



DEPARTMENT OF
**Planning &
Development**

Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 808
Detroit, Michigan 48226

Phone: 313.224.1339
Fax: 313.224.1310
www.detroitmi.gov/pdd

☐ **APPROVED**

☐ **APPROVED WITH CHANGES NOTED**



REVISE AND RESUBMIT

☐ **REJECTED**

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CITY OF DETROIT DESIGN GUIDELINES. THE APPLICANT IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, AS WELL AS COORDINATION OF THE WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL BUILDING CODES AND REGULATIONS.

STAFF BRIEF

This document is the staff's comparison of the City of Detroit Design Review Guiding Principles, Design Guidelines for City of Detroit Zoning Ordinance and other applicable adopted area guidelines as applied to the proposed application. It is intended to provide guidance during the City Planning and Development Design Review of the proposed application.

Date: 07/29/2021

Project: GLWA Freud Pump Station

Design Review Meeting: PPR 07/13/2021

Address: 1200 Freud Street

Staff: Russell Baltimore (baltimorer@detroitmi.gov), Julio Cedano (CedanoJ@detroitmi.gov)

Year structure built: NA

Applicant: Todd King, todd.king@glwater.org

Project Scope Under Review: New Construction

Project Summary:

From the developer:

Project goal is to protect the health, safety and welfare of residents served by improving operability, reliability and maintainability of Freud PS.

- **Isolation of Wet Well** –Provide the ability to safely and reliably isolate the Pump Station wet well to allow draining, cleaning, inspection and maintenance.
 - Currently no means to prevent flow from entering the station
- **Equipment Removal Safety** –Enhance removal of pumps, motors, and other major mechanical or electrical equipment.

Design Review Guiding Principles:

- ✓ IN COMPLIANCE
- ✗ NOT IN COMPLIANCE
- ⊘ NOT APPLICABLE
- 🔄 MORE INFORMATION NEEDED

- ⊘ **Historic Preservation:** The intent of development is to preserve existing structures and compliment the urban fabric through a thoughtful and intentional approach to design.

- 🕒 **Activate the Public Realm:** All projects shall build upon the walkable environment, providing a transparent and interactive building frontage and ground level meant to intrigue pedestrians through design and active uses.
- 🕒 **Appropriate Density:** Any new building shall be appropriate in scale with surroundings.
- 🕒 **Building Form and Material:** The site shall incorporate sound urban design and established development principles. The built environment shall provide interesting building typologies of varied architectural styles and compliment, not mimic, the nature of the existing urban fabric.
- ✗ **Maintain/Integrate the Street Grid:** Many city blocks have been combined into superblocks or developments built facing inwards. The goal is for new development to be directly integrated into the existing street grid - not to create an isolated development site.
- 🕒 **Street Frontage:** All new construction shall be designed along the front lot line of the property adjacent to the public right-of-way. Parking shall not be provided between the building frontage and the street edge.
- 🕒 **Pedestrian Experience:** Where appropriate, alleyways will serve as the main point of automotive ingress and egress. Curb cuts onto public right-of-way will be minimized or obsolete in order to provide a safe, walkable, pedestrian oriented street design.
- 🕒 **Parking and Access:** All on-site parking shall be appropriately landscaped or be screened from view, preferably developing parking lot edges of the site with new construction in order to shield the parking from view.
- 🕒 **Buffering:** Expand the use of green belts and natural buffer zones to protect residential areas from commercial and industrial areas which are environmentally detrimental to nearby residential neighborhoods. Minimize and screen outdoor storage and work areas.

Design Review notes:

The development team needs to provide more information. The applicant needs to submit a full Conceptual Design Package that includes but is not limited to:

- Site Location Map
- Existing Site Survey with an aerial photo of the development site
- Site Land Use Map (showing surrounding context, identifying any historic buildings and with adjacent building heights)
- Zoning Analysis –identifying zoning district info, parking requirements, setbacks, etc.
- Building Code Summary
- Conceptual Site & Landscape Plan –including conceptual stormwater and green roof design
- Conceptual Floor and Roof Plans
- Conceptual Exterior Elevations showing material scope, pattern & transitions (with images of proposed design within the context of the adjacent buildings, if any, and the neighborhood)
- Conceptual Building Section –thru the building showing the street and parking lot
- Conceptual 3D Massing Views of the proposed development and surrounding context
- At least one Conceptual 3D Rendered View that shows the desired end result or design intent of the development
- Conceptual Exterior Material Palette with sample images illustrating finish and desired texture

General Notes:

- Thoroughly explore other options to realigning Freud Street.
- Adhere to zoning requirements (setbacks, use, parking, etc.).
- Follow design standards for parking lots outlined in the zoning ordinance (including paving surfaces, interior landscaping, screening, etc.).
- Hire an architect to design the structure.
- Hire a landscape architect to design the site improvements and amenities.
- Identify a clear strategy for buffering this utility structure from the surrounding residential district.

SEE ATTACHED DESIGN SUBMITTAL PACKAGE MARK-UP FOR ADDITIONAL COMMENTS.

