

**PUBLIC NOTICE
FOR
DRAFT ENVIRONMENTAL PROTECTION AGENCY (EPA) BROWNFIELDS
ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES FOR THE 3600 BLOCK
OF RIO LINDA BOULEVARD**

Notice is hereby given that the Housing Authority of the City of Sacramento, a constituent entity of the Sacramento Housing and Redevelopment Agency (SHRA), has prepared a draft Analysis of Brownfields Cleanup Alternatives (ABCA) in preparation of applying for a U.S. Environmental Protection Agency (EPA) brownfield cleanup grant for the 3600 Rio Linda Boulevard block in Sacramento, CA.

The draft ABCA is available for review online at www.shra.org. You may also request a copy by email by contacting Brad Satterwhite at bsatterwhite@shra.org.

If you wish to make comments on the draft ABCA you may submit written comments no later than December 16, 2016 to:

Sacramento Housing and Redevelopment Agency
Development and Federal Programs
Attn: Brad Satterwhite
801 12th Street, Fourth Floor
Sacramento, CA 95814

Questions about the ABCA may be directed to Brad Satterwhite at (916) 449-6242 or bsatterwhite@shra.org.

11/18/16

DRAFT
ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES

Rio Linda Superblock Site
(Including 3605, 3609/3611 and 3637 Rio Linda Boulevard)
Sacramento, CA 95838

November 18, 2016

Prepared by:

Sacramento Housing and Redevelopment Agency
801 12th Street
Sacramento, CA 95814



INVESTING IN COMMUNITIES

Introduction

The Housing Authority of the City of Sacramento (Housing Authority), a constituent entity of the Sacramento Housing and Redevelopment Agency (SHRA) is applying for three Environmental Protection Agency Brownfield Cleanup Grants for a project known as the Rio Linda Superblock located at 3605, 3609/3611 and 3637 Rio Linda Boulevard, Sacramento, CA 95838.

As part of the grant, applicants must provide the community with notice of its intent to apply for a grant and allow the community an opportunity to comment on the draft proposal. The applicant must prepare an Analysis of Brownfields Cleanup Alternatives (ABCA) as an attachment to the proposal. The ABCA briefly summarizes information about the site and contamination issues, cleanup standards, applicable laws, cleanup alternatives considered and the proposed cleanup. If awarded, the grants will allow the Housing Authority to remediate the site to unrestricted, residential use for the development of affordable housing.

Note: The draft ABCA is subject to change.

Background

The Redevelopment Agency of the City of Sacramento (Redevelopment Agency), a constituent entity of SHRA began assembling vacant parcels on a block collectively known as the Rio Linda Superblock in the Del Paso Heights neighborhood of Sacramento since the late 1980's for the development of affordable single family homes. To date, the Agency has acquired ten of the 12 site parcels. The remaining two parcels are privately owned and SHRA has had amenable discussions with them in the past.

Remediation and development of this site with affordable housing has been a priority for the community since at least 1989 when the Del Paso Heights Redevelopment Advisory Committee (RAC), Sacramento Housing and Redevelopment Commission (SHRC) and Redevelopment Agency sought to remove blighting and incompatible uses including a gas station, liquor store and pool hall. Several of the goals in the Redevelopment Plan and Implementation Strategy (Redevelopment Plan) from that time were to a) improve the neighborhood environment and image, b) eliminate blighted and blighting conditions and c) increase and develop affordable housing in the area.

The 2009-2014 Redevelopment Plan called out this project as a top priority noting that completion of this project would result in reversing depreciated property values and eliminating factors hindering viable use.

Several setbacks stalled the project over the last 20 years, including lengthy acquisition processes, elimination of redevelopment in California and serious environmental contamination from illegal dumping and previous uses such as a gas station, auto body shop and a trucking company. The main contributor to the contamination was a debris field from an unknown source.

Phase I Environmental Site Assessments (ESAs) were performed on the site in 1992. Additional Phase I and II ESAs were performed between 2004 - 2006. Follow-up Phase II investigations consisting of soil sampling and testing were performed in 2008 and 2009. In 2010, after considerable environmental testing, a Corrective Action Plan was approved by the Sacramento County Environmental Management Department (SCEMD).

