

**Proposal for Special Use Authorization
36 CFR 212.6 and 36 CFR Pt. 251, Subpart B
New Application for Transportation and Utility Systems and Facilities on Federal Lands
January 23, 2020**

I. Co-applicant Information

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II. Project Description

(a) Type of system or facility;

The use requested in this application is in support of development of inholdings in the Kaibab National Forest owned by the applicants and pursuant to the *Pre-Annexation and Development Agreement (PADA) No. 2011-11-02* (Appendix A of this application), as amended by the First Amendment to the *PADA No. 2011-11-02* and the Second Amendment to the *PADA No. 2011-11-02* (Appendix B of this application) between the Town and Stilo.

The applicants propose to make improvements to segments of existing forest roads and to construct one (1) new segment of forest road to provide non-exclusive, all weather access and utility service to two inholdings in the Kaibab National Forest (TenX Ranch and Kotzin Ranch). Both Kotzin Ranch and TenX include land owned by Stilo and the Town. The roadway improvements and utility construction would begin at State Route 64 (SR 64) in the Town. As depicted in **Figure 1**, the project land is located within the Tusayan Ranger District of the Kaibab National Forest, and the proposed corridors cross land identified in **Table 1** below. TenX Ranch is identified as the Coconino County Assessor’s Parcel Number (APN) 502-14-001(A) and the parcel owned by the Town as 502-14-001(B). Kotzin Ranch has APNs 502-16-006 (owned by Stilo) and 502-16-006B (owned by the Town).

Table 1

Proposed Corridor from SR 64 to:	Sections	Township	Range
Kotzin Ranch (2 alignments)	13, 14, 23, 24	T30N	R2E
TenX Ranch (FR 302)	24 19, 29, 30	T30N T30N	R2E R3E

Township and Range of the Gila and Salt River Baseline and Meridian

The locations of the requested non-exclusive use authorizations are depicted in **Figure 2**. Generally, access and utility service to TenX Ranch requires improvements to the existing Forest Road (FR) 302;

the road and utility corridors to Kotzin Ranch would improve segments of existing FR 605M (Long Jim Loop) and FR 605 as well as construction of new road and utility corridor segments. **Table 2** identifies the physical specifications of the requested corridors on a segment-by-segment basis.

(b) Related structures and facilities;

Kotzin Ranch South Access/Utility Corridor: from the requested southern access road and utility corridor to Kotzin Ranch, a sewer line to the existing collection system facilities of the South Grand Canyon Sanitary District (SGCSD) wastewater treatment plant in the Town, as depicted in **Figure 3B**. In addition, an approximately 300-foot long sewer line corridor is necessary parallel to SR 64 from the intersection of FR 302 to the existing developed boundaries of the Town. This corridor facilitates a second tie-in to the SGCSD wastewater collection system to convey flows from TenX Ranch, and is depicted in **Figure 3A**. The two sewer line corridors are estimated to be 25 feet wide; the specific width and location will be dependent on the capacity, location and depth of the existing wastewater collection facilities. The sewer line corridors would consist of temporary ground disturbance for construction, with the exception of manhole covers that would remain at grade.

TenX Ranch Access/Utility Corridor: a wastewater lift station is anticipated to convey wastewater flows to the SGCSD wastewater treatment plant from TenX Ranch. The lift station would be located adjacent to the access and utility corridor along FR 302. Two booster pump stations, one for reclaimed water and one for potable water, would be located approximately 0.3 mile east of SR 64, adjacent to FR 302. Each station would each be approximately 0.2 acre in size, or 100 feet by 100 feet, and would be located adjacent to the access and utility corridor along FR 302. The approximate locations of these stations are depicted in **Figure 3A**.

Utilities would be installed per the applicable local standards. As part of the environmental review and engineering design, existing permitted utility easements would be identified and the proposed utility corridors designed to avoid conflicts. In the event of collection system or wastewater treatment plant capacity constraints, alternative solutions for service, such as an on-site package plant(s), would be identified. Necessary facilities for fire service will also be identified and addressed as appropriate.

(c) Physical specifications;

The project proposes to improve and construct one primary access maintenance level 5 roadway/utility corridor to each of the two in-holdings. As defined in Forest Service Handbook (FSH) 7709.58, 12.3, maintenance level 5 is assigned to roads that provide a high degree of user comfort and convenience; these roads are normally double-lane, paved facilities. The roadway and utility improvements are needed to accommodate the Town approved land use plans as defined in the PADA Exhibit B1 *Kotzin Ranch Land Use Plan and Data Table* and Exhibit B2 *TenX Ranch Land Use Plan and Data Table*. In addition, a secondary emergency road access-only corridor will be nominally improved to a maintenance level 4 roadway. As defined in Forest Service Handbook (FSH) 7709.58, 12.3, maintenance level 4 is assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds; these roads are normally double-lane and aggregate surfaced.

The total area of disturbance on USFS land is estimated to be approximately 49.4 acres, of which 20.1 acres has been previously disturbed, leaving 29.3 acres of total new disturbance.

Table 2 lists each corridor segment, existing and proposed maintenance levels, the existing recreation opportunity spectrum (ROS), the length of the segment (in feet and miles), the area disturbance (including estimates of new and previously disturbed areas), and the utility lines proposed for each primary access segment.

Figure 4 depicts the cross section of the proposed primary access corridors to each of the Kotzin and Ten-X parcels, conforms to the requirements specified by the PADA and meets applicable local standards. The primary access corridors would accommodate two, paved travel lanes (14 feet wide each), resulting in 28 feet of surfaced roadway, with aggregate shoulders (2 feet wide each) and a 14-

foot-wide border area/utility corridor adjacent to each shoulder. The primary access corridors would also accommodate an 8-foot-wide bike/pedestrian path on either side of the paved surface. An additional 4 feet would allow for adjustments to grade. In total, an 80-foot-wide corridor is requested to provide all weather access and utility service to the two privately owned in-holding parcels. Note that the dimensions specified above and in **Figure 4**, which comprise the overall 80-foot-wide corridor, represent a typical cross section; the engineering design may vary in locations to accommodate topographic and other site-specific constraints.