FREUD PUMP STATION IMPROVEMENTS

FREUD ISOLATION SHAFT & MAINTENANCE BUILDING

GLWA CONTRACT NO. CS-120

June 22, 2021

Freud Pump Station Overview

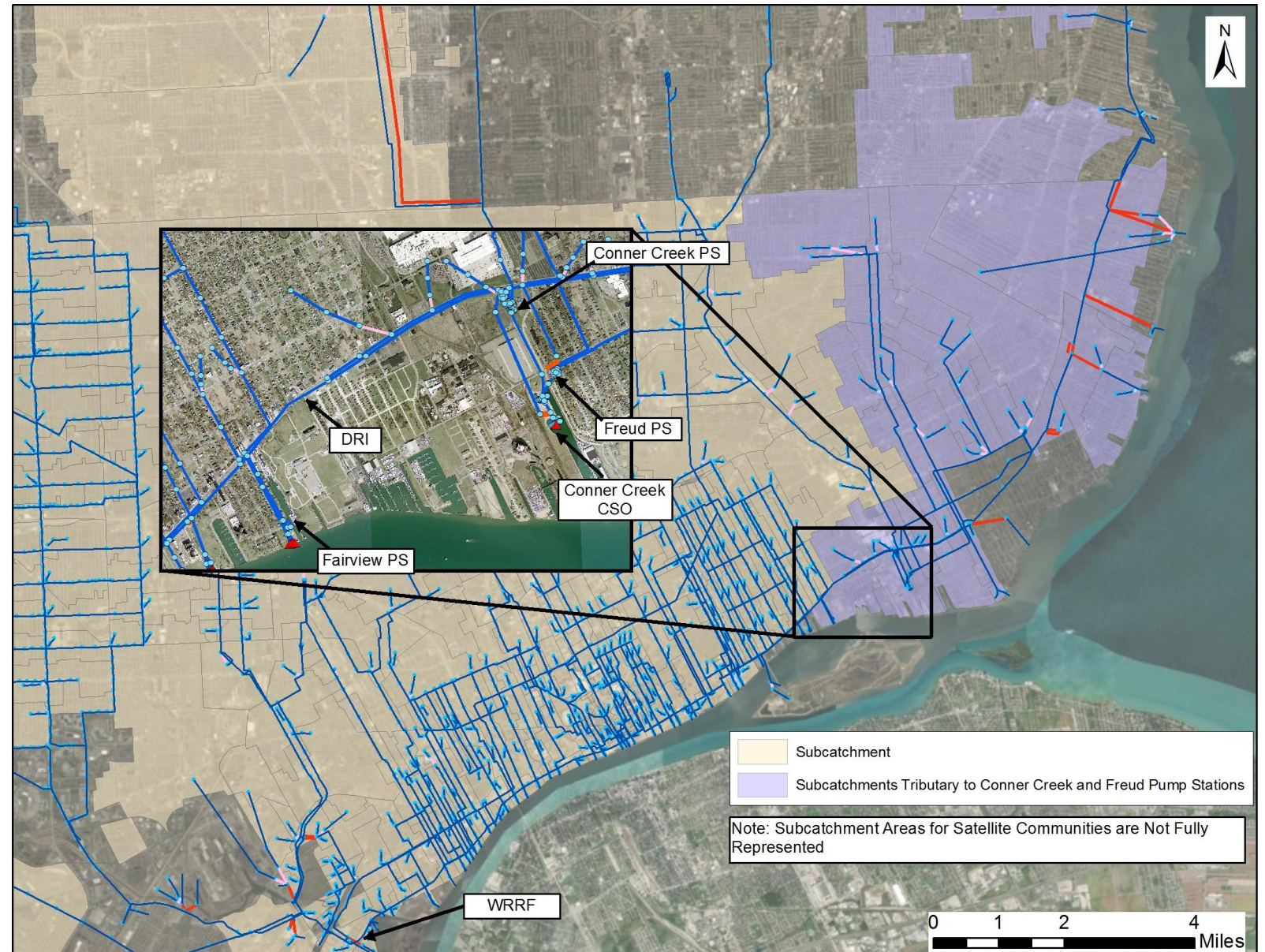
Freud Pump Station – Current Operation



- Located at 12300 Freud Street, Detroit MI 48215
- Constructed for Detroit DPW in 1954
- Manages both sanitary and storm water flows
- Sanitary: (2) Pumps; 13 and 25 MGD
 - Discharge to 5' diameter sewer on Tennessee St.
- Storm Water: (8) Pumps; 290 MGD each
 - Discharges to the Conner Creek CSO Facility

