



EAST BAY DISCHARGERS AUTHORITY  
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San Lorenzo, CA 94580-1841  
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*A Joint Powers Public Agency*

NOTICE: In compliance with AB 361 (2021), the Operations & Maintenance Committee meeting scheduled below will be accessible via Zoom video conferencing. Members of the public may participate in the meeting through the Zoom link or phone number below.

- Zoom link: <https://us02web.zoom.us/j/84250769407>
- Telephone dial-in: 1(669) 900-6833, meeting ID #842 5076 9407

## **ITEM NO. 12**

### **OPERATIONS & MAINTENANCE COMMITTEE AGENDA**

**Tuesday, April 19, 2022**

**9:00 A.M.**

**East Bay Dischargers Authority  
2651 Grant Avenue, San Lorenzo, CA 94580**

**Committee Members: Toy (Chair); Cutter**

**OM1. Call to Order**

**OM2. Roll Call**

**OM3. Public Forum**

**OM4. EBDA Permit Compliance**

(The Committee will be updated on EBDA's NPDES compliance.)

**OM5. Status Report**

(The Committee will be updated on EBDA's O&M activities.)

**OM6. Adjournment**

Any member of the public may address the Commission at the commencement of the meeting on any matter within the jurisdiction of the Commission. This should not relate to any item on the agenda. It is the policy of the Authority that each person addressing the Commission limit their presentation to three minutes. Non-English speakers using a translator will have a time limit of six minutes. Any member of the public desiring to provide comments to the Commission on an agenda item should do so at the time the item is considered. It is the policy of the Authority that oral comments be limited to three minutes per individual or ten minutes for an organization. Speaker's cards will be available in the Boardroom and are to be completed prior to speaking.

In compliance with the Americans with Disabilities Act of 1990, if you need special assistance to participate in an Authority meeting, or you need a copy of the agenda, or the agenda packet, in an appropriate alternative format, contact Juanita Villasenor at [juanita@ebda.org](mailto:juanita@ebda.org) or (510) 278-5910. Notification of at least 48 hours prior to the meeting or time when services are needed will assist the Authority staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting or service.

Agenda Explanation  
East Bay Dischargers Authority  
O&M Agenda  
April 19, 2022

In compliance with SB 343, related writings of open session items are available for public inspection at East Bay Dischargers Authority, 2651 Grant Avenue, San Lorenzo, CA 94580. For your convenience, agenda items are posted on the East Bay Dischargers Authority website located at <http://www.ebda.org>.

**The next O&M Committee meeting will be held  
Tuesday, May 17, 2022, at 9:00 a.m.**

**ITEM NO. OM4 EBDA PERMIT COMPLIANCE**

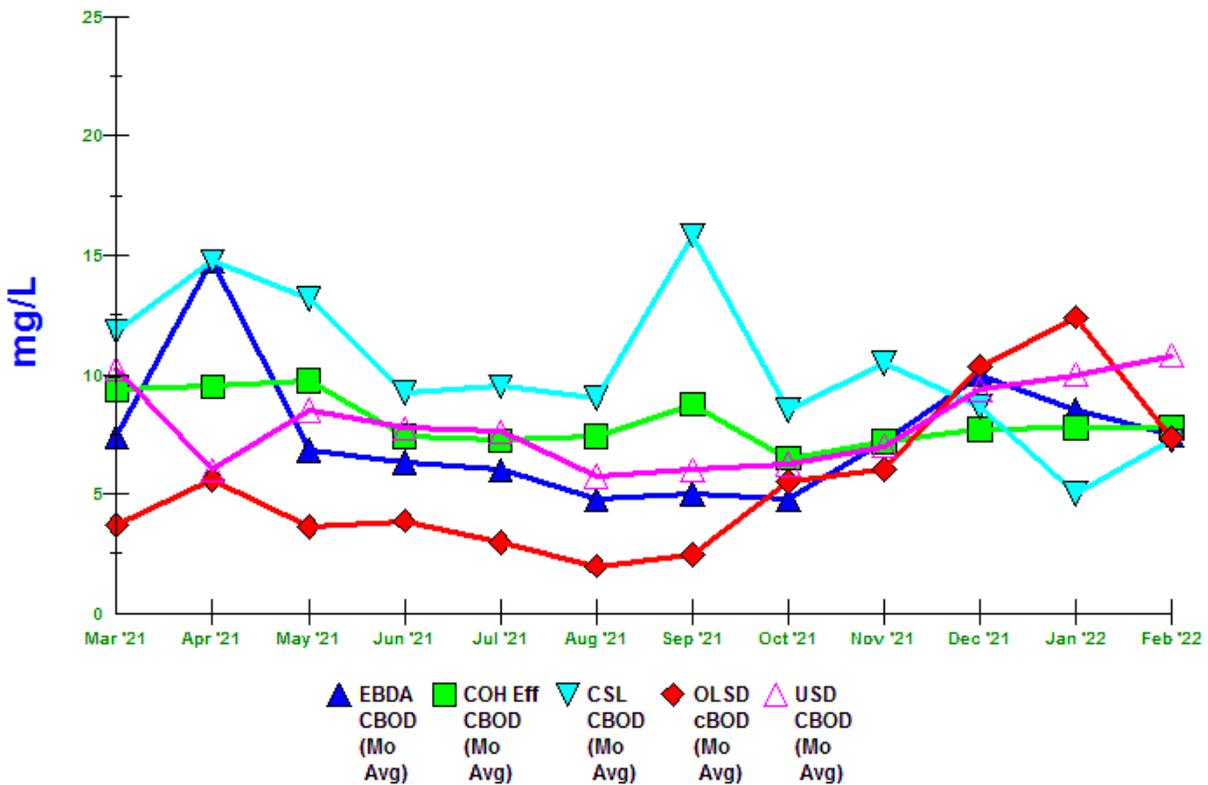
**Recommendation**

For the Committee’s information only; no action is required.