Corridor to TenX Ranch

FR 302 would be improved from SR 64 for approximately 2.8 miles, or 14,880 feet, to TenX Ranch. Utilities to be provided within the two, 14-foot-wide border area and utility corridors include a potable water distribution main, a reclaimed water transmission main, a sewer main, a natural gas pipeline, electric, and telecommunications (internet, cable television, telephone, etc.).

Corridor to Kotzin Ranch

Southern Access

The southern access roadway and utility corridor would be 1.53 miles (8,096 feet) long and would traverse lands within the Kaibab National Forest, connecting the existing SR 64 at Long Jim Loop to Kotzin Ranch, including the segments listed below. The utilities proposed within the two 14-foot-wide border area and utility corridors vary slightly by segment, but generally include water transmission and distribution mains, a reclaimed water main, and a sewer main. Dry utilities in the corridor also vary by segment, but generally include a natural gas pipeline, electric lines, and telecommunications. Details of the utility lines included in each segments are listed herein and in **Table 2**.

- The existing FR 605M (Long Jim Loop) would be improved from SR 64 west and south approximately 2,333 feet all on USFS lands.
 - Utilities proposed in this segment include water transmission and distribution mains, a natural gas pipeline, and telecommunications.
 - The sewer main from Kotzin Ranch would tie in to the existing 8-inch main paralleling FR 605M (Long Jim Loop) for approximately 2,100 feet to the existing wastewater collection facilities of the SGCSD. A new reclaimed water main would be constructed along FR 605M (Long Jim Loop) from the SGCSD to this point where it would be continue within the utility corridor to Kotzin Ranch described below.
- From FR 605M (Long Jim Loop) the existing unnamed roadway would be improved and a utility corridor would be constructed for approximately 2,766 feet west to the intersection with FR 605, which accommodates the existing Arizona Public Service (APS) easement.
 - Utilities proposed in this segment include water transmission and distribution mains, a reclaimed water main, a sewer force main, a natural gas pipeline, and telecommunications.
- From FR 605 to Kotzin Ranch, a new roadway and utility corridor would be constructed in a generally northwesterly direction along existing trails for approximately 2,997 feet to the west.
 - Utilities proposed in this segment include water transmission and distribution mains, a reclaimed water main, sewer force main, electric lines, a natural gas pipeline, and telecommunications.
 - Electric service would be in this segment of the corridor, connecting to the existing APS power lines that parallel FR 605.

Northern Emergency Access

The northern emergency access roadway would traverse lands within the Kaibab National Forest for approximately 8.057 miles, or 1.53 miles, from the intersection of SR 64 and Moqui Drive (FR 328) west to Kotzin Ranch, including the segments listed below. No wet or dry utilities are proposed in this corridor.

- FR 328 (Mogul Drive) would be improved approximately 3,715 feet from SR 64 west to FR 605F.
- FR 605F would be improved approximately 548 feet west from FR 328 to the intersection with FR 605E.
- FR 605E would be improved for approximately 2,794 feet west to Kotzin Ranch.

(d) Term of years needed;

All weather access and utility service is requested in perpetuity. Pursuant to the PADA, construction and maintenance funding for the roadway and utilities is the responsibility of Stilo, however, if not completed in a timely manner the Town may fund, construct and maintain. Per the PADA, the roads would be maintained to the standards of the Forest Service, which are defined in the *Guidelines for Road Maintenance Levels (2005)*. The utilities would be maintained to the standards of the local utility providers.

(e) Time of year of uses or operations;

All weather access and utility service is requested yearlong.

(f) Volume or amount of product to be transported;

The volume of traffic and sizes of utilities are undetermined at this time. Preliminary engineering indicates two-lane roadways would adequately accommodate anticipated density of development.

Utility infrastructure for inholdings for which the primary access roadways will provide non-exclusive legal access across Forest Service lands and will be sized based on the anticipated build out of the private parcels. The utility corridors within the primary access roadways are of sufficient size to support all of the utility infrastructure contemplated for the authorized improvements.

(g) Duration and timing of construction;

Roadway and utility corridor construction would be anticipated to be complete within an approximate 36-month period from commencement, considering the potential for inclement weather.

(h) Temporary work areas needed;

No temporary work areas for construction are anticipated within the Kaibab National Forest. All temporary construction areas will be on private lands.

(e) State and local government approvals;

N/A.

(f) Application fee;

To be separately provided.

(g) Impact on international waterways or boundaries;

None.

(h) Technical and financial capability to construct, operate and maintain and terminate system for which authorization is requested;

The applicants are technically and financially capable of completing the project described in this application. Any construction contractor must be duly licensed, bonded and insured, and would be selected based on a review of bids submitted in response to a solicitation/design package. Criteria to be considered may include factors such as: project understanding, relevant management and technical experience, staff qualifications, capacity to conduct the work, proposed work plan, past performance on similar work and record of completion, quality plan, cost, and health, safety, and environmental record.

Pursuant to the PADA, Stilo will fund construction and maintenance of the road and utilities, however if the project is not completed in a timely manner, the Town may fund construction and maintenance. The ability to fund will be demonstrated based upon the Kaibab National Forest requirements (i.e., financial records, list of completed projects, etc.). The applicants would agree to completion and maintenance bonding, as appropriate.

(i) Other reasonable alternative routes and modes considered;

The properties are inholdings, completely surrounded by federal lands administered by the Kaibab National Forest, with no private lands abutting either property. As such, any access to the properties would require use of National Forest System Lands.

During the zoning process Stilo undertook for development of its inholdings, Stilo retained a qualified engineer to evaluate alternatives for access based on routes that met the following criteria without regard to cost: (i) routes that disturbed the least amount of natural conditions; (ii) followed existing trails, roadways, primitive routes; (iii) utilized existing utility corridors; and (iv) otherwise provided safe, proximate and convenient future access for the enjoyment of the property for its intended use. Eight potential routes were identified and are shown in the PADA (at PADA Exhibits D1 and D2) and are depicted on **Figure 5**.