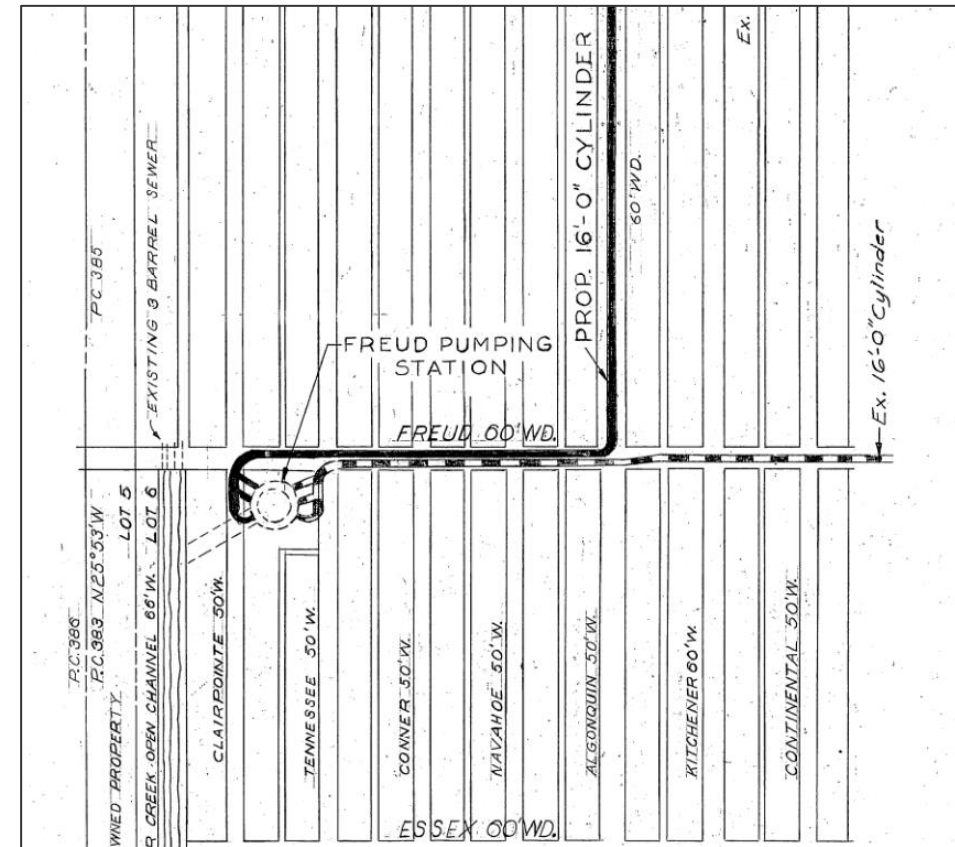
Service Area

- Population served
~263,400

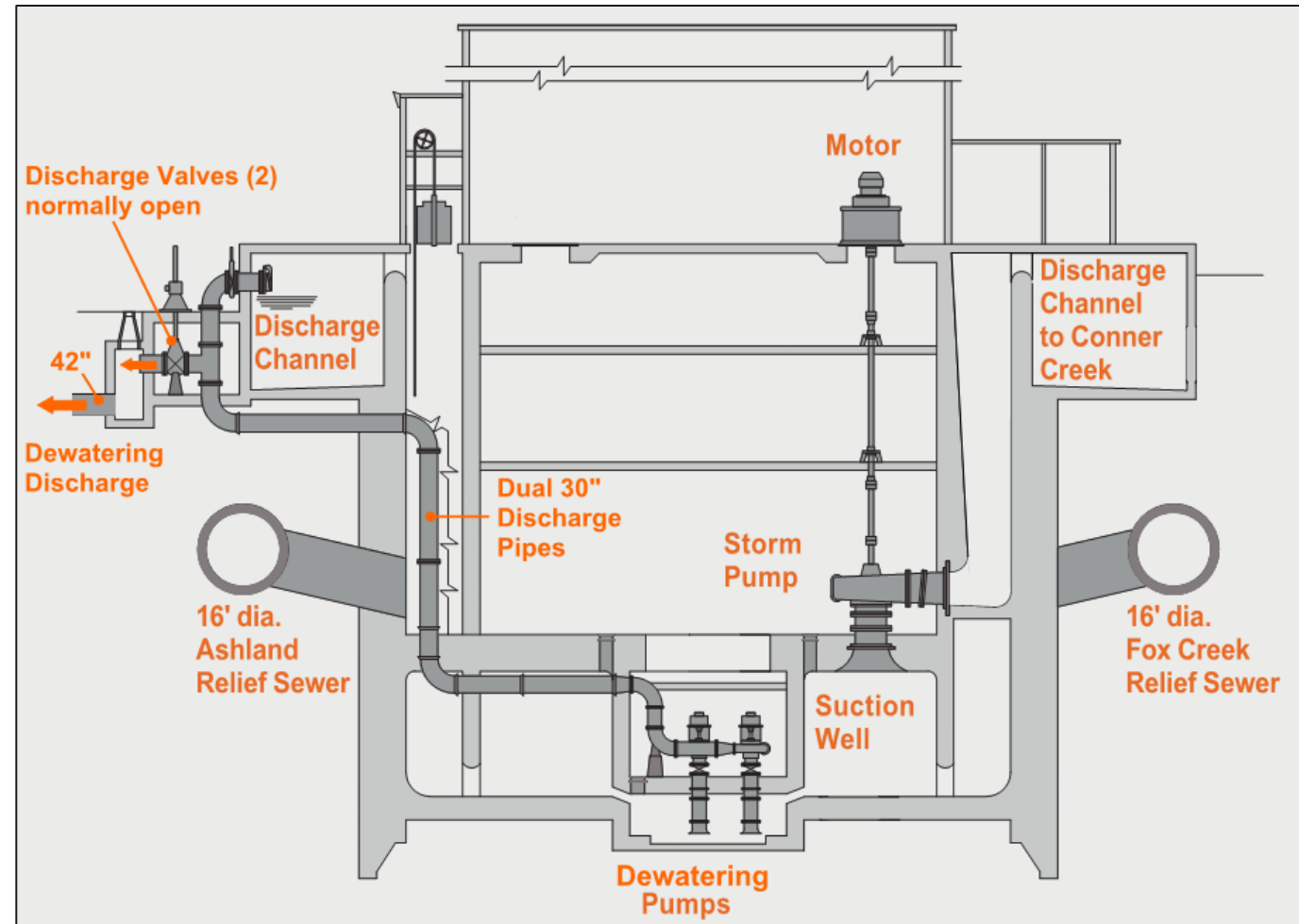
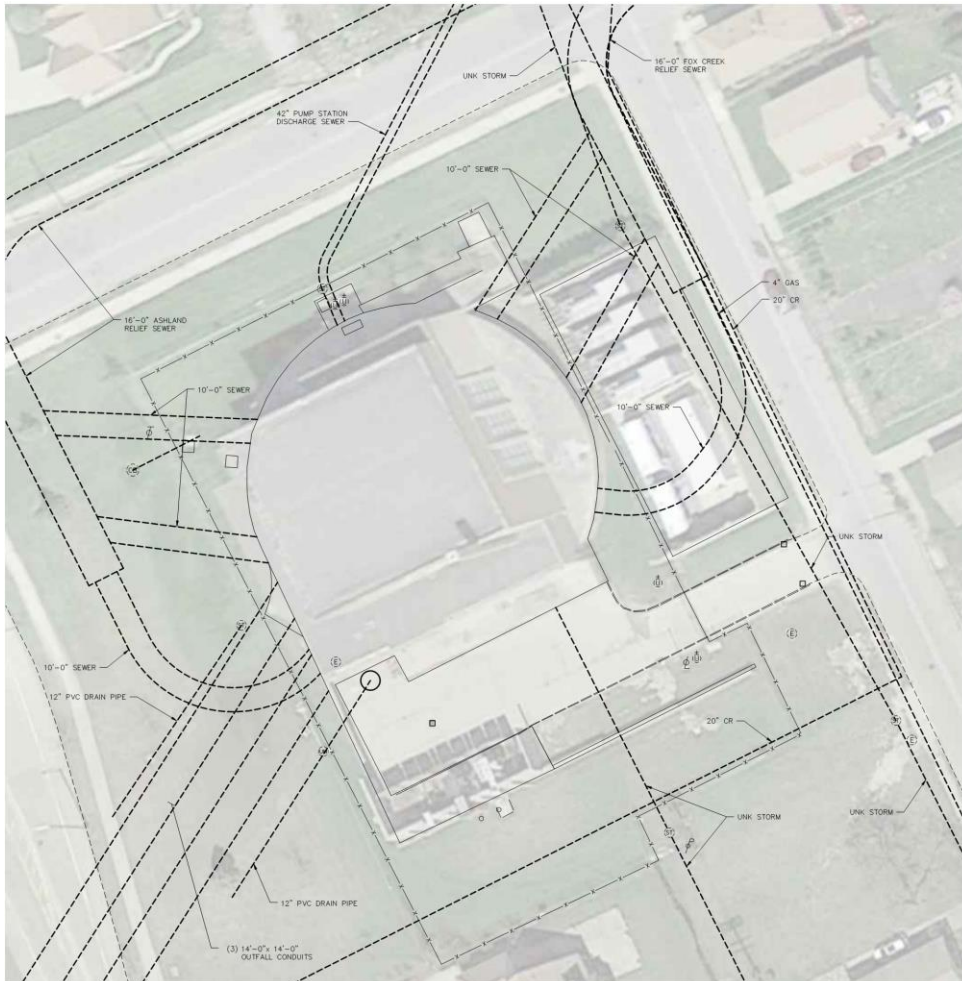


