



**THE CITY OF
HARRISONVILLE**
WHERE TRADITION MEETS INNOVATION

**AGENDA
CITY OF HARRISONVILLE
PLANNING & ZONING COMMISSION
REGULAR MEETING
CITY HALL
JANUARY 18, 2024
6:00 PM**

- 1. Call to Order**
 - A. Roll Call**
- 2. Approval of Minutes**
 - A. Planning & Zoning Commission - Regular Meeting - Nov 16, 2023 6:00 PM**
- 3. Agenda Items**
 - A. Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St. - PUBLIC HEARING**
 - B. Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St. - CONSIDERATION**
- 4. Discussion Items**
- 5. Adjourn**

Posted on City Hall Bulletin Board this 11th day of January 2024,

Daniel Barnett, City Clerk



THE CITY OF HARRISONVILLE

WHERE TRADITION MEETS INNOVATION

DRAFT
MINUTES
CITY OF HARRISONVILLE
PLANNING & ZONING COMMISSION
REGULAR MEETING
CITY HALL
NOVEMBER 16, 2023
6:00 PM

1. Call to Order

The meeting was called to order at 6:00 PM by Chair Kevin Wood

Attendee Name	Organization	Title	Status	Arrived
Kevin Wood	Harrisonville	Chair	Present	
Chris Chiodini	Harrisonville	Vice Chair	Late	6:15 PM
Scott Milner	Harrisonville		Present	
Cheryl Bush	Harrisonville		Absent	
Wilbert Crawford	Harrisonville		Present	
Mike Zaring	Harrisonville	Mayor	Present	
Brian Pulliam	Harrisonville		Present	
Milton Siegenthaler	Harrisonville		Absent	

Also in attendance were, Virginia Ford, Applicant; Paul Eason, Applicant; Dave Doerhoff, Aldermen Liaison; Christina Stanton, Community Development Director; and Jamie Martin, Recording Secretary.

2. Approval of Minutes

A. Planning & Zoning Commission - Regular Meeting - Sep 21, 2023 6:00 PM

With no additions or corrections, the minutes from the September, 21, 2023, meeting were unanimously accepted.

RESULT:	ACCEPTED [UNANIMOUS]
MOVER:	Brian Pulliam
SECONDER:	Mike Zaring, Mayor
AYES:	Wood, Milner, Crawford, Zaring, Pulliam
ABSENT:	Chris Chiodini, Cheryl Bush, Milton Siegenthaler

3. Agenda Items

A. Appl. #RZ-23-002--REZONING from EP District to R-1 District at 2701 E. Elm St. – PUBLIC HEARING

Director Stanton told the Commission of the previous actions on the Ford Rezoning Application. The application was presented to the Commission on June 15, 2023, with two conditions of approval. One pertaining to the need to obtain a variance for the number of detached accessory structures. The application was recommended for approval 8-0.

On June 20, 2023, the Board of Alderman heard the rezoning request. The Board read the ordinance for the first time only and scheduled the second reading for the July 17th Board meeting, with the understanding that the applicant was going to be heard for a requested variance at next Board of Zoning Adjustments meeting. On July 11, 2023, the Board of Zoning Adjustments discussed the requested variance and discussed the need for the Code to be updated to accommodate larger residential lots. A motion for approval was made and seconded, but with a vote of 3 to 1 the motion failed and the variance application was denied. On July 13, 2023, Ms. Ford submitted a formal request for the rezoning application to be placed on-hold due to the denial of the variance. As a result, the applicant's associated ordinance was pulled from the July 17th Board of Aldermen meeting and no final action was taken on the application. On October 16, 2023, the Board of Aldermen approved Code Amendments including an amendment to Section 405.550.A.3.a, to allow for an additional accessory building on properties zoned R-1 of 1.5 acres or larger in size provided all setbacks are met and the lot coverage requirement is not exceeded.

Staff recommended approval of the requested Rezone from Estate Planned District to Single-Family Residential District with the following condition: the builder of Lot 2 shall install a sewer lateral line to serve the house on that lot and said line shall connect to the existing sanitary sewer located between Lots 40 and 41 in East Elm Estates.

With no comments from the public, the Public Hearing was closed at 6:05 PM.

B. 4695 : Appl. #RZ-23-002--REZONING from EP District to R-1 District at 2701 E. Elm St. - CONSIDERATION

Wilbert Crawford made a motion to recommend approval of the application to the Board of Aldermen as presented. Brian Pulliam seconded the motion. The motion passed 5 Aye to 0 Nay.

RESULT:	RECOMMENDED FOR BOARD APPROVAL [UNANIMOUS]
MOVER:	Wilbert Crawford
SECONDER:	Brian Pulliam
AYES:	Wood, Milner, Crawford, Zaring, Pulliam
ABSENT:	Chris Chiodini, Cheryl Bush, Milton Siegenthaler

C. 4693 : Appl. #SUP-23-001--SPECIAL USE PERMIT for Crematorium and Mortuary at 1505 Brookhart Rd. - PUBLIC HEARING

Director Stanton presented the Special Use Permit Application for Stonegate-IFP, LLC. They are seeking approval of the requested Special Use Permit for the continued use of the existing Stonegate Crematorium and Mortuary located at 1505 Brookhart Road. The use has changed ownership, and the previous SUP contained a requirement that a new SUP be applied for if ownership were to change. Director Stanton said the property is zoned Light Industrial District, the uses of "crematorium" and "mortuary" are both allowed uses in the Light Industrial District with an approved Special Use Permit and supported by the 2040 Comprehensive Plan, in that it is located within the "Employment-Heavy" place type which is intended to accommodate uses that "are not compatible with other place types in the community, and must be intentionally separated". She said that Staff recommends approval of the requested Special Use Permit for the uses of "crematorium" and "mortuary" on the property located at 1505 Brookhart Road, subject to the following conditions: (1) The crematorium/ mortuary business is conditioned to Stonegate - IFP, LLC. If the applicants wish to transfer ownership to another part, the applicants must apply for a new Special Use Permit to the City prior to the transfer of ownership. (2) The

cremation units shall be within a fully enclosed structure. (3) The facilities shall be operated so as to not produce hazardous, objectionable or offensive conditions by reason of odor, dust, lint, smoke, cinders, fumes, noise, vibration, heat, solid or liquid wastes, fire or explosion. (4) The applicants shall comply with all applicable state regulations as required by the Missouri Department of Natural Resources. (5) The applicants shall comply with all applicable federal regulations as required by the Environmental Protection Agency. (6) The applicants shall obtain and maintain an active business license. (7) The Special Use Permit shall be valid for a time period of twelve years, at which time the applicants may re-apply.

Paul Eason, Representative for the Applicant, told the Commission that the operations will continue as they have for over 20 years.

With no other comments from the public, the Public Hearing was closed at 6:10 PM.

D. 4696 : Appl. #SUP-23-001--SPECIAL USE PERMIT for Crematorium and Mortuary at 1505 Brookhart Rd. - CONSIDERATION

Mayor Zaring made a motion to recommend approval of the application to the Board of Aldermen as presented. Brian Pulliam seconded the motion. The motion passed 5 Aye to 0 Nay.

RESULT:	RECOMMENDED FOR BOARD APPROVAL [UNANIMOUS]
MOVER:	Mike Zaring, Mayor
SECONDER:	Brian Pulliam
AYES:	Wood, Milner, Crawford, Zaring, Pulliam
ABSENT:	Chris Chiodini, Cheryl Bush, Milton Siegenthaler

E. Various Code Amendments – PUBLIC HEARING

Director Stanton proposed the various Municipal Code changes to provide clarity, clean-up, inconsistencies as well as missed corrections, and meet various recommendations from the City's 2040 Comprehensive Plan. She said that the Code Amendments can be separated into ten different areas. The first area is Adding Definitions. She explained that these stem from both comparing uses in the land use table with those currently defined and making sure that our Code allows for expanded types of housing as recommended by the 2040 Comprehensive Plan. The definitions proposed to be added are as follows: Bed and Breakfast; Cottage Housing; Dwelling, loft; Dwelling, patio home; Dwelling, town home; Dwelling, zero lot line; Event Venue; Home Composting; Mushroom Barns and Caves; and Short-term Rental. The second area is correcting "Limited" to "Light" Industrial in Sections 405.060 and .065 to match with other references in the Code. The third is correcting lot coverage requirements for the R-3 and R-4 Districts, Sections 405.185.A.5 and 405.205.A.6 and Dimensional Standards Table. The fourth are changes within Chapter 220, Nuisances to include definitions and plant listings for noxious and invasive plants. These changes stem from MARC's 2040 Model Ordinance for Tree Protection, Weed Management, and Native Plant Encouragement, which was recommended for review and consideration from the 2040 Comprehensive Plan. The fifth area is removal of Sections 410.240 and .250. These sections were intended to have been removed as part of the Code Amendment which revised Subdivision Regulations for greater clarity but were inadvertently missed when drafting the ordinance. The sixth area consists of changes to various code sections pertaining to the number of sets of plans and size of plans required for submittal. Director Stanton said that this should have been included in the Code Amendment that clarified the development process but was missed. She said the seventh area is adding Special Use Permit criteria for Bed and Breakfast, Intermodal Containers for seasonal sales and Massage Establishment in residential districts. The eighth area brings changes to Section 405.550.A.2.d - Intermodal Containers. These changes seek to build some flexibility back into the Code and clarify the various tiers of usage. The ninth area is adding "home composting" to the listed additional accessory uses so that it is clear that it is an allowed use for residential, as recommended in MARC's 2050 Climate Action Plan that was recommended for review

and consideration from the 2040 Comprehensive Plan. And last, the tenth area, is correcting a couple of references that were missed during previous Code Amendments pertaining to pawnshops and small loan establishments. Director Stanton said these proposed changes were presented to the Board of Aldermen in the November 6, 2023, Work Session.

Staff recommends approval of the proposed Code changes.

With no comments from the public, the Public Hearing was closed at 6:17 PM.

F. Various Code Amendments - CONSIDERATION

Mayor Zaring made a motion to recommend approval of the of the Code Amendments to the Board of Aldermen as presented. Wilbert Crawford seconded the motion. The motion passed 6 Aye to 0 Nay.

RESULT:	RECOMMENDED FOR BOARD APPROVAL [UNANIMOUS]
MOVER:	Mike Zaring, Mayor
SECONDER:	Wilbert Crawford
AYES:	Wood, Chiodini, Milner, Crawford, Zaring, Pulliam
ABSENT:	Cheryl Bush, Milton Siegenthaler

4. Discussion Items

5. Adjourn

With nothing further to come before the Commission, Chris Chiodini made a motion to adjourn. Mayor Zaring seconded. The meeting was adjourned at 6:27 PM.

Respectfully submitted,

Jamie Martin, Recording Secretary

STAFF REPORT

TO: Planning & Zoning Commission
FROM: Christina Stanton,
DATE: January 11, 2024
SUBJECT: Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St.

Type of Item: *Public Hearing*

A. Action Item (ID # 4737)

Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St. - PUBLIC HEARING

Attachments:

Staff Rpt - iFIL Expansion PDP 1-18-2024 P&Z (PDF)
Land Use - Zoning Application 2023 - signed (PDF)
2024.01.02-22-154 Prelim Dev Plan Rev 2 (PDF)
2024 0103 iFIL Expansion - E0.1.SP_Signed (PDF)
00-22-028_PlanningSet_Revised2024-01-03 (PDF)
22-154- Metal Panel Color Chart (PDF)
R-wall-panel-specifications (PDF)
Zoning Map (PDF)
Aerial Map (PDF)



THE CITY OF HARRISONVILLE

WHERE TRADITION MEETS INNOVATION

300 E. Pearl Street, P.O. Box 367 • Tel: 816-380-8900 • Fax: 816-380-8906 • Harrisonville, MO 64701

3.A.a

To: Planning and Zoning Commission

From: Christina Stanton, AICP, Community Development Director

Date: January 18, 2024

Re: Appl. #PREDEV-23-002 – PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine Street

GENERAL INFORMATION

Applicant: Jeffrey Skidmore, P.E., Schlager and Associates

Requested Actions: Approval of Requested Preliminary Development Plan for iFIL Expansion

Date of Application: December 1, 2023

PROPOSAL

Jeffrey Skidmore, P.E., with Schlager and Associates, is seeking approval, on behalf of the Donaldson Company, Inc. who is the owner of the property and iFIL USA, of a preliminary development plan for an expansion of the existing iFIL facility on property located at 1801 W. Vine Street. The project includes a 34,800 square foot addition for the production facility, with a new ingress/egress from Plaza Drive, 36 additional parking spaces, and the required site landscaping.

Please see the attached zoning and aerial maps.

The surrounding properties are currently zoned as follows:

North (across Vine St.): M-1 (Light Industrial) District—CASCO

East: M-1 (Light Industrial) District—ACCI manufacturer of additives

South: M-1 (Light Industrial) District—Vacant Undeveloped Ground

West (across Plaza Dr.): C-2 (Service Business) District—Offices and RV Park

PREVIOUS ACTIONS

- 1985—The Cass County Assessor's website indicates that the existing buildings were constructed in 1985.
- August 16, 1978—The Board of Aldermen approved an Ordinance (#1194) which established new zoning districts and associated regulations. The subject property's zoning was changed from the previously established Industrial District to Light Industrial (M-1) District.
- March 14, 1963—The Board of Aldermen approved an Ordinance (#608) to annex certain adjacent territory. This annexation included 66 tracts of land. Staff suspects that this may have been the ordinance that annexed the subject property and established its zoning as Industrial.

KEY ISSUES

- This property is currently zoned Light Industrial (M-1) District.

- The applicant is proposing a 34,800 square foot expansion of the existing iFIL production facility that manufactures air filtration devices. The expansion includes a new ingress/egress from Plaza Drive and the addition of 36 new parking spaces.
- The applicant is proposing to increase the building footprint from 35,575 to 70,375 by adding 34,800 square feet (an increase of nearly 98%).
- The City's 2040 Comprehensive Plan shows the property and surrounding area as Employment – Light, which is “intended to support employment formats that are not appropriately integrated into a downtown or mixed-use setting, such as office parks, institutional campuses, or light manufacturing hubs in the community”. This property is part of a light manufacturing hub within the community.

ANALYSIS

Zoning. The property is currently zoned Light Industrial (M-1) District. The proposed expansion and continued use of the facility are appropriate for this District. However, since the applicants are seeking to increase the existing floor area by more than twenty-five percent (25%) the level of review is higher and a preliminary development plan is required. Section 405.635.A.9 defines substantial changes. Subpart c includes “increases in the total floor area of all non-residential buildings covered by the plan of more than twenty-five percent (25%)”. The proposed increase is nearly 98%.

Dimensional Standards. The minimum dimensional standards pertaining to the Light Industrial (M-1) District are as follows:

District	Setbacks			Height	Lot Coverage
	Front	Side	Rear		
M-1	35 ft.	40 ft. total; 15 ft. min.; 20 ft. on street side for corner lots or abutting a zoned residential lot	25 ft.	3 stories or 50 ft.	60%

The proposed addition meets all the setback requirements, and the building height is less than the maximum height allowed. However, the lot coverage requirement is slightly exceeded as the total percentage of lot coverage (building coverage + pavement coverage) is 60.98%. The applicant has identified that Section 405.495.A.5 states “The building coverage shall not exceed sixty percent (60%)”, which it does not, however, Appendix B: Dimensional Standards Table that was adopted in February of 2023 states “Lot Coverage” so there is a slight contradiction between the two that staff will need to rectify in the near future.

Development Statistics							
	Lot Area	Building Coverage	% of Lot	Pavement Coverage	% of Lot	Open Space	% of Lot
Existing	200,635	35,575	17.73	25,586	12.75	139,474	69.52
Proposed	200,635	34,800	17.34	26,388	13.15	61,188	30.50
Total	200,635	70,375	35.08	51,974	25.90	78,286	39.02

*All numbers, other than percentages, in square feet.

Parking. Section 405.565.E, the Minimum Parking Required by Use Table, of the City's Municipal Code requires one (1) parking spaces for each one thousand (1,000) square feet of gross floor area for manufacturing/warehouse uses and four (4) spaces for each one thousand (1,000) square feet of office space. If it were assumed that the facility was 100% manufacturing/warehouse the required parking would be $70,375/1,000 = 70.375$ or 71 spaces. This is not the case.

However, the Preliminary Development Plan indicates that the maximum number of employees per shift is 40 and calculates a 150% “shift change-over overlap” for a total of 60 employees on site at any given time. Based on this data there are an adequate number of parking spaces (35 existing + 36 proposed = 71 total parking spaces).

Comprehensive Plan. The City's 2040 Comprehensive Plan shows this area as "Employment - Light". According to page 46 of the City's Comprehensive Plan, "The Light Employment areas are intended to support employment formats that are not appropriately integrated into a downtown or mixed-use setting, such as office parks, institutional campuses, or light manufacturing hubs in the community". Given the existing nearby manufacturing uses the continued use of the property as a light manufacturing facility is compatible with the city's vision of this area being "Employment - Light".

STAFF RECOMMENDATION

Staff recommends approval of the proposed Preliminary Development Plan for the proposed 34,800 square foot expansion to the existing facility with the following condition:

- 1) The proposed pavement on the site shall be reduced slightly so that the maximum lot coverage requirement is not exceeded.

ATTACHMENTS

Application
Preliminary Development Plan
Zoning Map
Aerial Map



THE CITY OF HARRISONVILLE

WHERE TRADITION MEETS INNOVATION

LAND USE – ZONING APPLICATION

Application Type

☐ Rezoning (Fee \$300.00 + \$65 Notice Fee) ☒ Preliminary Development Plan (Fee \$300.00 + \$65 Notice Fee)

☐ Special Use Permit (Fee \$300.00 + \$65 Notice Fee) ☐ *Final Development Plan (Fee \$200.00)

* Staff-only approval required

Applicant and Owner Information

Applicant (Print): Jeffrey T. Skidmore, P.E. **Signature:** *Jeffrey T. Skidmore*
Company Name: Schlagel and Associates
Street Address: 14920 W. 107th Street **City:** Lenexa **State:** KS **Zip:** 66215
Phone: (913) 492-5158 **Email:** js@schlagelassociates.com

Property Owner Authorization (Provide contact information and signatures of all property owners.)