In sum, alternative alignments for the southern roadway access and utility corridor to Kotzin Ranch may be feasible and could be considered during the environmental review and engineering design process. No other alternatives were considered for the roadway access and utility corridor to TenX Ranch or for the northern corridor to Kotzin Ranch due to the presence of existing forest roads or trails, thus minimizing new surface disturbance.

(1) Why not selected?

The routes proposed for access and utilities were selected because, to the extent possible, they utilize areas of prior existing disturbance.

(2) Why necessary to cross federal land?

Kotzin Ranch and TenX Ranch are in-holdings in the Kaibab National Forest. Both properties are accessible via existing forest roads, however, these roads are subject to closure at the discretion of the District Ranger during wet weather periods. Improved, all-weather access is necessary to ascertain reasonable use and enjoyment of these privately held lands. Per the PADA, both properties would be developed for current and future visitor needs and local residential purposes and year round use requiring all weather access.

(j) List authorizations and pending applications filed for similar projects;

The Town and the Kaibab National Forest have entered into a maintenance agreement for that portion of FR 302 from Highway 64 to the TenX property. The applicant is unaware of any other authorizations or pending applications for similar projects.

(k) Statement of need for project, including economic feasibility;

The need for this project is to improve access to facilitate reasonable use and enjoyment of the in-holding properties in a safe and adequate manner. All-weather access is required to the Kotzin Ranch and TenX Ranch in-holdings in accordance with the PADA. Per existing zoning authorizations, both properties will be developed for visitor and local area residential uses requiring higher level of services for vehicle access as well as accommodation for the required utilities. The project is economically feasible and would be privately funded.

(1) Cost of proposal?

Preliminary construction costs were provided in the Kotzin Ranch Applicant's Narrative Report, Planned Community District Zoning Submittal, Approved November 2, 2011, Exhibit 5, Primary Infrastructure (see Appendix B of this application) and TenX Ranch Applicant's Narrative Report, Planned Community District Zoning Submittal, Approved November 2, 2011, Exhibit 5, Primary Infrastructure (see Appendix C of this application). If required, revised cost estimates will be provided as the environmental review and engineering design proceed.

(2) Estimated cost of next best alternative?

Cost estimates for selected alternatives can be provided as the environmental review and engineering design proceed.

(3) Expected public benefits?

Expected public benefits include improved access to the in-holdings and the surrounding public lands of the Kaibab National Forest. The planned land use for the in-holdings is defined in the PADA, Exhibit B1 Kotzin Ranch Land Use Plan and Data Table and Exhibit B2 TenX Ranch Land Use Plan and Data Table, as modified by the environmental protection measures set forth in Section IV below which will facilitate responsible development, needed housing and enhanced visitor services.

(l) Describe probably effects on population in the area, including social and economic aspects, and the rural lifestyles;

The in-holdings are surrounded by National Forest System lands administered by the Kaibab National Forest and have no form of access except across National Forest System land. While the proposed access roadways and utility corridors across lands administered by the Kaibab National Forest would not directly result in population growth, the population growth anticipated by the authorized zoning of the in-holdings is a reasonably foreseeable future action that would be considered during the environmental review of this application.

The proposed roadway access and utility corridors would also improve access to lands administered by the Kaibab National Forest with the potential for some increase in utilization of localized areas for recreational purposes. Impacts to rural lifestyles are expected to be localized and minimal in the context of the role of the local community as a gateway to the Grand Canyon National Park. The applicants will work to identify and minimize potential resource conflicts with rural lifestyles with safety in mind.

(m) Describe likely environmental effects that the proposed project will have on:

The environmental effects of the proposed project will be analyzed as part of the National Environmental Policy Act process and a brief description of anticipated effects directly related to the proposed action are provided below.

(1) Air quality

The proposed project would pave existing gravel and dirt roads within the Tusayan Ranger District, which would reduce sources of fugitive dust in dry weather. There is substantial use of the existing roadways for dispersed camping and an immediate reduction of fugitive dust emissions from this user-group is anticipated with paving of these existing roadways. Additional traffic would be expected to traverse the improved roads, which may increase vehicle emissions.

(2) Visual impact

Removal of existing vegetation would be minimized to the extent practical; indigenous plants and trees and/or low-water use plants would be used to revegetate areas of temporary disturbance and in landscaped areas.

(3) Surface and ground water quality and quantity

The existing roads are unpaved and therefore subject to erosion during storm events, contributing to sediment generation and transport. The proposed project would pave the primary access roadways, reducing the potential for erosion and sedimentation. Increased runoff generation and the potential for water quality impacts from the impervious roadway surfaces would be managed through engineering controls. Impacts to groundwater would not be anticipated from the roadway access and utility corridors.

(4) Control of structural change on any stream or other body of water

The existing FR 302 crosses a tributary to Coconino Wash approximately one half mile east of SR 64. The existing culvert may need to be extended laterally to accommodate the wider roadway. Additional culvert crossings may also be required to accommodate existing drainages and swales. Stormwater conveyance would be maintained, and no control or structural change of any stream or other body of water is anticipated.

(5) Existing noise levels

Existing noise on forest roads serving Kotzin Ranch results from occasional vehicles passing through to access lands within the Kaibab National Forest for recreational uses. Existing noise on FR 302 near TenX Ranch also occurs from vehicles accessing lands within the Kaibab National Forest for commercial and non-commercial recreational use; jeep tour operators use FR 302 routinely to access Grandview. FR 302 has a higher operational maintenance level and continues through the Kaibab National Forest, ultimately providing access to Flagstaff. As such, the road has greater existing vehicle volumes than the roads at Kotzin Ranch, with resulting higher noise levels. The proposed roadway and utility corridors may increase noise levels; however, limited receptors exist in the project area.

(6) Surface of the land, including vegetation, permafrost, soil and soil stability

Where possible, new disturbance areas are proposed adjacent to existing roadways or other areas of prior disturbance. Impacts to the soil, vegetation, and soil stability would be minimized through the implementation of best management practices, engineering controls, and revegetation as appropriate. No impacts to permafrost would occur.

(n) Probably effects that the proposed project will have on:

(1) Populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species; and

Direct and indirect effects to plants and wildlife may occur, including lost or degraded habitat and increased vehicle/animal encounters and collisions. A complete analysis of the potential for effects to biological resources will be conducted during the environmental review.

