RESOLUTION NO. 2009-237

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE ADOPTING THE TRANSFER STATION MASTER PLAN PROJECT

WHEREAS, the City of Elk Grove adopted the 2008-13 Capital Improvement Program which identified several City facility projects that would improve City services and efficiency, including the Transfer Station Long Range Planning Project (SW0001); and

WHEREAS, on May 14, 2008 the City Council directed staff to consider two specific potential project sites for environmental review; and

WHEREAS, Winzler & Kelly, Solid Waste Facilities consultants, have considered the City's needs and prepared a description of possible components that might make up the future Solid Waste Infrastructure for the City of Elk Grove; and

WHEREAS, these Solid Waste components have been assembled into workable site development concepts (the "Transfer Station Master Plan" project); and

WHEREAS, the City has determined that the Transfer Station Master Plan project was subject to the California Environmental Quality Act (CEQA) and prepared an Environmental Impact Report (EIR) to evaluate the potential environmental effects of the project; and

WHEREAS, on October 15, 2009 the City of Elk Grove Planning Commission adopted Resolution No. 2009-24 finding that the Transfer Station Master Plan project was consistent with the Elk Grove General Plan; and

WHEREAS, on November 18, 2009 the City Council certified the Final EIR, for the Transfer Station Master Plan project finding that it has been prepared in accordance with CEQA.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Elk Grove as follows:

- 1) The City Council incorporates herein by reference City Council Resolution No. 2009-240, dated November 18, 2009, adopting CEQA Findings of Fact; adopting a Statement of Overriding Considerations; adopting a Mitigation Monitoring and Reporting Program; and certifying the Final Environmental Impact Report for the Transfer Station Master Plan project (EIR) and finds that the EIR adequately identifies the significant environmental effects of the project pursuant to CEQA.
- 2) Having reviewed and considered the Draft and Final EIR for the project and other relevant materials and information in the record, the City Council hereby adopts the Transfer Station Master Plan, attached hereto as Exhibit "A" and incorporated herein by this reference.

3) The documents and other materials that constitute the record of proceedings on which the City Council's findings are based are located at 8401 Laguna Palms Way, Elk Grove, California 95758. The custodian of the documents is the Environmental Planning Manager, City of Elk Grove, Development Services-Planning.

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 18th

day of November 2009.

PATRICK HUME, MAYOR of the CITY OF ELK GROVE

ATTEST:

SUSAN J. BLACKSTON, CITY CLERK

APPROVED AS TO FORM:

ÉUSAN COCHRAN, CITY ATTORNEY



CITY OF ELK GROVE

TRANSFER STATION PROJECT MASTER PLAN

October 1, 2009

PURPOSE OF THE PROJECT MASTER PLAN

Section 40002 of the Public Resources Code authorizes and requires local agencies to make provisions for solid waste handling. The purpose of this Transfer Station Master Plan ("Master Plan") is to provide a strategic planning document designed to identify existing facilities and other assets available to provide solid waste services to the City of Elk Grove and to create a blueprint to expand, improve and protect these assets for the future. There were a number of factors leading to the creation of this master plan, including:

The Master Plan itself does not commit the City or the City Council to construct any or all of the improvements identified in it or require any specific time in which it is to be implement. In addition, the project may be built in phases over many years as the community need for the facilities increases. The Master Plan recognizes the importance of both City long range planning and early identification of environmental impacts that may be imposed by the fully built-out project. Adoption of the Master Plan allows the City to undertake a phased development of a transfer station and its many components, including the acquisition of property to build the transfer station. This Master Plan may be modified in the future consistent with the California Environmental Impact Act (CEQA).

PROJECT OVERVIEW

The City of Elk Grove is proposing to build a solid waste transfer station facility (proposed project) within the southern portion of the City. The Elk Grove Transfer Station Project (proposed project) would be located on approximately 20 acres of land designed to accept, process, load and ship (via truck) all types of municipal solid waste, including green waste, recyclable/reusable materials, household hazardous waste and special wastes. The site and the facility would be owned and managed by the City and could be under contract with a private company or companies.

IDENTIFIED SITES

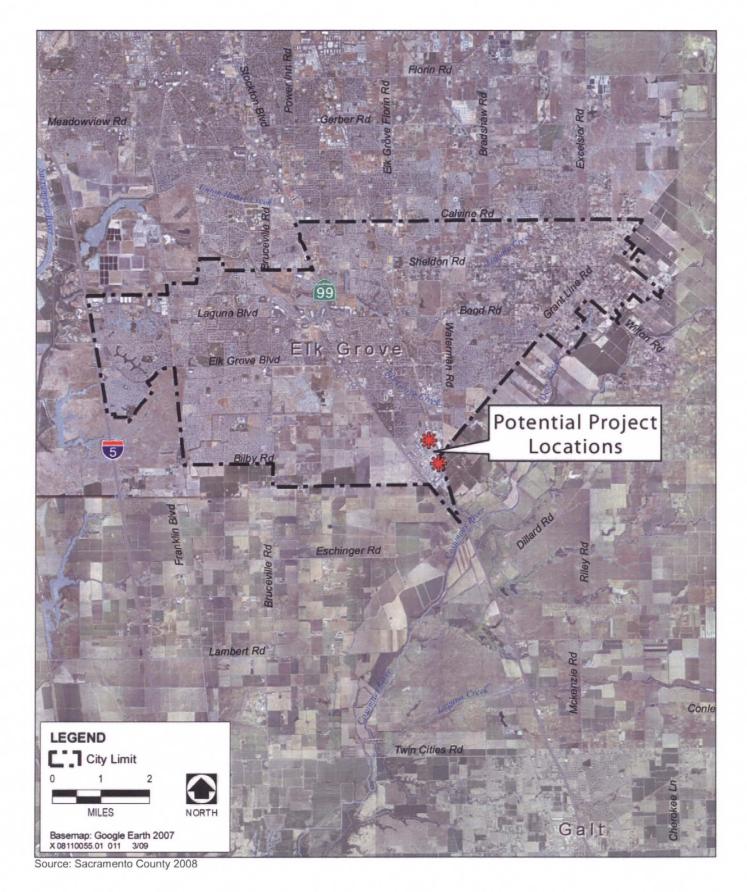
The City Council has previously identified two potential sites for the location of a transfer station. Both locations are located in the southern portion of the City of Elk Grove, east of SR 99 near the intersection of Waterman Road and Grant Line Road. The two potential project sites are identified as the Iron Rock Way site (Site 4) and the Grant Line Road site (Site 2) – Exhibit A.

