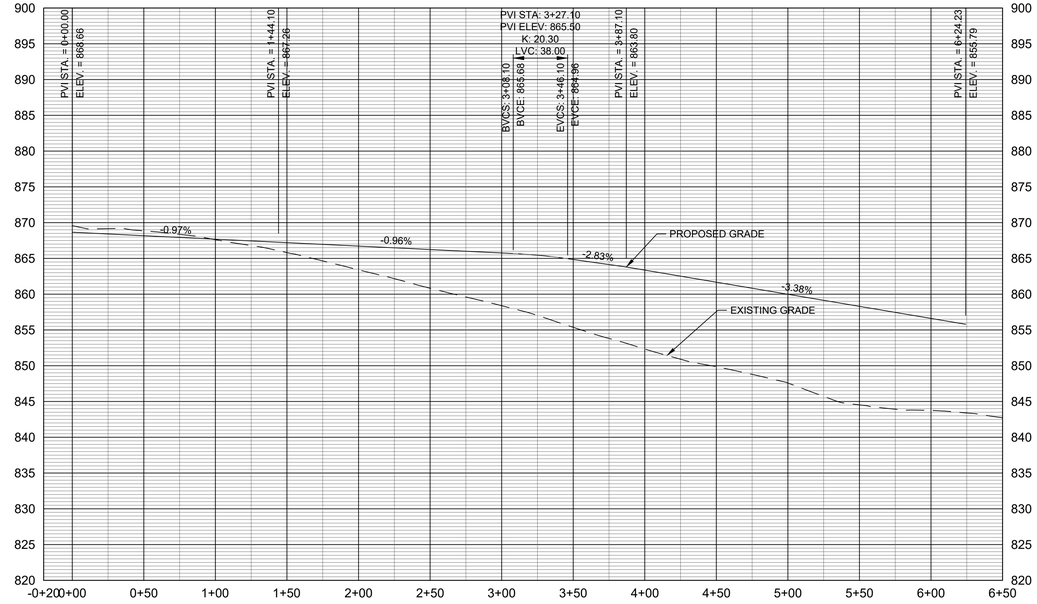
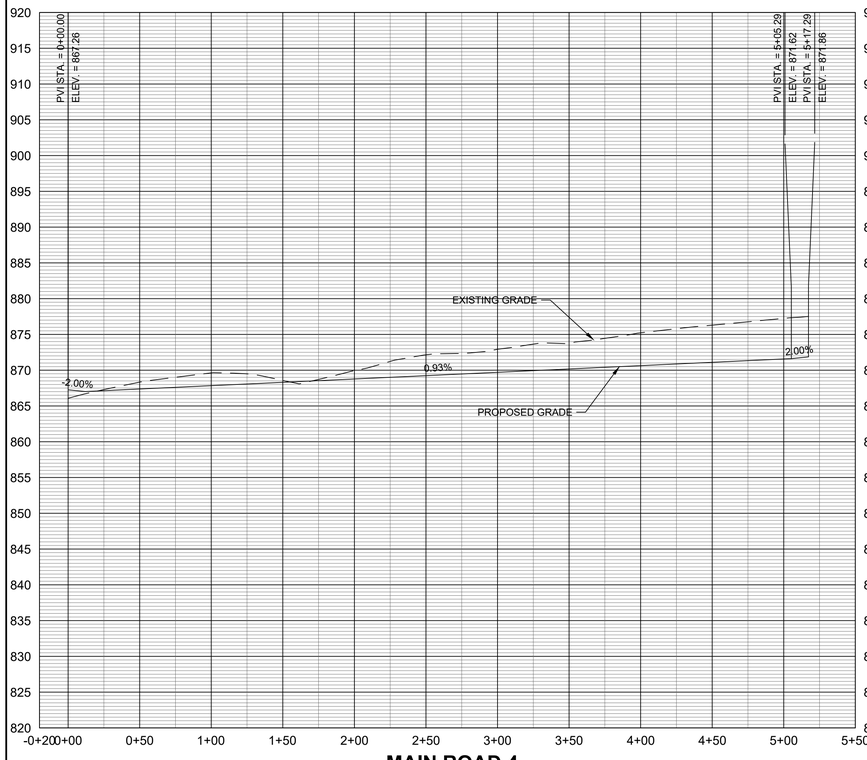


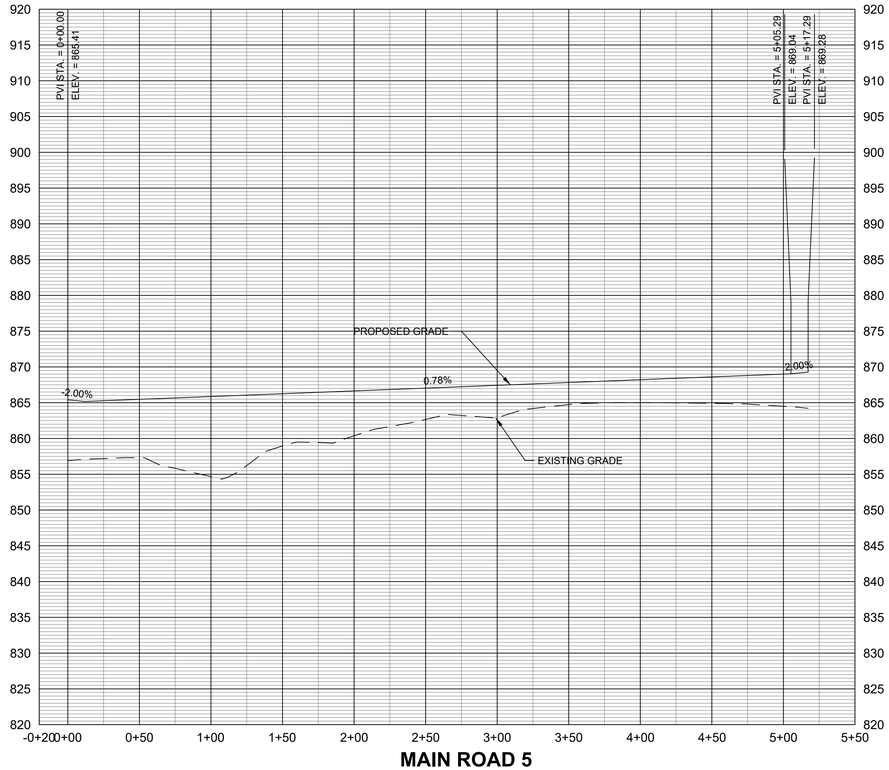
MAIN ROAD 2



MAIN ROAD 3



MAIN ROAD 4



MAIN ROAD 5

KCWATER SERVICES

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CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL

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KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

0 10' 20'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 50' 100'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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ROAD PROFILES 2-5

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C125

PROJECT NO. 81000927

SHEET 25 OF 40

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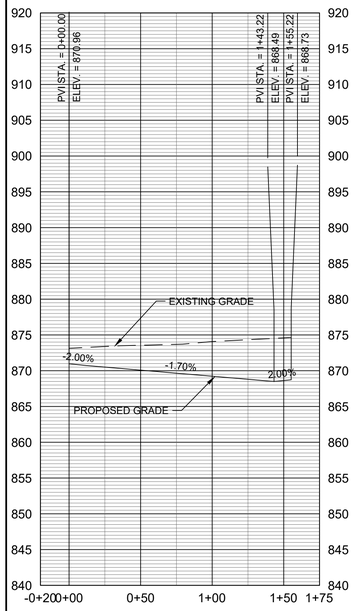
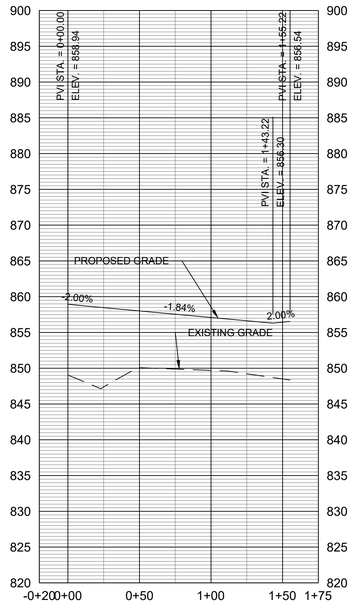
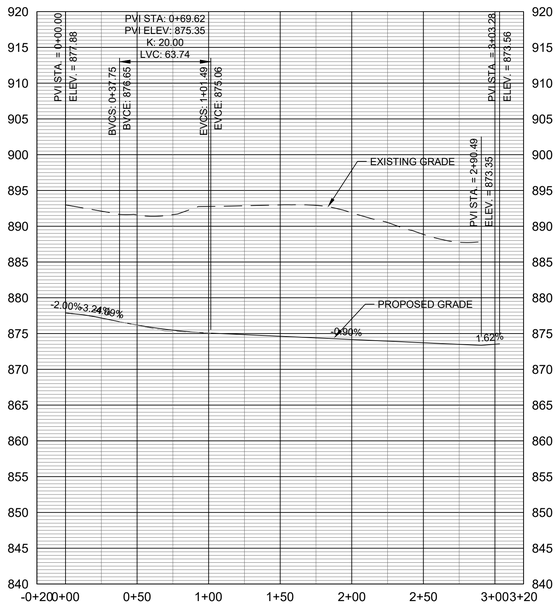


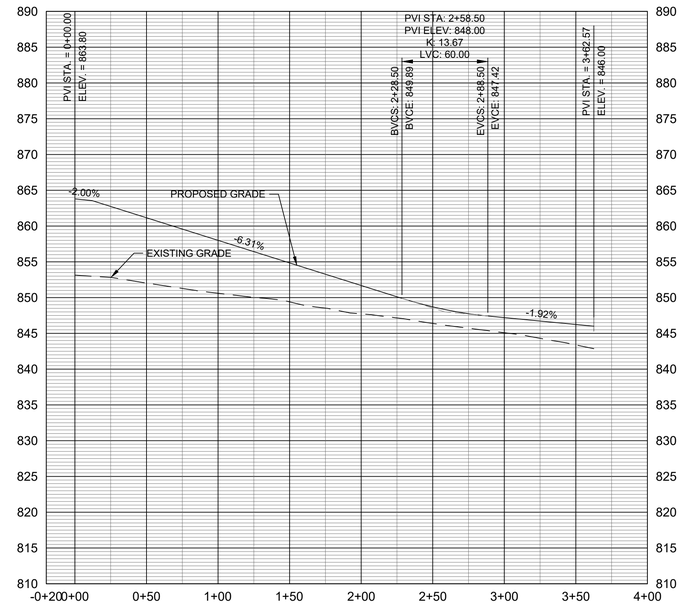
MAIN ROAD 6



MAIN ROAD 7



DRIVEWAY 1



ACCESS ROAD 1

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0 10' 20'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 50' 100'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

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ROAD PROFILES 6-7, DRIVEWAY 1 AND ACCESS ROAD 1

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C126

PROJECT NO. 81000927

SHEET 26 OF 40

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STORMWATER SCHEDULE				
NO	DESCRIPTION	NORTHING	EASTING	INVERT ELEVATION
1	CURB INLET	1158130.31	2740313.61	872.39
2	CURB INLET	1158162.49	2740313.78	872.23
3	CURB INLET	1158160.97	2740502.58	868.11
4	CURB INLET	1158159.63	2740683.74	866.21
5	CURB INLET	1158192.93	2740745.04	864.12
6	CURB INLET	1158402.22	2740746.72	862.89
7	CURB INLET	1158615.23	2740748.44	860.90
8	CURB INLET	1158676.29	2740749.87	860.59
9	CURB INLET	1158674.82	2740933.03	856.23
10	CURB INLET	1158672.64	2741204.95	850.00
11	5" MH	1158671.44	2741291.51	838.50
12	CURB INLET	1157973.10	2740560.13	864.90
13	CURB INLET	1157970.88	2740836.94	859.96
14	CURB INLET	1157968.42	2741143.33	852.64
15	CURB INLET	1157967.28	2741285.91	851.00
16	CURB INLET	1158155.07	2741287.44	855.50
17	5' MH	1158417.73	2741289.47	839.75
18	CURB INLET	1158411.61	2740929.81	860.09
19	CURB INLET	1158411.84	2740897.63	860.25
20	CURB INLET	1158156.58	2741049.58	859.35

STORMWATER SCHEDULE				
NO	DESCRIPTION	NORTHING	EASTING	INVERT ELEVATION
21	CURB INLET	1158124.39	2741049.41	859.51
22	CURB INLET	1158128.79	2740502.33	868.41
23	CURB INLET	1158402.45	2740714.54	862.43
24	CURB INLET	1158615.47	2740716.26	860.28
25	CURB INLET	1158003.06	2740837.11	872.39
26	CURB INLET	1158000.60	2741143.50	852.80
27	15" FLARED END SECTION	1158231.40	2740067.33	877.00
28	15" FLARED END SECTION	1158295.90	2740127.19	875.00
29	15" FLARED END SECTION	1158807.79	2741292.63	838.00

CASCADE AERATION TOW EL: 848

SERIES 600 UV DISINFECTION STRUCTURE FFE: 858

FUTURE CASCADE AERATION

DRY DETENTION BASIN
0.5 ACRES
BOTTOM ELEV = 835.00
WQV = 836.00
100 YEAR = 837.00

STORM SEWER END SECTION WITH RIP RAP (TYP) (SEE DETAIL ON SHEET C134)

PROPOSED FENCE

DETENTION POND

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

STORM LINE 14

CONSTRUCTION LIMITS

TRAPEZOIDAL DITCH

SERIES 400 AGS STRUCTURES FFE: 870

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

STORM LINE 3

ACCESS ROAD-1

MAIN ROAD-3

STORM LINE 2

STORM LINE 10

STORM LINE 9

MAIN ROAD-4

MAIN ROAD-5

FUTURE MAIN ROAD

STORM LINE 6

STORM LINE 5

EQUIPMENT PAD LOCATIONS REFERENCE ELECTRICAL (SEE SHEET E017)

CONSTRUCTION LIMITS

SERIES 400 BLOWER BUILDING FFE: 871

STORM LINE 1

STORM LINE 7

MAIN ROAD-1

MAIN ROAD-6

STORM LINE 8

STORM LINE 12

SERIES 400 FUTURE BLOWER BUILDING (BY OTHERS)

MAIN ROAD-7

MAIN ROAD-2

SERIES 800 ADMINISTRATION BUILDING FFE: 875.50

STORM LINE 11

INFLUENT PUMP STATION ELECTRIAL FFE: 859

SERIES 300 HEADWORKS BUILDING FFE: 871

STORM LINE 4

SERIES 700 SOLIDS HANDLING FFE: 872

INFLUENT VALVE VAULT FFE: 856

INFLUENT PUMP STATION FFE: 856

INFLUENT SCREENING STATION FFE: 856

PROPOSED FENCE

CONSTRUCTION LIMITS

1 2 3 4 5 6 7 8 9 10

NE 1/4 OF SECTION 1-T52N-R34W UNPLATTED

SE 1/4 OF SECTION 1-T52N-R34W UNPLATTED

WEST 1/2, SW 1/4 OF SECTION 1-T52N-R34W UNPLATTED

EAST 1/2, SW 1/4 OF SECTION 1-T52N-R34W UNPLATTED

N

0 50' 100'

SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

STORMWATER PLAN

FOR WSD USE:

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO

DATE COMPLETED:

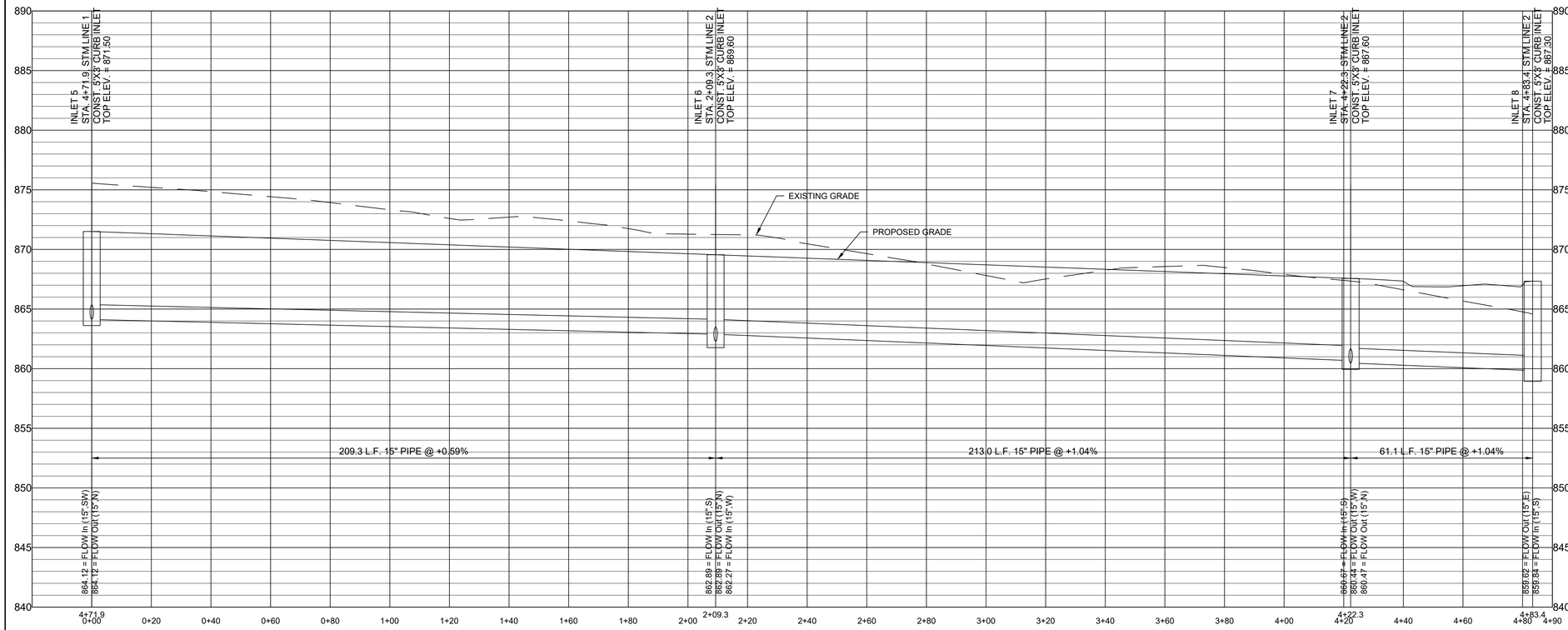
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C127

PROJECT NO. 81000927

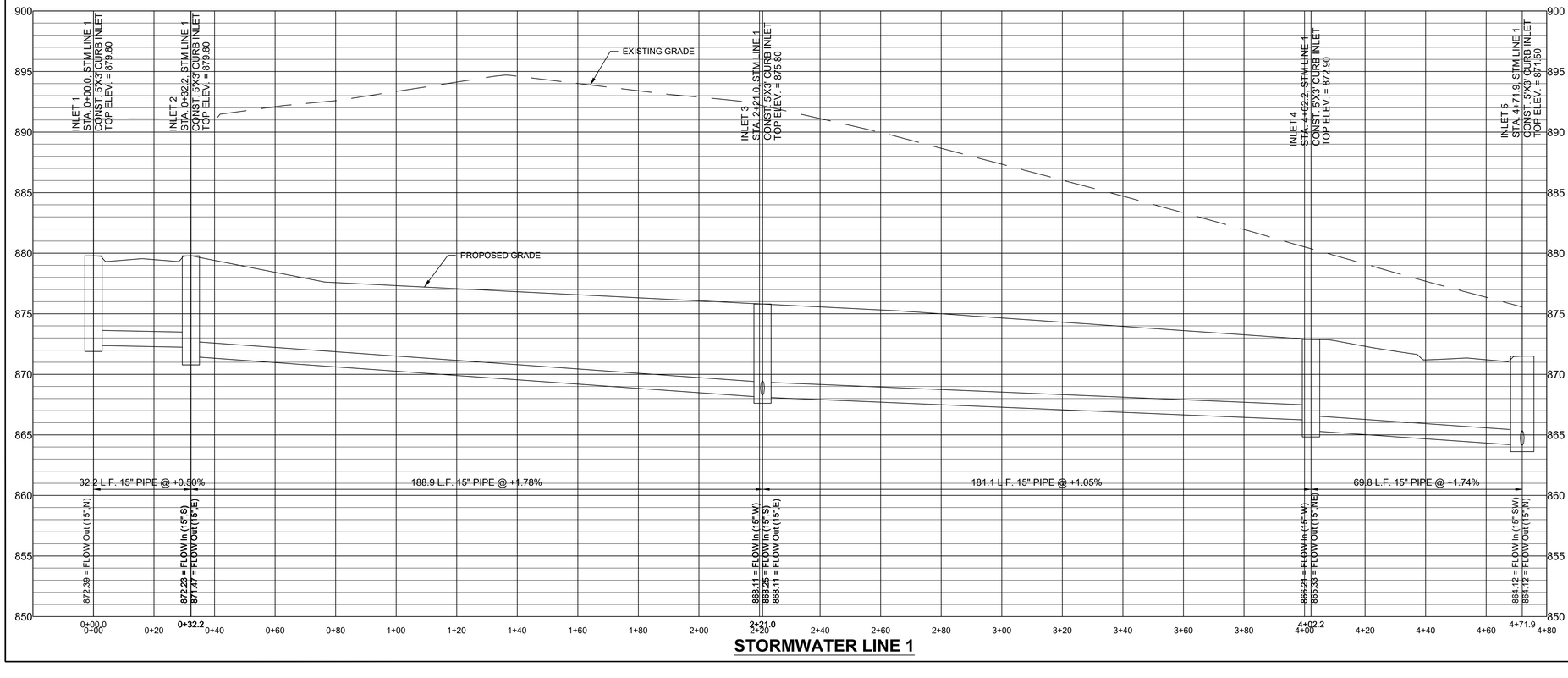
SHEET 27 OF 40

Saved 09-11-2025 11:58:38 PM by DAVID
PLOT DATE 9/12/2025 12:33:51 AM by DAVID
G:\J20\004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C127-STORMWATER PLAN.DWG

STORM PROFILE 2



STORMWATER LINE 2



STORMWATER LINE 1

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL • STRUCTURAL • ENVIRONMENTAL

WELLNER architects

BURNS McDONNELL

9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

PRELIMINARY - NOT FOR CONSTRUCTION

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

0 4' 8'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 10' 20' 40'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

STORMWATER PROFILES 1 AND 2

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

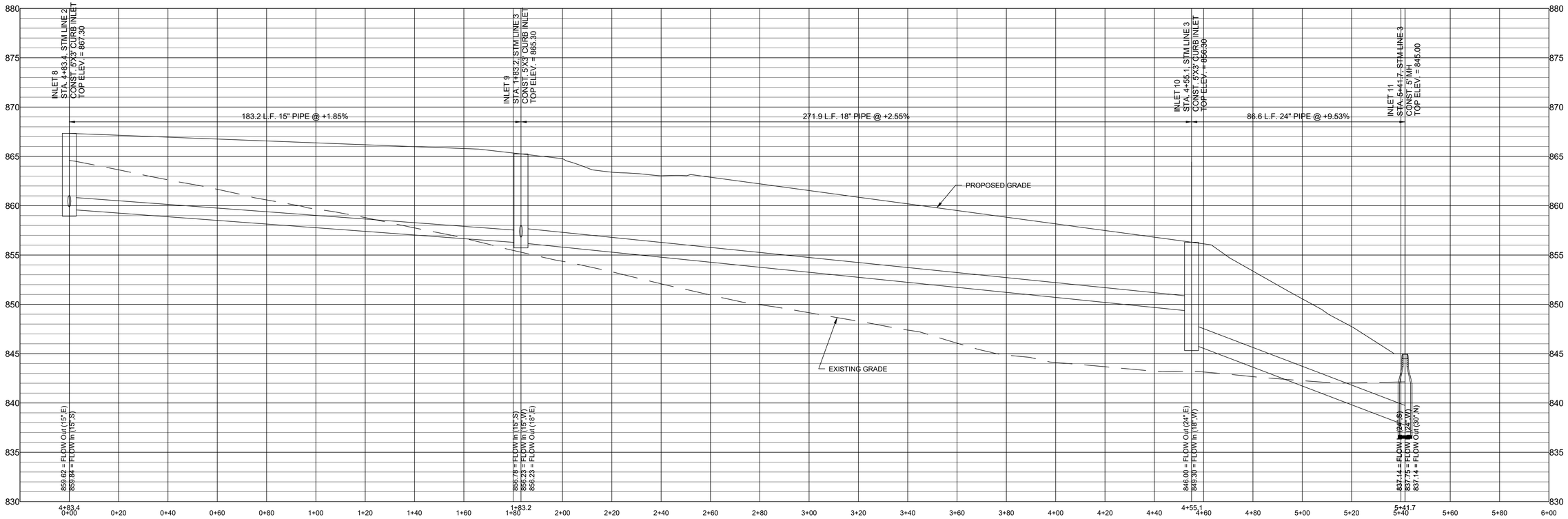
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C128

PROJECT NO. 81000927

SHEET 28 OF 40

Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE: 9/12/2025 12:34:50 AM by DAVID
G:\426004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C128-133 STORMWATER PROFILE.DWG

STORM PROFILE 3



STORMWATER LINE 3

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

0 4' 8'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 10' 20' 40'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

STORMWATER PROFILES 3

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C129

PROJECT NO. 81000927

SHEET 29 OF 40

KCWATER SERVICES
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL

9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE 9/12/2025 12:34:01 AM by DAVID
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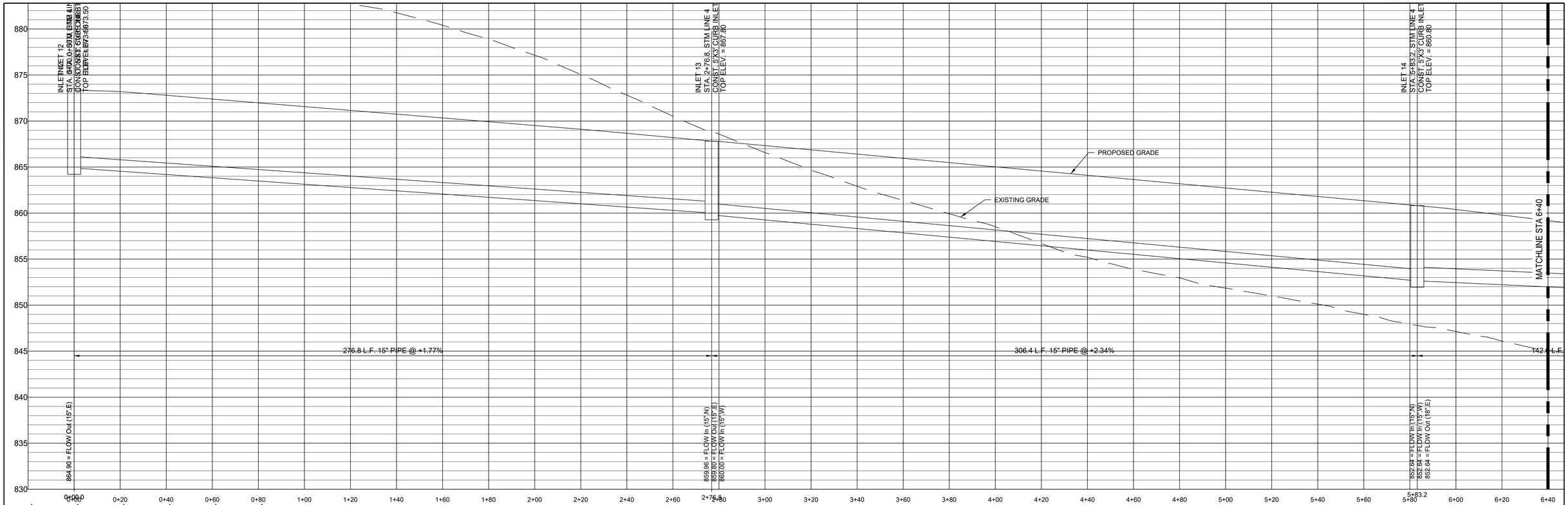

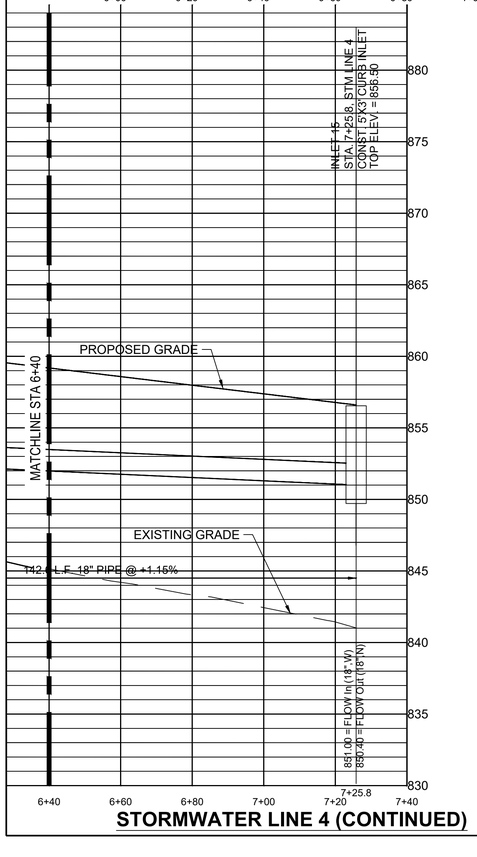

NOTE:

1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

SCALE IN FEET
VERTICAL SCALE IN FEET

SCALE IN FEET
HORIZONTAL SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

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STORMWATER PROFILES 4

FOR WSD USE:

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DuBois Consultants CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C130

PROJECT NO. 81000927

SHEET 30 OF 40

Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE: 9/12/2025 12:34:03 AM by DAVID
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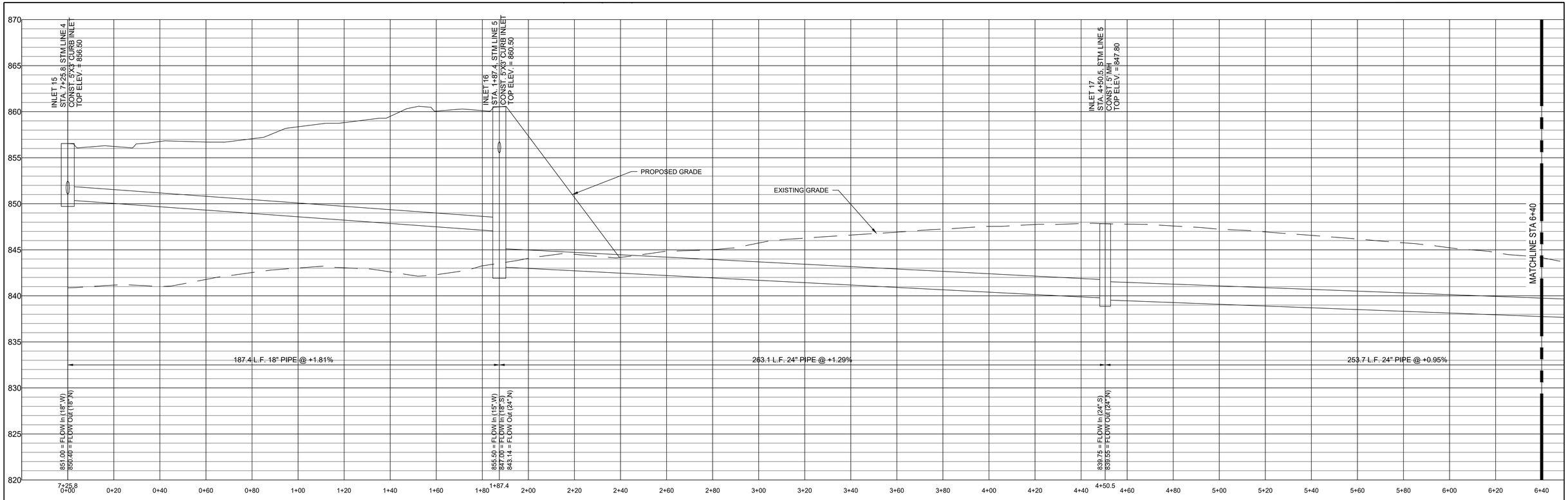
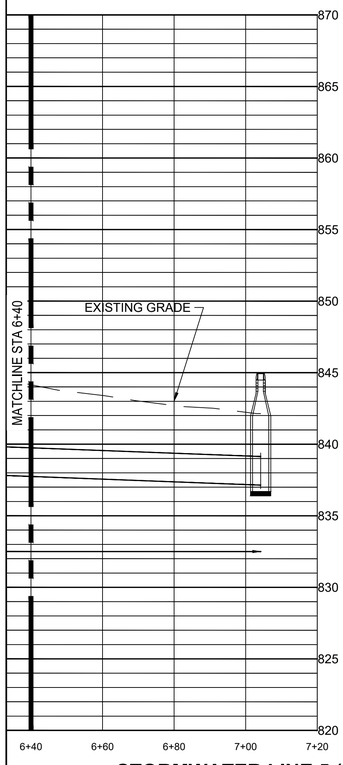


STORMWATER LINE 5



STORMWATER LINE 5 (CONTINUED)

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

SCALE IN FEET
VERTICAL SCALE IN FEET
0 4' 8'

SCALE IN FEET
HORIZONTAL SCALE IN FEET
0 10' 20' 40'

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER SERVICES
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL & STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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STORMWATER PROFILES 5

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C131

PROJECT NO. 81000927

SHEET 31 OF 40

Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE 9/12/2025 12:34:05 AM by DAVID
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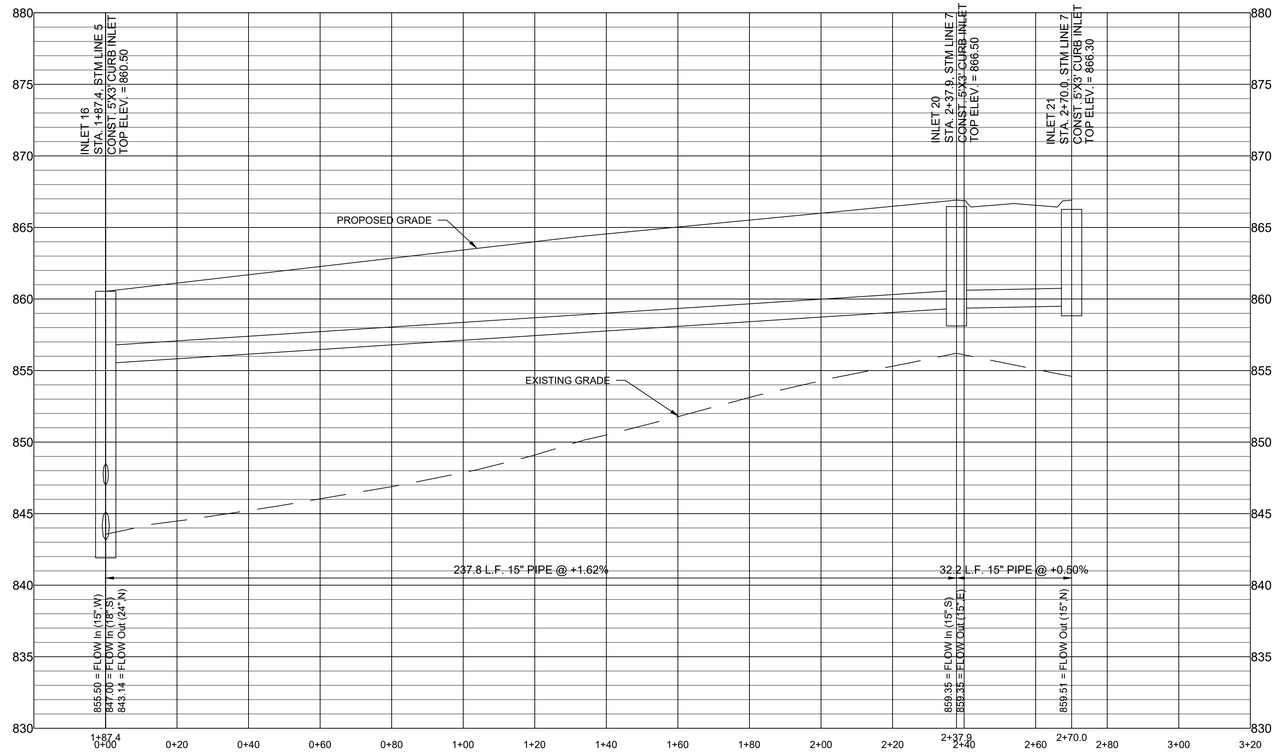
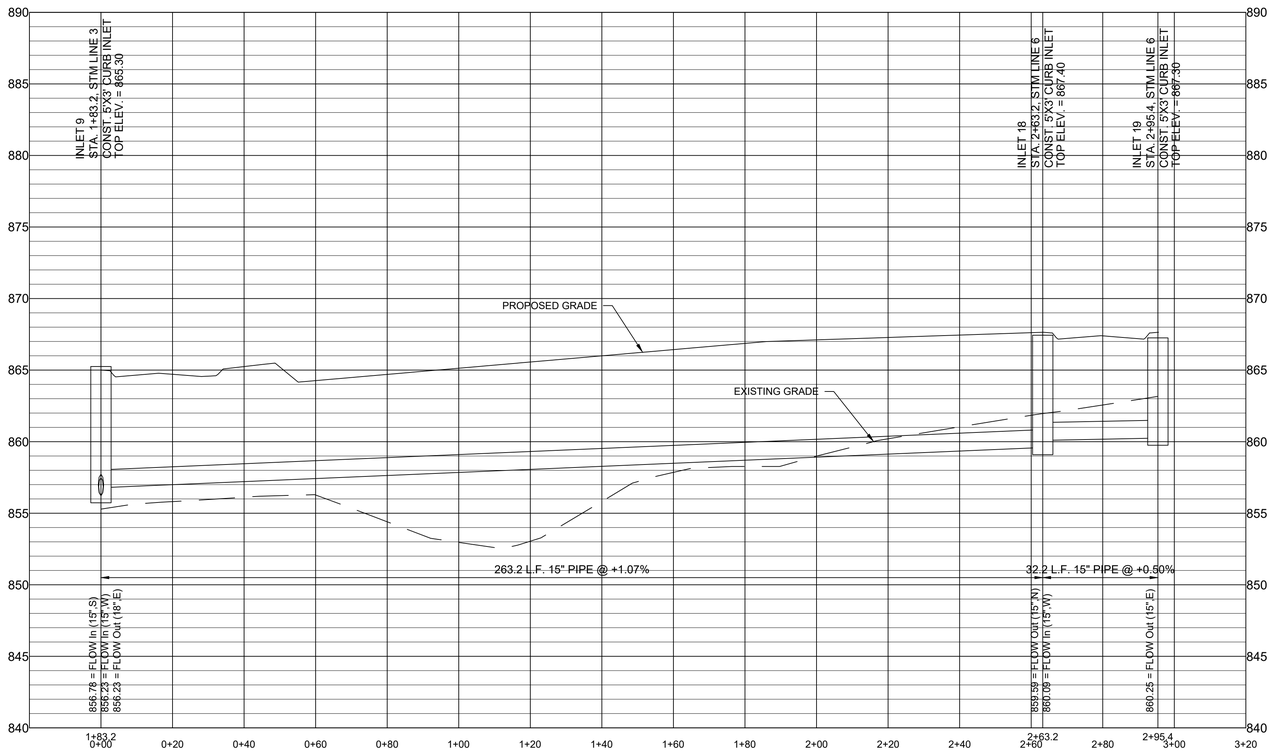


STORMWATER LINE 7



STORMWATER LINE 6

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

0 4' 8'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 10' 20' 40'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

STORMWATER PROFILES 6 AND 7

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C132

PROJECT NO. 81000927

SHEET 32 OF 40

KCWATER SERVICES

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE 9/12/2025 12:34:07 AM by DAVID
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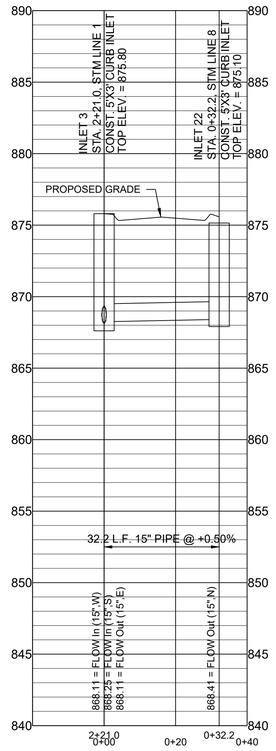
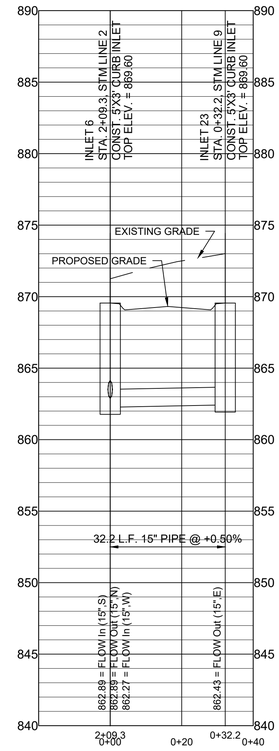
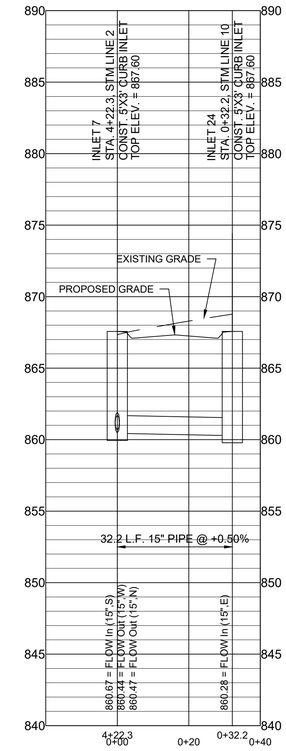


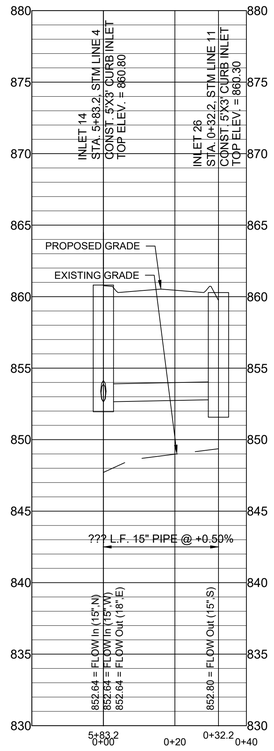
STORMWATER LINE 8



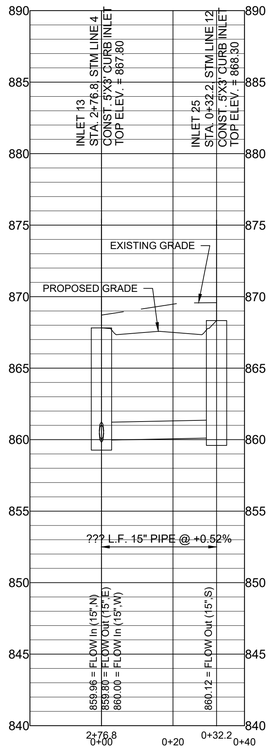
STORMWATER LINE 9



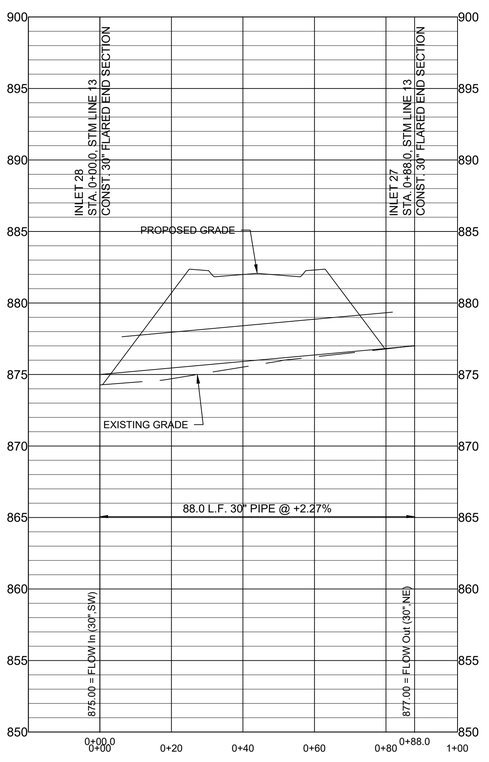
STORMWATER LINE 10



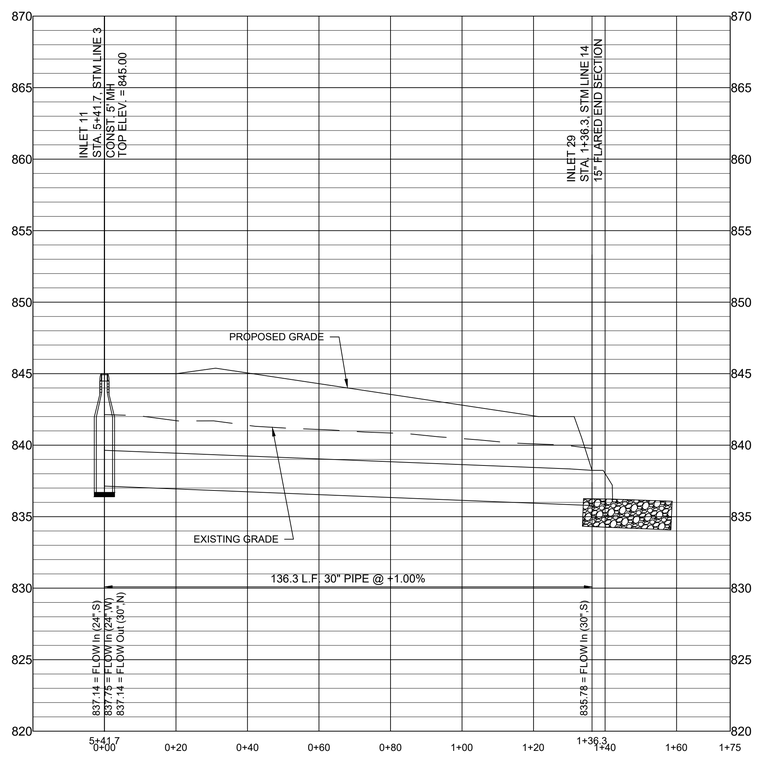
STORMWATER LINE 11



STORMWATER LINE 12



STORMWATER LINE 13



STORMWATER LINE 14

NOTE:

1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

SCALE IN FEET
0 4' 8'
VERTICAL SCALE IN FEET

SCALE IN FEET
0 10' 20' 40'
HORIZONTAL SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER SERVICES
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL • STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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REVISION BLOCK

FOR WSD USE:

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

STORMWATER PROFILES 8-12

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C133

PROJECT NO. 81000927

SHEET 33 OF 40

Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE 9/12/2025 12:34:09 AM by DAVID
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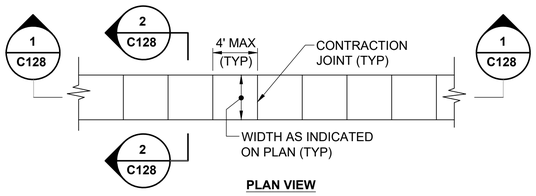
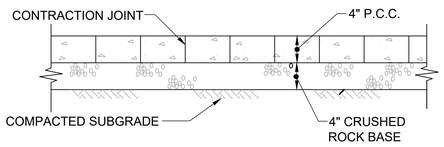


PLAN VIEW

TYPICAL SIDEWALK DETAIL
NOT TO SCALE



SECTION 1
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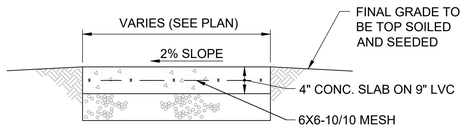

SECTION 2
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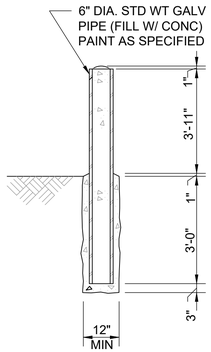
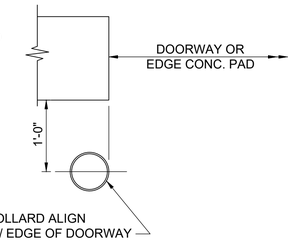
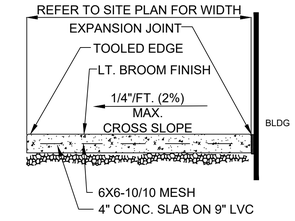


BOLLARD
NOT TO SCALE

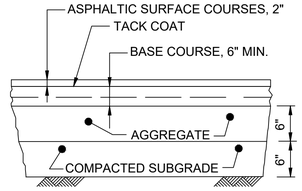
NOTE:
TYPICAL ALL OVERHEAD DOORWAYS



BOLLARD INSTALLATION
TYPICAL DETAIL
NOT TO SCALE

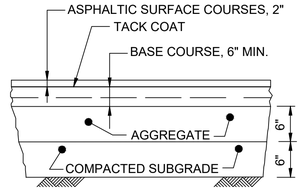


TYPICAL CONCRETE WALK @ BLDG. WALL
NOT TO SCALE



NOTE:
FOR NON-PARKING LOT AREAS

TYPICAL PARKING LOT PAVEMENT SECTION
NOT TO SCALE



TYPICAL FULL DEPTH ASPHALT PAVEMENT SECTION
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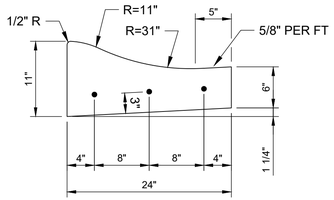
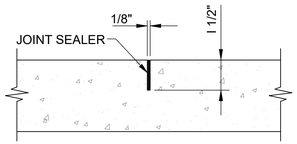
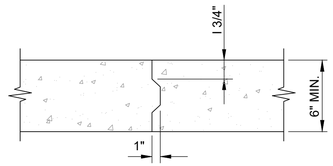


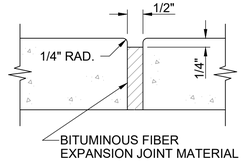
TYPE CG-2
ROLL BACK CURB & GUTTER



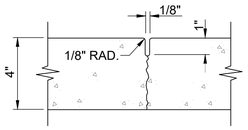
CONTRACTION JOINT
NOT TO SCALE



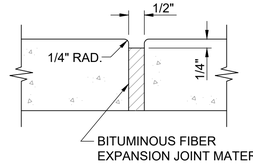
TRANSVERSE CONSTRUCTION JOINT
NOT TO SCALE



EXPANSION JOINT
NOT TO SCALE

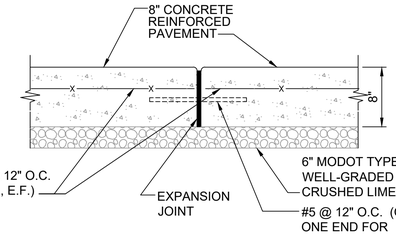


CONTRACTION JOINT



EXPANSION JOINT

SIDEWALK JOINT DETAILS
NOT TO SCALE



TYPICAL CONCRETE PAVEMENT SECTION
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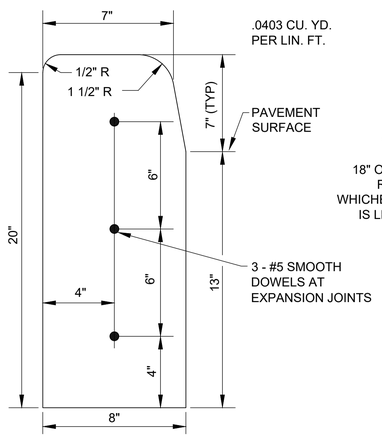
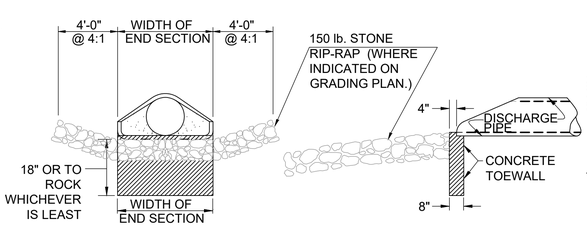


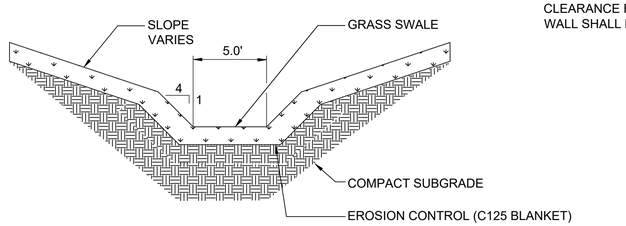
STRAIGHT CURB
(TYPE C-1)
NOT TO SCALE

NOTES:
1. PLACE 3/4" EXPANSION JOINTS WITH 2' DOWELS AT RADIUS POINTS. THESE DOWELS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. INSTALL 1.5" DEEP CONTRACTION JOINTS AT APPROXIMATELY 15' INTERVALS. THESE JOINTS SHALL PASS THROUGH THE ENTIRE CURB SECTION.
3. FIX DOWELS WITH BAR CHAIRS OR EQUAL.

