

# Village of Taos Ski Valley 2015 Master Plan Update

## Roadway Improvements Element

### Existing Conditions

The roadway system at the Village of Taos Ski Valley (Village) is characterized by steep terrain with narrow rights-of-way with severe snow storms and icy driving conditions. These conditions make roadway improvements very difficult and very expensive. Furthermore, the icy conditions, narrow roads, narrow sidewalks, and steep switch-backs cause safety hazards for drivers and pedestrians. The intensity of development proposed in the Village Core will exaggerate these conditions if new roadways are not designed and maintained properly.

There are 5.6 miles of public roads and .9 miles of private roads within the Village. This does not include the 7.7 miles of NM 150 between the intersection of NM 230 and the Village entry and the roadways located in the U.S. Forest Service (USFS) parking lot. Only the USFS parking lot, the Pioneer Glade subdivision, and Sutton Place are paved roads; however, development plans include pavement of several roads within the Village Core area.

The Village Public Works Department is responsible for maintaining public roads, including snow removal and snow storage. Snow storage easements are scattered throughout the Village along roadways.

Erosion is a concern to the Village and private property owners due to the impacts to roadways, culverts, and riparian areas.

The **Existing Conditions Map** identifies the individual roadway sections, their ownership, length, rights-of-way, surface type, **general condition, and overall slope.**

### Previous Plans

The Village has entertained numerous roadway improvement proposals since the Village was first incorporated in 1996. The Village adopted an updated Master Plan in 2010 and the annual Infrastructure Capital Improvements Plan. Below is a summary of these plans and a brief description of the roadway improvements that have been considered. **Some of the proposed projects have already been completed while most of the proposals have been disregarded due to the estimated cost or the failure of property owners to negotiate additional rights-of-way.**

### 1999 Larkin Group Study

This study was conducted to quantify traffic conditions for vehicle and pedestrians and to recommend roadway projects to satisfy the projected traffic demand as a result of new development. The study also examined snow storage, signage, subdivision regulations, and maintenance issues. The study states, "The most critical areas of concern for travel within the Village seem to be along Thunderbird Road and Ernie Blake Road and along Twining Road." Amizette was not included in the study.

The Study recommended the following roadway improvements:

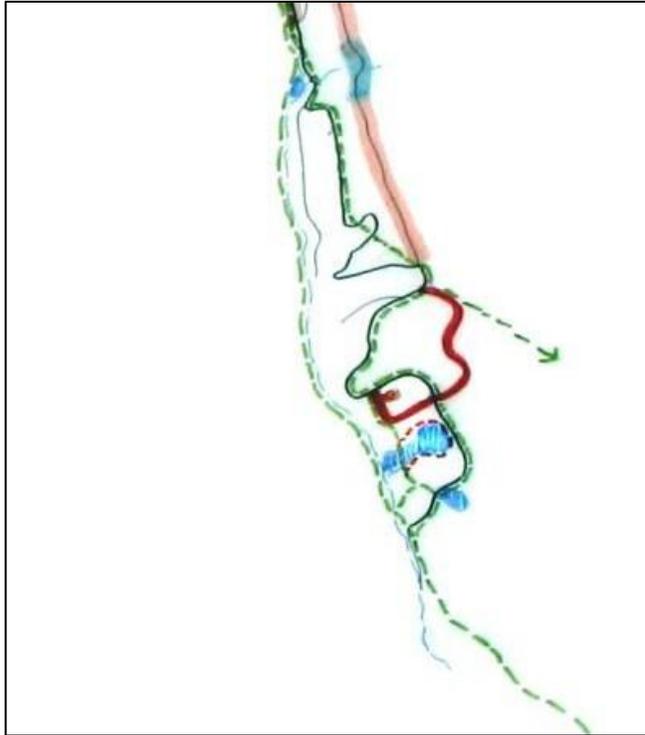
1. **Relocation of Ernie Blake Road** along the Sierra Del Sol condominiums toward the Twining Condominiums and connect to a new intersection at Twining Road.
2. **Improve Thunderbird Road** with 6 foot sidewalks and curb and gutter.
3. **Twining Road Drainage System** to provide positive drainage.
4. **Twining Road Pavement** near the Ernie Blake Road intersection.
5. **Phoenix Switchback Intersection Improvements** to improve turning movements.
6. **Cliffhanger Drive Improvement** to improve the sharp curves at Twining Road.
7. **Ernie Blake Drainage Improvements** to reduce ponding at the Thunderbird Road intersection.
8. **Improve Cliffhanger Drive** as a potential one way pair with Twining Road.
9. **O.E Pattison Loop** to become a one way road.
10. **Improve Twining Road** with grade changes and acquire snow storage easements and apply dust suppressants during summer months.
11. **Kachina Road Avalanche Structure** (and avalanche bridge) to minimize damage caused by avalanches and provide an alternative access to Kachina.
12. **Pedestrian Facilities** at Ernie Blake Road and Thunderbird Road, including a pedestrian path between Dolcetto Road and Twining Road.