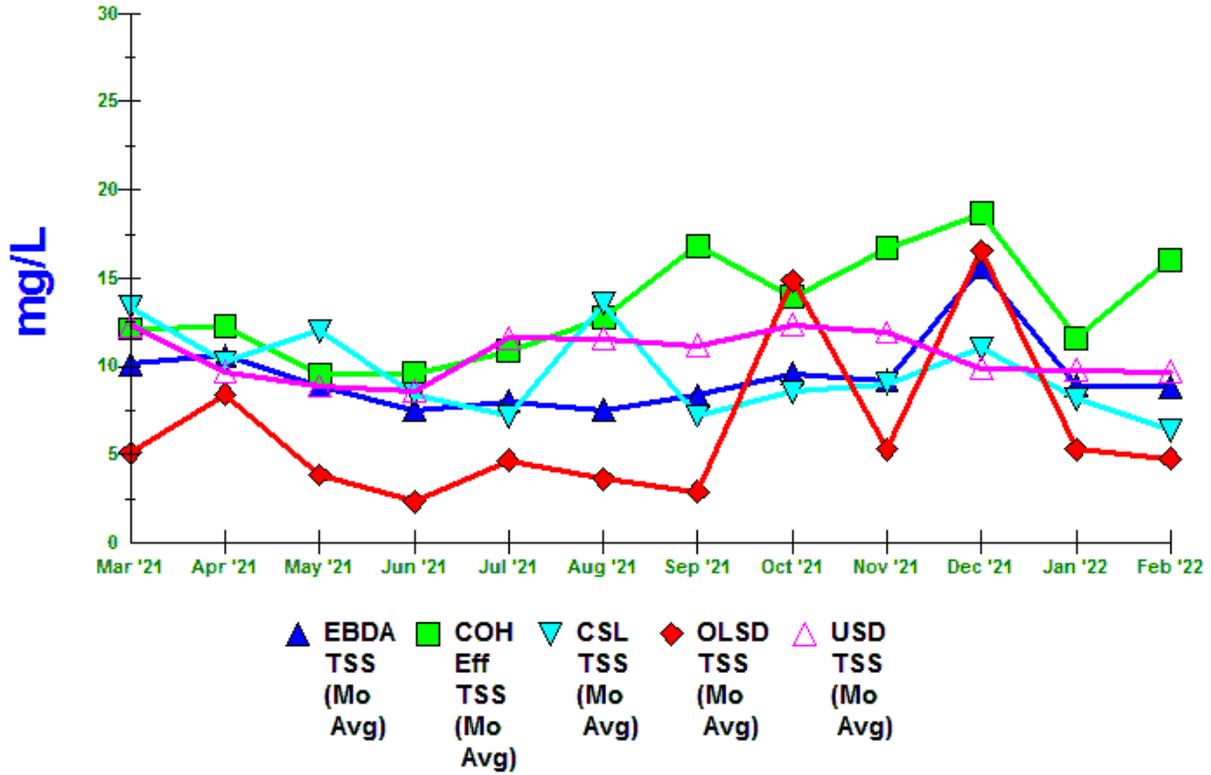
**Discussion**

There were no NPDES permit violations in February, and preliminary data from March are also free of permit exceedances. Member Agency CBOD and TSS performance are shown below. A table with bacterial indicators is also included.

**EBDA CBOD (Limit=25 ppm)**



## EBDA TSS (Limit 30 ppm)



EBDA EFF TSS

## EBDA Bacterial Indicators

Date	FECAL	ENTERO
	MPN/ 100mL	MPN/ 100mL
Limit (90th Percentile)	1100	
Limit (Geomean)	500	240
<b>April 2021 Geomean</b>	<b>13</b>	<b>3</b>
<b>May 2021 Geomean</b>	<b>10</b>	<b>6</b>
<b>June 2021 Geomean</b>	<b>13</b>	<b>4</b>
<b>July 2021 Geomean</b>	<b>11</b>	<b>2</b>
<b>August 2021 Geomean</b>	<b>52</b>	<b>32</b>
<b>September 2021 Geomean</b>	<b>26</b>	<b>10</b>
<b>October 2021 Geomean</b>	<b>33</b>	<b>4</b>
<b>November 2021 Geomean</b>	<b>13</b>	<b>8</b>
<b>December 2021 Geomean</b>	<b>22</b>	<b>8</b>
<b>January 2022 Geomean</b>	<b>4</b>	<b>2</b>
2/1/2022	2	2
2/2/2022	2	6
2/7/2022	3	< 2
2/8/2022	2	2
2/9/2022	11	27
2/14/2022	360	6
2/15/2022	13	21
2/16/2022	4	2
2/21/2022	6	6
2/22/2022	11	11
2/28/2022	2	8
<b>February 2022 Geomean</b>	<b>6</b>	<b>6</b>
3/1/2022	11	10
3/2/2022	< 2	2
3/7/2022	5	4
3/8/2022	< 2	6
3/9/2022	2	4
3/14/2022	10	< 2
3/15/2022	22	3
3/21/2022	9	6
3/22/2022	< 2	2
3/28/2022	154	< 2
3/29/2022	8	5
<b>March 2022 Geomean</b>	<b>7</b>	<b>4</b>

## **ITEM NO. OM5 STATUS REPORT**

### **Union Effluent Pump Station (UEPS)**

No change; all equipment is operational.

### **Hayward Effluent Pump Station (HEPS)**

#### **Effluent Pump Replacement Project**

Project bid documents are still under review. Staff expects the project to go out to bid shortly, with installation of the new pumps occurring in late-2022.

### **Oro Loma Effluent Pump Station (OLEPS)**

#### **Emergency Outfall Evaluation**

EBDA staff is working with Carollo Engineers (Carollo) on an evaluation of the OLEPS emergency outfall. The purpose of the evaluation is to determine the outfall's maximum capacity and whether modifications to the outfall weir would increase system detention time and delay or prevent an unanticipated bypass in the event of a catastrophic failure at OLEPS. The report was completed on March 28, 2022. The findings will be presented at the April MAC Meeting, and recommendations will subsequently be discussed with this Committee and the Commission.