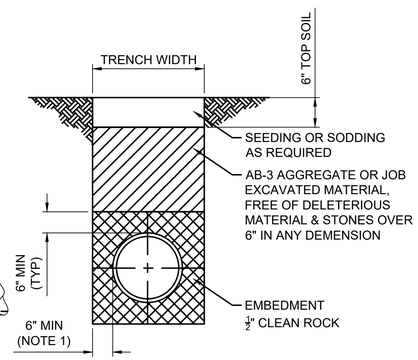


STORM SEWER END SECTION
W/TOEWALL & RIP-RAP

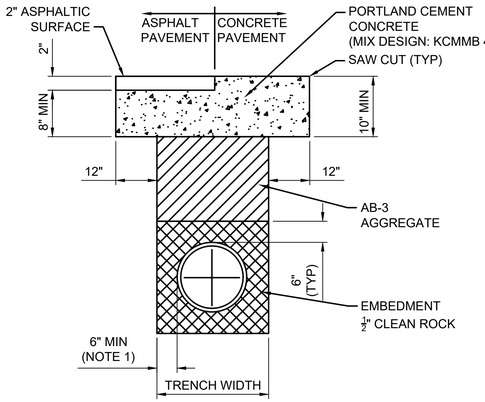
STORM SEWER END SECTION
NOT TO SCALE



TYPICAL GRASS SWALE
NOT TO SCALE



PIPE EMBEDMENT - BACKFILL UNDER NON-PAVED AREAS
NOT TO SCALE
NOTES:
1. FOR HDPE PIPE WITH NOMINAL PIPE OUTSIDE DIAMETER GREATER THAN 24", MINIMUM CLEARANCE FROM TRENCH WALL TO PIPE WALL SHALL BE 12".



PIPE EMBEDMENT - BACKFILL UNDER PAVED AREAS
NOT TO SCALE
NOTE:
1. IF THE TRENCH WIDTH IS LESS THAN OR EQUAL 24", IT SHALL BE BACKFILLED WITH FLOWABLE FILL. FLOWABLE FILL MIX DESIGN TO BE APPROVED BY THE CITY PRIOR TO PLACEMENT.
2. FOR HDPE PIPE WITH NOMINAL PIPE OUTSIDE DIAMETER GREATER THAN 24", MINIMUM CLEARANCE FROM TRENCH WALL TO PIPE WALL SHALL BE 12".

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER
CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL • STRUCTURAL • ENVIRONMENTAL
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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A	—	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

CIVIL DETAILS 1

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C134

PROJECT NO. 81000927

SHEET 34 OF 40

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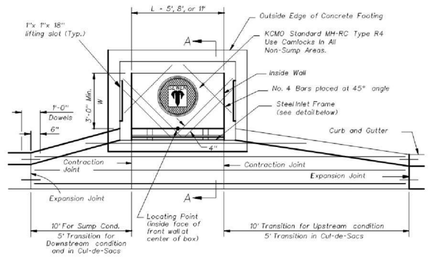
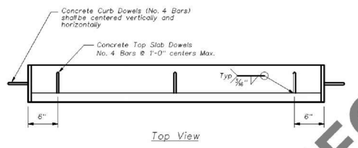
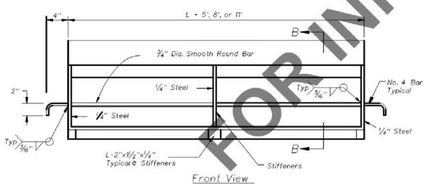
PLOT DATE 9/12/2025 12:34:13 AM by DAVID
G:\J20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKINGSHEETS\C134-CIVIL DETAILS 1.DWG



PLAN



Top View

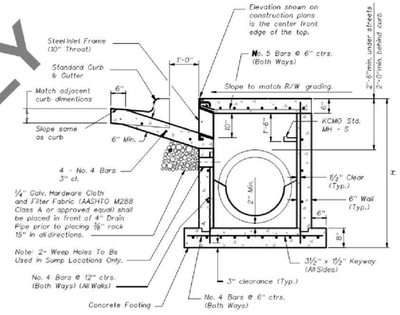


Front View

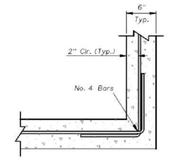
Steel Inlet Frame Notes

1. All welds shall be performed in accordance with appropriate AWS Specifications and Procedures.
2. All welds on exposed surfaces shall be dressed so as to provide a pleasing finished appearance.
3. The entire frame shall be hot dip zinc coated in accordance with ASTM A-123.
4. Steel inlet frame stiffeners shall be placed at equal intervals not to exceed 4'-0".

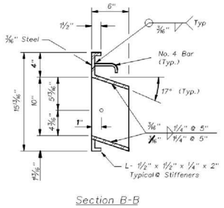
1. All work shall meet the requirements of APWA-KCMO 2600.
2. Inlet lid and throat shall conform to the street grade, except sump inlets which shall be level.
3. The first dimension listed in the construction notes is the "L" dimension. The second dimension is the "W" dimension.
4. Locate KCMO Standard MH-RC ring and cover over outlet. Add a second ring and cover over inlet when L = 11'.
5. Steps shall be spaced at 1'-4" O.C. vertically. The distance from the last step to the top of concrete invert should be a maximum of 24".
6. Bevel all exposed edges with ¾" chamfer or ½" tooled edge.
7. Expansion joint material shall comply with APWA - KCMO 2209.
8. The lugs may be precast. When poured in place, the wall steps shall be left exposed to a height 2" below the finish top elevation.
9. Bawouts shall not project through the structure corners. Reinforcing shall be bent around pipe openings when possible. When reinforcing is cut, a diagonal bar shall be used to tie all cut ends together.
10. Floor of inlet shall be sloped with invert to provide smooth flow.
11. Reinforcing steel shall be ASTM A615 Grade 40 new billet per ASTM A615, and shall be bent cold.
12. All dimensions relative to reinforcing steel are to centerline of bars. A clearance of 2" shall be provided throughout unless noted. Tolerance of +'-½" shall be permitted.
13. All lap splices not shown shall be a minimum of 40 bar diameters in length.
14. The bottom slab shall be at least 24 hrs old before placing sidewall concrete. All sidewall forms shall remain in place a minimum of 24 hours after sidewall is poured before removal, and after removal shall be immediately coated with membrane curing compound.
15. Precast inlets shall be set on four (4) solid concrete blocks with one at each corner, and the base and invert shall be poured monolithically. The vertical reinforcing shall be as per cast in place, except that the bars shall not protrude through the lid and base.
16. All curb inlet tops are to be constructed after final curb string line has been approved by the Engineer and prior to curb construction.
17. Pipe connections to precast structures shall have a minimum of 6" of concrete around the entire pipe within 2' of the structure, unless sealed with approved flexible waterproof gaskets in precast openings. Maximum clearance between pipe bowouts and precast riser joints is 4" without special design.
18. Flood ground structures shall comply with APWA-KCMO 2604.3.D.
19. Where drawings are not drawn to scale. Any questions regarding dimensions shall be brought to the attention of the Engineer prior to construction.
20. The structure elevation shown on the plans is the top surface over the locating point.
21. The curb inlet throat shall be 2' wide at the expansion joints, regardless of curb type.



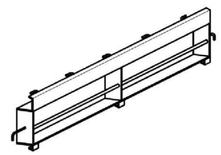
SECTION A-A



WALL CORNER DETAIL



Section B-B



THIS STANDARD IS ADAPTED FROM 1996 APWA "CI-2".

ADOPTED

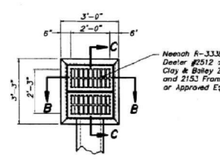
Acting Director of Public Works — 6/26/03 Date

Entry No.:

Kansas City, Missouri
Public Works Department
Engineering Division

CURB INLET TYPE 1	STANDARD DRAWING NUMBER CI-1

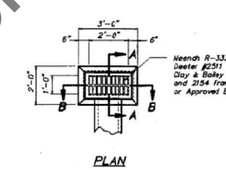
FOR INFORMATION ONLY



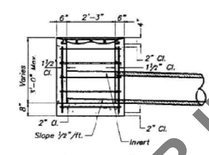
PLAN

NOTE:

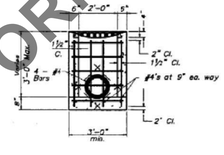
1. Location point at center of inlet.
2. A separate top slab may be utilized.
3. Not recommended for use in areas with bicycle traffic.



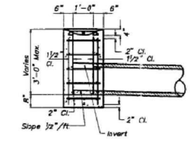
PLAN



SECTION C-C



SECTION B-B



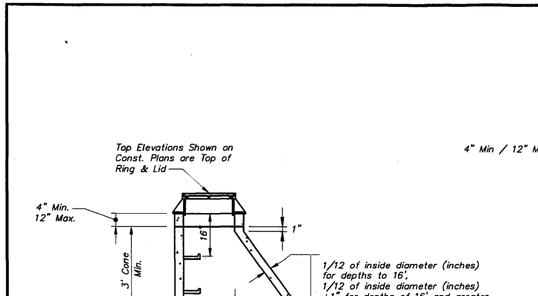
SECTION A-A

DOUBLE GRATE INLET DETAILS

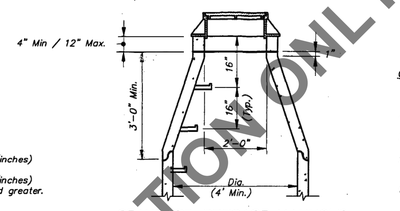
SINGLE GRATE INLET DETAILS

AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METROPOLITAN CHAPTER
APWA — GRATE INLET DETAILS	STANDARD DRAWING NUMBER G-1; ADOPTED APRIL 17, 1996

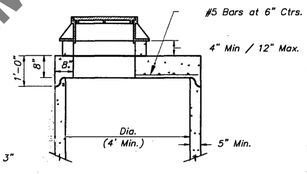
FOR INFORMATION ONLY



STANDARD PRECAST MANHOLE (ECCENTRIC CONE)



STANDARD PRECAST MANHOLE (CONCENTRIC CONE)
(See Eccentric Cone For Other Details)



STANDARD PRECAST MANHOLE (SHALLOW TYPE)
(See Eccentric Cone For Other Details)

GENERAL NOTES:

1. All manholes are to be precast concrete and of Eccentric Cone type unless otherwise specified.
2. Manhole top adjustments shall be accomplished by the use of concrete adjustment rings.
3. Top of manhole casting shall be set flush and on same slope as finished surface or as directed by the Engineer.
4. Reinforcement in all sections shall equal or exceed A.S.T.M. C-478 specifications.
5. The engineer shall designate modifications for manholes with special designs.
6. The inside diameter of the manhole shall be 4'-0" for pipe diameters from 12" thru 24", 5'-0" for pipe diameters from 27" thru 36", and 6'-0" for pipe diameters 42" thru 48".
8. Clearance Tolerance of Pipe Openings: The Maximum Allowable Pipe Opening on a Horizontal Axis Shall be the Outside Diameter of the Pipe Plus 12". The Maximum Allowable Pipe Opening on Vertical Axis Shall be the Outside Diameter Plus 8". The Minimum Clearance Between the Outside Surface of an Installed pipe and the Concrete of the Manhole Shall be 2".
9. Installation of Pipe Openings: All required pipe openings shall be plant cast in manhole units. Field alterations of openings will be permitted provided walls are scored with a masonry saw to a depth sufficient to sever reinforcing steel. A chipping hammer may then be used to remove the concrete. Minimum distance between any two adjacent pipes shall be 4".
10. No direct payment for shaping floor or connecting pipes as shown on plans.
11. Ring & Cover to be Neenah R-1736, Clay & Bailey #2008, Deeter #1316, or approved equal. (Casting may vary by municipality, refer to plans & contract documents.)
12. Sanitary Sewers shall be coated and conform to Section 2600.

* East Jordan is an approved manufacturer for casting.

AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METROPOLITAN CHAPTER
APWA — MANHOLE DETAILS	STANDARD DRAWING NUMBER MH - 1; ADOPTED: APRIL 17, 1995

FOR INFORMATION ONLY

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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

CIVIL DETAILS 2

FOR WSD USE:

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
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DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C135

PROJECT NO. 81000927 — SHEET 35 OF 40

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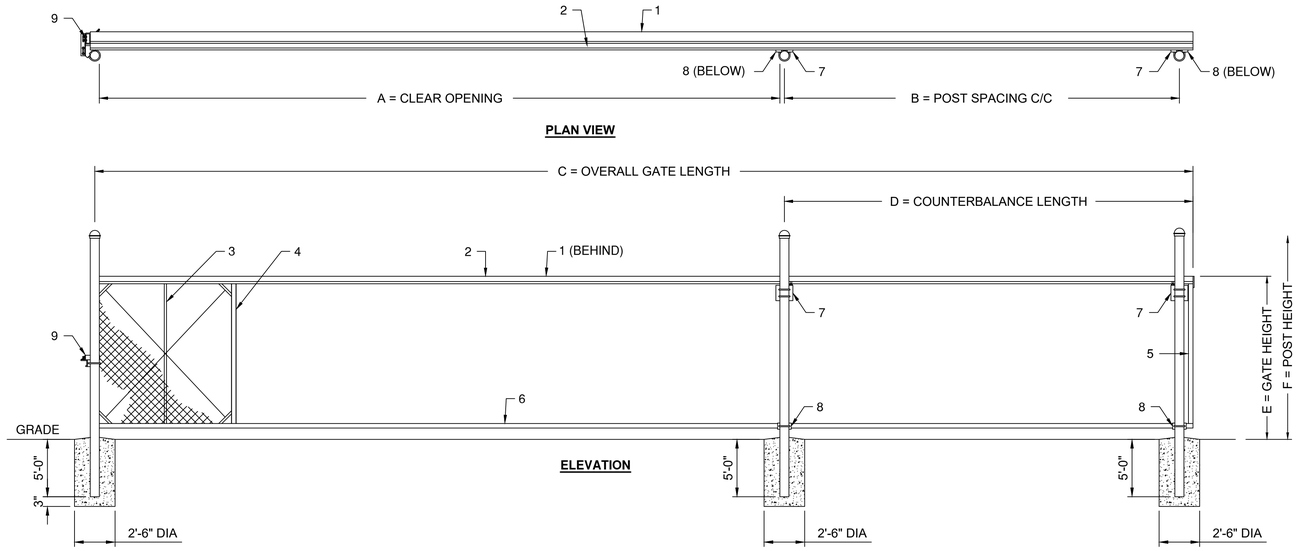


CRITICAL DIMENSION CHART			
MARK	DESCRIPTION	ROAD 1, ROAD4 (FEET)	DIM.
A	CLEAR OPENING	28	24
B	COUNTERBALANCE POST SPACING C/C	13	35
C	OVERALL GATE LENGTH	41	
D	COUNTERBALANCE LENGTH	14	12
E	NOMINAL GATE HEIGHT	7	7
F	POST HEIGHT (W/ BARB ARMS)	8.5	8.5
G	FABRIC HEIGHT	6	6

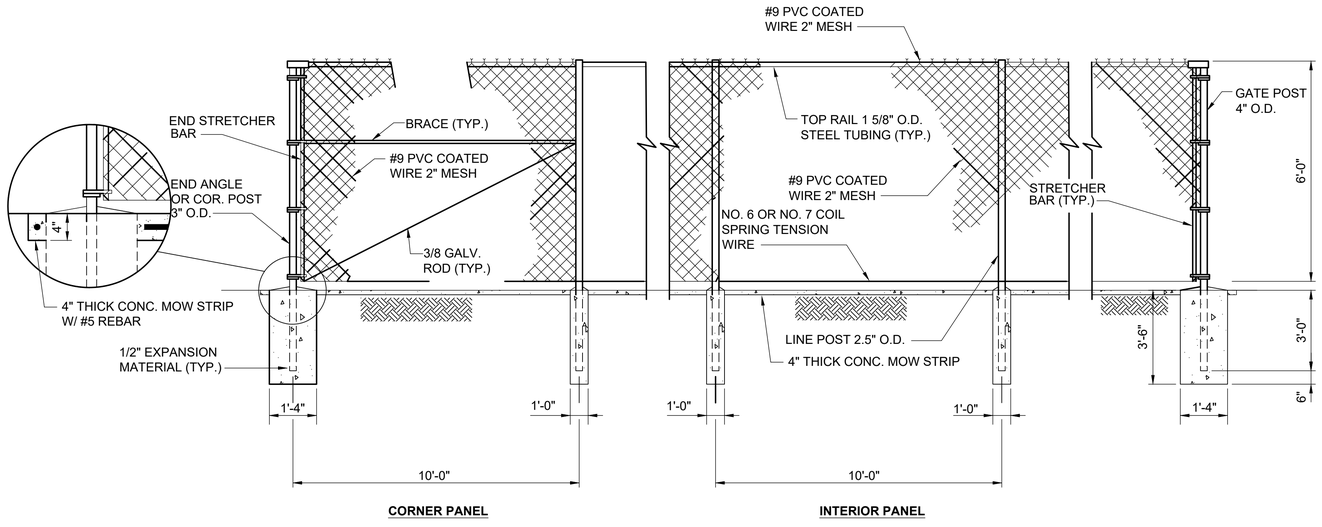
HEAVY DUTY CANTILEVER SLIDE GATE		
BILL OF MATERIALS		
MARK	DESCRIPTION	NOTES:
1	TOP PRIMARY MEMBER	
2	STANDARD TRACK	
3	1" x 2" ALUM. TUBE	CENTERED BETWEEN 2x2'S
4	2" x 2" ALUM. TUBE	
5	STANDARD PRIMARY	TYP. AT ENDS OF GATE FRAME
6	2" x 5" ALUM. TUBE	
7	HANGER ASSEMBLY	2 REQUIRED
8	BOTTOM GUIDE ASSEMBLY	2 REQUIRED
9	CATCH ASSEMBLY	1 REQUIRED

CATILEVER GATE NOTES:

1. ALL FITTINGS STANDARDLY PROVIDED FOR 4" O.D. POSTS.
2. FENCE GATES, DETAILS AND FIGURES ARE BASED ON "TYMETAL CORPORATION" GATES AND SHOULD BE CONFIRMED WITH THE MANUFACTURER PRIOR TO START OF WORK.
3. AUTOMATED OPERATING DEVICE SHALL BE COMPATIBLE WITH EXISTING FACILITY EQUIPMENT AND SHALL BE INSTALLED PER MANUFACTURER'S DESIGN AND RECOMMENDATIONS.
4. AUTOMATIC OPERATING DEVICE DESIGN AND INSTALLATION SHALL BE COORDINATED WITH GATE MANUFACTURER'S DESIGN AND INTALLATION.
5. GATE EQUIPMENT SHALL CONFORM TO ASTM F1184.
6. GATE CONSTRUCTION:
   A. CONSTRUCT WITH FITTING OR BY WELDING.
   B. PROVIDE RIGID, WATERPROOF JOINTS.
   C. ASSURE RIGHT, NON-SAGGING, NON-TWIST GATE.
   D. COAT WELDS WITH RUST PREVENTATIVE PAINT, COLOR TO MATCH GATE MATERIAL.
7. ELECTRIC GATE OPERATOR TO BE INSTALLED IN ACCORDANCE WITH 2017 NEC. AND MANUFACTURER'S RECOMMENDATIONS. OPERATOR SHALL BE 208 VOLT, 1-PHASE. OPERATOR SHALL BE RATED TO OPERATE GATE WEIGHT. MOTOR STARTER AND OVERLOADS AND CONTROL SHALL BE PROVIDED BY GATE SUPPLIER IN NEMA 4X ENCLOSURE. EXTERIOR CONTROL WIRING BY CONTRACTOR.
8. OPERATOR SHALL BE PAD MOUNTED. PAN AND ANCHORAGE BY CONTRACTOR.
9. PROVIDE OWNER WITH 10 HANDHELD GATE ACCESS REMOTE CONTROL UNITS.

AUTOMATIC CANTILEVER CHAIN LINK MAIN ROAD ACCESS GATE (A)

NOT TO SCALE

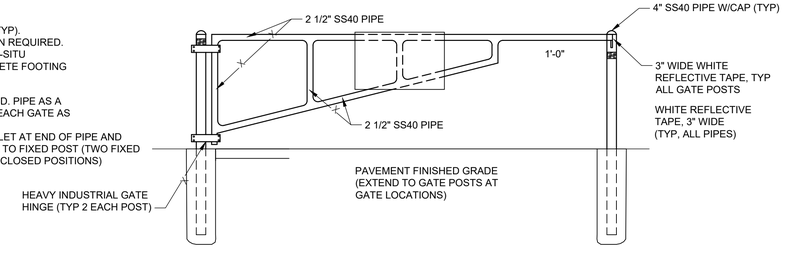


6' CHAIN LINK FENCE (B)

NOT TO SCALE

3,000 PSI CONCRETE (TYP).
AUGER CONSTRUCTION REQUIRED.
NO VOIDS BETWEEN IN-SITU MATERIAL AND CONCRETE FOOTING ALLOWED.

NOTE: PROVIDE A 4" O.D. PIPE AS A GATE HOLDBACK FOR EACH GATE AS SHOWN ON PLAN
PROVIDE WELDED EYELET AT END OF PIPE AND PROVIDE CONNECTION TO FIXED POST (TWO FIXED POSTS FOR OPEN AND CLOSED POSITIONS)



INTERURBAN ACCESS ROAD BARRIER GATE DETAIL (C)

NOT TO SCALE

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WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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REVISION BLOCK

FOR WSD USE:

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

CIVIL DETAILS 3

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C136

PROJECT NO. 81000927

SHEET 36 OF 40

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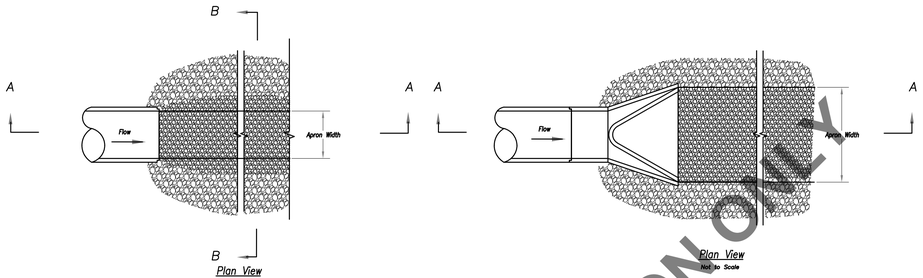


OUTLET PROTECTION W/O END SECTION

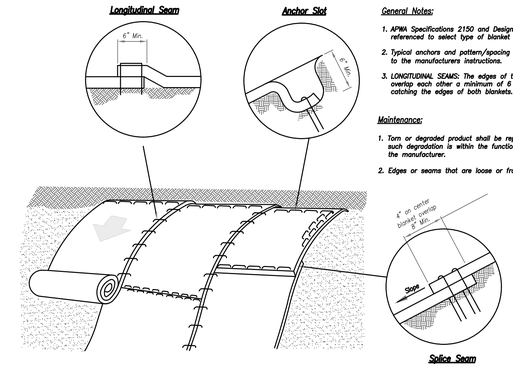
OUTLET PROTECTION WITH END SECTION

Notes:

1. Rock all sides steeper than 3:1.
2. Stabilize all disturbed areas downstream of outlet to the limits of disturbance.
3. Alternative outlet protection and slope stabilization measures may be used with approval by the Engineer.
4. Install riprap apron so that it is no higher than flowline of pipe.
5. Reference APWA Specification 2650 for rock type, size, and placement.

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter APWA American Public Works Association	KANSAS CITY METRO CHAPTER
OUTLET PROTECTION	STANDARD DRAWING NUMBER ESC-14
	ADOPTED: 10/24/2016

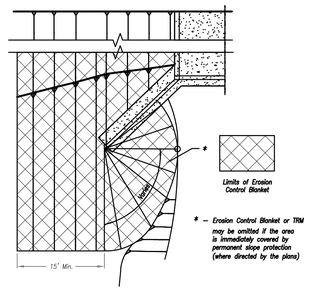


General Notes:

1. APWA Specifications 2150 and Design Guidance 5100 shall be referenced to select type of blanket or mat to be used.
2. Typical anchors and pattern/spacing shall be installed according to the manufacturers instructions.
3. LONGITUDINAL SEAMS: The edges of the blanket or mat should overlap each other a minimum of 6 inches, with anchors catching the edges of both blankets.

Maintenance:

1. Torn or degraded product shall be repaired or replaced, unless such degradation is within the functional longevity specified by the manufacturer.
2. Edges or seams that are loose or frayed shall be secured.

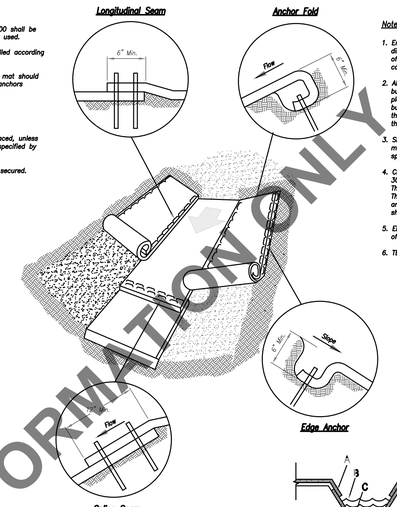


* – Erosion Control Blanket or TRM may be omitted if the area is immediately covered by permanent slope protection (where directed by the plans)

Installation Around Culvert Slope

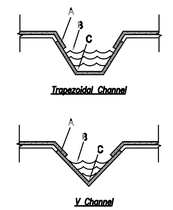
Notes for Installation on Slopes:

1. Erosion Control Blankets and TRMs shall be laid in the direction of the slope. In order for blanket to be in contact with the soil, lay blanket loosely, avoiding stretching.
2. ANCHOR SLOTS: The top of the blanket should be "slotted in" at the top of the slope and anchored in place with anchors 6 inches apart. The slots should be 6 inches wide x 6 inches deep with the blanket anchored in the bottom of the slot, then backfilled, tamped and smoothed.
3. SPLICE SEAM: When splices are necessary, overlap end a minimum of 8 inches in direction of water flow. Stagger splice seams.
4. TERMINAL FOLD: The bottom edge of the blanket shall be turned under a minimum of 4 inches, then anchored in place with anchors 6 inches apart.



Notes for Installation in Channels:

1. Erosion Control Blankets and TRMs shall be laid in the direction of the flow, with the first course at the centerline of channel, where applicable. In order for the mat to be in contact with the soil, lay the mat loosely, avoiding stretching.
2. ANCHOR FOLD: The top of the mat should be folded under, buried and secured with wood or other approved anchors placed 6 inches apart. The top edge of the mat should be buried in a slot 6 inches wide x 6 inches deep, anchored in the bottom of the slot, backfilled, and the mat folded over the top as shown in detail.
3. SPLICE SEAM: When splices are necessary, overlap end a minimum of 12 inches in direction of water flow. Stagger splice seams.
4. CHECK SLOTS: Establish check slots transverse to slope every 30 feet. The slots should be 6 inches wide x 6 inches deep. The mat shall be cut to a length 12 inches beyond the slot. The top of the downstream mat shall be slotted in, secured and buried similar to the edge anchor fold. The upstream mat shall then cover the slot and be anchored as shown.
5. EDGE ANCHORS: Lay outside edge of mat into trench at top of the slope and anchor.
6. TERMINUS: The bottom edge of the mat shall be anchored.



Critical Points:

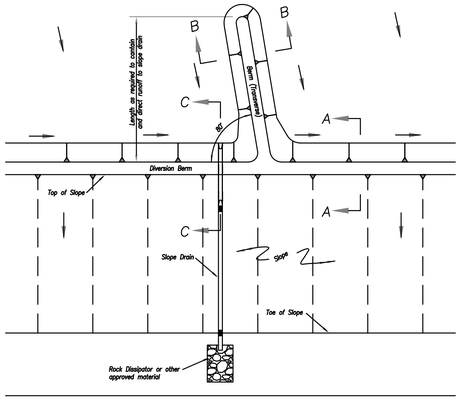
A – Overlaps and seams;

B – Projected water line;

C – Channel bottom / side slope vertices;

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter APWA American Public Works Association	KANSAS CITY METRO CHAPTER
EROSION CONTROL BLANKETS AND TURF REINFORMENT MATS	STANDARD DRAWING NUMBER ESC-02
	ADOPTED: 10/24/2016



TYPICAL PLAN VIEW OF DIVERSION BERM AND SLOPE DRAIN

Notes for Diversion Berm:

1. Slope drains are optional, but may be required by the engineer if the berm is at the top of a steep slope.
2. Diversion berms must be installed as a first step in the land–disturbing activity and must be functional prior to upslope land disturbance.
3. The berm should be adequately compacted to prevent failure.
4. Temporary or permanent seeding and mulch shall be applied to the berm immediately following its construction.
5. Place the berm as to minimize damages by construction operations and traffic.
6. The berm must discharge to a temporary sediment trap or stabilized area.
7. All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of diversion.
8. The diversion shall be excavated or shaped to line, grade and cross–section as required to meet the criteria specified herein, free of irregularities which will impede flow.
9. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the completed diversion. Fill shall be composed of soil which is free from excessive organic debris, rocks or other objectionable materials.

Maintenance:

1. Berm shall be reshaped, compacted, and stabilized as necessary to maintain its function.
2. Breaches in the berm shall be repaired immediately.

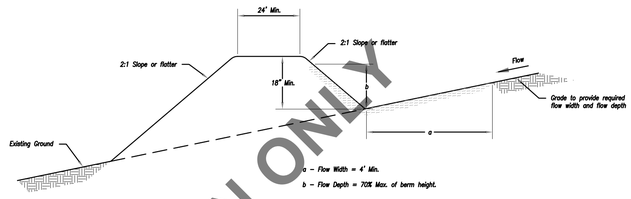
Notes for Slope Drain:

1. Slope Drain and Diversion Berm may be used on either project foreslopes or project backslopes.
2. Discharge of Slope Drains shall be into stabilized ditch or area, or into Sediment Basin.
3. Pipe shall be secured in place as approved by Engineer.

Maintenance:

1. Accumulation of any visible sediment at the inlet and outlet shall be removed promptly.
2. Outlet conditions shall be repaired if scour is observed. Leaking or damaged section of pipe shall be repaired immediately.
3. Barriers directing water to the inlet shall be monitored for continuity and effectiveness.

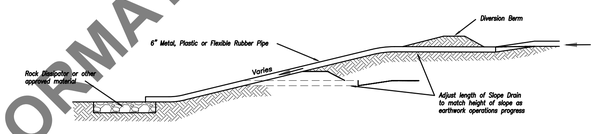
TYPICAL PROFILE OF DIVERSION BEAM
Not to Scale

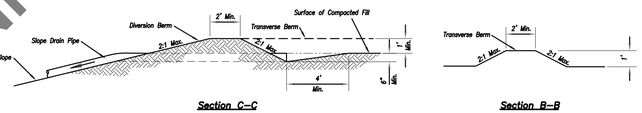


a – Flow Width = 4' Min.

b – Flow Depth = 70% Max. of berm height.

TYPICAL PROFILE OF DIVERSION BERM





Section C–C ***Section B–B***

TYPICAL PROFILE OF DIVERSION BERM WITH SLOPE DRAIN

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter APWA American Public Works Association	KANSAS CITY METRO CHAPTER
DIVERSION BERMS AND SLOPE DRAINS	STANDARD DRAWING NUMBER ESC-05
	ADOPTED: 10/24/2016

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TODD CREEK WWTP EXPANSION AND UPGRADE

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CIVIL DETAILS 4

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CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C137

PROJECT NO.	SHEET
81000927	37 OF 40

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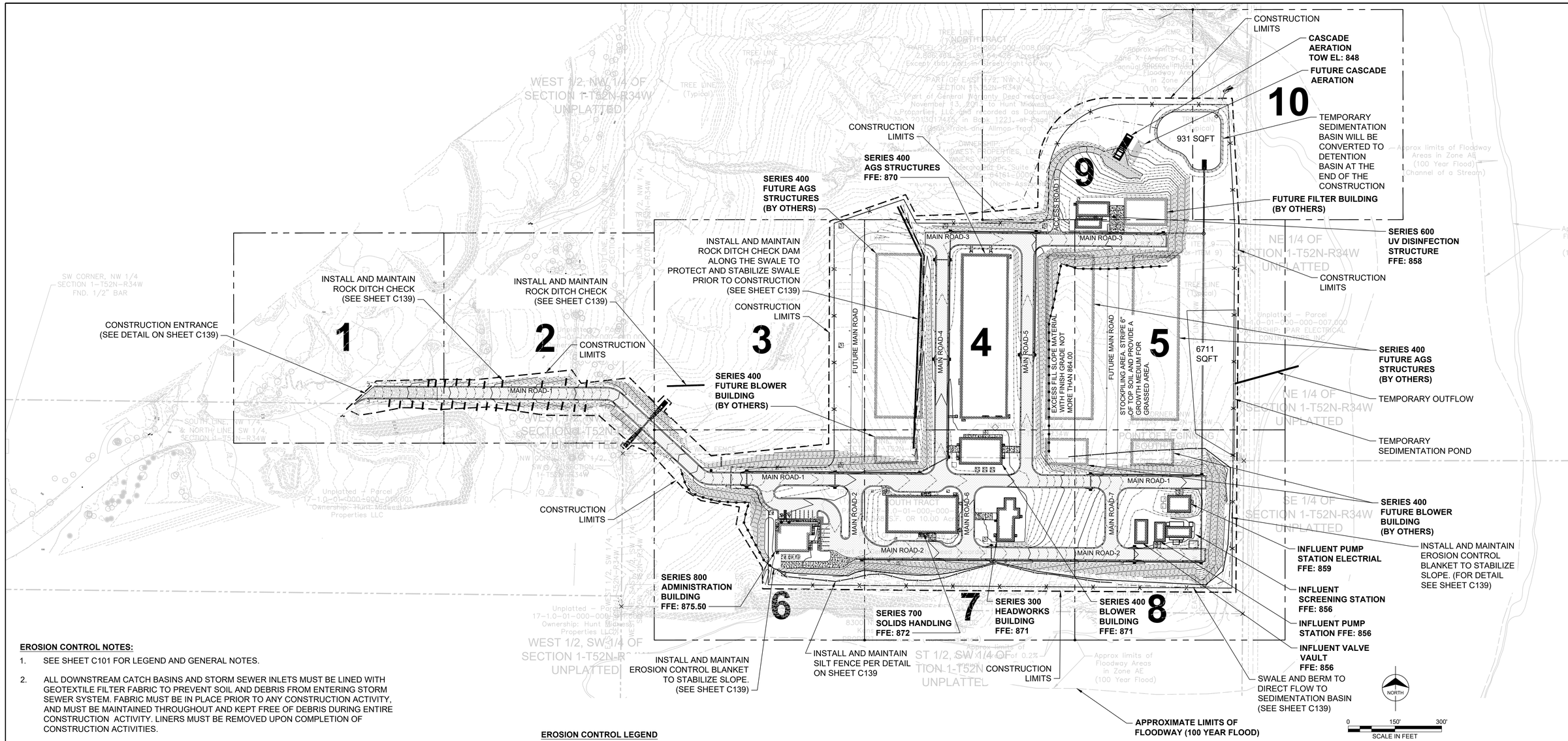

EROSION CONTROL NOTES:

1. SEE SHEET C101 FOR LEGEND AND GENERAL NOTES.
2. ALL DOWNSTREAM CATCH BASINS AND STORM SEWER INLETS MUST BE LINED WITH GEOTEXTILE FILTER FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING STORM SEWER SYSTEM. FABRIC MUST BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITY, AND MUST BE MAINTAINED THROUGHOUT AND KEPT FREE OF DEBRIS DURING ENTIRE CONSTRUCTION ACTIVITY. LINERS MUST BE REMOVED UPON COMPLETION OF CONSTRUCTION ACTIVITIES.
3. EROSION CONTROL METHODS OTHER THAN THOSE SHOWN ON THE DRAWINGS MAY BE UTILIZED IF APPROVED IN WRITING BY ENGINEER PRIOR TO THEIR USE.
4. THE LOCATION AND SIZE OF EROSION CONTROL DEVICES ARE APPROXIMATE ONLY AND REPRESENT THE MINIMUM REQUIREMENTS. THE DEVICES SHALL BE LOCATED GENERALLY AS SHOWN BUT THEIR LOCATIONS SHALL FACILITATE MAXIMUM PROTECTION FOR THE METHOD OF CONSTRUCTION UTILIZED. ADDITIONAL EROSION CONTROL DEVICES MAY BE REQUIRED TO COMPLY WITH SWPPP.
5. CONTRACTOR SHALL PROVIDE DUST CONTROL DURING ENTIRE CONSTRUCTION PERIOD. ALL DISTURBED AREAS SHALL BE MAINTAINED WITH DUST SUPPRESSORS (WATER, ETC.) TO PROHIBIT ENVIRONMENTAL CONTAMINATION. CALCIUM CHLORIDE SHALL NOT BE USED FOR DUST CONTROL.
6. THE CONTRACTOR SHALL PLAN AND CONDUCT GRADING OPERATIONS IN A MANNER THAT WILL MINIMIZE THE EXTENT AND DURATION OF UNPROTECTED SOIL.
7. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF MATERIALS ONTO PUBLIC PAVEMENT. ALL MATERIALS TRACKED ONTO PUBLIC ROADWAYS SHALL BE IMMEDIATELY REMOVED.
8. DITCH CHECK SHALL BE CONSTRUCTED OF ROCK UNLESS OTHERWISE APPROVED BY ENGINEER.
9. ALL EROSION CONTROL METHODS SHALL REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED.

EROSION CONTROL LEGEND

= ROCK DITCH CHECK

= CURB INLET SEDIMENT BARRIER

= CONSTRUCTION ENTRANCE
(USE DROP DOWN TO ADJUST FOR SCALE)

= SILT FENCE

= SPOIL AREA

= EROSION CONTROL BLANKET

= CL OF SWALE

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EROSION CONTROL PLAN AND NOTES

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CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C138

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SHEET 38 OF 40

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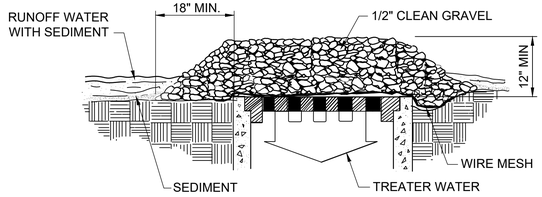


GRAVEL AND WIRE MESH
DROP INLET SEDIMENT TRAP

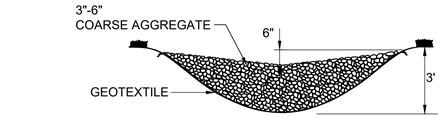
GRAVEL AND WIRE MESH DROP INLET SEDIMENT TRAP NOTES:

GENERAL NOTES:

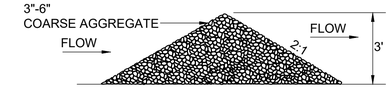
1. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
2. COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH. THE DEPTH OF STONE SHALL BE AT LEAST 12-INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18-INCHES ON ALL SIDES.
3. IF THE STONE BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET AND CLEANED OR REPLACED.

