

Utility Undergrounding Advisory Committee

Report and Recommendations

March 23, 2015



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I. Executive Summary

The Utility Undergrounding Advisory Committee was a collaborative effort between community members, SDG&E, AT&T, Cox Communications, Time Warner Cable, and the City. The Committee held nine public meetings from June 2014 to February 2015. The Committee reached consensus on a number of recommendations, including: improving public notices, creating a community input process, and formulating above ground equipment design options. Implementation of these recommendations will facilitate the City's management of the program, minimize community concerns, and improve communication among all stakeholders.

II. Recommendations

The Committee's work and recommendations are presented in five parts.

- Attachment A: Recommendations
- Attachment B: Utilities Undergrounding Community Process (Surcharge Program)
- Attachment C: Design Options for Utility Above Ground Equipment
- Attachment D: Issues Needing Further Discussion and Resolution
- Attachment E: Legend of City of San Diego and Utility Companies Above Ground Equipment

III. Process

On June 13, 2012, the City Council's Land Use and Housing Committee heard from numerous members of the public about the impacts of utility boxes on the character of San Diego's neighborhoods. To address these impacts LU&H sought formation of an advisory committee made up of citizens and the utility companies, and supported by City staff. The committee would be tasked with exploring ways to potentially mitigate concerns related to above ground equipment (boxes), as well as consider options for greater coordination within the City's Utilities Undergrounding Program.

The City Council empanelled the Utility Undergrounding Advisory Committee by Resolution R-308721 adopted February 12, 2014 which defined its purpose as:

"Undergrounding Committee shall advise the City Council on (1) how the City may better implement the program to minimize community concerns related to the installation of utility equipment, including above ground utility boxes, while undertaking undergrounding projects, and (2) how the City, community, and utility companies could improve communication in implementing the goals of the Program."

The resolution also set the scope, timeline, and the community appointments. Community members were appointed by Council action on May 13, 2014. One community member subsequently withdrew and a replacement was appointed. The utility company seats were filled at the discretion of each utility company (Two each for SDG&E, AT&T, Cox Communications and one for Time Warner Cable.) The Committee meetings were structured as public hearings conforming to the Brown Act, with public testimony, and convened in the Council Committee Room. The Committee set a meeting schedule of the third Friday of the month at 8:30 am. The first three meetings were devoted to education as each stakeholder group—community, utility companies, and city—took one meeting each to offer their perspective on the task before the Committee. The subsequent five meetings were roundtable discussions to identify solutions, build consensus, and draft the report. The ninth and final meeting was for adoption of this report which was passed by unanimous vote.

Committee Members:

- | | |
|--|------------------------------------|
| 1. Joe LaCava, Chair (D1) | |
| 2. Ignacio De La Torre, AT&T | |
| 3. Ileana Engel, Cox Communications ¹ | |
| 4. Joe Gabaldon, Time Warner Cable | |
| 5. Vicki Granowitz, North Park (D3) | |
| 6. Tom Hebrank, Kensington(D9) | |
| 7. Bobby Johnson(D8) | |
| | 8. Breandan Lee, AT&T |
| | 9. David Moty, Talmadge (D9) |
| | 10. John Ready, Mission Beach (D2) |
| | 11. Don Taylor, Kensington (D9) |
| | 12. Ian Stewart, SDG&E |
| | 13. Kathy Valdivia, SDG&E |

Utility company representatives were assisted by:

Christine Moore, AT&T	Rick Gardner, SDG&E
Chuck Baker, Cox Communications	Tom Scanlan, Time Warner Cable
Joe Michael Shaffer, Cox Communications	Randall Starkey, Time Warner Cable
Joe DeCarli, Cox Communications	Ray Harns, Time Warner Cable
Jonathan Woldemariam, SDG&E	

Council Offices Staffing the Committee:

Molly Chase, Council District 3
Ralph Dimarucut, Council District 9

City Staff, Utilities Undergrounding Program:

Hasan Yousef
Mario Reyes

IV. Acknowledgements

The Committee wishes to thank the Mayor and City Council for understanding the importance of this issue to the neighborhoods and to the utility companies. We recognize Councilmember Todd Gloria (District 3) and Councilmember Marti Emerald (District 9) for their leadership on this issue. This effort would not have been possible without the robust participation by all the Committee members, including: the utility companies, the volunteer community members, City staff from the Utilities Undergrounding Program, and Councilmember representatives. A special thanks to the many community leaders who have tirelessly pursued this matter over the years to protect and enhance their neighborhoods.

¹Cox Communications did not exercise their option to seat a second representative.

V. Prior Work

The Committee recognizes that both the City of San Diego Utilities Undergrounding Program (UUP) and the utility companies have been working together to address community concerns as expressed over the past several years. The Committee's work built on those improvements to the process and technical elements, including:

1. UUP and Utility Companies: In their ongoing efforts to streamline the undergrounding process and in preparation for this committee, the City and utility companies held four workshops to better align the process by proactively walking through the existing conversion planning and notification processes and identifying possible areas of improvement.
2. UUP: Recently expanded public participation process to include a meeting with the undergrounding district prior to the start of design (via the community planning group) as well as a meeting prior to the start of construction which allows an opportunity to refine the location of above ground equipment.
3. UUP: The City of San Diego's newly created Communications Department will provide the Utilities Undergrounding Program with the support it needs to improve communications with the public and other stakeholders. The City also improved its website and is developing more informative public notice mailers.
4. UUP: Giving the neighborhood/undergrounding district choices as to whether above ground equipment should be clustered or dispersed; whether to locate it near common property lines or mid-lot; whether to place it closer to or further from the curb; or, whether to place on private property if a voluntary easement is offered.
5. Time Warner Cable (TWC): In the past, TWC had used two-port taps. TWC has modified its design and construction practices to use more four-port and eight-port taps. While TWC still uses two-port taps when necessary, the result is a reduction in the number of pedestals installed in the neighborhoods.
6. Cox Communications: Over the last two years, Cox Communications reviewed its existing underground conversion process related to the Surcharge funded projects. In its review, it was determined that in some cases, the amount of pedestals to be installed could be reduced while still maintaining the reliability of the network. Additionally, there was a need to develop specific "Conversion Methods and Procedures" to better enhance the technical and aesthetic placement of pedestals and supporting equipment.
7. AT&T: AT&T is using a re-engineered vault-mounted pedestal that can accommodate up to twice the number of serving addresses over the prior design. This has resulted in a significant reduction of pedestal placements and improved capacity performance.

8. SDG&E: For a limited time early in this process, SDG&E will be open to community input on the placement of larger facilities associated with overall circuit operation and reliability.

VI. Other Issues

In the course of the Committee's work, several issues were identified as outside the Committee's scope and purpose. The Committee felt these issues should not be forgotten and has documented them for the City to address in a subsequent process. (See Attachment D: *Issues Needing Further Discussion and Resolution.*)

ATTACHMENT A

Recommendations

Recommendations

1. Consistent Language

Review and reconcile official UUP documents to ensure consistent language. These documents include but are not limited to: Council Policy 600-08, Underground Utilities Procedural Ordinance, Utilities Undergrounding Program website, and public notices. (*Note: These revisions to be done by City and UUP staff. Documents should be updated through an open process that includes the utility companies and the public.*)

2. Utilities Undergrounding Program Website

Expand the UUP website to include:

- a. Up-to-date program and project information
- b. Illustration of utility company above ground equipment and City owned equipment (*See Attachment E: Legend of Utility and City of San Diego Above Ground Equipment*)
- c. Graphic depiction of where above ground equipment may be located: that is, clustered versus dispersed, opposite sides of streets, adjacent to property lines versus mid-lot, etc.
- d. Design Options (*See Attachment C: Design Options for Utility Above Ground Equipment*)
- e. Flow chart with narrative of how the community participates in the design process. (*See Attachment B: Utilities Undergrounding Community Process (Surcharge Program)*)

3. Public Information Support

The Utilities Undergrounding Program's communications with the public must have a dedicated and adequate level of support from the Communications Department and the Program's staff to ensure its effectiveness. This should include a liaison between the public and the utility companies as well as assistance in organizing public forums.

4. Public Notice Mailers

Revise and simplify the initial notice and notice of City Council Action regarding the formation of the utilities undergrounding district and initiation of the undergrounding process. To the extent possible, avoid legal citations and technical language. Do not include full City Manager Reports, Ordinances, or Resolutions. List the Council Office and the Community Planning Group as sources for additional information. The mailer should be distinctive to capture the property owner's attention.

5. Coordination

Improve coordination between the Mayor's Office, the Council Offices, Utilities Undergrounding Program staff, utility companies, and the community by providing a formalized process for a collaborative conversation to establish local preferences, including securing voluntary easements, prior to the start of Engineering Design. Integrate the recommended Community Process into the more comprehensive utilities undergrounding flow chart developed by the UUP and the utility companies. (*See Attachment B: Utilities Undergrounding Community Process (Surcharge Program)*)

6. Design Options (Surcharge Utilities Undergrounding Program)

Strike a balance in implementing the Surcharge Utilities Undergrounding Program among the priorities of various stakeholders: the City who is owner of the right-of-way and manager of the process; the utility companies who are voluntary participants within agreed to standards; and property owners through the use of the Design Options for Utility Above Ground Equipment. (See Attachment C: *Design Options for Utility Above Ground Equipment*)

7. Design Options (Upgrades and Expansions)

The concerns heard by the UUAC apply to above ground equipment whether they arise from utilities undergrounding; meeting customer's changing needs; or expanding utility capacity. While not required, the City and the utility companies are encouraged to inform designers of above ground equipment in the public right-of-way of the UUAC's Design Options for Utility Above Ground Equipment. (See Attachment C: *Design Options for Utility Above Ground Equipment*)

8. Design Options (Right-of-Way Revitalization)

The concerns heard by the UUAC apply to above ground equipment whether they exist, or are to be installed as part of a public revitalization project or private development. While not required, the City and the utility companies are encouraged to inform designers of improvements in the public right-of-way of the UUAC's Design Options for Utility Above Ground Equipment. Costs for relocation of existing above ground equipment would be borne by the requester. (See Attachment C: *Design Options for Utility Above Ground Equipment*)

9. Innovative Equipment Design and Sizing

The City and the utility companies should work together to reduce the size and number of above ground equipment as technology, reliability, and safety allow. For example, to reduce equipment footprints in residential areas, pursue SDG&E's idea of poured-in-place concrete to tailor pads to local conditions and/or limiting transformer pads to 3 foot by 3 foot dimensions.

10. Quality Control

A quality control program will ensure critical decisions and agreements are carried through Engineering Design and thoughtfully implemented during construction. Strengthen the internal processes of the City, the utility companies, and private contractors to instill that quality control. The City should assign a project manager to assert quality control throughout the process.

11. Council Training

Councilmember representatives should be trained on the Utilities Undergrounding Program to better understand the program and neighborhood issues.

