
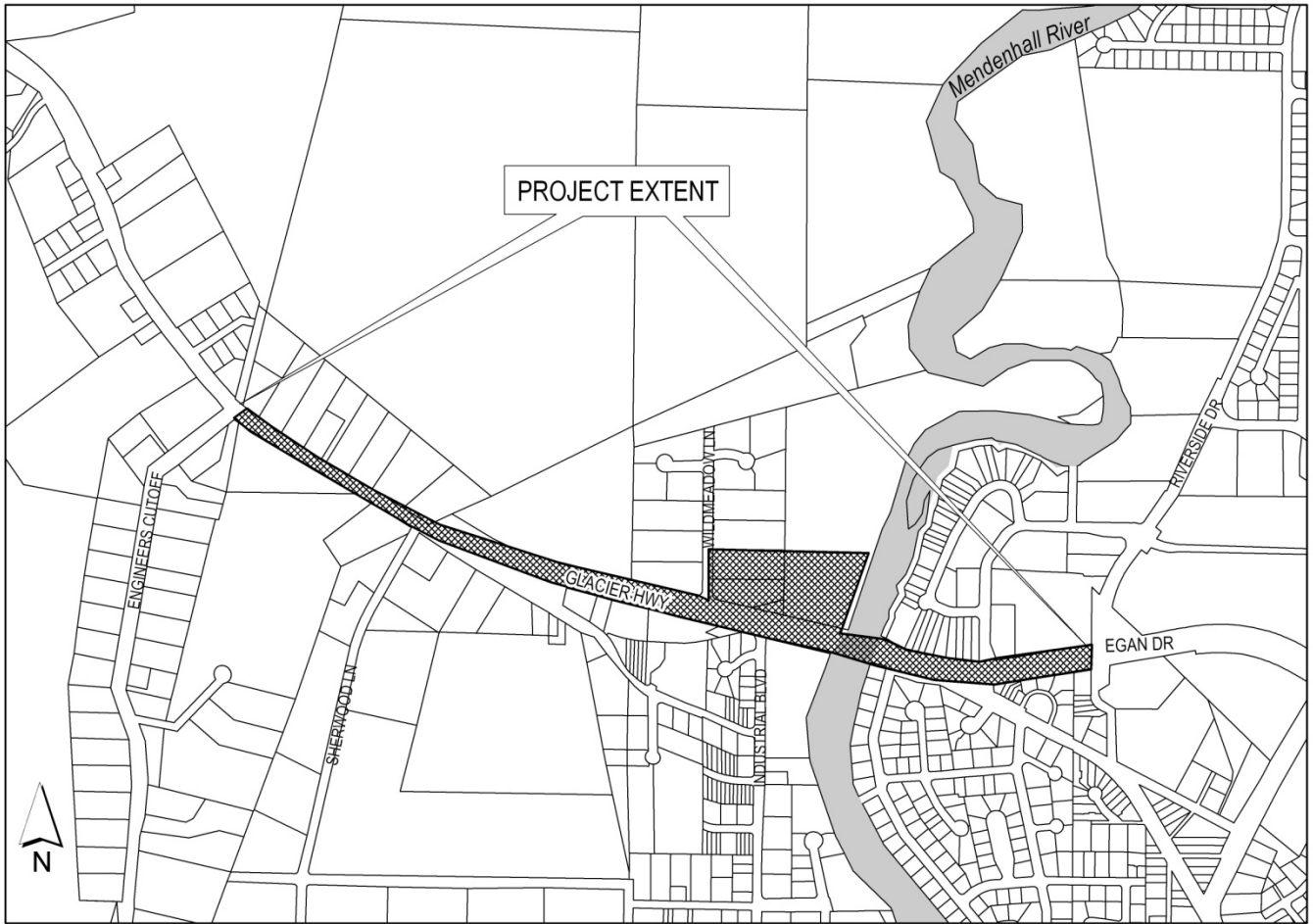


**DATE:** June 20, 2013  
**TO:** Planning Commission  
**FROM:** Ben Lyman, Senior Planner   
Community Development Department  
**FILE NO.:** CSP2013 0011  
**PROPOSAL:** Brotherhood Bridge replacement and related improvements, including revisions to Industrial Blvd. Vintage Blvd., and trailhead parking lot intersections and separated path to Engineer's Cutoff.

**GENERAL INFORMATION**

**Applicant:** State of Alaska DOT & PF  
**Property Owner:** State of Alaska DOT & PF and City and Borough of Juneau  
**Property Address:** N/A, 9990 Glacier Highway  
**Legal Description:** Glacier Highway, Wildmeadow Lane, USS 1042 Tract B, Wildmeadow Park Tracts 10 and 11  
**Parcel Code No.:** 0, 4B1601000010, 4B1701000090, 4B1701000100  
**Site Size:** 1.1 Miles in Length, Width Varies  
**Zoning:** Arterial Roadway  
**Utilities:** Public  
**Access:** Public Right-of-Way  
**Existing Land Use:** Public Right-of-Way and Undeveloped  
**Surrounding Land Use:** North - Commercial on east side of Mendenhall River; Parks and Open Space, Residential, Undeveloped, and Church on west side of Mendenhall River  
South - Residential on east side of Mendenhall River; Lumber Yard, Undeveloped, Offices, Fitness Center, and Industrial on west side of Mendenhall River

**VICINITY MAP**



### **ATTACHMENTS**

- Attachment A - Application materials including selected project drawings
- Attachment B - Preliminary Plan - Parking Lot Access
- Attachment C - May 30, 2013 emails between John Kern, Capital Transit Superintendent, and Ben Lyman, Senior Planner
- Attachment D - June 6, 2013 Historic Resources Advisory Committee letter to Jane Gendron, DOT&PF Environmental Manager

CBJ 49.15.580 - State project review. *The commission shall review proposed Alaska State Capital Improvement Projects for consistency with this title pursuant to AS 35.30.010, and may impose conditions on and modifications to such projects.*

### **PROJECT DESCRIPTION**

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) has applied for local consistency review pursuant to CBJ 49.15.580 and AS 35.30.010 for a proposed project described in the DOT&PF Needs List as:

*Replace Brotherhood Bridge (0737). Reconstruct approach roadway as required to tie into new bridge alignment and lane configuration, including intersection improvements with Industrial Blvd. Construct new multi-use path along the north side of Glacier Highway/Egan Drive from Riverside Drive to the west side of the entrance to Engineers Cut-Off. Reconstruct existing equestrian path between Industrial Blvd. and Engineers Cut-Off. The section of separated, multi-use pathway between Engineers Cut-Off and UAS will be completed as part of Glacier Highway Brotherhood Bridge and Separated Multi-Use Path to UAS, Stage II (Need ID 26488, Project No. 69500).*

The proposed project will require Right-of-Way (ROW) acquisition along the north side of Glacier Highway on the east side of the Mendenhall River. A combined Preliminary and Final Plat major subdivision, SMP2013 0001 and SMF2013 0002, accompanies this consistency review. The DOT&PF also proposes to obtain a public access easement overlaying the separated path on the north side of Glacier Highway between Riverside Drive and Vintage Boulevard from the owners of that property (currently occupied by Safeway). Additionally, a small portion of the southwest corner of the property occupied by Safeway may need to be dedicated as ROW and purchased by the DOT&PF. Although not applied for to date, any subdivision that might be required to accomplish this ROW dedication and purchase or easement acquisition would be a minor subdivision reviewed by CDD staff and approved by the CDD Director. The potential subdivision, dedication, and purchase of this small piece of property, if required, is included in this consistency review. Staff considers this potentially-required minor subdivision a routine matter that will not be discussed further in this memorandum.

### **EXECUTIVE SUMMARY**

The proposed project to reconstruct the Brotherhood Bridge over Mendenhall River will replace an aging structure that is past its functional and design life. This important project is intended to dramatically improve vehicular, bicycle, pedestrian, and equestrian safety in the project area. Upon review, however, City and Borough of Juneau (CBJ) staff from a number of departments, including the Juneau Police Department (JPD), Public Works Department (Capital Transit), Parks and Recreation Department, Administration (Lands and Resources Division), and the Community Development Department (CDD), found that the proposed design of the intersection of Industrial Boulevard and Glacier Highway is not consistent with the *Juneau Non-Motorized Transportation Plan* (NMTP), adopted as part of the *Comprehensive Plan* at CBJ 49.05.200(b)(1)(H).

The design treatments called for in the NMTP are, however, either out of scope of this project (a traffic signal) or do not meet the required warrants for installation at this intersection. It is furthermore the belief of all CBJ agency staff consulted on the matter that the applicant's intended safe route for pedestrian crossings of Glacier Highway will not be utilized, and that the design of the intersection will result in unsafe and illegal pedestrian crossings of Glacier Highway at-grade.

CBJ staff acknowledge that this is a discrete project that will improve safety in the project corridor for the majority of users; however, the phase of the corridor improvements that would address this intersection is not currently scheduled for funding, and due to the uncertain, and likely protracted, timeline associated with its funding and construction, CBJ staff recommends that this project, State Needs List ID No. 27701, be nominated to the Statewide Transportation Improvement Program and funded for construction as soon as practical.

CBJ staff further recommend that other conditions be placed on the finding of local consistency, pursuant to CBJ 49.15.580 and AS 35.30.010.

### **BACKGROUND**

Although it is not a criterion for local consistency review, CBJ staff found, during review of the proposed project, that local interpretation of the *Alaska Statewide Transportation Plan* (ASTP) is contrary to the design and resulting impacts to pedestrian safety for reasonably expected travel routes across Glacier Highway at or near Industrial Boulevard. Statements and policies that CBJ staff find particularly relevant to the project are included for reference:

*Let's Get Moving 2030 Vision Statement:*

*...In the state's urban centers, the vision is for a system that is multimodal, operates efficiently, and accommodates growth...*

*...At the state level, our vision is that we continue to have a robust open planning process through which regional and community plans are developed for the future improvement*

*of the system. We will provide our governmental partners and the public with ongoing opportunities for input to ADOT&PF decision-making and provide communication of progress along the way.*

*Policy 1: Develop the multimodal transportation system to provide safe, cost-effective, and energy-efficient accessibility and mobility for people and freight.*

*Policy 8: Preserve and operate Alaska's multimodal transportation system to provide efficient reliable access to local, national, and international markets.*

- We will focus on preserving and modernizing the existing system while recognizing that system development is also necessary in a state with an incomplete transportation system.*
- We will maintain and operate the system to provide acceptable reliability and performance.*

*Policy 9: Increase the safety of the transportation system for users of all modes.*

*Policy 12: Support energy conservation, specifically in our consumption of fossil fuels, as a matter of national security and to address climate change.*

- We will address strategies for energy conservation in regional plans, metropolitan plans, and community plans.*
- We will advocate for transit, ride sharing, trip reduction, non-motorized transportation, and the use of alternative fuels.*
- We will continue the State's role in establishing and supporting coordinated community transit systems*
- We will coordinate with and support local land use planning to ensure livable communities.*

Dedicated and officially opened to the public on October 18, 1965, Alaska Department of Highways, Dedication of Brotherhood Bridge; the existing Brotherhood Bridge is the fourth bridge crossing the Mendenhall River in this location, and is constructed of “a reinforced concrete slab...supported by welded steel plate girders...supported in turn on reinforced concrete piers and abutments, founded upon concrete-filled steel shell piles...The roadway width is 30 feet, curb-to-curb. Two sidewalks, each 5 feet wide, are provided.” (dedication pamphlet)

Intersections close to either end of the bridge (Vintage Boulevard to the east and Industrial Boulevard to the west) do not currently meet geometric design standards set by the American Association of State Highway and Transportation Officials (AASHTO). In order to provide adequate acceleration and turning lane lengths for these intersections, the DOT&PF proposes to widen the bridge substantially. Additional width is required to provide the proposed eight-foot-wide bicycle lanes on both sides of the bridge, a single six-foot-wide sidewalk on the south side of the bridge, and a 14-foot-wide separated multi-use path on the north side of the bridge, resulting in a 99-foot six-inch-wide bridge. (See Attachment A, Sheet B-2)

Changes in roadway geometry to match the new bridge width require additional ROW on the

east side of the bridge; this ROW acquisition is considered concurrently with this consistency review as a combined Preliminary and Final Plat of a Major Subdivision (SMP2013 0001 and SMF2013 0002).

On the west side of the bridge, the intersection of Industrial Boulevard with Glacier Highway will be revised as part of this project. Industrial Boulevard is directly across Glacier Highway from the parking lot entrance for the Kaxdigoowu Heen Dei Trail. This parking lot is also used as a scenic photo location for bus tours and is a pick-up point for river-rafting tours. The proximity of this intersection to Wildmeadow Lane creates potentially dangerous turning conflicts; DOT&PF proposes to abandon the existing driveway access to the parking lot and to construct a new driveway to the parking lot from Wildmeadow Lane in order to reduce these potential conflicts. The proposed new driveway crosses City and Borough of Juneau property; Lands and Resources Manager, Greg Chaney, has stated that the CBJ will likely grant a temporary construction easement to DOT&PF for the new driveway. Mr. Chaney has also stated that the CBJ and DOT&PF are discussing the possibility of transferring ownership of the parking lot to the CBJ, as Parks and Recreation Department staff already maintain the parking lot and trail. If CBJ ownership of this property is proposed at a future date, a consistency review under CBJ 49.10.170(c) *City and borough land acquisitions, disposals and projects* will be required.

The existing narrow, separated dirt track along the north side of the road will be widened and paved for the length of the project, from the Riverside Drive intersection in the east to the Engineer's Cutoff intersection in the west.

No protected or marked pedestrian crossings of Glacier Highway exist within the project area currently, and no at-grade crossings are proposed as part of this project. The proposed project does, however, include two paved underpasses of Glacier Highway; one on either side of the Mendenhall River and passing under the bridge. These paths will be accessed by separated paths that will connect to existing paths or routes on the north and south sides of the road on both sides of the river.

Glacier Highway experiences average daily traffic of between 11,865 and 13,682 within the project corridor.

According to data collected by the Juneau Police Department, there were three collisions in the project area between motor vehicles and bicycles or pedestrians in the 1999-2011 period. Two of these were bicyclists injured by motor vehicles on the Brotherhood Bridge (2001 and 2003); the third was a bicycle/motor vehicle collision with an injury to the bicyclist which occurred at the intersection of Riverside Drive and Glacier Highway (2008).

In the portion of the project between Riverside Drive and Wildmeadow Lane, street lighting will be installed to provide uniform light levels as part of this project.

## **ANALYSIS**

The purpose of the proposed project is to replace the existing Brotherhood Bridge with a new bridge capable of accommodating current and projected vehicular traffic volumes and non-motorized transportation modes. In order to accomplish this bridge replacement, changes to intersection geometry, deceleration, and acceleration lanes will also be required. Vehicular turning movements and through-traffic will be improved by reducing the number of access points onto Glacier Highway. Additionally, a new paved multi-use path will be constructed on the north side of Glacier Highway east of the Mendenhall River, and paved separated paths under Glacier Highway at the Mendenhall River will provide safe non-motorized crossing routes across the Glacier Highway corridor.

### **Crosswalks**

Although legal but “unmarked crosswalks” exist at all intersections in the project area, state and local law both include a provision that eliminates the legality of crossing at intersections “where a pedestrian tunnel...has been provided and which is accessible at road level at or near the point of crossing.”

*CBJ 72.02.160 - Crossing at other than crosswalk.*

- (a) A pedestrian crossing a roadway at a point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles upon the roadway.
- (b) No pedestrian may cross a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided and which is accessible at road level at or near the point of crossing, unless a marked crosswalk is also provided at that point. If a pedestrian overpass or tunnel is not accessible and if no marked crosswalk is provided, a pedestrian crossing the roadway must yield the right-of-way to all vehicles on the roadway which are so close as to constitute a hazard.

13 AAC 02.160. *Crossing at other than crosswalks* is substantially identical to local ordinance.

When asked about the applicability of the laws above to the intersection of Industrial Boulevard and Glacier Highway, DOT&PF staff indicated that they “do not want to encourage” pedestrian crossings at this intersection, and that the intent is that pedestrians will use the underpass. DOT&PF Project Manager, Gregory Lockwood, stated that some pedestrians will choose to cross Glacier Highway mid-block or otherwise outside a crosswalk, but that medians or pedestrian refuges would not be provided because these would encourage at-grade crossings.

### **Transit**

Comments on the proposed project were solicited from City and Borough of Juneau Departments and Enterprise Funds, and no concerns with the project were noted initially except by the

Superintendent of Capital Transit, John Kern. Mr. Kern stated that “I suggest that the stops remain at or near the current location with some provision for pedestrian crossing. [DOT&PF’s] idea that pedestrians will use the passage under the bridge is unrealistic.” (Attachment C)

Although exact distances were not provided, measurements off the submitted plans allow comparison of existing and proposed travel distances from the northbound bus stop as:

- Existing northbound bus stop to south side of road (directly across street): 72 feet
- Proposed northbound bus stop to same point on south side of road via sidewalk/shoulder/straight across road: 504 feet
- Proposed northbound bus stop to same point on south side of road via underpass: 1,152 feet

Even in good weather, these are substantial increases to travel distance, and effectively reduce the walkshed from the northbound bus stop from a ¼ mile radius to only those properties at the north end of Industrial Boulevard.

Capital Transit currently offers a modified routing to safely deliver northbound passengers who would otherwise use the stop on the north side of Glacier Highway to access this area. Riders who are not comfortable crossing Glacier Highway (currently a distance of approximately 70 feet) may ride north to Auke Bay, where they can cross the Mendenhall Loop Road and wait for a special stop (other than the stops described here, the Express only stops at UAS, the Nugget Mall, the Federal Building, and on Willoughby Avenue) on the southbound Express route to transfer to that bus and travel south to another special stop on the Express route – the stop between Willow Park and Industrial Boulevard – a detour of approximately four miles, one bus transfer, 12 minutes of waiting to transfer, and 10 minutes of driving (22 minutes total).

### **Effects on Pedestrian Safety Crossing Glacier Highway**

The combined effects of widening Glacier Highway, moving the northbound bus stop away from most destinations of transit riders (jobs on Industrial Boulevard and services at Juneau Job Service/Public Assistance), and eliminating the legal right for pedestrians to cross at Industrial Boulevard by providing an underpass result in a situation that Community Development Department staff believes will be a detriment to public safety, as the added distance required to use the underpass will result in its being infrequently used. With both Capital Transit and Community Development Department staff questioning this design, the Juneau Police Department was contacted to discuss this intersection. On June 10, 2013, Police Chief Bryce Johnson, Captain Ed Mercer, Lieutenant David Campbell (Juneau Police Department), Parks and Landscape Superintendent George Schaaf (Parks and Recreation), Transit Superintendent John Kern (Capital Transit), Planner I Christine McNalley, and Senior Planner Ben Lyman (Community Development Department) met at the site to discuss the proposed changes to this intersection and their effect on public safety.

After discussing the existing dynamics of the intersection, changes proposed by DOT&PF,



adopted plans (especially the *Non-Motorized Transportation Plan*, discussed below), and reasonably foreseeable use of the intersection by pedestrians, all CBJ staff present agreed that the proposed changes would result in a more dangerous intersection than what presently exists, in terms of at-grade pedestrian crossings of Glacier Highway.

DOT&PF staff responded to this concern with an invitation to join them at the site on June 18, 2013. In addition to those CBJ staff who met on June 10, CBJ staff in attendance included Lands and Resources Manager Greg Chaney and Community Development Director Hal Hart; Ed Mercer, John Kern, and Christine McNalley were not in attendance at this meeting. Staff of the various state agencies operating at the Willow Park building, including Department of Health and Social Services Division of Public Assistance (DPA) Heating Assistance Manager Debi James, Center for Community Case Manager John Hill, Department of Labor (DOL) Employment Security Specialist Zeno Cole, DPA Manager Jack Eddy, and DOL Division of Vocational Rehabilitation Counselor II David Belton (collectively referred to hereafter as “Willow Park staff”) joined CBJ and DOT&PF staff at the site. DOT&PF was represented by Southeast Region Director/Assistant Commissioner Al Clough, Engineering Assistant III Fred Thorsteinson, Technical Engineer I David Epstein, Engineer/Architect III Gregory Lockwood, Engineering Assistant III Janelle White, and others.

DOT&PF staff stated that their primary motive in all of their projects is safety, and that they were concerned about CBJ staff’s findings that the Industrial Boulevard/Glacier Highway intersection would be made less safe with the proposed project. DOT&PF staff further explained that the purpose of the project is to replace the Brotherhood Bridge, and that reconstruction of the Industrial Boulevard intersection with Glacier Highway is a separate project identified in the DOT&PF Needs List (“Reconstruct Egan Drive and Industrial Blvd and Rehabilitate road surface to Fritz Cove. Total project goes from approximately milepoint 9.4 to 11 for a total length of 1.6 miles. Include realignment, sub-base work, drainage improvements, guardrail, and lighting as necessary.” Needs List ID No. 27701). This project to realign Industrial Boulevard’s intersection with Glacier Highway is not programmed for funding at this time.

The Willow Park staff expressed concern regarding the safety of their clients, many of whom use Capital Transit to access the services at Willow Park, and noted that many of their clients are “by definition” people who experience disabilities, including mobility impairments and mental or other developmental disabilities. Willow Park staff noted that these clients already experience difficulty reaching Willow Park from the north side of Glacier Highway, especially during inclement weather or when snow and ice further restrict access, and that a wider roadway with additional vehicular lanes would pose a substantial barrier to access for these clients. Willow Park staff noted that several of their clients had been involved in vehicle/pedestrian collisions while crossing Glacier Highway in recent years; although these collisions are not shown in DOT&PF’s accident data for this area, Lt. Campbell noted that many accidents go unreported, and that a lack of data on such accidents does not mean that they do not happen. Willow Park staff further indicated that they did not believe that the underpass would be utilized by most of their clients, and that clients with cognitive difficulties would be very unlikely to modify their travel

behavior to walk away from their destination in order to use the underpass; instead, these clients are anticipated to be especially prone to continuing existing travel patterns and to cross Glacier Highway at grade, with or without amenities to improve the safety of that crossing.

Although realigning Industrial Boulevard at Glacier Highway is out of scope of the Brotherhood Bridge replacement project, which is the subject of this consistency review, the subject project is described by DOT&PF as “*including intersection improvements with Industrial Blvd.*” That CBJ and Willow Park staff are in unanimous agreement that the proposed revisions to this intersection will make it less safe for pedestrians to cross indicates that this portion of the project’s scope has not been adequately fulfilled in the proposed design.

### **CONFORMITY WITH ADOPTED PLANS**

The *Comprehensive Plan of the City and Borough of Juneau* (2008) contains several Implementing Actions (IAs) and one Development Guideline (DG) that are directly applicable to the proposed project:

8.2.DG1        Require sidewalks and bicycle paths or lanes along newly constructed arterial and collector streets where appropriate, and provide or work with DOT to provide such amenities along existing roads to provide safe and efficient access and recreation and to reduce pedestrian/automobile conflicts.

8.2.IA1        Complete and/or upgrade a continuous separated bicycle/pedestrian pathway between the Mendenhall Valley and downtown Juneau by connecting those portions now existing.

8.2.IA2        Work with the Alaska Department of Transportation/Public Facilities (DOT) to construct sidewalks and/or separated paths, or where these are not practical, a wide shoulder of at least 36” along roads that lack such improvements, with a priority given to those corridors which have Average Annual Daily Traffic (AADT) of 4000 vehicles or more. According to DOT 2005 data, these corridors are:

1.        Glacier Highway – Vintage Boulevard to Fritz Cove Road – 11,000 AADT...

8.2.IA3        Implement the pedestrian and non-motorized improvements called for in the Area Wide Transportation Plan as funding becomes available...

8.3.IA11        Require sidewalks and bicycle paths or lanes along newly constructed arterial and collector streets where appropriate, and provide or work with DOT to provide such amenities along existing roads to provide safe and efficient access and recreation and to reduce pedestrian/automobile conflicts.

8.3.IA13 Implement the subarea improvements for the Mendenhall Valley and Auke Bay called for in the *Area Wide Transportation Plan* as funding becomes available...

The project area, an arterial road, has average daily traffic counts of between 11,865 and 13,682, and neither sidewalks nor separated paths are currently provided along most of the project area, the proposed project is in conformance with these IAs. See discussion below regarding conformance with subarea improvements called for in the *Area Wide Transportation Plan*.

The project area is within both Subarea 3 and Subarea 4 of the *Comprehensive Plan*; several Guidelines and Considerations for these subareas apply to the project:

Subarea 3

13. The *Parks and Recreation Comprehensive Plan*, Chapter 8, recommends a number of parks, trail, community garden and stream corridor improvements for this subarea. Those recommendations include: ...(n) review connection routes with DOT[&PF] at Brotherhood Bridge...

19. Identify historic and cultural resources within the subarea. Projects that may impact historic resources identified within this subarea are to be reviewed by the Historic Resources Advisory Committee (HRAC) prior to issuance of a permit...The demolition or removal of historic resources should be avoided and should only occur when no other option for its preservation or relocation to a suitable site exists.

20. Work with DOT[&PF] to provide sidewalks, bicycle paths, and/or trails separated from the road travelway along existing and newly-constructed arterial and collector roadways to provide safe and efficient access and to reduce pedestrian and bicycle/motor vehicle conflicts.

Subarea 4

9. Consider the transportation improvements for this subarea discussed in Chapter 8 of this Plan and provide for pedestrian and bicycle access to schools, parks and shopping areas...

13. [Identical language to Subarea 3, Guideline and Consideration #19, above]

The CBJ Parks and Recreation Department has been working with DOT&PF to improve connections for all travel modes at the Brotherhood Bridge and throughout the project. The existing bridge is indisputably an historic resource and the HRAC met on Wednesday, June 5, 2013 to discuss the project. The HRAC letter to Jane Gendron, DOT&PF Environmental Manager, regarding this project is included as Attachment D.

The *Area Wide Transportation Plan* (2001) contains two priority solutions that relate to the proposed project:

ID	Solution	Description	Timeframe
48	Egan Drive Multi-Use Path Improvement	Widen and realign the multi-use path along Egan Expressway and correct other deficiencies including pavement deterioration. Upgrades include...increasing the path width from 8 to 10 feet...	Near-term
49	Glacier Highway North Improvement	Reconstruct Glacier Highway North, from Duck Creek to Egan Drive, and construct sidewalks, bicycle lanes and bus pullouts/shelters. Coordinate pedestrian crossing at Egan Drive with Brotherhood Bridge improvement project...	Near-term

Priority solution #48 would be accomplished by the proposed project, which will construct or widen the separated path to 10' or more throughout the project area.

Although priority solution #49 appears to refer to a portion of Glacier Highway that is southeast of the project area (“from Duck Creek to Egan Drive”), the reference to a “pedestrian crossing at Egan Drive with Brotherhood Bridge improvement project” indicates a relationship to this project. Two new underpasses beneath Egan Drive/Glacier Highway would be constructed as part of the proposed project; no other pedestrian crossing improvements are proposed as part of this project. Due to the lack of specificity in the description of this priority improvement, staff cannot determine if the proposed project would complete any portion of the improvement called for in the *Area Wide Transportation Plan*.

The *Juneau Non-Motorized Transportation Plan* (2009) lists priority improvements No. 3, 6, 8, 14, 24, 26, 29, and 32 in the project area. The intersection of Riverside Drive and Egan Drive (#29) is the eastern limit of the project but is not within the project limits, so that intersection is unaffected by the proposed project. Similarly, the intersection of Engineer’s Cutoff and Glacier Highway (#14) is the western limit of the project, but no changes to the intersection are proposed as part of this project; only the paved, separated path on the north side of Glacier Highway continues to this terminus. The remaining priority improvements are listed below, with priority rankings.