(2) Marine mammals, including hunting, capturing, collecting or killing these animals.

The proposed project would not affect marine animals.

(o) Use of hazardous materials;

Hazardous materials would not be produced or stored within the proposed corridor or related facilities. While not anticipated, hazardous materials that may be used during construction or transported by others would be in accordance with the Hazardous Materials Transportation Act and other applicable regulations.

(p) Place of application filing;

US Department of Agriculture, Forest Service – Kaibab National Forest, Tusayan Ranger District.

III. Pertinent Background Information and Environmental Protection Measures

(a) The PADA

As stated above, Stilo and the Town of Tusayan are parties to a Pre-Annexation and Development Agreement (PADA) dated November 11, 2011, as amended. The PADA authorizes development of the TenX and Kotzin inholdings at a density and intensity that is described therein.

In general, the 194.6-acre TenX Ranch is zoned as a Planned Community District (PCD) and was approved under Ordinance No. 2011-11-02-06 on November 2, 2011. Subsequent to the zoning, Stilo donated 20 acres of TenX land to the Town of Tusayan for affordable housing development. The concept for the development of the TenX property is primarily to establish a residential neighborhood for the local population along with supportive facilities serving their needs. The very south end of the property is reserved for a possible resort hotel, conference center hotel, spa hotel or dude ranch.

The 160-acre Kotzin parcel is also zoned as a PCD and was approved under Ordinance No. 2011-11-02-05 also on November 2, 2011. Subsequent to the zoning, Stilo donated 20 acres of the property to the Town of Tusayan for its affordable housing development. The Town has the option to retain the property or exchange it to Stilo for an additional 20 acres at the TenX. The concept for the development of the Kotzin property is primarily to establish a pedestrian oriented, visitor-centered campus of lodging, commercial services, educational facilities and shorter-term residential housing along with supportive facilities serving their needs. Facilities and services will cater to visitors desiring a longer-term stay in the area to connect with a more in-depth appreciation and understanding of the regions natural sciences and cultural history. Incentives are contemplated to encourage guests to park their vehicles once and not use it again until they are leaving the region. Shuttles are envisioned to transfer guests to and from the GCNP and other needs are met on campus.

IV. Applicant Committed Environmental Protection Measures (EPMs)

Notwithstanding the density and intensity of development authorized by the PADA for Stilo's inholdings, Stilo is voluntarily willing to agree to the following EPMs to address known public concerns with its proposed development which is an indirect effect of the proposed action.

(a) Land Use Restriction

Upon approval of the application and issuance of the authorizing instrument for road and utility construction, Stilo will agree to a reduction in the Town of Tusayan approved commercial densities in both the Kotzin Ranch and Ten-X properties by a combined total of thirty three percent (33%) as shown in the Zoning Summary Analysis chart below.

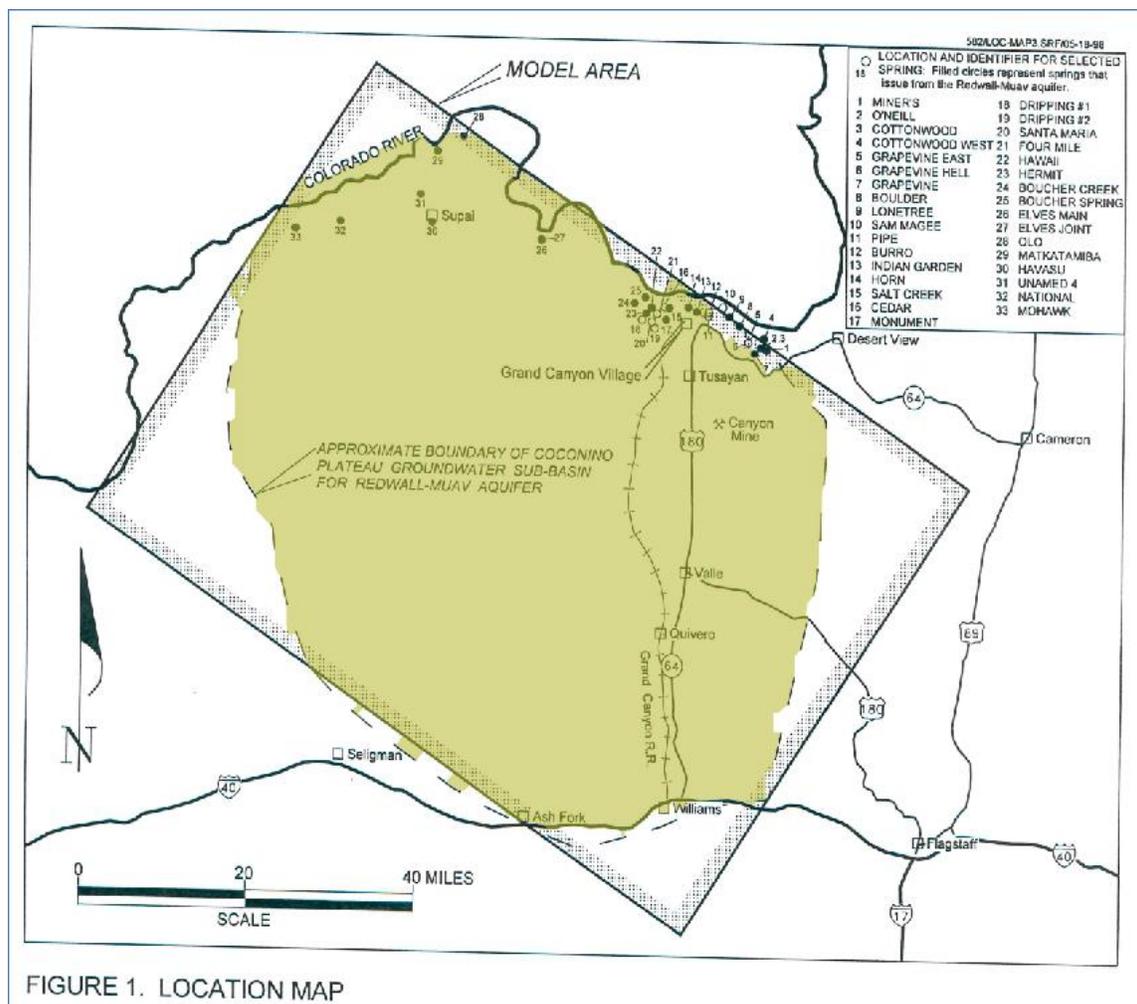
ZONING SUMMARY ANALYSIS												
Town of Tusayan Land Use Zoning Approvals												
33% REDUCTION	PARCEL	ACRES	APPROVED TUSAYAN ZONING FAR	APPROVED TUSAYAN ZONING DENSITIES SF	PROPOSED DENSITY FAR	PROPOSED SF	PROPOSED TUSAYAN SF REDUCTION	PROPOSED TUSAYAN % REDUCTION	% ROOMS DISTRIBUTION	% COMMERCIAL DISTRIBUTION	PROPOSED ROOMS 500 SF PER ROOM	PROPOSED COMMERCIAL SF
	TenX											
Neighborhood Commercial	CNV	5.9	0.25	64,251	0.20	51,401	12,850	20%		100%		51,401
Resort Conference	RC	35	0.35	533,610	0.20	304,920	228,690	43%	100%		610	
RV Park (248 spaces)	SRVP	22.2	0.005	4,835	0.01	4,835	0	0%		100%		4,835
Residential	R	130.9										
Open Space (WITHIN USE)	OS	10%										
		194.1		602,696		361,156	241,540	40%			610	56,236
Kotzin												
Neighborhood Commercial	CNV	6.5	0.25	70,785	0.25	70,785	0	0%		100%		70,785
Cultural Park 1	CP 1	27.7	0.45	542,975	0.35	422,314	120,661	22%	60%	40%	507	168,926
Cultural Park 2	CP 2	11	0.15	71,874	0.15	71,874	0	0%		100%		71,874
Lodging & Commercial	LC	41	0.65	1,160,874	0.40	714,384	446,490	38%	75%	25%	1,072	178,596
Resort Conference	RC	10	0.55	239,580	0.35	152,460	87,120	36%	100%		305	
Residential	R	63.8										
Open Space (WITHIN USE)	OS	10%										
		160		2,086,088		1,431,817	654,271	31%			1,883	490,181
Total Kotzin & TenX		354.1		2,688,785		1,792,973	895,811	33%			2,493	546,417
ROUNDED											2,500	550,000

