The image shows the cover of a report. The background is a photograph of a wooden trestle bridge crossing a river. The bridge has a complex lattice of wooden beams. In the background, there is a large, rugged cliff face with some trees on top. The sky is a deep blue. The title 'The River and the Road' is written in large, white, sans-serif font across the top. Below the title, the subtitle 'Development and Interpretive Guidelines North Pend Oreille Scenic Byway' is written in a smaller, white, sans-serif font.

The River and the Road

Development and Interpretive Guidelines
North Pend Oreille Scenic Byway

The River and the Road

Development and Interpretive Guidelines
North Pend Oreille Scenic Byway

Working Draft
December 9, 1999

Prepared By
The Department of Urban and Regional Planning
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Introduction

Every landscape has stories. Stories provide meaning and help us to understand and appreciate "place". Along the river and the road of north Pend Oreille there are many "stories" to instruct and honor the community as well as share with visitors. Among questions posed by this report are: What are the most important ones and how are they best told or displayed? The answers must come from the community. This report hopefully serves as a resource.

Study Area: The North Pend Oreille Scenic Byway is located one hundred miles northeast of Spokane, WA.. The 27 mile corridor (State Route 31) begins at the Tiger Junction (SR20) and proceeds north along the Pend Oreille River to the Canadian border (see Figure 1.1). The area's scenic, natural, and recreational qualities led to State scenic route designation in 1993 (RCW 47.39).

The setting is a narrow river valley surrounded by forested mountains, openings for the occasional farm or ranch, and includes 3 small towns; Lone, Metaline, and Metaline Falls, with an area population of less than 1500 people. The majority of the viewshed and the northern third of the corridor are on public lands managed by the U. S. Forest Service (Colville National Forest). The majority of the people live and carry out their daily lives on private lands in the valley. The mix of public and private interests is a notable feature of the physical and cultural landscape.

Community Context: Over the years, north Pend Oreille County 's natural resource based economies of timber and mining have declined leaving it with one of the highest unemployment rates in the state. While the area's economy is poor, the environment is rich with heritage resources. Tourism potential based on byway resources offers both opportunity and challenge. The community desires a modest degree of tourism activity. It also desires to maintain the quality and character of the rural lifestyle (EWU, 1998).

Byway Resources: In an earlier inventory, over 100 heritage sites representing cultural, historical, natural, scenic, and recreational qualities were identified (see Figure 1.2 for examples). The area's recreational amenities are probably the most familiar to urban residents in the Spokane area. Long time visitors annually schedule their preferred summer weekends at one of 300 public and private campsites along the area's river, lakes, and streams. And they tend to keep quiet about it. They also secretly smile as they hike alone on the numerous maintained trails throughout the Sullivan Lake Ranger District.

In addition to the scenic and recreation qualities of the river and Colville Forest, the area contains unique and diverse flora and fauna. It includes the Salmo Priest Wilderness Area, part of the Selkirk-Yaak-Cabinet Ecosystem, considered by many to be second only to Yellowstone as critical habitat for large mammals including sensitive species like grizzly bear, wolf, and caribou.

The geology of the area is also special with a long history of mineral resource extraction, abundant outcrops, and a bed rock that is 2 billion years old. Its a visible reminder of continuous change. A river flows north while streams flow south. Fossils from ancient sea beds lie perched on the mountain top. A rock outcrop displays what was on top is now on bottom.

The community theater, a restored historic school building designed by Kirkland Cutter, is recognized nationally for its small town efforts in visual & performing arts. Six other buildings are on, or eligible for, the historic register.

Old mines, lumber mills, pioneer homesteads, and remnant old growth forest offer ample opportunities for interpreting both ecological and cultural values and public and private views of the working landscape.

The river corridor is the defining landscape feature. In places, canyon walls rise out of the river bed up to 200 feet. These narrow channels, with their turbulent waters, turned back David Thompson's exploration for a Pacific trade route in 1809 (Nisbet, 1996). Today, these features are functional elements for two hydro dams supplying power to the Pend Oreille PUD for local use and external sales and also to Seattle City Light to power significant portions of the City.

Planning Background: Initial byway planning efforts included:

- .completing the heritage resource site inventory,
- .community workshops to identify plan values and vision,
- .formation of an ongoing Citizens Advisory Committee,
- .selection of a byway coordinator, and
- .completion of a Corridor Management Plan (EWU, 1997, 1998).

The vision of the plan called for promoting limited tourism that did not disrupt the rural lifestyles of residents. And it sought a balance for a road that would provide access to heritage resources while maintaining mobility for commercial traffic.

Even as the plan was being drafted, implementation was taking place.

An early priority was to "get on the map". Promotional efforts included design/distribution of brochures, attracting media attention, networking with state and national tourism efforts, establishing a web site, and design and placement of limited byway signage. A great deal was accomplished in a short time period due to strong community support, the tenacity of the coordinator, and beneficial public-private partnerships at the local level.

On a regional scale, the Byway has participated in the Selkirk Loop, a 200 mile scenic area route association formed to promote tourism in the region. The organization includes communities in southern British Columbia, northern Idaho, and northeastern Washington.

Over the past two years, several grant requests have been funded by USDOT, WSDOT, and USFS. About a half a million dollars in scheduled improvements have taken place or are under way. Additional contributions have been made by local agencies and the private sector. The most significant project to date is the restoration of the 100 year old Tiger Store, the oldest building in the area. The historic building, when restored, will serve as a southern gateway/ rest area, historical museum, and outlet for local arts & crafts.

In the past, the area was often referred to as the "forgotten corner". The North Pend Oreille Scenic Byway Project hopes to alter this perspective while remaining sensitive to community concerns and preferences. Continued development and interpretation of byway resources seeks to attract visitors from the greater Spokane region (>500,000 pop.), from Canada, and other nearby states; and thus add needed dollars to the local economy.

Current Study Scope: This University effort supports an ongoing corridor project, funded by National Scenic Byway monies, to undertake signage improvements and evaluate selected sites for future development. In earlier work by the Coordinator and Citizens Advisory Committee, 7 potential sites were suggested (Figure 1.1) for evaluation and a range of signage needs were identified.

Site assessment activities included:

- . site characterization and mapping
- . environmental assessment
- . evaluation of transportation access
- . layout of conceptual design options and potential uses,
- . estimates of costs and maintenance requirements.

Signage and Interpretive evaluation activities included:

- . inventory & analysis of existing signage
- . developing guidelines to address
 - . official DOT signs within the ROW
 - . byway signs within the ROW
 - . and interpretive panels/signs outside the ROW
- . compilation and synthesis of interpretive guidelines & resources.

Those findings and recommendations are presented in the following sections.

The intended study purpose is to provide guidance for :

- . updating & revising elements of the Corridor Management Plan
- . programming resource needs
- . service coordination with "public partners"
- . needs assessment and concept plans for grant requests
- . and supporting community dialogue on "appropriate stories".

In terms of interpretation, this report suggests the over arching themes are the connections of the river and the road. Driving the Byway, the road physically connects with the river. Each heritage site is on or near the river. Symbolically and physically, the river and its watershed can be viewed as the interconnection of the natural world elements. The road, and its links, can be viewed as connecting the developed world. The two together constitute a landscape where human activity, past, present, and future, is joined with the natural environment. Given north Pend Oreille's history, it seems an appropriate setting for telling stories about working landscapes. Given current affairs, such stories seem worth telling.

Table of Contents

Section 1: Introduction	1.1
Section 2: Site Assessment	2.1
Introduction	2.1
Assessment Activities	2.1
Tiger Historical Museum Site.....	2.3
Ione River Front Park.....	2.6
Box Canyon Overlook.....	2.7
Eagle's Nest View Site.....	2.8
Sweet Creek Falls Site.....	2.10
Metaline Falls Overlook Pocket Park.....	2.12
Crescent Lake.....	2.14
Conclusions.....	2.16
Section 3: Site Design and Concept Plans	3.1
Section 4: Signage Guidelines	4.1
Introduction	4.1
Overview	4.3
Sign Inventory and Assessment	4.5
Byway Right-of-Way Signing Guidelines	4.11
Interpretive and Orientation Panels Guidelines	4.19
General Programming Guidelines	4.33
Section 5: Interpretive Guidelines	5.1
Section 6: Implementation	6.1
Appendix	
A: Environmental Review Resources	A.1
B: Native Landscaping Design	B.1
C: Signage Support Material	C.1
D: Interpretive Resources	D.1

SECTION 1: INTRODUCTION

SECTION 2: SITE ASSESSMENT

Site Assessment

Introduction

This section constitutes the site assessment portion of the North Pend Oreille Scenic Byway Site Assessment and Signage Development Project. A preliminary assessment of seven candidate sites was conducted, each for their potential development as interpretive centers, rest areas, pullouts, or places of significant interest. These sites are: Tiger Historical Museum, Lone River Front Park, Box Canyon Overlook, Eagle's Nest Viewing Site, Sweet Creek, Metaline Falls Overlook Pocket Park, and Crescent Lake Pullout Site (see Figure 1.1). The purpose of the assessment is to identify important site and use characteristics that provide a foundation for future site design and development.

Assessment Activities

Site assessment activities included site visitations, environmental assessment, inventories of surrounding land uses, site measurement, costs and maintenance estimates, ingress/egress evaluation from State Route 31, preliminary site design options, and potential uses for each site. Highlights of those activities are provided below for each site.

Tiger Historical Museum Site
Proposed Use: Multipurpose Gateway Center

Located at the southern most point of the Byway, the Tiger site is the best option for a Gateway Center. Its location at a major crossroads (SR 20 and 31) makes it a logical stopping point for travelers and tourists. The Old Tiger Store/Post Office is in the process of being relocated and refurbished at its current site by the Tiger Museum Association. This location is within the historical town site of Tiger, formerly a major port on the Pend Oreille River, and at one time contained about 200 dwelling units (Bamonte, 1996). Not far from this location is where David Thompson, in the fall of 1809, was for the first time turned back from his quest to reach the Columbia River.

The current renovation project will provide a combination of activity space including museum, gift shop, parking, interpretive signage, information maps and brochures, restroom facilities, and a picnic area. A byway gateway sign is proposed either on the site or across the road.

Location

- Southernmost point on the North Pend Oreille Scenic Byway Heritage Corridor (SR 31)
- At the junction of State Route 31 and State Route 20 (Milepost 0)

Site Characteristics

-Adjacent Land Uses

- The old Tiger town site is about ½ mile east of Tiger junction.
- Pend Oreille River is ½ mile east.
- Open space and scenic beauty of the valley is observed from the site.
- A residential dwelling unit is located on the parcel directly west of the site, Southern parcel is a vacant 2.5 acre lot, the parcel to the north is a vacant commercial structure.
- Possibility for site expansion on 1 or more of these parcels.

-Adjacent Roadway Geometrics

- North of the Site
 - 55 MPH legal speed limit
 - (2) 12 foot lanes
- East of the Site
 - 55 MPH speed limit
 - (2) 12 foot lanes
 - (2) 4 foot shoulders

-Suitability for Development

- Relative minor grading proposed, the site is mostly flat
- Existing site can accommodate parking, interpretive and orientation signage
- Safe ingress and egress from SR 20 and SR 31

- The site is suitable for structures such as the museum.
- Site is covered with grasses thus natural vegetation can be reintroduced in landscaping designs.
- Soils are suitable for restroom facilities that are planned under current site proposal.
- Telephone, water, and electricity are currently available to the site.
- Site is approved for development.
- Amended site plan will address landscaping, orientation panel, and potential for further expansion to the south.

Significance to Byway

- The Tiger Museum, once the Tiger store, has been around for many years.
- The surrounding area includes the history of the Old Tiger town site, consisting of about 200 dwelling units, and the former port on the Pend Oreille River.
- The site is at the intersection of 2 major highways with ample transportation history.
- The Kalispel tribe also traveled through area in route to Kettle Falls.
- Located at the southern terminus and given the location's historical character, the site naturally lends itself to begin a trip north along the natural, scenic, cultural, recreational, and historic byway. The site has the best potential for a gateway center. This center would have interpretive displays, orientation maps depicting other sites along the byway, and ancillary services.
- The Tiger Museum Association currently owns the Tiger Museum. The funds for its current refurbishment comes from an Enhancement Program Grant provided by TEA 21.
- Current site plan development relocates building 15 feet to the south, refurbishes it, adds parking, loop driveway access, restrooms, and orientation panel.

Proposed Site Development (Amending Current Site Plan)

- Parking delineation based on Department of Transportation (DOT) figures for average daily traffic (ADT). This includes paving and creating parking stalls for oversized and additional vehicles.
- Gateway/ Orientation signage which includes historical interpretive panel, orientation panel, and gateway entry signage.
- Landscaping that incorporates native vegetation.
- Exploration of site expansion to the south.

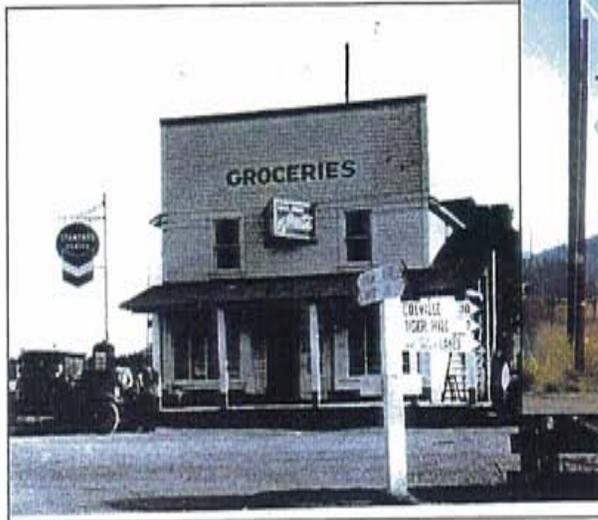
Maintenance Considerations

- Additional pavement area.
- Assessment of restroom access and maintenance in off season.
- Additional waste disposal pick up and receptacles.
- Landscaping maintenance—incorporating low maintenance native vegetation will reduce needed efforts.
- Upkeep of external signage/interpretive panels.
- The Tiger Museum Association is the owner and assumed site manager. A business plan for operation of museum, including site maintenance, is being developed.

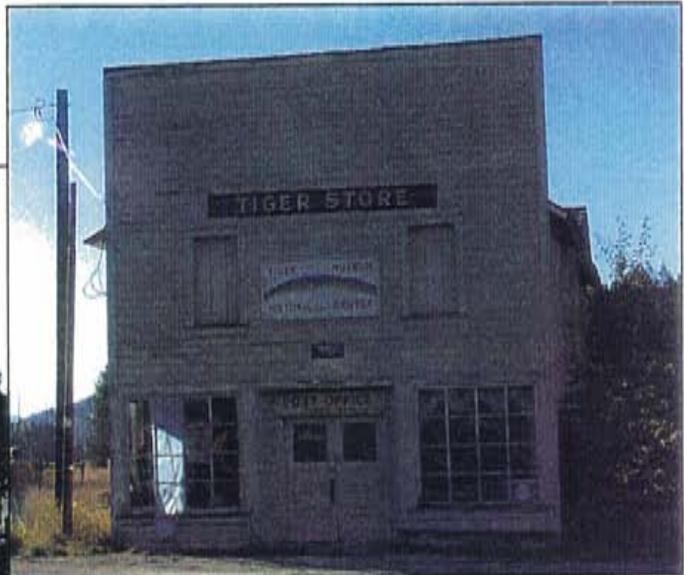
Other Considerations

- The development and site plans are in place. However attention will be given to the signage placement, landscaping issues, and added parking with amended site plan.
- Adjacent land use, that is, the residential property to the West and the commercial property to the North.

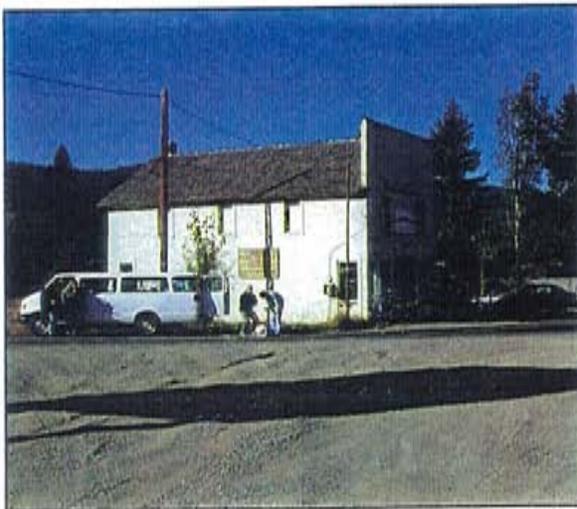
Tiger Site



Tiger Site – Historical Tiger Store



Tiger Site – Today



Tiger Site – Looking West



Tiger Site – Site Map

Ione River Front Park

Proposed Use: Interpretive Panel near Historic River Port Dock Point

Location

- Near Milepost 4.01, two blocks east of State Route 31 in downtown Ione
- Between Tiger and Box Canyon sites

Site Characteristics

- Located between residential district and Pend Oreille River
- Residential district buffered by raised topography, park area 30 feet lower
- Possesses recreational, scenic, and historical traits
- Many existing amenities and services, including picnic areas, restrooms, ample parking, boat launch, docks, indoor pool, and an attractive playground

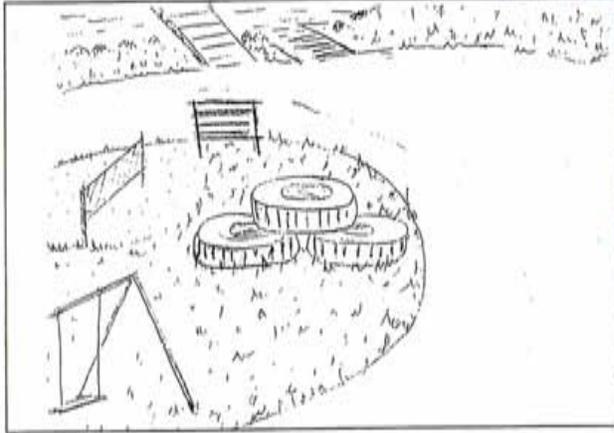
Significance to Byway

- Riverboat landing area historically significant. River was primary mode for shipping traffic until a highway bridge allowed truck traffic over the river in 1932.
- Another historical theme is the story of the *Ione*, a 165' long passenger steamer that transported as many as 500 people along the river route. Following the advent of rail transport, the steamer lay abandoned on the riverbank until it was finally dismantled in 1917.
- Ione's River Front Park makes a wonderful stop along the Byway for travelers and their children to stretch their legs, recreate or picnic along the scenic shore of the Pend Oreille River.
- Many will further enjoy learning a little bit about the town's colorful past centered around an active river transport route that predates the Byway.

Proposed Site Development

- One or more interpretive panels are proposed. One panel could identify the actual landing site, another panel might include other items of historical interest such as the river transportation history; Vaagen's Mill, or the town site itself.

Ione Site



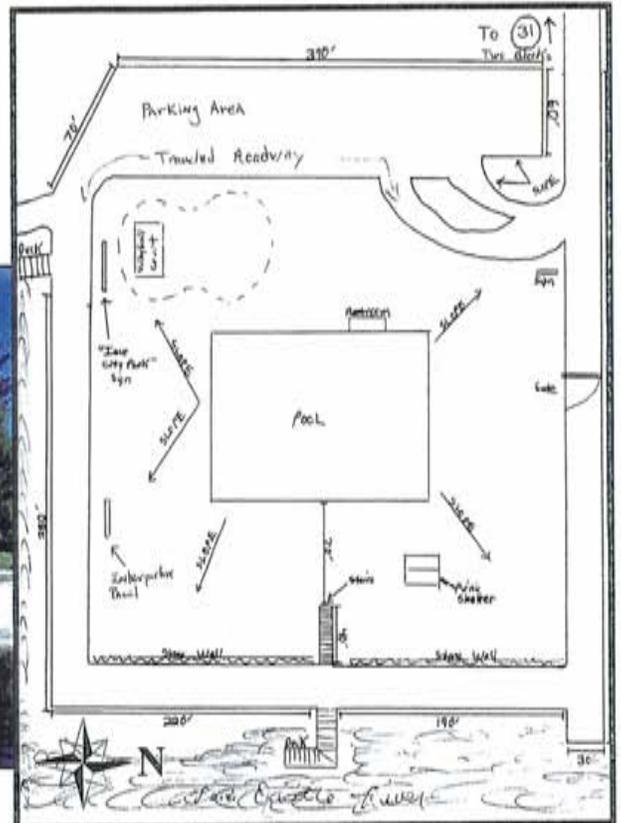
Ione Site - Sketch



Ione Site - Looking East



Ione Site - River Edge



Ione Site - Site Map

Box Canyon Overlook
Proposed Use: Nature Trail for Box Canyon Overlook Point

Location

- The Box Canyon Viewpoint Site, overlooking the Pend Oreille River and Box Canyon Dam, is approximately three miles north of Lone, along State Route 31. The entrance is clearly marked by signage on State Route 31.
- This site is located midway between Lone River Front Park and Sweet Creek at Milepost 6.85.

Site Characteristics

- A ¼ mile gravel road maintained by PUD accesses the current viewpoint site. The area to the east has heavy timber and an unmarked trailhead that leads to Box Canyon.
- The existing viewpoint site affords overlook to Box Canyon Dam, the river, and the historic railroad trestle.

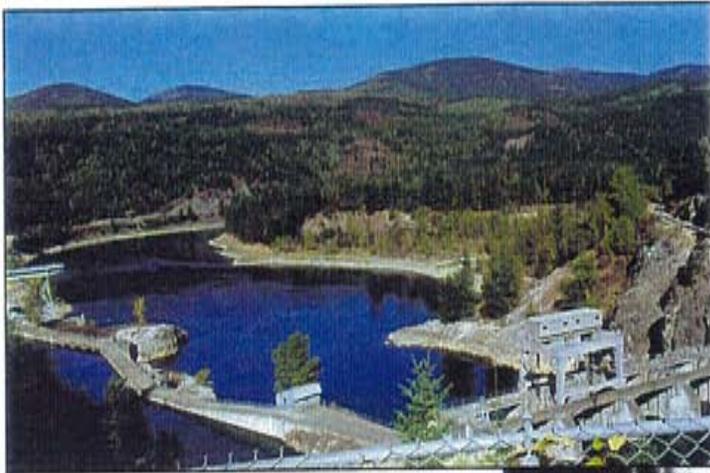
Significance to Byway

- Box Canyon Viewpoint Site is a major scenic attraction along State Route 31 with the view of the Pend Oreille river and gorge located below the viewpoint.
- Added historical significance comes from the journals of David Thompson in 1810. Thompson was a "river blazer" trying to discover a passage from the Pend Oreille to the Columbia River. He was stopped by the unforgiving rock formations and the ferocious rapids found within Box Canyon. Affording the visitor another viewpoint of the canyon rapids that turned back Thompson is an objective of future site development.
- The overlook site is equipped with a picnic table, benches, trash cans and signage describing the PUD's role in the region and the historical events of David Thompson. The visitor's center has restroom facilities, parking, picnic areas and a well-maintained outdoor swimming area.
- Adjacent to the overlook site, the PUD maintains a visitor's center located at the dam, ½ mile north on State Route 31. The center includes recreation space, restrooms, and interpretive displays.

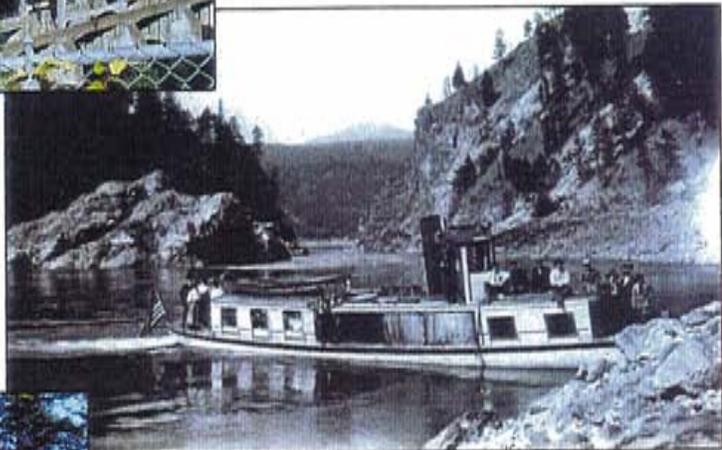
Proposed Site Development

- The existing site is well developed and maintained by the PUD. An enhancement is proposed that would create a "nature trail" leading to an overlook of the historic Box Canyon vista that David Thompson encountered.

Box Canyon Site



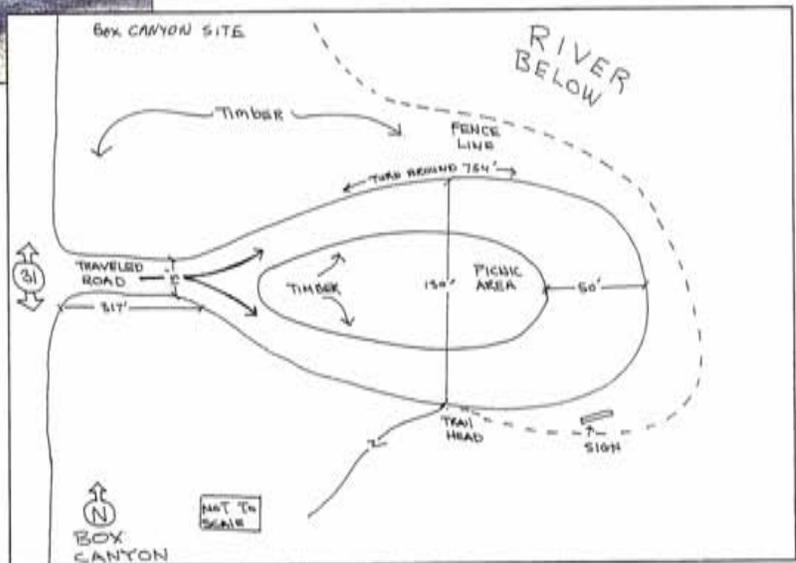
Box Canyon – River/Dam Overlook



Box Canyon – Historical



Box Canyon – Viewing Site



Box Canyon – Site Map

Eagle's Nest View Site
Proposed Use: Vehicle Pullout Point/Low Profile Interpretive Signage

The Eagle Nest View Site provides the opportunity for the visitor to “see” and hear the river up close as well as view an American icon, the eagle, in its natural environment. The site offers geological and environmental interpretation through its panoramic view of Tiger conglomerate rock outcrop, a riparian cottonwood forest, and the Pend Oreille River.

