



County of Santa Cruz

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October 28, 2013

Agenda: November 5, 2013

BOARD OF SUPERVISORS
County of Santa Cruz
701 Ocean Street
Santa Cruz, CA 95060

UPDATE ON IMPLEMENTING RECOMMENDED ACTIONS TO EXPAND BROADBAND IN SANTA CRUZ COUNTY

Dear Members of the Board,

On October 1, 2013, your Board directed staff to return on today's agenda with an update on implementing recommended actions to expand broadband in Santa Cruz County. Staff in the Information Services, Planning and Public Works Departments continue to work on administrative and planning initiatives that could lead to greater investment in broadband infrastructure in the County. This letter and the attached report provided an update on their efforts.

Since reporting on broadband connectivity and expansion, Planning and Public Works have reviewed the Unified Fee Schedule and will present any modifications needed to ensure that applications are processed "at cost". Changes to fees will be considered by the Board in December 2013.

Staff in Information Services and Public Works have made progress in drafting conduit specifications, master lease agreements and a "dig once" ordinance to facilitate the deployment of broadband infrastructure. Example specifications, agreements and ordinances from other jurisdictions are being used as guides in determining the best approach for the County of Santa Cruz. The attached report further discusses these items and provides draft language and other considerations. Staff expect to return with revised conduit specifications, a template lease agreement and a proposed "dig once" ordinance for Board consideration in January 2014.

Planning staff are looking at proposed changes to County regulations to achieve two goals:

- 1) Remove any requirement for broadband infrastructure within the public right of way to obtain a discretionary land use permit; and
- 2) Streamline the application process, include new definitions as needed and comply with the 2006 Digital Infrastructure and Video Competition Act.

Proposed amendments to the Santa Cruz County Code will require CEQA review and a Planning Commission public hearing and recommendation before they are brought to the Board. Staff expect to

present the proposed amendments to the Planning Commission by May 2014 and the Board by June 2014.

On an ongoing basis, staff continue to work with broadband providers to inform them of new projects and planning efforts that are being undertaken to support economic vitality and development projects. Efforts to work with utility companies on their financing and installation of conduit as part of County projects also continues.

The following are key milestones for the remainder of FY 13-14:

December 2013

- **Fees:** ensure that fees for processing any required discretionary planning permits for broadband infrastructure are based on actual costs.

January 2014

- **Conduit:** provide revisions to the conduit specifications, including input from public agencies and utility companies.
- **Agreements:** present a template lease agreement for the installation of broadband infrastructure on County assets.
- **Dig Once:** present a proposed "dig once" ordinance requiring conduit or other infrastructure in all new development or substantial repair projects whenever practical and feasible.

March 2014

- **Regulations:** provide draft amendments to land use regulations that facilitate the deployment of broadband technology.
- **Coordination:** provide status report on coordination activities with broadband providers and utility companies.

June 2014

- **Regulations:** present proposed amendments to land use regulations.

It is therefore RECOMMENDED that your Board accept and file this update and direct staff to return with a further update on implementation of the broadband recommendations on or before January 28, 2014.

Very truly yours,



SUSAN A. MAURIELLO
County Administrative Officer

Attachment

cc: Information Services Director
Planning Director
Public Works Director

COUNTY OF SANTA CRUZ

Update on Implementing Recommended Actions to Expand Broadband

Prepared for the Board of Supervisors

10/28/2013

Table of Contents

Section 1: Information Services	2
Rec. 1: Conduit Specifications	2
Rec. 2: Master Lease Agreements	2
Section 2: Planning	3
Rec. 3: Encroachment Permits	3
Rec. 4: Application Process and Costs.....	3
Rec. 5: County Regulations	4
Rec. 6: Economic Development.....	4
Section 3: Public Works.....	5
Rec. 7: Utility Companies.....	5
Rec. 8: Dig Once Ordinance.....	5
Attachment A: Draft Conduit Specifications	6

Section 1: Information Services

Summary: While providers have done extensive build outs of the County's fiber backbone, there is still room for improvement. Many areas of the County are limited to a single provider. To address this issue, the County could make it easier for the Internet Service Providers to work through the regulatory and permitting process, as discussed by Planning.

Rec. 1: Finalize conduit specifications in collaboration with Public Works and broadband providers.

The Information Services Department has worked with the Department of Public Works to develop conduit specifications for future construction projects in the County of Santa Cruz. After review of proposed specifications from other public and private entities, staff determined the best approach is to develop a written specification appropriate for vehicle impacts over the lifetime of the conduit.

In early October, Public Work Directors from the cities of Capitola, Santa Cruz, Scotts Valley and Watsonville and the County met and discussed the topic of conduit specifications and construction with a focus on the need to have a consistent countywide approach. Draft specifications (see Attachment A) were presented and will be reviewed by the Department of Public Works and Information Services Department. The regional group of Public Works Directors will schedule a follow-up meeting with utility companies to further this effort. The Information Services Department has been invited to participate in this follow-up meeting, which is expected to take place in December 2013. The Information Services Department will provide an update on the outcome of this meeting and revisions to the specifications in January 2014.