#### **Main Electrical Switchboard Upgrade**

With the start of the wet weather and manufacturing delays due to the pandemic, the installation of the new breakers has been postponed until Summer 2022.

### **Skywest Pump Station**

#### **Recycled Water Production**

The Skywest Recycled Water System did not produce any recycled water during the month of March 2022.

### **Marina Dechlorination Facility (MDF)**

#### **Total Residual Chlorine (TRC) Effluent Limit Implementation and Automation Upgrades**

As discussed previously, the Regional Water Quality Control Board recently adopted a blanket permit amendment revising the TRC effluent limits for all wastewater dischargers to San Francisco Bay. The permit amendment raises EBDA's TRC effluent limit from 0.0 mg/L at all times to 0.98 mg/L measured as a one-hour average. It is expected to take effect in the next few months as soon as the EPA approves the underlying Basin Plan Amendment. Work continues on the programmable logic controller (PLC) programming and control system modifications necessary to implement this new effluent limit. Staff is also working with Calcon to update the spreadsheets used for compliance reporting and data management.

## **Force Main**

### **Development Along the EBDA Force Main Easement**

As discussed in February, EBDA was contacted regarding site development on the EBDA force main easement in Hayward. The preliminary design called for parking spaces over the EBDA easement and a warehouse constructed 100 feet away from the EBDA force main. This design is consistent with development directly to the north of this site and in other areas of the easement. Staff contracted with DCM Consulting, Inc. (DCM) to prepare a Technical Memorandum (TM) that included recommendations and requirements for the site development. DCM has performed this type of geotechnical engineering review for EBDA in the past and has also worked with EBDA's Member Agencies. The TM prepared by DCM and forwarded to the site development engineering firm is attached at the end of the O&M status report.

After discussions with EBDA and the City of Hayward staff, the project developer has agreed not to develop a 10-foot-wide area above the EBDA force main running the length of the property and to provide site improvements that will include better access for EBDA to a force main manhole to the south of the property. The developer has also moved the warehouse further away from the EBDA force main.

## **Operations Center**

No change; all equipment is operational.

## **Miscellaneous Items**

### **Underground Service Alerts**

EBDA received fourteen (14) Underground Service Alert (USA) tickets during the month of March 2022. Ten required an Electronic Positive Response (EPR), and of the ten, four required calls/emails to the excavators, and five required field verification.

### **Wet Weather**

During the month of March 2022, there were no significant rain events that required the operation of an OLEPS diesel pump.

### **COVID-19 Response**

All EBDA staff members are fully vaccinated and boosted. Staff will work with the Commission to determine, on a month-to-month basis, whether Commission and Committee meetings will continue to be conducted via Zoom or whether to resume in-person meetings. To continue conducting remote meetings, the Commission must adopt a resolution compliant with AB 361 – see Item No. 8.

## **Special Projects**

### **Roof Replacement Projects**

Recently, EBDA requested The Garland Company, Inc. (Garland) complete an assessment of the roofs on the EBDA Office Building, the MDF SBS Storage Building and OLEPS. Garland has performed this type of assessment in the past and completed several roof replacement projects for EBDA's Member Agencies. The assessment report was completed on April 4, 2022. The report will be discussed at the April MAC Meeting, and recommendations will subsequently be discussed with this Committee and the Commission. Pending feedback, an improvement project will be included in the Renewal and Replacement Fund Project List for FY 2022/2023.

### **Disinfection Master Plan**

Staff is continuing to work with Carollo on a Disinfection Master Plan with a goal to develop a strategy for sodium hypochlorite (hypo) dosing and monitoring to prevent bacteria outbreaks and ensure consistent permit compliance while optimizing chemical dosage – both for disinfection and for dechlorination. Carollo presented their findings to the MAC at its February meeting, and the draft report was shared with the MAC in early April. Recommendations will be discussed with this Committee after the MAC has reviewed and discussed the draft report. The goal is to implement recommendations in time for Summer, when bacteria levels tend to elevate with the heat.

### **Cargill Brine Project**

A copy of the slides and recording of the presentation on the Cargill project at the March 2022 EBDA Commission Meeting are available on EBDA's website here: <https://ebda.org/projects/cargill-partnership/>. Staff is continuing to work with the Authority's CEQA consultant, Ascent Environmental, to begin preparation of the Environmental Impact Report (EIR) for the project. A Notice of Preparation of the EIR will be released in late April and will be posted on the website.

### **Advanced Quantitative Precipitation Information (AQPI) Project**

The regional AQPI project continues to move forward with a goal of improving prediction of rainfall events in the Bay Area. Installation of the radar at Rocky Ridge has faced some delays and is now planned for Summer 2022. A new East Bay AQPI Agreement will be circulated to extend the funding terms from the previous agreement, which has expired. National Oceanographic and Atmospheric Administration (NOAA) staff is continuing to make refinements to the user interface, which EBDA member agencies can access now for precipitation data and projections.

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To:	Howard Cin East Bay Dischargers Authority	Date:	April 1, 2022
From:	Dave Mathy DCM Consulting, Inc.	File:	No. 372
Subject:	3890-3898 Depot Road New Warehouse Development Hayward, CA		

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## 1.0 INTRODUCTION

This technical memorandum presents the results of a geotechnical engineering review of currently available project information for a new warehouse development with respect to construction and long-term impacts on East Bay Dischargers Authority's (EBDA) transport system pipeline. The new warehouse site is located at 3890-3898 Depot Road – a 6.5-acre parcel bounded by Depot Road to the north, EBDA transport pipeline easement to the west, Calpine Energy Center to the south and industrial properties and Whitesell Street to the east (see Figure 1). The EBDA transport system pipeline consists of approximately 11.5 miles of reinforced concrete pipe (RCP) extending along the eastern margin of San Francisco Bay from Union City to San Leandro. The pipeline transports treated (and chlorinated) waste water effluent from Union Sanitary District, Hayward, Oro Loma and San Leandro waste water treatment plants as well as from Livermore Amador Valley Water Management Agency to EBDA's outfall pipeline in San Francisco Bay. At the 3890-3898 Depot Road project site the EBDA transport pipeline is a 60-inch-diameter RCP located within an easement that extends 18 feet onto the warehouse parcel over a length of approximately 550 feet on the west side of the property (see Figure 1 and Figure 4, Section D). The 60-inch RCP EBDA transport pipeline was constructed in 1977 by open cut trenching. At the 3890-3898 Depot Road site the pipeline originally (i.e., in 1977) had an average of 9 to 10 feet of cover (see Figure 2).