Improve- ment No.	Description	Priority	Included in Project?
3	<b>Glacier Highway (Back Loop Road to Brotherhood Bridge)</b> - Shoulder is already paved - Additional pavement markings and signs to show that it is a bike lane - Intersection striping according to AASHTO standards - Regular maintenance required - Signed as part of cross-Juneau bikeway - Street lights are required	High	Partial, Conditions Required
6	<b>Glacier Highway and Industrial Boulevard</b> - Traffic light with signal for pedestrians - <u>Second option is a pedestrian activated light with signs and continental crosswalk markings</u> (emphasis added)	High	No
8	<b>Glacier Highway (Back Loop Road to Brotherhood Bridge)</b> - Separated path at least 10 feet wide required on north side of the road	High	Yes
24	<b>Brotherhood Bridge</b> - Widen bridge to allow bike lanes at least 6 feet wide on both sides - Needs to be year round maintenance priority - Informal non-motorized underpass formalized, widened and made safer	High	Yes
26	<b>Egan Drive (Brotherhood Bridge to Mendenhall Loop Road)</b> - Bike lanes should be improved in both directions - Clear access and signage to connect bike lanes with separated paths	High	Partial, Conditions Required
32	<b>Glacier Highway and Vintage Boulevard</b> - Intersection provides a pedestrian connection between Vintage Commercial area and residential area south of Egan and there are currently no signals - Pedestrian activated signal or Pedestrian underpass	High	Yes

The proposed project would accomplish nearly all of the priority improvements listed in the *Non-Motorized Transportation Plan* for the project area; however, several priority improvements are not included in the proposed project at this time.

1. The intersection of Industrial Boulevard and Glacier Highway (Priority Improvement No. 6) would not be provided with any pedestrian crossing improvements as part of this project. Instead, the Glacier Highway roadway will be widened, increasing the distance that pedestrians must cross. DOT&PF Project Manager Gregory Lockwood has stated that no median or pedestrian refuge is proposed to break up this crossing into directional segments (where the crossing pedestrian only has to worry about oncoming traffic from one direction, then waits at the median for an opportunity to cross the lanes going in the opposite direction) because DOT&PF does not want to encourage people to cross at this location. Instead, pedestrians are intended to use the improved underpass to cross Glacier Highway. This situation is discussed further below.
2. No signage plan has been submitted for the project, so staff cannot determine if Priority Improvements No. 3 and 6 are accomplished with this project. Staff has requested a signage plan from the applicant; if no signage plan is submitted prior to Planning Commission action on this consistency review, staff recommends that a condition requiring submittal of a signage plan for review by staff be placed on the finding of concurrence with local plans. Said signage plan would be reviewed by staff for consistency with the *Manual on Uniform Traffic Control Devices* (MUTCD) and the *Non-Motorized Transportation Plan*.

The *Transit Development Plan* (2008) contains a list of transit stops on DOT&PF Rights-of-Way (p. 146), with each stop scored on seven attributes by DOT&PF. The scored attributes include: the presence of a pullout; the pullout taper, width, and length; whether a waiting area is provided, and lighting. Based on those scores, recommendations for revisions to the pullout and to lighting at the pullout are provided. The two Capital Transit stops that would be affected by the proposed project are listed as stops 97 (south) and 98 (north). Stop #97 is recommended by DOT&PF for “Build new pullout” and “Improve lighting.” Stop #98 is one of only 14 pullouts scored by DOT&PF for which there is no recommended change; lighting is recommended to be improved at this stop. These two stops, jointly listed as Stop #182 in the 2013 Nelson\Nygaard boarding and alighting survey, had 32 boardings (“ons”) and 38 alightings (“offs”) on a weekday and five boardings and nine alightings on a Saturday.

In the proposed project, Stop #97 would be moved approximately 40 feet to the east from its present location, and Stop #98 would be moved approximately 400 feet to the east, towards the Mendenhall River. A new pullout and shelter would be constructed (See Attachment A, Sheets F5 (proposed) and F6 (existing)). CBJ staff suggested that Stop #98 could be relocated to the west side of Wildmeadow Lane if it needed to be relocated, and that since the width of Glacier Highway was not being increased in this location, the pedestrian crossing would be essentially

unchanged (i.e. mid-block, unsignalized, and of one travel lane in each direction and one center turn lane – three lanes total). Although DOT&PF staff stated that this would indeed be a shorter pedestrian crossing location, limited ROW width and environmental constraints precluded the construction of a bus turnout and shelter in this location.

During the June 18, 2013 site visit with CBJ and DOT&PF staff, DOT&PF stated that if the public safety concern with the intersection resulted from the need for transit riders to cross Glacier Highway to and from Stop #98, the best way to solve the problem would be to re-route Capital Transit buses off of Glacier Highway and onto Industrial Boulevard and Bentwood Place, where no pedestrian crossing of Glacier Highway would be required. For northbound buses, this route change would add two left turns, one from Glacier Highway onto Industrial Boulevard and one from Bentwood Place onto Glacier Highway. Capital Transit Superintendent John Kern estimates that this realignment would add approximately eight to fifteen minutes to the northbound route's travel time, causing it to miss timed transfers for the remainder of its route. Essentially, this re-routing would require a complete restructuring of the entire Capital Transit system; the City and Borough of Juneau is currently conducting a *Comprehensive Operations Analysis* (COA) of the Capital Transit System through its contractor, Nelson\Nygaard Consulting Associates. A *Transit Development Plan* will be developed by Nelson\Nygaard following the completion of the COA, and route realignments such as that proposed by DOT&PF will be considered as part of that work, however, redesigning the entire Capital Transit system is similarly out-of-scope of the current project to installing a traffic signal at Industrial Boulevard, and is not a reasonable response to an intersection design deficiency.

During the June 18 site visit, DOT&PF, Willow Park, and CBJ staff discussed various possible design treatments that could improve the safety of the at grade crossing of Glacier Highway at or near Industrial Boulevard; CBJ staff suggested that center medians could provide refuge areas for pedestrians crossing at grade, if a pedestrian-activated crosswalk signal could not be installed. DOT&PF staff responded that because medians would provide pedestrian refuges, they would make at-grade crossings more attractive to pedestrians, and that medians would therefore not be provided. Additionally, due to attributes such as the high Average Daily Traffic, Functional Classification, and speed limit (50 mph) of Glacier Highway at the Industrial Boulevard intersection, no pedestrian-activated signal would be appropriate or safe for use in this location. Willow Park staff suggested dropping the speed limit in this vicinity as it is lowered in Auke Bay (35 mph), to which DOT&PF staff responded that the speed limit should be raised in Auke Bay, not lowered in the project area. As stated above, DOT&PF has not been receptive to the idea of including raised medians at this intersection, as this would improve crossing safety and therefore encourage at grade crossing where DOT&PF's project design is intended to direct all pedestrian crossing movements to the underpass along the Mendenhall River. DOT&PF prefers to include signage discouraging at-grade crossings and for wayfinding to the underpass. The concept of including fencing or other pedestrian barriers was also suggested and discussed, but barriers can act to "trap" pedestrians who enter the travelway where such barriers don't exist (i.e. ducking around the end of a fence), and also impact snow removal and other maintenance.

Furthermore, since riders must be able to exit the bus onto the sidewalk, a gap in any barrier would have to exist at the very location where pedestrians are most likely to cross, thus making the barrier largely ineffective.

As discussed above, the *Non-Motorized Transportation Plan* (NMTP) calls specifically for a traffic signal or a pedestrian-activated signal at the Industrial Boulevard intersection with Glacier Highway. The *Manual on Uniform Traffic Control Devices* (MUTCD) states, in regard to traffic signals and pedestrian-activated signals:

*Section 4B.02 Basis of Installation or Removal of Traffic Control Signals*

*Guidance: 01 The selection and use of traffic control signals should be based on an engineering study of roadway, traffic, and other conditions.*

*Support: 02 A careful analysis of traffic operations, pedestrian and bicyclist needs, and other factors at a large number of signalized and unsignalized locations, coupled with engineering judgment, has provided a series of signal warrants, described in Chapter 4C, that define the **minimum** conditions under which installing traffic control signals might be justified. (emphasis added)*

DOT&PF Technical Engineer David Epstein has stated that the intersection of Glacier Highway and Industrial Boulevard does not meet the warrants that define the minimum conditions under which installing pedestrian-activated traffic control signals or a marked crosswalk might be justified; therefore, neither a pedestrian-activated traffic control signal nor a marked crosswalk can be installed at this intersection according to national standards, which are also adopted (with amendments) by the DOT&PF. DOT&PF Chief Engineer's (Roger Healy) Directive regarding Rectangular Rapid Flash Beacons (RRFBs) prohibits their use except in particular circumstances, which do not apply to the Industrial Boulevard intersection with Glacier Highway. Thus, an improvement called for with great specificity in the NMTP cannot be installed in accordance with national or state standards. The other potential improvement called for in the NMTP at this intersection, a traffic control signal, is included in the DOT&PF Needs List as part of project ID No. 27701. Staff recommends that a condition be placed on this consistency review that this project, or at least the portion thereof that would address the Glacier Highway/Industrial Boulevard intersection, be moved onto the Statewide Transportation Improvement Program and scheduled for funding as soon as practical.

## **HABITAT**

Relocating the driveway access to the Brotherhood Bridge parking lot to Wildmeadow Lane from its current direct access onto Glacier Highway will require fill of a wetland unit categorized as Class B in the Juneau Wetland Management Plan. The United States Army Corps of Engineers has permitting authority for this wetland unit, and will require the development to minimize wetland fill. In-water work for the bridge replacement will require permits from and/or review by the United State Army Corps of Engineers, the Alaska Department of Fish and Game, and the United State Fish and Wildlife Service.



## **FINDINGS**

The proposed project is substantially in conformance with locally-adopted plans, with three important exceptions:

1. The applicant has not provided a signing and striping plan for the project, and bicycle route and wayfinding signs are called for in the *Non-Motorized Transportation Plan*. Accordingly, staff recommends that a condition requiring wayfinding signs and appropriate striping be placed on the finding of concurrency.
2. The proposed project would, by widening Glacier Highway, result in a longer, and therefore more exposed pedestrian crossing from the bus stop on the north side of Glacier Highway to destinations on the south side of the highway. The lack of an at-grade pedestrian crosswalk with a signal at this intersection is contrary to priority improvement #6 of the *Non-Motorized Transportation Plan*. The construction of a new pedestrian underpass at Brotherhood Bridge exacerbates this situation instead of alleviating it, as both state and local law essentially eliminate the unmarked crosswalks that normally exist at intersections when an under- or over-pass is available nearby. Accordingly, staff recommends that a condition requiring modification of the design of this intersection be placed on the finding of concurrency. Although the pedestrian-activated signal called for in the NMTP cannot be installed according to national and state standards, DOT&PF can take steps to improve the safety of pedestrians crossing Glacier Highway in this location in two or more ways:
  - a. Include medians to channelize vehicular turning movements and to provide mid-crossing refuge for pedestrians; and,
  - b. Move Needs List ID No. 27701, *Reconstruct Egan Drive and Industrial Blvd and Rehabilitate road surface to Fritz Cove. Total project goes from approximately milepoint 9.4 to 11 for a total length of 1.6 miles. Include realignment, sub-base work, drainage improvements, guardrail, and lighting as necessary*, to the Statewide Transportation Improvement Program and schedule it for funding in the very near-term.
3. The bus stop on the north side of Glacier Highway near Industrial Boulevard (#98) is proposed to be moved towards the Mendenhall River in the proposed project. This relocation will significantly increase the walking distance from the bus stop to Willow Park, a popular destination for transit users. Transit Superintendent John Kern has submitted comments that bus stop #98 should remain at or near its current location, and the *Transit Development Plan* does not call for modification to this stop other than increased lighting. In combination with issue #2, the lack of a legal pedestrian crossing near the proposed bus stop and the long distance required to use the proposed underpass, the proposed relocation of stop #98 results in a dramatically reduced area potentially served by that stop, as well as making at-grade pedestrian crossings to and from that stop more dangerous than they presently are.



### **RECOMMENDATION**

1. Bicycle route and wayfinding signs and striping meeting the requirements of the *Manual on Uniform Traffic Control Devices* (MUTCD), as amended and adopted by DOT&PF, shall be installed as specified in the MUTCD throughout the project area. Final sign placement shall be subject to Community Development Department staff review and approval, consistent with the MUTCD and the *Non-Motorized Transportation Plan*.
2. The applicant shall revise the plans for the Industrial Boulevard intersection with Glacier Highway to provide one or more raised medians. The revised intersection design shall be subject to Community Development Department staff review and approval, consistent with the *Non-Motorized Transportation Plan*.
3. Upon the completion of proposed phased relocation of Industrial Blvd intersection improvements linking it to Wildmeadow Lane, Needs List ID No. 27701, bus stop #98 will be relocated to a location meeting the design specifications for bus stops on state routes adopted at that time adjacent to the Wildmeadow Lane intersection in order to encourage utilization of the signalized intersection by pedestrians.
4. The applicant shall move Needs List ID No. 27701, *Reconstruct Egan Drive and Industrial Blvd and Rehabilitate road surface to Fritz Cove. Total project goes from approximately milepoint 9.4 to 11 for a total length of 1.6 miles. Include realignment, sub-base work, drainage improvements, guardrail, and lighting as necessary*, or a portion thereof that addresses the intersection of Glacier Highway and Industrial Boulevard, to the Statewide Transportation Improvement Program and schedule it for funding as soon as practical.

If the Planning Commission finds that the proposed project is not consistent with locally adopted plans pursuant to CBJ 49.15.580 and AS 35.30.010, staff recommends that the Right-of-Way acquisitions related to SMP2013 0001 and SMF2013 0002, and any other required acquisition on the eastern side of Mendenhall River and northern side of Glacier Highway be found consistent with locally adopted plans independently of any other portion of the project.

# DEVELOPMENT PERMIT APPLICATION

Project Number <b>CSP 13-011</b>	CITY and BOROUGH of JUNEAU	Date Received: <b>5/6/13</b>
Project Name (City Staff to Assign Name)		

PROJECT / APPLICANT INFORMATION	<b>Project Description</b> Replace Brotherhood Bridge with a new bridge that will accommodate two lanes of traffic in each direction, a multi-use path on the upstream side, and a sidewalk on the downstream side. The multi-use path will begin at Riverside Drive and continue to Engineer's Cutoff.		
	<b>PROPERTY LOCATION</b>		
	Street Address Project Limits are Egan/Glacier HW from Riverside to Engineer's Cutoff		City/Zip
	Legal Description(s) of Parcel(s) (Subdivision, Survey, Block, Tract, Lot)		
	Assessor's Parcel Number(s)		
	<b>LANDOWNER/ LESSEE</b>		
	Property Owner's Name Alaska DOT&PF		Contact Person: Greg Lockwood
	Mailing Address PO Box 112506 Juneau AK 99811-2506		Work Phone: 465-2393
	E-mail Address greg.lockwood@alaska.gov		Home Phone: Fax Number:
			Other Contact Phone Number(s):
<b>LANDOWNER/ LESSEE CONSENT</b> ****Required for Planning Permits, not needed on Building/ Engineering Permits****			
I am (we are) the owner(s) or lessee(s) of the property subject to this application and I (we) consent as follows: A. This application for a land use or activity review for development on my (our) property is made with my complete understanding and permission. B. I (we) grant permission for officials and employees of the City and Borough of Juneau to inspect my property as needed for purposes of this application.			
X	 Landowner/Lessee Signature	<u>5/3/13</u> Date	
X	_____ Landowner/Lessee Signature	_____ Date	
NOTICE: The City and Borough of Juneau staff may need access to the subject property during regular business hours and will attempt to contact the landowner in addition to the formal consent given above. Further, members of the Planning Commission may visit the property before the scheduled public hearing date.			
<b>APPLICANT</b> If the same as OWNER, write "SAME" and sign and date at X below			
Applicant's Name SAME		Contact Person:	
Mailing Address		Work Phone:	
E-mail Address		Home Phone:	
		Fax Number:	
		Other Contact Phone Number(s):	
X	 Applicant's Signature	<u>5/3/13</u> Date of Application	

STAFF APPROVALS	-----OFFICE USE ONLY BELOW THIS LINE-----			
	<input checked="" type="checkbox"/>	<b>Permit Type</b>	***SIGN	Date Received
		Building/Grading Permit		
		City/State Project Review and City Land Action		5/6/13
		Inquiry Case (Fee In Lieu, Letter of ZC, Use Not Listed)		CSP 13-011
		Mining Case (Small, Large, Rural, Extraction, Exploration)		
		Sign Approval (If more than one, fill in all applicable permit #'s)		
		Subdivision (Minor, Major, PUD, St. Vacation, St. Name Change)		
		Use Approval (Allowable, Conditional, Cottage Housing, Mobile Home Parks, Accessory Apartment)		
		Variance Case (De Minimis and all other Variance case types)		
	Wetlands Permits			
	Zone Change Application			
	Other (Describe)			
***Public Notice Sign Form filled out and in the file.				
Comments:			<b>Permit Intake Initials</b>	
_____ _____ _____			_____ _____ _____	

# CITY/STATE PROJECT AND LAND ACTION REVIEW APPLICATION

Project Number	Project Name (15 characters)	Case Number CSP 13-041	Date Received 5/6/13
----------------	------------------------------	---------------------------	-------------------------

**TYPE OF PROJECT REVIEW:**

City Project Review     
  City Land Acquisition /Disposal     
  State Project Review

**DESCRIPTION OF PROJECT**

Replace Brotherhood Bridge with a new bridge that will accommodate two lanes of traffic in each direction, a multi-use path on the upstream side, and a sidewalk on the downstream side. The multi-use path will begin at Riverside Drive and continue to Engineer's Cutoff.

Please attach a cover letter to fully explain the project if there is not adequate space on this form.

**CURRENT USE OF LAND OR BUILDING(S):**

This is a replacement project that will replace the existing bridge to current standards and also improve pedestrian facilities.

**PROPOSED USE OF LAND OR BUILDING(S):**

**PROJECT NUMBERS ASSOCIATED WITH PROPOSAL:**

Is this project associated with any other Land Use Permits?  No  Yes Case No.: \_\_\_\_\_

Capital Improvement Program # (CIP) \_\_\_\_\_

Local Improvement District # (LID) \_\_\_\_\_

State Project # 67987

**ESTIMATED PROJECT COST:**    \$ 19.5 million (STIP Estimate)

For more information <sup>CITY/S</sup> regarding the permitting process and the submittals required for a complete application, please see the reverse side.

If you need any assistance filling out this form, please contact the Permit Center at 586-0770.

**TATE PROJECT FEES**

	Fees	Check No.	Receipt	Date
Application Fees	\$ <u>1600</u>	_____	_____	_____
Total Fee	\$ _____	_____	_____	_____

**NOTE: MUST BE ACCOMPANIED BY DEVELOPMENT PERMIT APPLICATION FORM  
&  
EVEN IF THE PROPOSED PROJECT IS ASSOCIATE WITH OTHER LAND USE PERMITS, THIS  
APPLICATION MUST BE FILLED OUT**

TO BE COMPLETED BY THE APPLICANT

## CITY/STATE PROJECT REVIEW REQUIREMENTS

Each application for a City/State Project is reviewed by the Planning Commission at a public hearing. The permit procedure is intended to provide the Commission the flexibility necessary to make recommendations tailored to individual applications.

**Application:** An application for a City/State Project Review will not be accepted by the Community Development Department until it is determined to be complete. The items needed for a complete application are:

**Forms:** A completed City/State Project Review Application form and Development Permit Application form. The "land owner or lessee consent" signature is mandatory for all landowners on the Development Permit Application form.

**Fees:** No fee required for projects that cost less than \$2.5 million. For projects costing more than this amount, the fee is \$1,600.00. All fees are subject to change.

**Project Description:** A detailed letter or narrative describing the project.

**Plans:** All plans are to be drawn to scale and clearly show the items listed below:

- A. Plat, site plan, floor plan and elevation views of existing and proposed structures and land;
- B. Existing and proposed parking areas, including dimensions of the spaces, aisle width and driveway entrances;
- C. Proposed traffic circulation within the site including access/egress points and traffic control devices;
- D. Existing and proposed lighting (including cut sheets for each type of lighting);
- E. Existing and proposed vegetation with location, area, height and type of plantings; and,
- F. Existing physical features of the site (i.e. drainage, eagle trees, hazard areas, salmon streams, wetlands, etc.)

**Document Format:** All information that is submitted as part of an application shall be submitted in either of the following formats:

- A. Electronic copies may be submitted by CD, DVD or E-mail in the following formats: .doc, .txt, .xls, .bmp, .pdf, .jpg, .gif, .xlm, .rtf or other formats pre-approved by the Community Development Department.
- B. Paper copies may not be larger than 11" X 17" (Unless a larger paper size is preapproved by the Community Development Department).

**Application Review & Hearing Procedure:** Once the application is determined to be complete, the Community Development Department will initiate the review and scheduling of the application. This process includes:

**Review:** As part of the review process the Community Development Department will evaluate the application for consistency with all applicable City & Borough of Juneau codes and adopted plans. Depending on unique characteristics of the permit request the application may be required to be reviewed by other municipal boards and committees. Review comments may require the applicant to provide additional information, clarification, or submit modifications/alterations for the proposed project.

**Hearing:** All City/State Project Review Permit Applications must be reviewed by the Planning Commission. Once an application has been deemed complete and has been reviewed by all applicable parties the Community Development Department will schedule the requested permit for the next appropriate meeting. The Planning Commission will make a recommendation based on staff's analysis and forward it to the Assembly for final approval/denial.

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**INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED**



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

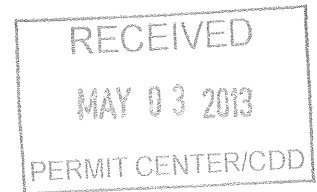
Department of Transportation  
and Public Facilities

SOUTHEAST REGION  
DESIGN & ENGINEERING SERVICES  
Preconstruction

6860 Glacier Highway  
PO Box 112506  
Juneau, Alaska 99811-2506  
Main: 907.465.4444  
Toll free: 877.305.6630  
Fax: 907.465.4414

April 30, 2013

Mr. Hal Hart  
Director of Community Development  
City and Borough of Juneau  
155 South Seward Street  
Juneau, Alaska 99801



RE: Federal Project No. NH-BR-0933(019) - State Project No. 67987 JNU: Glacier Highway Brotherhood Bridge Replacement

Dear Mr. Hart:

We are submitting the enclosed plans for your review and comment. In addition to a general review, please specifically review for compliance in accordance with AS 35.30.020.

Under AS 35.30.020, the Department must comply with local planning and zoning ordinances and other regulations in the same manner and to the same extent as other landowners. If you believe that the Department's construction of this project would result in a violation of planning, zoning, or other regulations generally applicable to landowners, please identify the portions of the project that would be in violation, and the specific planning, zoning, or other regulations that you believe would be violated.

If we have not received comments regarding the project's compliance with planning and zoning ordinances within 90 days after submittal of these plans, the Department will proceed with the project as planned. If you have any questions, I can be reached by phone at: (907) 465-2393, or by e-mail at: [greg.lockwood@alaska.gov](mailto:greg.lockwood@alaska.gov).

Sincerely,

A handwritten signature in cursive that reads "Greg Lockwood".

Greg Lockwood, P.E.  
DOT&PF Project Manager

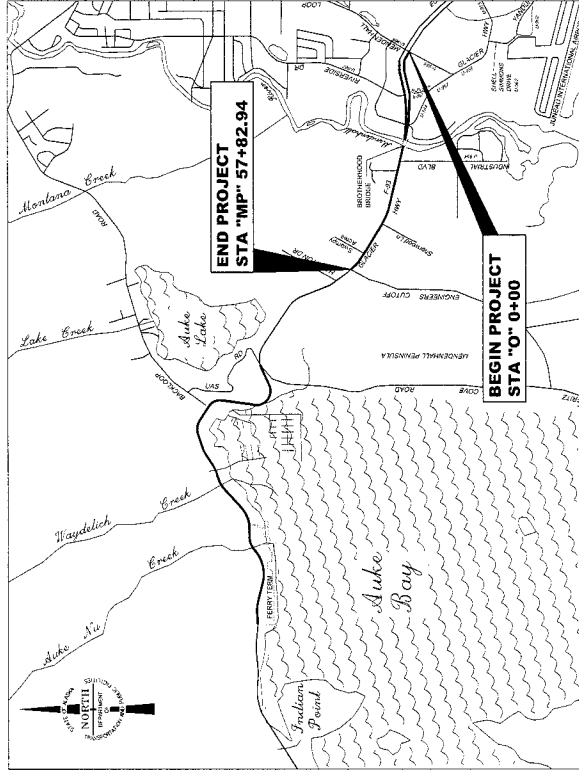
Enc: Preliminary Project Plans

# State of Alaska

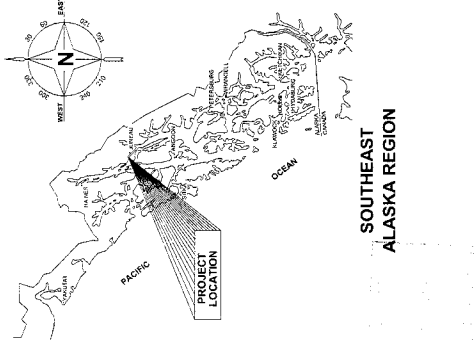
Department of Transportation  
and Public Facilities  
Southeast Region

## JNU: GLACIER HWY BROTHERHOOD BRIDGE REPLACEMENT

PROJECT No. NH-BR-0933(019) ~ 67987



VICINITY MAP



SOUTHEAST  
ALASKA REGION

### DESIGN DESIGNATION RIVERSIDE DRIVE TO ENGINEERS CUTOFF

A.D.T. 2006	=	13,410
A.D.T. 2050	=	20,680
D.H.W. 2050	=	2,500
% T	=	11.5%
V	=	50 M.P.H.
E.A.L.	=	17,200,000

### PROJECT SUMMARY

LENGTH OF PROJECT	=	1.1 MILES
LENGTH OF RESURFACING	=	0.5 MILES
WIDTH OF RESURFACING	=	76 - 90 FT.

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

THE FOLLOWING CITY AND BOROUGH OF JUNEAU  
STANDARD DETAILS APPLY TO THIS PROJECT:

### INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2*	SURVEY CONTROL DIAGRAM
B1-B4	TYPICAL SECTIONS
C1*	ESTIMATE OF QUANTITIES
D1*	SUMMARIES
F1-F21	PLANS
K1-K2*	MISCELLANEOUS DETAILS
N1-18	BRIDGE LAYOUT AND DETAILS
P1-P13*	SIGNING AND STRIPING
P14-P16*	SIGN SUMMARIES
Q1-Q2*	TRAFFIC LOOP DETAILS
S1*	TRAFFIC CONTROL
	*SHEETS AVAILABLE DURING PIH AND PS&E REVIEW

PATH: Q:\BR0933\PLANS\TSHEET\COMPLATION\67987\_AL1\TSHEET.DWG (A1)-TITLE SHEET  
Thursday, April 04, 2013 11:33:48 AM  
PLOT: PSPACE OR INSPACE: 1=1(F)

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION



APPROVED:

REGIONAL PRE-CONSTRUCTION ENGINEER  
CHUCK CORREA, P.E.

