

DISCUSSION ITME

Agenda Item #9

AGENDA REPORT SUMMARY

Meeting Date: March 9, 2021

Subject: Construction Contract Award: Annual Street Striping Project TS-01003

Prepared by: Gaku Watanabe, Assistant Engineer

Reviewed by: Jim Sandoval, Engineering Services Director

Approved by: Brad Kilger, Interim City Manager

Attachment(s):

1. Bid Summary dated January 20, 2021

2. Project Striping Layout Plan

Initiated by:

City Council CIP Project TS-01003

Previous Council Consideration:

None

Fiscal Impact:

Based on the lowest responsive and responsible bidder, the estimated project costs are:

Annual Street Striping Project Total Cost

Project Item	Project Budget
Construction	\$ 157,300.00
Construction Contingency (15%)	\$ 23,595.00
Printing/Advertising/Mailing/Misc.	\$ 5,000.00
Estimated Total Cost	\$ 185,895.00

Breakdown of funds to be used:

Funding Source	Amount
Remaining Project Budget for TS-01003 FY18-19	\$ 90,727.57
Approved Project Budget for TS-01003 FY19-20	\$ 100,000.00
Approved Project Budget for TS-01003 FY20-21	\$ 100,000.00
Total Project Budget	\$ 290,727.57

- Amount already included in approved budget: Yes
- Amount above budget requested: No

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Subject: Construction Contract Award: Annual Street Striping Project TS-01003

Environmental Review:

Categorically Exempt pursuant to CEQA Section 15301(c) for the repair and maintenance of existing public street facilities.

Policy Question(s) for Council Consideration:

None

Summary:

- CIP Project TS-01003 is an annual project intended for preventative maintenance and upgrading of roadway striping and markings on City-maintained streets.
- On December 23, 2020, City advertised the Annual Street Striping Project.
- On January 20, 2021, City received and opened 3 bids in public session.

Staff Recommendation:

Award the Base Bid, Annual Street Striping Project to Chrisp Company and authorize the Interim City Manager to execute a contract in the amount of \$157,300.00 and up to 15% contingency on behalf of the City.

Purpose

Award the Base Bid for the Annual Street Striping Project to Chrisp Company and authorize the City Manager to execute a contract in the amount of \$157,300.00 and up to 15% contingency on behalf of the City.

Background

The Annual Street Striping Project, TS-01003, is dedicated to maintaining and updating thermoplastic striping and pavement markings on City owned streets. This project will upgrade signage and striping to improve existing bicycle facilities on Almond Avenue, Covington Road and Homestead Road.

Discussion/Analysis

On December 23, 2020, City advertised CIP Project TS-01003. On January 20, 2021, three (3) bids were received and opened in a public online session. The bid result summary is provided in Attachment 1. The lowest responsive and responsible bidder is Chrisp Company for \$157,300.00.

This project will complete the bicycle facility upgrade element along Almond Avenue, Covington Road and Homestead Road, including green bicycle lanes, a new two-way Cycle Track (Almond Ave.), and other signage and striping items. Striping elements covered by this project were reviewed and recommended for implementation by the Complete Streets Commission on January 27, 2021.

Implementation of the new Cycle Track, a two-way bike lane on the north side of Almond Avenue from San Antonio Road to Los Altos High School will formalize the bicycle commute patterns noted by Los Altos High School students and administrators as existing condition. Residents along Almond

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Subject: Construction Contract Award: Annual Street Striping Project TS-01003

Avenue, including the 5 homes with direct impact on the north side of Almond Avenue between San Antonio Road and Valencia Drive, have been notified and invited to provide feedback during November 2019, August and September 2020, and January 2021 Complete Streets Commission meetings. The Complete Streets Commission, at its December 2020 meeting, recommended City staff to propose options to delineate the Cycle track from vehicle travel lane to protect cyclists from oncoming traffic.

This project will also finalize the new bike lane on Covington Road, between El Monte Avenue and Covington Elementary School. Striping layout for the bike lane was completed in summer 2020 with the Annual Street Resurfacing Project. This project will now designate this segment as a bike lane with new bike lane markings and green thermoplastic markings at conflict zones for added safety.

Public notices will be sent to residents as soon as the project is awarded by Council. Residents will be provided with information to follow project details, schedules for each area and updates on the City website. The Contractor will also be required to distribute notification letters to affected residents and post street signages at least 48-hours prior to start of work.

Options

1) Award the Base Bid for the Annual Street Striping Project to Chrisp Company and authorize the Interim City Manager to execute a contract in the amount of \$157,300.00 and up to a 15% contingency on behalf of the City.

Advantages: Contractor is the lowest responsive and responsible bidder. Project will

upgrade signage and striping to improve existing bicycle facilities on Almond

Avenue, Covington Road and Homestead Road.

Disadvantages: None

2) Reject all bids and re-advertise the project.

Advantages: None

Disadvantages: It is not anticipated that re-advertising the bid will result in lower bids.

Upgrading of signage and striping to improve existing bicycle facilities will be

delayed.

Recommendation

1) The staff recommends Option 1: award the Base Bid for the Annual Street Striping Project to Chrisp Company and authorize the Interim City Manager to execute a contract in the amount of \$ 157,300.00 and up to 15% contingency on behalf of the City.