Location

- Midpoint of the 27-mile North Pend Oreille Scenic Byway Heritage Corridor
- Between Box Canyon and Sweet Creek Sites
- Vicinity of Milepost 10.00 on State Route 31

Site Characteristics

-Adjacent Land Use

- Undeveloped/natural landscape with river to east and geologic outcrops to west
- Broad landscape between forest and rock outcropping
- No development anticipated in the vicinity of the proposed site

-Adjacent Roadway Geometrics

55 MPH legal speed limit
(2) 12 foot lanes
(2) 4 foot shoulders

-Suitability for Development

- Flat terrain
- Existing roadway grade and slope will accommodate parking and interpretive sign
- Adjacent to state highway
- Safe ingress and egress from the highway
- No history of flooding
- Natural vegetation can be maintained
- Soil riverbank conditions may require guardrail design/installation
- No utilities needed

Significance to Byway

“Among scenic roadway users, natural features (lakes, rivers, mountains, hills, natural vegetation, long distance views) are most highly valued”—Kent (1993)

- Viewpoint for riparian cottonwood forests on the Pend Oreille River, and large rock outcropping
- View of eagle nest (20 years), Canadian geese, river otters, and other avian and mammalian wildlife.

- View of river valley, natural landscape painted with nature's earth and forest tones – vibrant colors, form, and texture.
- Historical Significance – an inventory of Pend Oreille forests in the year 1935 identified 10% as hardwoods—primarily the cottonwoods along the river and streams. Currently, less than 1% of the forest is hardwood and this remains a prime example of the historical landscape along the river.
- Tiger Conglomerate formation contains mix of metamorphic, igneous, and sedimentary rocks and represents vast geologic time frame in one cross section.
- Corridor Continuity – Significant to scenic and natural resources of the corridor - within the sequence of visual features experienced by the tourist.
- Provides a "wildlife " theme connection to road – "river" theme, and a geologic theme for potential interpretation.

Proposed Site Development

"Visual features that fit the locality and contribute to a sense of place are generally valued by the public."—Melnick (1983)

- Turnout – a widened, unobstructed shoulder will allow vehicles to pull-out of the through lane for refuge and scenic observation.
- Parking delineation – minimum striping to define parking
- Timber base interpretive sign or shed roof sign support with viewing scope (*location will not promote visual clutter*)
- Steel-backed wood rail – semi-rigid barrier, an aesthetic alternative to conventional guardrail systems, providing a rustic appearance
- Low profile vegetation to retain desirable view

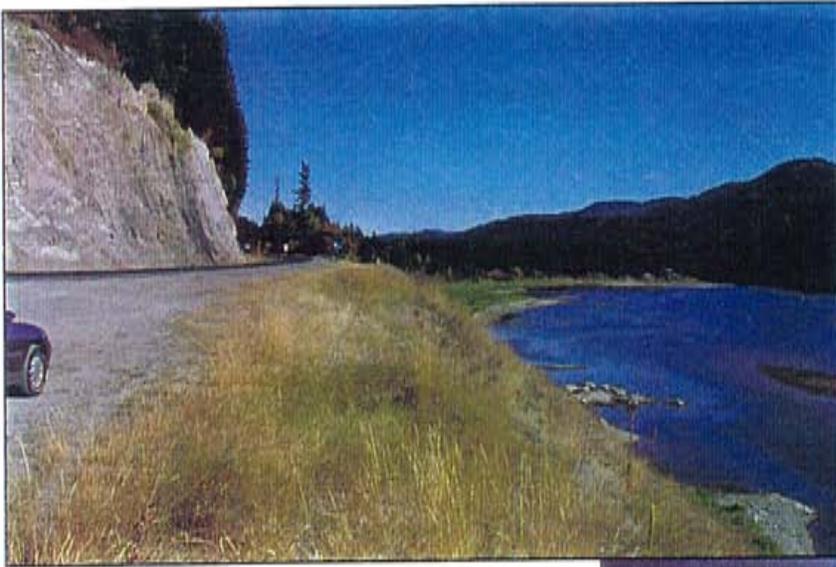
Maintenance Considerations

- No additional pavement surface maintenance or additional waste disposal/cleanup
- Additional guardrail maintenance costs – proposed guardrail not in existing maintenance inventory
- Additional cost for interpretive sign and view scope maintenance

Other Considerations

- Interpretive Signs and markers, agreement needed with Washington State Parks Commission (*Heritage Corridors Program, Highways and Local Programs is responsible for agreement*)
- Shoreline Permit needed as a result of minor grading, guardrail, and asphalt paving

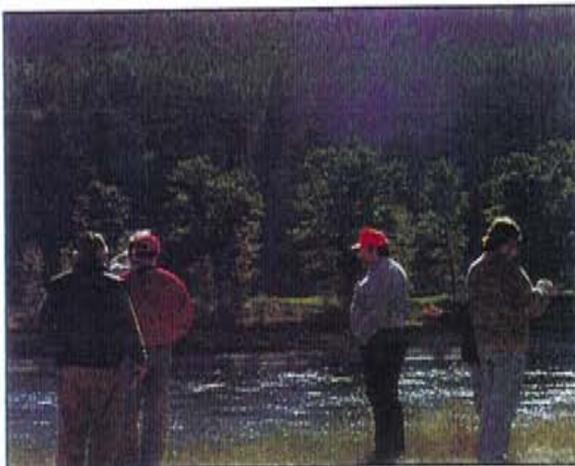
Eagle's Nest Pullout Site



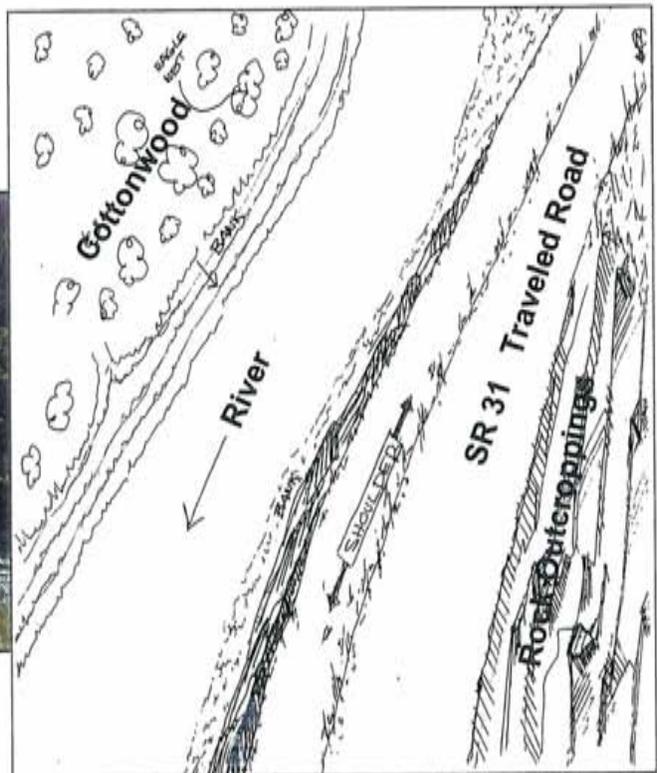
Eagle's Nest – Looking North



Eagle's Nest – Looking East



Eagle's Nest – River Edge



Eagle's Nest – Site Map

Sweet Creek Falls Site

Proposed Use: Multipurpose Interpretive/Recreation Center with Parking, Trails, and Restroom

The Sweet Creek Falls Site is another natural and scenic attraction on the Pend Oreille Scenic Byway. The highlights of the site are three 20-50 foot waterfalls located just a short walk from the parking lot. Sweet Creek, winding 3000' through the mountains before joining the Pend Oreille River in the valley below, bisects the site. Just north of Selkirk High School, and adjacent to State Route 31, the site offers excellent opportunities for wildlife viewing, hiking, picnicking, and recreating in a quiet, natural setting.

Location

- Midpoint of the Scenic Byway
- Between the Eagle's Nest site and Metaline Falls Pocket Park
- Milepost 10.72 along State Route 31
- ¼ mile north of Selkirk High School

Site Characteristics

-Adjacent Land Use

- Adjacent to State Route 31
- Dense forest and natural setting
- Two cascading waterfalls just a short walk from the parking area
- Undeveloped trail system
- Existing parking area for six autos (~3800 sf)
- Three picnic tables
- Bridge across the creek
- 40 acres of wooded parcel to west (acquisition efforts underway)

-Adjacent Roadway Geometrics

- 35 MPH Speed limit
- (2) 12 foot lanes
- (2) 4 foot shoulders
- 100' DOT Right-Of-Way
- Two points of ingress/egress

-Suitability for Development

- Minor shoulder modifications are necessary to allow for vehicle turn lanes
- Water, electricity, and telephone service available nearby
- Unique opportunities for public/private partnerships (Byway, DOT, Selkirk High School)
- Large, (1+acre) flat meadow with septic suitable soils
- Existing trail to the falls area needs only moderate improvements
- Areas for additional picnic tables, interpretive signage, nature walks

- Large naturally vegetated site lends itself to flora interpretation trail, and forest restoration interpretation

Significance to Byway

- Dense forest of Douglas Fir, Western Red Cedar, Paper Birch
- Naturally situated on the byway as the midpoint rest site and large enough to accommodate a rest area and restroom facilities
- Site has an accessible waterfall, rock cliffs, and creek that have been relatively undisturbed
- Wildlife observation
- Corridor Continuity – another fine example of the natural and scenic resources on the byway
- Presentation/development of historic local recreational area

Proposed Site Development

- Design turn lanes for Sweet Creek site traffic –widened and unobstructed shoulder Southbound
- Parking delineation for ~ 12 vehicles
- Improved parking lot and access
- Restrooms
- Interpretive vegetation trail
- Redeveloped trail to Falls viewpoint
- Interpretive Panels

Other Considerations

- Critical Area Permit – The Sweet Creek site will be included in the byway's Critical Area Permit due to the proximity to the creek and slopes.
- Partnership with the Selkirk High School for adjacent land timber restoration and interpretive trail.

Sweet Creek Site



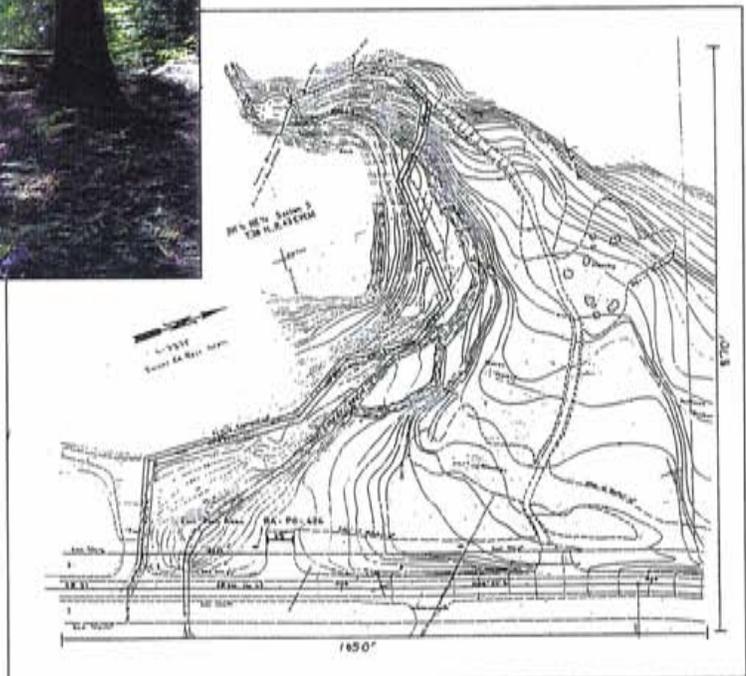
Sweet Creek – Falls



Sweet Creek – Looking West



Sweet Creek – Picnic Area



Sweet Creek – Site Map

Metaline Falls Overlook Pocket Park
Proposed Use: Scenic Overlook, Interpretive, and Adjacent Parking

Location

- The town-owned "pocket park" is located on a 1/3 acre parcel on the west side of the northbound portion of SR 31 bridge coming into Metaline Falls.
- Between Sweet Creek and Crescent Lake sites at Milepost 14.20

Site Characteristics

- 1/3 acre lot with scenic overlook at the junction of Sullivan Creek and Pend Oreille River along with an area of rapids (now submerged) that gave Metaline Falls its namesake.
- Historic bridge to the south, residential housing to the north, steep bank along the west edge, and river to the east.
- Caring neighbors nearby maintain the site including landscape improvements such as raised planter beds and flowers. It is clearly a source of pride for those who live in the area.
- Water and power available on site.

Significance to Byway

- The "Pocket Park" area affords travelers with a scenic overlook of river, river canyon to the north, and historic highway bridge with its graceful cement arch. The 1951 bridge was built to replace the earlier toll bridge built in 1920 which charged the outrageous price of \$1.00 per car and 15 cents per person to cross.
- The current bridge was built out of cement manufactured locally at the Inland Portland Cement Company. The same plant made cement for Spokane's Monroe Street Bridge and the Coulee Dam.
- Also of significance is the fact that adding the Pocket Park to the Byway program is consistent with local history during the founding of Metaline Falls. Founded in 1910 by a Danish mining engineer named Lewis Larsen, the Town was laid out with the expectation that it would rapidly grow into a thriving city. Following the development of the Pend Oreille Mines and Metals Company, Larsen spent lavish amounts of money on building company housing, commercial districts, and parks. He himself lived in a beautiful home built in 1912 by famed Spokane architect Kirtland Cutter. A total of 30 acres out of the town's 121 acre site were reserved for parks and open spaces, an achievement far ahead of its time. It is thus apparent that in addition to economic boom and bust cycles and layers of cement dust, park space is consistent to the character of Metaline Falls.
- Visitors to Metaline Falls frequently ask, "Where's the falls." This overlook to include viewpoint and historical falls signage will provide a response.

Proposed Site Development

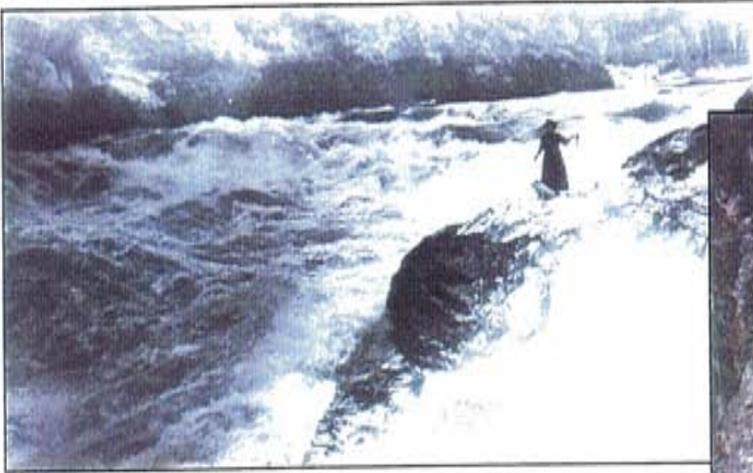
- Interpretive panels affixed to the viewing platform will depict photograph of the pre-impoundment falls view.

- Because of the scenic potential, a nominal investment in the form of an overlook platform or deck is suggested. Being consistent with local history, it may be appropriate to build an observation area out of Portland cement. As mature cedars, firs, and birch trees line the perimeter, such an overlook would have to be constructed above the steep slopes that drop off below the treed edge in order to maintain a "green screen" from the adjacent roadway.
- Given the integrity and stateliness of the trees on site, it is not recommended that any be removed.
- Among site considerations, some provisions for safe parking must be made. The roadway along SR 31 at the north end of the Pend Oreille River Bridge measures only 28 feet across with literally no shoulder room for safe pullout. Additionally, private properties in the form of single family residences border the site immediately to the north.
- It may be possible to arrange for some parking accommodation from the owners of a small motel located across the street from the site or from existing city right-of-way using reconfigured street entrance off State Route 31. This should probably be attempted prior to any further consideration for site development or improvement. The proposed development should be made safely accessible by a crosswalk from the parking area.

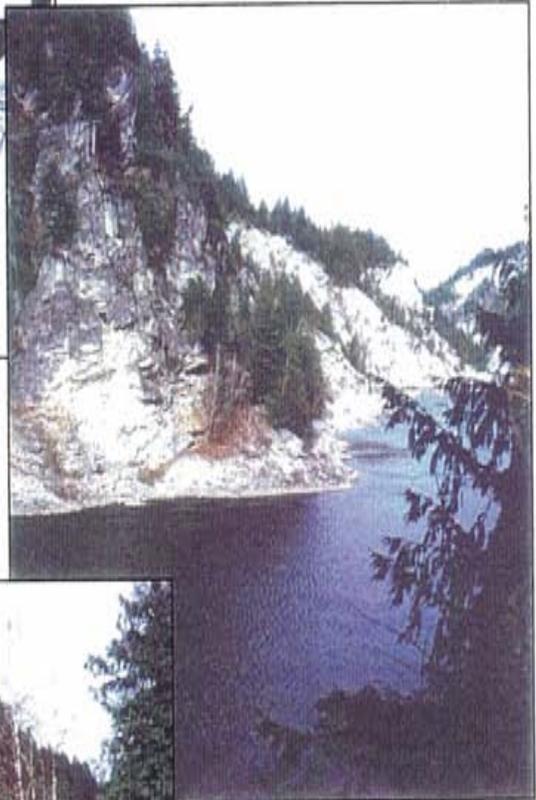
Maintenance and Other Considerations

- The Pocket Park has been diligently maintained by the adjacent property and thoughtful consideration ought to be given with regards to privacy screening such as landscape shrubbery or trees to ensure visitors do not mistakenly trespass on private property.
- The bridge may be eligible for listing on the historic registry.

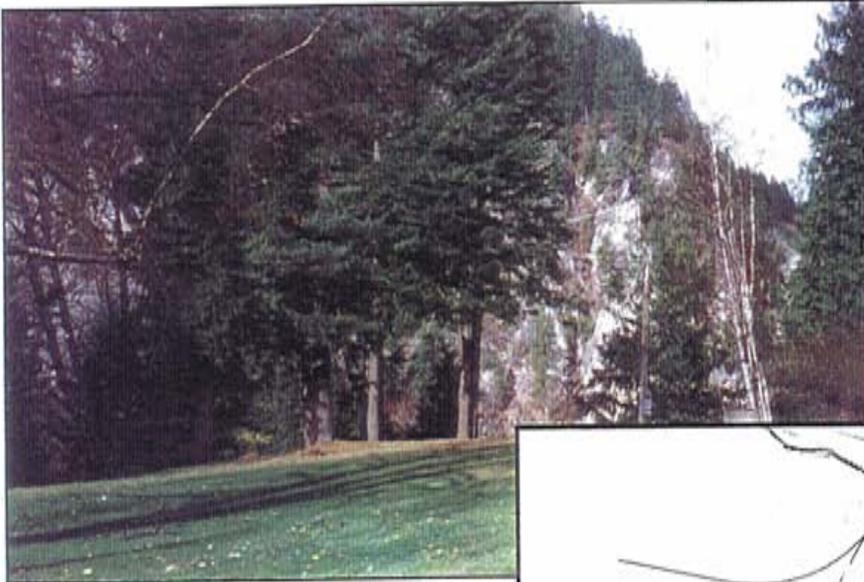
Metaline Falls Site



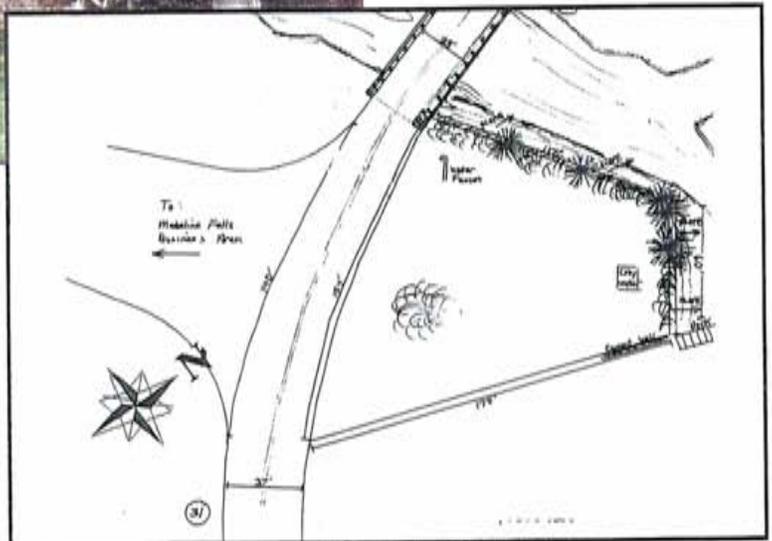
Metaline Falls – Historic Falls



Metaline Falls – Overlook



Metaline Falls – Looking West



Metaline Falls Site Map

Crescent Lake
Proposed Use: Orientation Panel at Pullout

Location

- The intersection of State Route (SR) 31 and Boundary Dam Vista Point Road (see attached USFS map)
- Mile Post 25.75 of the North Pend Oreille Scenic Byway (just south of Canadian border)
- 10 miles north of Metaline Falls

Characteristics

- The Crescent Lake site has Scenic, Natural, and Recreational intrinsic qualities. It has campground and restroom facilities. The lake can accommodate small boats. It also has the Boundary Dam overlook and views of Hooknose Mountain ¼ mile to the east.
- The land is publicly owned by the United States Forest Service (USFS--Sullivan Lake Ranger District, the Colville National Forest, (509-446-7500). The USFS has recently released (Oct. '99) its environmental assessment entitled, "Crescent Lake Campground Flood Rehabilitation Project," which identifies proposals to relocate existing campsite and restrooms out of flooded areas to bench areas to the northwest.
- There exists at the entrance to this site (the intersection of SR 31 and Boundary Dam Vista Point Road) a small clearing and an unofficial pullout (see attached photos). This area is marked as "no change to existing situation" in the northeast quarter of the attached USFS map.
- The site has approximately 81 feet bordering the edge of the pavement of SR 31 (where it intersects with Boundary Dam Vista Point Road) that roughly forms its southern boundary. As its western boundary, it has approximately 100 feet bordering what is roughly the eastern edge of the lake at Boundary Dam Vista Point Road where it meets SR 31. There is a 160-foot primitive pull-out running west-east that roughly forms the northern border of this site. The eastern boundary for this site is heavily forested.
- There is also a heavily forested area (with approximate dimensions of 59 feet to the north, 88 feet to the west, 36 feet to the south/or SR 31, and 74 feet to the east) within this site (see photo). Consequently, this area creates a potential safety concern in regards to sight distance at this intersection. This is mentioned in the USFS document (see appendix). There is a sagging vertical curve at this intersection that makes sight distance and therefore, motorist safety turning in and out of this site is a concern. The slopes are steep on both the northern and southern sides of SR31 at this intersection. There is considerable elevation gain on both sides of the road (see attached topography map).

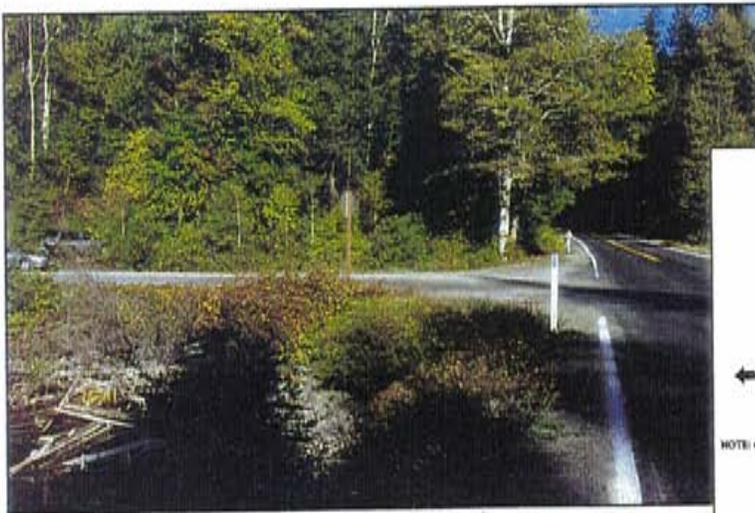
Significance to the Byway

- This site provides a recreational and scenic pullout point for the northern portion of the Byway. The Canadian border is just to the north and Metaline Falls is 10+ miles

Crescent Lake Site



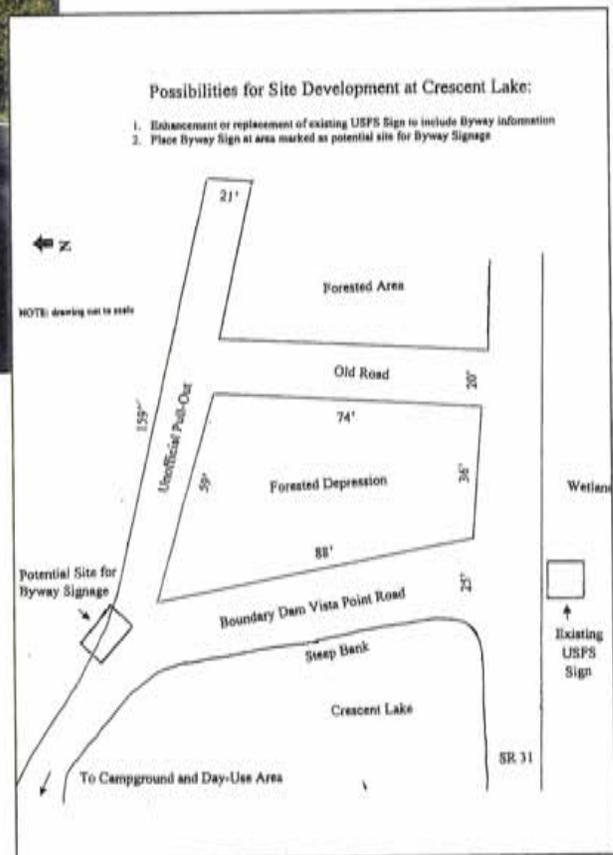
Crescent Lake - Lakeside



Crescent Lake – Looking North



Crescent Lake – Access Road



Crescent Lake – Site Map

**SECTION 3: SITE DESIGN AND
CONCEPT PLANS**

Tiger Museum Site Development Options

The purpose of this section is to supply alternatives for landscaping and other site design options at the Tiger Museum. There are four main "areas" one of which is the gravel area that provides access to State Route 31 and State Route 20. This area is not included in the landscaping design. The remaining three areas are the focal points for landscaping consideration and are described and evaluated below.