## 2.0 REFERENCES

The following references 4, 5 and 6 have been provided to EBDA by the property Developer. References 1, 2 and 3 have been provided by EBDA or are from DCM Consulting, Inc. project files.

1. Soil Investigation  
East Bay Dischargers Authority  
Force Main Interceptor  
San Leandro to Hayward  
By: Harding-Lawson Associates  
Dated: March 26, 1976  
120 Pages
2. Force Main Between Hayward and Alvarado  
East Bay Dischargers Authority  
Drawing No. 5 (Plan and Profile)  
Dated: August 2, 1977

3. Assessment of Liquefaction – Related Hazard  
East Bay Dischargers Authority  
Facilities and Force Main Interceptor Pipeline  
By: Geomatrix  
Dated: February 1996  
93 pages
4. Geotechnical Investigation  
Depot Road Warehouse  
3890 Depot Road  
Hayward, California  
By: Cornerstone Earth Group  
Dated: September 9, 2021  
79 pages (5 exploratory borings and 6 CPTs)
5. Utility Locating  
Pothole Depth Report  
Project Site: Hayward, California  
By: BESS Utility Solutions  
Dated: February 15, 2022  
6 pages
6. Preliminary Improvement Plans of  
3890 Depot Road for  
First Industrial Realty Trust, Inc.  
By: Kier + Wright  
Dated: January 2022  
6 sheets

Based on descriptions in the Cornerstone Geotechnical Investigation report (Reference 4) the planned warehouse footprint will be approximately 140,168 square feet in size. The structure will be single-story with concrete tilt up walls and interior clear height of 36 to 38 feet. The immediate west side of the warehouse will include 21 truck loading docks. The area around the warehouse building will be asphalt paved and used for truck access and auto, truck and trailer parking. The Cornerstone Geotechnical Investigation report references a “Conceptual Site Plan” dated 12/7/18 as the basis of their project development understanding. That site plan is reproduced herein on Figure 3.

The 2022 project Preliminary Improvement Plans by Kier + Wright (see Reference 6) indicate only minor grading over the EBDA easement, less than a foot or so, in order to build a 10-foot-wide planter and an asphalt pavement structural section for truck and trailer parking (see Figure 4). As shown in Figure 4, truck and trailer parking will not be directly over the EBDA 60-inch RCP. Finished grade for surface water drainage will slope from west to east, off of the 10-foot-wide planter and off of and away from the EBDA easement. The Preliminary Improvement Plans indicate that the separation between the warehouse structure and EBDA 60-inch RCP will be approximately 120 feet to 180 feet (see Figure 4).

### 3.0 CONCLUSIONS

1. The EBDA transport pipeline at the 3890-3898 Depot Road property has approximately 9 to 10 feet of cover and is underlain by stiff cohesive sandy lean clay and medium dense silty sand. There is no indication of problematic very soft to soft Bay Mud or very loose to loose sands underlying the pipeline in the Cornerstone exploratory borings and specifically in the boring nearest the EBDA 60-inch RCP, EB-5 (see Figure 5). Very soft to soft Bay Mud is highly compressible and sensitive to surcharge loading and loose non-cohesive sands are sensitive to vibrations. The stiff cohesive sandy lean clay and medium dense sands underlying the 60-inch RCP provide good and reliable pipeline support.
2. The exploratory borings and CPTs by Cornerstone are in substantial agreement with the original 1976 EBDA transport pipeline borings by Harding Lawson, specifically Boring 2 drilled at the west end of Depot Road (see Figure 6).
3. The depth of cover on the EBDA 60-inch RCP has been confirmed by current potholing (see Reference 5). Current potholing confirms a cover depth of 107 inches (8.9 feet) to 127 inches (10.6 feet) on the 60-inch RCP. Considering the time between the 1977 EBDA drawings (see Figure 2) and the current 2022 potholing, and minor surface grading activity in the interim, the agreement on the cover depth is good.
4. The proposed warehouse structure as depicted in the 2022 Preliminary Improvement Plans by Kier + Wright (see Reference 6) is a minimum of 120 feet east of the EBDA 60-inch RCP (see Figure 4).
5. The Cornerstone Geotechnical Investigation report mentions and covers at length stormwater management and stormwater infiltration/bio-retention swales and basins. The Preliminary Improvement Plans by Kier + Wright (see Reference 6) show bio-retention areas on the north, east and southeast sides of the new warehouse footprint. There are no bio-retention areas shown on the Preliminary Improvement Plans over the EBDA easement and 60-inch RCP.
6. Review of the Preliminary Improvement Plans by Kier + Wright (see Reference 6) indicates:
  - a. that fills over the EBDA 60-inch RCP will not exceed 2 feet;
  - b. that cuts over the EBDA 60-inch RCP will not exceed 1 foot;
  - c. that no stormwater infiltration/bio-retention swales or basins will be located over the EBDA 60-inch RCP;
  - d. that no storm drain pipelines will be located parallel to and over the EBDA 60-inch RCP; and
  - e. that truck and trailer parking will not be directly over the EBDA 60-inch RCP.