DATE

APPROVED:

DIRECTOR, SOUTHEAST REGION  
ALBERT H. CLOUGH, CPG

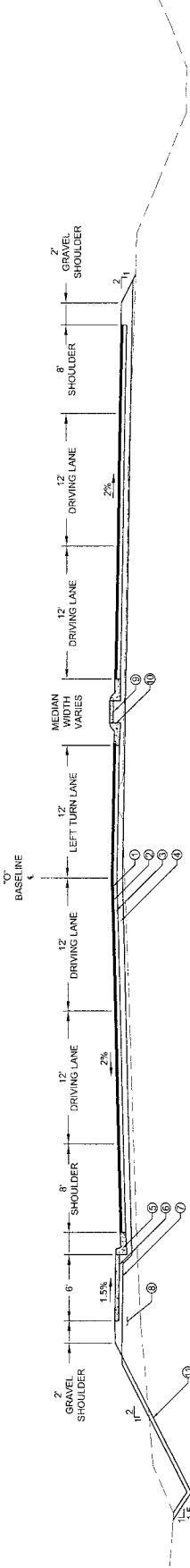
DATE

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD  
CONDITION

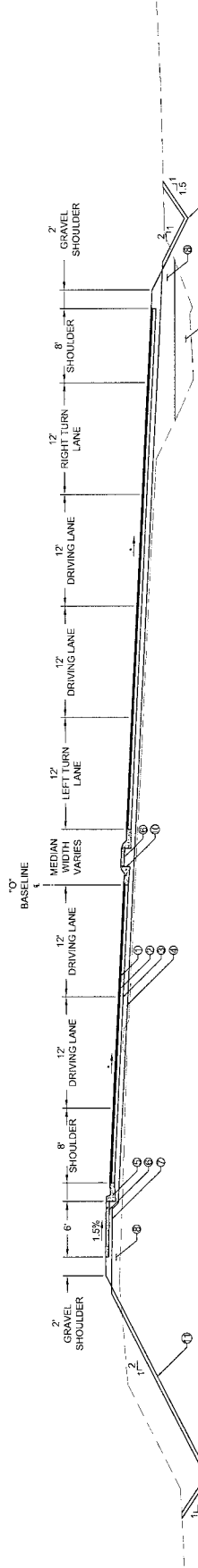
CONSTRUCTION PROJECT MANAGER

DATE

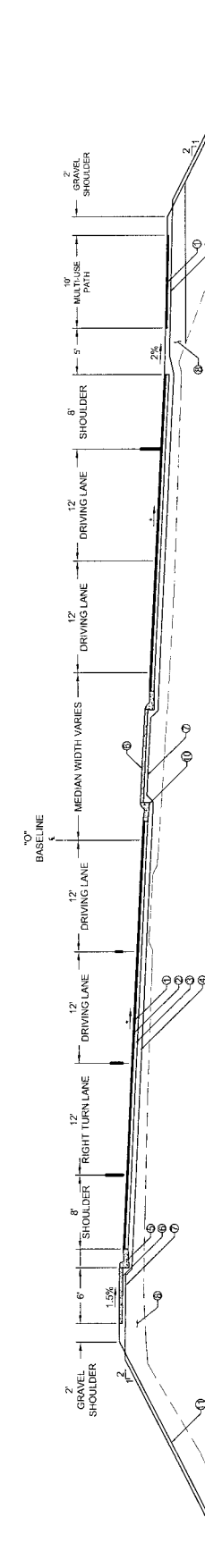
STATE	ALASKA	PROJECT DESIGNATION	NH-BR-0933(019)-67987	YEAR	2013	SHEET NO.	A1	TOTAL SHEETS	XX
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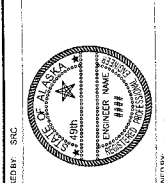
**TYPICAL SECTION**  
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**TYPICAL SECTION**  
 "0" STA 173.98 TO "0" STA 7+28.24



**TYPICAL SECTION**  
 "0" STA 7+28.24 TO "0" STA 12+17.29



**PLAN LEGEND**

CHECKED BY: SMC

DESIGN/NO. VALUE

DRAWN BY: TECH/RF

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY CONSTRUCTION  
 JUNEAU REGION  
 GLACIER HIGHWAY  
 BRIDGE PROJECT #8887

**TYPICAL SECTIONS**

PROJECT DESIGNATION: NH-BR-0933(019)

STATE	ALASKA
YEAR	2013
SHEET NUMBER	B1
TOTAL SHEETS	XX

**NOTES:**

1. SELECT MATERIAL TYPE B
2. ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B
3. SITE-1 TACK COAT
4. ASPHALT TREATED BASE
5. STANDARD CURB AND GUTTER, TYPE A
6. AGGREGATE BASE COURSE, GRADING D-1
7. CONCRETE SIDEWALK
8. AGGREGATE BASE COURSE, GRADING D-1
9. SELECT MATERIAL TYPE C
10. EXPRESSWAY CURB AND GUTTER, TYPE A
11. TOPSOIL AND SEEDING
12. MSE WALL REINFORCEMENT AND BACKFILL
13. GEOTEXTILE
14. SELECT MATERIAL TYPE A
15. MATCH POINT, SEE "0" STA X+XX TO STA X+XX
16. 4" CONCRETE SIDEWALK
17. 4" CONCRETE SIDEWALK
18. SELECT MATERIAL TYPE A

**LEGEND**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PROJECT NUMBER: 124646 PROJECTS: NH-0933(019)  
 COMPILATION: BR-01 BR-04 TYPICALS.DWG  
 DATE: 08/2013  
 DRAWN BY: T. ECKHOFF  
 CHECKED BY: SRC  
 PROJECT DESCRIPTION: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION  
 PROJECT LOCATION: EAST REGION  
 PROJECT NAME: GLACIER HIGHWAY BROCKENBROOK BRIDGE  
 PROJECT NUMBER: NH-BR-0933(019)  
 SHEET NUMBER: B2  
 TOTAL SHEETS: XX

NO.	DATE	DESCRIPTION

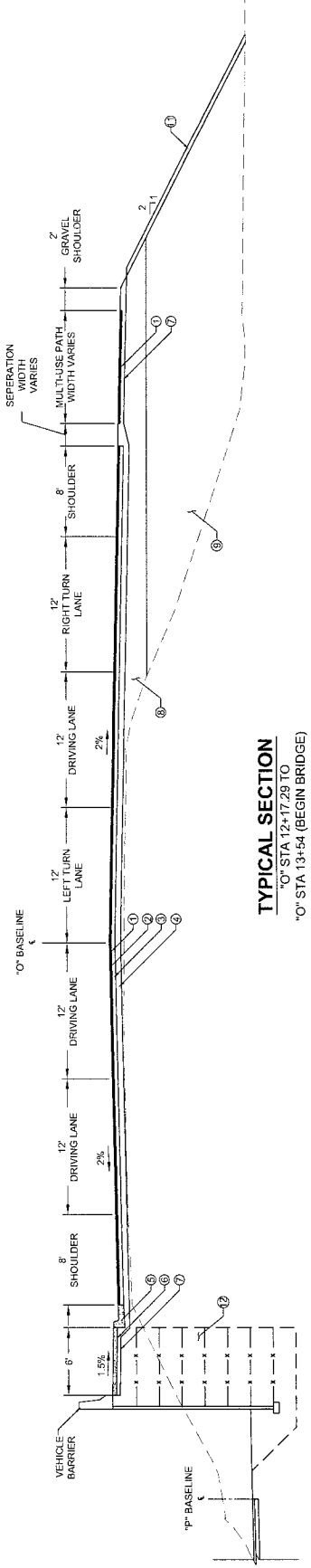
WRITE LABELS (DOT)  
 ACCESSORY NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS

PLAN LEGEND  
 CHECKED BY: SRC  
 DESIGNER: T. ECKHOFF  
 VALUE

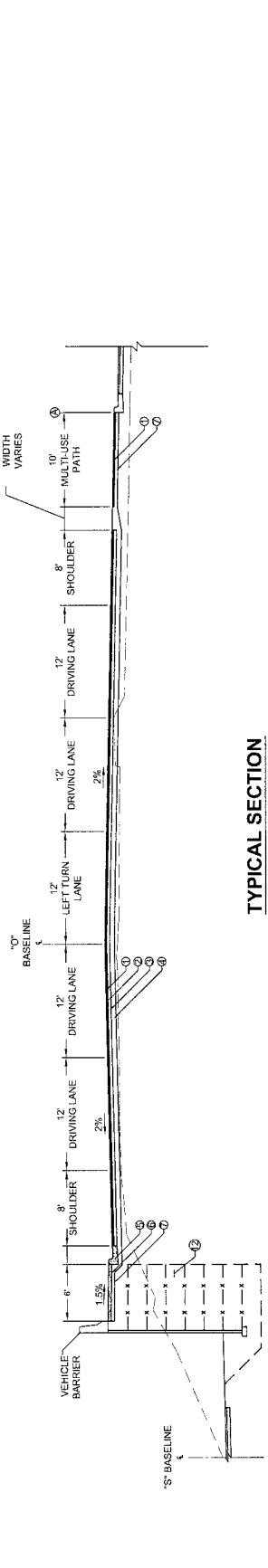


PROJECT DESCRIPTION: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION  
 PROJECT LOCATION: EAST REGION  
 PROJECT NAME: GLACIER HIGHWAY BROCKENBROOK BRIDGE  
 PROJECT NUMBER: NH-BR-0933(019)

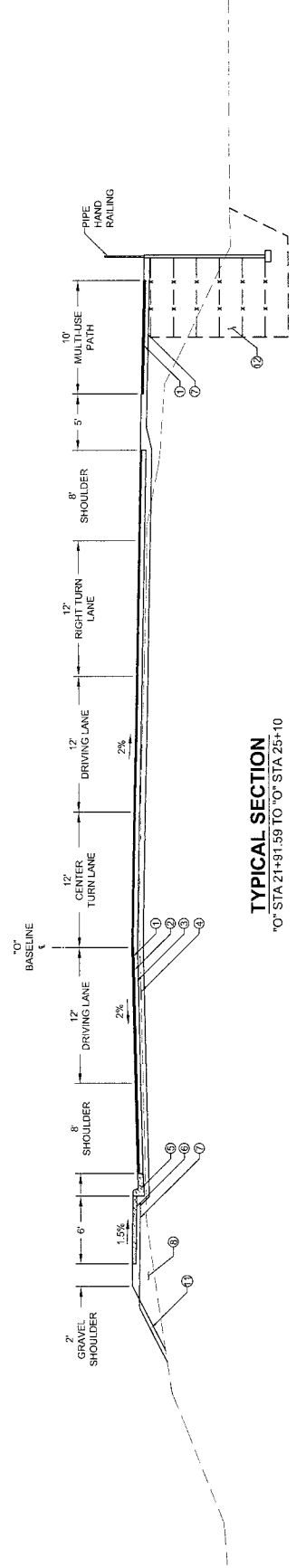
TYPICAL SECTIONS  
 PROJECT DESCRIPTION: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION  
 PROJECT LOCATION: EAST REGION  
 PROJECT NAME: GLACIER HIGHWAY BROCKENBROOK BRIDGE  
 PROJECT NUMBER: NH-BR-0933(019)  
 SHEET NUMBER: B2  
 TOTAL SHEETS: XX



**TYPICAL SECTION**  
 "O" STA 12+17.29 TO  
 "O" STA 13+54 (BEGIN BRIDGE)



**TYPICAL SECTION**  
 "O" STA 17+72 (END BRIDGE)  
 TO "O" STA 21+91.59



**TYPICAL SECTION**  
 "O" STA 21+91.59 TO "O" STA 25+10

**NOTES:**

1.

**LEGEND**

- 1 2" ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B
- 2 STE-1 TACK COAT
- 3 4" ASPHALT TREATED BASE
- 4 6" AGGREGATE BASE COURSE, GRADING D-1
- 5 STANDARD CURB AND GUTTER, TYPE A
- 6 4" CONCRETE SIDEWALK
- 7 4" AGGREGATE BASE COURSE, GRADING D-1
- 8 18" SELECT MATERIAL, TYPE A
- 9 SELECT MATERIAL, TYPE B
- 10 EXPRESSWAY CURB AND GUTTER, TYPE A
- 11 4" TOPSOIL AND SEEDING
- 12 MSE WALL REINFORCEMENT AND BACKFILL
- 13 GEOTEXTILE
- 14 SELECT MATERIAL, TYPE C
- 15 MATCH POINT, SEE "O" STA X-XX TO STA X+XX
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- 17
- 18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

WHITE LABEL (DOT)

DATE: 08/20/2013

PROJECT NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

NO. DATE DESCRIPTION

1. 08/20/2013

2. 08/20/2013

3. 08/20/2013

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77. 08/20/2013

78. 08/20/2013

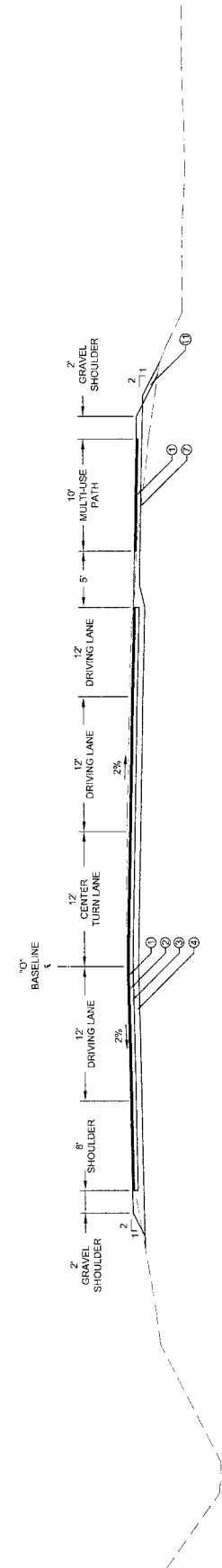
79. 08/20/2013

80. 08/20/2013

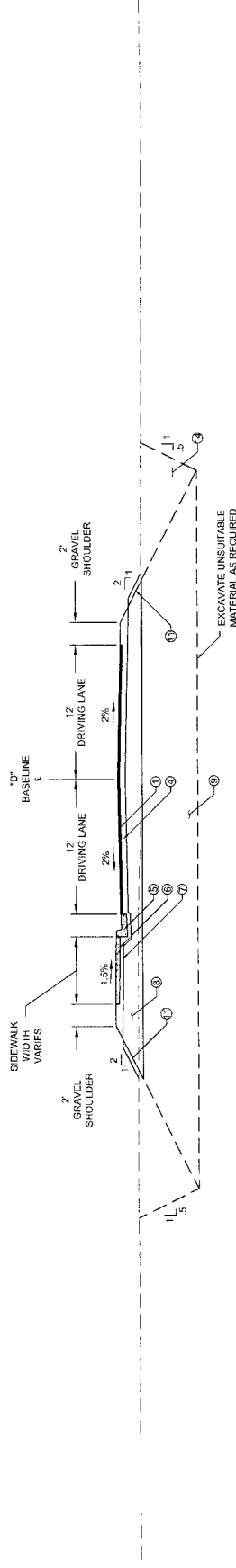
81. 08/20/2013

82. 08/20/2013

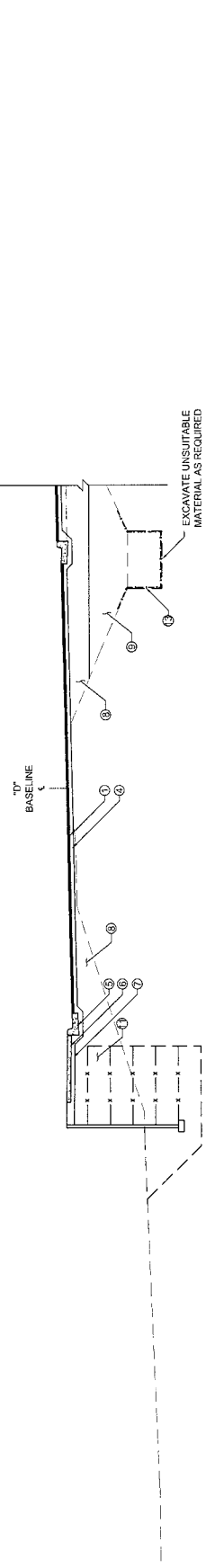
83. 08/20/2013



**TYPICAL SECTION**  
 "0" STA 25+10 TO "0" STA 26+79.64



**TYPICAL SECTION**  
 "D" STA 0+00 TO "D" STA 4+57.08



**PARKING LOT STRUCTURAL SECTION**  
 "D" STA 4+57.08 TO "D" STA 8+71.76  
 NOTE: REFER TO PARKING LOT GRADING PLAN FOR DIMENSIONS

**LEGEND**

- 1 2" ASPHALT CONCRETE PAVEMENT, TYPE II, CLASS B
- 2 STE-1 TACK COAT
- 3 4" ASPHALT TREATED BASE
- 4 6" AGGREGATE BASE COURSE, GRADING D-1
- 5 STANDARD CURB AND GUTTER, TYPE A
- 6 4" CONCRETE SIDEWALK
- 7 4" AGGREGATE BASE COURSE, GRADING D-1
- 8 18" SELECT MATERIAL, TYPE A
- 9 SELECT MATERIAL, TYPE B
- 10 EXPRESSWAY CURB AND GUTTER, TYPE A
- 11 4" TOPSOIL AND SEEDING
- 12 MSE WALL REINFORCEMENT AND BACKFILL
- 13 GEOTEXTILE
- 14 SELECT MATERIAL, TYPE C
- 15 MATCH POINT, SEE "0" STA X+XX TO STA X+XX

**NOTES:**

1.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

**PLAN LEGEND**

CHECKED BY: SNC



DESIGNED BY: VALUE  
 DRAWN BY: TECHDFF

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC SAFETY  
 SOUTHWEST REGION  
 GLACIER HIGHWAY  
 BRIDGE/FLOOD BRIDGE  
 PROJECT #61867

**TYPICAL SECTIONS**

PROJECT DESIGNATION	NH-BR-0933(019)
STATE	ALASKA
YEAR	2013
SHEET NUMBER	B3
TOTAL SHEETS	XX

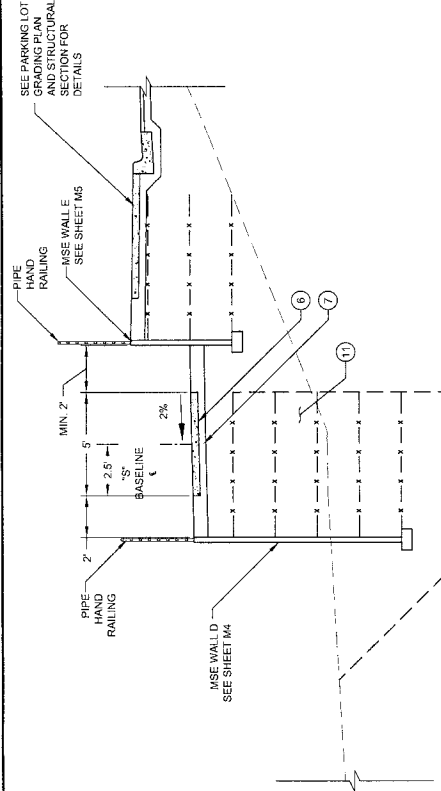
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 PLAN LEGEND



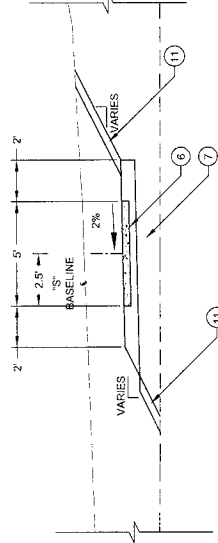
DESIGNED BY: T. ECKHOFF  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHCENTRAL REGION  
 GLACIER HIGHWAY  
 BROTHERSPOOD BRIDGE  
 PROJECT #013807

**TYPICAL SECTIONS**  
 PROJECT DESIGNATION  
 NH-BR-09330(19)

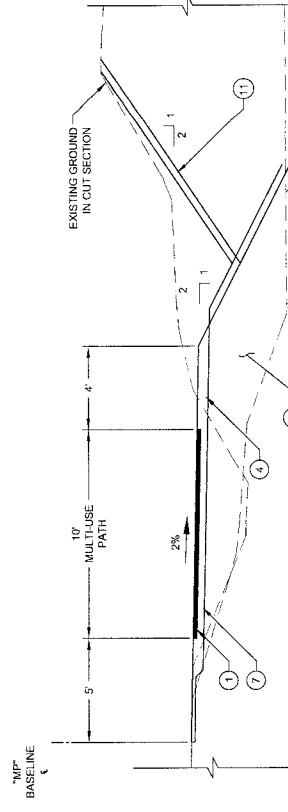
STATE	ALASKA
YEAR	2013
SHEET NUMBER	B4
TOTAL SHEETS	XX



**TYPICAL SECTION**  
 "S" STA 0+00 TO "S" STA 1+69.76

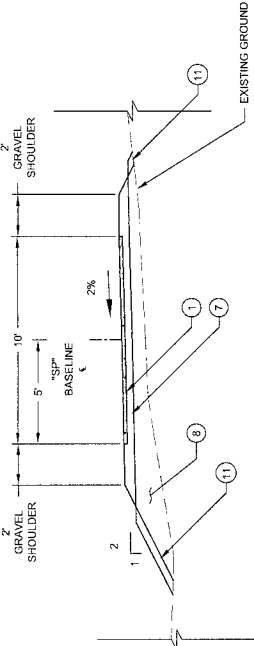


**TYPICAL SECTION**  
 "S" STA 1+69.76 TO "S" STA 8+15.46  
 NOTE: SEE TABLE XX OF SHEET XX FOR FILL AND CUT SLOPE SUMMARY

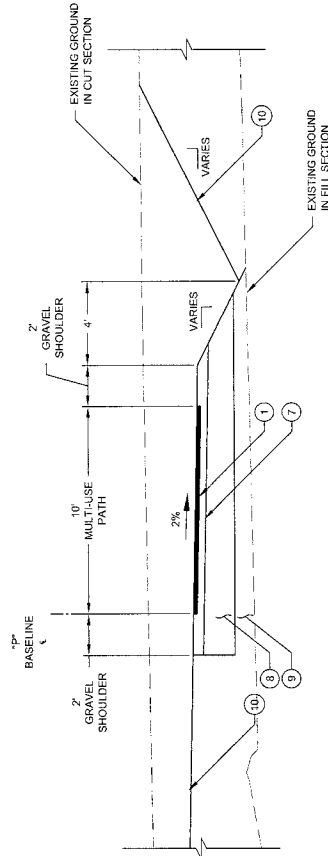


**TYPICAL SECTION**  
 "MP" STA 25+71.54 TO "MP" STA 37+82.94  
 NOTE: SEE TABLE XX OF SHEET XX FOR FILL AND CUT SLOPE SUMMARY

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



**TYPICAL SECTION**  
 "SP" STA 0+00 TO "SP" STA 7+01.75  
 NOTE: SEE TABLE XX ON SHEET XX FOR FILL AND CUT SLOPES

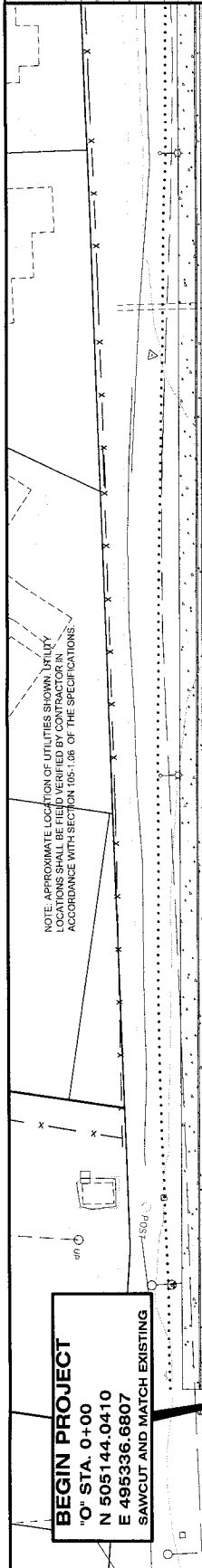


**TYPICAL SECTION**  
 "P7" STA 0+00 TO "P7" STA 5+18.70  
 NOTE: SEE TABLE XX ON SHEET XX FOR FILL AND CUT SLOPE SUMMARY

**LEGEND**

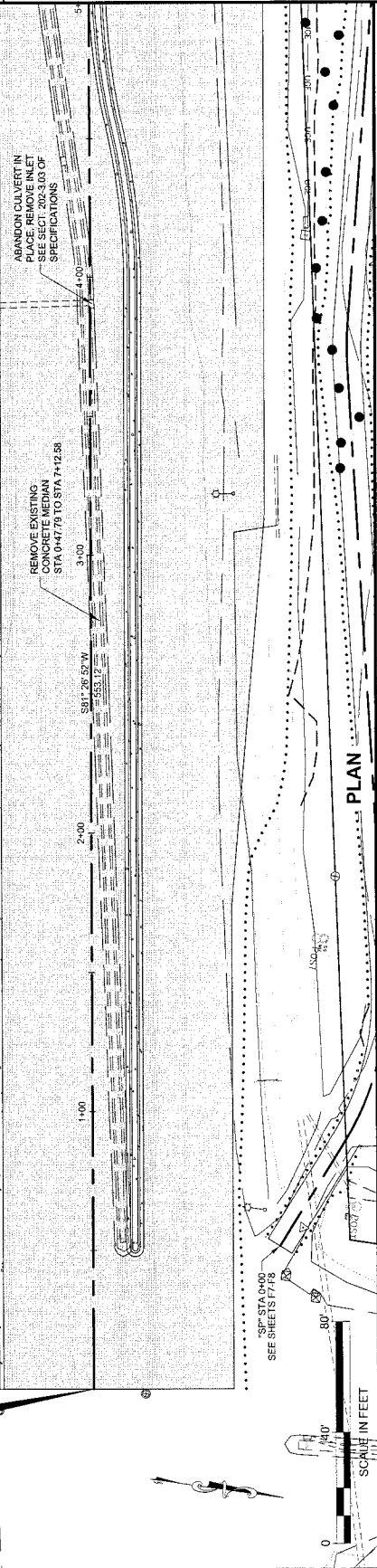
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- 2 2" ASPHALT TREATED BASE
- 3 4" ASPHALT TREATED BASE
- 4 4" ASPHALT TREATED BASE
- 5 6" AGGREGATE BASE COURSE, GRADING D-1
- 6 4" CONCRETE SIDEWALK
- 7 4" AGGREGATE BASE COURSE, GRADING D-1
- 8 18" SELECT MATERIAL, TYPE A
- 9 SELECT MATERIAL, TYPE B
- 10 EXPRESSWAY CURB AND GUTTER, TYPE A
- 11 4" TOPSOIL AND SEEDING
- 12 MSE WALL REINFORCEMENT AND BACKFILL
- 13 GEOTEXTILE
- 14 SELECT MATERIAL, TYPE C
- 15 MATCH POINT, SEE "O" STA X+XX TO STA X+XX

PARTIAL PLAN AND PROFILE SHEET  
 PROJECT #67987, "PLAN AND  
 PROFILE"  
 WHITE, JANELLE R. (DOT)  
 Tuesday, April 23, 2013 2:19:28 PM  
 TAB F1  
 ATTACHMENT NUMBER

