



Grand Ledge Construction
Board of Appeals

AGENDA

WEDNESDAY, 08 JANUARY 2025 – 4:00 P.M.

COUNCIL CHAMBERS, CITY HALL

310 GREENWOOD ST., GRAND LEDGE MI 48837

- I. ROLL CALL OF CONSTRUCTION BOARD OF APPEALS** – Gary Cypher, Jack McNamara II, Mike Stevens, Rodney Young

- II. PLEDGE OF ALLEGIANCE**

- III. AUDIENCE PARTICIPATION**

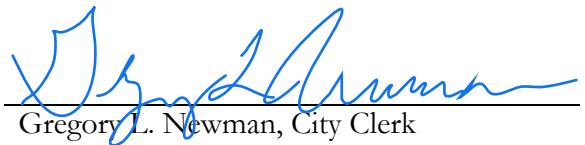
- IV. APPROVAL OF REGULAR AGENDA**
 - A. Motion** – To approve the Wednesday, 08 January 2025, Construction Board of Appeals agenda.

- V. NEW BUSINESS**
 - A. Appeal** – By the City of Grand Ledge of the Building Official’s decision on and interpretation of Michigan Mechanical Code Section 401.4(2).

- VI. AUDIENCE PARTICIPATION**

- VII. COMMUNICATIONS FROM BOARD MEMBERS**

- VIII. ADJOURNMENT**



Gregory L. Newman, City Clerk

City Clerk Gregory Newman

December 18, 2024

310 Greenwood Street

Grand Ledge, MI 48837

RE: Appeal of Building Officials Decision

Clerk Newman,

Please make the necessary arrangements to schedule a Construction Board of Appeals meeting at the earliest date possible. Pursuant to Section 113 (Board of Appeals) of the Michigan Building Code, the City of Grand Ledge is appealing a decision of the Building Official. Specifically, the City is appealing the Building Official's decision outlined in a December 6, 2024, email making the 'alternate solution' mandatory. The City is also asking the Construction Board of Appeals to find that Section 401.4(2) has been incorrectly interpreted by the Building Official. The attached form, provides information on the appeal.

The issue at hand is an air intake located on the north side of the City's Iron Removal Plant. The air intake has been installed in accordance with the approved construction drawings. The building department is asserting that the air intake location does not meet Section 401.4(2) as it is within 10 feet of a loading dock or parking area. The City and its' engineer do not agree with the building department's interpretation of the Mechanical Code and believe that reading the plain language of Section 401.4(2) clearly demonstrates compliance.

On November 7, 2024, building department staff did a rough inspection at the City's new Iron Removal Plant. The inspector communicated to the project engineer that there was a 'violation' of Section 401.4(2) of the State Mechanical Code. The details of the 'violation' are outlined in attached emails. In short, the building department will not approve the air intake as constructed, and presumably will not issue a certificate of occupancy for the building

On November 20, 2024, the building department approved (by email) an 'alternate method' of complying with Section 401.4(2). The 'alternate method' is apparently derived from safety requirements for Enclosed Parking Garages (Section 401.1). The 'alternate method' has a number of requirements, including the installation of a CO and NO2 detector that can shut the HVAC system down.

In an attempt to resolve this matter and address the building department's concerns the project engineer proposed to stripe and label an area within 10 feet of the air intake as "NO PARKING" in a December 5, 2024, email. The engineer also explained that the overhead door was installed so that large equipment inside the building could be serviced and replaced as needed.

On December 6, 2024, the Building Official stated in an email that "The signage and CO detection will remain mandatory" even though a plain reading of the mechanical code does not require a CO detection system or signage.

City Manager, Adam Smith, has met with City staff and the Building Official to gather information and to discuss this matter in person. After hearing from the Building Official that the area within 10 feet of the air intake is considered a parking/loading area, the decision to file an appeal was made.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rich Morrison". The signature is fluid and cursive, with a long horizontal stroke at the end.