Areas Defined

The purpose of defining the areas is to be able to better evaluate the alternatives. When these areas are separated it becomes easier to visualize the various landscaping amenities (see landscaping alternatives 1-3).

Area "A": is the area surrounding the Museum. This area includes the right-of-way property east of the Museum; however, minimal landscaping is recommended for the R.O.W. property.

Area "B": is the area south of the gravel access area. This area includes: the septic tank, drianfield, information display, septic treatment unit, and restrooms. The area includes the R.O.W. property, but like area "A" it will have minimal landscaping.

Area "C": is the parking area to the west of the gravel access area; however, its north south axis extends from the northern edge of area "B" to the northern property line, and its east west axis extends from the western property line east approximately nineteen feet.

Alternatives Defined

The primary focus in the following alternatives is to utilize the remarkable native vegetation to the area (Terrell in *Landscaping with Native and Adapted Plants*, page 8). The soils for the Tiger area have been identified as well-drained and receiving direct sunlight. The soil is usually composed of decomposed granite or freely draining gravels and sands.

"Least Maintenance Alternative" Alternative I

Any piece of property designated for public use requires maintenance. This alternative, however requires the least amount maintenance, yet provides a natural and attractive landscape for the Tiger Museum.

"Moderate Maintenance Alternative" Alternative II

The moderate maintenance alternative emphasizes the area around the Tiger Museum with a non-native grass and an increase in amenities. This introduction of non-native grasses will increase the maintenance needed because the grass will need to be mown and irrigated.

"Highest Maintenance Alternative" Alternative III

The highest maintenance alternative has the most landscaping of all the alternatives. This landscaping includes native and non-native vegetation, walkways, and lights overlooking the parking and Tiger Museum. There are ways to reduce the amount of maintenance, but overall this alternative requires the most human attention.

The following table describes what landscaping amenity each alternative possesses. Following the table is the definition of each amenity and suggested species for native grasses, trees, shrub, and groundcover (for general landscaping amenity locations see figure 1-3).

Table 1

<i>Alternative</i> <i>Landscaping amenity</i>	Least Maintenance	Moderate Maintenance	Highest Maintenance
Native Grasses	✓	✓	
Native Trees	✓	✓	✓
Native Shrubs	✓	✓	✓
Native Groundcover	✓	✓	✓
Picnic Tables	✓	✓	✓
Trash Receptacles	✓	✓	✓
Boulders	✓	✓	✓
Bluegrass Turf		✓	✓
Lighting		✓	✓
Stone Pathway			✓

Landscaping Amenities and Suggested Species

Native Grasses: the use of native grasses reduces significantly the amount of watering and general maintenance. It would be best to choose a native grass that is low lying eliminating the need to cut the grass, examples of native grasses that could be used are:

- *Achillea millefolium* – western yarrow, *Balsamorhiza sagittata* – arrowleaf balsamroot, *Lupinus sericeus* – silky lupine, *Phlox speciosa* – showy phlox, *Festuca idahoensis* – Idaho fescue, *Gaillardia aristata* – blanket-flower, and *Eriogonum umbellatum* – sulfurflower.

Native Trees/ Shrubs/ Groundcover: similar to the native grasses these types of vegetation require very little maintenance. There is a variety of native tree species to choose from in the area. It is recommended that for very low maintenance an evergreen variety be chosen, to reduce the amount of fall clean up. Some native trees to the area include:

- *Pinus ponderosa*- Ponderosa pine, some *Larix occidentalis* - western larch, and *Psuedotsuga menziesii* – Douglas fir.
- Native shrubs and groundcover include: *Symphoricarpus albus* – snowberry, *Amelanchier alnifolia* – serviceberry, *Arctostaphylos uva-ursi* – kinnikinnick, *Philadelphus lewisii* – syringa or mockorange, *Holodiscus discolor* – ocean-spray, and *Rubus leucodermus* – whitebark raspberry.

Picnic Tables and Trash Receptacles: this is perhaps the most maintenance intensive component of this alternative; however, this type of amenity gets people to stop and take a rest, drawing them into the feel of the scenic byway. Included into this component is the need for waste receptacles, this reduces the amount of maintenance needed because people are more likely to use trash cans then throwing trash on the ground.

Boulders instead of parking curbs: while there is little difference in the maintenance between these two items, the boulders provide a more natural look to the landscaping; giving the area a unique look meshing well with the Pend Oreille River schema. If possible, use boulders from other excavation sites, this ensures a natural look and is relatively inexpensive.

Bluegrass: this non-native grass requires watering and cutting throughout the summer, fall, and spring. An automated sprinkler system reduces the amount of actual human maintenance needed.

Lighting: this is more of a safety feature then a landscaping amenity; however, having adequate lighting shows a genuine caring for the people who stop by. It reduces the potential for vandalism. Lights directed toward the ground minimize light pollution.

Stone pathway: this pathway would start at the north side of the Museum and provide access to the picnic tables, and it would then continue around the east side of the Museum and meet with the gravel access to State Route 31. The amenity of having this pathway encourages people to look around and even checkout the information display.

A Word on the Alternatives

The three alternatives: Least Maintenance, Moderate Maintenance, and Highest Maintenance are not exclusive of one another, that is, they can be seen as a progressive phasing or they can be seen independent of one another. The alternatives have been designed to be modular; in other words, the various components of the alternatives can be interchanged. It is important to note this because it allows the people of Northern Pend Oreille County to add their own personal touch to the landscaping of the Tiger Museum site.

Future Expansion

There is the possibility for the Tiger Museum site to be expanded to the south, through acquisition of the parcel directly to the south of the Tiger Museum property. If this expansion is seen as desirable, then the development of the present Tiger Museum site needs careful planning. The planning on the current site should be in such a way to not prohibit the incorporation of the southern parcel into the current project. The items that most adversely affect the integration is access and parking. Consideration of future parking and access should be planned so that it is possible to reach the Tiger Museum via the southern parcel and not adversely effect expected pedestrian traffic to the restrooms, the information display panels, and the Museum. A

superficial examination reveals that a road between the western property line and the restrooms would be the best way to connect the two parcels.

Re-development Ideas for the Southern Parcel

If the southern parcel is acquired, then it is possible to re-configure road access ___ feet to the south providing a safer ingress/ egress point. This would enable the removal of the current access and the area could then be turned in to a grassy picnic area or perennial garden. On the southern site additional parking, interpretive signage, picnic tables, trees and shrubs, and grassy areas could be landscaping features for the added site.

Costs for Landscaping Items

Grasses.....	\$1.00 per square foot
Shrubs.....	\$2.00 – 3.00 per square foot
Boulders.....	\$200.00 each
Wheel stops.....	\$100.00 each
Trees (2 inch diameter)..	\$300.00 each installed
4-6 inch Pine....	\$200.00 – 220.00 each installed
Automated Sprinkler	
System...	\$6,500-8,000 – for approximately 14,000 square feet.
Picnic Tables.....	\$500.00 – each
Trash Receptacles....	\$200.00 – each
Lighting.....	\$4,000.00 – each
Stone Pathway... ..	\$1,500.00

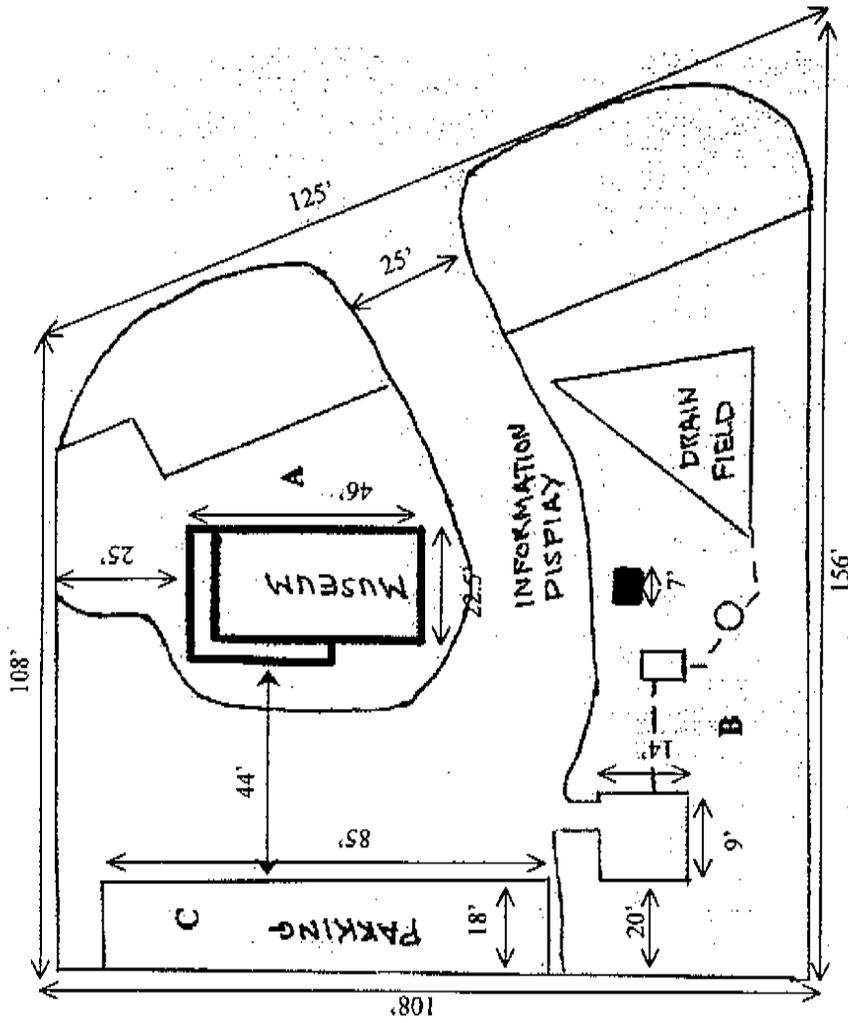
Cost Estimates for Landscaping Alternatives

Estimated cost for each alternative is in the following table.

Table 2

<i>Alternative</i>	Least Maintenance	Moderate Maintenance	Highest Maintenance
<i>Landscaping amenity</i>			
Native Grasses	\$14,700	\$5,200	
Native Trees	520.00	\$520.00	\$740.00
Native Shrubs	\$150.00	150.00	225.00
Native Groundcover	\$60.00	\$60.00	\$60.00
Picnic Tables	\$1,000	\$1,000	\$1,000
Trash Receptacles	\$200	\$200	\$200
Boulders	\$1,400	\$1,400	\$1,400
Bluegrass		\$9,500	\$14,700
Lighting		\$12,000	\$12,000
Stone Pathway			1,500
Automated Sprinkler		\$8,000	\$8,000
Total	\$18,030.00	\$38,030.00	\$39,825.00

Figure 1



Area A- The area surrounding the Museum including the right of way property to the east.

- Native Grasses
- Native Trees / Shrubs / Groundcover
- Picnic Tables

Area B- The area south of the gravel access including; the drainfield, information panel, septic treatment unit, and restrooms.

- Native Grasses

Area C- The parking area to the west of the gravel access area, with a long north-south axis. The southern boundary extending from the northern edge of area B and its northern boundary abutting the northern property line. The area is approximately nineteen feet wide.

- Parking Boulders

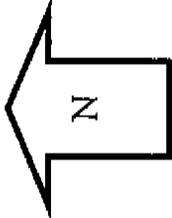
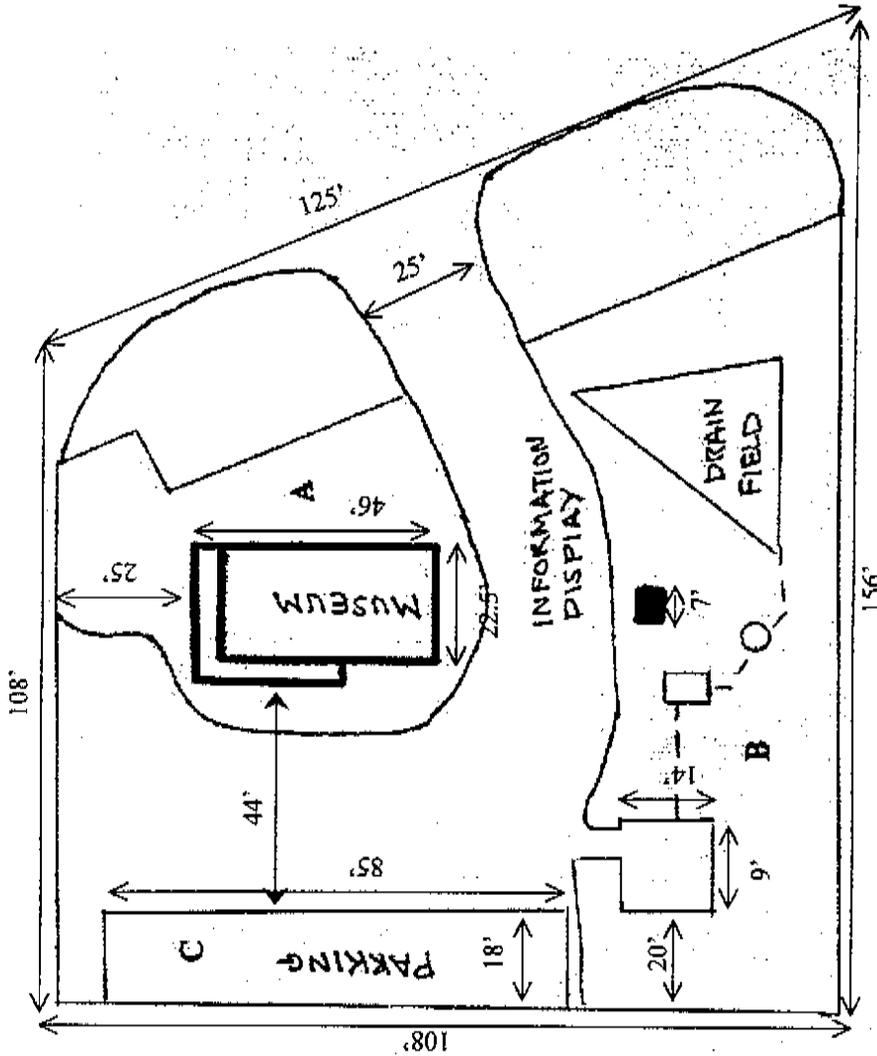
	<p>Least Maintenance Alternative</p>	<p>Eastern Washington University Graduates Planning Studio December 1999 Not to Scale</p>

Figure 2



Area A- The area surrounding the Museum including the right of way property to the east.

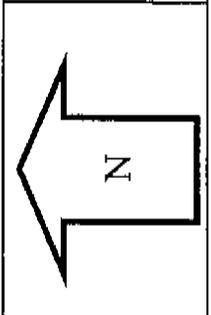
- Blue Grass
- Picnic Tables
- Native Trees / Shrubs / Groundcover
- Lighting

Area B- The area south of the gravel access including: the drainfield, information panel, septic treatment unit, and restrooms.

- Native Trees
- Native Grasses
- Lighting

Area C- The parking area to the west of the gravel access area, with a long north-south axis. The southern boundary extending from the northern edge of area B and its northern boundary abutting the northern property line. The area is approximately nineteen feet wide.

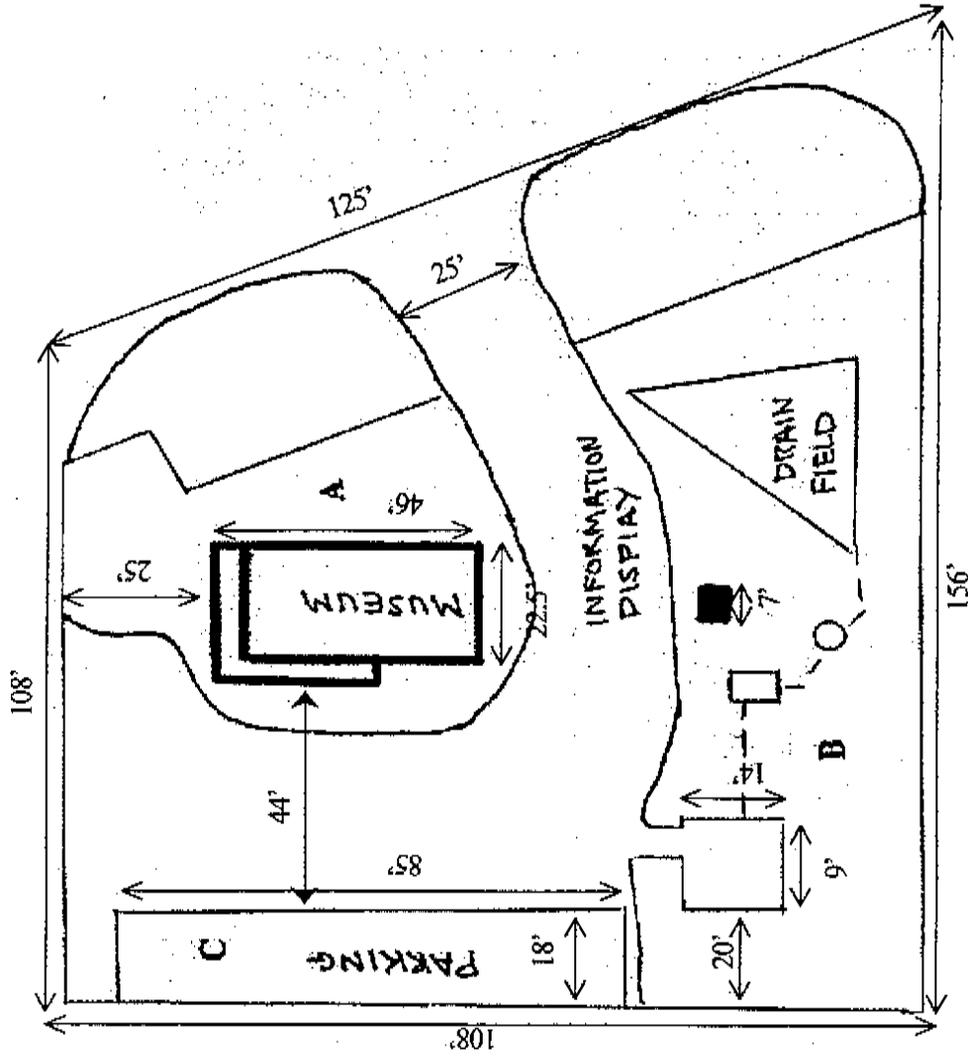
- Parking Boulders
- Native Trees / Shrubs / Groundcover



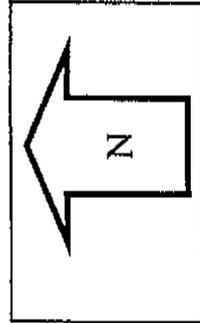
Moderate Maintenance
Alternative

Eastern Washington University
Graduates Planning Studio
December 1999
Not to Scale

Figure 3



- Area A- The area surrounding the Museum including the right of way property to the east.
 - Blue Grass
 - Native Trees or Shrubs
 - Picnic Tables
 - Stone Pathway
 - Lighting
- Area B- The area south of the gravel access including; the drianfield, information panel, septic treatment unit, and restrooms.
 - Blue Grass
 - Lighting
- Area C- The parking area to the west of the gravel access area, with a long north-south axis. The southern boundary extending from the northern edge of area B and its northern boundary abutting the northern property line. The area is approximately nineteen feet wide.
 - Parking Boulders
 - Native Trées
 - Hedges or Flowerbeds



Highest Maintenance Alternative

Eastern Washington University
 Graduates Planning Studio
 December 1999

Not to Scale

PROPOSED USE:

- Interpretive Panel near Historic River Port Dock Point

CHARACTERISTICS:

- Possesses Recreational, Scenic, Natural Traits
- Many Existing Amenities and Services

SIGNIFICANCE:

- Historically Significant Riverboat Landing Area
- Significant River Transportation Route
- Offers Recreational Opportunities
- Local Area has Colorful Past

PROPOSED DEVELOPMENT:

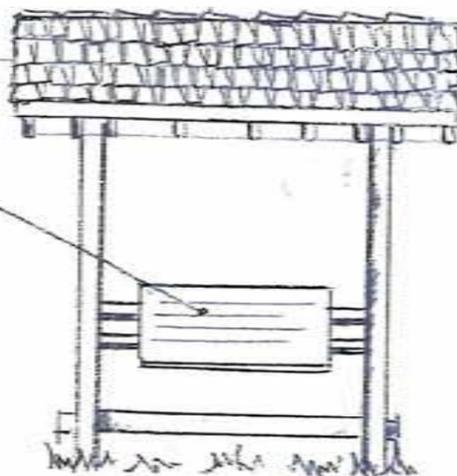
- Interpretive panels identifying actual riverboat landing site, and other relevant historical themes.
- Ongoing utilization as a park and recreation area.