(b) Water Use Restriction

Stilo is willing to agree to a complete prohibition of the use of groundwater with two exceptions: (i) the current or future provider of water for the Town of Tusayan can serve residential uses at TenX and Kotzin; and (ii) future groundwater use being authorized if as a result of technological breakthroughs resulting in proven zero-impact upon groundwater resources (i.e., recharge and recovery, water harvesting, off season water extraction surpluses, etc.). In addition, Stilo intends to require the utilization of state of the art water conservation measures including, water harvesting, use of reclaim water where feasible which would either meet or exceed existing practices utilized by water service providers and consumers within the Town of Tusayan.

Stilo proposes enforcement of this restriction be through either the recordation of a restrictive covenant or a conservation easement that will run with the land in perpetuity and provide appropriate rights of enforcement.

Commercial water demands are anticipated to be met by importing water via truck hauling and, with an exception for emergencies, those demands will be prohibited from being met by any groundwater supplies obtained from within the boundaries of the yellow shaded area within the Coconino Plateau Groundwater Sub-basin as depicted below.¹ A commercial supply is not specifically identified at this time, but may include private sources or credits available for purchase or other supplies made available as a result of regional delivery solutions. Peak season demand for commercial uses at TenX and Kotzin at full-build out are estimated to be approximately 275,000 gallons per day (based on recent commercial water sales data supplied by Hydro-Resources Inc.). Utilizing 6,000 gallon water trucks for hauling, at peak season, full-build out commercial demand equates to approximately 20 truck deliveries per day. Centralized water storage facilities would be constructed in locations deemed appropriate by the water service provider.



¹ Montgomery, EL., 1993, Projections for decrease in spring flow resulting from proposed groundwater withdrawal near Tusayan, Arizona: Canyon Forest Village Report (Figure 1).