12. Surcharge Utilities Undergrounding Program

- a. Allow sufficient time for the community to secure voluntary easements on private property to minimize aesthetic and walkability impacts. The utility easements on private property may increase costs to the surcharge program as well as cause some utility companies to seek

reimbursement of such additional costs. (See Attachment B: *Utilities Undergrounding Community Process (Surcharge Program)*)

- b. Explore offering a nominal flat-rate fee as an incentive to secure easements on private property to address local preferences. (See Attachment D: *Design Options for Utility Above Ground Equipment.*)
- c. Screen new above ground equipment with landscaping, fencing, or camouflaging compatible with the surroundings utilizing the surcharge fund.

13. Graffiti

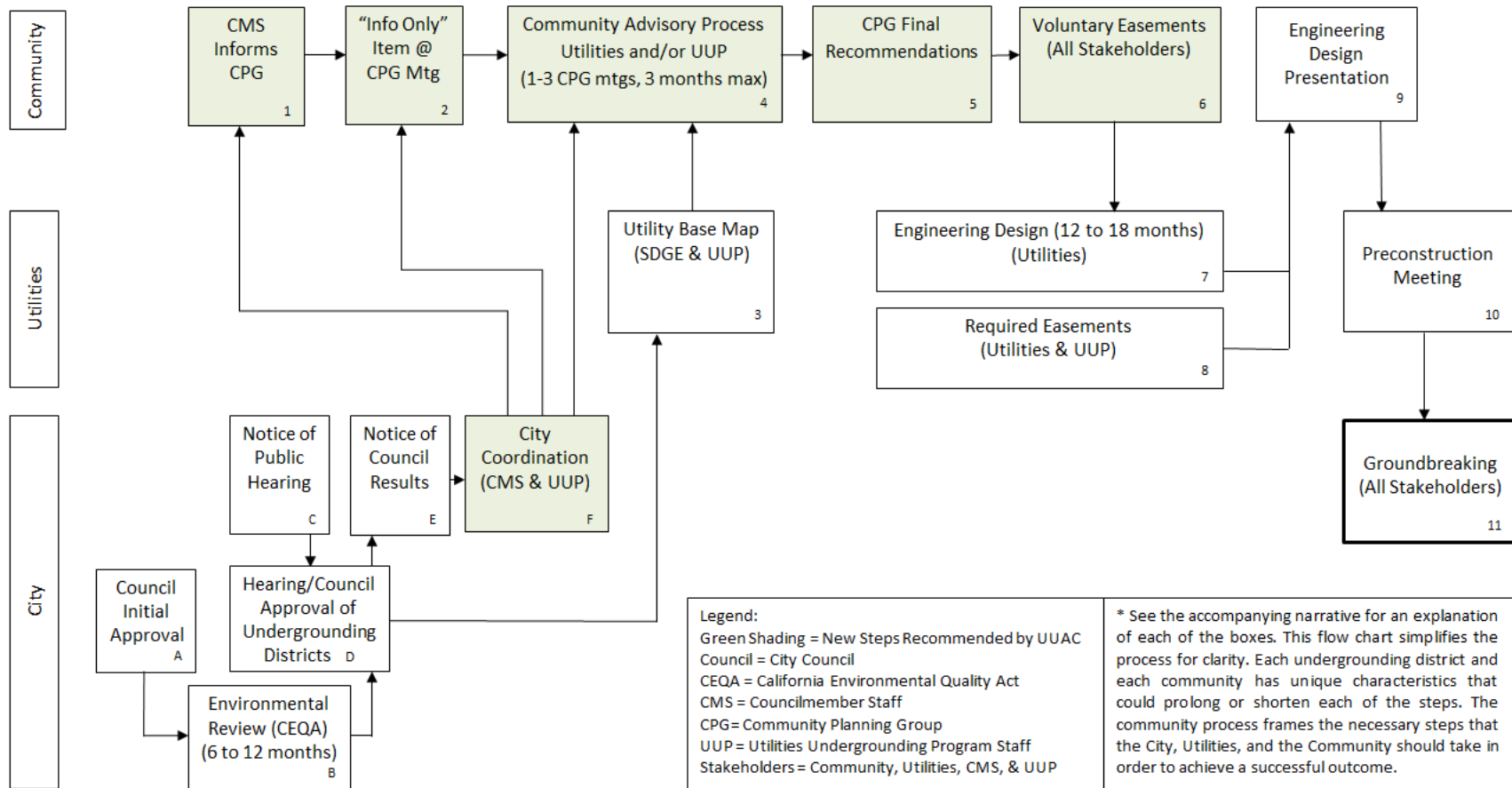
The public's response to proposed above ground equipment, or satisfaction with newly installed above ground equipment, can be affected by the state of existing equipment that is in disrepair or tagged with graffiti. The UUAC recognizes the City's recently adopted pilot program's goal to make it easier to report and abate graffiti more efficiently.

ATTACHMENT B

Utilities Undergrounding Community Process (Surcharge Program)

- Flowchart
- Narrative

UTILITIES UNDERGROUNDING COMMUNITY PROCESS (SURCHARGE PROGRAM)



NARRATIVE TO ACCOMPANY COMMUNITY PROCESS FLOW CHART

GLOSSARY

BID = Business Improvement District Local Manager

CMS = Councilmember Staff

CPG = Community Planning Group

SDGE = San Diego Gas & Electric

Utilities = AT&T, Cox Communications, San Diego Gas & Electric, Time Warner Cable

UUD = Utilities Undergrounding District

UUP = City of San Diego Utilities Undergrounding Program

INTRODUCTION

The Utilities Undergrounding Community Process (Surcharge Program) provides for integration of the public into the utilities undergrounding process. It provides reasonable time for initial notice by the City; dissemination of relevant information including Design Options; and public workshops, input and decision making. The Process has been simplified for clarity. Each Utilities Undergrounding District (UUD) and each community have unique characteristics that could prolong or shorten each of the steps. The Process frames the necessary steps that the City, utility companies, and the Community should take in order to achieve a successful outcome.