Freud PS Influent Sewers

- 16-ft diameter Ashland Relief Sewer
- 16-ft diameter Fox Creek Relief Sewer
- Approx. 55-ft deep
- Constructed for Detroit DPW in 1950's
- Parallel between Conner St and Algonquin St.
- Each branches into three 10-ft diameter sewers at Freud PS



Freud PS General Layout



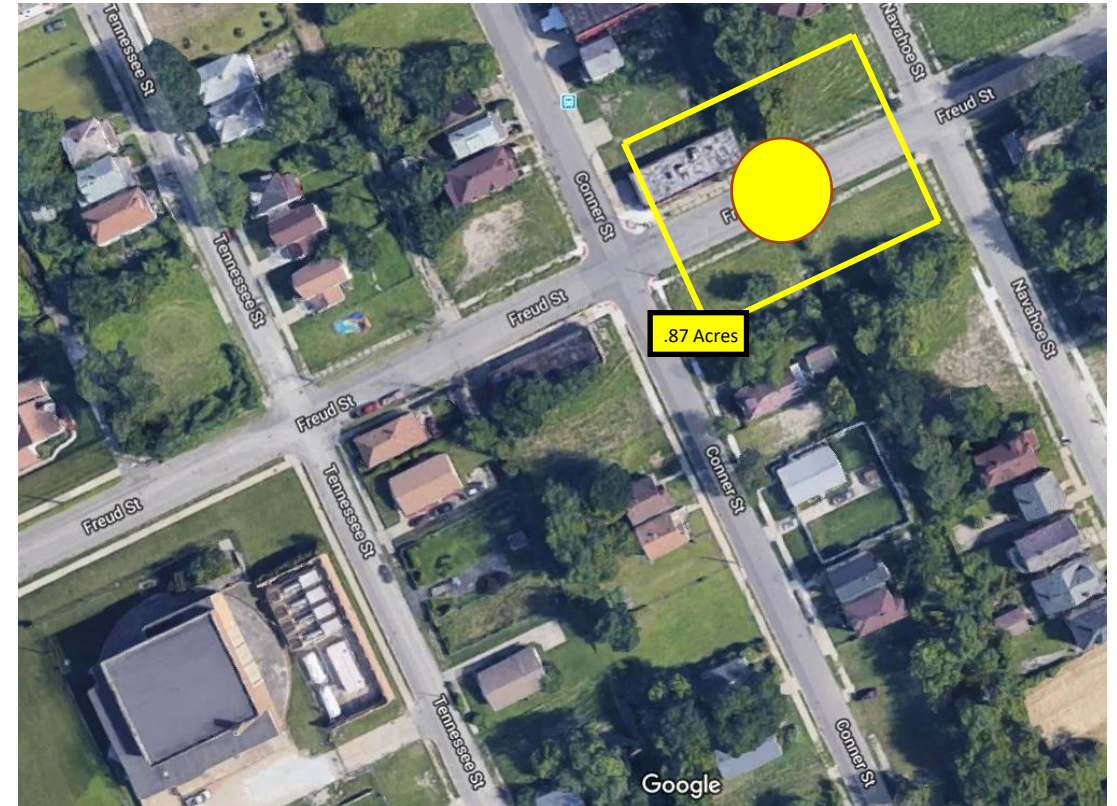
Project Needs and Purpose

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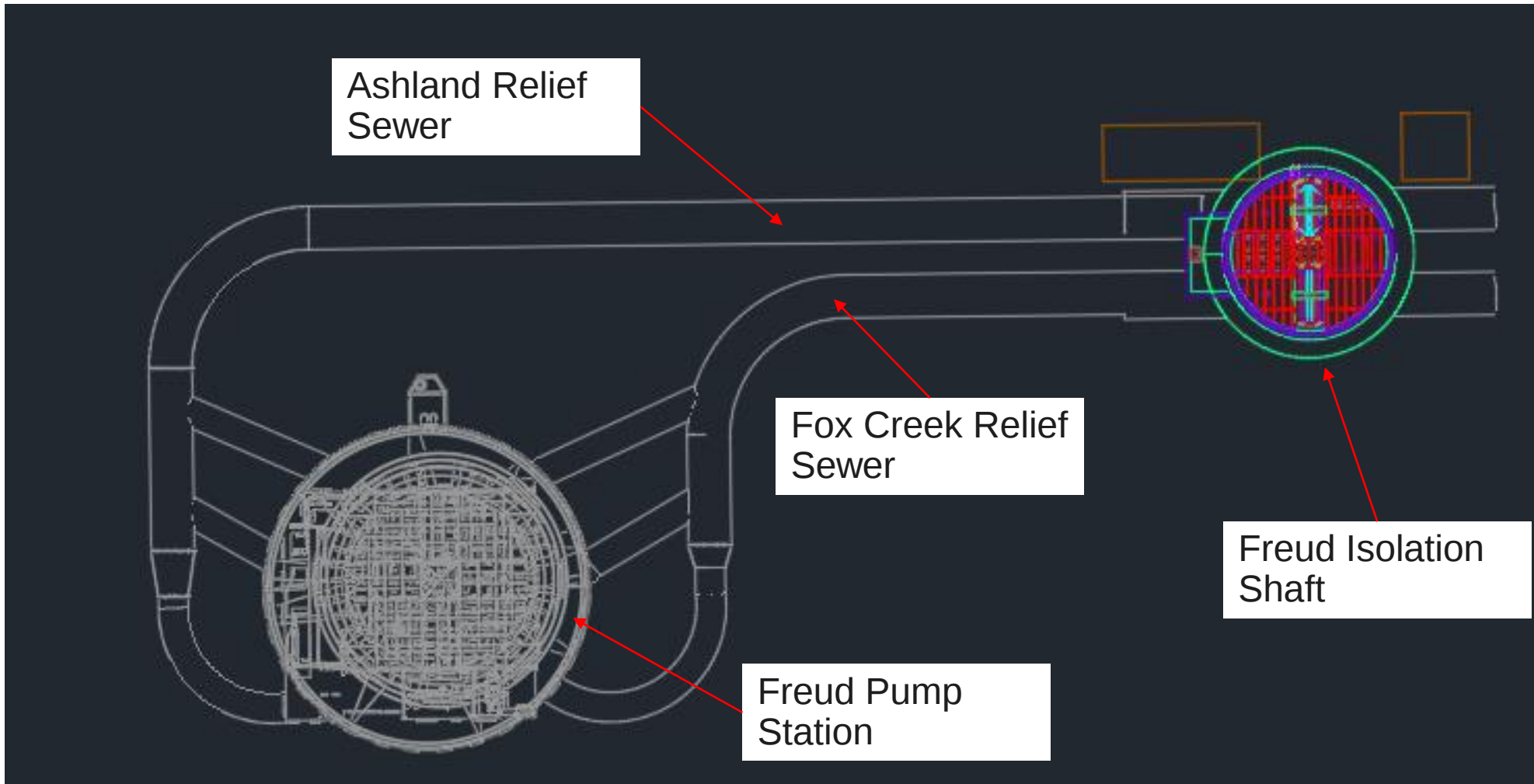
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Freud Isolation Shaft

