

April 17, 2019

The Honorable Bob Blumenfield
Chair, Public Works and Gang Reduction Committee
City Hall, Room 415
Los Angeles, California 90012

**Re: Council File No. 16-0395-S1
Status of City's Network of Concrete Streets**

Dear Councilmember Blumenfield:

The California Nevada Cement Association (CNCA) is committed to developing sustainable and economical construction solutions for California and Nevada. We serve as a non-profit association that provides expert technical leadership, research, and educational opportunities designed to responsibly transform our built environment and improve the lives of the people throughout the region.

Concrete pavements consistently perform well and often have the lowest life cycle cost because they are more durable than other pavement materials, thus requiring less maintenance during their lifetime. In addition, concrete streets and roads have a long history of exceptional environmental performance. They serve as natural "cool pavements" to reduce urban heat island effects, and offer lower rolling resistance for vehicles which results in better fuel mileage for all vehicles traveling on them.

The CNCA is a valuable resource, which supports and can further assist the city's effort to address its network of poorly performing concrete streets. We have been closely monitoring Council File No. 16-0395-S1 since 2017 when the City Council directed the City Administrative Officer (CAO) and Chief Legislative Office (CLA) along with the Bureau of Engineering (BOE), the Bureau of Street Services (BSS), and the Bureau of Contract Administration (BCA) to report back on this vexing issue. Over the past few years we have met with staff from these respective departments, along with City Council and Mayor's staff and Public Works Commissioners.

The CNCA salutes the comprehensive February 15, 2019 CAO/CLA report on the "**Status of the City's Network of Concrete Streets.**" This report is filled with contextual data, history, facts and observations pertinent to reaching sound policy decisions which can improve the quality of life for LA's residents, businesses and visitors. We note the following excerpts:

- Current PCI data indicates that 965 (82%) of the City's 1,184 concrete lane miles are in poor condition—rated "D" or "F" (p.3).
- Concrete streets have a useful life of 30-50 years. An asphalt street's life span ranges from 15-25 years. Factors such as climate, types of traffic, volume of traffic, and the performance of routine maintenance affect the lifespan of individual streets. Generally, asphalt streets must be reconstructed one or more times during the lifespan of a concrete street. Concrete streets, by comparison, do not require regular maintenance as asphalt streets (p.7).
- In addition to cosmetic appeal streets are concrete for logistical reasons such as high bus traffic areas and drainage related issues. Concrete streets are light and naturally reflective and can lower street temperatures, reducing urban heat island effects (p.7).
- Historically the City has not funded reconstruction programs for either concrete or asphalt streets. The Street Reconstruction Program was established in FY 2017-18. The 2018-19 FY Budget includes \$54 M in funding for asphalt construction (p. 9-10).
- The City has not yet funded dedicated programs for concrete street repairs and reconstruction. Concrete repair and reconstruction work has been budgeted on an ad hoc basis and the work has been performed by contractors managed by BOE. There are no dedicated concrete street repair and/or construction crews within BSS (p.10). Notable ad hoc projects include:
 1. Wilshire Bus Rapid Transit Project: \$14 M project completed by BOE contractor in 2015 which primarily consisted of concrete reconstruction of curb lanes and gutter and resurfacing of middle asphalt lanes
 2. Hancock Park Concrete Intersections: \$400,000 repair of 5 intersections in Hancock Park performed by BOE contractor



- 3. Hancock Park HPOZ 4th Street and McCadden Place Pilot Concrete Street Reconstruction:
\$750,000 reconstruction pilot project utilizing BSS crews vs. BOE contractor
 - Should the City Council choose to establish a “Concrete Street Repair and Reconstruction Program” the following eight (8) funding sources can be utilized for that work: (1) Measure R Local Return; (2) Measure M Local Return; (3) Special Gas Tax Improvement Fund; (4) SB1; (5) Prop. C Local Return; (6) Prop A; (7) Local Transportation Fund; (8) City General Fund

While not expressly discussed in this report, the CNCA strongly encourages that the City also look into the feasibility of utilizing “**diamond grinding**” as a tool to maintain its concrete streets. Diamond grinding is a pavement preservation technique that corrects a variety of surface imperfections. It’s a cost-effective technique used by Caltrans, the County of Los Angeles and many state agencies and municipalities across the country. Diamond grinding is substantially less expensive than most asphalt overlays, and keeps the need for future maintenance low. Anecdotally, we have surveyed several HPOZ’s (Angelino Heights, Hancock Park, Miracle Mile, Stonehurst) and hillsides where we believe diamond grinding could serve as cost-effective strategy to better maintain and improve the concrete street networks for these neighborhoods. We also note that a few years ago the County of Los Angeles successfully completed a diamond grinding project that improved an 80-year old concrete street along Slauson Avenue just east of the City limits located in an industrial area inundated with 18-wheel truck traffic.