This narrative and the flowchart should be treated as a living document to be refined as the community process is implemented. Furthermore, this Community Process should be integrated into the more comprehensive utilities undergrounding flow chart developed by the City and the utility companies.

FLOWCHART – CITY COUNCIL PROCESS, BOXES A – F

A. CITY COUNCIL INITIAL PROJECT APPROVAL

City Council hears Utilities Undergrounding Program's (UUP) project recommendations and takes public comment. Council makes a decision on staff's recommendations.

B. CEQA

Approved projects move to the CEQA phase.

C. NOTICE OF COUNCIL HEARING

City Council Hearing Notification to affected property owners.

D. PUBLIC HEARING AND APPROVAL OF UNDERGROUNDING DISTRICTS

E. NOTICE OF COUNCIL RESULTS

Notification of City Council Decision sent to affected property owners.

F. COORDINATION MEETING

Councilmember Staff (CMS) and UUP coordinate public outreach and tailor it to the unique needs of the UUD and community. Community Planning Group (CPG) Chair may be asked to participate.

FLOWCHART – PUBLIC PROCESS & CONCURRENT CITY/UTILITIES ACTIONS

BOXES 1 – 11

1) COUNCIL MEMBER STAFF INFORMS COMMUNITY PLANNING GROUP

- a) Responsible Group: City Council Office
- b) Participants: CMS, CPG, and Public. Include BID if UUD overlaps business improvement district.
- c) Duration: 1 meeting, 2 months prior to official notification of the process start
- d) Purpose: During the report at the monthly CPG meeting, the CMS makes an announcement alerting the community to the imminent start of the project.

2) INFORMATION ONLY COMMUNITY NOTICING MEETING

- a) Sponsoring Group: CPG
- b) Participants: Public Information Officer, UUP, CMS, CPG and Public. Include BID if UUD overlaps business improvement district.
- c) Duration: 1 meeting
- d) Purpose: The Community Noticing Meeting is to inform the property owners in the UUD and the community about the process. It is not a decision or discussion meeting. A tentative start date of the Community Advisory Process will be provided as well as a step by step explanation of the process and how it will affect the property owners in the UUD and the community over the next 1 to 3 months. Basic technical information including links to relevant documents will be provided.

Information to be provided:

- (1) Links to:
 - (a) An “Undergrounding Legend” which includes equipment names, descriptions of the use of the relevant above ground equipment and a picture of said equipment.
 - (b) A Glossary of Terms.
 - (c) Above ground equipment configurations relevant to right-of-way patterns in the UUD.
- (2) The boundaries of the project.
- (3) Information on latitude and restrictions regarding trunk line locations and boxes.
- (4) An estimate from SDG&E, and from other utility companies if available, of the overall number and types of above ground equipment the project will require. This estimate may be derived from the “Utility Base Map” or from geography and population rather than actual engineering given its preliminary nature.
- (5) Regarding the above ground equipment, specific mention will be made of the greater latitude available for the placement of the larger equipment related to trunk lines, and the lesser latitude available for the placement of other equipment. If this information is unavailable at this step, make available by the beginning of the “Community Advisory Process.”
- (6) Information on the available design choices and layouts.
- (7) Project cost estimate if available.

3) UTILITY BASE MAP

- a) Responsible Group: SDG&E
- b) Participants: The other utility companies and the UUP
- c) Duration: 2 to 3 months
- d) Purpose: Produce basic survey of area and very preliminary design.

4) COMMUNITY ADVISORY PROCESS

- a) Sponsoring Group: CPG
- b) Participants: Property Owners, Community, CMS, UUP staff and the utility companies. Include BID if UUD overlaps business improvement district.
- c) Duration: 1 to 3 CPG meetings, 3 month time limit
- d) Purpose: This process will be run by the local CPG to engage the community and the property owners in the UUD to produce advisory recommendations for UUP staff. UUP and/or Utility staff need not participate in all meetings, but should be available to the CPG Chair or designee for consultation.

The goals of this step in the process for the community and the property owners in the Utilities Undergrounding District are to:

- (1) Have a laymen's understanding of the undergrounding process.
- (2) Understand how it affects them.
- (3) Have discussed the pros and cons.
- (4) Have been presented the approximate locations of major distribution equipment and understand the options for equipment placement when available from the utility companies.
- (5) Understand what easements, public right-of-way boundaries, and permit-to-enter are and why they are needed.
- (6) Understand easement sizes, including clearances and distances between above ground equipment and other utility lines and structures.
- (7) Understand that property owners, at their own cost, will be responsible for upgrading their meter boxes and/or points of connection if they do not meet current building codes.
- (8) Understand the process and options of the utility line connection from the street to the house/building.
- (9) Have sufficient information to identify which private properties are eligible to offer voluntary easements to improve aesthetics and/or walkability of the neighborhood.
- (10) Choose preferences based on factual information provided in the Design Options Manual.
- (11) Provide advisory recommendations on the location and placement of above ground equipment appurtenances based on the approved design options.
- (12) Have decided in an organized process if the UUD wants to proceed with undergrounding and understand the consequences if they do not.
- (13) Understand that once this stage is closed, opting out is no longer an option as substantial costs will be incurred to reengineer the project.

