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# TECHNICAL MEMORANDUM

To: Todd Tripp, Coquille Indian Tribe (CIT)  
From: Steve Faust, AICP, 3J Consulting  
CC: Matt Jensen, CIT; Virginia Elandt, ODOT  
Date: April 30, 2018

**Project Name: Coquille Indian Tribe Comprehensive Plan**  
**Project No: 17421**  
**RE: Final Technical Memo #5: Preferred Land Use Alternative**

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## I. Introduction

This Technical Memorandum (TM) #5 describes the preferred land use and transportation alternative for the Coquille Indian Tribe's (CIT) Empire Site. The preferred alternative is a hybrid developed by blending the desired elements from two previous alternatives identified through applying established evaluation criteria and recommendations from meetings with the Comprehensive Plan Work Team, CIT Tribal Council and broader Tribe membership.

TM #5 is presents a conceptual plan for the Empire Site and contains a refined assessment of the elements included in TM #4 so the information is specific to the preferred alternative. We also have prepared four preliminary site plans for Tribal housing development projects. We begin by summarizing land uses and developable acreage, and forecasting population and housing and employment densities. We describe needed utility improvements and provide rough order of magnitude cost estimates. Then, we analyze land use and transportation growth conditions and provided cost estimates for needed transportation improvements are identified. A new section on implementation describes the actions recommended to implement the preferred alternative, including a funding strategy and phasing plan. This memo concludes with a description of next steps in the process. The information in this memo is organized into the following sections:

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## II. Preferred Land Use Alternative

### Proposed Land Uses

For the purpose of describing the preferred land use alternative for the North and South Empire Parcels, we have divided the properties into six areas. These areas primarily consist of trust lands, but there are presently two larger fee-owned parcels ("CSD" and "Lewis Connector") included in the Kellogg-Second Creek Area (B), and a small fee-owned lot ("Nelson") in the Tarheel-Libby Lane Area (E). The key factors in defining these areas are:

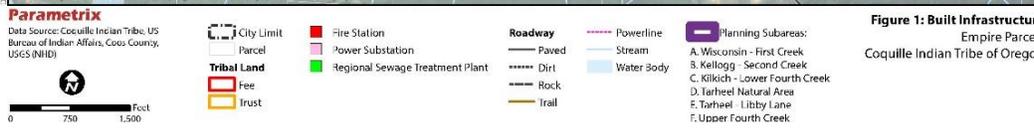
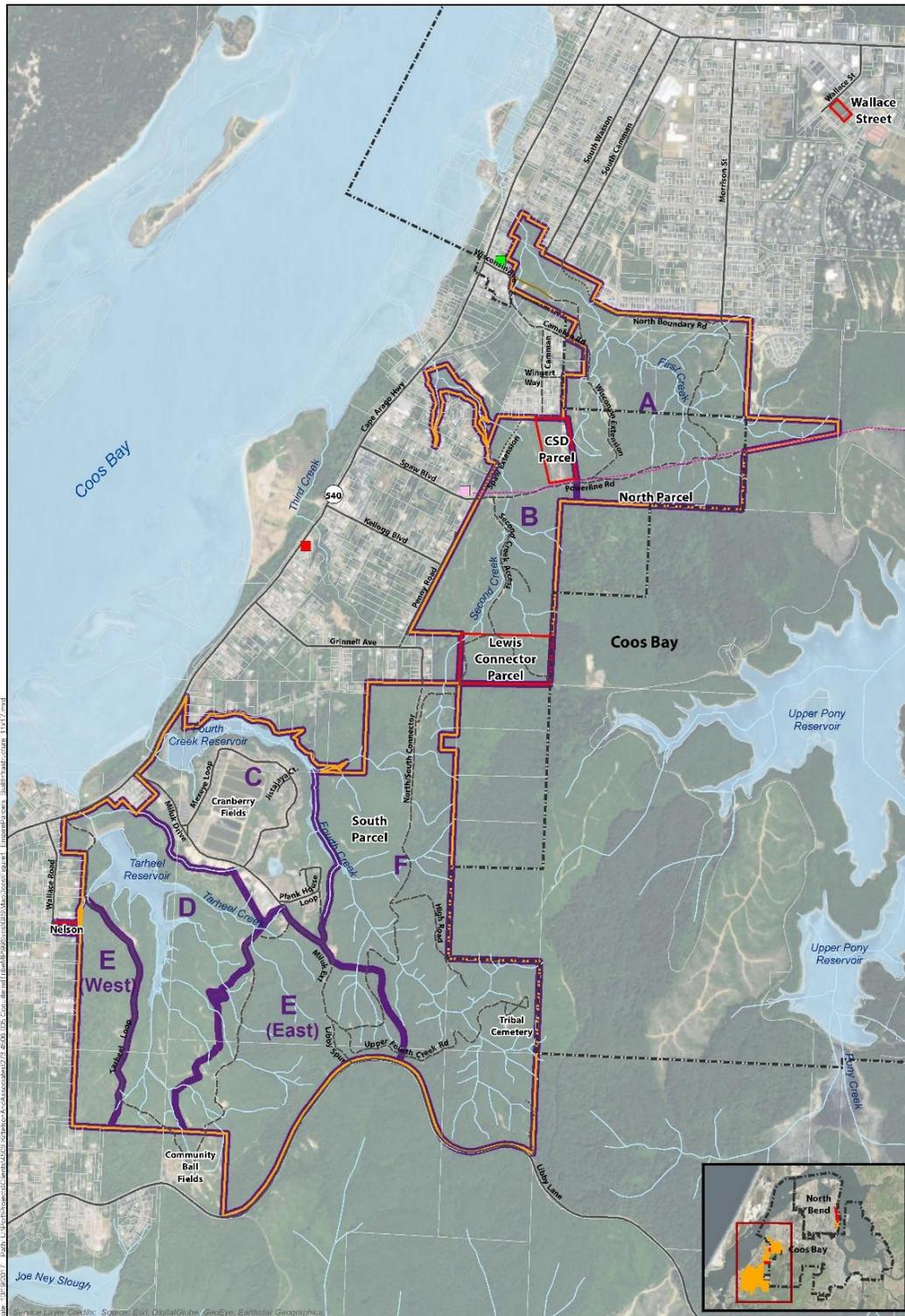
- Topography
- Creek watersheds and associated wetlands or floodplain
- Physical access points and routes

All six areas are located on the east side of Cape Arago Highway, and thus there is no Coos Bay waterfront access within the North or South Empire Parcels. The CIT owns relatively narrow bands of land around the lower reaches of both First and Second Creeks that do, however, come close to Cape Arago Highway; and some CIT lands have direct highway frontage between the Lower Fourth and Lower Tarheel Creek areas.

All areas are illustrated in Figure 1, and for the purposes of narrative identification and readability are numbered and named as follows:

- A. Wisconsin-First Creek
- B. Kellogg-Second Creek
- C. Kilkich-Lower Fourth Creek
- D. Tarheel Lake Natural Area
- E. Tarheel-Libby Lane
- F. Upper Fourth Creek

The North Parcel is comprised of areas A and B where there is significant opportunity for development. The South Parcel includes areas C, D, E and F. Several areas Area C is the Kilkich Community, which is mostly built out, though there is some opportunity to add accessory dwelling units. Area D encompasses the Tarheel Lake Natural Area (TLNA). No development is planned for lands within the TLNA designation. Area D divides Area E into two sections, E-West and E-East. Both areas include land suitable for development. Steep slopes and the Tribe Cemetery limited the development potential of Area F. However, the northwest corner is adjacent to an existing residential community and included in the developable land in the preferred alternative.



**Figure 1. CIT Empire Parcels: Built Conditions and Planning Areas**

**Developable Land**

A total of 282 acres of the Empire Parcels are identified as developable lands after removing environmental constraints as shown in Table 1. Environmental constraints are characterized by stream riparian corridors, wetlands and areas with slopes greater than 15% and are designated as Open Space or Forest. The preferred alternative is illustrated in Figure 2. The majority of developable acres in the preferred alternative are assigned residential land uses, with the exception of 18 acres of land dedicated to employment uses along on the eastern portion of Area A, south of First Creek. That area is designated as Employment (formerly Light Industrial). The Employment zone currently allows almost any non-residential use except heavy industrial.

The remaining 59 acres of developable land in Area A and 72 acres Area B are designated Residential Multifamily (RM), which permits residential uses ranging from single family detached to apartments and condominiums. The 56 acres of developable land in area E-West also are zoned R-M, along with 35 acres in E-East and 13 acres in Area F. Area E-East also has 30 developable areas designated a new Residential Rural (or modified R-1 zone), to allow single family detached homes on large lots.

**Table 1. CIT Empire Parcels: Developable Acres**

Developable Acres	A	B	C	D	E (East)	E (West)	F	Total
Employment	18							18
Residential Multifamily	59	72			35	56	13	234
Rural Residential					30			30
<b>Total</b>	<b>77</b>	<b>72</b>			<b>65</b>	<b>56</b>	<b>13</b>	<b>282</b>

Net Acres

Net acreage is defined as the developable land minus a percentage dedicated to infrastructure improvements. For more intense the R-M zone, we deducted 25 percent of the developable area, with another two percent identified as lands for public parks. For the R-R zone, 20% was deducted as less infrastructure, including parks, is required. Net acreage within the Employment area removes 20 percent of the total area for infrastructure. This results in a total net area of 220 acres as shown in Table 2.

**Table 2. CIT Empire Parcels: Net Acres**

Net Acres	A	B	C	D	E (East)	E (West)	F	Total
Employment	14							14
Residential Multifamily	46	56			27	44	10	183
Rural Residential					23			24
<b>Total</b>	<b>60</b>	<b>56</b>			<b>50</b>	<b>44</b>	<b>10</b>	<b>221</b>

Table 3 shows approximately 14.4 of the 221 net acres are designated as Employment. A Floor Area Ratio (FAR) of .35, yields an estimated maximum buildable area of 219,542 square feet. Based on a projection of one employee per 750 square feet, the estimated employment opportunity is approximately 293 employees.

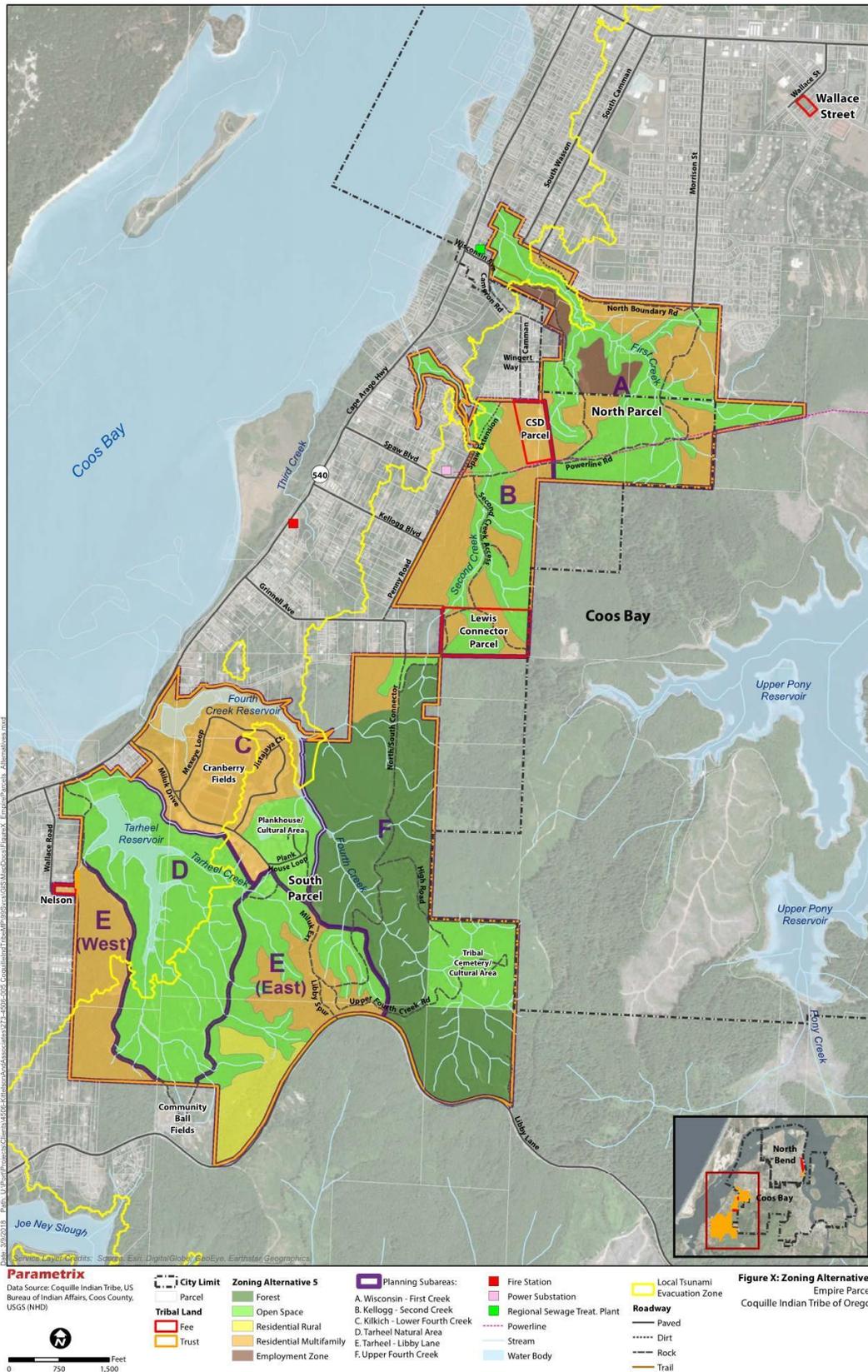


Figure 2. Preferred Alternative: Proposed Land Uses

**Table 3. CIT Empire Parcels: Employment Projections**

Gross Area (Acres)	Net Area (Acres)	Net Area (SF)	FAR	Max Buildable Area (SF)	Employees (1/750 SF)
18	14.4	627,264	.35	219,542	293

Of the 206 net acres zoned for residential use, 183 acres are zoned R-M. Since the R-M zone allows a range of housing types, from a regulatory standpoint, the area could yield anywhere from 1,281 single family units to 5,307 multifamily units. A total of 24 net acres are designated as R-R land, with the intent to develop large lots, yielding a range of 5 to 11 rural single family detached units. The preferred alternative has a total development potential of between 1,286 and 5,318 residential units as shown in Table 4. The average household size in Coos Bay from 2012-2016 2.45 people. Based on the average population, the Empire Parcels have the potential to house between 3,150 and 13,002 people.

From a market perspective, even the low end of the potential unit count (1,281) is unlikely to occur on CIT lands over the next 100 years. The traffic forecast conducted in Technical Memorandum #4 assumed a maximum unit count of 1,588. A more realistic assumption is that approximately 300 units may develop over the over a 10-year period. At this absorption rate, 1,588 units would take more than 50 years to develop with 100% of new construction happening on CIT land. Therefore, development of more than 1,588 units on Tribe land will require additional traffic forecasting.

**Table 4. CIT Empire Parcels: Residential Density Projections**

Net Acres		A	B	C	D	E (East)	E (West)	F	Total
R-M	Min	322	392			189	308	70	1,281
	Max	1,334	1,624			783	1,276	290	5,307
R-R	Min					5			5
	Max					11			11
Total		322	392			194	308	70	1,286
		1,334	1,624			794	1,276	290	5,318

**Utility Improvements**

The current utility services and infrastructure in the Empire Parcels is discussed in detail in TM #2 and #3. This TM #5 highlights any utility development requirements that can be discerned from application of the specific proposed land uses. <sup>1</sup>

<sup>1</sup> This CIT comprehensive plan project was not scoped to evaluate the location or condition of existing local or lateral service utility lines. Some such lines, particularly those in the older neighborhoods may require upgrades or replacement to be extended into the Empire Parcels. This can only be determined at the time of actual site-specific development proposals.

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## **Water**

All four future development areas (A, B, E, F) can be served by the regional water board's supply and distribution system.

Area A: Kilkich-Lower Fourth Creek. Water supply service into Area A could come through the City of Coos Bay neighborhoods to the north and east; and/or from unincorporated residential neighborhoods to the west and northwest between the Empire North Parcel west boundary, Cape Arago Highway, and First Creek.

