

Development Analysis Tract 1 Viewpoint Subdivision

Introduction

The purpose of this analysis is to explore the development potential of Tract 1, Viewpoint Subdivision and to identify any impediments to development that may exist. In doing so, we will look at zoning issues, particularly the Special Limitations that were approved over 30 years ago. As with any hillside property, of particular interest are the physical features of the tract, including slope, soils and drainage. This analysis will also address the requirement for a collector road that acts as a cloud on the property. Finally, the availability of utilities, or lack thereof, will be analyzed in terms of the densities that can be attained and the potential development costs.

Tract 1 Viewpoint Subdivision is located in southeast Anchorage on the lower Hillside (see Figure 1). It contains 96 acres and is zoned R-3 multiple-family residential district, with special limitations (R-3 SL). It is bordered on the south by the Potter Creek valley which is part of Chugach State Park. Across the valley to the south is the Potter Creek Subdivision. On the east it borders the very south end of Goldenview Drive. On the west it borders Potter Valley Road. On the north, it borders PLI zoned property that was the site of the now failed Legacy Project. This tract was originally part of the Potter Creek master planned project, approved in 1984. While the rest of the Potter Creek project has proceeded to development, resulting in a desirable residential neighborhood, the subject tract has never been developed. In fact, there has never been a proposed project on this site that has made it past the conceptual stage, though projects have been repeatedly attempted. Seemingly unresolvable development issues have always resulted in an early end to project feasibility studies. This analysis will attempt to identify and quantify those issues so that a plan can be developed to address them.

The property has several design challenges. As stated above, the issues that have been identified include:

- Zoning
- Steep terrain
- Drainage
- Soils
- Collector road
- Utilities

Zoning

AO 84-21 - This property was zoned as part of the Potter Creek Master Planned Community in 1984. Potter Creek was a large residential project that was planned during a time when several municipal initiatives were converging. This was the last of the areas to be zoned as part of Area Wide Zoning program that began under the former Greater Anchorage Area Borough in 1969. During that 15 year rezoning

process, the MOA and the community as whole went through a cathartic interaction that began to shape the future of Anchorage. They tested a number of new planning alternatives in several neighborhoods. Also, the community decided that some portions of the hillside should be served with full utilities, including sewer, so that densities could be distributed more evenly throughout the community. Along with utilities and densities came a decision to upgrade the road system.

Potter Creek was born as a result of all of these new initiatives. It was the first master planned community on the hillside that was to have water, sewer and full urban standard roads. To offset the cost of these improvements, densities were approved that encouraged attached housing. The initial site plans included cluster housing to help defray the site development costs associated with hillside construction. Since Tract 1 was the steepest portion of the project and because it had soils and other physical issues, it was designated in the master plan and subsequent zoning as the most dense tract in the entire 900 acre project.

The real estate market did not respond well the idea of cluster development on the hillside. Plans for townhouses on the south side of the creek were scrapped as soon as the developer heard from the realtors, builders and real estate bankers that townhouses would not sell on the hillside. Using a design that capitalized on the on the relatively mild slopes and benched topography on the land south of the creek, the project was switched to high end single family homes at a density of 1.5 units per acre (UPA). Since then, Potter Creek has been able to develop as a desirable single family subdivision, although, densities are consistently lower than anticipated by the master plan. Due to the development constraints discussed below, it has been impossible to develop Tract 1 as a single family project. Consequently, it remains the last tract in the Potter Creek project without development plans.

AO 84-21 which rezones the tract to R-3 SL is attached. The special limitations include:

1. A Master Site Plan must be submitted and approved by the Planning and Zoning Commission. The Master Site Plan will include:
 - Location of public facilities infrastructure
 - Demonstrate residential density distribution patterns
 - Establish phasing plans and buffering.
2. A Final Site Plan must be submitted and approved by the Director of Community Planning. The submission requirements of the Final Site plan are the same as for a cluster housing development final site plan.
3. The special limitations include design standards that are out dated. They reference the old Comprehensive Plan, the old Hillside Waste Water Management plan. The design standards reference an attachment A which is "Public Facilities and Open Space Design Standards". The most significant requirement in these standards is the requirement for 50% of the site to be retained as "usable open space". This requirement is clearly excessive. The section is poorly written and will be difficult to comply with. It does allow private yard areas to be included in the open space calculations.

A Master Plan is a reasonable requirement for a 900 acre development but not needed for 96 acres. The plating process will be sufficient for public input and Municipal oversight. The special limitations need to be up-dated to reflect the current comprehensive Plan, the Hillside District Plan, and recent design practices in Potter Valley and Goldenview areas.

The special limitations in the current zoning are outdated and need to be completely revised. This will require a rezoning of Tract 1. Rezoning this tract will be a difficult process and take eight to twelve months to complete.

New Title 21 - The Anchorage Land Use Code has been completely rewritten. It was adopted in December 2013. Through 2014 we had the option of completing projects with the old code or the new code. That option has been extended through 2015. The impacts of the new code on development densities and the increase costs have not been fully vetted. The new Title 21 requirements for steep slope development are significant and discussed below.

Steep Terrain

The property generally has steep terrain (see Figure 3 topographic map). The elevation at the Potter Valley Road switch back is 100. The elevation at Golden View Drive is 800 feet. Grades vary from 10% to 30%. When grades exceed 10% the physical constraints of the property reduce the densities that can be achieved.