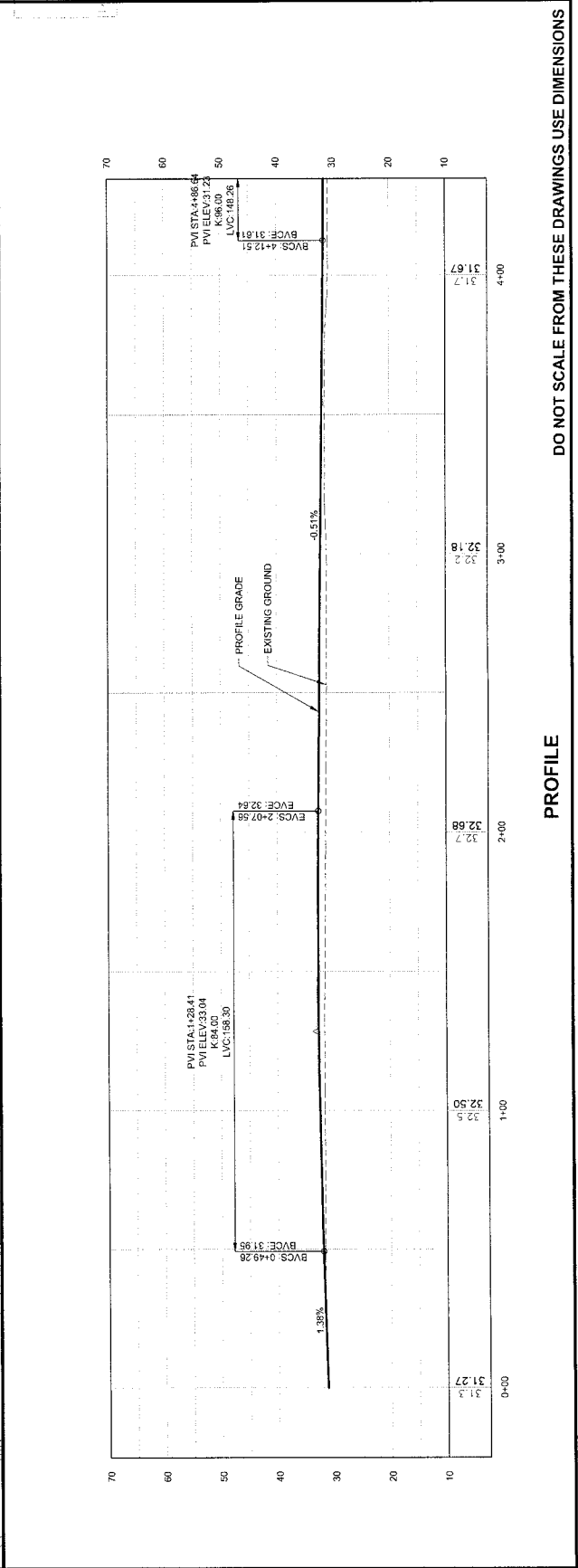


**BEGIN PROJECT**  
 "O" STA. 0+00  
 N 505144.0410  
 E 495336.6807  
 SAWCUT AND MATCH EXISTING

JNU: GLACIER HWY  
 BROTHEROOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
 PLAN AND PROFILE



CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHART  
 PROJECT LOCATION:  
 JNU: GLACIER HIGHWAY  
 BROTHEROOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
**PLAN AND  
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 NH-BR-09333(019)  
 STATE: ALASKA  
 YEAR: 2013  
 SHEET NUMBER: F1  
 TOTAL SHEETS: XX

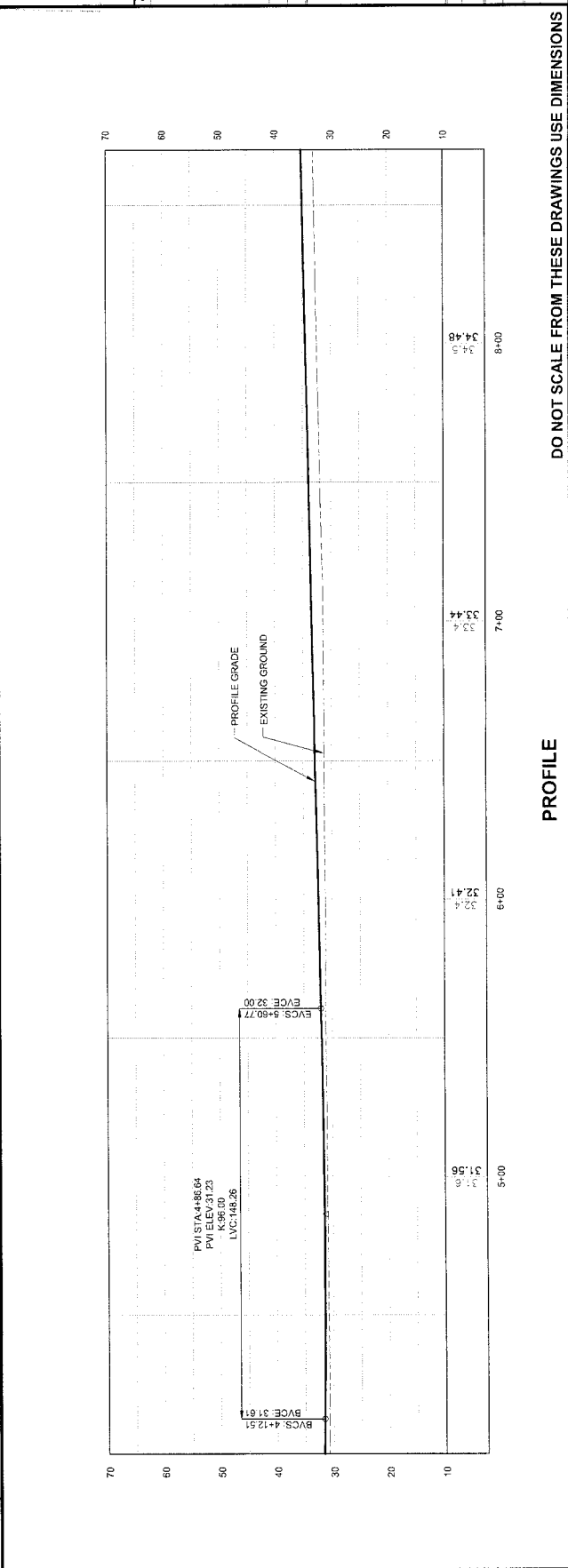
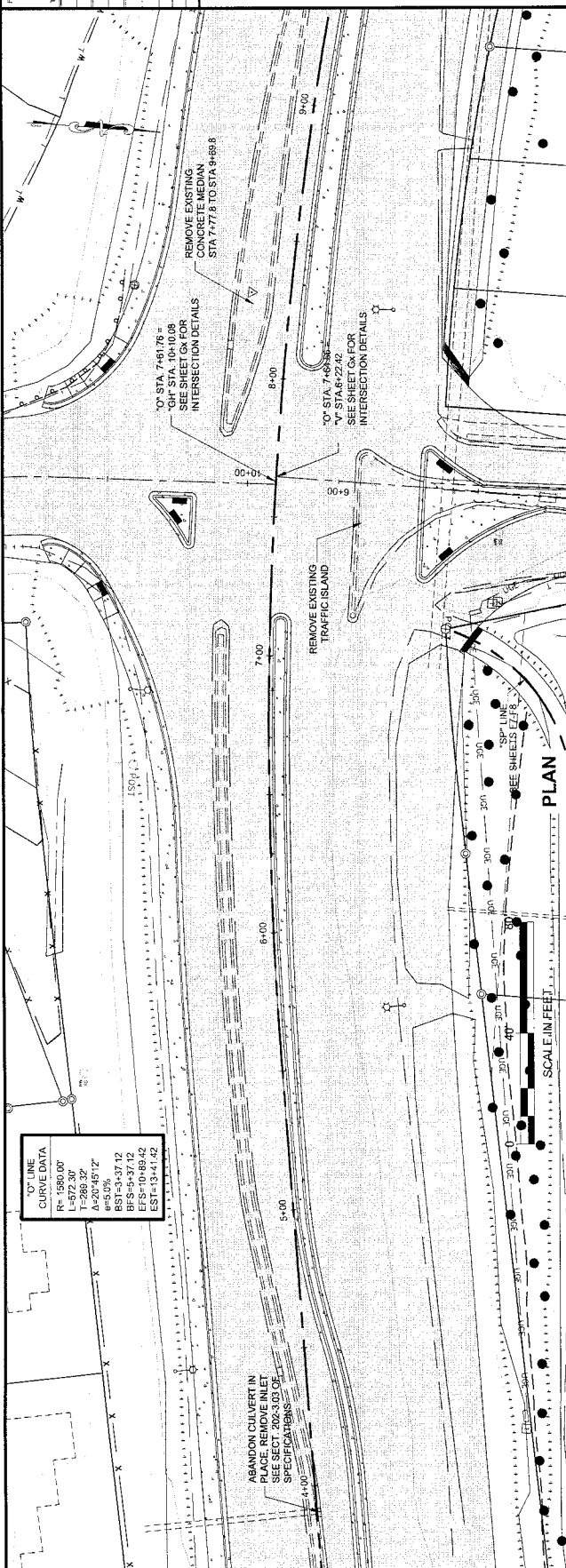


DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PARTIAL PLAN AND PROFILE  
 COMPUTATIONS FOR THE PLAN AND  
 PROFILE  
 ECKHOFF, TRAVIS W (DOT)  
 Tuesday, April 23, 2013 10:33:59 AM  
 TAB F2  
 APPENDIX NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS  
 NO. DATE DESCRIPTION

**PLAN AND PROFILE**  
**JNU: GLACIER HWY**  
**BROTHERHOOD BRIDGE**  
**REPLACEMENT**  
**PROJECT #67987**

CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
**PLAN AND PROFILE**  
 PROJECT INFORMATION  
 NH-BR-0933(019)  
 STATE ALASKA YEAR 2013  
 SHEET NUMBER F2 TOTAL SHEETS XX



PROJECT INFORMATION AND SHEET NO. 1  
 PROJECT NAME: JNU: GLACIER HWY  
 BROTHEROOD BRIDGE REPLACEMENT  
 PROJECT #67987  
 DRAWN BY: T. ECKHOFF  
 CHECKED BY: G. LOCKWOOD  
 DATE: 2013.04.23  
 TIME: 10:54:42 AM

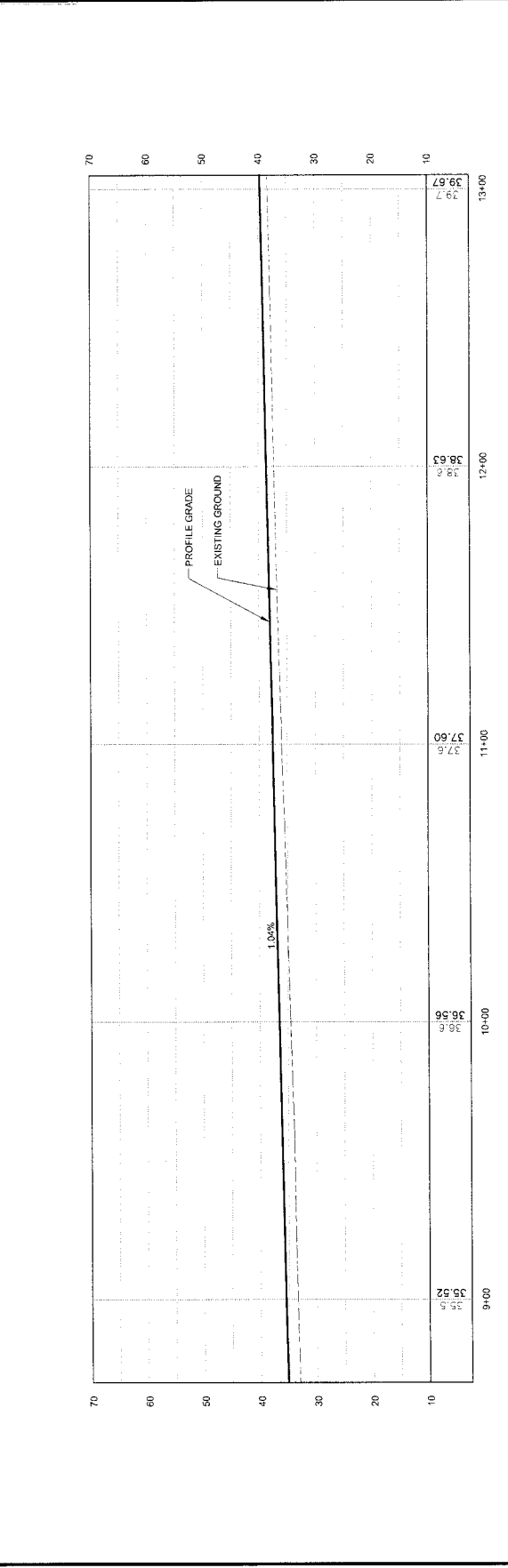
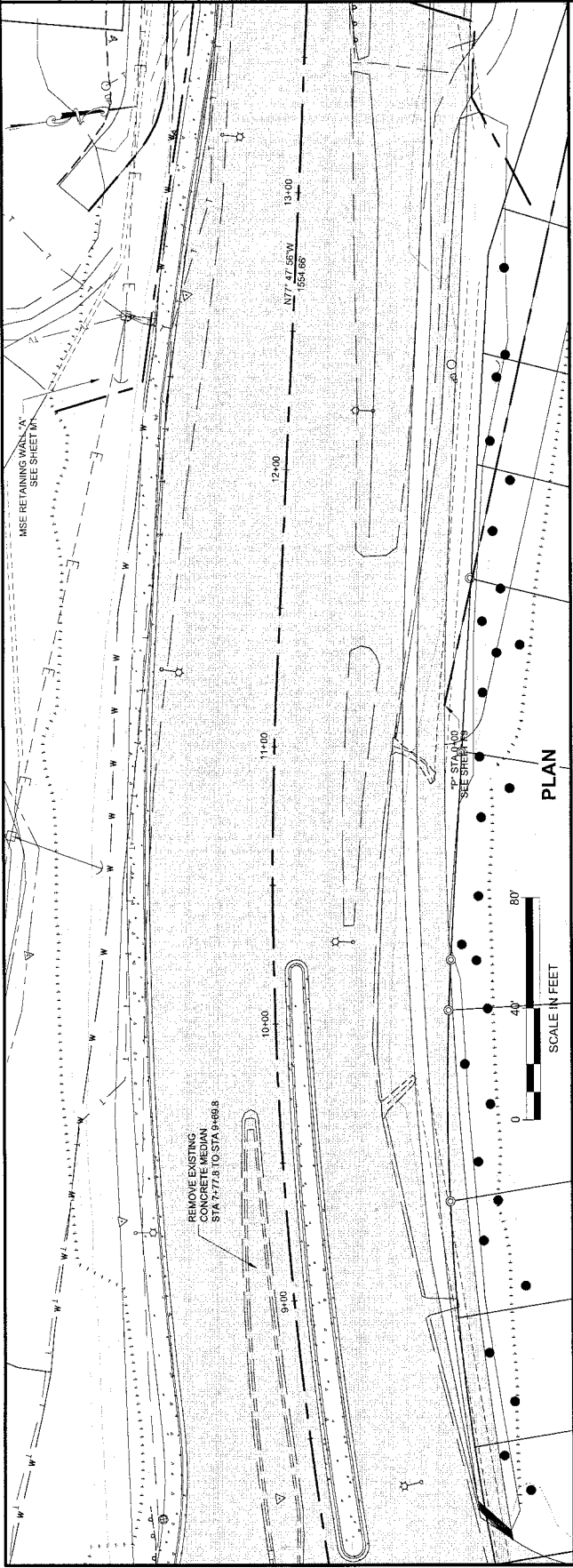
NO.	DATE	DESCRIPTION

**PLAN AND PROFILE**  
**JNU: GLACIER HWY**  
**BROTHEROOD BRIDGE**  
**REPLACEMENT**  
**PROJECT #67987**



DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION

**PLAN AND PROFILE**  
 PROJECT IDENTIFICATION  
 NH-BR-0933(019)  
 STATE: ALASKA  
 YEAR: 2013  
 SHEET NUMBER: F3  
 TOTAL SHEETS: XX

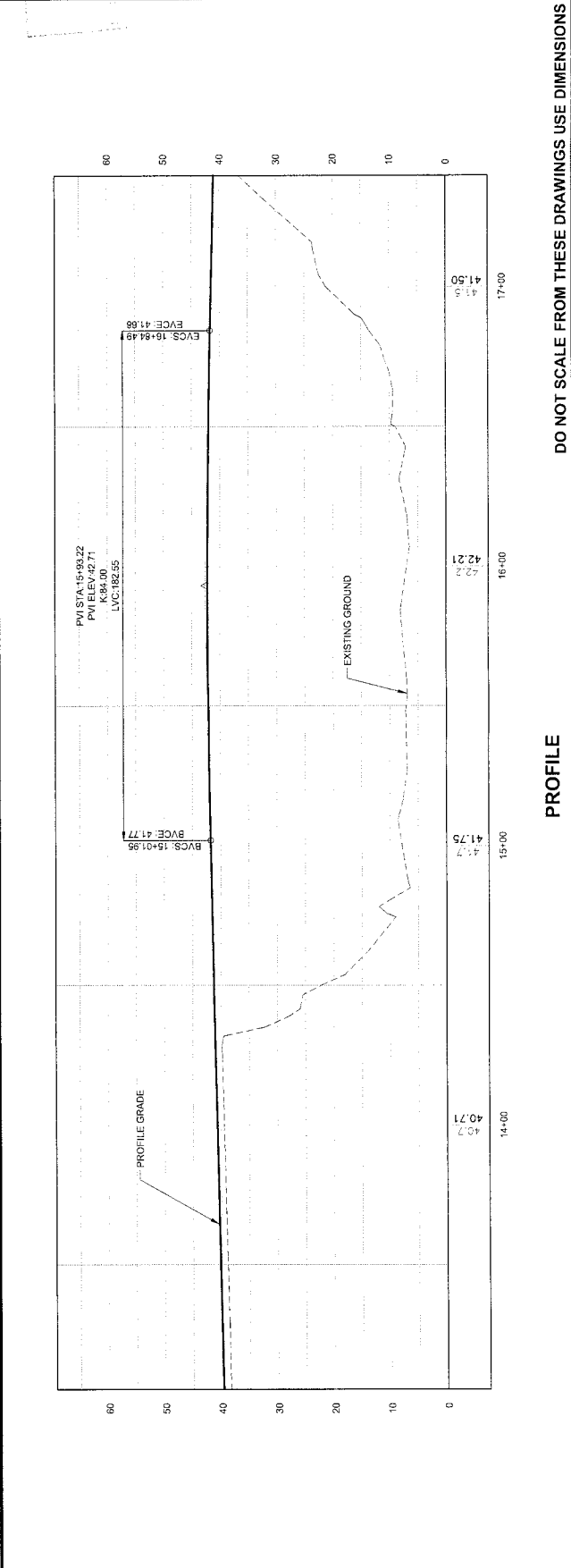
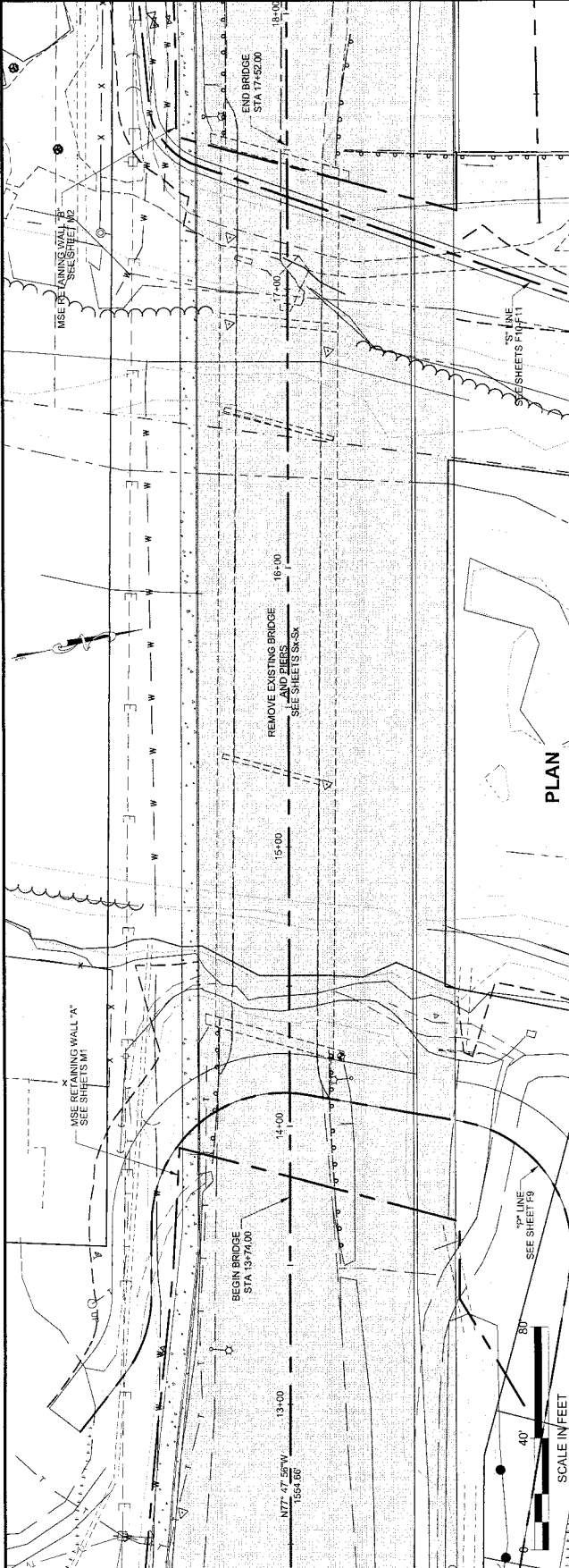


DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS  
**PROFILE**

PARTIAL PLAN AND PROFILE SHEET  
 PARTIAL PLAN AND PROFILE SHEET  
 PROFILE DWG  
 ECKHOFF, TRAVIS W (007)  
 TUESDAY, APRIL 23, 2013 10:52:07 AM  
 TWP 14  
 ADJUDICATION NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF MEASUREMENTS  
 DATE DESCRIPTION  
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**PLAN AND PROFILE**  
**JUN: GLACIER HWY**  
**BROTHERHOOD BRIDGE**  
**REPLACEMENT**  
**PROJECT #67987**

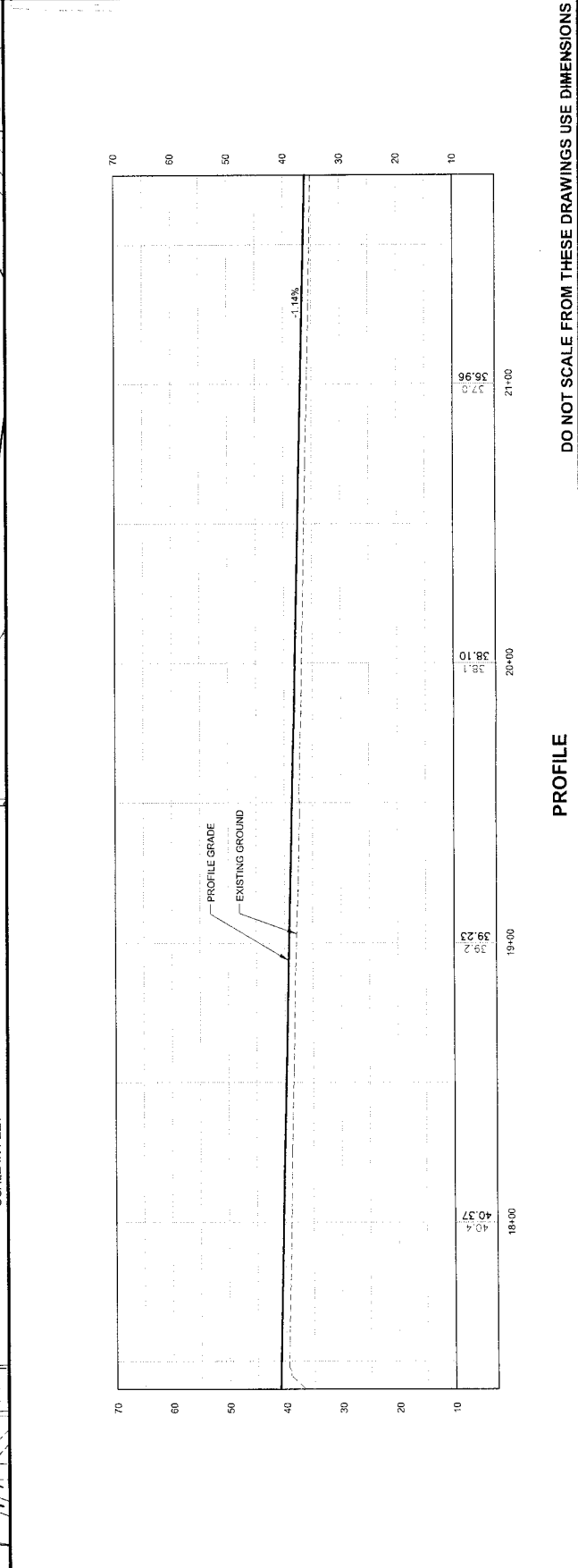
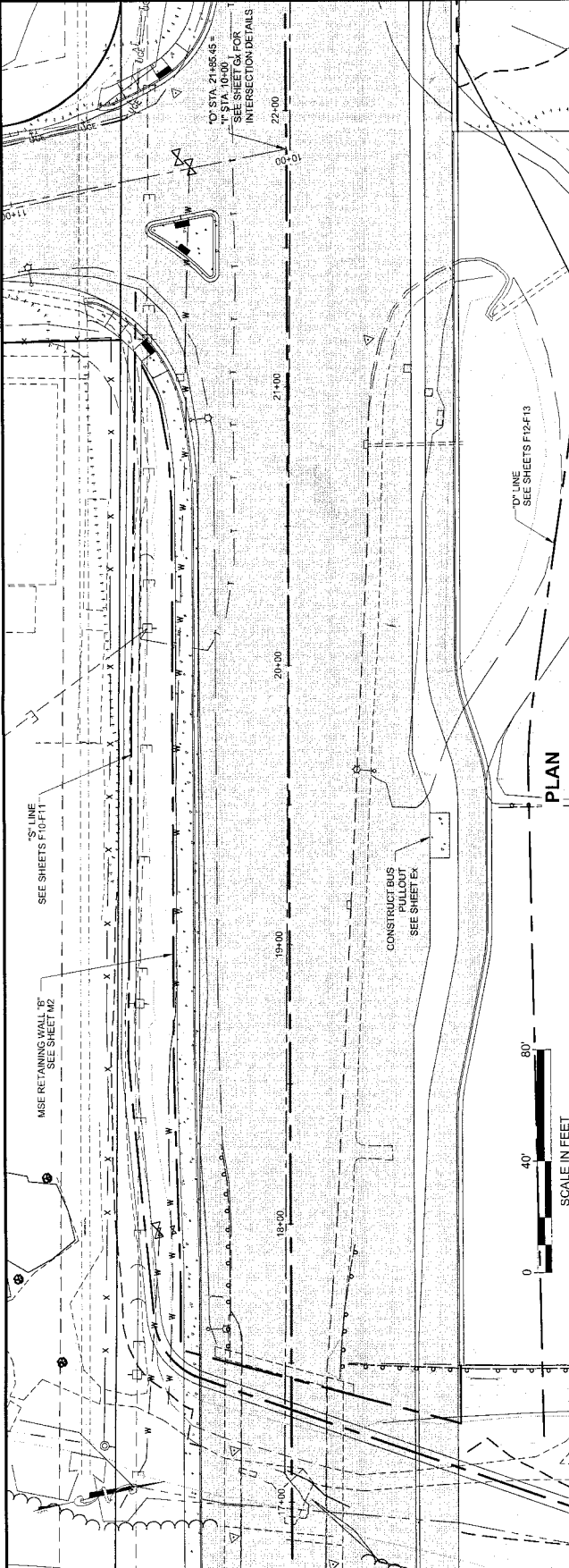
CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION  
 JUN: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
**PLAN AND PROFILE**  
 PROJECT DESIGNATION: NH-BR-0933(019)  
 STATE: ALASKA  
 YEAR: 2013  
 SHEET NUMBER: F4  
 TOTAL SHEETS: XX