Impacts on the utilities serving Area A employment zone will be dependent upon the actual uses proposed and developed in this area. Under the Tribe's Employment zone, a wide range of commercial and industrial uses are allowed. Commercial uses can probably be accommodated with utilities relatively near in sizing to residential areas, as could some light industrial uses. High water demand or power intensive uses may require larger capacity utilities, but such activities would be more likely in a general industrial type zone.

Area B: Kellogg-Second Creek. Water service into Area B could come through the unincorporated residential neighborhoods west of the Empire North Parcel between Second Creek and Grinnell Avenue.

Area E-West: Tarheel-Libby Lane. Water service into this area could come through the unincorporated residential neighborhood to the west or by an extension of water lines from Libby Lane. Area E-West does not front onto Libby Lane, and any new water (or sewer) extensions would be through lands outside of the Empire South Parcel and Tribal control or ownership.

Area E-East: Tarheel-Libby Lane. Water service could come from the Kilkich Village (Area C) but given distances and intervening non-developable lands, service from Libby Lane is likely a better option. A prior study conducted by the CIT determined that a water supply pump station would be required to extend viable water service down Libby Lane. Cost of this pump station has been estimated by the CIT at \$5 million.

Area F: Upper Fourth Creek. Water service into Area F could come through the unincorporated residential neighborhood north of the Empire South Parcel and west of the Lewis Connector Parcel adjacent to Grinnell Avenue.

## **Sewer**

Future development areas can be served by the City of Coos Bay and Charleston Sanitary District's wastewater collection and treatment system. The new (2017) Coos Bay sewage treatment plant is located along the Cape Arago Highway just outside of Area A and the Empire North Parcel near to Wisconsin Avenue and First Creek.

Area A. Sewer service into Area A could come through the City of Coos Bay neighborhoods to the north and east; and/or from unincorporated residential neighborhoods to the west and northwest between the Empire North Parcel west boundary, Cape Arago Highway, and First Creek.

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Impacts on the utilities serving Area A employment zone will be dependent upon the actual uses proposed and developed in this area. Under the Tribe's Employment zone, a wide range of commercial and industrial uses are allowed. Commercial uses can probably be accommodated with utilities relatively near in sizing to residential areas, as could some light industrial uses. High wastewater demand or power intensive uses may require larger capacity utilities, but such activities would be more likely in a general industrial type zone.

Area B. Sewer service into Area B could come through the unincorporated residential neighborhoods west of the Empire North Parcel between Second Creek and Grinnell Avenue.

Area E-West. Sewer service into this west portion of Area E could come through the unincorporated residential neighborhood to the west or by an extension of a sewer collection main line from Libby Lane. E-West does not front onto Libby Lane and any new sewer extensions would be through lands outside of the Empire South Parcel.

Area E-East. Sewer service could come from Kilkich Village (Area C) but given distances and intervening non-developable lands (the slopes of which may dictate sewer pumping stations), service from Libby Lane is likely a better option.

Area F. Sewer service into Area F could come through the unincorporated residential neighborhood north of the Empire South Parcel and west of the Lewis Connector Parcel adjacent to Grinnell Avenue.

### **Stormwater**

Most of the undeveloped land in the Empire North and South Parcels is forested, and surface water runs to and through five drainages – First Creek (Area A), Second Creek (Area B), Third Creek (drains a very small section of Area F), Fourth Creek (captures most of runoff from Kilkich Village, and large sections of Area E and F), and Tarheel Creek (drains two sections of Area E).

Conventional storm water management systems would be part of any residential, commercial or industrial development – curb and gutter, culverts, etc. However, given that the land use patterns suggested for the Empire Parcels already preserve all major stream and riparian corridors, the Tribe may wish to consider “green” and low impact surface water management techniques and systems, such as bio-swales.

### **Natural Gas**

The private natural gas utility serving the Coos Peninsula does not provide service anywhere within or near to the Empire Parcels. For the purposes of forecasting costs associated with build-out of the residential and light industrial zones proposed in TM #5, it is assumed this current circumstance will not change.

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### **Electric Power**

Pacific Power operates a transmission-scale electrical power line that enters the Empire Parcel from the east along Powerline Road and terminates at a power substation on Spaw Boulevard near Penny Lane just outside of the west boundary of Empire. Electric power capacity is more than adequate for any residential development currently being considered for Empire North and South.

New local service connections would be driven by the actual location and size of any development. Service could be extended from the power substation or potentially from existing lines north and west of the Empire Parcels.

### **Public Facility Needs**

In general, there is nothing intrinsic about the lower-density residential and employment zones being contemplated in Areas A, B, E and F that can be directly linked to the location, size, or number of needed new or expanded public facilities within the Empire Parcels. Kilkich Village is the location of all the tribal facilities on the west side of the Coos Peninsula, and the Village will be quickly and readily accessible from these areas via the improved road systems associated with new development

Nonetheless, as Empire becomes home to more tribal members, or even members of the non-tribal public, and as employment opportunities expand, tribal services may have to expand correspondingly.

### **Public Safety**

There is a tribal police station and a judicial court located in Kilkich Village (Area C). Fire protection/emergency medical service are provided by a non-tribal entity. There are no firehalls or hospitals within the Empire Parcels, although there is a Tribal Health Center in Kilkich. More activity and more neighborhoods and streets within Empire may dictate an increase in policing, and an increasing resident population of tribal members may place more demands on health services.

### **Schools/Libraries**

There are no K-12 schools within the Empire Parcels. School-age children that are residents of Kilkich Village attend Coos Bay-area schools. There is however a library facility within Kilkich Village.

### **Other Facilities**

There is a community center, and general education and cultural facilities within Kilkich Village. Tribal members have expressed a desire for new, consolidated, and/or expanded facilities accommodating these services, as well as library services. The southeast end of Area C includes a community Plankhouse and a canoe shed, which includes some tribal cultural offices, surrounded by a 26-acre community park.

There are also maintenance, warehousing, and public works buildings and yards along Miluk Drive. These facilities may have to be expanded or new sites found as the public

works responsibilities of the Tribe could greatly expand with the new and improved roadways, additional utilities, and expanded tribal and public amenities that will come with implementation of the new development.

## **Rough Order of Magnitude Concept Cost Estimates**

### **Utility Cost Assumptions and Estimates**

At the comprehensive plan level, precise development cost estimates are not possible. Land uses designations proposed in this CIT Comprehensive Plan are limited to two residential zones and an employment zone which is broadly defined. The system parameters necessary to make even non-engineered plan-level estimates require site information that will only be defined at later stages of development in the Empire Parcels.

Some of the utility system parameters and site information ideally needed to produce even plan-level cost estimates of reasonable accuracy include:

- Configuration and location of the developable lands. For instance, in Area B the 72 acres of developable land are broken into five distinct parcels separated by Forest and Open Space designated areas.
- Capacity and location of existing "main line" transmission or production (such as water supply storage, sewer treatment plants and pump stations, power substations and transmission lines).
- Capacity and location (or absence) of interconnecting lines and facilities.
- Specific localized natural conditions such as topography, streams and other water bodies, and road alignments and widths (a key factor in developing precise linear foot costs for utilities usually located under roadways)
- Site development plans and patterns defined at least at the conceptual level.

Not all this information is available at a comprehensive plan stage, and the estimates highlighted in Tables 5 below should be considered "rough order of magnitude". TM #2 and #3 cataloged the current location and condition of utilities currently serving of bordering the Empire Parcels. These memorandums should be referenced for further information on known conditions and challenges.

To provide some rough order of magnitude utility costs associated with the build-out of the R-M, R-R and E zones recommended by the two land use alternatives, actual costs for comparable developments in Pacific Northwest coastal areas were reviewed. Order of magnitude unit cost estimates were derived for water, sewer, stormwater, and electrical power. The dwelling unit projections for each area as described in Section II of this memo were used as the multiplier. Slightly higher demand is assumed from commercial and light industrial uses than for residential.

The development costs in Table 5 assumes any existing lines or other utility infrastructure is adequate to serve the proposed development in Areas A, B, E and F. These estimates also do not include:

- Design/engineering, including construction management and survey.
- Permitting and mitigation (although many permitting requirements may be limited or not applied based on the Tribe's sovereign status).
- Costs associated with roadway development, including sidewalks.
- Grading ("developable areas" with slope between 10% and 15% may require extensive grading).
- Fees such as utility connection fees and system development charges (both the water and sewer districts charge such fees, and the Tribe would not be exempt).

**Table 5. Preferred Alternative Conceptual Cost Estimates**

Area	Water	Sewer	Storm	Electrical	Pump Station	Total
A	\$5,800,000	\$7,200,000	\$5,000,000	\$6,700,000	\$0	\$24,700,000
B	\$5,200,000	\$6,400,000	\$4,500,000	\$6,000,000	\$0	\$22,100,000
E-East <sup>2</sup>	\$4,200,000	\$5,200,000	\$3,700,000	\$4,900,000	\$5,000,000	\$23,000,000
E-West	\$4,000,000	\$5,100,000	\$3,500,000	\$4,700,000	\$0	\$17,300,000
F	\$900,000	\$1,100,000	\$800,000	\$1,000,000		\$3,800,000

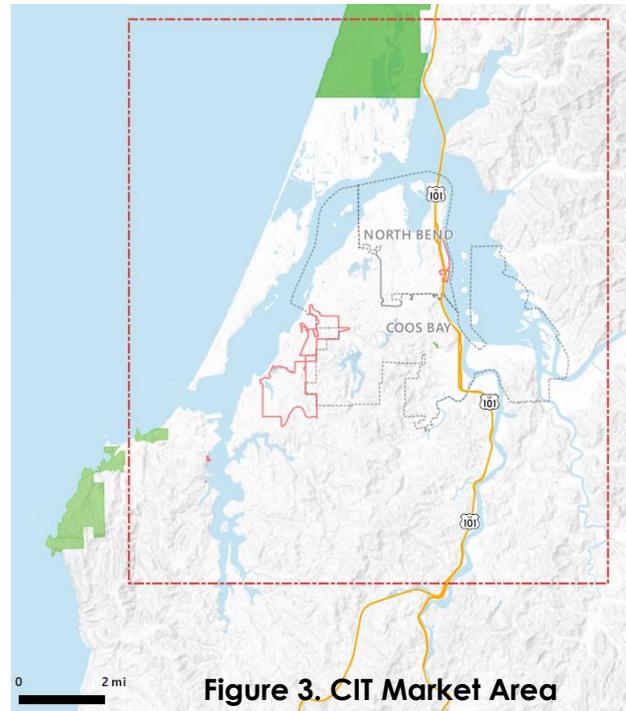
As noted, these conceptual cost estimates do not include costs associated with roadway development, including sidewalks. Those costs are provided in Section III.

**Financial, Market or Other Feasibility**

**Barriers and Opportunities**

This section summarizes the feasibility barriers and opportunities associated with the preferred land use alternative. While certain barriers and opportunities were established in the earlier alternatives analysis and remain the same here, finalized revisions to the preferred alternative warrant a fresh discussion of new issues.

Any new CIT development is likely to complete with other development in the region (or *market area*, approximated by the red box, left). This region has captured over half of the County's growth in the last decade and can be expected to continue in the same vein. As such, the opportunities and barriers discussed in this section refer exclusively to this area.



**Figure 3. CIT Market Area**

<sup>2</sup> The estimate for Area E (East) includes the \$5 million projected by the Tribe for a new water pump station along Libby Lane.

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## **Residential Development**

### Financial Barriers

#### *Construction Costs*

The recent increase in construction demand (both at the state and national level) and the dwindling supply of labor has resulted in skyrocketing construction costs over the last few years.<sup>3</sup> Hard construction costs are typically comparable whether projects are being built in a rural place, such as Coos County, or a major metropolitan area, such as Portland. As such, achieving the rents and home prices necessary to offset these high construction costs are rarely attainable in less urban places such as Coos County. While northwest cities, such as Portland and Seattle, continue to experience a construction boom despite rising costs, rural places struggle to compete and have ultimately been priced out of the wider market.<sup>4</sup> Over the long term, 20-year build out time line for this plan, the issue of construction costs could potentially diminish when and if the pace of development nationwide slows.

### Market Barriers and Opportunities

#### *Population Growth and Development Activity*

Population growth is the primary driver of new residential demand, so low growth would typically indicate low demand. While the cities of Coos Bay and North Bend grew about twice as fast as Coos County (0.31 percent versus 0.17 percent for the County), growth was significantly behind the state (1.03 percent, driven by the Portland Metropolitan Area's population boom).

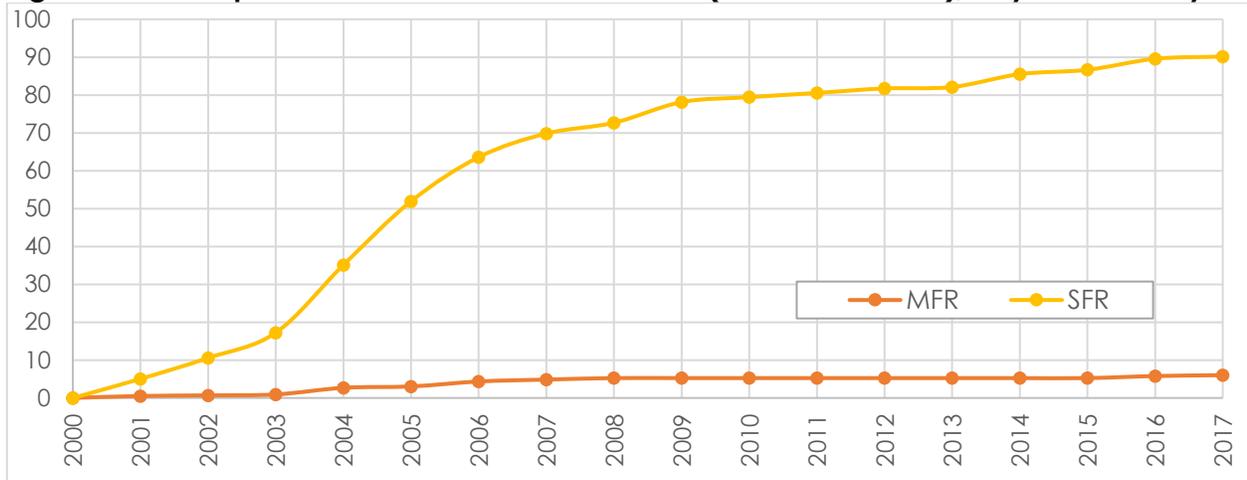
The following chart shows the number of new acres developed since 2000 in Coos Bay. They show recent residential development activity as consistent with the low population growth seen in the county. During the past decade (2007 to 2017), approximately 20 acres of single family land, and one acre of multifamily land, have been developed. This slow development pace followed a significant period of construction activity between 2003 to 2007. Single-family residential development has been the only primary land use to experience significant development in the region since 2000, indicating demand for new housing units.

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<sup>3</sup> While inflation increases U.S. prices by about 2 percent each year, construction costs in Oregon have been increasing by about 8 percent each year for the last few years.

<sup>4</sup> It is worth noting that the Coos County Housing Task Force has commissioned a comprehensive housing study, scheduled to begin in 2018, which should identify any funding gaps and potential solutions.

**Figure 4. Developed Residential Acres Since 2000 (indexed to 2000), City of Coos Bay**



Source: Coos County Assessor and Leland Consulting Group

Indeed, anecdotal evidence and quantitative data suggest that there may be pent-up demand and a high rate of housing obsolescence. Further, with less than 40 homes permitted annually but only a handful of new active “for-sale” listings in the area, absorption may be relatively high, despite low development activity.

*Market Demand and Absorption*

Looking ahead, the County’s population is projected to grow at a similar rate to the historical average, adding almost 700 households in the next 10 years (approximately 1,600 people), or about 70 households per year. If existing trends remain true, the market area—approximated by Coos Bay, North Bend, and the surrounding unincorporated areas—should capture at least half of this growth (at least 35 units per year).

The shortage of buildable land in the area potentially increases the attainable capture rate of new market demand for the Tribe’s land. It is therefore reasonable to assume that—with adequate phasing and financing—absorption of new units in a small subdivision could occur at a rate of four to eight units per year (a 10 to 20 percent capture rate of growth within the market area).

New homes have been recently constructed between Marshall Ave and Kentucky Ave—the area immediately adjacent to CIT lands in Area A. These homes, which were built between 2006 and 2013, have generally sold for between \$206,000 and \$325,000, and would serve as a comparable product for new residential development<sup>5</sup> on CIT lands. Further characteristics are as follow:

<sup>5</sup> The residential demand analysis determined that the bulk of new housing is likely to be absorbed by households earning between \$35,000 and \$75,000, which is typically a target market for homes priced from \$200,000 to \$350,000.