Iron Rock Wav Site 4

The approximately 20-acre Iron Rock Way Site (Site 4) is located near the Elk Grove Public Works Corporation Yard and includes nine separate parcels. Eight of these parcels are contiguous and are located directly east of Iron Rock Way. The ninth and final parcel is located separated from the other eight by Iron Rock Way. These nine parcels are surrounded to the north, west, and south by light industrial uses and to the east by the Union Pacific rail line and a large industrial cement batch plant. Access to this site is currently provided from SR 99 by way of Grant Line Road to East Stockton Boulevard to Elkmont Way to Iron Rock Way. East Stockton Boulevard has been realigned to the north, to align with Survey Road at the Grant Line Road/Survey Road intersection. East Stockton Boulevard will continue to connect Grant Line Road to Elkmont Way following its realignment – Exhibits B and C.

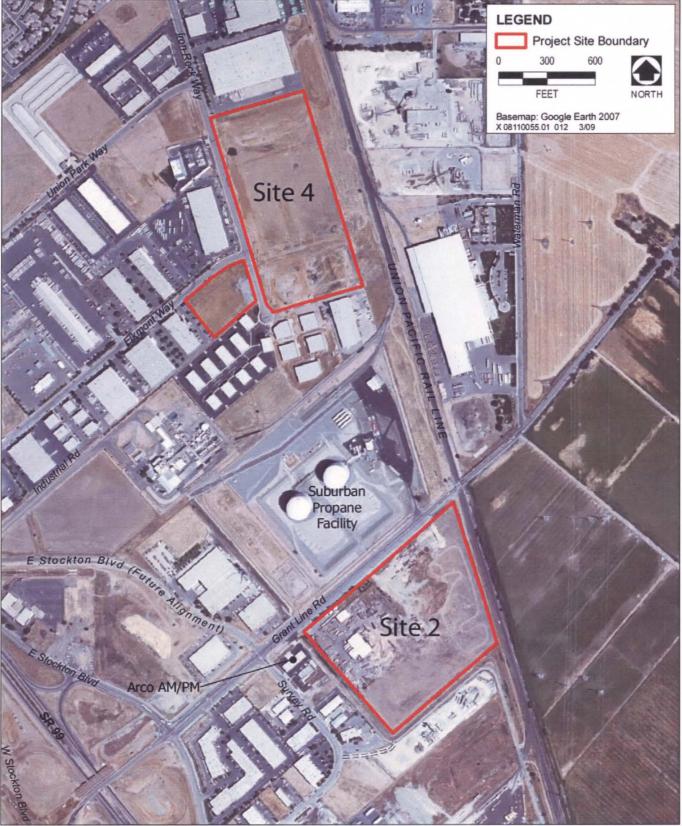
Grant Line Road Site 2

The approximately 21-acre Grant Line Road Site (Site 2) (also known as the Kalwani site) is located directly northeast of Survey Road, southeast of Grant Line Road, and west of a Union Pacific railroad line. Approximately seven acres of the site were historically used for the Transcon truck terminal. The developed portion of the site is presently utilized as a pallet processing facility (identified as Super Pallet) and a Federal Express truck storage site.



Regional Location Map

Exhibit A



Source: Sacramento County 2008, CaSil

Project Site Boundary

Exhibit B

The remaining portion of the site is undeveloped. A 50-foot wide by 20-foot deep storm water drainage canal borders this site along its western and southern edges. The site is bound to the north and west by commercial and light industrial uses, to the south by a concrete batch operation, and to the east by the rail line and agricultural land uses. Access to this site is currently provided from Grant Line Road. Following construction of the Grant Line Road Widening Project, access to the site would be provided from Survey Road by way of a new access road that would extend directly west from the southern tip of the project site to Survey Road. – Exhibit B and D.

PROJECT HISTORY AND PURPOSE

The majority of the municipal solid waste generated by the residents and businesses in Elk Grove is currently transported by franchised, commercial haulers and private self-haul vehicles to the privately-owned and operated (by Allied Waste) Elder Creek transfer station located in south Sacramento. Residents of Elk Grove are allowed one self-haul trip each year to this facility. Residents are also allowed to self-haul household hazardous wastes to collection facilities owned by the County and by the City of Sacramento.

The drive from Elk Grove's city center to these facilities is approximately 18 miles round trip. In addition, the recyclable materials collected at the curbside in the City are shipped more than 100 miles to a sorting facility in San Jose. Due to the rising costs associated with managing and transporting waste and recyclable materials, the City decided to explore waste management options that would stabilize these costs, improve services to its citizenry, reduce the amount of waste being sent to landfills, and reduce greenhouse gas emissions and air pollution associated with transportation.

