



Memo

DATE: April 18, 2016
TO: Sonia Bustamante, Chief of Staff, District 1
FROM: Mary Halle, Senior Civil Engineer, Transportation Engineering
SUBJECT: Kensington Utility Undergrounding

The undergrounding of overhead utilities in the community of Kensington has been discussed many times over the past 15-20 years. The following memo provides background information about past research and the process for each of the three categories (A, B, and C) for Rule 20 projects.

Quick Summary

There are three types of funding categories for utility undergrounding

- A – PG&E funded for civic areas
- B* – Property owner funded with PG&E rebate
- C* – Property owner funded

*Rule B and C projects require frequent communication with property owners as cost estimate is refined during the Design phase.

Past research of cost has provided varying estimates but the general indication is that an undergrounding project for Kensington will:

- Result in a commitment of \$40,000 per property or more.
- A non-refundable deposit of \$2,000 or more per property which is the cost for the project to progress to an official vote.
- Undergrounding projects continue to increase in cost every year with the most recent estimate in excess of \$600/foot or \$55 million to complete the facilities in Kensington.

RULE 20 – THREE CATEGORIES

There are three categories of utility undergrounding projects which are referred to as Rule 20A, 20B or 20C. The full specification for each of these categories is in an attached document provided by PG&E and briefly described below:

- **Rule 20A** – PG&E will replace overhead electric facilities with underground facilities at **PG&E's expense** using Rule 20A credits for the local agency, provided that one of the following applies:
 - Unusually heavy concentration of overhead facilities
 - The roadway is extensively used by the general public and carries a heavy volume of traffic
 - The road passes through a civic area
 - The road is considered an arterial or major collector.In Kensington, there is little opportunity for Rule 20A to apply. The majority of facilities on Arlington Avenue and Rincon Road are already underground. There are overhead facilities on Franciscan Way and Colusa Avenue which are classified as major collectors and may qualify for Rule 20A but do not rate high on the priority list as compared to major arterials.
- **Rule 20B** – PG&E will replace overhead electric facilities along public roads that do not qualify for Rule 20A provided the project is **funded up-front by the property owners**. A credit to the property owners or a reduction in cost is provided by PG&E and is typically **about 25% of the project cost**, based upon the premise that the community members are obligated to pay the increased cost for undergrounding the utilities as compared to the cost of a new overhead facility. The project must result in undergrounding on both sides of the street for at least a full block.
- **Rule 20C** – Undergrounding work is completed by PG&E and **fully funded by the requesting property owners**. A Rule 20C project would typically include work on a private road or a short project length that does not meet the minimum to qualify for Rule 20B.

THE PROCESS FOR RULE 20A

Public Works Staff prioritizes future utility undergrounding projects that are eligible for Rule 20A allocations by rating each project in 16 different categories to calculate an overall priority ranking for each Rule 20A project. The rating categories relate to whether the area is located within an area of civic importance, location with high volume of pedestrian or vehicle traffic, role of the utility undergrounding in future improvement projects, necessity of utility relocation for ADA accessibility, constructability, etc. The resulting prioritized list is presented to the Finance Committee for review and acceptance. The current priority list was approved by the Finance Committee in 2008. The utility undergrounding project that is currently in design with PG&E is on Bailey and Willow Pass Roads in Bay Point. The next projects on the priority list for Rule 20A funds include Pacheco Boulevard and Danville Boulevard.

Once a project is the top priority for Rule 20A funding and adequate 20A credits exist in the County's account, gaining community support is relatively simple as it does not require expenditures from the individual property owners. The scope of the utility undergrounding projects and the coordination efforts with each of the utility companies is complex. Due to the demands on staff resources, the Department has not undertaken multiple utility undergrounding projects at the same time.

THE PROCESS FOR RULE 20B

The Public Works Department does not have experience with implementation of a Rule 20B Project because it is uncommon that residents can fund these improvements privately; however, we have researched the process which is described below.

A utility undergrounding project under Rule 20B is considerably more complicated than a Rule 20A project because the majority of the cost is borne by private individuals which could feasibly be up to \$60,000 per property owner. With this significant financial investment, it is a big challenge to reach consensus among the property owners and neighbors as they decide whether the benefit is worth the cost of the project. An additional challenge is that there is a cost to get the project ready for a final vote and if the project is voted down, the up-front investment is lost. The initial funding to get the project to a vote may be up to \$2,000 per property owner which includes the cost to complete the design, environmental study, right of way acquisition, and to bid the project to contractors.

The financing of a Rule 20B project can be implemented through either of two options: 1) lump sum payment by property owners up front or 2) formation of an assessment district to sell bonds and assess the property owners through the assessor's tax roll over a period of ten, fifteen or twenty years.

1. Lump sum payment by property owners represents a lower total cost as it eliminates the cost of debt service on bonds and eliminates the cost to form and administer an assessment district.
2. Formation of an assessment district requires that the property owners petition the County to request formation of an assessment district, conduct a public hearing and conduct a vote of the property owners. If it passes a majority vote, the sale of municipal bonds generates the revenue required to construct the improvements in the short term while the total cost is spread over ten, fifteen or twenty years and repaid through the assessor's tax roll.

The time period required for community outreach, project planning, design, and construction is typically **3-5 years**.