- Lot Size: 3,900 to 4,100 square feet
- Square footage: 1,400 to 2,000 square feet
- Price: \$206,000 to \$325,000
- Density: 9 to 10 dwelling units per acre
- Type: mostly one and two stories

Further barriers to development include low wages and incomes in the region. Low area wages often result in depressed rents and limit the ability of a developer to finance a project. With that said, the highest incomes in the area are located immediately east and north of CIT lands, and it is unknown whether the lack of quality residential products have had a detrimental impact on area wages, and whether a higher quality residential product will attract higher-income residents.

Indeed, there are indications that projected population growth (which greatly determines demand) does not reflect actual market demand. A range of sources suggest that Coos County is in a “housing crisis,” in which existing residents have no upward mobility, and are ultimately forced to decide between staying in substandard housing or moving away from the region for higher quality housing<sup>6</sup>.

## Regulatory

### *For-sale Housing Barriers*

The most traditional form of single-family home ownership is for tenants own both the house and the land upon which it is built. However, this is not an option on Reservation Trust land. Instead, prospective homebuyers must either rent the home, or buy the home on leased land (also known as ground-leased, lease-hold, or land-trust property<sup>7</sup>).

Demand for ground-leased property is unlikely to be as high as demand for traditional “fee simple” for-sale housing, and therefore, consumers will be willing to pay less for ground-leased properties. This presents development feasibility challenges to the development of CIT land.

However, there are some advantages to ground-leased- property which may appeal to a wider demographic of prospective homeowners. Ground-leased property is typically cheaper than traditional housing as homebuyers are not purchasing the land on which the structure occupies. Prospective homebuyers with lower incomes who cannot afford to buy market-rate housing may be drawn to the concept of ground-leased property if the cost is significantly lower and the land lease is long enough. This concept has been implemented in numerous Community Land Trusts nationwide in order to offer more affordable housing (<http://cltnetwork.org/>).

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<sup>6</sup> Sometimes called “housing obsolescence”

<sup>7</sup> Despite being a rare product, there are many examples of ground-leased property. Trailer parks are the most common form and can be found almost anywhere. Ground-leased retirement communities are another form and are rather common in Florida and Arizona.

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### *Rental Housing Barriers*

Rental housing should be the preferred option over “for-sale” housing, largely due to the ownership complexities of trust land. Rental housing allows the Coquille Indian Tribe to maintain ownership of the land without adding ownership complexities and have the flexibility to assume responsibility for development (CEDCO) or partner with another agency.

However, rental housing is subject to many of the same market and financial barriers as for-sale housing, while barriers relating to zoning and management are unique to rental housing.

### **Employment Based Development**

LCG views employment-based development (e.g., office, industrial, or general commercial development) as significantly more challenging than residential development in this location. Barriers to industrial or employment-based development on CIT lands include low employment growth (both historical and projected) and challenging site conditions. One of the only mitigating factors to these distinct barriers is the shortage of industrial and employment-based land in the region, especially large lots.

### Slope / Site Conditions

Conditions such as steep topography, exposed bedrock, wetlands, sensitive environmental areas, and irregularly shaped parcels can contribute to site development costs and inefficient use of the land. Generally, industrial land should typically have few impediments to development for it to be competitive in the marketplace. Industrial land is ideally large, flat, square, and easily and immediately accessible to collector or arterial transportation facilities, and utility service. Visibility is beneficial as well. Commercial land uses can typically overcome slightly more challenging physical environments; for example, sites with greater slopes.

Any challenging site conditions will have a major impact on the feasibility of employment-based development, particularly for industrial development. Typically, industrial land commands the lowest value of any other land use (except agricultural land)— between \$3 and \$10 per square foot. Therefore, extensive efforts to prepare a site for development (such as building infrastructure and excavation) can exceed the value of the finished site, rendering development infeasible.

### *Slope*

The following table shows the development potential of various land uses for varying degrees of slope. Across all land uses, slopes between 8 and 15 percent present increasing risks and engineering costs for new development. For industrial development specifically, a degree of slope between 0 and 3 percent is ideal, with anything steeper than five percent typically presenting major barriers to development.

**Table 6. Degree of Slope and Development Potential**

Degree of Slope	Development Potential
0% to 3%	Usually poses few risks. Generally suitable for all development and uses.
3% to 8%	Usually good for land development and presents few engineering challenges for building and roads and for attendant cut and fill of land. Gradients are usually good for stormwater and sewer drainage. Suitable for medium density residential development, agriculture, industrial and institutional uses. Industrial estates usually require gradients below 5%.
8% to 15%	Engineering costs and risks increase. Suitable for moderate to low-density residential development, but great care should be exercised in the location of any commercial, industrial or institutional uses.
15% to 20%	Construction and development increasingly difficult, expensive and prone to erosion and instability. Only suitable for low-density residential, limited agricultural and recreational uses.
20% to 25%	Challenging, but not impossible to develop.
Greater than 25%	Only used for open space and certain recreational uses.

Sources: 'Understanding Land Development: A Project-Based Approach,' Coiacetto, E., 2012; Soil Surveys of Lehigh/Northampton Counties, Pennsylvania, Soil Conservation Service. 1963, 1974. (<http://www.lvpc.org/pdf/SteepSlopes.pdf>)

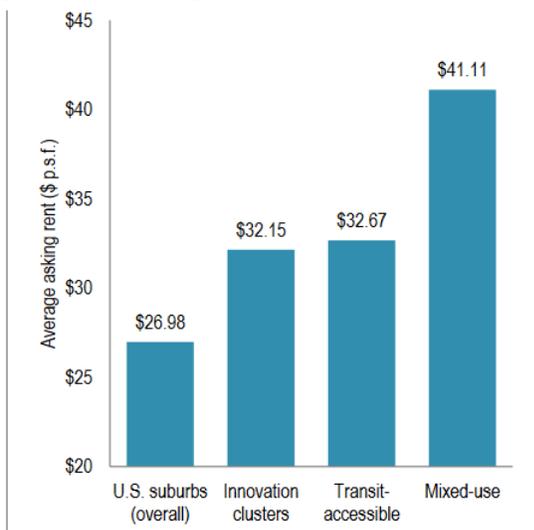
*Waterbodies*

The Employment Zone contains several creeks, which often present significant challenges, particularly for industrial development. Costly contamination issues can arise, so care must be taken with regard to surface runoff, sewage, and drainage to mitigate future impacts—all potentially costly and impact development feasibility.

*Shape and Size*

Industrial and other commercial development typically likes to cluster near similar uses. As these uses do not yet exist in the area, one might expect the employment zone to accommodate some sort of business or industrial park in the future. Typically, office and/or industrial parks range from 20 acres to hundreds of acres—the former being the total size of the employment zone. Larger areas of land—in excess of 50 acres—allow for flexibility for parcels, planting and internal transportation and parking systems.

Figure 5. Average rents by submarket



For office parks, similar land characteristics are applicable. However, successful office parks today are rarely stand-alone developments. Instead, they have evolved as master-planned, mixed-use developments incorporating a variety of ancillary uses such as residential, retail, entertainment and recreational components. The overall goal is to create a vibrant, self-contained business community that is more than just a place in which to work. This trend has been well established, clearly shown by the zero growth in rents for suburban office parks, versus mixed-use developments.

Source: JLL “US Suburban Office *Perspective* Winter 2016”

The Employment Zone’s natural features—such as slopes and creeks—have dictated its shape and size, resulting in an irregular and narrow northern section, opening into a wider southern section. While this may limit the amount of feasible development, the total acreage available in the Employment Zone should be large enough to allow for flexibility in the future.

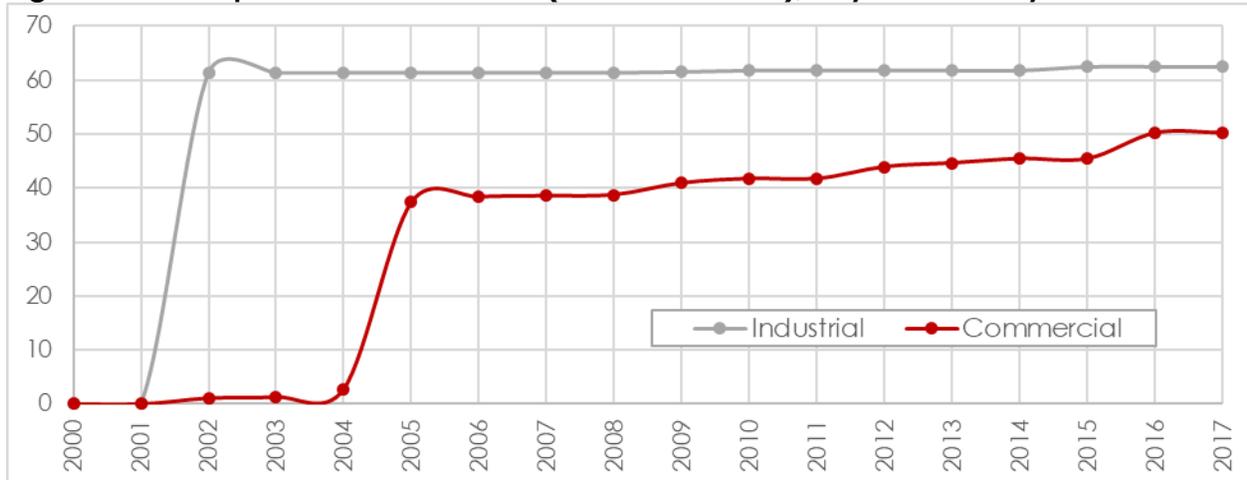
#### Job Growth and Market Demand

While the area (cities of Coos Bay and North Bend and the surrounding unincorporated region) accounts for most of the County’s jobs, employment growth has been slow, averaging only 0.1 percent annual growth between 2005 and 2015. However, after negative growth from 2005 to 2010 (due to the impact of the recession on rural jobs in particular), the area has added jobs at an annual rate of 0.6 percent since 2010. This growth has been primarily in the industry sectors of health care, education, construction, and manufacturing. Growth is also projected to continue at a marginally increased annual rate of 0.7 percent in these same industries.

However, as the following figure shows, manufacturing growth would greatly contrast with the historic rate of development in the City of Coos Bay. Industrial development stagnated after a brief growth period in 2002. Meanwhile, in keeping with job growth, commercial development growth, with only 12 acres developed since 2006.

With that said, this slow growth rate for new industrial development may have been significantly impacted by a shortage of buildable lands. Sites for new industrial and other employment uses are scarce in the area, with a shortage of large (10+ acre) sites in particular, as determined by the City of Coos Bay’s Economic Opportunity Analysis in 2009.

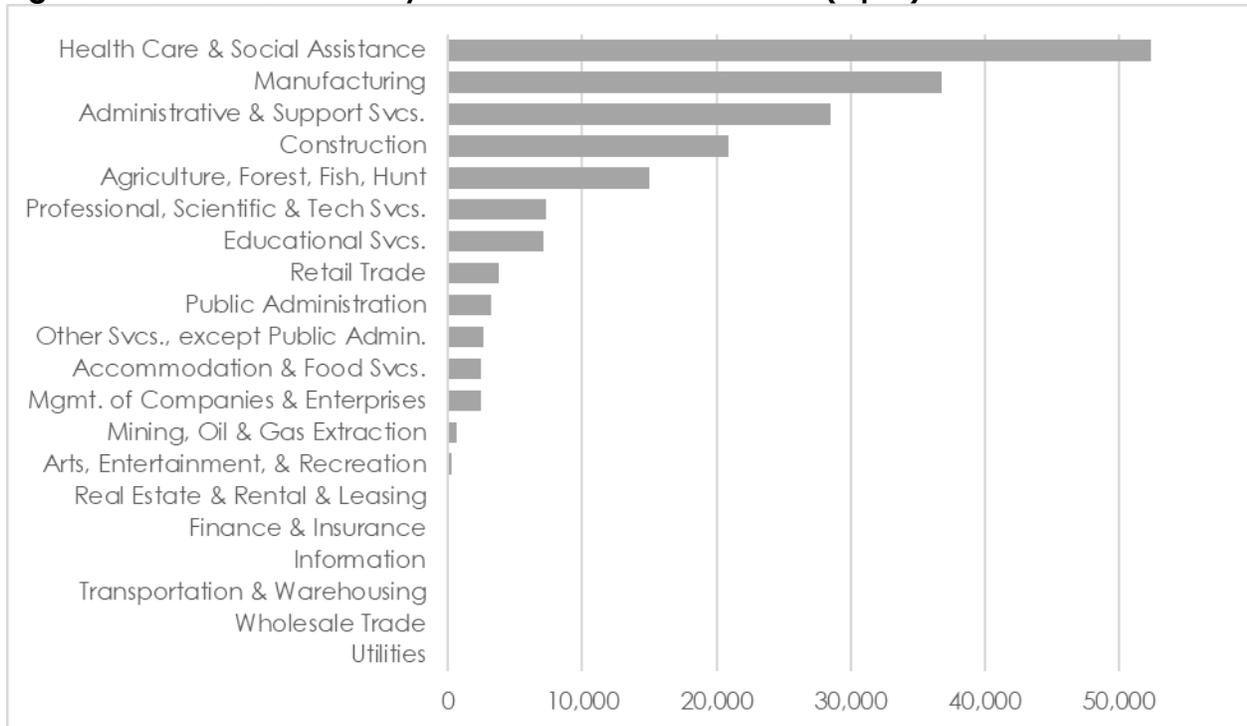
**Figure 6. Developed Acres Since 2000 (indexed to 2000), City of Coos Bay**



Source: Coos County Assessor and Leland Consulting Group

The following figure shows estimated new market area demand over the next 10 years. An employment demand analysis determined total demand for approximately 183,000 square feet of new office and/or industrial space over the next 10 years, with Health Care and Social Assistance comprising about 29 percent of total demand, and Manufacturing comprising about 20 percent. The total land required to build 183,000 square feet should be in the range of 10 to 20 acres, depending on building density.

**Figure 7. 2018-2028 Total 10-yr New Market Area Demand (sq. ft.)**



Source: QCEW, Oregon Employment Department & Leland Consulting Group

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While the 18 developable acres comprising the Employment Zone would accommodate all 183,000 square feet of new market area demand for office and industrial space, it is unlikely that this development will all occur in the CIT Employment Zone. The actual capture rate will rely on several factors, such as site readiness and marketability, availability of other land in the market area, and other factors. In the short- to medium-term, development is unlikely.

#### Shortage of Buildable Lands

The 2009 City of Coos Bay Economic Opportunity Analysis report identified the lack of buildable industrial and commercial lands – especially large lots (greater than 10 acres) – as a critical barrier to the future development of employment uses. Overall, it was determined that Coos Bay had an overall shortage of 53 acres of industrial land, and 63 acres of commercial land.

The Tribe may be able to capitalize on this shortage, but it will take significant investment to get these sites ready for development, and financial and other barriers will still remain. As suggested earlier, the Employment Zone may lend itself to the creation of an industrial or business park, at some point in the future. These parks can be stand-alone developments within a community, or they can be adjacent to or part of a larger district. Here, the former (stand-alone) would be true, given the lack of industrial or employment uses nearby. Industrial and business/office parks require large tracts of land, efficient transportation systems, and sufficient infrastructure for their success and for their ability to integrate into the larger community. At present, none of these characteristics are apparent in the Employment Zone.

**SUMMARY**

The following table summarizes the barriers and opportunities outlined in this section.