- Estimated Cost: \$7,500

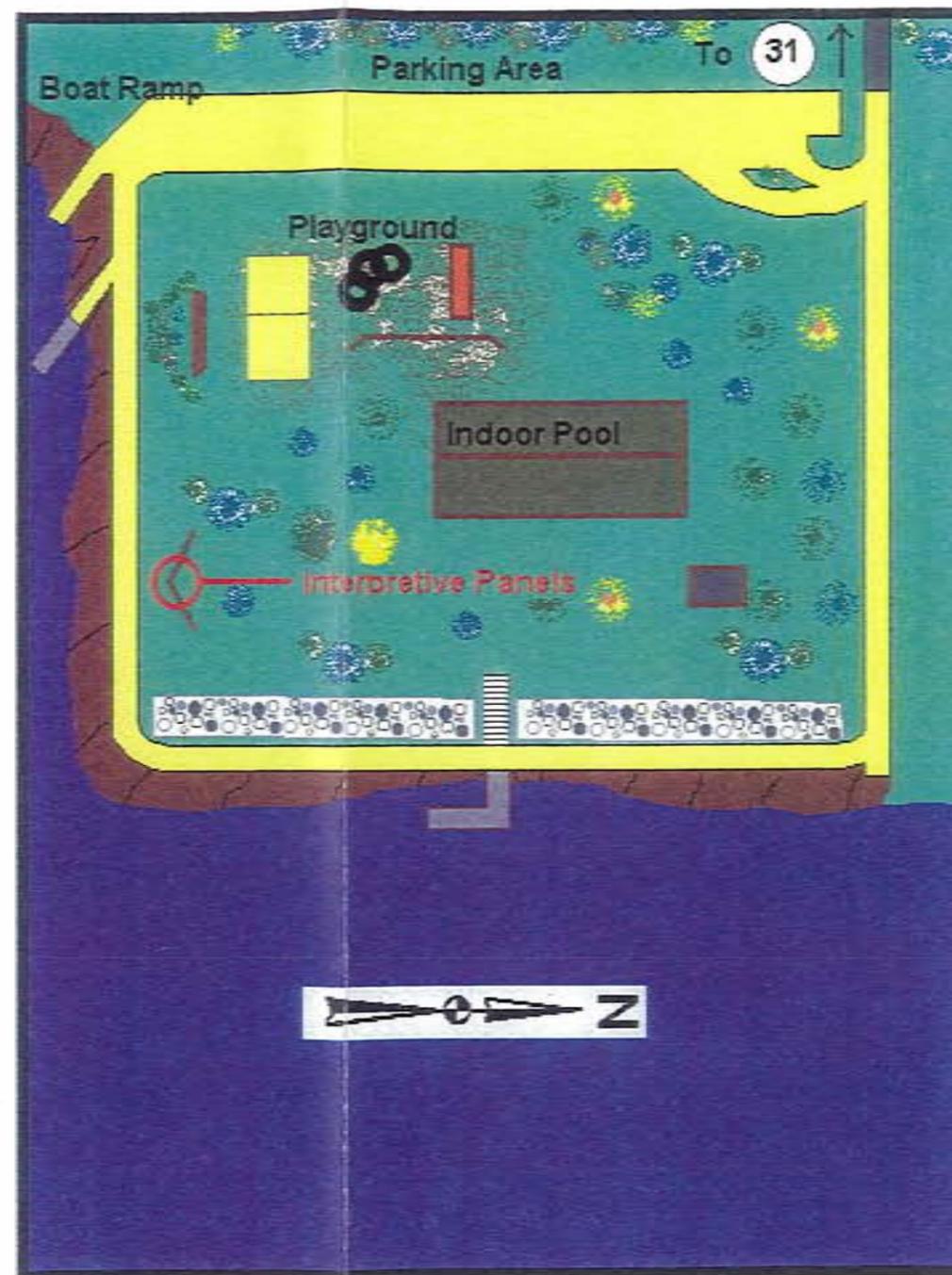
Details



GABLE ROOF 12' SIDED
 1 INTERPRETIVE PANEL
 3' X 4'



Concept Plan



Ione River Front Park

North Pend Oreille Scenic Byway

Not to Scale

PROPOSED USE:

- Vehicle Pullout Point/Low Profile Interpretive Signage

CHARACTERISTICS:

- Undeveloped Natural Landscape
- Nearby Geologic Outcroppings
- Vehicle Pullout Area

SIGNIFICANCE:

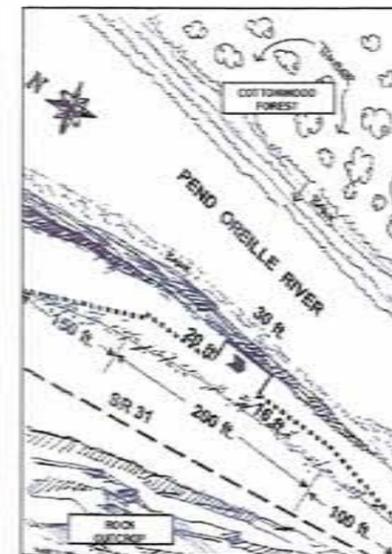
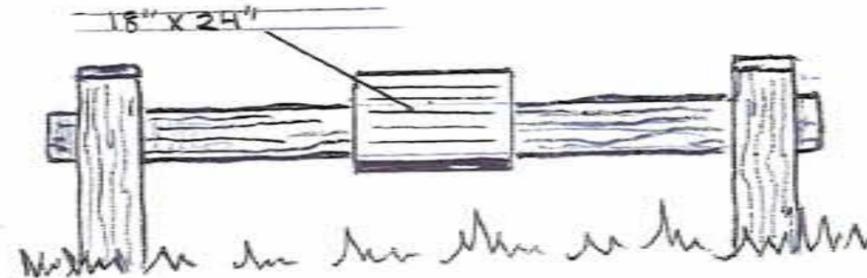
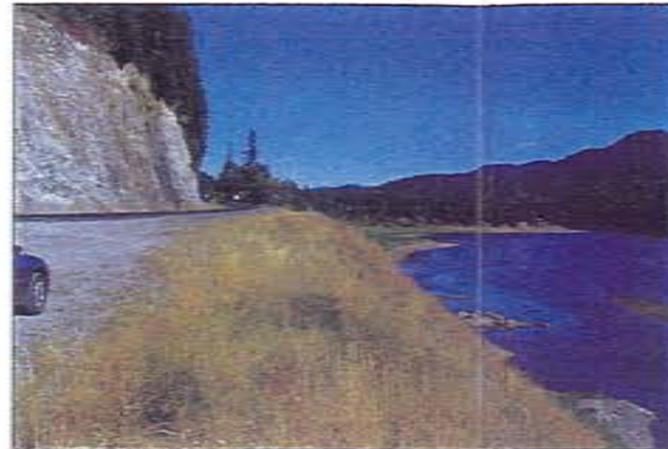
- View of Rare Riparian Cottonwood Forest
- View of Eagle's Nest, Geese, and Other Wildlife
- Tiger Conglomerate Outcrop Formation

PROPOSED DEVELOPMENT:

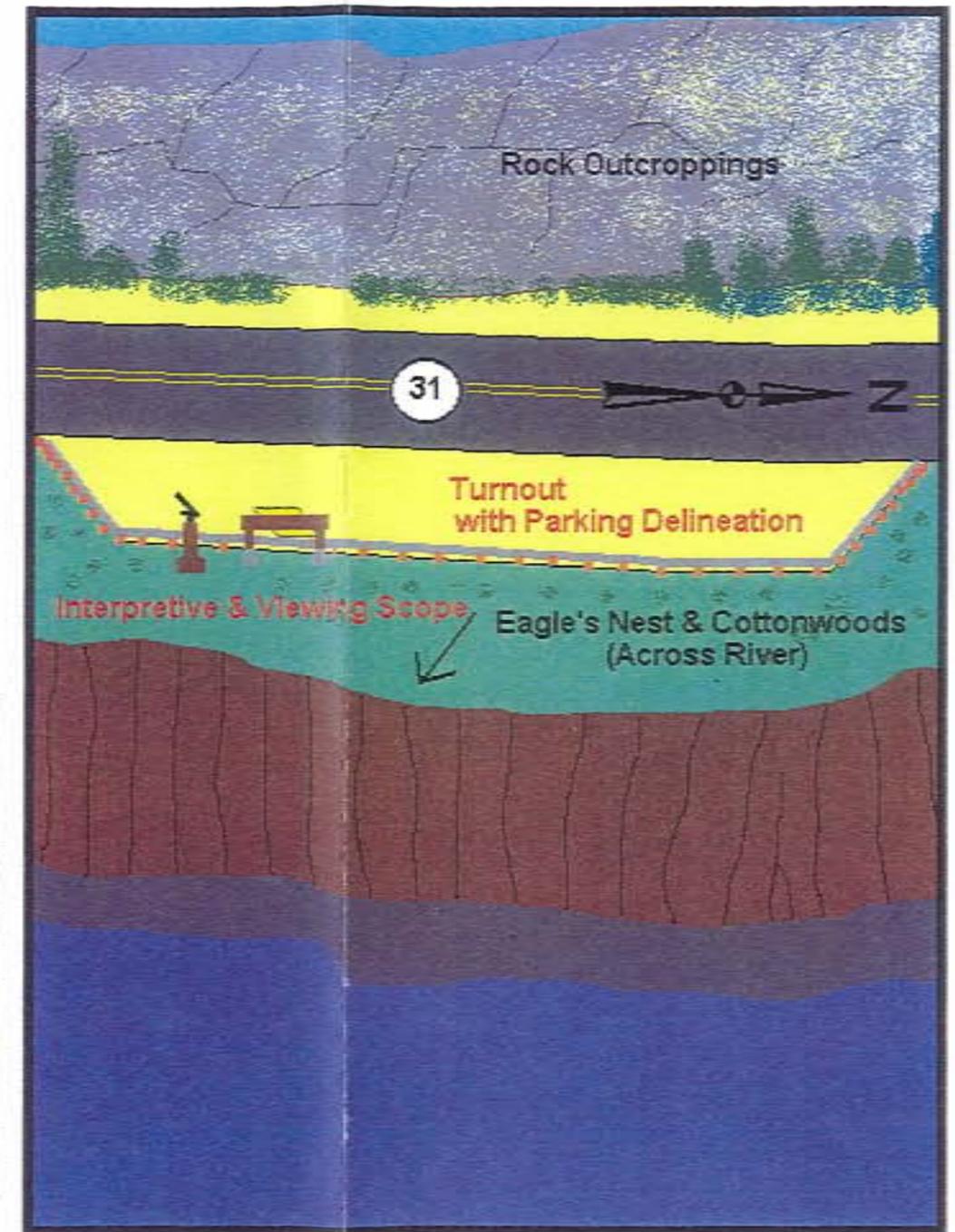
- A widened unobstructed turnout area is proposed.
- Parking delineation through the minimal application of striping.
- Timber-based interpretive sign with viewing scope.
- Steel-backed wood rail (safety barrier)
- Low-profile vegetation.

- Estimate Cost: \$20,000

Details



Concept Plan



Not to Scale

Eagle Nest Site

North Pend Oreille Scenic Byway

PROPOSED USE:

- Multipurpose Gateway Center

CHARACTERISTICS:

- Historical Museum
- Southern Gateway Point to Byway
- Traveler's Services and Information
- Interpretive Signage

SIGNIFICANCE:

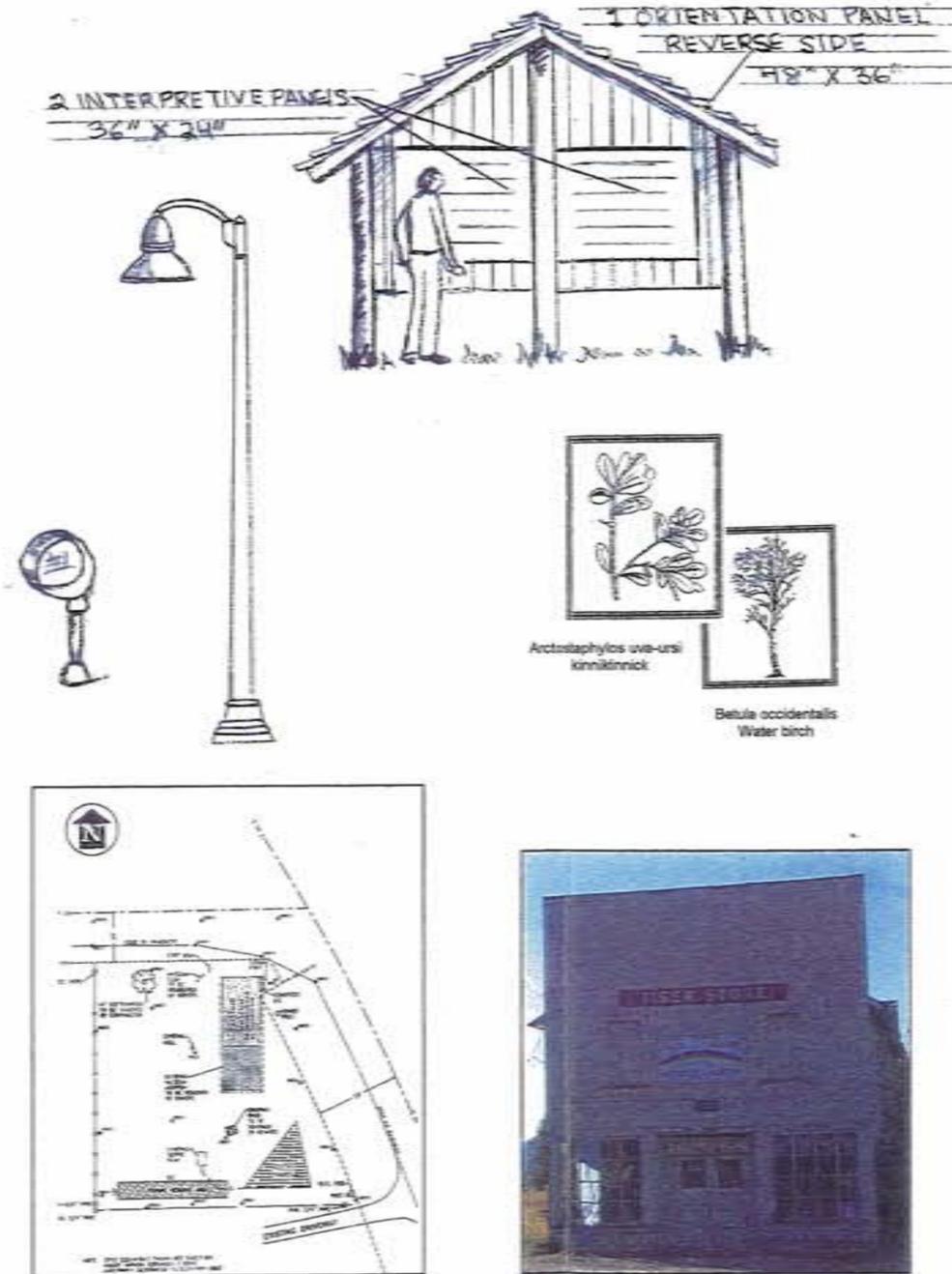
- Near Old Tiger Town Site
- Intersection of State Highway 20 & 31
- Historic Travel and Transportation Route
- Close to Former Pend Oreille River

PROPOSED DEVELOPMENT:

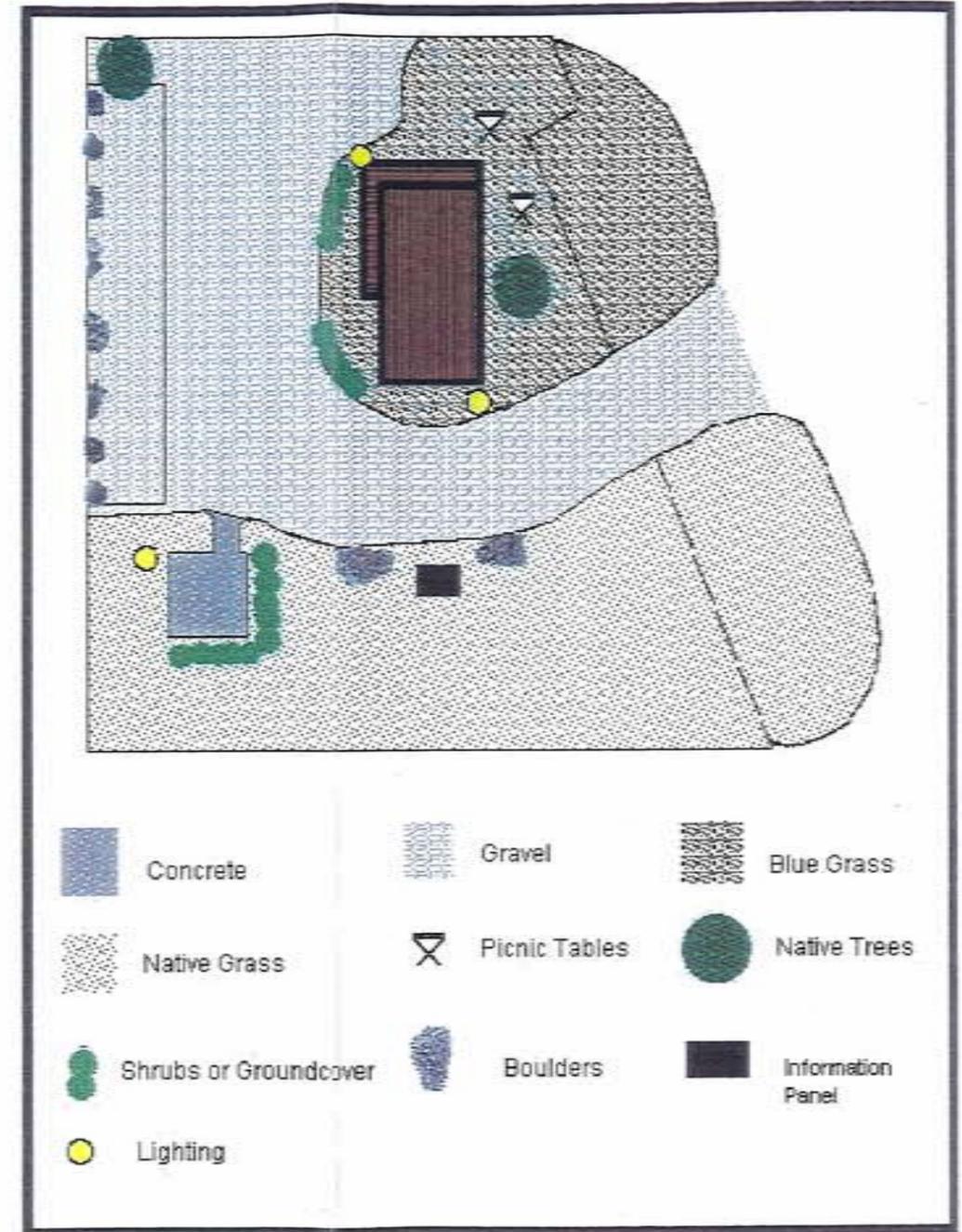
- Paved parking to accommodate autos and RVs.
- Kiosk
Orientation (Side 1)
2 Interpretive Panels (Side 2)
- Landscaping that incorporates native vegetation.
- Possible extension of site to the south.
- Restrooms, traveler information, trash receptacles, operating museum and store.

- Estimated Cost: \$80,000

Details



Concept Plan



Tiger Historical Museum

North Pend Oreille Scenic Byway

Not to Scale

Sweet Creek Falls Rest Area

Phased Cost Estimates

Phase 1 – (See Fig. 1) All options = \$4,800

- Improve current pullout (~2800 sf)
Construction Cost—Grading and Fill: \$3,000
- Provide eight parking stalls (~ 9'x18')
Construction Cost—Parking Boulders: \$1,600
- Install one bear-proof trash container
Construction Cost—\$200

Phase 2 – All options = \$73,611

- Detailed landscape and professionally engineered plan
Construction Cost—\$15,000
- Construct second parking area, located 500' north of current pullout
Construction Cost—Tree and Stump Removal: \$3,000
- Grade and improve 43,560 sf for ten auto parking stalls (10'x20')
and three recreational vehicle stalls (40' long)
Construction Costs—Grading & Prep. Work: \$15,000
Asphalt: 331.54 tons @ \$40 per ton = \$13,261
Striping and Parking Boulders: \$2,000
- Place an interpretive panel at the trailhead
Construction Cost—Single Panel Sign: \$7,500
- Install two picnic tables and a BBQ grill
Construction Costs—Two Picnic Tables installed without concrete: \$1,000
Barbecue Grill installed: \$500
- Place two bear-proof trash containers
Construction Cost—\$400
- Plant native shrubs in median
Construction Costs—Grasses and Shrubs: 2650 sf @ \$2-3 per sf = \$5,300-\$7,950
- Landscape parking perimeter
Construction Cost—Shrubs and Trees: \$6,000 - \$8,000

Phase 3 – All options = \$20,000

- Install vaulted toilet restroom facility
Construction Cost—One room vaulted privy: \$20,000

Phase 4 – All options = \$38,031

- Increase parking area to accommodate an additional ten autos and
two recreation vehicles (an increase of 21,780 sf) Total = 1.5 acres
Construction Costs—Grading & Prep. Work: \$7,500
Asphalt: 165.77 tons @ \$40 per ton = \$6,631
Striping and Parking Boulders: \$5,000
- Place an two additional interpretive panels on the site
Construction Costs—Two Single Panel Signs: \$15,000

- Install three more picnic tables and one BBQ grill
Construction Costs—Three Picnic Tables installed with concrete: \$3,000
One Barbecue Grill installed = \$500
- Place two bear-proof trash containers
Construction Cost—\$400

Phase 5 – All options = \$95,500

- Improve and complete trail system
Construction Costs—2,000' @ \$25 per linear ft = \$50,000
- Place handrail on steep trail sections
Construction Costs—800 ft @ \$25 = \$20,000
- Place interpretive signage on trail system
Construction Costs—Five Single Panel Signs: \$22,500
- Seed picnic area with bluegrass
Construction Costs: 3,000 sf @ \$1 per sf = \$3,000

Total of All Phases and All Options = \$241,942

Detailed Text for Chapter 3 (Concept Plans) Sweet Creek Falls Rest Area Development Option

Five development phases have been identified for the Sweet Creek Falls Rest Area. These phases are not intended to serve as a rule, but rather as a guide that can be adjusted as funding sources become available. The phases have been designed with both utility and the environmental constraints in mind. The potential for this site is great, and care should be taken to preserve the elements that make this site special.

Phase 1—Enhancement of existing parking area:

With very little money, time, and effort Phase 1 of Sweet Creek Falls could be completed in the very near future. The present Sweet Creek Falls site consists of an unimproved WSDOT roadside park. There are two existing picnic tables, one on each side of Sweet Creek that are connected by a walking bridge (which currently appears to be safe, but should be checked for safety and structural integrity). One necessary addition in Phase 1 is to add a bear-proof trash container shown in the south side of the unofficial parking area. This trash receptacle should be placed to the south side of the parking area because if any expansion occurs at this site to the north (e.g., more picnic tables, restrooms, interpretive signage, more parking), this container will not have to be removed or relocated. The current unofficial parking area can be made slightly more defined by placing eight large rocks as parking blocks. These barriers will provide parking for eight full size vehicles.

Phase 2—

The entrance for Phase Two improvements is located 500' north of the Phase 1 parking lot. An unimproved entrance on the west side of State Route 31 illustrates the beginning point for this phase. Presently large timbers and boulders block the entrance to a two-acre meadow, the proposed site for the Sweet Creek Falls Rest Area.

Approximately \$73,211 is necessary for complete Phase 2 construction. This phase is the first major development of the Sweet Creek Falls Rest Area. Improvements listed below could serve as a day-use site for ten cars and three recreation vehicles. Phase 2 improvements include a detailed landscape design and professionally engineered plan, the construction of a second parking area of approximately 43,560 square feet for ten auto parking stalls and three recreational vehicle stalls. Also included are the placement of an interpretive panel at the trailhead, the installation of two picnic tables and one standing BBQ grill, the addition of two bear-proof trash containers near the parking area, the planting of native shrubs in the parking lot median, and landscaping of the parking lot perimeter. Although this is not an exhaustive list, it represents a variety of uses at a reasonable cost.

Rest area users would exit SR 31 and keep right as they enter the parking lot. Cars would park near the edge of the parking lot under the shade of trees. RV's would continue past the cars, rounding a curve, where they would find three parallel spaces on their right. Travelers could then enjoy the two picnic tables or BBQ grill located in the landscaped picnic area, utilizing the bear proof containers for their refuse. Directly in front of the parked cars is the head of the trail that leads to the falls. An interpretive sign would orient visitors with the area and direct them up the trail to the falls and pools. Vehicles would exit through the same entrance they entered and continue their journey on the North Pend Oreille Scenic Byway.

Special care should be taken when constructing this phase. The heavily wooded area immediately south of the entrance should be preserved. The picnic area should be sufficiently far enough from the parking lot so as not to impede future expansions.

Phase 3—

Phase Three introduces a much need restroom facility to the site. A unisex vaulted toilet system with a 15,000-use tank can be constructed for on the southern edge of the parking lot. The \$20,000 building is weather and vandal resistant, and should only need to be pumped once a season.

The restroom building should be placed in the clearing on the far southern edge of the parking lot. This placement provides easy access for users of both Phase 1 and Phase 2.

Phase 4—

This phase increases the overall parking by leveling, grading, and improving an additional half-acre at a total cost of \$38,031. This allows for ten more car stalls and two more parking spots for RVs. The design of phase 4 allows for the necessary turning radius for the additional ten cars and two RVs. Again, vehicles travel around the parking lot counterclockwise fashion and exit at the entry point. Two interpretive signs are placed in this phase. One sign should be located near the creek on the southwestern edge of the parking lot; the other sign should be located up the trail at a site overlooking the falls.

The addition of three picnic tables, another barbecue grill, and two more trash containers should provide ample seating for the increased use of the Sweet Creek Falls Rest Area.

Phase 5—

The final phase in the Sweet Creek Falls Rest Area development plan, this option significantly improves and enlarges the trail system around the site and seeds the picnic area for a total cost of \$95,500. The mile long trail system, which includes access to the falls, the bridge and the larger loop trail would be upgraded and improved. Handrails would be added to the steeper sections and overgrown vegetation and deadfalls would be removed. These improvements, in conjunction with the seeding of the picnic area, make the Sweet Creek Rest Area a premier and long-lasting destination on the North Pend Oreille Scenic Byway.

SECTION 4: SIGNAGE GUIDELINES

Section 4 Signage Guidelines

4.0 Introduction

Signs identify, inform, warn, advertise, direct, describe, educate, and explain. People need them, read them, and sometimes hate them. There always seem to be too many signs until you need one to find your way on unfamiliar roads. Signs can stir passions and create controversy as they try to combine commercial and aesthetic appeal. The way signs occupy spaces can alter the landscape and vistas of corridors and communities.

Along a Scenic Byway, signs will denote the entrance to the Byway, describe the Byway, and help visitors find their way and the services. The signs should also communicate across languages and cultures since visitors may come from around the world. Signage is a term used to refer to signs as a group.

4.0.1 Purpose

This section will inform decisions related to signage along the North Pend Oreille Scenic Byway. This signage section is intended to accomplish the following objectives:

1. Contribute to policies and programs related to signage within the Corridor Management Plan
2. Outline design guidelines for Byway signs both within and outside of the right-of-way. Included in the discussion of design guidelines are the following types of signs:
 - Traffic Control: regulatory, warning and guide signs
 - Byway Signage within the right-of-way: gateway signs, trailblazer signs, and site directional signs
 - Interpretive Signage: such as outdoor exhibits and foot trail signs
3. Offer recommendations related to the various elements of signage and interpretation.

4.0.2 Benefit

Signage is a required and important component of the Scenic Byway Plan. Good signage will support economic growth by guiding tourists to services and areas of interest. Signage also improves visitors' enjoyment of the area through interpretation. When visitors enjoy the Byway, they will stay and/or return.

4.0.3 Organization

This section is organized into five parts. The first part provides an introduction to signage. The second part details the signage inventory along the Byway. The third part covers signage guidelines in the highway right-of-way. The fourth part

discusses the Byway themes and interpretive guidelines. The fifth part offers guidelines for creating interpretive signage. The sixth and final part describes signage programming.

4.1 Overview

Signs range widely in size from billboards to "street blades" (street name signs at intersections) and serve many functions. They identify road names, municipalities, and businesses large and small. They inform drivers about highway laws and warn them about road hazards. Signs advertise events, services, and businesses, and they describe and explain features, attractions, and history. These different functions correspond to different categories of signs and are described below.

With respect to signage along the Byway, several types are examined:

- Official signage within Department of Transportation (DOT) right of way for which the design and placement must conform to uniform standards set forth by national and state department of transportation through the Manual on Uniform Traffic Control Devices (MUTCD).
- Information signs within DOT's right of way for which uniform standards are suggested and typically adhered to, but some degree of flexibility is allowed. Local Byway signs, for example, fall under this broad category.
- Other signs, such as interpretive signs, which are often located outside DOT's Right of Way but serve a purpose for Scenic Byway traveler. Given their importance some consideration of appropriate guidelines is warranted.