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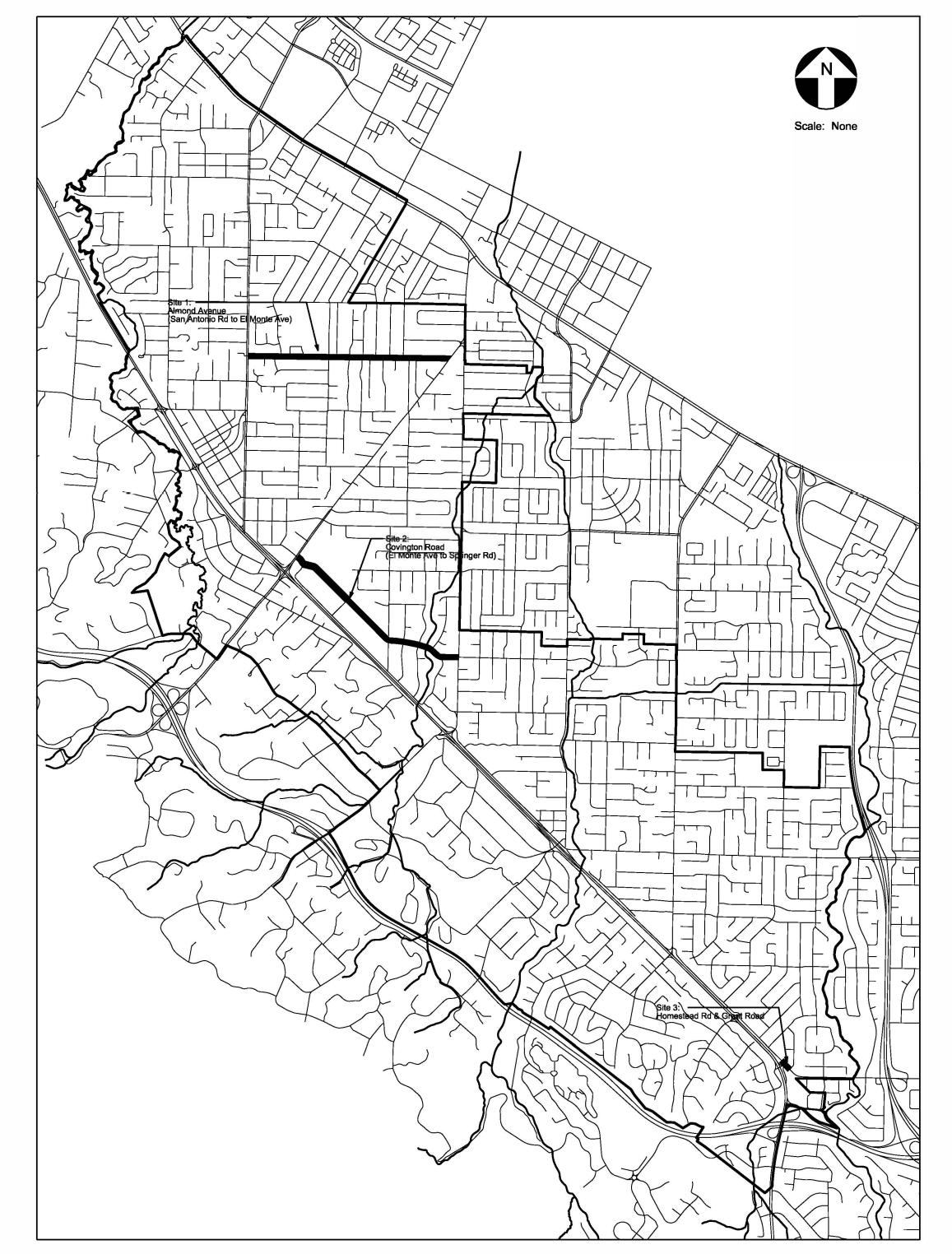
<u>CITY OF LOS ALTOS</u> <u>ANNUAL STREET STRIPING PROJECT TS-01003</u> <u>BID OPENING</u>

January 20, 2021 2:00 PM Virtual Bid Opening via Ring Central Conference Call

CONTRACTOR	TOTAL BID
Chrisp Company	\$157,300.00
Sierra Traffic Markings	\$174,226.75
Sterndahl Enterprises	\$242,255.00

Attachment 2

PROJECT MAP



CITY OF LOS ALTOS

Annual Street Resurfacing Striping Project No. TS-01003

- Installation of Roadway Markings, Striping and Signage
 Installation of Pre-Formed Thermoplastic Green Bike Lane Material
 Tree and Shrubbery Trimming
 Traffic Control

OWNER-FURNISHED MATERIALS:

- None

NOTES:

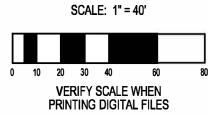
- Before excavating call USA (Underground Service Alert) at 811 seven (7) business days before planned work.

SHEET INDEX:

- 1. Title Sheet
- 2. Almond Avenue Signage & Striping, Page 1 of 2
- 3. Almond Avenue Signage & Striping, Page 2 of 2
- 4. Covington Road Signage & Striping Plan, Page 1 of 2
- 5. Covington Road Signage & Striping, Page 2 of 2
- 6. Homestead Rd & Grant Rd, Page 1 of 1

Revisions

7. Blueprint for a Clean Bay



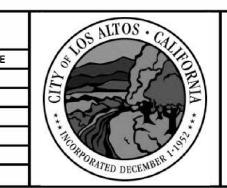






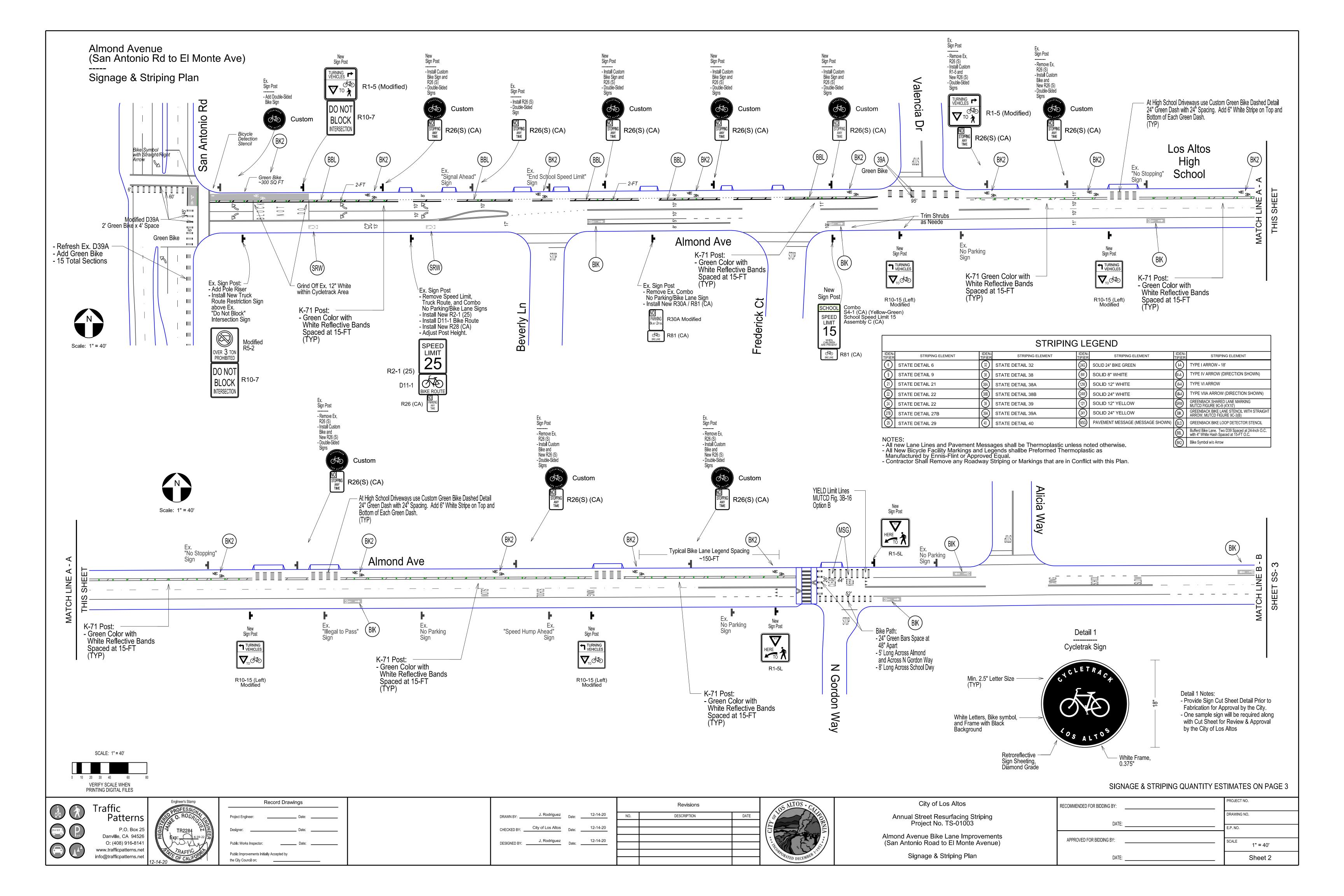
Stamp	Record Drawings	
DRIG EL	Project Engineer: Date:	
284 CEZ GINEER	Designer: Date:	
Duch	Public Works Inspector: Date:	
FIC RILL	Public Improvements Initially Accepted by the City Council on:	