**Table 7. Summary of Opportunities and Barriers**

	<b>Residential</b>	<b>Employment</b>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Potentially high capture rate of overall County market demand in Coos Bay/North Bend as the only “urban places” in the region.</li> <li>• Recent upswing in local development activity, with new residential development primarily occurring near CIT land (north of Area A).</li> <li>• Increasing population growth projected through 2030.</li> <li>• Residential (single-family) the strongest of all land uses.</li> <li>• Potentially promising rate of new housing unit absorption.</li> <li>• Potentially high rate of housing obsolescence driving a pent-up demand for new housing, despite modest development activity.</li> </ul>	<ul style="list-style-type: none"> <li>• High capture rate of market demand in the Coos Bay and North Bend area as the only “urban places” in the region.</li> <li>• Positive employment growth projected through 2024 (although relatively low for industrial uses).</li> <li>• Possible pent-up demand for storage units.</li> <li>• Greenfield development allows for maximum flexibility for large user.</li> <li>• Limited land/building availability for industrial expansion in the wider area may help mitigate other challenges associated with the site.</li> <li>• High growth of medical and services potentially indicative of demand for new office space; potential opportunities to partner with hospital.</li> </ul>
<b>Barriers</b>	<ul style="list-style-type: none"> <li>• Potentially high cost of infrastructure and low residential home values.</li> <li>• Modest 10-year market demand based on population growth.</li> <li>• Complex and unusual ownership structure for “for-sale” housing (ground-leased).</li> <li>• Low average area median incomes.</li> <li>• High construction costs for new development (and decline in construction employment).</li> <li>• Additional need for new management associated with rental housing.</li> </ul>	<ul style="list-style-type: none"> <li>• Potentially high cost of infrastructure and lack of market demand for many industry sectors.</li> <li>• Stagnant historical employment growth.</li> <li>• Existing employment clusters elsewhere.</li> <li>• Challenging site conditions such as slope, creeks, natural corridors.</li> <li>• Lack of access to site problematic.</li> <li>• Adjacent residential areas to employment zone possibly undesirable.</li> <li>• Other areas have competitive advantage over CIT lands, such as existing infrastructure and industry, and higher visibility.</li> <li>• Land ownership complexities.</li> </ul>

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### **III. Preferred Transportation Access and Circulation Alternative**

The preferred land-use alternative provides housing for approximately 1,400 units within the CIT site. Most of the projected housing is anticipated to occur in the North Parcel with residential access provided via Morrison Street and North Boundary Road. Additional space for housing development in the North Parcel is designated east of Penny Road with anticipated access provided via extensions of Spaw Boulevard and Kellogg Boulevard.

The South Parcel housing development is primarily anticipated to be accessed by Libby Spur via Libby Lane. Improving the Libby Spur to provide a connection from Libby Lane to Miluk Extension will create an opportunity for residential access as well as evacuation routing from the existing Kilkich residential area. Residential development is also feasible in the south west portion of the CIT with access provided via Tarheel Loop. Figure 8 illustrates the key roadways discussed throughout the preferred transportation alternative section as well as key access points to connect future residential areas to existing external roadways.



**Figure 8: Preferred Alternative Access and Circulation**

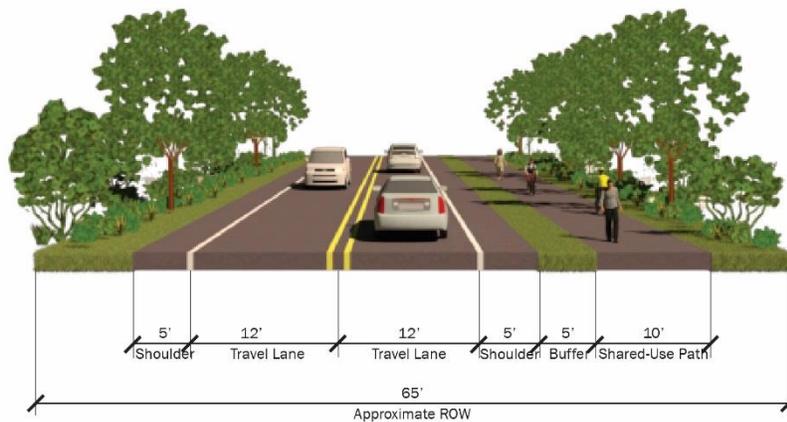
### Cape Arago Highway

Right-of-way information for Cape Arago Highway was obtained from the National Tribal Transportation Program Facility Inventory (NTTFI) 2014 and through a review of county tax parcel datasets. An assessment of these resources indicates two distinct right-of-way widths along Cape Arago Highway within the project area.

Throughout most of the Cape Arago Highway corridor, an 80-foot right-of-way is provided; however, in several segments of the corridor, a 65-foot right-of-way is provided. Roadway segments with a 65-foot right-of-way are primarily located at the intersection of Pigeon Point Loop and south of Pigeon Point Loop along Cape Arago Highway.

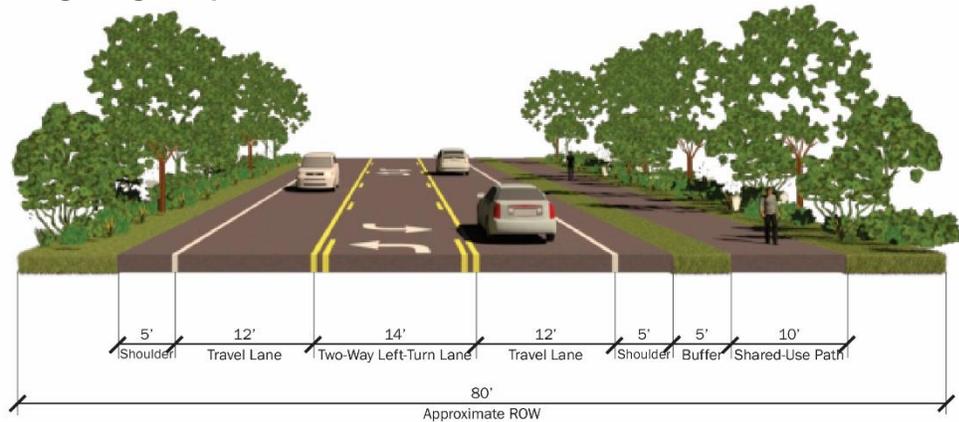
Left-turn volume criteria is met at multiple intersections along Cape Arago Highway where access is provided to the CIT site. Two separate preferred cross sections alternatives were identified for Cape Arago Highway depending upon whether a left-turn lane is provided or not. These are illustrated in Figure 9 and 10; both alternatives can be accommodated within a narrower 65-foot roadway cross section.<sup>8</sup>

**Figure9: Cape Arago Highway 65' Preferred Cross Sections**



<sup>8</sup> Environmental expansions, such as roadway widening and additions to impervious surface area within Oregon Department of Transportation (ODOT) right-of-way will likely require a stormwater runoff analysis to determine the appropriate type of mitigation needed. Environmental expansions and stormwater runoff analysis must be coordinated with ODOT.

**Figure 10: Cape Arago Highway 80' Preferred Cross Sections**



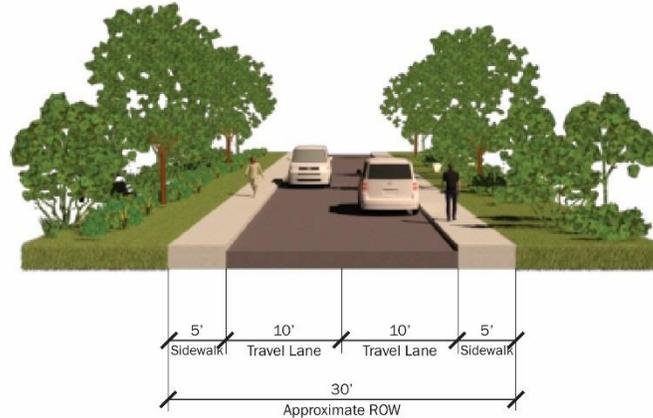
Refinement of conceptual construction costs were produced based on the cross-section elements shown in Figure 9 and Figure 10 for a segment length of 1000-feet. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. The preferred cross section alternative will cost approximately \$740 thousand to construct per 1000-feet for the 65-foot right-of-way alternative whereas the 80-foot right-of-way alternative including the center two way left-turn lane will cost approximately \$770 thousand per 1000-feet.

### **North Boundary Road**

North Boundary Road stretches 0.9 miles from the southern terminus of Morrison Street to Powerline Road through the eastern portion of the North Parcel. The roadway is classified by the Bureau of Indian Affairs (BIA) as a rural local roadway with mountainous terrain and a gravel surface type. North Boundary Road is an essential link in providing connectivity and access to the proposed residential and industrial uses in the North Parcel with key connections to Marshall Avenue, Morrison Street, and Nautical Lane.

Based on information provided in the NTTFI, a 30-foot right-of-way is available along the North Boundary Road. Based on the anticipated functionality of the roadway providing connectivity to future residential areas as well as its existing alignment with Morrison Street, it is recommended that the BIA designation be amended to reflect a rural minor collector roadway. The preferred cross section alternative for North Boundary includes two five-foot concrete sidewalks and two 10-foot improved travel lanes.

**Figure 11: North Boundary Road 30'-row**



A refinement of conceptual construction costs was produced based on the cross-section elements and roadway length for the North Boundary Road. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. The preferred cross section alternative will cost approximately \$1.6 million to construct for the full length of the North Boundary Road.

**Powerline Road**

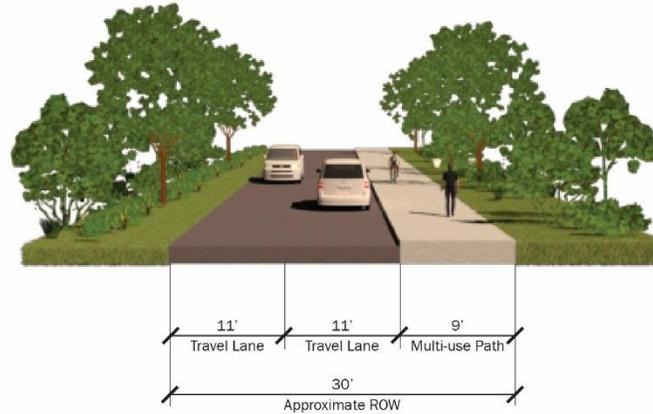
Powerline Road is the primary east-west roadway in the North Parcel stretching approximately 0.8 miles between Spaw Boulevard and the eastern terminus of the CIT site. The roadway provides external connections to Spaw Boulevard and Wisconsin Extension as well as internal connections to North Boundary Road and Second Creek Access Road. The roadway is classified by the BIA as a rural local roadway with mountainous terrain and a gravel surface type.



*Powerline Road looking east*

Based on information provided in the NTTFI, a 30-foot right-of-way is available along Powerline Road. Due to its existing function in providing east-west connectivity across the North Parcel as well as the proposed adjacent land-uses primarily consisting of open space, it is recommended that the BIA designation be amended to a rural major collector. The preferred alternative for Powerline Road includes two 11-foot travel lanes and a single nine-foot multi-use path. This preferred alternative attempts to address longer distance connections through open space and rural land-uses within the North Parcel.

**Figure 12: Powerline Road 30'-row**



A refinement of conceptual construction costs was produced based on the cross-section elements and roadway length for the Powerline Road. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. Generally speaking, the multi-use path alternative in comparison to sidewalks on both sides of the roadway is less expensive due to cost of curbing. The preferred cross section alternative will cost approximately \$1.4 million to construct for the full length of the Powerline Road.

### **Second Creek Access Road**

Second Creek Access Road is an important north-south roadway connecting Powerline Road to the North/South Connector. Together, Second Creek Access Road and North/South Connector provide the primarily north-south connections between the North and South Parcels. The roadway is classified by the BIA as a rural local roadway with mountainous terrain and a gravel surface type.



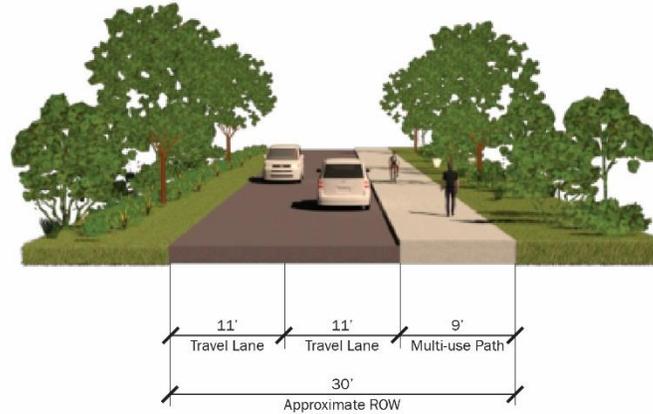
*Second Creek Access Road looking north*

Based on information provided in the NTTFI, a 25-foot right-of-way is available along the 0.6 miles stretch of Second Creek Access Road. The proposed land-uses adjacent to Second Creek Access Road primarily consists of open space; however, a significant area of residential land-use is proposed to the west between Penny Road and Second Creek Access Road. To access residential land land-use, local connections may be provided as extensions of Spaw Boulevard, Kellogg Boulevard, and Second Creek Access.

Due to its anticipated function in providing north-south connectivity between the North and South Parcels as well as the proposed adjacent land-uses primarily consisting of open

space, it is recommended that the BIA designation be amended to a rural major collector. As part of the preferred transportation alternative, it is recommended that the right-of-way of Second Creek Access Road be increased to 30-feet to accommodate a cross section treatment which can more safely accommodate all modes of transportation while providing increased connectivity.

**Figure 13: Second Creek Access Road 30'-row**



A refinement of conceptual construction costs was produced based on the cross-section elements and roadway length for the Second Creek Access Road. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. Generally speaking, the multi-use path alternative in comparison to sidewalks on both sides of the roadway is less expensive due to cost of curbing. The preferred cross section alternative will cost approximately \$1.1 million to construct for the full length of the Second Creek Access Road.

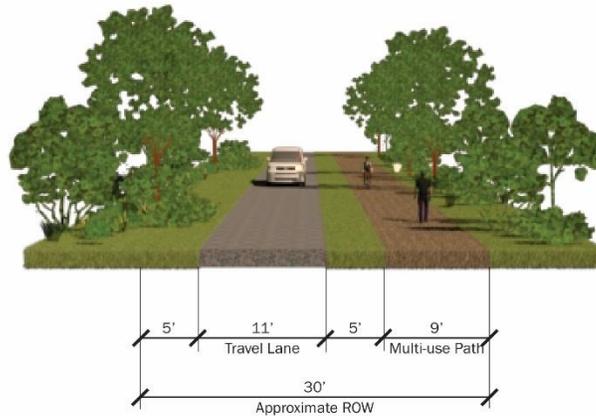
### North/South Connector

North/South Connector is the primary roadway connecting the north and south parcels of the CIT site. The roadway connects the extension of Grinnel Avenue and Second Creek Access Road from the north to Miluk Extension to the south. North/South Connector is approximately 1.2 miles in length with a 30-foot right-of-way and a gravel surface type. The adjacent proposed land-uses along the North/South Connector corridor primarily consists of forest with minor open space and residential land-use proposed towards the north of the roadway segment near Grinnell Avenue.



Due to the rural nature of North/South Connector, the preferred cross section alternative recommends maintaining a gravel surface roadway with a single bi-directional travel lane and designated pull-off areas to allow vehicles to safely pass each other. To accommodate pedestrians, bicyclists, hikers, and other non-motorized users, the preferred cross section for the North/South Connector also includes a nine-foot unimproved multi-use parallel to the roadway.

**Figure 14: North/South Connector 30'-row**



A refinement of conceptual construction costs was produced based on the cross-section elements and roadway length for the North/South Connector. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. The preferred cross section alternative will cost approximately \$440 thousand to construct for the full length of the North/South Connector.

**Miluk Extension**

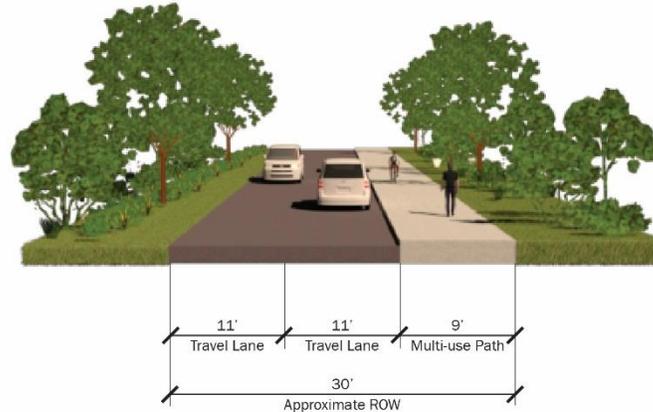
Miluk Extension, as indicated by its name, serves as an extension of Miluk Drive and is the primary roadway in the South Parcel. The roadway stretches approximately 0.8 miles and provides an opportunity to connect to Libby Lane via Libby Spur. The roadway is classified by the BIA as a rural major collector with rolling terrain and a gravel surface type. Through the public involvement process, concern was voiced regarding evacuation routing and emergency access to the Kilkich residential area. As part of the preferred transportation alternative, Miluk Extension via Libby Spur is recommended as the preferred evacuation route out of the Kilkich residential area to points east.



*Miluk Extension looking southeast*

Based on information provided in the NTTFI, a 30-foot right-of-way is available along Miluk Extension. The proposed land-uses adjacent to Miluk Extension primarily consists of residential multifamily with an open space buffer area between the Kilkich residential area. The preferred cross section alternative includes two five-foot concrete sidewalks and two 10-foot improved travel lanes.

