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DEPARTMENT OF
PUBLIC WORKS

DIVISION OF
FLOOD CONTROL AND SEWERS

CITY OF SACRAMENTO
CALIFORNIA

1391-35TH AVENUE
SACRAMENTO, CA
95822-2911

916-449-5271

January 15, 1991

City Council
Sacramento, California

Honorable Members in Session:

APPROVED
BY THE CITY COUNCIL

JAN 15 1991

OFFICE OF THE
CITY CLERK

SUBJECT: APPROVING AMENDMENT TO CONTRACT WITH HDR ENGINEERING (CITY AGREEMENT 90-119), DEFUNDING OF VARIOUS CAPITAL IMPROVEMENT PROJECTS (XC41, WC91, AND XD11) AND TRANSFER OF FUNDS TO THE SEWER FUND CONTINGENCY AND DRAINAGE FUND CONTINGENCY RESERVES, AND APPROPRIATING FUNDS FROM THE RESERVES TO CAPITAL IMPROVEMENT PROJECT XD41, COMBINED SEWER SYSTEM REPLACEMENT

SUMMARY

The California Regional Water Quality Control Board (RWQCB) issued a Cease and Desist Order to the City of Sacramento on June 22, 1990. The order requires the City to cease creating a threat to public health and the environment from overflows of sewage from the Combined Sewer System. To this end, the Order requires a Detailed Technical Report describing how the Combined System will be modified to prevent, or minimize, both street flooding and overflows to the Sacramento River.

In order to meet this requirement, this report requests that the City Council authorize the City Manager and City Clerk to execute the attached contract amendment with HDR Engineering for consultant services not to exceed \$654,746. The original contract with HDR Engineering was for \$132,538, bringing the present total not to exceed the amount to \$787,284. Staff recommends that the necessary funds be appropriated by defunding Capital Improvement Projects XD11, WC91, and part of XC41, to the Sewer Fund Contingency Reserve and the Storm Drainage Fund Contingency Reserve, then appropriating the needed funds from these reserve accounts into CIP #XD41, Combined Sewer System Replacement.

This item is scheduled to be heard by both the Budget and Finance Committee and City Council on the same day due to the time constraints imposed by the Cease and Desist Order.

BACKGROUND INFORMATION

The City of Sacramento's Combined Sewer System is the portion of the City's sewer system that conveys both sanitary sewage and stormwater in the same pipeline. The Combined System encompasses approximately 7,000 acres of the Downtown, East Sacramento, and Land Park areas. An additional area of approximately 2,200 acres encompassing the River Park, California State University, and Far Eastern Sacramento areas contribute only sanitary sewage flows to the Combined System. At present, development and redevelopment is occurring within the Combined System service area which will both rely on, and impact, the Combined System.

In the late 1800's and early 1900's, untreated sewage from the City flowed directly to the Sacramento River by gravity. After the construction of a levee system around Sacramento, untreated sewage and stormwater from the central portion of the City was pumped directly into the Sacramento River using Sump 1, which was constructed in 1908. Sump 2 was constructed in 1916 to pump untreated sewage and stormwater originating from development to the south and east of the City directly into the Sacramento River.

Historically, combined sewer systems were the most economical construction method for sewers to serve the City in the early to mid-1900's because it conveyed municipal sewage and stormwater run-off in a single pipeline. The City discontinued the practice of using combined sanitary sewage and stormwater sewer systems in 1946. In the 1950's, the City initiated an improvement program where new separated storm sewers were constructed in a few selected areas, with the existing combined sewer system continuing to be utilized for sanitary sewage flows only.

Sewer design, material, and equipment standards have changed dramatically in the past 40 years, leaving Sacramento's Combined System antiquated and substandard as compared to today's requirements. Much of the City's Combined Sewer System and its pumping facilities are nearing, or exceed, 100 years in age. The system has deteriorated to a state requiring a major rehabilitation effort. Additionally, due to the inherent design of combined systems, the City's Combined System is subject to flooding and overflows due to lack of capacity during moderate rain storms. These overflows of combined wastewater occur both within the system area and to the Sacramento River, resulting in threats to both public health and the environment.