Property Owner Name (print): Donaldson Company, Inc. **Signature:** *Jason Rohe*
Street Address: 14000 W. 94th Street **City:** Bloomington **State:** MN **Zip:** 55431
Phone: (952) 887-3320 **Email:** jason.rohe@donaldson.com

Firm Preparing Application: Schlagel and Associates

Contact: Jeffrey T. Skidmore, P.E.
Street Address: 14920 W. 107th Street **City:** Lenexa **State:** KS **Zip:** 66215
Phone: (913) 492-5158 **Email:** js@schlagelassociates.com

*All correspondence should be sent to: **Applicant** ☒ **Property Owner** ☒ **Firm** ☐

Project Information

General Location or Address: 1801 Vine Street, Harrisonville, MO 64701
Project Description: See attached
Acres or Sq. Ft. 4.61 Acres
Current Zoning: M-1 **Proposed Zoning:** M-1 (No change)

Items to be Submitted 30 Days Before Planning Commission Meeting

- ☒ 1) **Application**
☒ 2) **Filing Fee** – Payable to City of Harrisonville or contact the Community Development Office to pay by phone.
☒ 3) **Site Plan drawn to scale and showing adjacent tracts within 185 ft. and current ownership. Four (4) copies** of at least 8 1/2" x 11", and one (1) electronic copy emailed to the planner.
☒ 4) **Email full legal description in WORD** to planner (not assessor's abbreviated description).

City Staff may modify submittal requirements as necessary.

For Office Use Only

Case No: _____ **Filing Fee: Amount Paid \$** _____ **Date Application Received:** _____

Staff-only approval: _____ **P&Z meeting:** _____ **BOA Meeting:** _____



THE CITY OF HARRISONVILLE

WHERE TRADITION MEETS INNOVATION

LAND USE – ZONING APPLICATION

Resources

City Website	www.harrisonville.com
Zoning Map	https://www.harrisonville.com/DocumentCenter/View/9508/Zoning-Final-Draft?bidID=
Zoning Regulations	https://www.ecycle.com/27908265
Subdivision Regulations	https://www.ecycle.com/27909481
Cass County GIS Map	https://cassgis.integritygis.com/h5/index.html?viewer=cass

Contacts

City Hall, 300 E. Pearl St, Harrisonville, MO 64701	816-380-8900	
John Morris, Building Official	816-380-8917	jmorris@harrisonville.com
Christina Stanton, AICP, Community Development Director	816-380-8922	cstanton@harrisonville.com
Jamie Martin, Office Administrator	816-380-8958	jmartin@harrisonville.com
Public Works Department, 201 W. Chestnut, Harrisonville, MO 64701	816-380-8964	
Carl Brooks, P.E., CFM, Public Works Director		cbrooks@harrisonville.com
Ted Martin, P.E., CFM, City Engineer		tmartin@harrisonville.com

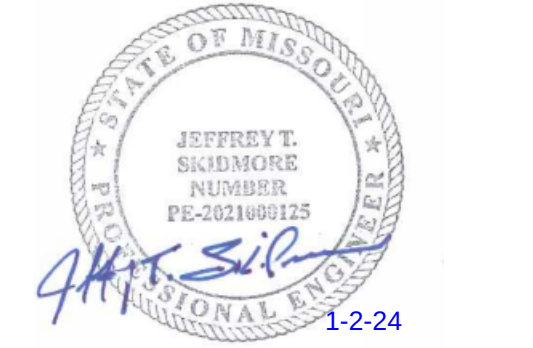


ARCHITECTURE

15225 Broadmoor Street
Overland Park, KS 66223

h|d Architecture, LLC

State Certificate of Authority Number:
FL001425890



Name - Jeffrey T. Skidmore P.E.
License - Missouri - 202100125

CIVIL CONSULTANT

SCHLAGEL & ASSOCIATES
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State Certificate of Authority #E2002003800-F
Phone Number - 913-492-5158

STRUCTURAL CONSULTANT

BOB D. CAMPBELL & COMPANY
4338 Bellevue Ave
Kansas City, MO 64111
State Certificate of Authority #
Phone Number - 816-531-4144

MEP CONSULTANT

5 by 5 ENGINEERS
1100 Main St, 4th Floor
Kansas City, MO 64105
State Certificate of Authority #
Phone Number - 913-689-9449

A Production Facility Expansion for:

iFIL
Innovative Filtration Technology
**1801 West Vine Street
Harrisonville, MO 64701**

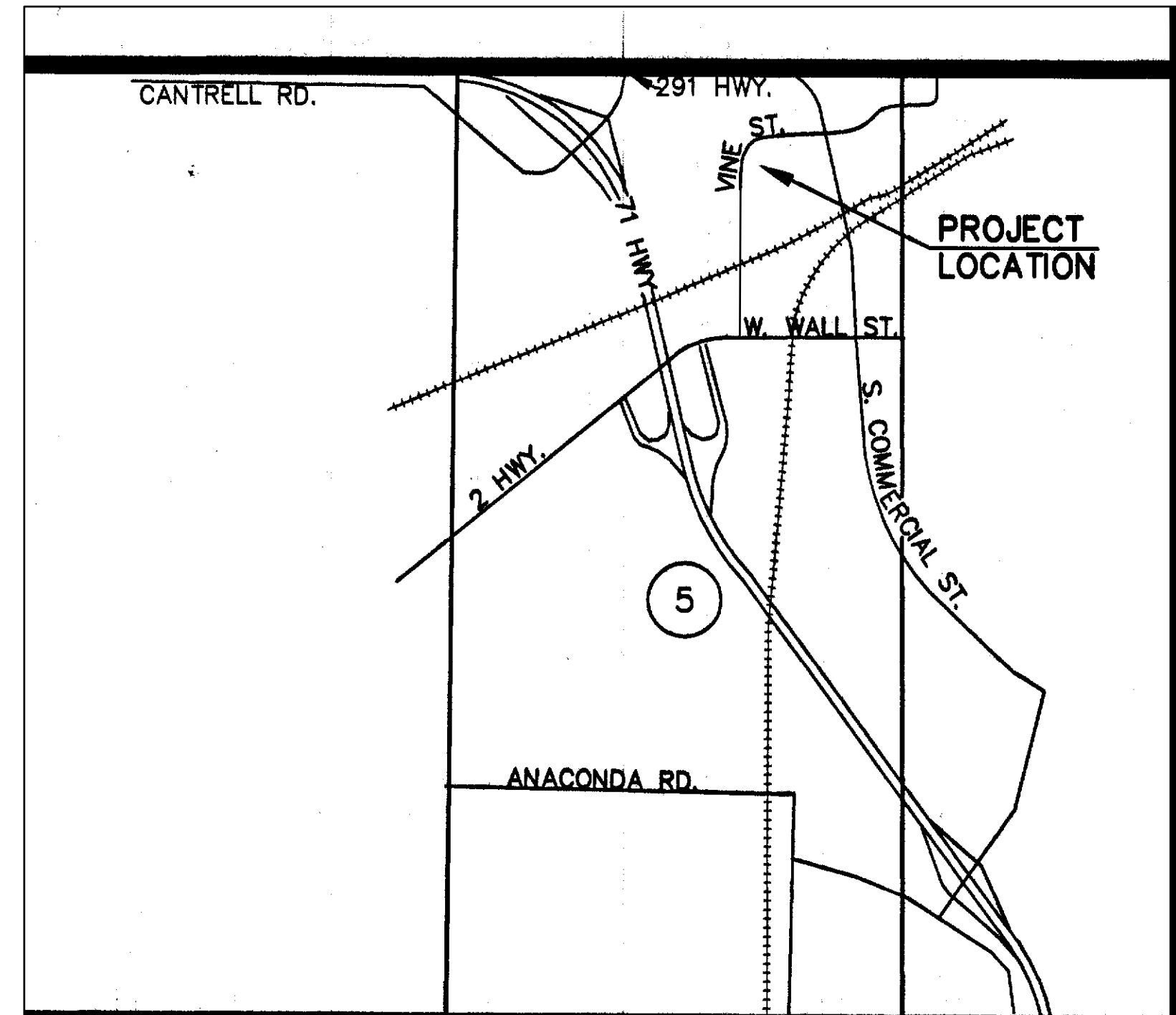
Date 01/03/2023
Job Number 22-028.00
Drawn By
Checked By

Revisions	Number	Date	Description
	01	09/14/2023	Post-Bid Addendum #01
	02	01/02/2024	City Planning Review

C1.0

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OVERALL SITE PLAN



VICINITY MAP
SECTION 5, TOWN. 44N RANGE 31W
NOT TO SCALE

Site and Zoning Information:

Current Zoning: M-1 (Light-Industrial District)
Proposed Zoning: M-1 (Light-Industrial District) (No Change)

Maximum Building Height: 50 Feet
Required Front Setback (North/West): 35 Feet
Required Rear Setback (South): 25 Feet
Required Side Setback (East): 15 Feet

Current Use: Manufacturing/Production/Warehousing
Proposed Use: Manufacturing/Production/Warehousing

Gross Lot Area: 200,635 Square Feet (4.61 Ac.)

Address:
1801 W. Vine Street
Harrisonville, Missouri 64701

Building Data:
Existing Building Area: 35,575 Square Feet
Existing Floor Area Ratio: 0.18
Proposed Building Area: 70,375 Square Feet
Proposed Floor Area Ratio: 0.35

Parking Data:
Required Parking:
Maximum # of Employees per shift: 40 Employees
Shift change-over overlap = 150%: 1.5 x 40 = 60 Employees
Parking Required: 60 Stalls

Proposed Parking: 71 Stalls (3 handicap-accessible stalls)

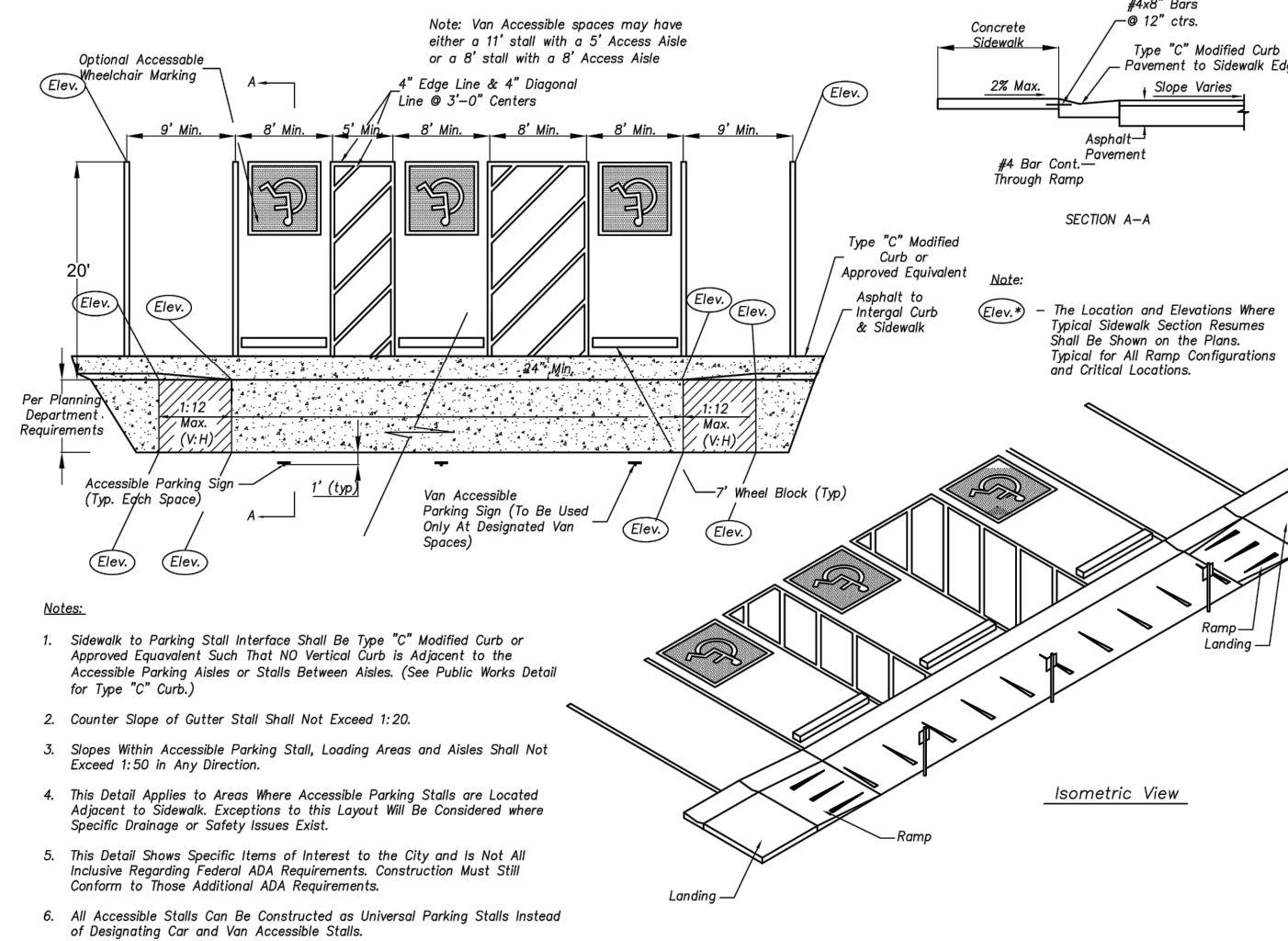
PAVEMENT LEGEND:

- CONCRETE SIDEWALK (4")
- NEW ASPHALT DRIVE/PARKING
- ASPHALT MILL/OVERLAY (1.5")
- NEW CONCRETE DRIVE (7")
- CONCRETE CURB AND GUTTER
- CONCRETE CURB & GUTTER - DRY CURB
- 24" WIDE, CONC. RIBBON CURB
- EXISTING CURB & GUTTER

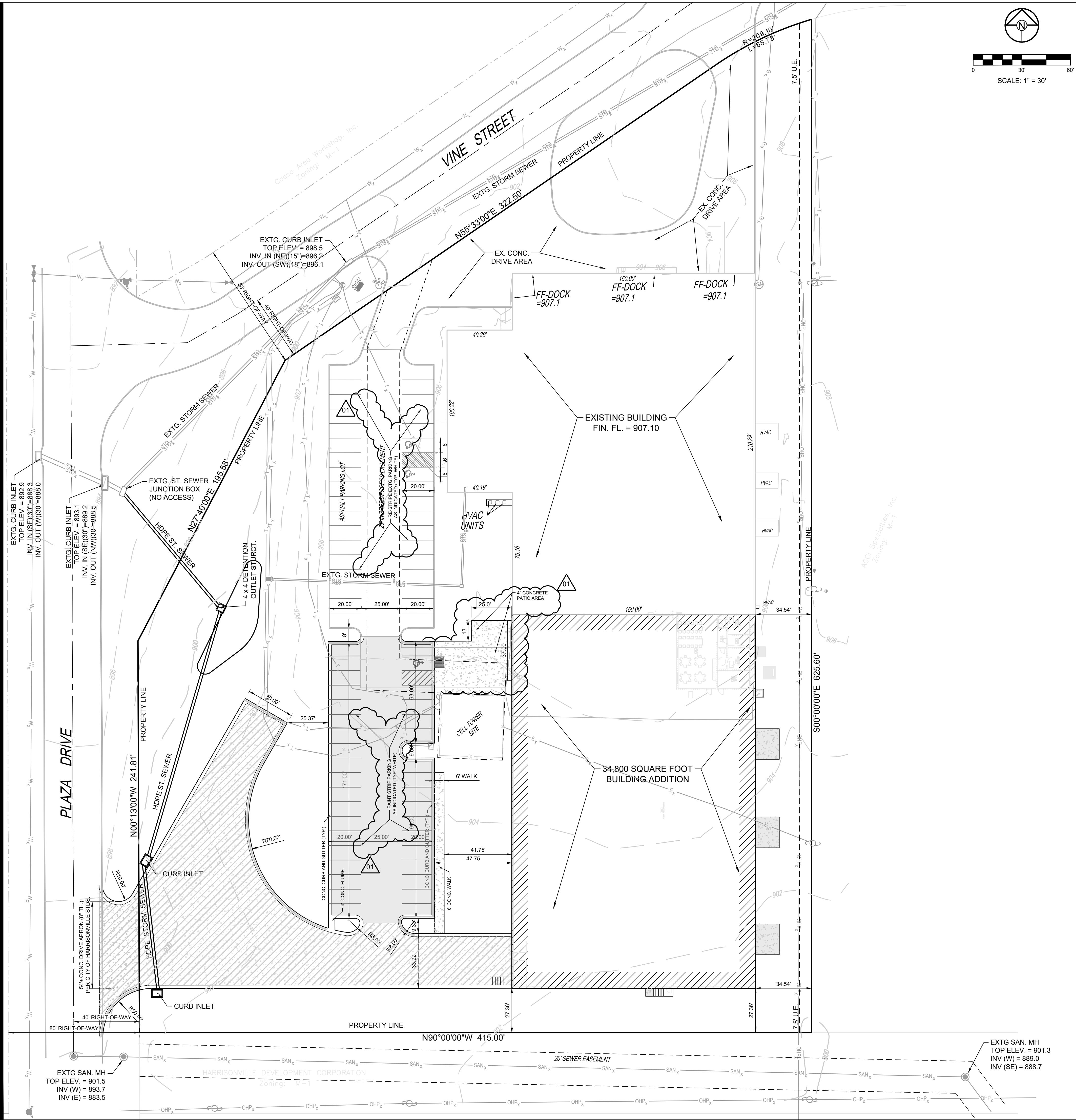
* - 8" THICK DRIVE AT CONC. APRON IN RIGHT-OF-WAY