**Figure 15: Miluk Extension 30'-row**



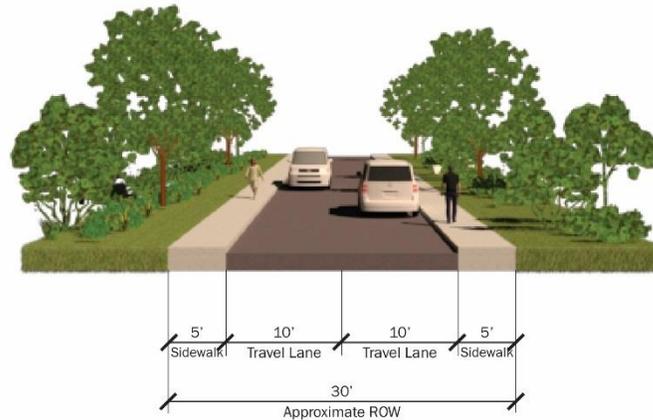
A refinement of conceptual construction costs was produced based on the cross-section elements and roadway length for the Miluk Extension. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. Generally speaking, the multi-use path alternative in comparison to sidewalks on both sides of the roadway is less expensive due to cost of curbing. The preferred cross section alternative will cost approximately \$1.4 million to construct for the full length of the Miluk Extension.

### **Libby Spur**

Libby Spur is an essential link in providing external access from Miluk Extension to Libby Lane. The existing Libby Spur is forested prohibiting access and connectivity to Miluk Extension from Libby Lane for most of its length. As noted under the Miluk Extension description, Libby Spur is intended to serve as the primary connection to Libby Lane for residential and evacuation routing.

Based on information provided by the NTTFI, a 15-foot right-of-way is provided along its 0.1-mile length with rolling terrain and earth surface type. In order to provide connectivity, the segment of Libby Spur must be cleared, and improved to accommodate a continuous roadway segment. The proposed land-uses adjacent to Libby Spur primarily consist of residential multifamily. The preferred cross section recommends that the right-of-way be increased to 30-feet to accommodate a cross section treatment which can more safely accommodate all modes of transportation while providing increased connectivity.

**Figure 16: Libby Spur 30'-row**



A refinement of conceptual construction costs was produced based on the cross-section elements and roadway length for the Libby Spur. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. The preferred cross section alternative will cost approximately \$230,000 to construct for the full length of the Libby Spur.

**Residential Roadways**

Details on residential roadways within the North and South Parcels are not identified within the preferred alternative; however, it is assumed that residential roadways will be intermittently dispersed throughout designated residential multifamily areas to provide local access to residential homes. Through the public involvement process, Mexeye Loop was expressed as a preferred model to replicate in most residential areas with the ability to provide denser development where needed. On-street parking on both sides of the roadway was also expressed as a desired outcome for future residential roadways. The preferred cross section is based on the Mexeye Loop cross section with the addition of on-street parking included on both sides.

**Figure 17: Residential 44'-row**



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Due to the uncertainty of the location and length of the internal residential streets, a refinement of conceptual construction costs was produced based on the cross-section elements shown in Figure 17 and a roadway length of 1000-feet. Cost estimates include an itemized breakdown of major earthwork, pavement structure, and other identifiable major components, signing, pavement marking, storm drainage systems, sidewalks, roadway widths. The preferred cross section alternative will cost approximately \$800 thousand to construct per 1000-feet of residential roadway.

Given the rural nature of the CIT site, it is worth noting that a smaller residential cross section width may be provided to efficiently accommodate residential needs by providing alternating on-street parking on both sides of the roadway and a shared single travel lane. This residential street type, commonly referred to as a “yield street” is appropriate for residential environments where drivers are expected to travel at low speeds. A yield street with parking on both sides functions most effectively at 24-28 feet, while a yield street with parking on only one side can be as narrow as 16-feet.

## **Public Transit**

### **Public Transit Needs**

Public transit service is provided along Cape Arago Highway by Coos County Area Transit (CCAT) which operates a fixed loop service referred to as the West Loop. The West Loop runs from Newmark Avenue to the north, to the unincorporated community of Charleston to the south, making approximately 35 stops throughout its two-hour run.

Several of the stops are located adjacent to the Empire Site including Pigeon Point – Dairy Queen (Stop ID #27), Sunset Market (Stop ID #6), Light House Grocery Market (Stop ID #7) as well as the Kilkich recreational building (Stop ID #5) located along Miluk Drive within the Kilkich recreational area.

Through conversations with CCAT staff, it was noted that the Kilkich Recreation Building (Stop ID #5) is only served by transit service traveling northbound along Cape Arago Highway due to the ease of the right-in, right-out maneuver on Cape Arago Highway. Stops are not permitted in the southbound direction due to the lack of a safe location for a bus stop on the west side of the highway near Miluk Drive. As a result, residents of the Kilkich area must ride the West Loop north to Newmark Avenue in order to turn around and travel southbound to Charleston or ride south to Charleston from Newmark Avenue to get to the Kilkich area.

### **Public Transit Recommendations**

There are several recommendations to better serve the transit needs for the residents of the Kilkich area as well as future transit service for the entire Empire Site. These recommendations are listed below:

- 
- Option 1 - Provide southbound service into the Kilkich recreational area (instead of northbound service) requiring left-in, left-out turning movements into Miluk Drive and provide a northbound stop along Cape Arago Highway at Miluk Drive. This would provide northbound and southbound access to transit for the Kilkich recreational area, maintain only one trip into the Kilkich recreational area for CCAT, but result in a minor increase to headways resulting from left-turn movements and an additional highway stop. As part of this recommendation, the existing sidewalk gaps on the east side of Miluk Drive should be filled to provide a continuous pedestrian connection from the Kilkich recreation area to Cape Arago Highway.
  - Option 2 - Construct a bus pull-out on the southbound side of Cape Arago Highway opposite Miluk Drive to allow for a designated space for buses to pull off and allow for transit users to safely board and alight transit vehicles. In order to safely cross Cape Arago Highway to the proposed bus stop location, an enhanced pedestrian crossing of Cape Arago Highway near Miluk Drive should be considered.
  - As internal collector roadways and land uses are developed within the Empire Site, the feasibility of rerouting transit service from Cape Arago Highway through the Empire Site between Miluk Drive and Spaw Lane should be evaluated.

In September 2017, the CCAT applied for a federal transit grant in partnership with the Coquille Indian Tribe (CIT) to improve local bus service within Coos Bay and North Bend. In December 2017, it was announced that the \$200,000 grant would be awarded to the CCAT and CIT through the government's Tribal Transit Program. Details on expanded service have yet to be determined; however, the CIT has indicated that headways will be reduced from 90 minutes to approximately 55 minutes along the West Loop.

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## **IV. Implementation**

### **Local, State, Land Use and Environmental Approvals**

#### **Land Use**

Nearly the entirety of the Empire North and South Parcels is held in trust. As a sovereign nation, the Coquille Indian Tribe has in most circumstances the right to plan and manage development on trust lands based on internal ordinance, rules, and plans. The exceptions would be for the three parcels of land held in fee within Empire – the CSD Parcel and Lewis Connector Parcel in Area B, and the very small Nelson Parcel on the edge of Area E-West. The Tribe is well into the process to bring these parcels into trust.

For lands held in trust, local and state land use regulations do not apply. However, these regulations would apply if development occurs while the lands are still held in fee. Nonetheless, as about half of Area A is within the city limits of Coos Bay, and some existing Coos Bay utilities may be the best options for extending services into this area, early coordination with the City is advisable. The land uses suggested for Area A are however similar and compatible with those within the City to the immediate north and east this area, so no conflicts are anticipated in this regard.

Areas B, E and F may also be best served, including utilities and roadways, through existing unincorporated neighborhoods. Early coordination with Coos County and these neighborhoods is advised.

#### **Environmental**

The Tribe's sovereign status also limits the range of environmental permitting and mitigation that can be required as an outcome of the application of the laws and regulations of other government entities. To the extent such regulations are applicable two aspects of the Empire Parcels should limit impacts and simplify permitting:

- Nearly all of the 1,000+ acres in Empire were logged off in the 1970's as part of the land transfer between the prior owner and the Tribe. Thus, there is no old growth timber or associated species within the area.
- The Open Space and Forest zoning designation boundaries mapped in this TM #5 effectively exclude streams and associated riparian corridors, flood zones and wetlands, open bodies of water, and slopes about 15% grade from any form of residential, commercial, or industrial development. This includes any such natural areas within Comprehensive Plan areas otherwise designated for development. Therefore, environmental permitting requirements should be limited and very site specific.

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## **Description of Applied Zoning**

Implementation of the new Comprehensive Plan will include applying zoning regulations to designated land within the Empire site. Current zoning regulations are codified in Chapter 315, the Land Use and Zoning Ordinance of the Coquille Indian Tribal Code (CITC). Zoning changes are recommended to reflect the Tribe's vision for future development of the community.

A unique feature of the zoning approach is that the Tribe is both the regulator and the regulated, as the sole land owner of the property within the Empire Site. Typically, zoning is developed by the regulating jurisdiction to guide development by individual property owners that complies with the broader community plan and limits impacts on other properties. Because the Tribe is regulating its own future actions, many of which will come to the Tribal Council for land use review, the zoning code serves the unique role of guiding development while maintaining future flexibility, and is less prescriptive than a standard zoning code. The following changes are recommended in that spirit, to frame general future land development direction within a flexible system rather than an overly deterministic, detailed set of regulations.

Recommended changes include:

**Permitting large-lot residential uses in a new "Rural Residential" zone:** The developable portion of Area E-East is proposed for Rural Residential zoning. The new Rural Residential (R-R) zone would permit homes at an average density of 2-5 homes per acre on lots as large as 1 acre, permit more than one dwelling per lot, and allow for raising of livestock, with other conditional uses and dimensional standards similar to the existing Residential Zone R-1 standards.

Benefits to the R-R zone approach include creating a tailored set of regulations that accommodates rural residential-scale living and protects the area from more intense residential development. Concerns include limiting the future development potential of the land by imposing density limits, and complicating the zoning ordinance with an additional zone. From a resource management perspective, there may also be concern about promoting residential development at a relatively low density given the finite nature of land resources and costs for land development related to road and utility extensions.

An alternative approach would be to modify the existing Residential Zone R-1 provisions to accommodate these same uses. The R-1 zone permits single-family dwellings on 6,000-square-foot minimum lots with no maximum lot size or density standards, with limited agricultural uses. Because there is no maximum lot size or minimum density, larger lots such as envisioned for the R-R zone would not be precluded under R-1 zoning. Permitted uses in CITC 315.250 could explicitly permit more than one dwelling per lot, and existing lot size standards are already written to require 6,000 square feet per dwelling rather than per lot which would effectively regulate the maximum number of dwellings permitted on a larger lot. "Raising of flowers, fruits and vegetables" as a permitted use in CITC 315.250(1.) could also be expanded to include raising of livestock.

Benefits of modifying the R-1 zone include maintaining the simplicity of the existing zoning ordinance rather than creating a new, single-purpose zone, and providing greater flexibility for development within the R-1 zone at various lot sizes. Concerns around modifying the R-1 zone rather than applying a specific R-R zone include limited ability to maintain the rural character, and unintended effects in other R-1 areas. If there is a desire to limit the scale of development to no more than 2-5 dwellings per acre in these rural areas, then a modified R-1 proposal would not offer that security since it would allow development of up to 7.2 dwellings per acre on 6,000-square foot lots. Changes to the R-1 zone could also result in larger lot sizes and livestock uses in areas intended for more traditional urban residential scale and zoned R-1; at present the R-1 zone is not proposed anywhere else on the Empire site which would limit the potential spillover effect, but R-1 may be desired in the future and may be in use on other Tribal properties outside of Empire.

**Expanding residential opportunities in the R-M zone:** Most of the developable land in the Empire site is proposed as Residential Multifamily (R-M), including portions of Areas A, B, E-West, E-East and F. R-M is the most flexible residential zone in the zoning code, permitting single family, duplexes, multifamily, manufactured home parks, and row houses. To implement the Comprehensive Plan concepts, the R-M zone should be expanded to include more “missing middle” housing types—housing types that are in the “middle” between single-family detached homes and apartment units—such as cottages, senior housing like assisted living, and accessory dwelling units (ADUs). Recommended changes:

- Expand list of permitted residential uses in CITC 315.310 to include ADUs, cottages, and assisted living options, and add definitions of dwelling types to CITC 315.020.
- Develop dimensional standards specific to each type of dwelling in CITC 315.320-335, as appropriate. For example, review the row house dimensions to ensure they line up with building models, and introduce alternative dimensions for cottage housing projects.
- Develop ADU standards that support development. Common regulatory obstacles to ADU development are requirements for owner occupancy of either the ADU or primary dwelling, off-street parking requirements for the ADU, requiring design compatibility between the ADU and primary dwelling, and restrictive minimum sizes or limited site configurations for the ADU. Recommended regulations in CITC 315.310 would permit attached or detached ADUs, up to 800 SF, no design standards specific to the ADU, compliance with the height and setback standards for the zone, no occupancy standards, and no or one off-street parking spaces required. ADUs would be allowed in addition to a primary dwelling on a lot meeting the minimum size, that is, exempt from density limits.
- Develop cottage housing standards that reflect the elements of cottage housing desired. The cluster of detached, traditional cottages with front porches around a common green with parking at the rear and sides of the projects is appealing, but rarely gets built because of relatively high construction costs, prescriptive design standards, and a lack of experienced developers and financing options. Given the generally flexible nature of the CITC provisions, relatively small changes in CITC 315.310 and related sections could open possibilities for cottage housing without regulating it as strictly as many traditional code. For example, a definition that

states multiple attached or detached structures are permitted on a single lot, a minimum front porch requirement, dimensional standards along the lines of one dwelling unit per 2,000 square feet of lot area, an exemption from minimum lot frontage per dwelling, adjusted yard standards, minimum common open space requirements, and minimum parking requirements would address the key features of a cottage housing standard. One consideration with the cottage housing standards is that there is usually a trade-off between higher densities for smaller units with more common open space, however, there is not much of a density “bonus” available to give in the RM zone given the existing minimum lot sizes, so the restrictions on size and requirements for open space should be minimal to keep cottages a feasible development option.

**Including supporting neighborhood commercial and social service uses in the R-M zone:** A limited range of nonresidential uses to support residential uses is desired under the R-M zone, to allow for limited neighborhood commercial in residential neighborhoods. Churches, governmental uses such as playgrounds, libraries, or museums, and schools are currently conditional uses in the RM zone. (CITC 315.315.) Recommended changes would:

- Add retail sales and business and professional offices, which could include health services, as conditional uses in the RM zone. These new uses could either be allowed as permitted or conditional uses. Given the importance of compatibility in a residential neighborhood, a conditional use review is recommended for retail and office uses and retaining conditional use review for the public and cultural uses, but a potential concern is the additional review burden it would create.
- A size limit on nonresidential uses is also recommended as a conditional use review criterion in CITC 315.690, limiting such uses to around 2,500 to 3,000 square feet.

**Expanding the “Employment” zone:** A portion of Area A is proposed as Employment zone to facilitate a range of office, industrial and storage development. The current zoning code includes the “Light Industrial” zone which permits a range of light manufacturing, warehousing, and related industrial processing uses. (CITC 315.365.) To implement the Comprehensive Plan concept for this area, recommended updates to the Light Industrial zone include:

- Rename the zone “Employment” rather than “Light Industrial.”
- Expand the permitted uses to include “business and professional offices,” and review whether any other conditional uses including government services and retail uses should be made permitted uses.

**Accommodating recreational uses in Open Space and Forest zones:** The Open Space and Forest zones are proposed across the Empire parcels to preserve natural resources, including the economic viability of forest resources, and limit competing development. There is interest in permitting a limited range of recreational uses in these areas, particularly on Open Space-zoned lands in Area C and Forest-zoned lands in Area F in the vicinity of the Plankhouse. Recreational uses could include a range of picnicking, parks, and camping and other temporary lodging uses.

The current zoning ordinance permits “recreational opportunities appropriate in a forest environment” in the Forest zone, and “camping and picnicking” as well as hunting, hiking and recreational trails in the Open Space zone as permitted uses. (CITC 315.395, 315.400 respectively.) None of these terms are defined in the definitions section, or otherwise regulated.

