



# *CITY COUNCIL STUDY SESSION REPORT*

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MEETING DATE: JULY 12, 2004

ITEM NUMBER:

**SUBJECT:** CITYWIDE UNDERGROUNDING OF OVERHEAD UTILITY FACILITIES

**DATE:** JULY 8, 2004

**FROM:** PUBLIC SERVICES DEPARTMENT/ADMINISTRATION

**PRESENTATION BY:** WILLIAM J. MORRIS, DIRECTOR OF PUBLIC SERVICES

**FOR FURTHER INFORMATION CONTACT:** ERNESTO MUNOZ, CITY ENGINEER, AT 714 754-5343

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## **RECOMMENDATION:**

Provide direction to staff on future action, including development of a possible City Council policy in regard to undergrounding of utility lines Citywide.

## **BACKGROUND:**

Overhead utility lines are located along arterial streets and in older neighborhoods throughout the City. Attachment 1 indicates the approximate location of all existing power poles in the City. Although the poles and lines were originally constructed to transmit and distribute electrical power, other purveyors, such as telephone and cable television, make use of the power poles to service the community. When the City requires overhead electric facilities to also be placed underground, other purveyors must also be required to underground their facilities prior to removal of the poles. As Council is aware, newer developments within Costa Mesa have been conditioned to place utilities underground within the development.

Generally, Southern California Edison Company (SCE) owns and maintains most of the power poles in the City. SCE operates two different types of major overhead facilities: namely, transmission and distribution lines. The transmission line system provides high voltage service to a large regional area. The distribution line system receives power from the transmission system and makes electricity available at a usable voltage to smaller regional areas. SBC telecommunications service lines are also found on SCE distribution poles, and service the same parcels as SCE.

City Council has, in the past, shown an interest in studying the possible undergrounding of overhead utility lines Citywide. To this end, City Council adopted Community Objective 98-B13 as follows: "Complete a survey as to the interest of the community in accepting an assessment fee for undergrounding of utilities."

At the October, 2000 study session, City Council reviewed a staff report, which included the estimated cost of a citywide assessment district for the undergrounding of all overhead utility lines. This report estimated that each parcel in the City would need to be assessed \$19,800 (year 2000 dollars) to fund a City-wide Assessment District for removal of all overhead lines. At that time, the City Council directed staff to suspend any further work on a possible Citywide assessment district.

In the past, the City has completed several undergrounding projects by utilizing funds set aside by SCE for such purposes. These funds are allocated to the various cities in the SCE service area based upon the amount of City overhead lines. The City is currently allocated approximately \$447,665 per year for undergrounding of electrical services. SBC also allocates funds for undergrounding of their facilities in conjunction with any approved SCE/City undergrounding project. In approximately 1990, the City established an underground utility district on Victoria Street, from Canyon Drive to west of Harbor Boulevard. In 1991, the City utilized over \$1.8M (1991 dollars) in Rule 20A allocations to underground overhead utilities on Victoria Street in conjunction with the widening project. The undergrounding of utilities on Placentia Avenue, from 18<sup>th</sup> Street to 20<sup>th</sup> Street, and on 19<sup>th</sup> Street, from Anaheim Street to Placentia Avenue, was recently completed at an estimated cost of \$3,310,000. An undergrounding project was also conducted on Sunflower Avenue, between Harbor Gateway South and Fairview Road, at a cost of \$2.6M(1998 Dollars). This project was bonded through Community Facilities District No. 97-1, and paid for with private funds.

### **ANALYSIS:**

In the absence of additional outside funding and/or assessment districts for undergrounding, the City must utilize its annual allocation from the utility companies as the only current source of funds. As construction costs rise in the future, and the annual “allocation” from the utility companies remains somewhat constant, the City will have less and less ability to underground the facilities. Currently, a ballpark cost to underground electrical distribution facilities is \$2.3M to \$2.5M per mile, assuming a minimum project length of one mile.

It is estimated that there are approximately 829,180 lineal feet of existing SCE overhead distribution lines within the City’s public right-of-way that could be undergrounded. The cost to underground these overhead facilities has been preliminarily estimated by staff at \$308,000,000 (year 2000 dollars). This estimate does not include the following costs associated with undergrounding of overhead utilities:

- A. Undergrounding of overhead facilities that run within private properties through utility easements.
- B. All services from the parkway to the private properties and to the structures that would be required to convert to the new underground system.
- C. Undergrounding of cable television.

It is estimated that an additional 66,500 lineal feet of overhead SCE transmission lines still exist in the City. Undergrounding of these lines is estimated at an additional \$42,892,500 (year 2000 dollars).

Telecommunications lines normally take the same overhead route as the electrical distribution lines. With this assumption, it is estimated that \$74,626,000 (year 2000 dollars) would be needed to underground the SBC facilities in the City.

