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North Shore Scenic Drive
The North Shore Scenic Drive (NSSD) has been awarded All-American Road status from Duluth to Grand Portage based on its recreational and scenic qualities. The unique North Shore of Lake Superior has been said to offer, “...an inland sea, a mountain backdrop, an unspoiled wilderness, and a unique feeling all its own...” (http://www.byways.org/) Additionally, the North Shore is one of the primary destinations for recreational driving in the Midwest, and is the main vehicle access to the western section of the Boundary Waters Canoe Area Wilderness (BWCAW), Canada, and to the resorts and state parks which dot its coastline. Lutsen is important because it is one of a small number of communities along this popular road that provides a large variety of amenities and lodging right off of the NSSD.

Superior Hiking Trail
The Superior Hiking Trail is a 205-mile footpath that follows the rocky ridgeline above Lake Superior in northeastern Minnesota. It begins just north of Two Harbors and ends just before the Canadian border. The trail has 30 trailheads and 81 backcountry campsites making it ideal for both day hikes and backpacking. There are no fees, reservations, or permits required to hike or backpack on the trail. (http://www.shta.org/)

Lake Superior Water Trail
Established by the Minnesota Legislature in 1993, when completed the Minnesota portion of the Lake Superior Water Trail will extend from the St. Louis Bay in Duluth to the Pigeon River on the Canadian border, a distance of approximately 150 miles. Cooperative efforts in Ontario, Wisconsin, Michigan, and First Nations will develop a water trail around Lake Superior. The trail is primarily for use by sea kayakers. The development and maintenance of the Water Trail is a joint effort of the Minnesota Department of Natural Resources and the Lake Superior Water Trail Association of Minnesota. (http://www.dnr.state.mn.us/kayaking/lswt/)

North Shore State Trail
The 146-mile natural surface trail from Duluth to Grand Marais provides multiple opportunities for recreation along the North Shore. Primarily used by snowmobiles, it traverses St. Louis, Lake, and Cook counties in northeastern Minnesota. The trail winds its way through the forests behind the outer bluffs that overlook Lake Superior and provides access to some of the most rugged and beautiful scenery in Minnesota. The trail also connects the Grants-In-Aid (GIA) trails at Silver Bay, Beaver Bay, Finland, Tofte, and Lutsen, as well as numerous local trails created and maintained by local snowmobile clubs. (http://www.dnr.state.mn.us/state_trails/north_shore/)

United States Forest Service Trails
Many USFS trails wind back into the upslope areas above the Lake, leading people into the remote and rugged backcountry. The United States Forest Service (USFS) trails include the Sawbill Trail in Tofte, the Caribou Trail in Lutsen, the Gunflint Trail in Grand Marais, and the Arrowhead Trail near Hovland. These major trails lead inland providing access to the BWCA from the shore of Lake Superior. (Source: www.fs.fed.us/r9/forests/superior/)

Lutsen Community Trails
There are currently few trails through the town center for residents with exception of the multi-use trail along the Frontage Road paralleling State Highway 61 through the town center. The designs created by this project enhance the connections to the existing regional trails and strengthen walkability within the community.
Presently, the Department of Natural Resources (DNR) has funding to build the Gitchi Gami Trail up to the Poplar River and/or potentially over the Poplar River.

East of the Poplar River the trail will follow the power corridor up to Mink Ranch road.

At this point, there are property ownership constraints with continuing the trail through the power corridor. From Mink Ranch Road the trail will head south to the Highway 61 right-of-way and continue on the north side until Arrowhead Electric Cooperative. Both the north and south sides of the highway were seen as options at this point.

During the design process, highway cross-sections were cut based on Minnesota Department of Transportation (MnDOT) data. There is 100’ of right-of-way from the centerline of the highway on the north side but only 50’ of right-of-way from the centerline of the highway on the south side. The existing slopes on the south side are generally steeper than 33% or 3:1 slopes. MnDOT and DNR require slopes around the highway or trail to be graded out to at least 3:1 or a guard rail is needed. This would limit the trail location on the south side. The trail would have to be within two feet of the highway with guard rails on both sides of the trail which is an undesirable option for trail users. Because of this constraint, efforts were focused on placing the trail on the north side of the highway.
EXISTING CONDITIONS & ZONING

RESIDENTIAL DEVELOPMENT- INCENTIVE AREA (LR-2)
“To the west and north of the Lutsen Town Center could be a tier of residential development intended to provide year-round housing and enhance the village-like atmosphere of the Town Center. Development density could be increased if the developments used common utility systems. Creation of new access points along Highway 61 will be discouraged.”

