City of Del Mar
Staff Report

TO: Honorable Mayor and City Council Members

FROM: Mohsen Maali, Deputy Public Works Director
Kristen M. Crane, Assistant City Manager
Via Scott W. Huth, City Manager

DATE: April 15, 2019

SUBJECT: Undergrounding Project Delivery Plan and Recommended Approach to Proceed with the Project

REQUESTED ACTION/RECOMMENDATION:

Staff and the Undergrounding Project Advisory Committee (UPAC) recommend that the City Council receive the draft Project Delivery Plan and UPAC and staff recommendations and provide direction to staff on the following items:

1. Reaffirm the City's commitment to Citywide undergrounding of all utility poles;

2. Approve the various policy recommendations identified by the UPAC;

3. Confirm the recommended block layout map, prioritization criteria, and ranking for moving forward in the future with the identified blocks;

4. Authorize moving forward with design of the two identified areas (1A and X) and the necessary funding for design and the initial implementation of the communications plan; and

5. Authorize staff to begin coordination with SDG&E for portions of the undergrounding work identified along Camino del Mar as eligible for Rule 20A funding.

DISCUSSION/ANALYSIS:

Background

Undergrounding of all utility poles Citywide is an identified City Council priority. Last spring, the City Council established the Undergrounding Project Advisory Committee (UPAC) which has worked diligently for nearly a year to address numerous policy questions related to this project, to assist with developing a scope of work for a project consultant and participate in the selection process, to develop a communications plan, to explore several project financing scenarios, and to develop prioritization criteria and a recommended approach for moving forward.

City Council Action:

See minutes for discussion.

The last update on the Undergrounding Project (UP) to the City Council was in October 2018. At that time, the City Council authorized entering an agreement with Lee & Ro, Inc (Consultant) to be the project consultant and proceeding with the first task order to develop a draft Project Delivery Plan. The City Council also accepted several policy-related recommendations from UPAC and directed the Project Team (i.e., UPAC, Staff, and Consultant) to optimize the prioritization process and to return with the Project Delivery Plan, the needed Policy decisions, and a funding plan.

Since October 2018, the following work has been completed by the Team: map/inventory of all overhead facilities within the City's right-of-way (ROW); an evaluation of the five privately-funded projects in-progress; preparation of Rough Order of Magnitude (ROM) cost estimates, including design, soft costs, and construction; identification of block boundaries for the citywide undergrounding project; development of a prioritization process and ranking of the project areas/blocks based on those criteria; development of key policy recommendations, which influence the recommended project delivery plan; development of several long-range project financing scenarios, which have been reviewed and vetted with the Finance Committee and the Undergrounding Committee and its Finance Subcommittee; extensive coordination with SDG&E on many topics, including how to proceed with Rule 20A-funded projects (which are funded and implemented by SDG&E); and development of a communications plan.

Project Delivery Plan

The Consultant's first task order was to complete a citywide inventory of all overhead utility poles to then develop a draft preliminary Project Delivery Plan (Attachment A). This document is still in draft form, pending City Council direction on the preferred approach for moving forward. It is envisioned that this document will serve as a roadmap for ongoing future implementation of the Undergrounding Project by way of establishing the blocks and prioritized order for moving forward with the completion based upon the ranking. Therefore, based on City Council direction, the Consultant will finalize the Project Delivery Plan accordingly, though the sections on long-term project schedule and timing will be subject to future changes based upon available funding and what is learned through the recommended pilot project. (*Note:* Some of the information in Attachment A may have been updated by subsequent actions of the Project Team but is not yet reflected therein since that document is still in draft form.)

As part of developing the Project Delivery Plan, Lee & Ro identified project "Blocks," which refer to a group of poles generally located in the same geographical location that have been identified as independent of each other based on logical termination points in the overhead circuitry, allowing each project to be constructed and energized independently. Different from a neighborhood block, the "Blocks" are areas based on optimal project size of about 220 parcels, according to both SDG&E and the Consultant's experience, as well as efficiency of system circuitry. The Consultant has identified seven Blocks (Block 1, made up of area 1A and 1B; Blocks 2 thru 6; and Block X) shown on Attachment B. These Blocks are also scale-able, in that they can be adjusted in size to be smaller if necessary based on project funding needs.

Staff recommends that the City Council approve the proposed layout of the undergrounding Blocks shown in Attachment B (subject to future adjustments by the City Council). This layout would then serve as the approach for moving forward in the future.

Policy Recommendations

Over the past several months, the UPAC has extensively analyzed and considered numerous policy questions to develop recommendations which will shape how the project moves forward. These topics and the associated UPAC recommendations are identified in Attachment C and have influenced the development of the project delivery approach, which is outlined below. Staff concurs with these recommendations.

One example of a policy question is the topic of reimbursement for past undergrounding work funded by private property owners. This topic has been vetted from both a legal perspective and an operational/practical perspective with the resulting conclusion that reimbursing private property owners for prior work completed is not a viable option. From a legal standpoint, there are significant cautionary dynamics surrounding "gifts of public funds" in terms of understanding prior project costs (generally 10+ years ago). Similarly, from a practical standpoint, there would be significant complexity in trying to figure out a manner to reimburse private property owners for their investments more than ten years later. In the case where undergrounding work was completed through an assessment district, even if individual properties were not supportive at the time of formation, those districts were established based on voter approval within the affected areas in accordance with California law. The private property owners have since enjoyed the benefit of their private investment for utility undergrounding.

These practical and legal dynamics, combined with limited Measure Q resources to fund the undergrounding project, led the UPAC and staff to maintain the same recommendation as previously identified which is not to reimburse private properties for past undergrounding costs.

Project Delivery Approach

The Consultant field surveyed and mapped the existing overhead utility pole infrastructure citywide in the Right of Way (ROW) and easements on private property; evaluated the status of the five earlier ongoing projects initiated by the private neighborhoods; prepared Rough Order of Magnitude (ROM) cost estimates; and proposed several layouts for the undergrounding Blocks based on location, circuitry, and efficiency for the City and Committee's review.

The Consultant work during this period provided the basis for many of the UPAC recommendations and is captured in their report dated January 2019, Version 3.1 (Attachment A). This report is presented in draft form and will be revised based on City Council direction in order to serve as roadmap for moving forward with the project in the years to come. (*Note:* Some of the information in Attachment A may have been updated by subsequent actions of the Project Team but is not yet reflected therein since that document is still in draft form.)

The UPAC's recommended approach to moving the project forward is to:

1) Embark on a long-term program to underground utility lines citywide.

2) Prioritize neighborhoods or Blocks for undergrounding according to the agreed upon criteria developed by the UPAC.

3) Begin by selecting a single neighborhood or Block as the first project to test the concept, including logistics, costs, and community coordination and impact.

4) Develop subsequent rollout plan based upon the results of the first area selected.

5) The City will cover the cost of all undergrounding work within the City's right-of-way when performed as part of the UP. This option simplifies the management of construction significantly, resulting in administrative cost savings and speeding up the process.

6) Private property owners will be responsible for the cost of the private lateral on their property, including the trench from their service panel to the service connection point (generally adjacent to the street). If applicable, private property owners would also be responsible for the cost to upgrade service panels to meet current Building Code requirements. The City would be paying for all other costs for the project.

This recommended approach from UPAC is the foundation for the overall approach to move forward with the project presented in this report.

Status of the Five Privately-Initiated Projects

As part of the Consultant's efforts, they were asked to evaluate the status of the five projects that had been previously initiated by private property owners to assess their readiness to proceed. Their finding was that all five projects were generally at the same status. Though SDG&E's design work was more or less complete, coordination and design work is not yet complete for the other affected utilities (such as telecom). Completing that design work is estimated to take approximately 12 months. Additionally, in evaluating the readiness of these projects to proceed and the cost estimates prepared for each of these areas, the UPAC's recommendation was not to proceed early with any of these projects because of the length of time necessary to get them ready for public bidding (which is only six less months than full design of a larger area) and because construction of the smaller areas would be much less cost-effective.

Prioritization Criteria

The UPAC developed criteria for how areas would be prioritized, which were presented to the City Council in October. Based on Council feedback and further consideration, the recommended criteria have been further refined to be customer density and fire safety. All of the Blocks identified by the Consultant were evaluated based on these criteria.

For each Block, the criteria are defined as

- Customer Density = Meter Quantity / Pole Quantity (a measure of the services still connected to poles)
- Fire Safety = Meter Quantity (in fire zone) / Pole Quantity (in fire zone)
- Weights are Customer Density, 75% and Fire Safety, 25%
- The results of (1) and (2) are multiplied by the weights, added together, and normalized to be ranked.

The Customer Density calculation is based on the number of meters with overhead service laterals that are directly connected to the poles in each Block. The number of meters is estimated from the GIS overhead transformer data provided by SDG&E. The SDG&E transformer data also includes surface mount transformers within or in the vicinity of each Block that service poles that have been already converted. The Project Team has checked the meter data against sample field surveys of the units and found the meter data to be relatively reliable. Staff has also obtained the number of dwelling units estimated from the SANDAG information and found that when compared citywide, although there is variation between the number of meters and the number of units among the Blocks, the total number of dwelling units citywide comes very close to the total number of meters with 97% accuracy.

Using the estimated data from SDG&E meter information, the Blocks have been ranked based on the formula above. A table with this information is included as Attachment D. On the map shown in Attachment B, each Block is labeled consistent with its rank.

As part of this item, staff is seeking Council approval of the recommended prioritization process and ranking of the undergrounding Blocks, subject to future adjustments by the City Council.

Total Project Cost Estimate

Based on the Consultant's detailed assessment of the existing overhead utility pole infrastructure, they have estimated that Citywide, there are at least 612 power poles to be undergrounded and approximately 77,135 linear feet of overhead wires.

Incorporating the cost for construction, as well as design; all soft costs (using industry standards and actual cost data from similar projects in the region), such as project management, communications, and legal services; contingency; and cost escalation over time, the consultant has estimated that the total program cost for all work in the City right-of-way is approximately $52 million (based on historical bid data from other agencies as of January 2019). It is considered ROM, based on several assumptions and therefore, subject to change when those assumptions change. For a list of the assumptions used, see the draft Project Delivery Plan (Attachment A). A detailed breakdown for this figure

for the entire Citywide project is included in the draft Project Delivery Plan (Appendix C of Attachment A).

The Consultant's ROM project total cost estimate translates to an average unit cost of $680 per linear foot (LF) of trenching. A recent survey of local agencies with active undergrounding projects indicates that the average unit cost in the current market is trending as follows:

Source	Cost Per Foot ($)
City of Coronado	$1,000-1,400
City of San Diego	$1,100
SDG&E	$1,021
California Public Utilities Commission	$700
City of Del Mar Consultant's Estimate	$680
City of Vista	$585-900
City of Poway	$540

Comparing costs is not easy since the costs change due to variations in the size, complexity, and scope of work for each project. For example, some of the higher numbers listed above include surface improvements for those projects as well. There has been, and continues to be, a fair amount of discussion regarding the estimated costs for the citywide undergrounding project. There are some members of the UPAC that believe that the total cost of the citywide project is significantly less than the current Lee & Ro estimate. Staff is concerned that in light of escalating construction costs, Lee & Ro's estimate may be not enough, especially if the City is contemplating paying cash as we go forward, which will lengthen the time period for the project.

The best way for Del Mar to accurately assess what construction costs will be is by designing the first area and then seeking bids for construction. When construction bids are received, the City should have a good indication of what the market rate for construction in Del Mar for this project will be. At that time, the City can revisit the funding plan and scheduling/timing approach.

Financing Scenarios

The envisioned funding source for undergrounding of utility poles has been revenues from Measure Q, which is the additional one-cent general sales tax approved by Del Mar voters in November 2016. That funding source generates approximately $2.5 million annually and was also envisioned to fund the Downtown Streetscape project and implementation of the Shores Park Master Plan.

As directed by the City Council, over the past several months, staff developed several financing scenarios based on various assumptions, which were discussed with the UPAC as a whole, the UPAC Finance Subcommittee, and the Finance Committee. These scenarios simulated different financing alternatives, such as "paygo" ("payment as you go" or cash), long-term financing, and a mix of short-term and long-term financing, along

with other scenarios such as the estimated cost for completion of the Shores Park Master Plan (modelling based on a cost of $13.5 million, which is an educated placeholder cost estimate).

Under current conditions, bond financing is not an option for this project because that would necessitate a public vote to approve the bond. However, shorter-term financing or leased asset financing (similar to the type of loan use for the Civic Center construction project) are potential options.

Among the scenarios, the factors that vary based on the assumptions are 1) length of time to complete the project, and 2) total cost to complete the project. There is an inverse correlation; financing the total project and completing it in a shorter time period would be more expensive than taking longer to do the project and paying cash as it accumulates.

All of the scenarios show that it is possible to fund the full cost to underground all utility poles using Measure Q revenues along with completing the redevelopment of Shores Park, both with long-term financing or "paygo," with the variation yielding completion time frames ranging from 12 to 26 years, and costing in a range of $61 to $95 million (including construction cost escalation and financing costs where applicable).

Whereas there are differing opinions between the Finance Committee and UPAC on paygo versus funding the whole project with long-term financing to complete it faster, the unified consensus is that it makes sense to proceed now with a pilot project and to then evaluate in a couple of years once there is more actual data for some of the variables and there is more accurate construction cost information through the bid process for the phase one areas. At that time, there will be more clarity on some of the assumptions (e.g., annual Measure Q revenue and estimated total project cost). Therefore, a recommendation on the long-term financing plan is not sought at this time, rather just financial authorization to proceed with the design for the phase one areas (1A and X) and the communications plan.

Recommended Project Delivery Approach

The recommendation of the Project Team (staff, the consultant and the UPAC), as well as the Finance Committee, is that the City proceed now with designing two areas, including: 1) one area, referred to as Area 1A, (approximately 265 parcels) that would serve as a pilot (a subset of one of the identified Blocks selected based on the prioritization criteria), and 2) a second area, referred to as Area X (approximately 43 parcels) selected based on fire safety exposure. For a map of these areas see Attachment B. There is a discussion below on how these areas were selected.

If the City Council authorizes moving forward, the first step will be to design these areas to remove the overhead wires and poles. This process is anticipated to take 18 months and will include all necessary coordination with SDG&E and the other affected utilities. Approximately 12 months into the design process, the Consultant should be able to inform affected property owners where their handhole box will be located, within proximity to the property line. Property owners will need to connect to this location. Throughout this

whole process, there will be extensive communication with property owners and residents in order to explain the process, timing, responsibilities for each party, etc.

Selection of the Pilot Area and Area X

There is consensus to proceed at this time, to begin the 18-month design process for two areas – one pilot area (referred to as 1A, which is a subsection of Block 1) and a second area, referred to as "Area X."

Area 1A contains 265 parcels, and is generally located along Stratford Court, north of 4th Street to 11th Street, west of Camino del Mar. Within this area are two of the five neighborhoods that have already been partially designed using private funding. This area was ranked number one by applying the ranking system developed by the UPAC and staff. UPAC also made an alternative recommendation that if the City Council felt that the pilot area was too big or costly, Area 1A could be reduced by removing 10th and 11th streets and having the northern boundary of the pilot area be 9th street. Staff believes that there would be sufficient resources to undertake Area 1A without reducing its size.

Area X contains approximately 43 parcels generally accessible off San Dieguito Drive in proximity to Crest Canyon. This area is within the area designated by the California Department of Forestry and Fire Protection (Cal Fire) as a fire risk exposure area. This area was recommended to be a top priority based on the fact that it has the highest exposure to fuel sources within the City. This area is within Crest Canyon.

Exposure to Fire Risk

Throughout the undergrounding project planning process, a topic that has been raised is whether and/or how potential exposure to fire risk, particularly in proximity to Crest Canyon, should be handled in terms of prioritization. In discussing this topic with SDG&E, they do not identify any poles in Del Mar as a fire risk, nor do they have any undergrounding plans for their system in Del Mar because of exposure to fire risk.

Cal Fire has a fire risk map that does identify areas of Del Mar generally, along the eastern border adjacent to and in Crest Canyon. In discussing this topic with Fire Chief Stein, with relationship to undergrounding of utility poles, from his perspective, understanding the terrain, topography, and fuel load, his recommendation for the poles that should be considered higher priority for undergrounding are those on the lower side of Crest Canyon off San Dieguito Drive/Oribia. Another factor for this is access to this area from a firefighting perspective.

Based on that information, Area X has been identified, separate from the other Blocks, and it is recommended that the design process for Area X begin as part of phase one. However, this would not be a "pilot project" because it is anticipated that the design work for this area may take longer than normal because of the coordination work with a number of private properties and similarly, it may also likely be more expensive for construction. Those two factors make it more of an anomaly versus a good candidate for a "pilot." Staff recommends proceeding with design of Area X as part of phase one.

The other areas of the City within the Cal Fire fire risk area fall within two of the Blocks (Blocks 4 and 5). These areas have an active fuel management program, and the majority of the poles are in the right-of-way.

Intended Lessons from the Pilot Project

The UPAC has extensively discussed the concept of a pilot project as the first phase for moving forward and the many ways in which it would be beneficial. Examples include opportunities to:

- Develop and test communications systems working with a smaller quantity of private property owners. The goal is to provide a high level of customer service and assistance during the process so property owners feel very familiar with the process, timing, and have the necessary resources for completing work on their private property;

- Test assumptions used to develop the overall project schedule; and

- Provide cost validation information on the per linear foot cost and all other cost assumptions developed to date as part of developing the Project Delivery Plan. Once the design is complete (about 18 months), following the Public Contracting Code and the City's purchasing procedures, there will be a public bid process for construction. Through the bid process, various construction companies will submit a bid to complete the necessary work. Per the City's purchasing policy, the City selects the lowest responsible bidder.

Outcomes from Pilot Project

If the City is proceeding with a pilot project, it is important to consider what the potential outcomes and next steps would be:

- If the cost outcome from the bid process is within the anticipated range, the next steps will be to move forward with construction for that area (anticipated to take approximately 18 months) and initiate the design for the next prioritized area (anticipated to take 18 months).

- If the cost outcome from the bid process is above the anticipated range, the City Council will be able to consider several alternatives:

    - Proceed with construction for the entire area understanding how that will affect the overall project budget but maintaining the commitment to citywide undergrounding.

    - Proceed with constructing a smaller portion of the pilot area (scaled back from 11th to 9th Street) and plan to fund the remaining portion as part of a future phase, still maintaining the commitment to citywide undergrounding.

- Explore ways to cost-share with private properties for work in the public right-of-way through formation of an assessment district.

One of the questions that has come up is the concern that by going forward with the pilot program, will the City be providing the properties in the pilot area with a benefit that may not be realized in the future by other property owners if the costs come in too high and the City needs to revise its financial commitment to the program. Staff believes that under most, if not all, potential outcomes that could be associated with moving forward with the UP based on higher costs, at a minimum, staff would recommend that the City pay for and manage the design portion of future citywide undergrounding.

As the City embarks upon design for a pilot project, it is important to note that there would be extensive dialogue with all of the affected property owners in the pilot area and work completed on their behalf on their property service laterals in preparation for the right-of-way construction effort. Additionally, SDG&E's design review expires after one year due to changes in technical standards, which means that if construction is deferred for a portion of the pilot area, there may be some additional costs to re-review those areas and to refresh the design.

Project Timing

The design process for the first phase is expected to take approximately 18 months. This includes both preparation of the design for undergrounding all the electricity poles and lines, as well as the necessary coordination and design work for the other utilities (telecom, cable), as well as review by SDG&E.

Once the design process is complete, the public bidding process will take about three months. This includes compilation of the bid package, the advertising period, receipt of bids, review of the bids, returning to the City Council to reaffirm the course of action or to discuss alternatives, and if directed, proceeding with the award of a contract for construction.

With that timeline, it is anticipated that construction could begin for the first phase area within approximately 21 months, though this timeframe may be slightly longer for Area X, due to anticipated necessary environmental permitting.

Financial Considerations

The UPAC discussed at length many scenarios related to project financing. The UPAC recommendation is that private property owners will be responsible for all work on their private property and undergrounding of private laterals. This includes both financial responsibility and coordination responsibility for completing the necessary work. In turn, the City would be responsible for all work in the public right-of-way. The cost estimates developed by the Consultant reflect this.

Over the course of this project, questions have been raised about how to handle circumstances where private properties may not be able to financially pay for the portion of the work on their private property. Staff has thoroughly investigated this issue. Measure

Q monies are not an option; that would be considered a gift of public funds. Staff has also looked into the possibility of property assisted clean energy (PACE) and voluntary assessments on property tax bills; neither of those is coming together as viable at this time. Other possibilities could be a financial assistance/loan program through the Del Mar Foundation (if they would be interested in establishing such a program and raising funds to support it); establishing a relationship with a private lender for private properties to use for private, individual loans to cover their private property costs; and/or neighbors privately assisting one another in unique, extenuating circumstances. If the City Council authorizes direction to proceed with the recommendation, staff will continue to explore these alternatives.

Privately-Designed Areas

As part of developing the Project Delivery Plan, the Consultant completed an in-depth evaluation of each of the five areas within the City that have had design work completed funded by private property owners. The Consultant's conclusion is that all of them are essentially at the same stage of readiness and all of them need approximately another twelve months of additional work to be ready to begin the construction bidding process, including all of the necessary work with the other utility companies. Based on this assessment, the recommendation of UPAC was not to proceed with any of these five areas as stand-alone, independent projects. However, two of them are located within the recommended larger pilot project Area 1A.

Cost to Proceed

The cost to proceed with designing both of the recommended areas is $581,280 and is anticipated to take approximately 18 months. While the design itself will be completed in a lesser time, built into the anticipated 18 months is time to coordinate with SDG&E and the other utility companies to complete their designs.

Another cost that has not yet been fully vetted is the cost for management of the overall program (internally and/or externally) and other soft costs like surveying, geotechnical investigations, environmental review, legal work on easements, and public communications with both the community at-large and the two specific first round design areas. Staff recommends planning on $35,000 for the initial communications effort for the next few months, and $183,720 for the above mentioned soft costs, with the expectation that staff will return to the City Council for a more in-depth discussion on the communications plan and project management costs.

Rule 20A Areas

By way of regulations established by the California Public Utilities Commission, some areas of Del Mar are eligible for what is referred to as "Rule 20A" funding. Rule 20A projects are completed and paid 100% by SDG&E, typically in areas of a community used most by the public, such as along arterial roadways. There is a limited amount of Rule 20A funding available from SDG&E to Del Mar (approximately $68,000 per year), which may be advanced up to five years for an estimated total of $340,000.

In Del Mar, there are three areas eligible for Rule 20A funds: 1) Camino del Mar (CDM), north of Seaview to the transition to Jimmy Durante Boulevard (JDB), then northward along Jimmy Durante toward San Dieguito Drive; 2) a few poles along Camino del Mar in the Beach Colony; and 3) along Via de la Valle.

Staff and UPAC's recommendation is that the City proceed with authorizing use of Rule 20A funds to underground poles along CDM/JDB from Seaview Avenue north (map shown in Attachment E). The amount of Rule 20A funds available will remove approximately 250 feet of overhead lines and the net removal of one pole. In this case, SDG&E will be completely responsible (including financially responsible) for all of the necessary design and coordination work. Other than approval and some coordination, the City will not be involved. Proceeding in this manner would commit Del Mar's funds through Fiscal Year 2024-2025. Alternatively, the City may wait for several years to accumulate funds for implementation of a larger project by SDG&E.

If the City Council supports proceeding now as recommended, staff will return at a future City Council meeting with a resolution (required by SDG&E) authorizing to proceed in this manner.

Communications Plan

Staff has been working with the UPAC Communications Subcommittee and Lee & Ro's subconsultant for communications, CityWorks, to develop a communications plan for the community at-large and the two recommended areas for phase one, Area 1A and Area X. Attachment F provides an overview of the audiences, planned messages, and communications tools. Recognizing that if the Council takes action on April 15th to proceed as recommended, there will be a lot of questions from the community, both from the community at-large and the areas recommended for phase one, the plan identifies the intended communications plan to provide detailed information on the overall envisioned process for moving forward and specific details for moving forward with the phase one areas. Staff and the UPAC Communications Subcommittee are working with CityWorks to develop a more detailed plan. Based on this plan, CityWorks will prepare a scope of work for executing the plan through the end of 2020. Staff anticipates returning to the City Council to discuss this plan in more detail. For moving forward at this time, staff recommends that the City Council appropriate $35,000 for initial work on establishing the plan and implementing the first few efforts over the next few months.

Cost to Proceed with Recommended Approach

Over time, the full cost to move forward with the recommended approach is estimated at $6.7 million. This includes the costs for design, all soft costs, and construction. The table below illustrates this in more detail by each area.

Cost Estimate	Pilot Area 1A	Area X	Total
Design Services (12% of construction estimate)	$375,600	$205,680	$581,280
Additional Soft Costs (Including Program Management and Public Communications)	$344,379	$233,737	$578,116
Construction Contracts	$3,130,000	$1,714,000	$4,844,000
Contingency (15% of construction estimate)	$450,021	$246,583	$696,604
Total	**$4,300,000**	**$2,400,000**	**$6,700,000**

At this time, staff is seeking City Council authorization of $800,000 to fund the design for these two areas and an initial portion of the communications effort.

Staff will present a more detailed project budget for the undergrounding project for the next two years as part of the two-year budget process based on City Council's April 15th direction.

Next Steps
If the City Council concurs with the recommended approach identified in this report, next steps to move forward will be:

- Revising the draft Project Delivery Plan to reflect the approach to proceed;

- Establishing each of the two areas recommended for phase one (Area 1A and Area X) as undergrounding districts as required by the Del Mar Municipal Code through a public hearing and adoption of a resolution;

- Coordinating with SDG&E to approve using the "Applicant Design" approach, which may also necessitate entering a Memorandum of Understanding (MOU) with SDG&E to clarify roles, responsibilities, and expectations. If the Applicant Design approach is approved, the next step would be to issue a task order to a consultant for design services of the priority projects. Otherwise, staff will initiate the design process with SDG&E.

- Approving a task order with Lee & Ro/CityWorks to proceed with the communications plan.

- Initiating the community outreach process, both for the community at-large and with the specific property owners/residents in the priority project areas.

- Coordinating with SDG&E to proceed with the identified 20A Undergrounding Districts, starting with the first, which will be Camino del Mar north of Seaview, then along Jimmy Durante Boulevard to San Dieguito Drive. This will also require a Council resolution.

While design is underway, staff recommends that the UPAC continue working on a number of items, such as 1) exploring a possible contractor pre-qualification process to assist private property owners in identifying a contractor for the lateral work on their property; 2) studying mechanisms to provide financial assistance to private property owners who need it for work on their property (not using funds from the City); and 3) evaluating options for structuring the undergrounding program in order to leverage Measure Q funds if costs come in higher than anticipated and/or there is interest in moving the project forward more quickly, while still working toward the overall end goal of undergrounding all utility poles.

FISCAL IMPACT:
The recommendation to proceed with the two identified areas for phase one (Area 1A and Area X) requires approval of funding for the necessary design work and an estimated amount for initial communications services. Staff is recommending that $800,000 of Measure Q revenues be appropriated to Account 40.6414.5900 for this purpose. If the City Council approves of this approach for moving forward, a budget appropriation resolution will be brought to City Council in the near future as part of other required actions. A more detailed budget for the undergrounding project for the next two years will be presented as part of the two-year budget development process.

NEXUS TO CITY COUNCIL GOALS AND PRIORITIES:
The UP is a City Council high priority project.

ENVIRONMENTAL IMPACT:
This item does not constitute a “project” under the California Environmental Quality Act, per the CEQA guideline definition.

PRIOR CITY COUNCIL REVIEW:
The City Council has discussed the UP several times, including most recently on October 1, 2018 and February 11, 2019.

ATTACHMENTS:
A. Project Delivery Plan Version 1.3 and Appendices
B. Citywide Undergrounding Map
C. Summary of UPAC Recommendations
D. Data Source and Block Ranking
E. Map of Recommended 20A Undergrounding Area - Camino del Mar at Seaview
F. Framework for Communications Plan

Note to Reader:
This report should serve as background information since some information may have been superseded by the subsequent work of the Project Team in the last 3.5 months. This report is a work in progress and will be updated soon after City Council acceptance of the recommended approach to move forward and subject to additional updates in the future once the pilot project is completed.

City of Del Mar

Utilities Undergrounding Program

DRAFT

Project Delivery Plan

January 2019

Version 1.3

Prepared by

LEE & RO, Inc.

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1. INTRODUCTION

The City of Del Mar (City) has begun the initiative to underground all overhead utilities within the City limits as part of their Utility Undergrounding Program (Program). As part of this initiative, this Project Delivery Plan (Report), in consultation with the City's Undergrounding Project Advisory Committee (UPAC), has been established to document the City's undergrounding Program. This Report is centered on summarizing the City's current overall undergrounding status, identifying the remaining work to be converted to underground, providing preliminary Program cost estimates, and establishing the framework for moving the Program forward. This Report is a work in progress and is being developed into a comprehensive Report which is anticipated to be finalized once all policy decisions regarding how to move the Program forward are decided by the City. The City plans to fund the Program using revenue from Measure Q, a ballot measure that was passed in favor of authorizing an additional one percent sales tax. This source of revenue is deposited directly into the City's General Fund.

San Diego Gas & Electric (SDG&E) Geographic Information System (GIS) data for overhead utilities was used to quantify the extent of construction efforts anticipated per project block and to calculate the resulting projected preliminary cost estimates for complete undergrounding conversions. These areas will be carved into new projects blocks for conversion work.

Furthermore, it is worthwhile to note that SDG&E requires that all electrical information remain undisclosed to the public for security concerns. For this reason, the electrical justifications presented throughout this report will be referred to in generic terms. Although electric distribution circuitry will be used for establishing the block boundaries, they will not be made available to the public due to the non-disclosure agreement between SDG&E, the City, and the professional consultant. Likewise, locations of substations and transformers along with detailed analysis of electrical systems used in creating the new block boundaries in accordance with electrical continuity will not be shown.

In addition to the overall Program, there are five (5) potential Pilot Projects which have been privately initiated by residents prior to Measure Q being instated. They have all asked the City to consider them as potential pilot projects for the Program. This Report will include an assessment of these five potential pilot projects and provide a recommendation to the City for the necessary steps required to move them forward. It will ultimately be at to the City's discretion to select which, if any, the City would like to undertake as pilot projects.

2. OVERALL PROGRAM STATUS AND BASELINE

In order to understand the city-wide extent of conversion work required for the Undergrounding Program, a base datum representing current conditions was established and documented herein. The basemap, shown in **Figure 2-1** depicts the current utility undergrounding status throughout the City. Refer to **Appendix A** for a large print view of the status map. This basemap was established in December 2018 with the most current SDG&E utility data in conjunction with field verifications which were also performed in December 2018. As field data is continuously being updated, this datum serves as a snapshot in time in which observations and assessments were made and was used as a starting point to develop the undergrounding Program costs discussed in **Section 3**.

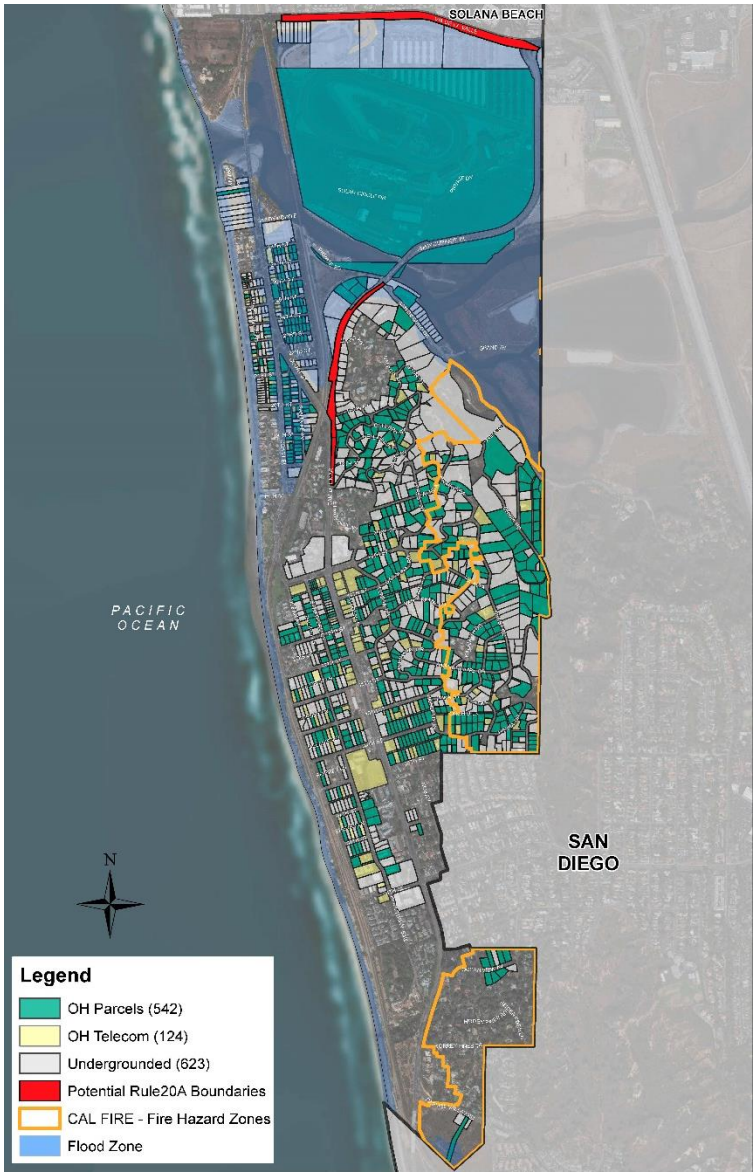


Figure 2-1 – City of Del Mar Undergrounding Program Status

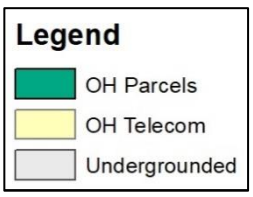
The basemap was generated through the use of ArcGIS Desktop, a powerful mapping and data analysis software. GIS Parcel layers were obtained from the San Diego Association of Governments (SANDAG) website found in their Regional GIS Data Warehouse. This Parcel layer contains polygons representing the taxable properties within the City of Del Mar along with their addresses. This information was used in collaboration with SDG&E's GIS utility data to canvass the City and collect data to determine which parcels are still being fed by overhead utilities and which have already been undergrounded. A list of the parcels verified during the field data collection is provided in **Appendix B**.