Types of Signs

Official signs:

Regulatory: traffic laws and speed limits

Warning: hazards and changing road conditions

Guide: highway route numbers, street names, mileposts, and Byway "wayfinders"

Information signs:

Motorist services: blue signs with white lettering or symbols. The most common are Gas, Food, Lodging, Camping, Phone, and Hospital.

Tourist Oriented Directional Signs (TODS): blue and white rectangular signs that direct travelers to specific businesses. For a fee, each establishment is listed next to a generic symbol for the service provided.

Recreational and Cultural: brown and white lettering or symbols. They point the way to parks, museums, boat launches, and historic sites or districts.

Other signs:

Interpretive: can be almost any material, color, and design. These panels and kiosks inform travelers about special qualities or historic features.

Placement and design is determined locally. Usually, these are publicly owned and maintained.

Advertising: privately designed and installed to promote particular businesses and services. On-premise signs are mounted on the building or free-standing on the site; off-premise signs may be near or far.

General Guidelines

The Guidelines interpret existing Washington State Department of Transportation (WSDOT) sign policy pertinent to Scenic Byway signs installed in the right-of-way (ROW). This document also contains the technical information and operational guidance needed to ensure that Byway signing in the ROW meets traffic requirements and serves as an effective Byway identification tool. These guidelines seek to balance traffic requirements for uniformity with flexibility to identify the Byway in a distinct way.

WSDOT takes the position that Byway signing is an acceptable mechanism to identify and guide travelers along state designated Scenic Byways. Byway signs shall be designed and sited in a manner that achieves their intended function and is compatible with their settings to the maximum extent practicable. When nonconforming signs are replaced, they should follow these guidelines.

To guide the placement of signs within the Byway and ensure consistency with the Scenic Byways philosophy, the following criteria were identified:

- The primary objective of signage should be to inform the traveling public.
- Action should be taken to consolidate signage wherever possible.
- Signing should be minimized in exceptional scenic areas.
- Redundant signs should be eliminated.
- New signage should be added to complement new visitor or interpretive facilities, to improve visitor guidance, and/or to enhance safety.

PROPOSED USE:

- Nature Trail for Box Canyon Overlook Point

CHARACTERISTICS:

- PUD-Maintained View Point Site
- Overlook of Box Canyon Dam, Pend Oreille River, and Historic Railroad Trestle

SIGNIFICANCE:

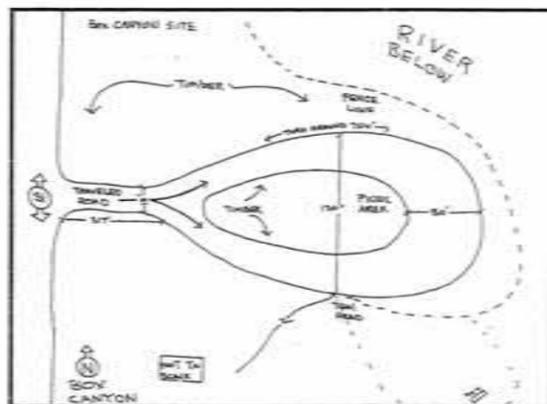
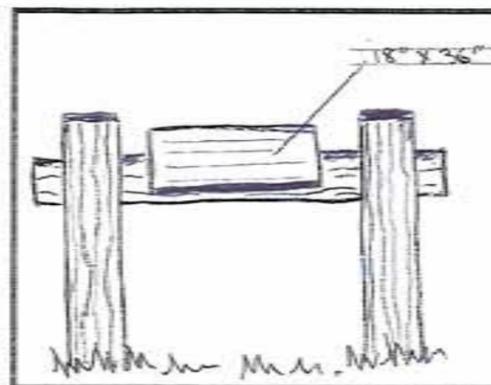
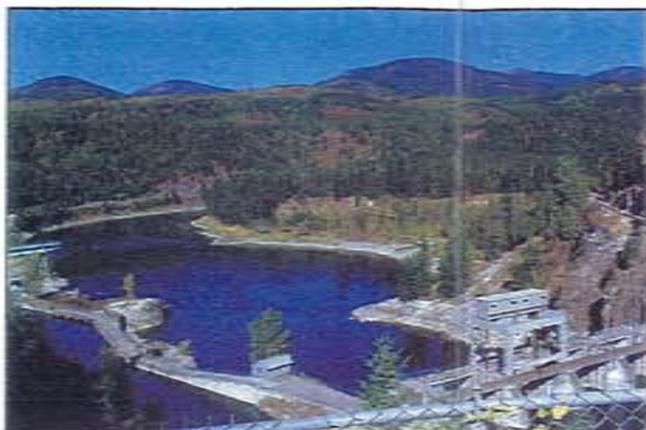
- Major Scenic Attraction
- Historically Significant
- Picnic Area and Nearby Visitor's Center
- Nature Trail

PROPOSED DEVELOPMENT:

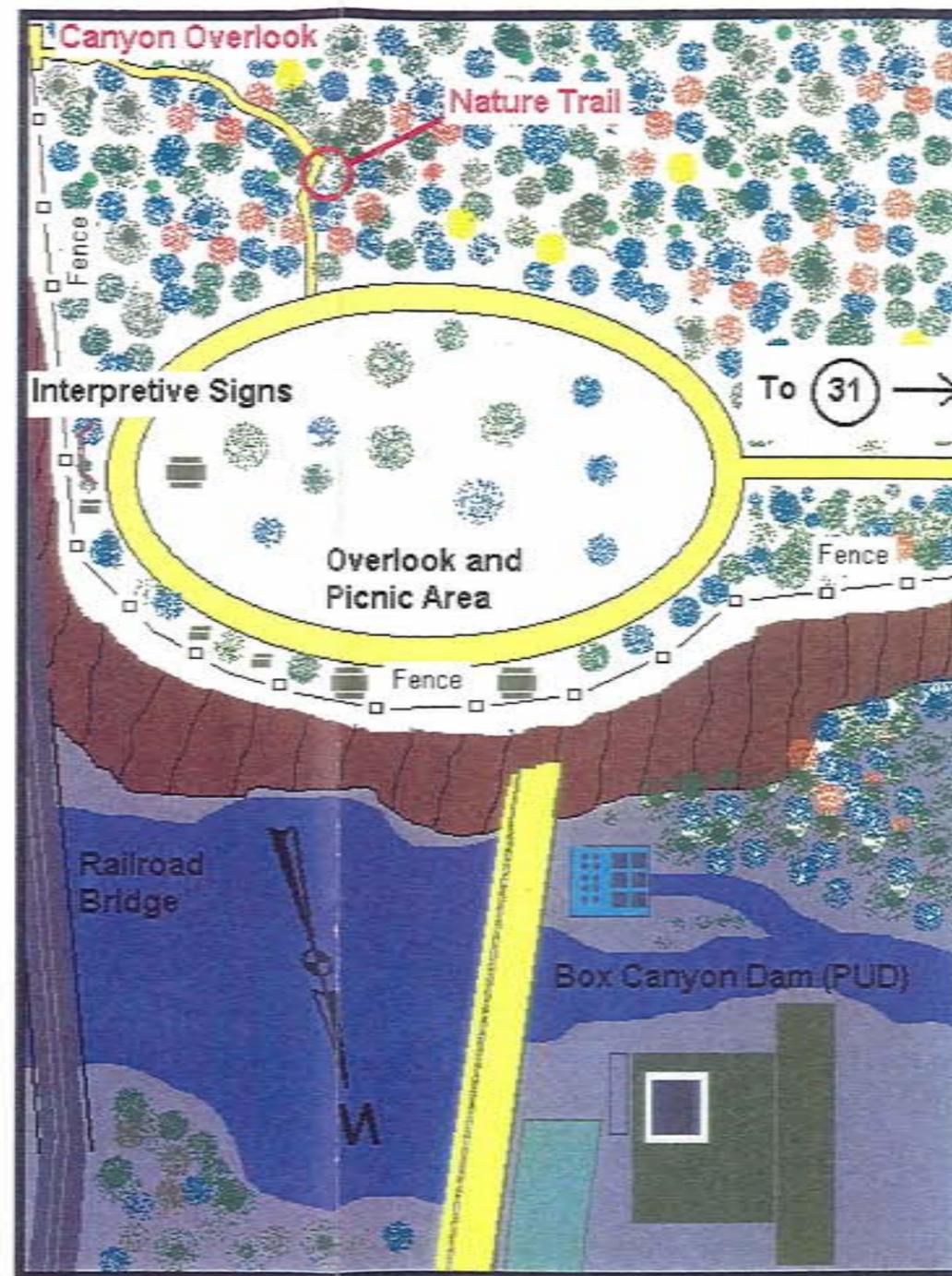
- Additional Looped Nature Trail to overlook Box Canyon
- Interpretive Panel at overlook

- Estimated Cost: \$25,000

Details



Concept Plan



Not to Scale

Box Canyon Overlook

North Pend Oreille Scenic Byway

PROPOSED USE:

- Scenic Overlook, Interpretive Panels, and Adjacent Parking

CHARACTERISTICS:

- 1/3 Acre Lot with Scenic Qualities
- View of Historic Bridge to the South
- Well Landscaped and Maintained

SIGNIFICANCE:

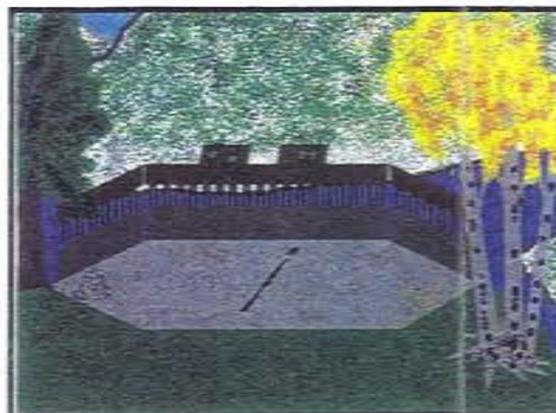
- Scenic View of Pend Oreille River and Former Falls Site
- Consistency With Local History (Cement Bridge, Park Space)

PROPOSED DEVELOPMENT:

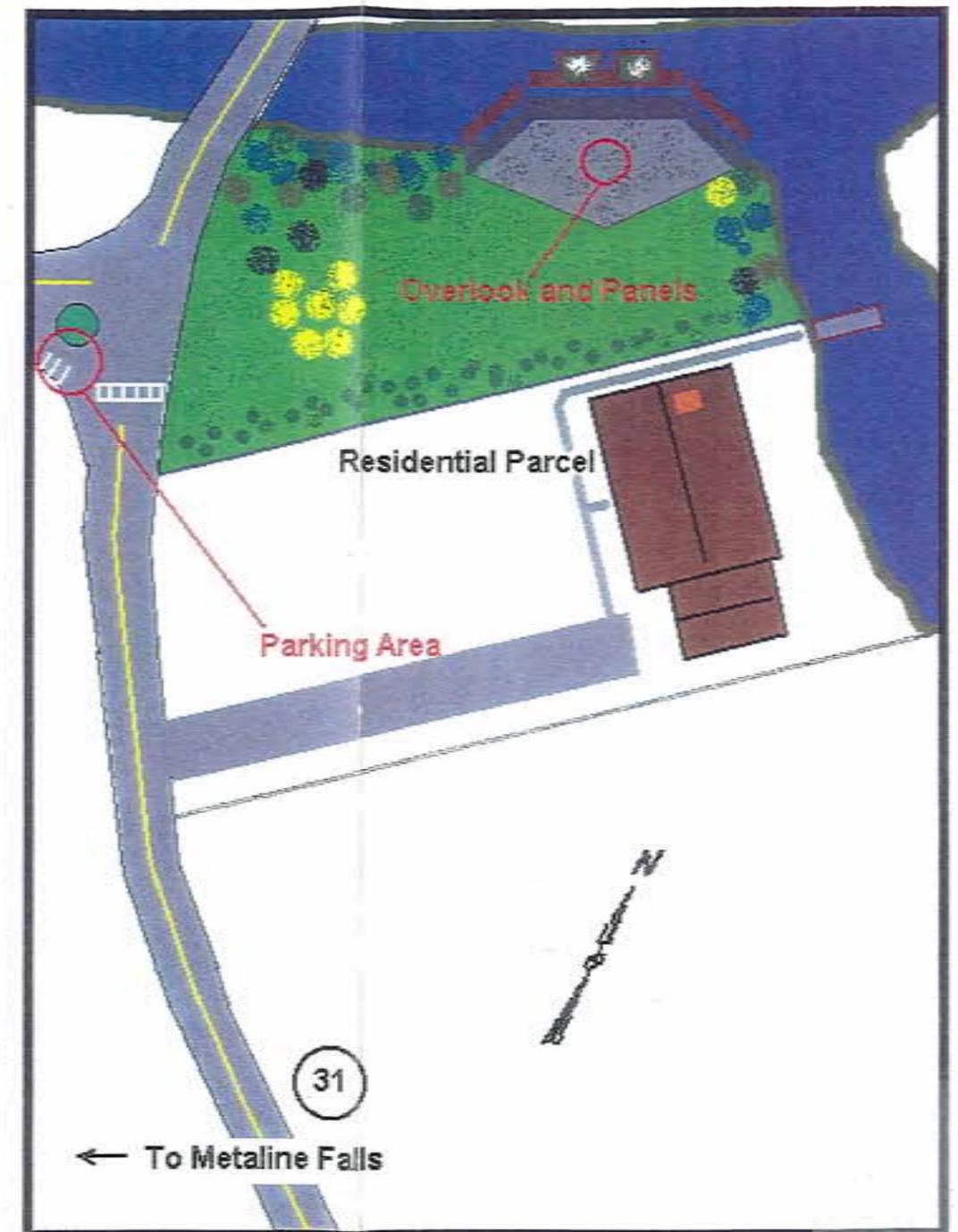
- Interpretive panels affixed to viewing platform will depict photograph of pre-impoundment falls view.
- Overlook platform or deck made of timber or cement.
- Provisions for 2-3 parking spaces across street.
- Pedestrian Crosswalk on SR 31.

- Estimated Cost: \$25,000

Details



Concept Plan

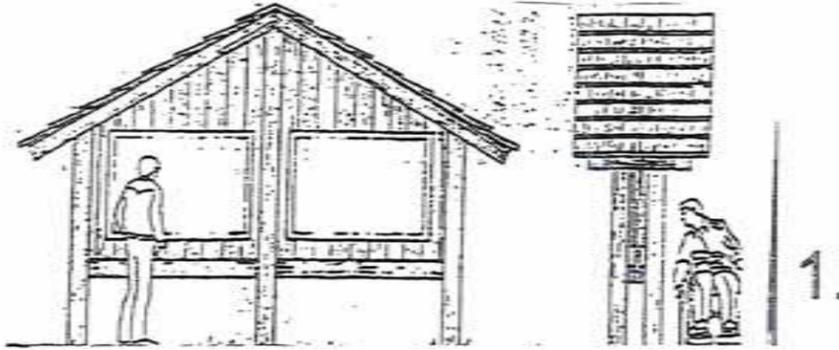


Metaline Falls Pocket Park

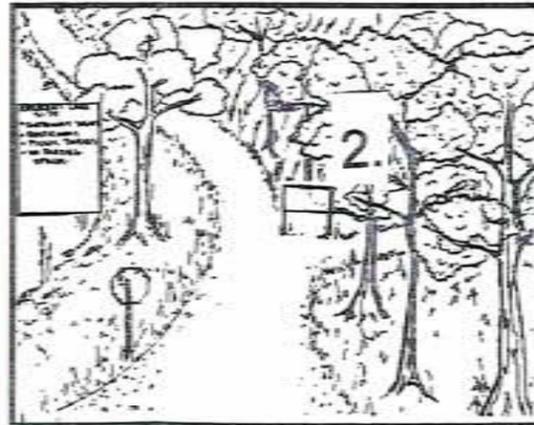
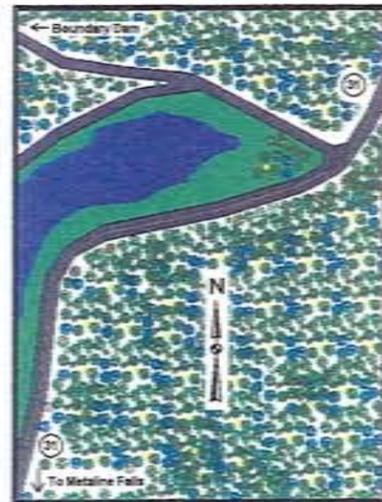
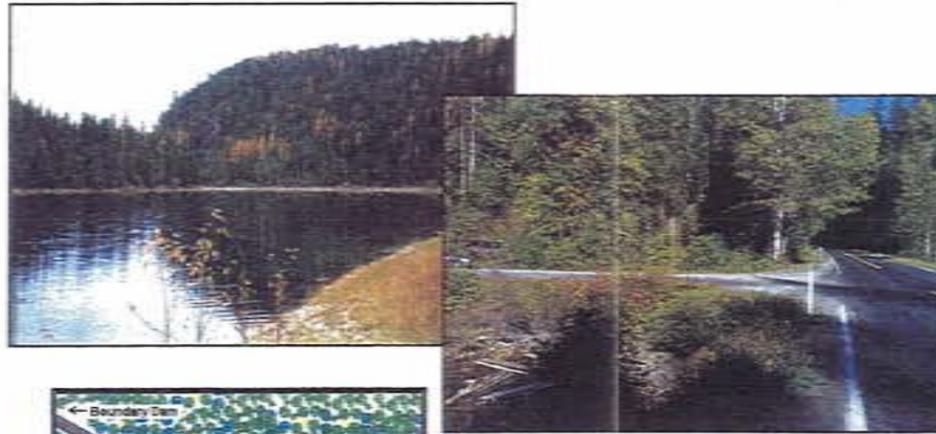
North Pend Oreille Scenic Byway

Not to Scale

Details



One side of this structure can have the 4'x3' Byway Orientation Panel (map). The other side has two 3'x2' standard interpretive panels (thematic or historic info.) as shown in this illustration.



PROPOSED USE:

- Orientation Panel at Pullout

CHARACTERISTICS:

- Scenic, Natural, and Recreational Qualities
- Owned & Maintained by U.S. Forest Service
- Unofficial Pullout Area and Site Entrance off SR 31

SIGNIFICANCE:

- Provides Pullout for Northern Byway Area
- Potential Space for Byway Orientation Panel
- Dedicated Panels at Campground Kiosk
- Many Recreational Opportunities Nearby

PROPOSED DEVELOPMENT:

- Byway orientation panel for the northern gateway.
- Two panels at kiosk for Byway information
- Byway logo sign within shared space of new USFS sign.

- Byway signage Estimated Cost: \$16,000

Concept Plan

Possibilities for Site Development at Crescent Lake:

1. Enhancement or replacement of existing USFS Sign to include Byway information
2. Place Byway Sign at area marked as potential site for Byway Signage



1. The USFS (Sullivan Lake Ranger Station/Colville National Forest) is proposing to replace the existing USFS sign. In its place they propose the installation of a new sign that will inform the Byway traveler of visitor information at this site. When the traveler of the Byway enters this site there will be a day-use area with approximately 6 parking spaces. A kiosk can be installed at this day-use area to provide Byway information by means of a Byway orientation panel displaying a map on one side and a thematic or historical informational panel on the other side. The day-use area will be located approximately two-tenths of a mile from SR 31.
2. This is an area identified by the EWU Study Team as a possible alternative for the placement of a Byway Orientation Panel (map display). This alternative allows the traveler of the Byway (who does not wish to drive to day-use area) to pull off of SR 31 to use the small existing pull-out to view the map display that orients the traveler to the Byway.

Not to Scale

Crescent Lake

North Pend Oreille Scenic Byway

4.2 Sign Inventory and Assessment

The sign inventory (Fall 1999) was undertaken to:

- determine the type and number of signs in the Byway;
- identify signs that might be eliminated, replaced, or combined; and
- ascertain which locations would be most appropriate for installation of Gateway and Trailblazer signs.

Both video and visual inventories of all signs within the Scenic Byway right-of-way were conducted. The milepost locations of the signs were then verified against the WSDOT sign inventory. Results of the inventory are organized in a table, and sign locations are plotted on a map of the Byway (See Appendix C.1, C.2). The data is sorted according to US DOT standards. Signs currently along the Byway are classified into three categories per Manual on Uniform Traffic Control Devices (MUTCD) from US DOT and Federal Highway Administration. The categories are: Regulatory, Warning, and Guide.

REGULATORY—These signs give notice of traffic laws or regulations including speed and passing control.



WARNING—These signs call attention to conditions on, or adjacent to, a highway or street that are potentially hazardous to traffic operations such as winding road, school crossings, railroad crossings, and slide areas.



GUIDE—These signs show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information.



Table 4.2.1 provides a summary of the inventory for SR 31, North Pend Oreille Scenic Byway

Table 4.2.1: SR 31 Signage Inventory

	Northbound	Southbound
Regulatory	24	24
Warning	73	64
Guide	141	72
TOTAL SIGNS	238	160
Sign Locations	194	138

Note: Includes only signs in right-of-way

The number of sign locations is smaller than the total number of signs due to the fact that multiple signs are mounted on a single pole. In many cases, signs from two or more categories are mounted together. The next step in the analysis was to look at each of the sign categories and determine which signs might be eliminated, replaced or combined to reduce the total number of signs in the Byway.

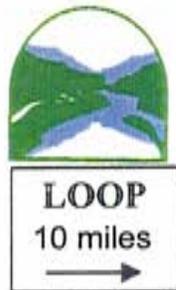
Byway Trailblazer Signs

Trailblazer signs are placed along a route for identification and traveler assurance. In consideration of the relatively short length of the Byway and the number of signs already in place, a minimalist approach to trailblazer sign placement along SR31 should be employed.

Trailblazer signs are typically placed at five to ten mile intervals. Five double-sided trailblazer signs could be placed at 4.5 mile intervals along the length of the Byway. Another option is to forego placement of any trailblazer signs relying solely upon the gateway signs and site advance warning signs for Byway identification.

Recommendations

A good use of Trailblazer signs or Byway Advance Warning signs are at the intersection of Highway 20 with State Route 31 and at either end of the Sullivan Loop Road. These are key roadway intersections along the Byway which would benefit from the placement of a trailblazer logo and directional guidance. Below are examples of these signs.



Purpose: To let visitors know the Byway consists of other roads besides SR 31.



Purpose: To assure or remind visitors they are reentering the Byway.

Site Directional Signs

Perspectives as to whether sites should have advanced warning varies. One school of thought suggests that a site should be visible, defined and inviting enough to encourage visitors to stop without having advance warning. Others would suggest that site directional signs play a key role in determining whether visitors stop. Site directional signs assist visitors in "homing in" on destinations, and for finding destinations not immediately adjacent to the Byway. The signing emphasis should be on clearly identifying features, directions, and distance. Features can be identified generally as in the sign on the right or specifically as in the name of the feature. Making a site specific sign can be more costly.



This is a good example of Site Directional Sign because it has the logo, direction, and distance. Also note, the Byway name is impossible to read.

Speed Control Signs

All the speed changes, both northbound and southbound, in the Scenic Byway were itemized (see Appendix C.3). While there are many changes, they are due to primarily two circumstances: entering and leaving towns and curves in the road (will be discussed under warning signs). The analysis of regulatory signs highlights one area of potential change. That is the area in and between Metaline and Metaline Falls where the speed changes from 25 to 40 to 55 and back to 25 within 1.5 miles. The distance covered by the 55 mph speed limit is only one-half mile in each direction: from MP 13.25 to 13.78 northbound; from MP 13.98 to 13.42 southbound. There is only .36 mile where the speed limit is 55 mph in both directions. The study team recommends elimination of the 55 mph signs and maintenance of the 40 mph speed limit.

Warning Signs

A significant number of the warning signs occur on the road between towns with reference to curves and winding road. The MUTCD is very specific about the type and location of warning signs. The following tables list pairs of signs which we believe meet that criteria and, therefore, might be consolidated.

Table 4.2.2: SR 31 Northbound Warning Signs

MP	Type	Distance to Next Sign	Consolidate
6.36 6.41	Curve Right Winding Road Right	264 feet	Winding Road Right
10.77 10.86	Reverse Curve Right Winding Road Right	475.2 feet	Winding Road Right
14.65 14.7	Curve Left Winding Road Left	264 feet	Winding Road Left
20.7 20.76	Right Arrow Winding Road Right	316.8 feet	Winding Road Right
23.93 24.04	Curve Left Winding Road Left	580.8 feet	Winding Road Left

Table 4.2.3: SR 31 Southbound Warning Signs

MP	Type	Distance to Next Sign	Consolidate
16.34 16.32	Turn Left Winding Road Left	105.6 feet	Winding Road Left
6.2 6.1	Reverse Curve Left Winding Road Left	528 feet	Winding Road Left

Two additional pairs of warning signs are recommended for consolidation as represented in the following table:

Table 4.2.4: SR 31 Rock and Slide Area Signs

MP	Type	Distance to Next Sign	Consolidate
7.66 NB 7.69 NB	Rocks Slide Area	158.4 feet	Slide Area
8.35 SB 8.3 SB	Rocks Slide Area	264 feet	Slide Area

Source: Eastern Washington University Survey, October 20, 1999

Guide Signs

The guide sign category contained the largest number of signs. There is a notable disparity between the total number of signs in the northbound right-of-way as compared to the southbound. This is due in part to the method used for counting some signs. For example, milepost markers are double-sided signs that are visible from both directions. They are on one post positioned on the right side of the road going northbound. In order to avoid duplication, all the milepost signs were counted in the northbound inventory. Similarly, most street signs, which again are single signs visible from both directions, were counted primarily in the northbound inventory (16 northbound v. 6 southbound).

Due to their large number, the guide signs were broken down by type and are represented in the following table.

