ALASKA STATE STATUTES

Sec. 29.35.250. Cities inside boroughs.

(a) A city inside a borough may exercise any power not otherwise prohibited by law.
(b) On adoption of a borough ordinance to provide for areawide exercise of a power, no city may exercise the power unless the borough ordinance provides otherwise or the borough by ordinance ceases to exercise the power.

Sec. 29.40.010. Planning, platting, and land use regulation.

(a) A first or second class borough shall provide for planning, platting, and land use regulation on an areawide basis.
(b) If a city in a borough consents by ordinance, the assembly may by ordinance delegate any of its powers and duties under this chapter to the city. The assembly may by ordinance, without first obtaining the consent of the city, revoke any power or duty delegated under this section.

Sec. 29.40.020. Planning commission.

(a) Each first and second class borough shall establish a planning commission consisting of five residents unless a greater number is required by ordinance. Commission membership shall be apportioned so that the number of members from home rule and first class cities reflects the proportion of borough population residing in home rule and first class cities located in the borough. A member shall be appointed by the borough mayor for a term of three years subject to confirmation by the assembly, except that a member from a home rule or first class city shall be selected from a list of recommendations submitted by the council. Members first appointed shall draw lots for one, two, and three year terms. Appointments to fill vacancies are for the unexpired term. The compensation and expenses of the planning commission and its staff are paid as directed by the assembly.
(b) In addition to the duties prescribed by ordinance, the planning commission shall
    (1) prepare and submit to the assembly a proposed comprehensive plan in accordance with AS 29.40.030 for the systematic and organized development of the borough;
    (2) review, recommend, and administer measures necessary to implement the comprehensive plan, including measures provided under AS 29.40.040.

Sec. 29.40.030. Comprehensive plan.

(a) The comprehensive plan is a compilation of policy statements, goals, standards, and maps for guiding the physical, social, and economic development, both private and public, of the first or second class borough, and may include, but is not limited to, the following:
   (1) statements of policies, goals, and standards;
   (2) a land use plan;
   (3) a community facilities plan;
   (4) a transportation plan; and
   (5) recommendations for implementation of the comprehensive plan.

(b) With the recommendations of the planning commission, the assembly shall adopt by ordinance a comprehensive plan. The assembly shall, after receiving the recommendations of the planning commission, periodically undertake an overall review of the comprehensive plan and update the plan as necessary.

Sec. 29.40.040. Land use regulation.

(a) In accordance with a comprehensive plan adopted under AS 29.40.030 and in order to implement the plan, the assembly by ordinance shall adopt or amend provisions governing the use and occupancy of land that may include, but are not limited to,
   (1) zoning regulations restricting the use of land and improvements by geographic districts;
   (2) land use permit requirements designed to encourage or discourage specified uses and construction of specified structures, or to minimize unfavorable effects of uses and the construction of structures;
   (3) measures to further the goals and objectives of the comprehensive plan.

(b) A variance from a land use regulation adopted under this section may not be granted if
   (1) special conditions that require the variance are caused by the person seeking the variance;
   (2) the variance will permit a land use in a district in which that use is prohibited; or
   (3) the variance is sought solely to relieve pecuniary hardship or inconvenience.

Chapter 17.45: Wasilla Special Land Use District

17.45.010 Purpose and Intent

(A) This chapter shall be known as the planning and zoning ordinance of the Matanuska-Susitna Borough for the city of Wasilla.

(B) The purpose of this chapter is:

(1) to implement the comprehensive development plan for the city of Wasilla;
(2) to encourage the most appropriate use of land;
(3) to conserve and stabilize the value of property;
(4) to aid in the rendering of fire and police protection;
(5) to provide adequate open space for light and air;
(6) to lessen the congestion on streets;
(7) to give an orderly growth to the city;
(8) to prevent undue concentrations of population;
(9) to improve the city's appearance;
(10) to facilitate adequate provisions for community utilities and facilities such as water, sewage and electrical distribution systems, transportation, schools, parks and other public requirements; and
(11) to promote public health, safety and general welfare.

17.45.030 Delegation of Authority

(A) Pursuant to A.S. 29.40.010(b) and MSB 1.10.115, the city has consented, and the borough hereby delegates to the city, planning authority to develop and from time to time amend a comprehensive development plan and other long range development plans for the city subject to approval by the borough planning commission and assembly. Planning authority delegation to the city does not include amendment or administration of the Matanuska-Susitna Borough Coastal Management Plan.

(B) Pursuant to A.S. 29.40.010(b) and MSB 1.10.115, the city has consented, and the borough hereby delegates to the city, the authority to adopt, amend, administer, and enforce land use regulations within the city limits of Wasilla provided that:

(1) the city land use regulation must be in compliance with the most recent Wasilla city comprehensive development plan adopted by the borough;
(2) the city shall transmit copies of all amendments of the land use regulations or official zoning map to the borough planning department;
(3) land use regulations must be adopted by a duly adopted ordinance of the Wasilla City Council; and
(4) land use regulation powers delegated to the city of Wasilla do not include the platting authority contained in MSB title 16 or flood damage prevention contained in MSB 17.29.

CITY OF WASILLA CODE OF ORDINANCES

Section 2.60.010 Establishment, duties and compensation

A. The planning commission consisting of seven members is established.
B. The commission shall:
    1. Periodically review the land development code and make recommendations to the council for amendments;
    2. Undertake a general review of the comprehensive plan at least once every two years and make recommendations to the council for amendments;
    3. Annually, review one or more elements of the comprehensive plan, and make recommendations for amendment to the council;
    4. Review and make determinations on state construction projects in accordance with AS 35.30.010 and may impose conditions or modifications on these projects. If the commission determines the project should be disapproved or that modification should be made to which the state disagrees, the commission shall immediately notify the council and recommend disapproval by council resolution pursuant to AS 35.30.010(c);
    5. Make recommendations to the council on all proposed rezoning, indicating compliance with the applicable provisions of the land development code and the comprehensive plan;
    6. Hear and decide all permit applications that require a public hearing, including but not limited to applications for variances, rezones, and other procedures that may be required by the land development code;
    7. Hear and decide appeals of permit decisions made by the city planner;
    8. Investigate and prepare on an annual basis recommendations on a capital improvement program;
    9. Investigate and prepare reports on the availability of public lands for city purposes;
    10. At the request of the mayor or council, investigate and prepare reports on the location and establishment of public facilities.

2011 CITY OF WASILLA COMPREHENSIVE PLAN

Future Land Use Map

"***Generally Commercial/Business***" future land use designation for commercially zoned properties along proposed transmission line corridor – Parks Highway & Palmer-Wasilla Highway Extension

Chapter 1. Introduction
1.1 Purpose

Plan Purpose and Organization
This Comprehensive Plan ("Plan") is intended to guide the decision-making of the City's elected officials, commissions, and staff regarding future development and community quality of life. It provides a flexible, forward-thinking road map for action, with findings and goals that address important community elements. The expected useful life of this Plan is ten years, 2011 through 2021, which could be extended with regular updates.

Chapter 2. Community Overview
2.2 Demographics and Forecasts

Growth Locally and Regionally
In Alaskan terms, Wasilla's size is just right; large enough to have metropolitan amenities and a blossoming growth center for business, yet small enough to preserve the familiarity, charm, and security of small-town living. The active population enjoys affordable land and housing, unparalleled recreation, a thriving economy, and a responsive local government committed to assisting private development.

At the same time, the City is continuing to grow. Since the 1996 Comprehensive Plan was adopted, the City has been experiencing unprecedented growth pressures. Since the 2000 census, the City has experienced a 43% increase in population— up to 7,831 residents in 2010—and is recognized as one of America's fastest growing communities. Although growth has generally enhanced the City, it also has added new challenges as the City seeks to respond to the demands and needs that new residents bring.

2.3 Physical Context

Location and Setting
Wasilla offers the best of Alaska. A thriving crossroads with a booming economy, it is the heart of a diverse and dynamic region. Located in Alaska's fastest growing area, the City serves as the region's commercial and retail center.

…The 50-minute driving commute between the City and Anchorage is manageable and scenic…
…Within its majestic surroundings, the City sits between two river valleys carved by glaciers…
…Area ridges and variations in topography provide sought after development sites with spectacular views…

Chapter 3. Transportation
3.1 Current Conditions and Trends

Road Networks
The City was founded as a regional crossroads, and is even more so today. It is where the Alaska Railroad, Parks Highway, and major arterial and collector roadways intersect, bringing together the State's travelers, regional trade area traffic, commuters, and local residents.

The Parks Highway is a critical transportation link that serves many users and needs. Current demands include:

- Long distance through-traffic, including Alaskan residents and the military traveling to Fairbanks.
- Freight traveling to local, regional, and statewide destinations.
- Greater Wasilla area residents (40,000+) seeking highway access for daily commutes.
- Seasonal tourism traffic, including visitors and Alaskans driving to Denali Park and Preserve.
- Local residents who have limited network options on daily trips seeking access to commercial nodes and community destinations.

At the same time, the City has benefited from the retail development that it attracts. For example, the commercial node at the Parks Highway and Palmer-Wasilla Highway intersection is bustling, and tax revenues currently fund public services.

Chapter 4. Land Use
4.1 Current Conditions and Trends

Existing Land Use Patterns
…it is only relatively recently that the City established the policy basis for fully implementing land use regulations, including comprehensive planning and Land Development Code (Title 16).

Many families are moving to the Valley seeking a higher quality of life than Anchorage provides in terms of scenic and wildlife values, larger lots, and separation from neighbors and more intensive land uses.

4.2 Desired Future Conditions

In the future, enhanced Land Use procedures and practices contribute significant benefit to the community as it continues to grow:

- Property owners' rights are respected and land use decisions are made in a clear, predictable and fair process.
- A successful balance of land uses is achieved in the community, supporting both fiscal and quality of life values.

4.3 Future Land Use

Overview
The Future Land Use Map element of the City of Wasilla Comprehensive Plan provides valuable guidance for future land use decisions. It consists of the Future Land Use Map in Appendix B and the following land use designation descriptions, criteria, and implementation zoning.

Land Use Designations
Land use designations are provided to generally define the amount, type, and character of future development allowed in a given location in the City and they reflect the goals, objectives, and actions outlined in the City's Comprehensive Plan.

4.4 Goals, Objectives, and Actions

Goal 1. Provide balanced land use patterns that support the community's future growth.

Goal 2. Encourage development opportunities that support the City's role as a regional commercial center.

Objective 2.1. Encourage expansion of the City's commercial major areas to accommodate regional demands.

Chapter 6. Community Assets

6.1 Current Conditions and Trends

Community assets specifically include the many resources and attributes that the City develops, manages, and enhances for current and future residents. Cost effective infrastructure and services, upholding important quality of life issues that residents and visitors value, and enhancing future economic development opportunities are all critically important aspects of this planning element.

Natural and Scenic Resources

The City is located within a spectacular setting with ample natural resources that contribute to the area's quality of life and potential visitor appeal. Retaining and enhancing these assets can be a challenge as the City grows and develops. Over the life of this Plan, working with private landowners and community partners will be vital to maintaining them for future generations.

Community Character and Identity

An intangible, yet critical asset of any community is its overall character and identity. Although difficult to manage, community planning and public projects should consider ways to "re-frame" and enhance perceptions of the City. This could include creating highly visible landmarks, buildings and enhancements along the Parks Highway, revitalizing Downtown, community branding, and outreach through the Wasilla Chamber of Commerce and other tourism agencies.

6.2 Desired Future Conditions

- Wasilla's Public Facilities are attractive, safe, functional and provide value to the community.
- Adequate water, sewer and utility networks serve residents and new growth, including economic enterprise and commercial uses.
- Recreation and parks are cost-effectively run and enhance local health and quality of life.
- A regionally linked network of trails serves diverse users safely and enjoyably.
- Historic, cultural and educational assets are enhanced for residents and visitors.
- Natural and scenic resources are preserved and maintained for the future.
- Wasilla enjoys an enhanced community character and identity.

6.3 Goals, Objectives, and Actions

Goal 4. Preserve and enhance the City's unique community assets.

Objective 4.2 Enhance the City's visual appearance and identity.

Action 4.2.1 Identify landmarks and features of visual interest to residents and visitors, and explore opportunities for enhancing access to them and/or framing views for the public (e.g. scenic overlooks, pullouts, site development that maintains and/or incorporates views.)

Action 4.2.2 Work to tap community pride and owners' self interest in enhancing properties along the Parks Highway by partnering with the Chamber of Commerce and other organizations on community beatification and cleanup efforts.

Action 4.2.3 Collaborate with ADOT&PF to identify ways to preserve landscaping along state roadways and minimize dust pollution from winter maintenance.

Chapter 7. Economic Vitality
7.1 Current Conditions and Trends

Regional Commercial and Service Center
The last decade has firmly established the City's "crossroads" as the region's major commercial center. As part of updating the Plan, in September 2009 a Wasilla Area Retail Office, Commercial, and Market Analysis Market Study ("Market Study") was completed by the Gibbs Planning Group and is included in Appendix D. This analysis was completed so that future development plans reflect actual market conditions and potentials. The Market Study indicated that the City is in the midst of evolving from a bedroom community of Anchorage to a more self-sufficient community, meeting some regional retail needs. Moreover, the September 2009 study determined that in 2009 the City's commercial district was serving a regional trade area population of around 90,000. State population projections indicate this could exceed 150,000 by 2034 (ADLWD 2010).

An Attraction for Residents and Visitors
A year-round recreation paradise, the City has historical ties to the renowned Iditarod Trail Sled Dog Race and is the home of the Tesoro Iron-Dog 2000, the world's longest snowmobile race. Fishing, swimming, boating, hiking, and biking are popular activities during summer's long daylight hours, and mountains, lakes, streams, wetlands, tundra, and boreal forests are within easy reach. The quality of life is excellent, the water is clean and abundant, the air is fresh, and the people are friendly. The City embodies the small-town values of family, community, and caring for neighbors. The unique locale appeals to those who seek an Alaskan lifestyle while raising a family, taking advantage of economic prospects, or retiring in comfort.

Gateway to Recreation
…Moreover, Wasilla has a growing tourism sector, and could market itself as the affordable, fun, and logical place for Alaskans and visitors to stay while pursuing their recreational experiences.

7.2 Desired Future Conditions
- The City's economy in the future is more diverse and vibrant. The region's commercial and service sectors provide competitive products keeping regional dollars in the local economy.
- The City attracts additional residents and visitors. The population grows, as does the City's tourism sector. The already high quality of life, in addition to a revitalized Downtown and enhanced community image, make the City a desirable place to live, visit, and play.

7.3 Goals, Objectives and Actions

Goal 1. Continue to promote and enhance the City's future as the region's major center for commerce, services, visitor hospitality, culture and arts, transportation and industry.

Objective 1.1 Adopt policies and programs that will ensure that the City remains the preferred place in the Valley for shopping, services, employment, arts, entertainment, sports, and culture.

Action 1.1.1 Develop a strategic economic plan that considers how to secure Wasilla's future as the leading commercial center given its location and proximity to growing population nodes, particularly Knik/Fairview.

Objective 1.2 Develop a plan to creating a more diverse economic base that will attract a wider range of employment opportunities.

Action 1.2.1 Identify ways to ensure that the City continues to support appropriate development.

Objective 1.3 Encourage the development of new anchor developments, facilities, and attractions that generate economic activity.

Action 1.3.1 Support community initiatives to strengthen the City as a regional center of art, culture, and education (e.g. Valley Performing Arts expansion, new Wasilla Library, new Sports Dome).

Action 1.3.2 Promote opportunities for creating a destination hotel, restaurant, timeshare and convention center in areas such the multi-modal transit center and the Museum of Alaska Transportation and Industry and Wasilla Heights.

Action 1.3.3 Promote and support new activities, festivals, and recreational opportunities that encourage visitors and tourists to visit the City (e.g., fishing derbies, new mining history display, winter festival, etc.).

Objective 1.4 Promote the City as a base for Valley recreation and a "Gateway to Adventure."

Action 1.4.1 Partner with the Mat-Su Convention and Visitors Bureau and Wasilla Chamber of Commerce and other recreation-oriented interests to promote the City's visitor hospitality services and location as the gateway to recreational opportunities.

Action 1.4.2 Identify opportunities for tourist attractions within the City.

Goal 2. Diversify the economic base and attract new employment generators.

Objective 2.1 Continue to expand the City airport and encourage development of adjacent economic generators on City-owned land.

Action 2.1.1 Identify ways to attract new product manufacturing and assembly plants, including focused on producing specialty items using local resources.

Action 2.1.2 Seeks funds to be used for capital improvements that serve as an incentive to attract new employers to the City.

Objective 2.2 Encourage employment opportunities within the City to reduce commuting to Anchorage for jobs.

Action 2.2.1 Reach out to commercial, financial, and government entities headquartered in Anchorage and Palmer and promote local branch Wasilla offices, both to provide better services directly in MSB's population growth center, and to allow commuting employees the option of working in their community.

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CITY OF WASILLA LAND DEVELOPMENT CODE

Official Zoning Map

The majority of properties in the proposed route along the Parks Highway and Palmer-Wasilla Highway Extension are zoned **Commercial.**

Section 16.04.010 Purposes.
This title is adopted:
A. To achieve the goals and objectives, and implement the policies, of the Wasilla comprehensive plan;
B. To ensure that future growth and development in the city is in accord with the values of its residents;
C. To identify and secure, for present and future residents, the beneficial impacts of growth;
D. To ensure public involvement in permitting, planning and zoning decisions;
E. To identify and avoid, mitigate or prohibit the negative impacts of growth; and
F. To ensure that future growth is of the proper type, design and location, and is served by a proper range of public services and facilities.

Section 16.04.040 Comprehensive plan.
A. The Wasilla comprehensive plan is a compilation of policies, plans, maps and associated materials that forms the basis for approvals under these regulations. The Wasilla comprehensive plan was adopted in 1996 and amended in 1999 to include the City of Wasilla Trails Plan, in 2004 to include the Wasilla Alaska Railroad Relocation Reconnaissance Study, and in 2005 to include the Wasilla All Hazard Mitigation Plan Phase I - Natural Hazards.

Section 16.08.010 Permits required - Reapplication.
A. The developer of a use shall apply for and obtain the appropriate approval prior to the establishment of a use or any site work except surveying.
   3. Conditions. The council, commission or planner may place conditions upon issuance of any approval which are necessary or desirable to ensure that a rule, policy, standard or intent will be implemented in a manner consistent with this title, the comprehensive plan and any rule, policy or standard implementing them.

Section 16.08.015 Site plan - As-built survey.
A. Except as provided in subsection D of this section, an application under Section 16.12.010 or 16.16.040 shall include a site plan conforming to the requirements of this section. If changes to the site plan that are submitted with an application are required as conditions of the approval of the application, the applicant shall submit a revised site plan that incorporates the required changes before the application is approved. The approved site plan shall be part of the approved application, and development under the approved application shall conform to the approved site plan.
D. No site plan is required with an application where:
   2. The commission waives the site plan requirement for the application after considering the recommendations of the public works director and city planner.

Section 16.08.030 Planning commission.
The commission has all powers and duties of a commission of a first class city as set forth in state law. The commission specific powers and duties are set forth in Chapter 2.60.

Section 16.12.040 Elevation.
The planner may elevate any use permit decision to the planning commission at any time between the acceptance of the application and the close of the decision period. The elevation must be based on a written finding that the permit decision satisfies one or more of the following criteria:

A. The proposed use could have significant negative effects on or conflict with existing land uses adjoining the site in a manner or to a degree that warrants consideration by the commission;
B. The proposed use could have significant negative impacts on the utility system, traffic flow or city-provided services;
C. The proposed use could conflict with adopted city policies or raises a particular issue or set of issues in a manner or to a degree that warrants consideration by the commission;
D. A written request for elevation has been received from an official reviewing party. To be valid an objection from a reviewing party must cite conflict(s) with city policy or unusual negative impacts from the proposed use;
E. A request to elevate has been received from two or more members of the commission. The planner must determine that the request from the commission member satisfies one or more of the criteria above.

Section 16.16.010 Planning commission approvals.
Approvals by the commission are intended to address uses and issues of community wide importance and are therefore subject to a broader public process and higher standards than approvals by the planner.

Section 16.16.030 Approval required.
All conditional uses and elevated approvals must receive approval by the commission prior to commencement. In all applications for an approval, the burden of proof shall be on the developer to prove, by a preponderance of the evidence, that the criteria set forth in this title are met. The uses eligible for approval by the commission as a conditional use are listed in the use chart in Section 16.20.020. Hearings held by the commission use the following procedure.

Section 16.16.040 Procedure for commission approvals.
6. **Decision.** The commission shall decide to deny, approve or approve with conditions the proposal or appeal. The burden of proof shall be on the applicant. The commission's decision may be made immediately following the public hearing portion of the commission meeting. The decision of the commission shall set forth the facts it finds relevant to its decision and the reasons for its decision, and notify interested persons, as defined in Section 16.36.010, of the right to appeal under Section 16.36.060. The effective date of the decision is the date the findings and the reasons are set out in writing and signed by the commission chairperson or the chairperson's designee.

Section 16.16.050 General approval criteria.

A. An administrative approval, use permit, elevated administrative approval, elevated use permit or conditional use may be granted if the following general approval criteria and any applicable specific approval criteria of Section 16.16.060 are complied with. The burden of proof is on the applicant to show that the proposed use meets these criteria and applicable specific criteria for approval. An approval shall include a written finding that the proposed use can occur consistent with the comprehensive plan, harmoniously with other activities allowed in the district and will not disrupt the character of the neighborhood. Such findings and conditions of approval shall be in writing and become part of the record and the case file.

Section 16.20.010 Zoning districts.

A. The city is divided into the following zoning districts. These districts are depicted on the official city zoning map.

5. **Commercial District**. The intent of the commercial district is to protect areas of existing commercial development and to provide areas for the continued growth of commercial enterprise. The uses in this zone are oriented towards serving the commercial needs of the residents of the city and the surrounding area.

Section 16.20.020 District use chart.

A. The following chart summarizes the uses allowed and the standard of review for each use. In the commercial and industrial districts, more than one building housing a permissible principal use may be erected on a single lot; provided, that each building and use shall comply with all applicable requirements of this chapter and other borough, state or federal regulations.

AA = Administrative approval	UP = Use permit	CU = Conditional use
EX = Excluded	Blank = No city approval necessary	

Districts	RR Rural	R1 Single-Family	R2 Residential	RM Multi-family	C Commercial	I Industrial	P Public
Uses							
Utility Facility	AA	UP	UP	UP	AA	AA	AA

Section 16.24.030 Setbacks and height.

A. Setbacks are measured from the outermost portion of the building to the nearest lot line or building as appropriate. Temporary buildings may be permitted within the side or rear yard area as administrative approval by the city planner. Where other setback standards are applicable, the most restrictive setback standards apply. The following are the building setback and height standards:

6. Building height is limited to thirty-five (35) feet above the average finished grade of the lot in the RR, R1, R2, RM and P zoning districts. Building height

in the C and I zoning districts is limited to thirty-five (35) feet above the average finished grade of the lot, except where the commission approves a greater height limit as a conditional use under the general approval criteria in Section 16.16.050, and the borough fire code official finds that the building conforms to the requirements of the Uniform Building Code and the Uniform Fire Code adopted by the borough.

C. Exceptions for setback requirements are as follows:

3. No building or footing may be located closer than seventy-five (75) feet from the high-water mark of a water course or body of water; provided, docks, piers, marinas and boathouses may be located closer than seventy-five (75) feet if they are located primarily over water, not used for habitation, and do not contain sanitary facilities. The city may require dedication of a maintenance easement of up to fifteen (15) feet from the high-water mark or bank of a body of water, whichever produces the greatest access. This section does not apply to structures where construction was completed prior to January 1, 1987, if the present owners of the property had no personal knowledge of any violation of the requirements of this section prior to substantial completion of the structures. Furthermore, this section does not apply if a land use permit was issued prior to October 28, 1997. The city planner shall, upon application by a property owner, determine whether a property qualifies for an exception under this subsection.

Chapter 16.33 LANDSCAPING STANDARDS

Section 16.33.010 Purpose.

The purposes of the landscaping standards in this chapter are to stabilize soils, reduce dust and erosion, protect natural vegetation, sustain wildlife and fish, protect shorelines, reduce runoff, facilitate groundwater recharge, reduce noise, enhance the community's environment and visual character, provide attractive and functional separation and screening between uses, and to attract visitors and tourists to the city for the economic benefit of everyone in the community.

Section 16.33.030 Landscaping standards.

A. **Landscaped Area**. No less than five percent of the total lot area shall be devoted to landscaping. All landscaped areas shall be covered with native vegetation, trees, shrubs, lawn seeding areas or wildflower seeding areas. Landscaped areas shall be located to define, soften, and/or screen the appearance of buildings and off-street parking areas.

B. **Minimum Planting**. A minimum of six newly planted trees and twelve (12) newly planted shrubs shall be provided per acre of required landscaped area on a lot.

C. **Alternative Landscaping Features**. The planner may permit the substitution of alternative landscaping features such as hanging baskets, flower boxes, barrels, pedestrian plazas, fountains, walkways, furnishings such as benches, retention ponds, catch basins, or bioswales for part of the landscaped area required under subsection A of this section.

D. **Shoreline Protection Area**. Native vegetation shall be preserved, and there shall be no clearcutting or placement of fertilizer in any area of a lot that is within seventy-five (75) feet of the mean high water mark of any body of water, including a lake, stream or river. The area within a lot that complies with the requirements of this subsection shall be treated as part of the landscaped area that is required under subsection A of this section.

E. **Parkway Landscaping**. Any area in the right-of-way of a public street or highway that is located between the lot line and roadway pavement, curb or sidewalk that is disturbed or devoid of landscaping, and that is covered with topsoil and planted with ground cover, trees or shrubs meeting city specifications shall be treated as part of the landscaped area that is required under subsection A of this section.

F. **Utility Easement Landscaping**. Landscaping within public utility easements is encouraged but shall be limited to topsoil, seed, flower plantings, small shrub plantings or native vegetation.

I. Landscaping required under this title shall be placed in a manner that does not interfere with the installation, maintenance or repair of any public utility, restrict pedestrian or vehicular traffic, or obscure traffic control signs or devices.

Section 16.33.070 Waivers or modifications.

A. The commission may waive or modify a requirement in this title concerning the density, location or height of landscaping as provided in this section.

1. **Preapplication Conference**. The applicant shall schedule a preapplication conference with the planner to review the proposed waiver or modification.
2. Application and Site Plan. After the pre-application conference, the applicant shall submit an application for the waiver or modification to the planner with the appropriate application fee. The application shall include a site plan depicting all information relevant to the requested waiver or modification. The planner may require that the site plan be produced by a registered professional engineer, architect, landscape architect or land surveyor.
3. **Public Hearing**. The commission shall hold a public hearing on the application. The notice, comment period, and hearing procedure shall be the same as provided in Section 16.16.040 for a conditional use.
4. **Decision**. The commission may approve an application only if the commission finds that the application meets all of the following standards:
    a. Either (i) natural vegetative features within or adjacent to the property, or the shape, topography, drainage or other physical features of the property, make compliance with the landscaping requirements of this title impracticable or contrary to the public interest; or (ii) compliance with the landscaping requirements of this title will have an adverse effect on other property;
    b. The special conditions that support the waiver or modification are not caused by the person seeking the waiver or modification, a predecessor in interest, or the agent of either;
    c. The waiver or modification is not sought solely to relieve pecuniary hardship or inconvenience;
    d. The waiver or modification will not significantly affect adjacent property or water bodies; and
    e. The waiver or modification is consistent with the spirit and intent of this chapter.

APPLICABLE DEFINITIONS

“Clear cutting” means the removal of all vegetation from the land, including native trees and shrubs.

“Developer” means any person who causes a use to occur or applies for an approval under this title.

“Due deference” means that deference which is appropriate in the context of the reviewing party’s expertise and area of responsibility, and all the evidence available to support any factual assertions.

“Ground cover” means any landscaping treatment intended to prevent the growth of invasive species and/or provide erosion control. Ground cover may include lawn or low-growing plants, which grow in a spreading fashion to form a more or less solid mat of vegetation.

“Lot” means a distinct parcel of land for ownership and tax purposes which is delineated and fixed on a plat filed for record or described by aliquot parts.

“Native vegetation” means dense stands of forest including trees and shrubs that are naturally occurring in the Matanuska-Susitna Valley.

“Public facility” is a use, lot or building owned or used by a federal, state or local government agency, school board or utility company, including fire stations, public education facilities, libraries, hospitals, and accessory uses.

“Shrub” means a woody plant that has many small branches from its base and is not tree-like and is a minimum of two feet in height.

“Site plan” means an accurate to scale graphic depiction of a plan of development that shows existing and planed future conditions including topography, waterbodies, buildings, uses, parking areas and vegetation on the lot and in the general area of the proposed development.

“Tree” means a woody plant, usually with one trunk, with a minimum height of eight feet.

“Utility facilities” means a use either public or private, which is above or below ground level and which is used to treat, condition or convey water, sewer, energy, electricity and communication services. The term includes pipes, cables, utilidors, substations, transformers, switching devices, lift stations, public satellite dishes, public antennas, and towers. This term does not include minor accessories to the existing system or utility connections necessary for an individual lot.

CITY OF WASILLA ALASKA

AM No. 12-52: CONFIRMING GOALS AND INITIATIVES FOR FY2014.

Agenda of: December 10, 2012 **Date:** November 28, 2012
Originator: Troy Tankersley, Finance Director

Route to:	Department	Signature	Date
X	Chief of Police		11/29/12
X	Public Works Director		11/20/12
X	Rec & Cultural Services Manager		
X	Finance Director		11.28.12
X	Interim Deputy Administrator		11/28/12
X	City Clerk		11/28/12

REVIEWED BY MAYOR VERNE E. RUPRIGHT:

FISCAL IMPACT: ☐ yes or ☒ no Funds Available ☐ Yes or ☐ No

Account name/number/amount: **N/A**

Attachments: Draft Budget Goals and Initiatives (8 pages)

SUMMARY STATEMENT: Attached is a listing of budget goals and initiatives for FY2014.

As part of the budget process, the City Council has adopted eight multi-year goals. To implement these long-range goals, the Council establishes budget initiatives each year as part of the budget preparation process. Once the Council adopts goals and budget initiatives, departments, begin preparing their budgets. As part of the final budget adoption process, City departments are assigned the responsibility for implementing specific budget initiatives. These goals and budget initiatives become the top priorities that administration and staff work to accomplish in their annual work program. These were discussed during the Special Meeting of the City Council on November 19 2012.

Several items were discussed at the November 19, 2012, City Council Special Meeting. There was no formal vote since the meeting was conducted within a committee of the whole. However, items where there seemed to be consensus have been noted and are as follows:

Goal Number: 1

Initiative Number 5 – An addition was added to read: *Please see attached.*

STAFF RECOMMENDATION: Confirm the FY2014 Goals and Initiatives.

Date:	12/10/12	Approved:	✓	Denied:		Initials:	JS	Comments:	Amended to add Item #9 & renumber.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Keep local government efficient and accountable to the citizens of Wasilla

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
1	X		X													
2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X			X	X	X	X	X	X
4	X				X											
5	X				X	X										

1. Achieve balanced budget for Fiscal Year 2013 and 2014 to maintain and improve existing services while maintaining a 0.0 mil rate.

2. Refine the performance measurement system for each department in order to evaluate performance of the City's departments in providing services.

3. Continue to enhance and expand City website to implement electronic government (e-government), to improve access to public notices, maps and economic data, and to facilitate communication.

4. Reestablish Tri-Cities meetings to work on items of mutual interest and work to establish a biennial Tri-Cities/Borough meeting.

5. Continue employee emergency management training and preparedness planning to ensure continuity and efficient recovery in the event of a disaster. Including discussions with the Mat-Su Local Emergency Planning Committee (LEPC) and local businesses.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Encourage a strong and diverse economic base in the City of Wasilla

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
6	X		X		X		X									
7	X		X		X		X	X			X			X		
8	X				X		X									
9	X		X		X						X					

6. Encourage new business to locate to and invest in the City of Wasilla by actively marketing Wasilla as an attractive business location.

7. Develop long range strategic economic development plan for the City that includes job development initiatives.

8. Develop a written strategic plan for annexation and consider requesting the State Legislature to provide additional annexation tools.

9. Encourage an increase in senior and disabled residents by improving handicap accessibility, researching impacts of utility costs, and supporting existing programs and new residential construction for seniors and the handicapped.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Refine and improve the long-term Capital Project Plan to preserve and improve City infrastructure to provide for future growth

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
10	X		X								X					
11											X	X				
12			X								X					
13	X				X											
14											X					
15	X		X		X						X					

10. Invest at least $1,250,000 in city infrastructure improvements each fiscal year.

11. Pave collector roads; Nicola and Susitna.

12. Modify Code and/or Policy to allow for LID process as a means to support improved street system.

13. Encourage co-location of various governmental and social services agencies in the City of Wasilla.

14. Plan for expanded utility capacity at the sewage treatment plant and new drinking water sources.

15. Identify funding sources for construction of new library.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Develop stable and equitable sources of revenue that will provide the needed funding to accomplish the mission statement

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
16	X		X													
17	X		X		X											
18	X		X		X									X	X	
19	X		X		X									X	X	
20	X		X		X											

16. Continue to improve and refine long-range financial planning process to include lobbying of federal and state entities.

17. Remain proactive in maintaining sale tax revenue in the event the Borough or State moves to enact a sales tax. Oppose any changes to AK Statutes that may restrict the City's ability to collect sales tax as set forth in WMC 5.16.

18. Work with Tri-Cities and the Borough on dedicated funding formula for use of Bed Tax to support tourism development.

19. Identify Borough funding sources to achieve full funding of the Library.

20. Support a continuing source of funding for community dividend, revenue sharing and/or other State aid to cities programs.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Continue progress in making the enterprise funds self-sufficient while ensuring the systems meet environment and development needs of the citizens and the businesses

Department(s) Responsible for Supporting Specific Budget Initiative																
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
21											X	X				
22	X				X											
23											X			X		
24	X		X		X						X					

21. Develop plans for water and sewer service at the Wasilla Municipal Airport.

22. Expand number of Airport tie-down spaces and lease lots, to accommodate aviation community and to expand Airport revenue.

23. Promote use of the Curtis Menard Memorial Sports Center for events including national, state, and regional sporting events; trade shows; conferences and conventions; while maintaining support to local organized sports programs.

24. Review utility rate structure to ensure water and sewer funds have suitable reserves while providing a fair rate structure to the customer.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Continue to provide the citizens with the highest quality of law enforcement service possible in the most efficient and effective manner available

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
25	X							X	X	X						
26			X					X	X	X			X			
27								X		X						
28	X							X	X							
29								X								
30	X		X		X			X			X		X			
31								X								

25. Through grant and local funding, support law enforcement training to enhance Police Officers' and Dispatchers' skills, maintain certification programs (established by the department or required by practice, regulation or law).

26. Update law enforcement equipment and related response capabilities to improve critical response capacity of Police Department personnel.

27. Utilize highly visible city presence to enhance safety of residents and businesses by increasing preventative presence and visibility in neighborhoods.

28. Continue to improve service to the public by promptly responding to calls and by providing and enhancing law enforcement dispatch services which we are contractually and ethically obligated to perform.

29. Support the youth of the community through existing programs such as School Resource Officer, Youth Court and Crimes Against Children Unit Investigator.

30. Support, design and develop a relocation plan of the exiting police facility and identify funding sources for relocation.

31. Increase community policing with programs such as Business Academy, Senior Academy, Neighborhood Watch and Business Watch.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Preserve and enhance the quality of life for current and future residents of Wasilla and for visitors to this community

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
32	X				X						X	X				
33					X							X				
34					X							X				
35	X		X													
36	X				X						X	X		X	X	X
37	X				X		X				X			X	X	X

32. Allocate funding annually for the preservation and clean-up of lakes and waterways within the City.

33. Enhance Lake Lucille Park and water quality to increase use.

34. Enhance Wasilla Lake Park use to include exploring opportunities to enhance recreational activities.

35. Assign $50,000 annually for land bank for the purpose of positioning the City to purchase land as necessary to enhance the quality of life for residents of the City of Wasilla.

36. Continue to encourage and promote cultural and recreational programs, events, and activities to improve the quality of life of the City's residents and visitors through the use of City facilities (such as parks, museums and library).

37. Establish citizen focus groups and continue to conduct community surveys to assist in the development of long-term plans and policies to accommodate future growth.

Wasilla Budget Goals and Initiatives for FY 2014

GOAL: Begin to implement the Comprehensive Plan

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
38	X				X		X				X					
39	X				X		X									
40					X		X									
41	X				X		X				X					
42					X		X				X	X				

38. Define the boundaries of the downtown district and develop design standards for new buildings in that district as on overlay district.

39. Require any new design standard to be placed into any building retrofit projects.

40. Encourage construction of new businesses, office space and hotels in Wasilla's downtown by publicizing the downtown plan.

41. Create a pedestrian friendly downtown district, including installing and improving sidewalks and pathways in the district.

42. Continue to enhance the structures and the aesthetics of the historic village in the downtown district.

CITY OF WASILLA ALASKA

Action Memorandum

AM No. 12-02: CONFIRMING GOALS AND INITIATIVES FOR FY2013 AND FY2014.

Agenda of: January 12, 2012 **Date:** December 27, 2011
Originator: Troy Tankersley, Finance Director

Route to:	Department	Signature	Date
X	Chief of Police		
X	Public Works Director		
X	Rec & Cultural Services Manager		12/28/11
X	Finance Director		12/27/11
X	Interim Deputy Administrator		12/28/11
X	City Clerk		1/3/12

REVIEWED BY MAYOR VERNE E. RUPRIGHT:

FISCAL IMPACT: ☐ yes or ☒ no Funds Available ☐ Yes or ☐ No

Account name/number/amount: N/a

Attachments: Draft Budget Goals and Initiatives (9 pages)

SUMMARY STATEMENT: The attached listing of budget goals and initiatives for FY2013 and FY2014 were developed on December 5, 2011, during a Special Meeting of the City Council.

BACKGROUND: As part of the budget process, the City Council has adopted eight multi-year goals. To implement these long-range goals, the Council establishes budget initiatives each year as part of the budget preparation process. Once the Council adopts goals and budget initiatives, departments, begin preparing their budgets. As part of the final budget adoption process, City departments are assigned the responsibility for implementing specific budget initiatives. These goals and budget initiatives become the top priorities that administration and staff work to accomplish in their annual work program.

STAFF RECOMMENDATION: Confirm the FY2013 and FY2014 Goals and Initiatives through adoption of AM No. 12-02.

Date:	1/9/2012	Approved:	✓	Denied:		Initials:	JSB.	Comments:	

Mission and Goals

Preface

The City of Wasilla is one of the fastest growing communities in the State of Alaska and the United States. The City of Wasilla's population has grown by approximately 47 percent since the year 2000. Along with this population growth, dramatic economic expansion has occurred. An indication of this expansion is the growth in sales tax revenue over the last years. It is projected that sales tax revenue has grown by over 207 percent since fiscal year 2000. Based on projections from state and local sources, these population and economic trends are predicted to continue into the foreseeable future.

Along with this expansion have come unique challenges for the City of Wasilla. It is the commitment of the City of Wasilla to ensure that the City meets these challenges and to ensure that the necessary services will be available when the citizens and businesses need them in the future to meet the dynamic growth that the City of Wasilla will continue to experience.

Mission Statement

It is the mission of the City of Wasilla to provide optimum service levels to the public as cost effectively as possible to ensure a stable and thriving economy, promote a healthy community, provide a safe environment and a quality lifestyle, and promote maximum citizen participation in government.

City Powers and Responsibilities

The City of Wasilla was organized to execute the powers that have granted to it through legislative action and voter mandate. Powers that have been given to the City of Wasilla include the following:

Taxation and Assessments	Police
Planning	Roads
Economic Development	Airport
Parks, Recreation, Museum and Library	Utilities (Water & Sewer)

Long-Range Goals and Budget Initiatives for Fiscal Year 2013 and 2014

The City of Wasilla has selected eight (8) long-range goals as its priorities. These goals are multi-year in nature and will be revisited periodically to fit changing conditions as they occur. Along with these long-term goals, the following pages display the City of Wasilla's budget initiatives.

The goals and budget initiatives in this year's budget reflect the dedication of the city's elected officials to the City of Wasilla's commitment to provide the highest level of public service while tackling the complex issues that the City of Wasilla must address to preserve the quality of life our residents' desire and deserve. The departments of the City have used these long-range goals and budget initiatives as the foundation in building their mission, goals, objectives and strategies for Fiscal Year 2013 and Fiscal Year 2014.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Keep local government efficient and accountable to the citizens of Wasilla

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
1	X		X													
2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X			X	X	X	X	X	X
4	X				X											
5	X				X	X										

1. Achieve balanced budget for Fiscal Year 2013 and 2014 to maintain and improve existing services while maintaining a 0.0 mil rate.

2. Refine the performance measurement system for each department in order to evaluate performance and accountability of City departments in providing services.

3. Continue to enhance and expand City website to implement electronic government (e-government), to improve timely access to public notices, maps and economic data, and to facilitate communication.

4. Restablish Tri-Cities and Borough meetings to work on items of mutual interest and work to establish a biennial Tri-Cities/Borough meeting.

5. Continue employee emergency management training and preparedness planning to ensure continuity and efficient recovery in the event of a disaster.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Encourage a strong and diverse economic base in the City of Wasilla

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
6	X		X		X		X									
7	X		X		X		X	X			X			X		
8	X				X		X									

6. Encourage new businesses to locate to and invest in the City of Wasilla by actively marketing Wasilla as an attractive business location.

7. Develop long range strategic economic development plan for the City with input from our local business community.

8. Develop a written strategic plan for annexation and consider requesting the State Legislature to provide additional annexation tools.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Refine and improve the long-term Capital Project Plan to preserve and improve City infrastructure to provide for future growth

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
9	X		X								X					
10											X	X				
11			X								X					
12	X				X											
13											X					
14	X		X		X						X					

9. Invest at least $1,250,000 in city infrastructure improvements each fiscal year.

10. Pave collector roads; Nicola and Susitna.

11. Modify Code and/or Policy to improve the LID process as a means to support improved street system.

12. Encourage co-location of various governmental and social services agencies in the City of Wasilla.

13. Plan for expanded utility capacity at the sewage treatment plant and new drinking water services.

14. Identify funding sources for construction of new library.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Develop stable and equitable sources of revenue that will provide the needed funding to accomplish the mission statement

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
15	X		X													
16	X		X		X											
17	X		X		X									X	X	
18	X		X		X									X	X	
19	X		X		X											

15. Continue to improve and refine long-range financial planning process to include lobbying of federal and state entities.