TABLES

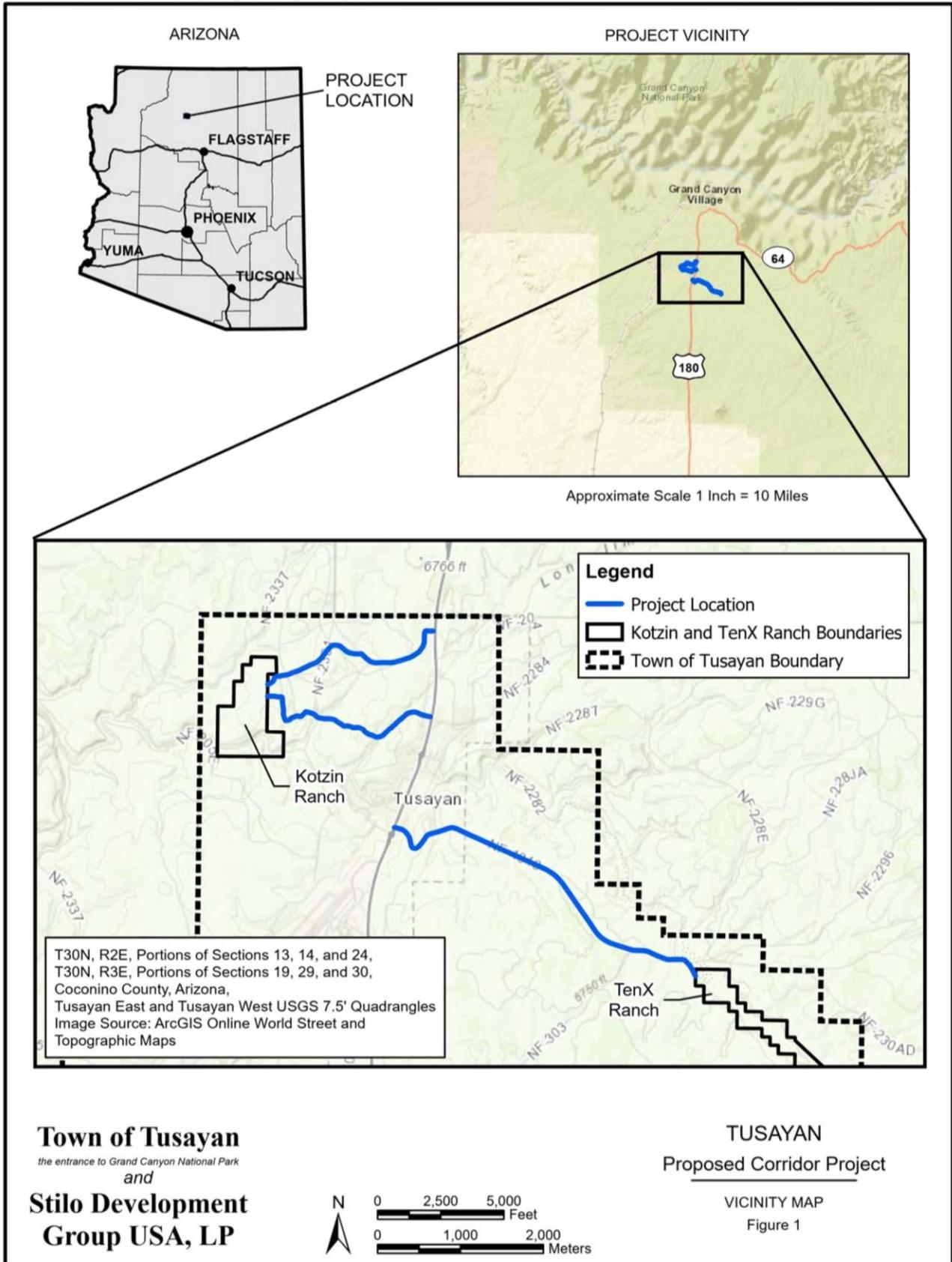
Table 2. Summary of Project Description

Route/Segment	Existing Maintenance Level	Proposed Maintenance Level	Existing Recreation Opportunity Spectrum	USFS LAND						Sewer	Water Transmission	Water Distribution	Reclaimed Water	Electric	Natural Gas	Telecommunications
				Length (approximate) (feet)	Length (approximate) (mile)	Width (feet)	Previously Disturbed Area (acre)	Area of New Disturbance (acre)	Total Disturbance Area (acre)							
TenX Ranch Access/Utility Corridor																
TenX Ranch Access Road	3	5	R/RN	14,880	2.82	80	12.7	14.6	27.3	X	X	X	X	X	X	X
Subtotals				14,880	2.82		12.7	14.6	27.3							
Kotzin Ranch South Access/Utility Corridor																
From SR 64 along FR 605M	2	5	R/RN	2,333	0.44	80	1.5	2.9	4.3		X	X	X	X	X	X
From FR 605M to FR 605	NA	5	RN	2,766	0.52	80	0.8	4.3	5.1	X	X	X	X	X	X	X
FR 605 to Kotzin Ranch	NA	5	RN	2,997	0.57	80	0.3	4.8	5.1	X	X	X	X	X	X	X
Subtotals				8,096	1.53		2.6	12.0	14.5							
Kotzin Ranch Emergency Access Road																
Intersection of SR 64 and Moqui Drive (FR 328)	3	4	R/RN	3,715	0.70	30	1.7	0.8	2.6							
FR 605F	2	4	RN	1,548	0.29	30	0.4	0.6	1.1							
FR 605E	2	4	RN	2,794	0.53	30	0.7	1.3	1.9							
Subtotals				8,057	1.52		2.8	2.7	5.6							
Related Structures and Facilities																
Reclaimed water service				2,100	0.40	25	1.2	0.0	1.2			X				
Sewer corridor along SR 64				287	0.05	25	0.2	0.0	0.2	X						
Potable water booster pump station (approx. 100 ft X 100 ft)							0.2	0.0	0.2			X				
Lift Station (approx. 100ft X 100ft)							0.2	0.0	0.2	X						
2128 Reclaimed water booster pump station (approx 100ft x 100ft)							0.2	0.0	0.2				X			
Subtotals				2,387	0.45		2.0	0.0	2.0							
TOTALS				33,420	6.32		20.1	29.3	49.4							