Table 4.2.5: Type and Number of Guide Signs on SR 31

	Northbound	Southbound
Mileposts	26	0
Street Name	16	6
Range Information	6	6
Chain Control	3	3
Adopt A Highway	10	10
Route Markers	4	2
Rest Area, Scenic Area, Motorist Services	9	3
Recreational and Cultural Interest	17	10
Destination, Distance, General Information	30	14
Miscellaneous	20	18
TOTAL	141	72

Note: Includes only Guide Signs in right-of-way

The Range Information and Adopt A Highway signs provide opportunities to reduce the number of sign locations. There are six Range Information signs in each direction. At location 4.19 the "Range Area Watch Out For Livestock" is back-to-back with "Leaving Range Area." Three sign locations could be eliminated by applying the same back-to-back method at locations 3.44, 11.22, and 14.5. The signs at the 13.35 milepost are located between Metaline and Metaline Falls and duplicate information on the signs at the 14.5 milepost. It is recommended that two signs be eliminated.

Table 4.2.6: SR 31 Range Information Signs

MP	NORTHBOUND	MP	SOUTHBOUND
0.14	Range Area Watch Out For Livestock		
3.44	Leaving Range Area	3.44	Range Area Watch Out For Livestock
4.19	Range Area Watch Out For Livestock	4.19	Leaving Range Area
11.22	Leaving Range Area	11.22	Entering Range Area Watch Out For Livestock
13.35	Range Area Watch Out For Livestock	13.35	Leaving Range Area
14.5	Range Area Watch Out For Livestock	14.5	Leaving Range Area
		26.4	Range Area Watch Out For Livestock

Of the ten Adopt A Highway signs in each direction, seven could be mounted back-to-back to eliminate seven additional locations. The study team also recommends that the old, larger signs be replaced with new, smaller ones.

Table 4.2.7: SR 31 Adopt A Highway Signs

Northbound Mileposts	Southbound Mileposts
2.9	3.0
5.94	6.0
8	8
10	10.2
12	12
16	16
23.98	23.98

The team identified several additional signs which need to be replaced. These are listed in the following table along with the reason why replacement is necessary.

Table 4.2.8: Replacement Signs

Milepost	Sign Message	Reason for Replacement
3.95 NB/SB	Commercial Avenue	No sign
4.07 NB/SB	Houghton Street	No sign
4.23 NB/SB	Madsen Road	No sign
6.85 NB	Scenic view→	Arrow paint worn out
3.08 SB	Sullivan Lake Ranger Station 18→	Mileage is incorrect
4.1 SB	Wildlife Viewing Area 4 Miles	Mileage is incorrect
13.35	Speed Limit 40	No sign

This inventory contributes to future placement of Byway information signs. Sign locations on the map will help to determine the best locations for the Byway Trailblazer signs. The Trailblazer signs show the Byway logo and inform the motorist that he/she is traveling on the Byway. The locations on the map will also help to decide where signs can be placed to guide motorists into the various interpretive sites to be developed along the Byway.

WSDOT Review

The study team met with the Washington State Department of Transportation, Eastern Region Traffic Engineer Ted Trepanier and Richard Moorhead on November 24, 1999, to discuss proposed recommendations to reduce signage along the byway. One of the purposes of meeting with WSDOT was to determine whether the proposed recommendations were feasible. General, but not total, consensus was made toward the proposed recommendations outlined in this chapter (see Appendix C.4 for details).

4.3 Byway Right-Of-Way Signing Guidelines

This section covers the design of Byway signage that will be constructed along the Scenic Byway right-of-way. These guidelines can be used by the Citizen Advisory Committee (CAC) to evaluate future signage in the right-of-way (ROW). These guidelines are for Byway signs within the right-of-way of the state highway and can also be used voluntarily by private landowners along the corridor. Supplemental references include MUTCD and Scenic Byway Logo Guide (WSDOT, 19996)

Signs along the Byway must conform to local, State, and Federal laws. These various government levels have laws that regulate sign size, location, height and content. This section is intended as a supplement to those regulations. The purpose of these guidelines is to provide the CAC and others with an operational tool that will assist them in the implementation of Scenic Byway highway signing.

Three types of Byway signage addressed:

- Trailblazer Logo Signs mark the North Pend Oreille Scenic Byway. They serve to remind visitors they are on the Byway especially at major intersections.
- Site Directional Signs serve as advance warnings to particular sites of interest associated with the Byway.
- Gateway Signs mark the two main entryways to the North Pend Oreille Scenic Byway.

Signage Purpose:

- Develop a "wayfinding" system—in both directions—to identify the Byway route and sites of interests. Attractive and consistently placed signs will allow visitors to follow the Byway without stopping frequently to consult a map or ask for directions.
- Develop a standard trailblazer sign that will be used sparingly along the route to remind visitors they are on the Byway.
- Develop gateway signage which demonstrates pride in the community and Byway. The design should integrate signs, landscaping, and plantings.

Recommendations

- Use brown and white signs for all Byway ROW Signage.
- Create further contrast in the Byway logo to make it easier to recognize.

- Enlarge and use graphic logo on Byway signage as opposed to logo and Byway name. "North Pend Oreille Scenic Byway" is too difficult to read. Use of only the logo can create a strong and immediate connection to the Byway. The Byway name will appear on the gateway signs, brochures, gateway centers, and interpretive sites to provide opportunities for name recognition.

Design Guidelines for Byway Right-of-Way Signs

All signs should follow WSDOT logo guidelines unless they conflict with the Manual for Uniform Traffic Control Devices for public safety, traffic control or highway construction signs. In such cases, the standards in the Manual for Uniform Traffic Control Devices shall supersede these guidelines. Byways may order signs through a WSDOT approved source or through WSDOT directly.

- A. The support structure should be unobtrusive and have low visual impact.
- B. Lettering colors should have sufficient contrast to provide clear message communication. Signs should be colored to blend with their setting to the maximum extent practicable.
- C. Backs of all signs shall be unobtrusive, non-reflective, and blend in with the setting.
- D. Spotlighting of signs may be allowed where needed for night visibility. Backlighting is not permitted for signs.
- E. Alteration of existing nonconforming signs shall comply with these guidelines.
- F. Any nonconforming sign used by a business must be brought into conformance concurrent with any expansion or change in use that requires a development permit.

Important Highway Signage Regulations

Following are other highway signage regulations of interest. Except for signs along public highways necessary for public safety, traffic control, or road construction and consistent with the Manual for Uniform Traffic Control Devices, the following signs are prohibited:

- A. Luminous signs or those with intermittent or flashing lights. These include neon signs, fluorescent signs, light displays, and other signs that are internally illuminated, exclusive of seasonal holiday light displays.
- B. New billboards.
- C. Signs with moving elements.
- D. Portable or wheeled signs, or signs on parked vehicles where the sign is the primary use of the vehicle.

Technical Design Information

While much of the process of designing and developing a logo for Scenic Byway use is based on creativity and unlimited possibilities, some areas are subject to, standards and guideline controls. The following defines selected technical limitations of logo design.

Table 4.3.1 Scenic Byway Logo and Advanced Warning Sign Guidelines

Issue/Concern	Design Constraints	Remarks
Sign Size	24" x 24" (600 mm x 600 mm) suggested for trailblazer signs.	Scenic Byway markers should not exceed the size of the prevailing route number markers on SR 31 which is 24" x 24". The sign size must be approved by the regional Traffic Engineer.
Night Visibility	Reflectorized for trailblazer and supplemental guide signs. Bottom-lit or reflectorized for gateway signs.	When the logo image is being used as a route marker it must be reflectorized, or bottom-lit for nighttime visibility .
Letter Style	Without serifs	<p>Letter styles should not have hooks or protrusions from the basic letter shape. Avoid typefaces with excessive contrast between thick and thin elements because they are harder to read.</p> <p>Lettering should be C Series or better</p> <p>Recommended letter styles:</p> <p>ARIAL, arial ARIAL, arial Albertus Medium, albertus, ALBERTUS, Albertus Medium Etc.</p> <p>If serifs are used they should not become so pronounced as to make the letter begin to look like a script style.</p>
Letter Size	3" (75 mm) minimum height	To achieve good readability, the letter size should be at least 3 inches (75) mm) tall when used on a sign 24" x 24" (600mm x 600mm). Letter size should be the same ratio on bigger signs.

Gateway Signs

The Gateway signs will welcome travelers to the North Pend Oreille Scenic Byway and orient them to the byway logo which will aid in site and sign recognition along the byway. The gateway signs should be located at the north and south entry points to the byway. These locations should be as close to the ends of SR31 as possible to inform motorists as soon after they enter the byway as possible.

Northern Gateway

The proposed north gateway location is at the first southbound pull-off from the border. This pull-off is located at MP 26.5. This location is the first point that has a clear view after leaving the border heading southbound (See Appendix C.5).

Currently, this location has a timber support sign, on which a paper, prevent forest fires, sign is tacked. This site is under the management of the USFS. Therefore use, permission and coordination must be secured. A major factor in approval is conformance with the Forest Service Scenic Requirements. As recreation corridor, the sign must not detract from the natural environment. The location has level ground with enough area where a sign can be placed outside the WSDOT clear space requirements.

It is recommended that the old timber sign be removed and a new timber support gateway sign be erected in its place. The prevent forest fires message can be incorporated in the entering the gateway message.

Southern Gateway

The proposed south gateway location is at the intersection of SR 20 and SR31 at the Tiger store site (see Appendix C.4). There are three possible locations where a gateway sign can be placed. Each location has tradeoffs.

The first location is on the east side of SR 31, north of the eastbound dirt road at the intersection of SR 20 and SR31. In this location, a gateway sign could be placed here which would be visible to travelers coming north on SR 20 or east on SR 20. Limitations on this site are another sign would have to be moved because there is already four closely spaced signs. A concrete or rock sign would require a very large DOT clear space setback (over 50feet). This clear space requirement would place the sign on private land, which would require negotiations to buy or long term lease that space.

The second location is on the east side of SR 20, south of the eastbound dirt road at the intersection of SR20 and SR 31. There are no signs in this location. Placing a concrete or rock sign here would again require a large DOT clear space setback, which would place the sign far off of the road and make that sign more difficult to read. However a timber support sign could be placed here with breakaway holes drilled in the supports to meet DOT requirements. The timber support design could not be built to provide visibility to northbound and

eastbound travelers. The land at this location is DOT and Pend Oreille County Port District.

The third possible location is at the Southeast corner of the Tiger store site. Here the land is under the influence of the byway so permission to place the sign here rests with locals. The ground is level and the clear space, which a concrete or rock sign would require, is only 18 feet from the edge of the road. A timber sign with breakaway holes could be placed closer to the road. The drawback to this location is that it is on the opposite side of the road, which a motorist would normally look for a sign. Also, it is completely hidden from travelers coming eastbound from Colville.

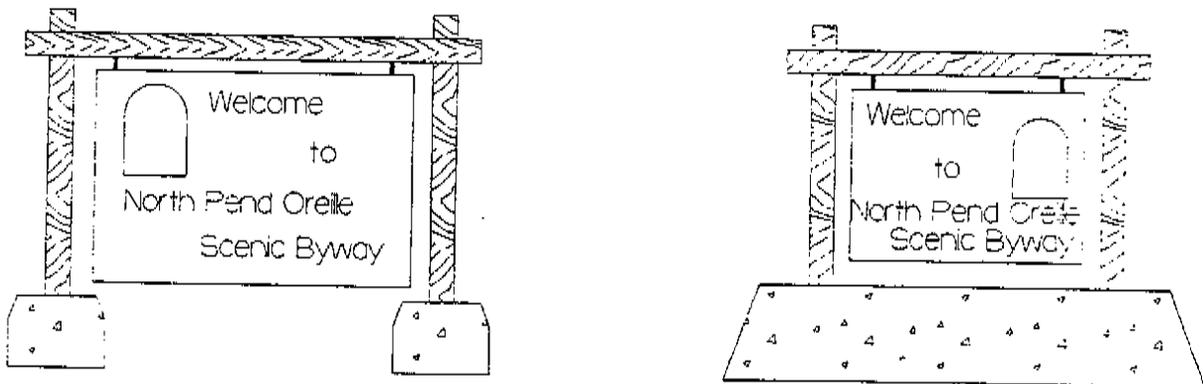
It is recommended that a timber support gateway sign be placed in the third location (SE corner of Tiger store site). The timber design would negate the setback requirement and it could be set for maximum visibility.

Description

Three gateway sign package possibilities are proposed. All packages have a variety of gateway and trailblazer sign designs. The first package is a timber approach where the sign supports and panel are constructed out of wood. Second is the concrete design. In this design, the supports are made from cast concrete and the sign panel can be of multiple materials. The third design scheme uses a rock facing design. The supports are made of concrete and faced with stone. Like the concrete scheme, the sign panel can be of a variety of materials.

Timber Design

This design scheme works in timber. It links the byway to the forest, which gives the byway its beauty and to the timber industry which is a vital part of the economy. The options that are available can be seen below. This design is recommended for the gateway sign. The design has a concrete base with timber columns and cross support. The sign panel can be wooden, metal or plastic in material.



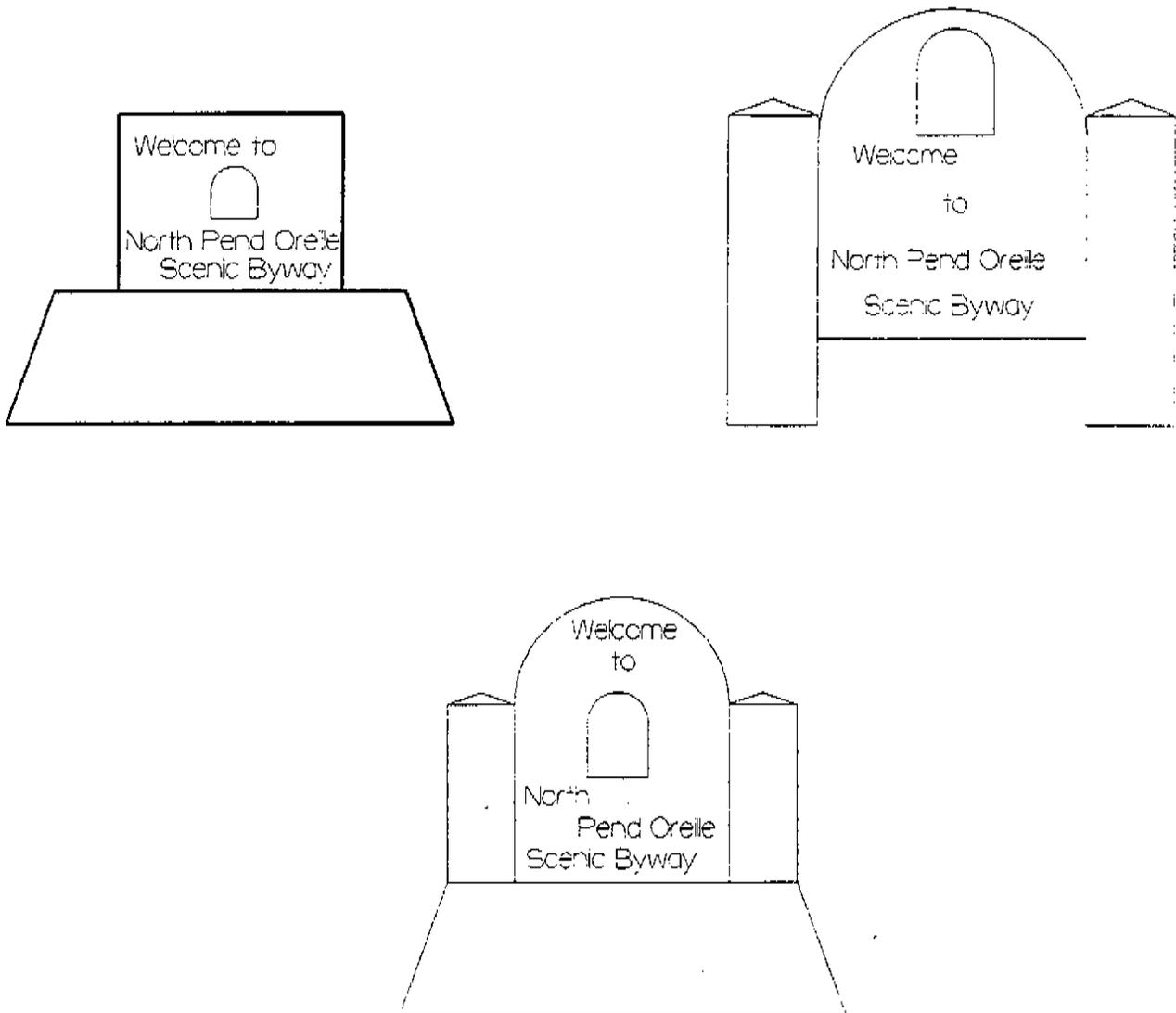
Two options are available for the trailblazer sign. The first is a timber post that is milled to the design shape and the logo is recessed. The second is a standard

DOT signpost with a metal reflective informational sign with the byway logo. This second option is also a second option for the other two categories.

The benefit of this type of design is that this design can be modified to meet the DOT breakaway requirement. This will preclude the necessity of placing the sign out of the required clear zone.

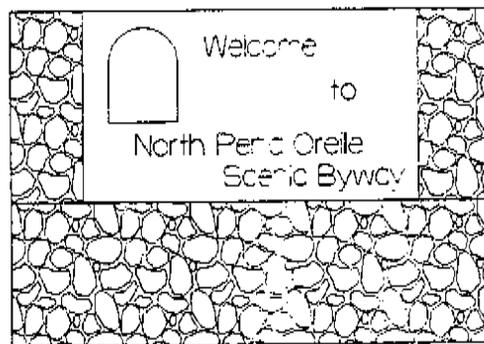
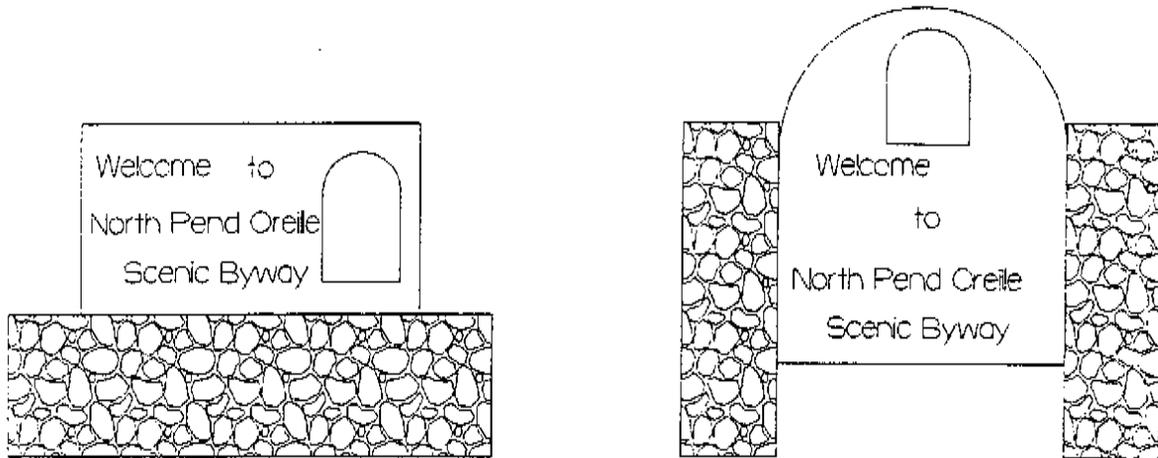
Concrete Design

This design scheme works in concrete. Concrete has been a very important industry in Pend Oreille County for decades. This design scheme has three options; a concrete base with sign panel above, dual concrete columns with the panel between, and a combination of the two styles. The sign panel can be concrete, metal, wood or plastic material. The options available for this scheme can be seen below.



Rock Design

This design scheme uses the same basic options as the concrete scheme. The base is concrete faced with rock or concrete stamped to look like rock. These options are a base, dual columns, and combination of the two. The sign panel can be concrete, metal, wood or plastic material.



Section 4.4 Interpretive and Orientation Panels Guidelines

This section provides information on the design of outdoor exhibits, orientation signage, and other related elements intended for the North Pend Oreille Scenic Byway. The guidelines for outdoor exhibits include the design and placement of interpretive and orientation panels that will interpret the story of the North Pend Oreille River Valley. Placed at significant sites along the Byway, these exhibits tell story of North Pend Oreille to the visitor.

Rationale

Interpretive and orientation panels are the keys to a successful North Pend Oreille River Valley interpretive experience. They provide travelers with information to find their way to sites and amenities, and to learn through interpretation the rich natural and cultural heritage of the North Pend Oreille.

Signs are a powerful tool for capturing attention and conveying information. Interpretive signs (panels) need to hold attention long enough to convey the interpretive theme and message. These panels should use catchy headings, graphics, and minimal text to attract and inform the visitor. With good interpretive panels, visitors are connected to the environment and motivated to look and read. If successful, visitors will want to move to other Scenic Byway sites to see and learn more.

Continuity

These guidelines suggest a framework of continuity for interpretive improvements within the Scenic Byway. Visually linking similar, easily recognizable elements will give travelers a clear indication that a specific site is a North Pend Oreille Scenic Byway site and part of a larger interpretive network. Of course, the details of the site and its interpretation will be unique to that site.

- By creating a continuous network of interpretation and design, the story of the North Pend Oreille River Valley can be fully explored with important themes being reinforced from one site to another. The richness and diversity of this story can be more fully interpreted by linking story and themes between sites.
- With each interpretive site being both part of the larger North Pend Oreille story, and also unique, visitors will be encouraged to continue the journey to visit other interpretive sites to explore all significant aspects of the area's history.

Advantages of Panels

Interpretive and orientation panels offer many advantages over other types of interpretation. These advantages include:

- Appeal to a wide range of visitors

- Appeal to a wide range of visitors
- Effective at depicting another time and place, bringing features closer to view, showing processes, and revealing the significance of place
- Relatively inexpensive to design, fabricate, install, maintain, repair, and replace (Estimate \$7000 each for design and fabrication)
- Durable enough to last for decades
- Self-pacing for visitors of multiple interest levels and abilities
- Available at all times for viewing
- Highly visible for attracting attention
- Flexible for a variety of graphic and text materials

Layout

Interpretive panels are still objects that attract attention in a dynamic environment. Panels need to communicate quickly and dramatically, be important to the visitor, and relate to what the visitor sees and experiences. The panel's effectiveness to relate the interpretation heavily depends on the design of the layout. The layout is the arrangement, particularly the schematic arrangement of parts or areas.

The layout of the panels should utilize an underlying layout grid to organize the arrangement of areas. A standard grid would provide consistency for all interpretive work along the North Pend Oreille Scenic Byway. The National Park Service uses a standard layout for National Historic Trail exhibits that may serve as a standard layout grid for the North Pend Oreille Scenic Byway interpretive panels. With consistent elements like title zone, outside dimensions, columns, and margins, the designer can be flexible and creative with the layout of graphics and text, and still keep the visual connection with all other North Pend Oreille Scenic Byway exhibits (See Appendix C.6).

Graphics

Graphics give you the ability and power to say it visually. A single graphic image can replace many words, focus attention, and lead the eye through a message sequence. A strong image will catch the visitor's attention more than any other element.

Graphics should reveal hidden meanings and ideas, instead of duplicating what is seen at the site. Reward is high and effort minimal for interpretive graphics that convey detailed stories and ideas in concise and dramatic ways. They add beauty, interest, and can give an interpretive panel unity and personality.

As the design of the panels move from concept to visual design to final art and then to production, some graphic tools and considerations for interpretive and orientation panels include:

- Develop a strong center of interest or focal point, and a visual sequence from that focal point. Design with a planned order that guides the viewer through illustrations and type, from big items to small, from color to non-color, and from the unusual to the usual. Emphasis and contrast will let visitors know what is important and will create interest.
- Color is effective and should be used when budget allows. Color attracts attention, improves readability, and increases memory retention. Warm advancing colors such as reds, oranges, and yellows are stimulating, while cool retreating colors like greens, blues, and violets are more relaxing.
- Light colored backgrounds with dark letters are more readable in shaded areas.
- Dark signs with light letters are harder to read in most conditions except in bright sun.
- Lines direct viewers, tie elements together, and create a mood. Vertical lines suggest power, horizontal lines relay tranquility, and converging and diverging lines add depth and tension.
- Texture can create emphasis, separation, or unity.
- Use symbols in addition to other graphics.
- Use balance. Asymmetrical balance will make text and graphics appealing and create diversity, while symmetrical balance is more static.

Images

The saying, "A picture is worth a thousand words" has much validity in interpretive work. There are considerations for the use of images in outdoor exhibits including:

- Quality
- Durability
- Production Techniques
- Availability of Source Material

Photos fade in the sunlight. Their life can be extended if embedded in fiberglass with an ultra violet inhibiting agent, but the best outdoor durability is obtained by reproducing the image in porcelain enamel. Some of the new digital output materials show promise. Using photos requires good source material, and original color slides work best for color reproduction. For black and white, negatives are best.

There are a variety of graphic images that can be used including:

- Photos
- Drawings

- Artwork
- North Pend Oreille Historic Maps
- Scenic Byway Logos
- Visitor Orientation Maps

Type

In terms of the layout and visual appeal of a panel, type is another graphic element. Consider the following items related to the use of type:

- Type style speaks its own language.
- Size of type suggests order to be read.
- Align letters with eye, not mechanical
- Set flush left and ragged right (generally).
- Symbols and objects are more identifiable than words, they may be the only means of communication for non-readers and foreign visitors. Use standard symbols as outlined in the Code of Federal Regulations, Parks, Forests, and Public Property Vol. 36, Parts 1-1999
- Try not to mix too many font styles, it creates disharmony. Use italics, bold, and print size variation for emphasis.
- Type size should depend not only on emphasis but also on viewing distance.
- Remember the visually impaired.

