

ENVIRONMENTAL  
PROTECTION

July 31, 1998

98 AUG -6 PM 3:09

3042.95-009

Mr. Mark Johnson  
California Regional Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street, Suite 500  
Oakland, California 94612

Subject: Work Plan for the Design and Installation of a Steel Barrier Plate along the Horton Street Frontage, Sherwin-Williams Property, Emeryville, California

Dear Mark:

Levine·Fricke·Recon Inc. (LFR) has prepared this work plan on behalf of the Sherwin-Williams Company (Sherwin-Williams). This work plan presents the scope of work associated with the design and installation of a steel barrier plate along the Horton Street frontage of the Sherwin Williams Property in Emeryville, California ("the Site").

## BACKGROUND

As discussed at the July 22, 1998 Consultative Workgroup meeting, LFR has prepared this work plan on behalf of Sherwin-Williams to address concentrations of lead and arsenic previously discovered from wipe samples collected along an existing concrete retaining wall facing Horton Street (see Figure 1). The measures proposed within this work plan are intended to supplement on-going interim remedial measures (IRM) while the Site as a whole is further evaluated under the pending Site Cleanup Requirements (SCR) Order (SCR 98-009).

The existing reinforced concrete retaining wall is 230 feet long by 4.5 feet high, and is 10 inches thick. The retaining wall abuts the existing concrete sidewalk along the westerly side of Horton Street, and rises approximately 4.5 feet above the surface of the sidewalk along its length. The lead and arsenic detected from surface wipe samples are suspected to have migrated with moisture through hairline cracks in the retaining wall from metals-affected soils on the Site. The retaining wall has been fenced off and covered with plastic to prevent any potential exposures to residents or workers in the area since December 1997.

Previous wipe sampling results showed concentrations of lead and arsenic. The results of a screening-level risk assessment LFR performed (LFR 1998) indicate that those concentrations are not an imminent threat to public health. However, Sherwin-Williams has agreed to address the affected wall through interim containment methods designed to eliminate exposure pathways to the public. Both human dermal and inhalation pathways will be addressed in this design.

## PREVIOUS SAMPLING AND RISK EVALUATIONS

In March 1997 arsenic- and lead-affected soils were identified in Horton Street which required investigation to characterize the extent of contamination. Excavation and removal of contaminated soils beneath sidewalks, curbs and gutters, and driveway entrances was implemented in the summer of 1997 and the project was substantially complete by September 1997.

During the investigation phase of the project, wipe samples were collected in March 1997 on the concrete retaining wall facing Horton Street to determine whether any contaminants were migrating through the wall or were present on the wall surface. A senior risk assessor with Weston conducted a risk evaluation of the wipe sample data that concluded that the contaminant concentrations were not a public health concern. As a result, no further action was taken with respect to the retaining wall at that time.

Subsequently, in December 1997, after completion of the Horton Street soil excavation and onset of winter rains, Sherwin-Williams' personnel noted a precipitate on the retaining wall. Sherwin-Williams requested that LFR take a sample to verify whether any contaminants were present in the precipitate. On December 10, 1997, LFR field personnel collected three samples by scraping off the precipitate from the retaining wall along the Sherwin-Williams facility on Horton Street. Sampling locations were chosen at areas where a brown-colored precipitate was visible near cracks in the north end, south end, and middle of the retaining wall.

For the three precipitate samples collected on December 10, 1997, arsenic was detected above the analytical method detection limits in all three samples at concentrations of 24, 66, and 84 mg/kg. Lead was detected above the analytical method detection limit in all three samples at concentrations of 140, 210, and 1,900 mg/kg. Zinc was detected above the reporting limit in all three samples at concentrations of 6,000, 7,500, and 10,000 mg/kg.

After receiving the precipitate sample data, Sherwin-Williams noted that the arsenic concentrations were slightly elevated. In addition, the concentrations of lead were slightly elevated. The presence of zinc was apparently elevated but was not anticipated to be a health risk. Sherwin-Williams personnel discussed the situation with the RWQCB, then covered the wall with plastic sheeting and fenced off the area until a risk evaluation could be conducted and reviewed by the regulatory agency.

