



CITY OF SACRAMENTO

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DEPARTMENT OF PUBLIC WORKS

SOLID WASTE DIVISION

JOHN F. BOSS
Solid Waste Division Manager

September 16, 1986

Transportation and Community Development
Sacramento, California

Honorable Members in Session:

SUBJECT: SOLID WASTE TRANSFER STATION PLANNING

SUMMARY

At its October 28, 1985 meeting, City Council directed staff to conduct an economic and siting study for a solid waste transfer station. The results of that investigation, and recommendations for implementation of a City owned transfer station to be sited at the 28th Street Landfill are presented.

BACKGROUND

With the projected closure of the City's 28th Street Sanitary Landfill, City Public Works Department staff has been actively investigating options for disposal after the closure of the landfill. Following is a brief synopsis of activities previously reported to Council:

June, 1985:

Presented a three part planning process to achieve the following:

- A. Evaluate waste-to-energy feasibility;
- B. Request proposals from the private sector for solid waste disposal options;
- C. Evaluate the feasibility of locating a new landfill (Granite Gravel Quarry) and/or a new transfer station

October, 1985:

Presented the results of the planning evaluation with the following recommendations adopted by Council:

- A. Staff conduct an economic and siting evaluation for various transfer station options.

October, 1985: (Continued)

- B. Authorize California Co-Compost Systems, Inc. six months to submit a detailed contract proposal to augment the conceptual proposal submitted earlier.
- C. Drop consideration of opening up a new landfill at three proposed sites within the City (including the Granite Gravel Quarry).
- D. Track other options such as processing waste for fuel, etc., and report back to Council if/when they become viable options.
- E. Drop active consideration of waste-to-energy as a viable option until air emission and energy sales contract problems are resolved.

June, 1986:

Presented the Closure Plan for the 28th Street Sanitary Landfill to City Council, which was adopted. The Closure Plan anticipates that the Landfill will reach capacity in late 1990.

June, 1986:

Presented staff findings and recommendations on the contract proposal submitted by California Co-Compost Systems, Inc. The combined Transportation and Community Development/Budget and Finance Committees found the contract submitted as deficient, and recommended suspension of further consideration of that option.

At this time, staff is submitting the transfer station siting and options evaluation for review and consideration. A detailed report prepared by City staff and Jones and Stokes Associates, Inc. covering the solid waste transfer system analysis is presented as Attachment B.

DISCUSSION OF ALTERNATIVES

Three basic ownership/operation alternatives were evaluated:

1. Direct haul all wastes to the two existing Sacramento County Transfer Stations located near McClellan A.F.B. (North Area Transfer Station) and near the Sacramento Army Depot (Fruitridge Transfer Station). Sacramento County has informed us that significant structural changes would be required at both

transfer stations to a) enclose them, b) provide additional capacity for City wastes, and c) provide separate access for City vehicles. The cost for this option appears to be significantly higher than the construction of a more centralized facility. The following factors contribute to the higher costs:

- a. The City would be required to contribute up to \$3 million for the cost of expanding and renovating the transfer station sites, and for the cost of purchasing additional capacity at the County's landfill.
 - b. Tipping fees are expected to be \$20/ton (1986/87).
 - c. The City would incur additional collection costs due to the relocation of disposal from the City's 28th Street Refuse Fleet Dispatch/Maintenance Yard to more remote locations (up to \$430,000/year).
 - e. City collection crews could experience significant delays at the transfer station sites, as they would be used jointly by the City, the County, and the public-at-large.
 - f. The total disposal cost is expected to range from \$23-24/ton.
2. Privately owned/operated facility with transfer haul to either Sacramento County Landfill (Kiefer Road) or Yolo County Landfill (West of Yolo Bypass). Evaluation of this option is based on reviewing the two top proposals received from the private sector. In order to proceed with this option the City would need to enter into a long-term contract (20 years) for use of the facility, with a concomitant contract for facility operation.

Initial costs for such an option appear to be about the same as a City owned/operated facility (\$18/ton - 1986 \$). This cost includes a landfill disposal charge of about \$6/ton. Potential advantages for this option include the following:

- a. The City would not have to raise, through bonds, the funds necessary to construct the facility and purchase equipment.
- b. The City would not have to recruit and train transfer station staff. All private parties submitting proposals have considerable experience in operating solid waste transfer stations.