2.1. Understanding the Map

The basemap above shows the color code status of taxable parcels within 100 feet of SDG&E overhead distribution utilities. In analyzing the GIS parcel information with respect to SDG&E's data, the decision was made to remove parcels which were further than 100 feet away from SDG&E distribution poles to better represent the remaining areas requiring underground conversions. SDG&E overhead lines do not typically service residences further than 100 feet away. This proximity algorithm removed parcels further than 100 feet away from an SDG&E distribution pole as they were assumed to already be undergrounded and were removed from further investigation. Furthermore, to estimate the number of service laterals required for conversion (which have a direct impact on the Program's costs), instances where multiple parcels resided within the same property boundary were observed (typically condominiums) were consolidated in GIS to represent one service drop as each building will typically require only one service lateral to underground that property. As such, the parcels reference herein are reflective of the parcels remaining in proximity to SDG&E overhead utilities and the number of service laterals anticipated, and not the number of individual dwelling units in a given area.

The remaining parcels were targeted during field investigations to determine whether they remained overhead or had already been undergrounded. The City of Del Mar's Municipal Code requires residents performing major home improvements as well as newly constructed homes to underground their utility services. Due to this, many neighborhoods contain a mix of overhead and undergrounded homes, resulting in the need for field investigations to determine each individual residence's undergrounding status. Furthermore, field investigations were necessary due to the fact that SDG&E GIS information provides approximate locations of overhead utilities but does not designate which individual homes have already been undergrounded or remain serviced overhead.

The field results were color coded as follows:



OH Parcels are parcels whose SDG&E electric utilities remain fed overhead. These parcels represent the approximate number of service laterals that will be required for the conversion work and will have a direct

cost associated to them. This work will require coordination between the right-of-way (ROW) work contractor and the private property work. These locations will require coordination for stub out locations during the design phase.

During field investigations, no information was available to identify which parcels employ telecommunication services and which do not. As such, there was no way to distinguish whether a residence had undergrounded their telecommunication services or if they currently have telecommunication services at all. It is assumed that if these residences have overhead SDG&E electric service then they also are likely to have overhead telecommunication services and the two should be undergrounded simultaneously during the conversion process.

OH Telecom are parcels that have their SDG&E electric service undergrounded but remain fed overhead by a telecommunication wire. These parcels will be treated as already undergrounded for cost analysis purposes within this Report. These parcels may require intercepts or new handholes as part of the work within the public right of way. These parcels will be primarily used to distinguish potential private property work that will be borne solely by the telecommunication companies and may require further coordination during joint trench designs. Potential spare conduits may or may not have been included for future use by telecommunication companies at the time SDG&E services were undergrounded at these locations. It is expected that the existing telecommunication providers will coordinate with each resident and the telecommunication company will bear the cost to underground the service.

Undergrounded denote parcels that have already undergrounded their electric services. These parcels are located in areas that still have overhead utilities, and although already undergrounded, will still bear a Program cost associated with having to potentially intercept the undergrounded line in the public right-of-way to the new transformer in the area.

The parcel information obtained from the SANDAG GIS Data Warehouse provides a good starting point for a city-wide planning level document. This dataset comprises parcel polygons and associated parcel information provided by the County Assessor/Recorder/County Clerk (ARCC) in their Master Property Record (MPR file) and Parcel Assessment Record (PAR file). It should be noted that the Parcel layer shows the legally subdivided parcels but not necessarily the individual residences that may reside within each parcel. As such, there may be additional addresses or buildings requiring a service trench within a given parcel. The layer is not expected to be a complete inventory of every address in the County as information is constantly changing. SDG&E was unable to provide meter information data at this stage, which would increase the accuracy of the GIS data by resolving any instances of discrepancy between parcels and the actual number of residences serviced within that parcel. However, these discrepancies are immaterial for use as a basis for planning and the information collected remains the most accurate available representation for a City-wide planning level document.

2.2. Using the Base Datum and Field Data Collected

In accordance with the field data collected, it will be the intent to correlate all the Program's projected cost estimates to the remaining overhead utilities requiring underground conversions. This information will be leveraged with the use of ArcGIS Desktop for analysis and planning. This GIS technology allows spatial analysis of the remaining parcels with overhead utilities along with SDG&E circuitry to define project area boundaries for efficient and manageable undergrounding conversions. A summary of the data collected is presented in **Table 2-1**.

Table 2-1 – Field Data Summary

	Overhead Parcels	Telecom Parcels	Undergrounded Parcels
Total City-Wide Parcels Within 100 feet of SDG&E Distribution Poles	542	124	623
Parcels Within CAL FIRE Hazard Zone	136	16	104
Parcels Within FEMA Flood Zone	100	24	92

City residents have expressed continued concerns regarding fire safety due to overhead utilities in the City especially near canyons and large open space areas. As part of the overall planning effort, the GIS layer for the Fire Hazard Zone was obtained from the California Department of Forestry and Fire Protection (CAL FIRE) and the Flood Zone layer was received from the City based on the Federal Emergency Management Agency (FEMA) and are shown on the map in **Figure 2-1** and the utility information related to those areas are tabulated above. This data set was used for reference in visually understanding the dynamics of the City and in developing options for dividing the City into undergrounding project blocks. However, regarding fire safety concerns due to overhead utilities, it should be noted that the City of Del Mar does not reside within the SDG&E or CPUC Fire Hazard Map as shown in **Appendix I**. The flood map was currently used for informational purposes only and will be used during the design phase for a more detailed summary of the area through a geotechnical report. This field data set will need to be continuously reviewed and updated to reflect the ongoing and future undergrounding projects.

The data set collected, in accordance with the field verifications performed, results in a 95 percent confidence level of the data which was used to generate the overall preliminary Program cost estimates and layout options. The margin of error expected within the data is in accordance with acceptable industry standard margins of error. The cost factors for every project block will be refined during the design phase and the overall Program cost data will continue to be refined throughout the life of the Program.

2.3. Preliminary Project Block Layout

The data set above (overhead parcels, telecom parcels, and undergrounded parcels) was used in correlation to SDG&E circuitry and remaining residences with overhead utilities to define project block boundaries for the City as shown in **Figure 2-2**.

Figure 2-2 – Potential Project Block Layout Option 1A

These project blocks were created to target circuitry efficiency, ideal construction size for ease of management, and available budget. Natural features and neighborhoods that are impacted were also used as natural boundary borders. The layout alternative shown above was created and vetted through

an iterative process through discussions and input from the City and the UPAC committee to target the above criteria.

Initial draft layouts were presented to the City and UPAC committee members and the result was Layout Option 1A. Initial draft alternatives included Project Block Layout Option 1 orienting project block boundaries north and south to include the CAL FIRE hazard zone. Another layout alternative divided the City with block boundary orientations running east and west in Project Block Layout 2 to more closely align with SDG&E's circuitry, and Layout Option 3 further divided the City into thirteen smaller project blocks. Refer to **Appendix J** for the layout alternatives presented. All of the layouts presented to the City and UPAC encompassed circuitry efficiency, and targeted similar sized project blocks in terms of undergrounding effort, and Layout 1A was ultimately selected as a hybrid of these layout alternatives to most efficiently encompass the perceived fire threat areas within the City while remaining an ideal size for conversion projects. Layout option 1A will be presented to City Council, and upon approval will establish the framework to begin undergrounding the City.

Table 2-2 – Block Features Summary for Layout Version 1A

Project Block	Estimated OH Cable Length (feet)	No. of Poles to be Removed	No. of Parcels Within Boundary
1	10,393	95	276
1A	3,592	24	38
2	9,792	98	268
3	14,739	132	275
4	10,447	79	163
5	13,264	111	213
6*	6,970	40	37

* Project block still to be determined. Will be evaluated upon further discussions with the City regarding coordination with the Watermark development and Potential Jimmy Durante Rule 20A project.

3. PROGRAM COSTS

The preliminary overall estimated program budget that the City will bear is estimated to be **$51.6 Million** (not including Private Property work) which includes adjustment for inflation over a potential six-year program, project management, engineering fees, and the City ROW and SDG&E construction costs. These preliminary costs were based on GIS data and historic information, and results in an average overall Program cost of $680 per length of overhead line (2018 Construction Index). This cost per overhead line is a calculated average and the range may vary depending on the scope of work finalized during the design phase. A detailed breakdown of the Program Cost Estimator may be found in **Appendix C.**

The budget (including a 15 percent contingency) for the construction bids for the City ROW and SDG&E work is estimated to be $38.45 million (2018 Construction Index). The cost of private property work was not included in the total budget as Measure Q funds are not proposed to be used for that work. The City's Measure Q yearly revenue is estimated to be around $2.1 million. It is currently anticipated that the City will be able to finance the entire Program. The private property budget (including a 15 percent contingency) is estimated to cost $5.2 million (2018 Construction Index) resulting in a citywide cost range from as low as $1,500 to as high as $20,000 per property depending on the individual residence lot size, landscaping, and proximity to the connection location; this is useful if the City decides to fully assist in establishing a funding mechanism for the private property work. The total construction cost for the ROW work, private property work, and SDG&E's work is estimated to be $43.6 million (2018 Present Value).

Table 3-1 – Construction Costs Summary[13]

	Private Property Work Cost	ROW Construction Cost	SDG&E Electrical Cost	Total Construction Cost (Including PP Work)[2]
Estimated Cost	$4.5 Million	$22.1 Million	$11.3 Million	$37.9 Million
15 Percent Contingency	$0.7 Million	$3.3 Million	$1.7 Million	$5.7 Million
Total	$5.2 Million	$25.4 Million	$13.0 Million	$43.6 Million

[1]Total Costs presented are 2018 Construction Index.
[2]PP = Private Property.
[3]Table does not include inflation, project management, and engineering fees.

Table 3-2 – Financing Amount City Will Require

	Cost
PMO + Engineering	$8.7 Million
City ROW Budget	$25.5 Million
SDG&E Electrical Budget	$13.0 Million
Inflation Budget	$4.4 Million
(Inflation Adjusted) PMO + Engineering + City ROW + SDG&E Electrical	**$51.6 Million**

The preliminary Program costs were developed using undergrounding utility engineering experience and with the use of ArcGIS Desktop software to tabulate the cost factor values such as number of remaining overhead poles, transformers, and anticipated trench lengths throughout the City based on the length of overhead cables to develop the cost estimates. Coordination meetings with the City and SDG&E took place to identify the proper breakdown of estimated costs necessary for the successful completion of the undergrounding work. The Excel Block Cost Estimator developed incorporates line item cost breakdown along with the respective GIS quantities found in each project area to generate the total projected budgets for each block created. A 15 percent contingency was included to the above preliminary construction cost estimates to account for change orders that may result due to unknowns discovered in the field during construction, actual designs, and potential program policy change. In addition, a 20 percent was added to cover the program expenses including program management, engineering fees, and remaining City soft costs. These soft costs include the cost for attorney fees, perform community outreach, and miscellaneous tasks required to administer the Program including Storm Water Pollution Prevention (SWPPP) and environmental review requirements as expected for a typical Undergrounding Program. Similarly, 25 percent was included to the preliminary construction cost estimates to account for the Contractor's overhead and profit. Assumptions made include a 3 percent inflation rate based on current market conditions which are projected currently over a six-year program and that construction will have staggered starts with the last block starting at year 4 and finishing by year 6 with mid-construction for the last block starting at year 5.

It is also assumed that no additional costs (other than standard installation costs) by telecommunication companies will be incurred on the residents for undergrounding new or existing services due to the fact the City will be declaring the area an undergrounding district which requires all companies to underground their overhead utilities at their own expense. Meetings with the individual telecommunication companies serving the City is expected to begin soon after approval by City Council of the Layout Option 1A presented.

3.1. Potential Program Cost Considerations

It is noteworthy to address that in an effort to reduce the overall Program costs, various cost reduction possibilities were explored and vetted through the UPAC meetings. Potential cost reductions which have

not been factored into the above estimates include CPUC Rule 20A funded projects and the utility lines within the Del Mar Fairgrounds. These costs have been currently retained in the above estimates as a safety factor for budgeting purposes.

The City has currently identified approximately 7,000 lines of overhead utilities which may qualify for Rule 20A funding from SDG&E between the Via De La Valle and Jimmy Durante Rule 20A projects. The CPUC allocates a portion of funding collected from rate payers to SDG&E and the other California electric utilities to convert overhead utilities to underground. Funding for the Rule 20A projects under the CPUC is essentially a utility credit program. Each utility is given an allotment of credits to distribute to its respective municipalities every year for undergrounding conversion work based on a formula that takes into account the number of utility meters within a municipality compared to the utility's overall service territory. This complex formula requires half the allocation to be based on the ratio of the City's overhead meters to the total remaining overhead meters in SDG&E's overall system, and half based on the City's total meters to SDG&E's total system meters. These Rule 20A credits will enable the City to allow SDG&E to begin undergrounding qualified projects in parallel to the City's overall Program. These Rule 20A projects, will in effect, reduce the remaining utilities to be undergrounded by the City's Program with SDG&E being responsible for the planning, design, and construction of these projects separate to the efforts being done through the City's Program.

However, CPUC funding only allows the City to mortgage five years of allocation credits at a time to complete large Rule 20A projects. Based on the current available yearly funding available to the City by CPUC of roughly $68,000, the Rule 20A funding available for the 2019-2023 calendar years is approximately $339,000 since the City's account is currently overdrawn and potentially another $342,000 in 2024-2028 assuming the account begins accumulating a positive balance making a $680,000 Rule 20A project feasible for this Program. This assumes the yearly allocations remain the same during that time period. However, as more of the City gets undergrounded, it is assumed the less yearly allocations the City will receive based on CPUC's allocation formula. SDG&E will provide yearly updates for actual Rule 20A credit amounts available. Initial project estimates for the two Rule 20A projects are approximately $2.7 million, indicating only a portion of the currently defined Rule 20A blocks could be undergrounded with this funding source. Of these two projects, the UPAC consensus was that Jimmy Durante would be of higher priority to the City then Villa de la Valle which may be completed last. Through initial discussions with SDG&E, SDG&E estimates using approximately $700 per foot as a general planning level average of what current 20A conversion projects may cost. That means the $68,000 allocation will generate roughly 100 feet of conversion per year. Due to this, the City has explored the possibility of a third smaller Rule 20A project option alternative along Camino Del Mar between 25th street and 22nd Street and has also considered allowing the Rule 20A funds to begin a portion of the Jimmy Durante Project (Part A) with the Program undergrounding the remainder once SDG&E completes their portion. However, caution should be used when using SDG&E's $700 per foot budget as SDG&E did not define the scope of work that is included in that budget per foot. **Figure 3-1** below shows the new potential Rule20A alternative options.

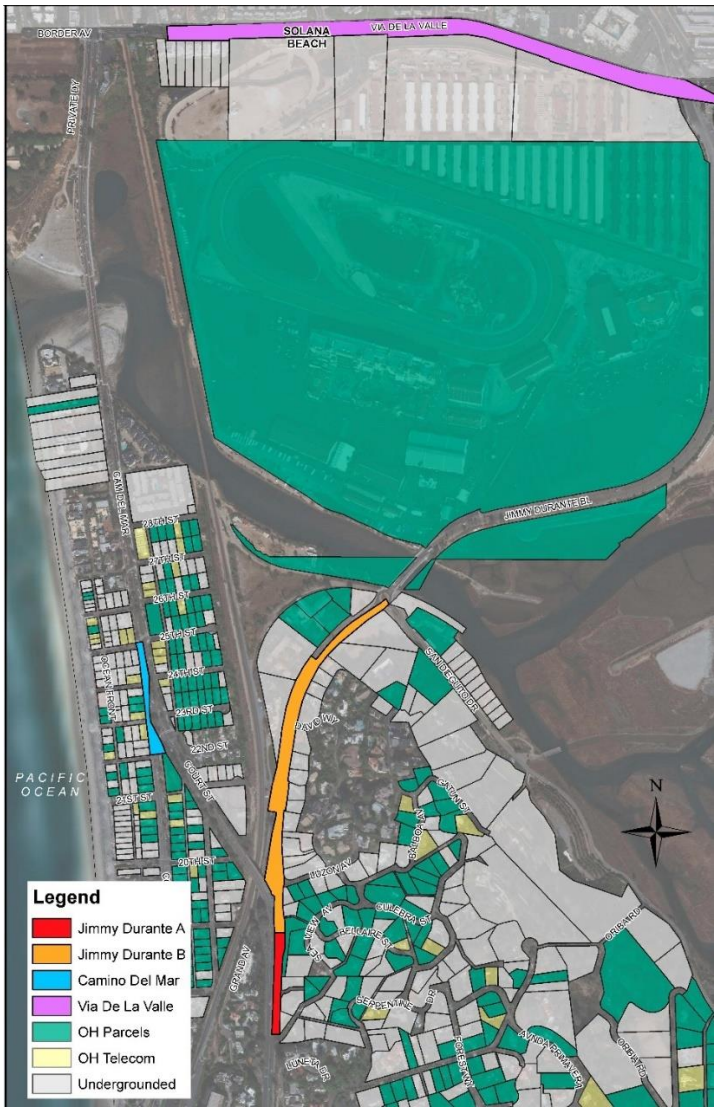


Figure 3-1 – Potential Rule 20A Alternatives

The two new options (Camino Del Mar and Jimmy Durante Part A) are projects closer to the 500 ft range of overhead lines estimated by SDG&E of what can be accomplished by mortgaging the 5 years' worth of credits. One of the ramifications of a negative balance is that the City cannot conduct any future overhead conversions until the balance is sufficient to cover future project costs. However, as allocation per year are expected to decrease due to increased undergrounding, it is recommended to pursue the available funding as soon as possible.

Similar to Rule 20A funding, Rule 20D was initially considered a possibility for additional funding by CPUC. Rule 20D funding was introduced in 2014 to facilitate undergrounding areas in SDG&E's high fire zone areas. Typically, the amount allocated to each city annually is the ratio of the number of miles of overhead electric high voltage distribution lines located in the SDG&E Fire Threat Zone in the city to the total miles of SDG&E overhead electric high voltage distribution lines located in the SDG&E Fire Threat Zone.

However as discussed above, the City of Del Mar does not reside within the SDG&E's Fire Threat Zone and thus no additional funding for Rule 20D by CPUC is available.

Another cost reduction considered may be the overhead utilities located within the Del Mar Fairgrounds. The Del Mar Fairgrounds includes approximately 2,500 feet of overhead lines, 3 overhead transformers, and 8 distribution poles resulting in an approximate undergrounding cost of $1 million. This cost is assumed will be borne by the Del Mar Fairgrounds 22nd District Agricultural Association.

Another potential cost adjustment would be to separate costs associated with servicing each meter and place that cost to the residents. In accordance with current City practices, residents are responsible for costs for undergrounding their utilities to the nearest connection point in the City ROW (either up to the distribution pole or handhole) when performing major home improvements. Pending program policy decisions, this cost responsibility may be placed to the residents or may be borne by the City. However, placing the costs associated with each service onto the residents would not only significantly raise the cost for each individual resident requiring undergrounding, but would also result in requiring homes that have already been undergrounded to pay an additional cost for the work to intercept their line and re-cable up to their property. This practice of pushing more financial burden to the residences may result in low participation or support for the Program.

3.2. Cost Assumptions

As a preliminary planning level estimate, these costs will continue to be refined as the Program moves forward and new information is made available. In summary, the assumptions used for generating these preliminary Program costs include:

- Program will be based on complete citywide conversion.
- City will be divided into 6-7 conversion blocks.
- Costs are based on the current field conditions documented herein as of January 2019 with 95% confidence in the field data gathered.
- City financing will be available to fully fund the Program resulting in a 6-year program.
- Design NTPs are anticipated to begin February 2019 with 1-2 conversion blocks per year staggered by 6 months.
- 18-month duration schedule is anticipated for the design to construction period.
- City will only be responsible for the conversion work on the ROW up to each residents' property line. All conversion work and costs for the private property work from the property line to each residents' meter will be the responsibility of the respective property owners including all SDG&E's cabling fees.
- The City will declare the City's limits an undergrounding district which requires all companies to underground their overhead utilities at their own expense.

- No additional costs (other than standard installation costs) by telecommunication companies will be incurred on the residents for undergrounding new or existing services due to the fact the City will be declaring the area an undergrounding district.
- Current SDG&E cost estimate includes an assumed 12 percent reimbursement credit ($1,903,436) from SDG&E for the conversion blocks performed under Rule 20B.
- Soft Costs are calculated as a percent of the hard costs plus contingency.
- The Soft Costs cover both private and public efforts as City coordination with residents will still be required.
- Rule 20A projects (e.g., Via De la Valle and Jimmy Durante Boulevard) will be performed separately by SDG&E and will be coordinated in parallel to the City's Program.
- Available Rule 20A credits for the City by CPUC is assumed to be $681,006 for the next 10 years by mortgaging 5 years' worth of credits at a time. This is based on the current yearly funding available to the City by CPUC of roughly $68,000.

Based on these assumptions, this preliminary cost estimate results in an average overall Program cost of $680 per length of overhead line (2018 Construction Index). The City surveyed various neighboring regional agencies about their average undergrounding cost per linear foot and these agencies have estimated their Programs costs to range from as low as $540 and as high as $1,400. A summary of the costs received are shown in **Table 3-3**.

Table 3-3 – Survey of Nearby Agency's UG Cost Per Foot Estimates

Agency	Cost Per Foot
Coronado	$1,000 - $1,400
San Diego	$1,100
Vista	$585 – $900
Poway	$540
CPUC	$700
SDG&E (20A)	$700

However, these numbers are not easily compared as each City's undergrounding program is different and vary in the amount of work that is included in their respective cost per foot estimates. The variations come from the size, complexity, and scope of work. Some of the higher numbers include other surface improvements. While some of the lower range numbers may only include construction costs and not engineering, overhead, and SDG&E fees. Additional work will be done to obtain line item costs from these agencies to better compare the scope of work that is included in these estimates.

3.3. Cash Flow Budget

Based on preliminary information, the chart below (**Figure 3-2**) illustrates the potential beginning of year cumulative budget that would be required to be committed to meet the potential cash flow demands assuming sufficient funding is readily available. Money not spent that year would roll out into the next year and so forth. Two potential scenarios are graphed below and assumes the City can meet the necessary cash flow. We assume for this analysis that the effort would be divided up into six block efforts. The first scenario assumes only one block a year goes into construction. The second scenario assumes two blocks a year go into construction with starts separated by six months. Beginning of calendar year 2019, the Program would need about $1.05 million or $1.67 million to be committed to the Program depending on the program speed desired of one or two blocks a year respectively. Both scenarios assume that a block and a pilot project would have a construction Notice to Proceed in the calendar year 2020.

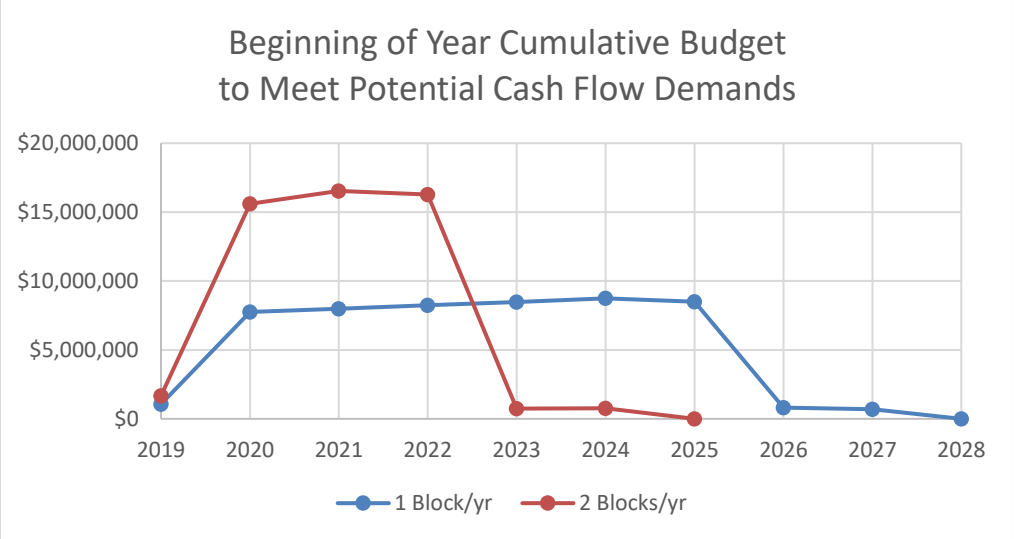


Figure 3-2 – Beginning of Year Cumulative Budget to Meet Potential Cash Flow Demands

The beginning of year cumulative budget figure above demonstrates the required committed financial resources and work to commence and move the Program forward. It should be noted that this shows the hypothetical shortest timeline for project completion ASSUMING all cash needed is raised when needed.

4. PROJECT IMPLEMENTATION

Project implementation will continue to be vetted through policy findings.

A preliminary Program concept schedule was created and is provided in **Appendix D.** This schedule is based on the assumption that the engineering and design Notice to Proceed is given in April 2019 and the City of Del Mar will be divided into approximately six (6) Undergrounding Districts. Initial boundaries and project blocks have been defined as shown in Layout 1A. These project boundaries serve as an outline and may be refined or shifted during the design phase based on actual undergrounding conversion needs. The actual project delivery implementation scenarios will continue to be vetted by the City and UPAC and will depend on the financing mechanism used by the City. This schedule along with its assumptions will continue to be refined through the life of the Program. As an initial outlook, it is estimated that preparation of the Undergrounding Package for the bidding process will take approximately 19.5 months with the Final Bid Set going out for bids in November 2020. Following that timeline, the Contract would be awarded in January 2021 allowing for construction of the first project to begin and the Contractor breaking ground in June 2021, taking into account the time needed for mobilization and submittal review.

It is understood that the schedule presented is a very aggressive schedule, does not include any float, and assumes the Program can be fully funded. It should be noted that homeowner issues will likely arise and will likely cause significant delays to the schedule. The detailed schedule in **Appendix D** shows the fastest possible schedule only to show what may be possible under the best of circumstances. For a typical project block, the anticipated construction sequence for the major key phases of the undergrounding conversion is simplified and summarized below in **Table 4-1**. This work sequence summary is ideal and it should be understood that although each phase is presented linearly for ease of understanding as an overall concept outline, overlap is expected to occur and is already factored into these durations.

Table 4-1 – Outline Concept of Anticipated Work Sequence (Block 1)

Major Phases	Duration	Start Date	Finish Date
Design (City)	19.5 Months	04/2019	11/2020
Private Property Work (Residents)	10 Months	08/2020	06/2021
Bid Phase (City)	3 Months	11/2020	02/2021
Trenching (City Contractor)	5 Months	06/2021	11/2021
Telecom	6 Months	11/2021	05/2022
Cabling (SDG&E)	3 Months	11/2021	01/2022
Cutovers (All Parties)	4 Months	01/2022	06/2022
Pole Removal (SDG&E)	2 Months	05/2022	07/2022

To summarize the table above, once undergrounding designs are underway, it is assumed that residents will be provided with a preliminary design concept to notify them of the general location of where their anticipated connection from the City's trenching contractor will be. Ideally, the private property work for installing the necessary conduit and pull boxes would be completed in the 6 months prior to the trenching contractor being awarded the bid. However, the private property work may be extended to 10 months to be completed prior to the trenching contractor breaking ground which is assumed to be 4 months after the contractor is awarded the bid. After the trenching contractor has installed all the infrastructure in the City right of way (ROW) and the private property trenching and conduit connections are completed, SDG&E would then begin their cabling work. After the cabling work by SDG&E; SDG&E, City contractor, and the resident would coordinate and begin the cutover phase. Upon completion of the cutover phase, and assuming all work (including telecom) is completed, SDG&E would then remove all of the poles. Telecom's work is assumed to occur independently of the work by the City contractor, residents, and SDG&E. Telecom will most likely begin their conversion work alongside the City contractor during the trenching phase and will ideally be completed prior to the removal of the poles by SDG&E. Variances and overlap of this work will inevitably occur and this summary is for informational purposes only for the overall sequence of events that is anticipated.

Once City Council has approved the layout option to be used for the Program, the City has introduced the use of prioritization criteria to determine the order in which the project blocks will be undergrounded and is presented herein. The priority ranking was developed by the UPAC committee and established a ranking system based on population density and fire hazard density criteria. Currently, population density is weighted 75 percent with the fire hazard criteria weighted at 25 percent and awaits to be approved by City Council. These criteria will allow for objective analysis of the individual project blocks and assign each one a prioritization ranking for the sequence in which they will be undergrounded. The number of projects or undergrounding work undertaken each year will be based on the available funding each year and dependent on the finance mechanism implemented by the City.

Due to the size of the Program and projected revenue from Measure Q, sufficient funding for the entire program will not be readily available and a longer financing period will be required to fund the Program. According to the financing method proposed by the City, the Program could be fully funded and completed within 13-15 years. Note, a potential pilot program schedule, pending decision to proceed by City Council, is shown separately from this schedule in **Section 4.2** and is provided in **Appendix F**.

4.1. Early Bird Pilot Project Readiness Comparison

Five (5) projects, which were privately initiated by residents before Measure Q was instated, have asked the City to consider them as potential Pilot Projects for the Program. All of these projects have already paid and received draft SDG&E design drawings which are expected to be finalized in the coming months. All of these potential pilot projects are at the same level of design and still require finalized designs proceeded by coordination with the telecommunication companies. The City's role in undertaking these projects would be to manage the next steps necessary in the undergrounding conversion process and oversee the construction work. These projects have been assessed to determine which, if not all, may be

selected as candidates by the City to move forward with. These potential pilot projects are outlined in **Figure 4-1**. A detailed boundary map of each potential pilot project is provided in **Appendix E**.

Two additional previous potential projects were also initially evaluated: North Hills and Sunset. However, the progress of these projects was halted due to lack of sufficient votes during the assessment formation and funding phase. The SDG&E designs have since been considered expired by SDG&E and would require complete redesign. As such, these projects were evaluated as not ready and were removed from further consideration as potential pilot projects. These areas, including all areas with remaining overhead utilities throughout the City, will be undergrounded as part of the overall Program separate from the pilot projects.

A preliminary cost estimate was also provided for each potential pilot project considered and are presented in **Appendix G**. It should be noted that the boundaries shown in **Appendix D** denote the boundary that would pose the most undergrounding conversion efficiency for each pilot project as discussed below. These boundaries reflect SDG&E's design but include parcels that would be affected by trenching efforts in front of their residence per SDG&E's current design (any parcel that has trenching in front of their street). This was done to highlight parcels that should be included in the current design to avoid the need for any retrenching in the future to underground remaining overhead utilities. **Figure 4-1** below shows the general vicinity of the five potential pilot projects in regard to the City.

Figure 4-1 – Potential Pilot Project Locations

Based on our analysis, all five projects were found to be in a similar status of readiness. At the onset of reviewing these pilot projects, it was assumed each would be at varying stages of design or stages of the undergrounding process. However, upon discussions with the SDG&E planner and project leads, it was discovered that all of the projects were at the same status of design with final designs still needing to be prepared. Furthermore, due to their similarities in size, undergrounding efficiency, and design status, no useful metric could be identified with which to substantially differentiate them for selection. However, based on minor design changes provided by the SDG&E planner, the Penny Lane project was observed to be the most efficient in terms of avoiding any need for future retrenching even though easement issues would still need to be resolved. Once the final SDG&E design drawings are received, all of these projects will still require coordinating those designs with the existing telecommunication companies and obtaining any remaining necessary easements and participation forms, therefore resulting in months before being ready to start the bid process.

Options discussed between the City and the consultant include: 1) allowing these projects to continue of their own accord at the property owners' expense (if desired by the residents) which would result in the most optimal option in terms of seeing construction commence, 2) rolling these projects into the overall Program which would become subject to the new undergrounding blocks created if both the City and the residents decide not to proceed with them, or 3) for the City to merge or redesign these candidate project areas to increase efficiency to reach the overall goal of undergrounding the entire City. Option 1 would include a potential for reimbursement for the ROW work if performed in accordance with City guidelines. These decisions will be determined at the City's discretion through the upcoming Utility Undergrounding Program Advisory Committee meetings.

The five pilot boundaries were established and analyzed in terms of engineering efficiency. The complete pilot program status analysis is provided in **Appendix H** and the findings summary is shown in **Table 4-2**.

Table 4-2 – Pilot Project Conversion Summary

	Ocean Front 25th - 27th	Ocean Front 21st-23rd	Ocean Front 20th-22nd	Penny Ln Project	Little Orphan Alley Project
(E) SDG&E OH Lines	**902 ft**	**437 ft**	**680 ft**	**1,023 ft**	**956 ft**
Demo OH Lines	774 ft	230 ft	342 ft	1,023 ft	787 ft
(E) SDG&E Poles	10	6	10	9	10
Demo Poles	6	2	4	6	7
Number of Properties Affected	29	12	28	40	24
Net Remaining OH lines After Undergrounding	**128 ft**	**207 ft**	**338 ft**	**0 ft**	**169 ft**
Net Remaining Poles After Undergrounding	**5**	**4**	**6**	**4**	**5**
Net Properties Remaining OH After Undergrounding	**0**	**5**	**1**	**0**	**2**

As observed from **Table 4-2**, most of the potential pilot project will still have remaining overhead utilities within their project area once they are completed. This inefficiency will result in the need for retrenching of the streets to remove the remaining overhead lines and poles as part of the overall Program. The additional street work, design efforts, traffic control, public outreach, and staff required to manage the removal of the remaining overhead utilities in these areas can be mitigated if these efficiency concerns are addressed at this time. Due to the lack of efficiency, these projects are more expensive and do not completely remove all the poles and overhead lines in the area.

Selecting to redesign any of these projects would increase their efficiency, avoid cause for rework, and still fulfill the purposes of a pilot project with moving forward in getting the telecommunication companies involved with the joint trench offer, reaching out to residents that have not yet been informed and getting their cooperation, navigating the contract set up for separation of right-of-way work and private property work, and dealing with SDG&E throughout the phasing or the conversion work.

4.2. Pilot Project(s) Next Steps for Moving Forward

Once the candidate pilot project(s) have been selected by the City, ownership and management of these projects will be overseen by the City's Program Manager.

Next steps are as follows:

- Possible re-design, at the City's discretion, for improved efficiency and cost effectiveness.
- Securing remaining necessary easements.
- Establish a proper survey and base map for competitive bidding.
- Coordination with telecommunication companies in the area by offering a joint trench agreement.
- QA/QC of 3rd party designs.
- Prepare a complete bid package.
- Establish contractor bid process.
- Public outreach for the effected homeowners.
- Coordination with homeowners to assure their private property lateral undergrounding work is commencing and properly done to meet SDG&E's requirements.

These pilot project(s) could proceed in tandem with the schedule created for the entire City's Program. A separate schedule for the expected potential project timeline is presented in **Appendix F.** If the City elects to proceed with the candidate pilot project(s), construction can potentially break ground in December 2019 if bids are advertised by September 2019. This schedule assumes we will redesign the selected pilot project(s) for improved efficiency which would require an estimated additional month for re-design by SDG&E after the original final designs are received and that the pilot project(s) would commence at the same time. Actual durations are subject to SDG&E cooperation. Outreach for the private property work would commence as soon as the Notice To Proceed is given and the private property lateral work by the

residents would be expected to start in July 2019 (five months prior to the construction bid for the ROW work being awarded). Refer to **Appendix F** for the complete schedule for a typical pilot project.