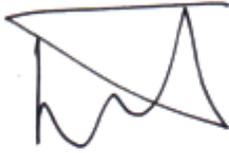
### 4.0 RECOMMENDATIONS

1. The Developer should confirm with EBDA that the minimum separation between the new warehouse building and EBDA 60-inch RCP will remain at least 120 feet as shown on the 2022 Preliminary Improvement Plans by Kier + Wright (see Figure 4). At 120 feet of separation, construction of the

warehouse shallow footing foundations and imposed footing surcharge pressures will have no effect on the 60-inch RCP.

2. According to the 2022 Kier + Wright Preliminary Improvement Plans there are no storm drain pipes to be installed parallel to and over the EBDA 60-inch RCP. The Developer should confirm with EBDA that no new storm drain pipes will cross perpendicular to and over the EBDA easement and 60-inch RCP. Any such overcrossing storm drain pipelines should be checked for clearance from the 60-inch RCP and for special pipe bedding, pipe embedment and trench backfill materials and compaction methods. Permeable pipe bedding, pipe embedment and trench backfill materials should not be used over the 60-inch RCP. In addition, vibratory compaction should be avoided over the 60-inch RCP.
3. At the time of site grading, the alignment of the EBDA 60-inch RCP should be field marked with stakes and flagging at no more than 100-foot spacings with signage directing all site contractors to protect the underlying EBDA 60-inch RCP transport pipeline during construction.
4. Limit construction equipment on the EBDA easement to rubber-tired vehicles conforming to H20 highway loading and track-mounted equipment to a track contact pressure of less than 10 psi.
5. Do not allow stockpiling of on-site or imported soils or construction materials over the 60-inch RCP and within 10 feet of either side of the 60-inch RCP.
6. Limit excavation within the EBDA easement to only that required for clearing and grubbing and subgrade preparation for minor cuts and/or minor fill placement and pavement construction (e.g., subgrade preparation is typically about 12 inches deep).
7. Limit vibrations from vibratory compaction equipment during site surface grading to a Peak Particle Velocity (PPV) of less than 2 inches per second at the nearest edge of the 60-inch RCP projected up to the ground surface.
8. Large trees of any kind should not be planted at any location within the EBDA easement. Small landscaping shrubs with shallow root structures can be planted within the EBDA easement.
9. The EBDA manhole at/just outside the southwest corner of the 3890-3898 Depot Road property is landlocked (see Figure 7). The final project development plans should include a wide gate at this corner of the property for EBDA truck access for manhole and pipeline inspection and maintenance.
10. The final project development plans should include installation of a new EBDA pipeline location bollard on the north end of the EBDA easement matching the existing pipeline location bollard on the south end of the EBDA easement (see Figure 7).

Let me know if you have any questions or need any additional review of the 3890-3898 Depot Road final development plans and specifications.



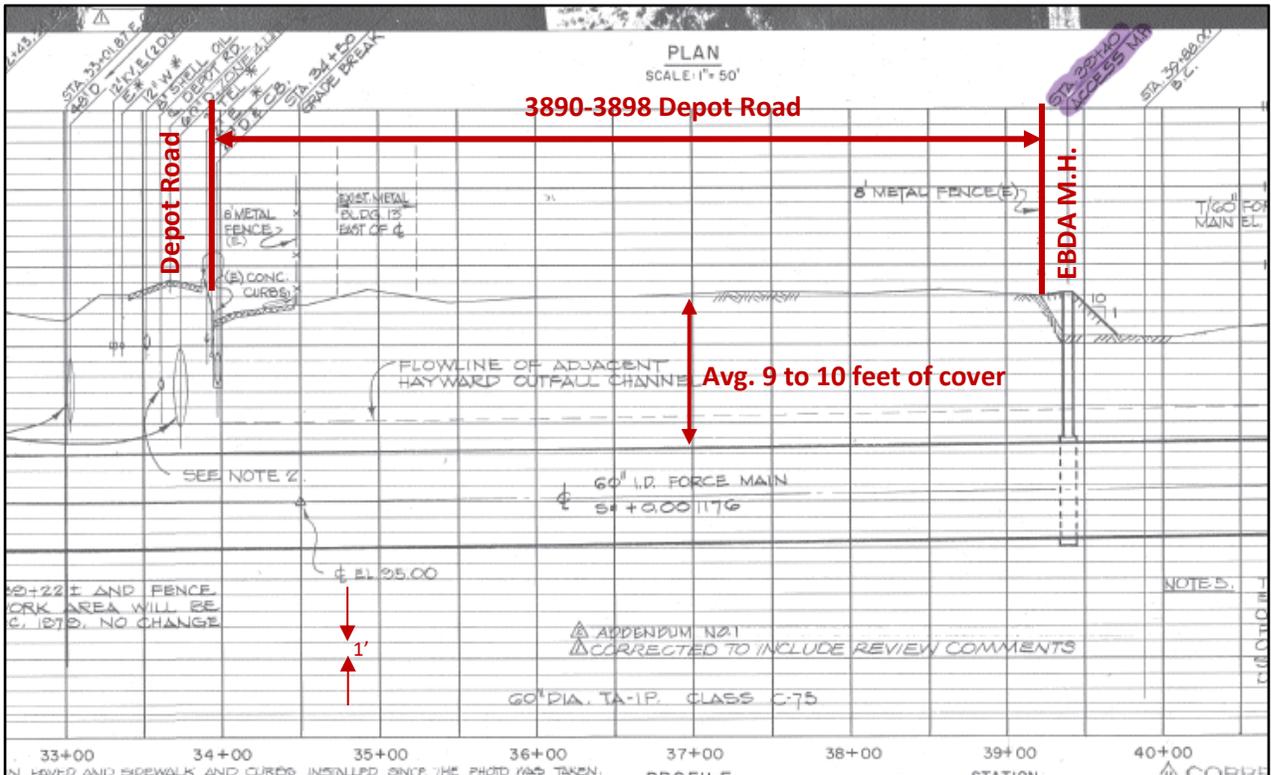
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David C. Mathy  
C.E. 28082  
G.E. 569