SITE DATA TABLE

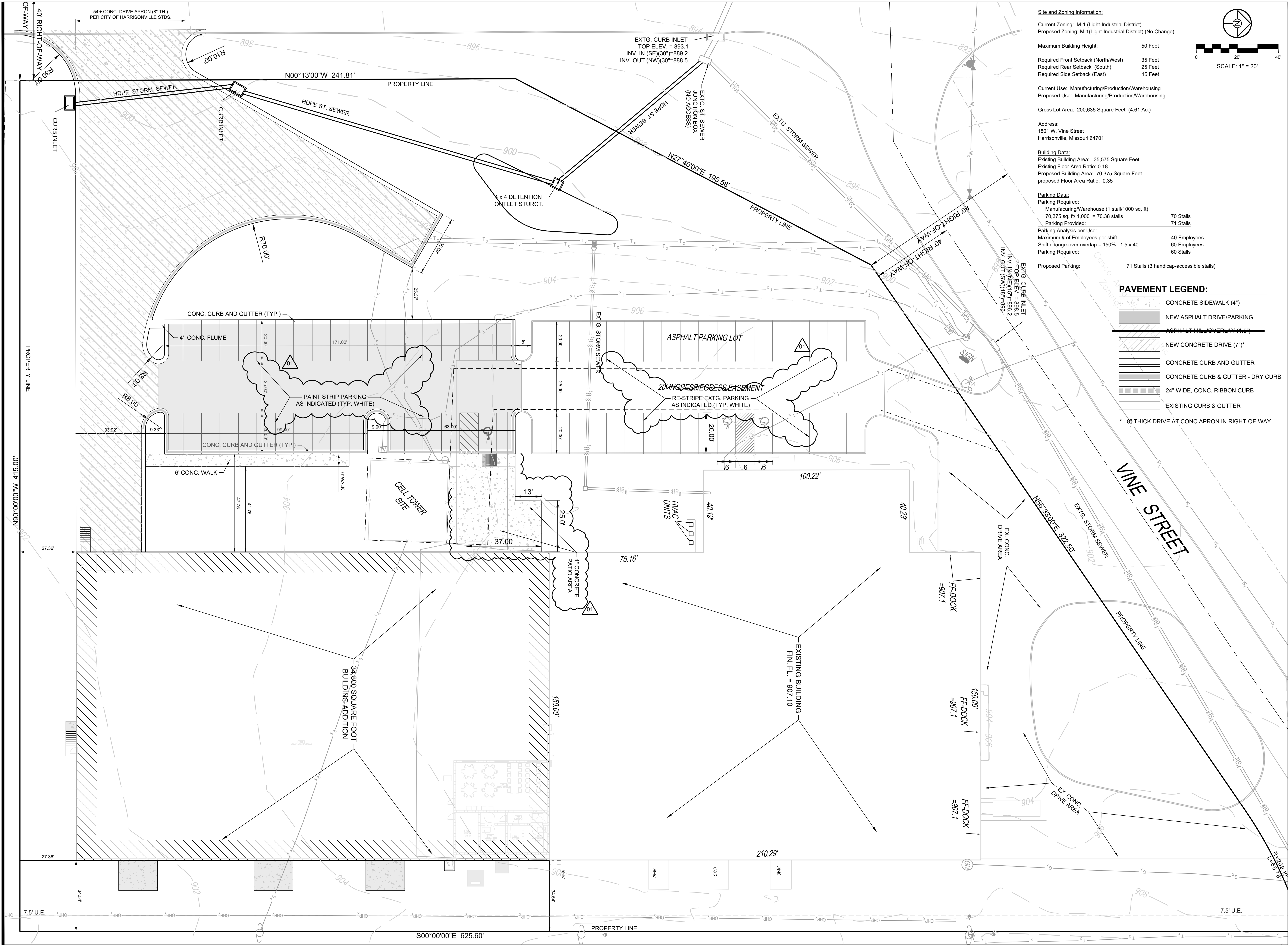
LOT AREA:	200,635 SQ. FT. (4.61 AC)	
	EXISTING	
BUILDING FOOTPRINT AREA	35,575 S.F. (17.73%)	70,375 S.F. (35.08%)
PAVEMENT/DRIVE AREA	25,586 S.F. (12.75%)	51,974 S.F. (25.90%)
OPEN/LANDSCAPE AREA	139,474 S.F. (69.52%)	78,286 S.F. (39.02%)



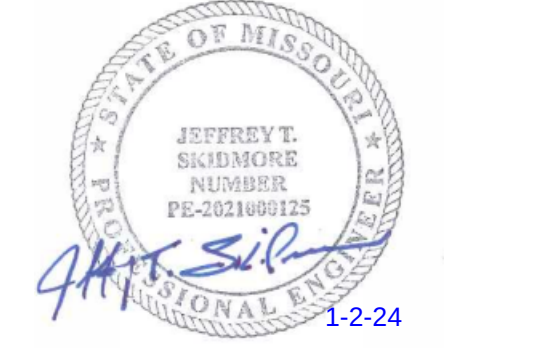
TYPICAL DETAIL @ EXISTING HANDICAP PARKING STALLS**



I:\PROJECTS\2022\22-15413 0 Design\3.0 DWG Plans\2.0 PDP\22-154 PDP SITE PLANS.dwg, C1.1, 1/2/2024 9:31:13 AM



15225 Broadmoor Street
Overland Park, KS 66223
h|d Architecture, LLC
State Certificate of Authority Number:
FL001425890



Name - Jeffrey T. Skidmore P.E.
License - Missouri - 2021000125

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State Certificate of Authority #E2002003800-F
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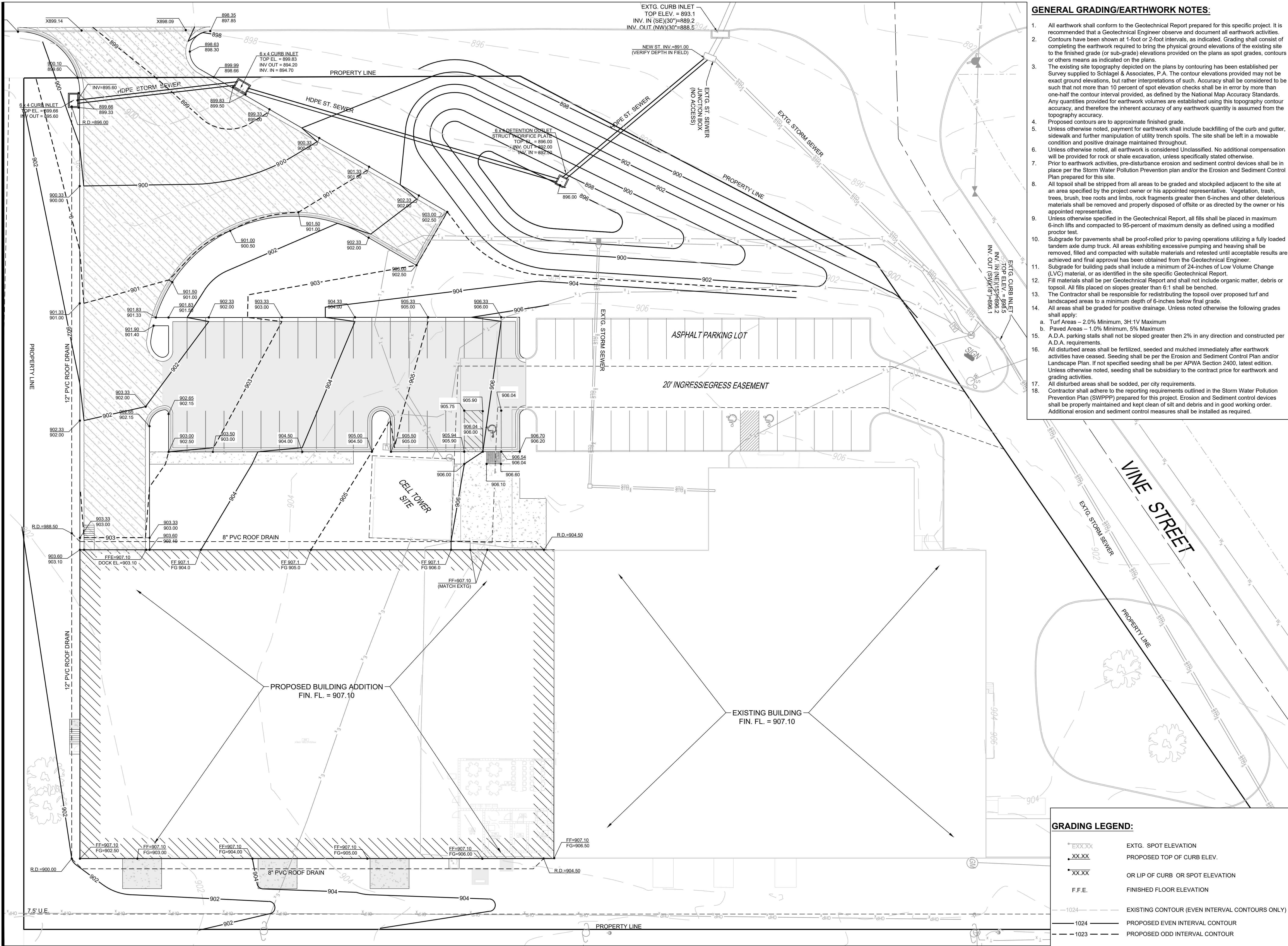
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A Production Facility Expansion for:
iFIL
Innovative Filtration Technology
**1801 West Vine Street
Harrisonville, MO 64701**

Date 01/03/2023
Job Number 22-028.00
Drawn By
Checked By

Revisions	Number	Date	Description
	01	09/14/2023	Post-Bid Addendum #01
	02	01/02/2024	City Planning Review

C1.1
ENLARGED SCALE SITE PLAN
© h|d Architecture, LLC
Packet Pg. 13



GENERAL GRADING/EARTHWORK NOTES:

- All earthwork shall conform to the Geotechnical Report prepared for this specific project. It is recommended that a Geotechnical Engineer observe and document all earthwork activities. Contours have been shown at 1-foot or 2-foot intervals, as indicated. Grading shall consist of completing the earthwork required to bring the physical ground elevations of the existing site to the finished grade (or sub-grade) elevations provided on the plans as spot grades, contours or others means as indicated on the plans.
- The existing site topography depicted on the plans by contouring has been established per Survey supplied to Schlagel & Associates, P.A. The contour elevations provided may not be exact ground elevations, but rather interpretations of such. Accuracy shall be considered to be such that not more than 10 percent of spot elevation checks shall be in error by more than one-half the contour interval provided, as defined by the National Map Accuracy Standards. Any quantities provided for earthwork volumes are established using this topography contour accuracy, and therefore the inherent accuracy of any earthwork quantity is assumed from the topography accuracy.
- Proposed contours are to approximate finished grade.
- Unless otherwise noted, payment for earthwork shall include backfilling of the curb and gutter, sidewalk and further manipulation of utility trench spoils. The site shall be left in a mowable condition and positive drainage maintained throughout.
- Unless otherwise noted, all earthwork is considered Unclassified. No additional compensation will be provided for rock or shale excavation, unless specifically stated otherwise.
- Prior to earthwork activities, pre-disturbance erosion and sediment control devices shall be in place per the Storm Water Pollution Prevention plan and/or the Erosion and Sediment Control Plan prepared for this site.
- All topsoil shall be stripped from all areas to be graded and stockpiled adjacent to the site at an area specified by the project owner or his appointed representative. Vegetation, trash, trees, brush, tree roots and limbs, rock fragments greater than 6-inches and other deleterious materials shall be removed and properly disposed of offsite or as directed by the owner or his appointed representative.
- Unless otherwise specified in the Geotechnical Report, all fills shall be placed in maximum 6-inch lifts and compacted to 95-percent of maximum density as defined using a modified proctor test.
- Subgrade for pavements shall be proof-rolled prior to paving operations utilizing a fully loaded tandem axle dump truck. All areas exhibiting excessive pumping and heaving shall be removed, filled and compacted with suitable materials and retested until acceptable results are achieved and final approval has been obtained from the Geotechnical Engineer.
- Subgrade for building pads shall include a minimum of 24-inches of Low Volume Change (LVC) material, or as identified in the site specific Geotechnical Report.
- Fill materials shall be per Geotechnical Report and shall not include organic matter, debris or topsoil. All fills placed on slopes greater than 6:1 shall be benched.
- The Contractor shall be responsible for redistributing the topsoil over proposed turf and landscaped areas to a minimum depth of 6-inches below final grade.
- All areas shall be graded for positive drainage. Unless noted otherwise the following grades shall apply:
 - Turf Areas – 2.0% Minimum, 3H:1V Maximum
 - Paved Areas – 1.0% Minimum, 5% Maximum
- A.D.A. parking stalls shall not be sloped greater than 2% in any direction and constructed per A.D.A. requirements.
- All disturbed areas shall be fertilized, seeded and mulched immediately after earthwork activities have ceased. Seeding shall be per the Erosion and Sediment Control Plan and/or Landscape Plan. If not specified seeding shall be per APWA Section 2400, latest edition. Unless otherwise noted, seeding shall be subsidiary to the contract price for earthwork and grading activities.
- All disturbed areas shall be sodded, per city requirements.
- Contractor shall adhere to the reporting requirements outlined in the Storm Water Pollution Prevention Plan (SWPPP) prepared for this project. Erosion and Sediment control devices shall be properly maintained and kept clean of silt and debris and in good working order. Additional erosion and sediment control measures shall be installed as required.

GRADING LEGEND:

- EXXX.XX EXTG. SPOT ELEVATION
- XX.XX PROPOSED TOP OF CURB ELEV.
- XX.XX OR LIP OF CURB OR SPOT ELEVATION
- F.F.E. FINISHED FLOOR ELEVATION
- 1024 — EXISTING CONTOUR (EVEN INTERVAL CONTOURS ONLY)
- 1024 — PROPOSED EVEN INTERVAL CONTOUR
- 1023 — PROPOSED ODD INTERVAL CONTOUR

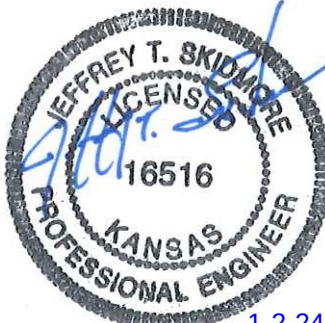


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Overland Park, KS 66223

h|d Architecture, LLC

State Certificate of Authority Number:
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License - Missouri - 2021000125

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Phone Number - 913-492-5158

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BOB D. CAMPBELL & COMPANY
4338 Belleview Ave
Kansas City, MO 64111
State Certificate of Authority #
Phone Number - 816-531-4144

MEP CONSULTANT

5 by 6 ENGINEERS
1100 Main St, 4th Floor
Kansas City, MO 64105
State Certificate of Authority #
Phone Number - 913-689-9449

A Production Facility Expansion for:



1801 West Vine Street
Harrisonville, MO 64701

Date 01/03/2023
Job Number 22-028.00
Drawn By
Checked By

Revisions	Number	Date	Description
	01	09/14/2023	Post-Bid Addendum #01
	02	01/02/2024	City Planning Review

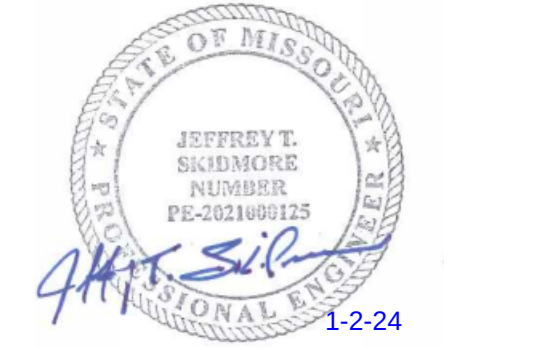
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SITE GRADING PLAN



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A Production Facility Expansion for:

iFIL
Innovative Filtration Technology

**1801 West Vine Street
Harrisonville, MO 64701**

Date 01/03/2023
Job Number 22-028.00
Drawn By
Checked By

Revisions	Number	Date	Description
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EROSION CONTROL PLAN

EROSION AND SEDIMENT CONTROL STAGING CHART				
PROJECT STAGE	BMP PLAN REF. NO	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRIOR TO LAND DISTURBANCE	1	STABILIZED CONSTRUCTION ENTRANCE	C	PLACE WHERE INDICATED. REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	2	INLET PROTECTION	D	INSTALL GRAVEL FILTER BAGS AT EXISTING INLETS PRIOR TO LAND DISTURBANCE & GRADING ACTIVITIES
	3	CONCRETE WASHOUT AREA	D	ESTABLISH PRIOR TO ANY CONCRETE WORK
	4	SEDIMENT FENCE	D	PLACE WHERE INDICATED. REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED.
B - STORM SEWER/UTILITY INSTALLATIONS	5	INLET PROTECTION (SILT FENCE)	C	PLACE SEDIMENT FENCE AROUND ALL STORM SEWER STRUCTURES IMMEDIATELY AFTER STORM SEWER INSTALLATION AND PRIOR TO TOPS BEING PLACED AND PRIOR TO COMMENCING GRADING OPERATIONS.
C - MASS GRADING / PAVING OPERATIONS	6	INLET PROTECTION (FILTER BAGS)	D	INSTALL AT THROAT OPENINGS OF ALL NEW STORM SEWER INLETS AFTER PAVING IS COMPLETED AND INLET TOPS ARE INSTALLED - MAINTAIN UNTIL COMPLETION OF PROJECT.
	7	STRAW WADDLES	N/A	PLACE WITH DRIVE APRON CONSTRUCTION & MAINTAIN UNTIL BASE LAYER OF ON-SITE PAVEMENT IS INSTALLED
	8	SEDIMENT FENCE	N/A	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED.
	9	ROCK DITCH CHECK	N/A	PLACE WHERE INDICATED 2 REAR SWALE & MAINTAIN WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER
C - UNTIL CLOSURE OF LAND DISTURBANCE PERMIT	10	SEEDING AND MULCHING*	N/A	ALL DISTURBED AREAS AFTER 14 DAYS OF CONSTRUCTION INACTIVITY. SEEDING TO OCCUR AFTER SITE IS 100% STABILIZED

* - ALL DISTURBED AREAS WITHIN THE PUBLIC STREET RIGHT-OF-WAY SHALL BE SODDED

OWNER/DEVELOPER:

INNOVATIVE FILTRATION TECHNOLOGY
JOHNNY FALK, PRODUCT ENGINEERING & SALES
1801 VINE STREET
HARRISONVILLE, MISSOURI 64701
p (913) 645-8105
Email: johnny.falk@ifitusa.com

GRADING LEGEND:

- *XXXXX EXTG. SPOT ELEVATION
- XX.XX PROPOSED TOP OF CURB ELEV.
- XX.XX PROPOSED PAVEMENT GRADE ELEV. OR LIP OF CURB ELEVATION
- F.F.E. FINISHED FLOOR ELEVATION
- - - 1023 EXISTING CONTOUR
- 1023 PROPOSED CONTOUR

* - ALL SIDEWALKS TO BE INSTALLED WITH A 2.0% MAXIMUM CROSS SLOPE.