Finally, the CNCA recommends that the City also analyze the long-term benefits of upgrading bus lanes (Wilshire BRT before/after example), key intersections, and intersection approaches to concrete pavements. On July 8, 2014 the Santa Monica City Council proactively authorized the upgrading of 5 intersections on Colorado Boulevard adjacent to the Expo Light Rail Line from asphalt to concrete:

”City staff determined it would be beneficial and cost efficient to upgrade and improve the baseline design by constructing the five intersections entirely in concrete. Concrete intersections are more sustainable and last longer requiring less maintenance than asphalt intersections. Completing this work now would prevent future street closures for repairs to asphalt thereby impacting traffic for businesses, residents, tourists, fire and police. The future street configuration would be condensed and any future construction within 10 feet of the dedicated railway would have to be performed during Metro’s limited non-operating hours (2-5 AM), thus costing more and having a longer construction time in the future.” (See Attachment)

We believe that similar analyses and findings could provide long-term economic, environmental, and public safety benefits for many streets and intersections in Los Angeles, especially those located adjacent to future transportation projects and Transit Oriented Developments like the Van Nuys LRT and Orange Line. These baseline upgrades compliment and strengthen tenets found in the City’s **Complete Streets** and **Vision Zero** initiatives. With the passage of Measure M and SB1 in recent years, the City has additional funding streams which could be tapped to finally address its backlog of failing concrete streets and ensure better maintenance of its existing concrete street network. And from a strategic standpoint, it also has the opportunity to proactively invest and upgrade its network of failing asphalt bus lanes and high volume intersections to more enduring concrete pavements.

The CNCA supports the recommendations outlined in the CAO/CLA report, especially the establishment of a Concrete Street Repair and Reconstruction Program. Thank you for considering our suggestions. We reiterate our offer to access CNCA resources including national experts, design standards, specifications, and best practices that can help the City with further analyses and recommended paths forward.

Sincerely,

Nathan Forrest, P.E., ENV SP
CNCA Pavement Engineer – Southern California & Southern Nevada

- cc: Public Works & Gang Reduction Committee
Councilmember David E. Ryu, 4th District (Vice Chair)
Councilmember Joe Buscaino, 15th District (Member)
Councilmember Nury Martinez, 6th District (Member)
Councilmember Mitch O’Farrell (Member)
Michael Espinosa, Office of the City Clerk

Attachment: Santa Monica City Council, July 8, 2014 (Exposition LRT Pavement Betterments)



City Council Meeting: July 8, 2014

Agenda Item: 3-A

To: Mayor and City Council
From: Martin Pastucha, Director of Public Works
Subject: Exposition Light Rail Intersection Pavement Betterments on Colorado Avenue

Recommended Action

Staff recommends that the City Council:

1. Authorize the City Manager to negotiate and execute an agreement with the Exposition Metro Line Construction Authority (Authority) in an amount not to exceed \$500,000 (including a 5% contingency) to upgrade the roadway pavement to concrete paving at five intersections on Colorado Avenue.
2. Authorize the Director of Public Works to issue any necessary change orders to complete additional work within budget authority.

Executive Summary

On [September 13, 2011](#), Council authorized the Master Cooperative Agreement (MCA) with the Exposition Metro Line Construction Authority. Per Section 9.3 of the MCA, City-owned facilities, including roads and intersections, may be replaced in kind at the City's request. City staff identified concrete pavement as necessary betterments, as defined in the MCA, to five existing intersections along Colorado Avenue which are currently asphalt concrete pavement. These betterments are recommended to be installed during the construction of the Exposition Light Rail (EXPO) project to minimize future traffic and operational interruptions to the rail line. In addition, implementation of these betterments will result in cost savings to the City versus performing the improvements after the EXPO Project is completed.

