

## **17. SUBDIVISION OR DEVELOPMENT ZONING PROPOSAL.**

The Wolfden Pickett Mountain planned development proposal includes the needed above ground facilities to conduct underground mining of metallic minerals containing economic quantities of Zn, Cu, Pb Au and Ag. Preliminary planning of the facilities results in a compact clustering of above ground buildings and structures for office, warehousing, mineral processing and beneficiation (mill feed storage pad, crushing, milling, and flotation), capture of contact waters (precipitation and mine waters), water treatment and re-infiltration (PDP) galleries, and long term above ground management of tailings in conformance with Maine DEP regulations (dry stacked tailings facility). Underground facilities are accessed through a mine portal and are ventilated by above ground ventilation fans and shaft openings. The property location and project description, including phases of permitting, construction, operation and reclamation were presented in Sections 3 and 4. A description of anticipated site conditions, reclamation and beneficial use of the affected area are further described in Appendix A, Attachment Q. Appendix A section B(3)(d) discusses impacts on existing uses and natural resources and approaches used to avoid and minimize adverse impacts and address impacts if they were to occur. Section 18 and Exhibit N present project environmental reviews by the Maine Natural Areas Program for rare and exemplary botanical features and the Maine Department of Inland Fisheries and Wildlife for important fisheries, wildlife and critical habitat resources in the vicinity of the proposed project. Plant and animal habitat resources, recreational resources, and scenic resources are also discussed in Section 15.

The findings of these evaluations regarding harmonious fit, scenic impacts and wildlife habitat are discussed below.

- a. Harmonious Fit: The project location is predicated by the location of the mineral deposit. The siting of surface facilities (buildings, treatment plant, and dry stacked tailings) avoid to the extent possible currently known areas of upland wetland, great ponds, streams and limit visibility from surrounding areas. The area requested for rezoning incorporates a 400-foot buffer from proposed facilities. The area is currently forested in regrowth from timber harvesting that occurred from 8 to 10 years ago. When developed a tree line will remain that will obscure the site facilities at ground level from most surrounding directions and areas. The area proposed for rezoning has a prominent ridgetop immediately west of the areas where proposed buildings would be constructed screening those buildings from view from that direction. A ring of higher elevation peaks is present south of Pickett Mountain Pond and north and west of Pleasant Lake. While an unobstructed line of site exists from Pickett Mountain Pond, Pleasant Lake, Mud Lake and Grass Pond, the visibility of the site itself would likely be obscured by tree lines that would be left in place around the developed areas. The most visible portion of the site would be the northern and northeastern corners of the dry stacked tailings area. There may be windows of visibility to this portion of the site along SR 11 north of the intersection with Route

212, but at large distances; approximately 8 miles distant. Visibility of ground elevation features such as buildings during operations and the tailings facility post-reclamation would be obscured by the tree line left in place.

The landforms surrounding the site are complex rolling hills and moderate elevation mountain peaks with mixed forests, that would be more tolerant to visual impacts from the site. The tailings management area will be graded to follow the ridgeline profile and upon restoration will be vegetated. Based on the topography, landforms and forested nature of the area, the proposed site is a reasonably harmonious fit with the surrounding environment and generally meets the CLUP's goal of protecting the high-value scenic resources of the surrounding area.

An analysis of impacts to existing transportation routes, traffic circulation, and improvements is presented in Appendix A, Attachment J. The project as proposed will not require development of new roads and will improve existing gravel roads to improve traffic safety. All roads off existing public roads are located on private land and currently used for logging operations and access to seasonal residences located on the southern and northern shore of Pleasant Lake. The project will provide for parking of employees on-site. The project will fit harmoniously into existing traffic patterns.

Signage for the project will be limited to traffic warning signs at the intersection of the private access road and SR 11 and will therefore not cause a visual impact and will aid in preventing a hazardous traffic condition.

All on-site above ground exterior lighting within the plant operations area greater than 60 watts or incandescent lights greater than 160 watts will be housed in downward facing full cut-off fixtures as specified in CLUP Standards under 10.25F. Other sources of light will include vehicle headlights and building interior lighting. Therefore, the project is making appropriate efforts to minimize light pollution and fit the project lighting needs harmoniously with the surrounding environment.

The project is located entirely on Wolfden owned land, is not adjacent to and will not affect existing communities or neighborhoods. Several seasonal residential properties are present along the shoreline of Pleasant Lake, but their view of the project will be obscured by the tree line left in place. Pleasant Lake lies entirely within the Wolfden owned parcel.