Potential zoning code changes to accommodate the desire for recreational and temporary lodging within the Forest and Open Space zones could look to expanding allowed uses in the respective zones and adding definitions that limit recreational development to a scale consistent with the resource uses. A primary consideration for the Tribe is the scale of desired development and tolerance of related site improvements within resource areas to minimize impacts, particularly related to temporary lodging which could range from basic campsites with no utility hook-ups to fully serviced cabins. Recommended code changes include:

- Develop definition of “camping” that matches the Tribe’s desired level of development. Camping could allow for temporary use of tent, travel trailer, yurt, and/or recreational vehicles, with or without utility hook-ups, with or without communal facilities such as a lodge, restrooms, play fields, picnic shelters, and similar.
- If additional lodging options are desired beyond those included under “camping,” develop terms and definition to cover proposed uses. Consider whether full utility services could or should be extended to serve such lodging, and the impact of development on the resource areas.
- Replace “recreational opportunities” as a permitted use in the Forest zone with more specific permitted uses, using the same terms as used in the Open Space zone. For example, permit hiking and trails as specific uses. Develop any additional terms needed to describe potential recreational uses.
- Review full list of recreational and camping/lodging uses, and determine which are compatible in each of the Forest and Open Space zones, and which should be permitted or conditional uses. Generally, we recommend the more intensive uses be permitted in the Open Space zone with more limitations on uses in the Forest zone to preserve the resource viability. Camping, for example, could be a permitted use in the Open Space zone and a conditional use in the Forest zone.

Although the Tribe is not bound by Oregon land use laws, the statewide regulations for forest land could provide a model of how to balance recreational uses and forest practices. Private and public parks and campgrounds are conditional uses in forest zones to protect the resource base, and may be developed with sites for tent, travel trailer, yurt, camper cabins, or recreational vehicles, without individual hook-ups for utilities, where occupancy is limited to 30 days within a 6-month period. Sites may include supporting features such as shelters, recreational amenities, boating and swimming areas, a camp store, interpretative centers, and similar. (See OAR 660-034-0035 and ORS 215.459, e.g.) There are also limited lodging opportunities permitted in the forest zones for seasonal accommodations associated with hunting and fishing operations, which may serve as a template for seasonal accommodations sought by the Tribe.

Benefits of a more inclusive definition of “camping” and other recreational uses include greater flexibility for future development, but with potential concerns around higher costs for road and utility extensions and impacts to the forest and natural resource lands that may compromise their long-term viability for future generations.

## **Funding Strategy**

Funding strategies should explicitly identify the best opportunities for development in any given area and identify the tools and programs available to further such development. These tools and programs should help address any established feasibility gaps associated with such future development. However, in this case, many of the specifics about future development are unknown, including, most notably, the cost of constructing the infrastructure necessary to support any given number of housing units or employment uses. It is therefore important to instead address the realities of the market, establish general financial thresholds for land development, and generally discuss potential funding tools and sources that may help bridge future funding gaps.

## **Overview**

### Employment Zone

Employment-based development is particularly challenging on CIT land and unlikely to happen in the short- to medium-term. To summarize the earlier section, there has been minimal new industrial development in Coos Bay in the last decade<sup>9</sup>, and while there has been more office and commercial development, the area is unlikely to be an attractive location for office and/or retail or other commercial development. Challenges include slope, natural/stream corridors and creeks (and the higher associated cost of utilities and ROW), access, and low visibility. Nonetheless, it is reasonable to designate this as an “employment” area in order to keep the options and opportunity open for the future.

Given the many challenges associated with employment development, the best short-term strategy for the employment lands is to do nothing; designating the land for future employment is sufficient at this time. Given the lack of market demand and challenging site conditions, the Tribe should also maintain maximum flexibility in the zoning code to ensure future market conditions and demands can be accommodated. If further specificity is added to the code, there is a danger of being too specific, detailed, and prescriptive and constraining future options.

If or when demand for employment development is sufficient to warrant new construction, the New Markets Tax Credits (NMTC) Program, which provides tax credits to private investors looking to make investments in job creation or material improvements in low-income communities, and other programs can help bridge feasibility gaps. A description of some funding programs is provided in Appendix B.

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<sup>9</sup> While the lack of new industrial development may be due in part to the lack of buildable lands in the region, many other conditions exist which remain unattractive to industrial users.

Nonetheless, residential development should be considered the primary focus, rather than employment-based development.

### Residential Zone

While residential development should be prioritized, implementation remains challenging as the cost of land development and housing development are relatively high (given high construction costs and lack of existing infrastructure), and home values are lower in the area than other markets (e.g., Medford). As such, phasing will be critical to implementation (a detailed phasing plan will follow this section). The Tribe should also focus predominately on rental housing rather than “for-sale” housing since the land cannot be sold to potential homebuyers, resulting in a lower value housing product. Prospective tenants will most likely be more familiar with a rental product, which should increase the development's marketability, even though rental single-family is often unusual (outside of private rentals).

The first step to getting new residential development on CIT lands is preparing the land. The market value of the land will greatly determine how much the Tribe and/or CEDCO can spend on infrastructure to prepare the land for new development. The following development scenario presents the likely conditions facing new development on CIT lands (especially Area A).

### *Model Housing Development Scenario*

While every parcel can be very different and present conditions which will drastically alter the cost of development, the following characteristics are likely true of the residential zones in Area A:

- Land lots valued at \$8 to \$10 per square foot (in keeping with comparable nearby lots).
- Average lot size would be approximately 4,000 square feet in size (\$40,000 at \$10 per square foot).
- Home values are likely to be valued at \$150 per square foot of living area but may rise to as much as \$200 per square foot, depending on market demand and the quality of the product.
- Density of dwelling units per developable acre is range from six to 16, likely averaging around 12.
- New development would require no more than 80 percent of estimated land value (about \$32,200 for a 4,000-square-foot lot valued at \$10 per square foot) attributable to utilities and other lot preparation activities.

Under this scenario, feasibility of new development would depend on the total cost of soft costs, site preparation, and utilities totaling no more than \$32,000 per lot. Greater costs than this would significantly diminish feasibility unless additional sources of funding were found to make up the funding gap.

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However, there are ways for the CIT to bridge funding gaps caused by higher construction costs and other factors. These include funding grant and loan programs from the state and federal government, including New Market Tax Credits, BIA funds, and Opportunity Zones (now being defined), as well as others that target certain market sectors, such as student or senior housing, and partnering with particular agencies, such as a low-income housing agency.

### **Funding Sources**

The scale and type of development varies drastically for each of the areas on CIT land. The southern section will remain exclusively for CIT members, in contrast that of the northern section, which will consist predominantly of market-rate housing. Due to market demand, residential development in the northern parcel will also be significantly larger in scale and will no doubt require significant funding. For this, there are grants, government agency loans, loan guarantees, and other programs that could fund or support elements of the larger project(s). All grants or loans have similar issues limiting or challenging the effective of this form of funding – availability, size of the grant or loan, matching requirements, and especially timing.

An extensive list of funding tools – including federal and state programs – exist not only for federally-recognized Tribes, but also for rural areas and small towns/cities for which the area mostly qualifies. These are often very competitive and require significant time and effort to obtain funding (in the form of loans, grants, etc.). While any combination of programs and grants are not likely to cover the total cost of building an entire subdivision, they may help bridge funding gaps.

A sampling of these programs and brief descriptions and links for each is provided as an appendix to this report.

### Eligibility

Federal grant and loan sources available to other units of governments almost always include tribal governments or tribal enterprises as grant eligible. There are also many grant and loan programs available exclusively to tribes. Some programs – the Indian Reservation Road Program under BIA for instance – offer tribes an annual entitlement.

### Housing Funding Opportunities

As the land cannot be sold—resulting in added ownership complexities—most new housing units will be renter-occupied. Fortunately, many programs exist exclusively for rental housing (many are also affordable housing programs).

1. **Multifamily Housing Loan Guarantees and Direct Loans (USDA):** works with qualified private-sector lenders to provide financing to qualified borrowers to increase the supply of affordable rental housing for low- and moderate-income individuals and families in eligible rural areas and towns.
2. **Title VI Tribal Housing Activities Loan Guarantee Program (HUD):** provides an additional source of financing to create new housing; rehabilitate housing; build infrastructure; construct community facilities; acquire land to be used for housing; prepare architectural and engineering plans; and fund financing costs.

3. **Rural Rental Housing Guaranteed Loans (USDA):** provides loans for safe, well-built, affordable rental housing for low to moderate income individuals and families.

If not already doing so, the tribe should have a designated point-person to explore all available funding sources for new housing.

### **Capital Funding Opportunities**

As CEDCO is not likely to have the capacity to pay for major infrastructure improvements, utilizing capital funding programs for specific infrastructure—roads, water and sewer, power, etc.—is arguably the best chance the Tribe has to bridge any funding gaps. A significant amount of infrastructure will need to be built by the Tribe or CEDCO, and programs for infrastructure stand the best chance of securing grant or loan support.

It cannot be overstressed that infrastructure should be implemented on an opportunistic basis when funding becomes available. Combining available capital funding opportunities and a conservative phased approach to encourage efficient spending should help bridge funding gaps, to an extent.

Some examples of programs that apply to the CIT development are as follow. All possibilities should be carefully monitored to understand their current status and grant cycle as a given CIT project is defined and ready for implementation.<sup>10</sup>

1. **Indian Community Development Block Grants (US HUD):** can be applied to affordable housing (but primarily rehab, not new), basic utility infrastructure – sewer, water, road, and some community building, and some other facilities associated with economic development. Also has a loan guarantee program.
2. **Rural Development Grants and Loans (USDA):** applied to housing, also some other capital development including community facilities and utilities.
3. **Clean Water Indian Set-Aside Grants (US EPA):** funds wastewater infrastructure.
4. **Indian Loan Guarantee Program (BIA):** provides a variety of support programs improving access to capital funding.
5. **Clean Energy on Indian Lands (US DOE):** the US DOE Office of Indian Energy has a capital grant program that periodically awards funding for development of renewable energy systems.

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<sup>10</sup> GRANTS.GOV is the US Government clearinghouse for all federally sponsored grant and loan programs and should be periodically referenced.

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## **Phasing Criteria and Concepts**

### **Background**

Given that the entire Empire Parcels are under CIT control, with most of the land being in held in sovereign trust, the Tribe can exercise land use planning and decision-making in an independent manner that is not available to private developers or even to other governments. Subject to the availability of development funding, any practical limitations to access and utility service extensions (topography, regional capacity, etc.), and demand for certain land use types in the Coos Bay region, the CIT will have few external limitations as to when to proceed with development consistent with any of the areas or land uses suggested by this comprehensive plan. The CIT is the land owner, ultimate land developer, and except for three smaller parcels that are owned fee-simple, the land use authority.<sup>11</sup>

### **Phasing Zones**

Suggested Empire developable “zones” for *phasing concept purposes* are described below. Figure 18 illustrates the boundaries of these potential phasing zones within each area, as well as the lands within each phasing zone that are excluded from development due to steep topography, major stream and riparian corridors, and other significantly constraining physical features. These constrained areas are typically designated Open Space (OS) or Forest (F), although some minor streams and headwaters with no documented riparian vegetation are left in a developable designation (Residential or Employment).

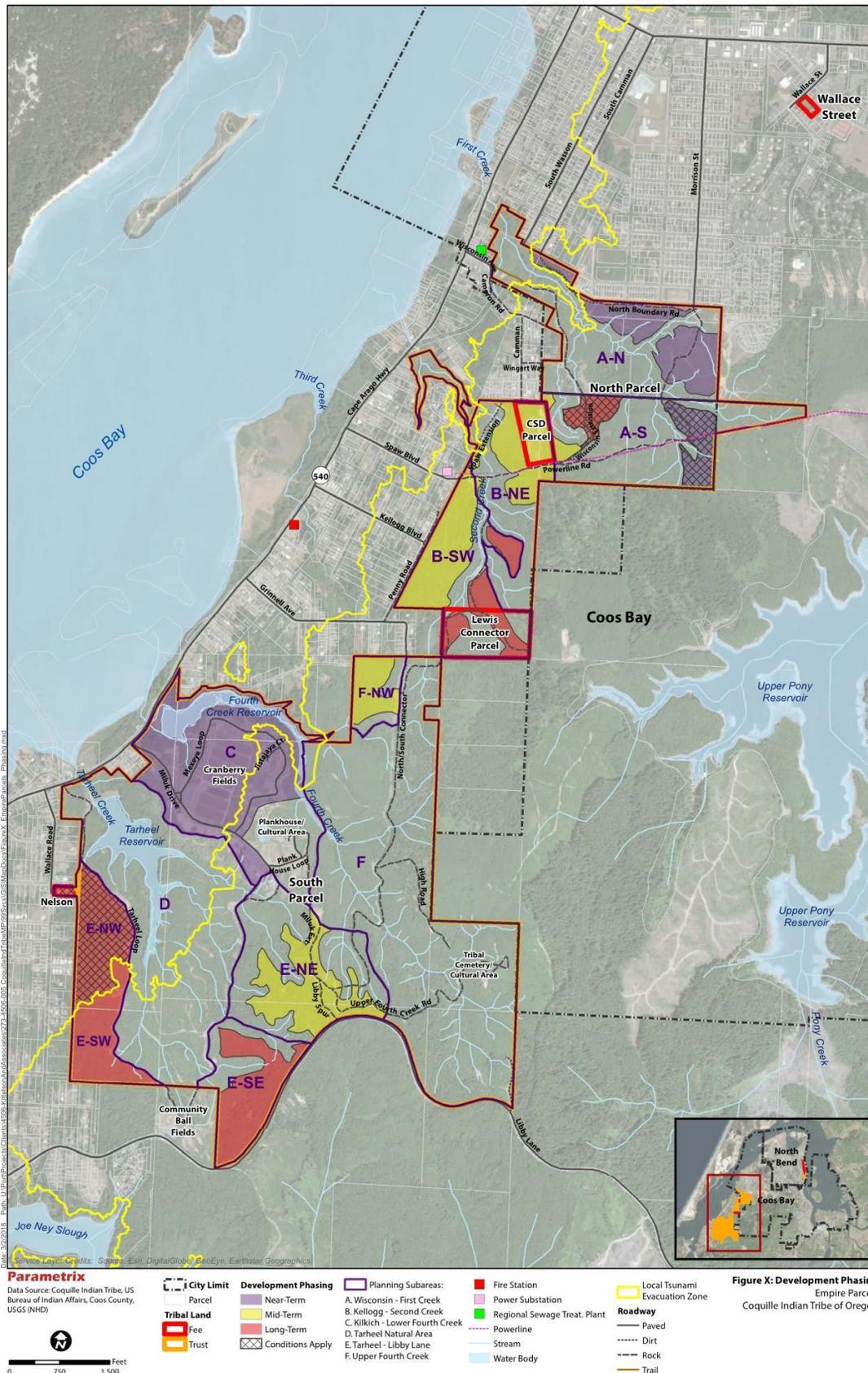
The CIT has indicated that, in general, those parcels considered for development in Empire North (Areas A and B) could be made available to non-Tribal individuals or entities, while parcels in Empire South (Areas C, E and F) should primarily be considered for use or occupation by CIT citizens.<sup>12</sup>

Area A also includes two areas of land designated for future employment-generating land uses - commercial, office, tribal services, possibly light industrial) along extensions of Wisconsin Avenue and/or Cameron Road. Kilkich Village (Area C) also holds potential for additional or redeveloped commercial, office, and tribal service facilities, particularly on the southeast side of Miluk Drive and the northwest side of Mexeye Loop. To provide maximum flexibility to the CIT, the comprehensive plan land use designation for Area C is uniformly Residential Medium (R-M) as existing commercial and public service facilities are mixed in with residential areas.

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<sup>11</sup> Otherwise developable Empire parcels held in trust cannot however have ownership transferred to private individuals or entities, thus constraining development feasibility and options in a manner not applicable to the private land development market.

<sup>12</sup> Nothing in this phasing concepts analysis should be taken as a limitation to developing tribal-only housing or other tribal-only uses in any Empire development phase or time frame, or in any given area or zone, should development funding and other opportunities become available.



**Figure 18: CIT Empire Parcels: Phasing Diagram**

**Figure X: Development Phasing Empire Parcels**  
 Coquille Indian Tribe of Oregon

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**Area A. Wisconsin-First Creek.** Area A divides for phasing purposes along the City of Coos Bay city limits which splits the area into North and South Zones, with the North Zone being within the City.