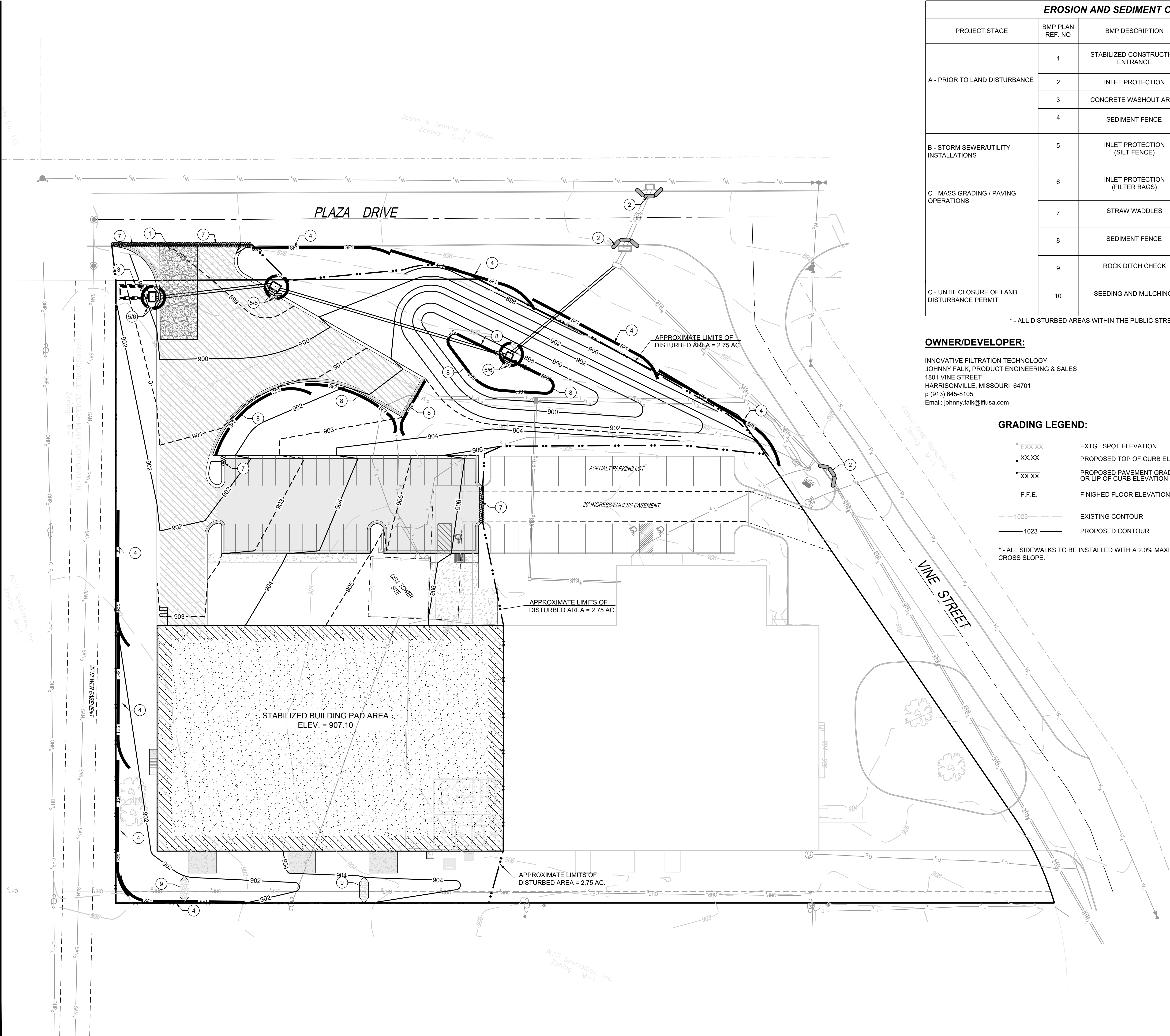
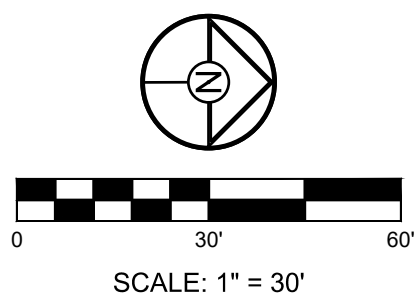
DISTURBED AREA = 2.75 AC.

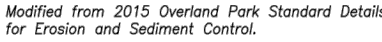
EROSION CONTROL LEGEND:

- SF1 SILT FENCE (PRIOR TO LAND DISTURBANCE)
- SF2 SILT FENCE (DURING CONSTRUCTION ACTIVITY)
- LIMITS OF DISTURBANCE
- x CONSTRUCTION FENCE
- 965 EXISTING CONTOURS
- 965 PROPOSED CONTOURS
- GRAVEL FILTER FOR STORM SEWER STRUCTURES ONLY
- ROCK DITCH CHECK
- 5 BMP PLAN REF. NO.
- CONCRETE WASHOUT AREA
- STOCKPILE AND MATERIAL EQUIPMENT STORAGE AREA
- STABILIZED CONSTRUCTION ENTRANCE

SITE SPECIFIC NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- THERE ARE NO WETLANDS, NATURAL OR ARTIFICIAL WATER STORAGE DETENTION AREAS IN THE PROJECT AREA
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO CONSTRUCTION.
- ADDITIONAL EROSION CONTROL MAY BE REQUIRED BY THE CITY ENGINEER AT ANY TIME EXISTING MEASURES ARE FOUND TO BE INEFFECTIVE OR PROBLEMATIC AREAS ARE NOTED IN THE FIELD.
- SOIL STABILIZATION OF DISTURBED AREAS SHALL BE COMPLETED AFTER PERIODS OF INACTIVITY IN CONSTRUCTION OF GREATER THAN 14 DAYS.
- DISCHARGE OF CONCRETE WASHOUT WATER INTO THE ENVIRONMENT IS NOT PERMITTED.
- ALL DISTURBED AREAS SHALL BE SODDED.







Attachment: 2024.01.02-22-154 Prelim Dev Plan Rev 2 (Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St.)

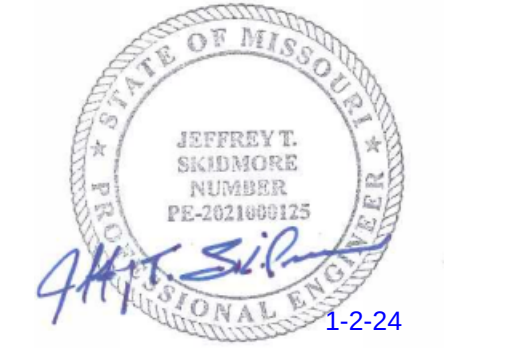


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A Production Facility Expansion for:

iFIL
Innovative Filtration Technology

**1801 West Vine Street
Harrisonville, MO 64701**

Date 01/03/2023
Job Number 22-028.00
Drawn By
Checked By

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SITE UTILITY PLAN

SANITARY NOTES:

- DOWNSPOUTS SHALL NOT DISCHARGE INTO THE SANITARY SEWER. ROOF DRAINS SHALL DISCHARGE TO UNDERGROUND STORM SEWER SYSTEM.
- FOUNDATION DRAINS ARE NOT PLANNED FOR THIS PROJECT. (RE: ARCH.).
- A MINIMUM OF 30" OF COVER SHALL BE MAINTAINED OVER THE TOP OF THE SERVICE LINE AND A MINIMUM OF 36" OF COVER SHALL BE MAINTAINED OVER THE TOP OF SANITARY SEWER MAINS.
- WHEN ADJACENT TO OR CROSSING A WATERLINE, THE WATERLINE SHALL BE DUCTILE IRON (MIN CLASS 50) TO A DISTANCE OF TEN FEET OF HORIZONTAL SEPARATION AND TWO FEET OF VERTICAL SEPARATION SHALL BE REQUIRED.
- DDS = DISTANCE TO DOWNSTREAM MANHOLE.
- EOS = END OF STUB ELEVATION

GENERAL NOTES:

- ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF CITY OF HARRIOSNVILE PUBLIC UTILITIES REQUIREMENTS AND SPECIFICATIONS.
- ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF HARRISONVILLE MUNICIPAL CODE.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- CONNECTIONS TO THE PUBLIC STORM SEWER BETWEEN STRUCTURES WILL NOT BE PERMITTED.

EXTG. CURB INLET
TOP ELEV. = 896.5
INV. IN (NE)(15")=896.2
INV. OUT (SW)(16")=896.1

EXTG. 2" WAT. METER & DOMESTIC
WATER SERVICE TO REMAIN
(NO MODIFICATIONS)

EXTG. SAN. SERV. PER RECORD DWGS
(VERIFY LOCATION/DEPTH IN FIELD)
ASSUMED INV. = 903.10

EXTG. 4" SAN. SERVICE @ 2.0% SLOPE (ASSUMED)
VERIFY DEPTH & LOCATION OF SERVICE IN FIELD

SEE SANITARY NOTE 4; THIS SHEET - VERIFY
DEPTH OF WATERLINE @ PROPOSED SANITARY
CROSSING AND VERIFY AND/OR PROVIDE A MIN.
OF 2 FEET OF VERTICAL SEPARATION BETWEEN
UTILITY PIPES

INSTALL 4" x 4" SAN. TEE @ EXTG. SERV.
FOR TIE-IN OF NEW SAN SERVICE
W/FLEX-SEAL COUPLING @ EA. SIDE
ASSUMED INV. = 901.3±
(VERIFY INV. IN FIELD)

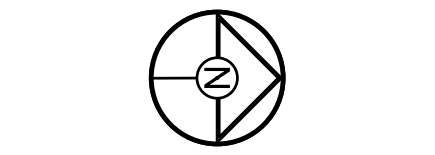
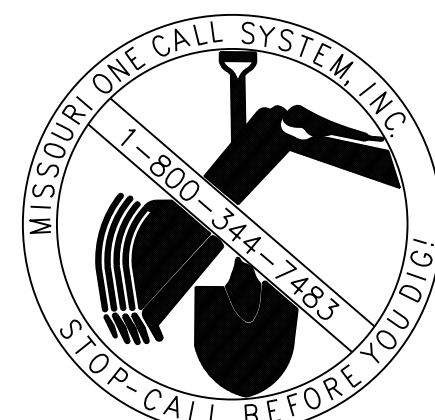
INSTALL 7 L.F. - 4" PVC (SDR-26, RUBBER
GASK. JTS.) @ 11.43% SLOPE

INSTALL CLEANOUT
@ 3' FROM BUILDING

4" SAN. SERV. - INV. = 902.10/F.F.=907.10
INSTALL MISSION FLEX-SEAL ARC COUPLING @
INTERFACE OF INTERIOR/EXTERIOR PIPING

PROPOSED BUILDING ADDITION
FIN. FL. = 907.10

EXISTING BUILDING
FIN. FL. = 907.10



SCALE: 1" = 20'

UTILITY CONTACTS:

WATER & SANITARY SEWER
City of Harrisonville, MO
201 W. Chestnut
Harrisonville, Missouri 64701
Phone: (816) 380-8964

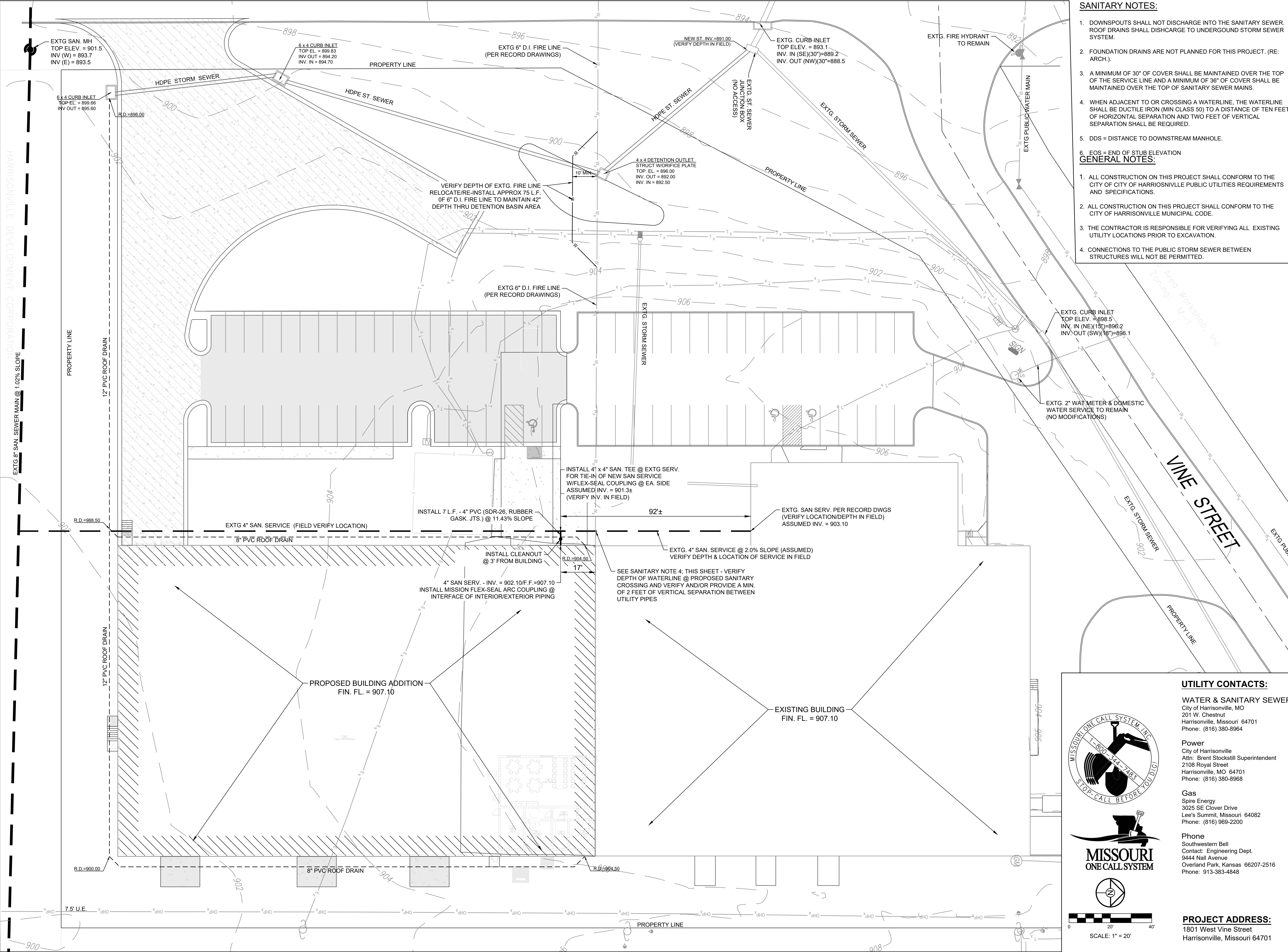
Power
City of Harrisonville
Attn: Brent Stockstill Superintendent
2108 Royal Street
Harrisonville, MO 64701
Phone: (816) 380-8968

Gas
Spire Energy
3025 SE Clover Drive
Lee's Summit, Missouri 64082
Phone: (816) 969-2200

Phone
Southwestern Bell
Contact: Engineering Dept.
9444 Nall Avenue
Overland Park, Kansas 66207-2516
Phone: 913-383-4848

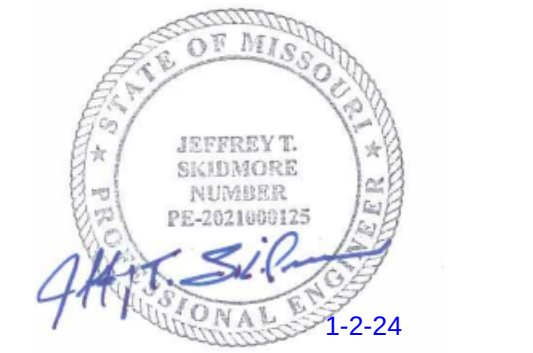
PROJECT ADDRESS:

1801 West Vine Street
Harrisonville, Missouri 64701





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A Production Facility Expansion for:



1801 West Vine Street
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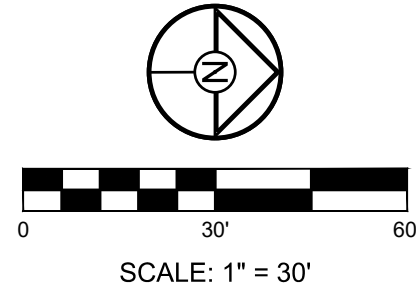
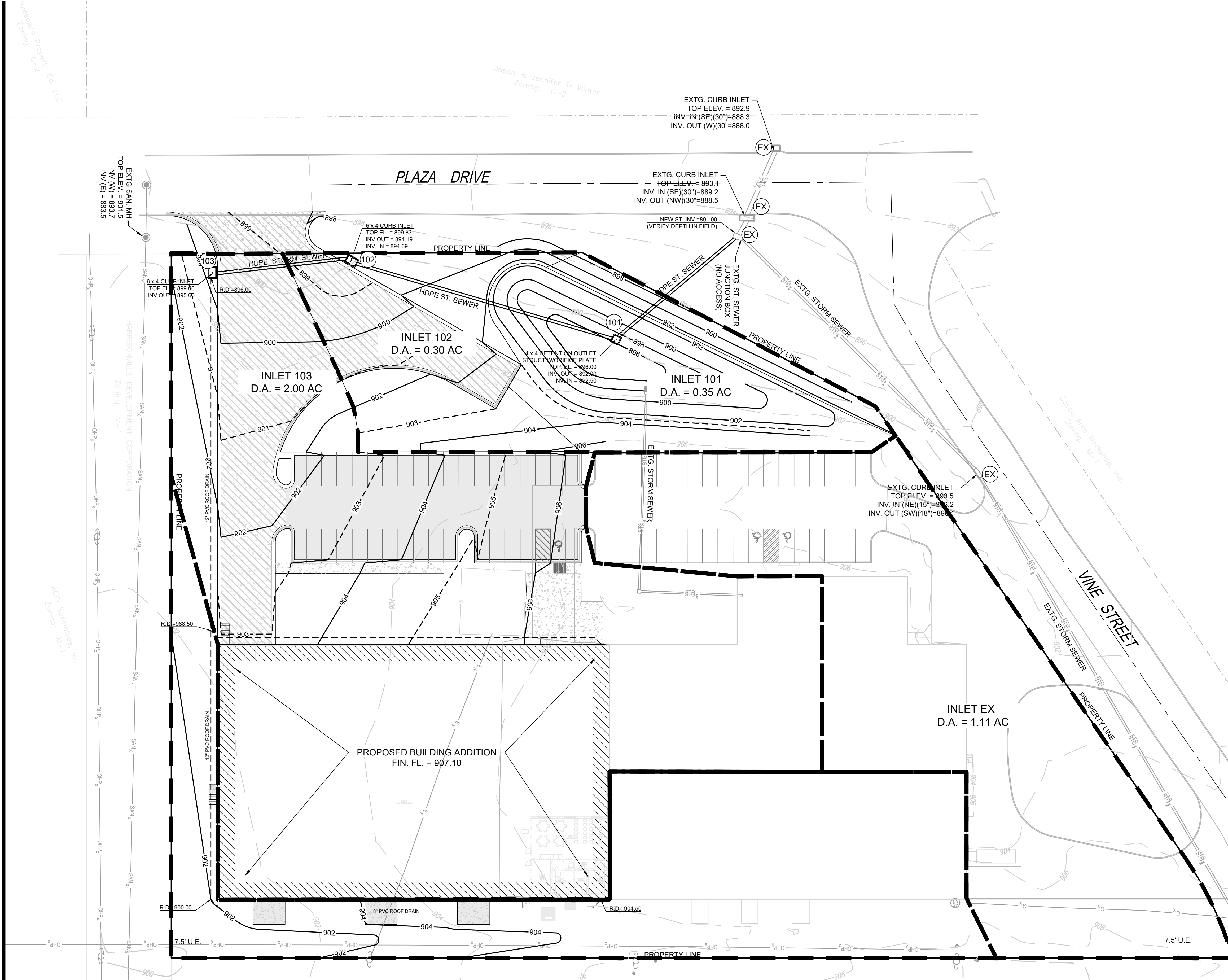
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C5.0

GRADING LEGEND:

- EXXX• EXTG. SPOT ELEVATION
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- XX.XX OR LIP OF CURB OR SPOT ELEVATION
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- 1024--- EXISTING CONTOUR (EVEN INTERVAL CONTOURS ONLY)
- 1024— PROPOSED EVEN INTERVAL CONTOUR
- - -1023 - - - PROPOSED ODD INTERVAL CONTOUR



Schlagel & Associates, P.A.

Project Name:	Innovative Filtration Technology	Curb Type:	B
Project #:	22-154	City:	Harrisonville, MO
Time:	12/28/2023 9:41		
Design Storm:	100		
"K" Value:	1.25		
"F" Factor:	1.00		

Runoff Calculations										Pipe Properties																
Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. CxA	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Up Piped Inlet 1	Up Piped Inlet 2	Up Area (acres)	Up CxA	Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev
LINE 100																										
101	0.35	0.81	2.65	2.15	5.5	10.11	3.58	27.14	25.70	8.18			0.00	0.00	101		HDPE	0.012	24	90.50	1.10	0.50	DS TAILWATER @ STR #			FREE
102	0.30	0.81	2.30	1.86	5.2	10.25	3.11	23.88	24.99	7.96			0.00	0.00	102	101	HDPE	0.012	24	163.00	1.04	0.50	894.19	892.50	899.83	896.45
103	2.00	0.81	2.00	1.62	5.0	10.32	20.90	20.90	25.70	8.18			0.00	0.00	103	102	HDPE	0.012	24	82.33	1.10	N/A	895.60	894.69	899.66	897.66

Schlagel & Associates, P.A.

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Runoff Calculations										Pipe Properties																				
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LINE 100																														
101	0.35	0.81	2.65	2.15	5.5	8.35	2.60	19.72	25.70	8.18			0.00	0.00	101		HDPE	0.012	24	90.50	1.10	0.50	DS TAILWATER	@ STR #	FREE					
102	0.30	0.81	2.30	1.86	5.2	8.47	2.26	17.36	24.99	7.96			0.00	0.00	102	101	HDPE	0.012	24	163.00	1.04	0.50	894.19	892.50	896.00	894.01				
103	2.00	0.81	2.00	1.62	5.0	8.53	15.20	15.20	25.70	8.18			0.00	0.00	103	102	HDPE	0.012	24	82.33	1.10	N/A	894.19	892.50	899.63	896.06				
																						DS TAILWATER @ STR #						FREE		
																						894.19						892.50	899.63	896.06
																						895.60						894.69	899.66	897.52

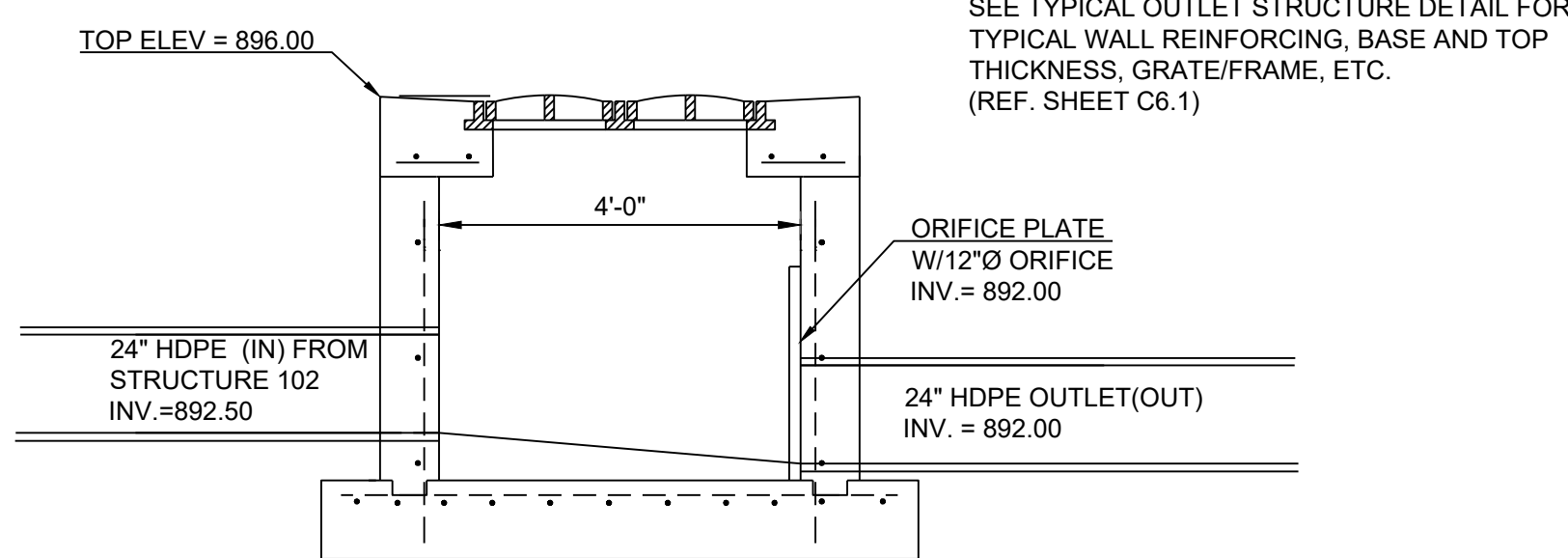
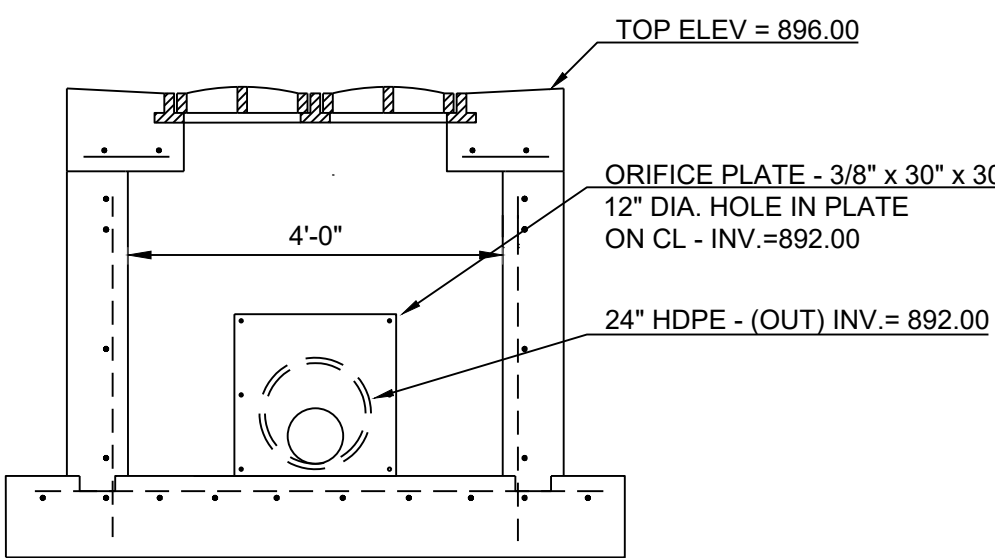
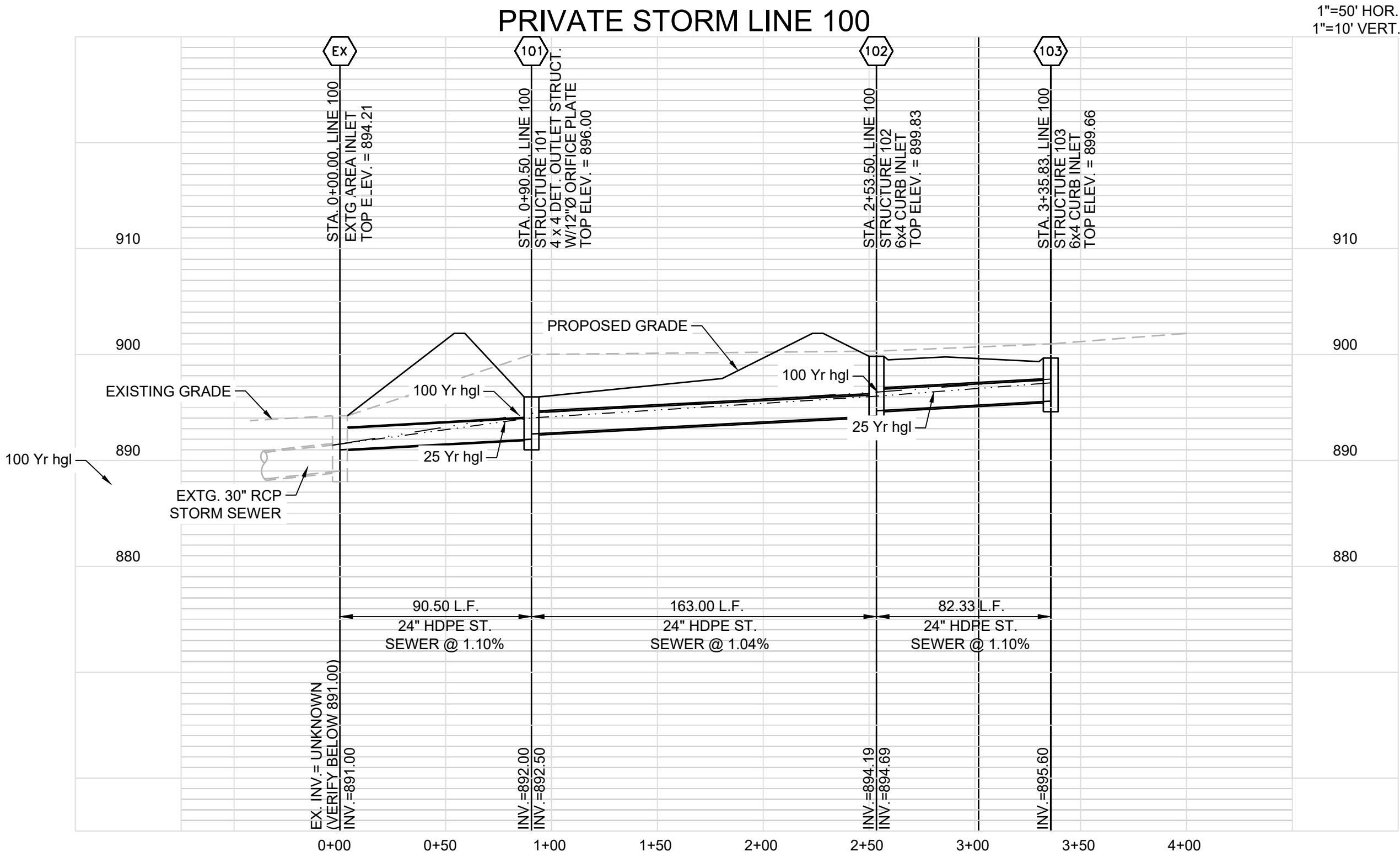
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Schlagel & Associates, P.A.

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LINE 100																										
101	0.35	0.81	2.65	2.15	5.5	10.11	3.58	27.14	25.70	8.18			0.00	0.00	101		HDPE	0.012	24	90.50	1.10	0.50	892.00	891.00	896.00	894.45
102	0.30	0.81	2.30	1.86	5.2	10.25	3.11	23.88	24.99	7.96			0.00	0.00	102	101	HDPE	0.012	24	163.00	1.04	0.50	894.19	892.50	899.83	896.45
103	2.00	0.81	2.00	1.62	5.0	10.32	20.90	20.90	25.70	8.18			0.00	0.00	103	102	HDPE	0.012	24	82.33	1.10	N/A	895.60	894.69	899.66	897.68

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															Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.	
LINE 100																											
101	0.35	0.81	2.65	2.15	5.5	8.35	2.60	19.72	25.70	8.18			0.00	0.00	101		HDPE	0.012	24	90.50	1.10	0.50	892.00	891.00	896.00	894.01	
102	0.30	0.81	2.30	1.86	5.2	8.47	2.26	17.36	24.99	7.96			0.00	0.00	102	101	HDPE	0.012	24	163.00	1.04	0.50	894.19	892.50	899.83	896.06	
103	2.00	0.81	2.00	1.62	5.0	8.53	15.20	15.20	25.70	8.18			0.00	0.00	103	102	HDPE	0.012	24	82.33	1.10	N/A	895.60	894.69	899.66	897.32	



DETAIL @ DETENTION OUTLET ORIFICE STRUCTURE

NOT TO SCALE

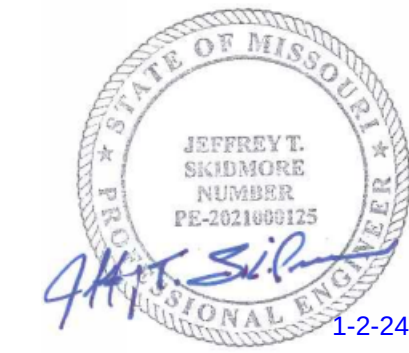


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A Production Facility Expansion for:



1801 West Vine Street
Harrisonville, MO 64701

Date 01/03/2023
Job Number 22-028.00
Drawn By
Checked By

Revisions	Number	Date	Description
	01	09/14/2023	Post-Bid Addendum #01
	02	01/02/2024	City Planning Review

C5.1

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PRIVATE STORM SEWER PROFILES

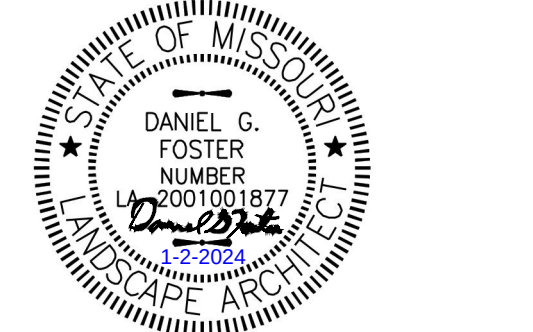


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Landscape Architect
MO# LA-2001001877
Name - Daniel G. Foster, L.A.
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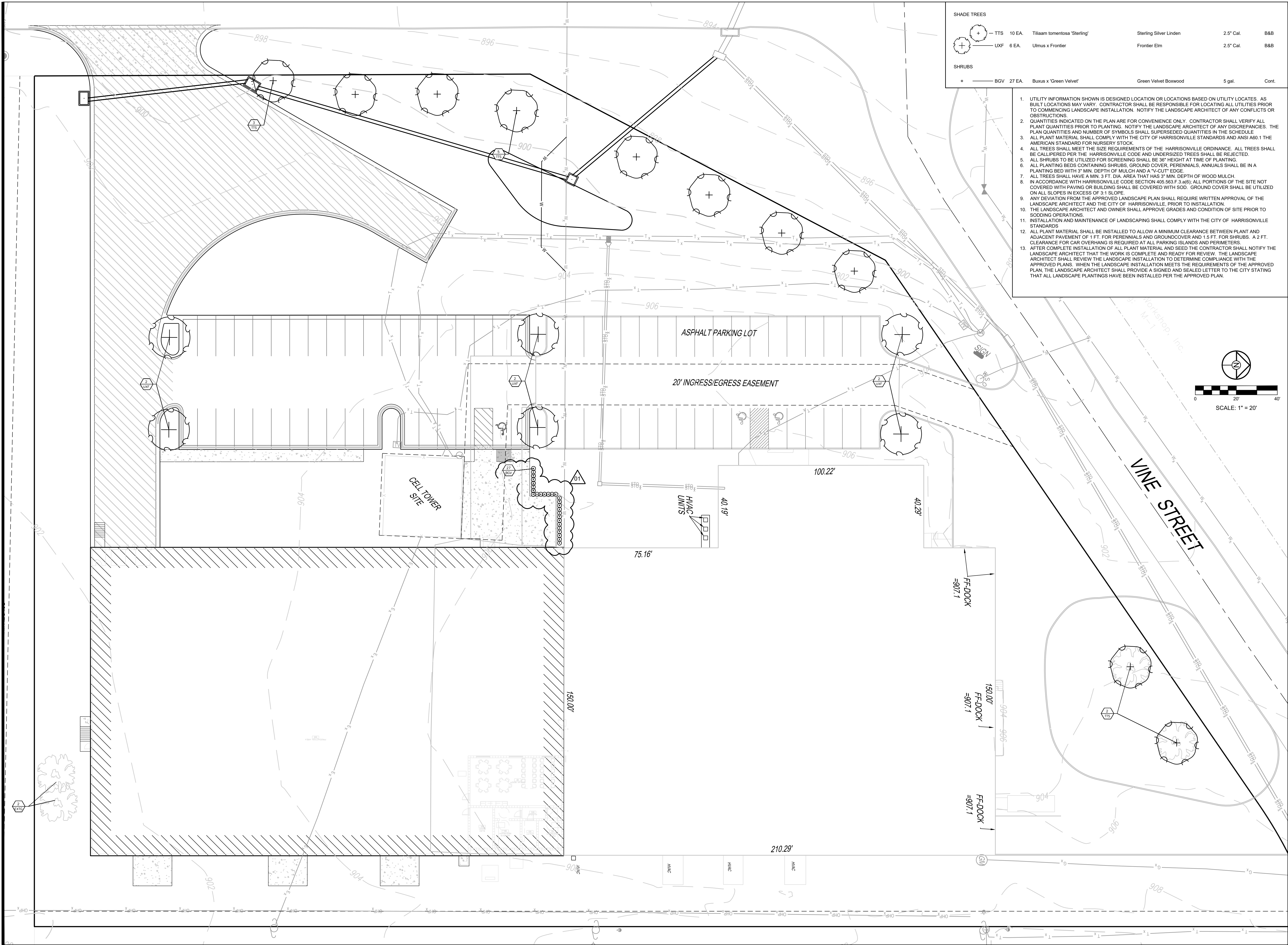