Based on the sampling results, a screening-level risk evaluation was conducted (LFR 1998). The risk evaluation concluded that concentrations of arsenic and lead detected in wipe and precipitate samples from the wall were not a public health concern to area residents or workers. It was concluded that the fence and plastic covering could be removed from the retaining wall pending review and approval of the risk evaluation by the RWQCB and DTSC.

To date, only the DTSC has provided comments on the risk evaluation. One of DTSC's comments recommended that the risk from the wall material be evaluated in the context of the overall risk evaluation for the entire site. Since the overall risk evaluation will not be completed until after the

site remedial investigation is completed, Sherwin-Williams has decided to implement interim actions to cover the wall. The final remedial actions with respect to the wall will be evaluated once the RI/FS process has been completed.

## **WORK PLAN TASKS**

The scope of work associated with the design and installation of the steel barrier plate includes the following tasks:

- design of the steel barrier plate
- permitting
- barrier construction
- construction schedule
- project management and reporting

### ***Task 1: Design of the Steel Barrier Plate***

This task includes preparation of the design for the steel barrier plate. This task has already been completed. The design, prepared by a professional engineer registered in the State of California, is presented in Figures 1 and 2.

The design includes a 10-gauge steel barrier plate to be installed along the exposed face of the entire 230-foot-long by 4.5-foot-high retaining wall fronting the sidewalk along Horton Street (see details within Figure 2). The plates will be field welded and anchored to the existing concrete retaining wall. A coal tar urethane coating compatible with site contaminants is also proposed along the affected side of the barrier plate to seal the affected portion of the wall, to keep moisture from migrating through the wall, and to further the effectiveness of the containment. Silicone caulking is proposed along the tops and sides of the installed barrier to prevent water infiltration between the barrier and the concrete retaining wall. This design is similar to the steel barrier plating LFR installed in April 1997 along the former hollow brick wall area that traverses the Rifkin and Sherwin-Williams property boundary. The steel plating will be set within a bevel cut along the existing sidewalk/retaining wall joint, and backfilled with a waterproof grout mixture. Upon installation of the steel barrier plate, the plate shall be painted with a double coat of direct-to-metal latex paint in a non-obtrusive color suitable to the area.

### ***Task 2: Permitting***

This task includes preparing permit applications and other documents, coordinating with agency representatives, responding to agency comments, and addressing regulatory issues that arise during construction and design of the steel barrier plate.

As discussed with the City of Emeryville staff, the only permit required will be an encroachment permit. Copies of the work plan and drawings for the barrier will be submitted to the City. The barrier plans will also be presented to the RWQCB and the Consultative Workgroup for review.

***Task 3: Barrier Construction***

This task includes selection of a general contractor to install the steel barrier plate, preparation of a health and safety plan, preparation of a traffic control plan, installation of the barrier at the Site, and monitoring of construction activities.

The general contractor will install the barrier based on the work plan approved by the RWQCB and the City. An LFR construction engineer will be at the Site during field construction activities. The construction engineer will monitor the contractor's work to verify that the requirements of the work plan are fulfilled.

The construction engineer will prepare construction reports describing the progress of the contractor's work, equipment, personnel, weather conditions, and other pertinent information applicable to construction. The construction engineer will also prepare correspondence to the contractor regarding technical and contractual issues, as necessary. Photographs will be taken to further document the progress of the contractor's work. The construction engineer will review submittal data on materials and equipment supplied by the contractor to confirm that these items comply with the specifications.

***Task 4: Construction Scheduling & Community Notification***

Construction of the steel barrier plate shall occur over an estimated eight-day period beginning August 10, 1998. A construction schedule has been prepared and included as Figure 3 to this work plan. This schedule is considered preliminary at this time as material and contractor availability may effect the proposed start date. LFR, Mara Feeney & Associates, and Sherwin-Williams will work closely with the RWQCB to ensure proper notification of the residents in the vicinity of the proposed work. The residents will be notified at least 5 days in advance, then again 48 hours in advance of work commencing. Work hours will be limited to between 8 a.m. and 5 p.m. Monday - Saturday.