Recreation Opportunity Spectrum (ROS): R = Rural; RN = Routed Natural

Table-2

FIGURES



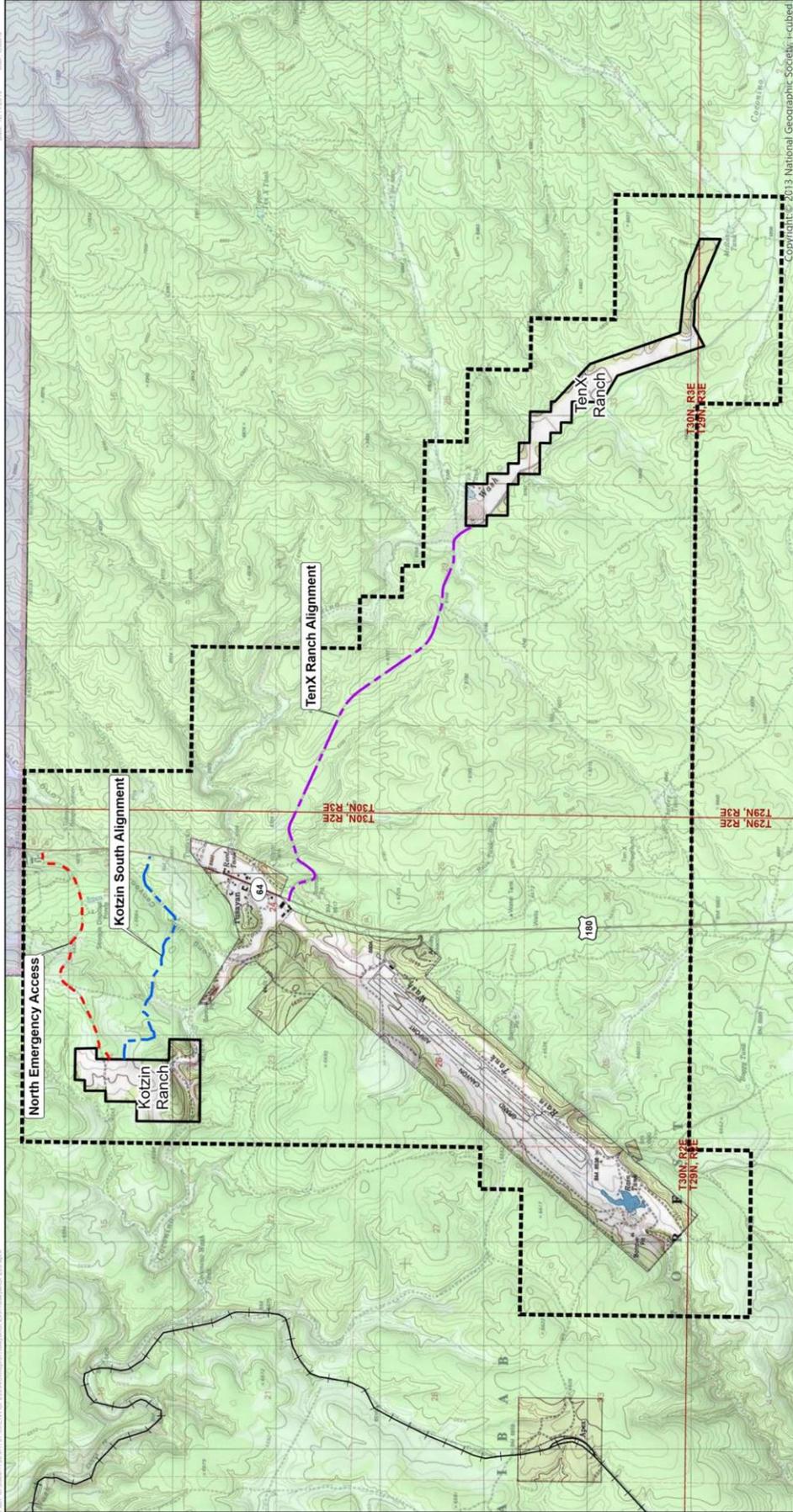
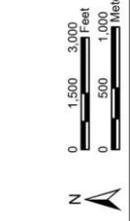


Image Source: ArcGIS Online USA Topo Map

Town of Tusayan
 the entrance to Grand Canyon National Park
and
Stilo Development
Group USA, LP



- Kotzin South Alignment
- - - North Emergency Access
- - - TenX Ranch Alignment
- + Grand Canyon Railway
- Kotzin and TenX Ranch Boundaries

- Town of Tusayan Boundary
- Surface Management (BLM 2019, WRI Modified 2019)**
- National Park Service (NPS)
- Private Land (No Color)
- US Forest Service (USFS)

TUSAYAN
 Proposed Corridor Project
 USGS TOPOGRAPHY
 Figure 2

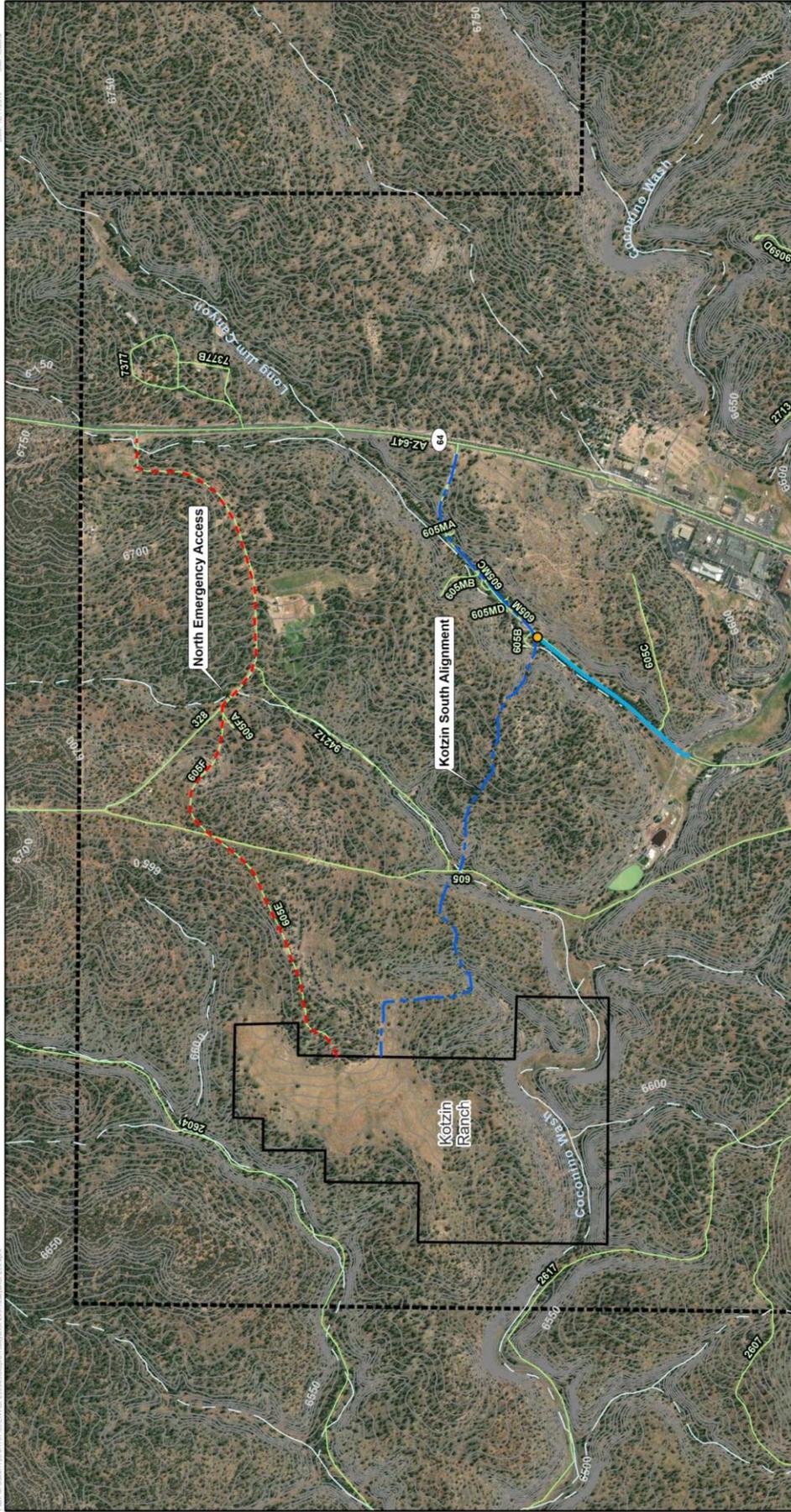
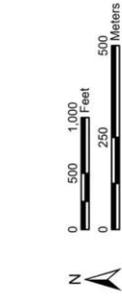