Rich Morrison

Attached to this letter and part of the City's appeal are the following items:

1. Appeal form
2. Section 401.4(2) of the Michigan Mechanical Code
3. December 6, 2024 decision of the Building Official
4. November 20, 2024 email to project engineer prescribing 'alternate solution'
5. December 5 email from project engineer to Building Official and Mechanical Inspector.
6. Section 113 (Board of Appeals) of the Michigan Building Code
7. Letter from Iron Removal Plant Engineer

Print

Building Code Appeal - Submission #3265

Date Submitted: 12/18/2024

PROPERTY INFORMATION

Address of Property for Appeal*

320 E. Saginaw Hwy

Property Owner's Name*

City of Grand Ledge

Property Owner's Phone Number*

5176227936

Applicant's Name*

Adam Smith

Applicant's Phone Number*

5176227936

Email Address*

rmorrison@cityofgrandledge.com

APPEAL INFORMATION

A request is hereby made to the Construction Board of Appeals to:*

Reverse the Building Official's decision to require an "alternate solution" to comply with Section 401.4 of the State Mechanical Code (email from D. Hufnagel dated 12/6/2024 attached) and find that the Building Official has incorrectly interpreted Section 401.4 of the Mechanical Code.

Arguments in support of this appeal:*

1. The outdoor air intake location has been installed pursuant to the approved plans.
2. The plans were approved by Greg Colley (Mechanical) on 3-29-2023 and Cory Donnell (Building Official) on 4-17-2023.
3. The Iron Removal Plant is gated, and access controlled. The area within 10 feet of the air intake is not accessible to the public and is under the control of the City.
4. The area within 10 feet of the air intake is not a hazardous or noxious contaminant source such as a "... street, alley, parking lot, or loading dock. The area within 10 feet of the air intake is a paved way to an overhead door designed for infrequent access to equipment inside the building.
5. In an attempt to resolve this matter the City has agreed to, and submitted plans to, stripe the area and designate the area in front of the overhead door as no parking. The City's Engineer provided an email to the Building Official on 12/5 which detailed why the overhead door was installed and addressed the Building Official's concerns.
6. The Building Official contends that the "...overhead door suggests a parking or drive area" (12/6/2024 email). The Mechanical Code requires air intakes to be horizontally separated from streets, alleys, parking lots and loading docks. Streets, alleys, parking lots, and loading docks are designed to accommodate frequent vehicular traffic. No such condition exists within 10 feet of the air intake. The Code language is clear and concise. It is not ambiguous, and it does not apply to this situation.

Please provide details to support your appeal:*

The matter at hand is the location of an outdoor air intake for the mechanical heating and cooling system at the City's Iron Removal Plant. Section 401.4 of the Mechanical Code requires air intakes to be located 10 feet horizontally from locations that create a hazardous or noxious contaminant source such as "...vents, streets, alleys, parking lots and loading docks...." The outdoor air intake is located 10 feet (measured diagonally) from the overhead door on the north side of the Iron Removal Plant. The area in front of the overhead door is paved. The closest parking to the air intake is 18 feet measured horizontally. The Building Official has likened the area in front of the overhead door to a street, alley, parking lot, or loading dock where hazardous or noxious contaminant sources are produced. In an effort to appease the Building Official, the City has offered to stripe and label the paved area in front of the overhead door as "No Parking". The area in front of the overhead door and within 10 feet of the outdoor air intake was not designed for parking, loading, or idling of vehicles and will not be used for those purposes.

The overhead door was installed for access to large equipment for maintenance, repair, and replacement within the Iron Removal Plant. Section 401.4 of the Code has been incorrectly interpreted by the Building Official as the area within 10 feet of the air intake is not designed for frequent vehicle use and is not a street, alley, parking lot, or loading dock.

Please upload any supplemental documentation

No file chosen

Electronic Signature Agreement*

By checking the "I agree" box below, you agree and acknowledge that 1) your application will not be signed in the sense of a traditional paper document, 2) by signing in this alternate manner, you authorize your electronic signature to be valid and binding upon you to the same force and effect as a handwritten signature, and 3) you may still be required to provide a traditional signature at a later date.

I agree.

Electronic Signature*

Rich Morrison

401.4 Intake opening location.



Air intake openings shall comply with all of the following:

1. Intake openings shall be located not less than 10 feet (3048 mm) from lot lines or buildings on the same lot.
2. Mechanical and gravity outdoor air intake openings shall be located not less than 10 feet (3048 mm) horizontally from any hazardous or noxious contaminant source, such as vents, streets, alleys, parking lots and loading docks, except as specified in Item 3 or Section 501.3.1. Outdoor air intake openings shall be permitted to be located less than 10 feet (3048 mm) horizontally from streets, alleys, parking lots and loading docks provided that the openings are located not less than 25 feet (7620 mm) vertically above such locations. Where openings front on a street or public way, the distance shall be measured from the closest edge of the street or public way.
3. Intake openings shall be located not less than 3 feet (914 mm) below contaminant sources where such sources are located within 10 feet (3048 mm) of the opening. Separation is not required between intake air openings and living space *exhaust air* openings of an individual *dwelling unit* or *sleeping unit* where an approved factory-built intake/exhaust combination termination fitting is used to separate the air streams in accordance with the manufacturer's instructions.
4. Intake openings on structures in flood hazard areas shall be at or above the elevation required by Section 1612 of the *International Building Code* for utilities and attendant equipment.