3. City owned/operated facility with transfer haul to Sacramento County Landfill. City staff, in conjunction with consultant support (Cooper Engineers) prepared a cost estimate for constructing the facility, purchasing equipment and operating the facility. Based on acquiring municipal bond financing for this facility, the initial costs are estimated to be about \$18/ton (1986 \$). This is equivalent to proposals received from the private sector. Potential advantages for this option include the following:
 - a. Private ownership would require a long term contract (20 years), with associated private operation. The City would not have the flexibility to obtain lower cost operation through more frequent operating contract rebidding.
 - b. Flexibility, without long-term contract constraints, to convert to alternative waste management options such as resource recovery, waste processing, waste-to-energy, etc.
 - c. Greater control for meeting regulatory concerns; greater responsiveness to meet concerns of constituents near the facility.
 - d. Consolidation of other fleet management/facility management needs with transfer station construction.
 - e. City collection vehicles and transfer station operating personnel would be under direct supervision of Solid Waste Division Manager, allowing for effective and efficient reduction of potential operational conflicts between the two groups.
 - f. Greater flexibility to modify transfer station operations, and/or collection operations to meet changing conditions and/or demands.

Based on the above evaluation, it appears that a centralized facility would be preferred over utilization of the two County transfer station facilities. A number of sites were considered and evaluated by Jones & Stokes Associates, Inc. Their evaluation included a review of previous transfer station site analyses conducted for the City by Brown and Caldwell Engineers (circa 1979-80). The location with the most favorable characteristics for a centralized transfer station is the south-western section of the 28th Street Landfill/ Dispatch/ Fleet Maintenance Facility. The locations of sites evaluated are shown on Figure 1, and the evaluation matrix on Table 1.

Preliminary responses from Sacramento County and Yolo County, regarding their desire to contract with the City for disposal, and their general contract provisions, indicate that the County of Sacramento offers better terms and conditions. However, additional discussions are necessary. Sacramento County's preliminary contract terms and conditions are as follows:

- a. Tip fees to be based on incremental costs to handle City wastes. These fees should be comparable to fees charged the private sector. Fees for 1986/87 are anticipated to be about \$5.50-6.00/ton.
- b. A minimum contract of five (5) years to allow cost recovery of additional equipment.
- c. Payment of a capacity "surcharge" to allow the County to recover lost capacity through expansion of their site.

At this time it appears that the disposal fee proposed for use of Sacramento County's Landfill is lower than the estimated initial disposal cost of a City owned/operated Landfill located near the County's Kiefer Road facility. Construction of any new landfills will likely require expensive water quality protection measures. However, as capacity diminishes at the County's landfill, and as costs for that site escalate due to possible additional environmental constraints placed on it; it is prudent for the City to develop an alternate disposal site.

FINANCIAL IMPACT

There are several short-term and long-term financial implications to the choice of a transfer station option at this time:

	<u>Estimated Tip Fee</u> <u>\$/ton (1986 \$)</u>	<u>Capital</u> <u>Cost</u>
County Transfer Station	\$ 23-24	\$ 3,000,000
Private Transfer Station	\$ 18	-0-
City Transfer Station	\$ 18	\$ 4,970,000

The estimated tip fee for the City owned/operated transfer station (\$18/ton) includes the cost of the CIP debt service (\$4,970,000). The estimated capital costs are included in the approved 1986-1991 CIP budget. The 1986-1987 approved Solid Waste Division budget includes \$400,000 for the environmental assessment, design, and permitting of the facility. This is included as part of the overall \$4,970,000 CIP estimate. A good portion of the environmental assessment can be handles as part of the existing consultant services contract with Jones & Stokes Associates, Inc.

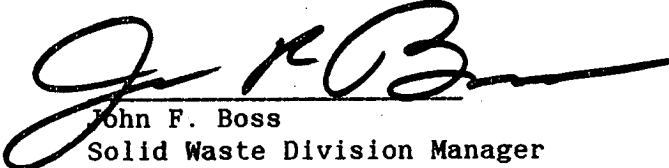
RECOMMENDATIONS

Staff presents the following recommendations to the Transportation and

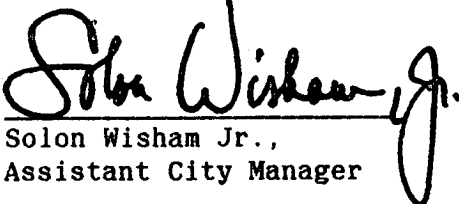
Community Development Committee for its consideration and approval. Staff recommends that approval by the Committee be deferred for a minimum of 30 days to allow review and comment by the City/County Solid Waste Advisory Committee and other interested parties.