In 2011, a significant amount of soil contaminated with metals was removed and stockpiled on-site and further confirmation sampling determined that the contamination was more extensive than originally thought and the project was halted. The site has remained that way since.

The table below demonstrates the current status (in tons) and estimated costs (for Alternative #3 below) associated with the contaminated soil.

Site	Est Soil Excavated	Est Remaining Soil to be Excavated	Total	Grant Cost Estimate	Leverage^	Total
Site 1: 3605 Rio Linda	450	750	1200	200k	-	200k
Site 2: 3609-3611 Rio Linda	550	750	1300	200k	-	200k
Site 3: 3633-3637 Rio Linda	650	900	1550	200k	-	200k
Rest of Site	1525	1884	3409	120k*	270k	390k
Total	3175	4284	7459	720k	270k	990k

* Grant requires 20% applicant cost share and can be in the form of a contribution of labor, material, or other services

Applicable Regulations and Cleanup Standards

As required by Health and Safety Code 57008 (The California Land Environmental Restoration and Reuse Act; SB32, Escutia, Chapter 764, Statutes of 2001), California Human Health Screening Levels (CHHSLs) are set by the California Environmental Protection Agency (Cal/EPA) in cooperation with the Department of Toxic Substances Control (DTSC), the State Water Resources Control Board and the Office of Environmental Health Hazard Assessment.

Analytical results for soil samples were positive for a range of metals including arsenic, cadmium and lead at levels exceeding respective residential CHHSLs. The CHHSL for lead is 80 mg/kg for residential property.

In 2010, a Corrective Action Plan (CAP), prepared by Nichols Consulting Engineers (NCE) was approved by the Sacramento County Environmental Management Department (SCEMD). SCEMD is the oversight agency for the assessment and remediation of the site. SCEMD is also responsible for enforcing the appropriate cleanup regulations and standards, assuring that the scope of work in the CAP is executed and for providing a No Further Action (NFA) determination for the site.

Evaluation of Cleanup Alternatives

Alternative #1 – No Action

This alternative would involve no remediation activities at the site and the site would remain in its current condition. Currently the site is vacant with impacted soil stockpiled on-site. SHRA has had to replace the fence at the site on several occasions as trespassers have been taking it down to access the site illegally. The site would continue to be a social, physical and economical blight on the community. This alternative is not effective in controlling or preventing the exposure of receptors to contamination at the subject site.

The cost estimate is \$5,000 annually for trash pickup and landscape maintenance. Fencing is approximately \$5,000 each time it has to be placed on the site. There is no estimated timeline for cleanup under this scenario and no development would occur.

Alternative #2 – Complete Soil Excavation and Off-site Landfill Disposal

This alternative includes removal of existing stockpiles to an off-site licensed Resource Conservation and Recovery Act (RCRA) landfill. RCRA is the public law framework for the proper management of hazardous and non-hazardous solid waste. RCRA disposal is the highest and most expensive level of disposal. There are taxes and liabilities attached to soil disposed of to a RCRA landfill. Additionally, disposal of RCRA classified soils often must be shipped to as far away as Utah.

Additional activities include excavating to depths of 1/2 - 1 foot in various locations across the site. The soil would be temporarily stockpiled on site, if necessary, while confirmation sampling and transportation logistics are coordinated. This will continue until residential cleanup goals are reached.

The site will be graded and backfilled, fenced, as necessary. Any soil brought on site will be certified clean. Cleanup and confirmation sampling results will be provided to SCEMD as part of our request to obtain site closure.

Estimated time of cleanup is approximately 6 months which includes SCEMD coordination, procurement and site cleanup. The cost estimate is approximately \$3,729,500 or \$500/ton for remediation of 7,459 tons. The cost estimate is generally in line with the previously approved CAP and the site would be remediated to residential CHHSLs to allow for unrestricted use.

Alternative #3 – Hazardous Substance Stabilization, Excavation, Confirmation Sampling and Off-Site Disposal

This alternative includes hazardous substance stabilization by the mechanical mixing of lime with soil to a depth of up to 1 foot in areas where soil is in excess of the residential CHHSL cleanup goals. Remaining soil would be excavated and confirmation soil sampling and analysis would be performed to confirm that the cleanup goals are achieved. Excavated soil would be characterized for disposal in accordance with the receiving facility requirements, and the soil would be transported for disposal at the appropriate facility in accordance with applicable regulations. The site will be graded, backfilled and fenced, as necessary. Any soil brought on site will be certified clean.