INSPECTION AND MAINTENANCE:

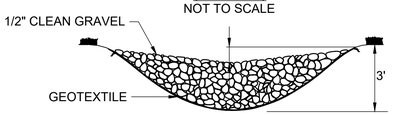
1. THE STRUCTURE SHALL BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT OF 1/2" OR GREATER AND REPAIRS MADE AS NEEDED.
2. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
3. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



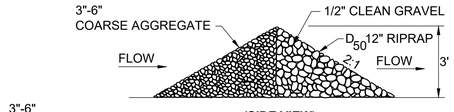
ROCK CHECK DAM
2 ACRES OR LESS OF DRAINAGE AREA
NOT TO SCALE



(SIDE VIEW)
NOT TO SCALE



2-10 ACRES OF DRAINAGE AREA
NOT TO SCALE



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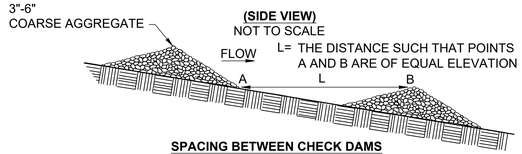


SPACING BETWEEN CHECK DAMS
NOT TO SCALE

ROCK CHECK DAM NOTES:

CONSTRUCTION SPECIFICATIONS & INSTALLATION:

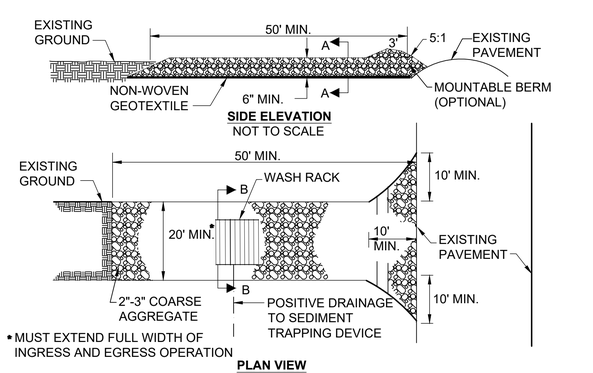
1. THE DRAINAGE AREA OF THE DITCH OR SWALE BEING PROTECTED SHALL NOT EXCEED 2 ACRES WHEN A COARSE AGGREGATE IS USED ALONE AND SHALL NOT EXCEED 10 ACRES WHEN A COMBINATION OF CLASS I RIPRAP AND COARSE AGGREGATE IS USED. AN EFFORT SHOULD BE MADE TO EXTEND THE STONE TO THE TOP OF CHANNEL BANKS.
2. THE MAXIMUM HEIGHT OF THE DAM SHALL BE 3 FEET. THE CENTER OF THE CHECK DAM IS AT THE SAME ELEVATION AS THE TOP OF THE OUTER EDGES.
3. FOR ADDED STABILITY, THE BASE OF THE CHECK DAM CAN BE KEYED INTO THE SOIL APPROXIMATELY 6 INCHES.
4. THE MAXIMUM SPACING BETWEEN THE DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
5. STONE SHOULD BE PLACED ACCORDING TO THE CONFIGURATION TO THE LEFT. HAND OR MECHANICAL PLACEMENT WILL BE NECESSARY TO ACHIEVE COMPLETE COVERAGE OF THE DITCH OR SWALE AND TO INSURE THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES.
6. REFER TO APWA 2150-SECTIOM- 2154.1, GEOTEXTILE MAY BE USED UNDER THE STONE TO PROVIDE A STABLE FOUNDATION AND TO FACILITATE REMOVAL OF THE STONE.

INSPECTION AND MAINTENANCE:

1. CHECK DAMS SHOULD BE CHECKED FOR SEDIMENT ACCUMULATION WEEKLY AND AFTER EACH STORM EVENT OF 1/2-INCH OR GREATER. SEDIMENT SHOULD BE REMOVED WHEN IT REACHES ONE HALF OF THE ORIGINAL HEIGHT OF THE DAM.
2. REGULAR INSPECTIONS SHOULD BE MADE TO ENSURE THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES. EROSION CAUSED BY HIGH FLOWS AROUND THE EDGES OF THE DAM SHOULD BE CORRECTED.

REMOVAL OF PRACTICE:

UNLESS THEY ARE TO BE PERMANENT, CHECK DAMS MUST BE REMOVED WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED. IN TEMPORARY DITCHES AND SWALES, CHECK DAMS SHOULD BE REMOVED AND THE DITCH FILLED WHEN THEY ARE NO LONGER NEEDED. IN PERMANENT STRUCTURES, CHECK DAMS SHOULD BE REMOVED WHEN A PERMANENT LINING CAN BE INSTALLED. IN THE CASE OF GRASS-LINED DITCHES, CHECK DAMS SHOULD BE REMOVED WHEN THE GRASS HAS MATURED SUFFICIENTLY TO PROTECT THE DITCH OR SWALE. THE AREA BENEATH THE CHECK DAMS SHOULD BE SEEDED AND MULCHED IMMEDIATELY AFTER THEY ARE REMOVED. THE USE OF FILTER CLOTH UNDERNEATH THE STONE WILL MAKE REMOVAL OF THE STONE EASIER.



SIDE ELEVATION
NOT TO SCALE

PLAN VIEW
NOT TO SCALE

SECTION A-A
NOT TO SCALE

SECTION B-B
NOT TO SCALE

TEMPORARY CONSTRUCTION ENTRANCE

ROCK CHECK DAM

TEMPORARY CONSTRUCTION ENTRANCE PAD NOTES:

INSTALLATION:

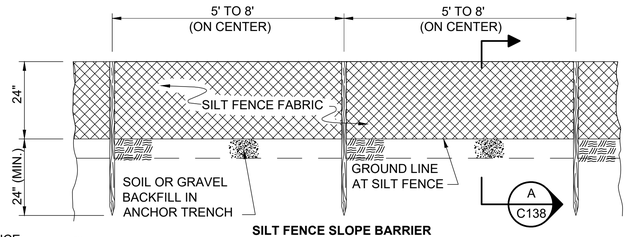
1. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
2. IF SLOPE TOWARD THE PUBLIC ROAD EXCEEDS 2%, CONSTRUCT A 6-TO 8-INCH HIGH RIDGE WITH 3H:1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
3. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS.
4. PLACE STONE TO DIMENSIONS AND GRADE AS SHOWN ON DRAWINGS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
5. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE. IF WET CONDITIONS ARE ANTICIPATED, PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY.

TROUBLESHOOTING:

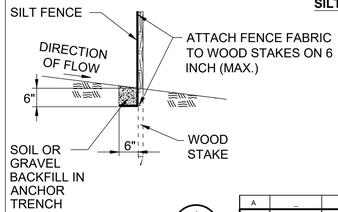
1. CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
   a. INADEQUATE RUNOFF CONTROL TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROAD - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES.
   b. SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC.
   c. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC - EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY.

INSPECTION AND MAINTENANCE:

1. INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER 1/2" OR GREATER STORM EVENTS.
2. RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL.
3. TOPDRESS WITH CLEAN 2-INCH AND 3-INCH STONE AS NEEDED.
4. IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROAD. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
5. REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED.



SILT FENCE SLOPE BARRIER
NOT TO SCALE



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NOT TO SCALE

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

EROSION CONTROL DETAILS

FOR WSD USE:

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CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C139

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SHEET 39 OF 40

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G:\020004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C139-EROSION CONTROL DETAILS.DWG

RUNOFF QUANTITIES*					
Basin	Acre(ac)	C	Q2(cfs)	Q10(cfs)	Q100(cfs)
1	0.55	0.46	1.37	1.85	2.61
2	0.49	0.48	1.26	1.71	2.41
3	0.16	0.46	0.40	0.54	0.76
4	0.215	0.46	0.53	0.72	1.02
5	0.12	0.45	0.29	0.39	0.55
6	0.28	0.36	0.55	0.74	1.04
7	0.07	0.90	0.34	0.46	0.65
8	1.07	0.62	3.57	4.82	6.80
9	0.69	0.41	1.53	2.07	2.92
10	0.88	0.63	3.00	4.06	5.73
11	0.79	0.98	4.17	5.64	7.96
12	0.23	0.23	2.97	4.02	5.67
13	0.64	0.56	1.94	2.62	3.69
14	0.23	0.50	0.62	0.83	1.18
15	0.24	0.54	0.70	0.95	1.34
16	0.4	0.62	1.34	1.81	2.56
17	0.1	0.71	0.38	0.52	0.73
18	0.73	0.31	1.21	1.63	2.30
19	0.17	0.61	0.56	0.75	1.06
20	0.54	0.56	1.63	2.20	3.10
21	0.18	0.90	0.87	1.18	1.67
22	0.2	0.90	0.97	1.31	1.85
23	1.02	0.39	2.15	2.91	4.10
24	0.25	0.44	0.60	0.81	1.14
25	1.35	0.30	1.14	2.03	2.84
26	0.5	0.54	1.14	1.94	2.78

(*) 1. RUNOFF QUANTITIES WERE CALCULATED USING THE RATIONAL METHOD IS ACCORDANCE WITH APWA 5600.
2. PIPE SIZES ARE BASED ON THE 100 YEAR RUNOFF QUANTITIES.
3. MINIMUM PIPE SIZE OF 15" DIAMETER WAS USED ACCORDING TO THE REQUIREMENTS OF APWA 5600.
4. ALL PIPES ARE TO BE REINFORCED CONCRETE PIPE (MANNINING'S N=0.013)

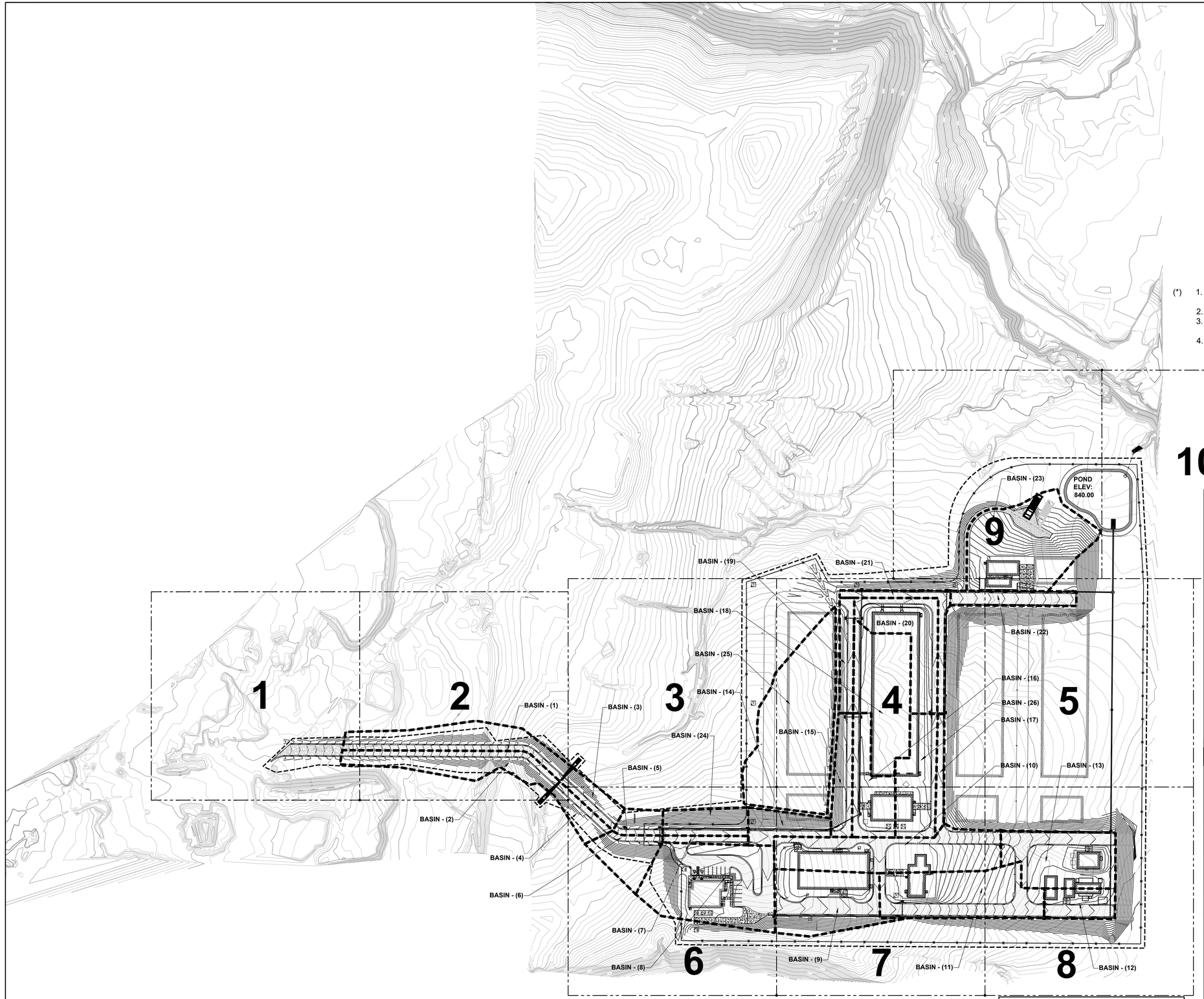
LEGEND

- PROPOSED DRAINAGE AREA BOUNDARY
- EXIST CONTOUR
- PROPERTY LINE
- ELEV: 918.00 SPOT ELEVATION

N

0 100' 200'

SCALE IN FEET



PROPOSED DRAINAGE AREA MAP

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants

WELLNER architects

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Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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PROPOSED DRAINAGE AREA MAP

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C140

PROJECT NO. 81000927 SHEET 40 OF 40

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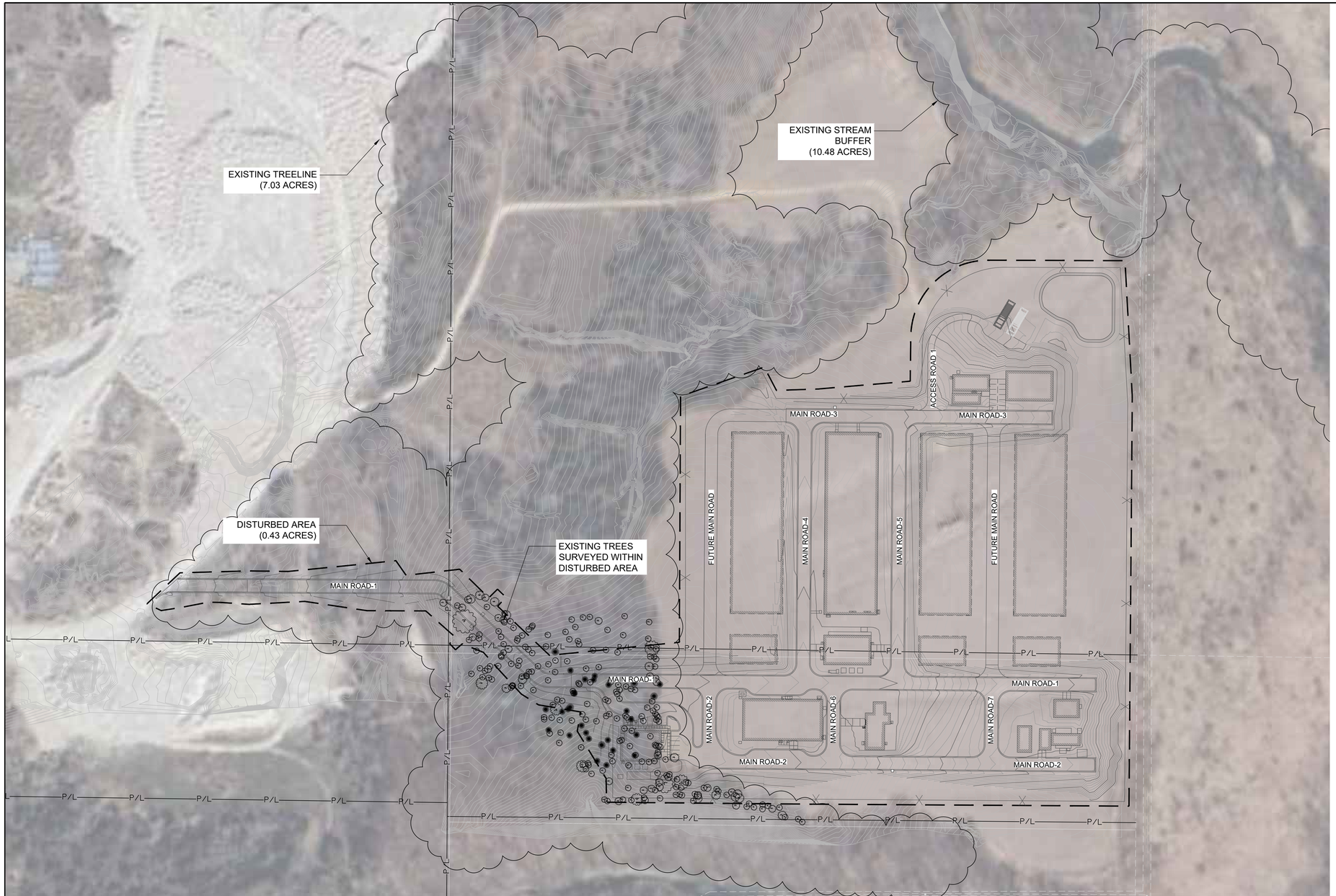
G:\Z80084 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C140-PROPOSED DRAINAGE AREA MAP.DWG



LEGEND

- P/L — PROPERTY LINE
- X — NEW FENCING
- CONSTRUCTION LIMITS
- EXISTING TREE

NORTH

0 50' 100'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

EXISTING CONDITIONS TREE PLAN

Brittney Swartz
Landscape Architect
LA-2011003571

FOR WSD USE:

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LDH, SFW	BMS	-	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	-

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				L103

PROJECT NO. 81000927

SHEET 1 OF 13

Saved 09-11-2025 3:07:35 PM by SFWARRICK
PLOT DATE 9/17/2025 3:09:05 PM by SFWARRICK
C:\BMCD_LIB\DCACDOCS\BURNS & MCDONNELL\125460_TODDCREEK\PROJECT FILES\103 - LANDSCAPE\PRODUCTION DRAWINGS\L100 - EXISTING CONDITIONS TREE PLAN.DWG

Attachment 2

Grading Plans

9400 Ward Parkway | Kansas City, MO 64114 | burnsmcd.com

PROPERTY LINE

CASCADE AERATION TOW EL: 848

FUTURE CASCADE AERATION

CONSTRUCTION LIMITS

SERIES 600 UV DISINFECTION STRUCTURE FFE: 858

10

DETENTION BASIN

RIP RAP

FUTURE FILTER BUILDING (BY OTHERS)

CONSTRUCTION LIMITS

SERIES 400 AGS STRUCTURES FFE: 870

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

9

ACCESS ROAD 1

MAIN ROAD-3

MAIN ROAD-3

CL OF 5' WIDE TRAPEZOIDAL SWALE

5' MH

CONSTRUCTION LIMITS

FUTURE MAIN ROAD

MAIN ROAD-4

MAIN ROAD-5

FUTURE MAIN ROAD

5' MH

PROPERTY LINE

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

SERIES 400 FUTURE BLOWER BUILDING (BY OTHERS)

1

2

3

4

5

CONCRETE FLUMES

CONSTRUCTION LIMITS

TODD CREEK ACCESS ROAD

MAIN ROAD-1

RIP RAP

RIP RAP

SERIES 400 FUTURE BLOWER BUILDING (BY OTHERS)

MAIN ROAD-1

MAIN ROAD-1

INFLUENT PUMP STATION ELECTRIAL FFE: 859

INFLUENT SCREENING STATION FFE: 856

INFLUENT PUMP STATION FFE: 856

INFLUENT VALVE VAULT FFE: 856

MAIN ROAD-2

MAIN ROAD-6

MAIN ROAD-7

MAIN ROAD-2

MAIN ROAD-2

CONSTRUCTION LIMITS

CONCRETE SIDEWALK (TYP)

6

7

8

PROPERTY LINE

SERIES 800 ADMINISTRATION BUILDING FFE: 875.50

EQUIPMENT PAD LOCATIONS REFERENCE ELECTRICAL DRAWINGS

SERIES 700 SOLIDS HANDLING FFE: 872

SERIES 400 BLOWER BUILDING FFE: 871

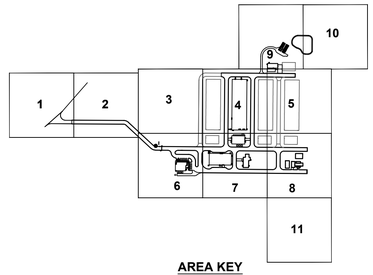
SERIES 300 HEADWORKS BUILDING FFE: 871

APPROXIMATE LIMITS OF FLOODWAY (100 YEAR FLOOD)

CONSTRUCTION LIMITS

NOTES:

1. SEE SHEETS C113 THRU C122 FOR DETAILED GRADING INFORMATION.
2. ALL AREAS TO GRADE TO DRAIN AWAY FROM STRUCTURES.
3. ALL ASPHALT PAVEMENT SHALL BE SLOPED TO DRAIN.



AREA KEY

NORTH

0 100' 200'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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GENERAL GRADING PLAN

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C112

PROJECT NO. 81000927

SHEET 12 OF 40

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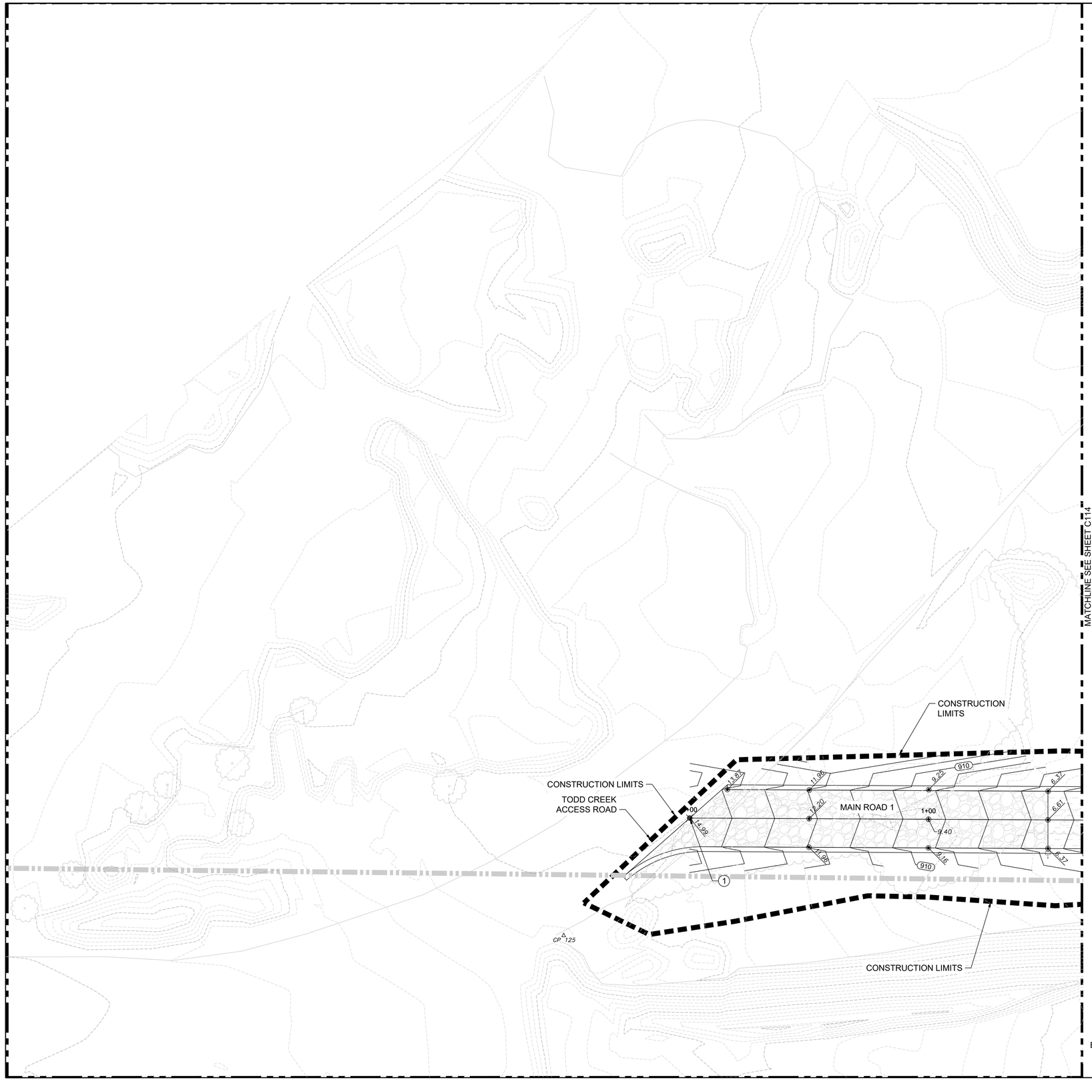
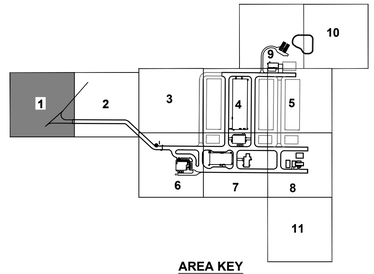
CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1158331.2902	2739501.4097	914.99	PI

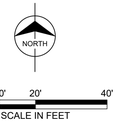


GRADING NOTE:

1. THE FIRST NUMBER OF THE SPOT ELEVATION SHOWN ON THESE PLANS HAS BEEN TRUNCATED. CONTRACTOR SHALL ADD 700, 800 OR 900 TO THE SPOT ELEVATIONS SHOWN TO GET TO ACTUAL PLAN ELEVATIONS. SEE ADJOINING CONTOUR LABELS WHEN DETERMINING ACTUAL ELEVATIONS. ALL CONTOURS LABELS ARE ACTUAL PLAN ELEVATIONS AND REQUIRE NO ADJUSTMENT.



AREA KEY



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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 1

FOR WSD USE:

KCWATER

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C113

PROJECT NO.	SHEET 13 OF 40
81000927	

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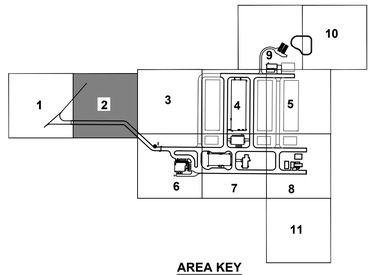
O:\J20004 - TODD CREEK CIVIL\07-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C113-GRADING PLAN 1.DWG

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
2	1158291.6339	2740012.7222	885.03	CTR
3	1158328.6334	2740012.9144	886.41	BC
4	1158326.0401	2740026.3316	885.68	MID
5	1158318.7534	2740037.8923	885.03	EC
11	1158328.5585	2740027.3277	885.68	PI

GRADING NOTE:

1. THE FIRST NUMBER OF THE SPOT ELEVATION SHOWN ON THESE PLANS HAS BEEN TRUNCATED. CONTRACTOR SHALL ADD 700, 800 OR 900 TO THE SPOT ELEVATIONS SHOWN TO GET TO ACTUAL PLAN ELEVATIONS. SEE ADJOINING CONTOUR LABELS WHEN DETERMINING ACTUAL ELEVATIONS. ALL CONTOURS LABELS ARE ACTUAL PLAN ELEVATIONS AND REQUIRE NO ADJUSTMENT.



AREA KEY

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 2

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WELLNER architects
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KANSAS CITY, MO 64114
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ODJ	JPG	08/27/2025	34W	53N 52N	36 01
CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO				DATE COMPLETED	
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C114	
PROJECT NO.			SHEET	14 OF	40
81000927					

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PLOT DATE 9/12/2025 12:29:58 AM by DAVID
G:\20004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C114-GRADING PLAN 2.DWG

(Typical)

TREE-LINE
(Typical)

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

CONSTRUCTION
LIMITS

MATCHLINE SEE SHEET C114

MATCHLINE SEE SHEET C116

CONSTRUCTION
LIMITS

RIP RAP

975

980

3:1

3:1

MATCHLINE SEE SHEET C118

AREA KEY

PRELIMINARY - NOT FOR CONSTRUCTION

NORTH

0 10' 20' 40'
SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

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TODD CREEK WWTP EXPANSION AND UPGRADE

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GRADING PLAN 3

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C115

PROJECT NO.	SHEET 15 OF 40
81000927	

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MATCHLINE SEE SHEET C121

MAIN ROAD 2

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

CL OF PROPOSED 5'
WIDE TRAPEZOIDAL SWALE

SIDEWALK (TYP.)
(SEE DETAIL
ON SHEET C134)

MAIN ROAD 3

MAIN ROAD 4

FUTURE AGS BASINS
TOW EL: 879
TOF EL: 855
FG: 870

AGS BASINS
TOW EL: 879
TOF EL: 855
FG: 870

FUTURE AGS BASINS
TOW EL: 873
TOF EL: 849
FG: 864

CL OF PROPOSED 5'
WIDE TRAPEZOIDAL SWALE

SIDEWALK (TYP.)
(SEE DETAIL ON
SHEET C134)

FOR DOOR STOOP
DETAILS (TYP)
(SEE STRUCTURAL
DRAWINGS)

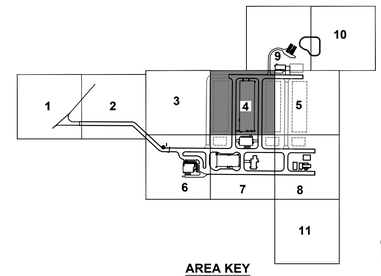
NORTH LINE, SW 1/4
SECTION 1-T52N-R34W

MATCHLINE SEE SHEET C119

MATCHLINE SEE SHEET C115

MATCHLINE SEE SHEET C117

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
20	1158661.4962	2740588.6091	868.66	BRD3
21	1158660.3376	2740732.7056	867.26	BRD4
22	1158658.8663	2740915.6997	865.50	BRD5
43	1158658.3839	2740975.6995	863.80	BACRD1



AREA KEY

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	–	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

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TODD CREEK WWTP EXPANSION AND UPGRADE

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GRADING PLAN 4

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DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C116

PROJECT NO. 81000927

SHEET 16 OF 40

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PLOT DATE: 9/12/2025 12:30:50 AM by DAVID
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MATCHLINE SEE SHEET C121

MATCHLINE SEE SHEET C122

MATCHLINE SEE SHEET C116

MATCHLINE SEE SHEET C120

MAIN ROAD 2

FUTURE MAIN ROAD

FUTURE FILTER BUILDING (BY OTHERS)

SERIES 600 UV DISINFECTION STRUCTURE FFE: 858

CONCRETE PAVEMENT (TYP.) (SEE DETAIL ON SHEET C134)

FUTURE AGS BASINS TOW EL: 873 TOF EL: 843 FG: 858

APPROXIMATE ℄ 20' S.E. Doc. No. M-10249 Bk. 833, Pg. 117 ITEM 9 (See Title Notes for ITEM 9)

EAST LINE, NW 1/4, SECTION 1-T52N-R34W

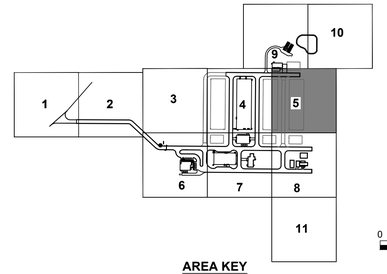
TREE LINE (Typical)

CONSTRUCTION LIMITS

FENCE (TYP.) (SEE DETAIL ON SHEET C136)

SE CORNER, NW 1/4, SECTION 1-T52N-R34W FND. 5/8" BAR

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
23	1158656.4934	2741210.8189	855.86	PI



AREA KEY

NORTH

0 10' 20' 40'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

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WELLNER architects

BURNS McDONNELL

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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GRADING PLAN 5

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C117

PROJECT NO. 81000927

SHEET 17 OF 40

Saved 09-11-2025 11:08:00 PM by DAVID
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MATCHLINE SEE SHEET C115

CONSTRUCTION LIMITS

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

MAIN ROAD 2

MAIN ROAD 1

WIRE FENCE

SEE SPECIFICATION 02765
FOR PAVEMENT MARKING

DRIVEWAY 1
1+00

TREE LINE
(Typical)

SIDEWALK (TYP)
(SEE DETAIL ON DRAWING C134)

FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

DROP FOOTING TO
ACCOMMODATE
PROPOSED GRADES.
(SEE STRUCTURAL PLANS.

ADMIN BUILDING
FFE: 875.50

CONSTRUCTION LIMITS

PROPOSED ELECTRICAL
PAD (TYP)

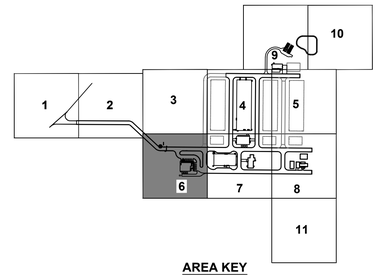
FENCE (TYP.)
(SEE DETAIL ON SHEET C136)

CONSTRUCTION LIMITS

FLOOD LINE

MATCHLINE SEE SHEET C119

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
6	1158184.0098	2740237.4604	883.30	CTR
7	1158156.8904	2740212.2902	884.65	BC
8	1158149.6230	2740223.8022	883.98	MID
9	1158147.0110	2740237.1632	883.30	EC
12	1158147.1263	2740222.8105	883.98	PI
13	1158144.5180	2740547.4542	875.00	BRD2
15	1158026.3058	2740546.5044	873.80	BC
16	1158000.0566	2740557.1309	873.51	MID
19	1157989.3070	2740546.2072	873.51	PI
28	1158146.0405	2740357.9478	877.38	BDRWY1
29	1158119.0053	2740357.7268	876.93	BC
30	1158091.7330	2740384.6446	875.78	EC
31	1158118.7841	2740384.7773	877.04	CTR
32	1158091.0832	2740465.9888	875.25	BC
33	1158054.0844	2740465.6932	875.20	CTR
34	1158080.0265	2740492.0752	874.85	MID
35	1158053.7578	2740502.6918	874.46	EC
36	1158033.7796	2740502.5154	874.19	BC
37	1158002.8749	2740519.9103	873.68	MID
38	1158033.6408	2740538.4197	873.70	CTR
39	1158001.9853	2740555.3628	873.56	EC
40	1158099.7814	2740365.5243	876.08	MID



AREA KEY

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 6

FOR WSD USE:

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL & STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
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816-333-9400
LICENSEE NO. 000165

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01
CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO			DATE COMPLETED		
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C118	
PROJECT NO.			SHEET	18 OF	40
81000927					

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PLOT DATE 9/12/2025 12:31:46 AM by DAVID
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MATCHLINE SEE SHEET C116

MATCHLINE SEE SHEET C118

MATCHLINE SEE SHEET C120

FUTURE BLOWER BUILDING FFE: 871

CONCRETE PAVEMENT (TYP.) (SEE DETAIL ON SHEET C134)

SIDEWALK (TYP.) (SEE DETAIL ON SHEET C134)

BLOWER BUILDING FFE: 871

FUTURE BLOWER BUILDING FFE: 865

MAIN ROAD-1

MAIN ROAD-2

MAIN ROAD-4

MAIN ROAD-5

MAIN ROAD-6

PIPE BOLLARD ON EACH SIDE OF OVERHEAD DOOR (TYP) (SEE DETAIL ON SHEET C134)

SOLIDS BUILDING FFE: 872

SERIES 300 HEADWORKS BUILDING ELEV: 871

PROPOSED BOLLARD (TYP.) (SEE DETAIL SHEET C134)

ASPHALT PAVEMENT (TYP.) (SEE DETAIL, SHEET C134)

FENCE (SEE DETAILS ON SHEET C136) (SEE SPEC SEC 02820)

CONSTRUCTION LIMITS

TREE LINE

PROPERTY LINE

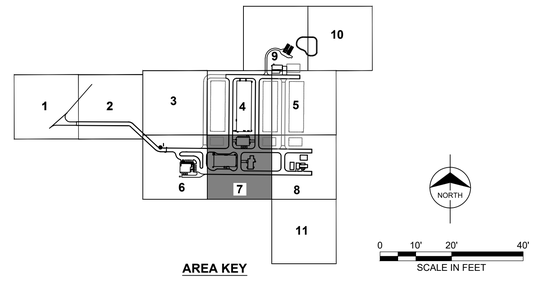
FLOOD LINE

FLOOD LINE

TREE LINE (Typical)

SOUTH LINE NORTH 1/2 OF THE EAST 1/2 SECTION 36 T52N – R34W

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
14	1158026.0085	2740583.5032	872.91	CTR
17	1157989.0097	2740583.2060	872.91	EC
24	1158143.0630	2740728.5502	871.86	ERD4
25	1158142.5838	2740788.2330	870.83	BRD6
26	1158141.5927	2740911.5443	870.00	ERD5
41	1157987.3726	2740786.9861	868.73	ERD6



AREA KEY

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GRADING PLAN 7

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C119

PROJECT NO. 81000927

SHEET 19 OF 40

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MATCHLINE SEE SHEET C117

MATCHLINE SEE SHEET C119

FUTURE BLOWER BUILDING FFE: 859

INFLUENT PUMP STATION ELECTRICAL BUILDING FFE: 859

VALVE VAULT STATION FFE: 856

INFLUENT PUMP STATION FFE: 856

INFLUENT SCREENING STRUCTURE FFE: 856

MAIN ROAD 1

MAIN ROAD 2

MAIN ROAD 7

PROPERTY LINE

FENCE
(SEE DETAILS ON SHEET C136)
(SEE SPEC SEC 02820)

FLOOD LINE

TREE LINE

CONSTRUCTION LIMITS

ASPHALT PAVEMENT (TYP.)
(SEE DETAIL ON SHEET C134)

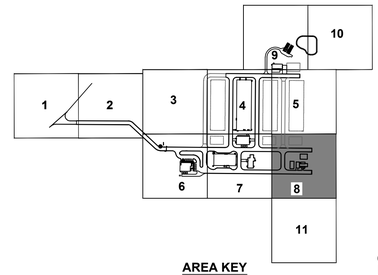
POINT OF BEGINNING
SOUTH TRACT

NE CORNER SW 1/4
SECTION 1-50N-R34W
MO. BASE BAR

SE CORNER SW 1/4
SECTION 1-50N-R34W

S00°27'39"W
327.69'

CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	1158138.4935	2741297.2798	860.00	PI
18	1157983.2828	2741296.0579	856.00	PI
27	1158140.1224	2741094.5403	858.20	BRD7
42	1157984.9118	2741093.2922	856.17	ERD7



AREA KEY

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 8

FOR WSD USE:

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WELLNER architects

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01
CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO			DATE COMPLETED		
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.	
1698				C120	
PROJECT NO. 81000927		SHEET 20 OF 40			

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CONTROL POINTS				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
44	1158788.5219	2740976.7451	856.69	BC
45	1158788.0078	2741040.7430	853.37	CTR
46	1158843.6748	2741009.1649	852.79	MID
47	1158843.2030	2741073.1388	845.99	EC
48	1158793.3574	2741158.0343	843.17	EACRD1

FENCE
(SEE DETAILS ON SHEET C136)
(SEE SPEC SEC 02820)

CONSTRUCTION LIMITS

DETENTION BASIN
(SEE DETAIL SHEET C137)

FUTURE CASCADE AERATION

CASCADE AERATION TOW EL: 848

RIP RAP

TREE LINE (Typical)

Approx limits of Floodway Areas in Zone AE (100 Year Flood)

ACCESS ROAD 1

SWALE CL

CONCRETE PAVEMENT (TYP.)
(SEE DETAIL ON SHEET C134)

PROPOSED BOLLARD (TYP.)
(SEE DETAIL SHEET C134)

GRAVEL ROAD (TYP.)
(SEE DETAIL ON SHEET C123)

FOR DOOR STOOP DETAILS (TYP)
(SEE STRUCTURAL SHEETS)

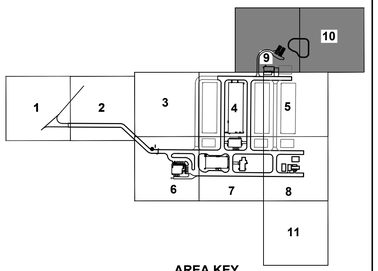
SERIES 600
UV DISINFECTION
STRUCTURE
FFE: 858

FUTURE FILTER
BUILDING
(BY OTHERS)

MATCHLINE SEE SHEET C116

MATCHLINE SEE SHEET C117

MATCHLINE SEE SHEET C117



AREA KEY

NORTH

0 10' 20' 40'
SCALE IN FEET

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 9

FOR WSD USE:

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BURNS McDONNELL
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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C121

PROJECT NO. 81000927

SHEET 21 OF 40

Saved 09-11-2025 11:49:12 PM by DAVID
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RIP RAP

RIP RAP

CONSTRUCTION LIMITS

DETENTION BASIN
(SEE DETAIL ON SHEET C137)

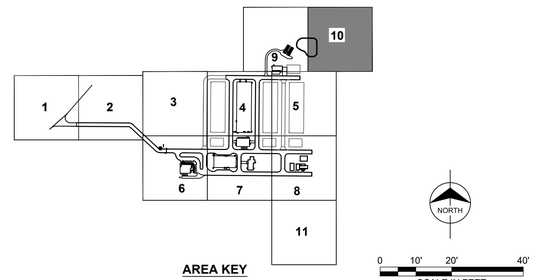
FENCE
(SEE DETAILS ON SHEET C137)
(SEE SPEC SEC 02820)

RIP RAP

CONSTRUCTION LIMITS

MATCHLINE SEE SHEET C121

MATCHLINE SEE SHEET C117



AREA KEY

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

GRADING PLAN 10

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C122

PROJECT NO.	SHEET 22 OF 40
81000927	

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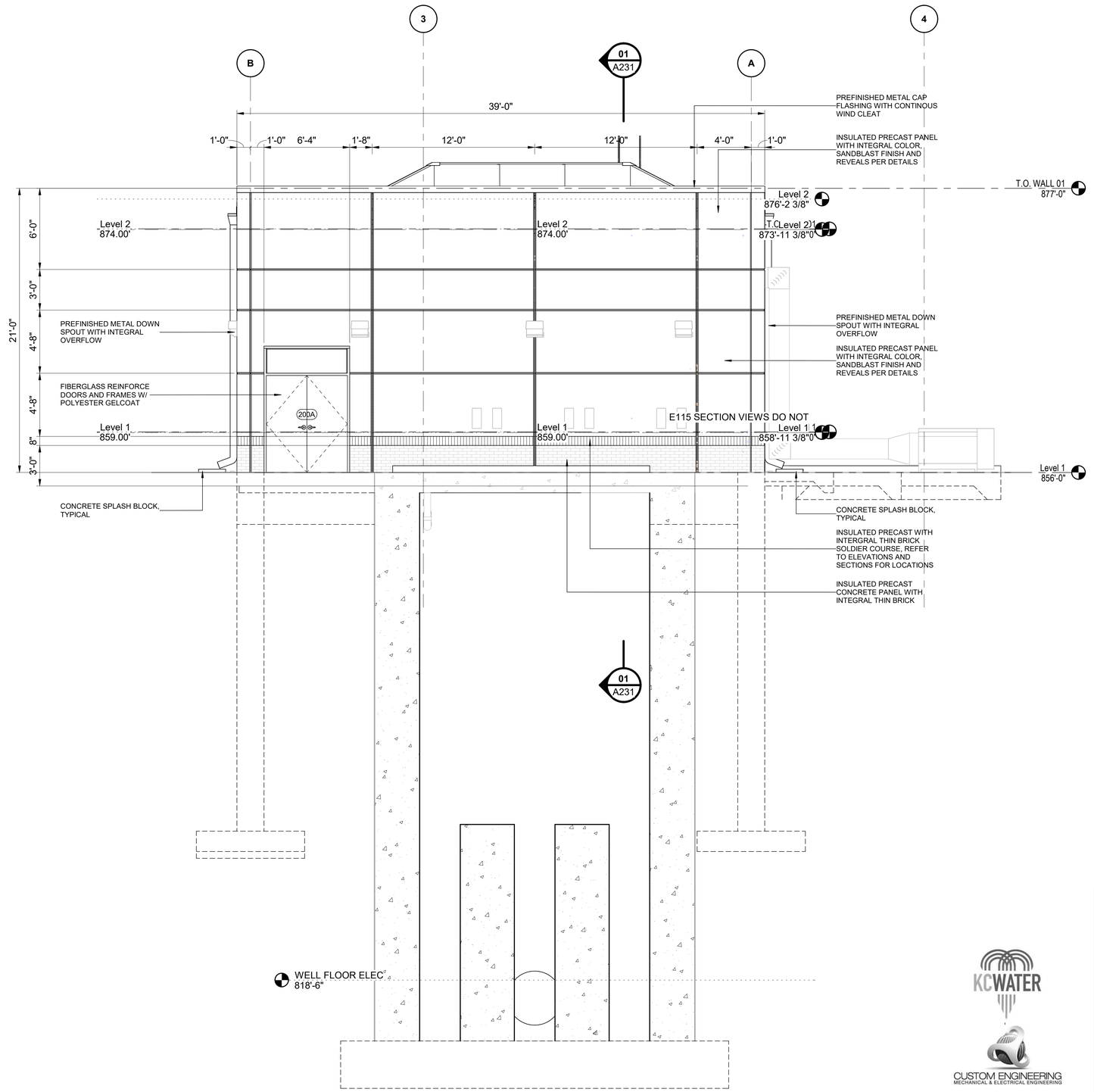
Attachment 3

Building Elevations

9400 Ward Parkway | Kansas City, MO 64114 | burnsmcd.com



NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

INFLUENT PUMP STATION SCREENING EXTERIOR ELEVATION

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

FOR WSD USE:

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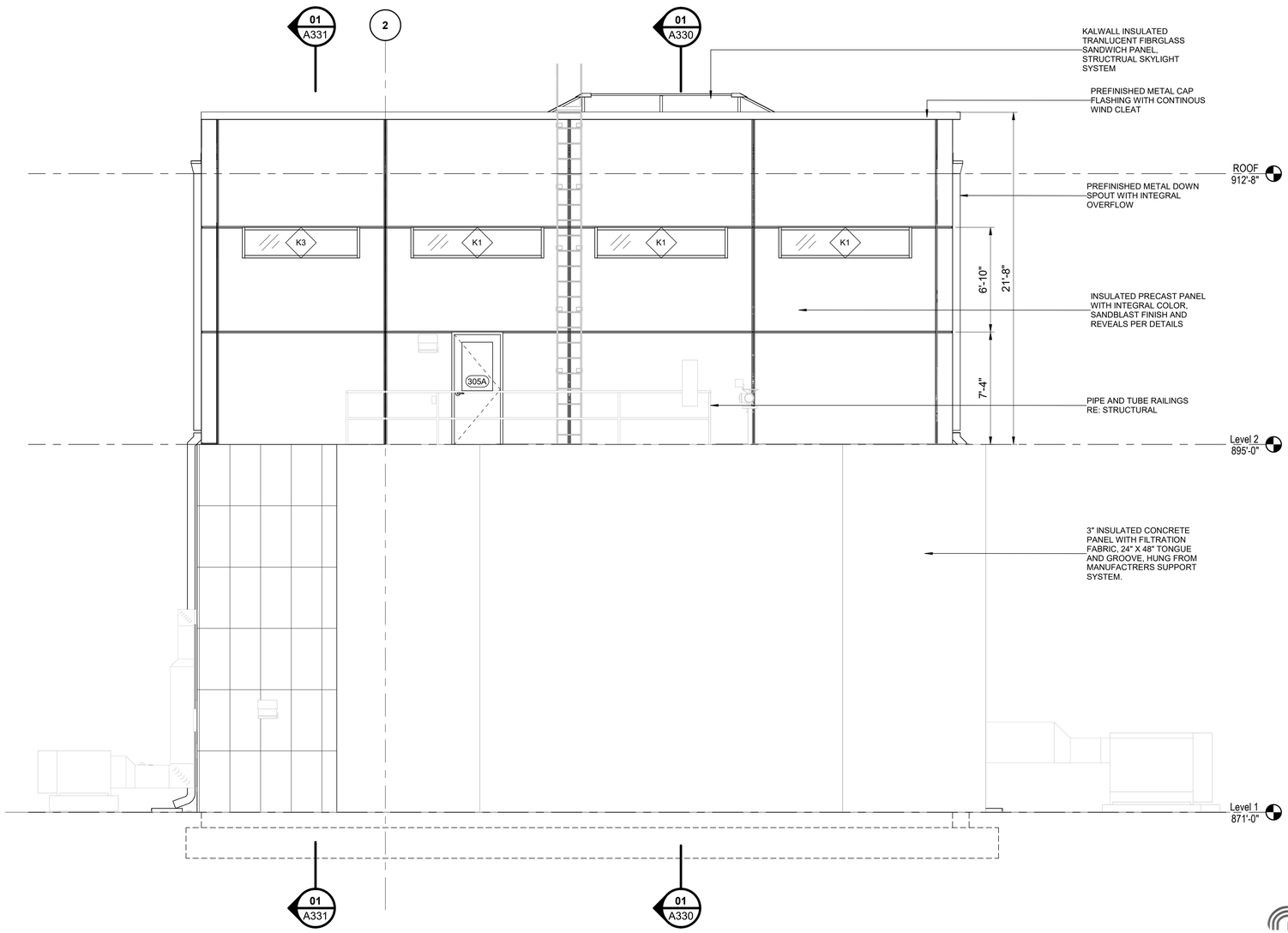
BK	JB		34W	52N	01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A225

PROJECT NO. 81000927 SHEET OF 560



ELEVATION 02 A301

NORTH ELEVATION

0 2' 4' 8'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER

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A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

HEADWORKS EXTERIOR ELEVATION

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

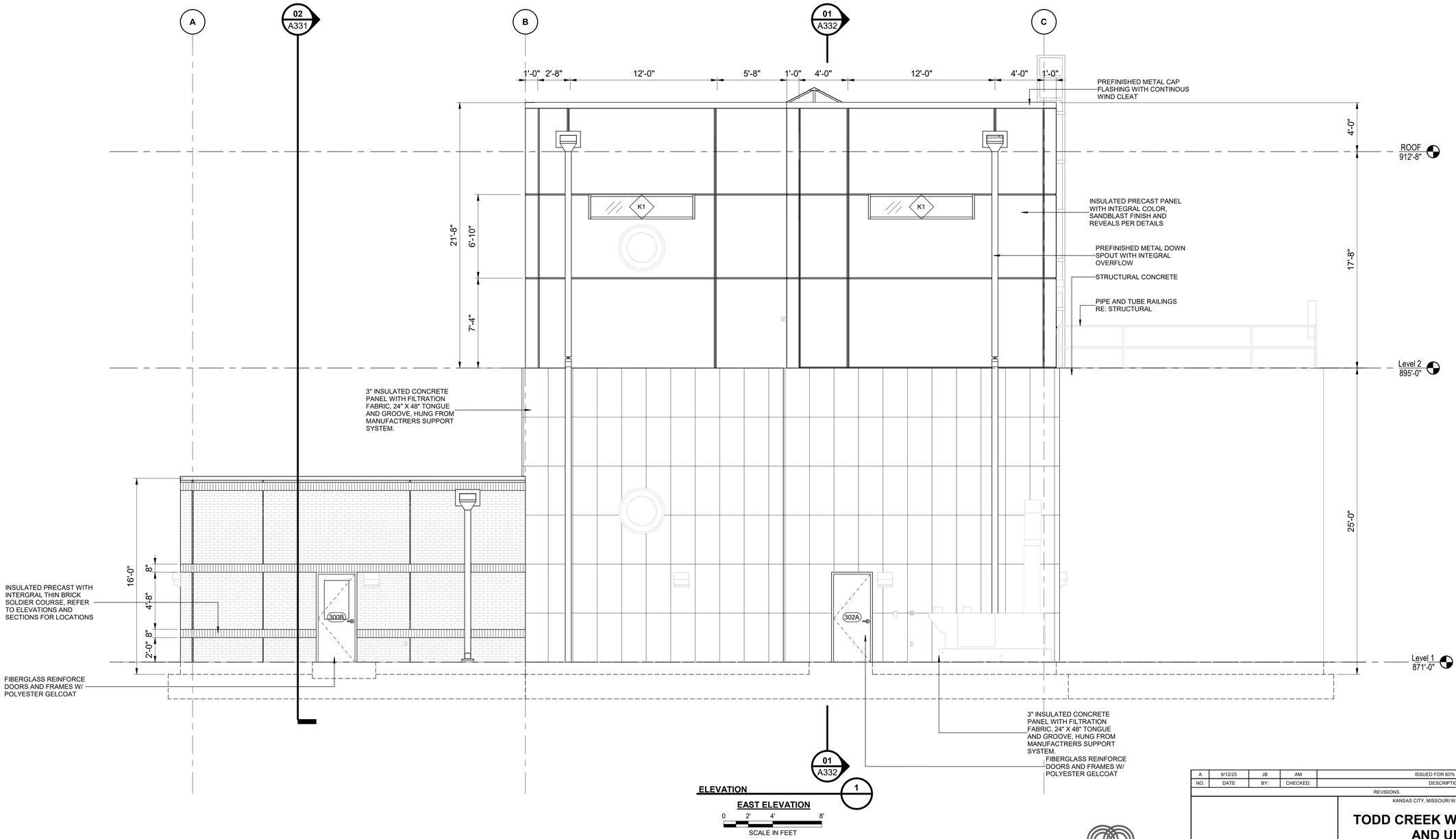
FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A320

PROJECT NO.	SHEET	OF
81000927		560



NO.	DATE	BY:	CHECKED:	REVISIONS
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

HEADWORKS EXTERIOR ELEVATION

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

FOR WSD USE:

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BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A321

PROJECT NO. 81000927 SHEET OF 560

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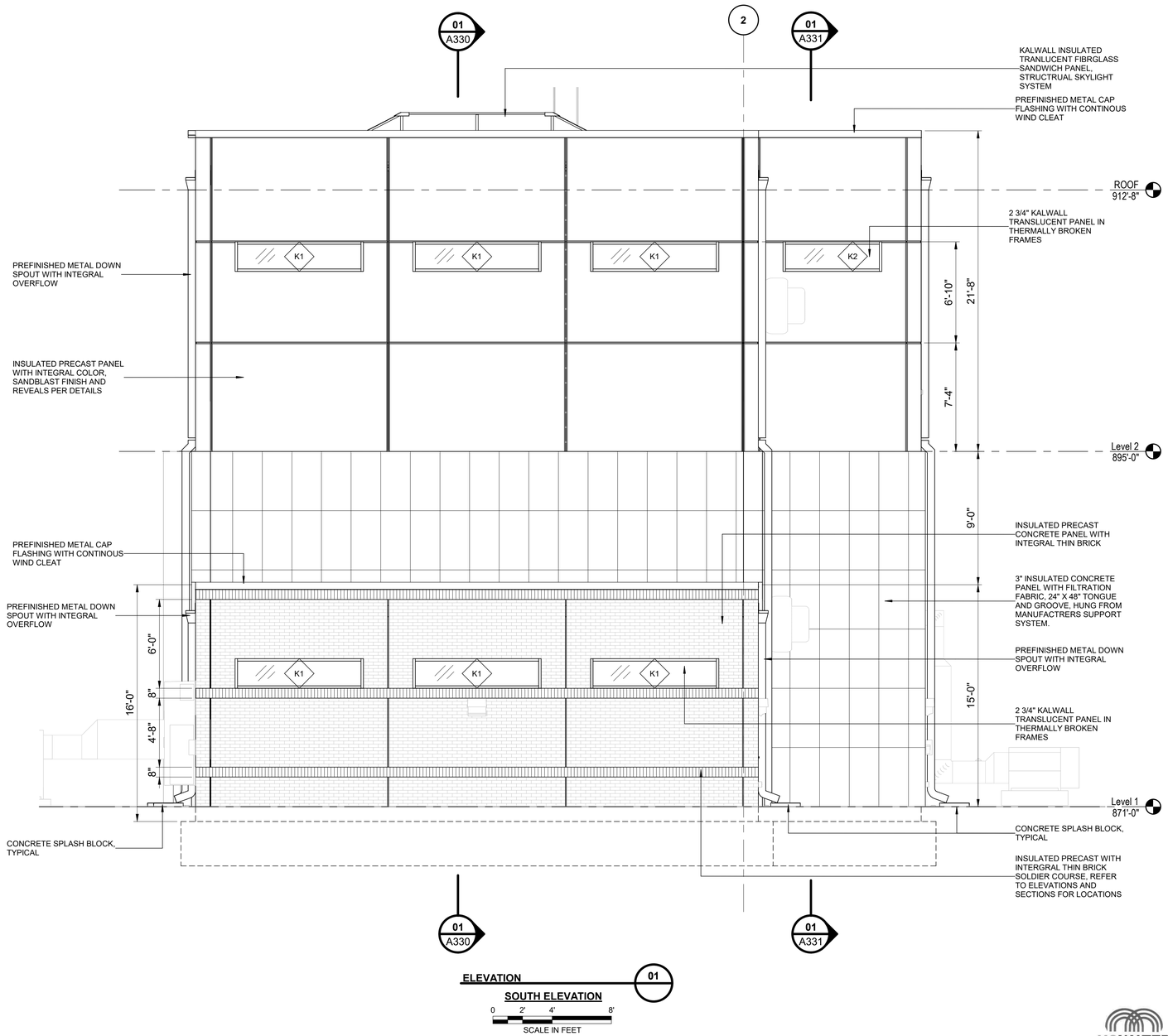

ELEVATION 01

SOUTH ELEVATION

0 2' 4' 8'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

KC WATER

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REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

HEADWORKS EXTERIOR ELEVATION

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

FOR WSD USE:

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BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
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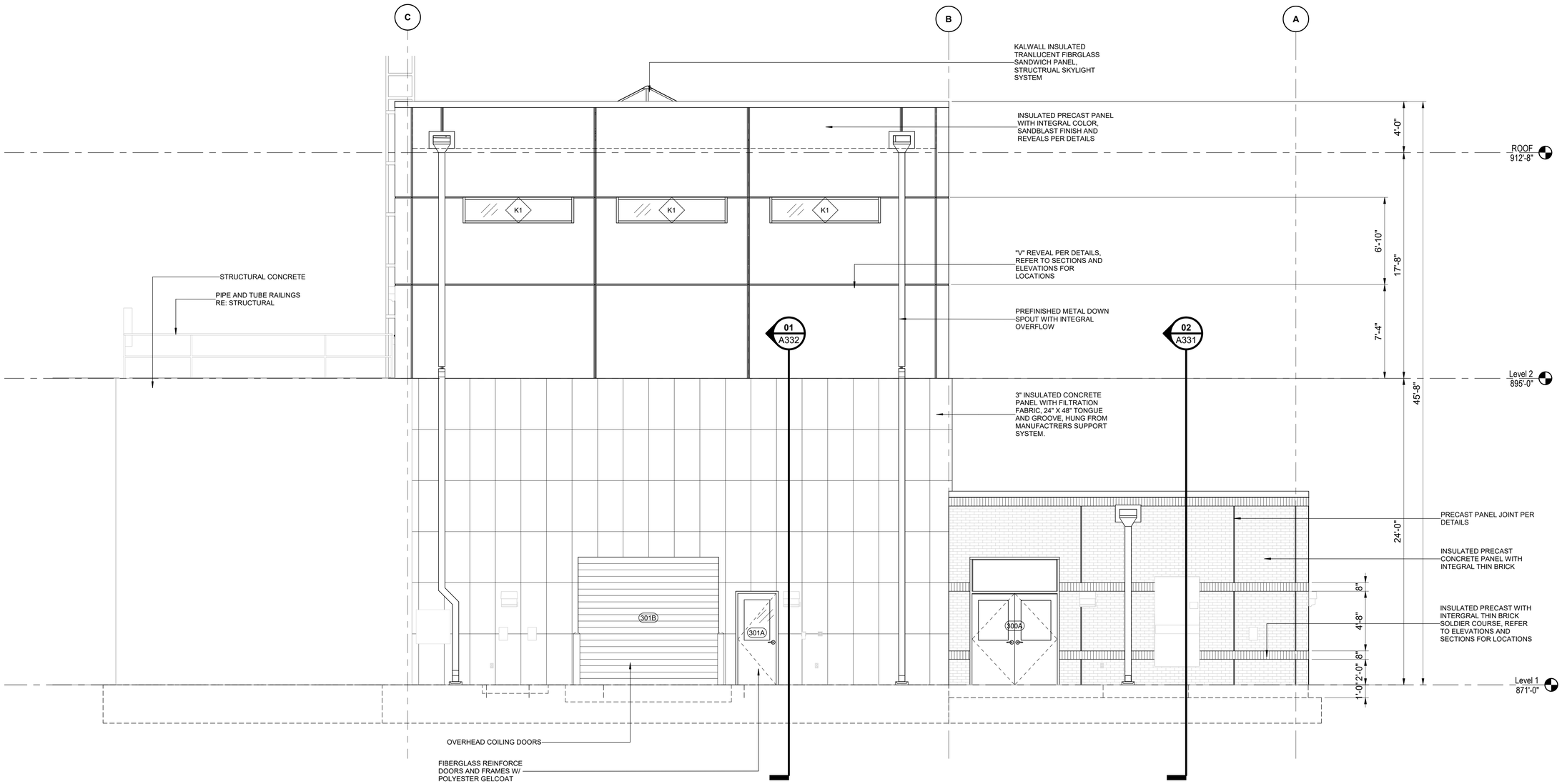
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A322

PROJECT NO.	SHEET	OF
81000927		560



ELEVATION 01

WEST ELEVATION

0 2' 4' 8'

SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

HEADWORKS EXTERIOR ELEVATION

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

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BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A323

PROJECT NO.	SHEET	OF
81000927		560

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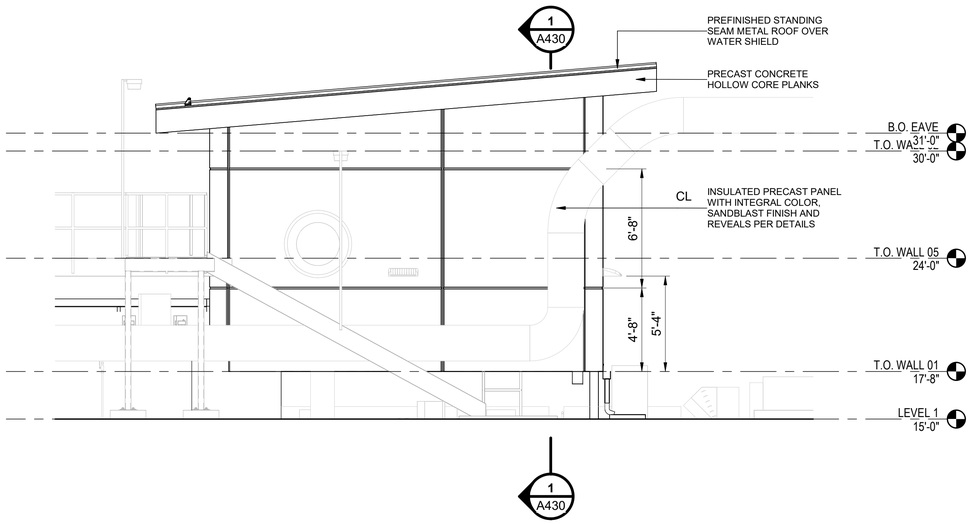
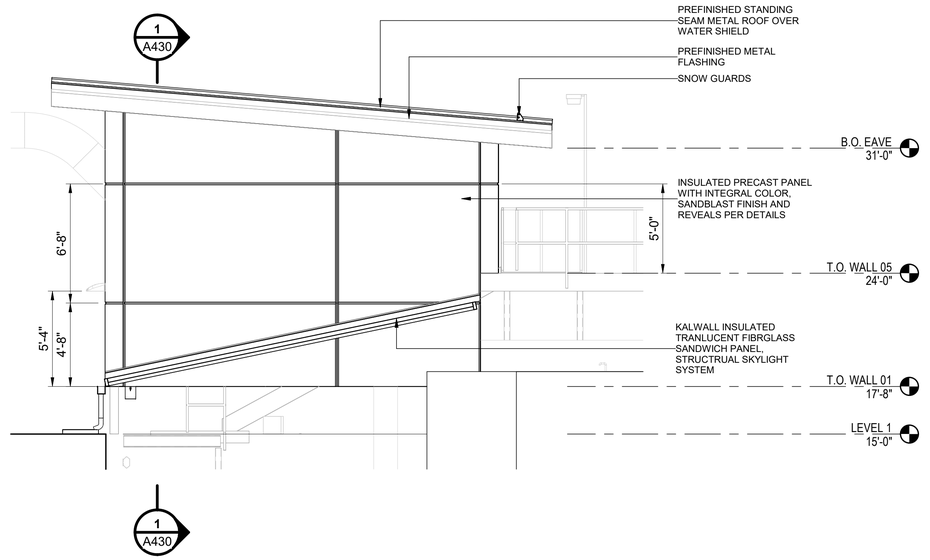


ELEVATION 02 A412

WEST ELEVATION SW TOWER

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET

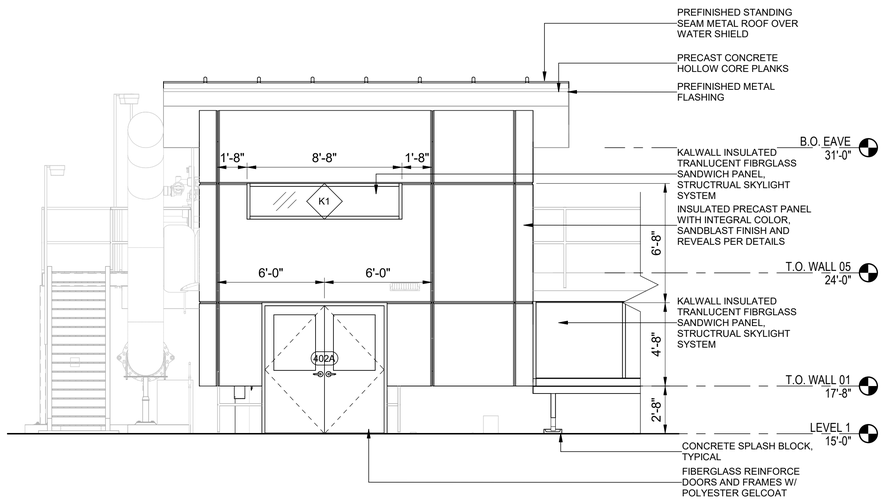


ELEVATION 01 A412

EAST ELEVATION SW TOWER

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET

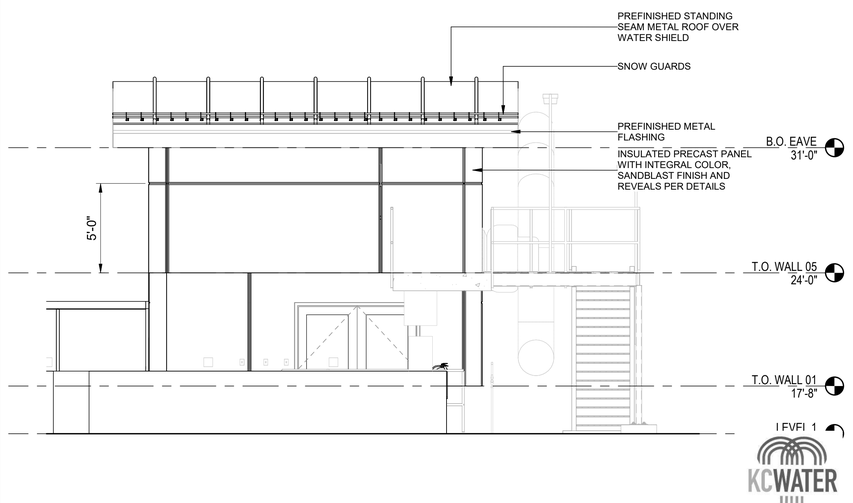


ELEVATION 04 A412

SOUTH ELEVATION SW TOWER

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET



ELEVATION 03 A412

NORTH ELEVATION SW TOWER

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

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CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

REVISIONS

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

FOR WSD USE:

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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AGS BASIN EXTERIOR ELEVATIONS SW STAIR

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
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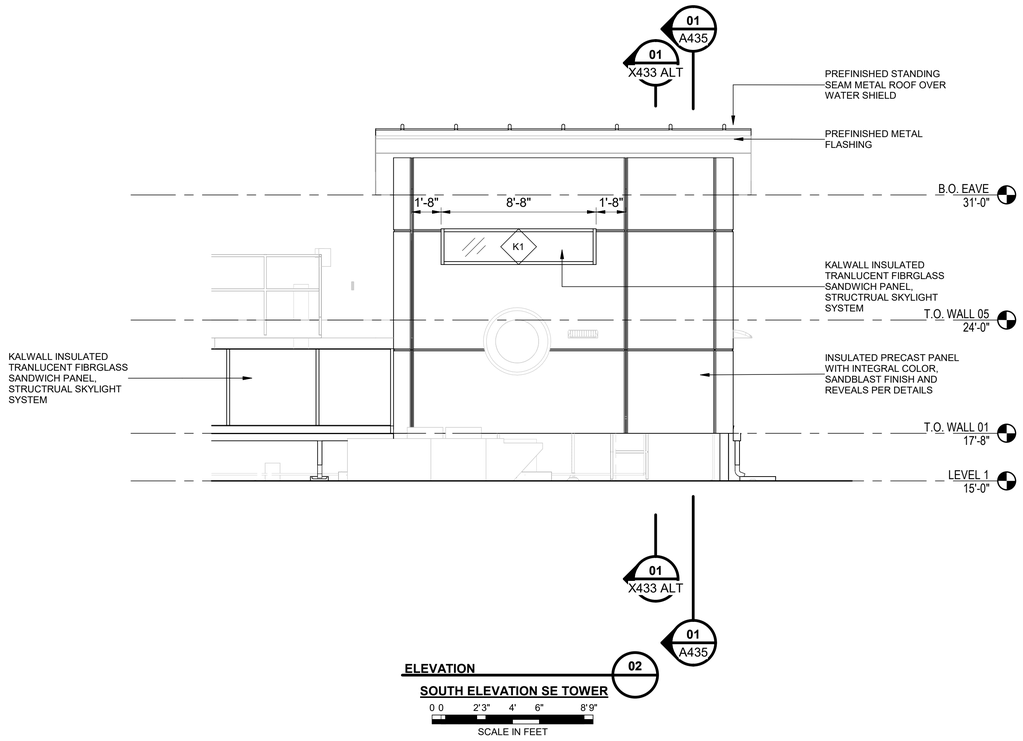
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A420

PROJECT NO. 81000927 SHEET OF 560

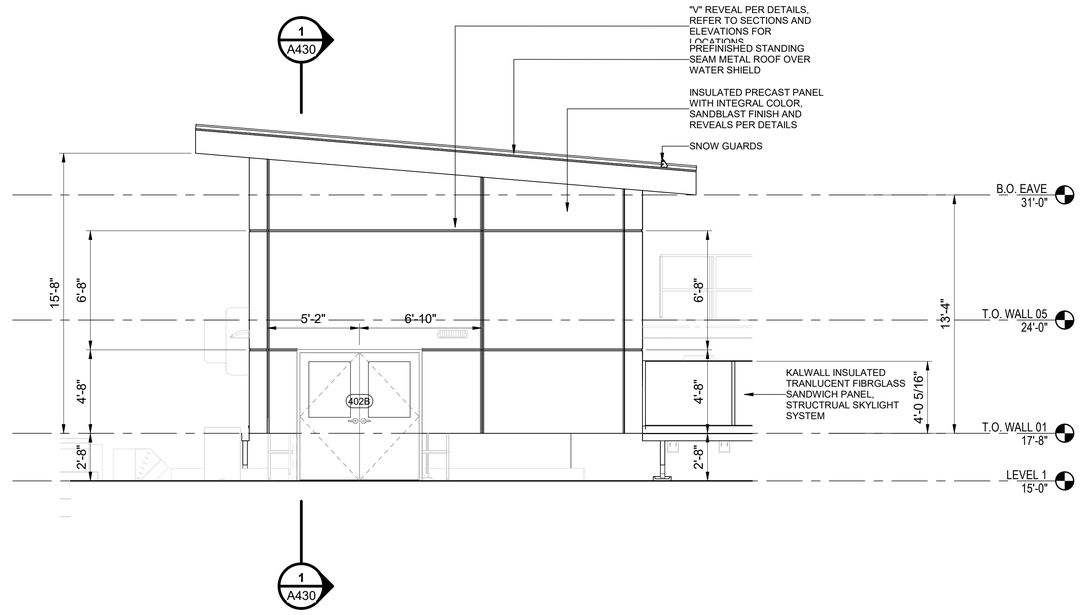


ELEVATION 02

SOUTH ELEVATION SE TOWER

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET

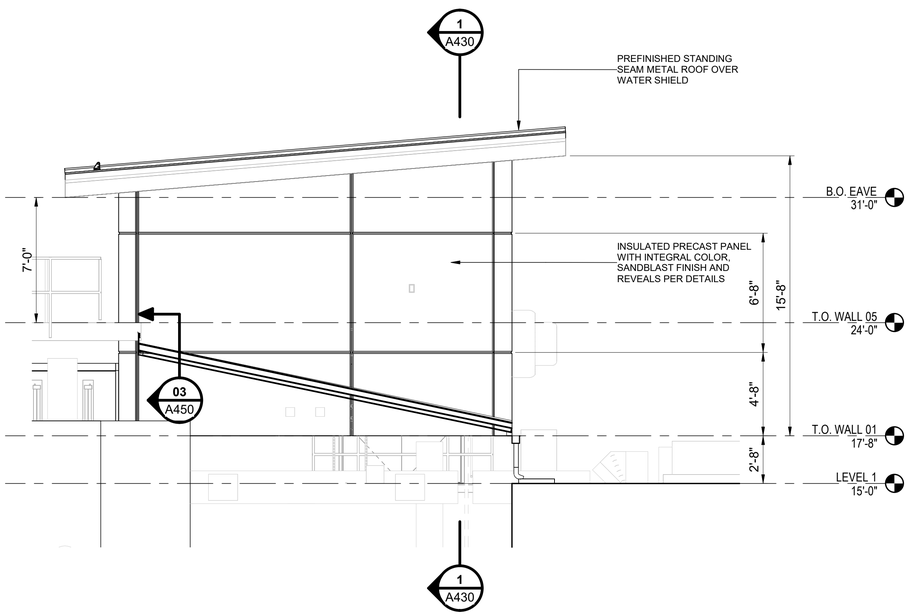


ELEVATION 01

EAST ELEVATION SE TOWER

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET

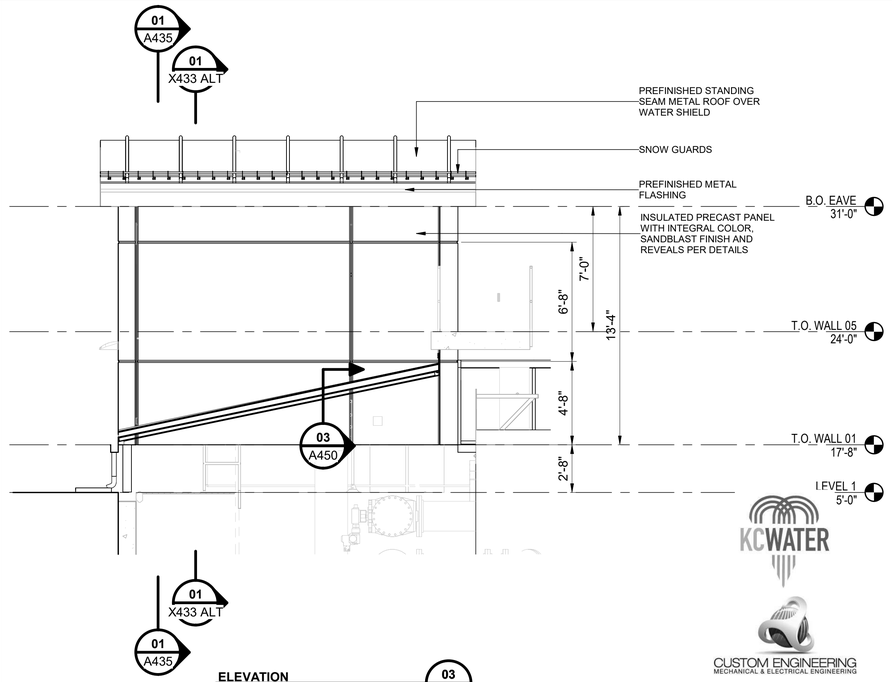


ELEVATION 04

WEST ELEVATION SE TOWERS

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET



ELEVATION 03

NORTH ELEVATION SE TOWER

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

AGS BASIN EXTERIOR ELEVATIONS SE STAIR

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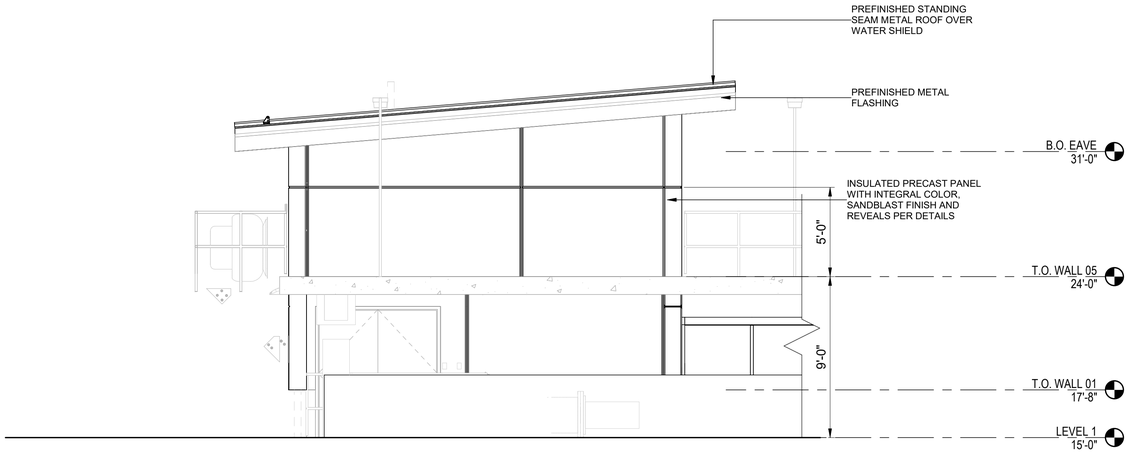
BK	JB		34W	53N	36

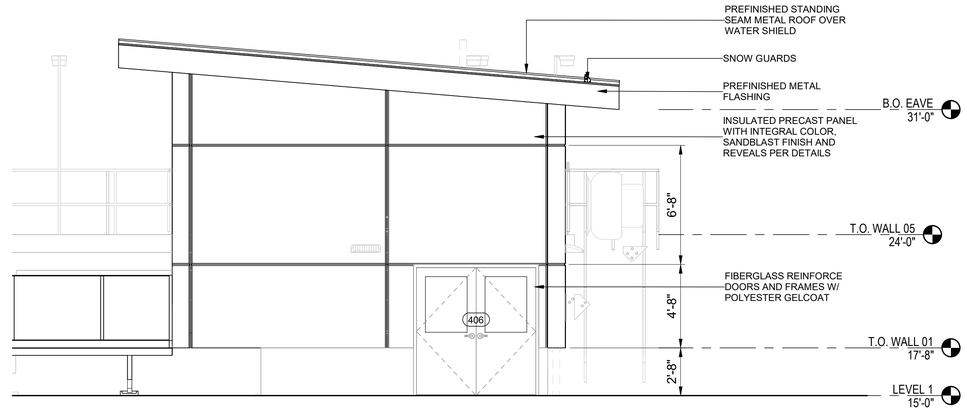
CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A421

PROJECT NO. 81000927 SHEET OF 560

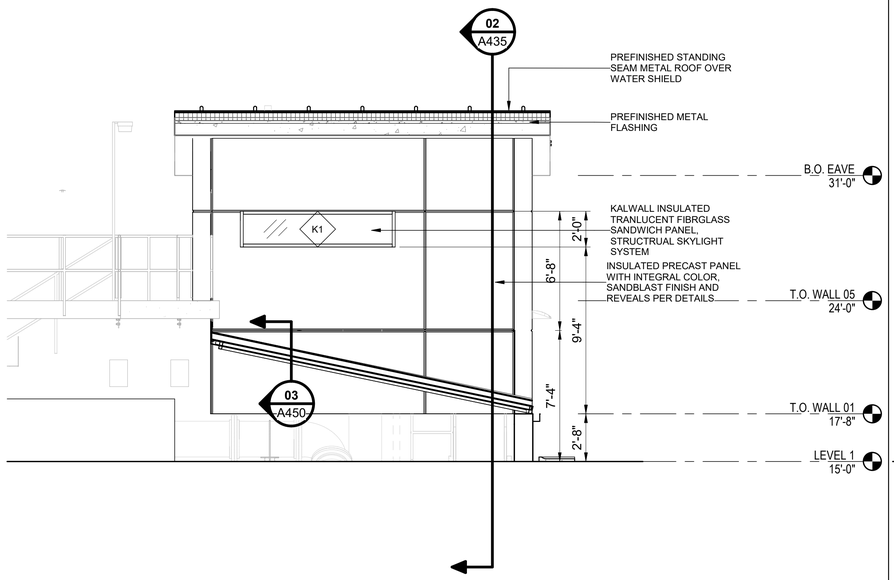


ELEVATION 02
WEST ELEVATION NE TOWER
0 0 2'3" 4' 6" 8'9"
SCALE IN FEET

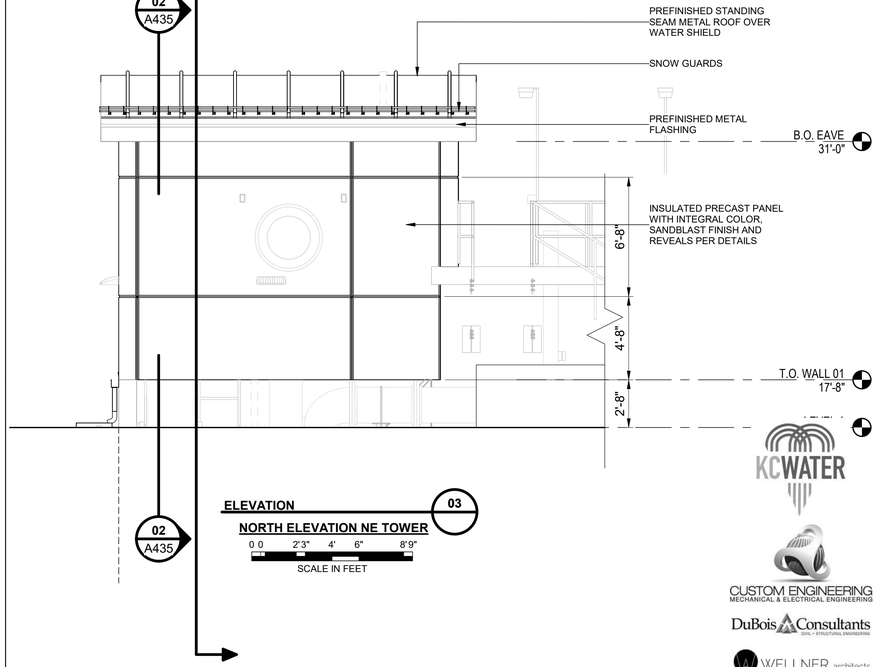


ELEVATION 01
EAST ELEVATION NE TOWER
0 0 2'3" 4' 6" 8'9"
SCALE IN FEET

02 X433 ALT



ELEVATION 04
SOUTH ELVATION NE TOWER
0 0 2'3" 4' 6" 8'9"
SCALE IN FEET



ELEVATION 03
NORTH ELEVATION NE TOWER
0 0 2'3" 4' 6" 8'9"
SCALE IN FEET

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REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

AGS BASIN EXTERIOR ELEVATIONS NE STAIR

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

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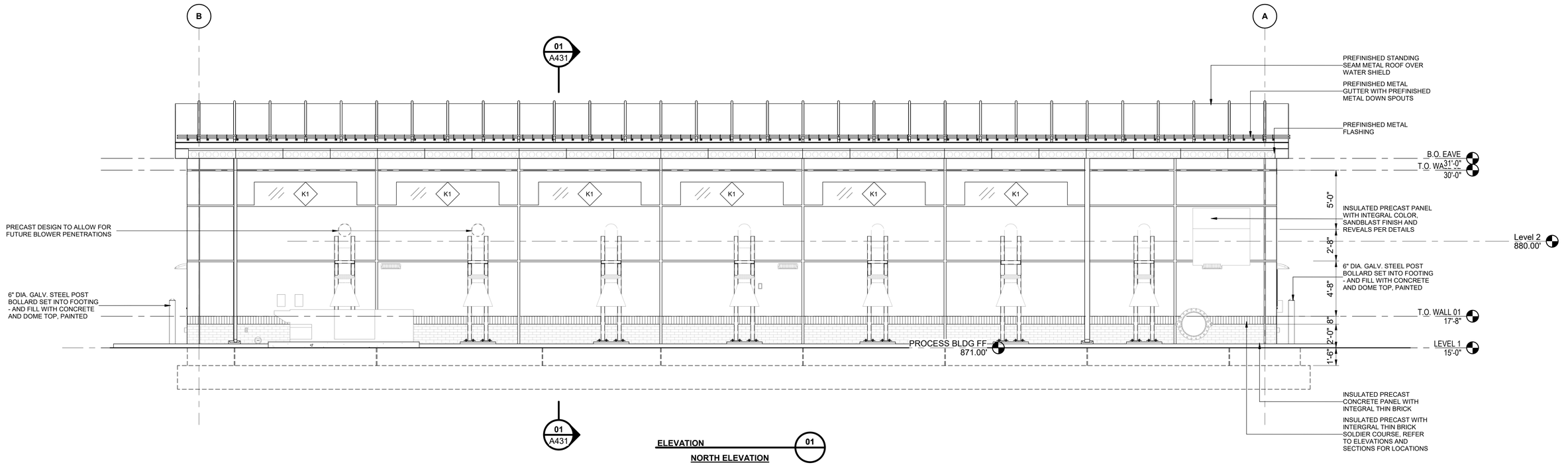
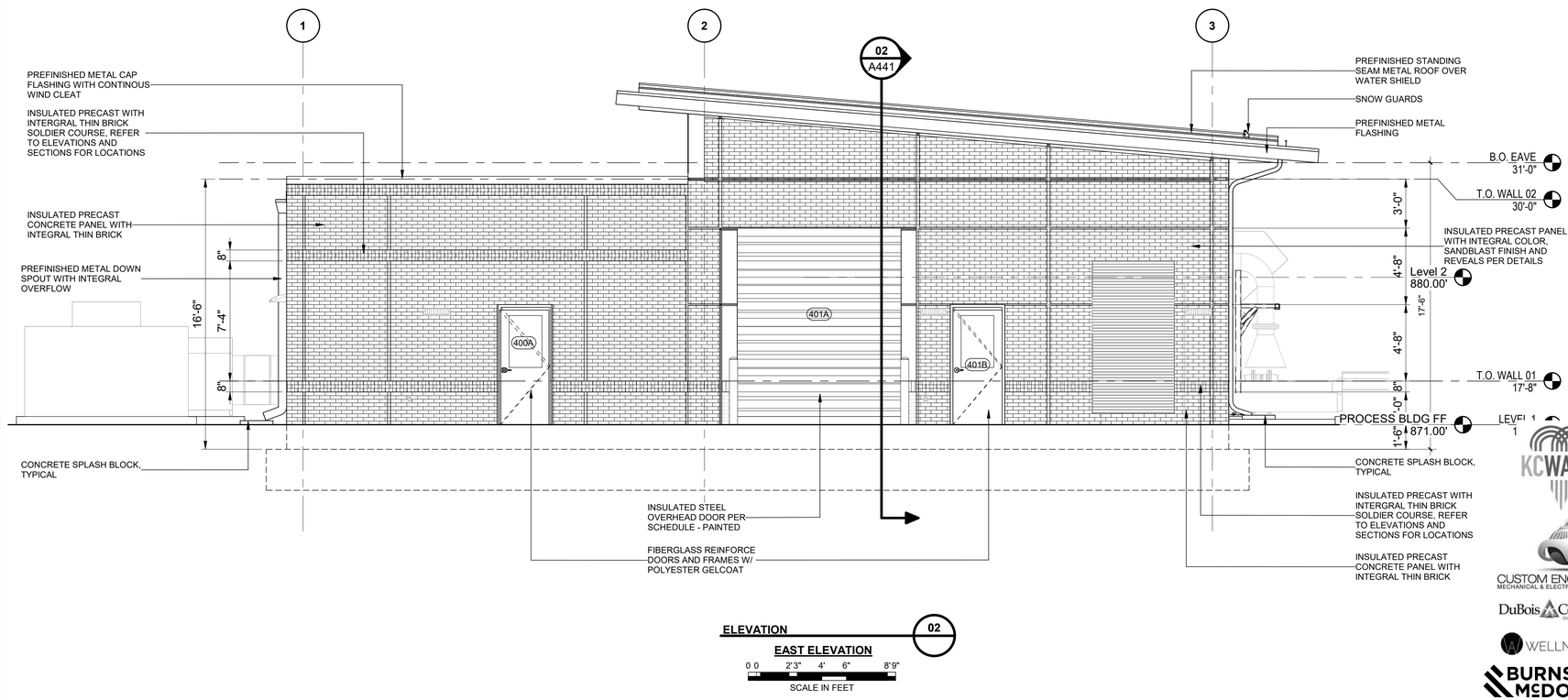
CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A422

PROJECT NO. 81000927 SHEET OF 560





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A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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BLOWER BUILDING EXTERIOR ELEVATIONS

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BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
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CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A423