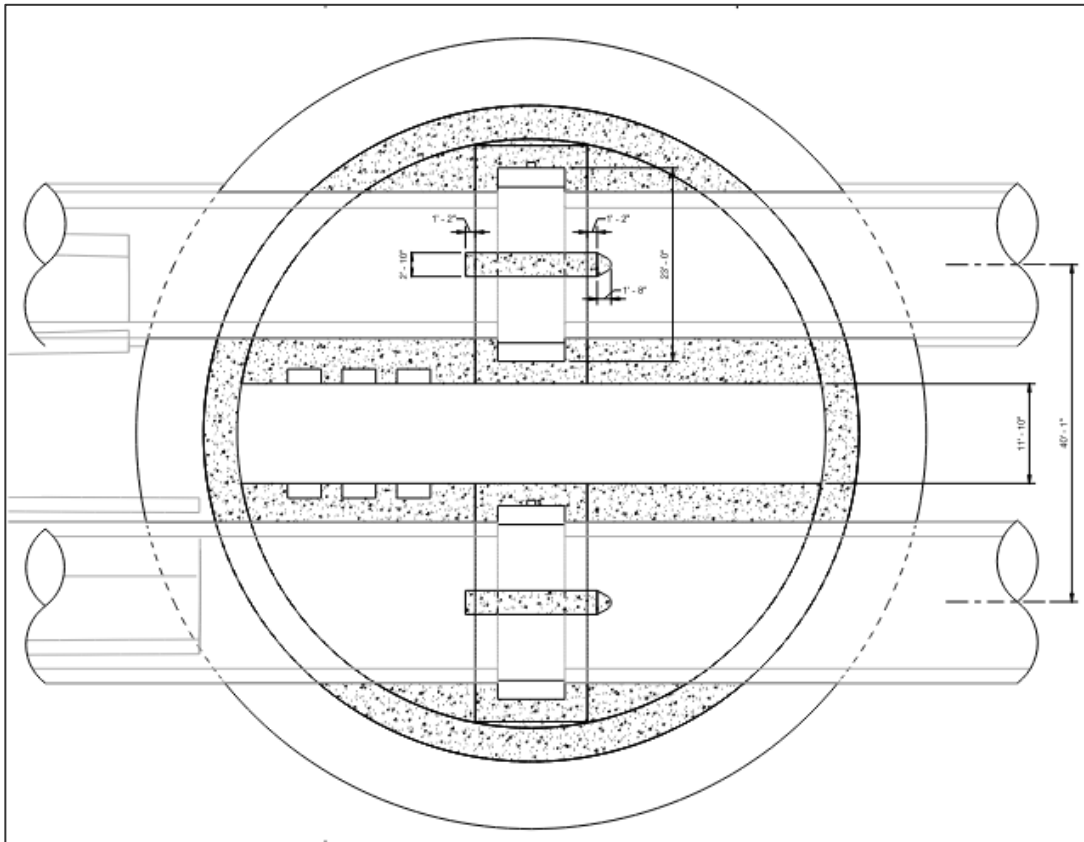
- One common isolation shaft for both 16 ft diameter relief sewers
- Isolation gates within shaft to isolate the Freud Pump Station
- Isolation shaft will be located a block and a half east of the Freud Pump Station
- Manage dry weather flow



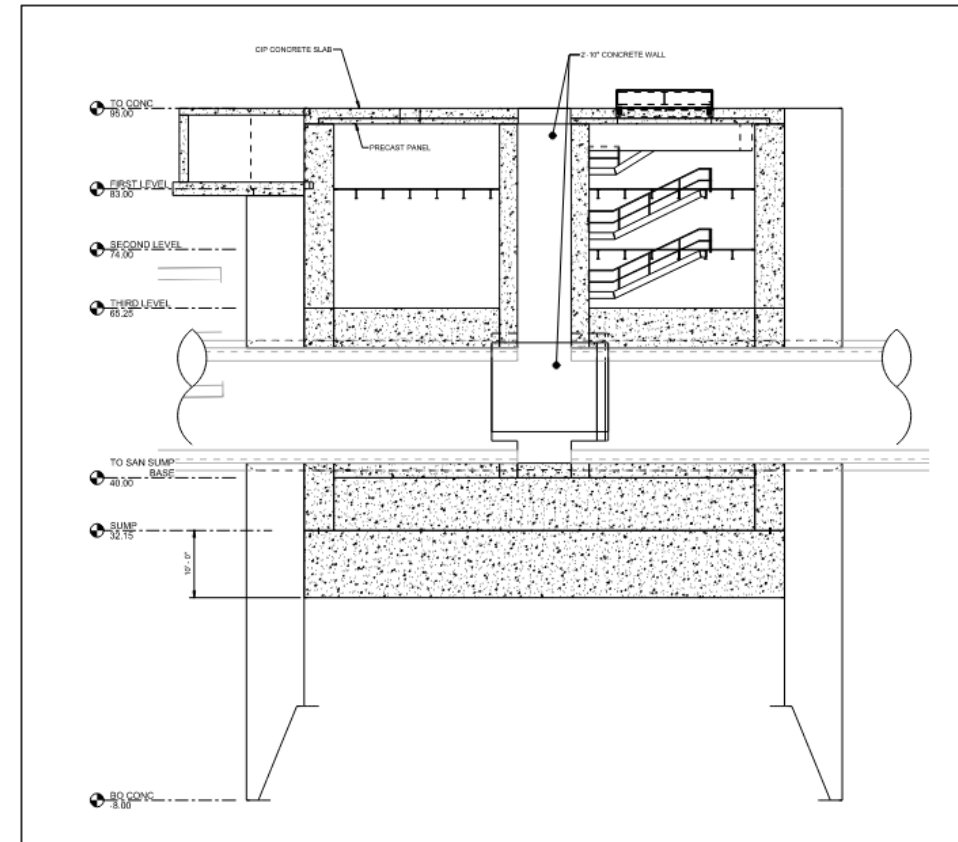
Freud Isolation Shaft



Freud Isolation Shaft



- ~70-ft ID
- ~95-ft OD
- (6) sanitary pumps
- (4) isolation gates



- ~80-ft deep

Freud St Realignment

****ENGAGE A LANDSCAPE ARCHITECT/DESIGNER TO HELP FIND AN APPROPRIATE WAY TO REALIGN FREUD AND PROVIDE AN APPROPRIATE AMOUNT OF VEGETATIVE BUFFERING.**