- All basic requirements of the current R-1 district apply except as otherwise noted
- Only within this area may developers utilize the proposed “Lutsen Community Incentive” components of the Open Space Subdivision regulations
- If units are served by a common wastewater collection and treatment systems, density of units may be increased up to 150% (that is, instead of potentially 20 units per 40 acres at 2 acres per unit, 30 units could be built) and the minimum lot size can be as low as 0.75 acres

Note: the full Lutsen Town Center Plan is located in Appendix G. “R1” is an existing Cook County zoning description and can be found in Appendix H.

HIGHWAY 61 AND ACCESS
The existing Highway 61 has a design speed of 40 M.P.H through the Town Center area. At this speed it is a rural road, and it is required to have shoulders and ditches. Currently a few highway signs define “the Town Center” but this distinction is neither visually significant nor do the parts work together to make a whole. The many existing access points off of Highway 61 through the town center result in often confusing and unsafe intersections as shown by the dashed circles on the drawing.

Project goals include creating a distinctive entrance into the town center, narrowing the visual corridor of the highway with plantings, and reducing the number of access points into the town center from Highway 61, all of which were desired by the community.

A thick red line bounding a portion of the “LGC” district indicates the “Town Center Study” area selected for this project. There are three owners that hold title to the land within this study area.

Information for the existing zoning map was taken from the 2004 Lutsen Town Center Plan. Cook County has rural zoning standards. Districts that would help shape the vision for a more densely-developed Lutsen Town Center are not included. In order to create a village-like Lutsen town center, new zoning variation descriptions were prepared by the Lutsen Town Planning Committee the language of these descriptions include:

GENERAL COMMERCIAL-LUTSEN TOWN CENTER (LGC)
“Commercial uses would focus on various retail and service outlets catering to local residents and tourists. Housing units could be integrated with commercial development most likely as second floor apartments; there would be no stand alone structures.”

- Dependent upon implementation of a grouped wastewater collection and treatment system
- Reduce minimum lot size to .25 acre
- For commercial or mixed-use commercial/residential developments reduce front and side yard setbacks to 0 feet
- Off-street parking requirements would be modified downward to account for presence of on-street parking and shared parking lots

RESIDENTIAL DEVELOPMENT- LUTSEN TOWN CENTER (LR-1)
“Growing outward from the Town Center is an area of ‘village-like’ residential development. The intent is to offer a mix of housing design and cost options within a setting that approximates a small village. Interconnecting streets and pedestrian ways would be preferred over separate cul-de-sac layouts. The actual density of this development will be determined by the capacity of the land to support grouped water and sewer utilities.”

- All development would have to be connected to a common wastewater collection and treatment system
- Permitted uses would be the same as R-1 except that temporary use of a recreational vehicle as a dwelling would not be allowed
- Conditional uses would be the same as R-1 except: long-term use of recreational vehicles as dwellings would not be allowed; home businesses would not be allowed
- Minimum lots area would be .25 acre for single and duplex units; would increase to .5 acre for larger units. Minimum lot width would be 75 feet; would increase to 125 feet for 2+ units
- Minimum road setbacks would be reduced to 25’ from right-of-ways. Side yard setbacks would be 10’. Rear yard setbacks would be decreased to 25’
**A. Lutsen Mountains**

The land that that is now Lutsen Mountains ski resort was first settled in 1880 by Swedish-immigrant, C.A.A. Nelson who rented rooms to other immigrants. It became a ski resort in 1948 when Nelson’s son, George opened two runs and a single ski lift. Today the resort features nine lifts and eighty-seven ski runs. Lutsen Mountains is a community, state landmark, and a destination for skiers and those that like to recreate outdoors.

**B. Northern Coniferous Forest**

The forest surrounding Lutsen and much of the north is classified as the northern coniferous forest. Much of the original forest, comprised mainly of red and white pines and aspens, was logged in the late 1800’s for furniture and building material manufacturing. The aspens that are seen today came after that logging boom and remain today due to fire suppression that would have allowed other species to thrive. (Tester 1995) The changing leaves of these forests lure tourists to the North Shore annually to see their color against the backdrop of the clear, blue sky, and Lake Superior.

**C. Poplar River**

The Poplar River runs just to the west of Lutsen Town Center carving its way through the bedrock of the Canadian Shield on its run down to Lake Superior. By changing its direction and plunging through a series of pools and drops, the outfall of the stream aerates and cleans its water; the pollutants and sediments collected upstream precipitate out of the water. The characteristic “poplar”, or aspen trees, that line the banks of the Poplar River frame and emphasize the verticality of the river’s steep banks.