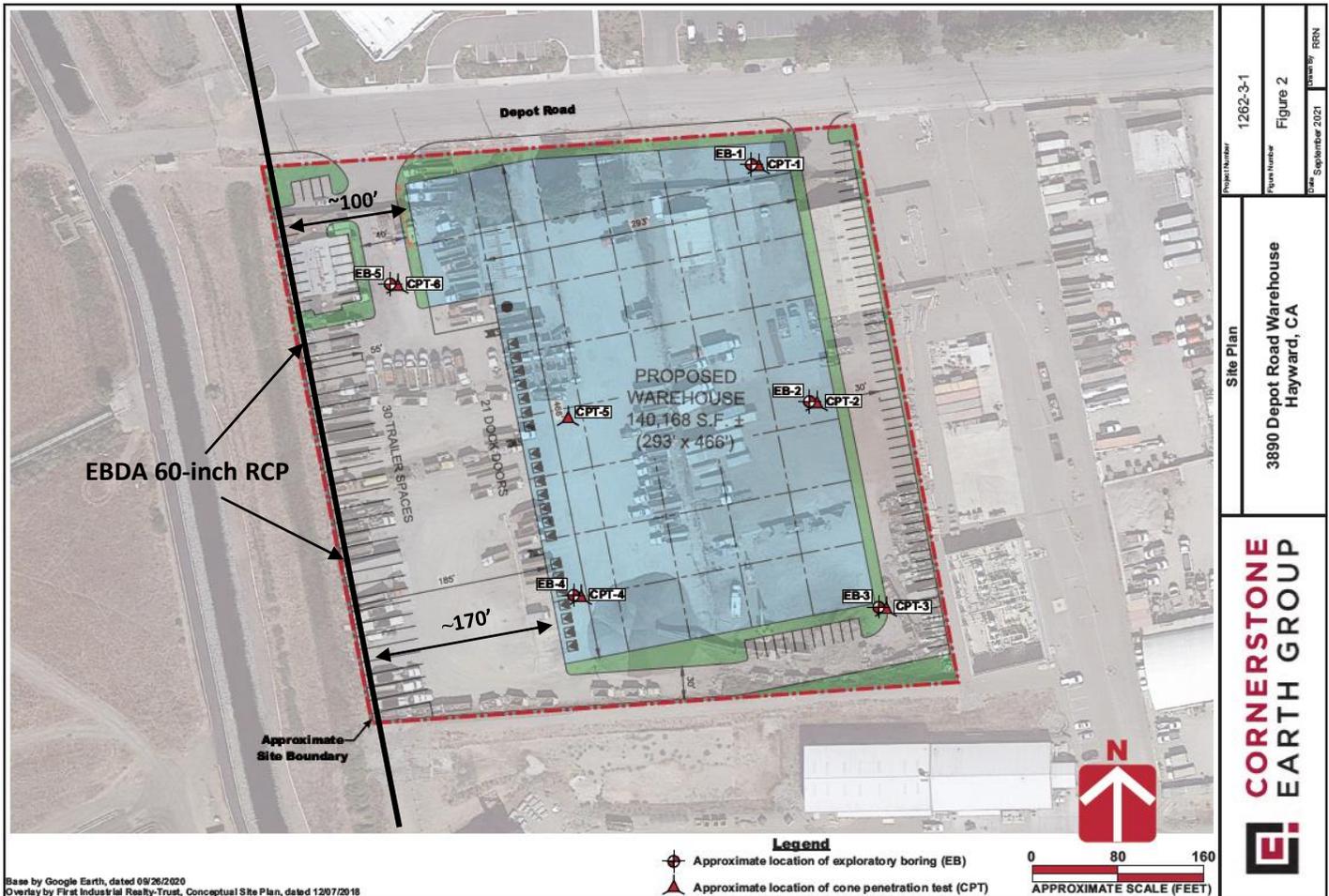


**Figure 1** – 3890-3898 Depot Road, Hayward and EBDA 60-inch RCP. Depot Road bounds the north side of the property. The EBDA manhole is pictured on Figure 7.

Google Earth image, 9/26/20.