To accomplish these goals, the City is proposing to build a transfer station facility in Elk Grove where residents and businesses could drop off their wastes and recyclable materials. Operating a transfer station facility in Elk Grove would reduce the number of miles that businesses and residents would have to haul their waste and recyclables, which would reduce fuel usage and the costs associated with transportation. The consolidation of waste at a transfer station and transport in long-haul vehicles to a landfill is more efficient due to the high capacity of the transfer trucks. By reducing miles travelled, the proposed facility would also reduce air pollutants and greenhouse gas emissions and help the City comply with Assembly Bill 32 (California Global Warming Solutions Act of 2006). AB 32 is green house gas reduction legislation that requires the state's global warming emissions to be reduced to 1990 levels by 2020.

The proposed project would also provide more cost-effective opportunities to recover recyclable materials and divert them from landfills. This would help the City meet their AB 939 (the Integrated Waste Management Act of 1989) diversion goals. AB 939 mandates a reduction in the amount of waste being disposed in California. All jurisdictions are required to meet waste diversion goals set by the State. AB 939 also established an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill management.

By developing a transfer station facility, the City would also gain more control over the rising costs of managing municipal solid waste and recyclables because the City would own the facility and would contract for the operations and management of the facility through a competitive bidding process. This management strategy is being adopted by many municipalities throughout California.

In taking the initial step in this process, the City contracted with HDR Engineering, Inc./Brown, Vence and Associates, Inc. (HDR/BVA) to prepare a siting study. The study area for the siting study was the Elk Grove

City limits. The study used industrial zoning as the initial screening criteria. One hundred-eighty parcels were identified in the Light Industrial (M1) and Heavy Industrial (M2) zones. The next three screening criteria used were parcel size, traffic accessibility, and compatibility with neighboring land uses. This reduced the number of potential sites to seven parcels, all in the M-2 zone. The seven parcels are grouped into three locations in the southern part of the City along the SR 99 corridor. They are all located near the intersection of Waterman Road and Grant Line Road.

In February 2008, the City Council selected five of the seven parcels at two locations for further evaluation, including the Grant Line Road parcel. However, the other four parcels subsequently became unavailable for development. At a meeting in May 2008, the City Council directed staff to consider another grouping of parcels located on Iron Rock Way at Elkmont Way, known as the Iron Rock Way site. These parcels are also zoned heavy industrial and together cover over 20 acres. Based on the direction provided by the City Council in May 2008, with the City prepared a Master Plan for a transfer station facility on either Site 4 or Site 2.

PROJECT OBJECTIVES

The proposed project includes the following objectives:

- ► To provide convenient, cost-effective and environmentally sound waste management services to the citizens of Elk Grove.
- ► To control the rising costs of managing solid wastes and recyclables for the City,
- ► To reduce regional vehicular traffic and associated air pollution,
- ► To comply with AB 32 (California Global Warming Solutions Act of 2006) by reducing greenhouse gas emissions,
- ► To comply with AB 939 (California's Integrated Waste Management Act of 1989) by improving recycling and diversion of waste from landfills, and
- ► To provide new employment opportunities to the residents of the City of Elk Grove and the surrounding areas.

PROJECT COMPONENTS

The proposed project construction and operation of a solid waste transfer station facility would be implemented in phases. The transfer station facility may include the following components:

- ► A transfer station building with a footprint of approximately 60,000 square feet.
- A materials recovery facility (MRF) building with a footprint of approximately 60,000 square feet. The transfer station and MRF would be housed inside of one 120,000 square feet building.
- A household hazardous waste (HHW) collection, processing and storage building (separate from the transfer station) with a footprint of approximately 30,000 square feet.

- Office space, employee facilities and an educational center attached to the transfer station or in a separate building with a footprint of approximately 10,000 square feet.
- ► A scale house with a footprint of approximately 500 square feet. Two 70-foot long truck scales and one (possibly two) 35-foot long scales for smaller vehicles would be located directly adjacent to the scale house.
- ▶ Other potential on-site uses including a recyclables drop-off/buy-back center, green waste/wood waste drop-off, additional resource recovery/processing activities, a repair shop and second hand store, a truck and equipment maintenance center with a fueling facility, a white goods and scrap metal yard, electronic waste drop-off, tire acceptance, and a storage yard covering approximately 30,000 square feet that could be used for a variety of uses including stockpiling inert materials such as soil, concrete and asphalt.

Exhibit C identifies the proposed layout of the project components for Site 4 and Exhibit D identifies the proposed layout for Site 2.