16. Remain proactive in maintaining sales tax revenue in the event the Borough or State moves to enact a sales tax. Oppose any changes to Alaska Statutes that may restrict the City's ability to collect sales tax as set forth in WMC 5.16.

17. Work with Tri-Cities and the Borough on dedicated funding formula for use of Bed Tax to support tourism development.

18. Identify Borough funding sources to achieve full funding of the Library.

19. Support a continuing source of funding for community dividend, revenue sharing and/or other State aid to cities programs.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Continue progress in making the enterprise funds self-sufficient while ensuring the systems meet environment and development needs of the citizens and the businesses

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
20											X	X				
21	X				X											
22											X			X		
23	X		X		X						X					

20. Develop plans for water and sewer service at the Wasilla Municipal Airport.

21. Expand number of Airport tie-down spaces and lease lots, to accommodate aviation community and to expand Airport revenue.

22. Promote use of the Curtis D. Menard Memorial Sports Center for events including national, state, and regional sporting events; trade shows; conferences and conventions; while maintaining support to local organized sports programs.

23. Review utility rate structure to ensure water and sewer funds have suitable reserves while providing a fair rate structure to the customer.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Continue to provide the citizens with the highest quality of law enforcement service possible in the most efficient and effective manner available

Department(s) Responsible for Supporting Specific Budget Initiative																
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
24	X							X	X	X						
25			X					X	X	X			X			
26								X		X						
27	X							X	X							
28								X								
29	X		X		X			X			X		X			
30								X								

24. Through grant and local funding, support law enforcement training to enhance Police Officers' and Dispatchers' skills, maintain certification programs (established by the department or required by practice, regulation or law).

25. Update law enforcement equipment and related response capabilities to improve critical response capacity of Police Department personnel.

26. Utilize highly visible city presence to enhance safety of residents and businesses by increasing preventative presence and visibility in neighborhoods.

27. Continue to improve service to the public by promptly responding to calls and by providing and enhancing law enforcement dispatch services which we are contractually and ethically obligated to perform.

28. Support the youth of the community through existing programs such as School Resource Officer, Youth Court, and Crimes Against Children Unit Investigator.

29. Support, design and develop a relocation plan of the existing police facility and identify funding sources for relocation.

30. Increase community policing with programs such as Business Academy, Senior Academy, Neighborhood Watch and Business Watch.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Preserve and enhance the quality of life for current and future residents of Wasilla and for visitors to this community

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
31	X		X								X	X				
32					X							X				
33					X							X				
34	X		X													
35	X				X						X	X		X	X	X
36	X				X		X				X			X	X	X

31. Allocate funding annually for the preservation and clean-up of lakes and waterways within the City.

32. Enhance Lake Lucille Park and water quality to increase use.

33. Enhance Wasilla Lake Park use to include exploring opportunities to enhance recreational activities.

34. Assign $50,000 annually for land bank for the purpose of positioning the City to purchase land as necessary to enhance the quality of life for residents of the City of Wasilla.

35. Continue to encourage and promote cultural and recreational programs, events, and activities to improve the quality of life of the City's residents and visitors through the use of City facilities (such as parks, museums and library).

36. Establish citizen focus groups and continue to conduct community surveys to assist in the development of long-term plans and policies to accommodate future growth.

Wasilla Budget Goals and Initiatives for FY 2013 – FY 2014

GOAL: Begin to implement the Comprehensive Plan

	Department(s) Responsible for Supporting Specific Budget Initiative															
	Admin	City Clerk & Records	Finance	MIS	General & Admin	Human Resources	Planning	Police	Dispatch	Code Compliance	Public Works	Parks, Property & Roads	Purchasing	Recreation & Cultural Services	Library	Museum
37	X				X		X				X					
38	X				X		X									
39					X		X									
40	X				X		X				X					
41					X		X				X	X				

37. Define the boundaries of the downtown district and develop design standards for new buildings in that district as on overlay district.

38. Require any new design standard to be placed into any building retrofit projects.

39. Encourage construction of new businesses, office space and hotels in Wasilla's downtown by publicizing the downtown plan.

40. Create a pedestrian friendly downtown district, including installing and improving sidewalks and pathways in the district.

41. Continue to enhance the structures and the aesthetics of the historic village in the downtown district.

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Article
1. Utility Permits. (17 AAC 15.010 - 17 AAC 15.111)
2. Utility Standards and Requirements. (17 AAC 15.120 - 17 AAC 15.301)
3. Utility Relocation and Installation. (17 AAC 15.310 - 17 AAC 15.461)
4. Railroads. (17 AAC 15.471 - 17 AAC 15.551)
5. General Provisions. (17 AAC 15.901)

Article 1
Utility Permits

Section

17 AAC 15.010. Application for utility permit

Repealed 5/23/82.

17 AAC 15.011. Utility permits

(a) Upon written application, the department may issue a permit authorizing the applicant to construct or install utility facilities within a department right-of-way. Permits for railroad facilities will be issued under 17 AAC 15.471 - 17 AAC 15.551.

(b) In analyzing whether to issue a permit, the department will consider the utility standards and requirements set out in 17 AAC 15.131 - 17 AAC 15.301.

(c) In a utility permit, the department will authorize the activities reasonably required for the construction, maintenance, or operation of the utility facility described in an approved permit application.

(d) The department may attach to the utility permit special provisions it considers necessary to protect the public interest.

(e) A utility permits expires if construction or installation of the facility has not started within one year after the date of approval, unless the applicant obtains an extension of time in writing from the department.

(f) This chapter applies only to those utility facilities that require utility permits.

(g) Any agreements between permittees, or between permittees and third parties, regarding the use of state right-of-way to which the department is not a signatory, are not binding on the department.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

17 AAC 15.012. Utility permits on airports and public facilities other than highways

Utility permits will, in the department's discretion, be issued on airports and public facilities other than highways. These permits are subject to the following provisions of this chapter:

(1) 17 AAC 15.011 - 17 AAC 15.111 on utility permits except for 17 AAC 15.031;

(2) 17 AAC 15.183 and 17 AAC 15.201 - 17 AAC 15.301 on utility standards and requirements, except for 17 AAC 15.231;

(3) 17 AAC 15.321 - 17 AAC 15.461 on utility relocation and installation; and

(4) 17 AAC 15.901, definitions.

History: Eff. 10/2/87, Register 103; am 7/15/2009, Register 191

Authority: AS 02.15.020

AS 02.15.102
AS 02.15.106
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

17 AAC 15.020. Utility permit

Repealed 5/23/82.

17 AAC 15.021. Application for utility permit

(a) Application for issuance of a utility permit must be made on a form prescribed by the department.

(b) The application must describe in detail the type of facility and its proposed location within the department right-of-way or other location. The application must include plans, specifications, and other pertinent data. A diagram or drawing showing the location of all known overhead, surface, and underground facilities existing in the vicinity of the proposed facility must also be included with the application.

(c) If a utility facility covered by an existing permit is to be reconstructed or modified substantially, the permittee shall apply for a new permit. If the proposed modifications are not substantial, the permittee need only apply for an amended permit. In either case the application must comply with (b) of this section.

(d) The applicant shall notify all known utilities in the immediate vicinity of the proposed installation.

(e) Permit applications for pipeline installations must describe the nature of the substance to be transmitted; the maximum working, test, and design pressures; and the design standards for the pipe. When it is anticipated that there will be a change in the nature of the substance that is transmitted, or an increase in maximum design pressure from that specified in the permit, the permittee shall obtain, in advance, written department approval for the change.

(f) If a utility proposes to locate a facility within a department highway right-of-way within a national forest, national park, military reservation, or other land of the federal government, the utility shall obtain written approval from the appropriate controlling federal agency.

(g) If a utility proposes to locate a facility within a department right-of-way that crosses navigable water, the utility shall obtain written approval from the U.S. Army Corps of Engineers or the U.S. Coast Guard.

(h) If a utility proposes to locate a facility within a department right-of-way which passes through restricted Native allotment land, the utility shall obtain written approval from the Bureau of Indian Affairs.

(i) If a utility proposes to locate a facility within a department right-of-way which passes through Bureau of Land Management land, the utility shall obtain written approval from the Bureau of Land Management.

(j) If a utility proposes to locate a facility within a department right-of-way that crosses a river, lake, or stream specified in the List of Waters Important to Anadromous Fish in 5 AAC 95.011, the utility shall obtain written approval from the Alaska Department of Fish and Game.

(k) If a utility proposes to locate an overhead facility within a department right-of-way located within two statute miles of any airport, airstrip, or private air facility, the utility shall obtain written approval from the Federal Aviation Administration or, if the airport or airstrip is under military control, from the appropriate military command.

(*l*) Applications not approved by the department will be returned to the applicant accompanied by a letter of explanation.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.20.090
AS 19.25.010
AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.030

Editor's note: Utility permit application forms may be obtained from the regional offices of the Department of Transportation and Public Facilities located in Juneau, Anchorage, and Fairbanks, Alaska.

Copies of the *Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes* for a specified region may be obtained by writing to the Department of Fish and Game (ADF&G), Division of Sport Fish, 333 Raspberry Road, Anchorage, AK 99518-1599. Electronic copies may also be viewed through the Department of Fish and Game's website at http://www.sf.adfg.state.ak.us/ SARR/AW C/AWC_catalogs.cfm

Copies of the entire *An Atlas to the Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes* are available for examination at the ADF&G, Division of Habitat offices in Anchorage, Douglas, and Juneau. Copies are also available for viewing at the Alaska State Library in Juneau and the ARLIS Library in Anchorage.

Copies of regional volumes of the atlas for the region of the state where they are located are available for examination at the ADF&G offices in Anchorage, Bethel, Cold Bay, Cordova, Craig, Delta Junction, Dillingham, Douglas, Dutch Harbor, Fairbanks, Glennallen, Haines, Homer, Juneau, Ketchikan, King Salmon, Kodiak, Nome, Palmer, Petersburg, Sand Point, Sitka, Soldotna, Tok, Wrangell, and Yakutat. An electronic equivalent may also be viewed through the ADF&G website at http://www.sf.adfg.state.ak.us/SARR/AWC/index.cfm/FA/intro.catalog, or http:/www.sf.adfg.state.ak.us/SARR/AWC/index.cfm/FA/maps.maps.

As of Register 186 (July 2008), and acting under AS 44.62.125 (b)(6), the regulations attorney made technical changes to 17 AAC 15.021(j) , to reflect Executive Order 114 (2008). Executive Order 114 transferred functions related to protection of fish habitat in rivers, lakes, and streams from the Department of Natural Resources to the Department of Fish and Game.

17 AAC 15.030. Bond

Repealed 5/23/82.

17 AAC 15.031. Application for utility permit on section-line rights-of-way

(a) Utility permits are required only for section-line rights-of-way presently used or proposed for use by the department. A person seeking to install a utility facility within a section-line right-of-way shall check with the department to determine whether the department presently uses or proposes to use the affected portion of the section-line right-of-way.

(b) Before issuing a permit for the installation of a utility facility within a section-line right-of-way, the department must be satisfied that a section-line right-of-way exists at the location where the facility is proposed to be installed by the permit applicant. The permit applicant shall furnish proof of the existence of the section-line right-of-way.

(c) An applicant that is granted a permit for the installation of a utility facility within a department section-line right-of-way shall coordinate the installation of the facility with any proposed department project using the section-line right-of-way.

(d) The permittee shall provide one copy of each permit for the installation of any utility facility within a department-controlled section-line right-of-way to the Department of Natural Resources.

(e) The department will immediately submit written notice to the Department of Natural Resources if a section-line permit application is denied.

History: Eff. 5/23/82, Register 82

Authority: AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065

17 AAC 15.040. Inspection of work authorized by utility permit

Repealed 5/23/82.

17 AAC 15.041. Permit fees and charges

(a) The applicant shall pay a $600 nonrefundable fee in a form acceptable to the department for those permits, including amendments, that allow

(1) installations of aerial or underground distribution and transmission lines;

(2) duct systems;

(3) utilidors and utility tunnels, including crossings and extensions;

(4) structure or appurtenance construction, including manholes, utility poles, pedestals, switch cabinets, transformers, and other design features of a similar nature;

(5) a crossing or installation, including service connections, requiring boring, trenching, or opening a roadway surface; and

(6) aerial service lines requiring installation of poles in a right-of-way.

(b) The applicant shall pay a $100 nonrefundable fee in a form acceptable to the department for those permits, including amendments, that allow

(1) aerial service lines not requiring structures within the right-of-way, including service lines from longitudinal distribution lines outside a right-of-way and service lines attached to existing poles; and

(2) installation of underground service lines that

(A) do not occupy any portion of the roadway prism; and

(B) connect to existing poles, pedestals, manholes, collection systems, distribution facilities and similar structures within the right-of-way.

(c) Upon the issuance of a utility permit under (a) of this section, if the proposed facility is more than 200 feet in length, the permittee shall pay the department a nonrefundable fee, not to exceed $10,000, of $1 per foot of length in excess of 200 feet.

(d) The department may require a permittee to reimburse the department for the actual cost of inspection if the special provisions of the utility permit require an inspection.

History: Eff. 5/23/82, Register 82; am 7/4/87, Register 102; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 02.15.260
AS 19.05.020
AS 19.05.040
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 35.25.020
AS 44.42.020
AS 44.42.030

17 AAC 15.050. Facility maintenance

Repealed 5/23/82.

17 AAC 15.051. Bond

The department will, in its discretion, require a bond or assurance to pay for damage to or repair of a highway or other state property which may result from a permittee's construction along, in, over, or under a department right-of-way. The department will determine the amount and duration of the bond or assurance. The bond form must comply with requirements of the department. The department will, in its discretion, require the permittee's contractor to furnish an indemnification bond secured by cash or other security when it is determined to be in the public interest.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 19.10.210
AS 35.10.230

17 AAC 15.060. Safety and protection

Repealed 5/23/82.

17 AAC 15.061. Indemnification

The permittee shall indemnify and hold harmless the state from all liability for damage to property and injury or death of persons arising wholly or in part from any action taken by a permittee in relation to the permittee's facilities on department rights-of-way or other permitted locations.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.070. Highway policy for accommodation of utilities

Repealed 5/23/82.

17 AAC 15.071. Assignment and transfer of utility permit

(a) A permittee may not assign or transfer any rights granted by the utility permit to another individual or other entity without prior written approval from the department.

(b) When a permittee sells out to another utility, or combines or merges with another utility, or otherwise changes identity, the new utility shall inform the department in writing within 30 days after the date of the transaction, and shall furnish the department with the names and addresses of the new officials responsible for the permittee's facilities.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.080. Bridges

Repealed 5/23/82.

17 AAC 15.081. Joint-use facilities

(a) The department will, in its discretion, require two or more utilities desiring to locate facilities on a department right-of-way to jointly use a single facility.

(b) Utilities jointly using utility facilities or the same location, trench, or conduit within the department right-of-way must provide the department upon request with a copy of their joint use agreement established under AS 42.05.311 - 42.05.321.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020

AS 44.42.030

17 AAC 15.090. Joint use

Repealed 5/23/82.

17 AAC 15.091. Violation of utility permit and stop work orders

(a) The department may revoke or suspend a utility permit, or issue a notice of violation, if

(1) the facilities were not constructed or installed in accordance with the terms of the utility permit;

(2) the facilities do not conform to the applicable federal, state, and local standards and requirements;

(3) the permittee fails to adequately maintain the facility after having been notified to do so in writing by the department;

(4) the permittee fails to provide safe and adequate detours, barricades, signs, flaggers, or other controls to protect the public as provided in 17 AAC 15.241, or fails to comply with the terms and conditions of any department-approved traffic control plan required under 17 AAC 15.241 or 17 AAC 20.017;

(5) the permittee fails, after written notice from the department, to take corrective measures to comply with the department's instructions or requests;

(6) it is in the mutual interest of the department and the utility as provided in 17 AAC 15.451.

(b) The department may suspend, by means of a stop work order, the construction or maintenance operations of a permittee, or the permittee's contractor, for any of the conditions listed in (a) of this section until the conditions are corrected. The department also may issue a stop work order to any person performing utility-related work without an appropriate permit.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.10.240
AS 19.25.010
AS 19.25.200
AS 19.25.220
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

17 AAC 15.100. Multiple facilities

Repealed 5/23/82.

17 AAC 15.101. Permits for utility service connections

(a) The department will require an amendment to an existing utility permit or new permit for all utility service connections subsequent to the issuance of the original permit for the distribution, collection, or feeder line facility.

(b) The department may allow a permittee to install additional service connections within a department right-of-way where a longitudinal underground, surface, or overhead distribution or feeder line has been installed under a utility permit. The department will amend the utility permit to include the additional service connections.

(c) New permits are required for underground utility service connections which cross a department right-of-way and which originate from distribution lines located outside the right-of-way.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

17 AAC 15.110. Driveways and road approaches utility conflicts

Repealed 5/23/82.

17 AAC 15.111. Utility facilities installed without permit

(a) Any utility facility installation located within a department right-of-way without a utility permit is an unauthorized encroachment, except for a facility installed

(1) before July 1, 1960;

(2) before the road became a part of the state highway system;

(3) in accordance with any applicable requirements of the Department of Natural Resources but before the department's need or use under 17 AAC 15.031; or

(4) in any other manner if the utility provides adequate proof to the department of a prior valid existing right.

(b) The owner of a utility facility within a department right-of-way and which is an unauthorized encroachment shall submit an application for a utility permit to the department.

(c) The department will issue a utility permit for encroaching utility facilities meeting the requirements of this chapter.

(d) The owner of an encroaching utility facility shall relocate the facility in order to comply with the minimum requirements of this chapter. Any relocation will be at the owner's expense. If the owner does not take appropriate action within a reasonable time, the unauthorized encroachment is subject to removal under AS 19.25.220 - 19.25.250.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.25.210
AS 19.25.220
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

Article 2
Utility Standards and Requirements

Section

17 AAC 15.120. Underground facilities

Repealed 5/23/82.

17 AAC 15.130. Utility standards of the department of highways

Repealed 5/23/82.

17 AAC 15.131. Utility accommodation on controlled-access highways

(a) A utility facility may not be installed within the controlled-access limits of a highway unless the utility demonstrates to the satisfaction of the department that

(1) a feasible alternative does not exist; and

(2) the proposed utility facility will not adversely affect the design, construction, maintenance, safety, or operation of the highway.

(b) Access for maintenance of a utility facility located within controlled-access limits of a highway or from the entrance or exit ramp of a highway is prohibited, except if

(1) alternate locations and means of access are unavailable or impractical due to terrain and environmental constraints; and

(2) that use will not adversely affect safety and traffic operation, or damage the highway, a highway structure, or a department installation.

(c) Where an existing highway will be or has been converted to a controlled-access highway, the department may

(1) relocate any existing facility that can be maintained only from the proposed controlled access of a highway or its entrance or exit ramps; or

(2) make other provisions to maintain any existing facility without using access from the highway or its entrance or exit ramps; or

(3) allow access as set out in (b) of this section.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 19.05.020
AS 19.05.040
AS 19.20.030
AS 19.20.070
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 44.42.020
AS 44.42.030

17 AAC 15.140. Codes of governmental and state agencies

Repealed 5/23/82.

17 AAC 15.141. Utility accommodation on existing highways to be converted to controlled access

Repealed.

History: Eff. 5/23/82, Register 82; repealed 7/15/2009, Register 191

17 AAC 15.150. Clearing for utilities in highway right-of-way

Repealed 5/23/82.

17 AAC 15.151. Overhead crossings on controlled-access highways

(a) An existing overhead facility may not cross a controlled-access highway if it interferes with the design requirements of the highway, or if it can be maintained or serviced only from within the controlled-access limits.

(b) New or relocated overhead utility facilities or overhead utility facilities located within the right-of-way of an intersecting roadway which crosses a controlled-access highway may not be maintained or serviced from within the controlled-access limits.

(c) New or relocated overhead facility crossings of controlled-access highways must be designed and constructed as double dead-end structures where the transmission voltage is 33,000 volts or more. Where the transmission voltage is less than 33,000 volts, design and construction standards must equal or exceed standards of the *National Electrical Safety Code* as adopted by reference under AS 18.60.580 - 18.60.600 and 8 AAC 70.025 as the minimum electrical safety standards of the state.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 19.05.020
AS 19.05.040
AS 19.20.030
AS 19.20.070
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 44.42.020
AS 44.42.030

17 AAC 15.160. Aerial clearance, minimum

Repealed 5/23/82.

17 AAC 15.161. Underground crossings on controlled-access highways

Repealed.

History: Eff. 5/23/82, Register 82; repealed 7/15/2009, Register 191

17 AAC 15.170. Prior rights

Repealed 5/23/82.

17 AAC 15.171. Utility accommodation on highways

(a) The department may allow utility facilities to be located within the rights-of-way of highways.

(b) Manholes for underground facilities must be located so that their maintenance may be accomplished with minimum interference to the use of the right-of-way.

(c) Facilities installed within the department right-of-way must be designed and placed so that their use or occupancy will not adversely affect the safety, construction, maintenance, or operations of the highway or related structures.

(d) The minimum distance between the nearest part of a surface-mounted utility facility and the edge of the traveled way must comply with the standards set out in the department's *Highway Preconstruction Manual*, adopted by reference in 17 AAC 15.301(e) .

(e) Facilities installed within a department right-of-way must

(1) be located as near as practicable to the highway right-of-way line; and

(2) comply with the standards set out in the *Highway Preconstruction Manual*, adopted by reference in 17 AAC 15.301(e) .

(f) A new facility crossing a highway right-of-way must be installed as nearly perpendicular to the highway centerline as is practicable.

(g) An underground facility crossing of a highway must be installed by boring, coring, or jacking through the roadway prism. Wet-boring is prohibited. The department may allow trenched or open-cut construction where untrenched construction is not practical. An underground facility crossing in a department right-of-way must conform to the specifications set out in any special provisions of the utility permit.

(h) If a utility locate service is not available, reference markers must be installed and maintained at both ends of an underground facility highway crossing, at angle points in the alignment of the underground facility, and at designated points along the longitudinal alignment as specified in any special provisions of the utility permit.

(i) If the utility can demonstrate that adherence to the requirements of this section is impractical because of difficult topography, mountainous terrain, or other special conditions, the department may modify the requirements.

History: Eff. 5/23/82, Register 82; am 10/2/87, Register 103; am 7/15/2009, Register 191

Authority: AS 19.05.020
AS 19.05.040
AS 19.20.010
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 44.42.020
AS 44.42.030

Editor's note: The *Highway Preconstruction Manual* referred to in 17 AAC 15.171(d) and (e) is available for inspection at the Juneau, Anchorage, and Fairbanks regional offices of the Department of Transportation and Public Facilities. The *Highway Preconstruction Manual* also may be viewed through the department's Internet website at http://www.dot.state.ak.us/stwddes/dcsprecon/resources.shtml.

17 AAC 15.180. Frequency of requested relocation and/or adjustments

Repealed 5/23/82.

17 AAC 15.181. Utility accommodation on rural highways and roads

Repealed.

History: Eff. 5/23/82, Register 82; am 10/2/87, Register 103; repealed 7/15/2009, Register 191

17 AAC 15.183. Underground utility accommodation on runways

An underground facility crossing of a runway must be installed by boring, coring, or jacking under the runway surface. Wet-boring is prohibited. The department may allow trenched or open-cut construction where untrenched construction is not practical. An underground facility crossing in a department right-of-way must conform to the specifications set out in any special provisions of the utility permit.

History: Eff. 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102

AS 02.15.106
AS 44.42.020
AS 44.42.030

17 AAC 15.190. Errors in facility placement by permittee

Repealed 5/23/82.

17 AAC 15.191. Utility accommodation in scenic areas

(a) The department will, in its discretion, require utility facilities that are inconsistent with the values of scenic areas to be relocated.

(b) The installation, within scenic areas, of new utility facilities, including those required for department purposes, must be made in accordance with the directions of the department.

(c) "Scenic area," as used in (a) of this section, includes scenic strips, view points, rest areas, adjacent highway rights-of-way, and the portions of highway rights-of-way which pass through public parks, recreation areas, wildlife and waterfowl refuges, and historic sites.

History: Eff. 5/23/82, Register 82

Authority: AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065

17 AAC 15.200. Special provisions and/or stipulations

Repealed 5/23/82.

17 AAC 15.201. Utility clearances

(a) A new or relocated overhead facility must be installed with a minimum vertical clearance of 20 feet between the overhead facility and the right-of-way surface.

(b) Existing overhead facilities must have at least 18 feet of vertical clearance between the overhead facility and the right-of-way surface.

(c) The depth of burial for an underground facility constructed or installed through a roadway prism or under a runway surface must be at least four feet, measured from the surface to the top of the cable, conduit, pipeline, or encasement. An underground facility constructed or installed under another surface must have a depth of burial of at least three feet, measured from the surface to the top of the cable, conduit, pipeline, or encasement.

(d) If the minimum depth of burial under (c) of this section is impractical, the department may permit an underground facility to be rerouted or protected with casing or other mechanical protection.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

17 AAC 15.210. Special use permits for highways

Repealed 5/23/82.

17 AAC 15.211. Underground facilities

Repealed.

History: Eff. 5/23/82, Register 82; repealed 7/15/2009, Register 191

17 AAC 15.220. Permittee's notice of intention of commencement of work

Repealed 5/23/82.

17 AAC 15.221. Irrigation and drainage facilities

(a) A longitudinal irrigation or drainage canal or ditch is not permitted within a department right-of-way unless the applicant can demonstrate to the department's satisfaction that an alternate location is not feasible and that the construction of the facility will not adversely affect the design, construction, maintenance, safety, and operation of the highway or other department structures.

(b) Flume, pipe, or siphon crossings must be installed in accordance with 17 AAC 15.201(c) . Crossings of canals and ditches may be made with bridges or culverts.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

AS 44.42.020
AS 44.42.030

17 AAC 15.230. Indemnification clause

Repealed 5/23/82.

17 AAC 15.231. Highway structures

(a) The department will, in its discretion, permit the attachment of utility facilities to a highway structure. The chief bridge engineer is responsible for exercising this discretion to grant permission.

(b) Attachments to a bridge must be located beneath the bridge structure's floor, between outer beams or within a cell of a box beam, and must be located above the lowest steel or masonry members. If the utility can demonstrate to the department's satisfaction that a location requirement is not feasible and that attachment at an alternate location will not adversely affect the design, construction, maintenance, safety, or operation of the structure, the department will, in its discretion, permit the attachment at an alternate location.

(c) Communication and electric power cables or conductors must be encased in an approved conduit supported by suitable hangers or brackets and must have appropriate expansion devices. Acceptable alternate methods of installation for communication cable will, in the department's discretion, be permitted.

(d) Where required by special provisions in the utility permit, pipelines carrying flammable, corrosive, or other hazardous materials must be encased and have sufficient venting. The facility must be provided with automatic shut-off valves or other safety devices at or near each end of the structure as specified in the special provisions of the permit. The department will, in its discretion, require cathodic protection.

(e) A utility shall restore or repair any portion of a bridge or highway that is damaged by the installation or the operation of a facility attached to a highway bridge structure or its appurtenances.

(f) The department will, in its discretion, require a utility to reimburse the department for any or all costs incurred by the department for engineering, design changes, or modifications of the highway bridge structure that are necessary to accommodate attachment of the utility facility.

History: Eff. 5/23/82, Register 82

Authority: AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065

17 AAC 15.240. Waiver

Repealed 5/23/82.

17 AAC 15.241. Safety precautions to be taken by permittee

Each permittee shall protect the public and provide for the continued safe use of a highway or other state property during construction, modification, or maintenance of utility facilities. Closing off a highway or highway segment or creating a detour must be specifically authorized by a current department-approved traffic control plan and must be done in a manner approved by the department. All traffic-control devices must comply with the *Alaska Traffic Manual,* 2005, described in 17 AAC 20.950(1) , and adopted by reference.

History: Eff. 5/23/82, Register 82; am 2/5/2004, Register 169; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.10.050
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

Editor's note: Copies of the *Alaska Traffic Manual*, adopted by reference in 17 AAC 15.241, are available for inspection at regional offices of the Department of Transportation and Public Facilities located at Juneau, Anchorage, and Fairbanks, Alaska. The *Alaska Traffic Manual* also may be viewed through the department's Internet website at http://www. dot.state.ak.us/stwddes/dcstraffic/resources.shtml.

17 AAC 15.250. Department's interest in public highway rights-of-way

Repealed 5/23/82.

17 AAC 15.251. Installation and inspection

(a) Each permittee shall give the department written notice not less than 10 days before the start of construction on any utility facility.

(b) A copy of the permit must be at the work site during construction and installation operations and must be shown, upon request, to any department representative, Alaska state trooper, or other enforcement officer of the state.

(c) The department will, in its discretion, require inspection of the facility during construction and installation operations. The inspection must be sufficient to ensure full compliance with the provisions of the permit.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040

AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.260. Revocation of utility permit

Repealed 5/23/82.

17 AAC 15.261. Errors in facility placement

Errors by a permittee in construction or location of a facility must be corrected by the permittee at his expense as soon as he has knowledge of the error.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.270. District administration of utility permit

Repealed 5/23/82.

17 AAC 15.271. Right-of-way clearing and restoration

(a) Clearing for utility facility installations within department rights-of-way must be kept to the minimum that is necessary to accommodate the installation, construction, operation, and maintenance of the facility. Indiscriminate cutting of trees or the disfiguration of any feature of scenic value will not be permitted.

(b) A utility may use chemical sprays only in compliance with applicable federal and state statutes and regulations.

(c) Each utility shall dispose of trees, brush, debris, refuse or waste as specified in the utility permit.

(d) The department will, in its discretion, require the permittee to restore or replace, at his expense, trees or shrubbery damaged or disturbed during the construction. Any damage to private property must be remedied as directed by the department.

(e) All excavated material in excess of the quantity required for backfill in a department right-of-way must be hauled by the permittee, at his cost and expense, and stockpiled as specified by the department. All unusable material must be disposed of at the permittee's expense and may not be placed within the limits of a department right-of-way unless approved by the department.

(f) Each utility shall maintain temporary pavement patches to provide a smooth all-weather surface at all times. Permanent replacement of the temporary patches must be made as soon as practicable after all other work under the permit is completed.

(g) The department will, in its discretion, require seeding or sodding of the construction area to prevent soil erosion or to replace the natural vegetative cover. Seeding and sodding operations must comply with the 1981 Edition of the *Alaska Standard Specifications for Highway Construction* and the special provisions of the utility permit. Any area of right-of-way that is adjacent to private property and which has a protective vegetative cover must be fully restored.

(h) The department will notify the permittee of cleanup and restoration work that has not been satisfactorily performed in accordance with the provisions of the utility permit and will specify a date for completion of the corrective work. The department will, in its discretion, perform the cleanup and restoration work that has not been completed to the satisfaction of the department by the specified date. The permittee shall reimburse the department for all work done by the department.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

Editor's note: Copies of *Alaska Standard Specification for Highway Construction* - 1981 may be obtained from Department of Transportation and Public Facilities, standards and technical services division, P.O. Box 3-1000, Juneau, Alaska 99802.

17 AAC 15.280. Authority of commissioner, department of highways

Repealed 5/23/82.

17 AAC 15.281. Routine maintenance

(a) Each permittee shall perform routine maintenance on the utility facility on a continuing basis. Maintenance work may not endanger any highway, airstrip, or other department property or create a hazard to the public.

(b) Each permittee shall secure authorization from the department before performing any maintenance which requires excavation, plowing, jacking, boring within, or in areas immediately adjacent to, a department right-of-way.

(c) If a permittee discontinues maintenance of or abandons a utility facility, the permittee shall notify the department within 30 days. Utility facilities that are not maintained or are abandoned are unauthorized encroachments.

(d) As part of routine maintenance required under (a) of this section, the permittee shall adjust manholes, valves, pull boxes, and any other object that rises to the surface of any paved surface within the highway right-of-way, as required to meet the *Alaska Standard Specifications for Highway Construction*, adopted by reference in 17 AAC 15.301(d) . The department may require additional or emergency adjustment if conditions warrant.

(e) If a permittee's routine maintenance is inadequate, the department may give notice and an opportunity to cure. If a permittee fails to take appropriate corrective actions after notice and a reasonable opportunity to cure, the department may perform the maintenance and charge the permittee for the reasonable associated costs.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

17 AAC 15.290. Clear roadside policy

Repealed 5/23/82.

17 AAC 15.291. Emergency maintenance

(a) If an accident, disaster, or other occurrence damages a utility facility located within a department right-of-way, damages a highway structure or other state property, or places a utility facility in danger of damage, the permittee shall immediately act to safeguard the public and its facilities and shall immediately notify the department and the Alaska State Troopers of its action. Temporary repairs must be made permanent as soon as practicable.

(b) The department may perform the emergency repair work if the department

(1) gives the permittee oral or written notification that immediate repairs are necessary, and the permittee is unable or unwilling to perform the work; or

(2) considers immediate repair work, without prior notification to the permittee, to be required for purposes of public safety.

(c) For repair work that the department performs under (b) of this section, the department may charge the permittee reasonable associated repair costs.

History: Eff. 5/23/82, Register 82; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

17 AAC 15.300. Utility service connections

Repealed 5/23/82.

17 AAC 15.301. Utility codes and standards

(a) Electric power and communication facilities installed within department rights-of-way must comply with regulations of other agencies, including

(1) the *National Electrical Code*, as adopted by reference under AS 18.60.580 - 18.60.600 and 8 AAC 70.025 as the minimum electrical safety standards of the state;

(2) the *National Electrical Safety Code*, as adopted by reference under AS 18.60.580 - 18.60.600 and 8 AAC 70.025 as the minimum electrical safety standards of the state;

(3) the provisions of 3 AAC 52.260, if the utility provides telecommunications service; and

(4) the provisions of 8 AAC 61.1010, 8 AAC 61.1070 - 8 AAC 61.1090, and 8 AAC 61.1160 - 8 AAC 61.1170 (Occupational Safety and Health Standards).

(b) Water line and sanitary sewer facilities installed within department rights-of-way must comply with regulations of other agencies, including 18 AAC 72 (Wastewater Treatment and Disposal) and 18 AAC 80 (Drinking Water).

(c) Pressure pipelines for natural gas, petroleum, steam, or other hazardous materials installed within department rights-of-way must comply with regulations and standards enforced by other agencies, including

(1) the provisions of 49 C.F.R. Part 192 (Transportation of Natural and Other Gas by Pipeline: Minimum Federal Standards) and 49 C.F.R. Part 195 (Transportation of Hazardous Liquids by Pipeline); and

(2) the provisions of 3 AAC 52.010 - 3 AAC 52.080 (Gas Utilities).

(d) Unless otherwise noted in the special provisions of the utility permit, all utility construction within department rights-of-way must comply with the following construction standards:

(1) the department's *Alaska Construction Manual,* as revised as of March 13, 2006 and adopted by reference;

(2) the department's *Standard Specifications for Highway Construction,* 2004 edition, adopted by reference.

(e) Unless otherwise provided in the special provisions of the utility permit, all utility designs for facilities to be installed within department rights-of-way must comply with the following design standards:

(1) the department's *Alaska Standard Drawings Manual,* as revised as of October 31, 2003, and adopted by reference;

(2) American Association of State Highway and Transportation Officials (AASHTO),

(A) *A Policy on the Accommodation of Utilities Within Freeway Right-of-way, 5th edition, 2005, adopted by reference;*

(B) *A Guide for Accommodating Utilities Within Highway Right-of-way*, 4th edition, 2005, adopted by reference;

(3) The department's *Alaska Highway Preconstruction Manual*, as revised as of January 1, 2005, and adopted by reference;

(4) The department's *Alaska Aviation Preconstruction Manual*, as revised as of January 1, 2005, and adopted by reference.

(f) Construction safety procedures must comply with regulations enforced by other agencies, including 8 AAC 61.1020 - 8 AAC 61.1960 (Occupational Safety and Health Standards).

(g) Unless otherwise provided in the special provisions of the utility permit, traffic-control devices and procedures must comply with the following codes and standards:

(1) *Alaska Traffic Manual,* 2005, described in 17 AAC 20.950(1) , and adopted by reference;

(2) the department's *Alaska Sign Design Specifications,* as revised as of April 25, 2003 and adopted by reference.

(h) In the event of a conflict between requirements or standards in (a) - (g) of this section, or a conflict between the requirements or standards in (a) - (g) of this section and a requirement or standard contained in a utility permit issued under this chapter, the more stringent requirement or standard applies.

History: Eff. 5/23/82, Register 82; am 10/2/87, Register 103; am 2/5/2004, Register 169; am 7/15/2009, Register 191

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020

AS 19.05.040
AS 19.10.040
AS 19.10.050
AS 19.25.010
AS 19.25.200
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230
AS 44.42.020
AS 44.42.030

Editor's note: Copies of the *Standard Specifications for Highway Construction*, adopted by reference in 17 AAC 15.301(d) , may be obtained from the Department of Transportation and Public Facilities, Division of Statewide Design and Engineering Services, Design and Construction Standards Section, 3132 Channel Drive, P.O. Box 112500, Juneau, Alaska 99811-2500.

Copies of the *Alaska Construction Manual, Alaska Standard Drawings Manual, Alaska Highway Preconstruction Manual, Alaska Aviation Preconstruction Manual, Alaska Traffic Manual*, and *Alaska Sign Design Specifications*, adopted by reference in 17 AAC 15.301, are available for inspection at the regional offices of the Department of Transportation and Public Facilities located in Juneau, Anchorage, and Fairbanks, Alaska. The *Alaska Construction Manual* also may be viewed through the department's Internet website at http://www.dot.state.ak.us/stwddes/dcsconst/resources.shtml. The *Highway Preconstruction Manual* and *Alaska Aviation Preconstruction Manual* may be viewed through the department's Internet website at http://www.dot.state.ak.us/stwddes/dcsprecon/resources.shtml. The *Alaska Traffic Manual* may be viewed through the department's Internet website at http://www.dot.state.ak.us/stwddes/dcstraffic/resources.shtml.

Copies of the material adopted by reference in 17 AAC 15.301(e) (2) may be obtained from the American Association of State Highway and Transportation Officials (AASHTO), 444 North Capitol Street, N.W., Suite 249, Washington, DC 20001; Internet address: http://www.transportation.org/aashto.

As of Register 151 (October 1999), the regulations attorney made technical revisions under AS 44.62.125 (b)(6) to reflect the name change of the Department of Labor to the Department of Labor and Workforce Development made by ch. 58, SLA 1999 and the corresponding title change of the commissioner of labor.

Article 3
Utility Relocation and Installation

Section

381. Utility change orders.
391. Engineering consultants.
401. Contract advertising and award.
411. Utility relocation by state contract.
421. Construction and inspection.
431. Billing and audit.
441. Utility installation agreements.
451. Termination agreements.
461. Emergency relocation.

17 AAC 15.310. Assignment and transfer of utility permit

Repealed 5/23/82.

17 AAC 15.320. Horizontal clearance between highway and utility facilities

Repealed 5/23/82.

17 AAC 15.321. Eligibility for relocation reimbursement

If utility facilities are ordered by the department to be relocated to accommodate construction and are not unauthorized encroachments as described in 17 AAC 15.111, the utilities that have facilities occupying department rights-of-way are eligible for reimbursement as provided in AS 02.15.104 , AS 19.25.020 , or AS 35.10.220 , unless otherwise provided for by contract or agreement between the department and the utility.

History: Eff. 5/23/82, Register 82; am 10/17/87, Register 104; am 7/15/2009, Register 191

Authority: AS 02.15.104
AS 19.05.020
AS 19.05.040
AS 19.25.020
AS 19.30.121
AS 19.40.065
AS 35.10.220
AS 44.42.020
AS 44.42.030

17 AAC 15.330. Utility definition

Repealed 5/23/82.

17 AAC 15.331. Utility notification and cooperation

(a) The department will notify each utility whose facilities are known by the department to be affected by a proposed department project as soon as possible after the location and scope of the project are known.

(b) The department will furnish preliminary project plans and related right-of-way maps to each utility within the proposed project limits. After receipt of these plans and maps, each utility with facilities located within the project limits shall notify the department in writing of the location of all these facilities.

(c) If there is a conflict between a proposed project and existing utility facilities, the department will, in its discretion, require the utility to relocate its facilities. The department will authorize the utility in writing to proceed with preliminary engineering for the required relocation of the facilities and will advise the utility of its eligibility to be reimbursed for the cost of relocation. The utility shall furnish the department with its proposal for accomplishing the relocation work. This proposal must include the estimated cost of the relocation work and the working schedule the utility intends to follow regarding the relocation work. The work described in the proposal must be the most economical method of accomplishing the relocation.

(d) The department will furnish the utility with all necessary construction plans and relocation schedule forms so that the utility can coordinate its relocation plans, estimates, and agreements in accordance with 17 AAC 15.421.

(e) The department will furnish the utility with field information necessary for the utility to establish the location and grade for the relocation of its facilities.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.080
AS 19.05.080
AS 19.25.010
AS 19.25.020
AS 19.25.210
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.341. Relocation agreements

(a) When it is necessary to relocate utility facilities because of a proposed project by the department, the utility shall enter into an agreement with the department setting out the terms of the relocation work along with the terms of the reimbursement for the costs of the relocation work. The department will establish the general format of this agreement.

(b) If a utility facility located within a department right-of-way is required to be relocated due to highway or other construction, the department will modify the existing utility permit or will issue a new utility permit.

(c) The department will, in its discretion, elect to use a lump-sum reimbursement agreement.

(d) The department will, in its discretion, require that any utility relocation agreement between the department and a municipality include a certificate of authority or a resolution authorizing execution of the agreement by the appropriate governing body of the municipality.

(e) The department will return an executed copy of the relocation agreement to the utility along with a written authorization to proceed with the relocation work.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.351. Estimates and costs

(a) The cost estimate referred to in 17 AAC 15.331(c) must reflect all the work shown on the plans and the scope-of-work statement referred to in 17 AAC 15.361 and 17 AAC 15.371, respectively. The estimate must set out the items of work to be performed in sufficient detail to provide a reasonable basis for analysis by the department. All factors included in the utility's general overhead account must be listed in the cost estimate.

(b) Preliminary engineering costs incurred after the date of the department's letter authorizing the utility to proceed with preliminary engineering will be reimbursable or chargeable to the utility's relocation-project work order or account. Preliminary engineering costs will continue to be chargeable to the utility's relocation-project work order or account until the date that the utility relocation agreement has been approved and signed by the department. Construction engineering costs, including engineering and inspection costs associated with the relocation of the utility facility, that are incurred after the date that the utility agreement is signed and approved by the department are reimbursable.

(c) Charges for engineering, inspection, equipment, transportation, materials handling, and labor included in the utility's general overhead account, need not be listed separately in the cost estimate.

(d) Charges incurred by the utility before the department's letter of authorization to proceed with preliminary engineering is sent will, in the discretion of the department, be ineligible for reimbursement.