For the design of the interpretive panels along the North Pend Oreille Scenic Byway, we recommend adhering to the National Park Service National Historic Trail standard types and type sizes. Most interpretive panel text should be ITC Century Book, which is a good readable serif style for signs (serif is a bar that crosses letter ends). For orientation and information panels, Helvetica Neue #75 should be used. In addition, to emphasize the of area's history, other special style types in quotes and sidebars can be used.

Size of panel

Size and design of the panels will vary according to content, context, audience, and function. There are two types of interpretive panels, each of a different size. One panel, 36" x 24" should be used to focus on important interpretive themes. For more detailed interpretation, use an 18" x 24" panel. These panels will be placed on bases and stands at key pull offs and important sites along the North Pend Oreille Scenic Byway. The story and message that relates to a specific site are told through these interpretive exhibits providing the opportunity to link the physical and historic qualities of the site.

In addition to the two interpretive panels, there is also a larger size panel for orientation that can also be used for major interpretation. The purpose of the orientation panel is to provide an overview of the Scenic Byway. It should include a corridor map that highlights major attractions, their locations, and provide information about them. It can also include major tourist services. Kiosk structures will support these large panels. At kiosk locations, visitors should be able to get orientation information about their location along the Byway, their proximity to goods and

services, and they should learn about safety and stewardship. These exhibits reach a large number of visitors helping to establish the identity of the corridor and promote a sense of heritage and stewardship.

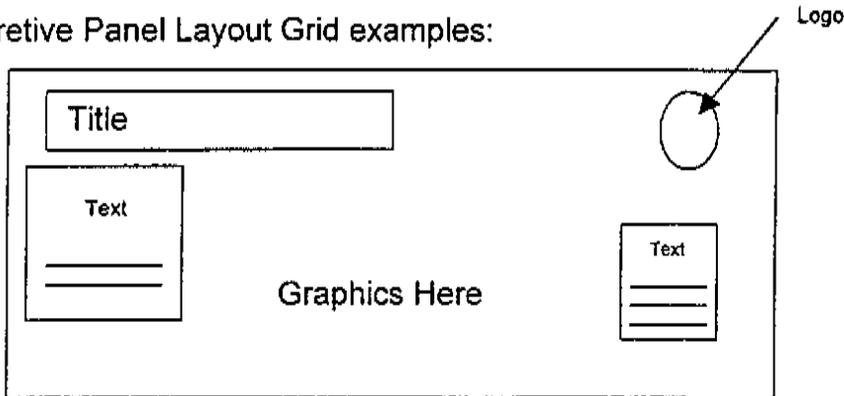
The grids are based upon three standard sizes of panels using the National Park Service's standard layout for outdoor exhibits.

Figure 4.4.1 Standard Panel Grids

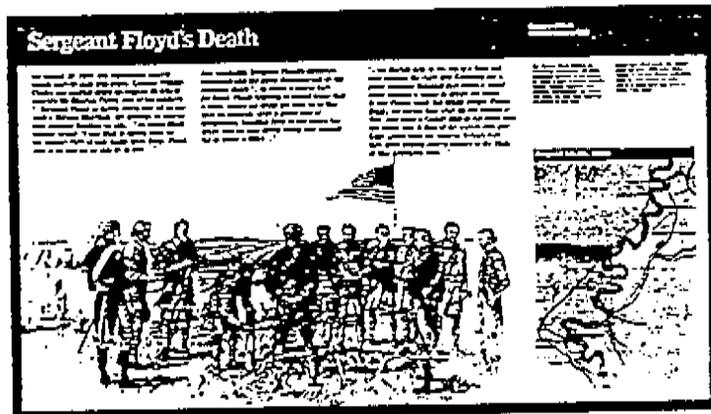
TYPE	USE	MOUNTING
 <p>Detailed Interpretive Panel</p>	<p>For most detailed interpretation on specific subjects</p>	<p>Low profile base on stand</p>
 <p>Standard Interpretive Panel</p>	<p>For thematic interpretation on major subjects</p>	<p>Low profile base on stand</p>
 <p>Orientation Interpretive Panel</p>	<p>For orientation displays (can be used for major interpretation)</p>	<p>Upright on kiosk, base or stand</p>

Source: Lewis and Clark Design Guidelines—Second Draft, September 1999

Interpretive Panel Layout Grid examples:



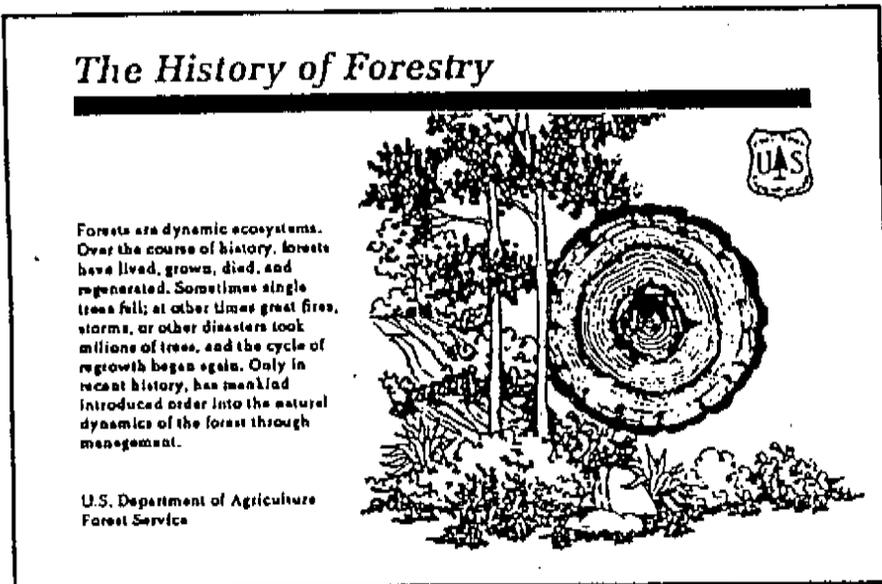
Examples of Panel Layout:



Source: Lewis and Clark Highway Enhancement Application, March 1999

36"

24"



Source: Forest Service Interpreting the Scenic Byway

Siting the Panel

The siting of interpretive exhibits is important for full integration of the special characteristics of the site with the interpretation of the North Pend Oreille Scenic Byway. The following considerations will help guide the site design:

- Draw on site characteristics such as views and access.
- Integrate regional materials whenever possible.
- Tie interpretation to views and geographic features.
- Plant vegetation and landscaping that enhances the native site conditions and qualities.
- Site interpretive elements to achieve a unity in design with materials and colors that work with the surrounding landscape.
- Provide access for people of all abilities to experience the same or similar interpretive opportunities. Follow ADA requirements, use low angle panel mountings for those in wheelchairs, and use large text and a tactile experience for the visually impaired.
- Construct pathways and trails with durable materials and of the appropriate size for the type of trail, its anticipated level of use, and its location.
- Ensure scale, context, and placement relate to visitor interest but does not compete or block out what is being interpreted.
- Do not intrude visually on the landscape and natural surroundings. Low angle interpretation is best for fitting in with landscape and being read by children and those in wheelchairs. Signs should be placed low and at about 45 degree angle for ease of reading. Keep larger panels within the kiosks or in non-sensitive areas.
- Consider changing site conditions during all seasons, weather, and the time of day. Sun and glare, shadows, orientation, and protective shelter needs are some considerations.
- When incorporating new interpretation or replacing existing interpretation, review existing panels for context, quality, and soundness. Replace if needed and feasible, or creatively and sensitively unify new interpretation with existing through site enhancement, and possibly new bases and stands

Types of Panel Materials

There are several types of materials that can be used. Each has specific qualities and costs that should be weighed in the planning and design process. Some of the more popular choices include fiberglass embedment, direct digital imaging, and porcelain enamel.

Fiberglass embedment is a process where graphics, maps, and text are printed onto high-quality paper then embedded in fiberglass. These panels will last in most environments for two to ten years. One advantage, especially in areas of high vandalism, is the inexpensive replacements or copies. If multiple prints are made up front, they can be embedded for about \$150. A full-color graphic has a high initial cost, but additional paper copies, if produced at the same time are inexpensive. A 24" x 36" screen printed embedded panel costs between \$250 and \$3000.

Direct digital imaging is a newer technology that transfers an electronic graphic file directly to a vinyl or phenolic resin sheet, where it can then be laminated to a sheet of aluminum or other structural backing. Some fabricators fuse prints into a foamed, closed cell polyvinyl chloride (PVC). Visual quality is typically not as high as some other processes, but materials are relatively inexpensive for either originals or copies. Because this technology is relatively new, longevity and durability are still questionable for outdoor applications and is being tested by the NPS. This technology is rapidly evolving and promises to offer a very inexpensive and good quality solution in the future. For now, its application may only be appropriate for orientation exhibits because they will be protected in kiosks, mounted vertically, and because the need to update maps and orientation information warrants the use of this inexpensive to change material. A 24" x 36" panel mounted on a sheet of aluminum and covered in a clear protective laminate costs about \$375.

Porcelain enamel is a process that uses ground glass colored with mineral oxides and fused to steel sheets by baking at high temperatures. The process is excellent for reproducing line art, photographs, maps, and other graphics. These panels are very hardy even in desert and marine environments and have a good track record lasting 25 years. They can be more expensive than other materials, depending on the complexity of the design. A 24" x 36" panel will cost about \$4000.

There are other materials and methods, such as wood, that may not compare to the functional aspects of these materials, but may be perfect for certain applications. The following table describes characteristics of some common types of materials. (See Appendix C.7 for evaluation of more materials.)

Table 5.1: Comparison of Sign Construction Materials

	<i>Porcelain</i>	<i>Fiberglass</i>	<i>Direct Digital</i>	<i>Wood</i>
Longevity	20 plus years	2 to 10 years	1 to 4 years	Low
Maintenance	Low	Low	Low	Medium
Weather Durability	High	Medium	Low	Low
Vandal Durability	High	Medium	Medium	Low
Cost (24" x 36")	\$4,000	\$250 to \$3000	\$375	Medium
Photo Quality	Excellent	Low	Low	N/A
Linework Quality	Excellent	Medium	Low	Low
Color Quality	Excellent	Medium	Low	Low
Production Time	4 months	4 months	2 weeks	variable

Source: Lewis and Clark Design Guidelines—Second Draft, September 1999

Interpretive Panel Bases, Stands, and Frames

Holding the interpretive panel in place with a secure and vandal resistant base or stand and mounted within a secure frame is critical for the longevity and appeal of the interpretive display. There are standard units available made of common materials such as wood, metal, and plastic, or even recycled materials. Ideally, durable, low maintenance materials should be used. All frame systems should be designed as tamper-resistant, but still allow for maintenance removal of signs for repair and replacement.

These functional aspects provide an opportunity to enhance the interpretive experience along the Byway. Drawing from some of the aesthetic qualities within each region, the bases and stands should reflect the natural and cultural environment in which they are placed. These bases and stands could enhance the drama of the interpretation to emphasize the unique qualities of the site. Options include a cement base, timber base, and an indigenous rock base.

Cement Base

This base draws on the importance of the concrete plant to the development of the North Pend Oreille River Valley. The concrete plant is a significant landmark in Metaline Falls. It is a powerful visual feature. Cement bases are easy to install, cost-effective, and low maintenance.

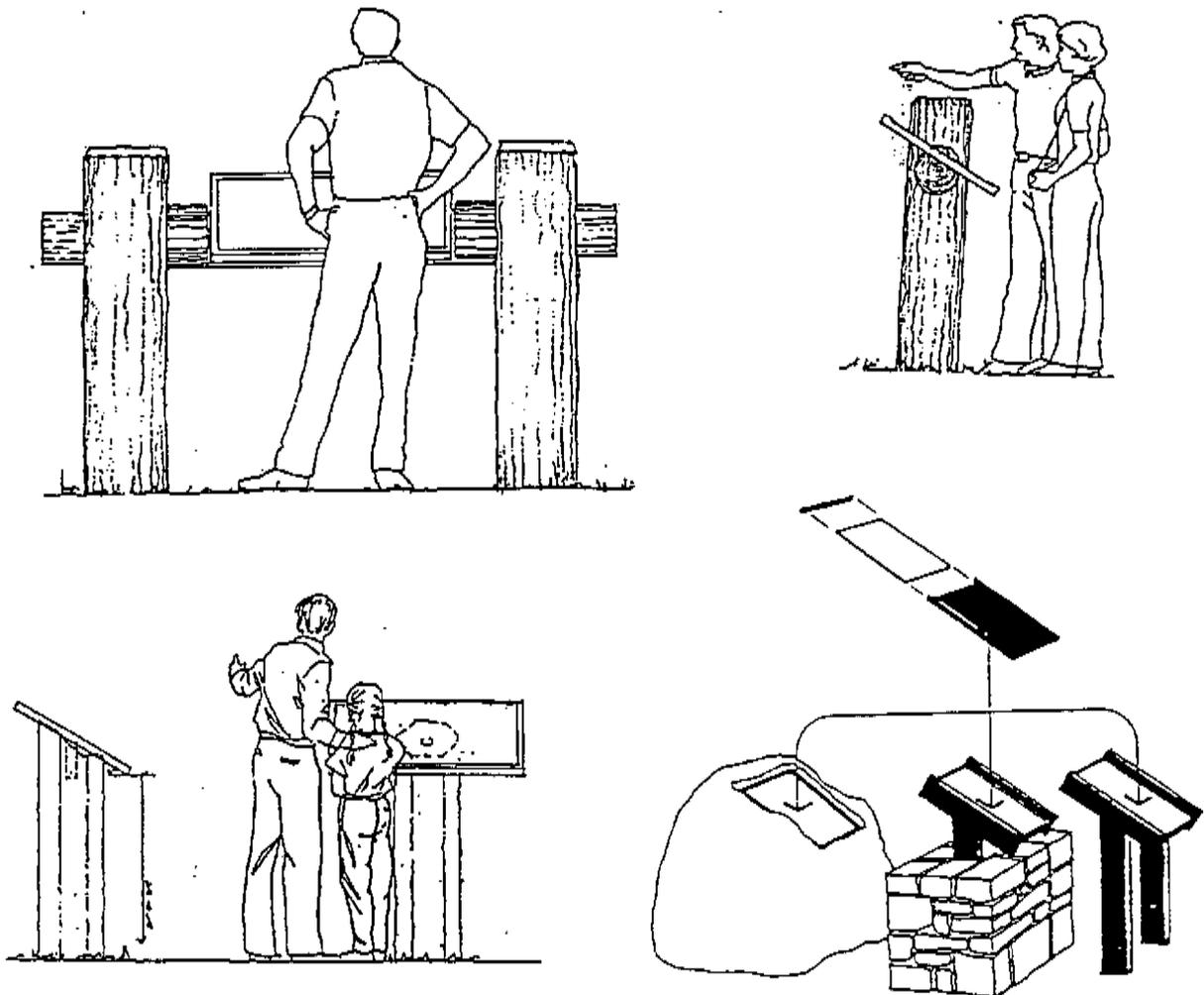
Timber Base

Timber has historically been a major industry in Pend Oreille County. Tree covered mountains can be seen throughout the Byway. It integrates nicely with the Byway environment and makes a connection to the abundant Forest Service Recreational opportunities. Timber adds a natural rustic quality.

Rock Base

The rock base is another natural material that can be used as a base. It is very durable and lends a sense of permanence. Rocks used should be found in the area. For example, river rock can be used at Lone Park or Sweetcreek.

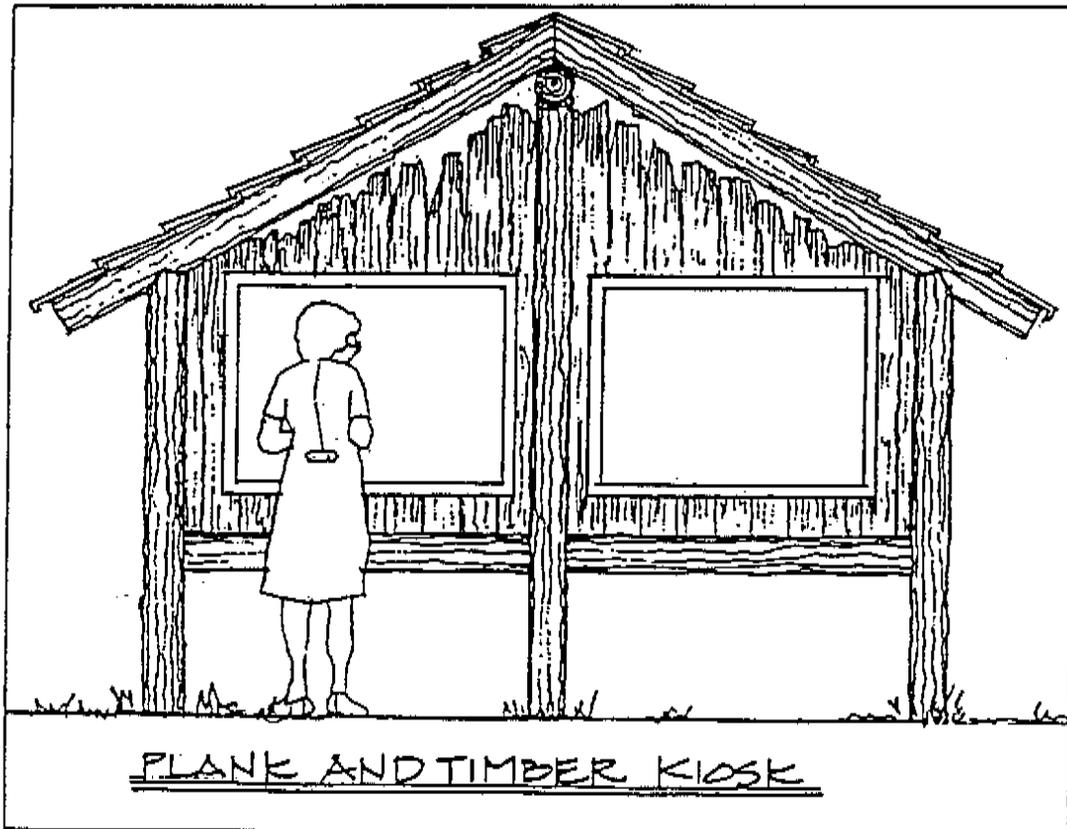
Below are examples of low profile panels using different materials:



Source: Lewis and Clark Design Guidelines—Second Draft, September 1999
and Lewis and Clark Transportation Enhancement Application, March 1999

Kiosks

Kiosks are architectural structures that are open on the sides, but have a covered roof to help protect displays and visitors. Kiosks will hold the large 36" x 48" orientation panels and may also have information display areas for special notices and events. Kiosks can vary in size to accommodate one to four orientation panels. They should be located at major orientation areas and significant historic sites along the Scenic Byway. *Use of kiosks along the Byway should be limited as most sites will not be large enough to warrant such a large interpretive panel.*



Source: Lewis and Clark Design Guidelines—Second Draft, September 1999

Interpretive Trail Signage

This section is taken from *Interpreting the Scenic Byway*, U.S. National Forest Service Interpretive Services (1993).

Self-guiding interpretive trails use two different types of signs: one large trail orientation sign and several smaller trail station signs located at various sites along the trail.

Trial Orientation Sign: the role of the trail orientation signs is to give the visitor a general overview of what the trail is about and what kind of recreational experience to expect.

Based on this information, the visitors can decide whether or not to walk the trail. Every trail orientation sign should include:

- The name of the trail;
- A brief introduction to the trail length and walking time;
- A map of the trail, so visitors can see where the trail may take them and where the trail ends;
- Any necessary safety information (i.e., sturdy hiking shoes recommended, steep hills, etc.) or overview of the steep slope the trail will be interpreting (i.e., promoting a first hand look at some of the ways we are managing forest resources).

Size: 24" x 36"

Self-Guiding Trail Station Signs: In planning and developing signs for self guiding trails, it is important to remember that the interpretive story for the entire trail should be developed first. Then each trail stop/sign interprets a part of that whole story. A self-guiding trail (SGT) should not have more than 7 – 10 stops. For more information on planning SGT's refer to the Corps of Engineers Interpretive Services course training manual.

In general, interpretive trail signs should follow the guidelines presented below.

- **Content:** Content format will generally be left to the creativity of the planner/designer/writer. Planning for the sign should follow the planning steps presented earlier. Sign content should employ Tilden's Interpretive Principles.
- **Text Length:** Text length should not exceed 50-60 words. If more text is required, it should be broken up into several paragraphs of 50 words or less each.
- **Graphic Selection:** Choose graphics that best "illustrate" the concept being communicated rather than duplicate what the visitor has already seen.

Tilden's Interpretive Principles
- Provoke - Relate - Provoke - Reveal

- **Non-verbal Communication:** Remember that the colors, label type style, and label size all affect the visitor and communicate part of the message. For example, a sign text about poisonous plants should not be done with green (red means danger).

Size: 20" x 30"

Costs of Signs

Because of the wide variety of sign types, styles and design, it is difficult to say with certainty what any sign will cost. Each proposed sign will have to be taken to an approved private sign shop or WSDOT sign shop to be priced out, prior to fabrication and installation.

Here are some approximate figures for sign installation costs, based on construction project bid prices over the past few years.

These prices will vary depending on quantity, location, type, etc.

On irregularly shaped signs (interstate markers, Stop & Yield signs), sign area for payment is normally based on the largest width x the largest height.

All costs are for complete in place, including all legend, screening, transportation, labor, hardware, and painting of posts.

Sign Panels

- Regulatory/Warning/Marker: \$15 to \$18 per sq. ft.
- Guide Signs \$20 to \$25 per sq. ft. (includes fabrication and installation)

Sign Posts

- Wood 6" X 6" Posts \$50 each
- U-Channel: \$125 to \$200 each
- Square Tube (Telespar): \$10 to \$15 per foot
- Large Steel Breakaway Posts: \$15 to \$25 per foot
- Cantilever Sign: \$15,000 to \$20,000 each

Foundations

- Square Tube: \$250 each
- Breakaway Post: \$300 to \$500 each
- Cantilever/Bridge: \$6,000 - \$7,000 each

NOTE: If you're evaluating the replacement cost of an existing sign, you must take into account the extra labor and transportation costs involved.

The following table details the costs of a large sign recently (10/99) approved for use in a Northeast Washington County.

Table 5.2 Sample Project Estimate

	UNITS	UNIT PRICE	QUANTITY	AMOUNT
FABRICATION				
(2) 8'X 6' SIGNS	S.F.	\$8.75	96.0	\$792.00
6" X 6" X 20' WOOD POSTS	EACH	\$50.00	4.0	\$200.00
WINDBEAM	FEET	\$2.50	42.0	\$105.00
ANGLE ALUMINUM	FEET	\$2.00	40.0	\$80.00
MOUNTING HARDWARE: RIVETS, LAG BOLTS, CLIPS	LUMP SUM	\$50.00	1.0	\$50.00
INSTALLATION				
SIGN INSTALLER SPECIALIST 2	HOUR	\$29.00	16	\$464.00
MAINTENANCE TECHNICIAN 2	HOUR	\$25.00	16	\$400.00
EQUIPMENT (Truck) RENTAL	HOUR	\$6.00	10	\$60.00
AGREEMENT SUBTOTAL				\$2,151.00
OVERHEAD COST		8.83%		\$189.93
TOTAL ESTIMATE				\$2,341.00

Source: WSDOT Eastern Region, October 22, 1999

Section 4.5. General Programming Guidelines

Below is some general information and guidelines to consider when starting a signange project.

Planning Steps

There are four main steps to creating outdoor exhibits.

1. *Getting Started* involves reviewing these design guidelines and brainstorming.
2. *Planning* includes determining goals, theme, audience, parameters, resources, and site. Other considerations during planning include the site context and ownership, and the availability of resources.
3. *Design* entails gathering a design team, agencies and resources needed to meet schedule and to ensure accuracy and consistency.
4. *Implementation* means getting the final review and permits, then fabricating, installing, and constructing the signage.

Evaluating and Monitoring

Once an outdoor exhibit is completed and installed, it must be periodically monitored and evaluated. An evaluation should determine if it is getting the message to the intended audience and how well it is satisfying their needs. Effectiveness of the text, graphics, and total communication presentation should be considered. To evaluate interpretive signs, some marketing research techniques include in-house review, review by visitors, or review by experts. Again, consult with a service marketer if you are unfamiliar with marketing techniques. The communication effectiveness of proposed interpretive signs should be evaluated before fabrication so that necessary changes can be made without incurring major costs.

To help evaluate an interpretive sign's effectiveness, here are five criteria to consider:

Intriguing: Will it excite interest and curiosity? Does it capture the visitor's attention?

Imaginative: Will it communicate in innovative ways, and does it stimulate new and different ideas and concepts? Does it encourage the visitor to look at familiar things in different ways?

Involving: Will it invite or encourage visitor participation? Will it draw the visitor into intimate personal contact with things so that he/she is more than a spectator?

Informative: Will it convey meaningful information or new knowledge about the North Pend Oreille River Valley? Will the visitor feel satisfied that he/she has learned about the special aspects of the Byway?

Influential: Will it effect significant changes in visitor attitudes or generate new ones?

Funding and Resource Opportunities

Using these guidelines to create a continuous system of interpretive and orientation exhibits should increase the potential for funding and resources. Grants and other funding opportunities are more likely supported when linked to a coordinated cohesive effort. By using these guidelines, the effort, cost, and time of creating a new interpretive exhibit will be minimized. It will be quicker and easier than starting from scratch.

Another possible source of funding is the business community. One community had their interpretive panels funded by different businesses. In return, the business was recognized as the donor on that particular panel.

Three cardinal rules

In implementing this signage plan, it is beneficial to remember the following points.