5) CPG FINAL RECOMMENDATIONS

- a) Responsible Group: CPG Chair
- b) Purpose: If the property owners in the UUD decide to move forward, within one month of the final community advisory meeting, recommendations will be communicated to UUP staff to guide the utility companies in their Engineering Design.

6) VOLUNTARY EASEMENTS

- a) Responsible Group: UUP and utility companies with CPG as host
- b) Participants: UUP staff, affected property owners, the utility companies, and if requested (by property owner, utility companies or UUP staff), a Planning Group Board member who has been tasked with facilitating these discussions.
- c) Duration: 1 month, preferably concurrent with Community Advisory Process and CPG Final Recommendations and prior to start of Engineering Design. Duration will depend on property owners having sufficient information from the utility companies to understand which properties are eligible to offer a voluntary easement; otherwise, there may be some overlap with Engineering Design.
- d) Purpose: The purpose of this step is to allow property owners, with the assistance of the community, to offer voluntary easements to mitigate the aesthetic and practical impacts of above ground equipment. The decision to grant a voluntary easement remains with the property owner. The utility companies will identify locations that are acceptable for their above ground equipment to meet technical parameters, and with UUP staff, will be available to address technical questions. Should a property owner voluntarily agree to an easement, they will work directly with UUP staff and the utility companies on the necessary paperwork.

7) ENGINEERING DESIGN

- a) Responsible Group: Utility companies and UUP
- b) Participants: Utility companies and UUP
- c) Duration: 12 to 18 months; can be initiated once CPG Final Recommendations are received.
- d) Purpose: Prepare the final design of utilities undergrounding and construction documents.

8) REQUIRED EASEMENTS

- a) Responsible Group: Utility companies and UUP
- b) Participants: Utility companies, UUP, affected property owners, CPG
- c) Duration: Concurrent with Engineering Design but may start while the Community Advisory Process is underway. If required easements cannot be secured, it may slow down or halt Engineering Design.
- d) Purpose: In some cases, the utility companies may need to secure easements from private property owners to meet technical and regulatory needs of the undergrounding process. During this stage UUP staff will also secure Permit to Enter (PTE) from all property owners to allow installation of service connections from the public right-of-way to the building. The CPG may help facilitate conversations with private property owners.

9) ENGINEERING DESIGN PRESENTATION

- a) Sponsoring Group: CPG
- b) Participants: The utility companies, CPG, UUP, Public, CMS. Include BID if UUD overlaps business improvement district.
- c) Duration: 1 meeting
- d) Purpose: A presentation by the utility companies and the UUP staff of the completed Engineering Design.

10) PRECONSTRUCTION MEETING

This is an internal process for the UUP, utility companies, and construction contractors. The CPG should be consulted if the contractor seeks a different location for equipment and material staging than agreed to at CPG Final Recommendations and/or Engineering Design Presentation.

11) GROUNDBREAKING

All stakeholders are invited to this public event including the Mayor, Councilmember, UUP, utility companies, CPG, BID, and the Public.

ATTACHMENT C

Design Options for Utility Above Ground Equipment

Design Options for Utility Above Ground Equipment

The City of San Diego (“City”), in partnership with utility companies, created the Surcharge Utilities Undergrounding Program to convert, when feasible and appropriate, overhead power and communication lines to safer and more reliable underground systems that result in clearer views. Also, under the CPUC Rule 20, the utility companies have other undergrounding commitments that primarily affect major City streets. Current City ordinances and policies require new power and communication lines to be installed underground. The Undergrounding Program affects the utility companies and the neighborhoods in different ways.

Underground power and communication lines entail the use of above ground equipment. To the greatest extent possible, subsurface structures such as hand holes, manholes, and cable terminations/junctions, should be used pursuant to each utility company’s engineering, maintenance, safety, and access standards.

Furthermore, these Design Options should apply to the above ground equipment of utility companies (power, phone, cable) as well as above ground equipment of the City of San Diego (traffic signals, street lights, water and sewer appurtenances, etc.)

I. PURPOSE

The purpose of the Design Options is to provide guiding principles and criteria to utility companies for design and installation; the City of San Diego in its oversight and management; and, the community and property owners in understanding the undergrounding process and options.

The Design Options attempt to strike a balance in designing and installing above ground equipment among the priorities of various stakeholders: property owners, the City, and the utility companies.

II. LOCATION FACTORS

A. PRIORITIES

Sizing and locating above ground equipment should be based upon the following priorities, in the following order:

1. Reliability and Safety
2. Technological requirements
3. Aesthetics

B. LOCAL PREFERENCES

Local Preferences means the preferences of the property owners in the undergrounding district. In general, above ground equipment, and associated concrete pads, should be placed in

a manner that is consistent with the preferences of the community. Reasonable time should be provided to secure, or for the community to assist in securing, voluntary easements outside the right-of-way. However, nothing in these Design Options is intended to preclude locating above ground equipment in the public right-of-way.

Preferences should be determined through collaborative discussions between the property owners in the undergrounding district, the local community planning group, City staff, the City Council Office, and the utility companies. Each neighborhood is unique and may have different preferences and options for above ground equipment placement; for example, more equipment might allow more strategic placement to meet aesthetic goals. The collaborative discussions should allow reasonable time for initial notice by the City, dissemination of relevant information including these Design Options, workshops, public input, and decision making.