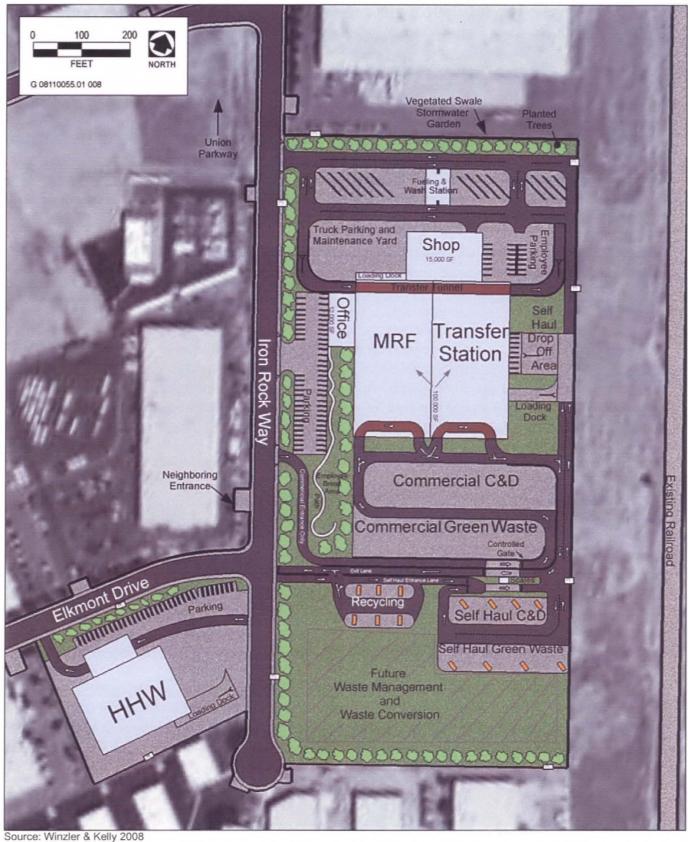
TRANSFER STATION

The transfer station would include an approximately 60,000 square-foot building where solid waste would be off-loaded from commercial, franchise collection vehicles and private cars and trucks. Inside the building waste would be processed and consolidated then loaded into large transfer trucks/trailers for shipment to a landfill. The transfer station's permitted peak tonnage is proposed to be 1,000 tons per day for the first five years of operation with an ultimate peak capacity of 2,000 tons per day.

The transfer station building would have a low-pitched roof with a peak height of approximately 50 feet. It would include several loading/unloading docks, roll-up doors, and skylights as well as interior and exterior electric lights. The building would have a transfer tunnel (a basement) under a portion of the building where large transfer trailers would be staged for loading through an opening in the main floor (loading shoot).

A reinforced concrete slab would form the floor of the transfer station building. The tipping floor (where waste is "tipped" out of the collection vehicles) would be sloped so that no liquids can drain out of the building. Waste would be off-loaded from commercial and self-haul vehicles onto the tipping floor. Self-haul and commercial vehicles would be separated from each other for safety and efficiency. Commercial haulers would be allowed direct access onto the tipping floor. Self-haul residential vehicles would access the building from a separate location. Only the waste transfer trucks and trailers would be allowed into the transfer tunnel.

One or two load checkers (transfer station staff) would rove on the tipping floor inspecting the waste as it is unloaded. The load checkers would primarily be watching for household hazardous waste and other restricted wastes, but they may also pick out recyclable materials, bulky items and other special wastes. These materials would be loaded into dumpsters and moved over to the materials recovery facility, to the HHW facility or to other facilities for processing.



Transfer Station Conceptual Plan for Site 4

Exhibit C



Source: Winzler & Kelly 2008

Transfer Station Conceptual Plan for Site 2

Exhibit D

Rubber-tired loaders would consolidate and crush the waste (possibly up against push walls). The waste would then be pushed to the loading shoot and placed or dropped into a transfer trailer staged in the transfer tunnel. The transfer trailers would sit on scales and when they are loaded to capacity would be pulled out of the tunnel and replaced with a new trailer. The loaded transfer trailers would be staged in the trailer storage area until they are hauled to a landfill. Under normal operations, all the waste would be loaded onto long haul trucks and shipped to a landfill by the end of each day. State regulations only allow waste to remain onsite for 48 hours.

All operational areas of the building, including the transfer tunnel, may be monitored by surveillance cameras that would provide real time coverage for supervisors in the administrative offices and visitors in the educational center. This would allow the supervisors to respond quickly to issues associated with worker safety and operational requirements and provides up close but safe educational opportunities.

Other interior operations and features may include a water misting system to control air-borne dust and to minimize fugitive dust and odor emissions. Also, passive venting and active air exhaust and supply systems may be used to maintain satisfactory air quality inside the building. The building would also have a fire sprinkler system and high-pressure hoses for fighting fires and dust control. Selected walls in the building may be insulated for sound.

Solid waste would not be off-loaded or processed outside the transfer station building. The waste acceptance and processing operations would be managed in accordance with state law (Title 14 of the California Code of Regulations).

MATERIALS RECOVERY FACILITY

The materials recovery facility (MRF) would include an approximately 60,000 square-foot building where recyclable materials (including but not limited to cans, bottles, paper and other materials) would be received, processed and sorted by machinery and hand labor, baled or placed into containers, loaded onto large trucks then shipped to other facilities for further processing and remanufacturing. The transfer station and MRF would be housed inside of one 120,000 square-foot building. The MRF's permitted peak tonnage is proposed to be 100 tons per day for the first five years of operation with an ultimate peak of 500 tons per day.

The layout of the MRF would include a tipping floor where source-separated recyclable materials would be off-loaded. "Source-separated" means that the recyclables are not mixed with municipal solid waste. All municipal solid waste would be directed to the transfer station side of the building. The facility would be considered a "clean MRF" because it would not include the processing of municipal solid waste.

The MRF would utilize mechanical processing equipment and manual labor to sort and bale materials such as paper, plastic, cans and bottles. The MRF can be designed as single-stream or dual-stream. A single-stream MRF accepts a mix of all recyclable materials and has one process train for everything. The dual-stream MRF processes two waste mixes. One mix includes all containers (glass, plastic and metal). The second mix includes all fibers (newspaper, cardboard, office paper, etc). The materials currently collected at the curb in Elk Grove are sent to a single-stream MRF in San Jose.