1. In the North Zone, north of First Creek, a creek tributary splits this area into two developable units, both designated Residential Multifamily (R-M). The stream corridors could be bridged allowing a concurrent, unified development.
2. The South Zone is outside of the city limits and otherwise greatly constrained by considerable topographic and stream/riparian corridor limitations.
  - Steeper topography and the First Creek riparian corridor isolates otherwise developable lands on the east side of the South Zone. If "extraterritorial" service extensions from the City could be negotiated, First Creek could be bridged and this area developed as part of the North Zone.
  - Topographic and stream corridor constraints reduce the developable area even more so on the west side of this zone. This being so, this second area is probably most feasible if phased concurrent with the Area B - Northeast Zone (see below).

**Area B. Kellogg-Second Creek.** Area B is divided by the line of the Second Creek Access Road and two unnamed spur roads, as well as by Second Creek and abutting steep slopes. These factors suggest dividing Area B into Northeast, Southwest, and Lewis Connector Zones for phasing purposes. This Area B includes the two larger fee-simple parcels in Empire – "CSD" on the north end and "Lewis Connector" on the south end.

1. Northeast Zone includes the CSD Parcel. As noted above, development of the west side of Area A - South Zone is probably most feasible if undertaken concurrently this Area B zone.
2. Southwest Zone runs along Penny Lane on its west side. Two narrow, more isolated areas of developable land in this zone are however east of Second Creek and the Second Creek Access Roadway.
3. Lewis Connector Zone could be developed concurrently with the Southwest Zone, but in general, the Lewis Connector Parcel and other lands east of Second Creek are more significantly constrained by topography and riparian corridors.

**Area C. Killich-Lower Fourth Creek.** Area C is the location of existing Killich Village residential/tribal facility development, as well as the Plankhouse Cultural Area and the CIT's commercial cranberry fields. Areas used for residential development and tribal facilities, excluding agricultural and recreational facilities and cultural facilities in the Plankhouse area, are considered as a single zone for phasing purposes.

Residential land still available for building in Area C is limited, but has the advantage of already being serviced by paved roadways and newer water and wastewater utilities. There also appears to be vacant lands in and around some of the existing Kilkich Village tribal facility sites that could be used for expansion or redevelopment.

**Area E. Tarheel-Libby Lane.** Area E was split into West and East areas at the Opportunities and Constraints stage of this comprehensive planning effort to reflect the intervening Area D: Tarheel Natural Area. The third Empire fee-simple parcel (“Nelson”) is contiguous to the West portion of Area E but is very small, essentially the size of a rural home site lot. Nelson is probably only useful as a future access connecting Area E development through neighboring private residential neighborhoods to Wallace Road. Wallace Road directly intersects with Cape Arago Highway.

Based on discussions with the CIT:

1. The West section of Area E is now split into Northwest and Southwest Zones along the “local tsunami evacuation line” that extends across the entire original West area at mid-point.
2. The East section of Area E is now split into Northeast and Southeast Zones along a stream/riparian corridor that extends across the entire original East area at mid-point.

**Area E. Upper Fourth Creek.** Area F is primarily excluded from development and reserved for forestry or cultural purposes (Tribal Cemetery). The northwest corner of Area F – Northwest Zone is designated for residential development. This zone could be developed by connecting directly to existing private residential neighborhoods to the north and west around Grinnell Avenue.

### Phasing Criteria

In referring to the findings and outcomes embedded in TM #3 and TM #4, several standards were used in arriving at phasing concepts and development priorities between or within the several Empire areas or zones that were determined to have future development potential. Phasing priorities exclude those portions of the “developable” areas or zones that are designated for Open Space, which includes riparian corridors, steep slope areas, parks, wetlands and other water features, and cultural areas, or Forest lands, limited to Area F.

As these phasing concepts are intended as guidance only, and the sovereign Coquille Indian Tribe can exercise unique authority and flexibility in managing the timing, pace, and sequence of development, the following criteria are applied in a simple narrative manner (i.e. no rating numbers or levels). For roadways, water, and wastewater, the following service levels were considered for phasing purposes.

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- Adequate services for the intended land use are in place.
  - Upgraded services may be required, such as road paving or widening or replaced or larger diameter utility lines.
  - New services may be required, such as totally rebuilt roads or completely new water/sewer line where none now exist.

Factors suggested in applying topographic and natural feature constraints to the phasing of these remaining developable parcels are:

- Location both relative to prior development and existing services, and with respect to being isolated from or contiguous to other developable parcels.
- Size larger is typically better.
- Configuration more uniform shapes are typically better.
- Connectivity can the intervening OS areas be “bridged” without significant harm to the resource?<sup>13</sup>

### **Relevant Empire Conditions**

The relevant conditions that may have a material impact on development and development phasing are:

- Topographic and natural features
- Roadways
- Water Supply
- Wastewater

### **Topographic and Natural Features**

Within the entirety of Empire, most streams and associated riparian corridors, and all slopes over 15% grade, are uniformly excluded from development by this comprehensive plan (see Figure 2). These excluded lands are designated Open Space (OS). Therefore, in support of environmentally responsible development, many development impacts on these natural resources and features are simply avoided.

The impact of these exclusions on otherwise developable lands will however in some cases limit future development, and potentially increase development costs, by complicating roadway and service extensions, and/or diminishing the net yield of buildable lots where subdivision patterns are adjusted to “fit” around and between OS boundaries.

Different and potentially more costly solutions for “bridging” OS areas to connect development zones may also be required.

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<sup>13</sup> All service level characterizations are based on input from the local utilities and brief field observations. No survey, testing, or engineering was conducted). The term “bridge” as used herein can be an actual bridge but also encompasses other solutions – elevated road beds, roads over culverts, etc.

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## Roadways

### Direct Connection to Cape Arago Highway

Most vehicular access into Empire will originate directly from Cape Arago Highway via relatively short sections of local roadways that intersect with Cape Arago. The highway is deemed adequate for future Empire development access purposes, although selected improvements upgrades, particularly to bicycle/pedestrian facilities, would be desirable. Access to the south end of Empire from Cape Arago is via:

- Libby Lane which connects to Cape Arago Highway near the community of Charleston. This roadway is deemed adequate for future Empire access purposes.
- Wallace Road and Tarheel Loop also intersect with Cape Arago, but would probably require upgrades to be points of access to a developed Area E-West.
- Local roadways within Kilkich Village, which except for some unpaved sections leading into Area E-East, are also considered adequate.

### **Collector-Type and Other Roadways**

#### External

Existing local roadways that serve a collecting function, even if not formally designated as Collectors, and that could be extended into Empire, include the following. The characterizations as “adequate”, “needs upgrade”, or “new” are applicable to only existing roadway sections that are outside of Empire if used as an entry point to new Empire developments.

- North end of Empire through Coos Bay neighborhoods (South Camman and Morrison). These roadways are assumed as being adequate as currently built.
- Through older private residential neighborhoods at the southwest end of Empire (Wallace). These are assumed as needing upgrades.
- Through older private neighborhoods between Cape Arago Highway and the west side of Empire (Cameron, Spaw, Kellogg, Grinnell, and Penny). These are deemed as needing upgrades.

#### Internal

Except for Kilkich Village, nearly all existing roadways within the boundary of Empire are gravel surface. To the extent these roadways are used in the future to access new Empire developments, conventional residential subdivision standards would indicate that collector-type roadways should be paved and otherwise upgraded.

Upgrades could therefore apply to all or portions of Wisconsin, Cameron, Morrison, North Boundary, Powerline, Spaw Extension, Second Creek Access, North-South Connector, Miluk Extension, Libby Spur, Upper Fourth Creek, and Tarheel Loop, plus two unnamed spur roads in Area B that access areas with some development potential. In addition, these roadways may require widening or even a complete rebuild and/or realignment based on final development patterns.

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There are no built roadways traversing Area E-West or the Southeast Zone of Area E-East. The gravel Tarheel Loop Road does bound the east edge of E-West, and paved Libby Road the southeast edge of E-East. Tarheel Loop would need upgrading if used to access development in E-West.

## **Water Supply**

Regional water service main lines follow Cape Arago Highway, and connecting lines extend into the Kilkich Village development. Input from the regional water provider indicates that main lines are all adequate for current demand and could serve any foreseeable future level of development within Empire.

The regional water provider also provides service to newer private residential neighborhoods in Coos Bay north and east of Area A – North Zone. These water supply services are deemed adequate for extension into Area A. Service is also provided to older unincorporated private residential neighborhoods on the west and south sides of Empire North. Based on the observed age and condition of these older neighborhoods, neighborhood water line upgrades are assumed to be probably necessary if extended into Empire in the future for development purposes.<sup>14</sup>

## Wastewater

The new regional wastewater treatment plant is located on Wisconsin Avenue on the west edge of Area A - North Zone, providing adequate treatment capacity for any developments contemplated for Empire. Regional wastewater collection mains follow Cape Arago Highway, with connecting lines extending into the Kilkich Village development. Input from wastewater service providers indicates all collections mains are adequate for current demand, and could serve any foreseeable level of future development within Empire.

- The City of Coos Bay provides wastewater collection service to newer private residential neighborhoods north and east of Area A - North Zone. These services are deemed adequate for extension into Empire to serve future uses.
- Wastewater collection service is provided by Charleston Sanitary to older unincorporated private residential neighborhoods on the west and south sides of Empire. Based on the observed age and condition of these older neighborhoods, neighborhood wastewater collection upgrades are assumed to be probably necessary if extended into Empire in the future for development purposes.

## Other Utilities

Power, natural gas, and storm water facility requirements are all essentially uniform between all areas and phasing zones, varied only in some cases by linear distance of any line extensions. Therefore, these utilities are not an appreciable factor in making phasing decisions.

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<sup>14</sup> A prior study conducted by the CIT indicated that a water pump station would be required to deliver adequate water pressure to Empire developments along Libby Lane (Area E-East)

- Power utility local line extensions will be required to any new development, but capacity is not an issue for Empire. There is a regional transmission-scale power substation on Spaw Boulevard just east of Empire Area B.
- Natural gas service is not available anywhere within Empire. See prior project reports for more information.
- Conventional or low impact storm water improvements will be dictated on a development by development basis.

### *Phasing Concepts*

The following suggestions for Empire development phasing are illustrated on Figure 18. This phasing hierarchy is conceptual only. Actual phasing will be most strongly influenced by the availability and timing of funding. Other factors such as changing CIT policies and priorities, and changing circumstances along the west side of the Coos Peninsula or in the greater Coos Bay region may influence phasing.

Internal to the Empire Parcels, the timing or extent of development in one area or zone may change the feasibility and/or preferences for other areas or zones. The CIT should revisit these phasing concepts every few years and make appropriate adjustments. Employment Zones and future employment uses in Areas A and C are not phased, and can be undertaken as opportunity, funding, and/or development partnerships dictate.

### **Nearest-term**

#### Area A - North Zone

- Areas north of First Creek abut existing newer development in City of Coos Bay. Roadways and utilities are therefore deemed to adequate to carry added demand from any Empire residential development
- As this North Zone is within the Coos Bay city limits, City services can be extended without an extraterritorial agreement.
- A creek tributary splits this area into two developable units. This stream corridor could be bridged allowing a concurrent, unified development.
- Collector-type roadways with this Zone would have to be upgraded and new water and wastewater utilities extended

#### Area C - Kilkich Village

- Opportunity for in-fill residential development with all utilities in place and adequate to meet added demand.
- May require paving of the southeast end of Miluk Drive, particularly if access and utilities are extended from Kilkich Village to serve Area E-West – Northeast Zone.

### **Nearest-Term with conditions**

#### Area A - South Zone (Eastside of Zone only).

- Requires utility extensions from City of Coos Bay. Area is presently outside of City limits. If utility extensions are not possible, this area drops to mid or even long-term phasing priority.

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## Mid-Term

### Area B - Northeast Zone (includes CSD Parcel)

- Access would be via an isolated section of South Cammon Road through unincorporated neighborhoods. Roadway and utility upgrades could be required.
- Upgraded access and utilities could also come from Spaw Blvd. Would cross Second Creek riparian corridor and connect to Powerline Road.
- Zone is otherwise somewhat isolated between First Creek and Second Creek riparian corridors.
- Only existing collector-type roadway within this zone is the gravel Powerline Road. Upgrade paving and rebuilding probably required

### Area B - Southwest Zone (west of Second Creek)

- Access possible from Spaw Blvd, Kellogg Blvd, and/or Grinnell Avenue, all connecting to Penny Lane.
- Roadway and utility upgrades probable, but the choice of three east-west access options may allow selection of the one with the best road and utility conditions.
- Whatever collector-type road option is selected, a new extension into this area would be required.
- No existing internal roadways except a very short section of Powerline Road and gravel surface north-south Second Creek Access.

### Area F - Northwest Zone

- This is the only section of Area F designated for development, thus access from areas internal to Empire would be along gravel roadways within designated Forest lands.
- Access is however possible through unincorporated neighborhoods to the north and south via Grinnell Avenue. This roadway would probably have to be upgraded.
- Utilities along Grinnell would also probably have to be upgraded.
- Slope and riparian corridors create the east and south edges of this zone.

### Area E-West – Northeast Zone

- The CIT views this zone as a prime location for expanding tribal-only housing opportunities outside of Kilkich Village.
- There may be some potential to access and serve this zone down Miluk Road out of Kilkich Village. This would provide the most direct connections between these two tribal neighborhoods (and perhaps avoid need for a water pump station). Feasibility would have to be determined through engineering study.
- Otherwise, this zone's frontage on Libby Lane is paved, but water service would require a pump station to create adequate pressure. If this zone is served from Libby Lane, phasing priority would probably drop to Long-term, absent any compelling policy or social purpose dictating that the CIT more immediately increase tribal housing stocks.

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- Miluk Extension and Libby Spur would minimally have to be upgraded with paving, as would lower sections of Upper Fourth Creek Road. The east section of Tarheel Loop borders this zone but is totally within OS designated lands, so no upgrades are necessary.
  - The shape and dimensions of developable land in this zone will have the practical impact of reducing the number of possible buildable lots.

### **Long-term**

#### Combination of Area B - Southwest Zone (east of Second Creek) and Area B - Lewis Connector

- The three parcels are somewhat isolated from each other by Second Creek, topography, and the North Empire boundary configuration.
- Each has gravel roadway access that would have to be upgraded.
- Adequate roadway and utility services are essentially dependent on prior development of Area B - Southwest Zone (west of Second Creek).

#### Area E-East – Southeast Zone

- The zone does not front onto Libby Lane and is somewhat distant from Cape Arago Highway.
- Access to this zone would be somewhat circuitous and along local residential roads or Tarheel Loop. Upgrades would be required.
- There are no existing roadways within this zone, gravel or otherwise.
- Nearby water and wastewater utilities would probably have to be upgraded.
- Significant natural and recreation features are protected by the abutting Tarheel Natural Area. Proximity to the natural area may be attractive for residential development.

#### Area E-West - Southwest Zone

- This zone is designated for future rural residential use, which may help mitigate the need for a water supply pump station to achieve adequate water pressure.
- Nearby water and wastewater utilities would probably have to be upgraded.
- Access is from Libby road which is deemed adequate.
- There are no existing roadways within this zone, gravel or otherwise.
- The shape of this zone may reduce the number of buildable lots that are possible.
- Significant natural and recreation features are protected by the abutting Tarheel Natural Area. The area is also near the community ballfields complex. Proximity to the natural area and ballfields may be attractive for residential development.

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## Long-term with Conditions

### Area A - South Zone (Westside of Zone only)

- The topographic and riparian corridor constraints in this area simply make any development complex, even if combined.
- Sections could be elevated to Mid-term if combined with Area B - Northeast Zone, but in general topographic and riparian corridor constraints will always limit developability.
- Access and utilities are probably best coming from the north but would be greatly dependent on Employment Zone development and associated upgrades.