**1801 West Vine Street
Harrisonville, MO 64701**

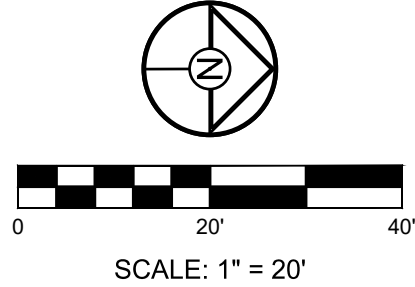
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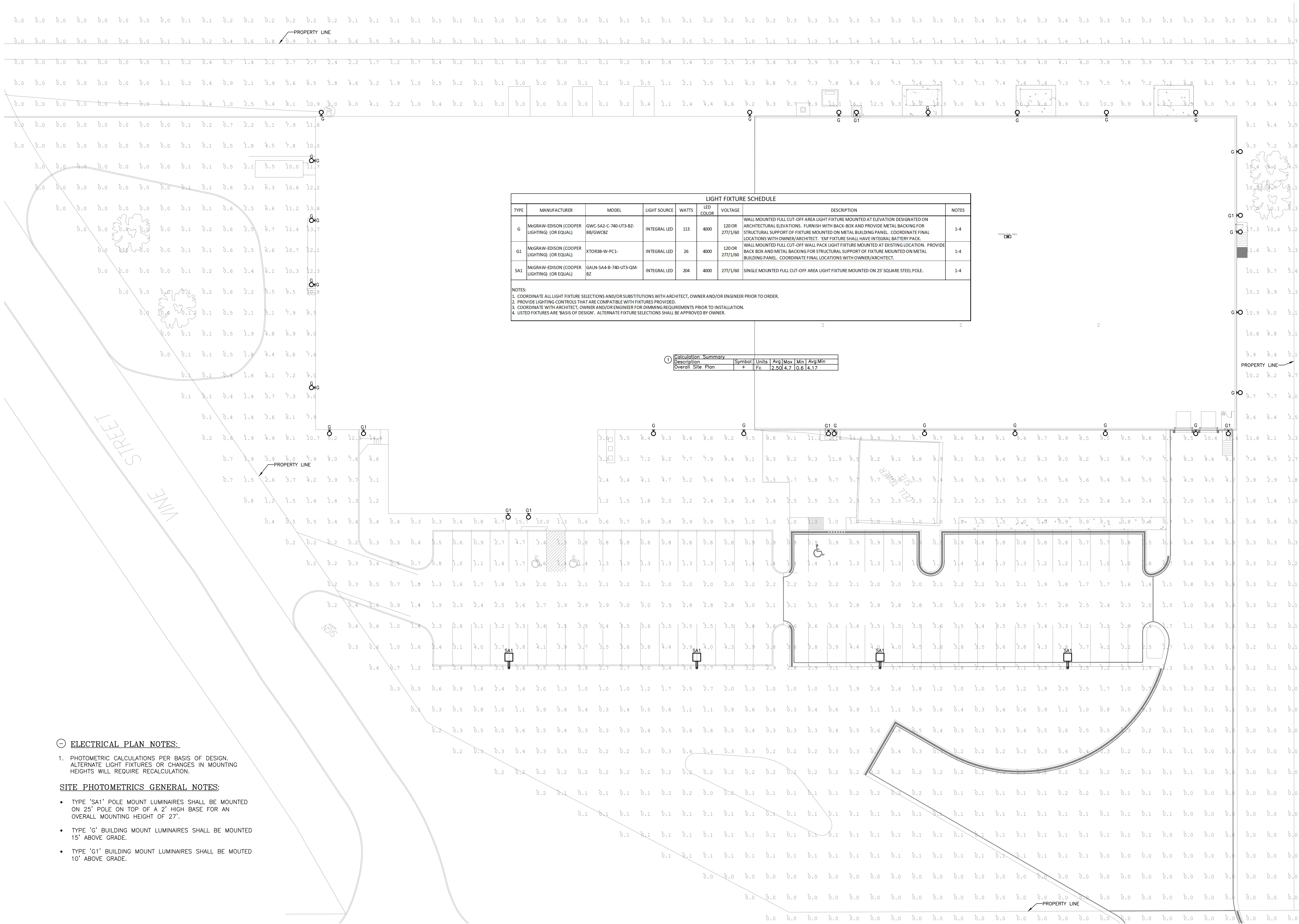
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- UTILITY INFORMATION SHOWN IS DESIGNED LOCATION OR LOCATIONS BASED ON UTILITY LOCATES. AS BUILT LOCATIONS MAY VARY, CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO COMMENCING LANDSCAPE INSTALLATION. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS OR OBSTRUCTIONS.
- QUANTITIES INDICATED ON THE PLAN ARE FOR CONVENIENCE ONLY. CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES PRIOR TO PLANTING. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. THE PLAN QUANTITIES AND NUMBER OF SYMBOLS SHALL SUPERSEDE QUANTITIES IN THE SCHEDULE.
- ALL PLANT MATERIAL SHALL COMPLY WITH THE CITY OF HARRISONVILLE STANDARDS AND ANSI A60.1 THE AMERICAN STANDARD FOR NURSERY STOCK.
- ALL TREES SHALL MEET THE SIZE REQUIREMENTS OF THE HARRISONVILLE ORDINANCE. ALL TREES SHALL BE CALIPERED PER THE HARRISONVILLE CODE AND UNDERSIZED TREES SHALL BE REJECTED.
- ALL SHRUBS TO BE UTILIZED FOR SCREENING SHALL BE 36" HEIGHT AT TIME OF PLANTING.
- ALL PLANTING BEDS CONTAINING SHRUBS, GROUND COVER, PERENNIALS, ANNUALS SHALL BE IN A PLANTING BED WITH 3" MIN. DEPTH OF MULCH AND A "V-CUT" EDGE.
- ALL TREES SHALL HAVE A MIN. 3 FT. DIA. AREA THAT HAS 3" MIN. DEPTH OF WOOD MULCH.
- IN ACCORDANCE WITH HARRISONVILLE CODE SECTION 405.563.F.3.a(6); ALL PORTIONS OF THE SITE NOT COVERED WITH PAVING OR BUILDING SHALL BE COVERED WITH SOD. GROUND COVER SHALL BE UTILIZED ON ALL SLOPES IN EXCESS OF 3:1 SLOPE.
- ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN SHALL REQUIRE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT AND THE CITY OF HARRISONVILLE, PRIOR TO INSTALLATION.
- THE LANDSCAPE ARCHITECT AND OWNER SHALL APPROVE GRADES AND CONDITION OF SITE PRIOR TO SODDING OPERATIONS.
- INSTALLATION AND MAINTENANCE OF LANDSCAPING SHALL COMPLY WITH THE CITY OF HARRISONVILLE STANDARDS.
- ALL PLANT MATERIAL SHALL BE INSTALLED TO ALLOW A MINIMUM CLEARANCE BETWEEN PLANT AND ADJACENT PAVEMENT OF 1 FT. FOR PERENNIALS AND GROUND COVER AND 1.5 FT. FOR SHRUBS. A 2 FT. CLEARANCE FOR CAR OVERHANGING IS REQUIRED AT ALL PARKING ISLANDS AND PERIMETERS.
- AFTER COMPLETE INSTALLATION OF ALL PLANT MATERIAL AND SEED THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT THAT THE WORK IS COMPLETE AND READY FOR REVIEW. THE LANDSCAPE ARCHITECT SHALL REVIEW THE LANDSCAPE INSTALLATION TO DETERMINE COMPLIANCE WITH THE APPROVED PLANS. WHEN THE LANDSCAPE INSTALLATION MEETS THE REQUIREMENTS OF THE APPROVED PLAN, THE LANDSCAPE ARCHITECT SHALL PROVIDE A SIGNED AND SEALED LETTER TO THE CITY STATING THAT ALL LANDSCAPE PLANTINGS HAVE BEEN INSTALLED PER THE APPROVED PLAN.





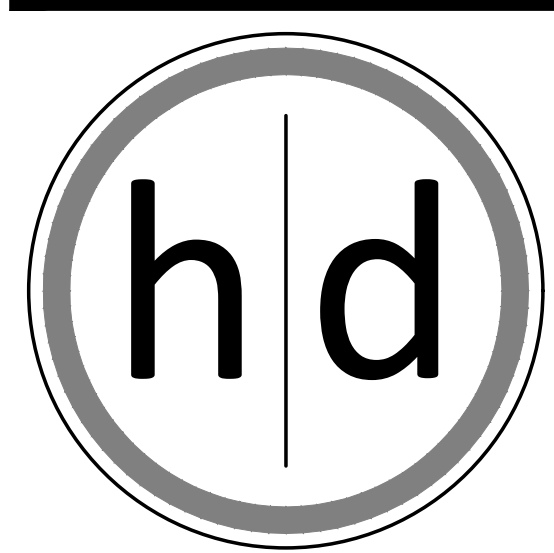
ELECTRICAL PLAN NOTES:

1. PHOTOMETRIC CALCULATIONS PER BASIS OF DESIGN. ALTERNATE LIGHT FIXTURES OR CHANGES IN MOUNTING HEIGHTS WILL REQUIRE RECALCULATION.

SITE PHOTOMETRICS GENERAL NOTES:

- TYPE 'SA1' POLE MOUNT LUMINAIRES SHALL BE MOUNTED ON 25' POLE ON TOP OF A 2' HIGH BASE FOR AN OVERALL MOUNTING HEIGHT OF 27'.
- TYPE 'G' BUILDING MOUNT LUMINAIRES SHALL BE MOUNTED 15' ABOVE GRADE.
- TYPE 'G1' BUILDING MOUNT LUMINAIRES SHALL BE MOUNTED 10' ABOVE GRADE.

1 FULL SITE PHOTOMETRICS PLAN
SCALE: 1" = 20'-0"



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A Production Facility Expansion for:

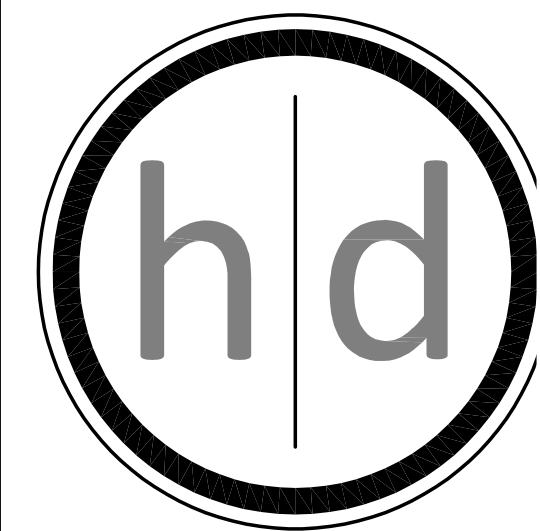


**1801 West Vine Street
Harrisonville, MO 64701**

Date: 01/03/2023
Job Number: 2022000061
Drawn By: 5BY5
Checked By: 5BY5

Revisions		
Number	Date	Description

E0.1.SP
SITE ELECTRICAL
PHOTOMETRIC PLAN
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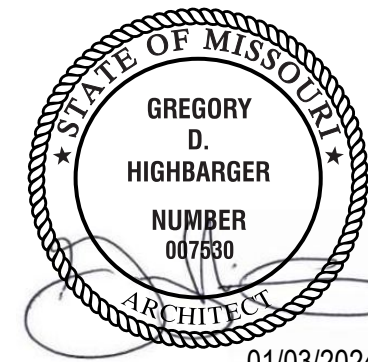


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A Production Facility Expansion for:



1801 West Vine Street
Harrisonville, MO 64701

Attachment: 00-22-028 PlanningSet Revised2024-01-03 (Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St.)

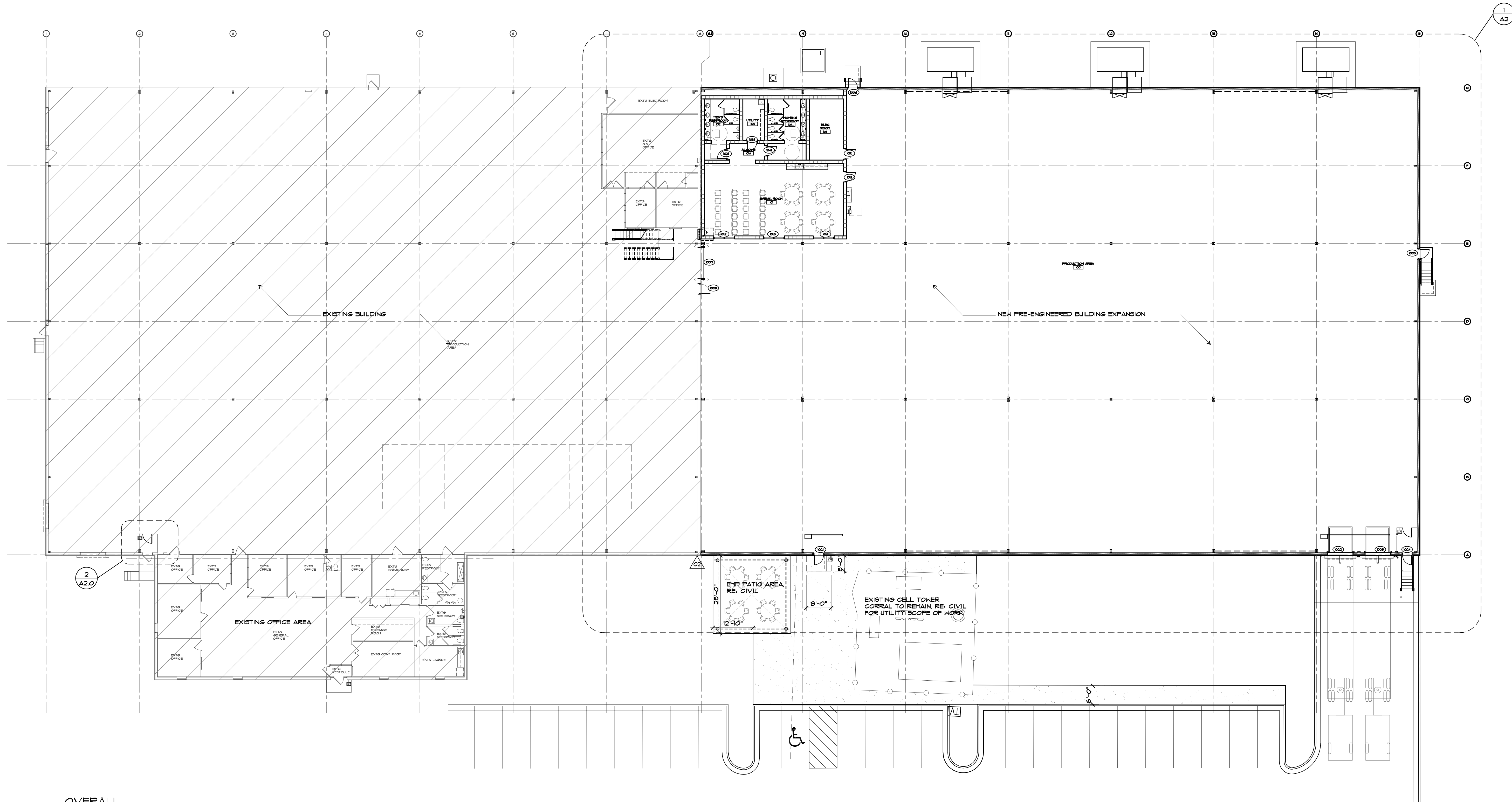
Date 01/03/202
Job Number 22-028.0
Drawn By
Checked By

Revisions		
Number	Date	Description
02	09/14/2023	POST-BID ADD #01
03	01/03/2024	PLANNING COMMENTS