Staff estimates the above-mentioned work (A through C) will add approximately thirty percent to the cost of undergrounding the main facilities. If the undergrounding work were to be accomplished by means of an Assessment District, there would be additional costs associated with the formation and oversight of such a district.

The table below summarizes the above stated figures:

**Citywide Undergrounding Preliminary Cost Estimates**  
**(In Year 2000 Dollars)**

<b>Description of Work</b>	<b>Length (Feet)</b>	<b>Cost/Foot</b>	<b>Total Cost (\$)</b>
SCE Distribution Poles	829,180	230	\$190,711,400
SCE Transmission Poles	66,500	645	\$42,892,500
SBC Service Line	829,180	90	\$74,626,200
Subtotal Construction Cost			\$308,230,100
Estimated On-site Work & Cable TV (30% of total construction cost)			\$92,469,030
<b>Total Citywide Undergrounding Estimated Cost</b>			<b>\$400,699,130*</b>

\*Does not include any costs associated with an assessment district.

In order to prioritize future undergrounding projects in the City, staff proposes a Council Policy to determine the most cost effective and beneficial projects for funding. Attachment 2 lists a number of factors that would be used to establish a policy, and hence a priority schedule, for funding underground utility projects.

As a part of this policy, staff would propose to list the arterial streets within the City that currently have overhead utility lines. The list would contain approximate one-half (1/2) mile segments, which are considered the minimum cost effective length in which to establish an underground utility district. Due to the extensive amount of overhead facilities currently located in the residential areas, no attempt would be made to list those other than in general terms

Staff estimates a minimum of thirty-two (32) hours would be required to develop a draft Council Policy on the prioritizing of street segments for undergrounding of utility lines in the City. This document would not prioritize specific areas, but would provide general parameters to be used by City Council in determining the most appropriate areas to underground as sufficient funds become available.

**ALTERNATIVES CONSIDERED:**

One alternative is to establish a list of logical undergrounding segments for all streets and alleys in the City. These segments could be matched to the amount of funding available, and presented to City Council for selection of a project area during the annual budget review.

Another alternative is to select specific areas, streets, or street segments for undergrounding on a priority basis, and have staff bring the highest priority location back to City Council for approval as sufficient funding is available.

## **FISCAL REVIEW:**

There are several methods and funding sources commonly used by local agencies to underground overhead facilities. First, and in order for the utility companies to participate in a project to underground their facilities, an “underground utility district” must be formally approved and adopted by the City Council. In accordance with California Public Utilities Commission (CPUC) rules, there are two ways to fund these projects as follows:

- Utilize funds set aside by the utility companies, as required by the CPUC, for undergrounding of utility lines (Rule 20-A); or
- Utilize local funds (public and/or private) to pay the utility companies for design and construction of the undergrounding project (Rule 20-B).

To qualify a project for Rule 20-A funds, a City is required to: 1) determine that undergrounding of overhead facilities will be in the general public interest; 2) receive concurrence from the utility companies that they have set aside sufficient funds for the proposed undergrounding; and 3) create an underground district by City Ordinance.

Rule 20-B of the CPUC Code allows for public agencies to pay for the establishment, design, and construction of underground utility districts with local funds. In this case, the utility companies perform the design and construction work with the local agency, paying the utility companies for all work involved. There are several ways that a local agency can fund Rule 20-B undergrounding Projects.

- Use of General Funds
- Establishment of an assessment district (or community facility district) (Attachment 4). In this type of funding, a majority of the population proposed to be assessed must approve of the assessment through a vote. A typical assessment district will provide for repayment of the undergrounding design and construction through annual property tax billings. A typical assessment may last from 10 to 15 years. Establishment of an assessment district may add from three percent to five percent to the total cost of the project. Attachment 3 lists the steps required in the establishment of an assessment district.

Staff is not aware of any grant funds that may be available for funding of Rule 20-B projects.

As mentioned previously, the City accrues approximately \$447,665 per year in Rule 20-A allocations. Currently, the City has expended all existing allocations on the 19<sup>th</sup> Street and Placentia Avenue undergrounding projects. Positive funds should begin to accrue in fiscal year 2004-05.

## **LEGAL REVIEW:**

Legal services are normally not required for the establishment, design, and/or construction of an underground utility district. However, extensive legal and bond counsel services are needed when an assessment district or community facilities district is established. These services may cost anywhere from \$100,000 to over \$300,000, depending on the size of the assessment district and the number of parcels involved.

**CONCLUSION:**

Information is provided on the procedures and costs related to an underground utility district. Staff requests further direction in regards to underground utility districts, and to any possible policy establishing underground district priorities.

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William J. Morris  
Director of Public Services

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Marc R. Puckett  
Finance Director

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- ATTACHMENTS:
- 1 - Map of Existing Utility Poles Citywide
  - 2 - Factors to Consider in Possible Council Policy on Undergrounding of Utility Lines
  - 3 - Steps Required for Establishment and Maintenance of an Assessment District

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## **CITY OF COSTA MESA**

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