(e) When the department determines that an existing facility must be removed by a utility, the actual cost of removal will, in the discretion of the department, be eligible for reimbursement. Where appropriate, the salvage value of the facility to be removed will be credited against the cost of removal.

(f) The department will have a credit against reimbursable costs set out in the relocation agreement equal to the value of any materials removed by the utility, unless the utility relocation work is being performed under a state contract or under a utility-let contract and the utility relocation agreement specifies that all removed materials become the property of the contractor. The value of the department's credit is to be measured by whatever rate the utility uses in its normal operations and is to be equal to the salvage value of all materials removed less the cost of removal. All materials must be removed by the most economical method possible. Recovered materials which are not usable in the normal operations of the utility but which have a sale value as scrap must be included in the calculation of the credit granted to the department. The value of the recovered scrap materials is to be determined by their estimated scrap value. Temporary-use materials which are reusable must be credited to the utility relocation project at stock prices, less the utility's prescribed stock-handling charge.

(g) Where betterments are not required by the department's construction project, but are installed solely for the benefit of the utility company, all costs attributable to these betterments are not eligible for reimbursement.

(h) The utility shall show on its work order account all relocation costs specified by the relocation agreement, including reimbursable and non-reimbursable items. Separate work order accounts will, in the discretion of the department, be used where the reimbursable and non-reimbursable portions of work can be distinguished by location or type of facility. All work order accounts to be used by the utility must be shown in the relocation agreement.

(i) An eligibility ratio for reimbursement must be determined and set out in the relocation agreement when the relocation work includes both reimbursable and non-reimbursable items.

(j) The department has an expired service life credit against reimbursement costs if a utility facility, including a building, pumping station, filtration plant, electric power substation, or other similar operational unit, is replaced. Credit for expired service life will not be required for a segment of utility service, distribution, or transmission line.

History: Eff. 5/23/82, Register 82; am 10/17/87, Register 104

Authority: AS 02.15.104
AS 19.05.020
AS 19.05.040
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.10.220
AS 44.42.030

17 AAC 15.361. Plans

(a) The plans, sketches, or drawings showing both existing and proposed facilities must be attached to each relocation agreement. If there is a combination of reimbursable and non-reimbursable work, the plans must clearly indicate which portion of the relocation work is reimbursable and which portion is non-reimbursable.

(b) The plans, sketches, or drawings must be sufficiently detailed to show all necessary work. In addition, the plans, sketches, or drawings must indicate that the planned relocation meets all construction design requirements of the department. Construction plans prepared by the utility must be approved by the department.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020

AS 35.10.210
AS 35.10.230

17 AAC 15.371. Scope-of-work statement

(a) A scope-of-work statement describing the items of work set out in the plans in sufficient detail so that they may be correlated with the proper items of cost in the cost estimate must be attached to the relocation agreement. The scope-of-work statement must describe any special methods of construction that are required.

(b) The department will, in its discretion, require the utility to include staking sheets in the scope-of-work statement.

History: (Eff 5/23/82, Register 82)

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.381. Utility change orders

(a) Changes in the plans, specifications, or quantities of work for relocating facilities must be authorized by a utility change order issued by the department.

(b) Modified cost estimates, plans, and a scope-of-work statement must include in each utility change order.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.391. Engineering consultants

(a) If a utility is not adequately staffed to perform the engineering for the relocation of its utility facilities, the department will, in its discretion, authorize the utility to retain an engineering consultant to perform the required engineering. The engineering proposal made by a consultant is subject to review and approval by the department.

(b) If a utility has a continuing contract with a consultant for engineering services, and if the consultant regularly performs the utility's engineering work at a reasonable cost, the utility may request approval for the use of the consultant by submitting a copy of the continuing contract to the department for review and approval.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.401. Contract advertising and award

(a) A utility may let a contract for the relocation of its facilities when it can show that the contract is necessary because it is not adequately staffed or equipped to perform the work itself. Bids must be requested through advertisement or solicited from qualified bidders, and the contract must be awarded to the lowest responsible bidder. The contract documents must be approved by the department before a contract is awarded.

(b) If a utility proposes to perform the work of relocation under an existing contract, the utility must furnish the department with a copy of the contract for review and approval.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.411. Utility relocation by state contract

(a) Utility relocation work may be performed under a construction contract or a utility relocation contract let by the department if the utility can demonstrate to the department that it is in the public interest to do so.

(b) When the utility relocation work that is to be included in a construction contract let by the department or in a utility relocation contract let by the department includes non-reimbursable items, the utility and the department must enter into an agreement by which the utility agrees to repay the department for the costs of the non-reimbursable contract items and any engineering expenses associated with non-reimbursable items.

(c) The department will, in its discretion, require the utility to make periodic progress payments for the costs of the non-reimbursable contract items. Any requirement for progress payments must be included in the non-reimbursable agreement referred to in (b) of this section. The department will, in its discretion, use these payments to pay for the work done by its contractor.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.421. Construction and inspection

(a) Whenever practicable, a utility shall schedule the work of relocating its facilities so that the work can be completed before the department's construction work begins. When the utility relocation work is to be performed along with the department's construction work, the utility shall coordinate the work schedule of its own personnel or of its contractor with the work schedule of the department's contractor. The utility shall work with the department's project engineer in order to effect this coordination.

(b) The utility is responsible for identifying and locating its facilities. The utility is also responsible for extra costs resulting from delays to the department contractor's operations if the utility facilities are not relocated in accordance with the relocation agreement, except when the delays are beyond the control of the utility.

(c) Unless otherwise provided in the relocation agreement, the utility shall give the department written notice not less than 10 days before the utility intends to begin work on the relocation of its facilities.

(d) If required by the relocation agreement, the utility shall furnish the department with records of all work performed and all materials installed or removed.

(e) The utility shall stockpile all unusable materials removed from the project and shall notify the department when these materials are available for inspection. The department's inspector and a representative of the utility will inspect these materials and record their disposition in order to determine if any credit is due the department.

(f) When an unforeseen problem arises during utility relocation work, the department will confer with the utility or utilities involved and will endeavor to bring about a satisfactory resolution of the problem. If the problem cannot be resolved by the parties, it will be referred to the commissioner or his designee for consideration. The commissioner's decision is final.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.010
AS 19.25.020
AS 19.25.200
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.431. Billing and audit

(a) Reimbursement for utility relocation work will be based upon the utility relocation agreement executed between the department and the utility described in 17 AAC 15.341.

(b) Reimbursement for railroad relocation work will be based upon the railroad relocation agreement executed between the department and the railroad as provided in 17 AAC 15.521.

(c) The utility shall furnish the department with its final and complete billing for all costs incurred in connection with the relocation of the facility within 120 days after the completion of the relocation work. The billing statement must disclose the cost of each item in the cost estimate that is attached to the utility relocation agreement described in 17 AAC 15.351(a) .

(d) If the utility fails to submit a proper billing within the 120-day period specified in (c) of this section, the department will, in its discretion, audit the utility's records and make the final reimbursement payment to the utility based on the audit findings.

(e) Under a lump-sum agreement as provided by 17 AAC 15.341(c) , a single and final billing must be submitted upon completion of the work. This billing must be for the amount that is stipulated in the agreement. Upon certification by the department that the work was completed in compliance with the agreement, the utility will be paid the lump-sum amount.

(f) All cost records and accounts of the utility are subject to audit by the department. Except where a lump-sum agreement is used under 17 AAC 15.341(c) , final payment will, in the department's discretion, be based on audit determinations made by the department. The department will, in its discretion, withhold a retainage from any billing.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020

AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.25.020
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.441. Utility installation agreements

When it is in the public interest to use utility personnel and equipment to install new facilities to serve a department purpose or to install new utility distribution facilities to serve department installations, and when the utility will retain ownership of the facility, the utility and the department shall enter into a utility installation agreement. This agreement must include cost estimates, plans, and a scope-of-work statement as required by 17 AAC 15.351 - 17 AAC 15.371. The utility is eligible for reimbursement for the costs of installing the new facilities.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

17 AAC 15.451. Termination agreements

When it is in the mutual interest of the department and the utility to terminate a previously executed utility agreement or utility permit, a utility termination agreement must be executed.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210

AS 35.10.230

17 AAC 15.461. Emergency relocation

Where unforeseen circumstances arise during construction on a department right-of-way that require an immediate relocation of a utility facility, the department will, in its discretion, require the immediate relocation of the facility, notwithstanding the terms of any existing utility permit or relocation agreement.

History: Eff. 5/23/82, Register 82

Authority: AS 02.15.020
AS 02.15.102
AS 02.15.106
AS 19.05.020
AS 19.05.040
AS 19.30.051
AS 19.30.121
AS 19.40.065
AS 35.05.020
AS 35.10.210
AS 35.10.230

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CHAPTER 17.05: ESSENTIAL SERVICE UTILITIES

Section

17.05.010 PURPOSE.

(A) The purpose of this chapter is to provide for public participation in the decision affecting the installation of essential service utilities in such a manner that they enhance the health, safety and general welfare of borough residents and properties while minimizing negative impacts. This chapter recognizes the importance and benefits of essential services, while ensuring that all feasible mitigation measures are taken to protect the scenic qualities of the Matanuska Susitna Borough. Essential services should be installed in cognizance of existing and projected demands for such services.

(Ord. 07-076, § 2 (part), 2007)

17.05.020 APPLICABILITY.

(A) This chapter applies to all areas of the borough except within the city boundaries of Houston, Palmer, and Wasilla. This chapter applies to municipal utilities that extend beyond city boundaries into unincorporated borough lands.

(Ord. 07-076, § 2 (part), 2007)

17.05.030 TYPE I ESSENTIAL SERVICE UTILITY.

(A) All proposed Type I essential service utilities, when installed or extended in any public way or borough-owned land, shall require a permit issued by the borough in accordance with MSB 11.30.030.

(Ord. 07-076, § 2 (part), 2007)

17.05.040 TYPE II ESSENTIAL SERVICE UTILITY.

(A) All proposed Type II essential service utilities shall require a public involvement program in accordance with a public participation plan as submitted by the utility in all areas of the borough excluding the cities of Houston, Palmer, and Wasilla.

(B) Within 20 calendar days of receipt of the proposed public participation plan, the director shall provide the applicant with written acknowledgement of receipt of the plan, along with any recommendations concerning the proposed process. The public involvement program, at a minimum, must contain the following:

(1) *Minimum requirements.*

(a) the utility's public involvement program must comply with established state and federal guidelines governing the utility including adequate public notice, public process, public meetings, or public hearings;

(b) if no established state or federal guidelines apply to the proposed action, the utility shall follow its own utility board adopted guidelines for public notification and involvement;

(c) if there are no established state, federal or utility board adopted guidelines, the public involvement program will consist of the minimum requirements outlined in subsection (B)(2) of this section, Public Involvement; and

(d) if a state, federal or utility board adopted public involvement program is used, they must at least meet or exceed the minimum guidelines in subsection (B)(2) of this section, Public Involvement.

(2) *Public involvement.*

(a) a minimum of one public meeting will be held by the utility and shall be held in an area central to the area impacted by proposed action;

(b) a minimum of one formal public hearing will be held by the utility later in the process to allow for formal public testimony. The public hearing will be held in an area central to the area impacted by proposed action; and

(c) notice of the public meeting and public hearing to occur a minimum of 15 days in advance of the public meeting or public hearing. The public notice will include:

(i) three notices in a newspaper of general circulation within the borough;

(ii) public postings in local areas such as libraries, public buildings, schools, stores, laundromats, lodges, on the utility's website, and on the Matanuska-Susitna Borough's website, etc.;

(iii) public service announcements on local radio stations starting 15 days before the public meeting; and

(iv) mailings, as appropriate, including notification of all affected community councils.

(C) Implementation of the public involvement program shall commence within 120 days from the issuance date of written acknowledgement.

(D) Upon completion of the public involvement program elements, the applicant shall create and submit to the director a decisional document that describes how the public involvement program was implemented, the nature of public comment, the chosen course of action, timeline for construction, and the public's appeal process. Copies of all written public comments and an audio record, if available, shall be included in the decisional document.

(Ord. 07-076, § 2 (part), 2007)

17.05.050 DEFINITIONS.

• "Type I essential service utility" means any above or below ground structures or facilities used for utility distribution including:

(1) "Electricity distribution" means medium voltage (less than 50KV) power lines, low voltage electrical substations and pole-mounted transformers; and low voltage (less than 1,000V) distribution wiring to provide service to individual customers; and

(2) "Service pipeline" means a distribution line that transports gas, oil, water, or sewage from a common source of supply to the meter set assembly or distribution endpoint to provide service to individual customers.

• "Type II essential service utility" means any aboveground or below ground structures or facilities used for utility transmission including:

(1) "Electricity transmission" means high-voltage (50KV or higher) power lines, high-voltage electrical substations and pole-mounted transformers, and high-voltage distribution or transmission wiring; and

(2) "Transmission pipeline" means pipelines installed for the purpose of transmitting gas, oil, water, or sewage from a source or sources of supply to one or more distribution centers, to one or more large

volume customers, or a pipeline installed to interconnect sources of supply. In typical cases, transmission lines differ from distribution lines in that they operate at higher pressures, are longer, and the distance between connections is greater.

(Ord. 07-076, § 2 (part), 2007)

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Chapter 21.90 - UTILITY DISTRIBUTION FACILITIES [178]

21.90.010 - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

CATV means a utility that operates nonbroadcast facilities that distribute to subscribers the signals of one or more television broadcast stations.

Central office means a utility facility where messages, impressions, pictures or signals are generated, received or controlled.

Distribution substation means a utility facility where the electric voltage is transformed for distribution through a substation transformer.

Joint trench means a trench excavated for the underground placement of utility distribution lines owned or operated by two or more utilities.

Municipal street improvements means street construction projects within the right-of-way used by motor vehicles and funded by the municipality.

Reinforcement means repair, replacement or addition of a crossarm, guy, pole, stub or conductor for a utility distribution facility.

Relocation means a change in alignment of more than six spans.

Service connection means conductors transmitting utility service from a utility distribution line to a customer's riser or service entrance.

State highway project means a highway project which has received design authorization from the Federal Highway Administration or legislative approval from the state legislature.

Substation transformer means a utility facility that transforms electric voltage to the level supplied to the distribution system.

Target area means an area designated under section 21.90.060 as a location in which overhead distribution lines are to be placed underground as provided in this chapter.

Utility means a public utility as defined in AS 42.05.701 furnishing electric service or telecommunications service as defined in AS 42.05.701.

Utility distribution line means all or any part of a conductor and supports owned or operated by a utility and used:

1. To transmit no more than 69 kilovolts of energy; or
2. To transmit messages, impressions, pictures or signals by means of electricity or electromagnetic waves;

between a distribution substation or central office and the lot line of a customer's premises, excluding auxiliary equipment such as aboveground transformers, switching devices, pad-mounted distribution facilities and CATV power supplies.

(AO No. 155-76; AO No. 156-76; AO No. 84-62; AO No. 86-17)

Cross reference— *Definitions and rules of construction generally, § 1.05.020.*

21.90.020 - Underground placement required for new or relocated lines; exceptions.

A. Except as provided in subsections B, C, D and E of this section, all newly installed or relocated utility distribution lines shall be placed underground.

B. Except where an assessment district has been formed to convert overhead utility distribution lines as provided in chapter 19.60

1. Utility distribution lines need not be placed underground in the rural area defined in section 21.85.020, or in the I-2 and I-3 zoning districts.
2. CATV utility distribution lines need not be placed underground where there are other overhead utility distribution lines; provided that, when all of the other overhead distribution lines are placed underground, the CATV utility distribution line shall be placed underground in a joint trench with the other utility distribution lines.
3. Notwithstanding subsection B.1 of this section, the following area shall be subject to the provisions of subsection A of this section requiring that newly installed or relocated utility distribution lines shall be placed underground: Lower Hillside, between and including Abbott Road, Rabbit Creek Road, Hillside Drive and the New Seward Highway.

C. A new utility distribution line may be placed overhead when necessary immediately to restore service interrupted by accident or damage by flood, fire, earthquake or weather; provided that the utility distribution line shall be replaced by a utility distribution line conforming to this chapter within 12 months of its placement.

D. A utility distribution line or service connection may be placed on the surface of frozen ground, provided that it is placed underground within 12 months thereafter.

E. New facilities may be added to existing overhead utility distribution facilities located outside target areas.

F. Utility distribution lines owned or operated by utilities that are parties to a joint trench agreement shall be placed underground in a joint trench.

G. Nothing in this section restricts the maintenance, repair or reinforcement of existing overhead utility distribution lines.

H. A temporary utility distribution line may be placed overhead in connection with new construction if the utility's tariff approved by the state public utilities commission expressly provides for removal of that line by a date certain, not to exceed 12 months thereafter.

(AO No. 156-76; AO No. 84-62; AO No. 86-17; AO No. 92-10)

Cross reference— *Damage to underground utility facilities, ch. 26.90.*

21.90.030 - Variances.

A. The director of the planning department may grant a variance from Section 21.90.020.A when any of the following is found:

1. Placing a utility distribution line underground would cause an excessive adverse environmental impact;
2. Placing a utility distribution line underground would threaten public health and safety, because the placement cannot be shown to meet acceptable technical standards for safety; or
3. Placing a utility distribution line underground in an environmentally sound and safe manner would cost more than three times the cost of placing the line overhead, where the applicant demonstrates the relative cost to the satisfaction of the director of the planning department.

B. The director of the planning department may grant a variance from section 21.90.020.A when he finds that the utility distribution line is being placed overhead temporarily for one of the reasons listed in this subsection:
1. The line is being placed to provide service when weather conditions do not allow excavation for underground placement;
2. A permanent location for underground placement is not available because of construction in progress; or
3. The line is being placed to provide service to a temporary use or structure.

A variance issued under this subsection shall expire within two years of its issuance.

C. The planning and zoning commission may adopt regulations in accordance with chapter 3.40, delegating authority to grant variances under subsection A of this section to the director of the planning department.

(AO No. 156-76; AO No. 84-62; AO No. 86-17; AO No. 2005-2, § 1, 5-30-05)

21.90.040 - Enforcement of chapter.

A. Violations of this chapter are subject to all of the penalties and remedies for violations of this title set forth in chapter 21.25

B. In addition to the penalties and remedies provided for violations of this chapter in subsection A of this section, no permit may be issued to install a utility distribution line on municipal property or in a municipal easement or right-of-way in violation of this chapter.

(AO No. 156-76; AO No. 84-62)

21.90.050 - Nonconforming overhead lines—Generally.

Existing overhead utility distribution lines located where this title requires new or relocated utility distribution lines to be placed underground are nonconforming utility distribution lines and are subject to sections 21.90.070 through 21.90.090. No utility distribution line is a nonconforming structure or a nonconforming use of land or a structure under chapter 21.55 because it is a nonconforming utility distribution line under this section.

(AO No. 84-62)

21.90.055 - Nonconforming overhead lines in dedicated municipal parks—Fees and costs.

A. *Alignment.* When a utility proposes to underground an existing overhead utility distribution line located in a dedicated municipal park, and the overhead and underground alignment are identical, no fee shall be assessed to the utility for the value of the easement.

B. *Administrative variances.* The director of the project management and engineering department may, upon request by a utility:
1. Grant an administrative variance from section 21.90.055A., up to five feet on either side of the existing overhead easement center line, to adjust the underground alignment.
2. An adjustment exceeding five feet on either side of the existing overhead easement center line shall require a new easement, including assessment of a fee for the value of the easement and administrative costs.

C.

The utility shall remain solely responsible for municipal administrative fees and costs associated with the relocation, including but not limited to, a managing department application fee, and document research, review and preparation.

D. The disposal procedures for interests in municipal land, set out in chapter 25.30, and the variance procedure, set out in section 21.90.030, shall not apply to this section.

(AO No. 2006-151, § 1, 11-14-06)

21.90.060 - Nonconforming overhead lines—Designation of target areas.

A. An electric utility that owns poles that support nonconforming utility distribution lines shall prepare or otherwise include as part of its annual capital improvement plan, a five-year undergrounding program consistent with Section 21.90.070. This five-year program shall be updated on an annual basis. Priorities shall be based on undergrounding in conjunction with the electric utility's essential system improvements and then by target area as set forth below in no particular order. The director of the planning department shall provide review and comment for consideration by the electric utilities on these five-year programs. When reviewing and commenting on these programs the director shall consider the following factors in no particular order:

1. Whether undergrounding will avoid or eliminate an unusually heavy concentration of overhead electric distribution or other attached utility facilities.
2. Whether the street or general area is extensively used by the general public and carries a heavy volume of pedestrian or vehicular traffic.
3. Whether the appearance of grounds and structures adjacent to the roadway is such that the removal of the overhead facilities will substantially improve the general appearance of the area.
4. Whether the street or area affects a public recreation area or an area of scenic interest.
5. Whether there is a significant opportunity to achieve economies due to the anticipated relocation or replacement of overhead lines or the widening or realignment of streets within a given area.
6. Whether the five-year program sufficiently addresses the objectives of Section 21.90.070
7. Whether the area under consideration is within a zone where new and relocated distribution lines are required to be placed underground.
8. Whether the installation of underground distribution lines is economically, technically and environmentally feasible including the effect on an attached utility.
9. Whether undergrounding will avoid or eliminate overhead electric distribution or other attached utility facilities in a residential area with significant risk exposure to wildfire, high winds, or other natural disaster.

B. The director of the planning department shall confirm annually that the electric utilities have developed project undergrounding implementation plans. The director shall consult with the utilities and public agencies affected by any implementation plan. In reviewing implementation plans, the director shall consider the factors stated in subsection A of this section.

C. The following shall be the target areas:

1. Central Business District: between and including Third Avenue and Tenth Avenue and L Street and Ingra Street.
2. Mid-town area: between and including New Seward Highway and Minnesota Drive and International Airport Road and Fireweed Lane.
3. All municipal and state street improvement projects except for those which do not require relocation of utility distribution facilities.
4. The following major traffic corridors:
   a. Old Seward Highway.
   b. Ingra and Gambell Streets between and including Ninth Avenue and Fireweed Lane.
   c. Northern Lights Boulevard and Benson Boulevard between and including Glenwood Street and Arlington Drive.

d. Muldoon Road between and including New Glenn Highway and Patterson Street.
e. Tudor Road between and including Patterson Street and Arctic Boulevard.
f. Boniface Parkway between and including 30th Avenue and New Glenn Highway.
g. Spenard Road between and including Hillcrest Drive and International Airport Road.
h. Arctic Boulevard between 17th Avenue and Tudor Road.
i. Lake Otis Parkway between Tudor Road and Abbott Loop

5. All park, recreational use and scenic interest areas.
6. Eagle River Central Business District between and including the New Glenn Highway, North Eagle River Access Road, Aurora Street as extended to the Old Glenn Highway and the Old Glenn Highway.
7. Any area where utility distribution facilities are provided by more than one utility as a result of mergers and boundary changes approved by the state public utilities commission.
8. School and university areas.
9. Any residential area with significant risk exposure to wildlife, high winds, or other natural disaster.

(AO No. 155-76; AO No. 156-76; AO No. 82-49; AO No. 84-62; AO No. 86-17; AO No. 2005-2, § 2, 5-30-05; AO No. 2009-28, § 1, 7-7-09)

21.90.070 - Nonconforming overhead lines.

A. An electric utility that owns poles that support nonconforming utility distribution lines shall remove the poles and place those lines underground. Any other utility that attaches to such poles shall place its lines underground at the same time that the pole owner places lines underground.
   1. The electric utility that owns poles shall, in each fiscal year, expend at least two percent of a three-year average of its annual gross retail revenues derived from utility service connections within the municipality, excluding toll revenues, revenues from sales of natural gas to third parties, and revenues from sales of electric power for resale for purposes of undergrounding nonconforming lines. An electric utility's expenditures, pursuant to AS 42.05.381(h), within the Municipality of Anchorage, shall be counted toward satisfaction of the two percent expenditure required by this subsection.
   2. A utility with lines attached to a pole that is to be removed under this subsection shall place its lines underground at the same time that the pole owner places its lines underground. To underground nonconforming utility lines, an attached utility shall not be required to expend more than two percent of its annual gross retail revenues derived connections within the municipality, excluding toll revenues. For the purpose of satisfying 21.90.070, the utility's expenditures pursuant to AS 42.05.381 (h) within the Municipality of Anchorage are counted toward this two percent expenditure limit.
   3. The electric utility that owns poles may choose which existing lines to underground in order to fulfill the two percent expenditure requirement, in consultation with appropriate public agencies and any other utilities.
   4. An electric utility that owns poles that does not expend the amount required in subsection A. of this section, or that expends more than that amount, may carry over the under expenditure or over expenditure as an adjustment to the following year's obligation.

B. The electric utility that owns poles shall notify the director of the planning department, and utilities or entities with lines attached to such poles, of the approximate date that the owner plans to remove the poles. Such notice, where possible, shall be given at least four months in advance of the undergrounding except where an emergency or other unforeseen circumstances preclude such notice, in which case such advance notice as is reasonable under the circumstances shall be provided.

C. A utility shall annually submit a report of its undergrounding projects and expenditures for non-conforming lines to the director of the planning department within 120 days of the end of the preceding calendar year.

D. All new service connections shall be placed underground in the same manner as required for utility distribution lines under Section 21.90.020. New service lines may be temporarily installed above ground from October through May, if placed underground within one year of installation.

(AO No. 155-76; AO No. 84-62; AO No. 2005-2, § 3, 5-30-05)

21.90.080 - Nonconforming overhead lines—Lines in municipal right-of-way.

A. The department of public works shall furnish to a utility owning or operating utility distribution lines all planning documents for municipal road construction which will require the relocation of those utility distribution lines.

B. Upon adoption of the ordinance from which this chapter is derived, a utility installing a utility distribution line underground in material compliance with a right-of-way permit issued by the department of public works, and in accordance with this chapter, the municipality shall reimburse the cost of any subsequent relocation of the utility distribution line required by municipal road construction.

C. If municipal road construction requires the relocation of a nonconforming utility distribution line, the municipality, as part of the road construction project cost, shall reimburse the cost of the relocation. Reimbursable costs under this subsection include engineering and design, inspection, construction and general overhead costs, but exclude utility plant betterment costs. Plant betterment costs are the costs of providing utility distribution line capacity or quality beyond what current industry standards require for the capacity or level of service existing before the relocation.

(AO No. 155-76; AO No. 84-62)

21.90.090 - Nonconforming overhead lines—Conversion of service connections.

A utility that places a nonconforming utility distribution line underground as required by section 21.90.070 shall bear the cost of placing underground any related service connections or other utility facilities on a customer's premises, in accordance with the utility's applicable tariff or rules or regulations of operation.

(AO No. 155-76; AO No. 84-62)

FOOTNOTE(S):

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[178] ***Cross reference***— *Fines, § 14.60.030.* *(Back)*

CITY OF WASILLA

MAYOR VERNE E. RUPRIGHT
290 E. Herning Avenue
Wasilla, AK 99654-7091
Phone: (907) 373-9055
Fax: (907) 373-9096

March 28, 2013

Mr. Joe Griffith
General Manager
Matanuska Electric Association, Inc.
P.O. Box 2929
Palmer, AK 99654

Re: Proposed Construction of New 115kV Double Circuit Transmission Line from the Eklutna Generation Station to the City of Wasilla and surrounding areas

Dear Mr. Griffith:

On February 14, 2013, the Wasilla City Planner, Tina Crawford, received a notice regarding the proposed transmission line construction, including the dates and times for the open house and public hearing. This notice was provided by the Matanuska Electric Association (MEA) as required by the Matanuska-Susitna Borough (MSB) for installation of Type II Essential Service Utilities.

After attending the open house on March 14, 2013 and reviewing the information regarding the proposed transmission line routes, the City of Wasilla has two key concerns with the proposed transmission line project. The first concern is whether the proposed transmission lines are even necessary to distribute power from the Eklutna generation station. The second concern is that if the transmission lines are necessary, MEA needs to give the residents and property owners a true "seat at the table" to help identify potential routes to ensure that the route has the least impact on surrounding uses, property values, and residents.

Based on information provided by MEA regarding the project on their website and at the open house meetings, including testimony by you to the Regulatory Commission of Alaska (RCA) on March 13, 2013, the City does not believe that the proposed transmission lines are necessary at this time. You testified that,

> ***"We can still feed through the existing line right here, and we also in our long-range plan will build from this area to Douglas Substation. So that will, in effect, give us a looped transmission system in the Valley and that's what's long been needed up there."***

Also, MEA's goal of tying into the Herning (Wasilla) substation is to achieve an "idealized" distribution system, at the sacrifice of Wasilla's continued economic development and efforts to protect existing view sheds and improve the attractiveness of the city. There are other ways for MEA to achieve this goal. Options include, but are not limited to: (1) extending the lines across the flats to the Hospital substation and then extending to and stopping at the Lazelle substation; (2) recognizing the new 24 MW

power plant being proposed as a co-generation site at the Goose Creek Correctional facility that will yield 10 MW back to the grid towards Wasilla as a form of redundancy; and/or (3) distributing power via the existing transmission lines from Eklutna to the Palmer and via Chugach-MLP from the south.

The City's other concern is that MEA only provided the minimum opportunity for the affected residents, property and business owners, and surrounding municipalities to be involved in the decision process regarding where to place the transmission lines. Although MEA held two open house meetings and scheduled a public hearing regarding this project, they submitted permit applications to the City on Tuesday, March 26, 2013, requesting approval for construction of the proposed transmission lines within their original preferred route. According to MEA, the purpose of the public hearing on March 28, 2013 is to give residents and property owners the opportunity to provide input on various routes. However, since the permits have already been submitted to construct the transmission lines along the route that was originally proposed last fall versus any of the three routes shown at the open house meetings, it is clear that MEA did not intend to ever allow the public to influence the decision regarding the proposed route. The public hearing is just a formality to meet the Matanuska-Susitna Borough's code requirements.

If MEA continues to insist that the proposed transmission line extending from the Hospital substation to the Herning substation is necessary, the approval/permit process needs to be postponed. MEA needs to collaboratively work together with residents, property and business owners, and the impacted municipalities to identify a route that has the least impact to the community.

The route requested in the City permit applications is located along the north side of the Parks Highway and the Palmer-Wasilla Highway Extension. This route will negatively impact the following:

- Existing commercial businesses along the route (including the ability to expand)
- Potential for future commercial development of vacant commercially zoned properties along the route
- Commercial property values
- Scenic vistas and view sheds along the Parks Highway and Palmer-Wasilla Highway Extension
- Economic development within the City and the Valley
- Potential for increased sales tax from commercial business, which directly impacts the existing and enhanced services provided by the City (e.g. new library, police, road maintenance, beautification efforts)

Although additional money to construct this transmission line can get MEA where it wants to be, no amount of money can compensate for the permanent, long-term impact felt by the residents and businesses in the area to the economic development potential, property values, and the scenic vistas in the area.

Additionally, as you are aware, the City of Wasilla has permitting authority for the portion of MEA's project within the City limits, which is classified as a "Utility Facility" in Title 16 of the Wasilla Municipal Code. Per the City Code, MEA is required to submit a permit application to the Planning Department. Review and approval of the permit will be performed by the Wasilla Planning Commission at a public hearing. At the public hearing, the Planning Commission will consider whether the proposed use is consistent with the City Comprehensive Plan and Land Development Code, including compatibility with the surrounding area.

If you have any questions regarding the information in this letter, please feel free to contact me. To obtain information regarding the permitting requirements, please contact Tina Crawford at 907-373-9022 or by email at tcrawford@ci.wasilla.ak.us.

Sincerely,

Verne E. Rupright
Mayor

cc: Regulatory Commission of Alaska
Larry DeVilbiss, Matanuska-Susitna Borough Mayor
Kevin W. Brown, MEA Communications Manager
publiccomments@mea.coop

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CITY OF WASILLA

MAYOR VERNE E. RUPRIGHT
290 E. Herning Avenue
Wasilla, AK 99654-7091
Phone: (907) 373-9055
Fax: (907) 373-9096

October 11, 2012

Mr. Kevin W. Brown
Communications Manager
Matanuska Electric Association, Inc.
P.O. Box 2929
Palmer, AK 99654

Re: Proposed Construction of New 115kV Double Circuit Transmission Line from the Eklutna Generation Station to the Herning Substation

Dear Mr. Brown:

On September 13, 2012, the Wasilla City Planner, Tina Crawford, received a notice regarding the proposed transmission line construction, including the dates and times for the open house and public hearing. This notice was provided by the Matanuska Electric Association (MEA) as required by the Matanuska-Susitna Borough (MSB) for installation of Type II Essential Service Utilities. The City of Wasilla also has permitting authority for the portion of your project within the City limits as a "Utility Facility" in accordance with Wasilla Municipal Code Title 16. You are required to make application for a land use permit through the City Planner. This will include a public hearing before the Wasilla Planning Commission, which will consider whether the proposed use is compatible with the surrounding area and is consistent with the City Comprehensive Plan and Land Development Code.

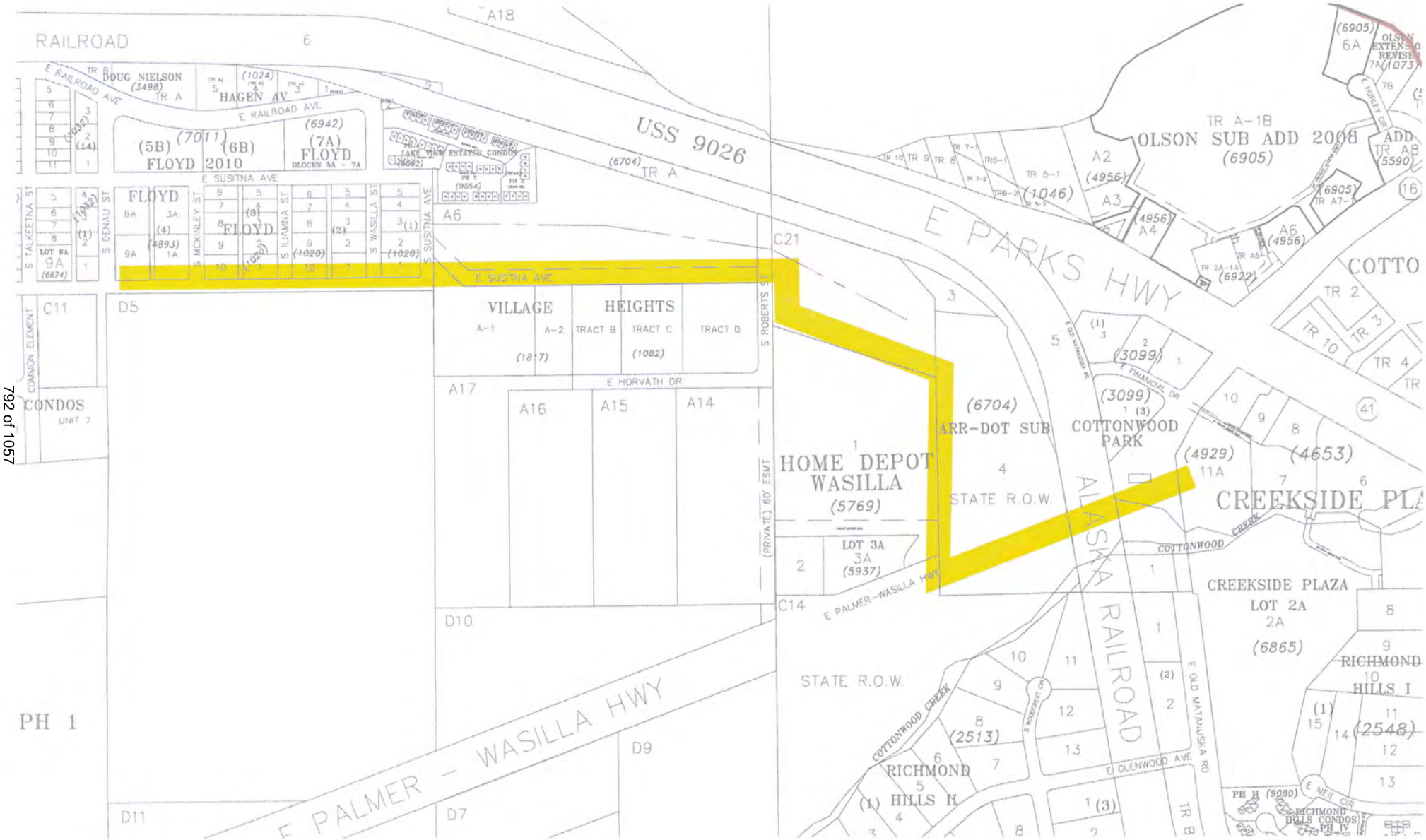
Our review of the project shows the portion entering the city limits (the City's gateway) along the north side of the Parks Highway will significantly impact existing businesses and future growth potential for the City. This proposed path will significantly impact the visual aspects of this gateway into the City of Wasilla and existing and proposed commercial development of properties in this area. To alleviate the impacts of the proposed transmission lines, the City is recommending the following:

- Transmission lines should be installed underground to minimize visual impact along the gateway corridor leading to, and also within, the City of Wasilla
- Route should be directed south of the Parks Highway before the Seward Meridian Interchange (see attached map showing preferred alternatives)

To obtain additional information regarding the permitting requirements, please contact Tina Crawford at 907-373-9022 or by email at tcrawford@ci.wasilla.ak.us.

Sincerely,

Verne E. Rupright
Mayor


RAILROAD
A18
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DOUG NIELSON (3498) TR A
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A6
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VILLAGE
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A-1
A-2
TRACT B
TRACT C
TRACT D
(1817)
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S ROBERTS ST
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A17
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COMMON ELEMENT
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(6704)
ARR-DOT SUB
HOME DEPOT WASILLA (5769)
STATE R.O.W.
(PRIVATE) 60' ESMT
LOT 3A
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TR A-1B
OLSON SUB ADD 2008
(6905)
A2
(4956)
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A4
A5
A6
(1046)
TR 2A-1A
(6922)
COTTONWOOD PARK
(3099)
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(4929)
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CREEKSIDE PLA
COTTONWOOD CREEK
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ALASKA RAILROAD
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E GLENWOOD AVE
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(2548)
RICHMOND HILLS II
(2513)
PH II (9080)
E NEIL CIR
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MEA
MATANUSKA ELECTRIC ASSOCIATION

RECEIVED
SEP 13 2012
Planning Office
City of Wasilla

September 12, 2012

Tina Crawford
City Planner
City of Wasilla Planning Department
Wasilla City Hall
290 East Herning Avenue
Wasilla, AK 99654

Dear Ms. Crawford:

Matanuska Electric Association, Inc. (MEA) plans to construct a new 115 kV double circuit transmission line from its new Eklutna Generation Station to its Herning Substation located at the south end of S. Denali St. south of E. Susitna Ave., Wasilla. This notice is being sent to inform you of the project and of upcoming public meetings where the project will be discussed because you are the owner of property near the project route. The preferred route from Eklutna Generation Station to the Herning Substation is shown on the attached map.

Dryden and LaRue, Inc., Consulting Engineers, under contract to MEA, prepared reports for each segment that analyzed route options and recommended a preferred route. A copy of these reports are available on the project website at *www.eklutnagenerationstation.com* and at the MSB Permit Center and Wasilla City Hall:

MSB Permit Center
Matanuska Susitna Borough
350 East Dahlia Avenue
Palmer

City of Wasilla Clerk's Office
Wasilla City Hall
290 East Herning Avenue
Wasilla

MEA has scheduled two public events, as listed below, to provide us with the opportunity to hear from you on this important project. .

Open House:
September 27
6:00 to 8:00 pm
Curtis D. Menard Sports Complex
Wasilla

Public Hearing:
October 11
6:00 to 8:00 pm
Curtis D. Menard Sports Complex
Wasilla

All comments need to be received in writing.

MATANUSKA ELECTRIC ASSOCIATION

You may also submit comments directly to MEA at *publiccomments@mea.coop* or contact:

Kevin W. Brown
Communications Manager, Matanuska Electric Association, Inc.
P.O. Box 2929
Palmer, AK 99645

Phone: (907) 761-9452.

If you have any questions or would like further information for your planning department, please do not hesitate to contact us.

Sincerely,

Joe Griffith
General Manager, Matanuska Electric Association, Inc.

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MATANUSKA ELECTRIC ASSOCIATION

February 12, 2013

Tina Crawford
City Planner
City of Wasilla Planning Department
Wasilla City Hall
290 East Herning Avenue
Wasilla, AK 99654

Dear Ms. Crawford:

Matanuska Electric Association, Inc. (MEA) is performing a route study for a new 115 kV double circuit transmission line between Hospital Substation near Trunk Road and the University Experiment Station, and either Herning Substation located at the south end of South Denali Street south of East Susitna Avenue, or Cottle Substation south of Fairview Loop and west of Knik Goose Bay Road. As the owner of property near one of the proposed alternative routes, this notice is being sent to inform you of the alternative alignments and of the upcoming public meetings where the project alternatives will be discussed. The alternative routes are shown on the attached alternatives map.

MEA has scheduled two public events, as listed below, to provide us with the opportunity to hear from you on this important project. .

Open House:
February 28, 2013
6:00 to 8:00 pm
First Christ United Methodist Church
5137 W Fairview Loop
Wasilla

Public Hearing:
March 14, 2013
6:00 to 8:00 pm
First Christ United Methodist Church
5137 W Fairview Loop
Wasilla

The enclosed alternatives map and reports from a prior hearing process are available on the MEA project website at *eklutnagenerationstation.com* and at the MSB Permit Center and Wasilla City Hall:

MSB Permit Center
Matanuska Susitna Borough
350 East Dahlia Avenue
Palmer, Alaska

City of Wasilla Clerk's Office
Wasilla City Hall
290 E. Herning Avenue
Wasilla, Alaska

MATANUSKA ELECTRIC ASSOCIATION

All comments need to be received in writing.