A1

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1/16" OVERALL FLOORPL



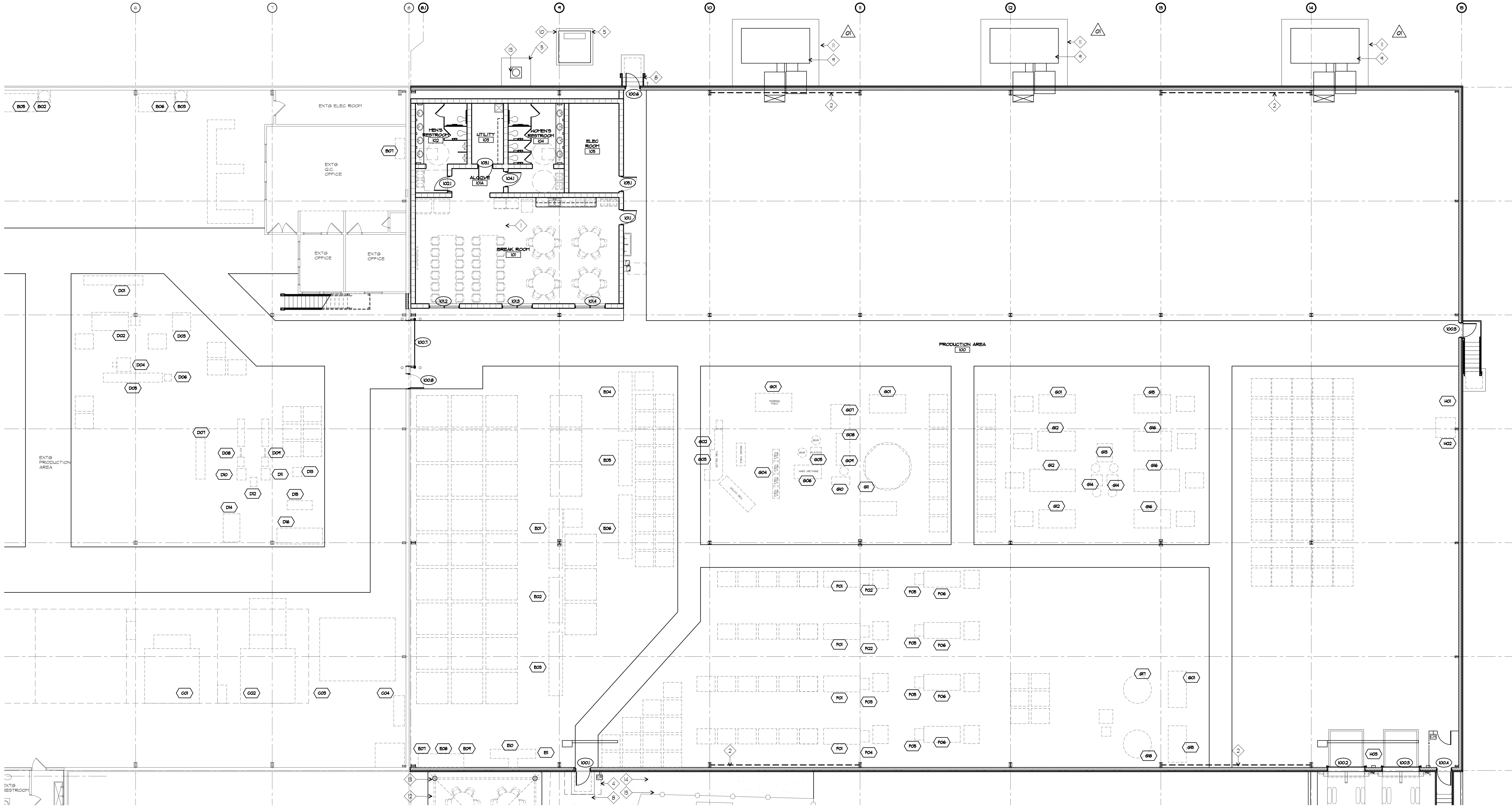
OVERALL
FLOOR PLAN
1/16" = 1'-0"



ARCHITECTURAL PLAN KEYED NOTES:

- PROVIDE NEW SURFACE MTD ELEC STRIKE (ADA'S-RITE MODEL HES 9800 OR EQ) TO EXTS ALUM STOREFRONT DOOR; MODIFY EXTS FRAME AS REQ'D; PROVIDE NEW EXIT RIM DEVICE; ALL FINISHES SHALL MATCH EXTG. CARD ACCESS READER BY OTHERS. EGRESS OUT SHALL BE MAINTAINED.
- NEW PRE-ENGINEERED METAL BUILDING BY VENDOR; PROVIDE STRUCTURAL FOUNDATION SYSTEM PER STRUCTURAL DWGS.
- NEW SECURED CHAIN LINK FENCE WITH CHAIN LINK OVERHEAD LID. FENCE SUPPLIER TO PROVIDE SUPPORT BACKING PLATES TO PROVIDE ELECTRIC STRIKE AND STOREROOM LOCKSET; CARD READER BY OTHERS.
- NEW OH BRACED, POWDER COATED STEEL TOILET PARTITIONS IN EXTG RESTROOMS.
- NEW SIDEWALK, RE: CIVIL
- NEW CONCRETE PAD, RE: CIVIL

C:\Users\jdoyle\OneDrive\Documents\Projects\2024\032-028_FIL-Expansion\02-Design\01-Planning\01-Planning\01-Planning\01-Planning.dwg, 1/2/2024 11:42:48 AM, Bluebeam PDF



GENERAL CONSTRUCTION PLAN NOTES:

- PROVIDE STUDS AND BRACING TO UNDERSIDE OF STRUCTURE AT ALL DOOR FRAMES.
- CONSTRUCTION MATERIALS SPECIFICATIONS TO BE ASBESTOS FREE.
- LOCATE DOOR OPENINGS 2" AWAY FROM ADJACENT CORNER, U.O.N. ALL DOORS TO A MINIMUM OF 90 DEGREES. MAINTAIN 1'-6" CLEAR ON FULL SIDE OF DOOR AND 1'-0" ON PUSH SIDE OF DOOR.
- PROVIDE FIRE RETARDANT TREATED BLOCKING AS REQUIRED BY CODE WITHIN WALL TO SUPPORT MILLWORK, MARKER BOARDS AND TACKABLE SURFACE AND WALL HUNG EQUIPMENT.
- ALL MILLWORK DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO COMMENCEMENT OF WORK.
- PROVIDE MOLD & MILDEW RESISTANT GYPSUM BOARD AT PLUMBING LOCATIONS.
- PARTITIONS AND GYPSUM BOARD CEILING SHALL BE TAPED, FILLED, SANDED SMOOTH AND PREPARED FOR SCHEDULE FINISHES.
- THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB. THE CONTRACTOR MUST NOTIFY THE OWNER AND ARCHITECT OF ANY VARIATIONS FROM THE DIMENSIONS AND DETAILS SHOWN ON THESE DRAWINGS.
- THE CONTRACTOR REMAINS RESPONSIBLE FOR THE DETAILS AND ACCURACY FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FOR SELECTING FABRICATION PROCESS, AND FOR TECHNIQUES OF ASSEMBLY.

ARCHITECTURAL PLAN KEYED NOTES:

- 6" W/ PAINTED "OSHA YELLOW" AISLE MARKINGS, BY OWNER.
- CROSS-BRACING BY METAL BUILDING SUPPLIER, RE: STRUCTURAL.
- NEW ELEC BOXES MOUNTED ON COLUMN, RE: ELEC.
- NEW 5' X 8' PRE-ENG MTL CANOPY/awning BY PER'S MFR.
- CONCRETE PAD PER UTILITY COMPANY REQUIREMENTS.
- STORAGE RACKS, O.F.O.I.
- WIP CARTS, O.F.O.I.
- 5' X 5' FROST FREE PAD, RE: STRUCTURAL.
- AIR HANDLING UNIT, RE: MECHANICAL.
- CONDENSING UNIT, RE: MECHANICAL.
- 12" THICK CONCRETE PAD CAST WITH 4500 PSI CONCRETE WITH 6% AIR, REINFORCED WITH #4 AT 12" ON CENTER TOP AND BOTTOM. TOP OF PAD TO BE 4" ABOVE GRADE.
- PRE-ENGINEERED SHADE STRUCTURE, BY OTHERS, PROVIDE CONCRETE PAD, RE: CIVIL, COORD REQUIREMENTS W/ SHADE STRUCTURE MFR.
- PROVIDE CONCRETE FOOTINGS FOR NEW PRE-ENG SHADE STRUCTURE, FOOTING DESIGN BY SHADE STRUCTURE MFR; HOLD #4,000,000 ALLOWANCE.
- WOOD FENCE, MATCH CELL TOWER FENCE.
- PROVIDE WEED FABRIC AND MIN 3" OF GRAVEL, RE: CIVIL.

XX	DESCRIPTION	RESPONSIBILITY
D01	PLASTIC MITER SAW	OWNER
D02	LATHE	OWNER
D03	SAND BLASTER	OWNER
D04	DONALDSON DUST COLLECTOR	OWNER
D05	ABRASIVE CHOP SAW	OWNER
D06	PEDESTAL GRINDER	OWNER
D07	CORE OVALIZER	OWNER
D08	RESISTANCE SPOT WELDER (BLUE)	OWNER
D09	RESISTANCE SPOT WELDER (WHITE)	OWNER
D10	WELD FUME DUST COLLECTOR (HARR)	OWNER
D11	WELD FUME DUST COLLECTOR (DONALDSON)	OWNER
D12	DRILL PRESS AND BELT SANDER	OWNER
D13	EDGE BEADER	OWNER
D14	SHEET METAL SHEAR	OWNER
D15	SHEET METAL SLIP ROLLER	OWNER
D16	LARGE METAL SLIP ROLLER	OWNER
E01	SLIDING JIG SAW FLEAT PACK CUTTING TABLE (1)	OWNER
E02	DUKANE SONIC WELDER (STRAP TAGGER - NEW)	OWNER
E03	DUKANE CONTINUOUS SONIC WELDER	OWNER
E04	SLIDING JIG SAW FLEAT PACK CUTTING TABLE (2)	OWNER
E05	BRANSON 490 SONIC WELDER (STRAP TRIGGER)	OWNER
E06	SONOBOND 12" BAR SONIC WELDER	OWNER
E07	STRAP CUTTER	OWNER
E08	BRANSON 400 SONIC WELDER (HOLE PUNCHER)	OWNER

XX	DESCRIPTION	RESPONSIBILITY
E09	EDWARD SEGAL EYELET MACHINE	OWNER
E10	SEWING MACHINE	OWNER
E11	JUKI BAR TRACKER	OWNER
F01	GENERAL PURPOSE 110V QUADPLEX	OWNER
F02	NORDSON MODEL 306 GLUE MACHINE	OWNER
F03	DYNATEK GLUE MACHINE	OWNER
F04	GRACO THERMOFLOW 20 GLUE MACHINE	OWNER
F05	GRACO THERMOFLOW 20 GLUE MACHINE (FUTURE)	OWNER
F06	GENERAL PURPOSE 110V QUADPLEX (FUTURE)	OWNER
G01	GENERAL PURPOSE 110V QUADPLEX	OWNER
G02	HELIX TUBE MACHINE	OWNER
G03	HELIX TUBE DUST COLLECTION BLOWER FAN	OWNER
G04	HELIX TABLE HEATERS	OWNER
G05	PLATECO SOFT URETHANE MACHINE (FUTURE FOR HELIX LINE)	OWNER
G06	SEE-FLO 1 URETHANE PUMP	OWNER
G07	HARD URETHANE TOTE MIXER	OWNER
G08	HARD URETHANE FILL PUMP 1	OWNER
G09	HARD URETHANE FILL PUMP 2	OWNER
G10	NORDSON HARD URETHANE DISPENSER	OWNER
G11	HARD URETHANE ROTARY TABLE	OWNER
G12	HEATED MOLDING TABLE	OWNER
G13	SOFT URETHANE TOTE MIXER	OWNER
G14	PLATECO SOFT URETHANE MACHINE	OWNER
G15	GENERAL PURPOSE 110V QUADPLEX (FUTURE)	OWNER

XX	DESCRIPTION	RESPONSIBILITY
G16	HEATED MOLDING TABLE (FUTURE)	OWNER
G17	HOT PLATE TABLE	OWNER
G18	HOT PLATE TABLE (FUTURE)	OWNER
H01	PHOENIX PALLET WRAPPER/SCALE	OWNER
H02	PALLET SCALE	OWNER
H03	DOCK SIGNAL AND LOADING LIGHTS	OWNER

1 ARCHITECTURAL FLOOR PLAN
3/32" = 1'-0"

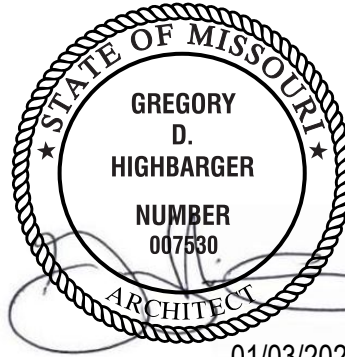


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A Production Facility Expansion for:



1801 West Vine Street
Harrisonville, MO 64701

Date: 01/03/2024
Job Number: 22-028.0
Drawn By:
Checked By:

Revisions	Number	Date	Description
	02	09/14/2023	POST-BID ADD #01
	03	01/03/2024	PLANNING COMMENTS

A2
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3/32" OVERALL FLOORPL

A circular professional seal for Gregory D. Highbarger, a Professional Engineer in the State of Missouri. The seal features the text "STATE OF MISSOURI" around the top inner edge and "ARCHITECT" around the bottom inner edge. In the center, it reads "GREGORY D. HIGHBARGER" and "NUMBER 007530". The seal is stamped over a document that includes a date "01/02/2002" at the bottom right.

Packet Pg. 25



EXTERIOR COLOR SCHEDULE	
MATERIAL NAME	COLOR
FE1B PRE-FIN ALUM WALL PANELS - R-PANEL- 24ga	WAR1 WHITE (MATCHES EXTG BLDG COLOR)
FE1B PRE-FIN ALUM TRIM/GUTTER	DARK BRONZE (MATCHES EXTG BLDG COLOR)
FE1B PRE-FIN ALUM TRIM/GUTTER	WAR1 WHITE (MATCHES EXTG BLDG COLOR)
FE1B PRE-FIN ALUM TRIM/GUTTER - CR PANEL	WAR1 WHITE (MATCHES EXTG BLDG COLOR)
FE1B STL SECTIONAL OVERHEAD DOORS	GLASS TO MATCH EXTG - WAR1 WHITE
GLASS	1" CLEAR INSULATED GLASS
PAINTED HOLLOW METAL DOOR & FRAMING	GLASS TO MATCH EXTG DOORS

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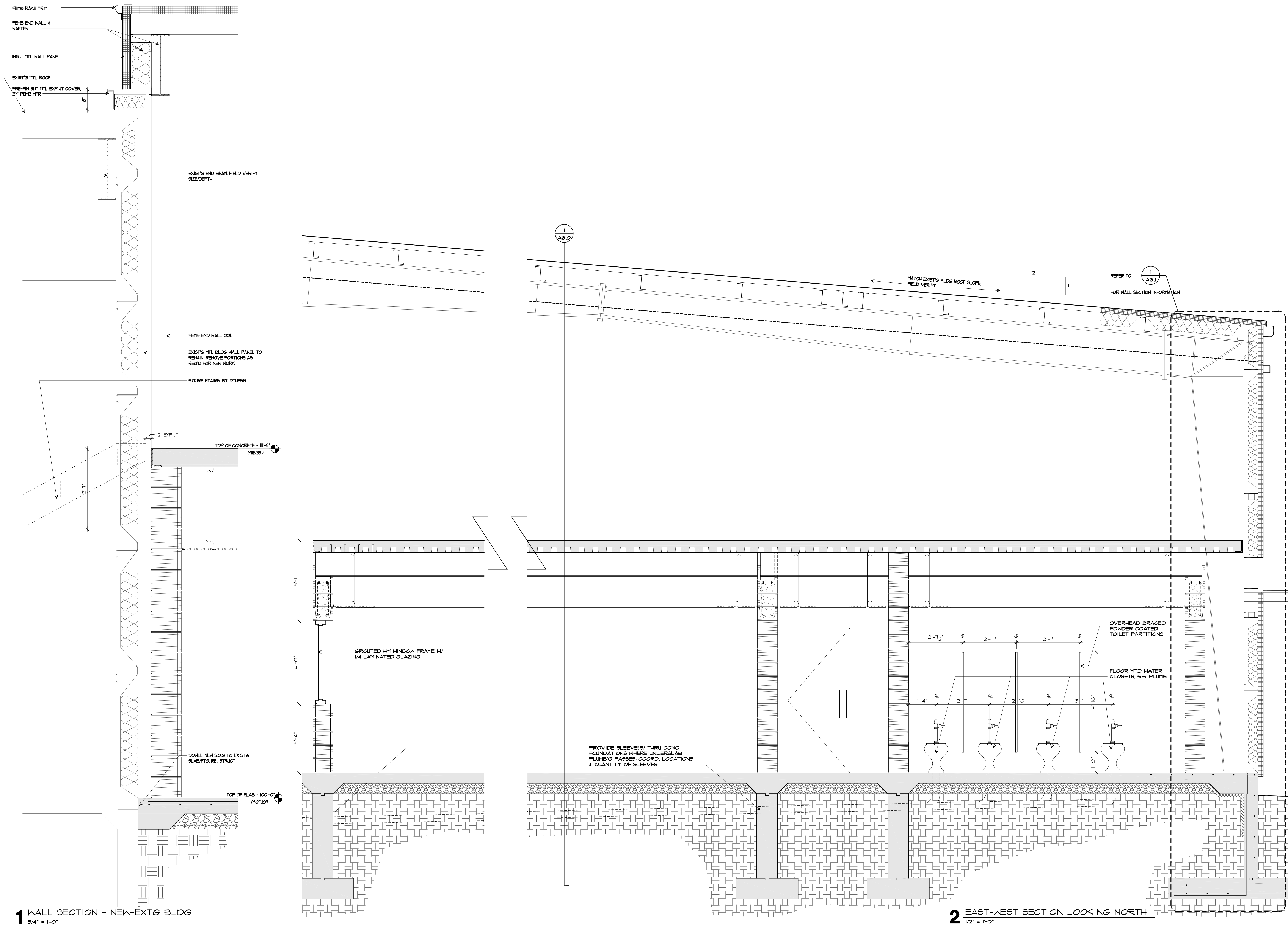
Attachment: 00-22-028_PlanningSet_Revised2024-01-03 (Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St.)