### 2010 Master Plan

The 2010 Master Plan included a variety of recommendations to improve roadways and traffic circulation. These included:

- develop a pedestrian circulation plan,
- provide appropriate street lights,
- consider people moving options such as an electric shuttle, cog railroad, gondola or funicular,

- examine the potential for a bypass to Kachina Road,
- create areas of snow storage,
- “a landscaped entry along Armadillo Road (previously the Armadillo parking lot) that focuses attention in the “Center” and the scenic vista of the narrowing valley beyond” and “Prohibit parking along Armadillo Road.”



The map illustrates the proposed Kachina Bypass.

A gondola was also recommended to connect the Village Core and Kachina.

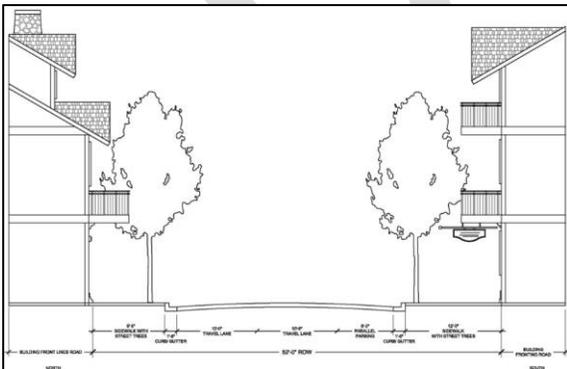
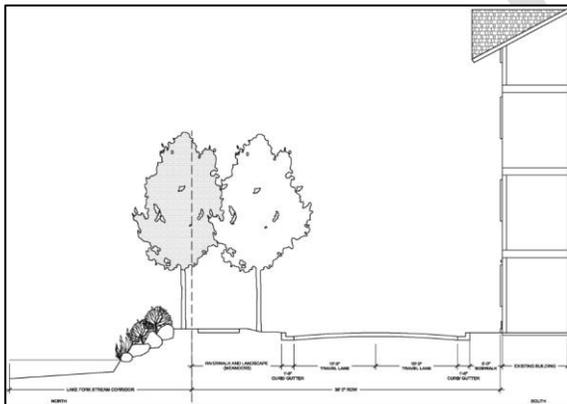
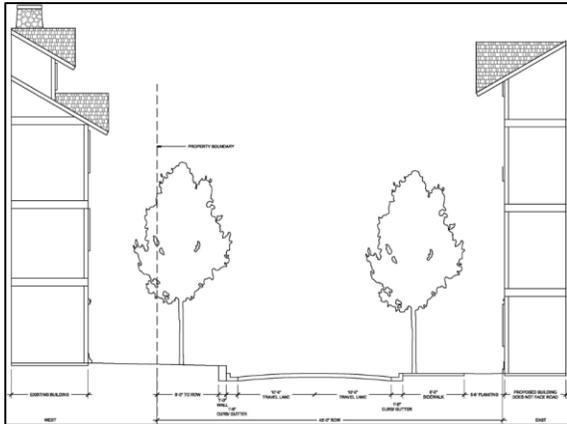
The Master Plan also included typical roadway sections to identify design standards for different roadways. However, the map and the illustrations do not identify which roadways should be developed to the particular standard.