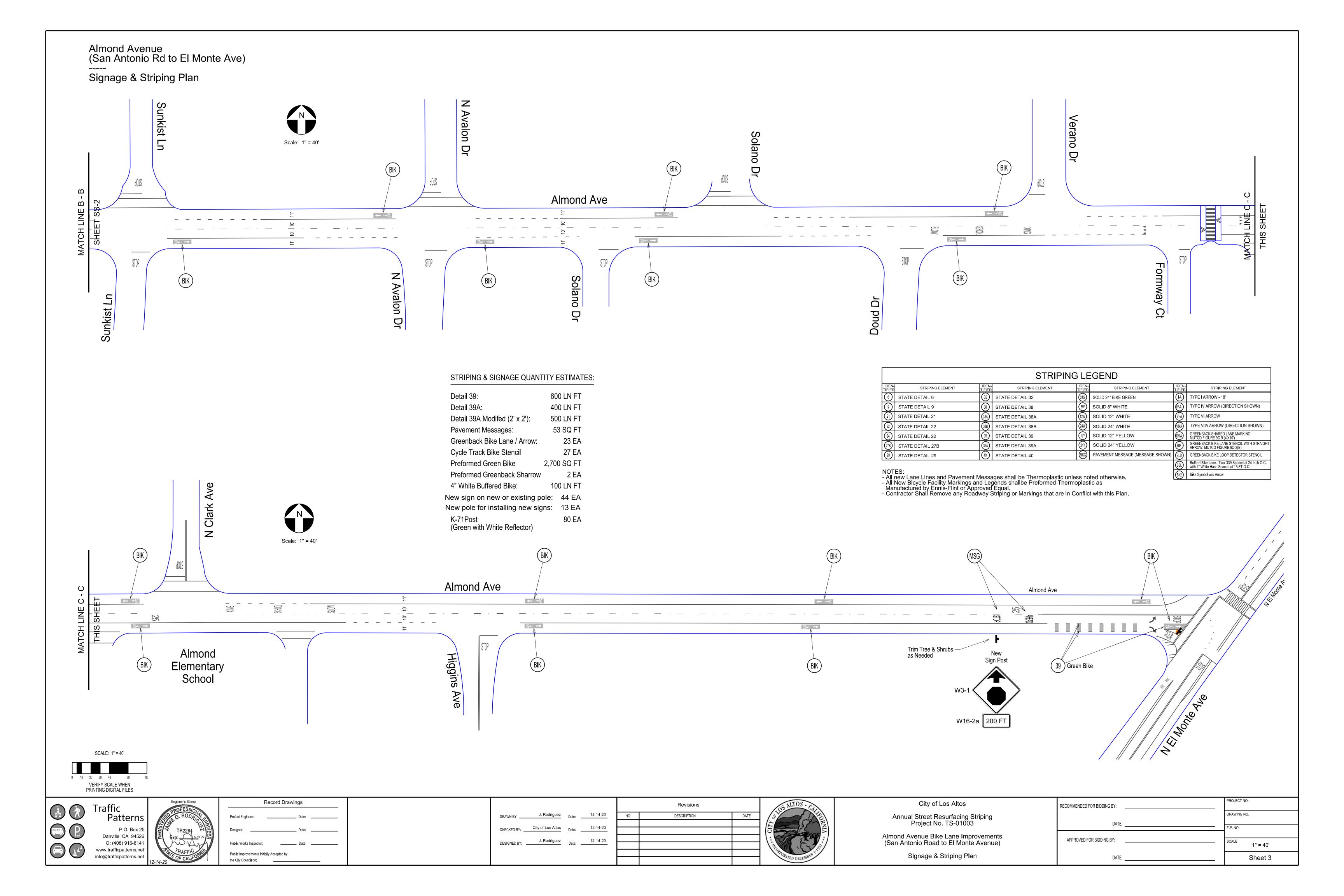
DRAWN BY:	J. Rodriguez	Date:	12-14-20
CHECKED BY:	City of Los Altos	Date:	12-14-20
DESIGNED BY:	J. Rodriguez	Date:	12-14-20