Bench scale testing of the treatment of soil would need to be conducted to ensure the hazardous substances stabilization is effective in reducing to the leachability of the hazardous substances to levels below hazardous waste criteria for disposal as a non-hazardous waste at an appropriate landfill. Hazardous substance stabilization activities in a residential area would require aggressive dust control of lime to control fugitive emission of the caustic material to the neighborhood. Limited space to stockpile soil may hinder implementation.

Treating the soil on-site is a deviation from the approved CAP. However, the main goal of the CAP is to remediate the site to residential CHHSLs which this alternative would still accomplish. Any deviations would be coordinated with SCEMD.

Estimated time of cleanup is approximately 6 months which includes SCEMD coordination, procurement and site cleanup. Estimated cleanup costs are provided in the table above.

Both Alternative #2 and Alternative #3 are effective in eliminating exposure of receptors to contamination at the site by removing all contaminated soil and gaining site closure from SCEMD for unrestricted, residential development. However, Alternative #3 is the recommended cleanup Alternative because it is more cost effective than Alternative #2. It is estimated that there is a site-wide cleanup cost savings of over \$2 million with Alternative #3.

Resiliency to Climate Change

The ABCA evaluates the resilience of the cleanup alternatives in light of reasonably foreseeable changing climate conditions.

The project is not located in a special flood hazard area (SFHA), wetland area, coastal management zone or adjacent to a creek or river. The project site is located within the Sacramento Valley Air Basin (SVAB), which is a non-attainment area for air quality.

According to the National Oceanic and Atmospheric Administration (NOAA)'s Regional Climate Trends and Scenarios for the Southwest United States the frequency of heat waves has generally been increasing in recent decades. Future regional climate scenarios include an increase in annual mean temperature but only a minor decrease in annual mean precipitation.

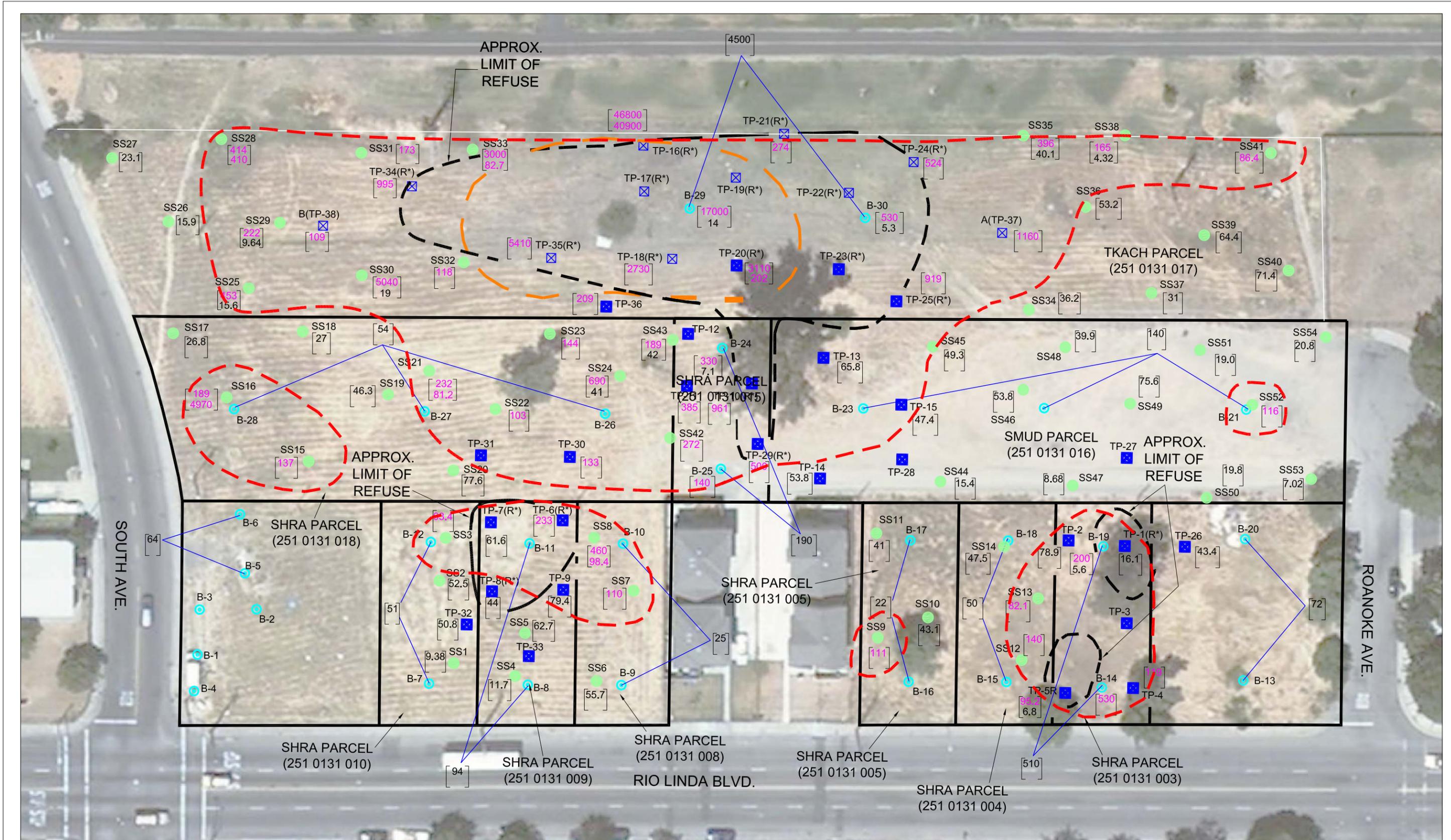
Completion of this project is consistent with the following goals of the City of Sacramento's 2007 Sustainability Master Plan:

- Public Health and Nutrition: Creating "Healthy Urban Environments" through restorative redevelopment.
- Public Health and Nutrition: Improving soil and groundwater conditions and by cleaning brownfields for future use.
- Energy Independence: Reducing the use of fossil fuels by allowing for redevelopment of an infill site.
- Climate Protection/Air Quality: Reducing vehicle trip generation by improving infill properties for future use.

This project is consistent with the City of Sacramento's 2012 Climate Action Plan in that it a) promotes sustainable growth patterns and infill development and creates a more complete neighborhood and b) improves mobility and connectivity because it is an infill development project along an existing transit corridor.

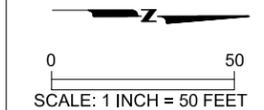
This project is consistent with the City of Sacramento's 2035 General Plan by favoring development inward over expanding outward into "greenfields" on the edge of the City. The 2035 General Plan is based on the city's Smart Growth Principles.

This project is consistent with the Sacramento Area Council of Governments (SACOG) by meeting four of the seven principles of smart growth including offering housing choices, compact development, use existing assets and natural resources conservation.



--- Approximate Distribution of Impacted Soil
 0.5 ft. depth - Excavate to 0.5 feet
--- Approximate Distribution of Impacted Soil
 2.0 ft. depth - Excavate to 2.0 feet
 (R*) = REFUSE ENCOUNTERED
 [95.2] LEAD (Pb) RESULTS IN mg/kg @ SURFACE
 [6.8] LEAD (Pb) RESULTS IN mg/kg @ 1 FOOT
453 = LEAD (Pb) RESULTS ABOVE CHHSL IN mg/kg

LEGEND
 CALIFORNIA HUMAN HEALTH SCREEN
 LIMIT (CHHSL) = 80 mg/kg
● ADDITIONAL SAMPLING POINTS
○ SOIL BORING LOCATIONS
⊗ TEST PIT LOCATIONS
> [] COMPOSITE LEAD RESULTS IN mg/kg



Reference: Aerial Photograph - 2006, Google Earth Pro.

Nichols Consulting Engineers, Chtd.
 8795 Folsom Blvd., Suite 250
 Sacramento, CA 95826
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Lead Results and Area of Planned Execution
 Soil Removal Corrective Action Plan
 Rio Linda Superblock
 Rio Linda Boulevard and Roanoke Avenue
 Sacramento, California

DRAWN	FILE NAME	PROJECT NUMBER	APPROVED	DATE	REVISED DATE
YG	48712351101.dwg	A487.12.35		4/10	