PROJECT NO. 81000927 SHEET OF 560

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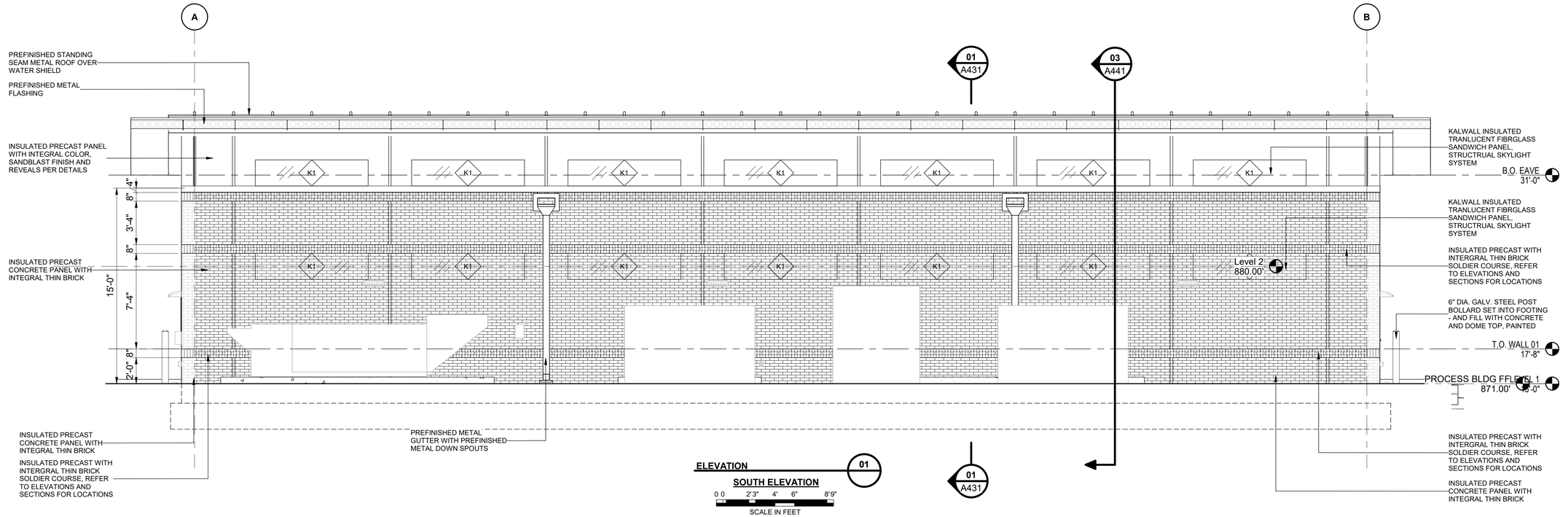
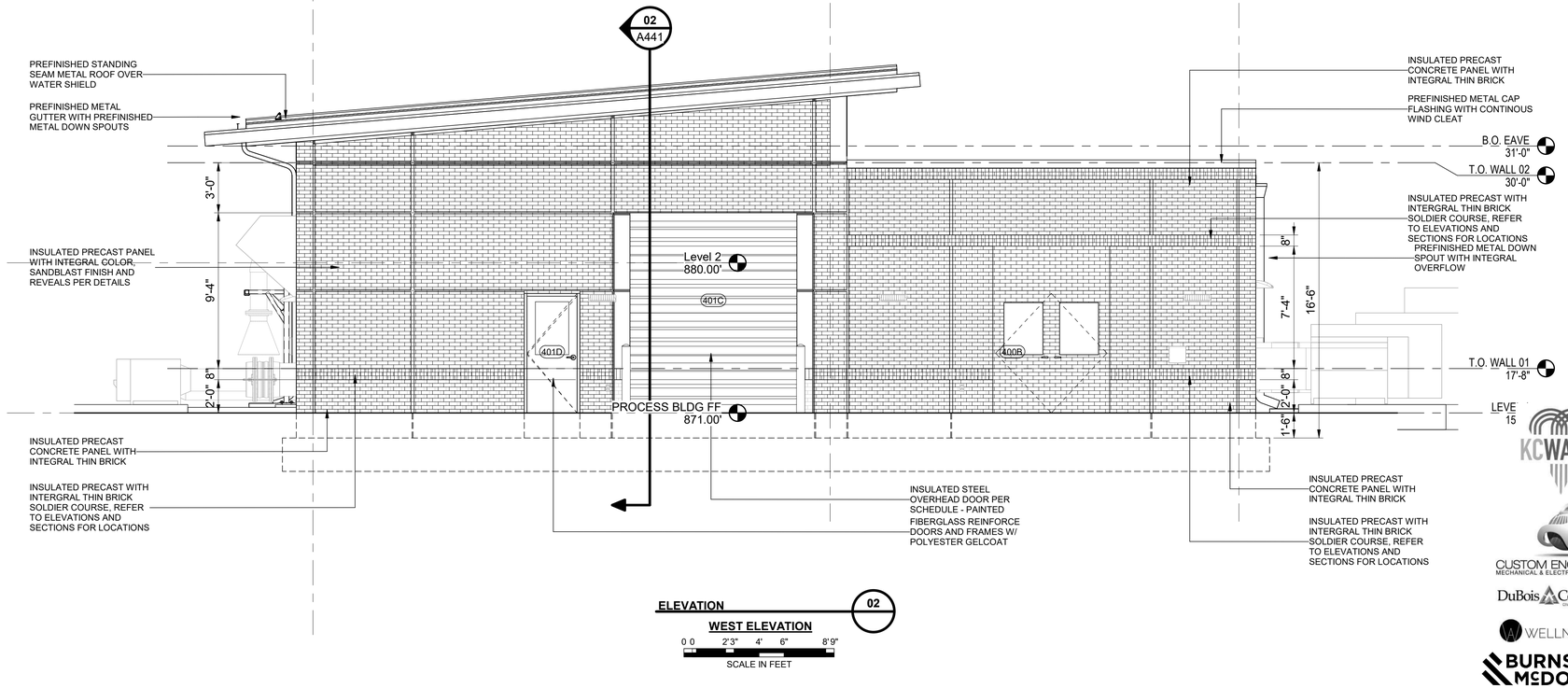


ELEVATION 01

SOUTH ELEVATION

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET



ELEVATION 02

WEST ELEVATION

0 0 2'3" 4' 6" 8'9"

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	REVISIONS
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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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BLOWER BUILDING EXTERIOR ELEVATIONS

JASON SCOTT BARKER
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BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
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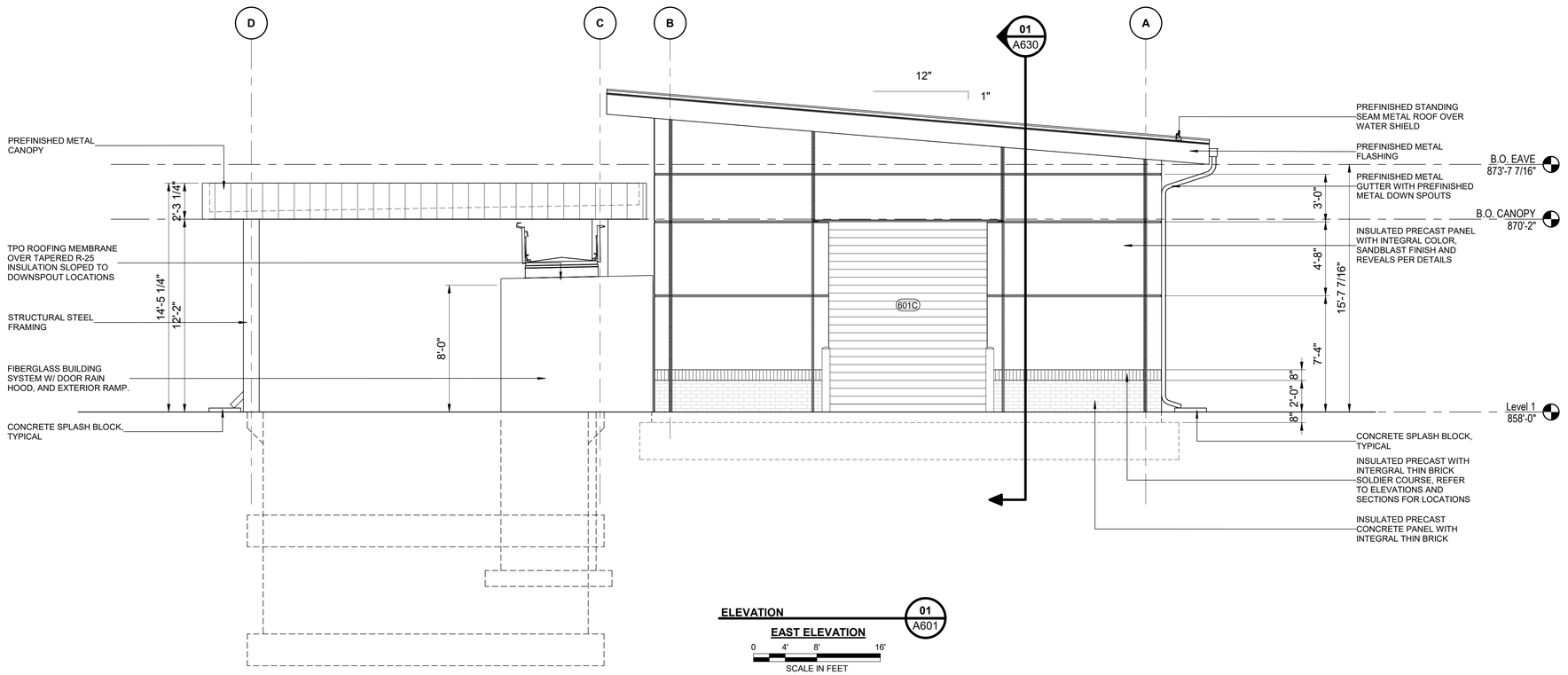
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A424

PROJECT NO. 81000927 SHEET OF 560

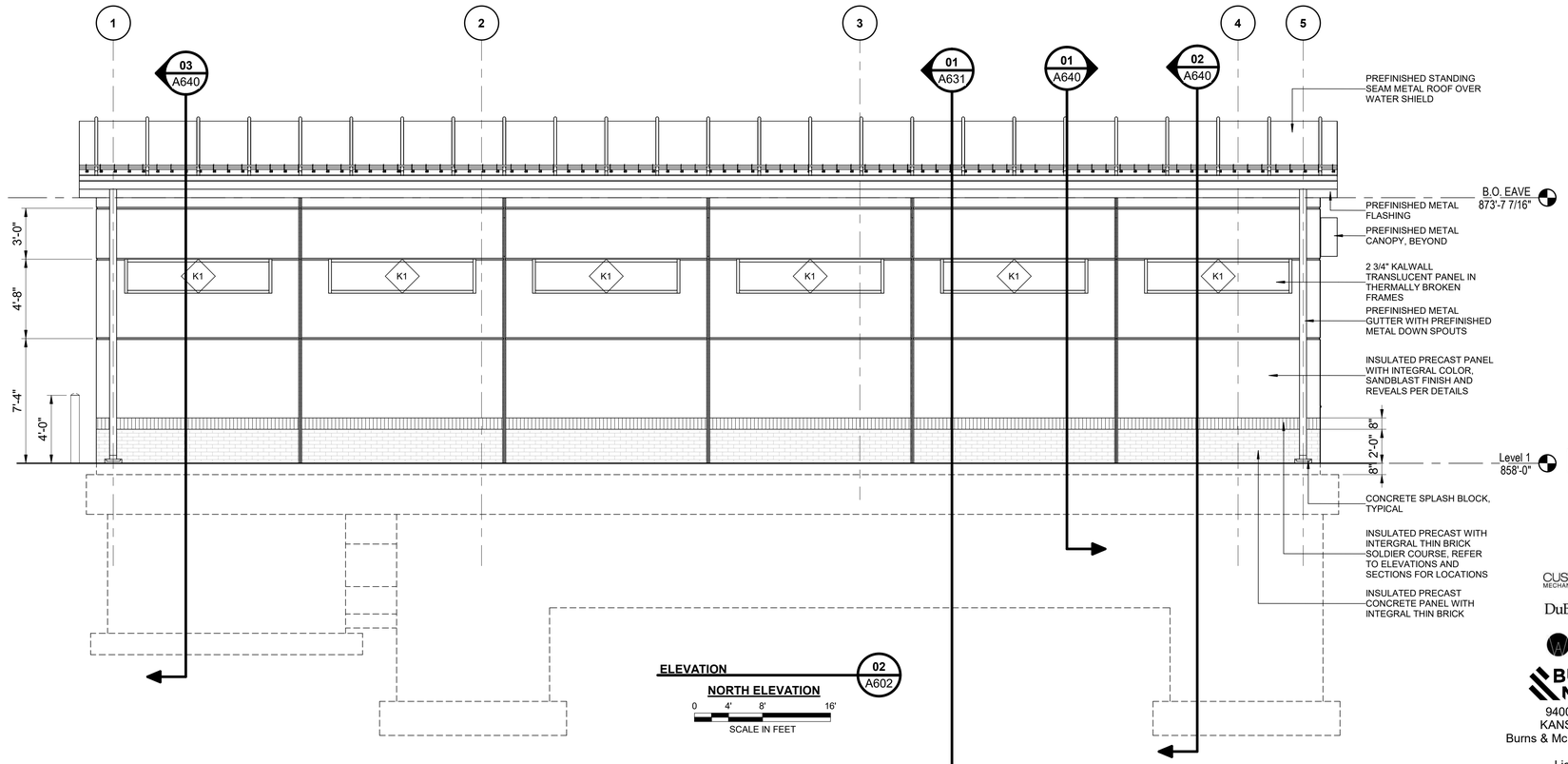


ELEVATION 01 A601

EAST ELEVATION

0 4' 8' 16'

SCALE IN FEET



ELEVATION 02 A602

NORTH ELEVATION

0 4' 8' 16'

SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

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UV DISINFECTION EXTERIOR ELEVATIONS

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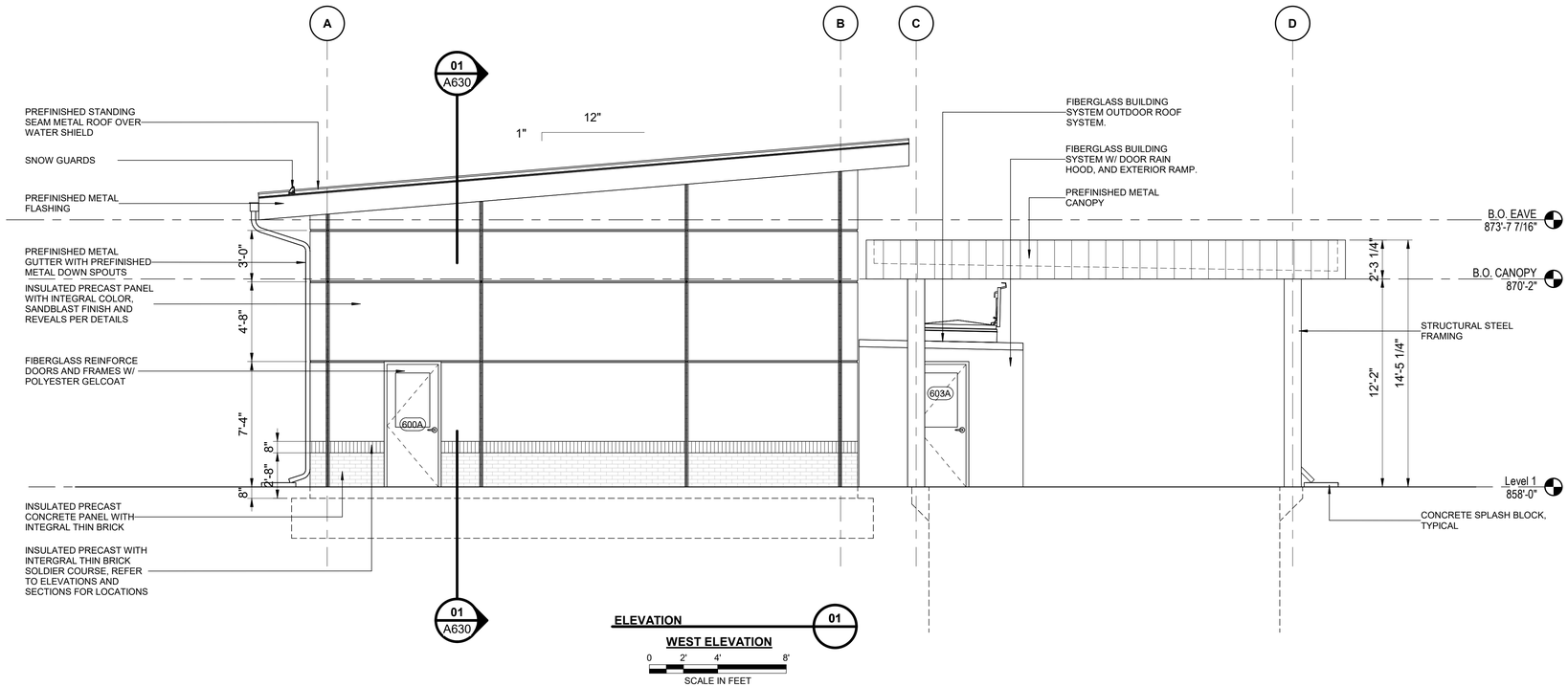
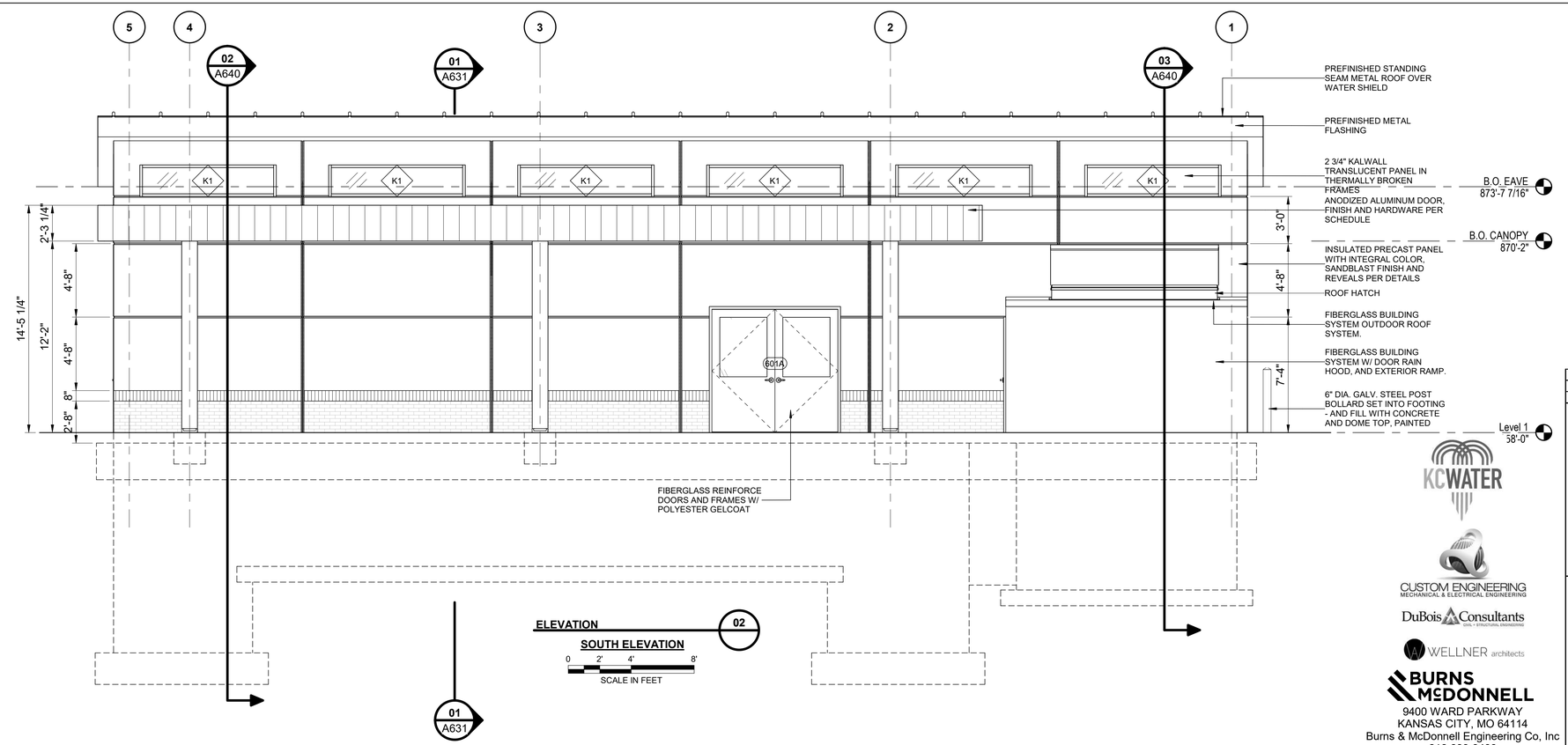
BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A620

PROJECT NO. 81000927 SHEET OF 560





NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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UV DISINFECTION EXTERIOR ELEVATIONS

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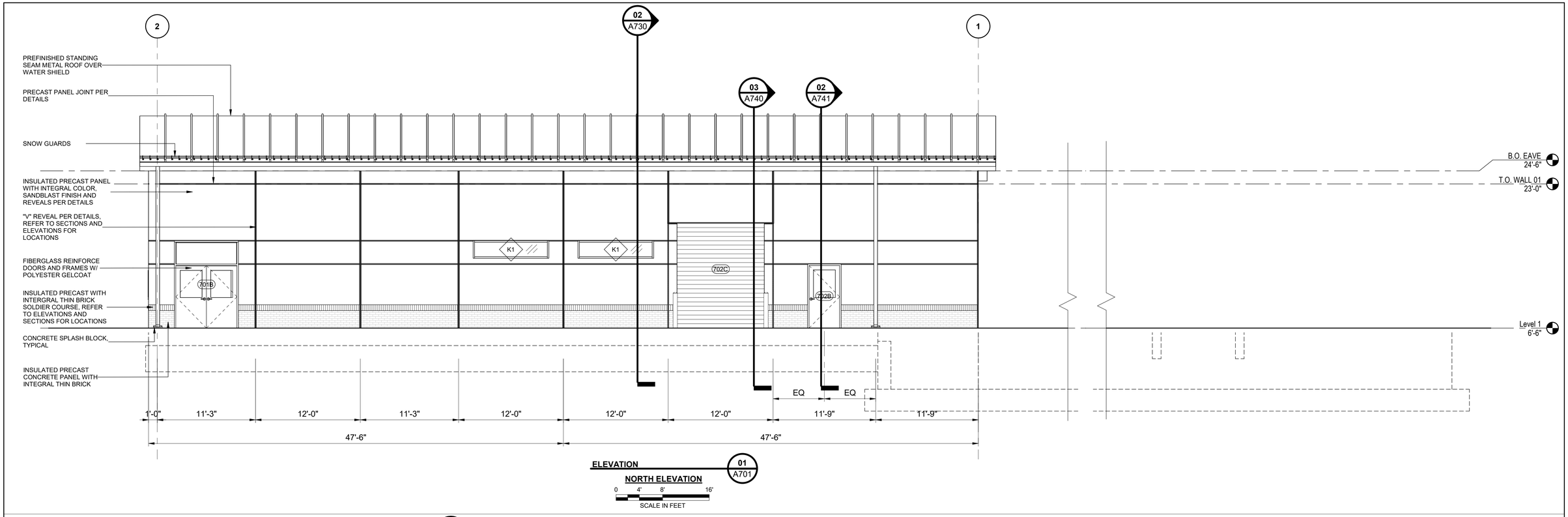
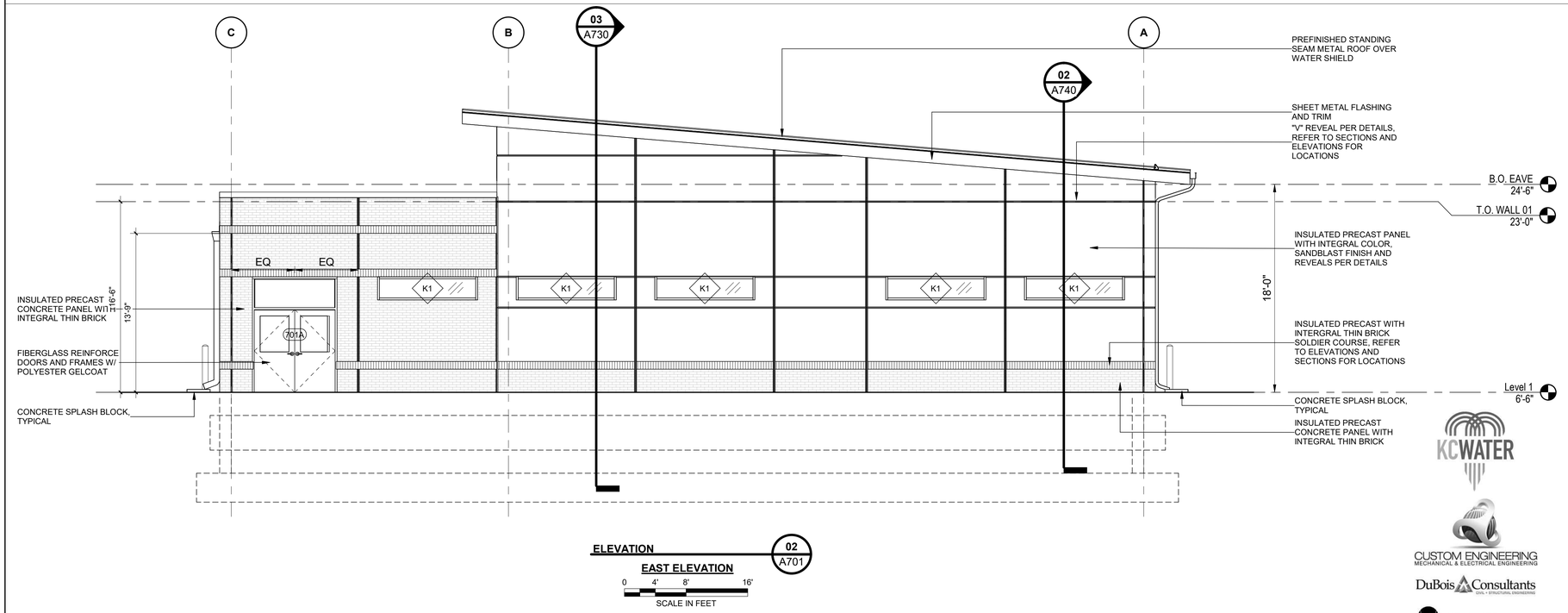
BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A621

PROJECT NO.	SHEET	OF
81000927		560





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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

SOLIDS HANDLING EXTERIOR ELEVATIONS

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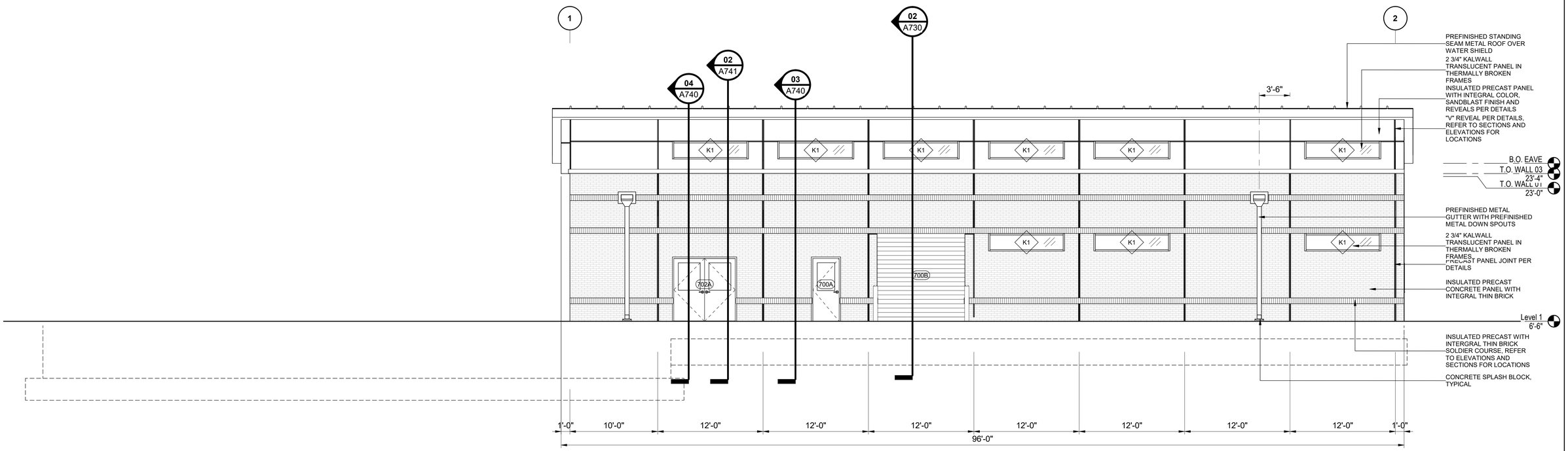
BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A720

PROJECT NO. 81000927 SHEET OF 560

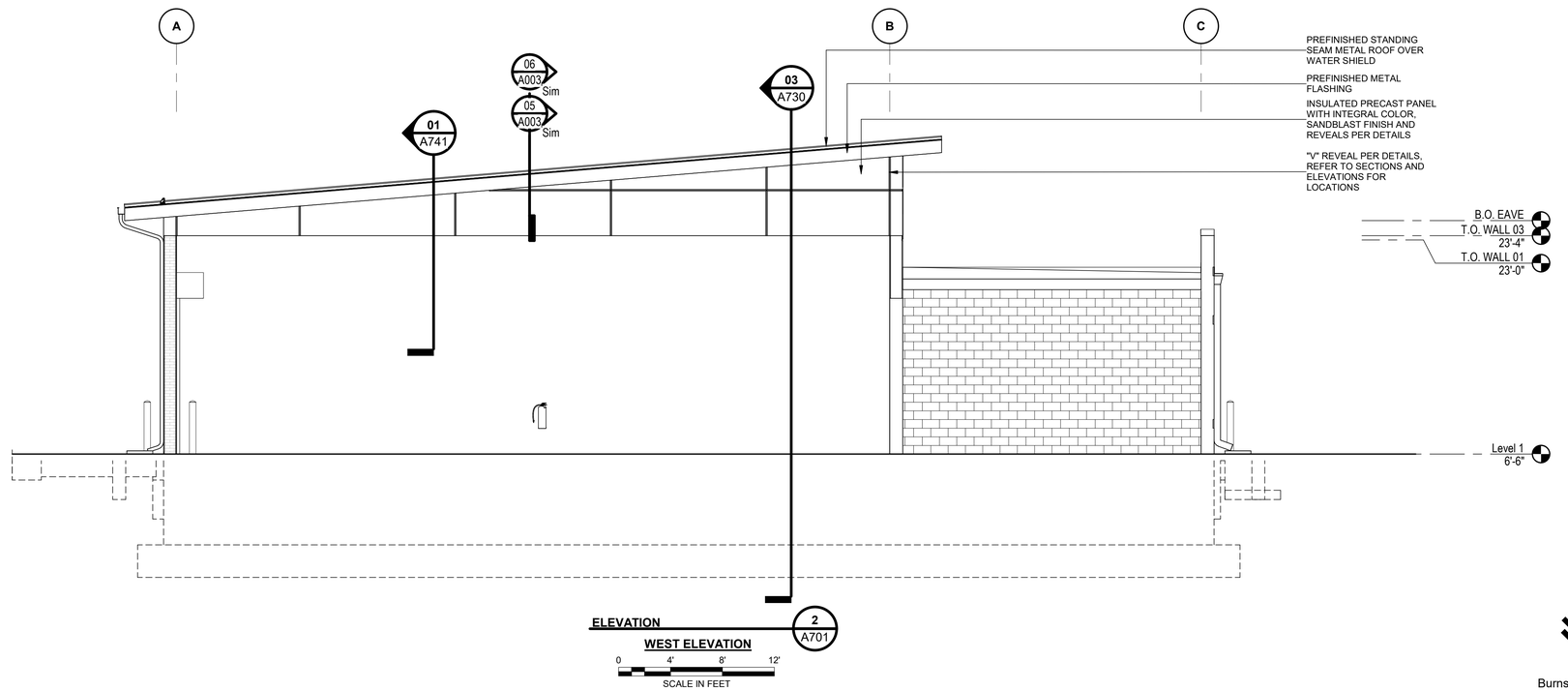


ELEVATION 1 A701

SOUTH ELEVATION

0 4' 8' 12'

SCALE IN FEET



ELEVATION 2 A701

WEST ELEVATION

0 4' 8' 12'

SCALE IN FEET

NO.	DATE	BY:	CHECKED:	REVISIONS
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

SOLIDS HANDLING EXTERIOR ELEVATIONS

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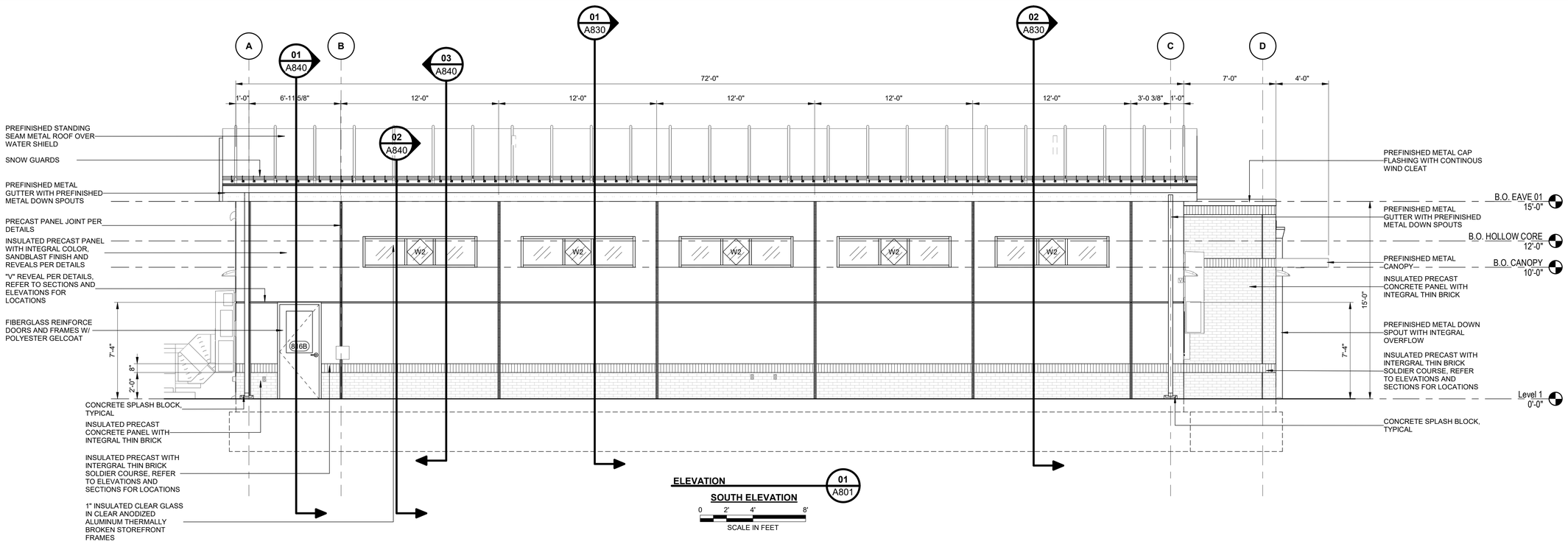
CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A721

PROJECT NO. 81000927 SHEET OF 560

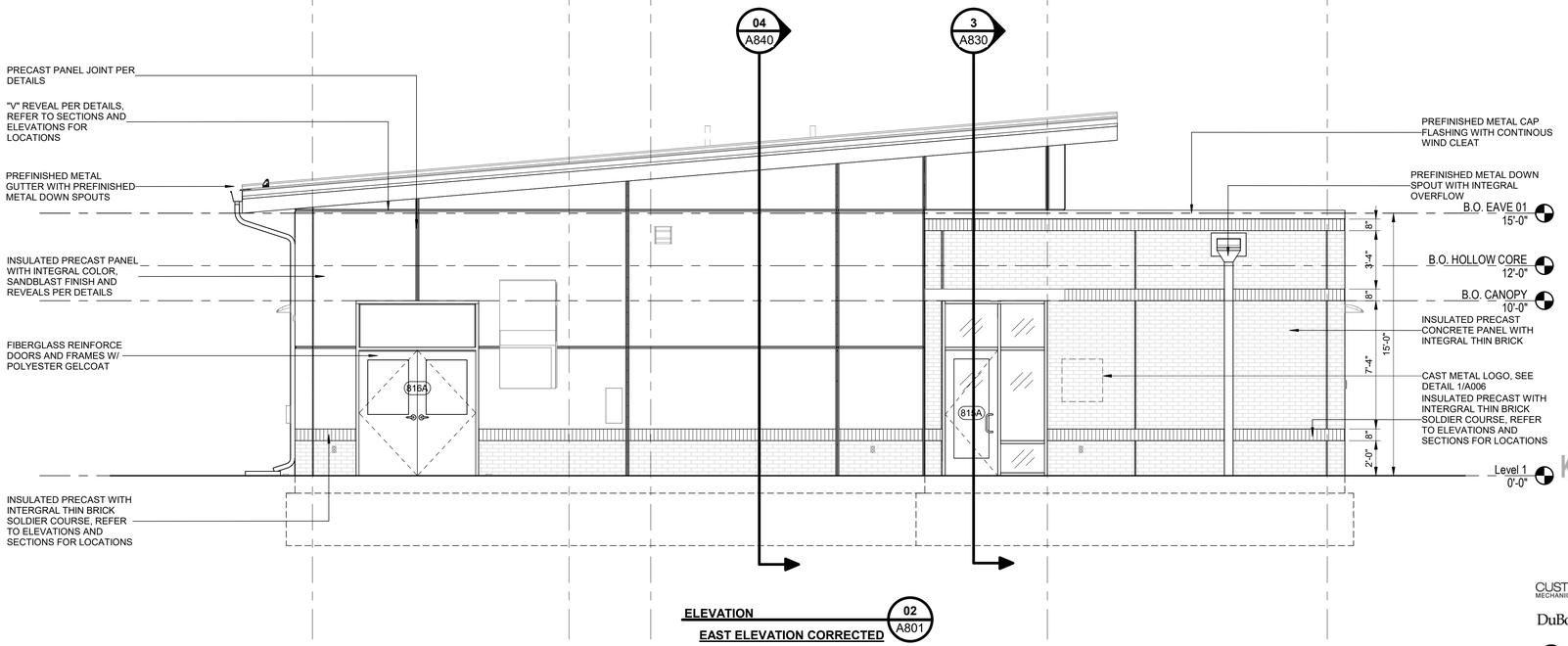


ELEVATION 01 A801

SOUTH ELEVATION

0 2' 4' 8'

SCALE IN FEET



ELEVATION 02 A801

EAST ELEVATION CORRECTED

0 2' 4' 8'

SCALE IN FEET

NO.	DATE	BY:	CHECKED:	REVISIONS
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

ADMIN EXTERIOR ELEVATIONS

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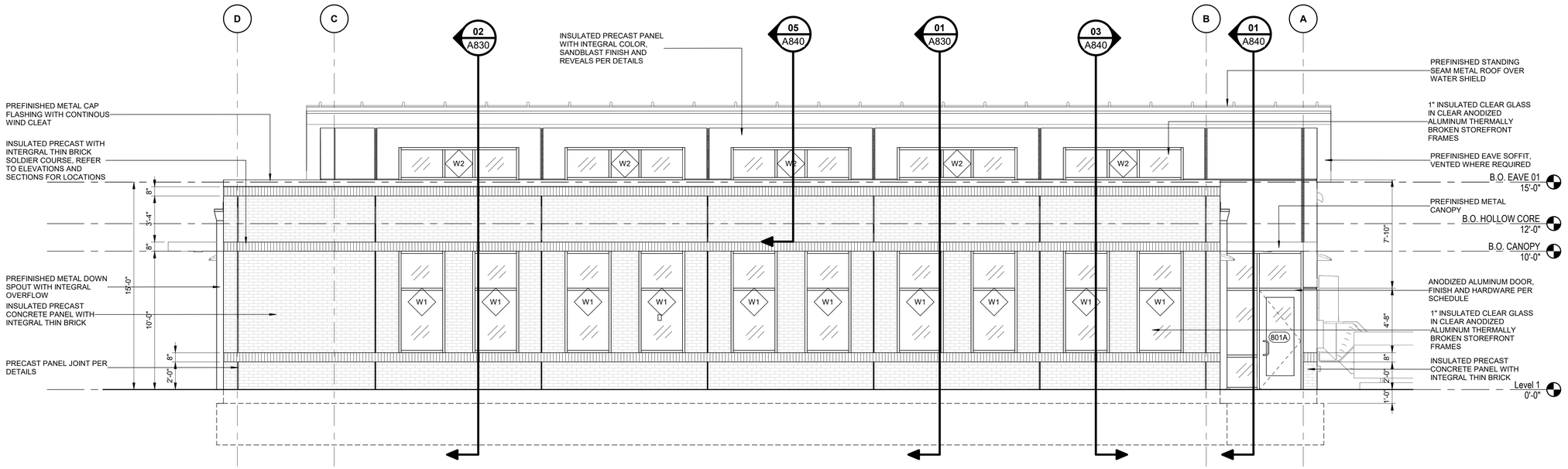
BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A820

PROJECT NO.	SHEET	OF
81000927		560

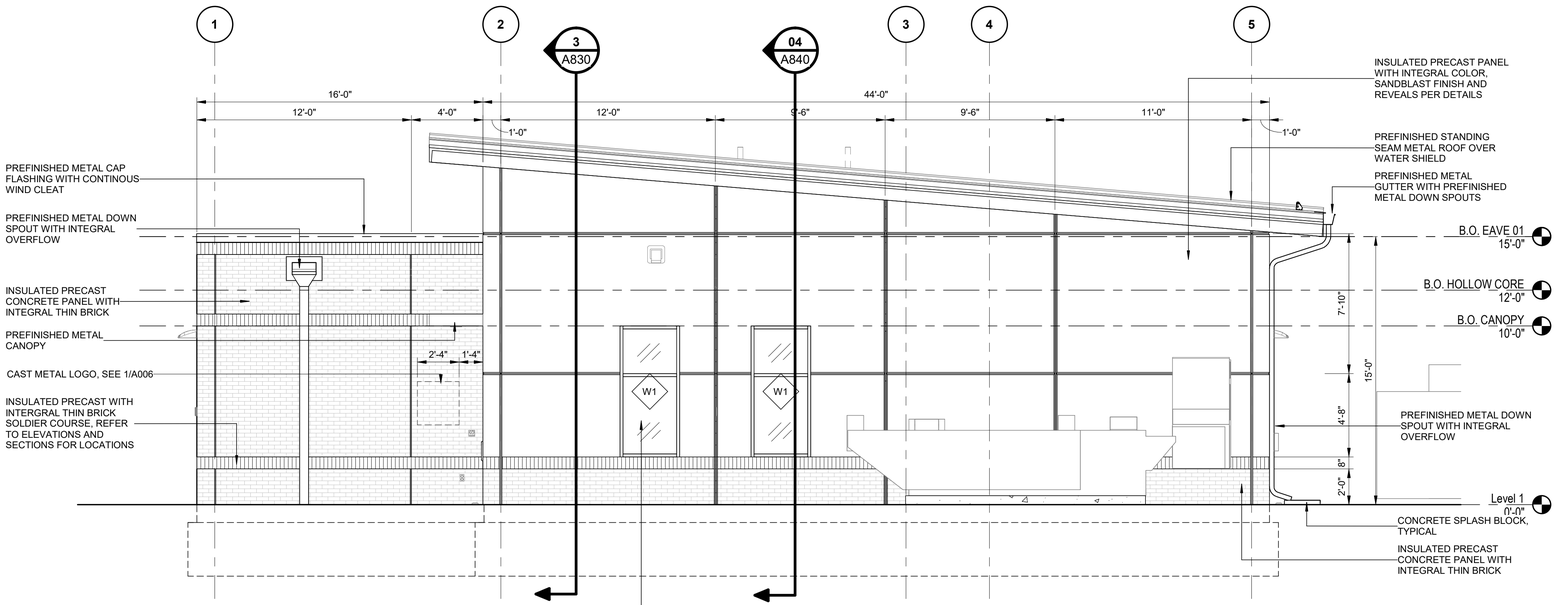


ELEVATION 01

NORTH ELEVATION CORRECTED

0 2' 4' 8'

SCALE IN FEET



ELEVATION 02

WEST ELEVATION CORRECTED

0 2' 4' 8'

SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	JB	AM	ISSUED FOR 60% REVIEW

REVISIONS

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW Interurban Road, KANSAS CITY, MO 64163

ADMIN EXTERIOR ELEVATIONS

JASON SCOTT BARKER
ARCHITECTURAL
A-2005001198

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL • STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
Licensee No. 000165

FOR WSD USE:

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BK	JB		34W	53N	36

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	

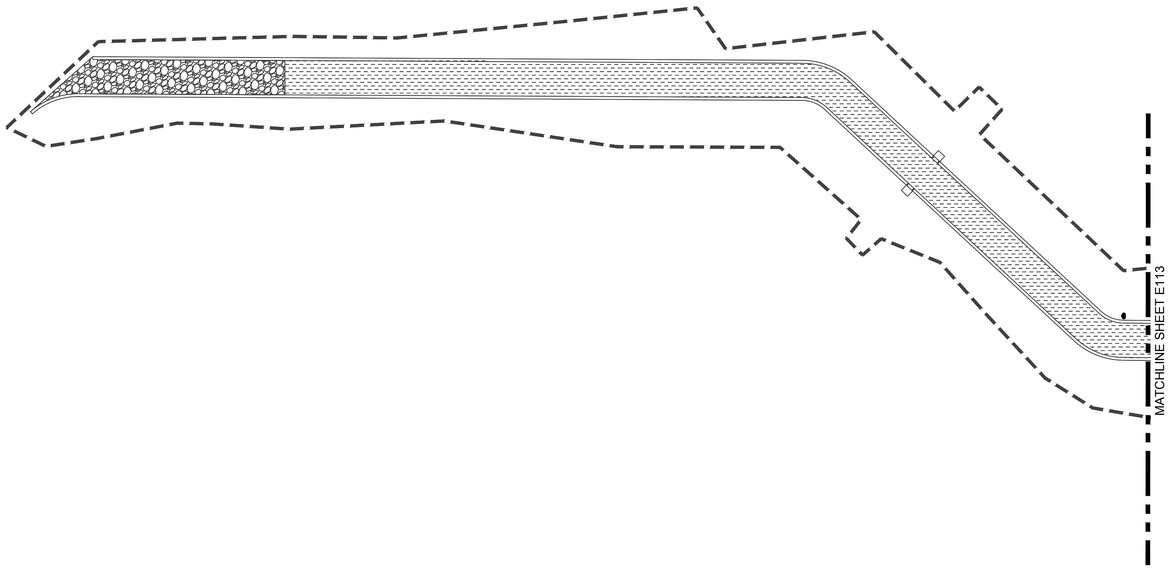
CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	A821

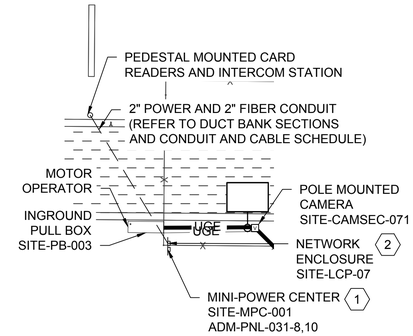
PROJECT NO. 81000927 SHEET OF 560

Attachment 5

Utility Plans

9400 Ward Parkway | Kansas City, MO 64114 | burnsmcd.com





ENLARGED GATE AREA 1 / E114

0 4' 8' 16'

SCALE IN FEET

ELECTRICAL SITE POWER PLAN SHEET 2

0 50' 100'

SCALE IN FEET

NORTH

PRELIMINARY - NOT FOR CONSTRUCTION

GENERAL NOTES:

1. REFER TO SHEET E001 FOR ELECTRICAL LEGEND.
2. CONTRACTOR SHALL INCLUDE ALL EVERGY ELECTRIC UTILITY COSTS TO PROJECT IN BID. EVERGY CONTACT PERSON:

   JACOB LEDGER
   EVERGY STAFF ENGINEER DISTRIBUTION DESIGN
   NORTHLAND SERVICE CENTER 8325 N PLATTE PURCHASE DR. KANSAS CITY, MO 64118

   EMAIL: JACOB.LEDGER@EVERGY.COM MOBILE: (816)652-1655
   ESS (ELECTRIC SERVICE STANDARDS) @ SS.EVERGY.COM
3. REFER TO SITE POWER PLANS FOR ADDITIONAL INFORMATION.