Background

The EXPO Line will connect Downtown Los Angeles to Downtown Santa Monica. There are three stations in Santa Monica officially named 26th Street/Bergamot, Colorado/17th Street/SMC, and Downtown Santa Monica. The Authority is designing and building the EXPO Line. Once completed, it will be turned over to the Los Angeles County Metropolitan Transportation Authority (Metro) for

operation. Phase 1 of the line to Culver City opened in April 2012 with Phase 2 to extend the line to Santa Monica and scheduled to open in early 2016.

On [July 13, 2010](#), Council adopted a range of betterments to incorporate into the City's three EXPO Line stations that included separate station platforms for east and west bound trains at the 26th Street/Bergamot Station and a second entrance at Memorial Park/17th Street Station.

On [May 24, 2011](#), Council authorized a funding agreement between the City, the Authority, and Metro to pay for baseline elements of the light rail and stations.

On [June 28, 2011](#), Council approved preliminary engineering services at Colorado/17th Street/SMC and 26th Street/Bergamot Stations. On [September 13, 2011](#), Council authorized negotiation with the Authority for the betterments at these stations. On [December 13, 2011](#), Council authorized an agreement with the Authority to perform final engineering and construction of betterments for the two stations.

On [January 24, 2012](#), Council authorized an agreement with the Authority for the required 3% local match and an agreement for engineering and construction of betterments at the Downtown Santa Monica Station.

On [September 11, 2012](#) Council authorized an agreement with the Authority for the final engineering services and construction of the betterments to the City water main on Colorado Avenue.

On [June 25, 2013](#), Council authorized an agreement with the Authority for Storm Drain Repairs and Replacement on Colorado Avenue.

On [August 13, 2013](#), Council authorized funding for the design and construction of upgraded street lights on the south side of Colorado between 5th Street and 16th Street.

Discussion

The Authority and its design-builder, Skanska-Rados Joint Venture (SRJV), have completed final design on all necessary City-owned infrastructure along Colorado Avenue. The final roadway design along Colorado Avenue between 5th Street and 17th Street was replaced with pavement materials in kind. There are five intersections on Colorado Avenue currently constructed in asphalt pavement. These intersections are located at 5th Street, 7th Street, 11th Street, 14th Street, and 17th Street. There are two other intersections

currently constructed in concrete pavement, 6th Street and Lincoln Boulevard, which will be reconstructed with concrete pavement as part of the baseline project, with the reconstruction of the Lincoln Boulevard intersection recently completed.

Upgrades

The Authority is installing tracks in the middle of Colorado Avenue. The tracks are embedded in concrete. The intersections on Colorado Avenue are proposed to be partially constructed in concrete, within the 26-foot track guideway section. The remaining section of the intersection is to be constructed in asphalt pavement.

City staff determined it would be beneficial and cost efficient to upgrade and improve the baseline design by constructing the five intersections entirely in concrete. Concrete intersections are more sustainable and last longer, requiring less maintenance versus asphalt concrete intersections. Completing this work now would prevent future street closures for repairs to asphalt, thereby impacting traffic for businesses, residents, tourists, fire, and police. The future street configuration would be condensed and any future construction within 10 feet of the dedicated railway would have to be performed during Metro's limited non-operating hours (2-5 AM), thus costing more and having a longer construction time in the future.

Negotiations

The Authority obtained cost proposals from SRJV for the City-requested betterments. Authority and City staff reviewed the cost and determined that it is competitive and comparable to other similar work conducted at the Downtown Santa Monica Station, Colorado/17th Street/SMC and 26th Street/Bergamot Stations. The work conducted in these locations included concrete pavement work similar in scope and unit price to the requested betterment. A credit in the amount of \$45,000 would be applied toward the proposed betterment, which is equal to the cost of paving the remainder of the intersection in asphalt pavement. The Authority has agreed not to charge an overhead fee on any betterment. In addition, a City controlled contingency of \$23,111 would be budgeted by the City. Only changes authorized by the Director of Public Works would be approved for payment to the Authority.

Financial Impacts & Budget Actions

The agreement to be awarded to the Authority is for an amount not to exceed \$500,000 (including a 5% contingency). The \$500,000 amount includes the \$45,000 credit to be applied toward the proposed betterment and the \$23,111 City-controlled contingency. Funds are available in the proposed FY 2014-15 Capital Improvement Program budget in account C017061.589000.

Prepared by: Hany Demitri, PE, TE, Civil Engineer

Approved:

Forwarded to Council:

Martin Pastucha
Director of Public Works

Rod Gould
City Manager

-