### Area E-West – Northwest Zone

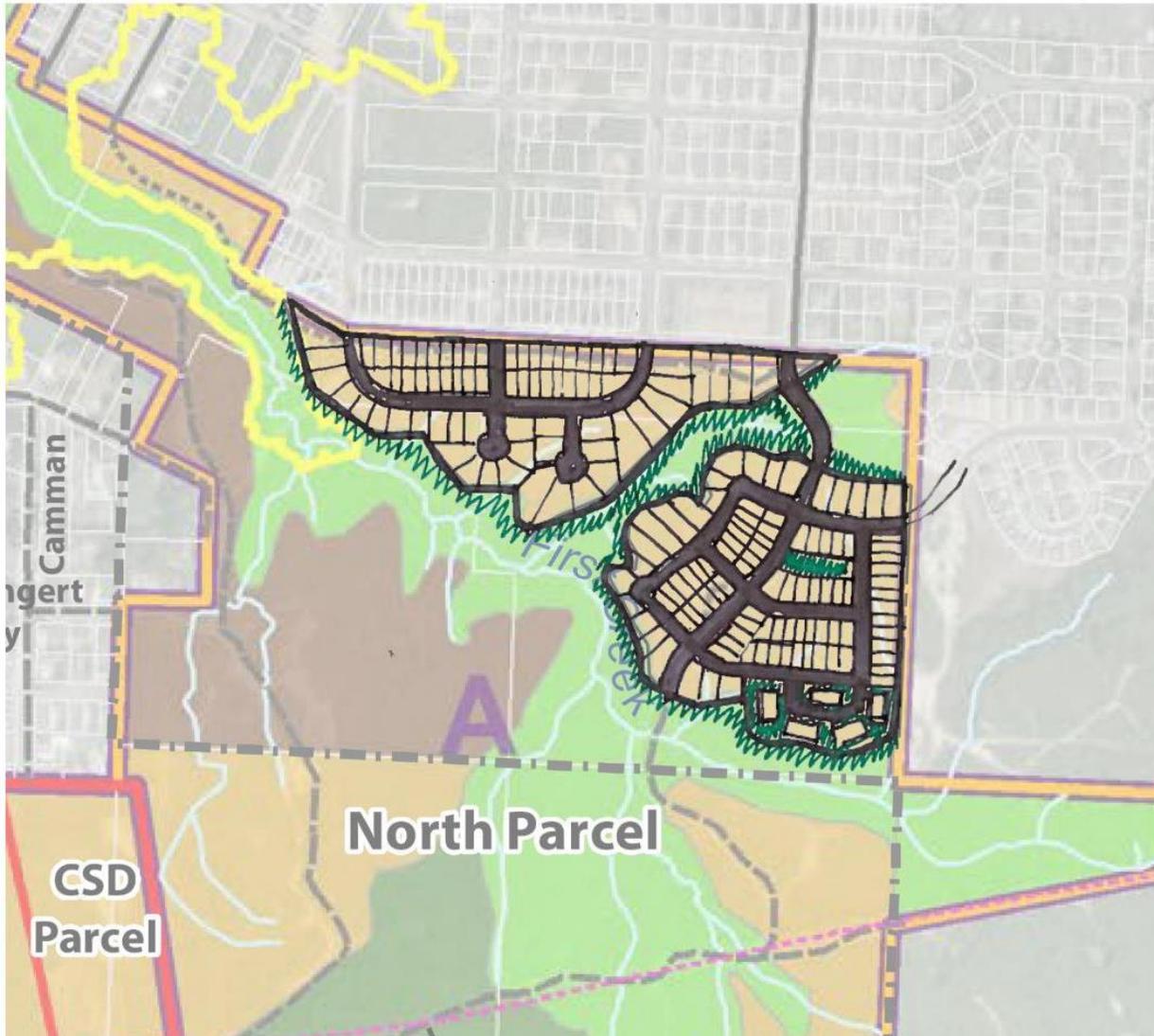
- Relatively proximate access from Cape Arago Highway via Wallace Road and Tarheel Loop (if upgraded).
- There are no existing roadways within this zone, gravel or otherwise.
- Nearby water and wastewater utilities would probably have to be upgraded.
- Significant natural and recreational features are protected by the abutting Tarheel Natural Area. Proximity to the natural area may be attractive for residential development.
- This area is entirely within the local tsunami evacuation zone. Given the many areas within Empire that can be developed, the CIT may consider removing this zone from the developable category, or consider uses such as agriculture, recreation, or very low density residential.

## V. Next Steps

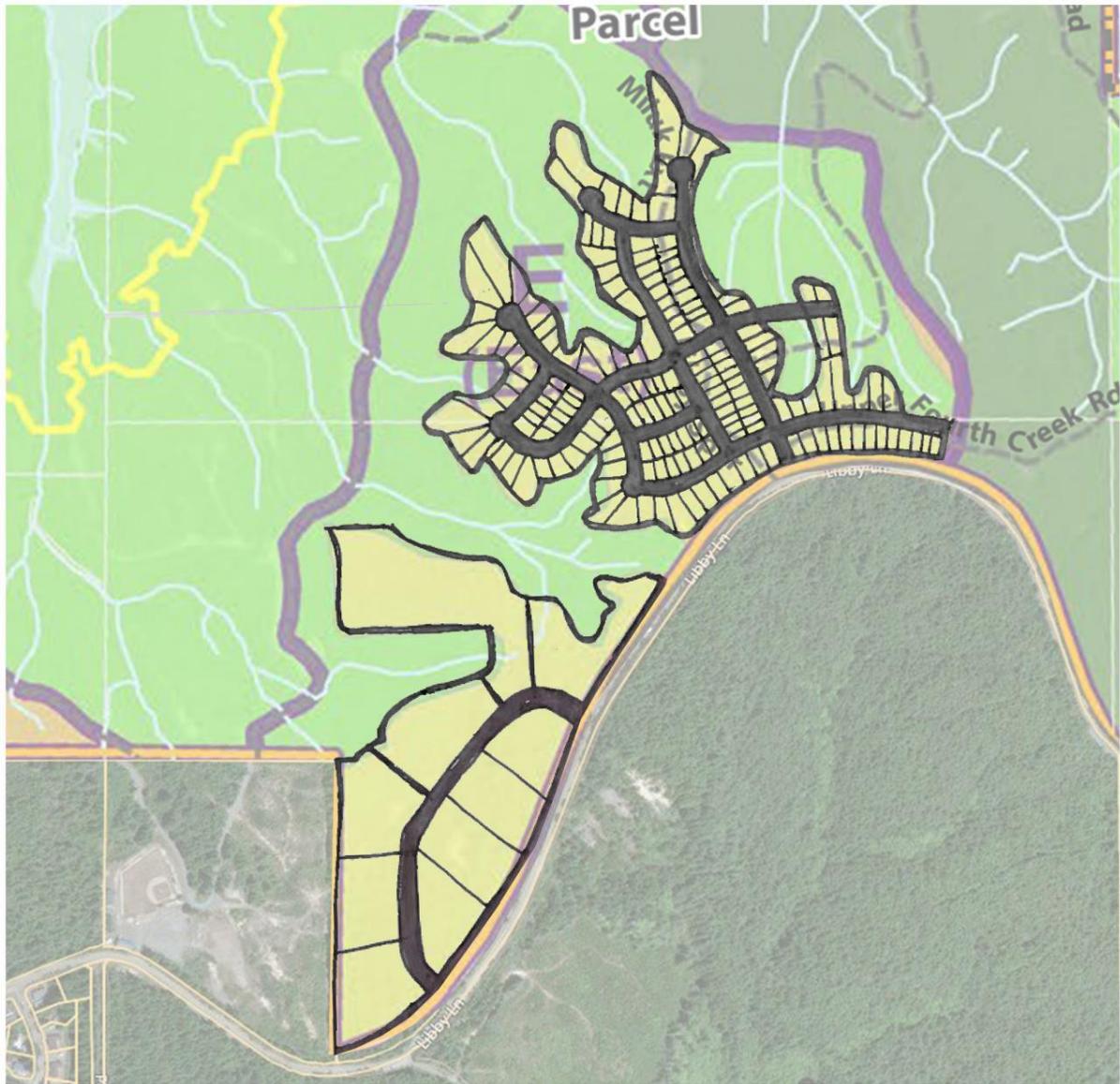
Feedback gathered on April 10 and 11 at meetings of the Comprehensive Plan Work Team and Tribal Council and through a public meeting will be used to revise this memo. Final TM #5 will serve as the basis of the CIT Comprehensive Plan for the Empire Parcels.

## APPENDIX A. Preliminary Residential Site Plans

### Area A, North Zone



**Area E-East, Southeast and Northeast Zones**



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## APPENDIX B. Funding Tools and Sources

### New Market Tax Credits

The federal New Markets Tax Credit (NMTC) Program was established in 2000 to stimulate investment and economic growth in low income urban neighborhoods and rural communities that lack access to the patient capital needed to support and grow businesses, create jobs, and improve local economies. The program attracts capital to eligible low-income communities by providing private investors with a federal tax credit for investments made in businesses or economic development projects located in distressed<sup>15</sup> communities.

NMTC Program applicants must be certified as Community Development Entities (CDEs) by the Community Development Financial Institutions (CDFI) Fund. A CDE is a domestic corporation or partnership that is an intermediary vehicle for the provision of loans, investments, or financial counseling in low-income communities.

The NMTC Program has supported a wide range of businesses including manufacturing, food, retail, housing, health, technology, energy, education, and childcare. Communities benefit from the jobs associated with these investments, as well as greater access to community facilities and commercial goods and services. The tribe would be eligible to receive NMTCs to help finance several key initiatives in both its residential and employment areas.

### Opportunity Zones

Opportunity Zones are a new community development program established by Congress in the Tax Cuts and Jobs Act of 2017 to encourage long-term investments in low-income census tracts designated as Opportunity Zones. Private investment vehicles that place 90 percent or more of their funds into an Opportunity Zone can earn tax relief on the capital gains generated through those investments. Tax benefits increase the longer investments are in place.

The governor of each state is permitted to designate 25 percent of its "low income census tracts" as Opportunity Zones subject to approval from the U.S. Department of the Treasury.

The State of Oregon must submit its nominated census tract by March 21. Business Oregon is currently hearing input for recommended census tracts (input is due by March 14).

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<sup>15</sup> Census tracts where the individual poverty rate is at least 20 percent or where median family income does not exceed 80 percent of the area's median income.

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## **Housing and Community Facilities Programs**

### USDA: Rural Rental Housing Guaranteed Loans (Section 538)

- For safe, well-built, affordable rental housing for low to moderate income individuals and families
- For rural areas with populations of 20,000 or less
- Allows up to 90 percent loan to value for loans made to for-profit entities, and up to 97 percent loan to value for loans made to non-profit entities. Repayment terms are 25 to 40-year amortization.
- <http://www.ruralhome.org/storage/documents/rd538guaranteed.pdf>

### USDA: Multi-Family Housing Loan Guarantees

- Program works with qualified private-sector lenders to provide financing to qualified borrowers to increase the supply of affordable rental housing for low- and moderate-income individuals and families in eligible rural areas and towns.
- <https://www.rd.usda.gov/programs-services/multi-family-housing-loan-guarantees>

### USDA: Multi-Family Housing Direct Loans

- Program provides competitive financing for affordable multi-family rental housing for low-income, elderly, or disabled individuals and families in eligible rural areas.
- Assists qualified applicants that cannot obtain commercial credit on terms that will allow them to charge rents that are affordable to low-income tenants.
- <https://www.rd.usda.gov/programs-services/multi-family-housing-direct-loans>

### HUD: Indian Housing Block Grant (IHBG)

- Formula grant that provides a range of affordable housing activities
- Eligible recipients are Federally recognized Indian tribes or their tribally designated housing entity
- Recipients must submit to HUD an Indian Housing Plan (IHP) each year to receive funding.
- Eligible activities include housing development, assistance to housing developed under the Indian Housing Program, housing services to eligible families and individuals, crime prevention and safety, and model activities that provide creative approaches to solving affordable housing problems.
- [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/ih/grants/ihbg](https://www.hud.gov/program_offices/public_indian_housing/ih/grants/ihbg)

### HUD: Title VI Tribal Housing Activities Loan Guarantee Program

- Public investment tool which provides an additional source of financing for affordable tribal housing activities.
- Purpose: Assist IHBG recipients who want to finance additional grant-eligible construction or development at today's costs.
- Title VI may be used to: create new housing; rehabilitate housing; build infrastructure; construct community facilities; acquire land to be used for housing; prepare architectural and engineering plans; and fund financing costs.
- [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/ih/homeownership/titlevi](https://www.hud.gov/program_offices/public_indian_housing/ih/homeownership/titlevi)

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### HUD: Indian Community Development Block Grant

- Direct grants for use in developing communities, including “decent housing, a suitable living environment, and economic opportunities, primarily for low and moderate-income persons.”
- The ICDBG program can provide funding for recipients in the following categories:
  - Housing, incl.: housing rehabilitation, land acquisition to support new housing construction, and under limited circumstances, new housing construction.
  - Community Facilities, incl.: Infrastructure construction, e.g., roads, water and sewer facilities; and, single or multipurpose community buildings.
  - Economic Development, incl.: Wide variety of commercial, industrial, agricultural projects which may be recipient owned and operated or which may be owned and/or operated by a third party.
- [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/ih/grants/icdbg](https://www.hud.gov/program_offices/public_indian_housing/ih/grants/icdbg)

### USDA: Community Facilities Programs

- For the provision of essential community facilities for rural communities
- Direct loan or loan guarantee, grant
- For building facilities and purchasing equipment for fire and rescue, early warning systems, police stations, health clinics, schools, libraries, hospitals, etc.
- Terms: up to 100 percent of market value. Up to 40 years or life of security. Maximum grant 75 percent of project cost.
- <https://www.rd.usda.gov/programs-services/all-programs/community-facilities-programs>

### HUD: Indian Home Loan Guarantee Program

- Home mortgage product, established to facilitate homeownership and increase access to capital in Native American Communities.
- With Section 184 financing “borrowers can get into a home with a low down-payment and flexible underwriting. Section 184 loans can be used, both on and off native lands, for new construction, rehabilitation, purchase of an existing home, or refinance.”
- [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/ih/homeownership/184](https://www.hud.gov/program_offices/public_indian_housing/ih/homeownership/184)

## **Business and Cooperative Programs**

### USDA: Intermediary Relending Program Loans

- Objective: finance business facilities and community development projects in rural areas.
- Can be used for community development projects, establishment or expansion of businesses, creation or saving of rural jobs.
- For rural areas and incorporated places with populations of less than 25,000
- Direct loan.
- Terms: the intermediary makes loans to businesses from its revolving loan fund on terms consistent with security offered. Intermediary pays 1 percent for 30 years.
- <https://www.rd.usda.gov/programs-services/intermediary-relending-program>

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USDA: Rural Business Opportunity Grants

- Objective: Finance technical assistance for business development and conduct economic development planning in rural areas.
- For technical assistance, leadership training, establishment of business support centers, and economic development plans.
- Grant. Must be completed within two years after project has begun.
- <https://www.rd.usda.gov/programs-services/rural-business-development-grants>

USDA: Business and Industrial Loan Guarantees

- Bolsters the availability of private credit by guaranteeing loans for rural businesses.
- <https://www.rd.usda.gov/programs-services/business-industry-loan-guarantees>

BIA: Native American Business Development Institute (NABDI) Grant

- Enables any Indian tribe to conduct a feasibility study on the viability of an economic development project, opportunity, enterprise, business or technology.
- <https://www.bia.gov/as-ia/ieed/division-economic-development/nabdi>

**Funding/Tools for Infrastructure Development**

EPA: Indian Environmental General Assistance Program (GAP)

- GAP grants are given for planning, developing, and establishing environmental protection programs, and for developing and implementing solid and hazardous waste programs on tribal lands.
- The goal of GAP ([CFDA 66.926](#)) is to assist tribes and intertribal consortia in developing the capacity to manage their own environmental protection programs, and to develop and implement solid and hazardous waste programs in accordance with individual tribal needs and applicable federal laws and regulations.
- <https://www.epa.gov/tribal/indian-environmental-general-assistance-program-gap>

USDA: Water and Waste Disposal Loans and Grants

- To build, repair, and improve public water systems, and waste collective
- Objective: Provide water and waste financing in rural areas to the most financial needy applicants re
- <https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program>

USDA: Community Facilities Direct Loan and Grant Program

- Provides funding to develop essential community facilities in rural areas, such as:
  - Health care facilities such as hospitals, medical clinics, dental clinics, nursing homes or assisted living facilities
  - Public facilities such as town halls, courthouses, airport hangars or street improvements
  - Community support services such as child care centers, community centers, fairgrounds or transitional housing
  - Public safety services such as fire departments, police stations, prisons, police vehicles, fire trucks, public works vehicles or equipment

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- Educational services such as museums, libraries or private schools
  - Utility services such as telemedicine or distance learning equipment
  - Local food systems such as community gardens, food pantries, community kitchens, food banks, food hubs or greenhouses
  - <https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program>