From: Dan Hufnagel <dhufnagel@dewittwp.org>

Sent: Friday, December 6, 2024 10:13 AM

To: McCorkle, Colin <cmccorkle@fishbeck.com>; joe hardin <allmanorinspection@gmail.com>

Cc: Rich Morrison <rmorrison@cityofgrandledge.com>; Kurt Ristow <kristow@cityofgrandledge.com>; Willemin, John <jwillemin@fishbeck.com>

Subject: Re: Grand Ledge IRP - Intake Louver

Hi Colin

As indicated in my previous email and after my site visit with you I remain confident in our original alternate resolution. I have reviewed your proposal and I do not feel the signage and parking striping changes meet the life safety requirements the code suggests. The paved area next to the overhead door suggests a parking or drive area. **The signage and CO detection will remain mandatory.** Please let me know if you have any further questions or concerns, thanks.

Sent from my Verizon, Samsung Galaxy smartphone

From: joe hardin <allmanorinspection@gmail.com>

Sent: Wednesday, November 20, 2024 6:00:15 PM

To: McCorkle, Colin <cmccorkle@fishbeck.com>; Dan Hufnagel <dhufnagel@dewittwp.org>

Subject: Re: Grand Ledge IRP

EXTERNAL EMAIL

Good morning Colin,

The Building Official approves your alternative method (gas detection in lieu of approved separation between vehicles and fresh air inlet) with the caveat that the Fire Marshal will be invited to offer his concerns (if any) and the following conditions:

Bollards shall be employed in positions to discourage parking near the fresh air inlet (but are not required where they would impede use of the adjacent OH door). The idea is to keep as much separation as possible without obstructing use of the door.

Approved "no idling" or "shut engine off" signs shall be placed in approved locations.

A sealed (by ME) detail of system plan revision shall be provided to this department.

Activation of detection system shall activate local alarm or send a supervisory signal to the alarm panel. A local alarm shall be of AV type in a conspicuous location and have approved signage that warns of elevated CO/NO2 levels and shall advise occupants to vacate and ventilate the space immediately.

Activation of the detector system shall shut down HVAC system served by the non conforming make up air inlet until levels are acceptable.

Detector shall sample a combination of return air from occupied space and outdoor air.

Tests to verify detector function with both CO and NO2 are required and shall be witnessed by the inspector.

Detection/alarm/shutdown shall be based on levels detailed in 404.1 of the MMC.

As always you may choose the prescriptive path if these terms are not agreeable.

Dan, have I forgotten anything? Would you ask Susan to please attach this letter to the permit record?

404.1 Enclosed Parking Garages

Mechanical ventilation systems for enclosed parking garages are not required to operate continuously where the system is arranged to operate automatically upon detection of **carbon monoxide (CO) not to exceed 25 parts per million (ppm) and nitrogen dioxide (NO₂) not to exceed 3 ppm** by approved automatic detection devices.

Regards,

Joe Hardin

Building/Mechanical Inspector

Rich Morrison

From: McCorkle, Colin <cmccorkle@fishbeck.com>
Sent: Thursday, December 5, 2024 2:47 PM
To: dhufnagel@dewittwp.org; joe hardin
Cc: Rich Morrison; Kurt Ristow; Willemin, John
Subject: Grand Ledge IRP - Intake Louver
Attachments: C201210262-C201.pdf

Hello Dan and Joe,

Upon detailed review of the concerns raised and further discussion with the building owner, the City of Grand Ledge, we take exception to the interpretation that the intake louver location is not compliant with the Building Code, as the area within 10 feet of the intake is not, nor is it similar to, a street, alley, parking lot, or loading dock. We have reviewed your concern on the intake louver location with Rich Morrison and Kurt Ristow with the City of Grand Ledge, reviewing the items which you have called for in your November 20, 2024, email, and they have directed this response.