Commercially collected, source separated loads would be routed to the MRF tipping floor. The materials would be discharged into one or two piles then pushed onto conveyor belts that would raise the materials up to the processing and sorting equipment lines. The process may utilize conveyor belts, screens, optical sorters,

magnets, air classifiers, eddy current separators and manual labor to move and separate the various materials. The separated materials would be dropped into bunkers then fed into a baler or dropped directly into shipping containers. Bales and containers may be stored inside the building or under shed roofs outside until being loaded onto trucks for shipment to secondary markets and other processing centers. Non-recoverable materials (waste) exiting the end of the sorting system would be conveyed to the transfer station.

All processing equipment would be located inside a building. Selected walls of the building may be sound insulated to reduce fugitive noise emissions and off-site noise impacts. As technology, markets, and regulations evolve over time, the machinery and the types of processing utilized on-site may change and evolve as well.

Empty transfer trailers would be parked on the site at the end of the day. If it is determined necessary to hold any loaded trailers overnight, these trailers would also be parked on the site in the transfer truck parking area. Adequate on-site parking would be provided for all employees and visitors.

It may be necessary to store recycled materials outside of the building. These materials would include baled and/or containerized recyclables, electronic waste (e-waste), universal waste (u-waste) and white goods (refrigerators, washing machines, water heaters, stoves). The baled recyclables would generally consist of paper, cardboard, plastics and metals (e.g., aluminum cans). The containerized recyclables would generally be limited to glass, wood, and scrap metal contained in uncovered fork lift maneuverable or roll-off type metal bin containers. Limited white goods dismantling would occur outdoors, including Freon removal from refrigerators and removal of mercury switches from washing machines, dryers, and other large appliances.

HOUSEHOLD HAZARDOUS WASTE COLLECTION CENTER

The household hazardous waste (HHW) collection center would include an approximately 30,000 square-foot collection center building (separate from the transfer station) that would include the collection, processing and storage of HHW (materials such as antifreeze, batteries, oil, paint, fuels, solvents, pesticides, drain cleaners, insecticides, herbicides, fluorescent light bulbs, electronic wastes and certain types of medical waste [sharps and pharmaceuticals]) that would be received from residents and small businesses. There may be a number of above-ground tanks in or near the HHW building that would be used to store used oil and other bulk fluids.

Customers would pull their vehicles into a covered containment area and remain in their vehicles. Attendants would have them fill out a form documenting where they are from and what types of HHW they are bringing to the facility. Trained staff would unload the containers of HHW onto roll-around carts and bring them inside the facility. The materials would then be examined and segregated by type before being packed into sealable drums or bulked into larger tanks in preparation for being shipped to regulated disposal sites of other processing centers. Accepted hazardous materials would be segregated according to strict protocol and would be required to be stored in conformance with all local, state and federal regulations. The facility would not accept explosives, radioactive materials or unacceptable medical wastes.

The HHW collection center would be open to the general public and Conditionally Exempt Small Quantity Generators (businesses that generate relatively small amounts of hazardous wastes that do not exceed certain regulatory thresholds, as defined by California law). It would accept HHW from Elk Grove and possibly other nearby communities, thereby serving as a southern area regional facility. This type of facility is common throughout California and crucial for keeping these wastes out of the landfills.

This HHW collection center may include a "drop and swap" or HHW re-use are option for the less hazardous materials that are still usable, such as unopened cans of motor oil, latex paint, non-corrosive cleaning supplies, fertilizers and many other still useful products. These types of services reduce costs by eliminating material disposal. The HHWCF staff would oversee the customers at the HHW re-use area and their selection of reusable items.

Office Space, Employee Facilities and Education Center

The site would include office space, employee facilities and an educational center designed to accommodate community groups and school children. These facilities would be either attached to the transfer station or located in a separate building with a footprint of approximately 10,000 square feet.

SCALE HOUSE AND SCALES

The site would include an approximately 500 square-foot scale house that would be located near the facility entrance. Two 70-foot long truck scales and one (possibly two) 35-foot long scales for smaller vehicles would be located adjacent to the scale house.

OTHER POTENTIAL ON-SITE USES

Other potential waste management facilities and services that may be implemented at the site include:

- A recyclables drop-off/buy-back center: Customers would be able to drop-off and possibly get paid for recovered recyclable resources. The facility may also be a State of California-Certified Redemption Center where consumers can be reimbursed for the California Redemption Value on recyclable containers. The drop-off center may consist of a series of open-topped dumpsters into which residents can off-load their source-separated recyclables. There may be a scale and an attendant to facilitate the buy-back. The dumpsters would be hauled into the MRF for further processing.
- ► Green waste/wood waste drop-off: Vegetative debris, yard waste, and unpainted, untreated wood (so called "clean green") may be accepted inside the transfer building or in a separate, possibly covered area. These materials would either be loaded as received into a container and shipped off site or processed and consolidated by chipping or grinding before being containerized. Any grinding or chipping of green waste would be conducted inside of a containment area (bunker/building) for safety and noise control. No green waste composted would be conducted at the site.
- Additional resource recovery/processing activities: Additional systems and equipment trains may be installed and operated for the processing of other types of waste that were not included in the original facility concept or that are generated by natural disasters such as earthquakes, fires and floods. Additional activities and facilities could include separate buildings, conveyors, sorting stations, storage containers and debris boxes, scales, forklifts, loaders, balers, grinders, shredders, crushers, choppers, screens, separators, storage areas, a repair shop, and a retail outlet. Some pieces of equipment (such as the mobile grinder for concrete or metal crushers) may be brought to the site for use on a periodic basis (quarterly or more often depending on the volume of the waste stream). Any grinding or crushing operations would be conducted inside of a containment area (bunker/building) for safety and noise control.