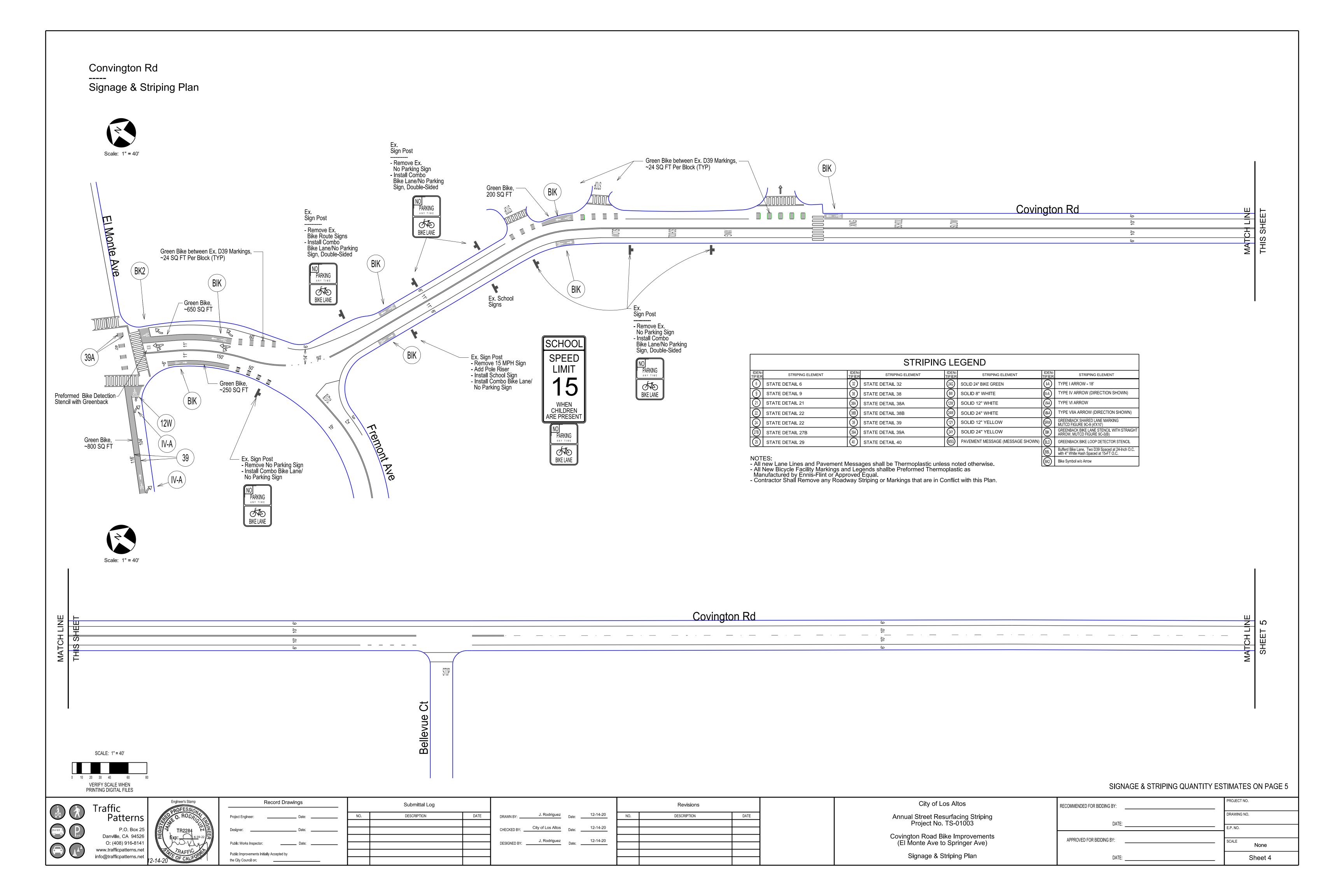


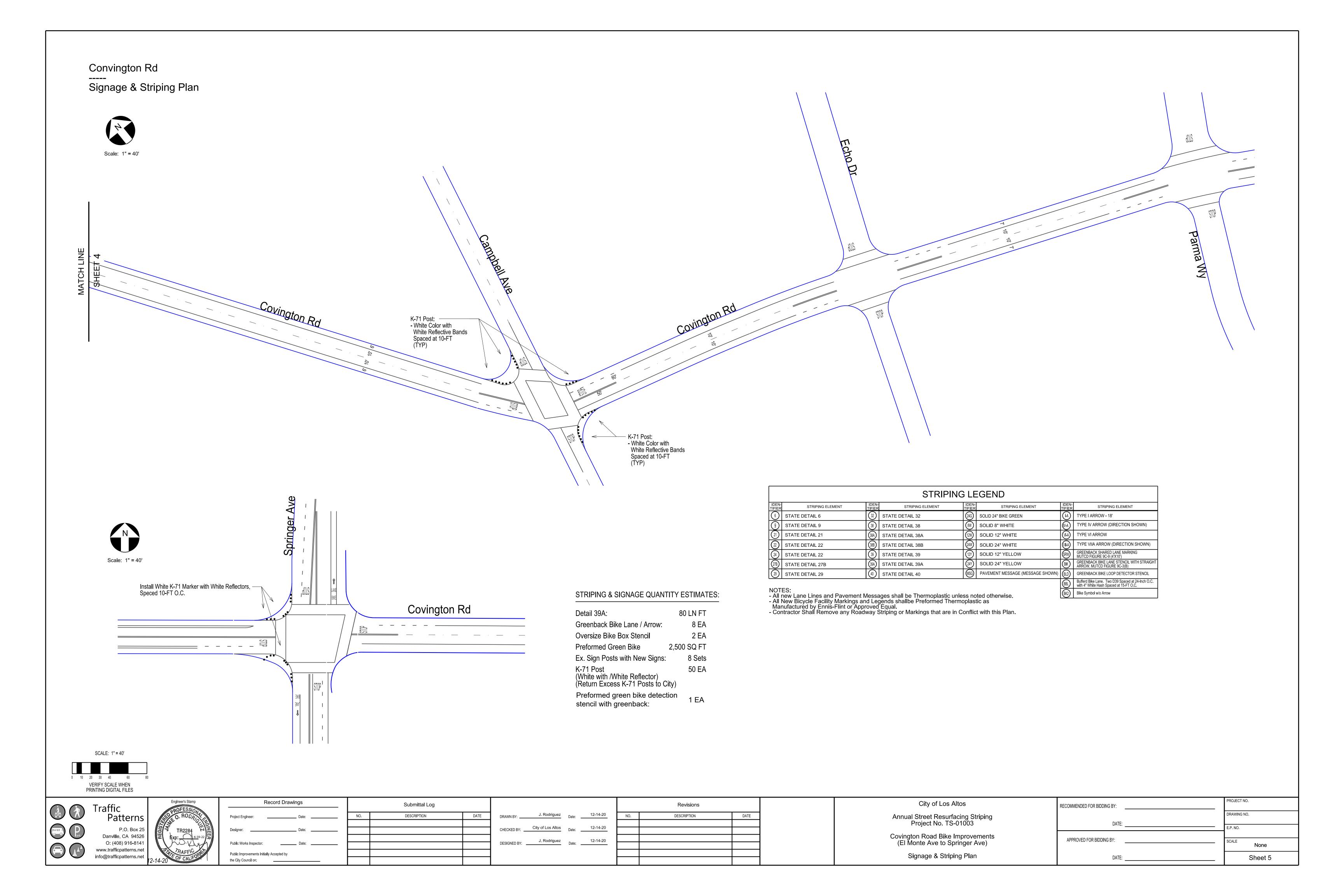
City of Los Altos Annual Street Resurfacing Striping Project No. TS-01003 **Cover Sheet**