The area within 10 feet of the intake is not designed for parking, loading, or regular vehicular traffic. There is an overhead door near the intake, but it is designed to be a point for equipment removal for maintenance or replacement. Removal of larger equipment in and out of the building when it needs to be replaced or repaired, which will be an infrequent occurrence at best, will not create an ongoing hazardous or noxious contaminant source. The intake location meets requirements for distance from the nearest marked parking space. The plant will not receive deliveries that would require use of the overhead door at the north end of the plant. The only deliveries are for chemicals which are delivered to the opposite side of the plant. The building design and the intake location was reviewed and approved by the Code officials during plan review.

In an effort to address your concern about a vehicular parking/idling in front of the overhead door, the City will paint pavement markings in front of the overhead door to indicate the area as a No-Parking space, including striping on the pavement and apron near the intake louver. The iron removal plant facility entrance is gated with access only allowed for City staff or approved visitors; it is not accessible to the public. This will allow the City to control access to the area in question.

Attached is a plan showing the no parking striping. We believe we have addressed your concerns and that the plain language of Section 401.4 is satisfied.

Please confirm that this matter has been resolved.

Thank you,

Colin

Colin McCorkle | Senior Water/Wastewater Engineer, Associate
Fishbeck | w: 616.464.3825 | c: 269.924.8737 | Fishbeck.com

[A] **110.4 Inspection agencies.** The *building official* is authorized to accept reports of *approved* inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

[A] **110.5 Inspection requests.** It shall be the duty of the holder of the building *permit* or their duly authorized agent to notify the *building official* when work is ready for inspection. It shall be the duty of the *permit* holder to provide access to and means for inspections of such work that are required by this code.

[A] **110.6 Approval required.** Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *building official*. The *building official*, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the *permit* holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *building official*.

**SECTION 111
CERTIFICATE OF OCCUPANCY**

111.1 Use and occupancy. A building or structure shall not be used or occupied, and a change in the existing occupancy classification of a building or structure or portion thereof shall not be made until a certificate of occupancy has been issued in accordance with the act.

Exception: Certificates of occupancy are not required for work exempt from permits under Section 105.2.

R 408.30412

111.2 Certificate issued. After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department and all permit and plan review fees are paid, the building official shall issue a certificate of occupancy that contains all of the following:

- (a) The building permit number.
- (b) The address of the structure.
- (c) A description of that portion of the structure for which the certificate is issued.
- (d) A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
- (e) The name and signature of the building official or designee, registered in accordance with the building officials and inspectors registration act, 1986 PA 54, MCL 338.2301 to 338.2313.
- (f) The edition of the code under which the permit was issued.
- (g) The use and occupancy, in accordance with the provisions of chapter 3.

- (h) The type of construction as defined in chapter 6.
- (i) The design occupant load.
- (j) If an automatic sprinkler system is provided, whether the sprinkler system is required.
- (k) Any special stipulations and conditions of the building permit.

R 408.30412

[A] **111.3 Temporary occupancy.** The *building official* is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the *permit*, provided that such portion or portions shall be occupied safely. The *building official* shall set a time period during which the temporary certificate of occupancy is valid.

[A] **111.4 Revocation.** The *building official* is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

**SECTION 112
SERVICE UTILITIES**

[A] **112.1 Connection of service utilities.** A person shall not make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a *permit* is required, until released by the *building official*.

[A] **112.2 Temporary connection.** The *building official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel or power.

[A] **112.3 Authority to disconnect service utilities.** The *building official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section 101.4 in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The *building official* shall notify the serving utility, and wherever possible the *owner* and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the *owner* or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

**SECTION 113
BOARD OF APPEALS**

113.1 Means of appeal. An interested person may appeal a decision of the enforcing agency to the board of appeals in accordance with the act. An application for appeal shall be based on a claim that the true intent of the code or the rules governing construction have been incorrectly interpreted, the provisions of the code do not apply, or an equal or better form

of construction is proposed. The decision of a local board of appeals may be appealed to the construction code commission in accordance with the act and time frames.

Exception: Requests for barrier free design exception shall be in accordance with 1966 PA 1, MCL 125.1352 to 125.1356.

R 408.30414

[A] **113.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

113.3 Qualifications. The board of appeals shall consist of members who are qualified in accordance with the act and are not employees of the governmental subdivision or the agency enforcing the code.

R 408.30414

SECTION 114 VIOLATIONS

[A] **114.1 Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

[A] **114.2 Notice of violation.** The *building official* is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

* **114.4 Violation penalties.** It is unlawful for any person, firm, or corporation to violate a provision of the code or fail to conform with any of the requirements thereof, or erect, construct, alter, extend, repair, move, remove, demolish, or occupy any building, structure, or equipment regulated by the code, or cause work to be performed or done, in conflict with or in violation of the approved construction documents or directive of the enforcing agency, or a permit or certificate issued under the code. A violator shall be assessed a fine in accordance with the act.