You may also submit comments directly to MEA at *publiccomments@mea.coop* or contact:

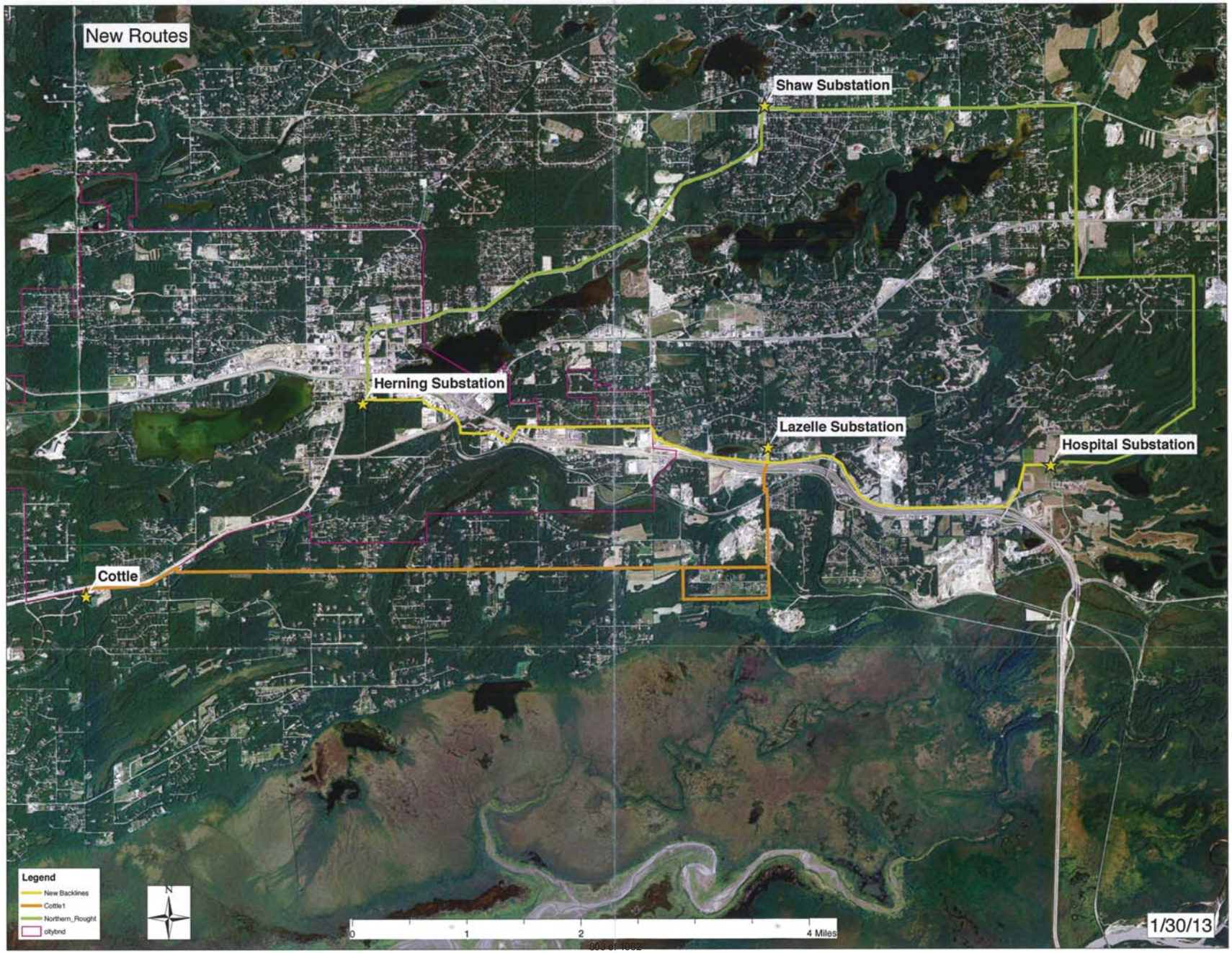
Kevin W. Brown
Communications Manager, Matanuska Electric Association, Inc.
P.O. Box 2929
Palmer, AK 99645,

Phone: (907) 761-9452.

Thank you, and if you have any questions please do not hesitate to contact us.

Sincerely,

Joe Griffith
General Manager, Matanuska Electric Association, Inc.


New Routes
Shaw Substation
Herning Substation
Lazelle Substation
Hospital Substation
Cottle
Legend
New Backlines
Cottle1
Northern_Rought
citybnd
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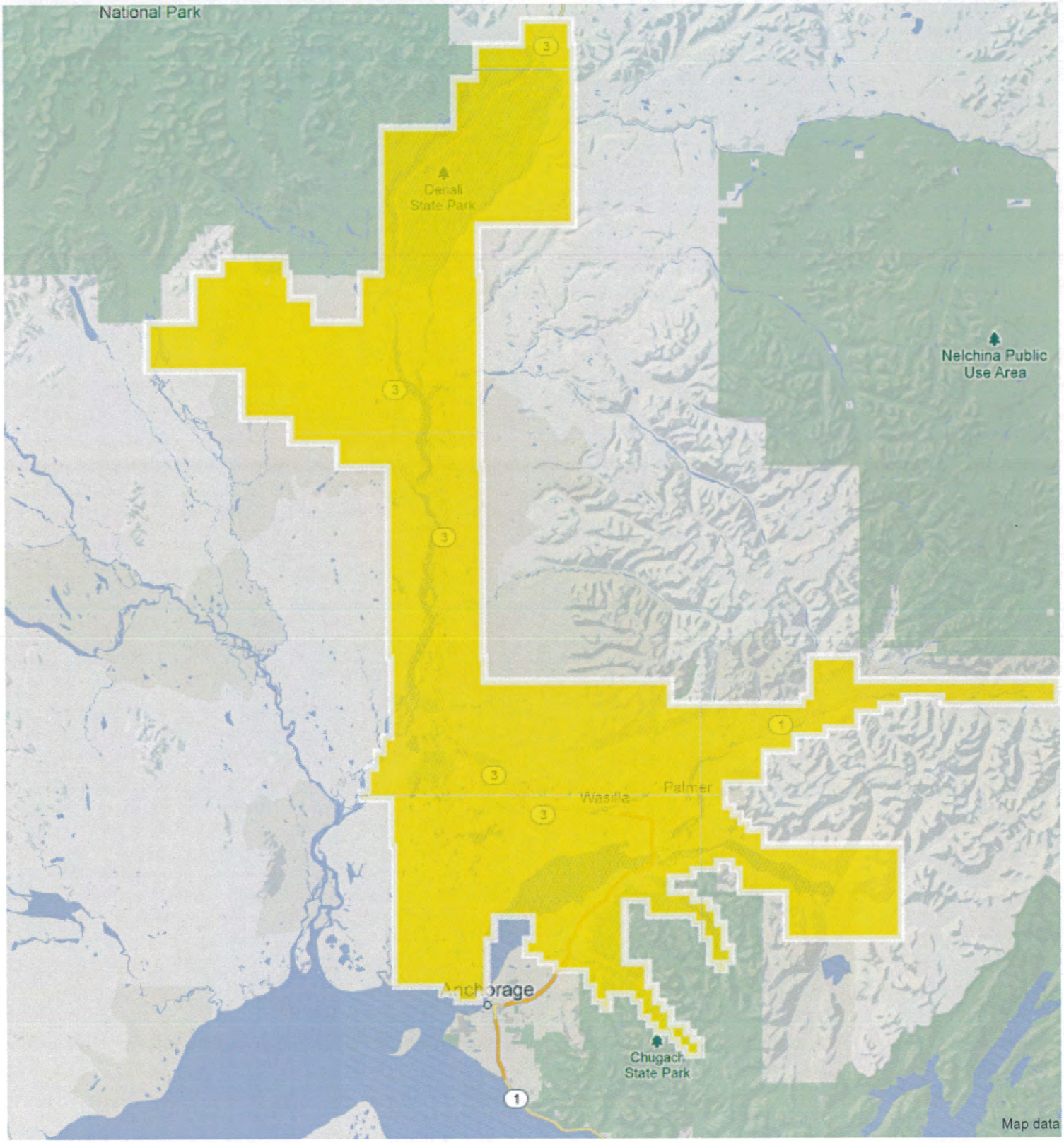


View Larger Map

MEA Service Area

First Concrete Delivery for Matanuska Electric Association's Eklutna Generation Station Power Block Building Foundation

Construction of Matanuska Electric Association's Eklutna Generation Station continues moving forward on schedule and on budget, with the first concrete truck for construction of the power block building base mat foundation arriving on-site on Tuesday April 2. The power block building will house the engines, generators, and support equipment for the $265 million generation facility. The 480 feet by 130 feet foundation, ranging in depth from two to four feet, is on schedule for completion by the end of April.

In all, more than 500 truckloads will be needed to supply the approximately 6,000 cubic yards of concrete necessary to support the massive engines at the heart of the Eklutna Generation Station. Klondike Concrete in Chugiak is supplying all concrete. In addition to the concrete, the Power Block foundations will contain nearly 1.5 million pounds of steel rebar, to further reinforce the structure.

This latest development at EGS is an important step as MEA moves toward completion of the state-of-the-art dual fuel power plant. When operational on January 1, 2015, EGS will produce 170 megawatts of power for the customers of Alaska's oldest and second-largest electrical utility. The plant will be operated primarily on natural gas, but in case of interruption to the gas supply, the advanced Wärtsilä dual-fuel technology enables the engines to switch smoothly while operating to an alternative fuel, in this case diesel. "In the event of a natural disaster such as an earthquake, these engines can switch fuels without a hiccup," states MEA General Manager Joe Griffith.

Matanuska Electric Association will release additional details as the construction process progresses.

MEA to Hold Series of Public Meetings to Discuss Transmission Line Routing

In order to provide for greater system stability, reduce outages, and help deliver power to key load centers, MEA must build a new transmission line in the Wasilla area. The engineering firm of Dryden and LaRue has been retained to help develop routing options and to design the final project.

As part of this process, MEA will be holding a series of public meetings to get feedback from those residents, businesses, and property owners in the vicinity of the proposed routes.

Two public open houses will be held to help MEA share information and get input from the community. These will be held on February 28 and March 14, from 6-8 p.m. at the Christ First United Methodist Church on the corner of Knik Goose Bay and Fairview Loop. These meetings will provide the opportunity for community members to discuss this project with our engineering project team and get answers to their questions.

An additional meeting, a formal public hearing, will be held on March 28th. This meeting will be a formal public hearing and will give attendees the opportunity to submit formal written and verbal comments on the record. The location of this public hearing is still being determined, and this article will be updated when the location is set.

For more information on the project, including maps of the various proposed routes and links to submit formal comments, **please visit the project website**, or call Kevin Brown, Communications Manager for Matanuska Electric Association, at (907) 761-9452.

MEA

The Power To Make It Happen!

Home | Transmission Project | Studies | Maps & Open House Exhibits | Important Dates | News | FAQ | Contact | COMMENTS

Core-area Transmission Line Construction and Upgrades

a project of Matanuska Electric Association

MEA needs your input.

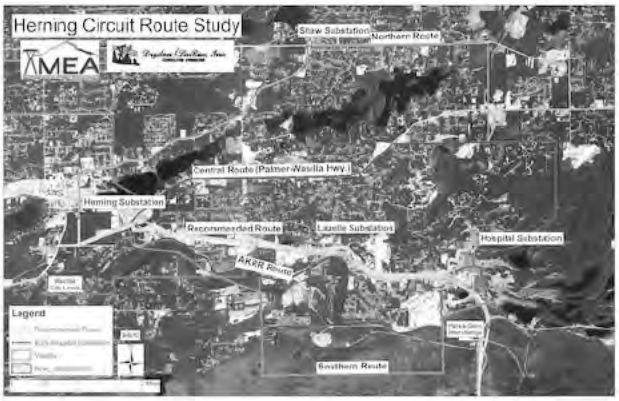
As part of its ongoing commitment to ensuring our members have safe, reliable, sustainable, and economical electricity, MEA is planning to build a new transmission line from Eklutna to either the Herning or Cottle substation in Wasilla.

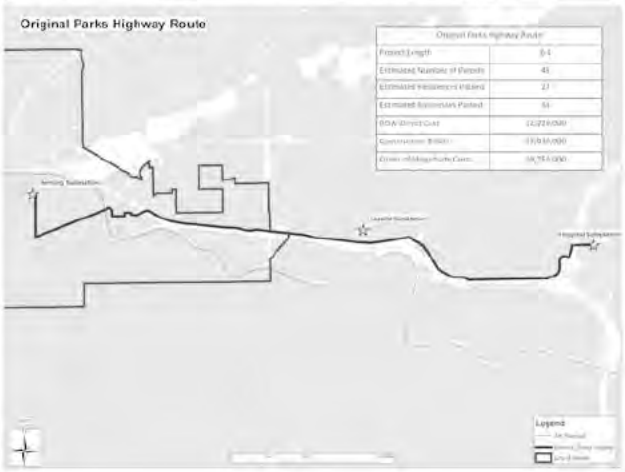
This project will:

- Loop the transmission around load centers
- Provide for multiple sources to MEA substations
- Improve reliability by reducing outages
- Carry larger capacity distribution lines as underbuild
- Serve more residential and commercial loads
- Follow MEA Transmission Long Range Plan (LRP)

This website is designed to help you keep informed about this important project.

Learn more ...





Upcoming Dates

No upcoming events

Project Information

NEW - View the Maps and Exhibits from the February 28, 2013 Open House

View the Studies

Contact MEA

Kevin W. Brown
Communications Manager
Department of Public Affairs
Matanuska Electric Association
P.O. Box 2929
Palmer, AK 99645

publiccomments@mea.coop

News

- UPDATE 02/13/13 – Public Notice
- UPDATE: Public Meeting & Hearing

Important Dates

No upcoming events

Information Links

- Dryden & LaRue, Inc.
- Mat-Su Borough
- Matanuska Electric Association

Transmission Project

Learn more about the transmission line project

MEA needs your input.

As part of its ongoing commitment to ensuring our members have safe, reliable, sustainable, and economical electricity, MEA is planning to build a new transmission line from Eklutna to either the Herning or Cottle substation in Wasilla.

This website is designed to help you keep informed about this important project.

MEA has scheduled three public events to provide us with the chance to hear directly from you. Please plan on attending one or more of these public events. You can also submit comments to us directly through this website. Click the COMMENTS tab for more information.

MEA contracted with Dryden & LaRue, Inc. to conduct the following transmission line routing studies:

- Eklutna Generation Station to Hospital Substation – Construction of a new double circuit transmission line from the switch yard located adjacent to the EGS to MEA's Hospital Substation near the Mat-Su Regional Medical Center.
- Hospital Substation to Herning Substation – Construction of a new double circuit transmission line from MEA's Hospital Substation near the Mat-Su Regional Medical Center to the Herning Substation located on South Denali Street just east of Knik-Goose Bay Road.

The study reviewed the viability of the following five routing options for the Hospital Substation to Herning Substation portion of the project:

- Northern Route Option (Bogard Road)
- Central Route Option (Palmer-Wasilla Highway)
- Southern Route Option
- Alaska Railroad Route Option
- ***Parks Highway Route Option*** (proposed optimal route)

The following rating criteria factored into the analysis of routing options:

- Cost
- Ability to strengthen MEA's transmission grid
- Minimize public controversy
- Schedule to energize

In analyzing each routing option two threshold questions were asked:

- Is the option physically feasible?
- Is the option efficient, effective and economic?

All of the complete Dryden & LaRue, Inc. route studies are available for review here.

Board of Directors Approves Eklutna Generation Station (EGS) Engineering Contract

During its August 13, 2012 meeting, the Matanuska Electric Association Board of Directors approved a contract with the firm of Burns & McDonnell for engineering and design services related to the ongoing Eklutna Generation Station (EGS) project. Burns & McDonnell, headquartered in Kansas City, Mo., is a full-service engineering, architecture, construction, environmental, and consulting solutions firm with more than 3,600 employee-owners. They have been in business for 113 years, and have significant experience in designing projects for the harsh environments of Alaska. The firm also has repeatedly designed plants utilizing the Wärtsilä generation technology selected in March by MEA to power EGS.

"Approval of this contract is another major step on our path to completing the Eklutna Generation Station on time and under budget," said MEA General Manager Joe Griffith."Burns & McDonnell is a nationally recognized engineering firm with significant past experience in the design of Wärtsilä-driven plants. They were able to provide us with a comprehensive proposal that brought the price down significantly below initial estimates. These savings and their expertise are the major driving factors for their selection. "

The contract, valued at $3,814,130, covers the engineering and design of both the new generation plant's power block (those pieces of the plant housing the generators and connecting them to the electrical grid) and its support buildings (including an administrative building and warehouse, known collectively as the "balance of plant").

Completion of the initial design documents is expected by the end of December 2012 to accommodate a spring 2013 construction start date. The Eklutna Generation Station is slated for completion by the end of 2014.

MEA
MATANUSKA ELECTRIC ASSOCIATION

The Eklutna Generation Station

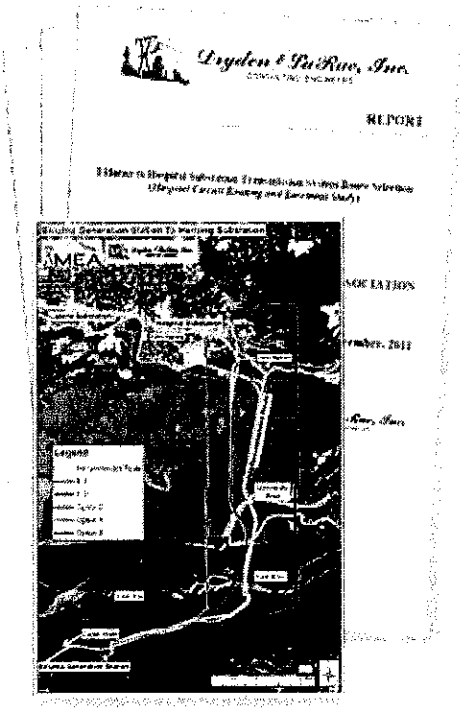
a project of Matanuska Electric Association

MEA needs your input.

As part of the construction of its new power plant, the state-of-the-art Eklutna Generation Station, MEA is planning to build a new transmission line from Eklutna to the Herning substation in Wasilla. This will let us more efficiently get the power we generate at Eklutna to our customers through our service territory.

This website is designed to help you keep informed about this important project.

Learn more...



Upcoming Dates

No upcoming events

Project Information

Eklutna to Hospital Route Selection
Eklutna to Hospital Supplement
Hospital to Herning Route Options
Hospital to Herning Optimal Route
Technology Report

Contact MEA

Kevin W. Brown
Matanuska Electric Association
Communications Manager
Department of Public Affairs
P.O. Box 2929
Palmer, AK 99645
publiccomments@mea.coop

Planned Natural Gas Plant at Eklutna

The Plan: Independence

MEA is working to build our own power generation facilities. We are very pleased to announce that we have made a critical step toward achieving that goal by an agreement that will allow us to build a natural gas power plant at Eklutna.

MEA is a not-for-profit cooperative, owned by you and your neighbors. Building a natural gas power plant at Eklutna will allow MEA to fulfill our mission of bringing reliable, affordable power to you.

The Site: Eklutna

In 2009, MEA acquired about 70 acres of land located northeast of the Eklutna Interchange of the Glenn Highway.

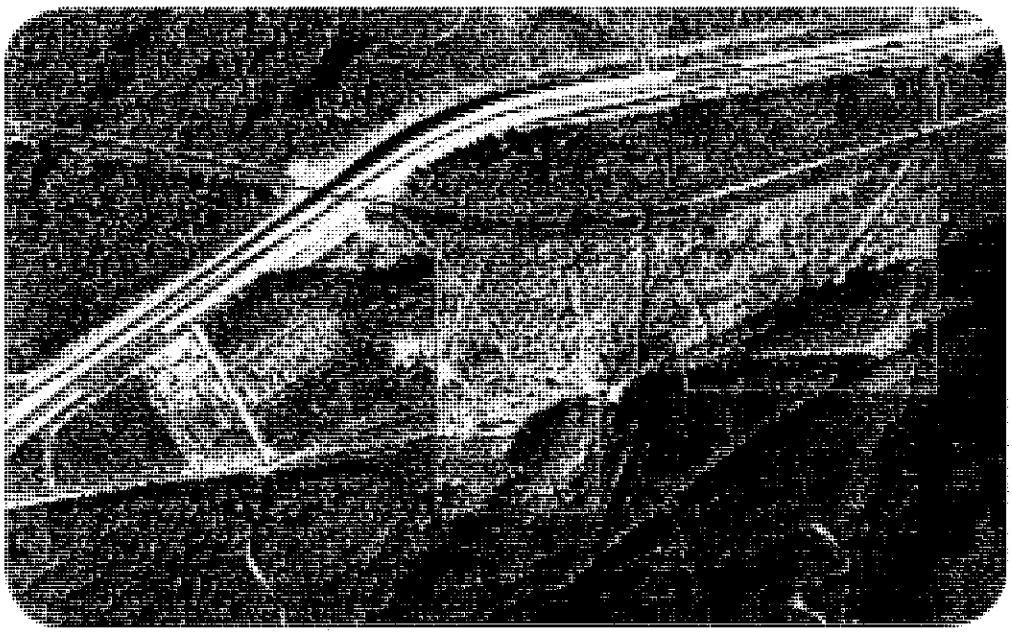
The 70 acres are divided into parcels that are re-zoned as I-3 (industrial 3, rural industrial district).

MEA's plans, include up to a 180 megawatt natural gas generation plant and related facilities. The size of the power plant may change as our research and planning progress.

The Eklutna area has been used as a power plant site in the past. In 1928, the Anchorage Light & Power Company began construction of what has become known as the "Eklutna Power Plant." It is now defunct.

Eklutna Plant Quick Links

- Interested Contractor List
- Integrated Resource Plan
- MEA IRP Study
- MEA Technology Report



A photograph showing the boundary lines as well as the Eklutna interchange.

Timeline

- January 2008 MEA & Eklutna, Inc., Renew Talks On Land Availability
- March 2008 Phase I Site Assessment
- June 2008 Phase II Site Assessment
- June 2008 MEA & Eklutna, Inc., Post Joint Press Release
- July 2008 Front Page Article On Project In MEA's Newsletter, Power Lines
- Fall 2008 MEA & Eklutna, Inc., Present Plans To Community Council Meetings For Chugiak, Birchwood, Eklutna Valley
- November 19, 2008 MEA & Eklutna, Inc., Discuss Plans With Eklutna Village Elders
- February 2, 2009, at 6:30 p.m., Public Hearings On Re-Zoning At Municipality Of Anchorage Planning and Zoning Commission
- 2009 Public Hearing At Anchorage Municipal Assembly
- February 4, 2009 MEA Discusses Plans At Chugiak/Eagle River Chamber of Commerce
- February 25, 2009 MEA Discusses Plans With Palmer Chamber of Commerce
- October 2009 MEA Solicits Bids For Contract To Build Plant
- February 2010 MEA receives bids on Power Plant
- March 2011 MEA Board Unanimously Approves Limited Notice to Proceed Phase
- April 2012 Target Date: Start Construction
- October 2014 Target Date: Power Plant Ready For Testing
- December 31, 2014 MEA Contract With Chugach Electric Ends
- January 1, 2015 MEA Begins Generating Our Own Power

Frequently Asked Questions

What type of electrical power generator is MEA proposing to build?
A natural gas power plant.

Where will the proposed natural gas plant be located?
Northeast of the Eklutna Interchange on the Glenn Highway, adjacent to the Reed Substation and old (defunct) Eklutna Power Plant.

How much land is MEA planning to purchase for the natural gas plant?
Approximately 70 acres.

Who owns the land currently?
MEA owns the 70 acre site.

Eklutna Inc., currently owns the surrounding land.

When would the plant be built?
Construction is proposed to begin 2012-2013.

Will we be able to hear the plant?
A recent noise impact study determined that traffic from the Glenn highway will be more noticeable than this natural gas plant.

Contact

For Questions & Information Contact:

Lydia Lindsey
Matanuska Electric Association, Inc.,
907.761.9395

Power Lines

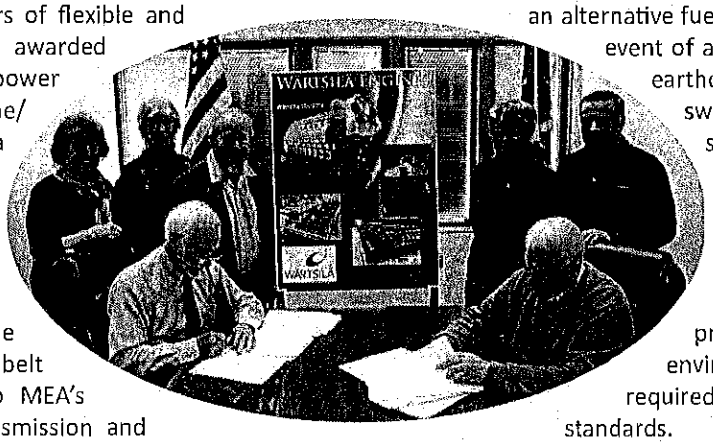
March/April 2012 / Issue 2

Matanuska Electric Association Newsletter

MEA
MATANUSKA ELECTRIC ASSOCIATION

Matanuska Electric Association (MEA) Board of Directors awards Wärtsilä North America $100 million + contract

The MEA Board of Directors unanimously approved the award of a $100-million-plus contract for engine generator units at the February 12 board meeting in Palmer, and ratified the confidential action at the March 12th Board meeting in public session. Wärtsilä, one of the world's leading manufacturers of flexible and efficient power plants, was awarded the contract to supply the power house engineering and engine/ generating equipment for a new power plant at Eklutna, Alaska.



Ten, 18-cylinder Wärtsilä 50DF (V configuration) dual-fuel generating sets will provide 171 mW of power to the Railbelt transmission system and to MEA's roughly 4,000 miles of transmission and distribution lines. General Manager Joe Griffith noted that "our member area is the fastest growing in the State of Alaska. We are confident that our choice of Wärtsilä engine/ gen sets provides the most reliable and cost-efficient power available while meeting our projected load."

Adding a new technology to the Railbelt, each dual-fuel 18-cylinder Wärtsilä 50DF generating set will be operated primarily on natural gas. However, in case of interruption to the gas supply, the advanced Wärtsilä dual-fuel technology enables the engines to switch smoothly while operating to an alternative fuel, in this case diesel. "In the event of a natural disaster such as an earthquake, these engines can switch fuels without a hiccup" states Griffith "and that was a huge factor in our decision to go with Wärtsilä."

Weighing in at 355 tons each, 50DF technology also provides the efficiency and environmental sustainability required by current air emission standards. Low emission levels and reduced fuel consumption gives these engines a substantial edge over alternative prime movers--gas turbines. Another important factor in the selection is that the Wärtsilä generating sets meet the State of Alaska air quality permits specific to this site.

Continued on page 3

What's Inside

2012 Annual Meeting!!!

The Power to Make It Happen!

When: April 24, 2012
Registration begins at 5:00 p.m.
Business Meeting begins at 6:00 p.m.

Where: Raven Hall - Alaska State Fairgrounds

Popcorn & Ice Cream to be served

See Page 2 for more information

The Power To Make It Happen!

2012 MEA Annual Meeting

TUESDAY APRIL 24, 2012

RAVEN HALL, ALASKA STATE FAIRGROUNDS

Registration opens at 5 p.m.
Business Meeting begins at 6 p.m.

2012 MEA Board Candidates

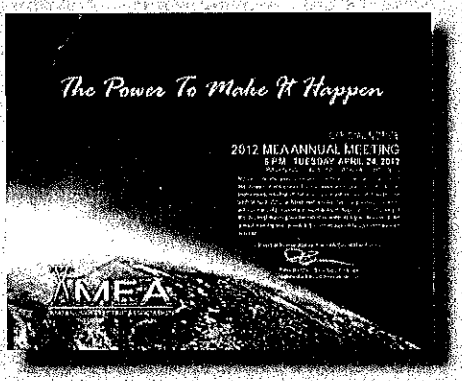
There are four (4) candidates for two (2) At-Large seats. Watch for your Annual Meeting notice for their full Biographies and Board application information.

Kit Jones
Incumbent Candidate
At-Large Nominated Candidate

Lois Lester
Incumbent Candidate
At-Large Nominated Candidate

Bryan J. Scoresby
At-Large Nominated Candidate

Marvin L. Yoder
At-Large Nominated Candidate



Watch the mail for your Annual Meeting packet containing your copy of the Annual Report, your ballot, and your ballot return envelope.

DO NOT HAND-DELIVER BALLOTS TO MEA.
Your mail-in ballot must be RECEIVED by the MEA Election Overseer by 5 p.m., April 23, 2012. Or you can vote at the Annual Meeting on April 24, 2012.

Mail in your ballot to be eligible to win:

- Three $1,000 travel vouchers
- MEA beater-vehicle - guaranteed to drive out of the parking lot
- 10,000 kWh of electricity

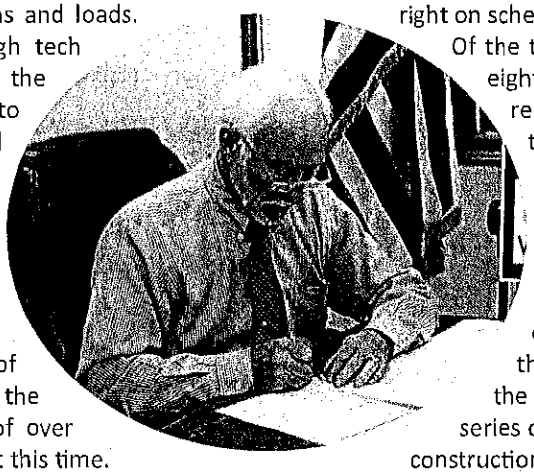
PLUS:
Every member who attends the Annual Meeting will receive a $10 credit applied to his or her primary account.

Visit www.mea.coop for more information about the candidates

Be sure to check out the MEA Annual Report in your Annual Meeting packet for a special update on the Eklutna Generation Station!

Wärtsilä (continued)

Beginning last fall, a negotiating team of MEA executives began meeting with the Wärtsilä representatives from Finland and the US. Gary Kuhn, Director of Engineering for MEA stated that "it was a lengthy but detailed process. These engines are highly efficient and responsive under a wide range of operations and loads. The machines are incredibly high tech and a lot of the issues before the negotiating team were related to that technology." The dual-fuel engine utilizes a "lean-burn" Otto Cycle Combustion process when operating on gas. Wärtsiläs are known for their low heat rate, which is a measure of the fuel going into the machine compared to the electricity coming out of them. According to Wärtsilä, the 50DF has shown an efficiency of over 48%, which is probably a record at this time.



The gas-diesel process can tolerate big variations in the gas quality and is especially suitable for "non-pipeline quality gas" such as associated gas in oil fields. The power plant will provide base load generation for MEA.

With the engines' efficiency and low heat rate, these units will likely be called on first to generate electricity for the Railbelt. Don Zoerb, MEA CFO, related that by "signing this contract we have made the major commitment to ensure the timely completion of this project; actually we are right on schedule and perhaps a little ahead." Of the ten engines MEA contracted for, eight have already been built and are ready for shipment. The remaining two will be built in Trieste, Italy.

MEA is the prime contractor on the power plant. Stanley Consultants, a leader in the electricity consulting and engineering market, has done the design basis engineering for the facility. MEA will be awarding a series of major contracts for design and construction of the key plant elements, with possibly multiple locally sourced contracts available. Stanley Consultants and in-house staff are presently preparing the RFP's for those contracts and should have them on the street inside of 45-60 days.

Tree Clearing Schedule

The following areas are scheduled for clearing this summer. For safety and efficiency please keep right-of-ways clear of obstructions and keep pets and children away from clearing crews.

CER - Upper-Skyline Drive,
Eagle River (est. 6 miles)

CER - Eagle River Road
from pole 112A-215
(est. 18 miles)

W - Wasilla
(est. 30 miles)

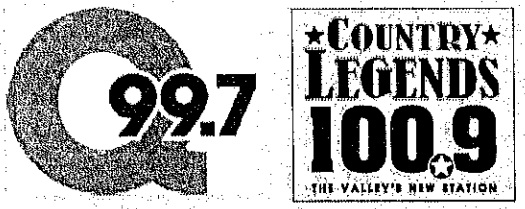
WW - Wasilla West
(est. 30 miles)

Thank You!

A well-cleared right-of-way ensures fewer interuptions to your electricity and enables MEA linemen to easily access poles, wires, and undergound cabinets to more efficiently deal with outages that do arise.

MEA is dedicated to providing safe and reliable service to all our members. We would like to thank each and every one of our members from the areas below for cooperating and understanding the necessity to clear MEA's utility easements in 2011.

B-Circuit (Butte), T-Circuit (Talkeetna), HC-Circuit (Hunter Creek), WN-Circuit (Wasilla North), CER-Circuit (Eagle River)



Remember:

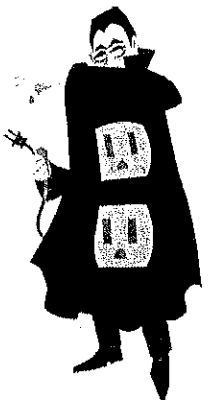
Keep your battery-powered **radios tuned in to either 100.9 or 99.7 FM for important updates during electrical power outages. You can also connect with us on Facebook and Twitter and receive power outage updates on your phone or computer.**

Conservation Corner

Tip of the Month

Thwart the Energy Vampires!

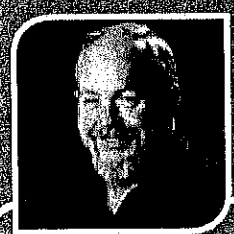
Unplug electronic devices and chargers when they aren't in use - most new electronics use electricity even when switched "off". Turn computers and printers off at the power strip to ensure that their LED lights and "standby mode" features aren't sucking up the juice when not in use.



Your Board of Directors

Elsie E. "Lois" Lester
President
Director At-Large
Home: 694-9390

David Glines
Vice President
Eagle River District
Home: 694-9425



Peter H. Burchell
Sec./Treas.
Director At-Large
Home: 376-8256

Contact Us

Eagle River: 11623 Aurora St.
Local: 694-2161 or 689-9600
From Mat-Su: 761-9600

Palmer: 163 E. Industrial Way
Local: 745-3231 or 761-9300
From Anchorage: 689-9300

Wasilla:Creekside Plaza, A-130
Local: 376-7237 or 761-9500
From Anchorage: 689-9500

MEA Director of Public Affairs
Cheryll Heinze Office: 761-9215

MEA's next Board of Directors meetings:
Monday, April 9
@ 4 p.m. &
Monday, May 14
@ 4 p.m.

Larry DeVilbiss
Matanuska District
Home: 746-6593

Bob Doyle
Susitna District
Home: 373-3147

Catharine W. "Kit" Jones
Director At-Large
Home: 745-7393

Janet Kincaid
Director At-Large
Home: 745-3855

Power Lines

August 2012

Matanuska Electric Association Newsletter

MEA
MATANUSKA ELECTRIC ASSOCIATION

Remembering Our Friend Cheryll Heinze

On July 11, 2012, the MEA family experienced a terrible loss. Cheryll Heinze, MEA's Director of Public Affairs and Human Resources, passed away due to injuries sustained in an airplane accident on Beluga Lake in Homer. Cheryll's warmth, energy, and genuine caring for both employees and members made her a beloved member of our team.

Cheryll was born in Wewoka, Oklahoma on October 30, 1946 to Nel-Jo and Dallas Boren. Her father was an Army Chaplain who served in both World War II and the Korean Conflict. Cheryll lived at Fort Richardson in her childhood while he was stationed in Alaska. This planted the seed of her love for Alaska and the outdoors.

In 1985, Cheryll found her way back to Alaska, making it her permanent home and deeply weaving herself into the fabric of the young state she loved. First she lived in a small cabin in Slana, later moving to Valdez. She finally settled in Anchorage in 1987. There, while working on Wally Hickle's gubernatorial campaign as Press Secretary, she met the love of her life, Harold Heinze. They were married in 1993, and the pair quickly became an inseparable fixture of Alaskan civic life.

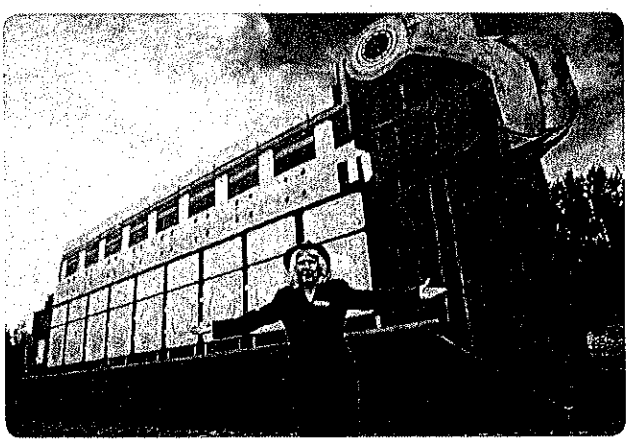
Cheryll served Alaska with distinction in many capacities. She was a great artist and an entrepreneur, portraying the beauty and majesty of Alaska in poetry and painting. She worked for the Department of Commerce, and then later became Deputy Commissioner of the Department of Natural Resources. In 2002 Cheryll was elected to the State Legislature and served one term, where she passed an impressive number of substantive bills and helped to guide the state through a severe budget crunch.

Cheryll valued being part of the community, and had the chance to contribute to a number of wonderful organizations and charities. She also loved to explore, taking every opportunity to get out and experience Alaska and the rest of the world. A special joy of hers was discovering quirky places off the beaten track and then sharing them with those she cared about. Talkeetna was one of those special places for her, and her Montana Creek cabin there became a frequent gathering place for family and friends.

Above all, Cheryll loved her family with passion and intensity. She was the leader, the organizer, the planner, and the chief cheerleader. She was often lovingly referred to as the "little general" because of her attention to detail and conviction that if there is still time, there is still time for improvement.

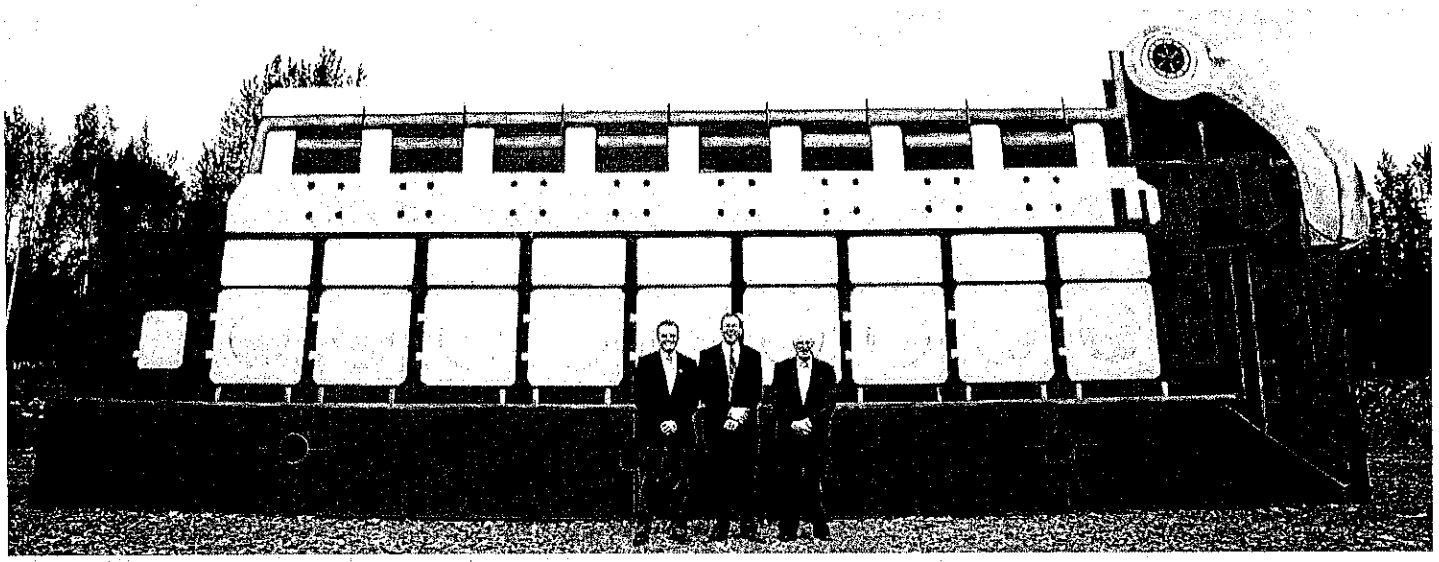
For Cheryll, family was not only those related through birth or marriage, but those people she found along the way and chose to make a part of her life. She loved easily and boundlessly. In this way, Cheryll took MEA, its employees, and members into her heart. Because of her we really are one big extended family.

The entire MEA family is and will forever be grateful to have been part of her adventure through this world, and to have been loved by her so dearly.



Cheryll Heinze posing with one of her masterpieces - a life-sized replica of one of the Wärtsilä engines which will power EGS in the future. Cheryll and her crew painted the mockup in June to give groundbreaking attendees an idea of the scale of these powerful engines.

Matanuska Electric Association Breaks Ground on Eklutna Generation Station (EGS) Power Plant



Wayne Elmore - Wärtsilä North America, Grant E. Grothen - Burns & McDonnell, and Dennis Finn - Wärtsilä North America, posing in front of a life-sized mockup of a Wärtsilä engine at the June 26 Groundbreaking event.

No amount of rain could dampen the spirits of those gathered together for the groundbreaking of Matanuska Electric Association's new Eklutna Generation Station (EGS). On June 26th, approximately 85 people marked the official launch of construction of the EGS natural gas power plant.

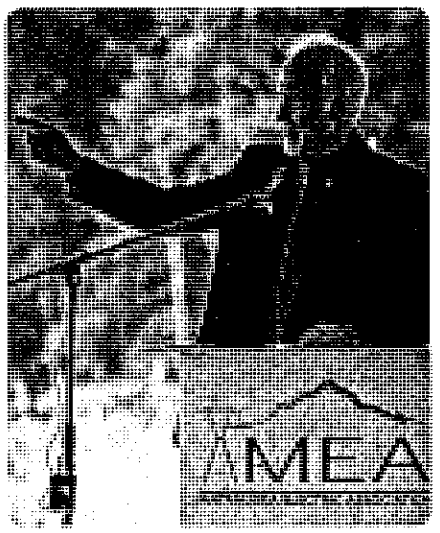
MEA Board President Lois Lester and General Manager Joe Griffith at the EGS Groundbreaking.

"This is the biggest undertaking in MEA history," noted Board President Lois Lester. "MEA now is striking out to take charge of its own destiny. With the construction of the Eklutna Generation Station, for the first time MEA will control its own power generation, transmission, and distribution system."

"This day marks the start of a project that will benefit hundreds of thousands of Alaskans along the Railbelt region, which stretches from the Kenai Peninsula north, more than 500 miles to Fairbanks," said MEA General Manager Joe Griffith. "With ten 18-cylinder Wärtsilä 50 DF dual-fuel generating sets, 171 mW of power will be added to the Railbelt transmission system and MEA will finally be in control of its own destiny."

With this event, MEA stands one step closer to joining a very elite group. Currently, of the more than 900 rural electric cooperatives in the United States, only 65 produce their own power.

The $250 million Eklutna Generation Station Project is slated for completion by the end of 2014, and will provide power for MEA's more than 56,000 customers.



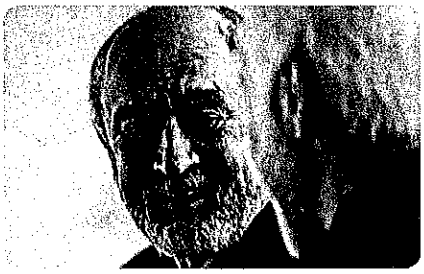
General Manager Joe Griffith gestures to the future location of the 10 reciprocating engines to be provided by Wärtsilä.