PARTIAL PLAN AND PROFILE SHEET  
 COMPLIANCE WITH 47 CFR 1.1311 PLAN AND  
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 ECKHOFF, TRAVIS W (001)  
 Title F5 Tuesday, April 17, 2013 10:54:17 AM  
 ARCHITECTURE NUMBER  
 ATTACHMENT NUMBER

**PLAN AND PROFILE**  
**JUN: GLACIER HWY**  
**REPLACEMENT**  
**PROJECT #67987**

CHECKED BY: G. LOCKWOOD  
 DRAWN BY: J. WHITE  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION  
 JUN: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
**PLAN AND PROFILE**  
 PROJECT DESIGNATION  
 NH-BR-0933(019)  
 STATE ALASKA  
 YEAR 2013  
 SHEET NUMBER F5  
 TOTAL SHEETS XX





PROJECT #67987  
 JNU: GLACIER HWY  
 REPLACEMENT  
 BROTHEROOD BRIDGE

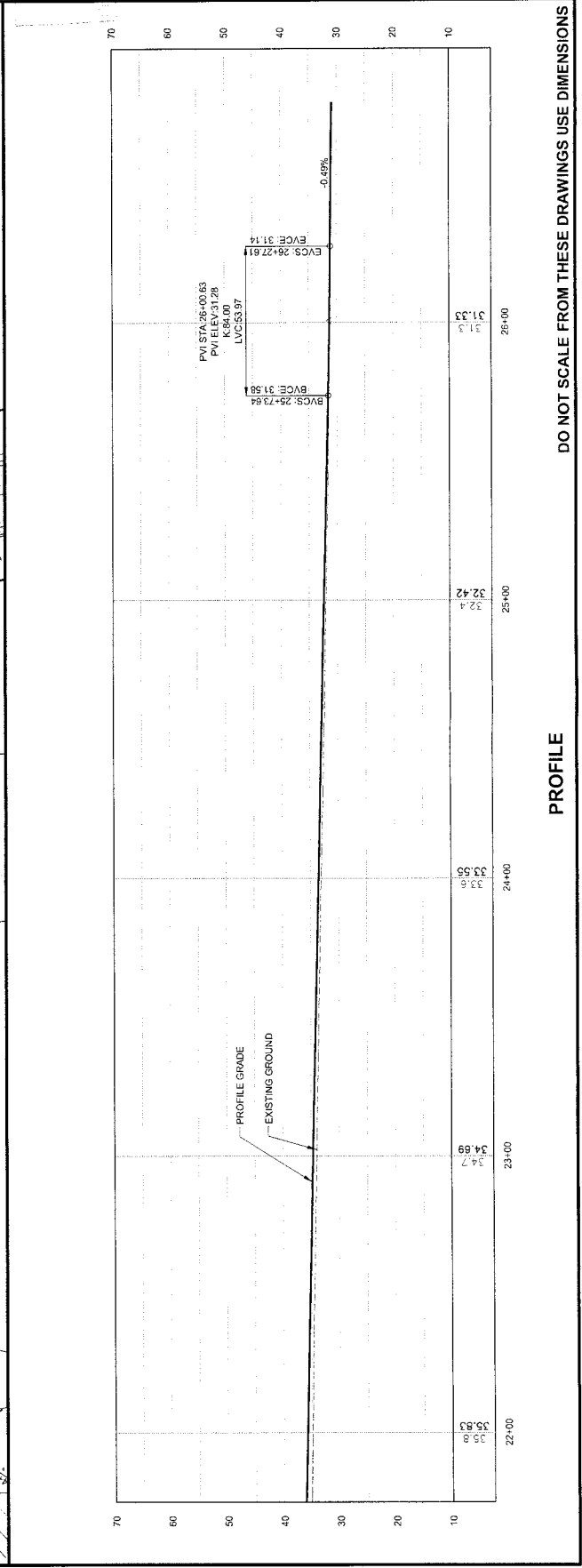
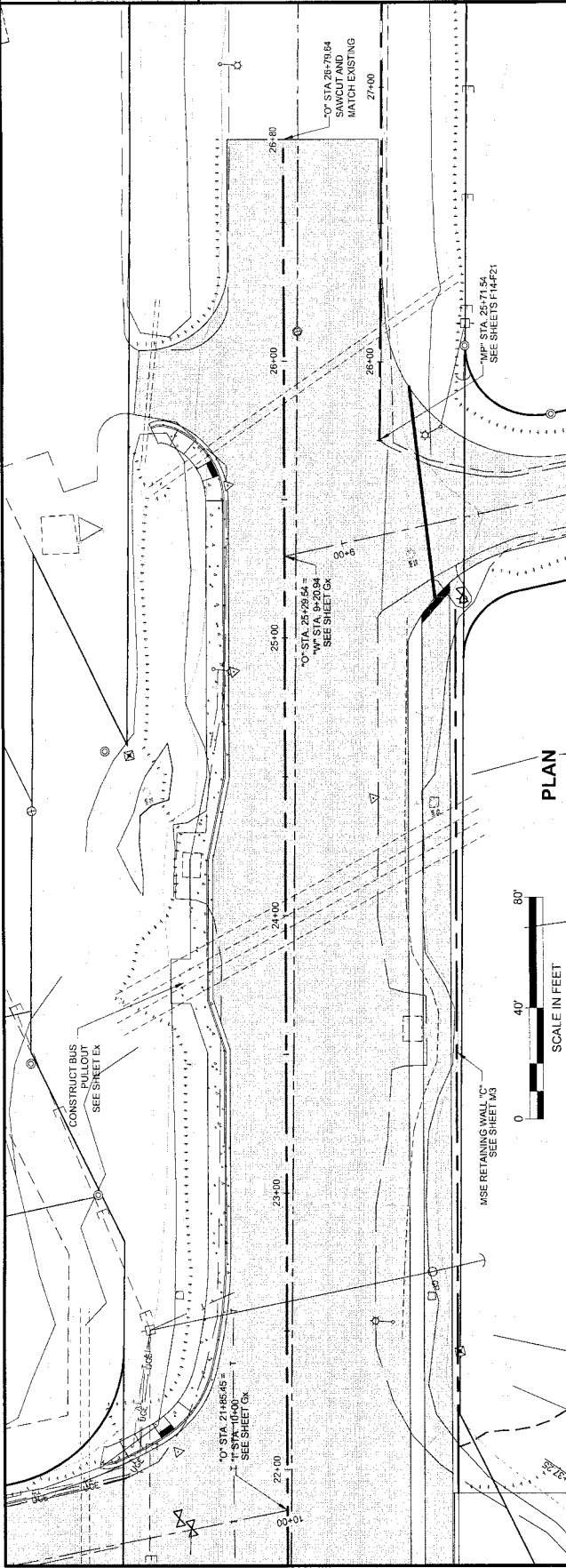
PLAN AND PROFILE



CHECKED BY: G. LOCKWOOD  
 DRAWN BY: J. WHITE  
 DESIGNED BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION

PROJECT #67987  
 JNU: GLACIER HIGHWAY  
 BROTHEROOD BRIDGE  
 REPLACEMENT

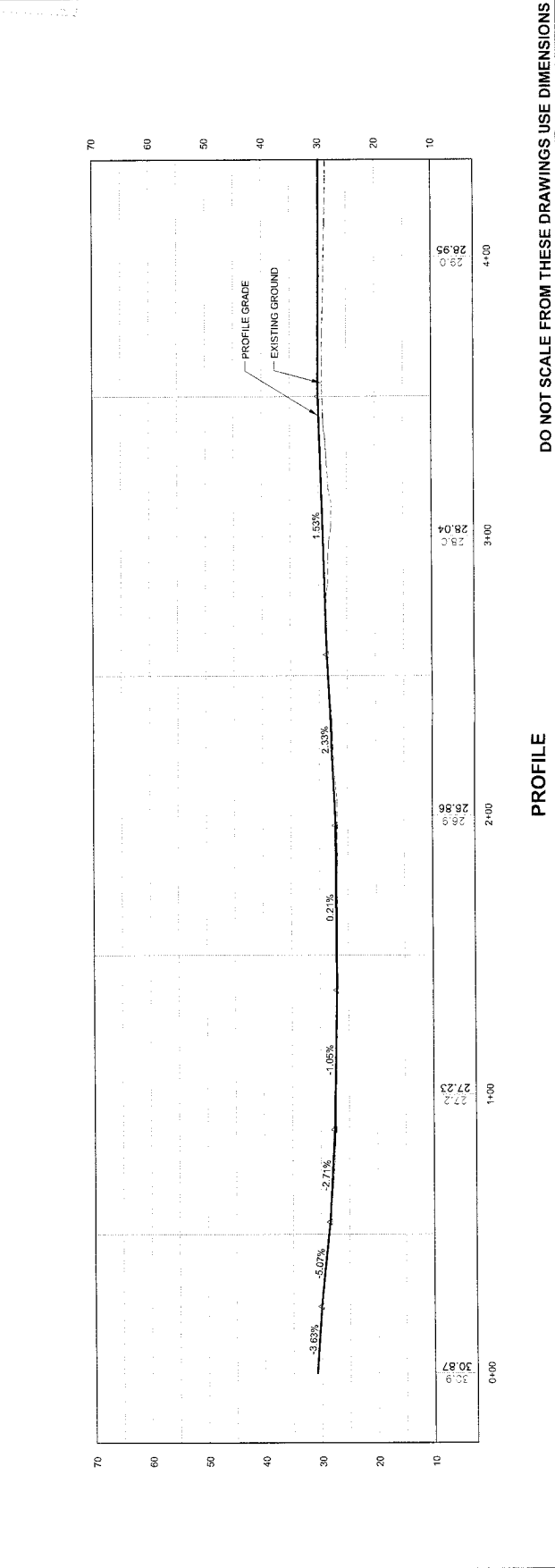
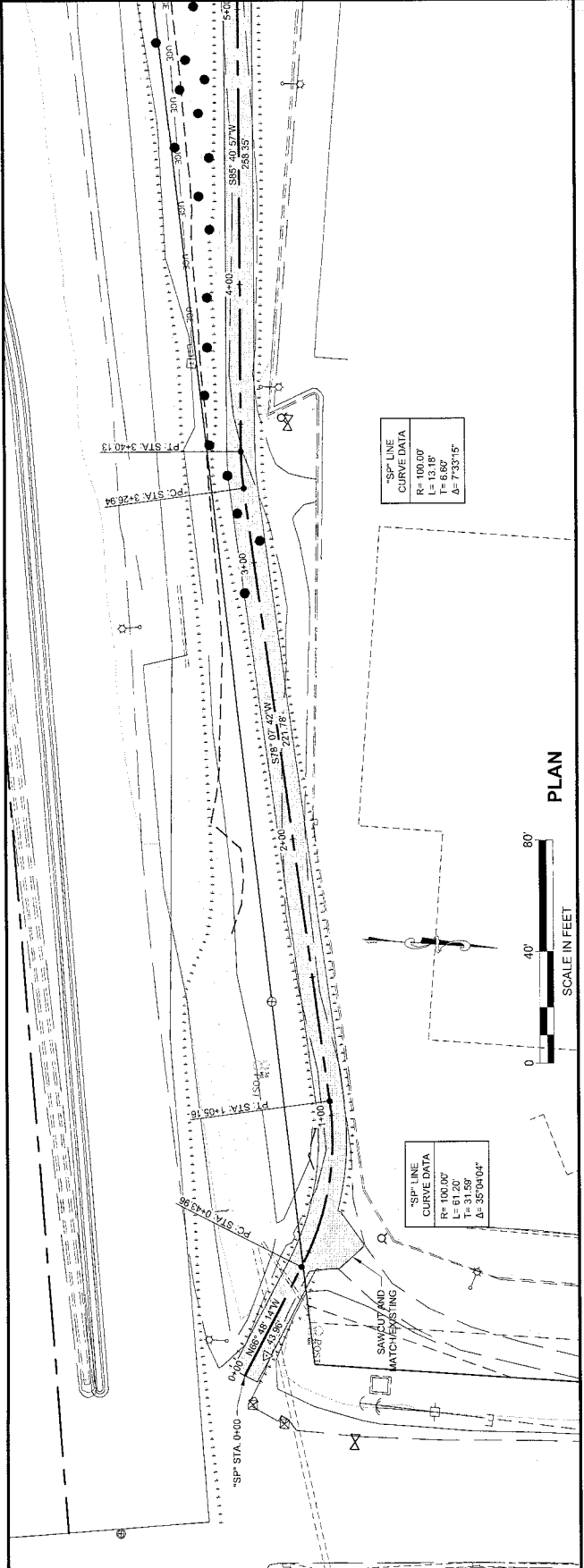
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 STATE ALASKA  
 YEAR 2013  
 SHEET NUMBER F6  
 TOTAL SHEETS XX



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 ECKHOFF, TRAVIS W (DOT)  
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 RECORD OF INVENTORY  
 No. DATE DESCRIPTION  
 ANTICIPATED NUMBER

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**BROTHERHOOD BRIDGE**  
**REPLACEMENT**  
**PROJECT #67987**

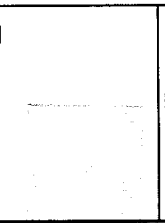
CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION  
 JUNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
**PLAN AND PROFILE**  
 SUBJECT DESCRIPTION  
 NH-BR-0933(019)  
 STATE ALASKA YEAR 2013  
 SHEET NUMBER F7 TOTAL SHEETS XX



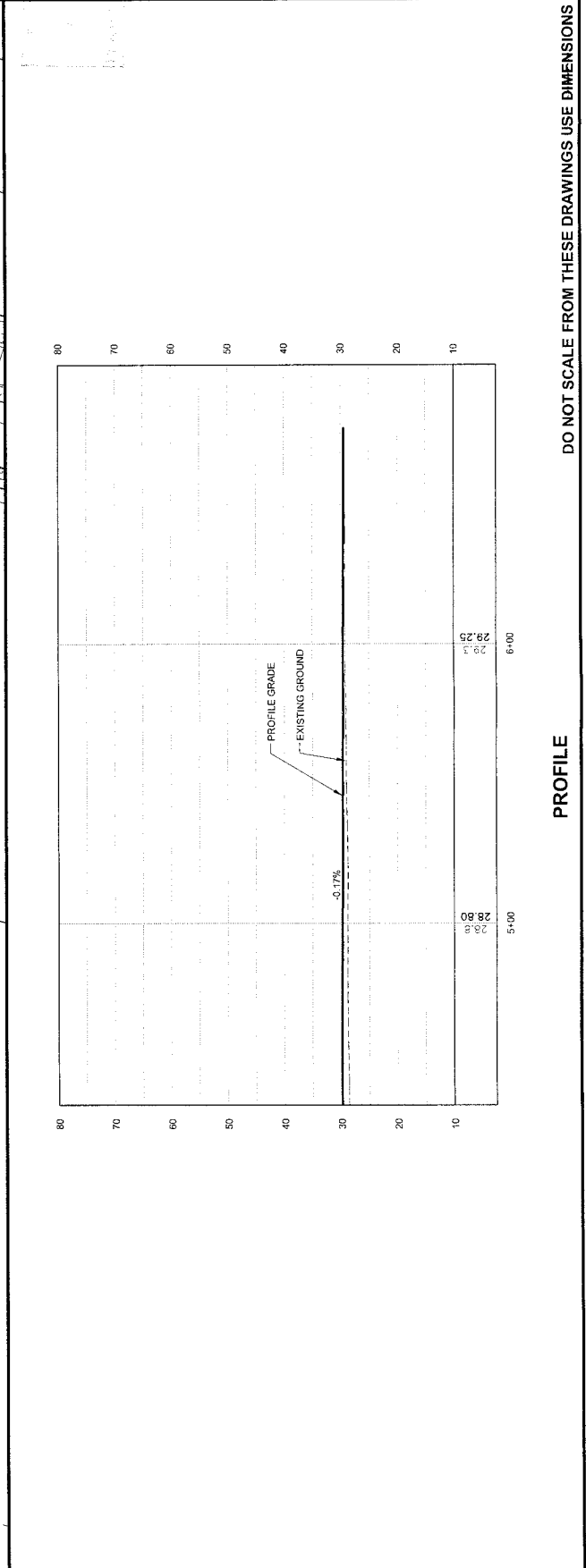
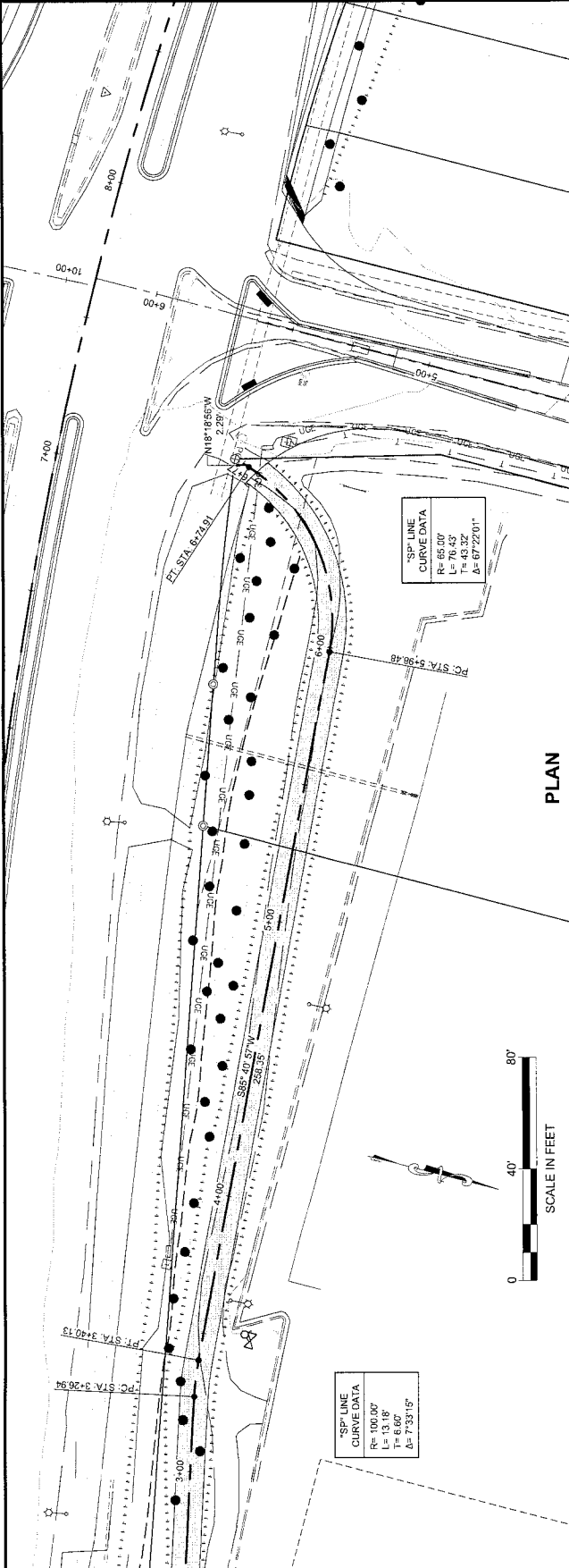
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTH-EAST REGION  
 JUNEAU  
 PROJECT #67987  
 BROTHEROOD BRIDGE REPLACEMENT  
 JUNU: GLACIER HWY  
 PROJECT #67987

DESIGNED BY	J. WHITE	
DRAWN BY	T. ECKHOFF	
CHECKED BY	G. LOCKWOOD	
DATE	Thursday, April 23, 2013 10:54:27 AM	
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
NO.	DATE	DESCRIPTION

**PLAN AND PROFILE**  
**JUNU: GLACIER HWY**  
**REPLACEMENT**  
**BROTHEROOD BRIDGE**  
**PROJECT #67987**



PROJECT RESERVATION	NH-BR-0933(019)
STATE	ALASKA
YEAR	2013
SHEET NUMBER	F8
TOTAL SHEETS	XX



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PROFILE

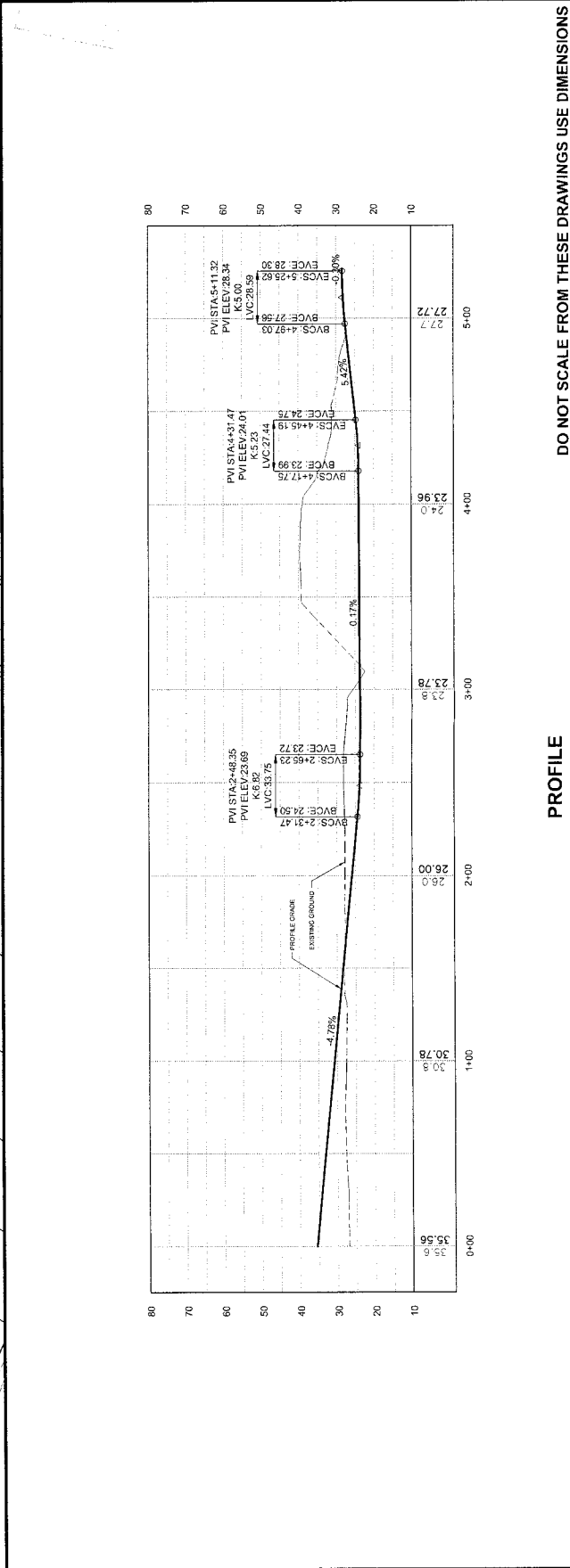
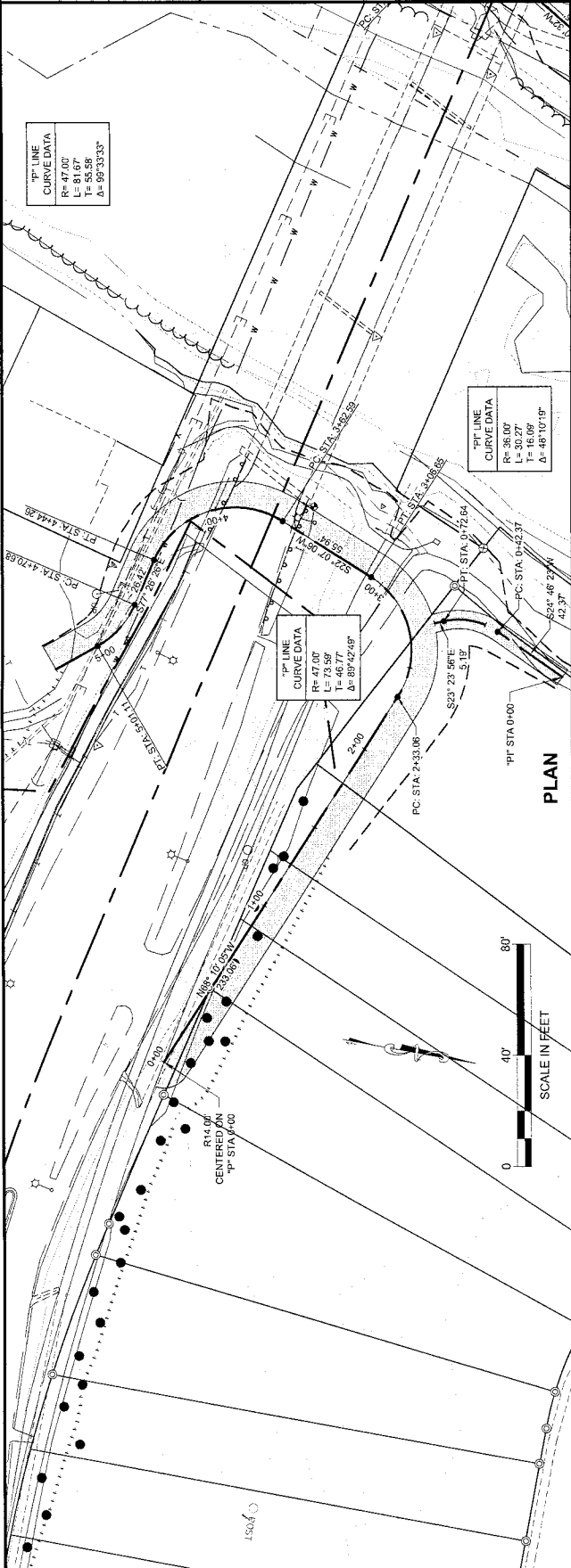
JNU: GLACIER HWY  
 REPLACEMENT  
 PROJECT #67987

PLAN AND PROFILE



DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC FACILITIES  
 SOUTHEAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

PROJECT DESIGNATION		NH-BF-0933(019)
STATE	YEAR	2013
ALASKA	TOTAL SHEETS	XX
SHEET NUMBER	F9	



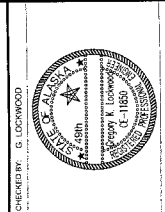
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