Freud St. Realignment

THE LEAST EXPENSIVE OPTION IS NOT NECESSARILY THE BEST OPTION. EXPLORE OTHER ALTERNATIVE TO RE-ROUTING FREUD STREET.

PROVIDE A LARGER SETBACK AND MORE LANDSCAPE IMPROVEMENTS AND SCREENING ALONG FREUD STREET. PUBLIC UTILITIES ARE REQUIRED TO HAVE A 15' SIDEYARD AND A 20' FRONT YARD SETBACK IN R2 DISTRICTS.

PROVIDE MORE LANDSCAPE
IMPROVEMENTS AND SCREENING
ALONG CONNER.

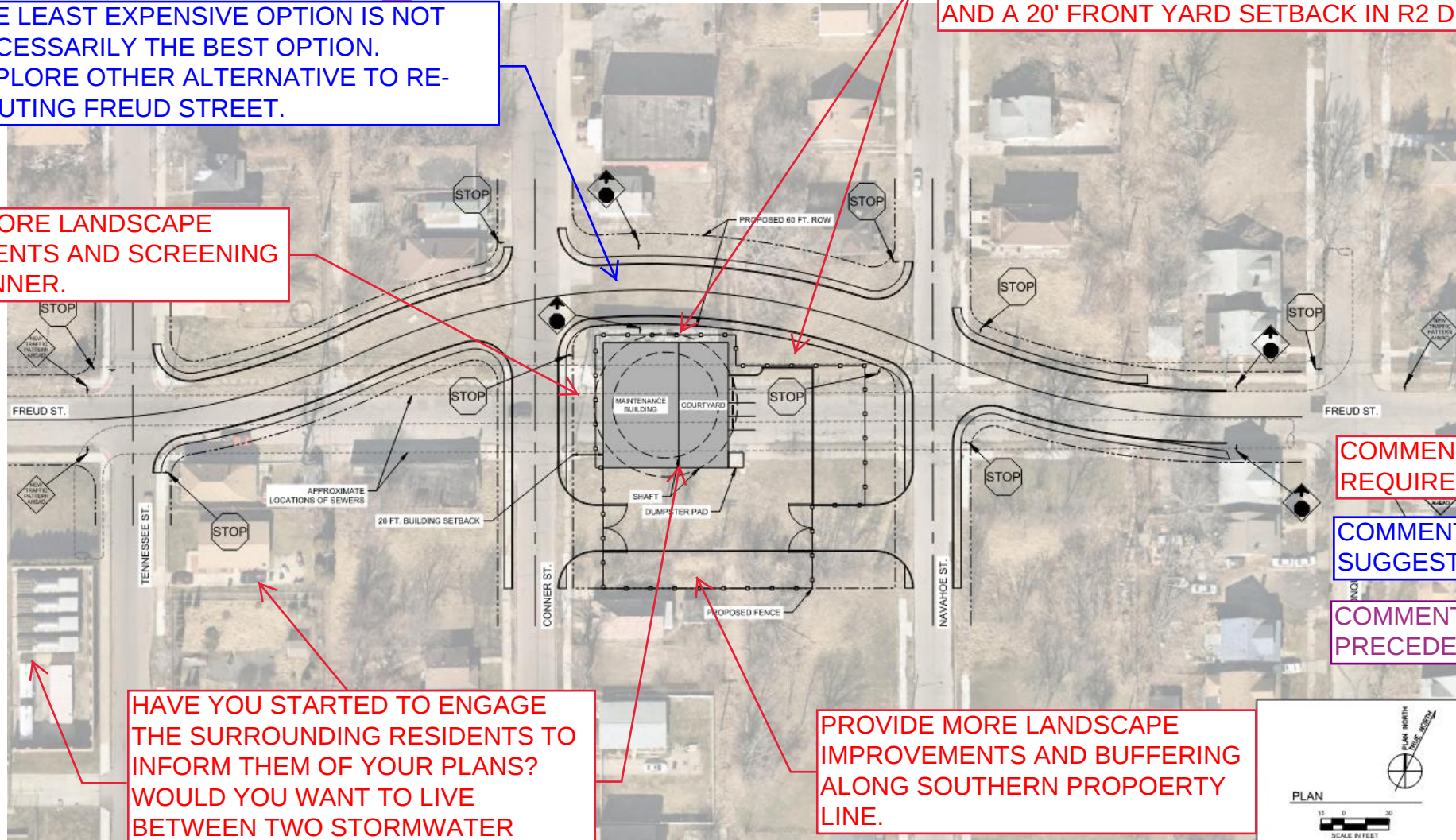
COMMENTS IN RED ARE
REQUIRED CHANGES

COMMENTS IN BLUE ARE
SUGGESTED CHANGES

COMMENTS IN PURPLE ARE PRECEDENT EXAMPLES

HAVE YOU STARTED TO ENGAGE THE SURROUNDING RESIDENTS TO INFORM THEM OF YOUR PLANS? WOULD YOU WANT TO LIVE BETWEEN TWO STORMWATER UTILITY STRUCTURES?

PROVIDE MORE LANDSCAPE
IMPROVEMENTS AND BUFFERING
ALONG SOUTHERN PROPERTY
LINE.



Freud Isolation Shaft Maintenance Building – Draft Renderings



IF YOU LIVED IN ONE OF THESE NEIGHBORING HOUSES, WHAT WOULD YOU WANT TO SEE HAPPEN WITH THIS STRUCTURE?