***Task 5: Project Management and Reporting***

This task will allow for project management and reporting associated with the design and installation of the steel barrier plate. Typical project management tasks include scheduling, project oversight, public updates, additional regulatory interface, budget management and cost tracking, and subcontractor and vendor management. A brief report will be prepared to document the installation of the barrier construction.

Please feel free to contact me or Michael Marsden at (510) 652-4500 or Larry Mencin of Sherwin-Williams at (216) 566-1768 if you have any comments or questions about this work plan.

Sincerely,



Mark D. Knox, P.E.  
Principal Engineer

Enclosure

**REFERENCES**

Levine Fricke Recon, Inc. 1998. "Letter dated February 2, 1998 Screening Level Exposure and Risk Evaluation, Retaining Wall Along the Sherwin-Williams Facility on Horton Street, Emeryville, California"

**DISTRIBUTION LIST**

Ms. Susan Hugo  
Mr. Ravi Arulanantham, Ph.D.  
Alameda County Department of  
Environmental Health

Mr. Ignacio Dayrit  
City of Emeryville, Redevelopment Agency

Mr. Larry Mencin  
Mr. Nick Maoloni  
Mr. John Gerulis  
Mr. Dave Gustafson  
The Sherwin-Williams Company (Ohio)

Mr. George Stavnes  
Mr. Frank McHugh  
The Sherwin-Williams Company (Emeryville)

Mr. Tom Kalinowski, Sc.D.  
Ms. Vera Nelson  
Erler & Kalinowski, Inc.

Mr. Ric Notini  
Chiron Corporation

Ms. Barbara Cook, P.E.  
Dept. of Toxic Substances Control

Mr. Mark Johnson  
Regional Water Quality Control Board

Ms. Jody Sparks  
Toxics Assessment Group

Ms. Peggy Peischl  
Treadwell and Rollo

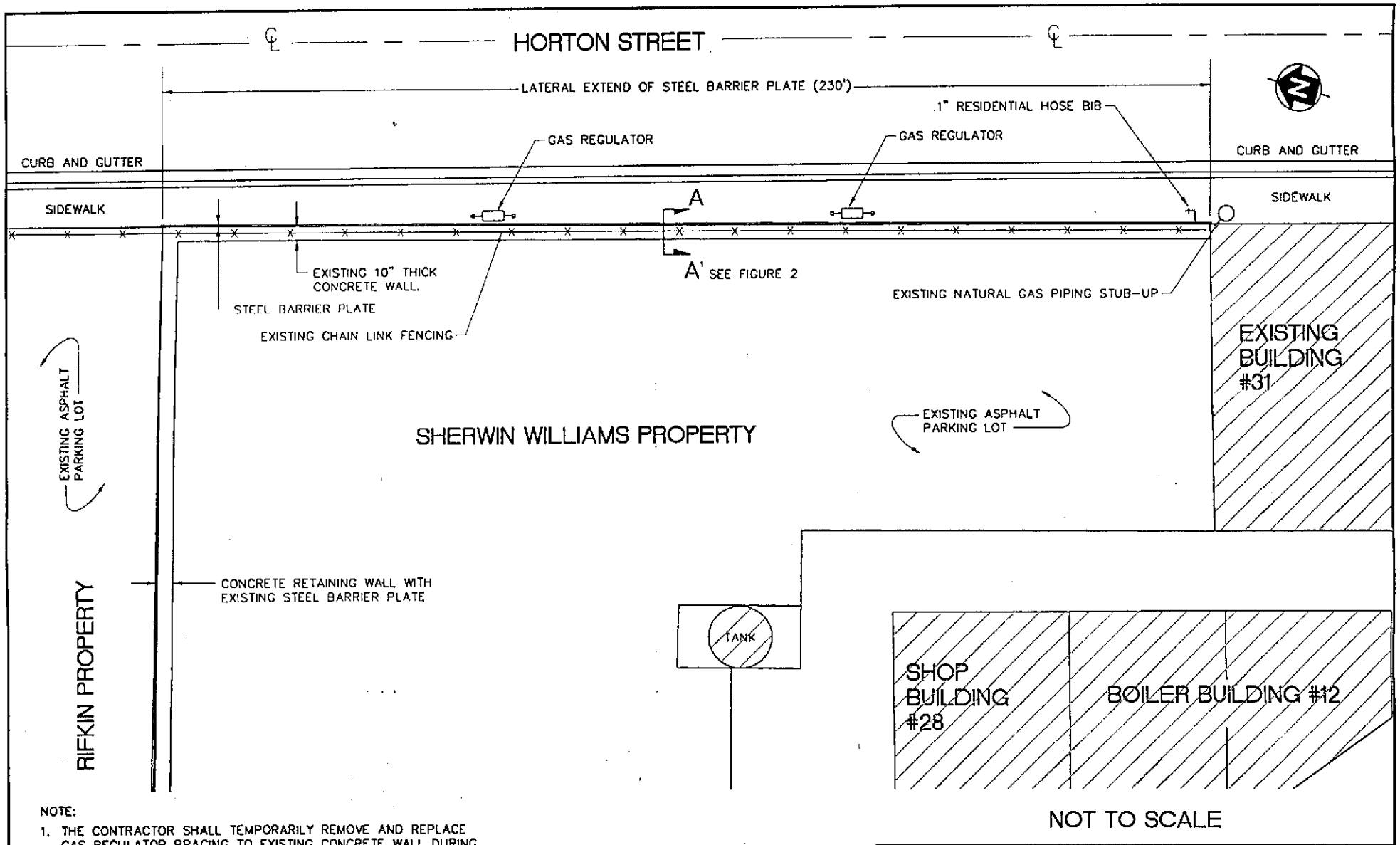
Ms. Mara Feeney  
Mara Feeney & Associates (San Francisco)