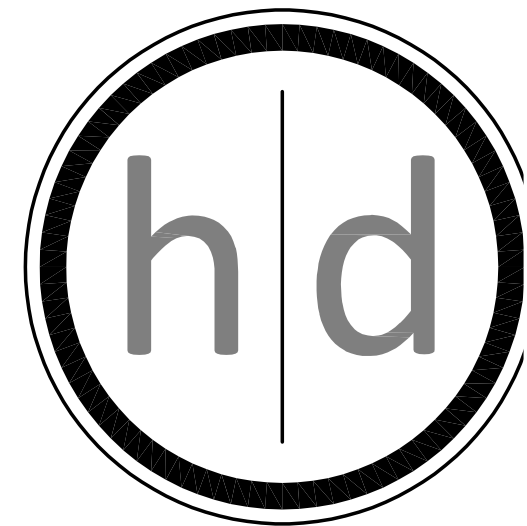
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Revisions		
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03	01/03/2024	PLANNING COMMENTS

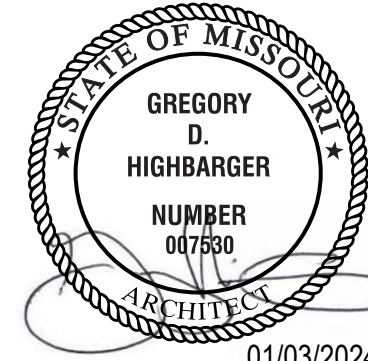
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SECTION





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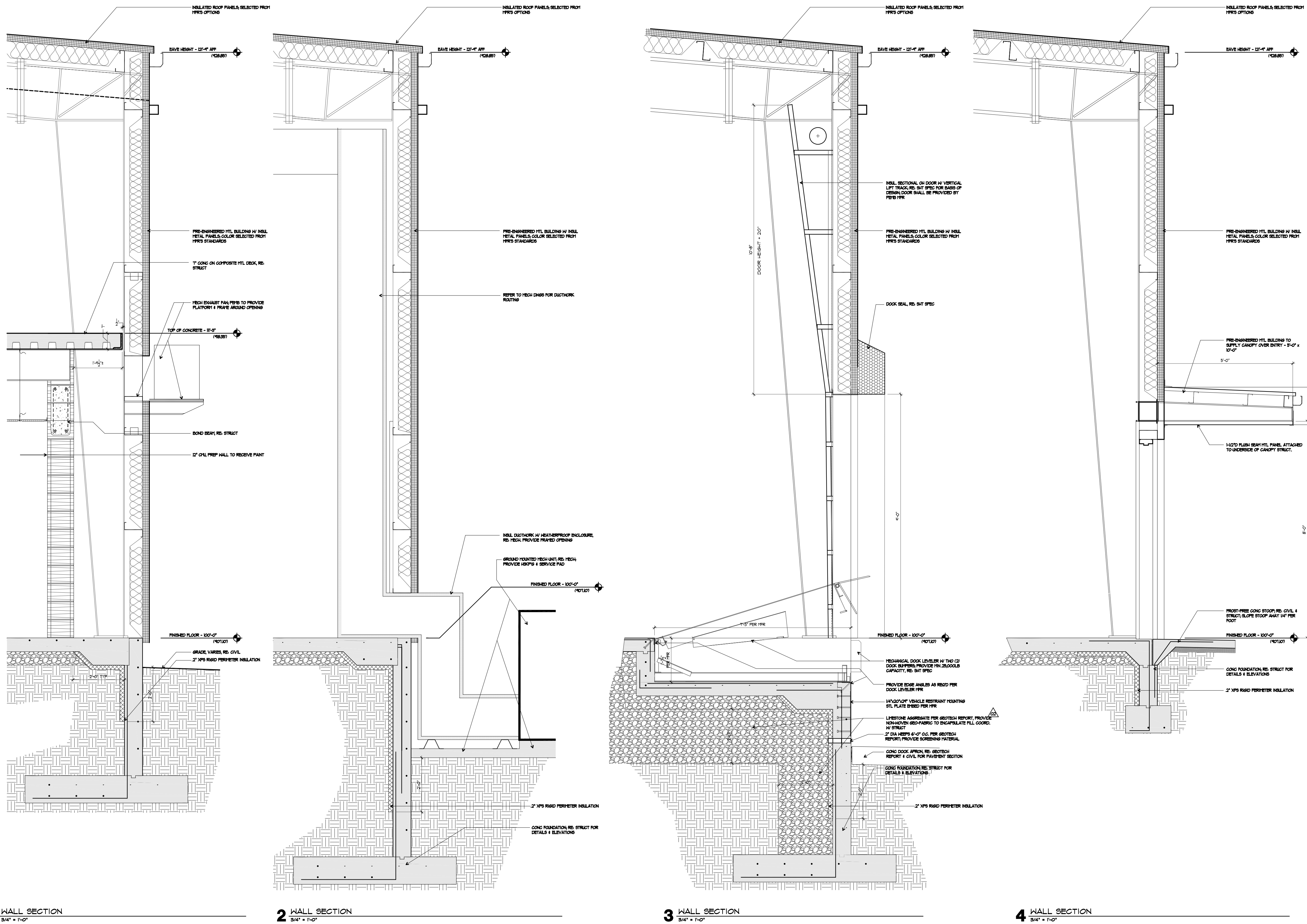
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	02	09/14/2023	POST-BID ADD #01
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A5

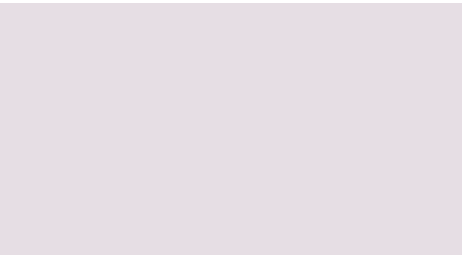
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WALL SECTIO

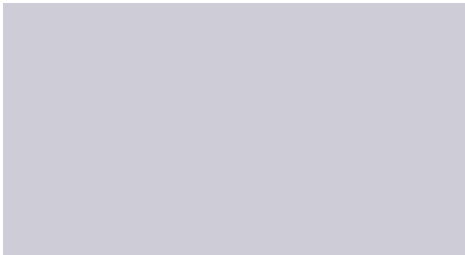


PVDF Cool Coatings

PVDF utilizes a two-coat system featuring fade resistant color, incredible durability, and environmentally-friendly “cool” technology.



Regal White ⁺ IR .72 SRI 88



Reflective White ⁺⁺ IR .63 SRI 76

Metal Panel Color

Warm White ⁺ IR .63 SRI 7



Pearl Gray ⁺⁺ IR .47 SRI 54



Desert Sand ⁺⁺ IR .57 SRI 67



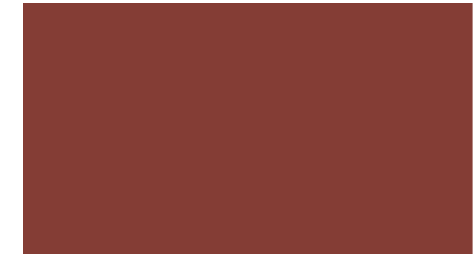
Surrey Beige ⁺ IR .50 SRI 5



Slate Gray ⁺ IR .37 SRI 40



Royal Blue ⁺ IR .30 SRI 30



Terra Cotta ⁺ IR .36 SRI 3



Cypress Green ⁺ IR .31 SRI 31

Trim Color

Dark Bronze ⁺ IR .32 SRI 33



Brite Red ⁺⁺ IR .38 SRI 4



Charcoal ⁺⁺ IR .32 SRI 34



Midnight Black ⁺⁺ IR .27 SRI 26



Galvalume ⁺⁺ IR .77 SRI 7

*Non-Stock Color: Extended lead times may apply. *The Galvalume coating process is likely to result in variances in spangle (size, number, and reflection) from coil to coil which may result in noticeable shade variations. Galvalume is also subject to variable weathering and may appear to have different shades due to weathering characteristics. These shade variations are not cause for rejection. ⁺ENERGY STAR® Qualified Color. All standard PVDF colors have a 35-year finish warranty. Colors shown closely approximate actual coating colors. These colors utilize Cool Coating Technology. The term “TBK” on the Order Document refers to “To Be Selected” from standard PVDF colors as shown on this chart. Please note that PVDF is a slight upcharge over

Attachment: 22-154- Metal Panel Color Chart (Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W.



a NUCOR company

PVDF Cool Coatings

Product Specifications

Solar Reflectance, Thermal Emittance and Solar Reflectance Index (SRI)

Solar Reflectance

To be considered “cool,” products must have a Solar Reflectance of at least .25. Solar Reflectance is the fraction of the total solar energy that is reflected away from a surface.

Thermal Emittance

Thermal Emittance is the measure of a panel's ability to release heat that it has absorbed.

Solar Reflectance Index (SRI)

Put Solar Reflectance and Thermal Emittance together and you get the Solar Reflectance Index (SRI). SRI is calculated by using the values of solar reflectance, thermal emittance and a medium wind coefficient. The higher the SRI value, the lower its surface temperature and consequently, the heat gain into the building. Metal roofs coated with pigmented PVDF resin achieve an SRI of 26-88, depending on the color.

Conventional roof surfaces have low reflectance (0.05 to 0.25) and high thermal emittance (typically over .85). Roof panels with both high reflectance and high emittance can reduce the surface temperature by as much as 30-50% based on color and geographic location, which will result in a reduced heat gain to the building, therefore reducing the energy demand.

GALVALUME® is a registered trademark of BIEC International Inc., and some of its licensed producers.

PVDF COOL PANEL COLORS

PVDF Cool Color	Initial Solar Reflectance (IR)	Initial Thermal Emittance	Solar Reflectance Index (SRI)
Regal White	.72	0.85	88
Reflective White	.63	0.86	76
Warm White	.63	0.86	76
Pearl Gray	.47	0.86	54
Desert Sand	.57	0.86	67
Surrey Beige	.50	0.85	56
Slate Gray	.37	0.85	40
Royal Blue	.30	0.85	30
Terra Cotta	.36	0.85	38
Cypress Green	.31	0.85	31
Dark Bronze	.32	0.86	33
Brite Red	.38	0.84	40
Charcoal	.32	0.86	34
Midnight Black	.27	0.85	26
Galvalume®	.77	0.08	72

PVDF COOL TECHNICAL INFORMATION

Test	Test Methods	Performance
Dry Film Thickness	ASTM D1400	0.15 - 0.30 mil primer 0.70 - 0.90 mil topcoat
Gloss	ASTM D523 @ 60°	25 - 35
Solar Reflectance	ASTM E903 Steep Slope: Low Slope:	>25% Initial >15% after 3 years >65% Initial >50% after 3 years
Emissivity	ASTM C1371, ASTM E408	0.80 (80%) min.
Pencil Hardness	ASTM D3363	F-2H
Flexibility	T-Bend, ASTM D4145	0 - 2 T-Bend; No pick off
Adhesion	ASTM D3359	No adhesion loss
Reverse Impact	ASTM D2794	No cracking or adhesion loss
Abrasion, Falling Sand	ASTM D968	65 - 85 l/mil
Mortar Resistance	ASTM C267	No effect
Detergent Resistance	ASTM D2248 3% detergent @ 100°F (72 hrs.)	No Effect
Acid Resistance	ASTM D1308 10% muriatic acid - 24 hrs. 20% sulfuric acid - 18 hrs.	No effect No effect
Acid Rain Test	Kesternich SO ₂ , DIN 50018	15 cycles min. No objectionable color change
Alkali Resistance	ASTM D1308 10% , 25% NaOH, 1 hr.	No effect
Salt Spray Resistance	ASTM B117 5% salt fog @ 95°F	None or few #8 blisters; Max. average 1/8" Scribe creep Passes 1000 hrs.
Humidity Resistance	ASTM D714, ASTM D2247 100% relative humidity @ 95°F	Passes 1500 hrs. No #8 blisters
Exterior Exposure	ASTM D2244, ASTM D 4214 10 yrs. @ 45°F, South Florida	Max. 5 fade Max. 8 chalk

Nucor Buildings Group R-Panel Metal Wall Panel System

The R-Panel wall is a strong, attractive wall panel ideal for commercial, community, and industrial applications. This panel delivers what most builders, contractors, and owners have come to expect from us in a versatile and attractive building system.



Panel Credentials

- ASTM E283 Test Method for Determining Air Leakage Through Wall Systems
- ASTM E331 Test Method for Water Penetration of Exterior Wall Systems
- State of Florida Product Approval
- UL263 Fire Tests of Building Construction and Materials

Panel Specifications

Gage	Thickness (in.)	Yield (ksi)	Tensile (ksi)	Panel Wt. (psf)	I _x (Gross) (in ⁴)	TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
						S _x (eff.) (in ³)	M _a (kip-in)	S _x (eff.) (in ³)	M _a (kip-in)
26	0.0177	80	82	0.86	0.0490	0.0378	1.3590	0.0462	1.6593
24	0.0222	80	82	1.08	0.0633	0.0543	1.9520	0.0588	2.1133

Panel Capacity (psf)

SPAN (ft.)	26 GAGE		24 GAGE	
	Pressure ⁷	Suction ^{4,8}	Pressure ⁷	Suction ^{4,8}
3.0	79	72	120	75
3.5	68	62	103	64
4.0	59	54	90	56
4.5	53	48	80	50
5.0	47	43	69	45
5.5	43	37	57	41
6.0	37	31	48	38
6.5	32	26	41	35
7.0	28	23	36	32
7.5	24	20	31	29

NOTES

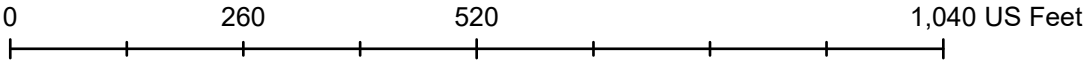
1. Section properties were calculated in accordance with AISI S100/CSA S136, 2016 Edition.
2. Panels were checked for bending, shear, combined bending and shear, web crippling, deflection and panel pullover.
3. Deflection is limited to Span/60.
4. Panel pullover limits are based on d/w = 0.44".
5. Thermal load has not been considered.
6. Capacities are based on a 3-span condition with equal length spans.
7. "Pressure" load is applied inward on the outer surface towards supports.
8. "Suction" load is applied outward on the inner surface away from panel supports.

Zoning Map



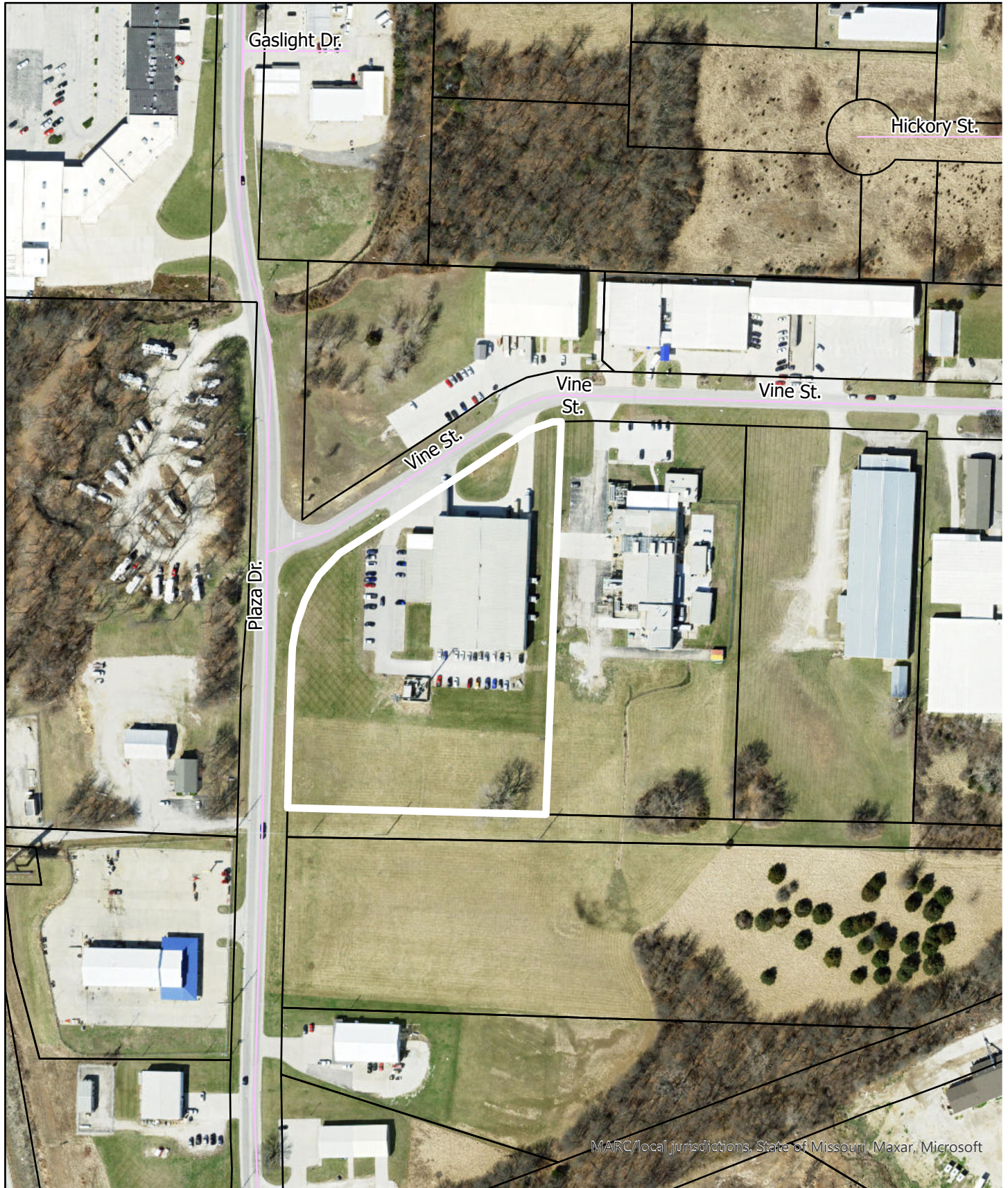
MARC/local jurisdictions, State of Missouri, Maxar, Microsoft

Attachment: Zoning Map (Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St.)



Aerial Map

3.A.i



MARC/local jurisdictions, State of Missouri, Maxar, Microsoft

Attachment: Aerial Map (Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St.)

0 237.5 475 950 US Feet

N

Packet Pg. 32

STAFF REPORT

TO: Planning & Zoning Commission
FROM: Christina Stanton,
DATE: January 11, 2024
SUBJECT: Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St.

Type of Item: *Approval*

B. Discussion Item (ID # 4738)

Appl. #PREDEV-23-002--PRELIM. DEVEL. PLAN for iFIL Expansion on property located at 1801 W. Vine St. - CONSIDERATION