Rec. 2: Work with County Counsel and Public Works to establish master lease agreements that allow the installation of broadband infrastructure on utility poles, light standards and County assets.

The County currently lacks a template Master Lease Agreement (MLA) and Site Lease Agreement (SLA) for the installation of broadband infrastructure on utility poles, light standards or property. Over the next several weeks, Real Property and the Information Services Department will develop language for a template MLA and SLA that address appropriate fee structures, agreement duration and renewal terms, access and responsibilities of the County and broadband providers, co-location rights and the legal language to protect County-owned infrastructure. Several public entities, including the City of San Jose, have developed similar agreements, and they will be reviewed as potential templates. Once language has been drafted, Real Property and the Information Services Department will work with County Counsel to finalize a template for Board consideration in January 2014.

Section 2: Planning

Summary: Efforts to expand broadband would benefit businesses, residents and students in Santa Cruz County. To assist providers in deploying new and improved infrastructure, the County could support a number of changes to its regulatory and permitting processes.

Rec. 3: Allow the installation of equipment within public right of ways, subject only to “time, place and manner” of access, through the County’s encroachment permit process.

The Department of Public Works already evaluates projects within the public right of way in this manner through the revocable encroachment permit process. Existing land use regulations require a land use permit for certain broadband facilities (i.e., boxes, cabinets, wireless facilities) within public rights of way, as well as on private property. The Planning Department will prepare proposed amendments to the Zoning Ordinance in order to remove any requirement for a discretionary land use permit for facilities within public rights of way. These changes will take into account the Board’s interest in maintaining a public process. In addition, fees for any building permits that are required will remain in place. As reviewed below, the Planning Department expects that a proposed ordinance amendment, after CEQA review and a Planning Commission public hearing and recommendation, will be ready for Board consideration in June 2014.

Rec. 4: Streamline the application process and ensure permit fees are based on actual costs.

As part of the update to the County Unified Fee Schedule, which the Board will consider for adoption in December 2013, the Planning Department will propose that fees for processing any required discretionary planning permits for broadband infrastructure, including wired and wireless facilities, be “at cost”.

The Planning Department will prepare proposed amendments to land use regulations in order to streamline the application process, include new definitions as needed, and reflect compliance with the 2006 Digital Infrastructure and Video Competition Act (DIVCA). As reviewed below, the Planning Department expects that a proposed ordinance amendment, after CEQA review and a Planning Commission public hearing and recommendation, will be ready for Board consideration in June 2014.

Rec. 5: Draft amendments to County regulations that facilitate the deployment of broadband technology.

The Planning Department will prepare proposed amendments to land use regulations in order to remove any requirement for broadband infrastructure within the public right of way to obtain a discretionary land use permit. The proposed amendments to regulations will also streamline the application process, include new definitions as needed, and reflect compliance with DIVCA. The Planning Department expects that a proposed ordinance amendment, after CEQA review and a Planning Commission public hearing and recommendation, will be ready for Board consideration in June 2014.

The Planning Department will support efforts of the Department of Public Works and the Information Services Department to present new specifications for broadband deployment, including methods and conduit requirements. The Planning Department will also be present, as requested, at quarterly meetings that the Department of Public Works holds with service providers, and will assist Public Works as needed with its efforts to create a yearly coordination letter to all utility companies and service providers.

Rec. 6: Work with broadband providers on economic development opportunities.

The Planning Department's Economic Development division will coordinate meetings three times a year with all service providers to provide education and information regarding new projects and planning efforts that are being undertaken to support economic vitality and development projects.

The Planning Department will ensure that the proposed Economic Vitality Strategy includes goals, policies and actions supportive of the broad deployment and public access to broadband technology.

Section 3: Public Works

Summary: Broadband infrastructure could be added to a number of utility improvement projects in the County based on available funding. A coordinated approach to installing a County-wide communication network could be accomplished by establishing a “dig once” ordinance similar to proposed legislation in the City and County of San Francisco.

Rec. 7: Work with utility companies on their financing and installation of conduit as part of County projects.

The Department of Public Works has had a number of meetings with local utility companies on these issues, and progress is being made. We will continue these efforts and keep the Board informed of all developments.

Rec. 8: Draft an ordinance based on the San Francisco “dig once” model for the County of Santa Cruz.

The Department of Public Works carefully reviewed San Francisco’s proposed ordinance in addition to a number of others, both within and outside California. We adapted the best of these to meet the County’s unique needs and used flexible language to allow our standards to be updated over time without the need for a new ordinance. The following language has been drafted to add a new chapter on telecommunications to Title 12, regulating building, in the Santa Cruz County Code:

In recognition of the need to provide local residents and business within the community with the infrastructure required to meet their telecommunications needs, all new development or substantial repair projects under the supervision of the County will include provisions for the installation of telecommunications cable, conduit and other related equipment whenever practical and feasible. Where appropriate, telecommunications infrastructure may be installed in or adjacent to County rights-of-way in conformance with current County standards. County staff will work with contractors to identify the most cost-effective approach consistent with County requirements. If a project includes excavation in or adjacent to a County right-of-way, installation of or upgrades to telecommunications cable, fiber optic wiring, conduit or other infrastructure will be included as needed. All installations shall conform to the size, shape, location and other specifications as determined by the Director of Public Works.