KEYED NOTES:

1. PROVIDE 2-#4H, 1-#4N, 1-#4G IN 2" ON-CONCRETE ENCASED BELOW GRADE FROM ADMIN BUILDING TO ENTRANCE POWER CENTER. REFERENCE DETAIL ON SHEET E012.
2. INSTALL VIDEO INTERCOM STATION AND CARD READERS IN DUAL LEVEL PEDESTAL AS REQUIRED. PROVIDE THE NECESSARY DEVICE OMTERCONNECTIONS BETWEEN THE GATE PEDESTAL, THE NETWORK ENCLOSURE SITE-LCP-071, AND THE GATE MOTOR OPERATOR. REFER TO THE CONDUIT AND CABLE SCHEDULE, SECURITY SYSTEM RISER DIAGRAMS, AND GATE PEDESTAL MOUNTED CARD READER AND INTERCOM DETAIL ON DRAWING E017 FOR ADDITIONAL REQUIREMENTS.

KCWATER SERVICES
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WELLNER architects
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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163
ELECTRICAL SITE POWER PLAN
SHEET 1

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
R. LARKEY	C.BREWSTER	9/12/25			

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				E114

PROJECT NO. 81000927 SHEET OF

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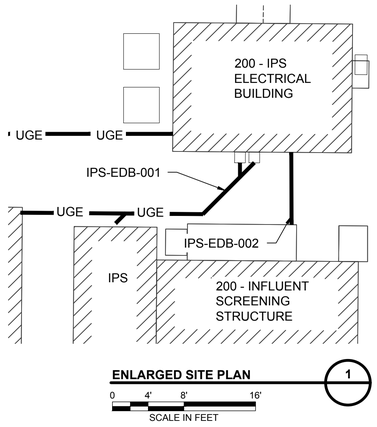
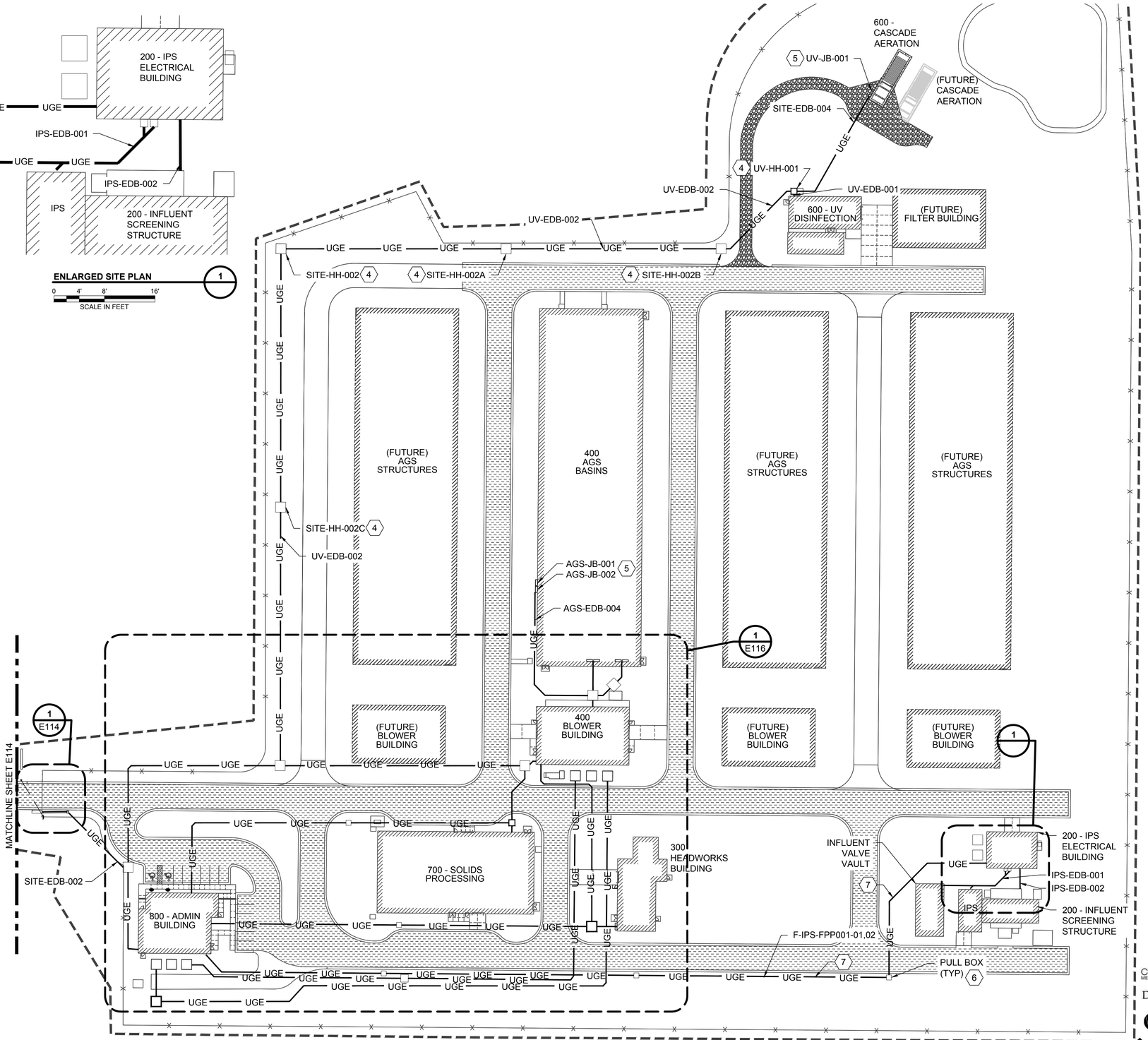
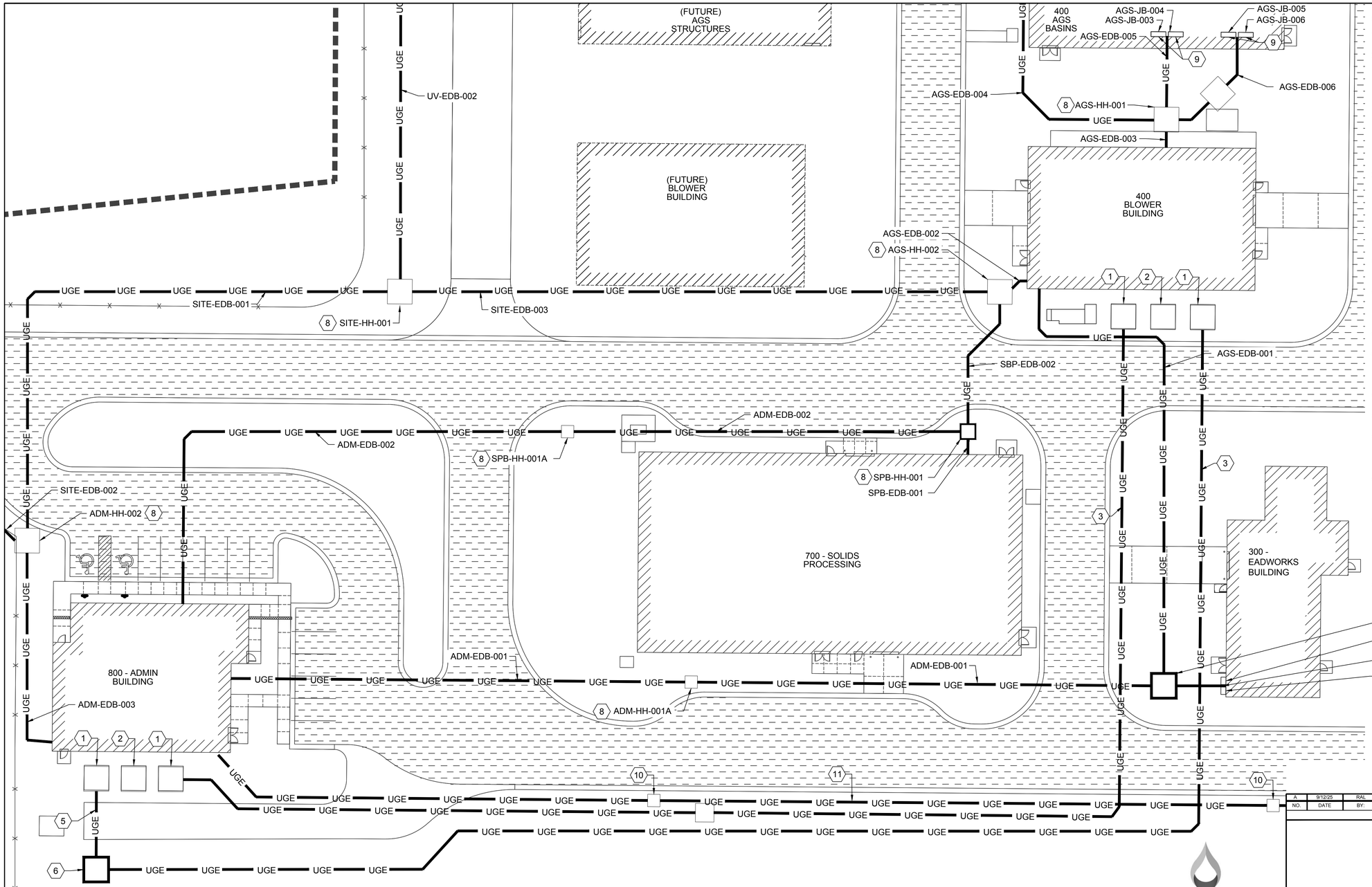


ENLARGED SITE PLAN 1

0 4' 8' 16'

SCALE IN FEET


600 -
CASCADE
AERATION
5 UV-JB-001
(FUTURE)
CASCADE
AERATION
SITE-EDB-004
UGE
4 UV-HH-001
UV-EDB-002
UV-EDB-001
UGE
600 - UV
DISINFECTION
(FUTURE)
FILTER BUILDING
UV-EDB-002
UGE UGE UGE UGE UGE UGE UGE
SITE-HH-002 4
4 SITE-HH-002A
4 SITE-HH-002B
UGE
UGE
UGE
UGE
UGE
(FUTURE)
AGS
STRUCTURES
400
AGS
BASINS
(FUTURE)
AGS
STRUCTURES
(FUTURE)
AGS
STRUCTURES
SITE-HH-002C 4
UV-EDB-002
AGS-JB-001 5
AGS-JB-002
AGS-EDB-004
UGE
1
E116
1
E114
(FUTURE)
BLOWER
BUILDING
400
BLOWER
BUILDING
(FUTURE)
BLOWER
BUILDING
(FUTURE)
BLOWER
BUILDING
1
MATCHLINE SHEET E114
UGE UGE UGE UGE UGE UGE
UGE
UGE
UGE
UGE



GENERAL NOTES:

1. REFER TO SHEET E001 FOR ELECTRICAL LEGEND.
2. CONTRACTOR SHALL INCLUDE ALL EVERGY ELECTRIC UTILITY COSTS TO PROJECT IN BID. EVERGY CONTACT PERSON:

   JACOB LEDGER
   EVERGY STAFF ENGINEER DISTRIBUTION DESIGN
   NORTHLAND SERVICE CENTER 8325 N PLATTE PURCHASE DR.
   KANSAS CITY, MO 64118

   EMAIL: JACOB.LEDGER@EVERGY.COM MOBILE: (816)652-1655

   ESS (ELECTRIC SERVICE STANDARDS) @ SS.EVERGY.COM
3. REFER TO CONCRETE DUCTBANK SECTIONS SHEETS E131 THROUGH E135.

KEYED NOTES:

1. EVERGY PAD MOUNT TRANSFORMER PROPOSED LOCATION.
2. PORTABLE GENERATOR CONNECTION TAP BOX PROPOSED LOCATION.
3. TWO 4-INCH PRIMARY CONDUITS IN CONCRETE DUCTBANK PER EVERGY STANDARDS. PRIMARY CIRCUIT CONDUCTORS FURNISHED AND INSTALLED BY EVERGY.
4. NOT USED
5. TWO 4-INCH PRIMARY CONDUITS NON-CONCRETE ENCASED BELOW GRADE PER EVERGY STANDARDS. PRIMARY CIRCUIT CONDUCTORS FURNISHED AND INSTALLED BY EVERGY.
6. PROVIDE EVERGY APPROVED SECTIONALIZER.
7. NOT USED
8. PROVIDE HANDHOLE SIZED AS REQUIRED. SEE HANDHOLE MINIMUM INTERIOR DIMENSIONS, DETAIL E, SHEET E131 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. PROPOSED LOCATIONS FOR JUNCTION BOXES FOR UNDERGROUND DUCTBANKS FOR PROCESS CONTROL CIRCUITS. REFER TO PROCESS SHEETS.
10. PROVIDE IN-GROUND PULL BOXES FOR F-IPS-FPP001-01,02 AS SPECIFIED IN SECTION 26 05 33. QUANTITY AND LOCATIONS OF PULL BOXES SHALL BE AS INDICATED AT MINIMUM. PROVIDE ADDITIONAL PULL-BOXES AS RECOMMENDED BY FIBER CABLE MANUFACTURER.
11. TWO 2-INCH CONDUITS IN CONCRETE ENCASED DUCTBANK PER SPECIFICATIONS WITH PULLWIRE FOR IPS FIBER.

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163
ELECTRICAL SITE POWER PLAN
SHEET 3

FOR WSD USE:

KCWATER SERVICES
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
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KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
R. LARKEY	C.BREWSTER	9/12/25			

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				E116

PROJECT NO. 81000927 SHEET OF

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STORMWATER SCHEDULE				
NO	DESCRIPTION	NORTHING	EASTING	INVERT ELEVATION
1	CURB INLET	1158130.31	2740313.61	872.39
2	CURB INLET	1158162.49	2740313.78	872.23
3	CURB INLET	1158160.97	2740502.58	868.11
4	CURB INLET	1158159.63	2740683.74	866.21
5	CURB INLET	1158192.93	2740745.04	864.12
6	CURB INLET	1158402.22	2740746.72	862.89
7	CURB INLET	1158615.23	2740748.44	860.90
8	CURB INLET	1158676.29	2740749.87	860.59
9	CURB INLET	1158674.82	2740933.03	856.23
10	CURB INLET	1158672.64	2741204.95	850.00
11	5" MH	1158671.44	2741291.51	838.50
12	CURB INLET	1157973.10	2740560.13	864.90
13	CURB INLET	1157970.88	2740836.94	859.96
14	CURB INLET	1157968.42	2741143.33	852.64
15	CURB INLET	1157967.28	2741285.91	851.00
16	CURB INLET	1158155.07	2741287.44	855.50
17	5' MH	1158417.73	2741289.47	839.75
18	CURB INLET	1158411.61	2740929.81	860.09
19	CURB INLET	1158411.84	2740897.63	860.25
20	CURB INLET	1158156.58	2741049.58	859.35

STORMWATER SCHEDULE				
NO	DESCRIPTION	NORTHING	EASTING	INVERT ELEVATION
21	CURB INLET	1158124.39	2741049.41	859.51
22	CURB INLET	1158128.79	2740502.33	868.41
23	CURB INLET	1158402.45	2740714.54	862.43
24	CURB INLET	1158615.47	2740716.26	860.28
25	CURB INLET	1158003.06	2740837.11	872.39
26	CURB INLET	1158000.60	2741143.50	852.80
27	15" FLARED END SECTION	1158231.40	2740067.33	877.00
28	15" FLARED END SECTION	1158295.90	2740127.19	875.00
29	15" FLARED END SECTION	1158807.79	2741292.63	838.00

CASCADE AERATION TOW EL: 848

SERIES 600 UV DISINFECTION STRUCTURE FFE: 858

FUTURE CASCADE AERATION

DRY DETENTION BASIN
0.5 ACRES
BOTTOM ELEV = 835.00
WQV = 836.00
100 YEAR = 837.00

STORM SEWER END SECTION WITH RIP RAP (TYP) (SEE DETAIL ON SHEET C134)

PROPOSED FENCE

DETENTION POND

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

STORM LINE 14

CONSTRUCTION LIMITS

TRAPEZOIDAL DITCH

SERIES 400 AGS STRUCTURES FFE: 870

SERIES 400 FUTURE AGS STRUCTURES (BY OTHERS)

STORM LINE 3

ACCESS ROAD-1

MAIN ROAD-3

STORM LINE 2

STORM LINE 10

STORM LINE 9

MAIN ROAD-4

MAIN ROAD-5

FUTURE MAIN ROAD

STORM LINE 6

STORM LINE 5

EQUIPMENT PAD LOCATIONS REFERENCE ELECTRICAL (SEE SHEET E017)

CONSTRUCTION LIMITS

SERIES 400 BLOWER BUILDING FFE: 871

STORM LINE 1

STORM LINE 7

MAIN ROAD-1

MAIN ROAD-6

STORM LINE 8

STORM LINE 12

SERIES 400 FUTURE BLOWER BUILDING (BY OTHERS)

MAIN ROAD-7

MAIN ROAD-2

SERIES 800 ADMINISTRATION BUILDING FFE: 875.50

STORM LINE 11

INFLUENT PUMP STATION ELECTRIAL FFE: 859

SERIES 300 HEADWORKS BUILDING FFE: 871

STORM LINE 4

SERIES 700 SOLIDS HANDLING FFE: 872

INFLUENT VALVE VAULT FFE: 856

INFLUENT PUMP STATION FFE: 856

INFLUENT SCREENING STATION FFE: 856

PROPOSED FENCE

CONSTRUCTION LIMITS

1 2 3 4 5 6 7 8 9 10

NE 1/4 OF SECTION 1-T52N-R34W UNPLATTED

SE 1/4 OF SECTION 1-T52N-R34W UNPLATTED

WEST 1/2, SW 1/4 OF SECTION 1-T52N-R34W UNPLATTED

EAST 1/2, SW 1/4 OF SECTION 1-T52N-R34W UNPLATTED

N

0 50' 100'

SCALE IN FEET

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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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STORMWATER PLAN

FOR WSD USE:

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

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KANSAS CITY, MO 64114
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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO

DATE COMPLETED:

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C127

PROJECT NO. 81000927

SHEET 27 OF 40

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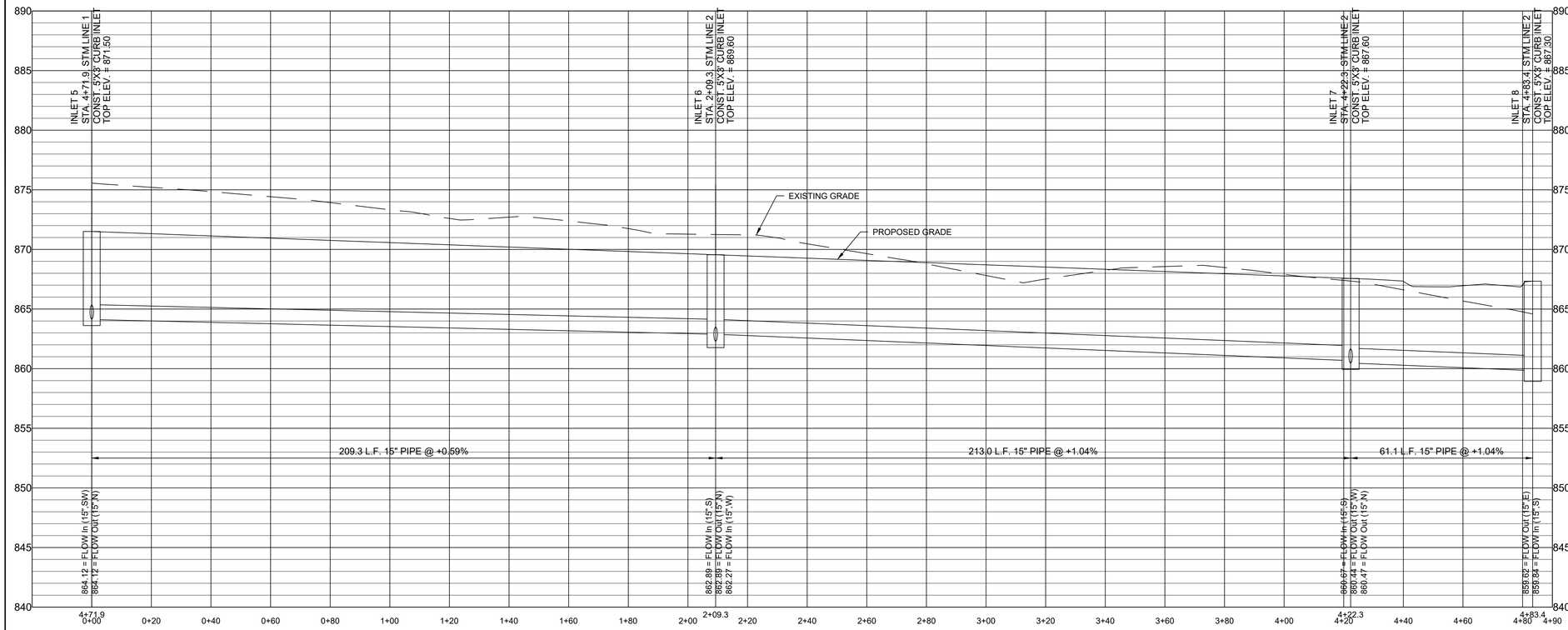
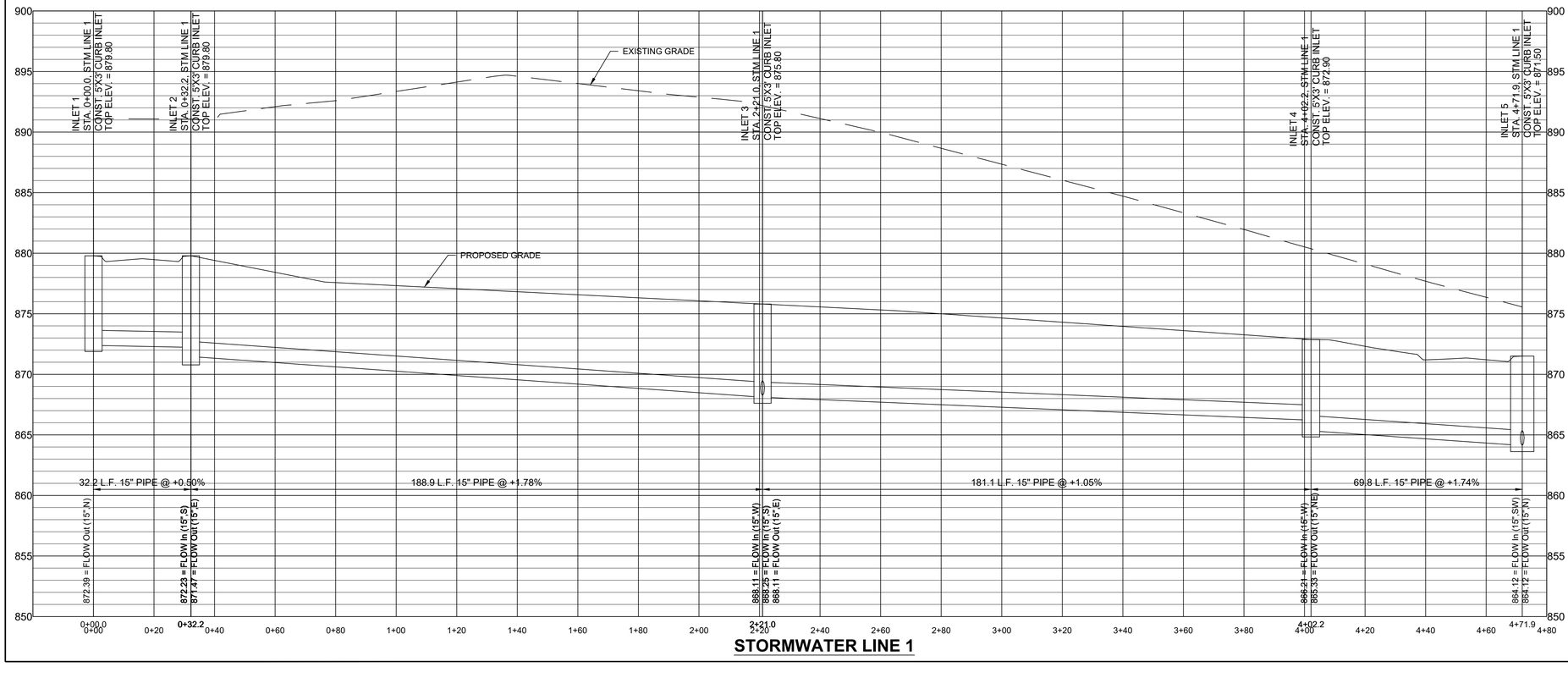
STORM PROFILE 2



STORMWATER LINE 2



STORMWATER LINE 1

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL • STRUCTURAL • ENVIRONMENTAL

WELLNER architects

BURNS McDONNELL

9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

PRELIMINARY - NOT FOR CONSTRUCTION

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

0 4' 8'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 10' 20' 40'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

STORMWATER PROFILES 1 AND 2

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C128

PROJECT NO. 81000927

SHEET 28 OF 40

Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE: 9/12/2025 12:34:50 AM by DAVID
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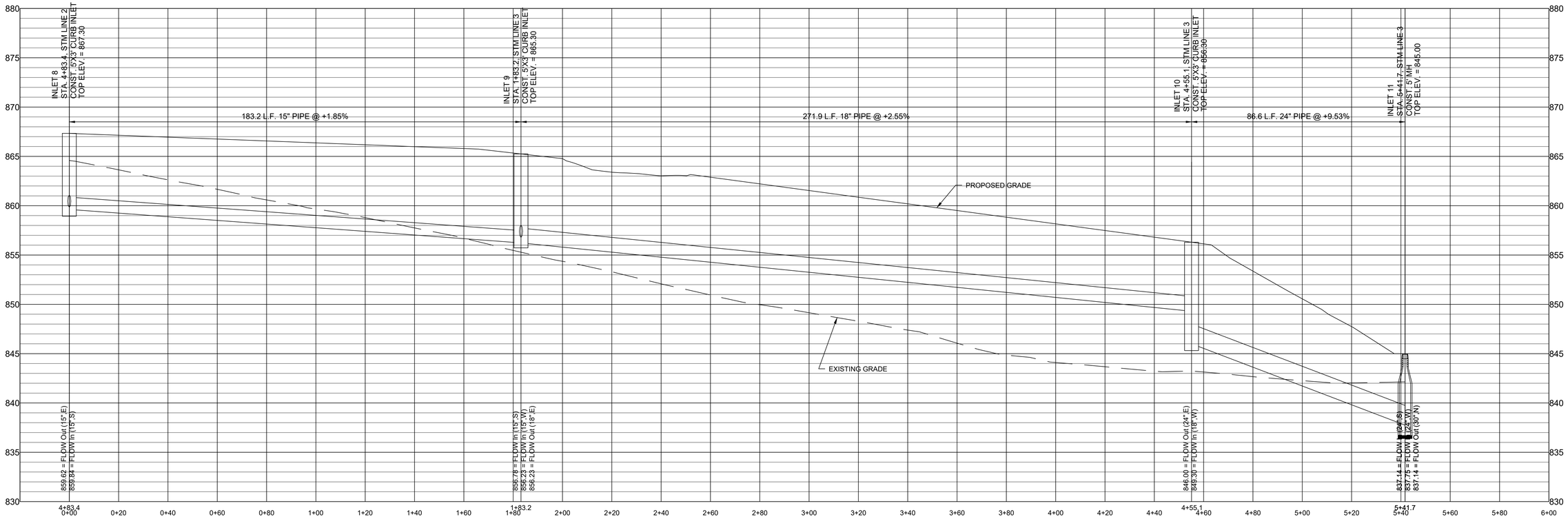
STORM PROFILE 3



STORMWATER LINE 3

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

0 4' 8'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 10' 20' 40'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

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TODD CREEK WWTP EXPANSION AND UPGRADE

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STORMWATER PROFILES 3

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C129

PROJECT NO. 81000927

SHEET 29 OF 40

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DuBois Consultants CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL

9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
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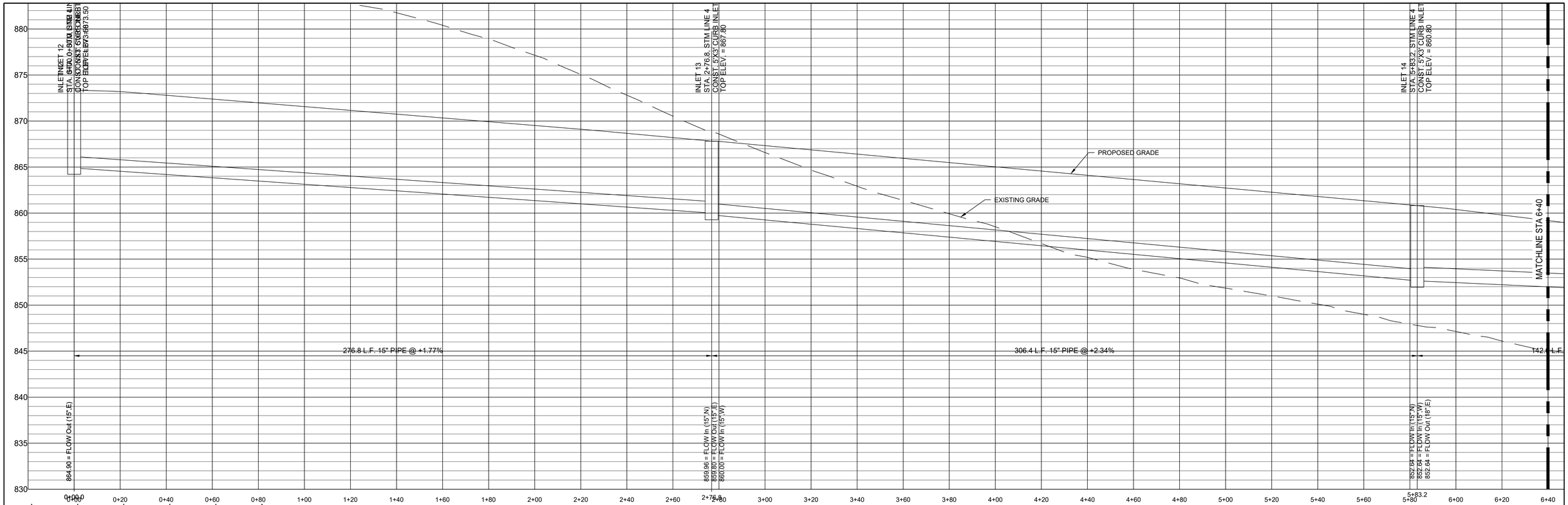

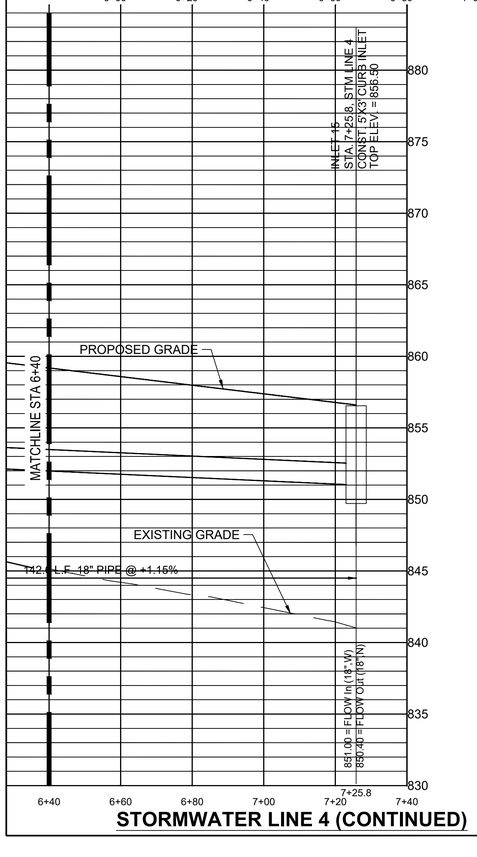

NOTE:

1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

SCALE IN FEET
VERTICAL SCALE IN FEET

SCALE IN FEET
HORIZONTAL SCALE IN FEET

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

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STORMWATER PROFILES 4

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DuBois Consultants CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C130

PROJECT NO. 81000927

SHEET 30 OF 40

Saved 09-12-2025 12:06:44 AM by DAVID
PLOT DATE: 9/12/2025 12:34:03 AM by DAVID
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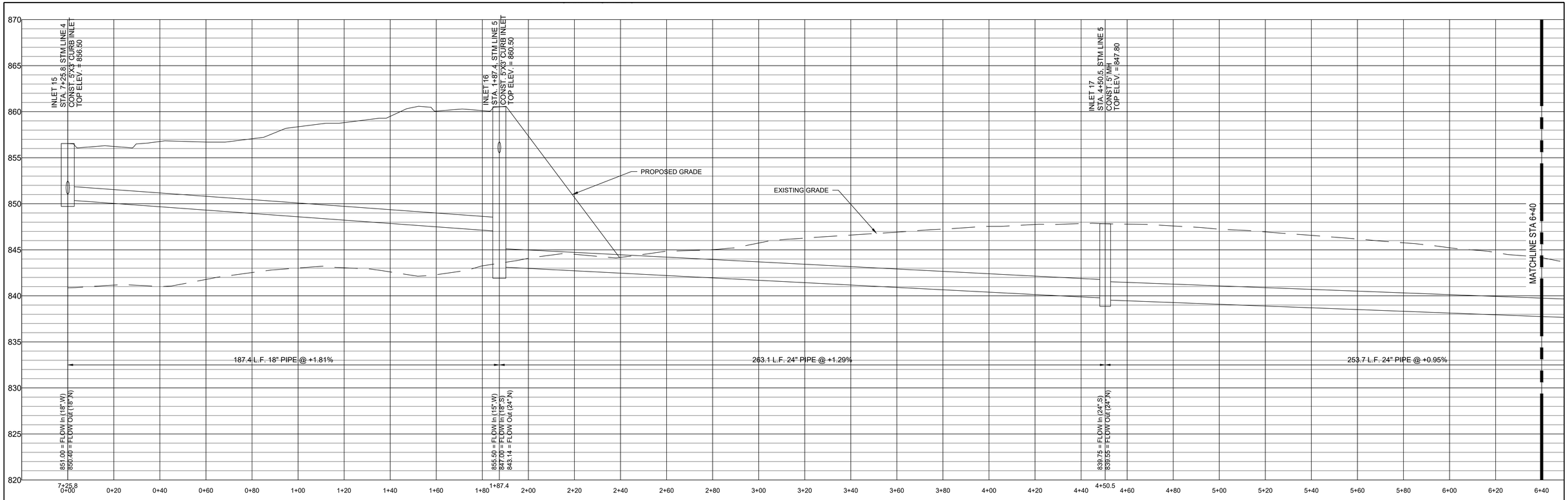
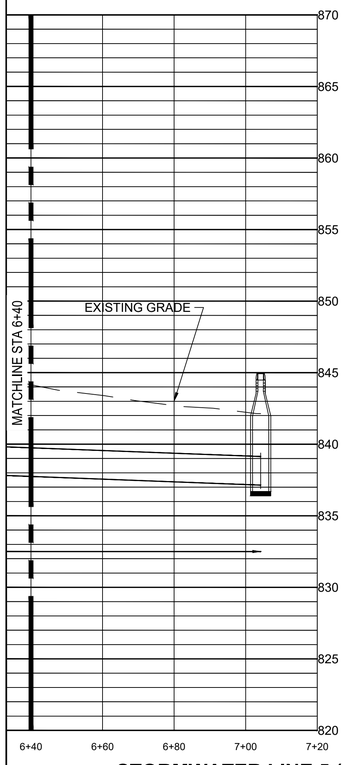


STORMWATER LINE 5



STORMWATER LINE 5 (CONTINUED)

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

SCALE IN FEET
VERTICAL SCALE IN FEET
0 4' 8'

SCALE IN FEET
HORIZONTAL SCALE IN FEET
0 10' 20' 40'

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER SERVICES
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL & STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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STORMWATER PROFILES 5

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C131

PROJECT NO. 81000927

SHEET 31 OF 40

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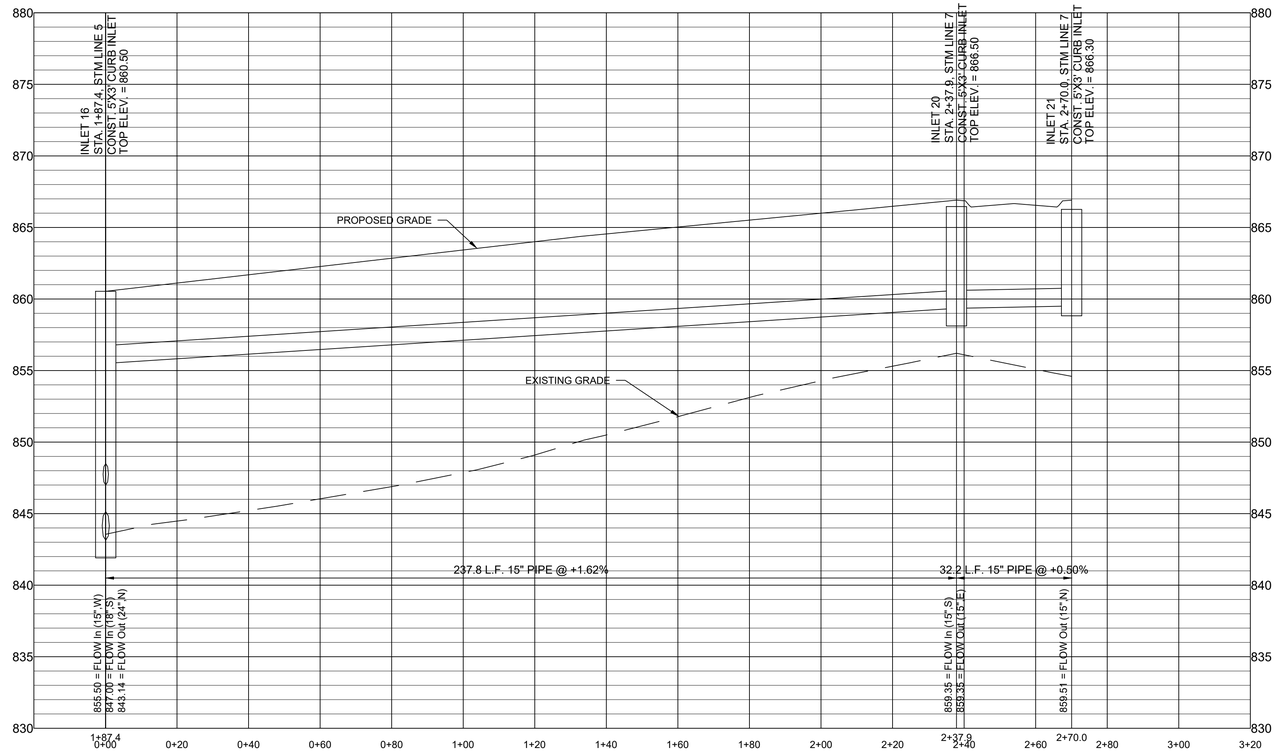
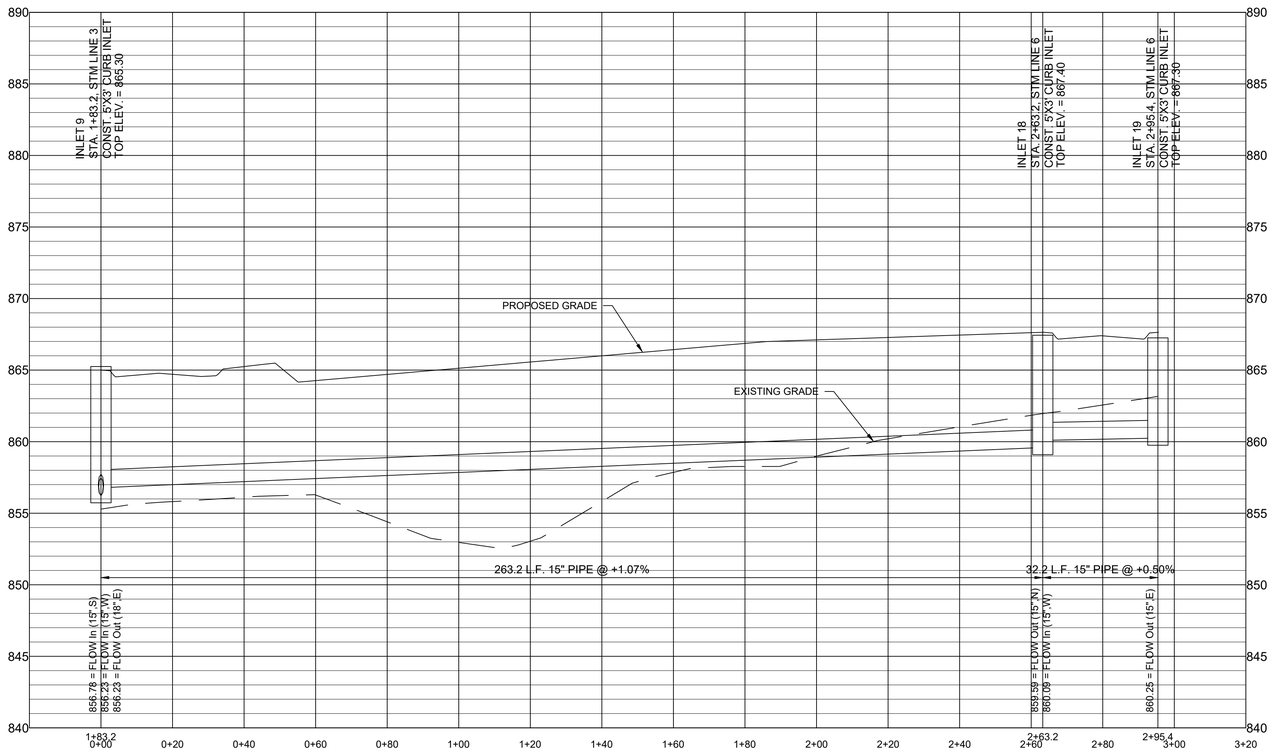
G:\020004 - TODD CREEK CIVIL\01-REDESIGN\00-CIVIL\09 WORKING\SHEETS\C128-133 STORMWATER PROFILE.DWG



STORMWATER LINE 7



STORMWATER LINE 6

NOTE:
1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

0 4' 8'
SCALE IN FEET
VERTICAL SCALE IN FEET

0 10' 20' 40'
SCALE IN FEET
HORIZONTAL SCALE IN FEET

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STORMWATER PROFILES 6 AND 7

FOR WSD USE:

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ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C132

PROJECT NO. 81000927

SHEET 32 OF 40

KCWATER SERVICES

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
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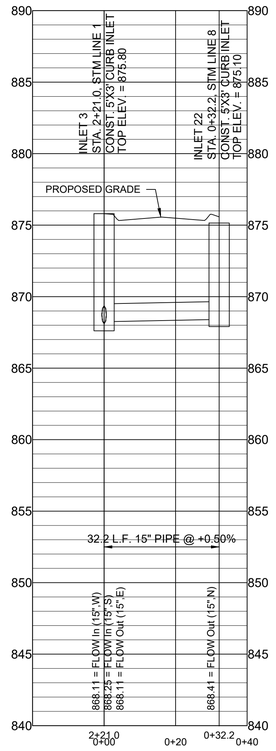
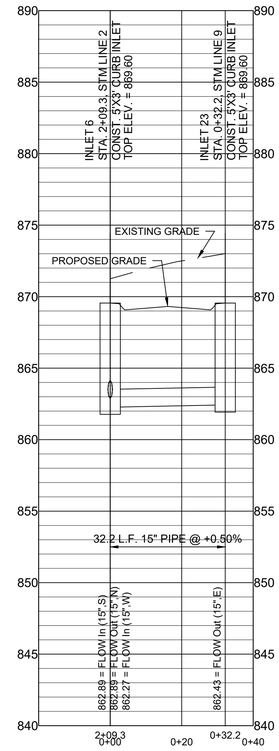
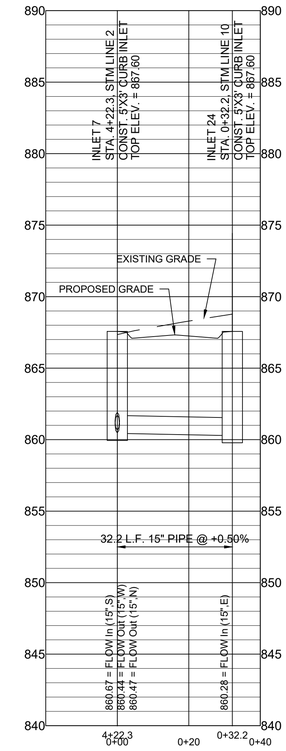