Road Type	Right-of-Way	Travel Lane Width	Speed	Other
Entry Avenues and Queuing Lanes	60'	10'	30 MPH	on-street parking, 12' landscape buffer & sidewalk
Main Road	50'	12'	20 MPH	on-street parking, 12' landscape buffer & sidewalk
One-Way Lane	24'	12'	not identified	6' landscape buffer
Rural Road	24'	12'	not identified	6' landscape buffer

The Master Plan also recommends:

1. "Study the feasibility of improving the Kachina High Road for year-round use."
2. "Also look at ways to improve Phoenix Switchback."
3. "The terminus of Armadillo is a public space, opening onto community facilities and providing a hub for transit services and mixed-use buildings."

### 2012 Parcel Conceptual Plan



The Planning & Zoning Commission and the Village Council amended the Zoning Regulations (Ordinance 14-30) to include the Core Village Zone to the zoning map and adopted a variety of development standards and procedures to facilitate new development within the Village Core. The Core Village Zone allows property owners to submit a Parcel Conceptual Plan for the purpose of "facilitating the redevelopment and revitalization of the CVZ area, stimulating a consistent and sustainable mixture of commercial, residential and recreational land uses, promoting a reasonable bed base of residential and lodging units to support the resort, fostering a vibrant pedestrian activity zone, and providing a base village environment that supports resort operations and provides a positive resident and visitor experience in multiple seasons."

Following the approval of the CVZ, the developers of Taos Ski Valley, Inc. submitted a Parcel Conceptual Plan for 6 parcels with the CVZ. The Parcel Conceptual Plan proposed roadway improvements for Sutton Place, Thunderbird Road, and the relocation of Ernie Blake and Burroughs Roads. The proposed roadway cross-sections are illustrated here.

## 2015 Tax Increment Development District (TIDD)

The Village Council unanimously approved the formulation of the TIDD and village residents and property owners overwhelmingly approved the TIDD in early 2015. The TIDD is a public finance “mechanism” whereby the developer provides the up-front bond financing for a variety of public infrastructure improvements in return for the dedication of future gross receipts taxes and property tax increments. The tax increments are used to re-pay the debt service of the bonds. A portion of the incremental taxes are dedicated to the local government to pay for the on-going operations and maintenance of the infrastructure after it has been developed and dedicated to the local government. The TIDD estimated over \$52 million in overall infrastructure needs. The following table identifies only the transportation and roadway improvements of the TIDD.

<b>Project</b>	<b>Year</b>	<b>Cost Estimate</b>
Visitor Drop-Off	2014-2015	\$1,650,000
Parking Lot Upgrades	2018	\$1,100,000
Sutton Place Crossing	2015	\$1,460,000
Pedestrian Bridge (Parcel D&G)	2016-2017	\$1,320,000
West Burroughs Crossing	2017	\$1,320,000
Strawberry Hill Access & Crossing	2018	\$2,335,000
Ernie Blake & Thunderbird Road Upgrades	2016-2017	\$1,650,000
Twining Road Pavement (.5 miles)	2018	\$660,000
Pave Road to Kachina	2018	\$2,200,000
Public Parking Facility (at Kachina)	2019	\$1,000,000

## Infrastructure Capital improvements Plan (ICIP)

Every year the Village Council adopts an ICIP. The ICIP is a list of unfunded infrastructure projects presented in priority order for a five year period. The following roadway and parking improvement projects have been included in the ICIP since 2011:

<b>Project</b>	<b>Estimated Cost</b>
Twining Road Improvement – Phase III Construction	\$50,000
Purchase Land for Pedestrian Walkways in Village Core	\$150,000
Village Core Pedestrian Walkway Construction	\$45,000
Construct Kachina Road Improvements – Phase II	\$70,000
Construct Kachina Road Improvements – Phase III	\$70,000
Phases I - IV Village Core Infrastructure Improvements	\$750,000
Phases IV – VIII Road Improvements	\$55,000
Acquire Land and Design New Village Entry Road	\$400,000
Construct Phase I Village Entry Road	\$1,800,000
Design and Construct Kachina Road Improvements (Hiker Parking to Bavarian)	\$100,000
Beaver Pond Sediment Control / Riparian Restoration	\$100,000/\$50,000/\$150,000

## **Existing Ordinances and Development Standards**

### **Zoning Regulations**

The Core Village Zone of the Village Zoning Regulations includes development standards for new roadways. It states, "The typical cross-sections should strive to strike a balance that provides a functionally efficient, safe and connected network of vehicular and pedestrian facilities with street cross-sections that balance the need for necessary vehicular movement with the minimized speeds and traffic management controls necessary to promote a pedestrian-oriented resort community. Parking on roads shall not be permitted unless the road is specifically designed for on-road parallel parking."

### **Impact Fees**

Impact fees are imposed on new development to pay "its fair and proportionate share of the costs to the Village of Taos Ski Valley associated with providing necessary public services and public facilities...that serve such development." Impact fees are charged for 1) roadway, pedestrian and drainage improvements, 2) parks & recreation / open space, 3) general government facilities, and 4) public safety. The fee for roadway, pedestrian and drainage improvements is \$2.4773 per square foot of development. These fees are used to pay for roadway improvements. This Master Plan will be used to determine which projects are necessary.

### **Subdivision Ordinance**

The subdivision ordinance includes design standards for new roadways to be constructed within a new subdivision. These standards are intended to preserve views and protect the natural characteristics of the hillside. Specific design standards require a minimum street right-of-way width not less than thirty (30) feet, two 12-foot travel lanes, twenty (20) feet snow storage easement on each side (excluding driveways), and a slope not to exceed 12% grade.

The Village applies these standards for re-design and re-construction of existing roadways when a development necessitates roadway improvements to service the development.

### **Goal, Policies, and Objectives**

The goal, policies, and objectives present a framework for evaluating new development proposals and for implementing roadway projects.

## **Goal**

**The Village accommodates the transportation needs of all users with a safe, convenient, and cost effective roadway network.**

### Policies

1. The Village will improve roadways (or propose new roadways) where there is a clear benefit to public safety, convenience, and welfare and when the development of Village facilities requires new roadways.
2. Private property owners will pay for all necessary roadway improvements which are necessitated by new development, particularly in areas where the existing roadways do not meet design standards for rights.
3. Accept dedication of roadways only when they are built to the Village's design standards. (TIDD)
4. The Village will accept ownership of private roadways only if they are improved to meet with Village's roadway standards and if the roadway improvements serve a specific public purpose.
5. Village roads will be designed, constructed, and maintained to provide adequate snow storage areas without placing an undue burden on individual property owners or the Village.
6. Roadway design will minimize cut and fill to avoid erosion and landslides.
7. The Village will maintain public roadways to ensure the safety and convenience of the public.
8. The Village will require new developments to improve existing roadways which service the proposed development to current standards as a part of new development (Impact Fees).
9. The Village will seek funding from federal and state agencies for roadway improvements, including the NMDOT Coop program.
10. New development will provide adequate off-street parking or meet the shared parking factor when located in the Core Village Zone.
11. The Village will participate in regional transportation and transit planning efforts sponsored by Taos County, NM Department of Transportation, the Regional Transit Authority, the Town of Taos Chili Line, the Northern Pueblos Planning Organization, or the of the Intergovernmental Council of the Enchanted Circle.
12. New roadways will be designed to minimize soil erosion and protect surface water quality.