RELY ON THE ENGINEERS TO DESIGN THE SYSTEMS AND HIRE AN ARCHITECT TO DESIGN THE STRUCTURE.

COMMENTS IN RED ARE REQUIRED CHANGES

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FREUD ISOLATION SHAFT MAINTENANCE BUILDING
 GLWA
 DRAFT RENDERING 6-10-21

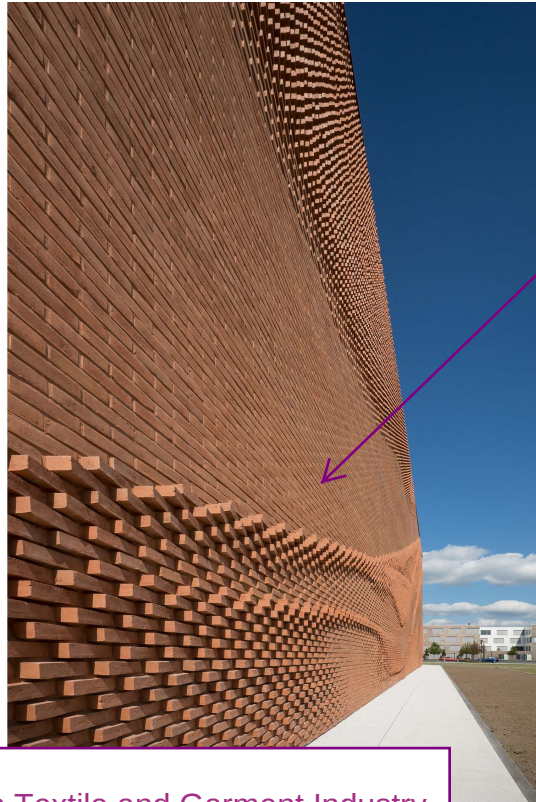
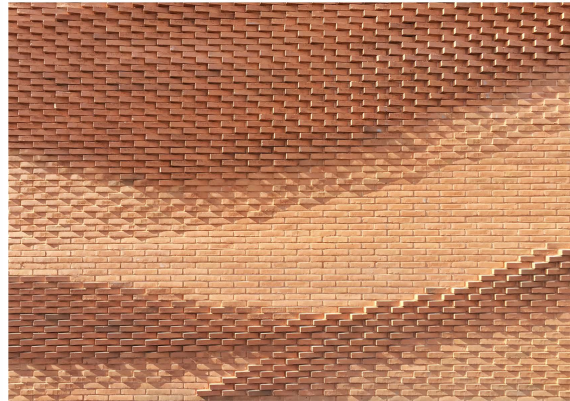
ARCADIS




Leers Weinzapfel Associates
ChilledWaterPlant



WITH THE RIGHT AMOUNT OF GREEN SPACE AND SITE AMENITIES, THIS BUILDING DOESN'T HAVE TO BE A NEGATIVE ADDITION TO AN AREA.



Behet Bdzio Lin Architects
Association of the Northwest German Textile and Garment Industry



WITH THE RIGHT AMOUNT OF PLANNING AND CREATIVE THINKING, EVEN A MUNDANE, BOX-SHAPED STRUCTURE CAN BE QUITE EXCEPTIONAL.