JNU: GLACIER HWY  
 REPLACEMENT  
 PROJECT #67987  
 PLAN AND PROFILE

NO.	DATE	DESCRIPTION

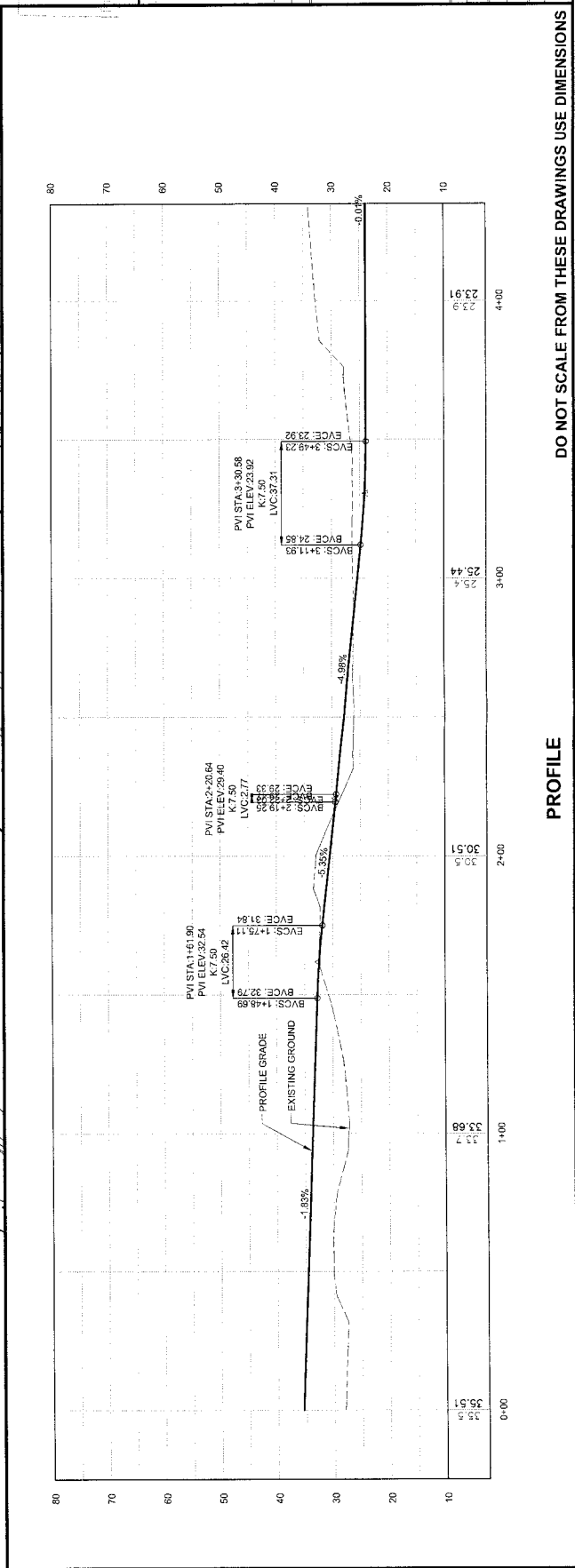
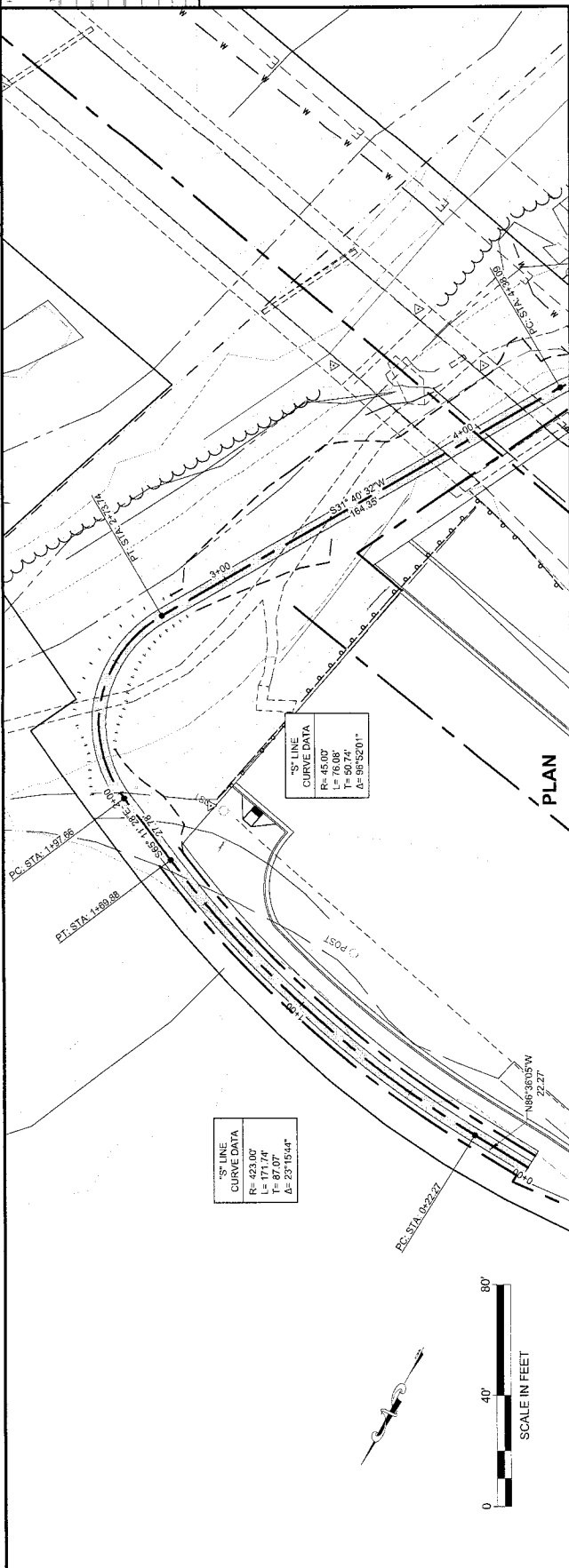
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 JNU: GLACIER HWY  
 REPLACEMENT  
 PROJECT #67987

CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC FACILITIES  
 SOUTHEAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987



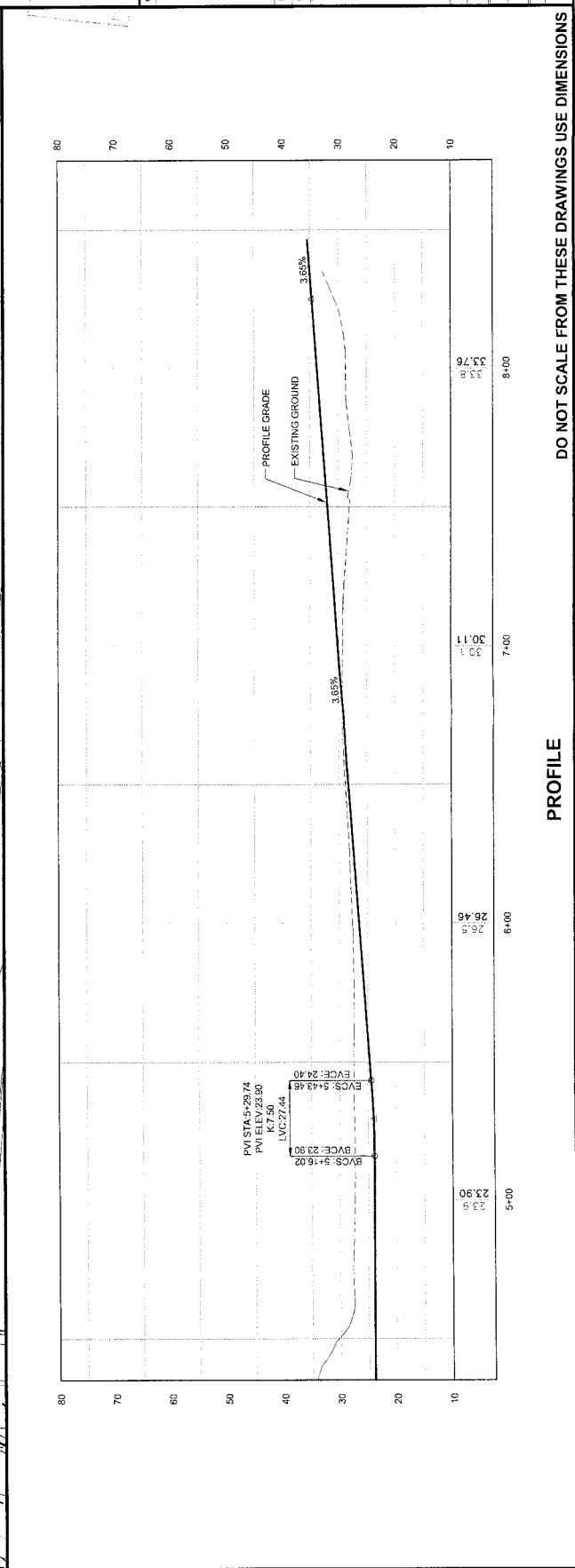
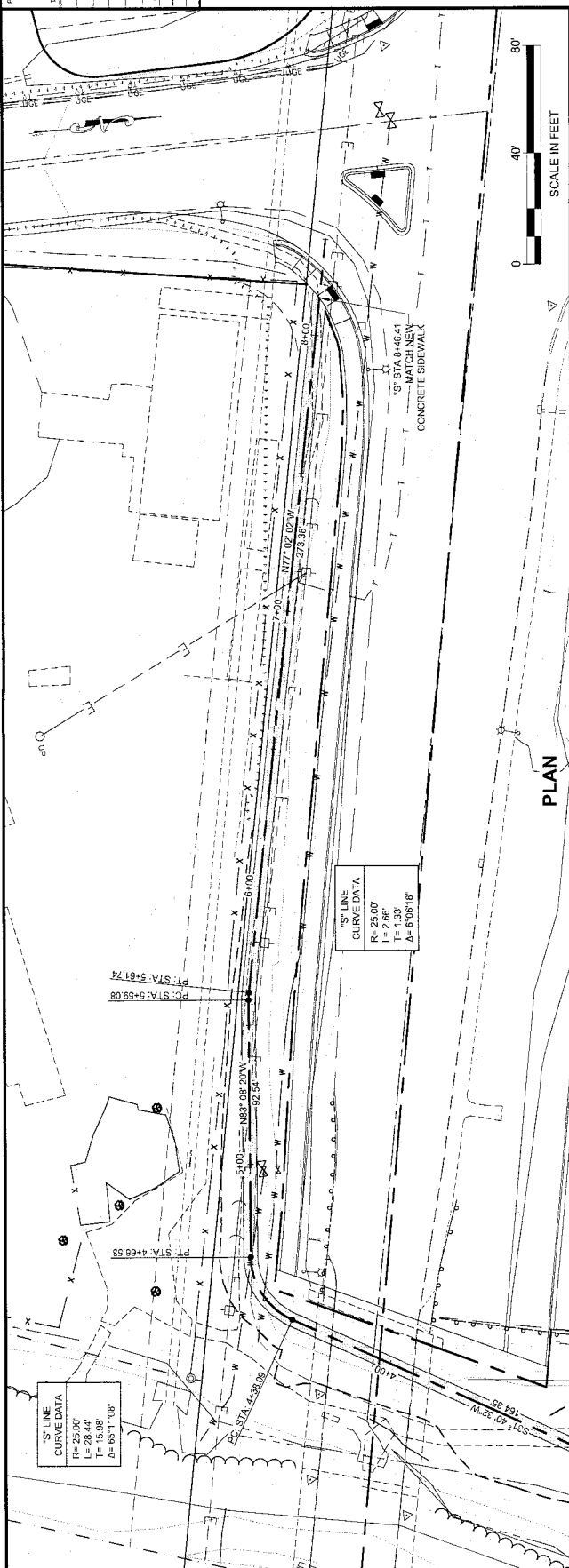
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 YEAR  
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PLAN AND PROFILE  
 PROJECT DESIGNATION  
 NH-BR-0933(019)  
 STATE  
 ALASKA  
 YEAR  
 2013  
 SHEET NUMBER  
 F10  
 TOTAL SHEETS  
 XX



5/11/13 JUNIEN PLAN SHEET  
 COMPILATION 3/20/13, F11 PLAN AND  
 PROFILE  
 ECKHOFF, TRAVIS W (DOT)  
 JOB F11 Tuesday, April 23, 2013 12:42:42 AM  
 ATTACHMENT NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS  
 NO. DATE DESCRIPTION

**PLAN AND PROFILE**  
**JNU: GLACIER HWY**  
**REPLACEMENT**  
**PROJECT #67987**  
 CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC FACILITIES  
 SOUTHEAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
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 NH-BR-0933(019)  
 STATE ALASKA YEAR 2013  
 SHEET NUMBER TOTAL SHEETS  
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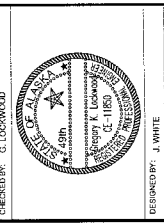
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PLAN AND PROFILE  
 PROJECT #67987  
 JNU: GLACIER HWY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT

NO.	DATE	DESCRIPTION

JNU: GLACIER HWY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

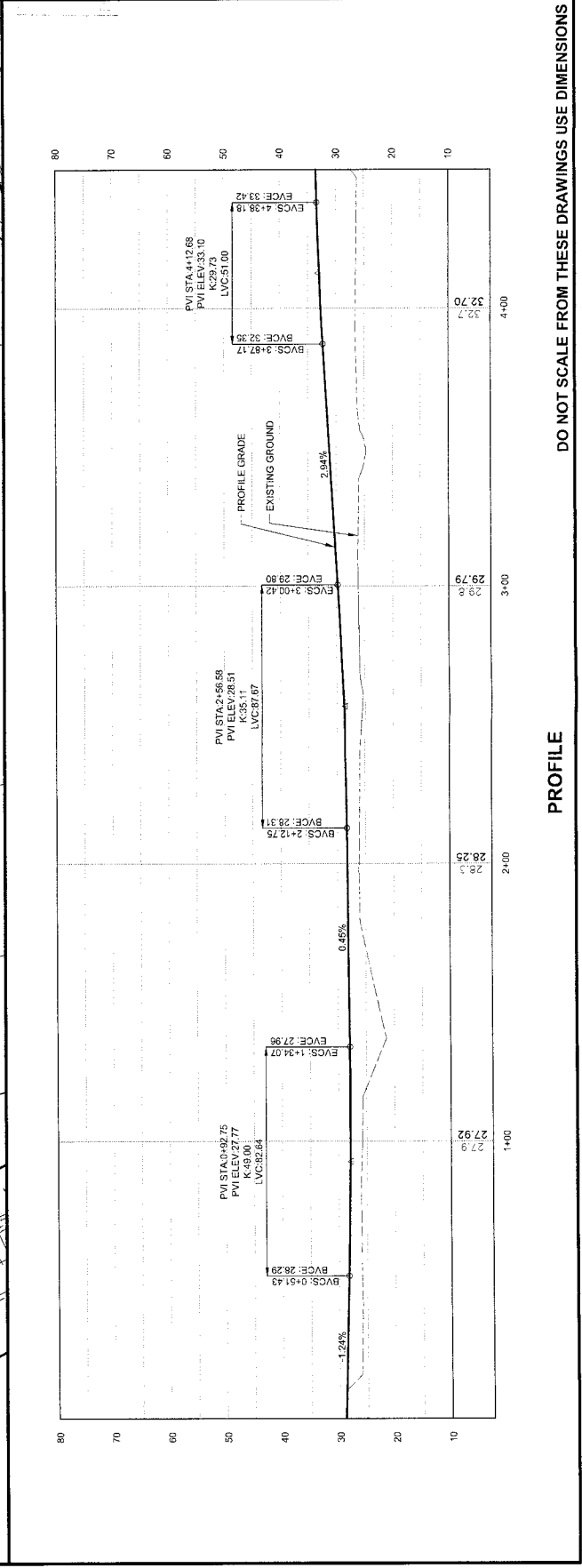
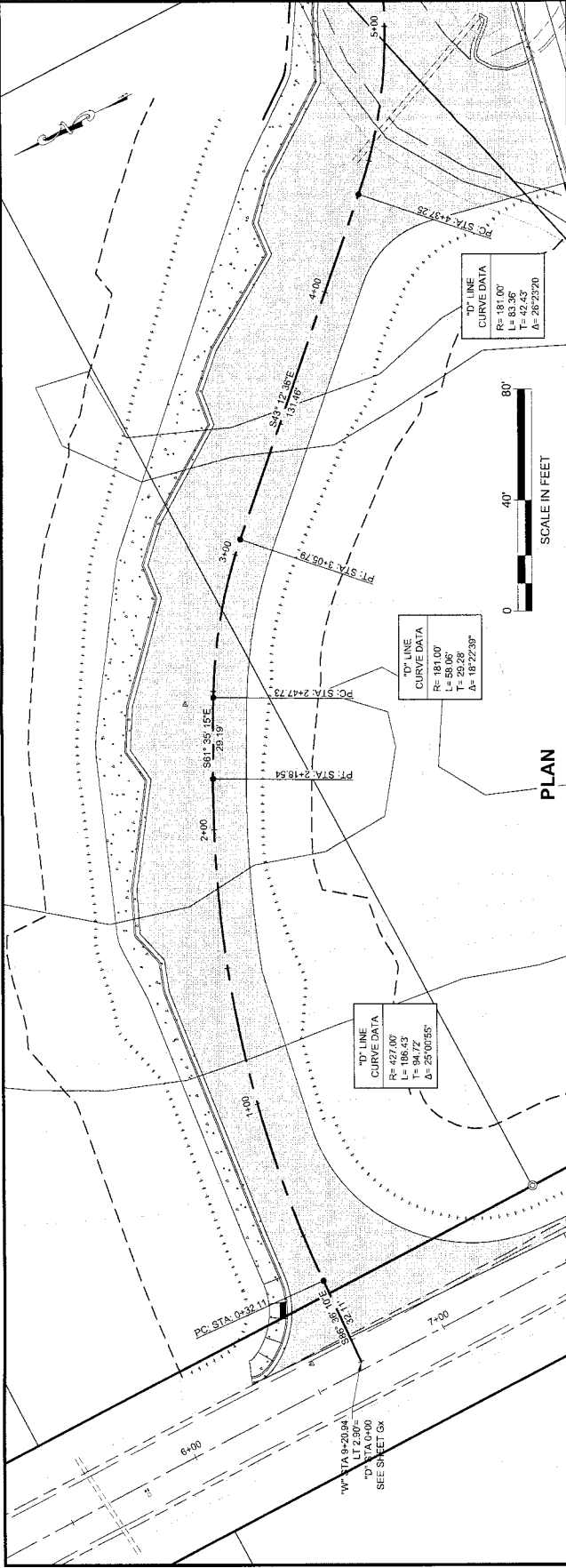
CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF



STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 SOUTHEAST REGION

JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

**PLAN AND PROFILE**  
 PROJECT RESOLUTION  
 NH-BR-0933(019)  
 STATE: ALASKA  
 YEAR: 2013  
 SHEET NUMBER: F12  
 TOTAL SHEETS: XX



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PART OF DRAWING FOR ANTISETTLEMENT  
 COMPLIATION/987.F1-F14 PLAN AND  
 PROFILE  
 ECKHOFF, TRAVIS W (DOT)  
 Tuesday, April 23, 2013 10:54:57 AM  
 SHEET F13  
 APPENDIX NUMBER  
 ATTACHMENT NUMBER

NO.	DATE	DESCRIPTION

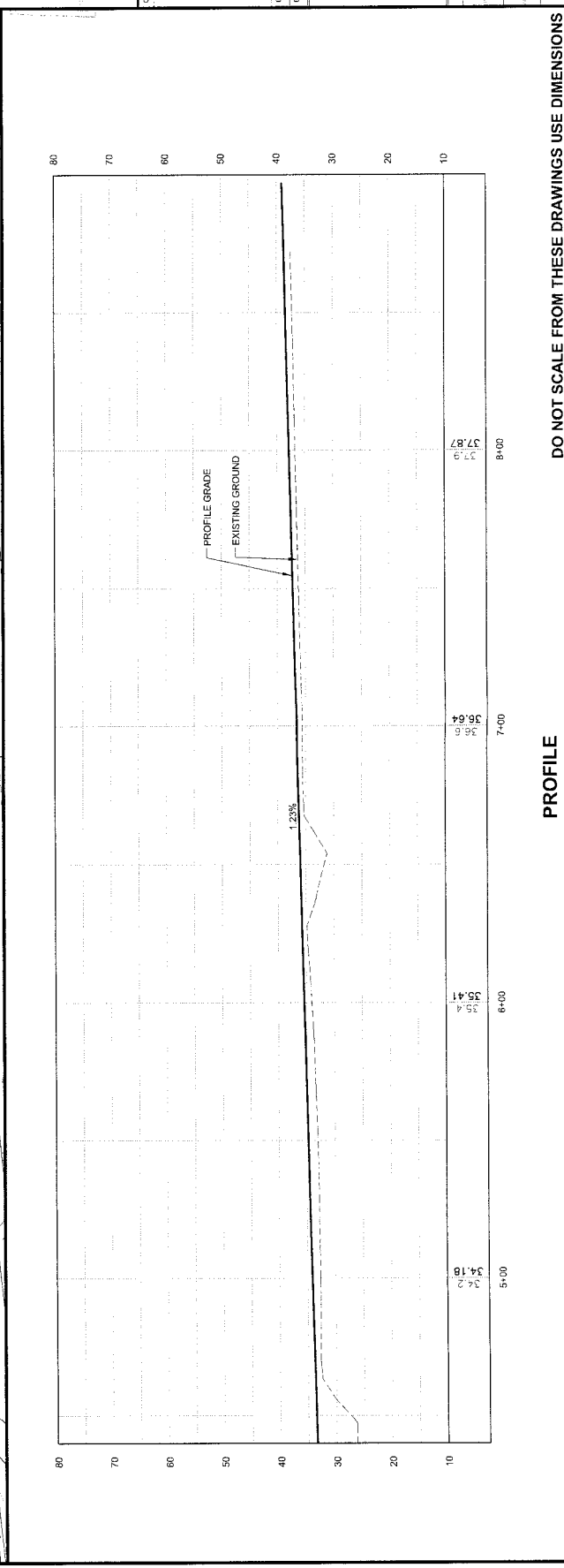
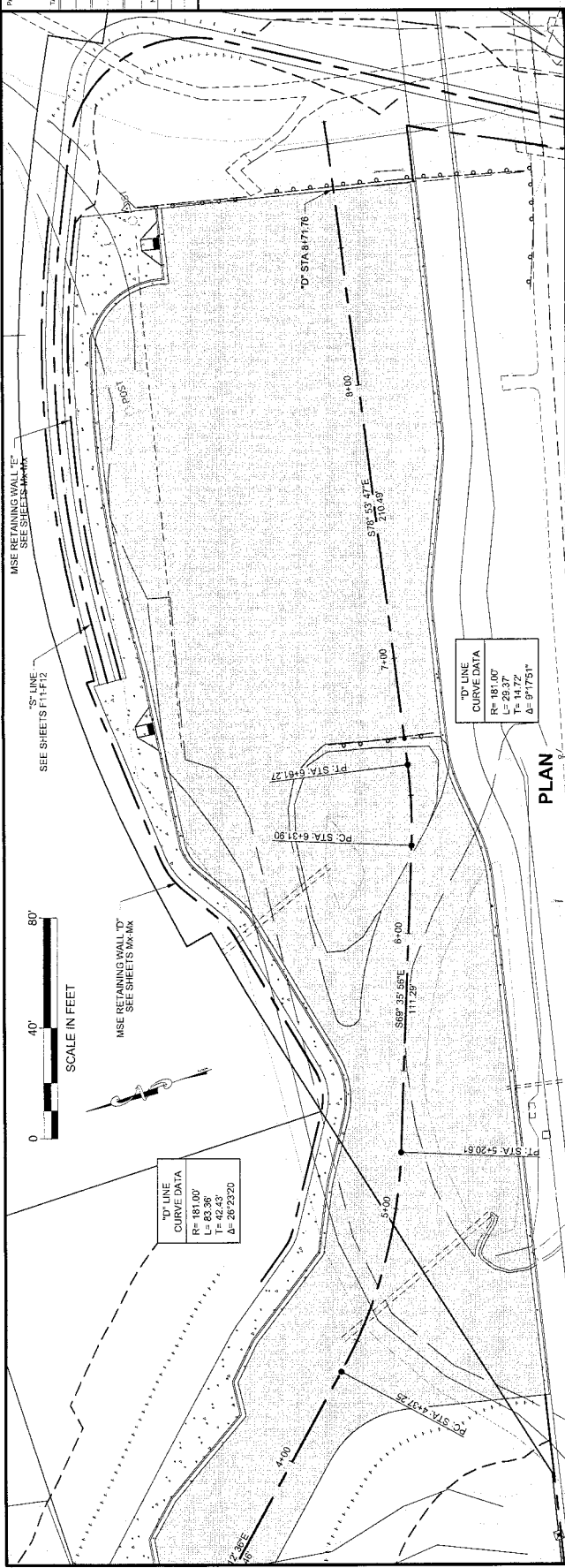
**PLAN AND PROFILE**  
**JNU: GLACIER HWY**  
**BROTHERHOOD BRIDGE**  
**REPLACEMENT**  
**PROJECT #67987**



DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 CHECKED BY: G. LOCKWOOD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC FACILITIES  
 SOUTHEAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

**PLAN AND PROFILE**

PROJECT DESIGNATION	NH-BR-0933(019)
STATE	ALASKA
YEAR	2013
SHEET NUMBER	F13
TOTAL SHEETS	XX

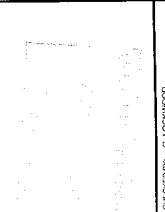




STATE OF ALASKA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJECT #67987  
 JNU: GLACIER HWY  
 BROTHERHOOD BRIDGE REPLACEMENT  
 PLAN AND PROFILE