APPENDIX A

Program Status Map – Citywide Undergrounding

City of Del Mar Undergrounding Program Status

APPENDIX B

Field Data Status Parcel List

City of Del Mar
Parcel Address Field Data

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
1	3000942000	100	10TH	ST	92014-2307	UG	UG
2	3001710201	111	10TH	ST	92014-2306	UG	UG
3	3001710202	113	10TH	ST	92014-2306	UG	UG
4	3001710300	119	10TH	ST	92014-2306	OH	OH
5	3000941200	120	10TH	ST	92014-2307	UG	UG
6	3000941100	128	10TH	ST	92014-2307	OH	OH
7	3001710400	129	10TH	ST	92014-2346	OH	OH
8	3000941001	136	10TH	ST	92014-2307	UG	OH
9	3000941002	138	10TH	ST	92014-2307	UG	OH
10	3001710500	141	10TH	ST	92014-2306	OH	OH
11	3000940901	144	10TH	ST	92014-2307	UG	UG
12	3000940902	146	10TH	ST	92014-2307	UG	UG
13	3001710600	149	10TH	ST	92014-2306	UG	OH
14	3000941501	150	10TH	ST	92014-2307	UG	UG
15	3000941502	152	10TH	ST	92014-2307	UG	UG
16	3001710701	157	10TH	ST	92014-2306	UG	UG
17	3000941600	158	10TH	ST	92014-2307	UG	OH
18	3001710702	159	10TH	ST	92014-2306	UG	OH
19	3001721800	215	10TH	ST	92014-2308	UG	UG
20	3000931400	220	10TH	ST	92014-2359	UG	UG
21	3001720101	221	10TH	ST	92014-2308	UG	UG
22	3001720200	227	10TH	ST	92014-2308	OH	OH
23	3001720301	231	10TH	ST	92014-2308	UG	UG
24	3001720302	233	10TH	ST	92014-2308	UG	UG
25	3000931300	234	10TH	ST	92014-2359	UG	OH
26	3002213200	307	10TH	ST	92014-2824	UG	OH
27	3004103000	326	10TH	ST	92014 2825	OH	OH
28	3002210201	327	10TH	ST	92014-2824	UG	UG
29	3002210202	329	10TH	ST	92014-2824	OH	OH
30	3002210300	335	10TH	ST	92014-2824	UG	OH
31	3004103100	336	10TH	ST	92014-2825	UG	UG
32	3002210400	341	10TH	ST	92014-2824	OH	OH
33	3004103201	342	10TH	ST	92014-2825	UG	UG
34	3002212600	345	10TH	ST	92014-2824	UG	OH
35	3004103202	346	10TH	ST	92014-2825	UG	UG
36	3002212700	403	10TH	ST	92014-2826	UG	OH
37	3002210700	407	10TH	ST	92014-2826	UG	UG
38	3004101700	410	10TH	ST	92014-2827	OH	OH
39	3002210800	411	10TH	ST	92014-2826	UG	UG
40	3004101800	412	10TH	ST	92014-2827	UG	UG
41	3002210900	419	10TH	ST	92014-2826	UG	UG
42	3004101900	420	10TH	ST	92014-2827	UG	UG
43	3002213100	427	10TH	ST	92014-2826	UG	OH
44	3004103400	428	10TH	ST	92014-2827	UG	UG
45	3002213000	433	10TH	ST	92014-2826	OH	OH
46	3004103500	444	10TH	ST	92014-2827	UG	UG
47	3004102100	456	10TH	ST	92014-2827	UG	UG
48	3004102200	510	10TH	ST	92014-2828	OH	OH
49	3004102300	520	10TH	ST	92014-2828	UG	UG
50	3000911800	100	11TH	ST	92014-2311	UG	OH
51	3000940100	101	11TH	ST	92014-2310	UG	UG
52	3000911700	106	11TH	ST	92014-2311	OH	OH
53	3000940200	107	11TH	ST	92014-2310	UG	UG
54	3000911300	110	11TH	ST	92014-2311	UG	OH
55	3000940300	111	11TH	ST	92014-2310	UG	OH
56	3000911201	116	11TH	ST	92014-2311	UG	UG
57	3000911202	118	11TH	ST	92014-2311	UG	UG
58	3000942304	119	11TH	ST	92014-2310	UG	UG
59	3000942303	121	11TH	ST	92014-2310	UG	UG
60	3000942302	123	11TH	ST	92014-2310	UG	UG
61	3000942301	125	11TH	ST	92014-2310	UG	UG
62	3000911001	134	11TH	ST	92014-2311	UG	UG
63	3000940600	137	11TH	ST	92014-2310	UG	UG
64	3000912100	140	11TH	ST	92014-2311	UG	UG
65	3000940700	149	11TH	ST	92014-2310	UG	UG
66	3000931101	217	11TH	ST	92014-2312	UG	UG
67	3000931102	219	11TH	ST	92014-2312	UG	UG
68	3000922200	220	11TH	ST	92014-2313	OH	OH
69	3000931200	225	11TH	ST	92014-2312	UG	UG
70	3000921000	230	11TH	ST	92014-2313	UG	UG
71	3000920902	234	11TH	ST	92014-2313	UG	UG
72	3000920901	238	11TH	ST	92014-2313	UG	UG
73	3004010700	330	11TH	ST	92014-2608	OH	OH
74	3004102500	333	11TH	ST	92014-2607	OH	OH
75	3004102400	343	11TH	ST	92014-2607	UG	UG
76	3004101600	411	11TH	ST	92014-2609	UG	UG
77	3004101500	425	11TH	ST	92014-2609	UG	UG
78	3004002200	434	11TH	ST	92014-2610	OH	OH

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
79	3004101400	443	11TH	ST	92014-2609	UG	UG
80	3004101300	511	11TH	ST	92014-2829	OH	OH
81	3004100700	512	11TH	ST	92014-2830	OH	OH
82	3004101200	527	11TH	ST	92014-2829	OH	OH
83	3004101100	545	11TH	ST	92014-2829	OH	OH
84	3000910100	101	12TH	ST	92014-2314	UG	UG
85	3000910200	111	12TH	ST	92014-2314	UG	UG
86	3000910300	119	12TH	ST	92014-2314	UG	UG
87	3000910500	135	12TH	ST	92014-2314	OH	OH
88	3000910600	143	12TH	ST	92014-2314	OH	OH
89	3000912003	149	12TH	ST	92014-2314	UG	UG
90	3000721402	150	12TH	ST	92014-2315	UG	UG
91	3000912003	151	12TH	ST	92014-2314	UG	OH
92	3000721401	152	12TH	ST	92014-2315	UG	UG
93	3000920100	203	12TH	ST	92014-2316	OH	OH
94	3000920200	205	12TH	ST	92014-2316	OH	OH
95	3000920300	211	12TH	ST	92014-2316	UG	OH
96	3000921600	243	12TH	ST	92014-2316	OH	OH
97	3000750700	300	12TH	ST	92014-2565	OH	OH
98	3004011100	327	12TH	ST	92014-2564	OH	OH
99	3003911100	336	12TH	ST	92014-2565	OH	OH
100	3000711000	106	13TH	ST	92014-2332	OH	OH
101	3000711100	118	13TH	ST	92014-2332	OH	OH
102	3000710600	124	13TH	ST	92014-2332	OH	OH
103	3000720300	125	13TH	ST	92014-2331	UG	UG
104	3000720402	139	13TH	ST	92014-2331	UG	UG
105	3000720401	141	13TH	ST	92014-2331	UG	UG
106	3000720501	145	13TH	ST	92014-2331	UG	UG
107	3000720502	145	13TH	ST	92014-2331	UG	UG
108	3000111000	150	13TH	ST	92014-2350	UG	UG
109	3000721200	155	13TH	ST	92014-2331	UG	UG
110	3000721301	165	13TH	ST	92014-2331	UG	UG
111	3000721302	167	13TH	ST	92014-2331	UG	UG
112	3000741100	207	13TH	ST	92014-2333	OH	OH
113	3000200700	316	13TH	ST	92014	UG	OH
114	3000750800	325	13TH	ST	92014-2556	OH	OH
115	3000200800	328	13TH	ST	92014-2555	OH	OH
116	3003910900	333	13TH	ST	92014-2556	UG	UG
117	3000200900	336	13TH	ST	92014-2555	OH	OH
118	3000201000	348	13TH	ST	92014-2555	UG	UG
119	3000201100	350	13TH	ST	92014	UG	UG
120	3000201200	354	13TH	ST	92014-2555	OH	OH
121	3000201900	378	13TH	ST	92014-2555	OH	OH
122	3000202000	386	13TH	ST	92014-2555	OH	OH
123	3000200200	317	14TH	ST	92014-2554	OH	OH
124	3000201702	321	14TH	ST	92014-2557	UG	UG
125	3000201701	323	14TH	ST	92014-2557	UG	UG
126	3000201600	325	14TH	ST	92014-2557	UG	UG
127	3000201500	327	14TH	ST	92014 2557	UG	UG
128	3000308700	334	14TH	ST	92014-2519	UG	OH
129	3000201400	341	14TH	ST	92014-2557	OH	OH
130	3000300900	344	14TH	ST	92014-2519	OH	OH
131	3000201300	345	14TH	ST	92014-2557	OH	OH
132	3000201800	355	14TH	ST	92014-2557	OH	OH
133	2993100300	110	15TH	ST	92014-2303	UG	UG
134	2993100200	122	15TH	ST	92014-8001	UG	UG
135	3000112207	155	15TH	ST	92014-2340	UG	OH
136	3000122800	201	15TH	ST	92014-2304	OH	OH
137	3000122900	207	15TH	ST	92014-2304	OH	OH
138	3000123000	211	15TH	ST	92014-2304	OH	OH
139	3000120200	215	15TH	ST	92014-2304	OH	OH
140	3000120300	221	15TH	ST	92014-2304	UG	OH
141	2992805500	410	15TH	ST	92014-2521	UG	UG
142	2992805000	432	15TH	ST	92014-2521	UG	OH
143	2992804800	436	15TH	ST	92014-2521	OH	OH
144	3000301300	439	15TH	ST	92014-2520	OH	OH
145	2992804900	442	15TH	ST	92014-2521	UG	UG
146	2992803300	446	15TH	ST	92014-2521	OH	OH
147	2992802900	454	15TH	ST	92014-2521	UG	UG
148	3000301600	461	15TH	ST	92014-2520	OH	OH
149	2992802800	462	15TH	ST	92014-2521	UG	UG
150	3000301700	463	15TH	ST	92014-2520	UG	UG
151	3000301800	467	15TH	ST	92014-2520	OH	OH
152	2992802500	470	15TH	ST	92014-2521	OH	OH
153	3000307500	475	15TH	ST	92014-2520	UG	UG
154	2992802400	482	15TH	ST	92014-2521	UG	OH
155	3000307400	499	15TH	ST	92014-2520	UG	OH
156	3000302500	507	15TH	ST	92014-2522	UG	OH

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
157	2992901200	508	15TH	ST	92014-2523	UG	UG
158	2992901300	510	15TH	ST	92014-2523	UG	UG
159	2992902300	534	15TH	ST	92014-2523	OH	OH
160	3000302600	539	15TH	ST	92014-2522	OH	OH
161	2992901600	550	15TH	ST	92014-2523	OH	OH
162	2992902100	565	15TH	ST	92014-2558	OH	OH
163	3000403800	581	15TH	ST	92014-2558	OH	OH
164	3000404800	589	15TH	ST	92014-2558	OH	OH
165	2992902800	590	15TH	ST	92014-2523	UG	UG
166	3000404700	615	15TH	ST	92014-2524	OH	OH
167	3000404500	627	15TH	ST	92014-2524	UG	UG
168	2992606000	628	15TH	ST	92014-2525	UG	UG
169	3000402700	645	15TH	ST	92014-2524	OH	OH
170	2992608400	650	15TH	ST	92014-2525	UG	UG
171	2991440700	224	18TH	ST	92014-2156	OH	OH
172	2991411500	212	19TH	ST	92014-2137	UG	UG
173	2991410700	224	19TH	ST	92014-2137	OH	OH
174	2991410800	228	19TH	ST	92014-2137	OH	OH
175	2991440100	229	19TH	ST	92014-2136	OH	OH
176	2991410100	221	20TH	ST	92014-2138	UG	OH
177	2991311000	226	20TH	ST	92014-2139	UG	UG
178	2991410200	227	20TH	ST	92014-2138	OH	OH
179	2991420300	255	20TH	ST	92014-2152	OH	OH
180	2991370900	130	21ST	ST	92014-2106	UG	UG
181	2991361700	131	21ST	ST	92014-2105	UG	OH
182	2991361800	141	21ST	ST	92014-2105	OH	OH
183	2991323200	208	21ST	ST	92014-2107	UG	UG
184	2991321700	216	21ST	ST	92014-2107	UG	UG
185	2991321000	228	21ST	ST	92014-2107	UG	UG
186	2991322200	232	21ST	ST	92014-2107	UG	UG
187	2991322100	236	21ST	ST	92014-2107	UG	UG
188	2990970900	136	22ND	ST	92014-2109	UG	UG
189	2991370400	141	22ND	ST	92014-2108	UG	UG
190	2991370500	143	22ND	ST	92014-2108	UG	UG
191	2990970800	144	22ND	ST	92014-2109	UG	UG
192	2990931900	212	22ND	ST	92014-2110	UG	UG
193	2990970300	125	23RD	ST	92014-2111	OH	OH
194	2990970400	133	23RD	ST	92014-2111	UG	UG
195	2990960900	136	23RD	ST	92014-2112	UG	UG
196	2990960800	142	23RD	ST	92014-2112	UG	OH
197	2990970500	143	23RD	ST	92014-2111	UG	UG
198	2990970600	151	23RD	ST	92014-2100	UG	OH
199	2990930100	203	23RD	ST	92014-2113	UG	UG
200	2990921600	210	23RD	ST	92014-2113	OH	OH
201	2990930600	211	23RD	ST	92014-2113	OH	OH
202	2990921500	220	23RD	ST	92014-2113	OH	OH
203	2990931600	223	23RD	ST	92014-2113	OH	OH
204	2990921400	226	23RD	ST	92014-2113	OH	OH
205	2990931700	227	23RD	ST	92014-2113	OH	OH
206	2990930400	229	23RD	ST	92014-2113	OH	OH
207	2990921300	238	23RD	ST	92014-2113	OH	OH
208	2990921200	240	23RD	ST	92014-2113	OH	OH
209	2990921100	246	23RD	ST	92014-2113	OH	OH
210	2990930700	247	23RD	ST	92014-2113	OH	OH
211	2990931300	251	23RD	ST	92014-2113	OH	OH
212	2990930900	255	23RD	ST	92014-2113	UG	UG
213	2990921000	260	23RD	ST	92014-2113	OH	OH
214	2990950500	122	24TH	ST	92014-2009	UG	UG
215	2990950600	130	24TH	ST	92014-2009	UG	UG
216	2990960400	133	24TH	ST	92014-2008	UG	UG
217	2990960500	145	24TH	ST	92014-2008	UG	UG
218	2990950700	146	24TH	ST	92014-2009	UG	OH
219	2990920100	205	24TH	ST	92014-2010	UG	OH
220	2990920300	217	24TH	ST	92014-2010	OH	OH
221	2990911400	224	24TH	ST	92014-2010	OH	OH
222	2990912000	226	24TH	ST	92014-2010	OH	OH
223	2990920400	227	24TH	ST	92014-2010	OH	OH
224	2990920500	235	24TH	ST	92014-2010	OH	OH
225	2990911200	236	24TH	ST	92014-2010	UG	UG
226	2990920600	239	24TH	ST	92014-2010	OH	OH
227	2990911100	244	24TH	ST	92014-2010	UG	UG
228	2990920700	251	24TH	ST	92014-2010	OH	OH
229	2990911000	252	24TH	ST	92014-2010	OH	OH
230	2990920800	259	24TH	ST	92014-2010	OH	OH
231	2990910900	264	24TH	ST	92014-2010	OH	OH
232	2990920900	267	24TH	ST	92014-2010	UG	UG
233	2990951100	131	25TH	ST	92014-2011	UG	UG
234	2990660900	140	25TH	ST	92014-2012	UG	UG

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
235	2990951000	145	25TH	ST	92014-2011	UG	UG
236	2990661000	150	25TH	ST	92014-2012	UG	OH
237	2990950900	153	25TH	ST	92014-2011	UG	UG
238	2990661100	162	25TH	ST	92014-2012	UG	OH
239	2990910300	219	25TH	ST	92014-2013	OH	OH
240	2990631400	220	25TH	ST	92014-2013	UG	UG
241	2990911900	225	25TH	ST	92014-2013	OH	OH
242	2990631300	226	25TH	ST	92014-2013	OH	OH
243	2990910500	233	25TH	ST	92014-2013	UG	UG
244	2990631200	234	25TH	ST	92014-2013	OH	OH
245	2990910600	239	25TH	ST	92014-2013	OH	OH
246	2990631100	240	25TH	ST	92014-2013	OH	OH
247	2990910700	247	25TH	ST	92014-2013	OH	OH
248	2990631000	248	25TH	ST	92014-2013	OH	OH
249	2990911800	255	25TH	ST	92014-2013	OH	OH
250	2990630902	256	25TH	ST	92014-2013	UG	UG
251	2990630901	258	25TH	ST	92014-2013	UG	UG
252	2990661400	137	26TH	ST	92014-2014	UG	UG
253	2990651200	146	26TH	ST	92014-2015	UG	UG
254	2990651300	154	26TH	ST	92014-2015	UG	UG
255	2990661300	157	26TH	ST	92014-2014	UG	UG
256	2990621400	220	26TH	ST	92014-2016	OH	OH
257	2990630300	221	26TH	ST	92014-2016	OH	OH
258	2990630400	227	26TH	ST	92014-2016	OH	OH
259	2990621300	228	26TH	ST	92014-2016	OH	OH
260	2990630500	237	26TH	ST	92014-2016	UG	OH
261	2990630600	241	26TH	ST	92014-2016	OH	OH
262	2990621200	244	26TH	ST	92014-2016	UG	UG
263	2990621700	248	26TH	ST	92014-2016	OH	OH
264	2990630700	251	26TH	ST	92014-2016	OH	OH
265	2990621000	252	26TH	ST	92014-2016	OH	OH
266	2990630800	257	26TH	ST	92014-2016	OH	OH
267	2990620900	264	26TH	ST	92014-2016	UG	UG
268	2990650200	121	27TH	ST	92014-2017	UG	UG
269	2990651900	131	27TH	ST	92014-2043	UG	UG
270	2990620100	211	27TH	ST	92014-2026	UG	UG
271	2990620300	219	27TH	ST	92014-2026	UG	UG
272	2990611400	220	27TH	ST	92014-2026	UG	UG
273	2990611300	224	27TH	ST	92014-2026	UG	UG
274	2990620400	227	27TH	ST	92014-2026	OH	OH
275	2990611200	234	27TH	ST	92014-2026	UG	UG
276	2990620500	235	27TH	ST	92014-2026	UG	OH
277	2990620602	243	27TH	ST	92014-2026	UG	UG
278	2990620601	245	27TH	ST	92014-2026	UG	UG
279	2990611100	246	27TH	ST	92014-2026	UG	OH
280	2990620700	251	27TH	ST	92014-2026	UG	UG
281	2990611000	252	27TH	ST	92014-2026	OH	OH
282	2990610900	260	27TH	ST	92014-2026	OH	OH
283	2990620800	261	27TH	ST	92014-2026	UG	UG
284	2990610300	223	28TH	ST	92014-2019	OH	OH
285	2990610400	229	28TH	ST	92014-2019	OH	OH
286	2990610500	235	28TH	ST	92014-2019	OH	OH
287	2990610600	245	28TH	ST	92014-2019	UG	OH
288	2990610700	251	28TH	ST	92014-2019	OH	OH
289	2990610800	263	28TH	ST	92014-2019	OH	OH
290	3003213300	167	4TH	ST	92014-3210	UG	OH
291	3003211700	201	4TH	ST	92014-3206	UG	UG
292	3003215806	220	4TH	ST	92014-3254	UG	UG
293	3003215500	117	6TH	ST	92014-2708	UG	UG
294	3001821200	118	6TH	ST	92014-2709	OH	OH
295	3001821100	126	6TH	ST	92014-2709	UG	UG
296	3003215400	127	6TH	ST	92014-2708	OH	OH
297	3001821001	132	6TH	ST	92014-2709	UG	UG
298	3001821002	132	6TH	ST	92014-2709	UG	OH
299	3003215300	135	6TH	ST	92014-2708	OH	OH
300	3003215200	141	6TH	ST	92014-2708	OH	OH
301	3001820902	142	6TH	ST	92014-2709	UG	UG
302	3001820901	142	6TH	ST	92014-2709	UG	UG
303	3003215101	149	6TH	ST	92014-2708	UG	UG
304	3001820800	150	6TH	ST	92014-2709	OH	OH
305	3003215102	151	6TH	ST	92014-2708	UG	UG
306	3003215001	157	6TH	ST	92014-2708	UG	UG
307	3001820702	158	6TH	ST	92014-2709	UG	OH
308	3003215002	159	6TH	ST	92014-2708	UG	UG
309	3001812101	0	7TH	ST	92014	UG	UG
310	3001812001	110	7TH	ST	92014-2711	UG	UG
311	3001821300	117	7TH	ST	92014-2710	UG	OH
312	3001812102	118	7TH	ST	92014-2711	UG	UG

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313	3001811801	126	7TH	ST	92014-2711	UG	UG
314	3001821401	127	7TH	ST	92014-2710	UG	UG
315	3001811702	134	7TH	ST	92014-2711	UG	UG
316	3001821501	135	7TH	ST	92014-2710	UG	UG
317	3001811701	136	7TH	ST	92014-2711	UG	UG
318	3001811600	140	7TH	ST	92014-2711	UG	UG
319	3001821601	141	7TH	ST	92014-2710	UG	UG
320	3001821701	149	7TH	ST	92014-2710	UG	UG
321	3001811501	152	7TH	ST	92014-2711	UG	UG
322	3001821801	155	7TH	ST	92014-2710	OH	OH
323	3001811400	156	7TH	ST	92014-2711	OH	OH
324	3001741300	110	8TH	ST	92014-2713	OH	OH
325	3001810100	113	8TH	ST	92014-2712	OH	OH
326	3001810200	119	8TH	ST	92014-2712	UG	UG
327	3001741200	120	8TH	ST	92014-2713	UG	UG
328	3001810300	123	8TH	ST	92014-2712	UG	UG
329	3001810400	129	8TH	ST	92014-2712	OH	OH
330	3001810500	143	8TH	ST	92014-2712	UG	OH
331	3001810601	151	8TH	ST	92014-2712	UG	UG
332	3002223200	322	8TH	ST	92014-2807	UG	OH
333	3002222600	328	8TH	ST	92014-2815	OH	OH
334	3002222500	336	8TH	ST	92014-2815	OH	OH
335	3002222400	342	8TH	ST	92014-2815	UG	UG
336	3002222300	350	8TH	ST	92014-2815	UG	OH
337	3002222200	402	8TH	ST	92014-2817	UG	OH
338	3002222100	406	8TH	ST	92014-2817	OH	OH
339	3002222000	410	8TH	ST	92014-2817	OH	OH
340	3002221900	420	8TH	ST	92014-2817	OH	OH
341	3002221800	428	8TH	ST	92014-2817	OH	OH
342	3002221700	434	8TH	ST	92014-2817	OH	OH
343	3002221600	442	8TH	ST	92014-2817	UG	OH
344	3002520200	450	8TH	ST	92014-2817	OH	OH
345	3002520300	612	8TH	ST	92014-2820	UG	UG
346	3002521400	624	8TH	ST	92014-2820	OH	OH
347	3001711400	106	9TH	ST	92014-2715	UG	UG
348	3001740100	113	9TH	ST	92014-2714	OH	OH
349	3001711302	114	9TH	ST	92014-2715	UG	UG
350	3001711200	120	9TH	ST	92014-2715	OH	OH
351	3001711100	128	9TH	ST	92014-2715	UG	UG
352	3001711001	134	9TH	ST	92014-2715	UG	UG
353	3001711002	138	9TH	ST	92014-2715	UG	UG
354	3001710900	142	9TH	ST	92014-2715	UG	UG
355	3001711601	154	9TH	ST	92014-2715	UG	OH
356	3001741501	157	9TH	ST	92014-2714	UG	UG
357	3001721200	222	9TH	ST	92014-2717	UG	UG
358	3001721100	232	9TH	ST	92014-2717	OH	OH
359	3001721000	236	9TH	ST	92014-2717	OH	OH
360	3001720900	240	9TH	ST	92014-2717	UG	UG
361	3002213400	300	9TH	ST	92014-2821	UG	UG
362	3002212300	318	9TH	ST	92014-2805	OH	OH
363	3002220401	325	9TH	ST	92014-2809	UG	UG
364	3002220402	327	9TH	ST	92014-2809	UG	UG
365	3002212200	328	9TH	ST	92014-2821	OH	OH
366	3002220500	329	9TH	ST	92014 2809	OH	OH
367	3002220600	333	9TH	ST	92014-2809	OH	OH
368	3002212100	342	9TH	ST	92014-2821	OH	OH
369	3002220700	343	9TH	ST	92014-2809	OH	OH
370	3002212000	346	9TH	ST	92014-2821	OH	OH
371	3002220800	401	9TH	ST	92014-2822	OH	OH
372	3002212900	402	9TH	ST	92014-2823	OH	OH
373	3002220900	405	9TH	ST	92014-2822	OH	OH
374	3002212800	408	9TH	ST	92014-2823	OH	OH
375	3002211700	410	9TH	ST	92014-2823	UG	UG
376	3002221000	411	9TH	ST	92014-2822	OH	OH
377	3002211600	416	9TH	ST	92014-2823	OH	OH
378	3002211500	420	9TH	ST	92014-2823	OH	OH
379	3002221100	421	9TH	ST	92014-2822	OH	OH
380	3002211400	428	9TH	ST	92014-2823	OH	OH
381	3002221200	429	9TH	ST	92014-2822	OH	OH
382	3002211300	436	9TH	ST	92014-2823	OH	OH
383	3002221300	445	9TH	ST	92014-2822	UG	UG
384	3002221400	445	9TH	ST	92014-2822	UG	UG
385	3002410500	506	AMPHITHEATRE	DR	92014-2612	OH	OH
386	3004100500	509	AMPHITHEATRE	DR	92014-2611	OH	OH
387	3004100600	515	AMPHITHEATRE	DR	92014-2611	UG	UG
388	3004100800	521	AMPHITHEATRE	DR	92014-2611	OH	OH
389	3002410600	526	AMPHITHEATRE	DR	92014-2612	OH	OH
390	3002410700	538	AMPHITHEATRE	DR	92014-2612	UG	UG

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391	3004100900	545	AMPHITHEATRE	DR	92014-2611	UG	UG
392	3002410800	550	AMPHITHEATRE	DR	92014-2612	UG	UG
393	3004101000	555	AMPHITHEATRE	DR	92014-2611	UG	UG
394	3002410100	564	AMPHITHEATRE	DR	92014-2612	OH	OH
395	3002430100	573	AMPHITHEATRE	DR	92014-2611	OH	OH
396	3002410200	574	AMPHITHEATRE	DR	92014-2612	OH	OH
397	3002430200	579	AMPHITHEATRE	DR	92014-2611	UG	OH
398	3002430300	603	AMPHITHEATRE	DR	92014-2613	OH	OH
399	3002430400	609	AMPHITHEATRE	DR	92014-2613	UG	UG
400	3002421400	610	AMPHITHEATRE	DR	92014-2614	UG	UG
401	3002421300	620	AMPHITHEATRE	DR	92014-2614	OH	OH
402	3002430500	621	AMPHITHEATRE	DR	92014-2613	OH	OH
403	3002421200	630	AMPHITHEATRE	DR	92014-2614	OH	OH
404	3002430600	631	AMPHITHEATRE	DR	92014-2613	OH	OH
405	3002421100	640	AMPHITHEATRE	DR	92014-2614	OH	OH
406	3002430700	645	AMPHITHEATRE	DR	92014-2613	OH	OH
407	3002630100	705	AMPHITHEATRE	DR	92014-2615	OH	OH
408	3002630200	711	AMPHITHEATRE	DR	92014-2615	OH	OH
409	3002610600	722	AMPHITHEATRE	DR	92014-2616	OH	OH
410	3002630800	725	AMPHITHEATRE	DR	92014-2615	OH	OH
411	2992606300	420	AVENIDA PRIMAVERA		92014-2421	UG	UG
412	2992804000	435	AVENIDA PRIMAVERA		92014-2420	UG	UG
413	2992804100	437	AVENIDA PRIMAVERA		92014-2420	OH	OH
414	2992804200	445	AVENIDA PRIMAVERA		92014-2420	OH	OH
415	2992900100	453	AVENIDA PRIMAVERA		92014-2420	UG	UG
416	2992900200	457	AVENIDA PRIMAVERA		92014-2420	OH	OH
417	2992602000	466	AVENIDA PRIMAVERA		92014-2421	OH	OH
418	2992903000	467	AVENIDA PRIMAVERA		92014-2420	UG	UG
419	2992902900	471	AVENIDA PRIMAVERA		92014-2420	OH	OH
420	2992602100	472	AVENIDA PRIMAVERA		92014-2421	UG	UG
421	2992900400	483	AVENIDA PRIMAVERA		92014-2420	OH	OH
422	2992602200	484	AVENIDA PRIMAVERA		92014-2421	UG	UG
423	2992602300	494	AVENIDA PRIMAVERA		92014-2421	OH	OH
424	2992604800	505	AVENIDA PRIMAVERA		92014-2422	OH	OH
425	2992605500	521	AVENIDA PRIMAVERA		92014-2422	UG	UG
426	2992603100	526	AVENIDA PRIMAVERA		92014-2423	OH	OH
427	2992603700	544	AVENIDA PRIMAVERA		92014-2423	UG	UG
428	2992603900	545	AVENIDA PRIMAVERA		92014-2454	OH	OH
429	2992602800	550	AVENIDA PRIMAVERA		92014-2423	UG	OH
430	2992603800	616	AVENIDA PRIMAVERA		92014-2425	OH	OH
431	2992607800	625	AVENIDA PRIMAVERA		92014-2424	UG	UG
432	2992603800	652	AVENIDA PRIMAVERA		92014-2425	OH	OH
433	2992608500	655	AVENIDA PRIMAVERA		92014-2424	UG	UG
434	2991740400	1904	BALBOA	AVE	92014-2202	UG	UG
435	2991810900	1925	BALBOA	AVE	92014-2201	OH	OH
436	2991740300	1928	BALBOA	AVE	92014-2202	UG	UG
437	2991940400	1930	BALBOA	AVE	92014-2202	UG	UG
438	2991940500	1944	BALBOA	AVE	92014-2202	UG	UG
439	2991810200	1945	BALBOA	AVE	92014-2201	OH	OH
440	2991940600	2026	BALBOA	AVE	92014-2204	OH	OH
441	2991922500	2029	BALBOA	AVE	92014-2203	UG	OH
442	2991921600	2041	BALBOA	AVE	92014-2203	UG	UG
443	2991920500	2051	BALBOA	AVE	92014-2203	OH	OH
444	2991940100	2060	BALBOA	AVE	92014-2204	UG	OH
445	2991920600	2065	BALBOA	AVE	92014-2203	UG	UG
446	2991004400	2158	BALBOA	AVE	92014-2205	UG	UG
447	2991004600	2164	BALBOA	AVE	92014-2205	UG	UG
448	2991000700	2165	BALBOA	AVE	92014-2205	OH	OH
449	2991850100	307	BELLAIRE	ST	92014-2206	UG	UG
450	2991850200	319	BELLAIRE	ST	92014-2206	OH	OH
451	2991821100	320	BELLAIRE	ST	92014-2207	OH	OH
452	2991850400	325	BELLAIRE	ST	92014-2206	UG	UG
453	2991821000	328	BELLAIRE	ST	92014-2207	UG	UG
454	2991820800	340	BELLAIRE	ST	92014-2207	OH	OH
455	2991820900	354	BELLAIRE	ST	92014-2207	OH	OH
456	2991850500	355	BELLAIRE	ST	92014-2206	OH	OH
457	2991820500	364	BELLAIRE	ST	92014-2207	UG	UG
458	2991851200	375	BELLAIRE	ST	92014-2206	UG	UG
459	2991820600	376	BELLAIRE	ST	92014-2207	OH	OH
460	2991851500	377	BELLAIRE	ST	92014-2206	UG	UG
461	2991851600	385	BELLAIRE	ST	92014-2206	UG	UG
462	2991851000	393	BELLAIRE	ST	92014-2206	OH	OH
463	2991820700	394	BELLAIRE	ST	92014-2207	UG	OH
464	3000122100	0	CAMINO DEL MAR		92014	UG	UG
465	3000122300	0	CAMINO DEL MAR		92014	UG	UG
466	3000921500	0	CAMINO DEL MAR		92014	UG	UG
467	3000741000	0	CAMINO DEL MAR		92014	UG	UG
468	3000200500	0	CAMINO DEL MAR		92014	UG	UG