## Objectives (not in priority order)

1. Utilize GIS to complete a comprehensive inventory of roadway conditions, rights-of-way, the location, type, and age of all roadway signs, utilities, and drainage structures.
2. Install Village Entry Signs at Amizette and TSV.
3. Work with NM Department of Transportation to resurface NM 150 from the intersection of NM 230 and the beginning of the Ski Valley parking lot.
4. Adopt roadway design standards for minimum slope, drainage, travel lane width, sidewalk width, crosswalks, landscape buffers, public lighting,
5. Improve Village roadways:

The Roadway Improvement Plan map identifies the proposed improvements to Village-owned roadways.

- a. Pave **Twining Road** to the Phoenix Switchback to include water line upgrades and dry utilities, curb and gutter with sidewalk and street lights. Reduce the grade of Twining between the intersections at the Phoenix Switchback and Cliffhanger Loop.
- b. **Improve Ernie Blake Road** to accommodate two-way traffic.
- c. Reconcile the right-of-way of **Emma Road** with the alignment of the existing roadway.
- d. Work with the USFS and Taos Ski Valley, Inc. to improve the skier **parking lot** with landscaping and signage improvements.
- e. Complete grading improvements to **Kachina Road** and **Zap's Road** to reduce the steep slope and improve safety and drainage.
- f. Work with the TIDD in designing, building, and maintaining new roadways to a standards acceptable to the Village prior to dedication. These roadways include:

The following table summarizes the proposed roadway improvements for all sections of the Village's roadways. Roadway maintenance will consist of routine grading, clearing of drainage and culverts, and the application of base course and/or pit run.

<b>Name</b>	<b>Proposed Improvements</b>
Big Horn Cove	Maintenance
Big Horn Hill	Grading & Drainage
Blue Jay Ridge Road	None
Burroughs	Abandon
Bull of the Woods Road	Maintenance
Burroughs Road	Maintenance, New River Crossing
Chipmunk Lane	One-Way, Improve Intersection at Phoenix Switchback
Cliffhanger Loop	Maintenance
Coyote Lane	Maintenance, Drainage Improvements
Deer Lane	None
Dolcetto Lane	Maintenance
Emma	Reconcile with Right of Way
Ernie Blake Alignment	Pave, Curb & Gutter, Sidewalk
Ernie Blake Road	Realignment, Pave, Curb & Gutter, Sidewalk
Firehouse Road	None
Gerson	Maintenance
Gusdorf	Maintenance
Kachina Road	Maintenance
Kachina Road	Grading & Drainage, Widen 20' for Snow
Lake Fork Creek	Gravel
Lake Fork Road	None
Lily Lane	Maintenance
Lynx Road	Maintenance
Marmot Lane	Maintenance
Mineslide Road	None
O.E. Pattison Loop	Maintenance
Phoenix Switchback	Improve Intersection at Chipmunk, Drainage Improvements
Porcupine Road	Maintenance
Snow Shoe Trail	Maintenance
State Road 150	Resurface
Strawberry Hill	Pave, Curb & Gutter, Sidewalk
Sutton Place	Pave, Curb & Gutter, Sidewalk
Thunderbird Road	Pave, Curb & Gutter, Sidewalk
Twining Road	Maintenance
Twining Road	Pave, Curb & Gutter
Twining Road	Grading & Drainage
Twining Road	Maintenance
Twining Road	Pavement
Upper Twining Road	Grading & Drainage, Widen 10' for Snow on East Side
West Burroughs Road	Pave, Curb & Gutter, Sidewalk, Relocate Utilities
Wolf Lane	Grading & Drainage
Zap's	Grading & Drainage

6. Amend the Village Zoning Regulations to quantify the shared parking calculations.
7. Adopt a comprehensive snow management plan.
8. Install standard name signs at all roads.

### **Conclusions**

To be concluded...

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