Hedging the Euro - Saving MEA $2.5 million

By agreeing to make part of the Wärtsilä engine purchase in Euros, MEA was able to save the co-op a lot of money. Because the exchange rate between Euros and Dollars constantly changes, MEA went through a process called "hedging", to ensure a favorable exchange rate. In all, this process saved the membership $2.5 million.

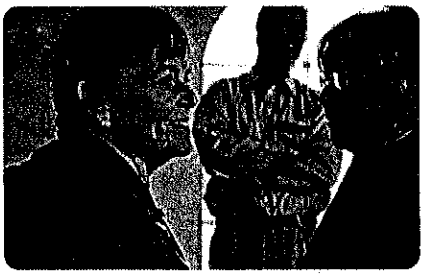
More from the EGS Groundbreaking

Mat-Su Borough Mayor and MEA Board Member Larry DeVilbiss speaks at the EGS Groundbreaking. "Everybody is convinced we can do this more cheaply than wheeling power out of Anchorage."



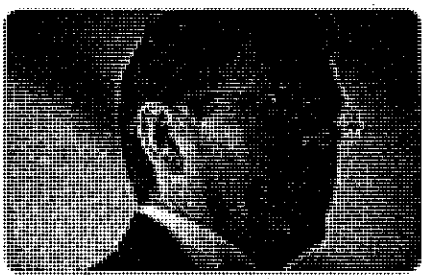
Senator Fred Dyson speaking with MEA General Manager Joe Griffith.

Curtis McQueen, Executive Director of Eklutna, Inc., speaking about the importance of EGS for the community.



Senator Linda Menard chatting with Marilyn Leland, Executive Director of the Alaska Power Association.

Senator Charlie Huggins enjoying the festivities.



Grant Grothen from Burns & McDonnell speaks to the groundbreoking guests. His firm has been chosen to engineer the EGS power block.

Rep. Bill Stoltze speaking with another groundbreaking guest.

2012 Tree Clearing

A well-cleared right-of-way ensures fewer interruptions to your electricity and enables MEA linemen to easily access poles, wires, and undergound cabinets to more efficiently deal with outages that do arise.

The following areas are scheduled for clearing this summer. Please keep right-of-ways clear of obstructions and keep pets and children away from clearing crews.

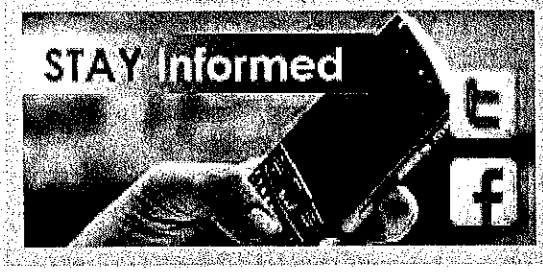
CER - Upper-Skyline Drive, Eagle River
CER - Eagle River Road from pole 112A-215
W - Wasilla
WW - Wasilla West

99.7

★COUNTRY★ LEGENDS 100.9 THE VALLEY'S NEW STATION

Remember:

Keep your battery-powered **radios tuned in to either 100.9 or 99.7 FM for important updates during electrical power outages. You can also connect with us on Facebook and Twitter and receive power outage updates on your phone or computer.**



The Matanuska Electric Association Board of Directors voted on May 14, 2012 to authorize an increase of 0.17 percent in base rates, effective the third quarter of 2012.

The average MEA consumer uses just over 700 kilowatt hours of electricity per month. "These consumers can expect to see a monthly increase of about $0.12 as a result of the base rate adjustment," said spokesperson Cheryll Heinze.

Conservation Corner

Let the Sun Shine In!

Nationwide, artificial lighting consumes between 10% and 20% of a household's electricity use. In Alaska's long summer days we can reduce our electricity usage by turning off the artificial light, throwing open the curtains, and letting the sun light up our lives. Soak it up while you can!

Your Board of Directors

Elsie E. "Lois" Lester
President
Director At-Large
Home: 694-9890

Janet Kincaid
Vice President
Director At-Large
Home: 745-3855

Peter H. Burchell
Secretary/Treasurer
Director At-Large
Home: 376-8256

MEA's next Board of Directors meeting:
Monday, August 13
@ 4 p.m.

Larry DeVilbiss
Matanuska District
Home: 746-6593

Bob Doyle
Susitna District
Home: 373-3147

David Glines
Eagle River District
Home: 694-9425

Catharine W. "Kit" Jones
Director At-Large
Home: 745-7393

Contact Us

Eagle River:
11623 Aurora St.
Local: 694-2161 or 689-9600
From Mat-Su: 761-9600

Palmer:
163 E. Industrial Way
Local: 745-3231 or 761-9300
From Anchorage: 689-9300

Wasilla:
Creekside Plaza, A-130
Local: 376-7237 or 761-9500
From Anchorage: 689-9500

Power Lines

October 2011 / Issue 10

Monthly Newsletter of Matanuska Electric Association

MEA
MATANUSKA ELECTRIC ASSOCIATION

MEA staff meets with emergency officials, September 28, 2011

Wind Event - 1 Year Later

Stronger Together!

MEA's management team recently met with city and borough emergency response leaders to discuss and plan coordination and communication for disaster and emergency situations. The emphasis of this, and subsequently scheduled meetings, is the safety of you, our members. In the event of a disaster or an extended power outage during the coldest

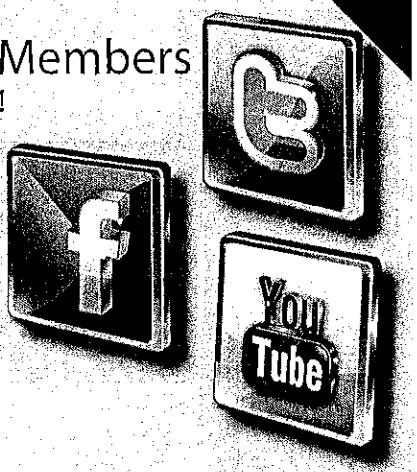
Continued on page 2

Jonathan Owen - City of Palmer

Contents

NYM's - New Young Members

The future of our co-op is bright!



70 years ago MEA was formed as Alaska's first electrical co-op. For seven decades we have provided a major building block of our local economy - affordable and reliable electricity.

In order for this to continue for future generations our new young members are the key.

We encourage them to:

- Participate in co-op elections by voting or running for board positions
- Volunteer for committees
- Become educated to fill technical and management positions

Continued on page 3

Promises made - promises kept.

Last year we made some promises concerning outage response improvements. We are pleased to inform you that we kept the following promises.

- Additional phone lines to increase call capacity during large outages
- More staff trained to handle outage calls
- Better outage communication through website, Facebook, Twitter and radio

By no means are we perfect, but we are working hard to improve our communications.

Wind Event - 1 Year Later

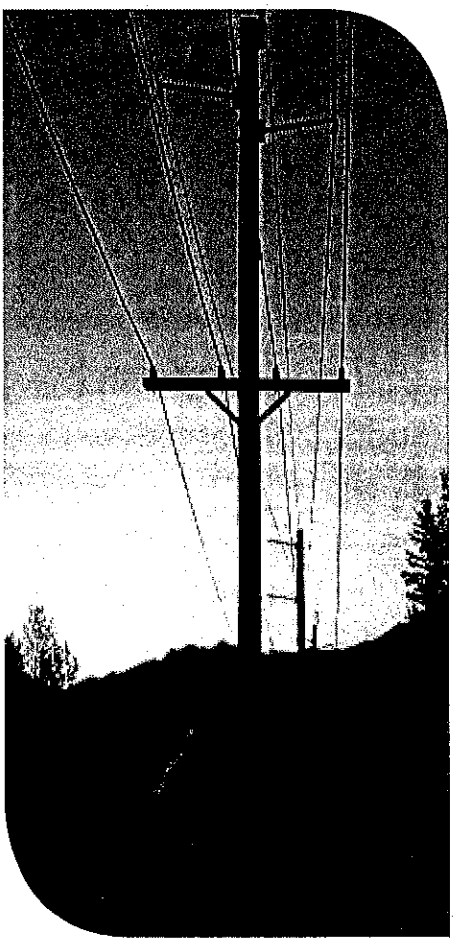
Working together to keep you safe!

Continued from page 1

Our area emergency responders save the lives of MEA members every day!

months this winter, we want to ensure that you have the information, knowledge and available resources to keep you and your family safe. MEA is grateful for the support and professionalism of our local responders.

Last September wind storms wreaked havoc on our electrical system. Trees were toppled onto power lines, poles snapped and the storm caused many dangerous electrical situations. Emergency responders rushed to many of these scenes and kept our members safe, while MEA crews worked diligently to repairs these dangers in high winds. This renewed team effort will no doubt be called on again as we approach the winter months. Thank you to the men and women who work hard to keep all of us safe!



Conservation Corner

Energy Efficiency *Tip of the Month*

Is your washing machine more than 10 years old? According to the U.S. Department of Energy, families can cut related energy costs by more than a third—and water costs by more than half—by purchasing a clothes washer with an ENERGY STAR label. Choose a front-load or redesigned top-load model.

Source: U.S. Department of Energy

NYM's - New Young Members

The future of our co-op is bright!

Continued from page 1

We are all young at heart, but our new young members are the future of our co-op. NYM's between the ages of 18-34 :

- Are less likely to see their relationship with MEA as being anything more than just a customer.
- Are more likely to turn to new communication methods such as Facebook, Twitter and text messaging instead of more traditional means of getting information.
- Make up a majority of our current membership

MEA recognizes the need to reach these new young members through the channels of communication that they are most engaged in. Over the next few months you will begin to see more and more information released through Facebook, Twitter, Youtube and offering an electronic version of our newsletter.

"The youth of today are the future of our co-op and I believe that future is bright."

~Joe Griffith -
MEA General Manager

Get connected!

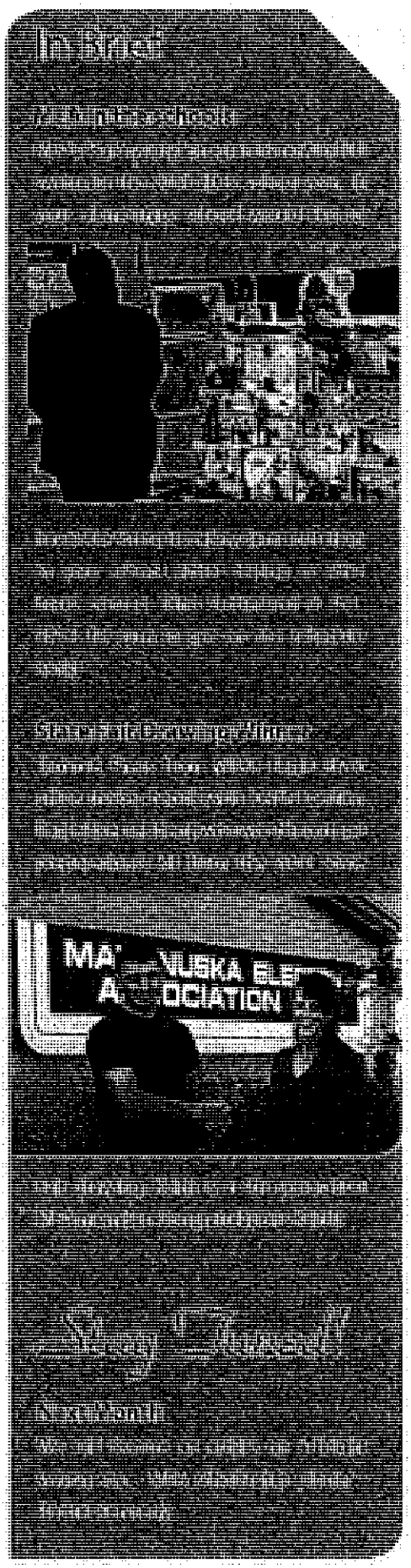
58% of Alaskan's use Facebook
54% of those are ages 18-34
29% are ages 35-54
47% are male
53% are female

Remembering Our Past

Justine Parks

Justine Parks served as MEA's President from 1951 - 1956 and was the first woman elected to the NRECA Board of Directors. Prior to a tragic automobile accident that took her life 8 years ago, MEA had presented a plaque to Justine in honor of her contribution to MEA's history. The plaque was left in a will to her grandaughter Pamela who is now retiring to the lower 48. Pamela and her huband Dale wanted MEA to have this piece of our history and recently donated it back.

We are honored - Thank you Pamela and Dale!



Remember:

Keep your battery powered **radios tuned in to either 100.9 or 99.7 FM for important updates during electrical power outages. You can also connect to us on Facebook and Twitter and receive power outage updates on your phone or computer.**

October Co-op Month "Open House"

October is National Co-op month, and MEA will celebrate with an open house at its three district offices the week of Oct. 18th. MEA just recently celebrated 70 years and is proud to be Alaska's oldest electrical co-op. Visit one of our district offices (Palmer, Wasilla, Eagle River) during the third week in October for free food, prizes and a great time as we celebrate co-op month.

Your Board of Directors

Elsie E. "Lois" Lester
President
Director At-Large
Home: 694-9890

David Glines
Vice President
Eagle River District
Home: 694-9425

Peter H. Burchell
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Contact Us

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From Anchorage: 689-9300

Wasilla: Creekside Plaza, A-130
Local: 376-7237 or 761-9500
From Anchorage: 689-9500

MEA Director of Public Affairs
Cheryll Heinze Office: 761-9215

MEA's next Board of Directors meetings:
Monday, Oct. 10
@ 4 p.m. &
Monday, Nov. 14
@ 4 p.m.

Larry DeVilbiss
Matanuska District
Home: 746-6593

Bob Doyle
Susitna District
Home: 373-3147

Catharine W. "Kit" Jones
Director At-Large
Home: 745-7393

Janet Kincaid
Director At-Large
Home: 745-3855

APUC No. 18 First Revised Sheet No. 26

Cancelling

Original Sheet No. 26

MATANUSKA ELECTRIC ASSOCIATION, INC.

RULES AND REGULATIONS

5. TECHNICAL PROVISIONS AND STANDARDS OF SERVICE (Continued)

5.08 Meter Tests (Continued)

whichever period is shorter. Adjustments will be made for billing purposes as if the meter registered one hundred percent (100%) accurate.

When a single-phase meter in service is tested and found to have under-registered the amount of energy delivered, the Association will not charge the consumer for the under-billings unless there is evidence of meter or electric service tampering by the consumer. If a three-phase meter is found to have under-registered either the energy or demand usage, the customer will be billed for no more than the four previous months usage, unless there is evidence of meter or electric service tampering by the customer. C C

5.09 Nonstandard Tolerances

Where a consumer requires a degree of regulation of the characteristics of the electrical service greater than that normally required under applicable codes and standards, the consumer shall be responsible for obtaining, owning, installing, and maintaining the required regulating equipment.

5.10 Protective Equipment

It is the consumer's responsibility to provide suitable protective equipment for the devices and appliances in his premises. If three-phase equipment is used, it is the consumer's responsibility to protect such equipment against single-phase operation and under and over voltage conditions.

5.11 Consumer's Obligation to Association Facilities

The Association will not unreasonably refuse a consumer permission to use the Association's easement or right-of-way. A consumer or consumer's representative shall not perform work, construct, or place obstructions adjacent to or within

L -Deleted material previously shown on Original Sheet 26 has been transferred to First Revised Sheet 27 L

Tariff Advice No. 140 Effective: October 27, 1989

Issued By: Matanuska Electric Association, Inc.

By: Kenneth E. Ritchey Title: Acting General Manager

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SEP 18 1989
State of Alaska
Public Utilities Commission

MATANUSKA ELECTRIC ASSOCIATION, INC.

RULES AND REGULATIONS

5. TECHNICAL PROVISIONS AND STANDARDS OF SERVICE (Continued)

5.11 Consumer's Obligation to Association Facilities (Continued)

an Association easement or right-of-way if it creates a violation of applicable codes or inhibit or denies the Association reasonable access to its facilities. If the Association is made aware that such work, construction or obstruction poses a hazard to the Association or to Association property, creates a violation of applicable codes, or inhibits or denies the Association reasonable access to its facilities, the Association shall notify the consumer in writing and shall advise the consumer to take corrective action unless the work, construction, or obstruction presents an immediate hazard to Association property or to the Association (as determined by the Association at its sole discretion). In that event, the Association shall take all necessary corrective action (as determined in its discretion) to eliminate the hazard, without notice and at the consumer's expense. If the work, construction, or obstruction does not present an immediate hazard to Association property or to the Association, the consumer shall correct the problem within fifteen (15) days of receipt of written notification from the Association. If the problem has not been corrected within that time, the Association may take necessary corrective actions to eliminate the hazard, violation, or obstruction at the consumer's expense. These provisions are for the protection of the Association and the Association's property and may not be relied upon by the general public or any third party. L

5.12 Unauthorized Attachments

Written permission must be obtained from the Association before any equipment or material of any description may be attached to any utility pole, guy wire, electrical equipment, or other property of the Association.

L - Previously shown on Original Sheet 26.

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State of Alaska
Public Utilities Commission

Matanuska Electric Association, Inc.

RULES AND REGULATIONS

6. SERVICE CONDITIONS

6.01 Membership

The Association is a nonprofit electric cooperative corporation, and membership herein is a condition of receiving electrical service. In order to receive electric service, any person, husband and wife jointly, firm, association, corporation or body politic, or subdivision thereof shall, by application and presentation of sufficient identification, become a member of the Association, pay the membership and record fees (see Schedule of Fees and Charges) and shall agree to be bound by the Articles of Incorporation and the Bylaws of the Association and policies and procedures adopted from time-to-time by the Board of Directors.

Memberships are not transferable. The membership fee is payable at the time of application.

6.02 Application for Service

Each applicant for electric service is required to sign the Association's form of application for electric service or a special contract. Large industrial or commercial contracts may be written on a special form and shall contain such provisions and stipulations as may be necessary or desirable to protect the interests of both the Association and the consumer. Acceptance of service, with or without a signed application or contract, shall be subject to compliance with the terms of the applicable rate schedule or schedules and these consumer service policies.

6.03 Connection

Each member applying or reapplying for electric service at an existing metered location shall be charged if the Association is required to perform the initial meter reading or turn on the electricity. This fee will not be levied if the electricity is already on, and the member furnishes an accurate current meter reading when he applies for service. See Schedule of Fees and Charges.

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Matanuska Electric Association, Inc.

RULES AND REGULATIONS

6. SERVICE CONDITIONS (Continued)

6.04 Record Fee

Each member, upon application for service, shall pay a fee to cover the initial expense of incorporating new account data into the Association's billing and member records system. See Schedule of Fees and Charges.

6.05 Service Contracts

When a member requires a nonstandard and/or has unusual service requirements, the Association may require the member to enter into a special contract which is subject to review by the Alaska Public Utilities Commission. Other agreements which implement tariffed provisions may be required for specific services or equipment.

6.06 Authorization

All orders concerning electrical service must be requested by the consumer, his attorney-in-fact, or his authorized agent. An officer or authorized representative may make orders on behalf of an association, corporation, or government unit. In case of joint membership, either member may act for the other and shall bind both members.

6.07 Former Indebtedness Paid

If a former consumer who is indebted to the Association attempts, by some agency, relationship, or otherwise, to obtain service, the Association reserves the right to refuse service until satisfactory payment arrangements have been made by the consumer of all money due from the consumer to the Association. This shall include the indebtedness, the delinquent disconnect charge, a late payment fee, interest on the indebtedness, and, if any, the funds due from any previous line extension contract.

6.08 Easements

The applicant for service shall, without charge to the Association, furnish an easement executed by the owner,

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Public Utilities Commission

Matanuska Electric Association, Inc.

RULES AND REGULATIONS

6. SERVICE CONDITIONS (Continued)

6.08 Easements (Continued)

providing for a suitable right-of-way for the Association distribution lines crossing the owner's property.

In the taking of easements in areas of new construction or service, it shall be and will remain the policy of the Association, as a condition for furnishing service, to require use of its standard form granting nonrestrictive right-of-entry to all the property described for the purposes therein mentioned, and, likewise, where practicable, in all other areas. Easements containing special requirements or stipulations shall be accepted by the Association only in special cases, at the discretion of the Association, for specific reasons and good cause shown.

Nonrestrictive easements are for the construction and maintenance of facilities to provide the requested service. Specific easements are obtained for future construction to other property.

At the request of the grantor, as a condition of acceptance of a restriction or limited easement which requires the services of a surveyor to determine the exact boundaries, such grantor shall be required to pay the full cost of such surveyor's services, further, such easement shall contain acceptable provision for future routes to other consumers.

6.09 Deposits

The Association may require a separate deposit for each meter installed. With the exceptions noted in this tariff, applicants may be required to pay the deposit upon application for service. The deposit can be equal to, but not exceed, the Association's estimate of two (2) times the member's average monthly bill. Said deposit shall be deemed as security for the payment of unpaid bills upon termination of service and shall not impair any right of the Association to terminate service as provided by these Rules and Regulations.

MATANUSKA ELECTRIC ASSOCIATION

MEA News

MEA News: MEA Board of Directors Approves $250 Million EGS Loan Agreement » Matanuska Electric Association Board of Directors approved an

The right landscaping for the right place

We all like to landscape our yards whether we hire a landscaping company or take the time to do the work ourselves. The beauty of flowers, rock gardens, and our favorite type of trees all add beauty to our property. However, before you make plans and go to the expense, MEA would like to take this opportunity to share with everyone the following message...

Often utility easements with underground and overhead power lines are misused by planting vegetation and the placement of obstructions. The utility easement needs to remain clear of vegetation, rocks, fences and other objects in order for MEA to access power lines and underground equipment without any hindrances. In addition, the grade of the ground should not be altered around the pedestals and transformer boxes without prior coordination. Please understand that MEA has rules and regulations that our members must follow.

Having accessibility to power lines and transformer boxes/pedestals is essential for MEA. Clear access enables MEA to safely perform routine maintenance and restore power as quickly as possible during a power outage.

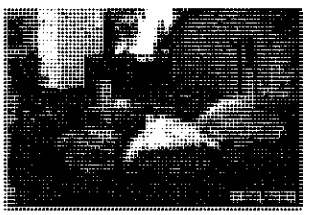
We are dedicated in keeping our members, the public, and our utility workers safe.

Please assist MEA by planting vegetation and by placing other objects out of the utility easement.

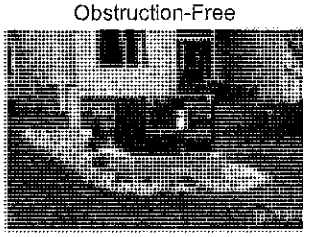
Have a Plan. Help keep the utility easement clear. The right landscaping for the right place.

MEA would like to thank you for your time and for understanding how important this message is.

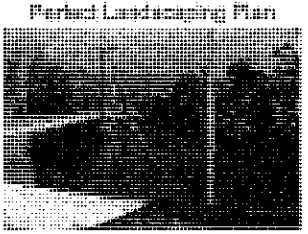
Obstacle Blocks Access



Obstruction-Free



Perfect Landscaping Plan



View Brochure

Keeping you safe! Keeping your power on!

Safety First!

MEA crews must have open access to our facilities.

The Right Landscaping For The Right Place

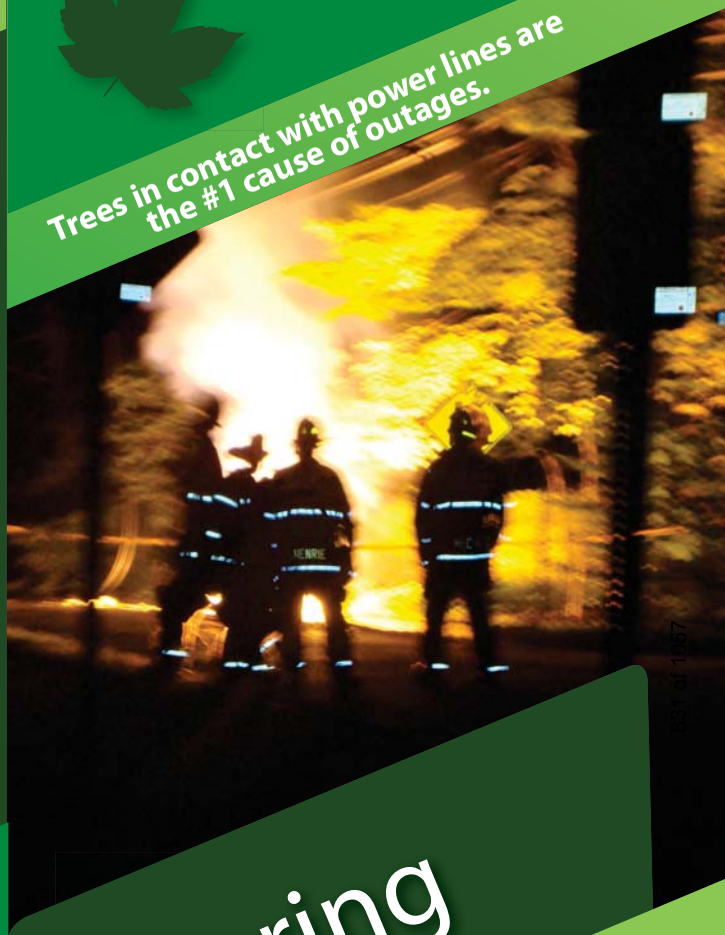
Visit MEA.coop for more information on proper landscaping.

Matanuska Electric Association
P.O. Box 2929
Palmer, AK 99645

Phone (907) 761-9300

e-mail info@matanuska.com
Web www.mea.coop

Trees in contact with power lines are the #1 cause of outages.



Clearing

MEA
MATANUSKA ELECTRIC ASSOCIATION

Right-of-Way Easement

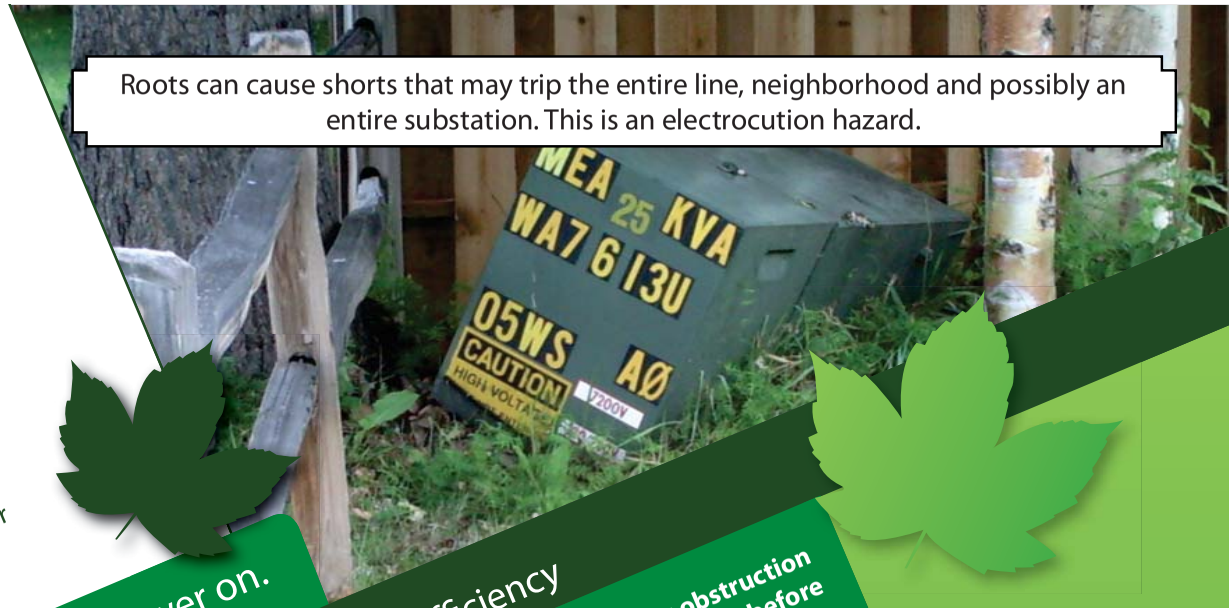
Easements allow MEA to provide electric service to a member's property. In accordance with the original right of way easement, Alaska State law and our tariff, MEA has the right to clear the easement allowing access to our facilities.

Overhead

- For an overhead line, trees, shrubs and other vegetation in the ROW will be cleared.

Underground

- All woody vegetation above an underground line and any obstruction near an underground pedestal or transformer is a hazard and will be removed.



Roots can cause shorts that may trip the entire line, neighborhood and possibly an entire substation. This is an electrocution hazard.

We are committed to keeping you safe and keeping your power on.

Safety First

Public safety and the safety of our crews is #1. Trees touching power lines, roots growing into underground line and equipment can cause safety hazards. We must clear our right-of-ways to maintain a safe electrical environment for all.

Never touch a tree that has fallen on a power line. It may be energized!

Reliability and Access

MEA must have clear access to safely perform routine maintenance and restore power as quickly as possible during a power outage.

Trees in contact with power lines is the #1 cause of power outages.

Cost Efficiency

When an outage occurs, any obstruction blocking access must be removed before crews can pinpoint and repair the trouble. This is costly to all MEA members.

Help us keep your cost down by keeping the Right-of-Way free of obstructions.

Obstacle Blocks Access

Obstruction-Free

Tree in Right-of-Way

Perfect Landscaping Plan

832 of 1057

South Wasilla Rail Line Relocation

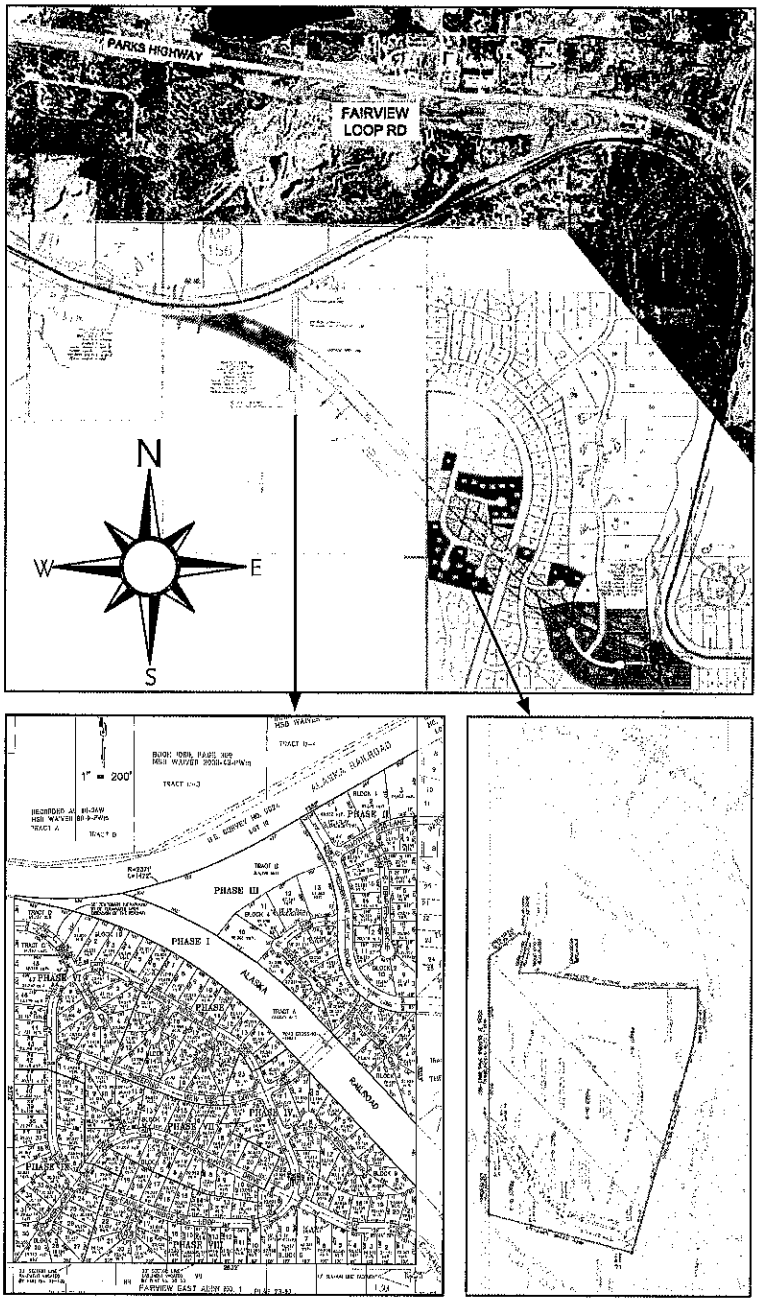
PROJECT FACTS

Project Scope

The Alaska Railroad Corporation (ARRC), in cooperation with the Federal Transit Administration (FTA), plans to straighten curves along the mainline track in South Wasilla, between ARRC Mileposts 154 and 158. This is part of a larger ARRC effort to reduce track curvature and improve safety along the main line track between Girdwood and Wasilla.

Project Benefits

- The new alignment will eliminate five at-grade (same level) road-rail crossings, thereby improving crossing safety.
- Straighter track reduces the risk of derailment, thereby improving operational safety.
- Reducing track curvature will allow trains to travel safely at increased speeds, thereby shortening passenger train travel times, as well as improving freight train efficiency.
- Shortened passenger travel times is a key factor to help make commuter rail service between Anchorage and the Matanuska-Susitna Valley a viable option.
- Straighter track reduces operating costs for fuel and labor, and decreases wear-and-tear on train wheels and rail, lowering maintenance costs.



Above: Land acquisition for Phase 1 is nearly complete. A number of parcels in the Sweeping Vista Subdivision (bottom left) and the neighboring Ranch Subdivision (bottom right) have been purchased to accommodate the new Phase One right-of-way.

07/31/2012

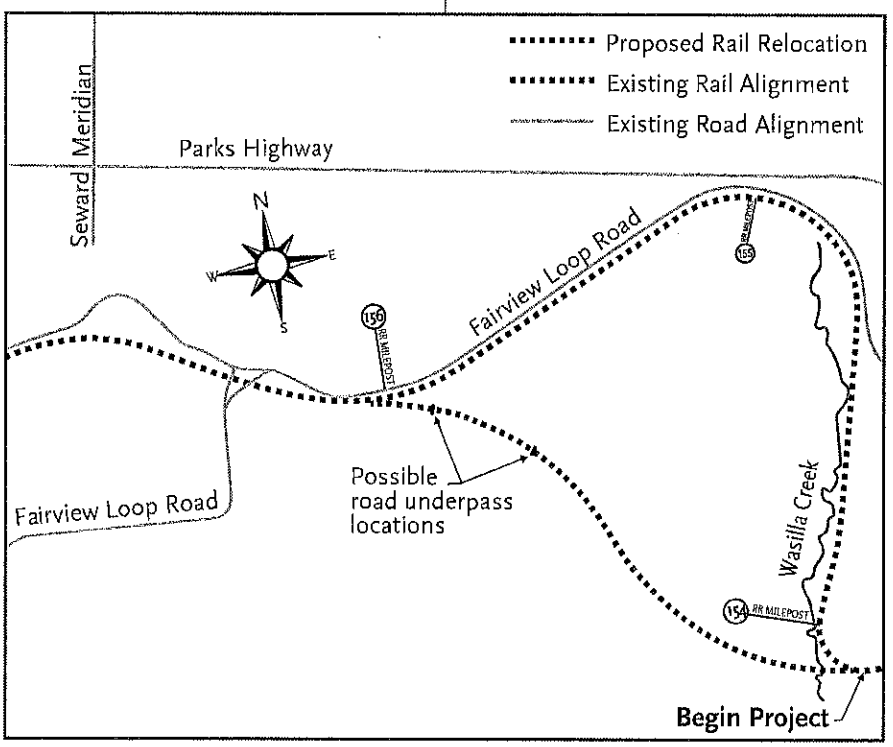
Status

- In spring 2003, a joint steering committee — comprised of ARRC, Alaska Dept. of Transportation & Public Facilities, Mat-Su Borough, City of Wasilla, and Mat-Su Community Transit — identified the South Wasilla Rail Line Relocation as a project to move forward for engineering and environmental analysis work.
- In 2003, ARRC began the environmental assessment (EA) and the EA was completed in late September 2005. FTA issued a Finding of No Significant Impact in January 2006.
- Four alternatives were analyzed, including a no-build option. One build option was identified as the preferred alternative, with construction recommended in two phases. Phase One stretches from MP 154 to 156; Phase Two is from MP 156 to 158. Due to continued land development in the Wasilla area, Phase Two is far less likely to proceed.
- In 2003, the FTA approved advance right-of-way acquisition. Land acquisition for Phase One is expected to be complete in 2012, followed by replatting of the purchased properties.
- ARRC also participated in the Mat-Su Borough diagnostic team to evaluate options for the South Trunk Road Extension.

Cost and Funding

Total funding dedicated to this project thus far is approximately $5.5 million.

- The initial $246,000 budget for conceptual engineering and the EA, was funded 80% by the FTA and 20% by ARRC, City of Wasilla and ADOT&PF.
- FTA granted $2.72 million for preliminary engineering and land acquisition, funded 91% by FTA and 9% by ARRC.
- The Federal Highway Administration (FHWA) granted approximately $2.5 million to continue land acquisition. This is funded 91% by FHWA (via FTA) and 9% by ARRC.
- The remaining cost for engineering, land acquisition and construction for Phase One is estimated at $37 million. Funding has not been identified.



Phase One of the Preferred Alternative.

Alaska Railroad 2012 Program of Projects

Established in 1923, the Alaska Railroad Corporation (ARRC) is the last of the full-service railroads in the United States, offering both freight and passenger services. From tidewater at Whittier and Seward to the heart of Interior Alaska, our route covers more than 500 miles. ARRC is a state-owned corporation, but it does not receive state funding to operate. ARRC relies on passenger, freight and real estate revenues to cover expenses to operate trains and maintain tracks and facilities. About $49 million is budgeted in new spending for capital improvements in 2012. An additional $68 million is budgeted for two special rail extension projects. Detailed project fact sheets are online at **www.AlaskaRailroad.com -> Capital Projects.**

Federally-funded Projects

Since 1996, ARRC has received federal funds for infrastructure improvements. Funding has come from the Department of Defense (DOD), Federal Railroad Administration (FRA), Federal Transit Administration (FTA), Federal Highway Administration (FHWA), Transportation Security Administration (TSA), Federal Emergency Management Agency (FEMA), U.S. Dept. of Homeland Security (DHS), U.S. Forest Service (USFS) and other federal sources, such as "Stimulus" money from the American Recovery & Reinvestment Act of 2009. Most FTA, FHWA and FEMA funded projects require 9% to 25% matching funds from ARRC.

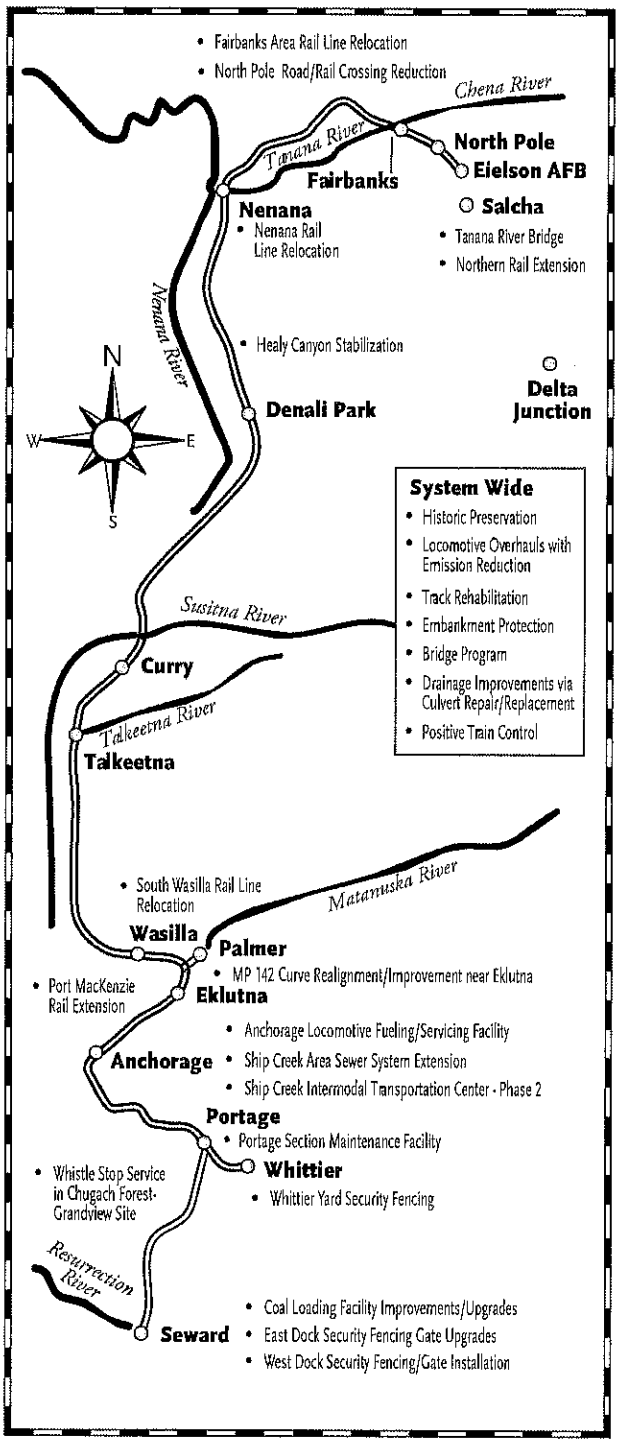
In 2012, ARRC expects to receive FTA formula funding to support an estimated $11.76 million in capital projects; ARRC will contribute 9% of this amount. Other federal funds include $1.26 million in FEMA-administered grants, $1.43 million from the FRA, and $295,000 from DHS. A $2.7 million settlement will repair deficient track work originally paid by federal grants.

Internally-funded Projects

In addition to the match for federal grants, ARRC internal funds (funds generated by corporate freight, passenger and real estate business revenues) support ARRC's ongoing expense activities as well as an annual capital program. In 2012, internal funds will provide $23.5 million toward capital projects that are not eligible or selected for federal funding support.

Bond-funded Projects

In 2006, ARRC sold $76.1 million in revenue bonds and another $89 million in 2007. These funds are primarily used to accelerate track rehabilitation efforts. About $8 million will be spent in 2012. Bonds are repaid with FTA formula funds.