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469	3000122200	0	CAMINO DEL MAR		92014	UG	UG
470	3003311302	541	CAMINO DEL MAR		92014-3005	UG	UG
471	3003311301	543	CAMINO DEL MAR		92014-3005	UG	UG
472	3002223300	807	CAMINO DEL MAR		92014-2810	OH	OH
473	3002223100	853	CAMINO DEL MAR		92014-2804	UG	OH
474	3002213300	941	CAMINO DEL MAR		92014-2812	UG	UG
475	3001720400	944	CAMINO DEL MAR		92014-2813	UG	OH
476	3004102900	1011	CAMINO DEL MAR		92014-2640	UG	OH
477	3000921400	1104	CAMINO DEL MAR		92014-2656	UG	OH
478	3000921300	1110	CAMINO DEL MAR		92014-2659	UG	OH
479	3000920700	1130	CAMINO DEL MAR		92014-2639	UG	OH
480	3000920600	1140	CAMINO DEL MAR		92014-2606	UG	UG
481	3000750600	1201	CAMINO DEL MAR		92014-2569	UG	OH
482	3000740600	1202	CAMINO DEL MAR		92014-2506	OH	OH
483	3000740700	1212	CAMINO DEL MAR		92014-2506	OH	OH
484	3000750500	1219	CAMINO DEL MAR		92014-2505	UG	OH
485	3000740800	1226	CAMINO DEL MAR		92014-2506	UG	OH
486	3000750400	1229	CAMINO DEL MAR		92014-2505	UG	OH
487	3000740900	1234	CAMINO DEL MAR		92014-2506	OH	OH
488	3000750900	1237	CAMINO DEL MAR		92014-2570	UG	OH
489	3000121300	1302	CAMINO DEL MAR		92014-2508	OH	OH
490	3000121400	1310	CAMINO DEL MAR		92014-2501	UG	UG
491	3000123300	1312	CAMINO DEL MAR		92014-2503	UG	OH
492	3000200400	1327	CAMINO DEL MAR		92014-2507	UG	OH
493	3000121700	1328	CAMINO DEL MAR		92014-2508	OH	OH
494	3000121800	1330	CAMINO DEL MAR		92014-2508	OH	OH
495	3000200300	1335	CAMINO DEL MAR		92014-2507	UG	OH
496	3000121900	1340	CAMINO DEL MAR		92014	UG	UG
497	3000122000	1342	CAMINO DEL MAR		92014-2508	OH	OH
498	3000200100	1349	CAMINO DEL MAR		92014-2553	UG	OH
499	3000300400	1401	CAMINO DEL MAR		92014-2502	UG	OH
500	3000122400	1404	CAMINO DEL MAR		92014-2510	OH	OH
501	3000122500	1412	CAMINO DEL MAR		92014-2551	OH	OH
502	3000122600	1414	CAMINO DEL MAR		92014-2510	OH	OH
503	3000123100	1424	CAMINO DEL MAR		92014-2510	OH	OH
504	3000308300	1431	CAMINO DEL MAR		92014-2572	UG	OH
505	3000308200	1435	CAMINO DEL MAR		92014-2571	UG	OH
506	3000120400	1438	CAMINO DEL MAR		92014-2510	UG	OH
507	2993100900	1540	CAMINO DEL MAR		92014-2411	UG	UG
508	3000308600	1555	CAMINO DEL MAR		92014-2401	UG	UG
509	2992202600	1801	CAMINO DEL MAR		92014-2250	UG	UG
510	2990921900	2305	CAMINO DEL MAR		92014-2147	UG	UG
511	2990920200	2315	CAMINO DEL MAR		92014-2114	UG	UG
512	2990950800	2402	CAMINO DEL MAR		92014-2090	UG	UG
513	2990911600	2403	CAMINO DEL MAR		92014-2021	UG	UG
514	2990911500	2411	CAMINO DEL MAR		92014-2021	UG	OH
515	2990910200	2427	CAMINO DEL MAR		92014-2021	UG	OH
516	2990910100	2435	CAMINO DEL MAR		92014-2021	UG	OH
517	2990631700	2515	CAMINO DEL MAR		92014-2075	OH	OH
518	2990621600	2609	CAMINO DEL MAR		92014-2023	UG	OH
519	2990621500	2617	CAMINO DEL MAR		92014-2023	UG	OH
520	2990620200	2625	CAMINO DEL MAR		92014-2023	UG	UG
521	2990611701	2727	CAMINO DEL MAR		92014-2036	UG	OH
522	2990301100	2801	CAMINO DEL MAR		92014-2039	UG	UG
523	2990204600	2920	CAMINO DEL MAR		92014-2033	UG	UG
524	2990201400	2928	CAMINO DEL MAR		92014-2033	UG	UG
525	2990201300	2932	CAMINO DEL MAR		92014-2033	UG	UG
526	3010320500	0	CARMEL VALLEY	RD	92014	UG	UG
527	3010321100	155	CARMEL VALLEY	RD	92014-3601	UG	UG
528	3000304000	405	CAROLINA	RD	92014-2526	UG	UG
529	3000303800	415	CAROLINA	RD	92014-2526	OH	OH
530	3000306100	424	CAROLINA	RD	92014-2527	OH	OH
531	3000308000	429	CAROLINA	RD	92014-2526	OH	OH
532	3000306000	432	CAROLINA	RD	92014-2527	OH	OH
533	3000308400	439	CAROLINA	RD	92014-2526	UG	OH
534	3000308500	441	CAROLINA	RD	92014-2526	UG	UG
535	3000302200	444	CAROLINA	RD	92014-2527	OH	OH
536	3000306400	459	CAROLINA	RD	92014-2526	OH	OH
537	3000306500	471	CAROLINA	RD	92014-2526	UG	UG
538	3000307600	480	CAROLINA	RD	92014-2527	OH	OH
539	2991721200	1963	CHRISTY	LN	92014-2239	UG	UG
540	2991721300	1967	CHRISTY	LN	92014-2239	UG	UG
541	2990724400	2020	CHRISTY	LN	92014-2235	UG	UG
542	2990724500	2036	CHRISTY	LN	92014-2235	UG	UG
543	2990724600	2054	CHRISTY	LN	92014-2235	UG	UG
544	2992310709	1753	COAST	BLVD	92014-2158	UG	UG
545	2991441500	1801	COAST	BLVD	92014-2115	OH	OH
546	2991441400	1809	COAST	BLVD	92014-2115	OH	OH

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547	2991441300	1817	COAST	BLVD	92014-2115	OH	OH
548	2991441200	1823	COAST	BLVD	92014-2115	OH	OH
549	2991441000	1833	COAST	BLVD	92014-2115	UG	OH
550	2991441100	1841	COAST	BLVD	92014-2115	OH	OH
551	2991440900	1847	COAST	BLVD	92014-2115	UG	OH
552	2991440800	1853	COAST	BLVD	92014-2115	OH	OH
553	2991411400	1911	COAST	BLVD	92014-2117	UG	UG
554	2991411300	1919	COAST	BLVD	92014-2117	OH	OH
555	2991411200	1927	COAST	BLVD	92014-2117	OH	OH
556	2991411100	1935	COAST	BLVD	92014-2117	UG	OH
557	2991411000	1943	COAST	BLVD	92014-2117	OH	OH
558	2991462000	1950	COAST	BLVD	92014-2118	UG	UG
559	2991410900	1951	COAST	BLVD	92014-2117	OH	OH
560	2991310900	2003	COAST	BLVD	92014-2119	OH	OH
561	2991362400	2004	COAST	BLVD	92014-2120	UG	UG
562	2991310800	2011	COAST	BLVD	92014-2119	OH	OH
563	2991362300	2014	COAST	BLVD	92014-2120	UG	UG
564	2991362200	2018	COAST	BLVD	92014-2120	OH	OH
565	2991310700	2019	COAST	BLVD	92014-2119	OH	OH
566	2991310600	2027	COAST	BLVD	92014	OH	OH
567	2991362100	2030	COAST	BLVD	92014	OH	OH
568	2991362000	2036	COAST	BLVD	92014-2120	OH	OH
569	2991310500	2037	COAST	BLVD	92014-2119	UG	OH
570	2991310400	2041	COAST	BLVD	92014-2119	OH	OH
571	2991361900	2044	COAST	BLVD	92014-2120	UG	OH
572	2991310300	2049	COAST	BLVD	92014-2119	OH	OH
573	2991311902	2057	COAST	BLVD	92014-2119	UG	OH
574	2991311901	2059	COAST	BLVD	92014-2119	UG	OH
575	2991311500	2069	COAST	BLVD	92014-2119	UG	UG
576	2991311600	2071	COAST	BLVD	92014-2119	OH	OH
577	2991311700	2073	COAST	BLVD	92014-2119	OH	OH
578	2991370800	2102	COAST	BLVD	92014-2122	OH	OH
579	2991370700	2112	COAST	BLVD	92014-2122	OH	OH
580	2991370600	2120	COAST	BLVD	92014-2122	OH	OH
581	2991312100	2135	COAST	BLVD	92014-2121	OH	OH
582	2990970700	2212	COAST	BLVD	92014-2123	UG	UG
583	2990960700	2310	COAST	BLVD	92014-2124	OH	OH
584	2990960600	2320	COAST	BLVD	92014-2124	OH	OH
585	3002632600	0	CREST	RD	92014	UG	UG
586	3000602800	0	CREST	RD		UG	UG
587	3002720800	700	CREST	RD	92014-2832	UG	UG
588	3002730600	701	CREST	RD	92014-2831	OH	OH
589	3002730500	715	CREST	RD	92014-2831	OH	OH
590	3002730400	725	CREST	RD	92014-2831	OH	OH
591	3002721700	728	CREST	RD	92014-2832	UG	UG
592	3002730300	733	CREST	RD	92014-2831	OH	OH
593	3002721100	740	CREST	RD	92014-2832	OH	OH
594	3002730200	743	CREST	RD	92014-2831	OH	OH
595	3002731000	801	CREST	RD	92014-2833	UG	UG
596	3002722200	810	CREST	RD	92014-2834	OH	OH
597	3002721400	834	CREST	RD	92014-2834	UG	UG
598	3002721500	860	CREST	RD	92014-2834	UG	UG
599	3002620600	905	CREST	RD	92014-2617	OH	OH
600	3002632500	964	CREST	RD	92014-2618	UG	UG
601	3002630900	980	CREST	RD	92014-2618	UG	UG
602	3002620500	999	CREST	RD	92014-2617	UG	UG
603	3002610500	1010	CREST	RD	92014-2602	OH	OH
604	3002610400	1016	CREST	RD	92014-2602	OH	OH
605	3002610300	1022	CREST	RD	92014-2602	OH	OH
606	3001440300	1036	CREST	RD	92014-2602	UG	UG
607	3001440200	1042	CREST	RD	92014-2602	OH	OH
608	3001440500	1110	CREST	RD	92014-2620	UG	UG
609	3001450400	1130	CREST	RD	92014-2650	OH	OH
610	3001531500	1135	CREST	RD	92014-2619	UG	UG
611	3001531600	1145	CREST	RD	92014-2619	UG	UG
612	3001531700	1203	CREST	RD	92014-2621	UG	UG
613	3001531800	1209	CREST	RD	92014-2621	UG	UG
614	3001430500	1210	CREST	RD	92014-2622	UG	OH
615	3001531900	1223	CREST	RD	92014-2621	OH	OH
616	3001431500	1230	CREST	RD	92014-2622	UG	UG
617	3000602700	1233	CREST	RD		OH	OH
618	3001433500	1250	CREST	RD	92014-2622	OH	OH
619	3000602600	1305	CREST	RD		UG	UG
620	3000401800	1316	CREST	RD	92014-2529	OH	OH
621	3000401700	1330	CREST	RD	92014-2529	OH	OH
622	3000602000	1335	CREST	RD	92014-2528	UG	UG
623	3000601900	1345	CREST	RD	92014-2528	UG	UG
624	3000401600	1346	CREST	RD	92014-2529	UG	UG

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625	3000601800	1361	CREST	RD	92014-2528	UG	UG
626	3000401500	1364	CREST	RD	92014-2529	UG	UG
627	3000404000	1366	CREST	RD	92014-2529	OH	OH
628	3000402900	1368	CREST	RD	92014-2529	OH	OH
629	3000403100	1370	CREST	RD	92014-2529	OH	OH
630	3000410400	1373	CREST	RD	92014-2528	OH	OH
631	3000403200	1406	CREST	RD	92014-2531	UG	UG
632	3000403600	1420	CREST	RD	92014-2531	UG	OH
633	3000403900	1422	CREST	RD	92014-2531	OH	OH
634	3000410300	1429	CREST	RD	92014-2530	UG	UG
635	3000405300	1440	CREST	RD	92014-2531	UG	UG
636	3000410200	1449	CREST	RD	92014-2530	OH	OH
637	3000410100	1465	CREST	RD	92014-2530	UG	OH
638	3000405500	1492	CREST	RD	92014-2531	UG	UG
639	2992608300	1507	CREST	RD	92014-2426	OH	OH
640	3004100400	1105	CUCHARA	DR	92014-2623	OH	OH
641	3004100300	1127	CUCHARA	DR	92014-2623	UG	UG
642	3004002100	1128	CUCHARA	DR	92014-2624	OH	OH
643	3004001600	1130	CUCHARA	DR	92014-2624	OH	OH
644	3004001500	1136	CUCHARA	DR	92014-2624	OH	OH
645	3004001400	1140	CUCHARA	DR	92014-2624	OH	OH
646	3004003300	1150	CUCHARA	DR	92014-2624	UG	UG
647	3004103300	1155	CUCHARA	DR	92014-2623	UG	UG
648	3004001100	1158	CUCHARA	DR	92014-2624	UG	OH
649	3004020200	1172	CUCHARA	DR	92014-2624	UG	OH
650	3001434800	1201	CUCHARA	DR	92014-2625	UG	UG
651	3001434600	1205	CUCHARA	DR	92014-2625	UG	UG
652	3004020300	1210	CUCHARA	DR	92014-2626	OH	OH
653	3003901100	1215	CUCHARA	DR	92014-2646	OH	OH
654	3003901300	1227	CUCHARA	DR	92014-2646	UG	UG
655	3003901400	1237	CUCHARA	DR	92014-2646	OH	OH
656	3004020100	1238	CUCHARA	DR	92014-2626	UG	UG
657	3003901500	1245	CUCHARA	DR	92014-2646	OH	OH
658	3003901600	1253	CUCHARA	DR	92014-2646	OH	OH
659	3003901700	1265	CUCHARA	DR	92014-2646	UG	UG
660	3004001000	1266	CUCHARA	DR	92014-2626	OH	OH
661	2991811000	422	CULEBRA	ST	92014-2212	OH	OH
662	2991820400	457	CULEBRA	ST	92014-2211	OH	OH
663	2991830100	459	CULEBRA	ST	92014-2211	OH	OH
664	2991810600	460	CULEBRA	ST	92014-2212	OH	OH
665	2991830200	465	CULEBRA	ST	92014-2211	OH	OH
666	2991830700	475	CULEBRA	ST	92014-2211	UG	UG
667	2992900700	1500	FOREST	WAY	92014-2429	OH	OH
668	2992902700	1511	FOREST	WAY	92014-2428	UG	UG
669	2992900600	1528	FOREST	WAY	92014-2429	UG	UG
670	2992604900	1535	FOREST	WAY	92014-2428	OH	OH
671	2992900500	1540	FOREST	WAY	92014-2429	OH	OH
672	2992603000	1605	FOREST	WAY	92014-2430	OH	OH
673	2992602900	1619	FOREST	WAY	92014-2430	UG	UG
674	2992602400	1622	FOREST	WAY	92014-2431	UG	UG
675	2992602700	1633	FOREST	WAY	92014-2430	UG	UG
676	2992605800	1634	FOREST	WAY	92014-2431	UG	UG
677	2991922400	0	GATUN	ST	92014	UG	UG
678	2991922100	2061	GATUN	ST	92014-2261	UG	UG
679	2991921500	2074	GATUN	ST	92014-2213	OH	OH
680	2991920700	2076	GATUN	ST	92014-2213	OH	OH
681	2991910600	2080	GATUN	ST	92014-2213	OH	OH
682	2991922200	2081	GATUN	ST	92014-2261	UG	UG
683	2992006400	2100	GATUN	ST	92014-2263	UG	UG
684	2990724300	2112	HEATHER	LN	92014-2244	UG	UG
685	2990724200	2124	HEATHER	LN	92014-2244	UG	UG
686	2990724100	2136	HEATHER	LN	92014-2244	UG	UG
687	2990724000	2148	HEATHER	LN	92014-2244	UG	UG
688	2991000600	2188	HEATHER	LN	92014-2244	UG	UG
689	3002512700	901	HIGHLAND	AVE	92014-2835	UG	OH
690	3002211200	914	HIGHLAND	AVE	92014-2836	OH	OH
691	3002510200	915	HIGHLAND	AVE	92014-2852	OH	OH
692	3002211100	940	HIGHLAND	AVE	92014-2836	OH	OH
693	3002431300	1001	HIGHLAND	AVE	92014-2837	UG	UG
694	3002221500	601	HOSKA	DR	92014-2838	OH	OH
695	3002520100	605	HOSKA	DR	92014-2838	OH	OH
696	3002520400	611	HOSKA	DR	92014-2838	OH	OH
697	3002521300	623	HOSKA	DR	92014-2838	OH	OH
698	3002512400	624	HOSKA	DR	92014-2839	OH	OH
699	3002521600	635	HOSKA	DR	92014-2838	UG	UG
700	3002513900	636	HOSKA	DR	92014-2839	UG	OH
701	3002520700	641	HOSKA	DR	92014-2838	UG	UG
702	3002512800	642	HOSKA	DR	92014-2839	OH	OH

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
703	3002511900	660	HOSKA	DR	92014-2839	OH	OH
704	3002521000	667	HOSKA	DR	92014-2853	OH	OH
705	3002511800	668	HOSKA	DR	92014-2839	OH	OH
706	3002513500	682	HOSKA	DR	92014-2839	OH	OH
707	3002521700	701	HOSKA	DR	92014-2840	UG	UG
708	3002720100	709	HOSKA	DR	92014-2840	UG	UG
709	3002722000	711	HOSKA	DR	92014-2840	UG	UG
710	3002710100	718	HOSKA	DR	92014-2841	OH	OH
711	3002722300	727	HOSKA	DR	92014-2840	UG	UG
712	3002710200	730	HOSKA	DR	92014-2841	OH	OH
713	3002720500	735	HOSKA	DR	92014-2840	OH	OH
714	3002720600	745	HOSKA	DR	92014-2840	UG	UG
715	3002721800	749	HOSKA	DR	92014-2840	OH	OH
716	3002710900	750	HOSKA	DR	92014-2841	UG	UG
717	3002720300	751	HOSKA	LN	92014-2840	UG	UG
718	3002710800	754	HOSKA	DR	92014-2841	OH	OH
719	3002722100	755	HOSKA	DR	92014-2840	UG	OH
720	3002710600	766	HOSKA	DR	92014-2841	OH	OH
721	3002721300	767	HOSKA	DR	92014-2840	OH	OH
722	3002710700	786	HOSKA	DR	92014-2841	OH	OH
723	3002721600	787	HOSKA	DR	92014-2840	OH	OH
724	2991004800	0	JIMMY DURANTE	BLVD	92014	UG	UG
725	2991004700	0	JIMMY DURANTE	BLVD	92014	UG	UG
726	2991720300	1955	JIMMY DURANTE	BLVD	92014-2245	UG	UG
727	2990710700	2002	JIMMY DURANTE	BLVD	92014-2258	UG	UG
728	2990710600	2010	JIMMY DURANTE	BLVD	92014-2237	UG	UG
729	2991002700	2120	JIMMY DURANTE	BLVD	92014-2273	OH	OH
730	2991002800	2126	JIMMY DURANTE	BLVD	92014-2215	OH	OH
731	2991002900	2132	JIMMY DURANTE	BLVD	92014-2215	OH	OH
732	2991003000	2148	JIMMY DURANTE	BLVD	92014-2215	OH	OH
733	2991004900	2236	JIMMY DURANTE	BLVD		UG	UG
734	7601450700	2240	JIMMY DURANTE	BLVD	92014-2216	OH	OH
735	7601452941	2260	JIMMY DURANTE	BLVD	92014-2216	OH	OH
736	3002410400	610	KALAMATH	DR	92014-2628	UG	UG
737	3001432100	730	KALAMATH	DR	92014-2630	UG	UG
738	3001432900	750	KALAMATH	DR	92014-2630	OH	OH
739	3001450100	755	KALAMATH	DR	92014-2629	OH	OH
740	3001450200	777	KALAMATH	DR	92014-2629	OH	OH
741	3001434100	780	KALAMATH	DR	92014-2630	OH	OH
742	3001450300	785	KALAMATH	DR	92014-2629	OH	OH
743	3002511500	810	KLISH	WAY	92014-2843	UG	UG
744	3002511400	820	KLISH	WAY	92014-2843	UG	OH
745	3002710300	825	KLISH	WAY	92014-2842	OH	OH
746	3002710400	837	KLISH	WAY	92014-2842	OH	OH
747	3002632100	915	KLISH	WAY	92014-2844	OH	OH
748	3002632000	919	KLISH	WAY	92014-2844	UG	OH
749	3002630500	963	KLISH	WAY	92014-2844	UG	UG
750	3002514200	966	KLISH	WAY	92014-2845	UG	UG
751	3002630700	969	KLISH	WAY	92014-2844	UG	UG
752	3002431400	1010	KLISH	WAY	92014-2632	UG	UG
753	3002630600	1019	KLISH	WAY	92014-2631	UG	OH
754	3002630400	1035	KLISH	WAY	92014-2631	UG	UG
755	3002632400	1041	KLISH	WAY	92014-2631	OH	OH
756	3002421000	1070	KLISH	WAY	92014-2648	OH	OH
757	3002610700	1075	KLISH	WAY	92014-2647	OH	OH
758	3002610200	1087	KLISH	WAY	92014-2647	OH	OH
759	3002420900	1090	KLISH	WAY	92014-2648	OH	OH
760	3002420600	1094	KLISH	WAY	92014-2648	OH	OH
761	3002610100	1095	KLISH	WAY	92014-2647	OH	OH
762	3002420500	1101	KLISH	WAY	92014-2633	UG	OH
763	3001440100	1102	KLISH	WAY	92014-2634	UG	UG
764	3002421700	1111	KLISH	WAY	92014-2633	UG	UG
765	3001450600	1115	KLISH	WAY	92014-2633	OH	OH
766	3001450500	1119	KLISH	WAY	92014-2633	OH	OH
767	3001440400	1122	KLISH	WAY	92014-2634	OH	OH
768	3002341300	306	LA AMATISTA	RD	92014-3030	UG	UG
769	3002341200	310	LA AMATISTA	RD	92014-3030	UG	UG
770	3002341000	318	LA AMATISTA	RD	92014-3030	UG	UG
771	3003310300	319	LA AMATISTA	RD	92014-3029	OH	OH
772	3001812002	111	LITTLE ORPHAN ALLEY		92014-2750	UG	UG
773	3001811802	128	LITTLE ORPHAN ALLEY		92014-2750	UG	UG
774	3001810602	152	LITTLE ORPHAN ALLEY		92014-2750	UG	UG
775	3001811502	154	LITTLE ORPHAN ALLEY		92014-2711	UG	UG
776	3004002000	1103	LUNETA	DR	92014-2635	UG	UG
777	3004001800	1107	LUNETA	DR	92014-2635	OH	OH
778	3004001900	1109	LUNETA	DR	92014-2635	UG	UG
779	3004011400	1110	LUNETA	DR	92014-2636	UG	UG
780	3004001700	1123	LUNETA	DR	92014-2635	UG	UG

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781	3004011700	1136	LUNETA	DR	92014-2636	UG	OH
782	3004011600	1140	LUNETA	DR	92014-2636	UG	UG
783	3004000500	1141	LUNETA	DR	92014-2635	UG	OH
784	3004002800	1149	LUNETA	DR	92014	UG	UG
785	3004003100	1209	LUNETA	DR	92014-2532	UG	UG
786	3003911000	1216	LUNETA	DR	92014-2533	UG	UG
787	3004003200	1225	LUNETA	DR	92014-2532	UG	UG
788	3003910800	1230	LUNETA	DR	92014-2533	OH	OH
789	3003911300	1234	LUNETA	DR	92014-2533	OH	OH
790	3004002300	1239	LUNETA	DR	92014-2532	UG	UG
791	3003911400	1252	LUNETA	DR	92014-2533	UG	OH
792	3003901800	1253	LUNETA	DR	92014-2532	OH	OH
793	3004000900	1255	LUNETA	DR	92014-2561	UG	UG
794	3003910400	1260	LUNETA	DR	92014-2533	OH	OH
795	3003910300	1280	LUNETA	DR	92014-2533	UG	UG
796	3000304300	1305	LUNETA	DR	92014-2534	OH	OH
797	3000304200	1309	LUNETA	DR	92014-2534	OH	OH
798	3000304100	1313	LUNETA	DR	92014-2534	OH	OH
799	3000303900	1333	LUNETA	DR	92014-2534	OH	OH
800	3000307200	1407	LUNETA	DR	92014-2535	OH	OH
801	3000301100	1410	LUNETA	DR	92014-2536	OH	OH
802	3000307300	1425	LUNETA	DR	92014-2535	UG	UG
803	3000307900	1437	LUNETA	DR	92014-2535	OH	OH
804	3000301200	1455	LUNETA	DR	92014-2535	UG	UG
805	2992801100	1555	LUNETA	DR	92014-2455	OH	OH
806	2991860500	309	LUZON	AVE	92014-2217	UG	UG
807	2991861800	313	LUZON	AVE	92014-2217	OH	OH
808	2991861700	317	LUZON	AVE	92014-2217	OH	OH
809	2991860300	329	LUZON	AVE	92014-2217	UG	UG
810	2991940200	429	LUZON	AVE	92014-2219	OH	OH
811	2991910300	450	LUZON	AVE	92014-2220	OH	OH
812	3001711301	116	MELANIE	WAY	92014-2768	UG	UG
813	3001711602	156	MELANIE	WAY	92014-2768	UG	OH
814	3010220200	133	NOB	AVE	92014-3316	OH	OH
815	3001710100	931	OCEAN	AVE	92014-2718	UG	UG
816	3000710700	1310	OCEAN	AVE	92014-2335	OH	OH
817	3000110900	1315	OCEAN	AVE	92014-2334	OH	OH
818	3000710400	1320	OCEAN	AVE	92014-2357	OH	OH
819	3000112101	1333	OCEAN	AVE	92014-2334	UG	OH
820	3000710800	1334	OCEAN	AVE	92014-2335	OH	OH
821	3000112102	1335	OCEAN	AVE	92014-2334	UG	OH
822	3000110700	1339	OCEAN	AVE	92014-2334	UG	UG
823	3000710300	1344	OCEAN	AVE	92014-2335	UG	UG
824	3000110600	1345	OCEAN	AVE	92014-2334	UG	UG
825	3000110501	1405	OCEAN	AVE	92014-2336	UG	UG
826	3000110502	1407	OCEAN	AVE	92014-2336	UG	UG
827	3000110400	1425	OCEAN	AVE	92014-2341	OH	OH
828	2990660600	0	OCEAN FRONT		92014	UG	UG
829	2990651100	0	OCEAN FRONT		92014	UG	UG
830	2991361500	0	OCEAN FRONT		92014	UG	UG
831	2991460100	1948	OCEAN FRONT		92014-2129	UG	UG
832	2991361200	2001	OCEAN FRONT		92014-2157	UG	UG
833	2991361100	2004	OCEAN FRONT		92014-2130	UG	UG
834	2991361000	2008	OCEAN FRONT		92014-2130	UG	UG
835	2991360900	2016	OCEAN FRONT		92014-2130	UG	UG
836	2991360800	2020	OCEAN FRONT		92014-2130	UG	UG
837	2991361300	2021	OCEAN FRONT		92014-2157	UG	UG
838	2991360700	2024	OCEAN FRONT		92014-2130	UG	UG
839	2991360600	2028	OCEAN FRONT		92014-2130	UG	UG
840	2991360500	2034	OCEAN FRONT		92014-2130	UG	UG
841	2991360400	2040	OCEAN FRONT		92014-2130	UG	UG
842	2991360300	2048	OCEAN FRONT		92014-2130	UG	UG
843	2991360200	2050	OCEAN FRONT		92014-2130	UG	UG
844	2991371200	2102	OCEAN FRONT		92014-2132	OH	OH
845	2991371000	2111	OCEAN FRONT		92014-2131	UG	UG
846	2991371100	2112	OCEAN FRONT		92014-2132	UG	UG
847	2991370200	2118	OCEAN FRONT		92014-2132	OH	OH
848	2991370100	2124	OCEAN FRONT		92014-2132	UG	UG
849	2991370300	2125	OCEAN FRONT		92014-2131	OH	OH
850	2990971200	2204	OCEAN FRONT		92014-2134	UG	OH
851	2990971000	2211	OCEAN FRONT		92014-2133	UG	UG
852	2990971100	2212	OCEAN FRONT		92014-2134	OH	OH
853	2990970200	2220	OCEAN FRONT		92014-2134	UG	UG
854	2990970100	2222	OCEAN FRONT		92014-2134	UG	UG
855	2990961300	2306	OCEAN FRONT		92014-2135	OH	OH
856	2990961100	2307	OCEAN FRONT		92014-2153	UG	UG
857	2990961200	2312	OCEAN FRONT		92014-2135	OH	OH
858	2990960200	2318	OCEAN FRONT		92014-2135	UG	UG

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
859	2990960300	2323	OCEAN FRONT		92014-2153	UG	UG
860	2990950400	2402	OCEAN FRONT		92014-2027	UG	UG
861	2990950300	2410	OCEAN FRONT		92014-2027	UG	UG
862	2990950200	2418	OCEAN FRONT		92014-2027	UG	UG
863	2990951200	2425	OCEAN FRONT		92014-2011	UG	UG
864	2990950100	2430	OCEAN FRONT		92014-2027	UG	UG
865	2990660500	2502	OCEAN FRONT		92014-2028	UG	UG
866	2990660400	2508	OCEAN FRONT		92014-2028	UG	OH
867	2990660300	2514	OCEAN FRONT		92014-2028	UG	OH
868	2990660200	2522	OCEAN FRONT		92014-2028	OH	OH
869	2990661500	2525	OCEAN FRONT		92014-2065	UG	UG
870	2990660100	2528	OCEAN FRONT		92014-2028	UG	OH
871	2990650900	2600	OCEAN FRONT		92014-2030	UG	UG
872	2990651000	2601	OCEAN FRONT		92014-2029	UG	UG
873	2990650800	2606	OCEAN FRONT		92014-2030	UG	UG
874	2990650700	2610	OCEAN FRONT		92014-2030	UG	UG
875	2990650600	2614	OCEAN FRONT		92014-2030	OH	OH
876	2990650500	2618	OCEAN FRONT		92014-2030	OH	OH
877	2990650400	2622	OCEAN FRONT		92014-2030	UG	UG
878	2990201200	2936	OCEAN FRONT		92014-2032	UG	UG
879	3010220600	132	OCEAN VIEW	AVE	92014-3320	OH	OH
880	3010220500	144	OCEAN VIEW	AVE	92014-3320	OH	OH
881	3010220400	156	OCEAN VIEW	AVE	92014-3320	UG	UG
882	3010230800	157	OCEAN VIEW	AVE	92014-3319	OH	OH
883	3010220300	166	OCEAN VIEW	AVE	92014-3320	OH	OH
884	3010230700	173	OCEAN VIEW	AVE	92014-3319	OH	OH
885	3010230600	185	OCEAN VIEW	AVE	92014-3319	OH	OH
886	3002510300	523	ORCHID	LN	92014-2846	OH	OH
887	3002512600	527	ORCHID	LN	92014-2846	OH	OH
888	3002510600	530	ORCHID	LN	92014-2847	OH	OH
889	3002512300	537	ORCHID	LN	92014-2846	OH	OH
890	3002510700	544	ORCHID	LN	92014-2847	UG	OH
891	3002513800	551	ORCHID	LN	92014-2846	OH	OH
892	3002511000	560	ORCHID	LN	92014-2847	UG	UG
893	3002512900	563	ORCHID	LN	92014-2846	OH	OH
894	3002512000	567	ORCHID	LN	92014-2846	OH	OH
895	3002511300	597	ORCHID	LN	92014-2846	OH	OH
896	3002511700	667	ORCHID	LN	92014-2848	OH	OH
897	3002514300	678	ORCHID	LN	92014-2849	UG	UG
898	3002513600	692	ORCHID	LN	92014-2849	OH	OH
899	3002513400	693	ORCHID	LN	92014-2848	OH	OH
900	3002513700	698	ORCHID	LN	92014-2849	UG	UG
901	2992004600	0	ORIBIA	RD	92014	UG	UG
902	3000600900	1174	ORIBIA	RD	92014-2513	OH	OH
903	3000600700	1180	ORIBIA	RD	92014-2513	OH	OH
904	3000601000	1200	ORIBIA	RD	92014-2514	OH	OH
905	3001530300	1230	ORIBIA	RD	92014-2514	OH	OH
906	3001530900	1234	ORIBIA	RD	92014-2514	OH	OH
907	3001532400	1236	ORIBIA	RD	92014-2514	OH	OH
908	3001532500	1238	ORIBIA	RD	92014-2514	OH	OH
909	3000600600	1260	ORIBIA	RD	92014-2514	OH	OH
910	3000601500	1340	ORIBIA	RD	92014-2515	OH	OH
911	3000601300	1346	ORIBIA	RD	92014-2515	OH	OH
912	3000600800	1352	ORIBIA	RD	92014-2515	OH	OH
913	3000601100	1402	ORIBIA	RD	92014-2412	UG	UG
914	3000601600	1420	ORIBIA	RD	92014-2412	UG	UG
915	3000601700	1426	ORIBIA	RD	92014-2412	OH	OH
916	2992004000	1435	ORIBIA	RD	92014-2417	OH	OH
917	2992007300	1439	ORIBIA	RD	92014-2417	OH	OH
918	3000602400	1440	ORIBIA	RD	92014-2412	OH	OH
919	2992002400	1445	ORIBIA	RD	92014-2417	OH	OH
920	2992006600	1450	ORIBIA	RD	92014-2412	OH	OH
921	2992003700	1490	ORIBIA	RD	92014-2412	OH	OH
922	2992002900	1522	ORIBIA	RD	92014-2452	OH	OH
923	3000721502	1220	PACIFIC	LN	92014-2362	UG	UG
924	3000721501	1224	PACIFIC	LN	92014-2362	UG	UG
925	3000301000	357	PARISH	LN	92014-2537	OH	OH
926	3010230900	490	PINE NEEDLES	DR	92014-3332	UG	UG
927	2992901100	1530	PRIMAVERA	LN	92014-2410	UG	UG
928	3003903000	501	RIMINI	RD	92014-2538	UG	UG
929	3003900600	515	RIMINI	RD	92014-2538	OH	OH
930	3000305400	524	RIMINI	RD	92014-2539	OH	OH
931	3000305600	528	RIMINI	RD	92014-2539	OH	OH
932	3003903100	531	RIMINI	RD	92014-2538	UG	UG
933	3000305500	538	RIMINI	RD	92014-2539	UG	UG
934	3003900900	545	RIMINI	RD	92014-2538	UG	UG
935	3001420800	549	RIMINI	RD	92014-2538	OH	OH
936	3001420600	553	RIMINI	RD	92014-2538	OH	OH