C. REQUIREMENTS

Above ground equipment installations must comply with all applicable local, state, and federal legal standards, including the following:

1. Reliability, safety, access, operating clearances and other technical requirements
2. Noise/sound restrictions
3. Accessible Design
4. Sight distance requirements for vehicular traffic per the Manual on Uniform Traffic Control Devices (MUTCD)

III. PRIORITIES, LOCAL PREFERENCES, REQUIREMENTS CRITERIA

A. LOCATIONS GENERALLY

In selecting the site of above ground equipment that best meets PRIORITIES, LOCAL PREFERENCES and REQUIREMENTS, factors recommended to be considered include whether the location:

1. Allows for screening the equipment by the surcharge program or property owner;
2. Provides for placement on private property if a property owner voluntarily offers a utility easement to accommodate above ground equipment;
3. Minimizes the need for retaining walls;
4. Maintains a clear and consistent path of travel for pedestrians;
5. Minimizes the size of the concrete pad especially in residential areas. Poured-in-place concrete pads should be tailored to local conditions and/or limited to 3 feet by 3 feet dimensions, where possible;
6. Minimizes the need for protective concrete bollards;
7. Minimizes sidewalk cuts; and,
8. Avoids enhanced parkway/hardscape; for example, sidewalks, brick, stamped concrete, fountains, walls, fences, walkways, sidewalk markers/date stamps.

B. RESIDENTIAL AND COMMERCIAL DESIGN LOCATIONS

Site selection for above ground equipment should generally be done in the following order:

1. Locations where screening of the equipment is possible.
2. Locations adjacent to an open space area or commercial parking lot.
3. Locations adjacent to the side yard or side of a building which is not the property's primary entrance or focal point.
4. Locations adjacent to the corner of the lot near the property line, or corner of the commercial building, and furthest from the primary entrance.
5. Locations that minimize loss of on- and off-street parking consistent with Local Preferences.
6. Locations elsewhere in the right-of-way behind the curb consistent with Local Preferences.

C. RESIDENTIAL ALLEYS LOCATIONS

If the Local Preference is to avoid relocating overhead lines in the alley to underground lines in the fronting streets, allow reasonable time for the community to secure easements outside the alley (right-of-way) to accommodate above ground equipment. This option can only be considered if enough property owners voluntarily cooperate in providing all necessary utility easements.

D. BUILDING SERVICE LOCATIONS

The service from the right-of-way to the meter or point of connection is recommended to be undergrounded as part of the Surcharge Utilities Undergrounding Program, preferably by boring. Conflicts with existing underground utilities or property owner preference may however preclude undergrounding. If wall-mounted above ground conduit is used, it should be attached/run as near to ground level as possible, unless the property owner requests a different reasonable installation solution.

E. SCREENING CRITERIA

1. At the request of the property owner, above ground equipment installed between the sidewalk and the private property line, or on private property, should be screened with compatible landscaping if it can be funded by the surcharge fund.
2. Provide screening to address aesthetic concerns, which also can be an effective deterrent to graffiti; therefore, screening should be considered for all four sides.
3. Landscaping should be drought-tolerant, hardy, and trample-resilient given the need of utility personnel to access equipment and compatible with the existing landscaping. Property owners should be made aware that the initial installation may require removal and/or relocation of existing landscaping and irrigation system.
4. Fence, wall or camouflaging may be an effective way to screen above ground equipment in commercial and residential areas. Such screening should be compatible with the surroundings.

ATTACHMENT D

Issues Needing Further Discussion and Resolution

ISSUES NEEDING FURTHER DISCUSSION AND RESOLUTION

The Utilities Undergrounding Advisory Committee identified a number of issues that are related but outside its scope. The Committee recommends that the City address these issues in consultation with the utility companies and the public in a subsequent open process.

1. Update the Development Services Departments' *Manual of Administrative Practices for Utility Installations in the Public Right-of-Way* (Adopted Feb 24, 1986 as Document RR-265128). The Manual is silent on utilities outside of the paved roadway and provides little guidance on issues the City now recognizes as important under its Complete Streets Policy, including walkability (which includes placement, trip and fall, and clear path of travel) and aesthetics. The Manual is also silent on public noticing requirements.
2. Through the Development Services Department's Right of Way permit process, develop a procedure to inform impacted property owners, before installation, of above ground equipment that arise as part of utility upgrades, expansions and/or replacements outside of the Surcharge Utilities Undergrounding Program. Inform property owners of the design options which are available to minimize impacts and how to communicate their preferences.
3. Private design and construction practice and the Development Services Department's discretionary and ministerial permit processes have historically resulted in the developers/builders not considering until the end of construction how dry utilities' (power, phone, cable, traffic signals, street lights, etc.) above ground equipment, new or pre-existing, and their placement may affect the aesthetics and functionality of their projects.

A new process needs to emerge which informs developers/builders/designers of the options available to them. It should enable them to choose new and reconsider existing above ground equipment at an early stage, so the equipment may be designed seamlessly into the project, right-of-way improvements, and the context of the neighborhood.

4. The City should coordinate with the Utilities and their graffiti abatement programs. In conjunction with the City of San Diego's Graffiti Pilot Program, improve graffiti abatement on above ground utility equipment, specifically related to reporting through the City's website. Discuss the value of unsanctioned community abatement efforts.
5. The City should make it easier for the public to report abandoned, or damaged but still functioning, above ground utility equipment through the City's website. The current reporting process through Street Division is not intuitive to the public.