Ms. Melissa Mednick  
Mara Feeney & Associates (Oakland)  
*[2 copies]*

Ms. Jane Riggan, M.S.W.  
Department of Health Services

Mr. Robert Cave  
Bay Area Air Quality Management District

Mr. Paul Germain  
45<sup>th</sup> Street Artists Co-op



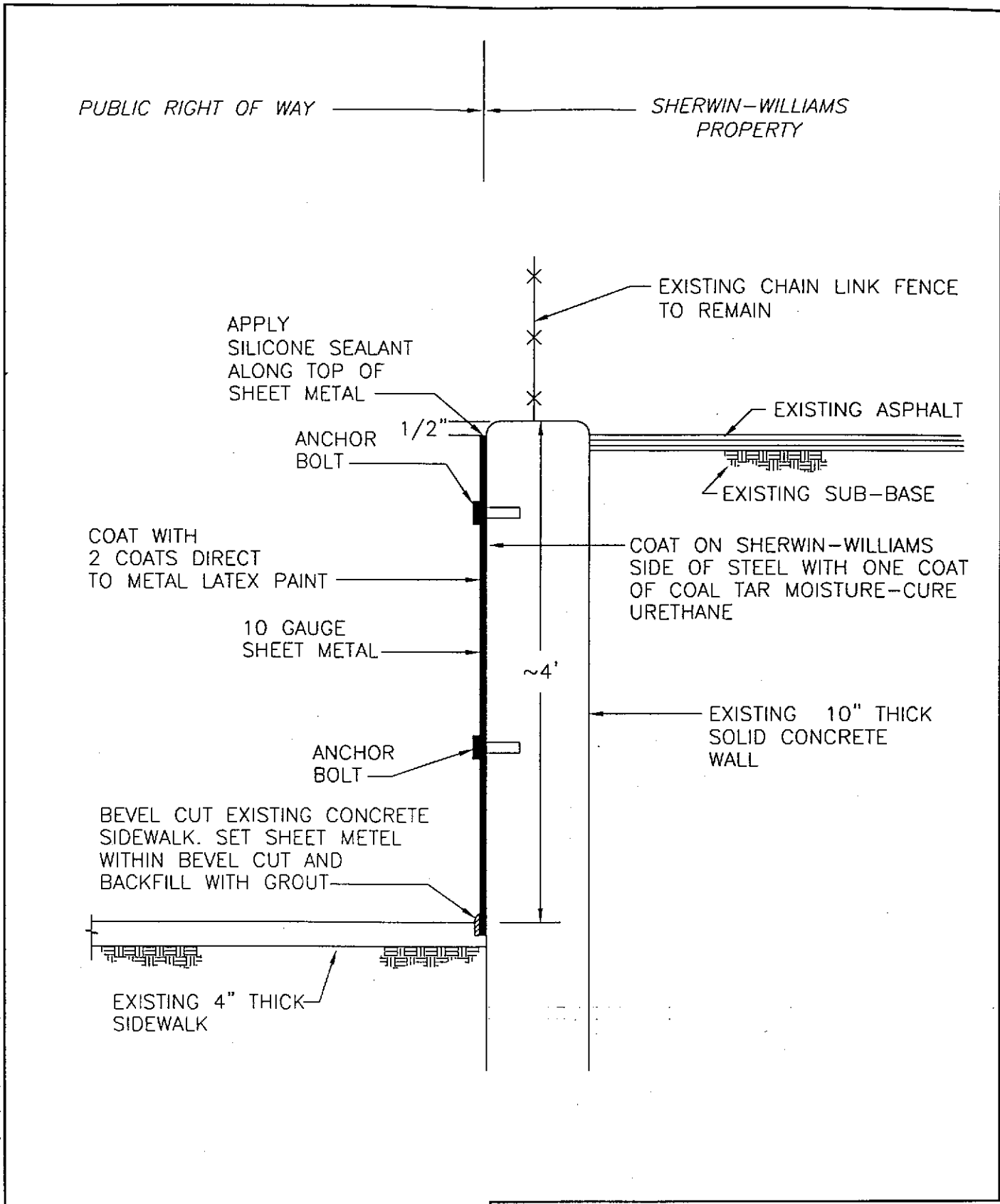
- NOTE:
1. THE CONTRACTOR SHALL TEMPORARILY REMOVE AND REPLACE GAS REGULATOR BRACING TO EXISTING CONCRETE WALL DURING INSTALLATION OF STEEL BARRIER PLATE.
  2. THE CONTRACTOR SHALL TEMPORARILY PROVIDE GAS REGULATOR SUPPORT BRACING DURING STEEL BARRIER PLATE INSTALLATION.
  3. THE CONTRACTOR SHALL CUT AND FIELD WELL STEEL PLATING TO INSTALL PLATING AROUND SEVEN EXISTING CONCRETE BEAM PROTRUSIONS AND ONE RESIDENTIAL TYPE HOSE BID.
  4. SEE FIGURE 2 FOR DETAILS OF STEEL BARRIER PLATE INSTALLATION.

NOT TO SCALE

SHERWIN WILLIAMS FACILITY, EMERYVILLE CALIFORNIA

**SITE PLAN**  
**STEEL BARRIER PLATE AT HORTON STREET**





7/28/1988 10:32 A.M. LTScale: 1:00 Drawing File(DWG): J:\ENGCAD\SHERWIN\3042\SW-4.DWG

SHERWIN-WILLIAMS  
**CROSS SECTION A-A'**  
**STEEL BARRIER PLATE**  
**ALONG HORTON STREET**  
 N.T.S.

**Levine-Fricke-Recon**

**Figure 2**

Project No. 3042

**Figure 3**  
**Horton Street Steel Barrier Plate**  
**Construction Schedule**  
**Sherwin-Williams Company**  
**Emeryville, California**

ID	Task Name	Duration	Start	Finish	July 26, 1998							August 2, 1998							August 9, 1998						
					S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	Construction Schedule	15 days	Mon 7/27/98	Fri 8/14/98																					
2	1.0 Permitting	10 days	Mon 7/27/98	Fri 8/7/98																					
3	2.0 Mobilization	1 day	Mon 8/10/98	Mon 8/10/98																					
4	3.0 Sidewalk Notching/Plate Preparation	1 day	Mon 8/10/98	Mon 8/10/98																					
5	4.0 Plate Installation	2 days	Tue 8/11/98	Wed 8/12/98																					
6	5.0 Plate Painting	1 day	Thu 8/13/98	Thu 8/13/98																					
7	6.0 Demobilization	1 day	Fri 8/14/98	Fri 8/14/98																					