Special Rail Extension Projects

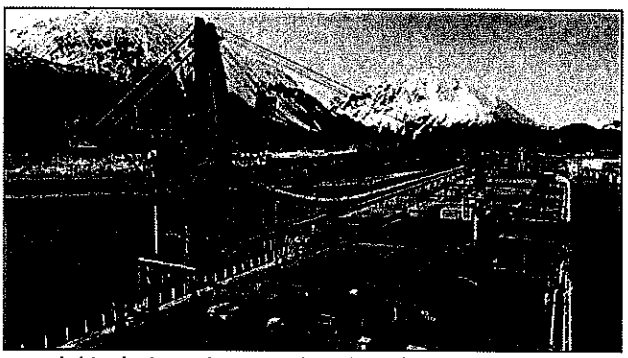
The State of Alaska appropriated FY2012 funds to support two major rail extensions. $44 million was approved mid-2011 to close the funding gap for Phase One of the Northern Rail Extension. ARRC will manage $24 of the $30 million the State approved mid-2011 to pursue Port MacKenzie Rail Extension construction.

Frequently used acronyms:

- ARRC = Alaska Railroad Corporation
- ARRA = American Recovery & Reinvestment Act
- FEMA = Federal Emergency Management Agency
- FTA = Federal Transit Administration
- FRA = Federal Railroad Administration
- FHWA = Federal Highway Administration
- DOD = Department of Defense
- EA = Environmental Assessment
- EIS = Environmental Impact Study
- STB = Surface Transportation Board

Seward Coal Loading Facility

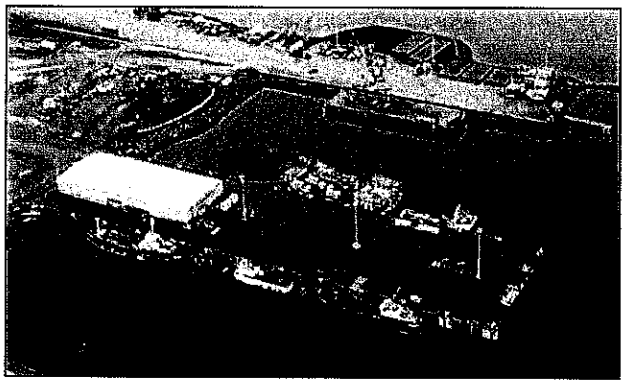
ARRC acquired the Seward Coal Loading Facility in 2003 and made subsequent improvements in order to increase facility efficiency, driving down the cost of operation, thus making Alaska's coal resources more competitive in the global market. ARRC completed an EA of proposed improvements and upgrades in 2004. FRA provided the original $9.54 million grant, with $8.3 million spent on acquisition and associated studies and $1.24 million used for inspections, repairs and improvements. ARRC is underwriting ongoing maintenance and capital improvements. In response to community concerns over coal dust problems resulting from unusual dry, windy weather in early 2007, ARRC and facility operator Aurora Energy Services (AES) modified operations and ARRC hired industry experts to analyze and recommend future capital improvements. Since 2007, ARRC and AES have spent more than $1.5 million on safety, operations and environmental improvements. $720,000 is budgeted for 2012.



A coal ship docks at the Seward Coal Loading Facility.

Seward East and West Dock Investments

ARRC built a new East Dock in Seward in 2000, and a section of the 640-foot long by 200-foot wide East Dock was expanded to 320 feet wide in 2007. Since 2001, the West Dock and its terminal building have been substantially improved to support intermodal passenger activity. In 2011, a 1,600-foot security fence with three roller gates was installed around the East Dock. In 2012, two of the three gates will be npgraded with card-reader control access and surveillance cameras. A security fence and card-reader access gates (with surveillance cameras) will also be installed on either side of the West Dock terminal building. 2012 fencing and gate upgrades funded by a $295,000 Port Security Grant.



ARRC's West (left) and East docks in Seward.

Chugach National Forest Whistle Stop Service

ARRC and the U.S. Forest Service (USFS) are partners in developing a whistle stop service in the Chugach National Forest. Plans call for five recreational sites between Portage and Moose Pass that will be accessible by rail and interconnected by trail. Sites include a passenger rail platform, passenger shelter, toilets and interpretive signage. Other features may include picnic, camping and wildlife viewing facilities. The project purchased a self-propelled diesel multiple unit (DMU) railcar, which arrived spring 2009. The first site was completed at Spencer in late summer 2007. Construction on the Grandview site began in 2011 and will be completed in 2012. Construction of a pedestrian bridge over Placer River at Spencer also began in 2011; it will be installed in 2012. $1.8 million for Spencer site funded by USFS and ARRC. The $5.35 million DMU was funded $4.7 million by USFS and $648,000 by FTA and ARRC. The pedestrian bridge at Spencer ($1.6 million), and the Grandview site ($1.2 million) funded by ARRA grants obtained by the USFS. Estimated $14 million is needed to complete all five sites and facilities.

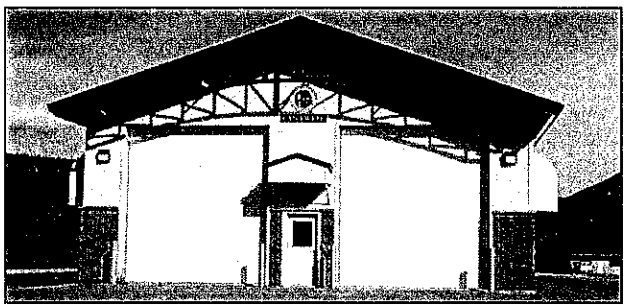
Whittier Infrastructure & Master Planning

ARRC is pursuing a Whittier Master Plan to improve railroad infrastructure. Recent projects: **1)** built a pedestrian underpass (2002); **2)** built an equipment maintenance facility (2002); 3) improved Delong Dock (2002); 4) built barge slip side-loading structures (2002); **5)** demolished the old transit shed (2003); **6)** built a cruiseship passenger spur and platform (2004); 7) improved security with a yard office at the entrance, seasonal yard fence and video cameras (2006/07); **8)** demolished the marginal wharf (2008); and **9)** extended barge slip ramp and replaced the stern (front) unloading area to include hydraulic lifts and pass/pass features (2009-2011). A security fence around the Whittier Yard will be installed in 2012 with a $311,224 Homeland Security grant and $82,000 from ARRC. Future actions recommended by the Master Plan include: a) construction of improved intermodal passenger

and public use facilities; **b)** rail yard reconfiguration and track improvements to separate freight and passenger activity; and **c)** additional security measures including lighting and detection equipment for passenger facilities.

Portage Section Maintenance Facility

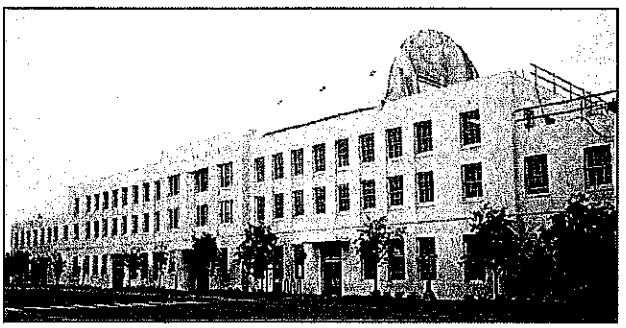
ARRC plans to build up to six section maintenance facilities. These steel-framed heated buildings house a shop area to store / maintain rail equipment and trucks, small office space, restroom and utility room. The prototype was constructed in Cantwell in 2006. Construction of a 47-by-65-foot facility at Portage began in 2011 (Phase 1: site prep). Phase 2 — building with shop area — will be complete in 2012. A final phase will add offices and restrooms at a later date. Phases 1 and 2 are budgeted to cost $1.25 million, funded by ARRC.



The prototype section maintenance facility built in Cantwell.

Ship Creek Intermodal Transportation Center

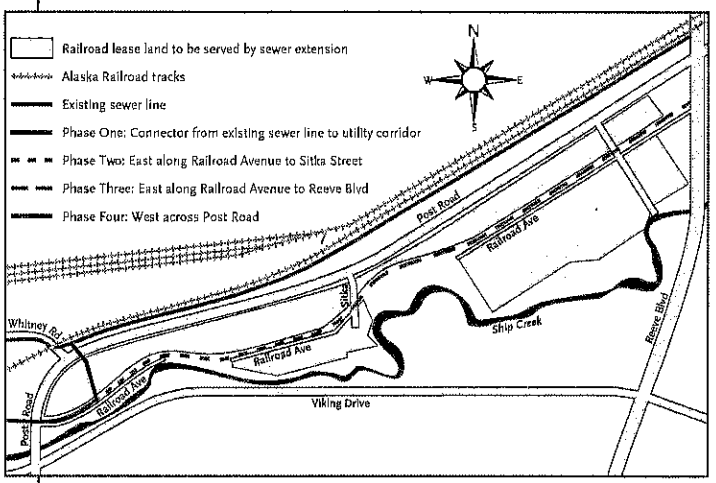
ARRC is pursuing an Intermodal Transportation Center (ITC) and associated improvements (pedestrian amenities, transit infrastructure, parking, track modifications, etc.) in the Ship Creek area. The ITC will facilitate connections from one transportation mode to another — rail, public transit, air, marine, bus, taxi, private vehicle, bicycle and pedestrian — and improve links to Anchorage's downtown business district to meet passenger transit needs over the next 30 years. Phase 1, completed 2007-2009, included utility relocation, new track and passenger platform construction, and track rehabilitation. Part of Phase 2 (2a) began in 2010 to include Anchorage Historic Depot exterior improvements, electrical upgrades and boiler replacement. Phase 2a was completed in 2011. Future phases will construct a service / office building, a new departure lounge over the tracks and an elevated covered walkway connecting to downtown. Approximately $23 million for conceptual and environmental work, preliminary design, and Phase 1 was funded 91% by the FTA and 9% by ARRC. Phase 2a budget of $7.94 million funded by ARRA Stimulus money. ARRA money also funded $300,000 in 2009-2010 to install 1,000 feet of security fencing east of the depot. Conceptual design for Phase 2b (replace annex building with smaller crew facility and improve pick-up /drop-off and other areas surrounding the depot) was complete in 2011. ARRC is seeking funding for 2b. Total cost for all phases is estimated at $78 million.



Phase 2a included installation of a paved-system roof along with more insulation for better energy conservation.

Ship Creek Area Sewer System Extension

ARRC plans to extend the existing Anchorage Water & Wastewater Utility sewer system to provide sewer service to railroad leased land on the east side of the Anchorage Railroad Reserve, located south of Post Road and north of Viking Drive. Phase 1 of the four-phase project would construct a connector from the existing sewer line to a proposed utility corridor along an old right-of-way parallel to, and south of, Post Road. Phase 1 design complete in 2011 and construction will begin in 2012. Phase 1 cost of $400,000 funded by ARRC. All four phases are estimated to cost nearly $2 million; funding for later phases is not yet identified.



Proposed sewer extension project in Anchorage Railroad Reserve.

Anchorage Locomotive Fueling/Servicing Facility

ARRC plans to replace an existing 1970s-era locomotive fueling delivery system in the Anchorage Yard. Plans call for a new facilty to provide fueling, sand loading, inspection and minor maintenance of locomotives. First considered in 2003, conceptual planning and design resumed in 2011 to include a cost/benefit analysis of a stationary fueling/serving facility versus mobile fueling by truck. Efforts to optimize the design continue. Preliminary design first budgeted at $200,000 in 2003; followed by $100,000 in 2010 and $150,000 in 2011. Funded by ARRC.

Curve Realignment / Improvement near Eklutna

ARRC plans to reduce the curvature of the mainline track and parallel siding track along a curve at ARRC MP 142, near Eklutna. The project will relocate a maintenance spur track from the north end of the curve to the south, and lengthen the spur from 130 to 1,000 feet. The timber road/rail crossing across the mainline and siding will be upgraded to concrete, improving drivability access to Eklutna Inc. land. Design began in 2011, and construction will begin 2012. Funding 80% U.S. Department of Transportation and 20% ARRC.

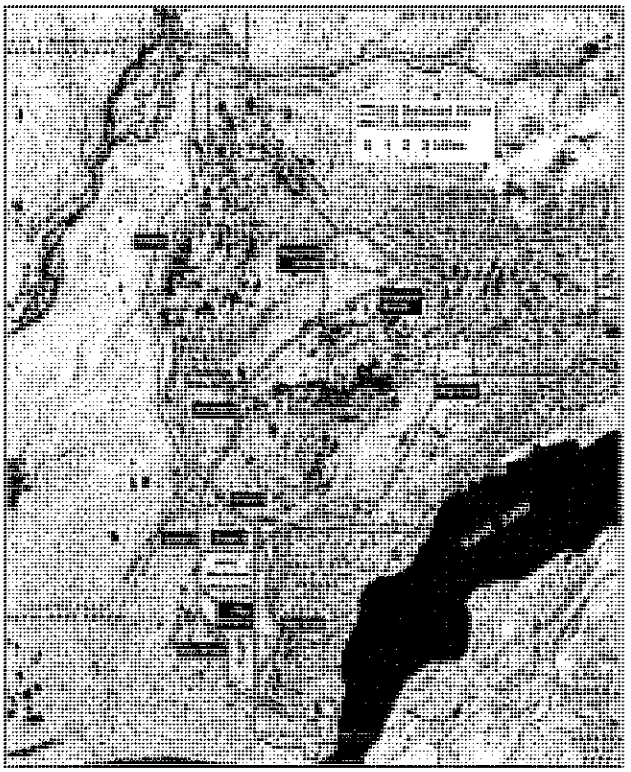
South Wasilla Rail Line Relocation

ARRC plans to straighten curves along the mainline track in South Wasilla, between ARRC MP 154 and 158. The track relocation would eliminate five at-grade crossings, reduce derailment risk, reduce operational and maintenance costs, and allow for faster train speeds. An EA of alternative relocation routes was completed in 2005. Land acquisition will be complete in 2012. $246,000 for conceptual engineering and the EA and $2.72 million for preliminary engineering and land acquisition, funded by 91% FTA and 9% by ARRC. $2.5 million to continue right-of-way land acquisition funded 91% by FHWA and 9% by ARRC. Total cost to construct Phase 1 (MP 154 to 156) is estimated at $37 million.

A large curve in the track slows train speeds in south Wasilla.

Port MacKenzie Rail Extension

The Matanuska-Susitna Borough and ARRC are partners in proposing a new 32-mile rail line connecting Port MacKenzie to the existing mainline track near Houston. Extensive public involvement activities were conducted in summer and fall 2007 to obtain citizen and agency input. In early 2008, ARRC submitted an application to the Surface Transportation Board (STB), the federal agency with authority over rail extensions in the United States. The STB conducted an EIS which was complete in spring 2011. The STB's record of decision to approve construction came in late November 2011. The State of Alaska appropriated $27.5 million (2007/2008) to support the EIS and supporting studies, and to construct a bulk commodities road loop. The State appropriated $35 million in 2010 and $30 million in 2011 to pursue design and construction of the first two phases. An estimated additional $180 is needed to complete design and construction.



Potential Port MacKenzie Rail Extension preferred route selected.

Healy Canyon Safety & Reliability Program

Healy Canyon lies between Denali Park and Healy. The tracks follow the Nenana River gorge on a narrow grade, originally through two tunnels. The area has steep slopes and erosion-prone soil. ARRC proposed a series of projects to: **1)** stabilize the track bed in Healy Canyon; **2)** control the rock fall problems; **3)** "daylight" (remove tbe top of) Moody Tunnel; **4)** realign tracks around Garner Tunnel; and **5)** realign the tracks to straighten the corridor. Total cost is estimated at approximately $71 million. $2.9 million in FRA funds were used to address the slide zone and realign track around Garner Tunnel in 2005. $5.2 million in FTA grants and FTA-backed revenue bonds were used to daylight Moody Tunnel, which was completed in 2009. About $5.86 million was spent in 2009-2011 to stabilize several areas (MPs 352.9, 354.1, 355.2 and 357) in the canyon, with a combination of funding from FEMA, FRA, ARRC and the Alaska Division of Emergency Services. MP 352.9 will be complete in 2012. ARRC continues to seek funding to pursue future stabilization.

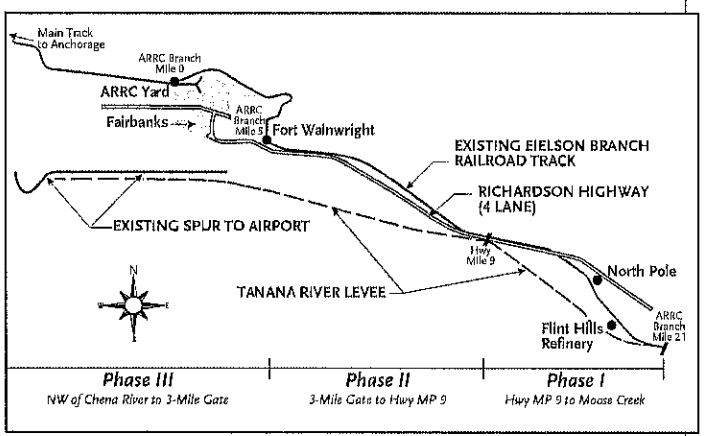
Nenana Rail Line Relocation

ARRC proposes to realign the railroad mainline around downtown Nenana, following a route outside of the existing right-of-way, north of the airport and southeast of town, over the Parks Highway. The track srructure through Nenana would be maintained to support port activities. ARRC completed an EA of three alternative realignment routes and a "no action" alternative in 2004. Right-of-way acquisition

was complete in 2009. A hydrology study completed in 2010 is being used to obtain flood plain permits. One such permit was approved by the City of Nenana in 2011. A $1 million budget for the EA was funded 91% by the FTA and 9% by ARRC. $2 million for land acquisition funded by 91% FHWA (administered via FTA) and 9% ARRC. $225,000 for the hydrology study funded by ARRA Stimulus funding. Estimated $37.7 million to complete final design and construction. Funding for construction has not yet been identified.

Fairbanks Area Rail Line Relocation

ARRC is analyzing options to: **a)** realign and improve safety of the main line and branch track, including potential realignments outside the more populated areas of Fairbanks and **b)** realign and improve the Eielson Branch, from the Fairbanks Depot to the end of the branch near Eielson AFB. The Fairbanks Area Rail Line Relocation will likely require an EIS. As a pre-cursor to the EIS, ARRC conducted an Alternatives Analysis (AA) in 2007-2008 that capitalizes on the findings of previous reconnaissance and engineering studies. The AA recommends a three-phased approach. In 2007-2009, ARRC also commissioned a *North End Rail Public Transportation Study and Operation Plan* to explore options for passenger tail and commuter service. Findings indicate low demand for Fairbanks-North Pole commuter service and results are inconclusive for Fairbanks-Denali service options. The AA and public transportation study were funded by $450,000 in grants from FHWA and FTA with 9% match from ARRC. Funding has been secured to pursue environmental work for Phase I, the North Pole area *(see separate project description below)*. Funding sources are being sought for National Environmental Policy Act (NEPA) environmental work to include an EIS for Phases II and III.

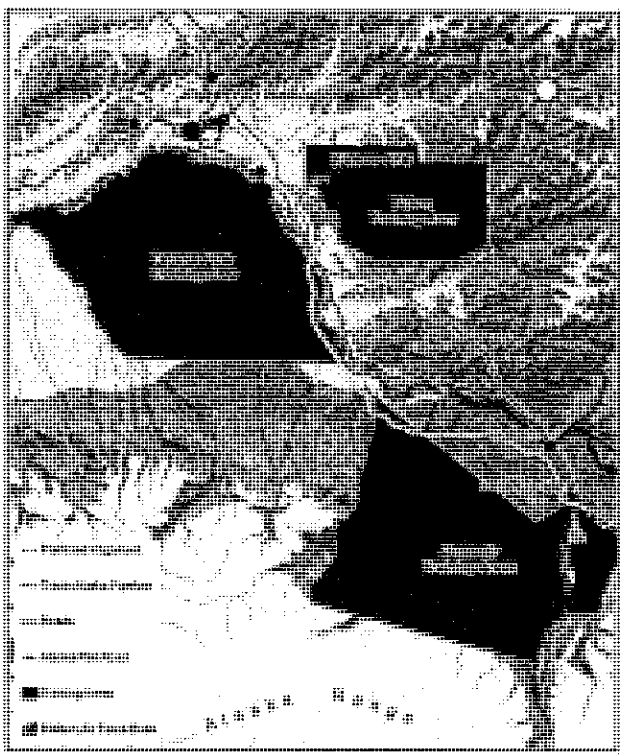


North Pole Road/Rail Crossing Reduction

In cooperation with the FRA, FHWA and Fairbanks Metropolitan Area Transportation System (FMATS), the ARRC initiated an EA and preliminary engineering for a proposed project to reduce at-grade road/rail crossings by realigning an 8-mile section of the Eielson Branch that runs through North Pole, between Richardson Hwy milepost 9 and the Chena River floodway. This project is essentially Phase I of the three-phased Fairbanks Area Rail Line Relocation. The EA is expected to be complete and ready for public review in early 2012. Funding of $1 million comes from FHWA funds re-allocated by FMATS and the Alaska Department of Transportation & Public Facilities. Cost for final design and construction will be determined through the EA process.

Northern Rail Extension

ARRC proposes to extend its mainline track from North Pole / Eielson AFB, about 80 miles southeast to Delta Junction. The project would offer: **a)** commercial freight service supporting communities and commerce in the corridor; **b)** a passenger transportation alternative to the Richardson Hwy; **c)** support of military training; and **d)** support of regional tourism. ARRC initiated the conceptual development in 2004. The STB initiated an EIS in 2005. The final EIS was released in late 2009 and the STB approving a license to construct and operate a rail extension on January 5, 2010. The EIS, preliminary engineering and design was funded by $16.5 million in DOD appropriations, administered by the FRA. DOD appropriated another $44.2 million in 2007 and $60 million in 2008 for planning, engineering, environmental work, design and to begin construction on the first phase of the project *(see project description below)*. The project is expected to be built in four phases, beginning with the river bridge, followed by rail construction from the bridge to the end of the Eielson Branch. Later phases will continue the extension

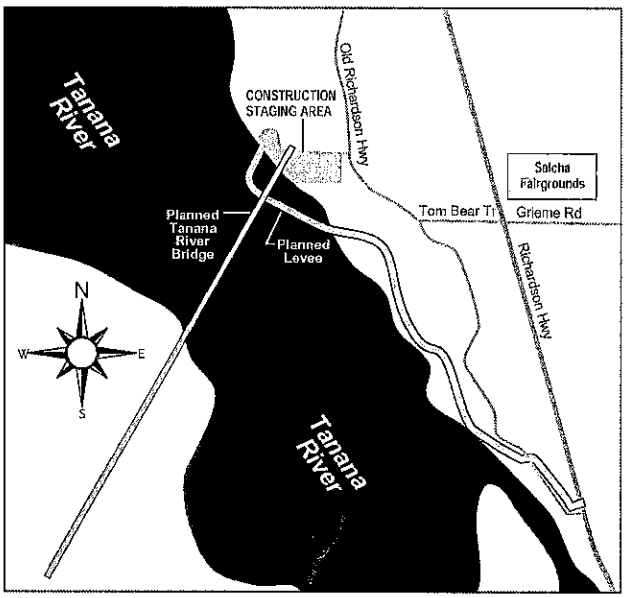


Area map showing the military training areas south and west of the Tanana River.

to Delta Junction. Cost of all phases is estimated at $650 to $850 million. Phase 1 is funded *(see below)*. Funding for later phases is not yet identified.

NRE Phase 1: Tanana River Crossing

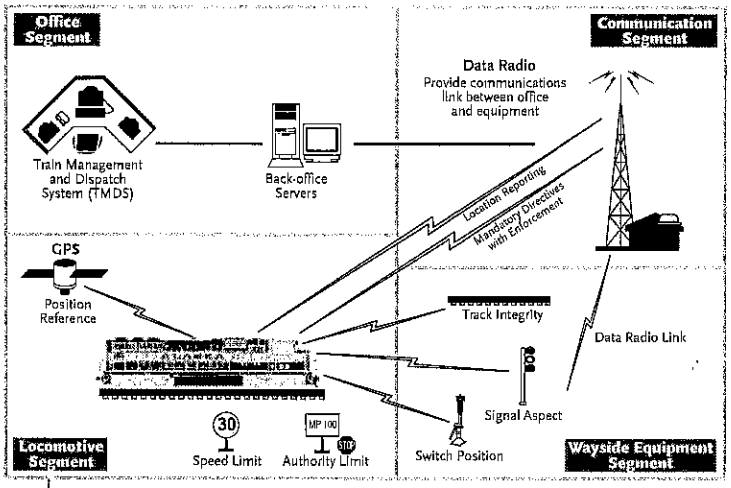
Design of the Northern Rail Extension Phase 1, Tanana River Crossing, got underway in 2010, after the STB had granted authority with a record of decision in January. Design includes a bridge over the Tanana River at Salcha as well as a levee to control river flow in the area. Kiewit was hired as Construction Management / General Contractor and construction on Phase 1 began in 2011. The bridge and levee are scheduled for completion in 2014. Budget is $188.2 million, funded with $104.2 million from the DOD and $84 million from the State of Alaska.



Phase One: Tanana River Crossing - Construction area map.

Positive Train Control

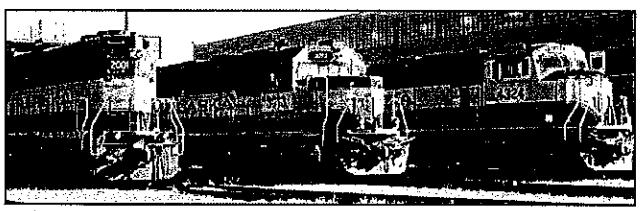
ARRC is pursuing a multi-phased program to design, develop and implement a communication-based train control system that uses data radio communications between train dispatchers and train crews, or dispatchers and roadway workers. The Positive Train Control (PTC) project is comprised of a replacement Computer Aided Dispatch (CAD) system, an on-board computer system, VHF packet data radio technology, and Global Positioning System (GPS) locator technology. The PTC will provide regulatory-mandated safety enhancements to prevent train-to-train collisions, to detect infrastructure failure and potential operations violations quickly, and to intervene when necessary. To date, ARRC has spent $53 million (1999-2011) on communications and preparational work, funded by FRA, FTA, ARRA and ARRC sources. An additional $70 million is estimated to complete the PTC system. For 2012, $5 million is funded $4 million by FTA grants (91% FTA; 9% ARRC) and $1 million by ARRC.



Positive Train Control System Overview.

Passenger Rail Cars and Locomotives

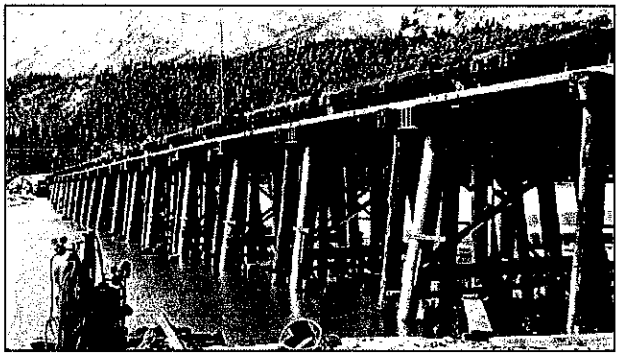
ARRC has 45 passenger-related railcars, including 30 coaches, six diners, six baggage cars, two business cars (charters) and one DMU. ARRC also has 53 locomotives: 28 SD70MACs (12 equipped with head-end-power to supply electricity to passenger cars), 15 GP40s, eight GP38s and two cab/power cars. ARRC upgrades older equipment and buys newer equipment to meet current and future passenger demands. In 2012, several passenger cars will be upgraded with new lighting, public address systems, batteries, signs, new flooring, wall-covering, seat upholstery and galley modification. $600,000 budget is funded by ARRC. Four SD70MAC locomotives and one or two GP40 locomotives will be overhauled to include installation of tier-plus kits to improve fuel efficiency, and installation of engine idle reduction systems (GP40s). SD70MACs funded by $1.23 million from ARRC. GP40s funded by a $1.4 million FTA "TIGGER" (Stimulus-funded) grant and $328,000 by ARRC.



Left to Right: GP-38-2, GP 40-2 and SD70MAC locomotive.

Bridge Program

ARRC's 500-plus miles of mainline track include about 160 bridges that cross barriers ranging from streams to gulches. ARRC's Bridge Program calls for major maintenance, overhaul and replacement needed to maintain railroad integrity, safety and efficiency. In 2012, ARRC plans to complete design for a structure to replace three culverts at Indian Creek (MP 88.1). Drainage and embankment work will be completed for a new bridge that was built over Skookum Creek Drainage (MP 59.4, near Portage) in 2011. Upgrades and

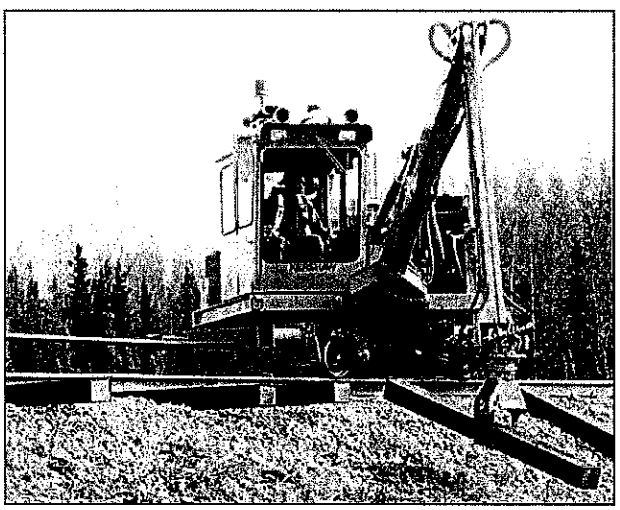


Timber piling and caps were replaced with steel pipe and pile caps on the bridge at MP 29.5 in 2011. In 2012, timber beams and ties will be replaced to complete bridge rehabilitation.

rehabilitation are also planned for 10 other bridges. In addition, a "rock shed" will be designed for the tunnel about 50 miles north of Seward to protect against falling rock and ice. Funding includes $2.95 million by ARRC plus $500,000 in FTA grants (funded 91% FTA; 9% ARRC).

Track Rehabilitation

ARRC continues an aggressive track rehabilitation program in 2012 that calls for replacement of rail, ties and ballast in areas of critical need. Each year, ARRC converts several miles of track into conrinuously welded rail, which dramatically decreases maintenance costs and improves ride quality. ARRC also replaces a portion of its nearly two million wooden ties (45,000 ties in 2012). ARRC also plans to resurface many miles of track using 50,000 tons of ballast rock. For 2012, $14.2 million is funded by current and prior year FTA grants (funded 91% FTA; 9% ARRC); $8 million is funded through the sale of ARRC revenue bonds backed by FTA formula funds; $6.3 million is funded by ARRC, and a $2.7 million legal settlement will repair deficient work originally paid for by federal grants.



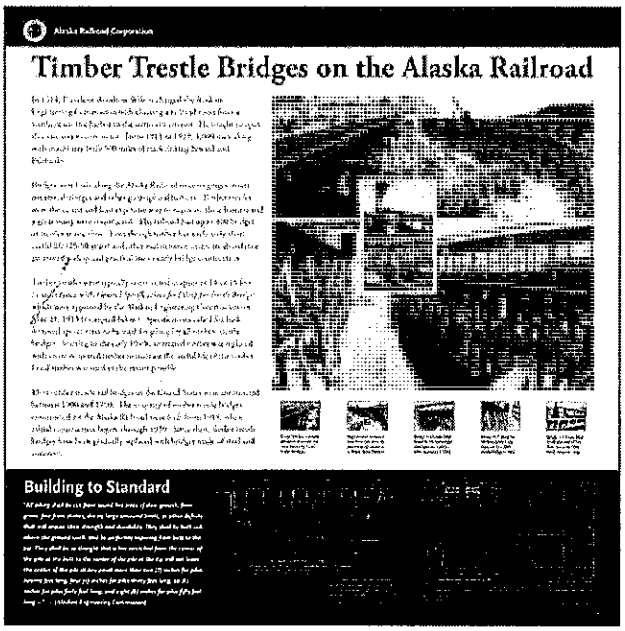
A tie crane operator positions a new tie during tie replacement operations in spring 2011.

Drainage Improvement/Embankment Protection

ARRC will repair or replace up to 15 culverts along the northern half of the rail corridor. Several culverts in this area are at risk of washout, collapse or clogging. ARRC also plans to install riprap and armor rock to fortify track embankment that is susceptible to high water events, including flooding. Culvert repair/replacement budget is $500,000, funded by ARRC. Embankment protection work is supported by $2.52 million in grants funded 75% by FEMA and 25% ARRC; and $446,000 in grants funded 80% by FRA and 20% ARRC.

Historic Preservation

ARRC supports historic preservation efforts that are related to railroad assets and infrastructure. Some ARRC assets are historic properties and are listed on the National Register of Historic Places and more than 50 ARRC properties are eligible for listing on the National Register. ARRC often consults with state and federal historic preservation agencies to mitigate impacts from capital projects that may adversely impact historic assets. Mitigation often takes the form of educational materials, including brochures, interpretive signage, archived photos and documentation.



This interpretive sign is posted in several common-use passenger railcars as part of a public education effort.

Integrated Vegetation Management Program

The Alaska Railroad pursues an integrated vegetation management program to protect the millions of dollars invested each year in its infrastructure. Uncontrolled weeds pose safety risks to ARRC operations and employees, including: **a)** vegetarion makes track and train inspection difficult; **b)** plants hinder automated equipment operation; **c)** overgrown weeds hide walking hazards, contributing to slips, trips and falls;

d) roots create uneven, heaving surfaces, again posing walking hazards for track workers; and **e)** vegetation accelerates rail and tie deterioration. Public safety is also impacted by uncontrolled weeds: **a)** overgrown bushes block line-of-sight; **b)** vegegation can obscure signs and signals that warn the public; **c)** plants cause heaving and slippery conditions at road/rail crossings; and **d)** dry vegetation can fuel brush fires.

The railroad has always, and will continue to use mechanical and manual methods to clean the ballast, cut and clip brush, mow grass and weeds, saw roots and trim limbs, etc. Mechanical and manual methods achieve limited and temporary success. ARRC has also tested many alternative and experimental methods of controlling weeds (including steam, hot water, radient heat, abrasion, flaming and burning), with no lasting success. Herbicides provide an additional tool to help maintain safe operations and regulatory compliance, and to protect infrastructure investments. The railroad seeks to control vegetation with a combination of mechanical and chemical methods, using herbicides in the most critical and difficult areas.

In 2008, ARRC commissioned herbicide research to provide scientific information about use in Alaska's environment. Results indicate that herbicides bebave tbe same as in other climates, and the glyphosate-based herbicide AquaMaster® does not linger or migrate in the soil. In 2009, ARRC applied for a Department of Environmental Conservation (ADEC) permit to use herbicides in the Seward yard and along 30 miles between Seward and Indian. The permit was approved in spring 2010 and AquaMaster® was applied selectively within the permitted area with good results. ARRC applied for additional permits in 2011 for herbicide use in the Anchorage Yard, Healy Yard, Fairbanks Yard and along the Eielson Branch. These were approved by ADEC and were used in July 2011. In 2012, ARRC is applying for three new permits covering 12 miles of track in the Palmer-Wasilla area, 38 miles of track between Gold Creek (34 miles north of Talkeetna) and Broad Pass, and 60 miles of track between Clear and Fairbanks. The ADEC will accept public comment through March 12, 2012. Public hearings are scheduled for January 31 in Fairbanks, February 1 in Wasilla and February 2 in Talkeetna.

Post herbicide control near Seward. Note clear distinction at control area boundary at the end of the ties.

current as of 01/11/2012

Alaska Railroad Corporation 2012 Program of Projects

At the beginning of each calendar year, ARRC conducts project open house events in Anchorage, Fairbanks, the Mat-Su Valley and Seward to inform the public about the proposed Program of Projects (POP) for the year. While these events provide a good forum for residents to comment on any or all projects, the public is not limited to commenting at these events. Public input is accepted year-round, and in a variety of formats as outlined at the right. Detailed project descriptions are provided within fact sheets that are created for major federally-funded and internally-funded capital improvement efforts. These fact sheets are accessible at the Alaska Railroad web site **ww.AlaskaRailroad.com** (click on "Capital Projects" and then select the geographica area of interest).

Public Input:

Public comment on any or all of these projects may be submitted via:

- Mail to: Capital Projects
  Alaska Railroad Corporation
  P.O. Box 107500
  Anchorage, AK 99510-7500
- E-mail to *public_comment@akrr.com*
- Fax to (907) 265-2365
- Call Stephenie Wheeler at (907) 265-2671
  ARRC's TTY/TTD 265-2620
  or voice 265-2494 or Alaska Relay TTY
  800-770-8973 or voice 1-800-770-82555

Alaska Railroad 2012 Program of Projects

The Alaska Railroad Corporation (ARRC) has budgeted approximately $49 million in new spending for capital improvements in 2012. An additional $68 million is budgeted for two special rail extension projects. Funding comes from federal, state and ARRC internally generated sources. Fact sheets with detailed project descriptions are also available online at **www.AlaskaRailroad.com -> Capital Projects.**

Federally-funded Projects

Since 1996, ARRC has received federal funds for infrastructure improvements. Funding has come from the Department of Defense (DOD), Federal Railroad Administration (FRA), Federal Transit Administration (FTA), Federal Highway Administration (FHWA), Transportation Security Administration (TSA), Federal Emergency Management Agency (FEMA), U.S. Dept. of Homeland Security (DHS), U.S. Forest Service (USFS) and other federal sources, such as "Stimulus" money from the American Recovery & Reinvestment Act of 2009. Most FTA, FHWA and FEMA funded projects require 9% to 25% matching funds from ARRC.

In 2012, ARRC expects to receive FTA formula funding to support an estimated $11.76 million in capital projects; ARRC will contribute 9% of this amount. Other federal funds include $1.26 million in FEMA-administered grants, $1.43 million from the FRA, and $295,000 from DHS. A $2.7 million settlement will repair deficient track work originally paid by federal grants.

Internally-funded Projects

In addition to the match for federal grants, ARRC internal funds (funds generated by corporate freight, passenger and real estate business revenues) support ARRC's ongoing expense activities as well as an annual capital program. In 2012, internal funds will provide $23.5 million toward capital projects that are not eligible or selected for federal funding support.

Bond-funded Projects

In 2006, ARRC sold $76.1 million in revenue bonds and another $89 million in 2007. These funds are primarily used to accelerate track rehabilitation efforts. About $8 million will be spent in 2012. Bonds are repaid with FTA formula funds.

Special Rail Extension Projects

The State of Alaska appropriated FY2012 funds to support two major rail extensions. $44 million was approved mid-2011 to close the funding gap for Phase One of the Northern Rail Extension. ARRC will manage $24 of $30 million the State approved mid-2011 to pursue Port MacKenzie Rail Extension construction.