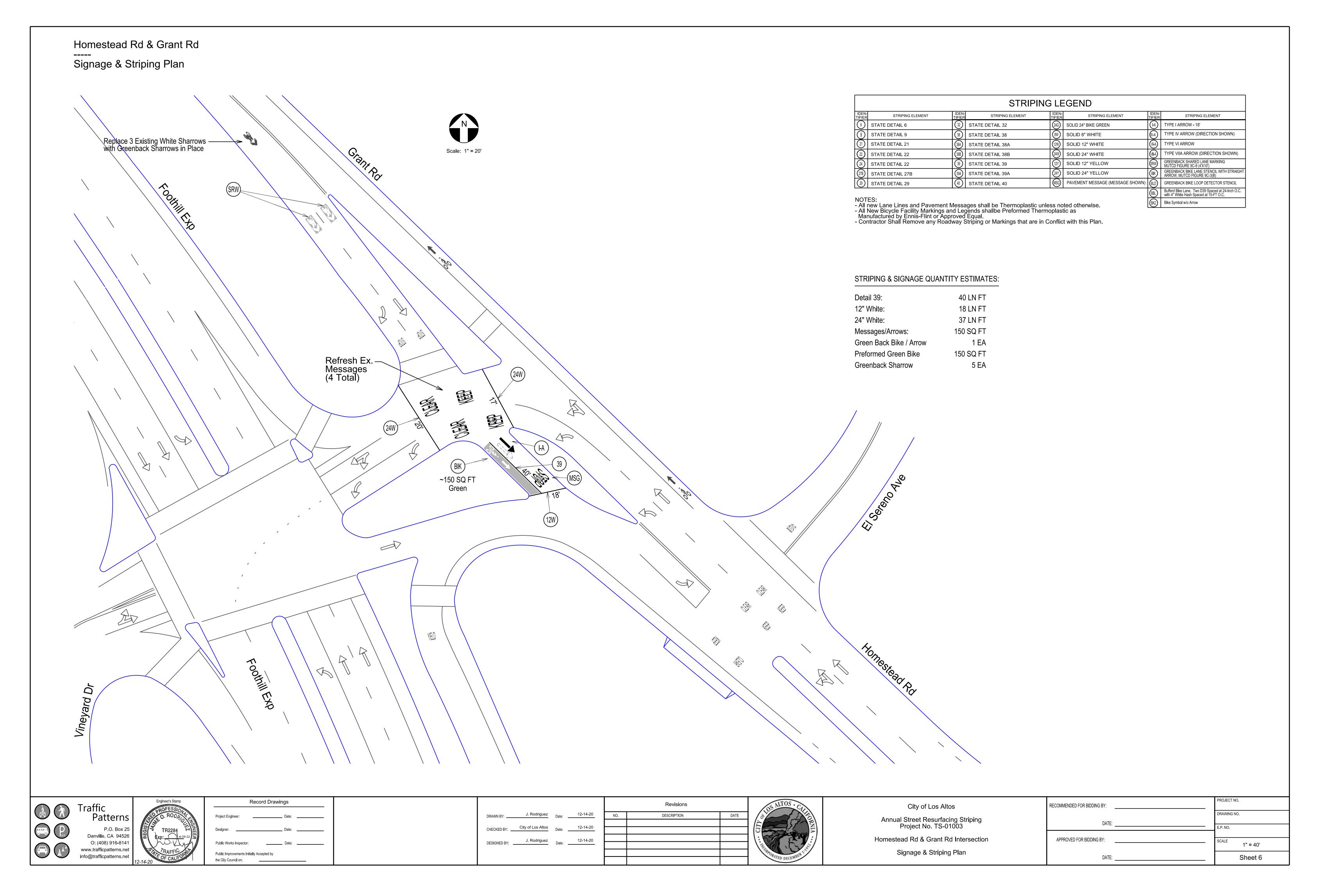
COMMENDED FOR BIDDING BY:	PROJECT NO.	
DATE:	DRAWING NO.	
	E.P. NO.	
APPROVED FOR BIDDING BY:	SCALE 1" = 40'	
DATE:	Sheet 1	





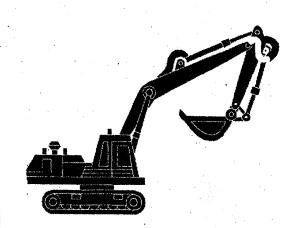






Heavy Equipment Operation

Best Management Practices for the Construction Industry



Best Management Practices for the

- Vehicle and equipment operators
- Site supervisors
- General contractors

Developers

Home builders

Storm water Pollution from Heavy Equipment on **Construction Sites**

Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible

Doing the Job Right

Site Planning and Preventive Vehicle

☐ Maintain all vehicles and heavy equipment

- Inspect frequently for and repair leaks. Perform major maintenance, repair jobs, and vehicle and equipment washing off site where
- ☐ If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in separate containers, and properly dispose as hazardous waste (recycle whenever possible).
- Do not use diesel oil to lubricate equipment parts, or clean equipment. Use only water for
- Cover exposed fifth wheel hitches and other oily or greasy equipment during rain events.

Spill Cleanup

- ☐ Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible and properly dispose of absorbent materials.
- ☐ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- Use as little water as possible for dust control. Ensure water used doesn't leave silt or discharge to storm drains.

Clean up spills on dirt areas by digging

- up and properly disposing of
- appropriate local spill response agencies immediately.

Roadwork **Paving**

Best Management Practices for the Construction Industry



Best Management Practices for the Road crews

- Seal coat contractors
- · Operators of grading equipment, paving machines, dump trucks, concrete mixers

Driveway/sidewalk/parking lot construction

- Construction inspectors General contractors
- Home builders Developers

Doing The Job Right

General Business Practices

- Develop and implement erosion/sediment control plans for roadway embankments.
- ☐ Schedule excavation and grading work during Check for and repair leaking equipment. Perform major equipment repairs at designated
- areas in your maintenance yard, where cleanup is easier. Avoid performing equipment repairs at construction sites.
- When refueling or when vehicle/equipment maintenance must be done on site, designate a location away from storm drains and creeks.
- parts or clean equipment. Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly:

Do not use diesel oil to lubricate equipment

During Construction

- Avoid paving and seal coating in wet weather, or when rain is forecast, to prevent fresh naterials from contacting stormwater runoff
- Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- Protect drainage ways by using earth dikes, sand bags, or other controls to divert or trap and filter runoff.

from Roadwork Road paving, surfacing, and pavement removal

Storm Drain Pollution

nappen right in the street, where there ar numerous opportunities for asphalt, saw-cut slurry or excavated material to illegally enter storm drains Extra planning is required to store and dispose of materials properly and guard against pollution o storm drains, creeks, and the Bay.