1. Approve the Draft Resolution (Exhibit A) for submittal to City Council for adoption.
2. Endorse the construction of a City owned, centralized Solid Waste Transfer Station as the preferred transfer station implementation option.
3. Proceed with the preparation of an Environmental Impact Report for the construction of a solid waste transfer station to be located at the South-west section of the City's 28th Street Landfill/ Dispatch / Fleet Maintenance Complex.
4. Proceed with the procurement of permits for a City owned transfer station.
5. Defer until 1989 a decision on whether to contract operations out to the private sector, or to assign transfer operations to City staff.
6. Authorize staff to complete the following activities to assure adequate landfill disposal capacity for the transferred wastes:
 - a. Negotiate contract specifications for an agreement for disposal at the Sacramento County Landfill.
 - b. Continue to investigate purchasing land in rural areas of Sacramento County for a potential City landfill.
 - c. Investigate and assess other landfill opportunities as they arise.

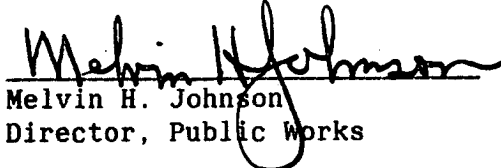
Respectfully submitted,


John F. Boss
Solid Waste Division Manager

Recommendation Approved:


Solon Wisham Jr.,
Assistant City Manager

Approved:


Melvin H. Johnson
Director, Public Works

Attachment

- Exhibit A - Draft Resolution
Exhibit B - Report -- Solid Waste Transfer System Analysis

RESOLUTION No.

Adopted by The Sacramento City Council on date of

A RESOLUTION ENDORSING THE
CONSTRUCTION OF A CITY-OWNED,
CENTRALIZED SOLID WASTE TRANSFER STATION
AND AUTHORIZING PREPARATION OF AN EIR

WHEREAS, the construction of a City-owned, Centralized Solid Waste Transfer Station is in the best interest of the City and citizens thereof, NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SACRAMENTO THAT:

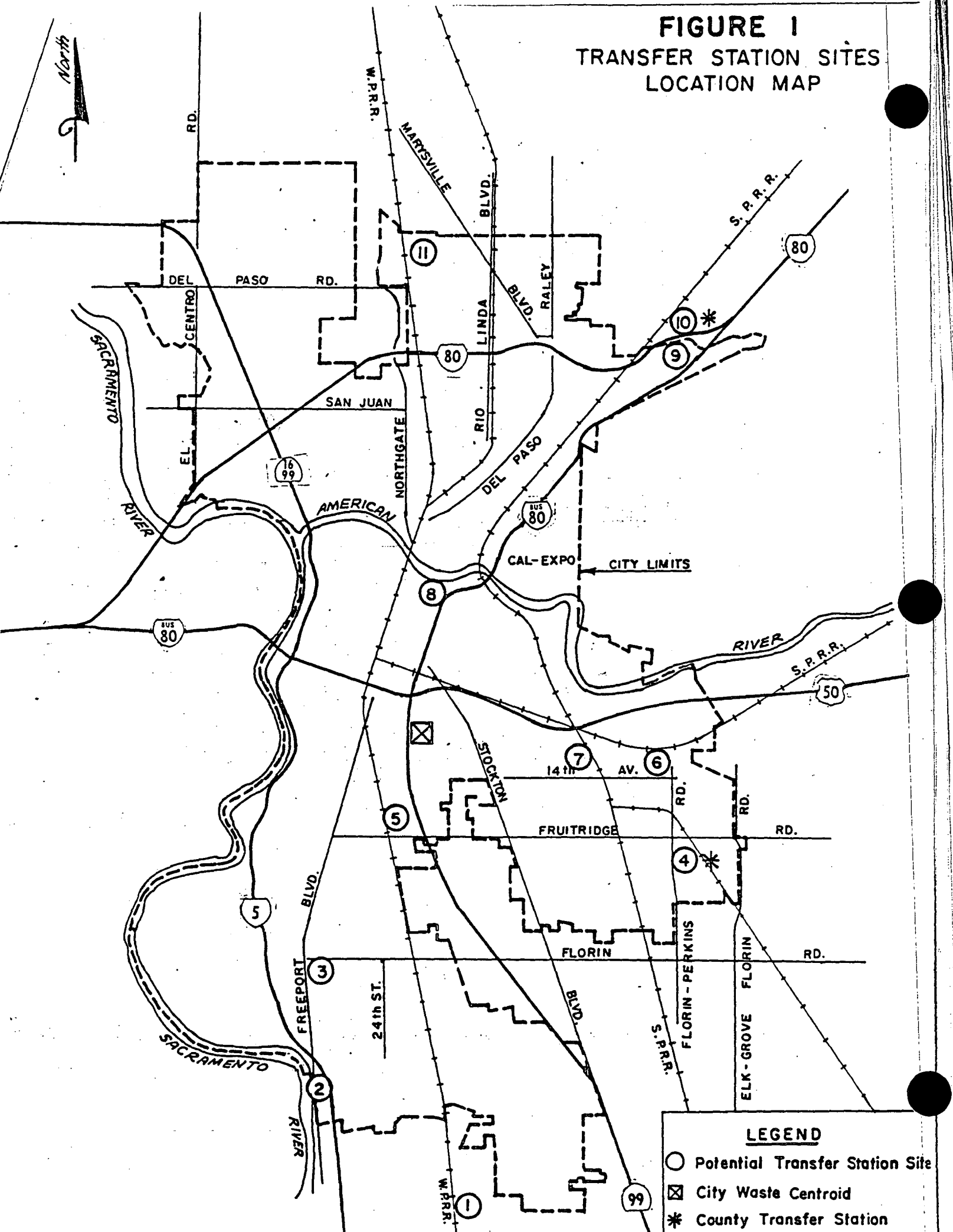
1. City staff proceed with the preparation of an Environmental Impact Report for the construction of a solid waste transfer station to be located at the southwest section of the City's 28th Street Landfill complex;
2. City staff proceed with procurement of the necessary permits for the City-owned transfer station;
3. The City Manager is authorized to:
 - a. Negotiate contract specifications for an agreement for disposal at the Sacramento County Landfill.
 - b. Continue to investigate purchasing land in rural areas of Sacramento County for a potential City landfill.
 - c. Investigate and assess other landfill opportunities as they arise.

MAYOR

ATTEST:

CITY CLERK

FIGURE I
TRANSFER STATION SITES
LOCATION MAP



LEGEND

- Potential Transfer Station Site
- ⊗ City Waste Centroid
- * County Transfer Station

Table 1. City of Sacramento Transfer Station Options: Matrix Evaluation

Evaluation criteria	Site no.					
	1	2	5	6	7	8
<u>Policy conformity^a</u>						
Consistency with land use plans	●	●	●	●	●	○
Consistency with COSWMP	●	●	●	●	●	○
<u>Economic character^b</u>						
Site development cost	●	●	●	●	●	●
Operation and maintenance cost	●	●	●	●	●	○
Alternate use value	●	●	●	●	●	●
<u>Engineering character^b</u>						
Ease of permitting	○	○	○	○	○	○
Geotechnical	●	●	●	●	●	●
Drainage	●	●	●	●	●	●
Use of existing equipment	●	●	●	●	●	●
Site access	●	●	●	○	●	●
Size constraints	○	●	○	○	●	N/A
Accommodate alternative technology	○	○	○	○	●	●
Effect of transport distance	●	●	●	●	●	●
<u>Environmental character^c</u>						
Soil loss	●	●	○	○	○	○
Water quality	○	○	○	○	○	○
Flooding	●	○	○	●	○	○
Biological resources	●	●	○	●	○	○
Noise	●	●	●	○	●	●
Land use conversion	●	●	○	○	●	○
Land use compatibility	●	●	●	○	○	○
Traffic/circulation	●	●	●	●	●	●
Public services	●	○	○	○	○	○
Energy	●	●	○	●	●	○
Health	○	○	○	○	○	○
Cultural resources	●	○	○	○	●	○
Aesthetics	●	●	●	●	○	○
Public acceptance	○	○	●	●	●	●

^a ○ = consistent; ● = marginally consistent; ● = inconsistent

^b ○ = good; ● = adequate; ● = poor; N/A = not applicable

^c ○ = no impact; ● = potential minor impact; ● = potential major impact