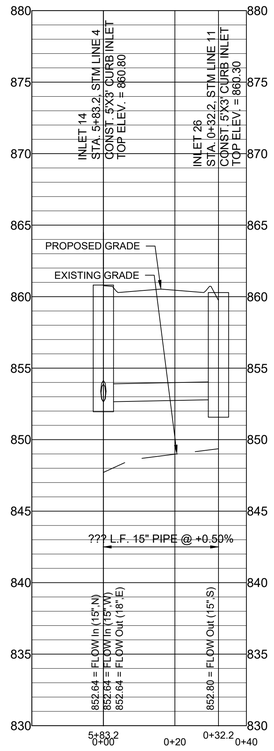
STORMWATER LINE 8



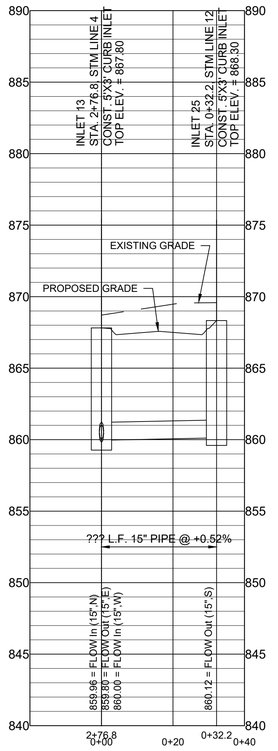
STORMWATER LINE 9



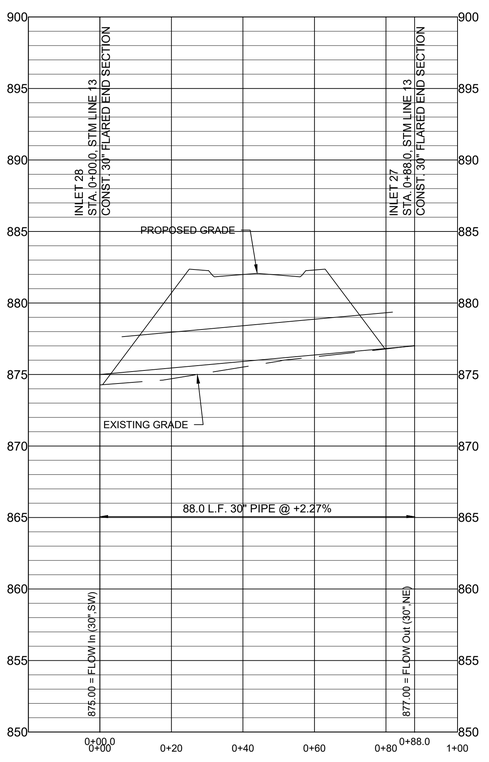
STORMWATER LINE 10



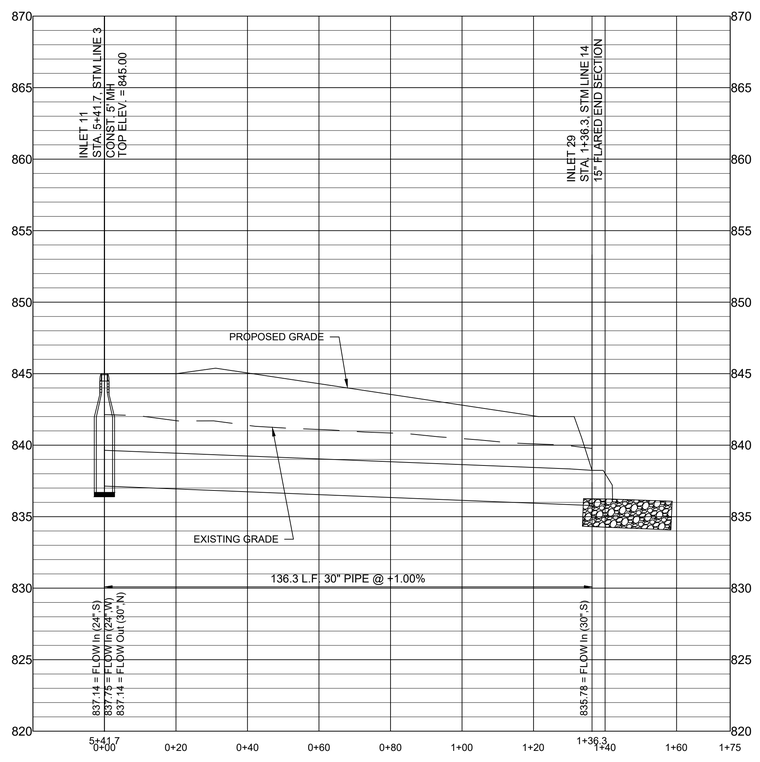
STORMWATER LINE 11



STORMWATER LINE 12



STORMWATER LINE 13



STORMWATER LINE 14

NOTE:

1. ALL STORM SEWER PIPE SHALL BE TYPE III RCP.

SCALE IN FEET
0 4' 8'
VERTICAL SCALE IN FEET

SCALE IN FEET
0 10' 20' 40'
HORIZONTAL SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER SERVICES
CUSTOM ENGINEERING MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants CIVIL • STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
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TODD CREEK WWTP EXPANSION AND UPGRADE

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STORMWATER PROFILES 8-12

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BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C133

PROJECT NO. 81000927

SHEET 33 OF 40

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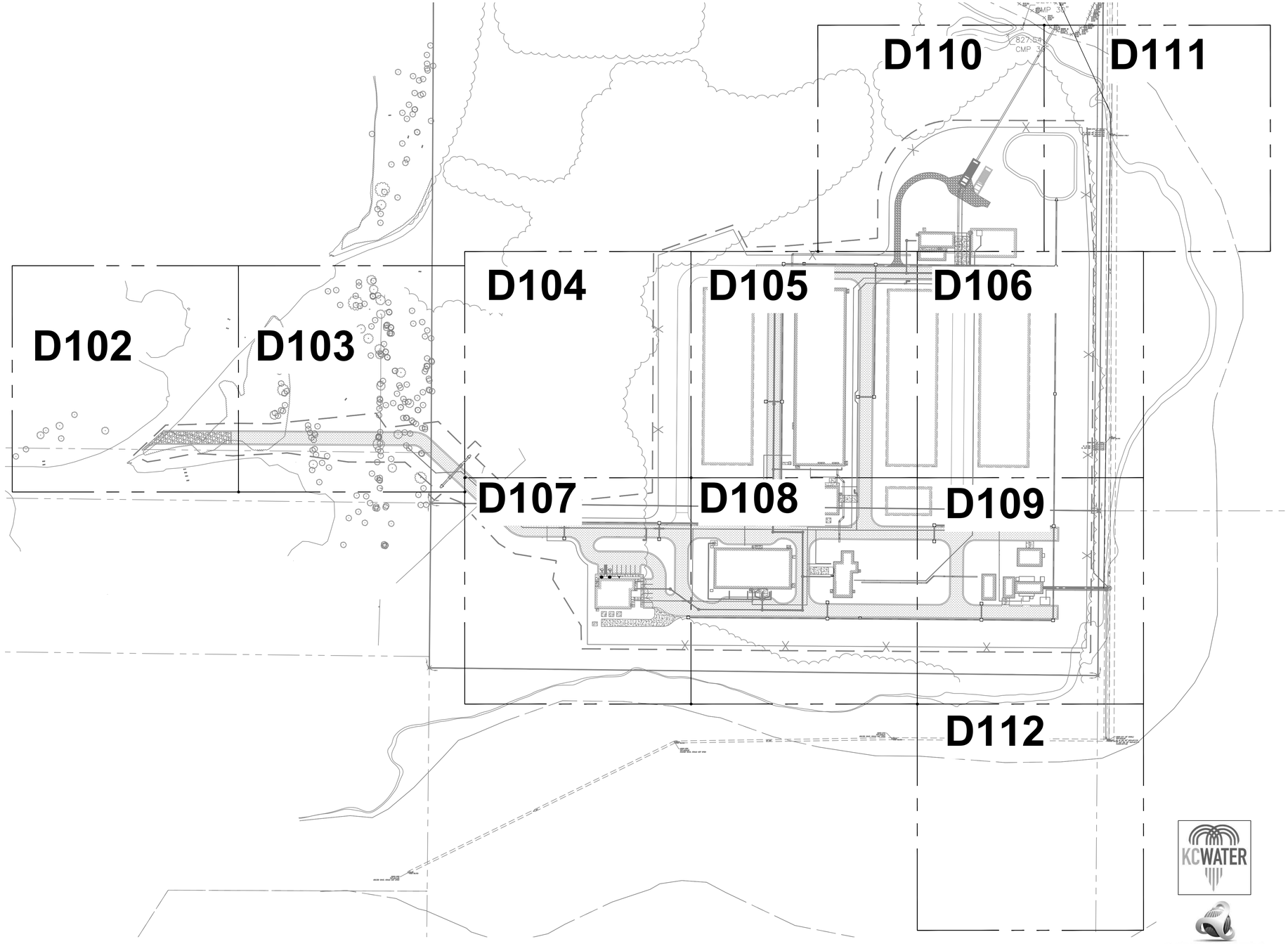

OVERALL SANITARY SEWER PLAN

0 50' 100'
SCALE IN FEET

NORTH

YARD PIPING NOTES:

1. ALL EXISTING UTILITY AND SUBSURFACE PIPING LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL EXPOSE ALL UTILITIES TO VERIFY LOCATION AND DEPTHS PRIOR TO CONSTRUCTION. LOCATIONS AND ELEVATIONS SHALL BE RECORDED ON CONSTRUCTION RECORD DRAWINGS.
2. THE CENTERLINE COORDINATES SHOWN FOR THE YARD PROCESS PIPING LAYOUT DESIGN ALIGNMENTS ARE FOR GENERAL HORIZONTAL LAYOUT LOCATION AND ORIENTATION, THE ACTUAL LOCATION OF THE EXISTING FEATURE MAY VARY FROM FIELD LOCATION. CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO STAKING YARD PIPING ALIGNMENTS.
3. CONTRACTOR SHALL PROVIDE PROTECTION TO PREVENT UNDERMINING OR DAMAGING THE STRUCTURAL INTEGRITY OF ALL EXISTING STRUCTURES AND UTILITIES WHEN INSTALLING BELOW GRADE PIPING.
4. MAINTAIN THE MAXIMUM SEPARATION DISTANCE POSSIBLE BETWEEN WATER MAINS, SEWER LINES, OTHER UTILITY LINES, AND IN COMPLIANCE WITH, MDNR STANDARDS. MINIMUM SEPARATION FROM POTABLE WATER LINES SHALL BE 10-FOOT HORIZONTAL AND 2-FOOT VERTICAL UNLESS SEWER LINE IS ENCASED OR UNLESS OTHERWISE NOTED. SOME MINOR DEVIATION OF THE PIPING DESIGN LAYOUT ALIGNMENTS MAY BE ALLOWED DEPENDING ON ACTUAL LOCATION OF EXISTING WATER, SEWER, AND UTILITY LINES.
5. PIPE BEDDING MATERIAL FOR EXTERIOR PIPE SHALL BE CLEAN AND GRADED CRUSHED ROCK CONFORMING TO KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT STANDARD SPECIFICATION SECTION 02250-TRENCHING. PIPE EMBEDMENT, AND BACKFILL.
6. CONTRACTOR SHALL TRANSITION FROM PROCESS PIPING TO YARD PIPING MATERIAL (SEE YARD PIPE MATERIALS TABLE, IN APPLICABLE SPECIFICATION SECTION) AT FIRST JOINT OUTSIDE OF STRUCTURE. CONCRETE ENCASE BENEATH STRUCTURES AND A MINIMUM OF 4 FEET BEYOND EDGE OF FOOTING.
7. ALL PROPOSED PIPING SHALL BE INSTALLED AT A MINIMUM DEPTH OF 42-INCHES.
8. ALL LOW PRESSURE PIPING SHALL BE RESTRAINED AT ALL BENDS AND UP TO FIRST JOINT.
9. ACCEPTANCE TESTS FOR PRESSURE PIPE SHALL INCLUDE HYDROSTATIC PRESSURE AND LEAKAGE TESTS CONFORMING TO SPECIFICATION SECTION 33 31 50-PIPE INSTALLATION.
10. ALL FITTINGS SHALL CONFORM TO APPLICABLE SPECIFICATION SECTIONS, AND BE RESTRAINED AT A MINIMUM OF ONE JOINT OUTSIDE OF SLABS/STRUCTURES AND BENEATH SLABS.
11. HORIZONTAL AND VERTICAL BEND SHALL BE RESTRAINED AT THE MINIMUM LENGTHS SHOWN IN YARD PIPE MATERIALS TABLE.

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

OVERALL YARD PIPING PLAN

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				D101

PROJECT NO.	SHEET	OF
81000927		

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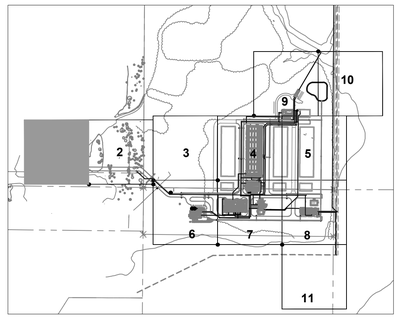

KEY MAP

MATCHLINE - SEE YARD PIPING PLAN AREA 2 - DWG D103

SE 125

NORTH

0 10' 20' 40'

SCALE IN FEET

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

YARD PIPING PLAN AREA 1

FOR WSD USE:

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MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL / STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
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KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
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CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				D102

PROJECT NO.	SHEET	OF
81000927		

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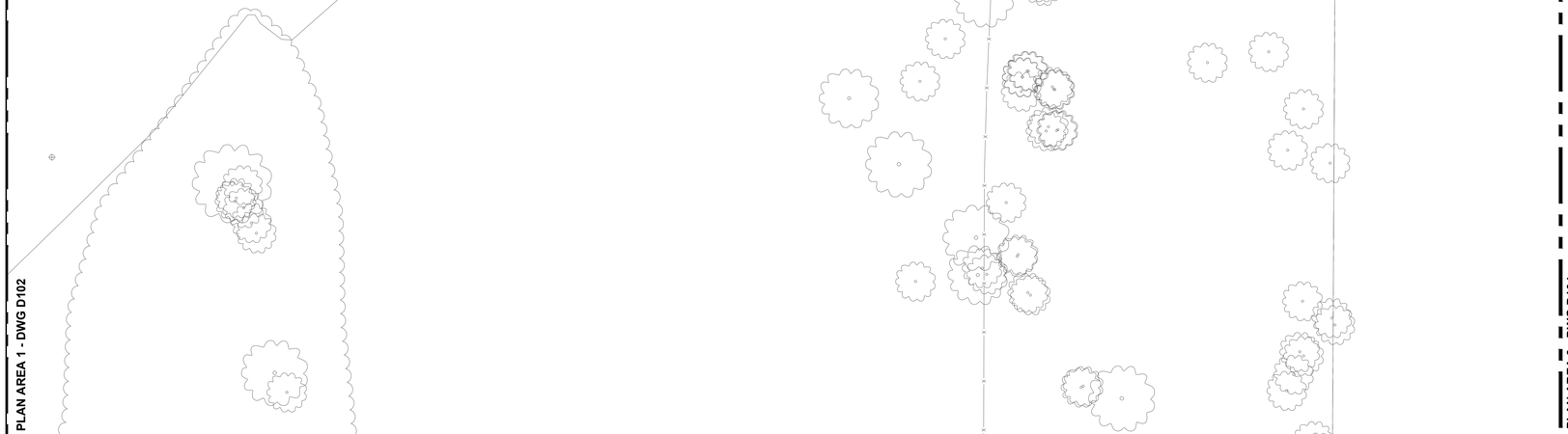
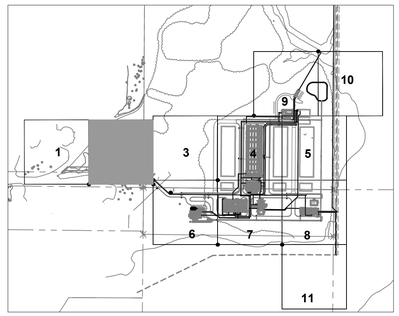
MATCHLINE - SEE YARD PIPING PLAN AREA 1 - DWG D102

MATCHLINE - SEE YARD PIPING PLAN AREA 3 - DWG D104





KEY MAP

NORTH

0 10' 20' 40'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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YARD PIPING PLAN
AREA 2

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1698				D103

PROJECT NO. 81000927 SHEET OF

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MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
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KANSAS CITY, MO 64114
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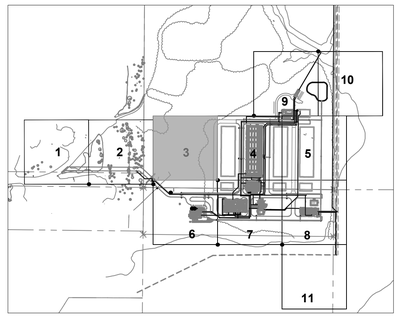
MATCHLINE - SEE YARD PIPING PLAN AREA 2 - DWG D104

MATCHLINE - SEE YARD PIPING PLAN AREA 4 - DWG D105

MATCHLINE - SEE YARD PIPING PLAN AREA 6 - DWG D107



KEY MAP

NORTH

0 10' 20' 40'

SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

YARD PIPING PLAN AREA 3

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CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

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1698				D104

PROJECT NO.	SHEET	OF
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MATCHLINE - SEE YARD PIPING PLAN AREA 9 - DWG D110

1+00 2+00 2+79.93

30" EFFLUENT - 1
SEE D113 FOR PROFILE

16" PLANT SEWER - 1
SEE D127 FOR PROFILE

4" PLANT SEWER - 5
SEE D128 FOR PROFILE

SEE SERIES 600
FOR CONTINUATION

MH-10 MH-11

11+00 12+00 13+00 0+00

9+00 15+00

TYPE A HYDRANT
SEE D133 FOR DETAIL

SEE SERIES 400
FOR CONTINUATION

10+00 14+00 8+00

8" POTABLE WATER - 1
SEE D117 FOR PROFILE

16" PLANT SEWER - 1
SEE D126 FOR PROFILE

4" PROCESS WATER - 1
SEE D121 FOR PROFILE

STORMWATER LINE (TYP)
SEE CIVIL DRAWINGS

STORMWATER LINE (TYP)
SEE CIVIL DRAWINGS

SERIES 400
FUTURE AGS BASINS
FG = 870

SERIES 400
AGS BASINS
FG = 870

SERIES 400
FUTURE AGS BASINS
FG = 864

9+00 13+00 7+00

MH-9 8+00 12+00 6+00

2+00 2+49.20 1+40.26

4" SLUDGE
SEE D130 FOR PROFILE

MH-8 7+00 11+00

0+00 0+84.49 1+00 1+54.13 5+00

2" PLANT SEWER - 4
SEE D128 FOR PROFILE

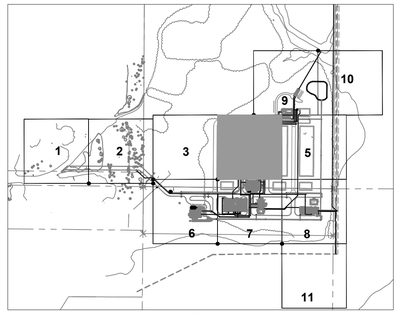
30" AGS INFLUENT
SEE D114 FOR PROFILE

4" POTABLE WATER - 6
SEE D118 FOR PROFILE

MATCHLINE - SEE YARD PIPING PLAN AREA 7 - DWG D108

MATCHLINE - SEE YARD PIPING PLAN AREA 3 - DWG D104

MATCHLINE - SEE YARD PIPING PLAN AREA 5 - DWG D106



KEY MAP

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION
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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

**YARD PIPING PLAN
AREA 4**

FOR WSD USE:

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
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PROJECT NO.: 81000927		SHEET	OF		

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MATCHLINE - SEE YARD PIPING PLAN AREA 9 - DWG D110

MATCHLINE - SEE YARD PIPING PLAN AREA 10 - DWG D111

30" EFFLUENT LINE

20" PLANT PLANT SEWER - 1
SEE D127 FOR PROFILE

MH-12

1.5" POTABLE WATER - 7
SEE D118 FOR PROFILE

8" END CAP

SEE SERIES 600
FOR CONTINUATION

4" PROCESS WATER - 1
SEE D122 FOR PROFILE

8" POTABLE WATER - 1
SEE D117 FOR PROFILE

8" PLANT FORCE MAIN - 1
SEE D124 FOR PROFILE

4" PVC HOOVER HEIGHTS
SEWER FORCE MAIN

STORMWATER LINE (TYP)
SEE CIVIL DRAWINGS

SERIES 400
FUTURE AGS BASINS
FG = 858

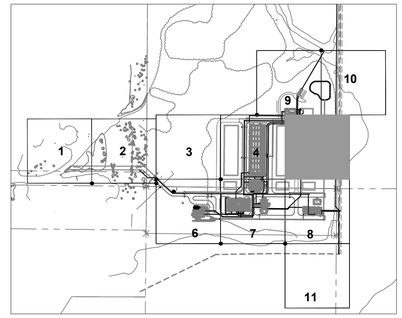
MH2622 (5' CONC.)
TOP=843.09
FL IN (S) 42" RCP=814.79
FL OUT (N) 48" RCP=814.69
FLOOR=814.64

MH
TOP=843.09'
MHSS BOLTED

MATCHLINE - SEE YARD PIPING PLAN AREA 4 - DWG D105

MATCHLINE - SEE YARD PIPING PLAN AREA 8 - DWG D109

KEY MAP



NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

NO.	DATE	BY:	CHECKED:	DESCRIPTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

**YARD PIPING PLAN
AREA 5**

FOR WSD USE:

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				D106

PROJECT NO.	SHEET	OF
81000927		

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MATCHLINE - SEE YARD PIPING PLAN AREA 3 - DWG D104

8" POTABLE WATER - 1
SEE D115 FOR PROFILE

STORMWATER LINE (TYP)
SEE CIVIL DRAWINGS

POT

2+00

3+00

4+00

5+00

6+00

MAIN ROAD 2

8" POTABLE WATER - 1
SEE D116 FOR PROFILE

TYPE A HYDRANT
SEE D133 FOR DETAIL

ENCASEMENT,
10' MIN EACH SIDE

SERIES 800
ADMINISTRATION
BUILDING
FFE = 877

4" PLANT SEWER - 1
SEE D125 FOR PROFILE

0+00

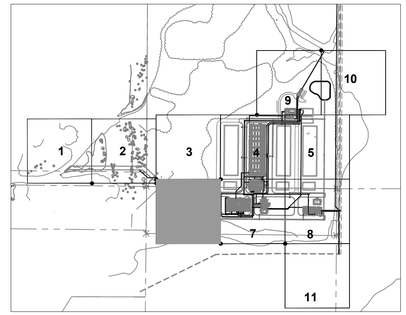
SAN

MH-1A

1+00

2" POTABLE WATER - 3
SEE D118 FOR PROFILE

MATCHLINE - SEE YARD PIPING PLAN AREA 7 - DWG D108



KEY MAP

NORTH

0 10' 20' 40'

SCALE IN FEET

KCWATER

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MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

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TODD CREEK WWTP EXPANSION AND UPGRADE

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YARD PIPING PLAN AREA 6

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CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				D107

PROJECT NO.	SHEET	OF
81000927		

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MATCHLINE - SEE YARD PIPING PLAN AREA 4 - DWG D105

4" SLUDGE LINE
SEE D130 FOR PROFILE

4" PLANT SEWER

16" PLANT SEWER - 1
SEE D126 FOR PROFILE

FUTURE BLOWER BUILDING
FFE = 871

SERIES 400
BLOWER BUILDING
FFE = 871

FUTURE BLOWER BUILDING
FFE = 865

4" POTABLE WATER - 6
SEE D118 FOR PROFILE

4" POTABLE WATER - 5
SEE D118 FOR PROFILE

TYPE A HYDRANT
SEE D133 FOR DETAIL

8" POTABLE WATER - 1
SEE D117 FOR PROFILE

4" PROCESS WATER - 1
SEE D120 FOR PROFILE

8" POTABLE WATER - 8
SEE D119 FOR PROFILE

8" POTABLE WATER - 1
SEE D116 FOR PROFILE

4" POTABLE WATER - 2
SEE D118 FOR PROFILE

MH-7

MH-5

MAIN ROAD 2

4" POTABLE WATER - 4
SEE D118 FOR PROFILE

30" AGS INFLUENT
SEE D114 FOR PROFILE

SEE SERIES 300
FOR CONTINUATION

4" PROCESS WATER - 2
SEE D122 FOR PROFILE

SERIES 700
SOLIDS
PROCESSING
FFE = 872

SERIES 300
HEADWORKS
BUILDING
FFE = 871

SEE SERIES 300
FOR CONTINUATION

8" PLANT FORCE MAIN - 1
SEE D123 FOR PROFILE

MH-5A

4" PLANT SEWER - 2
SEE D128 FOR PROFILE

20" SCREENED INFLUENT
SEE D114 FOR PROFILE

8" PLANT SEWER - 3
SEE D128 FOR PROFILE

MH-A

MH-1

MH-3

MH-4

4" PLANT SEWER - 8
SEE D129 FOR PROFILE

4" PLANT SEWER - 7
SEE D129 FOR PROFILE

4" PLANT SEWER - 6
SEE D129 FOR PROFILE

6" PLANT SEWER - 1
SEE D125 FOR PROFILE

4" POTABLE WATER - 2
SEE D118 FOR PROFILE

8" PLANT SEWER - 9
SEE D129 FOR PROFILE

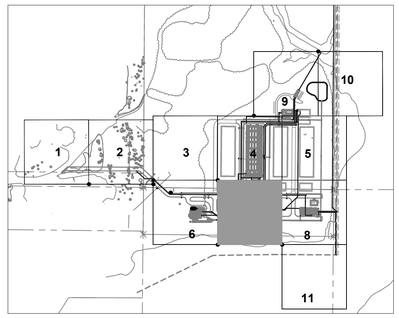
16" PLANT SEWER - 1
SEE D125 FOR PROFILE

4" PROCESS WATER - 1
SEE D120 FOR PROFILE

STORMWATER LINE (TYP)
SEE CIVIL DRAWINGS

MATCHLINE - SEE YARD PIPING PLAN AREA 6 - DWG D107

MATCHLINE - SEE YARD PIPING PLAN AREA 8 - DWG D109



KEY MAP

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

**YARD PIPING PLAN
AREA 7**

FOR WSD USE:

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CONTRACTOR: BURNS & MCDONNELL ENGINEERING CO

DATE COMPLETED:

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				D108

PROJECT NO. 81000927 SHEET OF

KCWATER
CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL & STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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MATCHLINE - SEE YARD PIPING PLAN AREA 5 - DWG D106

8" PLANT FORCE MAIN - 1
SEE D123 FOR PROFILE

FUTURE BLOWER BUILDING
FFE = 856

8" POTABLE WATER - 8
SEE D119 FOR PROFILE

STORMWATER LINE (TYP)
SEE CIVIL DRAWINGS

4" PVC HOOVER HEIGHTS
SEWER FORCE MAIN

8" END CAP

2" POTABLE WATER - 9
SEE D119 FOR PROFILE

SERIES 200
IPS ELECTRICAL
BUILDING
FFE = 859

20" SCREENED INFLUENT
SEE D114 FOR PROFILE

SERIES 200
IPS VALVE
VAULT
FFE =854

SERIES 200
IPS
FFE = 856

COURSE
SCREENING
BUILDING
FFE = 856

48" INFLUENT
SEE D114 FOR PROFILE

EXISTING 48" RCP
SEWER

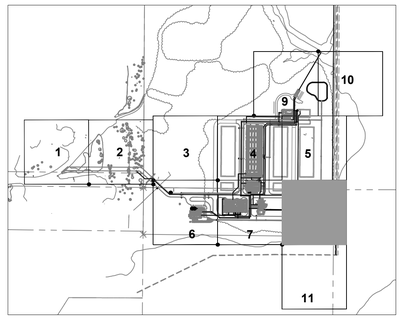
MH - 15
INSTALL
84" DIA MANHOLE

2" CHEMICAL FEED
SEE D131 FOR PROFILE

INSTALL CHEMICAL PULL BOX
SEE D132 FOR DETAILS

MATCHLINE - SEE YARD PIPING PLAN AREA 7 - DWG D108

MATCHLINE - SEE YARD PIPING PLAN AREA 11 - DWG D112



KEY MAP

NORTH

0 10' 20' 40'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

YARD PIPING PLAN
AREA 8

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1698				D109

PROJECT NO. 81000927 — SHEET OF

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
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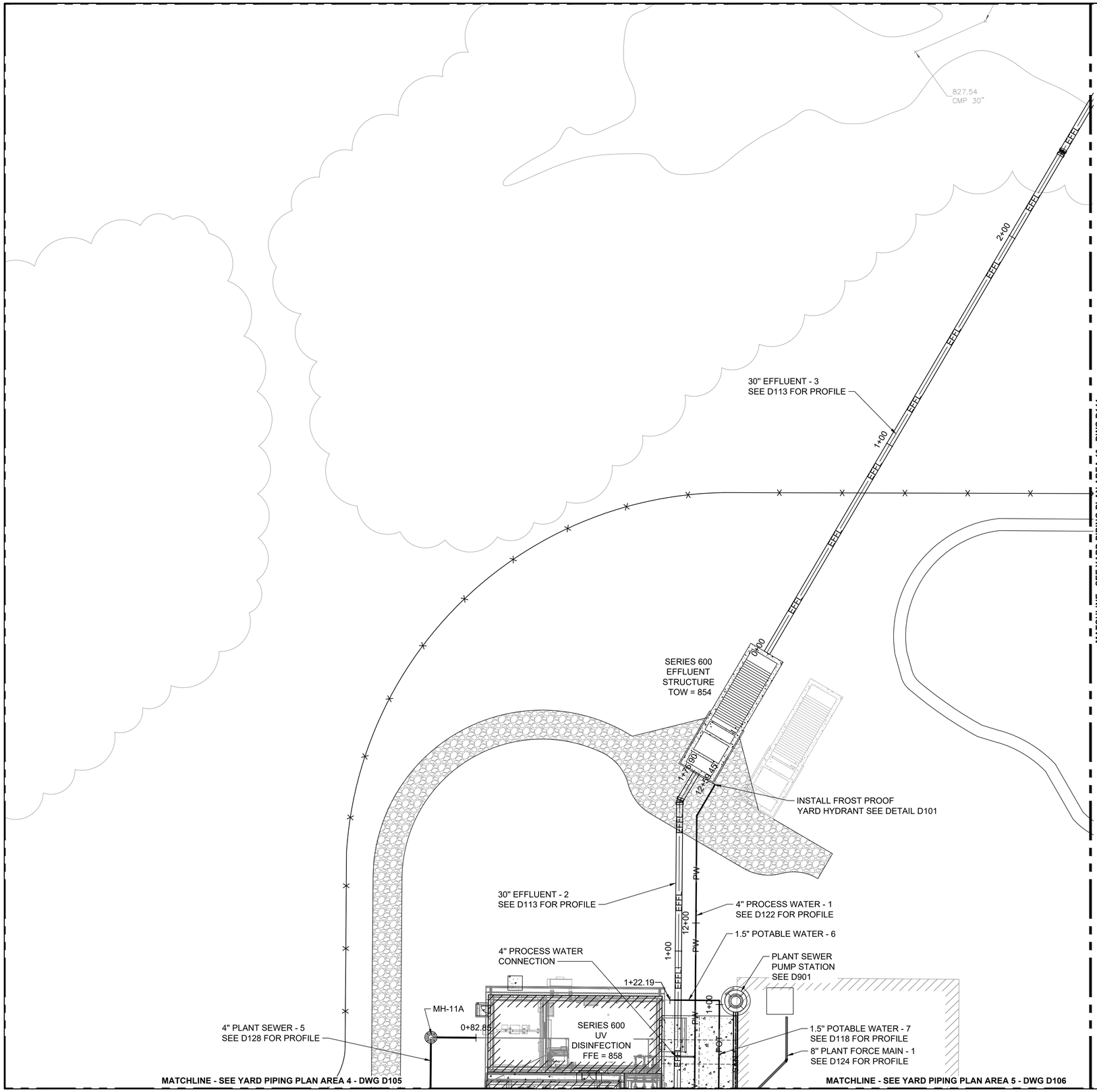

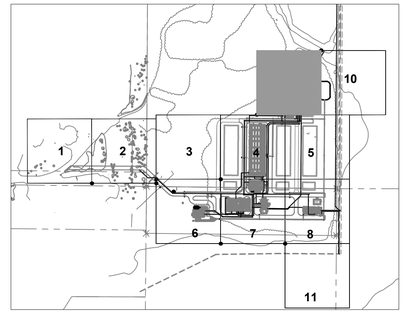

KEY MAP

NORTH

0 10' 20' 40'

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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

YARD PIPING PLAN
AREA 9

FOR WSD USE:

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				D110

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RCP FLARED END SECTION
SEE D?? FOR DETAIL

30" EFFLUENT - 3
SEE D113 FOR PROFILE

4" PVC HOOVER HEIGHTS
SEWER FORCE MAIN

11+00
10+00
9+00
8+00
7+00
SAN FM

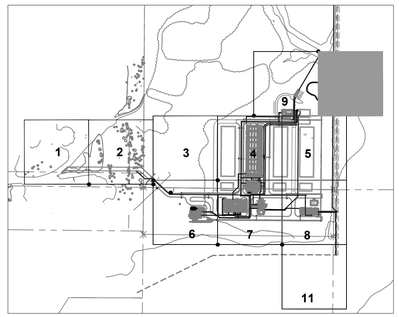
N262-013 (7" CONC.)
TOP=834.05
FL IN (S) 48" RCP=811.10
OUT (N) 48" RCP=811.07
FLOOR=811.05

834.05
MHSS BOLTEDDOWN 1"BOLT

MATCHLINE - SEE YARD PIPING PLAN AREA 9 - DWG D110

STORMWATER LINE (TYP)
SEE CIVIL DRAWINGS

MATCHLINE - SEE YARD PIPING PLAN AREA 5 - DWG D106



KEY MAP

NORTH

0 10' 20' 40'
SCALE IN FEET

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

YARD PIPING PLAN AREA 10

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CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				D111

PROJECT NO.	SHEET	OF
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MATCHLINE - SEE YARD PIPING PLAN AREA 8 - DWG D109

2" CHEMICAL FEED
SEE D131 FOR PROFILE

INSTALL CHEMICAL PULL BOX
SEE D132 FOR DETAILS

CHEM 4+00

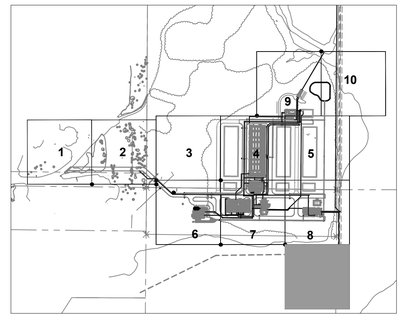
48" RCP

833.50
RHSS BOLTED

N262-011 (5' CONC.)
TOP=833.50
FL IN (W) 48" RCP=817.76
FL OUT (N) 48" RCP=817.21
FLOOR=817.65

4+38.20

EXISTING MANHOLE



KEY MAP

11

NORTH

0 10' 20' 40'
SCALE IN FEET

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
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KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

YARD PIPING PLAN
AREA 11

FOR WSD USE:

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MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
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1698				D112

PROJECT NO.	SHEET OF
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Attachment 6

Site Lighting Plans

9400 Ward Parkway | Kansas City, MO 64114 | burnsmcd.com

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER OR APPROVED EQUAL	DESCRIPTION	CATALOG/SERIES NUMBER	BATTERY	LAMP		VOLTAGE	TOTAL WATTS	MOUNTING	FIXTURE FINISH	NOTES
					TYPE	LUMENS					
A	H.E. WILLIAMS	1X4 ENCLOSED AND GASKETED LED FIXTURE WITH FIBERGLASS OUTER HOUSING AND CLEAR ACRYLIC LENS, RATED -20 TO +40 DEGREE C. 14,500 LUMENS, 4000K, 80 CRI, NEMA 4X, IP66 RATED.	EGL2-4-L145/840-HIA-(EM/10W)-DRV-UNV	EMERGENCY BATTERY PACK 10W WHERE INDICATED ON THE DRAWINGS	LED	14,500	277	95	PENDANT MOUNT AT HEIGHT PER PLANS	WHITE	
B	H.E. WILLIAMS	1X4 ENCLOSED AND GASKETED LED FIXTURE WITH FIBERGLASS OUTER HOUSING AND CLEAR ACRYLIC LENS, RATED -20 TO +40 DEGREE C. 10,700 LUMENS, 4000K, 80 CRI, NEMA 4X, IP66 RATED.	EGL2-4-L107/840-HIA-(EM/10W)-DRV-UNV	EMERGENCY BATTERY PACK 10W WHERE INDICATED ON THE DRAWINGS	LED	10,700	277	73	PENDANT MOUNT AT HEIGHT PER PLANS	WHITE	
C-1	HUBBELL KILLARK	53" X 8 " ENCLOSED AND GASKETED LED LINEAR LUMINAIRE WITH FIBERGLASS HOUSING, CLEAR LEXAN POLYCARBONATE LENS AND 20KA/10KV SURGE PROTECTION. CLASS I, DIV. 2, GROUP D, 5000 LUMENS, 5000K, 70 CRI.	LZ2NL-34-30 ADJUSTABLE WALL BRACKET - LAZB	EMERGENCY BACKUP VIA INVERTER WHERE INDICATED ON THE DRAWINGS	LED	5075	277	34	WALL MOUNT AT HEIGHT PER PLANS		CLASSIFIED AREAS. CLASS I, DIV. 2
C-2	HUBBELL KILLARK	53" X 8 " ENCLOSED AND GASKETED LED LINEAR LUMINAIRE WITH FIBERGLASS HOUSING, CLEAR LEXAN POLYCARBONATE LENS AND 20KA/10KV SURGE PROTECTION. CLASS I, DIV. 2, GROUP D, 5000 LUMENS, 5000K, 70 CRI.	LZ2NL-80-30	EMERGENCY BACKUP VIA INVERTER WHERE INDICATED ON THE DRAWINGS	LED	11,140	277	80	PENDANT MOUNT AT HEIGHT PER PLANS		CLASSIFIED AREAS. CLASS I, DIV. 2
C-3	HUBBELL KILLARK	53" X 8 " ENCLOSED AND GASKETED LED LINEAR LUMINAIRE WITH FIBERGLASS HOUSING, CLEAR LEXAN POLYCARBONATE LENS AND 20KA/10KV SURGE PROTECTION. CLASS I, DIV. 2, GROUP D, 5000 LUMENS, 5000K, 70 CRI.	LZ2NL-120-30	EMERGENCY BACKUP VIA INVERTER WHERE INDICATED ON THE DRAWINGS	LED	16,010	277	120	PENDANT MOUNT AT HEIGHT PER PLANS		CLASSIFIED AREAS. CLASS I, DIV. 2
D	HE WILLIAMS	1X4 ENCLOSED AND GASKETED LED FIXTURE WITH FIBERGLASS OUTER HOUSING, FROSTED UV POLYCARBONATE LENS, RATED -20 TO +40 DEGREE C. STAINLESS STEEL WALL BRACKET WHERE REQUIRED PER DRAWINGS. 8,100 LUMENS, 4000K, 80 CRI, NEMA 4X, IP66 RATED.	96-4-L81-840-PCFR-(EM/10W)-DRV-UNV WALL BRACKET - WMB	EMERGENCY BATTERY PACK 10W WHERE INDICATED ON THE DRAWINGS	LED	8100	277	65	WALL OR PENDANT MOUNT AT HEIGHT PER PLANS	WHITE	
F	LSI LIGHTING	EXTERIOR BUILDING PERIMETER WALL MOUNTED FIXTURE. RATED -40 T0 +50 DEGREE C, IP65 RATED. TYPE 3 DISTRIBUTION WITH NO UPLIGHT COMPONENT, 6000 LUMENS, 4000K, 70 CRI. PROVIDE INTEGRAL PHOTOCELL WHERE INDICATED ON DRAWINGS.	XWM-3-LED-6L-40-UE BATTERY BACKUP - CWBB INTEGRAL PHOTOCELL - PCI208-277	EMERGENCY BATTERY PACK 1500 LUMENS WHERE INDICATED ON THE DRAWINGS	LED	6000	277	30	WALL MOUNT AT HEIGHT PER PLANS	COORDINATE FINISH WITH ARCHITECT AND OWNER	
G	CURRENT LIGHTING (FIXTURE) CURRENT LIGHTING (POLE)	LED SINGLE HEAD FIXTURE ON 30 FT ROUND, TAPERED ALUMINUM POLE RATED FOR 100 MPH WIND WITH VIBRATION DAMPER. UL WET LOCATION RATED AND RATED FOR -40 DEGREE C tO +40 DEGREE C. PROVIDE UNIVERSAL ARM MOUNT, OCCUPANCY SENSOR CONTROL, TYPE IV FORWARD DISTRIBUTION, 9,626 LUMENS AT 75W, 4000K, 70 CRI.	VP-1-160L-75-4K7-4F-208-A4U-NXWS-16F POLE: RTAA-30-80-B-OT-UL-VM2S25	N/A	LED	9626	208	75	POLE MOUNT AT 33 FT AFG	COORDINATE FINISH WITH ARCHITECT AND OWNER	SEE DETAIL ON SHEET E012.
H	METALUX (COOPER)	2X2 RECESSSED LED PANEL, PROVIDE 0-10V DIMMING. 2610 LUMENS, 3500K	22FP2535HE-(EL14W)	EMERGENCY BATTERY PACK 14W, 1200 LUMENS WHERE INDICATED ON THE DRAWINGS	LED	2610	277	20	RECESSED AT H EIGHT PER PLANS	COORDINATE FINISH WITH ARCHITECT	
J	AFX LIGHTING	12 INCH ROUND DOWNLIGHT, WET LOCATION RATED. PROVIDE 1-10V DIMMING. 1320 DELIVERED LUMENS, 3500K, 90 CRI.	EGRF12LAJD3WH	EMERGENCY BACKUP VIA INVERTER WHERE INDICATED ON THE DRAWINGS	LED	1320	277	22	SURFACE MOUNT AT HEIGHT PER PLANS	COORDINATE FINISH WITH ARCHITECT	ADMIN L OCKER, BATHROOM, HALL AND EXTERIOR CANOPY
K	HE WILLIAMS	1 FT X 4 FT UTILITY FIXTURE. UL DAMP LOCATION RATED. 9,300 LUMENS WITH SIDE ILLUMINATION COMPONENT, 3500K.	NW-4-L93-8-35-RA-(EM/10WLP)-DIM-UNV	EMERGENCY BATTERY PACK 10W WHERE INDICATED ON THE DRAWINGS	LED	9241	277	70	PENDANT MOUNT AT HEIGHT PER PLANS	WHITE	ADMIN LAB ROOM
L	METALUX (COOPER)	2X2 RECESSSED LED PANEL, PROVIDE 0-10V DIMMING. 4330 LUMENS, 3500K	22FP4235C-(EL14W)	EMERGENCY BATTERY PACK 14W, 1200 LUMENS WHERE INDICATED ON THE DRAWINGS	LED	4330	277	39	RECESSED AT H EIGHT PER PLANS	COORDINATE FINISH WITH ARCHITECT	
M	HALO (COOPER)	4 INCH ROUND DOWNLIGHT, MEDIUM DISTRIBUTION, PROVIDE 0-10V DIMMING. 1000 LUMENS, 3500K, 80 CRI.	HC4-10-D010 HM4-0525-835-41-MD-C-WF	N/A	LED	1000	277	10	RECESSED AT H EIGHT PER PLANS	COORDINATE FINISH WITH ARCHITECT	ADMIN CONTROL ROOM

PRELIMINARY - NOT FOR CONSTRUCTION

KC WATER
CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
Licensee No. 000165

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	RAL	CKB	ISSUED FOR 60% REVIEW

REVISIONS

FOR WSD USE:

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

ELECTRICAL LIGHT FIXTURE SCHEDULE SHEET 1

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
M.CAYETANO	A.JONES	9/12/25	34W	-	-

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	-

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	E018

PROJECT NO. 81000927 SHEET - OF 560

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER OR APPROVED EQUAL	DESCRIPTION	CATALOG/SERIES NUMBER	BATTERY	LAMP		VOLTAGE	TOTAL WATTS	MOUNTING	FIXTURE FINISH	NOTES
					TYPE	LUMENS					
N	HUBBELL KILLARK	VM LED SERIES FIXTURE WITH 90 DEGREE STANCHION. MOUNT ON 10 FOOT ALUMINUM SPARTAN POLE WITH HINGE. NEMA 4X, IP66 RATED, 7000 LUMENS, 4000K, 80 CRI, TYPE 5 OPTIC WITH POLYCARBONATE DIFFUSE LENS. PROVIDE WITH GUARD AND DOME REFLECTOR TO ELIMINATE UPLIGHT. PROVIDE WITH EMERGENCY BATTERY PACK,	VML-1-X-7-(iE1)-30-S-4-G-PD-4080-DR VMLXDR (DOME), VMLXGRD (GUARD) MOUNTING BOX: STANCHION 90 DEGREE STRAIGHT POLE: HJB-AL-10	EMERGENCY BATTERY PACK 10W, WHERE INDICATED ON THE DRAWINGS	LED	7000	277	55	STANCHION MOUNT ON 10 FT POLE MOUNTED TO METAL PLATFORM WALKWAY	COORDINATE FINISH WITH ARCHITECT	SEE DETAIL ON SHEET E015. FIXTURES SHALL BE CONTROLLED THROUGH EXTERIOR LIGHTING CONTROL PANEL INSIDE BUILDING.
N1	HUBBELL KILLARK	VM LED SERIES FIXTURE. CLASS I, DIV.2, 9000 LUMENS, 4000K, 80 CRI, TYPE 5 OPTIC WITH POLYCARBONATE DIFFUSE LENS. PROVIDE WITH GUARD AND DOME REFLECTOR TO ELIMINATE UPLIGHT. PROVIDE WITH EMERGENCY BATTERY PACK,	VML-1-X-9-(iE1)-30-B-3-G-PD-4080-DR VMLXDR (DOME), VMLXGRD (GUARD) WALL MOUNTING BOX: VMB3B	EMERGENCY BATTERY PACK 10W, WHERE INDICATED ON THE DRAWINGS	LED	9000	277	75	SURFACE MOUNT TO METAL I-BEAM AT 15 FT	COORDINATE FINISH WITH ARCHITECT	IPS SCREENS BUILDING CLASSIFIED AREAS. CLASS I, DIV. 2. SEE DETAIL ON SHEET ??? FIXTURES SHALL BE CONTROLLED THROUGH EXTERIOR LIGHTING CONTROL PANEL INSIDE BUILDING.
N2	HUBBELL KILLARK	VM LED SERIES FIXTURE WITH 90 DEGREE STANCHION. MOUNT ON 30 FOOT ROUND, TAPERED ALUMINUM POLE RATED 100MPH WITH VIBRATION DAMPER. CLASS I, DIV.2, 9000 LUMENS, 4000K, 80 CRI, TYPE 5 OPTIC WITH POLYCARBONATE DIFFUSE LENS. PROVIDE WITH GUARD AND DOME REFLECTOR TO ELIMINATE UPLIGHT. PROVIDE WITH EMERGENCY BATTERY PACK,	VML-1-X-9-(iE1)-30-S-4-G-PD-4080-DR VMLXDR (DOME), VMLXGRD (GUARD) MOUNTING BOX: STANCHION 90 DEGREE STRAIGHT POLE: RTAA-30-80-B-OT-UL-VM2S25	EMERGENCY BATTERY PACK 10W, WHERE INDICATED ON THE DRAWINGS	LED	9000	277	75	STANCHION MOUNT ON 30 FT POLE.MOUNT AT 33 FT AFG.	COORDINATE FINISH WITH ARCHITECT	IPS SCREENS BUILDING CLASSIFIED AREAS. CLASS I, DIV. 2. SEE DETAIL ON SHEET E012 FIXTURES SHALL BE CONTROLLED THROUGH EXTERIOR LIGHTING CONTROL PANEL INSIDE BUILDING.
P	HUBBELL KILLARK	EXTERIOR BUILDING PERIMETER WALL MOUNTED FIXTURE RATED CLASS I, DIVISION 2, +55 DEGREE C. PROVIDE INTEGRAL PHOTOCELL, GLARE SHIELD WITH FULL CUTOFF VISOR, 4000 LUMENS, 4000K.	KWPL-4-30-P2-PVLV-VMFSPC2	EMERGENCY BACKUP VIA INVERTER WHERE INDICATED ON THE DRAWINGS	LED	4000	277	34	WALL MOUNT AT HEIGHT PER PLANS	COORDINATE FINISH WITH ARCHITECT AND OWNER	CLASS I, DIV. 2, EXTERIOR PERIMETER BUILDING LIGHITNG FOR HEADWORKS BUILDING
R	HE WILLIAMS	1 FT X 4 FT UTILITY FIXTURE. UL DAMP LOCATION RATED. PROVIDE LOWER LUMEN PACKAGE AT 7,000 LUMENS, 3500K, 80 CRI.	SLF-4-L98/835-(L70)-HIA-(EM/10W)-DIM-UNV	EMERGENCY BATTERY PACK 10W WHERE INDICATED ON THE DRAWINGS	LED	7000	277	54	WALL MOUNT AT HEIGHT PER PLANS	WHITE	
S	H.E. WILLIAMS	1 FT X 4 FT UTILITY FIXTURE WITH REFLECTOR. PROVIDE LOWER LUMEN PACKAGE AT 10,000 LUMENS, 4000K, 80 CRI. UL DAMP LOCATION RATED.	80-4-L115/840-(L100)-(EM/10W)-DRV-UNV	EMERGENCY BATTERY PACK 10W WHERE INDICATED ON THE DRAWINGS	LED	10,000	277	64	PENDANT MOUNT AT HEIGHT PER PLANS	WHITE	IPS AND ADMIN ELECTRICAL ROOM
S-1	H.E. WILLIAMS	1 FT X 4 FT UTILITY FIXTURE WITH REFLECTOR. PROVIDE 5,300 LUMENS, 4000K, 80 CRI. UL DAMP LOCATION RATED.	80-4-L53-8-40-(EM/10W)-DRV-UNV	EMERGENCY BATTERY PACK 10W WHERE INDICATED ON THE DRAWINGS	LED	5,300	277	34	PENDANT MOUNT AT HEIGHT PER PLANS	WHITE	ADMIN MECHANICAL AND JANITOR ROOM
T	PMC LIGHTING	1 FT X 4FT DIRECT WALL WASH, MEDIUM OUTPUT WITH 1100 LUMENS PER FOOT, 3500K, 80 CRI. PROVIDE DIFFUSER.	E3095-D-FL-35K-110-"X"-D-WHT-UNV 'X' INDICATES LENGTH PER DRAWINGS	N/A	LED	1100/FT	277	6.8/FT	RECESSED AT HEIGHT PER PLANS	WHITE	ADMIN RESTROOMS OVER SINKS AND STALLS. FIELD VERIFY LENGTHS AND COORDINATE INSTALLATION WITH ARCHITECTURAL DETAILS.
W		MONUMENT SIGN DELETED									
X	CURRENT LIGHTING (DUAL LITE)	NEMA 4X LED EXIT SIGN WITH BATTERY BACKUP. PROVIDE UNIVERSAL MOUNTING OPTION. PROVIDE SELF DIAGNOSTICS.	EVE4X-R-W-E-I	PROVIDE NICKEL CADMIUM BATTERY BACKUP FOR 90 MINUTES	LED		277	3	WALL OR SURFACE AT 7'-8" AFF, U.O.N.	WHITE WITH RED LETTERS. SEE PLANS FOR ARROWS AND FACES.	NEMA 4X EXIT SIGN
X2	HE WILLIAMS	LED EXIT SIGN WITH BATTERY BACKUP. PROVIDE UNIVERSAL MOUNTING OPTION. PROVIDE SELF DIAGNOSTICS.	EXIT/EM/LED-R-WHT-NH-D	PROVIDE NICKEL CADMIUM BATTERY BACKUP FOR 90 MINUTES	LED		277	3	WALL OR SURFACE AT 7'-8" AFF, U.O.N.	WHITE WITH RED LETTERS. SEE PLANS FOR ARROWS AND FACES.	EXIT SIGN
X3	LARSON ELECTRONICS APPROVED EQUAL BY EATON	CLASS I DIV. II RATED LED EXIT SIGN WITH BATTERY BACKUP. PROVIDE SELF DIAGNOSTICS.	HAL-EMG-EXT-3W-CLG-RED HAL-EMG-EXT-3W-PND-RED HAL-EMG-EXT-3W-WAL-RED	PROVIDE NICKEL CADMIUM BATTERY BACKUP FOR 90 MINUTES	LED		277	3	CEILING, PENDANT OR WALL, 7'-8" AFF, U.O.N.	WHITE WITH RED LETTERS. SEE PLANS FOR ARROWS AND FACES.	CLASS I, DIV. II EXIT SIGN FOR CLASSIFIED AREAS

FIXTURE SCHEDULE NOTES:

1. ALL INTERIOR LAMPS SHALL BE APPROXIMATELY 4000K, UNO.
2. ALL EXTERIOR LAMPS SHALL BE APPROXIMATELY 4000K, UNO.
3. ALL EXTERIOR FIXTURES SHALL HAVE COLD WEATHER LED DRIVERS.
4. ALL EXTERIOR FIXTURES SHALL BE CONTROLLED VIA TIMECLOCK OR PHOTOCELL ON AND PHOTOCELL OFF AS INDICATED ON DRAWINGS.
5. ALL FIXTURES SHALL BE DLC LISTED OR ENERGY STAR RATED FOR EVERGY REBATE PROGRAM.
6. FIXTURES DESIGNATED WITH "E" ON THE DRAWINGS SHALL INCLUDE AN INTEGRAL 90 MINUTE EMERGENCY BATTERY PACK OR CONNECT TO INVERTER.