1. Too many signs clutter the view and detract from the visitor experience.
2. Conflicting and redundant signs lead visitors and residents to doubt their value.
3. Inadequate information leaves visitors frustrated and unable to use Byway services and facilities. Unhappy visitors don't stay and they don't return.

SECTION 5: INTERPRETIVE GUIDELINES

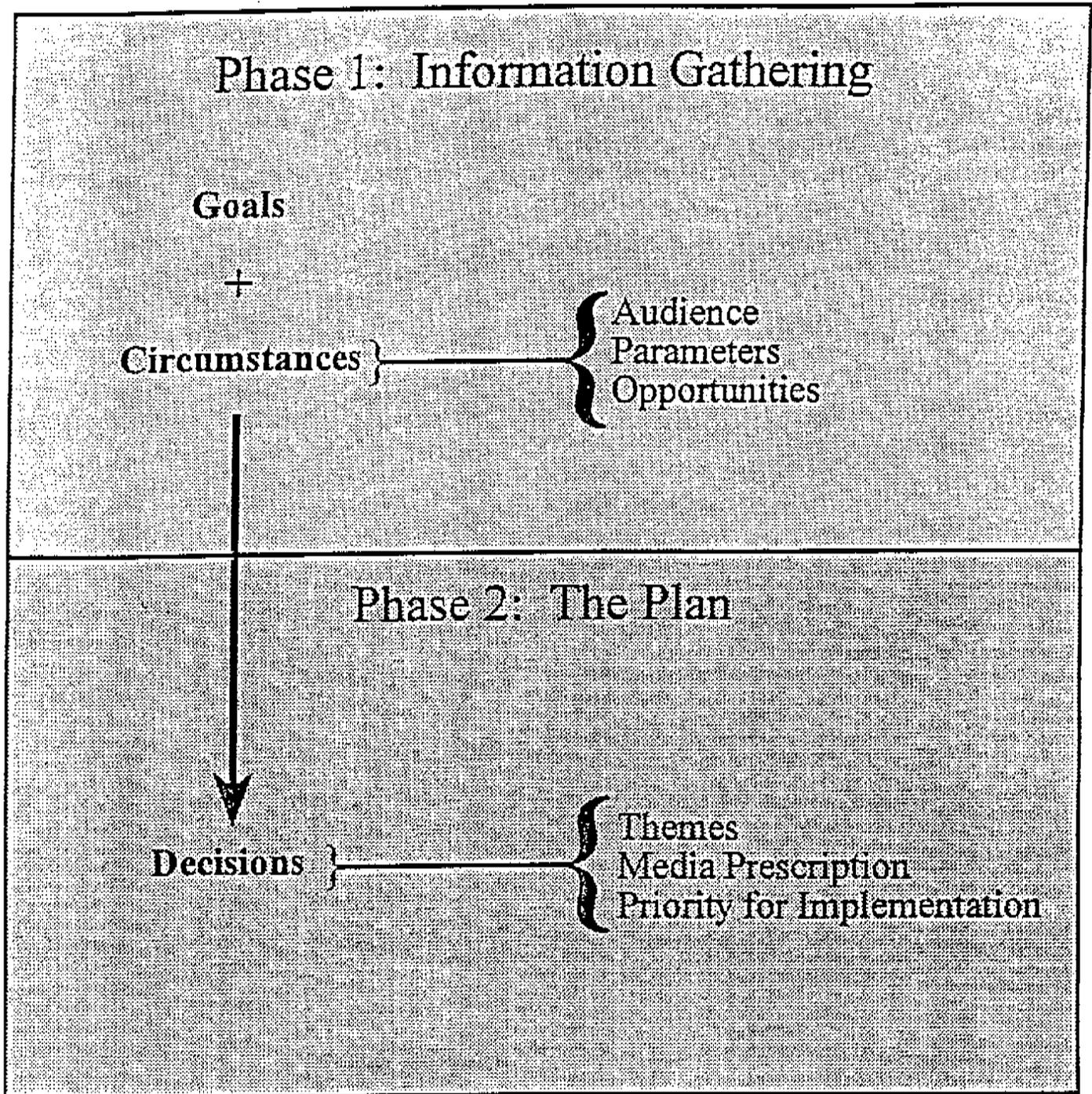
Section 5. Interpretive Guidelines

Interpretation is the link between visitors and the story of the North Pend O'reille River Valley. In addition to factual information researched about the sites and vicinity, it is necessary to add the human element and creatively rebuild a moment in time. The interpretation needs a focused theme that is made emotional and personal to the visitor. Below are selected principles and guidelines for undertaking this task.

Interpretive Cite Considerations

- 1) Explore a theme of the North Pend O'reille River Valley that is uniquely tied to that particular area.
- 2) Integrate interpretive themes throughout all outdoor exhibits and sites.
- 3) Interpret by showing rather than telling, interpretation is visual, and is revelation not just information.
- 4) Interpretation should be interesting, memorable, personal, enjoyable, dynamic, challenging, and factual.
- 5) Experience should leave an imprint of emotional inspiration on the visitor.
- 6) Create continuity between interpretive elements, sites, and the story, while maintaining uniqueness of each.
- 7) Consider seasonal and weather changes.
- 8) Consider other points of view for each element.
- 9) Use quotes from sources from the past – they are the link between the past and present.
- 10) Note connections to other sites.
- 11) Consider foreign visitors – language and international symbols.
- 12) Mapping – the purpose of the map should define the way it is designed . fro orientation maps., strive for clarity, orient to land and setting, and tie to the physical surroundings.
- 13) Integrate with existing signage and other interpretation where appropriate.
- 14) Consider persons of all abilities and ages; children – interactive, elderly – easily accessible and large print.

Basic Interpretive Planning Model



Interpretive Themes

This is the central message the visitor receives. A *theme is a sentence* that communicates a provable point about a topic. It is composed of facts and information through a panel's graphics and texts. To focus the theme, consider the following:

1. What are you trying to tell your visitors and what impression do you wish to make?
2. Focus on the facts that reinforce the theme. It should directly support the theme.
3. Keep each panel short in text and enhance graphics and the site experience.
4. The theme will connect visitors to their legacy of cultural and natural heritage and give meaning to the experience of the moment.
5. Remember thematic unity by linking the place to the story.

Appendix – provides specific themes from historical, cultural, and natural science documents for Pend Oreille County.

Theme Enhancement

To enhance a theme, remember that visitors will discover the most through an experience. The intellectual and emotional experience derives first from the visual then the other senses. Drama and authenticity should be exposed through historical quotes and graphics. Consider the following:

1. People remember 30% of what they read, 50% of what they see, and 90% of what they do.
2. The 3-30-3 rule says a visitor will receive a message in three seconds, thirty seconds, or three minutes. The interpretation should be developed to hold visitors through each of these levels of interest.
3. Less than 1% of visitors will read the entire text on a panel. The longer and more complex the text is, the less time visitors will spend reading it. About 40% of visitors will view graphic art, and photos. About 60% will enter kiosk type structures, and touchable interpretive items will attract about 90% of visitors.

Interpretive Master Planning

John A. Veverka

The six basic elements of the Interpretive Planning Model are shown in Figure 7 below.

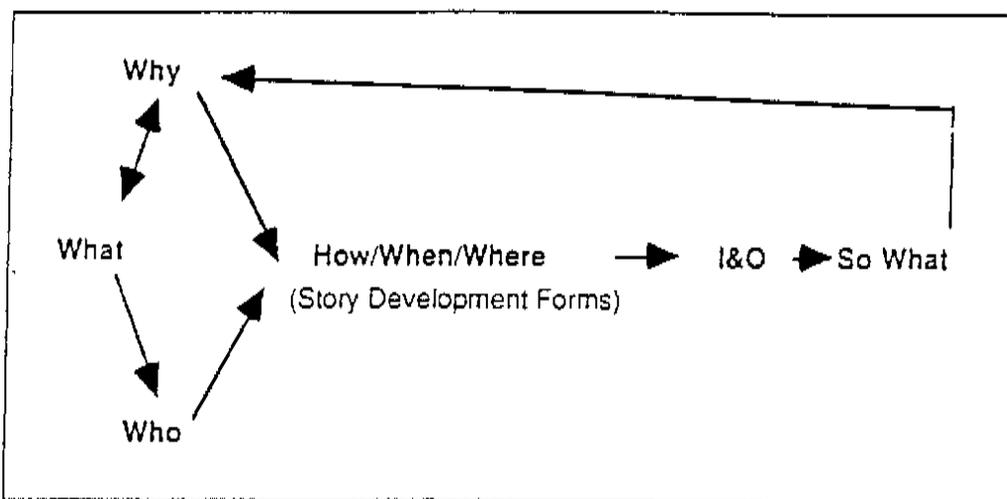


Figure 7. JVA Interpretive Planning Model.

Notice that the Model of Interpretation presented in Chapter Two is very similar to our planning model. Using this model in developing an interpretive plan, the following elements are considered:

- WHAT - The resources, theme, and sub-theme to be interpreted.
- WHY - The specific objectives that interpretation should accomplish.
- WHO - The visitors to our site. How can we relate our theme to them?
- HOW/WHEN/WHERE - The presentation of our interpretive programs and services.
- I&O - What it will cost (time, resources, budget, people) to implement the various aspects of the plan.
- SO WHAT - How we will evaluate the parts of the plan to see if all objectives are being achieved.

Interpretive Text

The interpretive text should compliment a strong graphic layout. It should inspire, entertain, and engage in a concise way. Interpretive text is an art form of the essence. Some considerations for interpretive text include:

- Focus on a North Pend Oreille related interpretive theme.
- Use short readable messages, short sentences, and short paragraphs (research shows that text blocks exceeding 50 to 75 words will lose readers interest).
- Use concrete nouns and active verbs.
- Inspire and provoke in bold and simple language.
- Use a minimal number of capital letters. Caps should only be used for titles or to emphasize certain words.
- Ensure accuracy and clearly state if information is speculation or state the source. Credit all quotes.
- Write text for the intended visitor with a level of understandability for the broadest range of visitors (generally the 7th grade reading level).
- Try for fresh perspectives, poetic twists, vivid imagery, and simple eloquence (sometimes powerful quotes will work best).
- Involve the reader intellectually, emotionally, and even physically.
- Help the visitor see the site in a new way.
- Relate to the visitor's experience by using personal pronouns, personal language, and familiar terms.
- Illustrate with metaphors, analogies, quotes, and real examples.

Through historical research, we visualize the time and place, and can tune into the experiences of the early inhabitants of this region. Our goal is to create a continuous network of interpretation and orientation information along this corridor for the many educational and tourism benefits it will bring to the county and state. Landscape elements will create a strong regional character, while cultural details will evoke the time and place of historical activities along the corridor.

NATURAL ENVIRONMENT

FOREST

SETTLEMENT

WILDLIFE

WATERSHED

EARLY PIONEERS

HYDROLOGIC CYCLE

THE RIVER

THE RIVER IS THE DEFINING LANDSCAPE
FEATURE OF THE BYWAY AND CAN BE
USED FIGURETIVELY AND LITERALLY AS
AN OVERARCHING MAJOR THEME.

ROAD

RIVERBOATS

REGIONAL CONNECTIONS

TIMBER

TRANSPORTATION

INDUSTRY

TOURISM

NATIVE AMERICAN CANOES

HYDRO

MINING

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.1

Site: Tiger, Washington

Theme(s):

Southern Gateway
Historical

Sub-themes:

Byway orientation panel - map of by-way and site locations and descriptions.
Highway, transportation history
Old Tiger town site
Pioneer Settlement
Kalispel Indians
Tiger Museum
River Landing and River Transportation
Post Office
David Thompson

Justification of this site as it relates to this byway:

The historical themes included at this site are numerous. The location is at the junction of SR 20 and SR 31, two major state highways, as well as a junction for travelers coming by riverboat, wagon, by foot, or by railroad in earlier days. It lies about mid-way along the Pend O'reille River corridor, and as the southern most point of SR 31, and the eastern most point of SR 21, is a natural gateway location for the byway. The original Tiger post office/store is still standing, and has been granted federal money for restoration. This will be the location of the Tiger Museum, transportation history exhibit, and gift shop.

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.2

Site: Ione, Washington

Theme(s):

- River
- Working Landscape
- History

Sub-themes:

- Historic Ione
- Old Panhandle Lumber Mill site (Blackwell to Vaagen)
- Logging Practices
- Forest Fire Ecology (Muddy Creek Fire)
- Steamboat Landing, River Port and Trade
- Recreation

Justification of this site for this byway:

Again, the historical themes at this site are numerous. Trappers and prospectors crisscrossed the region of the present town of Ione in the latter part of the 19th century. Settlers started arriving by 1894 finding plenty of grazing and farmland nearby, timber to build homes, fresh water, and proximity to the river for easy travel and trade. Lumber mills started operating in the area around 1900 and continued to be a major employer for the county through the 1990's. Nearby Cement experienced a quick but brief success in producing cement, but the industry eventually moved north to Metaline Falls. Several major forest fires swept across the area over the past hundred years, signs of which can still be seen across the river from Ione. The region is scattered with areas of land in various stages of recovery from forest fires. The opportunities for various recreational activities is abundant within this corridor. Fishing, hunting, hiking, canoeing, wildlife observation and bicycling are some of the recreational activities visitors can participate in while visiting this area.

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.3

Site: Box Canyon

Theme(s):

Natural History
River

Sub-themes:

David Thompson (turnaround point)
Geology/Geography
Scenery
Railroad and bridge
Box Canyon Dam - power generation

Justification of this site as it relates to this byway:

Natural history and the Pend Oreille River are the major themes at the Box Canyon site. The geological make-up of this region is ancient, complex and diverse, and is marked by many different methods of formation, a truly unique and special location. The large granitic outcrop directly across the river from where the information panels will be located offers a large and clear visual example of one of these formations - a granitic monolith.

Because of this formation, a narrow canyon was formed forcing a huge flow of water from this river through this narrow passage, it was a natural location for several of the sub-themes, including Box Canyon Dam, the railroad trestle, and the fact that because of the rough current through here, David Thompson was forced to turn back at this point on his quest for passage to the Columbia River.

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.4

Site: Eagle Nesting

Theme:

Natural Environment

Sub-themes:

Eagles

Riparian Forest - cottonwoods

Wildlife Observation

River

Justification of this site for this byway:

The many representations of natural environmental occurrences are apparent at this site, including flora, fauna and geologic, with very little evidence of man's built environment, besides the highway.

The eagle nests located across the river within the cottonwood riparian zone, with the forest and Selkirk mountains in the background, the Pend Oreille River and various fish species that live in it, the undisturbed broad landscape, the geologic outcrop on the west side of the highway, and the many species of birds and wildlife are reasons to justify this site for the byway.

Interpretation Development:

This location might offer interpretation of the natural environment starting with riparian zones, a fine example being located across the river. Riparian zones are mountain brooks, or stream-sides which are often lined with alders, cottonwoods, delicate herbs, ferns, etc. They are essential for maintaining healthy streams and rivers by reducing erosion of soils through complex root systems. These zones also offer habitat for fish to hide from predators, find a cool place to rest, lay eggs, raise their young, act as insect habitation which is a food source for fish, etc. Twenty-one species of fish have been identified in the Box Canyon Reservoir (Ashe & Scholz, 1992). Prominent game fish include resident rainbow trout, German brown trout, Eastern brook trout, large mouth bass, mountain whitefish, western cutthroat trout, and bull trout. There are no anadromous (migrate to ocean) fish found in the watershed.

The larger trees along a riparian zone, in this case the cottonwoods, offer nesting habitat for bird species such as bald eagles, especially in the dead snags. Eagles at this site also benefit from an adequate food source offered by the fish located nearby. Other birds that might be seen in this area include osprey and blue heron.

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.5

Site: Sweetcreek

Themes:

Natural Environment

Historic

Sub-themes:

Flora and forest ecology

Plant identification

Sweetcreek Falls

Forest restoration

Working landscape - Old concrete dam and mine

Justification of this site for this byway:

The climate and geography of the Pend Oreille River valley have created conditions for a micro-climate which in turn, have allowed for an incredible diversity of plant species. How all of these systems work together to create a natural balance and cycle is very apparent in this region, and is another very unique feature of Pend Oreille County. Sweetcreek, with its lush vegetation and trail system allows the visitor a great opportunity to observe this diversity, and to be a participant with a 'hands-on' educational tool in plant identification and education, to learn more about this diversity.

Sweetcreek Falls is a series of natural waterfalls occurring along Sweetcreek, just south of Metaline. Hiking trails allow the visitor to venture into the forest far enough to view these falls, and also the remnants of the old mine site and small concrete dam built to serve the mining activities. This is another example of the historic 'working landscape' which is found throughout Pend Oreille County, and which has been so vital in supporting the community for the past hundred years.

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.6

Site: Metaline Falls

Theme:

Historic
Scenic

Sub-themes:

Metaline Falls (the falls)
Mining
Cement Industry
David Thompson

Justification:

There are potentially many historical themes that could be discussed at this site, but the focus for this small 'pocket park' might be mining, cement manufacturing, David Thompson, and the intrinsic scenic beauty visible from this location.

If Ione was the center for the lumber industry, Metaline Falls could be considered the center for mining and cement manufacturing in the county. Tremendous deposits of pure limestone and quartz, used in the manufacture of cement, were found here. It was also the northern terminus for the Idaho and Washington Northern Railroad (I&WNR), owned by Frederick Blackwell, who also owned the Panhandle Lumber Company in Ione.

Some of the largest mines in north Idaho were located here - mining ore, lead, zinc, and other minerals. Placer mining was also common and used mainly for gold extraction. Most of this activity occurred during the first half of this century. This activity also brought many settlers to the region who produced timber, cement and ore - all of which were needed to build-up the fast growing communities throughout the Inland Northwest.

David Thompson was the first European to record his visit to Metaline Falls. He, again, was forced to turn back from continuing down the river in his quest for the Columbia. Thousands of people since, have enjoyed the beauty of Washington Rock, the confluence of Sullivan Creek and the Pend Oreille River, the rugged beauty of this forested and mountainous area. The Metaline Falls are not visible much of the time since the building of Boundary and Box Canyon Dams have controlled the flow of the river, but rapids can still be seen in late summer and early fall, a subdued remnant of what was once a truly spectacular waterfall.

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.7

Site: Crescent Lake

Theme:

Recreation
Scenic

Sub-themes:

Fishing
Hooknose Mountain
Mining - Carl Harvey and his gravesite

Justification:

Crescent Lake itself offers scenic and natural beauty to the visitor, here at the north end of the county. Besides the other interpretive elements located near here, such as Boundary Dam, the scenic qualities of this area are an opportunity for a great interpretive site. There are several good views of Hooknose Mountain west across the river, Crescent Lake, and views of the Pend Oreille River a mile west down Boundary Dam Road.

In the early years of settlement of this community, the discovery of gold in the Pend Oreille River brought many settlers to this region. These early miners soon discovered that there were rich mineral resources here, and they were the ones who started the mining industry, which would be of great economic benefit to this community during the next century.

Outdoor recreation is natural in a setting such as this, especially fishing, hiking and hunting. These activities already bring many visitors to this area.

NORTH PEND O'REILLE RIVER VALLEY SCENIC BYWAY - SR 31

5.3

Site: Box Canyon

Theme(s):

Natural History
River

Sub-themes:

David Thompson (turnaround point)
Geology/Geography
Scenery
Railroad and bridge
Box Canyon Dam - power generation

Justification of this site as it relates to this byway:

Natural history and the Pend Oreille River are the major themes at the Box Canyon site. The geological make-up of this region is ancient, complex and diverse, and is marked by many different methods of formation, a truly unique and special location. The large granitic outcrop directly across the river from where the information panels will be located offers a large and clear visual example of one of these formations - a granitic monolith.

Because of this formation, a narrow canyon was formed forcing a huge flow of water from this river through this narrow passage, it was a natural location for several of the sub-themes, including Box Canyon Dam, the railroad trestle, and the fact that because of the rough current through here, David Thompson was forced to turn back at this point on his quest for passage to the Columbia River.

Interpretation development:

The sub-theme of the *Pend Oreille River*, could include a brief description of its natural attributes. For example, the Pend Oreille Watershed comprises about 85% of Pend Oreille County, an area of about 1,266 square miles of land area. A watershed is comprised of the total land area that drains into a particular body of water - in this case the Pend Oreille River. It flows northward from Newport and bisects the county, lying between two small mountain ranges. To the east is the Selkirk Range and to the west of the river is the Kalispell Range. In recent years the river has been greatly altered by hydroelectric projects. From Newport north to Box Canyon the river is wide and sluggish, containing many backwater areas, islands and alluvial bars, the character of the river changes as it flows north.

At Box Canyon, prior to construction of the dam, the river was constricted by a narrow canyon, but beyond there to Metaline Falls it was again slow-flowing. The river valley, narrows from Ione northward. From Metaline Falls north, prior to Boundary Dam, the river plunged turbulently through a series of deep, narrow gorges. Most notable was Z-Canyon, where the river poured through an 18 foot wide chasm. At places the gorge

was over 500 feet deep with vertical rock walls. From Metaline Falls to the International Boundary, a distance of 11 miles, the river fell 225 feet. Since the dams, these features have been greatly modified.

It is because of these turbulent canyons that in 1809 *David Thompson*, the great explorer, surveyor, and mapmaker, was forced for the first time, to turn back on his quest to reach the Columbia River. (Nisbet. 1994)

This is one of the few rivers in the United States that flows north. And it is interesting to note that this river, in fact, used to flow south but changed course to flow north in recent geologic past.

The sub-theme *geology and geography* of the north Pend Oreille River Valley is a fascinating and potentially extensive one, due to the complexity and history of the land forms and geomorphology of this region. The evidence of the geologic activity can be seen everywhere, from valleys scoured by ice age glaciers, huge exposed batholiths formed from ancient volcanic activity, to the quartzitic limestone associated with ancient oceans which create phenomenon such as the dripping limestone ledges along Boundary Reservoir and the various caves, including Gardner cave system west of Boundary Dam which is the largest in the state. There are beautiful formations in this caves and it is open to the public for tours.

There have been multiple glacial periods, volcanic activity, flooding, and natural processes associated with weathering and tectonic movement over millions of years. There are bedrock groups here that are Cambrian in age and associated with the old North American Continent. In other words, millions of years ago, the Pacific Ocean used to lap against the shores of the old continent located north from Ione to Canada.

The great Cordilleran ice sheet covered, and in fact, shaped this valley twice. At one time the ice sheet was over 4000 feet thick! The highest elevation evidence known glaciation is a "granite erratic" on Crowell Ridge at 6500 feet. (Alt. 1990).

The sub-theme *Scenery* speaks for itself, in the dramatic view of the Pend Oreille River running through the narrow granite canyon, with the large batholith on the opposite side of the river. The Box Canyon Dam is located here, and the old railroad bridge can be viewed from here as well. The natural beauty can be closely appreciated by walking along the nearby trails through lush vegetation.

Frederick Blackwell built a railroad between Newport and Metaline Falls called the Idaho and Washington Northern Railroad (I&WNR). He had a bridge built across the Pend Oreille River at Box Canyon in 1910. It cost over one million dollars to build this railroad between Ione and Metaline Falls. It was essential to transport product from the Inland Portland Cement Company in Metaline Falls, as well as minerals. This bridge can be seen at the Box Canyon site, and is still used for the Lions Railroad Tours several times a year that travels from Ione to Metaline Falls.

The sub-theme *Box Canyon Dam* has existing interpretation provided by this utility at this site and at the dam.

SECTION 6: IMPLEMENTATION

Implementation

The interpretive and development guidelines suggested above must now be reviewed and revised as needed. A few recommendations address overall management needs. After review and approval, appropriate parts should be included in the Corridor Management Plan update. During that review, careful considerations should be given to an economic selection of an appropriate interpretive themes for telling the Byway story. Secondly, thoughtful consideration needs to be given to achieving a balance of programs needs with a limited staff. Thirdly, maintenance agreements for all sign and site development should be negotiated in advance of construction.

Phased Construction & Funding

1. Construction and placement of the 2 gateway signs at Tiger and north of Crescent, orientation/interpretive panel kiosk at Tiger and Crescent Lake, and Trail Blazer signs at the two spur roads Sullivan Lake and Boundary Dam. Should currently available funds be exceeded, a small grant to USFS Rural Development Funds could fill the gap.
2. Current funds for PE services should be allowed to cover costs of detailed landscaping plan for Tiger as well as partial implementation of grass & shrubs around area A. A portion of PE costs could also support limited studies needed to "warrant" uniform speed signage between Metaline and Metaline Falls, explore possibilities of moving cluster of directional signs at Tiger junction, and coordinate with maintenance to "pair" selected TOD signs.
3. A capital grant request for Tiger should be prepared and submitted (May 2000) to the Washington State Historical Fund to complete parking, landscaping and related furniture, as well as interior refurbishment.
4. A modest grant request (TEA 21 Scenic Byway) should be prepared in 2000 to complete Eagle Nest Site turnout, guard rail, and interpretive panel.
5. A major grant request (TEA 21: Enhancement) should be prepared in 2001 for development of the Sweet Creek Rest Area.
6. A modest grant request to complete interpretative panel at Lone Park should be submitted to Interagency Council (IAC) on Outdoor Recreation in 2001.
7. A collaborative public - private partnership funding strategy should be developed to complete trail and interpretive panel at Box Canyon Overlook in 2001.
8. A modest grant request should be prepared and submitted to IAC in 2002 for development of overlook deck, interpretive panel, and parking for Metaline Falls overlook site.

While not directly related to a particular byway site, but to the byway in general, the now delayed plans for modest road construction on SR 31 north of Metaline Falls could be revisited with attention to how design or roadway furniture could better compliment community context of scenic byway.