6. Define acceptable vegetation for landscape screening under the Surcharge Utilities Undergrounding Program that would not interfere with access to facilities or operation nor create safety hazards for employees.
7. Consider making the Design Options a requirement for City of San Diego installed/owned above ground equipment such as traffic signal boxes, street lights, water and sewer appurtenances, etc. Such a requirement should be consistent with the Complete Streets Policy recognizing the increased emphasis on walkability and neighborhood aesthetics.
8. Upon adoption, the UUAC's recommendations should be shared with other groups such as the Business Improvement District Council (BIDC), Business Improvement Districts (BIDs), Housing Commission, Building Industry Association, and Civic San Diego. Stakeholders on commercial streets may identify additional design options especially with regards to upgrades and expansions.
9. Even with full implementation of the UUAC recommendations, training will be necessary for a successful community advisory process. Therefore, a training program or manual for community planning group members, councilmember representatives, and community planning staffs should be implemented. One possible venue for CPG training is the Community Orientation Workshop. A CPG-to-CPG mentorship program should also be considered.
10. To promote safety and deter crime, the City has provided alley lights in some crime-impacted neighborhoods. Other neighborhoods with similar issues have requested alley lights. Nonetheless, there is no City standard for lighting in alleys. Lights that do exist have been installed on SDG&E owned and maintained utility poles; however, when the Utilities Undergrounding Program is implemented and the lighting power source has been moved to the fronting street, standard procedure is to remove the poles and their attached alley lights. The City uses the Program to install new street lights concurrent with relocation and undergrounding of utility lines, but no similar effort is extended towards preserving existing, or installing new alley lighting.

Identified, but unresolved alley lighting issues include:

- Are there cost effective means to implement alley lighting where it is needed?
- What funding sources are available to install and maintain alley lights and underground circuits?
- Could an existing or new Maintenance Assessment District fund alley lighting?
- Who will own and maintain alley utility poles abandoned by SDG&E?
- Because it would minimize trenching and electrical costs, would solar lighting provide cost effective alley lighting?

ATTACHMENT E

Legend of City of San Diego and Utility Companies Above Ground Equipment













City Type 336 Traffic
Signal Controller Cabinet



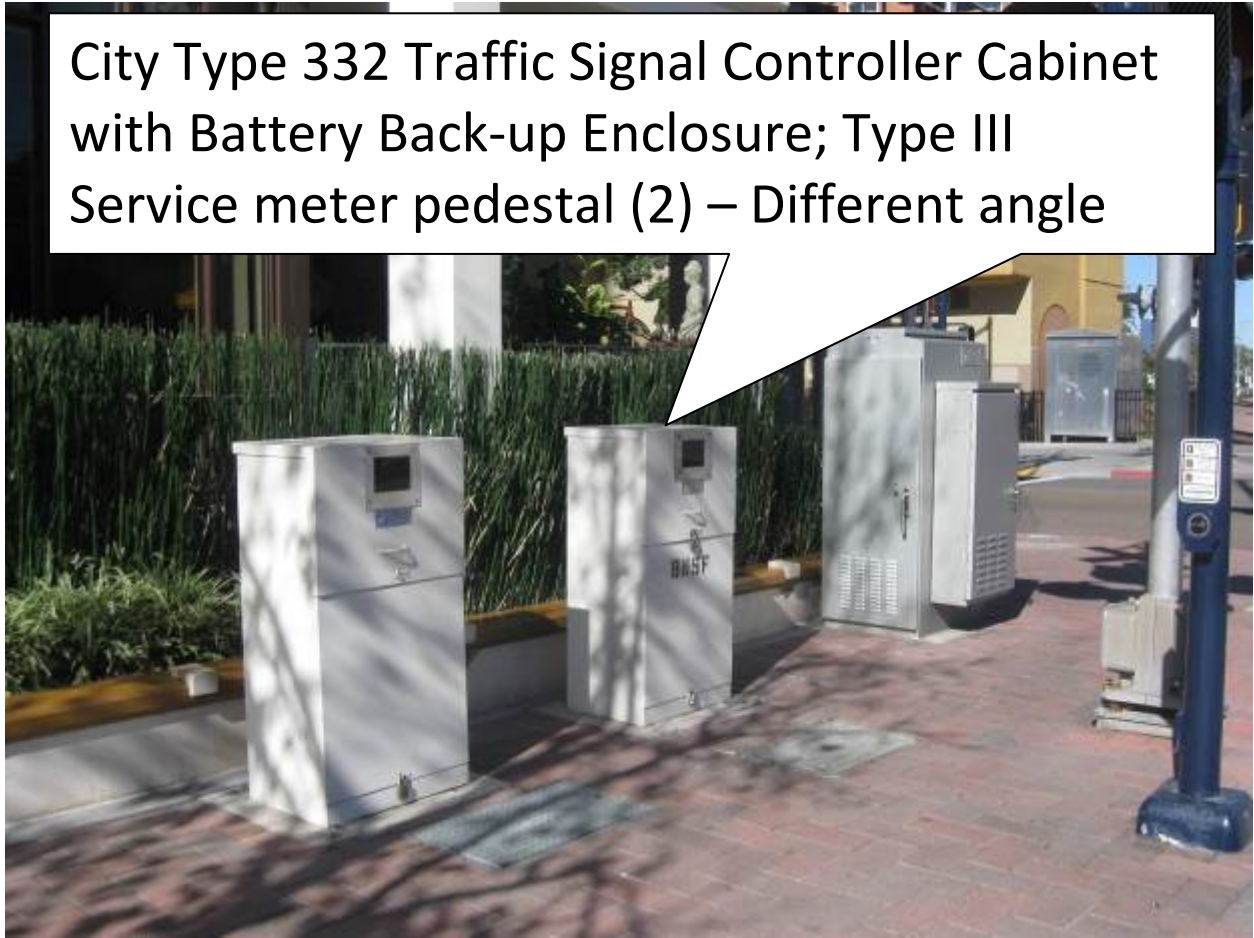


City Type 332 Traffic Signal Controller Cabinet with Battery Back-up Enclosure;
Type III Service meter pedestal (2)