Historically, the City has undertaken significant steps to analyze and mitigate a variety of conveyance and treatment problems within the Combined Sewer System. These steps can be summarized as follows:

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|---------|--|
| 1946 | City implements policy of no new combined sewer construction. |
| 1954 | Construction of City Sewage Treatment Plant. |
| 1965-74 | Separation of approximately 2100 acres from the Combined Sewer System. |
| 1985 | Connection to Regional Wastewater Treatment Plant, construction of Pioneer Reservoir, and modification of Combined System utilizing Combined Wastewater Treatment Plant, Pioneer Reservoir and Sump 2. |
| 1987-90 | Over 20 individual Capital Improvement Projects to replace or rehabilitate sewer lines in the Combined System. |
| 1990 | Conceptual Master Plan for Sewer/Storm Drain Separation, Richards Boulevard-North Core Study Area for the City of Sacramento, Nolte and Associates. |
| 1990 | Expansion and request for implementation of a 5-year, \$50 million Capital Improvement Program of the City's sewers. |
| 1990 | Adoption of a 68% rate increase in the Sewer Fund for Fiscal Year 1990-91. |

Literally billions of dollars are being, and will be, spent by numerous municipalities across the nation to control Combined System overflows and flooding, and to rehabilitate their systems. The Environmental Protection Agency (EPA) estimates that at least 1000 cities across the United States have combined systems requiring substantial modifications to comply with present EPA requirements. Sacramento is one among many Cities that will have to implement a costly program to comply with State and Federal regulations and to improve its deteriorating system. Notably, the cities of San Francisco, Seattle, and Chicago are all involved in major programs. Chicago is in the midst of a planned \$4 billion program. San Francisco has spent \$1.1 billion over the last 10 years and plans to spend another \$250 million in the next three years. Seattle has spent \$72 million over the last six to ten years and plans to spend \$343 million over the next 20 years.

On January 12, 1990, Sacramento experienced a significant storm event with rainfall intensities as high as one and one half inches per a two hour period. The probability of return of a storm containing this intensity is once every 100 years. This storm caused flooding throughout the Combined System area, as well as in outlying areas, with the obvious presence of sanitary wastes in some areas. As a result of media coverage of the January 12 storm, the California Regional Water Quality Control Board (RWQCB) issued a Cease and Desist Order to the City of Sacramento to cease overflow of sewage. The RWQCB and the State Department of Health Services determined that flooding which occurs in the Combined System during moderate storm events is a threat to public health. The Cease and Desist Order required the City to submit a Technical Overview Report by October 1, 1990. The Cease and Desist Order also requires the City to submit a Detailed Technical Report by July 1, 1991.

The October 1st Technical Overview Report included an evaluation of the present system, recommended interim operational measures to minimize flooding, and outlined a workplan for developing the Detailed Technical Report which will identify solutions for the Combined System problems. As part of the report, a new Plan of Operations was developed which describes an interim mode of operations to minimize flooding in the Combined System. Although the Plan of Operations will decrease flooding, it potentially increases the amounts of combined waste water discharged to the river during moderate to significant storm events.

A Detailed Technical Report is required by the Cease and Desist Order by July 1, 1991. The Report will include further computer model development; collection and analysis of water samples; evaluation and assessment of existing facilities and infrastructure; development, evaluation, and screening of engineering alternatives to improve the system; and a recommended system-wide improvement project and implementation plan.

In order to accomplish these tasks for the Detailed Technical Report, HDR was selected as the City's consultant for this large project through an open RFP process. HDR Engineering aided the City in developing the October 1, 1990 Technical Overview Report (Phase 1 - City Agreement No. 90-119 approved July 24, 1990) and will aid the City in developing the Detailed Technical Report (Phase 2) for the Combined Sewer System. The Phase 1 contract with HDR was for \$132,538. The Phase 2 contract with HDR totals \$654,746. The total contract amount will now be \$787,284.

In conclusion, the Cease and Desist Order requires substantial efforts by the City. To accomplish these requirements for the remainder of fiscal year 90/91 will necessitate substantial consultant support. Obtaining these resources will require funds totaling \$654,746.