**D. Lutsen Resort**

At the mouth of the Poplar River on Lake Superior, Lutsen Resort is a terminus of a journey from the top of the mountain to the Lake below. Also a piece of the original homestead of C.A.A. Nelson, this once-sprawling homestead has become a resort of lodges, cabins, and condominiums. Its colors are muted earth tones of reds and browns that blend into the background of the frothy iron-colored waters of the Poplar River and greens of the surrounding forest.
TOWN CENTER PHOTO ANALYSIS

E.  Highway 61
The North Shore Scenic Drive, U.S. Highway 61, cuts a narrow path through the forest as it winds along the shores of Lake Superior. The northern forest surrounds the road with breaks that provide framed lake views. Little villages are sited at intervals along the shore.

F.  Lockport Store
Providing gas, snacks, gifts, and café food to tourists and locals alike, the Lockport Store is one of the few businesses on the south side of Highway 61. It is only one of two gas stations in the Village of Lutsen, an amenity that is scarce along Highway 61 from Two Harbors to Grand Portage.

G.  Arrowhead Electric Cooperative
Founded in 1953 and located in the Village of Lutsen, the Arrowhead Electric Cooperative services over 4,000 residents and businesses in Cook and Lake Counties. (http://www.aecimn.com/)

H.  Norwood Shores Resort
With the entrance located directly across Highway 61 from the existing town center, this small resort is located on the cliffs above Lake Superior.

I.  County Plumbing & Heating Building
Recently built, this building houses several Lutsen businesses: County Plumbing & Heating, Timberwolf Realty, and the Lutsen Laundromat. Apartments are located on the second floor of the main building.

J.  Moondance Coffee House, Lutsen Real Estate Group, & North Shore Federal Credit Union Building
The left half of the building is the original building houses the North Shore Federal Credit Union and the Lutsen Real Estate Group. In 2006 the original building was renovated and the right half of the building which houses the Moondance Coffee House was added. This building is an important part of the frontage road commercial area.

K.  Clearview Building
The Clearview Building is built into the existing slope, having two stories on the downhill Highway 61 and one story on the uphill side. The businesses on the first floor face the frontage road. The second floor apartments are accessed through the rear of the building. Their decks on the front look out over Lake Superior. This building is also part of the frontage road commercial area.

L.  Lutsen Evangelical Lutheran Church
A center of community life, the Lutsen Evangelical Lutheran Church lies across the eastern creek that flows through the Lutsen Town Center. The frontage road provides access to the church and serves as overflow parking for busy services or community meetings.
Efforts were taken throughout the process to respond to community needs and desires with ‘green’ or sustainable design strategies.

**Highway 61**
- Limit access to Highway 61 by focusing access at a few, well-developed intersections, and
- Reinforce the sense of a village and slow traffic speeds by designing Highway 61 at the Lutsen Town Center with curb and gutter and native tree plantings.

**Town Center**
- Enhance the existing frontage road to reduce access points and create safer intersections,
- Create the Town Center as a mixed-use commercial and residential district with a small village identity,
- Make lots smaller in village-appropriate size,
- Limit structures to one- to two stories,
- Construct zero lot line buildings up to the sidewalk and to the side lot line, and
- Facilitate walking throughout the area with sidewalks and pedestrian walkways.

**Waste Water**
A package plant is a sustainable and flexible option for Lutsen. Land is at a premium on the North Shore and a package plant has a minimal footprint and meets MPCA requirements. A package plant can also expand with modular units to accommodate growth and can be disguised to blend in with its surroundings. The package plant should be sited downhill to the majority of development to take advantage of a gravity feed system when possible and desirable.

**Town Center Entrance Signs**
Locate distinctive Lutsen entrance signs to the west and east of the Town Center along Highway 61. These signs would mark the Town Center, inform visitors of local businesses, and along with highway design, slow traffic to facilitate safe travel through the area. (Lutsen Town Center Plan)

**Stormwater Management**
The stormwater management strategies focus on low development density that captures rain water runoff in large detention/retention areas between the frontage road and Highway 61. Additional water protection strategies include utilizing a 100-foot creek buffer for the two on-site creeks that flow into Lake Superior, and maximizing the tree canopy cover over the entire Town Center. Highway 61 through the town center has curb and gutter, and run-off should be directed into a swale system alongside the road to detain and slow water in order to trap sediment. The water should not flow directly into a pipe.

**Green Infrastructure**
- Maintain strong green spaces and tree cover to protect and enhance the character of Lutsen,
- Retain buffers along the creeks not only for stormwater management but also for recreation,
- Maintain vegetative buffers between the town center and residential areas to define public and private areas, and
- Create green corridors or spines to provide pedestrian connections that encourage walking between the town center and residential areas. All the plantings that define the corridors should be native to the area whenever possible.

**Flexibility and Staging**
Because the development of the Lutsen Town Center is dependent on market forces, and will develop incrementally over time. The design should reflect building in stages.

**Housing**
Community members expressed interest in a variety of housing options, all which should be taken into consideration. These housing options are:
- Single-family detached garage
- Single-family attached garage
- Multi-family housing
- Assisted-living facility