R 408.30410

SECTION 115 STOP WORK ORDER

[A] **115.1 Authority.** Where the *building official* finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the *building official* is authorized to issue a stop work order.

115.2 Issuance. Notice shall be in accordance with the act. A person who is served with a stop work order, except for work that the person is directed to perform to remove a violation or unsafe condition is subject to the penalty provisions prescribed in the act.

R 408.30411

[A] **115.3 Unlawful continuance.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

SECTION 116 UNSAFE STRUCTURES AND EQUIPMENT

[A] **116.1 Conditions.** Structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or that constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the *building official* deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

[A] **116.2 Record.** The *building official* shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

[A] **116.3 Notice.** If an unsafe condition is found, the *building official* shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the *building official* acceptance or rejection of the terms of the order.

[A] **116.4 Method of service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

[A] **116.5 Restoration.** Where the structure or equipment determined to be unsafe by the *building official* is restored to a safe condition, to the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions and change of occupancy shall comply with the requirements of Section 105.2.2 and the *International Existing Building Code*.

December 19, 2024
Project No. 210262

Rich Morrison
Community Development Director
City of Grand Ledge
310 Greenwood Street
Grand Ledge, MI 48837

Grand Ledge Iron Removal Plant Project – Intake Louver Code Review

The Dewitt Township Building Department provided the City of Grand Ledge (City) with a determination that the intake louver for the City's Iron Removal Plant project was in violation of Section 401.4 of the 2015 International Mechanical Code. Upon detailed review of the concerns raised and further discussion with the City, we take exception to the interpretation that the intake louver location is not compliant with the Building Code.

The location of the intake louver was selected, with consideration of code requirements and building purpose and use, to provide an efficient layout of the intake air components for construction and operation of the system. The building design and intake location was reviewed and approved by Dewitt Township Code officials during plan review.

The area within 10 feet of the intake is not designed for parking, loading, or vehicular traffic. The overhead door near this space is for removal of large equipment that can not otherwise be removed through a conventional door. Equipment removal would be infrequent, on the order of 10 years or more, and completed by forklift, for loading onto a trailer located in one of the driveway areas around the plant. Equipment removal and loading will not create an ongoing hazardous or noxious contaminant source. The intake location meets requirements for distance from the nearest marked parking space. The plant will not receive deliveries that would require use of the overhead door at the north end of the plant. The design of the site allows for deliveries to the south end of the building with access to the north side being limited for delivery trucks. The only deliveries are for chemicals which are delivered to the opposite side of the plant. The building design and the intake location was reviewed and approved by the Dewitt Township Code officials during plan review.

In an effort to address the concern about a vehicular parking/idling in front of the overhead door, the City proposed to paint pavement markings in front of the overhead door to indicate the area as a No-Parking space, including striping on the pavement and apron near the intake louver. The iron removal plant facility entrance is gated with access only allowed for City staff or approved visitors; it is not accessible to the public. This will allow the City to control access to the area in question.

Attached is a plan showing the no parking striping. The Dewitt Township Code officials rejected this proposed plan and are calling for installation of monitoring and alarms designated for enclosed parking garage structures. The City would like to appeal this determination.

If you have any questions or require additional information, please contact me at 616.464.3825 or cmccorkle@fishbeck.com.