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
937	3001410800	560	RIMINI	RD	92014-2539	UG	UG
938	3001410900	562	RIMINI	RD	92014-2539	UG	OH
939	3001420400	615	RIMINI	RD	92014-2637	UG	UG
940	3001433800	650	RIMINI	RD	92014-2638	UG	UG
941	3001430800	664	RIMINI	RD	92014-2638	OH	OH
942	3001420700	675	RIMINI	RD	92014-2637	UG	OH
943	3001421000	685	RIMINI	RD	92014-2637	OH	OH
944	3001432000	690	RIMINI	RD	92014-2638	OH	OH
945	3001432200	692	RIMINI	RD	92014-2638	OH	OH
946	3003902600	693	RIMINI	RD	92014-2637	OH	OH
947	3001434700	694	RIMINI	RD	92014-2638	UG	UG
948	2991003800	0	SAN DIEGUITO	RD	92014	UG	UG
949	2992000900	0	SAN DIEGUITO	DR	92014	UG	UG
950	2991002400	0	SAN DIEGUITO	DR	92014	UG	UG
951	2992006800	0	SAN DIEGUITO	DR	92014	UG	UG
952	2991003900	0	SAN DIEGUITO	DR	92014	UG	UG
953	2992007000	0	SAN DIEGUITO	DR	92014	UG	UG
954	2990725300	0	SAN DIEGUITO	DR	92014	UG	UG
955	2990722100	0	SAN DIEGUITO	DR	92014	UG	UG
956	2992006900	0	SAN DIEGUITO	DR	92014	UG	UG
957	2990722200	0	SAN DIEGUITO	DR	92014	UG	UG
958	2991002600	0	SAN DIEGUITO	DR	92014	UG	UG
959	2990722500	0	SAN DIEGUITO	DR	92014	UG	UG
960	2992001000	0	SAN DIEGUITO	DR	92014	UG	UG
961	2990725400	0	SAN DIEGUITO	DR	92014	UG	UG
962	2992002300	1441	SAN DIEGUITO	DR		OH	OH
963	2992003400	1505	SAN DIEGUITO	DR	92014-2414	OH	OH
964	2992003300	1515	SAN DIEGUITO	DR		OH	OH
965	2992002100	1525	SAN DIEGUITO	DR	92014-2414	UG	OH
966	2992003500	1535	SAN DIEGUITO	DR		OH	OH
967	2992002000	1555	SAN DIEGUITO	DR	92014-2414	UG	UG
968	2992005000	1557	SAN DIEGUITO	DR		OH	OH
969	2992001900	1561	SAN DIEGUITO	DR	92014-2414	OH	OH
970	2992001800	1567	SAN DIEGUITO	DR	92014-2414	OH	OH
971	2992006000	1569	SAN DIEGUITO	DR	92014-2414	OH	OH
972	2992005800	1601	SAN DIEGUITO	DR	92014-2415	OH	OH
973	2992005600	1604	SAN DIEGUITO	DR	92014-2416	OH	OH
974	2992007100	1810	SAN DIEGUITO	DR	92014-2458	OH	OH
975	2990721500	2136	SAN DIEGUITO	DR	92014-2223	UG	UG
976	2991003700	2179	SAN DIEGUITO	DR	92014-2222	UG	UG
977	2990721400	2186	SAN DIEGUITO	DR	92014-2223	UG	UG
978	2991001600	2194	SAN DIEGUITO	DR	92014-2223	OH	OH
979	2991003500	2195	SAN DIEGUITO	DR	92014-2259	UG	UG
980	2991003400	2201	SAN DIEGUITO	DR	92014-2256	OH	OH
981	2991410400	1939	SAND BARR	LN	92014-2148	OH	OH
982	2990201100	2938	SANDY	LN	92014-2041	UG	UG
983	2990201000	2940	SANDY	LN	92014-2041	UG	UG
984	2990200900	2984	SANDY	LN	92014-2041	UG	UG
985	2990204500	2986	SANDY	LN	92014-2041	OH	OH
986	2990200700	2996	SANDY	LN	92014-2041	UG	UG
987	2990204400	2998	SANDY	LN	92014-2041	UG	UG
988	2991440600	1812	SANTA FE	AVE	92014-2142	UG	UG
989	2991440500	1822	SANTA FE	AVE	92014-2142	OH	OH
990	2991440400	1830	SANTA FE	AVE	92014-2142	OH	OH
991	2991430300	1835	SANTA FE	AVE	92014	OH	OH
992	2991440300	1836	SANTA FE	AVE	92014-2142	OH	OH
993	2991440200	1844	SANTA FE	AVE	92014-2142	OH	OH
994	2991430200	1847	SANTA FE	AVE	92014-2141	OH	OH
995	2991430100	1855	SANTA FE	AVE	92014-2141	UG	UG
996	2991420900	1905	SANTA FE	AVE	92014-2143	UG	UG
997	2991410600	1920	SANTA FE	AVE	92014-2144	OH	OH
998	2991420800	1921	SANTA FE	AVE	92014-2143	UG	UG
999	2991421300	1923	SANTA FE	AVE	92014-2143	UG	UG
1000	2991410500	1928	SANTA FE	AVE	92014-2144	UG	UG
1001	2991421100	1935	SANTA FE	AVE	92014-2143	UG	UG
1002	2991410300	1942	SANTA FE	AVE	92014-2144	UG	UG
1003	2991420200	1945	SANTA FE	AVE	92014-2143	OH	OH
1004	2991420100	1953	SANTA FE	AVE	92014-2143	OH	OH
1005	2991340300	2007	SANTA FE	AVE	92014-2145	OH	OH
1006	2991340400	2011	SANTA FE	AVE	92014-2145	UG	UG
1007	2991311100	2012	SANTA FE	AVE	92014-2146	OH	OH
1008	2991311200	2020	SANTA FE	AVE	92014-2146	UG	UG
1009	2991311300	2028	SANTA FE	AVE	92014-2146	OH	OH
1010	2991312201	2034	SANTA FE	AVE	92014-2146	UG	UG
1011	2991312202	2036	SANTA FE	AVE	92014-2146	UG	UG
1012	3000911100	123	SEA ORBIT	LN	92014-2320	UG	UG
1013	3000910500	135	SEA ORBIT	LN	92014-2314	OH	OH
1014	3000911002	136	SEA ORBIT	LN	92014-2320	OH	OH

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1015	2992203900	0	SEAVIEW	AVE	92014	UG	UG
1016	2992205100	1722	SEAVIEW	AVE	92014-2226	UG	UG
1017	2992202100	1731	SEAVIEW	AVE	92014-2225	UG	UG
1018	2992204100	1735	SEAVIEW	AVE	92014-2225	UG	UG
1019	2992204000	1743	SEAVIEW	AVE	92014-2225	UG	UG
1020	2992202500	1760	SEAVIEW	AVE	92014-2226	UG	UG
1021	2992203000	1768	SEAVIEW	AVE	92014-2226	OH	OH
1022	2992206900	1779	SEAVIEW	AVE	92014-2225	UG	UG
1023	2992203100	1782	SEAVIEW	AVE	92014-2226	OH	OH
1024	2991850600	1801	SEAVIEW	AVE	92014-2266	OH	OH
1025	2991850300	1807	SEAVIEW	AVE	92014-2266	UG	UG
1026	2991861200	1832	SEAVIEW	AVE	92014-2265	OH	OH
1027	2991861900	1854	SEAVIEW	AVE	92014-2265	OH	OH
1028	2991860800	1862	SEAVIEW	AVE	92014-2265	OH	OH
1029	2991860700	1870	SEAVIEW	AVE	92014-2265	OH	OH
1030	2991860900	1878	SEAVIEW	AVE	92014-2265	UG	UG
1031	2991860600	1888	SEAVIEW	AVE	92014-2265	OH	OH
1032	2991860200	1896	SEAVIEW	AVE	92014-2265	OH	OH
1033	2991860100	1912	SEAVIEW	AVE	92014-2228	OH	OH
1034	2991860400	1930	SEAVIEW	AVE	92014-2228	UG	UG
1035	2991721000	1940	SEAVIEW	AVE	92014-2228	UG	UG
1036	2991720900	1956	SEAVIEW	AVE	92014-2228	UG	UG
1037	2991721500	1970	SEAVIEW	AVE	92014-2228	UG	UG
1038	2991722200	1974	SEAVIEW	AVE	92014-2228	UG	UG
1039	2992614200	0	SERPENTINE	DR	92014	UG	UG
1040	2992204200	340	SERPENTINE	DR	92014-2437	UG	UG
1041	2992606700	343	SERPENTINE	DR	92014-2436	UG	UG
1042	2992601700	347	SERPENTINE	DR	92014-2436	UG	UG
1043	2992601600	351	SERPENTINE	DR	92014-2436	UG	OH
1044	2992607400	355	SERPENTINE	DR	92014-2436	OH	OH
1045	2992203700	360	SERPENTINE	DR	92014-2437	OH	OH
1046	2992203800	368	SERPENTINE	DR	92014-2437	OH	OH
1047	2992207100	376	SERPENTINE	DR	92014-2437	OH	OH
1048	2992203400	386	SERPENTINE	DR	92014-2437	UG	UG
1049	2992203600	402	SERPENTINE	DR	92014-2439	UG	UG
1050	2992601800	417	SERPENTINE	DR	92014-2438	UG	UG
1051	2992610100	420	SERPENTINE	DR	92014-2439	UG	UG
1052	2992610500	450	SERPENTINE	DR	92014-2439	UG	UG
1053	2992602600	455	SERPENTINE	DR	92014-2438	UG	UG
1054	2992610600	532	SERPENTINE	DR	92014-2441	OH	OH
1055	2992603300	535	SERPENTINE	DR	92014-2440	OH	OH
1056	2992610700	540	SERPENTINE	DR	92014-2441	UG	OH
1057	2992610800	548	SERPENTINE	DR	92014-2441	UG	UG
1058	2992603200	567	SERPENTINE	DR	92014-2440	OH	OH
1059	2992610900	608	SERPENTINE	DR	92014-2442	UG	UG
1060	2992611700	617	SERPENTINE	DR	92014-2442	UG	UG
1061	2992611000	624	SERPENTINE	DR	92014-2442	OH	OH
1062	2992611600	625	SERPENTINE	DR	92014-2442	OH	OH
1063	2992614500	641	SERPENTINE	DR	92014-2442	UG	UG
1064	2992006500	690	SERPENTINE	DR	92014-2442	UG	UG
1065	2992611100	0	SERPERTINE	DR	92014	UG	UG
1066	3001821402	125	SHERRIE	LN	92014-2719	OH	OH
1067	3001821502	137	SHERRIE	LN	92014-2719	UG	UG
1068	3001821602	143	SHERRIE	LN	92014-2719	UG	UG
1069	3001821702	151	SHERRIE	LN	92014-2719	UG	UG
1070	3001820701	155	SHERRIE	LN	92014-2719	UG	UG
1071	3001821802	157	SHERRIE	LN	92014-2719	UG	OH
1072	3002003100	0	STRATFORD	CT	92014	UG	UG
1073	3003213401	402	STRATFORD	CT	92014-2721	UG	UG
1074	3003213402	404	STRATFORD	CT	92014-2721	UG	UG
1075	3003210901	410	STRATFORD	CT	92014-2721	UG	UG
1076	3003210902	412	STRATFORD	CT	92014-2721	UG	OH
1077	3003214023	424	STRATFORD	CT	92014-2733	UG	UG
1078	3003215700	425	STRATFORD	CT	92014-2759	OH	OH
1079	3003210300	510	STRATFORD	CT	92014-2732	UG	OH
1080	3003214101	511	STRATFORD	CT	92014-2722	UG	UG
1081	3003210100	516	STRATFORD	CT	92014-2770	OH	OH
1082	3002002013	519	STRATFORD	CT	92014-2742	OH	OH
1083	3003215901	526	STRATFORD	CT	92014-2767	UG	OH
1084	3005000501	531	STRATFORD	CT	92014-2722	UG	UG
1085	3005000502	533	STRATFORD	CT	92014-2722	UG	UG
1086	3005000401	541	STRATFORD	CT	92014-2722	UG	UG
1087	3005000402	543	STRATFORD	CT	92014-2722	UG	UG
1088	3005000302	551	STRATFORD	CT	92014-2722	UG	UG
1089	3005000301	553	STRATFORD	CT	92014-2722	UG	UG
1090	3005000202	601	STRATFORD	CT	92014-2724	UG	UG
1091	3005000201	603	STRATFORD	CT	92014-2724	UG	UG
1092	3005000102	611	STRATFORD	CT	92014-2724	UG	UG

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1093	3005000101	613	STRATFORD	CT	92014-2724	UG	UG
1094	3002001200	615	STRATFORD	CT	92014-2707	OH	OH
1095	3002001100	639	STRATFORD	CT	92014-2706	OH	OH
1096	3002001900	703	STRATFORD	CT	92014-2700	OH	OH
1097	3002002600	709	STRATFORD	CT	92014-2725	UG	UG
1098	3002003000	717	STRATFORD	CT	92014-2725	UG	UG
1099	3001810700	730	STRATFORD	CT	92014-2726	UG	UG
1100	3001740700	818	STRATFORD	CT	92014-2727	UG	UG
1101	3001741502	828	STRATFORD	CT	92014-2727	UG	UG
1102	3001722100	903	STRATFORD	CT	92014-2728	OH	OH
1103	3001722100	905	STRATFORD	CT	92014-2728	OH	OH
1104	3001712000	910	STRATFORD	CT	92014-2729	UG	UG
1105	3001722000	919	STRATFORD	CT	92014-2728	OH	OH
1106	3001711900	920	STRATFORD	CT	92014	UG	UG
1107	3001721900	931	STRATFORD	CT	92014-2728	OH	OH
1108	3001711700	950	STRATFORD	CT	92014-2729	OH	OH
1109	3000930900	1005	STRATFORD	CT	92014-2321	UG	UG
1110	3000941800	1010	STRATFORD	CT	92014-2322	OH	OH
1111	3000941800	1012	STRATFORD	CT	92014-2322	OH	OH
1112	3000930800	1023	STRATFORD	CT	92014-2321	OH	OH
1113	3000941700	1030	STRATFORD	CT	92014-2322	OH	OH
1114	3000930700	1035	STRATFORD	CT	92014-2321	UG	UG
1115	3000931000	1047	STRATFORD	CT	92014-2321	UG	UG
1116	3000911600	1104	STRATFORD	CT	92014-2324	UG	UG
1117	3000922000	1105	STRATFORD	CT	92014-2323	UG	UG
1118	3000921800	1135	STRATFORD	CT	92014-2351	OH	OH
1119	3000921700	1145	STRATFORD	CT	92014	OH	OH
1120	3000740500	1205	STRATFORD	CT	92014-2325	OH	OH
1121	3000721600	1206	STRATFORD	CT	92014-2326	OH	OH
1122	3000721700	1216	STRATFORD	CT	92014-2326	UG	UG
1123	3000740400	1219	STRATFORD	CT	92014-2325	OH	OH
1124	3000740300	1227	STRATFORD	CT	92014-2325	OH	OH
1125	3000721900	1236	STRATFORD	CT	92014-2326	UG	UG
1126	3000741200	1241	STRATFORD	CT	92014-2325	UG	UG
1127	3000722000	1246	STRATFORD	CT	92014-2326	UG	UG
1128	3000121200	1307	STRATFORD	CT	92014-2327	OH	OH
1129	3000111100	1310	STRATFORD	CT	92014-2328	UG	UG
1130	3000121100	1319	STRATFORD	CT	92014-2327	OH	OH
1131	3000121000	1329	STRATFORD	CT	92014-2327	OH	OH
1132	3000111200	1332	STRATFORD	CT	92014-2328	OH	OH
1133	3000120900	1343	STRATFORD	CT	92014-2327	UG	UG
1134	3000111300	1344	STRATFORD	CT	92014-2328	OH	OH
1135	3000111400	1350	STRATFORD	CT	92014-2328	OH	OH
1136	3000120801	1353	STRATFORD	CT	92014-2327	UG	UG
1137	3000120802	1355	STRATFORD	CT	92014-2327	UG	UG
1138	3000120701	1407	STRATFORD	CT	92014-2329	UG	UG
1139	3000111500	1408	STRATFORD	CT	92014-2330	OH	OH
1140	3000120702	1409	STRATFORD	CT	92014-2329	UG	UG
1141	3000120600	1415	STRATFORD	CT	92014-2329	UG	UG
1142	3000111600	1420	STRATFORD	CT	92014-2330	UG	UG
1143	3000111702	1426	STRATFORD	CT	92014-2330	UG	UG
1144	3000111701	1428	STRATFORD	CT	92014-2330	UG	UG
1145	3000120500	1431	STRATFORD	CT	92014-2329	OH	OH
1146	3002510100	505	TEWA	CT	92014-2850	UG	UG
1147	3002510400	519	TEWA	ST	92014-2850	UG	UG
1148	3002431200	528	TEWA	CT	92014-2851	OH	OH
1149	3002510500	529	TEWA	ST	92014-2850	UG	UG
1150	3002431100	540	TEWA	CT	92014-2851	OH	OH
1151	3002510800	543	TEWA	ST	92014-2850	UG	UG
1152	3002513300	551	TEWA	CT	92014-2850	OH	OH
1153	3002431500	562	TEWA	ST	92014-2851	UG	OH
1154	3002513200	565	TEWA	CT	92014-2850	UG	OH
1155	3001430100	1221	UMATILLA	ST	92014-2540	UG	UG
1156	3001430200	1227	UMATILLA	ST	92014-2540	UG	UG
1157	3001411000	1230	UMATILLA	ST	92014-2541	UG	UG
1158	3001435000	1241	UMATILLA	ST	92014-2540	UG	UG
1159	3001411100	1244	UMATILLA	ST	92014-2541	UG	UG
1160	3003900100	405	VAN DYKE	AVE	92014-2542	OH	OH
1161	3003900200	415	VAN DYKE	AVE	92014-2542	OH	OH
1162	3000304400	418	VAN DYKE	AVE	92014	OH	OH
1163	3000304500	428	VAN DYKE	AVE	92014-2543	UG	UG
1164	3003900300	431	VAN DYKE	AVE	92014-2542	UG	UG
1165	3000304600	436	VAN DYKE	AVE	92014-2543	OH	OH
1166	3000304700	444	VAN DYKE	AVE	92014-2543	OH	OH
1167	3003900400	445	VAN DYKE	AVE	92014-2542	UG	UG
1168	3000304800	452	VAN DYKE	AVE	92014-2543	OH	OH
1169	3000305700	507	VAN DYKE	AVE	92014-2544	OH	OH
1170	3000304900	508	VAN DYKE	AVE	92014-2545	UG	UG

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
1171	3000303400	530	VAN DYKE	AVE	92014-2545	UG	UG
1172	3000305100	531	VAN DYKE	AVE	92014-2544	OH	OH
1173	3000303300	542	VAN DYKE	AVE	92014-2545	UG	UG
1174	3000306200	550	VAN DYKE	AVE	92014-2545	OH	OH
1175	3000305800	560	VAN DYKE	AVE	92014-2545	OH	OH
1176	3000305000	561	VAN DYKE	AVE	92014-2544	OH	OH
1177	3000305200	565	VAN DYKE	AVE	92014-2544	UG	UG
1178	3000305900	578	VAN DYKE	AVE	92014-2545	OH	OH
1179	3000305300	585	VAN DYKE	AVE	92014-2544	UG	UG
1180	3000405200	0	VIA ALTA		92014	UG	UG
1181	3000401900	1305	VIA ALTA		92014-2546	UG	UG
1182	3000402000	1329	VIA ALTA		92014-2546	UG	UG
1183	3001434900	1330	VIA ALTA		92014-2547	UG	UG
1184	3000402100	1345	VIA ALTA		92014-2546	OH	OH
1185	3001410600	1352	VIA ALTA		92014-2560	OH	OH
1186	3001410500	1358	VIA ALTA		92014-2560	OH	OH
1187	3000405000	1359	VIA ALTA		92014-2546	UG	UG
1188	3001410400	1366	VIA ALTA		92014-2560	UG	UG
1189	3000404900	1367	VIA ALTA		92014-2546	UG	UG
1190	3000404300	1375	VIA ALTA		92014-2546	UG	OH
1191	3001410300	1378	VIA ALTA		92014-2560	UG	UG
1192	3001410200	1382	VIA ALTA		92014-2560	UG	UG
1193	3000403500	1383	VIA ALTA		92014-2546	UG	UG
1194	3001410100	1388	VIA ALTA		92014-2560	OH	OH
1195	3000302800	1408	VIA ALTA		92014-2549	UG	OH
1196	3000405100	1411	VIA ALTA		92014-2548	OH	OH
1197	3000403400	1415	VIA ALTA		92014-2548	OH	OH
1198	3000302700	1430	VIA ALTA		92014-2549	OH	OH
1199	2984211200	107	VIA DE LA VALLE		92014-2047	UG	UG
1200	2984210100	111	VIA DE LA VALLE		92014-2047	UG	UG
1201	2984210200	113	VIA DE LA VALLE		92014-2047	UG	UG
1202	2984210300	115	VIA DE LA VALLE		92014-2047	UG	UG
1203	2984210400	117	VIA DE LA VALLE		92014-2047	UG	UG
1204	2984210500	119	VIA DE LA VALLE		92014-2047	UG	UG
1205	2984210600	121	VIA DE LA VALLE		92014-2047	UG	UG
1206	2984210700	123	VIA DE LA VALLE		92014-2047	UG	UG
1207	2992614300	0	ZAPO	ST	92014	UG	UG
1208	2992203500	1720	ZAPO	ST	92014-2230	UG	UG
1209	2992610200	1825	ZAPO	ST	92014-2231	UG	UG
1210	2991830600	1830	ZAPO	ST	92014-2232	OH	OH
1211	2992610300	1839	ZAPO	ST	92014-2231	UG	UG
1212	2991830500	1848	ZAPO	ST	92014-2232	UG	OH
1213	2992610400	1859	ZAPO	ST	92014-2231	UG	UG
1214	2992613500	1905	ZAPO	ST	92014-2233	UG	UG
1215	2992612300	1919	ZAPO	ST	92014-2233	UG	UG
1216	2991810500	1934	ZAPO	ST	92014-2234	UG	UG
1217	2992613400	1945	ZAPO	ST	92014-2233	UG	UG
1218	2991810800	1946	ZAPO	ST	92014-2234	OH	OH
1219	2991810700	1952	ZAPO	ST	92014-2234	OH	OH
1220	2991930100	1958	ZAPO	ST	92014-2234	OH	OH
1221	2991930200	1962	ZAPO	ST	92014-2234	OH	OH
1222	2992612200	1969	ZAPO	ST	92014-2233	UG	UG
1223	2991930300	1970	ZAPO	ST	92014-2234	UG	UG
1224	2991930400	1986	ZAPO	ST	92014-2234	OH	OH
1225	2991921900	1993	ZAPO	ST	92014-2233	UG	OH
1226	2991921800	1997	ZAPO	ST	92014-2233	OH	OH
1227	2991920300	2015	ZAPO	ST	92014-2268	UG	UG
1228	2992801300	0	ZUNI	DR	92014	UG	UG
1229	2992902500	0	ZUNI	DR	92014	OH	OH
1230	2992803600	415	ZUNI	DR	92014-2445	OH	OH
1231	2992803100	427	ZUNI	DR	92014-2445	OH	OH
1232	2992801200	430	ZUNI	DR	92014-2446	OH	OH
1233	2992803000	435	ZUNI	DR	92014-2445	OH	OH
1234	2992804600	442	ZUNI	DR	92014-2446	UG	OH
1235	2992802700	443	ZUNI	DR	92014-2445	UG	UG
1236	2992802600	451	ZUNI	DR	92014-2445	UG	UG
1237	2992804500	454	ZUNI	DR	92014-2446	OH	OH
1238	2992802300	461	ZUNI	DR	92014-2445	OH	OH
1239	2992804400	466	ZUNI	DR	92014-2446	OH	OH
1240	2992802200	469	ZUNI	DR	92014-2445	OH	OH
1241	2992802100	477	ZUNI	DR	92014-2445	UG	UG
1242	2992804300	478	ZUNI	DR	92014-2446	UG	UG
1243	2992802000	485	ZUNI	DR	92014-2445	UG	UG
1244	2992902400	524	ZUNI	DR	92014-2448	UG	UG
1245	2992901000	530	ZUNI	DR	92014-2448	OH	OH
1246	2992901900	555	ZUNI	DR	92014-2447	UG	UG
1247	2992605000	606	ZUNI	DR	92014-2449	OH	OH
1248	2992605100	626	ZUNI	DR	92014-2449	OH	OH

	APN	Address Number	Street Name	Street Suffix	Zipcode	SDGE Status	Telecom Status
1249	2992608000	655	ZUNI	DR	92014-2453	UG	UG
1250	2992607600	660	ZUNI	DR	92014-2449	UG	UG

APPENDIX C

Program Cost Estimator

GIS Planning Block Cost Estimator

DRAFT

City of Del Mar

P_Length = Existing OH Poleline Length (ft):	77,135	XFMR_COUNT = No. of OH Transformers	184
OH_ServiceDrop (Houses or meters)	542	CustCount = No. of Customers, (via xfmr data, includes apt.)	2254
UG_ServiceDrop (Houses or meters)	747		

TOTAL Overhead Poles	612
Alley Power Poles	57
Backlot Power Poles:	103
Street Power Poles	452

	ITEM	DESCRIPTION	ARCGIS FIELD	DESCRIPTION OF ARCGIS FIELD	QUANTITY FROM ARCGIS	UNIT	UNIT COST (W/O O&P)	COST FORMULA	COST	WORK TYPE
11	Public Notifications	Cost is a function of number of services customers. Includes door hangers and public meetings.	CustCount	CustCount is the total number of customers being serviced by the transformers located within each block. The information was obtained from the "CustCount" column in the SDG&E Transformer layer.	2,254	-	$ 125	(CustCount x UnitCost) + 2,500	$ 284,250	Right-Of-Way Construction
12	Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 11,000	1.15 x P_Length x UnitCost / 100	$ 9,757,578	
13	Non-Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume telecommunications utilities will require their own trenching along street right-of-way.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information assumes half the length of the overall joint trenching will be used as trenching solely by other utilities.	77,135	CLF	$ 9,000	0.5 x P_Length x UnitCost / 100	$ 3,471,075	
14	Road Resurfacing	Assumes 3ft wide resurfacing patch and slurry sealing the width of the whole road. Assume new UG joint trench length is [1+(0.15+0.5)] times greater than P_Length.	P_ Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 2,500	1.65 x P_ Length x Unit Cost / 100	$ 3,181,819	
15	SWPPP	Cost for SWPPP along new UG joint trench. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 325	1.15 x P_ Length x Unit Cost / 100	$ 288,292	
16	Traffic Control	Traffic controls plans and traffic control implementation during construction.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 200	P_ Length x Unit Cost / 100	$ 154,270	
17	Intercepts	Cost to locate, dig, place handhole or splice conduit, and restore. Assume only 50% of UG homes will require an intercept.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	747	EA	$ 1,500	0.5 x UG_ServiceDrop x UnitCost	$ 560,250	
18							25%	**Contractor's Overhead & Profit**	$ 4,424,383	
19								**Right-Of-Way Construction**	**$ 22,121,917**	
20	Pad Mounted Transformers	Typical single phase pad mounted transformer used in residential conversions; includes transformer labor and materials for installation.	XFMR_COUNT	The Transformer count is the number of transformers found within each block. The information can be found in the SDG&E Transformer layer.	184	EA	$ 17,500	XFMR_COUNT x UnitCost	$ 3,220,000	SDG&E Electrical Construction
21	Backbone Cabling (Primary)	Primary distribution cabling feeding the transformers. Assumes average Citywide: qty (3) #2 conductors per length of trenching. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 350	3 x 1.15x P_Length x UnitCost / 100	$ 931,405	
22	Backbone Cabling (Secondary)	Secondary distribution cabling from the transformers to common pull box. Assumes average Citywide: qty (3) #250 conductors per length of trenching x 0.8. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 800	0.8 x 3 x 1.15 x P_Length x UnitCost / 100	$ 1,703,141	
23	Customer Service Cabling	Cost for the conductors and labor to pull the conductors from the common pull box to the customer meter. Assumes average Citywide: qty (4) #2 conductors per length of trenching x 1.5 plus an additional 75 of laterals on homeowners property (includes height of buildings for loop and bond). Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 340	(1.5 x 4 x 1.15 x P_Length + 75 x OH_ServiceDrop) x UnitCost / 100	$ 1,947,797	
24			OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	542					
25	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	542	EA	$ 500	OH_ServiceDrop x UnitCost	$ 271,000	
26	Boundary Circuit Feeders	Assume each block has on average 3 unique circuit feeders (cable poles). Cost includes converting the boundary poles from OH to underground. Assumes $15,000 for each cable pole.	N/A	Engineer needs to adjust quantity manually.	18	EA	$ 15,000	Quantity x UnitCost	$ 270,000	
27	Intercepts	Cost to inspect and or pull new cable.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	747	EA	$ 750	0.5 x UG_ServiceDrop x UnitCost	$ 280,125	
28	OH Customer Cable Removal	Removal of customer OH power lines. Assume 75' of OH per ServiceDrop.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	542	EA	$ 250	OH_ServiceDrop x UnitCost	$ 135,500	
29	OH Cable Removal	Removal of OH power lines, does not include customer service drop OH line removal.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	77,135	CLF	$ 500	P_Length x UnitCost / 100	$ 385,675	
30	Frontage Street Power Pole Removal	Cost includes demolition and labor of street power poles, associated OH transformers, and restoration.	OH_Poles	OH_Poles is the number of distribution and stub poles found in each block that may require removal to complete the undergrounding process. This information was obtained from selecting only the respective overhead structure subtypes found in the SDG&E OverheadStructure Layer.	452	EA	$ 2,000	(OH_Poles - Alley_Poles - Backlot_Poles) x UnitCost	$ 904,000	
31	Alley Pole Removal	Cost includes demolition and labor of alley power poles, associated OH transformers, and restoration.	Alley_Poles	The Alley Pole count was obtained from the OverheadStructure layer by selecting those poles that resided along alleyways which were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	57	EA	$ 2,000	Alley_Poles x UnitCost	$ 114,000	
32	Backlot Pole Removal	Cost includes demolition and labor of power poles residing in customer backlots, associated OH transformers, and restoration.	Backlot_Poles	The Backlot Pole count was obtained from the OverheadStructure layer by selecting those poles which were 30 feet or farther from street center lines. The 30 foot distance was assumed as sufficient distance for the location of standard home backyards. The distances were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	103	EA	$ 4,000	Backlot_Poles x UnitCost	$ 412,000	
33							25%	**Contractor's Overhead & Profit**	$ 2,643,661	
34							12%	**SDG&E Estimated Credit**	$ (1,903,436)	
35								**SDG&E Electrical Construction**	**$ 11,314,868**	
37							15%	Construction Change Order (Budgetary Contingency)	$ 5,692,340	TOTAL COST
38							8%	PMO, Program Management & Overhead (City, Consultants, Attorneys)	$ 3,491,302	
39							12%	Engineering (Consultants, Applicant Designers)	$ 5,236,953	

SUMMARY OF COSTS

41	Avg Program Cost per all effected OH & UG_ServiceDrop	$ 40,652				SUMMARY OF COSTS
42	Avg Program Block Cost Per foot of Existing OH Lines	$ 680	Inflation	City ROW + SDG&E Construction Budget	$ 38,452,302	
43	Average Private Property Cost (w/ Contingency)	$ 9,575	3%			
44				PMO + Engineering + City ROW + SDG&E Construction Budget	$ 47,180,557	
45				Inflation and Start of Construction Adjusted	$ 4,419,443	
				(Inflation Adjusted) PMO + Engineering + City ROW + SDG&E Construction Budget	**$ 51,600,000**	

Adjustments *(Not Applied to Tables)*

Rule 20A Funds Available (Assume 5 yr Loan)	
$ (338,956)	Adjustment (2019-2023)
$ (342,050)	Adjustment (2024-2028)
Del Mar Race Track (Private Work)	
$ (1,000,000)	Adjustment

GIS Planning Block Cost Estimator

DRAFT

City of Del Mar

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OH_ServiceDrop (Houses or meters)	542	CustCount = No. of Customers, (via xfmr data, includes apt.)	2254
UG_ServiceDrop (Houses or meters)	747		

TOTAL Overhead Poles	612
Alley Power Poles	57
Backlot Power Poles:	103
Street Power Poles	452

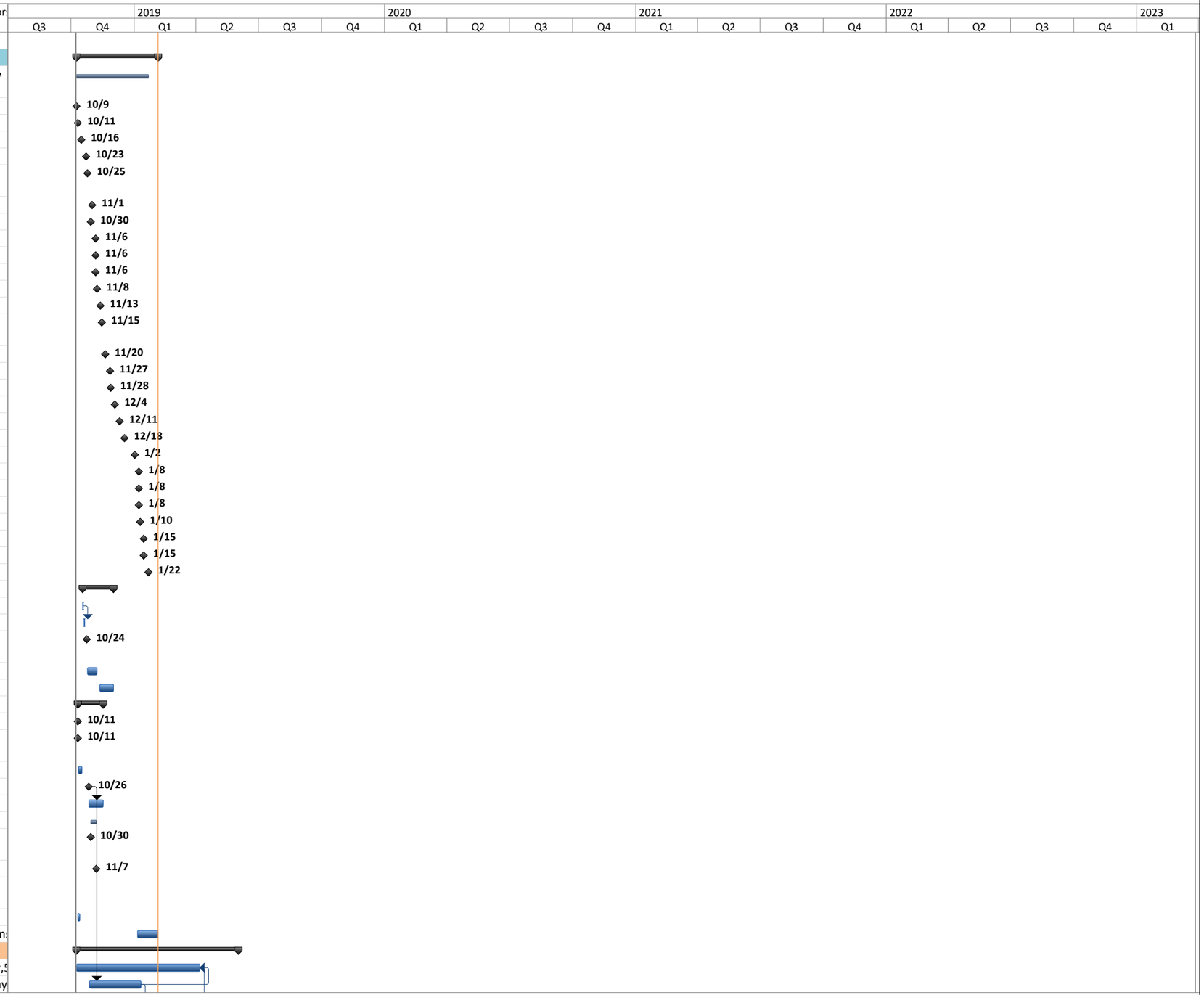
ITEM	DESCRIPTION	ARCGIS FIELD	DESCRIPTION OF ARCGIS FIELD	QUANTITY FROM ARCGIS	UNIT	UNIT COST (W/O O&P)	COST FORMULA	COST	WORK TYPE
Customer Service Trenching	Average cost for all customer service trenching and conduit from curb and gutter to meter panel. Average citywide length is assumed to be 50 feet. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	542	CLF	$ 3,000	OH_ServiceDrop x UnitCost x 50 / 100	$ 813,000	Private Property Construction
Customer Paneling	Average paneling cost for all customers such as: Direct Connect, Meter Adapter, Loop & Bond, Extended Loop and Bond, and grounding. Includes material and labor costs. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	542	EA	$ 4,400	OH_ServiceDrop x UnitCost	$ 2,384,800	
Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	542	EA	$ 500	OH_ServiceDrop x UnitCost	$ 271,000	
Customer Permits & Inspections	Building Department Fee: cost for permits and new service inspections.	OH_ServiceDrop	OH_ServiceDrop is the total number of OH customer service laterals.	542	EA	$ 260	OH_ServiceDrop x UnitCost	$ 140,920	
						25%	**Contractor's Overhead & Profit**	$ 902,430	
							Private Property Construction	**$ 4,512,150**	