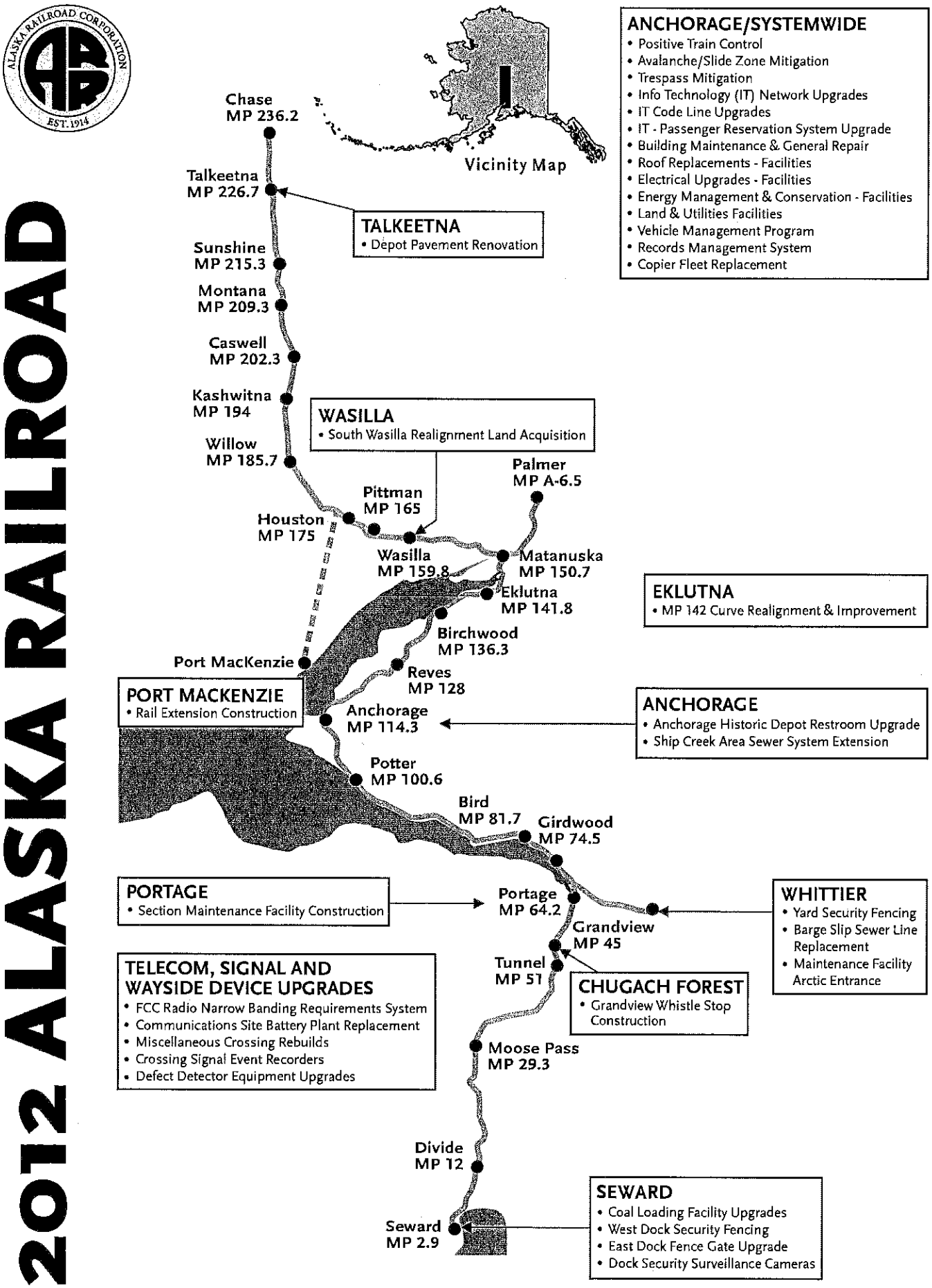
Table of Contents

Public Input:

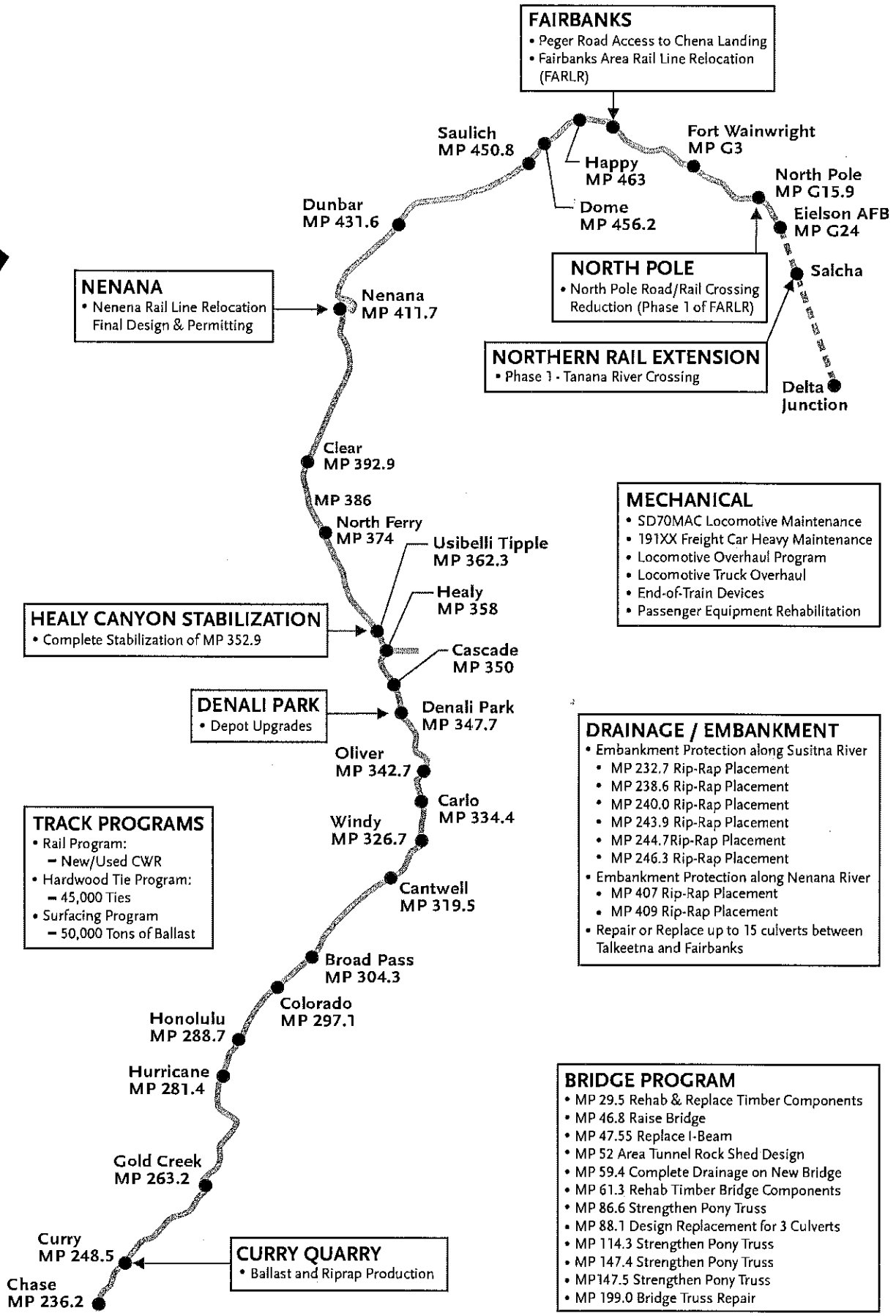
To comment on any or all of these projects:

- **E-mail:** public_comment@akrr.com
- **Mail:** Alaska Railroad Capital Projects P.O. Box 107500, Anchorage, AK 99510
- **Fax:** (907) 265-2365
- **Call:** (907) 265-2671, TTY/TDD 265-2620 or voice 265-2494, Alaska Relay Service TTY 800-770-8973/voice 800-770-8255

2012 ALASKA RAILROAD



PROGRAM OF PROJECTS




MIDTOWN
BUSINESS
CENTER


5571 East Northern Lights Boulevard
Exit Street View
N
4241
Food Mart
© 2013 Google
12 ft
Report a problem
© 2013 Google
Google earth
61°11'41.98" N 149°46'42.51" W elev 277 ft eye alt 204 ft


East Northern Lights Boulevard
Exit Street View
5 ft
Report a problem
© 2013 Google
East Northern Lights Boulevard
Google earth
61°11'47.07" N 149°47'43.77" W elev 216 ft eye alt 184 ft


East Northern Lights Boulevard / Glacier Street
Exit Street View
© 2013 Google
6 ft
Report a problem
Google earth
61°11'42.84" N 149°47'15.81" W elev 217 ft eye alt 196 ft


East Northern Lights Boulevard
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Report a problem
© 2013 Google
Google earth
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5571 East Northern Lights Boulevard
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© 2013 Google
East Northern Lights Boulevard
12 ft
Report a problem
© 2013 Google
Google earth
61°11'42.59" N 149°46'29.89" W elev 249 ft eye alt 204 ft


6475 East Northern Lights Boulevard
Exit Street View
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© 2013 Google
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© 2013 Google
Google earth
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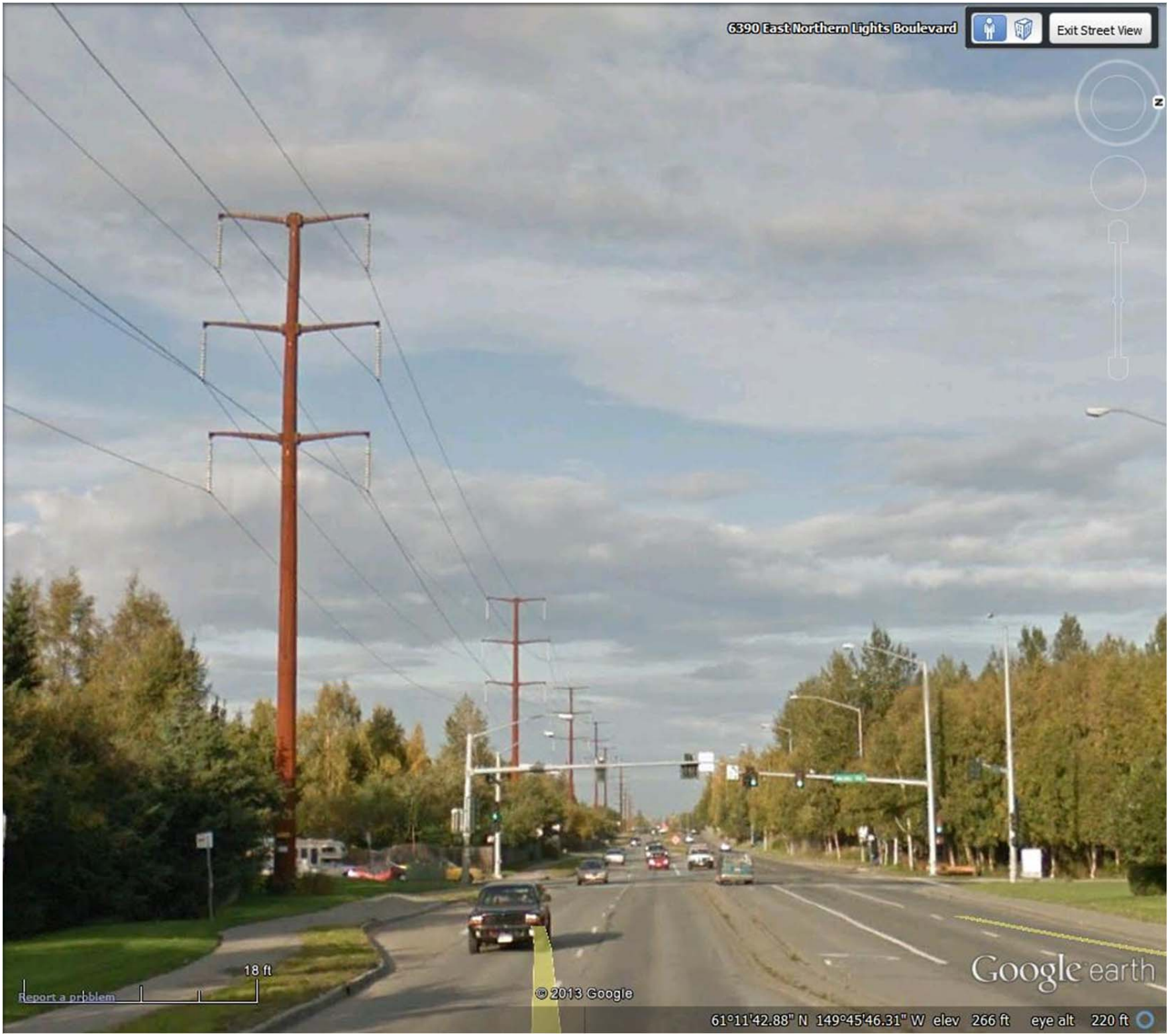
6390 East Northern Lights Boulevard
Exit Street View
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Report a problem
© 2013 Google
Google earth
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Boniface Parkway / East Northern Lights Boulevard
Exit Street View
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© 2013 Google
Google earth
61°11'42.78" N 149°46'34.95" W elev 225 ft eye alt 204 ft


5583 East Northern Lights Boulevard
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© 2013 Google
Google earth
61°11'42.70" N 149°46'29.02" W elev 240 ft eye alt 204 ft


East Northern Lights Boulevard
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© 2013 Google
Google earth
61°11'43.22" N 149°46'33.81" W elev 235 ft eye alt 215 ft


East Northern Lights Boulevard
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© 2013 Google
Google earth
61°11'42.53" N 149°46'38.60" W elev 236 ft eye alt 207 ft


5882 East Northern Lights Boulevard
Exit Street View
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© 2012 Google
9 ft
Report a problem
© 2013 Google
Google earth
61°11'42.48" N 149°46'07.89" W elev 252 ft eye alt 220 ft


2803 Campbell Airstrip Road
Exit Street View
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E Northern Lights
Campbell 2800
Airstrip Rd
STOP
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Report a problem
© 2013 Google
Google earth
61°11'42.48" N 149°46'12.14" W elev 220 ft eye alt 219 ft


5554 East Northern Lights Boulevard
Exit Street View
East Northern Lights Boulevard
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Report a problem
© 2013 Google
Google earth
61°11'41.89" N 149°46'32.32" W elev 219 ft eye alt 204 ft


2803 Campbell Airstrip Road
Exit Street View
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Report a problem
© 2013 Google
Google earth
61°11'42.53" N 149°46'13.65" W elev 218 ft eye alt 219 ft


East Northern Lights Boulevard
Exit Street View
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Report a problem
Google earth
61°11'41.70" N 149°46'56.34" W elev 274 ft eye alt 199 ft


Kingston Drive
Exit Street View
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61°10'49.79" N 149°45'31.13" W elev 321 ft eye alt 283 ft


6833 East Tudor Road
Exit Street View
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© 2013 Google
© 2013 Google
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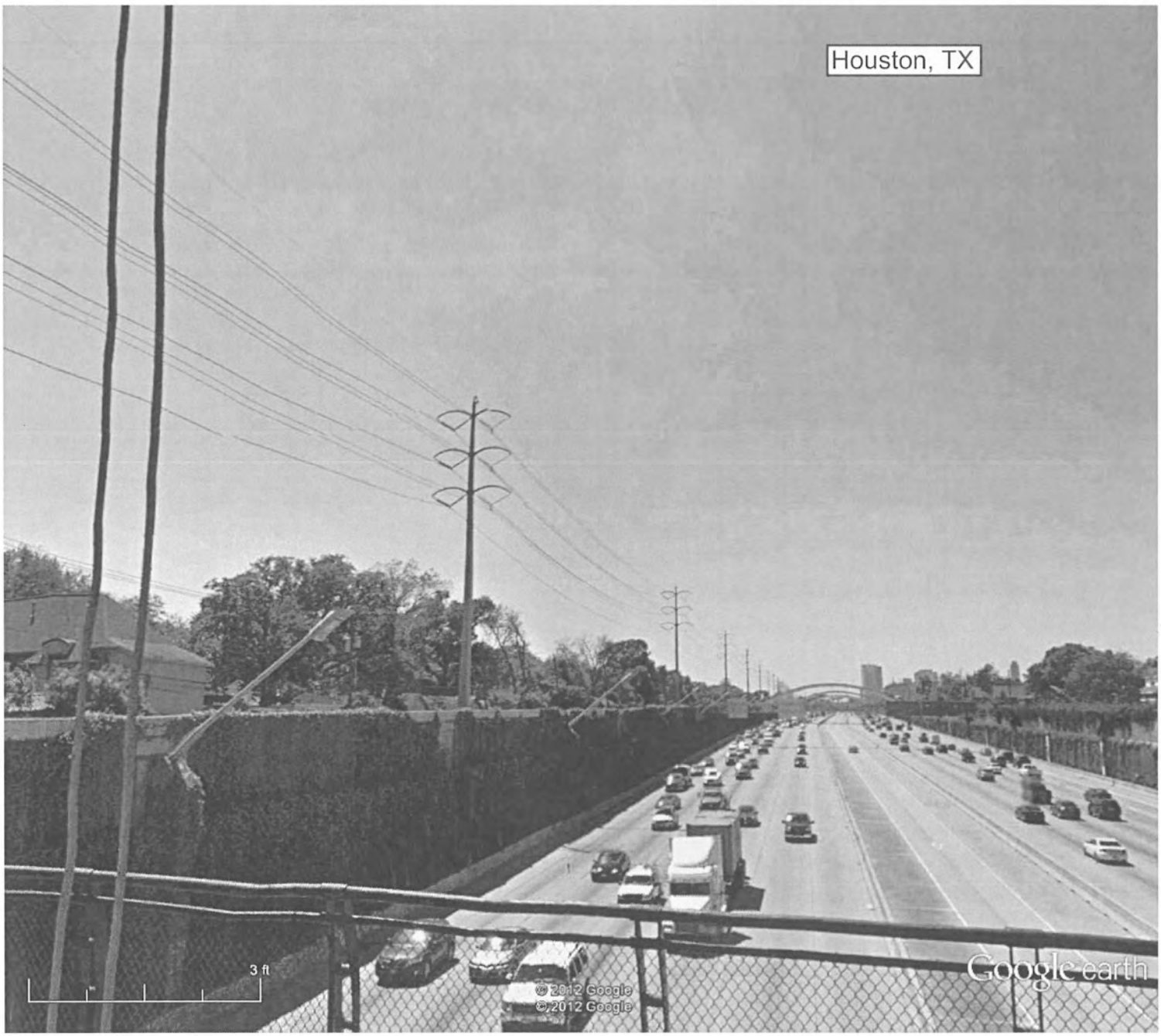
Google earth
East Tudor Road
61°10'50.32" N 149°45'31.65" W elev 330 ft eye alt 304 ft


Houston, TX
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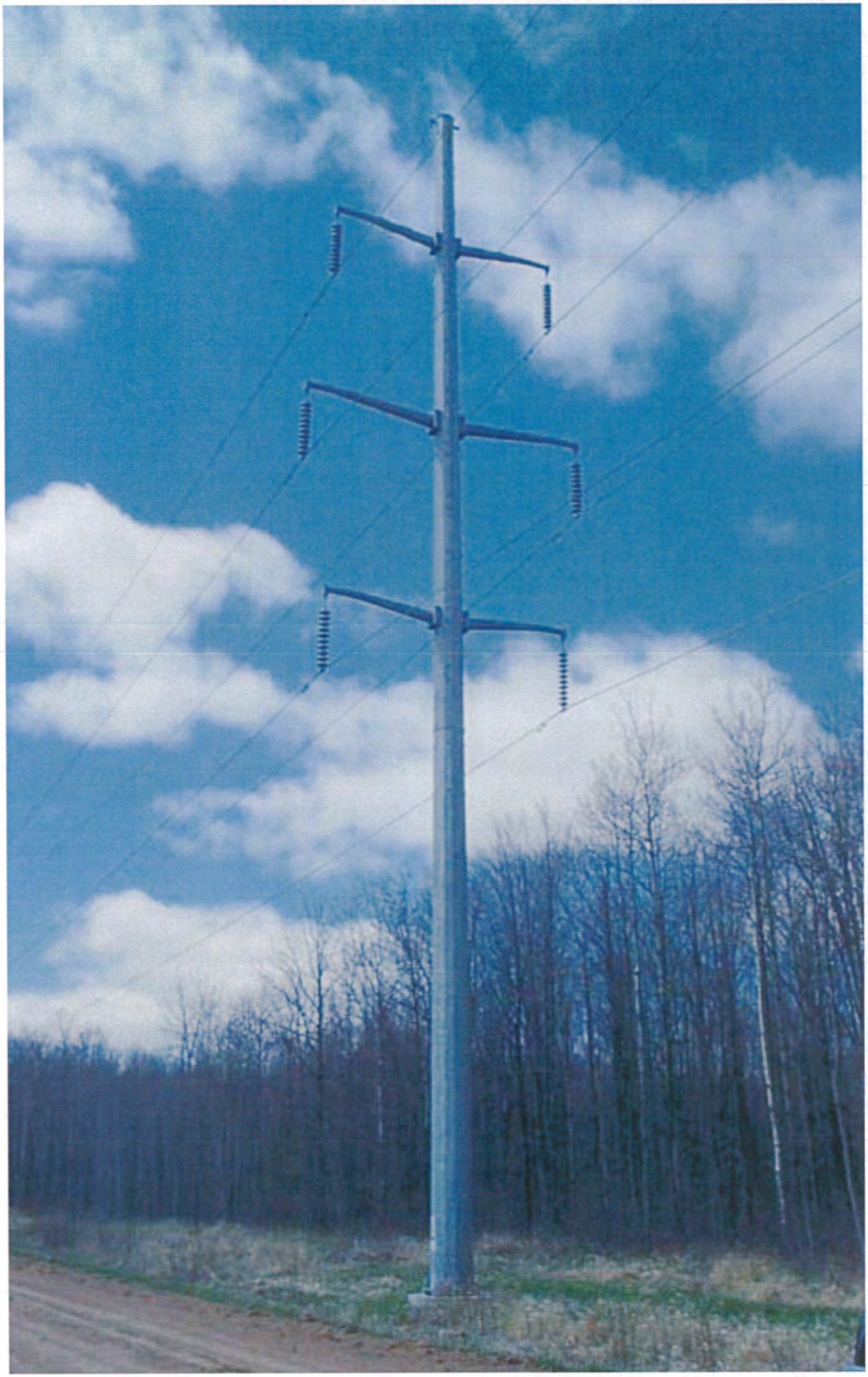
Google earth



Eklutna Transmission Line
230 kV double circuit on single steel poles

Figure IV-1 - 115kV transmission line structures located near Mall of New Hampshire in Manchester. (Photo by NEI – PSNH System)

http://puc.nh.gov/2008IceStorm/Final%20Reports/2009-10-30%20Final%20NEI%20Report%20With%20Utility%20Comments/Chapter%204%20-%20System%20Planning,%20Design,%20Construction%20and%20Protection.pdf

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NIAGARA this WEEK.com

Residents ready for legal battle over power lines

Amanda Moore
August 29, 2012

A group of Beamsville residents are prepared to take proponents of a West Lincoln wind farm to court. While they aren't opposed to the storeys-high towers being erected in West Lincoln, they are opposed to plans to install 80-foot high power lines down Mountainview Road.

The recently incorporated Mountainview Niagara Escarpment Commission Association has already raised $75,000 which president Harald Thiel says they will use should Niagara Region Wind Corporation move ahead with installing a connection line down Mountainview Road in Beamsville.

"It's a shame that we, as citizens, have to spend our own hard-earned money to defend our property rights," said Thiel, owner of Hidden Bench Vineyards and Winery, located just off Mountainview Road. "But we intend to do so. We've hired a law firm."

The citizen's group isn't the only entity fighting the proposal. Lincoln council has also expressed its opposition to the plan, and the Niagara Escarpment Commission has retained a consultant, at the expense of NRWC, to peer review the study "to identify options that do not require the installation of a power line down the face of the escarpment."

Despite the NEC review, NRWC is moving forward with Mountainview as the preferred route to connect the 230-megawatt wind farm to the Beach Transfer Station in Hamilton, council heard from Randi Rahamim, project spokesperson, at Monday's corporate priorities meeting.

"It's the route the project team prefers," Rahamim said adding NRWC is "fully committed" to working with the escarpment commission.

That news angered some members of council, who had already expressed their opposition to placing the power lines on Mountainview at a June meeting.

"You heard loud and clear, Mountainview is not an option for us," said Coun. Rob Foster, suggesting NRWC look at Thirty Road. "This is not us being NIMBY (not in my backyard) there is a better route. We made it very clear last time."

For Coun. Rob Condotta there is only one viable option — burying the lines.

"To tell you the truth, we really don't care about the costs," said Condotta in response to a comment from NRWC that burying the lines is cost prohibitive. "You are putting something on the escarpment that is going to ruin it. We don't care abut the costs. Those are there for life. My great, great grand children don't want to look at it. Bury it."

Coun. JD Pachereva said NRWC had an opportunity to "do the right thing" by listening to council and coming back with alternatives.

"I'd like to see you come back (with an alternative route) when the review is complete, even if it is in your favour," Pachereva said. "You can see that people don't want this."

Those same feelings were expressed by all of council in a June resolution which requested the NEC to conduct a peer review, which both NEC staff and board members supported.

"NEC staff is concerned that there is potential for a negative impact on the open landscape character and natural scenery of the Niagara Escarpment as well as negative impact on the vegetation and the properties along the proposed route," reads a June report from Nancy Mott-Allen, senior strategic advisor for the NEC.

It's that impact that has residents up in arms.

"Green energy not only has to be green, but it has to respect green space and what is a recognized biosphere," said Thiel. "We're not against the wind farm. We just feel the connection of the wind farm needs to be done in a respectful manner. It doesn't necessarily need to cross the escarpment."

Residents can preview the draft plans for both the transmission lines and proposed wind farm at an open house NRWC is hosting Sept. 20 from 5-8 p.m. at Smithville Christian High School, 6488 Smithville Townline Rd. The plan is also available on NRWC's website, www.nrwc.ca, and hard copies are available at town halls in Grimsby, Lincoln and West Lincoln.

TRANSMISSION & DISTRIBUTION WORLD

Underground Line Crosses Historic Site Double-circuit, 115-kV line maintains the historic integrity of scenic parkway.

Feb 1, 1997 12:00 PM
By Robert W. Munley, BGE; Thomas J. Rodenbaugh, EPRI; Kenneth C. Malten, Sargent & Lundy

Several years ago after 14 years of litigation regarding potential adverse health effects attributed to high-voltage lines, Potomac Electric Power Co. (PEPCO) received approval from Maryland's highest court to build a 10-mile (16 km) length of 500-kV line through Montgomery and Howard counties (T&D, November 1990). This piece of line was the key portion of a 45-mile (72.4 km) segment that would complete a 243-mile (391 km) regional power loop spanning 10 counties in Maryland and Virginia. The loop was built by several utilities in the area and was designed to enhance reliability of electric service in the Baltimore, Maryland; Washington, DC; and Virginia areas.

Baltimore Gas and Electric Co. (BGE), Baltimore, was responsible for building a portion of the line, but the utility encountered an additional stumbling block when it announced that its construction plans included crossing over the Baltimore-Washington Parkway. Although the crossing had already been approved by the Maryland Public Service Commission, the parkway was later designated as an historic site. The National Parks Service, which has jurisdiction over the site, expressed concern about the impact the proposed line would have on the scenic parkway. After negotiating with the Parks Service, BGE agreed to place underground an existing double-circuit 115-kV overhead line in exchange for being allowed to build the 500-kV overhead crossing. However, the National Parks Service would not allow the parkway to be cut for open trenching to place the proposed underground circuit.

Underground Drilling To avoid open trenching, some electric utilities have used trenchless boring techniques and large, horizontal directional drilling rigs to cross under highways and rivers. Smaller directional drilling machines are often used for distribution circuits in suburban areas. For built-up neighborhoods, where transmission cable must be installed in conduit, the large rigs are too big and the small machinery have inadequate and limited power capabilities. To overcome this problem, the Electric Power Research Institute (EPRI), BGE and PEPCO sponsored a project to develop the tools, techniques and design to facilitate trenchless installation of urban transmission lines. Since the National Parks Service would not permit roadway cutting and open trenching of the site, the parkway crossing offered an opportunity to demonstrate the feasibility of the trenchless technique.

A project team of experts was assembled with Sargent & Lundy, Chicago, Illinois, U.S., acting as prime contractor, team leader and overall manager. Jason Consultants International, Inc. of Washington, DC, U.S. acted as trenchless technology consultant; Power Delivery Consultants, Inc. of Ballston Lake, New York, U.S. provided underground cable system expertise; Geotherm, Inc. of Newmarket, Ontario, Canada performed thermal analyses of the soils and drilling mud; Flippo Construction Co., Inc. of Forestville, Maryland was general contractor for the installation and Kinnan Engineering, Inc. of Camas Valley, Oregon, U.S. was the drilling subcontractor.

The Requirements Since oil-filled cable was not desired, the 2500 kcmil aluminum cable would be insulated

with XLPE and the work for its installation would be constrained to occupy the existing 66-ft (20 m) R/W. The installation required a new terminal riser pole structure for the double-circuit 115-kV lines, which would allow one circuit to remain energized while work progressed on the other circuit (Fig. 1). The proposed route was required to be selected in a way that minimized bends in the conduit system, that avoided above- and below-grade obstructions and that remained in the specified R/W. Borings were required to identify the extent, thickness and characteristics of the various soil layers and the ground water profile along the route. Geothermal properties were also needed of the soils along the route. The final plan and profile was required to minimize drilling in the gravel strata, which existed along the route.

The Design To take advantage of the guided drilling technique, BGE's standard 3 by 3 duct bank had to be changed from a square to a circular cross section. The selected cross section consisted of the 6-inch (15.24 cm) diameter conduits arranged concentrically with one central conduit and six perimeter conduits. Two 2-inch (5 cm) conduits were located in the bundle for fiber-optic lines. To assure the nominal 2-inch conduit spacing needed to maintain the desired ampacity rating, HDPE spacers were located at 6-ft (1.8 m) intervals along the length of the line. Steel bands were placed around the conduits at each spacer to secure the assembly and create one 24-inch (61 cm) diameter bundle (Fig. 2). If a casing was used to simplify installation in sandy, non-cohesive soil, a bore hole at least 40 inches (101.6 cm) in diameter would be required to install the bundle using guided directional drilling equipment. To minimize the diameter of the bore hole, the crew decided the conduit bundle could be installed without a casing, which would permit a bore-hole diameter as small as 30 inches (76.2 cm). Because the sands at the site were well graded and contained significant amounts of silt, the drilling mud was thought to be sufficient to stabilize the bore hole long enough to pull in the conduit bundle without the casing.

Ampacity Considerations Since circuit ampacity is a function of distance between adjacent conductors, whether overhead or underground, it is necessary to consider derating effects due to close phase spacing where mutual heating effects lower the permissible current. Large spacing between phases increases the ampacity and dissipates the heat more efficiently than when spacing is close. However, large spacing among underground cables increases the cost of installation since a larger bore would be needed. A minimum of 2-inches between conduits allows drilling mud to fill the air pockets, increasing heat dissipation in the earth. The desired rating for the double circuit was 1500A with one circuit in service.

BGE's typical open-cut rating for one circuit operating was 1250A and 625A when both circuits were energized. Although the trenchless rating could not meet BGE's desired rating of 1500A, it could match the open-cut ratings. Calculations showed that a conduit bundle with 2-inch spacing would be rated at 888A with both circuits operating and 1337A with one circuit in operation. Since the single-circuit rating was less than desired, a fiber optic temperature-sensor cable was installed within the conduit bundle to allow continuous measurement of temperatures and real-time monitoring for the installation. It was hypothesized that this mode of operation would show that actual temperatures were lower than expected, which would then allow higher currents to be carried. In this way, ratings could be closer to the values desired by BGE.

Installation Method and Equipment The drilling machine selected for the project had to be powerful enough to drill the 30 inch (76 cm) bore hole, to pull the 24-inch diameter conduit bundle and small enough to be used in an urban installation. The selected machine (Fig. 3) was supplied by Kinnan Engineering. Slightly larger than a standard mini-rig commonly used for small installations, it measured 6 ft (1.8 m) wide by 25 ft (7.6 m) long. The torque and pullback capabilities of 5000 ft-lbs (6779 J) and 100,000 lb (45,360 kg), respectively, are five to 10 times greater than typical mini-rigs.

Truck-mounted slurry handling equipment was selected to mix bentonite with water and pump the resulting drilling mud to the drill head. The mud was recycled, using a trailer-mounted recycling system, to minimize the amount of water and bentonite required. A 5-inch (12.7 cm) diameter pilot hole was drilled first, followed by three backreaming passes, using reamers with diameters of 14, 24 and 34 inches, to enlarge the hole prior to pulling in the conduit bundle. If a comparison was made of boring a single hole for the double circuit or boring two smaller holes, which would contain one circuit each, a saving of about US$250,000 per mile

(per 1.6 km) would be realized for the boring of the single hole.

Installation Plans Although the Baltimore/Washington Parkway site was not typical of suburban or urban neighborhoods, the construction area was laid out to demonstrate how directional drilling could be used in these environments sometime in the future. The 1800-ft (548 m) installation was organized to locate the drilling equipment near the midpoint of the run and drill two holes, one in each direction, from the mid-point setup. To simulate a boring project on a city street, the support equipment was lined up in tandem, limiting the mud pump, mixing system and recycling system to a single car lane. This equipment occupied an area about 8 ft (2.4 m)wide by 80 ft (24 m) long. A water tank, which would normally not be required in a city setting was not aligned with the other support equipment. The drill rig was set up to make the first 800-ft (243.8 m) boring and then rotated to make the 1000-ft (304.8 m) boring in the other direction. Spoils transfer pumps were located at the entrance and exit pits to transport the mixture of drilling mud and soil from the backreaming operations. These pumps transferred the mixture to the recycling system, which removed the large size particles and recycled the mud. Conduit bundle assembly areas were located at the exit ends of both runs, with 40-ft (12 m) lengths of conduit fused together, placed in the spacers and banded to form two single bundles.

Installation The pilot hole for 800-ft long east segment required three days to complete instead of the scheduled one day because of problems with the mud pump, the guidance system and the drill bit, which had difficulty cutting through the layer of gravel near the entrance pit. The first backream had numerous equipment problems involving the mud pump and recycling system, which were incapable of achieving their rated capacities. To overcome this problem for additional backreaming, larger equipment and a recycling system with a higher rating was obtained. The next two backreams were each completed in two days with an additional day expended to make one more backream to ensure that the bore hole was clear for pulling in the conduit bundle. The bundle was pulled in a single day (Fig. 4) with spacers and banding withstanding the strains of the installation imposed by fluid pressures exerted by the viscous slurry and the frictional forces exerted by the sides of the hole. The recycling system failed during the bundle pull, which caused large amounts of mud to overflow the entrance pit.

The pilot hole drilling ran into several problems. The initial pilot hole for the 1000-ft (304.8 m) west segment had to be abandoned because the drill head veered off course due to problems with the guidance system and the presence of dense gravel. A second pilot hole encountered an additional problem: the 40-ft (12 m) difference in elevation between the entrance pit and low point of the bore caused drilling mud following unexpected paths into porous gravel pockets and break through to the surface. After completing about 280 ft (85.3 m) of the initial backream, a drill rod broke, requiring the removal of the entire 1000-ft (304.8 m) long drill string. A third pilot hole was drilled because of concern that the soil inside the second hole had collapsed, which would make steering impossible for the subsequent operations in the hole. The third hole was completed in three days. The initial 14-inch (35.5 cm) backream was 80% completed when the mud, again, broke through to the surface of the parkway. At this point, the crew stopped the backreaming to consider alternatives.

To facilitate the installation, the crew decided to drill eight separate 6-inch diameter holes, using a mini-guided horizontal drilling machine to install individual conduits in place of the conduit bundle. Eight bores, 350-ft (106.6 m) long and 8 ft (2.4 m) deep were made under both the parkway and parkway entrance ramp. Open trenches connected the bored sections. The smaller holes and shorter lengths required lower mud pressures and flow rates, while the shallower depth avoided the difficult gravel layers. This segment was completed in 38 days, 19 for making the three pilot holes and partial backreaming for the bundle and 19 for the installation of the eight separate conduits.

Summary The project exceeded the estimated cost by about US$290,000 because of the problems with mud-handling equipment and the revised procedure for the west segment. The cost is not competitive with open-cut trenching in unrestricted areas but would be competitive in urban environments.

The project demonstrated that, for the first time, a mid-size horizontal drilling machine (midi HDD) could be used for installing a bundle as large as 24 inches (61 cm) in diameter: the technique employed was successful in installing an 800-ft (243.8 m) section of conduits in a single bundle. The mid-size equipment with short drill string sections allow this equipment to be placed in locations with limited space. As this technology evolves, midi HDD may be used effectively in urban locations for installing transmission cable underground. The large boring dictated that large volumes of drilling fluids be handled, requiring reliable mud-handling equipment capable of pumping the heavy mixture of soil and mud. In urban areas this requirement will be important to avoid delays caused by the inability of recycling and transporting spoils during drilling and reaming operations. Because ampacity characteristics of the cables are affected by the thermal properties of the soil and mud mixture, the mixture density must be closely controlled to ensure that the fill around the cable/conduit assembly is as dense as possible for best heat dissipation to earth. At the same time the density should not be so great that it makes bundle installation difficult.

Although the utility encountered numerous problems on this project, with each additional project new tools and techniques become available and the database of knowledge on this procedure increases to make the tasks easier.

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TRANSMISSION & DISTRIBUTION WORLD

SRP Quiets the Critics with Line Design

Jun 1, 1998 12:00 PM
Stuart K. Harrah, Salt River Project

When part of its service territory began experiencing phenomenal growth in commercial and residential developments, the Salt River Project (SRP) responded by initiating its Schrader Transmission Project.

The project, begun in 1994, had all the potential for controversy. SRP, Phoenix, Arizona, U.S., needed to build two 230-kV overhead lines, each capable of effectively transmitting power through urbanized and rapidly developing areas known for environmental consciousness.

No federal lands were located in the project's proposed transmission area. Therefore, project leaders at SRP were not required to file a federal Environmental Impact Statement (EIS).

However, Arizona state law does require that the siting and construction of any transmission line 115 kV and above be approved by the Arizona State Power Plant and Transmission Line Siting Committee. This committee, whose members included an Arizona assistant state attorney general, heads of state agencies, environmentalists and private citizens, had the authority to evoke immeasurable influence over the outcome of the project.

To make the siting process as efficient and noncontroversial as possible, SRP retained the services of Phoenix-based, environmental consultants Dames and Moore, Inc. Dames and Moore recommended a public planning process and the formation of a Citizens' Working Group (CWG).

Citizens' Working Group Helped Dan Hawkins, SRP transmission line project engineer, said, "The CWG was a stroke of genius. It was an 18-member committee made up of a variety of area citizens with vastly different backgrounds: homemakers, city council members, staff from the municipalities, and school district superintendents. Each individual worked with us to establish criteria that we would later use to site the two lines."

Arthur Kroese, SRP principal engineer said, "We wanted to make the Schrader transmission system a showplace project. We had to demonstrate that we could design and build 230-kV transmission lines that were 130-ft tall and not an eyesore."

Over the course of six meetings, SRP showed the CWG a variety of possible transmission line routes, substation locations and pole designs. At one time, there were more than 100 miles of transmission line route alternatives before it came down to the 22 miles that SRP built. SRP presented its ideas and an environmental analysis of each alternative. Before the meeting, the CWG and the general public basically thought all power transmission lines were about the same - now they don't.

The public planning process took 15 months, but in the end, the CWG recommended the location of the substation and the transmission line routes. The Siting Committee was impressed with the entire process, and it issued the project a Certificate of Environmental Compatibility (CEC), as recommended by the CWG.

Critics Pleased with Line As a result of extensive preparation and community involvement, SRP developed

a line design that even its toughest critics deemed aesthetically pleasing. The design featured tubular-steel poles from Thomas & Betts Utility Div.; deglared, non-specular Aluminum Conductor Steel Supported (ACSS) from BICC Cable Co.; and standoff line-post composite insulators from Sediver, and horizontal-vee composite insulators from MacLean. The project's two new 230-kV lines consist of: - A single-circuit line connecting the new Schrader Substation 7.7 miles to Corbell Substation where it picks up a 230-kV circuit from Kyrene Generating Station. - A double-circuit line connecting Schrader Substation to Santan Substation, 13.8 miles away.

Both 230-kV lines use tubular-steel transmission poles 115- to 130-ft high designed to accommodate 69-kV underbuild with a minimum ground clearance of 30 ft. The poles were assembled in two sections and jacked together on the job site. Erection of the 70 poles spaced 600 ft apart on the single-circuit line and 107 poles on the double-circuit line spaced 700 ft apart were done by crane including approximately 11 miles in railroad R/W.

All structures were fabricated from ASTM A572 or A871 grade 65 steel. Their finish was a sprayed-on zinc coating ("metallizing"). Then, a Micaceous Iron Oxide (MIO) point was applied to eliminate the glare and provide a dull finish. After the exterior of the steel pole was blast cleaned, a zinc rod was fed into a nozzle where the zinc was melted and "sprayed" on the steel surface followed by the MIO. Tangent-structure foundations (Fig. 4) were drilled-pier, cast-in-place concrete, anchor-bolt type, except large angle and deadend structure foundations utilize reinforcing steel cages.

The 230-kV conductor on both lines was 1272-kcmil 45/7 ACSS BITTERN, 1.345 inch diameter, weighing 1.434 lb/ft. ACSS (aluminum conductor steel supported) was supported entirely by the steel core wires, which allowed a much higher operating temperature (up to 2007C) and approximately double the current carrying capacity of ACSR. By using ACSS conductor, only one conductor was needed in each phase position. In the past, with ACSR, two conductors were required for each phase position. In addition, a deglared, non-specular finish was specified to eliminate reflection.

The single-circuit line was shielded using a 48-fiber OPGW (optical ground wire), which used alumoweld wires. The double-circuit line had a ground wire above each circuit. One groundwire was 7 # 8 alumoweld, and the other was OPGW, same as for the single-circuit line. The optical fiber will be used for voice, relaying and data communications.

The Schrader Transmission Project was also the first time SRP had been totally committed to the use of composite line-post insulators on its 230-kV tangent structures. In the few locations where the line deflection angle exceeded 2 degrees, horizontal-vee silicone rubber insulators were used.

"We had used composite insulators on our 69-kV lines for years," Kroese said. "But, before now, single-post composite insulators were not a viable alternative for our 230-kV lines. Sediver's Series 40 extra-high-strength line-post insulators with ArmourSil silicone rubber provided the necessary stiffness and load capability on the 230-kV tangent structures. They were one of the primary reasons why our design was so readily accepted."

Substation Is Low Profile In keeping with the project's overall planning, the new Schrader 230/69-kV Substation is a low-profile and aesthetically attractive design. Its supporting structures are all structural steel. The 230- and 69-kV rigid busses are tubular aluminum pipe sections (Fig. 5). Maximum height of the structures and equipment inside the station is 33 feet. Transmission line structures within the station and overhead ground and supports are taller than 33 feet.

Only two of the station's major pieces of electrical equipment contain oil: the 230/69-kV power transformer and the 69-kV auxiliary power transformer.

Contractor for the transmission lines was Mustang Line Contractors, Inc., Spokane, Washington. The

Schrader Transmission Project was successfully completed in January 1998 at a significant cost underrun of $10 million from the budget estimate of $45 million. The timing of this project was opportune as manufacturers, suppliers and contractors offered favorable prices for their products and services. The effort the SRP team put into making the design and specifications detailed, clear and precise helped to eliminate unknown risks by both the suppliers and contractors and reduced the prices of the goods and services.

Before this project, SRP's design choices for high-voltage, overhead transmission lines in highly developed, urbanized areas were simple: How tall will the structures be, and how many will we put up? Now, SRP's engineers can design and build high-voltage lines that carry more load and have a profile and appearance that is both aesthetically and environmentally pleasing. n

Stuart K. Harrah is senior project manager, Schrader Transmission Project, the Salt River Project, Phoenix, Arizona, which he joined in 1962. He has the BSCE degree from Arizona State University. Since May 1996 he has been responsible for design, procurement, construction and commissioning the Schrader Transmission Project. From 1991-96 he was senior project manager of the Mead-Phoenix Project, the 1300-MW transmission system that connects utilities in the Pacific Northwest, California and the Southwest. Harrah is a registered professional engineer in Arizona.

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1. Scope

This standard describes the vegetation clearing along rights-of-way (ROW) of the NU operating companies in Connecticut and Massachusetts where overhead transmission lines are to be constructed. The practices described here apply to the construction requirements for all 115kV and 345kV [1] electric transmission lines, and are consistent with the North American Electric Reliability Council (NERC) Vegetation Management Standard FAC-003-1 dated 2/16/2006, The New England Independent System Operator's (ISO-NE) vegetation clearing standard OP-3 dated 2/1/2005, and the National Electrical Safety Code (NESC) Rule 218 as adopted by the Connecticut Department of Public Utility Control (Regulation Sec. 16-11-134).

This standard applies to new construction clearing requirements and practices and not to on-going future vegetation maintenance of the ROW's. The initial clearance requirements outlined in this standard are intended to provide adequate clearances for a period of four (4) years at which time scheduled maintenance will be performed to reestablish or preserve the initial clearances. The maintenance of the vegetation following construction is addressed under the Northeast Utilities Specification for Rights-of-Way Vegetation Management. Low-maturing trees, which are allowed to remain after completion of vegetation clearing, are still subject to future trimming and removals, depending upon their growth and health, as well as the future needs of NU to operate, maintain, and add or replace electric facilities on the ROW.

NU operating companies typically obtain permanent easement rights for the placement of overhead transmission lines, including the right to clear vegetation within the fully defined limits of a ROW. In most locations the right to remove any tree or portion of tree outside the easemented limits of the ROW ("danger tree") that by falling could endanger the transmission line facilities is also obtained. These rights are necessary to provide for the safe and reliable operation and maintenance of any overhead transmission line that is built on a ROW.

Notwithstanding these rights, the standard practice of the NU operation companies is to minimize tree and other vegetation removal that is required for new transmission line construction by:

A. Designing new lines to keep the positions of new conductors as much as possible within any existing cleared ROW corridor, thus minimizing additional clearing

B. Remove non-compatible vegetation (trees and tall growing shrub species) within the conductor clearance zone (area directly under the conductors extending 15 feet horizontally outward from the outermost line conductors)

[1] Except for possible modifications to existing 69kV lines, it is unlikely that NU will construct any new 69kV lines. Therefore, this standard covers 115 and 345kV lines only, and 115kV line clearances would apply to any new 69kV lines.