- A repair shop and a HHW re-use area: Such services could include a designated space and facilities for incubating small business enterprises that are based on recycling and resource recovery. This could take the form of indoor and outdoor storage, processing, repair, and resale areas in which privately owned businesses would market used building materials, appliances, furniture, electronics, and other repairable and reusable items and materials.
- ▶ A truck and equipment maintenance center: This facility could include a fueling facility (with underground tanks), a mechanic shop and a pressure washing system. The pressure washing area would be on a separate concrete pad, inside a containment area and may be located inside or outside of the building. The pad would drain to an oil/water separator, then into the City's sewer system or to a holding tank whose contents would regularly be hauled to the City's sewage treatment plant. The truck washing station may be used for cleaning trucks, waste handling equipment and containers.
- ▶ White goods and scrap metal yard: White goods (washers, dryers, stoves, refrigerators, etc.) may be accepted in a designated outside area. The appliances would be sorted and diverted for potential repair and reuse, or stockpiled outside with other scrap metals for eventual transport to secondary markets. Refrigerators separated for recycling would be stored with other white goods only after their Freon was removed.
- ▶ Electronic waste drop-off: Electronic waste (e-waste) may be accepted at a designated, covered area. It would be loaded into containers or directly into a truck for transport to off-site processors.
- ► Tires may be accepted at a designated, covered area. The tires would be loaded into containers or directly into a truck for transport to off-site processors. Tires could also be shredded on-site to consolidate them prior to shipment. Tire shredding would be conducted inside of a containment area (bunker/building) for safety and noise control.
- Additional outside, uncovered areas would be made available for the stockpiling of inert materials such as soil, concrete, and asphalt.
- ► Construction and demolition waste would be accepted within the interior of the facility. Any processing of the construction and demolition waste would occur within the facility. Outside areas that may be used for stockpiling of recovered materials would be covered during rainy periods.
- ► Future Waste Management and Waste Conversion: An area is designated on the site for future waste management and waste conversion uses. These uses have not been identified or are not known to exist at this time.

FACILITY ACCESS

All access to the sites would be controlled by gates and attendants with security fencing (with vegetative screening at various locations) surrounding the perimeter of the facility. For both sites, there may be a number of queuing lanes to reduce bottle necks and traffic congestion. Site 4 includes multiple entrances to reduce traffic congestion. All vehicles carrying solid waste, construction/demolition debris and other materials that have a weight-based fee charged for their disposal would enter and leave the site across the scales. Those carrying only solid waste would be routed directly to the transfer station building while other loads may be directed to other areas of the site. Customers with mixed loads including materials or items that can be

dropped off for free or that are paid for on a per item basis may be routed through a sequential drop-off loop where green waste, recyclables, household hazardous wastes and various types of special wastes can be off-loaded before or after crossing the scales. Customers with only recyclables or household hazardous wastes may have a separate entrance to those facilities at Site 4. The offices and second hand store may also have their own access points at Site 4. The sites would include outside lighting in order to enhance site security and maintain safe operations.

OPERATIONAL CAPACITIES

TRANSFER STATION

The waste stream that would be managed as part of the transfer station operations includes private self-hauled and commercial franchise-hauled municipal solid waste (MSW), green waste and alternative daily cover (ADC). ADC includes demolition debris and other materials that can be used as daily cover in landfill operation. In 2006, the City of Elk Grove generated approximately 138,094 tons of these wastes. Based on the transfer station operating 365 days per year, the average throughput of waste materials would be approximately 378 tons per day (tpd). Based on the transfer station operating 311 days per year (closed Sundays, Christmas and New Years day), the average throughput would be 444 tpd.

The tonnage is projected to rise proportionally to the population growth rate (approximately 2% per annum). In the year 2025, the City of Elk Grove is projected to generate approximately 201,176 tons of waste. Based on the transfer station being open 365 days per year, the average throughput of waste materials would be approximately 561 tpd. Based on the transfer station being open 311 days per year, the average throughput would be 647 tpd.

During the rainy season and in certain situations (holidays, big public events, road closures and natural disasters) the peak daily tonnage could temporarily increase. This could require extended hours of operation. The proposed permitted peak tonnage would be set at 1,000 tpd. for the first five years. The operational goal would be to have all solid waste received at the transfer station loaded onto trucks and on its way to a landfill by the end of each day with no on-site storage.

The transfer station would typically process and ship less than 1,000 tons of solid waste per day (8-hour shift, loading 6 long-haul trucks per hour) and have emergency storage capacity of up to 3 days of the City of Elk Grove's waste stream. However, the facility would ultimately be permitted for 2000 tons per day of municipal solid waste and 500 tons per day of recyclable materials in order to accommodate unusual peak conditions (e.g. winter storm conditions).

MATERIAL RECOVERY FACILITY

Recyclable materials are hauled by franchise haulers and by private waste management companies. In 2006, approximately 25,329 tons of recyclable materials were collected in Elk Grove. Operating 311 days per year would require a throughput of approximately 81 tpd. The materials recovery facility would be designed to process and prepare for shipment approximately 100 tons of recyclable materials per 8-hour shift with room to expand the operation by adding additional sorting lines and sorting stations.