City Type 332 Traffic Signal Controller Cabinet
with Battery Back-up Enclosure; Type III
Service meter pedestal (2) – Different angle












Equipment Name	Utility Company	Description / Use	Picture
3309 Handhole (3309 or 09)	SDG&E	Connection point for secondary and service voltage cables (120/240V)	
3313 Handhole w/Traffic Lid (3313 TRF or 13)	SDG&E	Connection point for secondary and service voltage cables (120/240V) when traffic lid required	
3314 Handhole (3314 or 14)	SDG&E	Connection point for primary and secondary voltage cables	



3315 Handhole (3315 or 15)	SDG&E	Connection point for primary and secondary voltage cables	
3316 Handhole (3316 or 16)	SDG&E	Connection point for primary and secondary voltage cables	
Capacitor	SDG&E	Used on the primary voltage circuitry to regulate primary distribution voltage	

<p>Closed-delta station</p>	<p>SDG&E</p>	<p>Transformer design used typically in commercial areas for a particular secondary voltage</p>	
<p>Fuse Cabinet</p>	<p>SDG&E</p>	<p>Facility designed to protect (fuse) local distribution system (transformers feeding homes and local businesses)</p>	
<p>Open-delta station</p>	<p>SDG&E</p>	<p>Transformer design used typically in commercial areas for a particular secondary voltage</p>	



Terminator	SDG&E	Primary voltage (12kv) cable termination point – used for pulling and connection point			
Switch - PME	SDG&E	Primary cable switching capability to allow for switching between different circuits; offers multiple fusing options than Trayer			
Switch - Trayer	SDG&E	Primary cable switching capability to allow for switching between different circuits; more useful where space is a premium			



Switch PME5	SDG&E	Fused switching cabinet; used typically in commercial areas near residential for primary electric distribution	
Single-phase transformer	SDG&E	Typical step-down equipment used in residential areas; steps down primary voltage to useable secondary/service voltages	



<p>Universal Pedestal</p>	<p>AT&T</p>	<p>A fiber & copper splice point and may house terminals. Equipment enclosures will remain in place because they contain equipment that is water sensitive and require ready access</p>	
<p>Hand-Hole Base</p>	<p>AT&T</p>	<p>A connection point that contains cables and splice cases.</p>	


<p>Multi-Purpose Housing</p>	<p>AT&T</p>	<p>Contains a splice point for both fiber & copper cable and may contain terminals. Equipment is water-sensitive and must be placed above-grade. Equipment requires ready access</p>	
<p>Pedestal/Hand-hold combination</p>	<p>AT&T</p>	<p>Pedestals with hand-hole bases provide increased flexibility and capacity that should result in the reduction of required equipment.</p>	

<p>Serving Area Interface/ Video Ready Access Device</p>	<p>AT&T</p>	<p>Serving Area Interface (SAI): The primary distribution point for a serving area.</p> <p>Video Ready Access Device (VRAD): Contains fiber optic equipment that delivers U-verse video and other communications services to homes and business in the serving area.</p> <p>The SAI and VRAD are sensitive to water and must be placed above-grade, requires ready-access and will remain in place to serve the community.</p>	 A photograph showing two white metal utility cabinets mounted on a concrete pad outdoors. The larger cabinet on the left has red warning labels on its top panel. The smaller cabinet is to its right. The background shows a brick wall and some greenery.
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<p>Hand-Hole</p>	<p>Cox Communications Time Warner Cable</p>	<p>This round vault is a service drop and used as a long distance pull point and creates an access points for construction, installation, and repair of fiber or coaxial plant.</p> <p>9.5" Diameter x 12" Deep x 12.5 " Bottom</p>	
<p>Vault</p>	<p>Cox Communications Time Warner Cable</p>	<p>Used to create access points for construction, installation, and repair of fiber or coaxial plant.</p> <ul style="list-style-type: none"> • 17" x 30" x 24" • 24" x 36" x 36" • 36" x 60" 	

<p>Node</p>	<p>Cox Communications Time Warner Cable</p>	<p>This pedestal houses the node in conversions that converts light to RF and a limited amount of fiber optic cable.</p> <ul style="list-style-type: none"> • 18" x 36" x 20" • 24" x 36" x 31" 	
<p>Tap</p>	<p>Cox Communications Time Warner Cable</p>	<p>This pedestal is for conduit taps and some amplifiers in conversions and new development.</p> <ul style="list-style-type: none"> • 25" above ground 10" x 10" base – Taps • 25" above ground 12" x 12" base – Taps & Amplifiers • 32" above ground "12 x 12" base – Taps & Amplifiers 	

<p>Tap</p>	<p>Cox Communications Time Warner Cable</p>	<p>This green pedestal is for conduit taps in conversions and new development. The size is determined by the equipment requirement as well as the number and size of the conduits serving the pedestal.</p> <ul style="list-style-type: none"> • 9"x16" • 9"x20" • 10"x12" • 10"x16" • 10"x22" • 11"x16" 	
<p>Power Supply</p>	<p>Cox Communications</p>	<p>Provides power to amplifiers that supply services to customers.</p> <ul style="list-style-type: none"> • Pictured: 44" • Can have 1- 3 cabinets. Two is typical as shown. 	

Power Supply	Time Warner Cable	Powers the cable system. <ul style="list-style-type: none">• 15.5" x 17" x 47"• 22.5" x 28.5" x 42"• 17" x 15" x 17" (top)	
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