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TODD CREEK WWTP EXPANSION AND UPGRADE

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ELECTRICAL LIGHT FIXTURE SCHEDULE SHEET 2

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
M.CAYETANO	A.JONES	9/12/25	34W	-	-

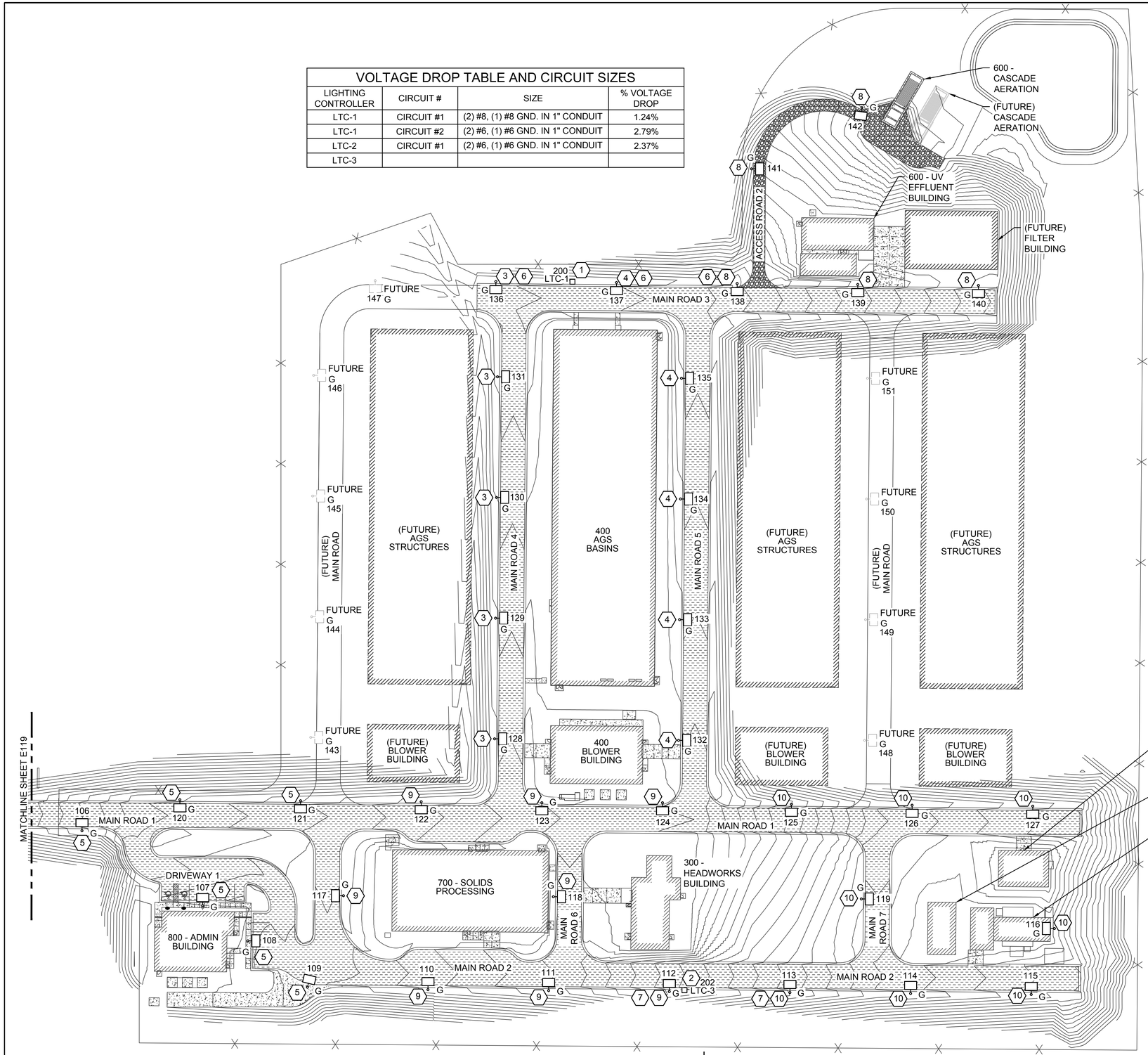
CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO.	-

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698	-	-	-	E019

PROJECT NO. 81000927

SHEET - OF 560

VOLTAGE DROP TABLE AND CIRCUIT SIZES			
LIGHTING CONTROLLER	CIRCUIT #	SIZE	% VOLTAGE DROP
LTC-1	CIRCUIT #1	(2) #8, (1) #8 GND. IN 1" CONDUIT	1.24%
LTC-1	CIRCUIT #2	(2) #6, (1) #6 GND. IN 1" CONDUIT	2.79%
LTC-2	CIRCUIT #1	(2) #6, (1) #6 GND. IN 1" CONDUIT	2.37%
LTC-3			



ELECTRICAL SITE LIGHTING PLAN
0 25' 50' 100'

PRELIMINARY - NOT FOR CONSTRUCTION

GENERAL NOTES:

1. REFER TO SHEET E001 FOR ELECTRICAL LEGEND.
2. REFER TO SHEETS E018 AND E019 FOR LIGHT FIXTURE SCHEDULE.
3. REFER TO SHEET E118 FOR NORTHING AND EASTING COORDINATES FOR SITE LIGHT POLES.
4. REFER TO PANEL SCHEDULES ON SHEET E603 AND E803.

KEYED NOTES:

1. PROPOSED LOCATION OF NEW LIGHTING CONTROLLER LTC-1. PROVIDE (4) #4, (1) #8 GND IN 2" CONDUIT FROM LIGHTING CONTROLLER LTC-1 TO PANEL UV-PNL-041, CIRCUITS 4, 6 LOCATED IN UV DISINFECTION BUILDING. REFER TO LIGHTING CONTROLLER DETAILS ON SHEET E008 AND E009.
2. PROPOSED LOCATION OF NEW LIGHTING CONTROLLER LTC-3. PROVIDE (4) #4, (1) #8 GND IN 2" CONDUIT FROM LIGHTING CONTROLLER LTC-3 TO PANEL GRSC-PNL-041, CIRCUITS 7, 9 LOCATED IN HEADWORKS BUILDING. REFER TO LIGHTING CONTROLLER DETAILS ON SHEET E008 AND E009.
3. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT #1 ON LIGHTING CONTROLLER LTC-1. PROVIDE (2) #8, (1) #8 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-1. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.
4. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT #2 ON LIGHTING CONTROLLER LTC-1. PROVIDE (2) #6, (1) #6 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-1. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.
5. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT#1 ON LIGHTING CONTROLLER LTC-2. PROVIDE (2) #6, (1) #6 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-2. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.
6. PROVIDE (2) #8, (1) #8 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLE TYPE 'G' AND LIGHTING CONTROLLER LTC-1.
7. PROVIDE (2) #6, (1) #6 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLE TYPE 'G' AND LIGHTING CONTROLLER LTC-3 .
8. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT #3 ON LIGHTING CONTROLLER LTC-1. PROVIDE (2) #6, (1) #6 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-1. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.
9. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT #1 ON LIGHTING CONTROLLER LTC-3. PROVIDE (2) #8, (1) #8 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-3. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.
10. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT #2 ON LIGHTING CONTROLLER LTC-3. PROVIDE (2) #6, (1) #6 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-3. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.

9400 WARD PARKWAY
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Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

ELECTRICAL SITE LIGHTING PLAN
SHEET 1

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
R. LARKEY	C.BREWSTER	9/12/25			

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				E117

PROJECT NO. 81000927 SHEET OF

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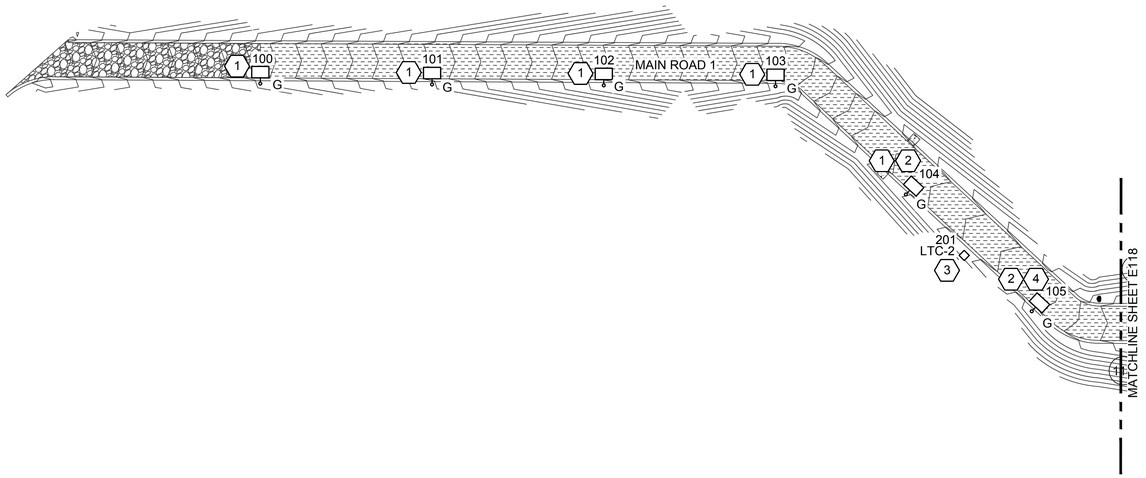
LIGHT COORDINATES		
NUMBER	NORTHING	EASTING
100	1158314.511	2739651.373
101	1158313.888	2739771.371
102	1158313.264	2739891.370
103	1158312.641	2740011.368
104	1158237.002	2740102.455
105	1158155.369	2740190.410
106	1158130.483	2740302.805
107	1158055.949	2740422.862
108	1158021.038	2740467.740
109	1157974.841	2740527.027
110	1157972.498	2740646.906
111	1157971.533	2740766.903
112	1157970.569	2740886.899
113	1157969.605	2741006.895
114	1157968.641	2741126.891
115	1157967.677	2741246.887
116	1158033.275	2741269.934
117	1158065.852	2740562.823
118	1158064.865	2740771.610
119	1158062.629	2741077.917
120	1158161.220	2740400.171
121	1158160.256	2740520.167
122	1158159.292	2740640.164
123	1158158.328	2740760.160
124	1158158.328	2740880.160
125	1158156.815	2741008.399
126	1158155.851	2741128.395
127	1158154.887	2741248.391
128	1158221.834	2740713.183
129	1158341.830	2740714.147
130	1158461.826	2740715.112
131	1158581.822	2740716.076
132	1158220.364	2740896.177
133	1158340.360	2740897.141
134	1158460.356	2740898.106
135	1158580.352	2740899.071
136	1158676.487	2740714.399
137	1158675.520	2740834.395
138	1158674.552	2740954.391
139	1158673.585	2741074.387
140	1158672.618	2741194.384
141	1158788.586	2740968.745
142	1158849.372	2741078.432
143	1158223.303	2740530.266
144	1158343.299	2740531.230
145	1158463.295	2740532.195
146	1158583.292	2740533.159
147	1158677.455	2740594.403
148	1158220.364	2741081.171
149	1158340.360	2741082.136
150	1158460.356	2741083.100
151	1158580.352	2741084.065

LIGHT CONTROLLER COORDINATES		
NUMBER	NORTHING	EASTING
200	1158676.426	2740790.562
201	1158194.416	2740143.203
202	1157971.879	2740901.986

VOLTAGE DROP TABLE AND CIRCUIT SIZES			
LIGHTING CONTROLLER	CIRCUIT #	SIZE	% VOLTAGE DROP
LTC-2	CIRCUIT #2	(2) #8, (1) #8 GND. IN 1" CONDUIT	2.37%



GENERAL NOTES:

1. REFER TO SHEET E001 FOR ELECTRICAL LEGEND.
2. REFER TO SHEETS E018 AND E019 FOR LIGHT FIXTURE SCHEDULE.
3. SEE THIS SHEET FOR NORTHING AND EASTING COORDINATES FOR SITE LIGHT POLES.

KEYED NOTES:

1. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT#2 ON LIGHTING CONTROLLER LTC-2. PROVIDE (2) #8,(1) #8 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-2. REFER TO SHEET E117 FOR LOCATION OF LIGHTING CONTROLLER LTC-2. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.
2. PROVIDE (2) #8, (1) #8 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLE TYPE 'G' AND LIGHTING CONTROLLER LTC-2.
3. PROPOSED LOCATION OF NEW LIGHTING CONTROLLER LTC-2. PROVIDE (4) #4, (1) #8 GND IN 2" CONDUIT FROM LIGHTING CONTROLLER LTC-2 TO PANEL ADM-PNL-041, CIRCUITS 20, 24 LOCATED IN ADMIN BUILDING. REFER TO LIGHTING CONTROLLER DETAILS ON SHEET E008 AND E009.
4. PROPOSED LOCATION OF NEW SITE LIGHT POLE TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE ON CIRCUIT #1 ON LIGHTING CONTROLLER LTC-2. PROVIDE (2) #8, (1) #8 GND IN 1" CONDUIT BETWEEN SITE LIGHT POLES TYPE 'G'. SITE LIGHT POLE TYPE 'G' SHALL BE CONTROLLED BY PHOTOCELL ON, PHOTOCELL OFF LOCATED INSIDE THE LIGHTING CONTROLLER LTC-2. REFER TO SHEET E117 FOR LOCATION OF LIGHTING CONTROLLER LTC-2. REFER TO SITE LIGHT POLE DETAILS ON SHEET E012.

ELECTRICAL SITE LIGHTING PLAN
0 25' 50' 100'

NORTH

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER SERVICES
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TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

ELECTRICAL SITE LIGHTING PLAN
SHEET 2

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
M.CAYETANO	C.BREWSTER	9/12/25			

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				E118

PROJECT NO. 81000927 SHEET OF

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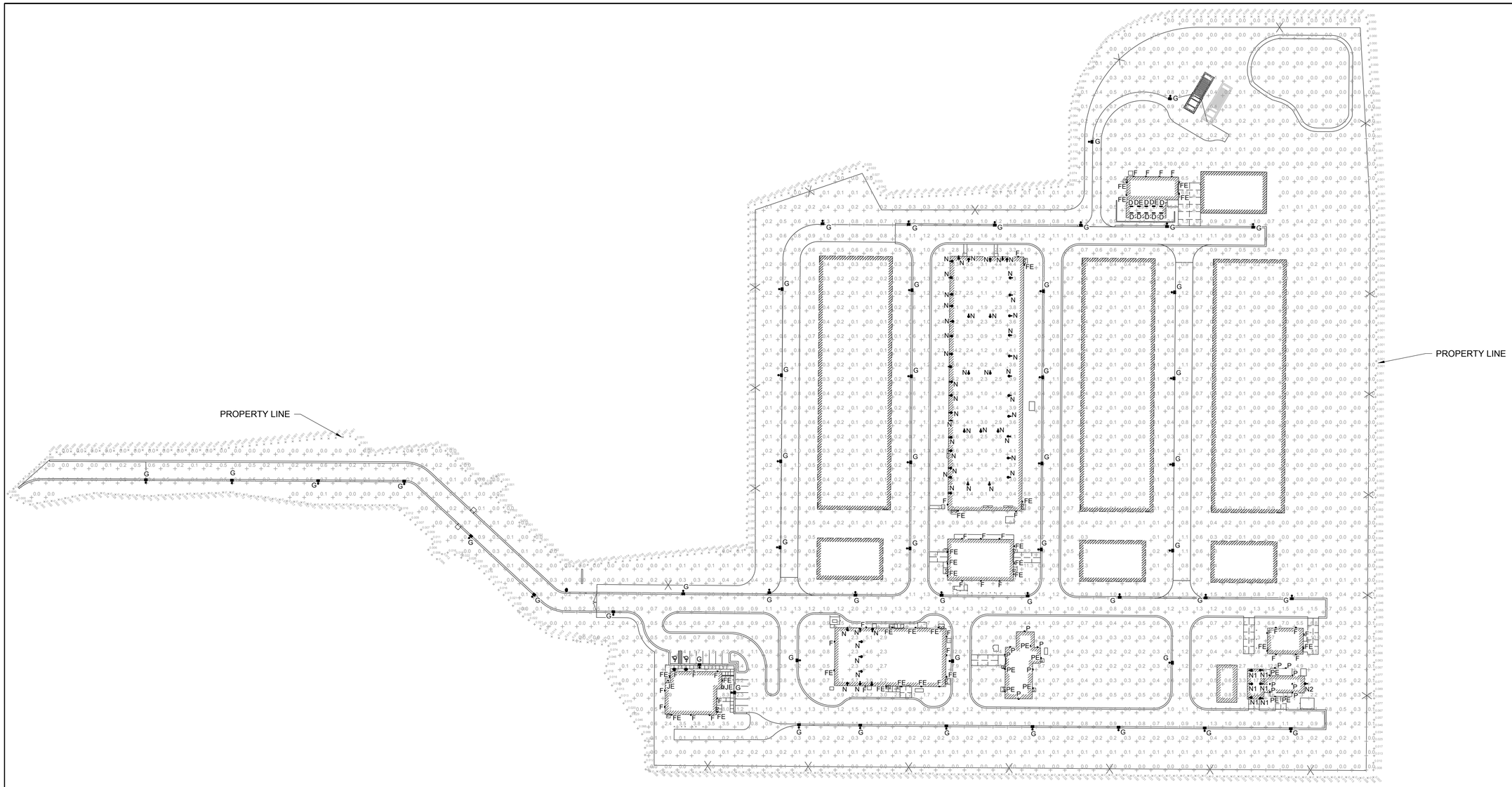

PHOTOMETRIC SITE LIGHTING PLAN

0 70' 120'

NORTH

IES RECOMMENDED MAINTAINED ILLUMINANCE VALUE		
LABEL	UNIT	MIN
SITE LIGHTING/ ROAD WAY	+FC	0.2

CALCULATION SUMMARY				
LABEL	UNITS	AVG	MAX	MIN
SITE LIGHTING/ ROAD WAY	+FC	0.8	29.2	0.0
SITE LIGHTING/ PROPERTY LINE	+FC	0.027	1.55	0.0

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PHOTOMETRIC SITE LIGHTING PLAN

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R. LARKEY	A. JONES	10/10/25			

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				EXXX

PROJECT NO.	SHEET	OF
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Attachment 7

Tree Preservation & Mitigation Plans

9400 Ward Parkway | Kansas City, MO 64114 | burnsmcd.com

EXISTING TREELINE
(7.03 ACRES)

EXISTING STREAM
BUFFER
(10.48 ACRES)

DISTURBED AREA
(0.43 ACRES)

EXISTING TREES
SURVEYED WITHIN
DISTURBED AREA

MAIN ROAD-1

MAIN ROAD-2

MAIN ROAD-3

MAIN ROAD-4

MAIN ROAD-5

MAIN ROAD-6

MAIN ROAD-7

ACCESS ROAD-1

FUTURE MAIN ROAD

P/L

973.68

FND 1" RDBAR
W/ CAP LS 1985

LEGEND

- P/L — PROPERTY LINE
- X — NEW FENCING
- CONSTRUCTION LIMITS
- EXISTING TREE

NORTH

0 50' 100'
SCALE IN FEET

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

WELLNER architects

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	SFW/LDH	BMS	ISSUED FOR 60% REVIEW

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

EXISTING CONDITIONS TREE PLAN

Brittney Swartz
Landscape Architect
LA-2011003571

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
LDH, SFW	BMS	-	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	-

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				L104

PROJECT NO. 81000927

SHEET - OF -

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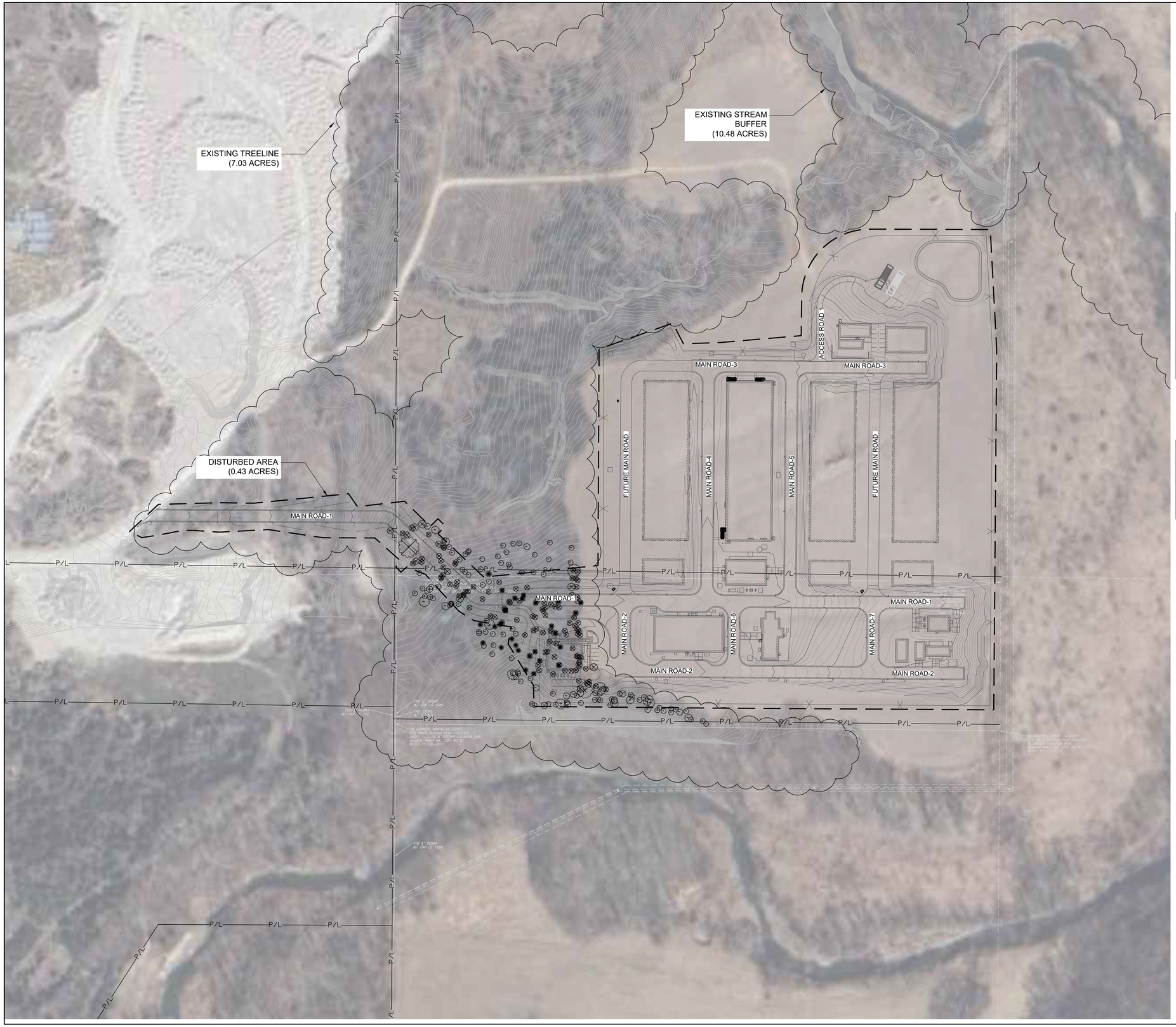

LEGEND

- P/L — PROPERTY LINE
- X — NEW FENCING
- CONSTRUCTION LIMITS
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED

Code 88-424-07			
Steps	Calculation	Value	Trees Provided
step 1	total acreage of contiguous canopy cover to be removed minus total acreage of contiguous tree cover of 1+ acre preserved outside of any stream buffers	A acres - B acres	7.03-0.43
step 2	subtract undisturbed stream buffer acres	ans - D acres	6.6-10.48
step 3	Step 2 answer * 0.35	ans *.35	-10.13
step 4	Step 3 answer * 150 caliper	ans *150 caliper	-1519.5
step 5	Step 4 answer minus total caliper of inches of trees provided for required landscaping per 88-425	ans - caliper	-1521.5
step 6	Step 5 answer = number of caliper inches required for mitigation.	x caliper required	-1519.5

No Tree Mitigation is required

Strem Buffer Undistrubed	10.48 Acres
Contiguous Tree Canopy at Disturbed Area	7.03 Acres
Contiguous Tree Canopy to be Removed	0.43 Acres

Code 88-425 Landscape Requirements	Required	Proposed
88-425-04 General		
Trees*	1 tree per 5000 SF of principal building coverage.	6 Trees
88-425-06 Interior Vehicular Use Area		
Interior Area**	35 SF interior landscape per parking space	680 SF
Trees	1 tree per 5 parking spaces	3 Trees
Shrubs	1 shrub per parking space	38 Shrubs

*88-425-04 Administration Building covers 27,000 SF. 27,000/5,000 = 6 trees.

**88-425-06 Interior Vehicular Use: 35 SF x 14 Parking Stalls = 490 SF.

Detailed Landscape Plan around the principal building will be submitted with final plans.

NORTH

0 50' 100'
SCALE IN FEET

KCWATER

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MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants
CIVIL + STRUCTURAL ENGINEERING

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REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

OVERALL TREE PRESERVATION AND MITIGATION PLAN

Brittney Swartz
Landscape Architect
LA-2011003571

FOR WSD USE:

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LDH, SFW	BMS	-	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	-

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				L104

PROJECT NO.	SHEET	OF
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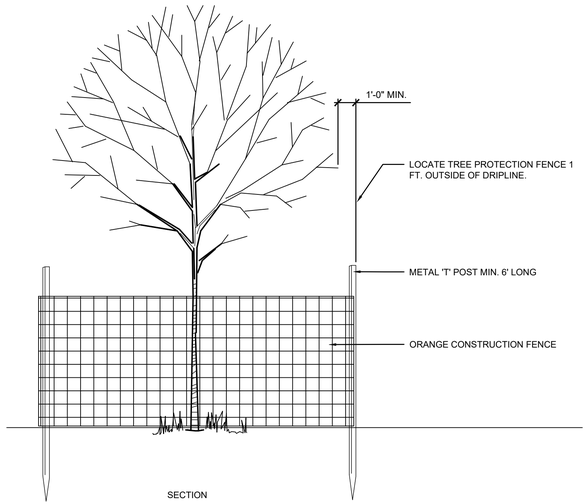

SECTION

NOTES:
1. CONSTRUCTION FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION OPERATIONS
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FENCE MAINTENANCE. REPAIR AND/OR REPLACE ALL SECTIONS DAMAGED DURING CONSTRUCTION OPERATIONS
3. CONTRACTOR SHALL BE RESPONSIBLE FOR HEALTH OF PROTECTED TREES THROUGHOUT THE CONSTRUCTION PERIOD. TREES SHOWING SIGNS OF STRESS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE IMMEDIATELY. ALL TREES THAT DIE DUE TO CONSTRUCTION OPERATIONS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. THE REPLACEMENT TREE SHALL BE OF COMPARABLE SIZE & SPECIES BASED ON NURSERY AVAILABILITY. CONTRACTOR SHALL SUBMIT REPLACEMENT TREES TO OWNERS REPRESENTATIVE FOR FINAL ACCEPTANCE PRIOR TO INSTALLATION.

1 TREE PROTECTION DETAIL

KCWATER
CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING
DuBois Consultants
WELLNER architects
BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
816-333-9400
LICENSEE NO. 000165

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NO.	DATE	BY:	CHECKED:	DESCRIPTION
A	9/12/25	SFW/LDH	BMS	ISSUED FOR 60% REVIEW

REVISION BLOCK

Brittney Swartz
Landscape Architect
LA-2011003571

FOR WSD USE:

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

LANDSCAPE DETAILS

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
LDH, SFW	BMS	-	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	-

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				L104

PROJECT NO.	SHEET	OF
81000927	-	-

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Attachment 8

Legal Description

EXHIBIT "A"

Legal Description

TRACT 1:

A tract of land in the Northwest Quarter and the Southwest Quarter of Section 1, Township 52 North, Range 34 West of the 5th Principal Meridian in Kansas City, Platte County, Missouri, being bounded and described as follows:

Commencing at the Northeast corner of said Northwest Quarter; thence South 00°27'39" West, along the East line of said Northwest Quarter, 172.64 feet to the point of beginning of the tract of land to be herein described; thence continuing South 00°27'39" West along said East line, 16.70 feet; thence South 81°08'13" West, 240.00 feet; thence South 69°33'24" East, 252.00 feet to a point on said East line; thence South 00°27'39" West, along said East line, 2,263.13 feet to the Southeast corner of said Northwest Quarter; thence South 00°27'03" West, along the East line of the Southwest Quarter, 327.63 feet to the Southeast corner of the North ten (10) acres of the East Half of the Southwest Quarter; thence North 89°19'57" West, along the South line of said North ten (10) acres, 1,329.83 feet to the Southwest corner of said North ten (10) acres; thence North 00°32'30" East, along the West line of the East Half of the Southwest Quarter, 327.62 feet to the Southwest corner of the East Half of the Northwest Quarter; thence North 00°18'11" East, along the West line of said East Half, 2,002.34 feet to a point on the centerline of an existing gravel road, said centerline being the centerline of NW 144th Street, as established and exists; thence South 82°21'47" East, along said centerline, 537.79 feet; thence Easterly, continuing along said centerline along a curve to the left, being tangent to the last described course with a radius of 117.42 feet, a central angle of 37°45'05" and an arc distance of 77.37 feet; thence North 59°53'08" East, continuing along said centerline, 185.06 feet; thence Northeasterly, continuing along said centerline, along a curve to the left, being tangent to the last described course with a radius of 226.62 feet, a central angle of 19°21'51" and an arc distance of 76.59 feet; thence North 40°31'17" East, continuing along said centerline, 19°21'51", and an arc distance of 76.59 feet; thence North 40°31'17" East, continuing along said centerline, 282.48 feet; thence Northeasterly, continuing along said centerline, along a curve to the right, being tangent to the last described course with a radius of 124.77 feet, a central angle of 39°22'41" and an arc distance of 85.75 feet; thence North 79°53'58" East, continuing along said centerline, 259.32 feet to the point of beginning, EXCEPT that part subject to road right of way and the rights of the public.

TRACT 2:

All that part of the Northwest Quarter of Section 1, Township 52, Range 34, Kansas City, Platte County, Missouri, being described as follows: Beginning at a point 42.00 feet South of a concrete covered well located in the Southeast corner of the Roy C. Cox farms, said point being South 00°27'39" West, 189.39 feet South of the Northeast corner of said Northwest Quarter; thence continuing South 00°27'39" West, along the East line of said Northwest Quarter, 125.00 feet; thence North 69°33'24" West, 252.00 feet; thence North 81°08'13" East, 240.00 feet to the point of beginning.

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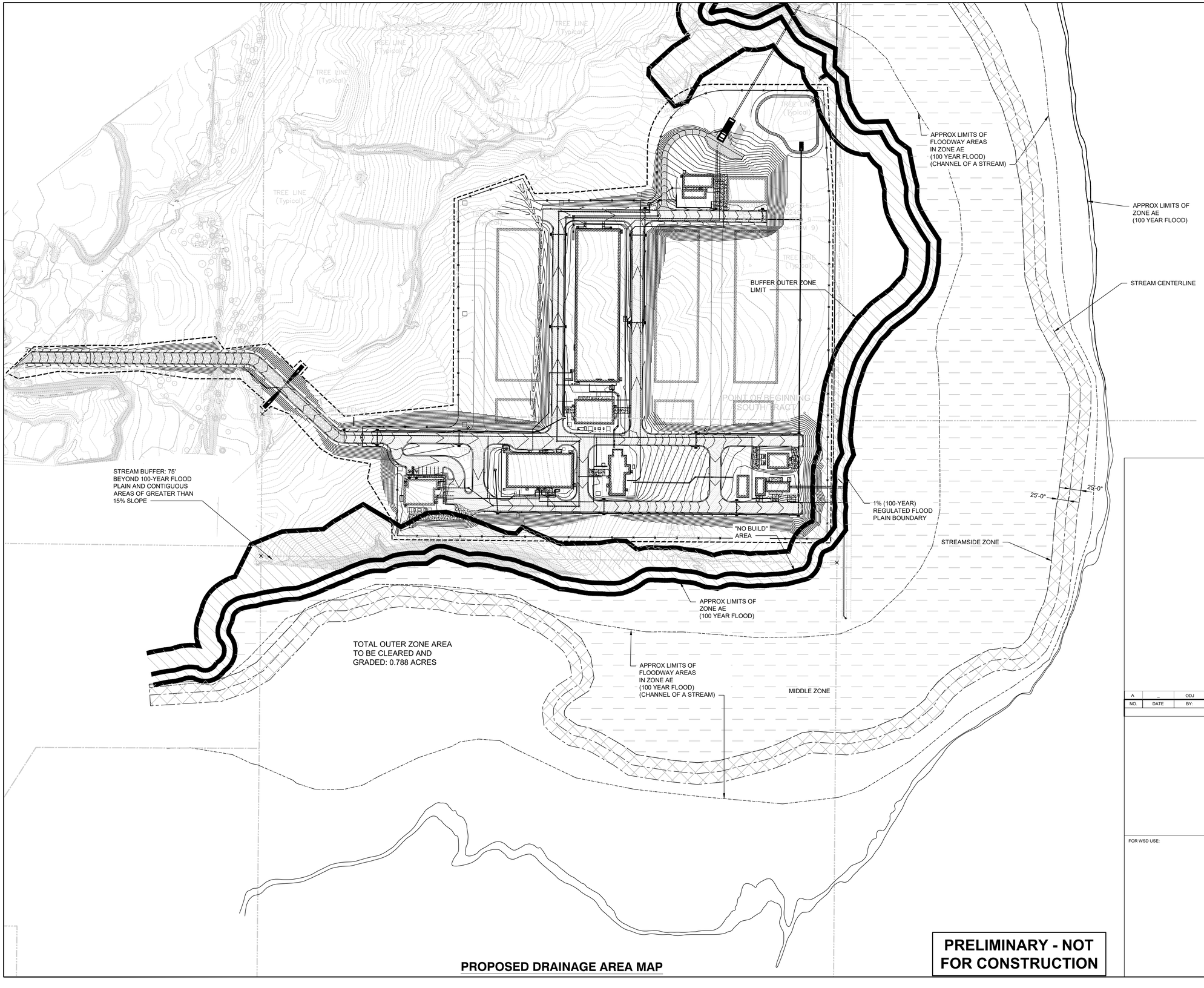
Attachment 9

Stream Buffer Plan

9400 Ward Parkway | Kansas City, MO 64114 | burnsmcd.com



NOTE:
APPROXIMATE PERCENTAGE OF STREAM BUFFER AREA SLOPES GREATER THAN 15%-30%

LEGEND

- EXISTING 1' CONTOUR
- STREAM BUFFER ZONE LINE
- STREAM BUFFER OUTER ZONE
- MIDDLE ZONE
- STREAMSIDE ZONE

N

0 100' 200'

SCALE IN FEET

PROPOSED DRAINAGE AREA MAP

PRELIMINARY - NOT FOR CONSTRUCTION

KCWATER

CUSTOM ENGINEERING
MECHANICAL & ELECTRICAL ENGINEERING

DuBois Consultants

WELLNER architects

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9400 WARD PARKWAY
KANSAS CITY, MO 64114
Burns & McDonnell Engineering Co, Inc
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A	_	ODJ	JPG	60% DESIGN REVIEW PACKAGE-NOT FOR CONSTRUCTION

REVISION BLOCK

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT

TODD CREEK WWTP EXPANSION AND UPGRADE

14001 NW INTERURBAN ROAD, KANSAS CITY, MO 64163

STREAM BUFFER PLAN

FOR WSD USE:

DRAWN BY:	CHECKED BY:	DATE SUBMITTED	RANGE	TOWNSHIP	SECTION
ODJ	JPG	08/27/2025	34W	53N 52N	36 01

CONTRACTOR	DATE COMPLETED
BURNS & MCDONNELL ENGINEERING CO	

CONTRACT NO.	CONTRACT DATE	MAP NO.	WORK ORDER NO.	DRAWING NO.
1698				C001

PROJECT NO. 81000927 SHEET 1 OF 1

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Public Meeting Notice

Please join KC Water for a meeting about the Todd Creek Wastewater Treatment Plant application for development plan, case number CD-CPC-2025-00083 proposed for the following address: KCMO City pin numbers 171615 and 171616

Meeting Date:	June 24, 2025
Meeting Time:	Public engagement meeting will be held in an open house format from 5:00 p.m. to 6:30 p.m.
Meeting Location:	Four Points Sheraton at the Kansas City Airport, Plaza Ballroom, 11832 NW Plaza Circle, Kansas City, MO 64153

Project Description: The current Todd Creek Wastewater Treatment plant (located 7600 NW 144th St, Platte City, MO 64079) was built in 1968 and expanded in 1990 but has exceeded its useful life due to northland growth, the new KCI passenger terminal, and aging less efficient treatment technology. KC Water plans to construct a new plant at the proposed location above to increase capacity, install new treatment technology, and accommodate future growth.

If you have any questions, please contact:

Name: Blake Anderson, KC Water

Phone: 816-513-7258

Email: Blake.W.Anderson@kcmo.org

You are receiving this notice in accordance with city code that requires a public meeting with neighborhoods for certain types of development projects. You can read more about the process requirements at kcmo.gov/publicengagement

COMPASSKC

If you would like further information on this proposed project, please visit the city's planning and permitting system, Compass KC, at Compasskc.kcmo.org. You may search by project type and address/case number to find project details.

Sincerely,

Blake Anderson

Meeting Sign-In Sheet

Project Name and Address

PROJECT: Todd Creek Wastewater Treatment Plant - Relocation Development Plan

ADDRESS: KCMO City pin numbers 171615 and 171616

Name	Address	Phone	Email
Shelly Blakely	11365 Baker PKWY	816 616 4253	deanblakely@juno.com
Crystal Harris	6085 NW Martin Rd KCMO		Crystal.r.harris31@gmail.com
CHRIS HERRERA	2316 NW 86TH ST KC, MO 64154	(816) 804-1922	herrera.chris@att.net
KIRBY HOLDEN	14890 Interurban Platte City 64079	916 223 6899	V8fish47@Yahoo.com
Tracy Hansen	15900 N. Winan Rd Platte City, MO 64079	816-853-4472	thansend@gmail.com
DAVID HANSEN	" " "	816-516-0508	" "
Joe Morris	14810 Interurban Rd Platte City, MO 64079	816-456-6476	morrisjockim@gmail.com
Andrew Saad Wafa Saad	15148 Kirk AVE	816-532-3487	anwarsaad1978@gmail.com
Conyer Hon	16690 Interurban Rd Platte City mo	816 591-8846	~~[illegible]~~
LISA REINIER	6901 NW COOKINGHAM DR. KCMO 64163	816-547-5683	lreindeer@att.net

Christian Holferty	12200 N Ambassador Drive	816-792-3976	christian.holferty@mail.house.gov
Jim Bilski	7630 92 Hwy	8169351572	
Michelle Macke	6325 NW Standardbred Dr	816-808-7013	m.macke@outlook.com
Danny Houlahan	14615 Todd Creek Road PC/Mo 64079	816-654-5133	dan.houlahan@icloud.com
Austin Ewers Micah Ewers	6715 NW Eastside Dr	816-518-2950	aewerscript@gmail.com
Doug Behnc	7770 Chez La Terre Dr Smithville MO 64089		
Ryder Mesik	1220 N. Ambassador Dr	660-537-5594	ryder.mesik@mail.house.gov
Dean Blakely	11365 Baker Rd Platte City Mo 64079	816 739 5042	
Jeff Macke	6325 NW Standardbred Dr KC, MO 64163	816-808-7063	
Jeana Houlahan	14615 Todd Creek Rd Platte City MO 64079	816 985 7289	houlahan@me.com
Dennis Swenson	15120 Jana St Platte City Mo 64079	816-804-6326	Swedew1950@gmail.com

CITY OF KANSAS CITY, MISSOURI

CITY PLANNING & DEVELOPMENT

Public Meeting Summary Form

Project Case # CD-CPC-2025-00083

Meeting Date: June 24, 2025

Meeting Location: Four Points Sheraton KC Airport, 11832 NW Plaza Cir, KCMO

Meeting Time (include start and end time): 5:00 to 7:30 p.m.

Additional Comments (optional):

Open House: 5 to 6:30 p.m.

Presentation on the Environmental Impact of the Project: 6:30 p.m.

Q&A: 7:00 p.m.

Total attendees signed in: 23