☐ Keep all liquid paint products and wastes

away from the gutter, street, and storm

exposed- aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt Cover stockpiles (asphalt, sand, etc.)

- and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or
- plastic sheets and berms. Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use.
- Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags), or dig up, remove, and properly dispose of contaminated soil.

Collect and recycle or appropriately

dispose of excess abrasive gravel or

☐ Never wash excess material from

Avoid over-application by water trucks

Asphalt/Concrete Removal

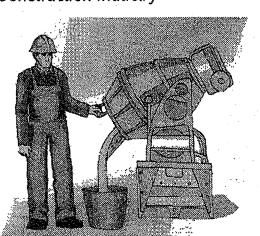
- ☐ Avoid creating excess dust when breaking asphalt or concrete.
- After breaking up old pavement, be sure to remove all chunks and pieces. Make sure broken pavement does not come in contact with rainfall or runoff.
- When making saw cuts, use as little water as possible. Shovel or vacuum saw-cut slurry and remove from the site Cover or protect storm drain inlets during saw-cutting. Sweep up, and properly dispose of, all residues.

Sweep, never hose down streets to

clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm drains.

Fresh Concrete and Mortar **Application**

Best Management Practices for the Construction Industry



Best Management Practices for the

- Masons and bricklayers
- Sidewalk construction crews Patio construction workers
- Construction inspectors
- General contractors
- Home builders Developers
- Concrete delivery/pumping workers

Doing The Job Right

General Business Practices

- Wash out concrete mixers only in designated wash-out areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by
- pumping back into mixers for reuse. ☐ Wash out chutes onto dirt areas at site that do not flow to streets or drains.
- Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect Secure bags of cement after they are open. Be
- sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and
- Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.

Storm Drain Pollution from Fresh Concrete and Mortar Applications

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these

materials to the storm drains or creeks can block

Los Altos Municipal Code Requirements

resources. Domestic or industrial wastes that are no longer contained in a pipe, tank or other container are considered to be

A. A spill response plan for hazardous waste, hazardous materials and uncontained construction materials shall be prepared and

B. A storm water pollution prevention plan shall be prepared and available at the construction sites for all projects greater than one

available at the construction sites for all projects where the proposed construction site is equal to or greater than one acre of

disturbed soil and for any other projects for which the city engineer determines is necessary to protect surface waters. Preparation

acre of disturbed soil and for any other projects for which the city engineer determines that a storm water management plan is

necessary to protect surface waters. Preparation of the plan shall be in accordance with guidelines published by the city engineer.

improve the water quality of the discharge. Contaminated groundwater or water that exceeds state or federal requirements for

discharge to navigable waters may not be discharged to the storm drain. Such water may be discharged to the sewer, provided

that the requirements of Section 10.08.240 are met and the approval of the superintendent is obtained prior to discharge.

construction debris be deposited or allowed to be deposited in the storm drain system. (Prior code § 5-5.643)

D. No cleanup of construction debris from the streets shall result in the discharge of water to the storm drain system; nor shall any

Prior approval shall be obtained from the city engineer or designee to discharge water pumped from construction sites to the storn

storm drains, causes serious problems, and is

prohibited by law.

Los Altos Municipal Code Chapter 10.08.390 Non-storm water discharges

threatened discharges unless they are actively being cleaned up.

Criminal and judicial penalties can be assessed for non-compliance.

Los Altos Municipal Code Section 10.08.430 Requirements for construction operations

of the plan shall be in accordance with guidelines published by the city engineer.

During Construction

- Don't mix up more fresh concrete or cement than you will use in a two-hour
- Set up and operate small mixers on
- tarps or heavy plastic drop cloths. ☐ When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
- Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
- ☐ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete at a landfill.
- Never bury waste material. Dispose of small amounts of excess dry concrete grout, and mortar in the trash.
- ☐ Never dispose of washout into the street, storm drains, drainage ditches, or

Spill Response Agencies

Preventing Pollution:

It's Up to Us

In the Santa Clara Valley, storm drains

transport water directly to local creeks

and San Francisco Bay without treatment.

Storm water pollution is a serious problem

for wildlife dependent on our waterways

and for the people who live near polluted

streams or bay lands. Some common

sources of this pollution include spilled oil,

fuel, and fluids from vehicles and heavy

equipment; construction debris; sediment

created by erosion; landscaping runoff

containing pesticides or weed killers; and

materials such as used motor oil,

antifreeze, and paint products that people

Thirteen valley municipalities have joined

together with Santa Clara County and the

Santa Clara Valley Water District to

educate local residents and businesses

and fight storm water pollution. TO

comply with this program, contractors

most comply with the practices described

pour or spill into a street or storm drain.

DIAL 9-1-1

this drawing sheet.

State Office of Emergency Services Warning 800-852-7550 Center (24 hours):

Santa Clara County Environmental Health (408) 299-6930 Services:

Local Pollution Control Agencies

County of Santa Clara Pollution Prevention (408) 441-1195

County of Santa Clara Integrated Waste

(408) 441-1198 Management Program: County of Santa Clara District Attorney

Environmental Crimes Hotline: (408) 299-TIPS

Santa Clara County 1-800-533-8414

Recycling Hotline:

Santa Clara Valley Water

(408) 265-2600 District: Santa Clara Valley Water District Pollution

1-888-510-5151 Regional Water Quality Control Board San

(510) 622-2300 Francisco Bay Region: Palo Alto Regional Water Quality

Altos Hills, Mountain View, Palo Alto, Stanford

drain. The city engineer or designee may require gravity settling and filtration upon a determination that either or both would (650) 329-2598 Control Plant: Serving East Palo Alto Sanitary District, Los Altos, Los

City of Los Altos

Building Department:

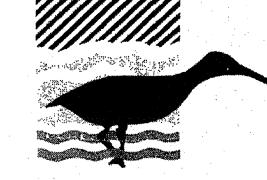
(650) 947-2752

Engineering Department: (650) 947-2780

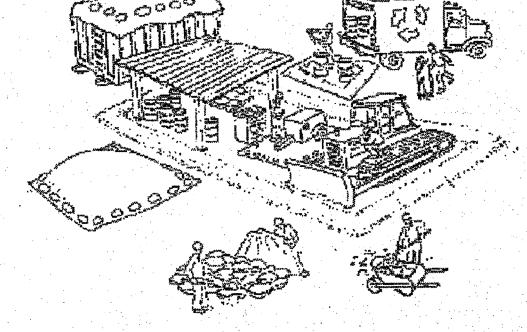
Blueprint for a Clean Bay

Remember: The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage

Best Management Practices for the Construction Industry



Urban Runoff Pollution Prevention Program



APPROVED BY: LARRY LIND DRAWN BY: VICTOR CHEN CHECKED BY:

CITY OF LOS ALTOS OCTOBER, 2003 48056 SCALE: DRAWING NO: SHEETS

Landscaping, Gardening, and **Pool Maintenance**

Best Management Practices for the Construction Industry



Best Management Practices for the

- Landscapers
- Gardeners
- Swimming pool/spa service and repair
- Home builders

Developers

Homeowners

General contractors

Doing The Right Job

- **General Business Practices** Protect stockpiles and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting. Store pesticides, fertilizers, and other
- chemicals indoors or in a shed or storage ☐ Schedule grading and excavation projects
- during dry weather. Use temporary check dams or ditches to divert runoff away from storm drains.

Protect storm drains with sandbags or other

- sediment controls. Re-vegetation is an excellent form of erosion
- Landscaping/Garden Maintenance Use pesticides sparingly, according to instructions on the label. Rinse empty
- Dispose of rinsed, empty containers in the trash. Dispose of unused pesticides as hazardous waste.

containers, and use rinse water as product.

waste, and tree trimmings. Chip if necessary, and compost In communities with curbside pick-up of yard waste, place clippings and pruning waste at the curb in approved bags or containers. Or, take to a landfill that composts yard waste. No

commercial properties. **Storm Drain Pollution**

curbside pickup of yard waste is available for

Swimming Pool Maintenance Many landscaping activities expose soils and chemicals will run off into the storm drains during irrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These

From Landscaping and

Do not blow or rake leaves, etc. into the street, or place yard waste in gutters or on dirt shoulders, unless you are piling them for recycling (allowed by San Jose and unincorporated County only). Sweep up any leaves, litter or residue in gutters or on

In San Jose, leave yard waste for curbside recycling pickup in piles in the street, 18 inches from the curb and completely out of the flow line to any storm drain.

Pool/Fountain/Spa Maintenance

Draining Pools Or Spas When it's time to drain a pool, spa, or fountain please be sure to call your local wastewater treatment plant before you start for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Discharge flows

- shall not exceed 100 gallon per minute. ■ Never discharge pool or spa water to a street or storm drain; discharge to a
- If possible, when emptying a pool or spa let chlorine dissipate for a few days and then recycle/reuse water by draining it gradually onto a landscaped area. Do not use copper-based algaecides.

Filter Cleaning Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area and spade filter residue into soil. Dispose

Control algae with chlorine or other alternatives, such as sodium bromide.

of spent diatomaceous earth in the

If there is no suitable dirt area, call your

local wastewater treatment plant for

or rinse water to the sanitary sewer.

Clean up leaks, drips and other spills

immediately so they do not contaminate

soil or groundwater or leave residue on

paved surfaces. Use dry cleanup methods

use just enough to keep the dust down.

Cover and maintain dumpsters. Check

secured around the outside of the

dumpster, Never clean out a dumpster by

hosing it down on the construction site.

Make sure portable toilets are in good

☐ Practice Source Reduction -- minimize

Use recyclable materials whenever

antifreeze, batteries, and tires.

Dispose of all wastes properly. Many

construction materials and wastes.

including solvents, water-based paints,

wood, and cleared vegetation can be

vehicle fluids, broken asphalt and concrete

recycled. Materials that cannot be recycled

must be taken to an appropriate landfill or

disposed of as hazardous waste. Never

bury waste materials or leave them in the

street or near a creek or stream bed.

In addition to local building permits, you

will need to obtain coverage under the

Storm water Permit if your construction

State's General Construction Activity

site disturbs one acre or more. Obtain

information from the Regional Water

Quality Control Board

aterials/Waste Handling

Set portable toilets away from storm drains

working order. Check frequently for leaks.

waste when you order materials. Order

only the amount you need to finish the job

possible. Arrange for pick-up of recyclable

materials such as concrete, asphalt, scrap

maintenance materials such as used oil,

metal, solvents, degreasers, cleared

vegetation, paper, rock, and vehicle

whenever possible. If you must use water,

frequently for leaks. Place dumpsters under

roofs or cover with tarps or plastic sheeting

instructions on discharging filter backwash

Application of Solvents and **Adhesives**

Best Management Practices for the Construction Industry



 Plasterers Graphic artists Dry wall crews Floor covering installers General contractors

Home builders

Developers

And

☐ Wash water from painted buildings constructed before 1978 can contain high amounts of lead, paint tests positive for lead, block storm drains

Doing The Job Right

Handling Paint Products

Best Management Practices for the

 Painters Paperhangers

Paints, Solvents, and Adhesives

Doing The Job Right

All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

Painting Cleanup

- Never clean brushes or rinse paint containers into a street, gutter, storm drain, French drain, or stream. For water-based paints, paint out
- into a drain that goes to the sanitary sewer. Never pour paint down a storm ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner

brushes to the extent possible, and rinse

or solvent in a proper container. Filter and

reuse thinners and solvents. Dispose of

excess liquids and residue as hazardous

- Paint Removal Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths
- and disposed of as trash. Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury or tributyl tin must be disposed of as hazardous wastes Lead based paint removal requires a

state-certified contractor

When stripping or cleaning building exteriors with high-pressure water, block storm drains. Direct wash water onto a dirt area and spade into soil. Or, check with the local wastewater treatment authority to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater

treatment authority in making its decision. Recycle/Reuse Leftover Paints Whenever Possible ☐ Recycle or donate excess water-based

Reuse leftover oil-based paint. Dispose of non-recyclable thinners, sludge and unwanted paint, as hazardous waste. Unopened cans of paint may be able to be

returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

- **Dewatering Operations** 1. Check for Toxic Pollutants Check for odors, discoloration, or an oily
- ☐ If contamination is suspected, have the
- to the storm drain (if no sediments present) or sanitary sewer. OR, you may be required to collect and haul pumped groundwater offsite for treatment and
- less than 24 hours, and the flow rate is less than 20 gallons per minute, you may pump water to the street or storm drain. If the pumping time is more than 24 hours
 - for filtering include: Pumping through a perforated pipe sunk part way into a small pit filled
- the inlet using a barrier of burlap bags filled with drain rock, or cover inlet with filter fabric anchored under the grate. Of

Cover stockpiles and excavated soil with secured tarps or plastic sheeting.