Image Source: DigitalGlobe 9/10/2018

Town of Tusayan
 the entrance to Grand Canyon National Park
 and
Stilo Development
 Group USA, LP



- Tie-in to Existing 8-inch Sewer
- - - Kotzin South Alignment
- - - North Emergency Access
- New Reclaimed Water Service
- Motorized Vehicle Use Map (MVUM) Roads
- Drainage
- Kotzin Ranch Boundary
- Town of Tusayan Boundary

TUSAYAN
 Proposed Corridor Project
 Figure 3A

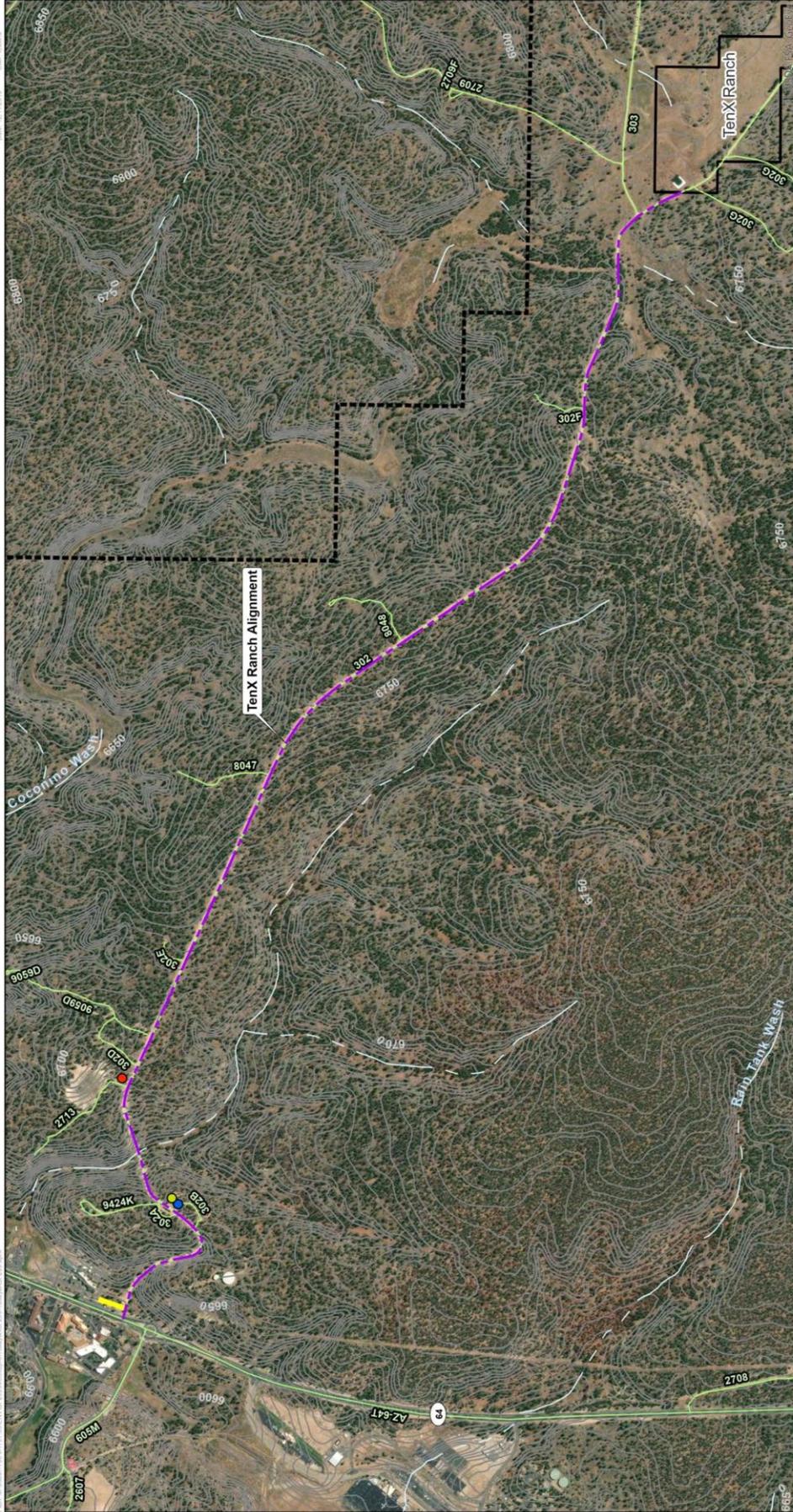


Image Source: DigitalGlobe 9/10/2018

Town of Tusayan
the entrance to Grand Canyon National Park
and
Stilo Development
Group USA, LP

- Proposed Booster Pump Station
- Proposed Lift Station
- Proposed Reclaimed Water Booster Pump Station
- Drainage
- Motorized Vehicle Use Map (MVUM) Roads
- Proposed Sewer Easement
- TenX Ranch Alignment
- TenX Ranch Boundary
- Town of Tusayan Boundary

TUSAYAN
 Proposed Corridor Project
 Figure 3B



Figure 4 – Southern Kotzin and Ten-X Primary Access/Utility Schematic