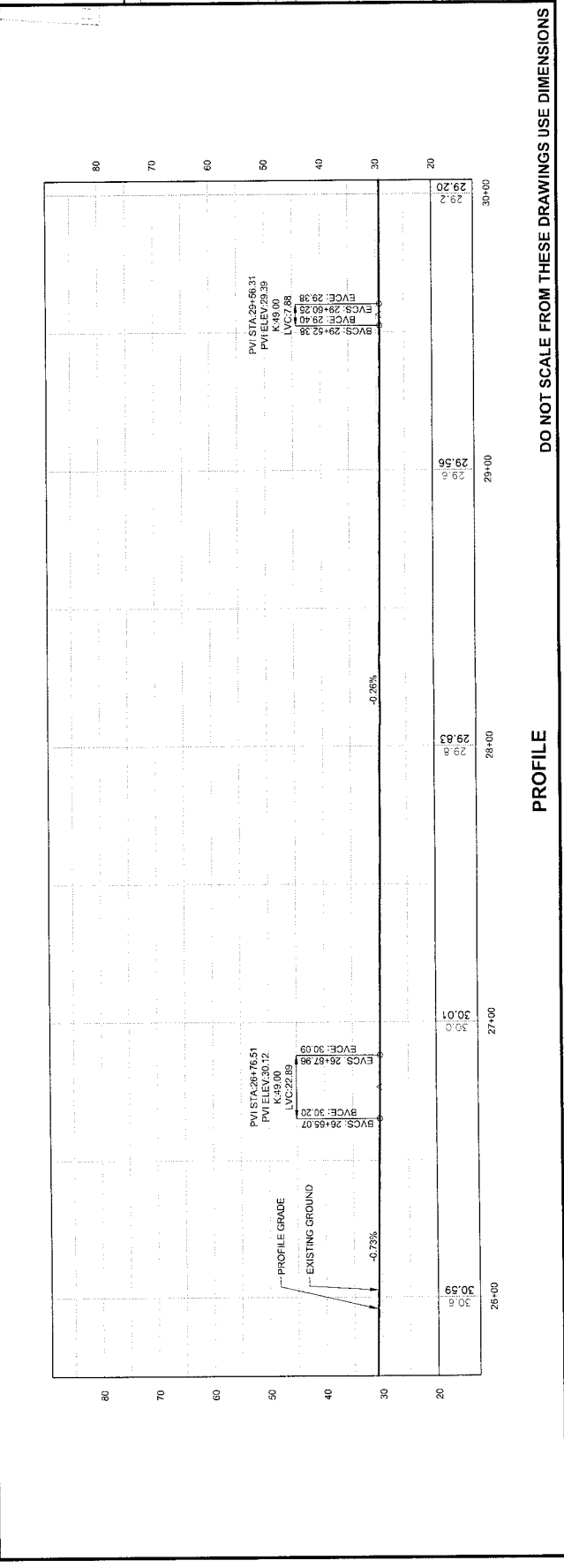
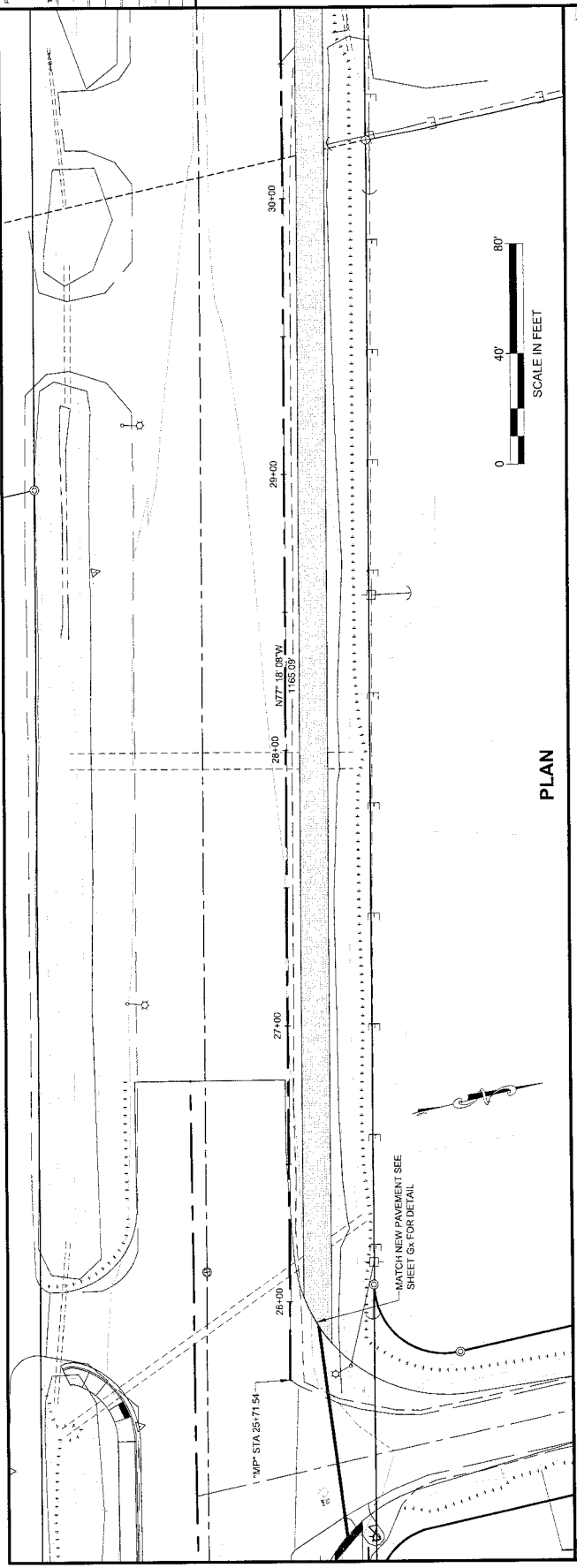
NO.	DATE	DESCRIPTION

DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 CHECKED BY: G. LOCKWOOD



STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 SOUTHEAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987


**PLAN AND PROFILE**  
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 STATE: ALASKA  
 YEAR: 2013  
 SHEET NUMBER: F14  
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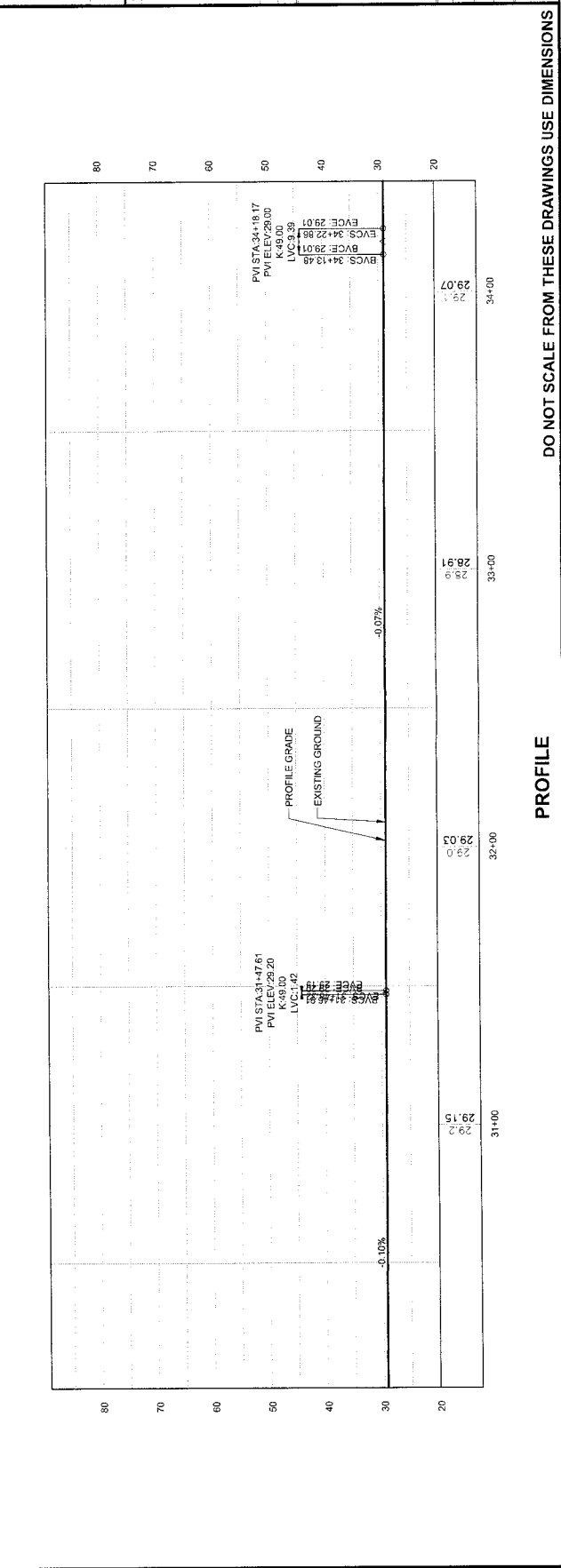
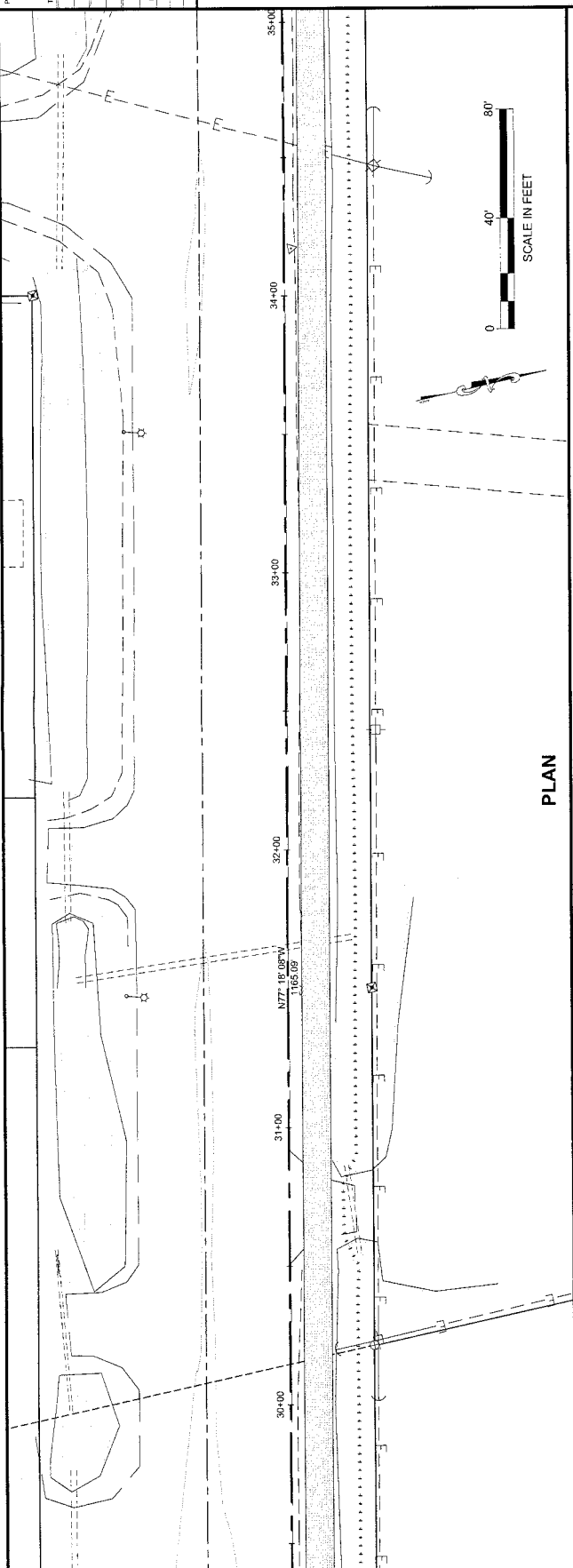
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PART 03 - UNIVERSAL SHEET  
 COMPUTATIONS FOR FIFTH PLAN AND  
 PROFILE  
 ECKHOFF, TRAVIS W (DOT)  
 JOB #15  
 Thursday, April 22, 2010 10:55:08 AM  
 APPROPRIATION NUMBER  
 ATTACHMENT NUMBER  
 RECORD OF REVISIONS  
 NO. DATE DESCRIPTION

**PLAN AND PROFILE**  
**JNU: GLACIER HWY**  
**BROTHERHOOD BRIDGE**  
**REPLACEMENT**  
**PROJECT #67987**  
 CHECKED BY: G. LOCKWOOD  
 DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 ENGINEERING DIVISION  
 SOUTH-EAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987  
**PLAN AND PROFILE**  
 PROJECT DESIGNATION  
**NIH-BR-0933(019)**  
 STATE ALASKA YEAR 2013  
 SHEET NUMBER TOTAL SHEETS  
**F15 XX**



STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 ENGINEERING DIVISION  
 SOUTH-EAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987



PLAN AND PROFILE  
 PROJECT #67987  
 JNU: GLACIER HWY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT

DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC FACILITIES  
 SOUTHEAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

ALASKA  
 STATE  
 YEAR  
 2013  
 NH-BR-0933(019)  
 PROJECT DESIGNATION  
 SHEET NUMBER  
 F16  
 TOTAL SHEETS  
 XX

RECORD OF REVISIONS  
 NO. DATE DESCRIPTION

ATTACHMENT NUMBER

PLAN AND PROFILE

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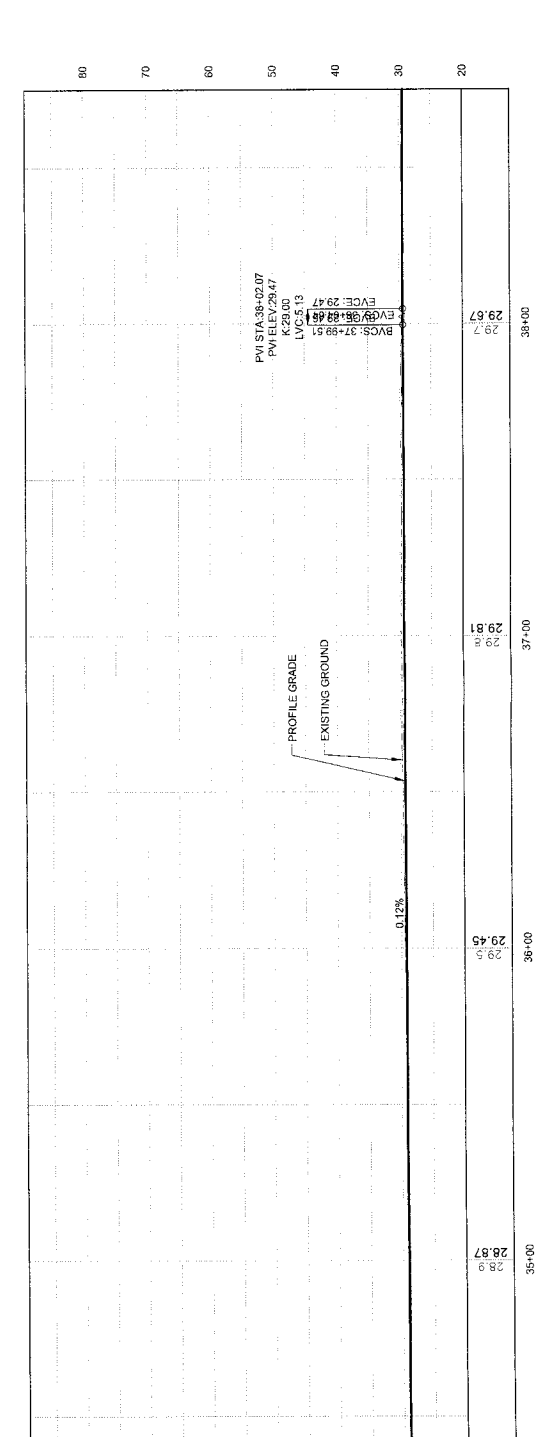
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 L= 3.82'  
 Δ= 1°08.57'

SCALE IN FEET  
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PLAN



PROFILE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PROJECT: JUNO GLACIER HIGHWAY  
 BROTHEROOD BRIDGE REPLACEMENT  
 PROJECT #67987

DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION

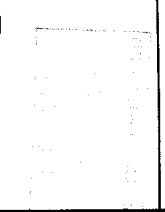
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 STATE ALASKA  
 YEAR 2013  
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 TOTAL SHEETS XX

RECORD OF REVISIONS  
 NO. DATE DESCRIPTION

ATTACHMENT NUMBER

PLAN AND PROFILE

JUNO GLACIER HWY  
 BROTHEROOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987



CHECKED BY: G. LOCKWOOD

DESIGNED BY: J. WHITE

DRAWN BY: T. ECKHOFF

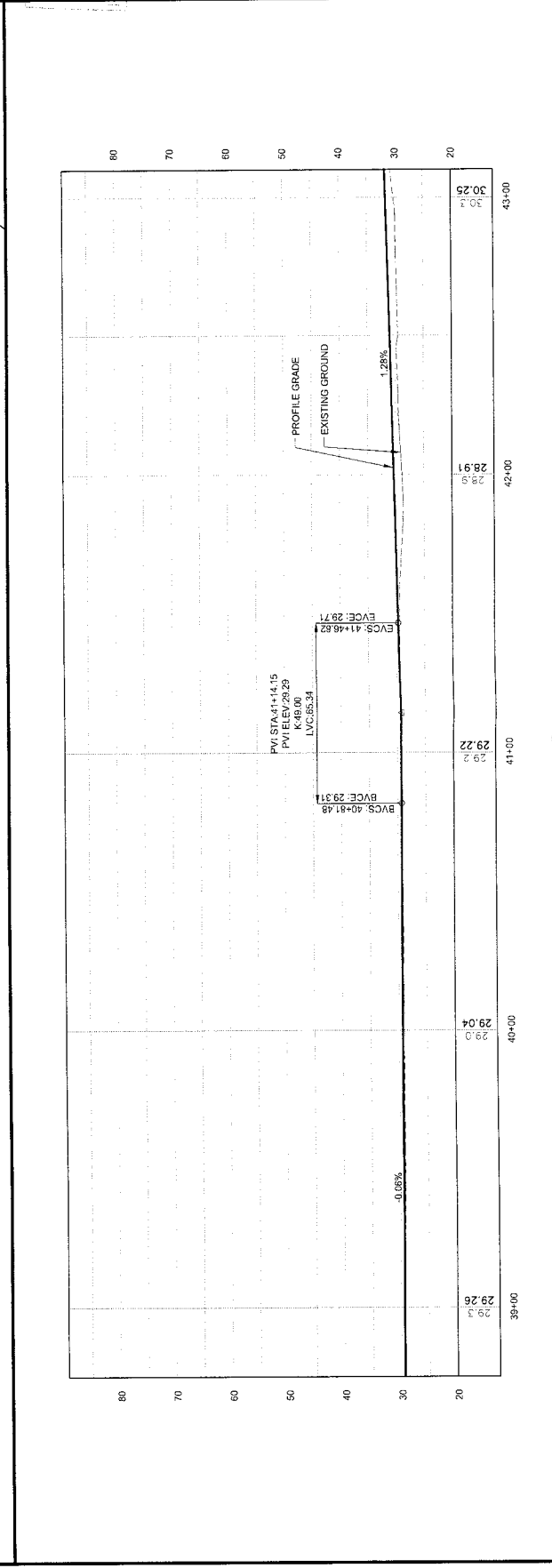
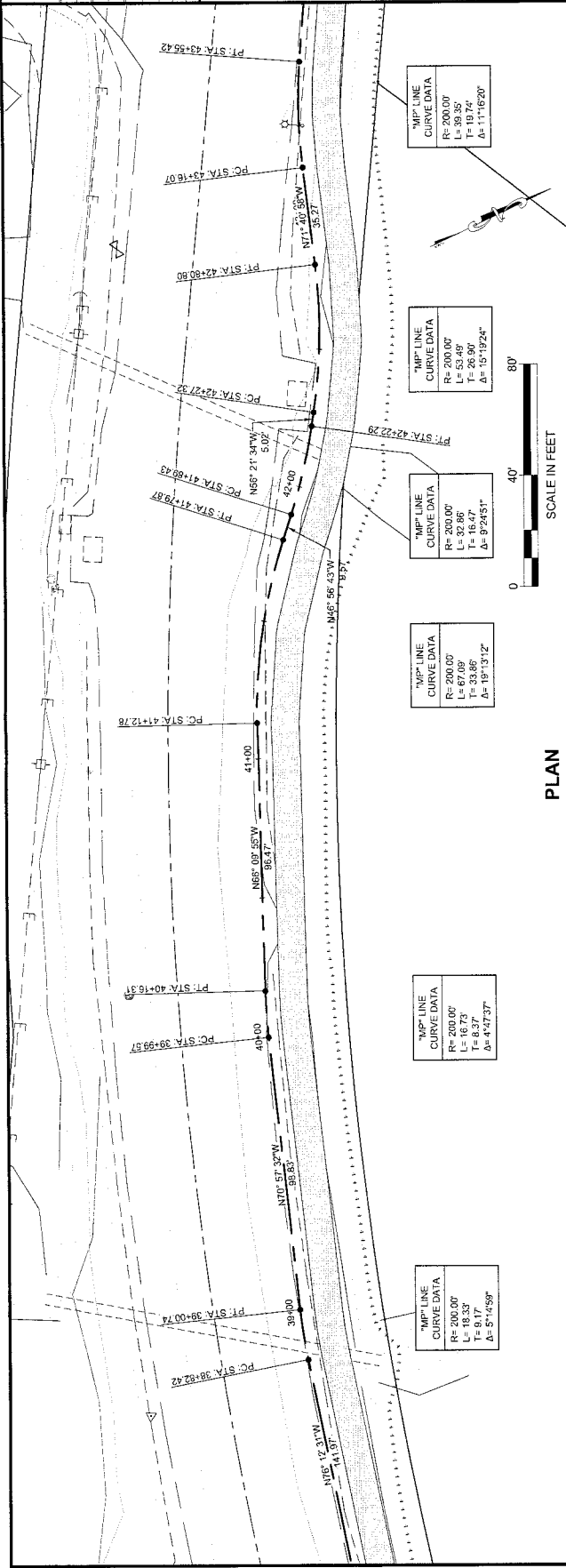
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION

JUNO GLACIER HIGHWAY  
 BROTHEROOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

PLAN AND PROFILE

PROJECT DESIGNATION  
 NH-BR-0933(019)

STATE ALASKA  
 YEAR 2013  
 SHEET NUMBER F17  
 TOTAL SHEETS XX



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PLAN AND PROFILE  
 PROJECT #67987  
 JNU: GLACIER HWY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT

DRAWN BY: T. ECKHOFF  
 CHECKED BY: C. LOCKWOOD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC UTILITIES  
 SOUTH EAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

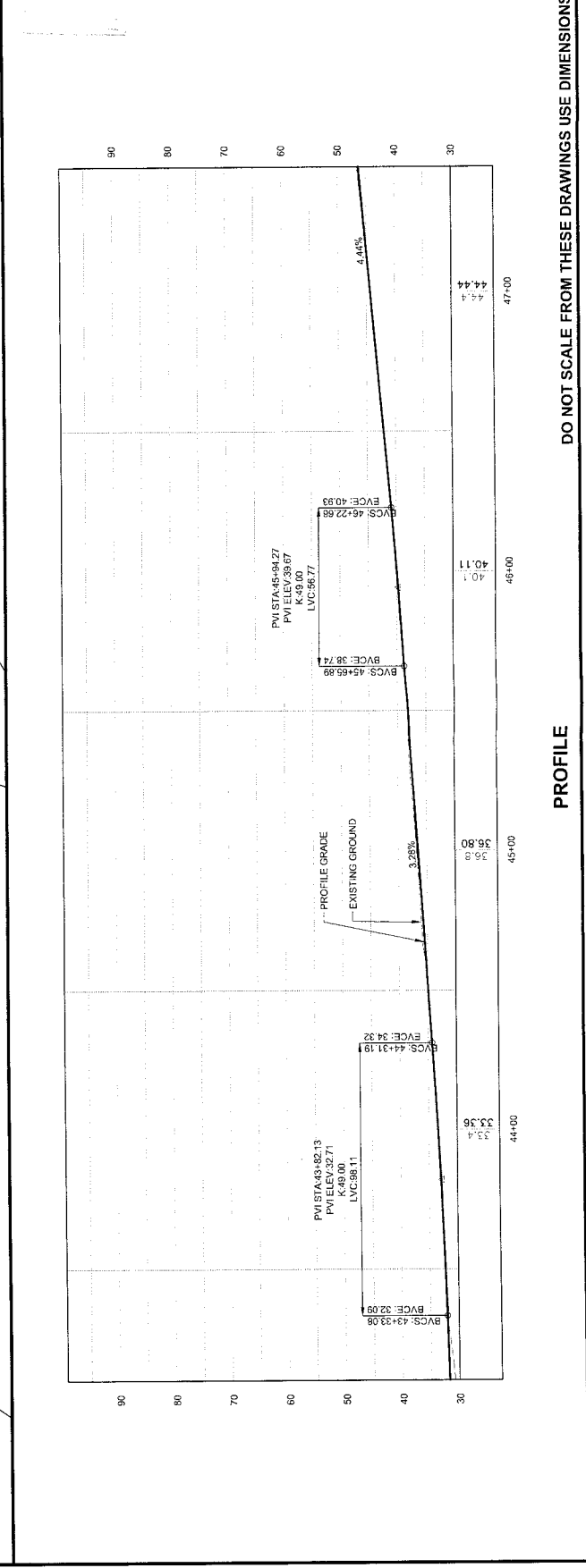
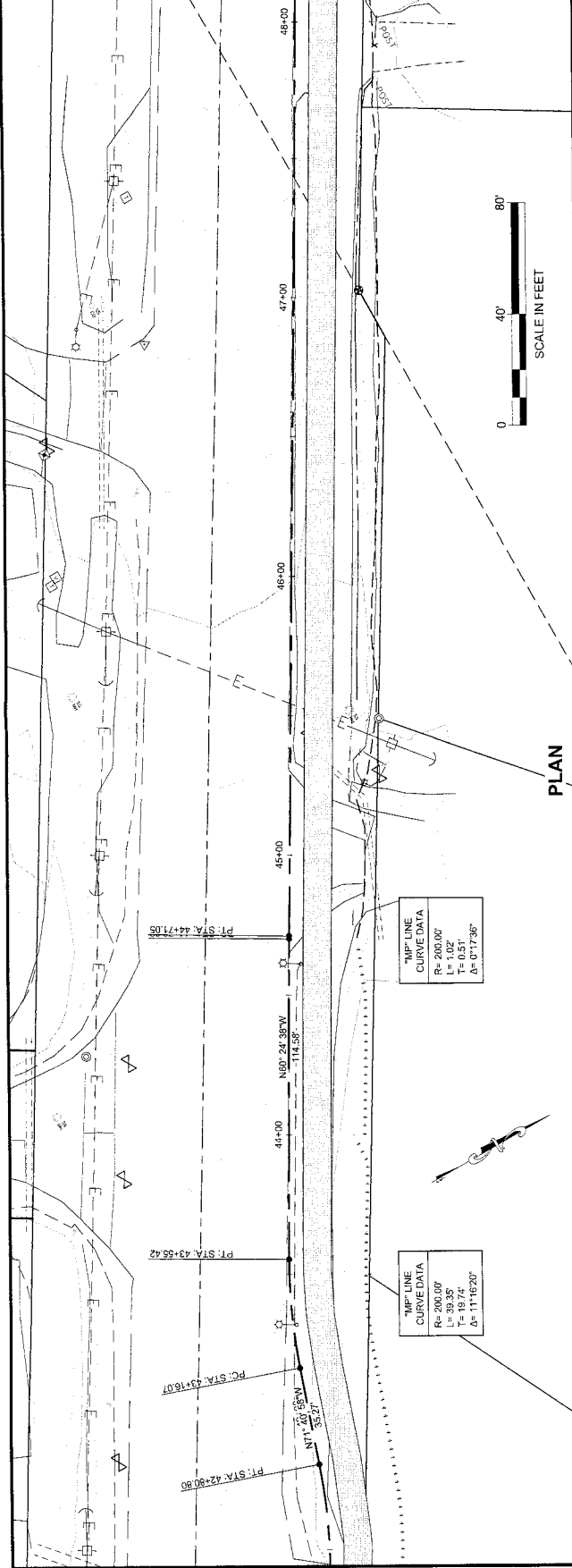
PROJECT #67987  
 JNU: GLACIER HWY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT

DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC UTILITIES  
 SOUTH EAST REGION  
 JNU: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987



PROJECT DESIGNATION  
 NH-BR-0933(019)  
 STATE: ALASKA  
 YEAR: 2013  
 SHEET NUMBER: F18  
 TOTAL SHEETS: XX

PLAN AND PROFILE  
 PROJECT #67987  
 JNU: GLACIER HWY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT