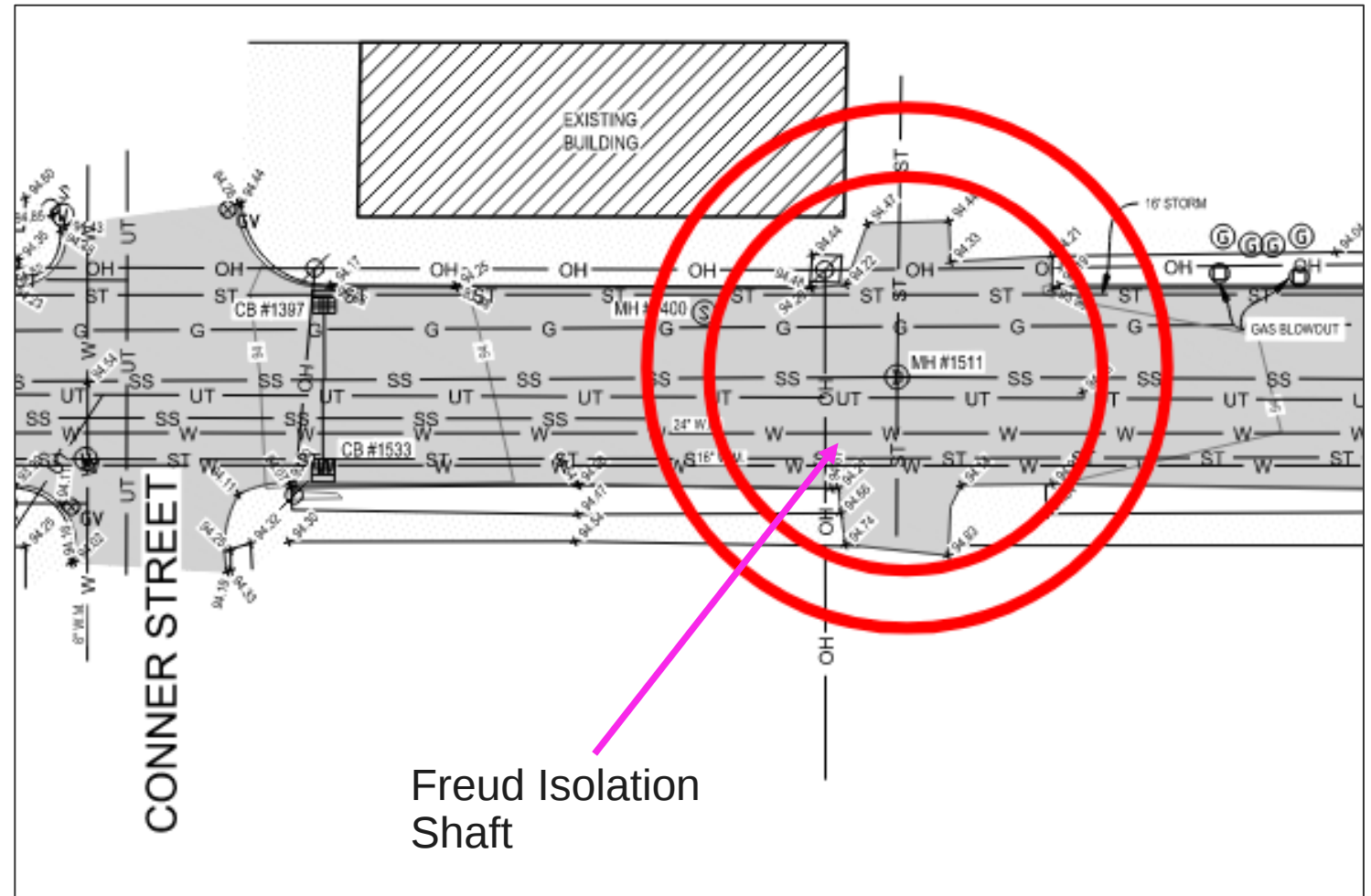
Proj3ct
CARCEMAL CLOTHING FACTORY

PRECEDENT EXAMPLES
FOR INSPIRATION ONLY

Utility Relocation

Utility Relocation

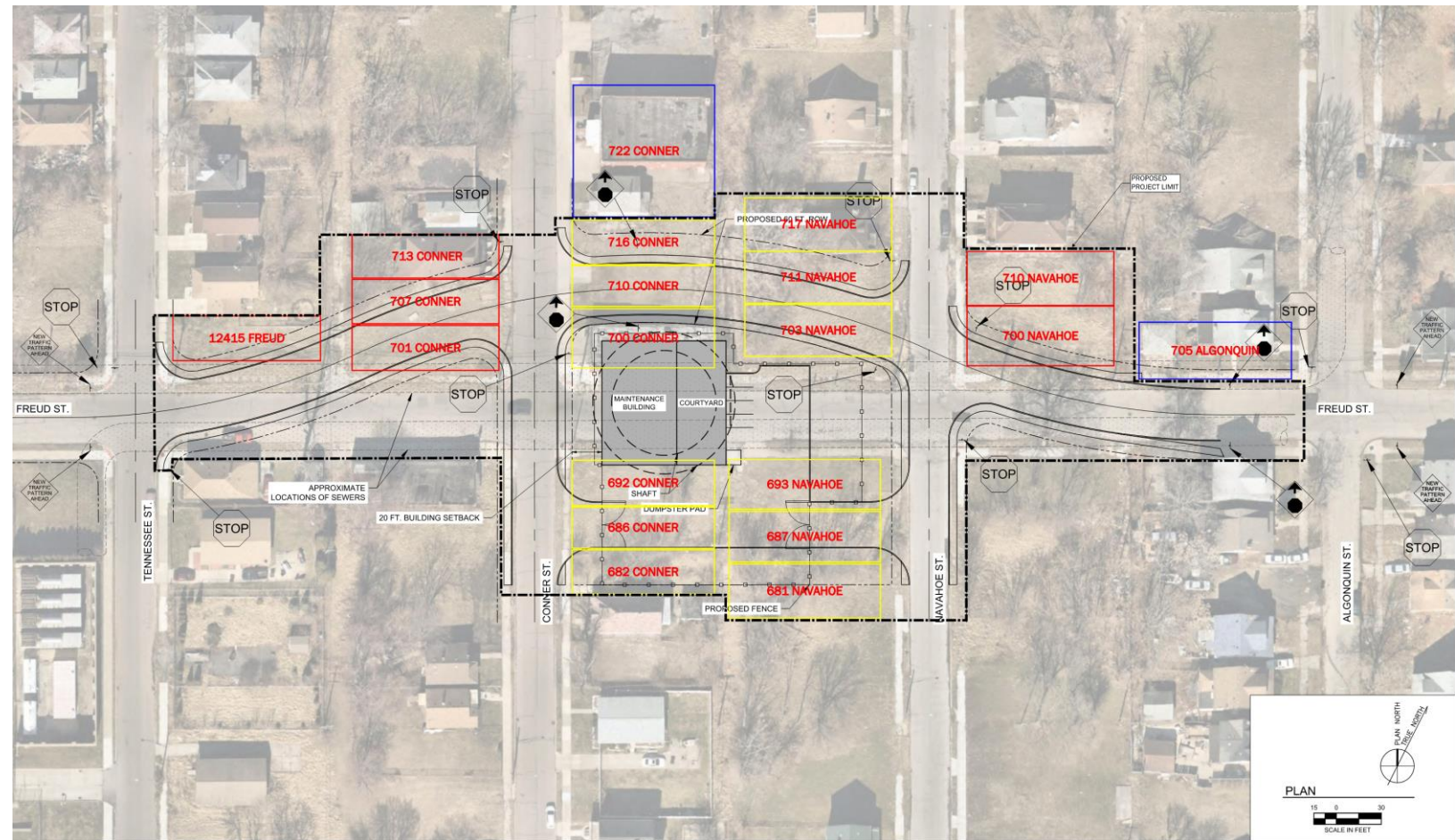
- Underground and overhead utilities will need to be relocated
- Utilities will be located and confirmed prior to intrusive work



Land Acquisition

Properties Required

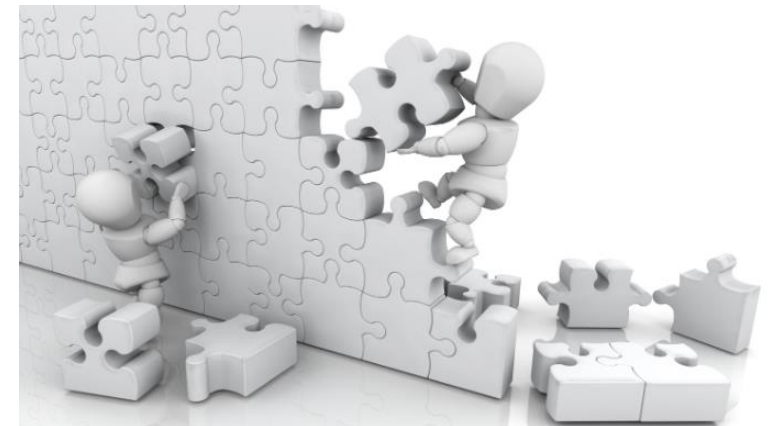
- At a minimum 18 properties are required to construct the new Freud Isolation Shaft
- Most properties that are required are either empty lots or abandoned structures



Project Schedule

Project Schedule

- Property Acquisitions to Begin – Summer 2021
- Property Boundary Surveys – Fall 2021
- Final Design Completed – Winter 2021
- Construction Bidding and Negotiations – Spring 2022
- Construction to Start – Fall 2022



Questions/Discussion