APPENDIX D

Program Concept Schedule

Preliminary Concept Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1	**Contract NTP**	0 days	10/8/18	10/8/18	
2	**Program Planning and Data Gathering**	**3.97 mons**	**10/9/18**	**2/5/19**	
3	**Meetings with City Staff and UUPAC to establish project protocol and framework**	**3 mons**	**10/9/18**	**1/7/19**	**1FS+1 day**
4	City Kickoff Meeting	0 days	10/9/18	10/9/18	
5	UUPAC Monthly Meeting October	0 days	10/11/18	10/11/18	
6	City Progress Meeting No. 1	0 days	10/16/18	10/16/18	
7	City Progress Meeting No. 2	0 days	10/23/18	10/23/18	
8	Prevous Project-Lessons Learned Meeting with Terry Sinnott	0 mons	10/25/18	10/25/18	
9	Finance sub-committee Kickoff Meeting	0 days	11/1/18	11/1/18	
10	City Progress Meeting No. 3	0 days	10/30/18	10/30/18	
11	Communications Sub Committee Meeting	0 days	11/6/18	11/6/18	
12	Scheduling Sub Committee Meeting	0 days	11/6/18	11/6/18	
13	City Progress Meeting No. 4	0 days	11/6/18	11/6/18	
14	UUPAC Monthly Meeting November	0 days	11/8/18	11/8/18	
15	City Progress Meeting No. 5	0 days	11/13/18	11/13/18	
16	Meeting with Early Bird Project Leads (Status Findings)	0 days	11/15/18	11/15/18	
17	City Progress Meeting No. 6	0 days	11/20/18	11/20/18	
18	City Progress Meeting No. 7	0 days	11/27/18	11/27/18	
19	Meeting with Early Bird Project Lead David Doyle	0 days	11/28/18	11/28/18	
20	City Progress Meeting No. 8	0 days	12/4/18	12/4/18	
21	City Progress Meeting No. 9	0 days	12/11/18	12/11/18	
22	City Progress Meeting No. 10	0 days	12/18/18	12/18/18	
23	City Progress Meeting No. 11	0 days	1/2/19	1/2/19	
24	City Progress Meeting No. 12	0 days	1/8/19	1/8/19	
25	Finance Sub Committee Meeting	0 days	1/8/19	1/8/19	
26	Scheduling Sub Committee Meeting	0 days	1/8/19	1/8/19	
27	UPAC January Meeting	0 days	1/10/19	1/10/19	
28	City Progress Meeting No. 13	0 days	1/15/19	1/15/19	
29	Budget Review Committee Workshop	0 days	1/15/19	1/15/19	
30	City Progress Meeting No. 14	0 days	1/22/19	1/22/19	
31	**City Data Collection and Review**	**1.48 mons**	**10/18/18**	**12/1/18**	
32	Scanning City "Shovel Ready" Hard Copies	0.03 mons	10/18/18	10/19/18	
33	Review and Sort Scanned documents	0.03 mons	10/19/18	10/20/18	32
34	Scan Documents received from Mr. Hoffmeister for Penny Ln Project	0 mons	10/24/18	10/24/18	
35	Receive and Review City GIS	2 wks	10/25/18	11/8/18	
36	Canvassing City - Field Data Collection	2.77 wks	11/12/18	12/1/18	
37	**SDG&E Coordination and Data Gathering**	**1.21 mons**	**10/11/18**	**11/16/18**	
38	Initiated GIS request from SDG&E	0 days	10/11/18	10/11/18	
39	Initiated Correspondence for Status of Shovel Ready Projects	0 days	10/11/18	10/11/18	
40	Initiated City Representative Authorization Lette	4.38 days	10/12/18	10/16/18	
41	Received SDG&E GIS information	0 days	10/26/18	10/26/18	
42	Review and Sort SDG&E GIS Data	3 wks	10/26/18	11/16/18	41
43	**Meetings with SDG&E**	**1 mon**	**10/30/18**	**11/29/18**	
44	SDG&E Kickoff Meeting with Julian Mullen and Addie Woodard	0 mons	10/30/18	10/30/18	
45	SDG&E Planner Kickoff Meeting with Andrea Per	0 days	11/7/18	11/7/18	
46	**Meeting with City Attorney to discuss Program Questions**	**0 days**	**11/2/18**	**11/2/18**	
48	**Assessors Office Coordination**	3 days	10/11/18	10/14/18	
49	**Meetings with Telecommunication Utilitites**	1 mon	1/6/19	2/5/19	1FS+3 mons
50	**Project Delivery Plan**	**7.87 mons**	**10/9/18**	**6/2/19**	
51	Prepare Draft Project Delivery Plan	6 mons	10/9/18	4/7/19	1FS+1 day,5
52	GIS Review and Establish Initial Block Boundaries	2.5 mons	10/27/18	1/10/19	41FS+1 day



Project: Tentative Program Sched
Date: 2/5/19

Task | Summary | Manual Task | Manual Summary Rollup | Baseline Summary
Milestone | Project Summary | Duration-only | Baseline | Progress

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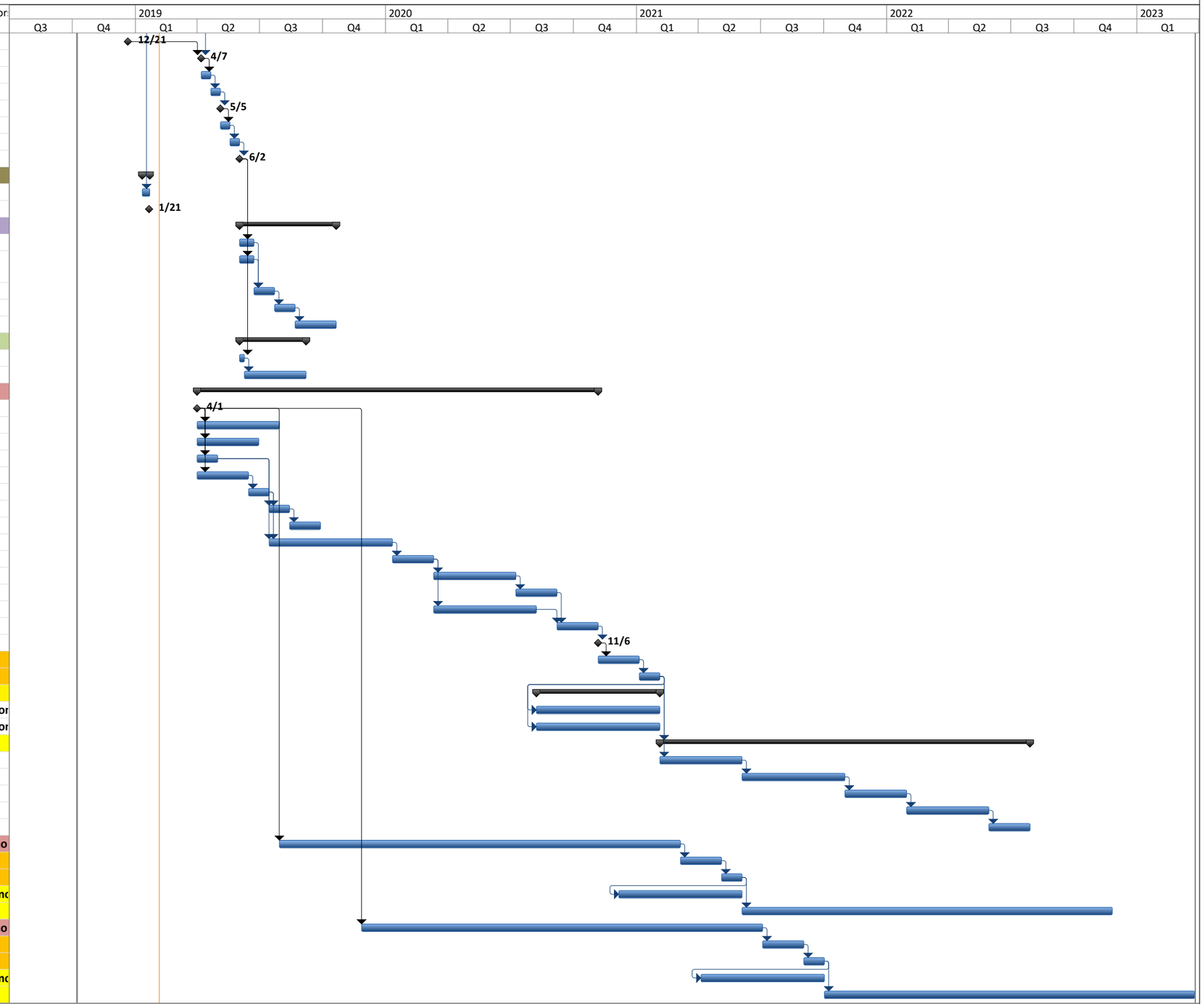
Preliminary Concept Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
53	Submit Preliminary Findings/Summary Schedule	0 days	12/21/18	12/21/18	
54	Submit Draft Project Delivery Plan	0 days	4/7/19	4/7/19	51,53
55	City Review of Working Draft	2 wks	4/7/19	4/21/19	54
56	Incorporate City Comments	2 wks	4/21/19	5/5/19	55
57	Submit Preliminary Final Draft for City Council	0 days	5/5/19	5/5/19	56
58	City Council Review of Working Draft	2 wks	5/5/19	5/19/19	57
59	Incorporate Council Review Comments	2 wks	5/19/19	6/2/19	58
60	Submit Final Project Delivery Plan	0 days	6/2/19	6/2/19	59
61	**Project Block Layout Map**	**0.35 mor**	**1/11/19**	**1/21/19**	
62	Draft potential project block boundary options	0.35 mor	1/11/19	1/21/19	52
63	Submitted draft Project Block Layout Options to Cit	0 days	1/21/19	1/21/19	
64	**Planning Level Outreach**	**4.7 mons**	**6/2/19**	**10/21/19**	
65	Establish Website for Dissemination of Information	3 wks	6/2/19	6/23/19	60
66	Establish Hotline for Resident Questions and Concerns	3 wks	6/2/19	6/23/19	60
67	Public Notification (Advertising/Mailers)	1 mon	6/23/19	7/23/19	66,65
68	Hold Strategic Community Meetings	1 mon	7/23/19	8/22/19	67
69	Consolidate and Summarize Resident Concerns	2 mons	8/22/19	10/21/19	68
70	**Financing**	**3.23 mor**	**6/2/19**	**9/7/19**	
71	Initiate Bonding Request	1 wk	6/2/19	6/9/19	60
72	Financing Procurement Period	3 mons	6/9/19	9/7/19	71
73	**Prepare Undergrounding Package (1 of 6)**	**19.5 mor**	**4/1/19**	**11/6/20**	
74	NTP	0 days	4/1/19	4/1/19	
75	Geotech Report	4 mons	4/1/19	7/30/19	74
76	Environmental Permitting Review	3 mons	4/1/19	6/30/19	74
77	SDG&E to Provide Customer Meter Information	1 mon	4/1/19	5/1/19	74
78	Perform Field Survey (Including Aerial Survey)	2.5 mons	4/1/19	6/15/19	74
79	Project Basemap	1 mon	6/15/19	7/15/19	78
80	Transformer Desktop Study	1 mon	7/15/19	8/14/19	79,77
81	Easement Consent	1.5 mons	8/14/19	9/28/19	80
82	Preliminary Applicant Design	6 mons	7/15/19	1/11/20	77,79
83	SDG&E Preliminary Design Review	2 mons	1/11/20	3/11/20	82
84	iCUE Submittal	4 mons	3/11/20	7/9/20	83
85	SDG&E Review of iCUE	2 mons	7/9/20	9/7/20	84
86	Utility Non-Joint Trench	5 mons	3/11/20	8/8/20	83
87	Final Applicant Design	2 mons	9/7/20	11/6/20	85,86
88	Submit Bid Ready Set	0 days	11/6/20	11/6/20	87
89	**Bid Phase (Block 1 of 6)**	**2 mons**	**11/6/20**	**1/5/21**	**88**
90	**Review and Award Contract (Block 1 of 6)**	**1 mon**	**1/5/21**	**2/4/21**	**89**
91	**Private Property Work (Block 1 of 6)**	**6 mons**	**8/8/20**	**2/4/21**	
92	Outreach	6 mons	8/8/20	2/4/21	**90FS-6 mor**
93	Paneling	6 mons	8/8/20	2/4/21	**90FS-6 mor**
94	**Construction (Block 1 of 6)**	**18 mons**	**2/4/21**	**7/29/22**	**90**
95	Mobilize	4 mons	2/4/21	6/4/21	90
96	Trenching	5 mons	6/4/21	11/1/21	95
97	Cabling	3 mons	11/1/21	1/30/22	96
98	Cut-Overs	4 mons	1/30/22	5/30/22	97
99	Pole Removal	2 mons	5/30/22	7/29/22	98
100	**Prepare Undergrounding Package (Block 2 of 6)**	**19.5 mor**	**7/30/19**	**3/6/21**	**74FS+4 mo**
101	**Bid Phase (Block 2 of 6)**	**2 mons**	**3/6/21**	**5/5/21**	**100**
102	**Review and Award Contract (Block 2 of 6)**	**1 mon**	**5/5/21**	**6/4/21**	**101**
103	**Private Property Work (Block 2 of 6)**	**6 mons**	**12/6/20**	**6/4/21**	**102FS-6 mo**
104	**Construction (Block 2 of 6)**	**18 mons**	**6/4/21**	**11/26/22**	**102**
105	**Prepare Undergrounding Package (Block 3 of 6)**	**19.5 mor**	**11/27/19**	**7/4/21**	**74FS+8 mo**
106	**Bid Phase (Block 3 of 6)**	**2 mons**	**7/4/21**	**9/2/21**	**105**
107	**Review and Award Contract (Block 3 of 6)**	**1 mon**	**9/2/21**	**10/2/21**	**106**
108	**Private Property Work (Block 3 of 6)**	**6 mons**	**4/5/21**	**10/2/21**	**107FS-6 mo**
109	**Construction (Block 3 of 6)**	**18 mons**	**10/2/21**	**3/26/23**	**107**



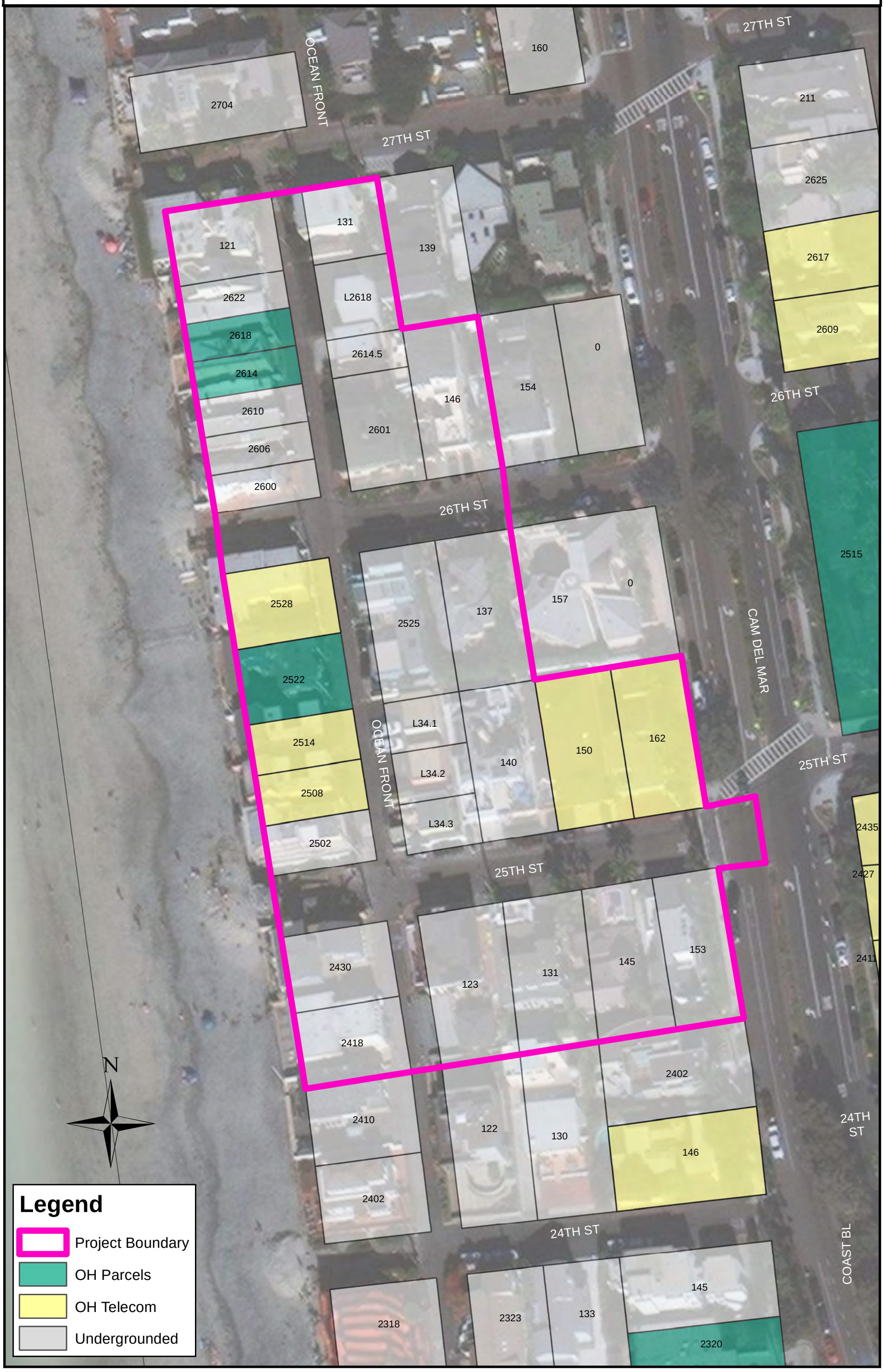
Project: Tentative Program Sched
Date: 2/5/19

Task | Summary | Manual Task | Manual Summary Rollup | Baseline Summary
Milestone | Project Summary | Duration-only | Baseline | Progress

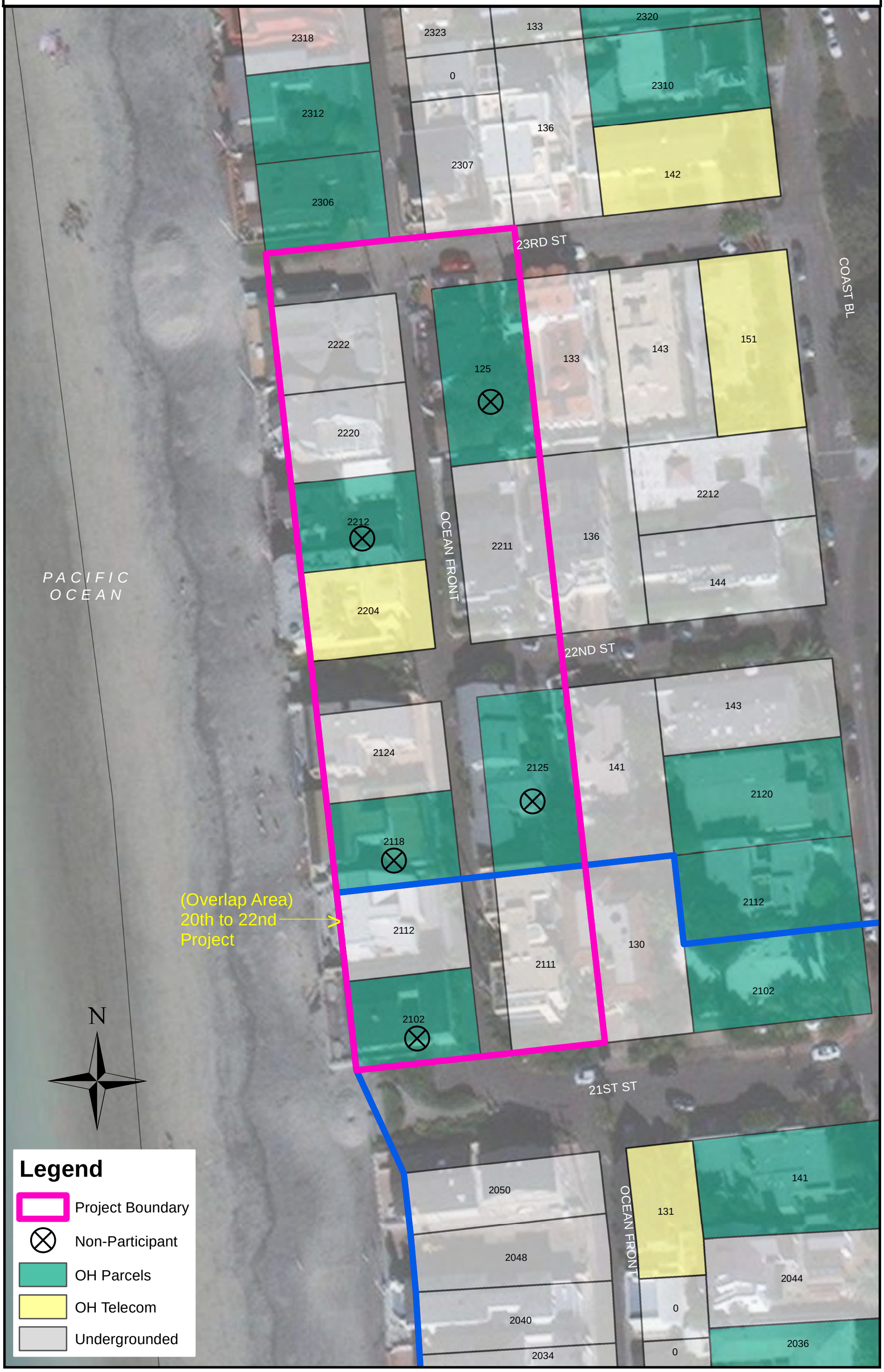
APPENDIX E

Pilot Program Boundary Maps

Ocean Front 25th-27th Street



Ocean Front 21st to 23rd Street



Ocean Front 20th to 22nd Street

Penny Ln Conversion Project

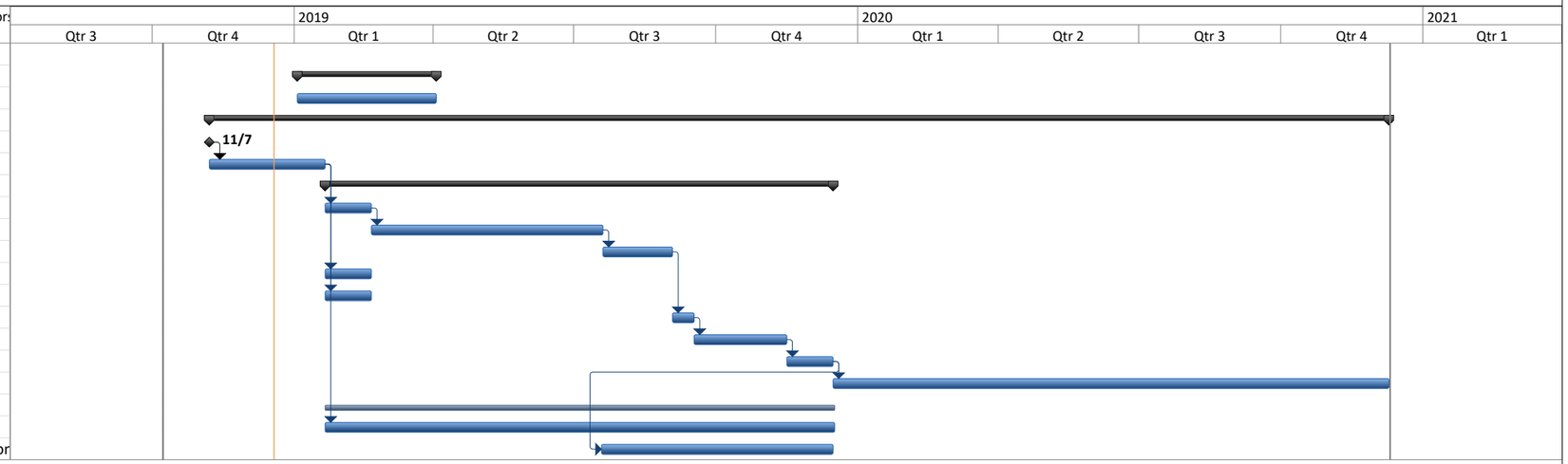
Little Orphan Alley Conversion Project

APPENDIX F

Pilot Program Project Concept Schedule

Preliminary Concept Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1	**Contract NTP**	0 days	10/8/18	10/8/18	
2	**Measure Q Fund**	**3 mons**	**1/3/19**	**4/3/19**	
3	Bonding Procurement Period, if needed	3 mons	1/3/19	4/3/19	
4	**Potential Pilot Project**	**25.47 mor**	**11/7/18**	**12/10/20**	
5	Kickoff Meeting with SDG&E Planner	0 days	11/7/18	11/7/18	
6	Confirm Go/No Go Status	2.5 mons	11/7/18	1/21/19	5
7	**Design/Assess/Bid Coordination**	**10.97 mor**	**1/21/19**	**12/16/19**	
8	SDG&E Redesign	1 mon	1/21/19	2/20/19	6
9	Joint Trench Offer	5 mons	2/20/19	7/20/19	8
10	Bid Package	1.5 mons	7/20/19	9/3/19	9
11	Survey	1 mon	1/21/19	2/20/19	6
12	Geotech?	1 mon	1/21/19	2/20/19	6
13	QA/QC	2 wks	9/3/19	9/17/19	10
14	Advertise Bid	2 mons	9/17/19	11/16/19	13
15	Award Bid	1 mon	11/16/19	12/16/19	14
16	**Construction**	12 mons	12/16/19	12/10/20	15
17	**Private Property**	**11 mons**	**1/21/19**	**12/17/19**	
18	Outreach	11 mons	1/21/19	12/17/19	6
19	PP Lateral Work	5 mons	7/19/19	12/16/19	15FS-5 mor



Project: Tentative Program Sched
Date: 12/19/18

Task | Summary | Manual Task | Manual Summary Rollup | Baseline Summary
Milestone | Project Summary | Duration-only | Baseline | Progress

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APPENDIX G

Pilot Program Cost

GIS Planning Block Cost Estimator

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Ocean Front 25th to 27th

OH Lines RFS	774	XFMR_COUNT = No. of OH Transformers	3	Overhead Poles RFS	6
Service Laterals	3	CustCount = No. of Customers, (via xfmr data, includes apt.)	29	Alley Power Poles	0
UG_ServiceDrop (Houses or meters)	26			Backlot Power Poles:	0
				Street Power Poles	6

	ITEM	DESCRIPTION	ARCGIS FIELD	DESCRIPTION OF ARCGIS FIELD	QUANTITY FROM ARCGIS	UNIT	UNIT COST (W/O O&P)	COST FORMULA	COST	WORK TYPE
5	Customer Service Trenching	Average cost for all customer service trenching and conduit from curb and gutter to meter panel. Average citywide length is assumed to be 50 feet. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	CLF	$ 3,000	OH_ServiceDrop x UnitCost x 50 / 100	$ 4,500	Private Property Construction
6	Customer Paneling	Average paneling cost for all customers such as: Direct Connect, Meter Adapter, Loop & Bond, Extended Loop and Bond, and grounding. Includes material and labor costs. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 4,400	OH_ServiceDrop x UnitCost	$ 13,200	
7	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 500	OH_ServiceDrop x UnitCost	$ 1,500	
8	Customer Permits & Inspections	Building Department Fee: cost for permits and new service inspections.	OH_ServiceDrop	OH_ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 260	OH_ServiceDrop x UnitCost	$ 780	
9							25%	**Contractor's Overhead & Profit**	$ 4,995	
10								**Private Property Construction**	**$ 24,975**	
11	Public Notifications	Cost is a function of number of services customers. Includes door hangers and public meetings.	CustCount	CustCount is the total number of customers being serviced by the transformers located within each block. The information was obtained from the "CustCount" column in the SDG&E Transformer layer.	29	-	$ 125	(CustCount x UnitCost) + 2,500	$ 6,125	Right-Of-Way Construction
12	Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 11,000	1.15 x P_Length x UnitCost / 100	$ 97,911	
13	Non-Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume telecommunications utilities will require their own trenching along street right-of-way.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information assumes half the length of the overall joint trenching will be used as trenching solely by other utilities.	774	CLF	$ 9,000	0.5 x P_Length x UnitCost / 100	$ 34,830	
14	Road Resurfacing	Assumes 3ft wide resurfacing patch and slurry sealing the width of the whole road. Assume new UG joint trench length is [1+(0.15+.5)] times greater than P_Length.	P_ Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 2,500	1.65 x P_ Length x Unit Cost / 100	$ 31,928	
15	SWPPP	Cost for SWPPP along new UG joint trench. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 325	1.15 x P_ Length x Unit Cost / 100	$ 2,893	
16	Traffic Control	Traffic controls plans and traffic control implementation during construction.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 200	P_ Length x Unit Cost / 100	$ 1,548	
17	Intercepts	Cost to locate, dig, place handhole or splice conduit, and restore. Assume only 50% of UG homes will require an intercept.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	26	EA	$ 1,500	0.5 x UG_ServiceDrop x UnitCost	$ 19,500	
18							25%	**Contractor's Overhead & Profit**	$ 48,684	
19								**Right-Of-Way Construction**	**$ 243,418**	
20	Pad Mounted Transformers	Typical single phase pad mounted transformer used in residential conversions; includes transformer labor and materials for installation.	XFMR_COUNT	The Transformer count is the number of transformers found within each block. The information can be found in the SDG&E Transformer layer.	3	EA	$ 17,500	XFMR_COUNT x UnitCost	$ 52,500	SDG&E Electrical Construction
21	Backbone Cabling (Primary)	Primary distribution cabling feeding the transformers. Assumes average Citywide: qty (3) #2 conductors per length of trenching. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 350	3 x 1.15x P_Length x UnitCost / 100	$ 9,346	
22	Backbone Cabling (Secondary)	Secondary distribution cabling from the transformers to common pull box. Assumes average Citywide: qty (3) #250 conductors per length of trenching x 0.8. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 800	0.8 x 3 x 1.15 x P_Length x UnitCost / 100	$ 17,090	
23	Customer Service Cabling	Cost for the conductors and labor to pull the conductors from the common pull box to the customer meter. Assumes average Citywide: qty (4) #2 conductors per length of trenching x 1.5 plus an additional 75 of laterals on homeowners property (includes height of buildings for loop and bond). Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 340	(1.5 x 4 x 1.15 x P_Length + 75 x OH_ServiceDrop) x UnitCost / 100	$ 18,923	
24			OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3					
25	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 500	OH_ServiceDrop x UnitCost	$ 1,500	
26	Boundary Circuit Feeders	Assume each block has on average 3 unique circuit feeders (cable poles). Cost includes converting the boundary poles from OH to underground. Assumes $15,000 for each cable pole.	N/A	Engineer needs to adjust quantity manually.	1	EA	$ 15,000	Quantity x UnitCost	$ 15,000	
27	Intercepts	Cost to inspect and or pull new cable.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	26	EA	$ 750	0.5 x UG_ServiceDrop x UnitCost	$ 9,750	
28	OH Customer Cable Removal	Removal of customer OH power lines. Assume 75' of OH per ServiceDrop.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 250	OH_ServiceDrop x UnitCost	$ 750	
29	OH Cable Removal	Removal of OH power lines, does not include customer service drop OH line removal.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	774	CLF	$ 500	P_Length x UnitCost / 100	$ 3,870	
30	Frontage Street Power Pole Removal	Cost includes demolition and labor of street power poles, associated OH transformers, and restoration.	OH_Poles	OH_Poles is the number of distribution and stub poles found in each block that may require removal to complete the undergrounding process. This information was obtained from selecting only the respective overhead structure subtypes found in the SDG&E OverheadStructure Layer.	6	EA	$ 2,000	(OH_Poles - Alley_Poles - Backlot_Poles) x UnitCost	$ 12,000	
31	Alley Pole Removal	Cost includes demolition and labor of alley power poles, associated OH transformers, and restoration.	Alley_Poles	The Alley Pole count was obtained from the OverheadStructure layer by selecting those poles that resided along alleyways which were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 2,000	Alley_Poles x UnitCost	$ -	
32	Backlot Pole Removal	Cost includes demolition and labor of power poles residing in customer backlots, associated OH transformers, and restoration.	Backlot_Poles	The Backlot Pole count was obtained from the OverheadStructure layer by selecting those poles which were 30 feet or farther from street center lines. The 30 foot distance was assumed as sufficient distance for the location of standard home backyards. The distances were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 4,000	Backlot_Poles x UnitCost	$ -	
33							25%	**Contractor's Overhead & Profit**	$ 35,182	
34							12%	**SDG&E Estimated Credit**	$ (25,331)	
35								**SDG&E Electrical Construction**	**$ 150,580**	
36								**SUB-TOTAL COST (Private, ROW, SDG&E)**	**$ 418,973**	TOTAL COST
37							15%	Construction Change Order (Budgetary Contingency)	$ 62,846	
38							12%	PMO, Program Management & Overhead (City, Consultants)	$ 57,818	
39							10%	Engineering (Consultants, Applicant Designers)	$ 48,182	
40								**(2018 Basis) TOTAL COST, Private Property + City ROW + SDG&E + Contingency + PMO + Engineer**	**$ 588,000**	

SUMMARY OF COSTS

41	Avg Block Cost per all effected OH & UG_ServiceDrop	$ 20,276		Private Property Construction Budget	$ 28,721	SUMMARY OF COSTS
42	Avg Block Cost Per foot of Existing OH Lines	$ 760		City ROW + SDG&E Construction Budget	$ 453,098	
43	Average Private Property Cost	$ 8,325		**PMO + Engineering + City ROW + SDG&E Construction Budget**	**$ 559,098**	