Sincerely,



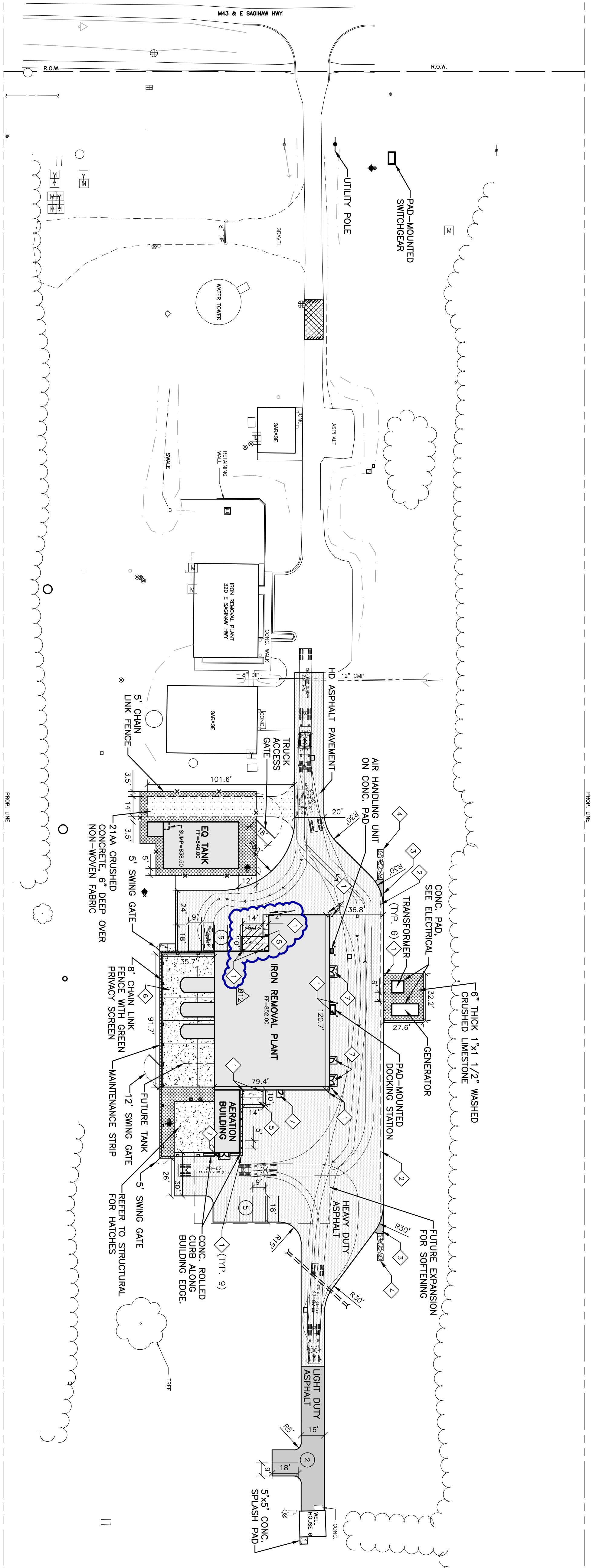
Colin G. McCorkle, PE

Senior Water and Wastewater Engineer

Attachment

By email

Copy: Kurt Ristow, Adam Smith – City of Grand Ledge



SITE LAYOUT PLAN
 SCALE: 1" = 40'
 0 20 40 80
 NORTH

SYMBOL LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- PROPOSED BUILDING
- GRAVEL AREA
- STONE MAINTENANCE STRIP
- 4" THICK CONCRETE SIREWALK
- EXPANSION JOINT
- STANDARD CURB AND GUTTER
- ROLLED CURB AND GUTTER
- PARKING SPACE COUNT
- SITE LIGHT POLE
- CHAIN LINK FENCE
- DECORATIVE FENCE

NOTES

1. DIMENSIONS ARE TO BACK OF CURB, OUTSIDE FACE OF BUILDING, AND EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
2. KEEP THE APPROVED AND MOST CURRENT SET OF PROJECT DRAWINGS ON SITE AT ALL TIMES. CONTRACTOR TO CONFIRM FILES ARE IN POSSESSION OF THE MOST CURRENT DRAWING.
3. RESTORE ALL LAWN AREAS WITH 4" TOPSOIL AND SEED.

KEY NOTES

1. BOLLARD - SEE DETAIL ON C501
2. ASPHALT ROLLED CURB
3. ASPHALT SPLIKWY/SCUPPER
4. RIPRAP
5. 7" THICK CONCRETE OVER 8" 21AA AGGREGATE
6. 4" THICK CONCRETE OVER 4" 21AA AGGREGATE
7. 7" THICK CONCRETE STOOP. SEE STRUCTURAL FOR DETAIL. DOUBLE DOOR STOOP DIMENSION: 5'x5'



City of Grand Ledge
 Eaton County, Michigan
Iron Removal Plant

REVISIONS	DATE	BY	DESCRIPTION
1	11/12/2022	AT	ADDITIONAL NO. 1
2	4/15/2024	B88	BUCKET NO. 9
3	6/18/2024	B108	BUCKET NO. 10
4	11/05/2024	B11	(REVISED)
5	12/10/2024	B12	BUCKET NO. 12

11/12/2022	BIDS AND CONSTRUCTION
Drawn By	BEV
Designer	BEV
Reviewer	ROM
Manager	DLB

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
210262
 SHEET NO.

C201