The steep grades also increase cost. Large cuts and fills are required to construct roads and building areas. Retaining walls and mass grading is needed to terrace the land. Single loaded roads (homes only on one side) are needed where the slopes are 20% or more which doubles the development costs of those units.

Steep terrain will reduce development densities and increase costs.

The new Title 21 places additional requirements on slopes over 20%.

- 50% of a lot must remain undisturbed.
- The original grade may not be raised or lowered by more than four feet.
- Retaining walls should be no higher than six feet.

These new requirements will be very difficult to comply with and will further reduce development densities and increase costs.

Soils

The overriding feature of the subsurface conditions on this site is the ubiquitous presence of shallow bedrock. Ranging from surface outcropping to just a few feet deep, this bedrock can affect all aspects of site development – roads, foundations, utilities and drainage. Moreover, the presence of shallow bedrock generally traps water from runoff

near the surface, further complicating construction. Soils above the bedrock across the site vary. The materials vary from silty gravel to silt. Ground water is generally shallow. Bed rock out cropping does can be seen in several locations. All roads will require structural sections with deep gravel fill and insulation to prevent frost heave. Sub drains will be required to control subsurface flows. Bedrock may require blasting.

These subsurface conditions could increase development costs by as much as 20 to 30%.

Drainage

There are several mapped and un-mapped drainage ways through the property. In addition there are several springs on the property. The drainage ways will need to be mapped in the field. The important drainage ways will require 50 – 100 foot easements to protect them. The springs will need to be located and protected also.

Each area that is developed will require on-site water detention areas. Post-development flow rated can't exceed pre-development flow rates. In steep terrain ponds are not a viable option. Underground vaults and large diameter pipes are required which increases development costs and reduce the developable area.

Protecting the small creeks and drainage ways will reduce the developable area. Providing retention facilities on steep slopes is challenging and expensive.

Collector Road and Access

The Anchorage Official Streets and Highways Plan indicate a collector road through the property. A switch back road similar to the Potter Valley Road will be required. This requirement will remove a significant amount of land from the development. The cost to construct a collector road will be 5-12 million dollars and it is currently not in the Municipality's capital improvement plan. This road will also require the cooperation of the property owner to the north.

While access is available to this site from both Goldenview Drive and Potter Valley Road, both are affected by significant issues. Goldenview borders the site at the top of the hill. Unfortunately, this uphill end is the narrowest part of the property which quickly becomes steep after you enter the property. The usual method of mitigating steep slopes is to design side hill runs of road that are connected by switchbacks. This technique uses a lot of land area but there are no alternatives that will allow the roads to be built with reasonable grades. Since the property is so narrow across the slope at the upper end, side hill road runs would be limited to 500 linear feet. If a road were to be built in that manner, it would leave almost no property to be developed with homes. Prospective developers who have looked at this property have universally concluded that it must be developed in conjunction with the adjacent property in order to solve this problem.

The potential cost of the road overrides the grade issues discussed above. Recent roads built to collector road standards in the MOA have cost from \$1,000 to \$1,500 per linear foot. A road that traverses this and the adjacent property could be as much as a mile and a half long and could cost 5.5 to 11.9 million dollars. The cost of this road cannot reasonably be borne by the development of this site or even by both sites combined.

Until the funding for this road is resolved, it acts as an overriding cloud on the development potential of the property.

Utilities

Water - Tract 1 is in an area that could be served by the Potter Creek Water Company. This is a small private water company. The water system will require up-grades to serve Tract 1. A booster station will be required to maintain minimum pressure to the homes in the upper elevations of the tract. Additional water storage will also be required. This would be installed at the upper elevations of the tract. 50,000 – 100,000 gallon storage tank should be sufficient.

The cost of a booster station and water reservoir is \$500,000 - \$750,000.

The other option for water service is to connect to the AWWU water system in Golden View Drive. This would require 6,300 LF of off-site water improvements.

The cost of the off-site water main extension would be \$6,600,000.

Sewer – Sanitary Sewer is available in Potter Valley Road.

Other Utilities – A high pressure gas main crosses the property within a 25 foot easement. A 20 foot telephone and electric easement also crosses the tract. These utility is in inconvenient locations which will restrict the development and the density of the development (see the attached plat). The areas between the two easements may not be usable.

The area of undevelopable land due to existing utilities is approximately 6 acres.

Summary

Tract 1 Viewpoint subdivision has several significant challenges. The combination of issues makes the project unfeasible.

Housing Density - The only development the market will support is a high end single family subdivision in this area. Steep slopes, collector road land requirements, creek protection easements, open space requirements, and existing utilities will all combine to reduce the net developable area and housing densities. This property will have a difficult time achieving the gross housing densities Potter Creek subdivision to the south was able to achieve of 1.5 UPA.

Development Costs - The costs to develop this property will be very high. The bedrock, marginal soils, high water table, drainage issues, and water system up-grades all combine to increase the costs beyond what the current market will allow. Development costs will be 30-50% higher than other single family developments.

Collector Road - The collector Road is the single biggest issue for the development of this property. The road must be planned with the cooperation of the property owner to the north. The cost is more than the two properties can bear and will require cost sharing with the Municipality. The project is not currently in the Municipality's or the State of Alaska's capital improvement program. It will take several years to coordinate, design, and obtain funding for the collector road. Given the current funding challenges at the state level due to falling oil prices the time line could be long.

Zoning - The Special Limitations of the R-3 zone must be revised. They are out of date and unduly restrictive. The community will need to be included in the process and support from the local Assembly members will be essential.