GIS Planning Block Cost Estimator

DRAFT

Ocean Front 21st to 23rd

OH Lines RFS	230	XFMR_COUNT = No. of OH Transformers	2	Overhead Poles RFS	2
Service Laterals	0	CustCount = No. of Customers, (via xfmr data, includes apt.)	7	Alley Power Poles	0
UG_ServiceDrop (Houses or meters)	7			Backlot Power Poles:	0
				Street Power Poles	2

	ITEM	DESCRIPTION	ARCGIS FIELD	DESCRIPTION OF ARCGIS FIELD	QUANTITY FROM ARCGIS	UNIT	UNIT COST (W/O O&P)	COST FORMULA	COST	WORK TYPE
5	Customer Service Trenching	Average cost for all customer service trenching and conduit from curb and gutter to meter panel. Average citywide length is assumed to be 50 feet. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	0	CLF	$ 3,000	OH_ServiceDrop x UnitCost x 50 / 100	$ -	Private Property Construction
6	Customer Paneling	Average paneling cost for all customers such as: Direct Connect, Meter Adapter, Loop & Bond, Extended Loop and Bond, and grounding. Includes material and labor costs. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	0	EA	$ 4,400	OH_ServiceDrop x UnitCost	$ -	
7	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	0	EA	$ 500	OH_ServiceDrop x UnitCost	$ -	
8	Customer Permits & Inspections	Building Department Fee: cost for permits and new service inspections.	OH_ServiceDrop	OH_ServiceDrop is the total number of OH customer service laterals.	0	EA	$ 260	OH_ServiceDrop x UnitCost	$ -	
9							25%	**Contractor's Overhead & Profit**	$ -	
10								**Private Property Construction**	**$ -**	
11	Public Notifications	Cost is a function of number of services customers. Includes door hangers and public meetings.	CustCount	CustCount is the total number of customers being serviced by the transformers located within each block. The information was obtained from the "CustCount" column in the SDG&E Transformer layer.	7	-	$ 125	(CustCount x UnitCost) + 2,500	$ 3,375	Right-Of-Way Construction
12	Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 11,000	1.15 x P_Length x UnitCost / 100	$ 29,095	
13	Non-Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume telecommunications utilities will require their own trenching along street right-of-way.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information assumes half the length of the overall joint trenching will be used as trenching solely by other utilities.	230	CLF	$ 9,000	0.5 x P_Length x UnitCost / 100	$ 10,350	
14	Road Resurfacing	Assumes 3ft wide resurfacing patch and slurry sealing the width of the whole road. Assume new UG joint trench length is [1+(0.15+.5)] times greater than P_Length.	P_ Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 2,500	1.65 x P_ Length x Unit Cost / 100	$ 9,488	
15	SWPPP	Cost for SWPPP along new UG joint trench. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 325	1.15 x P_ Length x Unit Cost / 100	$ 860	
16	Traffic Control	Traffic controls plans and traffic control implementation during construction.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 200	P_ Length x Unit Cost / 100	$ 460	
17	Intercepts	Cost to locate, dig, place handhole or splice conduit, and restore. Assume only 50% of UG homes will require an intercept.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	7	EA	$ 1,500	0.5 x UG_ServiceDrop x UnitCost	$ 5,250	
18							25%	**Contractor's Overhead & Profit**	$ 14,719	
19								**Right-Of-Way Construction**	**$ 73,596**	
20	Pad Mounted Transformers	Typical single phase pad mounted transformer used in residential conversions; includes transformer labor and materials for installation.	XFMR_COUNT	The Transformer count is the number of transformers found within each block. The information can be found in the SDG&E Transformer layer.	2	EA	$ 17,500	XFMR_COUNT x UnitCost	$ 35,000	SDG&E Electrical Construction
21	Backbone Cabling (Primary)	Primary distribution cabling feeding the transformers. Assumes average Citywide: qty (3) #2 conductors per length of trenching. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 350	3 x 1.15x P_Length x UnitCost / 100	$ 2,777	
22	Backbone Cabling (Secondary)	Secondary distribution cabling from the transformers to common pull box. Assumes average Citywide: qty (3) #250 conductors per length of trenching x 0.8. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 800	0.8 x 3 x 1.15 x P_Length x UnitCost / 100	$ 5,078	
23	Customer Service Cabling	Cost for the conductors and labor to pull the conductors from the common pull box to the customer meter. Assumes average Citywide: qty (4) #2 conductors per length of trenching x 1.5 plus an additional 75 of laterals on homeowners property (includes height of buildings for loop and bond). Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 340	(1.5 x 4 x 1.15 x P_Length + 75 x OH_ServiceDrop) x UnitCost / 100	$ 5,396	
24			OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	0					
25	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	0	EA	$ 500	OH_ServiceDrop x UnitCost	$ -	
26	Boundary Circuit Feeders	Assume each block has on average 3 unique circuit feeders (cable poles). Cost includes converting the boundary poles from OH to underground. Assumes $15,000 for each cable pole.	N/A	Engineer needs to adjust quantity manually.	0	EA	$ 15,000	Quantity x UnitCost	$ -	
27	Intercepts	Cost to inspect and or pull new cable.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	7	EA	$ 750	0.5 x UG_ServiceDrop x UnitCost	$ 2,625	
28	OH Customer Cable Removal	Removal of customer OH power lines. Assume 75' of OH per ServiceDrop.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	0	EA	$ 250	OH_ServiceDrop x UnitCost	$ -	
29	OH Cable Removal	Removal of OH power lines, does not include customer service drop OH line removal.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	230	CLF	$ 500	P_Length x UnitCost / 100	$ 1,150	
30	Frontage Street Power Pole Removal	Cost includes demolition and labor of street power poles, associated OH transformers, and restoration.	OH_Poles	OH_Poles is the number of distribution and stub poles found in each block that may require removal to complete the undergrounding process. This information was obtained from selecting only the respective overhead structure subtypes found in the SDG&E OverheadStructure Layer.	2	EA	$ 2,000	(OH_Poles - Alley_Poles - Backlot_Poles) x UnitCost	$ 4,000	
31	Alley Pole Removal	Cost includes demolition and labor of alley power poles, associated OH transformers, and restoration.	Alley_Poles	The Alley Pole count was obtained from the OverheadStructure layer by selecting those poles that resided along alleyways which were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 2,000	Alley_Poles x UnitCost	$ -	
32	Backlot Pole Removal	Cost includes demolition and labor of power poles residing in customer backlots, associated OH transformers, and restoration.	Backlot_Poles	The Backlot Pole count was obtained from the OverheadStructure layer by selecting those poles which were 30 feet or farther from street center lines. The 30 foot distance was assumed as sufficient distance for the location of standard home backyards. The distances were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 4,000	Backlot_Poles x UnitCost	$ -	
33							25%	**Contractor's Overhead & Profit**	$ 14,007	
34							12%	**SDG&E Estimated Credit**	$ (10,085)	
35								**SDG&E Electrical Construction**	**$ 59,948**	
36								**SUB-TOTAL COST (Private, ROW, SDG&E)**	**$ 133,545**	TOTAL COST
37							15%	Construction Change Order (Budgetary Contingency)	$ 20,032	
38							12%	PMO, Program Management & Overhead (City, Consultants)	$ 18,429	
39							10%	Engineering (Consultants, Applicant Designers)	$ 15,358	
40								**(2018 Basis) TOTAL COST, Private Property + City ROW + SDG&E + Contingency + PMO + Engineer**	**$ 188,000**	

Adjust as required if your have an actual SDG&E Hard Quote -->

Adjust higher for smaller block jobs -->

Assumes Engineering is Already Completed by SDG&E -->

SUMMARY OF COSTS

					SUMMARY OF COSTS
41	Avg Block Cost per all effected OH & UG_ServiceDrop	$ 26,857	Private Property Construction Budget	$ -	
42	Avg Block Cost Per foot of Existing OH Lines	$ 817	City ROW + SDG&E Construction Budget	$ 153,576	
43	Average Private Property Cost	#DIV/0!	**PMO + Engineering + City ROW + SDG&E Construction Budget**	**$ 187,363**	

GIS Planning Block Cost Estimator

DRAFT

Ocean Front 20th to 22nd Street

OH Lines RFS	342	XFMR_COUNT = No. of OH Transformers	2	Overhead Poles RFS	4
Service Laterals	6	CustCount = No. of Customers, (via xfmr data, includes apt.)	27	Alley Power Poles	0
UG_ServiceDrop (Houses or meters)	21			Backlot Power Poles:	0
				Street Power Poles	4

	ITEM	DESCRIPTION	ARCGIS FIELD	DESCRIPTION OF ARCGIS FIELD	QUANTITY FROM ARCGIS	UNIT	UNIT COST (W/O O&P)	COST FORMULA	COST	WORK TYPE
5	Customer Service Trenching	Average cost for all customer service trenching and conduit from curb and gutter to meter panel. Average citywide length is assumed to be 50 feet. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	6	CLF	$ 3,000	OH_ServiceDrop x UnitCost x 50 / 100	$ 9,000	Private Property Construction
6	Customer Paneling	Average paneling cost for all customers such as: Direct Connect, Meter Adapter, Loop & Bond, Extended Loop and Bond, and grounding. Includes material and labor costs. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	6	EA	$ 4,400	OH_ServiceDrop x UnitCost	$ 26,400	
7	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	6	EA	$ 500	OH_ServiceDrop x UnitCost	$ 3,000	
8	Customer Permits & Inspections	Building Department Fee: cost for permits and new service inspections.	OH_ServiceDrop	OH_ServiceDrop is the total number of OH customer service laterals.	6	EA	$ 260	OH_ServiceDrop x UnitCost	$ 1,560	
9							25%	**Contractor's Overhead & Profit**	$ 9,990	
10								**Private Property Construction**	**$ 49,950**	
11	Public Notifications	Cost is a function of number of services customers. Includes door hangers and public meetings.	CustCount	CustCount is the total number of customers being serviced by the transformers located within each block. The information was obtained from the "CustCount" column in the SDG&E Transformer layer.	27	-	$ 125	(CustCount x UnitCost) + 2,500	$ 5,875	Right-Of-Way Construction
12	Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 11,000	1.15 x P_Length x UnitCost / 100	$ 43,263	
13	Non-Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume telecommunications utilities will require their own trenching along street right-of-way.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information assumes half the length of the overall joint trenching will be used as trenching solely by other utilities.	342	CLF	$ 9,000	0.5 x P_Length x UnitCost / 100	$ 15,390	
14	Road Resurfacing	Assumes 3ft wide resurfacing patch and slurry sealing the width of the whole road. Assume new UG joint trench length is [1+(0.15+.5)] times greater than P_Length.	P_ Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 2,500	1.65 x P_ Length x Unit Cost / 100	$ 14,108	
15	SWPPP	Cost for SWPPP along new UG joint trench. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 325	1.15 x P_ Length x Unit Cost / 100	$ 1,278	
16	Traffic Control	Traffic controls plans and traffic control implementation during construction.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 200	P_ Length x Unit Cost / 100	$ 684	
17	Intercepts	Cost to locate, dig, place handhole or splice conduit, and restore. Assume only 50% of UG homes will require an intercept.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	21	EA	$ 1,500	0.5 x UG_ServiceDrop x UnitCost	$ 15,750	
18							25%	**Contractor's Overhead & Profit**	$ 24,087	
19								**Right-Of-Way Construction**	**$ 120,435**	
20	Pad Mounted Transformers	Typical single phase pad mounted transformer used in residential conversions; includes transformer labor and materials for installation.	XFMR_COUNT	The Transformer count is the number of transformers found within each block. The information can be found in the SDG&E Transformer layer.	2	EA	$ 17,500	XFMR_COUNT x UnitCost	$ 35,000	SDG&E Electrical Construction
21	Backbone Cabling (Primary)	Primary distribution cabling feeding the transformers. Assumes average Citywide: qty (3) #2 conductors per length of trenching. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 350	3 x 1.15x P_Length x UnitCost / 100	$ 4,130	
22	Backbone Cabling (Secondary)	Secondary distribution cabling from the transformers to common pull box. Assumes average Citywide: qty (3) #250 conductors per length of trenching x 0.8. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 800	0.8 x 3 x 1.15 x P_Length x UnitCost / 100	$ 7,551	
23	Customer Service Cabling	Cost for the conductors and labor to pull the conductors from the common pull box to the customer meter. Assumes average Citywide: qty (4) #2 conductors per length of trenching x 1.5 plus an additional 75 of laterals on homeowners property (includes height of buildings for loop and bond). Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 340	(1.5 x 4 x 1.15 x P_Length + 75 x OH_ServiceDrop) x UnitCost / 100	$ 9,553	
24			OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	6					
25	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	6	EA	$ 500	OH_ServiceDrop x UnitCost	$ 3,000	
26	Boundary Circuit Feeders	Assume each block has on average 3 unique circuit feeders (cable poles). Cost includes converting the boundary poles from OH to underground. Assumes $15,000 for each cable pole.	N/A	Engineer needs to adjust quantity manually.	0	EA	$ 15,000	Quantity x UnitCost	$ -	
27	Intercepts	Cost to inspect and or pull new cable.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	21	EA	$ 750	0.5 x UG_ServiceDrop x UnitCost	$ 7,875	
28	OH Customer Cable Removal	Removal of customer OH power lines. Assume 75' of OH per ServiceDrop.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	6	EA	$ 250	OH_ServiceDrop x UnitCost	$ 1,500	
29	OH Cable Removal	Removal of OH power lines, does not include customer service drop OH line removal.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	342	CLF	$ 500	P_Length x UnitCost / 100	$ 1,710	
30	Frontage Street Power Pole Removal	Cost includes demolition and labor of street power poles, associated OH transformers, and restoration.	OH_Poles	OH_Poles is the number of distribution and stub poles found in each block that may require removal to complete the undergrounding process. This information was obtained from selecting only the respective overhead structure subtypes found in the SDG&E OverheadStructure Layer.	4	EA	$ 2,000	(OH_Poles - Alley_Poles - Backlot_Poles) x UnitCost	$ 8,000	
31	Alley Pole Removal	Cost includes demolition and labor of alley power poles, associated OH transformers, and restoration.	Alley_Poles	The Alley Pole count was obtained from the OverheadStructure layer by selecting those poles that resided along alleyways which were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 2,000	Alley_Poles x UnitCost	$ -	
32	Backlot Pole Removal	Cost includes demolition and labor of power poles residing in customer backlots, associated OH transformers, and restoration.	Backlot_Poles	The Backlot Pole count was obtained from the OverheadStructure layer by selecting those poles which were 30 feet or farther from street center lines. The 30 foot distance was assumed as sufficient distance for the location of standard home backyards. The distances were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 4,000	Backlot_Poles x UnitCost	$ -	
33							25%	**Contractor's Overhead & Profit**	$ 19,580	
34							-21%	**SDG&E Estimated Credit** (Adjust as required if your have an actual SDG&E Hard Quote -->)	$ 24,374	
35								**SDG&E Electrical Construction**	**$ 122,273**	
36								**SUB-TOTAL COST (Private, ROW, SDG&E)**	**$ 292,658**	TOTAL COST
37							15%	Construction Change Order (Budgetary Contingency)	$ 43,899	
38							12%	PMO, Program Management & Overhead (City, Consultants) (Adjust higher for smaller block jobs -->)	$ 40,387	
39							10%	Engineering (Consultants, Applicant Designers) (Assumes Engineering is Already Completed by SDG&E -->)	$ 33,656	
40								**(2018 Basis) TOTAL COST, Private Property + City ROW + SDG&E + Contingency + PMO + Engineer**	**$ 411,000**	

SUMMARY OF COSTS

41	Avg Block Cost per all effected OH & UG_ServiceDrop	$ 15,222		Private Property Construction Budget	$ 57,443	SUMMARY OF COSTS
42	Avg Block Cost Per foot of Existing OH Lines	$ 1,202		City ROW + SDG&E Construction Budget	$ 279,114	
43	Average Private Property Cost	$ 8,325		**PMO + Engineering + City ROW + SDG&E Construction Budget**	**$ 353,156**	

GIS Planning Block Cost Estimator

DRAFT

Stratford Court & Penny Lane

OH Lines RFS	1,023	XFMR_COUNT = No. of OH Transformers	5
Service Laterals	5	CustCount = No. of Customers, (via xfmr data, includes apt.)	31
UG_ServiceDrop (Houses or meters)	26		

Overhead Poles RFS	6
Alley Power Poles	5
Backlot Power Poles:	0
Street Power Poles	1

	ITEM	DESCRIPTION	ARCGIS FIELD	DESCRIPTION OF ARCGIS FIELD	QUANTITY FROM ARCGIS	UNIT	UNIT COST (W/O O&P)	COST FORMULA	COST	WORK TYPE
5	Customer Service Trenching	Average cost for all customer service trenching and conduit from curb and gutter to meter panel. Average citywide length is assumed to be 50 feet. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	5	CLF	$ 3,000	OH_ServiceDrop x UnitCost x 50 / 100	$ 7,500	Private Property Construction
6	Customer Paneling	Average paneling cost for all customers such as: Direct Connect, Meter Adapter, Loop & Bond, Extended Loop and Bond, and grounding. Includes material and labor costs. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	5	EA	$ 4,400	OH_ServiceDrop x UnitCost	$ 22,000	
7	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	5	EA	$ 500	OH_ServiceDrop x UnitCost	$ 2,500	
8	Customer Permits & Inspections	Building Department Fee: cost for permits and new service inspections.	OH_ServiceDrop	OH_ServiceDrop is the total number of OH customer service laterals.	5	EA	$ 260	OH_ServiceDrop x UnitCost	$ 1,300	
9							25%	**Contractor's Overhead & Profit**	$ 8,325	
10								**Private Property Construction**	**$ 41,625**	
11	Public Notifications	Cost is a function of number of services customers. Includes door hangers and public meetings.	CustCount	CustCount is the total number of customers being serviced by the transformers located within each block. The information was obtained from the "CustCount" column in the SDG&E Transformer layer.	31	-	$ 125	(CustCount x UnitCost) + 2,500	$ 6,375	Right-Of-Way Construction
12	Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 11,000	1.15 x P_Length x UnitCost / 100	$ 129,410	
13	Non-Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume telecommunications utilities will require their own trenching along street right-of-way.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information assumes half the length of the overall joint trenching will be used as trenching solely by other utilities.	1,023	CLF	$ 9,000	0.5 x P_Length x UnitCost / 100	$ 46,035	
14	Road Resurfacing	Assumes 3ft wide resurfacing patch and slurry sealing the width of the whole road. Assume new UG joint trench length is [1+(0.15+.5)] times greater than P_Length.	P_ Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 2,500	1.65 x P_ Length x Unit Cost / 100	$ 42,199	
15	SWPPP	Cost for SWPPP along new UG joint trench. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 325	1.15 x P_ Length x Unit Cost / 100	$ 3,823	
16	Traffic Control	Traffic controls plans and traffic control implementation during construction.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 200	P_ Length x Unit Cost / 100	$ 2,046	
17	Intercepts	Cost to locate, dig, place handhole or splice conduit, and restore. Assume only 50% of UG homes will require an intercept.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	26	EA	$ 1,500	0.5 x UG_ServiceDrop x UnitCost	$ 19,500	
18							25%	**Contractor's Overhead & Profit**	$ 62,347	
19								**Right-Of-Way Construction**	**$ 311,735**	
20	Pad Mounted Transformers	Typical single phase pad mounted transformer used in residential conversions; includes transformer labor and materials for installation.	XFMR_COUNT	The Transformer count is the number of transformers found within each block. The information can be found in the SDG&E Transformer layer.	5	EA	$ 17,500	XFMR_COUNT x UnitCost	$ 87,500	SDG&E Electrical Construction
21	Backbone Cabling (Primary)	Primary distribution cabling feeding the transformers. Assumes average Citywide: qty (3) #2 conductors per length of trenching. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 350	3 x 1.15x P_Length x UnitCost / 100	$ 12,353	
22	Backbone Cabling (Secondary)	Secondary distribution cabling from the transformers to common pull box. Assumes average Citywide: qty (3) #250 conductors per length of trenching x 0.8. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 800	0.8 x 3 x 1.15 x P_Length x UnitCost / 100	$ 22,588	
23	Customer Service Cabling	Cost for the conductors and labor to pull the conductors from the common pull box to the customer meter. Assumes average Citywide: qty (4) #2 conductors per length of trenching x 1.5 plus an additional 75 of laterals on homeowners property (includes height of buildings for loop and bond). Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 340	(1.5 x 4 x 1.15 x P_Length + 75 x OH_ServiceDrop) x UnitCost / 100	$ 25,275	
24			OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	5					
25	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	5	EA	$ 500	OH_ServiceDrop x UnitCost	$ 2,500	
26	Boundary Circuit Feeders	Assume each block has on average 3 unique circuit feeders (cable poles). Cost includes converting the boundary poles from OH to underground. Assumes $15,000 for each cable pole.	N/A	Engineer needs to adjust quantity manually.	1	EA	$ 15,000	Quantity x UnitCost	$ 15,000	
27	Intercepts	Cost to inspect and or pull new cable.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	26	EA	$ 750	0.5 x UG_ServiceDrop x UnitCost	$ 9,750	
28	OH Customer Cable Removal	Removal of customer OH power lines. Assume 75' of OH per ServiceDrop.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	5	EA	$ 250	OH_ServiceDrop x UnitCost	$ 1,250	
29	OH Cable Removal	Removal of OH power lines, does not include customer service drop OH line removal.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	1,023	CLF	$ 500	P_Length x UnitCost / 100	$ 5,115	
30	Frontage Street Power Pole Removal	Cost includes demolition and labor of street power poles, associated OH transformers, and restoration.	OH_Poles	OH_Poles is the number of distribution and stub poles found in each block that may require removal to complete the undergrounding process. This information was obtained from selecting only the respective overhead structure subtypes found in the SDG&E OverheadStructure Layer.	1	EA	$ 2,000	(OH_Poles - Alley_Poles - Backlot_Poles) x UnitCost	$ 2,000	
31	Alley Pole Removal	Cost includes demolition and labor of alley power poles, associated OH transformers, and restoration.	Alley_Poles	The Alley Pole count was obtained from the OverheadStructure layer by selecting those poles that resided along alleyways which were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	5	EA	$ 2,000	Alley_Poles x UnitCost	$ 10,000	
32	Backlot Pole Removal	Cost includes demolition and labor of power poles residing in customer backlots, associated OH transformers, and restoration.	Backlot_Poles	The Backlot Pole count was obtained from the OverheadStructure layer by selecting those poles which were 30 feet or farther from street center lines. The 30 foot distance was assumed as sufficient distance for the location of standard home backyards. The distances were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 4,000	Backlot_Poles x UnitCost	$ -	
33							25%	**Contractor's Overhead & Profit**	$ 48,333	
34							23%	**SDG&E Estimated Credit**	$ (65,265)	
35								**SDG&E Electrical Construction**	**$ 176,397**	
36								**SUB-TOTAL COST (Private, ROW, SDG&E)**	**$ 529,757**	TOTAL COST
37							15%	Construction Change Order (Budgetary Contingency)	$ 79,464	
38							12%	PMO, Program Management & Overhead (City, Consultants)	$ 73,106	
39							10%	Engineering (Consultants, Applicant Designers)	$ 60,922	
40								**(2018 Basis) TOTAL COST, Private Property + City ROW + SDG&E + Contingency + PMO + Engineering**	**$ 744,000**	

Adjust as required if your have an actual SDG&E Hard Quote -->

Adjust higher for smaller block jobs -->

Assumes Engineering is Already Completed by SDG&E -->

SUMMARY OF COSTS

41	Avg Block Cost per all effected OH & UG_ServiceDrop	$ 24,000	Private Property Construction Budget	$ 47,869	SUMMARY OF COSTS
42	Avg Block Cost Per foot of Existing OH Lines	$ 727	City ROW + SDG&E Construction Budget	$ 561,352	
43	Average Private Property Cost	$ 8,325	**PMO + Engineering + City ROW + SDG&E Construction Budget**	**$ 695,380**	

GIS Planning Block Cost Estimator

DRAFT

Little Orphan Alley

OH Lines RFS	787	XFMR_COUNT = No. of OH Transformers	3	Overhead Poles RFS	7
Service Laterals	3	CustCount = No. of Customers, (via xfmr data, includes apt.)	22	Alley Power Poles	3
UG_ServiceDrop (Houses or meters)	19			Backlot Power Poles:	0
				Street Power Poles	4

	ITEM	DESCRIPTION	ARCGIS FIELD	DESCRIPTION OF ARCGIS FIELD	QUANTITY FROM ARCGIS	UNIT	UNIT COST (W/O O&P)	COST FORMULA	COST	WORK TYPE
5	Customer Service Trenching	Average cost for all customer service trenching and conduit from curb and gutter to meter panel. Average citywide length is assumed to be 50 feet. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	CLF	$ 3,000	OH_ServiceDrop x UnitCost x 50 / 100	$ 4,500	Private Property Construction
6	Customer Paneling	Average paneling cost for all customers such as: Direct Connect, Meter Adapter, Loop & Bond, Extended Loop and Bond, and grounding. Includes material and labor costs. (Assumes bulk work.)	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 4,400	OH_ServiceDrop x UnitCost	$ 13,200	
7	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 500	OH_ServiceDrop x UnitCost	$ 1,500	
8	Customer Permits & Inspections	Building Department Fee: cost for permits and new service inspections.	OH_ServiceDrop	OH_ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 260	OH_ServiceDrop x UnitCost	$ 780	
9							25%	**Contractor's Overhead & Profit**	$ 4,995	
10								**Private Property Construction**	**$ 24,975**	
11	Public Notifications	Cost is a function of number of services customers. Includes door hangers and public meetings.	CustCount	CustCount is the total number of customers being serviced by the transformers located within each block. The information was obtained from the "CustCount" column in the SDG&E Transformer layer.	22	-	$ 125	(CustCount x UnitCost) + 2,500	$ 5,250	Right-Of-Way Construction
12	Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 11,000	1.15 x P_Length x UnitCost / 100	$ 99,556	
13	Non-Joint Trenching	Cost includes trenching and conduit work including: labor and materials for trenching, all conduit, substructure installation such as vaults, pad installations, backfill, and repairs within City streets. Assume telecommunications utilities will require their own trenching along street right-of-way.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information assumes half the length of the overall joint trenching will be used as trenching solely by other utilities.	787	CLF	$ 9,000	0.5 x P_Length x UnitCost / 100	$ 35,415	
14	Road Resurfacing	Assumes 3ft wide resurfacing patch and slurry sealing the width of the whole road. Assume new UG joint trench length is [1+(0.15+.5)] times greater than P_Length.	P_ Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 2,500	1.65 x P_ Length x Unit Cost / 100	$ 32,464	
15	SWPPP	Cost for SWPPP along new UG joint trench. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 325	1.15 x P_ Length x Unit Cost / 100	$ 2,941	
16	Traffic Control	Traffic controls plans and traffic control implementation during construction.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 200	P_ Length x Unit Cost / 100	$ 1,574	
17	Intercepts	Cost to locate, dig, place handhole or splice conduit, and restore. Assume only 50% of UG homes will require an intercept.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	19	EA	$ 1,500	0.5 x UG_ServiceDrop x UnitCost	$ 14,250	
18							25%	**Contractor's Overhead & Profit**	$ 47,862	
19								**Right-Of-Way Construction**	**$ 239,312**	
20	Pad Mounted Transformers	Typical single phase pad mounted transformer used in residential conversions; includes transformer labor and materials for installation.	XFMR_COUNT	The Transformer count is the number of transformers found within each block. The information can be found in the SDG&E Transformer layer.	3	EA	$ 17,500	XFMR_COUNT x UnitCost	$ 52,500	SDG&E Electrical Construction
21	Backbone Cabling (Primary)	Primary distribution cabling feeding the transformers. Assumes average Citywide: qty (3) #2 conductors per length of trenching. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 350	3 x 1.15x P_Length x UnitCost / 100	$ 9,503	
22	Backbone Cabling (Secondary)	Secondary distribution cabling from the transformers to common pull box. Assumes average Citywide: qty (3) #250 conductors per length of trenching x 0.8. Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 800	0.8 x 3 x 1.15 x P_Length x UnitCost / 100	$ 17,377	
23	Customer Service Cabling	Cost for the conductors and labor to pull the conductors from the common pull box to the customer meter. Assumes average Citywide: qty (4) #2 conductors per length of trenching x 1.5 plus an additional 75 of laterals on homeowners property (includes height of buildings for loop and bond). Assume new UG joint trench length is 1.15 times greater than P_Length.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 340	(1.5 x 4 x 1.15 x P_Length + 75 x OH_ServiceDrop) x UnitCost / 100	$ 19,228	
24			OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3					
25	Customer Cut-Overs	Customer cut-overs required to switch from OH to UG system. Includes material and labor costs. Joint effort between Applicant and SDG&E.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 500	OH_ServiceDrop x UnitCost	$ 1,500	
26	Boundary Circuit Feeders	Assume each block has on average 3 unique circuit feeders (cable poles). Cost includes converting the boundary poles from OH to underground. Assumes $15,000 for each cable pole.	N/A	Engineer needs to adjust quantity manually.	2	EA	$ 15,000	Quantity x UnitCost	$ 30,000	
27	Intercepts	Cost to inspect and or pull new cable.	UG_ServiceDrop	UG_ServiceDrop is the total number of UG customer service laterals.	19	EA	$ 750	0.5 x UG_ServiceDrop x UnitCost	$ 7,125	
28	OH Customer Cable Removal	Removal of customer OH power lines. Assume 75' of OH per ServiceDrop.	OH_ServiceDrop	ServiceDrop is the total number of OH customer service laterals.	3	EA	$ 250	OH_ServiceDrop x UnitCost	$ 750	
29	OH Cable Removal	Removal of OH power lines, does not include customer service drop OH line removal.	P_Length	P_Length is the footage of OH power lines bound by the defined block. This information is obtained from SDG&E PoleLine Layer.	787	CLF	$ 500	P_Length x UnitCost / 100	$ 3,935	
30	Frontage Street Power Pole Removal	Cost includes demolition and labor of street power poles, associated OH transformers, and restoration.	OH_Poles	OH_Poles is the number of distribution and stub poles found in each block that may require removal to complete the undergrounding process. This information was obtained from selecting only the respective overhead structure subtypes found in the SDG&E OverheadStructure Layer.	4	EA	$ 2,000	(OH_Poles - Alley_Poles - Backlot_Poles) x UnitCost	$ 8,000	
31	Alley Pole Removal	Cost includes demolition and labor of alley power poles, associated OH transformers, and restoration.	Alley_Poles	The Alley Pole count was obtained from the OverheadStructure layer by selecting those poles that resided along alleyways which were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	3	EA	$ 2,000	Alley_Poles x UnitCost	$ 6,000	
32	Backlot Pole Removal	Cost includes demolition and labor of power poles residing in customer backlots, associated OH transformers, and restoration.	Backlot_Poles	The Backlot Pole count was obtained from the OverheadStructure layer by selecting those poles which were 30 feet or farther from street center lines. The 30 foot distance was assumed as sufficient distance for the location of standard home backyards. The distances were delineated from the ROADS_ALL Layer found in the City of San Diego's SANDAG website.	0	EA	$ 4,000	Backlot_Poles x UnitCost	$ -	
33							25%	**Contractor's Overhead & Profit**	$ 38,980	
34							21%	**SDG&E Estimated Credit** (Adjust as required if your have an actual SDG&E Hard Quote -->)	$ (48,367)	
35								**SDG&E Electrical Construction**	**$ 146,531**	
36								**SUB-TOTAL COST (Private, ROW, SDG&E)**	**$ 410,818**	TOTAL COST
37							15%	Construction Change Order (Budgetary Contingency)	$ 61,623	
38							12%	PMO, Program Management & Overhead (City, Consultants) (Adjust higher for smaller block jobs -->)	$ 56,693	
39							10%	Engineering (Consultants, Applicant Designers) (Assumes Engineering is Already Completed by SDG&E -->)	$ 47,244	
40								**(2018 Basis) TOTAL COST, Private Property + City ROW + SDG&E + Contingency + PMO + Engineer**	**$ 577,000**	

SUMMARY OF COSTS

41	Avg Block Cost per all effected OH & UG_ServiceDrop	$ 26,227		Private Property Construction Budget	$ 28,721	SUMMARY OF COSTS
42	Avg Block Cost Per foot of Existing OH Lines	$ 733		City ROW + SDG&E Construction Budget	$ 443,720	
43	Average Private Property Cost	$ 8,325		**PMO + Engineering + City ROW + SDG&E Construction Budget**	**$ 547,657**	

APPENDIX H

Pilot Program Status

POTENTIAL PILOT PROJECTS *(DRAFT)*

BLOCK NO.	PROJECT NAME	APPLICANT	RULE	(NO.) OF POLES				(FEET) OF O/H		(NO.)				(NO.) OF PROPERTIES LEFT	NEW SERVICE LATERALS		(NO.) OF INTERCEPT LOCATIONS	UTILITY EASEMENTS		BUDGET					POTENTIAL ENVIRONMENTAL ISSUES
												EXISTING									CITY				
				EXIST	RFS	NEW	NET REMAINING AFTER CONV	EXIST	RFS	AFFECTED PROP	AFFECTED METERS	U/G	O/H	NOT U/G	NO	PARTICIPANT FORMS		REQ'D	OBTAINED	PRIVATE	ROW	SDG&E	PMO + Eng.	TOTAL (not including PRIVATE)	
1	Ocean Front 25th to 27th	David Doyle	20B	10	6	1	5	902	774	29	13	26	3	0	3	0	12	1	0	$28,721	$279,931	$173,167	$106,000	$560,000	NONE
2	Ocean Front 21st to 23rd	Brian Church	20C	6	2	0	4	437	230	12	3	7	5	5	0	0	4	0	N/A	$0	$84,636	$68,941	$33,787	$188,000	NONE
3	Ocean Front 20th to 22nd Street	Rich Logiurato	20B	10	4	0	6	680	342	28	16	21	7	1	6	0	8	3	1	$57,443	$138,500	$140,614	$74,042	$354,000	NONE
4	Stratford Court & Penny Lane	Gerald Hoffmeister	20B	9	6	1	4	1023	1023	31	11	26	5	0	5	5	8	1	0	$47,869	$358,495	$202,857	$134,028	$696,000	NONE
5	Little Orphan Alley	Dianne Reppucci	20B	10	7	2	5	956	787	24	27	19	5	2	3	0	5	1	0	$28,721	$275,209	$168,511	$103,937	$548,000	POTENTIAL