Following the initial review and modification of this language, the Department of Public Works will work with County Counsel to prepare a proposed ordinance, with the purpose, findings and definitions, for Board consideration in January 2014.

Attachment A

Draft Conduit Specifications

INSTALLATION REQUIREMENTS – CONDUIT FOR FIBER OPTIC CABLE.

SUBARTICLE (Page) is deleted and the following substituted:

Fiber Optic Cable Conduit: Prevent the ingress of water, dirt, sand, and other foreign materials into the conduit prior to, during and after construction. Exclude water and debris from buried conduit and from the top riser assembly of aboveground conduit using a foam-sealing material, rubber plug, or other device designed for this application and approved by the Engineer. Use a UV-rated flexible conduit to protect the cable from the top of the conduit riser to the span messenger where the cable is to be lashed.

Ensure that the conduit fill ratio (outer cable diameter to inner conduit/duct diameter) does not exceed 50%.

Install the conduit system so the fiber optic cable maintains a minimum bend radius of 20 times the cable diameter.

Install the conduit as shown in the plans. Provide all fittings and incidental materials necessary to construct a complete installation. Use approved methods for connecting inner duct or conduit within or between plowed portions, trenched portions, and bored portions. Submit the conduit manufacturer's coupling method and material to the Department's Project Manager for approval.

Fiber Optic Cable Locate Wire: Install locate wire in the trench or bore with all underground conduits. Do not install locate wire in a conduit with fiber optic cable. Ensure the locate wire provides end-to-end electrical continuity for electronically locating the underground conduit system.

Do not run locate wires into field cabinets. Terminate locate wires at the first and last pull boxes in the conduit run. Ensure that wire termination occurs only at the top of a pull box.

In a trenching operation, install the locate wire no more than 3 inches [75 mm] above the conduit. Ensure that the locate wire enters all access points, and that a minimum of 10 feet [3 m] of slack locate wire is coiled and neatly stored at each access point to allow for future additions or repairs to the conduit route marking system.

In a boring operation, install the locate wire in an encasement.

Core-drill the access point wall at the conduit diameter and at the location indicated in the plans. After placement, apply a nonshrink grout or other acceptable material around the conduit/locate wire to seal the hole.

Perform continuity tests and insulation resistance tests on all locate wires. Provide the Engineer with all test results. If the installation of the locate wire is not continuous, replace the locate wire at no additional cost.

Make locate wire splices in a flush grade-level pull box. Ensure that locate wire splices are waterproof and suitable for direct burial. Ensure that locate wire splices at the pull box meet NEC requirements. Ensure that locate wire splices include a mechanical crimp connection with a butt sleeve, an oxide-preventing aerosol lacquer, mastic electrical splicing tape, and standard electrical tape using methods and materials approved by the Engineer. At the completion of the installation, provide the Engineer with as-built drawings that document all splice locations.

SUBARTICLE (Page) is deleted and the following substituted:

Furnish and Install: The Contract unit price per foot [meter] of Conduit, furnished and installed, will include furnishing all hardware and materials as specified in the Contract Documents, and all labor, trenching, backfilling, and restoration materials necessary for a complete and accepted installation.

Payment for conduit placed in the ground or used on bridge decks will be based on the horizontal path of the installed conduit as measured in a straight line between the centers of pull boxes, cabinets, poles, etc. No allowance will be made for sweeps or vertical distances above or below the ground or the bridge deck.

Due to conditions which may exist on the project site, the Contractor may furnish conduit in variable lengths.

Furnishing and installing the locate wire is included in the cost of the conduit.

Conduit used for Fiber Optic Cable includes the cost of furnishing and installing the locate wire and the cost of conducting the continuity test and the insulation resistance test.

SUBARTICLE (Page) is deleted and the following substituted:

Install: The Contract unit price per foot [meter] of Conduit, installed, will include all miscellaneous hardware and materials, labor, trenching, backfilling, and restoration materials necessary for a complete and accepted installation.

The Engineer will supply conduit in sections with one coupling per section and elbows as required.

Payment for conduit placed in the ground or used on bridge decks will be based on the horizontal path of the installed conduit as measured in a straight line between the centers of pull boxes, cabinets, poles, etc. No allowance will be made for sweeps or vertical distances above or below the ground or the bridge deck.

Installing the locate wire is included in the cost of the conduit. Conduit used for Fiber Optic Cable includes the cost of installing the locate wire and the cost of conducting the continuity test and the insulation resistance test.