



# PARKS SUBSTATION UPGRADE

## 2013 Effort vs. Current Upgrade Project Comparison

The following is a summary of major changes between the Matanuska Electric Association's (MEA) Parks Substation (PASS) improvement effort in 2013 and the current PASS project to upgrade and expand the substation. Drainage, landscaping, and public notice/engagement process were the primary areas of concern; however, the current PASS Upgrade proposes additional changes intended to enhance the compatibility of PASS in the neighborhood.

	2013 Project	Current Project
<b>Drainage</b>	<ul style="list-style-type: none"> <li>• <b>Concern that drainage would not be kept on site and may impact adjacent properties.</b> <ul style="list-style-type: none"> <li>○ To the west: landscaping, concrete retaining wall at end of pad, perforated pipe to direct excess water north</li> <li>○ To the north: concrete retaining wall at end of pad, infiltration basin 3 feet wide and 5 feet deep filled with bone rock.</li> <li>○ Dike in NW corner between basin and property line</li> <li>○ Gravel pads for on-site infiltration</li> </ul> </li> <li>• <b>Drainage plan did not show runoff direction</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>All storm water will be kept on site and will not impact adjacent properties.</b> <ul style="list-style-type: none"> <li>○ Grassed swale to divert excess runoff to northwest portion of site, where water will be held for infiltration</li> <li>○ Onsite driveways/circulation and substation pad will not be paved, increasing the amount of pervious surface on site: relatively level gravel pads are good for on-site infiltration</li> <li>○ Purchase of lot 93 to the west and replat adjusting lot line further west, providing more space for adequate storm water catchment/drainage improvements</li> <li>○ Additional landscaping for improved on-site infiltration</li> </ul> </li> <li>• <b>Drainage plan clearly shows runoff retention on site</b></li> </ul>
<b>Buffer Landscaping</b>	<ul style="list-style-type: none"> <li>• <b>Property was clear-cut, concern that substation would not be buffered and therefore be clearly visible by adjacent residents</b> <ul style="list-style-type: none"> <li>○ 71 Coniferous Trees to be planted</li> <li>○ 218 Shrubs to be planted</li> <li>○ No-mow seed mix for disturbed areas</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Significant increased landscaping to mitigate impact to adjacent residents, retain natural vegetation where possible, and blend with community character.</b> <ul style="list-style-type: none"> <li>○ 122 Coniferous Trees to be planted (<i>35 more than AMC Title 21 requires</i>)</li> <li>○ 488 Shrubs to be planted (<i>231 more than AMC Title 21 requires</i>)</li> <li>○ Plants are USDA hardiness zone 4. Species chosen mitigate tree loss from spruce bark beetles and increased year-round site screening.</li> <li>○ No-mow seed mix for disturbed areas</li> </ul> </li> <li>• <b>Buffer landscaping with a depth of 30 feet or more</b> along the east and south property boundaries</li> <li>• <b>Buffer landscaping with a depth of 15 feet or more</b> along the north and west property boundaries</li> <li>• <b>Retention of natural vegetation with a depth of 30 feet or more</b> along the southern property boundary (<i>9893 sq. ft of existing vegetation retained. Title 21 requires 4503 sq. ft</i>)</li> </ul>
<b>Screening</b>	<ul style="list-style-type: none"> <li>• <b>Concern that substation will be clearly visible by adjacent residents</b></li> <li>• 10' Chain Link Fence with privacy slats; would provide security but unappealing screening</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Significant screening by a 12-foot Trex fence in wood tones to blend in with neighborhood is proposed to mitigate impact to adjacent residents</b> <ul style="list-style-type: none"> <li>○ 12' High-Quality Trex (composite) Fence providing full screening; increase to 12' at the request of Birchwood Community Council</li> </ul> </li> </ul>
<b>Community Outreach</b>	<ul style="list-style-type: none"> <li>• <b>44 public hearing notices mailed</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>447 notices of public meeting mailed</b> (invite to project meeting at Birchwood Community Council): 3,000' distance from edge of boundary, exceeding AMC Title 21 required 500' distance</li> <li>• MEA providing <b>consistent updates to Birchwood and Chugiak Community Councils</b> throughout project and the past 3-4 years</li> <li>• <b>Notices of public hearing to be mailed</b> by the Municipality of Anchorage after application submittal</li> <li>• <b>Posted notice of public hearing will be placed on the substation property after application submittal</b></li> </ul>
<b>Substation Size</b>	<ul style="list-style-type: none"> <li>• Property size of 90,019 square feet (2.067 acres)</li> <li>• <b>Electrical Poles near the western property line were designed to 46', and taller poles were to be installed adjacent to Steffes St. at 60'.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Increased property size of 99,132 square feet (2.276 acres)</b> <ul style="list-style-type: none"> <li>○ Replat of the property to gain square footage on the western side of the lot, to address drainage concerns and increase buffering.</li> </ul> </li> <li>• <b>Electrical poles near the western property line will be 51 feet, poles adjacent to Steffes St. will be 70 feet tall. The Eklutna Double Circuit Transmission Line (off-site) structures are approximately 90'-97' tall and will remain unchanged. Transmission Line is about 200' away from Parks Substation.</b> <ul style="list-style-type: none"> <li>○ Reduces the visual impact to Lot 93 residents and retains existing conditions with taller poles and electrical line adjacent to Steffes St. The structures will be slightly taller than the original design. This was done to accommodate lightning protection for the substation, which is recommended due to increased lightning occurring in the area in recent years.</li> </ul> </li> </ul>
<b>Project Timing</b>	<ul style="list-style-type: none"> <li>• MEA conducted clearing, grubbing and fill <b>work before receiving all permits</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>MEA will not begin work before receiving all permits and will sufficiently notify adjacent residents prior to construction activities.</b></li> </ul>
<b>Location</b>	<ul style="list-style-type: none"> <li>• MEA Purchased Parks Substation Property in 1973 (Lot 94A) and purchased additional property (Lot 94B) in 2012 for proposed expansion.</li> <li>• MEA Parks Substation has been in operation at its existing location for 47 years</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Electrical utility substations are permitted in the Residential district through a Conditional Use Permit to serve residents, schools, retail and other services</b></li> <li>• <b>Consistent with and implements the Chugiak-Eagle River Comprehensive Plan Update, 2006:</b></li> <li>• <b>Public Facilities Goal: "Provide public facilities and services that are located, designed and maintained to accommodate current and future needs of the area in an effective, cost-efficient and timely manner"</b> <ul style="list-style-type: none"> <li>○ PASS directly benefits surrounding MEA customers and is the backup substation to the downtown Eagle River Area substation</li> <li>○ Upgrading the existing substation is less intrusive, is more cost-efficient and effective than constructing a new substation</li> </ul> </li> </ul>