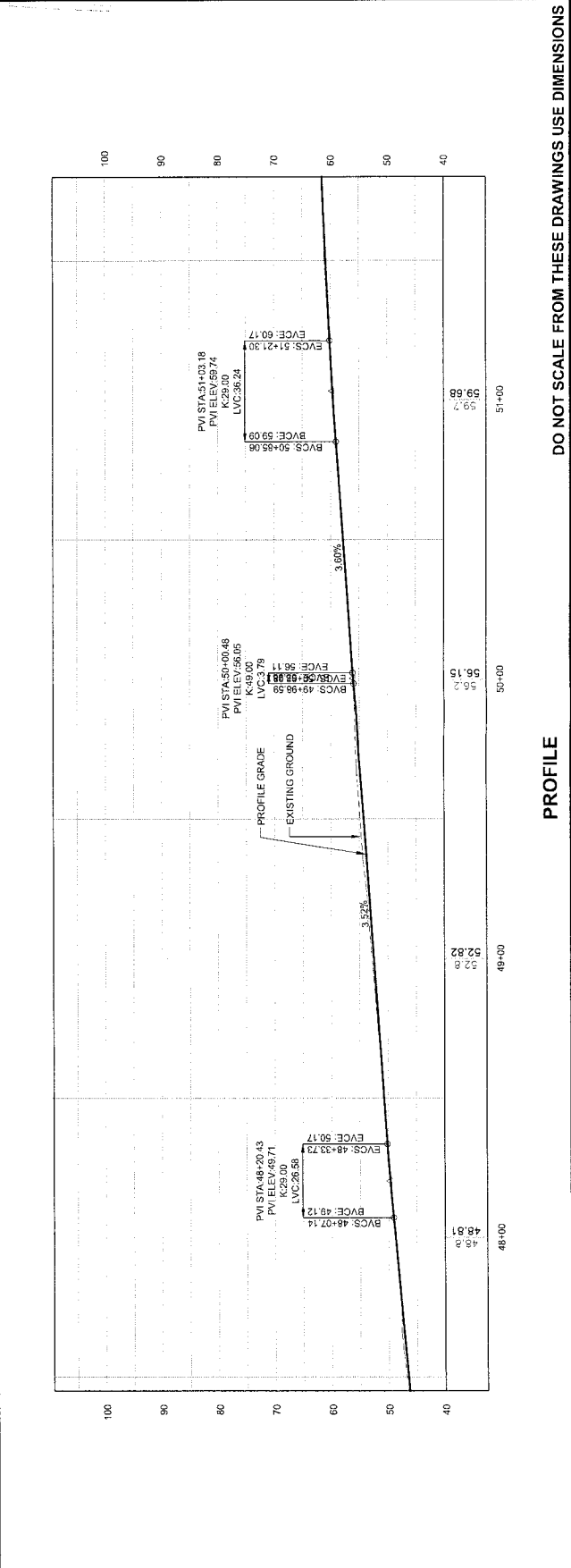
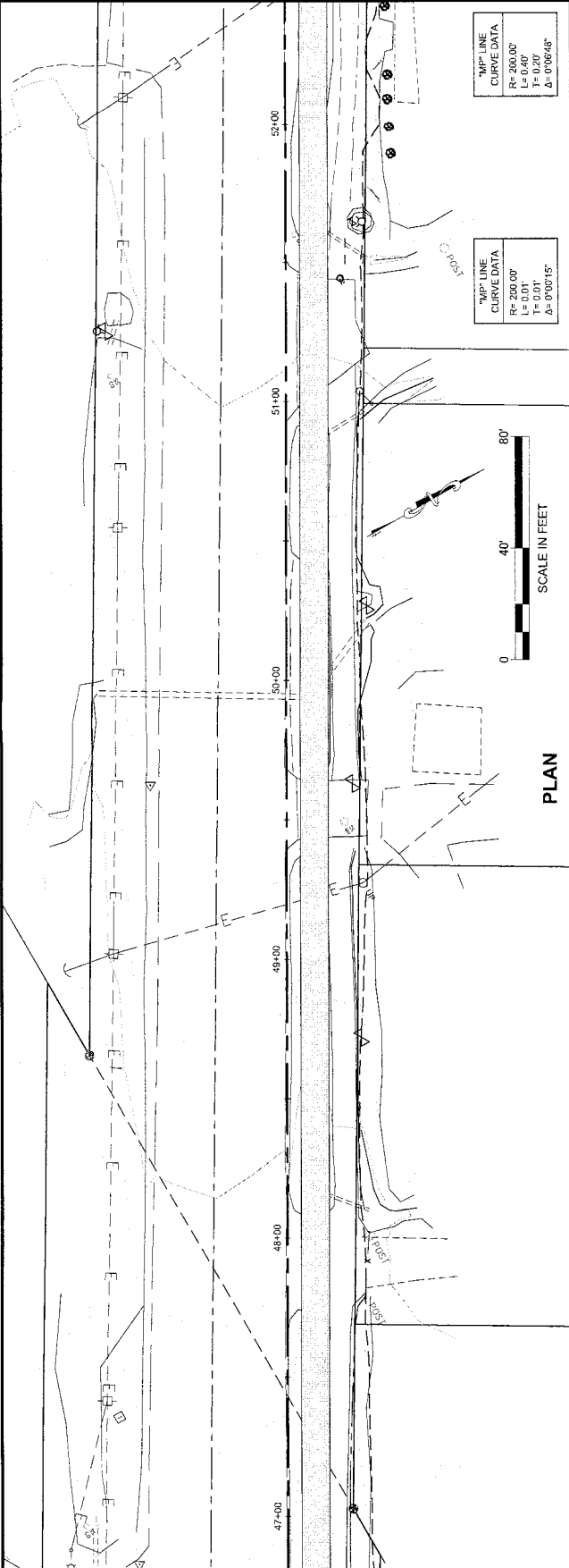
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

JUN: GLACIER HWY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

PLAN AND PROFILE

DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 CHECKED BY: G. LOGANWOOD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 SOUTHEAST REGION  
 JUN: GLACIER HIGHWAY  
 BROTHERHOOD BRIDGE  
 REPLACEMENT  
 PROJECT #67987

PROJECT DESIGNATION  
 NH-BR-0933(019)  
 STATE ALASKA  
 YEAR 2013  
 SHEET NUMBER F19  
 TOTAL SHEETS XX

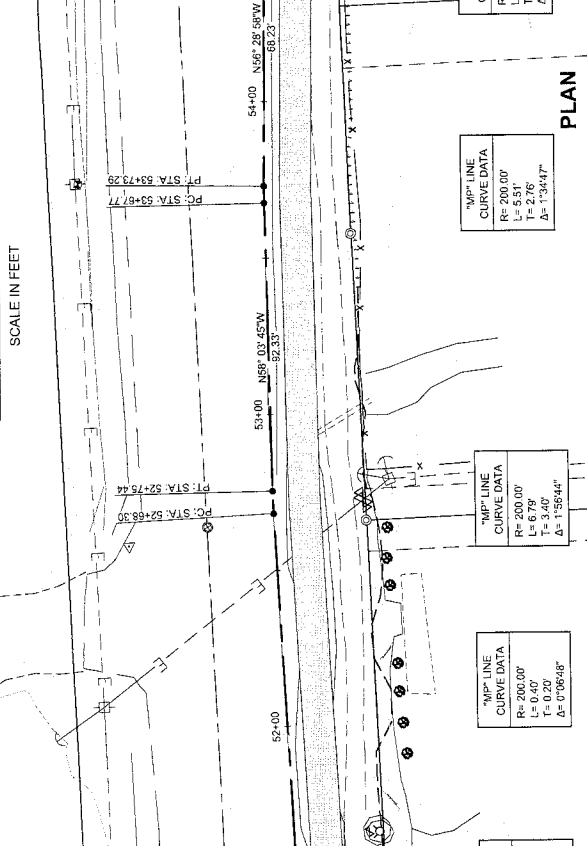
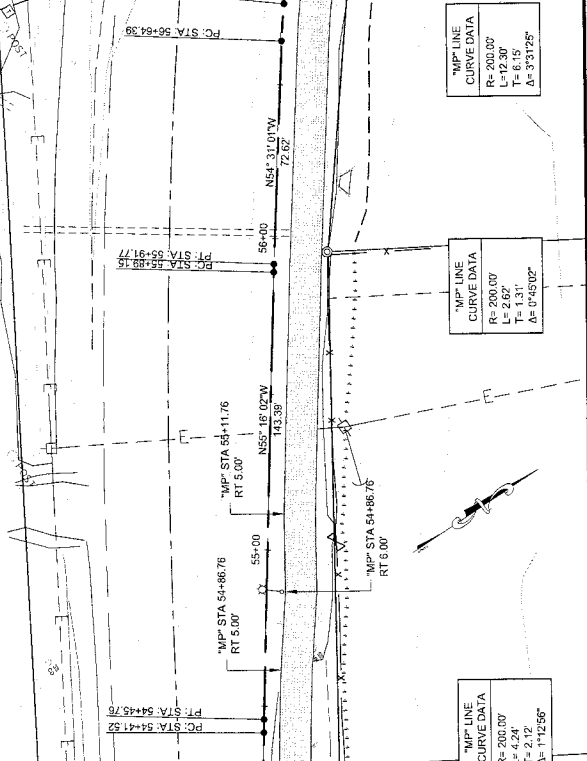


JNU-GLACIER HWY  
 REPLACEMENT  
 PROJECT #67987  
 BROTHEROOD BRIDGE  
 PLAN AND PROFILE

DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECHOFF  
 CHECKED BY: G. LOCKWOOD  
 STATE OF ALASKA  
 DEPARTMENT OF PUBLIC SAFETY  
 DIVISION OF HIGHWAYS  
 JUNO, ALASKA  
 PROJECT #67987

PROJECT DESIGNATION  
 NH-BR-0933(019)  
 STATE ALASKA  
 YEAR 2013  
 SHEET NUMBER TOTAL SHEETS  
 F20 XX

RECORD OF REVISIONS  
 No. DATE DESCRIPTION  
 ATTACHMENT NUMBER

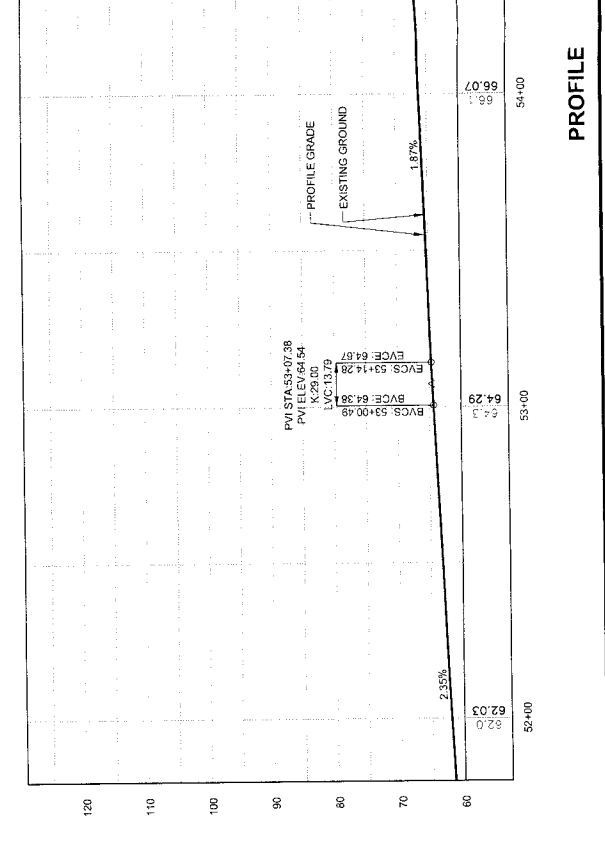


JNU-GLACIER HWY  
 REPLACEMENT  
 PROJECT #67987  
 BROTHEROOD BRIDGE  
 PLAN AND PROFILE

DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECHOFF  
 CHECKED BY: G. LOCKWOOD  
 STATE OF ALASKA  
 DEPARTMENT OF PUBLIC SAFETY  
 DIVISION OF HIGHWAYS  
 JUNO, ALASKA  
 PROJECT #67987

PROJECT DESIGNATION  
 NH-BR-0933(019)  
 STATE ALASKA  
 YEAR 2013  
 SHEET NUMBER TOTAL SHEETS  
 F20 XX

RECORD OF REVISIONS  
 No. DATE DESCRIPTION  
 ATTACHMENT NUMBER



STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 PROJECT #67987  
 JNU, GLACIER HWY  
 BROTHEROOD BRIDGE REPLACEMENT

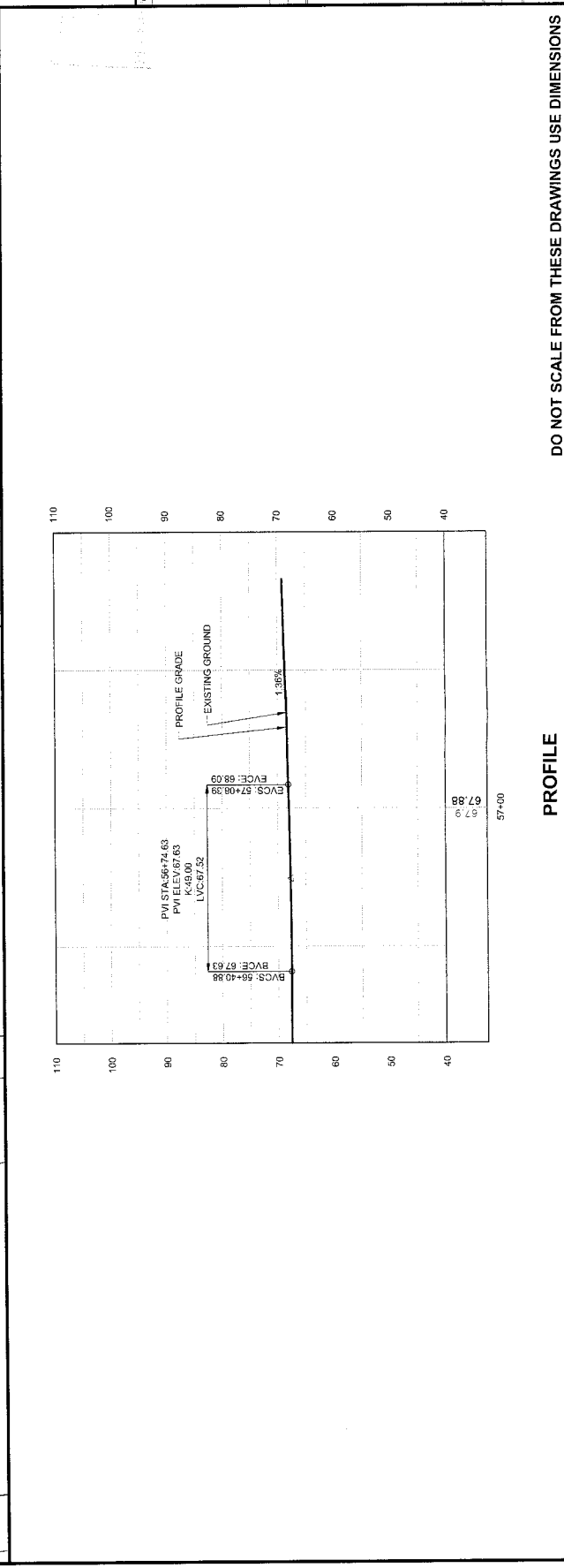
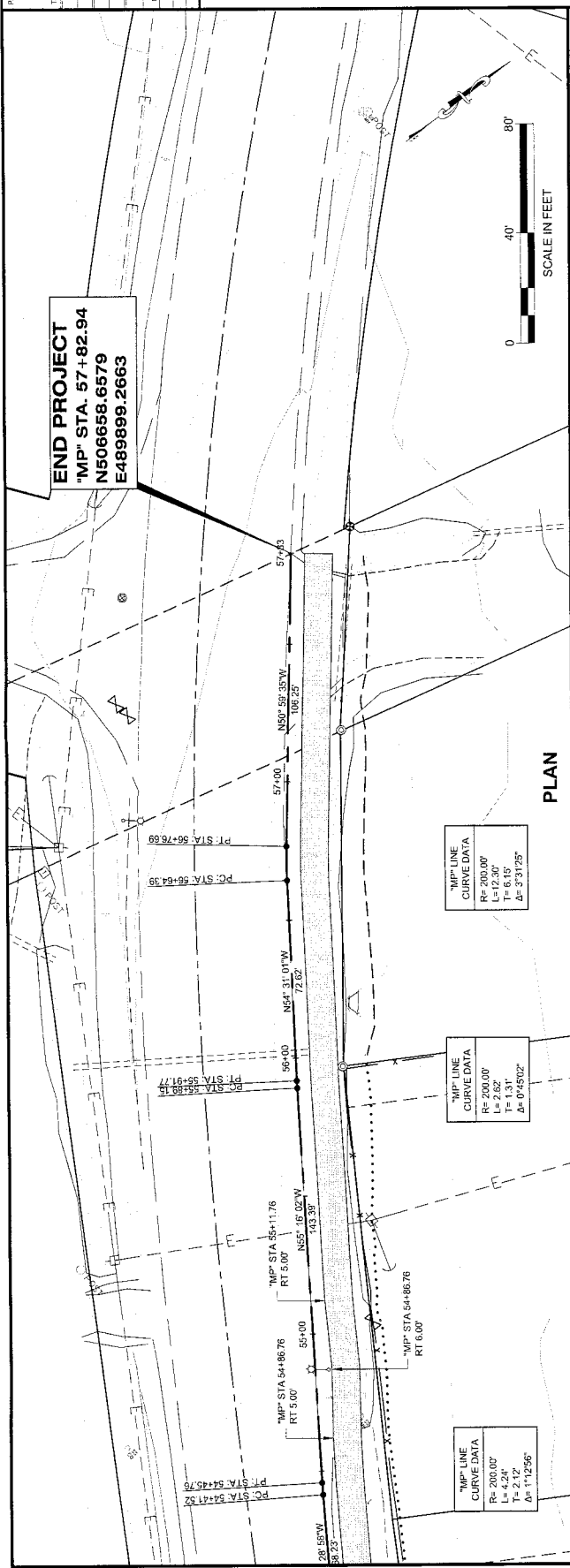
No.	DATE	DESCRIPTION

PLAN AND PROFILE  
 JNU, GLACIER HWY  
 BROTHEROOD BRIDGE REPLACEMENT  
 PROJECT #67987



DESIGNED BY: J. WHITE  
 DRAWN BY: T. ECKHOFF  
 CHECKED BY: G. LOCKWOOD  
 STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 PUBLIC UTILITIES  
 DIVISION OF HIGHWAYS  
 SOUTHEAST REGION  
 JNU, GLACIER HIGHWAY  
 BROTHEROOD BRIDGE REPLACEMENT  
 PROJECT #67987

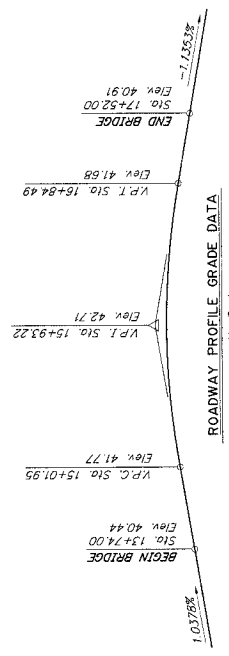
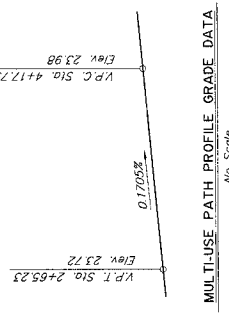
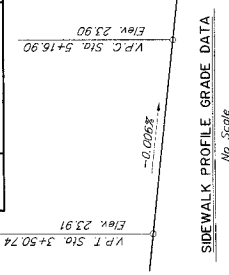
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STATE	ALASKA
YEAR	2013
SHEET NUMBER	F21
TOTAL SHEETS	XX



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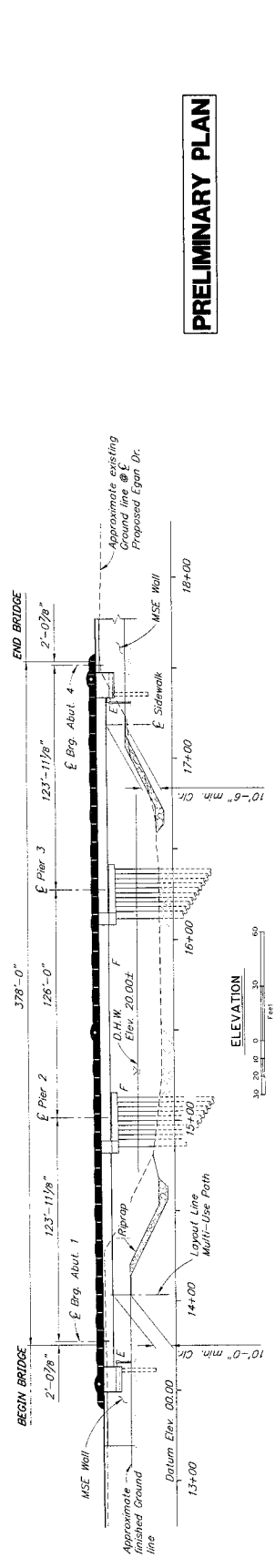
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA		2014		



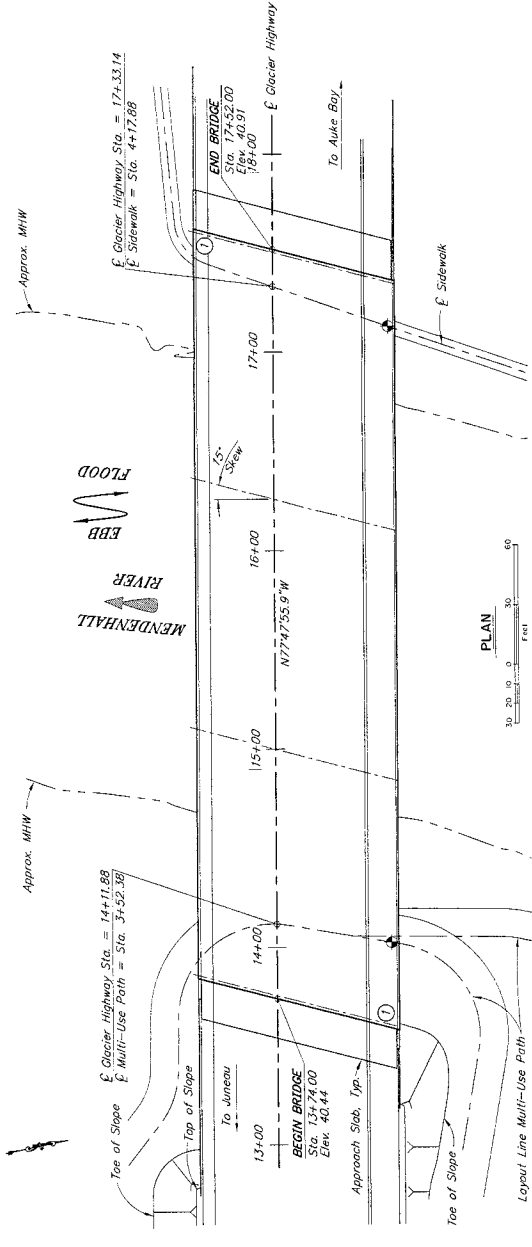
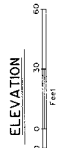
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MULTI-USE PATH PROFILE GRADE DATA  
No Scale

ROADWAY PROFILE GRADE DATA  
No Scale



**PRELIMINARY PLAN**



TITLE	DWG. NO.
GENERAL LAYOUT	1
STAGE CONSTRUCTION	2
SITE PLAN	3

① Approximate location of Bridge Number Plate.  
 ● Point of minimum vertical clearance.



**MENDENHALL RIVER BRIDGE**  
**GLACIER HIGHWAY**  
**GENERAL LAYOUT**

STATE OF ALASKA  
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**  
 BRIDGE SECTION

DESIGNED BY:	Checked:	LAYOUT BY:	Checked:
DRAWN BY:	Checked:	SPECIFICATIONS BY:	Checked:
QUANTITIES BY:	Checked:	APPROVAL RECOMMENDED BY:	Checked:

# DRAFT



**PRELIMINARY PLAN**  
SCALE IN FEET  
0 90 180

**BOUNDARY LEGEND**

- SECTION 6/0 BOUNDARY
- SECTION 4/0 BOUNDARY
- PROPOSED PARK ACCESS
- BROTHERHOOD PARK
- WEST MENDENHALL VALLEY GREENBELT

**PARK ACCESS**  
54,000 SF = 1.24 ACRE

DO NOT SCALE FROM THESE DIMENSIONS

PROJECT DESCRIPTION <b>NH-093-3(19)</b>	
STATE	YEAR
ALASKA	2013
SHEET NUMBER	TOTAL SHEETS
1	1

DESIGNED BY	J. WHITE	
DRAWN BY	J. WHITE	
CHECKED BY	S. LOCKWOOD	
DATE		
RECORD OR REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT NUMBER	
ATTACHMENT NUMBER	
DATE	
DESCRIPTION	

116. APPROVAL NUMBER: 27. 2013 5:28:22 AM

PROJECT NUMBER: 67987-1  
 ATTACHMENT NUMBER: 1  
 DATE: 05/27/2013  
 DESCRIPTION: JNU: GLACIER HWY - BROTHERHOOD BRIDGE RECONSTRUCTION PROJECT NO. 67987

**PARKING LOT ACCESS**  
**Attachment B**

## Holly Kveum

---

**From:** John Kern  
**Sent:** Thursday, May 30, 2013 1:33 PM  
**To:** Benjamin Lyman  
**Subject:** RE: Brotherhood Bridge and Industrial Blvd. bus stops

Yes, I made the same comments to them, but could not convince them it was not a good idea. I suggest that the stops remain at or near the current location with some provision for pedestrian crossing. Their idea that pedestrians will use the passage under the bridge is unrealistic.

---

**From:** Benjamin Lyman  
**Sent:** Thursday, May 30, 2013 10:28 AM  
**To:** John Kern  
**Subject:** Brotherhood Bridge and Industrial Blvd. bus stops

Good morning, John-

I know you've been in contact with DOT&PF regarding their proposed changes to Capital Transit stop location on the north side of Glacier Highway near the Brotherhood Bridge and Industrial Boulevard, but wanted to check directly and see if you had any comments or unresolved issues with their proposed relocation of this stop.

My primary concern is in regard to moving the stop further from the services at Job Service/DHSS and the failure to provide a designated at-grade crossing near the bus stop, or even a pedestrian refuge/median.

Please let me know if you have any thoughts on this project.

Ben Lyman  
Senior Planner  
Community Development Department  
City and Borough of Juneau, Alaska

(907)586-0758

Attachment C



## Historic Resources Advisory Committee

155 S. Seward Street  
Juneau, Alaska 99801

*Advising on Historic Resources and City Museum Issues*

June 6, 2013

Jane Gendron, Environmental Manager  
DOT&PF Southeast Region  
6860 Glacier Highway  
PO Box 112506  
Juneau, Alaska 99811-2506

Re: Brotherhood Bridge Replacement - Fed/State Project #NH-093-3(19)/67987  
Implementation of Memorandum of Agreement

Dear Jane,

The Historic Resources Advisory Committee (HRAC) of the City and Borough of Juneau is writing in reference to the Brotherhood Bridge Replacement project and your letter dated May 28, 2013. The HRAC reviewed the Brotherhood Bridge Replacement project at its June 5<sup>th</sup> regular meeting, and supports the implementation plan as itemized in the letter. Preference was given to Bridge Rail Option 2.

The Committee would like to thank you for the opportunity to review this project. The HRAC also requests more details concerning the overall scope of the project, including the locations of the retaining wall, trail overlook, and interpretive display.

Thank you for your time and we look forward to seeing further development of this exciting project.

Sincerely,

Gary Gillette, Chair  
Historic Resources Advisory Committee

Cc: Ben Lyman, Senior Planner, CDD  
Jon Lange, Planner, CDD, HRAC Liaison  
Laura Boyce, Senior Planner, CDD, HRAC Liaison  
Jane Lindsey, Museum Director, HRAC Liaison

---

Gary Gillette, HRAC Chair  
Don Harris, Vice Chair  
Shauna McMahon, Recorder

Connie Munro  
Myra Gilliam

Elizabeth Eskelin  
Marie Darlin

Rico Worl  
Gerald Gotschall

Attachment D