The steps outlined below include the general process to move a Rule 20B project forward. Three of these steps (1, 2, and 4) include polling of individual property owners to indicate their level of commitment as the estimated project cost becomes increasingly more refined and step 6 is the actual vote of the property owners.

1. First Informal Survey – Because the ballot process to vote on formation of the Assessment District represents significant time, resource, and cost to property owners, it is wise to start the process with an informal survey within the tentative boundary of the District to get a general idea of whether the majority of the community supports the anticipated cost. Although the response to the survey is not binding, it should include questions for the property owners that quantify the range of the financial commitment so the result of the survey is valuable and realistic. The informal survey should specify that:
 - a. For Kensington terrain, it is estimated that the final cost of the project will be in the range of **\$40,000 - \$60,000 per property owner (or \$3,500 - \$4,000 per year for twenty years)**.
 - b. The property owner will be required to contribute an initial deposit in the range of **\$2,000 per property owner** to hire an engineer to prepare the Assessment District Report and for PG&E engineers to design the project. The Assessment District Report will include a preliminary cost estimate, boundary maps, and determine the cost to each parcel in the boundary based upon the benefit received. The property owners should be informed that if the utility district does not pass the vote, the initial contribution will be lost.
2. Formal Petition & Deposit – In order for the County to move forward with formation of an Assessment District, 60% of the parcel owners must sign a petition and provide the initial deposit of approximately \$2,000 per property owner. This deposit is nonrefundable even if the Assessment District is not approved.
3. Preparation of Assessment District Report - The Assessment District Engineer will prepare the Utility District Boundary Map, Assessment District analysis in collaboration with the utility companies (PG&E, Comcast, and AT&T), and County Public Works staff. The final report will provide a more refined cost estimate and indicate the cost to each parcel in the boundary based upon the increase in benefit received.

4. Second Informal Survey- Based upon the Assessment District Analysis, property owners will have a refined estimate to determine if a majority of owners continue to support the financial obligation of the project.
5. Design Phase – This phase will take approximately 2 years with PG&E project managers.
6. Ballot & Hearing –Based upon the final design and contract bids for the project, the community will have the exact cost of the project and the amount of payment required for each property owner. At this time, the ballots are distributed and owners must return their ballot to the Clerk of the Board. A public hearing is conducted at a Board of Supervisors meeting in the Board Chambers in Martinez to provide an opportunity for property owners to testify to express their support or opposition to the project. All parcels within the boundary will be assessed the cost of the project over an agreed duration (10, 15, or 20 years). Community members and Board members must recognize that there will be some property owners who may not be able to or may not be willing to fund the project. The result will be **placement of a lien on their property** until the assessment has been paid. If the assessment is approved by a majority of property owners within the specified boundary, the Board of Supervisors will make the final determination of whether to form the Assessment District.

THE PROCESS FOR RULE 20C

The process for a Rule 20C project would be the same as the Rule 20B process described above except there would not be the potential for a rebate or credit back to the property owners; thus, it is anticipated that the cost per parcel would increase.

CONSTRUCTION

The work will include installation of the main trench in the street, placement of the three utilities in the main trench (electric, cable and communications), installation of underground service lines on each property from the street to the home, and conversion of individual utility panels to receive the feed from underground. It will also include installation of pad mounted cabinets for transformers or other necessary equipment and removal of the utility poles. If street lights are currently mounted on wooden power poles, street light poles would also need to be purchased and installed.

COST ESTIMATES - PAST RESEARCH

Since the community has inquired about utility undergrounding several times in the past, we were able to pull up the estimates provided over the last twelve years. The important concept to remember is that these estimates should be considered cursory as the values are based upon the cost of similar projects, but there has not been a preliminary design performed that is specific to the project specific constraints. If the project progresses, the estimates will continue to be more refined after preliminary design, final design, and then after the contract is bid by contractors.

- In 2004, efforts were made to work with PG&E staff to understand a potential range of cost if the Kensington community wanted to move forward with utility undergrounding. At that time, PG&E staff estimated that 71,800 feet of joint trench in the public road right of way, 1,700 feet of secondary trench (required when there are two 12 KV lines), and 7,830 feet of joint trench outside the public right of way will cost approximately \$400 per foot of trench, estimated as a total **\$32 million for the project in 2004** to underground all remaining overhead lines in Kensington.
- In 2007, the discussion was revisited and the estimate reevaluated based upon the City of Berkeley's project which had recently been completed and resulted in a cost of approximately \$520 per linear foot of trench, providing a refined estimate of **\$47 million in 2008 dollars**. Escalation of these costs from 2008 to 2016 dollars is approximately **\$55 million or more**.
- Recently, two different assessment district consultants were asked about the general range they would anticipate for a project in Kensington. Given the terrain, both consultants estimated a cost range of **\$40,000-\$60,000 per property owner** but did not estimate the total cost of the project.
- The Rule 20A project for Bailey and Willow Pass Road in Bay Point is currently under design and the preliminary cost of the project comes in around \$560 per foot of trench; however, this includes only the cost to PG&E and does not include the cost of Comcast or AT&T to relocate their equipment. It is assumed that the total cost of the project with all three utilities will exceed well over \$600 per foot of trench in an area where the roadway is wide, straight, and flat.

FREQUENTLY ASKED QUESTIONS

See attached