The stream of recyclable materials is projected to rise proportionally to the population growth rate (2%). The projected average throughput of recyclable materials in 2025 would be approximately 36,899 tons. Operating

311 days per year would require a throughput of approximately 119 tpd. During certain situations such as holidays and big public events, the peak daily tonnage accepted could spike as high as 200 tpd. This material would be processed over the course of a few days. If the tonnage numbers rise, extended shifts and additional equipment may be considered. The proposed permitted peak tonnage for the first five years would be set at 100 tpd. with an ultimate permitted peak of 500 tpd.

HOUSEHOLD HAZARDOUS WASTE FACILITY

In 2006, approximately 1,210 customers from Elk Grove made a trip to either the City of Sacramento's or the County of Sacramento's HHWCFs. Because the available records do not track the weight of the materials delivered by the customers from Elk Grove, the average tonnage per customer was estimated by dividing the total tonnage collected at these facilities by the total number of customers. Based on this calculation, the customers from Elk Grove each disposed of approximately 37.5 pounds of HHW for a total of 45,422 pounds (approximately 23 tons) during 2006. On a basis of 1,210 customers out of a total of 44,200 customers in Elk Grove's waste services rate base, the participation rate in the HHW disposal program was 2.73 percent.

The proposed HHW facility would only need to be open 26 days per year (twice per month) to accommodate this participation rate. Because the proposed facility would be closer to the customer base and because regulatory changes may require many other types of waste to be processed through a HHW facility in the future, the participation rate is expected to increase by at least 10% with the proposed HHW facility. This greater demand would require the HHW facility to be open more than twice per month.

Based on a population growth rate of 2%; the population of the City of Elk Grove would reach approximately 200,000 in the year 2025, which would represent 64,391 customers in the waste services rate base. Assuming 10% of the rate base would utilize the HHW facility, 6,439 vehicles would be expected to access the HHW facility annually. To accommodate this demand, the proposed facility would need to be open 8 hours per day, two days per week, and 52 weeks per year. A typical HHW facility staffed by four workers can process up to 15 vehicles per hour for about 4 hours, or 60 customers per day. The rest of the 8-hour shift is spent taking required breaks and processing and packaging what has been collected.

The facility would be designed to accept and handle antifreeze, batteries, oil, paint, fuels, solvents, pesticides, acids and bases, drain cleaners, fluorescent light bulbs, electronic wastes and certain types of medical waste (sharps and pharmaceuticals) with room for expansion of quantities as well as other waste types that have not yet been banned from the landfill.

UTILITY SYSTEMS

The project site would require the following public utility services in order to accommodate the proposed operations: wastewater, water (domestic and fire), electrical, natural gas, and telephone services. Neither the transfer station nor the MRF would use water in processing wastes and recyclables, which minimizes water demand and associated wastewater generation. The buildings may require sprinkler systems that would require at least a 4-inch fire connection.

VEHICULAR TRAFFIC

The following types of vehicles are anticipated to use the facility;

- ► Residential and commercial route trucks (6 to 8 ton capacity)
- ► Commercial self-haul trucks, trailers and vans (3 ton capacity)
- Residential self-haul pickup trucks, trailers and cars
- ► Transfer trucks/trailers, 18-wheelers (22 ton capacity)
- Passenger vehicles and school buses used by employees and visitors

Table 1 lists the projected vehicle counts for each type of vehicle that is anticipated to use the facility in the year 2025.

Empty transfer trailers would be parked on the site at the end of the day. If it is determined necessary to hold any loaded trailers overnight, these trailers would also be parked on the site in the transfer truck parking area. Adequate on-site parking would be provided for all employees and visitors.

An on-site traffic management plan would be implemented at the facility to ensure safe and efficient flow of traffic through the site. During waste receiving hours, facility personnel stationed in the scale house would monitor all incoming traffic. During non-waste receiving hours, the facility would be secured by fences, walls, and gates at all entry and exit points.

Table 1 Vehicle Counts for the Elk Grove Transfer Station Facility in the Year 2025		
Vehicles Types	Vehicles/Day ²	
Residential Route Trucks	99	
Commercial Route Trucks ¹ (Single/Multiple)	97/199	
Commercial Self Haul	44	
Residential Self Haul	144	
Self-Haul (Household Hazardous Waste)	60	
Employee Vehicles	100	
Buy-Back (cars and pickup trucks)	40	
Transfer Truck/Trailers (Garbage)	91	
Transfer Truck/Trailers (Recyclables)	23	
Outbound HHW Trucks	1	

If there is a single commercial franchised hauler, the number of trucks per day entering the facility is anticipated to be less than with multiple commercial franchised haulers.

Source: Fehr & Peers Transportation Consultants 2009

The facility layout and traffic patterns would be designed to separate large truck traffic from the employees, visitors, and residential self-haul customers. Large private and franchise collection trucks would enter the facility on a dedicated lane, pull onto the dedicated truck scale to weigh in, and then proceed to their designated areas to off-load their waste. The trucks would cross the common outbound scales as they leave the site. Residential and commercial self-haul vehicles would follow a similar pattern, using their designated

Residential vehicles are assumed to access the site 259 days per year and commercial vehicles are assumed to access the site 311 days per year.

lane, scale and tipping area. These separate areas would provide both safety for the public and a quicker turnaround for the commercial haulers.

The average turn-around time for commercial collection vehicles is anticipated to be less than 10 minutes except during peak traffic periods. The turn-around time for self-haulers would depend on the material they are unloading and the services they utilize. The average turn-around time for residential self-haul traffic is anticipated to be less than 15 minutes.