FINANCIAL DATA

It is proposed that the following Capital Improvement Projects be defunded:

1. William Land Park Main Replacement (PN:XD11): \$480,000

This project originally was placed in the capital improvement budget because there were several problems needing to be solved within the scope of the project. Since the "Cease and Desist" Order, this project must be re-evaluated for its priority to the full range of projects within the combined system after the Detailed Technical Report has been prepared. This project can be defunded; should the Detailed Technical Report identify additional reconstruction or rehabilitation work in this area, it will be as part of the overall work within this section of the system. Defunding this project will return \$50,000 to the Sewer Fund Contingency Reserve and \$430,000 to the Storm Drainage Fund Contingency Reserve.

2. Sacramento Metro General Drainage Investigation (PN:WC91): \$168,000

This project was initiated to fund the City's cost-share of a study to recommend improvements to the Sacramento River System. This project deals with West Sacramento and the Yolo Bypass and the City and SAFCA are not participating in this study, therefore, the funds are no longer needed. Defunding this project will return \$168,000 to the Storm Drainage Fund Contingency Reserve.

3. Miscellaneous Sewer Improvements Downtown (PN:XC41): \$6,746

This project is funded for the purpose of performing sewer line expansion and reconstruction relating to other development-related projects in the downtown, or combined system, area. Many such projects have been scaled back because of impacts on the combined system, and these will be re-evaluated after the Detailed Technical Report has been prepared. In addition, less than 10% of the funds authorized for the current fiscal year have been expended; the current budget, including funding from previous years, is \$385,122, of which \$322,716 is unobligated. Therefore, the department is willing to defund \$6,746, leaving an unobligated balance of \$315,970, sufficient for the remainder of the fiscal year. Defunding this amount will return \$6,746 to the Storm Drainage Fund Contingency Reserve.

TOTAL \$654,746

The total amount of funds returned to the Sewer Fund Contingency Reserve (414-710-7012-4999) is \$50,000, and the total amount of funds returned to the Storm Drainage Fund Contingency Reserve (425-710-7012-4999) is \$604,746. The estimated cost for the amendment to the contract with HDR Engineering, Inc., for Phase 2 is \$654,746. It is recommended that \$50,000 for this contract amendment be appropriated to CIP #XD41, Combined System Replacement, from the Sewer Fund Contingency Reserve (414-710-7012-4999), which is equal to the amount defunded; it is also recommended that \$604,746 for this contract amendment be appropriated to CIP #XD41, Combined System Replacement, from the Storm Drainage Fund Contingency Reserve (425-710-7012-4999), which is equal to the amount defunded above. This appropriation represents no impact on rates because of the projects defunded.

MBE/WBE EFFORTS

During the open selection process, MBE/WBE firms were encouraged to apply, although none did. Also, affirmative action efforts were part of the selection criteria. Although the selected firm of HDR Engineering is not an MBE/WBE firm, the contract project manager is a woman.

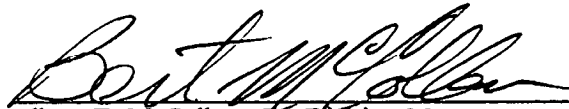
POLICY CONSIDERATIONS

The funds being requested to accomplish the tasks described are a result of a State enforcement order. Failure to take the recommended actions will result in violation of the Cease and Desist Order, possibly resulting in fines, a building moratorium, or both. Producing the Detailed Technical Report will lead to long term plans and commitments to rehabilitate and redesign the Combined System which will significantly reduce, or remove, threats to both public health and water quality.

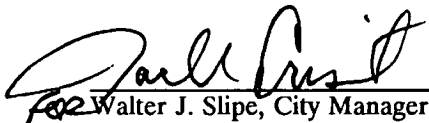
RECOMMENDATION

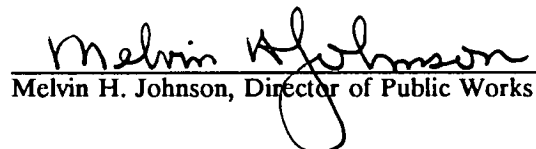
It is recommended that the City Council approval the attached resolution. The resolution authorizes the City Manager and City Clerk to defund certain Capital Improvement Projects and appropriate funds from the Contingency Reserve to fund consultant services.