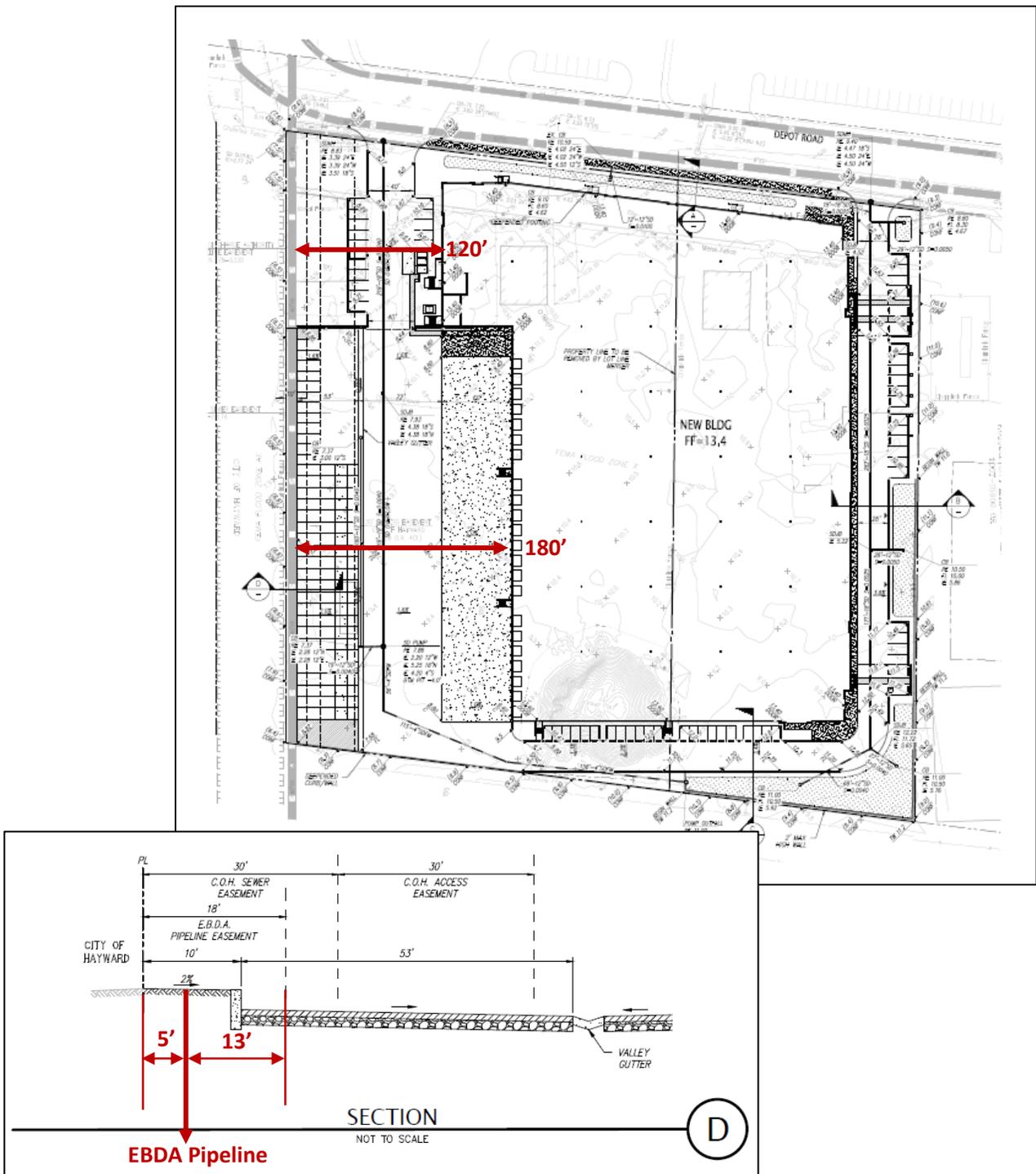
**Figure 2** – From EBDA Drawing No. 5, 1977 (see Reference 2). The design depth of cover on the 60-inch RCP in 1977 drawings averages from 9 to 10 feet. The EBDA manhole is pictured on Figure 7.



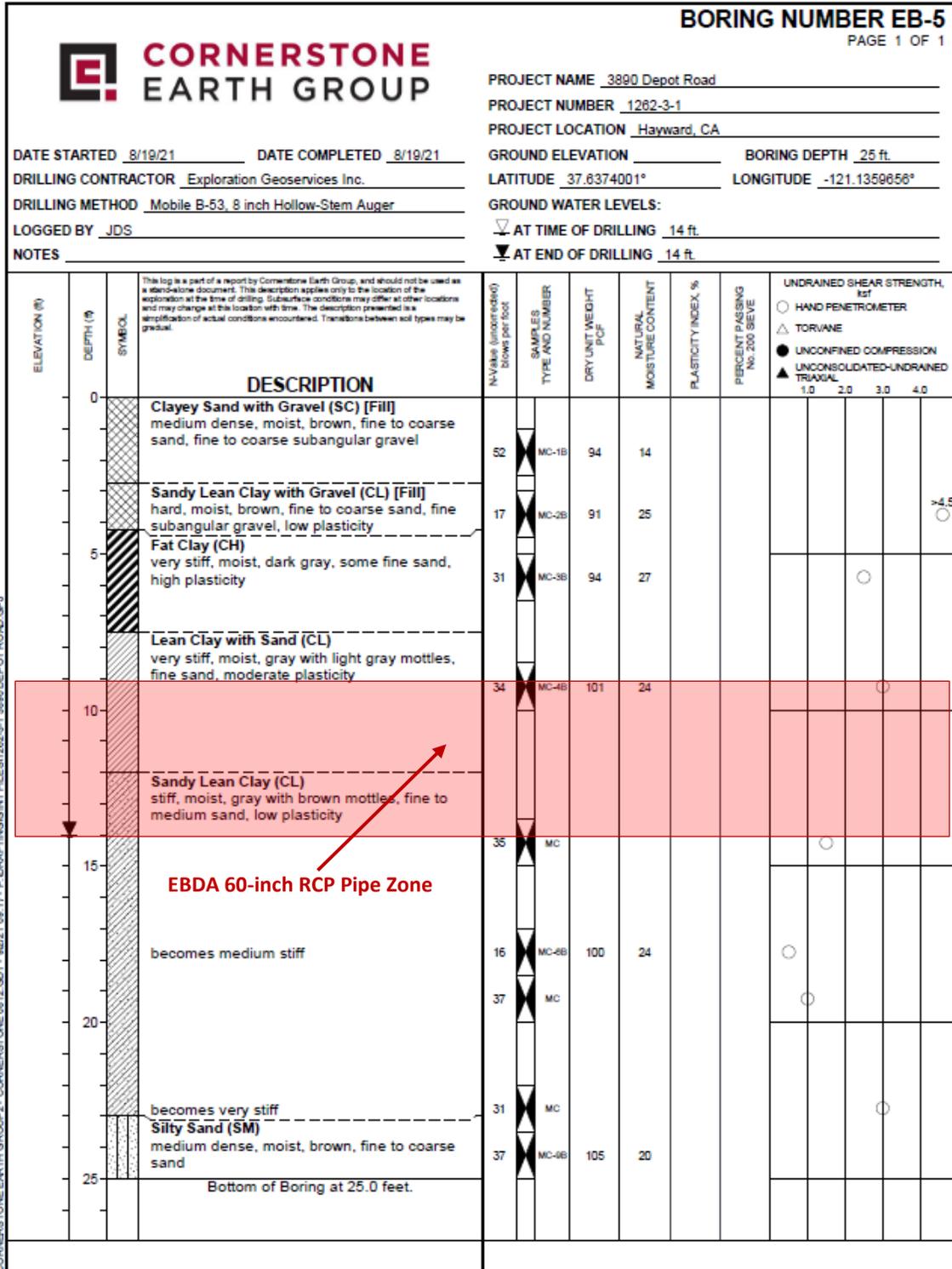
**Figure 3** – From Cornerstone Earth Group, 2021, Figure 2 (see Reference 4). Footprint of proposed 140,168 square foot warehouse in blue. Warehouse separation from the EBDA 60-inch RCP is approximately 100 feet to 170 feet.