- Call your local wastewater treatment agency and ask whether the groundwater
- water tested by a certified laboratory. Depending on the test results, you may be allowed to discharge pumped groundwater
- the Regional Water Quality Control Board's Erosion and Sediment Control Field Manual for and the flow rate greater than 20 gpm, call your local wastewater treatment plant
- drains when handled improperly. Sediments in runoff can clog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay. Effective with gravel; Pumping from a bucket placed below water level using a submersible pump;

Pumping through a filtering device such as a swimming pool filter or filter fabric wrapped around end of suction

caused by your subcontractors or employees.



Santa Clara

General Construction **And Site** Supervision Best Management Practices For Construction

- **Best Management Practices for the** General contractor
- Site supervisors Inspectors

Home builders

Storm Drain Pollution from **Construction Activities** Construction sites are common sources of storm

water pollution. Materials and wastes that blow or

As a contractor, or site supervisor, owner or operator of a site, you may be responsible for any environmental damage caused by your ibcontractors or employees

as a reference.

- ☐ Keep an orderly site and ensure good housekeeping practices are used.

Over materials when they are not in use.

Ensure dust control water doesn't leave site or discharge to storm drains. Advance Planning To Prevent Pollution Schedule excavation and grading activities for dry weather periods. To reduce soil erosion.

plant temporary vegetation or place other

erosion controls before rain begins. Use the

Erosion and Sediment Control Manual, available

from the Regional Water Quality Control Board,

or temporary or permanent drainage ditches to divert water flow around the site. Reduce storm check dams or berms where appropriate. Train your employees and subcontractors. Make these best management practices

available to everyone who works on the

construction site. Inform subcontractors about

responsibilities. **Good Housekeeping Practices** Designate one area of the site for auto parking vehicle refueling, and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets,

Keep materials out of the rain – prevent runoff

contamination at the source. Cover exposed

piles of soil or construction materials with plastic

wash into a storm drain, gutter, or street have a sheeting or temporary roofs. Before it rains, direct impact on local creeks and the Bay. sweep and remove materials from surfaces that drain to storm drains, creeks, or channels. Keep pollutants off exposed surfaces. Place trashcans and recycling receptacles

☐ Maintain equipment properly.

chemicals are toxic to aquatic life.

- **Doing The Job Right**
- and drainage channels.

☐ Keep materials away from streets, storm drains

- Control the amount of runoff crossing your site (especially during excavation!) by using berms water runoff velocities by constructing temporary
- the storm water requirements and their own bermed if necessary. Make major repairs off
- around the site to minimize litter.

- ☐ Clean up spills immediately when they

- Report significant spills to the
- If the spill poses a significant hazard to human health and safety, property or the environment, you must also report it to the State Office of Emergency

Painting and



- Homeowners

Earth-Moving

Dewatering **Activities**

Best Management Practices for the

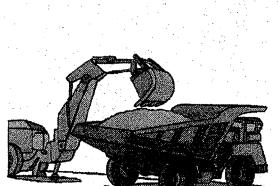
Construction Industry

Site supervisors

Home builders

Developers

General contractors



Best Management Practices for the

 Buildozer, back hoe, and grading machine Dump truck drivers

- drains. Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of at a hazardous waste collection facility (contact your local stormwater program listed on the back of this brochure). When thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be
- even if paint chips are not present. Before you begin stripping paint or cleaning pre-1978 building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. See Yellow Pages for a state-certified laboratory. If there is loose paint on the building, or if the

disposed of as garbage in a sanitary landfill.

Empty, dry paint cans also may be recycled as

for disposal as hazardous waste. Storm Drain Pollution from

Check with the wastewater treatment plant to

determine whether you may discharge water to

the sanitary sewer, or if you must send it offsite

(latex) paint, or return to supplier.

General Business Practices ☐ Schedule excavation and grading work during dry weather Perform major equipment repairs away from the

maintenance must be done on site, designate a

☐ When refueling or vehicle/equipment

location away from storm drains.

Do not use diesel oil to lubricate equipment

parts, or clean equipment. **Practices During Construction** Remove existing vegetation only when absolutely necessary. Plant temporary vegetation for erosion control on slopes or where construction is not immediately planned Protect down slope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or ditches

to divert runoff around excavations. Refer to

proper erosion and sediment control Storm Drain Pollution from Earth-Moving Activities and Dewatering

Soil excavation and grading operations loosen large

amounts of soil that can flow or blow into storm

dewatering site into any water of the state

without treatment is prohibited.

erosion control practices reduce the amount of runoff crossing a site and slow the flow with check dams or roughened ground surfaces Contaminated groundwater is a common problem in the Santa Clara Valley. Depending on soil types and site history, groundwater pumped from construction sites may be contaminated with toxics (such as oil or solvents) or laden with sediments. Any of these pollutants can harm wildlife in creeks or the Bay, or interfere with wastewater treatment plant operation. Discharging sediment-laden water from

- sheen on groundwater.
- disposal at an appropriate treatment . Check for Sediment Levels If the water is clear, the pumping time is
- for guidance. ☐ If the water is not clear, solids must be filtered or settled out by pumping to a settling tank prior to discharge. Options
- When discharging to a storm grain, protect pump water through a grassy swale prior

A. Unlawful discharges. It shall be unlawful to discharge any domestic waste or industrial waste into storm drains, gutters, creeks, or San Francisco Bay, Unlawful discharges to storm drains shall include, but not be limited to, discharge from toilets; sinks; industrial processes; cooling systems; boilers; fabric cleaning; equipment cleaning; vehicle cleaning; construction activities, including, but not limited to, painting, paving, concrete placement, saw cutting and grading; swimming pools; spas; and fountains, unless specifically permitted by a discharge permit or unless exempted pursuant to guidelines published by the superintendent. Threatened discharges. It shall be unlawful to cause hazardous materials, domestic waste, or industrial waste to be deposited i such a manner or location as to constitute a threatened discharge into storm drains, gutters, creeks or San Francisco Bay. A "threatened discharge" is a condition creating a substantial probability of harm, when the probability and potential extent of harm make it reasonably necessary to take immediate action to prevent, reduce or mitigate damages to persons, property or natural