Respectfully submitted,


Albert E. McCollam, Jr., Division Manager

RECOMMENDATION APPROVED:


Walter J. Slipe, City Manager


Melvin H. Johnson, Director of Public Works

Contact Person:
Gary Reents, Sr. Engineer
449-2047

January 15, 1990
All Districts

RESOLUTION NO. 91-033

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF _____

APPROVED
BY THE CITY COUNCIL

JAN 15 1991

OFFICE OF THE
CITY CLERK

RESOLUTION TO DEFUND CERTAIN CAPITAL IMPROVEMENT PROJECTS; TO APPROPRIATE FUNDS FROM THE SEWER FUND CONTINGENCY RESERVE AND THE STORM DRAINAGE FUND CONTINGENCY RESERVE; TO AUTHORIZE THE CITY MANAGER AND CITY CLERK TO SIGN AND EXECUTE AN AMENDMENT TO THE CONTRACT WITH HDR ENGINEERING, INC.

BE IT RESOLVED BY THE CITY COUNCIL OF SACRAMENTO THAT:

1. Capital Improvement Project WC91, Sacramento Metro General Drainage Investigation (425-500-WC91-4802) is hereby defunded and funds of \$168,000 transferred to the Storm Drainage Contingency Reserve (425-710-7012-4999).
2. Capital Improvement Project XD11, William Land Park Main Replacement, is hereby defunded as follows:

414-500-XD11-4820:	\$ 50,000
425-500-XD11-4414:	\$ 34,000
425-500-XD11-4802:	\$ 24,000
425-500-XD11-4820:	\$284,000
425-500-XD11-4831:	\$ 28,000
425-500-XD11-4880:	\$ 36,000
425-500-XD11-4881:	<u>\$ 24,000</u>

TOTAL: \$480,000

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____ 6

and funds transferred to the contingency reserves as follows:

Sewer Fund Contingency Reserve (414-710-7012-4999):	\$ 50,000
Storm Drainage Fund Contingency Reserve (425-710-7012-4999):	\$430,000

3. Funds in the amount of \$6,746 are defunded from Capital Improvement Project XC41, Miscellaneous Sewer Improvements Downtown (425-500-XC41-4820) and transferred to the Storm Drainage Contingency Reserve (425-710-7012-4999).

4. Funds totaling \$654,746 are appropriated to Capital Improvement Project XD41, Combined Sewer System Replacement, as follows:

From Sewer Fund Contingency Reserve:

414-710-7012-4999: (\$50,000)

to: 414-500-XD41-4802: \$50,000

and from Storm Drainage Fund Contingency Reserve:

425-710-7012-4999: (\$604,746)

to: 425-500-XD41-4802: \$604,746

5. The City Manager is authorized to sign an agreement with HDR Engineering for an amount not to exceed \$654,746 for Phase 2, Detailed Technical Report, for the Combined Sewer System, and the City Manager and City Clerk are authorized to execute said agreement.

MAYOR

ATTEST:

CITY CLERK

FOR CITY CLERK USE ONLY

RESOLUTION NO.: _____

DATE ADOPTED: _____



OFFICE OF THE
CITY CLERK

OPERATION SERVICES

CITY OF SACRAMENTO
CALIFORNIA

CITY HALL
ROOM 304
915 I STREET
SACRAMENTO, CA
95814-2671

916-449-5426

January 18, 1991

HDR Engineering Inc.
5175 Hillsdale Circle
El Dorado Hills CA 95630-5700

On January 15, 1991, the Sacramento City Council adopted Resolution No. 91-033 authorizing the execution of Agreement No. 90-119-2 regarding amendment number two for Phase 2, Detailed Technical Report for the Combined Sewer System.

Enclosed, for your records, is one fully certified copy of said agreement and authorizing resolution.

Sincerely,

Valerie A. Burrowes
City Clerk

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Enclosures

cc: Public Works
Risk Management