The warehouse foundation to consist of shallow spread footings (see Cornerstone Geotechnical Investigation Report, 2021, Section 8: Foundations pages 21 and 22).

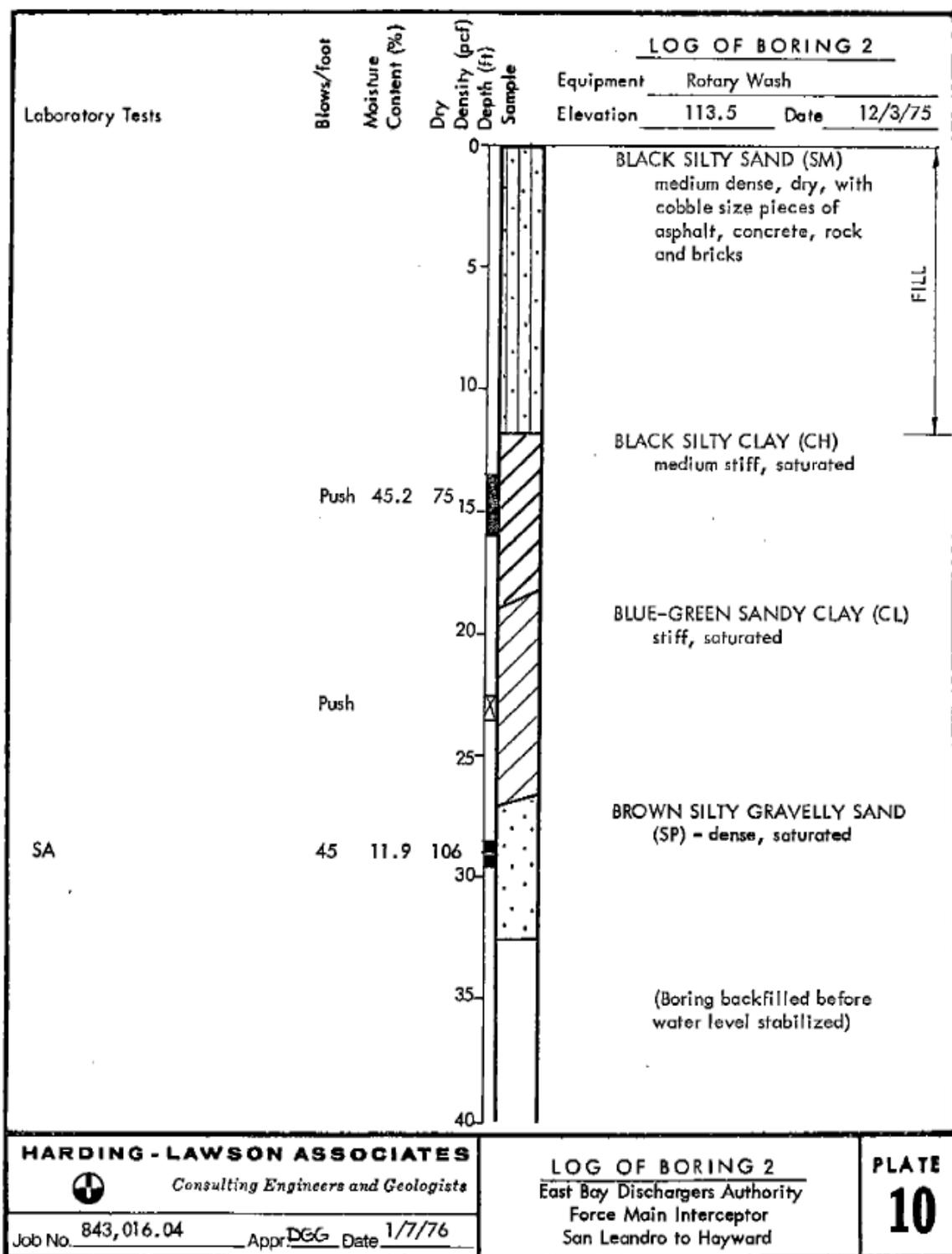
This Cornerstone Site Plan is taken from a 2018 “Conceptual Site Plan” as provided to Cornerstone as the basis of their geotechnical investigation and report.



**Figure 4** – From Preliminary Improvement Plans by Kier + Wright dated January 2022, Sheet C2.0 (see Reference 6) and EBDA Drawing No. 5, 1977 (see Reference 2). Warehouse separation from the EBDA 60-inch RCP is approximately 120 feet to 180 feet. As shown in Section D, the EBDA easement extends 18 feet onto the warehouse parcel. Asphalt pavement for truck and trailer parking starts at 10 feet east of the west property line. The EBDA 60-inch RCP is located 13 feet west of the eastern easement line beneath the 10-foot-wide planter area. The 10-foot-wide planter area along the western property boundary will be positively graded to drain off of the EBDA easement.



**Figure 5** - 2021 test boring EB-5 by Cornerstone Earth Group (see Reference 4). This is the closest Cornerstone test boring to the 60-inch EBDA RCP. The test boring indicates that the pipeline is underlain by stiff, cohesive sandy lean clay (no soft Bay Mud, no non-cohesive loose sands).



**Figure 6** – 1976 Harding Lawson boring B-2 at the west end of Depot Road. As with Cornerstone’s 2021 exploratory boring EB-5, the native soil profile directly beneath the 60-inch RCP includes medium stiff to stiff clay over dense sand (no soft Bay Mud and no non-cohesive loose sands).



**Figure 7** – EBDA manhole at/just outside the southwest corner of the 3890-3898 Depot Road property looking north. Final development plans should include a wide gate in the finished property fencing to allow EBDA truck access to the manhole for inspection and maintenance of the manhole and 60-inch RCP.