- b. Scenic Impacts: The project has provisions to minimize scenic impacts both during operating and post closure periods (after reclamation). The project would not be visible from primary recreational and scenic resources including the Katahdin

Woods and Waters National Monument or nearby Upper and Lower Shin Ponds as described in Section 19.

During operations, the tree line surrounding the site will remain and obscure the site except for areas immediately south including Pickett Mountain and adjacent peaks. The site will also be visible from Pickett Pond. During operations the tailings facility will be graded and sequentially covered and closed in phases so that the profile will be maintained consistent with, though slightly higher than the existing ridgeline.

During reclamation all buildings will be removed, and underground mine openings permanently closed. The water treatment plant will be decommissioned and removed last once it has been determined that it is no longer needed based on environmental monitoring. Therefore, at project closure no above ground structures will remain except the dry stacked tailings facility which will have been capped and revegetated. The site topography will be regraded and revegetated to mimic the original landforms, including the tailings facility whose profile will be below the surrounding tree line.

- c. Wildlife Habitat: The project does not impinge on shorelines of any lakes or ponds within the Wolfden owned parcel. Therefore, impacts to riparian zones around water bodies, associated birds and waterfowl are not anticipated. The IF&W provided a correspondence on November 25, 2019 which indicated there were no known occurrences of endangered, threatened or special concern species within the project area (Exhibit N). The IF&W also has not mapped any significant wildlife habitats within the project area. The IF&W did identify Great Blue Heron colonies as species of concern and noted the special protection afforded to eight species of bats and concern for habitat protection. The preliminary screening survey conducted to date did not identify habitat that would support Great Blue Heron colonies or bats, the latter due principally to very limited and small exposures of bedrock outcrop and lack of any talus slopes. When the detailed mapping of wetlands, intermittent streams and vernal pools is conducted in the spring it will include a final species assessment encompassing a survey of the area proposed for development individual species and or suitable habitat for the species identified. Impacts to rare, threatened or endangered wildlife are not known or expected and if identified will be avoided and minimized.
  
- d. Sufficient Land Area: The project proposed area for rezoning, based on revisions necessary to address LUPC comments dated March 6, 2020, includes a total 528.2 acres. The project will manage all tailings in the above ground dry stacked tailings

facility. In order to accommodate tailings placement, compaction and closure in a manner that minimizes vertical height of the placed tailings and allows the final closed facility to mimic the existing ridgeline, the tailings facility will occupy approximately 91.7 acres. The wastewater treatment plant and infiltration galleries (Potential Disposal Points or PDPs) are in the south eastern portion of the site. The four PDPs occupy a footprint in excess of 5 acres. Collectively the mine facilities (Mill feed storage pad, waste rock staging area, Concentrator, offices etc) occupy a footprint of approximately 7.3 acres. The area between these facilities contains upland wetland resources and will not be developed. Underground ventilation facilities are in the southwestern portion of the site. When a 400- foot buffer was developed around the locations of these collective facilities, that buffer occupies approximately 347 acres. To simplify the shape of this resulting area needed for rezoning a polygon was drawn around the corners and extremities of the buffer zone; and this has resulted in the final proposed area for rezoning of 528.2 acres. This difference (approximately 181 acres) provides appropriate flexibility during subsequent development, design and permitting review, to adjust the proposed facility, including avoidance, to the extent possible, of natural resource impacts such as wetlands and vernal pools once mapped. The additional area would also allow adequate space to locate and develop a renewable energy asset (solar farm) if future evaluations indicate such a facility is viable, and other project needs including parking and domestic wastewater facilities.

The project wastewater management plan includes a sophisticated water treatment plant for industrial waters (mine waters and contact water) as described in Appendix A section B(3)(d). Grey water and black water will be managed through a contracted disposal service for below ground and an on-site septic for above ground facilities.

- e. High Yield Sand and Gravel or Bedrock Aquifer: The proposed facility is not located near a high yield sand and gravel aquifer nor a high yield bedrock aquifer. Please see Appendix A Attachment I. All contact waters will be collected and treated prior to discharge ensuring that recharging waters will not impact overburden and bedrock groundwater resources as discussed in Appendix A Section B(3)(d). During mine development and mine operation bedrock groundwater movement is toward the mine workings since they will exist in a dewatered state. Sulfides present in bedrock below the water table are in a reducing state and will not be oxidized. This aspect of hydrologic control further protects bedrock groundwater resources. Existing groundwater quality in bedrock will be characterized as part of the background study for MEDEP permitting and will be the basis to evaluate and remediate any impacts should they occur.