Based on 8/3/2017 SDG&E Plot ***DRAFT***

25th to 27th on Ocean Front					New Service Lateral	Participation Forms	Permit To Enter	NOTES
ADDRESS	O/H	U/G	METER	CUTOVERS				
29	**3**	**26**	**25**	**13**	**3**			**Item 33, 3313 TC SEC, assumed it is existing. NEEDS TO BE RE-DESIGNED, POTENTIAL NEW CROSS ARM EASEMENT.**
121		1	1					
2622		1	1	1				
2618	1		1	1	1			
2614	1		1	1	1			
2610		1	1	1				
2606		1	1	1				
2600		1	1					
131		1	1					
L2618		1						
2614.5		1	1	1				
2601		1	1					
146		1	1					
2528		1	1	1				
2522	1		1	1	1			**Potential issues with homeowner compliance.**
2514		1	1	1				
2508		1	1	1				
2502		1	1	1				
2525		1	1					
137		1	1					
L34.1		1						
L34.2		1						
L34.3		1						
140		1	1	1				
2430		1	1					
2418		1	1					
123		1	1	1				
131		1	1					
145		1	1					
153		1	1					

Based on 7/20/2018 SDG&E Plot ***DRAFT***

Ocean Front from 21st to 23rd					New Service Lateral	Participation Forms	Permit To Enter	NOTES
ADDRESS	O/H	U/G	METER	CUTOVERS				
12	**5**	**7**	**12**	**3**	**0**			Item 14 intercept will effect (7) properties outside the block: 136, 144, 141, 143, 2122, 2120, 2112
2222		1	1					
2220		1	1	1				
2212	1		1	**0**				**This property should be U/G as part of this project but is currently not included in the conversion.**
2204		1	1					
125	1		1	**0**				**This property should be U/G as part of this project but is currently not included in the conversion.**
2211		1	1					
2124		1	1	1				
2118	1		1	**0**				**This property should be U/G as part of this project but is currently not included in the conversion.**
2112		1	1	1				
2102	1		1	**0**				**This property should be U/G as part of this project but is currently not included in the conversion.**
2125	1		1	**0**				**This property should be U/G as part of this project but is currently not included in the conversion.**
2111		1	1					

Based on 12/31/2018 SDG&E Plot ***DRAFT***

Ocean Front 20th to 22nd Street					New Service Lateral	Participation Forms	Permit To Enter	NOTES
ADDRESS	O/H	U/G	METER	CUTOVERS				
28	**7**	**21**	**28**	**16**	**6**			**Homeowners for L2040, 2036, 2030, 2032, 2020, and 2018 need to coordinate UG service.**
2112		1	1					
2102	1		1	**0**	**0**			**This property should be U/G as part of this project but is currently not included in the conversion. 21st & Ocean Front**
2111		1	1					Under Construction.
130		1	1	1				
2102	1		1	1	1			Coast & 21st
2135	1		1	**0**	**0**			**This property should be U/G as part of this project but is currently not included in the conversion.**
2050		1	1					
2048		1	1	1	1			Under Construction.
2040		1	1					
L2040		1						GARAGE. **(Need Easement)**
2034		1	1	1				
L2034		1						GARAGE.
2028		1	1	1				
L2028		1						GARAGE.
2024		1	1	1				
2020		1	1	1				
2016		1	1	1				
2008		1	1	1				
2004		1	1					
131		1	1					
141	1		1	1	1			Lot 141 and 145 have common service lateral.
145			1	1				
2046		1	1					Lot 2046 and 2044 have common service lateral.
2044		1	1					
2036	1		1	1	1			**Need Easement.**
2030	1		1	1	1			Lot 2030 and 2032 have common service lateral. **Need Easement.**
2032			1	1				
2020	1		1	1	1			Lot 2020 and 2018 have common service lateral. **Need Easement.**
2018			1	1				
2014		1	1					
2004		1	1					

Based on 5/31/2018 SDG&E Plot ***DRAFT***

Stratford Court & Penny Lane					New Service Lateral	Participant Forms	Permit To Enter	NOTES
ADDRESS	O/H	U/G	METER	CUTOVERS				
31	5	26	28	11	5	0	0	Confirm if the pole at the corner of Penny Lane and Statford is being demolished? It does not show up on the SDG&E plans. Also, who is paying for the work on 10th street east of Stratford Ct associated with the construction at 220.
101		1	1			Yes		
107		1	1			Yes		
111		1	1			Yes		
119		1	1	1		Yes		
121		1	1	1				
123		1	1	1		Yes		
125		1	1	1				
137		1	1			Yes		
149		1	1			Yes		
151		1	?					
100		1	1			Yes		
120		1	1			Yes		
128.5	1		1	1	1	Yes		
128	1		1	1	1	Yes		
138		1	1	1		Yes		**Need Easement.**
146		1	1	1		Yes		Both meters are located at 146.
144		1	1			Yes		
152		1	1					Currently under re-design so it will not need an Easement.
158		1	1			Yes		
1010	1		1	1	1	Yes	Yes	Fix address on SDG&E Plans, they are shown incorrectly, 1010 & 1012 need to flip.
1012	1		1	1	1	Yes	Yes	Fix address on SDG&E Plans, they are shown incorrectly, 1010 & 1012 need to flip.
1047		1	1			Yes		
1035		1	1			Yes		
219		1	?			Yes		
217		1	1					
227		1	?					At Penny Lane.
225		1	1					
1023	1		1	1	1	Yes		
1005		1	1			Yes		
234		1	1			Yes		
220		1	1			Yes		This is currently under construction and is currently OH. But once construction is complete, it will be classified as UG.
150						Yes		Confirm if they are impacted since they have a participant form signed.
110						Yes		Confirm if they are impacted since they have a participant form signed. (Need to locate)
215		1	1					
223		1	1					A future stub outs is shown at this location, but I assume it is actually for 227.
221		1	1					
227	1		1	0	0	1		At 10th St. **This property should be U/G as part of this project but is currently not included in the conversion.**
233		1	1					
231		1	1					
944		1	1					
1050	1		1	0	0			**This property should be U/G as part of this project but is currently not included in the conversion.**
1030	1		1	0	0			Only future stub outs are provided. Both meters are located at 1050.

Based on 1/31/2018 SDG&E Plot ***DRAFT***

Little Orphan Alley					New Service Lateral	Participation Forms	Permit To Enter	NOTES
ADDRESS	O/H	U/G	METER	CUTOVERS				
24	**5**	**19**	**25**	**27**	**3**			Item 13, possible environmental issues, also requires an easement ADJACENT 111.
113	1		1	1	1			Meters for 113 & 115 are located at 115.
115			1	1				
119		1	1	1				
123		1	1	1				
129	1		1	1	1			Meters for 129 & 131 are located at 131.
131			1	1				
143A		1	1	1				Meters for 143A & 143B are located at 143B.
143B		1	1	1				
151		1	1	1				Meters for 151 & 152 are located at 152.
152		1	1	1				**Address shown as 151.5 on SDG&E Plans should be address 152.** Meters for 151 & 152 are located at 152.
730		1	1	1				**Fix address on SDG&E Plans, they are shown incorrectly, 750 & 730 need to flip.**
750		1	1	1				**Fix address on SDG&E Plans, they are shown incorrectly, 750 & 730 need to flip.**
111		1	1	1				Meters for 111 & 110 are located at 111.
110		1	1	1				
118		1	1	1				
120		1	1	1				
128		1	1	1				Meters for 128 & 126 are located at 128.
126		1	1	1				
134		1	1	1				
136		1	1	1				
140		1	1	1				
152		1	1	1				
154		1	1	1				
156	1		1	1	1			It appears that private property work on 156 and 158 need to be coordinated. Combined service lateral for 156 & 158. Meters loacted at 156.
158			1	1				
703	1		?	1	**0**			**This property should be U/G as part of this project but is currently not included in the conversion.**
639	1		?	1	**0**			**This property should be U/G as part of this project but is currently not included in the conversion.**

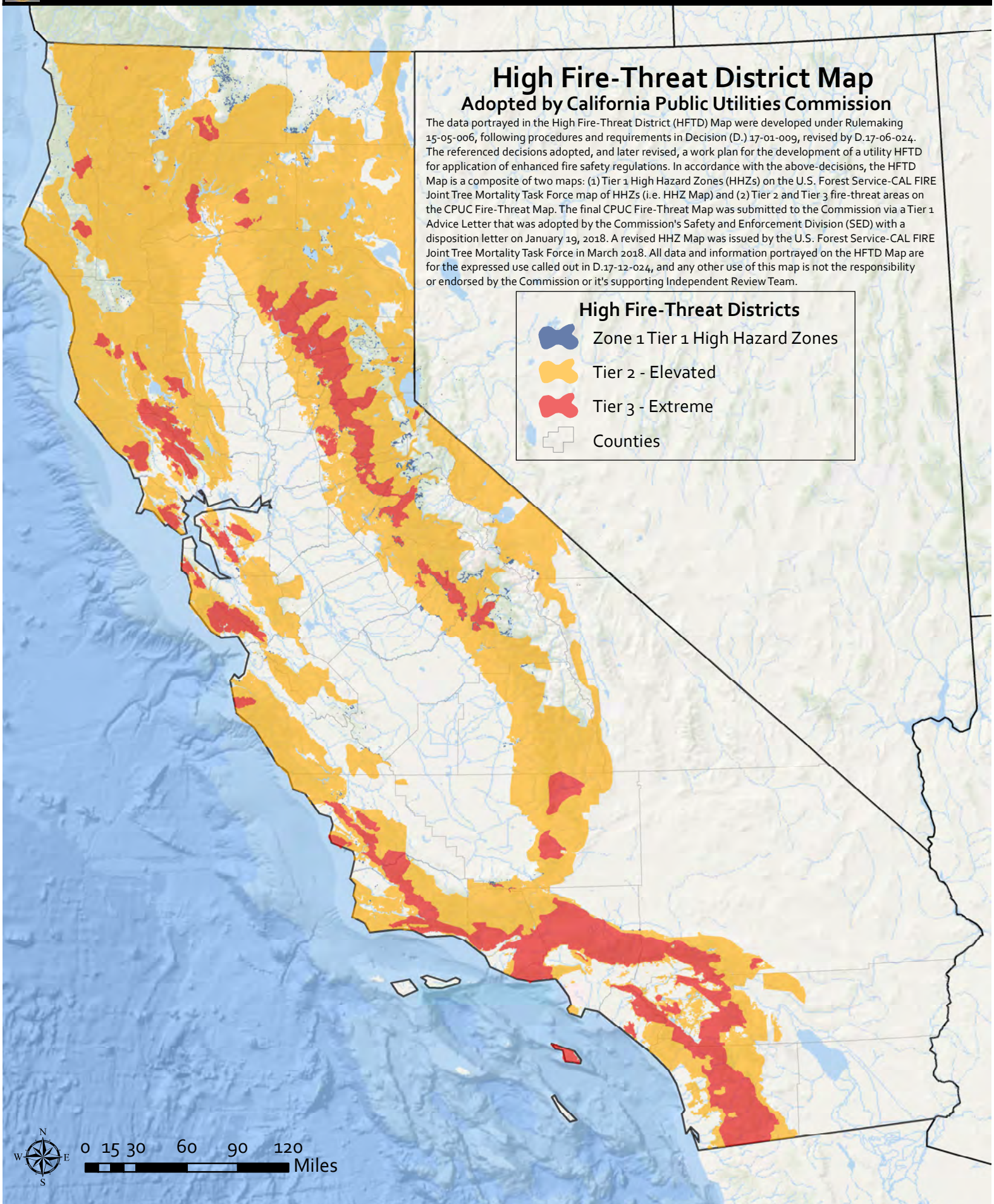
APPENDIX I

CPUC Fire Threat District Map

High Fire-Threat District Map

Adopted by California Public Utilities Commission

The data portrayed in the High Fire-Threat District (HFTD) Map were developed under Rulemaking 15-05-006, following procedures and requirements in Decision (D.) 17-01-009, revised by D.17-06-024. The referenced decisions adopted, and later revised, a work plan for the development of a utility HFTD for application of enhanced fire safety regulations. In accordance with the above-decisions, the HFTD Map is a composite of two maps: (1) Tier 1 High Hazard Zones (HHZs) on the U.S. Forest Service-CAL FIRE Joint Tree Mortality Task Force map of HHZs (i.e. HHZ Map) and (2) Tier 2 and Tier 3 fire-threat areas on the CPUC Fire-Threat Map. The final CPUC Fire-Threat Map was submitted to the Commission via a Tier 1 Advice Letter that was adopted by the Commission's Safety and Enforcement Division (SED) with a disposition letter on January 19, 2018. A revised HHZ Map was issued by the U.S. Forest Service-CAL FIRE Joint Tree Mortality Task Force in March 2018. All data and information portrayed on the HFTD Map are for the expressed use called out in D.17-12-024, and any other use of this map is not the responsibility or endorsed by the Commission or it's supporting Independent Review Team.

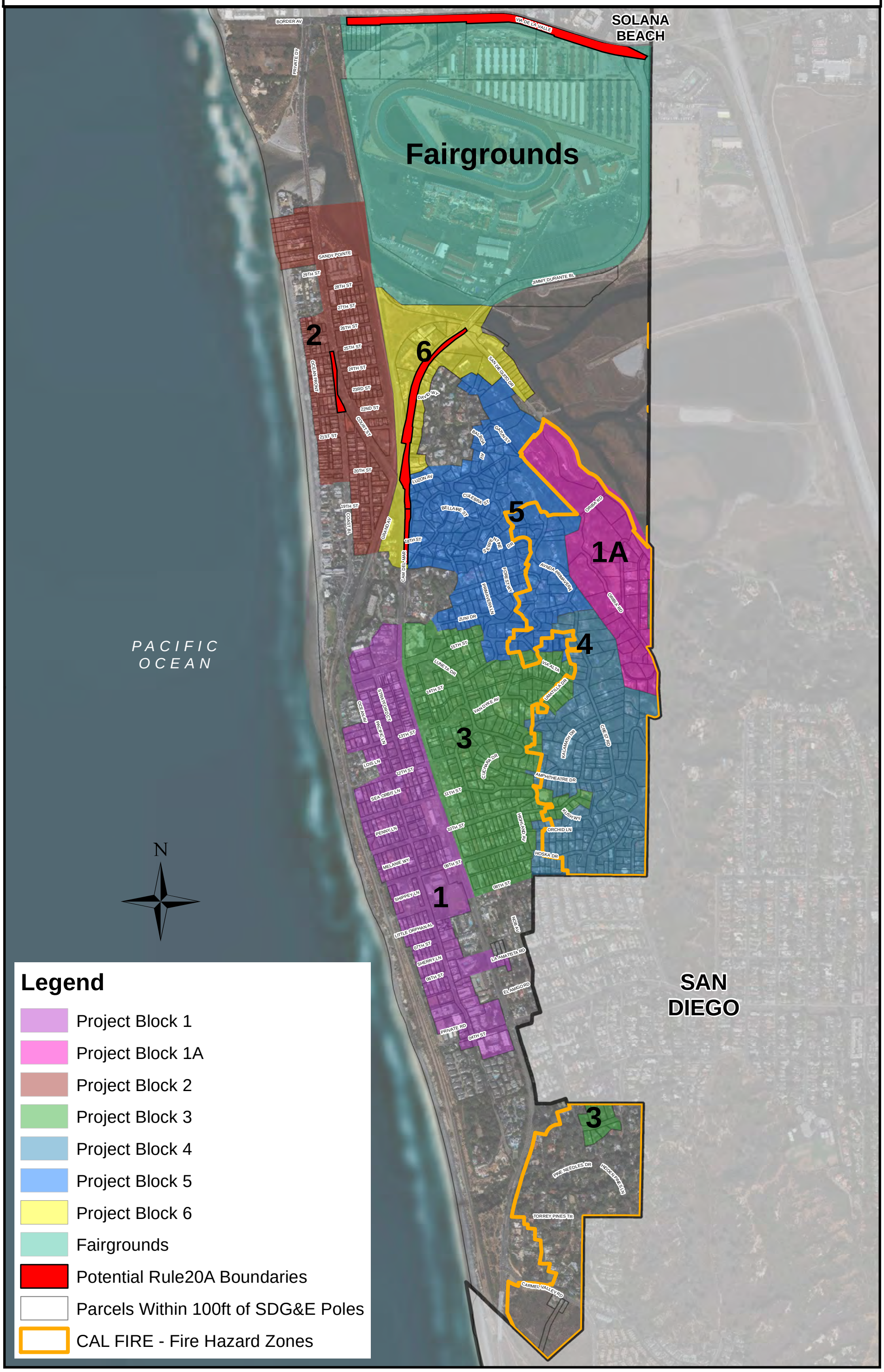


For more information about the data and map depicted,
or other matters related to Utility wildfire safety,
please contact Terrie Prosper at Terrie.Prosper@cpuc.ca.gov
Basemap sourced from ESRI (World Oceans).

APPENDIX J

Program Project Block Layout Alternatives

Potential Project Blocks - Layout 1A

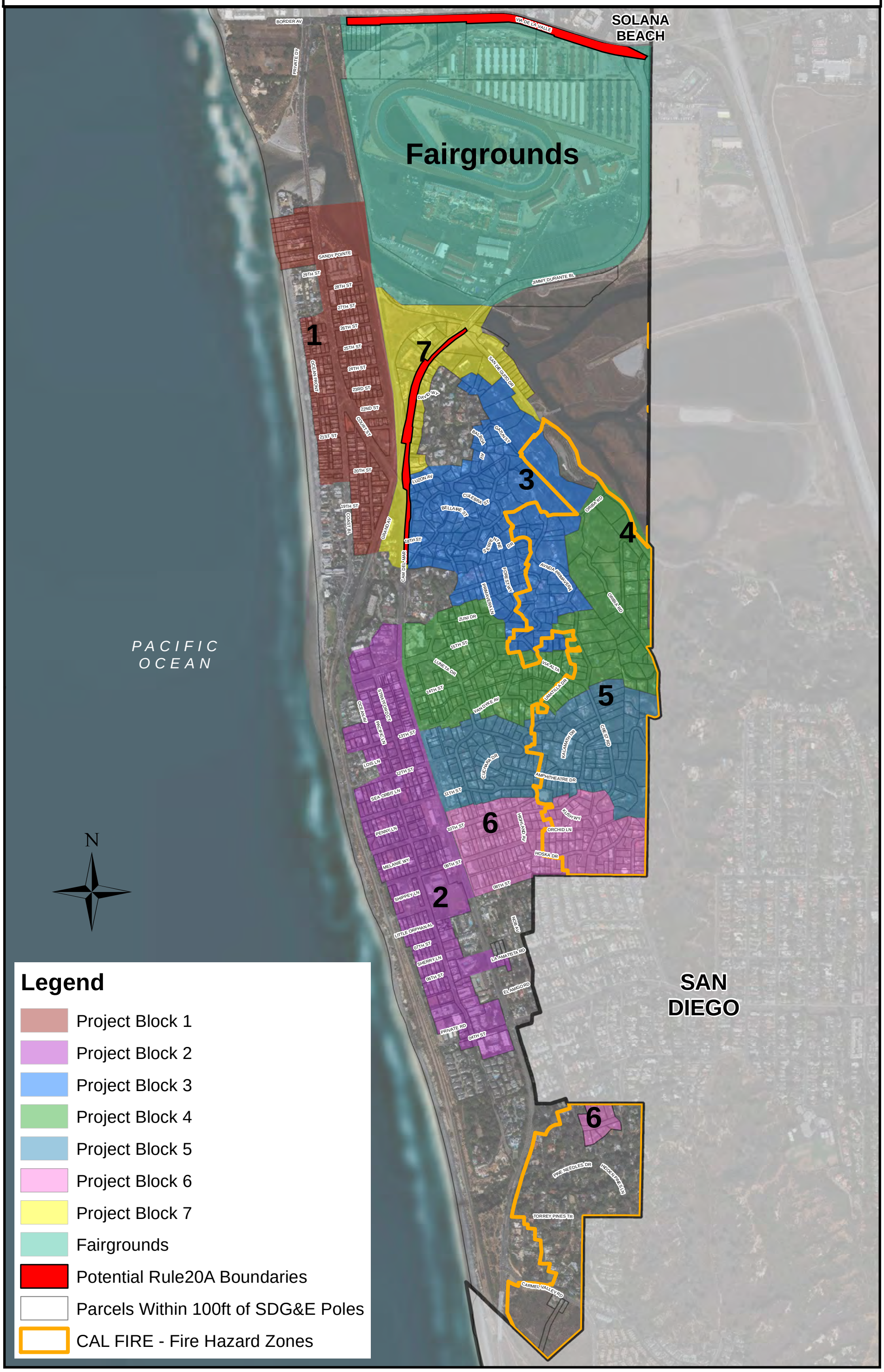


Legend

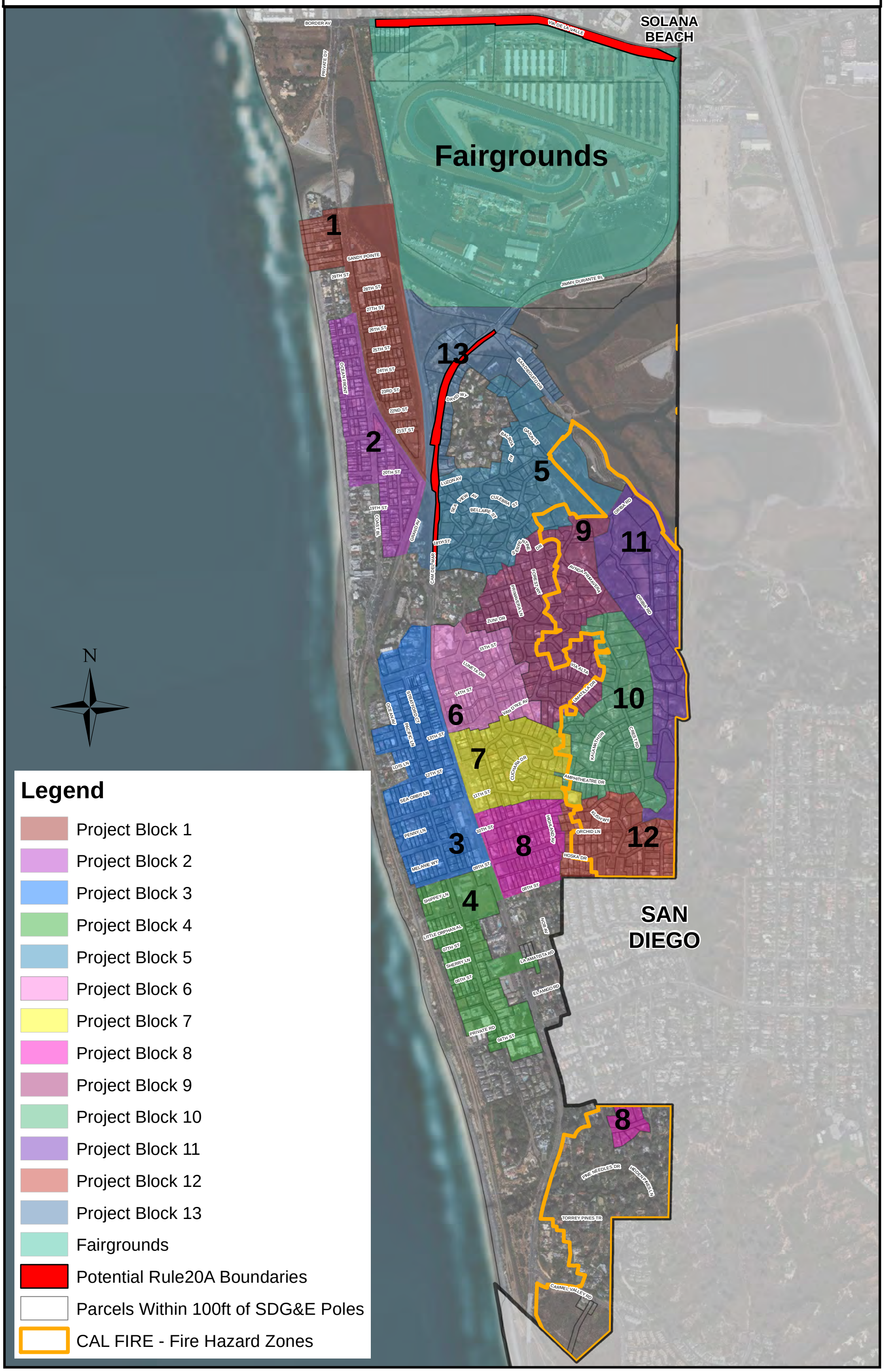
- Project Block 1
- Project Block 1A
- Project Block 2
- Project Block 3
- Project Block 4
- Project Block 5
- Project Block 6
- Fairgrounds
- Potential Rule20A Boundaries
- Parcels Within 100ft of SDG&E Poles
- CAL FIRE - Fire Hazard Zones

Potential Project Blocks - Layout 1

Potential Project Blocks - Layout 2



Potential Project Blocks - Layout 3



Legend

- Project Block 1
- Project Block 2
- Project Block 3
- Project Block 4
- Project Block 5
- Project Block 6
- Project Block 7
- Project Block 8
- Project Block 9
- Project Block 10
- Project Block 11
- Project Block 12
- Project Block 13
- Fairgrounds
- Potential Rule20A Boundaries
- Parcels Within 100ft of SDG&E Poles
- CAL FIRE - Fire Hazard Zones

City of Del Mar Project Block Boundaries

Following is a list of recommendations developed by the Undergrounding Project Advisory Committee (UPAC) which have been used to develop the recommended Project Delivery Plan, including the blocks and prioritization for moving forward.

- Despite the high forecasted costs, the Undergrounding Project (UP) must remain a City Council high priority project and continue to completion.
- The City should remain committed to prioritizing and eventually undergrounding all overhead utilities.
- The City should cover all costs in the public right-of-way and on City property.
- Private property owners and other government agencies should cover all the costs associated with the undergrounding project that is on their property.
- The City should limit expenditures on the UP to using Measure Q money and do the best the City can with those funds, even if it means the City cannot underground its entire jurisdiction as fast as the citizens wish.
- With regard to allowing private parties/neighborhoods to contribute to the costs to accelerate their areas, subject to the prioritization rules, private parties/neighborhoods should be encouraged to organize and prepare to meet the private property project requirements, and contribute to the neighborhood's costs in order to avoid delays from City project moving forward.

Grouping Criteria

- The guiding principles for developing the project area groupings, such as size, selection, defining projects, and prioritizing projects should be:
    - Use location, circuitry, and efficiency for grouping poles into discrete projects
    - Use available money for sizing projects
    - Separate 20A projects
    - Separate Fairgrounds and other government agencies as private service laterals
    - Separate San Dieguito Lagoon SDG&E Projects
    - Use Cal Fire maps to identify Fire Zone Areas
    - Density/Zoning

Prioritization

- The prioritization process should be streamlined and limited to two criteria, customer density and fire safety.
- For each Block, the criteria is defined as follows:
    - Customer Density = Meter quantity/pole quantity
    - Fire Safety = Meter quantity (in fire zone) / Pole quantity (in fire zone)
    - Weights are customer density (75%) and Fire Safety (25%)
- The Area identified as Block X was identified as a top priority based on 1) it is in the CAL Fire hazard Zone, 2) this area is the closest to a designated preserve which has limitations to annual fuel management efforts and poses a higher potential risk than other underground areas. 3) there are poles and lines that are located in close proximity to fuel (protected vegetation).; 4) there is constrained access in and out of this area
- Rule 20A areas should be blocked out separately. Camino del Mar/Jimmy Durante Boulevard going north should have a higher funding priority than Via de la Valle.
    - Apply for SDG&E five-year allocation of 20A funding now for the CDM/JDB project going north.
- Do not proceed separately/early with the five projects initiated by private neighborhoods. Consider bundling them individually or together as part of the citywide projects and their associated priority. They should be reviewed and addressed as early as project efficiency would allow.

Project Financing

- Begin with designing and bidding pilot project to gain a better understanding of what the actual project costs will be.
- Consider paying cash for design fees and borrowing only for construction costs.

Reimbursement for Past Privately-Funded Projects

- UPAC recommends not reimbursing for past work for privately-funded projects and assessment districts.
    - With regard to reimbursement of work completed in the past by the private properties, there are substantial legal and practical issues related to reimbursing property owners who previously paid for undergrounding, having done so in the past with no expectation of reimbursement or obligation by the City to reimburse.
    - Reimbursement of any costs for private undergrounding work (i.e., for private laterals) is particularly problematic, as any payment for private lateral work – reimbursement or in the future – is for private benefit versus public benefit and the industry standard is that property owners are responsible for their lateral work.

For each Block, the criteria are defined as follows:

1. Customer Density = Meter Quantity / Pole Quantity (a measure of the services still connected to poles)
2. Fire Safety = Meter Quantity (in fire zone) / Pole Quantity (in fire zone)
3. Weights are Customer Density, 75% and Fire Safety, 25%
4. The results of (1) and (2) are multiplied by the weights, added together, and normalized to be ranked.

The Customer Density calculation is based on the number of meters with overhead service laterals that are directly connected to the poles in each Block. The number of meters is estimated from the GIS overhead transformer data provided by SDG&E. The SDG&E transformer data also includes surface mount transformers within or in the vicinity of each Block that service poles that have been already converted. The Project Team has checked the meter data against sample field surveys of the units and found the meter data to be relatively reliable. Staff has also obtained the number of dwelling units estimated from the SANDAG information and found that when compared citywide, although there is variation between the number of meters and the number of units among the Blocks, the total number of dwelling units citywide comes very close to the total number of meters with 97% accuracy. Using the estimated data from SDG&E meter information, the Blocks have been ranked based on the formula above. A table with this information is included as follows. Each Block is labeled consistent with its rank.

Block	No. of Total Properties Including Taxable Parcels within Boundary (SANDAG)	No. of Meters Served by OH Transformers within Boundary	No. of Meters Served by OH and At-Grade Transformers within Boundary	No. of Total Properties Including Taxable Parcels within Cal Fire Zone (SANDAG)	No. of Meters Served by OH Transformers within Cal Fire Zone	No. of Meters Served by ALL Transformers within Cal Fire Zone	Taxable Properties (SANDAG)	OH Transformers (SDG&E)	All Transformers (SDG&E)	Total Dwelling Units (SANDAG)
1A	265	265	473	0	0	0	1	2	1	1
1B	175	229	253	0	0	0	2	1	2	2
2	340	317	498	0	0	0	3	3	3	3
3	295	291	460	47	36	36	4	4	4	4
4	179	153	160	174	133	140	5	5	5	5
5	224	198	210	56	36	36	6	6	6	6
6	72	39	77	0	0	0	8	8	7	8
X	43	29	29	43	29	29	7	7	8	7
	1593	1521	2160	320	234	241				


Ranch & Coast Properties
Grand Ave
Camino Del Mar
Seaview Ave
Grand Ave
S21
P60727
P60726
P980007
Approx. 250 feet
EXISTING


Attachment E
Ranch & Coast Properties
Grand Ave
Camino Del Mar
Seaview Ave
Grand Ave
S21
P60727
New Stub Pole
FUTURE

	Pre-April 15th City Council Meeting	Community At-Large Post April 15th City Council Meeting (Assuming Authorization to Proceed with Design of First Phase Block(s))	Targeted Communication to First Phase Block(s) IMMEDIATE	Targeted Communication to First Phase Block(s) ON-GOING THRU DESIGN
Audience	Community At-Large	Community At-Large	Block Specific	Block Specific
Message	Communication to City at-large explaining the City Council will receive a report on the Undergrounding Project on April 15th based on months' of UPAC work and review of the Lee & Ro Project Delivery Plan, consideraton of financing scenarios for Measure Q, and potential timeline for overall project completion. Include a link to the staff report. Explain the recommended action is for the City to authorize proceeding with design of the first phase block(s). High-level overview of next steps if Council gives that direction, including proceeding with a more detailed communications plan.	Communication to the City at-large explaining what the City Council approved at the meeting on April 15th and what the next steps will be. On project web page, provide detailed information for: 1) Overview of the planned approach and why it was selected 2) How the phasing is envisioned to work 3) Financing strategy 4) How blocks were determined? 5) Map showing blocks 5) Prioritization criteria - what they are 6) What to expect for timing as to when each neighborhood will be done	Initial outreach; send right away ASAP post-April 15th as a preliminary communication piece on what to expect. "The City Council has given direction to proceed. Your block is first for design. Here's a sneak peek on timing and what to expect. We are putting together a detailed plan and will contact you ASAP with additional detailed information on next steps and timeline. In the interim, please subscribe for email updates." High level overview of project timeline and private property owner responsbilities. Explain the City will provide detailed information and resources to help the property owners. Include that we are looking for volunteers to be block captains/ambassadors	Provide detailed specific information for property owners on process, timing, their responsibilities, resources, etc so there is clear informaton on how to navigate moving forward. Will be provided in detail on an on-going basis as the project proceeds through design and into construction.
Communication Tools/Methods	1) City web site and e-blast to those subscribed for general new updates. 2) E-blast to those subscribed for email updates on UP.	1) City web site and e-blast to those subscribed for general new updates. 2) E-blast to those subscribed for email updates on UP. 3) Press release 4) Social media 5) Update FAQs and resources on City web site 6) Not immediate (but maybe late spring 2019) - Work with DMTV to do a short informational overview video. ** Should we do a general overview project newsletter explaining what's coming that would be mailed to property owners and residents citywide?	Set-up a block specific email distribution list. First contact could be a postcard or flyer (including the UPAC logo) with a branded look that will be eye-catching. UPAC Communications Subcomittee has requested that this be delivered by mail and door-to-door.	1) Identify block captains/ambassadors within each of the first phase blocks. Organize a pre-meeting/orientation meeting for block ambassadors to provide a project overview. 2) Prepare detailed information for private property owners on what they need to know (like a guide book) with all the pertinent details, contact info, timing, etc. Include specific info for different property owner situations, such as parcels that are already undergrounded, have overhead telecom only, or have both electricity and telecom overhead. 2) Organize neighborhood block meetings to go over specific details on timeline, what to expect, what they need to do on their private property, provide resources, etc. 3) Offer remote webinar-style meetings for off-site property owners. 4) Lee & Ro and their subconsultant team - Establish a database of property owners and residents within each block to track communication and details associated with each property, including status Establish an email list for each block. Initial contact should be an official mailing to property owners and residents with broad, preliminary communication on what to expect and next steps. Hold a neighborhood meeting. Follow-up communication will be more tailored and specific. May consider duing periodic mailings (like a project newsletter) to update on the overall project status.

Other Action Items to Discuss with Lee & Ro and Coordinate for the design process:

1) Do we want to create a list of pre-qualified contractors for completing service lateral work on private property? If so, what would the process be for a pre-qualification process? At what point in the process does that need to be ready?

2) Lee & Ro needs to create a more detailed timeline that explains and identifies the timing milestones during the design phase for obtaining SDG&E required easements, City right-of-entry forms, SDG&E consent forms.

3) Prepare a handout that explains the process for private lateral work, including the City building permit process and timing.

4) Find out from Lee & Ro when the meter panel inspections/upgrades need to happen. Include details on the requirements and process in materials for property owners.