Transfer trucks/trailers may enter and exit the facility through a separate access point. They would either proceed directly to the transfer tunnel or to a staging area where trailers are staged prior to loading.

FACILITY EMPLOYEES

On-site personnel would include facility managers, administrative/clerical personnel, recycling sorters, supervisors, equipment operators, load checkers, scale house attendants, mechanics and others. The facility is expected to have approximately 100 employees at full capacity.

ENVIRONMENTAL MONITORING AND CONTROLS

The facility would be required to comply with Occupational, Safety, and Health Administration (OSHA) and California Occupational, Safety, and Health Administration (Cal/OSHA) standards and methods to protect worker safety. The standards include preventing, insofar as practicable, the entrance or infestation of the facility by insects, rodents or other vectors. A vector control program would be implemented at the site. This program may include minimizing the propagation or attraction of vectors through building design, daily cleaning the facility of loose materials and litter, transporting all waste off-site in a timely manner and hiring firms to implement vector control programs and extermination procedures when necessary.

All employees would receive training including, but not limited to, safety, health, environmental controls, and emergency procedures. The training programs would offer standardized training for all employees in company operations, policies and procedures, as well as additional job-specific training based on the specific job description and responsibilities of the employee. For example, sorters would be trained to recognize the types of hazardous and special waste that may be inadvertently included in the loads brought to the facility, including loads delivered by self haulers. All employees would receive regular safety training.

Title 14 of the California Code of Regulations (CCR) requires that solid waste be stored or handled in such a manner so as not to promote the propagation, harborage, or attraction of flies, rodents, or other vectors, or the creation of nuisances. The facility owner is responsible for the satisfactory removal of all refuse accumulated to prevent propagation, harborage, or attraction of vectors and the creation of nuisances. (Title 14 CCR § 17312 and § 17331). In addition, Title 14 CCR requires that the design of any facility provide for proper storage or handling to accommodate the solid waste loading anticipated and allow for efficient and safe waste removal or collection (Title 14 CCR § 17313). In accordance with the requirements of Title 14 CCR, various environmental controls would be implemented as part of the proposed project to minimize potential effects on facility employees and adjacent properties.

Records would also be kept at the facility, which demonstrate implementation of various facility programs outlined above. A Special Occurrences Log would be kept to document any loads refused entry to the facility, fires, vectors, injuries, accidents, flooding, property damage, inspections, and notices of violations.

The site would also include a storm water management system in order to prevent the project from degrading local water quality. The design of the storm water management system would incorporate Low Impact Development (LID) strategies including minimization of the amount of storm water generated and treatment, retention and detention in vegetated bioswales, rain gardens and oil/water separators. All municipal solid waste would be processed inside a building to ensure it is not exposed to storm water. The storm water captured on the site would be treated to required regulatory standards prior to being discharged off-site.

POTENTIAL WASTE DISPOSAL SITES (LANDFILLS)

The residual municipal solid waste (MSW) remaining following processing at the facility would be transported to an approved landfill for final disposal. Possible destinations for disposal these residual wastes include the Potrero Hills Landfill in Solano County, the Kiefer Landfill near Rancho Murrieta in Sacramento County, the Lockwood Landfill near Reno Nevada, the Forward Landfill in San Joaquin County and other landfills in the region that are permitted to receive MSW.

The long-haul transfer trucks would travel either north or south on SR 99 to access the majority of these landfills, with the exception of the Kiefer Landfill, which would be accessed via Grant Line Road. The HHW would be transported in accordance with State law to licensed treatment and disposal facilities. Recovered recyclable materials may be sent to a wide variety of recyclable materials processing companies. Recyclable materials would be hauled off-site on a regular basis as sufficient materials are collected and processed to make the transportation economical. The truck traffic associated with the HHW and recyclable materials would most likely travel either north or south on SR 99.

REQUIRED DISCRETIONARY ACTIONS/PROCESS

In order to implement the Master Plan, the City will be required to obtain a variety of permits and approvals from other agencies. Such other project approvals may include, but are not limited to:

- Solid Waste Facilities Permit *SWFP) from the Local Enforcement Agency (Sacramento County Environmental Management Department, Environmental Compliance Division) with concurrence from the California Integrated Waste Management Board;
- Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (depending upon the site selected);
- Endangered Species Act-Section 7 Consultation with the U.S. Fish and Wildlife Service (depending upon the site selected);
- Clean Water Act Section 401 Certification from the Regional Water Quality Control Board (RWQCB) (depending upon the site selected);
- Construction activity storm water permit from the RWQCB;
- National Pollutant Discharge Elimination System permit from the RWQCB; and
- Authority to Construct/Permit to Operate from the Sacramento Metropolitan Air Quality Management District.

CERTIFICATION ELK GROVE CITY COUNCIL RESOLUTION NO. 2009-237

STATE OF CALIFORNIA)	
COUNTY OF SACRAMENTO)	SS
CITY OF ELK GROVE)	

I, Susan J. Blackston, City Clerk of the City of Elk Grove, California, do hereby certify that the foregoing resolution was duly introduced, approved, and adopted by the City Council of the City of Elk Grove at a special meeting of said Council held on November 18, 2009 by the following vote:

AYES: COUNCILMEMBERS: Hume, Scherman, Cooper, Davis, Detrick

NOES: COUNCILMEMBERS: None

ABSTAIN: COUNCILMEMBERS: None

ABSENT: COUNCILMEMBERS: None

Susan J. Blackston, City Clerk City of Elk Grove, California