C. Allowing low-maturing tree species such as dogwoods to remain within the side zones (area outside of the conductor clearance zone extending to the edge of the ROW clearing limits) where these low-maturing species exist

D. Re-establishing pre-existing access roads for construction vehicles to minimize the clearing of low growth within the existing corridor for access

E. Locating new line structures close to old structures and overlapping the work areas of old structures to reduce to the amount of clearing for the new structure work areas

F. Where feasible, using existing conductors to pull in new conductors, thus reducing damage to low growth vegetation along the cleared corridor

G. Engaging an arborist to determine individual "danger trees" for removal considering
   1) Species
   2) Soil conditions
      a) including wetland vs. upland
      b) susceptibility to flooding
      c) depth to rock (and adaptability of the species to those conditions)
   3) Health of the tree
   4) Inclination of trunk
   5) shape of crown

Refer to figures V-1 through V-6 for diagrams of the conductor clearance zone and side zones associated with various line structure types.

2. Clearance between Conductors and Woody Vegetation

Transmission lines within the Northeast Utilities System present a variety of woody vegetation control situations. Regulatory authorities may require "buffers" or "screening" at visually sensitive highway and local road crossings or other locations, and such locations require special attention to achieve and maintain the necessary clearances. At all other locations, standard ROW vegetation clearing practices for new line construction are as follows:

A. Within the ROW limits, as depicted on Figures A, B, and C, cut all tall-maturing tree species of any height while retaining existing compatible woody shrub species (see Appendix 1).

B. Clear-cut construction areas at structure locations and access roads as depicted on Figure C.

C. At road crossings, within side zones and other sensitive areas, as specified by ROW development and management plans, retain existing low-maturing tree species such as Flowering Dogwood (see Appendix 2) to the extent that these trees will not conflict with operation of the transmission line prior to the next scheduled vegetation maintenance.

D. At ravines, river crossings, and similar locations: retain tree species on the ROW where the conductors will be significantly higher than normal and where the

vegetation at full mature height would not violate Figure A clearances and will not cause construction or access problems.

The minimum clearances established in Figures A, B, and C between conductors and woody vegetation includes allowances for re-growth over the periodic maintenance cycle of four (4) years for vegetation within the cleared limits of the ROW, and ten (10) years for vegetation beyond the cleared limits of the ROW. The defined clearances cover all vegetation including natural growth, screens or buffers, orchards, ornamental plantings, nursery stock, and danger trees.

The minimum clearances applicable to woody vegetation are shown in the included figures.

1) Figure A; Minimum Conductor Clearances
2) Figure B; Danger Tree Clearance
3) Figure C; Conductor Clearance Zone, Side Zones and Structure Clearing Areas for New Construction

Where Orchards, ornamental plantings, or nursery stock is permitted by easement or license to exist, the maximum tree heights allowed within the conductor and side zones are shown in Figure A. Agreements with individual property owners may define site-specific maximum allowable tree heights and should be checked prior to scheduled maintenance activities.

Where rights exist beyond the edge of the ROW, any tree designated as a "danger tree," i.e. a tree that can fall within the dimensions noted in Figure B that is determined to be an imminent hazard will be removed at the discretion of the arborist. In sensitive areas adjacent to or within the ROW or where rights or other permission to remove danger trees cannot be obtained, arborists will direct the removal of those portions of the tree canopy projecting into the ROW, and those portions of a tree which, if they become detached, may fall within the minimum clearance distances as shown on Figure B. On side-hill ROW's, danger trees can be found significantly further from the conductors on the uphill side of the ROW.

3. Clearing for New Construction

This clearing consists of clear cutting four distinct areas of the ROW as defined by Figure C. These clearing areas are:

A. Basic clearing of the ROW width, which consists of a conductor clearance zone and side zones. Low-maturing woody shrub species are typically not removed from the side zones, and low maturing tree species such as Flowering Dogwood will be preserved where they do not conflict with construction needs.

B. Clearing at each structure location as required for construction equipment

C. Clearing the full length of all access road and spurs to structure sites for a cleared width of fifteen (15) feet

D. Removal of danger trees that pose an imminent risk to the new line along the new or existing clearing edge

For new line construction, in addition to the cleared area around each structure, a lay-down and assembly area may be required that is considerably larger. The size of this area depends upon topography, the type of structure to be assembled, and the type of foundation required at the site. Also at selected locations spaced several miles apart, setup sites for conductor-pulling equipment are required within the conductor zone and may require some removal of shrub growth.

The process to accomplish the clearing for new construction involves:

A. Field survey and stake the edge of the clearing limits and conductor zone

B. The NU "Owner's Representative" further reviews the survey staking before clearing begins

C. Where specified in an existing agreement with individual landowners, the Owner's Representative or his designee marks acceptable low growing trees they will attempt to retain within a side zone

D. The Owner's Representative contacts landowners before the clearing begins if they wish to discuss the clearing as marked out, and to ask if the property owner wishes to take ownership of the cut wood

E. Where the landowner will take the cut wood, an agreement will specify the contractor's placement of cut wood outside the ROW, or the landowner's schedule for removal if at a location within the ROW

F. Carry out the clearing operation

G. Cut using chain saws within wetland areas, and minimize the use of mechanized equipment for removal (note: mechanized equipment may be used to remove the logs and tree tops from a wetland by positioning equipment outside wetlands to drag out logs and tops using cables)

H. During or shortly after the initial clearing operation, an arborist will evaluate trees beyond the edge of the clearing limits to identify and mark danger trees that pose an imminent risk to the new line

I. The landowner will then be given an opportunity to discuss the danger trees marked for removal with the Owner's Representative who will then give instructions to the contractor

Contracts for clearing will be structured to effectively implement the above process and this standard. Despite efforts to minimize tree and other vegetation removal, there may still be locations where the transmission facility requirements and/or the existing vegetation conditions are such that no substantial vegetation may remain within the ROW limits.

4. Clearing for Structure Maintenance or the Replacement of an Existing Line

Clearing for structure maintenance or replacement of an existing line is similar to that for new line construction with the following exceptions:

A. Clearing needs depend on the relative location of the rebuilt line with respect to the existing maintained area of the ROW and the proposed construction method for installation of conductors and shield wires. These factors may reduce the needed clearing.

B. Structure site and access road clearing will still be required but may also be significantly reduced.

C. When structures from the old line are removed, the cleared area at these sites and the access spurs to them will be allowed to naturally re-vegetate with native plant species, which may include native grasses, forbs or shrubs.

5. Decision Responsibility for Retention of Non-standard Woody Vegetation

The transmission line Construction Manager and Contractor Arborist will be responsible for obtaining approval from the Transmission Supervisor, Vegetation Management before allowing vegetation to remain which conflicts with the clearances shown in Figures A, B, and C.

6. Approving Managers and SME

Dorian Hill
Manager Transmission Line and Civil Engineering
Northeast Utilities

Peter Avery
Manager Transmission Line Construction and MTCE
Northeast Utilities

SME

Anthony Johnson III
Supervisor Transmission Vegetation Management
Northeast Utilities

7. Deviations

This standard sets forth the current NU 'best practices' for most applications of this subject matter. Therefore, deviation from this standard is generally not permitted. However, in unique instances a user may submit a written deviation request including justification to the listed Subject Matter Expert (SME). The SME must approve or deny the request in writing prior to the user commencing any non-standard activities. The SME may consult with his/her supervisor, co-SME if any and co-SME supervisor, and subsequently must copy any approval to them.

Revision History
Rev.0 – original issue
Rev. 1 – Clarified conductor zone and side zone definitions, and clearing practices to address NERC reliability requirements through strict conformance to the ISO-NE OP-3.

APPENDIX 1

SHRUB SPECIES ALLOWED TO REMAIN: (PARTIAL LIST)

COMMON NAME	GENUS/SPECIES
Arrowwood Viburnum	*Viburnum dentatum*
Bayberry	*Myrica pennsylvanica*
Blueberry - Highbush	*Vaccinium corymbosum*
Blueberry - Lowbush	*Vaccinium angustifolium & V. vacillans*
Brambles	*Rubus spp.*
Buttonbush	*Cephalanthus occidentalis*
Dogwood - Gray	*Cornus racemosa*
Dogwood - Redosier	*Cornus stolonifera*
Dogwood - Silky	*Cornus amomum*
Elderberry	*Sambucus spp.*
Hazelnut	*Corylus americana & C. cornuta*
Honeysuckle - Bush	*Diervilla lonicera*
Honeysuckle - Fly	*Lonicera canadensis*
Honeysuckle - Tartarian	*Lonicera tatarica*
Huckleberry	*Gaylussacia spp.*
Maple-leaf Viburnum	*Viburnum acerifolium*
Meadowsweet - Broad-leaved	*Spirea latifolia*
Meadowsweet - Narrow-leaved	*Spirea alba*
Mountain Laurel	*Kalmia spp.*
Oblong Fruited Juneberry	*Amelanchier bartramiana*
Oldfield Common Juniper	*Juniperus depressa*
Pasture Juniper	*Juniperis communis*
Running Shadbush	*Amelanchier stolonifera*
Sheeplaurel	*Kalamia augustifolia*
Spicebush	*Lindera benzoin*
Steeplebush	*Spirea tomentosa*
Sumac - Smooth	*Rhus glabra*
Sweetfern	*Comptonia peregrina*
Sweetpepperbush	*Clethra alnifolia*
Winterberry	*Ilex verticillata*
Witch Hobble	*Vburnum alnifolium*
Witherod	*Viburnum cassinoides*

APPENDIX 2

LOW-MATURING TREE AND SHRUB SPECIES ALLOWED TO REMAIN ALONG THE SIDE ZONES: (PARTIAL LIST)

All species listed above including:

Alder	*Almus spp.*
Dogwood - Alternate-leaved	*Cornus alternifolia*
Dogwood - Flowering	*Cornus florida*
Sumac - Shining	*Rhus copillina*
Sumac - Staghorn	*Rhus typhina*
Willows (except tree species)	*Salix spp.*
Witch-Hazel	*Hamamelis virginiana*

Figure A

Minimum Conductor Clearances

* All Other Woody Species		
Line Voltage	A (ft.)	B (ft.)
69 & 115 kV	12	11
230 & 345 kV	16	15

* Orchards		
Line Voltage	A (ft.)	B (ft.)
69 & 115 kV	14	11
230 & 345 kV	18	15

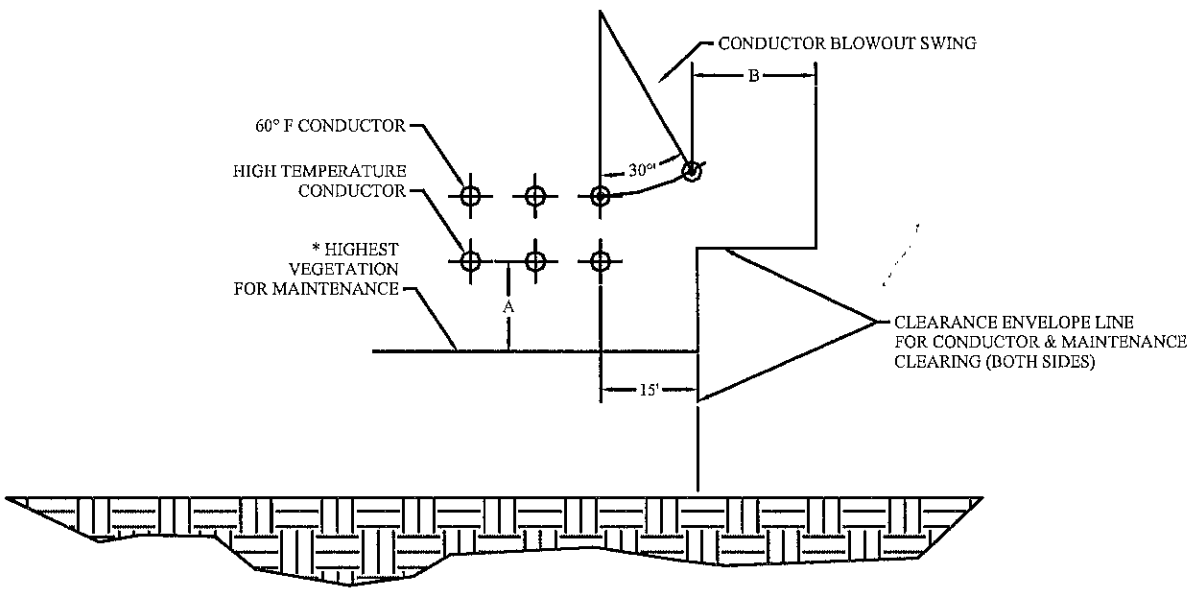

Figure A Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
Northeast Utilities Approved by: DEH, PJA	**Design and Application**	**OTRM** **030.008**	**Rev. 1** **05/16/2008**

Figure B

Danger Tree Clearances

Line Voltage	A (ft.)
69 & 115 kV	6
230 & 345 kV	10

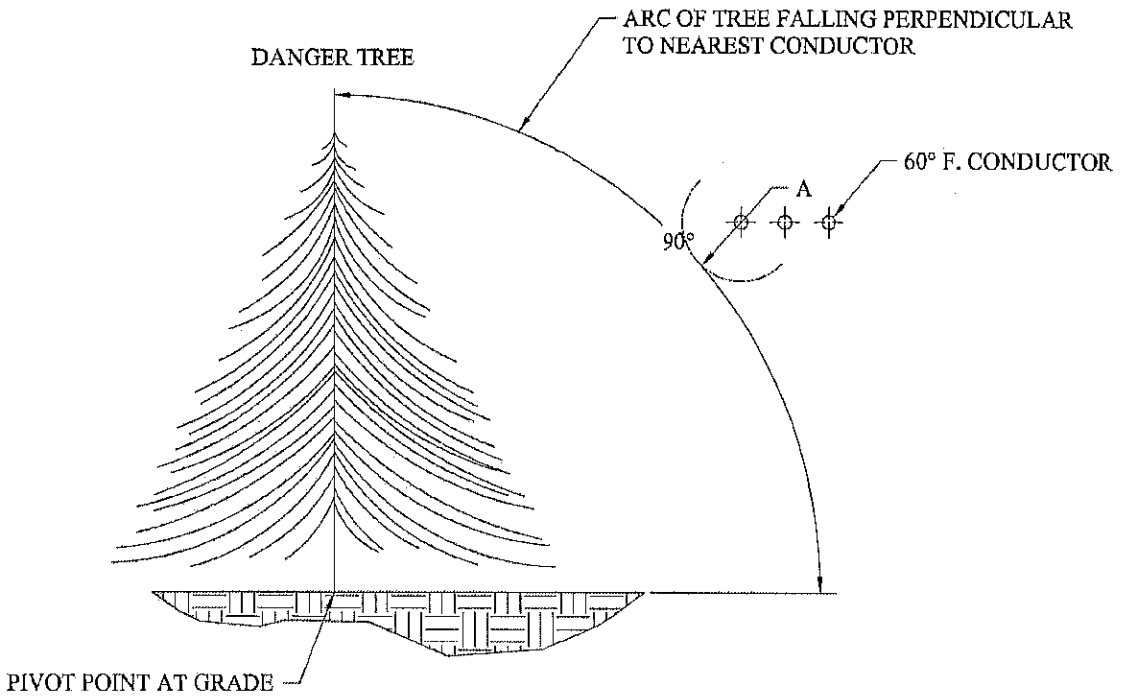

Figure B Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
Northeast Utilities Approved by: DEH, PJA	**Design and Application**	**OTRM** **030.009**	**Rev. 1** **05/16/2008**

Figure C

Conductor Clearance Zone, Side Zones
and Structure Clearing Areas for New Construction

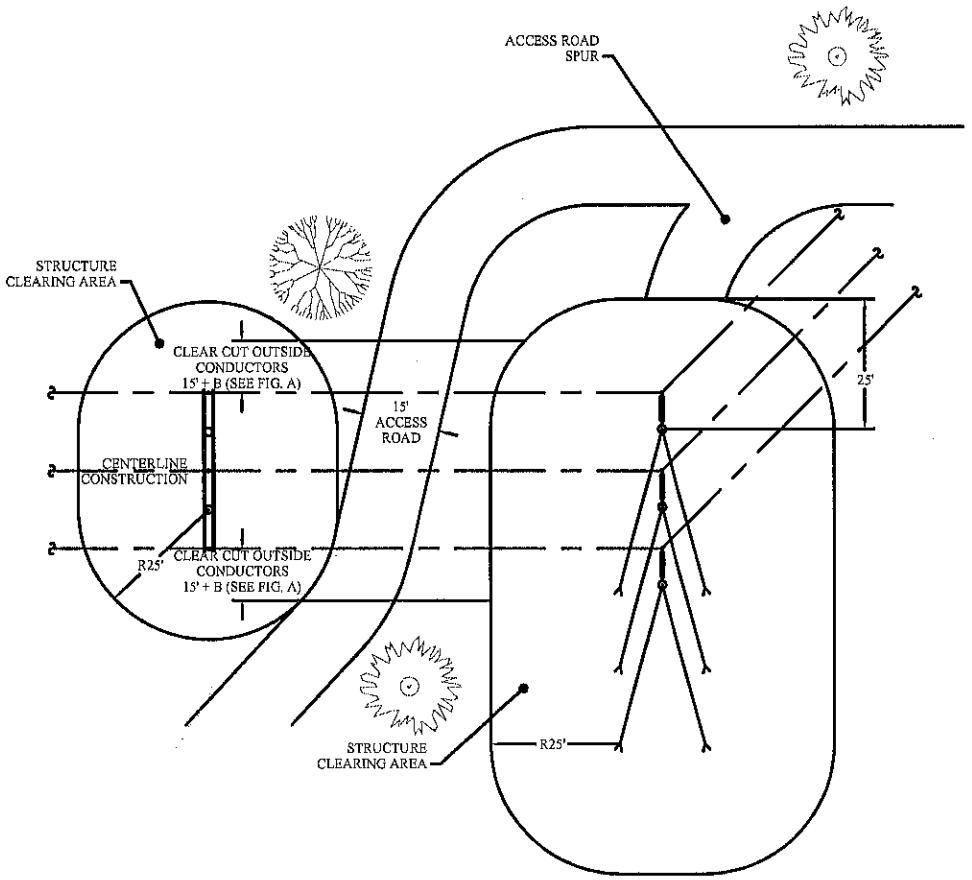

Figure C Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
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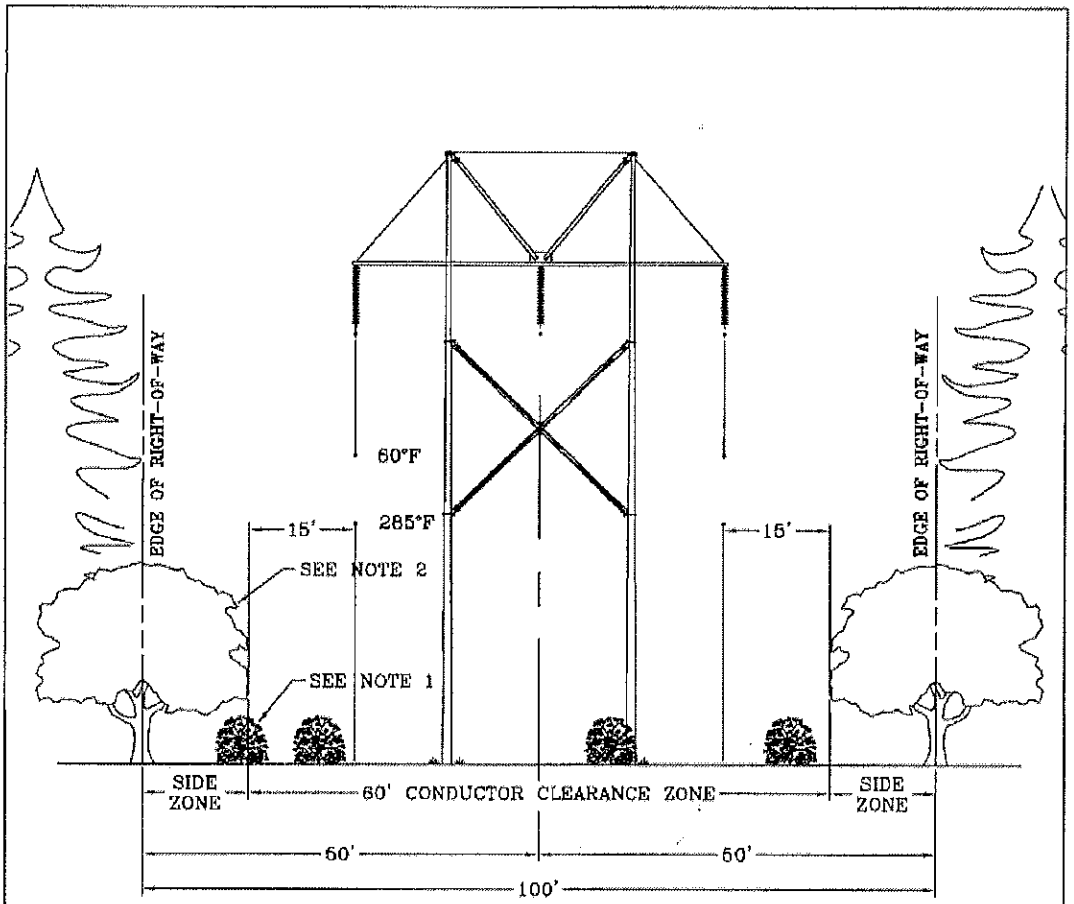


NOTES:
1) WOODY SHRUB SPECIES
2) LOW MATURING TREE SPECIES SUCH AS DOGWOODS ALLOWED OUTSIDE CONDUCTOR CLEARANCE ZONES.
3) ACTUAL DIMENSION TO R.O.W. EDGE VARIES. ADD UP TO 25' TO SIDE ZONE WHERE EXTRA RIGHT-OF-WAY EXISTS.

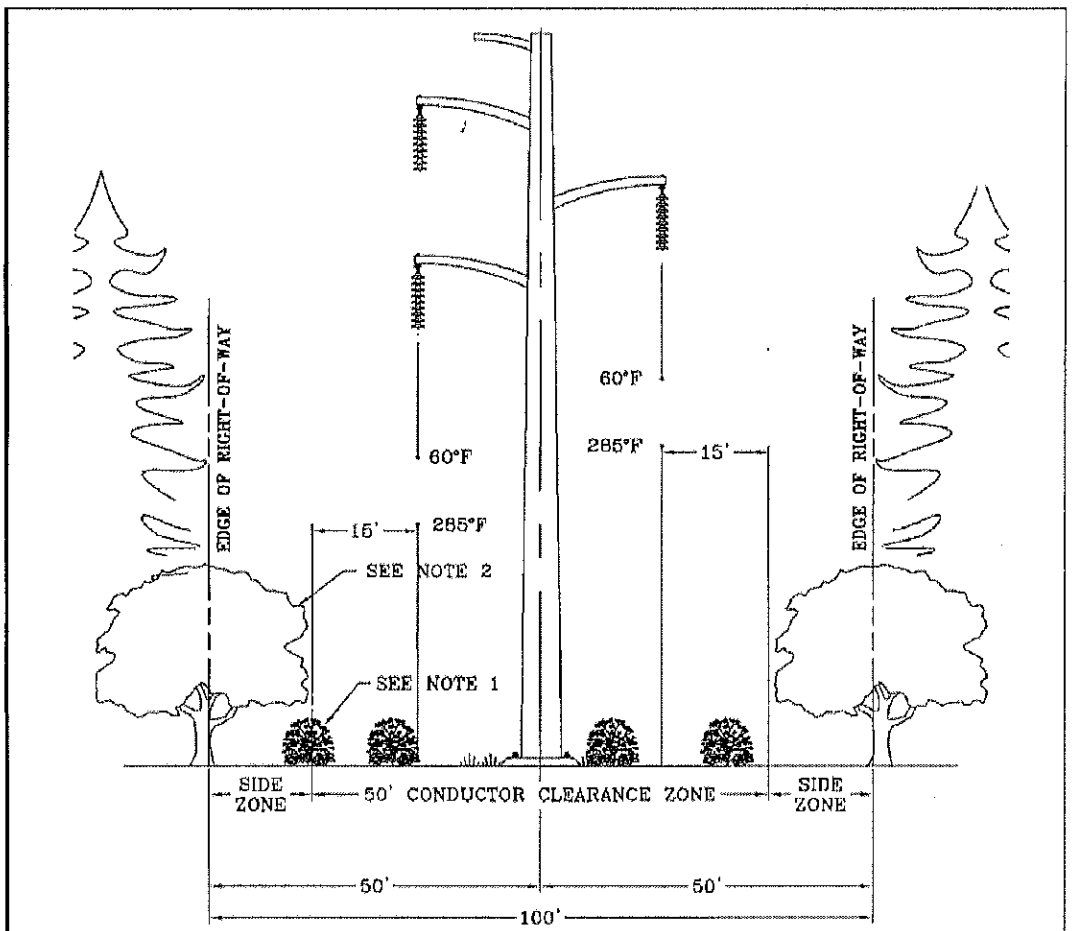
NORTHEAST UTILITIES SERVICE CO.

TITLE
TYPICAL VEGETATION CLEARING FOR A 115-kV H-FRAME STRUCTURE LINE

BY RDG	REV A	APP DEH	APP
DATE 04/13/04	DATE 05/13/08	DATE 12/23/04	DATE
SCALE NONE	MICROFILM DATE	DWG. NO. FIGURE V-1	
P.A. #			

K:\Engineering\Transmission Engineering\NH345\OH\ROW Management

Figure V-1 Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
Northeast Utilities Approved by: DEH, PJA	**Design and Application**	**OTRM** 030.0011	**Rev. 1** 05/16/2008



NOTES:
1) WOODY SHRUB SPECIES
2) LOW MATURING TREE SPECIES SUCH AS DOGWOODS ALLOWED OUTSIDE CONDUCTOR CLEARANCE ZONES.
3) ACTUAL DIMENSION TO R.O.W. EDGE VARIES. ADD UP TO 25' TO SIDE ZONE WHERE EXTRA RIGHT-OF-WAY EXISTS.

NORTHEAST UTILITIES SERVICE CO.

TITLE
TYPICAL VEGETATION CLEARANCE
FOR A 115-kV DELTA POLE STRUCTURE LINE

BY RDG	REV RDG	APP DEH	APP
DATE 04/13/04	DATE 05/13/08	DATE 12/23/04	DATE
SCALE none	MICROFILM DATE	DWG. NO. FIGURE V-2	
P.A. #			

K:\Engineering\Transmission Engineering\MN345\OH\ROW Management

Figure V-2 Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
Northeast Utilities Approved by: DEH, PJA	**Design and Application**	**OTRM** 030.0012	**Rev. 1** 05/16/2008

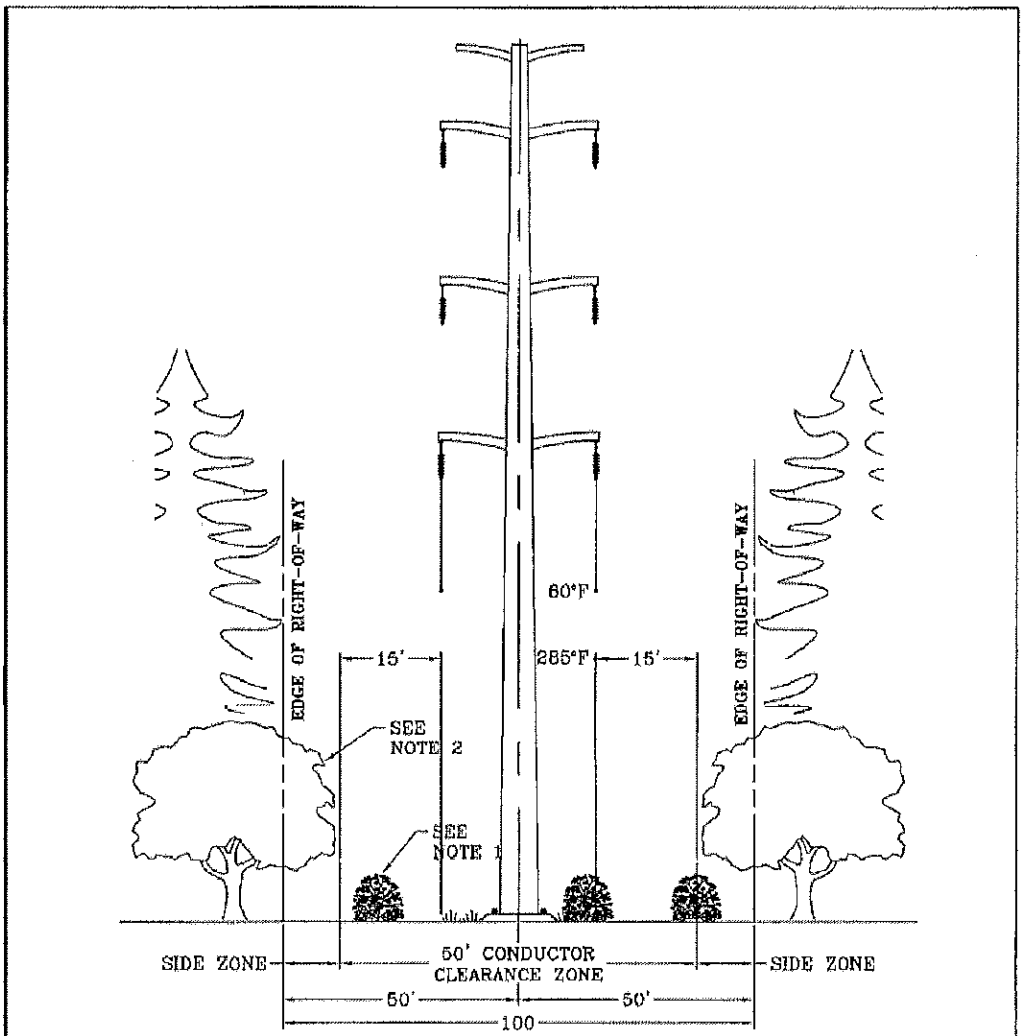
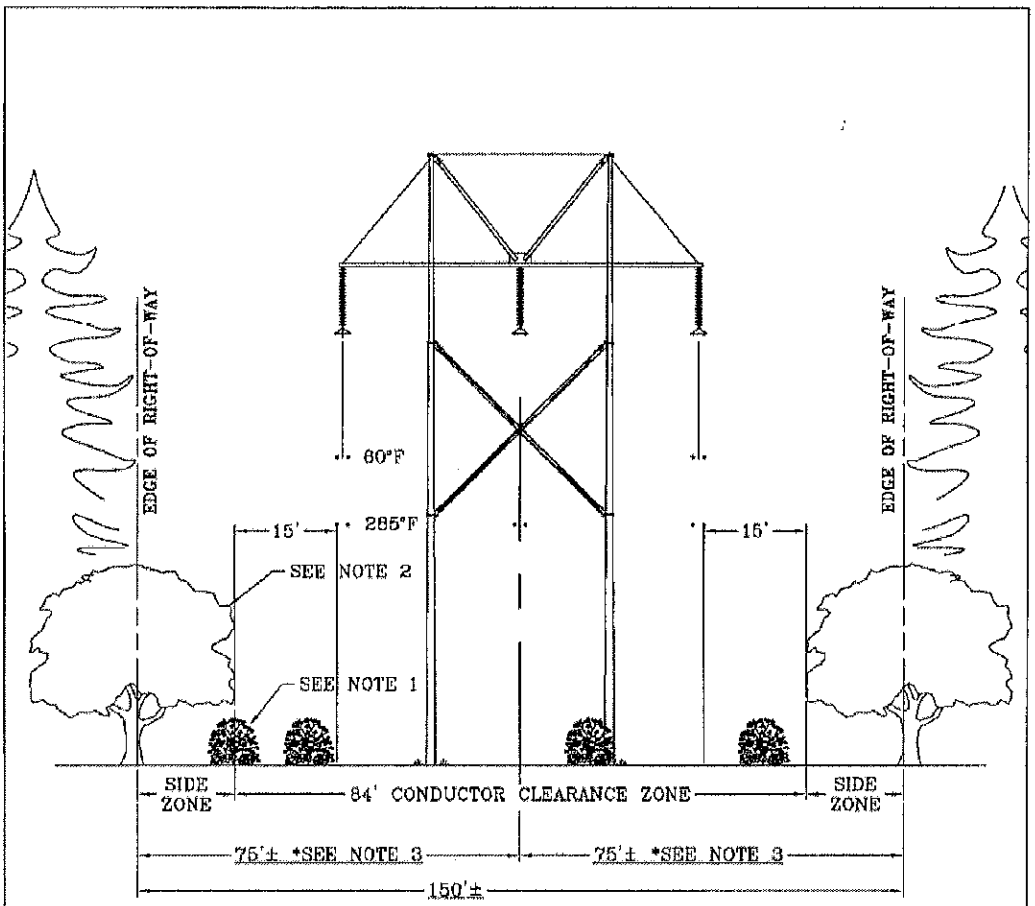


Figure V-3 Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
Northeast Utilities Approved by: DEH, PJA	**Design and Application**	**OTRM** **030.0013**	**Rev. 1** **05/16/2008**



NOTES:
1) WOODY SHRUB SPECIES
2) LOW MATURING TREE SPECIES SUCH AS DOGWOODS ALLOWED OUTSIDE CONDUCTOR CLEARANCE ZONES.
3) ACTUAL DIMENSION TO R.O.W. EDGE VARIES. ADD UP TO 25' TO SIDE ZONE WHERE EXTRA RIGHT-OF-WAY EXISTS.

NORTHEAST UTILITIES SERVICE CO.

TITLE
TYPICAL VEGETATION CLEARING FOR A 345-kV H-FRAME STRUCTURE LINE

BY RDG	REV A	APP DEH	APP
DATE 04/13/04	DATE 05/13/08	DATE 12/23/04	DATE
SCALE NONE	MICROFILM DATE	DWG. NO. FIGURE V-4	
P.A. #			

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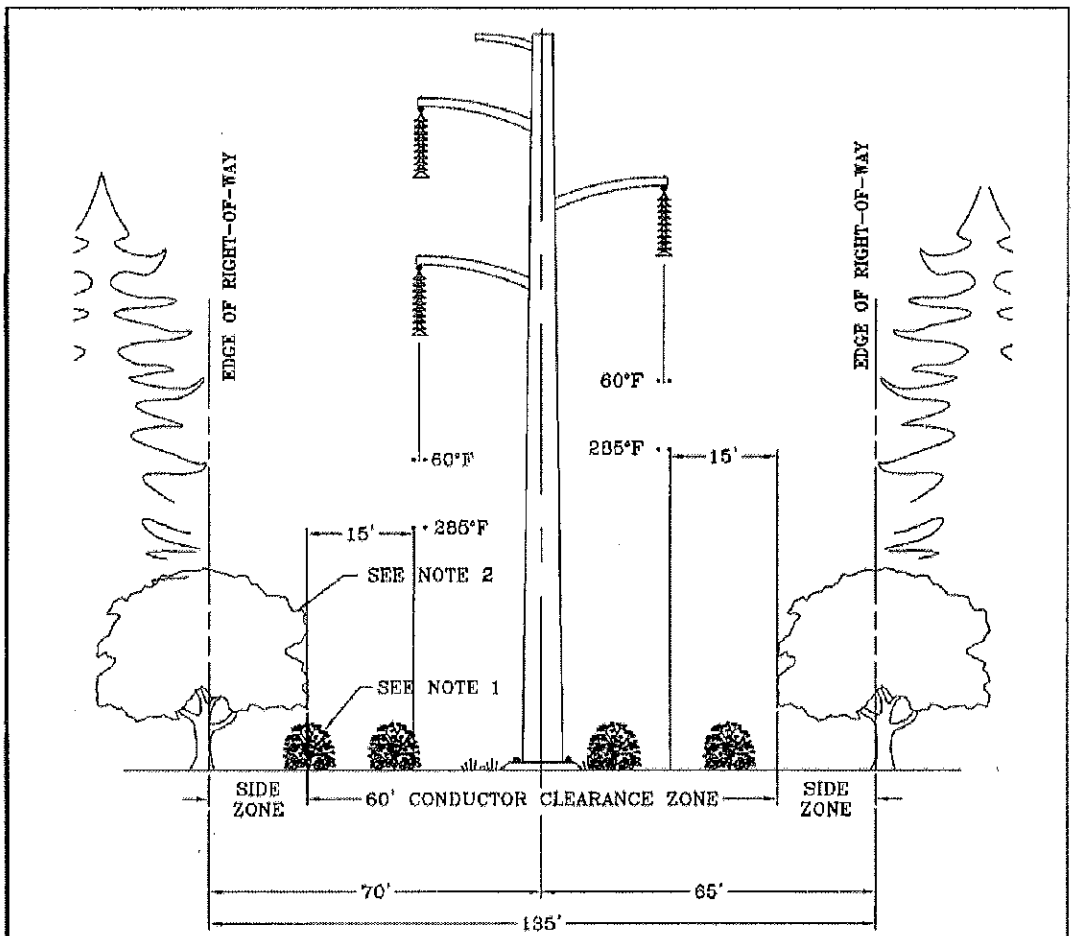
Figure V-4 Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
Northeast Utilities Approved by: DEH, PJA	**Design and Application**	**OTRM** **030.0014**	**Rev. 1** **05/16/2008**



NOTES:
1) WOODY SHRUB SPECIES
2) LOW MATURING TREE SPECIES SUCH AS DOGWOODS ALLOWED OUTSIDE CONDUCTOR CLEARANCE ZONES.
3) ACTUAL DIMENSION TO R.O.W. EDGE VARIES. ADD UP TO 25' TO SIDE ZONE WHERE EXTRA RIGHT-OF-WAY EXISTS.

NORTHEAST UTILITIES SERVICE CO.

TITLE
TYPICAL VEGETATION CLEARING FOR A 345-kV DELTA POLE STRUCTURE LINE

BY ROG	REV ROG	APP DEH	APP
DATE 04/13/04	DATE 05/13/08	DATE 12/23/04	DATE
SCALE none	MICROFILM DATE	DWG. NO. FIGURE V-5	
F.A. #			

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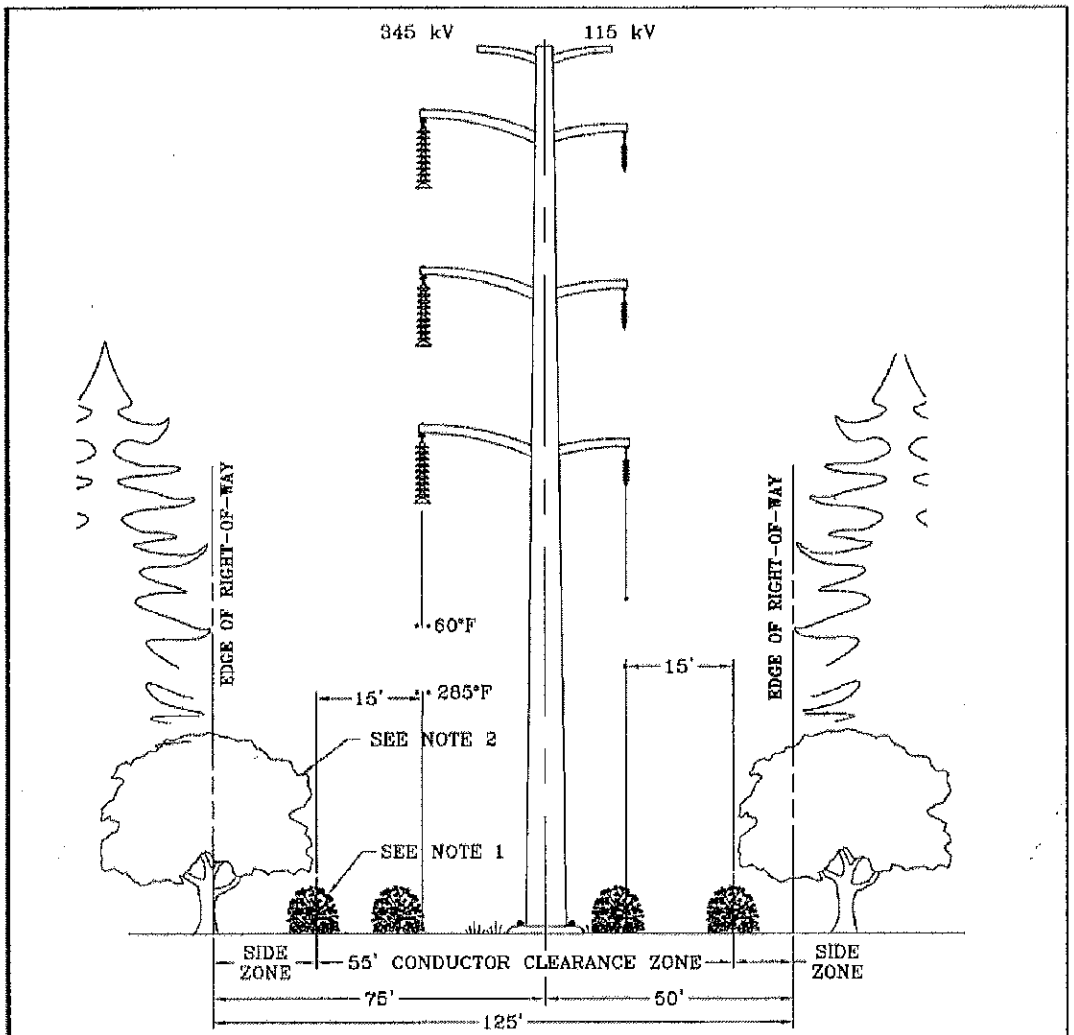
Figure V-5
Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines

Northeast Utilities Approved by: DEH, PJA	Design and Application	OTRM 030.0015	Rev. 1 05/16/2008



NOTES:
1) WOODY SHRUB SPECIES
2) LOW MATURING TREE SPECIES SUCH AS DOGWOODS ALLOWED OUTSIDE CONDUCTOR CLEARANCE ZONES.
3) ACTUAL DIMENSION TO R.O.W. EDGE VARIES. ADD UP TO 25' TO SIDE ZONE WHERE EXTRA RIGHT-OF-WAY EXISTS.

NORTHEAST UTILITIES SERVICE CO.

TITLE
TYPICAL VEGETATION CLEARING FOR A 345/115-kV VERTICAL POLE STRUCTURE LINE

BY BJG	CHKD A	APP DEH	APP
DATE 04/13/04	DATE 05/13/08	DATE 12/23/04	DATE
SCALE none	MICROFILM DATE	DWG. NO. FIGURE V-6	
P.A. #			

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Figure V-6 Right-of-Way Vegetation Initial Clearance Standard for 115- and 345-kV Transmission Lines			
Northeast Utilities Approved by: DEH, PJA	**Design and Application**	**OTRM** 030.0016	**Rev. 1** 05/16/2008

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- A sixty-foot-wide right-of-way will be required for the transmission line. Building and other structures will typically not be allowed within the right-of-way of the transmission line.

- Trees and taller vegetation will be removed from the right-of-way to maintain required clearances for the transmission line facilities and to prevent damage to the transmission line from falling trees.

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